DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

July 9, 2001

Regulatory Division
CENAE-R-2000-01098

Joe Orfant
Metropolitan District Commission
20 Somerset Street
Boston, MA 02108

Dear Mr. Orfant:

This is to inform you that we have reviewed your application to dredge and place fill material for the purpose of proactive restoration of the tidal flows and pre-existing elevations to a salt marsh located on the west bank of the Neponset River in Boston, Massachusetts. This work is depicted on the enclosed plans entitled "NEPONSET RIVER SALT MARSH RESTORATION, DORCHESTER, MASSACHUSETTS", dated 3/23/2000, and as described in the attached report entitled "LOWER NEPONSET RIVER SALT MARSH RESTORATION PROJECT, FINAL RESTORATION PLAN" dated March 2001.

Based on the information you have provided, we have determined that the proposed activity, which includes a discharge of dredged or fill material into waters or wetlands, will have only minimal individual or cumulative environmental impacts. Therefore, this work is authorized under the Federal Massachusetts Programmatic General permit provided you comply with the following special condition:

1. No work shall occur below the high tide line from February 15th to May 30th of any year in order to minimize adverse impacts to smelt, herring, alewives and winter flounder.

2. The attached "FINAL RESTORATION PLAN, LOWER NEPONSET RIVER SALT MARSH RESTORATION PROJECT, BOSTON, MASSACHUSETTS" dated March 2001 and revised June 11, 2001 shall be implemented by the permittee.

3. The permittee shall ensure that an archaeologist is present during excavation work at the project site that meets the attached Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716, September 29, 1983). MDC archaeologist William Stokinger shall serve as this monitor. In the event of a change in personnel, the permittee shall send written notification of the name of the monitor to the Corps and the Wampanoag Tribal Historic Preservation Officer (WTHPO). The address and phone and fax numbers of the WTHPO are on Page 13 of the attached PGP. In accordance with General Requirement No. 6 on Page 7 of the attached PGP, the permittee shall immediately notify the Corps, in writing, if, during construction of the authorized work, a previously unidentified archaeological, historic or cultural artifact or resource that might be eligible for listing in the national Register of Historic Places is encountered within the area subject to Department of the Army jurisdiction. Human remains are included among such artifacts and resources. The permittee shall also notify the WTHPO. Work shall stop until the Corps issues written approval to resume work.

4. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. 2001-01098 and shall be addressed to "Inspection Section, CENAE-CO-R, U.S. Army Corps of

Engineers, 696 Virginia Road, Concord, MA 01742-2751." Documents, which are not marked and addressed in this manner, may not reach their intended destination and do not comply with the requirements of this permit.

This determination becomes valid only after the Massachusetts Department of Environmental Protection (DEP) issues or waives the necessary 401 Water Quality Certification. In the event the State denies 401 Water Quality Certification, this determination becomes null and void. The address of the DEP Regional office for your area is provided in the enclosed PGP.

Your project is located within, or may affect resources within the coastal zone. In order for the above determination to become valid, you must obtain Federal consistency concurrence from the Massachusetts Office of Coastal Zone Management (MCZM) if the proposed work is above the review thresholds of the Massachusetts Environmental Policy Act (MEPA). The MCZM address is provided in the enclosed PGP.

The Corps of Engineers has consulted with the National Marine Fisheries Service (NMFS) regarding the effects of your project on Essential Fish Habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act. NMFS provided an EFH conservation recommendation, which we included in the special condition listed above, to reduce turbidity and sedimentation during spawning and migration.

You must perform the activity authorized herein in compliance with the special condition provided above, all the terms and conditions of the PGP and any conditions placed on 401 Water Quality Certification. Enclosed is a copy of the PGP. Please review it carefully to familiarize yourself with its contents. You are responsible for complying with all of the PGP requirements; therefore, you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

Please note that this determination does not constitute an authorization to proceed until all other applicable state and local permits are obtained. Performing work not specifically authorized by this permit, starting work without obtaining other applicable State and local approvals, or failing to comply with the permit conditions may subject you to the enforcement provisions of our regulations.

Condition 33 of the PGP (page 12) provides one year for completion of work that has commenced prior to the expiration of this PGP on January 11, 2005. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by January 11, 2006.

Please complete and return the enclosed Work Start Notification Form to this office no later than two weeks before the anticipated starting date to allow us to inspect the project if necessary.

Sincerely,

DM TJ
for Branch chief

Brian E. Osterndorf
Colonel, Corps of Engineers
District Engineer

Div. Chief

Enclosures
Copies Furnished:
Mr. John McCulloch, U.S. EPA, Region 1, 1 Congress Street, Suite 1100-Mail Code CWQ, Boston, MA 02114-2023
Mr. Eric Hutchins, National Marine Fisheries Service, One Blackburn Drive, Gloucester, Massachusetts 01930-2298

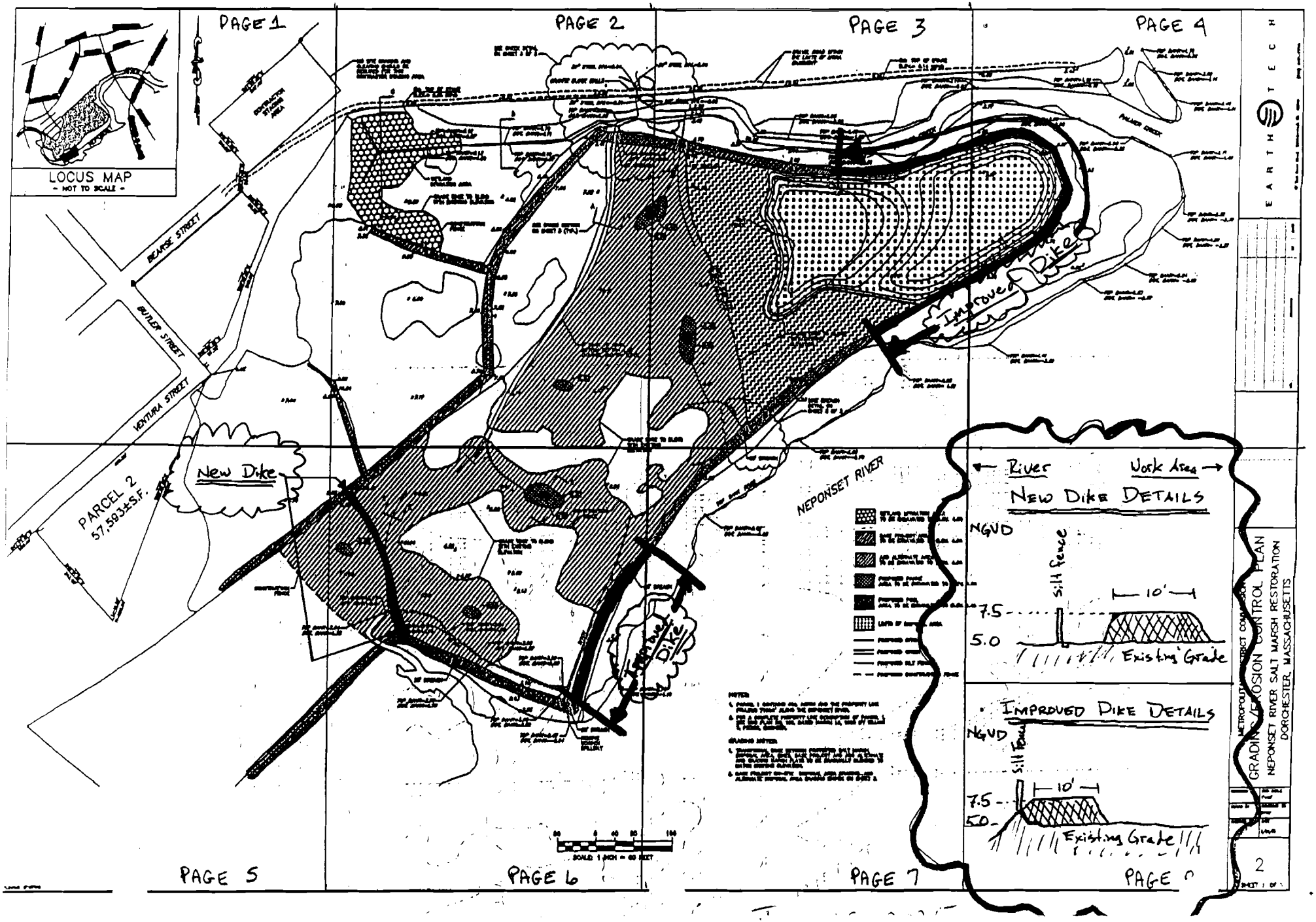
Note: approvals from EEU & Archaeologist are in file

Mr. Phil Morrison, U.S. Fish and Wildlife Service, 22 Bridge Street, Unit #1, Concord, New Hampshire 03301-4901
Ms. Jane Mead, Coastal Zone Management, 251 Causeway Street, Suite 900, Boston, MA 02114
Mr. Robert Erikson, EarthTech, 196 Baker Avenue, Concord, MA 01742
Mr. Mark D. Harding, Deputy Tribal Historic Preservation Officer, 20 Black Brook Road, Aquinnah, MA 02535-1546

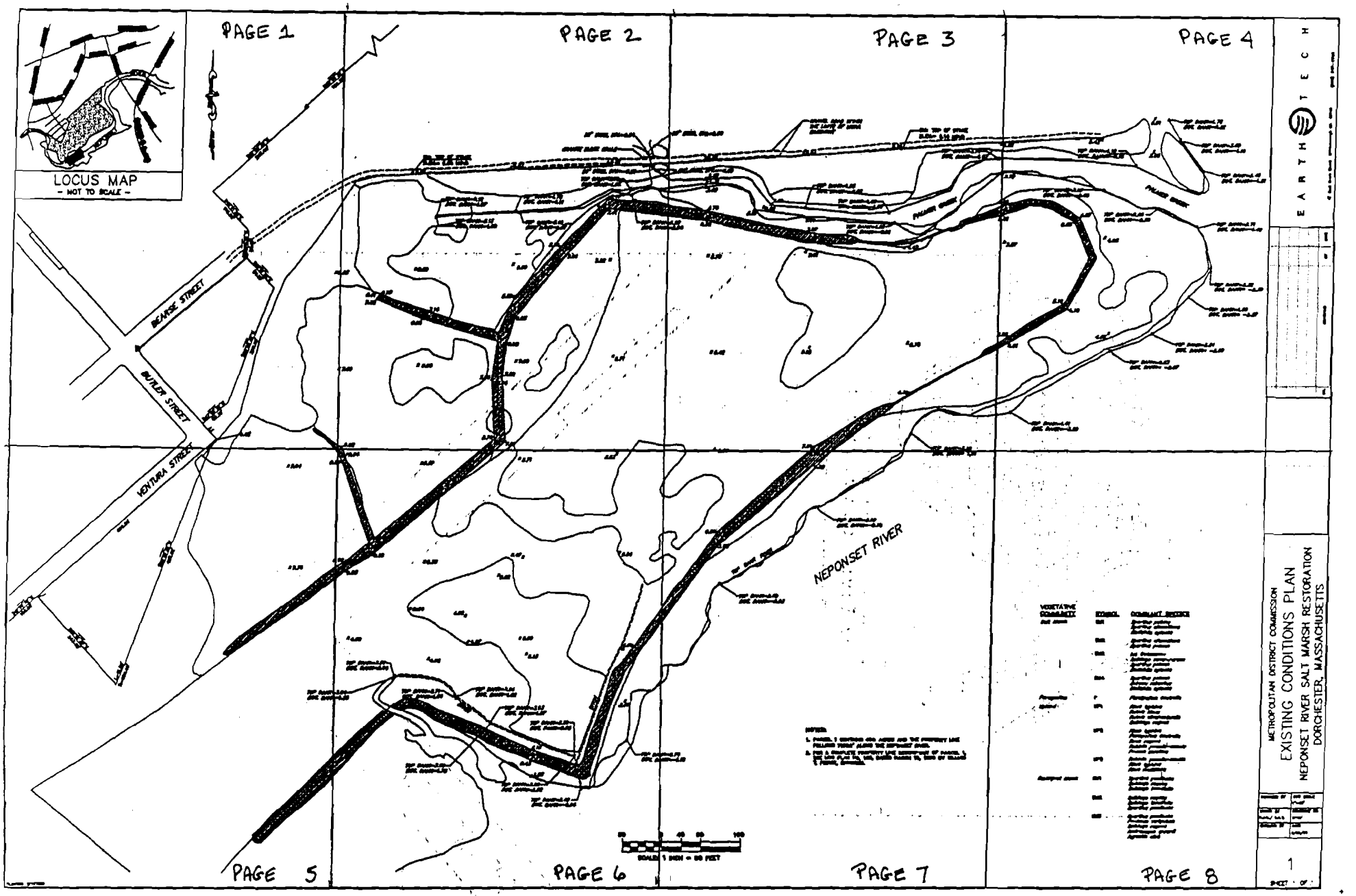
Date: 06 Jan 99 10:32:12 Wednesday
/usr2/neponset/drq.map

Figure 2 - 1
Project Locus Map
Neponset River Salt Marsh Restoration Project

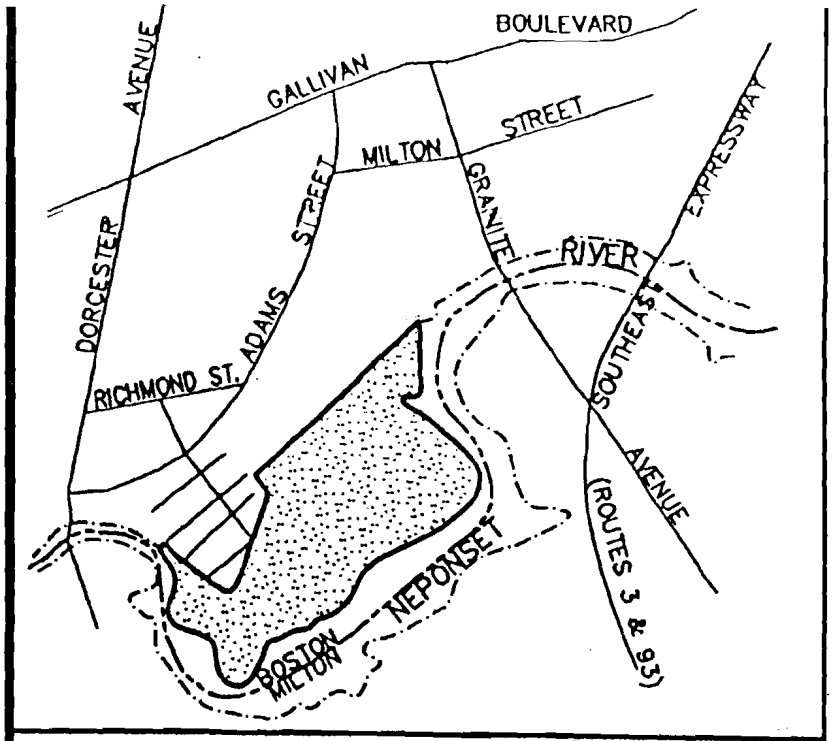
SHEET 2


PAGE 1
PAGE 2
PAGE 3
PAGE 4
PAGE 5
PAGE 6
PAGE 7
PAGE 8
LOCUS MAP
- NOT TO SCALE -
BEARSE STREET
BUTLER STREET
VENTURA STREET
PARCEL 2
57,593±S.F.
New Dike
Improved Dike
NEPONSET RIVER
River
Work Area
NEW DIKE DETAILS
NGVD
Silt Fence
10'
7.5
5.0
Existing Grade
IMPROVED DIKE DETAILS
NGVD
Silt Fence
10'
7.5
5.0
Existing Grade
EARTH TECH
METROPOLITAN DISTRICT COMMISSION
GRADING & EROSION CONTROL PLAN
NEPONSET RIVER SALT MARSH RESTORATION
DORCHESTER, MASSACHUSETTS
2

SHEET 1


PAGE 1
PAGE 2
PAGE 3
PAGE 4
PAGE 5
PAGE 6
PAGE 7
PAGE 8
LOCUS MAP
- NOT TO SCALE -
BEARSE STREET
BUTLER STREET
VENTURA STREET
NEPONSET RIVER
EARTH TECH
METROPOLITAN DISTRICT COMMISSION
EXISTING CONDITIONS PLAN
NEPONSET RIVER SALT MARSH RESTORATION
DORCHESTER, MASSACHUSETTS
1

SHEET 1 PAGE 1



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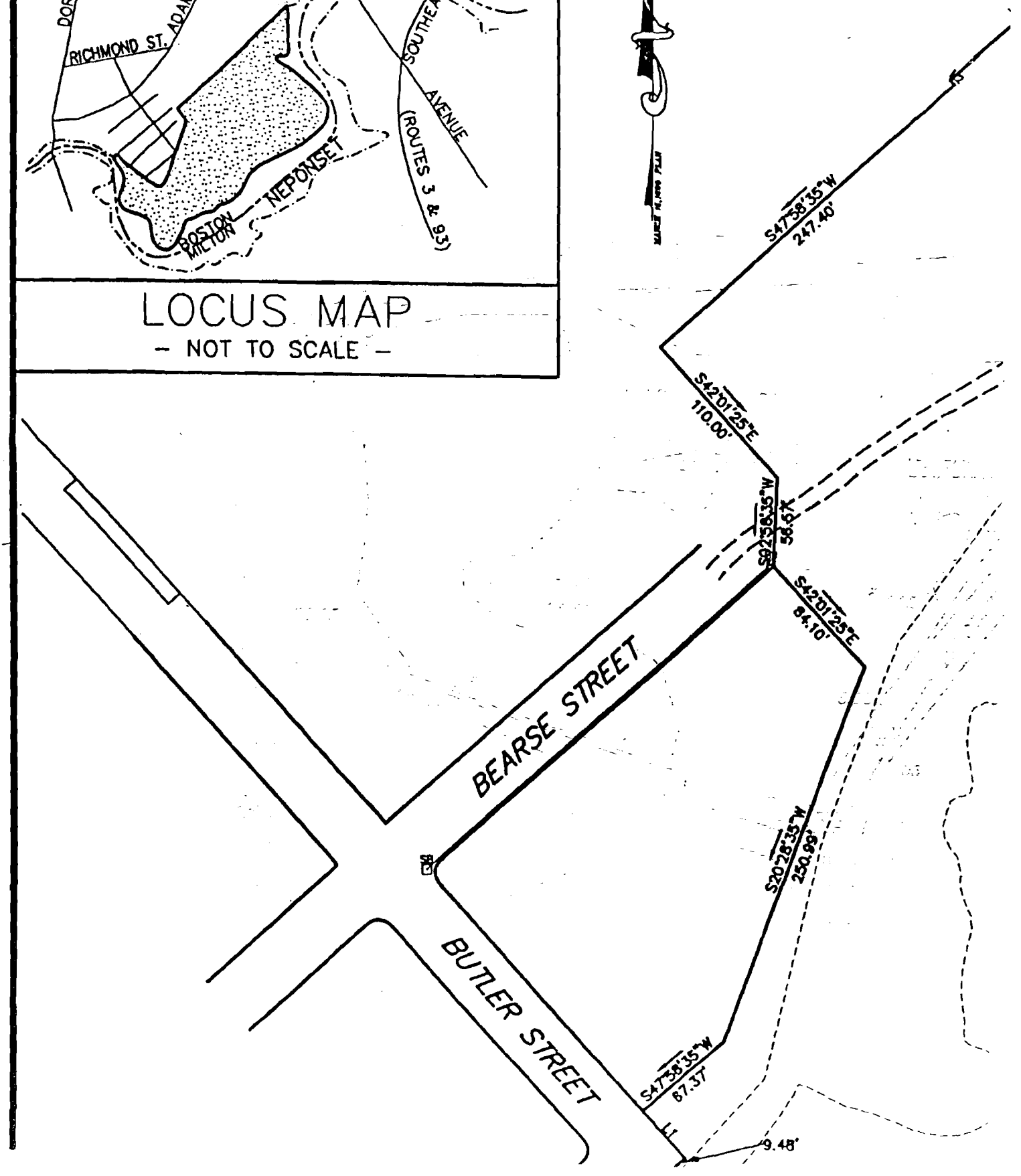
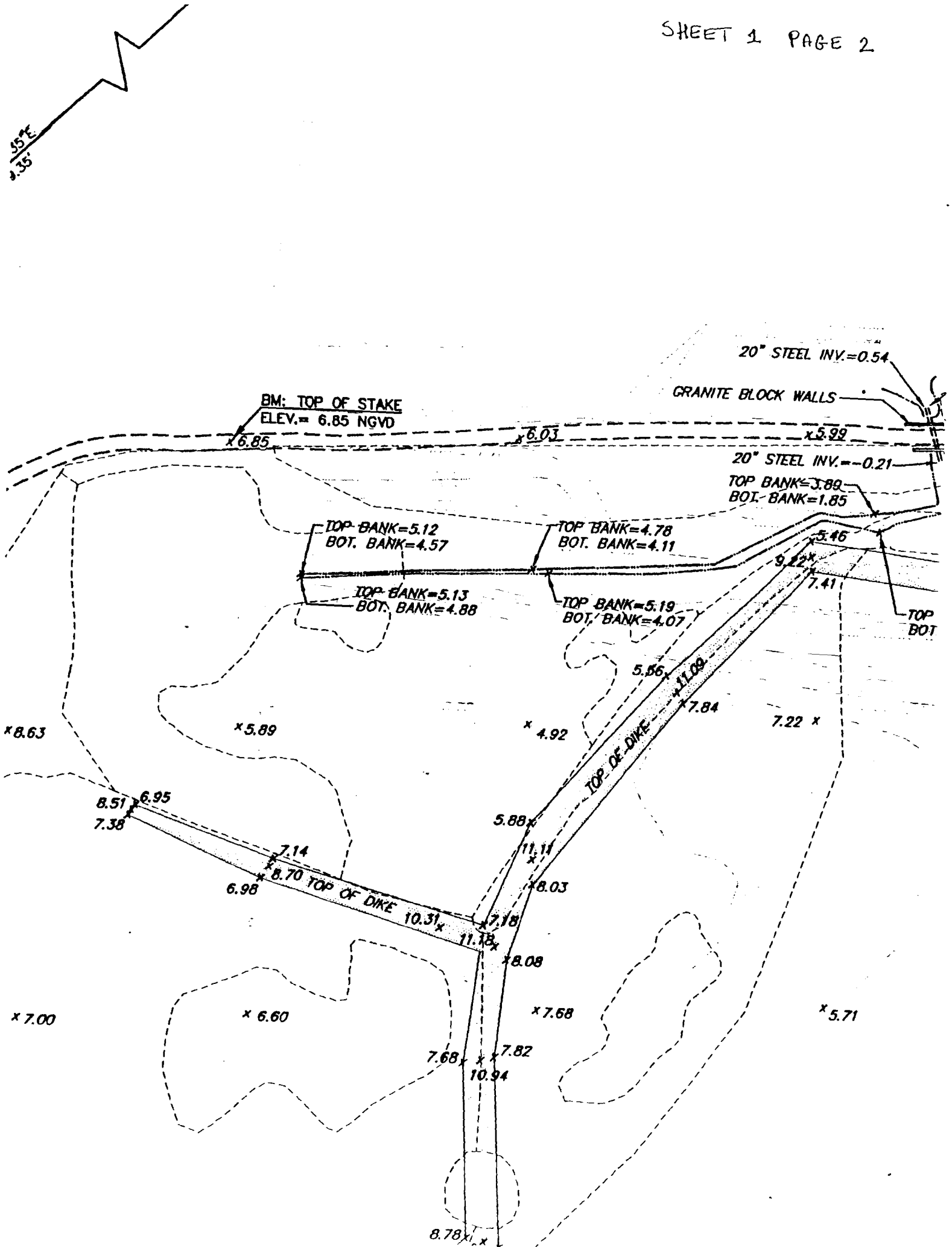
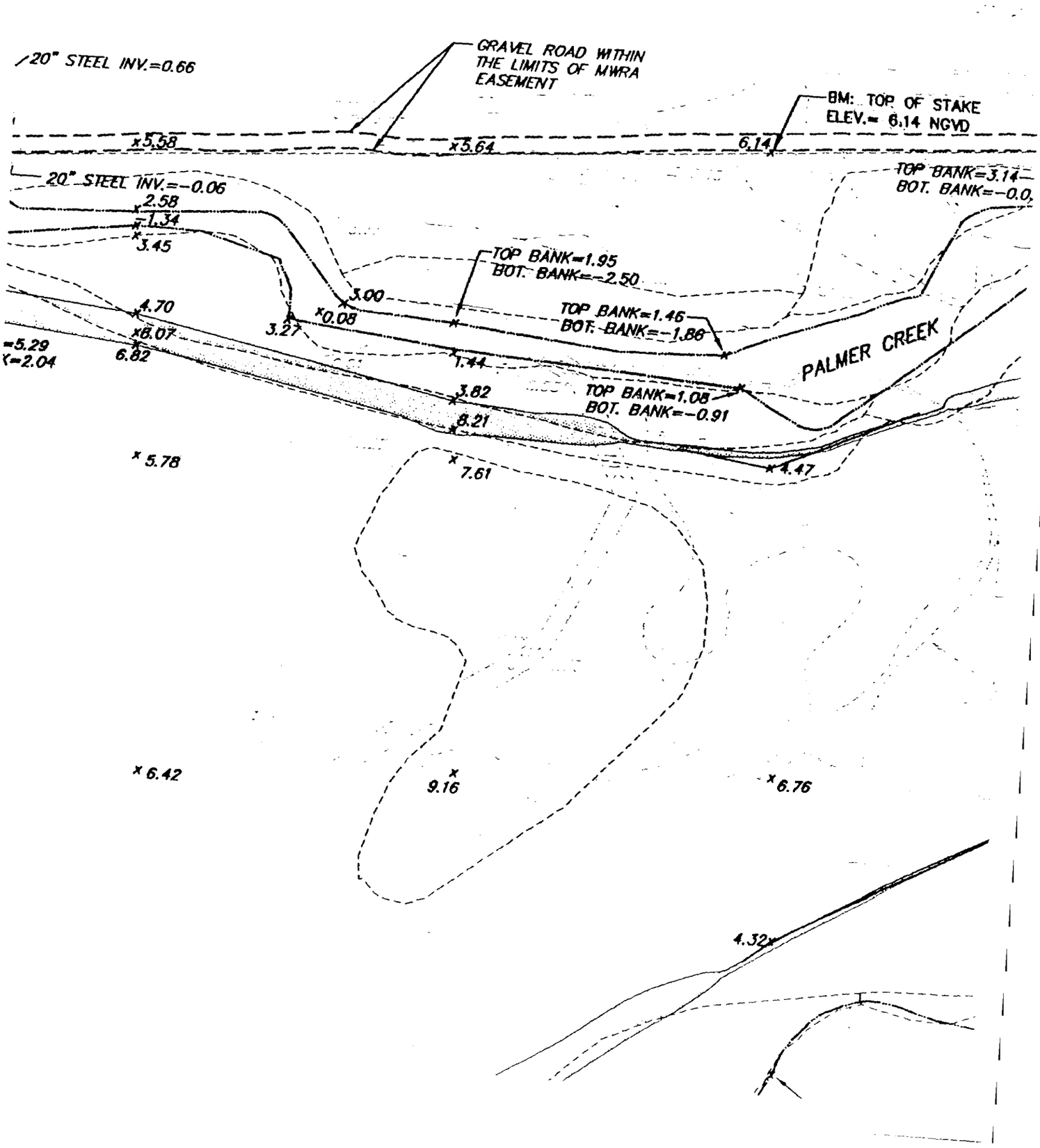
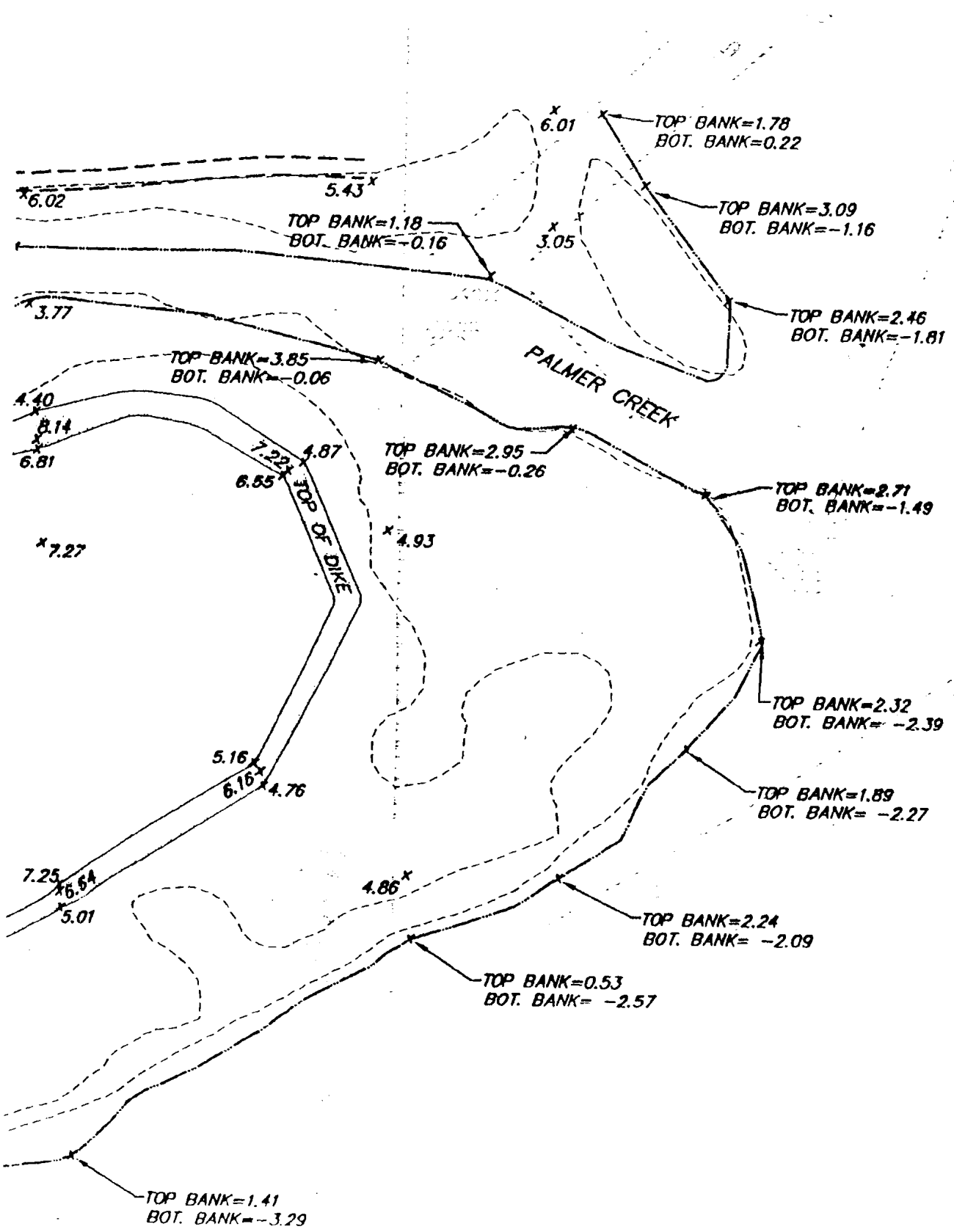


SHEET 1 PAGE 2



SHEET 1 PAGE 3

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TOP BANK=1.78
BOT. BANK=0.22
6.02
5.43
TOP BANK=3.09
BOT. BANK=-1.16
TOP BANK=1.18
BOT. BANK=-0.16
3.05
3.77
TOP BANK=2.46
BOT. BANK=-1.81
TOP BANK=3.85
BOT. BANK=-0.06
PALMER CREEK
4.40
8.14
6.81
7.22
4.87
6.55
TOP BANK=2.95
BOT. BANK=-0.26
TOP BANK=2.71
BOT. BANK=-1.49
TOP OF DIKE
7.27
4.93
TOP BANK=2.32
BOT. BANK= -2.39
5.16
6.16
4.76
TOP BANK=1.89
BOT. BANK= -2.27
7.25
6.64
5.01
4.86
TOP BANK=2.24
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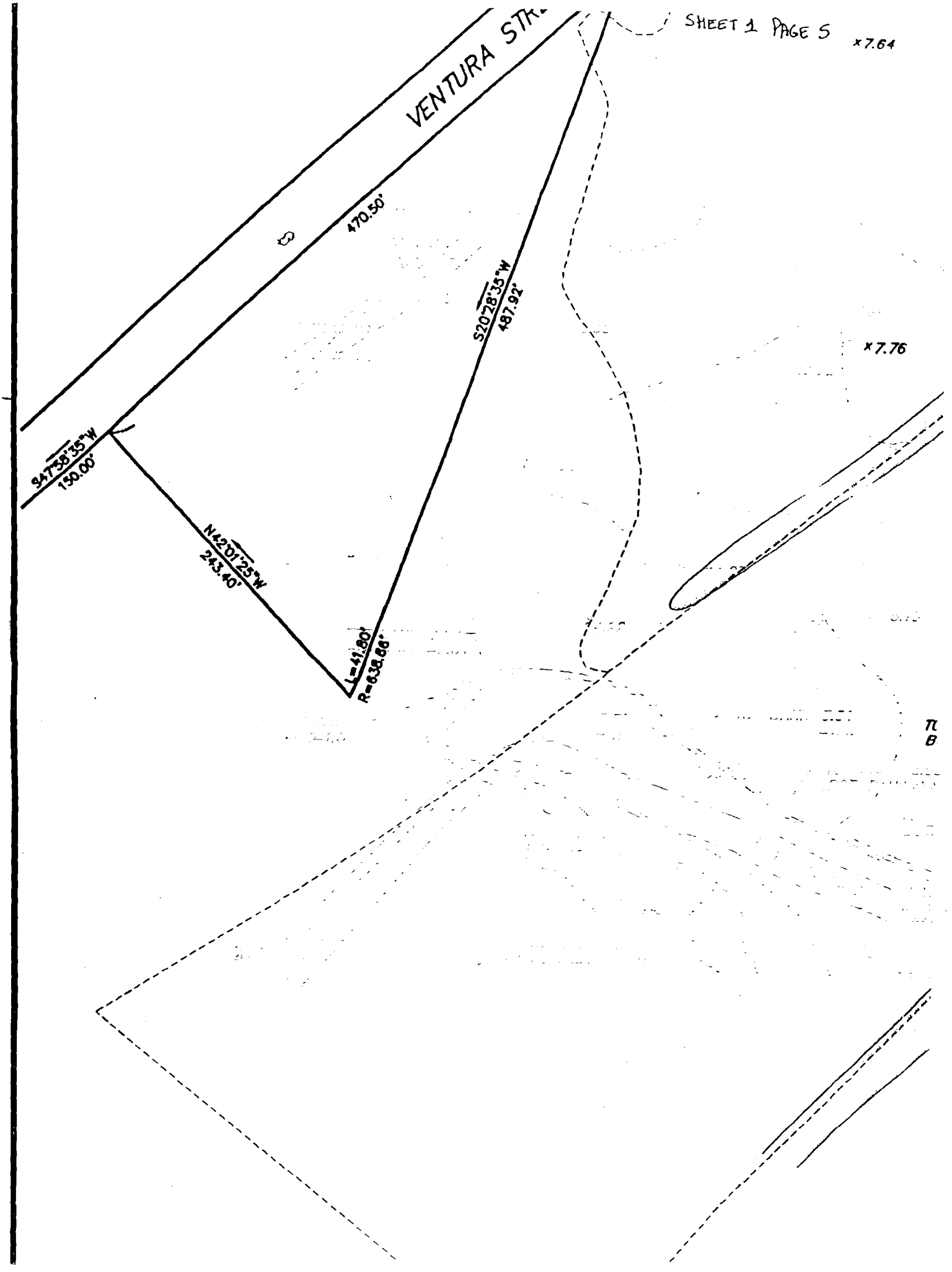
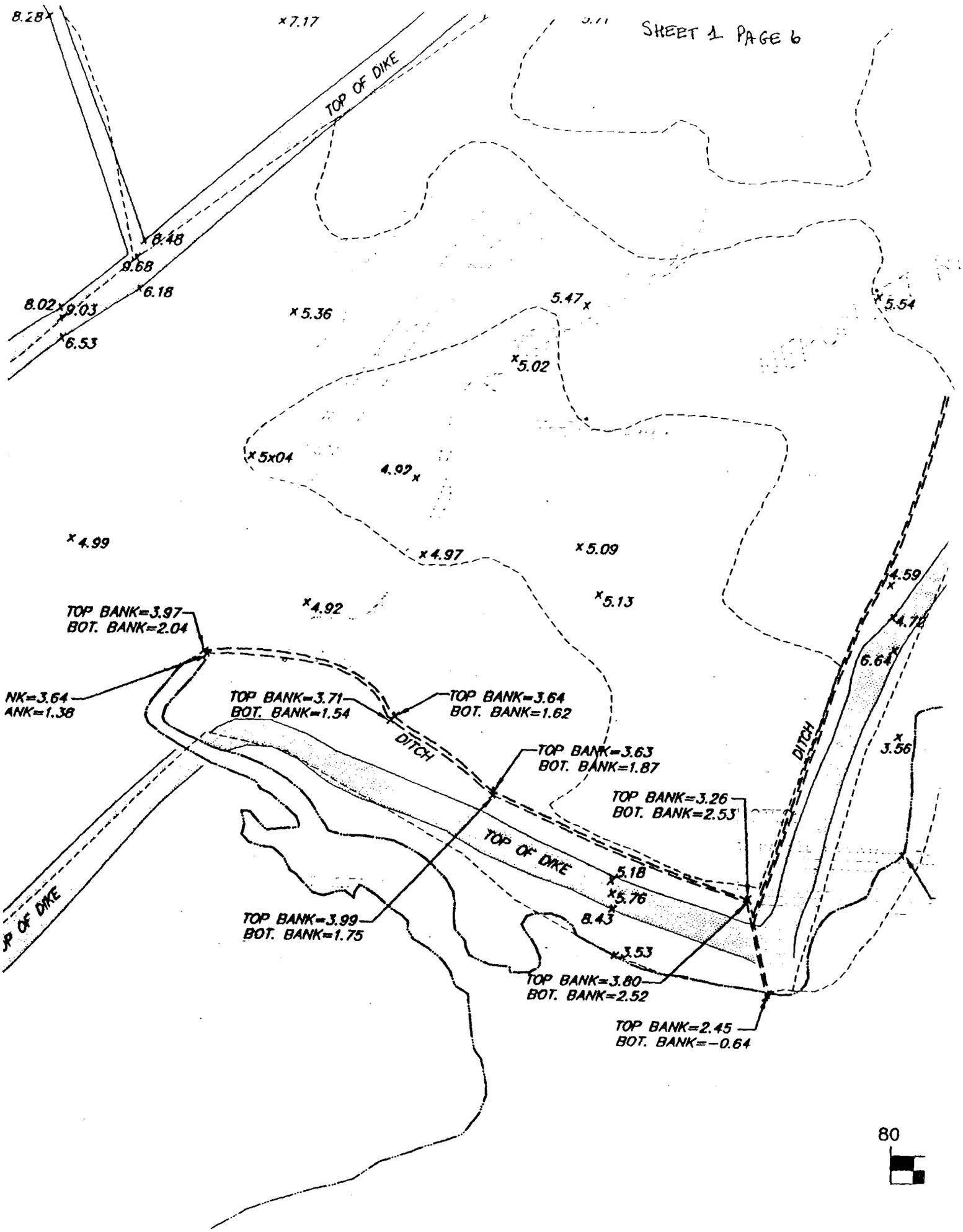
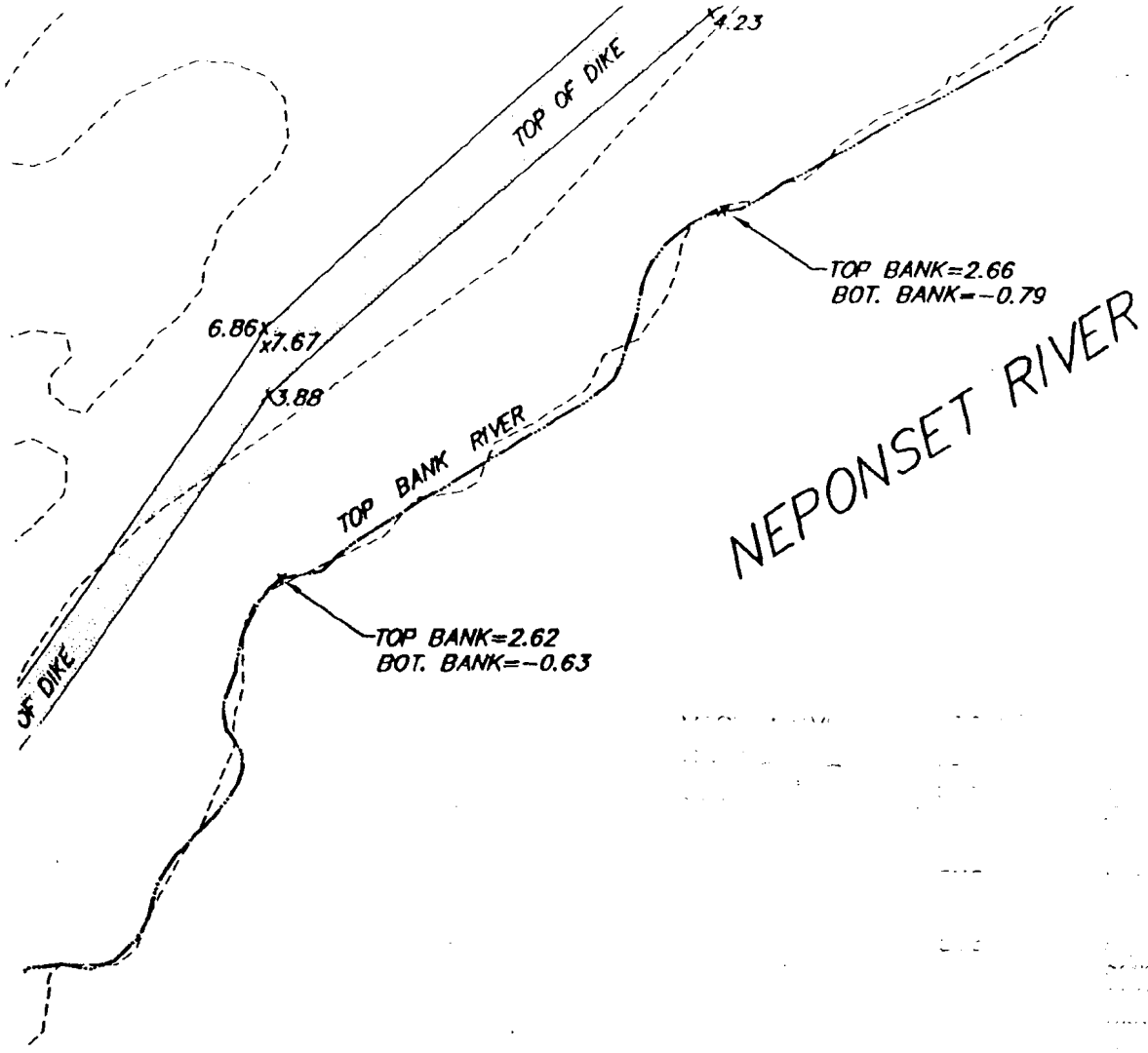
TOP BANK=1.41
BOT. BANK=-3.29

EARTHTECH


SHEET 1 PAGE 5
×7.64
VENTURA STR
470.50'
S20°28'35"W
487.92'
×7.76
S47°38'35"W
150.00'
N42°01'25"W
243.40'
L=41.80'
R=638.86'

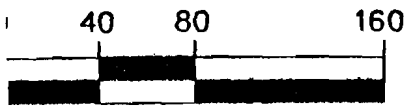

SHEET 1 PAGE 6
8.28
7.17
TOP OF DIKE
8.48
9.68
6.18
8.02
9.03
6.53
5.36
5.47
5.54
5.02
5x04
4.92
4.99
4.97
5.09
4.59
4.92
5.13
4.72
6.64
TOP BANK=3.97
BOT. BANK=2.04
NK=3.64
ANK=1.38
TOP BANK=3.71
BOT. BANK=1.54
TOP BANK=3.64
BOT. BANK=1.62
DITCH
TOP BANK=3.63
BOT. BANK=1.87
DITCH
3.56
TOP BANK=3.26
BOT. BANK=2.53
TOP OF DIKE
5.18
5.76
8.43
TOP BANK=3.99
BOT. BANK=1.75
3.53
TOP BANK=3.80
BOT. BANK=2.52
TOP BANK=2.45
BOT. BANK=-0.64
80



K=2.74
NK=-1.16

NOTES:

1. PARCEL 1 CONTAINS 40± ACRES AND THE PROPERTY LINE FOLLOWS 7150±' ALONG THE NEPONSET RIVER.
2. FOR A COMPLETE PROPERTY LINE DESCRIPTION OF PARCEL 1, SEE MDC PLAN NO. 183, DATED MARCH 15, 1899 BY WILLIAM T. PIERCE, ENGINEER.



1 INCH = 80 FEET

VEGETATIVE COMMUNITY	SYMBOL	DOMINANT SPECIES
Salt Marsh	SM1	*Spartina patens* *Spartina alterniflora* *Distichlis spicata*
	SM2	*Spartina alterniflora* *Spartina patens*
	SM3	*Iva frutescens* *Solidago sempervirens* *Spartina patens* *Distichlis spicata*
	SM4	*Spartina patens* *Scirpus robustus* *Distichlis spicata*
Phragmites	P	*Phragmites australis*
Upland	UP1	*Rhus typhina* *Rubus ideus* *Rubus alleghenlensis* *Solidago rugosa*
	UP2	*Rhus typhina* *Phragmites australis* *Rosa rugosa* *Robinia pseudo-acacia* *Prunus serotina*
	UP3	*Robinia pseudo-acacia* *Rhus typhina* *Rosa multiflora*
Emergent Marsh	EM1	*Spartina pectinata* *Solidago rugosa* *Solidago tenuifolia*
	EM2	*Solidago rugosa* *Solidago tenuifolia* *Spartina pectinata*
	EM3	*Spartina pectinata* *Panicum varigatum* *Solidago rugosa* *Andropogon gerardi* *Agrostis alba*

METROPOLITAN DISTRICT COMMISSION

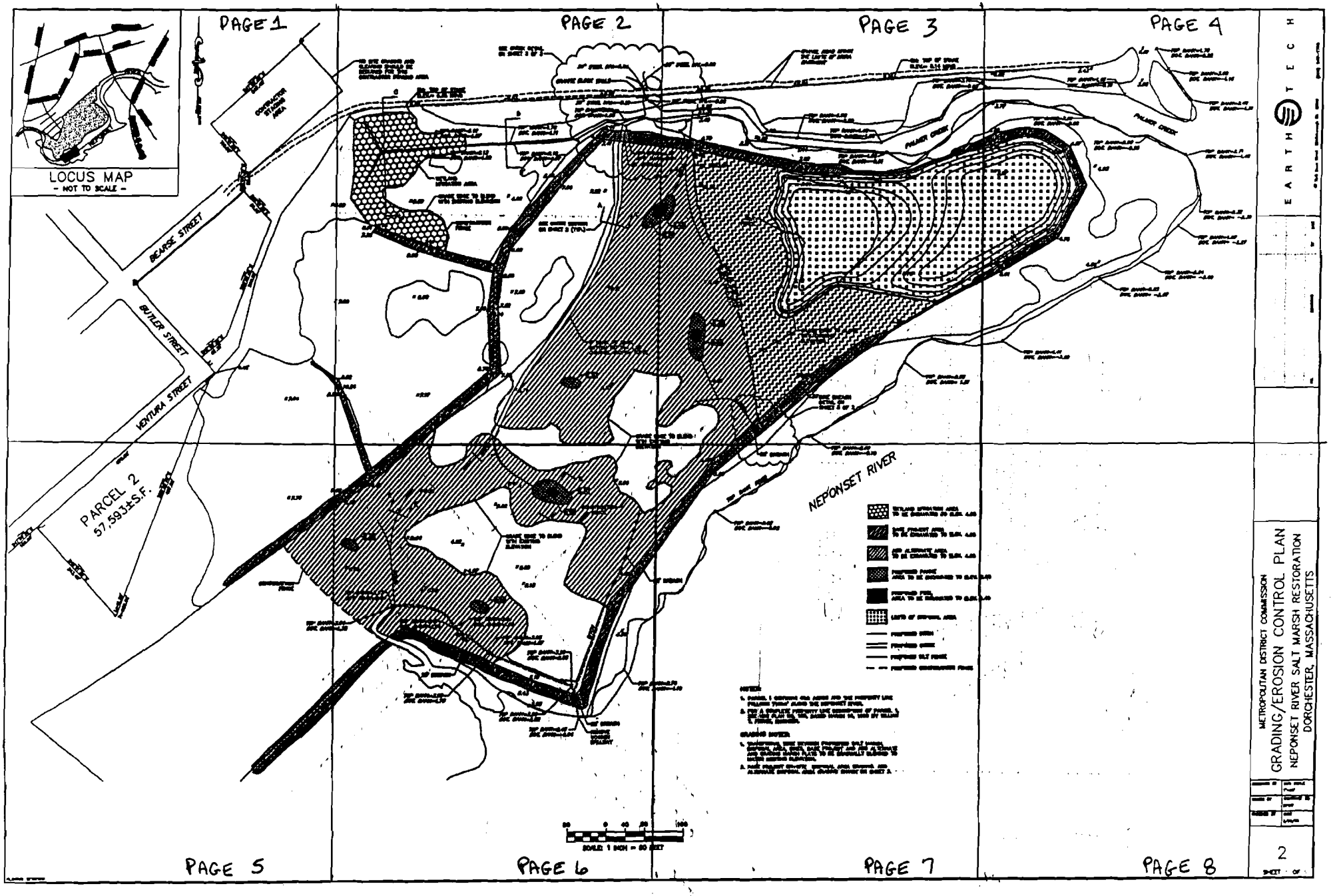
EXISTING CONDITIONS PLAN

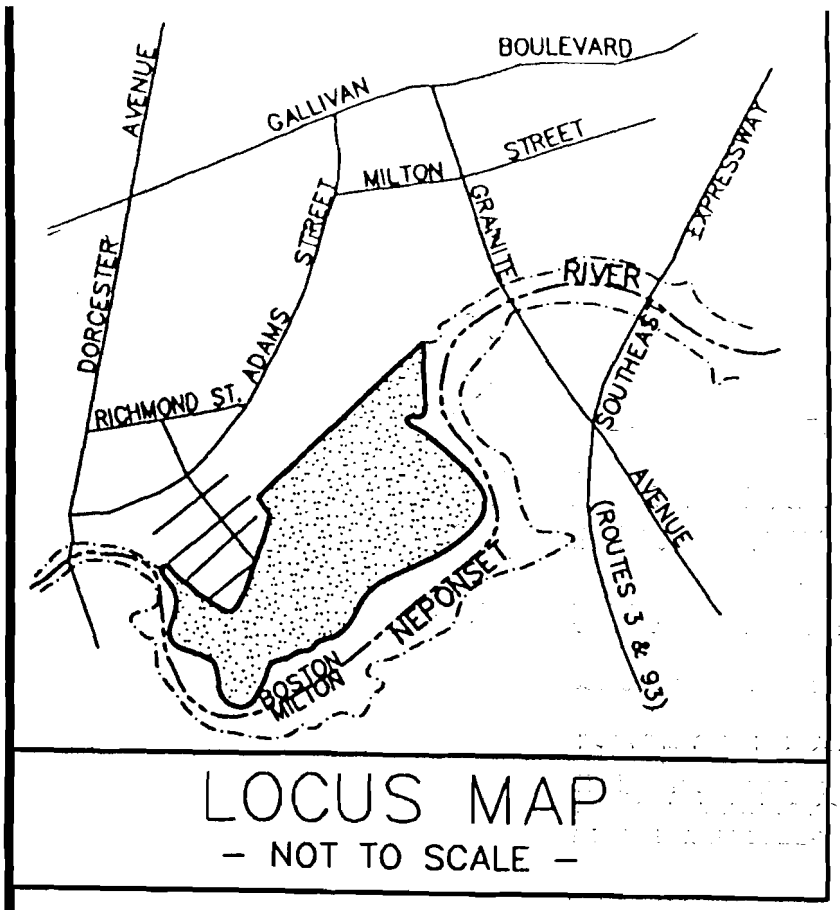
NEPONSET RIVER SALT MARSH RESTORATION

DORCHESTER, MASSACHUSETTS

DESIGNED BY	DWG SCALE 1"=80'
DRAWN BY D.J.M./ C.B.T.	CONTRACT 27157
CHECKED BY	DATE 3/23/00

SHEET 2


PAGE 1
PAGE 2
PAGE 3
PAGE 4
PAGE 5
PAGE 6
PAGE 7
PAGE 8
LOCUS MAP
- NOT TO SCALE -
BEARSE STREET
BUTLER STREET
VENTURA STREET
PARCEL 2
57,593±S.F.
NEPONSET RIVER
PALMER CREEK
EARTH TECH
METROPOLITAN DISTRICT COMMISSION
GRADING/EROSION CONTROL PLAN
NEPONSET RIVER SALT MARSH RESTORATION
DORCHESTER, MASSACHUSETTS
2



LOCUS MAP
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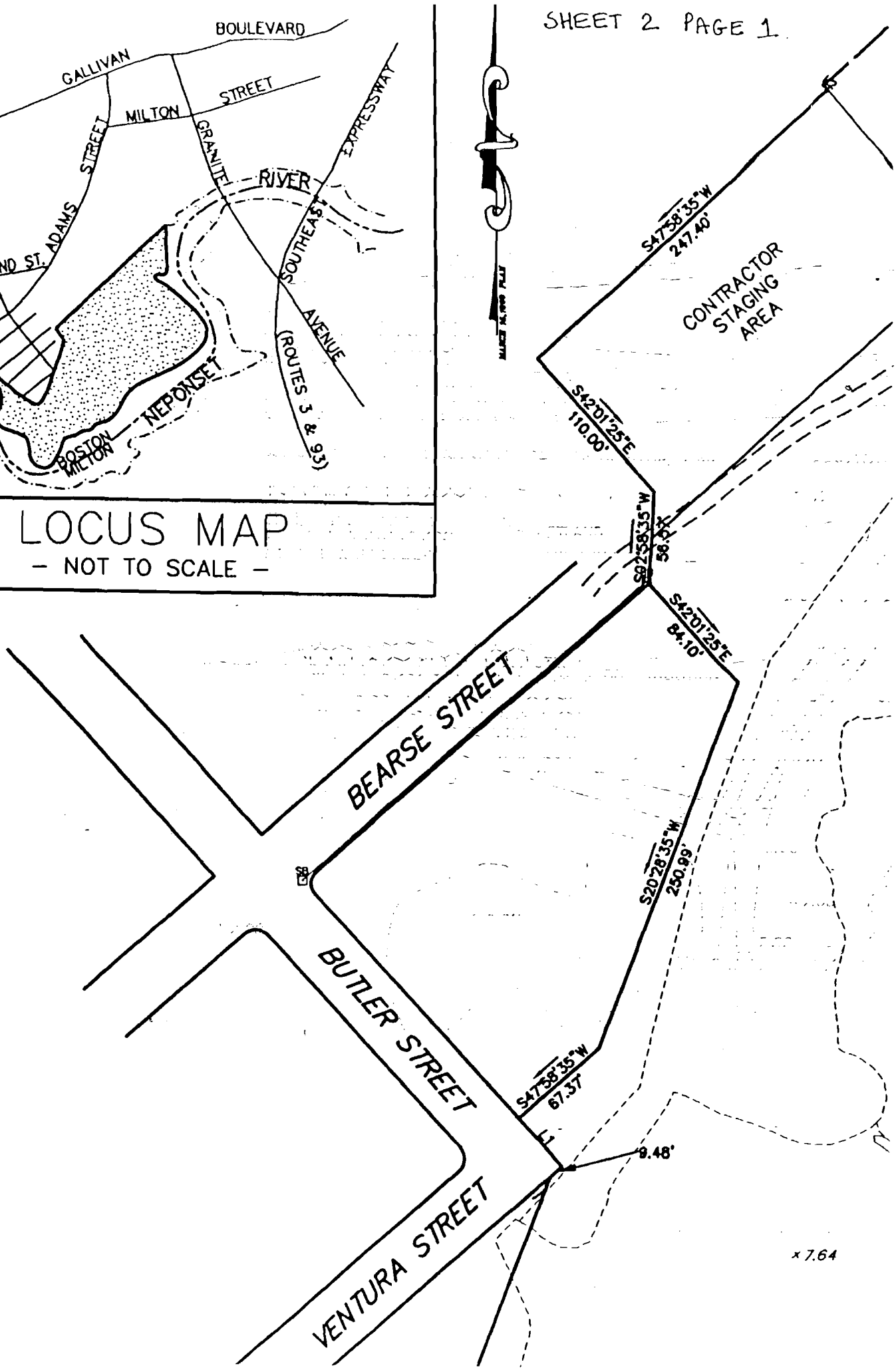
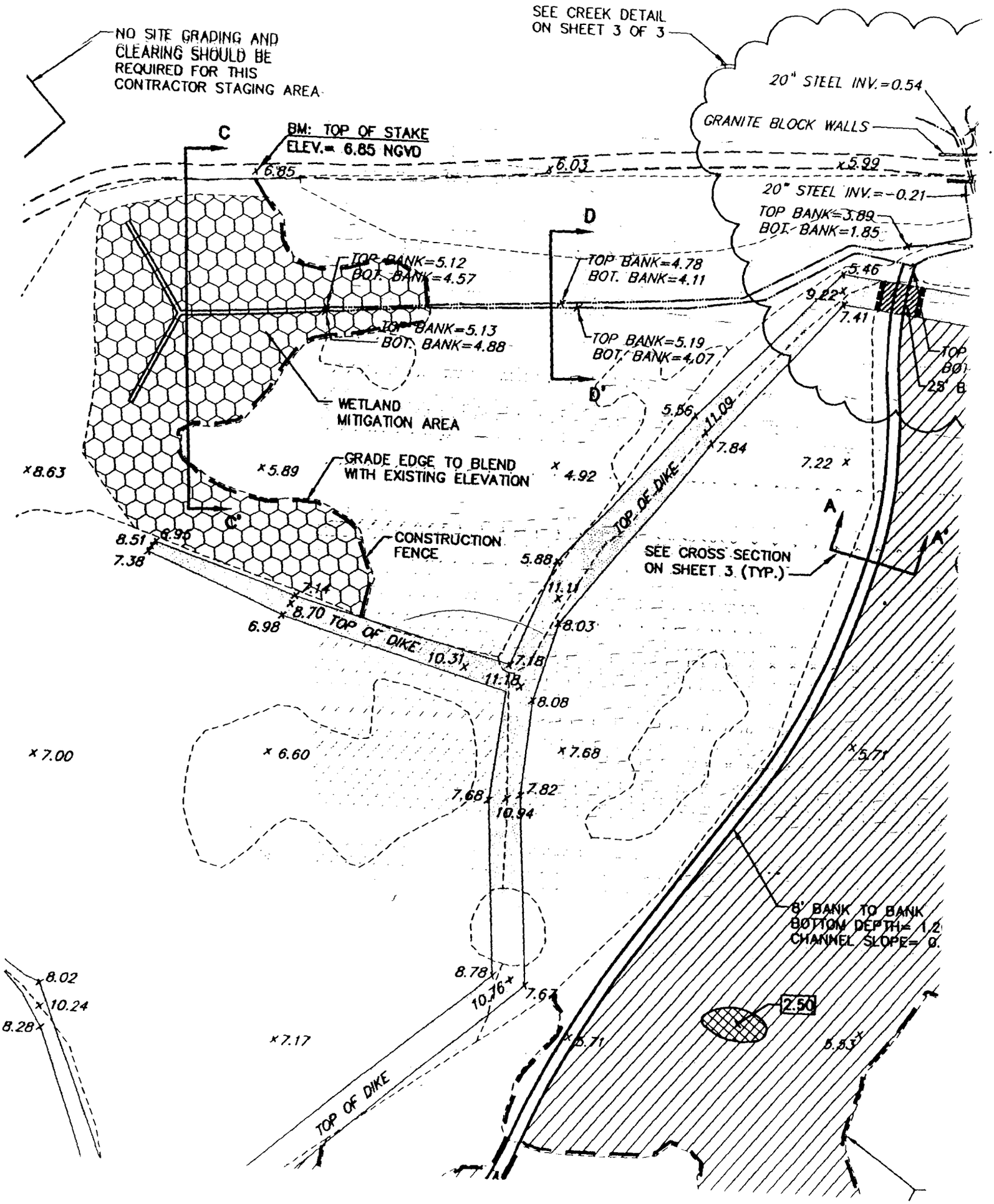
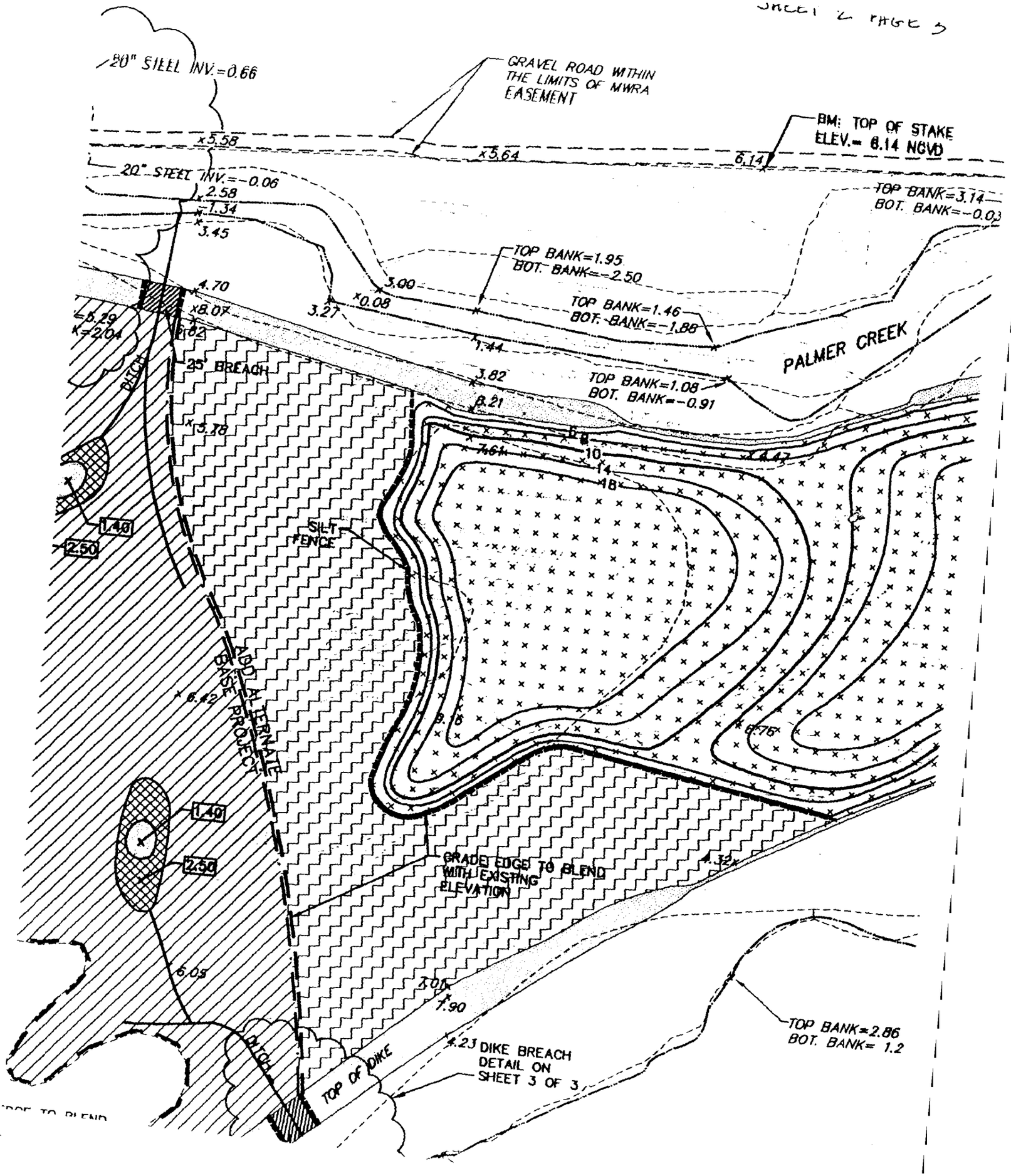
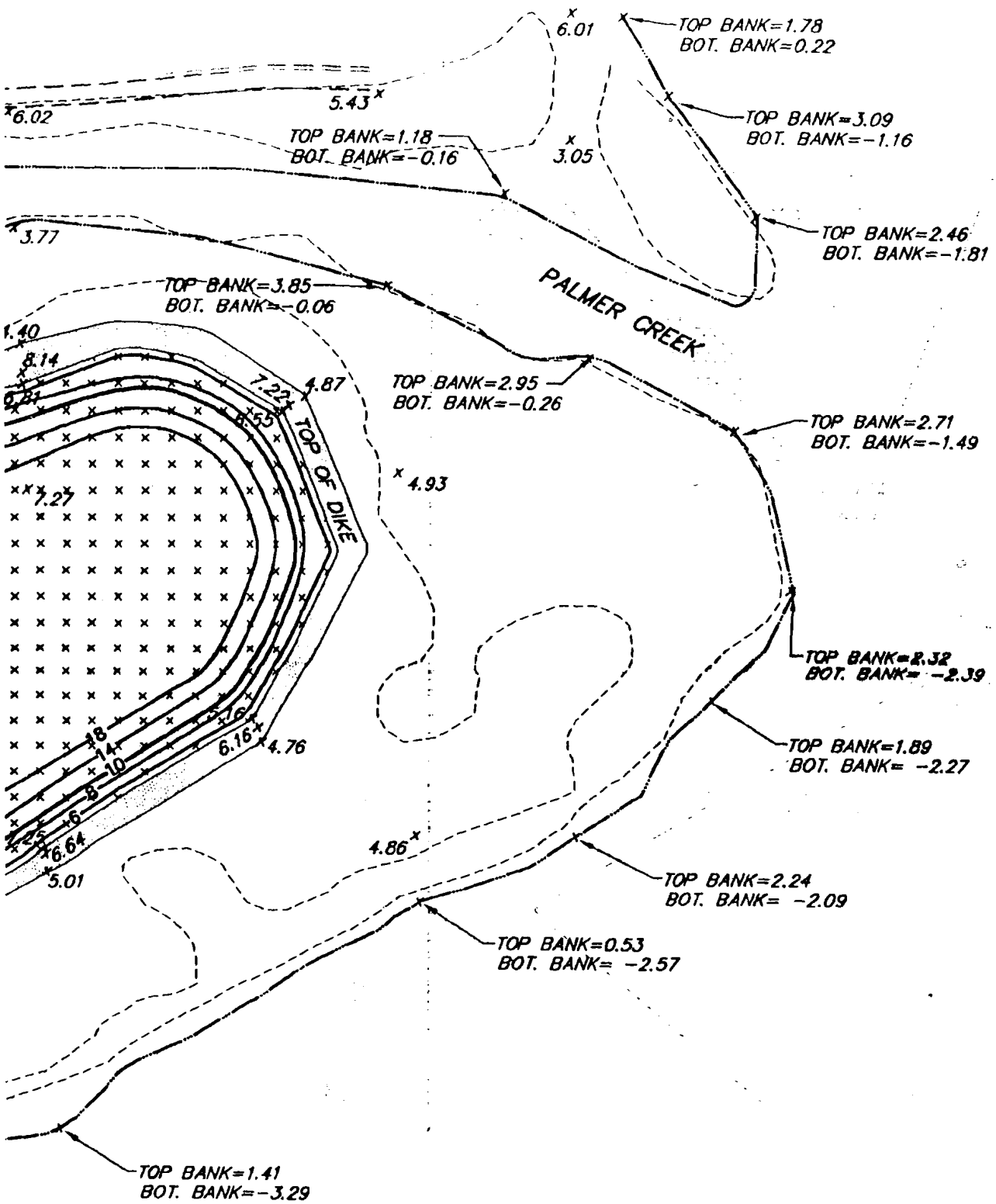
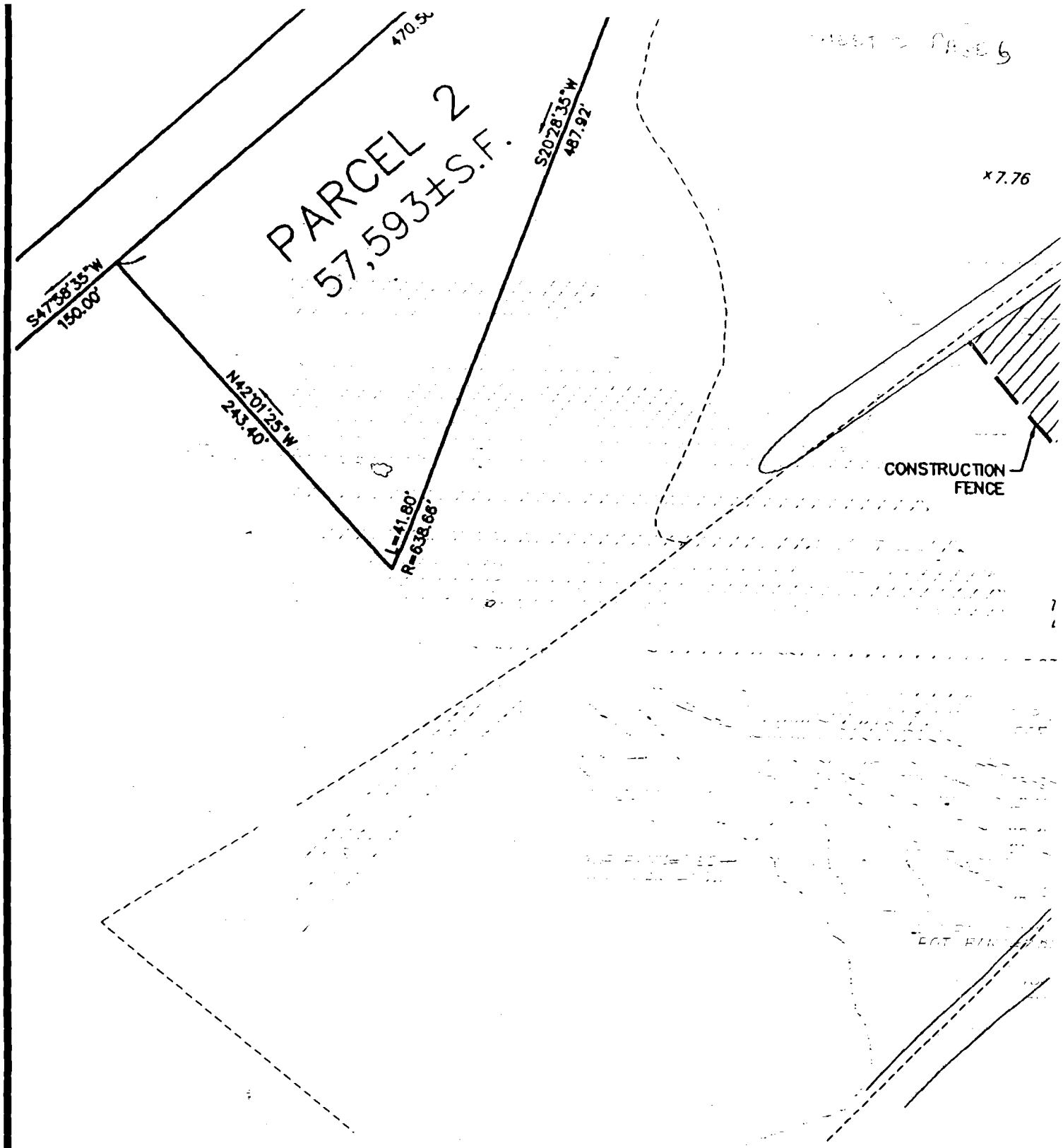



NO SITE GRADING AND CLEARING SHOULD BE REQUIRED FOR THIS CONTRACTOR STAGING AREA
SEE CREEK DETAIL ON SHEET 3 OF 3
20" STEEL INV.=0.54
GRANITE BLOCK WALLS
20" STEEL INV.=-0.21
TOP BANK=3.89
BOT. BANK=1.85
BM: TOP OF STAKE
ELEV.= 6.85 NGVD
C
D
D'
C'
A
A'
6.85
6.03
5.99
TOP BANK=5.12
BOT. BANK=4.57
TOP BANK=4.78
BOT. BANK=4.11
TOP BANK=5.13
BOT. BANK=4.88
TOP BANK=5.19
BOT. BANK=4.07
5.46
9.22
7.41
WETLAND MITIGATION AREA
GRADE EDGE TO BLEND WITH EXISTING ELEVATION
CONSTRUCTION FENCE
TOP OF DIKE
SEE CROSS SECTION ON SHEET 3 (TYP.)
8.63
5.89
4.92
7.22
5.56
11.09
7.84
8.51
6.96
7.38
5.88
11.11
7.14
8.70
6.98
8.03
10.31
7.18
11.18
8.08
7.00
6.60
7.68
5.71
7.68
7.82
10.94
8' BANK TO BANK
BOTTOM DEPTH= 1.2
CHANNEL SLOPE= 0.
8.02
10.24
8.28
8.78
10.76
7.67
2.50
7.17
5.71
5.83


20" STEEL INV.=0.66
GRAVEL ROAD WITHIN THE LIMITS OF MWRA EASEMENT
BM: TOP OF STAKE ELEV.= 6.14 NGVD
20" STEEL INV.=-0.06
TOP BANK=3.14
BOT. BANK=-0.03
TOP BANK=1.95
BOT. BANK=-2.50
TOP BANK=1.46
BOT. BANK=-1.88
TOP BANK=1.08
BOT. BANK=-0.91
PALMER CREEK
25' BREACH
DITCH
SILT FENCE
ADD ALTERNATE BASE PROJECT
GRADE EDGE TO BLEND WITH EXISTING ELEVATION
TOP OF DIKE
DIKE BREACH DETAIL ON SHEET 3 OF 3
TOP BANK=2.86
BOT. BANK= 1.2


6.01
TOP BANK=1.78
BOT. BANK=0.22
5.43
6.02
TOP BANK=3.09
BOT. BANK=-1.16
TOP BANK=1.18
BOT. BANK=-0.16
3.05
3.77
TOP BANK=2.46
BOT. BANK=-1.81
TOP BANK=3.85
BOT. BANK=-0.06
PALMER CREEK
1.40
8.14
6.81
7.22
4.87
8.55
TOP OF DIKE
TOP BANK=2.95
BOT. BANK=-0.26
TOP BANK=2.71
BOT. BANK=-1.49
4.93
7.27
TOP BANK=2.32
BOT. BANK= -2.39
18
14
10
8
6
6.16
4.76
TOP BANK=1.89
BOT. BANK= -2.27
6.64
5.01
4.86
TOP BANK=2.24
BOT. BANK= -2.09
TOP BANK=0.53
BOT. BANK= -2.57
TOP BANK=1.41
BOT. BANK=-3.29

EARTH TECH



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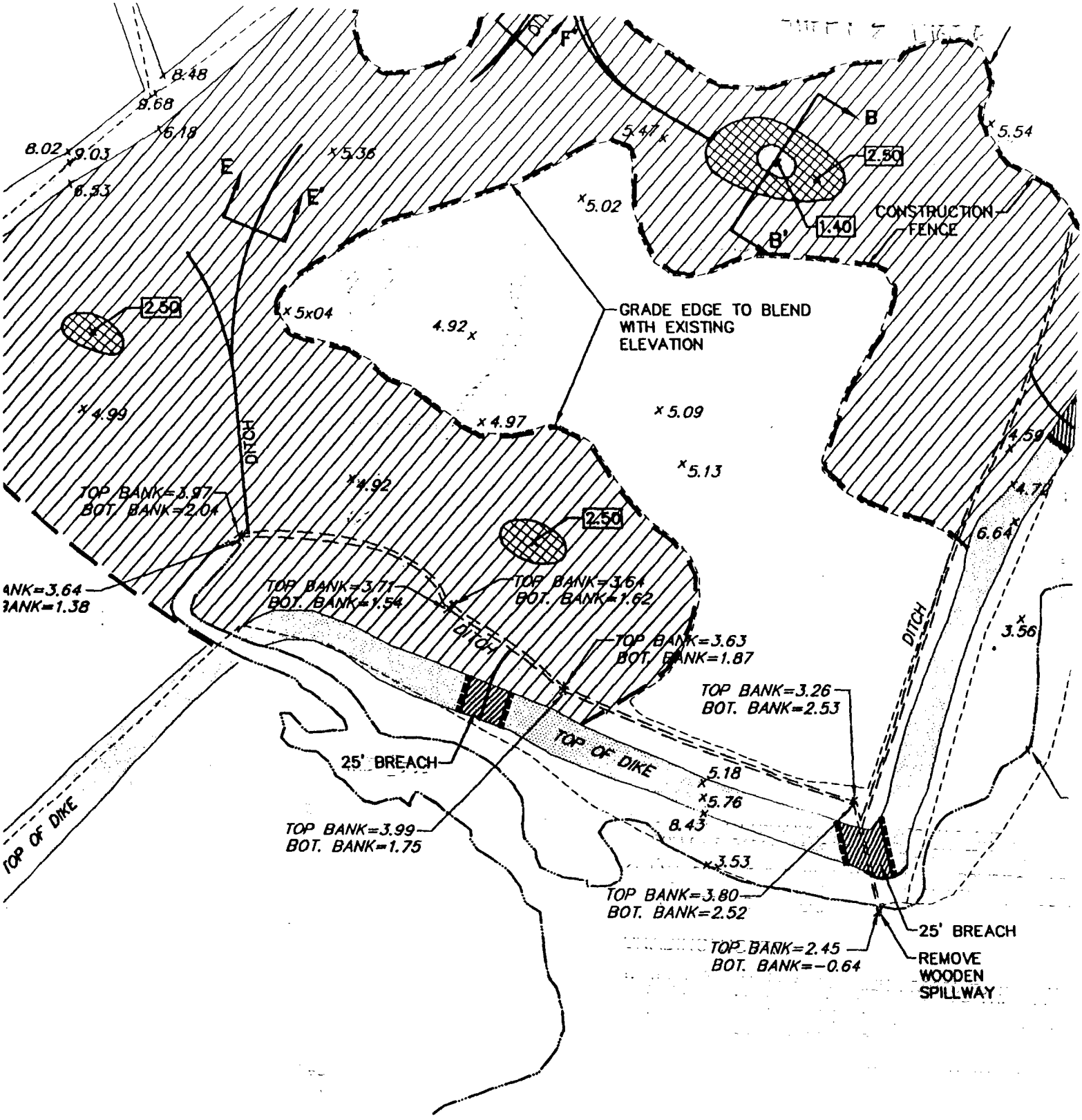
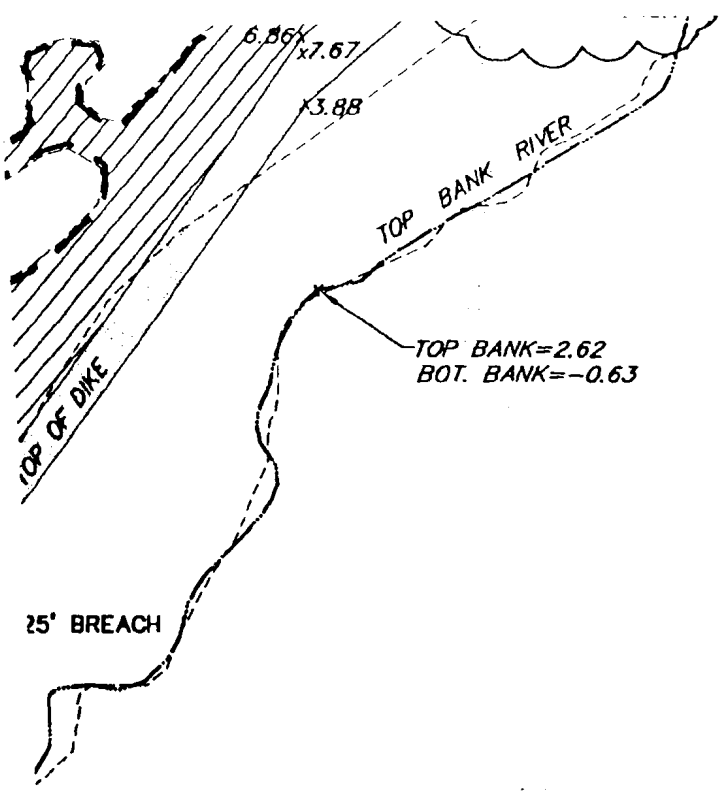

F
F'
B
B'
E
E'
8.48
8.68
6.18
8.02
9.03
6.53
5.36
5.41
5.54
5.02
2.50
1.40
CONSTRUCTION FENCE
GRADE EDGE TO BLEND WITH EXISTING ELEVATION
5x04
4.92
4.99
4.97
5.09
5.13
4.59
4.74
6.64
3.56
DITCH
TOP BANK=3.97
BOT. BANK=2.04
TOP BANK=3.64
BOT. BANK=1.38
TOP BANK=3.71
BOT. BANK=1.54
TOP BANK=3.64
BOT. BANK=1.62
TOP BANK=3.63
BOT. BANK=1.87
TOP BANK=3.26
BOT. BANK=2.53
25' BREACH
TOP OF DIKE
5.18
5.76
8.43
3.53
TOP BANK=3.99
BOT. BANK=1.75
TOP BANK=3.80
BOT. BANK=2.52
TOP BANK=2.45
BOT. BANK=-0.64
25' BREACH
REMOVE WOODEN SPILLWAY
80
0
40
SCALE: 1 INCH



NEPONSET RIVER

WETLAND MITIGATION AREA TO BE EXCAVATED TO ELEV. 4.

BASE PROJECT AREA TO BE EXCAVATED TO ELEV. 4.

ADD ALTERNATE AREA TO BE EXCAVATED TO ELEV. 4.

PROPOSED PANNE AREA TO BE EXCAVATED TO EL

PROPOSED POOL AREA TO BE EXCAVATED TO EL

LIMITS OF DISPOSAL AREA

PROPOSED DITCH

PROPOSED CREEK

PROPOSED SILT FENCE

PROPOSED CONSTRUCTION FENCE

VK=2.74
INK=-1.16

NOTES:

1. PARCEL 1 CONTAINS 40± ACRES AND THE PROPERTY LINE FOLLOWS 7150±' ALONG THE NEPONSET RIVER.
2. FOR A COMPLETE PROPERTY LINE DESCRIPTION OF PARCEL 1, SEE MDC PLAN NO. 183, DATED MARCH 15, 1899 BY WILLIAM T. PIERCE, ENGINEER.

GRADING NOTES:

1. TRANSITIONAL EDGE BETWEEN PROTECTED SALT MARSH, DISPOSAL AREA, DIKES, BASE PROJECT AND ADD ALTERNATE AND GRADING MARSH FLATS TO BE GRADUALLY BLENDED TO MATCH EXISTING ELEVATION.
2. BASE PROJECT ON-SITE DISPOSAL AREA GRADING. ADD ALTERNATE DISPOSAL AREA GRADING SHOWN ON SHEET 3.

160

SHEET 2 PAGE 8

2.50

.40

METROPOLITAN DISTRICT COMMISSION

GRADING/EROSION CONTROL PLAN

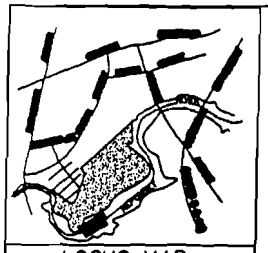
NEPONSET RIVER SALT MARSH RESTORATION

DESIGNED BY	DWG SCA 1"=80'
DRAWN BY	CONTRAC 27157
CHECKED BY	DATE 3/23/00

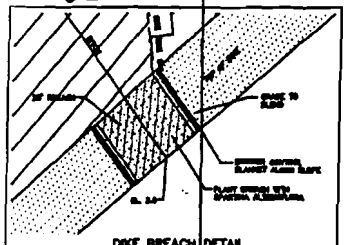
2

SHEET 3

PAGE 1

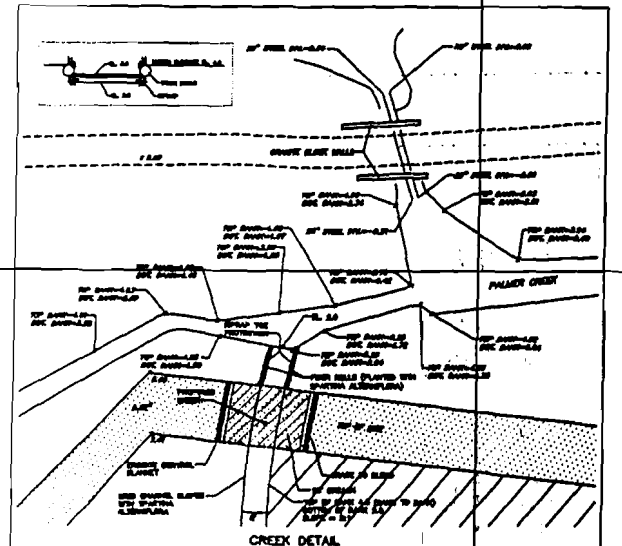


LOCUS MAP
- NOT TO SCALE -



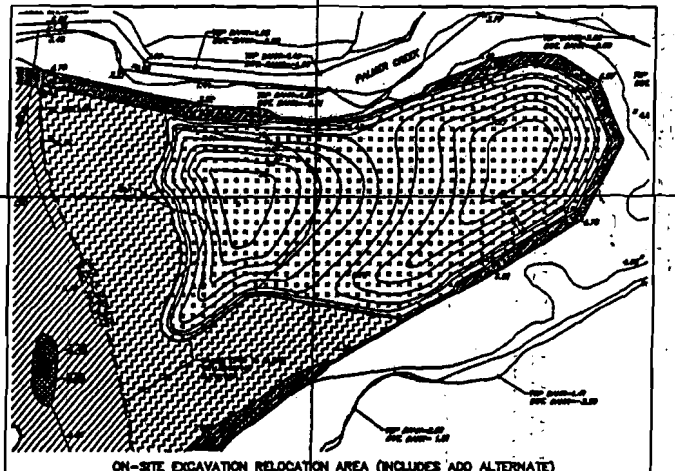
DIKE BREACH DETAIL
SCALE 1"=20'

PAGE 2



CREEK DETAIL
SCALE 1"=20'

PAGE 3



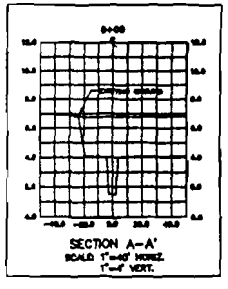
ON-SITE EXCAVATION RELOCATION AREA (INCLUDES ADD ALTERNATE)
SCALE 1"=20'

PAGE 4

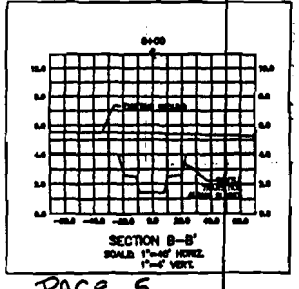
General Sequence of Construction

The following is a proposed sequence to guide the restoration effort:

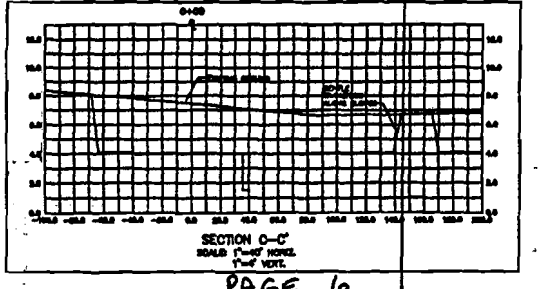
- Establish access routes, soil disposal area in the field.
- Demarcate limits of work and areas of existing salt marsh (silt fence) within the site to be maintained.
- Install temporary bridge and swamp mats for crossing existing creek and marsh areas (prior approval by MDC on location). Remove structures and restore disturbed areas to original conditions.
- Mow Phragmites within limits of restoration area, proposed ditches and disposal area. Cut to approximately 6-inches and remove stems.
- Follow-up with treatment of herbicide on cut stems to weaken rootstock.
- Create temporary berms along the southern edge of the site in areas where tidal flooding can be controlled and minimize flooding.
- Stake out the location of ditches, pools, pannes and areas to be excavated.
- Establish grade stakes for rough elevations for proposed marsh surface.
- Prepare spoil disposal area and install erosion and sedimentation controls around perimeter.
- Avoid work during lower tides and other extreme high water conditions.
- Use specialized construction equipment (long-reach excavators, hydraulic dredge, etc...), as necessary, for excavation and site work.
- Excavate overburden in surrounding marsh to achieve proposed marsh surface elevations.
- Establish gentle sloping of marsh plain towards creek, ditches and pannes of approximately 0.01%.
- Excavate pools, pannes and secondary ditches within the site, including ditches behind the dike breaches.
- Plant slopes of newly formed creeks and ditches with Spartina alterniflora.
- Dewater portions of site as necessary by using temporary pits.
- Survey final elevations as construction progresses through site.
- Relocate excavated material and shape disposed area according to plan.
- Excavate primary creek from south to north towards Palmer Creek. Do not establish connection with Creek.
- Upon final grading and completion of pools and ditches, complete connection to Palmer Creek and stabilize creek slopes using riprap, fiber rolls and erosion control blankets.
- During the same time as establishing the connection to Palmer Creek create breaches in the perimeter dikes. Stabilize slopes adjacent to breaches with erosion control blankets.
- Stabilize disposed area with erosion control materials (silt fence, geotextile fabric) and revegetate according to plan.
- Follow-up with selective herbicide treatment as needed.



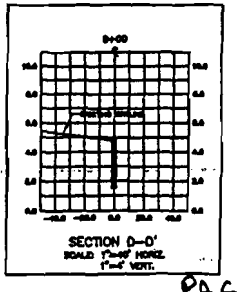
SECTION A-A'
SCALE 1"=40' HORIZ.
1"=4' VERT.



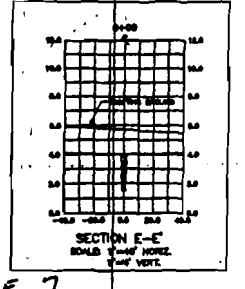
SECTION B-B'
SCALE 1"=40' HORIZ.
1"=4' VERT.



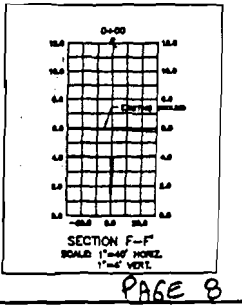
SECTION C-C'
SCALE 1"=40' HORIZ.
1"=4' VERT.



SECTION D-D'
SCALE 1"=40' HORIZ.
1"=4' VERT.



SECTION E-E'
SCALE 1"=40' HORIZ.
1"=4' VERT.



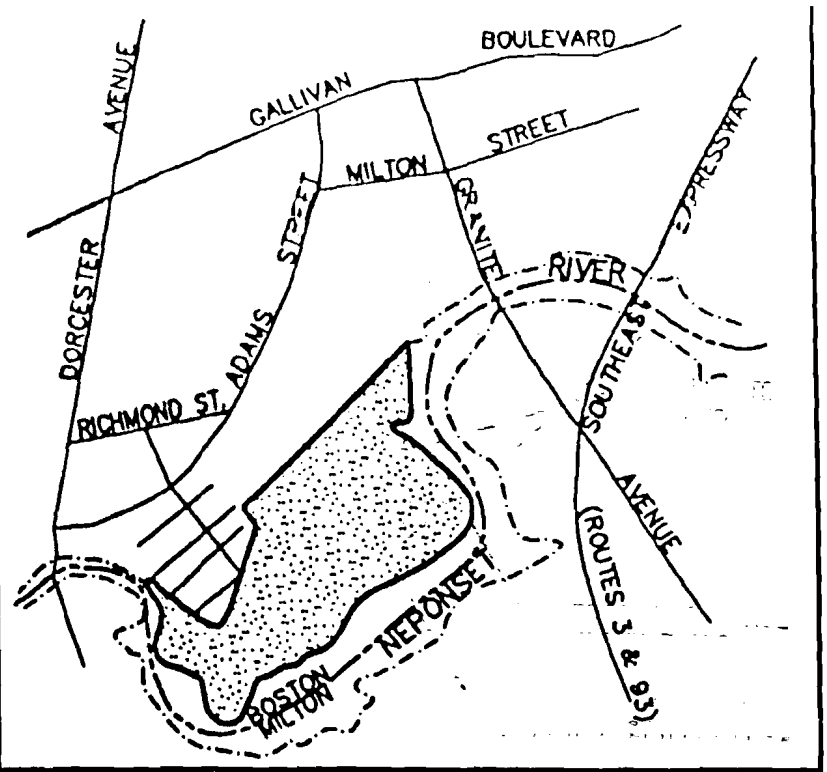
SECTION F-F'
SCALE 1"=40' HORIZ.
1"=4' VERT.

PAGE 5 PAGE 6 PAGE 7 PAGE 8

EARTH TECH

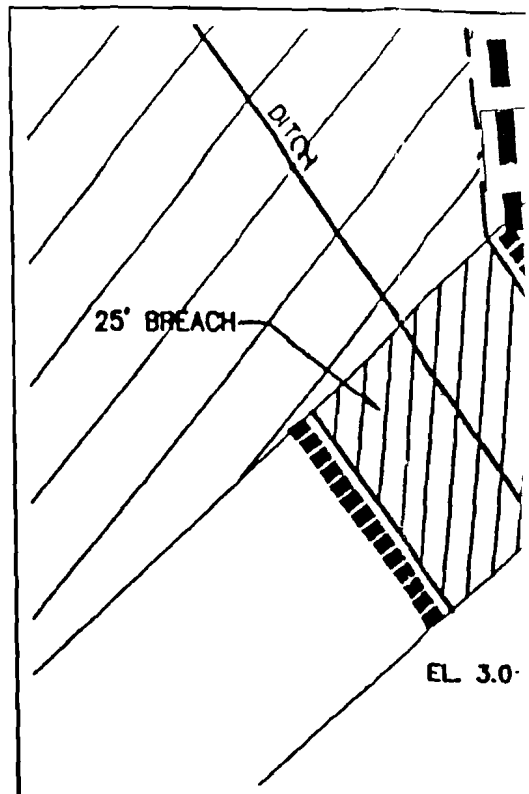
METROPOLITAN DISTRICT COMMISSION
GRADING/EROSION CONTROL DETAILS
NEPONSET RIVER SALT MARSH RESTORATION
DORCHESTER, MASSACHUSETTS

3
SHEET - OF -



LOCUS MAP

– NOT TO SCALE –



DIKE BI
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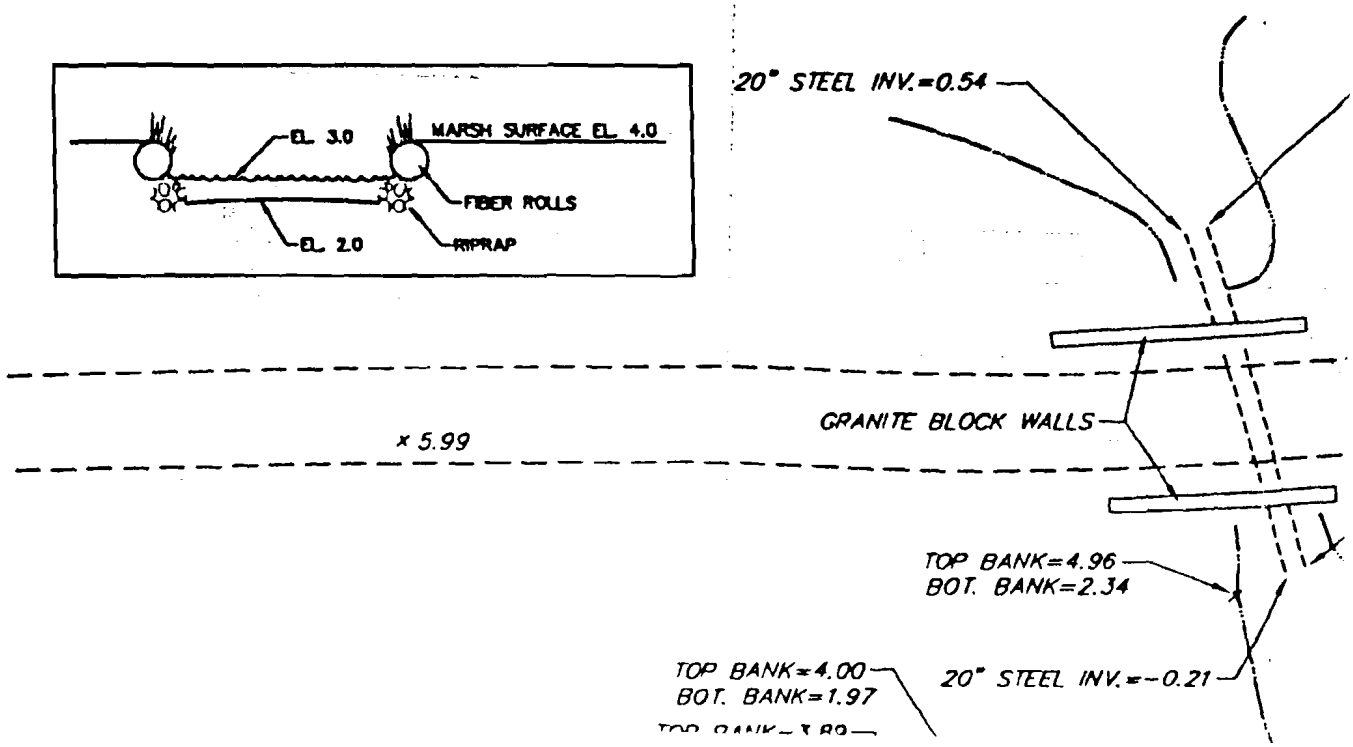
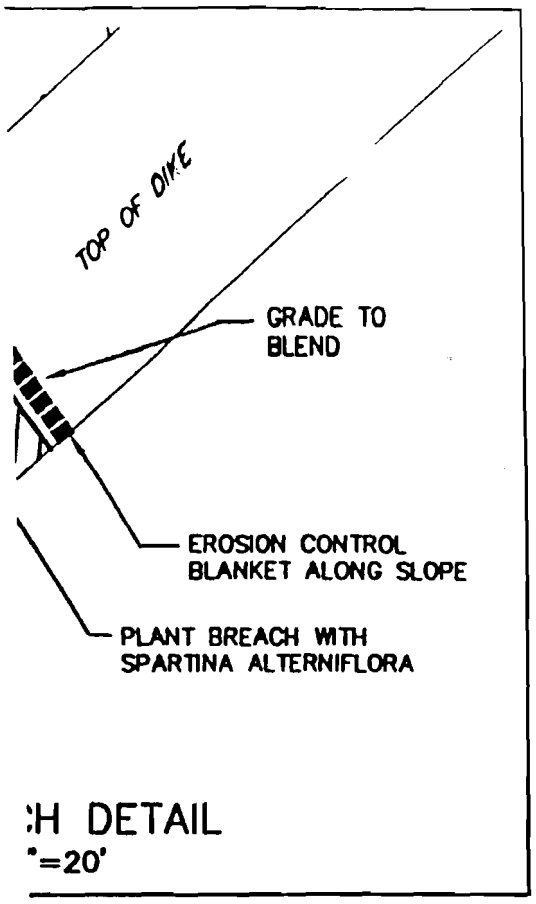
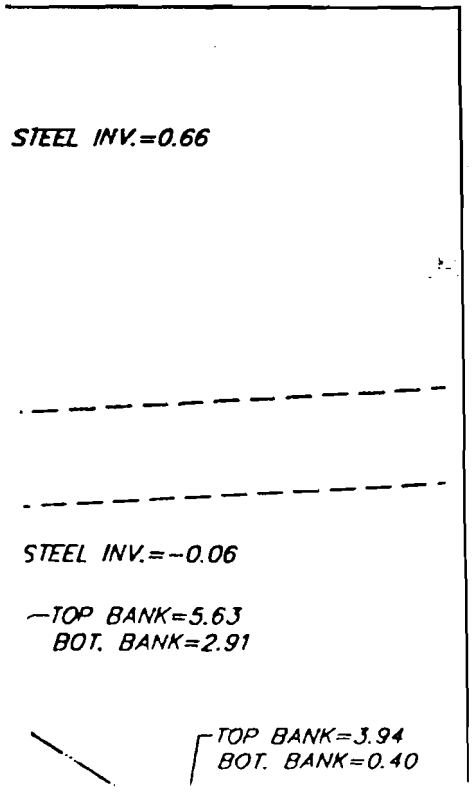



TOP OF DIKE
GRADE TO BLEND
EROSION CONTROL BLANKET ALONG SLOPE
PLANT BREACH WITH SPARTINA ALTERNIFLORA
:H DETAIL
"=20'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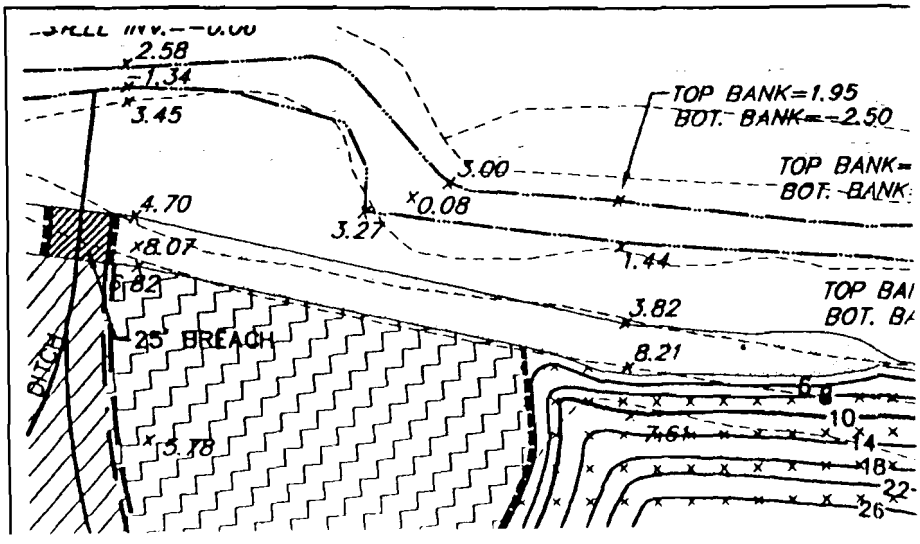
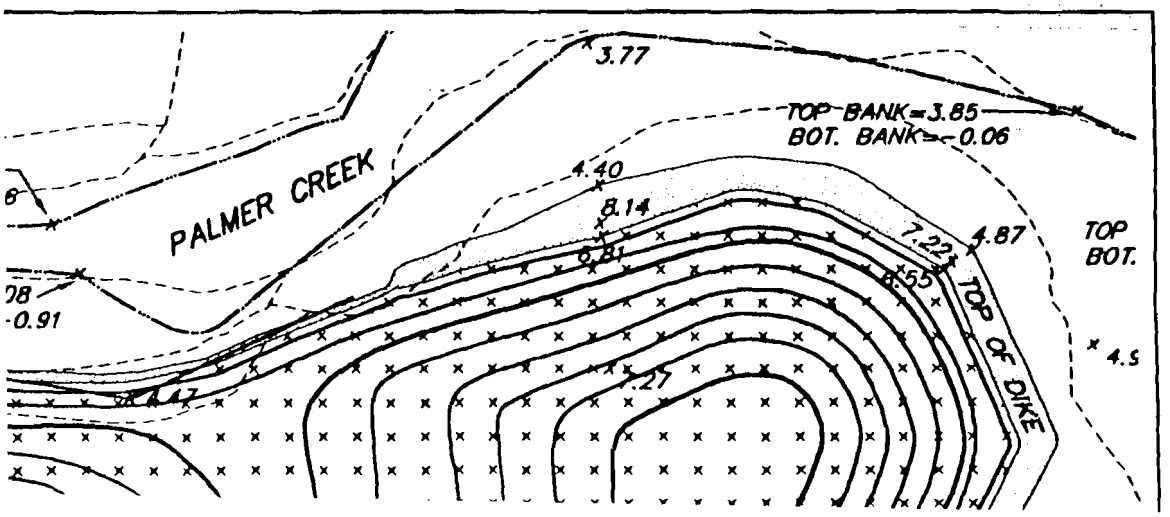
STEEL INV.=-0.06
TOP BANK=5.63
BOT. BANK=2.91
TOP BANK=3.94
BOT. BANK=0.40


2.58
1.34
3.45
TOP BANK=1.95
BOT. BANK=-2.50
3.00
0.08
4.70
3.27
8.07
1.44
6.82
3.82
25' BREACH
8.21
DITCH
5.78
10
14
18
22
26



General Sequence of

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- Demarcate l within the s
- Install temp marsh areas restore dist
- Mow Phragn disposal are
- Follow-up v
- Create temp where tidal
- Stake out t
- Establish gr
- Prepare spc around peri
- Avoid work
- Use special dredge, etc
- Excavate o

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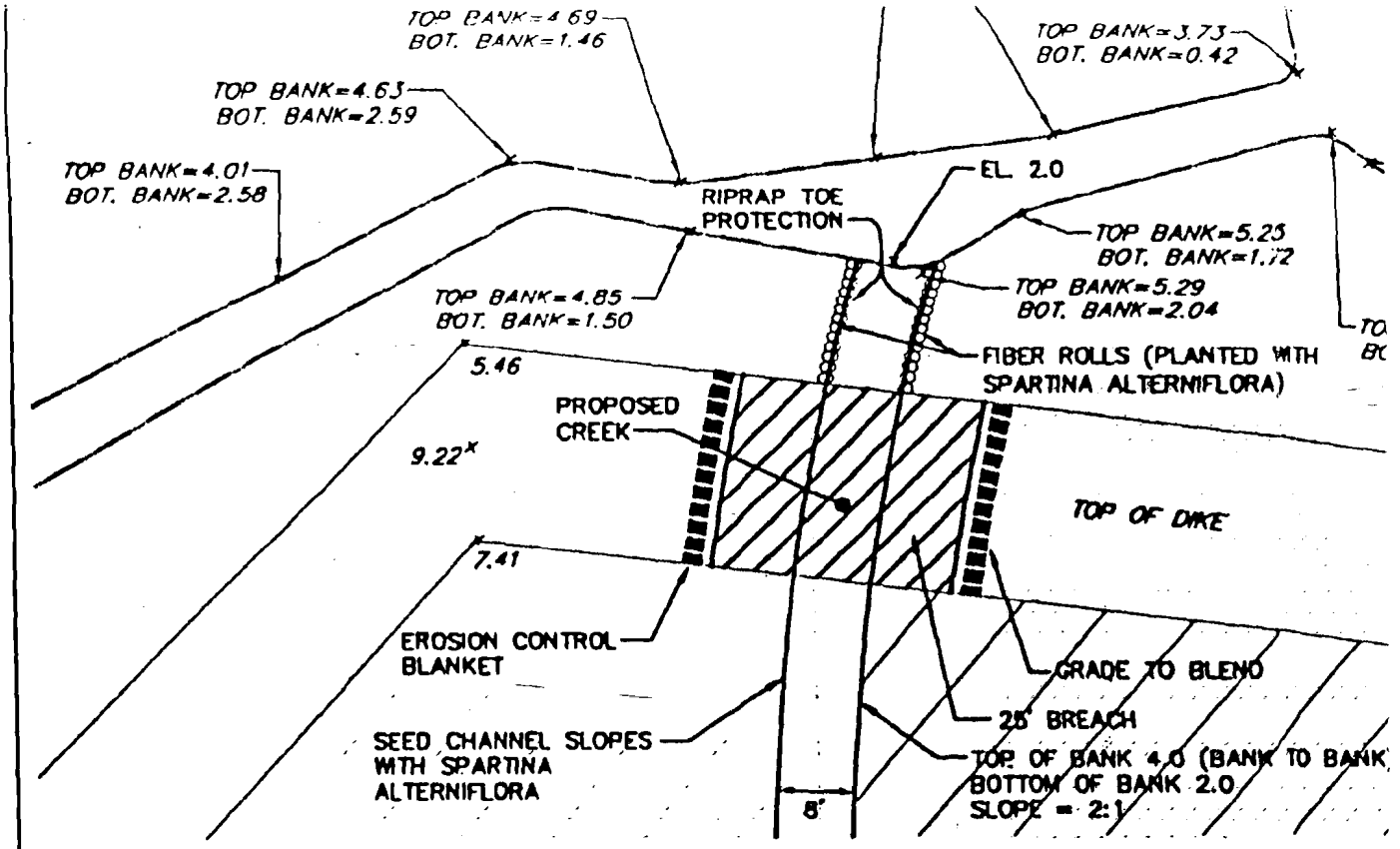
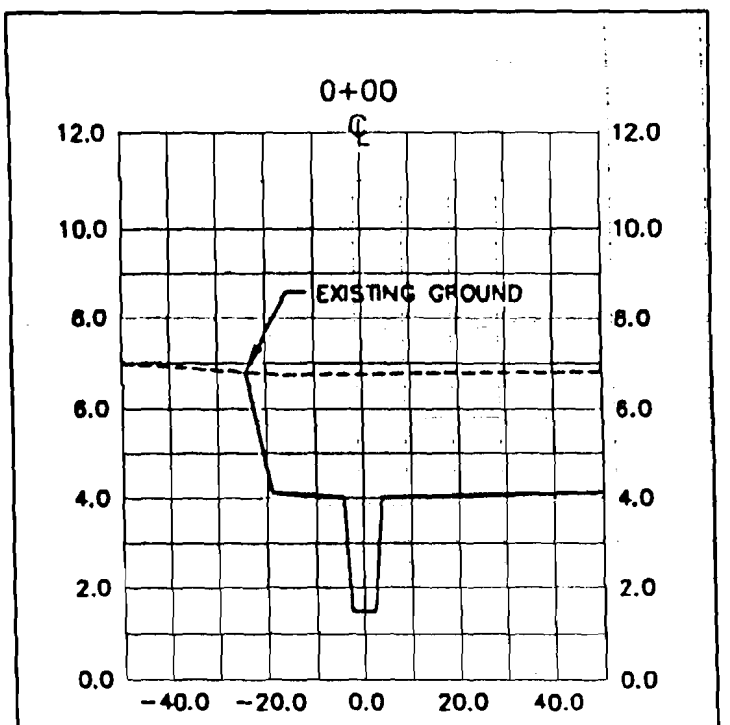
rden in surrounding marsh to achieve proposed evations

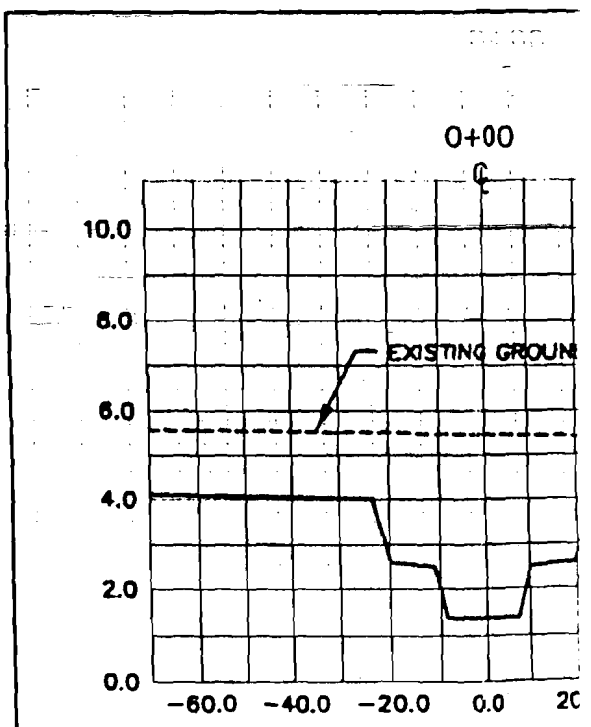
EARTH TECH



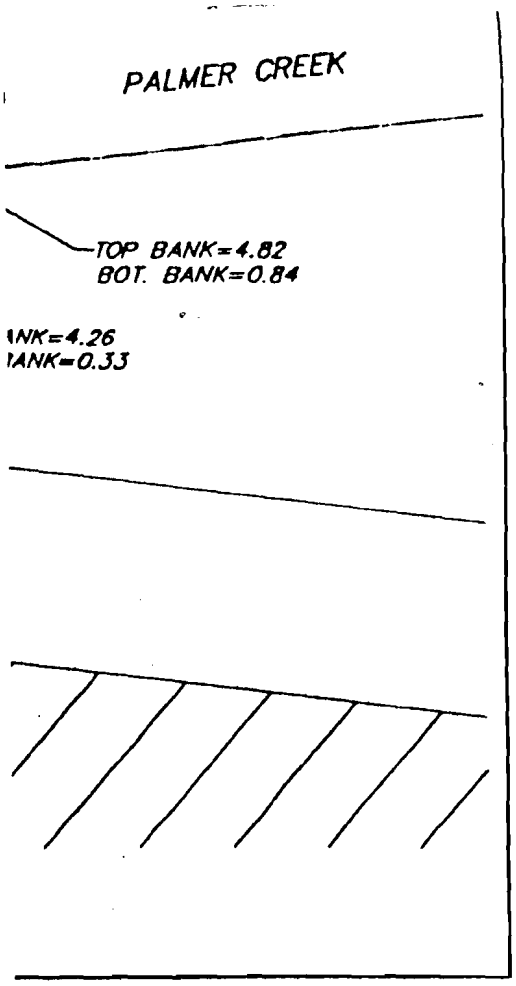
CREEK DETAIL
SCALE: 1"=20'

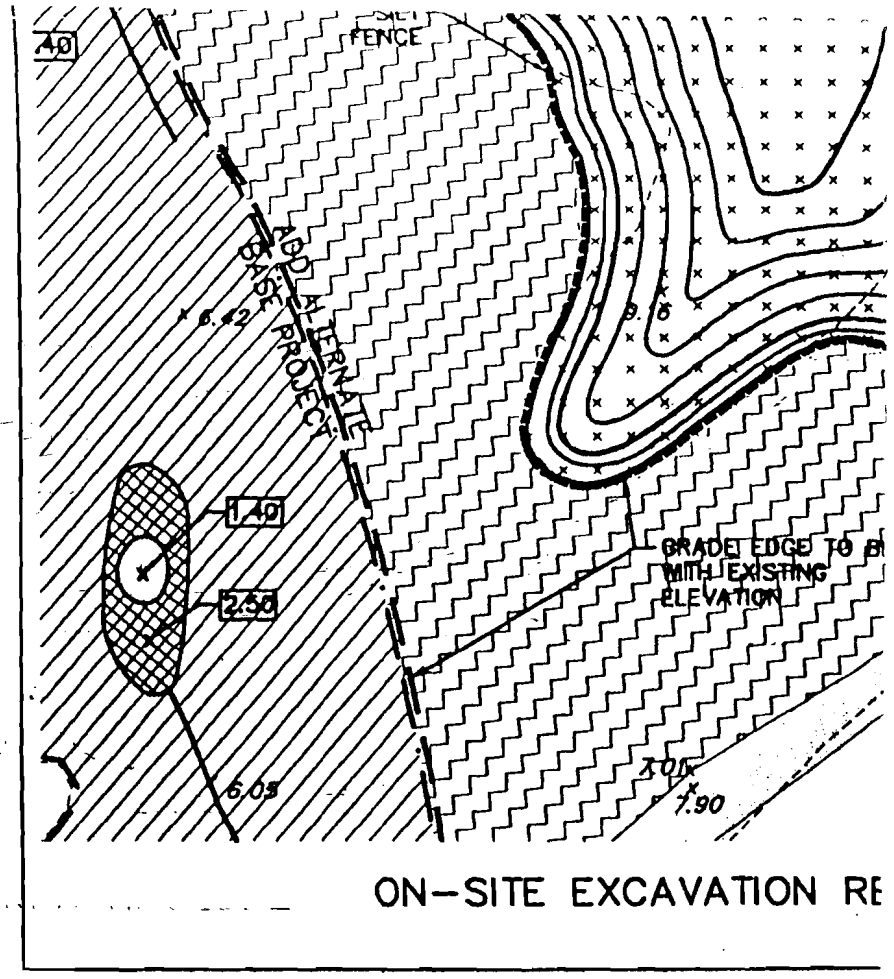


SECTION A–A'
SCALE: 1"=40' HORIZ.
1"=4' VERT.

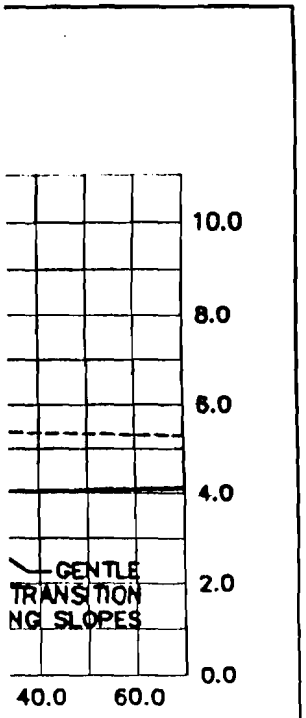


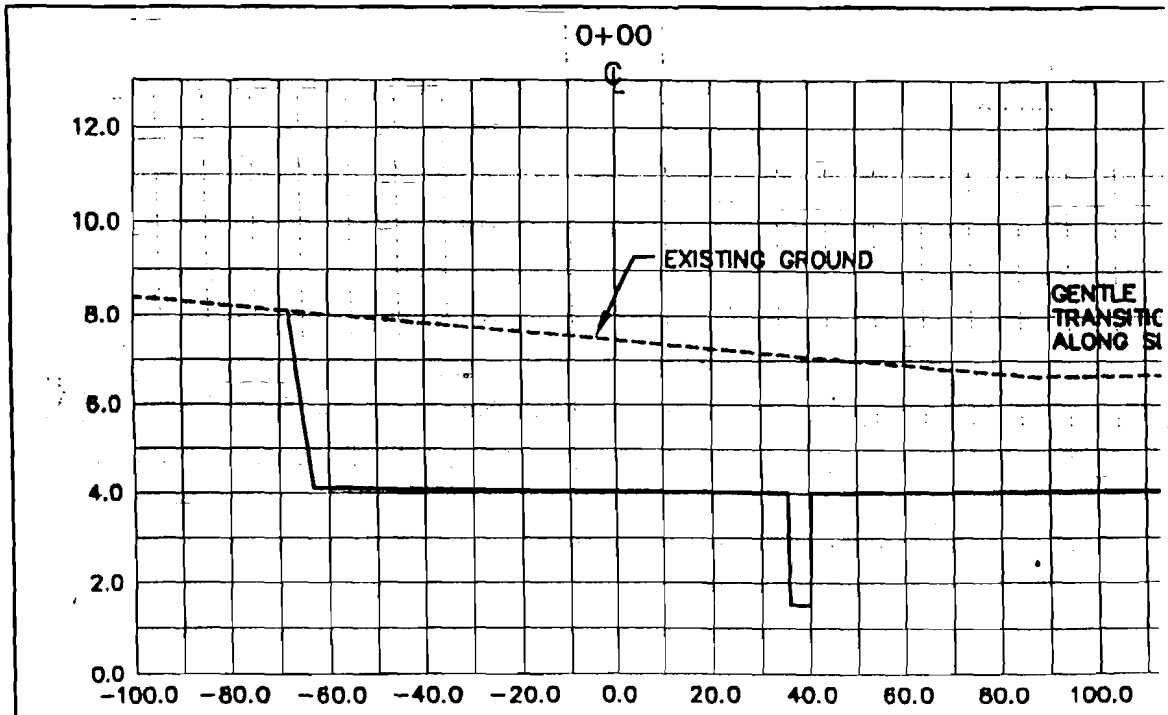
SECTION B-
SCALE: 1"=40' H
1"=4' VE



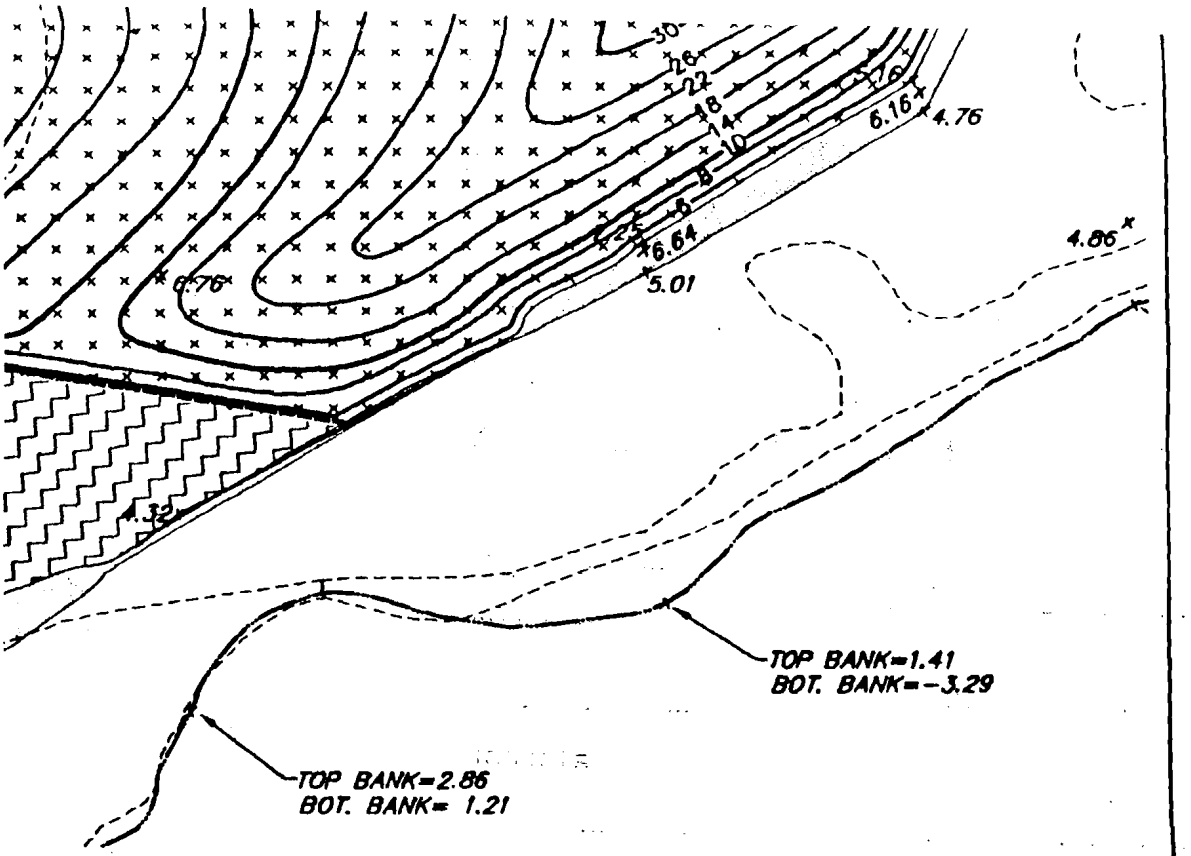


ON-SITE EXCAVATION RE





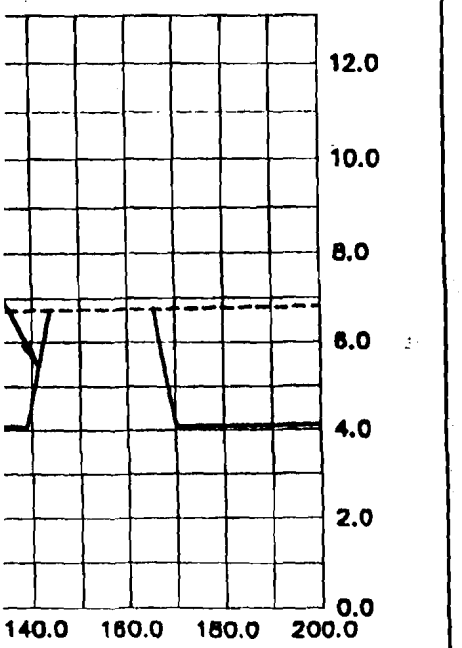
SECTION C-C'
SCALE: 1"=40' HORIZ.
1"=4' VERT.

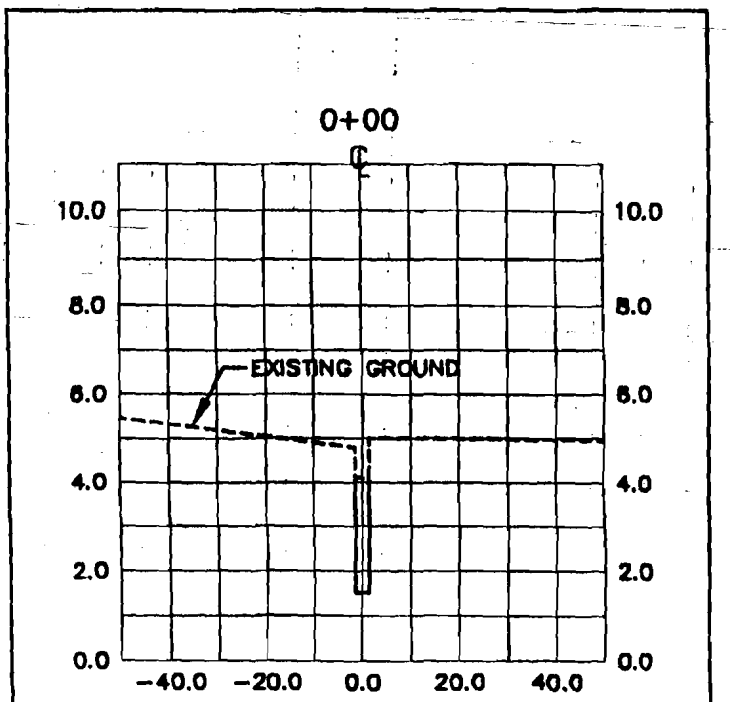


ATION AREA (INCLUDES ADD ALTERNATE)
SCALE: 1"=80'

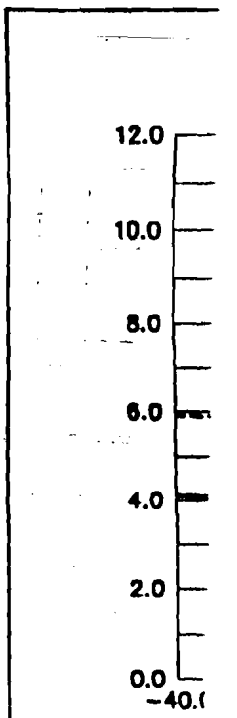
pannes or ap

- Excavate poo including ditc
- Plant slopes
- Dewater port
- Survey final
- Relocate exc
- Excavate pri not establist
- Upon final g to Palmer C erosion cont
- During the breaches in erosion con
- Stabilize dis fabric) and
- Follow-up





SECTION D-D'
SCALE: 1"=40' HORIZ.
1"=4' VERT.



ɔximately 0.01%.

pannes and secondary ditches within the site,
ɜ behind the dike breaches.

newly formed creeks and ditches with Spartina alterniflora.

ɜ of site as necessary be using temporary pits.

'ations as construction progresses through site.

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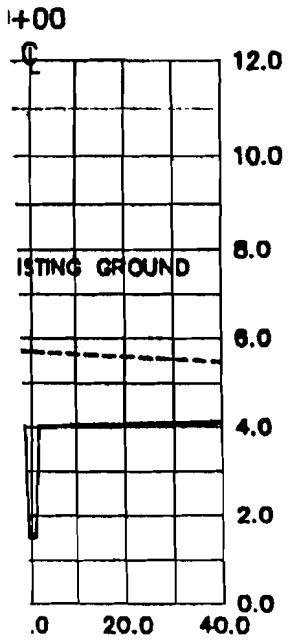
/ creek from south to north towards Palmer Creek. Do
nnection with Creek.

ıg and completion of pools and ditches, complete connection
and stabilize creek slopes using riprap, fiber rolls and
lankets.

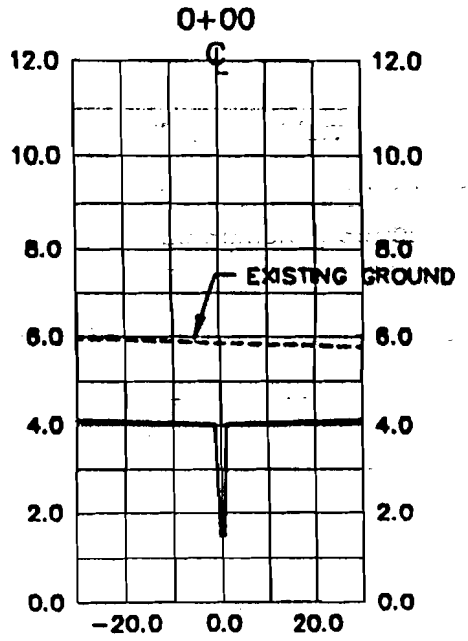
time as establishing the connection to Palmer Creek create
perimeter dikes. Stabilize slopes adjacent to breaches with
lankets.

area with erosion control materials (silt fence, geotextile
etate according to plan.

ɜlective herbicide treatment as needed.



ɪ E–E'
40' HORIZ.
4' VERT.



SECTION F–F'
SCALE: 1"=40' HORIZ.
1"=4' VERT.

METROPOLITAN DISTRICT COMMISSION

GRADING/EROSION CONTROL DETAILS

NEPONSET RIVER SALT MARSH RESTORATION

DORCHESTER, MASSACHUSETTS

DESIGNED BY	DWG SCALE AS SHOWN
DRAWN BY	CONTRACT NO 27157
CHECKED BY	DATE 3/23/00

3

SHEET 3 PAGE 8

SHEET 3 OF 3