DRAFT

CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF SUNNYVALE AND HNTB CORPORATION FOR ENGINEERING ANALYSIS FOR THE BERNARDO AVENUE BICYCLE UNDERCROSSING PROJECT (ST-00/08-04)

THIS AGREEMENT dated _____ is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and HNTB Corporation, a Delaware corporation ("CONSULTANT").

WHEREAS, CITY desires to secure professional services necessary for an engineering analysis and feasibility study services for a project known as the Bernardo Avenue Bicycle Undercrossing ("the Project"); and

WHEREAS, CONSULTANT represents that it, and its sub-consultants, if any, possess the professional qualifications and expertise to provide the required services and are licensed by the State of California to practice engineering in the required disciplines;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS AGREEMENT.

1. Services by CONSULTANT

CONSULTANT shall provide services in accordance with Exhibit "A" entitled "Scope of Work." All exhibits referenced in this Agreement are attached hereto and are incorporated herein by reference. To accomplish that end, CONSULTANT agrees to assign Steve A. Whitaker to this project, to act in the capacity of Project Manager and personally direct the professional services to be provided by CONSULTANT.

Except as specified in this Agreement, CONSULTANT shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise to perform all operations necessary and required to satisfactorily complete the services required in this Agreement.

2. Notice to Proceed/Completion of Services

(a) CONSULTANT shall commence services upon receipt of written Notice to Proceed from CITY. Notice shall be deemed to have occurred three (3) calendar days after deposit in the regular course of the United States mail.

(b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily completed the Scope of Work (Exhibit "A"), and if so requested, CITY shall make this determination within fourteen (14) days of such request.

3. Project Schedule

The Project Schedule is set forth in the attached Exhibit "A-1." Neither party shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. However, both parties shall make every effort to adhere to the project schedule.

4. Payment of Fees and Expenses

Payments shall be made to CONSULTANT on a monthly basis as set forth in the attached Exhibit "B" entitled "Compensation Schedule." All compensation will be based on monthly billings as provided in Exhibit "B." Compensation will not be due until said detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion associated with the various categories of the services shall be furnished by CONSULTANT with said billing. When applicable, copies of pertinent financial records will be included with the submission of billing(s) for all direct reimbursables. Compensation shall not exceed the amounts set forth in Exhibit "B" for each phase, unless approved in writing by the Director of Public Works or his designee. In no event shall the total amount of compensation payable under this agreement exceed the sum of Seventy Nine Thousand Two Hundred Fifty and No/100 Dollars ($79,250.00) unless upon written modification of this Agreement. Notwithstanding the foregoing, the Director of Public Works may, at the Director's sole discretion, authorize additional or optional services to be performed under this Agreement at additional compensation not to exceed Eight Thousand and No/100 Dollars ($8,000.00).

All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

5. No Assignment or Sub-Contracting of Agreement

CONSULTANT bind themselves, their partners, successors, assigns, executors, and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement or any of the services provided for under this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of CITY. However, claims for money due to or to become due to CONSULTANT from CITY under this Agreement may be assigned to a bank, trust company or other financial institutions, or to a trustee in bankruptcy, provided that written notice of any such assignment or transfer shall be first furnished to CITY. In case of the death of one or more members of CONSULTANT's firm, the surviving member or members shall complete the services covered by this Agreement. Any such assignment shall not relieve CONSULTANT from any liability under the terms of this Agreement. Consultant shall not sub-contract any portion of the services contemplated and provided for herein without prior written approval of CITY.

6. Prevailing Wage

If applicable, CONSULTANT and all subconsultants are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code.

7. Consultant is an Independent Contractor

CONSULTANT is not an agent or employee of CITY but is an independent contractor with full rights to manage its employees subject to the requirements of the law. All persons employed by CONSULTANT in connection with this Agreement will be employees of CONSULTANT and not employees of CITY in any respect. CONSULTANT is responsible for obtaining statutory Workers' Compensation coverage for its employees.

8. Consultant's Services to be Approved by a Registered Professional

All reports, costs estimates, plans and other documents which may be submitted or furnished by CONSULTANT shall be approved and signed by a qualified registered professional in the State of California. The title sheet for calculations, specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the professional responsible for their preparation.

9. Standard of Workmanship

CONSULTANT represents and maintains that it is skilled in the professional calling necessary to perform the services and its duties and obligations, expressed and implied, contained herein, and CITY expressly relies upon CONSULTANT's representations regarding its skills and knowledge. CONSULTANT shall perform such services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California.

The plans, designs, specifications, estimates, calculations reports and other documents furnished under the Scope of Work (Exhibit "A") shall be of a quality acceptable to CITY. The criteria for acceptance of the services provided under this Agreement shall be a product of neat appearance, well-organized, technically and grammatically correct, checked and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that used by CITY for similar projects.

10. Responsibility of CONSULTANT

CONSULTANT shall be responsible for the professional quality, technical accuracy and the coordination of the services furnished by it under this Agreement. Neither CITY's review, acceptance nor payment for any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement and CONSULTANT shall be and remain liable to CITY in accordance with applicable law for all damages to CITY caused by CONSULTANT's negligent performance of any of the services furnished under this Agreement.

Any acceptance by CITY of plans, specifications, calculations, construction contract documents, reports, diagrams, maps and other material prepared by CONSULTANT shall not, in any respect, absolve CONSULTANT for the responsibility CONSULTANT has in accordance with customary standards of good engineering practice in compliance with applicable Federal, State, County and/or municipal laws, ordinances, regulations, rules and orders.

11. Right of CITY to Inspect Records of CONSULTANT

CITY, through its authorized employees, representatives, or agents, shall have the right, at any and all reasonable times, during Consultant's normal business hours, to audit the books and records including, but not limited to, invoices, vouchers, canceled checks, time cards of CONSULTANT for the purpose of verifying any and all charges made by CONSULTANT in connection with its services under this Agreement. CONSULTANT shall maintain for a minimum period of three (3) years from the date of final payment to CONSULTANT or for any longer period required by law, sufficient books and records in accordance with generally accepted accounting practices to establish the correctness of all charges submitted to CITY by CONSULTANT. Any expenses not so recorded shall be disallowed by CITY.

12. Confidentiality of Material

All ideas, memoranda, specifications, plans, calculations, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for CONSULTANT and all other written information submitted to CONSULTANT in connection with the performanceof its services under this Agreement shall be held confidential by CONSULTANT and shall not, without the prior written consent of CITY be used for any purposes other than the performance of the Project services, nor be disclosed to an entity not connected with the performance of the Project services, except as otherwise provided by law. Nothing furnished to CONSULTANT which is otherwise known to CONSULTANT or is or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use CITY's name, insignia or distribute exploitative publicity pertaining to the services rendered under this Agreement in any magazine, trade paper, newspaper or other medium without the express written consent of CITY.

13. No Pledging of CITY's Credit

Under no circumstances shall CONSULTANT have the authority or power to pledge the credit of CITY or incur any obligation in the name of CITY.

14. Ownership of Material

All material, including information developed on computer(s), which shall include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports and other material developed, collected, prepared or caused to be prepared, under this Agreement shall be the property of CITY, but CONSULTANT may retain and use copies thereof.

CITY shall not be limited, in any way, in its use of said material, at any time, for services associated with Project. However, CONSULTANT shall not be responsible or liable in any regard, for damages resulting from the use of said material for services other than Project, including, but not limited to the release of this material to third parties for services other than on Project.

15. Hold Harmless/Indemnification

To the extent permitted by law, CONSULTANT agrees to indemnify and hold harmless CITY, its officers and employees from any and all claims, demands, actions, causes of action, losses, damages, liabilities, known or unknown, and all costs and expenses, including reasonable attorneys' fees in connection with any injury or damage to persons or property to the extent arising out of any negligent act, error, omission or negligence of CONSULTANT, its officers, employees, agents, contractor, subcontractors or any officer, agent or employee thereof in relation to CONSULTANT's performance under this Agreement. Such defense and indemnification shall not apply in any instance of and to the extent caused by the sole negligence or willful misconduct of CITY, its officers, employees, agents or representatives.

16. Insurance Requirements

CONSULTANT shall take out and maintain during the life of this Agreement policies of insurance as specified in Exhibit "C" attached and incorporated by reference, and shall provide all certificates and/or endorsements as specified in Exhibit "C."

17. No Third Party Beneficiary

This Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action hereunder for any cause whatsoever.

18. Notices

All notices required by this Agreement shall be in writing, and shall be personally delivered, sent by first class mail with postage prepaid, or by commercial courier, addressed as follows:

To CITY: Chuck Neumayer, Project Administration
Department of Public Works
CITY OF SUNNYVALE
P. O. Box 3707
Sunnyvale, CA 94088-3707

To CONSULTANT: HNTB Corporation
Attn: Steve A. Whitaker, Vice President
2025 Gateway Place, Suite 250
San Jose, CA 95110-1005

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of a facsimile transmission must be sent by first class mail, by commercial carrier, or hand-delivered. Each party may change the address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of three days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.

19. Waiver

CONSULTANT agrees that waiver by CITY of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

20. Amendments

No alterations or changes to the terms of this Agreement shall be valid unless made in writing and signed by both parties.

21. Integrated Agreement

This Agreement embodies the agreement between CITY and CONSULTANT and its terms and conditions. No verbal agreements or conversation with any officer, agent or employee of CITY prior to execution of this Agreement shall affect or modify any of the terms or obligations contained in any documents comprising this Agreement. Any such verbal agreement shall be considered as unofficial information and in no way binding upon CITY.

22. Conflict of Interest

CONSULTANT certifies that to the best of its knowledge, no CITY employee or officer of any public agency interested in this Agreement has any pecuniary interest in the business of CONSULTANT and that no person associated with CONSULTANT has any interest that would conflict in any manner or degree with the performance of this Agreement.

23. California Agreement

This Agreement has been entered into in the State of California and this Agreement shall be governed by California law.

24. Records, Reports and Documentation

CONSULTANT shall maintain complete and accurate records of its operation, including any and all additional records required by CITY in writing. CONSULTANT shall submit to CITY any and all reports concerning its performance under this Agreement that may be requested by CITY in writing. CONSULTANT agrees to assist CITY in meeting CITY's reporting requirements to the state and other agencies with respect to CONSULTANT's services hereunder.

All records, reports and documentation relating to the services performed under this Agreement shall be made available to City during the term of this Agreement.

25. Termination of Agreement

If CONSULTANT defaults in the performance of this Agreement, or materially breaches any of its provisions, CITY at its option may terminate this Agreement by giving written notice to CONSULTANT. If CITY fails to pay CONSULTANT, CONSULTANT at its option may terminate this Agreement if the failure is not remedied by CITY within thirty (30) days from the date payment is due.

Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY also shall have the right to terminate this Agreement for any reason upon ten (10) days' written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be compensated in proportion to the percentage of services performed or materials furnished (in relation to the total which would have been performed or furnished) through the date of receipt of notification from CITY to terminate. CONSULTANT shall present CITY with any services product completed at that point in time.

26. Subcontracting

None of the services covered by this Agreement shall be subcontracted without the prior written consent of CITY. Such consent may be issued with notice to proceed if subcontract consultants are listed in the project services plan.

27. Fair Employment

CONSULTANT shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, condition of physical handicap, religion, ethnic background or marital status, in violation of state or federal law.

28. Changes

CITY or CONSULTANT may, from time to time, request changes in the terms and conditions of this Agreement. Such changes, which are mutually agreed upon by CITY and CONSULTANT, shall be incorporated in amendments to this Agreement.

29. Other Agreements

This Agreement shall not prevent either Party from entering into similar agreements with others.

30. Severability Clause.

In case any one or more of the provisions contained herein shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions which shall remain in full force and effect.

31. Captions

The captions of the various sections, paragraphs and subparagraphs, of the contract are for convenience only and shall not be considered nor referred to for resolving questions of interpretation.

32. Entire Agreement; Amendment

This writing constitutes the entire agreement between the parties relating to the services to be performed or materials to be furnished hereunder. No modification of this Agreement shall be effective unless and until such modification is evidenced by writing signed by all parties.

33. Miscellaneous

Time shall be of the essence in this Agreement. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. This Agreement shall be governed and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the parties have executed this Agreement.

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

CITY OF SUNNYVALE ("City")

_____
City Manager

HNTB CORPORATION
("CONSULTANT")

By_____

_____
Name/Title

By_____

_____
Name/Title

EXHIBIT A – SCOPE OF SERVICES

TUNNEL TYPE SELECTION

METHODOLOGY

This proposal is intended to significantly advance the Bernardo Avenue Bicycle Undercrossing Project and position it for funding under the VTA Bicycle program by completing a tunnel type selection and cost estimate to determine feasibility.

The design process is as follows:

Project Management

- Prepare Project Management Plan and Design Criteria
- Prepare Project QA Plan

Type Selection Phase

- Update existing mapping data with supplemental field survey
- Prepare geotechnical memorandum for shoring/foundations
- Review likely portal locations, based on adjacent street/expressway configurations
- At target portal locations, determine available property for entrance ramps and stairs
- Study adjacent utilities and facilities affected by the proposed portal locations
- Develop preliminary sketches of two or three tunnel structural alternatives, including street access/circulation, for review with the City of Sunnyvale
- Once preliminary consensus is reached on what options are available for portal placement, prepare the alternatives analysis for the options, including:
    - Drawing of geometry of undercrossing structure and approaches
    - Drawing of reconfiguration of adjacent street signing and striping
    - Written opinion of needed reconfiguration of adjacent traffic signals
    - Definition of real-estate, utility impacts
    - Estimated construction costs
    - Brief summary report of advantages/disadvantages of each alternative
- Conduct "Tunnel Type Selection" meeting with Caltrain
- Document results of Type Selection Meeting and prepare recommendation for Preliminary Engineering Phase

PROJECT MANAGEMENT

The Project Management Plan is specific to this project and will contain the following information:

1) Project Organization
2) Project Scope
3) Project Budget
4) Project Schedule
5) Project Procedures (including Engineering, Administrative, Management and Quality Assurance/Quality Control)
6) "S" Curve

The Project Procedures will be specifically tailored to streamline the Bernardo Undercrossing project, with guidelines for communications and reporting that best suit the City. QA/QC procedures are standard for all projects.

There will be a Level I QC review of plans at the following points in the project:

- Prior to submitting type selection report for Caltrain review
- Prior to submitting Preliminary Engineering drawings for review

Communications with the City of Sunnyvale

The flow of information and communications with the City will be established between the City project manager and the HNTB project manager, and reviewed and adjusted as mutually agreed throughout the project. Communications will consist of the following:

- Formal written communications:
  - Monthly or bi-weekly reports
  - Letters
  - Transmittals
  - Meeting minutes
- Informal communications

We expect that the majority of the communications will be informal between the project managers. Informal communications include telephone calls and emails. We generally consider emails to be 'informal' communications that should be backed with a letter to confirm the content if contractual issues are involved.

All formal communications will be between the respective project managers, while informal communications will occur between other staff members.

PHASE I – TUNNEL ALTERNATIVES ANALYSIS AND TYPE SELECTION

SCOPE OF SERVICES

Our proposed project study tasks and subtasks are as follows:

1. Project Management/Coordination
   a. Prepare Project Management Plan
   b. Develop Design Criteria
   c. Conduct Project Meetings
2. Tunnel Alternatives Analysis Studies
   a. Update Base Mapping
   b. Assemble, Review Available
   c. Geotechnical Information
   d. Traffic Circulation Studies/Walkway Layouts
   e. Undercrossing Geometric and Structural Configuration Alternatives
   f. Architecture/Urban Design
3. Environmental Constraints Analysis
4. Type Selection Report (and meeting with Caltrain)

The schedule or **timeline** at the end of this section provides a detailed outline for the completion of the project with milestones.

1. Project Management/Coordination

a. Prepare Project Management Plan

As described in *"Management Plan,"* a Project-Specific Project Management Plan will be developed to cover the key areas of organization, communications and procedures. These procedures will be tailored as applicable to a feasibility study.

b. Develop Design Criteria

One of the first tasks in the project is to establish the basic criteria for the performance of the bicycle/pedestrian undercrossing, so that the geometry can be set and not continually revised, throughout the project.

Deliverable: Design criteria memo

c. Conduct Project Meetings

As with any other planning/engineering project, face-to-face meetings will be required periodically. As our Team will be locally based, we can meet with the City as-needed throughout the project. It is anticipated that monthly progress meetings will be advisable, as well as special, focus meetings with the stakeholders. HNTB will document meetings with meeting minutes prepared and issued within 48 hours of the meeting. We will maintain a project action list to help expedite resolution of the key decisions.

Deliverable: Meeting minutes

2. Tunnel Alternatives Analysis/Type Selection

a. Supplement Available Base Mapping

HNTB is in possession of GIS baseline mapping in the region of the project. This information was prepared by HNTB for Caltrain as part of the five-year, ongoing General Engineering Consultant Contract. For detailed design, this information will need to be supplemented by local field survey work, as the exact dimensions between Evelyn Avenue and the Central Expressway are critical to the final design of the project. For the purpose of this project, the following tasks are required:

- Confirm spacing between Evelyn Avenue and Central Expressway along the tracks over a distance of 200 ft.
- Confirm elevation of top of rail and other locations in 100 ft. length along tracks

The GIS mapping also includes information on available utilities, although additional inquiries will be made to confirm the latest information.

Deliverable:Update base mapping with a supplemental survey. Include results in plans..

b. Assemble, Review Available Geotechnical Information

Our Team's geotechnical consultant, Parikh Consultants, was the geotechnical engineer of record for the Evelyn LRT Station Pedestrian/Bicycle Undercrossing, which is within a mile of the proposed Bernardo Avenue project to the north. PCI's experience is primarily in Santa Clara County and they are very familiar with soils, groundwater levels and other geotechnical conditions relevant to the construction of an undercrossing. No new field work is included in this phase of the project. Information to be included in the geotechnical memorandum includes,

- Expected range of watertable level
- Soil strengths
- Feasibility of installing/driving or drilling various types of shoring, including CIDH piles and secant piles

Deliverable: Geotechnical memorandum

c. Traffic Circulation Studies/Walkway Layouts

The Bernardo Avenue Bicycle Undercrossing will require new pedestrian crosswalks across Evelyn Avenue and Central Expressway. Both of these locations are existing signalized tee intersections; however, neither location has a cross-walk across the major street (Central Expressway or Evelyn Avenue). Pedestrian phases will need to be added to the existing minor street (Bernardo Avenue) left-turn phases. At the Central Expressway intersection, a pedestrian crossing will need to be added across the existing free right turn lane. Sidewalks leading to the new crosswalks may requirement improvements to provide adequate pedestrian and bicycle access. Recommendations will be developed in terms of the associated signal phase and required pedestrian timings. Level of service analyses will be performed to determine how the addition of pedestrian timings will impact the operation of the traffic signals.

Deliverable: Traffic circulation/signal timing memo/walkway layouts

d. Undercrossing Structural Configuration Alternatives

Up to three alternatives for ramp and access layout will be studied in conjunction with up to three variations in the structural configuration.

Approach/Access Ramp Configurations

Various combinations of ramps and stairs are possible. Single, long ramps will be compared to switch-back ramps. The minimum overall tunnel length will be achieved using long single ramps, parallel to the railroad tracks, however, switchback ramps may provide a safer landing/entrance configuration. The ramp layout will be coordinated with the crosswalk/sidewalk configurations developed in the previous task.

Undercrossing Structural Configuration Alternatives
There are three main considerations in the design of the undercrossing structure:

- Final structural configuration
- Construction method
- Maintainability (resistance to moisture intrusion)

Final Structural Configuration
The final structural configuration must be sufficiently robust to carry the Caltrain train loads, including dynamic impact factors. HNTB was recently retained by Caltrain to write their "Structural Design Standards and Criteria." Patrick Casey, PE, the HNTB engineer who authored that document, will be assigned the task of designing the undercrossing structure.

Construction Method
In the last several years, Caltrain has implemented the construction of over a dozen types of grade separations, including bicycle/pedestrian undercrossings. The construction methods used vary, but always keep the following consideration at the forefront:

- Safety of workers
- Minimum disruption of train operations
- Structural integrity of all interim conditions

In order to achieve these objectives, the exact site location must be analyzed for access and track geometry. Shoring methods range from conventional steel sheet piles to drilled concrete secant piles, which also serve as part of the final wall configuration. Our Team members have participated in the design of three types of construction for undercrossings:

1. **Secant Pile Method, with cast-in-place tunnel linings**: At Caltrain's new Lawrence Station, there is an undercrossing designed by HNTB now in construction. That undercrossing uses secant piles to shore the ground before excavation occurs. Precast bridge deck elements will be placed ontop of the pilings, tracks replaced, then excavated.

2. **Drilled Piers with Steel Sheet Piles**: The Evelyn LRT Station Pedestrian Undercrossing in Mountain View uses large-diameter cast-in-drilled hole piles that were installed between the tracks in the work window between the last nighttime and first morning trains on weekends. Steel sheet piles were then driven between these piles to form a continuous support for excavation and placement of bridge decks on top of the drilled piles. Excavation and lining of the tunnel then occurred during normal work hours with minimum interference with train operations.

3. **Pre-cast Concrete Box Sections**: Pre-cast concrete box sections can be installed underneath the tracks by using a weekend work-window to fully excavate the area, place the boxes, then backfill and replace the tracks before train operations begin the next Monday morning. If necessary, the box can be installed in two parts, if steel sheet piling is placed between the tracks.

Maintainability: The key to the long-term maintainability of an underground structure is to minimize water intrusion by effective waterproofing. This will minimize the corrosion of reinforcing steel and damage to the architectural finishes. A double layer of waterproofing membrane will be considered for the purpose of estimating construction costs of the undercrossing.

Deliverable: Conceptual general plan sheet for each alternative

e. Architecture/Urban Design
The layout of the undercrossing will include design considerations for safety and appearance.

Safety issues include:
- ADA Access
- Lighting
- Visibility

The appearance of the undercrossing can be developed economically in the following areas:
- Portal design
- Finishes – materials and color selection
- Planting boxes
- Artwork – if desired

For the purpose of assisting in the structural type selection an artist's rendering will be prepared to illustrate the appearance of the facility

Deliverable: One artist's rendering of the recommended alternative

3. Environmental Studies
The Alternatives Analysis phase of the project will include definition of the environmental constraints. It is assumed that the alternatives being studied will all be tunnel concepts.
- Environmental constraints analysis of alternatives

This scope assumes that no federal funding will be obtained for the project and, therefore, that preparation of documents to comply with the National Environmental Policy Act (NEPA) will not be necessary.

The environmental constraints analysis will assist in formulation of the project design and identify potential mitigation measures. Upon selection of the recommended project design alternative, we will complete an Initial Study in the second project phase to conform with the requirements of CEQA as well as the City of Sunnyvale's and the CALTRAIN's requirements. The specific tasks included in this scope of work are outlined below.

Environmental Constraints Analysis
Our approach is to provide environmental information and constraints to be taken into consideration during the alternative selection and design of the project. This approach allows the project design to either avoid significant environmental impacts and/or include any necessary mitigation within the project itself. This approach has the dual advantage of minimizing impacts by avoidance and of integrating the mitigation into the project, rather than devising mitigation subsequent to project design.

Review Background Information and Site Visit
We propose to review relevant background documentation and conduct a site visit to evaluate the project site conditions. We will also meet with City staff and gather information to develop an understanding of the environmental constraints and potential impacts associated with development along the project site and near the Caltrain corridor.

Prepare Environmental Constraints Memorandum
We will briefly evaluate the potential environmental constraints and impacts of up to three potential design alternatives, and compile the results of this preliminary analysis into a brief letter report. This

preliminary letter report will include completion of a preliminary environmental checklist for each alternative.

As part of the environmental constraints report, we will also identify the regulatory approvals that may be necessary for development of the project.

Deliverable: Environmental constraints analysis memo.

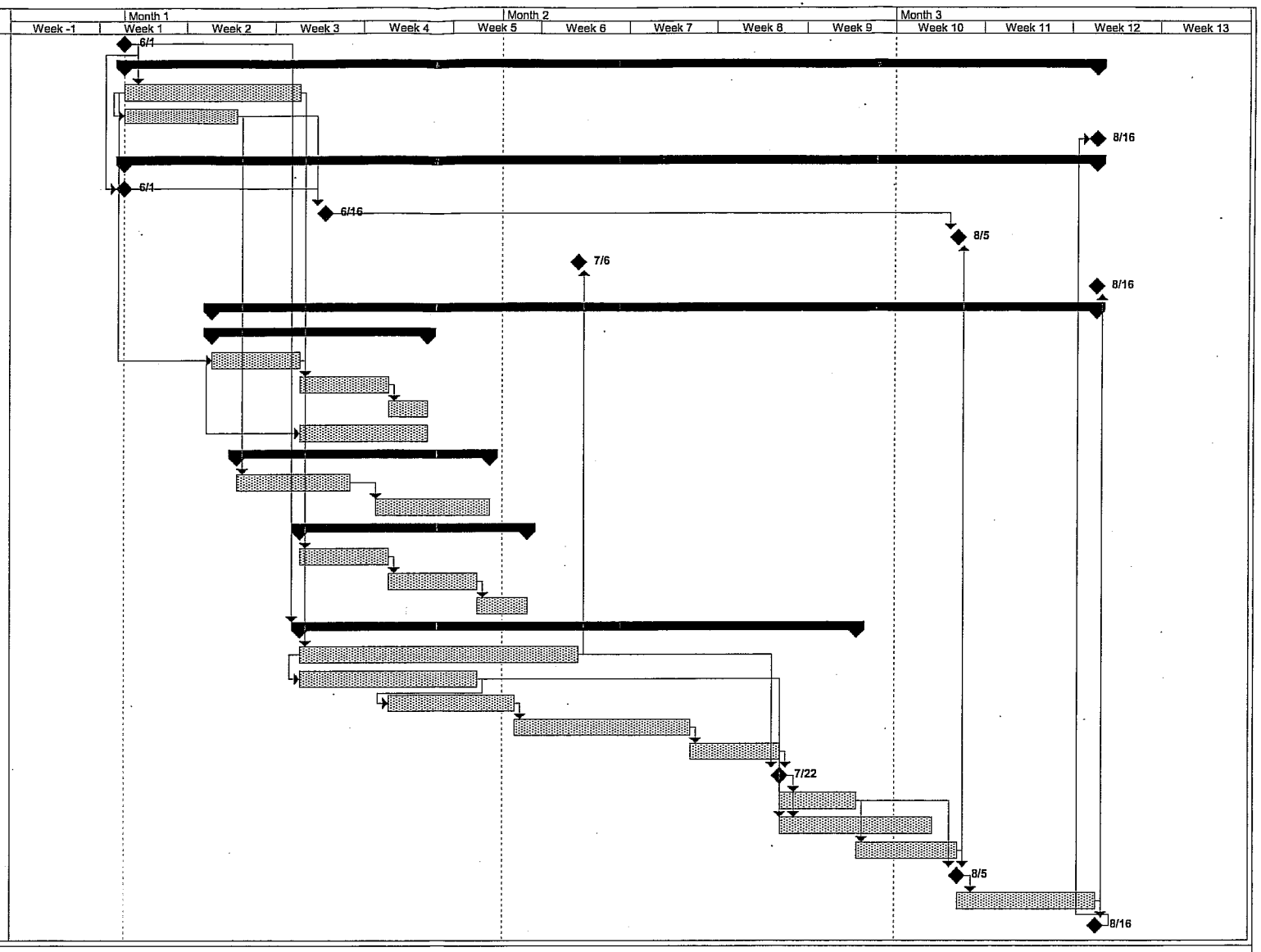
The following is a proposed outline of the **Tunnel Alternatives Analysis and Type Selection Report:**

1. Executive Summary
   a. Description of recommended alternative
   b. Discussion of key issues
   c. Diagram of recommended alternative
2. Description of Design Alternatives
   a. Alternative access routes
   b. Alternative structural designs
3. Evaluation of alternatives (including evaluation matrix)
4. Environmental Studies/Considerations\
   a. Summary of Environmental Constraints Analysis
5. Cost Estimating
   a. Summary of estimates
   b. Discussion of pricing considerations and assumptions
   c. Estimate spreadsheets
6. Appendices/Attachments
   a. Geotechnical memorandum
   b. Site photographs

This report will be drafted and reviewed with the City of Sunnyvale before a "Type Selection Meeting" held with Caltrain. It is expected that the type selection meeting will result in the selection of a preferred alternative that can be developed further. The Type Selection Report will not be further revised and updated, but will be appended with the meeting minutes with noted actions for the next phase of the project development.

Exhibit A-1

ID	Task Name
1	Notice to Proceed
2	**PROJECT MANAGEMENT/ADMINISTRATION**
3	Prepare Management Plan
4	Prepare Design Criteria
5	Project Complete
6	**Project Meetings**
7	Kick-Off Meeting
8	Progress Meeting (Review Criteria)
9	Progress Meeting (Review Draft Reports)
10	Meet Santa Clara County Dept. of Roads
11	Present Final Configuration to Stakeholders
12	**ALTERNATIVES ANALYSIS/TYPE SELECTION PHASE**
13	**Survey and Mapping**
14	Obtain Available Base Mapping
15	Supplemental Field Survey
16	Update Mapping
17	Identify Utilities
18	**Geotechnical Studies**
19	Gather Preliminary Geotechnical Data
20	Prepare Geotechnical Memorandum
21	**Environmental Constraints Document**
22	Review Site Data and Records
23	Prepare Environmental Constraints Memo
24	Revise and Finalize Initial Environmental Studies
25	**Prepare Conceptual Alternatives**
26	Develop Approach Alternatives
27	Develop Structural Alternatives
28	Traffic Circulation/Impacts Evaluation
29	Prepare Cost Estimates for Alternatives
30	Evaluate Alternatives
31	Review Alternatives with CSV
32	Revise Alternatives
33	Architecture/Urban Design - Rendering
34	Prepare Draft Type Selection Report
35	**Type Selection Meeting with JPB**
36	Summarize Type Selection Meeting Outcome
37	**Project Complete**



Project: Bernardo Avenue Phase I
Date: Thu 4/15/04

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

EXHIBIT B

HNTB

	Bernardo Avenue - Bicycle Undercrossing					
	COST PROPOSAL 1 - TYPE SELECTION					
	Scope Item	**HNTB**	**Subs**	**ODC'S**	**Total**	**Comments**
	PHASE I - ALTERNATIVES ANALYSIS AND TYPE SELECTION					
	PROJECT MANAGEMENT	$ 12,750		$ 2,500	$ 15,250	
	Project Management	$ 3,120			$ 3,120	
	Prepare Project Management Plan	$ 1,620			$ 1,620	
	Prepare Design Criteria	$ 1,170			$ 1,170	
	Project Meetings	$ 2,790			$ 2,790	
	Project Administration	$ 3,600			$ 3,600	
	Quality Assurance	$ 450			$ 450	
	Other Direct Costs			$ 2,500	$ 2,500	
	ENGINEERING FEASIBILITY STUDIES	$ 26,310	$ 20,500		$ 46,810	
	Geotechnical	0	$ 6,000		$ 6,000	No new borings
	Develop Base Mapping	$ -	$ 9,500		$ 9,500	
	Alternative cross walk layouts/traffic impacts	0	$ 5,000		$ 5,000	
	Conceptual Civil/Utilities	$ 8,910			$ 8,910	
	Structural Alternatives	$ 13,500			$ 13,500	
	Architecture/Urban design	$ 3,900			$ 3,900	
	INITIAL ENVIRONMENTAL STUDIES		$ 2,250		$ 2,250	Constraints Analysis only
	Environmental Constraints Analysis		$ 1,500		$ 1,500	
	Initial Studies (IS)		$ -		$ -	
	Site Visit/Meetings		$ 750		$ 750	
	TYPE SELECTION REPORT	$ 14,940	$ -		$ 14,940	
	Cost Estimating	$ 5,310			$ 5,310	
	Report Writing/Editing	$ 9,630			$ 9,630	
	TOTAL LABOR COSTS	$ 54,000	$ 22,750	$ 2,500	$ 79,250	
	SUBTOTAL - PHASE I - ALTERNATIVES ANALYSIS AND TYPE SELECTION				$ 79,250	

EXHIBIT C
INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by CONSULTANT, its agents, representatives, or employees.

Minimum Scope and Limits of Insurance

CONSULTANT shall maintain limits no less than:

1. **Commercial General Liability:** $1,000,000 per occurrence for bodily Injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location, or the general aggregate limit shall be twice the required occurrence limit. ISO Occurrence Form CG 0001 is required.

2. **Automobile Liability:** $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 is required.

3. **Worker's Compensation** and **Employer's Liability**: $1,000,000 per accident for bodily injury or disease.

4. **Errors and Omissions**: Liability Insurance appropriate to CONSULTANT'S profession: $1,000,000 per claim.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared and approved by CITY. CONSULTANT shall guarantee payment of any losses and related investigations, claim administration and defense expenses within the deductible or self-insured retention.

Other Insurance Provisions

The **general liability** and **automobile liability** policies are to contain, or be endorsed to contain, the following provisions:

1. CITY, its officials, employees, agents and volunteers are to be covered as additional insureds with respect to liability arising out of activities performed by or on behalf of CONSULTANT; products and completed operations of CONSULTANT; premises owned, occupied or used by CONSULTANT; or automobiles owned, leased, hired or borrowed by CONSULTANT.

2. For any claims related to this project, CONSULTANT'S insurance shall be primary. Any insurance or self-insurance maintained by CITY, its officers, officials, employees, agents and volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to CITY, its officers, officials, employees, agents or volunteers.

4. CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be cancelled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to CITY.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to CITY.

Verification of Coverage

CONSULTANT shall furnish to CITY original Certificate(s) of Insurance and copies of endorsements effecting the coverage required. The Certificate(s) shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and copies of endorsements are to be received and approved by CITY prior to commencement of work.