



BRIEFING: April 12, 2016 BOARD MEETING AGENDA ITEM #4

TO: Chairman Richard and Board Members

FROM: Frank Vacca, Chief Program Manager
Paul Engstrom, Third Party Manager
Tom Fellenz, Chief Counsel

DATE: April 12, 2016

RE: Consider Delegating Authority to Negotiate and Finalize Agreements with the BNSF Railway Company (BNSF)

Background

The Authority's First Construction Section (FCS), which is being constructed under three design-build contracts (CP 1, CP 2-3 and CP 4), will be adjacent to the BNSF corridor in the Central Valley. At no point will high-speed rail share passenger tracks with BNSF, but it will pass over, under and in some areas be in close proximity to the BNSF right-of-way.

BNSF's cooperation and accommodation is crucial to successful delivery of construction in the Central Valley and the high-speed rail program is dependent on BNSF taking the following actions:

- (1) Reviewing, commenting on, and approving designs and proposals for construction;
- (2) Participating in conference calls, attending a variety of meetings, and coordinating ongoing site investigation, right-of-way and engineering planning and design meetings with the Authority staff, contractors and consultants;
- (3) Granting permission to enter to assess potential environmental risks during construction and for appraisal of parcels to be acquired;
- (4) Allowing safe access to their right-of-way for construction;
- (5) Temporarily and permanently relocating operating tracks and train signal/communication systems;
- (6) Approving of key design features, including overpasses and intrusion protection barriers;
- (7) Continuously and safely operating freight service during and after construction.

BNSF Railway is one of the largest freight railroad networks in North America. BNSF is the product of mergers and acquisitions of nearly 400 different railroad lines, including two major

railroads (Burlington Northern Railroad and the Atchison, Topeka and Santa Fe Railway), over the course of 160 years.

In California, BNSF operates over 2,125 miles of track – 1,155 miles of which are owned by BNSF and 975 miles through trackage rights (rights of one railroad to operate on another's tracks). BNSF is a publicly traded corporation and a subsidiary of Berkshire Hathaway Inc., whose priority is to preserve and protect their ability to move freight through their systems in order to serve future and current customers.

Authority staff is negotiating the terms and conditions of BNSF's agreements to address the Authority's construction needs. A separate Reimbursement Agreement (within the CEO's delegated authority) was executed with BNSF to permit reimbursement for BNSF expenses to review and comment on the Authority's Design Builders Plans and Designs. The major terms of Construction & Relocation, as well as Joint Corridor Use Agreements have been resolved, allowing staff to seek Board approve for final negotiation and execution.

The Authority is seeking Board approval to delegate authority to the CEO to execute these agreements which are crucial to the Design-Build contracts for the FCS and successful delivery of the high-speed rail program.

Discussion

Relocation and Construction Agreements

In connection with the development and construction of the FCS, BNSF will modify or relocate certain facilities and implement improvements, either permanently or temporarily, to enable construction and/or operation of the high-speed rail system. This includes constructing rail-over-rail grade separation structures (either overpasses or underpasses); local streets/highway overpasses and/or underpasses over or under the existing BNSF property; and, replacement of existing at-grade crossings and closure of existing at-grade crossings. Separate Relocation and Construction Agreements will be signed for each Construction Package.

A portion of the work to modify BNSF facilities will be performed by and are included in the design build contracts. This work includes all civil work necessary to relocate BNSF facilities up to the track level.

Other portions of the work to modify BNSF facilities will be performed by BNSF. This work includes installing ballasted mainline tracks, freight yard tracks, train signals, removal of existing crossing gates, and relocation of existing signals near at-grade crossings.

Relocation and Construction Agreements will address:

- (1) The cost of any BNSF facility modifications including:
 - a. the cost of signal, track, civil and associated modifications required to modify or install grade crossing warning devices at at-grade crossings;
 - b. the cost of any signal, track, civil and associated work;

- c. the cost of installing at-grade crossing track integrity systems and modifications to active warning devices to accommodate such systems; and,
 - d. design review and approval costs, permit, construction costs, construction oversight costs, coordination necessary to facilitate the project.
- (2) The Cost of flaggers who are freight railroad employees designated to communicate with the contractor which is required whenever the contractor's work could endanger or interfere with the freight railroad operations;
 - (3) The BNSF construction and/or maintenance costs during the construction of the Authority improvements caused by the Authority's construction activities;
 - (4) All BNSF construction management or inspection costs related to construction of the Authority Improvements;
 - (5) All emergency work costs caused by the Authority in connection Authority's project necessary to restore BNSF's operations or protect BNSF employees or property;
 - (6) All Costs associated with the BNSF Project Coordinator;
 - (7) All Costs associated with compliance with the Federal Flow Down Requirements; and,
 - (8) All Costs incurred under trackage, haulage or similar agreements between BNSF and other freight railroads in connection with detouring freight in BNSF's account onto track owned by another freight railroad in order to accommodate the Project's construction timeline.

Joint Corridor Agreement

The Joint Corridor Agreement addresses the use, operation and maintenance of the Authority's facilities including operation of its passenger service where the mainline tracks for Authority passenger service are within two hundred and fifty (250) feet of BNSF's property line.

Unlike the many intercity and commuter passenger rail services with which the freights have negotiated indemnification agreements, the Authority will not be sharing its dedicated tracks or right-of-way with the freight railroads. Safety design requirements include staying at least 102 feet away from the edge of the freights existing right-of-way (except for overpasses/viaducts), when feasible.

The federal Amtrak Reform and Accountability Act (Amtrak Act) explicitly authorizes passenger rail providers, including the Authority, to enter into indemnification agreements to allocate financial responsibility for claims. The Amtrak Act imposed a statutory \$300 million liability cap (on aggregate damages from a single incident to be readjusted for inflation every five years) which was set by Congress to keep train systems such as Amtrak operating when faced with major lawsuits. The cap applies to claims by passengers on intercity, commuter, or high-speed rail service.

The terms within the Joint Corridor Agreement are based on existing state and federal laws, including the Amtrak Act, as adjusted, which specifically addresses commercial passenger liability. Also included is a commitment that the eventual Authority Rail Operator will provide

\$500 million liability insurance policy to cover both the Authority and BNSF. The Authority's insurance experts have verified availability and cost for this insurance.

The Authority may be responsible for losses in excess of negotiated policy limits and coverage restrictions depending on responsibility. There are situations where, despite contractually agreed to insurance requirements, insurance companies will not agree to cover everything (or will specifically exclude coverage through endorsements, exclusions or otherwise). For example it is typical for general liability policies to exclude coverage for liability caused by asbestos, based upon punitive damages, arising out of an act of war or terrorism.

Reimbursement Agreement

The terms of the Reimbursement Agreement govern BNSF's on-going review of the design and construction plans for the Project and include BNSF's staff, consultants and contractors review, comment and approval of preliminary and final designs; project management for design; construction administration and management; and, any permits or fees required to be obtained by BNSF. The current agreement in place, HSR14-40, is for \$5 million and was executed under the CEO's delegated authority. To cover all three construction packages, this agreement will require an amendment to increase the contract amount.

Work performed by BNSF under the Reimbursement Agreement is managed by Task Order, services performed are at the Authority's request, and are for actual and reasonable costs.

Other Agreements

In addition to the agreements discussed above, there will be additional agreements with BNSF. These agreements are described as information to the Board and are not included in this delegation request.

Purchase and Sale Agreements will be executed for property interests or rights to be conveyed or granted to the Authority by BNSF Agreements and will be approved by the state's Public Works Board. Aerial easements which will be conveyed to the Authority by BNSF will be conveyed pursuant to the **Overpass Agreements**, other than rights to one or more temporary construction licenses from BNSF to the Authority which will be granted in the Relocation and Construction Agreement. Overpass Agreements involving construction of new or changes to existing at-grade crossings will require the approval of the California Public Utilities Commission. The costs for the property rights in the Purchase and Sale Agreements and the Overpass Agreements are included in the Right-of-Way Acquisition plan and budget. The costs of the Overpass Structures are included in the Design-Build Contracts.

Right of Entry Agreements will be used for access to BNSF's property for appraisals, surveys, identification of underground utilities, testing for hazardous materials, and other related activities. Fees for access are paid by the applicable contractor and included within their contract costs.

Additionally, several construction elements and costs are included in the Authority's civil construction packages (CP 1, CP 2-3 and CP 4) which include, but are not limited to: any costs associated with the construction of high-speed rail; underground track conduit, duct banks, manholes or pull boxes; removal or treatment of hazardous materials; any costs for disruption of freight service or lost revenue; fencing or gates; intrusion protection devices including barriers, ditch/berms or detection monitoring; relocation of non-BNSF owned utilities; any costs for BNSF mitigations (shoofly, turntable, spurs, wyes); any costs incurred from Alternate Technical Concepts (ATCs); and demolition and removal of existing BNSF tracks when required for relocation.

Legal Approval

All BNSF agreements are negotiated with assistance and involvement by the Authority's in-house Counsel and contracted outside Counsel. All agreement will be approved as to form and compliance with laws by Counsel prior to execution.

Budget Implications

The \$100 million budget for work associated with the BNSF Agreements is included in the Phase 1 and FCS budgets. The budget has recently been validated and independently checked. BNSF will provide complete labor rate schedules and will invoice on an hourly basis. The budget will be tracked and managed by developing estimates for various work components to be performed during the performance periods. Those estimates will include labor, materials and equipment. The progress and management of the BNSF work will be based on structured weekly coordination meetings to review schedule, priorities, delivery dates, responsibility assignments, and to identify issues and problems. The design progress will be tracked closely by implementing a global tracking commodity chart. This chart will be maintained with weekly updates, shared with team members, and used as a tool to gauge whether progress is sufficient or if action needs to be taken. The project teams will coordinate the contractors schedule with BNSF work activities on a four week look-ahead schedule and review progress at the weekly coordination meeting. BNSF design will be reviewed to assure all work proposed is within the scope of work identified in the Relocation and Construction agreement.

The project teams will monitor anticipated construction dates to the BNSF work matrix to aid in prioritizing designs. Actual progress should be updated weekly and compared to anticipated construction start dates. The team will develop trend-type charts as much as possible on the dashboard, as this type of chart shows both the current status and past trends. These trends will tell the team if they are on a course that will achieve the goals set by the project. Noted below are metrics that are being considered for the dashboard.

- Design Trends
- Construction Trends
- Cost Versus Budget
- Top Ten Issues/Problems
- Indicators of potential delay in contractors operation

Risk Analysis

Contingencies are typically included in large budget items of this nature but are not included in the request for Board approval. A contingency analysis and budget request for risks related to the BNSF contracts will be presented to the Board at a subsequent meeting.

Estimate

In March/April 2016 these estimates were prepared by Rail Delivery Partner estimators and independently checked. The estimates are based upon the most current underlying assumptions about work to be performed by and costs expected to be incurred by BNSF. The Preliminary Engineering Drawings included in the Final EIR were used as the basis for all quantities associated with relocation, construction, and adjacency to BNSF. RDP railroad experts and construction personnel from both the RDP and the Authority provided the underlying assumptions to the estimators and validated the final estimates.

Relocation and Construction costs were segregated using FRA unit price element codes. The RDP estimators prepared assembly costs for each element of construction that included both material and labor costs. Estimates were prepared with the understanding that BNSF will construct all trackway elements from the sub-ballast up (i.e. ballast, ties, and rail). Additionally, BNSF estimates included turnouts, crossovers, train control and communications, and a minor amount of demolition. RDP estimators reviewed quantities provided by the Regional Consultant and then independently developed quantities that were used with the unit prices to estimate relocation and construction costs.

For the Professional Services and support, two estimating methods were employed. In the first category, common industry averages were used against construction costs (i.e. 6% for final design, 3% for project management, etc.). Second category services were based upon average or blended rates (inspection services at \$150/hour and flagging at \$1,500/day). A 30% Overtime allowance was incorporated for flagging and Document Review for our adjacency was assumed at \$451,000/Route Mile where the HSR is within 250' of BNSF. Again, where unit costs were utilized for Professional Services, independent quantities were developed by the RDP estimators and applied.

The breakdown and description of costs is featured in the table on the next page.

DESCRIPTION	CP 1	CP 2-3	CP 4
TRACK STRUCTURE & TRACK		\$23,595,666	\$11,537,588
SITWORK (REMOVAL OF BALLASTED TRACK)		\$270,638	
COMMUNICATIONS AND SIGNALING		\$6,968,637	\$3,256,621
PROFESSIONAL SERVICES (FINAL DESIGN, PROJECT MANAGEMENT FOR DESIGN, CONSTRUCTION ADMIN & MANAGEMENT, PERMITS & FEES, SYSTEMS START-UP)		\$4,580,835	\$2,415,337
BNSF FLAGGING SERVICES, DOCUMENT REVIEW AND INSPECTIONS	\$12,040,600	\$23,696,740	\$7,483,660
TOTAL BY CP	\$12,040,600	\$59,112,517	\$24,693,206
ESCALATION 2014 3RD QTR. TO 2016 1ST QTR. (@ 3.75%/YR.)		\$2,216,719	\$925,995
SUBTOTAL FOR CP01, CP 2/3, CP04 AND ESCALATION			\$98,989,037
		ROUNDED	\$100,000,000

Recommendation

Approve the proposed resolution delegating authority to the Chief Executive Officer (CEO) or a designee of the CEO, to execute Relocation and Construction agreements and the Joint Corridor Agreement with BNSF. Upon execution, these agreements will be set up as a five year reimbursement agreement for payment of all actual and eligible costs incurred by BNSF in an amount not to exceed \$100,000,000. This amount is the estimated cost of: (1) a scheduled and dedicated flagging crew through construction; (2) materials and construction work performed by BNSF for temporary track relocation and signal/communication modifications; and, (3) the development of design standards and compliance review of Design-Builders' designs for all mutual benefit improvements.

Attachments

- Draft Resolution #HSRA 16-11