Contract Number: BF-20162127

OPERATIONS AND MAINTENANCE AGREEMENT
Phase 4 of U.S. Army Rio de Flag Project

BNSF File No.: BF-XXXXXXXX
Mile Post 344.XX
Line Segment 7200
U.S. DOT Number TBD
Seligman Subdivision

This Agreement **("Agreement")**, is executed to be effective as of _____ **("Effective Date")**, by and between **BNSF RAILWAY COMPANY**, a Delaware corporation **("BNSF")** and the **CITY OF FLAGSTAFF**, a political subdivision of the State of Arizona **("City")**.

RECITALS:

WHEREAS, BNSF owns and operates a line of railroad in and through the City of Flagstaff, State of Arizona;

WHEREAS, the City and BNSF are parties to that certain Coordination and Reimbursement Agreement dated as of _____ (the **"CRA"**) pursuant to which the parties have agreed to terms and conditions to govern the several flood control and other projects that will be completed as described in the CRA, referred to collectively in the CRA as the **"Project;"**

WHEREAS, pursuant to the CRA, the City and BNSF have become parties to that certain Easement Agreement For Phase 4 of U.S. Army Corps of Engineers Rio de Flag Project dated as of _____ pursuant to which BNSF will grant to the City the easement described therein for the purposes described therein (the **"Easement**");

WHEREAS, BNSF and the U.S. Army Corps of Engineers ("**USACE**") are parties to that certain Memorandum of Understanding dated as of _____ (the "**MOU**") providing certain terms to govern the construction of flood control improvements as described therein on the Easement, which includes, among other things, a requirement that all contractors of USACE entering onto the Easement enter into the General License with BNSF in the form attached to the MOU (each, a "**General License**");

WHEREAS, the City has requested and BNSF has agreed to allow USACE to construct Phase 4 of the USACE Rio de Flag project as described herein and in the _____ (the "**USACE Phase 4 Improvements**")

on the Easement in strict accordance with the Easement, the MOU and the General License;

WHEREAS, USACE, the City and BNSF have agreed that once the USACE Phase 4 Improvements are complete and accepted by USACE, the City and BNSF, the City shall operate and maintain the USACE Phase 4 Improvements in perpetuity pursuant to the CRA, the Easement, and the terms hereof; and

NOW, THEREFORE, in consideration of the recitals and the mutual covenants and agreements of the parties contained herein, the receipt and sufficiency of which are hereby acknowledged, and the faithful performance by the City of all such covenants and agreements, the parties agree as follows:

Article I INCORPORATION

The Recitals are incorporated into this Agreement as operative provisions. This Agreement is entered into pursuant and subject to all terms of the CRA and the Easement. All terms and conditions of the CRA and the Easement are incorporated into this Agreement and govern all activities related to operations and maintenance of the USACE Phase 4 Improvements.

ARTICLE II SCOPE OF WORK

1) The USACE Phase 4 Improvements include, without limitation, _____ as described in _____ as further described on the **Exhibit A**, which is attached hereto and incorporated herein, including, but not limited to, any and all changes to telephone, telegraph, signal and electrical lines and appurtenances, temporary and permanent track work, fencing, grading, alterations to or new construction of drainage facilities, preliminary and construction engineering and contract preparation. Additionally, temporary controls during construction under this Agreement must comply with Section 8A-08, "Temporary Traffic Control Zones" of the Manual of Uniform Traffic Control Devices ("**MUTCD**"), U.S. Department of Transportation. Further, temporary controls during maintenance activities must be in compliance with Section 8A-5, "Traffic Controls During Construction and Maintenance" of the MUCTD. In addition to all other requirements hereof, the City must install and maintain fencing around the construction and maintenance site during any maintenance activities to direct pedestrians around the construction and maintenance sites.

ARTICLE III BNSF OBLIGATIONS

1) BNSF will furnish all labor, materials, tools, and equipment for railroad work required for the proper maintenance of the USACE Phase 4 Improvements, such railroad work and the estimated cost thereof to be furnished to City within _____ days following City's notice to BNSF of the need for maintenance and BNSF's approval of the City's submissions as required herein for such maintenance. In the event such maintenance work on the USACE Phase 4 Improvements has not commenced within six (6) months following BNSF's delivery of any such cost estimate, BNSF may, in its sole and absolute discretion, revise the cost estimate. The initial or any revised cost estimate will become a part of this Agreement as though originally set forth herein. Any item of work incidental to the items listed on any initial cost proposal by BNSF may be included as a part of this Agreement upon written approval of City, which approval will not be unreasonably withheld. Items of railroad work required for any particular operation or maintenance activity may include, but are not limited to:

A. Procurement of materials, equipment and supplies necessary for the railroad work;

B. Preliminary engineering, design, and contract preparation;

C. Furnishing of flagging services as required and set forth in further detail on **Exhibit C;**

D. Furnishing engineering and inspection as required in connection with such maintenance or operation of the USACE Phase 4 Improvements;

E. Providing a contract project coordinator, at City's expense, to serve as a project manager for any such maintenance activities for which BNSF requires the same;

2) BNSF will do all railroad work for the proper maintenance of the USACE Phase 4 Improvements required for any particular operation or approved maintenance, including, without limitation, any set forth herein as may be required by BNSF on an actual cost basis, when BNSF, in its sole discretion, determines it is required by its labor agreements to perform such work with its own employees working under applicable collective bargaining agreements.

3) City agrees additionally to reimburse BNSF for work of an emergency nature affecting safety or rail operations arising from or relating to the USACE Phase 4 Improvements to the extent caused by or related to City or City's contractor(s) in connection with the operation or maintenance of the USACE Phase 4 Improvements which BNSF deems

in its sole reasonable discretion is necessary for the immediate restoration of railroad operations, or for the protection of persons or BNSF property. Such work may be performed by BNSF without prior approval of City and City agrees to fully reimburse BNSF for all such emergency work.

4) BNSF may charge City for insurance expenses, including self-insurance expenses, when such expenses cover the cost of Employer's Liability (including, without limitation, liability under the Federal Employer's Liability Act) in connection with the work performed by BNSF regarding the operation or maintenance of the USACE Phase 4 Improvements. Such charges will be considered part of the actual cost of the operation and maintenance of the USACE Phase 4 Improvements, regardless of the nature or amount of ultimate liability for injury, loss or death to BNSF's employees, if any.

5) During any operation or maintenance of the USACE Phase 4 Improvements involving railroad work, BNSF will send City progressive invoices detailing the costs of the railroad work performed by BNSF under this Agreement. City must reimburse BNSF for completed force-account work within thirty (30) days of the date of the invoice for such work. Upon completion of any particular operation or maintenance project, BNSF will send City a detailed invoice of final costs, segregated as to labor and materials for each item in the recapitulation BNSF furnished to City as provided above. Pursuant to this section and Article V, Section 7 herein, City must pay the final invoice within ninety (90) days of the date of the final invoice. BNSF will assess a finance charge of .033% per day (12% per annum) on any unpaid sums or other charges due under this Agreement which are past its credit terms. The finance charge continues to accrue daily until the date payment is received by BNSF, not the date payment is made or the date postmarked on the payment. Finance charges will be assessed on delinquent sums and other charges as of the end of the month and will be reduced by amounts in dispute and any unposted payments received by the month's end. Finance charges will be noted on invoices sent to City under this section.

ARTICLE IV CITY OBLIGATIONS

1) The City shall timely and properly perform all periodic inspections at prescribed frequences and all other maintenance necessary or desirable to ensure the USACE Phase 4 Improvements continue to function as designed and at no time imperil or damage any property, facilities or operations of BNSF. Each time the City desires to perform any specific task of inspection or maintenance, City must furnish to BNSF a full description of such task(s) and the dates City would like to undertake such activities. For tasks other than inspection and debris removal, City must also furnish BNSF with its description of the task(s), all plans and specifications for any work

involved in the same at least _____ days before City would like to perform such maintenance. Except for work conforming to the O&M Manual and/or the as-builts, four sets of said plans (reduced size 11" x 17"), together with two copies of calculations, and two copies of specifications in **English Units**, must be submitted to BNSF for approval prior to commencement of any maintenance activity alternatively, (this information may be submitted electronically to BNSF rather than in hard copy). BNSF will give City final written approval of the requested dates and the plans and specifications substantially in the form of **Exhibit E,** attached to this Agreement and made a part hereof, and may also notify City of maintenance and activities related to the USACE Phase 4 Improvements that BNSF will require be included by City as part of any such proposed inspection or maintenance activity. Upon BNSF's final written approval of the dates and plans and specifications, said plans and specifications will become part of this Agreement and are hereby incorporated herein. Any approval of the plans and specifications by BNSF shall in no way obligate BNSF in any manner with respect to any finished product design and/or construction. Any approval by BNSF shall mean only that the plans and specifications meet the subjective standards of BNSF, and such approval by BNSF shall not be deemed to mean that the plans and specifications meet applicable regulations, laws, statutes or local ordinances and/or building codes.

2) City must make any required application and obtain all required permits and approvals for any operations or maintenance of the USACE Phase 4 Improvements.

3) City must provide for and maintain minimum vertical and horizontal clearances, as required in **Exhibit C** and as approved by BNSF as part of the plans and specifications for the Lone Tree Overpass Segment of the Project.

4) (Intentionally Deleted.)

5) City must make any and all arrangements, in compliance with BNSF's Utility Accommodation Manual (http://www.bnsf.com/communities/faqs/pdf/utility.pdf), for the installation or relocation of wire lines, pipe lines and other facilities owned by private persons, companies, corporations, political subdivisions or public utilities other than BNSF which may be necessary for the operation and maintenance of the USACE Phase 4 Improvements.

6) City must do all work provided for in the plans and specifications submitted to BNSF for the operation and maintenance of the USACE Phase 4 Improvements on the Easement ("**City's Work**"), except railroad work that will be performed by BNSF hereunder. City must furnish all labor, materials, tools and equipment for the performance of City's Work. City's Work may include, without limitation:

A. (Intentionally Deleted.);

B. All necessary grading and paving, including backfill of excavations and restoration of disturbed vegetation on BNSF's right-of-way;

C. Placement of 12 inches of sub-ballast and the initial six inches of crushed rock ballast on all track roadbeds for the shooflys and for the permanent replacement of the main tracks and storage tracks;

D. Provide suitable drainage, both temporary and permanent, in areas affected by the City's Work;

E. Temporary Installation of K-Rail (Jersey) barriers and chain link fencing along any impacted public or private roads during maintenance between the tracks and the traveled roadways;

F. Temporary Installation of a chain link fence barrier separating any operation or maintenance activity from any track;

G. Construction and removal of a temporary pedestrian roadway detour crossing of the tracks, including chain link fence;

H. Provide appropriate pedestrian control during construction operation and maintenance activities; and

I. Job site cleanup including removal of all unused construction materials, concrete debris, surplus soil, refuse, contaminated soils but only as set forth in the CRA, asphalt debris, litter and other waste materials brought onto the site by the City to the satisfaction of BNSF.

7) (Intentionally Deleted.)

8) Work may be performed by City for minor repair work such as, for example, debris and sediment removal or graffiti clearing, but must be performed by a contractor to City for any other ((_____*major repairs – BNSF will supply a definition of this))*. Both such parties must perform in a manner that will not endanger or interfere with the safe and timely operations of BNSF and its facilities.

9) For any future operations activities, inspection or maintenance, either routine or otherwise, performed by contractors or subcontractors on behalf of the City, City shall require the contractors and subcontractors to comply with the provisions of the

attached **Exhibit C** and execute the agreement attached hereto as **Exhibit C-1**. Prior to performing any future maintenance with its own personnel, City shall: comply with all terms of the CRA; comply with all of BNSF's applicable safety rules and regulations; require any City employee performing maintenance to complete the safety training program at the BNSF's Internet Website " www.BNSFContractor.com "; notify BNSF when, pursuant to the requirements of **Exhibit C**, a flagger is required to be present; procure, and have approved by BNSF's Risk Management Department, Railroad Protective Liability insurance.

10) In order to prevent damage to BNSF trains and property, City must require its contractor(s) to notify BNSF's Roadmaster at least thirty (30) calendar days prior to requesting a BNSF flagman in accordance with the requirements of **Exhibit C** attached hereto. Additionally, City must require its contractor(s) to notify BNSF's Manager of Public Projects thirty (30) calendar days prior to commencing work on BNSF property or near BNSF tracks. BNSF shall provide and update contact information for BNSF personnel designated to receive information under this Agreement.

11) City or its contractor(s) must submit electronic copies of any plans (including two sets of calculations in **English Units**) for proposed shoring, falsework or cribbing to be used over, under, or adjacent to BNSF's tracks to BNSF's Manager of Public Projects for approval. The shoring, falsework or cribbing used by City's contractor shall comply with the BNSF Bridge Requirements set forth on **Exhibit F** attached to this Agreement and incorporated herein. Additionally, the shoring and cribbing must comply with all applicable requirements promulgated by state and federal agencies, departments, commissions and other legislative bodies. If demolition is to be involved, City must submit for approval electronic copies of a professionally engineered demolition plan, as set forth in **Exhibit G**, with applicable calculations to BNSF's Manager of Public Projects.

12) City must include the following provisions in any contract with its provider(s) performing any inspection, operation or maintenance work regarding the USACE Phase 4 Improvements on the Easement:

A. The contractor is placed on notice that fiber optic, communication and other cable lines and systems (collectively, the "**Lines**") owned by various telecommunications companies may be buried on BNSF's property or right-of-way. The locations of these Lines have been included on the plans based on information from the telecommunications companies. The contractor will be responsible for contacting BNSF's Engineering Representative _____, BNSF's Signal Representative _____, and the telecommunications companies and notifying them of any work that may damage these Lines or

facilities and/or interfere with their service. The contractor must also mark all Lines shown on the plans or marked in the field in order to verify their locations. The contractor must also use all reasonable methods when working in the BNSF right-of-way or on BNSF property to determine if any other Lines (fiber optic, cable, communication or otherwise) may exist.

B. The City and its contractor will be responsible for the rearrangement of any facilities or Lines determined to interfere with the operation and maintenance of USACE Phase 4 Improvements located on BNSF property. The City and its contractor must cooperate fully with any telecommunications company(ies) in performing such rearrangements.

C. Failure to mark or identify these Lines will be sufficient cause for BNSF's Engineering Representative _____ to stop any activities at no cost to the City or BNSF until these items are completed.

D.

13) City must require compliance with the obligations set forth in this Agreement, including **Exhibit C** and **Exhibit C-1**, and incorporate in each prime contract for operations or maintenance activities of the USACE Phase 4 Improvements on the Easement and the specifications therefor (i) the provisions set forth in Article IV and V; and (ii) the provisions set forth in **Exhibit C**, **Exhibit C-1** attached hereto and by reference made a part hereof.

14) Except as otherwise provided below in this Section 14 or above in Section 8 all of this **Article IV**, all work City desires to have performed for operation or maintenance of the USACE Phase 4 Improvements on the Easement will be pursuant to a contract or contracts to be let by City, and all such contracts must include the following:

A. All work performed under such contract or contracts within the limits of BNSF's right-of-way must be performed in a good and workmanlike manner in accordance with plans and specifications approved by BNSF;

B. Changes or modifications during construction operation or maintenance activities that affect safety or BNSF operations must be subject to BNSF's approval;

C. No work will be commenced within BNSF's right-of-way until each of the prime contractors employed in connection with said work must have (i) executed and

delivered to BNSF an agreement in the form of **Exhibit C-1**, and (ii) delivered to and secured BNSF's approval of the required insurance; and

D. To facilitate scheduling for the Project, City shall have its contractor give BNSF's representative BNSF's Engineering Representative _____, _____weeks advance notice of the proposed times and dates for work windows. BNSF and City's contractor will establish mutually agreeable work windows for any inspection, operation or maintenance work. BNSF has the right at any time to revise or change the work windows, due to train operations or service obligations. BNSF will not be responsible for any additional costs and expenses resulting from a change in work windows. Additional costs and expenses resulting from a change in work windows shall be accounted for in the contractor's expenses for the Project.

E. The plans and specifications for all operations and maintenance activities must be in compliance with the BNSF Bridge Requirements set forth on **Exhibit F**, attached to this Agreement and incorporated herein.

15) City must advise the appropriate BNSF Manager of Public Projects, in writing, of the completion date of each instance of inspections, operations or maintenance activities hereunder within thirty (30) days after such completion date. Additionally, City must notify BNSF's Manager of Public Projects, in writing, of the date on which City and/or its Contractor will meet with BNSF for the purpose of making final inspection of the particular operations or maintenance activities and/or construction.

16) City must give BNSF's Manager of Public Projects written notice to proceed ("**Notice to Proceed**") with the railroad work after receipt of necessary funds for the Project. BNSF will not begin the railroad work (including, without limitation, procurement of supplies, equipment or materials) until written notice to proceed is received from City.

ARTICLE V JOINT OBLIGATIONS

1) All work and activities contemplated in this Agreement must be performed in a good and workmanlike manner and each portion must be promptly commenced by the party

obligated hereunder to perform the same and thereafter diligently prosecuted to conclusion in its logical order and sequence. Furthermore, any changes or modifications during such activities which affect BNSF will be subject to BNSF's written approval prior to the commencement of any such changes or modifications.

2) The work and activities hereunder must be done in accordance with the BNSF Bridge Requirements set forth on **Exhibit F** and the detailed plans and specifications approved by BNSF.

3) City must require its contractor(s) to adhere to any schedule approved by BNSF for each particular instance of inspections, operations or maintenance work. The parties hereto mutually agree that BNSF's failure to complete the railroad work in accordance with the construction operation or maintenance schedule due to inclement weather or unforeseen railroad emergencies will not constitute a breach of this Agreement by BNSF and will not subject BNSF to any liability. Regardless of the requirements of any approved schedule, BNSF reserves the right to reallocate the labor forces assigned to complete the railroad work in the event of an emergency to provide for the immediate restoration of railroad operations of either BNSF or its related railroads or to protect persons or property on or near any BNSF owned property. Neither BNSF nor the City will be liable to the other for any additional costs or expenses resulting from any such reallocation of BNSF's labor forces. The parties mutually agree that any reallocation of labor forces by BNSF pursuant to this provision and any direct or indirect consequences or costs resulting from any such reallocation will not constitute a breach of this Agreement by BNSF.

4) BNSF will have the right to stop any activities described herein if any of the following events take place: (i) City (or any of its contractors) performs any work or activities in a manner contrary to the plans and specifications approved by BNSF; (ii) City (or any of its contractors), in BNSF's opinion, prosecutes any work or activities described herein in a manner that is hazardous to BNSF property, employees, contractors, invitees, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached **Exhibit C-1** is canceled during the course of any work or activities by the relevant contractor. The work stoppage will continue until all necessary actions are taken by City or its contractor to rectify the situation to the satisfaction of BNSF's Division Engineer or until proof of additional insurance has been delivered to and accepted by BNSF. Any such work stoppage under this provision will not give rise to any liability on the part of BNSF. BNSF's right to stop the work is in addition to any other rights BNSF may have including, but not limited to, actions or suits for damages or lost profits. In the event that BNSF desires to stop work or activities hereunder, BNSF agrees to immediately notify the following individual in writing:

_____

_____

_____

5) City must supervise and inspect the operations of all City contractors to ensure compliance with the plans and specifications approved by BNSF, the terms of this Agreement, the Easement and the CRA and all safety requirements of BNSF. If BNSF determines that proper supervision and inspection are not being performed by City personnel at any time during any activities hereunder, BNSF has the right to stop such activities (within or adjacent to its operating right-of-way). Such activities will not proceed until City corrects the situation to BNSF's reasonable satisfaction. If BNSF feels the situation is not being corrected in an expeditious manner, BNSF will immediately notify _____ for appropriate corrective action.

Pursuant to this Section and Article III, Section 6 herein, City must reimburse BNSF in full for the actual costs of all work performed by BNSF under this Agreement (including taxes, such as applicable sales and use taxes, business and occupation taxes, and similar taxes.

6) All expenses detailed in statements sent to City pursuant to Article III, Section 6 herein will comply with the terms and provisions of _____. The parties mutually agree that BNSF's preliminary engineering, design, and contract preparation costs described in Article III, Section 2 herein are part of the costs of operation and maintenance of the USACE Phase 4 Improvements even though such work may have preceded the date of this Agreement.

7) The parties mutually agree that no construction activities for or related to the USACE Phase 4 Improvements, nor operations, inspections or maintenance of the same, will be permitted during the fourth quarter of each calendar year. Emergency work will be permitted only upon prior notification to BNSF's Network Operations Center (telephone number: 800 832-5452). The parties hereto mutually understand and agree that trains cannot be subjected to delay during this time period.

8) Subject to the restrictions imposed by Article V, Section 7 above, no inspection, operations or maintenance activities may commence until City gives BNSF's Manager of Public Projects thirty (30) days prior written notice of such commencement. The commencement notice will reference BNSF File Number _____and must state the time that activities will begin.

9) In addition to the terms and conditions set forth elsewhere in this Agreement and in the Easement and CRA, including, but not limited to, the terms and conditions stated in **Exhibit F**, BNSF and City agree to the following terms:

A. BNSF will, at its sole cost and expense, accept, own, and maintain its roadbed; track; any access gates installed pursuant to this Agreement or pursuant to the original construction of the USACE Phase 4 Improvements; railroad drainage; and all other railroad facilities.

B. City will own and maintain, at its sole cost, risk and expense, the USACE Phase 4 Improvements and all appurtenances thereto, lighting, drainage and any access roadways to BNSF gates installed pursuant to this Agreement. BNSF may, at its option, but is not obligated to perform maintenance on the USACE Phase 4 Improvements in order to avoid conflicts with train operations. BNSF will notify City prior to performing any such maintenance on the USACE Phase 4 Improvements. In the event such maintenance involves emergency repairs, BNSF will notify City at its earliest opportunity. City must fully reimburse BNSF for the costs of maintenance performed by BNSF pursuant to this subsection. No such maintenance by BNSF, nor the failure of BNSF to perform any maintenance shall in any way reduce, limit or restrict City's obligations hereunder, including without limitation its obligation to perform all needed maintenance to the USACE Phase 4 Improvements.

C. City must, at City's sole cost and expense, keep the USACE Phase 4 Improvements on the Easement painted and free from graffiti.

D. City agrees to reimburse BNSF for the cost of track surfacing due to settlement caused by the construction or state of repair or lack of repair of the USACE Phase 4 Improvements on the Easement for a period not to exceed two (2) years.

E. City must provide BNSF with any and all necessary permits and maintain roadway traffic controls, at no cost to BNSF, whenever requested by BNSF to allow BNSF to inspect the Structure or to make emergency repairs thereto.

F. It is expressly understood by City and BNSF that any right to install utilities will be governed by a separate permit or license agreement between the parties hereto.

G. To the extent practicable, City must keep the USACE Phase 4 Improvements on the Easement clean and free from birds, pigeons, scavengers, vermin, creatures and other animals.

H. If City (including its contractors and agents) or BNSF, on behalf of City, performs (i) alterations, maintenance, operations, modifications or other work to the USACE Phase 4 Improvements on the Easement, or (ii) any alterations, maintenance, operations, modifications or other work on the USACE Phase 4 Improvements on

the Easement with heavy tools, equipment or machinery at ground surface level horizontally within 25'-0" of the centerline of the nearest track, or (iii) any alterations, maintenance, operations, modifications or other work to any superstructure of the USACE Phase 4 Improvements on the Easement, then City and/or its contractors, whichever is conducting the work, must procure and maintain the following insurance coverage, which may be changed from time to time:

Railroad Protective Liability insurance naming only BNSF as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 12 04 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to remove any exclusion for punitive damages.
- Endorsed to include Evacuation Expense Coverage Endorsement.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to BNSF prior to performing any activities or work under this Agreement
- Definition of "Physical Damage to Property" shall be endorsed to read: "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured' care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

As used in this paragraph, "BNSF" means "Burlington Northern Santa Fe, LLC", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

In lieu of providing a Railroad Protective Liability Policy, City or its contractor, as applicable, may participate in BNSF's Blanket Railroad Protective Liability Insurance Policy if available to City or its contractors. The limits of coverage are the same as above.

11) City hereby grants to BNSF, at no cost or expense to BNSF, a permanent right of access from City property described in **Exhibit** __hereto to BNSF tracks for maintenance purposes. BNSF shall release, indemnify, defend and hold harmless City and its employees, subcontractors, agents, licensees, invitees, affiliates and subsidiaries (collectively, with City, the "City Indemnified Parties") from any and all judgments, awards, claims, demands, damages, fines or other governmental

penalties of any type, and expenses (including attorneys' and experts' fees) related to: injury or death to all persons, including, without limitation, the City Indemnified Parties; BNSF's or its contractor(s)'employees, subcontractors, agents, or invitees (collectively, with BNSF and its contractor(s), the "BNSF Persons"); and/or loss and damage to property belonging to any person, or the enforcement or alleged enforcement actions, demands for investigation, and/or penalties issued by any governmental authority (collectively, "Claims"), arising in any manner from or relating to acts or omissions of any BNSF Persons relating to access to City property under this O&M Agreement.

12) City must provide one set of as built plans (prepared in **English Units**) to BNSF, as well as an electronic copy containing as built CAD drawings showing any work performed on the USACE Phase 4 Improvements in the Easement hereunder and identifying the software used for the CAD drawings. The "as built plans" must comply with the BNSF Bridge Requirements set forth on **Exhibit F** and depict all information in BNSF engineering stationing and mile post pluses. The "as built plans" must also include plan and profile, structural bridge drawings and specifications, and drainage plans. All improvements and facilities must be shown.

13) Subject to the restrictions imposed by Article V, Section 9 above and in accordance with the other requirements of this Agreement, City must notify and obtain prior authorization from BNSF's Manager of Public Projects before entering BNSF's right-of-way for any purposes, and the BNSF Manager of Public Projects will determine if flagging is required. City shall be responsible for all required flagging costs. If any activities under this Agreement are contracted, City must require its prime contractor(s) to comply with the obligations set forth in **Exhibit C** and **Exhibit C-1**, as the same may be revised from time to time. To the extent permitted by law, City will be responsible for its contractor(s) compliance with such obligations.

14).

15) BNSF may, at its expense, make future changes or additions to any railroad components affected by the USACE Phase 4 Improvements if necessary or desirable, in BNSF's sole discretion, including, without limitation the following: (i) the right to raise or lower the grade or change the alignment of its tracks, (ii) the right to lay additional track or tracks, or (iii) the right to build other facilities in connection with the operation of its railroad. Such changes or additions must not change or alter the hydraulic components or structural integrity of the USACE Phase 4 Improvements. If it becomes necessary or desirable in the future to change, alter, widen or reconstruct the components of the USACE Phase 4 Improvements to accommodate railroad projects, the cost of such work, including any cost incidental to alteration of railroad or other facilities made necessary by any such changes to the USACE Phase 4 Improvements will be borne solely by BNSF,

or if the City is agreeable, divided between BNSF and City in such shares as may be mutually agreed to by the parties hereto.

16) City may, at City's sole expense, alter or reconstruct the components of the USACE Phase 4 Improvements if necessary or desirable, due to traffic conditions or pedestrian or other recreational traffic, provided, however, that any such alteration or reconstruction must receive BNSF's prior written approval in its sole discretion and based upon BNSF's review and the taking of no exceptions to the plans and specifications for any such alteration or reconstruction as evidenced by either a supplement to this Agreement, or execution of a new agreement that provides for the termination of this Agreement.

17) Except with respect to any attorney-client privileged information or documents, any books, papers, records and accounts of the parties hereto relating to the work hereunder or the costs or expenses for labor and material connected with activities hereunder will at all reasonable times be open to inspection and audit by the agents and authorized representatives of the parties hereto, as well as the State of Arizona and the Federal Highway Administration, for a period of three (3) years from the date of final BNSF invoice related to a particular activity under this Agreement.

18) The covenants and provisions of this Agreement are binding upon and inure to the benefit of the successors and assigns of the parties hereto. Notwithstanding the preceding sentence, City may not assign any of its rights or obligations hereunder without the prior written consent of the other party.

19) In the event construction of the USACE Phase 4 Improvements on the Easement are not completed within _____ of the Effective Date, this Agreement may become null and void at the election of BNSF.

20) Neither termination nor expiration of this Agreement will release either party from any liability or obligation under this Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration.

21) To the maximum extent possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is prohibited by, or held to be invalid under, applicable law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

22)(Intentionally Deleted.)

23) Any notice provided for herein or concerning this Agreement (a "**Notice**") must be in writing and sent by overnight courier and is deemed given on the business day of delivery if delivered before 5 pm on a business day, otherwise on the next business day and shall be sent to the parties at the following addresses:

BNSF: BNSF's Manager Public Projects

_____

_____

City: _____

_____

_____

23. In the event of any conflict between the terms of this Agreement and the terms of the CRA or Easement, the CRA shall control.

24.

SIGNATURE PAGE FOLLOWS

Contract Number: BF-20162127

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and attested by its duly qualified and authorized officials as of the day and year first above written.

BNSF RAILWAY COMPANY

By: _____

Printed Name: _____

Title: _____

WITNESS:

_____

CITY

CITY of FLAGSTAFF, ARIZONA

By: _____

Printed Name: _____

Title: _____

WITNESS:

_____

Contract Number: BF-20162127

Exhibit A

Exhibit B

Contract Number: BF-20162127

EXHIBIT "C"

CONTRACTOR REQUIREMENTS

EXHIBIT D

(Deleted)

Contract Number: BF-20162127

Exhibit E

[Public Projects Manager's letterhead]

Date: _____

Mr./Ms. _____
_____ [Name of City Here]
_____ [Address for City]
_____

Re: Final Approval of Plans and Specifications dated _____, 20__, drafted by _____ **[insert name of architecture or engineering firm here]** **(hereinafter called, the "Plans and Specifications")**

Dear _____:

This letter serves as BNSF RAILWAY COMPANY's ("BNSF") final written approval of the Plans and Specifications covering the construction of _____ **[insert description of the project here]**. This final written approval is given to _____ **[insert name of City here]** ("City") pursuant to Article IV, Section 1 of that certain Underpass Agreement between BNSF and City, dated _____, 20__. If the Plans and Specifications are revised by City subsequent to the date set forth above, this letter shall no longer serve as final written approval of the Plans and Specifications and City must resubmit said Plans and Specifications to BNSF for final written approval.

Regards,

_____
[Public Projects Manager's Name]

Contract Number: BF-20162127

Exhibit F

Bridge Requirements

BRIDGE DESIGN, PLANS & SPECIFICATIONS:

Bridge design calculations will be submitted to BNSF for review and approval. Design calculations will be summarized on a cover sheet to state the design dead load, design live load and amount of impact and any secondary loads considered. Bridge design by other than a BNSF pre-approved consultant will be subject to a third party design check at the City's expense.

For railroad bridges and culverts over waterways, BNSF will be provided with the Hydrology and Hydraulic design criteria, calculations and site specific data, including electronic data utilized in computer simulation modeling. Design considerations should include future land use changes that would increase the volume, velocity or sediment transport characteristics of the streambed flows. Design shall include sediment transport calculations and erosion control mitigation measures if necessary.

Bridge plans will be submitted to BNSF for review and approval at the 30%, 60% and 90% stage of design. The final set of plans must be approved by BNSF prior to letting of bids for the Project.

Prior to issuing any invitation to bid on construction of the Structure, the City should conduct a pre-bid meeting where prospective Contractors have the opportunity to communicate with BNSF personnel as to the site specific train speeds, train density, and general safety requirements for men and equipment working near live tracks. Any invitation to bid and specifications for the Structure and the Project must be submitted to BNSF for review and approval prior to letting of bids for the Project.

BRIDGE CONSTRUCTION:

After awarding the bid, but prior to the Contractor entering BNSF right of way, the City should conduct a pre-construction meeting with BNSF personnel in attendance to reiterate the safety requirements of construction activity adjacent to live tracks.

During construction, BNSF will require an experienced Quality Control Inspector to be present during certain critical times of the Project, including but not limited to: driving foundation piles, erecting falsework, construction of shoring and retaining walls, placing concrete, placing soil backfill and compaction processes. Certain components, normally produced off site, will require a QC inspector to be present, including the production of precast concrete components and steel fabrication. The QC inspector will provide reports to BNSF including pile driving records, concrete compressive test records, and

other such reports requested by BNSF. QC Inspection services can be provided by the City subject to acceptance by BNSF. If the QC services provided are not acceptable, BNSF will provide an independent QC Inspection service to supplement the deficiencies. The City shall reimburse BNSF for all costs of supplemental QC Inspection services.

Within 90 days of the conclusion of the Project and final acceptance by BNSF, the City will provide BNSF with a complete electronic set of the bridge plans labeled “As Built”. Those plans will reflect any and all deviations from the original plans that occurred during construction. The “As Built” plans will be submitted in Micro Station *.dgn electronic format (preferred) or AutoCAD *.dwg format. Electronic plans are to be submitted in the original format used for CAD plan preparation and not converted to another format prior to submission. The plans must show dimensioned locations of existing and relocated utilities.

BRIDGE MAINTENANCE:

BNSF will be responsible for maintenance of the track and ballast over the bridge and the earth embankment approaches. The City will be responsible for maintenance of the structural components of the bridge, including deck waterproofing and paint.

For bridges over roadways, to the extent roadways under bridges are controlled by the City, the City will maintain the roadways under the bridge including signs, pedestrian walkways, fences, drains, landscaping, earth retention components, embankment slopes, erosion control, surface drainage, paint, walkways, handrails, lighting and other improvements associated with the Project. The City will be responsible to post highway vertical clearance signs and maintain such signs to reflect potential future pavement profile elevation changes. Clearance signs, traffic control signals or other signs should not be attached to a load-carrying member of the railroad bridge.

For railroad bridges over waterways, the City will be responsible for all aspects of channel maintenance across BNSF’s right-of-way, including toe of slope erosion control where the railroad embankment meets the streambed. The City will be responsible for debris removal that may accumulate at bridge piers as well as silt removal, local and general scour and remediation and streambed lateral migration and streambed degradation remediation.

Fencing and other trespass controls within BNSF’s right-of-way and incorporated into the Project shall be designed and maintained by the City. Graffiti removal will be the responsibility of the City.

BRIDGE INSPECTION:

BNSF will conduct annual routine structural inspections of railroad bridges over public roadways and waterways at no cost to the City. The City shall provide traffic control under those bridges spanning roadways to enable BNSF personnel or representatives to safely conduct the annual inspections. For routine annual inspections, BNSF will give the City 7 days advance notice of traffic control requirements. In the event of an earthquake, fire, flood, damage from vehicular impacts or other emergent situations,

the City will provide traffic control in roadways to allow immediate inspection by BNSF personnel or representatives. Traffic control will include lane closures or other such measures to allow BNSF personnel, contractors and equipment to be safely positioned under the superstructure.

Upon the conclusion of the BNSF inspection, the City will be notified of items in need of repair. If the City does not complete the repairs requested by BNSF within a reasonable time period, BNSF personnel and/or contractors will perform the repairs and invoice the City for the entire cost of such repairs. Regardless of the nature or cause of such maintenance and repairs, traffic control will be provided by the City at no cost to BNSF to allow safe access to the bridge.



Contract Number: BF-20162127

Contract Number: BF-20162127

EXHIBIT G
Grade Separations

BNSF PROCESS REQUIREMENTS FOR DESIGN & CONSTRUCTION OF GRADE SEPARATION PROJECTS BY A PUBLIC AGENCY ON BNSF RIGHT OF WAY, WHICH IMPACT BNSF PROPERTY OR OPERATIONS

1.01 General:

- 1.01.01 The Contractor must cooperate with BNSF RAILWAY COMPANY, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of _____ _____.
- 1.01.02 Definitions:
- Operationally Critical, (OC): defined as Work that requires a submittal and acceptance by BNSF, which impacts, or could impact BNSF operations, on BNSF right-of-way or adjacent to it.
- Acceptance: BNSF's response to plan submittals indicating a notice to proceed with work in the field; Disclaimer for Acceptance: *BNSF has reviewed these submittals and no exceptions are taken with regard to BNSF's ability to use or accommodate the project as intended. BNSF has not reviewed the design details or calculations for structural integrity or engineering accuracy. BNSF accepts no responsibility for errors or omissions in the design or execution of the project.
- Inspector/Coordinator, (I/C): A third party consultant which BNSF hires to assist in the coordination of the project on BNSF's behalf. When referenced, "I/C" refers to the I/C team consisting of I/C-I, I/C-II, and the Resident Engineer (RE). The I/C team's role is to ensure the project is constructed per accepted* plans and specifications for that portion of the project on BNSF right of way, as it affects BNSF. The I/C will monitor construction activities to ensure that improvements used by BNSF meet all requirements of BNSF, and accommodate railroad operations.

- 1.01.03 The following submittals and actions are required by BNSF prior to Operationally Critical, (OC) Work being performed on BNSF property or above tracks being operated by BNSF Railway:

2.01 Submittals and Actions Required During the Project Design Phase:

- 2.01.01 The Agency shall be the main contact for BNSF throughout the project. Agency shall be included on all correspondence relating to BNSF.
- 2.01.02 Required Design Submittals: (Allow for 4 weeks for BNSF to review design submittals)

Agency shall refer to the requirements of the UP/BNSF Guidelines on Grade Separation Projects when designing a grade separation which will impact BNSF Railway. Agency will be required to submit plans for BNSF review and comment. Plans shall not be labeled “final” until all comments have been addressed and BNSF has accepted* the plans.

Examples of required design submittals may be, but are not limited to:
Concept, vertical profile of Top of Rail, 30% plans and final plans

The following submittals will require a Professional Engineer, (PE) stamp:
Overpass design
Underpass design
Hydraulic study
Any non-standard design of a structure which will carry train loading

Work covered by a submittal shall not be performed in field without receiving Acceptance from BNSF.

Work windows will not exceed 6 hours, so project should be designed accordingly.

The following Disclaimer applies to BNSF acceptance of Agency design plans:
**BNSF has reviewed these submittals and no exceptions are taken with regard to BNSF's ability to use or accommodate the project as intended. BNSF has not reviewed the design details or calculations for structural integrity or engineering accuracy. BNSF accepts no responsibility for errors or omissions in the design or execution of the project.*
3.01 Submittals and Actions Required During the Construction Phase:

- 3.01.01 The Agency shall be the main contact for BNSF throughout the project. Agency shall be included on all correspondence relating to BNSF. BNSF will NOT accept submittals directly from the Agency’s Contractor.

- 3.01.02 BNSF will hire a consultant team to perform the duties of an Inspector/Coordinator, (I/C) on behalf of BNSF for the duration of the field construction of the project. The cost of the I/C will be reimbursable to BNSF by the Agency or their Contractor.

BNSF requires the I/C team be involved in the project throughout the construction phase to represent BNSF.

The I/C has authority to remove a contractor’s employee from BNSF property if that employee fails to comply with the BNSF safety policy, does not have proper PPE or otherwise ignores instructions regarding work on BNSF right-of-way. The I/C has authority to shut down work on BNSF right-of-way if the contractor works in a manner that is in violation of BNSF’s safety policy or FRA regulations. Anytime instructions to the contractor by BNSF or the I/C are not complied with, the project may be shut down. All equipment and personnel will be removed from BNSF property until issues causing the shutdown are resolved to BNSF’s satisfaction.

- 3.01.03 Agency must hold a pre-construction meeting with contractor and BNSF prior to work beginning on BNSF property.

The Pre-Construction meeting shall not be held until 30 days after I/C has been selected – this allows time for the I/C to become familiar with the project.

Recommend scheduling two weeks prior to construction commencing to allow for adjustment to work plans, if needed.

- 3.01.04 Required Construction Submittals: : (Allow for 4 weeks for BNSF to review submittals)

All submittals should flow from the Contractor to the Agency, to the I/C Consultant, to the BNSF Project Engineer, (PE), and to BNSF Structures with responses back through the same communication chain. BNSF will not accept submittals directly from the Contractor.

Any changes to the work governed by a submittal requires that the submittal be re-accepted* by BNSF before the work commences.

Examples of construction submittals required include but are not limited to:
Contractors Safety Action Plan, Fire Prevention Plan, Proposed Project Schedule, Demolition, Shoring, Falsework and Lifting of Materials.

The following submittals will require a Professional Engineer, (PE) stamp:
Critical Pick Plan (75% of capacity of crane, or multi-crane pick)
Lifted Material Plan (Placement or Removal) – When lift is within temporary construction clearances and when list is within 25’ of the centerline of the nearest track
Demolition Plan
Temporary Shoring Plan
Bracing Design Plan (non-standard only per DOT)

For overpasses, Agency shall submit as-built plans of the structure, including final clearance dimensions to the I/C. Vertical clearance must be measured from the Top of Rail, horizontal clearance must be measured from the nearest track centerline.
OPERATIONALLY CRITICAL WORK AND SUBMITTALS: (4 to 6 weeks review timeline) All OC work requires a submittal and acceptance* by BNSF.

- Operationally Critical (OC) submittals are those that have the potential to affect the safe operation of trains and will need to be reviewed carefully. Work must be monitored to ensure it conforms to the submitted/accepted* plan.
- In-person safety review meetings will be required with BNSF representative, I/C, Contractor and Agency representative for all OC work and must be documented. The purpose of the meeting is to ensure all parties understand BNSF requirements and are following the applicable submittals.

When a track work window is required the meeting shall occur at least 48 hours in advance of work starting.

- Submittals must meet the requirements of the UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects. Submittals must also follow the requirements outlined in BNSF Review Comment Sheets, Use of Cranes & Lifting of Materials Submittal Schedule, BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan and the BNSF-UPRR Guidelines for Temporary Shoring. Some submittals are required to be sealed by a licensed professional engineer.
    a. See Table 3-1 for Overhead Structures in UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects
    b. See Table 3-2 for Underpass Structures UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects
    c. Examples of OC submittals included in the above are:
        i. Shoring (Follow BNSF-UPRR Guidelines for Temporary Shoring)
        ii. Falsework
        iii. Demolition (Need plans for substructure and superstructure. Follow BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan)
        iv. Erection (overhead and underpass structures)
        v. Construction Phasing Plans
    d. Additional OC submittals required, but not included in the Guidelines are:
        i. All work plans that remove tracks from service (track outage windows require a detailed Gantt chart when greater than 2 hours)
        ii. Contingency plans
        iii. Additional OC submittals may be required on a project by project basis.

For underpasses and other railroad bridges, as required in Sections 4.11 and 4.12 of the UP Railroad - BNSF Railway Guidelines for Railroad Grade Separation Projects, a RE will be on site full-time during construction, at the cost of the project. At the discretion of the RE, as accepted by BNSF, an I/C-I or I/C-II maybe assigned for field duties where the work is not critical to ensuring the bridge is built to accepted project plans and specification.

- BNSF requires temporary and new track and railroad bridges be inspected by an FRA qualified BNSF employee prior to being placed into service. Two week advanced notice to BNSF structures department is required. For underpasses, all pile driving records are to be provided within 3-days of driving to the BNSF PE.
- Agency shall submit an as-built survey of shoo-fly final alignments. Alignments must conform to BNSF Shoo-fly procedures.

- 3.01.05 Prior to any work commencing on BNSF right of way:

Contractors C/C-1 or Right of Entry must be fully executed and their insurance must be approved before they can perform work on BNSF property.

Proof of Contractors insurance approval must be produced to the BNSF PE and the I/C.

- 3.01.06 Contractor must adhere to all other BNSF policies and procedures not specifically mentioned in this agreement.