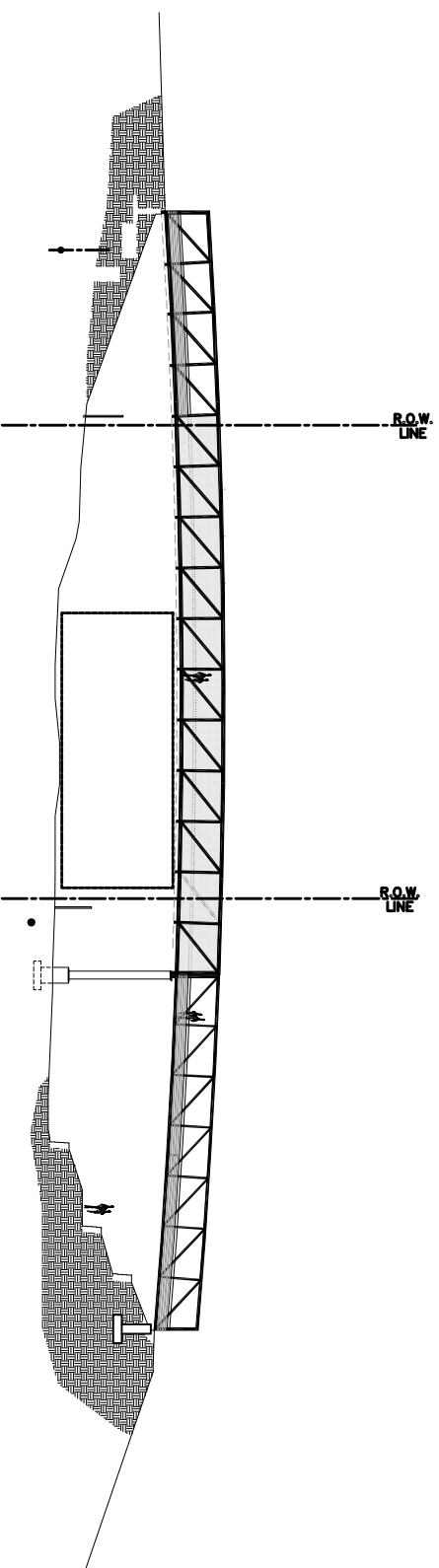


# GRADE SEPARATED OVERHEAD PEDESTRIAN BRIDGE STRUCTURE PALMER LAKE, COLORADO



## Applicant

Town Of Palmer Lake, Colorado  
 Mayor: Nikki MacDonald  
 Town Office:  
 42 Valley Crescent  
 PO Box 208  
 Palmer Lake, CO 80133

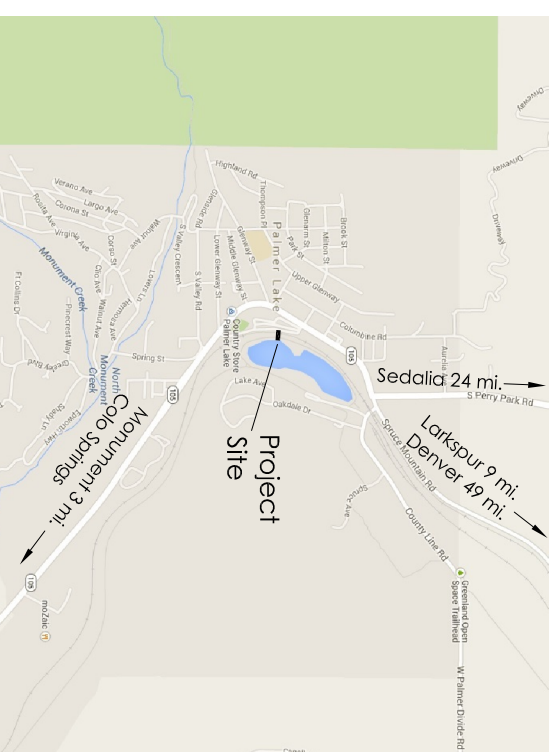
## Project Management Team

Paul Banta - TOPL Trustee  
 Cathy Green - TOPL Administrator  
 Jeff Hulsman - Grant Committee Chair  
 Kurt Ehrhardt - General Contractor  
 Jane Fredman - Attorney  
 William L Fisher, AIA - Architect

## Funding Source

State Board of the  
 Great Outdoors Colorado Trust Fund  
 303 East 17th Avenue, Suite 1060  
 Denver, CO 80203  
 Project Title: Rockin' the Rails Railroad Park  
 Grantee: Town of Palmer Lake  
 Contract Number: 15038  
 Completion Date: December 9, 2016

## Vicinity Map



## Design Team

Park Planning & Design:  
 Bridge Engineering:  
 William L Fisher, AIA  
 LEED AP  
 Fisher Architecture  
 PO Box 1395  
 Palmer Lake, CO  
 80133

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S4	Bridge Schematic Elevation & Steel Support Details
S5	Bridge Foundation & Steel Support Details

Geotechnical Engineer:  
 Surveying:  
 Foundation Engineering:

RMG  
 2910 Austin Bluffs  
 Pkwy, Colorado  
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David E. Archer  
 & Associates, Inc  
 105 Wilcox St  
 Castle Rock, CO  
 80104

HCD A Engineering  
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 Colorado Springs, CO  
 80903

## Title Sheet & General Project Information



Palmer Lake  
 Colorado  
 Rockin' The  
 Rails Park

Pedestrian  
 Bridge

Construction  
 Documents

Mile Post No.	52.24
Colorado Springs Subdivision	
Palmer Lake, CO	
El Paso County	
Latitude & Longitude	
39.122872/-104.91345	
ISSUED:	03/7/17
REV'D:	11/9/17, 1/15/18, 1/30/18, 8/28/18, 9/18/18, 8/15/19
DRAWN BY:	WLF
CHECKED BY:	JH/CG/JF

Title Sheet &  
 General  
 Project  
 Information  
**C0.1**

RAILROAD COORDINATION GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED W/O DISRUPTION TO RAILROAD OPERATIONS.
2. BRIDGE ERECTION PLAN SHALL MOBILIZE CRANE COMPLETELY OUTSIDE OF RAILROAD R.O.W. MAINTAIN OR EXCEED RAILROAD CLEARANCE AS REQUIRED.
3. ALL CONCRETE FOUNDATION WORK, CONSTRUCTION OF STEEL SUPPORTS, EXCAVATION & GRADING, EMBANKMENT CONSTRUCTION, LANDSCAPING, OR FENCING WORK OCCURS OUTSIDE RAILROAD R.O.W.
4. BRIDGE, EMBANKMENTS, FOUNDATIONS, & RETAINING WALLS BY COMPETITIVE BID. GC SHALL COORDINATE W/ RAILROAD PRIOR TO NOTICE TO PROCEED.
5. GC SHALL COORD. ALL WORK INSIDE R.O.W. W/ RAILROAD. EXECUTE IN STRICT ACCORD W/ RAILROAD RIGHT OF ENTRY AGREEMENT. HOWEVER, NO WORK INSIDE R.O.W. IS ANTICIPATED EXCEPT FOR ERECTION OF CENTER BRIDGE SPAN. SAID ERECTION SHOULD OCCUR IN LESS THAN 1 WORKING DAY. ERECTION PLANNING SHALL ENABLE TRACK TO REMAIN OPEN TO TRAFFIC PER RAILROAD REQUIREMENTS.
6. GC SHALL FURNISH ALL CONSTRUCTION SUBMITTALS FOR REVIEW AND APPROVAL BY ENGINEER OF RECORD AND RAILROAD PRIOR TO EXECUTING WORK.
7. ALL WORK TO BE DONE IN STRICT ACCORD. W/ RAILROAD APPROVED STAGING & PHASING PLAN.
8. STEEL TRUSS BRIDGE SHALL BE PRE-ENGINEERED, STAMPED BY A COLORADO REGISTERED ENGINEER, AND FABRICATED OFF-SITE.
9. ALL GRADING WORK OCCURS OUTSIDE OF R.O.W. IN STRICT ACCORD W/ RAILROAD APPROVED EROSION & SEDIMENT CONTROL PLAN.
10. MILE POST 52 OCCURS ±0.24 MI. N. OF PROJECT.
11. SUPERSTRUCTURE AND FOUNDATION ENGINEERING IS PRELIMINARY TO BE FINALIZED BY ENGINEER OF RECORD AFTER RAILROAD APPROVAL AND PRIOR TO CONSTRUCTION.
12. VERIFY EXG TOP OF RAIL ELEV'S BEFORE CONSTR. REPORT ALL DISCREPANCIES TO UPRR.
13. NEW CONSTRUCTION DOES NOT CHANGE DRAINAGE FLOWS W/IN R.O.W. IN ANY WAY EXCEPT FLOWS WILL BE REDUCED BY VEGETATED EMBANKMENT SLOPES IN ADJACENT LAND OUTSIDE R.O.W. REPLACING EXISTING GRAVEL AREAS.
14. THE CONTRACTOR SHALL SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD PRIOR TO BEGINNING ANY GRADING ON THE PROJECT SITE.

15. NO DEMOLITION OCCURS INSIDE OR OUTSIDE TE RAILROAD'S R.O.W. THAT IMPACTS THE RAILROAD'S TRACKS OR OPERATIONS IN ANY WAY.
16. TEMPORARY CONSTRUCTION CLEARANCES AND FLASEWORK CLEARANCES DO NOT APPLY AS ALL WORK IS OUTSIDE R.O.W.
17. ALL PERMANENT CLEARANCES SHALL BE VERIFIED PRIOR TO PROJECT CLOSEOUT.
18. PROPOSED DESIGN OF CONCRETE FOUNDATIONS AND STEEL SUPPORTS DOES NOT REQUIRE SHORING INSIDE RAILROAD R.O.W.

**ADDITIONAL GENERAL NOTES REQUIRED BY RAILROAD REVIEW COMMENTS 6/6/17:**

1. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.
2. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD. PROJECT CLOSING.
4. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
5. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
6. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
7. RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.
8. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.
9. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.



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Palmer Lake  
 Colorado

Rockin' The  
 Rails Park

**Pedestrian  
 Bridge**

Construction  
 Documents

Mile Post No.	52.24
Colorado Springs Subdivision	
Palmer Lake, CO	
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DRAWN BY:	WLF
CHECKED BY:	JH/CG/JF

General  
 Notes

**CO.2**

General Notes

MAIN LINE TRACK LOCATION IN 100' R.O.W.  
 ACCOMMODATES FUTURE TRACKS EITHER SIDE(PER  
 UP/BNSF GUIDELINES PLAN NO. 711100 SHT. 1)

FENCING TO BE PROVIDED MINIMUM 500' TOTAL CENTERED  
 ON BRIDGE THIS PHASE - TYPICAL BOTH SIDES OF R.O.W.

EXISTING GRAVEL  
 PAVED/PARKING

FLATWORK BY G.C.

NEW CONC. WALK

EXISTING DRIVE  
 NEW FLATWORK  
 BY G.C.

FUTURE PIER PROTECTION TO BE  
 PROVIDED IF 3RD SET OF FUTURE  
 TRACKS ADDED EAST OF EXISTING  
 TRACKS

LIMITS OF CONSTRUCTION

8' TALL HIGH-TENSION WIRE NO-CLIMB FENCE  
 - 300 LF EA. SIDE 2'-0" O.S. R.O.W.

BNSA MP & DIRECTION  
 INCREASING

100.00 R.O.W.

TOP RAILS  
 30.83

MILE MARKER 52 ±.24 MI. N.  
 OF BRIDGE SITE (NO'S  
 ASCEND TO S.)

EXG TRAIL TO REMAIN

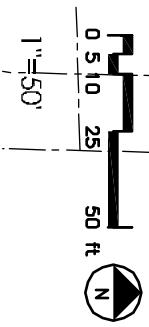
EXG UPRR ACCESS RD

CONCRETE SLAB ON GRADE  
 LANDINGS 3 LOCATIONS BY GC  
 GRAVEL TRAILS BY OTHERS -  
 TYPICAL

FIBER OPTIC LINES - HAND  
 LOCATE PRIOR TO EXCAVATION  
 CONC. & STEEL BRIDGE PIERS  
 & FOUNDATIONS

EXISTING EMBANKMENTS &  
 RETAINING WALLS  
 GRAVEL PATH, STEPS, &  
 HANDBRAILS BY OTHERS

EXISTING TRAIL TO REMAIN



Bridge & Embankment Overall Site Plan



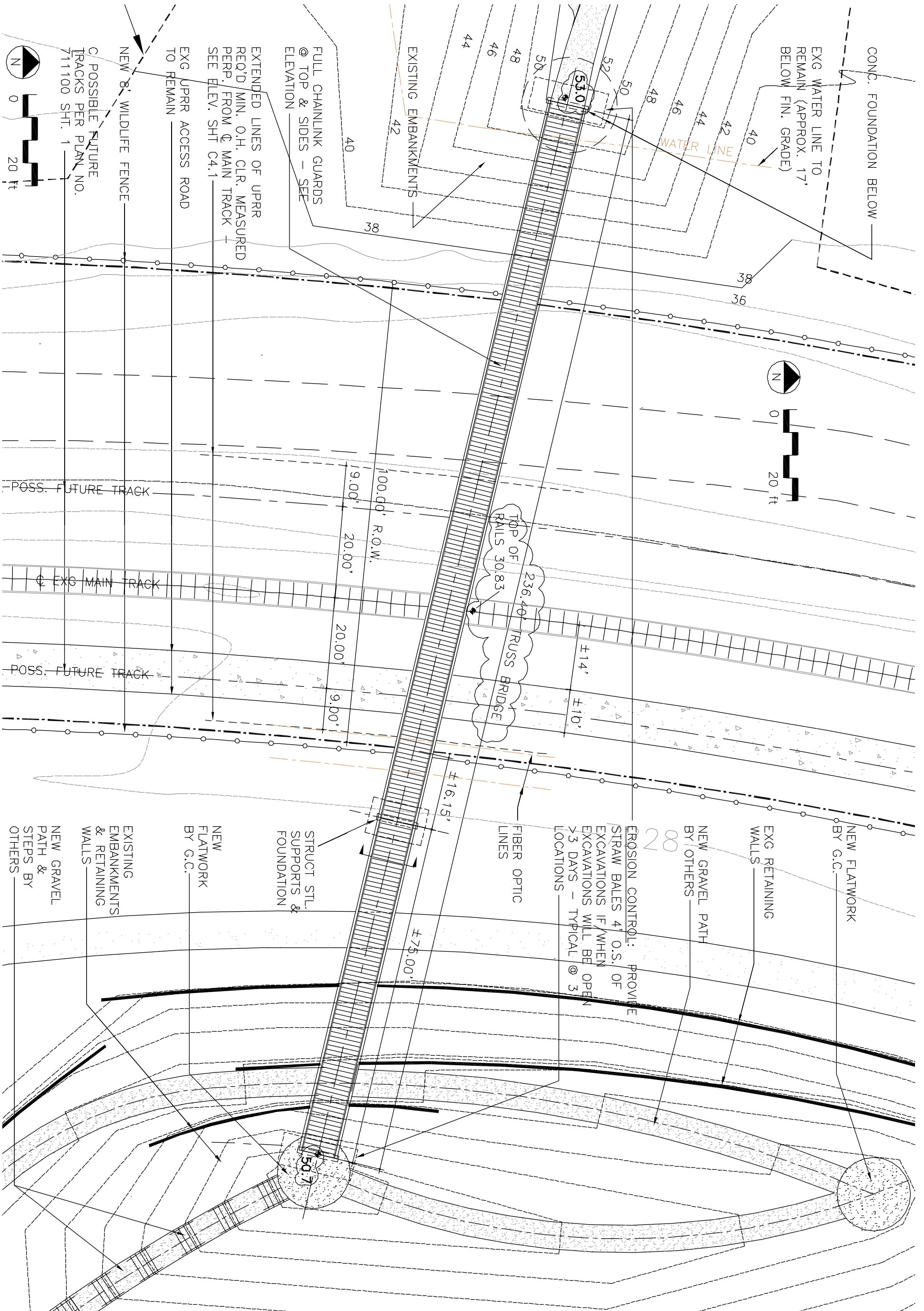
**HCDA**  
 HCD/A ENGINEERING, INC.  
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 7 9490-356 www.fisharc.com  
 PO BOX 1392, BALDWIN CO. 80123

Palmer Lake  
 Colorado  
 Rockin' The  
 Rails Park  
 Pedestrian  
 Bridge

Construction Documents	Mile Post No. 52.24
Colorado Springs Subdivision	Palmer Lake, CO
El Paso County	Latitude & Longitude
39.122872/-104.91345	ISSUED: 03/7/17
REV'D: 8/28/18, 9/18/18, 8/15/19	11/9/17, 1/15/18, 1/30/18
DRAWN BY: WLF	CHECKED BY: JH/CG/JF
Bridge & Embankment Overall Site Plan	

**C1.1**



Center Span Bridge Layout Plan  
1"=20'



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Palmer Lake  
 Colorado  
 Rockin' The  
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 Pedestrian  
 Bridge

Construction Documents

Mile Post No. 52.24

Colorado Springs Subdivision

Palmer Lake, CO

El Paso County

Latitude & Longitude

39.122872/-104.91345

ISSUED: 03/17/17

11/9/17/1/15/18/1/30/18

REVD: 8/28/18, 9/18/18, 8/15/19

DRAWN BY: WLF

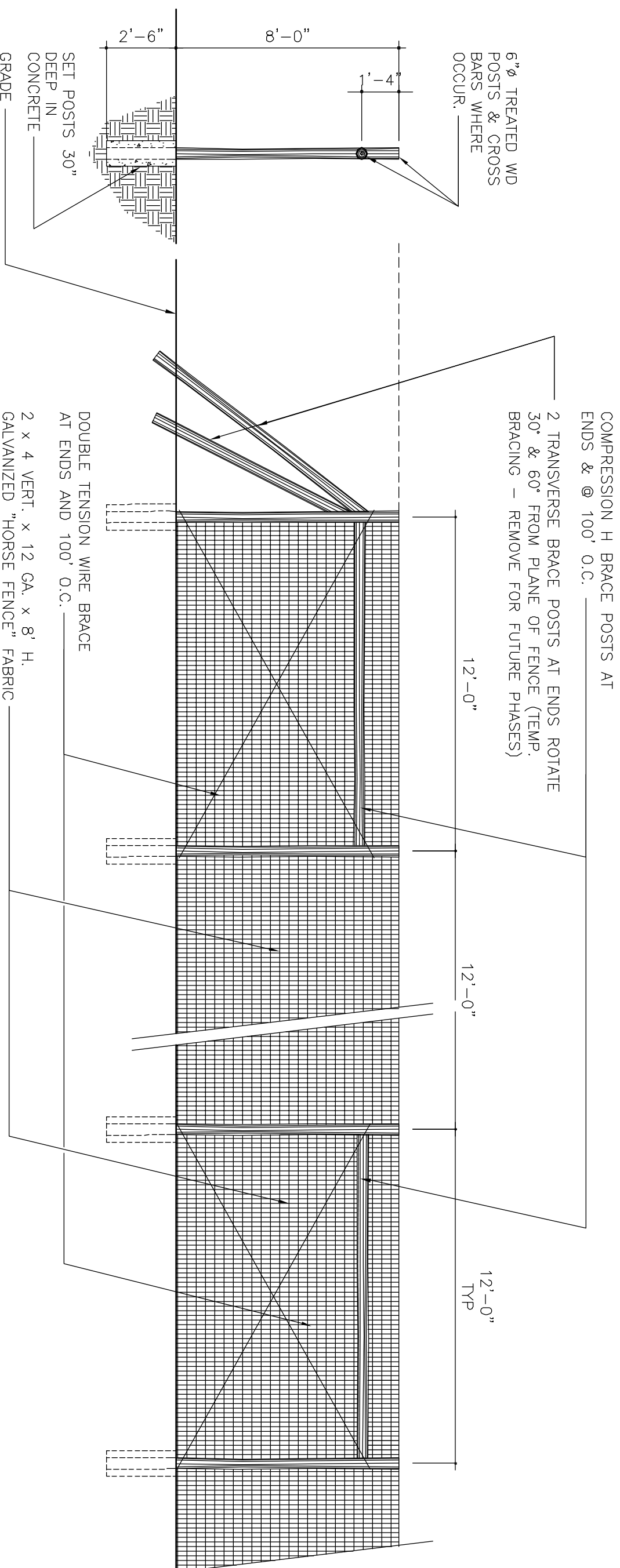
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Center Span Bridge  
 Layout Plan

**C2.2**

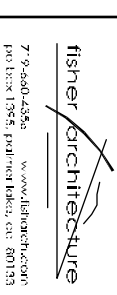
FENCING NOTES:

1. "EXCLUSION FENCE" PER COLORADO DEPT OF WILDLIFE GUIDE IS DESIGNED TO PREVENT PASSAGE OF LARGE WILDLIFE. DESIGN HAS BEEN ADAPTED W/ FINER WOVEN WIRE MESH TO BE "NO CLIMB".
2. INSTALL ALL FENCING IN COMPLIANCE W/ NATURAL RESOURCE, AGRICULTURE, AND ENGINEERING SERVICE - NRAES 11 "HIGH-TENSILE WIRE FENCING" INCLUDING ALL H (COMPRESSION) BRACES, BRACE WIRE, PINS, & STAPLES.
3. SEE OVERALL PLAN SHT C1.1 FOR LOCATION AND EXTENT OF FENCING - CORRESPONDS TO CONSTRUCTION LIMITS THIS PHASE OF CONSTRUCTION.
4. ADDITIONAL FENCING TO BE PROVIDED IN FUTURE PARK CONSTRUCTION PHASES.



High Tension Wire Exclusion Fencing

1/4"=1'-0"



Palmer Lake Colorado  
 Rockin' The Rails Park  
 Pedestrian Bridge

Construction Documents

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REV'D:	8/28/18, 9/18/18, 8/5/19
DRAWN BY:	WJLF
CHECKED BY:	JH/CG/JF

High Tension Wire Exclusion Fencing

C3.1



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Palmer Lake  
 Colorado  
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Construction  
 Documents

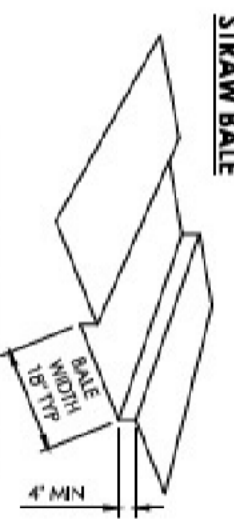
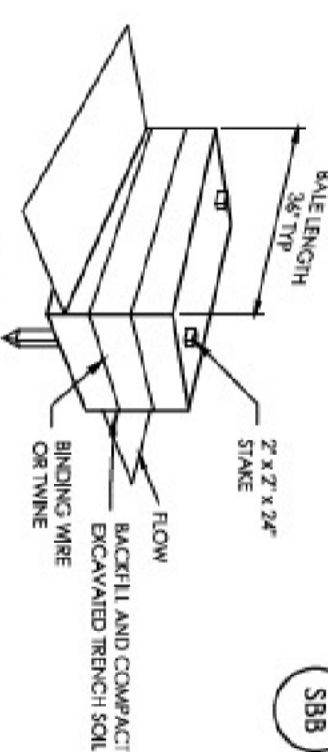
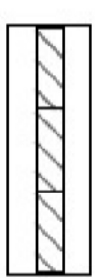
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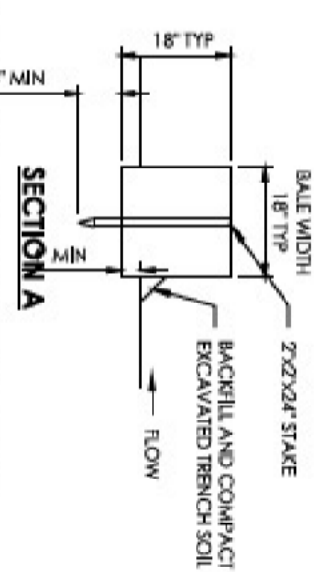
STRAW BALE  
 EROSION  
 CONTROL  
 BARRIERS

**C3.2**

SBB



**TRENCH FOR STRAW BALE**



**SBB-1. STRAW BALE BARRIER**

**STRAW BALE INSTALLATION NOTES:**

1. SEE PLAN VIEW FOR: —(LOCATIONS) OF STRAW BALES.
2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.
3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
4. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.
5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"x18"x18".
6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINES ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.
7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"x2"x24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

**STRAW BALE MAINTENANCE NOTES:**

1. INSPECT BMP'S EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMP'S SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMP'S AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP'S IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMP'S HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.
5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE STRAW BALE BARRIER.
6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDS AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

**Erosion Control Notes**

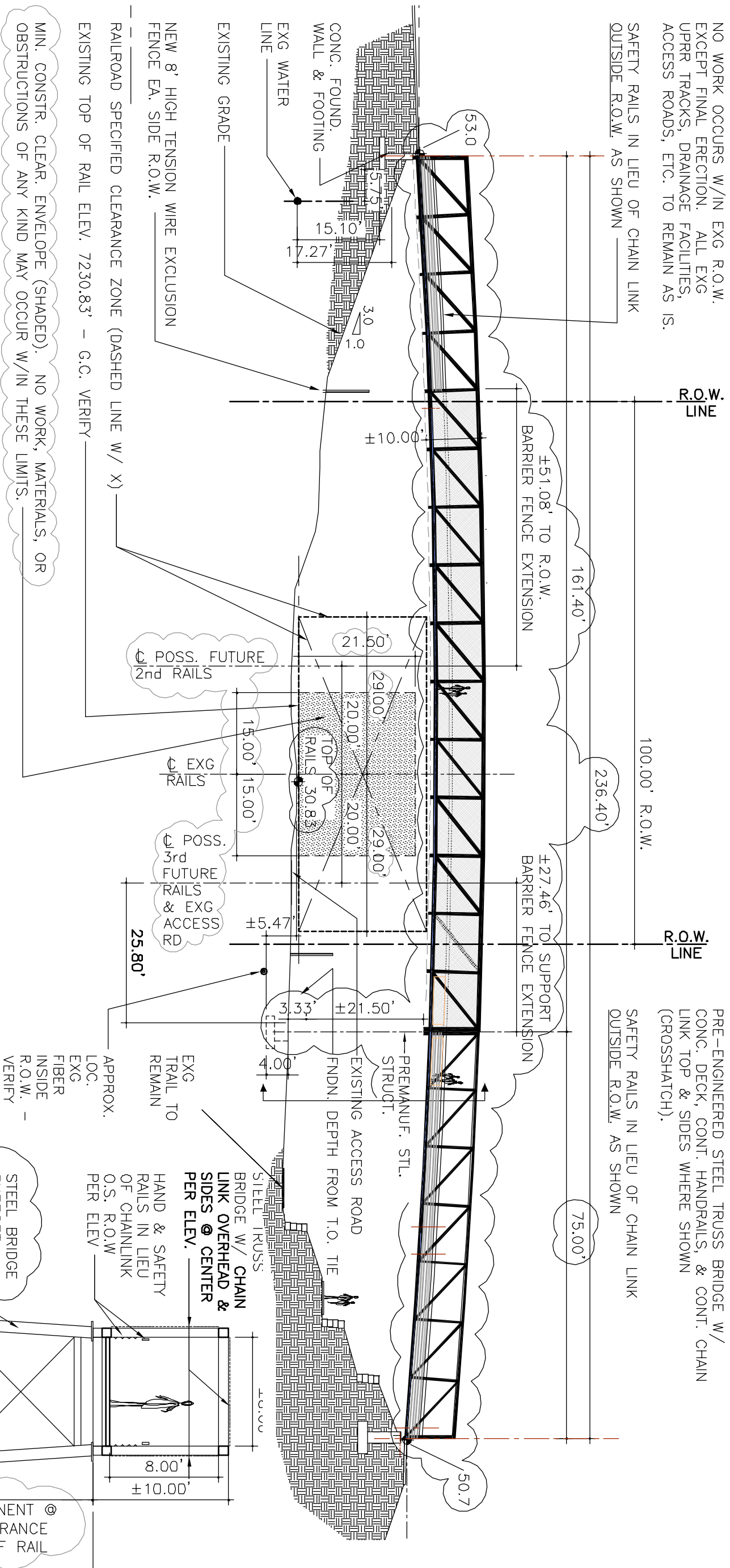
1/4"=1'-0"

NO WORK OCCURS W/IN EXG R.O.W. EXCEPT FINAL ERECTION. ALL EXG UPRR TRACKS, DRAINAGE FACILITIES, ACCESS ROADS, ETC. TO REMAIN AS IS.

SAFETY RAILS IN LIEU OF CHAIN LINK OUTSIDE R.O.W. AS SHOWN

PRE-ENGINEERED STEEL TRUSS BRIDGE W/ CONC. DECK, CONT. HANDRAILS, & CONT. CHAIN LINK TOP & SIDES WHERE SHOWN (CROSSHATCH).

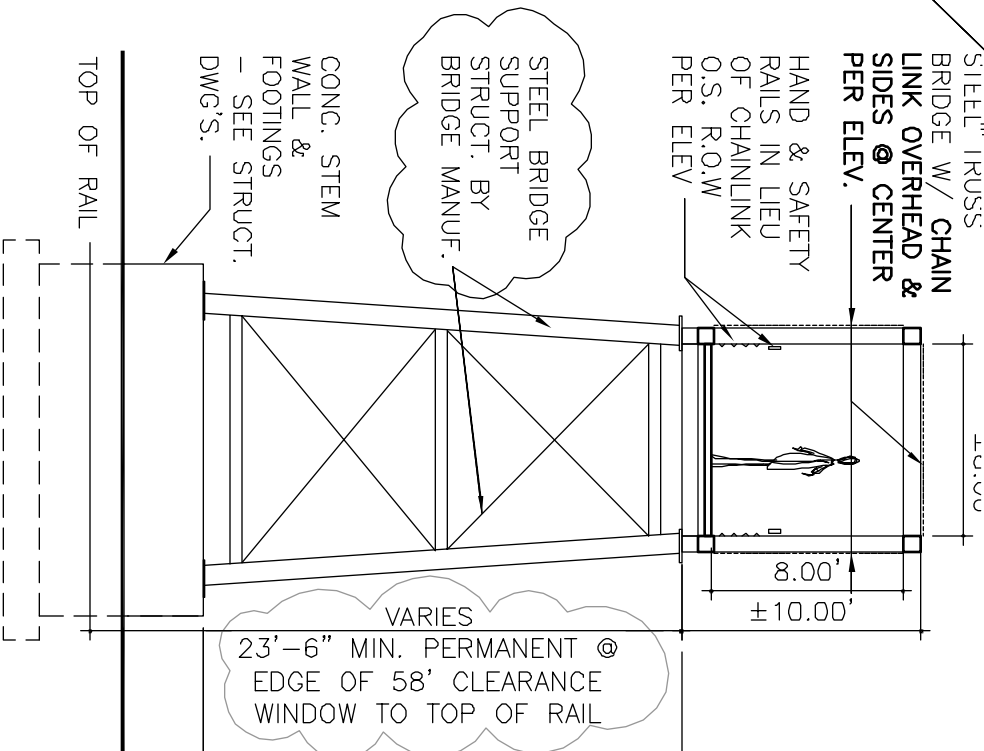
SAFETY RAILS IN LIEU OF CHAIN LINK OUTSIDE R.O.W. AS SHOWN



**Pedestrian Bridge South Elevation (N. Elev. Reversed)**  
1"=20'

NOTE: FINAL REVISIONS SUMMARY (9/18/18):

- ELIMINATE PREVIOUS CONTAINER RAMPS & PROVIDE CONTINUOUS PRE-MANUFACTURED TRUSS BRIDGE.
- ELIMINATE 2 INTERMEDIATE SUPPORTS.
- PROVIDE SINGLE PRE-MANUFACTURED INTERMEDIATE STEEL SUPPORT LOCATED FARTHER AWAY FROM UP/BNSF R.O.W.
- UPDATE ELEVATIONS PER CURRENT FIELD DATA
- ALL UP/BNSF CLEARANCES & OTHER CRITERIA IS UNCHANGED FROM 100% DESIGN APPROVAL.



**Section**

1/8"=1'-0"

**Bridge Elevation, Section, Details**



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**Palmer Lake Colorado**

**Rockin' The Rails Park**

**Pedestrian Bridge**

**Construction Documents**

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DRAWN BY:	WLF
CHECKED BY:	JH/CG/JF

BRIDGE ELEVATIONS, SECTIONS, & DETAILS

**C4.1**

**OUTLINE SPECIFICATIONS:**

**DIVISION 1 – GENERAL REQUIREMENTS**

**A. SUMMARY OF WORK:**

1. All work shall be carefully designed and constructed in accordance with the requirements of the Union Pacific Railroad (the Railroad) including an executed C & M Agreement. UPRR coord. shall be part of these specifications.
  2. The only work that occurs in the Railroad R.O.W. is bridge erection which shall be executed in accordance with Railroad Right-of-Entry Agreement. All earthwork, bridge embankments, foundations, steel supports, walks and landscaping occurs outside of the Railroad R.O.W. Design negates need for shoring, shooftly tracks, demolition, falsework, etc. and enables tracks to remain in service.
  3. Project includes all work associated with new pedestrian bridge construction including earthwork, concrete foundations, structural steel supports, pre-engineered structural steel bridges, steel shipping container ramps, wood bridge decks, chain link guard walls, concrete walks, and landscaping. Additional provisions include placing and maintaining erosion and sediment control measures – all outside R.O.W.
  4. All work shall be competitively bid and performed under 1 prime contract in accordance w/ the Railroad C&M Agreement. Prequalified bidders shall possess staff with the level of experience required by the Railroad.
  5. Additional provisions include industry standard project meetings; reporting; coordination with all trades; coordination w/ Owner, E.O.R. & Railroad; submittals, quality control; field engineering; site security including prevention of any and all public access to the area of work; and as-builts.
- B. REGULATORY REQUIREMENTS:** All work shall be executed in strict accordance with:
1. BNSF Railway – Union Pacific Railroad Guidelines For Railroad Grade Separation Projects.
  2. AREMA – Manual for Railway Engineering
  3. Colorado DORA Public Utilities Commission Rail/Transit regulations.
  4. Bridge shall be designed in accordance with the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges.
  5. The American Concrete Institute ACI 301.
  6. Applicable provisions of the National Design Specification for Wood Construction, ANSI NDS–Latest Edition.
  7. Applicable provisions of the American Inst. of Steel Construction (AISC) Manual, 13th Ed.
  8. American Welding Society, Structural Welding Code, D1.1, Latest Edition.
  9. Tropical Timbers of the World, US Forest Products Laboratory.
  10. GC & Applicant shall obtain all required Federal, State, local, and other permits.

**DIVISION 2 – SITE CONSTRUCTION**

- A. EARTHWORK:** Clear & grub site. Remove, store, and replace topsoil. Rough grade and place all soils in strict accord. w/ Geotechnical Engineer's requirements including soil compaction & testing. Finish grade as req'd for walks, steps, and landscaping.
- B. CONCRETE WALKS AND STEPS:** Provide concrete sidewalks and steps where indicated on the drawings. Comply with all Town of Palmer Lake standards. All new walks shall be ADA compliant including slopes, landings, and provision of handrails. Provide mix designs and test reports for all concrete materials.
- C. LANDSCAPING:** Place & thoroughly till topsoil and amendment material. Seed all turf areas with native grass and/or wild flower mixes at locations indicated. All seeded areas shall be "netted." All trees & shrubs shall be placed in amended soils, staked, and surrounded w/ organic mulch beds.
- D. FENCING:** "Exclusion Fence" per Colorado Dept Of Wildlife Guide is designed to prevent passage of large wildlife and is adapted w/ fine woven wire mesh to be "no climb." Construct all fencing in compliance with NRAES 11 "High Tensile Wire Fencing" including all H (compression) bracing, brace wires, pins, & staples. Location, extent, and construction details of new fencing to be 8' high with "no climb" woven wire fabric 2" (horizontal) x 4" vertical mesh on pressure treated nominal 6" diameter wood posts set in concrete as shown on drawings.

- E. RETAINING WALLS:** Provide retaining walls as req'd at new embankments to maintain min. 1:20 and 1:12 ADA walks and 1:3 vegetated slopes as shown n the drawings. All walls shall be 36"x36"x72" galvanized gabion baskets, rock fill, and reinforcing fabric, as req'd & designed by registered Colorado Engineer in strict accordance w/ Geotech's requirements. Provide calculations and stamped shop drawings.

**DIVISION 3 – CONCRETE**

- A.** Provide all formwork, accessories, reinf, and conc. materials per applicable reference std's and E.O.R. drawings & specs. Provide mix designs and reinf. shop drawings for review and approval by E.O.R, GC, & UPRR prior to ordering materials or placing any work.
- B.** Provide geotech. open hole observations, soils compaction testing, & concrete testing in strict accord. with industry & UPRR standards and furnish all reports.
- C.** Coordinate all base plates, inserts, and anchor bolts furnished under Div. 5.

**DIVISION 5 – METALS**

- A. STRUCTURAL STEEL:** Loadbearing structural steel truss members, bolted connections, and welded connections shall meet all applicable requirements of AISC and AWI.
- B. PREFABRICATED STEEL ARCH BRIDGE:**

1. Prefab. steel truss bridge shall be provided by a supplier/fabricator with min. five years experience designing and fabricating similar structures, min. five successful bridge projects, and be AISC certified Major Bridge Fabricator with Fracture Critical endorsement. All engineering shall be stamped by a registered Colorado P.E.
  2. Bridge shall be size and config. shown on the drawings. Members shall be high strength, low alloy, atmospheric corrosion resistant welded square and rectangular tubing (weathering steel). All truss members fully welded except for req'd field splices.
  3. The bridge shall be designed for a uniformly distributed load of 90 psf and an occasional vehicle load of 10,000 pounds with 60% of the load on the rear axle. Camber for dead load of the bridge plus 1% of the overall span length.
  4. Wind loads shall be as specified by AASHTO Signs, Articles 3.8 and 3.9. Wind Importance Factor shall be 1.15.
  5. Bridge shall be fully enclosed @ sides and top w/ chain link fabric meeting all UPRR requirements and securely attached to structure.
  6. Approved suppliers: Contech, Big R Bridge, Excel, or approved equal.
  7. Provide review/approval submittals for all struct. engr'g, conn's, fabrication, & erection.
  8. **BRIDGE WARRANTY:** Warrant free of design, material, and workmanship defects for a period of ten years from the date of delivery. Naturally durable hardwood decking and hardwood attachments shall carry a one-year warranty against rot, termite damage, or fungal decay. Other types of wood are excluded under this warranty.
- B. CONTAINER RAMPS:**
1. Containers shall be new steel units configured as shown on the drawings with door openings each side and each end. Furnish containers without doors.
  2. Container load capacity shall be ±58,000 lbs (approx. 180 psf) meeting ISO 668 and certified by E.O.R. for specified live loads.
  3. Units shall be factory painted w/ Hempel Marine Paint System.

**DIVISION 6 – WOOD & PLASTICS**

- A.** Provide wood plank bridge decking of naturally durable hardwood lpe (Tabebuia Spp Lapacho Group). All planks shall be partially air dried to a moisture content of 20% or higher, and shall be supplied S4S with eased edges.
- B.** Provide wood lpe rails continuous at bridge interiors each side.

**Specifications**



**HCDA**  
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**Palmer Lake Colorado**  
**Rockin' The Rails Park**  
**Pedestrian Bridge**

**Construction Documents**  
 Mile Post No. 52.24  
 Colo Springs Subdivision  
 Palmer Lake, CO  
 El Paso County  
 Latitude & Longitude  
 39.122872/-104.91345

ISSUED:	03/7/17
REV'D:	11/9/17, 1/15/18, 1/30/18, 8/28/18, 9/18/18, 8/15/19
DRAWN BY:	WLF
CHECKED BY:	JH/CG/JF

Outline Specifications

**CG.1**