Atlantic Richfield Company
(a BP affiliated company)

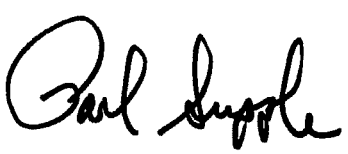
P.O. Box 1257
San Ramon, CA 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

29 June 2007

Re: Dual-Phase Extraction Remediation System Design/Request for Bid
Former BP Station # 11117
7210 Bancroft Avenue
Oakland, California
ACEH Case # RO0000356

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:



Paul Supple
Environmental Business Manger

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
Chico, CA 95926
Voice (530) 566-1400
Fax (530) 566-1401

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

29 June 2007 Project No. 06-08-649

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Dual-Phase Extraction Remediation System Design Specifications/Request for Bid
Former BP Station #11117, 7210 Bancroft Avenue, Oakland, California
ACEH Case # RO0000356

Dear Mr. Supple:

On behalf of the Atlantic Richfield Company, RM - a BP affiliated company, Broadbent & Associates, Inc. (BAI) has prepared the attached Dual-Phase Extraction (DPE) Remediation System Design Specifications/Request for Bid (hereafter Design) for the former BP Station #11117, located at 7210 Bancroft Avenue, Oakland, California (Site). The Design was prepared in response to a letter from the Alameda Environmental Health Department Program (ACEH) dated 19 March 2007 approving recommendations to use DPE technology at the Site. Recommendations to implement DPE were provided to the ACEH in the December 2006 Corrective Action Plan (CAP). Information relative to Site history and current and historical geologic, hydrogeologic and environmental subsurface conditions can be referenced in the previously-mentioned CAP. The primary objective of the Design is to facilitate subcontractor bid solicitation and selection and subsequent installation of a DPE remediation system at the Site.

As indicated in the above-referenced CAP, the herein specified DPE system (hereafter System) will be used to remediate residual soil and ground-water hydrocarbon contamination at the Site. A Site vicinity map is included in the attached Design as Drawing 1. A thermal/catalytic oxidizer equipped with a liquid-ring blower will be utilized to extract vapor and water from a total of six extraction wells (EX-1, MW-2, MW-4, DPE-1, DPE-2, and DPE-3). Proposed extraction well locations are depicted on Drawing 2. Extracted vapors will be treated via thermal or catalytic oxidation prior to discharge to the atmosphere per Bay Area Air Quality Management District requirements. Extracted ground water will be treated via activated carbon filtration prior to discharge to the City of Oakland sanitary sewer system.

Proposed DPE Well Specifications

As stated above, a total of six DPE wells are recommended for the System. The System will utilize three (3) new DPE wells (DPE-1, DPE-2, and DPE-3) and existing wells EX-1, MW-2 and MW-4. However, it is recommended that existing 2-inch diameter monitor wells MW-2 and MW-4 be over-drilled and reconstructed as 4-inch diameter wells (MW-2R and MW-4R, respectively) to better facilitate DPE effectiveness in the area surrounding these wells. Proposed well construction/modification specifications are provided below.

It is proposed that the well borings for wells DPE-1, DPE-2, DPE-3, and MW-4R be advanced to approximately 40 feet below ground surface (bgs). Four-inch diameter, Schedule 40 poly-vinyl chloride (PVC) factory slotted casing and blank casing should be installed down the center of each boring. Slotted casing (0.020 inch slots) should be placed from total depth of the boring to approximately 20 feet bgs, and blank casing should be installed from approximately 20 feet bgs to ground surface. Number three silica sand should be placed in the annular space from total depth to approximately 18 feet bgs. A bentonite plug approximately two feet thick should be placed above the sand pack. Cement grout (five percent by weight bentonite/cement ground mix) should be placed above the bentonite to ground surface. The well head should be completed with a locking security plug and covered with a traffic-rated well vault.

It is proposed that the well boring for well MW-2R be advanced to approximately 40 feet bgs. Four-inch diameter, schedule 40 PVC factory slotted casing and blank casing should be installed down the center of the boring. Slotted casing (0.020 inch slots) should be placed from total depth of the boring to approximately 18 feet bgs, and blank casing should be installed from approximately 18 feet bgs to ground surface. Number three silica sand should be placed in the annular space from total depth to approximately 16 feet bgs. A bentonite plug approximately two feet thick should be placed above the sand pack. Cement grout (five percent by weight bentonite/cement ground mix) should be placed above the bentonite to ground surface. The well head should be completed with a locking security plug and covered with a traffic-rated well vault.

Should you have questions regarding the system or design proposed, please do not hesitate to contact us at (530) 566-1400.

Sincerely,
BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

Robert H. Miller, P.G., C.HG.
Principal Hydrogeologist

Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (Submitted via ACEH ftp site)
Ms. Shelby Lathrop, ConocoPhillips (Submitted via WebXtender)
Mr. Jay Johnson, Stratus Environmental (Submitted via ENFOS)
Mr. Paul Bernard, One Eastmont Town Center, 7200 Bancroft Avenue, Oakland, CA 94605
Electronic copy uploaded to GeoTracker

DUAL-PHASE EXTRACTION REMEDIATION SYSTEM
DESIGN SPECIFICATIONS/REQUEST FOR BID
Former BP Station #11117
7210 Bancroft Avenue, Oakland, California

CONTENTS

APPENDICES

DUAL-PHASE EXTRACTION REMEDIATION SYSTEM
DESIGN SPECIFICATIONS/REQUEST FOR BID
Former BP Station #11117
7210 Bancroft Avenue, Oakland, California

1.0 GENERAL REQUIREMENTS

General requirements of the Dual-Phase Extraction Remediation Design Specifications/Request for Bid (Design) are detailed below.

1.1 Summary of Work

The Design provided herein was prepared for Atlantic Richfield Company, RM (hereinafter referred to as "Owner") by the team of Stratus Environmental, Inc. (Stratus) and Broadbent & Associates, Inc. (BAI) (hereinafter both parties are collectively referred to as "Engineer"). Engineer is acting as an agent for the Owner and represents Owner for purposes of this contract. The work covered under this contract shall be performed for the former BP Service Station #11117 located at 7210 Bancroft Avenue in Oakland, California (Site).

The work shall consist of furnishing all skilled and unskilled labor, materials and equipment (except Owner-furnished equipment) to install a full-scale dual-phase extraction remediation system (hereinafter System). The System is intended to be used for remediation of residual soil and ground-water hydrocarbon contamination and includes, but is not limited to, the following components:

A. Project Setup, pre-construction meeting, and location of underground utilities (to include contracting with a private utility locator and Underground Service Alert);

B. Installation of System wellhead assemblies and lateral underground poly-vinyl chloride (PVC) conveyance piping;

C. Construction of an equipment compound, curb, fence, protective posts and gates;

D. Installation of a natural gas line and electrical service to remediation compound;

E. Installation of a wastewater pipeline from the remediation compound;

F. Construction of above-ground piping manifolds;

G. Installation of System equipment and connection of equipment to utility services; and

H. Acquisition of all required permits except air pollution control and water discharge permits.

1.2 Contract

Contract terms shall be in accordance with the Construction Contract provided in Appendix A. In submitting a bid for this work, the Contractor acknowledges that he/she has thoroughly reviewed this Bid Package, including the Construction Contract contained in Appendix A, and that he/she is willing to accept all terms contained in the Construction Contract. Additionally,

the Contractor should schedule a site visit prior to submitting a bid. A site visit can be scheduled by calling either Kiran Nagaraju of Stratus at (530) 676-6007 or Tom Venus of BAI at (530) 566-1400.

1.3 Proposed Schedule and Bid

Contractor must submit to the Owner and Engineer a detailed timeline for completion of installation activities. It is requested that installation activities be completed no later than October 15, 2007. Bids are to be submitted by filling out the form provided in Appendix B. Bid submittals must be signed and can be faxed to Tom Venus at (530) 566-1401. Please fax bids to the above indicated fax number on or before August 1, 2007.

Selection of Contractor will be made by August 3, 2007. Contractor will be required to attend a pre-construction meeting subsequent to selection with the Owner and the Engineer.

1.4 Survey Information

The site plan is based on site visits by Engineer and information provided by an outside licensed surveyor. While the site plan is believed to be reasonably accurate, the Contractor shall not rely upon facilities or dimensions shown. The Contractor is responsible for securing a locator service to identify subsurface utilities, as needed for construction. Costs for locator service should be included in bid (Item A in Appendix B).

1.5 Standards and Codes

National or industry standards under which the work is to be performed or tested are specified through-out the Specifications. Where such standards are specified, it shall be understood that the latest issue or revision of the Specifications in effect at time of submission of bids shall apply. Other equivalent standards may be substituted for those specified, provided approval is obtained from the Engineer. In referring to codes and standards, the following abbreviations have been used:

Name	**Abbreviation**
American National Standards Institute	ANSI
American Society for Testing and Materials	ASTM
National Electrical Manufacturers Association	NEMA
National Electrical Code	NEC
National Electrical Safety Code	NESC
Underwriter's Laboratories, Inc.	UL
Occupational Safety and Health Administration	OSHA

Federal, State, County, or Municipal Codes, Laws or Ordinances of the place of installation also apply as does the Uniform Building Code. If overlapping or conflict occurs regarding the

requirements of the standards listed or the Specifications, then that requirement which is most stringent shall take precedence.

1.6 Notifying Owner Prior to Shipping

The Contractor shall notify all affected public entities and the Engineer at least 72 hours prior to the station receiving any equipment under this Contract.

1.7 Handling and Protection of Materials and Equipment

1.7.1 General

In handling, cleaning, moving or working around facilities, materials and equipment at the station, the Contractor shall exercise all reasonable care to protect such facilities materials and equipment. Where damage occurs, the Contractor shall repair, restore or replace the damaged items to original condition, or in kind, to the satisfaction of the Owner.

1.7.2 Materials and Equipment Furnished by Owner

Materials and equipment specified to be furnished by Owner shall be installed by the Contractor. If the Contractor discovers defects in material or equipment furnished by Owner, the Contractor shall notify Engineer. After such discovery, the Contractor shall not proceed with work involving Owner furnished materials and equipment unless authorized by Owner or Engineer. Once received by the Contractor, Owner-furnished material and equipment shall form part of the work, for the purposes of this contract, including risk of loss, as if it had been supplied and stored by the Contractor himself. A list of equipment provided by Owner is provided in Section 2.5.1 below.

1.8 Electrical Requirement

The Contractor shall supply all the electrical and instrumentation devices and other components required to provide power to the remediation equipment. Electrical components must meet the minimum standards of design and material quality specified in Section 2.2.

2.0 TECHNICAL SPECIFICATIONS

2.1 General

2.1.1 Scope

In accordance with the Design and the Drawings provided in Appendix C, the Contractor shall supply (with exception of equipment provided by Owner) and install all equipment for the installation of a DPE remediation system (also referred to as the Work). All work and work areas shall comply with OSHA regulations.

2.1.2 Warranty

All materials, equipment, and workmanship provided by the Contractor and work performed shall be warranted for a period of one year from the date of acceptance by Owner. The Contractor is not responsible for warranty on the materials and equipment furnished by the Owner.

2.1.3 Final Inspection and Acceptance

When all the Work has been completed and tested, a thorough inspection of the Work shall be made by the Engineer, and if it is found to comply with the Specifications, it shall be formally accepted by the Owner.

2.2 General Requirements for Materials and Workmanship

All material incorporated in furnishing the Work shall be new and of first-class quality, free from defects and imperfections, and of the classification and grades designated. Materials not specifically designated herein shall be subject to approval by the Engineer and shall be the most suitable for the purpose intended and shall, as far as practicable, comply with the latest ASTM, ANSI, or approved equivalent standards.

Workmanship shall be first-class quality and shall be done by persons skilled in their various trades. Like parts and spare parts shall be interchangeable wherever possible. All material furnished shall be essentially standard products of manufacturers regularly engaged in the production of the types of equipment specified. Where major items of equipment are similar in type and description, they shall be the products of a single manufacturer.

Electrical work shall be in accordance with the requirements of the latest issue of the NEC, NESC, OSHA, and the latest applicable NEMA, ANSI, UL, and Federal Standards.

2.3 Trenching, System Piping, and Manifold Construction

Piping installation to be performed by the Contractor shall involve trenching and installation of all piping to the remediation system compound. Piping shall be buried in the trenched area leading to the equipment concrete pad. Trenching shall be excavated by hand within five feet of underground product tanks, product lines, product dispensing islands, or other utilities. The Contractor should be aware that the exact locations of underground utilities (including product lines) are unknown. Contractor shall notify Underground Service Alert at least 48 hours before digging. Contractor is responsible for identifying all conflicting utilities with utility owners before beginning work. Contractor shall repair or replace at his own cost utilities that are damaged during construction activities. The Engineer shall be notified immediately upon any such damage to utilities. Existing asphalt and concrete surfaces shall be sawcut in a neat, straight line prior removal and soil excavation.

All trenching and piping shall be installed as specified in the Drawings. Tracer tape shall be placed in the trenches to mark piping locations. Trenches will be backfilled and shall be

completed to grade with a finish equivalent to the existing pavement (concrete or asphalt, whichever applies). Native backfill material should be used when suitable. Should native material not be suitable (contaminated or not fit for backfill), Contractor shall purchase and import backfill materials. Backfill material shall be compacted to a minimum 90% compaction. All paving work shall be done at appropriate grades that prevent pooling of water.

As indicated above, Contractor must complete trenching, pipe installation, and resurfacing activities as quickly as possible. The Contractor may be allowed to close portions of the station whereon this work is being performed; however, the station must remain open at all times. Accordingly, the Contractor must complete this work in sections (i.e. a portion of trench is excavated, pipe is installed and pressure tested, and trench backfilled prior to proceeding to a new work section). Contractor will be allowed to complete final re-surfacing in one step following trench/piping/backfill completion.

Some of the System wells indicated on Drawing 2 have not been installed and/or surveyed as of the date of this RFB package and as a result, actual locations of these wells may vary slightly. Contractor shall assume in preparing bid that the actual total linear footage required for all piping will not be 5% more than that anticipated herein. Any additional linear footage greater than 5% will be considered an extra to the Contractor's bid and shall be billed on a per foot basis. Accordingly, the Contractor shall list a per foot cost for additional trenching, pipe installation, and re-surfacing in the Unit Rates for Outside Services section of the Bid Submittal Form in Appendix B.

2.3.1 Field Line Testing

Field testing of all piping shall be conducted by the contractor. The Engineer must be present during field testing activities. All piping shall be air tight to a pressure of 20 pounds per square inch (psi). If the test is not passed, the leak shall be found using a helium leak detection technique or other Engineer-approved method, repaired to the satisfaction of the Engineer, and the line re-tested.

2.3.2 Construction Debris and Contaminated Soil

Construction debris including cut asphalt, concrete, broken pipe, and excess soil is the responsibility of the Contractor to properly dispose of according to all applicable local, state and federal rules, laws or regulations (include fees in Item B in Appendix B). Should the Contractor encounter soil that appears to be contaminated, the Contractor shall immediately notify Engineer. Soil determined by the Engineer to be contaminated shall be segregated by the Contractor from non-contaminated soil. Contaminated soil shall be placed within sealed bins or drums at an on-site location approved of by the Engineer. Contaminated soil will be disposed of by the Owner.

2.4 Equipment Concrete Pad

The Contractor shall install a 30 foot by 15 foot concrete pad in accordance with specifications provided in Drawing 5. The concrete pad shall include grade steel - #4 rebar reinforcement 24-

inch spacing each way (EW), and have a minimum compressive strength of 2,500 psi. A 12 foot by 15 foot area within the concrete pad will include a six-inch high containment curb.

2.5 Installation of Equipment

All equipment shall be installed by the Contractor so that it rests on a level plane and as directed by the Engineer and in accordance with local building/seismic requirements. Contractor shall make all necessary connections (natural gas, electrical, and piping) for all of the System equipment and test its operation.

2.5.1 Equipment Provided by Owner

The Owner will provide the following equipment with associated minimum specifications/requirements:

- Thermal/Catalytic Oxidizer:
  230V, 3 Phase, max 75 AMP, 500,000 BTU/hr (includes water knockout and booster pump;
- Three 1,000 Pound Carbon Vessels (with carbon media);
- One sediment filter; and
- One 150 Gallon Capacity Storage Tank with Booster Pump
  240V, 3 Phase, max 10 AMP.

2.6 Electrical and Natural Gas Service Installation

The Contractor shall furnish, install, and connect all equipment, devices and material required to supply electrical power and natural gas to the System. The actual location(s) of the closest suitable power and/or natural gas sources were not available at the time this document was prepared. Electrical and gas installation shall conform to all applicable codes. The System requires three-phase electricity and a 200 amp, 120/240 volt service. The System requires natural gas a flow rate of 500,000 BTUs per hour at five psi standard gauge pressure.

2.7 Permitting

Contractor shall acquire and provide payment for all required building permits except the air pollution control and water discharge permits. The Engineer will provide necessary plan modifications to facilitate permitting and assist the Contractor in the permitting process.

2.8 Fencing, Security, and Fire Extinguisher Specifications

The Contractor shall install six-foot high, temporary, chain link security fencing around the perimeter of the construction area on the Site that is to remain in place during construction activities. The Contractor will post signs on temporary fencing visible to passing traffic. Sign wording will be determined during the pre-construction meeting. The Contractor is responsible for providing security during non-working hours for the construction period.

The Contractor shall install fencing to enclose the equipment pad (remediation compound) which shall be seven-foot high, permanent chain-link security fencing with white plastic slats topped with a roof of chain-link security fencing. Contractor shall include two 15-foot wide locking equipment access gates.

Four-foot high traffic bumper posts (painted white) shall be installed around the perimeter of the remediation compound as specified on Drawing 5.

Contractor shall supply one fire extinguisher in an approved weather-protective cabinet. The extinguisher shall be mounted in a readily assessable location inside the enclosure. The fire extinguisher shall be minimum 20 pound dry chemical with a A:B:C rating.

APPENDIX A

CONSTRUCTION CONTRACT

APPENDIX B

BID SUBMITTAL FORM

BID SUBMITTAL FORM
DPE REMEDIATION SYSTEM
FORMER BP STATION #11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

The undersigned, as bidder, declares that we have received and examined this bid specification package and will contract with the Owner, on the form of agreement contained in Appendix A, to do everything required for the fulfillment of the contract for the lump sum of

$_____ dollars (not including outside services, below)

Bid breakdown:

A.	Project Setup, pre-construction meeting, and location of underground utilities (including locator service)	$
B.	Installation of System piping including disposal of construction debris	$
C.	Construction of System equipment compound	$
D.	Installation of a natural gas line and electrical service at remediation compound	$
E.	Construction of System above ground piping manifolds	$
F.	Installation of System equipment and connection of equipment to utility services	$
G.	Acquisition of all required permits	$
H.	Construction area security – construction of temporary security fencing and provide security during off-hours	$

Unit Rates for Outside Services

1.	Installation of piping (greater than 5% of that anticipated herein) (see Section 2.3)	$ per foot

_____ _____
Name of Bidder Contractor's License Number

_____ _____
Signature of Bidder Date

APPENDIX C

DRAWINGS

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE MOST CURRENT EDITION OF THE "UNIFORM BUILDING CODE" (UBC) AND ALL OTHER REGULATING AGENCIES EXERCISING AUTHORITY OVER ANY PORTION OF THE WORK. BUILDING CODE REQUIREMENTS SHALL SUPERSEDE THESE SPECIFICATIONS.

2. CONTRACTOR SHALL ACQUIRE ALL REQUIRED BUILDING PERMITS EXCEPT THE AIR POLLUTION CONTROL PERMIT AND WASTEWATER DISCHARGE PERMIT. ANY ACTIVITIES NECESSARY TO ACQUIRE PERMITS MUST BE CONDUCTED BY THE CONTRACTOR. PLEASE BE ADVISED THAT PERMIT APPLICATIONS MUST BE SUBMITTED IMMEDIATELY AFTER CONTRACTOR SELECTION IN ORDER TO COMPLETE CONSTRUCTION ACTVITIES WITHIN THE TIME FRAME REQUIRED. THE ENGINEER WILL ACQUIRE THE AIR POLLUTION CONTROL AND WASTE WATER DISCHARGE PERMITS.

3. ALL WORK AND WORK AREAS SHALL COMPLY WITH OSHA REGULATIONS.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION BEFORE BEGINNING WORK. CONTRACTOR SHALL REPAIR OR REPLACE AT HIS OWN COST UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION ACTIVITIES.

5. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED PUBLIC ENTITIES AND THE ENGINEER AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK.

6. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL ELEVATIONS, DIMENSIONS, EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

7. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE, INGRESS, AND EGRESS TO THE PROJECT.

SITE WORK

1. SITE PREPARATIONS: EXERCISE CAUTION DURING REMOVAL AND/OR EXCAVATION OF EXISTING WORK. LOCATIONS OF BELOW GRADE FACILITIES ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. SHOULD DISCREPANCIES ARISE CONTRARY TO THE INFORMATION ON THE DRAWINGS, NOTIFY THE ENGINEER IMMEDIATELY. DO NOT PROCEED WITH WORK IN AREAS OF DISCREPANCY UNTIL ALL DISCREPANCIES ARE FULLY RESOLVED.

2. EXISTING STRUCTURES: TAKE ALL PRECAUTIONS NECESSARY SO AS NOT TO DISTURB OR REMOVE ANY PART OF THE EXISTING UTILITIES, SUBSTRUCTURES, ETC., DURING THE EXECUTION OF THE WORK. IN THE EVENT OF DAMAGE TO ANY PART OF THE EXISTING STRUCTURES, NOTIFY THE ENGINEER.

3. EXISTING ASPHALT AND CONCRETE SURFACES SHALL BE SAWCUT IN A NEAT, STRAIGHT LINE PRIOR TO REMOVAL AND SOIL EXCAVATION.

4. TRENCHING SHALL BE EXCAVATED BY HAND WITHIN 5 FEET OF UNDERGROUND UTILITIES AND/OR PRODUCT TANKS/LINES AND/OR PRODUCT DISPENSING ISLANDS.

5. PIPING SHOULD BE SLOPED TO DRAIN BACK TO WELLS (WHEREVER POSSIBLE).

6. NATIVE BACKFILL MATERIAL SHOULD BE USED WHEN SUITABLE.

7. BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM 90% COMPACTION.

8. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI.

GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL EXAMINE THE DRAWINGS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES HE MAY FIND BEFORE PROCEEDING WITH THE WORK.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS BEFORE STARTING WORK. THE ENGINEER SHALL IMMEDIATELY BE NOTIFIED OF ANY DISCREPANCIES.

3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.

4. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.

5. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THESE DRAWINGS.

6. WHERE DRAWINGS SHOW EXISTING STRUCTURE TO BE USED FOR SUPPORT OF NEW CONSTRUCTION, THE CONTRACTOR SHALL VERIFY TRUE CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION. INFORMATION SHOWN ON THE DRAWINGS WHICH RELATE TO EXISTING STRUCTURES SHALL BE USED FOR ESTIMATING PURPOSED ONLY. THIS INFORMATION WAS DETERMINED FROM ON SITE INSPECTIONS AND EXTRAPOLATION. ACTUAL CONDITIONS MAY VARY CONSIDERABLY FROM DRAWINGS.

7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITIONS WHICH IN HIS OPINION MIGHT ENDANGER THE STABILITY OF THE SYSTEM OR CAUSE DISTRESS TO THE SYSTEM.

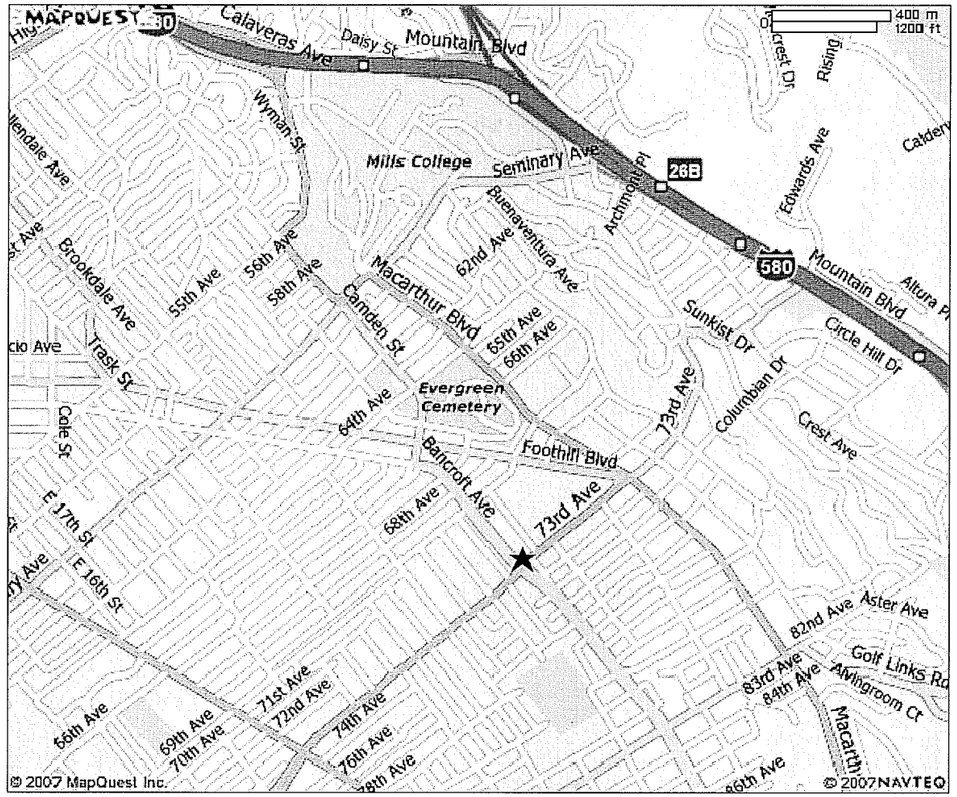
8. THE CONTRACTOR SHALL SUPERVISE AND DIRECT HIS WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. AS A PART OF HIS RESPONSIBILITY, THE CONTRACTOR SHALL PROVIDE THE SERVICES OF A LICENSED ENGINEER TO DESIGN AND SUPERVISE ANY SCAFFOLDING FOR HIS WORKMEN AND SHORING OF EXCAVATIONS AND ELEMENTS OF CONSTRUCTION AFFECTED BY HIS WORK, IF NECESSARY.

9. IN CASE OF CONFLICT, SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER "GENERAL NOTES" AND/OR "STANDARD DETAILS."

10. ALL CONSTRUCTION SHALL BE DONE WITH MATERIALS, METHODS, AND WORKMANSHIP ACCEPTED AS GOOD PRACTICE BY THE CONSTRUCTION INDUSTRY IN CONFORMANCE TO THE PROVISIONS OF THE MOST CURRENT EDITION OF THE "UNIFORM BUILDING CODE" (UBC), AND STANDARDS REFERENCED THEREIN.

11. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

LOCATION MAP



★ APPROXIMATE PROJECT LOCATION

Drawing 1

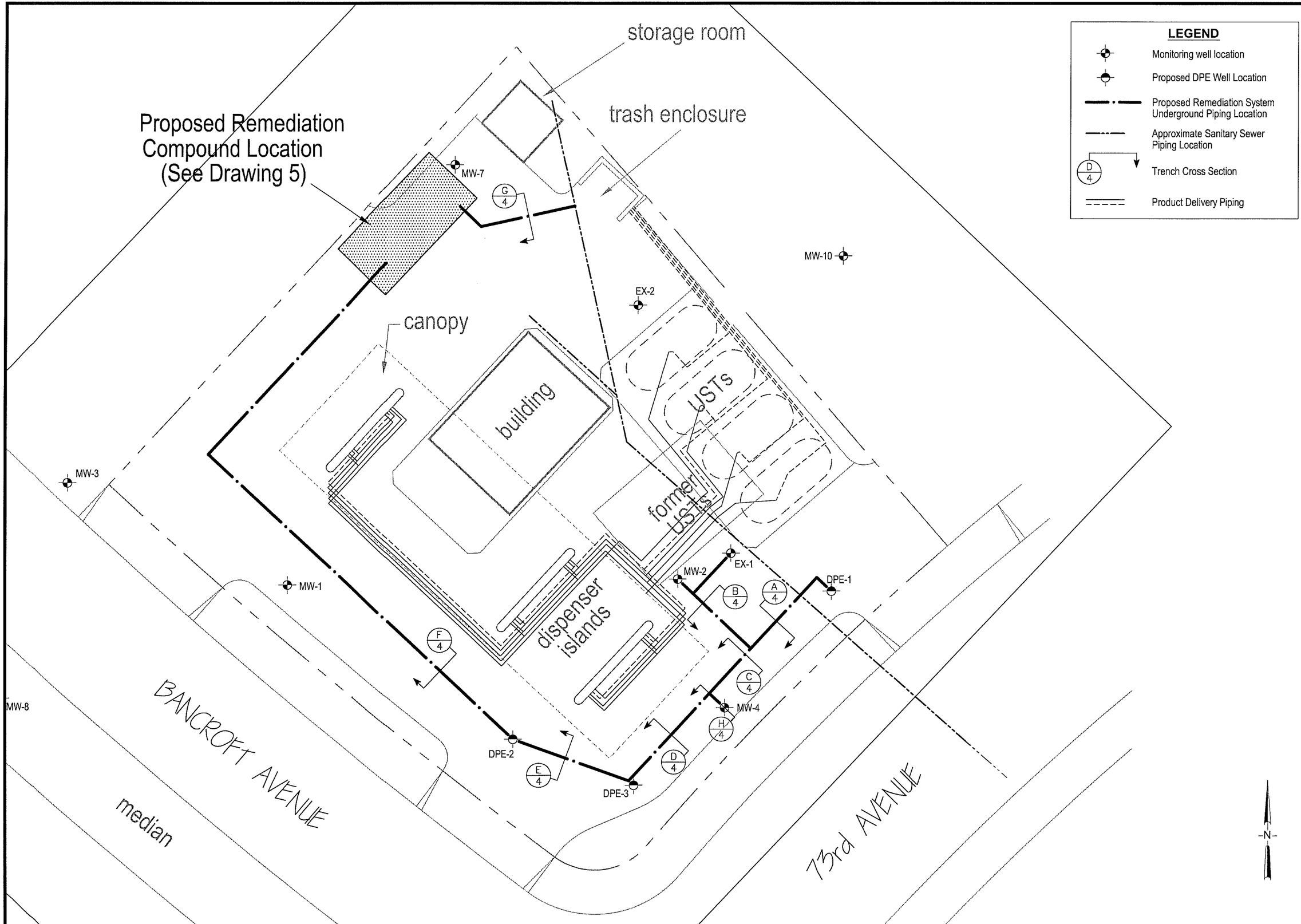
Construction Notes

Project No.: 06-02-649 Date: 4/25/2007

Station #11117
7210 Bancroft Avenue
Oakland, California

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
2000 Kirman Ave.
Reno, Nevada 89502

NOT TO SCALE

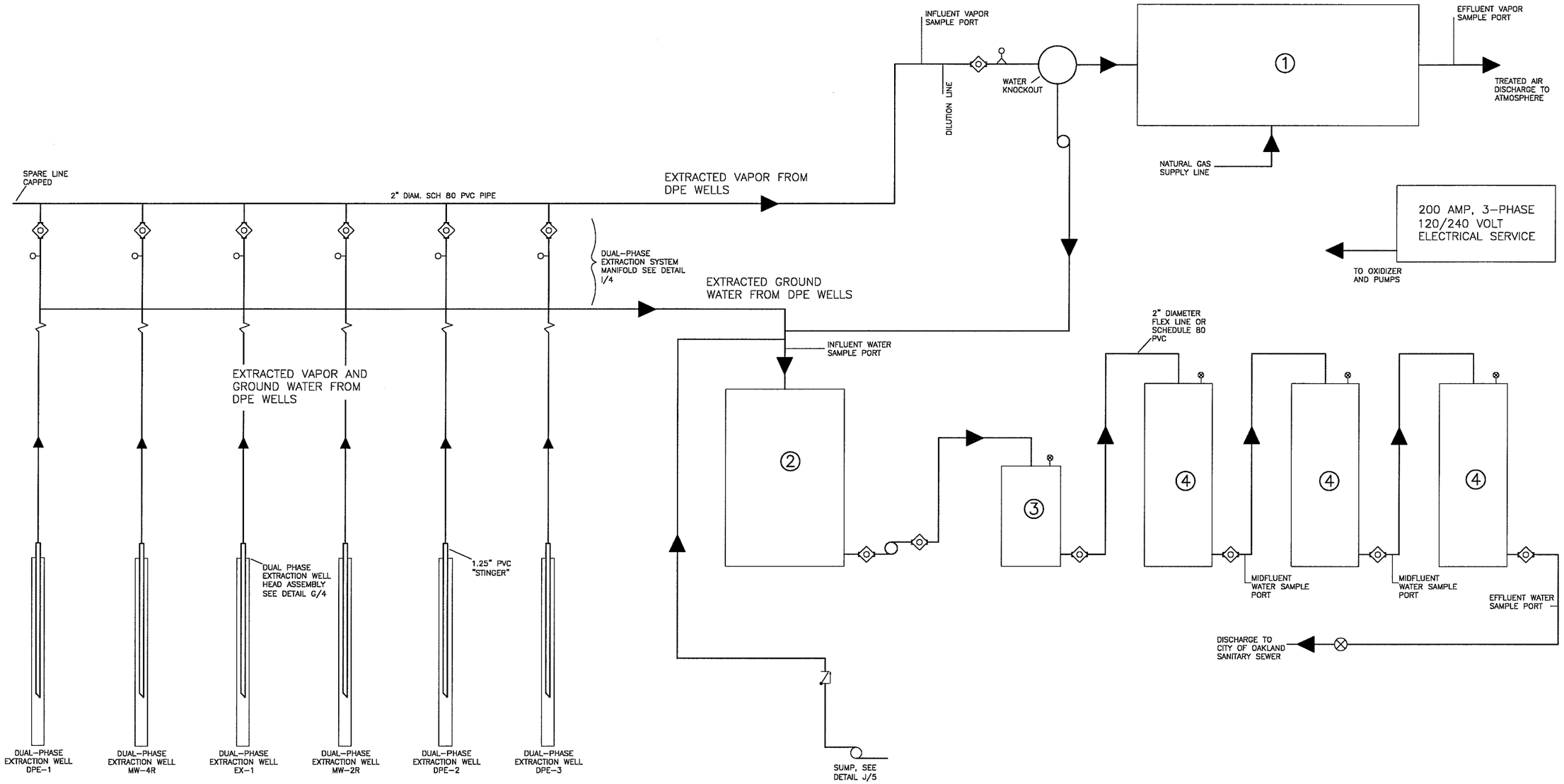


Drawing 2

Site Map with Proposed Remediation Well Locations
Project No.: 06-02-649 Date: 6/18/2007

Station #11117
7210 Bancroft Avenue
Oakland, California

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
2000 Kirman Ave.
Reno, Nevada 89502



LEGEND

- CHECK VALVE
- TOTALIZER
- 2 INCH PVC BALL VALVE
- 0-30 INCHES OF MERCURY VACUUM GAUGE
- BOOSTER PUMP
- 0-50 PSI PRESSURE GAUGE

NUMBER	DESCRIPTION	MANUFACTURER & MODEL NUMBER	SIZE AND CAPACITY (MINIMUM SPECIFICATIONS)
①	THERMAL/CATALYTIC OXIDIZER	SOLLECO 1M	300 CFM @ 28" Hg VAC
②	WATER STORAGE/EQUILIZATION TANK	NOT AVAILABLE	150 GALLON
③	SEDIMENT FILTER	NOT AVAILABLE	NOT AVAILABLE
④	CARBON CANISTER	NOT AVAILABLE	1,000 LBS

Drawing 3

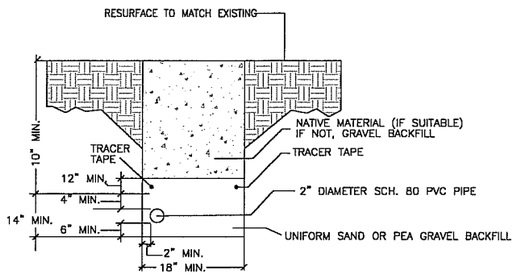
Process Flow Diagram

Project No.: 06-02-649 Date: 6/18/2007

Station #11117
7210 Bancroft Avenue
Oakland, California

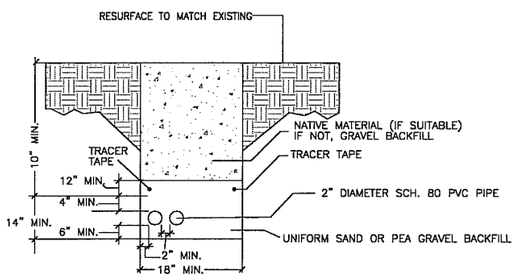
BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
2000 Kirman Ave.
Reno, Nevada 89502

NOT TO SCALE



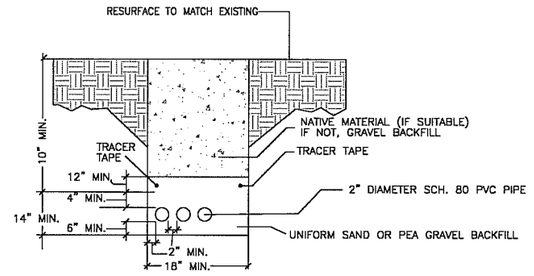
PIPING TRENCH

DETAIL A/4



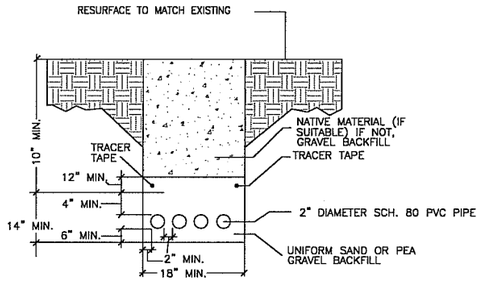
PIPING TRENCH

DETAIL B/4



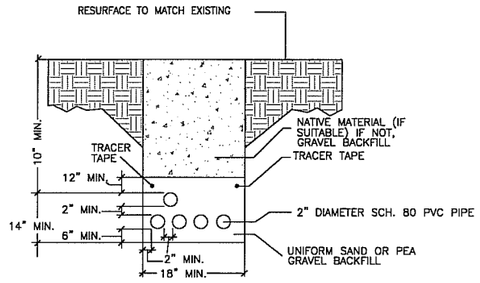
PIPING TRENCH

DETAIL C/4



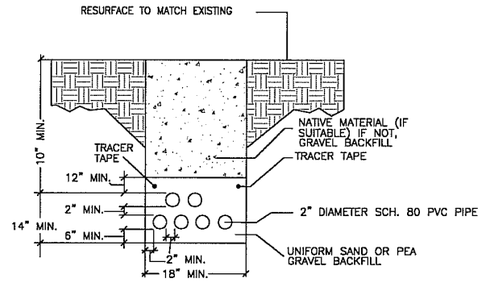
PIPING TRENCH

DETAIL D/4



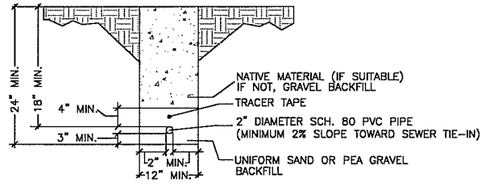
PIPING TRENCH

DETAIL E/4



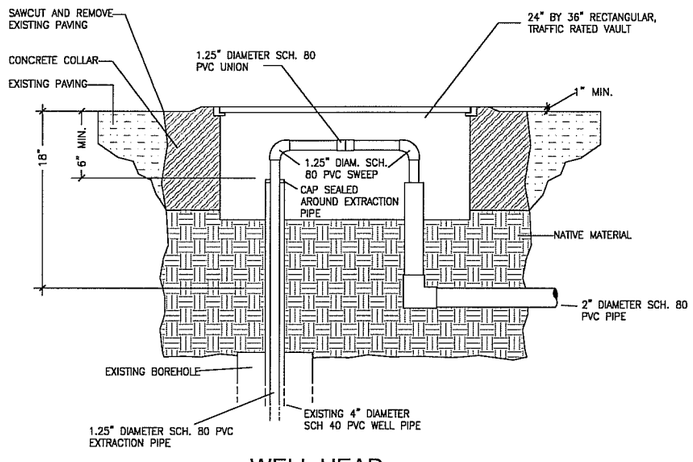
PIPING TRENCH

DETAIL F/4



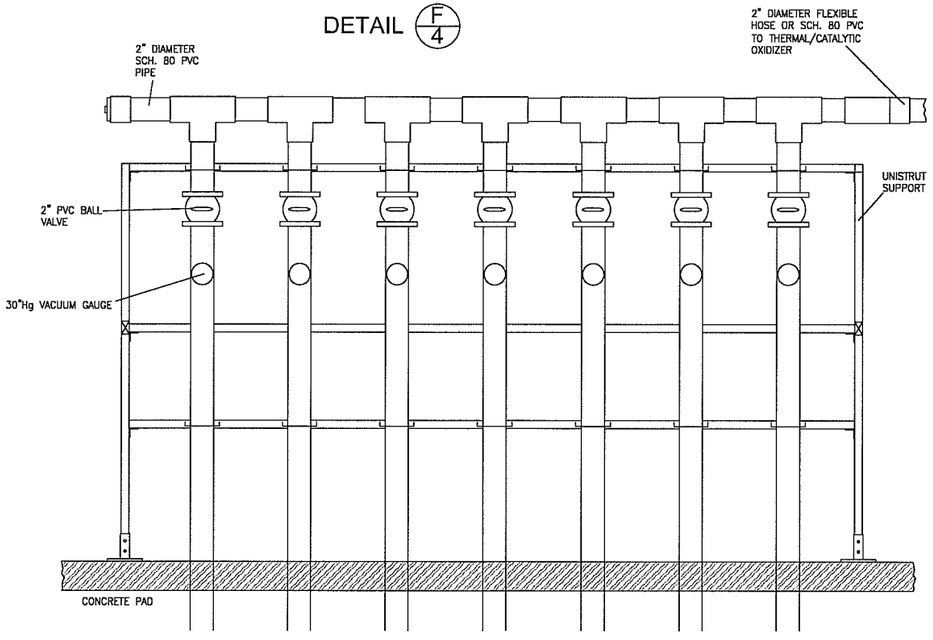
GROUND-WATER DISCHARGE PIPING TRENCH

DETAIL G/4



WELL HEAD

DETAIL H/4



DUAL-PHASE EXTRACTION SYSTEM MANIFOLD

SIDE ELEVATION

DETAIL I/4

Drawing 4

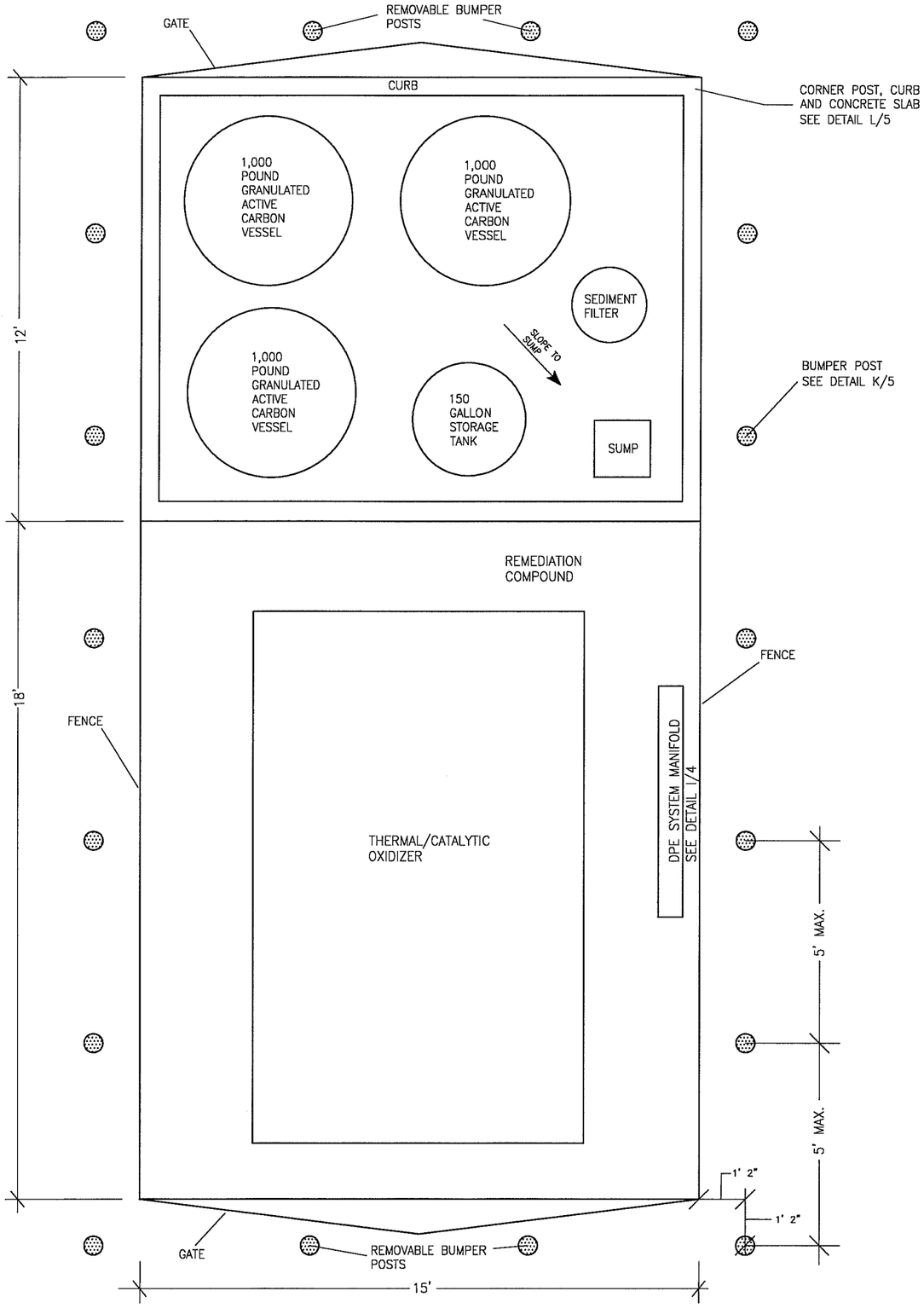
Details

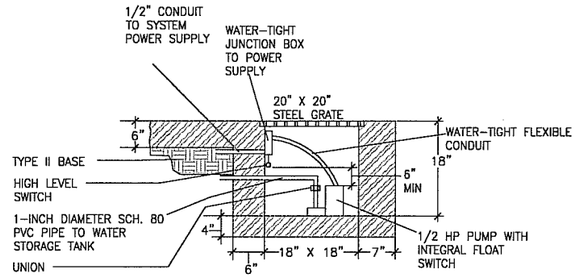
Project No.: 06-02-649 Date: 6/18/2007

Station #11117
7210 Bancroft Avenue
Oakland, California

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
2000 Kirman Ave.
Reno, Nevada 89502

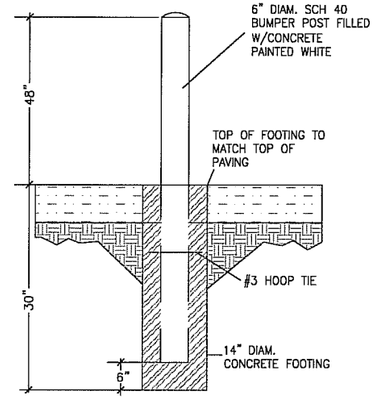
NOT TO SCALE





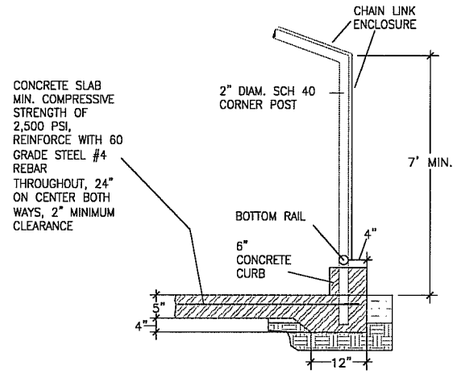
SUMP DETAIL

DETAIL J/5



BUMPER POST

DETAIL K/5



CONCRETE SLAB, CURB & CORNER POST

DETAIL L/5

Drawing 5

Compound Details

Project No.: 06-02-649 Date: 6/18/05

Station #111117
7210 Bancroft Avenue
Oakland, California

BROADBENT & ASSOCIATES, INC.
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