ATTACHED SUBMITTALS

Submittal No.	Description
7	Schedule of Values
9	Site Layout Plan
11	Trailer Layout
15	Geotextile
17	Vapor Carbon Vessel
18	Influent Flow Sensing System
19	Pressure Blower
23	Carbonair Tray Stripper
25	Drywell
28	Portland Cement, Masonry Cement, Hydrated Lime and Masonry Sand
30	Flow Meter
33	Precast Wet Well
34	Sealant
35	Air Flow Sensor and Differential Pressure Guage
36	Sch. 80 PVC Pipe and Fittings for Process Equipment Skids
37	Reinforcing Steel Plan
41	Aluminum Grating
42	Masonry Accessories – Concrete Masonry Units
43	Loose Fill Insulation
45	Hand Operated Hoist
46	Containment Island
47	Sump Pump
48	Extraction and Treatment System Controls
49	Rigid Insulation
50	Flygt Submersible Pumps
51	Flygt Submersible Pump Controls
52	Asphalt Shingles
53	Butterfly Valve
57	Centrifugal Fan
63	Painting Systems
66	SDR 26 Influent Pipe
73	Epoxy Resin Coating
74	Louver

Submittal 7 – Schedule of Values

Submittal 7 Issued
Returned

Submittal 7A Issued on 7/29/02
Returned 8 Days later on 8/06/02 Revise and Resubmit

Submittal 7B Issued on 9/17/02
Returned 59 Days later on 11/15/02 Revise and Resubmit

Submittal 7C Issued on 12/20/02
Returned 26 Days later on 01/16/03

Submittal 7D Issued on 2/25/03
Returned 34 Days later on 03/31/03 as Approved

In accordance with Section VIII General Conditions Article 1- Preliminary Matters (1.4.3) a form was to be supplied by the Engineer for an interim schedule of values. This form was never supplied by the Engineer therefore this article of the General Conditions was breached.

Section XII Measurement and Payment references the schedule of values in two Paragraphs (A)(2) and (B). B states that, "The schedule of Values is an itemized list that establishes the value or cost of each part of the work." URS provided a schedule of values that met the requirements of B. The Engineer utilized the definition of what was to be included under each pay item as to how the Schedule of Values was to be broken down. The provided definitions are informational only and tell the contractor what is to be included in each division of the work. It was requested URS provide a breakdown of insignificant items under $100 such as hose reels and sink drains. Requiring URS to place a cost to each item in each measurement and payment division is an arbitrary interpretation, which was not specified and was unreasonable to expect URS to adhere to this approach.

Per article 13- Payments to Contractor and Completion (13.1) The schedule of values is to be used for basis of progress payments and Article 10- Change of Contract Price or Time is to be used to price change orders. Therefore this defective interpretation of the specifications placed an onerous condition on URS resulting in a dramatic level of effort and delays to satisfy. It further resulted in the delay of our progress payments. As seen above this unfounded exercise extended over 8 months to satisfy.

Submittal 7A

1. The Schedule of Values is very confusing. It is very difficult to determine which Activity ID belongs to which Payment Item Number. The Schedule of Values must be revised to reflect the Payment Item Numbers as shown on the bid form and a breakdown of all subtasks and total budgeted amounts for each payment item number.

Due to the nature of the submittal, more specific comments shall be provided one a revised Schedule of Values has been resubmitted. Additionally, as an attachment to this letter, please find a copy of the comments provided to New York State Department of Environmental Conservation (NYSDEC) on July 27 2001 with regards to the initial Schedule of Values, dated July 13, 2001, for your review.

Submittal 7B

1. Payment Item G1 - Mobilization, Maintenance and Demobilization - shall include a breakdown of all costs associated with providing surveys, equipment, storage areas, sanitary facilities, and removal and proper off-site disposal of waste generated during construction, the submitted Schedule of Values does not reflect these breakdown items and must be modified to include these items.

2. The earned value of Payment Item G2 - Site Work - as shown on the submitted Schedule of Values is $119,485. The value for this Payment Item on the Bid Sheet is $119,585. The submittal must be modified to reflect the Bid Sheet Cost.

3. Payment Item G2 - Site Work - shall include a breakdown of all costs associated with earthwork, cutting, tilling, compacting, grading and related work required for site development, and building construction and excavations. This payment item also needs to include a breakdown of all costs associated with sedimentation and erosion control, dust. Noise and odor control. The submitted Schedule of Values must be modified to include these items.

4. Payment Item G2 - Site Work - must also include all costs associated with removal and disposal of the fencing

5. "Surveying" is listed twice in Payment Item G2 - Site Work. Please modify the Schedule of Value to clarify the surveying costs

6. Payment Item G3 - Treatment System Building - shall include all costs associated with lintels, sills, frames, hardware, penetrations, soffits, waterproofing. Hashing, caulking, fillers and sealants, equipment pads, and building and roof insulation. The

submitted Schedule of Values must be modified to include a breakdown of these items.

7. All costs associated with item "Prepare Subgrade of Slab" shown in Payment Item G3 -Treatment System Building - shall be incorporated in Payment Item (G2 - Site Work. The Submittal must he modified to include these items.

8. All costs associated with furnishing the required submittals must be included in Payment Item G1. Please remove "Prepare & Submit Masonry Submittals" as listed in Payment Item G3.

9. Payment Item G4 - Infraction and Treatment System Equipment shall include a breakdown of the costs associated with the air stripper and blower separately. In addition, the costs presented must be further broken down to include such items as the extraction well vaults, modification to EW-01, construction of EW-02, gratings, access hatches, covers, flow sensors, flow meters, strainers, transmitters, registers, the flow meter vault, equipment coatings, sound-proofing, safety cages, and pipe and equipment coatings, painting and labeling. The submittal must be modified to include these items.

10. Payment Item G4 - Extraction and Treatment System Equipment - shall also include a breakdown of all costs associated with "Piping and Valves and Vaults." 'this breakdown should include itemized costs for the valves, flexible connectors, restraints, supports, anchors, pipe sleeves, modular seals, couplings, adapters, vents, vent screens, rain cap, rain hood vault ladders and steps, instrumentation, sample taps, gauges, switches, fire extinguisher, portable hoist, utility sink. Faucet, hoses, hose reels, relief valve, water tank and sink drain. Costs for the "Containment Island" should also be broken down further to include costs for pressure washer, drum, cables, controls, transformers, starters, meters, timers, panels, enclosures and variable frequency drives. The submittal must be modified to include these items.

11. Payment Item G4 - Extraction and Treatment System Equipment - shall also reflect a breakdown of all costs associated with connecting the wet well discharge force main to the Nassau County storm water manhole including applying for and obtaining a County Road Opening Permit, constructing the connection and restoring the public roadway in accordance with all applicable requirements of the County of Nassau and the Village of Rockville Center. The submittal must be modified to include these items.

12. The cost for "Carbon Vessels" in Payment Item G4 - Extraction and Treatment System Equipment totals $16,050 not $18,550 as shown. The cost for this item must be modified.


#15

13. Similarly, the total cost for "Containment Island" in Payment Item G4 is $4,900. The breakdown for this item totals $3,900. The cost for this item must be modified.

14. With regard to Payment Item G5 - Buried Extraction and Discharge Pipe - a breakdown of all costs associated with the buried 2-inch diameter PVC extraction well discharge pipes, fittings and restraints, trenching, assembly, bedding, filling, grading, compaction and testing must be provided. The Schedule of Values must be modified to include these items.

15. Payment Item G6 - New Groundwater monitoring Wells - shall reflect a breakdown of all costs associated with the installation of casing, screen, well packing, grout, concrete base, flush mount vault, frame and cover, end plug, locks, accessories and appurtenances disposal of cuttings, decontamination water and other wastes, well development and submittal of all specified reports. The Schedule of Values must he modified to include these items.

16. Payment Item G7 - Seeding - shall reflect a breakdown of all costs associated with seeding, topsoil, seed mixture, fertilizers and appurtenances. This Payment item should also relied a breakdown of all costs associated with irrigation, reseeding and maintenance services for the period specified. The Schedule of Values must be modified to include these items.

17. Payment item G8 - Planting - shall reflect a breakdown of all costs associated with installing trees, shrubs, planting soil, stakes, wire, hose, tree wrap paper, fertilizer and appurtenances. This payment item shall also include a breakdown of all costs associated with irrigation, plant materials replacement and maintenance services for the planting areas for the period specified. The Schedule of Values must be modified to include these items.

18. Payment Item G11 - Clearing and Grading of Molloy College Yard Waste Disposal Area- shall reflect a more detailed breakdown of all the costs associated with removal and proper off-site disposal of vegetation, yard waste and debris from the Molloy College Yard Waste Disposal Area, and filling, grading and compaction for staging of construction materials, supplies and equipment, and placement of construction trailers. The Schedule of Values must be modified to include these items.

19. Payment Item G12 - Operations and Maintenance - shall reflect a breakdown of all costs associated with utility services, reporting, record keeping, testing, operating, maintaining and repairing the extraction and treatment system, building and appurtenances. This payment item shall also reflect a breakdown of all costs associated with groundwater monitoring well sample collection and analysis, preparation of the Plan of Operations and Monthly Status Reports and training of

Department personnel. The Schedule of Values must be modified to include these items.

Submittal 7C

General

1. The Department reserves the right to contest any/all values presented within the referenced submittal, throughout the duration of the Contract, which are not representative of current market values. Additionally, in accordance with the General Conditions of the Contract Documents, the Department shall have the right to examine and audit all books, ledgers, records and documents pertinent to all cost and pricing data available and relied upon by the Contractor including, but not limited to, that used by the Contractor in the determination of its bid for the work, in order to evaluate accuracy completeness and currency of the cost or pricing data.

Payment Item No. G2

1. As previously commented, Payment Item No. G2 shall include a break down of all costs associated with cutting, filling, compacting, grading and related work for site development and the building construction, including excavations and filling for the building foundation, wet well and valve vault The referenced submittal shall be modified accordingly

2. Payment Item No. G2 contains a cost in the amount of $16,500 for "Building Foundation." accordance with Section XII of the Contract Documents, payment for the Treatment System Building, including the foundation walls, shall be made under Payment Item No. G3. The referenced submittal shall be modified accordingly.

3. Payment Item No. G2 contains a cost in the amount of $8,100 for "Wet Well." In accordance with Section XII of the Contract Documents, payment for the Treatment System Building including the wet well shall be made under Payment Item No. G3. The referenced submittal shall be modified accordingly.

4. Payment Item No. G2 contains a cost in the amount of $6,000 for "Valve Vault." accordance with Section XII of the Contract Documents, payment for the Treatment System Building, including the valve vault, shall be made under Payment Item No. G3. Referenced submittal shall be modified accordingly.

5. Payment Item No. G2 contains cost in the amount of $32,450 for "Clearing and Grubbing.' Be advised, in accordance with Site Work and Landscape Cost Data, as published by RS Means Company, Inc. (2002), total cost for clearing and grubbing, inclusive of overhead and profit, is as follows:

Clearing and grubbing of brush and stumps - $4,825 per acre Cut and chip medium trees to 12-INCH diameter - $4,150 per acre

The area within the Contract Limits for the referenced project is approximately 1.3 acres. Therefore, assuming a value of $8,975 per acre for clearing and grubbing, the total value this item should be in the vicinity of $12,000 dollars. Please clarify proposed cost.

Payment Item No. G4

1. Several items listed under Payment Item No. G4 did not contain associated values. Referenced submittal shall be modified to include values for these items.

Payment Item No. G8

1. As previously commented, Payment Item No. G8 shall include a break down of all costs associated with installing shrubs, planting soil, stakes, wire, hose tree wrap paper, fertilizer and appurtenances. The referenced submittal shall be modified accordingly.

Payment Item No. G1l

1. Payment Item No. Gl 1 shall include a break down of all costs associated with furnishing and installing a 6-foot high fence and gate to enclose the perimeter of the office trailer/staging area within the Molloy College property boundaries in compliance with Section 02447 of the Standard Specifications. Additionally, costs associated with removal of fencing and gate enclosing the perimeter of the office trailer/staging area at the completion of construction are also to be provided. The referenced submittal shall be modified accordingly.

2. Be advised, we do not concur with the allotted cost of $500 for "Fence" as provided under Payment Item No. G11. In accordance with the Site Layout Plan submitted by URS, a total of 288 linear feet offence and one double leaf gate would be required to enclose the perimeter of the office trailer/staging area. Based upon relevant costs provided under Payment No. G9 and Payment Item No G10, the value of this item should be as follows: -

	Quantity	**Unit Cost**	**Total**
6-foot Chain Link Fencing (G9)	288 linear feet	$71.5 6 per liner foot	

$20,609.30

Double Leaf Gate (G10)	1	$4,668.50 each	$4,668.50;

Therefore, the total value of these items, exclusive of fencing removal upon construction completion, is approximately $25,277.80. Please clarify proposed cost.

3. Be advised, we do not concur with the allotted cost of $48,290 for "Disposal of Yard Waste and Debris" as provided under Payment Item No. G11. Research of current market value for this item revealed the following:

	Quantity	**Unit Cost**	**Total**
Disposal Cost	556yd^3*	$26.00	$14,456
(110 Sand Company) Transportation Cost (Hempstead to Farmingdale)	556yd^3*	$4.50	2.502

Subtotal	$16,958
Contractor's Fee (5%)	848
Total	$17.806

* Quantity of 556 yd^3 reflects an area of 5,000 square feet requiring yard waste removal, in accordance with Section 02120 of the Standard Specifications, multiplied by an average thickness of 3 feet throughout the entire area.

Therefore, the total value of this item is approximately $17,806. Please clarify proposed cost.

Submittal 7D

Approved

Submittal 9 – Site Layout Plan

Submittal 9 Issued 7/25/02
Returned 12 days later on 8/06/02 Revise and Resubmit

Submittal 9A Issued on 8/08/02
Returned 18 Days later on 8/26/02 Revise and Resubmit

Submittal 9B Issued on 8/20/02

Submittal 9C Issued on 9/10/02
Returned 65 Days later as Approved as Submitted

Submittal 9

Specification 1500 Temporary Facilities and Controls Part (1.9)(A)(1) states that "The Contractor's staging areas shall be as submitted and approved by the Engineer." This is the only reference requiring the submittal of the staging area and does not address requirements for trailer, parking area, and sanitary facilities which URS was required to respond to. URS did however, on our first submission submit a drawing as requested by the Engineer, indicating parking areas, sanitary facilities, equipment lay down area and all other pertinent information, that should have been sufficient to approve the submittal. The requests for additional information (as well as the initial submittal) were well beyond our scope of work. In addition, Comment 3 requests that we provide our methods of construction, that should not be the Engineer's responsibility. Finally, Comment 5 should have been directed to the electrical contractor, not URS and was indicative of the Engineer's true understanding of the work. Indicated below are the comments URS was required to respond to. This effort, in addition to the delays in the review of the submittals, as indicated above resulted in cost and schedule impacts to URS.

1. In accordance with Section 1500 of the Standard Specifications the contractor shall provide separate sanitary facilities for male and female personnel. The referenced submittal only contains one (1) sanitary facility.

2. In accordance with Section 1500 of the Standard Specifications the contractor shall provide a 35-foot by 40-foot temporary parking area adjacent to the trailer, consisting of a six (6) inch thick layer of recycled concrete aggregate, for exclusive use of the Engineer's and Department's personnel. The referenced submittal must be modified to clearly define the extents of the Engineer's and Department's personnel temporary parking area and the associated construction methods.

3. In accordance with Section 1500 of the Standard Specifications the contractor shall maintain suitable parking and storage areas for his/her use acceptable to the Department

and the Engineer. The referenced submittal must be modified to clearly define the extents of the contractor's temporary parking area and the associated construction methods.

4. In accordance with Section 1500 of the Standard Specifications the contractor shall be responsible for placing and maintaining crushed stone surfacing throughout staging areas or any other work area as required. The referenced submittal must be modified to clearly define the extents of the staging areas and the associated construction method. Additionally, be advised that special consideration should be put into the sizing of the staging areas to provide suitable storage facilities for all materials that are subject to injury by exposure to weather, theft, breakage or otherwise.

5. In accordance with Section 1500 of the Standard Specifications the contractor shall furnish, install and maintain a security lighting system. A minimum of three poles for security lighting—one at the staging area, one at the construction trailer area, and one at the treatment system building—shall be installed. The referenced submittal must be modified to include this requirement.

6. In accordance with Section 1653 of the Standard Specifications the contractor shall construct a decontamination station as specified and as proposed in Figure 8-1 of URS's Site Safety and Health Plan. The referenced submittal must be modified to include this requirement.

Submittal 9A

1. In accordance with the Standard Specifications, the contractor shall be responsible for placing and maintaining a 6-inch thick layer of recycled concrete aggregate for all temporary parking areas, as well as a crushed stone surface throughout staging areas or any other work area as required. The referenced Submittal must be modified to reflect this requirement.

2. In accordance with the Standard Specifications, decontamination shall take place within a designated decontamination area on-site, as approved by the engineer and as proposed in Section 11.0 of URS's Site Safety and Health Plan. The referenced submittal must be modified to reflect this requirement.

3. It is acknowledged that URS will utilize the lay-down area for use of heavy equipment storage only and shall coordinate with vendors and subcontractors for the scheduling of materials to the site so that they are delivered when needed. In accordance

with the Standard Specifications, please be advised that URS is solely responsible for the care and protection of all work and materials covered by the contract. Additionally, all equipment and materials staged on-site shall be stored in a manner conforming to applicable statutes, ordinances, regulations and rulings of the public authorities having jurisdiction.

4. It is understood that J.K. Electric Co., Inc. shall furnish, install and maintain a security lighting system as specified. At this time we request that URS coordinate with J.K. Electric Co. to install the security lighting system as proposed.

Submittal 11 – Trailer Layout

Submittal 11 Issued 7/26/02
Returned 10 days later on 8/06/02 as Revise and Resubmit

Submittal 11A Issued 2 days later on 8/08/02
Returned 18 days later on 08/26/02 as Approved

Submittal 11 – Comments

a) It is unclear as to which is the proposed trailer layout. Please indicate specifically which layout is intended for use.

Submittal number 11 was a catalogue cut provided by the trailer vendor. This submittal has an arrow directing the reviewer's attention to the overall trailer dimensions and the Engineer should have easily concluded which trailer was being submitted. Additionally, all three trailers on the page were essentially the same layout. Finally, at the preconsturction meeting the State indicated that they would not require a separate trailer and URS and the Engineer agreed that one trailer would be sufficient for both to share. This should have been the start of a very amicable, working relationship, but instead these comments set the tone for what proved to be extensive unnecessary effort URS was forced to expend on a continual basis.

b) The shop drawing submittal was of poor resolution and for the most part illegible. Please resubmit a legible copy.

URS has reviewed this initial submittal and while it is admitted that the resolution could have been better, it is for the most part legible and should have been acceptable for this purpose.

The effort expended to respond to these comments and the delay in the review resulted in additional costs and impact to our schedule.

Submittal 15 - Geotextile

Submittal 15 Issued 8/08/02
Returned 18 days later on 8/26/02 as Revise and Resubmit

Submittal 15A Issued on 08/23/02
Returned 25 days later on 09/17/02as Revise and Resubmit

Submittal 15B Issued on 01/03/03
Returned 15 days later on 01/18/03 Approved

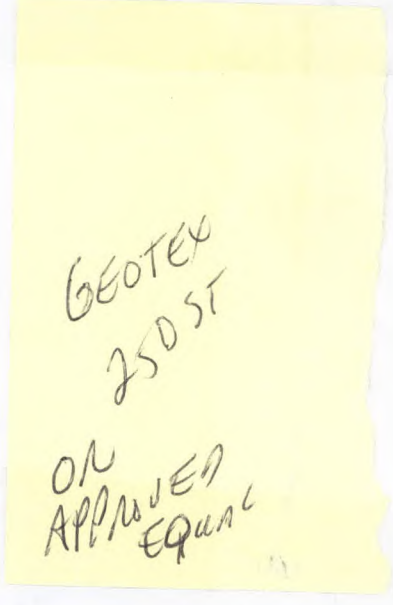
Submittal 15

1. In accordance with Section 02540 of the Standard Specifications, the contractor shall provide the Engineer with a certificate from the manufacturer stating the name of the geotextile manufacturer, product name, style, chemical compositions of filaments or yams and other pertinent information to fully describe the geotextile. The certificate shall state that the furnished geotextile meets the MARV requirements of the specification as evaluated under the manufacturer's quality control program. Additionally, a person having legal authority to bind the manufacturer must attest the certificate. The referenced submittal must be modified to include this information.

Specification 02540 Recycled concrete aggregate Roadway and Parking Areas is a defective specification. The required geotextile Geotex 250ST was no longer manufactured and after an extensive search we were not able to locate a geotextile available that met all of the specified properties. The time to find a suitable replacement and address the Engineer's comments resulted in additional costs and delays to URS.

3. In accordance with Section 02540 of the Standard Specifications the geotextile Minimum Average Roll Value (MARV) for permitivity shall be 0.08 sec^{-1}. The referenced submittal does not meet this requirement.

See comment for #1.


GEOTEX
250 ST
OR
APPROVED
EQUAL

Submittal 17 – Vapor Carbon Vessel

Submittal 17 Issued 9/08/02
Returned 25 days later on 9/30/02 as Disapproved

Submittal 17A Issued on 12/06/02
Returned 13 days later on 12/19/02 Approved as Noted

Submittal 17B Issued on 01/03/03
Returned 15 days later on 01/18/03 Approved

Submittal 17

1. In accordance with Section 15500 of the Standard Specifications, each carbon vessel shall be nominally 4'-0" by 4'-0", with a height of 4'-0". The proposed vessels contained within the referenced submittal are 5'-0" in diameter, with a height of 7'-2", exceeding the specified requirements. Additionally, review of the Final Coordination Drawings submitted by URS indicate a clearance of approximately 1'-0" between the carbon vessel series piping and the building trusses, limiting access for standard maintenance. The referenced submittal must be modified to meet the requirements Standard Specifications.

Prior to submittal URS reviewed the functional and maintenance requirements internally and with the manufacturer and were satisfied that our proposed vessels met the intent of the contract. In addition, we reviewed the aisle requirements and again were satisfied that the submitted vessels did not impact code or functionality requirements.

However, after receipt of the Engineer's review and a subsequent discussion URS determined it was in the best interest of the project to submit the specified model. As seen above, even after submitting the specified unit in Submittal 17A, it still took approximately six weeks to receive approval. URS was required to submit information that should not have held up the approval of the specified model. Comments received from the Engineer as well as our responses to these comments are described below.

Submittal 17A

1. In accordance with Section 15500 of the Standard Specifications, the Contractor shall provide vapor carbon GAC unit performance data and/or curves showing granular activated carbon properties, adsorption isotherms of carbon for adsorption of tetracholoroethene in air stream, and estimations of mass transfer zones as a fraction of GAC bed depth. Please be advised of the following:

a. The vapor phase design parameters contained on the submitted isotherm report, as performed by Tetrasolv Filtration, Inc., were not representative of the actual system operating conditions (i.e., influent air flow shall be 600 scfm not 175 scfm). We request that the isotherm report be modified to represent actual system operating conditions.

b. Estimation of mass transfer zones as a fraction of GAC bed depth was not provided. The submittal shall be modified to include this information.

URS submitted the specified make and model (Tetrasolv Filtration, Model VF-1000) had the Engineer adequately performed his design responsibilities he would not have requested the information in a and b above.

2. In accordance with Section 15500 of the Standard Specifications, after installation of the carbon vessels, piping, gauges and all appurtenances, and when construction of other units of the treatment system shall permit, each unit shall be subject to field tests as specified in Section 01650. The field tests shall be made by URS under the direct supervision of a qualified factory-trained engineer, and in the presence of, and as directed by the Engineer. The field tests shall determine the overall efficiency characteristics of the carbon vessels. Samples shall be collected and analyzed by URS. The inlet and outlet concentrations of tetracholoroethene in the gas stream shall be determined b) USEPA Method TO-14, using an approved laboratory. Engineer's approval of the test methods shall be required. Test results shall be submitted to the Engineer by the approved laboratory within 7 days of collection. In addition, the testing shall demonstrate that under all conditions of operation, each vessel:

a. has not been damaged by transportation or installation.

b. has been properly installed.

c. has no mechanical defects.

d. is in proper alignment.

e. has been properly connected.

The information requested in comment number 2 is from Part 3 Execution, 3.2 Field Quality Control. Restating of the specification is redundant and a Field QC issue. Having to respond to this, at this time, in this submittal, resulted in delays to our schedule and required URS to expend additional costs.

3. Based upon recent phone conversations, it is understood that URS intends to submit the proposed source of vapor phase activated carbon, specifications of vapor phase activated carbon and the proposed piping assembly for the vapor carbon vessels under separate cover. This information must be provided prior to manufacture and delivery of the proposed units. We request that this information be provided to this office by no late than December 24, 2002 so that delays are not encountered.

There is no specified requirement to submit the source of vapor phase activated carbon or the proposed piping assembly. In addition, there was no reason this information had to be provided prior to the manufacture of the units. This request was outside of our scope of work and resulted in delays and additional costs to URS.

Submittal 18 – Influent Flow Sensing System

Submittal 18 Issued 9/08/02
Returned 25 days later on 9/30/02 Approved as Noted

Submittal 18A Issued on 12/06/02
Returned 13 days later on 12/19/02 Approved as Noted

URS submitted the specified flow indicators/transmitters, flow sensors and power supply. URS was required to respond to comments that in large part should not have been necessary had the Engineer adequately performed his responsibilities during the design phase.

Submittal 18 Comments

1. The system shall be capable of measuring the flow of influent in a range of 0 to 40 gpm.

This should not have been required. Had the Engineer adequately performed his design responsibilities he should have known this product was capable of this range.

2. Two flow transmitters shall be provided—one for each flow sensor.

Why is this a comment, this requirement was spelled out in the contract documents? URS had to expend additional resources to respond to this comment.

4. Indicate part number for the power converters.

This was included in the original submittal. Thus, URS had to expend additional resources as a result of the Engineer's inadequate review.

5. Submit flow sensor mounting detail for review.

This was included in the original submittal. Thus, URS had to expend additional resources as a result of the Engineer's inadequate review.

7. Indicate dimensions of the NEMA 4X enclosure that will house the transmitters and power converters.

This was not a submittal requirement. URS expended additional resources to respond to this out of scope request.

Submittal 19 – Pressure Blower

Submittal 19 Issued 9/05/02
Returned 35 days later on 10/10/02 Revise and Resubmit

Submittal 19A Issued on 10/18/02
Not returned

Submittal 19B Issued on 11/12/02
Returned 24 days later on 12/06/02 Approved as Noted

Submittal 19C Issued on 1/28/03
Returned 24 days later on 2/21/03 Approved as Noted

Submittal 19D Issued on 03/05/03
Returned 6 days later on 03/11/032 Approved as Submitted

Submittal 19 Comments

1. In accordance with Section 15300 of the Standard Specifications, the blower motor shall be a 20 horsepower motor. The referenced Submittal proposes a 15 horsepower motor. Prior to approval, pressure drop calculations must be submitted, including losses for ductwork and all air handling components, for review.

URS met the performance criteria of the blower with the submitted motor. Having met the performance criteria, a qualified reviewer would not have requested that pressure drop calculations be submitted as the pressure drop would not be affected by the use of this motor. The specification also indicated that the "Exact design criteria shall be determined by the Air Stripper manufacturer." This is the motor that our air stripper manufacturer recommended. After concluding that a fair, competent evaluation could not be made by the Engineer, URS in Submittal 19A submitted a 20 horsepower motor. However, the additional effort URS expended and the delays URS experienced to gain approval for this submittal is considered to be an extra.

5. In accordance with Section 15300 of the Standard Specifications, the manufacturer must certify that the blower assembly will be statically and dynamically balance prior to delivery.

This information was submitted in 19B, however it is not required by the specifications. Therefore requiring URS to provide this information is a defective application of the specification and all schedule delays, costs and the cost to respond are an extra.

6. In accordance with Section 15300 of the Standard Specifications, the blower wheel shall be constructed of commercial quality carbon steel. The wheels shall

continuously be welded in compliance with ASME Section 9 standards. The reference submittal must be modified to include this requirement.

The specification section Part 2 Products, Paragraph 2.1 Pressure Blower B.3 requires that the wheels be continuously welded in compliance with ASME. Complying with this specification section is a QC issue and not a submittal requirement. Requiring URS to provide this information is a defective application of the specification and all schedule delays, costs and the cost to respond are an extra.

7. In accordance with Section 15300 of the Standard Specifications, the blower brake Horsepower shall not exceed 7.9. The referenced submittal must be modified to show or certify blower brake horsepower on the performance curve for the steel wheel.

This was deleted in Addendum 1. Requesting URS to provide this information that has been deleted is a defective application of the specification and all schedule delays, costs and the cost to respond are an extra.

8. In accordance with Section 15300 of the Standard Specifications, in addition to manufacturer's standard guarantee, the manufacturer shall include the services of factory-trained serviceman to provide repair service for the equipment for the period of one year commencing with the time the equipment is placed in continual permanent operation. This service shall include the cost of all replacement parts during the interval. The referenced submittal refers to Carbonair's warranty sheet however, it is not contained within the submittal. The referenced submittal must be modified to include the manufacturer's guarantee, as specified.

As per the Specifications, Section 1500, this is not a submittal requirement.

9. In accordance with Section 15300 of the Standard Specifications, finish paint of the blower shall be as specified in Section 09900, Painting. The referenced submittal must be modified to certify that the blower will be painted in accordance with the requirement.

The information requested in this comment is from Part 2 – Products. It is not a submittal requirement as defined in Paragraph 1.3 Submittals. The time to respond to this statement and any delays encountered and all associated costs are beyond our scope of work.

Submittal 19B Comments

2. With regard to your response to our Comment No. 4, it is our understanding that system curve shown on "The New York Blower Company" document Version 1.64.3000-R(Feb, 2002) is the system curve for this project. Please clarify.

The submittal clearly indicates the model of the pressure blower as 2506. The time to respond to this comment is considered an extra.

4. With regard to your response to our Comment No. 8, in accordance with Section 15300 of the Standard Specifications, in addition to the manufacturer's standard guarantee, the manufacturer shall include the services of a factory-trained serviceman to provide repair service for the equipment for the period of one year commencing with the time the equipment is placed in continuous permanent operation. This service shall include the cost of all replacement parts during the interval. Although the Carbonair's warranty sheet is provided, the requirement above is not included. The referenced submittal must be modified to include the manufacturer's guarantee, as specified.

As per the Specifications, Section 1500, this is not a submittal requirement. In addition, this information was provided in Submittal 19B.

6. The contractor shall provide the following spare parts: one complete set of heavy-duty bearings and two sets of V-belts.

Providing this information is not a submittal item per Paragraph 1.3 Submittals. It is a QC requirement that is easily verified in the field. Requiring URS to provide this information is a defective application of the specification and all schedule delays, costs and the cost to respond are beyond our scope of work..

Submittal 19C

1. In accordance with Section 15200(1.1)(A)(2) of the Standard Specifications, the manufacturer shall verify that each component of the low-profile air-stripper system is compatible with all other components, that piping, ductwork sizes and pressure blower are appropriate, and that all devices necessary for proper operation of the equipment have been provided. Please be aware that, as the proposed pressure blower is an "or equal" item, it is the contractor' responsibility to verify that the equipment is suitable and compatible for operation of the rest of the system. Please provide this verification.

The paragraph cited does not require this verification to be submitted. In addition, only one vendor was used by URS to provide the treatment system that included the stripper and the blower. Thus, this was being done as a matter of the detailed design stage by the vendor. Requiring URS to provide this information is a defective application of the specification and all schedule delays, costs and the cost to respond are beyond our scope of work..

2. We note that the volume flow rate as shown on the blower performance curve is 740 CFM at 50 inches water column, which is different from 600 CFM at 44 inches water as submitted under Submittal 19B. Although we do not object, please be aware that, in accordance with Section 15300 (Addendum No. 1) (2.1)(B)(1) of the Standard

Specifications, the blower shall be capable of delivering the vacuum and flow required by the air stripper manufacturer under the intended conditions of service taking into consideration all upstream and downstream piping, instrumentation and equipment.

A qualified reviewer should have been capable of concluding that the submitted blower curve exceeded the specified requirements. URS was required to expend additional resources to respond to this comment. Any costs spent on this response are considered to be beyond our scope of work.

Submittal 23 – Carbonair Tray Stripper

Submittal 23 Issued 9/09/02
Returned 50 days later on 10/29/02 Revise and Resubmit

Submittal 23A Issued on 11/12/02
Returned 24 Days later on 12/06/02 Approved as Noted

Submittal 23B Issued on 1/28/03
Returned 24 days later on 2/21/03 Approved as Noted

Submittal 23C Issued on 3/06/03
Returned 39 days later on 4/14/03 Approved

Submittal 23 Comments

1. In accordance with Section 15200 of the Standard Specifications, factory test reports must be provided. The submittal must be revised to include this information.

URS did not provide the factory test report in this submittal, as the unit had not been built. URS's understanding of this submittal requirement is that the test report is not generic but for the actual unit. In the submittal it is clear that this information would be provided after the unit is approved and built. Section 3.2 C clearly indicated the system could not be manufactured prior to the engineer approval of shop drawings. The shop drawing provided was in our opinion sufficient to approve for construction. Therefore this delayed the project and requiring the test report in this phase of the submittal process is a defective application of the specifications.

4. In accordance with Section 15200 of the Standard Specifications process design summary for the controlling compounds must be provided. The submittal only provides data for benzene and must be revised to include information specific to tetracholoroethene. In addition, although Carbonair indicates that the "design model" is included in this submittal, additional information on the parameter used for the "design model" must be provided.

The paragraph referenced in comment number 4 is from part 1. General, 1.3 Submittals A 9; and is repeated here" Process Design Summary for the controlling compounds, including Henrys Law Constant, mass transfer coefficient (kla), stripping factor, liquid loading rate, and air to water ratio." This was deleted in amendment 1" Delete paragraph 1.3(A)(9) and replace it with the following: "Empirical operating data documenting specified performance at design liquid phase and vapor phase flow rates and temperatures." Therefore the requirement to provide information that was deleted

from the specifications is a defective application on the specifications. The cost to respond to this request is an extra and is all schedule delays and associated costs.

6. The submittal states "Carbonair is not responsible for unknown influent water conditions or compounds that can effect [sic] stripper performance." Please be aware that since the proposed air stripper is not the model specified in the Specifications, URS is responsible for providing Carbonair with all available information on influent water quality, such as the information provided in the Franklin Cleaners Groundwater Extraction and Treatment Design Report provided to your office.

The contractor can only be held responsible for the contaminants as provided in the bid documents and can not be held responsible for concentrations or chemicals outside what is provided by the contract documents.

10. In accordance with Section 15200 of the Standard Specifications, five gasketed removable trays are to be included with integral stainless steel baffles, double lipped with nitrile rubber. The referenced submittal must be modified to include this requirement.

In submittal 23 URS stated that we would be providing five removable trays. Further, the above comment is from Part 2 Products, Paragraph 2.1 E, which is not a submittal requirement but rather a QC requirement. The cost to respond to this request resulted in URS having to expend additional resources.

12. In accordance with Section 15200 of the Standard Specifications, the low-profile air stripper must be provided with two internal spray nozzles. The referenced submittal indicates that no internal spray nozzles are used with the STAT design. While we do not object, prior to acceptance, we request additional information pertaining to the STAT design to justify the elimination of the specified internal spray nozzles.

This was provided in submittal 23A

13. In accordance with Section 15200 of the Standard Specifications, certification from the manufacturer must be provided certifying that the equipment provided meets the general intent of the specifications. Additionally, the certification must list all deviations from the specifications.

This was provided in submittal 23. Requiring that we repeat what was already submitted required URS to expend additional resources and delayed the project.

Submittal 23A

1. Although we do not object to the use of the "System Testing & QC Report," for factory testing, please be aware that the field-testing of the equipment must comply with Section 01650 of the Standard Specifications.

We do not understand the need for this requirement. If the Engineer did not object to it, we assume he reviewed it against the specifications. Therefore, URS should not have had to expend the time to respond to this comment.

2. In accordance with Section 01650 of the Standard Specifications, the General Contractor shall submit to the Engineer for approval a detailed description for the initial start-up and testing of the extraction and treatment system before the system is put into

operation. The description shall include, but not be limited to a detailed account of methods, labor and equipment for testing, staffing and personnel assigned to operate the system, and procedures for logging of equipment failures and/or abnormalities.

This comment is a repeat of comment number 1 above and responding to this comment twice is an extra.

3. As commented previously, in accordance with Section 15200 of the Standard Specifications, a list of similar installations must be provided. The submitted list "STAT References" only contains, names and telephone numbers and does not include the model number, design flow, contamination, and year of manufacturing. The submittal must be modified to include this information.

The additional information noted above is not required. The specification only requires a list of similar installations. The submittal provided a reference list that the Engineer could have contacted if he was truly concerned about the expertise of our vendor.

7. The design effluent concentration for the air stripper is an effluent concentration less than 1 ppb. If the contractor does not meet this requirement, the contractor will be responsible for achieving the effluent concentration until he/she can determine that an unknown/unanticipated component is interfering with the performance of the air stripper.

The statement in our submittal that apparently evoked this comment clearly stated that we would not be responsible for unknown/unanticipated influent compounds but, that under the designed influent concentrations tetrachloroethene < 1 ppb would be met. Therefore, this comment was unnecessary and required URS to expend additional resources to respond to it.

10. As commented previously, in accordance with Section 15200 of the Standard Specifications, certification from the manufacturer must be provided certifying that the equipment provided meets the general intent of the Specifications. Additionally, the certification must list all deviations from the Specifications. Although we note a sentence in your response to our comments, a certification from the manufacturer was not included. The submittal must be modified to include this requirement.

In the original submittal the manufacturer stated, "The equipment furnished by us will meet the general intent of the specifications". Having to respond to this resulted in URS expending additional resources.

11. We note that URS proposes lowering the height of the air stripper, and decreasing the storage capacity under the air stripper. Although we do not object, we request URS to submit under separate cover additional technical information on the already approved float switch (Submittal No. 26). More specifically, we request URS to submit information on the minimum height for proper installation and function for the float switch. This information must be provided before this submittal can be approved.

The Engineer makes reference to Submittal No. 26 that was for the submersible pump floats and had nothing to do with this float switch. Further, the fact that this dimension decreased has absolutely nothing to do with the installation of this item. URS had to expend additional resources and time to compensate for the Engineer's lack of understanding of this item.

Submittal 23B

1. In accordance with Section 15200 (1.1)(A)(2) of the Standard Specifications, the manufacturer shall verify that each component of the low-profile air-stripper system is compatible with all other components, that piping, ductwork sizes and pressure blower are appropriate and that all devices necessary for proper operation of the equipment have been provided. Please be aware that, as the proposed low-profile air-stripper is an "or equal" item, it is the contractor's responsibility to verify that the equipment is suitable and compatible for operation of the rest of the system. Please provide this verification.

The requirement was for the manufacturer to verify the compatibility, not to submit this verification. Also, the Engineer raised this comment on the third round of submittals further delaying the approval process.

2. We note that the minimum airflow rate to avoid weeping (650 CFM) is almost the same as the operation flow rate (650 SCFM) as submitted under Submittal 23. Although we do not object, please be aware that in accordance with Section 15300 (Addendum No. 1) (2.1)(B)(1) of the Standard Specifications, the blower shall be capable of delivering the vacuum and flow required by the air stripper manufacturer under the intended conditions of service taking into consideration all upstream and downstream piping, instrumentation and equipment.

URS was aware of the specifications. Having to respond to this comment was unwarranted.

3. We note that field-testing and start-up manual will be provided prior to start up. Although we do not object, we request that URS submit this information for approval no later than 10 days prior to start up.

This commented was not warranted and requiring URS to respond to it resulted in expending additional resources.

4. We request that a manufacturer's written guarantee be provided certifying compliance with Performance and Design Requirements as listed in Section 15200 (1.4) of the Standard Specifications.

This written guarantee is not specified. Further the performance and design requirements were addressed to the satisfaction of the Engineer throughout the submittal process. Having to respond to this resulted in URS expending additional resources.

Submittal 23C

"Approved."

Submittal 25 - Drywell

Submittal 25 Issued 9/10/02
Returned 19 days later on 9/30/02 Revise and Resubmit

Submittal 23A Issued on 10/18/02
Returned 24 Days later on 11/11/02 Revise and Resubmit

Submittal 23B Issued on 11/26/02
Returned 21 days later on 12/17/02 Approved as Noted

Submittal 23C Issued on 10/15/03 as an FI

Submittal 25

2. In accordance with Section 03400 of the Standard Specifications, all precast concrete structures delivered to the site shall be clearly marked at the factory with the date of manufacture and manufacturer's identification. Omission of this information may be cause for rejection

In submittal 25A URS acknowledged this requirement, however, this requirement is not a submittal requirement for approval of the structure. It is a requirement in Part 1 paragraph 1.2 Quality Assurance requiring a response is a defective application of the specification. Any and all schedule delays and costs caused by responding to this are out of scope.

4. In accordance with Section 03400 of the Standard Specifications, precast structures must be constructed of precast concrete sections that meet the requirements of ASTM C478, latest edition. The referenced submittal must be modified to include this requirement.

ASTM C478 is not applicable to dry wells. The efforts URS expended and the delays incurred replying to this comment is an extra.

5. In accordance with Section 03400 of the Standard Specifications, the minimum wall thickness must be one-twelfth of the inside diameter of the riser of the largest cone. The referenced submittal must be modified to meet this requirement.

This requirement is not applicable to dry wells, therefore this section is defective and replying to it and the delays incurred are an extra.

6. In accordance with Section 03400 of the Standard Specifications, joints between precast sections must be sealed by means of flexible Butyl Rubber sealant in compliance

with Federal Specifications (C.S.A.-FSS) and AASHTO M-198. The referenced submittal must be modified to include this requirement.

This is not applicable to dry wells, therefore this section is defective and replying to it and the delays incurred are an extra.

8. In accordance with Section 03400 of the Standard Specifications, the exterior and interior surfaces of the precast structures shall be painted with one coat of Kop-Coat Bitumastic No. 300-M (16) mils dry film thickness, or equal. The referenced submittal must be modified to include this requirement.

This requirement is not applicable to dry wells, therefore this section is defective and replying to it and the delays incurred are an extra.

10. In accordance with Section 03400 of the Standard Specifications, all castings shall be given two coats of approved bituminous paint. The referenced submittal must be modified to include this requirement.

This section of the specifications is defective. In a letter date April 1, 1989 Campbell Foundry discontinued coating of castings this should have been determined by the Engineer prior to issuing the specifications. In a later submittal this requirement was removed due to a letter provided by Campbell. The level of effort required to clarify this and the delays incurred are an extra.

11. In accordance with Section 03400 of the Standard Specifications, manhole steps shall be constructed of steel reinforced copolymer polypropylene plastic conforming NYSDOT specifications. Section 725-02.01. The referenced submittal must be modified to include this requirement.

This is not applicable to dry wells, therefore this section is defective and replying to it and the delays incurred are an extra.

12. In accordance with Section 2200 of the Standard Specifications, the contractor must submit plans of open cut excavations showing side slopes and limits of excavation at grade. The referenced submittal must be modified to include this requirement. Additionally, please be advised, excavations deeper than ten (10) feet require the submission of shop drawings for sheeting and bracing systems. The shop drawings must be prepared and signed by a Professional Engineer licensed in the State of New York.

URS's original plan for installation of the dry well did not require sheeting or shoring because no one was going into the excavation. The Engineer dictated to URS our means and methods by refusing to approve the submittal without a sheeting or shoring system. In order to proceed URS relented and provided a manhole box. The delays to the schedule and any costs incurred are an extra.

Submittal 25A

1. As previously commented, in accordance with Section 03400 of the Standard Specifications, samples of brick, block and accessories, if any for the structures shall be submitted for approval. Although the submittal stated that a sample of brick is included, we did not receive any samples. The submittal must be modified to include this requirement.

URS had submitted the sample of brick to the Engineer's site trailer and not to the Engineers office. Had there been adequate coordination between the site and office locations, or had the Engineer made a simple phone call to URS this issued could have been clarified without requiring URS to incur the additional resources to reply to this comment.

2. As previously commented, in accordance with Section 03400 of the Standard Specifications, certificates of compliance with the Standard Specifications must be submitted for each proposed precast concrete structure. URS's proposal to issue the certificate of compliance after construction inspection is unacceptable. The referenced submittal must be modified to include this requirement.

It is standard procedure to certify that an item has been built to the specifications not that it will be built to the specifications. When a contractor signs a contract they are certifying that they intend to meet the specifications.

3. We note that the pre-cast drywell shop drawings have been provided in this submittal are not from the same supplier as the previous submittal. The previous submittal indicated that the dry well would meet AASHTO H-20 loadings. This submittal must be revised to indicate that the precast structure shall be of sufficient strength to safely support AASHTO H-20 loadings.

The original supplier refused to continue to work on this project due to the number of specified requirements that were not applicable to dry wells. This caused a financial burden to URS and delay to the project that were a direct result of the Engineer's defective specification and its implementation.

5. While we do not object that URS noted Comment Number 10 of our letter dated September 27, 2002, please be advised that in accordance with Section 03400 of the Standard Specifications, all castings shall be given two coats of approved bituminous paint.

This section of the specifications is defective. In a letter date April 1, 1989 Campbell Foundry discontinued coating of castings this should have been determined by the Engineer prior to issuing the specifications. URS provided a letter by Campbell Foundry

supporting the elimination of the coating and as such this requirement was eliminated. The level of effort required to clarify this issue and the associated time delay is an extra.

6. As previously commented, in accordance with Section 02200 of the Standard Specifications, the contractor must submit plans of open cut excavations showing slopes and limits of excavation at grade. Additionally, please be advised, excavations deeper than 10 feet require the submission of shop drawings for sheeting and bracing systems. The shop drawings must be prepared and signed by a Professional Engineer licensed in the State of New York. Your installation plan has not been reviewed because the installation plan does not provide sheeting and bracing as specified. The referenced submittal must be modified to include this requirement.

URS's original means and methods for installation of the dry well didn't require sheeting or shoring because no entry into the excavation was anticipated. In addition, URS provided a sloping plan that met OSHA requirements and was adequate for this purpose. The specification was incorrectly interpreted by the Engineer that all excavations over 10 feet required a sheeting and shoring system. Whereas the Engineer refused to approve the submittal without a sheeting or shoring system they interfered with our work and dictated our means and methods. In order to proceed, URS relented and provided a manhole box. The delays to the schedule and any costs incurred are an extra.

Submittal 25B

1. In accordance with Drawing G3 of the Contract Documents, as well as Section 02200 of the Standard Specifications, the Contractor shall provide a 3-foot ring of bank run gravel, or well graded granular material, free of organic matter conforming to the following gradation:

Sieve Size	Percent Retained on Sieve
40	80
200	<10
3" Square	100

Prior to installation of the dry well, URS must submit the source of supply for this material accompanied by the gradation analysis for review and approval.

This comment was not provided to URS until our third submittal which resulted in delays to the approval of this submittal. Further the inclusion of gravel in this submittal is not appropriate.

2. Prior to installation of the dry well, verify that no possible loss of soil from behind or below the shield can occur if shield is suspended above the bottom of excavation.

It is not clear what the true intent of this question is. However, it appears to be more appropriate for a pre-installation QC discussion as opposed to during the submittal phase.

3. We request that the dry well will be installed prior to the building foundation.

This requirement was not made available at the time of bid and affected our plan of installation. All costs incurred to meet this requirement are an extra.

4. In accordance with Section 01653 of the Standard Specifications, construction safety is the sole responsibility of the Contractor. All excavations shall conform to all OSHA and other applicable codes.

URS fully appreciates this. Having to respond to this comment as a part of this submittal is not warranted. All costs incurred to respond to this are an extra.

5. As per the manufacturer's Trench Shield Certifications, soil sloped into the excavation must be constructed in accordance with the suggested slope based on the soil characterizations provided.

What was the point in reiterating this requirement? *Having to respond to this comment as a part of this submittal is not warranted. All costs incurred to respond to this are an extra.*

Submittal 28 – Portland Cement, Masonry Cement, Hydrated Lime and Masonry Sand

Submittal 28 Issued 9/16/02
Returned 24 days later on 10/10/02 Revise and Resubmit

Submittal 28A Issued on 11/07/02
Returned 8 Days later on 11/15/02 Approved as Noted

Submittal 28B Issued on 1/08/03
Returned 24 days later on 2/01/03 Approved

Submittal 28

2. In accordance with Section 04100 of the Specifications, instructions for each manufactured product must be provided.

This information was provided for the masonry cement as part of the technical data sheet included in the initial submittal. It is also evident that neither the Engineer nor URS understood exactly what was required to meet this requirement. Included in Submittal 28A were generic instructions on masonry construction as opposed to the materials themselves. This information, while questioned was in general found to be acceptable to the Engineer. URS expended efforts beyond what should have been expected in trying to respond to this ambiguous requirement.

3. With regard to the information provided with the Portland cement please clarify that the material to be provided will be nonstaining and is of natural color or white.

As Portland cement is typically natural or white, and the fact that no color was indicated; the reviewer should have been able to draw this conclusion without the need for a response.

5. As noted in your cover letter, the sand aggregate proposed to be utilized does not meet the specification for joints less than 1/4-inch which will require 100 percent passing the No. 16 sieve.

The specified joint was not less then ¼" therefore the submitted sand met the specification.

Submittal 28A

1. Selection of the colored mortar cannot be completed until the block sample is provided to our office. Two block samples were left in the field office trailer but it is unclear

which, if either sample, is the proposed block as described in Submittal 42. Please clarify or provide this office with a sample of the proposed block

Two types of block were delivered because one block was an example of the exterior split face block and the second was an example of the interior block.

2. In addition, selection of the colored mortar is dependent on input from the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Transportation (NYSDOT) and New York State Office of Parks, Recreation and Historic Preservation. Due to the time frame involved with the approval process, approval of the colored mortar shall be provided at a later date under separate cover

At the time of bid the potential for delay due to consultation with other state agencies was withheld from the bidders, any impact on schedule or cost resulting from this is an extra.

3. With regard to the installation instructions, please note that Section 04201 of the Specifications provides significant detail on the installation of masonry walls. We are concerned that the installation instructions provided in the submittal is significantly different than the installation instructions required by the Specifications. We request that you review this portion of your submittal and compare it to the Specifications. Once compared to the Specifications, please provide us with the differences between the Specifications and the submittal, and the reason why you would like to request a deviation from the Specifications.

Specification 04220 Concrete Unit Masonry requires that the manufacturers installation instructions be submitted. Specification 04201 Unit Masonry Construction provides installation instructions; the two specification sections conflict and are defective. If URS could not use the manufacturers installation instructions then there should not have been a requirement to provide them. The time and effort to prepare the submittal, respond to comments and any and all delays to the schedule and added costs are an extra.

Submittal 30 – Flow Meter

Submittal 30 Issued 9/16/02
Returned 24 days later on 10/10/02 Revise and Resubmit

Submittal 30A Issued on 11/19/02
Returned 17 Days later on 12/06/02 Approved as Noted

Submittal 30B Issued on 10/15/03
Returned 13 days later on 10/28/03 Approved

Submittal 30 Comments

2. In accordance with Section 15800 of the Standard Specifications, an operation and maintenance manual must be submitted for the proposed flow meter. The referenced submittal must be modified to include this requirement.

Individual O&M manuals are not typically provided separately, but rather in the project O&M manual. Not providing one in this submittal should not have been a reason to delay approval.

3. In accordance with Section 15800 of the Standard Specifications, the flow meter pressure loss rating shall be less than 5 inches of water column at 80 gallons per minute. The proposed flow meter contains a pressure loss rating of approximately 11 inches of water column at 80 gallons per minute, exceeding the specified requirements. Prior to consideration of the proposed flow meter, pressure loss calculations must be provided across the entire extraction and treatment system.

URS provided the specified instrument. If it did not meet the specification then the specification is defective and URS should not have to expend additional monies to fix the Engineer's errors. Requesting the contractor to perform pressure loss calculations across the entire extraction and treatment system is beyond comprehension and once again reflects the Engineer's lack of understanding of the technical requirements of the project as well as the appropriate contractual responsibilities. Any impact on schedule or cost resulting from this is considered to be an extra.

4. In accordance with Section 15800 of the Standard Specifications, the remote register shall be enclosed in a clear polycarbonate plastic cover and shall be tamper proof and not resettable. The referenced submittal must be modified to include this requirement.

URS provided the specified instrument. Had the Engineer adequately performed his responsibilities this question would not have had to be asked.

Submittal 30A

As previously commented, in accordance with Section 15800 of the Standard Specifications, the flow meter pressure loss rating shall be less than 5 inches of water column at 80 gallons per minute. The proposed flow meter contains a pressure loss rating of approximately 11 inches of water column at 80 gallons, exceeding the specified requirements. Prior to final acceptance of the proposed flow meter, as discussed during our meeting on November 22, 2002, pressure loss calculations must provided across the entire extraction and treatment system.

See prior response under #3 above.

Submittal 33 - Precast Wet Well

Submittal 33 Issued 9/20/02
Returned 17 days later on 10/07/02 as Revise and Resubmit

Submittal 33A Issued on 10/04/02
Returned 24 days later on 10/28/02as Approved as Noted

Submittal 33A1 Issued 1/06/03
Returned 18 days later on 1/22/03 as Approved as Submitted

Submittal 33A2 Issued on 01/09/03
This submittal was a notice of fabrication

Submittal 33

2. See attached comments on wet well flat top reinforcement.

URS provided the wet well in accordance with the contract drawing, The 8" thick top slab for the wet well was certified by the manufacturer to meet the H20 loading requirement. Due to defective or incomplete contract drawings URS expended a considerable level of effort and time to coordinate and address the Engineer's concerns with our vendor.

3. The typical 6'-0" diameter manhole shall be revised to show the actual opening that will receive the flat top cover. The diameter of the flat top cover must also be provided

The precast structure dimensions are from the contract drawing, the diameter of the cover was as specified.

4. The heavy-duty aluminum door must be watertight and must have stainless steel hinges and hardware. Aluminum hardware is not acceptable

All hardware was as specified and was clearly indicated on the shop drawing. Had the Engineer adequately performed his review this question would not have been asked. The time required to address the questions and schedule delay are an extra.

Submittal 33A

1. The pipe penetrations for the electrical conduits are not shown on the manhole data sheet, revision 2 dated October 4, 2002. Please coordinate the number, size and location of these pipe penetrations with the Electrical Contractor. The submittal must be modified to include this information.

The electrical contractor and the Engineer had the opportunity to provide this information when the coordination drawing was issued for comment and modification of the electrical contactors work. Requiring URS to add this information at this time forced URS to incur additional expenses and delays.

2. We acknowledge your request to utilize rubber seals for all pipe penetrations on the wet well in lieu of pipe sleeves and Link-Seal modular seals. While we do not object to the use of the rubber seals, please be advised that the seals must be installed on the interior of the wet well and two coats of epoxy resin coatings must be applied to all exposed surfaces of the concrete in the interior of the wet well

Contradictory information was provided in Section 03400, Paragraph 2.1.F. This paragraph required a bitumastic coating which created confusion and additional time and effort on the part of URS to coordinate.

3. The top slab of the wet well must be at least 14 inches in thickness for the H20 loading when a 2'-6" x 4'-0" opening is made in the top slab. The referenced submittal must be modified to meet this requirement.

URS provided the wet well in accordance with the contract drawing, The 8" thick top slab for the wet well was certified by the manufacturer to meet the H20 loading requirement. Due to defective or incomplete contract drawings URS expended a considerable level of effort to coordinate this with our subcontractor.

4. As previously commented, the vault reinforcements must be a minimum of what is shown on the drawings, as provided to you with our previous comments on Submittal 33, to handle the moments and shears in the slab due to the H20 wheel loading. The referenced submittal must be modified to meet this requirement.

URS provided the wet well in accordance with the contract drawing. The 8" thick top slab required for the wet well was certified by the manufacturer to meet H20 loading. Due to defective or incomplete contract drawings URS expended a considerable level of effort and time to coordinate this with our.

Submittal 33A1

1. We have reviewed the proposed reinforcements and have redrawn the wet well roof plan at a larger scale and provided a section through the edge of the opening to clarify the placement of the reinforcements, which is basically the same as the reinforcement proposed. The attached roof plan clarifies our understanding and our expectations on how the reinforcement shall be placed. With regard to the 4'-0" base slab, please refer to our comments provided on the manhole data sheet.

The submittal as originally issued met the submittal and construction requirements and should have been approved. All impacts on the schedule and associated costs are an extra.

3. We have reviewed your calculations with regard to the H20 loading and do not concur with some of the assumptions utilized for the calculation. With the reinforcing shown, we calculate that the roof is capable of supporting a uniform load of 250 pounds per square foot or a concentrated wheel load of 4,000 pounds. We have reviewed the potential wheel loads that the wet well may be subjected to, and in order to not encounter further delays with the project, we have decided to accept a reduced load requirement for this structure, which will still be compatible with the intended use of the facility.

The contract drawings indicated this slab to be 8" thick. URS provided this slab and confirmed it met H20 loading. Further, URS was requested to prepare calculations to demonstrate the H20 loading. Requiring URS to provide calculations was clearly not a contractual requirement and was out of scope for this contract.

Submittal 34 - Sealant

Submittal 34 Issued 09/23/02
Returned 3 days later on 09/30/02 as Revise and Resubmit

Submittal 34A Issued on 1/03/03
Returned 41 days later on 02/13/03as Approved as Noted

Submittal 34 A1 Issued on 01/13/03
Comments on this submittal were included in 34A

Submittal 34B Issued on 03/15/04Warranty
Returned approved

Submittal 34

1. In accordance with Section 07920 of the Standard Specifications, the Contractor must provide information that the sealants and caulking have been tested for compatibility with the substrates specified for conformance to FS-TT-S-0027

URS provided the specified product (Sonoplastic NP 2). Had the Engineer adequately performed his design responsibilities he would not have been insistent that we reiterate this item.

3. In accordance with Section 07920 of the Standard Specification, the guarantee provided must include an agreement to repair or replace sealants for a period of two years.

URS provided the specified material. The guarantee should not have delayed the approval of the submittal.

4. In accordance with Section 07920 of the Standard Specification, the Contractor must provide the type of joint cleaning compound to be utilized.

This was not a submittal requirement. The statement from the specification is to "Provide the type of joint cleaning compound recommended by the sealant and caulking manufacturer". URS should not have had to expend additional resources to respond to this nor, should the approval of the submittal been impacted.

Submittal 34A

1. In accordance with Section 07920 (1.6) of the Standard Specifications a 2-year written guarantee shall be provided agreeing to repair or replace sealants which fail to perform as air-tight and watertight joints; or fail in adhesion, weather resistance, extrusion resistance, migration resistance, stain resistance, or general durability; or

appear to deteriorate in an other matter not clearly specified by the submitted manufacturer's data, as an inherent quality of the material for the exposure indicted.

URS provided the specified material. The guarantee should not have delayed the approval of the submittal.

Submittal 35 - Air Flow Sensor and Differential Pressure Gauge

Submittal 35 Issued 9/25/02
Returned 43 days later on 11/07/02 as Revise and Resubmit

Submittal 35A Issued on 11/14/02
Returned 18 days later on 12/02/02as Approved as Submitted

Comments on submittal 35

URS provided an" or equal" and the submittal was returned revise and resubmit

1. We acknowledge you proposal to substitute the air flow sensor VOLU-probe/FI, as manufactured by Air Monitor Corporation, in place of the specified air flow Sensor (Dwyer Instruments., model DS-300-8). Please be advised, in accordance with Section 15099 of the Standard Specifications, the differential pressure gauge and flow sensor shall be from a single manufacturer. The submittal does not meet this requirement; therefore, we find the proposed substitution to be unacceptable. The submittal must be modified to meet this requirement.

URS acknowledges that we did not provide the two items from a single manufacturer. However, our treatment system manufacturer, who has utilized these components with very good results over the past five years, recommended their use. As such, we believe a qualified reviewer would have not rejected the submittal solely on the described basis, but would have given the proposal reasonable consideration.

3. It is understood that the ducting layout, as provided within the coordination drawings for the referenced project, prohibits the use of Dwyer DS-300-8 in the area specified due to the manufacturer's requirement of 10-pipe diameters before the flow sensor and 5-pipe diameters after the sensor and differential pressure gauge to an alternate location. Please see attached figure for revised locations.

Had the Engineer adequately performed his responsibilities, URS would not have had to call this issue to his attention.

4. In accordance with Section 15099 of the Standard Specifications, the flow sensor and differential pressure gauge shall be permanently installed on the pipe in accordance with the manufacturer's recommended parts and accessories (I. E., fittings, mounting brackets, hardware and tubing) to provide a complete and accurate flow sensing system. The referenced submittal must be modified to include all parts and accessories required to install the flow sensing equipment at the desired location.

This was not a submittal requirement. The specifications required that we "Furnish all manufacturer's recommended parts and accessories ...". URS should not have had to

expend the resources to submit this information nor, should the approval of the submittal been delayed because of it.

5. In accordance with Section 15099 of the Standard Specifications, complete installation, operations and maintenance manuals must be submitted for the references equipment. The submittal must be modified to include this requirement.

Operations and Maintenance manuals are normally provide after the instrument or piece of equipment is approved and as a part of the Project O&M Manual. This should not have delayed the approval of the submittal.

Comments on submittal 35A

3. Although we note that URS will use manufacturer's recommended accessories, we request submittal of catalog cuts for all parts and accessories to install the flow sensing equipment at the desired location.

This was not a submittal requirement. The specifications required that URS "Furnish all manufacturer's recommended parts and accessories ...". URS should not have had to expend the resources to submit this information nor, should the approval of the submittal been delayed because of it.

Submittal 36 - SCH 80 PVC Pipes and Fittings for

Process Equipment Skids

Submittal 36 Issued 9/25/02
Returned 50 days later on 11/14/02 as a Revise and Resubmit

Submittal 36A Issued on 2/05/03
Returned 15 days later on 2/20/03 as an Approved as Noted

Submittal 36B issued 03/07/03
Returned 48 days later on April 24 as an Approved as Noted

Submittal 36C issued 05/02/03
Returned 10 days later as Approved

Submittal 36 Comments

1. In accordance with Section 15052 of the Standard Specifications, complete layout and installation drawings with clearly marked dimensions shall be submitted. Piece numbers which are coordinated with the tabulated pipe layout schedule shall be clearly marked. Scale and size of the drawings shall conform to the Contract Documents. Piping layout drawings shall include the following information on pipe supports: location, support type, hanger rod size, insert type and the load in pounds.

URS responded to Dvirka and Bartilucci on January 28, 2003. In our correspondence we noted that Specification Section 15052 was not applicable to this submittal. No further comments were received related to this section. It is therefore concluded that the Engineer misapplied this specification.

2. In accordance with Section 15052 of the Standard Specifications, the weight of all component parts shall be provided for approval.

This information was provided in the original submittal.

3. In accordance with Section 15052 of the Standard Specifications, all welds to be made in the field shall be prominently and individually marked on the Shop Drawings with a note, such as "field weld" and the pertinent weld data in accordance with AWS standards.

This submittal was for PVC pipe. Had the Engineer been familiar with this work he would have understood there were no welds to be made (other then chemical welds).

4. In accordance with Section 15064 of the Standard Specifications, detailed procedures to be used for jointing and installing the piping system must be submitted for approval. The referenced submittal must be modified to include this requirement. Please be advised, piping system installations shall be in strict compliance with the appropriate sections of Division 15 of the Standard Specifications.

This submittal was for PVC pipe. As this is such basic construction we did not feel any information was required on this. In fact, all that was ultimately submitted on this issue was the type of cement and primer.

5. In accordance with Section 15064 of the Standard Specification, a bill of materials indicating material composition of pipe, pressure rating, nominal size and its location on the coordination drawings must be submitted for approval. The referenced submittal must be modified to include this requirement.

Composition, pressure rating and nominal size was all included in the original submittal. As there are many field variables that make a detailed location drawing impractical on all components, it was agreed that this information would be provided on the as-builts.

6. In accordance with Sections 15052 and 15064 of the Standard Specifications, the pipe manufacturer must submit certificates of compliance with referenced standards, as listed in paragraph 1.2 of Sections 15052 and 15064, for approval. The referenced submittal must be modified to include this requirement.

Applicable standards were referenced in the original submittal and noted as in compliance with appropriate ASTM Standards.

7. In accordance with Section 15064 of the Standard Specifications, PVC pipe shall be Type 1, Grade 1, Schedule 80, conforming to ASTM D1785. The submitted pipe is Schedule 40 and does not meet this requirement.

The submitted information was clearly Schedule 80, each page of the catalogue cuts listed Schedule 80 in its title.

8. In accordance with Section 15064 of the Standard Specifications, Teflon filled or natural rubber gaskets shall be used for flanged fittings. The submittal does not show the type of gaskets URS proposes to use. The submittal must be modified to include this requirement.

Providing the information requested by this question is not a submittal requirement according to Specification section 15064 paragraph 1.3 Submittals, therefore this question exceeded requirements.

9. In accordance with Section 15064 of the Standard Specifications, backup flanges shall be a minimum of 1/8-inch thick. Type 304 stainless steel. Additionally, connecting bolts for PVC flanges shall be Type 304 stainless steel. The referenced submittal must be modified to meet this requirement.

As issued in submittal 36A, stainless steel backup flanges are not available for PVC flanges, therefore this is a defective specification.

10. In accordance with Section 15064 of the Standard Specifications, contractor shall submit for approval to the engineer type, grade and strength of pipe required to meet the specified service conditions. The submittal does not show this requirement. The submittal must be modified to include this requirement.

URS provided the type of pipe specified and provided the appropriate information in our submittal. Further, this is not a contractor's responsibility. The system was designed by the Engine; why should URS be requested to re-engineer this work.

11. In accordance with Section 15064 of the Standard Specification, piping and fittings shall have ultraviolet inhibitor pigment to resist ultraviolet deterioration. The submittal does not show this requirement. The submittal must be modified to include this requirement.

The requirement to provide ultraviolet inhibitor pigment is in Part 2, Paragraph 2.2 F which is not a submittal requirement. Further, it was concluded that all pertinent piping was inside and did not require the ultraviolet inhibitor. Had the Engineer adequately performed his responsibilities and understood the requirements of the project he would not have specified this, nor would he have commented on it.

12. In accordance with Section 15064 of the Standard Specification, spacing of supports shall be in accordance with the manufacturer's published values at the maximum design operating temperature of the pipe. The submittal does not show this information and must be modified to include this requirement.

This is not a submittal requirement. It is a part of the Detailed Requirements section and is purely a QC function.

13. In accordance with Section 15064 of the Standard Specification, on long runs of piping, guides will be used to maintain alignment and reduce chance of elastic failure of pipe. Space guides as recommended by manufacturer are not included in this submittal. The submittal must be modified to include this requirement.

Again, this is not a submittal requirement. It is a part of the Detailed Requirements section and is purely a QC function.

14. In accordance with Section 15064 of the Standard Specification, the contractor shall use expansion joints to take up pipe expansions due to thermal movement. At this point, we assume URS is going to use expansion joints at the pressure blower. We request URS to confirm whether they propose to use any expansion joints. If so, URS shall submit information on the flexible connectors for approval to the engineer.

Again, this is not a submittal requirement. It is a part of the Detailed Requirements section and is purely a QC function.

15. In accordance with Section 15064 of the Standard Specifications, pipe shall not be installed when temperature is less than 60 degrees Fahrenheit. We request URS to provide manufacturer's recommendations and incorporate this information in a plan showing how to maintain this temperature requirement inside the treatment building during pipe installation in the winter period.

This is not a submittal requirement and far exceeded our scope of work.

17. In accordance with Section 15052 of the Standard Specifications, the engineer shall be notified, at a minimum, 48 hours in advance of pipeline testing.

This is not appropriate for a submittal comment. URS should not have had to expend the resources to respond to this.

18. In accordance with Section 15052 of the Standard Specifications, each pipe and fitting shall be clearly marked with a designation, which shall conform to the designations shown on Shop Drawings. The submittal does not include this information.

As noted, Section 15052 was not applicable to this work. Further, for this small job(less then 200 L.F. of PVC piping in the building) was it truly necessary to hold up the approval of the submittal for this information. The requirement to clearly mark *each pipe is in Paragraph 2 Products 2.3 Identification item A. it is not a submittal requirement it is for information only.*

19. In accordance with Section 15052 of the Standard Specifications, pipe identification markers and arrows will be furnished as specified in Section 09900 - Painting and Division 15 of the Standard Specifications. The submittal does not include this requirement. This submittal must be modified to include this requirement.

The requirement for identification markers and arrows for each pipe was not a submittal requirement. Further, Section 15052 was not an applicable specification.

Submittal 36A

2. Based on a conversation held with Ms. Anne Fung on February 14, 2003, and in accordance with the referenced submittal, it is understood that URS will comply with Section 09900 of the Specifications regarding pipe identification markers, arrows and pipe designation.

The requirement for identification markers and arrows for each pipe was not a submittal requirement. Further, Section 15052 was not an applicable specification.

3. As commented in a letter to your attention dated February 14, 2003, responding to Request for Information No. 10, we take no exception to the use of Spears Molded Class 150 PVC Flange in lieu of the stainless steel backup flange as specified in Section 15064(2.1)© of the Standard Specifications.

As URS noted in Submittal 36A stainless steel backup flanges are not available for PVC flanges, therefore this is a defective specification and the level of effort researching this issue, preparing RFI Number 10 and responding to this is an extra.

Submittal 36B

1. In accordance with Section 15094 of the Standard Specifications, the contractor shall submit for approval locations of all hangers and supports. We request URS to submit a drawing indicating the final locations of all hangers and supports in accordance with the referenced standard of the aforementioned Section after placement of the equipment within the treatment building.

URS acknowledged and provided the information requested. However, this information should have been requested in response to submittal 36 if the submittal was deficient. Addressing this

issue on the 3rd round of submittals is late and complicates completion of a submittal and impacts the schedule. Delays and extra work caused by the delay in review of this submittal is an extra.

2. In accordance with Section 15094 (1.2)© of the Standard Specifications, the contractor shall comply with the applicable reference standards for pipe supports and hangers. We request URS to confirm that they will meet this requirement.

Confirming compliance with the specifications is a QC function and is recorded in the project logs, to certify that the work will be completed in accordance with the contract documents is redundant, signing the contract is certifying that you intend to do the work in compliance with the specifications.

3. Please be aware that in accordance with Section 15094 of the Standard Specifications, all pipe supports, except stainless steel and plastic-coated steel, shall be prepared and painted in accordance with the requirements of Section 09900 of the Standard Specifications.

This is a meaningless comment and adds to confusion and delays. Responding to this question is an extra.

5. In accordance with Section 15068 of the Standard Specifications, all hose lengths shall have quick-connect hose shank couplers hydraulically banded with stainless steel clamps, rated at 50 psi. Please confirm.

Confirming compliance with the specifications is a QC function and is recorded in the project logs, to certify that the work will be completed in accordance with the contract documents is redundant, signing the contract is certifying that you intend to do the work in compliance with the specifications. Responding to this question is an extra.

Submittal 36C

1. The support for the check valve in the valve vault shall be furnished in accordance with the requirements of the Contract Documents.

This is a meaningless comment and adds to confusion and delays. Responding to this question is an extra.

2. All Pipe supports and hangers shall adhere to section 15094 of the Standard Specifications.

This is a meaningless comment and adds to confusion and delays. Responding to this question is an extra.

3. Please be aware that all pipe supports and hangers shall be mounted to a firm foundation or provide foundation if required.

This is a meaningless comment and adds to confusion and delays. Responding to this question is an extra.

Submittal 37 – Reinforcing Steel Plan

Submittal 37 Issued 10/09/02
Returned 37 days later on 11/14/02 as a Revise and Resubmit

Submittal 37A Issued on 12/03/02
Returned 15 days later on 12/18/02 as an Approved as Noted

Submittal 37B issued on 02/18/03
Returned 8 days later as an Approved as Noted

Submittal 37C issued 03/07/03
Returned 4 days later as Approved

Submittal 37 Comment Review

2. Please clarify what portion of the project the concrete mix design provided applies to. The information provided in this submittal is identical to the information provided in Submittal 13E for the fence and even references Ponderosa Fence.

As per the specification requirements the concrete mix design was submitted with the reinforcing details. Based on this information it should have been obvious what portion of the project this mix design applied to. Further, there is only one concrete design specified. Therefore, the location was not relevant.

3. With regard to the concrete mix design, please clarify that the air entraining admixture is in accordance with ASTM C260 Type F.

Type F refers to the type of admixture, i.e. air entraining admixture is Type F. Had the Engineer had the appropriate knowledge to adequately review this submittal he would not have asked this question.

4. In accordance with Section 03300 of the Standard Specifications, the contractor shall establish concrete proportions on the basis of laboratory trial batches in conformance with Chapter 4, ACI 318-83. Please confirm that the testing provided complies with the referenced standard.

URS provided a copy of the Trial Batch Report/Design Mix from Seville Central Mix. The submittal requirement was to submit "Concrete mix design". This submittal met that requirement. The citation noted above was from Paragraph 2.6 Proportioning which states that the trial batches be in conformance with Chapter 4, ACI 318-83. URS should not have had to expend resources responding to this.

5. In accordance with Section 03300 of the Standard Specifications, trial design mixes of each class of concrete required shall be made in accordance with ASTM C39 by the testing laboratory and four standard cylinders shall be made in accordance with ASTM Cl 92. Please confirm that the testing provided complies with the referenced standard.

There was only one class of concrete, 4000 psi. There were four tests indicated on the submittal. Had a qualified Engineer reviewed this information he would not have asked this question.

8. The following note must be added on Drawing No. D: "Unless otherwise approved or shown on the drawings, all splices shall be staggered such that not more than 50% of bars are spliced at any location". The submittal must be modified to include this information

This requirement is not in the specifications. If it is an ACI requirement, we are required to be in conformance with the entire standard as it is applicable, why was this one called out? In addition, it is not clear what the actual meaning of the statement is – "50% of bars are spliced at any location", how big of an area is a location?

Submittal 37A

1. Please confirm that the wire mesh reinforced steel shall conform to ASTM A185, as specified in Section 03200 of the Standard Specifications.

Confirming compliance with the specifications is a QC function and is recorded in the project logs. This is not a submittal requirement and responding to this question should not have been required.

2. In accordance with Section 03200 of the Standard Specifications, satisfactory test certificates shall be furnished to the Engineer on any shipments as required.

Compliance with the specifications is a QC function and is recorded in the project logs. This is not a submittal requirement and responding to this question should not have been required.

3. In accordance with Section 03200 of the Standard Specifications, concrete shall not be placed until the reinforcing steel is inspected and permission for placing concrete is granted by Engineer. Additionally, no foundation, slab or pavement concrete shall be placed until the depth and character of the foundation soils have been inspected and approved by the Engineer

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

4. In accordance with Section 03300 of the Standard Specifications, no concrete shall be placed while the air temperature is below 40 degree Fahrenheit without the permission of the Engineer. We acknowledge the following:

a. Seville Central Mix of Freeport, NY will be supplying a 4,000-psi Air Entrained Design Mix in accordance with ACI Standards.
b. Triple H Concrete Inc. of Ronkonkoma, NY will be supplying a 4,000 psi Design Mix in accordance with ACI Standards for temperatures 30 degrees Fahrenheit and rising.

Please be advised, at a minimum of 48 hours prior to the placement of any concrete, URS must notify the Engineer of the anticipated placement date, anticipated ambient temperature at time of placement and intended design mix.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

5. Please be advised, after placing and finishing concrete, concrete shall be cured and protected in accordance with Section 3300 (3.7) of the Standard Specifications, as well as in accordance with ACI 301, Chapter 12.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

6. Please be advised all formwork shall be constructed in accordance with Section 3300 (3.7) of the Standard Specifications.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

7. Please be advised removal of formwork and shoring shall be in accordance with Section 3300 (3.8) of the Standard Specifications.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

8. In accordance with Section 03300 (3.9) of the Standard Specifications, an accurate record shall be maintained of the dates of concrete placing, the exact location of placement and the dates of formwork removal. These records shall be available for inspection at all times on the job and two copies shall be furnished to the Engineer upon completion of the concrete work.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

9. In accordance with Section 03300 (3.9) of the Standard Specifications, the subgrade of the slab shall be well drained and of adequate and uniform load bearing nature. The in-place density of the subgrade soils shall be at least 95 percent in accordance with ASTM D698.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

10. Please be advised concrete finish shall be provided in accordance with Section 3300 (3.13), as well as Section 09821 of the Standard Specifications.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

11. Please be advised, at the Department's request, please provide a cost estimate for field quality control testing (compression test cylinders) in accordance with Section 3300, Part 3 (3.1) of the Standard Specifications. Upon review and approval, this item will be addressed as a Change Order item.

This request is not appropriate for a submittal review. It should have been handled under a separate cover as resolution of it could have affected the acceptance of this submittal.

Submittal 37B

1. In accordance with Section 03300 (3.3)(A) of the Standard Specifications, if permission is granted by the Engineer for concrete mixing while the air temperature is below 40 degrees Fahrenheit, the work shall be performed in accordance with ACI 306, "Recommended Practice for Winter Concreting," and the aggregates or water, or both if required, shall be heated and the temperature of the concrete, when placed, shall not be less than 70 degrees Fahrenheit or more than 100 degrees Fahrenheit.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this. Additionally, why is brought up in our third submittal.

2. In accordance with Section 03300 (3.7)(E)(2) of the Standard Specifications, when the atmospheric temperature is 40 degrees Fahrenheit and below, the concrete temperature shall be maintained between 50 and 70 degrees Fahrenheit throughout the entire curing period. When necessary, the Contractor shall make arrangements in compliance with ACI 306 before concrete placement for heating, covering, insulation or housing, as required to maintain the specified temperature and moisture conditions continuously for the concrete curing period.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this. Additionally, why is brought up in our third submittal.

3. In accordance with Section 03300 (3.7)(I) of the Standard Specifications, after the concrete has been placed, it shall be enclosed and protected until 70% of the designated strength has been attained, as indicated by the cylinder tests.

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this. Additionally, why is brought up in our third submittal.

4. As indicated in a letter to Mr. Terrill Stammler dated January 29, 2003, the Department has decided to retain an independent laboratory to perform the testing as described in Section IX - Supplementary Conditions (C)(l)(a) of the Contract Documents. Please be advised that, in accordance with Section 03300 (3.1)(A) of the Standard Specifications, the Contractor shall give the Engineer a minimum of twenty-four (24) hours' notice prior to concrete placement. Furthermore, the Contractor shall be required to furnish labor to the Engineer for assisting in preparing test cylinders for testing

What was the purpose of this comment? This is a field QC issue. URS should not have had to expend resources to respond to this.

Submittal 41 – Aluminum Grating

Submittal 41 Issued 11/20/02
Returned 16 days later on 12/6/02 as an Approved as Noted

Submittal 41A Issued on 1/7/03
Returned 10 days later on 1/18/03 as Approved as Noted

Submittal 41B Issued on 10/17/03
Returned 41B 47 days later on 12/03/03 Approved

Submittal 41 Review comments

1. In accordance with Section 05532 of the Standard Specifications, the Contractor must comply with the applicable reference standards as shown in Paragraph 1.2 of the referenced Section. The submittal does not show this information and must be modified to include this information.

Requiring submission of this data is a misapplication of the specifications and is an administrative changed condition resulting in extra cost to URS. This is not a submittal requirement, nor is it typical in the industry to acknowledge compliance with reference standards and responding to this question resulted in URS expending additional resources.

2. In accordance with Section 05532 of the Standard Specifications, the aluminum grating shall not be fabricated until the Contractor submits field measurements of the openings and manufacturer's drawings, based upon the Contractor's measurements, have been approved by the Engineer. Although it is understood that URS provided a drawing showing the dimensions of the grating, final approval for fabrication shall be provided after field measurements have been taken and the manufacturer's drawings have been submitted.

The delay in field measurements were a direct result of URS having to wait until the precast concrete wet well could be approved and constructed (see Submittal 33).

3. In accordance with Section 05532 of the Standard Specifications, the maximum aluminum fiber stress shall be 12,000 psi. We request URS to provide additional information showing the aluminum fiber stress.

The drawings clearly indicate that the depth of the aluminum grate is 11/2 inches. To meet the above criteria the actual depth of the aluminum grate is 21/2 inches. This discrepancy resulted in additional cost to URS for engineering, field work, materials and delays.

4. In accordance with Section 05532 of the Standard Specifications, the aluminum finish shall be clear anodized with a minimum coating of 0.0008 inch in accordance with Aluminum Association Standard A41. Please confirm that the coating shall be provided as specified above.

Confirming compliance with the specifications is a QC function and is recorded in the project logs. Requiring submission of this data is a misapplication of the specifications and is an administrative changed condition resulting in extra cost to URS.

Submittal 42- Masonry Accessories – Concrete Masonry Units

Submittal 42 Issued 10/30/02
Returned 15 days later on 11/14/02 as a Revise and Resubmit

Submittal 42A Issued on 1/8/03
Returned 24 days later on 2/01/03 as Approved

Submittal 42 Review comments

1. The submittal indicates that block samples were provided, however, our office did not receive the block samples. Please clarify if the block samples were submitted to our office for our review.

As the Engineer noted in Submittal 28A, he was in receipt of the block samples. Submittals 28A and 42 took place during the exact timeframe. The fact that this question was raised is indicative of the confusion on the Engineer's part.

2. With regard to the certification, the certification must indicate that the material provided complies with all of the specified requirements. Although some of the specified requirements are included in the certification, not all of the referenced standards are included in the certification. Please modify the certification to include all required standards.

This question is flawed and resulted in its defective application. The certifications are for different types of materials, some of which were applicable and some are not. This was pointed out in submittal number 42A. This issue resulted in an additional expenditure of resources beyond our scope of work.

3. In accordance with Section 04220 of the Specifications, please provide additional information on handling, storage and protection of the concrete masonry unit.

While this was indeed a specified requirement our response (which was acceptable) was as follows: The units will be brought to site on pallets. They will remain on the pallets until they are being used. In the interim, we will cover the block cubes with plastic.

While on a large masonry project this requirement may have been relevant, but was it really necessary to go through this exercise for this small project?

4. With regard to the installation instructions, please note that Section 04201 of the Specifications provides significant detail on the installation of masonry walls. We are concerned that the installation instructions provided in the submittal are significantly different than the installation instructions required by the Specifications. We request that you review this portion of your submittal and compare it to the Specifications. Once compared to the Specifications, please provide us with the differences between the

Specifications and the submittal and the reason why you would like to request a deviation from the Specifications.

There is a conflict between specification section 04201Unit Masonry Construction and section 04220 Concrete Unit Masonry. Per Comment 4 above, URS was directed to compare the manufacture's recommended installation instructions and the installation instructions in the specification. Specification Section 04220 Paragraph 1.3 B. directs URS to submit manufacturers data for approval to include instructions for handling, storage, installation, and protection of each type of concrete masonry unit. URS followed the submittal requirements and then was directed to perform additional work. This is out of scope and resulted in a significant expenditure of resources responding to this question.

Submittal 43 – Loose Fill Insulation

Submittal 43 Issued 11/04/02
Returned 10 days later on 11/14/02 as Revise and Resubmit

Submittal 43A Issued on 12/02/02
Returned 14 days later on 12/16/03 as Approved as Noted

Submittal 43B Issued on 1/24/03
Returned 43B 5 days later on 1/29/03 Approved

Submittal 43 Review Comments

1. In accordance with Section 07210 of the Standard Specifications, the submittal should include data substantiating that the materials comply with the specified reference standards. Please provide additional information showing that the proposed loose fill insulation meets or exceeds the requirements and regulations as listed in Section 07210-1.2, Quality Assurance. The submittal must be modified to include this information.

URS provided Perlite insulation as per the specifications. The technical data sheet provided did not reference all the standards noted in 1.2 because all are not relevant to this application. As the Paragraph 1.2.C.1 states "Comply with applicable provisions". The specification correctly does not require that absolutely all standards be met as the Engineer has required above.

2. In accordance with Section 07210 of the Standard Specifications, the thermal conductivity, K-value at 75 degree Fahrenheit shall be at least 0.35. Although the submittal shows a graph with thermal conductivity of expanded Perlite, no information is provided showing the density of the material. The submittal must be modified to include this information.

The specification requires that the recommendations of the manufacturer be followed and those of the Perlite Institute, Incorporated be complied with. The technical data sheet provided clearly indicates the recommended density range to be 2 – 11 lbs/ft^3. Within this range it is evident from the graph that the K-value of .35 can easily be obtained.

Submittal 43A Review Comments

1. As commented previously, the proposed material must comply with the reference standards as listed in Section 07210 of the Standard Specifications. Please be advised, while it is understood that URS intends to supply loose Perlite, there are multiple manufacturers of this material; therefore, it is important that all parameters of the specifications are adhered to. However, after reviewing the proposed material with a technical representative of the manufacturer, The Schundler Company, we find the material to be acceptable.

The material was concluded to be acceptable. URS should not have had to expend resources to respond to this.

2. In accordance with Section 07210 of the Standard Specifications, the loose fill insulation shall be applied to fill voids of all new concrete brick walls (exterior only).

Confirming compliance with the specifications is a QC function and is recorded in the project reports. Requiring acknowledgement of this during the submittal phase is a misapplication of the specifications and is an administrative changed condition resulting in extra cost and delays to URS.

3. In accordance with Section 07210 of the Standard Specifications, insulation which has become wet, damaged or deteriorated, as inspected and determined by the Engineer, shall be promptly removed from the job.

Confirming compliance with the specifications is a QC function and is recorded in the project reports. Requiring acknowledgement of this during the submittal phase is a misapplication of the specifications and is an administrative changed condition resulting in extra cost and delays to URS.

Submittal 45 – Hand Operated Hoist

Submittal 45 Issued 11/7/02
Returned 8 days later on 11/15/02 as an Approved as Noted

Submittal 42A Issued on 1/13/03
Returned 19 days later on 2/6/03 as Approved

Submittal 45 Review comments

1. In accordance with Section 14310 of the Standard Specifications, operation and maintenance manuals for the hoist must be submitted. We request URS to provide this information.

Operations and maintenance manuals are typically submitted at the end of the construction phase and should not have affected the approval of this submittal.

2. In accordance with Section 14310 of the Standard Specifications, the hoist cable shall be 1/4-inch diameter. Type 316 stainless steel and shall be a minimum of 20 feet long. Please confirm that the diameter, material and length of the hoist cable meet these requirements.

URS provided the specified manufacturer and model number. Had the Engineer properly performed his responsibilities he would not have requested this information.

3. In accordance with Section 14310 of the Standard Specifications, the winch shall be of marine grade construction. Please confirm that the winch to be supplied meets this requirement.

URS provided the specified manufacturer and model number. Had the Engineer properly performed his responsibilities he would not have requested this information.

Submittal 45A

1. The submitted operation and maintenance manual was not for the approved hand-operated hoist, as manufactured by Flygt Corporation, but rather for a hand-operated hoist as manufactured by Halliday Products Inc., Series DS. As previously requested, an operation and maintenance manual shall be submitted for the approved hand-operated hoist, as manufactured by Flygt Corporation.

URS provided a letter by Pumping Services the Flygt distributor describing why this substitute was utilized. O&M information was provided with this submittal.

2. As previously commented, in accordance with Section 14310 of the Standard Specifications, the hoist cable shall be '/4-inch diameter. Type 316 stainless steel and

shall be a minimum of 20 feet long. Please confirm that the diameter, material and length of the hoist cable meet these requirements.

This submittal provided the requested information. Had the Engineer adequately reviewed this submittal, this question would not have been asked.

3. As previously commented, in accordance with Section 14310 of the Standard Specifications, the winch shall be of marine grade construction. Please confirm that the winch to be supplied meets this requirement.

This submittal provided the requested information. Had the Engineer adequately reviewed this submittal, this question would not have been asked.

Submittal 46 – Containment Island

Submittal 46 Issued 11/7/02
Returned 8 days later on 11/15/02 as a Revise and Resubmit

Submittal 46A Issued on 12/11/03
Returned 22 days later on 1/2/03 as Approved as Noted

Submittal 46B Issued on 02/05/03
Returned 7 days later as Approved

Submittal 46 Review Comments

1. In accordance with Section 15600 of the Standard Specifications, operation and maintenance manuals shall be submitted in accordance with Division 1.

O&M Manuals are typically submitted at the end of the construction phase. This item should not have held up the approval of this submittal.

3. In accordance with Section 15600 of the Standard Specifications, the contractor shall submit manufacturer's certifications stating that the equipment meets the general intent of the Specifications, a list of all deviations from the Specifications, and that the equipment has been constructed and installed properly. The submittal does not include this information. The submittal must be modified to include this requirement.

This question is flawed as equipment that has not been constructed and installed can't be certified that it has been constructed and installed properly. This issue resulted in a significant expenditure of resources and delayed the approval of the submittal.

5. In accordance with Section 15600 of the Standard Specifications, the Containment Island shall be equipped with a closed loop filtration system comprised of a recirculation pump and dual filter housing. Filters shall include a 3 3/16-inch wide mesh screen and dual filter housing carrying 150 and 50-micron-filter media. The submittal does not include information on the dual filter housing and filter media. The submittal must be modified to meet this requirement.

URS provided the specified containment island. Had the Engineer properly performed his design responsibilities this question would not have been asked and URS would not have had to expend resources to respond to it.

6. In accordance with Section 15600 of the Standard Specifications, the recirculation pump shall be provided with a pressure switch that shuts down the pump when the pressure across the filter housing rises above manufacturer's preset limits. The control panel shall have a "change filter" indicating lamp. The submittal does not indicate that these items will be provided. The submittal must be modified to include this requirement.

URS provided the specified containment island. Had the Engineer properly performed his design responsibilities this question would not have been asked.

7. Please provide a layout drawing showing the control panel location for the Containment Island.

The control panel is placed in one location on the containment island. URS provided the specified containment island. Had the Engineer properly performed his design responsibilities this question would not have been asked.

8. Please confirm that all electrical wiring on the unit shall be routed through liquid-tight flexible conduits and fittings.

This is a QC issue. URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked.

9. Please confirm that the control panel enclosure for the Containment Island shall be rated NEMA 12

This is a QC issue. URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked.

10. In accordance with Section 15600 of the Standard Specifications, a stainless steel water level sensor shall be provided. The submittal does not show this information. The submittal must be modified to include this requirement.

URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked.

11. The information on the Containment Island provided is the submittal is difficult to read. Please provide copies of better quality that confirm the requirements of the Specifications have been met.

Admittedly, the quality of the technical data sheet could have been better. However, URS was supplying the specified item. Had the Engineer properly performed his design responsibilities the need for a cleaner copy should not have been required.

12. We request URS to confirm that the electrical ratings for the pressure washer are: 208 volt, 3 phase.

The cut sheet provided was for the specified make and model. The options for the electrical rating were also on the cut sheet, insuring that the specified electrical rating was supplied is a purchasing and QC issue. Responding to this question is redundant and required extra manhours for URS to respond to.

13. Please be aware that the utility sink shall be equipped with a 1 ½-inch diameter p-trap.

URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked.

14. In accordance with Section 15600 of the Standard Specifications, a faucet, brass body, clamp type mounting with 4-inch center distance and overhead threaded union inlets, as manufactured by E.L. Mustee and Sons, Inc. (part No. 90.600) shall be submitted. Although the faucet block as specified has been submitted, the clamp-on faucet was not included. Please confirm that the faucet part number 90.600, as manufactured by E.L. Mustee and Sons, Inc. shall be installed.

This item was clearly included in the original submittal.

15. Please be aware that the flexible power and control cords for the Sink-paQ pump shall be oil and water resistant, with a watertight seal at the motor. Additionally, power and control cords shall be supplied in a continuous length and shall be wired as specified and shown on the drawings with no intermediate splicing.

This is a QC issue. URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked.

16. We request URS to confirm that the electrical ratings for the jet pump are: 115 volt, 1 phase, ¾ horsepower.

The specified item was provided the cut sheet had two options for the electrical rating a 115v and a 230v insuring that the specified electrical rating was supplied is a purchasing and QC issue. Responding to this question is redundant and required extra manhours and a delay to the approval of this submittal.

Submittal 46A

6. As commented previously, please confirm that the flexible power and control cords for the Sink-paQ pump shall be oil and water resistant, with a watertight seal at the motor. Additionally, please confirm that power and control cords shall be supplied in a continuous length and shall be wired as specified and shown on the drawings with no intermediate splicing.

URS was supplying the specified item. Had the Engineer properly performed his design responsibilities this question would not have been asked. Additionally, this is a QC issue and should not have impacted the approval of this submittal.

Submittal 47 – Sump Pump

Submittal 47 Issued 11/06/02
Returned 9 days later on 11/15/02 as an Approved as Noted

Submittal 47A Issued on 2/5/03
Returned 7 days later on 2/01/03 as Approved

Submittal 47 Review comments

1. Please be aware that the flexible power and control cords for the sump pump shall be oil and water resistant, with a watertight seal at the motor end. Additionally, power and control cords shall be supplied in a continuous length as shown on the drawings with no intermediate splicing.

URS provided the specified make and model of pump. Had the Engineer adequately performed his responsibilities this comment would not have been made.

2. In accordance with Section 15999 of the Standard Specifications, a sealed float type mercury switch shall be supplied to control sump pump operation in automatic mode. The specified float switch has not been submitted. The submittal must be modified to include this requirement.

URS provided the specified make and model of pump. Had the Engineer adequately performed his responsibilities this comment would not have been made.

3. In accordance with Section 15999 of the Standard Specifications, the following spare parts shall be furnished: one complete set of bearings, one impeller, one replacement quantity of oil and a one complete shaft seal.

This is not a submittal requirement and it should not have affected the approval of this submittal. Having to expend resources to respond to this resulted in additional costs and delays to the project.

4. Please be advised that, in accordance with Section 15999 of the Standard Specifications, the equipment shall be guaranteed for a period of 1 year from the date of final acceptance thereof, against defective materials, designs and workmanship. Upon receipt of notice from the Department of failure of any part of the equipment during the guarantee period, the affected part or parts shall be replaced promptly at no expense to the Department.

The warranty is clearly indicated in the initial submittal. Had the Engineer adequately reviewed this submittal this question would not have been asked.

5. Please be advised of the requirements of Division 1 regarding the submittal of equipment certification, guarantees, shop drawings, and operation and maintenance manuals.

This is not a submittal requirement. Having to expend resources to respond to this comment resulted in additional costs to URS.

Submittal 48 – Extraction and Treatment System Controls

Submittal 48 Issued 11/6/02
Returned 30 days later on 12/06/02 as a Revise and Resubmit

Submittal 48A Issued on 12/18/03
Returned 16 days later on 1/3/03 as Approved as Noted

Submittal 42B Issued on 01/08/03
Returned 12 days later as Approved

Submittal 48 Review Comments

1. The control panel assembly and wiring shall be constructed in accordance with Underwriters Laboratories UL508

This requirement is in section 1.4 of the specifications and is a QC issue, not a submittal issue. Responding to comments on QC in the submittal process is time consuming and is not taken into consideration when preparing the estimate to prepare submittals. Responding to this type of issue is a result of a defective application of the specifications.

2. There shall be a nameplate permanently affixed to the enclosure door indicating the order reference number, and the name, address and telephone number of Carbonair.

See response under #1 above.

3. All wiring shall have a permanent number marking on each end to match the control schematic drawings.

See response under #1 above.

10. The air flow switch safety shall have its own adjustable time delay (user adjustable) for low air flow condition. If air flow is not detected for the selectable time period, a low air flow alarm shall be initiated. Indicate recommended time delay setting.

According to the specifications, URS was not required to provide a recommended time delay setting. This submittal should have been returned as an "Approved as Noted" it is questions like this that delayed approval and ordering the equipment. Therefore this question contributed to the delays the time to revise this submittal and any and all delays are an extra.

11. Indicate recommended run time for the pressure blower after shut down of the system. The specification requires a 0-15 minute adjustable period.

See response for #10 above.

14. Submit catalog cuts of control panel enclosure. The enclosure shall be gasketed and minimum 16-gauge steel.

URS provided the information requested in section 1.3 of the specifications, which does not call for shop drawings of the control panel; only the physical arrangement of the controls and wiring schematics.

16. Selector switches shall be oil tight.

URS provided the information requested in section 1.3 of the specifications, which does not call for confirmation of complying with one subpart of Part 2 of the specifications.

17. Each alarm condition shall be furnished with one normally open and one normally closed spare contact.

The original submittal exceeded the specified requirements.

18. Furnish one normally open and one normally closed common alarm contact. The common alarm shall encompass all of the individual alarms.

The original submittal met the specified requirements.

19. If the nameplates on the panel exterior are affixed with screws, screws shall be stainless steel.

This comment is not required and responding to it is extra, this requirement is in paragraph 3.3.B of Part 3 Execution, the contractor should not be penalized for not repeating every phase in the specifications, meeting a subsection such as this is a QC requirement not a submittal requirement.

Submittal 49 – Rigid Insulation

Submittal 49 Issued 11/07/02
Returned 7 days later on 11/14/02 as Approved as Noted

Submittal 49A Issued on 1/23/03
Returned 6 days later on 1/29/03 as Approved

1. In accordance with Section 07220 of the Standard Specifications, submittal must include data substantiating that the materials comply with specified requirements of this Section.

URS submitted the specified product. Had the Engineer adequately performed his responsibilities, the resources URS expended to respond to this comment would not have been required.

Submittal 50 – Flygt Submersible Pumps

Submittal 50 Issued 11/25/02
Returned 22 days later on 12/16/02 as Approved as Noted

Submittal 50A Issued on 1/23/03
Returned 23 days later on 2/14/03 as Approved as Noted

Submittal 50A1 Issued on 04/07/03
Returned 14days later as Approved

Submittal 50B Issued on 03/06/03
Returned 3 days later Approved

Submittal 50C Issued on 03/20/03
Returned 19 days later Approved

1. In accordance with Section 15160 of the Standard Specifications, the Contractor must submit certified P.E. stamped bearing life calculations. The submittal must be modified to include this requirement.

URS submitted the specified make and model number (Flygt CP3085). It is incumbent upon the Engineer to be familiar with the equipment they specify. This requirement cannot be met as the specified pump is a European pump and they do not have a P.E. designation. In addition, it is the standard of the industry to provide bearing life calculations for custom-built pumps not standard products. This requirement is a defect in the specification in which URS expended significant resources and delayed the project.

2. In accordance with Section 15160 of the Standard Specifications, the following spare parts must be furnished: two spare impellers with hex nut and washers, two complete sets of 0-rings, two sets of upper and lower bearings, and two mechanical seal assemblies.

The requirement to supply the above listed spare parts is in Part 3 Execution Section 3.3 Schedules A. Spare Parts. This section does not require submittal. Requiring URS to respond to this during the submittal phase resulted in the expenditure of additional resources and delays.

3. Please be advised all nuts, bolts, washers, and other fastening devices supplied with the pumps shall be stainless steel.

The requirement to supply the above listed parts is in Part 2 Materials, Section 2.1 Fabrication and Manufacture C General Pumping Unit Requirements; this section does not require approval. Requiring URS to respond to this during the submittal phase resulted in the expenditure of additional resources and delays.

4. Please be advised the material for the strain relief assembly shall be stainless steel. Additionally, the Contractor shall verify the cable length.

This requirement is in Part 2 Materials, Paragraph 2.1 Fabrication and Manufacture Subsection K. 3 and is not a submittal requirement. Meeting the specifications is a QC requirement and should not have required a response by URS during the submittal phase.

5. It is acknowledged that seven certified copies of all factory pump test data shall be submitted prior to delivery and installation of the pumps.

URS clearly stated in our transmittal that we would provide prior to shipment.

8. We request URS to provide a certified pump curve, indicating conditions of service on performance curve, and indicating limits of pump operation of performance curve for continuous operation.

This requirement cannot be complied with until the submittal is approved, the pumps ordered and manufactured. This comment leads to an extra round of submittals when it would have been more appropriate to note that it should be submitted prior to shipment.

Submittal 50A

1. In accordance with Section 15160 of the Standard Specifications, the contractor shall submit certified P.E. stamped bearing calculations. We acknowledge that ITT Industries is unable to provide the bearing calculations with the required Professional Engineers (P.E.) seal as the submitted pumps are manufactured in Europe. Therefore, in an effort to expedite the project, bearing life calculations for the submersible pumps can be submitted without P.E. stamp.

It is incumbent upon the Engineer to be familiar with the equipment they specify. The requirement cannot be met as the specified pump is a European pump and they do not have a P.E. designation. In addition it is the standard of the industry to provide bearing life calculations for custom built pumps and not standard products.

Submittal 50A1

4. Please mark items that don't apply with "--" (e.g. Gear Type and Gear Ratio).

It should be obvious to a competent reviewer what was not applicable and should not have required a response by URS.

Submittal 51 – Flygt Submersible Pump Controls

Submittal 51 Issued 11/25/02
Returned 17 days later on 12/12/02 as Revise and Resubmit

Submittal 51A Issued on 2/06/03
Returned 13 days later on 2/19/03 as Approved as Noted

Submittal 51B Issued on 02/10/03
Returned 42days later as Approved

Submittal 51B1 Issued on 04/21/03
Returned 16 days later Approved as Noted

Submittal 51C Issued on 03/20/03
Returned 6 days later Approved as Noted

1. In accordance with Section 15161 of the Standard Specifications, the Contractor shall submit detailed written description of the functions, of all switches, relays and time relays. The submittal does not include this requirement and must be modified.

This type of information is typically included with the O&M Manual (as was the case on this project). The O&M Manual is generally submitted towards the end of construction and this requirement should not have impacted the approval of this submittal.

8. The off and lead level float switches are open (closes on rising level).

This comment was incorrect and not warranted. The submittal indicated both are normally open and therefore no change was necessary.

12. A time delay relay shall be provided for staggered starting of each pump.

This comment was incorrect and not warranted. The time delay relay was shown in the submittal.

14. Delete logic for the lag level float switch (FR4) and high level pilot light. Only three float switches will be connected (low level alarm, lead pump off and lead pump on). The high level float switch will be connected to the extraction system control panel.

This item was correct as per the original contract requirements. It was removed as a revision to the initial contract documents. Therefore, this is a change to the scope of work.

15. Time delay relays shall be provided with a red LED for output contact status.

This item was correct as submitted. A red LED was included in the initial submittal.

16. In accordance with Section 15161 of the Standard Specifications, spare parts shall be provided in accordance with subsection 3.3.A.I of the referenced section. Please confirm.

This comment is not warranted and URS should not have had to expend the resources to respond to it. This is a QC requirement, not a submittal requirement. Additionally, issues such as this should not have impacted the approval of this submittal.

17. Please be aware that the parts list shall include price for each part.

This comment is not warranted and URS should not have had to expend the resources to respond to it. Additionally, issues such as this should not have impacted the approval of this submittal.

Submittal 51 A

1. In accordance with Section 15161 (1.2) of the Standard Specifications, a detailed written description of system operation shall be submitted for approval. Please be advised that these descriptions shall also be incorporated in the O&M manuals.

As a part of the O&M Manual this should not have impacted the approval of this submittal.

2. Spare parts shall include two (2) Flygt MiniCAS relays and two (2) Flygt intrinsically safe relays. Please confirm that these spare parts shall be furnished.

This comment is not required and responding to it is extra. This requirement is in Paragraph 2.2.e.2 of Part 2 Materials, the contractor should not be penalized for not repeating every phase in the specifications, meeting a subsection such as this is a QC requirement not a submittal requirement. URS should not have had to expend resources to respond to this.

3. The parts list to be included with the O&M manuals shall include the price for each part.

This comment is not required and responding to it is extra. This requirement is in Paragraph 2.2.e.2 of Part 2 Materials, the contractor should not be penalized for not repeating every phase in the specifications, meeting a subsection such as this is a QC requirement not a submittal requirement. URS should not have had to expend resources to respond to this.

4. Certified shop test reports shall be submitted to the Engineer prior to shipment of the control panel.

This comment is not required and responding to it is extra. Meeting a subsection such as this is a QC requirement not a submittal requirement. URS should not have had to expend resources to respond to this.

Submittal 51C

2. It is understood that certified shop test reports shall be submitted to the Engineer prior to shipment of the control panel.

URS should not have had to expend the resources to respond to this requirement.

3. Response to comments provided in reference to Submittal 51B - Flygt Test Procedures shall be provided to this office for review prior to final approval of the referenced submittal

This information was previously provided and responded to under submittal 51B1. URS should not have had to expend the resources to respond to this requirement.

Submittal 52 – Asphalt Shingles

Submittal 52 Issued 11/13/02
Returned 22 days later on 12/06/02 as Revise and Resubmit

Submittal 52A Issued 12/18/02
Returned 20 days later on 01/07/03as Approved as Noted

Submittal 52B Issued on 01/09/03
Returned 18 days later as Approved

Submittal 52C Issued on 03/11/04
Returned 11 days later on 03/22/04 Approved

2. In addition, selection of the colored asphalt shingle is dependent on input from the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Transportation (NYSDOT) and New York State Office of Parks, Recreation and Historic Preservation. Due to the timeframe involved with the approval process, approval of the colored asphalt shingle shall be provided at a later date under separate cover.

When preparing the bid URS was not informed that delays due to NYSDOT and Dept of Parks approvals were possible. Therefore this is an administrative changed condition and any delays or resubmissions due to this approval process should be reimbursable to URS.

3. Please be aware that contractor shall supply 1% additional stock.

Providing the quantity of material specified is a QC issue, the need to restate it in a response to a submittal is redundant and requires URS to respond. Delays and increase in costs due to this comment should be reimbursable to URS.

4. In accordance with Section 07314 of the Standard Specifications, material of shingles shall be incombustible fiberglass base, covered with ceramic coated granules deeply embedded in scientifically refined water-resistant asphalt with self-sealing thermoplastic adhesive. The roofing felts shall be #15 minimum Double Coated Felt. Please clarify which Asphalt Shingle type URS proposes to use. Additionally, we request URS to provide additional technical information to confirm the requirements of the Specifications have been met. The submittal must be modified to include this requirement.

URS was proposing the specified shingle. Had the Engineer adequately performed his responsibilities this comment would not have been made.

5. Please confirm that one-inch standard galvanized roofing nails shall be used for installation.

This submittal is for asphalt shingles as required in the Standard Specifications section 07314. The submittal requirements listed do not include confirming that we will meet the specifications for nails. This is a QC requirement. URS should be entitled to delays and increase in costs responding to this unnecessary comment.

6. In accordance with Section 07314 of the Standard Specifications, the Contractor shall furnish to the Department a ten (10) year written Manufacturer's Warranty (with an additional five (5) year renewal option) covering materials and workmanship for the entire "Roofing System," including repair and replacement of roofing components which are deemed faulty or in disrepair at no cost to the Department. These guarantees shall cover both labor and materials necessary to effect watertightness, including that required to repair roof leaks caused by standing water, defective material and/or workmanship, without limit as to amount required to effect watertightness. The written manufacturer's guarantee is not included. The submittal must be modified to include this requirement.

This is a defective specification, as it requires a manufacturer to warranty a "roofing system". The roofing system has not been defined leaving up to interpretation as to what it includes, e.g. does it include plywood, felt, shingles or felt and shingles, or does it include the roof trusses? Further, how is a manufacturer expected to provide a warranty for products that are not provided by him? This has required significant resources for URS to respond to this ambiguous requirement.

7. In accordance with Section 07314 of the Standard Specification, the manufacturer shall furnish a guarantee label to be mounted by the Contractor at the building or other prominent location as directed by the Department. Please confirm that a guarantee label shall be installed as directed by the Department and that size and information shall comply with the specification of above-referenced Section.

This is a QC requirement and should not have impacted the approval of this submittal.

Submittal 52A

1. In accordance with Section 07314 of the Standard Specifications, the material shall comply with the reference standards ASTM D 226-75 and SS-C-153C. Please confirm that the material will comply with these reference standards.

ASTM D226-75 covers asphalt-saturated organic felts, with or without perforations that may be used with asphalts conforming to the requirements of Specification D 312 in the construction of built-up roofs. Built-up roofs include several different types of roof, but not asphalt shingle. Had the Engineer been knowledgeable with this type of work and

had adequately performed his responsibilities, he would not have included this requirement in the specifications nor, would he have requested it in this comment.

Submittal 53 – Butterfly Valve

Submittal 5 Issued 11/14/02
Returned 22 days later on 12/0/02 as Revise and Resubmit

Submittal 53A Issued 28 days later on 1/02/03
Returned 42 days later on 02/13/03as Approved as Noted

Submittal 53B Issued on 03/06/03
Returned 5 days later as Approved

Submittal 53

1. In accordance with Section 15099 of the Standard Specifications, all valves must be shop tested at test pressures in accordance with the requirements of applicable AWWA Standards. Additionally, the manufacturer shall certify that the required tests on the various materials and on the completed valves were performed and the valves were found conforming to the requirements of AWWA Standards. Please be advised, we have taken the initiative in contacting the manufacturer of the proposed butterfly valve, Asahi/America, concerning this matter. A sales representative with Asahi/America indicated that the proposed butterfly valve (Type 56, 8") does not meet this requirement. The referenced submittal must be revised to meet the specification requirements.

Reference Standards cited in this specification section only include AWWA C500. This standard is for gate valves and not butterfly valves. The Engineer rejected this valve solely on this basis, as it appears the submitted valve met all the specified requirements. In addition, Asahi is an industry leader in the production in these types of valves. URS expended considerable resources and time in responding to this request.

Submittal 53A

1. We acknowledge that URS proposes to submit the Operation and Maintenance Manuals after approval of the referenced submittal.

Specification 15099Part 1 General 1.3 submittals B, requires that this information be included in the O&M Manual.

2. We acknowledge that URS will submit certificates of shop testing for all valves in accordance with Section 15099 (1.2)(C) of the Standard Specifications prior to shipment.

The requirement is to test in accordance with the requirements of applicable AWWA Standards. The Standards the Engineer has referenced in Section 1.2.B do not include any citation for butterfly valves.

3. In accordance with Section 15099 of the Standard Specifications, the contractor shall conform to the requirements of "Valve and Valve Operator Schedules" as specified in Part 3 of the referenced Section.

This is obvious. Why did URS have to expend the resources and time to respond to this.

4. Please be aware that surface preparation and shop painting are required for all ferrous metals, equipment and accessories, and shall be in accordance with Section 09900 of the Standard Specifications.

This comment should not have been a part of the submittal process. The valve submitted was the valve specified and met the submittal requirements. URS was required to expend resources to respond to this.

5. In accordance with Section 15099 of the Standard Specifications, all installed valves shall be hydrostatically field tested with the corresponding piping at the test pressures specified in Sections 15051 and 15052. Valves shall withstand full test pressures without leakage. Valves found defective shall be repaired or replaced at the Contractor's expense.

This is a QC requirement and should not have been a part of the submittal process. Requiring URS to respond to these issues resulted in additional costs and lost time.

Gate Valve

1. Please confirm that the gate valves shall have flanged ends.

This could have easily been handled with a note to meet this requirement as opposed to going through the very inefficient process of another round of the submittal.

Check Valve

1. In accordance with Section 15099 of the Standard Specifications, the check valves shall be horizontal swing check valves, installed in the horizontal position, with outside weight and lever. The valve counterweight shall be designed to assume the closed position by gravity under no flow conditions in a horizontal pipeline.

URS submitted one of the specified valve manufacturers in accordance with AWWA C508. The submitted information indicates an outside lever and weight assembly. The

position of the valve is a QC requirement that should have been ensured in the field, not during the submittal process.

2. In accordance with Section 15099 of the Standard Specifications, the disc arm and chamber construction shall be of heavy steel construction. The hinge shaft shall be adequate diameter to withstand a complete hydraulic unbalance working pressure of 175 psi on the valve disc.

URS submitted one of the specified valve manufacturers in accordance with AWWA C508.

Butterfly valve

1. Please confirm that the butterfly valves to be provided shall be wafer style.

This information was included in the submittal however, URS neglected to highlight the wafer style. Had the Engineer simply noted this comment, it would have saved all parties the inefficient process of having to make another submittal on this item.

2. Please confirm that the butterfly valves shall be provided with EPDM disc seals.

This information was included in the submittal however, URS neglected to highlight the EPDM discs. Had the Engineer simply noted this comment, it would have saved all parties the inefficient process of having to make another submittal on this item.

Submittal 57 – Centrifugal Fan

Submittal 57 Issued 12/02/02
Returned 15 days later on 12/17/02 as Approved as Noted

Submittal 57A Issued on 2/03/03
Returned 10 days later on 02/13/03as Approved

Submittal 57

1. In accordance with Section 17100 of the Standard Specifications, the manufacturer shall furnish a certificate that the equipment has been installed properly. This certificate must be provided after installation.

This paragraph requires the manufacturer to come out to the site to certify one, 1/3 HP fan. Had the Engineer adequately performed his responsibilities, URS is of the opinion, he would have concluded that this item did not warrant that level of effort.

2. In accordance with Section 17100 of the Standard Specifications, the contractor must provide a one-year supply of the necessary lubricants. Please confirm that this will be provided.

Confirming that we would meet this subsection of the specification is not a submittal requirement and URS should not have had to expend the resources to respond to this.

3. In accordance with Section 17100 of the Standard Specifications, a flanged aluminum grille for mounting on the interior wall opening must be provided. Please confirm that this will be provided.

An aluminum grille was clearly indicated as being included in the initial submittal. Had the Engineer adequately performed his design responsibilities URS would not have had to expend the resources to respond to this.

4. In accordance with Section 17100 of the Standard Specifications, a polyester urethane coating must be provided on all surfaces of the manufactured components. Please confirm that this will be provided.

Polyester coating was noted in the initial submittal.

5. Installation of the submitted centrifugal fan, and accessories shall be in accordance with the manufacturer's recommendations and published instructions, and as shown on Drawing G8 of the Contract Documents.

URS was providing the specified equipment. This submittal met all the requirements of Part 1 General Paragraph 1.3 Submittals. Installing the fan per instructions is a QC issue not a submittal issue. This is a defective application of the specifications and URS should not have had to expend resources or been delayed responding to this..

Submittal 63 – Painting Systems

Submittal 63 Issued 2/03/03
Returned 18 days later on 12/21/03 as Revise and Resubmit

Submittal 63A Issued 33 days later on 3/25/03
Returned 20 days later on 04/14/03as Approved as Noted

Submittal 63 B Issued 10/20/03
Returned 8 days later on 10/27/03

Submittal 63 Comments

5. In accordance with Section 09900 (1.3)(B)(6) of the Standard Specifications, the Contractor shall provide a maintenance manual, including the following information:
a. Product name and number
b. Name address, and telephone number of manufacturer and local distributor
c. Detailed procedures for routine maintenance and cleaning
d. Detailed procedures for light repairs, such as dents, scratches and staining.

The referenced submittal shall be modified to include this requirement.

Per the specifications, this was to be issued upon completion of the work not in this submittal. This comment was not applicable to this submittal and should not have delayed its approval.

7. In accordance with Section 09900 (2.3)(G) of the Standard Specifications, all painting systems specified are based on brush application except as noted or specified. Other mechanical techniques shall be submitted to the Engineer for approval before these application techniques may be reflected in any paint schedules submitted by the contractor. Please confirm proposed application techniques.

This information was only required if the application technique was different then brush. URS had made no indications that we were applying in any fashion other then brush. This should not have impacted the approval of this submittal.

Submittal 63A

1. As previously commented, in accordance with Section 09900 (1.3)(B)(6) of the Standard Specifications, upon completion of the Work the Contractor shall provide a maintenance manual, including the following information:

a. Product name and number

b. Name address, and telephone number of manufacturer and local Distributor

c. Detailed procedures for routine maintenance and cleaning
d. Detailed procedures for light repairs, such as dents, scratches and staining

Additionally, the maintenance manual shall be submitted in accordance with the requirements of Section 01730 of the Standard Specifications. Please be advised, as a prerequisite to obtaining payment for construction performed under this Contract in excess of 50 percent of the Contract Price, the contractor shall prepare, submit and obtain the Engineer's approval of the required maintenance manual. The referenced submittal shall be modified accordingly

Per the specifications this was to be issued upon completion of the work, not in this submittal and to threaten the contractor with withholding of payment for a submittal that is not required at this time is inflammatory.

2. As previously commented, in accordance with Section 09900 (2.3)(G) of the Standard Specifications, all painting systems specified are based on brush application, except as noted or specified. Other mechanical techniques shall be submitted to the Engineer for approval before these application techniques may be reflected in any paint schedules submitted by the Contractor. Please confirm proposed application techniques.

This information was only required if the application technique was different then brush. URS had made no indications that we were applying in any fashion other then brush. This should not have impacted the approval of this submittal.

3. Selection of the colors is dependant on input from the New York State Department of Environmental Conservation (NYSDEC). Due to the timeframe involved with the approval process, the Engineer shall provide color schedules at a later date under separate cover.

URS should not be responsible for an additional submittal due to this delay. Also, within the contract documents the contractor should have been advised of potential delays due to consulting with other state agencies.

4. In accordance with Section 09900(3.4)(K) of the Standard Specifications, upon completion of each coat of paint, the Contractor shall notify the Engineer for inspection and dry film thickness. Additionally, the Contractor shall purchase for the Department two new dry-film thickness gages for checking the film thickness (Manufacturer Micro Test 09901, Model FM-III) and one set of visual standards to check surface preparations (ASTM D 2200).

This was not a submittal requirement and URS should not have had to expend the resources to respond to this.

Submittal 63 B

1. As previously commented, in accordance with Section 09900 (1.3)(B)(6) of the Standard Specifications, upon completion of the Work the Contractor shall provide a maintenance manual, including the following information:

a. Product name and number

b. Name address, and telephone number of manufacturer and local Distributor

c. Detailed procedures for routine maintenance and cleaning

d. Detailed procedures for light repairs, such as dents, scratches and staining

While the referenced submittal provides maintenance and cleaning procedures for the Painting Systems, specific information pertaining to the manufacturer, product and local distributor were not provided. Furthermore, the required information above shall be appended to the existing Operation and Maintenance Manual, as submitted and approved under Submittal 78a, for each applicable strata, prior to final approval of the referenced submittal.

The maintenance manual per the specification was required to be submitted, at the completion of the work. Having received this comment on every submittal unjustly delayed its ultimate approval.

Submittal 66 – SDR 26 Influent Pipe

Submittal 66 Issued 2/14/03
Returned 8 days later on 2/21/03 as Approved as Noted

Submittal 66A Issued 8 days later on 2/28/03
Returned 10 days later on 03/10/03as Approved as Submitted

Neither of the below comments are submittal requirements and URS should not have had to expend the resources to respond to them.

Submittal 66 Comments

1. Based on conversation with Ms. Anne Fung during the week of February 14, 2003, we acknowledge that the treatment system influent piping will be provided in accordance with Submittal No. 32 -Discharge Underground Pipe as initially submitted on September 16, 2002 and subsequently approved after fourth submission on January 22, 2003. While we take no exception, please be advised of the following:

a. Please confirm that influent piping under the building shall be tested prior to installation of the concrete slab.

b. Coordinate all work with J.K. Electric Co. Inc., in accordance with Section 01010 of the Standard Specifications, prior to the installation of the influent pipe so that all associated electrical Work can be performed concurrently.

Submittal 73 – Epoxy Resin Coating

Submittal 73 Issued 4/28/03
Returned 9 days later on 5/07/03 as Approved as Noted

Submittal 73A Issued on 2/28/03
Returned 10 days later on 03/10/03as Approved as Submitted

Submittal 73 – Comments

1. In accordance with Section 09821 (1.2)(C)(1) of the Standard Specifications, the Contractor shall submit a copy of the applicator's qualifications (name and experience record) inclusive of a list of utility or industrial installations coated, responsible officials, architects, or engineers concerned with the project and approximate Contract Price. Additionally, the applicator shall be an Approved Contractor of the manufacturer of the specified product. This information must be submitted for review and approval prior to the application of the epoxy resin coating.

URS submitted for approval the specified material as manufactured by Sika Corporation, Sika discontinued its approval process in January of 2000. This gave the Engineer sufficient time to amend the specification prior to Award of Contract. Therefore the time spent on clarifying this issue is an extra as are any resultant schedule delays.

2. In accordance with Section 09821 (1.2)(E) of the Standard Specifications, the Contractor shall provide the Department with a joint and separate guarantee on the application and product supplied. The referenced submittal should be modified to include the required guarantees.

The specification requires the approved contractor of the manufacturer to provide this guarantee. As noted, the manufacturer did not perform this approval process any longer. Therefore, this requirement is no longer applicable and resulted in additional time and delays to URS.

3. In accordance with Section 09821 (1.5)(C) of the Standard Specifications, the Contractor shall certify that all coatings are compatible with substrate as specified. Please confirm.

Why should URS have to make this certification? We provided the specified product and there was only one place the product was required to be applied to. Had the Engineer adequately performed his responsibilities he would not have required us to make this certification.

Submittal 74 - Louver

Submittal 74 Issued 4/28/03
Returned 9 days later on 5/07/03 as Approved as Noted

Submittal 74A Issued on 11/21/03
Returned 11 days later on 12/04/03as Approved as Submitted

Submittal 74 Comments

2. In accordance with Section 17200 (1.3)(A)(2) of the Standard Specifications, the Contractor shall obtain the manufacturer's written installation certification, certifying that the equipment has been installed properly. The referenced submittal shall be modified to include this information.

URS submitted the specified louver by the specified manufacturer, Greenheck. Greenheck does not provide a certification on installation. Had the Engineer adequately performed his responsibilities he would not have requested this information. Furthermore, only one 24"x24" louver was required on this project; was the level of effort necessary to perform this certification, really warranted for this item on this size of project? Finally, how could URS provide a certification of the installation during the submittal phase? URS incurred unnecessary costs and delays responding to this comment.