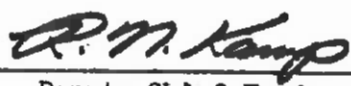


Superseded by EI 77-031  
6/16/77

<b>TO:</b>  M. Tegza Final Plans Review Bur. Bldg. 5 4th Fl. /2 Copies/ <b>SUPERSEDED BY EI 77-031</b> <b>EFFECTIVE 5/1/1977</b>	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
<b>Distribution:</b> <input type="checkbox"/> Main Office <input type="checkbox"/> Regions <input checked="" type="checkbox"/> Special	<b>SUBJECT:</b> STANDARD DETAILS FOR HIGHWAY BRIDGES  Subject Code: 7.35-1
<b>APPROVED:</b>   _____ Deputy Chief Engineer (Structures)	Code: <u>EI 74-62</u> Date: <u>7/1/74</u> Supersedes:

The attached pages are to be inserted in the back of the Standard Details for Highway Bridges Manual.

TITLE PAGE - GUIDE LINE DRAWINGS  
Pages GLD-A1 to GLD-A7

These pages make up a set of seven Guide Line Drawings pertaining to the design of an ABUTMENT ON SPREAD FOOTINGS OR PILES (LESS THAN 30° SKEW).

This first set of drawings has been prepared in order to standardize the drawings produced by the design units and consultants in the design of an abutment. Future Guide Line Drawings will be issued pertaining to the design of other structures.

Addressees are authorized and directed to immediately use these drawings as guides in the preparation of their respective drawings.

The Standard Details for Highway Bridges Manual will be revised to remove any conflicts between these Drawings and the Manual. Until official issuance of the revisions, the Guide Line Drawings take precedence.

The use of these drawings will not apply to the following projects:

- PIN 9357.09
- PIN 9357.10
- PIN 9357.11
- Any structure over I-88.
- Any structure for which detailed drawings of abutments has begun.

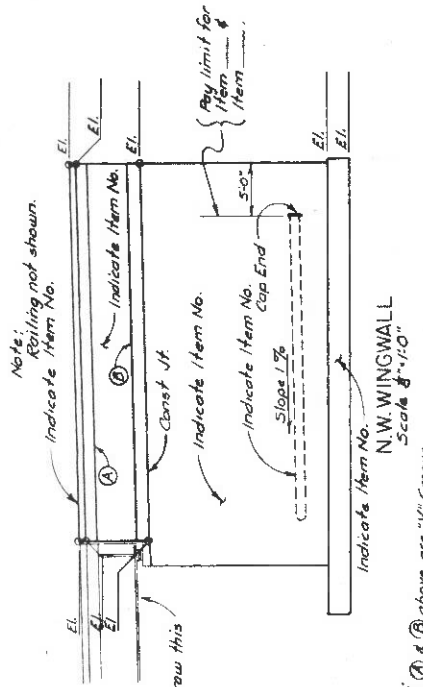
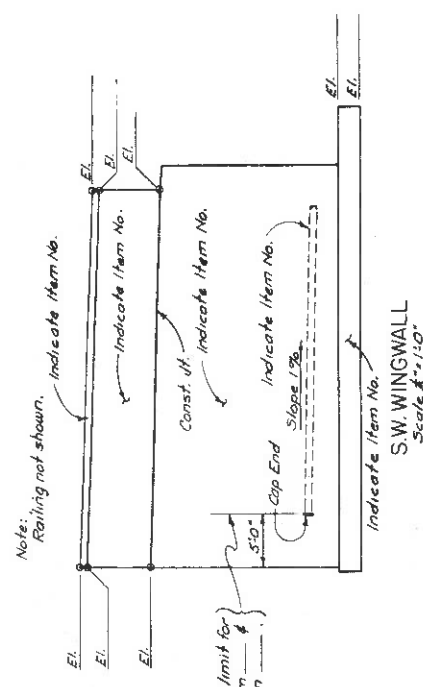
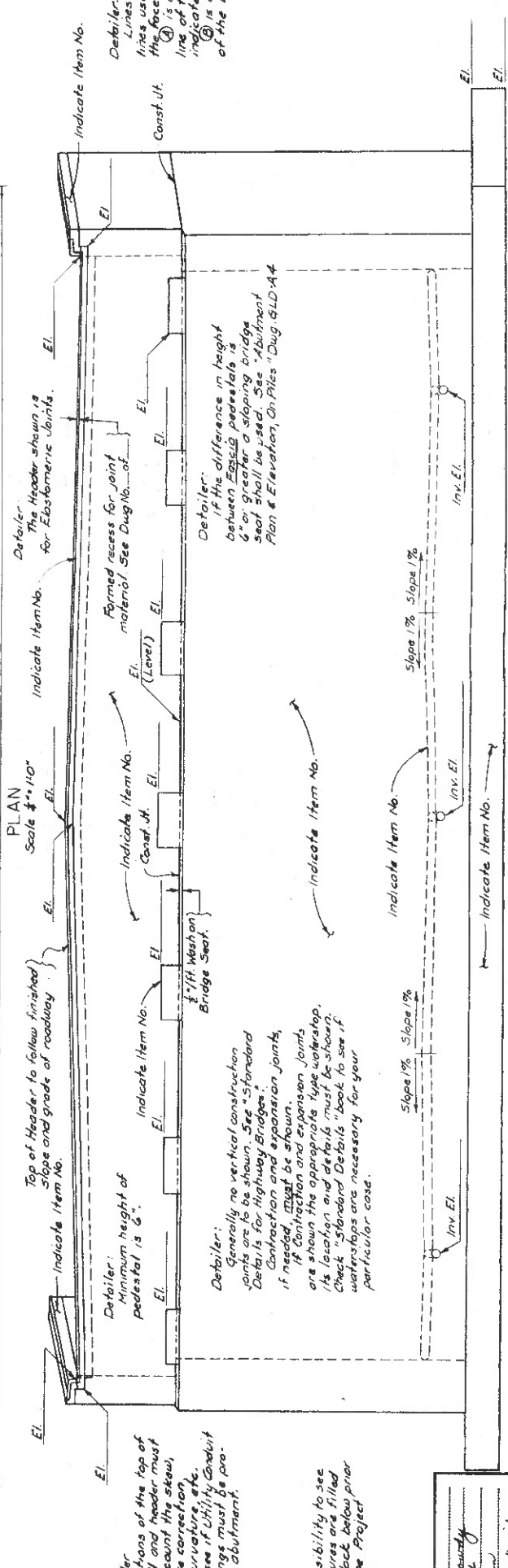
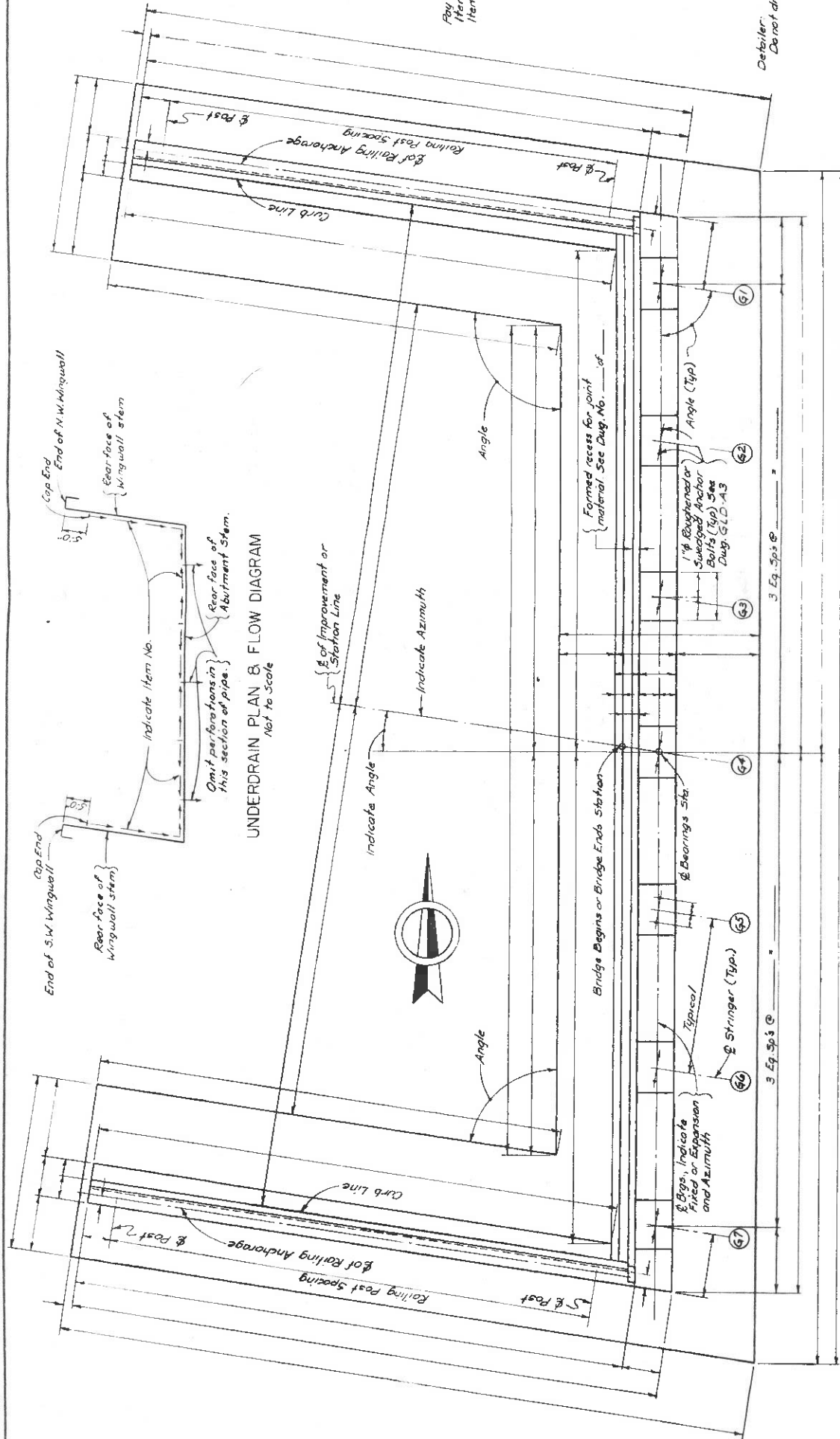
PREL.	FINAL
PHOTOGRAM.	LANDSCAPE
RECEIVED	
FACILITIES DESIGN SUBDIVISION	
AUG 30 1974	
CIRC.	
FILE	DESIGN

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**GUIDE LINE  
DRAWINGS  
SECTION**

---

REG. NO. REL. NO.	STATE NEW YORK	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
CAPITAL PROJECT IDENTIFICATION NO.				



**Notes:**  
 This area on all drawings should be reserved for notes.  
 The suggested scale for any abutment plan and elevation is 1/4" = 1'-0". If a scale of 1/8" = 1'-0" is used, it may be necessary to allow enlarged portions or isometrics to clarify complicated or unclear details.  
 \* The minimum size of lettering shall be as follows:  
 For Railing: Details are Dwg. # of \_\_\_\_\_ of \_\_\_\_\_  
 For Curb details: Details are Dwg. # of \_\_\_\_\_ of \_\_\_\_\_  
 For Stringer details: Details are Dwg. # of \_\_\_\_\_ of \_\_\_\_\_  
 For Underdrain Filter details: See Dwg. # of \_\_\_\_\_ of \_\_\_\_\_  
 Don't forget note giving Foundation Pressure.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.  
 S.W. WINGWALL  
 Scale 1/4" = 1'-0"

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.  
 N.W. WINGWALL  
 Scale 1/4" = 1'-0"

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

STATE OF NEW YORK  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF CONSTRUCTION  
 SAMPLE DETAIL ABUTMENT  
 ABUTMENT PLAN AND ELEVATION  
 SPREAD FOOTING  
 FOR SKEW 30° 8' UNDER  
 DRAWING NO. GLD-A1

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

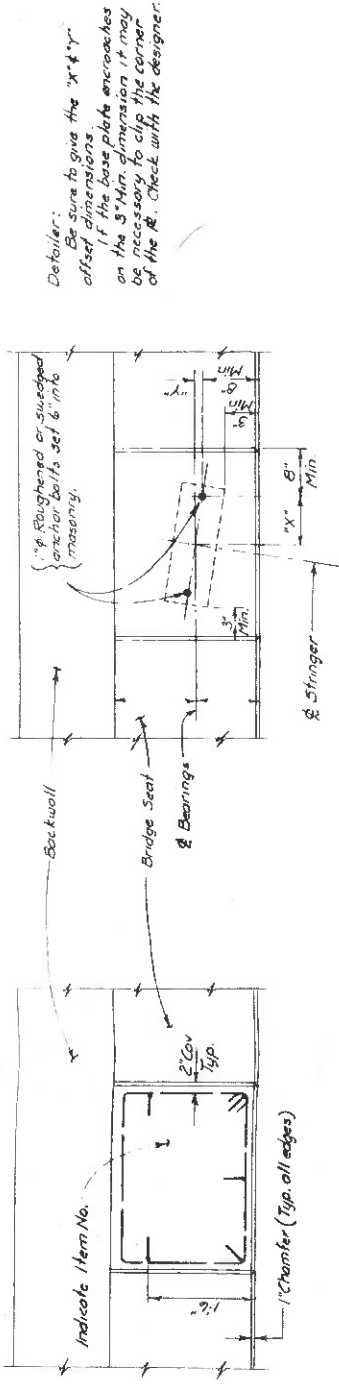
**Notes:**  
 Railing not shown.  
 Indicate Item No.  
 Const. Jt.  
 Indicate Item No.  
 Pay limit for Item # \_\_\_\_\_  
 Slope 1%  
 Cap End  
 Indicate Item No.

DATE MADE 6/10/74  
 PROJECT ENGINEER [Signature]  
 IN CHARGE OF PROJECT [Signature]  
 DESIGNED BY [Signature]  
 DESIGN CHECKED BY [Signature]  
 DETAIL CHECKED BY [Signature]

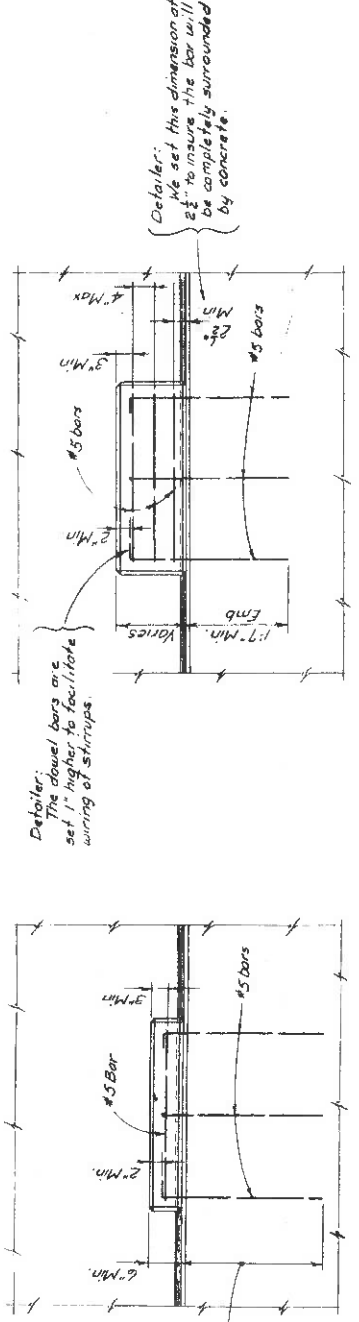
This is only a sample.  
 Added July 1974



FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK			
CAPITAL PROJECT IDENTIFICATION NO.				



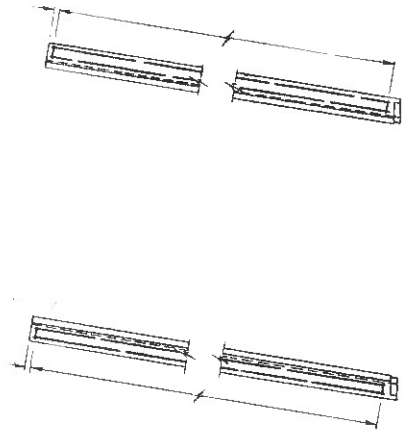
Detailer: Be sure to give the "x" & "y" offset dimensions. If the base plate encroaches on the 3" Min. dimension it may be necessary to clip the corner of the B. Check with the designer.



ELEVATION INTERIOR PEDESTAL

ELEVATION FASCIA PEDESTAL

PEDESTAL DETAILS  
Scale 3/4" = 1'-0"



S.W. SAFETY WALK N.W. SAFETY WALK  
OVERLAY REINFORCEMENT  
Scale 3/4" = 1'-0"

Detailer: All reinforcement to be verified by designer.

Area reserved for notes

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF CONSTRUCTION  
SAMPLE DETAIL - ABUTMENT  
PEDESTALS & OVERLAYS  
FOR SKEW 30° & UNDER  
DRAWING NO. G.L.D.-A-9

DATE MADE	6/30/74
PROJECT ENGINEER	
IN CHARGE OF	
DESIGNED BY	
DESIGN CHECKED BY	
DETAILED BY	
DETAIL CHECKED BY	

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK			

CAPITAL PROJECT IDENTIFICATION NO.

**LEGEND**

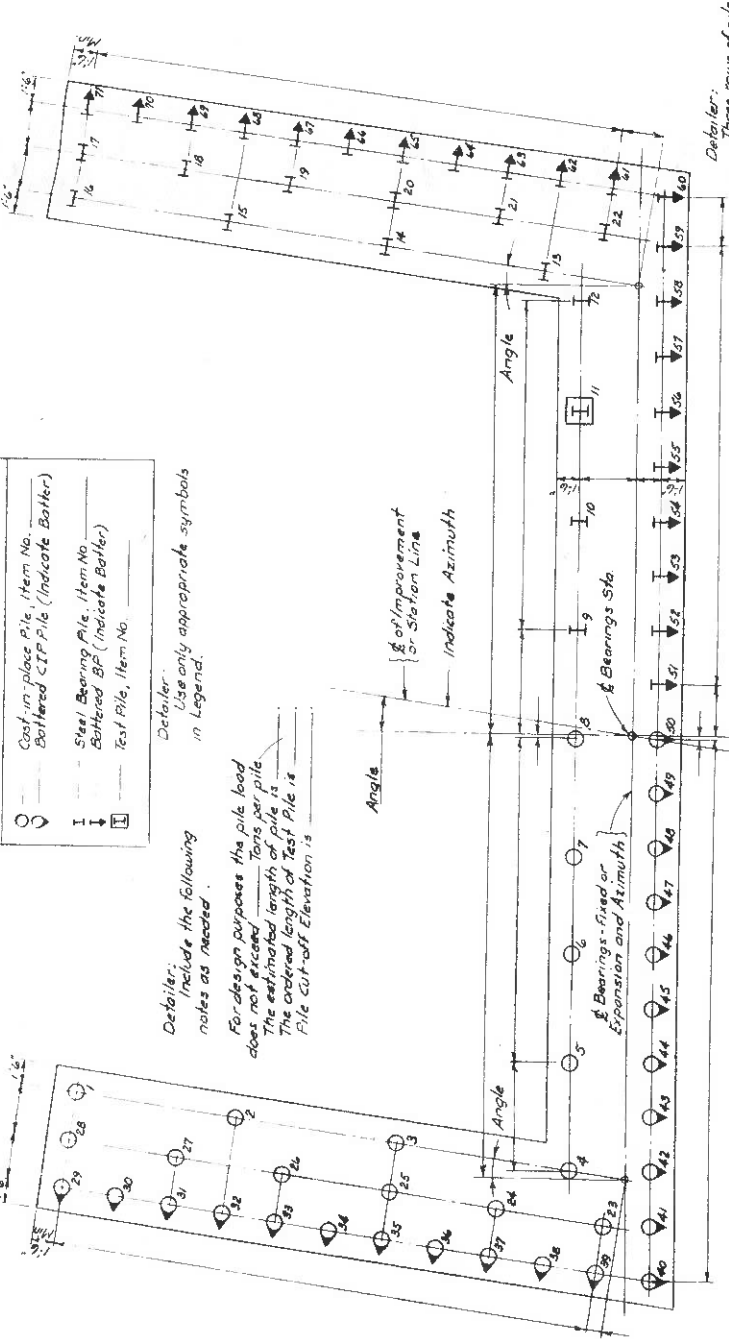
- Cast-in-place Pile, Item No. Battered CIP Pile (Indicate Batter)
- ⊖ Steel Bearing Pile, Item No. Battered BP (Indicate Batter)
- ⊕ Test Pile, Item No.

*Detailer: Use only appropriate symbols in Legend.*

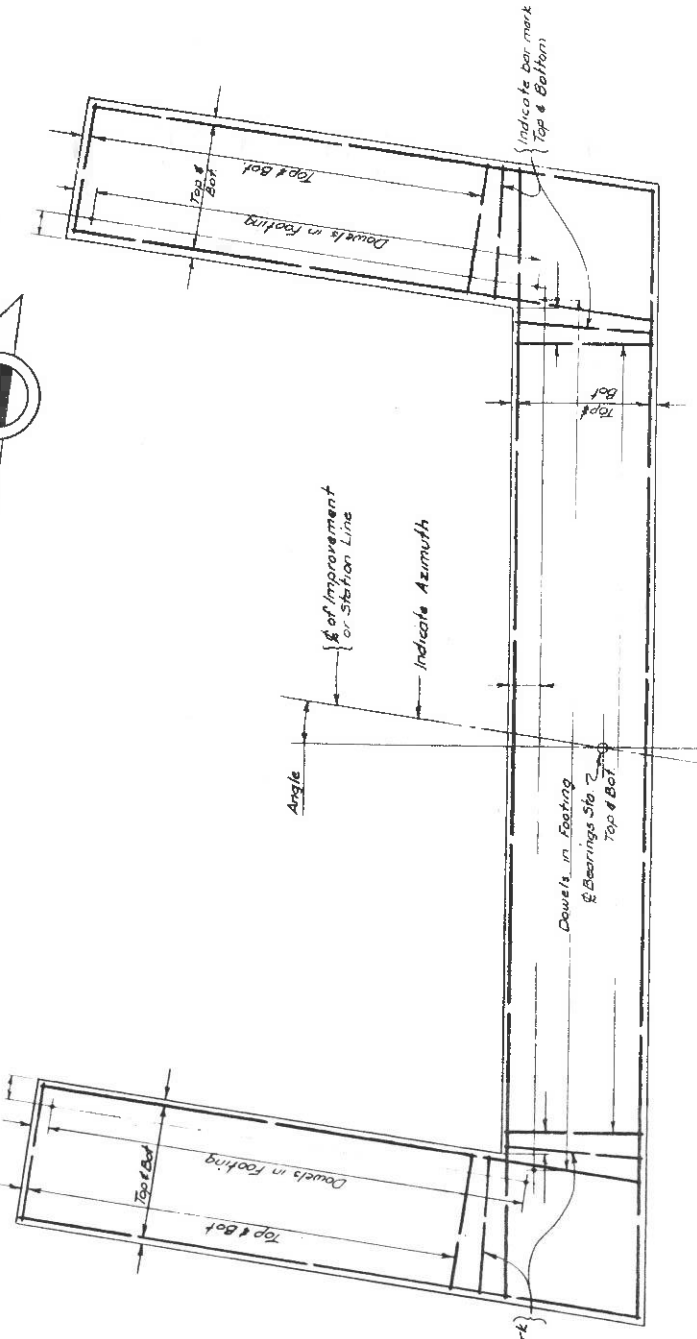
*Detailer: Include the following notes as needed:*

For design purposes the pile load does not exceed  $\frac{1}{2}$  tons per pile. The estimated length of pile is \_\_\_\_\_ The created length of Test Pile is \_\_\_\_\_ Pile cut-off Elevation is \_\_\_\_\_

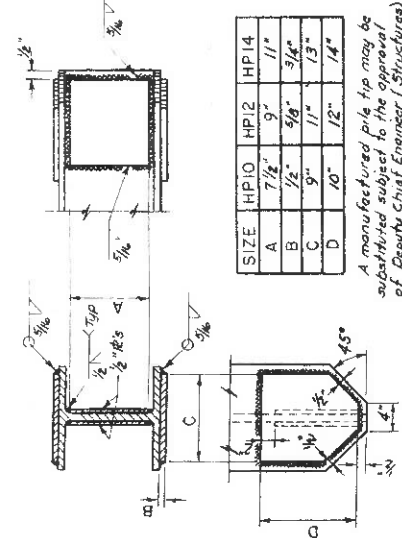
*Detailer: Three rows of piles are shown in the wing walls to indicate system of numbering piles when more than two rows are used.*



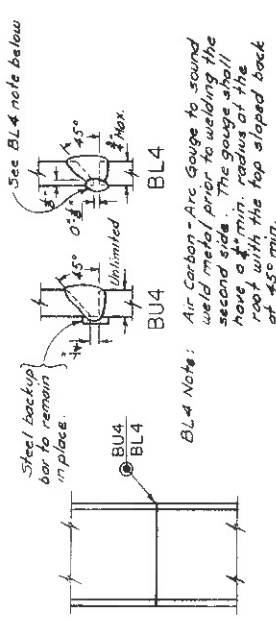
CAST-IN-PLACE PILES  
FOOTING REINFORCEMENT PLAN  
Scale 1/8"=1'-0"



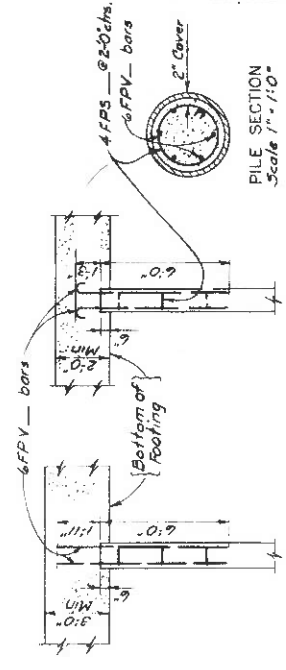
STEEL BEARING PILES  
FOOTING REINFORCEMENT PLAN  
Scale 1/8"=1'-0"



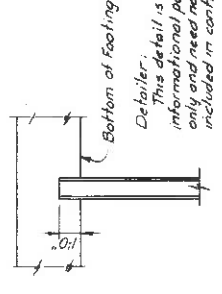
REINFORCED BEARING PILE TIP  
INDICATE ITEM NO. HERE  
Not to Scale



STEEL SPLICE FOR BEARING PILE  
INDICATE ITEM NO. HERE  
Not to Scale



CAST-IN-PLACE CONCRETE PILE REINFORCEMENT  
Scale 1/4"=1'-0"



BEARING PILE EMBEDMENT  
Scale 1/4"=1'-0"

CONCRETE & REINFORCEMENT TABLE


Area reserved for notes

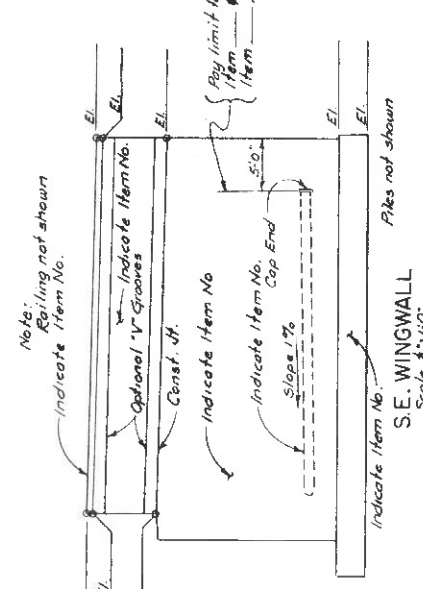
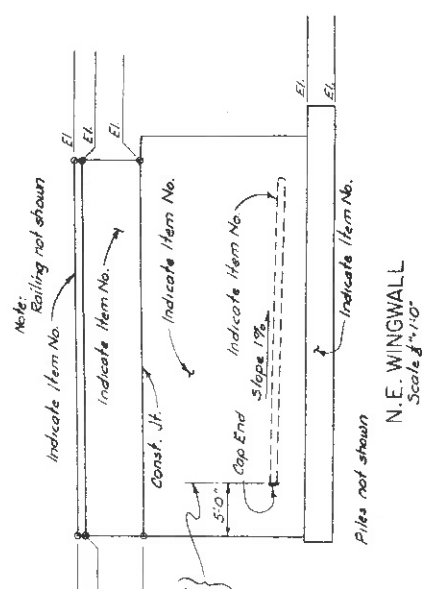
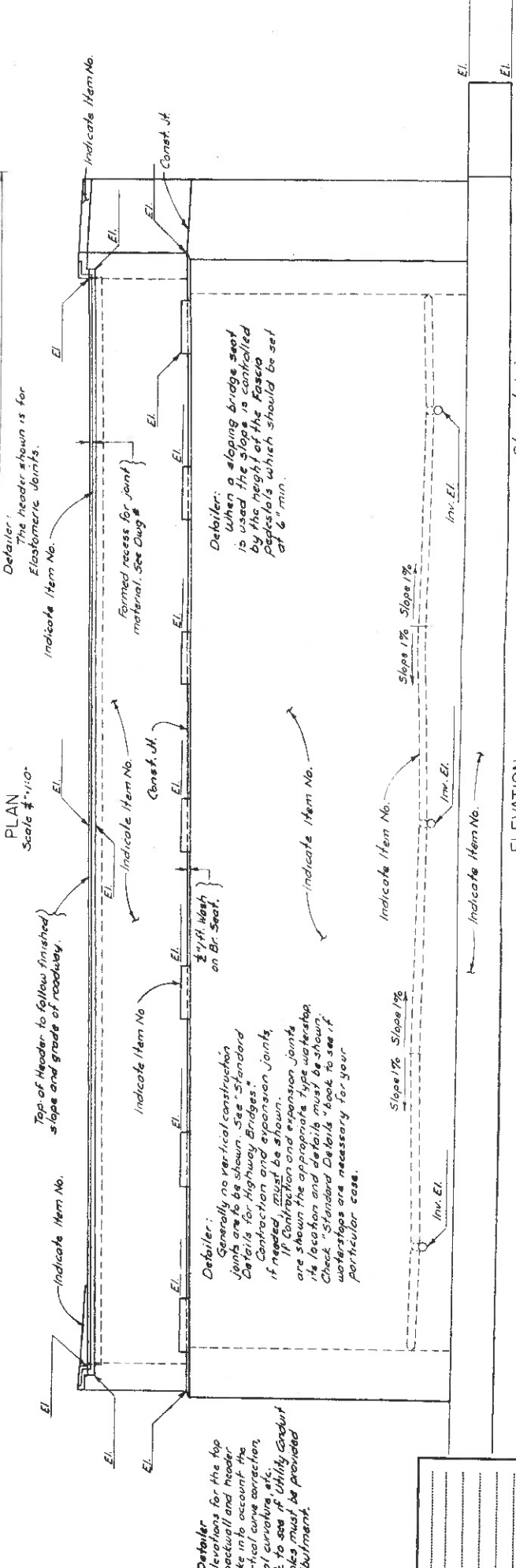
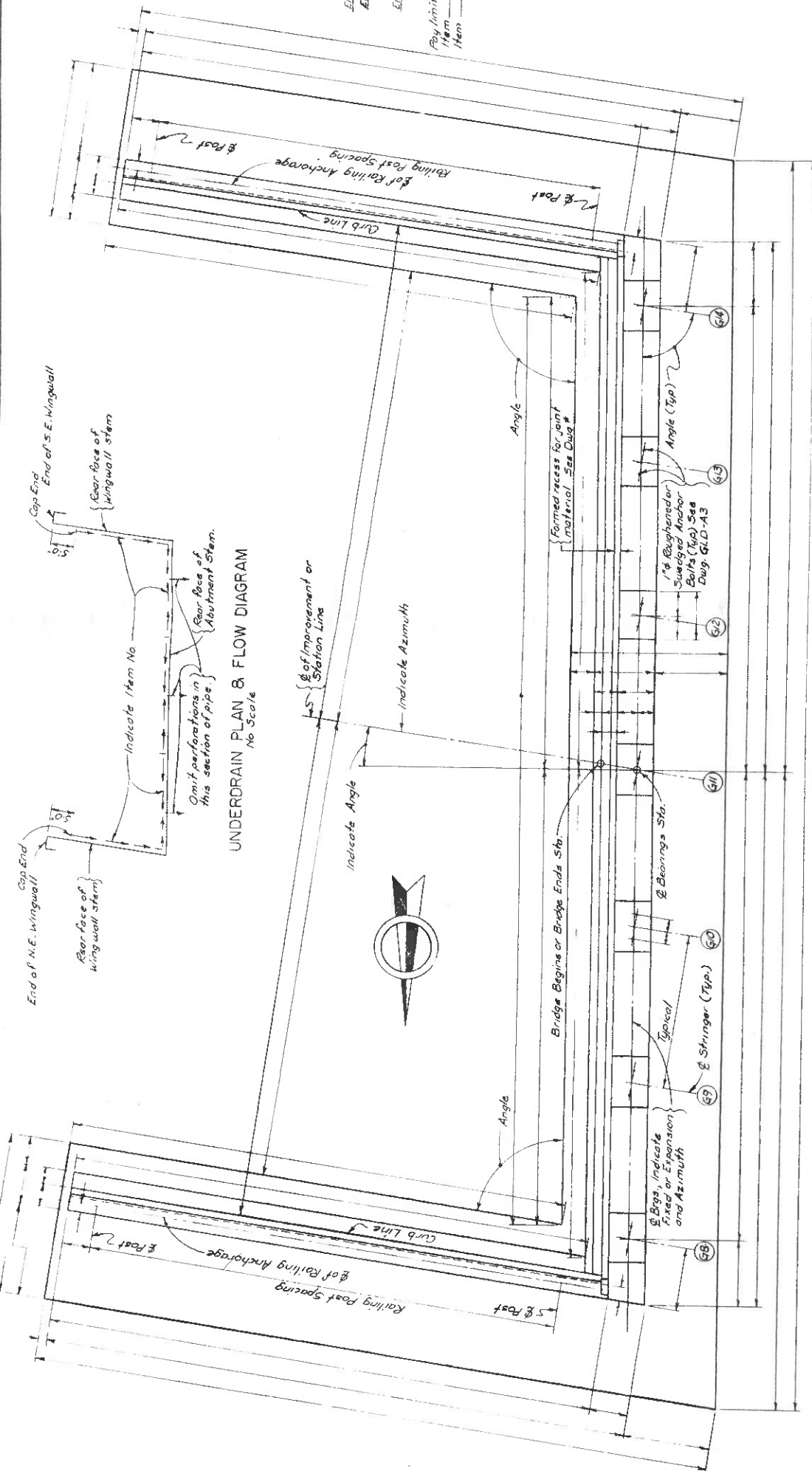
DATE MADE 5/10/74  
PROJECT ENGINEER  
IN CHARGE OF  
DESIGNED BY  
DESIGN CHECKED BY  
DETAILED BY  
DETAIL CHECKED BY

*Detailer: All reinforcement to be verified by designer.*

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF CONSTRUCTION  
SAMPLE DETAIL ABUTMENT  
FOOTING & PILE DETAILS  
FOR SKEW 30° & UNDER  
DRAWING NO. G.L.D.-45

Added July 1974

FED. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
REG. NO.	NEW YORK			
CAPITAL PROJECT IDENTIFICATION NO.				



**Designer/Detailer:**  
The elevations for the top of the backwall and header must take into account the skew, vertical curve correction, horizontal curvatures, etc. Check to see if Utility Gadget or any holes must be provided in the Abutment.

**Detailer:**  
Generally no vertical construction joints are to be shown. See "Standard Details for Highway Bridges." Contraction and expansion joints, if needed, must be shown. If Contraction and expansion joints are shown the appropriate type waterproofing location and details must be shown. Check "Standard Details" book to see if waterproofing are necessary for your particular case.

**Detailer:**  
When a sloping bridge seat is used the slope is controlled by the height of the Forming Posts which should be set at 6" min.

Reserved for Notes

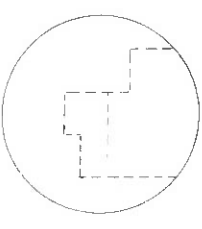
DATE MADE: 6/20/74
PROJECT ENGINEER:
IN CHARGE OF:
DESIGNED BY:
DESIGN CHECKED BY:
DETAILED BY:
DETAIL CHECKED BY:

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF CONSTRUCTION  
SAMPLE DETAIL ABUTMENT  
ON PILES  
FOR SKEW 30° & UNDER  
DRAWING NO. GLD-A4

Added July 1974

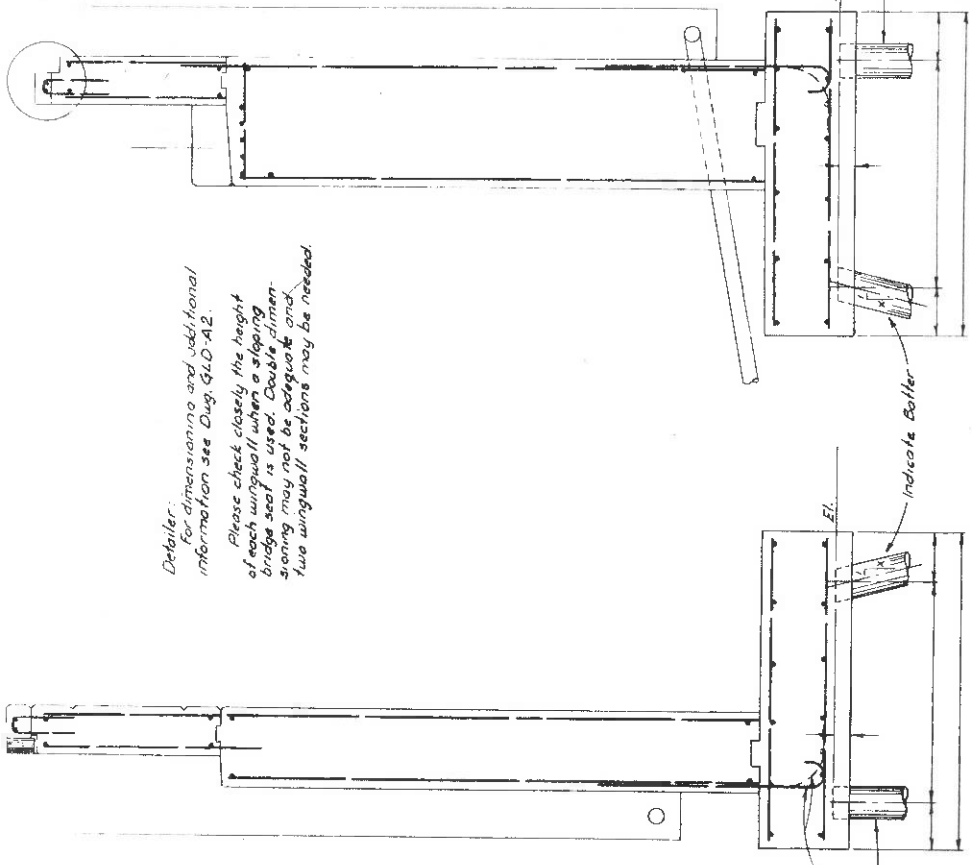


FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK			
CAPITAL PROJECT IDENTIFICATION NO.				



HEADER DETAIL  
Scale 1"=1'-0"

*Detailer:*  
For dimensioning and additional information see Div. G.L.D.-A2.  
Please check closely the height of each wingwall when a sloping bridge seat is used. Double dimensioning may not be adequate and two wingwall sections may be needed.



TYPICAL WINGWALL SECTION  
Scale 3/4"=1'-0"

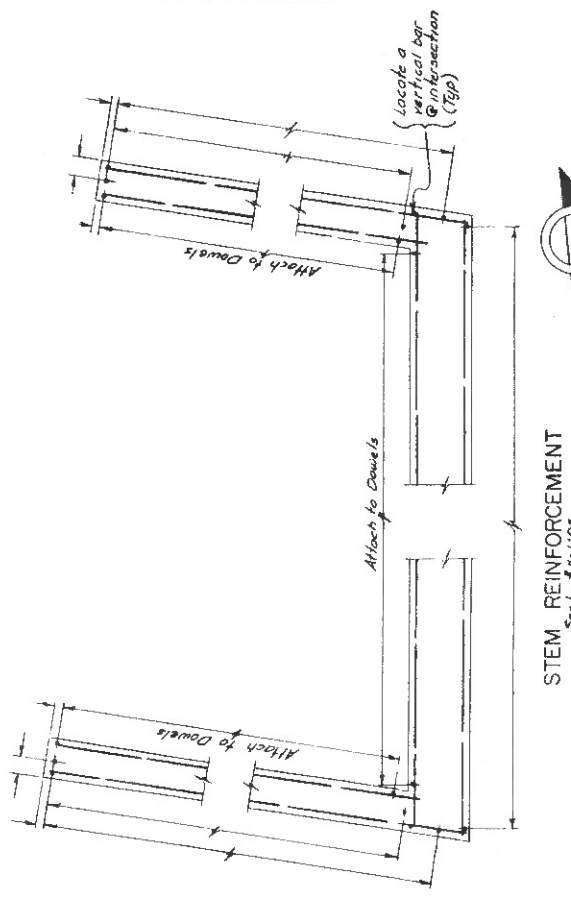
TYPICAL ABUTMENT SECTION  
Scale 3/4"=1'-0"

*Detailer:*  
The embedment of the dowel and depth of the footing will determine the configuration of this hook.  
Indicate Item No.

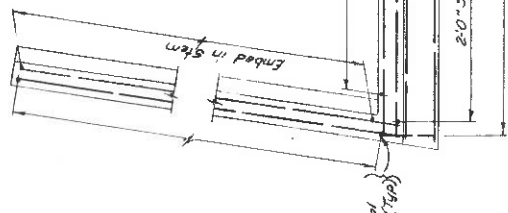
*Detailer:*  
Show anchor bolt detail or refer to appropriate drawing where information is given.

*Detailer:*  
The dowel bars are set 1" higher to facilitate wiring of stirrups.

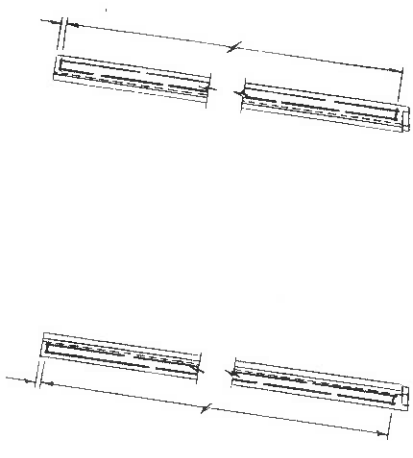
*Detailer:*  
Use the same length dowel in all pedestals.



STEM REINFORCEMENT  
Scale 3/4"=1'-0"

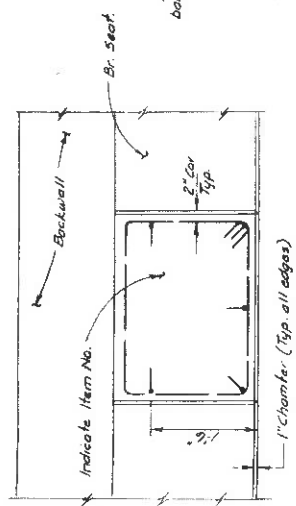


BACKWALL & UPPER WINGWALL REINFORCEMENT  
Scale 3/4"=1'-0"

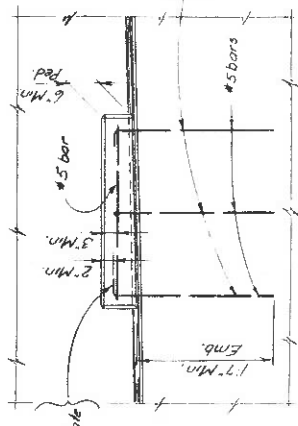


N.E. SAFETY WALK OVERLAY REINFORCEMENT  
Scale 3/4"=1'-0"

S.E. SAFETY WALK OVERLAY REINFORCEMENT  
Scale 3/4"=1'-0"



PEDESTAL PLAN  
Scale 3/4"=1'-0"



PEDESTAL ELEVATION  
Scale 3/4"=1'-0"

Area reserved for notes

*Detailer:*  
All reinforcement to be verified by designer.

DATE MADE	6/29/74
PROJECT ENGINEER	
IN CHARGE OF	
DESIGNED BY	
DESIGN CHECKED BY	
DETAILED BY	
DETAIL CHECKED BY	

STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF CONSTRUCTION  
SAMPLE DETAIL - ABUTMENT  
ABUTMENT SECTIONS  
REINFORCEMENT DETAILS  
FOR SKEW 30° & UNDER

DRAWING NO. G.L.D.-A6  
Added July 1974