OREGON
OPPORTUNITY ON THE BAY
Department of Public Service
5330 Seaman Road
Oregon, Ohio 43616
(419) 698-7047
FAX (419) 691-0241

May 3, 2023

ADDENDUM No. 1
WOLF CREEK STREAM RESTORATION AT OREGON RECREATION COMPLEX

CITY OF OREGON
DEPARTMENT OF PUBLIC SERVICE

BIDS TO BE OPENED: Tuesday, May 9, 2023 at 2:00 P.M.

Plan holders of the City of Oregon's Wolf Creek Stream Restoration at Oregon Recreation Complex are hereby notified of the following amendments to the Contract Documents. The following additions, alterations, deletions and/or clarifications shall be part of the Base Bid and Alternate Bid Items as much as if they were originally included in the Contract Documents. This Addendum No. 1 is hereby made a part of the Contract Documents.

GENERAL INFORMATION

As a reminder, all bidders are required to be a plan holder to submit bids.

CONTRACT CHANGES – REVISED PLAN SHEETS

1) **Revised Plan Sheets 11, 12A, and 12B: Boardwalk Details**

   Two sheets have been revised in order to provide further clarification on boardwalk details as well as fix a scaling error. Incorporate the two attached revised sheets, REVISED SHEET 12A and REVISED SHEET 12B into the planset and remove the prior sheets.

QUESTIONS RECEIVED

1) **Drawings 12A and 12B:**

   a) Drawings 11 12A 12B are not to scale. Even if the scale is corrected on Detail 1, Detail 2 that has the same scale is not the same. This is going to make it harder to give an accurate estimate.

   RESPONSE:
   Drawings have been rescaled, scales now match.

   b) Detail 2 on both – show beams longer than the decking. Detail 3 shows flush with the decking. Verify which is correct.

   RESPONSE:

The decking should be constructed as shown on Detail 3. The only instance decking may vary some is when the beams are offset for the next span. Decking extends to the end as shown on the detail.

c) Detail 2 on both – seem to have something bolted on the inside on the double 2x8 on the left side. What is this?

RESPONSE:
We are assuming you are referring to Detail 5. It's a 2x4 to attach the diaphragm to.

d) Detail 3 on both – Specify type of twist straps as there are many different sizes and styles

RESPONSE:
12"-14 gauge for all connections.

e) Detail 3 both – Shows a Timber rail. No rail is shown on Detail 1 elevation to show post spacing.
   a. ODOT RM-5.2 dimensions will work with lumber dimensions given. This for bikeways not walkways. Curb is a 4x4 and post in RM-5.2 calls to be 6x6. Please note materials to use, where to install, and how the post are to be secured.

RESPONSE:
The detail is for the horizontal rails. The post should be 6x4 and spaced at 10'-0" over each pier, 9'-0" spacing on the longer spans.

f) What size bolts do the helical piers need to have? They are through bolted in my experience.

RESPONSE:
1"

g) Scupper is called out 4'-0" C/C. Scupper shown are 4'-6" and 4'-10" respectively, but are less than 4' in between. Please clarify what is needed.

RESPONSE:
Scuppers shall be placed at diaphragms.

h) 1/12B appears to match detail 1/12A with 2x diaphragm. Detail 2/12B shows Glulam diaphragm. Confirm which is to be used.

RESPONSE:
Bolted 2x12

i) 2/12A – the way the joists are laid out on the overlap will not work with detail 3 & 4. Can the joists be staggered/overlapped at the cap beam and glued & screwed together?

RESPONSE:
Yes, shown as one line now on the drawing.

j) 2/12B – Where the section overlap on the cap beam (right hand side). Do the Glulam beam need to be doubled up for the second section? If so, what does the third section consist of if these 2 are different.

RESPONSE:
Single is only needed.

k) 3/12A is showing 2x12 double stringer and 6/12A is detailing a 2x8 double stringer. Will the 2x12 stringer need additional fastening for the additional width.

RESPONSE:
No. 6/12A should state 2x12.

2) **Drawing 12B Overlook Plan**

a) Are Glulams connected to the beams with the same twist straps?

RESPONSE:
Yes

b) Does the overlook have curb and/or railing?

RESPONSE:
Yes

c) What is to be used to catch the deck boards wear they land where the Glulams change direction (outside 45 degree corners)?

RESPONSE:
Added a diaphragm to catch it.

d) Are the A193 B7 threaded rod to be galvanized?

RESPONSE:
Yes

e) Assuming threaded rod is bored through the glulam diaphragm blocking? Please confirm.

RESPONSE:
Yes

f) Detail for the diaphragm tie rod?

RESPONSE:
Added detail

g) Dimension on the left 10'-0" Boardwalk path. Should this be 10'-7" per Detail 3?
RESPONSE:
Path is 10'-0" out to out is 10'-7".

h) Section view through the Overlook?

RESPONSE:
Typical sections and details should be sufficient for construction.

3) 12B Note 6 – How are the beams supported to camber at midspan with piers on the sides? Are we just putting the crown of the beams up or do they need to be planed down a ¼" in each direction from the middle?

RESPONSE:
Note is for long span only. Overlook beams shall have no camber.

4) Overlook Plan – What is the dimension of the cap beam at the bottom of the detail that connects to the 18' sections? 12" or 14"?

RESPONSE:
14x14

5) 2/12B – Do the threaded rod need to be 4.5' for a reason? That is over 12" to long for the boardwalk area.

RESPONSE:
No, dimension removed

6) 2/12B – Does the diaphragm blocking over the cap beam need to be similar to detail 5/12A? Does it need to be the full 12.375" of the Glulam or would 2x12 work?

RESPONSE:
No, and a 2x12 will work

7) 12B – Does the glulam diaphragm need 1 or 2 threaded rods?

RESPONSE:
3

8) The print is calling for a 12.375" high beam. The options are 11-7/8" or the next size up is 14". Which is preferred?

RESPONSE:
Between the two, it will have to be 14". 12.375" was the design size, so it would have to be larger to work.

9) On drawing 12A, detail 3, we believe the scale is incorrect. Please verify it is correct.

RESPONSE:
Revised Drawing Issued. Scales have been removed, all dimensions are shown

10) Same drawing, the 2 x 12's shown in detail 3, appear to be shown as 2 x 8's in detail 5 & 6. Please clarify

RESPONSE:

Revised Drawing Issued. Scales have been removed, all dimensions are shown

11) Same drawing, the timber ODOT spec appears to call for a 6 x 6, but drawings show 4 x 4. What size is required

RESPONSE:

Post in RM-5.2 calls to be 6x6. The post should be 4x6 as shown on the revised drawing.

12) Same drawing, please send how the handrail posts attach.

RESPONSE:

Revised drawing issued. Handrail posts will be bolted to the outer stringer. Decking will be trimmed around the post. Curbing can be installed, as shown, between the handrail posts.

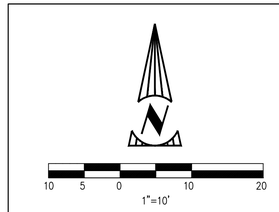
13) Same drawing, detail 3, are the horizontal members 2 x 4's or 2 x 6's? ODOT has one thing, but drwgs do not match the odot spec….please advise.

RESPONSE:

Revised drawing issued...follow ODOT spec.

*** * * END OF ADDENDUM NO. 1 * * ***

Paul Roman, P.E
Director of Public Service



LEGEND

BOARDWALK OUTLINE

HELICAL PILE

CAP BENT OR SIL

SHALLOW FOUNDATION RECOMMENDATIONS:

THE SOIL ENCOUNTERED IN SOIL BORINGS B-03 AND B-04 CONSISTED OF STIFF TO VERY STIFF HIGH PLASTICITY CLAY IN THE UPPER 6 FEET UNDERLAIN BY VERY SOFT TO MEDIUM STIFF LEAN CLAY TO DEPTHS RANGING FROM 23.5 FEET TO 33.5 FEET BELOW GROUND SURFACE. STIFF TO VERY STIFF CLAY WAS ENCOUNTERED BELOW THE VERY SOFT TO MEDIUM STIFF CLAY AND EXTENDED TO THE BORINGS' TERMINATION DEPTH OF 40 FEET BELOW GROUND SURFACE.

THE FOLLOWING ARE RECOMMENDATIONS FOR THE DESIGN OF THE SHALLOW FOUNDATION(S) FOR THE PROPOSED PEDESTRIAN BRIDGE:

- REMOVAL OF HIGH PLASTICITY CLAY WITHIN 3 FEET OF THE FOUNDATION BEARING ELEVATION AND REPLACEMENT WITH A SUITABLE MATERIAL. REPLACEMENT WITH LEAN CONCRETE OR SUITABLE COHESIVE SOIL FILL IS PREFERRED TO LIMIT WATER FROM ACCUMULATING IN UNDERCUT AREAS. IF GRANULAR FILL MATERIAL IS USED IN UNDERCUTS, AN UNDERDRAIN SYSTEM SHOULD BE INSTALLED AT THE BOTTOM OF THE UNDERCUT TO LIMIT WATER ACCUMULATION.
- SHALLOW FOUNDATIONS BEARING ON WELL COMPACTED ENGINEERED FILL CAN BE DESIGNED FOR A NET ALLOWABLE BEARING CAPACITY OF 1,000 PSF.
- RAMMED AGGREGATE PIERS CAN BE USED IN CONJUNCTION WITH THE SHALLOW FOUNDATIONS IF A HIGHER BEARING CAPACITY IS REQUIRED FOR THE DESIGN OF THE PROPOSED BRIDGE. (SIZE TO BE DETERMINED BY CONTRACTOR.)

END BOARDWALK
STA. 3+59.74
= BIKEPATH STA. 35+38.41
EL. 592.00

20 SIMPLE SPANS @ 10'-0"

8 SIMPLE SPANS @ 10'-0"

BEGIN BOARDWALK
STA. 0+00
= BIKEPATH STA. 30+82.43
EL. 592.00

STA. 1+40.77
EL. 592.00

3 SIMPLE SPANS @ 18'-0"

585

MIDDLE SECTION TO SPAN EXISTING CREEK CHANNEL (OHWM TO OHWM)
CONTRACTOR TO VERIFY THIS SECTION LOCATION
AND FIELD ADJUST PRIOR TO CONSTRUCTION, IF NECESSARY.

ORDINARY HIGH WATER MARK
EL = 585.89

END BOARDWALK
STA. 1+40.77, 62.75'RT
EL. 591.00

REVISED 5/2/2023
FOR BIDDING

NO.	DATE	BY	DESCRIPTION

1800 INDIAN WOOD CIRCLE
MAUMEE, OH 43537
TEL: 419.891.2222
FAX: 419.891.1595

PROJECT DATE: 10/06/2022
PROJECT NO.: OREG0012
DRAWN BY: NAC
CHECKED BY: GAB

Mannik Smith GROUP
TECHNICAL SKILL. CREATIVE SPIRIT.
www.MannikSmithGroup.com

PREPARED FOR:
OREGON
OPPORTUNITY ON THE BAY
5330 SEAMAN ROAD
OREGON, OHIO 43616

WOLF CREEK RESTORATION

BOARDWALK SITE PLAN
(ALTERNATE BID ITEM)

11 | 15

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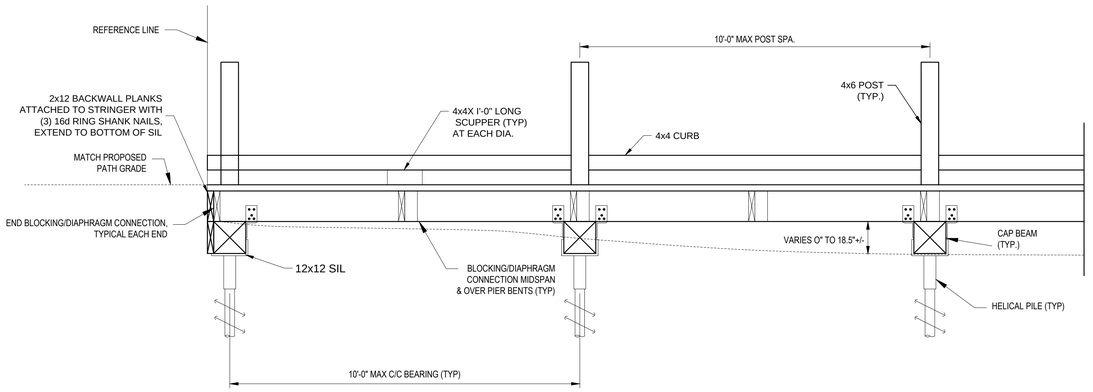
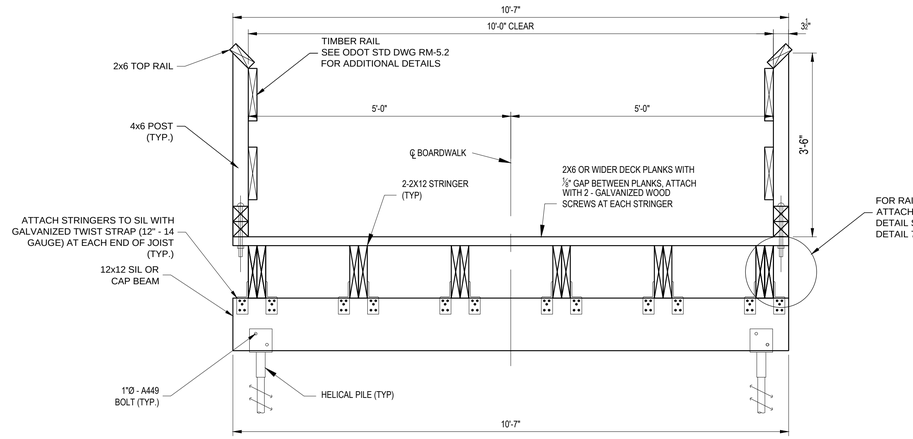
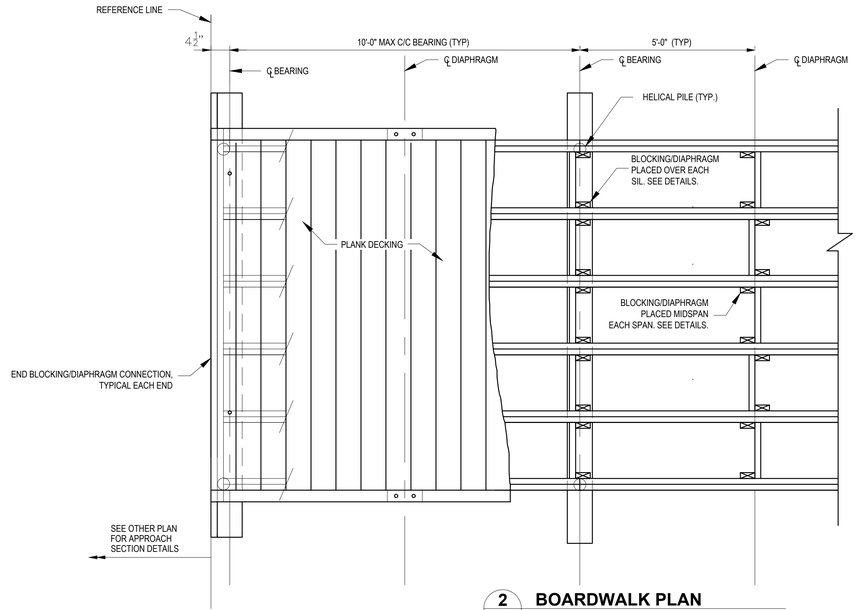


1 / 12A BOARDWALK ELEVATION
NOT TO SCALE



3 / 12A TYPICAL SECTION
NOT TO SCALE



2 / 12A BOARDWALK PLAN
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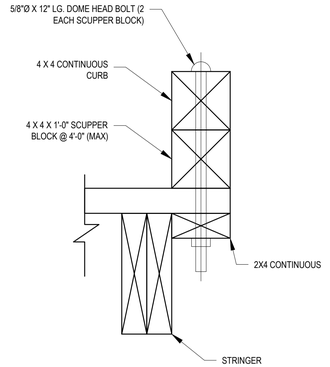
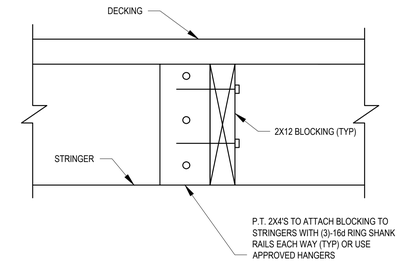
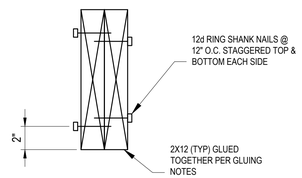


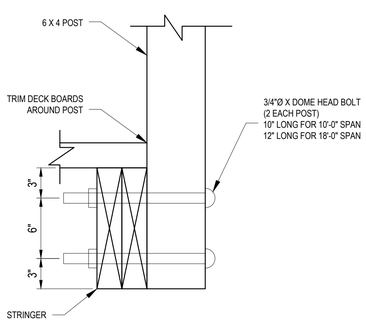
4 / 12A TYPICAL CURB DETAIL
NOT TO SCALE



5 / 12A BLOCKING/DIAPHRAGM DETAIL
NOT TO SCALE



6 / 12A 2 x 12 STRINGER
NOT TO SCALE



7 / 12A TYPICAL CURB DETAIL
NOT TO SCALE

GENERAL NOTES:

SPECIFICATIONS:

1. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2018, 8TH EDITION.
2. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2015 EDITION, BY NATIONAL FOREST PRODUCTS ASSOCIATION.
3. AMERICAN WOOD PERSERVERS ASSOCIATION STANDARDS, WATERBORNE PRESERVATION STANDARDS P5 TYPE A, STANDARD C2, AND STANDARD C14.
4. OHIO DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, 2020.

LOADING AND DESIGN CRITERIA:

1. GROUND SNOW LOAD - Pg = 20 PSF
2. DECK LIVE LOAD - PEDESTRIAN (AASHTO) = 90 PSF
3. STRINGER LIVE LOAD DEFLECTION LIMITS - LUMBER = L/360.
4. STRUCTURE SHALL MEET ADA ACCESSIBILITY REQUIREMENTS FOR TRAILS, STRUCTURE SHALL HAVE A LEVEL CROSS-SLOPE WITH NO MORE THEN A 5% GRADE ALONG IT'S LENGTH, MINIMUM OF 6'-0" CLEAR (36" CLEAR WIDTH MINIMUM PER ADA), MINIMUM 3' CURB HEIGHT (NO RAILING), AND MINIMUM 80" OVERHEAD CLEARANCE. SPACING BETWEEN DECKING PLANKS SHALL NOT EXCEED 1/2" AFTER SEASONING. THE MAXIMUM VERTICAL ELEVATION CHANGE BETWEEN DECK PLANKS IS 1/2". THERE SHALL BE A SMOOTH TRANSITION FROM APPROACH TO THE BOARDWALK.

LUMBER:

1. LUMBER FOR SOLID SAWN STRINGERS, BACKWALL, AND MUD SIL SHALL BE NO. 1 OR BETTER SOUTHERN YELLOW PINE PRESSURE TREATED PER AWPA STANDARDS.
2. LUMBER FOR SOLID SAWN DECK, SCUPPER, AND CURBS, SHALL BE NO. 2 OR BETTER SOUTHERN YELLOW PINE PRESSURE TREATED PER AWPA STANDARDS.
3. DRAWINGS ARE PREPARED USING S4S FINISHED DIMENSIONS UNLESS NOTED OTHERWISE. IF ROUGH SAWN LUMBER IS USED ADJUST DIMENSIONS AS REQUIRED.
4. ALL LUMBER SHALL BE SAWN AND FABRICATED PRIOR TO PRESSURE TREATMENT WITH RESPECTIVE PRESERVATIVE.

HARDWARE:

1. ALL BOLTS, WASHERS, NUTS, AND MISCELLANEOUS METAL HARDWARE SHALL BE ASTM A 307 HOT DIPPED GALVANIZED.
2. FASTENERS SHALL BE HOT DIPPED GALVANIZED RING SHANK NAILS OR WOOD SCREWS.

HELICAL PILES:

1. THE CONTRACTOR SHALL DETERMINE HELICAL PILE SIZE AND DEPTH IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION CONTAINED IN THE PROJECT SPECIFICATIONS.
2. THE CONTRACTOR SHALL DETERMINE SIZE AND LENGTH OF HELICAL PILES TO RESIST THE FACTORED VERTICAL AND LATERAL LOADING.
   VERTICAL LOADING: 9.194 KIPS
   LATERAL LOADING: 2.178 KIPS
3. THE CONTRACTOR SHALL ENSURE THE SIL AND OTHER DECK COMPONENTS ARE ADEQUATELY ANCHORED DURING AND AFTER CONSTRUCTION TO PREVENT UPLIFT.

GLUE:

1. APPLY GLUE BETWEEN EACH LAMINATION USING A WATERPROOF EXTERIOR ADHESIVE COMPATIBLE WITH THE PRESERVATIVE TREATMENT SUCH AS A pl-500 BY CONTECH OR APPROVED EQUAL. APPLY 3.8" CONTINUOUS BEAD AT 1 1/2" ON CENTER.

CONSTRUCTION:

1. CLEAR OPENING OF THE BOARDWALK ABOVE THE WETLAND IS PREDETERMINED AND PORTIONS OF THE SUPPORTING STRUCTURE WILL BE SUBSURFACE.
2. STRINGER WITH CAMBER SHALL BE POSITIONED SO THE CAMBER IS UP AND KNOTS NEAR THE EDGE WILL BE IN THE TOP HALF OF THE STRINGERS.
3. DECK PLANKS SHALL BE LAID HEART SIDE DOWN.

REVISED 5/2/2023
FOR BIDDING

NO.	DATE	BY	DESCRIPTION
1	5/2/2023	RJS	REVISED PLAN SHEET FOR BIDDING

1800 INDIAN WOOD CIRCLE
MAUMEE, OH 43537
TEL: 419.891.2222
FAX: 419.891.1595

PROJECT DATE: 1/17/2023
PROJECT NO.: OREG0012 RJS
DRAWN BY: GAB
CHECKED BY:

TECHNICAL SKILL. CREATIVE SPIRIT.
Mannik Smith GROUP
www.MannikSmithGroup.com

PREPARED FOR:
OREGON
OPPORTUNITY ON THE BAY
5330 SEAMAN ROAD
OREGON, OHIO 43616

WOLF CREEK RESTORATION

BOARDWALK DETAILS (ALTERNATE BID ITEM)

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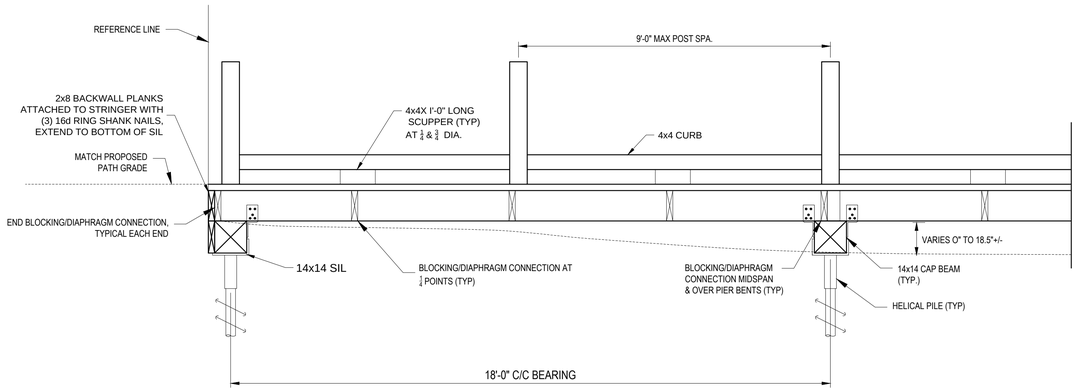
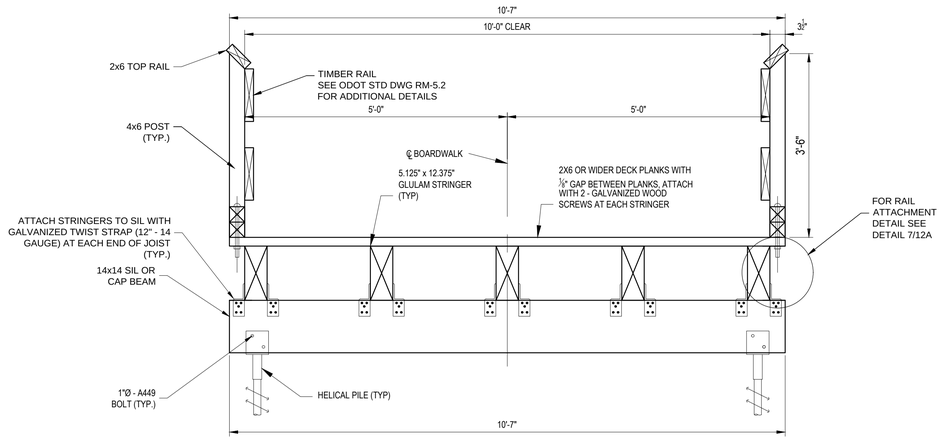


1 / 12B BOARDWALK ELEVATION
NOT TO SCALE



3 / 12B TYPICAL SECTION
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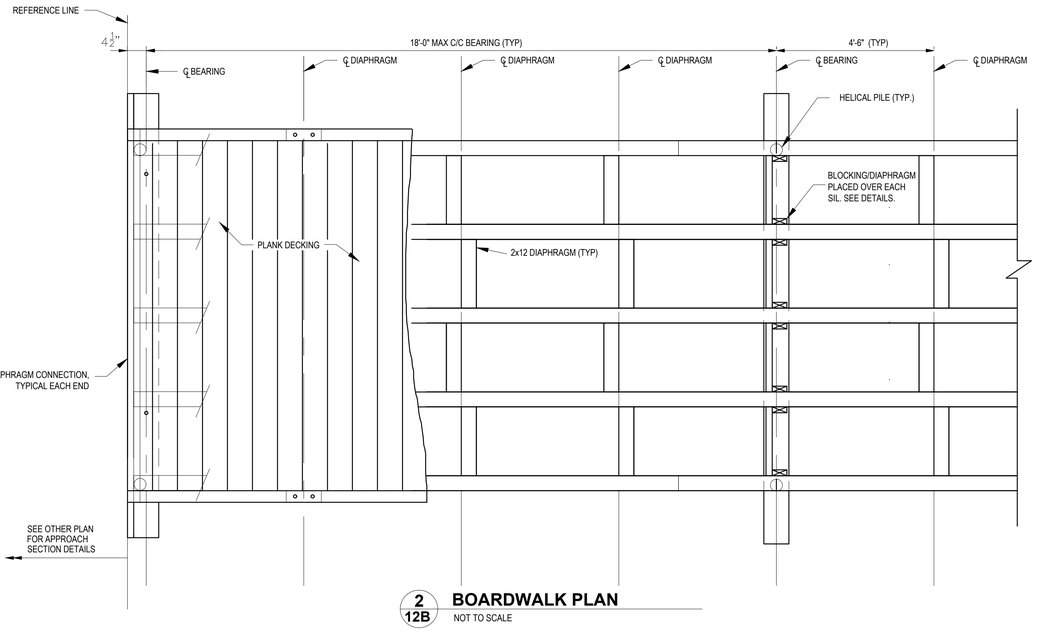

2 / 12B BOARDWALK PLAN
NOT TO SCALE

DESIGN NOTES:

SPECIFICATIONS:

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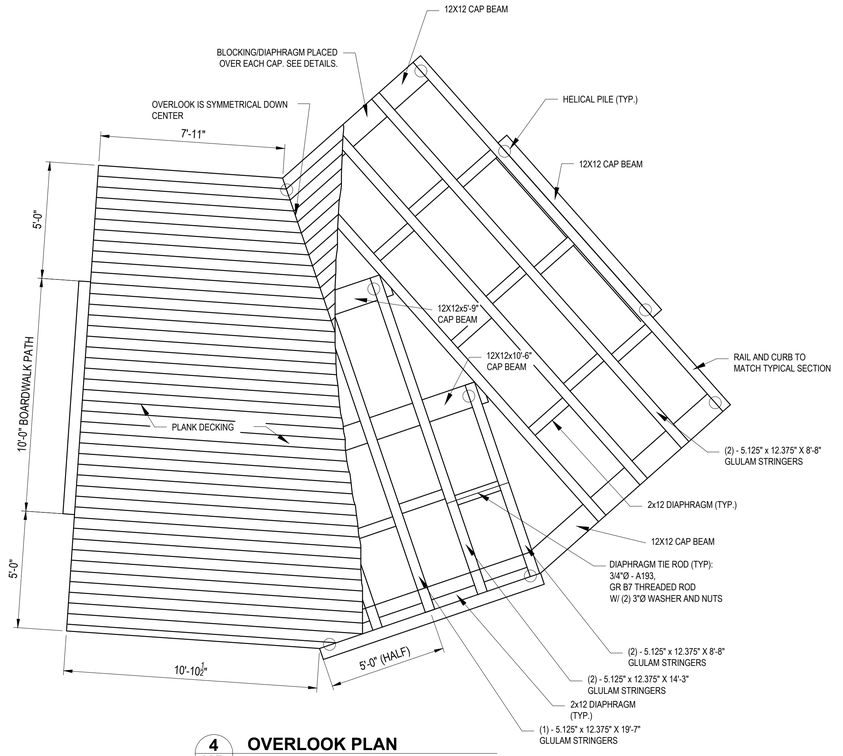
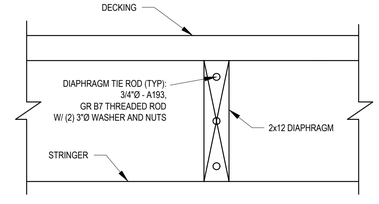
4. OHIO DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL, 2020.

LOADING AND DESIGN CRITERIA:

1. GROUND SNOW LOAD - Pg = 20 PSF
2. DECK LIVE LOAD - PEDESTRIAN (AASHTO) = 90 PSF
3. MATERIAL:
   GLUED LAMINATED BEAMS: SOUTHERN PINE, 24F-V5 OR BETTER USED WET
   FB = 2400 PSI FV = 300 PSI E = 1700 KSI
   DIMENSION LUMBER NO. 1 SOUTHERN PINE USED WET
   FB == 1350 FV = 165 PSI
4. PRESERVATION TREATMENT:
   GLUED LAMINATED BEAMS - PENTACHLOROPHENAL
   DIMENSION - COPPER AZOLE CA-B
5. HARDWARE:
   BOLTS - ASTM A449 GALVANIZED PER ASTM A153
   WLEDMENTS - HOT DIP GALVANIZED PER ASTM A123
6. CAMBER:
   BEAMS SHALL BE CAMBERED 0.25 IN AT MIDSPAN
   OVERLOOK BEAMS SHALL NOT BE CAMBERS
7. THE CONTRACTOR SHALL DETERMINE SIZE AND LENGTH OF HELICAL PILES TO RESIST THE FACTORED VERTICAL AND LATERAL LOADING FOR THE 20 FOOT SPAN.
   VERTICAL LOADING: 10.926 KIPS
   LATERAL LOADING: 6.309 KIPS



4 / 12B OVERLOOK PLAN
NOT TO SCALE
STRINGERS TO BE CONNECTED TO BEAMS USING 12" - 14 GAUGE GALVANIZED TWIST STRAPS



5 / 12B DIAPHRAGM DETAIL
NOT TO SCALE

REVISED 5/2/2023
FOR BIDDING

NO.	DATE	BY	DESCRIPTION
1	5/2/2023	RJS	REVISED PLAN SHEET FOR BIDDING

1800 INDIAN WOOD CIRCLE
MAUMEE, OH 43537
TEL: 419.891.2222
FAX: 419.891.1595

PROJECT DATE: 1/17/2023
PROJECT NO.: OREG0012
DRAWN BY: RJS
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5330 SEAMAN ROAD
OREGON, OHIO 43616

WOLF CREEK RESTORATION

BOARDWALK DETAILS (ALTERNATE BID ITEM)

12B 15

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