

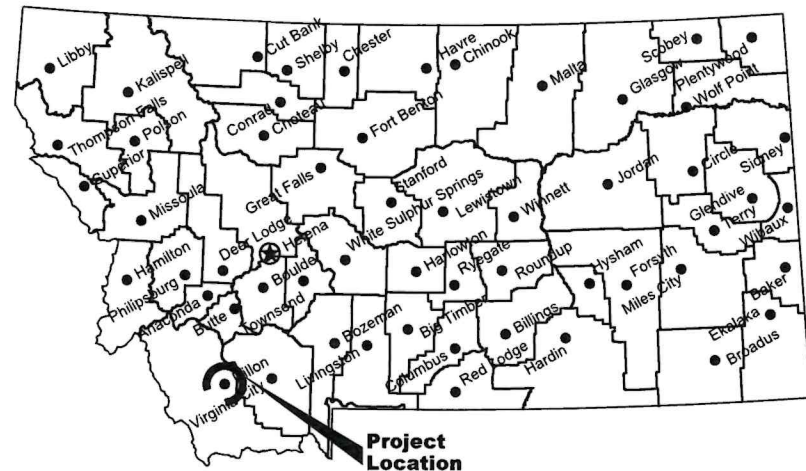
Montana Fish, Wildlife & Parks

# Bannack State Park

## BOARDWALK REPLACEMENT PHASE 1-B

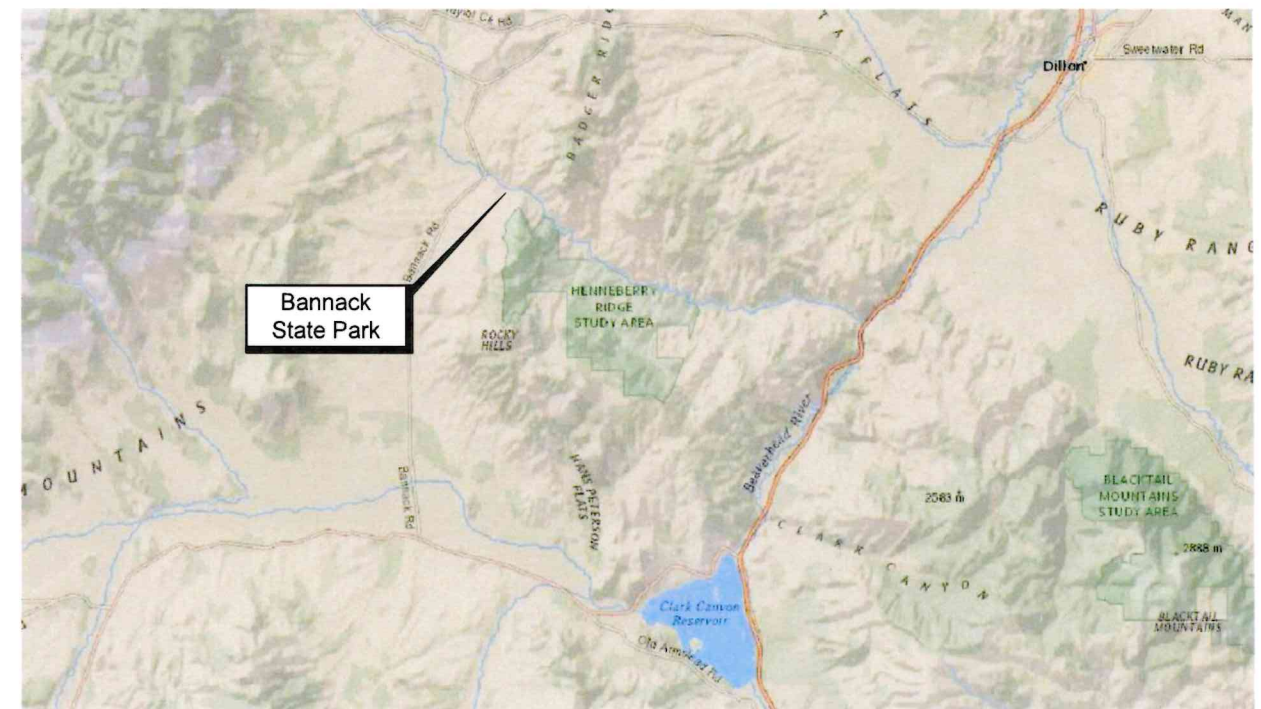
near Dillon, Montana

FWP Project No. - 7216431



**Location Map**

No Scale



**Vicinity Map**

No Scale



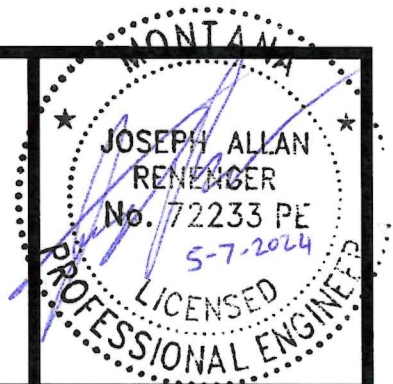
**MONTANA FISH, WILDLIFE AND PARKS  
DESIGN AND CONSTRUCTION**

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**DRAWING INDEX**

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| 2     | Materials Notes  | 6     | Details          |
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| 4     | Enlargement Plan |       |                  |



|             |            |
|-------------|------------|
| R.Rognlie   | 03-04-2024 |
| DRAWN BY:   | DATE:      |
| J. Renenger | 03-05-2024 |
| CHECKED BY: | DATE:      |

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**MONTANA FISH,  
WILDLIFE & PARKS**

**Bannack State Park Boardwalk Replacement  
PHASE 1-B  
Cover Sheet**

SHEET: 1 of 7

**Recap of Owner Provided Materials Phase I-B**

| Description    | Units | Total Qty | Comments   |
|----------------|-------|-----------|--|
| 4" Deck Screws | EA    | 15444     | Approx. 17 boxes of 900 screws per box.<br>Ceramic coated lag screws with star drive |
| 4X4 Stringers* | LF    | 3776      | 4X4X10 pressure treated for ground contact.  |

\* Cost of installation of all stringers shall be included in the boardwalk installation unit costs in the proposal. Additional Contractor-supplied stringers will be necessary to complete the in-kind boardwalk replacement and shall be furnished by the Contractor. An estimated quantity of additional, Contractor-furnished stringers is listed in the Project Proposal.

**Recap of Existing Bannack Boardwalk Measurements  
NOT Including the newly replaced boardwalk in Ph.1-A**

| Boardwalk segments by width | Units* | Qty | Comments                                 |
|-----------------------------|--------|-----|--|
| 4 foot wide                 | LF     | 70  | Around Historic Church, north side       |
| 5 foot wide                 | LF     | 324 | North side of the street                 |
| 6 foot wide                 | LF     | 586 | Both north and south sides of the street |
| 6 foot wide                 | LF     | 186 | Around the Mead Hotel                    |
| 7 foot wide                 | LF     | 424 | Both north and south sides of the street |
| 8 foot wide                 | LF     | 56  | North side of the street                 |
| 13'X19' landing at jog      | SF     | 247 | North Side of the street                 |
| 15'X20' landing at jog      | SF     | 300 | South Side of the street                 |
| 10'X16' landing at jog      | SF     | 160 | South Side of the street                 |

\*Unit LF is lineal feet of Boardwalk, not boards

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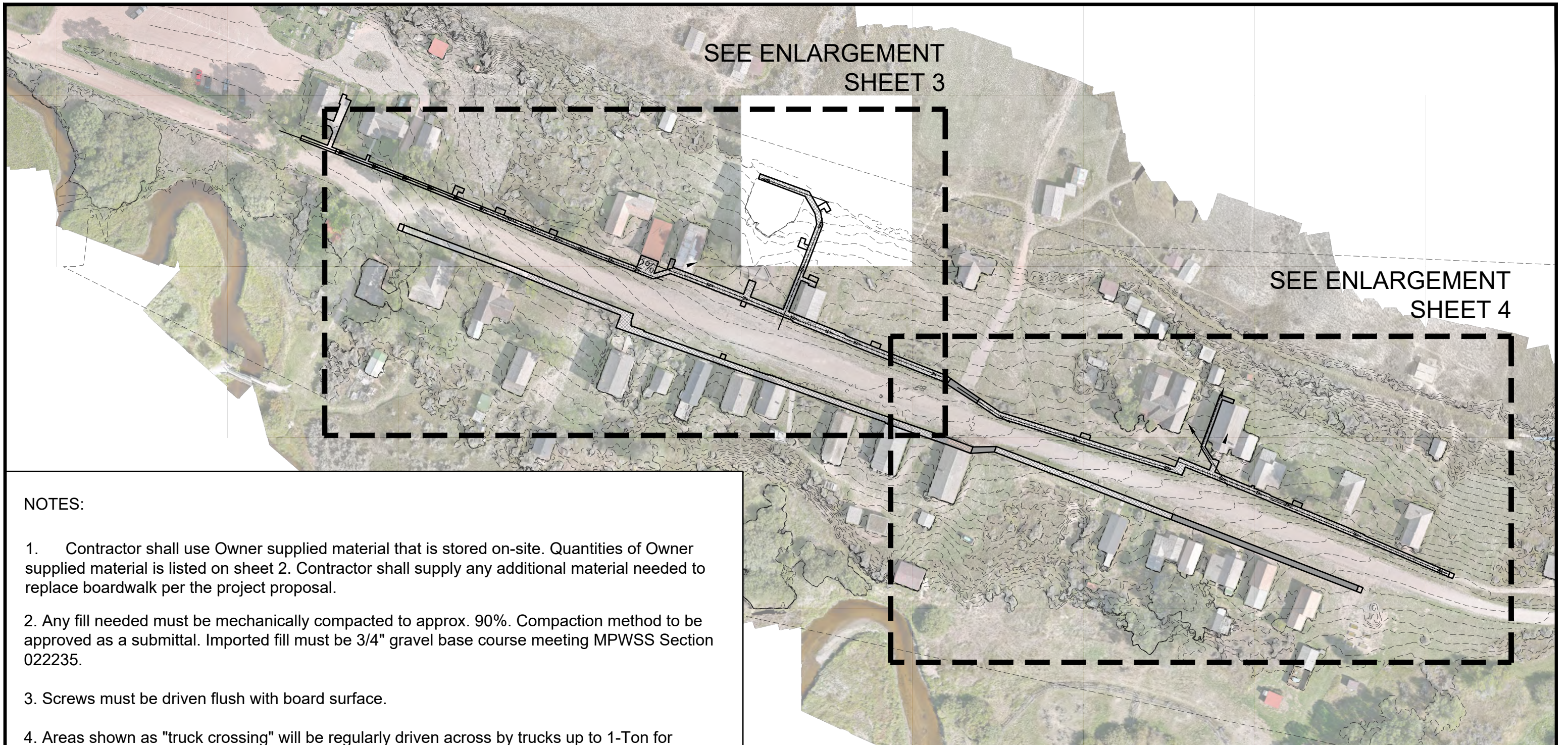
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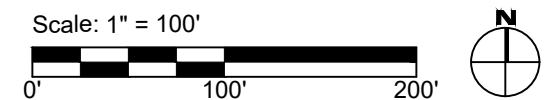
**Bannack State Park Boardwalk Replacement  
PHASE 1-B  
Materials Notes**





**NOTES:**

1. Contractor shall use Owner supplied material that is stored on-site. Quantities of Owner supplied material is listed on sheet 2. Contractor shall supply any additional material needed to replace boardwalk per the project proposal.
2. Any fill needed must be mechanically compacted to approx. 90%. Compaction method to be approved as a submittal. Imported fill must be 3/4" gravel base course meeting MPWSS Section 022235.
3. Screws must be driven flush with board surface.
4. Areas shown as "truck crossing" will be regularly driven across by trucks up to 1-Ton for maintenance access. Fill must be placed flush to the boardwalk edges per detail.
5. Contractor responsible for field verifying existing conditions.
6. Boardwalk boards must be whole boards, not spliced except at pads/landings and corners.



**OVERALL PLAN**

PLAN VIEW

R.Rognlie 03-04-2024  
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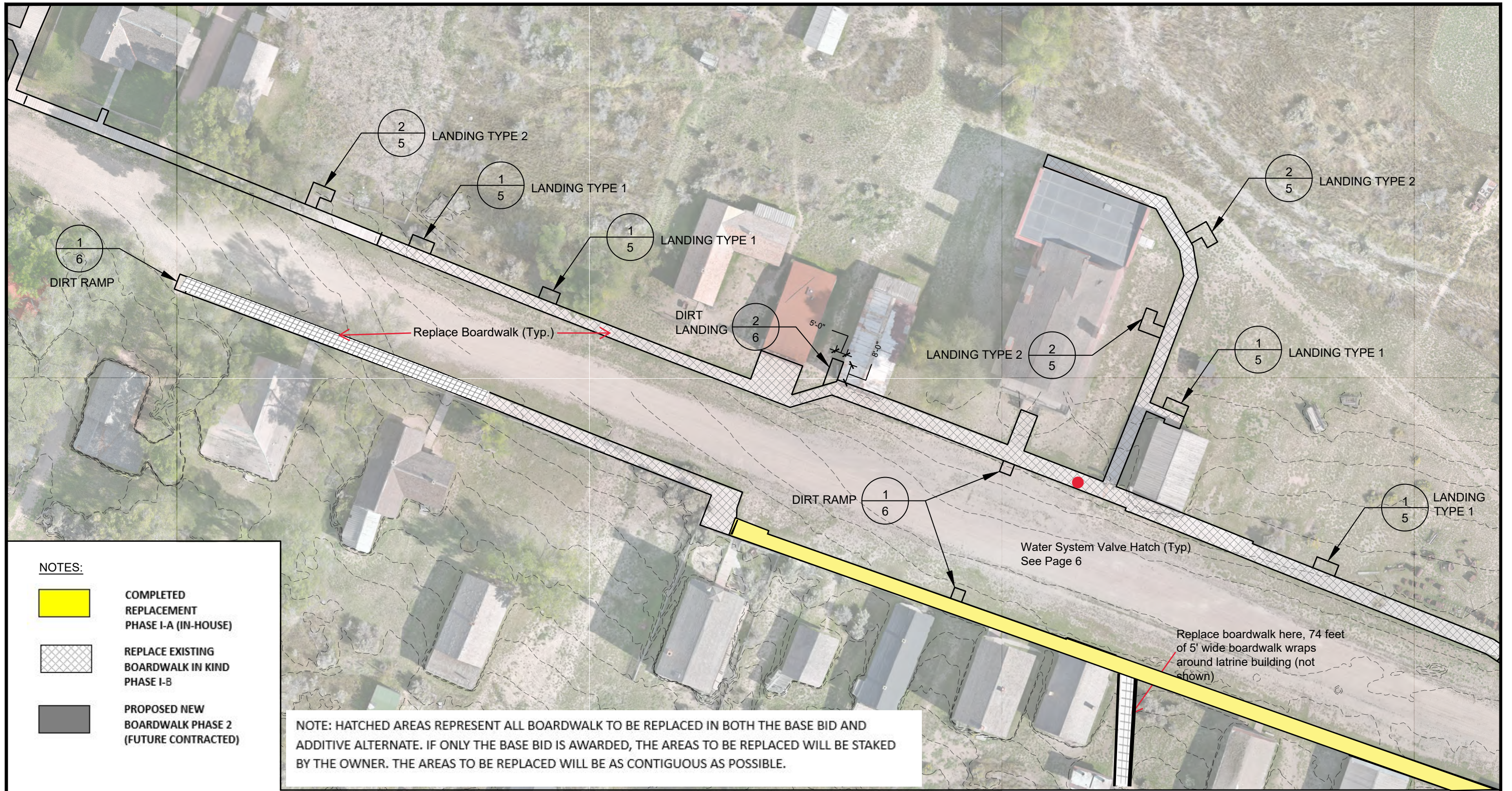


**MONTANA FISH,  
 WILDLIFE & PARKS**

**Bannack State Park Boardwalk Replacement  
 PHASE 1-B  
 Overall Plan**

SHEET: **3**  
 of **7**

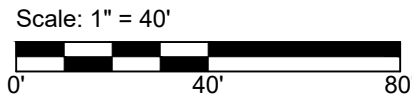




**NOTES:**

- COMPLETED REPLACEMENT PHASE I-A (IN-HOUSE)
- REPLACE EXISTING BOARDWALK IN KIND PHASE I-B
- PROPOSED NEW BOARDWALK PHASE 2 (FUTURE CONTRACTED)

NOTE: HATCHED AREAS REPRESENT ALL BOARDWALK TO BE REPLACED IN BOTH THE BASE BID AND ADDITIVE ALTERNATE. IF ONLY THE BASE BID IS AWARDED, THE AREAS TO BE REPLACED WILL BE STAKED BY THE OWNER. THE AREAS TO BE REPLACED WILL BE AS CONTIGUOUS AS POSSIBLE.



**ENLARGEMENT WEST**

PLAN VIEW

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**MONTANA FISH,  
 WILDLIFE & PARKS**

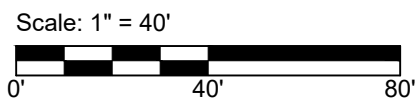
**Bannack State Park Boardwalk Replacement  
 PHASE 1-B  
 Enlargement Plan**





- NOTES:**
- COMPLETED REPLACEMENT PHASE I-A (IN-HOUSE)
  - REPLACE EXISTING BOARDWALK IN KIND PHASE I-B
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**ENLARGEMENT EAST**

PLAN VIEW

R.Rognie 03-04-2024

DRAWN BY: J. Reneger DATE: 03-05-2024

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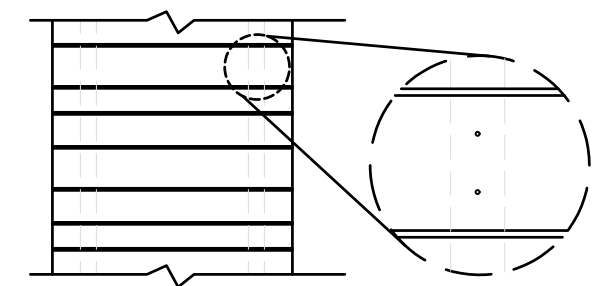
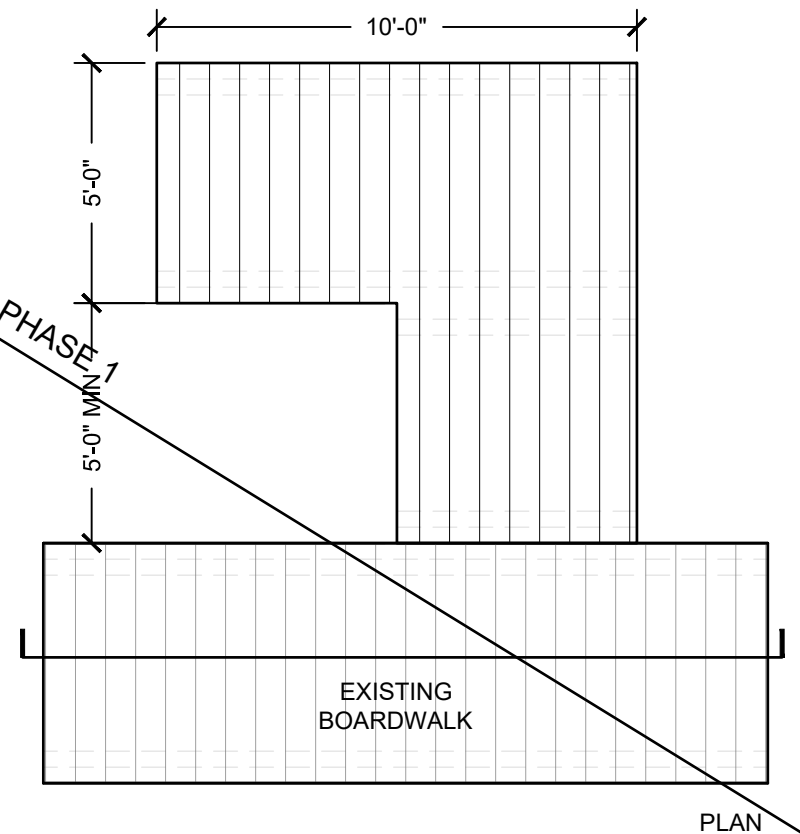
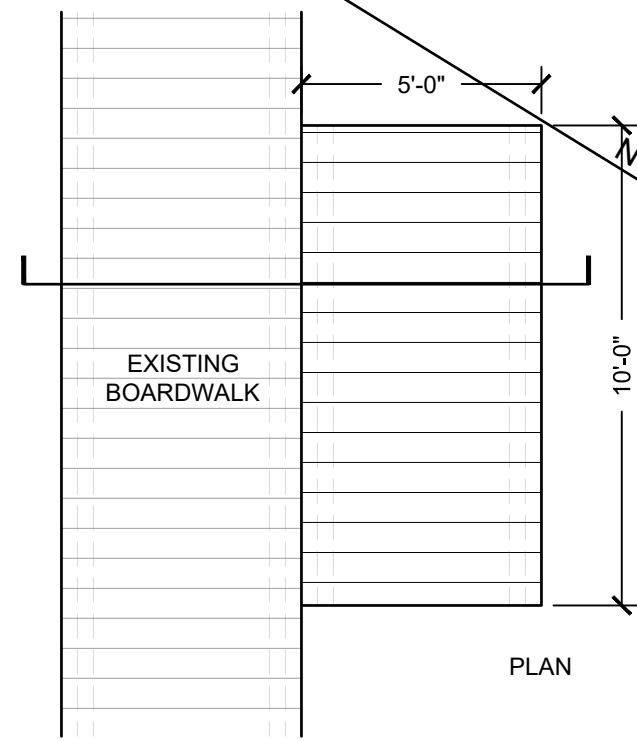
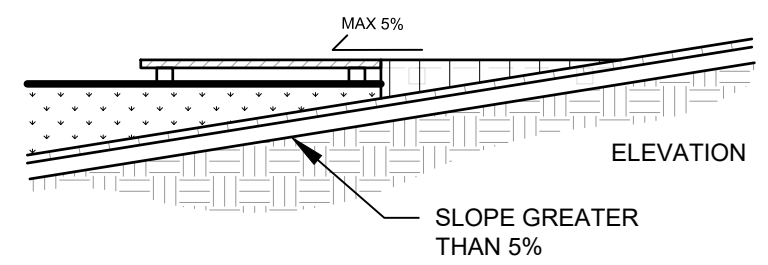
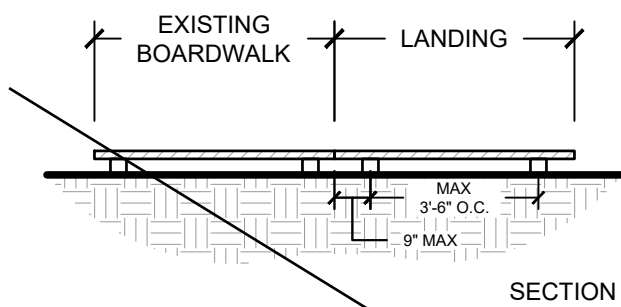


**MONTANA FISH, WILDLIFE & PARKS**

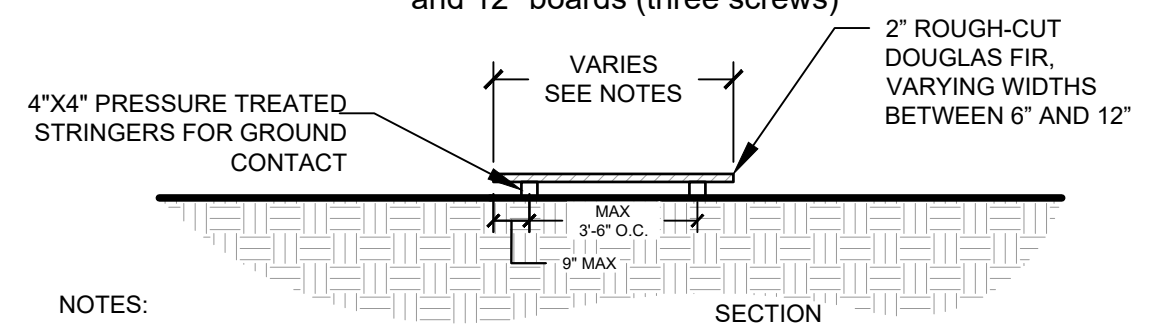
**Bannack State Park Boardwalk Replacement PHASE 1-B Enlargement Plan**

SHEET: 5 of 7





Fastening Plan  
for boards 6"-10" (two screws),  
and 12" boards (three screws)



NOTES:

1. SEE P.2 FOR SUBGRADE COMPACTION REQUIREMENTS AND FILL.
2. BOARDWALK WIDTH IN NEW AREAS SHALL MATCH THE WIDTH OF THE EXISTING BOARDWALK ON BOTH SIDES
3. ADD MIDDLE STRINGER IF WIDTH EXCEEDS 3'-6" O.C. BETWEEN STRINGERS
4. BOARDS SHALL BE FIT TIGHT TO EACH OTHER.
5. CONTRACTOR TO PROVIDE EXAMPLE OF WOOD TO OWNER PRIOR TO DELIVERY TO SITE.
6. CONTRACTOR TO STOCKPILE ANY BOARD OR STRINGER ENDS LONGER THAN 2-FEET, NEAR THE SHOP. OTHER WOOD SCRAP CAN BE PUT IN THE BANNAK BURN PILE.

1 LANDING TYPE 1 slopes less than 5%  
5 NTS

2 LANDING TYPE 2 slopes greater than 5%  
5 NTS

3 PROPOSED BOARDWALK  
5 NTS

Note: Landings shown for informational purposes only

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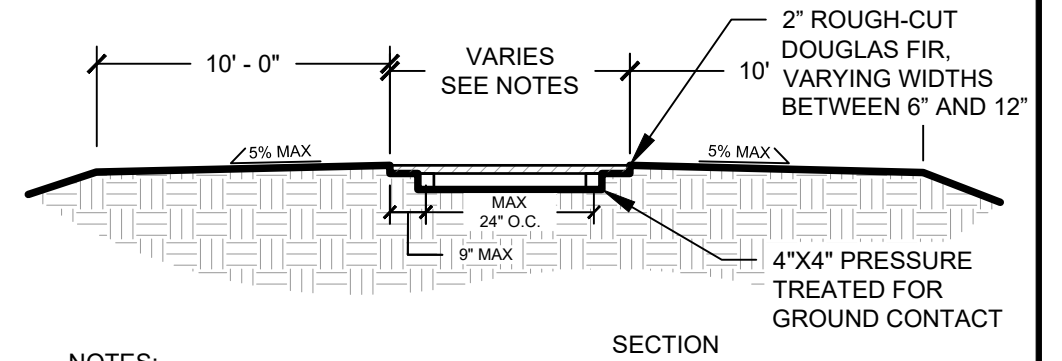
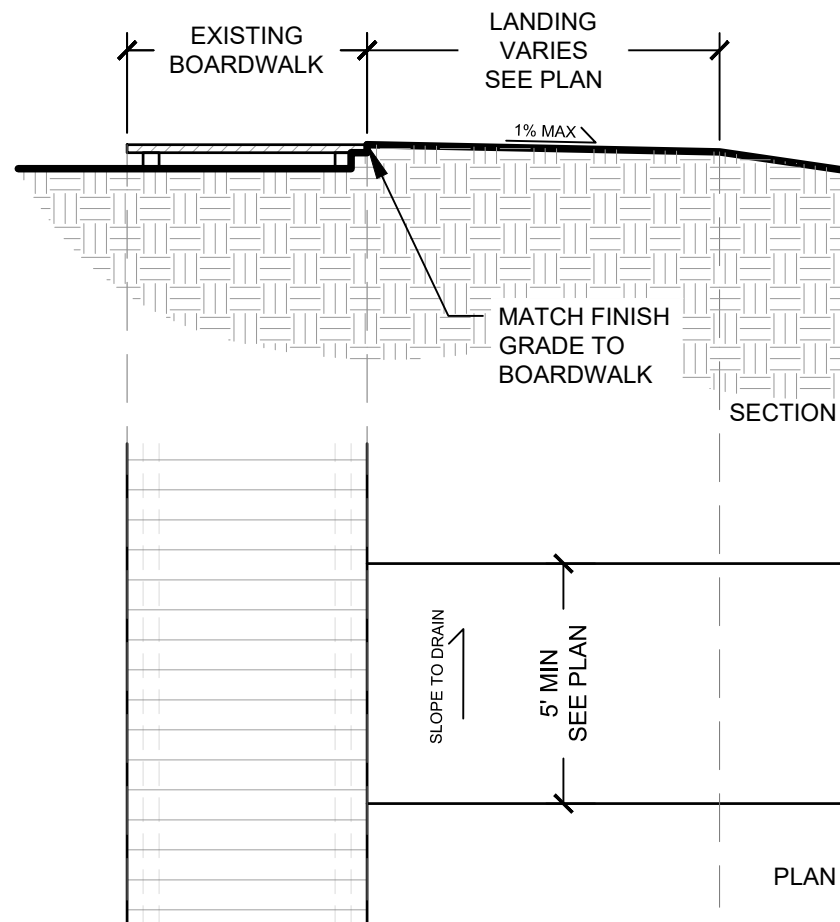
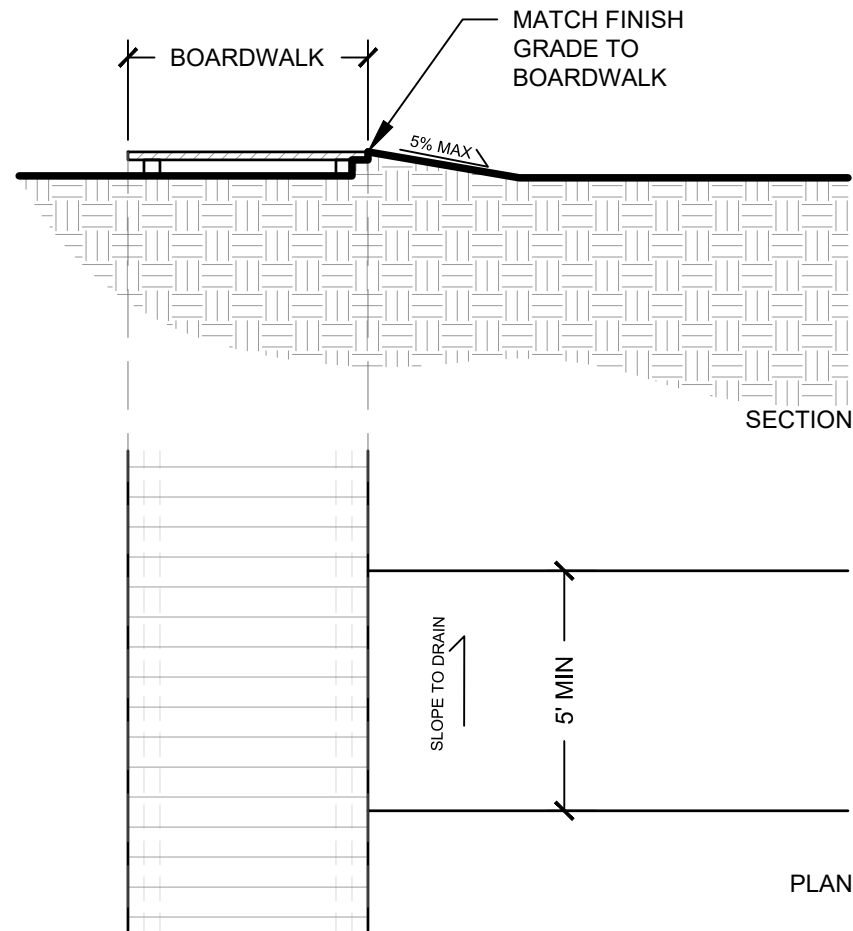


**MONTANA FISH,  
WILDLIFE & PARKS**

**Bannack State Park Boardwalk Replacement  
PHASE 1-B  
Details**

SHEET: 6 of 7





- NOTES:
1. SEE P.2 FOR COMPACTION AND FILL NOTES
  2. BOARDWALK WIDTH IN NEW AREAS SHALL MATCH THE WIDTH OF THE EXISTING BOARDWALK ON BOTH SIDES
  3. ADD MIDDLE STRINGER IF WIDTH EXCEEDS 24" O.C. BETWEEN STRINGERS

1 DIRT RAMP

6 NTS

2 DIRT LANDING

6 NTS

3 TRUCK CROSSING

6 NTS



UNDERSIDE EXISTING BOARDWALK AT WATER VALVE ACCESS (TYP)



PHOTO OF WATER VALVE ACCESS BELOW BOARDWALK (TYP)

WATER VALVE ACCESS NOTES:

1. THERE ARE FOUR (4) LOCATIONS AT WHICH A BURIED WATER VALVE VAULT IS LOCATED. CONTRACTOR TO REBUILD BOARDWALK IN SIMILAR FASHION. PIECES TO BE LIGHT ENOUGH FOR ONE PERSON TO EASILY MOVE TO ACCESS THE VALVE HATCH BELOW.



CORNER BEVEL (TYP)

CORNER NOTES:

1. SOME CORNERS HAVE BEVELED CUT BOARDS. NEW BOARDS ARE TO MATCH BEVEL STYLE

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**MONTANA FISH,  
 WILDLIFE & PARKS**

**Bannack State Park Boardwalk Replacement  
 PHASE 1-B  
 Details**

SHEET: 7 of 7