TG03 - Buttress, Shoring, Excavation - Issued for Bid

Questions are numbered in the order received. Question numbers missing in the sequence either have been answered or are still under review and will be published in future responses.

Question No.	Submission Date	Question	Response
TG0300-0164	9.7.2010	Reviewing Drawings GT-1110, GT-1111, GT-1112 and GT-5101, and our In-house Design, there seems to be a conflict in the TJPA Design of the CDSM wall. Drawings GT-1111 and GT-1112 note that the Max Cantilever to ground surface is 10' max (install) and 13' max (removal), but with the West, East, and Buttress Earth pressures from GT-1110 and Strut Elevation called out at + Elevation 11, + Elevation 6, and + Elevation 4 and the Top of Pile beams form GT-5101, produce cases where the install Cantilever exceed the 10' Max. A/1-5 +22.0 -11 = 11' that exceeds 10' 1-1 +24.0-11 = 13' that exceeds 10' X1-1 +25.0 -11 = 14' that exceeds 10' X1-2 +24.0 -11 = 13' that exceeds 10' J/13-19 +18.0 -6 = 12' that exceeds 10' J/19-25 +17.0 -6 = 11' that exceeds 10' J/25-27 +15.0 +4 =11' that exceeds 10' Does the note on Stage 2 on Drawing GT-1111 infer that the Owners Design of the CDSM wall can take the "Over Cantilever" because we can dig to a specific Elevation of +8 west of Grid Line 17 and to Elevation + 7 east of Grid Line 17? Or does the Owners Design need to be Revised to add an additional Strut/Waler Level to the Owners Wall Design? Can we get a clarification on the 10' max shown on Drawing GT-1111 and the west end walls? Can we use 14', 13', 12', 11' cantilever to the first strut level elevation shown at +11, +6, and +4 vs the 10' max shown on GT-1111 Drawings?	The elevation of the top strut shall be no lower than the following elevations (NAVD88): at Case West +11.00 (install) and +8.00 (removal); at Case East +6.00 (install) and +3.00 (removal); at 301 Mission Buttress Case and 301 Mission Podium Case +4.00 (install) and +1.00 (removal). This information will be included in an Addendum.
TG0300-0171	9.7.2010	As noted in Question TG0300-0058, preloading the struts will increase the effective stiffness of the bracing system (particularly by pre-compressing the struts). (1) Can this factor be considered when evaluating the "average stiffness tributary to a given strut" per the note in the lower right-hand corner of GT-1111? (2) Can preload values higher than those specified in Tables 1 through 4 on GT-1110 be used to increase the effective stiffness of the bracing system?	We do not believe that preloading increases the effective stiffness of the struts. The struts will expand and contract due to temperature variations and this could be interpreted as changing the effective stiffness, but we do not believe it is feasible to control the temperature at the time of installation and pre-loading to account for this when selecting the member sizes.
TG0300-0175	9.7.2010	The response to previous question TG0300-0054 states that the rebracing loads can be determined based on the information provided on GT-1110. Please identify the specific information on GT-1110 that is to be used to determine these loads. We note that the computation of these loads will depend upon the assumed degree of CDSM wall fixity at the base slab, the assumed distribution of seismic loads, as well as, other inherent assumptions. The CDSM wall	Our staged analysis of the build-out case indicates that the total compressive force due to soil pressure does not change from that obtained from our analysis of the excavation case. This is compatible with the need to control ground movements during the build-out stages. The soil

		analysis and design computations (which we assume must have included an analysis of the bracing removal/rebracing stages) have not been made available to the bidders so it is not possible to ascertain the basic loading and support conditions assumed by the CDSM wall designer for the bracing removal/rebracing conditions. We recommend that the static and seismic components of the rebracing design loads be provided so that all bidders are designing the rebracing for bracing demands that are consistent with the CDSM wall designer's computations.	loads on the temporary re-bracing struts and the permanent structural elements used for propping the shoring wall can be determined by tributary area using the pressure diagrams on GT-1110.
TG0300-0176	9.7.2010	Will it be permissible to incorporate additional reinforcing steel in the permanent structure concrete walls so that a portion of the wall can act as a wale to spread loads to the rebracing rakers/struts?	The Shoring Contractor may propose a waler design that would allow the concrete wall to act as a waler. Contractor-proposed design shall include calculations and supporting design data. All aspects of the design shall comply with requirements in the Contract Documents and the design intent of the building systems not fully designed at this point. Note the maximum spacing of rebracing elements is to be modified in Addendum 3.
TG0300-0181	9.7.2010	Sheet GT-1110 shows numerical values for horizontal strut loads. GT-1110 also shows a design profile. Are we to use the numerical values shown or are we to calculate loads based upon the design profile?	The "Design Profile" earth pressure was obtained by fitting a trapezoidal diagram to the strut loads obtained by analysis. Therefore, the results obtained using tributary areas from the "Design Profile" will vary slightly from the strut loads presented in tables 1 thru 4. Tables 1 thru 4 shall be used for strut loads. For seismic increment strut loads, refer to tables 5 thru 8.
TG0300-0212	9.15.2010	Reference paragraph 13.2 of the Long Form Subcontract: clarify Trade Subcontractor's continuing obligation to keep a representative at the jobsite during the period of time when Trade Subcontractor's work is limited to Dewatering Operations.	Trade Subcontractor is responsible for meeting the requirements of the Contract Documents.
TG0300-0213	9.15.2010	Reference paragraph 15.1.1(a) of the Long Form Subcontract, part 16.2 of the Long Form Subcontract and section 1.3.A of specification section 00 08 05, Insurance Requirements: Confirm that the CM/GC has (or will) furnish the required Builder's Risk Insurance for the project. Since the Buttress, Shoring and Excavation Trade Subcontractor is not required to furnish the Builder's Risk insurance policy, that the Builder's Risk insurance policy furnished by the CM/GC includes a waiver of subrogation and the Trade Subcontractor's other insurance excludes coverage for the work itself, we propose that you modify paragraph 15.1.1(a) of the Long Form Subcontract to avoid creating a conflicting situation where the Trade Subcontractor is required to indemnify against damage to the Work even though the CM/GC is providing property insurance (Builder's Risk Insurance) to protect the work from damage. We propose to modify this provision to read as follows: "Personal injury, including, but not limited to, bodily injury, emotional injury, sickness or disease,	No revision to the indemnification provision will be made. As set forth in Section 15.3 of the Long Form Subcontract, the indemnities set forth in this Section 15 shall not be limited by the insurance requirements set forth in Section 16.

		or death to persons, including, but not limited to, any employees or agents of Subcontractor, the Owner, Contractor, or any other subcontractor and/or damage to property of anyone (including loss of use thereof, but excluding damage to the Work itself), caused, or alleged to be caused, in whole or in part, by any act or omission of Subcontractor or anyone directly or indirectly employed by Subcontractor or anyone for whose acts Subcontractor may be liable regardless of whether such personal injury or damage is caused by a party indemnified hereunder."	
TG0300-0214	9.15.2010	Reference paragraphs 16.2.1 and 16.2.4 of the Long Form Subcontract and section 1.3.A of specification section 00 08 05, Insurance Requirements (as amended by Addendum #2): which states that the project Builder's Risk Insurance policy includes coverage for damages caused by earthquake or floods (up to 5% of the contract price). Clarify how TJPA or CM/CG will protect the Buttress, Shoring and Excavation trade subcontractor's interests (including claims related to damage to the Buttress, Shoring and Excavation trade subcontractor's work) caused by an earthquake or flood. Confirm that the Buttress, Shoring and Excavation trade subcontractor will have no liability for damages (including damages to its work) caused by earthquakes or flood and that the Buttress, Shoring and Excavation trade contractor will have no contractual obligation to furnish Builder's Risk Insurance coverage, including coverage for claims due to earthquake or flood. We propose that you modify paragraph 16.2.1 of the Long Form Subcontract to add the following sentence after the first sentence: "Additionally, Contractor and Subcontractor waive all rights against each other and against all other subcontractors and the Owner for loss or damage to the extent caused by Earthquake or Floods, except for Subcontractor's rights to recover against Contractor for losses caused by earthquake or flood." We propose that you modify the beginning of the first sentence of paragraph 16.2.4 of the Long Form Subcontract to read "Except for damage or losses caused by earthquake or floods, for other claims not covered under the Builder's Risk policy of insurance or any other …".	Trade Subcontractor will be listed as an insured party under the Builder's Risk Policy obtained for the Project. The Builder's Risk Policy will include coverage for damages caused by earthquake and flood (up to 5% of the Contract Price). The Builder's Risk Policy will include a waiver of subrogation in favor of all insured parties.
TG0300-0218	9.15.2010	Reference section 4.02.A of the General Conditions, document 00 07 00: which requires that the CM/GC identify written terms and conditions of the CM/GC proposed subcontract agreement that vary from the Contract Documents. Provide this information.	CM/GC is unaware of any differences that have not already been identified between the Long Form Subcontract and the Prime Contract. As set forth in Section 1 of the Long Form Subcontract, in the event there is any conflict between the Contract Documents, the more stringent of the documents shall apply.
TG0300-0221	9.15.2010	Reference section 13.01 of the General Conditions, document 00 07 00: Has Partnering been accepted and initiated for this project? If so, what fees relating to partnering are required from the Buttress, Shoring and Excavation Trade Subcontractor?	Partnering is anticipated, but the kick-off meeting hasn't been scheduled. Partnering will focus on project metrics, issue resolution, and escalation process and high performance goals. Following the Partnering Workshop, project metrics will be monitored on a monthly or quarterly schedule. The time needed to participate in this process will be part of the base bid. No other

			charges will be incurred by the Trade Subcontractor.
TG0300-0224	9.15.2010	We are unclear as to where the temporary trestle deck needs to be located vertically in relation to the permanent "train box lid" (note: the structural concrete slab we are referring to here is called out in the drawings variously as "trainbox lid", "ground level slab", or "ground floor slab"). Your responses to questions TG0300 0056 and 0139 refer the bidder to Exhibit A, Attachment 3 and Section IV.C.21. Attachment 3 tells us, "The level of the Access Trestle shall be the same as the level of the Temporary Bridges at the connections." It also tells us that the layout of the access trestle (including piles, beams, bracing and deck) "shall not conflict with the permanent structure except for unavoidable penetrations at foundation mat/lower concourse slab and walls." Section IV.C.21, the description for Bid Item 21 (Design, Installation and Maintenance of Access Trestle), states that that as part of the design and installation of the access trestle, "The Trade Subcontractor shall coordinate with other Trade Subcontractors so as to not interfere with the other Trade Subcontractors' work or with the permanent structure." These statements indicate at least two possibilities to us: One possibility is that the trestle deck is to remain in place to accommodate the construction of the train box lid and the above-grade structural steel elements. If this is the case, the trestle deck structure (including decking, girders and cap beams) cannot occupy the same horizontal space as the train box lid. Based on existing street levels and the elevations shown in Schedule A on Sht. S1-3201, the top of the train box lid appears to be approx. 5' below street level. Scaling from street level to the top of the train box lid as shown on Shts. A1-6118 and A1-6231 also yields approx. the same result. Are the trestle deck structure and cross street bridge deck structures meant to be above the top of the train box lid? If so, given this limited vertical space for the trestle superstructure, this is a critical piece of information necessary for us to design and price these structures. It does not seem feasible to us that the trestle deck structure would be below the train box lid given the requirement for the trestle level to conform to the cross street bridges (we assume the elevations of the cross street bridges must also conform to the existing street elevations). For similar reasons, it does not	Refer to response TG0300-0150, posted 9/20/10, and Exhibit I of Addendum No. 3. Refer to drawing S1-3201 showing concrete/structural steel relationship at ground floor in Addendum No. 3.

		seem feasible that the top of the trestle deck structure would be above the existing street level. Another possibility is that the installation of the train box lid is meant to be concurrently staged with the removal of the access trestle. However, there is no information in the bidding documents that either confirms or disallows this approach. Please note that the BSE Concept Schedule (Exhibit I) does not contain activities for removing the trestle, nor is it clear to us whether it contains activities for placing the train box lid concrete. The descriptions of Activities BG-105900, BG-108500, BG-111500 and BG-114500, "Vertical Walls (2nd Lift) to Ground Level" make no mention of the train box lid (or ground level slab). Questions 0056 and 0139 appear to have been based on concerns similar to ours. The responses to these questions did not provide any additional clarity as to the required interface of the access trestle with the train box lid either in space or time. Since, we are obviously not in a position prior to bidding to coordinate this interface with any other future Trade Subcontractors, we must rely on Webcor/Obayashi to provide us with a clear, detailed understanding of what is expected of us. Please do so.	
TG0300-0225	9.15.2010	What will be the protocol for the follow on Trade Subcontractors to accept the Access Trestle and Temporary Bridges after we complete our work on the BSE project?	BSE Trade Subcontractor is responsible for Temporary Bridges and Access Trestle.
TG0300-0227	9.15.2010	Spec section 31 55 00 part 1.4.A.2 details the requirement for a Peer Review of the internal bracing system design. Is the Peer Review engineer subject to the same $25,000,000 Professional Liability insurance limit as the Engineer of Record?	With respect to the Peer Reviewer (as defined in Specification Section 31 55 00, part 1.4.A.2), the Trade Subcontractor or its retained engineers should only have to evidence $1,000,000 in professional liability insurance covering that scope of work, consistent with the standard requirements set forth in Article 16 of the Long Form Subcontract. This will be included in Addendum 3.
TG0300-0228	9.15.2010	Reference specification 00 08 21, paragraph 1.3.D. Do all certified SF HRC firms count towards the goal regardless if they are small or micro businesses or OBEs?	All SF HRC certifications for micro, small, and SBA businesses count towards SBE participation, whether they are MBE, WBE, or OBE ownership types.
TG0300-0229	9.15.2010	Reference specification 00 08 21/AT1, paragraph 7. In regards to trucking services, if the DBE trucking firm is paying for the disposal fee will this fee be entitled for credit towards the SBE goal?	As stated in Section 00 08 21/AT1, paragraph 7, item c, the DBE receives credit for the total value of the transportation services it provides on the Agreement using trucks it owns, insures, and operates using drivers it employs. This includes required disposal fees.
TG0300-0230	9.15.2010	S1-3003, Detail 5 (Addendum #1), shows a 4 inch thick concrete mud slab (f'c=2,500 psi) with #4 @ 18" oc @ mid depth each way. A1-8711, Details 1 & 3, show a 4" mud slab with 6X6 wire mesh. A1-8881, detail 1, shows a 4" mud slab with wire mesh.	Detail 5 on S1-3003 governs for the mud slab construction and reinforcement. As noted on the documents, A1-8881 and A1-

		Please verify S1-3003, detail 5, governs as regards mud slab construction and reinforcing.	8711 are for reference only.
TG0300-0232	9.15.2010	Reference specification 00 05 20, 4.01. Time of Substantial Completion is 1825 consecutive calander (calendar) days for Phase I. Please confirm the official date of Notice to Proceed with Pre-Construction Services, as established by the EXECUTIVE DIRECTOR. It appears that NTP for the BSE contract, if utilizing the longest path of 1075 Cal Days in Zone 4 to complete Mud Slab, does not leave enough time to complete removals and construction of the Train Box. Does Webcor/Obatashi (Obayashi) anticipate an extension of time to their Contract, or is an acceleration contemplated to the BSE contract to complete within the given time frame?	Refer to response TG0300-0150, posted 9/20/10, for the schedule.
TG0300-0233	9.15.2010	Reference specification 31 55 00, 1.5.N. Proof Loading of Struts may induce point loading which will require reactive soil loading on the exterior of the CLSM walls, particularly at the upper levels. How much outward movement of the walls do you anticipate with this loading requirement? If proof loading causes the CLSM wall to leak, will a change order be issued to pay for the costs?	Proof loading beyond the pre-load values specified on the Drawings is not required.
TG0300-0234	9.15.2010	Reference Exhibit A and specification 01 53 13, 1.6.H.1. *******QBD TG300-135 clarified the welding quakification (qualification) requirements to the more stringent AWS D1.5 for the Temporary Bridges. The Acces (Access) trestle is specified to have the same requirements as the Temporary Bridges. Does this requirement (D1.5) apply to the access trestle? ********Will this be clarified in an addendum?	Yes, the requirement applies to the Access Trestle. An addendum is not required.
TG0300-0235	9.16.2010	Drawings M1-5002 (detail 2), and E1-2002 show work to be performed by others prior to the Mud Slab Please confirm that the other Trade Subcontractors will be required to re-establish suitable subgrade prior to the BSE Mudslab installation without delaying the Work.	It is intended that the BSE Trade Subcontractor will coordinate the installation of the "other Trade Subcontractors" work and re-establish suitable sub grade for the installation of the BSE mud slab without delaying the work.
TG0300-0236	9.16.2010	Please define Contract Completion for this project? Will the CM/GC begin the warranty period for the permanent works installed by this contract upon the completion of permanent works such as the cdsm walls, the buttress piles, etc? Will there be different warranty period start dates since the CDSM piles will be completed far in advance of the buttress piles?	The Warranty conditions are defined in paragraph 1.5 of Section 01 17 40.
TG0300-0237	9.16.2010	Section 01 14 00 indicates the CQC System Manager is an employee of the Contractor. Verify the CQC System manager is an employee of the CM/GC. Clarify what portions of section of section 01 14 00 are to be performed by the CM/GC. Clarify what portions of section of section 01 14 00 are to be performed by the	It is the intent that the BSE Trade Subcontractor perform Section 01 14 00 in its entirety. So, all portions of all paragraphs of Section 01 14 00 are performed by the Trade Subcontractor.

		Trade Subcontractor (if any).	
TG0300-0239	9.17.2010	Reference specification 31 23 19, 1.8 Qualifications. Is it the intent to exclude licensed contractors with decades of experience dewatering excavations in highly constrained urban sites? We request that Contractors demonstrating relevant experience on a national level are permitted to perform this scope of work.	The intent of the qualification requirements is to ensure the dewatering subcontractor has appropriate experience in similar ground water conditions. To ensure reasonable experience is defined, clause 1.8 will be revised as follows: "1.8.A. Company specializing in performing work of this section with a minimum 5 years' documented experience and responsible for design, installation, operation, and maintenance of dewatering system for shored excavations greater than 40 feet deep on the west coast of the United States within 2 miles of the shoreline of a bay, sound or inlet." Revision will be issued in an upcoming addendum.
TG0300-0240	9.17.2010	Reference specification 31 63 33 Drilled Micropiles Section 3.2.K.2. The acceptance criteria for performance test per section 3.2.K.2 is creep movement of less than 0.04 during hold from 1 to 10 minutes at maximum test load, T, or else movement meeting requirements of section 3.2.M. The parameter T is defined in Table B for a proof test as: T = 1.4 X 1.1 X Design Load. Maximum Performance test load, F, is defined in Table A as: F = 1.4 X F.F X Design Load, with F.S. = 2.0 Micropile design load is 200 kips per plans, therefore: T = 1.4 X 1.1 X 200 kips = 308 kips F = 1.4 X 2.0 X 200 kips = 560 kips = maximum performance load. Does the performance test creep acceptance criteria detailed in section 3.2.K.2 of less than 0.04 movement during hold from 1 to 10 minutes apply to load hold at: 560 kips = Maximum performance test load, OR 308 kips = T ?	The performance test creep acceptance criteria in 3.2.K.2 applies to the load F as defined in Table A.
TG0300-0241	9.17.2010	Note 16 on GT-2101 indicates wall X1-1 will be removed PRIOR to the completion of the excavation. Please provide dates when wall removal is expected to begin.	Refer to response TG0300-0177, posted 9/20/10.

TG0300-0242	9.17.2010	Reference specification 01 53 13, paragraph 1.3 (6) and TG03 BSE Appendix A - Attachment 3.********** The Temp Bridge spec required 24' wide gates @ the bridge and trestle intersections. These 24' wide gates will not accommodate the specified truck turn w/60' radius as called for in Attachment 3 of TG03 BSE Trade Package Appendix A.	Refer to response TG0300-0163, posted 9/20/10.
TG0300-0244	9.21.2010	Reference Specification 00 05 20 4.02 / Long Form Subcontract Section 7 The Long Form Subcontract Section 7 - Damages Caused by Delays. Please confirm that the exclusive remedy for damages caused by delay is limited strictly to those costs as identified in the schedule contained in Specification section 00 05 20 4,02 - Liquidated Damages.	This cannot be confirmed.
TG0300-0246	9.21.2010	Reference Long Form Subcontract Section 15.1.2 Request modification of language to read, "..counsel agreed to by Contractor and Trade Subcontractor"	No modification will be made.
TG0300-0247	9.21.2010	Reference Long Form Subcontract Section 15.1.2.b Detail 2 Please provide a definition of "Claim"	See Section 00 07 00, article 1.01 A.14.
TG0300-0248	9.21.2010	Reference Long Form Subcontract Section 19 Please confirm the 24 month (@year) Warranty as described in 01 17 40 1.5 is applicable, and is not a "fit for use" warranty.	Refer to response TG0300-0236.
TG0300-0249	9.21.2010	Reference Long Form Subcontract Section 15.2 Please confirm that completed work accepted by Contractor is defined as acceptance of the work.	This cannot be confirmed.
TG0300-0250	9.21.2010	Reference Long Form Subcontract Section 21 Please add the statement, "Such assignment shall not be unreasonably witheld (withheld) from the Trade Subcontractor.	No modification will be made.
TG0300-0251	9.21.2010	Reference Long Form Subcontract Section 25.18 Detail 2 Please confirm the documents for audit will those as provided in the Escrow Bid Documents.	This cannot be confirmed.
TG0300-0253	9.21.2010	Reference Drawing GT-5101, 1&5 Details 1 and 5 on GT-5101 show new CDSM columns fitting between steel soldier beams installed for the 80 Natoma shoring. Allowing for installation tolerances of the existing and new construction, it will be difficult if not	Jet grouting is not acceptable. Note 3 in detail 1/GT-5101 (and referenced in detail 5/GT-5101) allows/suggests the use of a smaller diameter, single point auger for placing the CDSM wall between the existing piles.

		impossible to install the soil mix columns between the existing steel piles. Would jet grout columns be acceptable in lieu of the CDSM columns shown?	
TG0300-0254	9.21.2010	Reference Geotech Report 6.1.2.2 The first paragraph of Section 6.1.2.2 Subsurface Conditions of the Final Geotechnical Data Report includes the statement "A more detailed description of stratigraphy and information on the characterization of the major soil strata are presented in the Geotechnical Recommendations report. "Where can we obtain a copy of the "Geotechnical Recommendations report" that is referenced?	Refer to response TG0300-0183.
TG0300-0255	9.21.2010	Reference Specification 31 56 13, 3.1.B.4 3.1.BA of Spec Section "31 56 13 - Shoring Wall by Cement Deep Soil Mixing (CDSM) Method" states "The average width of the overlapping columns over a length of 100 feet is at least 32 inches. " Is the "width" the same as "thickness"? How is average width calculated? Is it the average of the column diameter and the narrowest dimension of the overlapping columns? If not, how is it calculated?	Article 3.1 B 4 refers to the average of the column diameter and the narrowest dimension of the overlapping columns at two overlapping panels.
TG0300-0256	9.21.2010	Reference Specification 31 63 33, 1.1B / Drawing S1-3003, Detail 1 1.1.B of Spec Section "31 63 33 - Drilled Micropiles" states "The Micropile Contractor shall select the micropile type, size, pile top attachment, installation means and methods, estimate the ground-grout bond value, and determine the required grout bond length and final micropile diameter. " Drawing S1-3003 shows a 10" minimum hole diameter, a 2.5" diameter Grade 80 bar, pile lengths (as measured from bottom of trainbox slab) of 110 lf & 90 If and HSS 7.50x0.500 min. thickness casing, and a 12"x12" bearing plate with domed nut. Note 1 of Sl-3003 states 'The Contractor's bid can be based on his own micropile design." If the micropile is to be designed by the Micropile Contractor, please confirm that the micropile hole diameter, micropile length, bar size, determination if casing is required, casing diameter, length and thickness (if casing is used) and micropile top attachment are all to be designed by the Micropile Contractor and that the information shown on 1/S1-3003 can be disregarded.	Detail 1/S1-3003 is an example detail to illustrate design intent and performance criteria of the micropiles in conjunction with the specifications. The micropile is to be designed by the Micropile Contractor. Note that the vertical rebar identified in the detail is a minimum requirement (to be clarified in an upcoming addendum).
TG0300-0258	9.21.2010	Reference Drawing S1-3003 Are the "micropiles" tension only piles? The specs refer to the drawings for the design load. S1-3003 states "The required design load of the pile is 200 kips in tension." Please confirm that these are tension-only micropiles and that the design load is 200 kips.	Confirmed that micropiles are tension-only. The design load is confirmed to be 200K in tension as stated in the drawings on detail 1/S1-3003, note 1.
TG0300-0259	9.21.2010	Reference Specification 31 63 33 Micropiles loaded in tension usually are designed for corrosion protection. Is the selection of corrosion protection method (e.g., corrugated sheathing, epoxy-coating, etc.) being left up to the micropile subcontractor?	The micropiles are a passive system and are grouted for the full length. The grout offers corrosion protection for the full length, and no additional corrosion protection is required.
TG0300-	9.21.2010	Reference Specification 31 63 33	Micropiles are a passive system and do not

0260		Are there any requirements for locking off the micropiles after the trainbox bottom slab is poured? If yes, what is the lockoff load? If yes, will this be done by others under another contract? If it is to be done under this contract, when would this work be available?	require lockoff.
TG0300-0261	9.21.2010	Reference Specification 31 63 29 Drilled Concrete Piers/ Shafts Part 3.4.C This paragraph explicitly requires that temporary casings are advanced "by rotating and hydraulically pushing." Project reference documents report that the prototype Test program required the maximum capacity (see hydraulic operating pressure charts) of a large hydraulic rotator (RDM 3000) in order to complete the work. Therefore we understand that equipment which allows only "oscillation" rather than full continuous rotation will not be considered acceptable to advance casing through adjacent cured concrete and provide deviation control necessary to meet specified tolerances.	Equipment which advances through oscillating movement of the casing is acceptable provided the performance criteria specified, e.g., vertical tolerance, is met.
TG0300-0263	9.21.2010	Reference Drawing GT-2102 & D-2210 Three (3) production pile and one (1) indicator pile for 80 Natoma are in the allignment (alignment) of new shoring wall Segment 1-1. Can the allignment (alignment) of shoring wall Segment 1-1 be re-alligned (re-aligned) to miss these existing pile?	Pre-trenching is required along the shoring wall alignment shown. If pre-trenching reveals that the existing piles are within the shoring wall alignment, the documents specify that the piles shall be removed. Shifting the wall alignment is not acceptable.
TG0300-0265	9.21.2010	Reference Specification 03 30 01 - Part 2.2.2 Can the air content requirement for shaft concrete be waived? None of the shafts will ever be exposed to any freeze-thaw cycle.	The entrained air may be omitted provided the workability gained from air entrainment is achieved by other means.
TG0300-0269	9.21.2010	Reference Specification 31 63 29 - Part 3.9.d / Drawing GT 2201 10% of all shafts shall be cored to verify concrete quality. Installation sequence note #8 on plan sheet GT 2201 reads that all coring will be performed by TJPA. Please confirm that no provisions for concrete coring have to be included in our proposal. If not, please advise core diameter, length of core and type of required sample.	Article 3.9 D in Section 31 63 29 describes the coring which will be performed by the Contractor to verify the quality of the concrete. The coring described in note #8 on GT-2201 will be performed by the TJPA's representative to test the interface strength between overlapping shafts. Note: Article 3.9 D in Section 31 63 29 was revised in Addendum 3 to read: "Not less than 28 days after concreting is completed, perform HQ coring over the full depth of the 10% of the shafts to verify the quality of concrete and test whether the shafts are free of defects. Provide these cores for inspection by the TJPA Representative. The TJPA's Representative will select the location where coring shall be performed and will select the cores which will be tested for strength."
TG0300-0270	9.21.2010	Reference Specification 31 63 29	Potential schedule impact will be handled as a changed condition.

		Bid Item #34, 35, 36 do not include the 73 EA cost add shafts. If these additional shaft will be required, the overall construction schedule will be largely impacted. Please provide a separate bid item since cost might vary from the base bid and advise how scheduling impact should be addressed.	
TG0300-0273	9.21.2010	Reference Drawing GT-1110 1. It is our understanding that soil pressure diagrams shown on the Drawing GT -1110 were developed for the North and South CDSM walls. Please clarify: A. Shall the apparent soil pressure diagram for the load "Case East" be used for analysis and design of the "bulkhead" located along Gridline 35 and the load "Case West" be used for analysis and design of the "bulkhead" located along Gridline 1?	The interpretation is correct. "Case West" shall be used for the design of the internal bracing system at wall along grid line 1; "Case East" shall be used for the design of the internal bracing system at wall along grid line 35.
TG0300-0275	9.21.2010	The maximum Mobilization amounts allowed in Bid Items #1 and #2 are each capped at less than 1% of the Total Bid Amount. These amounts are drastically understated and cannot begin to provide the early capital necessary to fund a project of this magnitude. The mobilization of our equipment alone and those of the specialty trade subcontractors quoting with expensive, high-specialized equipment will be considerably more than the 2%of Total Bid Amount for NTP's 1 & 2. With this being a fully bonded project of little risk to the Owner we feel that the allowance for the two Mobilizations should be up to 5 (five) percent each of the Total Bid Amount, similar to the allowance allowed by Caltrans. Please review the maximum allowance for each of the bid items for Mobilization and address our concerns as to the increasing the current limits of 1% to 5% each.	Bid items 1 & 2 will be combined, and the maximum moblization amount shall be capped at 5% of the Total Bid Amount. This will be issued in an upcoming addendum.
TG0300-0278	9.21.2010	If required, how are the "Cost-Add" 301 Mission Street Buttress Shafts to be compensated? The current Addendum 2 Bid Schedule (Bid Items 34 thru 36) only have quantity amounts to pay for buttress shafts that exclude the "Cost-Add" shafts quantities.	Reimbursement will be per unit cost up to the identified percentage variance above which will be handled as a change condition.