

HOWARD COUNTY, MARYLAND

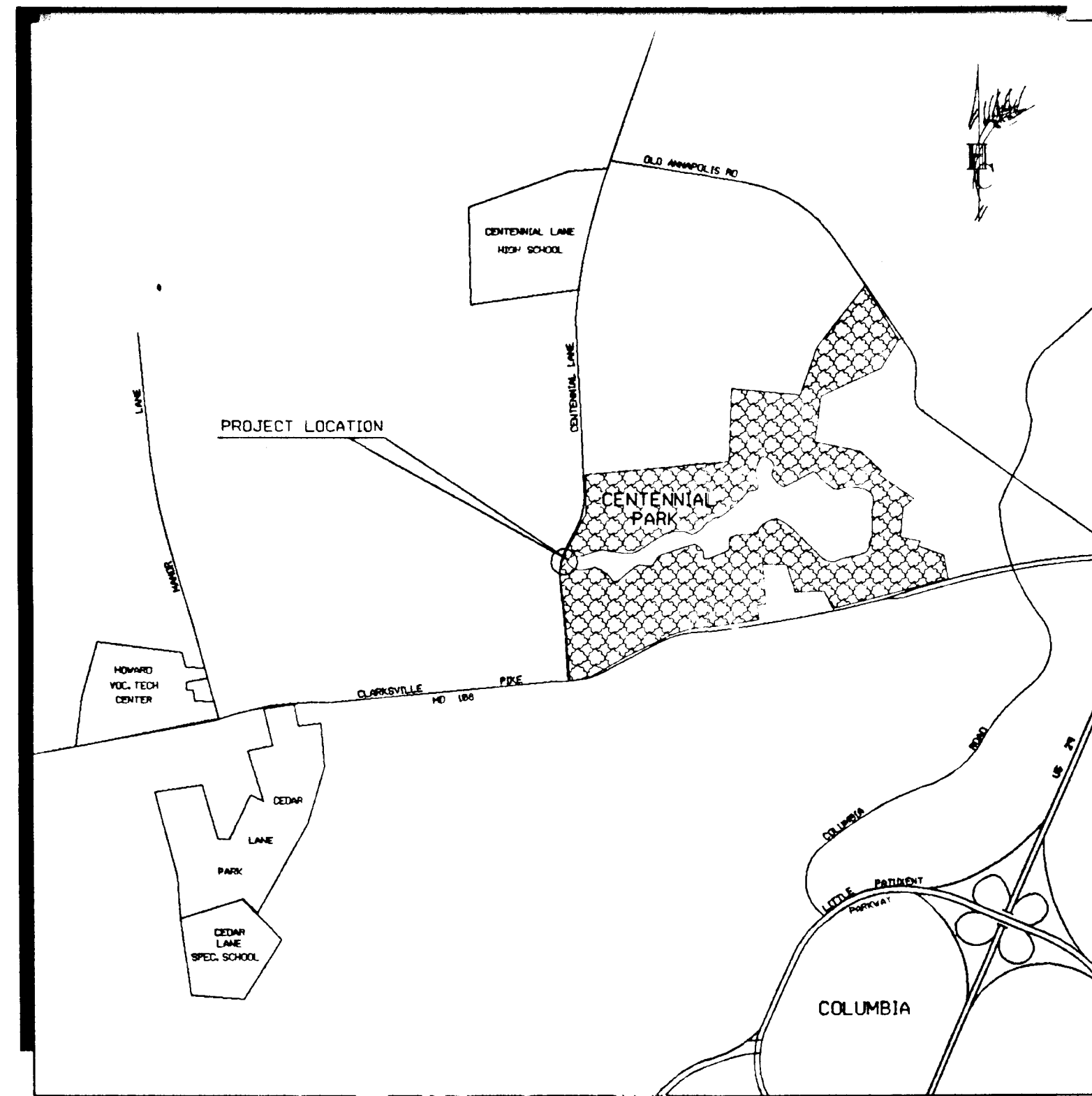
DEPARTMENT OF PUBLIC WORKS

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 SITE PLAN
- 3 GENERAL PLAN AND ELEVATION
- 4 TYPICAL SECTIONS
- 5 ABUTMENT DETAILS
- 6 WING WALL AND HANDRAIL DETAILS

NOTE:

FOR THE CONVENIENCE AND INFORMATION OF BIDDERS PRINTS OF PLANS OF EXISTING PERTINENT STRUCTURE(S) ARE INCLUDED WITH THIS CONTRACT. NO RESPONSIBILITY FOR THEIR ACCURACY OR COMPLETENESS IS ASSUMED BY HOWARD COUNTY DIMENSIONS, DETAILS, ETC., AS SHOWN THEREON MAY NOT BE AS BUILT. INCLUDED FOR YOUR USE ARE SHEETS 13.23 AND 25 OF 25 OF CONTRACT J-4015



VICINITY MAP
SCALE: 1"=2000'

CERTIFICATION BY THE ENGINEER
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Signature: *William T. Mahoney Jr.* DATE: 4/16/94

CERTIFICATION BY THE OWNER/DEVELOPER
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Signature: *James Wilkins* DATE: 4/16/94

Plans Approved By: *MOHAMMED AYUB*
Date: 4-21-94
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
APPROVED: *[Signature]* DATE: 4/7/94
HOWARD S.C.D.

REVIEWED FOR: *Howard* NAME: S.C.D.
AND MEETS TECHNICAL REQUIREMENTS
Signature: *Patricia Eyles/G.S.* DATE: 4/7/94
U.S. SOIL CONSERVATION SERVICE

THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID LOCATIONS.

Plans Approved By: _____
Date: _____
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

RIGHT-OF-WAY LINES AS SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THESE LINES DO NOT REPRESENT THE OFFICIAL PROPERTY ACQUISITION LINES. FOR OFFICIAL FEE RIGHT-OF-WAY AND EASEMENT INFORMATION REFER TO THE APPROPRIATE RIGHT-OF-WAY PLATS.

CENTENNIAL PARK

PEDESTRIAN BRIDGE

CAPITAL PROJECT N-3944

DEPARTMENT OF RECREATION AND PARKS
HOWARD COUNTY, MARYLAND.

Kenneth M. Allen Jr. 4/7/94
DIRECTOR OF RECREATION AND PARKS
ACTING

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

James A. Lee 4/7/94
DIRECTOR OF PUBLIC WORKS

Kenneth M. Allen Jr. 4/7/94
DIRECTOR OF RECREATION AND PARKS
ACTING

William T. Mahoney Jr. 4/16/94
CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION

PREPARED BY:
TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

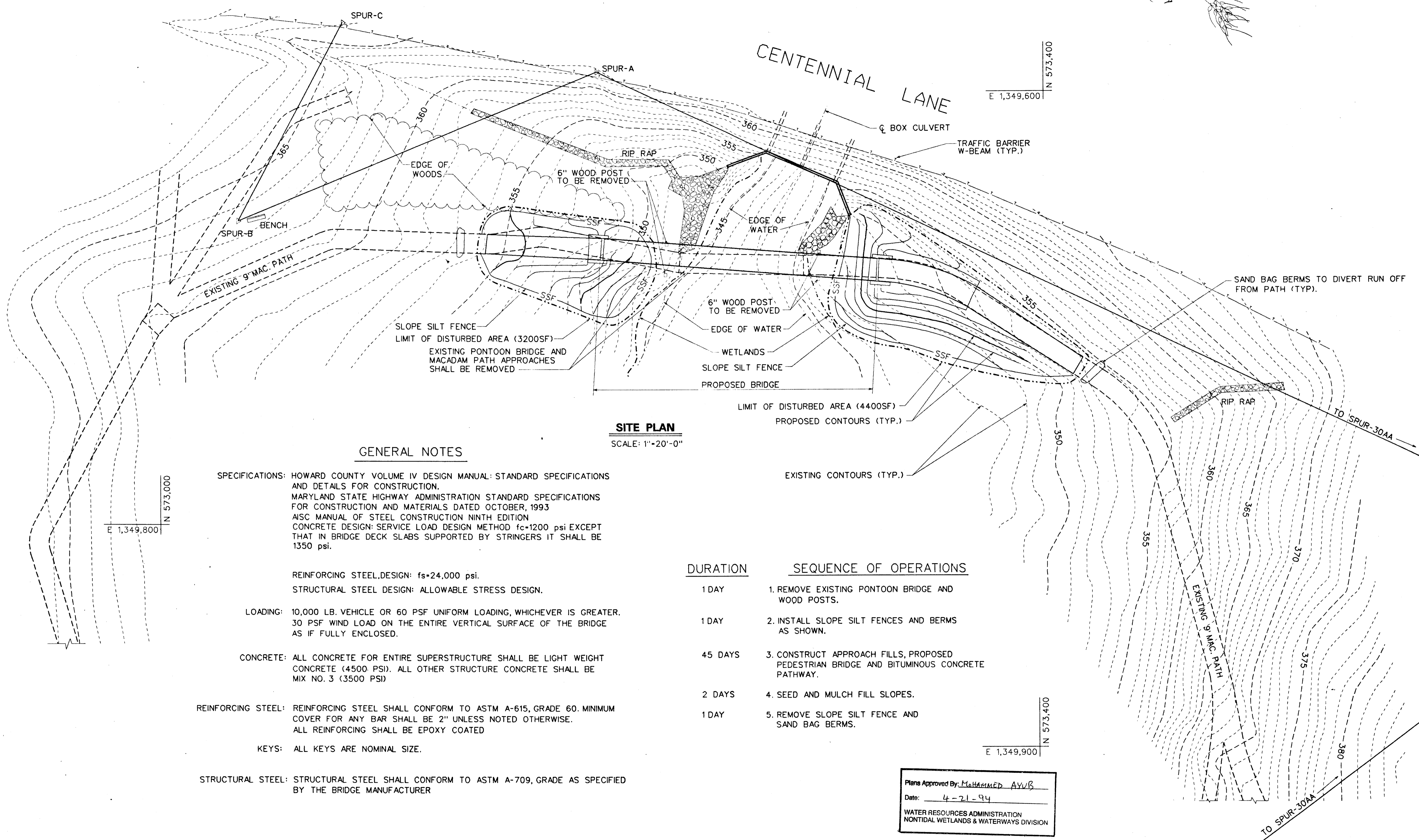
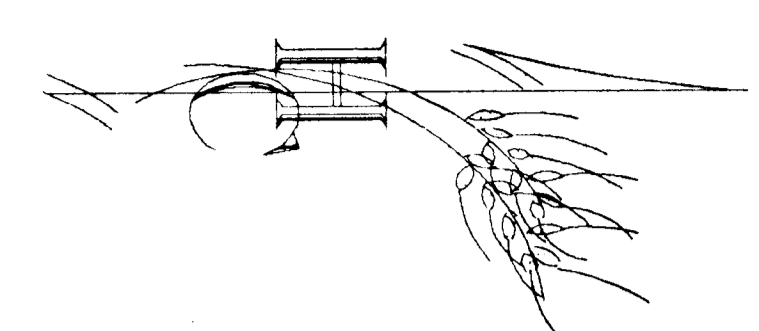
William T. Mahoney Jr.
4/16/94

DES: WFM					
DRN: RAD					
CHK: WFM					
DATE:	BY:	NO.:	REVISION:	DATE:	

TITLE SHEET

C915JZQ1

SCALE AS SHOWN
SHEET 1 OF 6



SITE PLAN
SCALE: 1"=20'-0"

GENERAL NOTES

SPECIFICATIONS: HOWARD COUNTY VOLUME IV DESIGN MANUAL: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
 MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED OCTOBER, 1993
 AISC MANUAL OF STEEL CONSTRUCTION NINTH EDITION
 CONCRETE DESIGN: SERVICE LOAD DESIGN METHOD $f_c=1200$ psi EXCEPT THAT IN BRIDGE DECK SLABS SUPPORTED BY STRINGERS IT SHALL BE 1350 psi.

REINFORCING STEEL, DESIGN: $f_s=24,000$ psi.
 STRUCTURAL STEEL DESIGN: ALLOWABLE STRESS DESIGN.

LOADING: 10,000 LB. VEHICLE OR 60 PSF UNIFORM LOADING, WHICHEVER IS GREATER.
 30 PSF WIND LOAD ON THE ENTIRE VERTICAL SURFACE OF THE BRIDGE AS IF FULLY ENCLOSED.

CONCRETE: ALL CONCRETE FOR ENTIRE SUPERSTRUCTURE SHALL BE LIGHT WEIGHT CONCRETE (4500 PSI). ALL OTHER STRUCTURE CONCRETE SHALL BE MIX NO. 3 (3500 PSI)

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS NOTED OTHERWISE.
 ALL REINFORCING SHALL BE EPOXY COATED

KEYS: ALL KEYS ARE NOMINAL SIZE.

STRUCTURAL STEEL: STRUCTURAL STEEL SHALL CONFORM TO ASTM A-709, GRADE AS SPECIFIED BY THE BRIDGE MANUFACTURER

DURATION

SEQUENCE OF OPERATIONS

- | | |
|---------|--|
| 1 DAY | 1. REMOVE EXISTING PONTOON BRIDGE AND WOOD POSTS. |
| 1 DAY | 2. INSTALL SLOPE SILT FENCES AND BERMS AS SHOWN. |
| 45 DAYS | 3. CONSTRUCT APPROACH FILLS, PROPOSED PEDESTRIAN BRIDGE AND BITUMINOUS CONCRETE PATHWAY. |
| 2 DAYS | 4. SEED AND MULCH FILL SLOPES. |
| 1 DAY | 5. REMOVE SLOPE SILT FENCE AND SAND BAG BERMS. |

Plans Approved By: Muhammed AVVB
 Date: 4-21-94
 WATER RESOURCES ADMINISTRATION
 NONTIDAL WETLANDS & WATERWAYS DIVISION

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND.

Ramona J. Lane 4/7/94
 DIRECTOR OF PUBLIC WORKS DATE

Kenneth M. Allen 4/16/94
 DIRECTOR OF RECREATION AND PARKS DATE

William Z. Mahan 4/7/94
 CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION DATE

Donald E. Soper 4/7/94
 CHIEF, BUREAU OF ENGINEERING DATE

PREPARED BY:
 TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION
 D.P.W. / BUREAU OF ENGINEERING
 HOWARD COUNTY, MARYLAND.

DES : WFM					
DRN : RAD					
CHK : WFM					
DATE:	BY	NO.	REVISION	DATE	

**PEDESTRIAN BRIDGE
 SITE PLAN**

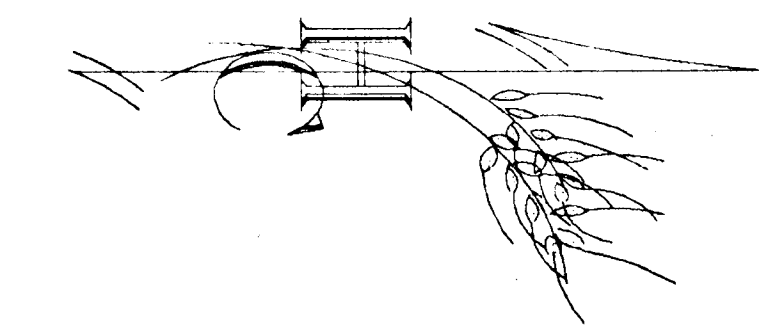
**CENTENNIAL PARK
 PEDESTRIAN BRIDGE**
 CAPITAL PROJECT N-3944
 ELECTION DISTRICT NO 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 6

TIE INTO EXISTING PATH
AT STA 0+46±

EXISTING BOX CULVERT

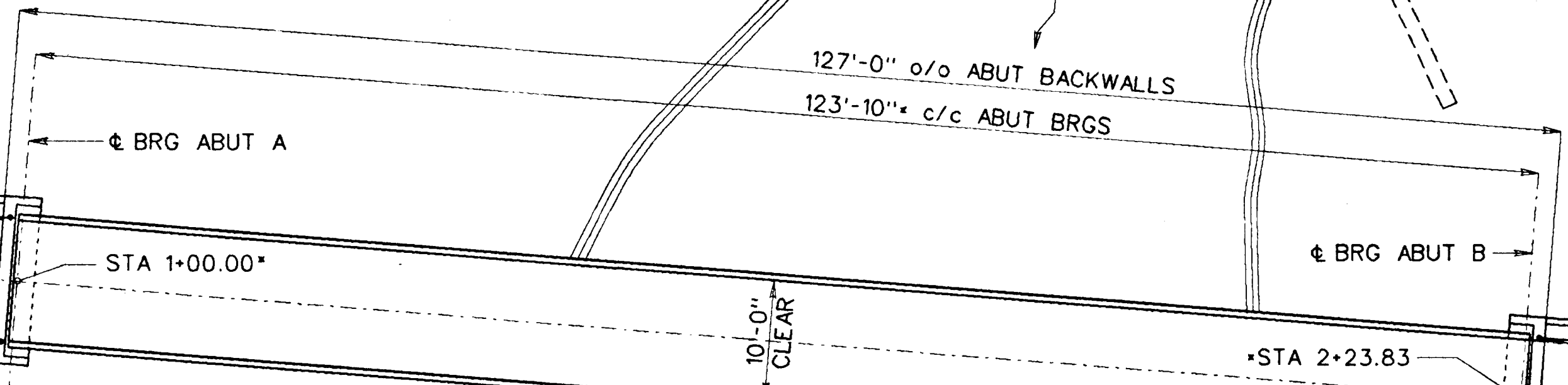
CLARKS
CREEK



* EXACT DIMENSIONS WILL DEPEND ON THE PROPRIETARY
BRIDGE TYPE. SHOP DRAWINGS SHALL SHOW CORRECT
DIMENSIONS FOR THE PROPRIETARY BRIDGE TYPE CHOSEN.

POINTS	COORDINATES	
	NORTH	EAST
0+46	573,147.825	1,349,671.295
2+26	573,328.443	1,349,684.056
2+77.33	573,376.435	1,349,700.866
3+28	573,417.700	1,349,729.633

± PATH

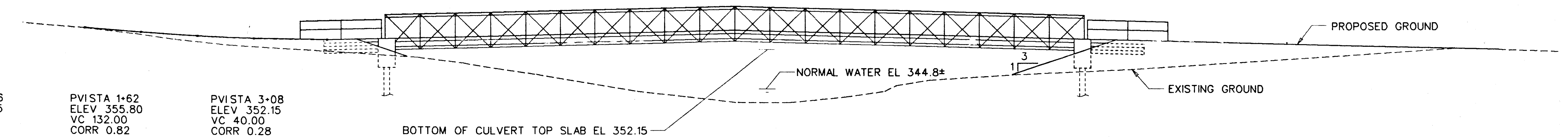


TIMBER WING WALLS (TYP)
HANDRAIL (TYP)

CURVE DATA
Δ = 29°-24'-35.7"
D = 57°-17'-44.8"
R = 100.00'
T = 26.24'
L = 51.33'
E = 3.39

TIE INTO EXISTING
PATH AT STA 3+28 ±

PLAN
SCALE: 1" = 10'



ELEVATION
SCALE: 1" = 10'

STATION	ELEVATION
STA 0+46	EL 356.0
PVC STA 0+56	EL 355.21
PVCC STA 0+96	EL 354.15
PVI STA 2+28	EL 354.15
PVC STA 2+88	EL 352.65
PVI STA 3+28	EL 352.77

PVISTA 0+76
ELEV 353.65
VC 40.00
CORR 0.51

PVISTA 1+62
ELEV 355.80
VC 132.00
CORR 0.82

PVISTA 3+08
ELEV 352.15
VC 40.00
CORR 0.28

SLOPES: -7.8%, -2.5%, 2.5%, 3.1%

VERTICAL CURVE DATA

SCALE: NONE

DATUM EL. 300.0

Plans Approved By: MOHAMMED AYUB
Date: 4-21-94
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

Director of Public Works: James M. Allen 4/7/94
Director of Recreation and Parks: James M. Allen 4/7/94
Chief Transportation Projects and Watershed Management Division: William Z. Maloney 4/7/94
Chief, Bureau of Engineering: William Z. Maloney 4/7/94

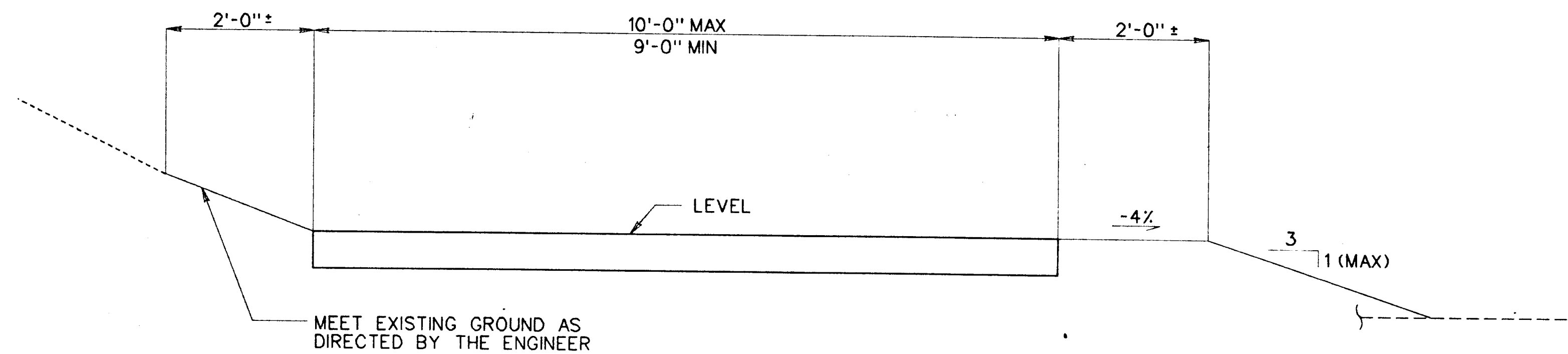
PREPARED BY:
TRANSPORTATION PROJECTS AND
WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

DES : WFM			
DRN : WFM			
CHK : WFM			
DATE:	BY	NO.	REVISION

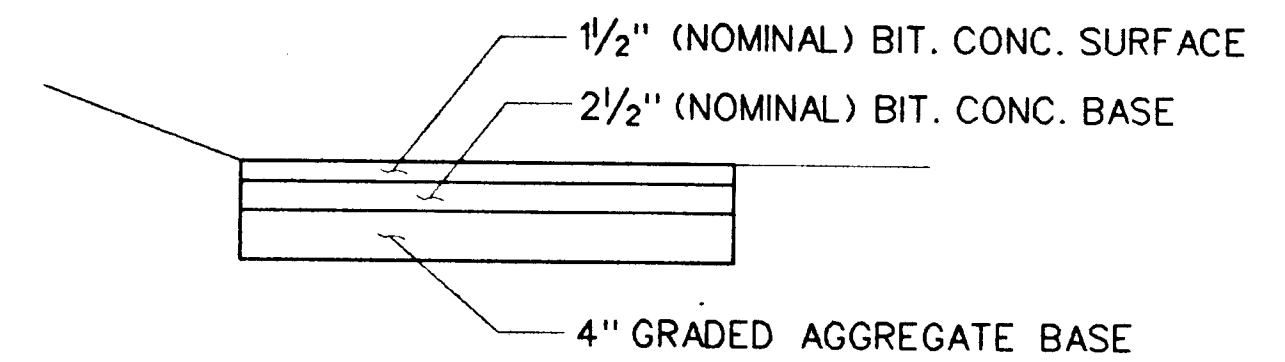
PEDESTRIAN BRIDGE
GENERAL PLAN
AND ELEVATION

CENTENNIAL PARK
PEDESTRIAN BRIDGE
CAPITAL PROJECT N-3944
ELECTION DISTRICT NO 2
HOWARD COUNTY, MARYLAND

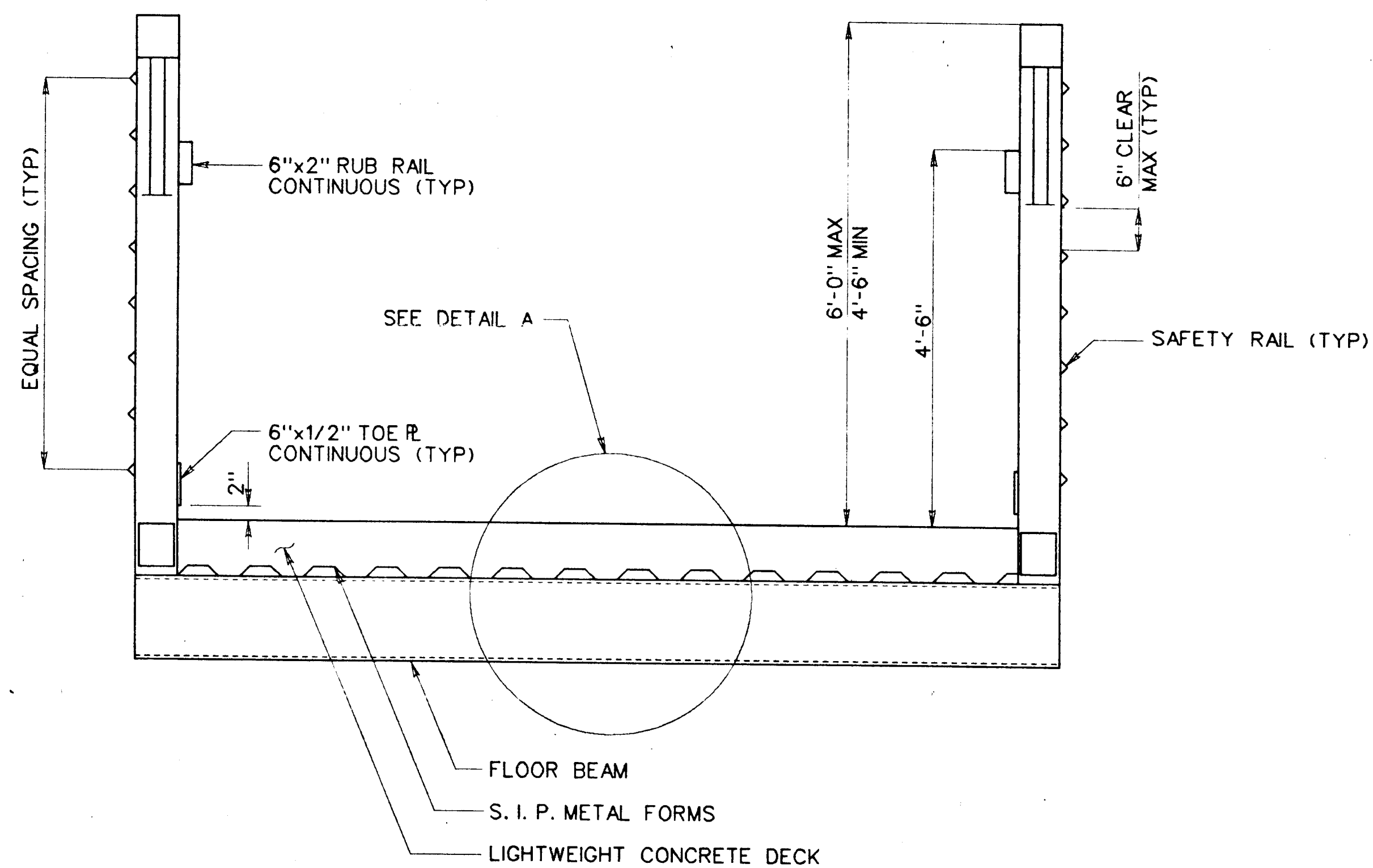
SCALE
AS
SHOWN
SHEET
3 OF 6



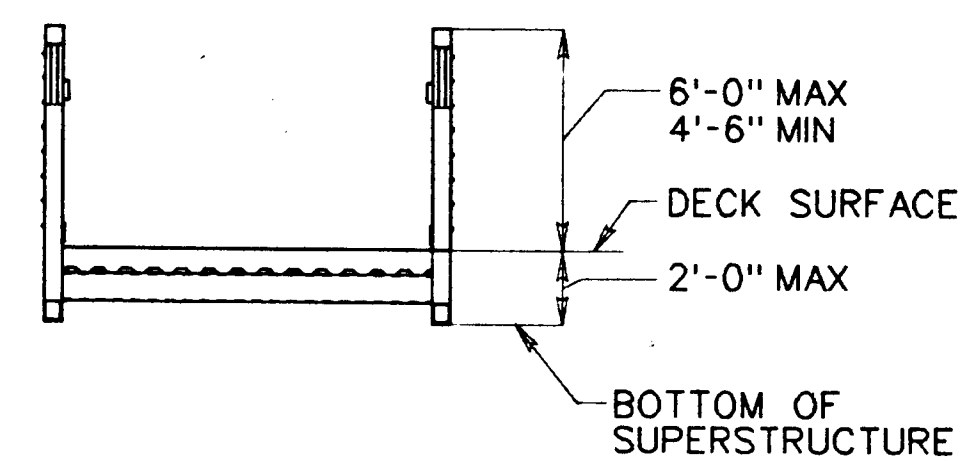
TYPICAL PATHWAY SECTION
SCALE: 3/4" = 1'-0"



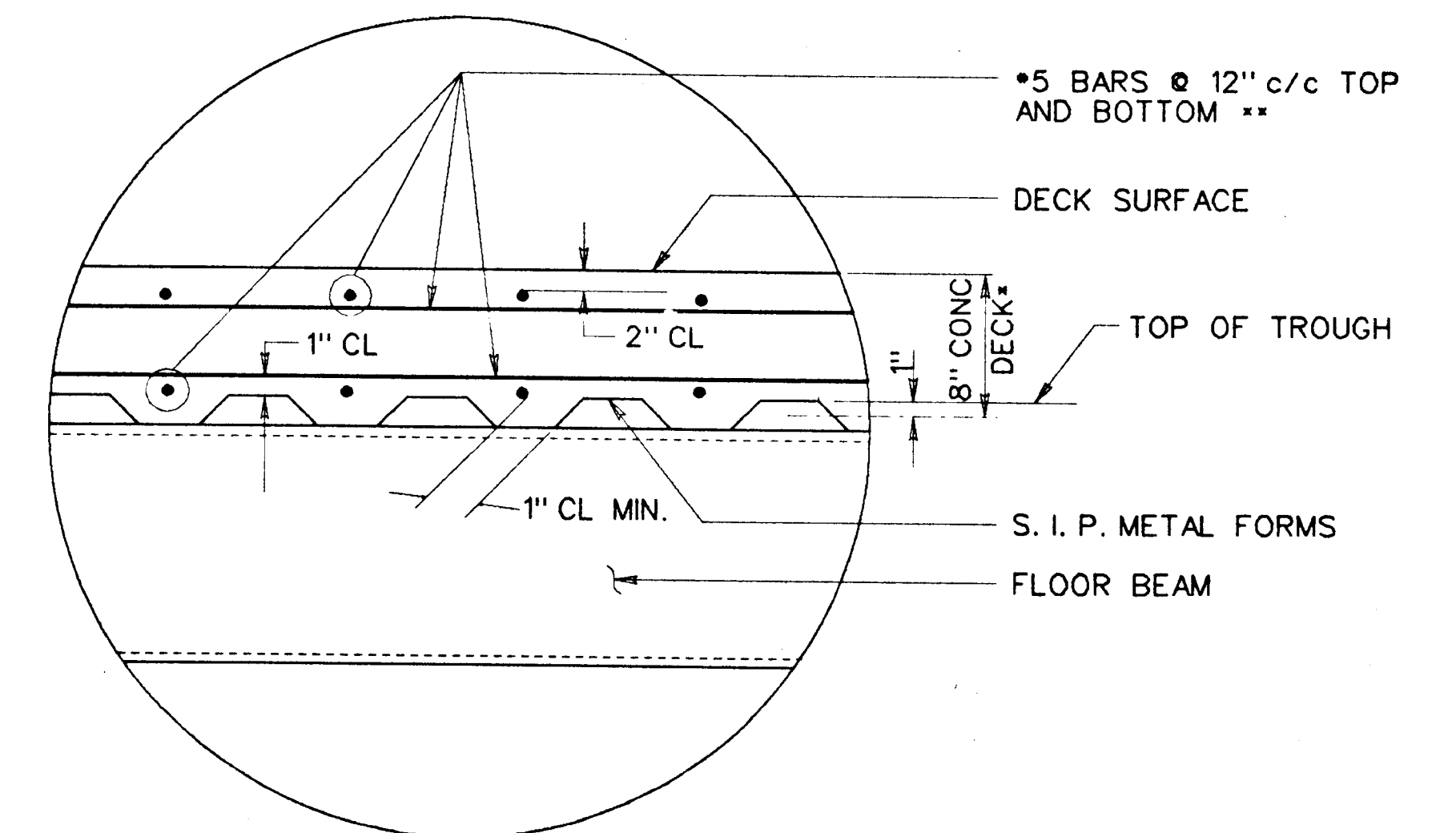
PAVEMENT SECTION
SCALE: NONE



TYPICAL BRIDGE SECTION U-FRAME ALTERNATE
SCALE: 3/4" = 1'-0"



TYPICAL BRIDGE SECTION H-FRAME ALTERNATE
SCALE: 3/8" = 1'-0"



* 8" DECK THICKNESS SHALL BE MEASURED FROM TOP OF TROUGH IF TROUGHS DO NOT ALIGN WITH LONGITUDINAL REINFORCING.
** SPACING OF LONGITUDINAL REINFORCING SHALL BE DECREASED IF FLOOR BEAM SPACING EXCEEDS 9'-0" c/c. COST OF ADDITIONAL REINFORCING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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

Plans Approved By: MUHAMMAD AYUB
Date: 4-21-94
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

Ronald G. Lew 4/7/94
DIRECTOR OF PUBLIC WORKS DATE

Kenneth M. Am. Q. Adams 4/7/94
DIRECTOR OF PARKS AND RECREATION DATE

Elizabeth Anderson Palen 4/6/94
CHIEF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION DATE

William J. Malachuk 4/7/94
CHIEF, BUREAU OF ENGINEERING DATE

PREPARED BY:
TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

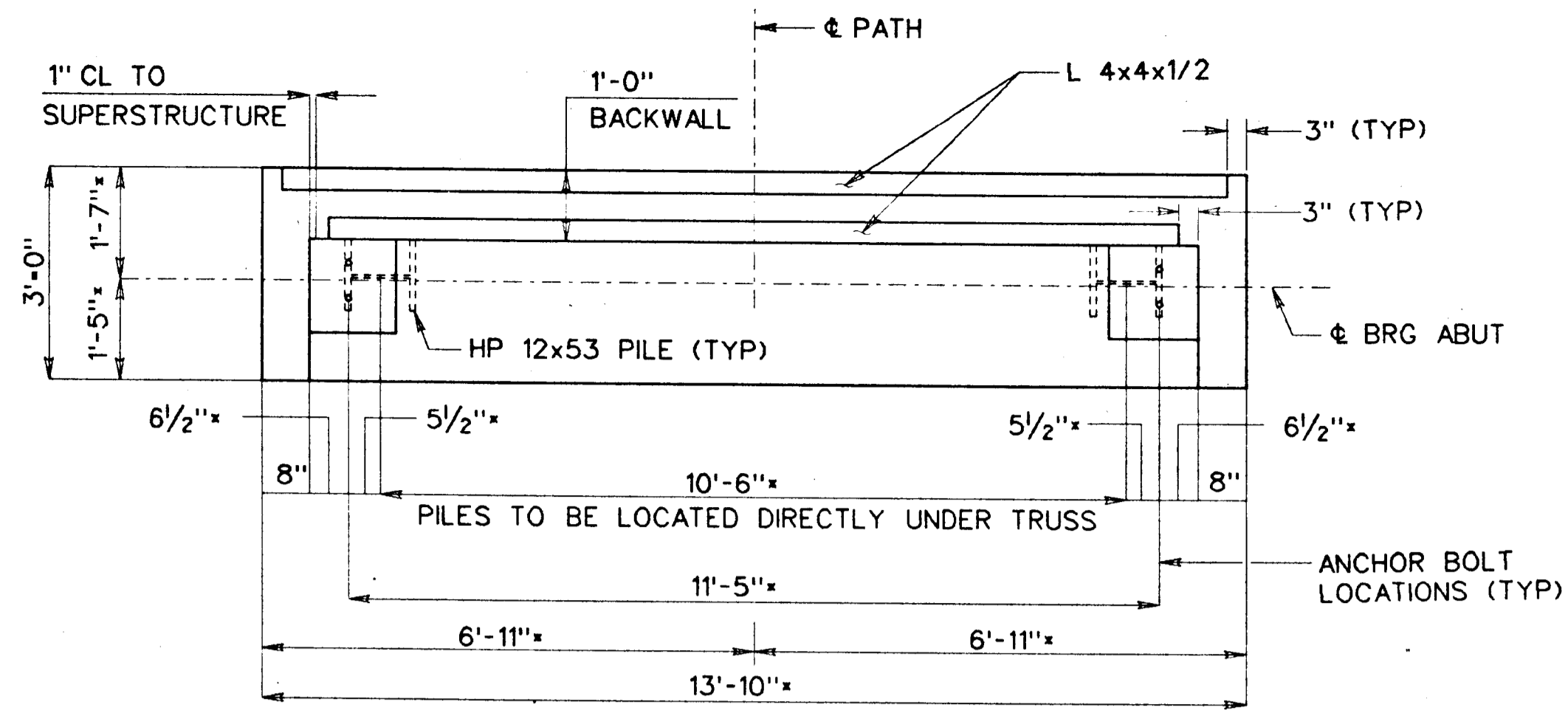
William J. Malachuk
4/6/94

DES : WFM				
DRN : WFM				
CHK : WFM				
DATE:	BY	NO.	REVISION	DATE

PEDESTRIAN BRIDGE
TYPICAL SECTIONS

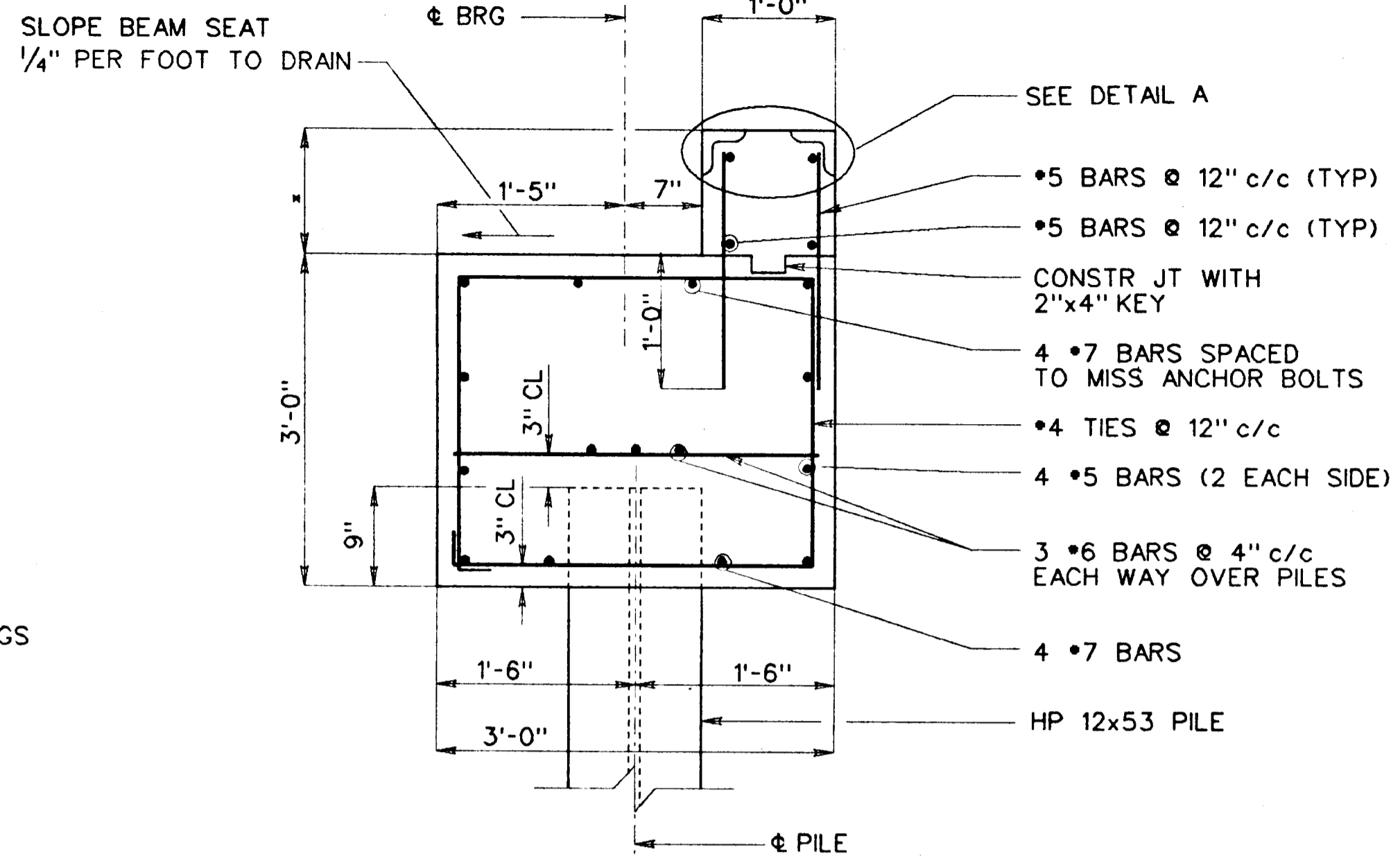
CENTENNIAL PARK
CAPITAL PROJECT N-3944
ELECTION DISTRICT NO 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 6

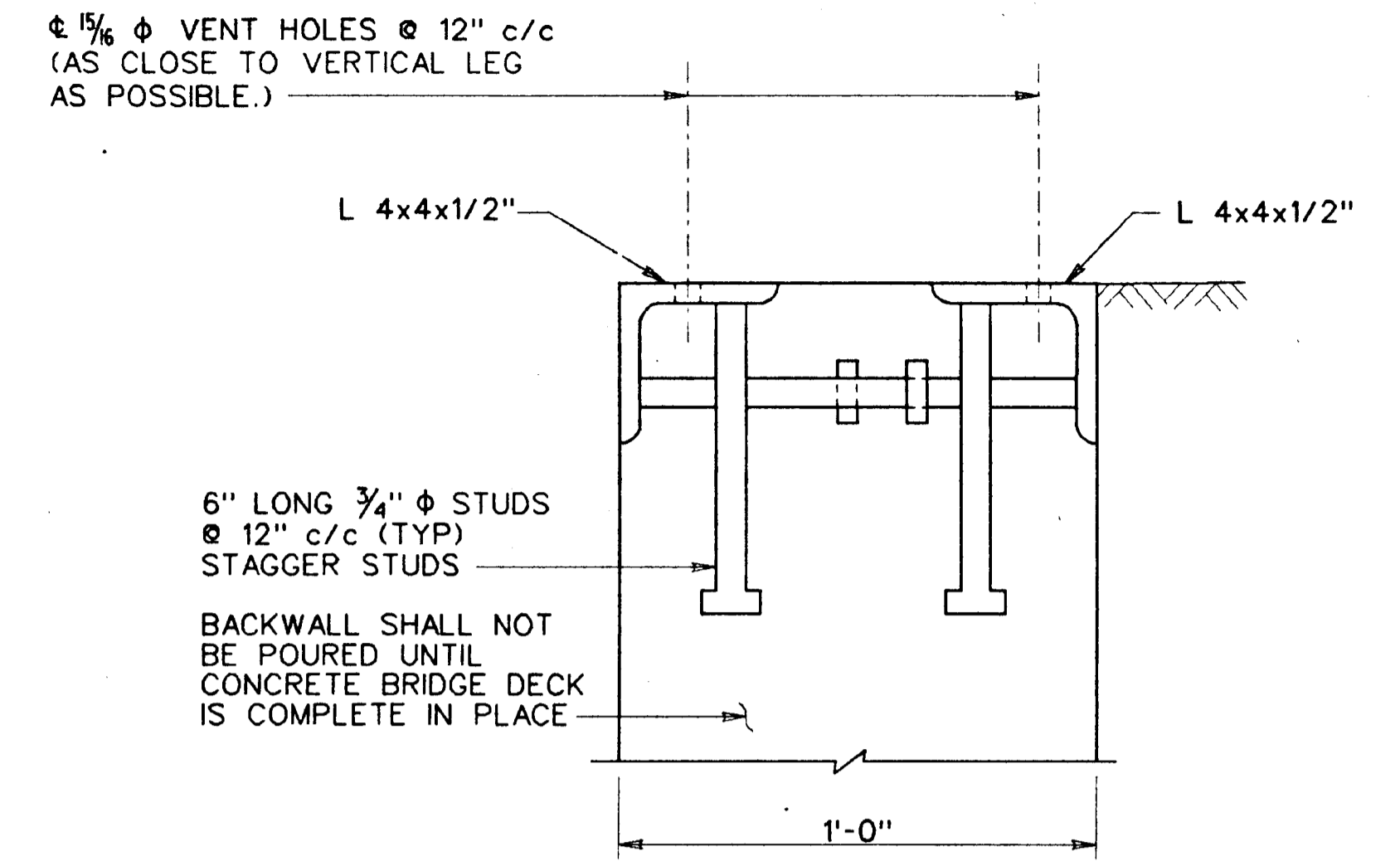


PLAN VIEW
SCALE: 1/2" = 1'-0"

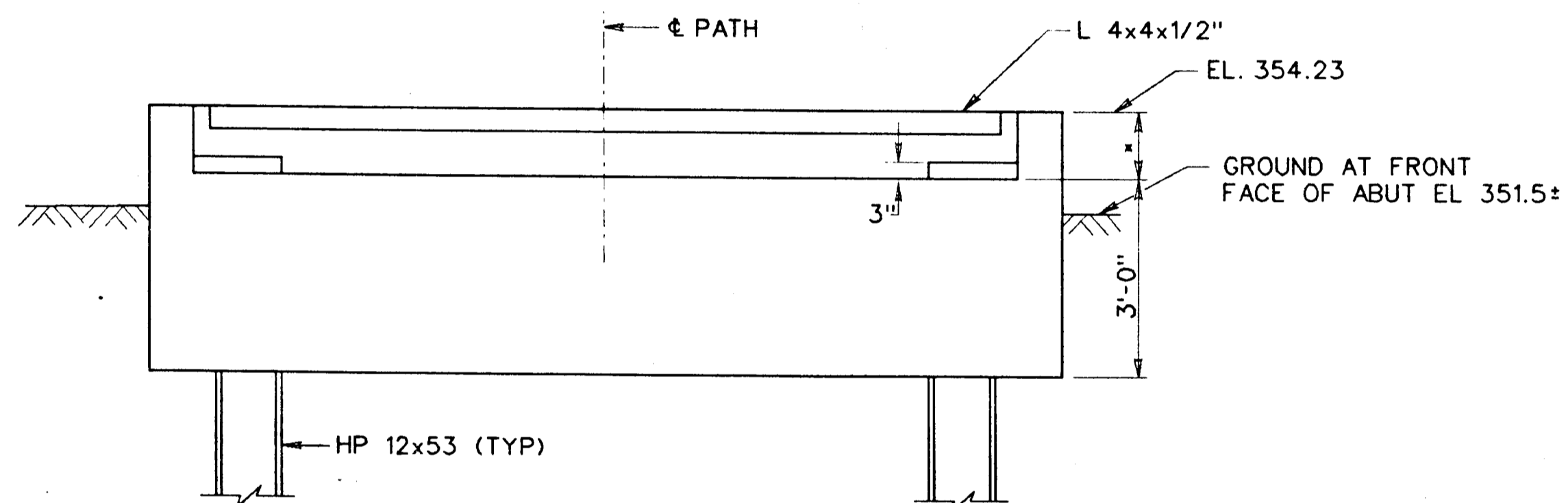
* THESE DIMENSIONS WILL DEPEND ON THE PROPRIETARY BRIDGE TYPE. SHOP DRAWINGS SHALL SHOW CORRECT DIMENSIONING FOR THE PROPRIETARY BRIDGE TYPE CHOSEN



TYPICAL ABUT SECTION
SCALE: 1" = 1'-0"



DETAIL A
SCALE: 3" = 1'-0"



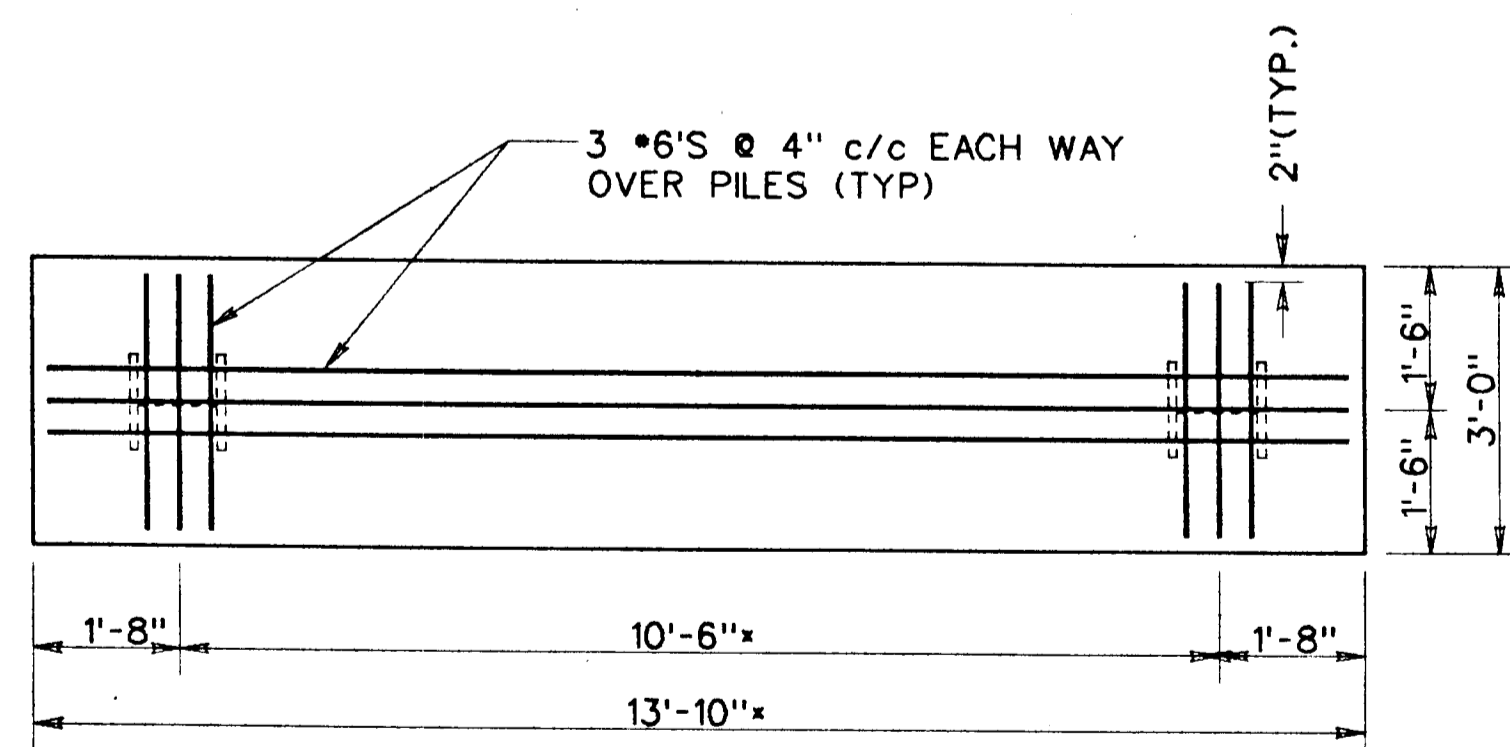
ELEVATION VIEW
SCALE: 1/2" = 1'-0"

PILE NOTES

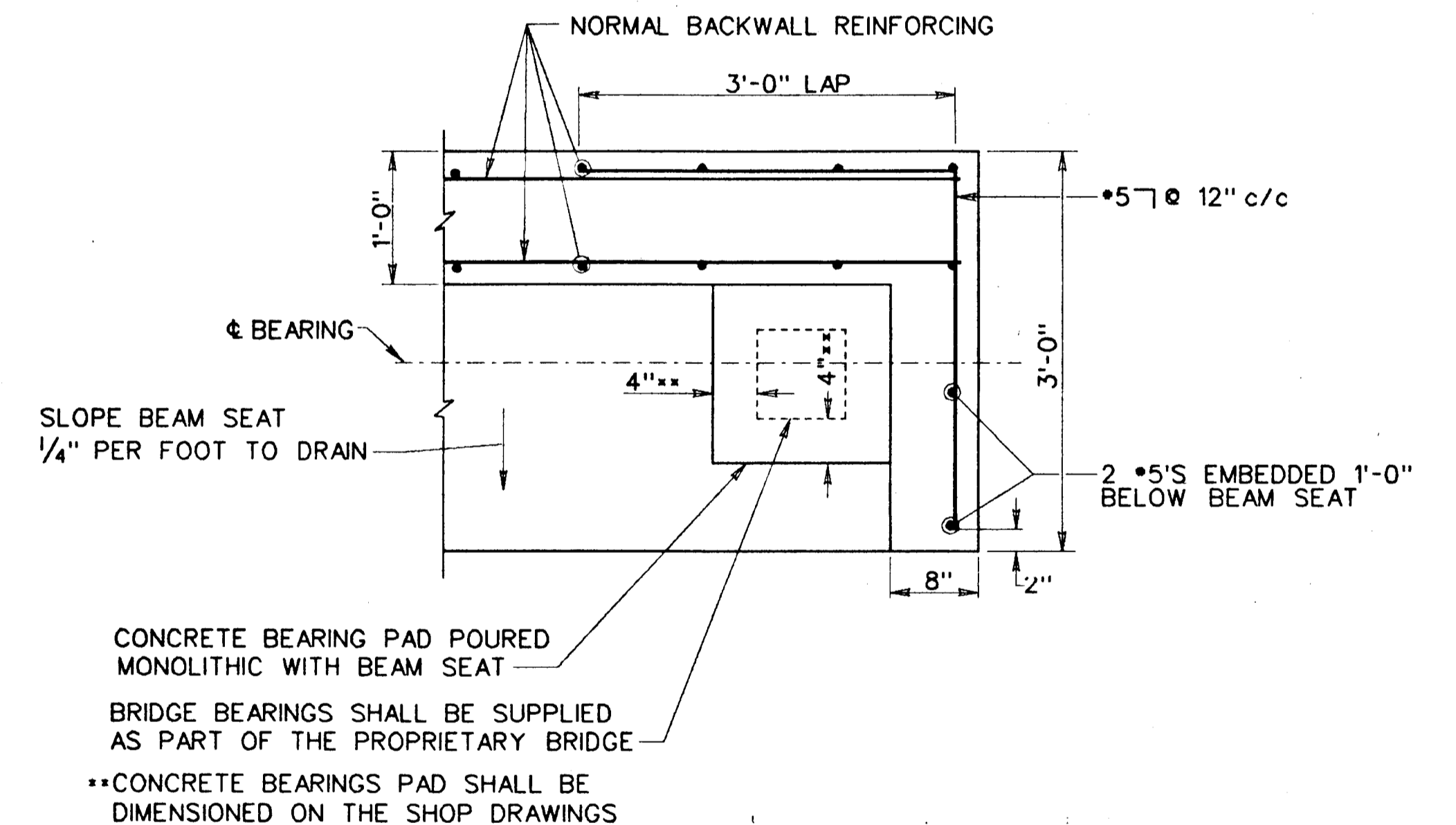
THE DESIGN BEARING VALUE OF THE HP 12x53 PILING IS 17 TONS. THE MINIMUM SAFE BEARING VALUE TO WHICH THE HP 12x53 PILING IS TO BE DRIVEN IS 21 TONS. THE MINIMUM PENETRATION OF THE HP 12x53 PILING SHALL BE ELEVATION 335. THE ESTIMATED TIP ELEVATION FOR THE HP 12x53 PILING IS ELEVATION 330.

SHOP PLANS SHALL SHOW HOW REBARS ARE TO BE TIED AS WELL AS HOW THEY WILL BE HELD IN PLACE ABOVE PILING WHILE POUR IS BEING MADE.

THE MINIMUM SAFE BEARING VALUE AND MINIMUM PENETRATION SHOWN ON THESE PLANS MUST BE ACHIEVED FOR EACH PILE. IF THE ESTIMATED TIP ELEVATION IS NOT REACHED OR IS EXCEEDED WHILE ACHIEVING THE MINIMUM SAFE BEARING VALUE AND THE MINIMUM PENETRATION, THE PILE WILL BE CONSIDERED SATISFACTORY.



PILE PLAN VIEW
SCALE: 1/2" = 1'-0"



CORNER DETAIL ABOVE THE BEAM SEAT
SCALE: 1" = 1'-0"

Plans Approved By: Muhammad Ayub
Date: 4-21-74
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.
James A. Lee 4/7/74 DIRECTOR OF PUBLIC WORKS
Kenneth M. Allen, Jr. 4/1/74 DIRECTOR OF RECREATION AND PARKS
Elizabeth Anderson-Palva 4/6/74 CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION
Charles E. Brown 4/7/74 CHIEF, BUREAU OF ENGINEERING

PREPARED BY:
TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

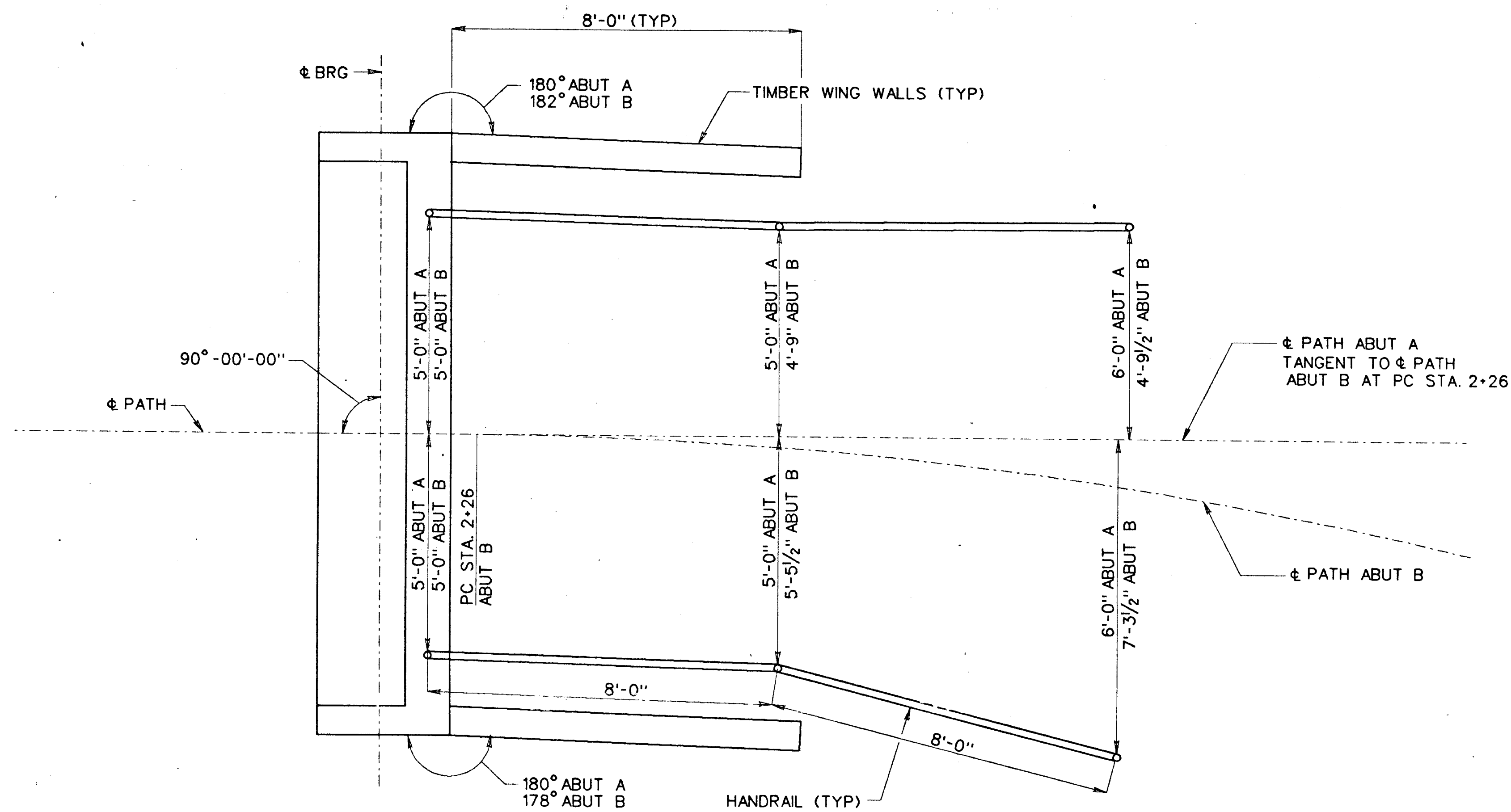
William J. Malone 4/6/74

DES : WFM					
DRN : WFM					
CHK : WFM					
DATE:	BY	NO.	REVISION	DATE	

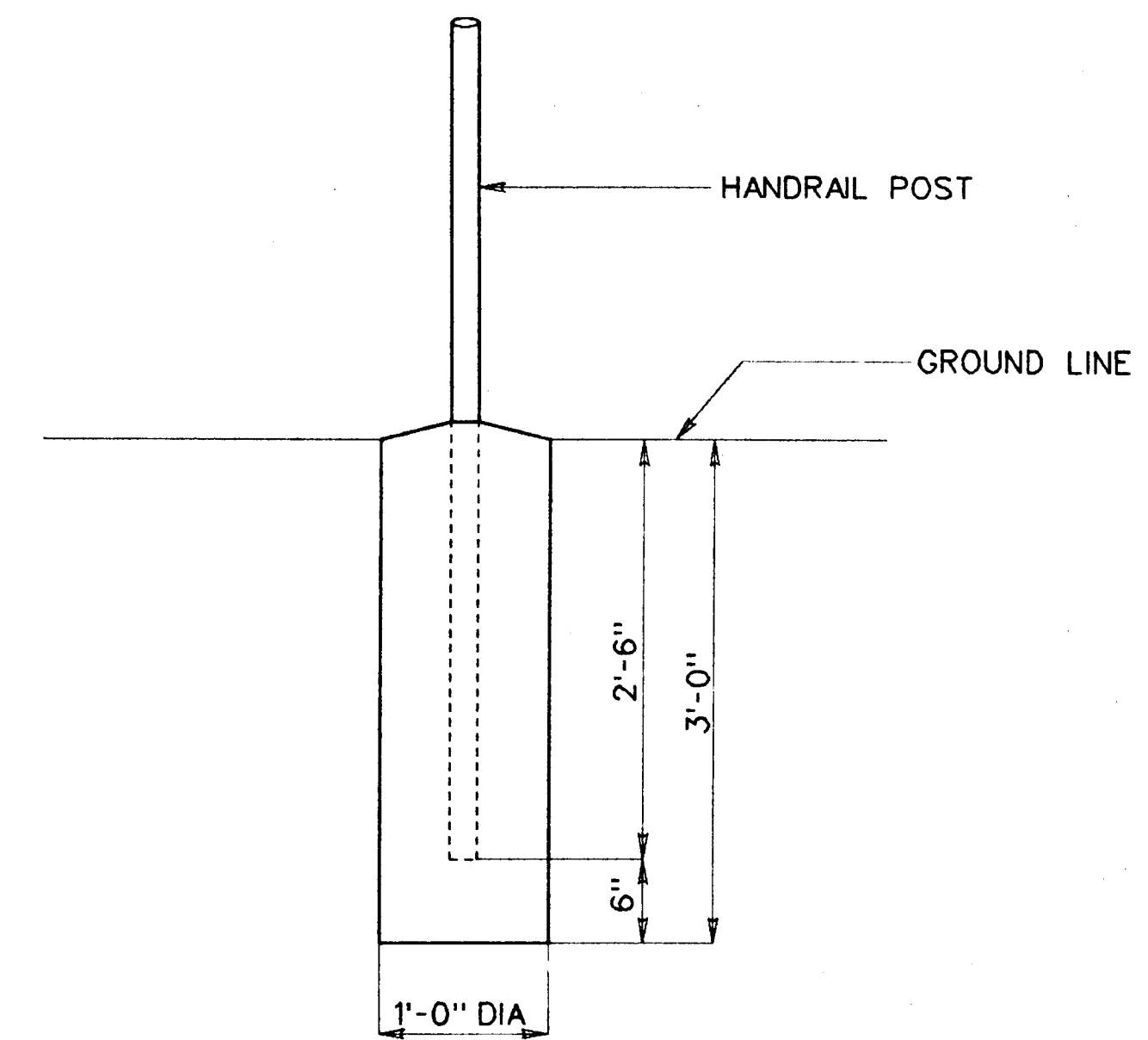
PEDESTRIAN BRIDGE
ABUTMENT
DETAILS

CENTENNIAL PARK
CAPITAL PROJECT N-3944
ELECTION DISTRICT NO 2
HOWARD COUNTY, MARYLAND

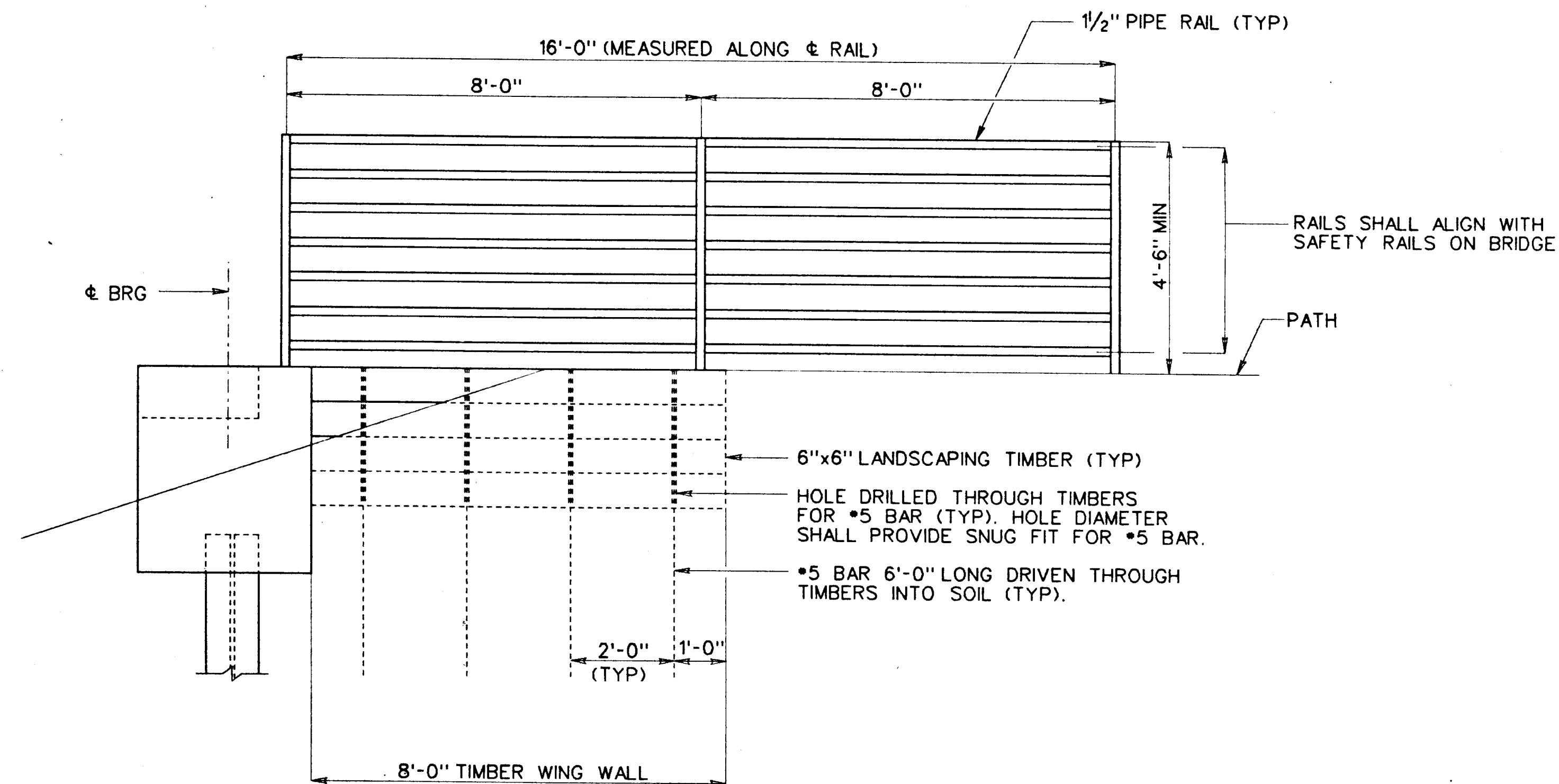
SCALE AS SHOWN
SHEET 5 OF 6



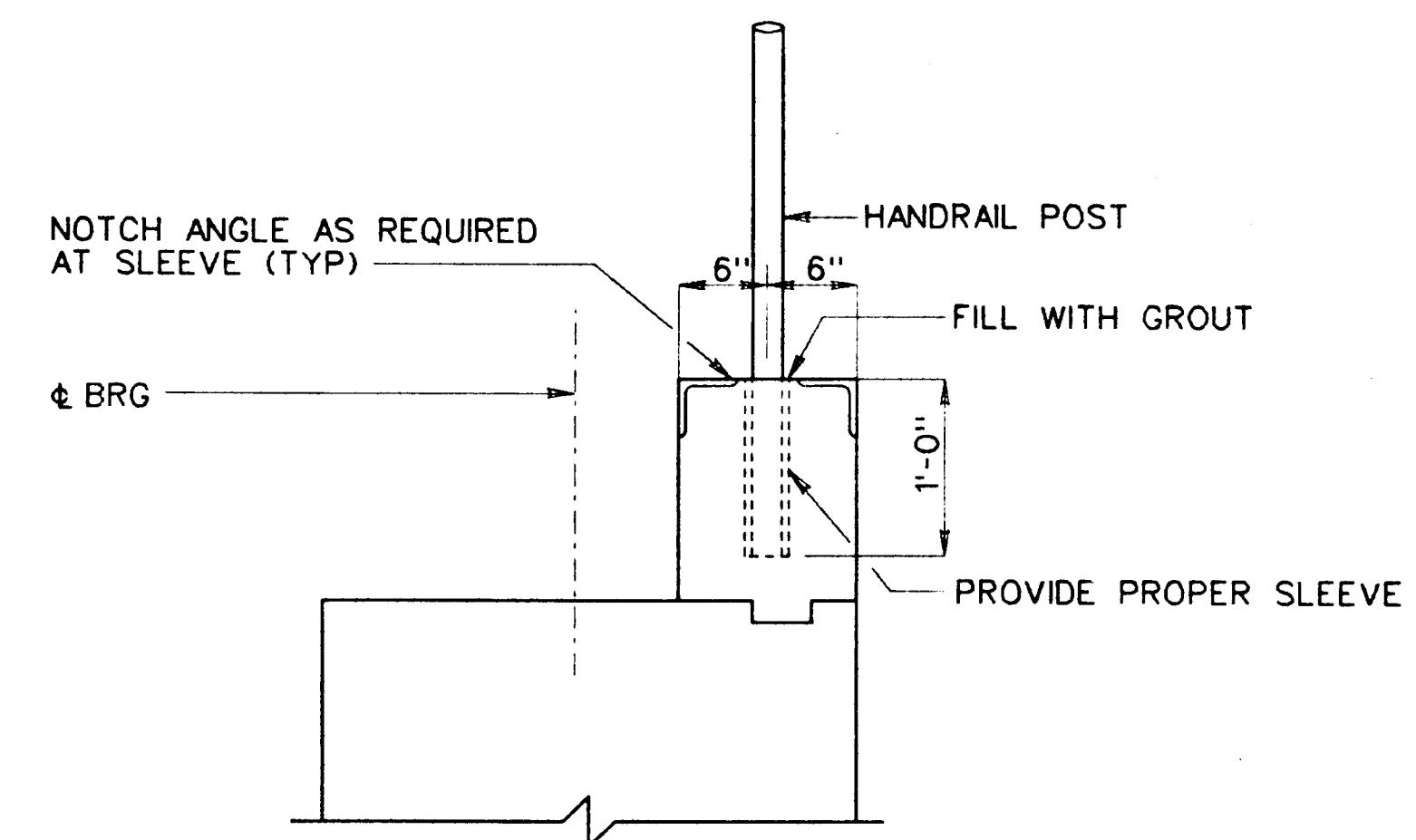
PLAN VIEW
WING WALL AND RAILING
SCALE: 1/2" = 1'-0"



HANDRAIL POST
ANCHORAGE ON PATH
SCALE: 1 1/2" = 1'-0"



ELEVATION VIEW
WING WALL AND RAILING
SCALE: 1/2" = 1'-0"



HANDRAIL POST
ANCHORAGE ON ABUTMENT
SCALE: 1 1/2" = 1'-0"

Plans Approved By: MOHAMMED AYUB
Date: 4-21-94
WATER RESOURCES ADMINISTRATION
NONTIDAL WETLANDS & WATERWAYS DIVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

James P. Law 4/16/94
DIRECTOR OF PUBLIC WORKS DATE

Kenneth M. Allen Jr. 4/22/94
DIRECTOR OF PARKS AND RECREATION DATE

Paul J. Soper 4/27/94
BRIEF, BUREAU OF ENGINEERING DATE

PREPARED BY:
TRANSPORTATION PROJECTS AND
WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

William Z. Marshall
4/6/94

DES : WFM					
DRN : WFM					
CHK : WFM					
DATE:	BY:	NO.	REVISION	DATE	

PEDESTRIAN BRIDGE
WING WALL AND
HANDRAIL DETAILS

CENTENNIAL PARK
CAPITAL PROJECT N-3944
ELECTION DISTRICT NO 2
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
6 OF 6