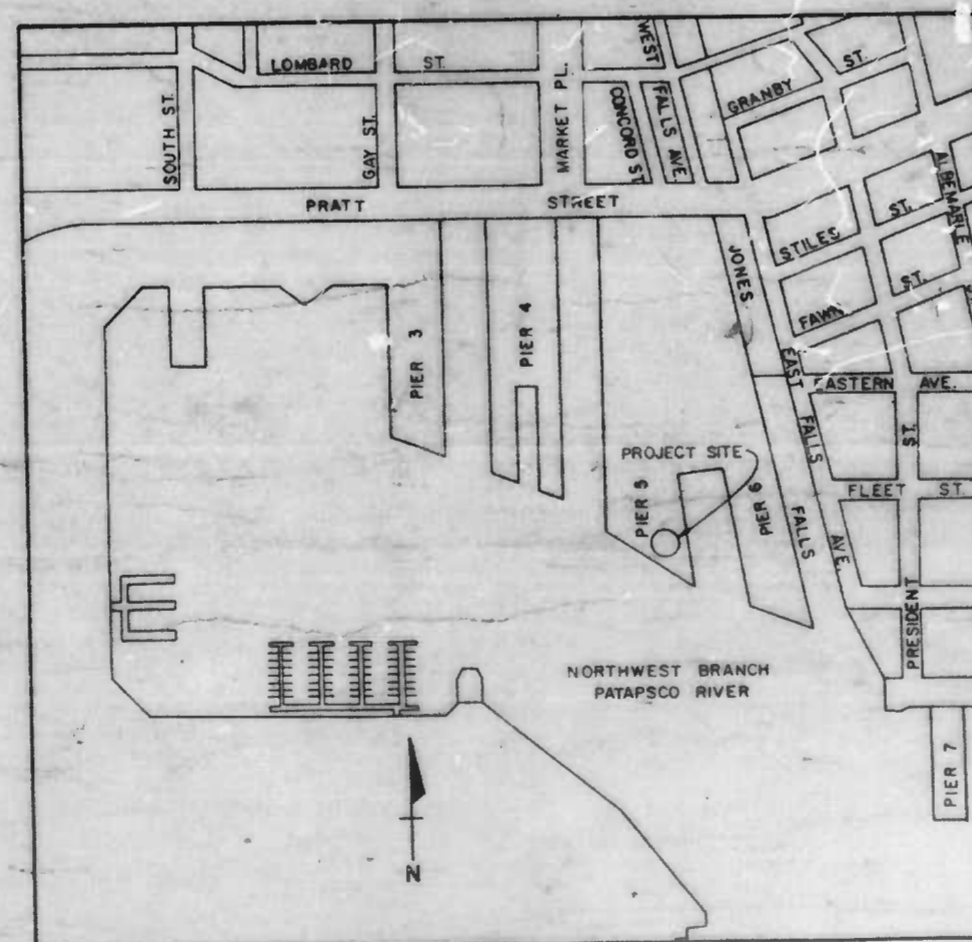


CITY OF BALTIMORE
 DEPARTMENT OF **TRANSPORTATION**
 HIGHWAY AND BRIDGE ENGINEERING

CONTRACT NO. 3114



**SEVEN FOOT KNOLL
 LIGHTHOUSE RELOCATION**



INDEX OF DRAWINGS

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1	<u>GENERAL</u> TITLE SHEET
2	<u>STRUCTURAL</u> EXISTING SITE PLAN
3	AID TO NAVIGATION PLATFORM DETAILS
4	LIGHTHOUSE RELOCATION FOUNDATION PLAN AND DETAILS
5	<u>SEDIMENTATION AND EROSION CONTROL</u> SEDIMENTATION AND EROSION CONTROL PLAN
6	SOIL EROSION/SEDIMENT CONTROL NOTES
7	SOIL EROSION/SEDIMENT CONTROL DETAILS

CONT 3114

DEPARTMENT OF TRANSPORTATION

APPROVED:
[Signature]
 ASSISTANT COMMISSIONER

APPROVED:
[Signature]
 ASSISTANT COMMISSIONER

DRAWING SHEET 1 OF 4



WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 2315 ST PAUL STREET
 BALTIMORE, MARYLAND

3/31/88
 DATE

[Signature]

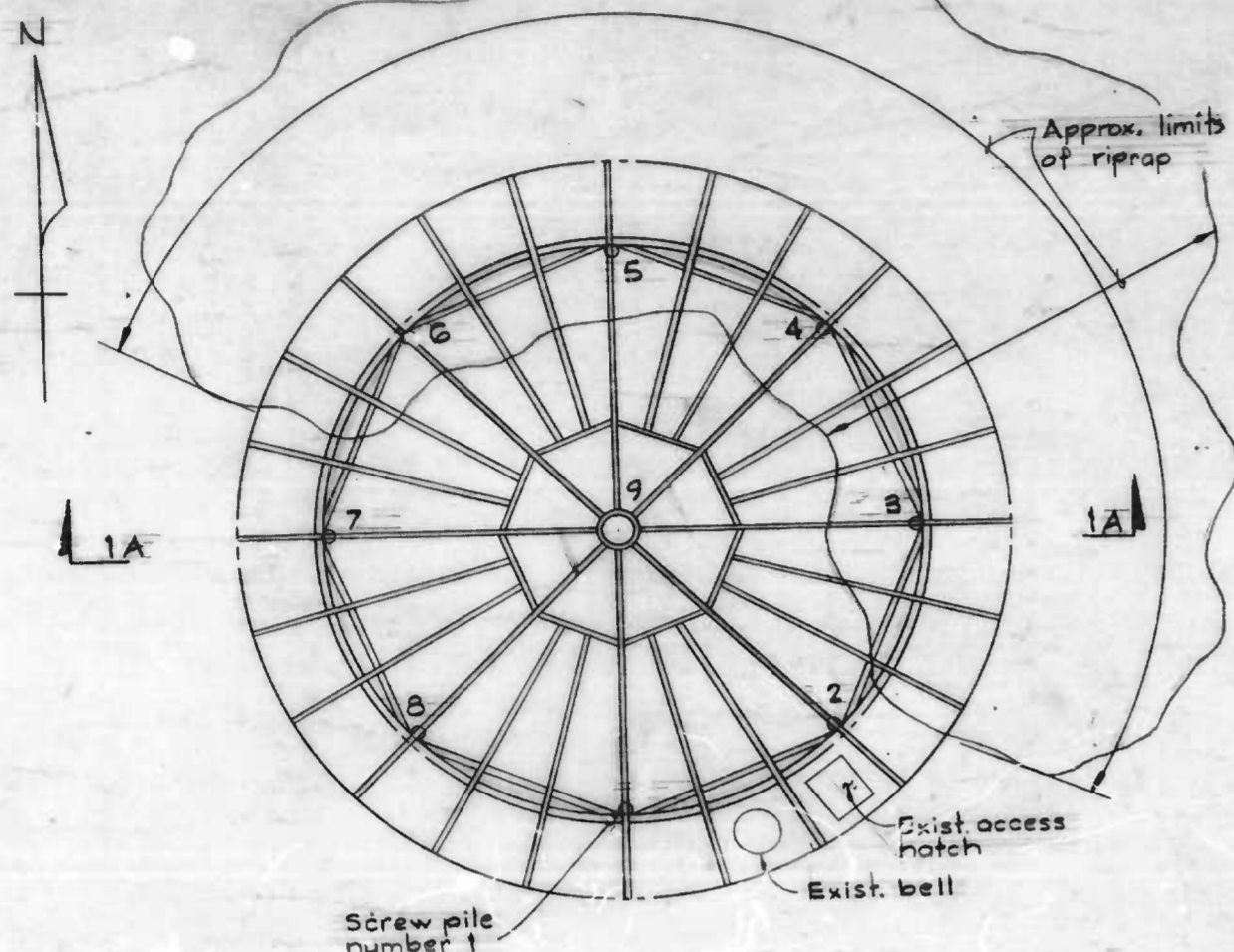
LOCATION PLAN

SCALE IN FEET
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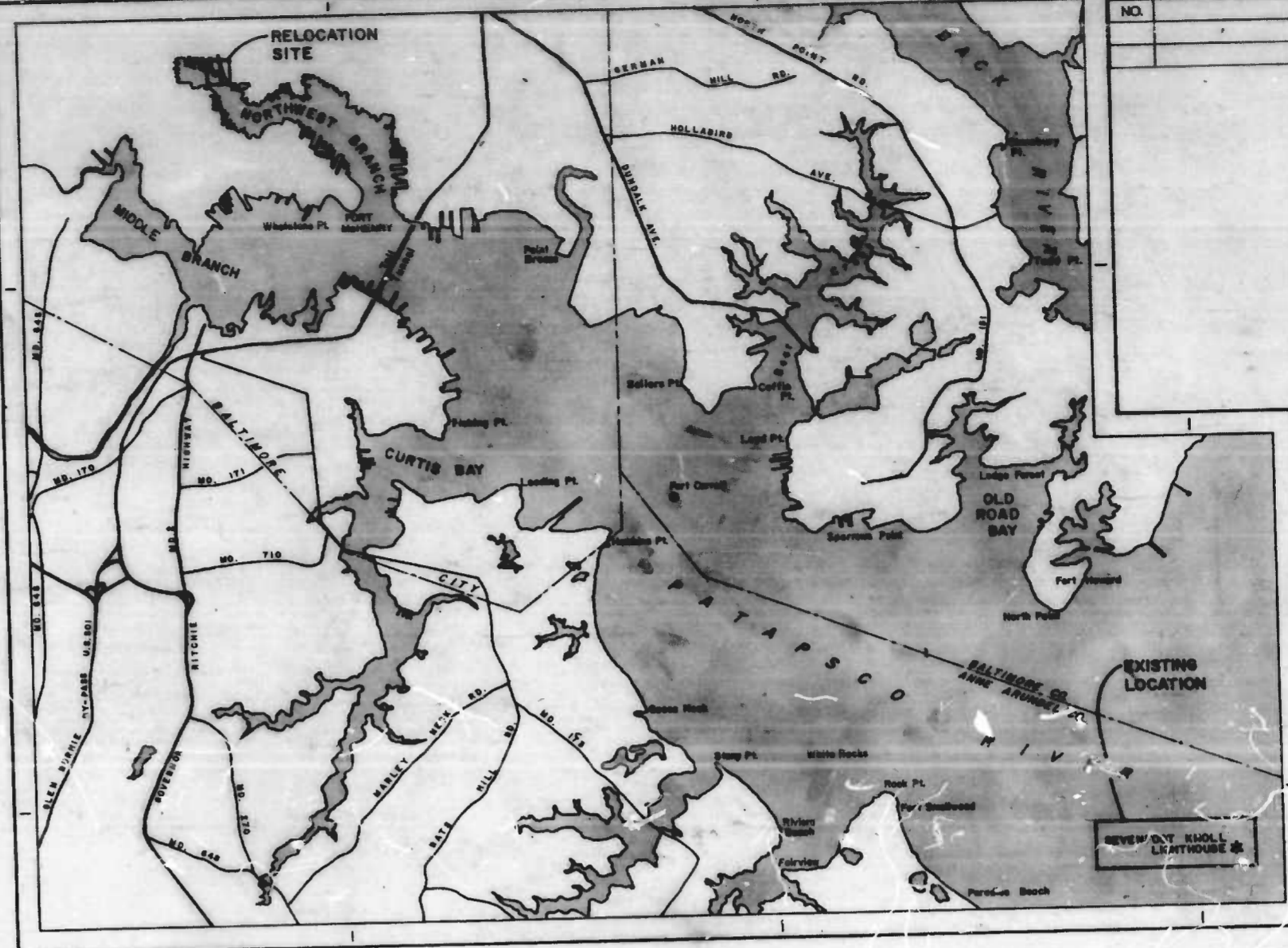
S. OF H. REVIEW	R/W RELEASE	GRADE EST.	HIGHWAY DESIGN	STRUCTURAL	DRAINAGE	LIGHTING	CONDUIT	SEDIMENTATION AND EROSION CONTROL	OFFICE OF TRANSPORTATION	WASTE WATER ENGINEERING	WATER ENGINEERING	TRAFFIC AND UTILITY ENGINEERING APPROVAL RECOMMENDED
BY: JCB	RJB	RJB	RJB		V	JCB	POR	DM	RRE	J. Long	H	<i>[Signature]</i>
DATE: 4/4/88	3/2/88	3/2/88	3/2/88		3-31-88	4-4-88	4/4/88	4/4/88	4/4/88	3/2/88	4/4/88	ASSISTANT COMMISSIONER

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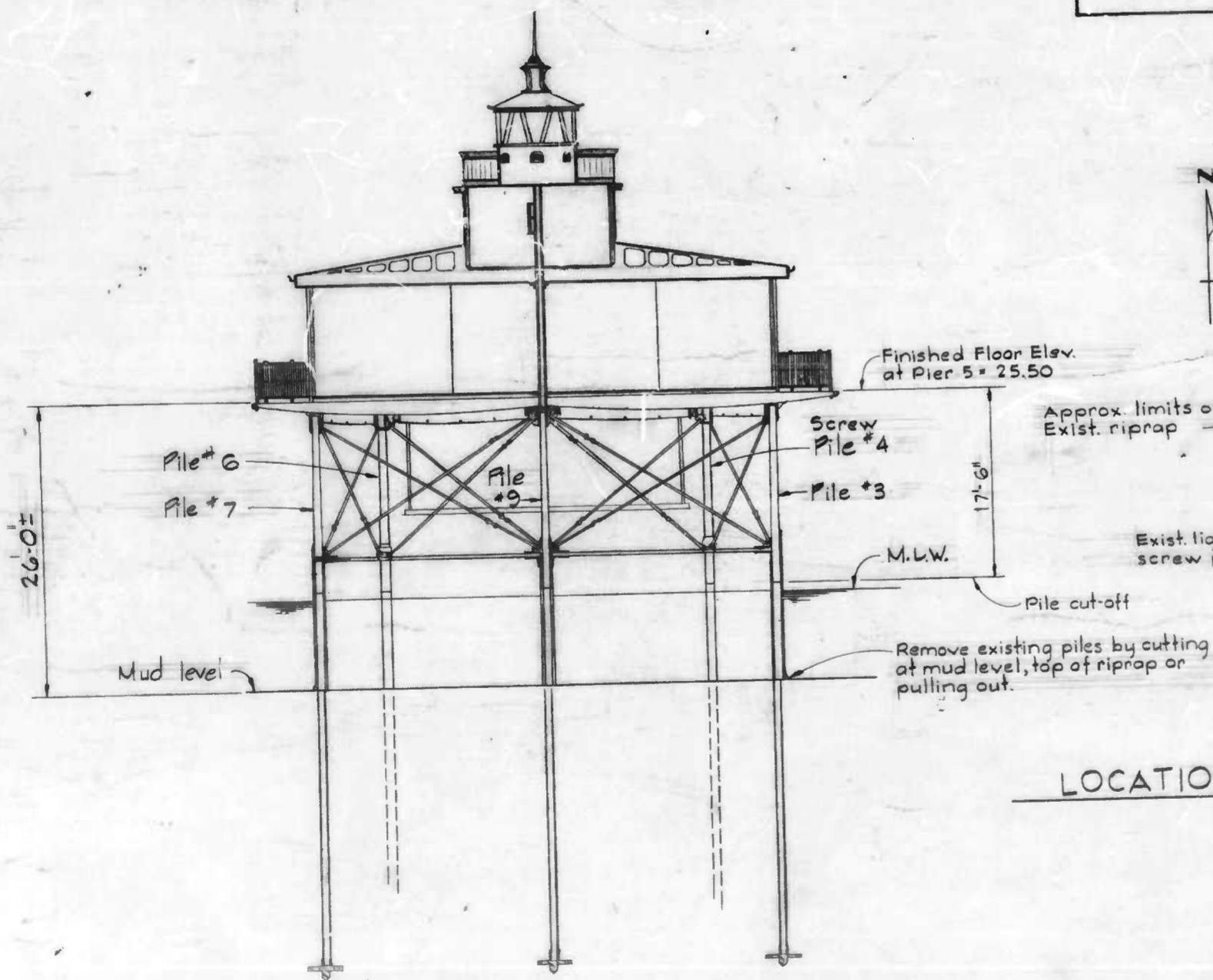
REVISIONS		DATE	BY
NO.	DESCRIPTION		



PLAN - SEVENFOOT LIGHTHOUSE FIRST FLOOR
Scale: 1/8" = 1'-0"

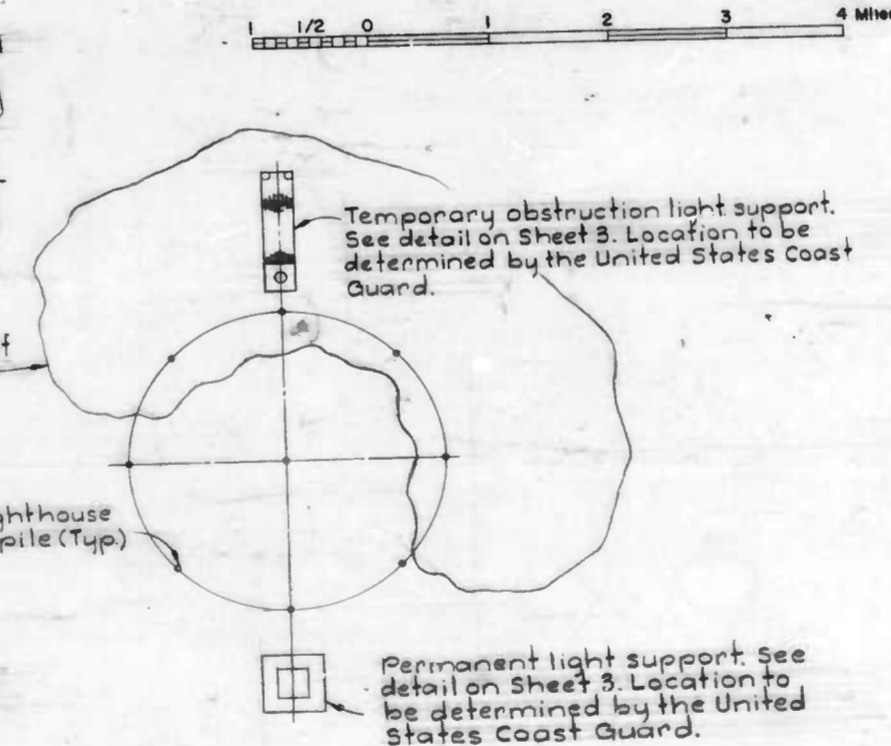


EXISTING LOCATION PLAN



SECTION 1A/1
Scale: 1/8" = 1'-0"

LOCATION PLAN - AIDS TO NAVIGATION
Scale: 1/16" = 1'-0"



DRAWN BY
EXAMINED BY

W.O. 80307



WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
BALTIMORE MARYLAND

BY: *Charles R. Latz*

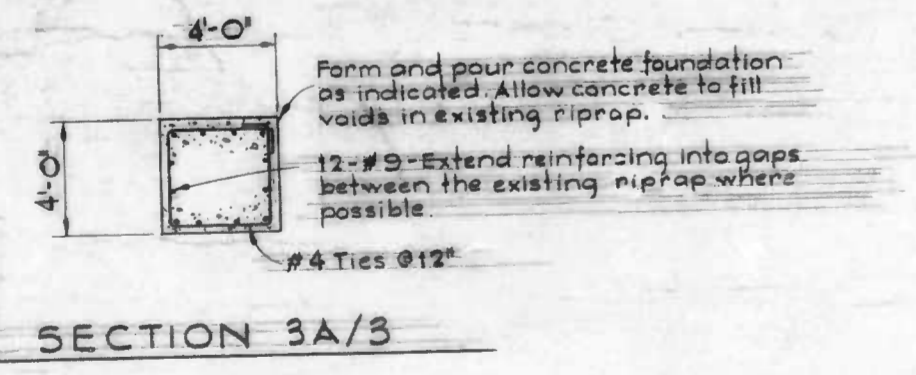
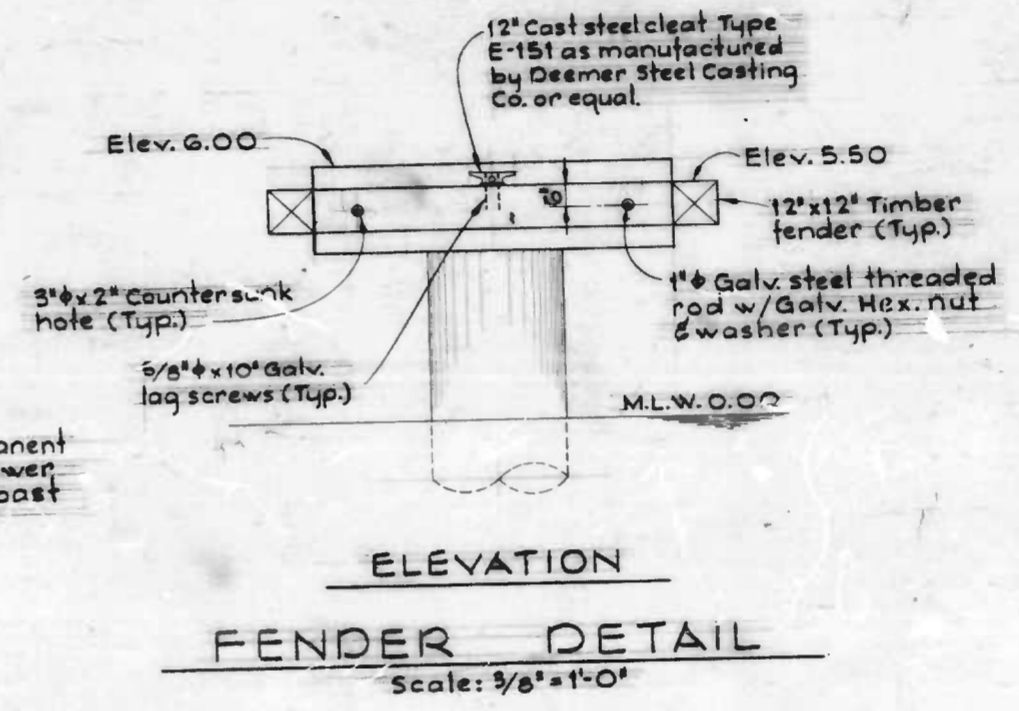
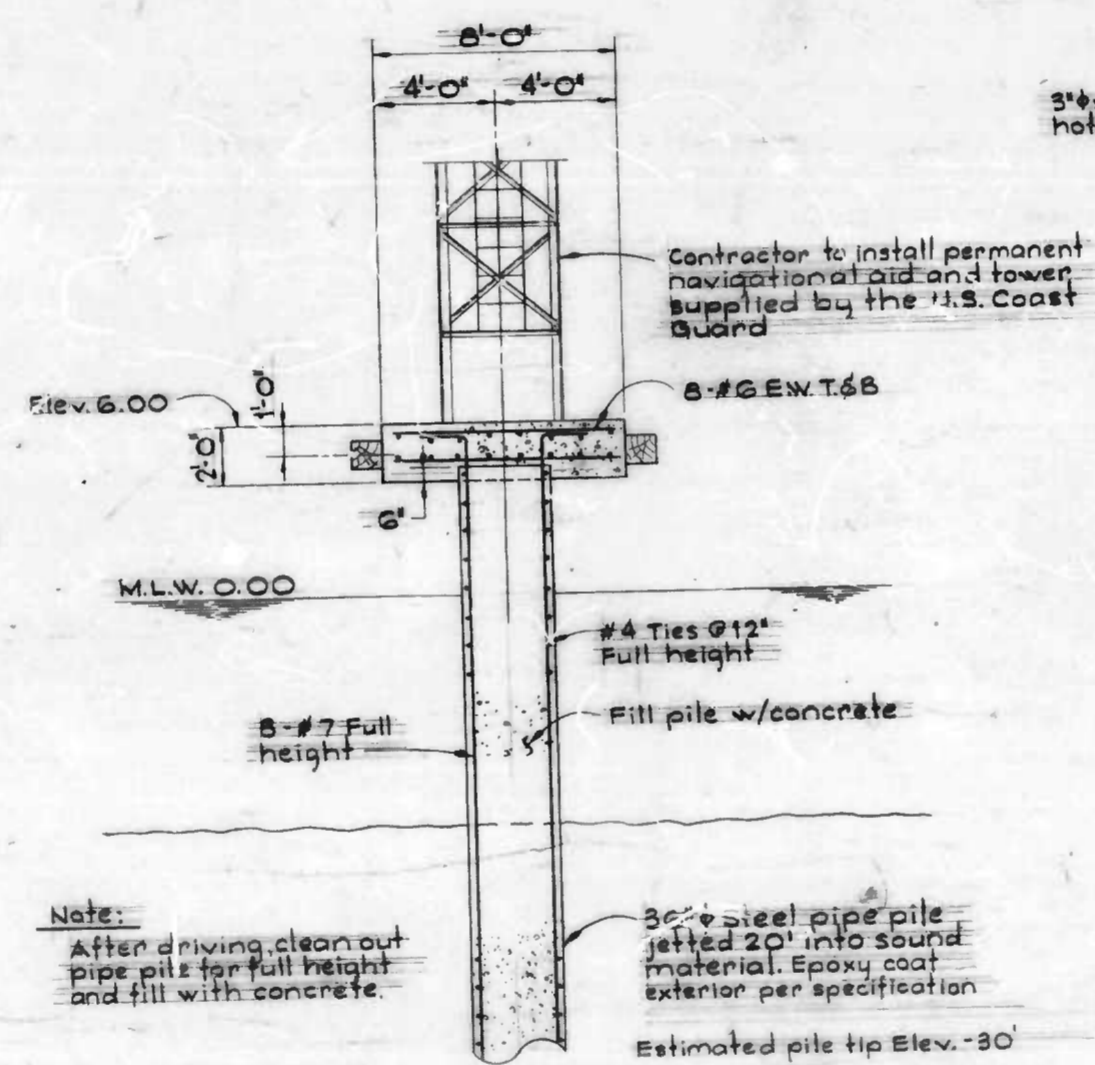
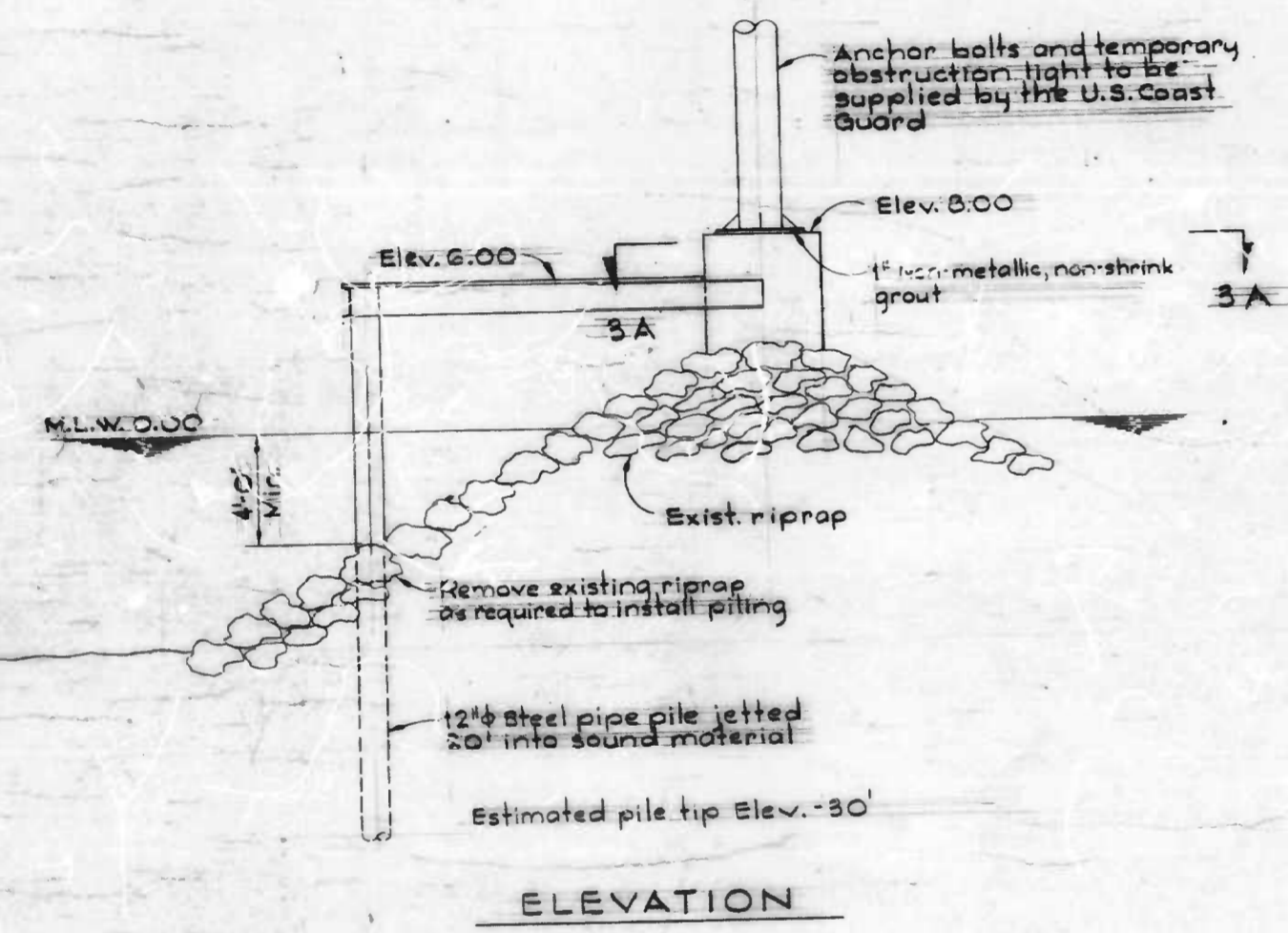
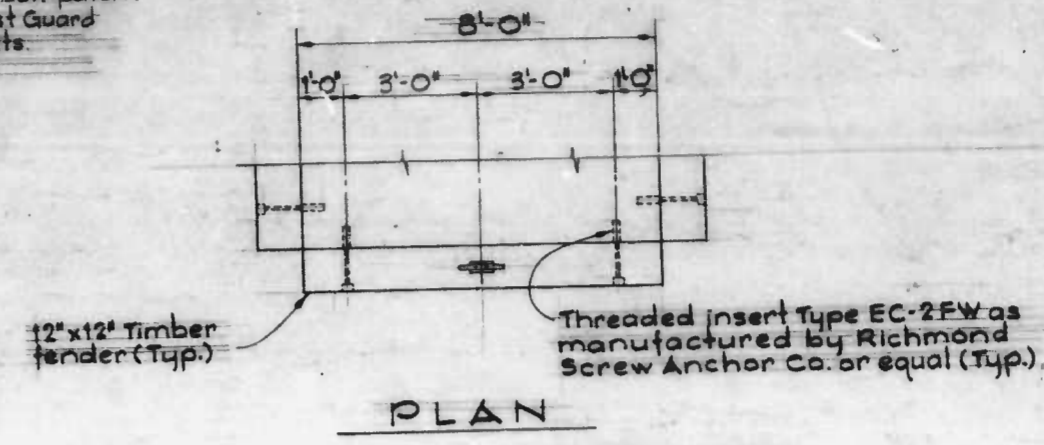
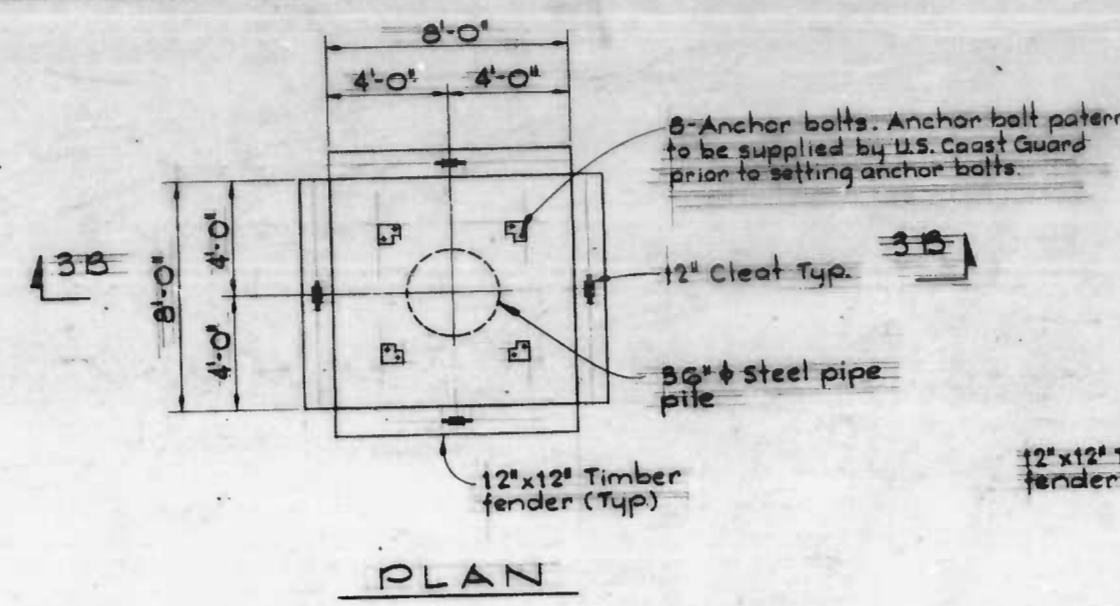
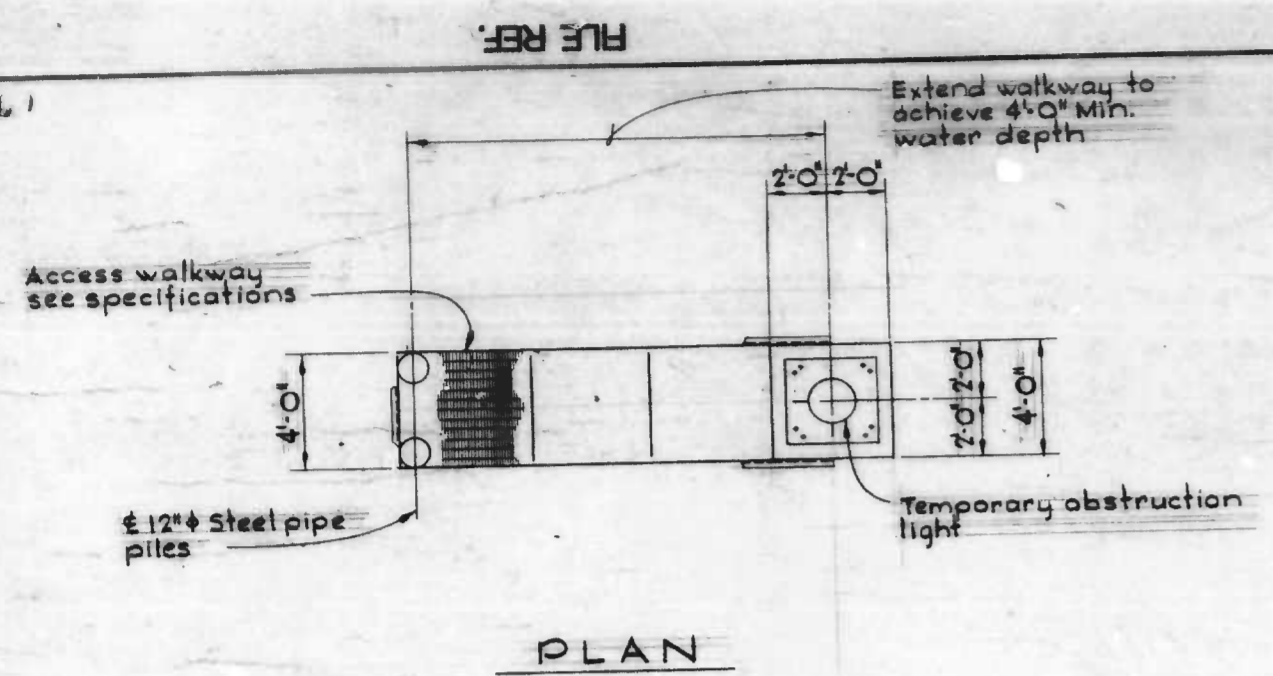
CITY OF BALTIMORE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CONTRACT NO. 3114
SEVENFOOT KNOLL
LIGHTHOUSE RELOCATION
EXISTING SITE PLAN
LIGHTHOUSE FOUNDATION

SCALE AS SHOWN
DRAWING: SHEET 2 OF 7
DATE Oct. 9, 1987

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY



SECTION 3B/3
PERMANENT LIGHT SUPPORT
Scale: 1/4"=1'-0"

TEMPORARY OBSTRUCTION LIGHT SUPPORT
Scale: 1/4"=1'-0"

DRAWN BY
EXAMINED BY

W.O. 803J7

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
BALTIMORE MARYLAND

BY *Charles P. Long*

CITY OF BALTIMORE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CONTRACT NO. 3114
SEVENFOOT KNOLL
LIGHTHOUSE RELOCATION
AID TO NAVIGATION
PLATFORM DETAILS

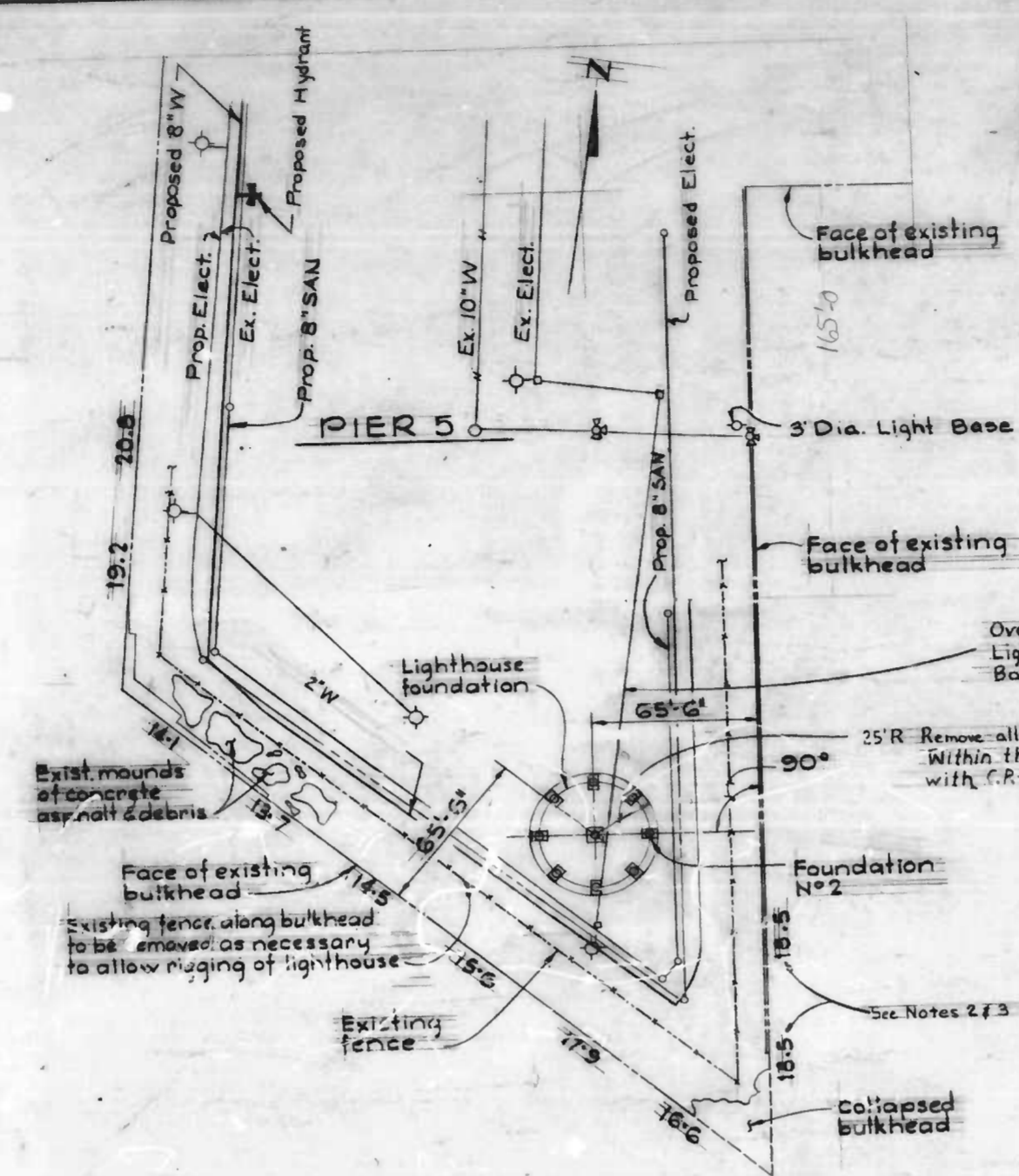
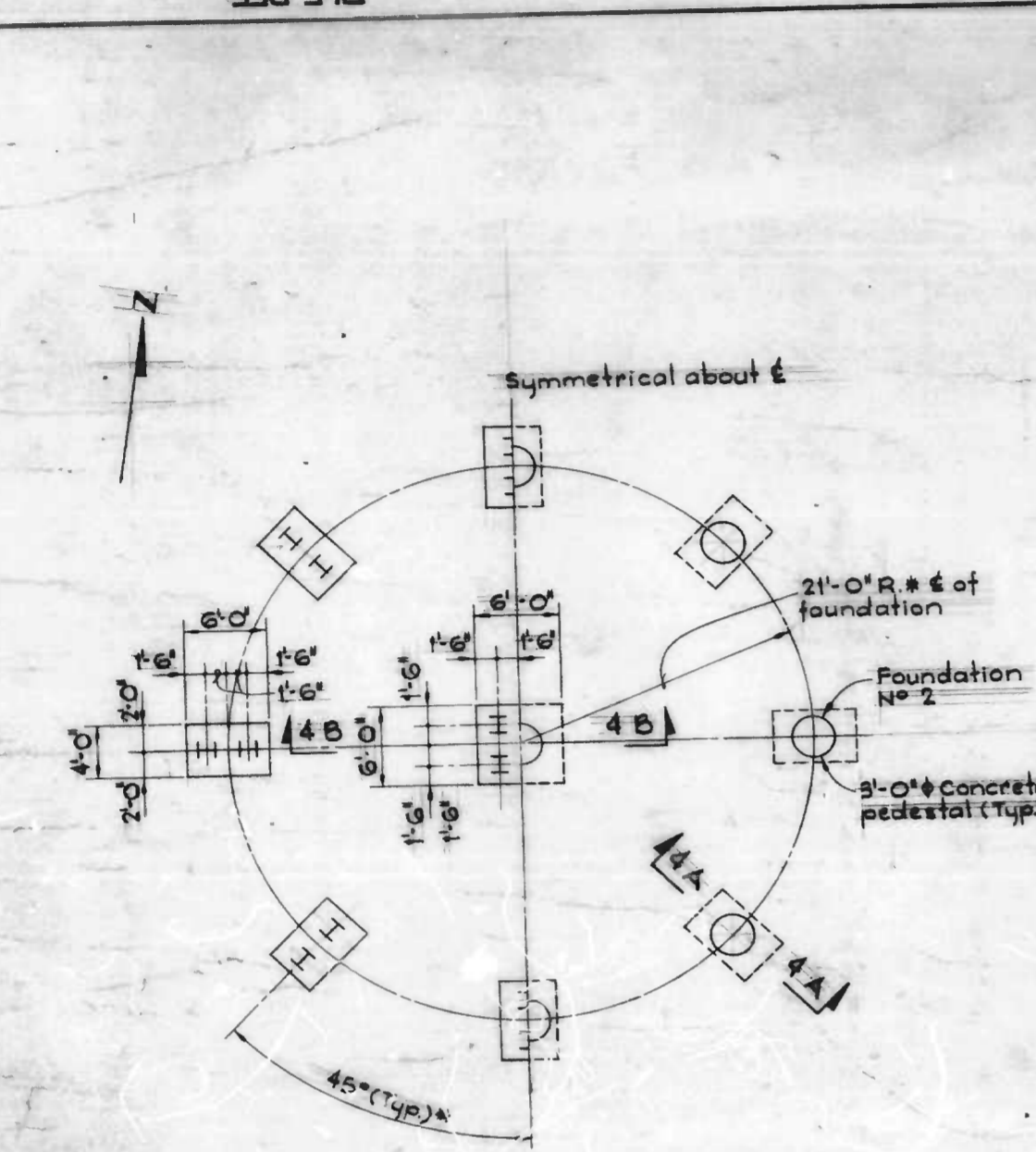
SCALE AS SHOWN DATE Oct 9, 1987 SHEET 3 OF 7

FILE REF.

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

- NOTES**
- TO ORIENT LIGHTHOUSE ON PIER 5, MATCH EXISTING SCREW PILE NUMBERING SHOWN ON SHEET 2 WITH FOUNDATION NUMBERING SHOWN ON THIS SHEET.
 - WATER DEPTHS SHOWN ALONG THE PERIMETER OF PIER 5 ARE THE DEPTH BELOW MLW ELEVATION 0.00 (BALTIMORE CITY DATUM).
 - WATER DEPTHS ARE APPROXIMATE. THE CONTRACTOR IS ADVISED THAT UNDERWATER OBSTRUCTIONS MAY EXIST WHICH MAY LIMIT ACCESS ALONG THE PIER 5 BULKHEAD.
 - ~~THE CONTRACTOR SHALL ERECT A TEMPORARY 6'-0" HIGH CHAIN-LINK FENCE ALONG THE LIMIT OF SITE SHOWN ON THIS SHEET. THIS FENCING TO BE REMOVED PRIOR TO CONTRACT COMPLETION.~~
 - THE CONTRACTOR IS ADVISED THAT THE EXISTING BULKHEAD EDGES ALONG PIER 5 ARE DETERIORATED AND MAY NOT SUPPORT HEAVY LOADING WITHIN 10'± OF THE EDGE.
 - ALL CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28-DAYS.
 - REINFORCED CONCRETE IS DESIGNED AND SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH THE CURRENT SPECIFICATION ACI-318-83.
 - ALL REINFORCING SHALL CONFORM TO ASTM A615-B2 GRADE 60 EXCEPT GRADE 40 FOR STIRRUPS AND TIES. ALL EPOXY COATED PER ASTM A-775.
 - UNLESS NOTED OTHERWISE, CONCRETE COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
BOTTOM AND SIDES OF PEDESTALS AND SLABS - 3 INCHES.
 - ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4 INCHES UNLESS NOTED OTHERWISE.
 - ALL SPLICES AND EMBEDMENTS FOR REINFORCING BARS NOT DIMENSIONED ON THE DRAWINGS SHALL BE DETAILED AS 4L±" C" SPLICES.
 - ALL H-PILES EXTERIOR OF 36" PIPE AND PILE CAPS TO BE EPOXY COATED PER SPECIFICATION.
 - HOT DIPPED GALVANIZED PER SPECIFICATION.



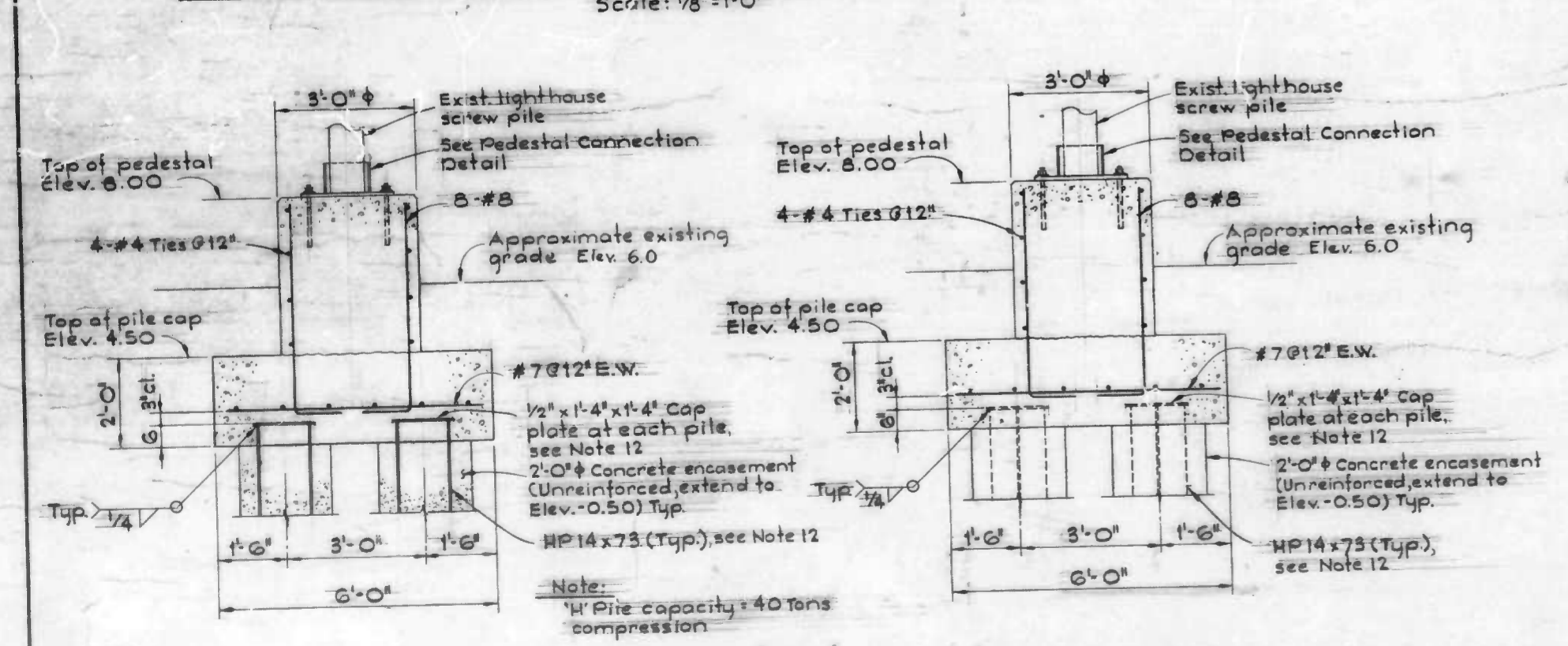
MISS UTILITY
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATIONS BY TEST FITS IN ADVANCE OF CONSTRUCTION. IF EXISTING UTILITIES TO BE MAINTAINED ARE DAMAGED THE CONTRACTOR SHALL SATISFACTORILY REPAIR AND RESTORE THEM TO SERVICE IMMEDIATELY AT NO ADDITIONAL COST IN THE CONTRACT.
FOR UTILITY LOCATIONS, AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION, CALL "MISS UTILITY" COLLECT - (1-888-0100).

BENCH MARKS

B.M. 776.7	Elev. 9.663
Square (□) cut, west end of bottom stone step, entrance to 2 S.B. Pumping Station, south side Eastern Avenue, 140'± east of East Falls Avenue.	
B.M. 876.5	Elev. 11.491
Brass screw in east end of south concrete retaining wall of World Trade Center driveway, South side Pratt St, 60'± west of W. St. at Gay St.	

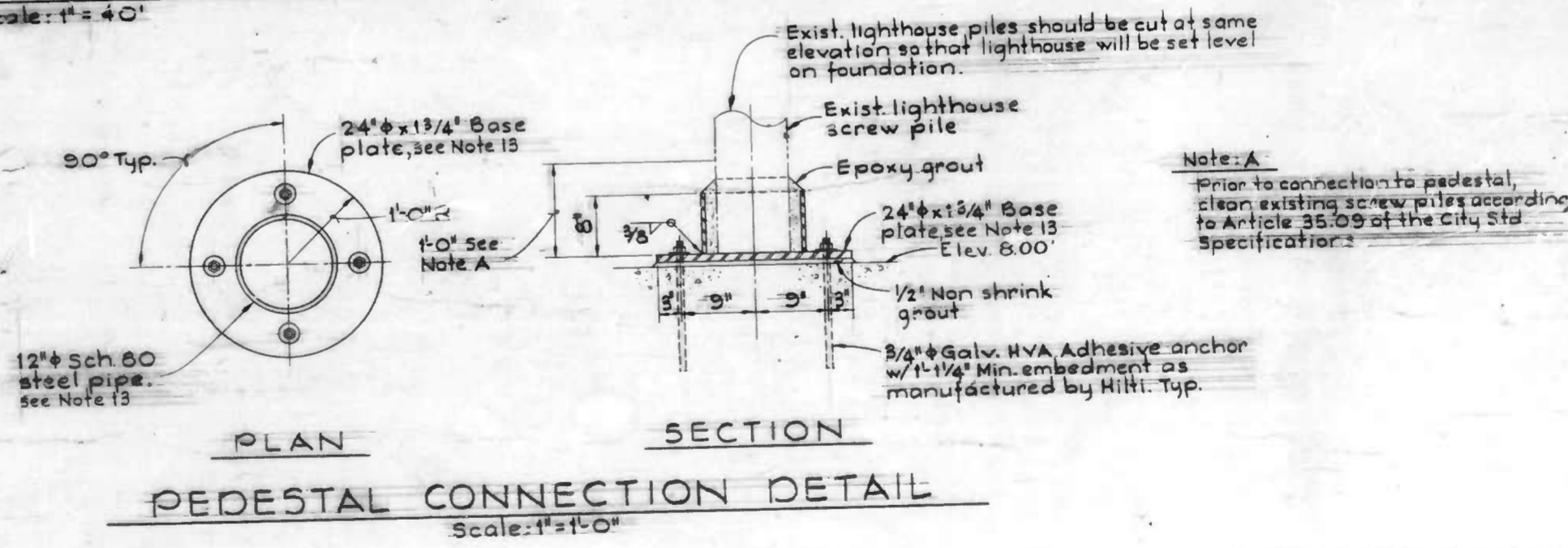
PIER 5 - LIGHTHOUSE FOUNDATION PLAN
Scale: 1/8" = 1'-0"

LOCATION PLAN - PIER 5
Scale: 1" = 40'



SECTION 4A/4
Scale: 1/2" = 1'-0"

SECTION 4B/4
Scale: 1/2" = 1'-0"



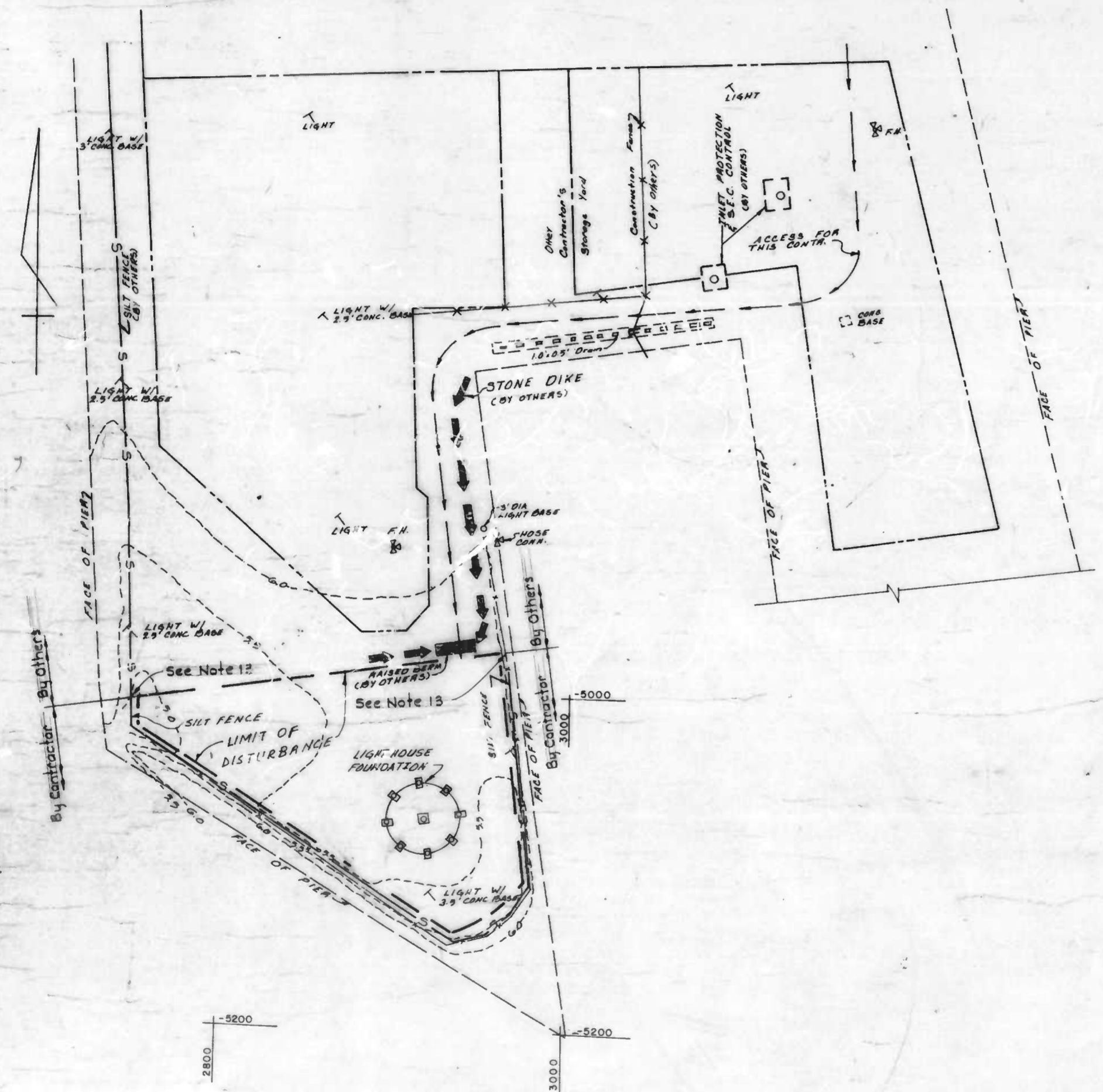
PEDESTAL CONNECTION DETAIL
Scale: 1" = 1'-0"

STATE OF MARYLAND
WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
BALTIMORE MARYLAND
BY: *Charles R. Lat*

CITY OF BALTIMORE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
CONTRACT NO 3114
SEVENFOOT KNOLL
LIGHTHOUSE RELOCATION
**LIGHTHOUSE RELOCATION
FOUNDATION PLAN AND DETAILS**
SCALE: AS SHOWN DATE Oct 9, 1987
SHEET 4 OF 7

FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY




SUGGESTED SEQUENCE OF OPERATIONS:

1. CONTRACTOR MUST SUBMIT WRITTEN NOTIFICATION 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES TO THE BALTIMORE CITY SEDIMENT CONTROL SECTION STATING:
 - A) WHEN CONTRACTOR INTENDS TO BEGIN CONSTRUCTION.
 - B) SOURCE OF BORROW MATERIAL, IF ANY.
 - C) DISPOSAL SITE.
 - D) CONTRACTOR'S TENTATIVE COMPLETION DATE.
2. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES.
3. CONSTRUCT SILT FENCE WITH ACCESS GATE AT SPINE OF THE PLANS.
4. EXCAVATE 6'x6' AND 6'x6' AT THE LOCATIONS OF FOUNDATIONS TO AT-LEAST 12" DEPTH.
5. DRIVE HP PILES.
6. TYPEN THE FOUNDATION LOCATIONS TO FINAL ELEVATIONS OF 2.5.
7. CONCRETE PILE CAPS.
8. CONSTRUCT PEDESTALS AND THE REST OF THE SUPERSTRUCTURES.
9. CONSTRUCT FINAL FENCE WITH GATE AND REMOVE THE TEMPORARY FENCE.
10. RESTORE THE DISTURBED AREAS (PAVING ETC.) WITH EQUAL OR BETTER SURFACES.
11. REMOVE ALL SEDIMENT CONTROL DEVICES AFTER APPROVAL HAS BEEN OBTAINED FROM THE SEDIMENT CONTROL INSPECTOR AND THE SOIL CONSERVATION DISTRICT.
12. PAVE/RESTORE THE AREAS OCCUPIED BY SEDIMENT CONTROL DEVICES.
13. Contractor shall install silt fence to this point and connect to silt fence by others.

SEDIMENT AND EROSION CONTROL GENERAL NOTES:

1. IT IS ANTICIPATED THAT NO STOCKPILE WILL BE REQUIRED FOR THIS PROJECT. IN CASE ANY STOCKPILING AND/OR STAGING WILL BE CONSIDERED NECESSARY BY THE CONTRACTOR, HE MUST SUBMIT SEDIMENT CONTROL METHODS FOR THE STOCKPILE AREAS.
2. THE CONTRACTOR SHALL NOT EXPOSE EARTH, THAT CAN NOT BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS. STABILIZE THE AREAS TO BE PAVED WITH APPROPRIATE SUBBASE MATERIAL. ANY EXCAVATED AREAS WHICH HAVE BEEN FILLED TO THE SURFACE CAN NOT BE IMMEDIATELY STABILIZED, MUST BE TEMPORARILY STABILIZED WITH AT LEAST 3" OF CRUSHER RUN.
3. THE CONTRACTOR SHALL NOT DEVIATE FROM THE APPROVED SEDIMENT AND EROSION CONTROL PLANS WITHOUT PRIOR APPROVAL OF THE BALTIMORE CITY SEDIMENT CONTROL REPRESENTATIVE. VARIATIONS TO THE PLAN MUST BE SUBMITTED IN WRITING, ACCOMPANIED BY THE COPY OF THE ORIGINALLY APPROVED PLAN MODIFIED TO SHOW THE REQUESTED CHANGES. FOR HIS APPROVAL, SUBSTANTIAL CHANGES WILL NECESSITATE AMENDING THE BUILDING AND/OR GRADING PERMIT IF APPLICABLE.
4. IT IS BROUGHT TO THE ATTENTION OF THE CONTRACTOR THAT THE ACCESS PATH FOR THE CONTRACTOR WILL BE LIMITED TO THE AREAS SHOWN ON THE DRAWINGS. THERE WILL BE SEVERAL SEDIMENT CONTROL MEASURES AND OTHER CONSTRUCTION ACTIVITIES IN THE ADJACENT AREAS (EVEN BY OTHER CONTRACTORS). THE EXACT LOCATIONS OF SUCH ITEMS HAS BEEN SHOWN ON THE DRAWINGS. THESE ARE NOT GUARANTEED AND IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEM ON THE FIELD.
5. THE CONTRACTOR IS TO MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES IN THE PROJECT AREA, EVEN IF THESE DEVICES WERE PLACED BY OTHERS. THE INTENTION OF THIS NOTE IS THAT IN EVERY EVENT EROSION AND SEDIMENT CONTROL DEVICES WILL BE FUNCTIONING PROPERLY AT ALL THE REQUIRED TIMES.

DRAWN BY
EXAMINED BY
W.O. 80307


WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE MARYLAND
 BY: DATTA CONSULTANTS, INC.

CITY OF BALTIMORE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3114
 SEVENFOOT KNOLL
 LIGHTHOUSE RELOCATION
**SEDIMENT AND
 EROSION CONTROL PLAN**
 SCALE: 1"=40' DATE: 06.9.1987
 DRAWING: SHEET 5 OF 7

FILE REF.

FILE REF.

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NO.	DESCRIPTION	DATE BY

STABILIZATION SPECIFICATIONS

TEMPORARY STABILIZATION - ARTICLE 36.12

Planting Season Temporary seeding can be done anytime of the year except when the ground is frozen. This item shall consist of furnishing and placing all fertilizer, temporary seed and mulch on areas disturbed for more than fourteen (14) days.

Schedule of Procedure The contractor shall provide temporary stabilization as specified in the approved sediment control plan.

Seedbed Preparation When the area to be seeded is packed and hard, the top layer of topsoil shall be loosened by raking or other means before seed is applied.

Lime No lime shall be required for temporary seeding.

Fertilizer Commercial fertilizer of an analysis 5-10-5 applied at a rate of 35 pounds per 1000 square feet.

Seeding (Section 20.28-1) Seed mixture, Annual Ryegrass applied at the rate of 3 pounds per 1000 square feet.

Mulching Applied at the rate of 100 pounds per 1000 square feet. Mulch consisting of asphalt mix at the rate of 10 gallons per 1000 square feet. This mulch shall be applied by blowing and the asphalt binder material shall be sprayed into the mulch.

PERMANENT STABILIZATION - ARTICLE 36.06

Planting Season No sod shall be placed between the dates of June 1 and August 15 inclusive nor at anytime when the temperature is below thirty-two (32) degrees Fahrenheit. No frozen sod shall be used and no sod shall be placed upon frozen soil.

Sodbed Preparation Before placing or installing sod upon any surfaces, all shaping and dressing of such surfaces shall have been completed. The completed areas to be sodded shall present a smooth, uniform, well-tilled surface true to line and cross section and any raking required to accomplish this will be done prior to the placing of the sod.

Fertilizers All areas to be sodded shall be fertilized with a commercial fertilizer of an analysis 10-10-10 and Ureafom fertilizer 38-0-0 applied at the rate of 20 and 5 pounds respectively per 1000 square feet.

NOTE: After sod is in place, topdress the sod with Ureafom fertilizer 38-0-0 at the rate of 5 pounds per 1000 sq. ft.

Lime Limit of the rate of 100 pounds of ground limestone per 1000 square feet. This lime and the 10-10-10 and 38-0-0 fertilizers shall be worked into the top two (2) inches of soil prior to placing sod.

Seed Mixture Grass Sod (Section 20.28-5)

TYPE A - Bluegrass Sod
 not less than 80% Kentucky Bluegrass
 not more than 35% Creeping Red Fescue
 not more than 10% other grasses and legumes

TYPE B - Tall Fescue Sod
 not less than 80% Tall Fescue
 not more than 20% other grasses and legumes

BALTIMORE CITY SEDIMENT CONTROL

Title 8, Subtitle 11, Natural Resources, Annotated Code of Maryland and Baltimore City Ordinance 1013, require that provisions to control erosion and sediment shall be included for all City land disturbance. As required by State Law, construction cannot be started until such erosion and sediment control provisions are approved.

The Contractor must filter off run-off and control all sediment within the project. All work must comply with all requirements of the "Baltimore City Erosion and Sediment Control Manual" and the "1983 Maryland Standards And Specifications For Soil Erosion And Sediment Control", as distributed and modified by the Baltimore City Sediment Control Section.

Nothing herein relieves the Contractor from complying with any and all other Federal, State or Municipal Regulations.

EROSION AND SEDIMENT CONTROL NOTES

- All utilities to be constructed first, prior to any construction on the site.
- No pumping from foundation excavations will be allowed directly into City system unless it is filtered by way of Sediment Traps or Filter.
- All excavation material shall be placed on the high side whenever possible and confined to an area where it will not obstruct the normal flow of drainage courses.
- Continuous inspection and maintenance of all Sediment Control devices will be required.
- The Owner/Contractor shall not deviate from the approved sediment and erosion control plan without prior approval of the Baltimore City Sediment Control Representative. Variations to the plan must be submitted in writing, accompanied by a copy of the originally approved plan modified to show the requested changes, for his approval. Substantial changes will necessitate amending the building and/or grading permits if applicable.

INSTRUCTIONS

- For land disturbing activities it is understood that the following conditions will be met:
- A. Grading**
- All disturbed areas shall be protected to control erosion and to prevent sedimentation of adjacent properties, storm sewers and/or streams.
 - Sediment control devices such as diversion berms, sediment traps, silt fences, vegetative stabilization, etc., shall be used to prevent off-site sedimentation at all times, at every location throughout the site where natural or existing conditions would cause sediment to normally wash off the site.
 - No proposed cut or fill will exceed three feet in depth (cut) or height (fill) without erosion and sediment controls. Exclusive of excavation for foundations.
 - No fill will be placed on any existing slope steeper than 5:1 without erosion and sediment controls.
 - There will be no final grades steeper than 2:1.
 - Borrow and/or spoil material shall not be stockpiled within the limits of this project.
 - All fills will be free of any organic or other deleterious materials and will be compacted. All areas to receive fill will have the ground surface prepared by removing all existing vegetation and root mat.
 - The proposed grading will not impair existing surface drainage, constitute a potential erosion hazard, or source of sedimentation to any adjacent property, drainage way or right-of-way.
 - All points of ingress and egress shall be protected to prevent tracking of mud onto public ways.
- B. Stabilization**
- As soon as final grading is completed, all disturbed areas will be stabilized with temporary or permanent mulch, including stone, blocktop, conc. surfacing, etc.
 - For vegetating areas steeper than three horizontal units to one vertical unit, adequate mulch, fertilizer and type of seed will be placed to ensure a vigorous ground cover and such application will be repeated, if necessary, until such growth is established.
 - Timing - Following initial soil disturbances or redistribution, permanent or temporary stabilization shall be completed within:
 - Seven calendar days for the surfaces of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than three horizontal to one vertical (3:1) one.
 - Twenty-four (24) hours for disturbed areas such as base repairs, alley returns, curb repairs, bus pads, pedestrian ramps, sidewalks and backfilled utility trenches. Stabilization shall consist of a minimum of 4 inch Graded Aggregate Sub-base and,
 - Fourteen calendar days for all other disturbed or graded areas.
 - For details regarding temporary and permanent stabilization practices, reference the "1983 Maryland Standards And Specifications For Soil Erosion And Sediment Control", or contact the Baltimore City Sediment Control Representative.
 - Sediment control devices are to be removed only after all disturbed areas have been stabilized.

CONDITIONS

- The Contractor will submit written notification to the Baltimore City Sediment Control Representative at least three working days before starting any grading activities, stating the following:
- The day he intends to start work
 - The source of all borrow material
 - The designated stockpile area
 - The Contractor's staging area
 - The disposal site for all excess material
 - The construction sequence
 - The completion day of the work

Owners/Developer Certification

I/We hereby certify that any clearing, grading, construction and/or development will be done pursuant to the plan and that all responsible personnel involved in the construction project will have a certification of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

Mario C. Lusca
 Signature Owner/Developer

MARIO C. LUSCA 4/4/88
 Print Name Date

204 Municipal Bldg.
 Address

396-4600
 Phone

Engineer's Certification

I certify that this plan for Erosion and Sediment Control represents a practical, workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Baltimore City Erosion and Sediment Control Section.

Jitender K. Datta
 Signature Date 9/29/77

JITENDER K. DATTA
 Print Name

7820 MAIN FALLS CIRCLE
 Address BALTIMORE, 21228

(301) 521-5000
 Phone

APPROVED BY:

Frederick MacDonell
 EROSION & SEDIMENT CONTROL REPRESENTATIVE

Department of Public Works, Bureau of Highways
 Environmental Services Division, Erosion and Sediment Control Section
 309 Municipal Building, Baltimore, MD 21202
 Phone - (301) 396-3693

CITY OF BALTIMORE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

CONTRACT NO. 3114
 SEVENFOOT KNOLL
 LIGHTHOUSE RELOCATION

SOIL EROSION / SEDIMENT CONTROL NOTES

SCALE: NONE DATE: _____ SHEET 6 OF 7

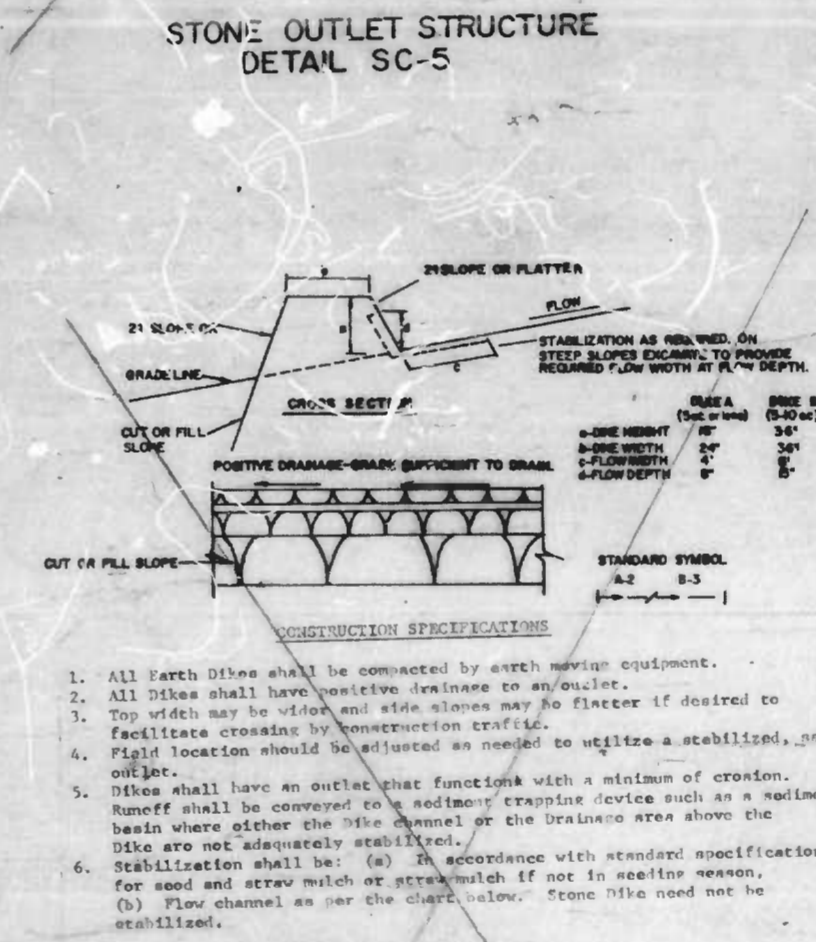
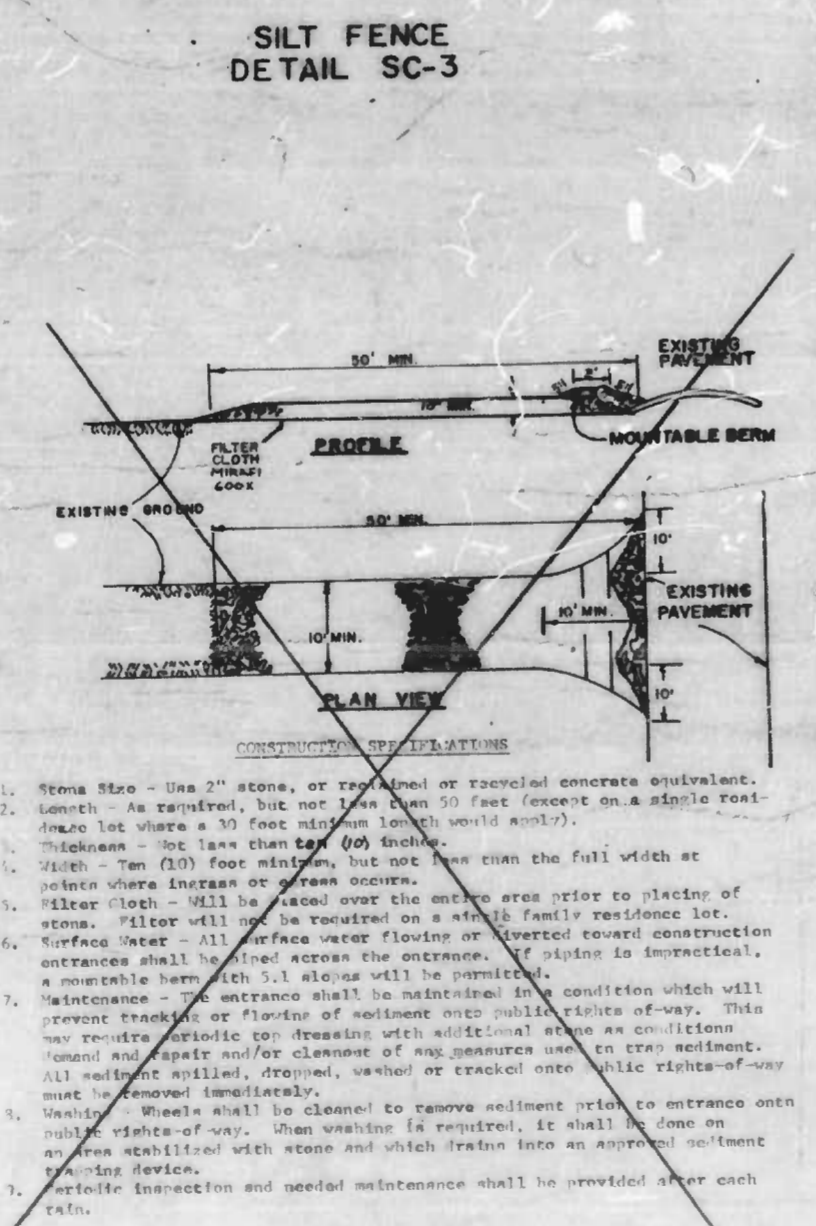
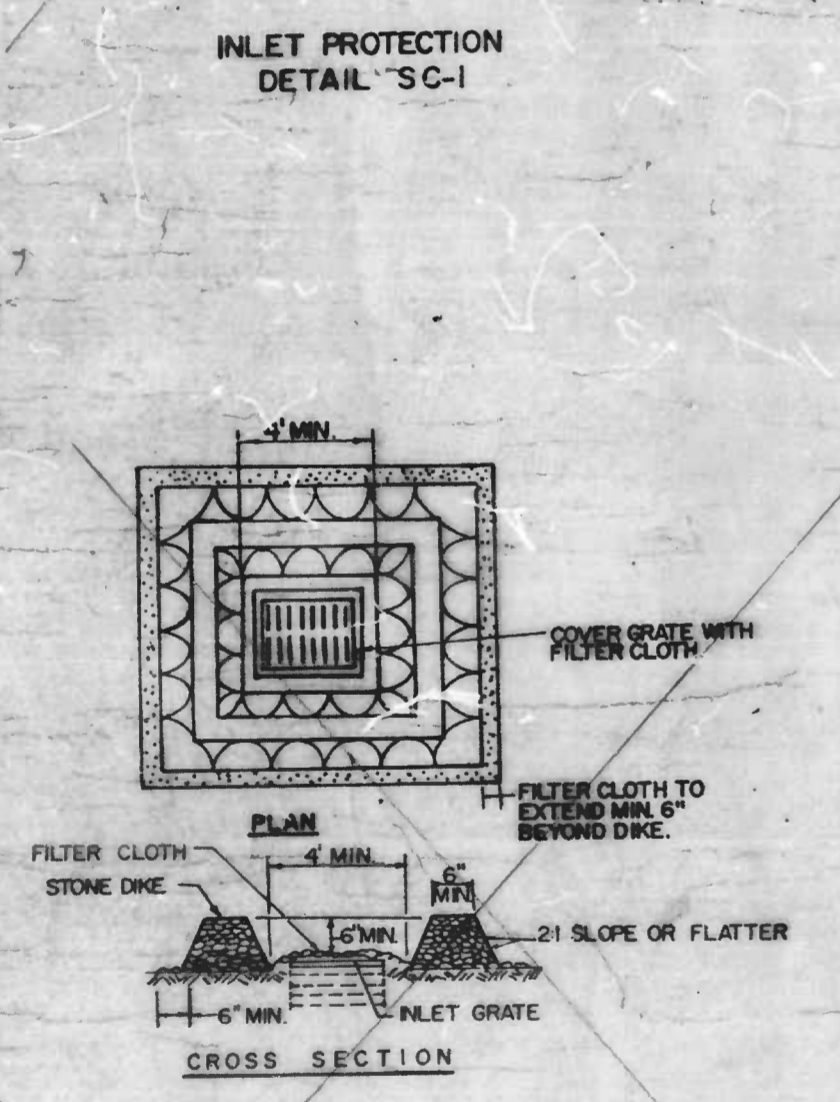
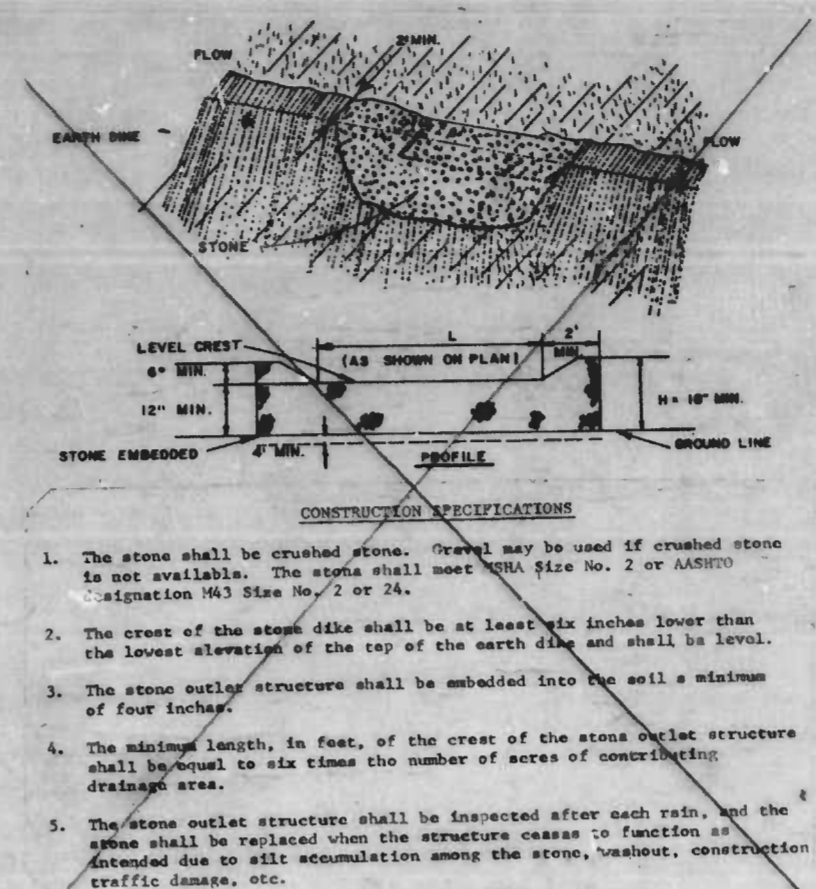
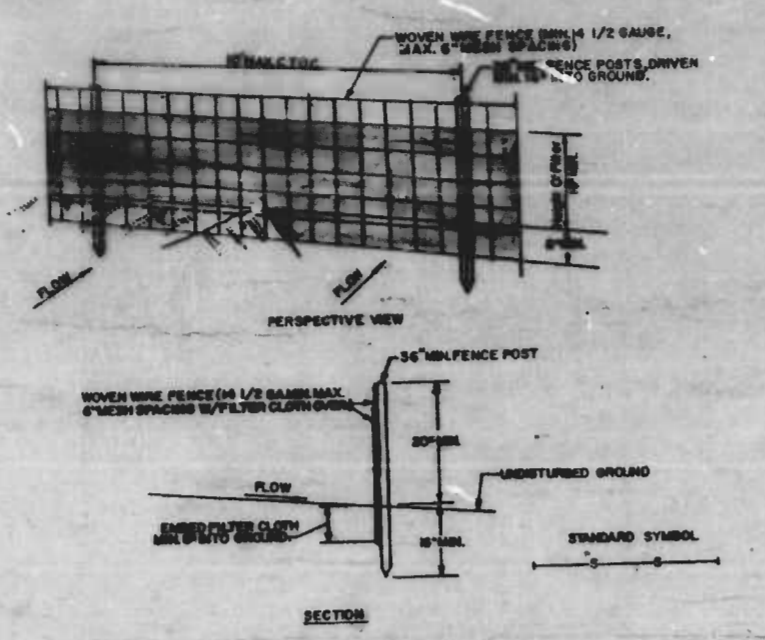
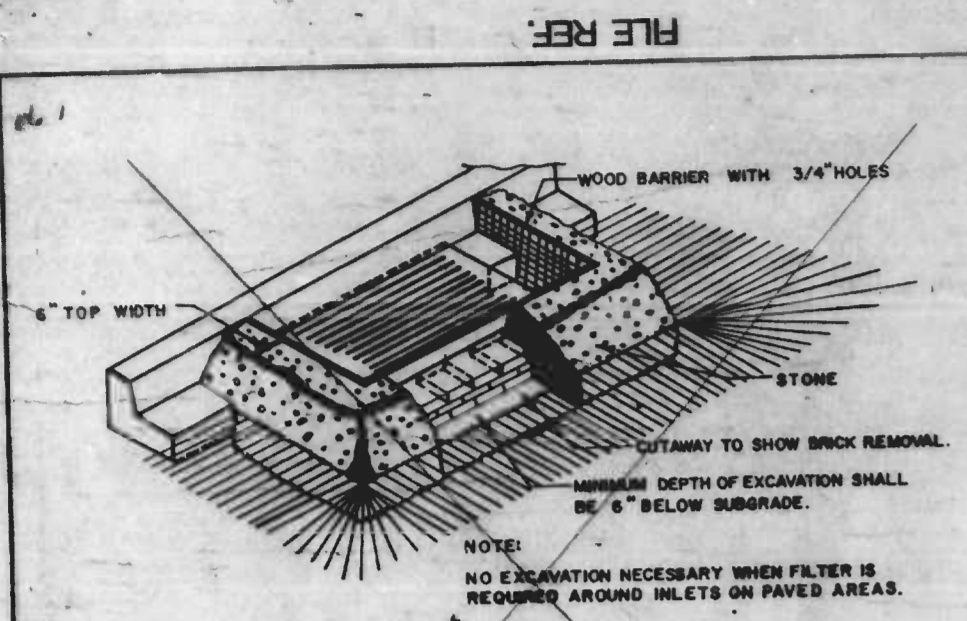
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 EXAMINED BY
 W.O. 80307

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REVISIONS		
NO.	DESCRIPTION	DATE BY

LEGEND

- LIMITS OF DISTURBANCE
- INLET PROTECTION (SC-1 OR SC-2 AS NOTED)
- S-S- SILT FENCE (SC-3)
- STABILIZED CONSTRUCTION ENTRANCE (SC-4)
- STONE OUTLET STRUCTURE (SC-5)
- EARTH/STONE DIKE (SC-6 OR SC-7 AS NOTED)
- STOCKPILE AREA
- SUMP PIT (SP-1)
- SEDIMENT TRAP (ST-1)
- CHECK DAM
- CONTRACTOR STAGING AREA
- INSTREAM SEDIMENT TRAP (SC-8)



DRAWN BY A. MOSCATO
EXAMINED BY
W.O. 80307

CITY OF BALTIMORE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CONTRACT NO. 3114
SEVENFOOT KNOLL
LIGHTHOUSE RELOCATION

SOIL EROSION / SEDIMENT CONTROL DETAILS

SCALE NO SCALE
HIGHWAY ENGINEERING DIVISION

DATE Oct 9, 1997
SHEET 7 OF 7

FILE REF.