



Contract Number: BF-20253718

GRADE CROSSING CONSTRUCTION AND MAINTENANCE AGREEMENT

BNSF File No.: BF-20253718
Mile Post 272.34, 273.160
Line Segment 7600
U.S. DOT Number 026900R, 026904T
San Diego 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 NATIONAL CITY**, a political subdivision of the
State of California ("**City**"), collectively referred to as the "**Parties**".

RECITALS

WHEREAS, BNSF owns and operates a line of railroad in and through National City, State
of California;

WHEREAS, in the interest of aiding vehicular travel and public safety, the City is
undertaking an improvement project along the existing Harbor Drive & Bay Marina Drive
at-grade rail crossings, more specifically identified as the BNSF Line Segment **7600** and
Milepost **272.34 & 273.16**, and designated by D.O.T. No. **026900R, 026904T**; the
improvements consist of reconstructing the at-grade rail crossing surfaces and
installation of railroad crossing signals and activation equipment within the now existing
roadway easements and across the BNSF right-of-way as depicted on the Exhibit A,
attached hereto;

WHEREAS, the City desires to replace the highway traffic control signals with the at-
grade crossing warning devices as depicted in Exhibit A;

WHEREAS, BNSF agrees to allow the City to replace the highway traffic control signals
with the at-grade traffic crossing and warning devices depicted in Exhibit A;

WHEREAS, the City agrees that BNSF and its railway system will receive no
ascertainable benefit from the installation of advance warning signs, pavement marking
stop bars, or related crossing signal equipment (hereinafter collectively called, "Crossing
Signal Equipment");



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WHEREAS, the City also desires BNSF to install a new crossing surface at Harbor Dr with a new concrete and rubber crossing surface;

WHEREAS, the City by this Agreement agrees to pay for the acquisition and installation of crossing signal equipment improvements and the new crossing replacement surface located at Harbor Dr. & Bay Marina Dr. with funds received by state and federal grants consistent with 23 U.S.C. § 130;

WHEREAS, BNSF agrees to purchase and install, at the City's sole expense, the crossing signal equipment and the new crossing surface improvements described in the scope of work incorporated herein, and upon the terms and conditions set forth in this Agreement;

WHEREAS, each recital shall be incorporated into this Agreement with the full force and effect applied as if in the body of the Agreement; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the Parties contained herein, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE I – SCOPE OF WORK

- 1) The term "**Project**" as used herein includes any and all work related to the reconstruction of the at-grade rail crossing surfaces by City and installation of railroad crossing signals and activation equipment for the Bayshore Bikeway Segment 5 project at U.S. D.O.T No. **026900R, 026904T**, (hereinafter referred to as the "**Crossing**") by BNSF on behalf of the City, or particularly described in Exhibit A, 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 and the permanent removal, closure, vacation, and to perform the at-grade crossings known as Harbor Drive & Bay Marina Drive, Milepost 272.34, 273.16, DOT No. 026900R, 026904T, Line Segment 7600, San Diego Subdivision, California Division.

ARTICLE II – RAILROAD OBLIGATIONS

In consideration of the covenants of Agency set forth herein and the faithful performance thereof, BNSF agrees as follows:

- 1) Upon City's payment to BNSF of an administrative fee in the sum of Two Thousand and No/100 Dollars (\$2,500), together with the Temporary Construction License Fee



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in the sum of \$[REDACTED] and No/100 Dollars (\$[REDACTED]), BNSF hereby grants to City, its successors and assigns, upon and subject to the terms and conditions set forth in this Agreement, a temporary non-exclusive license (hereinafter called, "Temporary Construction License") to enter upon and use the portion of BNSF's right-of-way as is necessary to reconstruct, widen and thereafter maintain, the Crossing as described further on Exhibit A-1, excepting and reserving BNSF's rights, and the rights of any others who have obtained, or may obtain, permission or authority from BNSF, to do the following:

- A. Operate, maintain, renew and/or relocate any and all existing railroad track or tracks, wires, pipelines and other facilities of like character upon, over or under the surface of said right-of-way;
- B. Construct, operate, maintain, renew and/or relocate upon said right-of-way, without limitation, such facilities as the BNSF may from time to time deem appropriate; and
- C. Otherwise use or operate the right-of-way as BNSF may from time to time deem appropriate.

The term of the Temporary Construction License begins on the Effective Date and ends on the earlier of (i) substantial completion of the Project, or (ii) Temporary Construction License Duration, 12 months following the Effective Date. The Temporary Construction License and related rights given by BNSF to City in this provision are without warranty of title of any kind, express or implied, and no covenant of warranty of title will be implied from the use of any word or words herein contained. The Temporary Construction License is for construction of the Project only and shall not be used by City for any other purpose. City acknowledges and agrees that City shall not have the right, under the Temporary Construction License, to use the BNSF's right-of-way for any other purpose than construction. In the event City is evicted by anyone owning, or claiming title to or any interest in said right-of-way, BNSF will not be liable to City for any damages, losses or any expenses of any nature whatsoever. The granting of similar rights to others, subsequent to the date of this Agreement, will not impair or interfere with the rights granted to City herein.

Upon City's payment to BNSF of the additional sum of \$[REDACTED] and No/100 Dollars (\$[REDACTED]), such payment to be made within thirty (30) days of issuing the Notice to Proceed pursuant to Article III, Section 16 of this Agreement, and provided further that City is in compliance with the term and conditions of this Agreement, BNSF will grant to City, its successors and assigns, an easement (hereinafter called, the "Easement") to enter upon and use that portion of BNSF's right-



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of-way as is necessary to use and maintain the Crossing, substantially in the form of Exhibit B attached to this Agreement. If City fails to pay BNSF within the thirty-day time period set forth in the preceding sentence, BNSF may stop construction of the Project until full payment is received by BNSF.

- 1) BNSF will furnish all labor, materials, tools, and equipment for railroad work required for the construction of the Project, such railroad work and the estimated cost thereof being as shown on Exhibit D attached hereto and made a part hereof. In the event construction on the Project has not commenced within six (6) months following the Effective Date, BNSF may, in its sole and absolute discretion, revise the cost estimates set forth in said Exhibit D. In such event, the revised cost estimates will become a part of this Agreement as though originally set forth herein. Any item of work incidental to the items listed on Exhibit D not specifically mentioned therein may be included as a part of this Agreement upon written approval of the City, which approval will not be unreasonably withheld. Construction of the Project must include the following railroad work by BNSF:
 - A. Procurement of materials, equipment and supplies necessary for the railroad work;
 - B. Furnishing of flagging services during construction of the Project as required and set forth in further detail on Exhibit C, attached to this Agreement and made a part hereof;
 - C. Furnishing engineering and inspection as required in connection with the construction of the Project;
 - D. Installation of Crossing Signal Equipment and Crossing Signal Control House as shown on Exhibit A;
 - E. Provide an interface box, with contact terminals, mounted on side of Crossing Signal Control House; and
 - F. Make such changes in the alignment, location and elevation of its telephone, telegraph, signal and/or wire lines and appurtenances along, over or under the tracks, both temporary and permanent, as may become necessary by reason of the construction of the Project.



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- 2) BNSF will perform all railroad work set forth in Article II, Section 2 above 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 to reimburse BNSF for work of an emergency nature caused by City or City's contractors in connection with the Project which BNSF deems is reasonably 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. 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 construction of the Project. Such charges will be considered part of the actual cost of the Project, regardless of the nature or amount of ultimate liability for injury, loss or death to BNSF's employees, if any.
- 5) During the construction of the Project, BNSF will send to the City periodic invoices detailing the costs of the railroad work performed by BNSF under this Agreement. The 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 the Project, BNSF will send City a detailed invoice of final costs, segregated as to labor and materials for each item in the recapitulation shown on Exhibit D. Pursuant to this section and Article IV, Section 7 herein, the 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 the City under this section. For purposes of computing the time limits prescribed by the California Government Code Section 911.2 for the presentment of a claim against the City the cause of action for failure to reimburse BNSF for the costs of the Railroad work performed by it pursuant to this Agreement shall be deemed to have accrued one hundred and eighty (180) days of the date of the final invoice.



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ARTICLE III – CITY OBLIGATIONS

In consideration of the covenants of BNSF set forth herein and the faithful performance thereof, Agency agrees as follows:

- 1)** The City must furnish to BNSF plans and specifications for the Project. Said plans (reduced size 11" x 17"), showing the plan and profile of the roadway work on BNSF right-of-way and marked as Exhibit A, attached hereto and made a part hereof, must be submitted to BNSF for the development of railroad cost estimates.
- 2)** The City must make any required application and obtain all required permits and approvals for the construction of the Project.
- 3)** The City must acquire all rights of way necessary for the construction of the Project.
- 4)** 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 construction of the Project.
- 5)** The City must construct the Project as shown on the attached Exhibit A and do all work ("City's Work") provided for in the plans and specifications for the Project, except railroad work that will be performed by BNSF as outlined in the below. The City must furnish all labor, materials, tools and equipment for the performance of City's Work. The principal elements of City's Work are as follows:
 - A.** Design and Reconstruction/Construction of Harbor Dr & Bay Marina Dr;
 - B.** Installation of a pavement marking stop bar in accordance with the Manual on Uniform Traffic Control Devices (hereinafter called, "MUTCD");
 - C.** Installation of advance warning signs in accordance with the MUTCD;
 - D.** Perform all necessary grading and paving, including backfill of excavations and restoration of disturbed vegetation on BNSF's right-of-way.;
 - E.** Construct suitable drainage, both temporary and permanent;



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- F. Provide all barricades, lights, flagmen or traffic control devices necessary for preventing vehicular traffic from using a portion of the Crossing, during the installation of the concrete crossing surfaces, and also during the installation of the Crossing Signal Equipment;
 - G. Construct asphalt/concrete roadway surface on approaches to each track. Roadway surface will match elevation of the Main (and Siding) Track crossing surface(s) and remain level to a point at least thirty (30) feet from nearest rail. Any concrete headers will be constructed no closer than 5'-6" (preferably 6'-0") from centerline of each track to provide for a minimum of 11'-0" (preferably 12'-0") opening for track and railroad crossing surface;
 - H. Perform job site cleanup including removal of all construction materials, concrete debris, surplus soil, refuse, contaminated soils, asphalt debris, litter and other waste materials to the satisfaction of BNSF;
 - I. Provide BNSF in writing with the total time required from start of preempt cycle of highway traffic control signals until arrival of the train at the highway-rail crossing;
 - J. Connect the highway traffic control signals to the contact terminals in the interface box including all necessary cable and conduit; and
 - K. Install the new highway traffic control signals.
- 6) The City will approve the location of the signals and signal bungalow prior to the installation by BNSF.
- 7) The City must have advanced railroad crossing signs and standard pavement markings in place at the crossing shown on Exhibit A (if the same are required by the MUTCD) prior to the acceptance of this Project by the City.
- 8) The City must provide to the BNSF's Manager of Public Projects written notice to proceed ("**Notice to Proceed**") with the railroad portion of the 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.
- 9) The City's Work must be performed by the City or City's contractor in a manner that will not endanger or interfere with the safe and timely operations of BNSF and its facilities.



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- 10)** For any future inspection or maintenance, either routine or otherwise, performed by subcontractors on behalf of the City, City shall require the 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, the City shall: 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.contractororientation.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.
- 11)** The 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, the 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 railway tracks.
- 12)** The City must include the following provisions in any contract with its contractor(s) performing work on said Project:

 - A.** The City and its contractors are 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 City and its contractors will be responsible for contacting BNSF and the telecommunications companies and notifying them of any work that may damage these Lines or facilities and/or interfere with their service. The City's contractors must mark all Lines shown on the plans or marked in the field in order to verify their locations. The City's contractors must 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.** Failure to mark or identify these Lines will be sufficient cause for BNSF's engineering representative to stop construction at no cost to the City or BNSF until these items are completed.
 - C.** The Contractor will be responsible for the relocation of any facilities or Lines determined to interfere with the construction. The City's contractor must cooperate fully with all telecommunications company(ies) in performing such relocations.



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D. In addition to the liability terms contained elsewhere in this Agreement, the City's contractors hereby indemnifies, defends and holds harmless BNSF for, from and against all cost, liability, and expense whatsoever (including, without limitation, attorney's fees and court costs and expenses) arising out of or in any way contributed to by any act or omission of contractor, its subcontractors, agents and/or employees that cause or in any way or degree contribute to: (1) any damage to or destruction of any Lines by contractor, and/or its subcontractors, agents and/or employees, on BNSF's property or within BNSF's right-of-way, (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on BNSF's property or within BNSF's right-of-way, and/or (3) any claim or cause of action for alleged loss of profits or revenue by, or loss of service by a customer or user of such telecommunication company(ies). **THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF BNSF.**

13) The 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 construction of the Project, or the specifications therefor (i) the provisions set forth in Article III and IV; and (ii) the provisions set forth in Exhibit C and Exhibit C-1, attached hereto and by reference made a part hereof.

14) Except as otherwise provided below in this Section 13, all construction work performed hereunder by City for the Project 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 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



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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;

- D. If it is in City's best interest, the City may direct that the construction of its Project be done by day labor under the direction and control of the City, or if at any time, in the opinion of the City, if one of its contractors has failed to prosecute with diligence the work specified in and by the terms of said contract, City may terminate its contract with the contractor and take control over the work and proceed to complete the same by day labor or by employing another contractor(s) provided; however, that any contractor(s) replacing the original contractor(s) must comply with the obligations in favor of BNSF set forth above and, provided further, that if such construction is performed by day labor, the City will, at its expense, procure and maintain on behalf of BNSF the insurance required by Exhibit C-1.
 - E. To facilitate scheduling for the Project, the City shall have its contractors give BNSF's Roadmaster 90 days advance notice of the proposed times and dates for work windows. BNSF and the City's contractor will establish mutually agreeable work windows for the Project. 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.
- 15) City must advise the appropriate BNSF Manager Public Projects, in writing, of the completion date of the Project within thirty (30) days after such completion date. Additionally, City must notify BNSF's Manager 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 Project.**
- 16) TO THE FULLEST EXTENT PERMITTED BY LAW, CITY HEREBY RELEASES, INDEMNIFIES, DEFENDS AND HOLDS HARMLESS BNSF, ITS AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART) (I) THE USE, OCCUPANCY OR PRESENCE OF CITY, ITS**



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CONTRACTORS, SUBCONTRACTORS, EMPLOYEES OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (II) THE PERFORMANCE, OR FAILURE TO PERFORM BY THE CITY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS, ITS WORK OR ANY OBLIGATION UNDER THIS AGREEMENT, (III) THE SOLE OR CONTRIBUTING ACTS OR OMISSIONS OF CITY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (IV) CITY'S BREACH OF THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT GRANTED TO CITY PURSUANT TO ARTICLE II OF THIS AGREEMENT, (V) ANY RIGHTS OR INTERESTS GRANTED TO CITY PURSUANT TO THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT DISCUSSED IN ARTICLE II OF THIS AGREEMENT, (VI) CITY'S OCCUPATION AND USE OF BNSF'S PROPERTY OR RIGHT-OF-WAY, INCLUDING, WITHOUT LIMITATION, SUBSEQUENT MAINTENANCE OF THE STRUCTURE BY CITY, OR (VII) AN ACT OR OMISSION OF CITY OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR CONTRACTORS OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER. THE LIABILITY ASSUMED BY CITY WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF BNSF.

17) The City agrees to provide BNSF for the performance of their work with one of the following credit enhancements guaranteeing the total amount of City's financial obligations (including, without limitation, liquidated damages, indemnity obligations and other expenses) under this Agreement:

- A.** Irrevocable Bank Letter of Credit drawn upon a bank satisfactory to BNSF;
- B.** Surety Bond underwritten by an insurance company listed in the Department of Treasury Federal Register with terms acceptable to BNSF, in BNSF's sole discretion; or
- C.** A posted cash deposit via wire transfer to a BNSF deposit account.

Any irrevocable letter of credit or surety bond provided to BNSF pursuant to this provision shall have a minimum term of eighteen (18) months. The bank issuing the letter of credit and the insurance company issuing the surety bond shall notify BNSF thirty (30) days prior to the expiration date of the letter of credit or the surety bond.



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Upon expiration of any surety bond or letter of credit, the City must immediately provide BNSF with a substitute letter of credit, surety bond or cash deposit as set forth above until the City's financial obligations to BNSF are fully and finally satisfied.

Any cash deposit provided under this provision will be held in a non-interest bearing account in the name of BNSF. If the City's financial obligations at the end of the Project are less than the amount of the cash deposit, BNSF shall refund any remaining sum to City.

The City should forward the letter of credit or the surety bond to BNSF's Manager of Risk Management, 2500 Lou Menk Drive, AOB-1, Fort Worth, Texas 76131 (phone: 817-352-3485). If posting a cash deposit pursuant to this provision, contact BNSF Manager of Risk Management to obtain the BNSF account information.

ARTICLE IV – JOINT OBLIGATIONS

IN CONSIDERATION of the premises, the parties hereto mutually agree to the following:

- 1) All work 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 construction which affect BNSF will be subject to BNSF's approval prior to the commencement of any such changes or modifications.
- 2) The work hereunder must be done in accordance with the Exhibit A and the detailed plans and specifications approved by BNSF.
- 3) The City must require its contractor(s) to reasonably adhere to the Project's construction schedule for all Project work. The parties hereto mutually agree that BNSF's failure to complete the railroad work in accordance with the construction 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 the construction 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. BNSF will not be liable for any additional costs or expenses resulting from any such redirecting their labor forces to other matters. The parties mutually agree that any reallocation of labor forces by BNSF pursuant to this provision



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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 construction work on the Project if any of the following events take place: (i) City (or any of its contractors) performs the Project work in a manner contrary to the plans and specifications approved by BNSF; (ii) City (or any of its contractors), in BNSF's opinion, prosecutes the Project work in a manner that is hazardous to BNSF property, 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 the Project; or (iv) City fails to pay BNSF for the Temporary Construction License or the Easement pursuant to Article II, Section 1 of this Agreement. 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. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, BNSF may immediately terminate the Temporary Construction License or the Easement. 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 construction work on the Project, BNSF agrees to immediately notify the following individual in writing:

National City
City Manager
1243 National City Blvd
National City, CA 91950

- 5) The 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 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 construction of the Project, BNSF has the right to stop construction (within or adjacent to its operating right-of-way). Construction of the Project will not proceed until City corrects the to BNSF's reasonable satisfaction. If BNSF feels the situation is not being corrected in an expeditious manner, BNSF will immediately notify the City's City Manager for appropriate corrective action.
- 6) Pursuant to this section and Article II, Section 6 herein, City must reimburse BNSF in full for the **actual costs** of all work performed by BNSF under this Agreement



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(including taxes, such as applicable sales and use taxes, business and occupation taxes, and similar taxes), less BNSF's Share as set forth in Article IV, Section 6 herein. BNSF's share must be paid upon completion of the Project. In any action brought under this Agreement, the prevailing party shall be entitled to recover its actual costs and attorneys fees pursuant to California Civil Code Section 1717, as well as other litigation costs, including expert witness fees. The prevailing Party shall also be entitled to recover all actual attorneys fees and litigation costs incurred in connection with the enforcement of a judgment arising from such action or proceeding.

- 7) All expenses detailed in statements sent to City pursuant to Article II, Section 6 herein will comply with the terms and provisions of the Title 23 U.S. Code, Title 23 Code of Federal Regulations, and the Federal-Aid Policy Guide, U.S. Department of Transportation, as amended from time to time, which manual is hereby incorporated into and made a part of this Agreement by reference. The parties mutually agree that BNSF's preliminary engineering, design, and contract preparation costs described in Article II, Section 2 herein are part of the costs of the Project even though such work may have preceded the date of this Agreement.
- 8) The construction of the Project will not commence until City gives BNSF's Manager Public Projects thirty (30) days prior written notice of such commencement. The commencement notice will reference BNSF's file number and D.O.T. Crossing No. 026900R, 026904T and must state the time that construction activities will begin.
- 9) In addition to the terms and conditions set forth elsewhere in this Agreement, BNSF and the City agree to the following terms upon completion of construction of the Project:
 - A. The City will own and be fully responsible for repairs, maintenance, future construction or reconstruction of the Harbor Drive & Bay Marina Drive roadway, including the portion of roadway located between the tracks.
 - B. The City will maintain the elevation of the Harbor Drive & Bay Marina Drive roadway approaches to match the elevation on the railroad track crossing surfaces and to be no more than three (3) inches above or six (6) inches below top-of-rail elevation at a distance measured thirty (30) feet from the nearest rail.
 - C. The City will maintain the advanced railroad crossing warning signs and pavement markings and agrees to hold harmless and indemnify BNSF for any claims, damages or losses, in whole or in part, caused by or due to the City's failure to maintain the advanced warning signs and markings or other requirements of the MUTCD.



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- D. City will do nothing and permit nothing to be done in the maintenance of the Harbor Drive & Bay Marina Drive roadway, which will interfere with or endanger facilities of BNSF.
- E. 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.
- F. BNSF will, at its sole cost and expense, operate and maintain the Crossing Signal Equipment, Crossing Signal Control House, and the new crossing surfaces, from end-of-tie to end-of-tie, in proper condition.
- G. Notwithstanding the preceding provision, if any regulations, ordinances, acts, rules or other laws subsequently passed or amended by the Agency or any other governmental or legislative authority increase the Agency's portion of maintenance cost under this Agreement, BNSF will receive the benefit of any such regulations, ordinances, acts, rules or other laws and the Agency's increased portion of maintenance costs will be incorporated into and made a part of this Agreement.
- H. If a railway or highway improvement project necessitates rearrangement, relocation, or alteration of the Crossing Signal Equipment, Crossing Signal House, or the new crossing surface installed hereunder, the costs for such rearrangement, relocation or alteration will be the responsibility of the party requesting such changes.
- I. If any of the Crossing Signal Equipment is partially or wholly destroyed, then such repair and/or replacement costs must be distributed among the parties as follows:
 - i) BNSF must, at its sole cost and expense, replace or repair such Crossing Signal Equipment and/or Crossing Signal House. Except for the new warning devices added to protect the Bike path.
 - ii) City must, at its sole cost and expense, reimburse to replace or repair the dedicated bike path Crossing Signal Equipment.
- J. BNSF will operate and maintain, at its expense, the necessary relays and other materials required to preempt the highway traffic control signals with the grade crossing warning devices.



Contract Number: BF-20253718

- K. BNSF will operate and maintain, at its expense, the railroad crossing warning devices up to the contact terminals in the interface box.
 - L. City will own, operate and maintain, at its expense, the highway traffic control signals up to and including connection to the contact terminals in the interface box including all necessary cable and conduit.
- 10) The City must notify and obtain prior authorization from BNSF's Manager of Public Projects before entering BNSF's right-of-way for **Inspection and Maintenance** purposes and the BNSF Manager of Public Projects will determine if flagging is required. If the construction work hereunder is 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. City will be responsible for its contractor(s) compliance with such obligations.
- 11) 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 the Project construction 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 California and the Federal Highway Administration, for a period of three (3) years from the date of final BNSF invoice under this Agreement.
- 12) The covenants and provisions of this Agreement are binding upon and inure to the benefit of the successors and assigns of the Parties. Notwithstanding the preceding sentence, neither Party may assign any of its rights or obligations without the prior written consent of the other Party which shall not be unreasonably withheld.
- 13) In the event construction of the Project does not commence within one year of the Effective Date, this Agreement will become null and void. Either Party may extend such time with the consent of the other which shall not be unreasonably withheld.
- 14) 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.
- 15) 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



Contract Number: BF-20253718

law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

- 16)** This Agreement (including exhibits and other documents, manuals, etc. incorporated herein) is the full and complete agreement between BNSF and City with respect to the subject matter herein and supersedes any and all other prior agreements between the parties hereto.
- 17)** Any notice provided for herein or concerning this Agreement must be in writing and will be deemed sufficiently given when sent by certified mail, return receipt requested, to the parties at the following addresses:

BNSF: BNSF's Manager Public Projects
 740 E Carnegie Dr
 San Bernardino, CA 92408

City: National City Manager
 1243 National City Blvd
 National City, CA 91950

SIGNATURE PAGE FOLLOWS



Contract Number: BF-20253718

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

BNSF RAILWAY COMPANY

By: _____

Printed Name: _____

Title: _____

**CITY
City Of National City**

By: _____

Printed Name: _____

Title: _____ City Manger

Approved as to form:

City Attorney



Contract Number: BF-20253718

Exhibit A

[See attached]

DIGALERT

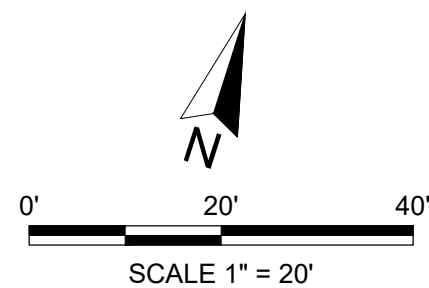
DIAL
BEFORE
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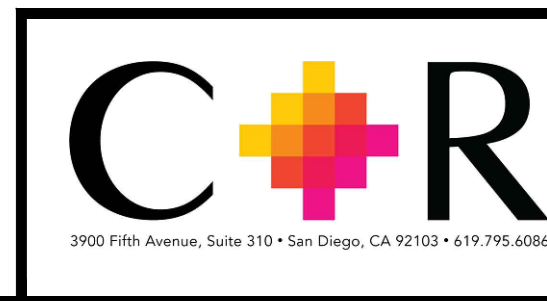
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DAYS BEFORE
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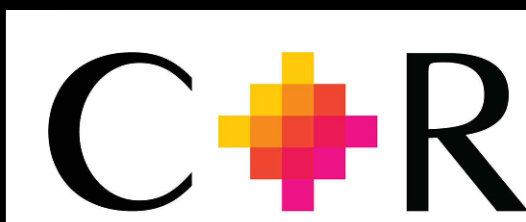
TOLL FREE 1-800-227-2600

A PUBLIC SERVICE BY
UNDERGROUND SERVICE ALERT

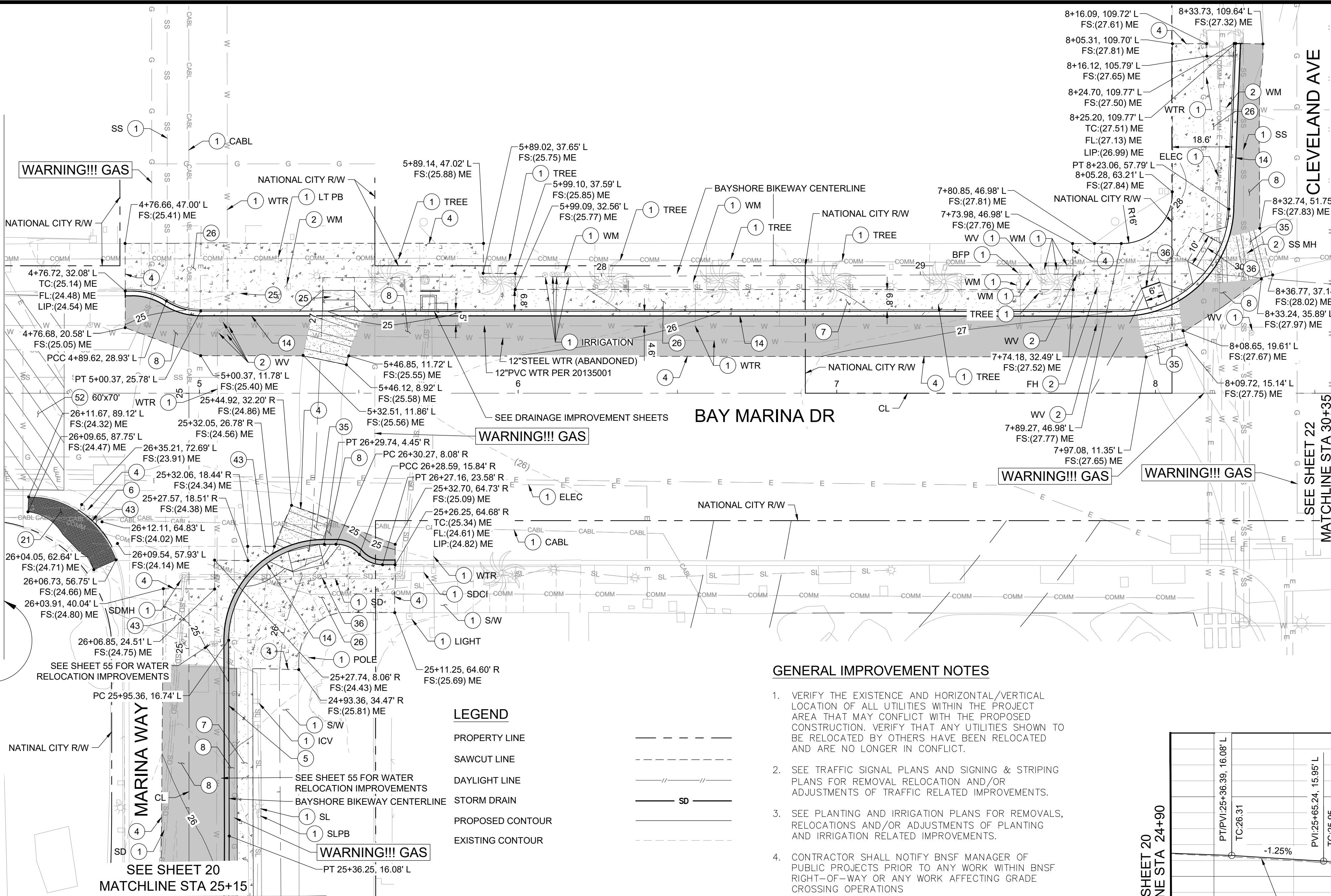
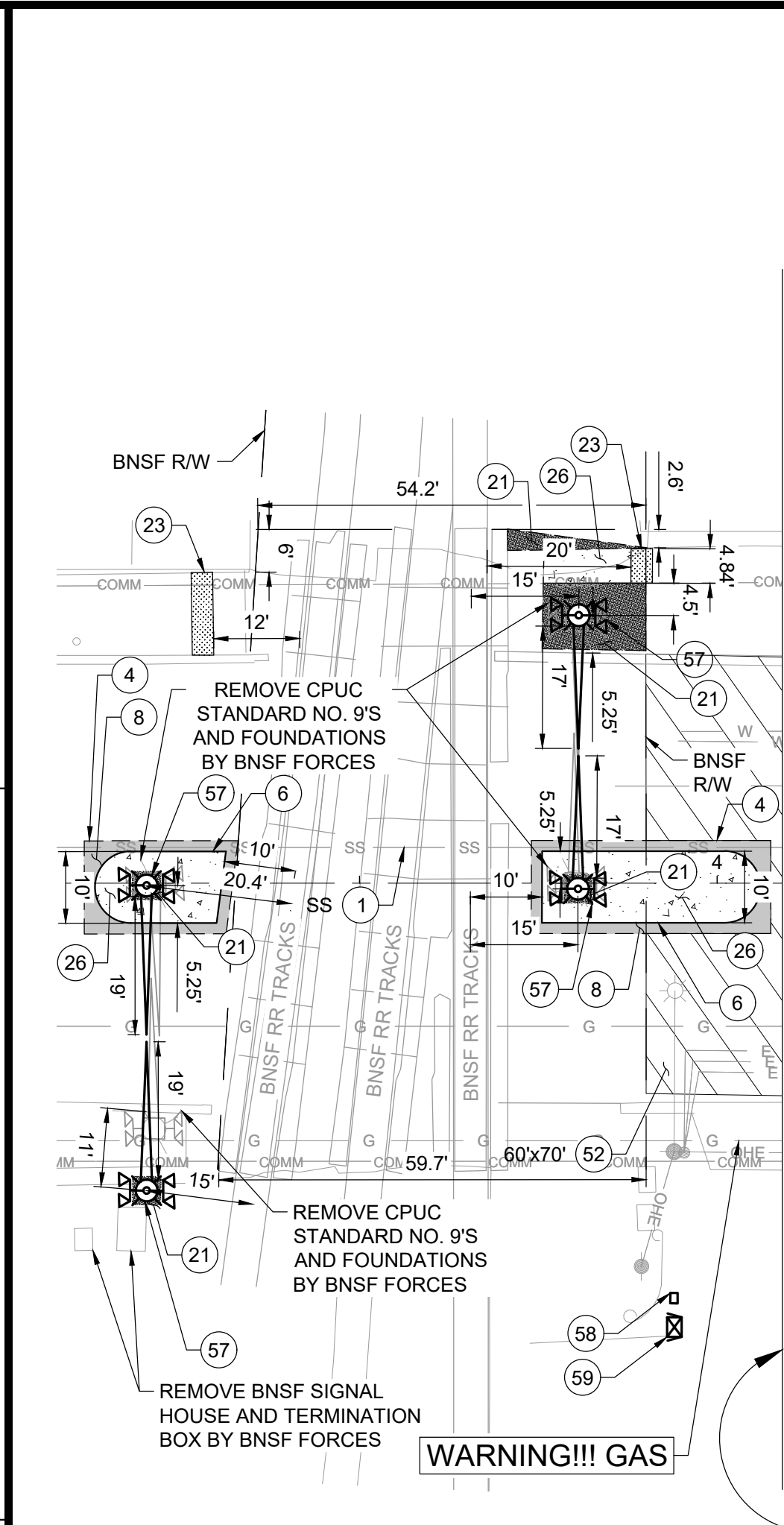


- | | |
|------------------------|---------------|
| | CIP NO.19-20 |
| SHEET 11 OF 117 SHEETS | XXXX-XX-####D |





ENGINEERING DEPARTMENT						CONSTRUCTION SURVEYOR		GEO/TECHNICAL OF RECORD		CONSTRUCTION RECORDS		SURVEYOR: _____	
AS-BUILT		BY		APPROVED		DATE				DATE STARTED: _____		BENCHMARK: _____	
								NAME _____		COMPANY _____			
REVISIONS								SIGNATURE _____		INSPECTOR: _____			
										DATE COMPLETED: _____		HORIZONTAL CONTROL: _____	



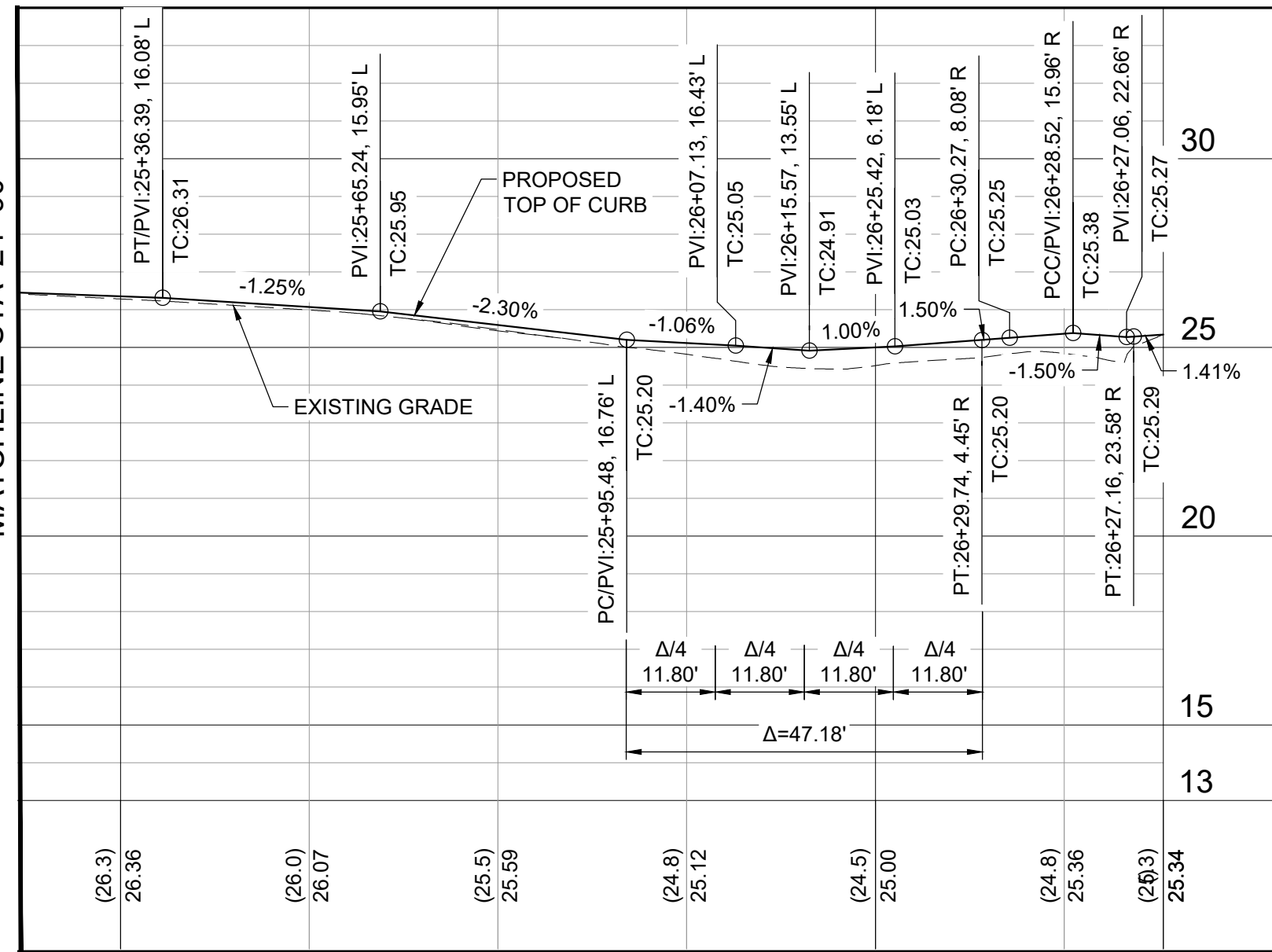
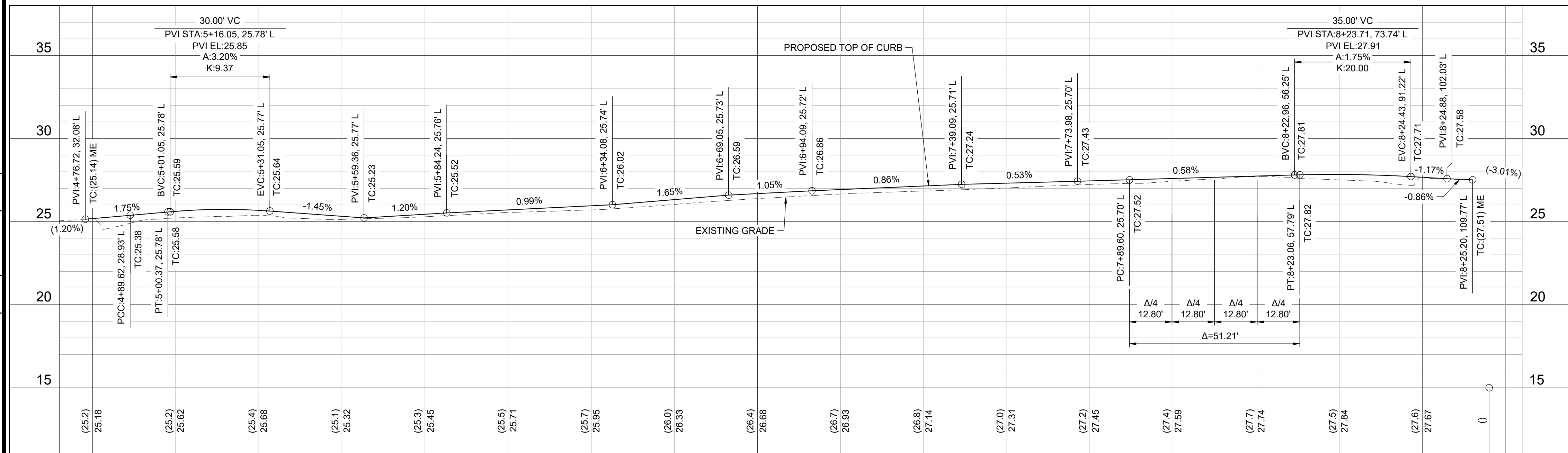
- ### CONSTRUCTION NOTES
- 1 PROTECT IN PLACE
 - 2 ADJUST TO FINISH GRADE
 - 3 REMOVE AND RELOCATE PER PLAN
 - 4 SAWCUT PER DETAIL ON SHEET 6
 - 5 CONSTRUCT TYPE 'B-2' CURB AND GUTTER PER SDRSD G-06
 - 6 CONSTRUCT TYPE 'B-1' CURB PER SDRSD G-06
 - 7 CONSTRUCT BIKEWAY SECTION 4" ASPHALT OVER 6" CLASS II AGGREGATE BASE. SEE TYPICAL CROSS SECTION PER DETAIL ON SHEET 7
 - 8 CONSTRUCT PAVEMENT SECTION - 3" AC OVER 7" CLASS II AGGREGATE BASE. SEE TYPICAL CROSS SECTION PER DETAIL ON SHEET 7
 - 14 CONSTRUCT TYPE 'G' CURB AND GUTTER PER SDRSD G-02
 - 20 SEE CORRIDOR IMPROVEMENT PLANS
 - 21 INSTALL 2" ANGULAR BALLAST GRAVEL. SEE LANDSCAPE PLANS FOR MORE DETAIL
 - 23 CONSTRUCT TRUNCATED DOMES PER SDRSD G-30
 - 25 CONSTRUCT TYPE B CURB RAMP PER SDRSD G-27
 - 26 CONSTRUCT CONCRETE SIDEWALK PER SDRSD G-07. DESIGN SIDEWALK CROSS SLOPE TO 1.5%.
 - 35 CONSTRUCT DECORATIVE CONCRETE CROSSWALK PER DETAIL ON SHEET 07
 - 36 CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27
 - 43 CONSTRUCT FULL DEPTH 7.5" PORTLAND CEMENT CONCRETE SECTION. CONCRETE MIX TO BE 3,500 PSI
 - 52 COLDMILL EXISTING PAVEMENT 2" DEEP AND CONSTRUCT 2" AC OVERLAY
 - 57 CPUC STD. NO. 9 RR WARNING DEVICE (H=9.5' TO BASE OF FLASHER) TO BE INSTALLED AND MAINTAINED BY BNSF (PER SEPARATE PERMIT)
 - 58 FURNISH AND INSTALL RR TERMINATION BOX. PROVIDE 3" STUB FROM RR INTERCONNECT. COORDINATE WITH BNSF FOR EXACT LOCATION FOR TERMINATION BOX.
 - 59 FURNISH AND INSTALL NEW RR SIGNAL HOUSE BY BNSF FORCES

GENERAL IMPROVEMENT NOTES

1. VERIFY THE EXISTENCE AND HORIZONTAL/VERTICAL LOCATION OF ALL UTILITIES WITHIN THE PROJECT AREA THAT MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. VERIFY THAT ANY UTILITIES SHOWN TO BE RELOCATED BY OTHERS HAVE BEEN RELOCATED AND ARE NO LONGER IN CONFLICT.
2. SEE TRAFFIC SIGNAL PLANS AND SIGNING & STRIPING PLANS FOR REMOVAL RELOCATION AND/OR ADJUSTMENTS OF TRAFFIC RELATED IMPROVEMENTS.
3. SEE PLANTING AND IRRIGATION PLANS FOR REMOVALS, RELOCATIONS AND/OR ADJUSTMENTS OF PLANTING AND IRRIGATION RELATED IMPROVEMENTS.
4. CONTRACTOR SHALL NOTIFY BNSF MANAGER OF PUBLIC PROJECTS PRIOR TO ANY WORK WITHIN BNSF RIGHT-OF-WAY OR ANY WORK AFFECTING GRADE CROSSING OPERATIONS

LEGEND

PROPERTY LINE	---
SAWCUT LINE	---
DAYLIGHT LINE	---
STORM DRAIN	---
PROPOSED CONTOUR	---
EXISTING CONTOUR	---



MARINA WAY TC PROFILE

Exhibit A

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

MATTHEW B. CAPUZZI, 69815 DATE



PLANS FOR THE IMPROVEMENTS OF:

BAYSHORE BIKEWAY SEGMENT 5

IMPROVEMENT PLANS

CITY OF NATIONAL CITY

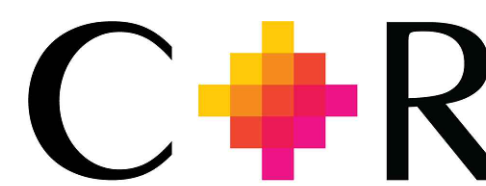
ROBERTO YANO RCE# 56292
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

DATE

CIP NO.19-20

SHEET 21 OF 117 SHEETS

XXXX-XX-####D



3900 Fifth Avenue, Suite 310 • San Diego, CA 92103 • 619.795.6086



- 1 PROTECT IN PLACE
- 2 ADJUST TO FINISH GRADE
- 4 SAWCUT PER DETAIL ON SHEET 6
- 7 CONSTRUCT BIKEWAY SECTION 4" ASPHALT OVER 6" CLASS II AGGREGATE BASE. SEE TYPICAL CROSS SECTION PER DETAIL ON SHEET 7
- 9 CONSTRUCT AC DIKE PER DETAIL ON SHEET 6
- 10 CONSTRUCT 6" CURB PER DETAIL ON SHEET 6
- 15 CONSTRUCT PAVEMENT SECTION - 5.5" AC OVER 9.5" CLASS II AGGREGATE BASE. TENSAR TS-7 REINFORCEMENT OR APPROVED EQUAL TO BE UNDERLAIN ON PREPARED SUBGRADE
- 16 CONSTRUCT TYPE 'B-3' PIN ON CURB PER SDFWC SDG-154
- 21 INSTALL 2" ANGULAR BALLAST GRAVEL. SEE LANDSCAPE PLANS FOR MORE DETAIL
- 22 CPUC STD. NO. 8 RR WARNING DEVICE TO BE INSTALLED BY BNSF FORCES
- 23 CONSTRUCT TRUNCATED DOMES PER SDRSD G-30
- 27 SEE PLANTING PLANS
- 43 CONSTRUCT FULL DEPTH 7.5" PORTLAND CEMENT CONCRETE SECTION. CONCRETE MIX TO BE 3,500 PSI
- 53 FULL DEPTH PAVEMENT RECONSTRUCTION 5.5" AC OVER 9.5" CLASS 2 AGGREGATE BASE. TENSAR REINFORCEMENT OR APPROVED EQUAL TO BE UNDERLAIN ON PREPARED SUBGRADE
- 60 CROSSING PANELS TO BE INSTALL BY BNSF FORCES
- 61 FURNISH AND INSTALL RR TERMINATION BOX. PROVIDE 3" STUB FOR RR INTERCONNECT. COORDINATE WITH BNSF FOR EXACT LOCATION TERMINATION BOX.
- 62 RR SIGNAL HOUSE TO BE INSTALL BY BNSF FORCES
- 63 REPLACE EXISTING RR FLASHERS WITH NEW LED RR FLASHERS BY BNSF FORCES

1. VERIFY THE EXISTENCE AND HORIZONTAL/VERTICAL LOCATION OF ALL UTILITIES WITHIN THE PROJECT AREA THAT MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. VERIFY THAT ANY UTILITIES SHOWN TO BE RELOCATED BY OTHERS HAVE BEEN RELOCATED AND ARE NO LONGER IN CONFLICT.
2. SEE TRAFFIC SIGNAL PLANS AND SIGNING & STRIPING PLANS FOR REMOVAL RELOCATION AND/OR ADJUSTMENTS OF TRAFFIC RELATED IMPROVEMENTS.
3. SEE PLANTING AND IRRIGATION PLANS FOR REMOVALS, RELOCATIONS, AND/OR ADJUSTMENTS OF PLANTING AND IRRIGATION RELATED IMPROVEMENTS.

HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

XXXX-XX-####D

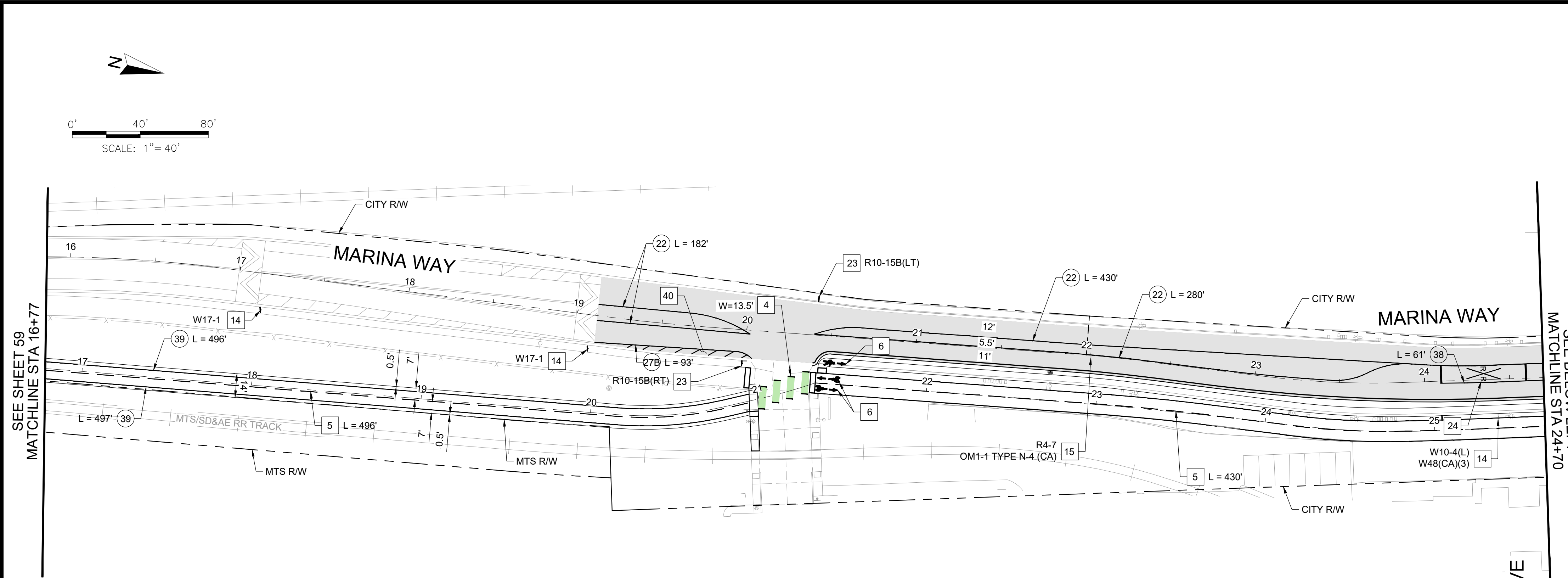


SCALE: 1" = 10'

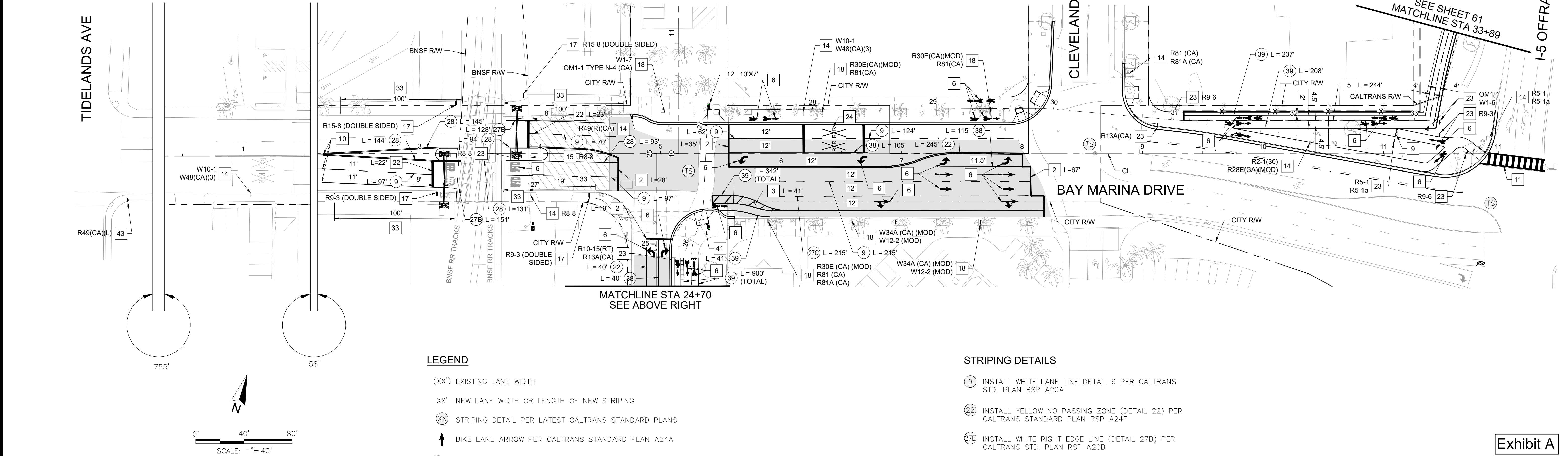
HORZ: 1" = 20'
VERT: 1" = 4'

HORZ: 1" = 20'
VERT: 1" = 4'

SURVEYOR:	BENCHMARK:	CONSTRUCTION RECORDS	DATE STARTED:	INSPECTOR:	DATE COMPLETED:	HORIZONTAL CONTROL:
CONSTRUCTION SURVEYOR	NAME	COMPANY	SIGNATURE	NAME	COMPANY	SIGNATURE
BY	APPROVED	DATE				
ENGINEERING DEPARTMENT	AS-BUILT					
REVISIONS						



- ### SIGNING AND MARKING NOTES
- | | | | |
|----|--|----|---|
| 1 | INSTALL WHITE THERMOPLASTIC CONTINENTAL CROSSWALK PER DETAIL ON SHEET 53. | 17 | FURNISH AND INSTALL NEW BREAK AWAY POST PER CITY STANDARD DRAWING NO 112-S-B |
| 2 | INSTALL 12" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN. | 18 | INSTALL NEW SIGN ON EXISTING POST |
| 3 | INSTALL BIKE LANE BUFFER DIAGONAL MARKINGS PER DETAIL ON SHEET 53. | 19 | REMOVE AND REPLACE SIGN PER PLAN |
| 4 | INSTALL CONFLICT STRIPING PER DETAIL ON SHEET 53, WIDTH PER PLAN. | 22 | INSTALL 24" LIMIT LINE AS SHOWN ON PLANS |
| 5 | INSTALL BROKEN YELLOW SHARED USE PATH CENTERLINE PER MUTCD FIGURE 9C-2A. | 23 | FURNISH AND INSTALL NEW SIGN ON BREAK-AWAY POST PER CITY STANDRAD DRAWING NO. 112-S-B |
| 6 | INSTALL THERMOPLASTIC PAVEMENT MARKING PER CALTRANS STANDARD PLAN. SEE LEGEND ON THIS SHEET. | 24 | INSTALL HIGHWAY-RAIL GRADE CROSSING PAVEMENT MARKING PER MUTCD FIGURE 8B-7 |
| 9 | INSTALL WHITE THERMOPLASTIC BICYCLE YIELDING MARKING PER DETAIL ON SHEET 53. | 26 | CONSTRUCT BIKE BOX PER DETAIL ON SHEET 53 |
| 10 | MATCH EXISTING STRIPING | 30 | INSTALL SPEED HUMP PAVEMENT MARKING, OPTION C PER CAMUTCD FIGURE 3B-29 |
| 11 | INSTALL WHITE THERMOPLASTIC LADDER CROSSWALK PER CALTRANS STANDARD PLAN RSP A24F | 31 | INSTALL GREEN PAINT PER SPECS |
| 12 | INSTALL TWO-STAGE LEFT TURN QUEUE BOX PER DETAIL ON SHEET 53, DIMENSIONS PER PLAN. | 32 | INSTALL TYPE D BLUE RETROREFLECTIVE PAVEMENT MARKER 6" FROM LEFT EDGE LINE |
| 14 | EXISTING SIGN TO REMAIN | 33 | PAINT EXISTING CURB RED |
| 15 | REMOVE AND SALVAGE EXISTING SIGN | 40 | CONSTRUCT WHITE 8" THICK DIAGONAL CHEVRON MARKING 8.5' O.C. PER MUTCD SECTION 3B.24 |
| 16 | EXISTING STRIPING TO REMAIN | 41 | INSTALL THERMOPLASTIC BICYCLE DETECTOR PAVEMENT MARKING PER DETAIL ON SHEET 54 |
| | | 43 | FURNISH AND INSTALL NEW SIGN ON EXISTING POLE PER PLAN |



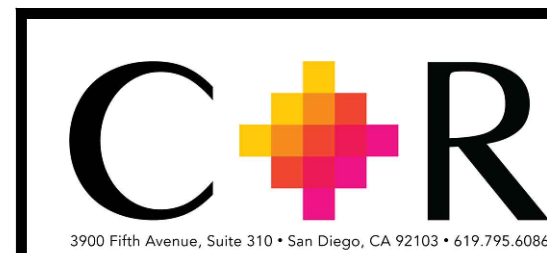
- ### LEGEND
- (XX') EXISTING LANE WIDTH
XX' NEW LANE WIDTH OR LENGTH OF NEW STRIPING
(XX) STRIPING DETAIL PER LATEST CALTRANS STANDARD PLANS
↑ BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24A
BIKE LANE WITH PERSON SYMBOL PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C
WAIT HERE PAVEMENT MARKING PER CALTRANS STANDARD PLAN A20A. TO BE INSTALLED AT 1/4 SCALE
TYPE IV (L) ARROW PER CALTRANS STANDARD PLAN A24A
TYPE I 18'-0" ARROW PER CALTRANS STANDARD PLAN A24A
TYPE VII (R) ARROW PER CALTRANS STANDARD PLAN A24A
(TS) TRAFFIC SIGNAL
SLURRY SEAL PER SPECIFICATIONS
COLD MILL EXISTING PAVEMENT 2" DEEP AND CONSTRUCT 2" AC OVERLAY

- ### STRIPING DETAILS
- 9 INSTALL WHITE LANE LINE DETAIL 9 PER CALTRANS STD. PLAN RSP A20A
22 INSTALL YELLOW NO PASSING ZONE (DETAIL 22) PER CALTRANS STANDARD PLAN RSP A24F
27B INSTALL WHITE RIGHT EDGE LINE (DETAIL 27B) PER CALTRANS STD. PLAN RSP A20B
27C INSTALL RIGHT EDGE LINE EXTENSION (DETAIL 27C) PER CALTRANS STD. PLAN RSP A20B
28 INSTALL YELLOW MEDIAN ISLAND LINES (DETAIL 28) PER CALTRANS STD. PLAN RSP A20B
38 INSTALL WHITE CHANNELIZING LINE (DETAIL 38) PER CALTRANS STD. PLAN RSP A20D
39 INSTALL WHITE BIKE LANE LINE (DETAIL 39) PER CALTRANS STD. PLAN RSP A20D

Exhibit A

GENERAL IMPROVEMENT NOTES

- SEE TRAFFIC SIGNAL PLANS FOR REMOVAL RELOCATION AND/OR ADJUSTMENTS OF TRAFFIC RELATED IMPROVEMENTS.
- SEE PLANTING AND IRRIGATION PLANS FOR REMOVALS, RELOCATIONS AND/OR ADJUSTMENTS OF LANDSCAPE AND IRRIGATION RELATED IMPROVEMENTS.
- CONTRACTOR SHALL NOTIFY BNSF MANAGER OF PUBLIC PROJECTS PRIOR TO ANY WORK WITHIN BNSF RIGHT-OF-WAY OR ANY WORK AFFECTING GRADE CROSSING OPERATIONS.



DECLARATION OF RESPONSIBLE CHARGE	
I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.	
I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.	
MATTHEW B. CAPUZZI, 69815	DATE

PLANS FOR THE IMPROVEMENTS OF:	
BAYSHORE BIKEWAY SEGMENT 5	
SIGNING AND STRIPING PLANS	
CITY OF NATIONAL CITY	
ROBERTO YANO RCE# 56292 DIRECTOR OF PUBLIC WORKS/CITY ENGINEER	
CIP NO.19-20	DATE
SHEET 60 OF 117 SHEETS	XXXX-XX-####D

Plot date: 5/31/2023 3:30:46 PM

SURVEYOR:	CONSTRUCTION RECORDS		DATE STARTED:	INSPECTOR:	DATE COMPLETED:
	BENCHMARK:				
HORIZONTAL CONTROL:	GEOLOGICAL OF RECORD		NAME	COMPANY	SIGNATURE
CONSTRUCTION SURVEYOR	CONSTRUCTION SURVEYOR		NAME	COMPANY	SIGNATURE
ENGINEERING DEPARTMENT	BY	APPROVED	DATE		
	AS-BUILT				
REVISIONS					



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DIAL BEFORE YOU DIG
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TOLL FREE 1-800-227-2600
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GENERAL IMPROVEMENT NOTES

- SEE TRAFFIC SIGNAL PLANS FOR REMOVAL RELOCATION AND/OR ADJUSTMENTS OF TRAFFIC RELATED IMPROVEMENTS.
- SEE PLANTING AND IRRIGATION PLANS FOR REMOVALS, RELOCATIONS AND/OR ADJUSTMENTS OF LANDSCAPE AND IRRIGATION RELATED IMPROVEMENTS.

LEGEND

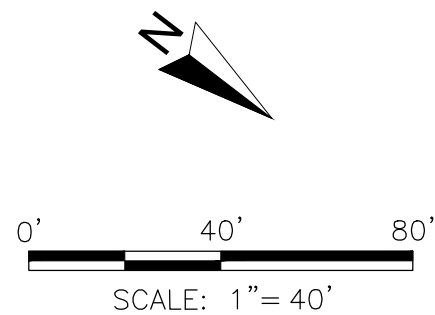
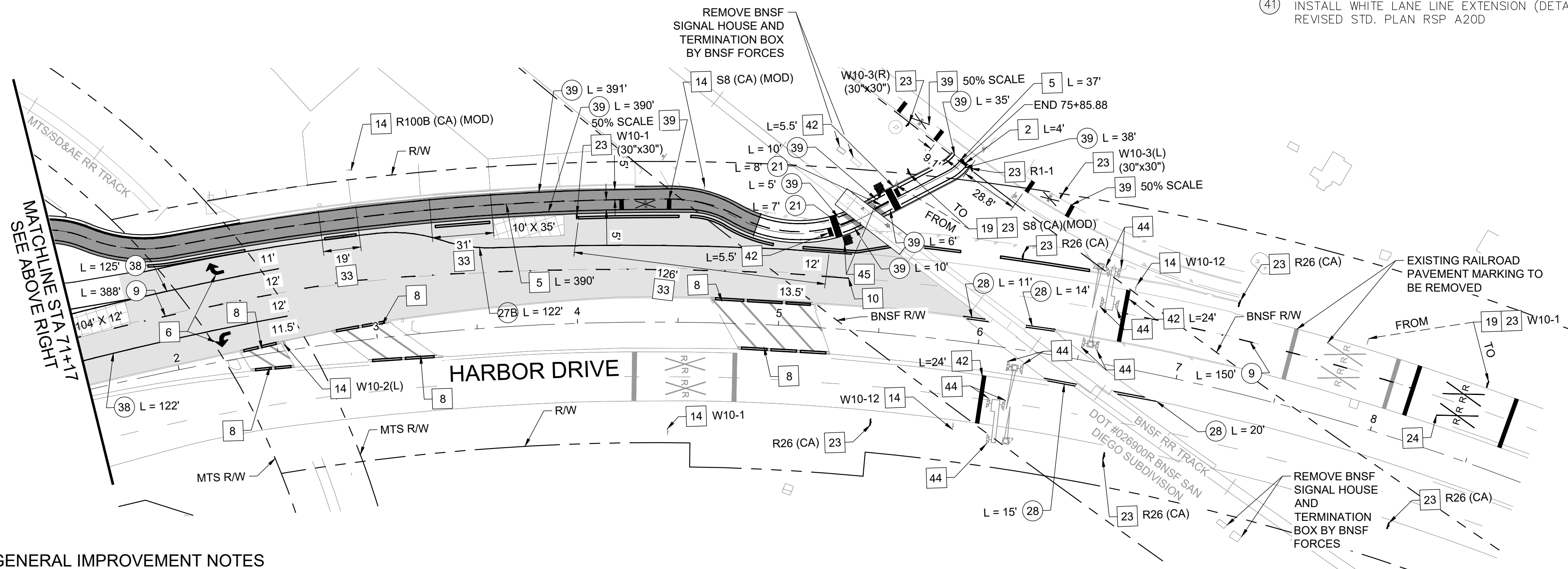
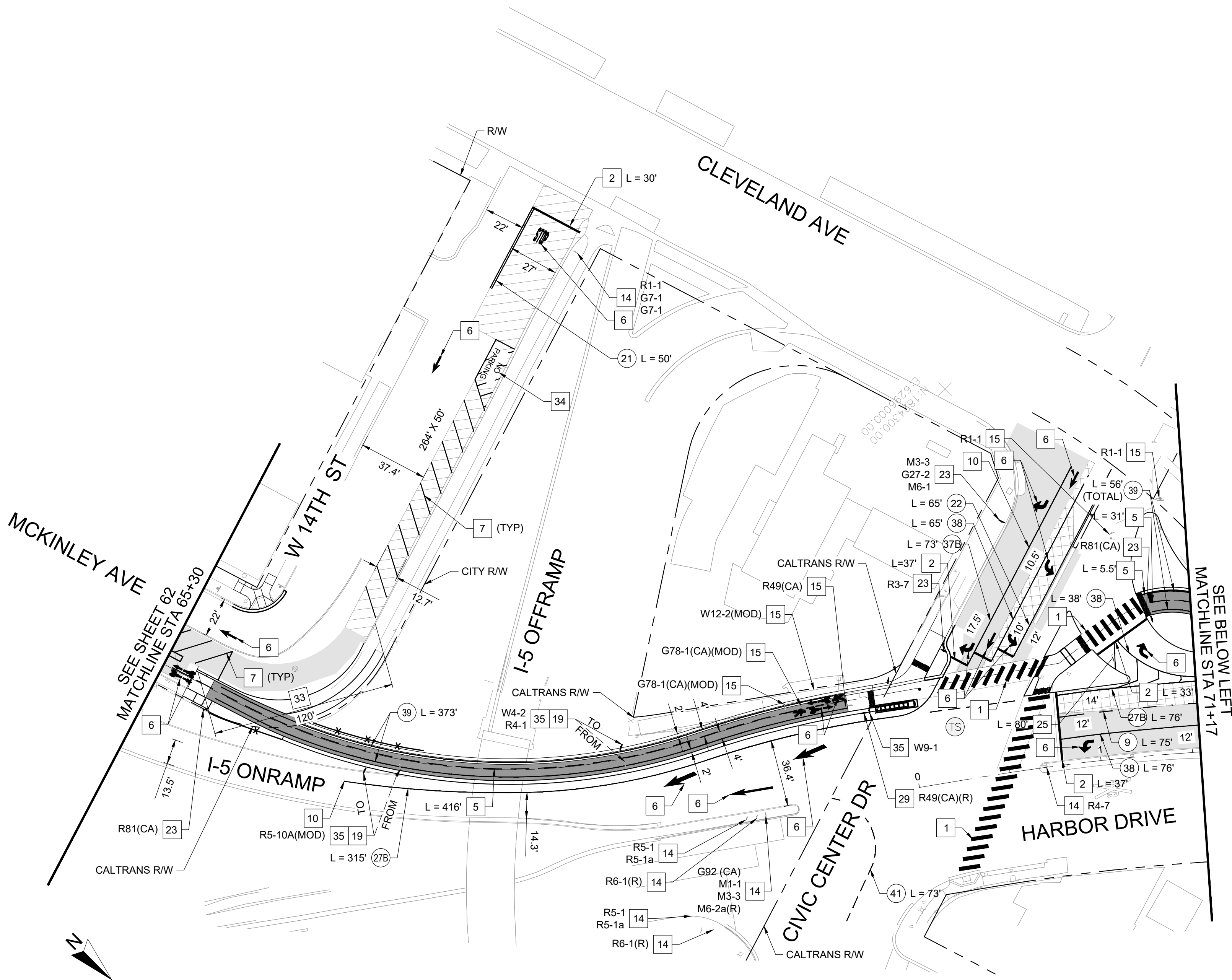
- (XX') EXISTING LANE WIDTH
XX' NEW LANE WIDTH OR LENGTH OF NEW STRIPING
⊗ STRIPING DETAIL PER LATEST CALTRANS STANDARD PLANS
↑ BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24A
BIKE LANE WITH PERSON SYMBOL PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C
→ TYPE VI ARROW PER CALTRANS STANDARD PLAN A24A
↗ TYPE IV ARROW PER CALTRANS STANDARD PLAN A24A
Ⓣ TRAFFIC SIGNAL
Ⓢ "STOP" PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24D
■ SLURRY SEAL PER SPECIFICATIONS
▨ FULL DEPTH PAVEMENT RECONSTRUCTION 3" AC OVER 9" CLASS 2 AGGREGATE BASE, SCARIFY TOP 6" OF EXISTING SUBGRADE AND RECOMPACT TO 95% RELATIVE COMPACTION
← TYPE I 10' ARROW PER CALTRANS STANDARD PLAN A24A
← TYPE I 24' ARROW PER CALTRANS STANDARD PLAN A24A

STRIPING DETAILS

- INSTALL WHITE LANE LINE (DETAIL 9) PER CALTRANS STD. PLAN RSP A20A
- INSTALL YELLOW NO PASSING ZONE-TWO DIRECTION CENTERLINE (DETAIL 21) PER CALTRANS STD. PLAN A20A
- INSTALL YELLOW NO PASSING ZONE-TWO DIRECTION CENTERLINE (DETAIL 22) PER CALTRANS STD. PLAN A20A
- INSTALL WHITE LEFT EDGE LINE (DETAIL 24) PER CALTRANS STD. PLAN A20B
- INSTALL WHITE RIGHT EDGE LINE (DETAIL 27B) PER CALTRANS STD. PLAN RSP A20B
- INSTALL YELLOW MEDIAN ISLAND LINES (DETAIL 28) PER CALTRANS STD. PLAN A20B
- INSTALL YELLOW MEDIAN ISLANDS (DETAIL 29) PER CALTRANS STD. PLAN RSP A20B
- INSTALL WHITE CHANNELIZING LINE (DETAIL 38) PER CALTRANS REVISED STD. PLAN RSP A20D
- INSTALL WHITE BIKE LANE LINE (DETAIL 39) PER CALTRANS REVISED STD. PLAN RSP A20D
- INSTALL WHITE LANE LINE EXTENSION (DETAIL 40) PER CALTRANS REVISED STD. PLAN RSP A20D
- INSTALL WHITE LANE LINE EXTENSION (DETAIL 41) PER CALTRANS REVISED STD. PLAN RSP A20D

SIGNING AND MARKING NOTES

- INSTALL WHITE THERMOPLASTIC CONTINENTAL CROSSWALK PER DETAIL ON SHEET 53.
- INSTALL 12" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN.
- INSTALL BROKEN YELLOW SHARED USE PATH CENTERLINE PER MUTCD FIGURE 9C-2A.
- INSTALL THERMOPLASTIC PAVEMENT MARKING PER CALTRANS STANDARD PLAN. SEE LEGEND ON THIS SHEET.
- INSTALL ANGLED PARKING STALL PER DETAIL ON SHEET 53.
- INSTALL YELLOW SHUR-CURB BOLTED POST DELINEATORS OR APPROVED EQUAL AT 10' INTERVALS O.C. AS SHOWN ON PLANS. SEE BUFFER/DELINEATOR DETAIL ON SHEET 57
- MATCH EXISTING STRIPING
- INSTALL 6" YELLOW DIAGONAL MARKING AT 45° AND 10 FEET CENTER TO CENTER
- EXISTING SIGN TO REMAIN
- REMOVE AND SALVAGE EXISTING SIGN
- INSTALL NEW SIGN ON EXISTING POST
- REMOVE AND REPLACE SIGN PER PLAN
- INSTALL RED PAINTED CURB PER PLAN
- INSTALL PED BARRICADE PER CITY OF SAN DIEGO STD DWG SDG-141
- INSTALL 24" LIMIT LINE AS SHOWN ON PLANS
- FURNISH AND INSTALL NEW SIGN ON BREAK-AWAY POST PER CITY STANDRAD DRAWING NO. 112-S-B
- INSTALL HIGHWAY-RAIL GRADE CROSSING PAVEMENT MARKING PER MUTCD FIGURE 8B-7
- FURNISH AND INSTALL 6" WIDE WHITE 2-COAT PAINT DIAGONAL MARKINGS AT 45° AND 12' SPACING CENTER TO CENTER.
- DIAGONAL NO PARKING ZONE STRIPING PER DETAIL ON SHEET 58
- FURNISH AND INSTALL NEW SIGN MOUNTED ON RETAINING WALL.
- PAINT EXISTING CURB RED
- FURNISH AND INSTALL NEW SIGN ON WOOD POST PER CALTRANS STD. PLAN RS2
- RAILROAD CROSSING SYMBOL (THERMOPLASTIC) PER CTSP A24B
- INSTALL 24" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN.
- REPLACE EXISING RR FLASHERS WITH NEW LED RR FLASHERS BY BNSF FORCES
- INSTALL DOUBLE SIDED R15-8 PER MUTCD FIGURE 8C-4, HEIGHT = 7' BY BNSF FORCES

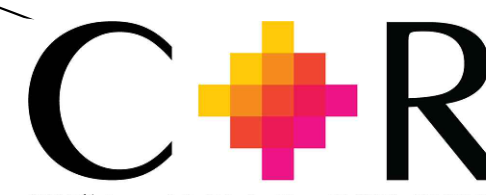


DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

MATTHEW B. CAPUZZI, 69815 DATE



PLANS FOR THE IMPROVEMENTS OF:
BAYSHORE BIKEWAY SEGMENT 5
SIGNING AND STRIPING PLANS

CITY OF NATIONAL CITY

ROBERTO YANO RCE# 56292
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
DATE
SHEET 63 OF 117 SHEETS
XXXX-XX-####D

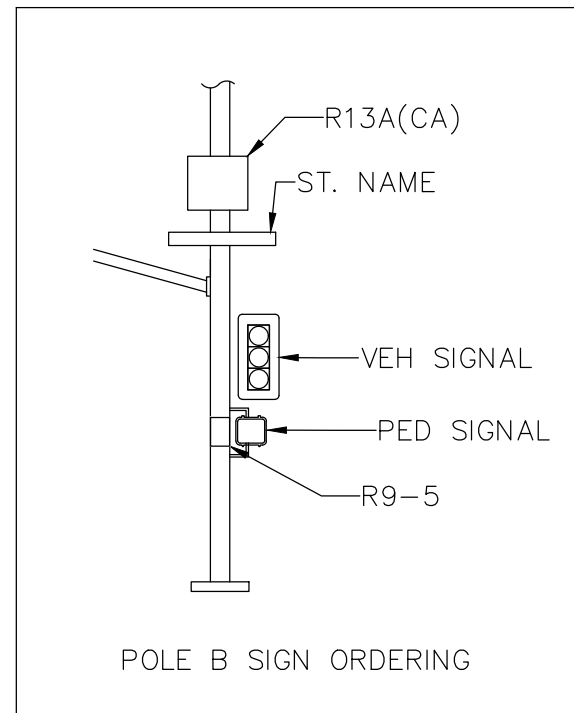
Exhibit A

SURVEYOR:	BENCHMARK:	CONSTRUCTION RECORDS	DATE STARTED:	INSPECTOR:	DATE COMPLETED:	GEOLOGICAL OF RECORD	NAME	COMPANY	SIGNATURE	CONSTRUCTION SURVEYOR	NAME	COMPANY	SIGNATURE	ENGINEERING DEPARTMENT	AS-BUILT	REVISIONS

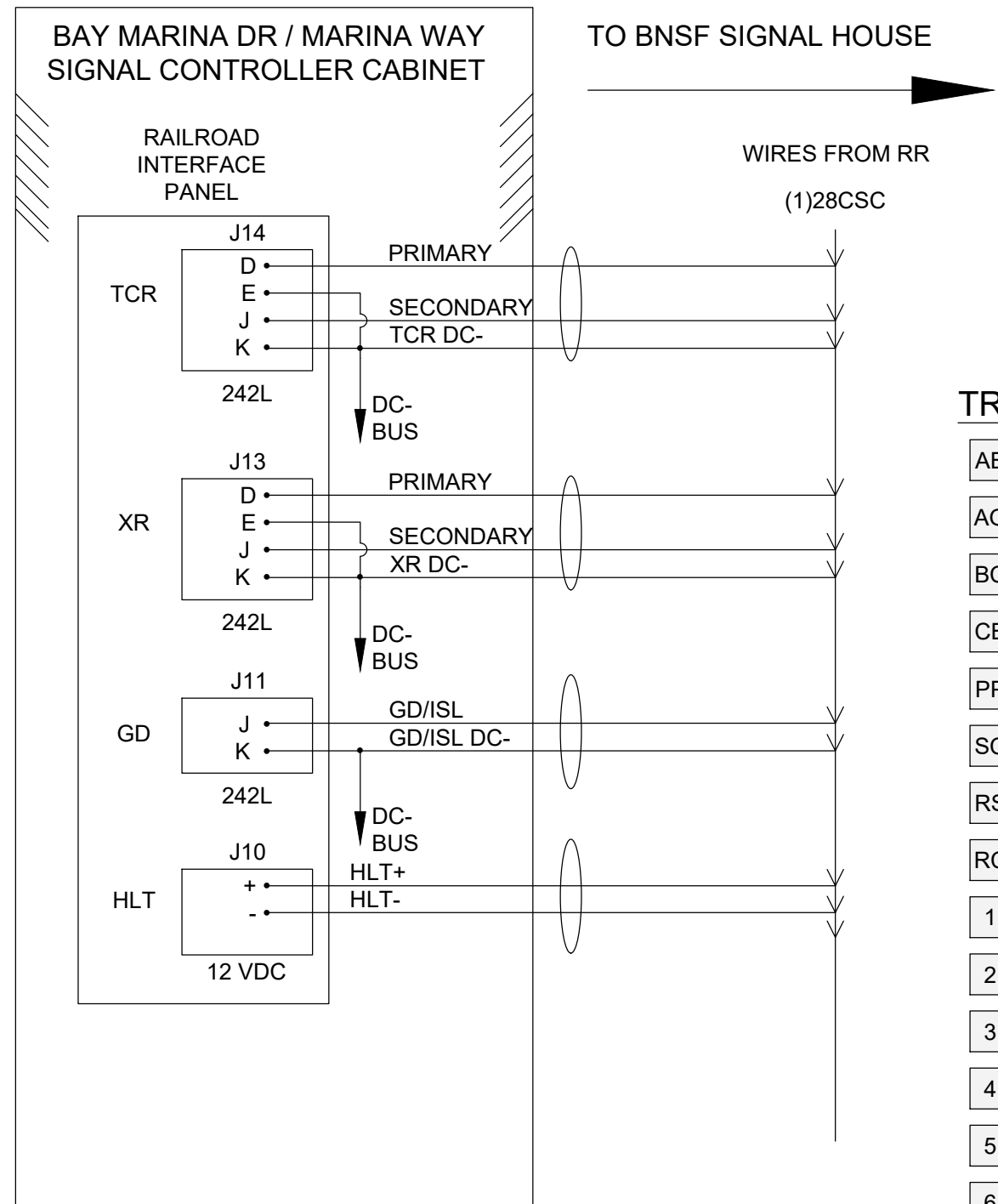
POLE & EQUIPMENT SCHEDULE															
NO.	STANDARD				LUM.	PLACEMENT		MOUNTING AND PLACEMENT							NOTES
	TYPE	HEIGHT	SIG. M.A.	LUM. M.A.	LED	A	B	VEHICLE SIGNAL			PED SIGNAL		PUSH BUTTON		
								MOUNTING	INDICATION	PHASE	MOUNTING	PHASE	LOCATION	PHASE	
A	(24-4-70)	(30')	(35')	(15')	130W	EX.	EX.	(MAS) (MAS) (MAS) SV-2-TB -	(RA,YA,GA) (R,Y,G) (R,Y,G) RA,YA,GA	(Ø1) (Ø6) (Ø6) Ø6 Ø8	-	-	-	-	REMOVE EXISTING SV-2-TB MOUNTING WITH PH6 AND Ø8 SIGNAL HEADS. REPLACE WITH NEW SV-2-TB MOUNTING WITH Ø6 AND Ø8 SIGNAL HEADS.
B	(24-3-100)	(30')	(40')	(15')	130W	EX.	EX.	MAS MAS SV-1-T	RA,YA,GA RA,YA,GA RA,YA,GA	Ø8 Ø8 Ø8+OLA	(SP-1-T)	Ø7P	(3)	Ø7P	REMOVE EXISTING MAS MOUNTED Ø8 SIGNAL HEAD. REPLACE WITH NEW Ø8 SIGNAL HEAD ON EXISTING TENONS. REMOVE EXISTING SV-1-T MOUNTED Ø8 SIGNAL HEAD. REPLACE WITH NEW Ø8 SIGNAL HEAD ON NEW SV-1-T MOUNTING. FURNISH AND INSTALL NEW SIGNS PER PLAN. SEE DETAIL 'A' FOR SIGN PLACEMENT ON POLE.
C	PBA	5'-7"	-	-	-	6'	-	-	-	-	-	-	8	Ø7P	FURNISH AND INSTALL ALL NEW EQUIPMENT.
D	PBA	5'-7"	-	-	-	7.5'	2.8'	-	-	-	-	-	8	Ø7P	FURNISH AND INSTALL ALL NEW EQUIPMENT.
E	(29-5-70)	(30')	(50')	(15')	130W	EX.	EX.	(MAS) (MAS)	(R,Y,G) (R,Y,G)	(Ø2) (Ø2)	-	-	-	-	EXISTING EQUIPMENT TO REMAIN. FURNISH AND INSTALL NEW SIGN PER PLAN.
F	(1-A)	(10')	-	-	-	EX.	EX.	(TV-1-T)	(R,Y,G,YA,GA)	(Ø8+OLA)	(SP-2-T)	(Ø2P) (Ø8P)	(2) (4)	(Ø2P) (Ø8P)	REMOVE AND SALVAGE ALL EQUIPMENT
G	1-A	10'	-	-	-	16'	8'	TV-1-T	RA,YA,GA	Ø8+OLA	SP-1-T	Ø7P	-	-	FURNISH AND INSTALL ALL NEW EQUIPMENT
H	(15TS)	(30')	-	(15')	130W	EX.	EX.	(SV-1-T)	(RA,YA,GA)	(Ø1)	-	-	-	-	REMOVE AND SALVAGE EXISTING PEDESTRIAN PUSH BUTTON AND PED SIGNAL HEAD. FILL ANY REMAINING HOLES LEFT WITH IN STANDARD WITH CENTRAL GALVANIZED STEEL FASTENERS. REPLACE EXISTING LUMINAIRE WITH NEW LED LUMINAIRE. ALL OTHER EQUIPMENT TO REMAIN.
I	TYPE 15	30'	-	12'	130W	STA.2+80, 39'R		-	-	-	-	-	-	-	FURNISH AND INSTALL ALL NEW EQUIPMENT.

NOTE: ALL NEW EQUIPMENT UNLESS NOTED AS EXISTING IN (PARENTHESIS).
ALL NEW LED LUMINAIRES SHALL BE CREE/BETA LED SERIES MODEL NO. STR-LWY-3M-HT-Ø8-E-UL-SV-525-DIM-R-UTL-40K OR APPROVED EQUAL.

DETAIL 'A'

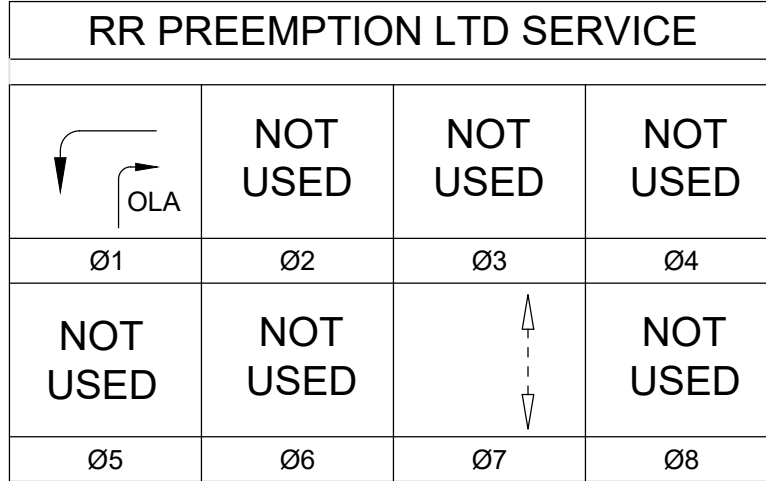
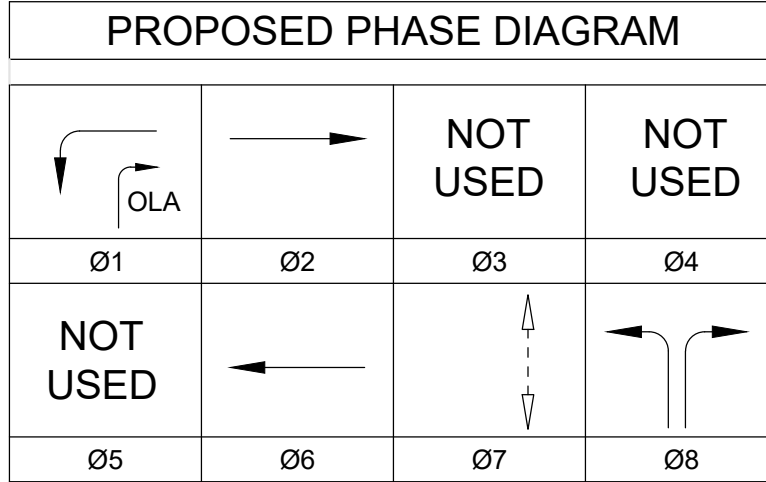
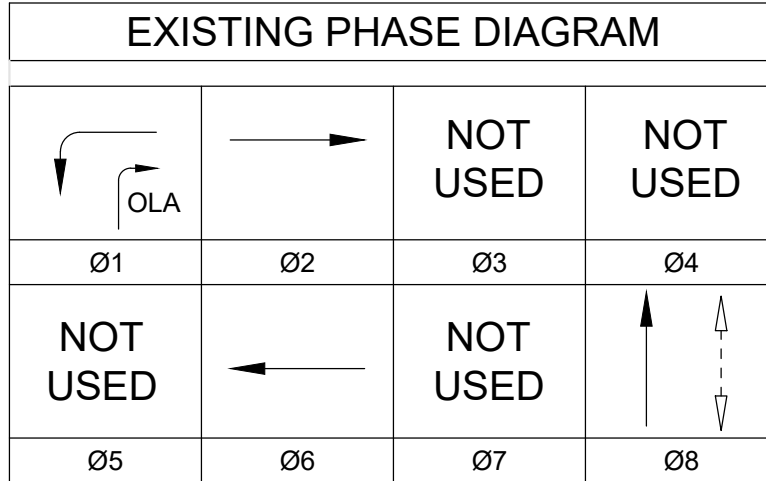


RR INTERCONNECT CIRCUIT DIAGRAM:



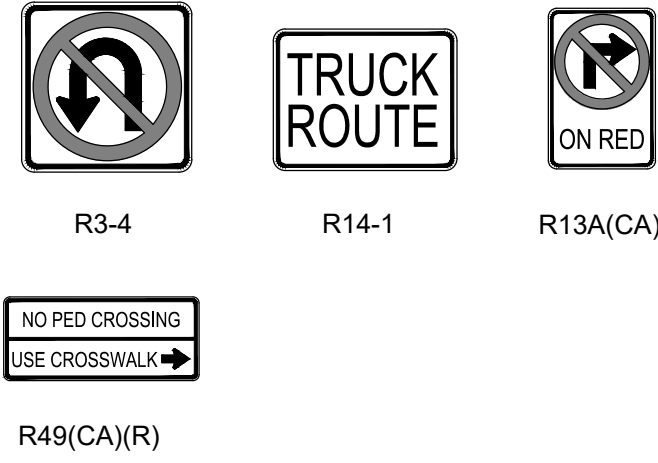
TRAFFIC SIGNAL CONSTRUCTION NOTES:

- AB ABANDON AS NOTED. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
- AG ADJUST TO GRADE
- BC FURNISH AND INSTALL NEW PB INTO EXISTING CONDUIT RUN.
- CB FURNISH AND INSTALL NEW CONDUIT INTO EXISTING PULL BOX.
- PP PROTECT IN PLACE PER PLAN.
- SC SPLICE NEW TO EXISTING CONDUCTORS.
- RS REMOVE AND SALVAGE
- RC EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.
- 1 FURNISH AND INSTALL NEW VEHICLE LOOP DETECTORS. SEE DETAILS B AND C ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET.
- 2 FURNISH AND INSTALL TYPE "Q" BIKE LOOP DETECTOR IN CENTER OF BICYCLE DETECTOR SYMBOL PER SIGNING AND MARKING PLANS.
- 3 FURNISH AND INSTALL NEW SIGN ON POLE PER PLAN
- 4 FURNISH AND INSTALL NEW SIGN ON SIGNAL MAST ARM PER PLAN
- 5 FURNISH AND INSTALL EXTERNAL BATTERY BACKUP UNIT AND BATTERIES ON EXISTING SIGNAL CABINET.
- 6 FURNISH AND INSTALL CONDUIT INTO EXISTING SIGNAL CABINET FOUNDATION. SEE DETAIL A ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET
- 7 FURNISH AND INSTALL NEW LED LUMINAIRE ON EX. MAST ARM. WORK TO BE CONDUCTED BY SDG&E PER SEPARATE PERMIT. COORDINATE WITH BNSF PRIOR TO WORK.
- 8 PROPOSED RR SIGNAL HOUSE BY BNSF. FINAL LOCATION SHALL BE DETERMINED BY BNSF FORCES.
- 9 FURNISH AND INSTALL RR TERMINATION BOX. PROVIDE 3" STUB FOR RR INTERCONNECT. COORDINATE WITH BNSF FOR EXACT LOCATION OF TERMINATION BOX.
- 10 FURNISH AND INSTALL TYPE 1 PEDESTRIAN BARRICADE WITH R49(CA)(R) SIGNS PER CALTRANS STANDARD PLAN ES-7Q.



DETECTOR SCHEDULE			
DETECTOR	PHASE	SLOT	TERMINAL
1	Ø2	I2U	T2-5&6
2	Ø2	I2L	T2-7&8
3	Ø6	J2U	T3-5&6
4	Ø6	J2L	T3-7&8
5	Ø1	I1U	T2-1&2
6	Ø8+OLA	J8U	T7-5&6
7	Ø8	J8L	T5-7&8
PPB	Ø7P	I13U	T8-4 & COM6
EVA	Ø2+Ø5	J12U	T9-4&COM6
EVb	Ø4+Ø7	J13U	T9-7&COM9
EVC	Ø1+Ø6	J12L	T9-5&COM6
FLASH	FLASH	I14U	T8-10&COM12

SIGN LEGEND



CONDUIT & CONDUCTOR SCHEDULE																
AWG SIZE OR CABLE TYPE	P H A S E	POLE OR CIRCUIT	1-3"	1-3"	(1-4")	1-3"	(1-3") 1-3"	1-3"	(1-3")	(1-3") 2-3"	(2-3") 2-3"					
			1	2	3	4	5	6	7	8	9					
3 CONDUCTOR		POLE (A)									2	2	2			
		POLE (B)									2	2	2			
		POLE (C)									1	1	1			
		POLE (D)	1	1	1	1	1	1	1	1	1	1	1			
		POLE (E)				1	1	1				1	1			
		POLE (F)	1	1	1	1	1	1			1	1	1			
		POLE (H)					1	1				1	1			
		POLE (I)														
12 CONDUCTOR																
TOTAL CABLES			2	1	1	2	2	2	3	1	2	2	2	7	3	7
#6			SIGNAL SERVICE					2	2	2			2	2		
#8			COMMON GROUND			1	1	1	1	1	1	1	1	1	1	
#10			SAFETY LIGHTING				2	2	2		2	2				
6P#22			INTERCONNECT							(1)	(1)	(1)	(1)			
			12 SMFO				1	1	1				1	1		
28CSC			RR INTERCONNECT							(1)			(1)	(1)		
TYPE "B" DLC		Ø1	LOOP DETECTION							1			1			
		Ø2	LOOP DETECTION						2			2	2			
		Ø6	LOOP DETECTION								2		2			
		Ø8	LOOP DETECTION		2		2	2	2				2	2		
EV-DLC			EV DETECTION			1	1	1			1		2	3		
TOTAL CONDUCTORS / CABLES			5	3	12	13	17	3	11	24	26					
CONDUIT FILL			13%	3%	14%	18%	23%	4%	25%	26%	20%					
NOTE: ALL NEW WIRING UNLESS NOTED AS (EXISTING).																
NOTE: CONTRACTOR IS RESPONSIBLE TO USE EXTREME CARE AND TAKE ALL PRECAUTIONARY MEASURES NOT TO DAMAGE EXISTING FUNCTIONING LOOP DETECTORS.																

PROPOSED RR PREEMPTION SEQUENCE:

- TRAIN ENTERS TRACK CIRCUIT ASSOCIATED WITH "TCR" INTERCONNECT CIRCUIT. ANY PEDESTRIAN SIGNAL SHOWING "WALK" IS TRUNCATED AND DISPLAYS STEADY "DON'T WALK". PEDESTRIAN SIGNALS NOT SHOWING "WALK" WILL NOT START A "WALK" DISPLAY. VEHICULAR INDICATIONS DISPLAYING GREEN (EXCEPT FOR Ø2 WHICH IF GREEN, REMAIN GREEN) BEGIN YELLOW CLEARANCE.
- TRAIN ENTERS TRACK CIRCUIT ASSOCIATED WITH "XR" INTERCONNECT CIRCUIT. TRACK CLEARANCE GREEN FOR Ø2 SIGNALS. STEADY RED FOR ALL OTHER VEHICULAR SIGNALS. TRACK CLEARANCE GREEN TIMING SHALL MATCH EXISTING. ALL PEDESTRIAN SIGNALS REMAIN STEADY "DON'T WALK".
- TRAIN ENTERS TRACK CIRCUIT ASSOCIATED WITH "GD" INTERCONNECT CIRCUIT. YELLOW CLEARANCE FOR Ø2 SIGNALS. STEADY RED FOR ALL OTHER VEHICULAR SIGNALS. ALL PEDESTRIAN SIGNALS REMAIN STEADY "DON'T WALK".
- LIMITED SERVICE OPERATION FOR Ø1+OLA, Ø7. STEADY RED FOR ALL OTHER VEHICULAR SIGNALS.
- AT THE END OF PREEMPTION, NORMAL OPERATION RESUMES.

Exhibit A



DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

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TOMO TAKAHASHI, 81522

DATE



PLANS FOR THE IMPROVEMENTS OF:

BAYSHORE BIKEWAY SEGMENT 5
BAY MARINA DRIVE AND MARINA WAY

CITY OF NATIONAL CITY

ROBERTO YANO RCE# 56292
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

DATE

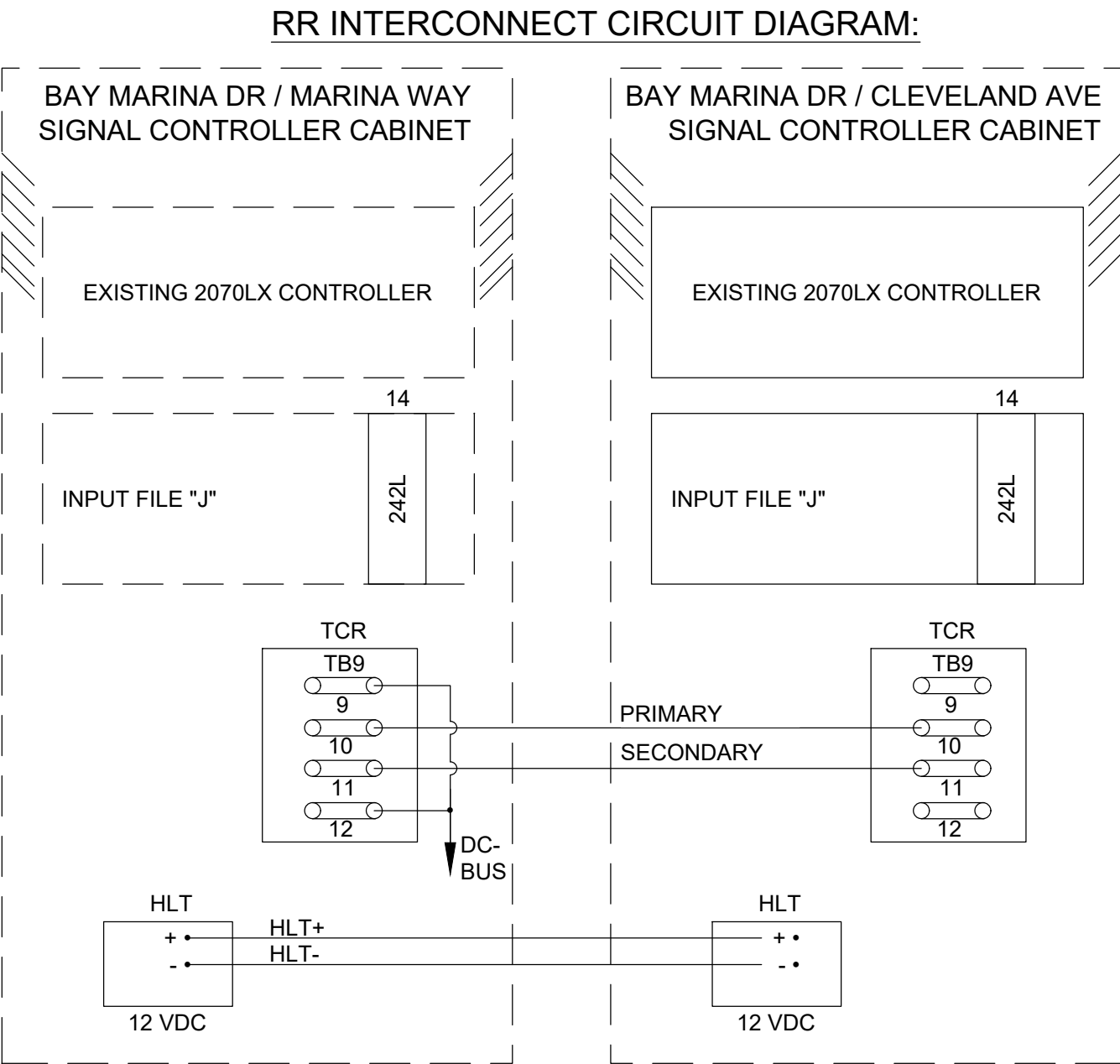
CIP NO. 19-20

SHEET 67 OF 4 SHEETS

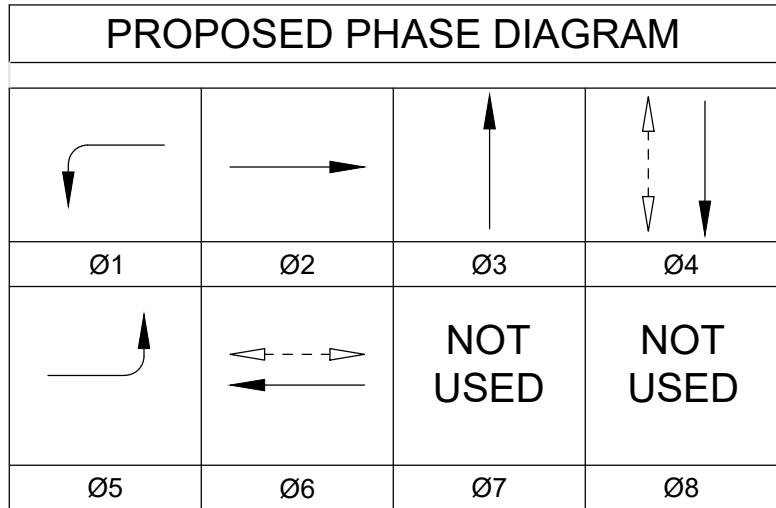
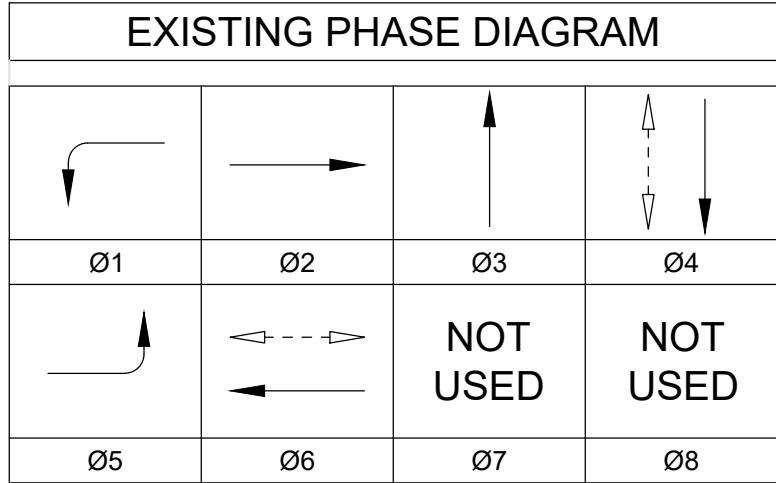
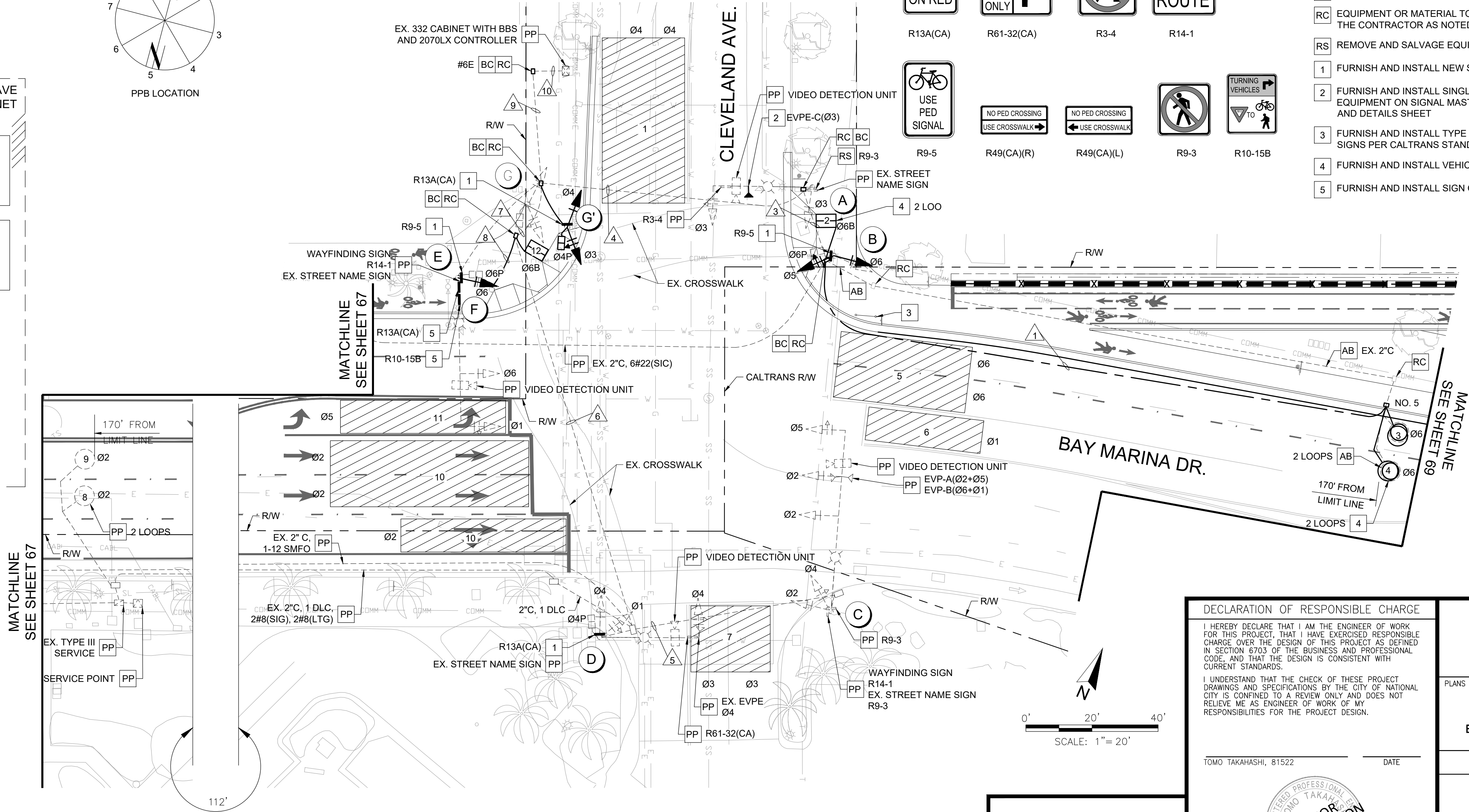
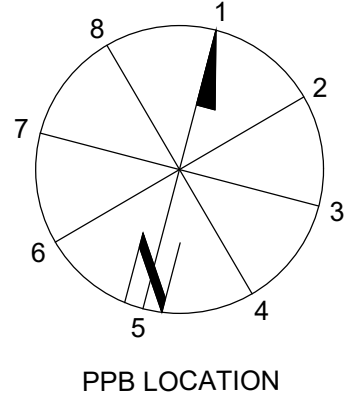
SURVEYOR:	BENCHMARK:	CONSTRUCTION RECORDS	DATE STARTED:	INSPECTOR:	DATE COMPLETED:	CONSTRUCTION SURVEYOR	NAME	COMPANY	SIGNATURE	BY	APPROVED	DATE	ENGINEERING DEPARTMENT	AS-BUILT	REVISIONS

POLE & EQUIPMENT SCHEDULE															
NO.	STANDARD				LUM.	PLACEMENT		MOUNTING AND PLACEMENT							NOTES
	TYPE	HEIGHT	SIG. M.A.	LUM. M.A.	LED	A	B	VEHICLE SIGNAL			PED SIGNAL		PUSH BUTTON		
								MOUNTING	INDICATION	PHASE	MOUNTING	PHASE	LOCATION	PHASE	
A	(19-3-100)	(30')	(25')	(12')	200W	0'	6'	(MAS-4B) (SV-1-T)	(R,Y,G,GA) (R,Y,G)	(Ø3) (Ø3)	-	-	(5)	(Ø6P)	EXISTING EQUIPMENT TO REMAIN.
B	(1-A)	(10')	-	-	-	17'	5.5'	TV-3-T -	R,Y,G RA,YA,GA RB,YB,GB	Ø6 Ø5 Ø9	(SP-1-T)	Ø9P	-	-	REMOVE EXISTING TV-2-T MOUNTING EQUIPMENT. REPLACE WITH NEW TV-3-T(MOD) MOUNTING EQUIPMENT. SEE DETAIL C ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET.
C	(29-5-100)	(30')	(50')	(15')	200W	19'	5'	MAT (MAS) (MAS) (SV-2-TD) -	(RA,YA,GA) (R,Y,G) (R,Y,G) (RA,YA,GA) (R,Y,G)	(Ø5) (Ø2) (Ø2) (Ø4) (Ø2)	-	-	-	-	EXISTING EQUIPMENT TO REMAIN.
D	(19-3-100)	(30')	(25')	(12')	200W	9'	3'	MAS-4B (SV-2-T) -	(R,Y,G,GA) (R,Y,G) (RA,YA,GA)	(Ø4) (Ø1) (Ø4)	(SP-1-T)	(Ø4P)	(3)	(Ø4P)	EXISTING EQUIPMENT TO REMAIN.
E	(26-4-100)	(30')	(45')	(15')	200W	2.5'	5'	(MAT) (MAS) SV-2-TB -	(RA,YA,GA) (R,Y,G) (RB,YB,GB) R,Y,G	(Ø1) (Ø6) (Ø9) (Ø6)	(SP-1-T)	Ø9P	(1) (3)	(Ø6P) (Ø4P)	REMOVE EXISTING SV-1-T MOUNTING EQUIPMENT. REPLACE WITH NEW SV-2-TB(MOD) MOUNTING EQUIPMENT. SEE DETAIL D ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET
F	PBA	5'-7"	-	-	-	5.25'	8.25'	-	-	-	-	-	3	Ø4P	FURNISH AND INSTALL ALL NEW EQUIPMENT
G	(1-A)	(10')	-	-	-	15'	3.5'	(TV-2-T) -	(RA,YA,GA) (R,Y,G)	(Ø3) (Ø4)	(SP-1-T)	(Ø4P)	-	-	REMOVE AND SALVAGE ALL EQUIPMENT
G'	1-A	10'	-	-	-	7'	6'	TV-2-T -	RA,YA,GA R,Y,G	Ø3 Ø4	SP-1-T	Ø4P	5	Ø6P	FURNISH AND INSTALL ALL NEW EQUIPMENT

NOTE: ALL NEW EQUIPMENT UNLESS NOTED AS EXISTING IN (PARENTHESIS). ALL NEW LED LUMINAIRES SHALL BE CREE/BETA LED SERIES MODEL NO. STR-LWY-3M-HT-08-E-UL-SV-525-DIM-R-UTL-40K OR APPROVED EQUAL.



- PROPOSED RR PREEMPTION SEQUENCE:
1. TRAIN ENTERS TRACK CIRCUIT ASSOCIATED WITH "TCR" INTERCONNECT CIRCUIT. ANY PEDESTRIAN SIGNAL SHOWING "WALK" IS TRUNCATED AND DISPLAYS "DON'T WALK". PEDESTRIAN SIGNALS NOT SHOWING "WALK" WILL NOT START A "WALK" DISPLAY. VEHICULAR INDICATIONS DISPLAYING GREEN (EXCEPT FOR Ø2 WHICH IF GREEN, REMAIN GREEN) BEGIN YELLOW CLEARANCE.
 2. TRACK CLEARANCE GREEN FOR Ø2 SIGNALS. SOLID RED FOR ALL OTHER VEHICULAR SIGNALS. TRACK CLEARANCE GREEN TIMING SHALL MATCH EXISTING. ALL PEDESTRIAN SIGNALS REMAIN SOLID "DON'T WALK".
 3. YELLOW CLEARANCE FOR Ø2 SIGNALS. SOLID RED FOR ALL OTHER VEHICULAR SIGNALS. ALL PEDESTRIAN SIGNALS REMAIN SOLID "DON'T WALK".
 4. AT THE END OF PREEMPTION, NORMAL OPERATION RESUMES.



FLASHING OPERATION SHALL BE ALL RED. LPI SHALL BE PROVIDED FOR Ø6 PED PHASE.

NOTE: CONTRACTOR IS RESPONSIBLE TO USE EXTREME CARE AND TAKE ALL PRECAUTIONARY MEASURES NOT TO DAMAGE EXISTING FUNCTIONING LOOP DETECTORS.

DETECTOR SCHEDULE			
DETECTOR	PHASE	SLOT	TERMINAL
1	Ø4	I6U	VIDEO
2	Ø6B	J2U	T3-5&6
3	Ø6	J3U	T3-9&10
4	Ø6	J3L	T3-11&12
5	Ø6	J3U	VIDEO
6	Ø1	I1U	VIDEO
7	Ø3	I5U	VIDEO
8	Ø2	I2U	T2-5&6
9	Ø2	I2L	T2-7&8
10	Ø2	I3U	T2-9&10
11	Ø5	J1U	T3-1&2
12	Ø6B	J2L	T3-7&8
PPB	Ø6	I13U	7&8 & COM 9
PPB	Ø4	I12L	T&S & COM 6

CONDUIT & CONDUCTOR SCHEDULE																	
AWG SIZE OR CABLE TYPE	P H A S E	POLE OR CIRCUIT	(1-2")	(1-2")	(1-3")	(1-3")	(1-3")	(1-3")	(1-3")	(1-2") 1-3"	(2-3") 1-3"	(3-3")					
			1	2	3	4	5	6	7	8	9	10					
3 CONDUCTOR		POLE (A)				1	1				1	1	1				
		POLE (B)										1	1				
		POLE (C)				1	1				1	1	1				
		POLE (D)						1	1	1		1	1				
		POLE (E)							1	1	1	1	1				
		POLE (F)								1	2	1	2				
		POLE (G)										1	1				
12 CONDUCTOR																	
TOTAL CABLES					1	1	2	1	2	2	2	1	2	4	7	4	7

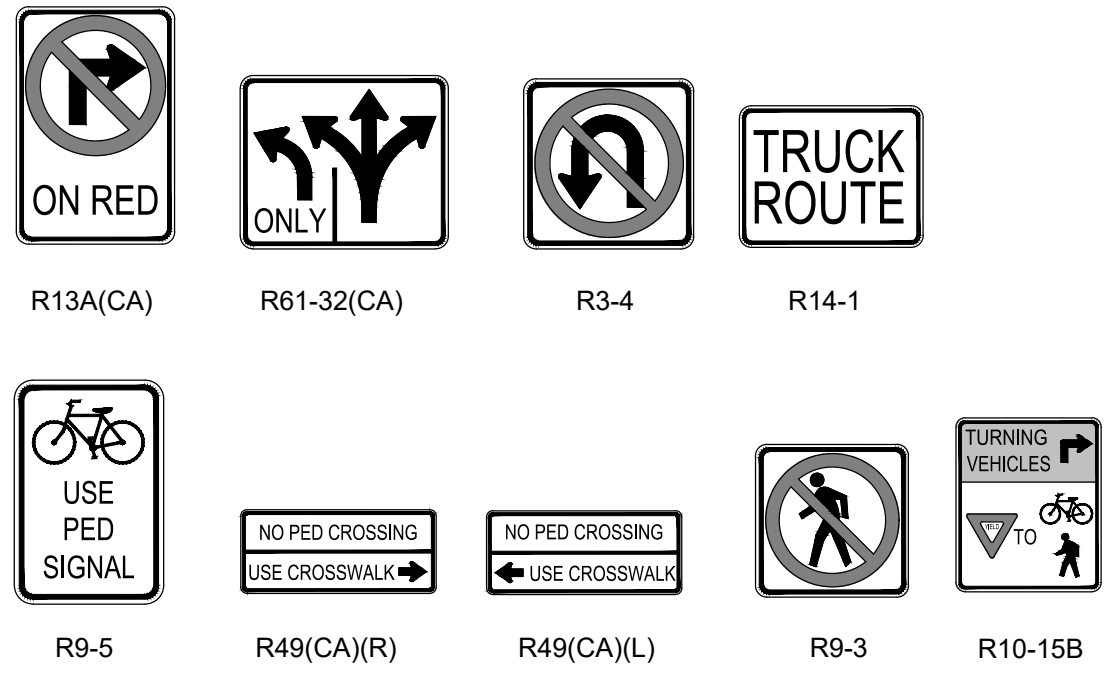
#6	SIGNAL SERVICE								1			
#8	COMMON GROUND	1	1	1	1	(1)	1	1	1	1	1	1
#8	SAFETY LIGHTING	1			1	(2)	1	1	1	1	1	1
6P#22	INTERCONNECT	(2)	(2)	(2)	(2)					(2)	(2)	(2)
VIDEO CABLE HARNESS	VIDEO DETECTION				1	(1)	2	2	1	4	4	4

TYPE "B" DLC	Ø1	LOOP DETECTION										
	Ø2	LOOP DETECTION						1	1		1	1
	Ø6	LOOP DETECTION		1	1	1					1	1
	Ø8	LOOP DETECTION										
	Ø9	LOOP DETECTION				1			1		2	2
EV-DLC	EV DETECTION					(2)	2	2			2	2

TOTAL CONDUCTORS / CABLES		4	4	5	9	7	12	11	6	23	23
CONDUIT FILL		16%	16%	14%	27%	15%	30%	28%	23%	27%	27%

NOTE: ALL NEW WIRING UNLESS NOTED AS (EXISTING).

SIGN LEGEND



TRAFFIC SIGNAL CONSTRUCTION NOTES:

1. FURNISH AND INSTALL NEW SIGN ON POLE PER PLAN
2. FURNISH AND INSTALL SINGLE CHANNEL EMERGENCY VEHICLE PREEMPTION EQUIPMENT ON SIGNAL MAST ARM PER DETAIL C ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET
3. FURNISH AND INSTALL TYPE 1 PEDESTRIAN BARRICADE WITH R49(CA)(L&R) SIGNS PER CALTRANS STANDARD PLAN ES-7Q
4. FURNISH AND INSTALL VEHICLE LOOP DETECTOR
5. FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

TOMO TAKAHASHI, 81522 DATE



PLANS FOR THE IMPROVEMENTS OF:

BAYSHORE BIKEWAY SEGMENT 5
BAY MARINA DR. AND CLEVELAND AVE.

CITY OF NATIONAL CITY

ROBERTO YANO RCE# 56292
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

CIP NO. 19-20

SHEET 68 OF 4 SHEETS

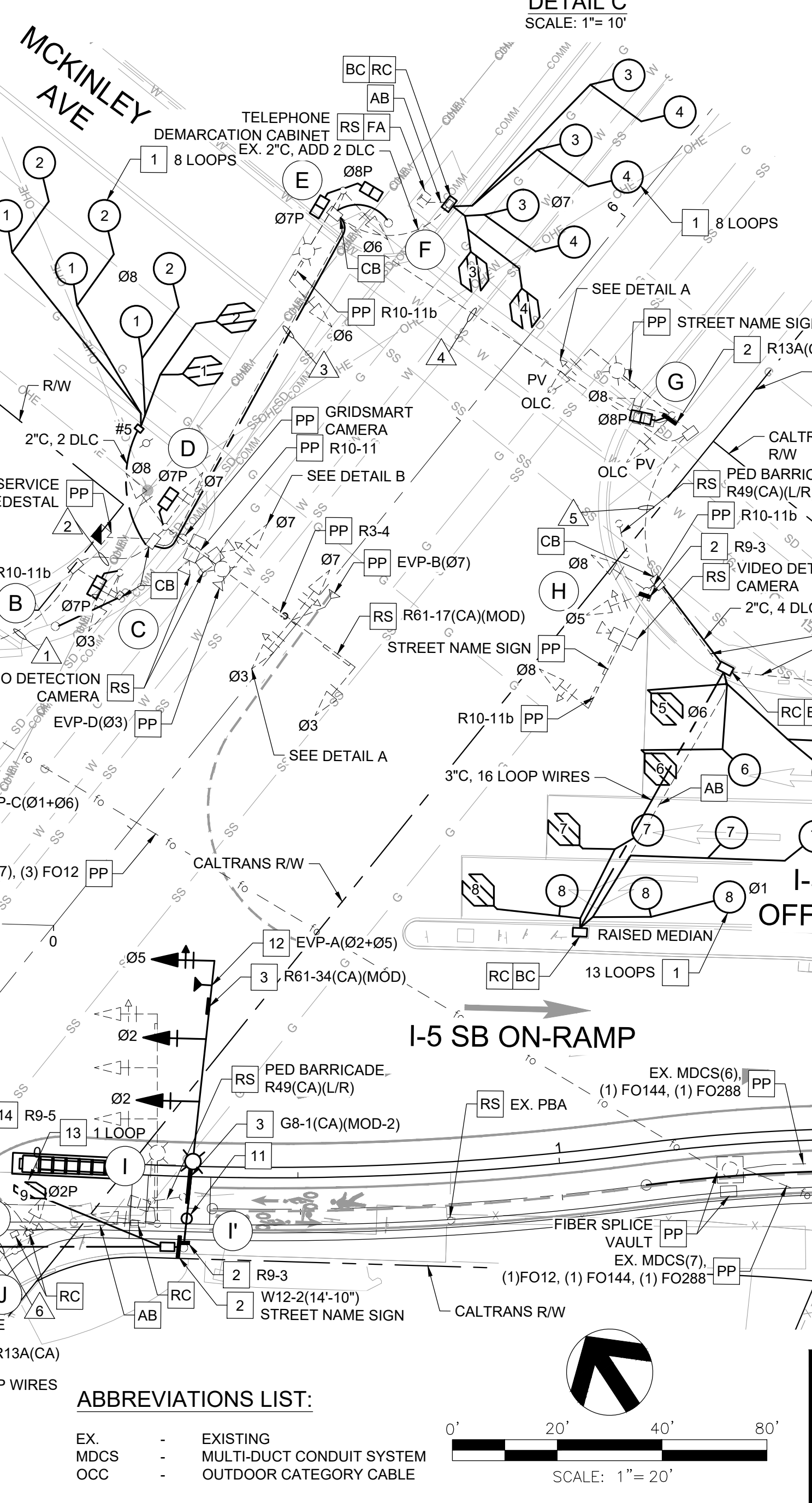
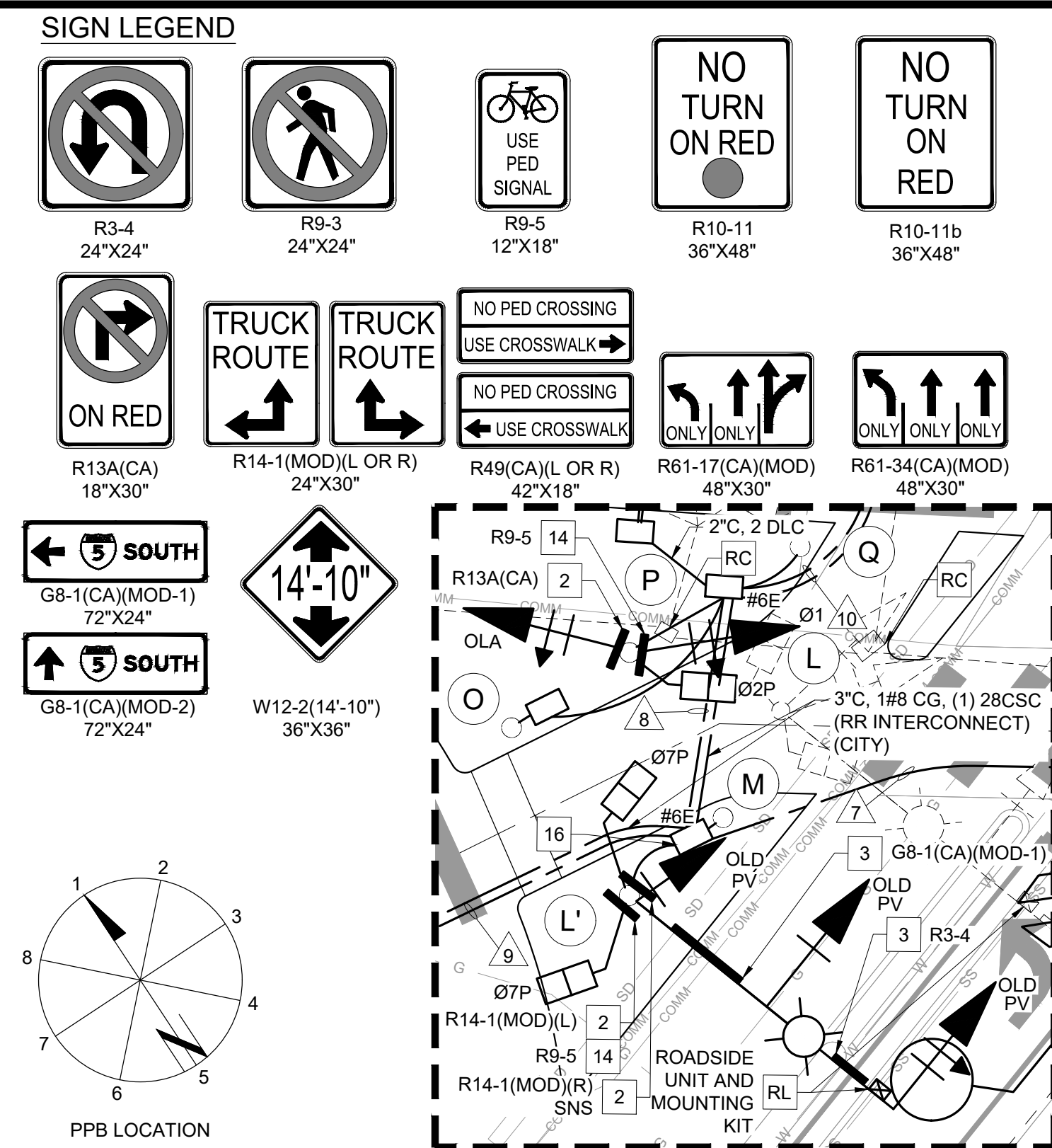
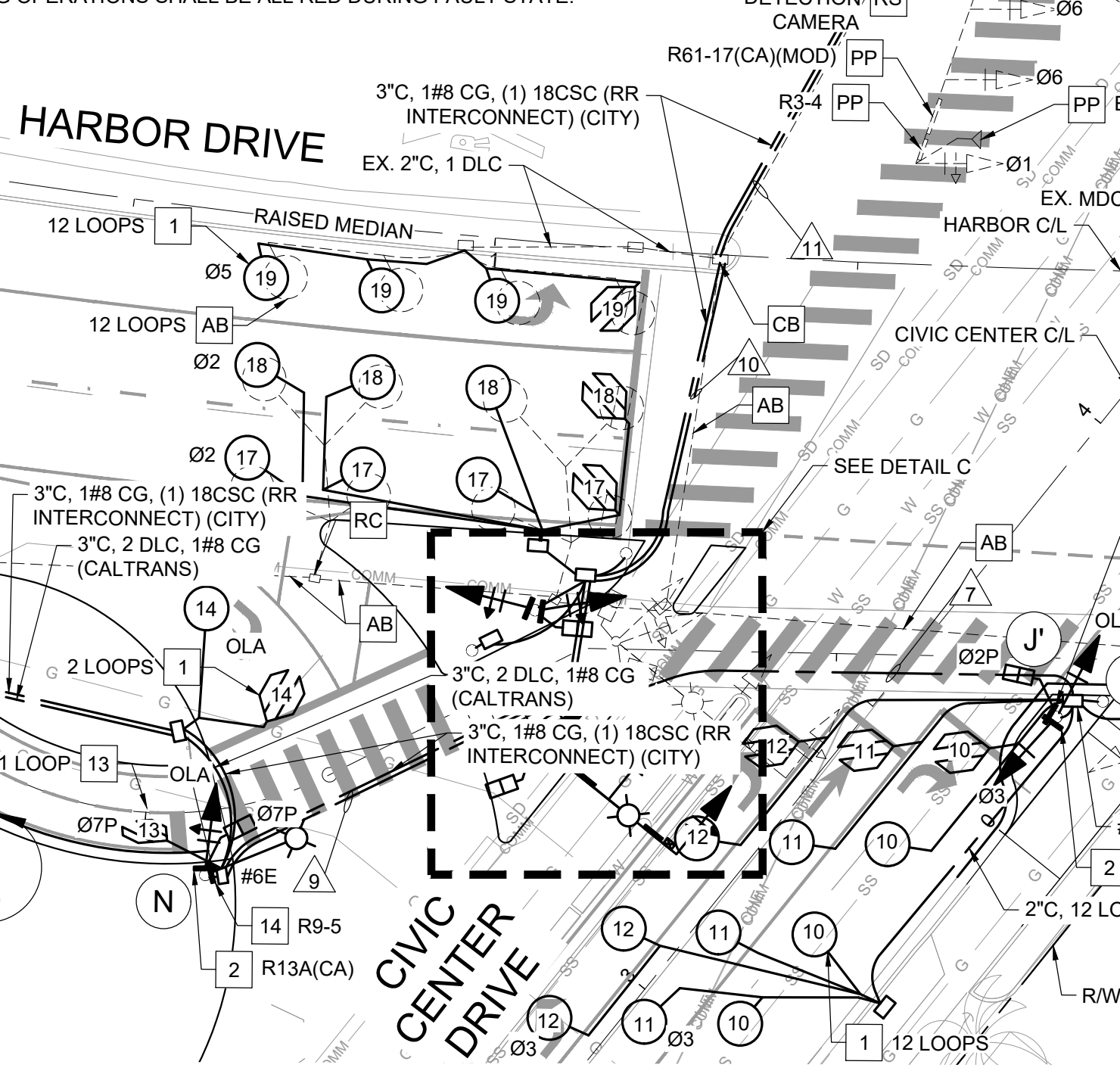
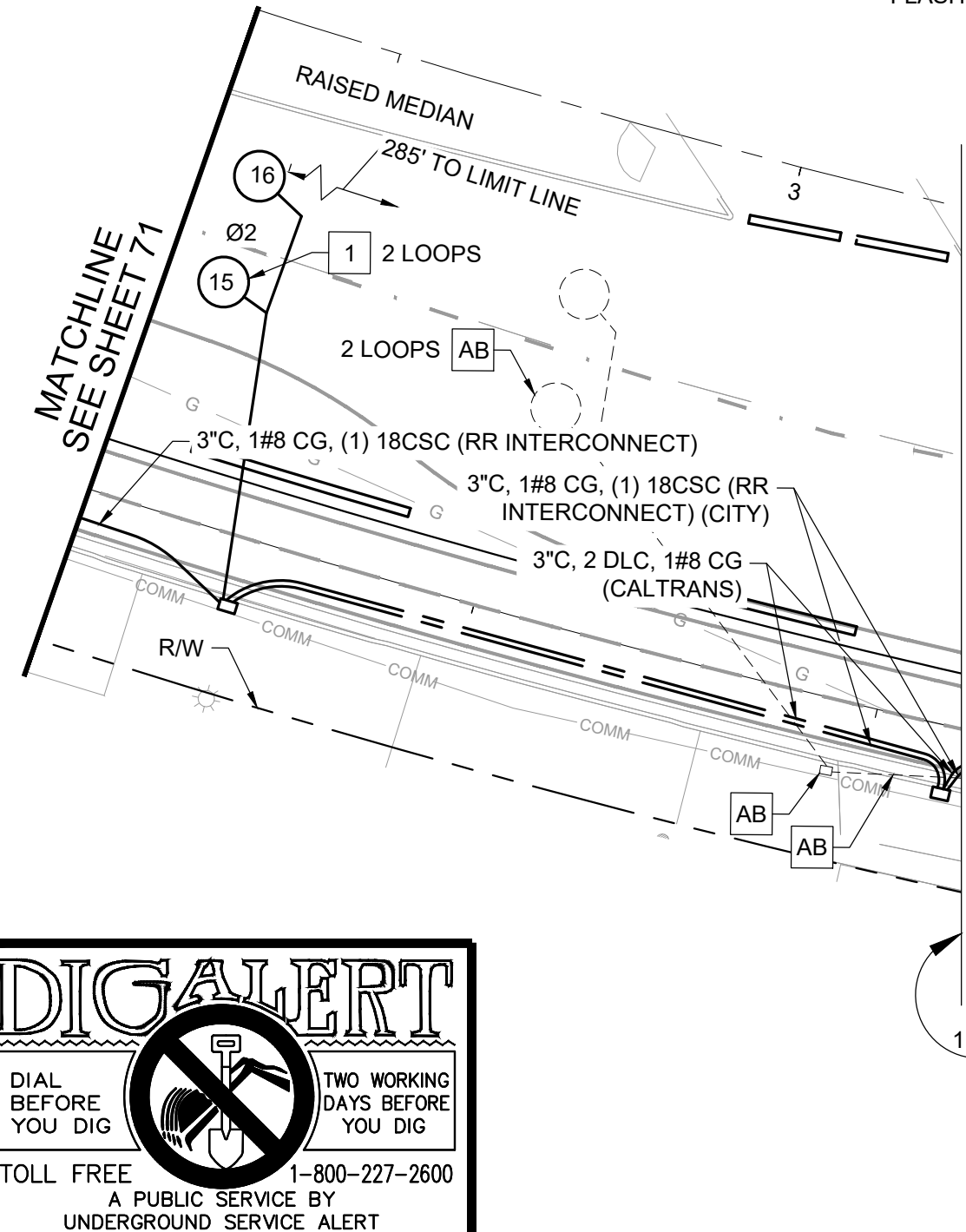
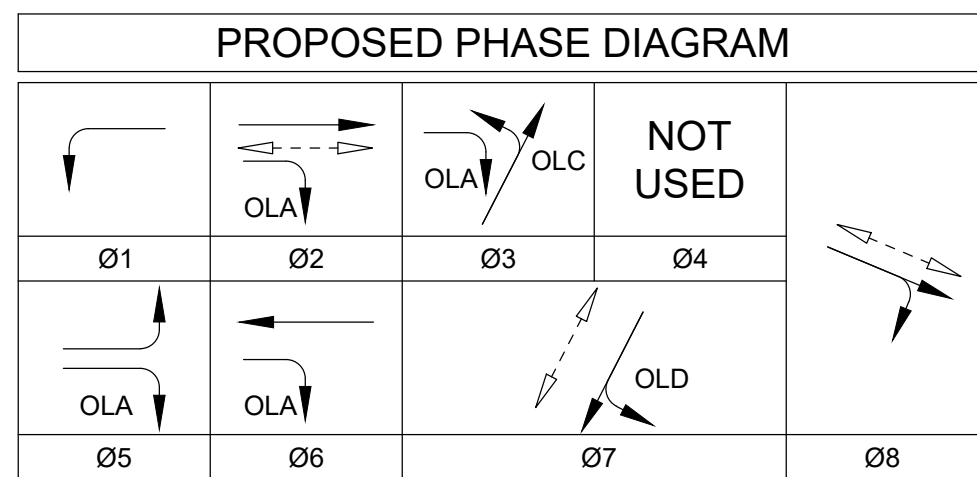
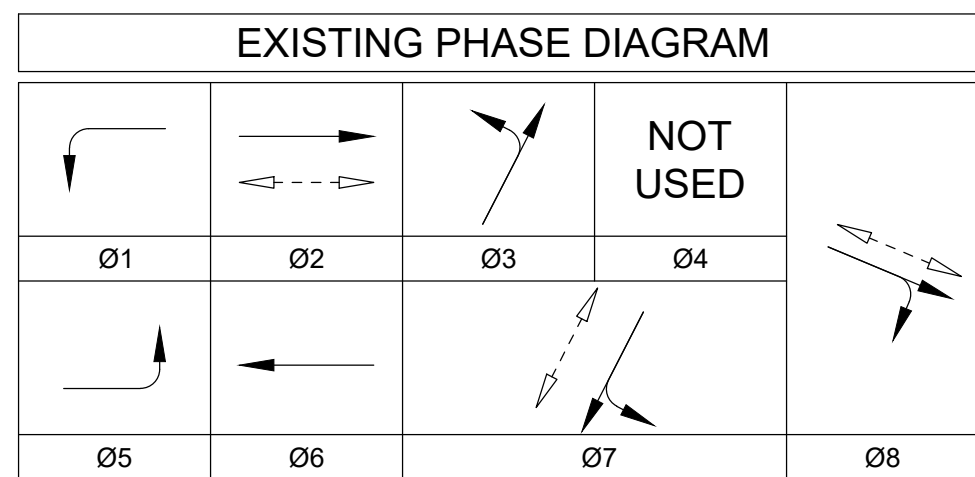


Exhibit A

SURVEYOR:	BENCHMARK:	CONSTRUCTION RECORDS	DATE STARTED:	INSPECTOR:	DATE COMPLETED:	GEO/TECHNICAL OF RECORD	NAME	COMPANY	SIGNATURE	CONSTRUCTION SURVEYOR	NAME	COMPANY	SIGNATURE	BY	APPROVED	DATE	REVISIONS	ENGINEERING DEPARTMENT	AS-BUILT

POLE & EQUIPMENT SCHEDULE																	
NO.	STANDARD			LUM. M.A.	LED	PLACEMENT		MOUNTING AND PLACEMENT						NOTES			
	TYPE	HEIGHT	SIG. M.A.			A	B	VEHICLE SIGNAL		PED SIGNAL		PUSH BUTTON					
								MOUNTING	INDICATION	PHASE	MOUNTING	PHASE	LOCATION		PHASE		
A	(26-4-80)	(30')	(45')	(15')	(130W)	EX.	EX.	(MAT) (MAS) (SV-1-T)	(RA,YA,GA) (R,Y,G) (R,Y,G)	(Ø1) (Ø6) (Ø6)	-	-	(4)	(Ø7P)	5	REMOVE AND SALVAGE EXISTING ITERIS VIDEO DETECTION CAMERA. ALL OTHER EXISTING EQUIPMENT TO REMAIN.	
B	PBA	5'-7"	-	-	-	7'-2"	2'-6"	-	-	-	-	-	8	Ø7P	7	ALL NEW EQUIPMENT.	
C	(1-A)	(10')	-	-	-	EX.	EX.	(TV-1-T)	(RA,YA,GA)	(Ø3)	SP-1-T	Ø7P	-	-	6	8	ALL OTHER EXISTING EQUIPMENT TO REMAIN.
D	(29-5-100)	(30')	(45')	(12')	(130W)	EX.	EX.	(MAS-4B)	(R,Y,G,GA)	(Ø3)	SP-1-T	Ø7P	1	Ø7P	5	6	REMOVE AND SALVAGE (2) EXISTING ITERIS VIDEO DETECTION CAMERAS. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
								(MAS)	(R,Y,G)	(Ø3)							
								(MAS-4B)	(R,Y,G,GA)	(Ø7)							
								(SV-2-T)	(R,Y,G)	(Ø7)					7	8	
E	(17-2-100)	(30')	(20')	(15')	(130W)	EX.	EX.	(MAS) (SV-1-T)	(R,Y,G) (R,Y,G)	(Ø6) (Ø6)	SP-2-T	Ø7P Ø8P	(3) (5)	(Ø8P) (Ø7P)	5	6	ALL OTHER EXISTING EQUIPMENT TO REMAIN.
															8		
F	PBA	5'-7"	-	-	-	4'-0"	5'-10"	-	-	-	-	-	3 1	Ø8P Ø7P	7		ALL NEW EQUIPMENT.
G	(17-2-100)	(30')	(20')	(15')	(130W)	EX.	EX.	(MAS-4B) (SV-1-T)	(R,Y,G,GA) (R,Y,G)	(ØLC) (Ø8) (ØLC)	SP-1-T	Ø8P	7	Ø8P	5	6	ALL OTHER EXISTING EQUIPMENT TO REMAIN.
															7	8	
H	(18-3-100)	(17')	(25')	-	-	EX.	EX.	(MAS) (SV-2-T)	(RA,YA,GA) (RA,YA,GA) (R,Y,G)	(Ø8) (Ø5) (Ø8)	-	-	-	-	-	-	REMOVE AND SALVAGE EXISTING ITERIS VIDEO DETECTION CAMERA. ALL OTHER EXISTING EQUIPMENT TO REMAIN.
I	(26-4-80)	(30')	(40')	(15')	(130W)	EX.	EX.	(MAT) (MAS) (SV-1-T)	(RA,YA,GA) (R,Y,G) (R,Y,G)	(Ø5) (Ø2) (Ø2)	(SP-1-T)	(Ø2P)	-	-	FA		REMOVE AND SALVAGE EXISTING EQUIPMENT.
I'	29-5-100	30'	55'	15'	130W	17'-10"	1'-6"	MAT MAS MAS	RA,YA,GA R,Y,G R,Y,G	Ø5 Ø2 Ø2	-	-	-	-			ALL NEW EQUIPMENT.
J	(1-A)	(10')	-	-	-	EX.	EX.	(TV-2-T)	(RA,YA,GA) (R,Y,G)	(ØLD) (Ø3)	-	-	(2)	(Ø2P)	FA		REMOVE AND SALVAGE EXISTING EQUIPMENT.
J'	1-A	10'	-	-	-	"CIVIC CENTER" LINE: STA 3+64.7, 20.6' R		TV-2-T	RA,YA,GA R,Y,G	ØLD Ø3	SP-1-T	Ø2P	-	-			ALL NEW EQUIPMENT.
K	PBA	5'-7"	-	-	-	"CIVIC CENTER" LINE: STA 3+70.4, 24.3' R		-	-	-	-	-	2	Ø2P	7		ALL NEW EQUIPMENT.
L	(19-4-80)	(30')	(30')	(15')	(130W)	EX.	EX.	(MAT) (MAS) (SV-2-T)	(RA,YA,GA) (R,Y,G) (R,Y,G)	(ØLD) (ØLD) (ØLD)	(SP-2-T)	(Ø7P) (Ø2P)	(4) (2)	(Ø7P) (Ø2P)	FA		RELOCATE WIRELESS RADIO PER PLAN. REMOVE AND SALVAGE ALL OTHER EQUIPMENT.
L'	19-4-100	30'	25'	12'	130W	"CIVIC CENTER" LINE: STA 3+17.2, 33.3' L		MAT	RA,YA,GA	ØLD	SP-2-T	Ø7P Ø7P	2	Ø2P	7	9	SV-1-TB (OLD) SIGNAL HEAD SHALL BE MOUNTED MIN 17' FROM BOTTOM OF SIGNAL HEAD TO FINISHED GRADE. RELOCATE WIRELESS RADIO PER PLAN. ALL OTHER EQUIPMENT IS NEW.
								MAS	R,Y,G	ØLD							
								SV-1-TB	R,Y,G	ØLD							
M	PBA	5'-7"	-	-	-	"CIVIC CENTER" LINE: STA 3+26, 31.5' L		-	-	-	-	-	2	Ø2P	7		ALL NEW EQUIPMENT.
N	15TS	30'	-	12'	130W	25'-0"	4'-0"	SV-1-TB	RA,YA,GA	OLA	SP-1-T	Ø7P	1	Ø7P	7		ALL NEW EQUIPMENT.
O	PBA	5'-7"	-	-	-	"CIVIC CENTER" LINE: STA 3+21.4, 48.8' L		-	-	-	-	-	5	Ø7P	7		ALL NEW EQUIPMENT.
P	1-A	10'	-	-	-	"CIVIC CENTER" LINE: STA 3+31.1, 44.5' L		TV-2-T	RA,YA,GA RA,YA,GA	OLA Ø1	SP-1-T	Ø2P	-	-			ALL NEW EQUIPMENT.
Q	PBA	5'-7"	-	-	-	"CIVIC CENTER" LINE: STA 3+45.1, 39.6' L		-	-	-	-	-	4	Ø7P	7		ALL NEW EQUIPMENT.

NOTE: ALL NEW EQUIPMENT UNLESS NOTED AS EXISTING IN (PARENTHESIS).
ALL NEW LED LUMINAIRES SHALL BE LEOTEK GCM1-60J-MV-30K-3R-GY-110-PCR7-CR-WL-DSC-CF-CT-SP2-AD OR APPROVED EQUAL.
ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE TOUCHLESS PEDSAFETY GUARDIAN WAVE FS 912 APS OR APPROVED EQUAL.



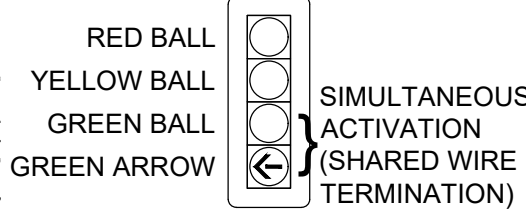
CONDUIT & CONDUCTOR SCHEDULE													
AWG SIZE OR CABLE TYPE	POLE OR CIRCUIT	CONDUIT SIZE AND RUN											
		(2-3")	(1-4")	1-3" (1-4")	(1-4")	(1-3")	2-3"	2-3"	2-3"	3"	3-3"	1-4" (1-4")	(2-4")
		1	2	3	4	5	6	7	8	9	10	11	12
3 COND	POLE (A)												
	POLE (B)	1											
	POLE (C)		1										
	POLE (D)	1	2	1									
	POLE (E)		1	2	1								
	POLE (F)	2	2	2	1								
	POLE (G)	1	1	1	1	1							
	POLE (H)	1	1	1	1	1	1						
	POLE (I)						1	1	1	1	1	1	1
	POLE (J)						1	1	1	1	1	1	1
12 COND	POLE (K)						1	1	1	1	1	1	1
	POLE (L)						1	1	1	1	1	1	1
	POLE (M)						1	1	1	1	1	1	1
	POLE (N)						1	1	1	1	1	1	1
	POLE (O)						1	1	1	1	1	1	1
	POLE (P)						1	1	1	1	1	1	1
	POLE (Q)						1	1	1	1	1	1	1
	3 & 12 COND TOTALS	5	6	4	5	3	3	1	2	1	1	5	6
	#6 SIGNAL SERVICE	2	2										2
	#8 COMMON GROUND	1	1	1	1	1	1	1	1	1	1	1	1
#10 SAFETY LIGHTING		2	2	2	2	2	2	2	2	2	2	2	2
#12 ILLUMINATED SNS		2	2	2	2	2							
18-COND RR INTERCONNECT													1
F.O.													(3)
TYPE "B" DLC	Ø1 LOOP DET.	1	1	1	1	1							1
	Ø2 LOOP DET.												4
	Ø2P LOOP DET.						1	1	1	1	1	1	1
	Ø3 LOOP DET.												3
	Ø5 LOOP DET.												1
	Ø6 LOOP DET.	3	3	3	3	3							3
	Ø7 LOOP DET.	2	2	2									2
	Ø7P LOOP DET.												1
	Ø8 LOOP DET.	2	2										2
	OLA LOOP DET.												1
EV-DLC	EV DETECTION	2	2				1	1	1	1	1	3	4
CAT5E (OCC)	VIDEO DETECTION	1	1				1	1	1		1	1	2
TOTAL CONDUCTORS / CABLES		29	27	17	12	8	7	12	21	9	26	27	55

NOTE: ALL NEW WIRING AND CONDUIT UNLESS NOTED AS EXISTING IN (PARENTHESIS).

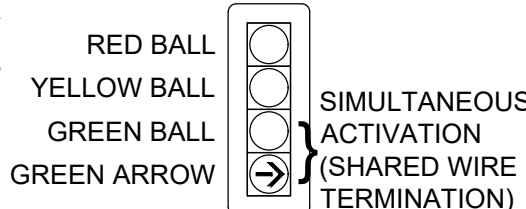
TRAFFIC SIGNAL CONSTRUCTION NOTES:

- ABANDON AS NOTED. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
- ADJUST TO GRADE.
- FURNISH AND INSTALL NEW PB INTO EXISTING CONDUIT RUN.
- INSTALL CONDUIT INTO EXISTING PULL BOX.
- FOUNDATION TO BE ABANDONED.
- PROTECT IN PLACE PER PLAN.
- EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.
- REMOVE AND SALVAGE EQUIPMENT.
- SPLICE NEW TO EXISTING CONDUCTORS.
- FURNISH AND INSTALL VEHICLE LOOP DETECTOR PER DETAIL D ON SHEET 69.
- FURNISH AND INSTALL SIGN ON POLE PER PLAN.
- FURNISH AND INSTALL SIGN ON SIGNAL MAST ARM PER PLAN.
- FURNISH AND INSTALL INTERCONNECTED WARNING LABEL FOR SIGNAL INTERCONNECT TO BNSF RR SIGNAL HOUSE.
- REMOVE AND SALVAGE EX. PEDESTRIAN PUSH BUTTON. FILL ANY REMAINING HOLES LEFT IN STANDARD WITH CENTRAL GALVANIZED STEEL FASTENERS.
- EXISTING PED SIGNAL HEAD AND MOUNTING TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.
- FURNISH AND INSTALL TOUCHLESS APS PPB.
- FURNISH AND INSTALL PED SIGNAL HEAD ON NEW MOUNTING.
- FURNISH AND INSTALL PROGRAMMED VISIBILITY (PV) HEAD. YELLOW INDICATION SHALL NOT BE MASKED. PV HEAD PLACEMENT SHALL BE AT A POINT WHERE VISIBILITY IS 3.5 FT ABOVE GROUND FOR PASSENGER CARS AND 8 FT ABOVE GROUND FOR A TRUCK. PV HEAD ADJUSTMENT SHALL BE CONDUCTED IN THE FIELD PER CALTRANS INSPECTORS WORKING ON BEHALF OF THE CALTRANS ENGINEER.
- FURNISH AND INSTALL (1) 242L DETECTOR CARD FOR RAILROAD INTERCONNECT INPUT.
- FURNISH AND INSTALL GRIDSMART BELL CAMERA PERFORMANCE PLUS MODULE ON SIGNAL MAST ARM PER MANUFACTURER'S RECOMMENDATIONS.
- FURNISH AND INSTALL SINGLE CHANNEL EMERGENCY VEHICLE PREEMPTION EQUIPMENT ON SIGNAL MAST ARM PER DETAIL D ON TRAFFIC SIGNAL NOTES AND DETAILS SHEET.
- FURNISH AND INSTALL BIKE LOOP DETECTOR PER DETAILS A AND C ON SHEET 69.
- FURNISH AND INSTALL SIGN ON POLE. SIGN SHALL BE INSTALLED ADJACENT TO PED SIGNAL HEAD.
- REMOVE AND SALVAGE EXISTING ITERIS VIDEO DETECTION CARDS.
- COIL MINIMUM 200' OF CAT6 CABLE (OCC) IN #6E PULLBOX FOR FUTURE CONNECTION OF ROADSIDE UNIT TO TRAFFIC SIGNAL CONTROLLER.

DETAIL A



DETAIL B



DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

TOMO TAKAHASHI, 81522




























DATE



PLANS FOR THE IMPROVEMENTS OF:	
BAYSHORE BIKEWAY SEGMENT 5	
HARBOR DR. AND CIVIC CENTER DR.	
TRAFFIC SIGNAL MODIFICATION PLAN	
CITY OF NATIONAL CITY	
ROBERTO YANO RCE# 56292 DIRECTOR OF PUBLIC WORKS/CITY ENGINEER	DATE
CIP NO. 19-20	
SHEET 70 OF 117 SHEETS	

Exhibit A

SURVEYOR:	BENCHMARK:	HORIZONTAL CONTROL:	CONSTRUCTION RECORDS	DATE STARTED:	INSPECTOR:	DATE COMPLETED:	CONSTRUCTION SURVEYOR	NAME	COMPANY	SIGNATURE
ENGINEERING DEPARTMENT	AS-BUILT	REVISIONS	BY	APPROVED	DATE					

CONDUIT AND CONDUCTOR SCHEDULE						
AWG SIZE OR CABLE TYPE	POLE OR CIRCUIT	CONDUIT SIZE AND RUN				
		1-3"	1-3"	1-3"	1-3"	3-3"
						
3 COND	POLE (A)				1	1
	POLE (B)					
	POLE (C)			1		1
	POLE (D)					
	POLE (E)					
3 & 12 COND TOTALS			1	1	3	3
#6	SIGNAL SERVICE					2
#8	COMMON GROUND	1	1	1	1	1
#10	SAFETY LIGHTING	2	2		2	
18 COND.	RR INTERCONNECT					2
VID-POWER	VIDEO DETECTION			1	1	1
VID-COAX				1	1	1
TOTAL CONDUCTORS / CABLES		3	4	4	8	10
% CONDUIT FILL		2%	9%	10%	25%	22%

NOTE: ALL NEW WIRING AND CONDUIT.
*NEW CONTROLLER FOUNDATION SHALL HAVE A SPARE 3" CONDUIT INSTALLED TO THE ADJACENT HOME RUN PULL BOX FOR FUTURE USE.

PROPOSED NORMAL OPERATION SEQUENCE:

- QUEUE CUTTER SIGNAL DETECTS VEHICLE IN THE QUEUE DETECTION ZONE FOR MIN 5 CONTINUOUS SECONDS. VEHICULAR INDICATIONS FOR Ø2 TRANSITIONS TO YELLOW INDICATION.
- STEADY RED INDICATION FOR ALL VEHICULAR SIGNALS.
- IF NO RAILROAD PREEMPTION, NORMAL OPERATIONS RESUME WHEN VEHICLES ARE NOT DETECTED IN THE QUEUE DETECTION ZONE.

PROPOSED RR PREEMPTION SEQUENCE:

- TRAIN ENTERS TRACK CIRCUIT ASSOCIATED WITH "TCR" INTERCONNECT CIRCUIT. QUEUE CUTTER VEHICULAR INDICATIONS FOR Ø2 COMPLETE TRUNCATED VEHICULAR PHASE. FOR TRAFFIC SIGNAL AT HARBOR DRIVE AND CIVIC CENTER DRIVE, ANY PEDESTRIAN SIGNALS SHOWING "WALK" IS TRUNCATED AND DISPLAYS FLASHING "DON'T WALK". PEDESTRIAN SIGNALS NOT SHOWING "WALK" WILL NOT START A "WALK" DISPLAY. VEHICULAR INDICATIONS DISPLAYING GREEN (EXCEPT FOR Ø2 AND Ø5 WHICH IF GREEN, REMAINS GREEN) COMPLETE REMAINING CYCLE TIME.
- YELLOW CLEARANCE PHASE FOR Ø2 SIGNAL INDICATIONS AT QUEUE CUTTER SIGNAL. FOR TRAFFIC SIGNAL AT HARBOR DRIVE AND CIVIC CENTER DRIVE, EMERGENCY VEHICLE PREEMPTION CALL TRANSITIONS Ø2 AND Ø5 VEHICULAR SIGNALS TO STEADY GREEN INDICATION. ALL OTHER VEHICULAR SIGNALS REMAIN STEADY RED.
- STEADY RED FOR ALL SIGNAL PHASES AT QUEUE CUTTER SIGNAL. TRAFFIC SIGNAL AT HARBOR DRIVE AND CIVIC CENTER DRIVE RESUMES NORMAL OPERATION.
- AT THE END OF PREEMPTION, QUEUE CUTTER SIGNAL RESUMES NORMAL OPERATION.

INPUT LOGIC SCENARIOS

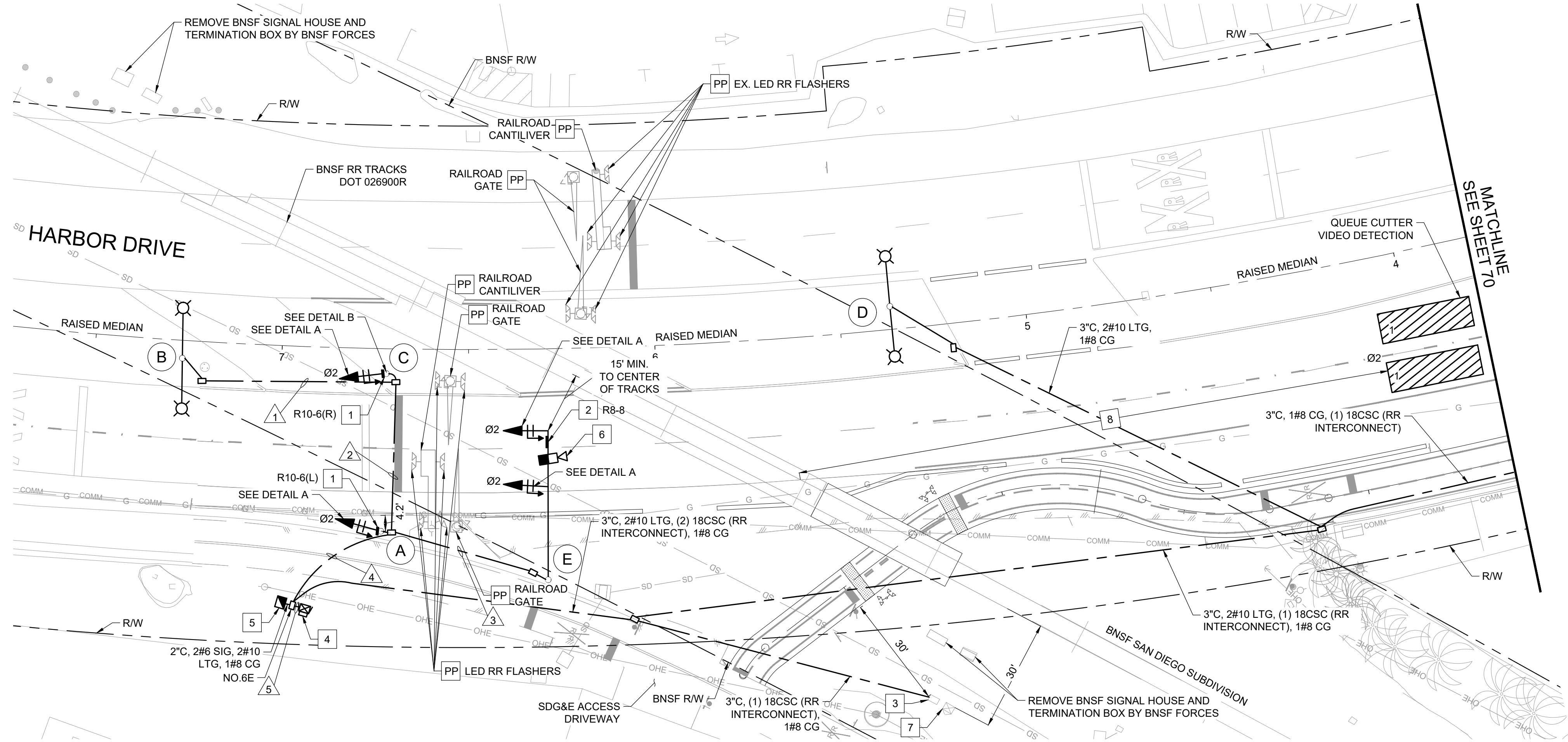
- NO PREEMPTION CALL
- CALL: ADV VEH PREEMPT (TCR)
- SUPERVISORY FAULT
- SUPERVISORY FAULT

TCR1	TCR2	STATE
OPEN	CLOSED	NORMAL PREEMPT
CLOSED	OPEN	
CLOSED	CLOSED	FAULT FAULT
OPEN	OPEN	

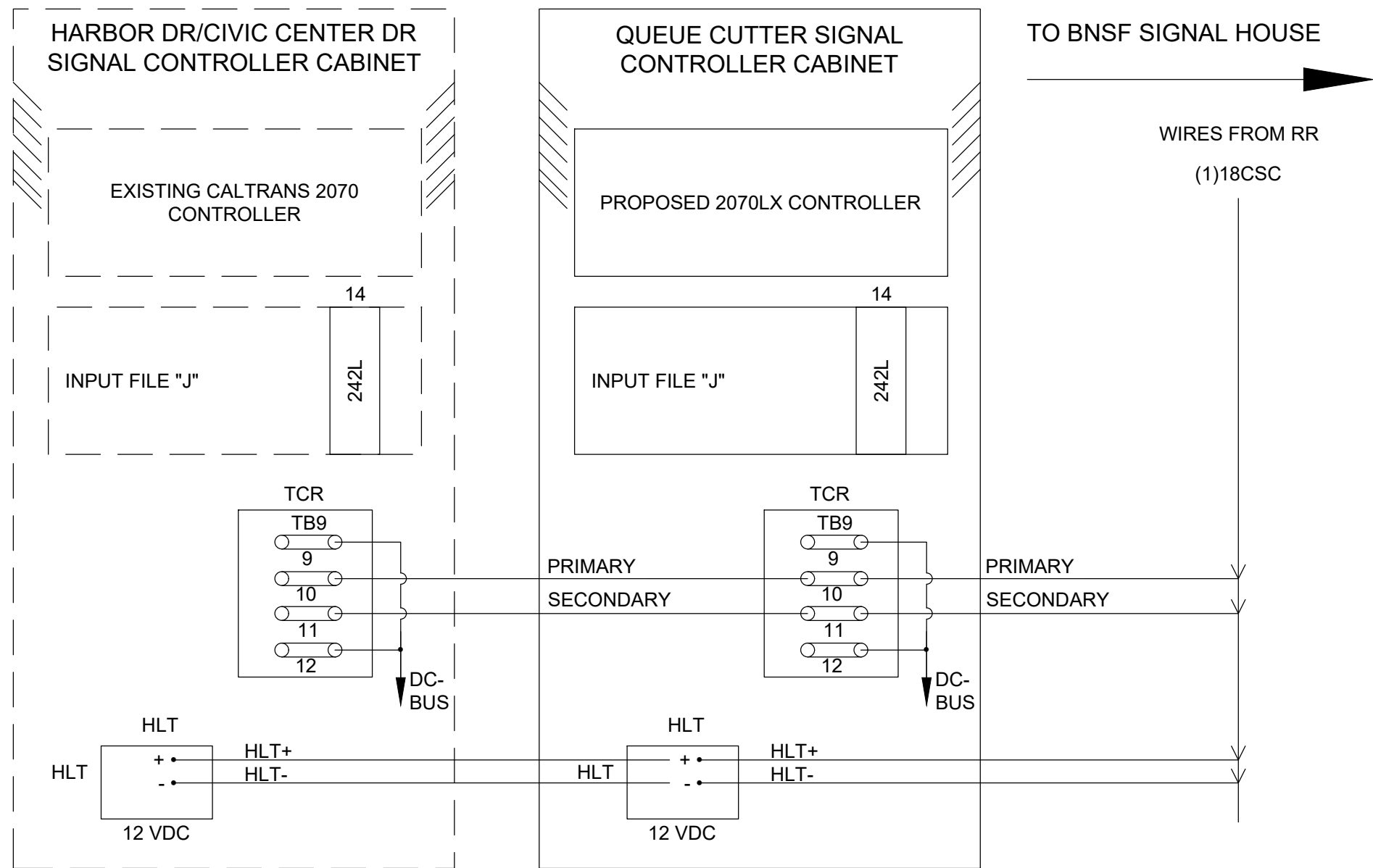
DETECTOR ASSIGNMENT			
DETECTOR	PHASE	SLOT	TERMINAL
1	Ø2	I2U	VIDEO
FLASH	FLASH	I14U	T8-10&COM12

POLE AND EQUIPMENT SCHEDULE										
NO.	STANDARD				LUM.	PLACEMENT	MOUNTING AND PLACEMENT			NOTES
	TYPE	HEIGHT	SIG. M.A.	LUM. M.A.	LED	STA. OFFSET	VEHICLE SIGNAL			
							MOUNTING	INDICATION	PHASE	
(A)	TYPE 1-A	10'	-	-	-	STA. 6+72, 50'L	TV-1-T	R,Y,GA	Ø2	
(B)	TYPE 15D	30'	-	12' 12'	130W 130W	STA. 7+26, 5'L	-	-	-	
(C)	TYPE 1-A	4'-6"	-	-	-	STA.6+71, 7'L	TV-1-T	R,Y,GA	Ø2	
(D)	TYPE 15D	30'	-	12' 12'	130W 130W	STA.5+36, 6'L	-	-	-	
(E)	27-4-100	17'	40'	-	-	STA.6+34, 59'L	MAT MAS	R,Y,GA R,Y,GA	Ø2 Ø2	

NOTE: ALL NEW EQUIPMENT.
ALL NEW LED LUMINAIRES SHALL BE CREE/BETA LED SERIES MODEL NO. STR-LWY-3M-HT-08-E-UL-SV-525-DIM-R-UTL-40K OR APPROVED EQUAL.



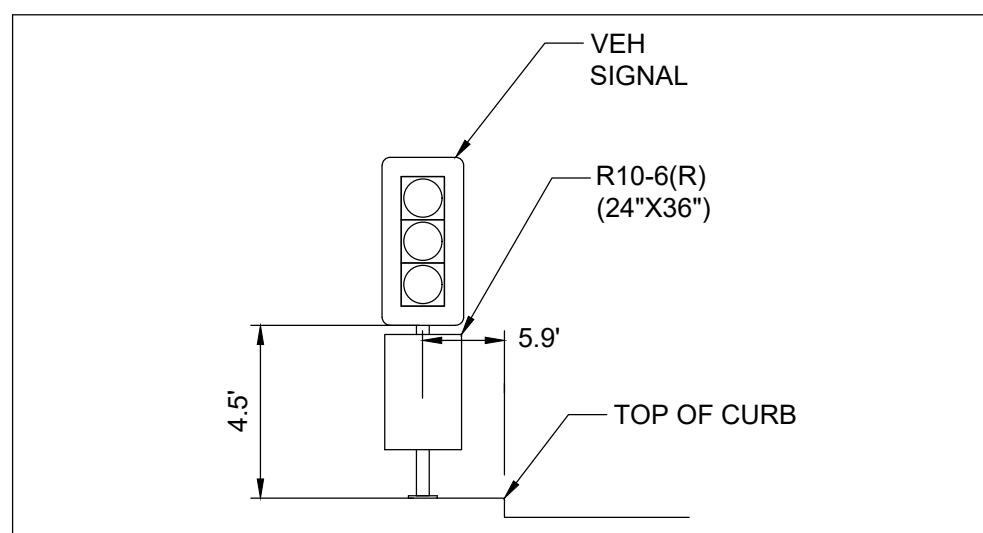
RR INTERCONNECT CIRCUIT DIAGRAM:



RR INTERCONNECT CIRCUITS: CALTRANS RAILROAD INTERFACE PANEL

- TCR1 = TRAFFIC CONTROL RELAY, NORMALLY OPEN; WHEN CLOSED, INDICATES THAT A TRAIN IS APPROACHING. THE CIRCUIT WILL CALL THE EVP PHASE OF THE TRAFFIC SIGNAL AND STAY ACTIVE UNTIL THE CROSSING GATES ARE DOWN.
- TCR2 = TRAFFIC CONTROL RELAY, NORMALLY CLOSED; WHEN OPEN, INDICATES THAT A TRAIN IS APPROACHING. THE CIRCUIT WILL CALL THE EVP PHASE OF THE TRAFFIC SIGNAL AND STAY ACTIVE UNTIL THE CROSSING GATES ARE DOWN.
- HLT = SIGNAL HEALTH CIRCUIT, NORMALLY CLOSED; WHEN OPEN, INDICATES THAT THERE IS AN ISSUE WITH THE TRAFFIC SIGNAL CONTROLLER (I.E. HARDWARE FLASH OR POWER OUTAGE).

DETAIL B: MEDIAN POLE MOUNTING DETAIL



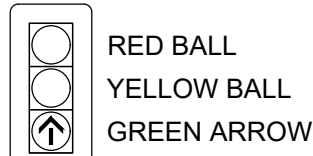
PROPOSED PHASE DIAGRAM			
NOT USED	NOT USED	NOT USED	NOT USED
Ø1	Ø2	Ø3	Ø4
NOT USED	NOT USED	NOT USED	NOT USED
Ø5	Ø6	Ø7	Ø8

FLASHING OPERATION SHALL BE ALL RED DURING FAULT.

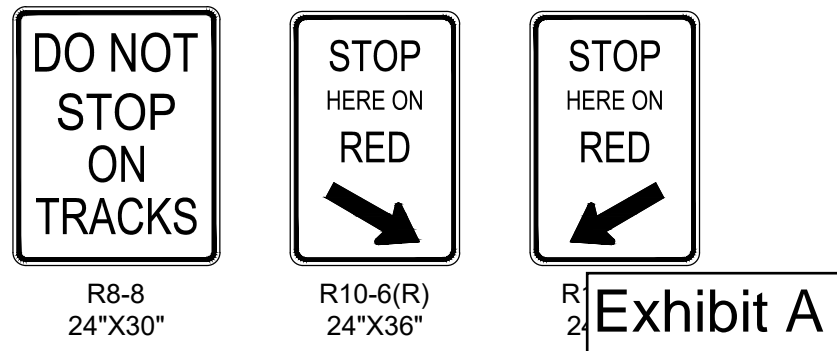
TRAFFIC SIGNAL CONSTRUCTION NOTES:

- PROTECT IN PLACE.
- FURNISH AND INSTALL SIGN ON POLE PER PLAN.
- FURNISH AND INSTALL SIGN ON MAST ARM PER PLAN.
- FURNISH AND INSTALL RR TERMINATION BOX. PROVIDE 3" STUB FOR RR INTERCONNECT. COORDINATE WITH BNSF FOR EXACT LOCATION OF TERMINATION BOX.
- FURNISH AND INSTALL MODEL 2070LX CONTROLLER WITH UNIT CHASSIS, 2070-1C CPU MODULE UPLOADED WITH INTELIGHT MAXTIME SOFTWARE, 2070-2E+ F/O, 2070-3B FRONT PANEL AND 2070-4A POWER SUPPLY MODULES, ONE (1) BLANK 8MB DATA KEY, BATTERY BACK-UP SYSTEM AND CONTROLLER ASSEMBLIES PER SPECIFICATIONS. PROVIDE WARNING LABEL INSIDE THE TRAFFIC SIGNAL CABINET STATING THAT THE SIGNAL IS INTERCONNECTED WITH THE RAILROAD. PROVIDE CONTACT INFORMATION FOR HIGHWAY AND RAILROAD AGENCY.
- FURNISH AND INSTALL TYPE III-BF SIGNAL AND LIGHTING SERVICE PER CALTRANS STANDARD PLAN ES-2E. PROVIDE 50A-1P CIRCUIT BREAKER FOR SIGNAL (METERED) AND 30A-1P CIRCUIT BREAKER FOR LIGHTING (UNMETERED).
- FURNISH AND INSTALL ITERIS VANTAGE VECTOR HYBRID VIDEO DETECTION CAMERA (OR APPROVED EQUAL) ON 2.5' VERTICAL RISER. ALL EQUIPMENT NEEDED IN CONTROLLER AND ALL REQUIRED WIRING (OR APPROVED EQUAL).
- PROPOSED RR SIGNAL HOUSE BY BNSF FORCES.
- QUEUE CUTTER DETECTION ZONE TO BE PLACED 160' FROM NEAREST RAIL TO BACK OF DETECTION ZONE. FINAL PLACEMENT TO BE DETERMINED IN FIELD.

DETAIL A



SIGN LEGEND



DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THIS PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONAL CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THESE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF NATIONAL CITY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

TOMO TAKAHASHI, 81522

DATE



PLANS FOR THE IMPROVEMENTS OF:

BAYSHORE BIKEWAY SEGMENT 5

HARBOR DR. QUEUE CUTTER TRAFFIC SIGNAL PLAN

CITY OF NATIONAL CITY

ROBERTO YANO RCE# 56292

DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

DATE

CIP NO. 19-20

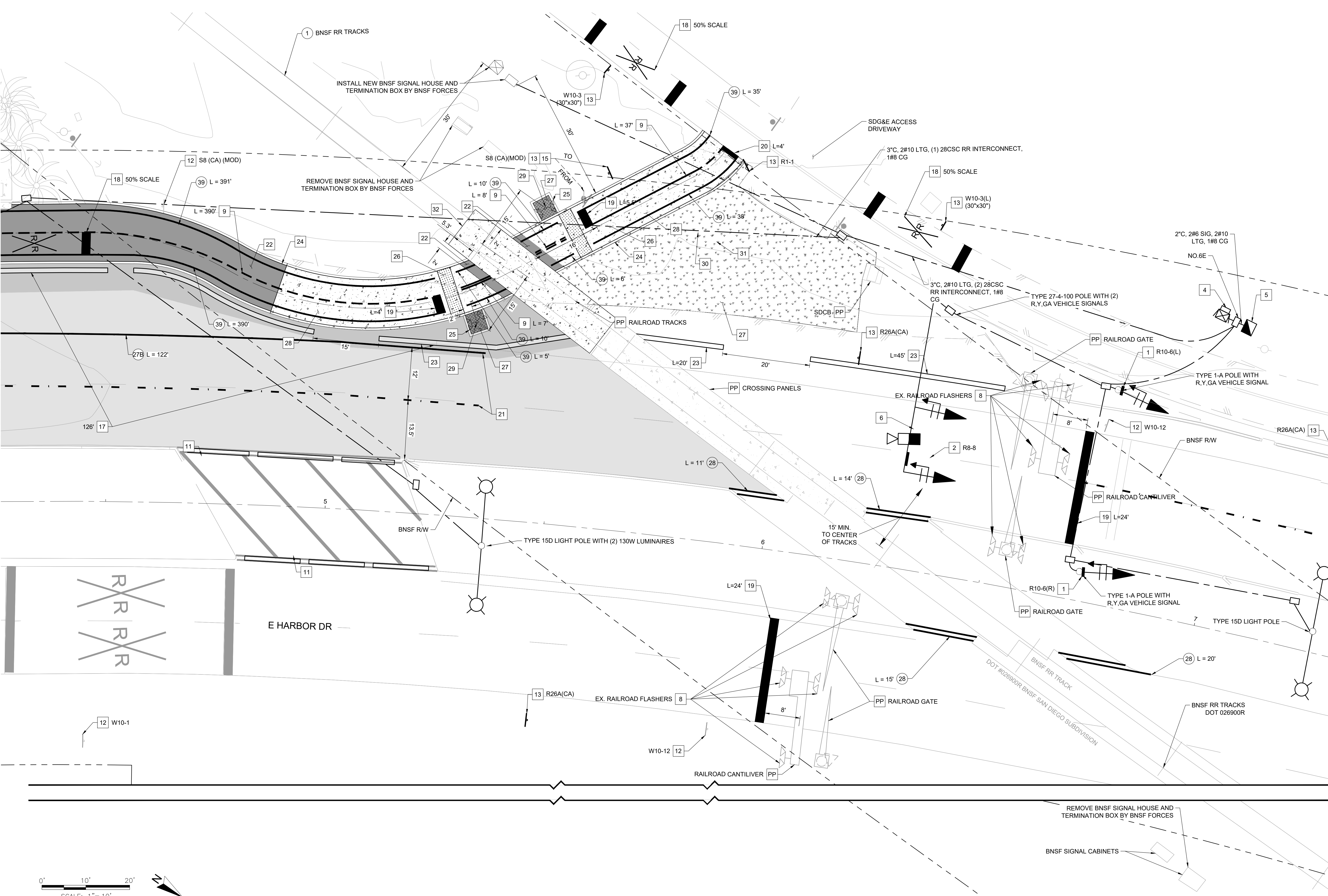
SHEET 71 OF 117 SHEETS

- (XX') EXISTING LANE WIDTH
- XX' NEW LANE WIDTH OR LENGTH OF NEW STRIPING
- (XX) STRIPING DETAIL PER LATEST CALTRANS STANDARD PLANS
- ↑ BIKE LANE ARROW PER CALTRANS STANDARD PLAN A24A
- 🚶 BIKE LANE WITH PERSON SYMBOL PAVEMENT MARKING PER CALTRANS STANDARD PLAN A24C
- 🚶 WAIT HERE PAVEMENT MARKING PER CALTRANS STANDARD PLAN A20A. TO BE INSTALLED AT $\frac{1}{3}$ SCALE
- 🚶 EXISTING CLEAR PAVEMENT MARKING PER CALTRANS STANDARD PLAN A20A
- 🚶 EXISTING KEEP PAVEMENT MARKING PER CALTRANS STANDARD PLAN A20A
- ↩ TYPE IV (L) ARROW PER CALTRANS STANDARD PLAN A24A
- ➡ TYPE I 18'-0" ARROW PER CALTRANS STANDARD PLAN A24A
- ↪ TYPE VII (R) ARROW PER CALTRANS STANDARD PLAN A24A
- (TS) TRAFFIC SIGNAL
- SLURRY SEAL PER SPECIFICATIONS

1. SEE TRAFFIC SIGNAL PLANS FOR REMOVAL RELOCATION AND/OR ADJUSTMENTS OF TRAFFIC RELATED IMPROVEMENTS.
2. SEE PLANTING AND IRRIGATION PLANS FOR REMOVALS, RELOCATIONS AND/OR ADJUSTMENTS OF LANDSCAPE AND IRRIGATION RELATED IMPROVEMENTS.
3. CONTRACTOR SHALL NOTIFY BNSF MANAGER OF PUBLIC PROJECTS PRIOR TO ANY WORK WITHIN BNSF RIGHT-OF-WAY OR ANY WORK AFFECTING GRADE CROSSING OPERATIONS

- 9 INSTALL WHITE LANE LINE DETAIL 9 PER CALTRANS
STD. PLAN RSP A20A
- 27B INSTALL WHITE RIGHT EDGE LINE (DETAIL 27B) PER
CALTRANS STD. PLAN RSP A20B
- 28 INSTALL YELLOW MEDIAN ISLAND LINES (DETAIL 28)
PER CALTRANS STD. PLAN RSP A20B

1. INSTALL WHITE THERMOPLASTIC CONTINENTAL CROSSWALK PER DETAIL ON SHEET 53.
2. INSTALL 12" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN.
6. INSTALL THERMOPLASTIC PAVEMENT MARKING PER CALTRANS STANDARD PLAN.
14. EXISTING SIGN TO REMAIN
15. REMOVE AND SALVAGE EXISTING SIGN
17. FURNISH AND INSTALL NEW SIGN ON NEW BREAK AWAY POST PER CITY STANDARD DRAWING NO 112-S-B
22. INSTALL 24" LIMIT LINE AS SHOWN ON PLANS
33. INSTALL RED PAINTED CURB PER PLAN



CONSTRUCTION NOTES:

- PP PROTECT IN PLACE.
- 1 FURNISH AND INSTALL SIGN ON POLE PER PLAN.
- 2 FURNISH AND INSTALL SIGN ON MAST ARM PER PLAN.
- 4 FURNISH AND INSTALL MODEL 2070LX CONTROLLER WITH UNIT CHASSIS, 2070-1C CPU MODULE UPLOADED WITH INTELLIGHT MAXTIME SOFTWARE, 2070-2E+ FIO, 2070-3B FRONT PANEL AND 2070-4A POWER SUPPLY MODULES, ONE (1) BLANK 8MB DATA KEY, BATTERY BACK-UP SYSTEM AND CONTROLLER ASSEMBLIES PER SPECIFICATIONS. PROVIDE WARNING LABEL INSIDE THE TRAFFIC SIGNAL CABINET STATING THAT THE SIGNAL IS INTERCONNECTED WITH THE RAILROAD. PROVIDE CONTACT INFORMATION FOR HIGHWAY AND RAILROAD AGENCY.
- 5 FURNISH AND INSTALL TYPE III-BF SIGNAL AND LIGHTING SERVICE PER CALTRANS STANDARD PLAN ES-2E. PROVIDE 50A-1P CIRCUIT BREAKER FOR SIGNAL (METERED) AND 30A-1P CIRCUIT BREAKER FOR LIGHTING (UNMETERED).
- 6 FURNISH AND INSTALL ITERIS VANTAGE VECTOR HYBRID VIDEO DETECTION CAMERA (OR APPROVED EQUAL) ON 2.5' VERTICAL RISER. ALL EQUIPMENT NEEDED IN CONTROLLER AND ALL REQUIRED WIRING (OR APPROVED EQUAL).
- 8 REPLACE EXISTING RR FLASHERS WITH NEW LED RR FLASHERS BY BNSF FORCES.
- 9 INSTALL BROKEN YELLOW SHARED USE PATH CENTERLINE PER MUTCD FIGURE 9C-2A.
- 10 INSTALL THERMOPLASTIC PAVEMENT MARKING PER CALTRANS STANDARD PLAN. SEE LEGEND ON THIS SHEET.
- 11 INSTALL YELLOW SHUR-CURB BOLTED POST DELINEATORS OR APPROVED EQUAL AT 10' INTERVALS O.C. AS SHOWN ON PLANS. SEE BUFFER/DELINFATOR DETAIL ON SHEET 57
- 12 EXISTING SIGN TO REMAIN
- 13 FURNISH AND INSTALL NEW SIGN ON BREAK AWAY POST PER CITY STANDARD DRAWING NO 112-S-B
- 14 INSTALL NEW SIGN ON EXISTING POST
- 15 REMOVE AND REPLACE SIGN PER PLAN
- 16 FURNISH AND INSTALL NEW SIGN ON BREAK-AWAY POST PER CITY STANDRAD DRAWING NO. 112-S-B
- 17 PAINT PROPOSED CURB RED
- 18 RAILROAD CROSSING SYMBOL (THERMOPLASTIC) PER CTSP A24B
- 19 INSTALL 24" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN.
- 20 INSTALL 12" WHITE THERMOPLASTIC LIMIT LINE AS SHOWN ON PLAN.
- 21 MATCH EXISTING STRIPING
- 22 CONSTRUCT BIKEWAY SECTION 4" ASPHALT OVER 6" CLASS II AGGREGATE BASE.
- 23 CONSTRUCT AC DIKE
- 24 CONSTRUCT 0" CURB
- 25 CPUC STD. NO. 8 RR WARNING DEVICE TO BE INSTALLED BY BNSF FORCES
- 26 CONSTRUCT TRUNCATED DOMES PER SDRSD G-30
- 27 INSTALL 2" ANGULAR BALLAST
- 28 CONSTRUCT FULL DEPTH 7.5" PORTLAND CEMENT CONCRETE SECTION. CONCRETE MIX TO BE 3,500 PSI
- 29 INSTALL DOUBLE SIDED R15-8 PER MUTCD FIGURE 8C-4, HEIGHT = 7' BY BNSF FORCES
- 30 RR SIGNAL HOUSE TO BE INSTALL BY BNSF FORCES
- 31 FURNISH AND INSTALL RR TERMINATION BOX. PROVIDE 3" STUB FOR RR INTERCONNECT. COORDINATE WITH BNSF FOR EXACT LOCATION TERMINATION BOX.
- 32 CROSSING PANELS TO BE INSTALL BY BNSF FORCES

STRIPING DETAILS

- 9 INSTALL WHITE LANE LINE (DETAIL 9) PER CALTRANS STD. PLAN RSP A20A
- 27B INSTALL WHITE RIGHT EDGE LINE (DETAIL 27B) PER CALTRANS STD. PLAN RSP A20B
- 28 INSTALL YELLOW MEDIAN ISLAND LINES (DETAIL 28) PER CALTRANS STD. PLAN A20B
- 39 INSTALL WHITE BIKE LANE LINE (DETAIL 39) PER CALTRANS REVISED STD. PLAN RSP A20D

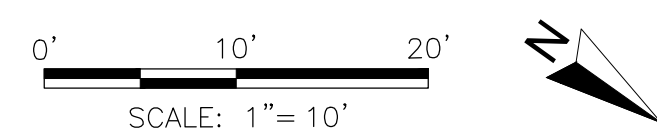


Exhibit A

**BAYSHORE BIKEWAY SEGMENT 5
GRADE CROSSING EXHIBIT**

5/31/2023
Sheet 1 of 1





Contract Number: BF-20253718

EASEMENT AGREEMENT

FOR HARBOR DRIVE GRADE-CROSSING

(C&M Agreement)

THIS EASEMENT AGREEMENT FOR THE HARBOR DRIVE GRADE-CROSSING ("Easement Agreement") is made and entered into as of the _____ day of _____ 20__ ("**Effective Date**"), by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Grantor**"), and the **CITY OF NATIONAL CITY**, a political subdivision of the State of California ("**Grantee**").

A. Grantor owns or controls certain real property situated at or near the vicinity of National City State of California at Mile Post 273.45, as described or depicted on **Exhibit "A"** attached hereto and made a part hereof (the "**Premises**").

B. Grantor and Grantee have entered into that certain Construction and Maintenance Agreement dated as of _____ concerning improvements on or near the Premises (the "**C&M Agreement**").

C. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

D. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement and in the C&M Agreement incorporated herein as if fully set forth in this instrument which terms shall be in full force and effect for purposes of this Easement even if the C&M Agreement is, for whatever reason, no longer in effect.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1 Granting of Easement.

1.1 Easement Purpose. The "**Easement Purpose**" shall be for the purposes set forth in the C&M Agreement.

Any improvements to be constructed in connection with the Easement Purpose are referred to herein as "**Improvements**" and shall be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the C&M Agreement.



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1.2 Grant. Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) and zoning laws (collectively, "**Laws**"). Grantee may not make any alterations or improvements or perform any maintenance or repair activities within the Premises except in accordance with the terms and conditions of the C&M Agreement.

1.3 Reservations by Grantor. Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:

- (a) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and appurtenances and other facilities or structures of like character (collectively, "**Lines**") upon, over, under or across the Premises;
- (b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and
- (c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

Section 2 **Term of Easement**. The term of the Easement, unless sooner terminated under provisions of this Easement Agreement, shall be perpetual.

Section 3 **No Warranty of Any Conditions of the Premises**. Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR



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PURPOSE, THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the Improvements.

Section 4 **Nature of Grantor's Interest in the Premises.** GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

Section 5 **Improvements.** Grantee shall take, in a timely manner, all actions necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements, including such actions as may be necessary to obtain any required permits, approvals or authorizations from applicable governmental authorities. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Improvements shall be made and maintained in such manner, form and extent as will provide adequate drainage of and from the adjoining lands and premises of the Grantor; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from such lands and premises of the Grantor, the Grantee shall construct and maintain such culverts or drains as may be requisite to preserve such natural and pre-existing drainage, and shall also wherever necessary, construct extensions of existing drains, culverts or ditches through or along the premises of the Grantor, such extensions to be of adequate sectional dimensions to preserve the present flowage of drainage or other waters, and of materials and workmanship equally as good as those now existing. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "**Other Improvements**"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all



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reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist. The Grantee agrees to keep the above-described premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on said premises, said work of cutting and removal to be done at such times and with such frequency as to comply with Grantee and local laws and regulations and abate any and all hazard of fire.

Section 6 Taxes and Recording Fees. Grantee shall pay when due any taxes, assessments or other charges (collectively, "**Taxes**") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Grantor or the Premises that are attributable to the Improvements. Grantee agrees to purchase, affix and cancel any and all documentary stamps in the amount prescribed by statute, and to pay any and all required transfer taxes, excise taxes and any and all fees incidental to recordation of the Memorandum of Easement. In the event of Grantee's failure to do so, if Grantor shall become obligated to do so, Grantee shall be liable for all costs, expenses and judgments to or against Grantor, including all of Grantor's legal fees and expenses.

Section 7 Environmental.

7.1 Compliance with Environmental Laws. Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "**Environmental Laws**"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

7.2 Notice of Release. Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.



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7.3 Remediation of Release. In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

7.4 Preventative Measures. Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

7.5 Evidence of Compliance. Grantee agrees periodically to furnish Grantor with proof satisfactory to Grantor that Grantee is in compliance with this **Section 7**. Should Grantee not comply fully with the above-stated obligations of this **Section 7**, notwithstanding anything contained in any other provision hereof, Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice of termination upon Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 9**.

Section 8 Default and Termination.

8.1 Grantor's Performance Rights. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.



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8.2 Abandonment. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

8.3 Effect of Termination or Expiration. Neither termination nor expiration will release Grantee from any liability or obligation under this Easement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 9**.

8.4 Non-exclusive Remedies. The remedies set forth in this **Section 8** shall be in addition to, and not in limitation of, any other remedies that Grantor may have under the C&M Agreement, at law or in equity.

Section 9 Surrender of Premises.

9.1 Removal of Improvements and Restoration. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform the following:

- (a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;
- (b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;
- (c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and
- (d) leave the Premises in the condition which existed as of the Effective Date.

9.2 Limited License for Entry. If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any liability or obligation under this Easement Agreement, 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 Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If



Contract Number: BF-20253718

Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all liabilities and obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

Section 10 **Liens.** Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 10** or any other section of this Easement Agreement.

Section 11 **Tax Exchange.** Grantor may assign its rights (but not its obligations) under this Easement Agreement to Goldfinch Exchange Company LLC, an exchange intermediary, in order for Grantor to effect an exchange under Section 1031 of the Internal Revenue Code. In such event, Grantor shall provide Grantee with a Notice of Assignment, attached as Exhibit C, and Grantee shall execute an acknowledgement of receipt of such notice.

Section 12 **Notices.** Any notice required or permitted to be given hereunder by one party to the other shall be delivered in the manner set forth in the C&M Agreement. Notices to Grantor under this Easement shall be delivered to the following address: BNSF Railway Company, Real Estate Department, 2500 Lou Menk Drive, Ft. Worth, TX 76131, Attn: Permits, or such other address as Grantor may from time to time direct by notice to Grantee.

Section 13 **Recordation.** It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as Exhibit "B" (the "**Memorandum of Easement**") subject to changes required, if any, to conform such form to local recording requirements. The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within 30 days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

Section 14 **Miscellaneous.**

14.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of California without regard to conflicts of law provisions.

14.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.



Contract Number: BF-20253718

14.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

14.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

14.5 This Easement Agreement and the C&M Agreement, which is incorporated herein, is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Grantee or Grantee's obligation to defend and hold Grantor harmless in any prior written agreement between the parties.

14.6 Time is of the essence for the performance of this Easement Agreement.

Section 15. Administrative Fee. Grantee acknowledges that a material consideration for this agreement, without which it would not be made, is the agreement between Grantee and Grantor, that the Grantee shall pay upon return of this Easement Agreement signed by Grantee to Grantor's Broker a processing fee in the amount of \$2,500.00 over and above the agreed upon acquisition price. Said fee shall be made payable to BNSF Railway Company by a separate check.

Witness the execution of this Easement Agreement as of the date first set forth above.



Contract Number: BF-20253718

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: _____
Title: _____

GRANTEE:

CITY OF NATIONAL CITY, a political subdivision of the
State of California

By: _____
Name: _____
Title: _____



Contract Number: BF-20253718

EXHIBIT "A"

Premises

EXHIBIT "A"
PERMANENT EASEMENT
APN'S 555-090-02-00

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF NATIONAL CITY, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY RIGHT-OF-WAY LYING SOUTHWESTERLY OF THE SOUTHERLY RIGHT-OF-WAY LINE OF HARBOR DRIVE AS SHOWN ON CALTRANS RIGHT-OF-WAY MAP LO 9559 ON FILE AT CALTRANS DISTRICT 11 OFFICE AND ON RECORD OF SURVEY MAP NO. 20257 FILED IN THE OFFICE OF THE SAN DIEGO COUNTY RECORDER ON AUGUST 1, 2008 AS FILE NO. 2008-0412499 OF OFFICIAL RECORDS AND LYING EASTERLY OF THE UNNUMBERED LOT EAST OF THE ALLEY IN BLOCK 268 IN THE CITY OF NATIONAL CITY, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF NO. 348 FILED IN THE OFFICE OF THE RECORDER OF SAID SAN DIEGO COUNTY OCTOBER 2, 1882.

MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF SAID SOUTHERLY RIGHT-OF-WAY LINE OF HARBOR DRIVE WITH THE WESTERLY LINE OF SAID ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY RIGHT-OF-WAY AS SHOWN ON SAID RECORD OF SURVEY, SAID POINT BEING THE BEGINNING OF A 1280.00-FOOT RADIUS CURVE CONCAVE NORTHEASTERLY, A RADIAL LINE TO SAID POINT BEARS SOUTH 61°55'51" WEST;

1. THENCE ALONG SAID SOUTHWESTERLY RIGHT-OF-WAY LINE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 2°29'04" A DISTANCE OF 55.50 FEET;
2. THENCE LEAVING SAID SOUTHWESTERLY RIGHT-OF-WAY LINE NORTH 57°34'41" WEST 33.41 FEET TO SAID WESTERLY RIGHT-OF-WAY LINE AND THE BEGINNING OF A NON-TANGENT 5679.65-FOOT RADIUS CURVE CONCAVE WESTERLY, A RADIAL LINE TO SAID POINT BEARS SOUTH 87°54'38" EAST;
3. THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 0°18'28" A DISTANCE OF 30.50 FEET TO THE **POINT OF BEGINNING**.

AREA = 427 SF, MORE OR LESS (BASED ON GROUND DISTANCES).

SEE EXHIBIT "B" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

THE BEARINGS AND DISTANCES USED IN THE ABOVE DESCRIPTION ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 6, NAD83, EPOCH 1991.35 (UNLESS OTHERWISE NOTED). DIVIDE DISTANCES SHOWN BY 1.00002970 TO OBTAIN GROUND DISTANCES.

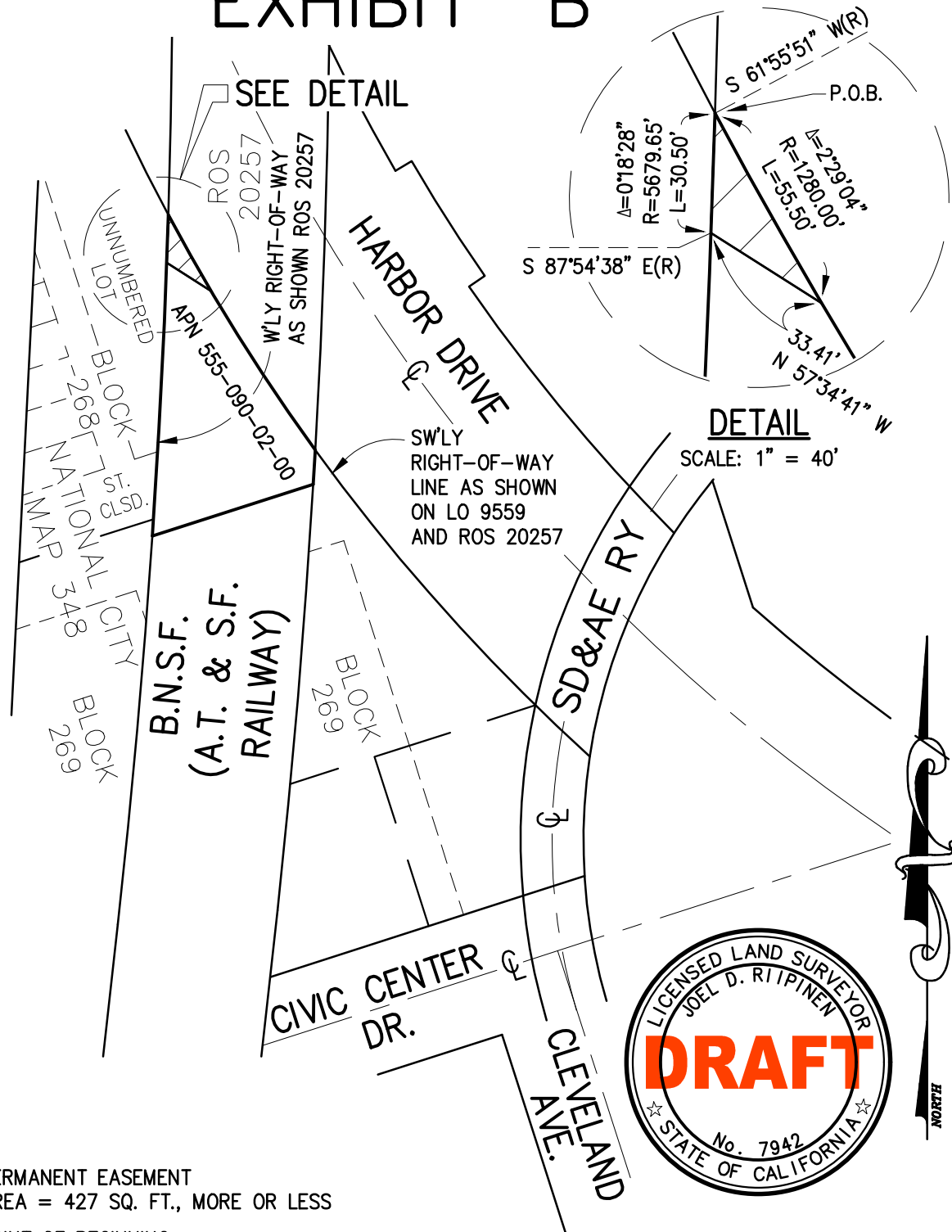
DRAFT

JOEL D. RIIPINEN LS 7942

1/24/2022



EXHIBIT "B"



DRAWN BY: KA	DATE: 1/24/2022	BNSF RAILWAY	SCALE 1" = 100'
CHECKED BY: JR	DATE: 1/24/2022	PERMANENT EASEMENT APN 555-090-02-00	DOC. NO.
REVISED BY:	DATE:	BURLINGTON NORTHERN AND SANTA FE RAILWAY	DWG. NO.
REVISED BY:	DATE:		



Contract Number: Document ID

EXHIBIT "B"

MEMORANDUM OF EASEMENT

THIS MEMORANDUM OF EASEMENT is hereby executed this _____ day of _____, 202_, by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Grantor**"), whose address for purposes of this instrument is 2500 Lou Menk Drive, Fort Worth, Texas 76131, and the **CITY OF NATIONAL CITY**, a political subdivision of the State of California ("**Grantee**"), whose address for purposes of this instrument is _____, which terms "Grantor" and "Grantee" shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

WITNESSETH:

WHEREAS, Grantor owns or controls certain real property situated in National City, California, as described on **Exhibit "A"** attached hereto and incorporated herein by reference (the "**Premises**");

WHEREAS, Grantor and Grantee entered into an Easement Agreement, dated _____, 202_ (the "**Easement Agreement**") which set forth, among other things, the terms of an easement granted by Grantor to Grantee over and across the Premises (the "**Easement**"); and

WHEREAS, Grantor and Grantee desire to memorialize the terms and conditions of the Easement Agreement of record.

For valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor does grant unto Grantee and Grantee does hereby accept from Grantor the Easement over and across the Premises.

The term of the Easement, unless sooner terminated under provisions of the Easement Agreement, shall be perpetual.

All the terms, conditions, provisions and covenants of the Easement Agreement are incorporated herein by this reference for all purposes as though written out at length herein, and both the Easement Agreement and this Memorandum of Easement shall be deemed to constitute a single instrument or document. This Memorandum of Easement is not intended to amend, modify, supplement, or supersede any of the provisions of the Easement Agreement and, to the extent there may be any conflict or inconsistency between the Easement Agreement or this Memorandum of Easement, the Easement Agreement shall control.

END OF PAGE – SIGNATURE PAGE FOLLOWS



Contract Number: Document ID

IN WITNESS WHEREOF, Grantor and Grantee have executed this Memorandum of Easement to as of the date and year first above written.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: _____
Title: _____

STATE OF TEXAS

§

COUNTY OF TARRANT

§
§

This instrument was acknowledged before me on the _____ day of _____, 201_, by _____ (name) as _____ (title) of **BNSF RAILWAY COMPANY**, a Delaware corporation.

Notary Public

My appointment expires: _____

(Seal)



Contract Number: Document ID

GRANTEE:
CITY OF NATIONAL CITY, a political subdivision of the State
of California

By: _____
Name: _____
Title: _____

STATE OF _____ §
COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 201_,
by _____ (name) as _____ (title) of
_____, a _____.

Notary Public

My appointment expires: _____

(Seal)



Contract Number: Document ID

EXHIBIT "C"

CONTRACTOR REQUIREMENTS

1) General

- A. 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
-
-
-
- B. The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1". Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.
- C. The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- D. The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations. Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the Project work in a manner which is hazardous to Railway property, 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 the Project; or (iv) Contractor fails to pay Railway for the Temporary Construction License or the Easement. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, Railway may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the following individual in writing:



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- E. The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.
- F. The Contractor must notify **(Agency)** at (_____) _____ and Railway's Manager Public Projects, telephone number (_____) _____ at least thirty (30) calendar days before commencing any work on Railway Property. Contractor's notification to Railway must refer to Railway's file _____.
- G. For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as,



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cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.

- H. Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

2) Contractor Safety Orientation

- A. No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.BNSFContractor.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

3) Railway Requirements

- A. The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.
- B. The Contractor must notify the Railway's Division Engineer _____ at (_____) _____ and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- C. The Contractor must abide by the following temporary clearances during construction:
- 15'-0" Horizontally from centerline of nearest track
 - 21'-6" Vertically above top of rail
 - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts



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- 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
- 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
- 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

D. Upon completion of construction, the following clearances shall be maintained:

- 25' Horizontally from centerline of nearest track
- 23' 6" Vertically above top of rail

E. Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the **(Agency)** and must not be undertaken until approved in writing by the Railway, and until the **(Agency)** has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

F. In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.

G. The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by **(Agency)** for approval before work is undertaken and this work must not be undertaken until approved by the Railway.

H. At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.

I. Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the **Railway's Resource Operations Center at 1(800) 832-5452**, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.



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- J. The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

4) Contractor Roadway Worker on Track Safety Program and Safety Action Plan

- A. Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site www.BNSFContractor.com, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.
- B. Contractor shall have a background investigation performed on all of its employees, subcontractors and agents who will be performing any services for Railroad under this Agreement which are determined by Railroad in its sole discretion **a)** to be on Railroad's property, or **b)** that require access to Railroad Critical Infrastructure, Railroad Critical Information Systems, Railroad's Employees, Hazardous Materials on Railroad's property or is being transported by or otherwise in the custody of Railroad, or Freight in Transit involving Railroad.
 - i) The required background screening shall at a minimum meet the rail industry background screening criteria defined by the e-RAILSAFE Program as outlined at www.eVerifile.com, in addition to any other applicable regulatory requirements.
 - ii) Contractor shall obtain written consent from all its employees, subcontractors or agents screened in compliance with the e-RAILSAFE Program to participate in the Program on their behalf and to release completed background information to Railroad's designee. Contractor shall be subject to periodic audit to ensure compliance.
 - iii) Contractor subject to the e-RAILSAFE Program hereunder shall not permit any of its employees, subcontractors or agents to perform services hereunder who are not first



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approved under e-RAILSAFE Program standards. Railroad shall have the right to deny entry onto its premises or access as described in this section above to any of Contractor's employees, subcontractors or agents who do not display the authorized identification badge issued by a background screening service meeting the standards set forth in the e-RAILSAFE Program, or who in Railroad's opinion, which may not be unreasonable, may pose a threat to the safety or security of Railroad's operations, assets or personnel.

- iv) Contractors shall be responsible for ensuring that its employees, subcontractors and agents are United States citizens or legally working in the United States under a lawful and appropriate work VISA or other work authorization.

5) Railway Flagger Services

- A.** The Contractor must give Railway's **Roadmaster** a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.
- B.** Unless determined otherwise by Railway's Project Representative, Railway flagger will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:
 - i) When, upon inspection by Railway's Representative, other conditions warrant.
 - ii) When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
 - iii) When work in any way interferes with the safe operation of trains at timetable speeds.
 - iv) When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.



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- v) Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

C. Flagging services will be performed by qualified Railway flaggers.

- i) Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
- ii) Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
- iii) The cost of flagger services provided by the Railway will be borne by **(Agency)**. The estimated cost for one (1) flagger is approximately between \$1,200.00-\$2,000.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. **THE FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.**

The cost of **inspector coordinator services** provided by the railway will be borne by **Contractor**. The estimated cost for inspector coordinator services is approximately \$1,200 per day. The contractor shall reimburse the railroad for actual costs of inspection services.

- iv) The average train traffic on this route is _____ freight trains per 24-hour period at a timetable speed _____ MPH and _____ passenger trains at a timetable speed of _____ MPH.

6) Contractor General Safety Requirements

- A.** Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.



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- B. Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).
- C. Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- D. When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railway's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- E. Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.
- F. Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.
- G. For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- H. All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, www.BNSFContractor.com, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats; c) safety shoe with: hardened toes,



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above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railway's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**

- I. THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILWAY'S REPRESENTATIVE.**
- J.** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)
- K.** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- L.** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

7) Excavation

- A.** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway



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traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact **BNSF's Field Engineering Representative**. All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. **It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.**

- B. The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.
- C. All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- D. Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

8) Hazardous Waste, Substances and Material Reporting:

- A. If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

9) Personal Injury Reporting

- A. The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the



Contract Number: Document ID

Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.



Contract Number: Document ID

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

(If injuries are in connection with rail equipment accident/incident, highway rail grade crossing accident or automobile accident, ensure that appropriate information is obtained, forms completed and that data entry personnel are aware that injuries relate to that specific event.)

Injured Person Type:

- | | |
|---|--|
| <input type="checkbox"/> Passenger on train (C) | <input type="checkbox"/> Non-employee (N)
<i>(i.e., emp of another railroad, or, non-BNSF emp involved in vehicle accident, including company vehicles)</i> |
| <input type="checkbox"/> Contractor/safety | <input type="checkbox"/> Contractor/non-safety sensitive (G) |
| <input type="checkbox"/> Volunteer/safety sensitive (H) | <input type="checkbox"/> Volunteer/other non-safety sensitive (I) |
| <input type="checkbox"/> Non-trespasser (D) - to include highway users involved in highway rail grade crossing accidents who did not go around or through gates | |
| <input type="checkbox"/> Trespasser (E) - to include highway users involved in highway rail grade crossing accidents who went around or through gates | |
| <input type="checkbox"/> Non-trespasser (J) - Off railroad property | |

If train involved, Train ID:

Transmit attached information to Accident/Incident Reporting Center by:
Fax 1-817-352-7595 or by Phone 1-800-697-6736 or email to: Accident-Reporting.Center@BNSF.com

Officer Providing Information:

<hr/>	<hr/>	<hr/>
(Name)	(Employee No.)	(Phone #)

REPORT PREPARED TO COMPLY WITH FEDERAL ACCIDENT REPORTING REQUIREMENTS AND PROTECTED FROM DISCLOSURE PURSUANT TO 49 U.S.C. 20903 AND 83 U.S.C. 490



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NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

Please complete this form and provide to the BNSF supervisor, who will input this information into the EHS Star system. For questions, call (817) 352-1267 or email Safety.IncidentReporting@BNSF.com.

Accident City/State: _____ Date: _____ Time: _____

County: _____ Temperature: _____ Weather: _____
(if non-BNSF location)

Name (Last/First/MI): _____

Age: _____ Gender (if available): _____

Company: _____

eRailsafe Badge Number: _____ Expiration Date: _____

BNSF Contractor Badge Number: _____ Expiration Date: _____

Injury: _____ Body Part: _____
(e.g., laceration) (e.g., hand)

Description of accident (including how accident occurred, potential cause, etc.):

Work activity in progress at time of accident: _____

Tools, machinery, or hazardous materials involved in accident: _____

Treatment:

- ☐ First Aid Only
☐ Required Medical Treatment
☐ Other Medical Treatment: _____

Dr. Name: _____ Date: _____

Dr. Street Address: _____ City: _____ State: _____ Zip: _____

Hospital Name: _____

Hospital Street Address: _____ City: _____ State: _____ Zip: _____

Diagnosis: _____

THIS REPORT IS PART OF BNSF'S ACCIDENT REPORT PURSUANT TO THE ACCIDENT REPORTS STATUTE AND, AS SUCH SHALL NOT "BE ADMITTED AS EVIDENCE OR USED FOR ANY PURPOSE IN ANY SUIT OR ACTION FOR DAMAGES GROWING OUT OF ANY MATTER MENTIONED IN SAID REPORT...." 49 U.S.C. § 20903. See 49 C.F.R. § 225.7(b).



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EXHIBIT "C-1"

**Agreement Between
BNSF RAILWAY COMPANY
and the
CONTRACTOR**

Railway File: _____

Agency Project: _____

Account Name, a/an State or Country of Formation Type of Organization (hereinafter called "Contractor"), has entered into an agreement (hereinafter called "Agreement") dated _____, 20__, with **AGENCY** for the performance of certain work in connection with the following project:_____. Performance of such work will necessarily require Contractor to enter **BNSF RAILWAY COMPANY** (hereinafter called "Railway") right of way and property (hereinafter called "Railway Property"). The Agreement provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for **National City** (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Agreement, has agreed and does hereby agree with Railway as follows:

1) RELEASE OF LIABILITY AND INDEMNITY

- A.** Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of



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Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. **THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE WILLFUL MISCONDUCT OR SOLE NEGLIGENCE OF RAILWAY**

- B. THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, WHENEVER SO CLAIMED.**
- C.** Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.
- D.** In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. **THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE.**



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- E. It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

2) TERM

- A. This Agreement is effective from the date of the Agreement until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

3) INSURANCE

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability "CGL" Insurance

- i) The policy will provide a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$6,000,000 but in no event less than the amount otherwise carried by the provider. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limited to, the following:
 - (1) Bodily Injury and Property Damage
 - (2) Personal Injury and Advertising Injury
 - (3) Fire legal liability
 - (4) Products and completed operations
- ii) This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:
 - (1) definition of "Insured Contract" will be amended to remove any exclusion or other limitation for any work being done within 50 feet of RAILWAY's



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property.

- (2) Waiver of subrogation in favor of and acceptable to RAILWAY; and
 - (3) Additional insured endorsement in favor of and acceptable to RAILWAY and include coverage for ongoing operations and completed operations; and
 - (4) Separation of insureds; and
 - (5) The policy will be primary and non-contributing with respect to any insurance carried by RAILWAY.
- iii) It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to **Railway** employees.
 - iv) No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

B. Business Automobile Insurance

- i) The insurance will provide minimum coverage with a combined single limit of at least \$1,000,000 per accident, and include coverage for, but not limited to the following:
 - (1) Bodily injury and property damage
 - (2) Any and all vehicles owned, used or hired
- ii) The policy will include the following endorsements or language, which will be



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indicated on or attached to the certificate of insurance:

- (1) Waiver of subrogation in favor of and acceptable to RAILWAY;
- (2) Additional insured endorsement in favor of and acceptable to RAILWAY;
- (3) Separation of insureds;
- (4) The policy shall be primary and non-contributing with respect to any insurance carried by RAILWAY.

C. Workers Compensation and Employers Liability Insurance

- i) Workers Compensation and Employers Liability insurance including coverage for, but not limited to:
 - (1) Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
 - (2) Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.
- ii) This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:
 - (1) Waiver of subrogation in favor of and acceptable to Railway.

D. Railroad Protective Liability insurance

- i) Railroad Protective Liability insurance naming only the **Railway** as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 12 04 and include the following:
 - (1) Endorsed to include the Pollution Exclusion Amendment
 - (2) Endorsed to include the Limited Seepage and Pollution Endorsement.
 - (3) Endorsed to remove any exclusion for punitive damages.



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- (4) No other endorsements restricting coverage may be added.
- (5) The original policy must be provided to the **Railway** prior to performing any work or services under this Agreement.
- (6) 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.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate (if available) in Railway's Blanket Railroad Protective Liability Insurance Policy.

E. Other Requirements:

- i) Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.
- ii) Contractor agrees to waive its right of recovery against **Railway** for all claims and suits against **Railway**. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against **Railway** for all claims and suits. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against **Railway** for loss of its owned or leased property or property under Contractor's care, custody or control.
- iii) Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.
- iv) Contractor is not allowed to self-insure without the prior written consent of **Railway**. If granted by **Railway**, any self-insured retention or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. Any and all **Railway** liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.
- v) Prior to commencing services, Contractor shall furnish to **Railway** an acceptable certificate(s) of insurance from an authorized representative



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evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following address:

BNSF Railway Company
c/o CertFocus
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378
Fax number: 817-840-7487
Email: BNSF@certfocus.com
www.certfocus.com

- vi) Contractor shall notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration.
- vii) Any insurance policy shall be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.
- viii) If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation or termination of this Agreement. Annually Contractor agrees to provide evidence of such coverage as required hereunder.
- ix) Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement.
- x) Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.
- xi) If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage(s) as set forth herein, naming Railway as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railway to the same extent and under the same terms and



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conditions as Contractor is required to release, defend and indemnify Railway herein.

- xii) Failure to provide evidence as required by this section shall entitle, but not require, Railway to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder.
- xiii) The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway shall not be limited by the amount of the required insurance coverage.
- xiv) In the event of a claim or lawsuit involving Railway arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.
- xv) These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.
- xvi) For purposes of this section, Railway shall mean "Burlington Northern Santa Fe LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

4) SALES AND OTHER TAXES

- A. In the event applicable sales taxes of a state or political subdivision of a state of the United States are levied or assessed in connection with and directly related to any amounts invoiced by Contractor to Railway ("Sales Taxes"), Railway shall be responsible for paying only the Sales Taxes that Contractor separately states on the invoice or other billing documents provided to Railway; *provided, however*, that (i) nothing herein shall preclude Railway from claiming whatever Sales Tax exemptions are applicable to amounts Contractor bills Railway, (ii) Contractor shall be responsible for all sales, use, excise, consumption, services and other taxes which may accrue on all services, materials, equipment, supplies or fixtures that Contractor and its subcontractors use or consume in the



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performance of this Agreement, (iii) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) that Contractor fails to separately state on the invoice or other billing documents provided to Railway or fails to collect at the time of payment by Railway of invoiced amounts (except where Railway claims a Sales Tax exemption), and (iv) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) if Contractor fails to issue separate invoices for each state in which Contractor delivers goods, provides services or, if applicable, transfers intangible rights to Railway.

- B. Upon request, Contractor shall provide Railway satisfactory evidence that all taxes (together with any penalties, fines or interest thereon) that Contractor is responsible to pay under this Agreement have been paid. If a written claim is made against Contractor for Sales Taxes with respect to which Railway may be liable for under this Agreement, Contractor shall promptly notify Railway of such claim and provide Railway copies of all correspondence received from the taxing authority. Railway shall have the right to contest, protest, or claim a refund, in Railway's own name, any Sales Taxes paid by Railway to Contractor or for which Railway might otherwise be responsible for under this Agreement; provided, however, that if Railway is not permitted by law to contest any such Sales Tax in its own name, Contractor shall, if requested by Railway at Railway's sole cost and expense, contest in Contractor's own name the validity, applicability or amount of such Sales Tax and allow Railway to control and conduct such contest.
- C. Railway retains the right to withhold from payments made under this Agreement amounts required to be withheld under tax laws of any jurisdiction. If Contractor is claiming a withholding exemption or a reduction in the withholding rate of any jurisdiction on any payments under this Agreement, before any payments are made (and in each succeeding period or year as required by law), Contractor agrees to furnish to Railway a properly completed exemption form prescribed by such jurisdiction. Contractor shall be responsible for any taxes, interest or penalties assessed against Railway with respect to withholding taxes that Railway does not withhold from payments to Contractor.

5) EXHIBIT "C" CONTRACTOR REQUIREMENTS

- A. The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Agreement, and the Contractor Requirements set forth on Exhibit "C" attached to the Agreement and this Agreement, including, but not be limited to, payment of all costs incurred for any



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damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site. Contractor shall execute a Temporary Construction Crossing Agreement or Private Crossing Agreement (<http://www.bnsf.com/communities/faqs/permits-real-estate/>), for any temporary crossing requested to aid in the construction of this Project, if approved by BNSF.

6) TRAIN DELAY

- A.** Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.
- B.** For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.
- C.** Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.
- D.** The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. The rate then in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of train delay pursuant to this agreement.



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- E.** Contractor and its subcontractors must give Railway's representative Four (4) weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.
- F.** Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

SIGNATURE PAGE FOLLOWS



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IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed by its duly authorized officer the day and year first above written.

BNSF RAILWAY COMPANY

Account Name

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Accepted and effective this _____.

Contact Person: _____

Address: _____

City: _____

State: _____

Zip: _____

Fax: _____

Phone: _____

E-mail: _____



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EXHIBIT D

[Insert Cost Estimate(s) for Railroad Work here]