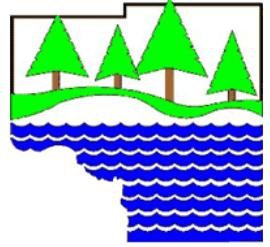




ITASCA COUNTY REGIONAL RAILROAD AUTHORITY

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744
(218) 327-2847



Tuesday, March 11, 2025

2:00 PM

Itasca County Boardroom

FINAL

REGULAR SESSION MINUTES

I. CALL TO ORDER

Chair Venema called the meeting to order at 2:00 PM.

Attendee Name	Title	Status	Arrived
Cory Smith	District #1	Present	2:00 PM
Terry Snyder	District #2	Present	2:00 PM
John Johnson	District #3	Absent	
	District #4	Vacant	
Casey Venema	District #5	Present	2:00 PM

II. ADDITIONS/CORRECTIONS TO THE AGENDA

Motion To: Approve Additions/Corrections to the Agenda.

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

III. APPROVE OF MINUTES

Motion To: Approve the minutes as delineated below.

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner Cory Smith
SECONDER:	Commissioner John Johnson
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

1. Approve the minutes of the Tuesday, February 11, Regional Rail Authority Regular Session.

IV. DISCUSSION / INFORMATIONAL

1. Sewer Piping Crossing Agreement

Motion To: Approve the Sewer Piping Box Culvert Crossing Agreement.

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

2. Electrical Box Crossing Agreement

Motion To: Approve the Electrical Box Culvert Crossing Agreement.

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

V. **ADJOURN**

Chair Venema adjourned the meeting at 2:05 PM.

ATTEST

Shelley Kebart
Administrative Support

Casey Venema
Chair, Regional Railroad Authority



ITASCA COUNTY REGIONAL RAILROAD AUTHORITY

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744
(218) 327-2847



Tuesday, February 11, 2025

2:00 PM

Itasca County Boardroom

DRAFT

REGULAR SESSION MINUTES

I. CALL TO ORDER

Chair Venema called the meeting to order at 2:00 PM.

Attendee Name	Title	Status	Arrived
Cory Smith	District #1	Present	2:00 PM
Terry Snyder	District #2	Present	2:00 PM
John Johnson	District #3	Present	2:00 PM
	District #4	Vacant	
Casey Venema	District #5	Present	2:00 PM

II. ADDITIONS/CORRECTIONS TO THE AGENDA

Motion To: Approve the Agenda with additional information.

RESULT:	APPROVED (4 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Terry Snyder
AYES:	Cory Smith, Terry Snyder, John Johnson, Casey Venema
VACANT:	District #4

III. APPROVE OF MINUTES

Motion To: Approve the minutes, as delineated below.

RESULT:	APPROVED (4 TO 0)
MOVER:	Commissioner Cory Smith
SECONDER:	Commissioner John Johnson
AYES:	Cory Smith, Terry Snyder, John Johnson, Casey Venema
VACANT:	District #4

1. Approve the minutes of the Tuesday, January 14, 2025 Regional Railroad Authority Regular Session.

IV. DISCUSSION / INFORMATIONAL

1. Adopt the Resolution Re: Mesabi Trail Reconstruction Project Federal Recreational Trails Program Grant Application and authorize necessary signatures.

Motion To: Approve the Mesabi Trail-Kelly Lake to Keewatin Reconstruction Resolution.

RESULT:	APPROVED (4 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, Terry Snyder, John Johnson, Casey Venema
VACANT:	District #4

V. ADJOURN

Chair Venema adjourned the meeting at 2:05 PM.

ATTEST



Shelley Kebart
Administrative Support



Casey Venema
Chair, Regional Railroad Authority



**ITASCA COUNTY
REGIONAL RAILROAD AUTHORITY**

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744

Tuesday, March 11, 2025

IV.1.

REQUEST FOR BOARD ACTION: RBA-2025-308

DEPARTMENT: Transportation

TIME REQUESTED: 5 Minutes

PRESENTER: Karin Grandia

AGENDA ITEM:

Sewer Piping Box Culvert Crossing Agreement

BOARD ACTION REQUESTED:

Authorize the execution of the Sewer Piping Crossing Agreement with Mesabi Metallica Company, LLC by ICRRA Chair .

BACKGROUND:

Mesabi Metallica Company has requested authorization to remove the existing rail line at approximately station 312+50 for the installation of a concrete box culvert that will be a conduit for sewer piping. This agreement requires Mesabi Metallica to provide ICRRA with a performance and payment bond for the reinstallation and restoration of the tracks and ICRRA ROW once the box culvert has been installed.

SUPPORTING DOCUMENTATION:

1. Sewer Piping Box Culvert Crossing Agreement

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

ITASCA COUNTY REGIONAL RAILROAD AUTHORITY
AGREEMENT FOR SEWER PIPING BOX CULVERT CROSSING

AGREEMENT, Made this 11th day of March, 2025; subject to the terms and conditions set forth herein between **Itasca County Regional Railroad Authority**, a regional railroad authority organized and existing as a political subdivision and local government unit under the laws of the State of Minnesota (hereinafter called "ICRRA"), its successors and assigns, party of the first part; and **Mesabi Metallica Company, LLC**, a Minnesota limited liability company, (hereinafter whether one or more persons or corporations called the "Licensee"), party of the second part.

RECITALS

The Licensee has requested of ICRRA permission to remove and replace the track near Station 312+50, to allow for the construction of the 12' x 8' box culvert, and in the manner shown in the approved plans, marked Exhibit A and made a part hereof, which permission ICRRA is willing to grant upon conditions hereinafter set forth.

ARTICLE I

In consideration of the covenants of the Licensee hereinafter set forth, ICRRA hereby agrees to allow Licensee to construct, upon its rail corridor, except as set forth elsewhere herein, at the location shown on Exhibit A, an approved project (hereinafter the "Project"), and gives Licensee a non-exclusive license and permission to enter upon and cross ICRRA's rail corridor and tracks during the term of the agreement.

This agreement shall be effective upon execution by both parties, subject to prior termination as hereinafter described.

ARTICLE II

In consideration of the foregoing license and permission given by ICRRA the Licensee hereby agrees:

1. a. Licensee shall construct the Project to the plans and specifications marked Exhibit A & B or approved by ICRRA. If ICRRA is required to incur any expenses relative to the Project, Licensee agrees to reimburse ICRRA for said expenses within thirty (30) days after invoices are rendered for said expenses.
- b. All work, including restoration, within ICRRA Right-of-Way must conform to the specifications in Exhibit B.
- c. The trackwork shall be performed by an ICRRA preapproved railroad contractor. Original track materials may be reused if not damaged during the removal process. Any damaged or missing track material shall be replaced with materials meeting the specifications outlined in Exhibit B, by the Licensee at their own cost. The alignment and surface shall match the existing track.
- c. Subballast shall meet the standards outlined in Exhibit B and the Typical Section found in Exhibit A.
- d. The embankment shall meet the industry standards outlined in Exhibit B.
- e. The Licensee shall procure a payment and performance bond payable to ICRRA for the duration of this construction in the amount of \$150,000.00.
- f. Licensee warrants the work for 2 years after completion of the work. If the track settles or is not in compliance with Federal Railroad Administration Class 3 standards, the ICRRA may complete the required repairs and the Licensee agrees to reimburse ICRRA for said expenses within thirty (30) days after invoices are rendered for said expenses
- 2 Except as provided herein, Licensee agrees that under no circumstances will Licensee or Licensee's agents dig in or disturb the surface of ICRRA's corridor without written permission of ICRRA.

3. Prior to any Project work in the ICRRA right of way, five (5) days advance notice must be given to ICRRA's representative – Karin Grandia, Itasca County Engineer, at Itasca County Courthouse, 123 NE 4th Street, Grand Rapids, MN 55744, telephone: 218-327-2853. LICENSEE will allow access to ICRRA to observe and inspect the work as it proceeds. ICRRA will have the authority to reject any work that does not comply with this agreement or the attached plans.
4. (a) Except as set forth in Section 4(b), Licensee and its Contractors and/or agents shall indemnify and hold harmless ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA) for all losses, damages, injuries, death and expenses, including claims under the Federal Employees Liability Act (45 U.S.C. 51), or any applicable safety act (45 U.S.C. 20101 *et al*), including lost profits, consultant and attorney fees, and environmental clean-up or remediation costs and expenses arising in any manner out of the failure of Licensee to take any action required by this Agreement, the condition of the right-of-way or any equipment or property thereon, or any act or omission of Licensee, its employees, agents or contractors ("Licensee's Invitees") arising out of the Project regardless of whether such loss, damage, injury, death or expense is caused or contributed to by the negligence of ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA), except to the extent any such loss, damage, injury, death or expense is proximately caused by ICRRA's and/or ICRRA's agent's or contractors (including any rail operator designated by ICRRA) gross negligence or intentional misconduct.

(b) Whenever any Licensee or any of Licensee's Invitees make any claim relating to the Project for personal injury or death against ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA) within the meaning of the Federal Employers' Liability Act (45 U.S.C. 51), or any applicable safety act, (45 U.S.C. 20101 *et al*) for any incident caused, wholly or in part, by property, equipment or condition belonging to or under the control of Licensee, or claims or alleges that he or she is an employee of ICRRA or is furthering the operational activities of ICRRA, Licensee agrees to indemnify and hold harmless ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by the ICRRA) for all losses, damages, costs or expenses related to such claim, regardless of ICRRA's and/or ICRRA's agents or contractors (including any rail operator designated by the ICRRA) negligence, other than gross negligence or intentional misconduct.

(c) Notwithstanding the above, ICRRA and Licensee agree that, with respect to this Section 4, ICRRA's agents or contractors (including any rail operator designated by ICRRA) are third-party beneficiaries to this Agreement.
5. (a) Licensee and its Contractors and/or agents shall comply with all federal, state and local environmental laws and regulations, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA). Licensee shall not release or suffer the release of oil or hazardous substances, as defined by CERCLA, on the Project. Notwithstanding any other requirements in this Agreement, Licensee assumes all responsibility for the investigation and cleanup of such release and shall indemnify and defend ICRRA and/or its agents or contractors (including any rail operator designated by ICRRA) for all costs and claims, including consultant and attorney fees, arising in any manner out of such release or Licensee's failure to comply with environmental laws, regardless of ICRRA's negligence, except to the extent such costs or claims are proximately caused by ICRRA's affirmative negligent act, or its gross negligence or intentional misconduct.

(b) Licensee and its Contractors and/or agents shall give ICRRA timely notice of any release, violation of environmental laws or inspection or inquiry by governmental authorities charged with enforcing environmental laws with respect to ICRRA's rail corridor that relates to the Project, as applicable to this Agreement. Licensee also shall give ICRRA timely notice of all measures undertaken by or on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.

(c) In the event that ICRRA receives notice from Licensee or otherwise of a release or violation of environmental laws which occurred or is occurring during the term of this Agreement with respect to

ICRRA's rail corridor that relates to the Project, ICRRA may require Licensee, at Licensee's sole expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation.

6. Licensee and its Contractors and/or agents shall, at its sole cost and expense, procure and keep in place at all times during the term of this Agreement, the following minimum insurance coverage, to be further documented in a Certificate of Liability Insurance to be provided to ICRRA prior to access and/or use of the Rail Line:
- (a) Commercial General Liability insurance or Railroad Liability insurance, providing bodily injury, personal injury and property damage coverage, with minimum limits of not less than \$5,000,000 per occurrence and \$10,000,000 in the aggregate, and specifically noting that any 50-foot Railroad Right of Way Contractual Liability Exclusion has been removed from the Commercial General Liability insurance policy. If that Contractual Liability Exclusion has not been removed, then in addition to the above, Railroad Protective Liability insurance, providing bodily injury, including death, personal injury and property damage coverage with a limit of not less than \$5,000,000 for each incident and \$10,000,000 in aggregate is required. This insurance shall contain Broad Form Liability covering the indemnity provisions contained in this Agreement. If coverage is purchased on a "claims made" basis it shall provide for at least a one year extended reporting or discovery period, which shall be invoked should insurance covering the time period of this Agreement be cancelled, unless replaced with a policy containing the same retroactive date as the policy being replaced.
 - (b) Workers Compensation and Occupational Disease insurance meeting the statutory requirements of the State of Minnesota, and Coverage B, Employer's Liability insurance, with the following minimum limits:
 - \$1,000,000 – Bodily Injury by Accident
 - \$1,000,000 – Bodily Injury by Disease per employee
 - \$1,000,000 – Bodily Injury by Disease policy limit
 - (c) Commercial Automobile Liability insurance, with coverage including onsite and offsite operations, and owned, non-owned, or hired vehicles, in an amount not less than \$1,500,000 combined single limits, including pursuant to any umbrella policy.
 - (d) If the Commercial General Liability or Railroad Liability insurance policy contains an absolute pollution liability exclusion, a separate Pollution Liability policy in an amount not less than \$5,000,000 is required.
 - (e) Each policy (except Workers Compensation) shall be endorsed to include ICRRA and Itasca County as additional insureds on a primary and non-contributory basis with respect to liabilities arising out of Licensee's obligations to ICRRA and Itasca County in this Agreement. A waiver of subrogation against ICRRA and Itasca County must be included on all the above policies.
 - (f) All risk insurance on the equipment of the Licensee, or in the Licensee's care, custody and control shall contain a waiver of subrogation of claims against ICRRA and Itasca County.
 - (g) All insurance shall be placed with insurance companies licensed to do business in the State in which the Project is located, with a current Best's Insurance Guide Rating of A- and Class X, or better. Licensee shall provide, and thereafter maintain in effect, a current Certificate of Insurance evidencing such insurance. Each policy shall provide that it shall not be cancelled or materially changed unless at least thirty (30) days' prior written notice of cancellation or change shall have been mailed by the insurance company to ICRRA at the address designated herein.
 - (h) If any portion of the activities to be conducted under this agreement is subcontracted, subcontractors must meet all applicable provisions of this Section.
 - (i) The furnishing of insurance required by this Section shall in no way limit or diminish the liability or responsibility of Licensee as provided under any Section of this Agreement.

ARTICLE III

1. Rights granted to the Licensee are subject and subordinate to the prior and continuing right and obligation of ICRRRA to use and maintain its entire rail corridor, and are also subject to the right and power of ICRRRA to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, signal, communication, fiber optics or other wire lines, pipelines and other facilities upon, along, or across any or all parts of said rail corridor, any of which may be freely done at any time by ICRRRA without liability to the Licensee or to any other party for compensation or damages.
2. The Licensee's rights are also subject to all outstanding rights to the rail corridor (including those in favor of the Licensee and others), and subject to any licenses or easements granted by ICRRRA, or of record, so long as such agreements do not materially interfere with Licensee's ability to construct the Project, and the right of ICRRRA to renew and extend same, and are granted without covenant of title or quiet enjoyment.
3. It is mutually agreed that this Agreement may be terminated by either party upon thirty (30) days' notice in writing to be served upon the opposite party; and upon the expiration of the time specified in such notice this Agreement, and all rights and privileges of the Licensee thereunder shall absolutely cease. In addition, ICRRRA may terminate this Agreement upon any breach or default of the terms of this Agreement if said breach or default is not remedied within thirty (30) days of ICRRRA's written notice to Licensee of the breach or default. In either case, no termination hereof shall release the Licensee from any liability or obligation hereunder, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or, if later, the date when the rail corridor is restored to its condition at the date of this agreement.
4. Any notice to be given by ICRRRA to the Licensee hereunder shall be deemed to be properly served if the same be deposited in the United States mail, postage prepaid, addressed to the Licensee at Mesabi Metallics Company, LLC, 17113 County Road 58, PO Box 25, Nashwauk MN 55769. Any notice to be given by the Licensee to ICRRRA hereunder shall be deemed to be properly served if it be deposited in the United States mail, postage prepaid, addressed to Karin Grandia, Itasca County Engineer, 123 NE 4th Street, Grand Rapids, MN 55744.
5. In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.
6. It is understood and agreed that this Agreement shall not be placed of public record.
7. All the covenants and provisions of this Agreement shall be binding upon the heirs, legal representatives, successors and assigns of Licensee. No assignment by Licensee of any interest in this Agreement shall be binding upon ICRRRA without the prior written consent of ICRRRA in each instance.
8. Court jurisdiction regarding any disputes or action under this Agreement shall be in the District Courts of the State of Minnesota, without the right of removal to the United States District Courts, except with respect to matters that are under the exclusive jurisdiction of the Federal Courts of the United States, which shall be brought and/or defended in the Federal District Court sitting in Minneapolis, Minnesota. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Minnesota, without giving effect to the principles of conflict of laws.
9. To the maximum extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this Agreement.
10. The waiver by ICRRRA of the breach of any provision herein by Licensee shall in no way impair the right of ICRRRA to enforce that provision for any subsequent breach thereof.

11. This Agreement is the full and complete agreement between ICRRA and Licensee with respect to all matters relating to use of the Project, and supersedes any and all other agreements between the parties hereto relating to use of the Project.

For Licensee:

Mesabi Metallica Company, LLC

By: _____

Name: _____

Title: _____

Date: _____

For ICRRA:

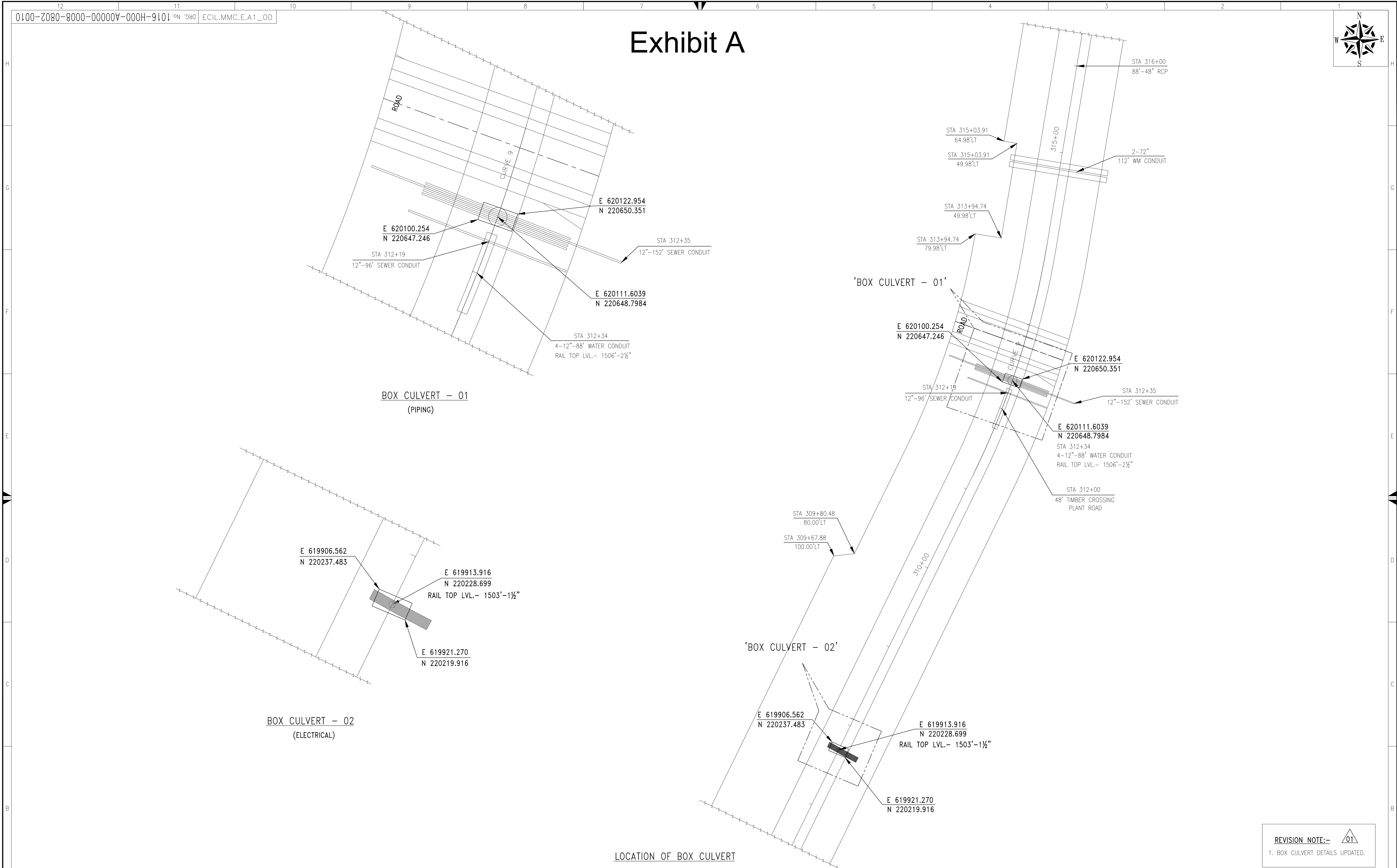
Itasca County Regional Railroad Authority

By: _____

Name: Karin Grandia

Title: County Engineer

Date: _____



ALL APPLICABLE HSE STANDARDS & LEGAL REQUIREMENTS ARE CONSIDERED & CHECKED.				NAME JIGAR P.				SIGN DATE 22.11.24			
12				11				NOTES			
1. ALL DIMENSIONS & LEVELS ARE IN FEET-INCHES. 2. GRADE OF CONCRETE FOR R.C.C. WORK SHALL BE 5000-PSI. 3. DEFORMED REINFORCEMENT SHALL CONFORM TO ASTM-A615/A615M 4. REFER DRG NO. 101600000GLD60H002 FOR GENERAL NOTES. 5. BEARING PRESSURE AT THE FOUNDING LEVEL SHALL NOT EXCEED 2.5 kips/sq-ft. 6. RMC SHALL CONFORM TO ASTM C-94/C-94m-2004 STANDARD SPECIFICATION OF READY MIXED CONCRETE 7. FILLING SHOULD BE DONE AS RECOMMENDED IN GEOTECHNICAL REPORT. 8. LAPS SHALL BE STAGGERED IN SUCH A WAY THAT NOT MORE THEN 25% OF BARS ARE LAPPED AT ONE PARTICULAR SECTION. 9. DISCREPANCY IN DRAWING, IF ANY, SHALL BE BROUGHT TO NOTICE OF THE SITE ENGINEER/CONSULTING ENGINEER				01 INTERPLANT CONDUIT LAYOUT OF BENEFICIATION AREA 1016-H000-A00000-0009-0923-0002				Sr.No. References Drawings Dwg. Nos.			
LEGEND:- N.G.L. - NATURAL GROUND LEVEL				THIS DOCUMENT DISCLOSES PROPRIETARY INFORMATION OF ESSAR CONSTRUCTIONS INDIA LIMITED. IT MAY BE REPRODUCED OR DISCLOSED ONLY WITH THE WRITTEN PERMISSION AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF ESSAR CONSTRUCTIONS INDIA LIMITED.				C 01 21.02.25 REVISED AS REV. 01 MARKED & ISSUED FOR CONSTRUCTION PRATHAM G SUNIL P JIGAR P			
C 00 22.11.24 ISSUE FOR APPROVAL. GANESH P. KETAN N. JIGAR P.				A 00 22.11.24 ISSUE FOR APPROVAL. GANESH P. KETAN N. JIGAR P.				C 01 21.02.25 REVISED AS REV. 01 MARKED & ISSUED FOR CONSTRUCTION PRATHAM G SUNIL P JIGAR P			
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FINAL APPROVE JIGAR P. 22.11.24				FINAL APPROVE JIGAR P. 22.11.24				FINAL APPROVE JIGAR P. 22.11.24			
ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1				ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1				ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1			
CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED				CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED				CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED			
CLIENT : MESABI METALLICS COMPANY LLC.				CLIENT : MESABI METALLICS COMPANY LLC.				CLIENT : MESABI METALLICS COMPANY LLC.			
PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA				PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA				PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA			
UNIT: 7 MTPA PELLET PLANT				UNIT: 7 MTPA PELLET PLANT				UNIT: 7 MTPA PELLET PLANT			
SUB UNIT: RECLAIM WATER PUMP HOUSE				SUB UNIT: RECLAIM WATER PUMP HOUSE				SUB UNIT: RECLAIM WATER PUMP HOUSE			
MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK				MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK				MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK			
DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1				DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1				DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1			
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00-0802-00	A000000-000H-1016	DWG. No.	ECIL.MMC.E.A1_00

VIEW + 'B-B'

ALL APPLICABLE HSE STANDARDS & LEGAL REQUIREMENTS ARE CONSIDERED & CHECKED.	NAME	SIGN	DATE
	JIGAR P.		16.11.20

- NOTES

REFERENCE

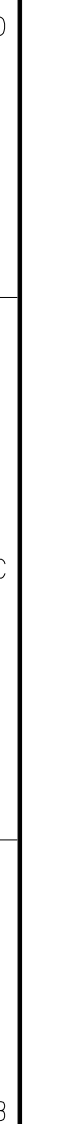
C	01	21.02.25	REVISED AS REV. 01	MARKED & ISSUED FOR CONSTRUCTION	PRATHAM G	SUNIL P	JIGAR P	
A	00	22.11.24	ISSUE FOR APPROVAL		GANESH P	SUN P, JIGAR N	JIGAR P	
I.P.	REV.	DATE	DESCRIPTION		DRN	CKD	APD	FINAL APPROVAL
R E V I S I O N S								
					JIGAR P			

FINAL APPROVE	
JIGAR P.	

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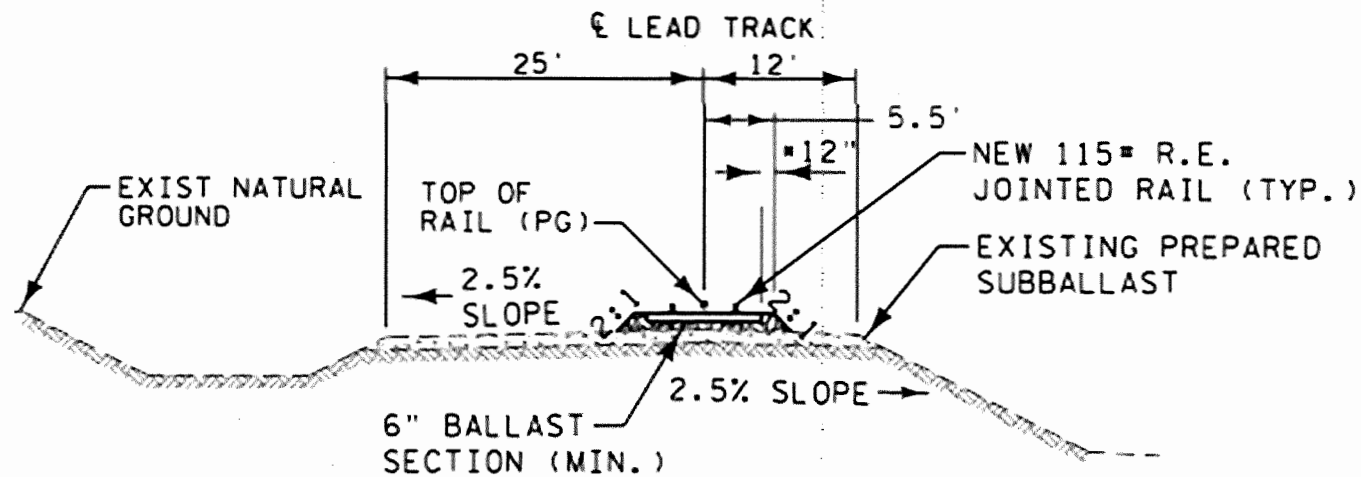


SECTION - 'A-A'
(FOR ELECTRICAL)



REVISION NOTE:-  01
SECTION "A-A" DETAILS UPDATED.

Exhibit A



TYPICAL SECTION WEST LEG OF WYE AND SINGLE LEAD TRACK WITH ACCESS ROAD

NOT TO SCALE
STA. 0+00 TO STA. 40+57
STA. 120+09 TO STA. 330+00

- VARIES FROM 1' TO 4' - SEE
WALKWAY DETAIL SHEET 5 OF 40

Exhibit B – Track Specifications

Track Removal and Replacement Agreement

S-1 (2105) RAILROAD TRACK BALLAST

S-1.1 Material. Track ballast shall conform to AREMA Size No. 5 for the yard tracks and walkways. The Lead and Wye Tracks track ballast shall conform to AREMA Size No. 3, 4A or 4. Ballast shall be free from loam, dust, and other foreign particles and shall not have less than 75% crushed particles with two or more fractured faces, unless otherwise approved by County Engineer. Processed ballast shall be hard, dense, of angular particle structure, providing sharp corners and cubicle fragments and free of deleterious materials. Ballast materials shall provide high resistance to temperature changes, chemical attack, have high electrical resistance, low absorption properties and free of cementing characteristics. Materials shall have sufficient unit weight (measured in pounds per cubic foot) and have a limited amount of flat and elongated particles. Gradations for ballast shall conform to AREMA recommendations in Chapter 1, Part 2, Table 1-2-2 of the current AREMA documents and shall conform to the limiting values of testing in Table 1-2-1 within the same section of the AREMA recommendations. Ballast shall be from a source approved by the County Engineer and conform to the quality requirements as specified herein. The Contractor shall furnish test results of the ballast to the County Engineer prior to delivery to the site, in accordance with AREMA recommendations. The test results shall be evidence that the Contractor has or has not met the requirements. Additional samples shall be tested by the independent laboratory when, in the opinion of the County Engineer, the quality of ballast rock has changed. All testing will be at the expense of the Contractor.

S-1.2 Contractor shall unload all crushed rock ballast material, surface, tamp, line, finish surface, regulate, and power broom new track constructed, crossings prior to installation of panels, and turnouts. All tracks shall be surfaced and tamped as soon as possible after unloading ballast.

Ballast shall be placed to a minimum depth of six (6) inches below the bottom of the ties at grade point to the dimensions and widths as shown on the Drawings. Ballast shall be compacted by approved tamping methods to hold track firmly in place. All tamping operations shall be performed with an approved power tamper machine. Super elevation of the track structure through curves is to be provided for in the rock ballast section. Design top of rail profile applies to the low rail of each track. If track is super elevated, a minimum of six (6) inches of rock ballast is to be placed beneath the ties below the low rail of each track. Contractor will direct the unloading and distribution of ballast and will be fully responsible for all aspects of the unloading and distribution, subject to approval by the ICRRRA.

Contractor will utilize a ballast regulating machine to provide the ballast section as shown in the Typical Track Section of the Drawings. No dirt or foreign materials will be allowed into the ballast section. After regulating ballast the turnouts, the switch points, switch rods, connecting rods, and guard rails will be pocketed and cleaned of ballast. Ballast remaining between the rails at the frog crotches and at the switch points shall be removed by hand. In addition, ballast shall be removed to a point below the top of tie as necessary through the switch area in order to allow unrestricted movement of the switch points, switch rods and connecting rod.

After track has been brought to true surface, elevation, and grade it shall be given a final lining and placed in true alignment conforming to design and the ballast and walkway ballast shall be trimmed neatly to the dimensions and widths of the Typical Track Section on the Drawings.

Surplus ballast shall be spread evenly along the ballast slopes. Dressing of the ballast by placing earth higher than the toe and thus preventing proper drainage will not be permitted. After all ballast placement has been completed, the track shall be given a complete power broom finish with approved machinery.

Contractor shall insure that the top of ballast rock matches the top of tie surface and that no excess ballast remains on either the top of rail, top of tie, base of rail, or top of tie plate, spike, or anchor.

Contractor shall exercise caution while regulating ballast shoulders so as to avoid track misalignments and to avoid obstructing adjacent drainage ditches, structures, or culverts with ballast, dirt, vegetation, or other material.

If Contractor obstructs an adjacent drainage ditch, structure, or culvert, he shall initiate the cleaning of those as soon as possible, at his expense.

S-2 (2540) RAILROAD TRACK

The Contractor shall furnish and install all track material and all material shall be in accordance with AREMA current published recommendations and BNSF Specifications and standards included in Appendix "A", along with any additional criteria indicated on the Drawings and as indicated below

S-2.1 Rail section shall be new 115# RE section or greater jointed rail. Minimum rail length shall not be less than 39 feet with no more than 10% shorts down to 20 foot lengths drilled 3-1/2" x 6" x 6" for 36" angle bars and shall be free from defects. Rails shall be unloaded, stored or distributed along the roadbed in such a manner and by use of such equipment as will prevent injury to them. The method and equipment used by the Contractor will be subject to the approval of the County Engineer.

Assemble joints before fastening rails to ties, using joint bars with full number of track bolts and spring washer for each bolt, first removing loose mill scale and rust from contact surfaces or joint bars and rails.

The right-hand rail facing in direction of increasing stationing shall be spiked to ties, and the opposite rail shall be brought to gage of 4' 8-1/2", measured at right angles between the rails, on a plane 5/8" below top of rail. A track gauge manufactured for the purpose of measuring gage should be used rather than a tape measure. Gage is to be checked at every third tie.

Do not strike rail directly with a maul, either on top when driving spikes, or on side to obtain track gage. Under no circumstances must rail be struck in web with tool or any metal object.

Rail shall be laid with staggered joints. Joints shall be located as nearly as possible to the middle of the opposite rails with the following variation: (a) except through turnouts, the staggering of the joints on one side shall not vary more than 6' in either direction from the center of the opposite rail. Rails of miscellaneous lengths, not less than 25 feet shall be used at suitable intervals for maintaining the proper stagger of joints on curves to minimize the cutting of full length rails and to prevent the occurrence of joints within road crossings.

An abrasive rail saw will be used to cut rail square and clean. Holes for complete bolting of cut rails shall be drilled by an approved type of rail drill. Under no circumstances shall new holes be drilled between two holes already drilled. Cutting rails or drilling holes in cut rails by means of acetylene or electric torch will not be permitted.

S-2.2 Anchors. Rail anchors shall be new, drive-on type, sized to fit the rail section for standard track construction..

S-2.3 Creosote hardwood ties shall be new 7" x 8"x 8'-6" IG for the with 100% anti-splitting devices. Ties shall be placed on 21-1/2" centers except at those locations indicated below. Creosote hardwood ties

for track through timber panel crossings shall be 7" x 9" x 8'-6" grade and shall be placed on 19-3/16" centers per BNSF standards.

Ties will be unloaded and handled in such a manner as not to damage ties, using approved handling equipment. When handling or spacing timber ties into position the use picks, hammers, mauls or shovels will not be permitted. Tie tongs shall be used for this purpose.

Cross ties shall be placed at design spacing of 21.5-inch center to center (22 ties/39 feet) for normal track construction not including road crossings, on the finished subgrade, perpendicular to center line of track with the right hand ends of ties being parallel looking ahead stationing. On curves, align the ties to the inside of the curve. The line side of the ties shall be placed 22-3/4" from the end of tie to the gage of the nearest rail.

Top surface of ties shall be clean and smooth to provide full bearing for tie plates. Lay wood ties with heartwood face down, and if not possible to determine position of the heartwood, lay the widest surface of the tie down.

If spikes are pulled from any tie, hole shall be filled by driving in a treated wood tie plug the full depth of the hole. Boring or adzing of ties shall be kept to a minimum.

S-2.4 Tie Plates. Tie plates may be new or secondhand, free of injurious defects and foreign material, conforming either to AREMA Plan 7 (7-3/4" x 13") or Plan 8 (7-3/4" x 14"), with 6 or 8 hole punch, and shall fit rail being used. All plates will be double-shouldered.

Double-shouldered tie plates will be used on all ties and set in position with cant surface sloping inward, making sure they are firmly seated and have full bearing. After rails are in place, shoulder of plates shall be in full contact with outside edge of rail base.

S-2.5 Joints. New or secondhand joints, free of foreign material and without injurious defects, and with 6 bolt holes, 36" in length, toeless and headless conforming to AREMA recommendations, shall be furnished to fit rail section for which they are designed. Bolt holes must be drilled with proper equipment and to the proper diameter of the track bolt furnished. Torch-cutting of bolt holes will not be allowed. New joint bars are required where new track is installed.

New compromise joints of manufactured type (welded or homemade not acceptable), free of foreign material and without injurious defects, shall be furnished and used where rail section (weight or design) changes. Rail section by weight shall not be compromised where difference in weight is in excess of 25 lbs. When this becomes necessary, a rail of some weight between the two different rail sections, in excess of 25 lbs., shall be used and the compromise made in two steps. The length of the medium-weight rail should be 39 feet where practical. Compromise joints shall be sized to fit the corresponding rail weight and shall be 6-hole bars.

All joints, to the extent possible, are to be suspended between ties. If necessary to force joint bar into position, strike lower edge of bar lightly with 4-lb. maul. Do not drive bolts in place. All rail joints shall be fully bolted. The nuts of all bolts shall alternate uniformly inside and outside of each joint. All track bolts shall be installed when the rail is laid and nuts turned up snug, after which all bolts shall be tightened three times; first after track has been brought to approximately true alignment; second, after it has been given the first raise of ballast; and finally, immediately before completion and acceptance of the Work. Tighten bolts in sequence, beginning at joint center and working out to ends. Bolts are to be tightened to a range of 20,000 to 30,000 ft-lbs. tension. If a bolt tightening machine is not used, a standard track wrench with a 42" long handle may be used by men of average strength or bolt tighteners

adjusted to bolts tightened by hand, as described above.

At the time of installation, rail expansion shims of softwood not over 1" width shall be placed between the ends of adjacent rails to insure proper space allowance for expansion required by the rail temperatures relative to lengths of rail as indicated in the AREMA recommendations in Chapter 5, Part 5, Table 5-5-2. Shims are to be removed after all joint bolts have been tightened.

S-2.6 Spikes. New 5/8" x 6" high carbon, prime cut track spikes shall be furnished except where premium/elastic fasteners are to be applied. All spikes shall conform to AREMA recommendations.

Rails shall be spiked to every tie, using not less than 2 spikes for each rail at each tie. Drive spikes through tie plate holes into ties, located diagonally opposite each other but not less than 2" from edge of tie. Start and drive spikes vertically and square with rail. Take care to avoid slanting, bending, or causing sideways movement of spike.

Each rail will be spiked with two spikes per tie plate on tangent track staggered with inside spikes to the east or north and outside spikes to the west or south. On curves a third spike is required on the gauge side of the rail.

When spikes are driven by machine, work shall be closely supervised to see that they are driven with hammer centered exactly over each spike head and drive spike vertically. Set stop bolt on the machine to prevent over-driving.

Withdraw spikes that are incorrectly driven and fill hole by driving a creosote treated tie plug to full depth of hole. Locate replacement spike at another hole in tie plate and tie.

S-2.7 Track Bolts & Nuts. 1" x 6" new track bolts and nuts shall be furnished and conform to AREMA recommendations Bolts and corresponding nuts shall be correct size and length to fit rail if differing rail section and drilling dictates otherwise.

S-2.8 Lock Washers. One new, properly sized spring lock washer conforming to AREMA recommendations shall be installed on each track bolt.

S-2.9 Anchoring. Rail anchoring shall be provided at a minimum rate of 28 anchors per 39' panel, i.e. box anchor every third tie. In order to avoid tie skewing, anchors are to be installed in the same direction against the same tie on both rails. Anchors must be installed to insure firm bearing against the adjacent tie. Anchors improperly installed will be removed and applied correctly without additional charge by the Contractor. Anchors damaged by overdriving, etc., will be replaced at the Contractor's sole expense. Anchors shall be installed only after the track has been raised, lined and ties re-spaced, following all ballast operations.

S-3 (2540) ALIGN, SURFACE, DRESS – RAILROAD

This work shall consist of aligning, surfacing, and dressing of railroad track; in accordance with the applicable Mn/DOT Standard Specifications, the details shown in the Plans, and the following: Tamping shall be performed by an approved on-track tamper, of the vibratory or squeeze type, with automatic alignment equipment. The tamper shall be equipped with its full complement of tamping tools. Each timber tie shall be tamped with a minimum of four insertions.

Track shall have true alignment, with all swings, dog legs, or flat spots corrected at Contractor's

expense. A tolerance of 1/2" in 62 feet will be allowed.

Tangent track shall be raised to zero x-level with no exceptions. Any deviations shall be corrected at the Contractor's expense.

Curves shall be surfaced to the designated super elevation called for in the project plans. The outer rail shall be raised to provide the proper spiral and curve super elevation specified. The Contractor will be responsible for staking out the curves.

During the surfacing operation, all "down track ties" shall be cleaned off and tamped with a mechanized tamper. All track ties shall be plugged, plated, and respiked.

The Contractor will be required to exercise quality control at all times, i.e. driving down of high spikes, correcting any hanging tracks ties and other corrections considered incidental to the work. All turnouts and crossing shall be surfaced and lined in conjunction with the surfacing program, unless otherwise specified.

Ballast must be dressed and evenly distributed immediately after surfacing. Cribs shall be filled to within 1-inch from the top of the ties. On jointed track ballast shall be dressed to provide for a minimum 12" shoulders.

Alignment, Surface & Dressing of turnouts will not be separately measured. Each track through the turnout will be measured by the linear foot of track for payment.

No part of the track structure will be raised more than four (4) inches in any one lift. New track construction will have to be worked more than once and the Contractor will have to apply additional ballast to conform to the ballast cross section shown within the Typical Track Section in the Drawings. All ties are to be fully tamped before proceeding with any additional lift.

Power tamping machines are to be used throughout the limits of track construction, track lining, and turnout construction.

Contractor will raise and surface track with machines having a minimum of eight tamping feet per rail, each foot will be replaced once its aggregate size is reduced to one and one-half inches by three inches (1-1/2" x 3"). Each tie will be tamped with a minimum of two insertions per lift at an inserting depth of not less than one and one-half (1-1/2) inches below the tie bottom.

These power tamping machines being multi-tooled, automatic tamping machines having automatic profile reference beams of not less than seventy five (75) feet, and having tamping pressures sufficient to close the ballast beneath each tie.

Manual tamping will not be allowed unless authorized in writing by the County Engineer. If manual tamping is authorized, then it is to be performed using AREMA approved tamping tools appropriate for the type of ballast being placed.

In manually raising mainline track, not less than eight (8) jacks shall be used simultaneously per thirty-nine (39) foot rail panel, with jacks spaced uniformly throughout the panel. No jack shall be placed nearer than twelve (12) inches from the end of any joint bar. All jacks shall be set plumb and both rails shall be raised at the same time and as nearly uniformly as possible. The use of powered track jacks for making track raises will be acceptable to the County Engineer. No single lift shall exceed four (4) inches in compacted thickness.

Each lift is to be tamped from a line fifteen (15) inches inside each rail on both sides of and to the ends of the ties. Center area between these limits shall be filled lightly with ballast but not tamped. Tamping shall proceed, simultaneously, at both ends of the tie making sure ballast is forced directly under the ties and against the sides and ends of the ties.

Too many insertions with a power tamper may cause a center bound track condition. Generally two (2) squeezes per tie up to one and one-half (1-1/2) inch of raise with one additional insertion and squeeze for each additional one (1) inch of raise is preferred.

When the track has been raised to within two (2) inches of final grade and properly compacted by traffic, the final lift shall be made by raising the track up to grade stake elevation making necessary allowance for settlement. The ballast shall be applied under the ties for their entire length. Unless otherwise authorized, this final lift shall be tamped by approved tamping machines. The amount of super elevation through curves as indicated by the Drawings shall be provided for in each instance.

At turnouts, tamp ballast uniformly for the full length of the ties. The straight side at the turnout is to be used as the line rail.

In locations where power tampers cannot fill and compact ballast, such as at frogs, guard rails, switch portions of turnouts, and head blocks, etc., provisions must be made to mechanically tamp with air or other power tamping tools.

During raising and tamping, if any crib area is void of ballast below the bottom of the tie then the area of the track is to be re-tamped following the application of additional ballast.

While raising and tamping, sufficient spot boards, track level boards, or other standard surfacing devices shall be constantly used to insure correct surface and cross level.

Contractor shall finish each point on the track to within a maximum of one-half (1/2) inch elevation from zero cross level on tangent, or desired super elevation on curves. Average cross level on tangent and super elevation on curves will be as specified.

Contractor shall finish the track so that the difference in cross level between any two points less than sixty-two (62) feet apart on tangents and on curves between the spirals must be no more than one (1) inch. Deviation from zero cross level at any point on tangent or from designated elevation on curves between spirals may not be more than one half (1/2) inch. Variations in cross level on spirals in any thirty-one (31) feet may not be more than three-quarters (3/4) inch. Track will be finished so that the deviation from uniform profile on either rail at the mid-ordinate of a sixty-two (62) foot chord may not be more than one and one quarter (1-1/4) inch.

Contractor shall finish the track so that the horizontal alignment between any two points sixty-two (62) feet apart on tangent track will deviate from a straight line by no more than three-quarters (3/4) of an inch. Mid ordinate of a sixty-two (62) foot chord between two points on the gage side of the outer rail will be one inch per degree of curve with an allowable tolerance of plus or minus five-eighths (5/8) of an inch.

Contractor shall ballast and surface through curves to conform with the super elevations specified herein. The low rail in each curve will be the profile rail. The high rail in each curve will be the line rail.

All newly constructed or lined curves, although not spiraled, shall be constructed with super elevation. Super elevation shall be gradually placed into each end of the simple curves at the rate of one (1) inch per forty-four (44) feet of trackage. The full super elevation indicated on the Drawings shall be provided for within the remainder of the simple curve between the ends of these transitions.

If a curve is lined in, after the track has been surfaced and regulated to the design ballast cross section, then it will be the responsibility of the Contractor to cut-in a new piece of rail not less than 19'-6" in length and account for joint gap, drilling, cutting of rail and bolting of joints as specified herein at no additional cost to the ICRRA

After track has been brought to true surface, elevation, and grade, it shall be given a final lining and placed in true alignment and grade conforming to the elevations and alignment according to the Drawings and the ballast dressed to the design ballast cross section.

Line and grade stakes will not be disturbed or removed until approval has been received from Engineer.

Line stakes are to be set prior to placement of wood ties; prior to final ballast raise; and prior to final lining.

Grade stakes are to be set identifying the design top of profile rail elevations. Care is to be exercised to avoid disturbing or removing those stakes until approval has been received from the County Engineer.

When raising track, the Contractor has a tolerance of plus or minus one-half (1/2) inch to the design grade. If not raised to the established grade, then the Contractor will unload ballast in sufficient quantity and continue to surface the track to comply with the tolerances.

All ties are to be straightened and re-spaced as necessary immediately prior to unloading ballast for the final raise.

If the Contractor raises the track too high to comply with the allowable tolerance, Contractor, at his expense, will excavate the ballast sufficiently to lower the track and then surface the track again to bring it into full conformity.

Contractor will notify the County Engineer when any stake or marker has been disturbed or destroyed. The stakes must be replaced by the Contractor at his expense.

When track is lifted or jacked, care must be exercised by the Contractor to avoid over stressing or permanently bending the rail, joints, or turnout components.

Contractor, at his expense, will correct any down or skewed tie that is a result of his tamping and raising the track. Tie plates will be positioned so that the shoulder is against the outside base of rail for the entire length of the shoulder.

Contractor, at his cost, will re-drive all spikes knocked loose and will replace all spikes removed.

Contractor, at his cost, will replace and/or adjust all tie plates or rail anchors knocked off or that worked loose or were damaged during the surfacing and regulating. The anchors must remain matched across from each other on each rail. Tie plates must remain square to the tie.

As an integral part of the surfacing and regulating operations, Contractor will restore any joints, bolts, or switch material which is damaged or loosened.

Contractor is responsible to ensure that the partially ballasted track in his work area does not buckle out of alignment. If a misalignment of the track occurs as a result of the Contractor's operations, he must correct at his own expense.

S-4 AGGREGATE FOR SUBBALLAST AND SERVICE ROADS

For subballast and service road restoration, class 5 material meeting 2016 Mn/DOT 3138 specifications are required.

S-5 GRADING & EMBANKMENT

The work covered by this section of the specifications consists of furnishing all plant, labor, material and equipment and performing all operations in connection with construction of track roadbed, including clearing and grubbing, excavation, construction of embankments and incidental items, all in accordance with the contract drawings and specifications.

The Contractor shall load, haul, spread, place and compact suitable materials in embankments and shall finish the embankments to the grade, slope and alignment as shown in the plans. Suitable materials shall consist of mineral soils free from organics, debris, and frozen materials. Embankment slopes shall be compacted and dressed to provide a uniform and dense slope. Embankments shall be built with approved materials from excavation of cuts or from borrow unless otherwise shown on the plans.

If materials unsuitable for embankments (organics, debris, brush and trees, etc.) are encountered within the areas to be excavated, or material existing below the designated subgrade in cuts or within areas on which embankments are to be placed are of such nature that stability of the roadbed will be impaired, such materials shall be removed and wasted or stockpiled for other use. Topsoil removed from embankment areas shall be spread uniformly over the embankment slopes.

Unsuitable material removed from embankment foundations or below subgrade elevation in excavation areas shall be replaced to grade with suitable material compacted as specified for embankments in these specifications.

Wherever an embankment is to be placed on or against an existing slope steeper than four horizontal to one vertical, such slope shall be cut into steps as the construction of the new embankment progresses. Such steps shall each have a horizontal dimension of not less than three feet and a vertical rise of one foot.

At all times, the Contractor shall operate sufficient equipment to compact the embankment at the rate at which it is being placed. Compaction shall be accomplished by sheep's foot rollers, pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment. Use construction procedures and drainage design that will provide a stable roadbed.

Each layer in embankments made up primarily of materials other than rock shall not exceed 6" in loose depth and shall be compacted to the dry density as specified hereinafter before additional layers are placed. All embankments shall be compacted to a density of not less than 95% of the maximum standard laboratory density, and not more than +4 percentage points above the optimum moisture content, unless otherwise specified on the drawings. The standard laboratory density and optimum moisture content shall be the maximum density and optimum moisture as determined in accordance with ASTM Designation: D 698 (Standard Proctor Test). A minimum of 2 tests shall be performed per 2 foot lift. Tests shall be approved geotechnical testing firm and copies of soil test results shall be furnished to ICRRA.



**ITASCA COUNTY
REGIONAL RAILROAD AUTHORITY**

Itasca County Courthouse
123 NE 4th Street
Grand Rapids, MN 55744

Tuesday, March 11, 2025

IV.2.

REQUEST FOR BOARD ACTION: RBA-2025-312

DEPARTMENT: Transportation

TIME REQUESTED: 5 Minutes

PRESENTER: Karin Grandia

AGENDA ITEM:

Electrical Box Culvert Crossing Agreement

BOARD ACTION REQUESTED:

Authorize the execution of the Electrical Box Crossing Agreement with Mesabi Metallica Company, LLC by ICRRA Chair .

BACKGROUND:

Mesabi Metallica Company has requested authorization to remove the existing rail line at approximately station 307+25 for the installation of a concrete box culvert that will be a conduit for electrical lines. This agreement requires Mesabi Metallica to provide ICRRA with a performance and payment bond for the reinstallation and restoration of the tracks and ICRRA ROW once the box culvert has been installed.

SUPPORTING DOCUMENTATION:

1. Electrical Piping Box Culvert Crossing Agreement

RESULT:	APPROVED (3 TO 0)
MOVER:	Commissioner John Johnson
SECONDER:	Commissioner Cory Smith
AYES:	Cory Smith, John Johnson, Casey Venema
ABSENT:	Terry Snyder
VACANT:	District #4

ITASCA COUNTY REGIONAL RAILROAD AUTHORITY
AGREEMENT FOR ELECTRICAL BOX CULVERT CROSSING

AGREEMENT, Made this 11th day of March, 2025; subject to the terms and conditions set forth herein between **Itasca County Regional Railroad Authority**, a regional railroad authority organized and existing as a political subdivision and local government unit under the laws of the State of Minnesota (hereinafter called "ICRRA"), its successors and assigns, party of the first part; and **Mesabi Metallica Company, LLC**, a Minnesota limited liability company, (hereinafter whether one or more persons or corporations called the "Licensee"), party of the second part.

RECITALS

The Licensee has requested of ICRRA permission to remove and replace the track near Station 307+25, to allow for the construction of the 7' x 8' box culvert, and in the manner shown in the approved plans, marked Exhibit A and made a part hereof, which permission ICRRA is willing to grant upon conditions hereinafter set forth.

ARTICLE I

In consideration of the covenants of the Licensee hereinafter set forth, ICRRA hereby agrees to allow Licensee to construct, upon its rail corridor, except as set forth elsewhere herein, at the location shown on Exhibit A, an approved project (hereinafter the "Project"), and gives Licensee a non-exclusive license and permission to enter upon and cross ICRRA's rail corridor and tracks during the term of the agreement.

This agreement shall be effective upon execution by both parties, subject to prior termination as hereinafter described.

ARTICLE II

In consideration of the foregoing license and permission given by ICRRA the Licensee hereby agrees:

1. a. Licensee shall construct the Project to the plans and specifications marked Exhibit A & B or approved by ICRRA. If ICRRA is required to incur any expenses relative to the Project, Licensee agrees to reimburse ICRRA for said expenses within thirty (30) days after invoices are rendered for said expenses.
b. All work, including restoration, within ICRRA Right-of-Way must conform to the specifications in Exhibit B.
c. The trackwork shall be performed by an ICRRA preapproved railroad contractor. Original track materials may be reused if not damaged during the removal process. Any damaged or missing track material shall be replaced with materials meeting the specifications outlined in Exhibit B, by the Licensee at their own cost. The alignment and surface shall match the existing track.
c. Subballast shall meet the standards outlined in Exhibit B and the Typical Section found in Exhibit A.
d. The embankment shall meet the industry standards outlined in Exhibit B.
e. The Licensee shall procure a payment and performance bond payable to ICRRA for the duration of this construction in the amount of \$150,000.00.
f. Licensee warrants the work for 2 years after completion of the work. If the track settles or is not in compliance with Federal Railroad Administration Class 3 standards, the ICRRA may complete the required repairs and the Licensee agrees to reimburse ICRRA for said expenses within thirty (30) days after invoices are rendered for said expenses
- 2 Except as provided herein, Licensee agrees that under no circumstances will Licensee or Licensee's agents dig in or disturb the surface of ICRRA's corridor without written permission of ICRRA.

3. Prior to any Project work in the ICRRA right of way, five (5) days advance notice must be given to ICRRA's representative – Karin Grandia, Itasca County Engineer, at Itasca County Courthouse, 123 NE 4th Street, Grand Rapids, MN 55744, telephone: 218-327-2853. LICENSEE will allow access to ICRRA to observe and inspect the work as it proceeds. ICRRA will have the authority to reject any work that does not comply with this agreement or the attached plans.
4. (a) Except as set forth in Section 4(b), Licensee and its Contractors and/or agents shall indemnify and hold harmless ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA) for all losses, damages, injuries, death and expenses, including claims under the Federal Employees Liability Act (45 U.S.C. 51), or any applicable safety act (45 U.S.C. 20101 *et al*), including lost profits, consultant and attorney fees, and environmental clean-up or remediation costs and expenses arising in any manner out of the failure of Licensee to take any action required by this Agreement, the condition of the right-of-way or any equipment or property thereon, or any act or omission of Licensee, its employees, agents or contractors ("Licensee's Invitees") arising out of the Project regardless of whether such loss, damage, injury, death or expense is caused or contributed to by the negligence of ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA), except to the extent any such loss, damage, injury, death or expense is proximately caused by ICRRA's and/or ICRRA's agent's or contractors (including any rail operator designated by ICRRA) gross negligence or intentional misconduct.
 - (b) Whenever any Licensee or any of Licensee's Invitees make any claim relating to the Project for personal injury or death against ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by ICRRA) within the meaning of the Federal Employers' Liability Act (45 U.S.C. 51), or any applicable safety act, (45 U.S.C. 20101 *et al*) for any incident caused, wholly or in part, by property, equipment or condition belonging to or under the control of Licensee, or claims or alleges that he or she is an employee of ICRRA or is furthering the operational activities of ICRRA, Licensee agrees to indemnify and hold harmless ICRRA and/or ICRRA's agents or contractors (including any rail operator designated by the ICRRA) for all losses, damages, costs or expenses related to such claim, regardless of ICRRA's and/or ICRRA's agents or contractors (including any rail operator designated by the ICRRA) negligence, other than gross negligence or intentional misconduct.
 - (c) Notwithstanding the above, ICRRA and Licensee agree that, with respect to this Section4, ICRRA's agents or contractors (including any rail operator designated by ICRRA) are third-party beneficiaries to this Agreement.
5. (a) Licensee and its Contractors and/or agents shall comply with all federal, state and local environmental laws and regulations, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA). Licensee shall not release or suffer the release of oil or hazardous substances, as defined by CERCLA, on the Project. Notwithstanding any other requirements in this Agreement, Licensee assumes all responsibility for the investigation and cleanup of such release and shall indemnify and defend ICRRA and/or its agents or contractors (including any rail operator designated by ICRRA) for all costs and claims, including consultant and attorney fees, arising in any manner out of such release or Licensee's failure to comply with environmental laws, regardless of ICRRA's negligence, except to the extent such costs or claims are proximately caused by ICRRA's affirmative negligent act, or its gross negligence or intentional misconduct.
 - (b) Licensee and its Contractors and/or agents shall give ICRRA timely notice of any release, violation of environmental laws or inspection or inquiry by governmental authorities charged with enforcing environmental laws with respect to ICRRA's rail corridor that relates to the Project, as applicable to this Agreement. Licensee also shall give ICRRA timely notice of all measures undertaken by or on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.
 - (c) In the event that ICRRA receives notice from Licensee or otherwise of a release or violation of environmental laws which occurred or is occurring during the term of this Agreement with respect to

ICRRA's rail corridor that relates to the Project, ICRRA may require Licensee, at Licensee's sole expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation.

6. Licensee and its Contractors and/or agents shall, at its sole cost and expense, procure and keep in place at all times during the term of this Agreement, the following minimum insurance coverage, to be further documented in a Certificate of Liability Insurance to be provided to ICRRA prior to access and/or use of the Rail Line:
- (a) Commercial General Liability insurance or Railroad Liability insurance, providing bodily injury, personal injury and property damage coverage, with minimum limits of not less than \$5,000,000 per occurrence and \$10,000,000 in the aggregate, and specifically noting that any 50-foot Railroad Right of Way Contractual Liability Exclusion has been removed from the Commercial General Liability insurance policy. If that Contractual Liability Exclusion has not been removed, then in addition to the above, Railroad Protective Liability insurance, providing bodily injury, including death, personal injury and property damage coverage with a limit of not less than \$5,000,000 for each incident and \$10,000,000 in aggregate is required. This insurance shall contain Broad Form Liability covering the indemnity provisions contained in this Agreement. If coverage is purchased on a "claims made" basis it shall provide for at least a one year extended reporting or discovery period, which shall be invoked should insurance covering the time period of this Agreement be cancelled, unless replaced with a policy containing the same retroactive date as the policy being replaced.
 - (b) Workers Compensation and Occupational Disease insurance meeting the statutory requirements of the State of Minnesota, and Coverage B, Employer's Liability insurance, with the following minimum limits:
 - \$1,000,000 – Bodily Injury by Accident
 - \$1,000,000 – Bodily Injury by Disease per employee
 - \$1,000,000 – Bodily Injury by Disease policy limit
 - (c) Commercial Automobile Liability insurance, with coverage including onsite and offsite operations, and owned, non-owned, or hired vehicles, in an amount not less than \$1,500,000 combined single limits, including pursuant to any umbrella policy.
 - (d) If the Commercial General Liability or Railroad Liability insurance policy contains an absolute pollution liability exclusion, a separate Pollution Liability policy in an amount not less than \$5,000,000 is required.
 - (e) Each policy (except Workers Compensation) shall be endorsed to include ICRRA and Itasca County as additional insureds on a primary and non-contributory basis with respect to liabilities arising out of Licensee's obligations to ICRRA and Itasca County in this Agreement. A waiver of subrogation against ICRRA and Itasca County must be included on all the above policies.
 - (f) All risk insurance on the equipment of the Licensee, or in the Licensee's care, custody and control shall contain a waiver of subrogation of claims against ICRRA and Itasca County.
 - (g) All insurance shall be placed with insurance companies licensed to do business in the State in which the Project is located, with a current Best's Insurance Guide Rating of A- and Class X, or better. Licensee shall provide, and thereafter maintain in effect, a current Certificate of Insurance evidencing such insurance. Each policy shall provide that it shall not be cancelled or materially changed unless at least thirty (30) days' prior written notice of cancellation or change shall have been mailed by the insurance company to ICRRA at the address designated herein.
 - (h) If any portion of the activities to be conducted under this agreement is subcontracted, subcontractors must meet all applicable provisions of this Section.
 - (i) The furnishing of insurance required by this Section shall in no way limit or diminish the liability or responsibility of Licensee as provided under any Section of this Agreement.

ARTICLE III

1. Rights granted to the Licensee are subject and subordinate to the prior and continuing right and obligation of ICRRA to use and maintain its entire rail corridor, and are also subject to the right and power of ICRRA to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, signal, communication, fiber optics or other wire lines, pipelines and other facilities upon, along, or across any or all parts of said rail corridor, any of which may be freely done at any time by ICRRA without liability to the Licensee or to any other party for compensation or damages.
2. The Licensee's rights are also subject to all outstanding rights to the rail corridor (including those in favor of the Licensee and others), and subject to any licenses or easements granted by ICRRA, or of record, so long as such agreements do not materially interfere with Licensee's ability to construct the Project, and the right of ICRRA to renew and extend same, and are granted without covenant of title or quiet enjoyment.
3. It is mutually agreed that this Agreement may be terminated by either party upon thirty (30) days' notice in writing to be served upon the opposite party; and upon the expiration of the time specified in such notice this Agreement, and all rights and privileges of the Licensee thereunder shall absolutely cease. In addition, ICRRA may terminate this Agreement upon any breach or default of the terms of this Agreement if said breach or default is not remedied within thirty (30) days of ICRRA's written notice to Licensee of the breach or default. In either case, no termination hereof shall release the Licensee from any liability or obligation hereunder, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or, if later, the date when the rail corridor is restored to its condition at the date of this agreement.
4. Any notice to be given by ICRRA to the Licensee hereunder shall be deemed to be properly served if the same be deposited in the United States mail, postage prepaid, addressed to the Licensee at Mesabi Metallics Company, LLC, 17113 County Road 58, PO Box 25, Nashwauk MN 55769. Any notice to be given by the Licensee to ICRRA hereunder shall be deemed to be properly served if it be deposited in the United States mail, postage prepaid, addressed to Karin Grandia, Itasca County Engineer, 123 NE 4th Street, Grand Rapids, MN 55744.
5. In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.
6. It is understood and agreed that this Agreement shall not be placed of public record.
7. All the covenants and provisions of this Agreement shall be binding upon the heirs, legal representatives, successors and assigns of Licensee. No assignment by Licensee of any interest in this Agreement shall be binding upon ICRRA without the prior written consent of ICRRA in each instance.
8. Court jurisdiction regarding any disputes or action under this Agreement shall be in the District Courts of the State of Minnesota, without the right of removal to the United States District Courts, except with respect to matters that are under the exclusive jurisdiction of the Federal Courts of the United States, which shall be brought and/or defended in the Federal District Court sitting in Minneapolis, Minnesota. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Minnesota, without giving effect to the principles of conflict of laws.
9. To the maximum extent possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this Agreement.
10. The waiver by ICRRA of the breach of any provision herein by Licensee shall in no way impair the right of ICRRA to enforce that provision for any subsequent breach thereof.
11. This Agreement is the full and complete agreement between ICRRA and Licensee with respect to all matters relating to use of the Project, and supersedes any and all other agreements between the parties hereto relating to use of the Project.

For Licensee:

Mesabi Metallics Company, LLC

By: _____

Name: _____

Title: _____

Date: _____

For ICRRRA:

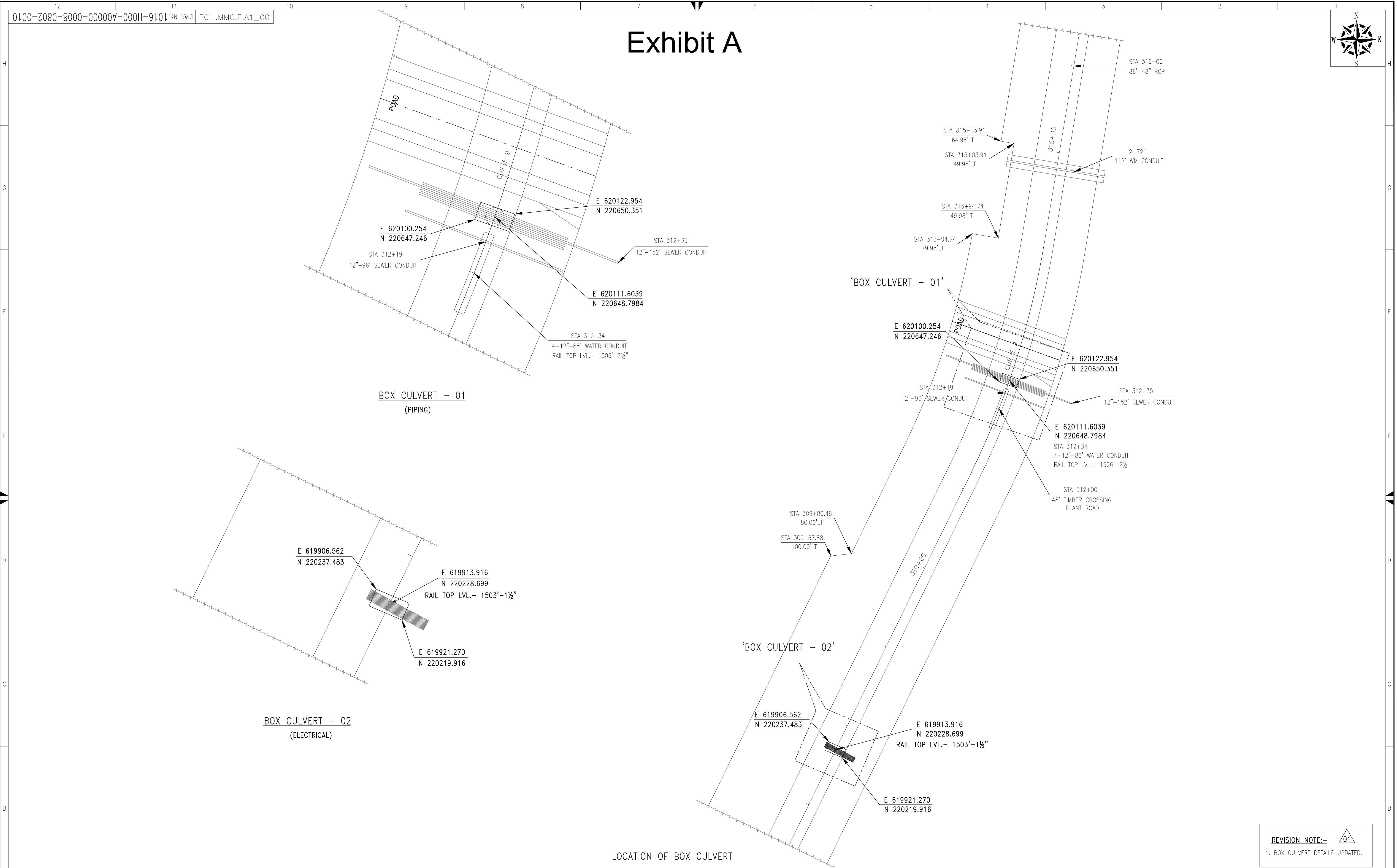
Itasca County Regional Railroad Authority

By: _____

Name: Karin Grandia

Title: County Engineer

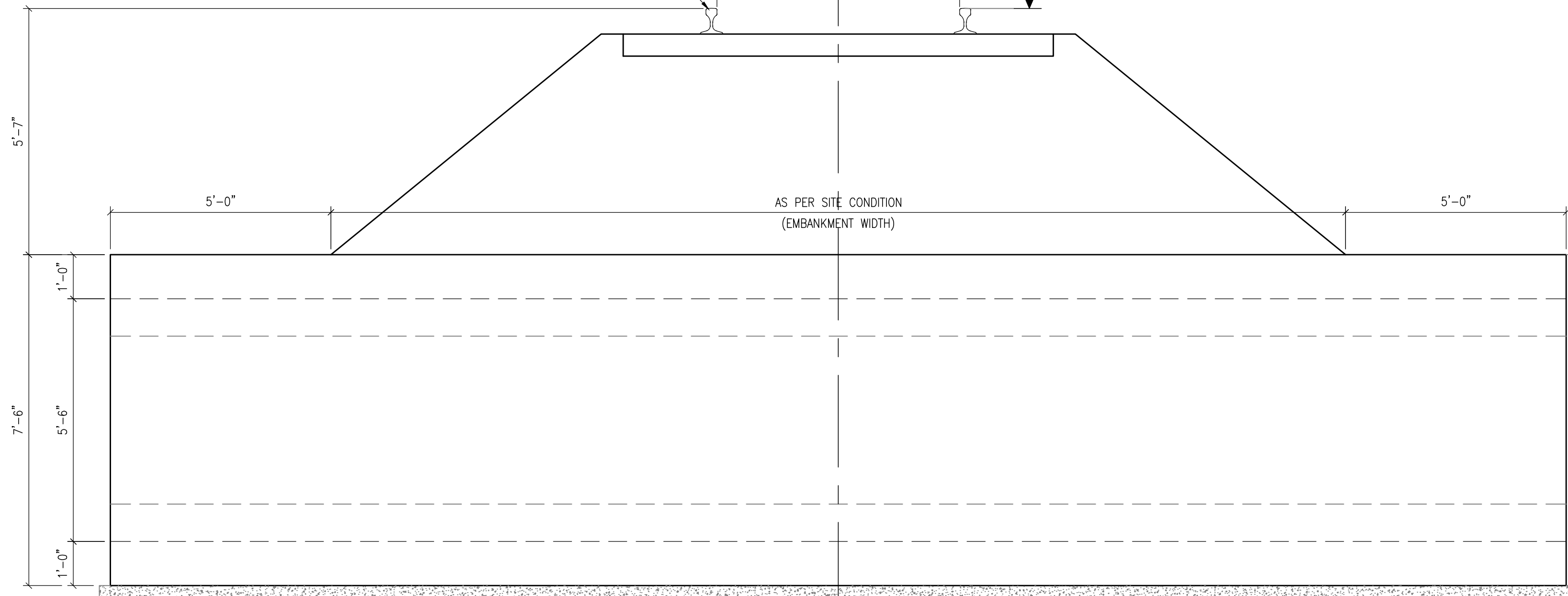
Date: _____



ALL APPLICABLE HSE STANDARDS & LEGAL REQUIREMENTS ARE CONSIDERED & CHECKED.				NAME JIGAR P.				SIGN DATE 22.11.24			
12				11				NOTES			
1. ALL DIMENSIONS & LEVELS ARE IN FEET-INCHES. 2. GRADE OF CONCRETE FOR R.C.C. WORK SHALL BE 5000-PSI. 3. DEFORMED REINFORCEMENT SHALL CONFORM TO ASTM-A615/A615M 4. REFER DRG NO. 101600000GLD60H002 FOR GENERAL NOTES. 5. BEARING PRESSURE AT THE FOUNDING LEVEL SHALL NOT EXCEED 2.5 kips/sq-ft. 6. RMC SHALL CONFORM TO ASTM C-94/C-94m-2004 STANDARD SPECIFICATION OF READY MIXED CONCRETE 7. FILLING SHOULD BE DONE AS RECOMMENDED IN GEOTECHNICAL REPORT. 8. LAPS SHALL BE STAGGERED IN SUCH A WAY THAT NOT MORE THEN 25% OF BARS ARE LAPPED AT ONE PARTICULAR SECTION. 9. DISCREPANCY IN DRAWING, IF ANY, SHALL BE BROUGHT TO NOTICE OF THE SITE ENGINEER/CONSULTING ENGINEER				01 INTERPLANT CONDUIT LAYOUT OF BENEFICIATION AREA 1016-H000-A00000-0009-0923-0002				Sr.No. References Drawings Dwg. Nos.			
LEGEND:- N.G.L. - NATURAL GROUND LEVEL				THIS DOCUMENT DISCLOSES PROPRIETARY INFORMATION OF ESSAR CONSTRUCTIONS INDIA LIMITED. IT MAY BE REPRODUCED OR DISCLOSED ONLY WITH THE WRITTEN PERMISSION AND IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO THE INTEREST OF ESSAR CONSTRUCTIONS INDIA LIMITED.				C 01 21.02.25 REVISED AS REV. 01 MARKED & ISSUED FOR CONSTRUCTION PRATHAM G SUNIL P JIGAR P			
C 00 22.11.24 ISSUE FOR APPROVAL. GANESH P. KETAN N. JIGAR P.				A 00 22.11.24 ISSUE FOR APPROVAL. GANESH P. KETAN N. JIGAR P.				C 01 21.02.25 REVISED AS REV. 01 MARKED & ISSUED FOR CONSTRUCTION PRATHAM G SUNIL P JIGAR P			
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FINAL APPROVE JIGAR P. 22.11.24				FINAL APPROVE JIGAR P. 22.11.24				FINAL APPROVE JIGAR P. 22.11.24			
ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1				ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1				ESSAR DRG.No. 7020-H000-A00000-0008-0802-0010 SH 1/1			
CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED				CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED				CONSULTANT : ESSAR CONSTRUCTIONS INDIA LIMITED			
CLIENT : MESABI METALLICS COMPANY LLC.				CLIENT : MESABI METALLICS COMPANY LLC.				CLIENT : MESABI METALLICS COMPANY LLC.			
PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA				PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA				PROJECT: PELLETIZING & BENEFICIATION PLANT AT MINNESOTA			
UNIT: 7 MTPA PELLET PLANT				UNIT: 7 MTPA PELLET PLANT				UNIT: 7 MTPA PELLET PLANT			
SUB UNIT: RECLAIM WATER PUMP HOUSE				SUB UNIT: RECLAIM WATER PUMP HOUSE				SUB UNIT: RECLAIM WATER PUMP HOUSE			
MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK				MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK				MARKING PLAN OF BOX CULVERT ACROSS ROAD & TRACK			
DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1				DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1				DRG.No. 1016-H000-A00000-0008-0802-0010 SH 1/1			
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VIEW + 'B-B'



1. ALL DIMENSIONS & LEVELS ARE IN FEET-INCHES.
2. GRADE OF CONCRETE FOR R.C.C WORK SHALL BE 5000-PSI.
3. DEFERRED REINFORCEMENT SHALL CONFORM TO ASTM-A615/A615M
4. REBAR ID# 10160000000000002 FOR GENERAL NOTES.
5. SCARING PRESSURE AT THE FOUNING LEVEL SHALL NOT EXCEED 2.5 kips/sq-ft.
6. RMC SHALL CONFORM TO ASTM C-94/C-94M-2004 STANDARD
7. PRESCRIPTION
8. FILLING SHOULD BE DONE AS RECOMMENDED IN GEOTECHNICAL REPORT
9. LAPS SHALL BE STAGGERED IN SUCH A WAY THAT NOT MORE THAN 25% OF BARS ARE LAPPED AT ONE PARTICULAR SECTION.
10. DISCREPANCY BETWEEN DRAWING AND FIELD SHALL BE BROUGHT TO NOTICE OF THE SITE ENGINEER/CONSULTING ENGINEER

01	INTERPLANT CONDUIT LAYOUT OF BENEFICIATION AREA	1016-H000-A02000-0009-0923-0002
Sr.No.	R e f e r e n c e s D r a w i n g s	D w g. N o s.
R E F E R E N C E		

ISSUE PURPOSE (I.P.): A-APPROVAL, B-BID, C-CONSTRUCTION/FABRICATION/ERECTION, D-DESIGN, E-ENQUIRY, H-CONSTRUCTION WITH HOLD, I-INFORMATION/REFERENCE, K-HAZOP
M-IMPLEMENTATION/USE, P-PURCHASE, R-REVIEW/COMMENTS/PRELIMINARY, S-SUPERSEDED BY ANOTHER Doc. No., V-VOID(CANCELLED), Z-AS BUILT

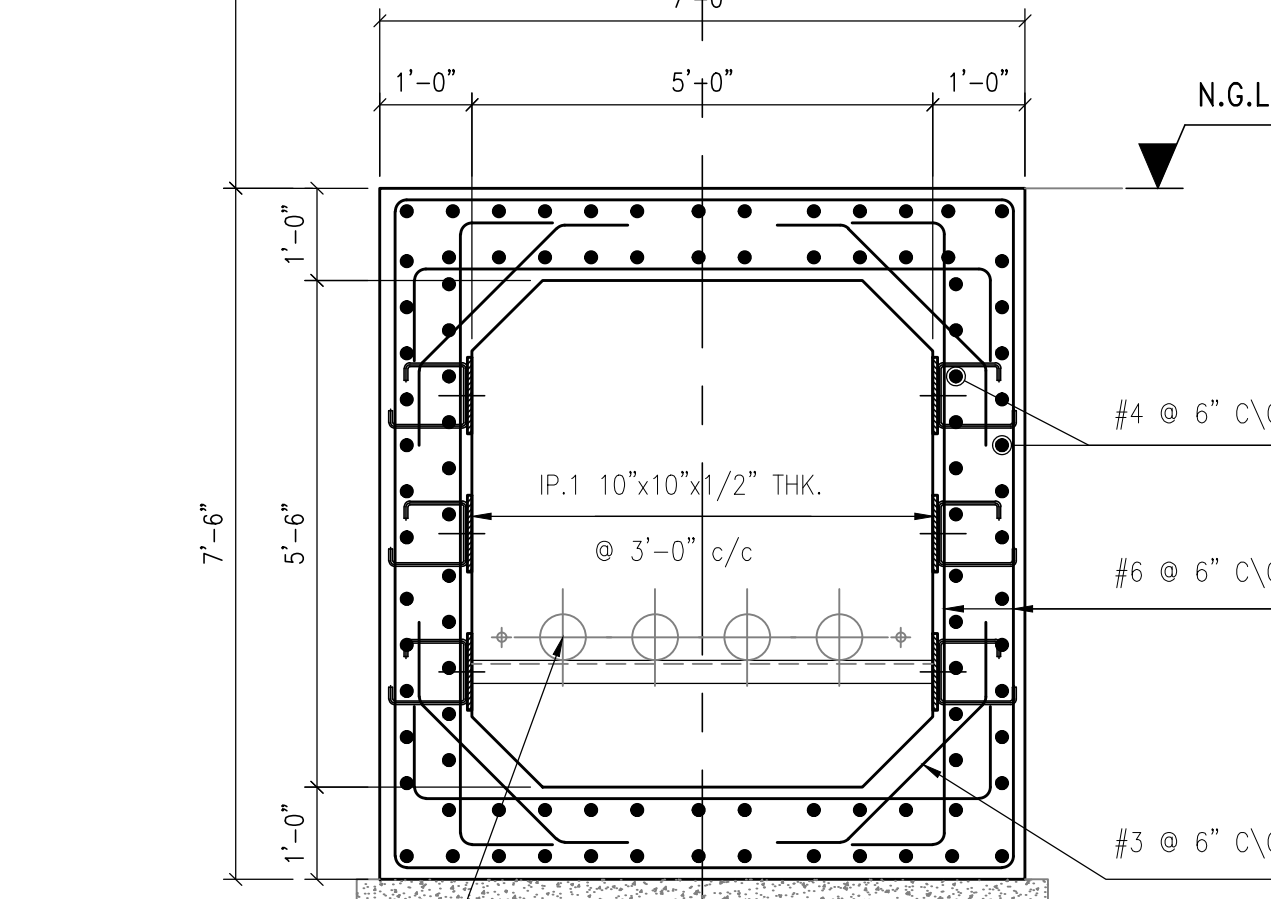
ISSUE PURPOSE (I.P.): A-APPROVAL, B-BID, C-CONSTRUCTION/FABRICATION/ERECTION, D-DESIGN, E-ENQUIRY, H-CONSTRUCTION WITH HOLD, I-INFORMATION/REFERENCE, K-HAZOP
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Plt. Scale: 1:25

ISSUE PURPOSE (I.P.): A-APPROVAL, B-BID, C-CONSTRUCTION/FABRICATION/ERECTION, D-DESIGN, E-ENQUIRY, H-CONSTRUCTION WITH HOLD, I-INFORMATION/REFERENCE, K-HAZOP
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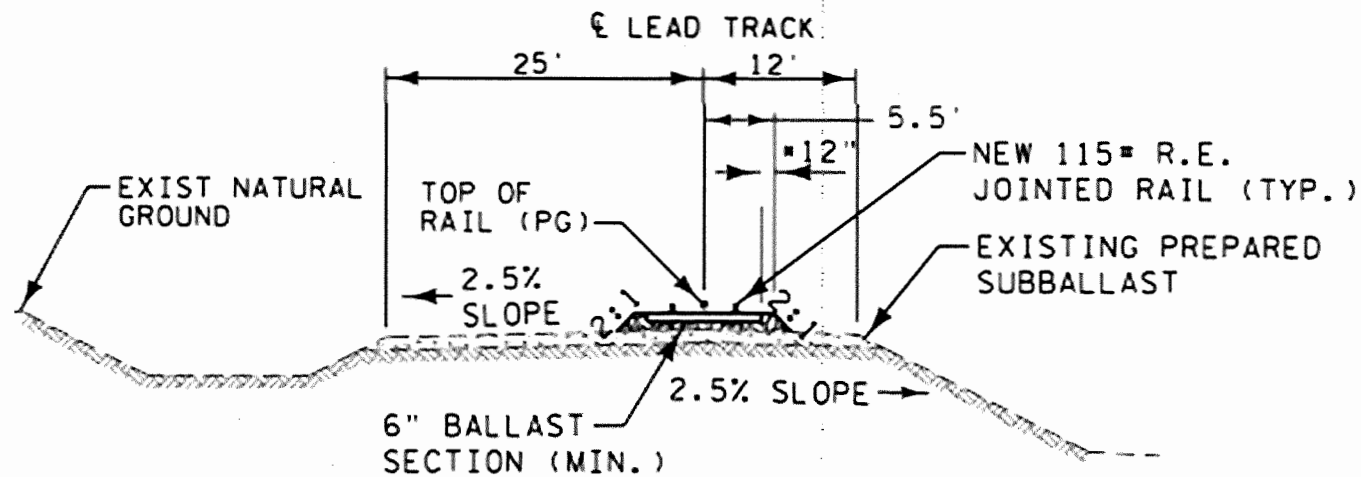
REVISION NOTE:-  01

1. SECTION "A-A" DETAILS UPDATED.



Drg. Size-A1

Exhibit A



TYPICAL SECTION WEST LEG OF WYE AND SINGLE LEAD TRACK WITH ACCESS ROAD

NOT TO SCALE
 STA. 0+00 TO STA. 40+57
 STA. 120+09 TO STA. 330+00

- VARIES FROM 1' TO 4' - SEE WALKWAY DETAIL SHEET 5 OF 40

Exhibit B – Track Specifications

Track Removal and Replacement Agreement

S-1 (2105) RAILROAD TRACK BALLAST

S-1.1 Material. Track ballast shall conform to AREMA Size No. 5 for the yard tracks and walkways. The Lead and Wye Tracks track ballast shall conform to AREMA Size No. 3, 4A or 4. Ballast shall be free from loam, dust, and other foreign particles and shall not have less than 75% crushed particles with two or more fractured faces, unless otherwise approved by County Engineer. Processed ballast shall be hard, dense, of angular particle structure, providing sharp corners and cubicle fragments and free of deleterious materials. Ballast materials shall provide high resistance to temperature changes, chemical attack, have high electrical resistance, low absorption properties and free of cementing characteristics. Materials shall have sufficient unit weight (measured in pounds per cubic foot) and have a limited amount of flat and elongated particles. Gradations for ballast shall conform to AREMA recommendations in Chapter 1, Part 2, Table 1-2-2 of the current AREMA documents and shall conform to the limiting values of testing in Table 1-2-1 within the same section of the AREMA recommendations. Ballast shall be from a source approved by the County Engineer and conform to the quality requirements as specified herein. The Contractor shall furnish test results of the ballast to the County Engineer prior to delivery to the site, in accordance with AREMA recommendations. The test results shall be evidence that the Contractor has or has not met the requirements. Additional samples shall be tested by the independent laboratory when, in the opinion of the County Engineer, the quality of ballast rock has changed. All testing will be at the expense of the Contractor.

S-1.2 Contractor shall unload all crushed rock ballast material, surface, tamp, line, finish surface, regulate, and power broom new track constructed, crossings prior to installation of panels, and turnouts. All tracks shall be surfaced and tamped as soon as possible after unloading ballast.

Ballast shall be placed to a minimum depth of six (6) inches below the bottom of the ties at grade point to the dimensions and widths as shown on the Drawings. Ballast shall be compacted by approved tamping methods to hold track firmly in place. All tamping operations shall be performed with an approved power tamper machine. Super elevation of the track structure through curves is to be provided for in the rock ballast section. Design top of rail profile applies to the low rail of each track. If track is super elevated, a minimum of six (6) inches of rock ballast is to be placed beneath the ties below the low rail of each track. Contractor will direct the unloading and distribution of ballast and will be fully responsible for all aspects of the unloading and distribution, subject to approval by the ICRRA.

Contractor will utilize a ballast regulating machine to provide the ballast section as shown in the Typical Track Section of the Drawings. No dirt or foreign materials will be allowed into the ballast section. After regulating ballast the turnouts, the switch points, switch rods, connecting rods, and guard rails will be pocketed and cleaned of ballast. Ballast remaining between the rails at the frog crotches and at the switch points shall be removed by hand. In addition, ballast shall be removed to a point below the top of tie as necessary through the switch area in order to allow unrestricted movement of the switch points, switch rods and connecting rod.

After track has been brought to true surface, elevation, and grade it shall be given a final lining and placed in true alignment conforming to design and the ballast and walkway ballast shall be trimmed neatly to the dimensions and widths of the Typical Track Section on the Drawings.

Surplus ballast shall be spread evenly along the ballast slopes. Dressing of the ballast by placing earth higher than the toe and thus preventing proper drainage will not be permitted. After all ballast placement has been completed, the track shall be given a complete power broom finish with approved machinery.

Contractor shall insure that the top of ballast rock matches the top of tie surface and that no excess ballast remains on either the top of rail, top of tie, base of rail, or top of tie plate, spike, or anchor.

Contractor shall exercise caution while regulating ballast shoulders so as to avoid track misalignments and to avoid obstructing adjacent drainage ditches, structures, or culverts with ballast, dirt, vegetation, or other material.

If Contractor obstructs an adjacent drainage ditch, structure, or culvert, he shall initiate the cleaning of those as soon as possible, at his expense.

S-2 (2540) RAILROAD TRACK

The Contractor shall furnish and install all track material and all material shall be in accordance with AREMA current published recommendations and BNSF Specifications and standards included in Appendix "A", along with any additional criteria indicated on the Drawings and as indicated below

S-2.1 Rail section shall be new 115# RE section or greater jointed rail. Minimum rail length shall not be less than 39 feet with no more than 10% shorts down to 20 foot lengths drilled 3-1/2" x 6" x 6" for 36" angle bars and shall be free from defects. Rails shall be unloaded, stored or distributed along the roadbed in such a manner and by use of such equipment as will prevent injury to them. The method and equipment used by the Contractor will be subject to the approval of the County Engineer.

Assemble joints before fastening rails to ties, using joint bars with full number of track bolts and spring washer for each bolt, first removing loose mill scale and rust from contact surfaces or joint bars and rails.

The right-hand rail facing in direction of increasing stationing shall be spiked to ties, and the opposite rail shall be brought to gage of 4' 8-1/2", measured at right angles between the rails, on a plane 5/8" below top of rail. A track gauge manufactured for the purpose of measuring gage should be used rather than a tape measure. Gage is to be checked at every third tie.

Do not strike rail directly with a maul, either on top when driving spikes, or on side to obtain track gage. Under no circumstances must rail be struck in web with tool or any metal object.

Rail shall be laid with staggered joints. Joints shall be located as nearly as possible to the middle of the opposite rails with the following variation: (a) except through turnouts, the staggering of the joints on one side shall not vary more than 6' in either direction from the center of the opposite rail. Rails of miscellaneous lengths, not less than 25 feet shall be used at suitable intervals for maintaining the proper stagger of joints on curves to minimize the cutting of full length rails and to prevent the occurrence of joints within road crossings.

An abrasive rail saw will be used to cut rail square and clean. Holes for complete bolting of cut rails shall be drilled by an approved type of rail drill. Under no circumstances shall new holes be drilled between two holes already drilled. Cutting rails or drilling holes in cut rails by means of acetylene or electric torch will not be permitted.

S-2.2 Anchors. Rail anchors shall be new, drive-on type, sized to fit the rail section for standard track construction..

S-2.3 Creosote hardwood ties shall be new 7" x 8"x 8'-6" IG for the with 100% anti-splitting devices. Ties shall be placed on 21-1/2" centers except at those locations indicated below. Creosote hardwood ties

for track through timber panel crossings shall be 7" x 9" x 8'-6" grade and shall be placed on 19-3/16" centers per BNSF standards.

Ties will be unloaded and handled in such a manner as not to damage ties, using approved handling equipment. When handling or spacing timber ties into position the use picks, hammers, mauls or shovels will not be permitted. Tie tongs shall be used for this purpose.

Cross ties shall be placed at design spacing of 21.5-inch center to center (22 ties/39 feet) for normal track construction not including road crossings, on the finished subgrade, perpendicular to center line of track with the right hand ends of ties being parallel looking ahead stationing. On curves, align the ties to the inside of the curve. The line side of the ties shall be placed 22-3/4" from the end of tie to the gage of the nearest rail.

Top surface of ties shall be clean and smooth to provide full bearing for tie plates. Lay wood ties with heartwood face down, and if not possible to determine position of the heartwood, lay the widest surface of the tie down.

If spikes are pulled from any tie, hole shall be filled by driving in a treated wood tie plug the full depth of the hole. Boring or adzing of ties shall be kept to a minimum.

S-2.4 Tie Plates. Tie plates may be new or secondhand, free of injurious defects and foreign material, conforming either to AREMA Plan 7 (7-3/4" x 13") or Plan 8 (7-3/4" x 14"), with 6 or 8 hole punch, and shall fit rail being used. All plates will be double-shouldered.

Double-shouldered tie plates will be used on all ties and set in position with cant surface sloping inward, making sure they are firmly seated and have full bearing. After rails are in place, shoulder of plates shall be in full contact with outside edge of rail base.

S-2.5 Joints. New or secondhand joints, free of foreign material and without injurious defects, and with 6 bolt holes, 36" in length, toeless and headless conforming to AREMA recommendations, shall be furnished to fit rail section for which they are designed. Bolt holes must be drilled with proper equipment and to the proper diameter of the track bolt furnished. Torch-cutting of bolt holes will not be allowed. New joint bars are required where new track is installed.

New compromise joints of manufactured type (welded or homemade not acceptable), free of foreign material and without injurious defects, shall be furnished and used where rail section (weight or design) changes. Rail section by weight shall not be compromised where difference in weight is in excess of 25 lbs. When this becomes necessary, a rail of some weight between the two different rail sections, in excess of 25 lbs., shall be used and the compromise made in two steps. The length of the medium-weight rail should be 39 feet where practical. Compromise joints shall be sized to fit the corresponding rail weight and shall be 6-hole bars.

All joints, to the extent possible, are to be suspended between ties. If necessary to force joint bar into position, strike lower edge of bar lightly with 4-lb. maul. Do not drive bolts in place. All rail joints shall be fully bolted. The nuts of all bolts shall alternate uniformly inside and outside of each joint. All track bolts shall be installed when the rail is laid and nuts turned up snug, after which all bolts shall be tightened three times; first after track has been brought to approximately true alignment; second, after it has been given the first raise of ballast; and finally, immediately before completion and acceptance of the Work. Tighten bolts in sequence, beginning at joint center and working out to ends. Bolts are to be tightened to a range of 20,000 to 30,000 ft-lbs. tension. If a bolt tightening machine is not used, a standard track wrench with a 42" long handle may be used by men of average strength or bolt tighteners

adjusted to bolts tightened by hand, as described above.

At the time of installation, rail expansion shims of softwood not over 1" width shall be placed between the ends of adjacent rails to insure proper space allowance for expansion required by the rail temperatures relative to lengths of rail as indicated in the AREMA recommendations in Chapter 5, Part 5, Table 5-5-2. Shims are to be removed after all joint bolts have been tightened.

S-2.6 Spikes. New 5/8" x 6" high carbon, prime cut track spikes shall be furnished except where premium/elastic fasteners are to be applied. All spikes shall conform to AREMA recommendations.

Rails shall be spiked to every tie, using not less than 2 spikes for each rail at each tie. Drive spikes through tie plate holes into ties, located diagonally opposite each other but not less than 2" from edge of tie. Start and drive spikes vertically and square with rail. Take care to avoid slanting, bending, or causing sideways movement of spike.

Each rail will be spiked with two spikes per tie plate on tangent track staggered with inside spikes to the east or north and outside spikes to the west or south. On curves a third spike is required on the gauge side of the rail.

When spikes are driven by machine, work shall be closely supervised to see that they are driven with hammer centered exactly over each spike head and drive spike vertically. Set stop bolt on the machine to prevent over-driving.

Withdraw spikes that are incorrectly driven and fill hole by driving a creosote treated tie plug to full depth of hole. Locate replacement spike at another hole in tie plate and tie.

S-2.7 Track Bolts & Nuts. 1" x 6" new track bolts and nuts shall be furnished and conform to AREMA recommendations Bolts and corresponding nuts shall be correct size and length to fit rail if differing rail section and drilling dictates otherwise.

S-2.8 Lock Washers. One new, properly sized spring lock washer conforming to AREMA recommendations shall be installed on each track bolt.

S-2.9 Anchoring. Rail anchoring shall be provided at a minimum rate of 28 anchors per 39' panel, i.e. box anchor every third tie. In order to avoid tie skewing, anchors are to be installed in the same direction against the same tie on both rails. Anchors must be installed to insure firm bearing against the adjacent tie. Anchors improperly installed will be removed and applied correctly without additional charge by the Contractor. Anchors damaged by overdriving, etc., will be replaced at the Contractor's sole expense. Anchors shall be installed only after the track has been raised, lined and ties re-spaced, following all ballast operations.

S-3 (2540) ALIGN, SURFACE, DRESS – RAILROAD

This work shall consist of aligning, surfacing, and dressing of railroad track; in accordance with the applicable Mn/DOT Standard Specifications, the details shown in the Plans, and the following: Tamping shall be performed by an approved on-track tamper, of the vibratory or squeeze type, with automatic alignment equipment. The tamper shall be equipped with its full complement of tamping tools. Each timber tie shall be tamped with a minimum of four insertions.

Track shall have true alignment, with all swings, dog legs, or flat spots corrected at Contractor's

expense. A tolerance of 1/2" in 62 feet will be allowed.

Tangent track shall be raised to zero x-level with no exceptions. Any deviations shall be corrected at the Contractor's expense.

Curves shall be surfaced to the designated super elevation called for in the project plans. The outer rail shall be raised to provide the proper spiral and curve super elevation specified. The Contractor will be responsible for staking out the curves.

During the surfacing operation, all "down track ties" shall be cleaned off and tamped with a mechanized tamper. All track ties shall be plugged, plated, and respiked.

The Contractor will be required to exercise quality control at all times, i.e. driving down of high spikes, correcting any hanging tracks ties and other corrections considered incidental to the work. All turnouts and crossing shall be surfaced and lined in conjunction with the surfacing program, unless otherwise specified.

Ballast must be dressed and evenly distributed immediately after surfacing. Cribs shall be filled to within 1-inch from the top of the ties. On jointed track ballast shall be dressed to provide for a minimum 12" shoulders.

Alignment, Surface & Dressing of turnouts will not be separately measured. Each track through the turnout will be measured by the linear foot of track for payment.

No part of the track structure will be raised more than four (4) inches in any one lift. New track construction will have to be worked more than once and the Contractor will have to apply additional ballast to conform to the ballast cross section shown within the Typical Track Section in the Drawings. All ties are to be fully tamped before proceeding with any additional lift.

Power tamping machines are to be used throughout the limits of track construction, track lining, and turnout construction.

Contractor will raise and surface track with machines having a minimum of eight tamping feet per rail, each foot will be replaced once its aggregate size is reduced to one and one-half inches by three inches (1-1/2" x 3"). Each tie will be tamped with a minimum of two insertions per lift at an inserting depth of not less than one and one-half (1-1/2) inches below the tie bottom.

These power tamping machines being multi-tooled, automatic tamping machines having automatic profile reference beams of not less than seventy five (75) feet, and having tamping pressures sufficient to close the ballast beneath each tie.

Manual tamping will not be allowed unless authorized in writing by the County Engineer. If manual tamping is authorized, then it is to be performed using AREMA approved tamping tools appropriate for the type of ballast being placed.

In manually raising mainline track, not less than eight (8) jacks shall be used simultaneously per thirty-nine (39) foot rail panel, with jacks spaced uniformly throughout the panel. No jack shall be placed nearer than twelve (12) inches from the end of any joint bar. All jacks shall be set plumb and both rails shall be raised at the same time and as nearly uniformly as possible. The use of powered track jacks for making track raises will be acceptable to the County Engineer. No single lift shall exceed four (4) inches in compacted thickness.

Each lift is to be tamped from a line fifteen (15) inches inside each rail on both sides of and to the ends of the ties. Center area between these limits shall be filled lightly with ballast but not tamped. Tamping shall proceed, simultaneously, at both ends of the tie making sure ballast is forced directly under the ties and against the sides and ends of the ties.

Too many insertions with a power tamper may cause a center bound track condition. Generally two (2) squeezes per tie up to one and one-half (1-1/2) inch of raise with one additional insertion and squeeze for each additional one (1) inch of raise is preferred.

When the track has been raised to within two (2) inches of final grade and properly compacted by traffic, the final lift shall be made by raising the track up to grade stake elevation making necessary allowance for settlement. The ballast shall be applied under the ties for their entire length. Unless otherwise authorized, this final lift shall be tamped by approved tamping machines. The amount of super elevation through curves as indicated by the Drawings shall be provided for in each instance.

At turnouts, tamp ballast uniformly for the full length of the ties. The straight side at the turnout is to be used as the line rail.

In locations where power tampers cannot fill and compact ballast, such as at frogs, guard rails, switch portions of turnouts, and head blocks, etc., provisions must be made to mechanically tamp with air or other power tamping tools.

During raising and tamping, if any crib area is void of ballast below the bottom of the tie then the area of the track is to be re-tamped following the application of additional ballast.

While raising and tamping, sufficient spot boards, track level boards, or other standard surfacing devices shall be constantly used to insure correct surface and cross level.

Contractor shall finish each point on the track to within a maximum of one-half (1/2) inch elevation from zero cross level on tangent, or desired super elevation on curves. Average cross level on tangent and super elevation on curves will be as specified.

Contractor shall finish the track so that the difference in cross level between any two points less than sixty-two (62) feet apart on tangents and on curves between the spirals must be no more than one (1) inch. Deviation from zero cross level at any point on tangent or from designated elevation on curves between spirals may not be more than one half (1/2) inch. Variations in cross level on spirals in any thirty-one (31) feet may not be more than three-quarters (3/4) inch. Track will be finished so that the deviation from uniform profile on either rail at the mid-ordinate of a sixty-two (62) foot chord may not be more than one and one quarter (1-1/4) inch.

Contractor shall finish the track so that the horizontal alignment between any two points sixty-two (62) feet apart on tangent track will deviate from a straight line by no more than three-quarters (3/4) of an inch. Mid ordinate of a sixty-two (62) foot chord between two points on the gage side of the outer rail will be one inch per degree of curve with an allowable tolerance of plus or minus five-eighths (5/8) of an inch.

Contractor shall ballast and surface through curves to conform with the super elevations specified herein. The low rail in each curve will be the profile rail. The high rail in each curve will be the line rail.

All newly constructed or lined curves, although not spiraled, shall be constructed with super elevation. Super elevation shall be gradually placed into each end of the simple curves at the rate of one (1) inch per forty-four (44) feet of trackage. The full super elevation indicated on the Drawings shall be provided for within the remainder of the simple curve between the ends of these transitions.

If a curve is lined in, after the track has been surfaced and regulated to the design ballast cross section, then it will be the responsibility of the Contractor to cut-in a new piece of rail not less than 19'-6" in length and account for joint gap, drilling, cutting of rail and bolting of joints as specified herein at no additional cost to the ICRRA

After track has been brought to true surface, elevation, and grade, it shall be given a final lining and placed in true alignment and grade conforming to the elevations and alignment according to the Drawings and the ballast dressed to the design ballast cross section.

Line and grade stakes will not be disturbed or removed until approval has been received from Engineer.

Line stakes are to be set prior to placement of wood ties; prior to final ballast raise; and prior to final lining.

Grade stakes are to be set identifying the design top of profile rail elevations. Care is to be exercised to avoid disturbing or removing those stakes until approval has been received from the County Engineer.

When raising track, the Contractor has a tolerance of plus or minus one-half (1/2) inch to the design grade. If not raised to the established grade, then the Contractor will unload ballast in sufficient quantity and continue to surface the track to comply with the tolerances.

All ties are to be straightened and re-spaced as necessary immediately prior to unloading ballast for the final raise.

If the Contractor raises the track too high to comply with the allowable tolerance, Contractor, at his expense, will excavate the ballast sufficiently to lower the track and then surface the track again to bring it into full conformity.

Contractor will notify the County Engineer when any stake or marker has been disturbed or destroyed. The stakes must be replaced by the Contractor at his expense.

When track is lifted or jacked, care must be exercised by the Contractor to avoid over stressing or permanently bending the rail, joints, or turnout components.

Contractor, at his expense, will correct any down or skewed tie that is a result of his tamping and raising the track. Tie plates will be positioned so that the shoulder is against the outside base of rail for the entire length of the shoulder.

Contractor, at his cost, will re-drive all spikes knocked loose and will replace all spikes removed.

Contractor, at his cost, will replace and/or adjust all tie plates or rail anchors knocked off or that worked loose or were damaged during the surfacing and regulating. The anchors must remain matched across from each other on each rail. Tie plates must remain square to the tie.

As an integral part of the surfacing and regulating operations, Contractor will restore any joints, bolts, or switch material which is damaged or loosened.

Contractor is responsible to ensure that the partially ballasted track in his work area does not buckle out of alignment. If a misalignment of the track occurs as a result of the Contractor's operations, he must correct at his own expense.

S-4 AGGREGATE FOR SUBBALLAST AND SERVICE ROADS

For subballast and service road restoration, class 5 material meeting 2016 Mn/DOT 3138 specifications are required.

S-5 GRADING & EMBANKMENT

The work covered by this section of the specifications consists of furnishing all plant, labor, material and equipment and performing all operations in connection with construction of track roadbed, including clearing and grubbing, excavation, construction of embankments and incidental items, all in accordance with the contract drawings and specifications.

The Contractor shall load, haul, spread, place and compact suitable materials in embankments and shall finish the embankments to the grade, slope and alignment as shown in the plans. Suitable materials shall consist of mineral soils free from organics, debris, and frozen materials. Embankment slopes shall be compacted and dressed to provide a uniform and dense slope. Embankments shall be built with approved materials from excavation of cuts or from borrow unless otherwise shown on the plans.

If materials unsuitable for embankments (organics, debris, brush and trees, etc.) are encountered within the areas to be excavated, or material existing below the designated subgrade in cuts or within areas on which embankments are to be placed are of such nature that stability of the roadbed will be impaired, such materials shall be removed and wasted or stockpiled for other use. Topsoil removed from embankment areas shall be spread uniformly over the embankment slopes.

Unsuitable material removed from embankment foundations or below subgrade elevation in excavation areas shall be replaced to grade with suitable material compacted as specified for embankments in these specifications.

Wherever an embankment is to be placed on or against an existing slope steeper than four horizontal to one vertical, such slope shall be cut into steps as the construction of the new embankment progresses. Such steps shall each have a horizontal dimension of not less than three feet and a vertical rise of one foot.

At all times, the Contractor shall operate sufficient equipment to compact the embankment at the rate at which it is being placed. Compaction shall be accomplished by sheep's foot rollers, pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment. Use construction procedures and drainage design that will provide a stable roadbed.

Each layer in embankments made up primarily of materials other than rock shall not exceed 6" in loose depth and shall be compacted to the dry density as specified hereinafter before additional layers are placed. All embankments shall be compacted to a density of not less than 95% of the maximum standard laboratory density, and not more than +4 percentage points above the optimum moisture content, unless otherwise specified on the drawings. The standard laboratory density and optimum moisture content shall be the maximum density and optimum moisture as determined in accordance with ASTM Designation: D 698 (Standard Proctor Test). A minimum of 2 tests shall be performed per 2 foot lift. Tests shall be approved geotechnical testing firm and copies of soil test results shall be furnished to ICRRA.