

HL-150T  
BOOM LENGTH: 150'  
(4) 4'x12'x8" CRANE MATS

GIRDER UNLOADING ZONE:  
6G1B  
7G2B  
8G3B  
9G4B  
10G5B

GIRDER UNLOADING ZONE:  
1G1A  
2G2A  
3G3A  
4G4A  
5G5A

DEMAG AC 180  
BOOM LENGTH: 81.7'  
(5) 4'x12'x8" CRANE MATS

MAD RIVER

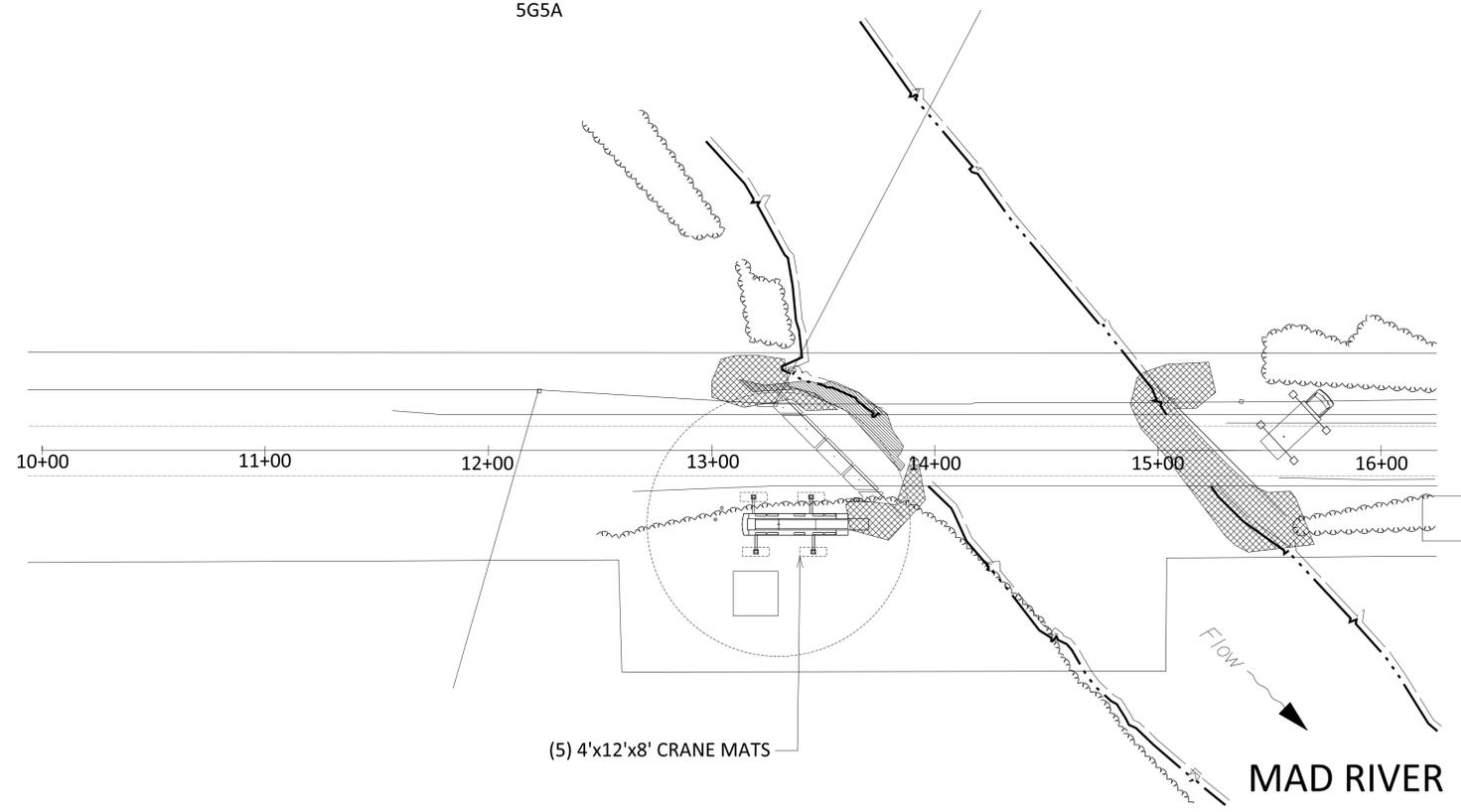
**STAGE 1- UNLOADING OF GIRDERS AND PREPARATION**

1. IT IS IMPERATIVE THAT THE CRANE OPERATORS FAMILIARIZE THEMSELVES WITH THE LOCATION OF OVERHEAD UTILITIES.
2. INSTALL CRANE MATS. USE (5) 4'x12'x8" CRANE MATS UNDER EACH OUTRIGGER OF THE DEMAG AC180 AND (4) 4'x12'x8" CRANE MATS UNDER EACH OUTRIGGER OF THE HL-150T.
3. THE CONTRACTOR SHALL VERIFY THE STABILITY AND LOCATION OF CRANE PRIOR TO ALL PICKS.
4. THE MAXIMUM RADIUS OF THE HL-150T, WHILE MANUEVERING GIRDERS, IS 90 FEET. THE MAXIMUM RADIUS OF THE DEMAG AC180, WHILE MANUEVERING GIRDERS, IS 72 FEET. REMOVE THE GIRDERS FROM THE TRUCK AND PLACE THEM IN THE DESIGNATED UNLOADING ZONES, AS SHOWN TO THE LEFT.

**NOTES:**

DIFFERENTLY SIZED CRANE MATS ORGANIZED TO ACHIEVE THE SAME BEARING AREA AND DEPTH MAY BE SUBSTITUTED AT THE DISCRETION OF THE CONTRACTOR.

THE GIVEN STATIONING AND ORIENTATION FOR THE CRANE MATS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR



(5) 4'x12'x8" CRANE MATS

MAD RIVER

**STAGE 2- INSTALLION OF WINGWALLS AND FOOTINGS FOR ABUTMENT 1**

1. POSITION THE DEMAG AC 180 ON THE EAST SIDE OF ROUTE 100 JUST PAST STATION 13+00. THE MAXIMUM RADIUS FOR THE DEMAG AC 180, FOR MEMBERS BEING INSTALLED IN THIS STAGE, IS 59 FEET. THE BOOM LENGTH IS 98.1 FEET.
2. INSTALL CRANE MATS. USE (5) 4'x12'x8" CRANE MATS UNDER EACH OUTRIGGER.
3. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE WINGWALLS AND FOOTINGS.
4. IF UNDERSIRABLE SOIL IS PRESENT IN THE LOCATIONS OF THE CRANE MATS, EXCAVATE 5 FEET, FILL AND COMPACT GRANULAR MATERIAL FOR APPLICABLE AREA.
5. THE CONTRACTOR SHALL VERIFY THE STABILITY AND LOCATION OF CRANE MATS.
6. INSTALL ABUTMENT FOOTINGS MD-WW1, MD-WW2, MD-FG1, MD-FG2, AND MD-FG3 IN PLACE PER CONTRACT DOCUMENTS.

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ALStOng



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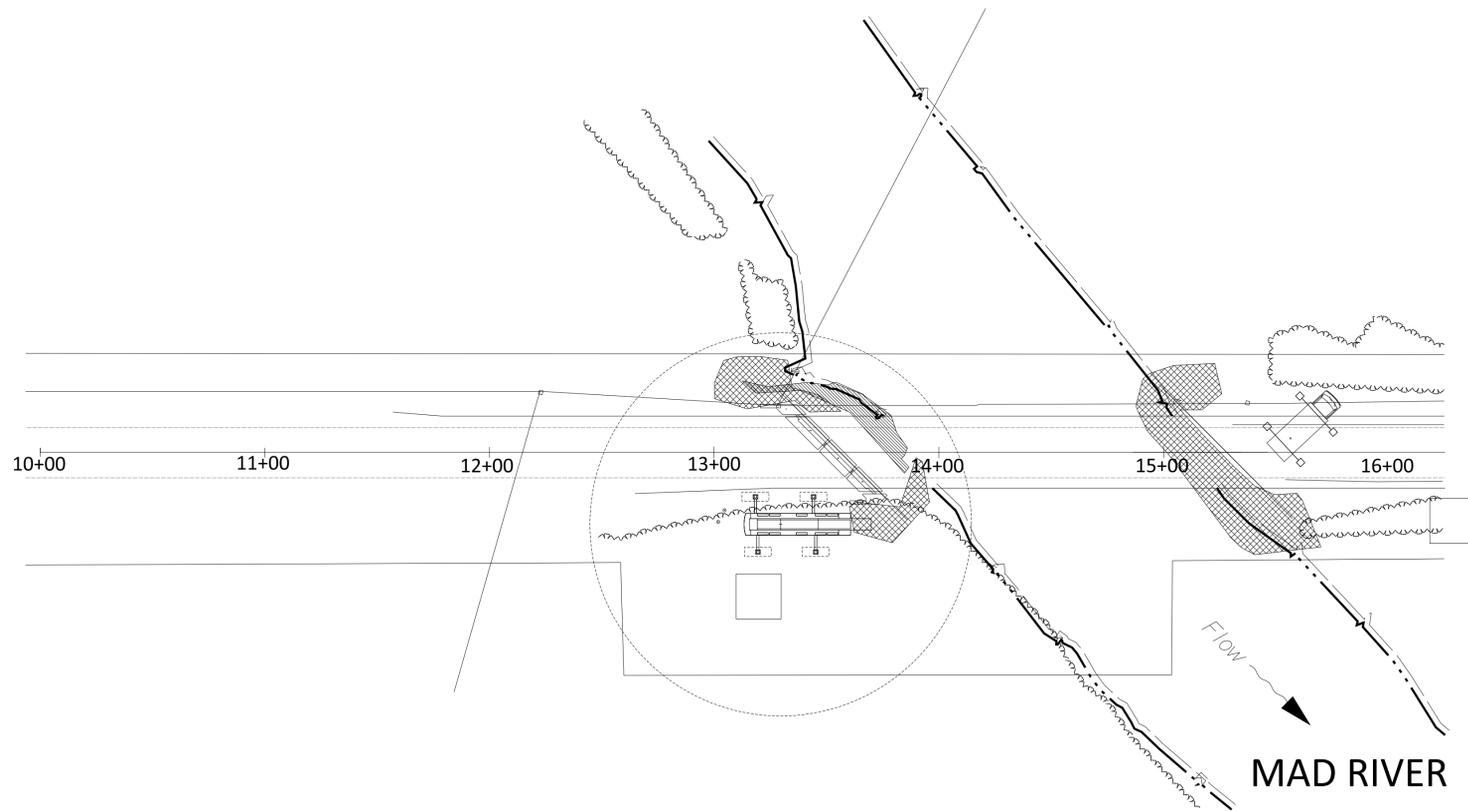
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WAITSFIELD, VT- ROUTE 100  
OVER MAD RIVER  
ERECTION PLAN

SHEET NUMBER

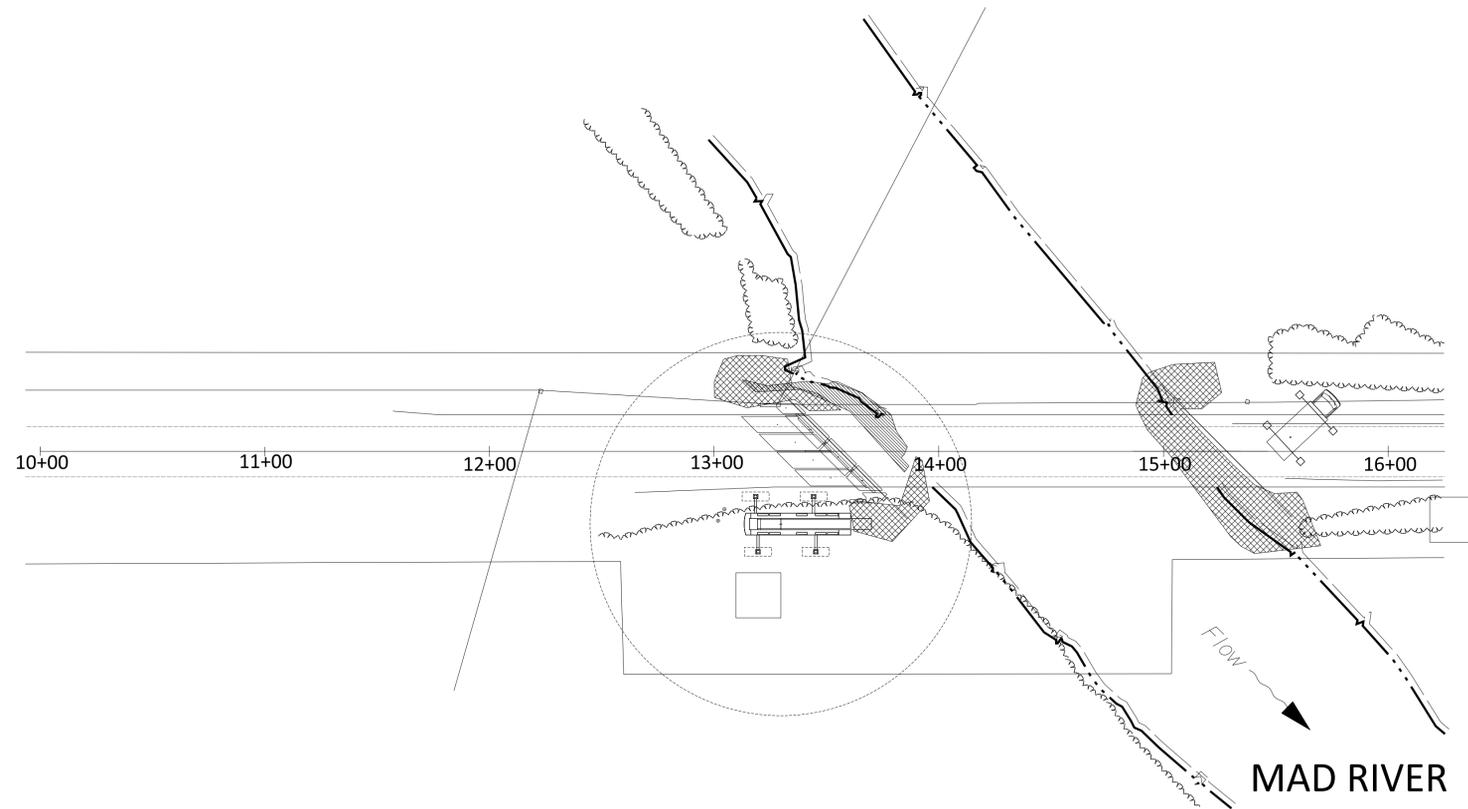
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**STAGE 3- INSTALLATION OF BACKWALLS FOR ABUTMENT 1**

1. LEAVE THE DEMAG AC180 AND CRANE MATS IN PLACE. THE MAXIMUM RADIUS FOR THE DEMAG AC 180, FOR MEMBERS BEING INSTALLED IN THIS STAGE, IS 85 FEET. THE BOOM LENGTH IS 98.1 FEET.
2. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE BACKWALL.
3. INSTALL BACKWALL MEMBER MD-BW1, MD-BW2, AND MD-BW4 IN PLACE PER CONTRACT DOCUMENTS.

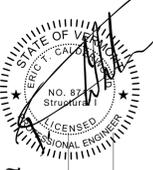


**STAGE 4- INSTALLATION OF APPROACH SLABS FOR ABUTMENT 1**

1. LEAVE THE DEMAG AC180 AND CRANE MATS IN PLACE. THE MAXIMUM RADIUS FOR THE DEMAG AC 180, FOR MEMBERS BEING INSTALLED IN THIS STAGE, IS 85 FEET. THE BOOM LENGTH IS 98.1 FEET.
2. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE APPROACH SLABS.
3. INSTALL APPROACH SLAB MEMBERS MD-AS1, MD-AS2, MD-AS3, AND MD-AS4 IN PLACE PER CONTRACT DOCUMENTS.

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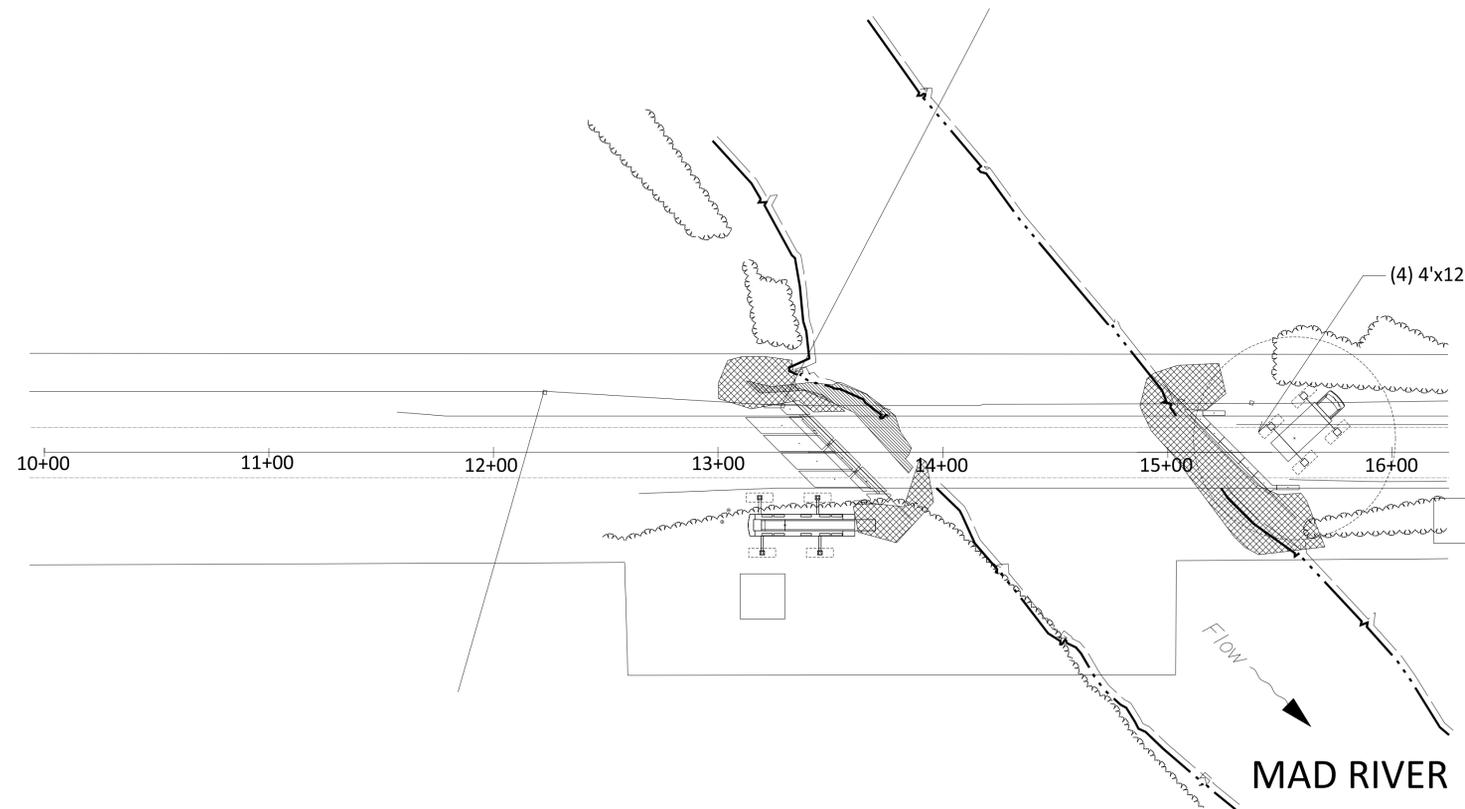
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ERECTION PLANS

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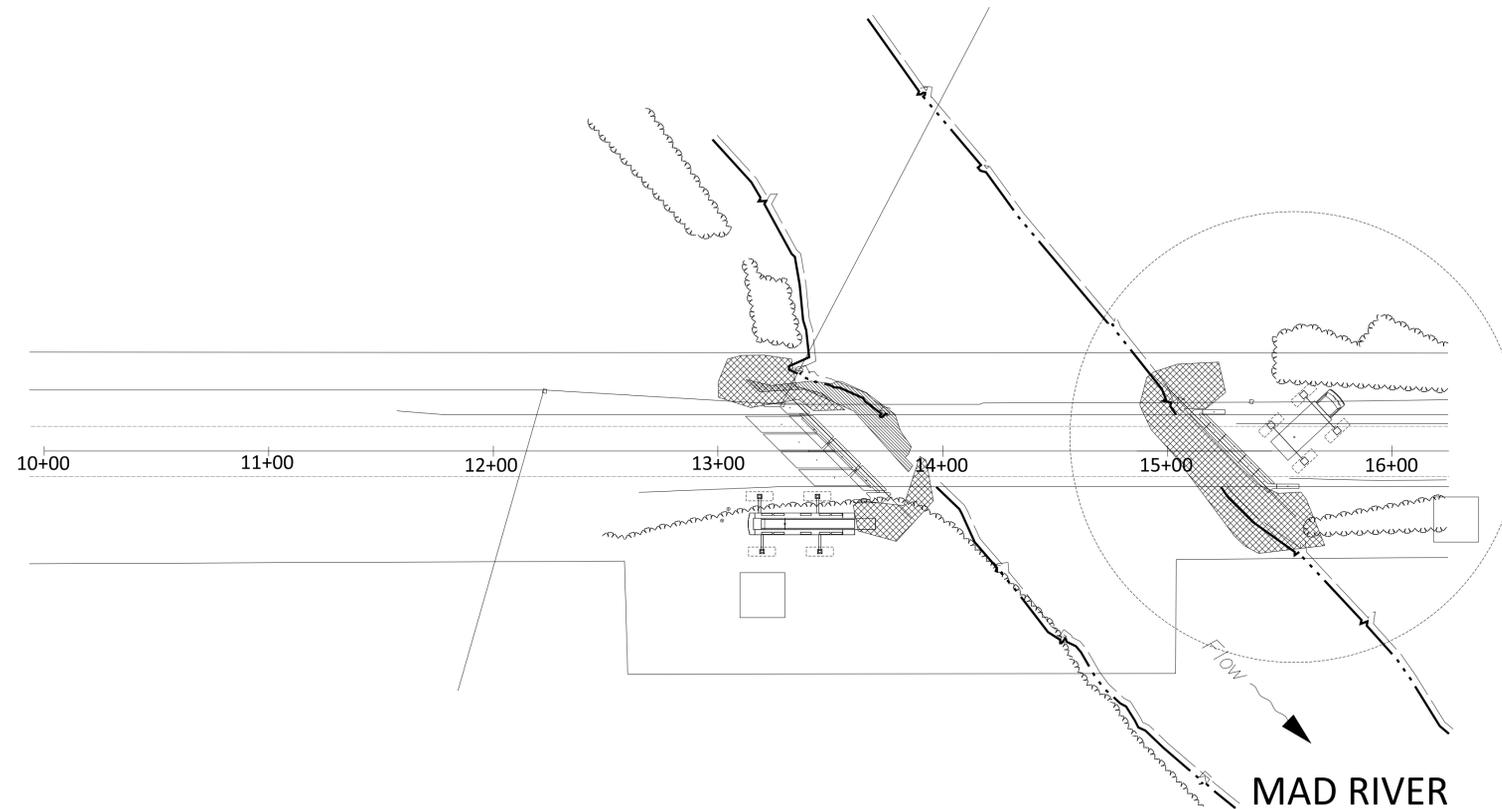
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**STAGE 5- INSTALLATION OF WINGWALLS AND PILE CAPS FOR ABUTMENT 2**

1. POSITION THE BACK END OF THE HL-150T APPROXIMATELY PARALLEL WITH THE BEARING LINE OF ABUTMENT 2 AND AT STATION 15+50. THE MAXIMUM RADIUS OF THE HL-150T WHILE MANEUVERING MEMBERS IN THIS STAGE IS 45 FEET. THE BOOM LENGTH IS 150 FEET.
2. INSTALL CRANE MATS. USE (4) 4'x12'x8" CRANE MATS UNDER EACH OUTRIGGER.
3. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE WINGWALLS AND PILE CAPS.
4. IF UNDESIRABLE SOIL IS PRESENT IN THE LOCATIONS OF THE CRANE MATS, EXCAVATE 5 FEET, FILL AND COMPACT GRANULAR MATERIAL FOR APPLICABLE AREA.
5. THE CONTRACTOR SHALL VERIFY THE STABILITY AND LOCATION OF CRANE MATS.
6. INSTALL PILE CAPS AND WINGWALL PIECES MD-PC1, MD-PC2, MD-PC3, MD-PC4, MD-PC5, MD-WW3, AND MD-WW4 IN PLACE PER CONTRACT DOCUMENTS.



**STAGE 6- INSTALLATION OF THE BACKWALL**

1. LEAVE THE HL-150T AND CRANE MATS IN PLACE. THE MAXIMUM RADIUS FOR THE HL-150T, FOR MEMBERS BEING INSTALLED IN THIS STAGE, IS 100 FEET.
2. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE BACKWALL.
3. INSTALL BACKWALL PIECES MD-BW4, MD-BW5, MD-BW6, AND MD-BW7 IN PLACE PER CONTRACT DOCUMENTS.

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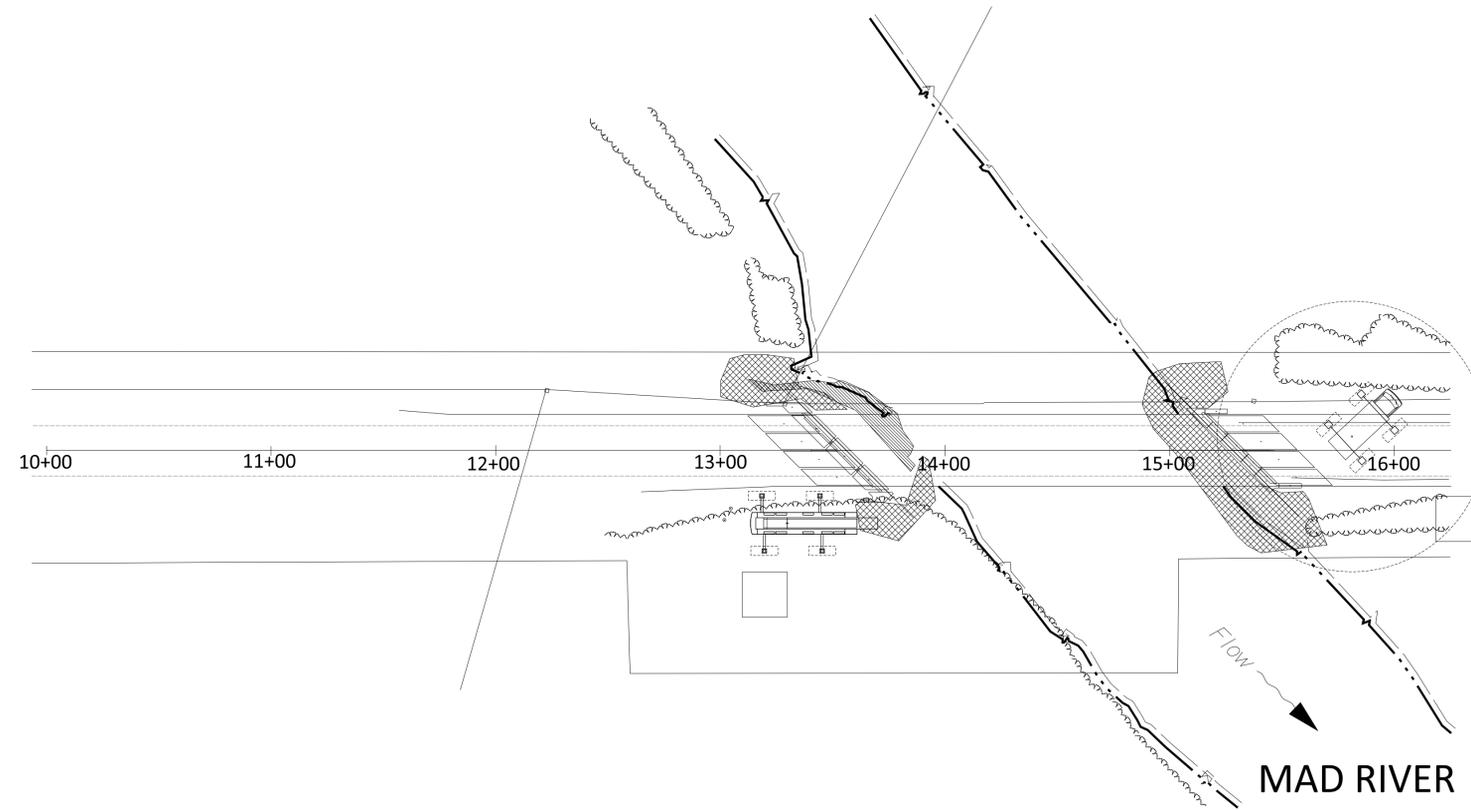
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**WAITSFIELD, VT- ROUTE 100  
 OVER MAD RIVER**  
**ERECTION PLANS**

SHEET NUMBER  
**03**



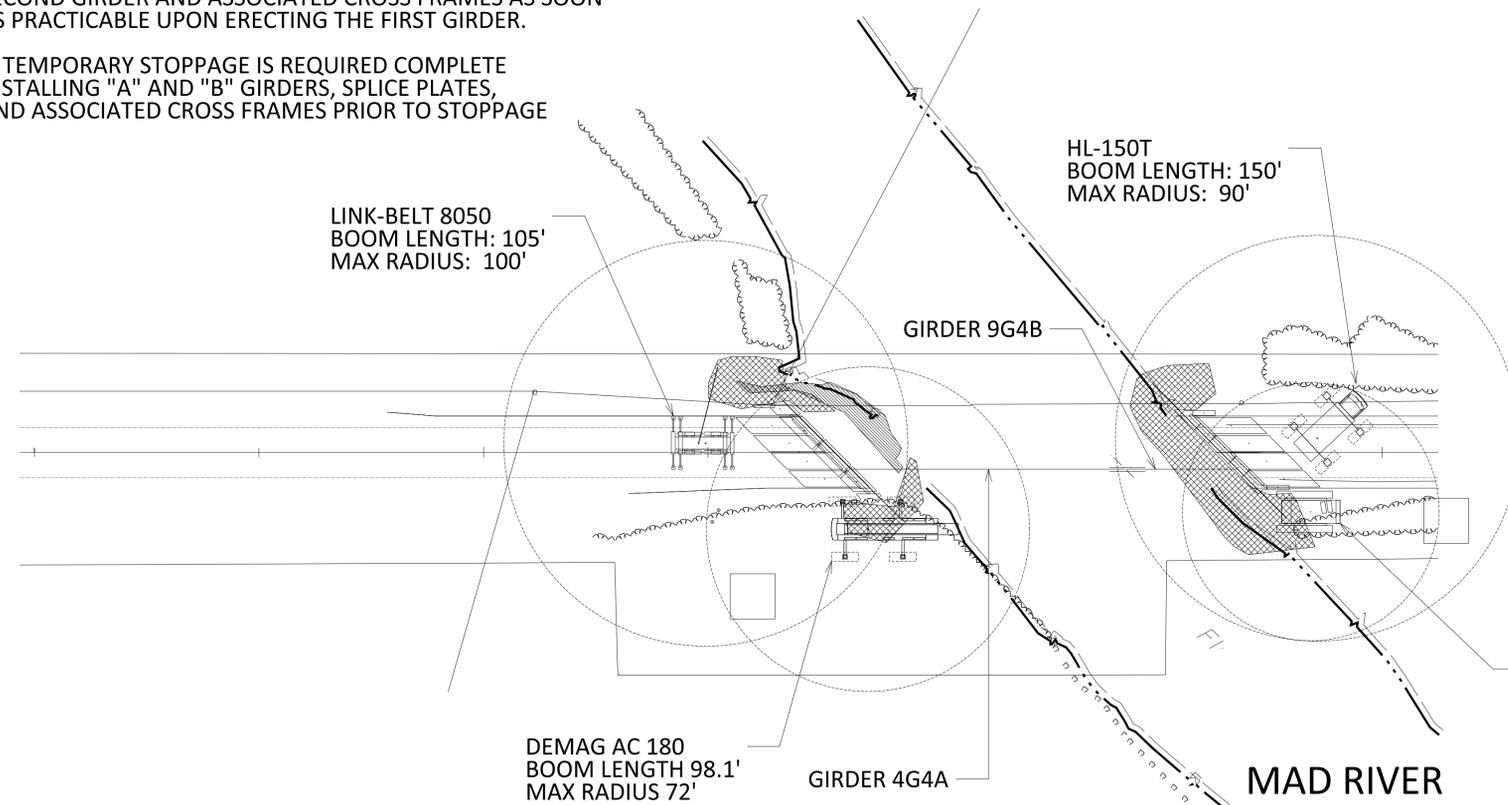


**STAGE 7- INSTALLATION OF APPROACH SLABS FOR ABUTMENT 2**

1. POSITION THE BACK END OF THE HL-150T APPROXIMATELY PARALLEL WITH THE BEARING LINE OF ABUTMENT 2 AND AT STATION 15+75. THE MAXIMUM RADIUS OF THE HL-150T WHILE MANEUVERING MEMBERS IN THIS STAGE IS 60 FEET. THE BOOM LENGTH IS 150 FEET.
2. INSTALL CRANE MATS. USE (4) 4'x12'x8" CRANE MATS UNDER EACH OUTRIGGER.
3. ENSURE ELEVATION AND POSITION OF CRANE MATS ARE APPROPRIATE FOR THE PLACEMENT OF THE APPROACH SLABS.
4. IF UNDESIRABLE SOIL IS PRESENT IN THE LOCATIONS OF THE CRANE MATS, EXCAVATE 5 FEET, FILL AND COMPACT GRANULAR MATERIAL FOR APPLICABLE AREA.
5. THE CONTRACTOR SHALL VERIFY THE STABILITY AND LOCATION OF CRANE MATS.
6. INSTALL APPROACH SLABS MD-AS1, MD-AS2, MD-AS3, AND MD-AS5 IN PLACE PER THE CONTRACT DOCUMENTS.

**NOTE:**  
DO NOT ERECT STEEL IN CONDITIONS WHERE WIND IS FORECAST TO BE IN EXCESS OF 20MPH. INSTALL SECOND GIRDER AND ASSOCIATED CROSS FRAMES AS SOON AS PRACTICABLE UPON ERECTING THE FIRST GIRDER.

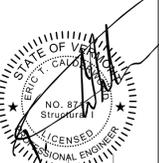
IF TEMPORARY STOPPAGE IS REQUIRED COMPLETE INSTALLING "A" AND "B" GIRDERS, SPLICE PLATES, AND ASSOCIATED CROSS FRAMES PRIOR TO STOPPAGE



**STAGE 8- INSTALLATION OF GIRDERS 4G4A AND 9G4B**

1. PICK GIRDER 4G4A AT PICK POINTS SHOWN ON SHEET E6 WITH THE DEMAG AC 180.
2. ERECT GIRDER 4G4A ON BEARING AT ABUTMENT 1.
3. PICK GIRDER 9G4B AT PICK POINTS SHOWN ON SHEET E6 WITH AMERICAN HC 125.
4. ERECT GIRDER 4G4A ON BEARING AT ABUTMENT 2.
5. CONNECT GIRDERS AT CONNECTION SPLICE WITH ALL BOLTS TIGHTENED SNUG.
6. PICK AND INSTALL 12 CF1 WITH THE HL-150T.
7. PICK AND INSTALL 11 CF1 WITH THE LINKBELT HSP-8050.
8. STABILIZE THE GIRDER BY HOOKING ON TO IT 15 FEET ON EITHER SIDE OF THE SPLICE WITH THE HL-150T.
9. UNHOOK DEMAG AC 180 AND AMERICAN HC 125.

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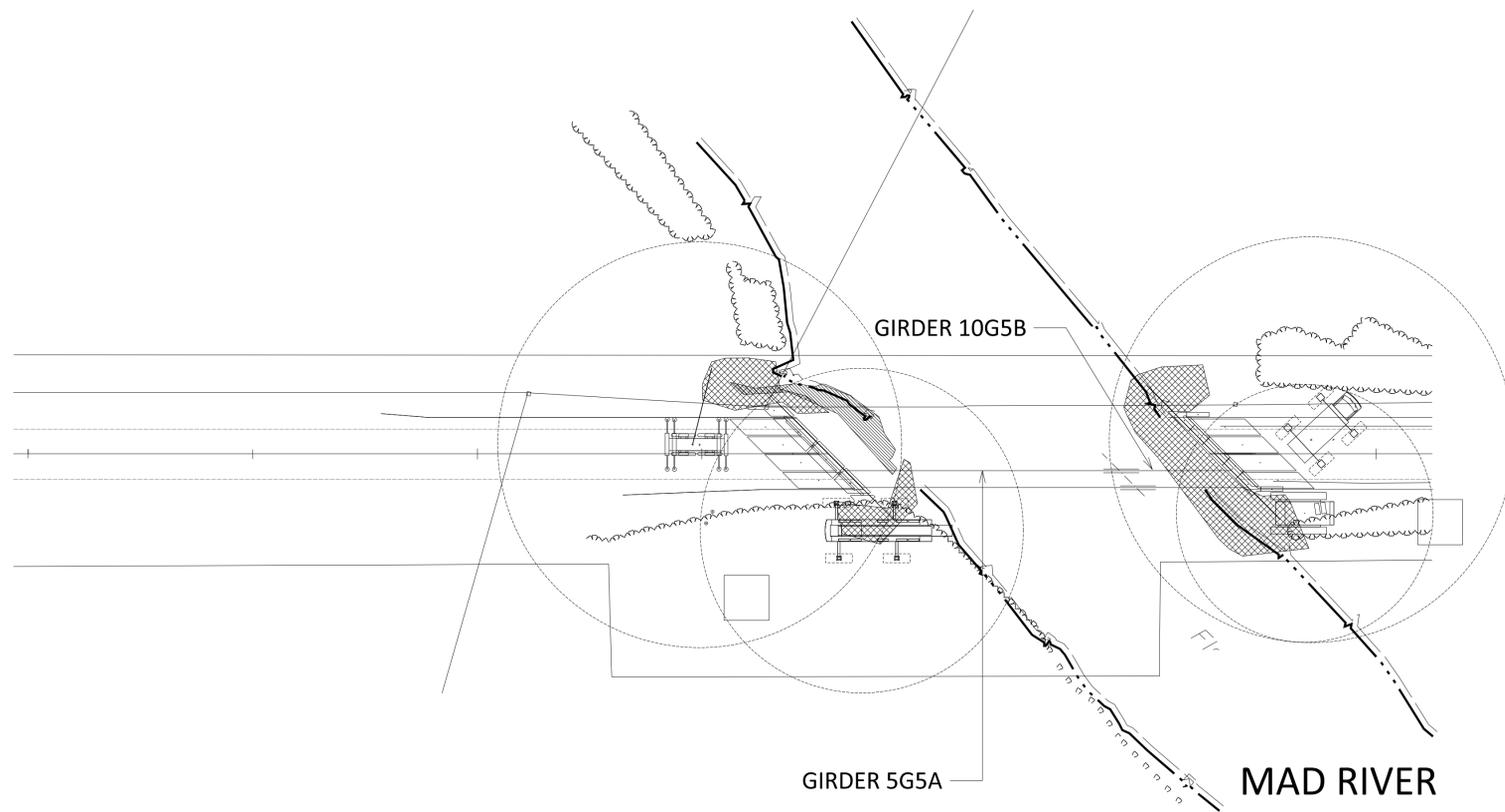
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**ERECTION PLANS**

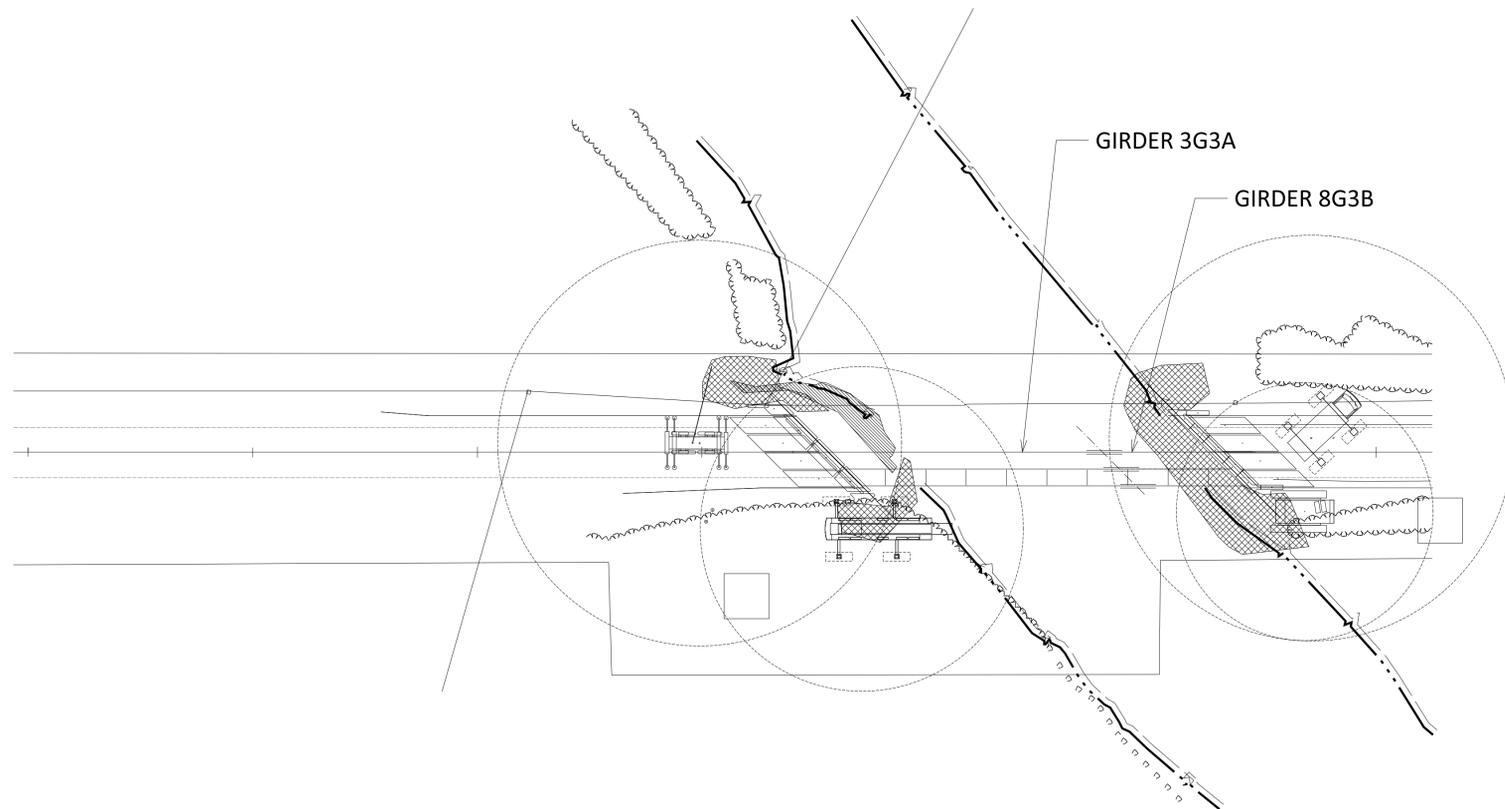
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**04**





**STAGE 9: INSTALLING GIRDERS 5G5A AND 10G5B**

1. PICK GIRDER 5G5A AT PICK POINTS SHOWN IN SHEET E4 WITH THE DEMAG AC 180.
2. ERECT GIRDER 5G5A ON BEARING AT ABUTMENT 1.
3. CONNECT GIRDERS 4G4A AND 5G5A TO 11 CF1 AT ABUTMENT 1.
4. PICK GIRDER 10G5B AT PICK POINTS SHOWN IN SHEET E4 WITH THE AMERICAN HC 125.
5. ERECT GIRDER 10G5B ON BEARING AT ABUTMENT 2.
6. CONNECT GIRDERS AT CONNECTION SPLICE WITH ALL BOLTS TIGHTENED SNUG.
7. MAKE CONNECTION WITH 12 CF1 AT ABUTMENT 2.
8. USE LINKBELT HSP 80-50 TO INSTALL INTERMEDIATE CROSSFRAMES BETWEEN 5G5A AND 4G4A.
9. UNHOOK AMERICAN HC 125 FROM 10G5B.
10. USE AMERICAN HC 125 TO INSTALL 14CF6 THEN 14CF4 THEN 14CF3 AND LAST 14CF8.
11. UNHOOK DEMAG AC 180 AND HL-150T
12. INSTALL 11CF1 BETWEEN 4G4A AND 3G3A WITH LINKBELT HSP-8050.
13. INSTALL 12CF1 BETWEEN 9G4B AND 8G3B TO 9G4B WITH THE AMERICAN HC 125.



**STAGE 10: INSTALLING GIRDERS 3G3A AND 8G3B**

1. PICK GIRDER 3G3A AT PICK POINTS SHOWN IN SHEET E7 WITH THE DEMAG AC 180.
2. ERECT GIRDER 3G3A ON BEARING AT ABUTMENT 1.
3. CONNECT GIRDER 3G3A AND 11 CF1 ON GIRDER 4G4A SIDE.
4. PICK GIRDER 8G3B AT PICK POINTS SHOWN IN SHEET E7 WITH THE HL-150T.
5. ERECT GIRDER 8G3B ON BEARING AT ABUTMENT 2.
6. MAKE CONNECTION BETWEEN 12 CF1 AND 8G3B.
7. CONECT GIRDERS AT CONNECTION SPLICE WITH ALL BOLTS TIGHTENED SNUG.
8. INSTALL 14 CF4, 14CF3, 14CF2 AND 14CF1 BETWEEN 4G4A AND 3G3A WITH LINKBELT 80-50.
9. INSTALL 14 CF5, 14CF6, 14CF7, 14 CF8, AND 14CF9 BETWEEN GIRDERS 4G4A AND 3G3A, 9G4B AND 8G3B.
10. UNHOOK HL-150T AND DEMAG AC 180.
11. INSTALL 13 CF1 WITH AMERICAN HC 125 TO 8G3B ON 7G2B SIDE OF GIRDER.
12. INSTALL 11 CF1 BETWEEN 3G3A AND 2G2A TO 3G3A WITH LINKBELT 80-50.

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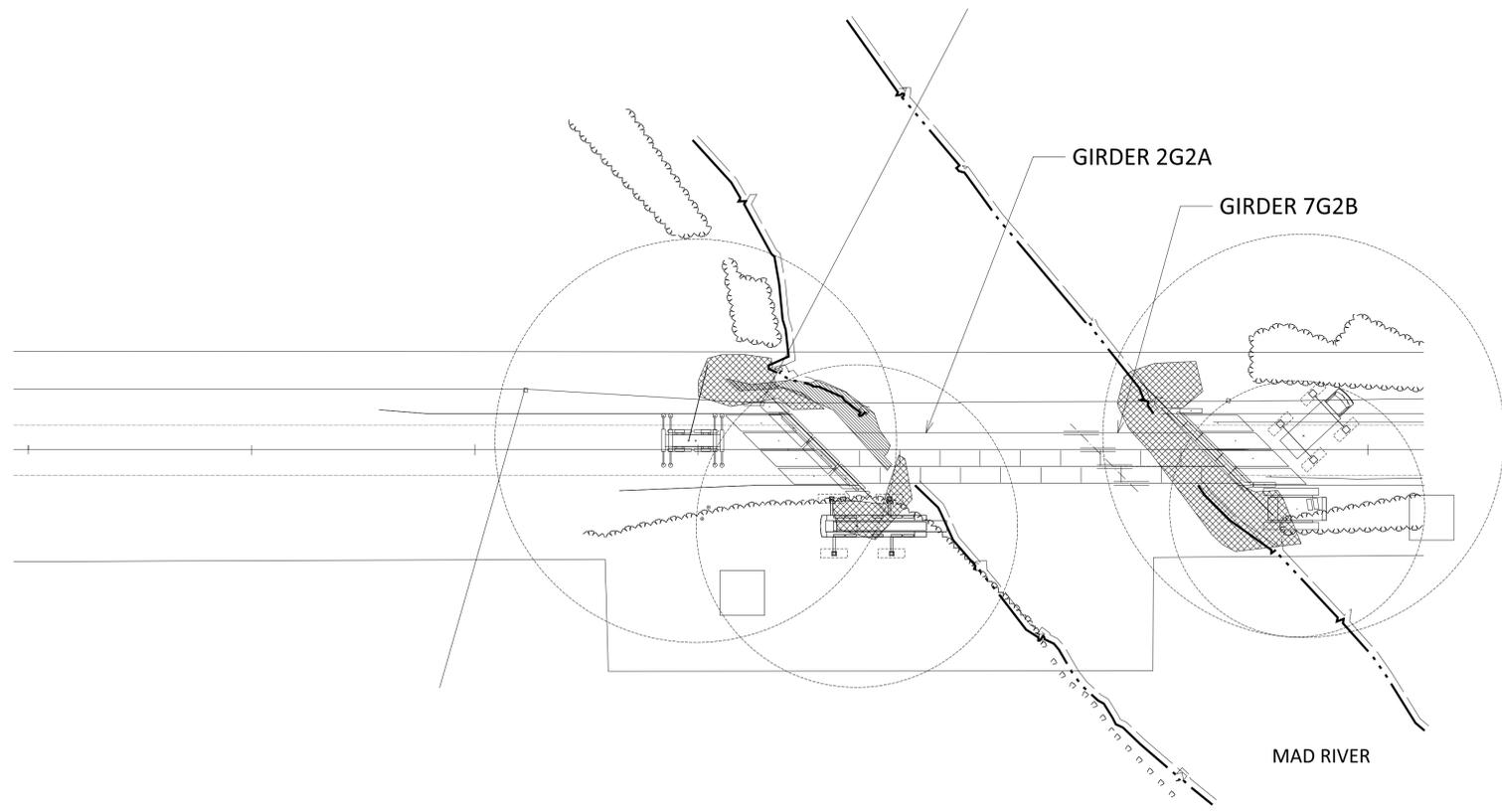
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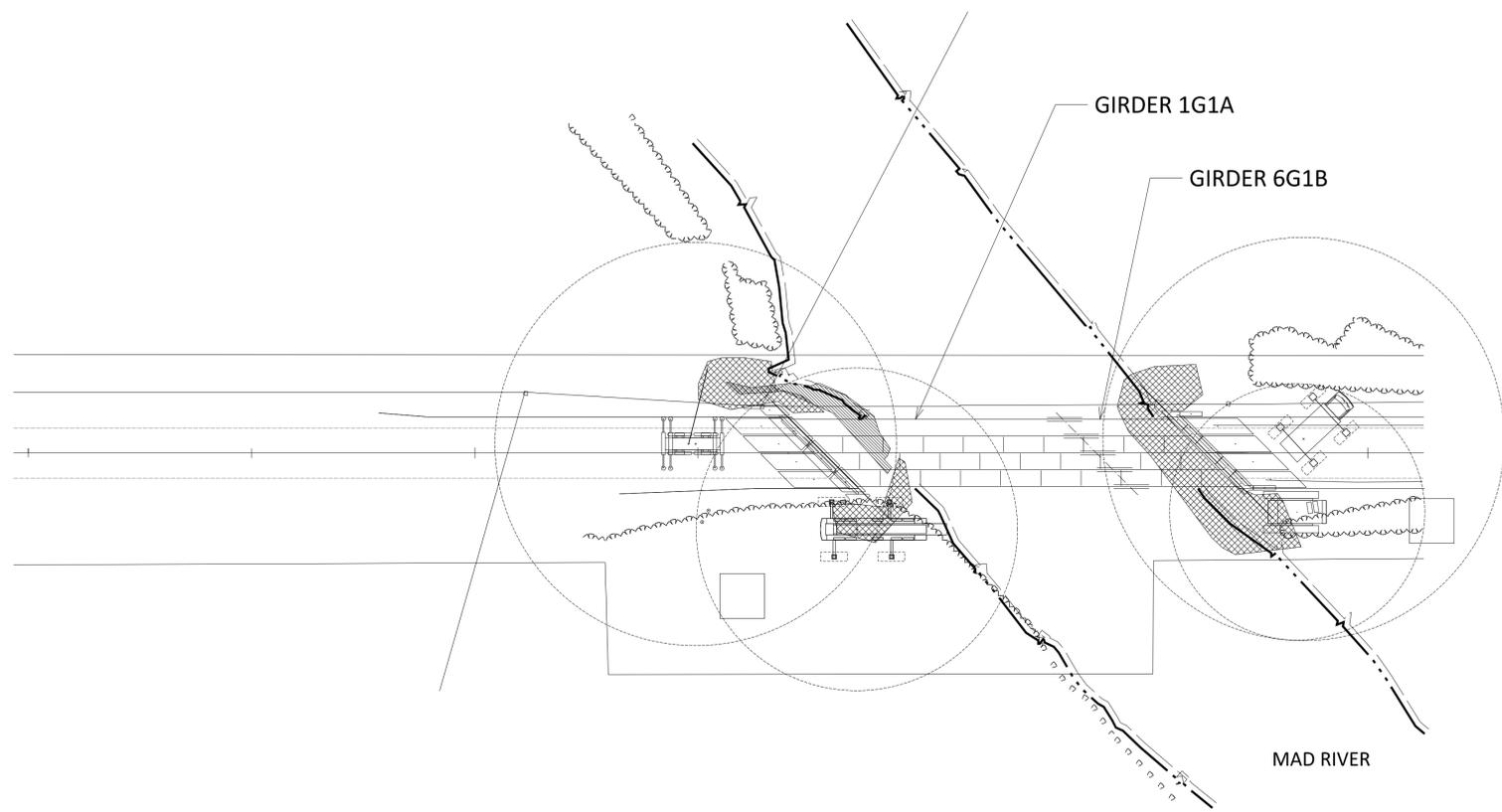
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**STAGE 11: INSTALLING GIRDERS 2G2A AND 7G2B**

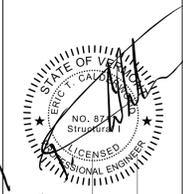
1. PICK GIRDER 2G2A AT PICK POINTS SHOWN IN SHEET E4 WITH THE DEMAG AC 180.
2. ERECT GIRDER 2G2A ON BEARING AT ABUTMENT 1.
3. HOLD IN PLACE TO MAKE CONNECTION BETWEEN 2G2A AND 11 CF1 BETWEEN 3G3A AND 2G2A.
4. PICK GIRDER 7G2B AT PICK POINTS SHOWN IN SHEET E4 WITH HL-150T.
5. ERECT GIRDER 7G2B ON BEARING AT ABUTMENT 2.
6. MAKE CONNECTION BETWEEN 7G2B AND 13 CF1 BETWEEN 7G2B AND 8G3B.
7. CONNECT GIRDERS AT CONNECTION SPLICE WITH ALL BOLTS TIGHTENED SNUG.
8. INSTALL 14 CF6, 14 CF7, 14CF8, AND 14 CF9 BETWEEN 3G3A AND 2G2A WITH LINKBELT 80-50.
9. INSTALL 14 CF5, 14 CF4, 14 CF3, 14 CF2, AND 14 CF1 BETWEEN 3G3A AND 2G2A, 8G3B AND 7G2B WITH AMERICAN HC 125.
10. UNHOOK HL-150T AND DEMAG AC 180.
11. INSTALL 11CF1 TO 2G2A BETWEEN 2G2A AND 1G1A WITH LINKBELT 80-50.
12. INSTALL 13CF1 TO 7G2B BETWEEN 7G2B AND 6G1B WITH AMERICAN HC 125.



**STAGE 12: INSTALLING GIRDERS 1G1A AND 6G1B**

1. PICK GIRDER 1G1A AT PICK POINTS SHOWN IN SHEET E4 WITH THE DEMAG AC 180.
2. ERECT GIRDER 1G1A ON BEARING AT ABUTMENT 1.
3. HOLD IN PLACE TO MAKE CONNECTION BETWEEN 1G1A AND 11 CF1.
4. PICK GIRDER 6G1B AT PICK POINTS SHOWN IN SHEET E4 WITH HL-150T.
5. ERECT GIRDER 6G1B ON BEARING AT ABUTMENT 2.
6. MAKE CONNECTION BETWEEN 6G1B AND 12 CF1.
7. CONNECT GIRDERS AT CONNECTION SPLICE WITH ALL BOLTS TIGHTENED SNUG.
8. INSTALL 14 CF4, 14 CF6, 14CF7, AND 14 CF8 BETWEEN 1G1A AND 2G2A WITH LINKBELT 80-50.
9. INSTALL 14 CF3, 14 CF2, (3) 14 CF1 BETWEEN 1G1A AND 2G2A, 6G1B AND 7G2B WITH AMERICAN HC 125.

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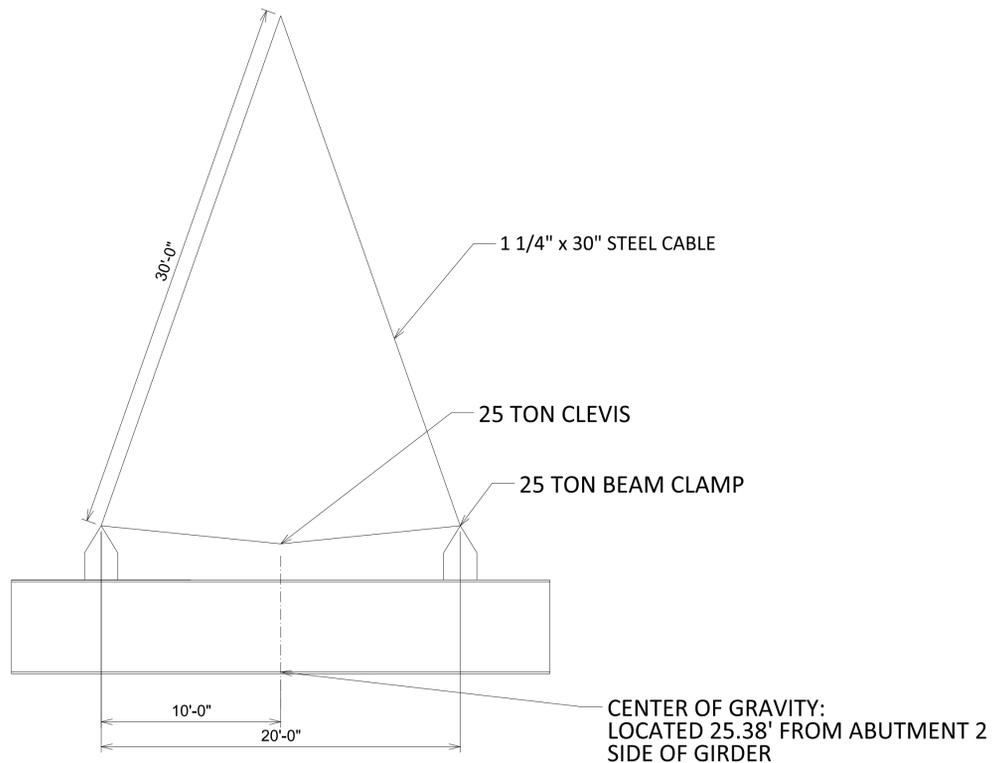
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**WAITSFIELD, VT- ROUTE 100  
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**ERECTION PLANS**

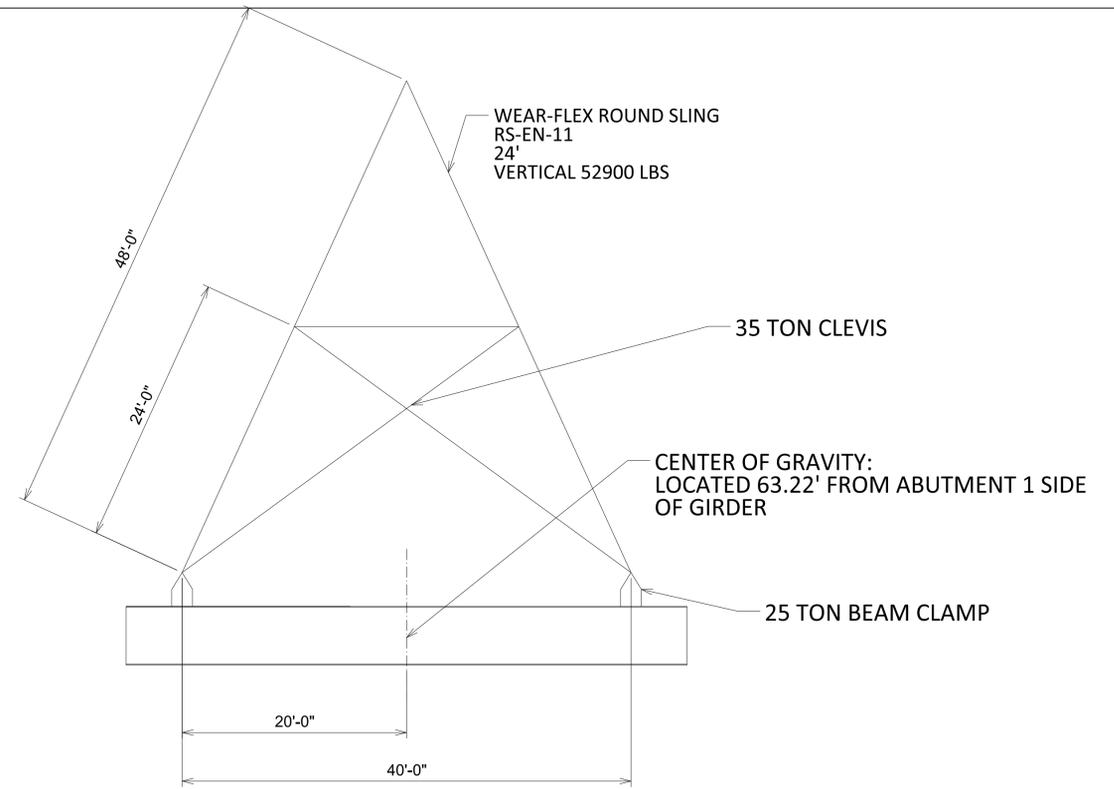
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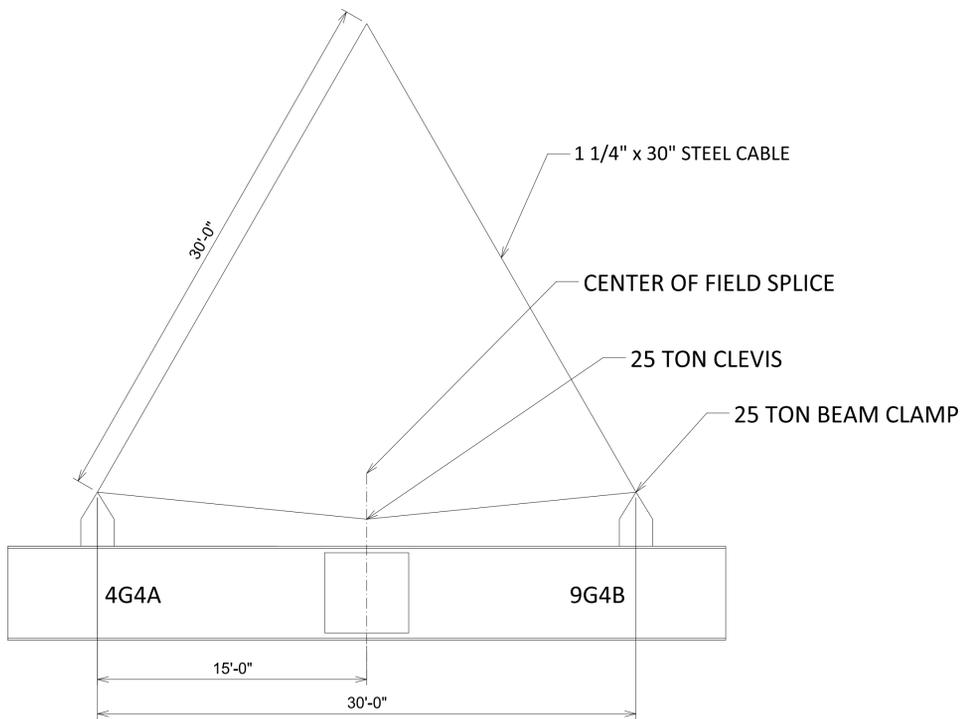
GIRDER LIFTING SCHEME FOR GIRDERS:

- 8G3B
- 7G2B
- 6G1B
- 10G5B
- 9G4B

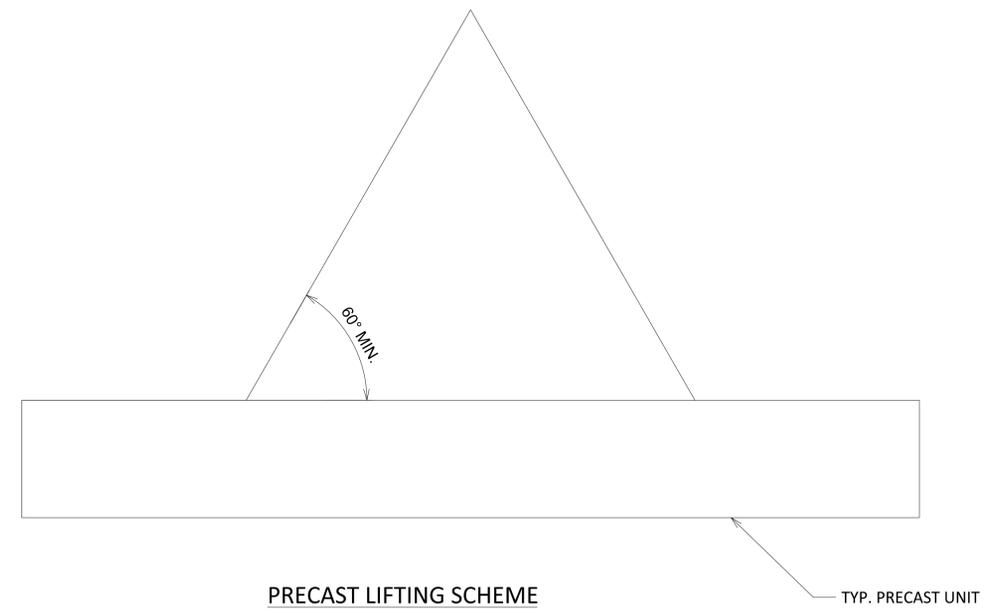


GIRDER LIFTING SCHEME FOR GIRDERS:

- 5G5A
- 4G4A
- 3G3A
- 2G2A
- 1G1A

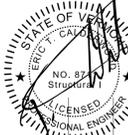


STABILIZATION LIFT SCHEME  
FOR ERECTION OF 4G4A & 9G4B  
STAGE 8



PRECAST LIFTING SCHEME

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MISC. DETAILS

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**07**

