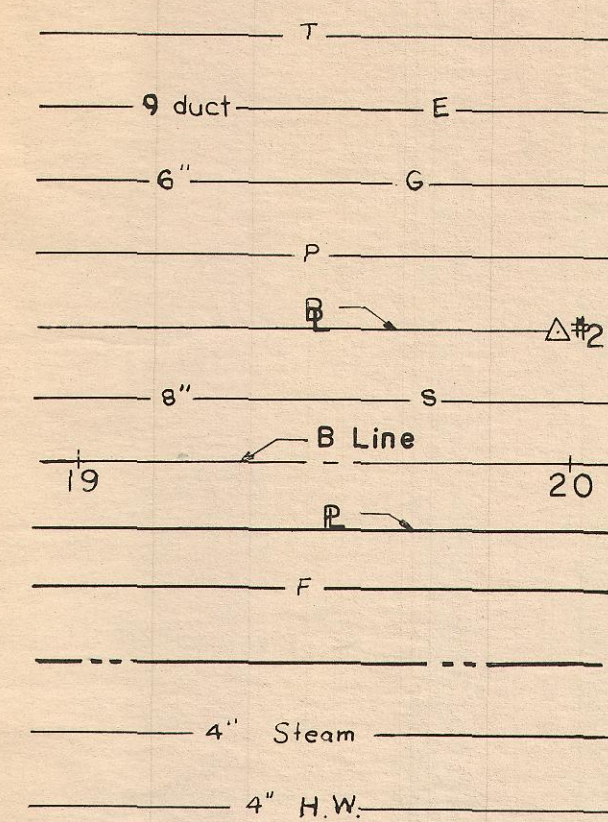


EXISTING TOPOGRAPHY & ABBREVIATIONS:



Underground Telephone Duct N.E.T. & T.
Underground Electric Duct N.B.G. & E.L. Co.
6" Gas Main N.B.G. & E.L. Co.
Underground Police Line
Baseline and Angle Point No. 21
8" Sanitary Sewer
Stationing Line
Profile Line
Underground Fire Alarm Line
Easement Line or R.O.W. Line
4" Steam Pipe
4" Hot Water

Anticipated Rock Line

Stone Wall

Tree

Curb Inlet

Manhole

Water Gate Valve

Hydrant

Street Light or Utility Pole with Street Light

Utility Pole without Street Light

Private Utility Pole

Fire Alarm Box

Police Call Box

N.B.G. & E.L. Co.

N.B.W.W.

N.E.T. & T. or A.T. & T.

Conc. Sdk.

Bit. Conc.

P.V.R.C.

P.R.C.

P.V.I.

P.I.

L.V.C.

M.H.W.

M.L.W.

R.O.W.

B.O.W.

Inv.

M.H.

C.B.

R.C.

C.C.

B.C.

E.C.

E.P.

S.B.

New Bedford Gas and Edison Light Company

New Bedford Water Works

New England Telephone and Telegraph

Portland Cement Concrete Sidewalk

Bituminous Concrete

Point of Reversing Vertical Curve

Point of Reversing Horizontal Curve

Point of Intersection (Vertical Curve)

Point of Intersection (Horizontal)

Length of Vertical Curve

Mean High Water

Mean Low Water

Right of way

Back of Walk

Invert

Manhole

Catch Basin

Reinforced Concrete

Center to Center

Beginning of Horizontal Curve

End of Horizontal Curve

Edge of Pavement

Stone Bound

PROPOSED CONSTRUCTION: (See Note 1)

12" V.C.P.

24" R.C.P.

16" C.I.P.

New Manhole (4' or 5' diameter)

New Special Manhole

New Catch Basin (Number 13)

New Water Gate Valve

New Hydrant & Valve Assembly (See Water Details Sht)

Existing Pipe to be Plugged & Abandoned or Removed (Removal req'd only where indicated on Drawings)

Existing Manhole to be Removed

New Street Light Foundation and Conduit

New Police Alarm Foundation & Pedestal

New Fire Alarm Foundation & Pedestal

New Chain Link Fence

New Sign (See Note 14)

Finished Pavement Grade (See Note 5)

New Retaining Wall

New Granite Block Paving

New Property Monument (Number 19)

New Tree or Shrub — Deciduous (See Note 12)

New Tree or Shrub — Evergreen (See Note 12)

Conform to Existing Surface

Curb (Granite or Bit. Conc.)

Pavement

Sidewalk (Conc. or Bit. Conc.)

New Reinforced Concrete Box Culvert (Twin 13' x 7' Shown)

Top of Fill (See Fill & Grading Sheet)

Toe of Slope

New 12" Vitrified Clay Sanitary Sewer Pipe. (See Note 10)

New 24" Reinforced Concrete Storm Drain Pipe. (See Note 9)

New 16" Cast Iron Pipe. (Water pipe except where noted otherwise)

New Manhole (4' or 5' diameter)

New Special Manhole

New Catch Basin (Number 13)

New Water Gate Valve

New Hydrant & Valve Assembly (See Water Details Sht)

Existing Pipe to be Plugged & Abandoned or Removed (Removal req'd only where indicated on Drawings)

Existing Manhole to be Removed

New Street Light Foundation and Conduit

New Police Alarm Foundation & Pedestal

New Fire Alarm Foundation & Pedestal

New Chain Link Fence

New Sign (See Note 14)

Finished Pavement Grade (See Note 5)

New Retaining Wall

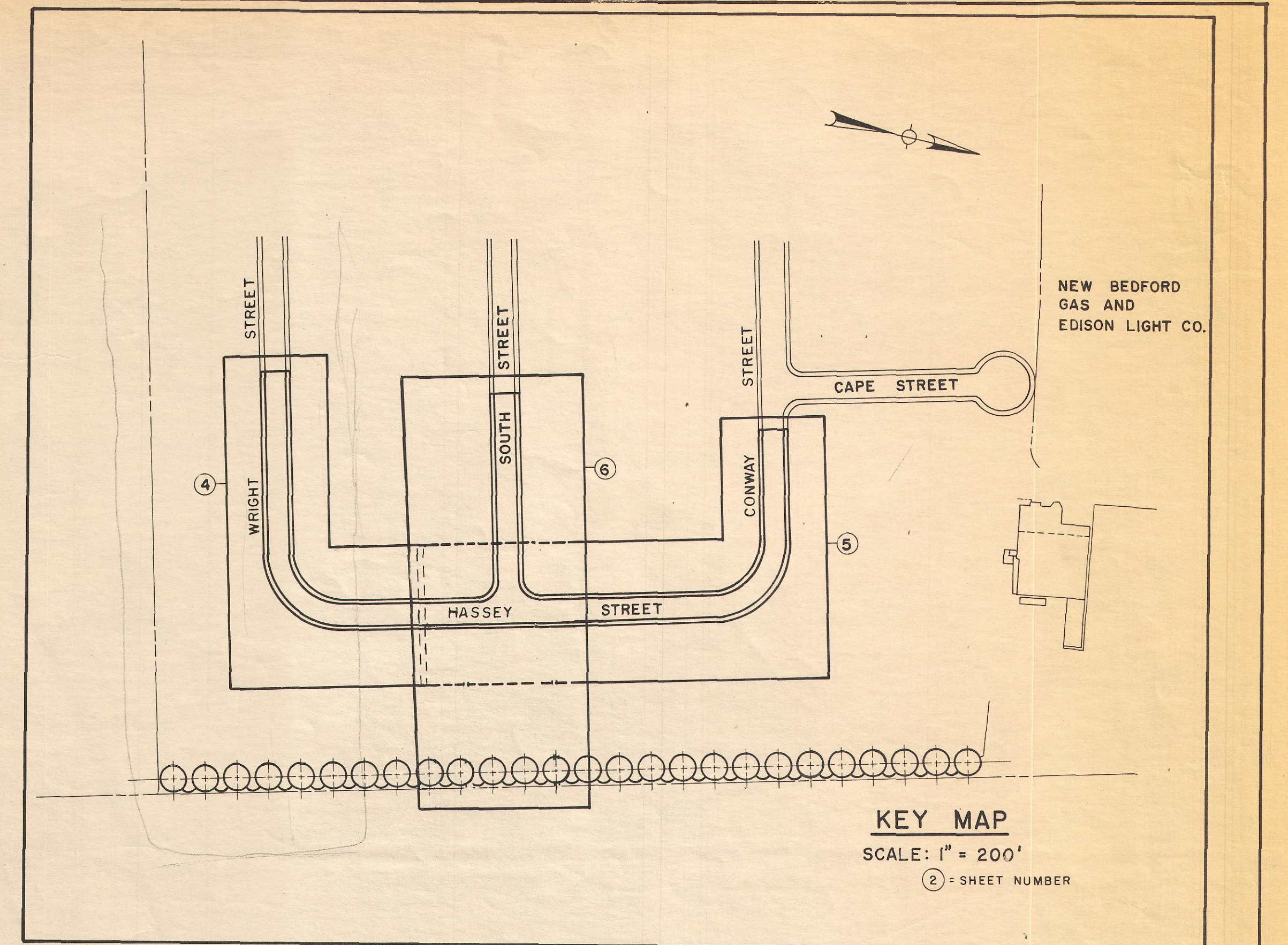
New Granite Block Paving

New Property Monument (Number 19)

New Tree or Shrub — Deciduous (See Note 12)

New Tree or Shrub — Evergreen (See Note 12)

Conform to Existing Surface

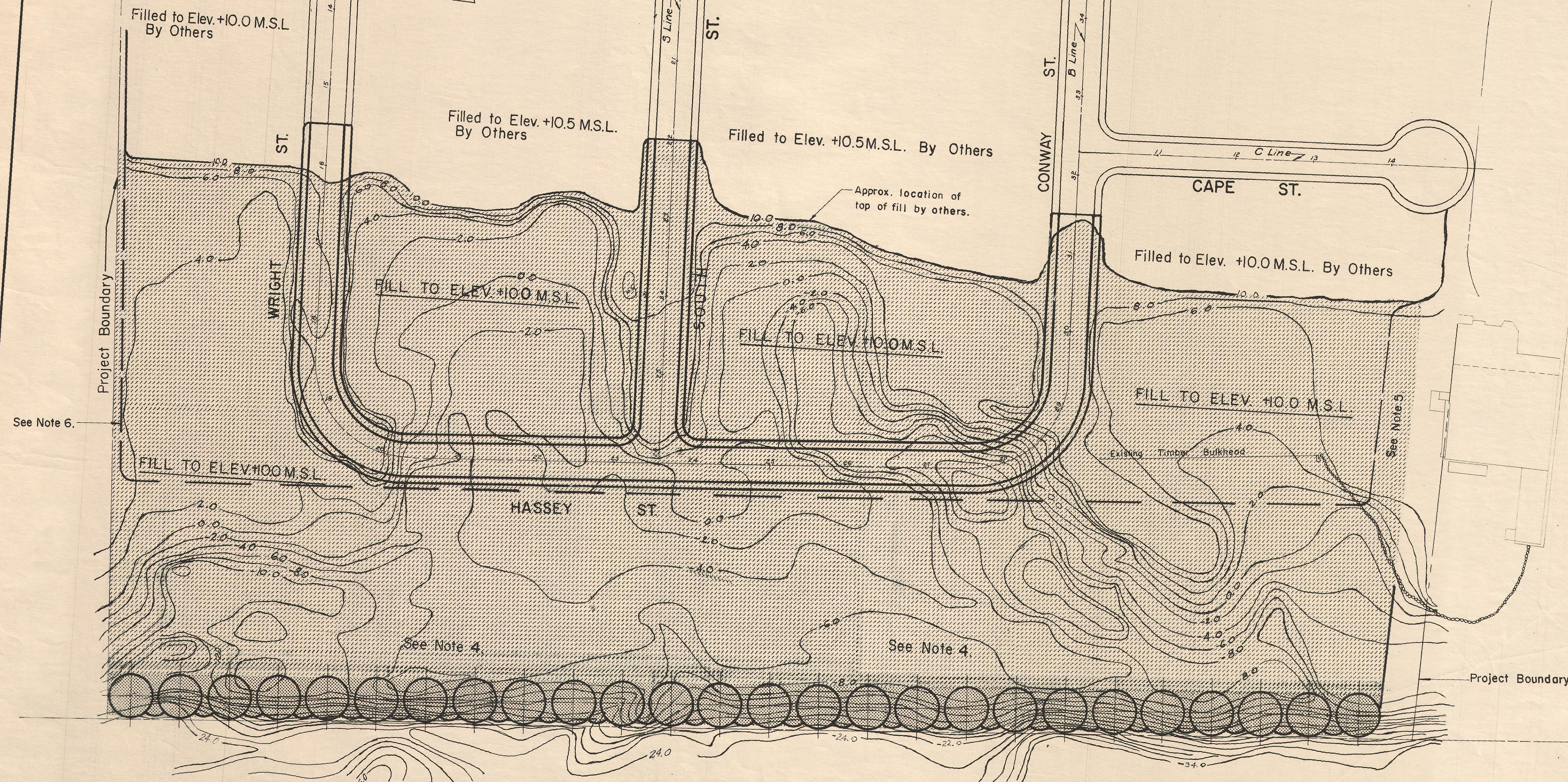
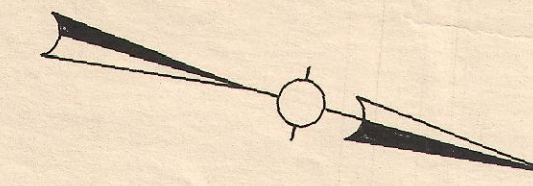


GENERAL NOTES:

- Symbols listed under "Proposed Construction" (at left) refer to work to be done by Contractor under the terms of the contract. These symbols and other specific instructions on the Drawings and in the Specifications will be used to indicate the work to be done by the Contractor.
- Elevations are referenced to United States Coast and Geodetic Mean Sea Level (M.S.L.) datum. Mean high tide = 1.70'. Spring tide = +3.0'±. New Bedford city datum = +2.55'.
- Coordinates are referenced to Mass. Geodetic System.
- Location of existing utilities is approximated, and is based on the best information available. Local connections are not shown. The Contractor is fully responsible for locating all utilities, whether shown on the Drawings or not, and is fully liable for any damage thereto. Additional compensation for errors and omissions in the location of utilities as shown on the Drawings will be allowed only as specified in the Specifications.
- All elevations refer to finished pavement grade unless otherwise noted.
- Catch Basin grate elevations are measured at center of grate and at face of curb. Elevations include 1-3/8" gutter depression. (See Catch Basin Details)
- Curb radii are to face of curb.
- Location of demolished buildings are not shown.
- All proposed storm drainage pipes not labeled are 15" R.C.P.
- All proposed sanitary sewer pipes not labeled are 8" V.C.P.
- Modification, abandonment and/or addition to gas, electric & telephone utilities are not shown on the Drawings, but are shown on the Information Sheets only.
- See Landscaping Detail Sheet for other landscaping work to be done by the Contractor.
- Place 2 vitrified clay "y"s (one aimed at each side of street), with vitrified clay stoppers jointed in place, on V.C.P. sanitary sewer lines every 50' measured upgrade from the last preceeding manhole.

NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE: May 19, 1969	LEGEND & GENERAL NOTES		CONTRACT NO. 2
DESIGNED BY E. L.			SHEET NO. 2 OF 37
CHECKED BY W. D.			SCALE AS SHOWN
APPROVED BY G. R. C.			DRW. NO. 371- 02- 02
GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS			

NEW BEDFORD GAS & EDISON LIGHT CO.



LEGEND

- Top of proposed fill
- 2.0 — Existing Contour
- ▨ Borrow
- ▨ Gravel Fill

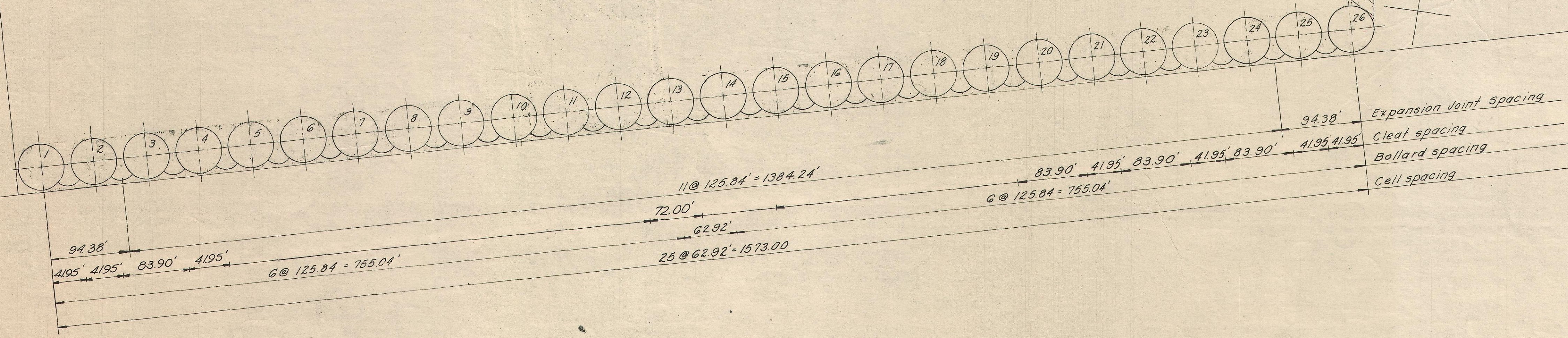
Notes:

1. Existing contours as per field survey performed March 1969.
2. The entire area in which fill is to be placed shall be cleared and grubbed.
3. Material shall not be removed from areas in which fill is not required, all fill shall be obtained from beyond the Project Boundary.
4. Fill & Grade uniformly from elev. 10.0 M.S.L. to elev. 6.5 M.S.L. at Bulkhead Wall.
5. Grade from elev. 10.0 M.S.L. to existing ground at 10:1 or as directed by the Engineer.
6. Grade from elev. 10.0 M.S.L. to existing ground at Project Boundary at 2:1, or as directed by the Engineer.
7. Dust control shall be performed throughout the entire area of work. (See Specs.)
8. See sheet No. 34 for additional detail on fill & excavation.

NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE May 19, 1969	FILL & GRADING PLAN	CONTRACT NO. 2	
DESIGNED BY P.L.		SHEET NO. 14 OF 37	
CHECKED BY W.D.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE 1" = 80'	
APPROVED BY G.R.C.		DRW. NO. 371-02-14	

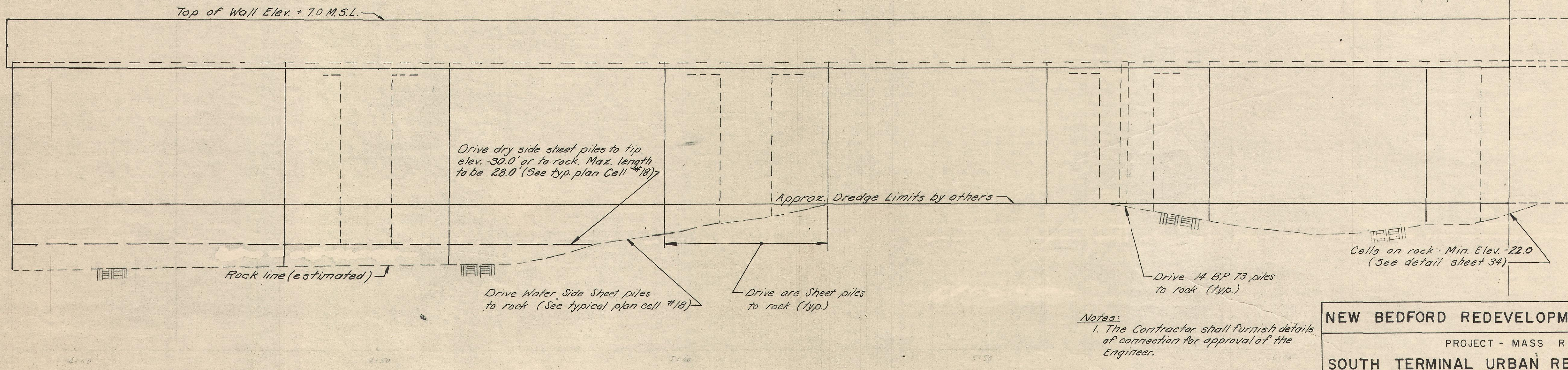
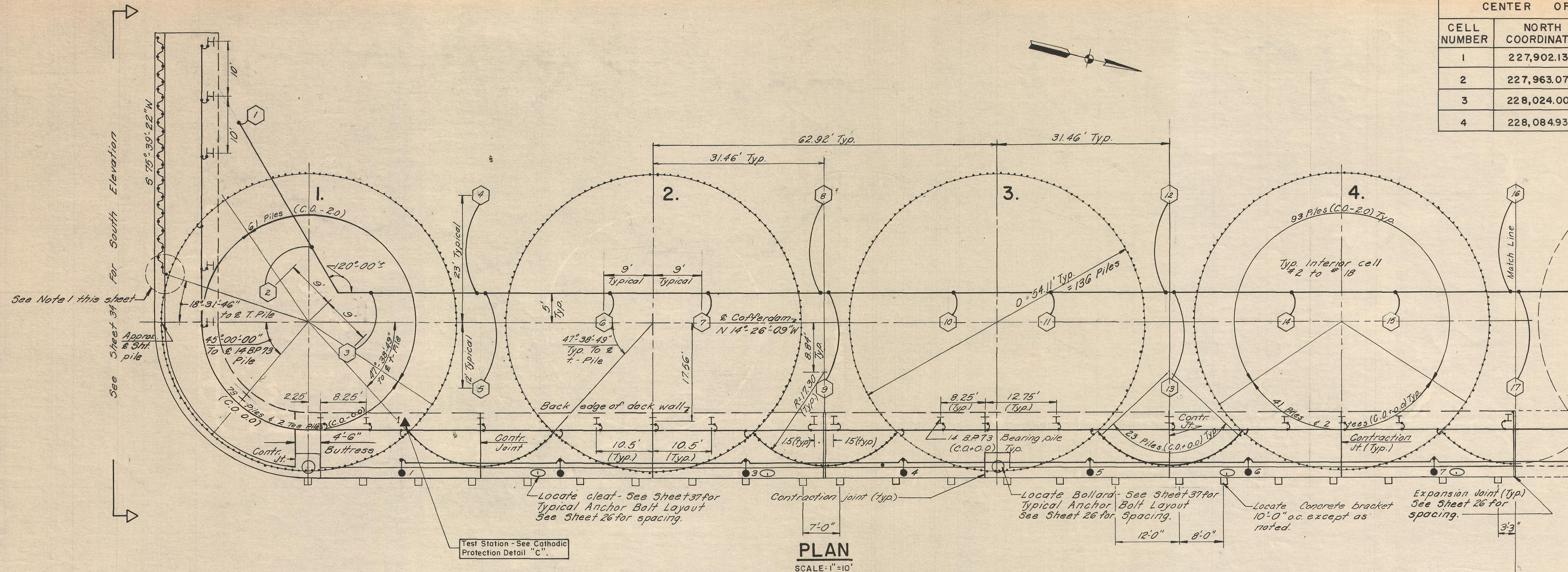
DESIGN NOTES

1. General
 - a. Elevations are based on mean sea level datum.
 - b. Mean tide range is 3.7 feet.
2. Live Load Surcharge = 1,000 psf
3. Earthwork
 - a. Unit dry weight = 106 pcf
 - b. Unit moist weight = 120 pcf
 - c. Unit submerged weight = 60 pcf
 - d. Angle of friction, ϕ = 35°
4. Concrete
 - a. All concrete shall have 4,000 psi ultimate.
 - b. Concrete below water shall be tremie concrete.
 - c. Reinforcing steel shall have a minimum yield strength of 50,000 psi and shall conform to ASTM A-615.
 - d. Lap all splices 30 bar diameters.
 - e. All reinforcement to have protection shown on all faces exposed to salt water action protect with 4" Concrete cover.
5. Structural Steel
 - a. All material to be ASTM A36 except as noted.
 - b. All hardware, anchor bolts, etc., shall be hot dipped galvanized steel.
6. Timber
 - a. All timber shall be Douglas fir or Southern Yellow Pine pressure creosoted.
7. Cathodic Protection
 - a. Cathodic protection shall be an impressed current system.



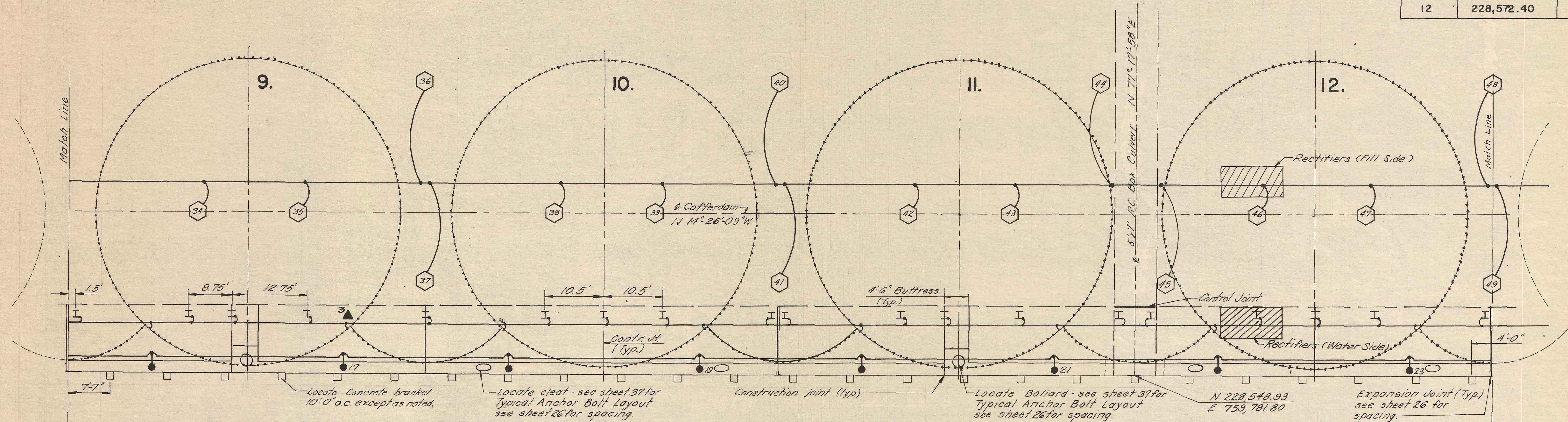
NEW BEDFORD REDEVELOPMENT AUTHORITY		
PROJECT - MASS. R-96		
SOUTH TERMINAL URBAN RENEWAL PROJECT		
DATE May 19, 1969	BULKHEAD GENERAL PLAN	CONTRACT NO. 2
DESIGNED BY R.C.S.		SHEET NO. 26 OF 37
CHECKED BY E.P.L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE 1" = 80'
APPROVED BY G.R.C.		DRW. NO. 371-02-26

CENTER OF CELLS		
CELL NUMBER	NORTH COORDINATE	EAST COORDINATE
1	227,902.13	759,919.33
2	227,963.07	759,903.64
3	228,024.00	759,887.96
4	228,084.93	759,872.27

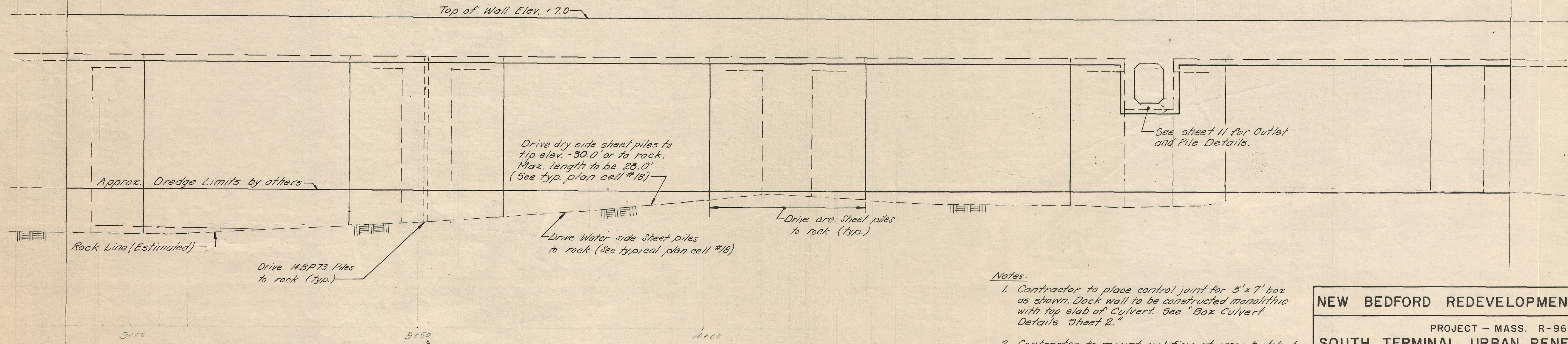


NEW BEDFORD REDEVELOPMENT AUTHORITY		
PROJECT - MASS R-96		
SOUTH TERMINAL URBAN RENEWAL PROJECT		
DATE May 19, 1969	SHEET PILING CELLS 1 THRU 4 PLAN AND PROFILE	CONTRACT NO. 2
DESIGNED BY R.C.S.		SHEET NO. 27 OF 37
CHECKED BY P.L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE AS SHOWN
APPROVED BY G.R.C.		DRW. NO. 371-02-27

CENTER OF CELLS		
CELL NUMBER	NORTH COORDINATE	EAST COORDINATE
9	228,389.60	759,793.84
10	228,450.53	759,778.16
11	228,511.47	759,762.47
12	228,572.40	759,746.78



PLAN
SCALE: 1"=10'

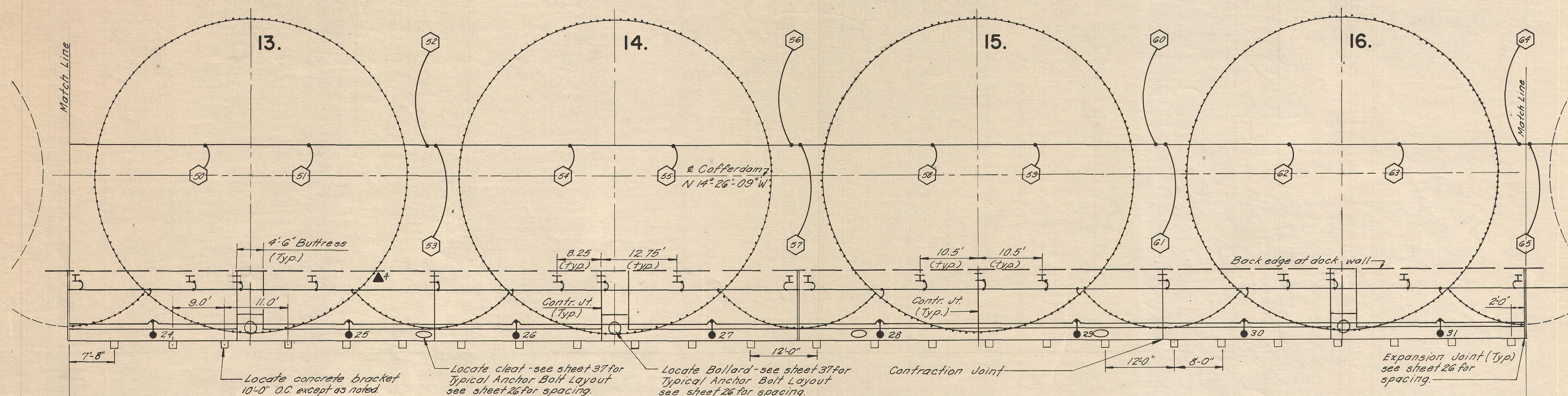


PROFILE
SCALE: 1"=10'

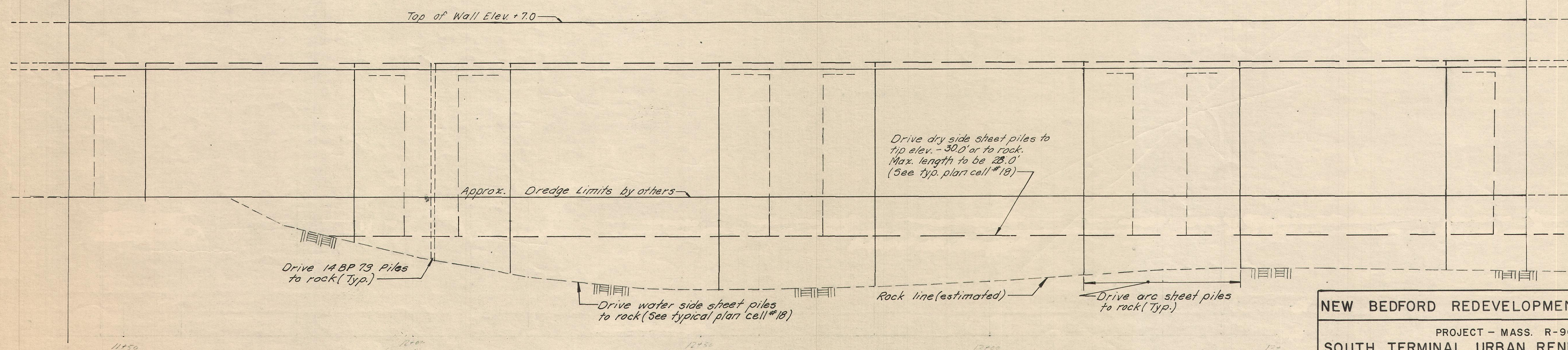
- Notes:**
- Contractor to place control joint for 5' x 7' box as shown. Dock wall to be constructed monolithic with top slab of Culvert. See "Box Culvert Details Sheet 2."
 - Contractor to mount rectifiers at cross hatched sections shown or as directed by Engineer in field. Provision for Concrete Anchors must be made in slab of dock wall in accordance with Manufacturers requirements.
 - A.C. power to rectifier provided by others.

NEW BEDFORD REDEVELOPMENT AUTHORITY		
PROJECT - MASS. R-96		
SOUTH TERMINAL URBAN RENEWAL PROJECT		
DATE May 19, 1969	SHEET PILING CELLS 9 THRU 12 PLAN AND PROFILE	CONTRACT NO. 2
DESIGNED BY R.C.S.		SHEET NO. 29 OF 37
CHECKED BY P.L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE AS SHOWN
APPROVED BY G.R.C.		DRW. NO. 371-02-29

CENTER OF CELLS		
CELL NUMBER	NORTH COORDINATE	EAST COORDINATE
13	228,633.34	759,731.10
14	228,694.27	759,715.41
15	228,755.20	759,699.73
16	228,816.14	759,684.04



PLAN
SCALE: 1"=10'



PROFILE
SCALE: 1"=10'

NEW BEDFORD REDEVELOPMENT AUTHORITY		
PROJECT - MASS. R-96		
SOUTH TERMINAL URBAN RENEWAL PROJECT		
DATE May 19, 1969	SHEET PILING CELLS 13 THRU 16 PLAN AND PROFILE	CONTRACT NO. 2
DESIGNED BY R.C.S.		SHEET NO. 30 OF 37
CHECKED BY P.L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE AS SHOWN
APPROVED BY G.R.C.		DRW. NO. 371-02-30

Match Line

17.

Approx. E Pile (Typ.)

38° 05' 17"

84° 43' 22"

47° 38' 49"

Back edge of dock wall

Contr. Jt. (Typ.)

7'-7"

Layout of Cell Sheet Piles Symmetrical About this line

Locate Concrete bracket 14" a.c. except as noted

18.

Typ. interior cell #12 to #18

Drive 93 Sheet piles to tip elev. -30.0' or to rock (Min. elev. -22.00')

Cofferdam N 14° 26' 09" W

Drive 41 Sheet piles & 2 tees to rock (Min. elev. -22.00')

Contr. Jt. (Typ.)

4'-6" Buttress See detail 31st.

11'-0"

Locate Bollard - see sheet 37 for Typical Anchor Bolt Layout see sheet 26 for spacing.

19.

Typ. interior cell #19 to #25

Drive 93 Sheet piles to tip elev. -40.0' or to rock (Min. elev. -32.0')

Drive 41 Sheet piles & 2 tees to rock (Min. elev. -32.0')

Locate cleat - see sheet 37 for Typical Anchor Bolt Layout see sheet 26 for spacing.

20.

Expansion Joint (Typ.) see sheet 26 for spacing.

The number of full Sheet Piles shown in ○

Backfill anodes nos. 78 & 79 omitted for clarity

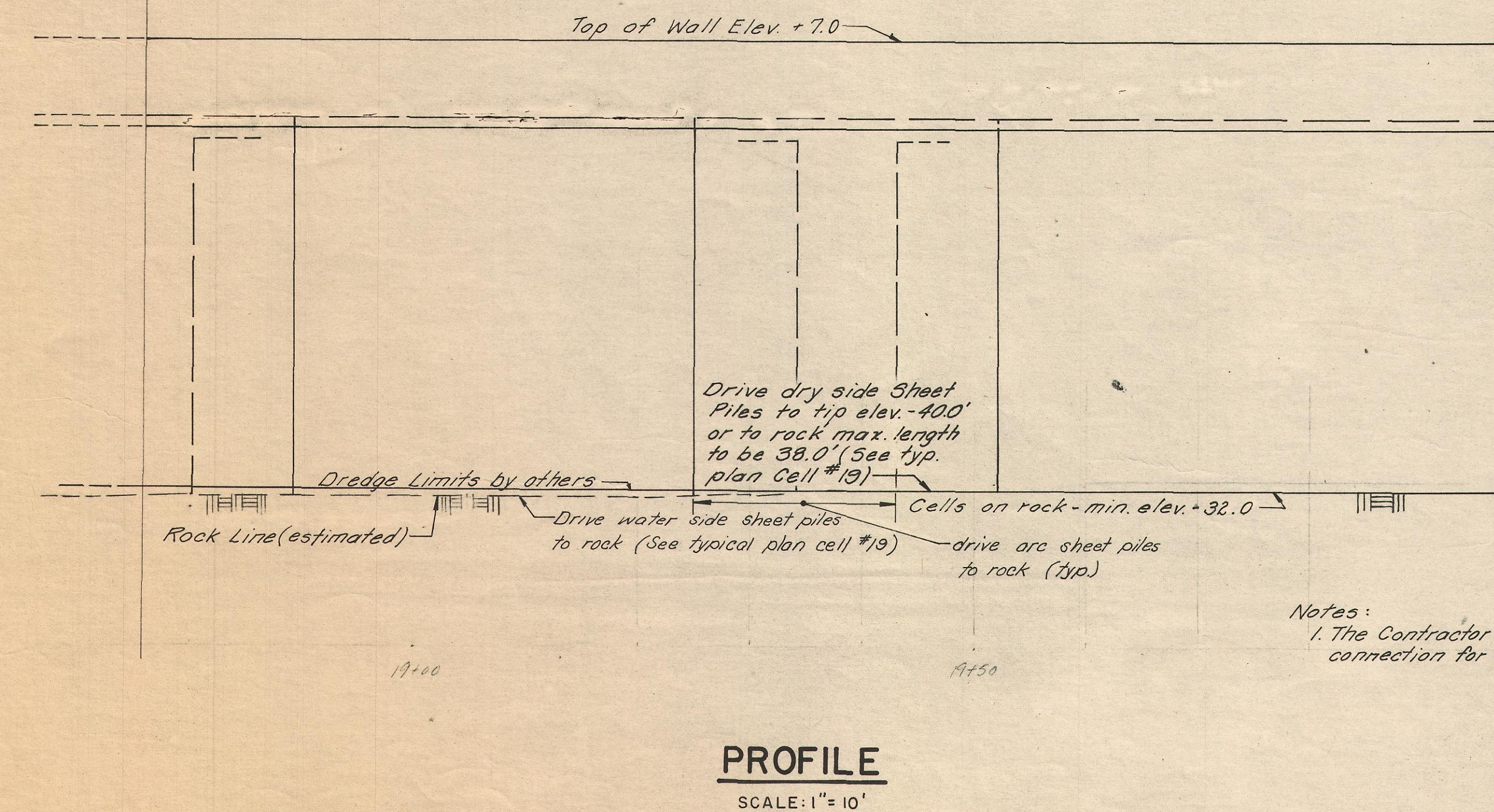
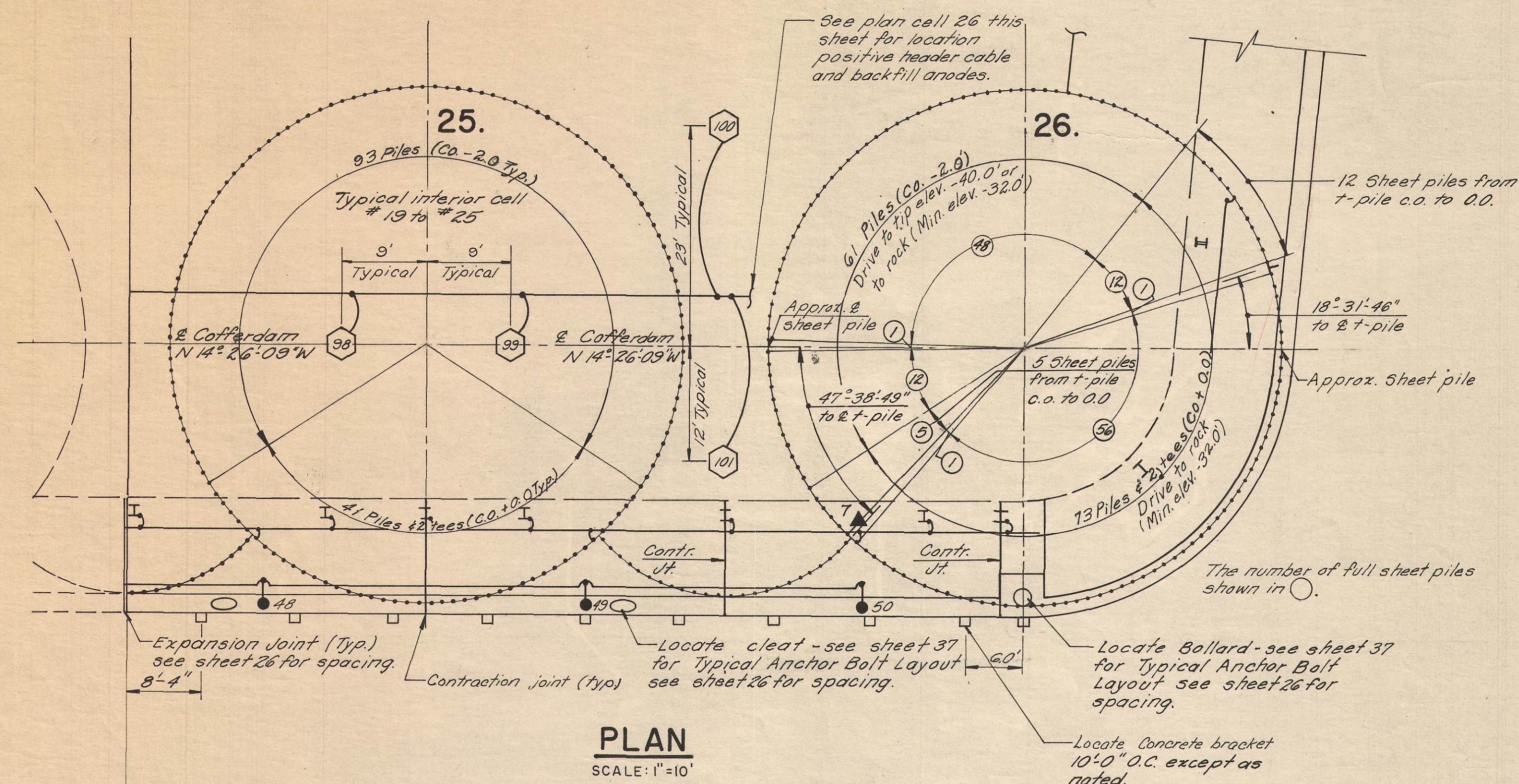
PLAN

-
- Top of Wall Elev. + 7.0
- Drive dry side sheet piles to tip elev. -30.0 or to rock. Max. length 28' (See typ. plan cell #18)
- Approx. Dredge Limits by others
- End dry side Sheet piles to elev. -30.0 or to rock
- Begin dry side Sheet piles to elev. -40.0 or to rock.
- Drive water side Sheet piles to rock (See typical plan cell #18)
- Drive 14 BP 73 piles to rock (Typ.)
- rock line (estimated)
- Drive arc sheet piles to rock (typ.)
- Drive water side Sheet piles to rock (See typical plan cell #19)
- Cells on rock - min. elev. -32.0 (See detail Sheet)
- Drive dry side sheet piles to tip elev. -40.0 or to rock. Max. length 38' (See typ. plan cell #19)
- NEW BEDFORD REDEVELOPMENT AUTHORITY
- PROJECT - MASS. R-96
- CONSTRUCTION

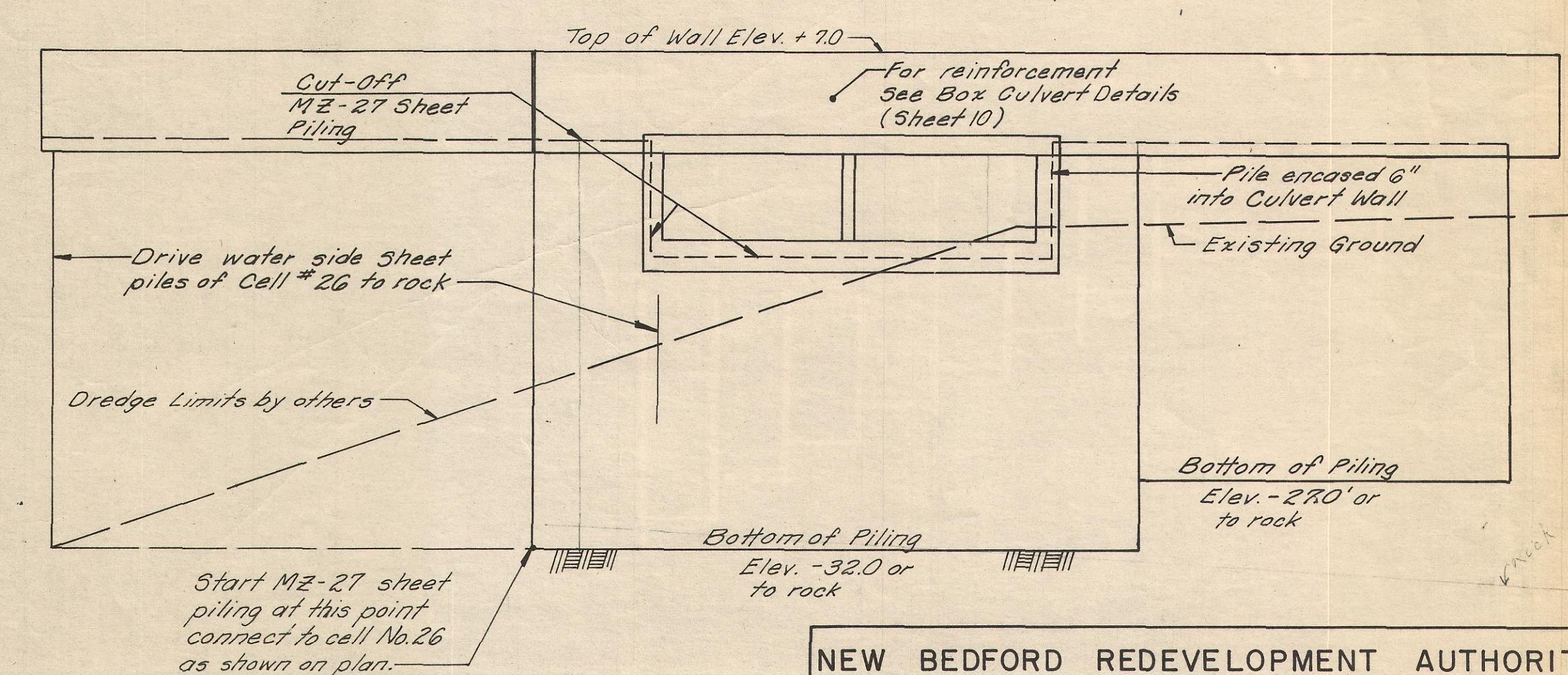
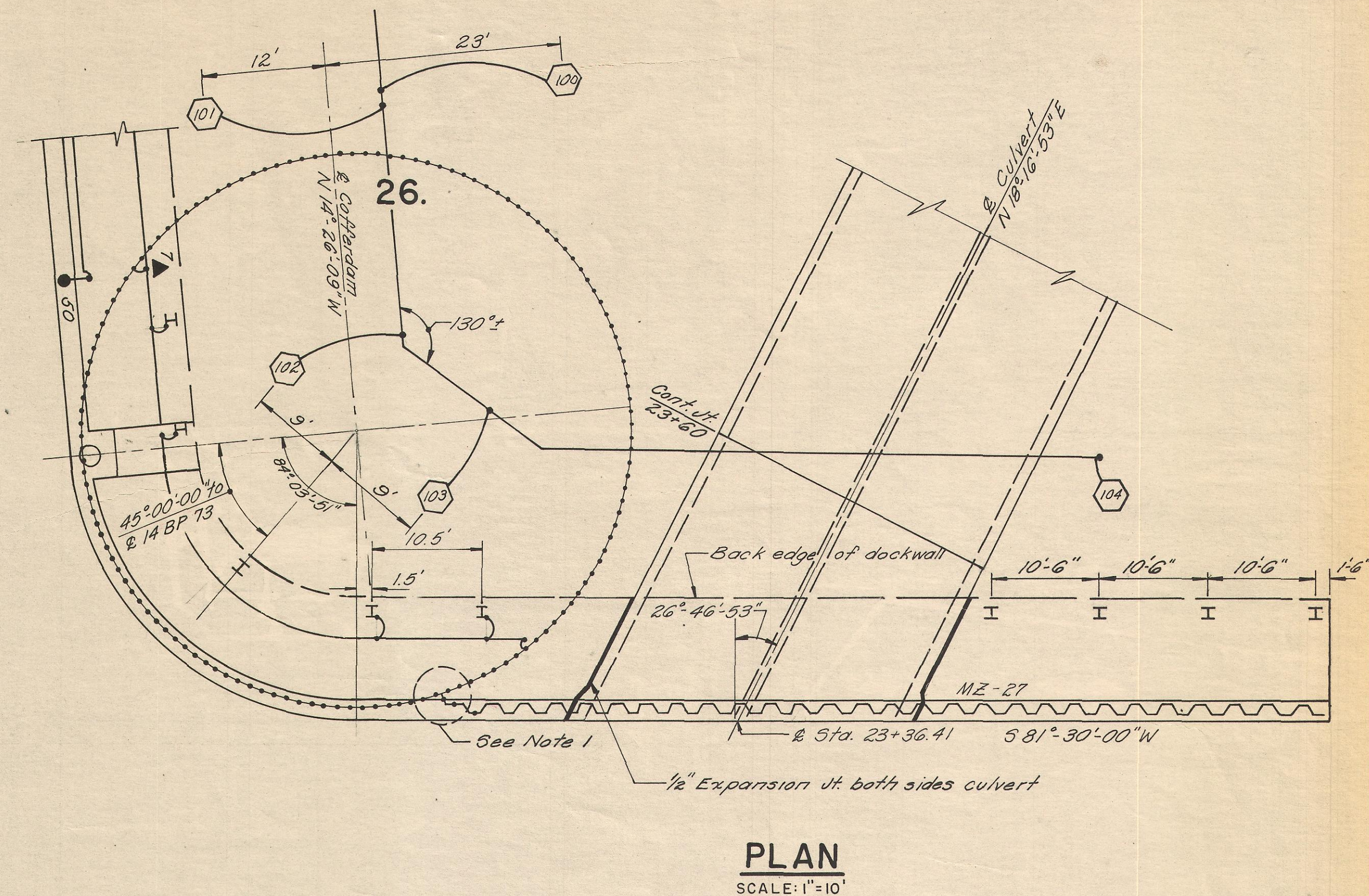
SCALE: 1" = 10'

NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL* URBAN RENEWAL PROJECT			
DATE	SHEET		PILING CELLS
May 19, 1969	17		THRU 20
DESIGNED BY	PLAN		AND PROFILE
R.C.S.			
CHECKED BY	GOODKIND & O'DEA, INC.		CONTRACT NO.
P. L.	CONSULTING ENGINEERS		2
APPROVED BY	SPRINGFIELD, MASSACHUSETTS		SHEET NO.
G. R. C.			31 OF 37
			SCALE
			AS SHOWN
			DRW NO.
			371-02-31

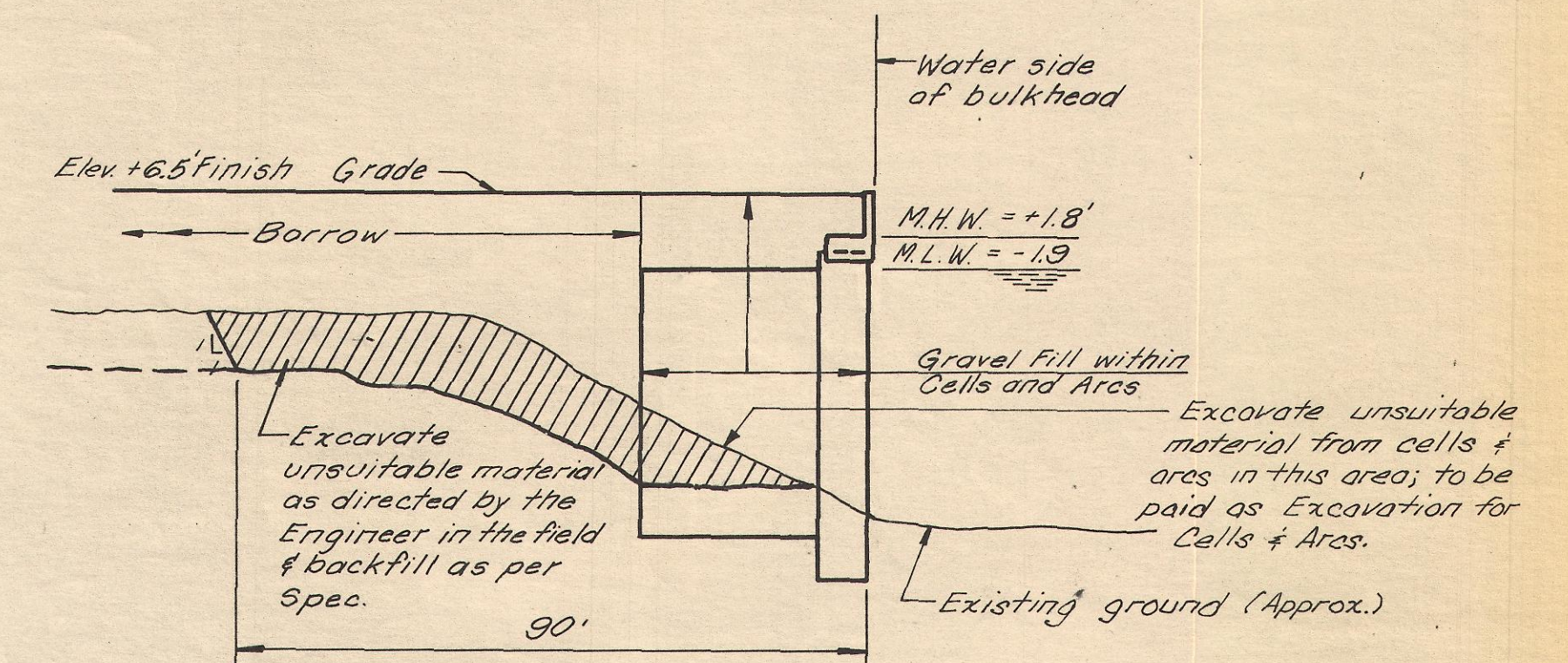
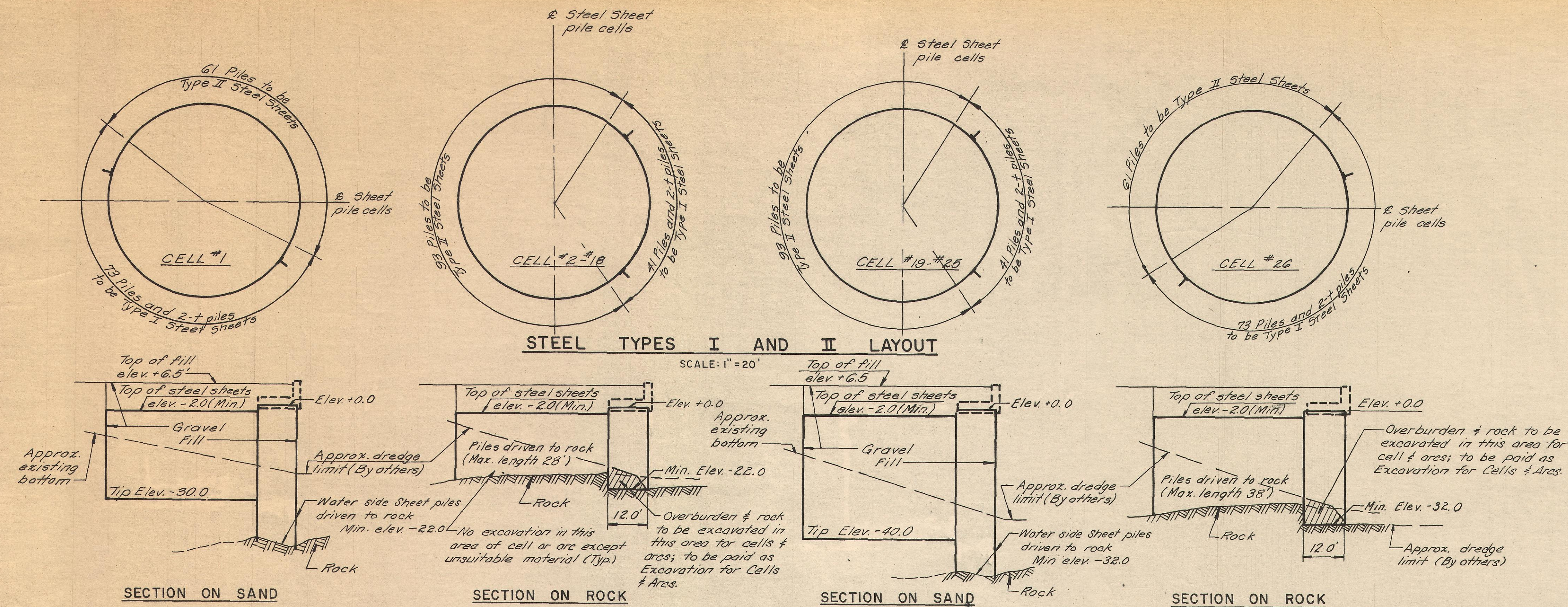
CENTER OF CELLS		
CELL NUMBER	NORTH COORDINATE	EAST COORDINATE
25	229,364.87	759,542.87
26	229,425.47	759,527.18



Notes:
1. The Contractor shall furnish details of connection for approval of the Engineer.

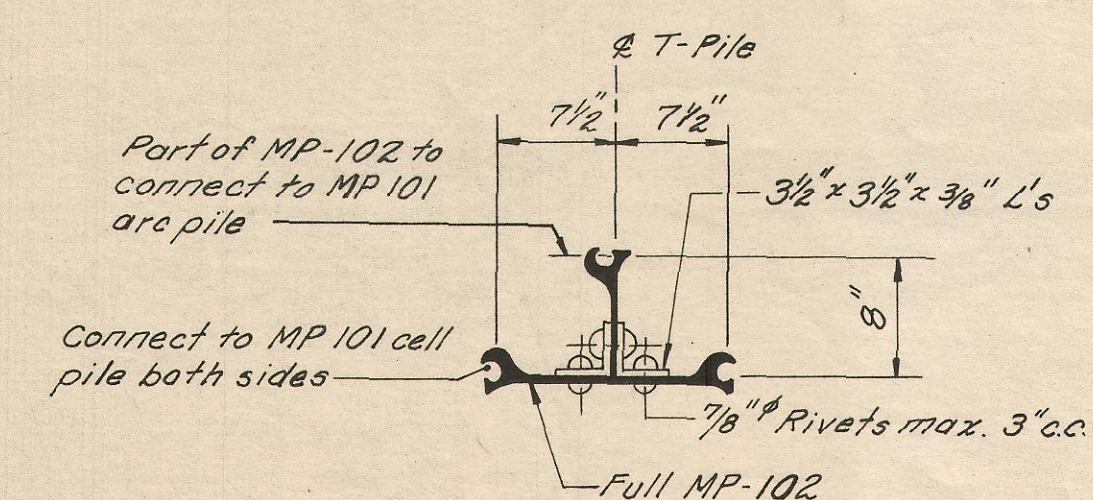
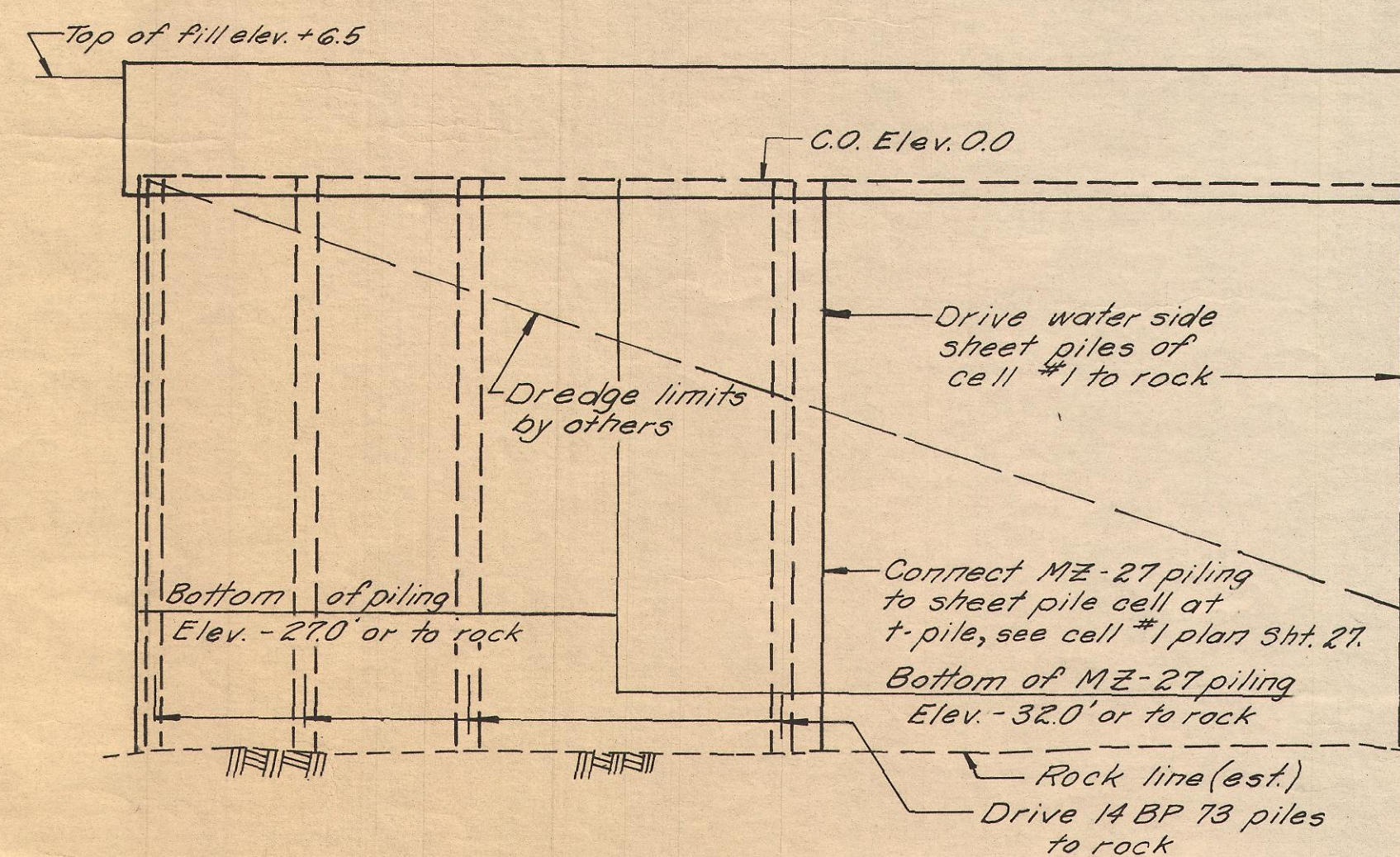


NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE	SHEET PILING CELLS		CONTRACT NO.
May 19, 1969	25	8 26	2
DESIGNED BY	PLAN AND PROFILE		SHEET NO.
R.C.S.			33 OF 37
CHECKED BY	GOODKIND & O'DEA, INC.		SCALE
P.L.	CONSULTING ENGINEERS		AS SHOWN
APPROVED BY	SPRINGFIELD, MASSACHUSETTS		DRW. NO.
G.R.C.			371-02-33

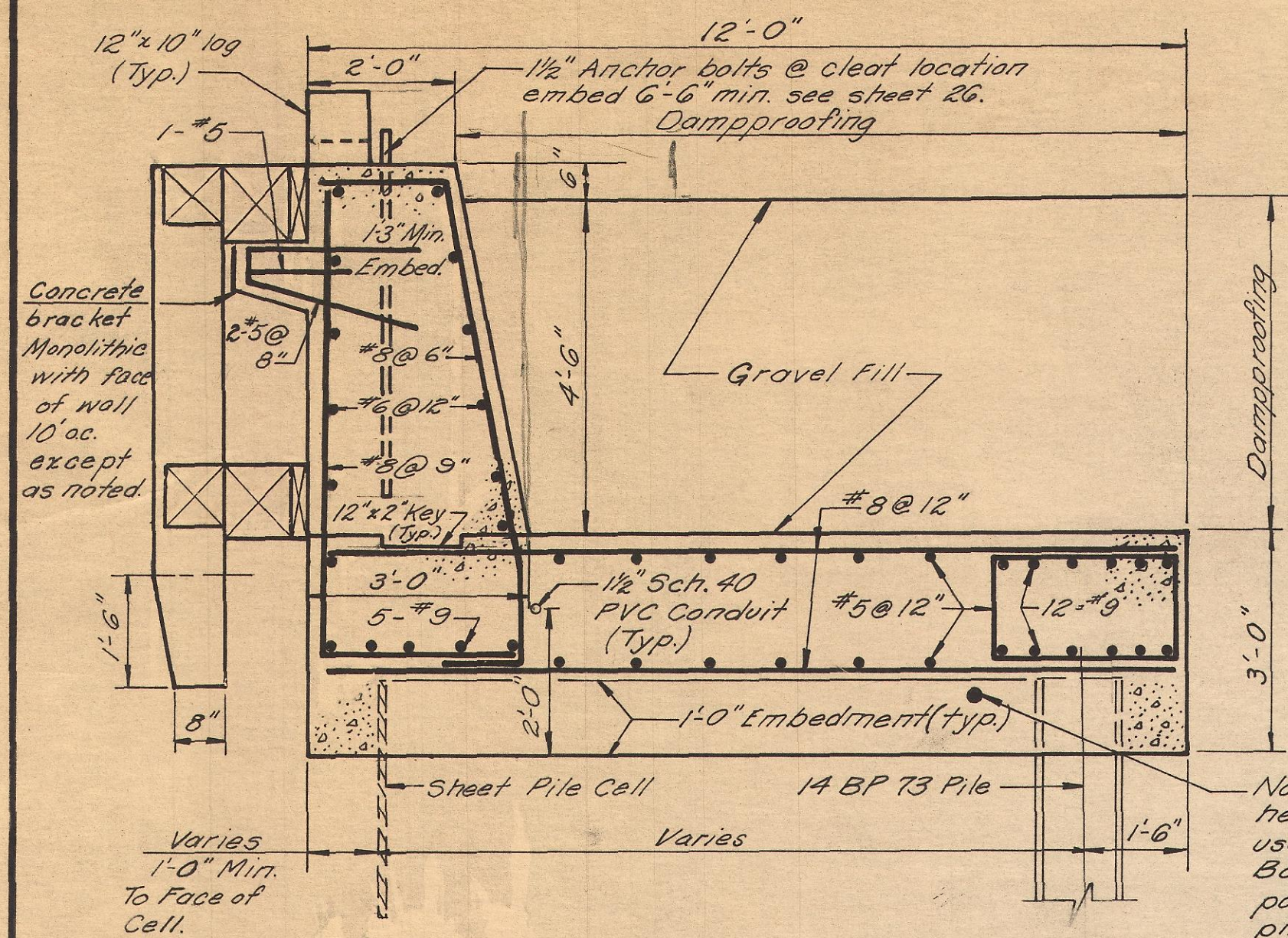


Notes:

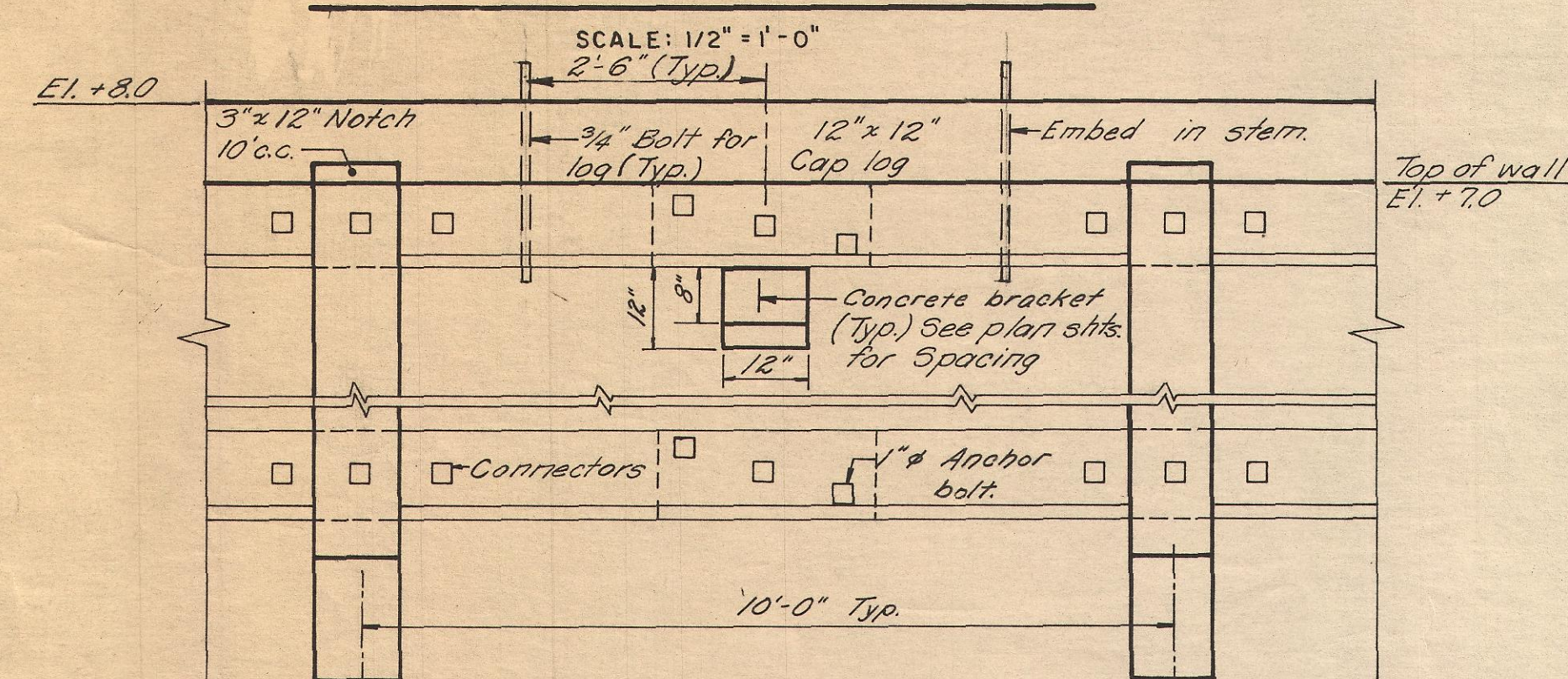
1. Unserviceable material to be disposed of as per specifications.
2. Minimum length of dry side steel sheets in cells to be 15' in 20' draft, and 20' in 30' draft.
3. All steel sheet, piling for cells and arcs to have section properties of U.S. Steel MP-101 except as otherwise noted.
4. All arc piles, and all MZ-27 sheet piles to be type -I steel sheets.
5. Gravel fill to be placed within cells and arcs insuring no segregation of particle sizes, uncontrolled dumping will not be allowed.
6. No welding of "tee" pile or fabricated connections will be permitted.
7. Protective Coating to be applied in accordance with Specifications to all type-I steel sheets.



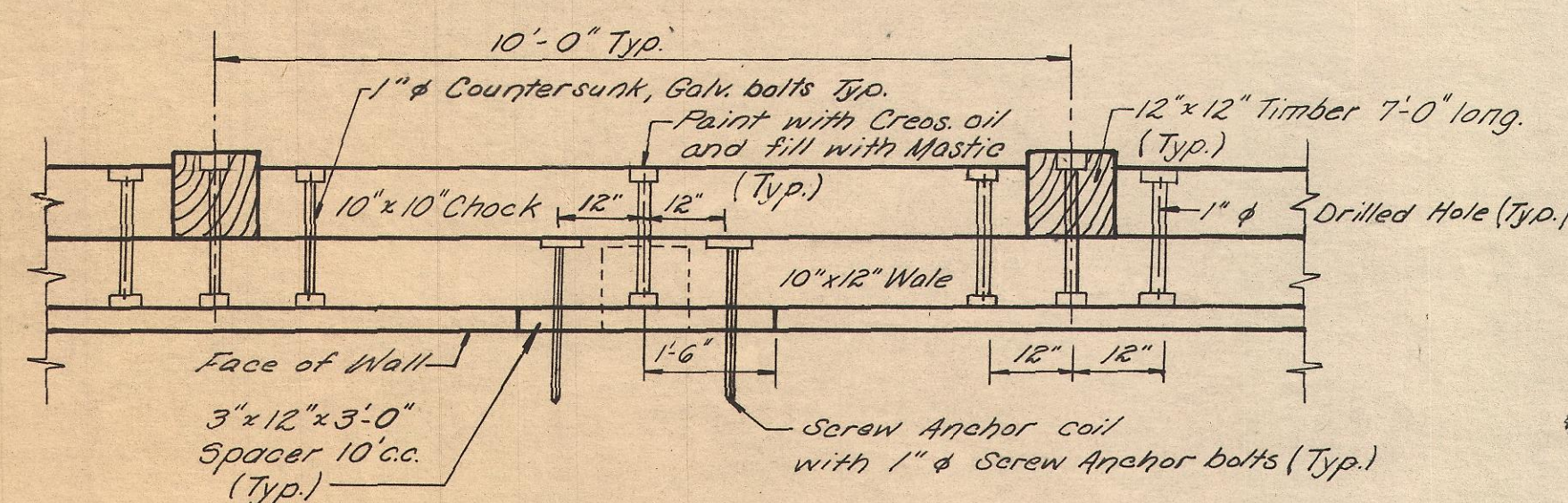
NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE	DETAILS		CONTRACT NO.
May 19, 1969			2
CHECKED BY	(SHEET	PILING	SHEET NO
R.C.S..		CELLS)	34 OF 37
CHECKED BY	GOODKIND & ODEA, INC.		SCALE
P.L.	CONSULTING ENGINEERS		AS SHOWN
APPROVED BY	SPRINGFIELD, MASSACHUSETTS		DRW NO.
G.R.C.			371 - C2 - 34



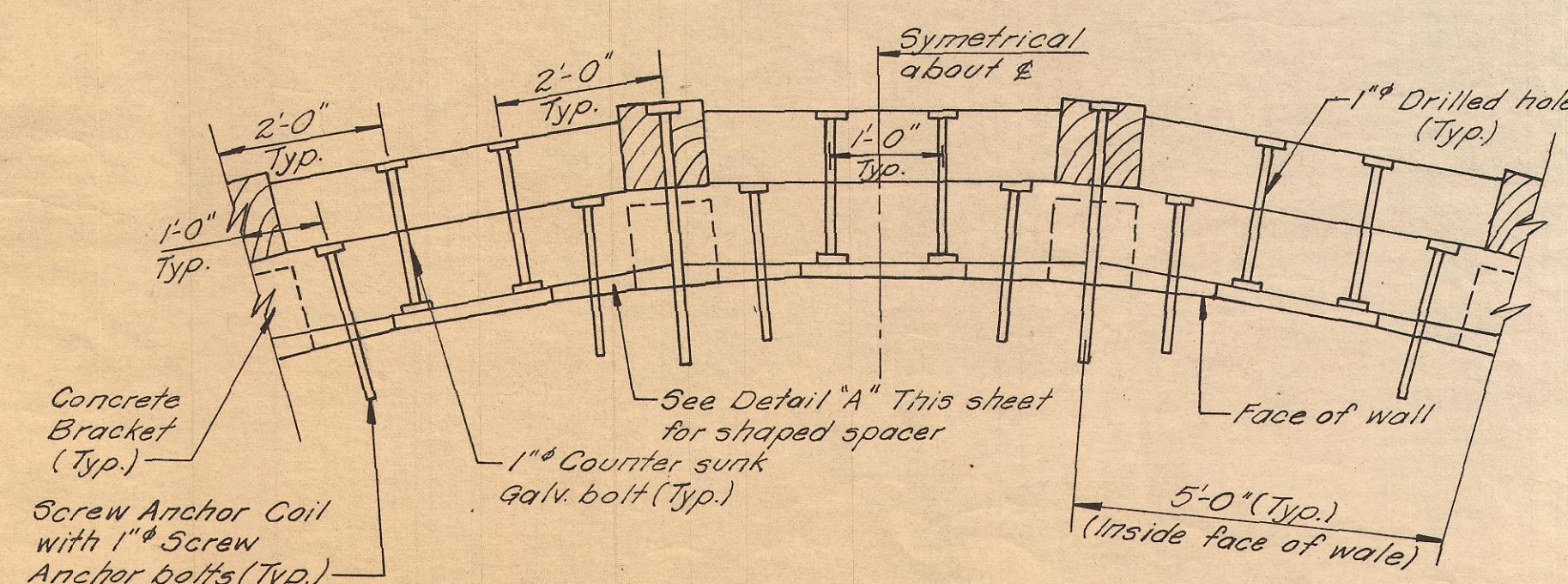
TYPICAL WALL SECTION



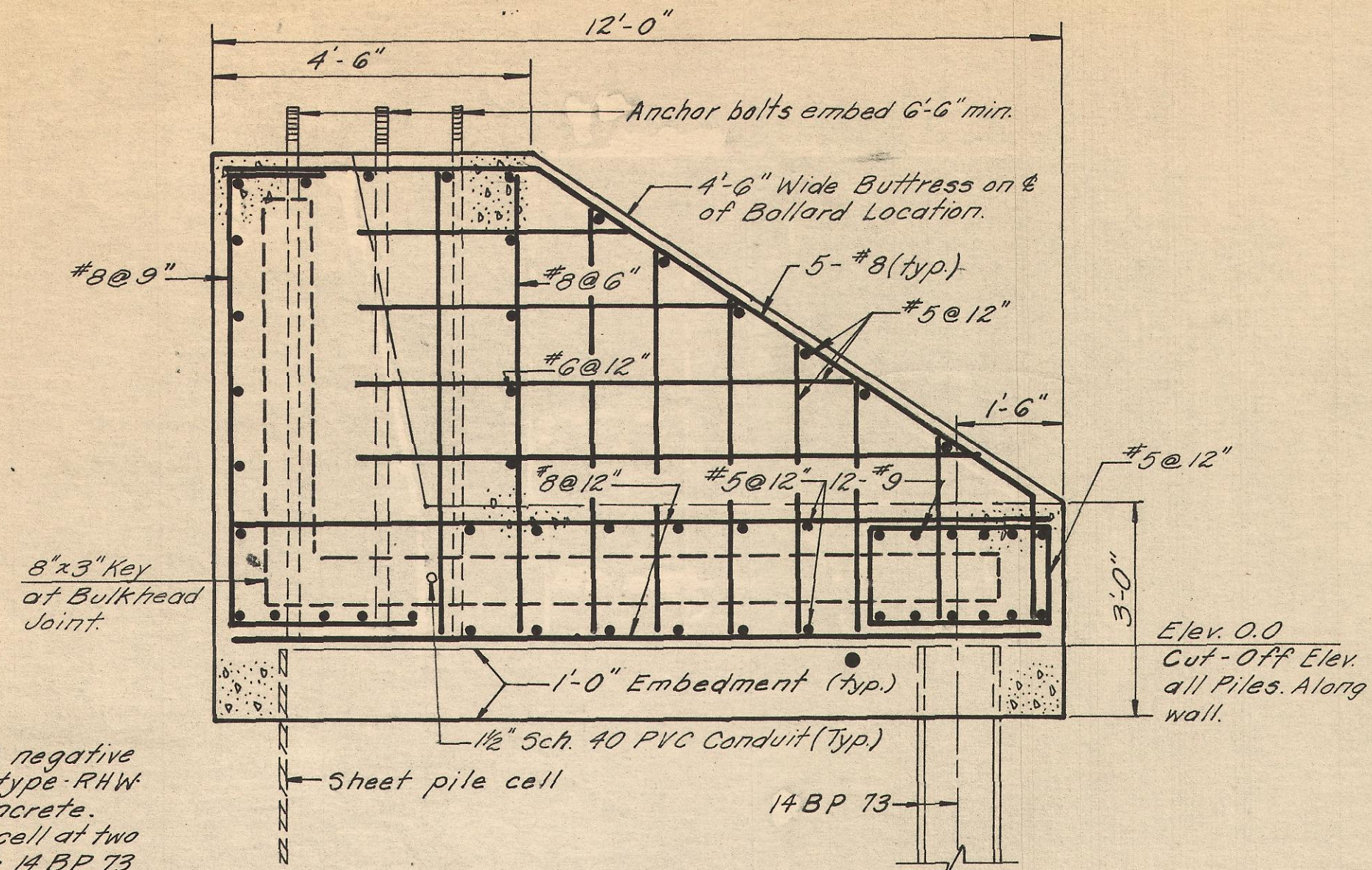
TYPICAL FRONT ELEVATION



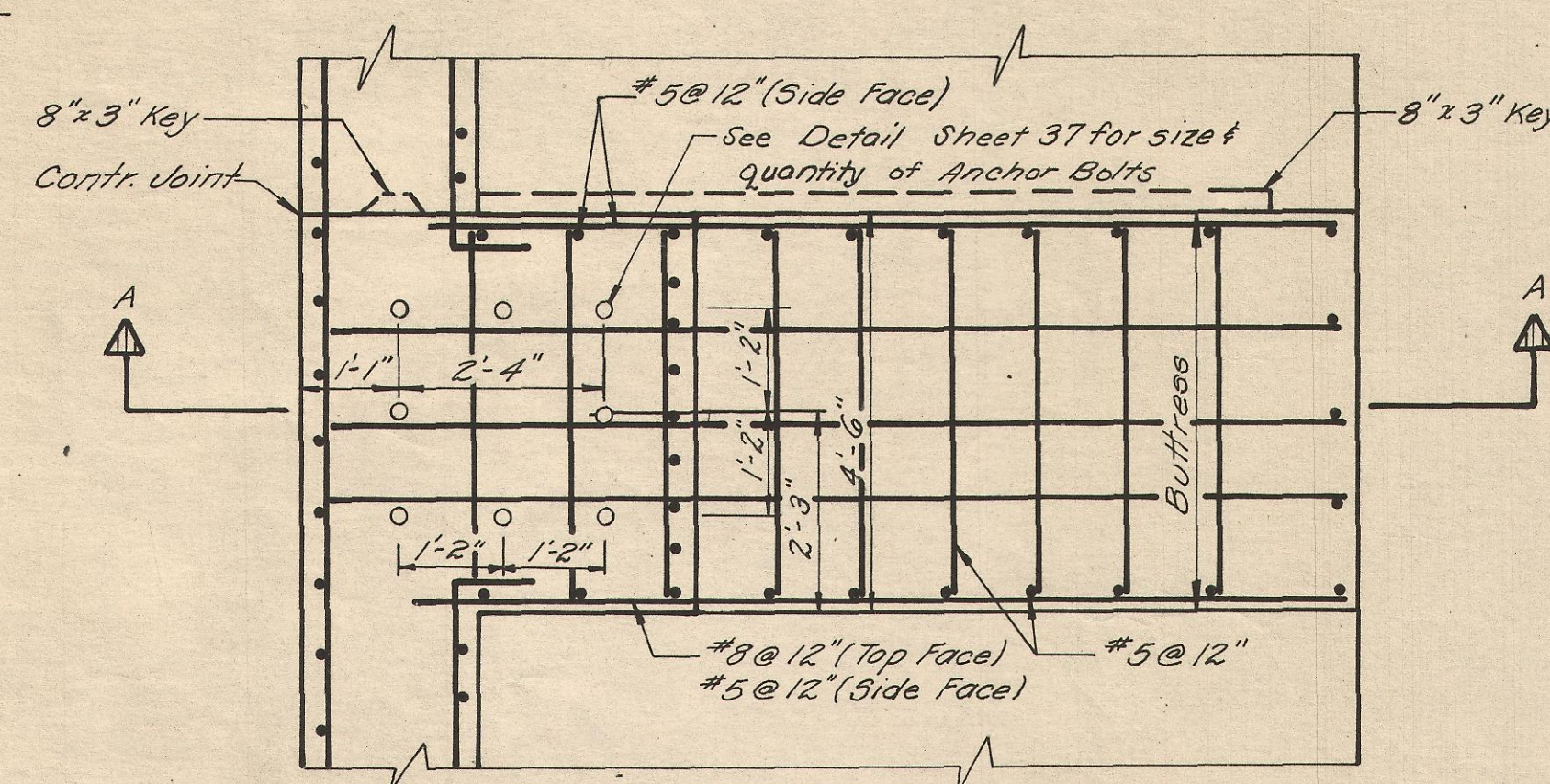
FENDER DETAIL



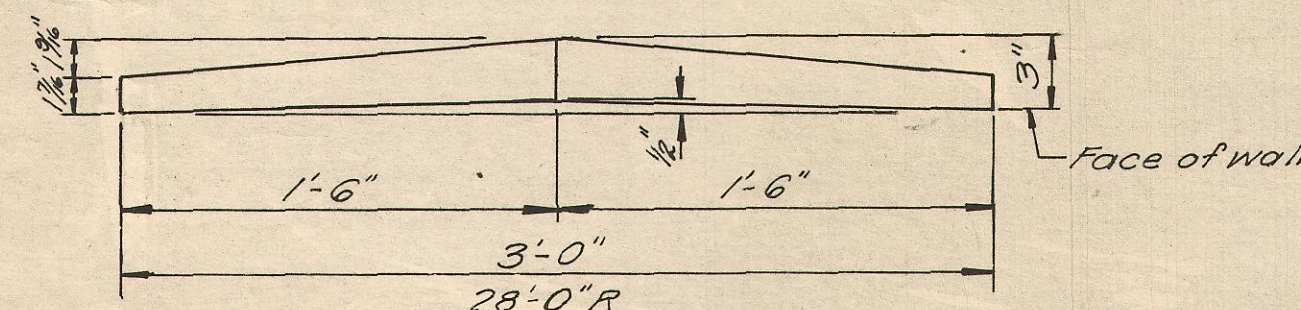
FENDER DETAIL CURVED WALL



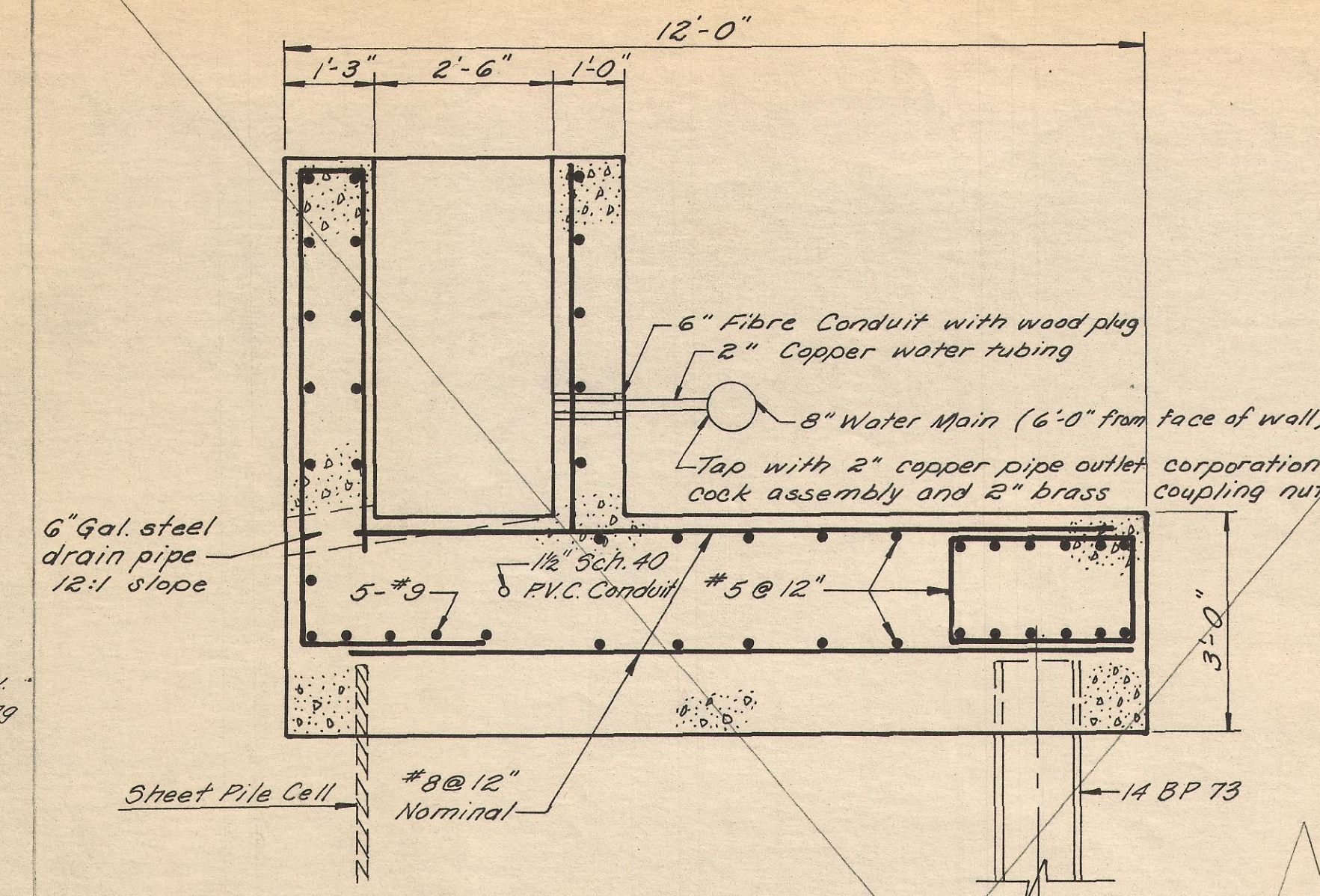
SECTION A-A



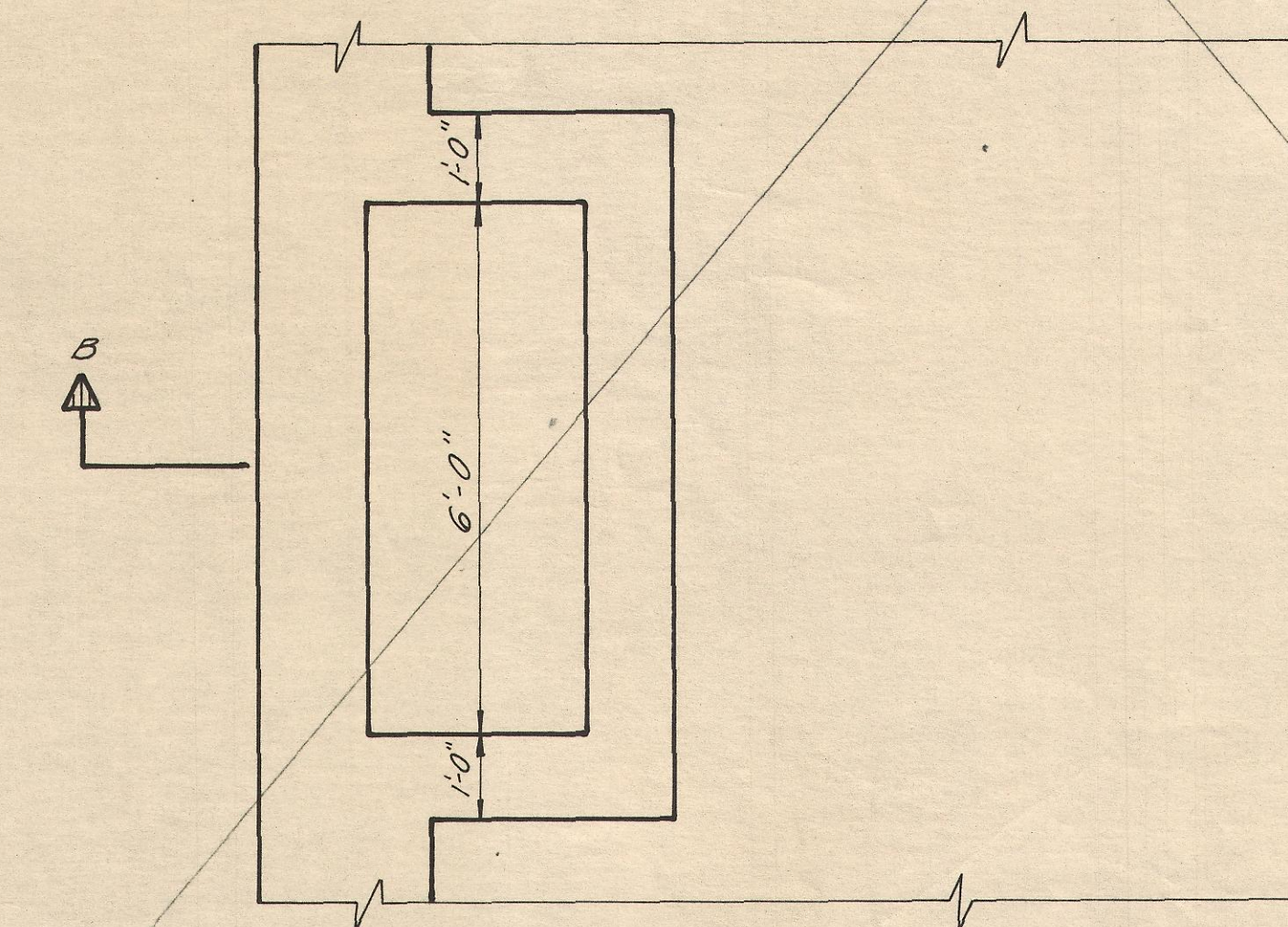
PLAN AT BOLLARD LOCATION



DETAIL "A"

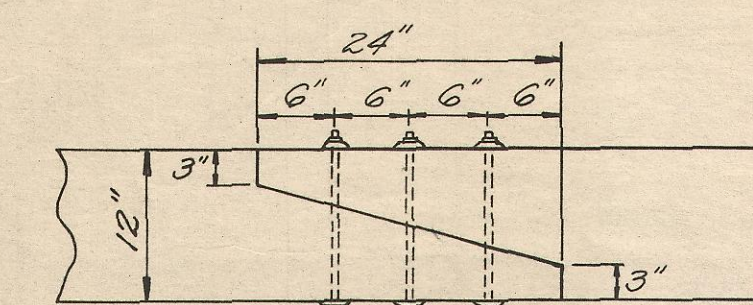


SECTION B-B



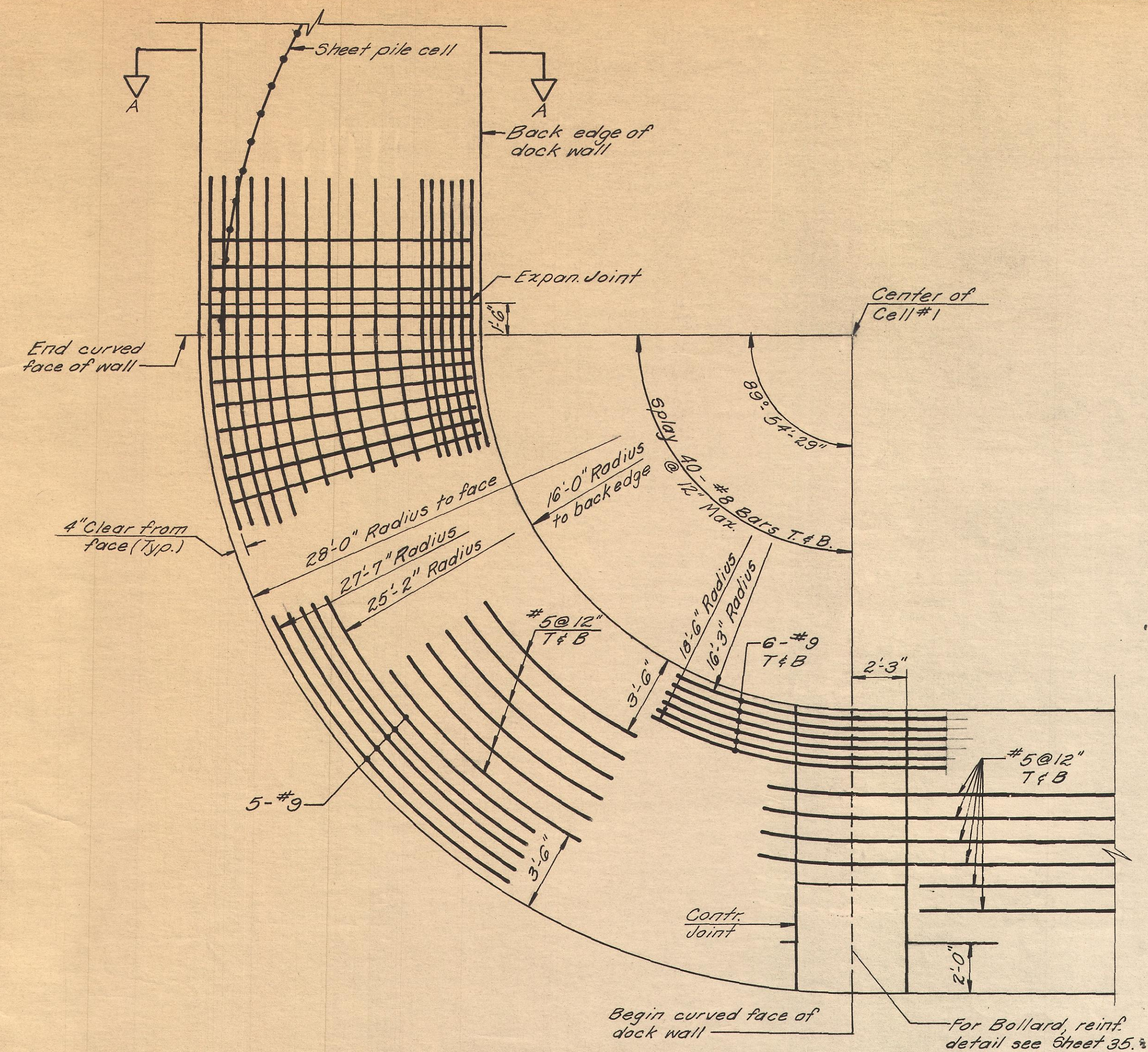
UTILITY PIT PLAN

- Notes:**
1. All exposed edges of Concrete Dock Wall to have 1" x 1" chamfer.
 2. Fender System to be pressure creosoted Douglas Fir conforming to details shown. The Contractor is to submit Shop Drawings of Fender System for approval of Engineer prior to fabrication.
 3. Upper and lower wale splices to be staggered 10'-0" c.c. minimum.
 4. All piles are to be driven prior to placing Dock Wall.
 5. Cap log to be discontinued at Bollard and cleat locations to allow for tie-up lines.

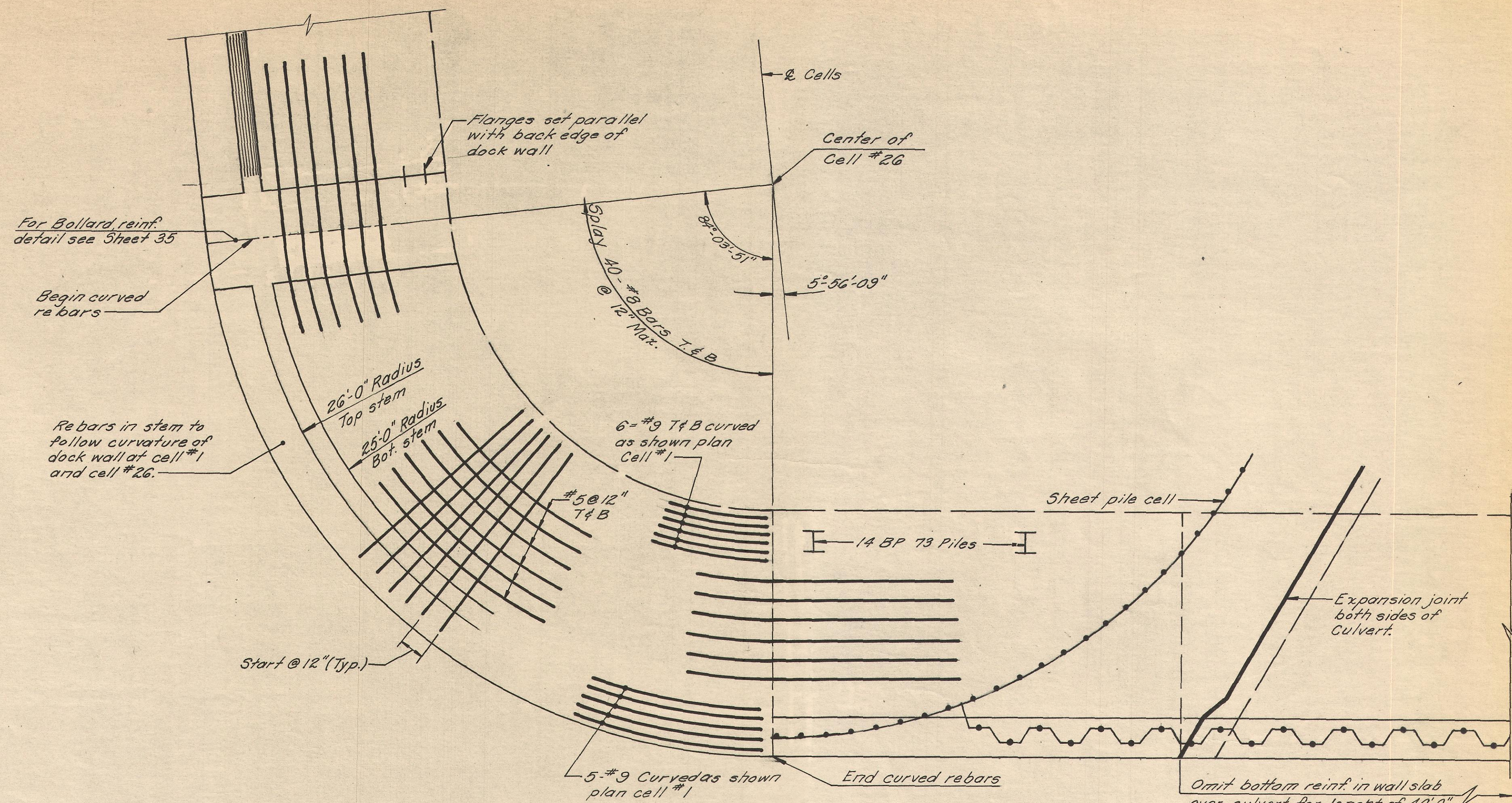


WALE SPLICE

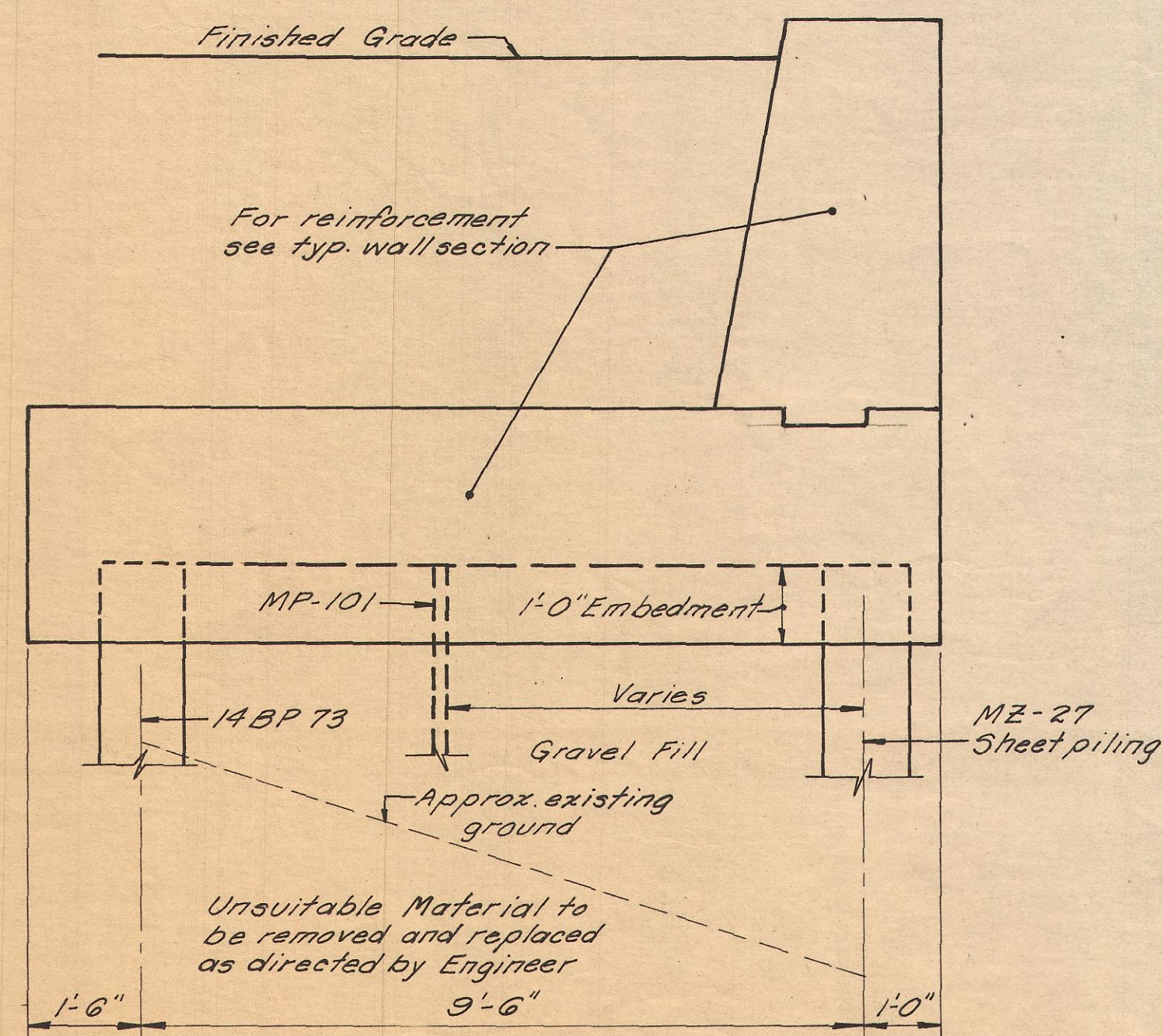
NEW BEDFORD REDEVELOPMENT AUTHORITY		
PROJECT - MASS. R-96		
SOUTH TERMINAL URBAN RENEWAL PROJECT		
DATE May 19, 1969	CONCRETE DOCK WALL & FENDER SYSTEM	CONTRACT NO. 2
DESIGNED BY R.C.S.		SHEET NO. 35 OF 37
CHECKED BY P.L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	SCALE AS SHOWN
APPROVED BY G.R.C.		DRW. NO. 371-02-35



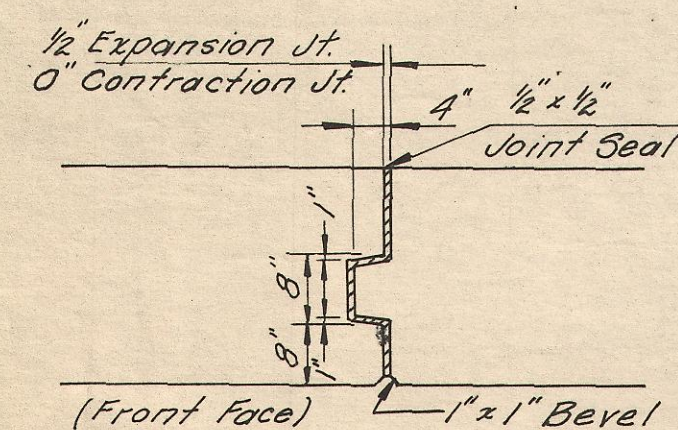
PLAN
SCALE: 1/4" = 1'-0"



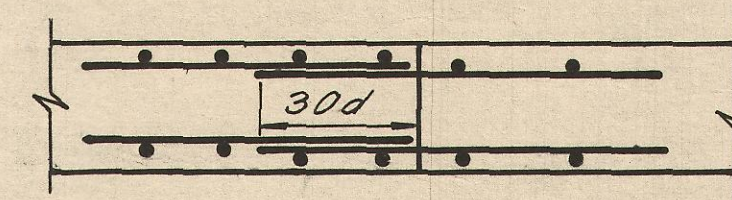
PLAN
SCALE: 1/4" = 1'-0"



SECTION A-A
SCALE: 1/2" = 1'-0"



WALL JOINT DETAILS



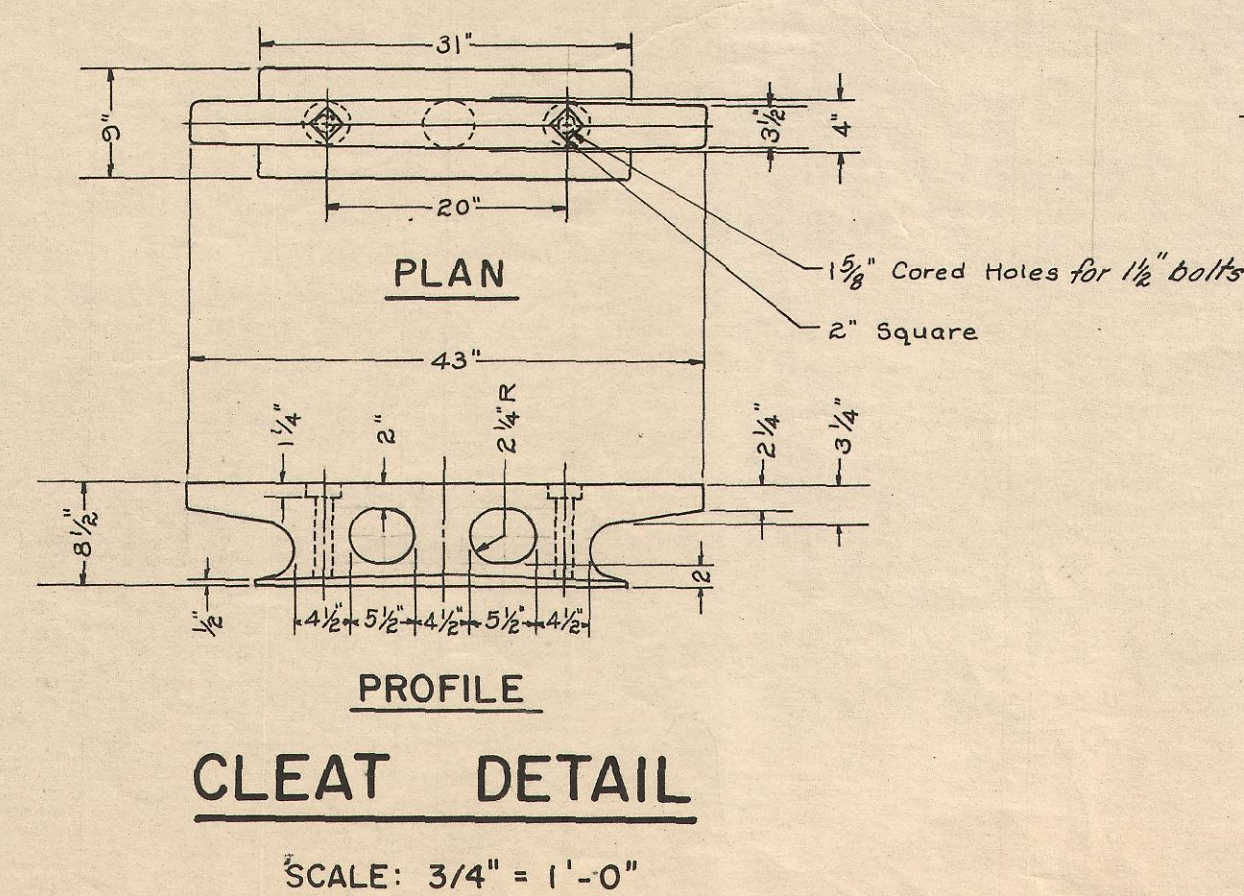
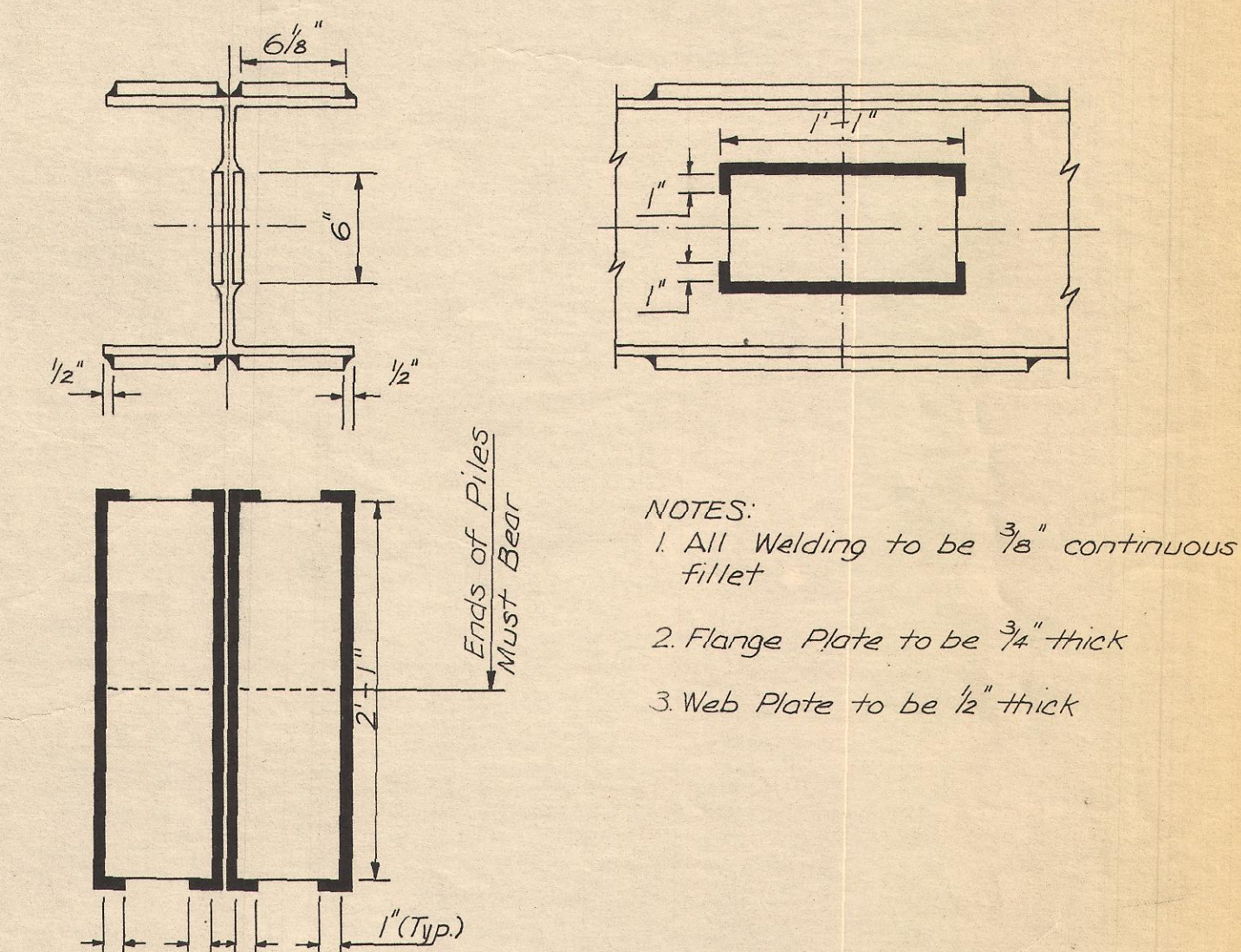
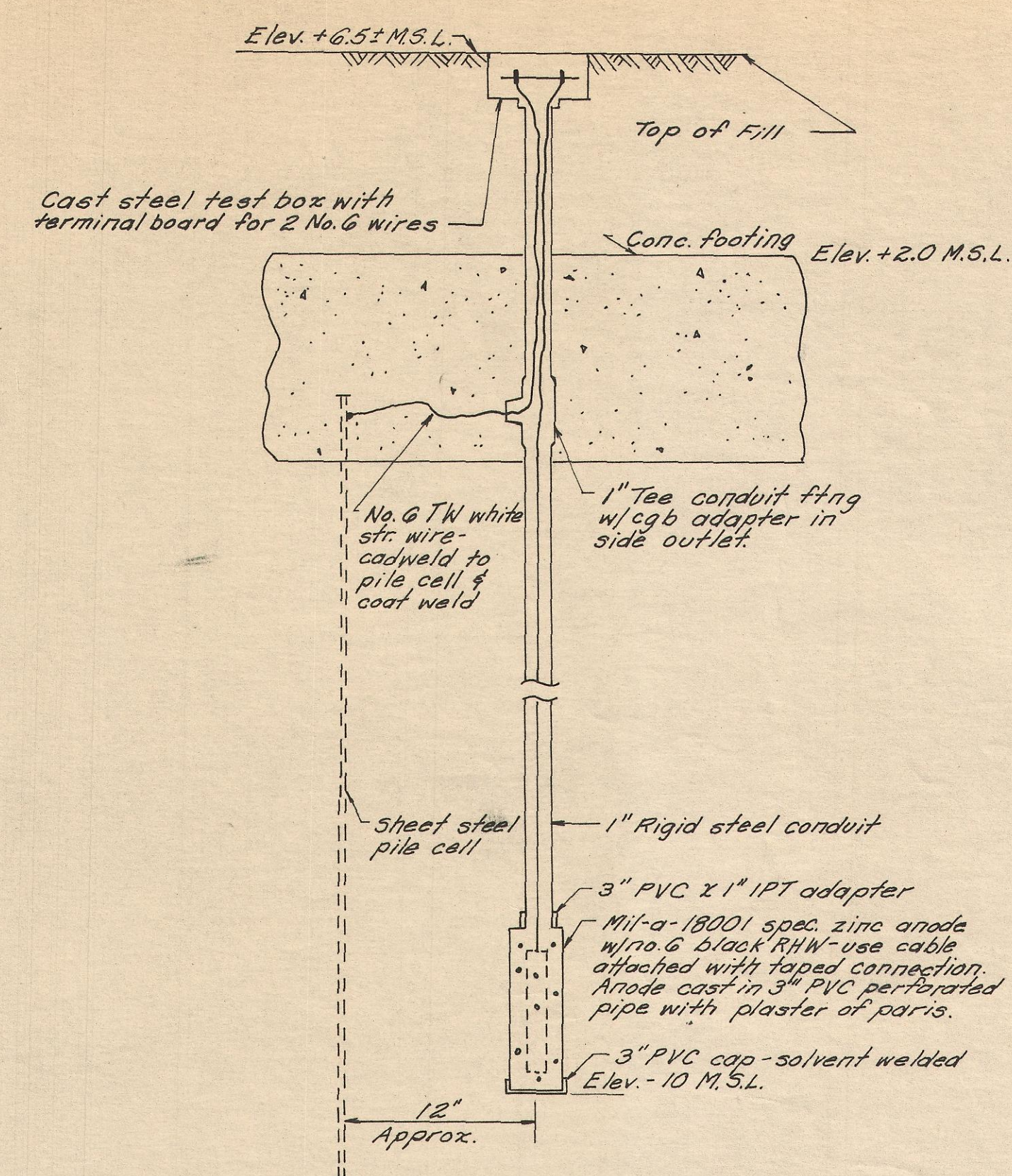
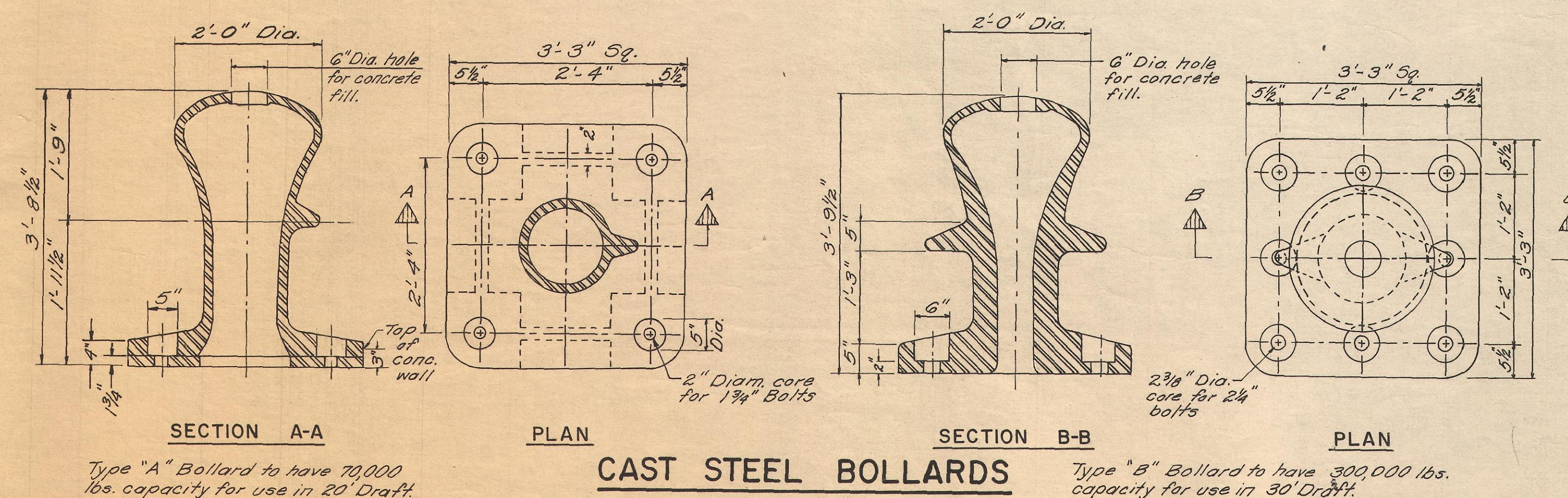
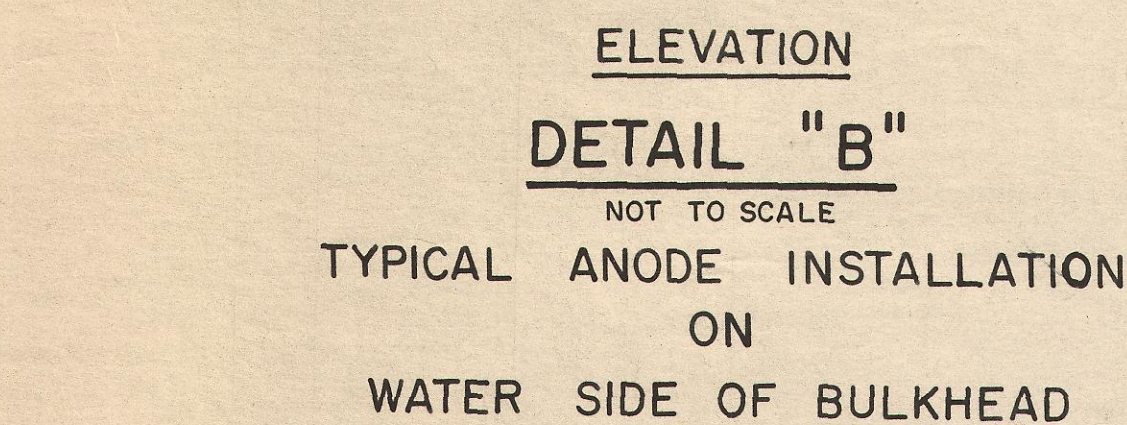
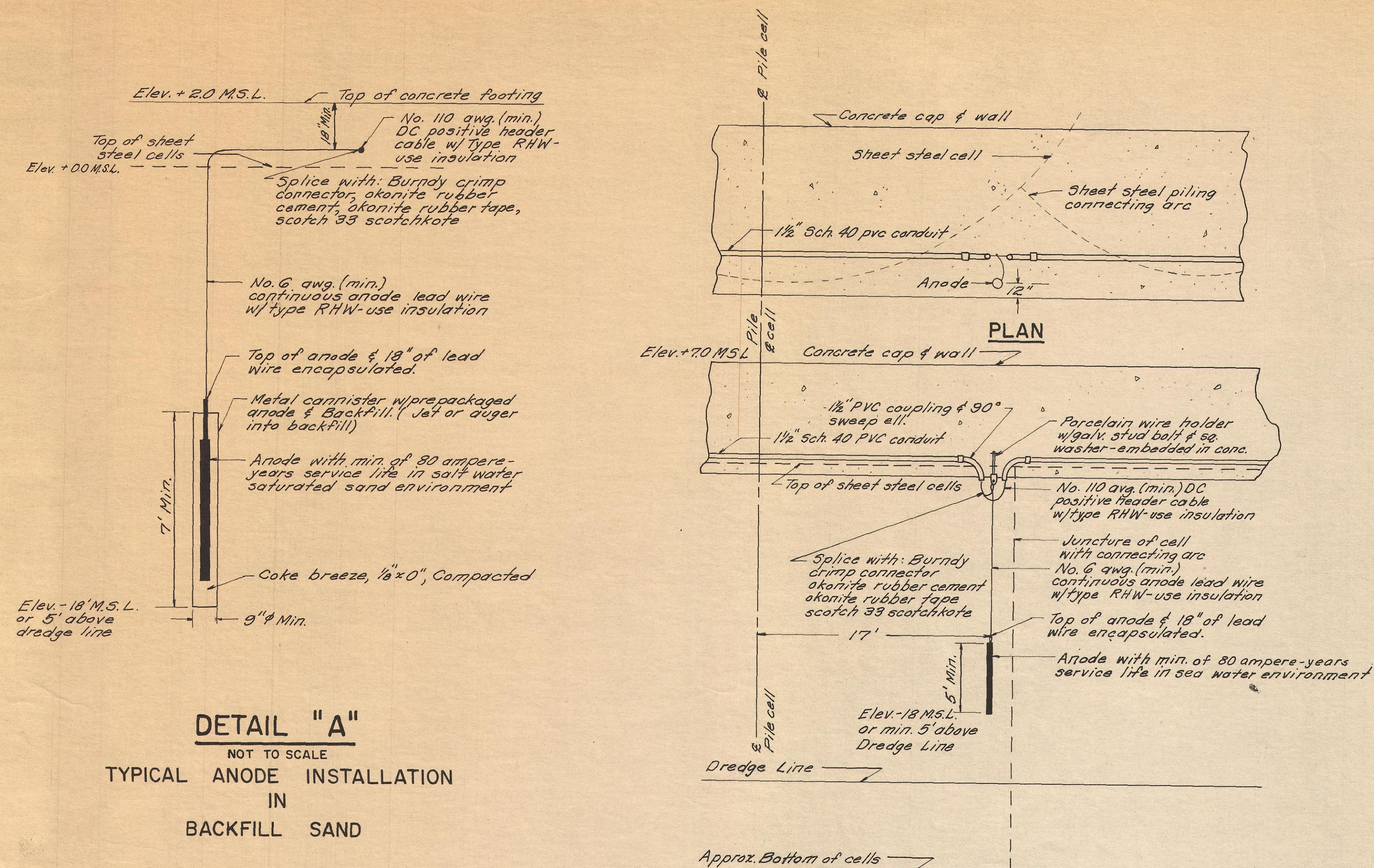
CONSTRUCTION JOINT

DOCK WALL JOINT DETAILS

NOT TO SCALE

- Notes:
1. Joint Filler to extend to top of wall.
 2. No reinforcement to pass through expansion joint.

NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE: May 19, 1969	DOCK WALL DETAILS	CONTRACT NO. 2	
DESIGNED BY R. C. S.		SHEET NO. 36 OF 37	
CHECKED BY R. L.		SCALE AS SHOWN	
APPROVED BY G. R. C.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS	DRW. NO. 371-02-36	



NEW BEDFORD REDEVELOPMENT AUTHORITY			
PROJECT - MASS. R-96			
SOUTH TERMINAL URBAN RENEWAL PROJECT			
DATE - May 19, 1969	MISCELLANEOUS BULKHEAD DETAILS		CONTRACT NO. 2
DESIGNED BY R. C. S.			SHEET NO. 37 OF 37
CHECKED BY P. L.	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS SPRINGFIELD, MASSACHUSETTS		SCALE AS SHOWN
APPROVED BY G. R. C.			DRW. NO. 371 - 02-37