MONROE COUNTY, NEW YORK

ADDENDUM NO. 1

SPECIFICATIONS AND RELATED DOCUMENTS

FOR

PIN 4755.06 (D# 032483)

MULTI-AGENCY GREEN FLEET FUELING STATIONS
MT. READ OPERATIONS CENTER
AND VAN LARE WWTP
CITY OF ROCHESTER

Contract No. 1: General Construction
Contract No. 2: Electrical Construction

MAY 2012

Bids Due
June 6, 2012
11:00 A.M.

Prepared By:
Barton & Loguidice, P.C.
Consulting Engineers
11 Centre Park, Suite 203
Rochester, New York 14614

Prepared For:
Monroe County
Department of Environmental Services
7100 City Place
50 West Main Street, Suite 700
Rochester, New York 14167-1228

TO ALL BIDDERS:
The following constitutes Addendum No. 1 of the Contract Documents. Each bidder shall acknowledge receipt of this Addendum on Page P-5 of the Proposal; failure to do so may subject the bidder to disqualifications.

Pages ADD 1-1 through ADD 1-4

May 30, 2012

MULTI-AGENCY GREEN FLEET FUELING STATIONS
MT. READ OPERATIONS CENTER
AND VAN LARE WWTP
CITY OF ROCHESTER

BID PROJECT NO. 0506-12

ADDENDUM NO. 1
MAY 30, 2012

BIDDERS:
This Addendum forms a part of the Contract Documents and modifies the original Documents dated May 2012. Acknowledge receipt of the Addendum in the space provided on the Proposal form; failure to do so may subject the Bidder to disqualification.

CLARIFICATION

In clarification, Bidders are directed to Pages 12 A 74 through 12 A 75 in Appendix 12 for "Requirements Regarding Training in Federal Aid Contracts" that apply to this Contract.

In clarification, Bidders are directed to the following websites for DOT item number descriptions and historical itemized costs: https://www.dot.ny.gov/main/business-center/engineering/specifications/updated-standard-specifications-us?nd=nysdot and https://www.dot.ny.gov/main/business-center/engineering/specifications/pay-item-catalog.

BORING INFORMATION

Available subsurface boring information for the Mt. Read Operations Center and Van Lare WWTP is attached to this Addendum No. 1.

I. CHANGES TO SPECIFICATIONS:

SUMMARY OF QUANTITIES

1. Page S-1 and S-2, DELETE Summary of Quantities in its entirety and SUBSTITUTE THEREFOR, the attached revised Summary of Quantities.

PROPOSAL

2. Page P-26R through P-30R, Bid Sheets (Base Bid) Contract No. 1 – General Construction, DELETE in their entirety and SUBSTITUTE THEREFOR the attached Revised Bid Sheets "Page P-26R through P-30R (Base Bid) Contract No. 1 – General Construction as attached to this Addendum No. 1.

SPECIAL CONDITIONS

1. Page SC-8, Article 12, "GC #43 – Shop Drawings", DELETE the second paragraph in its entirety and SUBSTITUTE THEREFOR: "Provide a copy of the manufacturer's warranty, including warranty period, local contact person and contact information with telephone number, for all equipment supplied on this project. Equipment shall include, but is not limited to, fuel tanks, pumps, motors, dispensers, fuel management system, tank monitoring system, CNG system, LPG system, and all associated accessories and appurtenances."

II. CHANGES TO DRAWINGS:

DRAWING E-3 – VAN LARE ELECTRICAL SITE PLAN

2. Under KEYED NOTES, ELECTRICAL - SITE PLAN, NOTE 5, ADD "TRANSFORMER TO BE PLACED MINIMUM OF 10' FROM CNG FUELING AREA." To clarify, transformer 'TR2' shall be at least 10' away from areas where compressed natural gas (CNG) is stored, handled, or dispensed.

3. Under KEYED NOTES, ELECTRICAL - SITE PLAN, NOTE 6, ADD "ELECTRICAL BACKBOARD TO BE PLACED MINIMUM OF 10' FROM CNG FUELING AREA." To clarify, electrical backboard shall be at least 10' away from areas where compressed natural gas (CNG) is stored, handled, or dispensed.

DRAWING E-4 – MT. READ ELECTRICAL DEMOLITION PLANS

4. DELETE "FUEL ISLAND – ELECTRICAL ROOM ENLARGED DEMOLITION PLAN" in its entirety, and SUBSTITUTE THEREFOR Figure SK-1 "FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN" as attached to this Addendum No. 1.

5. DELETE "GENERAL NOTES, FUEL ISLAND – ELECTRICAL ROOM ENLARGED DEMOLITION PLAN" and DELETE "KEYED NOTES, FUEL ISLAND – ELECTRICAL ROOM ENLARGED DEMOLITION PLAN" in their entirety, and SUBSTITUTE THEREFOR Figure SK-2 "GENERAL NOTES, FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN" and "KEYED NOTES, FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN" as attached to this Addendum No. 1.

DRAWING G-4 MT. READ OPERATIONS CENTER FUELING SYSTEM SITE PLAN

6. ADD the following sentence to General Note No. 2, "REFINISH ALL SURFACES AROUND AND BELOW THE EXISTING CANOPY, INCLUDING STRUCTURAL STEEL FRAMING, SUPPORTS AND COLUMNS."

DRAWING G-5 MT. READ OPERATIONS CENTER SITE PLAN

7. ADD Note 5 to the GENERAL NOTES, "APPROXIMATE BEDROCK ELEVATION IS 8 FEET BELOW GROUND SURFACE. IT IS ASSUMED APPROXIMATELY 50 CUBIC YARDS OF BEDROCK WILL NEED TO BE REMOVED FOR THE INSTALLATION OF THE UNDERGROUND HOLDING TANK. THE COST OF ANY ROCK EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203.02."

DRAWING G-6 VAN LARE DEMOLITION SITE PLAN

8. ADD Note 5 to the UNDERGROUND TANK CLOSURE AND REMOVAL NOTES, "All DEMOLITION WORK FOR UST REMOVALS INCLUDING ELECTRICAL DEMOLITION WORK IS TO BE COMPLETED BY GENERAL CONTRACTOR. CONTRACTOR TO PROTECT AND RESTORE FENCING FOLLOWING DEMOLITION AND REMOVAL OF TANK. ALL SECURITY CAMERAS TO BE SALVAGED AND TURNED OVER TO THE OWNER."

DRAWING G-7 VANLARE WWTP FUELING SYSTEM SITE PLAN

9. DELETE the "OVERALL SITE PLAN" in its entirety and SUBSTITUTE THEREFOR, the "OVERALL SITE PLAN" with approximately 1,200 feet over underground 3-inch natural gas piping as shown on Figure SK-3 as attached to this Addendum No. 1.

10. ADD the following General Note, “6. EXTEND THE NEW 3-INCH NATURAL GAS LINE FROM THE EXISTING 8-INCH SERVICE TO THE CNG SYSTEM AS SHOWN ON THE OVERALL SITE PLAN. NATURAL GAS LINE SHALL BE INSTALLED A MINIMUM 24-INCHES BELOW GRADE USING ASTM D2513 POLYETHYLENE PIPING, 100 PSIG WORKING PRESSURE, MINIMUM SDR 11.5, ASTM D2683 SOCKET FITTINGS, AND ASTM D2513 MOLDED BUTT-FUSION FITTINGS. CONTRACTOR SHALL ALSO PROVIDE ALL TRENCHING, BACKFILL AND COMPACTION, REMOVAL AND REPLACEMENT OF ASPHALT PAVEMENT, CONCRETE, AND/OR TOPSOIL AND SEEDING NECESSARY TO INSTALL NEW GAS LINE. ALL WORK ASSOCIATED WITH GAS LINE INSTALLATION SHALL BE INCLUDED IN ITEM 990.07.”

DRAWING G-8 VAN LARE WWTP SITE PLAN

11. Under SITE PLAN, CONCRETE EQUIPMENT PAD note with arrow, DELETE the words “ITEM 555.01015” and SUBSTITUTE THEREFOR, “ITEM 555.0105”.

12. Under SITE PLAN, TANK PAD PILE note with arrow, DELETE the words “ITEM 551.012053” and SUBSTITUTE THEREFOR, “ITEM 551.010042”.

DRAWING G-14 SITE DETAILS

13. Under TYPICAL VAN LARE CONCRETE TANK SLAB SECTION, DELETE the note “STEEL H-PILE (HP 12X53) ITEM 551.012053 (TYP.)” in its entirety and SUBSTITUTE THEREFOR, “STEEL H-PILE (HP 10X42) ITEM 551.010042 (TYP.)”.

14. Under TYPICAL VAN LARE CONCRETE TANK SLAB SECTION, DELETE Note No. 1 in its entirety and SUBSTITUTE THEREFOR, “1. THE PILES ARE DESIGNED TO SUPPORT MAXIMUM ALLOWABLE LOAD OF 154 KIPS AND A REQUIRED ULTIMATE TEST CAPACITY OF 308 KIPS. HOWEVER ALL PILES SHALL BE DRIVEN TO PRACTICAL REFUSAL.”

DRAWING G-15 SITE DETAILS

15. ADD Note to the SECTION 3, “CONCRETE BALLAST PAD REINFORCING TO MATCH TYPICAL UNDERGROUND TANK SECTION 2 (SEE SHEET G-12). BALLAST PAD DIMENSIONS TO EXTEND 2’-0” MINIMUM BEYOND ENDS AND SIDES OF TANK, LEVEL IN ALL DIRECTIONS.”

DRAWING G-16 SITE DETAILS

16. Under CANOPY PILE AND FOUNDATION DETAIL, DELETE the note “STEEL H-PILE (HP 12X53) ITEM 551.012053 (TYP.)” in its entirety and SUBSTITUTE THEREFOR, “STEEL H-PILE (HP 10X42) ITEM 551.010042 (TYP.)”.

17. Under CANOPY PILE AND FOUNDATION DETAIL, DELETE Note No. 1 in its entirety and SUBSTITUTE THEREFOR, “1. THE PILES ARE DESIGNED TO SUPPORT MAXIMUM ALLOWABLE LOAD OF 154 KIPS AND A REQUIRED ULTIMATE TEST CAPACITY OF 308 KIPS. HOWEVER, ALL PILES SHALL BE DRIVEN TO PRACTICAL REFUSAL.”

Attachments

END OF ADDENDUM NO. 1

REVISED SUMMARY OF QUANTITIES (BASE BID)

DATE MAY 2012
MULTI-AGENCY GREEN FLEET FUELING STATION - MT. READ OPERATIONS CENTER/VANLARE, PIN 4755.06
MONROE COUNTY, NEW YORK

ITEM	DESCRIPTION	UNITS	QUANTITY
201.06	CLEARING AND GRUBBING	LS	NEC
202.010001	DISPOSAL OF BUILDINGS	LS	NEC
202.19	REMOVAL OF SUBSTRUCTURES	CY	350
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	1,167
203.03	EMBANKMENT IN PLACE	CY	400
203.07	SELECT GRANULAR FILL	CY	480
203.21	SELECT STRUCTURE FILL	CY	210
205.0201	SEGREGATION AND STORAGE OF CONTAMINATED SOIL	LS	NEC
205.0401	PETROLEUM CONTAMINATION PARAMETER ANALYSIS	EACH	11
205.0402	LABORATORY ANALYSIS FOR HAZARDOUS WASTE RCRA TOXICITY CHARACTERISTICS	EACH	11
205.0403	LABORATORY ANALYSIS FOR IGNITABILITY	EACH	11
205.0404	LABORATORY ANALYSIS FOR pH	EACH	11
205.0405	LABORATORY ANALYSIS FOR POLYCHLORINATED BIPHENYLS (PCBs)	EACH	11
205.0406	LABORATORY ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS - GASOLINE RANGE ORGANICS	EACH	11
205.0407	LABORATORY ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS -DIESEL RANGE ORGANICS	EACH	11
205.050201	DISPOSAL OF CONTAMINATED NON-HAZARDOUS WASTE SOIL	TON	1,890
206.01	STRUCTURE EXCAVATION	CY	250
206.02	TRENCH AND CULVERT EXCAVATION	CY	460
207.20	GEOTEXTILE BEDDING	SY	440
207.21	GEOTEXTILE SEPARATION	SY	395
209.1106	CHECK DAM, STONE-PERMANENT	EA	5
209.13	SILT FENCE - TEMPORARY	LF	600
209.22	CONSTRUCTION ENTRANCE	SY	70
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY	1,020
402.128202	12.52 F2 TOP COURSE HMA, 80 SERIES COMPACTION	TON	270
402.198902	19 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	TON	350
402.378902	37.5 F9 BASE COURSE HAM, 80 SERIES COMPACTION	TON	1,030
407.0101	TACK COAT	GAL	130
520.5014008	SAWCUTTING, ASPHALT PAVEMENT, ASPHALT SURFACE COURSE, CONCRETE PAVEMENT OR ASPHALT OVERLAY ON CONCRETE PAVEMENT	LF	750
551.010042	STEEL H-PILES	LF	1,000
551.13	FURNISHING EQUIPMENT FOR DRIVING PILES	LS	NEC
551.14	DYNAMIC PILE TESTING	EACH	2
555.0105	CONCRETE FOR STRUCTURES, CLASS A	CY	555
556.0201	UNCOATED BAR REINFORCEMENT	LB	44,150
556.0202	UNCOATED BAR REINFORCEMENT	LB	49,950
603.16500002	INTERNALL SLOPPING SLOTTED DRAIN (TRENCH DRAIN)	LF	20
603.6002	REINFORCED CONCRETE PIPE CLASS III, 12 INCH	LF	260
603.9804	SMOOTH INTERIOR CORRUGATED POLYETHYLENE STORM DRAIN 4 INCH	LF	60
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE STORM DRAIN 12 INCH	LF	35
604.070401	ALTERING DRAINAGE STRUCTURES, LEACHING BASINS AND MANHOLES	EACH	1
604.301990	RECTANGULAR DRAINAGE STRUCTURE TYPE S	EACH	5
605.1001	UNDERDRAIN FILTER, TYPE II	CY	130
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	13
609.0204	STONE CURB GRANITE TYPE D	LF	970
609.04	CAST IN PLACE CONCRETE CURB	LF	200
610.0203	ESTABLISHING TURF	ACRE	0.35
611.01010010	PLANTING-MAJOR DECIDUOUS TREES	EACH	2
611.03010010	PLANTING-MAJOR CONIFEROUS TREES	EACH	14
613.02	PLACING TOPSOIL-TYPE A	CY	110
615.88020004	BOLLARD, FIXED (GALVANIZED)	EACH	69
615.88040004	BOLLARD, MOVABLE (GALVANIZED)	EACH	32
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	NEC
620.02	STONE FILLING (FINE)	CY	30
625.01	SURVEY OPERATIONS	LS	NEC
629.01	REMOVAL/DISPOSAL OF LIQUIDS FROM PETROLEUM TANKS	GAL	6,200
629.0201	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-MT. READ SITE)	EACH	1

REVISED SUMMARY OF QUANTITIES (BASE BID)

DATE MAY 2012
MULTI-AGENCY GREEN FLEET FUELING STATION - MT. READ OPERATIONS CENTER/VANLARE, PIN 4755.06
MONROE COUNTY, NEW YORK

ITEM	DESCRIPTION	UNITS	QUANTITY
629.0202	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-MT. READ SITE)	EACH	1
629.0203	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-MT. READ SITE)	EACH	1
629.0204	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-MT. READ SITE)	EACH	1
629.0205	PETROLEUM STORAGE TANK CLOSURE (MOTOR OIL-MT. READ SITE)	EACH	1
629.0206	PETROLEUM STORAGE TANK CLOSURE (HYDRAULIC OIL-MT. READ SITE)	EACH	1
629.0207	PETROLEUM STORAGE TANK CLOSURE (SPILLAGE TANK-MT. READ SITE)	EACH	1
629.0208	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-VANLARE SITE)	EACH	1
629.0209	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-VANLARE SITE)	EACH	1
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MONTH	12
627.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	NEC
655.0901	PARALLEL BAR FRAME 10 PCB & PARALLEL BAR GRATE 10 PCB	EA	5
655.1202	MANHOLE FRAME AND COVER	EACH	3
699.040001	MOBILIZATION	LS	NEC
990.01	FUELING SYSTEM (MT. READ SITE)	LS	NEC
990.02	CNG SYSTEM (MT. READ SITE)	LS	NEC
990.03	SPECIAL DEMOLITION (MT. READ SITE)	LS	NEC
990.04	REMEDIATION/WATER TREATMENT (MT. READ SITE)	LS	NEC
990.0401	PETROLEUM CONTAMINATED GROUNDWATER TREATMENT SYSTEM	LS	NEC
990.0402	GROUNDWATER TREATEMNT DISPOSAL	GAL	150,000
990.0403	MONITORING WELL INSTALLATION	EA	3
990.06	FUELING SYSTEM (VAN LARE SITE)	LS	NEC
990.07	CNG SYSTEM (VAN LARE SITE)	LS	NEC
990.08	LPG SYSTEM (VAN LARE SITE)	LS	NEC
990.09	CANOPY (VAN LARE SITE)	LS	NEC
990.10	PREASSEMBLED ELECTRICAL BUILDING (VAN LARE SITE)	LS	NEC
990.11	SPECIAL DEMOLITION (VAN LARE SITE)	LS	NEC

BID SHEETS (BASE BID)
Contract No. 1 - General Construction
ITEMIZED PROPOSAL

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

ITEM	DESCRIPTION	EST. QUANT.	UNIT	UNIT BID PRICE (NUMERALS)	UNIT PRICE (WORDS - PRINTED LEGIBLY)	AMOUNT BID
201.06	CLEARING AND GRUBBING	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
202.010001	DISPOSAL OF BUILDINGS	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
202.19	REMOVAL OF SUBSTRUCTURES	350	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	1,167	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
203.03	EMBANKMENT IN PLACE	400	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
203.07	SELECT GRANULAR FILL	480	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
203.21	SELECT STRUCTURE FILL	210	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0201	SEGREGATION AND STORAGE OF CONTAMINATED SOIL	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0401	PETROLEUM CONTAMINATION PARAMETER ANALYSIS	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

205.0402	LABORATORY ANALYSIS FOR HAZARDOUS WASTE RCRA TOXICITY CHARACTERISTIC	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0403	LABORATORY ANALYSIS FOR IGNITABILITY	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0404	LABORATORY ANALYSIS FOR pH	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0405	LABORATORY ANALYSIS FOR POLYCHLORINATED BIPHENYLS (PCBs)	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0406	LABORATORY ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS-GASOLINE RANGE ORGANICS	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.0407	LABORATORY ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS-DIESEL RANGE ORGANICS	11	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
205.050201	DISPOSAL OF CONTAMINATED NON-HAZARDOUS WASTE SOIL	1,890	TON	$_____	_____ DOLLARS and _____ CENTS	$_____
206.01	STRUCTURE EXCAVATION	250	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
206.02	TRENCH AND CULVERT EXCAVATION	460	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
207.20	GEOTEXTILE BEDDING	440	SY	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

207.21	GEOTEXTILE SEPARATION	395	SY	$_____	_____ DOLLARS and _____ CENTS	$_____
209.1106	CHECK DAM, STONE-PERMANENT	5	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
209.13	SILT FENCE - TEMPORARY	600	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
209.22	CONSTRUCTION ENTRANCE	70	SY	$_____	_____ DOLLARS and _____ CENTS	$_____
304.15	SUBBASE COURSE, OPTIONAL TYPE	1,020	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
402.128202	12.52 F2 TOP COURSE HMA, 80 SERIES COMPACTION	270	TON	$_____	_____ DOLLARS and _____ CENTS	$_____
402.198902	19 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	350	TON	$_____	_____ DOLLARS and _____ CENTS	$_____
402.378902	37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION	1,030	TON	$_____	_____ DOLLARS and _____ CENTS	$_____
407.0101	TACK COAT	130	GAL.	$_____	_____ DOLLARS and _____ CENTS	$_____
520.5014008	SAWCUTTING, ASPHALT PAVEMENT, ASPHALT SURFACE COURSE, CONCRETE PAVEMENT OR ASPHALT OVERLAY ON CONCRETE PAVEMENT	750	LF	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

BID SHEETS (BASE BID)
Contract No. 1 - General Construction
ITEMIZED PROPOSAL

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

551.010042	STEEL H-PILES	1,000	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
551.13	FURNISHING EQUIPMENT FOR DRIVING PILES	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
551.14	DYNAMIC PILE TESTING	2	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
555.0105	CONCRETE FOR STRUCTURES, CLASS A	555	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
556.0201	UNCOATED BAR ENFORCEMENT	44,150	LB	$_____	_____ DOLLARS and _____ CENTS	$_____
556.0202	EPOXY COATED BAR ENFORCEMENT	49,950	LB	$_____	_____ DOLLARS and _____ CENTS	$_____
603.16500002	INTERNALLY SLOPPING SLOTTED DRAIN (TRENCH DRAIN)	20	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
603.6002	REINFORCED CONCRETE PIPE CLASS III, 12 INCH	260	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
603.9804	SMOOTH INTERIOR CORRUGATED POLYETHYLENE STORM DRAIN 4 INCH	60	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE STORM DRAIN 12 INCH	35	LF	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

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MT. READ OPERATIONS CENTER AND VANLARE SITE

604.070401	ALTERING DRAINAGE STRUCTURES, LEACHING BASINS AND MANHOLES	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
604.301990	RECTANGULAR DRAINAGE STRUCTURE TYPE S	5	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
605.1001	UNDERDRAIN FILTER, TYPE II	130	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	13	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
609.0204	STONE CURB GRANITE TYPE D	970	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
609.04	CAST-IN-PLACE CONCRETE CURB	200	LF	$_____	_____ DOLLARS and _____ CENTS	$_____
610.0203	ESTABLISHING TURF	0.35	ACRE	$_____	_____ DOLLARS and _____ CENTS	$_____
611.01010010	PLANTING-MAJOR DECIDUOUS TREES	2	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
611.03010010	PLANTING-MAJOR CONIFEROUS TREES	14	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
613.02	PLACING TOPSOIL –TYPE A	110	CY	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

615.88020004	BOLLARD, FIXED (GALVANIZED)	69	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
615.88040004	BOLLARD, MOVABLE (GALVANIZED)	32	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
619.01	BASIC WORK ZONE TRAFFIC CONTROL	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
620.02	STONE FILLING (FINE)	30	CY	$_____	_____ DOLLARS and _____ CENTS	$_____
625.01	SURVEY OPERATIONS	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
629.01	REMOVAL/DISPOSAL OF LIQUIDS FROM PETROLEUM TANKS	6,200	GAL	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0201	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0202	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0203	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0204	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

BID SHEETS (BASE BID)
Contract No. 1 - General Construction
ITEMIZED PROPOSAL

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

629.0205	PETROLEUM STORAGE TANK CLOSURE (MOTOR OIL-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0206	PETROLEUM STORAGE TANK CLOSURE (HYDRAULIC OIL-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0207	PETROLEUM STORAGE TANK CLOSURE (SPILLAGE TANK-MT. READ SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0208	PETROLEUM STORAGE TANK CLOSURE (DIESEL FUEL-VAN LARE SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
629.0209	PETROLEUM STORAGE TANK CLOSURE (UNLEADED GASOLINE-VAN LARE SITE)	1	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
637.11	ENGINEER'S FIELD OFFICE-TYPE I	12	MONTHS	$_____	_____ DOLLARS and _____ CENTS	$_____
637.34	OFFICE TECHNOLOGY AND SUPPLIES	NEC	DC	$_____	_____ DOLLARS and _____ CENTS	$_____
655.0901	PARALLEL BAR FRAME 10 PCB & PARALLEL BAR GRATE 10 PCB	5	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
655.1202	MANHOLE FRAME AND COVER	3	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
699.040001	MOBILIZATION	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

BID SHEETS (BASE BID)
Contract No. 1 - General Construction
ITEMIZED PROPOSAL

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

990.01	FUELING SYSTEM (MT. READ SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.02	CNG SYSTEM (MT. READ SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.03	SPECIAL DEMOLITION (MT. READ SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.04	REMEDIATION/WATER TREATMENT (MT. READ SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.0401	PETROLEUM CONTAMINATED GROUNDWATER TREATMENT SYSTEM	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.0402	GROUNDWATER TREATMENT DISPOSAL	150,000	GAL	$_____	_____ DOLLARS and _____ CENTS	$_____
990.0403	MONITORING WELL INSTALLATION	3	EA	$_____	_____ DOLLARS and _____ CENTS	$_____
990.06	FUELING SYSTEM (VAN LARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.07	CNG SYSTEM (VAN LARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.08	LPG SYSTEM (VAN LARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____

CARRY FORWARD _____

BID SHEETS (BASE BID)
Contract No. 1 - General Construction
ITEMIZED PROPOSAL

MULTI-AGENCY GREEN FLEET FUELING STATION CIP No. 0506.12
MT. READ OPERATIONS CENTER AND VANLARE SITE

990.09	CNOPY (VAN LARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.10	PREASSEMBLED ELECTRICAL BUILDING (VAN LARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____
990.11	SPECIAL DEMOLITION (VANLARE SITE)	NEC	LS	$_____	_____ DOLLARS and _____ CENTS	$_____

TOTAL _____ $ _____

DOLLARS and _____ CENTS

CARRY FORWARD _____

Plotted: May 30, 2012 – 9:50AM SYR By: jer2
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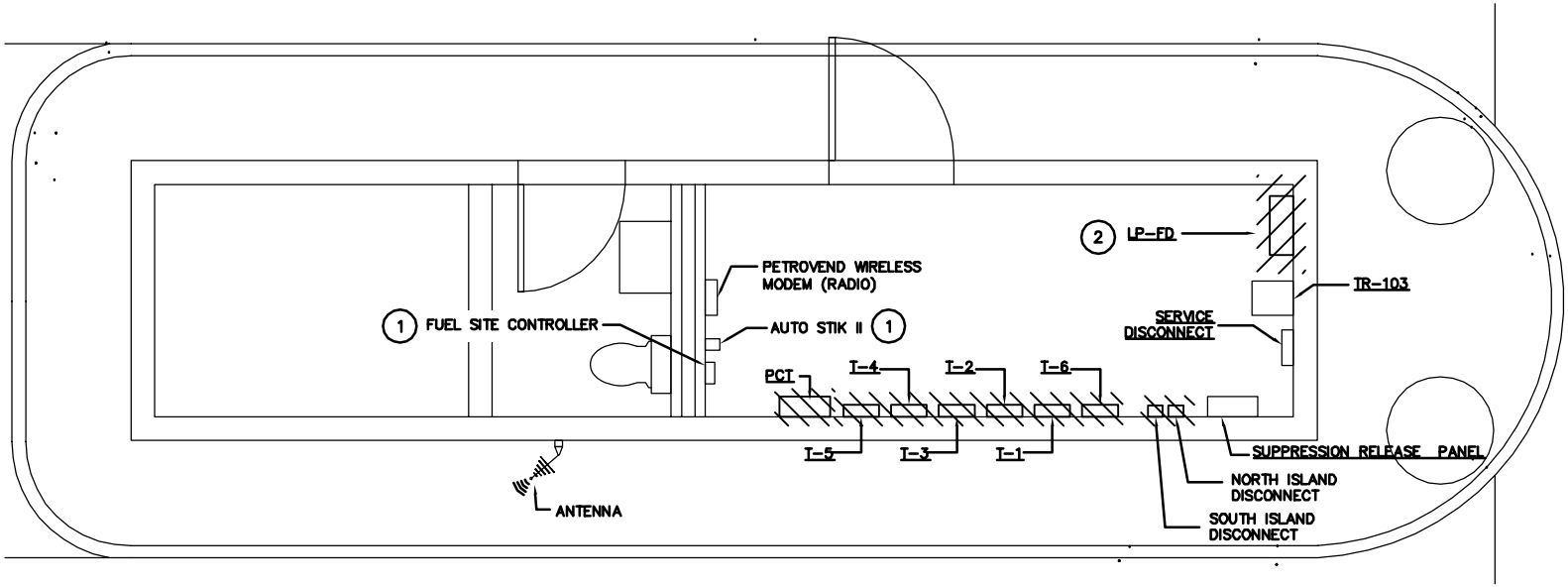
TRUE OR CALLED NORTH



FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN

3/16" – 1'–0"

4' 0 6' 12'
3/16"=1'–0"

Barton & Loguidice, P.C.

Date	Scale
MAY, 2012	AS SHOWN

MONROE COUNTY
MULTI–AGENCY GREEN FLEET FUELING STATION

FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN

CITY OF ROCHESTER MONROE COUNTY, NEW YORK

Figure Number
SK–1

Project Number
1066.018

Plotted: May 30, 2012 – 9:49AM SYR By: jer2
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GENERAL NOTES, FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN:

1. ALL ITEMS OF WORK TO BE PAID UNDER ITEM NUMBER 990.05
2. ITEMS INDICATED TO BE DEMOLISHED:
   –REMOVE ALL WIRE AND EXPOSED CONDUIT BACK TO SOURCE, (UNLESS OTHERWISE INDICATED)
   –REMOVE CIRCUIT WIRING FROM SOURCE PANEL, REMOVE EXISTING CIRCUIT BREAKERS.
   –REMOVE ALL ASSOCIATED CONTROL WIRING AND DEVICES.
3. THESE DEMOLITION DRAWINGS ARE SCHEMATIC IN NATURE AND ARE BASED ON CURSORY FIELD OBSERVATION. IT IS NOT THE INTENTION OF THESE DRAWINGS TO INDICATE EVERY DEVICE/FIXTURE REQUIRING REMOVAL/DEMO RATHER GENERAL SYSTEMS WHICH ARE TO BE REMOVED. IN GENERAL:
   MOTOR STARTERS: ALL PUMP MOTOR STARTERS (T–1, T–2, T–3, T–4, T–5, T–6) TO BE REMOVED. REMOVE ALL WIRE AND CONDUIT BACK TO SOURCE PANEL.
   PUMP CONTROLLER: ALL PUMP CONTROLLERS AND DEVICES TO BE REMOVED. REMOVE ALL WIRE AND CONDUIT BACK TO SOURCE PANEL.
   EMERGENCY FUEL SHUT OFFS: ALL EMERGENCY FUEL SHUT OFFS AND DISCONNECTS ASSOCIATED WITH FUELING ISLAND ARE TO BE REMOVED. REMOVE WIRE AND CONDUIT BACK TO SOURCE PANEL.
   LIGHTS: ALL CANOPY LIGHTING FIXTURES ARE EXISTING TO REMAIN. DURING PAINTING AND SANDBLAST LIGHTS SHALL BE PROTECTED SO THAT NO DAMAGE IS DONE TO LIGHTS. COORDINATE WITH OTHER TRADES.
4. REFER TO 'FUEL ISLAND DEMOLITION – ONE LINE DIAGRAM' FOR ADDITIONAL INFORMATION REGARDING REMOVAL AND DEMOLITION OF ELECTRICAL EQUIPMENT.
5. MECHANICAL AND HVAC EQUIPMENT IN AREA OF WORK SHALL BE DISCONNECTED FROM SOURCE OF POWER AND MADE ELECTRICALLY SAFE.
6. CIRCUITS NOT IN AREA OF WORK THAT ARE AFFECTED BY WORK SHALL BE OPERATIONAL DURING PROJECT. PROVIDE TEMPORARY CIRCUITS AS NECESSARY.
7. CONTRACTOR SHALL FIELD VERIFY THAT REMOVAL OF CIRCUITS SHALL NOT AFFECT INTEGRITY OF CIRCUITS TO REMAIN. ALL CIRCUITS TO REMAIN SHALL BE MAINTAINED. PROVIDE NECESSARY CIRCUIT MODIFICATIONS AND EXTENSIONS INCLUDING JUNCTION BOXES TO MAINTAIN EXISTING CIRCUITS. MODIFICATIONS AND EXTENSIONS OF CIRCUITS SHALL NOT INTERFERE WITH EXISTING EQUIPMENT OR WITH EQUIPMENT TO BE INSTALLED.

KEYED NOTES, FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN:

(1) TO REMAIN OPERATIONAL UNTIL NEW FUEL ISLAND CONSTRUCTION IS COMPLETE AND OPERATIONAL. UPON COMPLETION OF CONSTRUCTION AND AN OVERALL COMPLETE AND OPERABLE NEW FUELING SYSTEM, DEVICE IS TO BE REMOVED.

(2) UPON DEMOLITION OF PANEL, PROVIDE TEMPORARY CIRCUIT TO EXISTING AUTO STIK II CONTROLLER, FUEL SITE CONTROLLER, AND PETROVEND WIRELESS MODEM (RADIO) EQUIPMENT. THIS EQUIPMENT IS TO REMAIN. THIS EQUIPMENT IS SERVICING THE TEMPORARY FUELING STATION. THIS EQUIPMENT SHALL NOT BE OUT OF SERVICE FOR MORE THAN AN HOUR. COORDINATE OUTAGES WITH OWNER.

Barton & Loguidice, P.C.

Date	Scale
MAY, 2012	AS SHOWN

MONROE COUNTY
MULTI–AGENCY GREEN FLEET FUELING STATION

FUEL ISLAND ELECTRICAL ROOM ENLARGED PLAN

CITY OF ROCHESTER MONROE COUNTY, NEW YORK

Figure Number
SK–2

Project Number
1066.018

OVERALL SITE PLAN
SCALE: 1"= 100'

Barton & Loguidice, P.C.

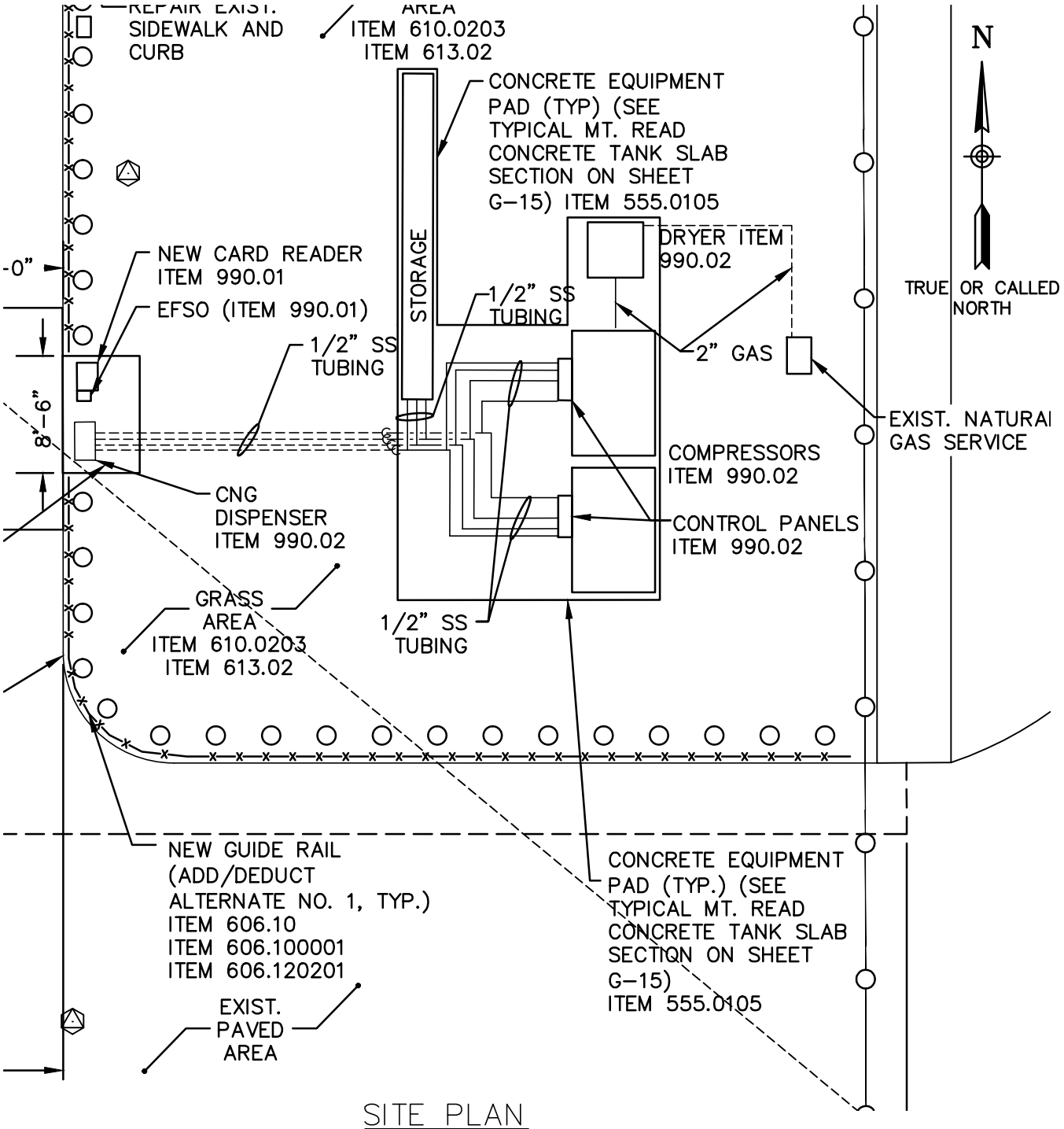
Date	Scale
MAY, 2012	AS SHOWN

MONROE COUNTY
MULTI-AGENCY GREEN FLEET FUELING STATION

VANLARE WWTP SITE PLAN CNG MAIN

MONROE COUNTY, NEW YORK

Figure Number	Project Number
SK-3	1066.018



SITE PLAN

SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. EXTEND CONCRETE EQUIPMENT PAD AROUND CNG AREA AS SHOWN AND INSTALL CNG TUBING ABOVE GRADE ON CONCRETE ADJACENT TO THE NEW EQUIPMENT. TUBING TO THE DISPENSER SHALL BE INSTALLED BELOW GRADE AS SHOWN.

Barton & Loguidice, P.C.	MONROE COUNTY MULTI-AGENCY GREEN FLEET FUELING STATIONS MT. READ OPERATIONS CENTER PARTIAL SITE PLAN CITY OF ROCHESTER MONROE COUNTY, NEW YORK	Figure Number SK-4 Project Number 1066.018
Date MAY, 2012	Scale AS SHOWN	

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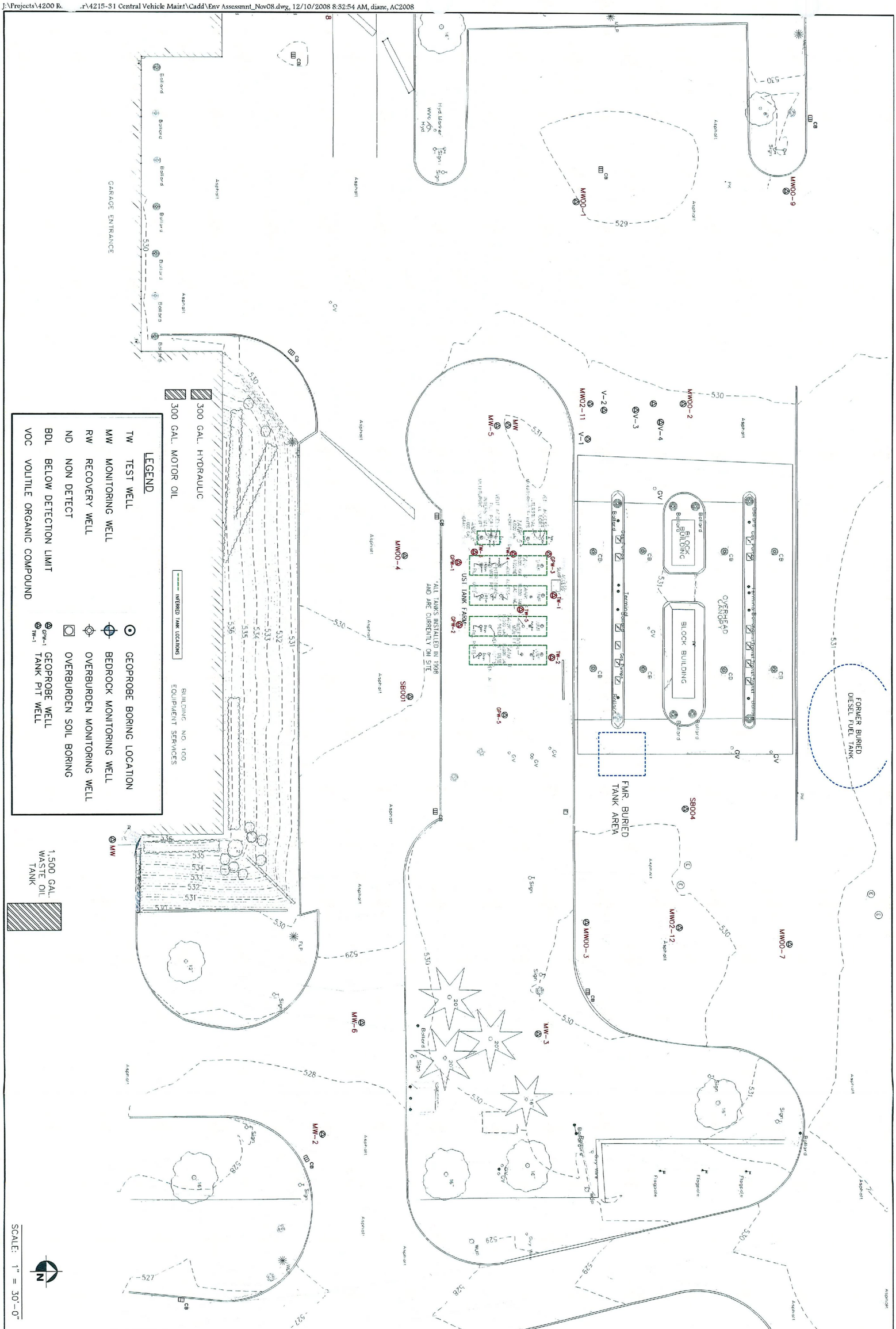


SCALE: 1" = 30'-0"

LU ENGINEERS
Civil and Environmental
JOSEPH C. LU ENGINEERING AND LAND SURVEYING, P.C.
2230 PENFIELD ROAD PENFIELD, NEW YORK 14526
PHONE: 585.377.1450 FAX: 585.377.1266

FIGURE 2. SITE PLAN
PHASE II ENVIRONMENTAL ASSESSMENT

CITY OF ROCHESTER
CENTRAL VEHICLE MAINTENANCE
945 MT. READ BLVD.

DATE:	NOVEMBER 2008
DESIGNED/DRAWN:	JB/DLS
MAP SOURCE:	"TOPOGRAPHIC MAP of 945 MT. READ BLVD." DEPARTMENT OF ENVIRONMENTAL SERVICES DEPARTMENT OF ENGINEERING SERVICES OFFICE OF MAPS & SURVEYS, ROCHESTER, NY

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 98-1 City of Rochester CVMF – Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar	Drilling	Date	Time
Drill Method: Geoprobe Sytems Model 5400	Started	11/04/99	
Sample Method: MacroCore	Finished	11/04/99	
Borehole Diameter: 2" In. / Water Level: Not Measured	Logged By: J. Forbes	Checked By: J. Forbes	

Sample No.	Recovery (In.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
S1		MC	35.1	1–2		Fill, dark Brown sandy SILT, some Gravel	
				3		Reddish-brown SAND, slight petroleum odor	
				4		Reddish-brown SAND, some Silt, little Gravel	
S2		MC	380	5		Gray silty GRAVEL, strong petroleum odor, some staining, moist at 5.5' bgs	moist
				6		*Refusal at 6.0 feet.*	
				7			

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 98-2 City of Rochester CVMF - Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar	Drilling	Date	Time
Drill Method: Geoprobe Sytems Model 5400	Started	11/04/99	
Sample Method: MacroCore	Finished	11/04/99	
Borehole Diameter: 2" in. / Water Level: Not Measured	Logged By: J. Forbes	Checked By: J. Forbes	

Sample No.	Recovery (in.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
S1		MC	N/A	1		Fill, Brown silty GRAVEL and CLAY, some organics with cobbles, no odor	
S2			13	2 3		Tannish-brown SILT and GRAVEL, little Clay, little Cobbles, dry, no odor, tighter Clay at 3' to 4' bgs	dry
S3			20.2	4 5		Tan-brown SILT and CLAY, little Gravel, grading to sandy Silt at 6.5' to 7.5' bgs, moist at 7' bgs, no petroleum odor	
			80.3	6 7			moist
						Refusal at 7.5 feet.	

MARCOR Remediation Inc.
Environmental Contractors
52 Marway Circle
Rochester, NY 14624
Phone (716) 247-6955 Fax (716) 247-6852

Log of Boring GP 98-3

City of Rochester
CVMF - Mt. Read Blvd.
Rochester, NY

Sheet 1 of 1

Job Number: 51-02869-005

Elevation: Not Surveyed

Driller: J. Agar

Drill Method: Geoprobe Sytems Model 5400

Sample Method: MacroCore

Borehole Diameter: 2" In.

Water Level: Not Measured

Drilling	Date	Time
Started	11/04/99	
Finished	11/04/99	

Logged By: J. Forbes

Checked By: J. Forbes

Sample No.	Recovery (In.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
				0		Asphalt, till Gravel	
S1		MC	N/A	1			
				2		Brownish-gray SILT and GRAVEL, some Clay, dry, slight weathered petroleum odor	
S2			82.0	3			dry
				4		Brown-Gray silty SAND, some Gravel, little Clay, moist to wet at 6.5', weathered petroleum odor at 6' to 6.5' bgs	
S3		MC	79.1	5			moist
				6			
						Bottom of boring at 6.5 feet.	
				7			

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 99-4 City of Rochester CVMF - Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar	Drilling	Date	Time
Drill Method: Geoprobe Sytems Model 5400	Started	11/04/99	
Sample Method: MacroCore	Finished	11/04/99	
Borehole Diameter: 2" In. / Water Level: Not Measured	Logged By: J. Forbes	Checked By: J. Forbes	

Sample No.	Recovery (in.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
S1		MC	N/A	1		Asphalt, fill, Gravel, concrete to 2.5' bgs	
S2			90.5	2 3		Fill and Gravel to 3' bgs Brown sandy SILT, some Gravel, trace red Clay, moist at 4' bgs, no petroleum odor	
S3		MC	217	4 5		No recovery 4' to 5' bgs Brown SILT with Gravel, trace Clay, slight petroleum odor, moist at 6' bgs	moist
S4			1100	6		Brown clayey SILT, trace Gravel, wet at 8.5' bgs, bedrock at 8.5' to 7' bgs, strong petroleum odor	moist wet
				7		*Bottom of boring at 7.0 feet.*	

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 99-5 City of Rochester CVMF - Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar	Drilling	Date	Time
Drill Method: Geoprobe Sytems Model 5400	Started	11/04/99	
Sample Method: MacroCore	Finished	11/04/99	
Borehole Diameter: 2" In. / Water Level: Not Measured	Logged By: J. Forbes	Checked By: J. Forbes	

Sample No.	Recovery (in.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
						No recovery 0' to 1' bgs	
S1			N/A	1		Asphalt, concrete fill	
		MC		2			
S2			777	3		Dark Brown SAND and GRAVEL, some Silt, trace Clay, trace Cobbles, dry, slight petroleum odor at 4' bgs	dry
				4		Similar Soil, strong petroleum odor, moist	
S3			1498	5			moist
		MC		6			
S4			1518	7		Brown sandy SILT, some Gravel, trace Clay, strong petroleum odor, wet, sheen, possible free product	wet
						Bottom of boring at 7.5 feet.	

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 99-6 City of Rochester CVMF - Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar		**Drilling**	**Date**	**Time**
Drill Method: Geoprobe Sytems Model 5400		**Started**	11/04/99	
Sample Method: MacroCore		**Finished**	11/04/99	
Borehole Diameter: 2" in.	**Water Level:** Not Measured	**Logged By:** J. Forbes	**Checked By:** J. Forbes	

Sample No.	Recovery (in.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
						No recovery 0' to 1' bgs	
S1			N/A	1		Asphalt, fill, Gravel	
		MC		2		Brown gravelly SAND to 3' bgs grading to sandy Silt and Clay, little Gravel, trace Cobbles, dry, no petroleum odor	
S2			70.1	3			
				4		Brownish-gray sandy SILT, little Gravel, trace Clay, wet at 6' bgs, strong petroleum odor	dry
S3			342	5			
		MC		6		Similar Soil	
S4			N/A	7			wet
						Bottom of boring at 7.5 feet.	

MARCOR Remediation Inc. Environmental Contractors 52 Marway Circle Rochester, NY 14624 Phone (716) 247-6955 Fax (716) 247-6852	Log of Boring GP 99-7 City of Rochester CVMF - Mt. Read Blvd. Rochester, NY	Sheet 1 of 1 Job Number: 51-02869-005 Elevation: Not Surveyed

Driller: J. Agar	Drilling	Date	Time
Drill Method: Geoprobe Sytems Model 5400	Started	11/04/99	
Sample Method: MacroCore	Finished	11/04/99	
Borehole Diameter: 2" in. / Water Level: Not Measured	Logged By: J. Forbes	Checked By: J. Forbes	

Sample No.	Recovery (in.)	Sampler Type	PID (ppm)	Depth (feet)	Graphic Log	Materials Description	Moisture
						No recovery 0' to 1' bgs	
S1		MC	N/A	1		Dark Brown SILT and GRAVEL, some Sand, little organics, no odor	
S2			299	2		Reddish-brown SAND with Gravel and Silt, slight petroleum odor	
				3			
				4		"blow up", no recovery	
S3		MC	N/A	5			
				6		Dark Brown SAND, trace Gravel, moist, strong petroleum odor	
S4			1399	7			moist
						Refusal at 7.5 feet.	

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-1

Enclosure:

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
		FILL FILL, asphalt, gravel, dry, no petroleum odor.	15	S1	MC		24"			6.5
2			2							
		Sandy CLAY Brown Sandy CLAY with Silt, tightly packed, trace cmf Gravel, dry, moderate petroleum odor.	13	S1	MC		24"			46.4
4			4							
		Sandy SILT Brown Sandy SILT, tightly packed, some cmf Gravel, little Cobbles, dry to moist, strong petroleum odor.	11	S2	MC		8"			761
5			5							
		Refusal @ 5.0' bgs.	10							
		End of Borehole								
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-2

Enclosure:

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
		FILL FILL, asphalt, gravel, dry, no petroleum odor.	15	S1	MC		0"			1.5
1				S1	MC		8"			
			2							
2			13							
		Silty CLAY Dark Brown Silty CLAY with cmf Gravel, trace Cobbles, dry, moderate petroleum odor.		S1	MC		24			344
3										
			4							
4		***Silty CLAY*** Dark Brown Silty CLAY, tightly packed, with cmf Gravel, trace Sand, trace Cobbles, dry to moist, moderate petroleum odor.	11	S2	MC		24"			501
5										
			6							
6		***Silty CLAY*** Brown Silty CLAY, little cmf Gravel, moist to wet, strong petroleum odor.	9 6.5	S2	MC		6"			951
			8.5							
7		Refusal @ 6.5' bgs.								
		End of Borehole								
8										
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-3

Enclosure:

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
		FILL FILL, asphalt, gravel, concrete, dry, no petroleum odor.	15	S1	MC		24"			2.8
2			2							
		Clayey SILT Gray and Brown mottled, tightly packed Clayey SILT, little cmf Gravel, little Sand, moist, moderate petroleum odor.	13	S1	MC		24"			60.8
4			4							
		SILT Brown SILT, tightly packed with cmf Gravel, little f Sand, moist to wet @ 6.0' bgs, strong petroleum odor. Refusal @ 6.0' bgs.	11	S2	MC		24			717
6			6							
		End of Borehole	9							
7										
8										
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-4

Enclosure:

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
		FILL FILL, asphalt, gravel, concrete, dry, no petroleum odor.	15	S1	MC		24"			0.4
1										
2			2							
		Silty SAND Brown Silty SAND with cmf Gravel, trace Cobbles, moist @ 4.0' bgs, no petroleum odor.	13	S1	MC		24"			0.0
3										
4			4							
		Silty SAND Brown Silty SAND, little cmf Gravel, moist, no petroleum odor.	11	S2	MC		24			2.8
5										
6			6							0.9
		Similar Soil Similar Soil, moist to wet @ 6.5', no petroleum odor.	9 6.5	S2	MC		6"			
7		Refusal @ 6.5' bgs.	8.5							
		End of Borehole								
8										
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-5

Enclosure:

Engineer: JMHF

Depth	Symbol	Description	Depth/Elev.	Sample Number	Sample Type	Blows/ft	Recovery	Shear Strength blows/ft (20 40 60 80)	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
0		***Concrete*** Concrete to 1.0' bgs.	15 / 1	S1	MC		0"			N/A
1		***No Recovery*** No Recovery - concrete and asphalt.	14 / 2	S1	MC		0"			N/A
2		***Sandy SILT*** Brown and Gray mottled Sandy SILT with cmf Gravel, little Cobbles, dry, no petroleum odor.	13 / 4	S1	MC		24			1.8
4		***Silty SAND*** Brown and Gray Silty SAND with Clay, some cmf Gravel, little Cobbles, moist to wet @ 5.0' bgs, moderate petroleum odor.	11 / 6	S2	MC		24"			211
6		***Sandy SILT*** Brown and Gray Sandy SILT grading to Sand, moist, moderate petroleum odor.	9 / 7.5	S2	MC		18"			126
7		Refusal @ 7.5' bgs.	7.5							
8		End of Borehole								
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GP00-6

Enclosure:

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	15	S1	MC		24"			4.1
2			2							
3		***SAND*** Dark Brown and Black mottled SAND, some cmf Gravel, moderate petroleum odor @ 3.0' bgs, tightly packed Silty Clay layer @ 3.5' bgs, moist.	13	S1	MC		24"			5.9
4			4							
5		***SILT and CLAY*** Brown and Gray mottled SILT and CLAY with cmf Gravel, moist @ 6.0' bgs, moderate petroleum odor.	11	S2	MC		24			148
6			6							
7		***Silty SAND*** Gray Silty SAND, trace mf Gravel, wet @ 6.5' bgs, strong petroleum odor and staining.	9	S2	MC		12"			219
			7							
		Refusal @ 7.0' bgs.	8							
8		End of Borehole								
9										
10										
11										
12										
13										
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW00-1

Well Diameter 2" sch 40 PVC

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
		FILL FILL, asphalt, dry, no petroleum odor.	15	S1	SS		24"			N/A
2			2							
		SILT Brown and Gray SILT with f Sand, trace Clay, trace mf Gravel, moist @ 3.5', no petroleum odor.	13	S2	SS	6-8-10-16	24"			0.0
4			4							
		No Recovery No Recovery from 4.0 to 5.0' bgs.	11	S3	SS	4-16-16-34	0"			N/A
5			5							
		SILT Brown and Gray SILT with f Sand, 6" Red Clay and Sand layer @5.5' bgs, moist to wet, no petroleum odor.	10	S3	SS	50 @ 3"	12"			0.0
6			6							
			9	S4	SS		3"			0.0
		Sandy SILT 3" Recovery - Brown Sandy SILT with dolostone fragments @ 8.0' bgs, saturated, no petroleum odor.		S4	SS		0"			
8			8							
			7							
9										
10										
11		***NX Core*** Begin NX rock coring through fractured dolostone. Cored from 8.0 to 15.0' bgs.								
12										
13										
14										
15			15							
		End of Borehole	0							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: March 16, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW00-2

Well Diameter 2" sch 40 PVC

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
0		***FILL*** FILL, asphalt, dry, no petroleum odor.	15	S1	SS		24"			N/A
2			2							
2		***Silty CLAY*** Brown Silty CLAY, little f Sand, trace cmf Gravel, dry, moderate petroleum odor @ 3.0' bgs, no petroleum staining.	13	S2	SS	3-5-7-8	24"			468
4			4							
4		***Silty SAND*** Brownish Red Silty SAND with Clay layer @ 5.0' bgs, little cmf Gravel, wet @ 6.0' bgs, strong petroleum odor and visible sheen.	11	S3	SS	1-2-1-2	24"			616
6			6							
6		***Silty CLAY*** Brown Silty CLAY with cmf Gravel, little f Sand, saturated, strong petroleum odor and visible sheen.	9	S4	SS	4-6-13-19	24"			330
8			8							
8		***No Recovery*** No Recovery - Blow up.	7	S5	SS	50 @ 2"	0"			N/A
			8.75							
9			6.25							
10										
11		***NX Core*** Begin NX rock coring through fractured dolostone. Cored from 8.75 to 15.0' bgs.								
12										
13										
14										
15			15							
		End of Borehole	0							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: March 16, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW00-3

Well Diameter 2" sch 40 PVC

Engineer: JMHF

Depth	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0	Ground Surface	0							
1	***FILL*** FILL, asphalt, dry, no petroleum odor.	15 / 2	S1	SS		24"			N/A
3	***Silty SAND*** 12" Recovery - Asphalt and Gravel grading to Brown Silty SAND with Clay, moist, no petroleum odor.	13 / 4	S2	SS	9-9-7-9	12"			6.2
5	***Silty SAND*** Brown Silty SAND, trace Clay, trace fractured dolostone bedrock @ 6.0' bgs, moist, no petroleum odor.	11 / 6	S3	SS	9-29-38-50	24"			1.5
7	***No Recovery*** No Recovery - Fractured bedrock in split spoon, saturated, no petroleum odor.	9 / 7.5	S4	SS	50 @ 1"	0"			N/A
8		7.5							
10	***NX Core*** Begin NX rock coring through fractured dolostone. Cored from 7.5 to 15.0' bgs.								N/A
15	End of Borehole	15 / 0							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: March 20, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW00-4

Well Diameter 4" sch 40 PVC

Engineer: JMHF

Depth	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0	Ground Surface	0							
0–2	***FILL*** FILL, asphalt, dry, no petroleum odor.	15 / 2	S1	SS		24"			N/A
2–4	***Silty CLAY*** Brown and Gray Silty CLAY, little cmf Gravel, trace f Sand, dry, strong petroleum odor and visible staining @ 4.0' bgs.	13 / 4	S2	SS	2-4-6-4	24"			400
4–6	***Silty CLAY*** Dark Gray Silty CLAY with f Sand, little cmf Gravel, wet @ 6.0' bgs, strong petroleum odor and visible staining.	11 / 6	S3	SS	1-2-5-12	24"			
6–8	***Similar Soil*** Similar Soil grading to Black, saturated @ 6.5' bgs, Black petroleum staining @ 7.5' bgs.	9 / 8	S4	SS	3-5-28-23	24"			96.4
8–15	***NX Core*** 3" Recovery - fractured dolostone bedrock @ 8.0' bgs. Begin NX rock coring through fractured dolostone. Cored from 8.0 to 15.0' bgs.	7 / 15							N/A
15	End of Borehole	0							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: March 15, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 6 1/4" HSA/ 4" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW00-5

Well Diameter 2" sch 40 PVC

Engineer: JMHF

Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
		Ground Surface	0							
0		***FILL*** Topsoil and peastone backfill	15							
1				S1	SS		0"			N/A
2			2							
			13							
3		***Similar Soil*** Similar Soil - Peastone backfill		S2	SS	11-11-11-15	0"			N/A
4			4							
		Similar Soil Similar Soil - Peastone backfill grading to Brown and Gray mottled Sand (fill sand), slight petroleum odor.	11							
5				S3	SS		12"			147
6			6							
		Silty SAND Brown Silty Sand and peastone backfill, saturated, moderate petroleum odor.	9							
7				S4	SS	14-28-50 @ 2"	12"			213
8			8							
			7							
9										
10										N/A
11		***NX Core*** 3" Recovery - fractured dolostone bedrock @ 8.0' bgs. Begin NX rock coring through fractured dolostone.								
12		Cored from 8.0 to 15.0' bgs.								
13										
14										
			15							
15		End of Borehole	0							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: March 15, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 6 1/4" HSA/ 4" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GPW-1

Well Diameter 1" sch 40 PVC

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***Topsoil*** Topsoil, Organics with peastone backfill, no petroleum odor.	15	S1	MC		0"			N/A
2			2							
3		***Peastone Backfill*** Tank Excavation Peastone backfill, moist, no petroleum odor.	13	S1	MC		0"			N/A
4			4							
5		***Similar Soil*** Similar Soil - Peastone backfill, wet, motor oil sheen @ 5.5' bgs, no petroleum odor.	11	S2	MC		0"			N/A
6			6							
7			9							
8										N/A
9		***Similar Soil*** Similar Soil - Tank Excavation Peastone, dual tubed to 14.0' bgs. Screened from 14.0 to 4.0' bgs.								
10										
11										
12										
13										
14			14							
		End of Borehole	1							
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: GPW-2

Well Diameter 1" sch 40 PVC

Engineer: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
0		***Topsoil*** Topsoil, Organics with peastone backfill, no petroleum odor.	15	S1	MC		0"			N/A
2			2							
2		***Peastone Backfill*** Tank Excavation Peastone backfill, moist, no petroleum odor.	13	S1	MC		0"			N/A
4			4							
4		***Similar Soil*** Similar Soil - Peastone backfill, wet, motor oil sheen @ 5.5' bgs, no petroleum odor.	11	S2	MC		0"			N/A
6			6							
6			9							
8										N/A
9		***Similar Soil*** Similar Soil - Tank Excavation Peastone, Redish Brown Sandy SILT layer @ 7.5' bgs, moist, no petroleum sheen or odor, dual tubed to 13.5' bgs. Screened from 13.5 to 3.5' bgs.								
13			13.5							
13		End of Borehole	1.5							
14										
15										

Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

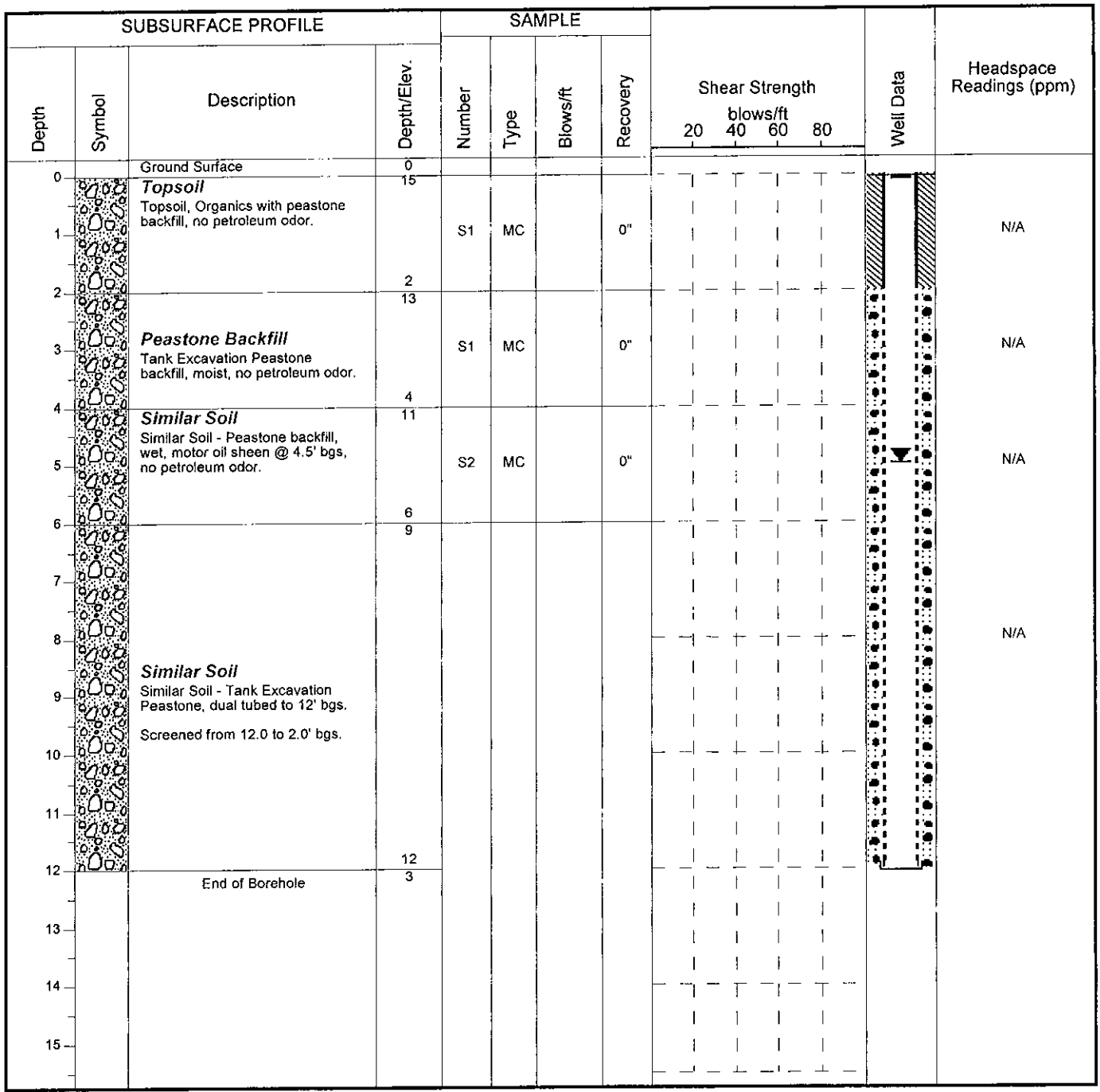
Client: City of Rochester

Location: Rochester, New York

Borehole #: GPW-3

Well Diameter 1" sch 40 PVC

Engineer: JMHF



Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

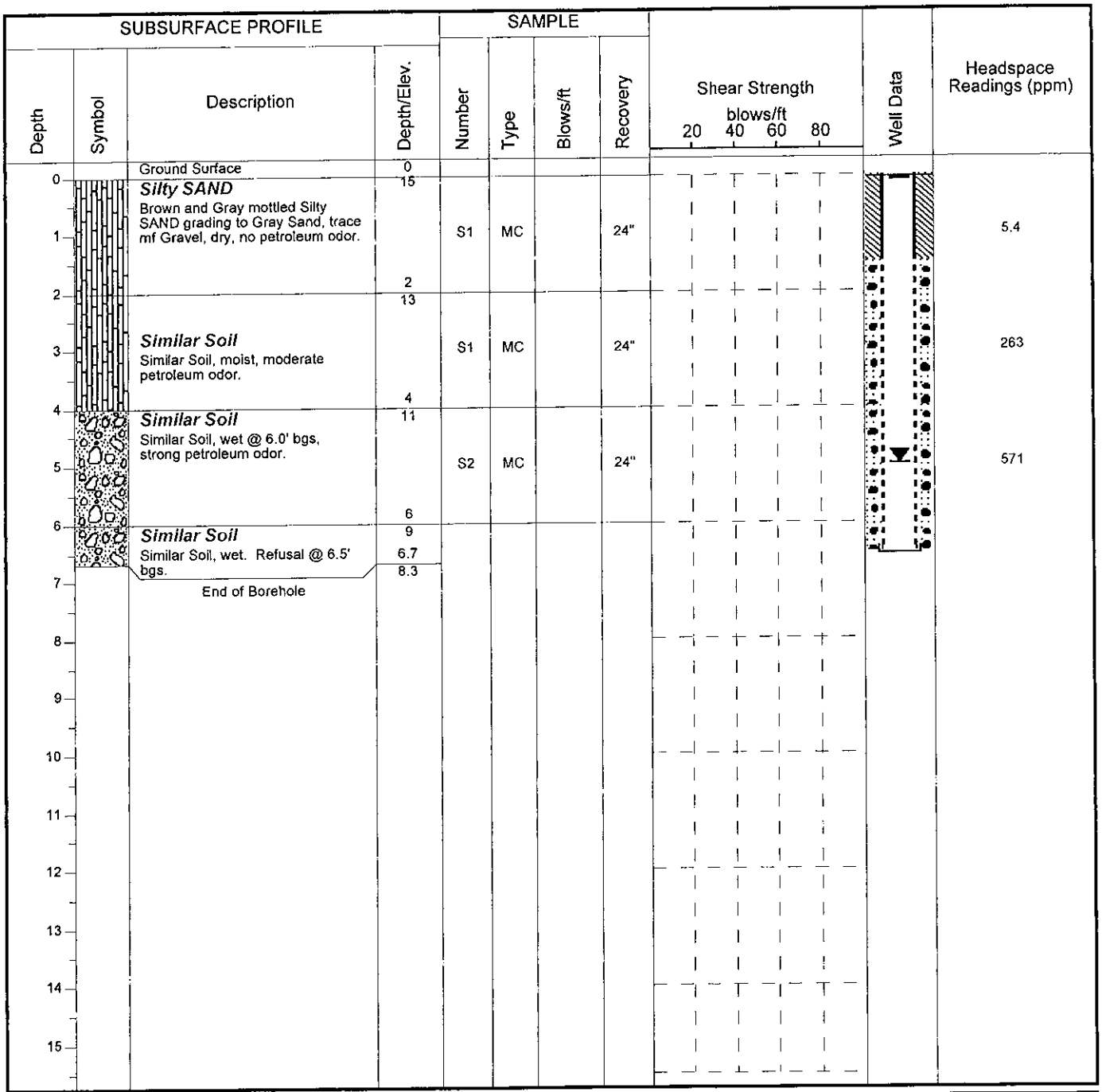
Client: City of Rochester

Location: Rochester, New York

Borehole #: GPW-5

Well Diameter 1" sch 40 PVC

Engineer: JMHF



Drilled By: MARCOR Remediation, Inc

Drill Method: Geoprobe 5400

Drill Date: March 13, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 2" Macro Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-1

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2		***Silty SAND*** Blackish Brown asphalt and Silty SAND, little Gravel, dry, no petroleum odor.	2	S2	SS	15-21-22-24	12"			N/A
3			3	S3	SS		12"			4.3
4		***Silty SAND*** Reddish Brown Silty SAND, dry to moist, slight petroleum odor at 2.0'.	4							
5		***Silty SAND*** Brown/ Gray Silty SAND, little Clay, little Gravel, moist to wet at 6.0', moderate petroleum odor.	5	S3	SS	8-15-12-14	24"			38.4
6			6							
7		***Silty SAND*** Brown/ Gray Silty SAND with Gravel, wet, strong petroleum odor and sheen.	7	S4	SS	8-28-31-36	24"			47.6
8		***Bedrock at 8.2'***	8							33.1
9		End of Borehole	9							
10			10							
11			11							
12			12							
13			13							
14			14							
15			15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-2

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2			2							
3		***Sandy SILT*** Tan Sandy SILT with Clay, trace Gravel, dry, no petroleum odor.	3	S2	SS	8-13-21-22	24"			2.5
4			4							
5		***Sandy SILT*** Brown Sandy SILT, little cmf Gravel, dry, slight petroleum odor.	5	S3	SS	13-16-21-30	24"			2.7
6			6							
7		***Silty SAND*** Brown grading to Black Silty SAND and Gravel, some Cobbles, wet to saturated at 7.0', strong odor and black staining at 7.5'.	7	S3	SS	36-49-78-4	24"			50.2
8		End of Borehole	8							
9			9							
10			10							
11			11							
12			12							
13			13							
14			14							
15			15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-3/ MW00-6

Well Diameter 2" sch 40 PVC

Logged By: JMHF

Depth	Symbol	Description	Depth/Elev.	Sample Number	Sample Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
0		***FILL*** FILL, asphalt, dry, no petroleum odor.	0							
1			1	S1	SS		24"			N/A
2			2							
3		***SAND*** Brown mf SAND, trace mf Gravel, dry, no petroleum odor.	3	S2	SS	4-8-10-12	24"			0.8
4			4							
5		***Silty SAND*** Tan-Brown Silty SAND, trace mf Gravel, rock fragments at 5.5', moist at 6.0', no petroleum odor.	5	S3	SS	15-42-18-35	24"			1.2
6			6							
7			7							N/A
8			8							
9			9							
10		***No Recovery*** No Recovery - Bedrock at 6.2'. Began rock coring. Set well into bedrock to 15.0' bgs.	10	S3	SS		0"			
11			11							
12			12							
13			13							
14			14							
15		End of Borehole	15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-4

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2		***Silty SAND*** 6" Recovery. Tan-Brown Silty SAND, little Gravel, little Clay, dry, no petroleum odor.	2	S2	SS	9-4-7-7	6"			1.9
3			3							
4		***SAND and SILT*** Brown SAND and SILT, little cmf Gravel, moist at 5.0', slight petroleum odor at 6.0', no staining.	4							
5			5	S3	SS	3-7-15-27	24"			6.9
6			6							
7		***SAND and SILT*** 12" Recovery Brown SAND and SILT, with cmf Gravel, little Cobbles, wet, no petroleum odor, no staining.	7	S3	SS	22-50@2"	12"			4.0
8		End of Borehole	8							
9			9							
10			10							
11			11							
12			12							
13			13							
14			14							
15			15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-5/ MW00-7

Well Diameter 2" sch 40 PVC

Logged By: JMHF

Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
		Ground Surface								
0		***FILL*** FILL, asphalt, dry, no petroleum odor.	0							
1			1	S1	SS		24"			N/A
2			2							
3		***Sandy SILT*** Brown Sandy SILT and Clay, grading to Silty Clay at 3.5' bgs, little cmf Gravel, dry, no petroleum odor.	3	S2	SS	25-14-15-18	24"			2.6
4			4							
5		***SILT*** Brown-Gray SILT with Clay, some mottling throughout, little cmf Gravel, moist, no petroleum odor.	5	S3	SS	5-5-4-15	24"			2.2
6			6							
7		***SILT*** Brown SILT, little Clay, wet at 7.0' bgs, trace cmf Gravel at 7.5', no petroleum odor, no sheen.	7	S3	SS	16-21-28-34	24"			1.3
8			8	S4	SS	26-50@4"	12"			
9			9							2.0
10			10							
11		***Sandy SILT/Bedrock*** Brown Sandy SILT, trace mf Gravel, moist to wet, no sheen or odor. Bedrock at 9.0'.	11							
12		Began coring at 9.0'. Set well into bedrock to 15.0' bgs.	12							
13			13							
14			14							
15		End of Borehole	15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-6

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2			2							
3		***SILT*** Tan-Brown SILT with Clay, little Sand, trace cmf Gravel, moist, no petroleum odor.	3	S2	SS	10-7-8-14	24"			2.6
4			4							
5		***Sandy SILT*** Tan-Brown Sandy SILT grading to mf Sand, trace Cobbles, trace mf Gravel, moist, no petroleum odor.	5	S3	SS	10-17-35-50	30"			1.7
6			6							
7		End of Borehole	7							
8			8							
9			9							
10			10							
11			11							
12			12							
13			13							
14			14							
15			15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-7

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2			2							
3		***Silty CLAY*** 8" Recovery Tightly packed Brown-Black Silty CLAY, with cmf Gravel, little Cobbles, moist, slight petroleum odor.	3	S2	SS	11-6-5-5	8"			4.5
4			4							
5		***Silty SAND*** Brown-Black Silty SAND, with Clay, little cmf Gravel, wet at 4.5', dark staining and sheen at 5.0', strong petroleum odor.	5	S3	SS	1-3-6-50	24"			135.7
6			6							
7		End of Borehole	7							
8			8							
9			9							
10			10							
11			11							
12			12							
13			13							
14			14							
15			15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-8/ MW00-8

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2			2							
3		***Silty SAND*** Brown Silty SAND, trace mf Gravel, moist to wet, no petroleum odor.	3	S2	SS	6-4-3-2	24"			0.0
4			4							
5		***Silty SAND*** Brown Silty SAND, trace cmf Gravel, moist to wet, no petroleum odor, Bedrock at 6.0' bgs.	5	S3	SS	2-8-38-50	24"			0.0
6			6							
7			7							
8			8							
9			9							
10		***Rock Coring*** Began rock coring at 6.0' bgs. Set well into bedrock to 15.0' bgs.	10							
11			11							
12			12							
13			13							
14			14							
15		End of Borehole	15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: SB00-9/ MW00-9

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS		24"			N/A
2			2							
3		***Clayey SILT*** Brown-Red Clayey SILT, little Sand, trace mf Gravel, moist, no petroleum odor. Concrete or bedrock at 4.0' bgs.	3	S2	SS	4-11-11-26	24"			0.0
4		***Rock Coring*** Began rock coring at 4.0' bgs. Set well into bedrock to 15.0' bgs.	4							
5			5							
6			6							
7			7							
8			8							
9			9							
10			10							
11			11							
12			12							
13			13							
14			14							
15		End of Borehole	15							

Drilled By: MARCOR Remediation, Inc

Drill Method: Canterra 150

Drill Date: August 21, 2000

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW02-10

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS	-2-4-6	4"			2.6
2			2							
3		***SILT and CLAY*** Brown SILT and CLAY, trace mf Gravel, moist, no petroleum odor.	3	S2	SS	2-2-4-5	6"			5.1
4			4							
5		***SILT*** Brown SILT, some cmf Gravel, trace Clay, fractured Bedrock @ 5.5' bgs, saturated, No Petroleum Odor.	5	S3	SS	20-12-15-12	12"			10.6
6			6							3.2
7			7							
8			8							
9			9							
10		***SILT*** Brown SILT with cmf Gravel, little Sand, slightly moist, No Petroleum Odor.	10	S4	SS	23-100 1"	1"			
11		Bedrock @ 6.1' Set Well to 15.0' bgs Screened from 3.0' to 15.0'	11							
12			12							
13			13							
14			14							
15		End Borehole @16.0'	15							
16			16							
17			17							

Drilled By: Nothnagle Drilling

Drill Method: Canterra 150

Drill Date: July 11, 2002

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Location: Rochester, New York

Borehole #: MW02-11

Well Diameter 2" sch 40 PVC

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS	0-0-19-19	12"			10.4
2			2							
3		***Clayey SILT*** 3" Asphalt and FILL grading to Reddish Brown Clayey SILT, trace mf Gravel, Dry, Slightly weathered Petroleum Odor.	3	S2	SS	15-12-10-10	18"			11.4
4			4							
5		***SIMILAR SOIL*** Similar Soil, Saturated @ 5.5' bgs, Strong Petroleum Odor.	5	S3	SS	4-15-16-17	12"			297
6			6							306
7			7							
8			8							
9			9							
10		***Refusal*** 3" Similar Soil, Refusal @ 6.3' bgs, moist, moderate petroleum odor.	10	S4	SS	100 3"	3"			
11		Bedrock @ 6.3' Set Well to 15.0' bgs Screened from 3.0' to 15.0'	11							
12			12							
13			13							
14			14							
15		End Borehole @16.0'	15							
16			16							
17			17							

Drilled By: Nothnagle Drilling

Drill Method: Canterra 150

Drill Date: July 11, 2002

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

Project No: DEQ-00043

Borehole #: MW02-12

Project: 945 Mt Read Blvd - CVMF

Client: City of Rochester

Well Diameter 2" sch 40 PVC

Location: Rochester, New York

Logged By: JMHF

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft 20 40 60 80	Well Data	Headspace Readings (ppm)
0		Ground Surface	0							
1		***FILL*** FILL, asphalt, dry, no petroleum odor.	1	S1	SS	0-0-5-9	8"			8.2
2			2							
3		***SILT*** 2" Asphalt and FILL grading to Brown SILT, little mf Gravel grading to Clayey Silt at 3.5' bgs, moist to wet (perched water), No Petroleum Odor.	3	S2	SS	5-6-28-9	14"			6.7
4			4							
5		***SILT*** Brown SILT, some mf Gravel, dry to moist, No Petroleum Odor.	5	S3	SS	3-2-3-11	12"			2.5
6			6							1.6
7		***Silty CLAY*** Brown Silty CLAY grading to Silty SAND @ 6.5' bgs, little cmf Gravel, little Cobbles, saturated @ 6.0' bgs, No Petroleum Odor.	7	S4	SS	23-28-24-45	3"			
8			8							
9			9							
10			10							
11		***Refusal*** 1" Similar Soil, Top of bedrock @ 8.1' bgs.	11	S5	SS	100 1"	1"			
12		Roller bit to 15' bgs. Set well at 15' bgs. Screened from 3 to 15'.	12							
13			13							
14			14							
15		End Borehole @16.0'	15							
16			16							
17			17							

Drilled By: Nothnagle Drilling

Drill Method: Canterra 150

Drill Date: July 11, 2002

City of Rochester - DEQ
30 Church Street Room 300B
Rochester, New York 14614

Hole Size: 4 1/4" HSA/ 2" NX Core

Datum:

Sheet: 1 of 1

SJB SERVICES, INC.
Contract Drilling and Testing

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SUBSURFACE INVESTIGATION REPORT
PROPOSED MULTI-AGENCY FLEET FUELING FACILITY
VAN LARE WASTEWATER TREATMENT FACILITY
MONROE COUNTY, NEW YORK

Prepared For:

Barton & Loguidice, P.C.
290 Elwood Davis Road, Box 3107
Syracuse, New York 13220

SJB # RD-10-024
February 7, 2011

SUBSURFACE INVESTIGATION REPORT
PROPOSED MULTI-AGENCY FLEET FUELING FACILITY
VANLARE WASTEWATER TREATMENT FACILITY
MONROE COUNTY, NEW YORK

SJB # RD-10-024
February 7, 2011

SJB Services, Inc. (SJB) is pleased to present this summary of our subsurface investigation for the Proposed Multi-Agency Fleet Fueling Facility planned for the VanLare Wastewater Treatment Plant in Monroe County, New York.

The test borings were requested and authorized by Barton and Loguidice (B&L) in Syracuse, New York. A total of two (2) test borings (B-1 and B-2) were advanced to depths of 50.0 feet and 53.1 feet, respectively, along the east side of the main entrance road to VanLare WWTP. The test borings were located in the field by a representative of B&L. Refer to the attached test boring plan (aerial) prepared by SJB included in Appendix A, for the approximate location of each test boring.

SJB utilized a Central Mine Equipment 550x all terrain mounted drill rig to advance the hollow stem augers and to perform split spoon sampling at B-1 and B-2 soil test borings. As each of the borings were advanced, soil samples were obtained in the materials below the augers using the Standard Penetration Test (SPT), in general accordance with the procedures set forth in ASTM D1586. A Geologist visually classified all recovered soil samples in our office.

In general, the subsurface conditions encountered at the test borings consisted topsoil, fill soils or reworked soils overlying indigenous sands, silts, clayey silts/silty clays underlain by reddish-brown glacial till and shale bedrock. Detailed descriptions of the subsurface conditions encountered at each test borehole location are presented on the individual subsurface logs included in Appendix B. Subsurface conditions between exploration locations will vary. The stratification lines shown on the boring logs are approximate, where as in-situ, the changes between the strata may be more gradual.

Free standing water was observed in the test borings upon completion of overburden sampling. Freestanding water was first encountered at a depth of about 6 feet during overburden sampling of boring B-1 and at a

depth of about 12 feet at B-2 with a post-drilling borehole measurement of 28.1 feet at B-2. An accurate post-drilling measurement at B-1 could not be made due to the augers being filled with "running sands/silts". It should be noted that post drilling free water observations may not accurately represent groundwater levels as a result of the short time allowed for stabilization of the water levels. Groundwater levels will be influenced by seasonal and construction related fluctuations.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, please contact our office. All recovered samples will be retained for a maximum of sixty (60) days, at which time they will be destroyed unless otherwise noted.

Respectfully submitted,

SJB Services, Inc.

Chuck Guzzetta

Project Manager

APPENDIX A

DRAWING

SJB SERVICES, INC.

Contract Drilling and Testing

TEST BORE LOCATION PLAN

APPENDIX B

SUBSURFACE LOGS

DATE

STARTED _____

FINISHED _____

SHEET ____ OF ____

SJB SERVICES, INC.
SUBSURFACE LOG

PROJ. No. _____

HOLE No. _____

SURF. ELEV. _____

G.W. DEPTH _____

PROJECT _____ LOCATION _____

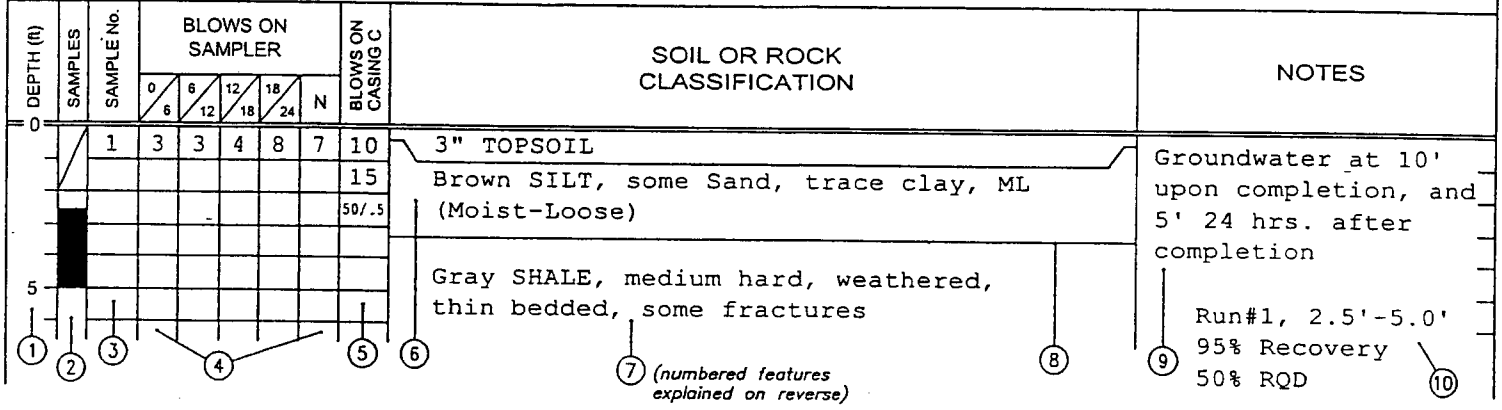

TABLE I

- Split Spoon Sample
- Shelby Tube Sample
- Geoprobe Macro-Core
- Auger or Test Pit Sample
- Rock Core

TABLE II

Identification of soil type is made on basis of an estimate of particle sizes, and in the case of fine grained soils also on basis of plasticity.

Soil Type	Soil Particle Size	
Boulder	>12"	Coarse Grained (Granular)
Cobble	3" - 12"	
Gravel - Coarse	3" - 3/4"	
- Fine	3/4" - #4	
Sand - Coarse	#4 - #10	
- Medium	#10 - #40	
- Fine	#40 - #200	
Silt - Non Plastic (Granular)	<#200	Fine Grained
Clay - Plastic (Cohesive)		

TABLE III

The following terms are used in classifying soils consisting of mixtures of two or more soil types. The estimate is based on weight of total sample.

Term	Percent of Total Sample
"and"	35 - 50
"some"	20 - 35
"little"	10 - 20
"trace"	less than 10

(When sampling gravelly soils with a standard split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter.)

TABLE IV

The relative compactness or consistency is described in accordance with the following terms:

Granular Soils		Cohesive Soils	
Term	Blows per Foot, N	Term	Blows per Foot, N
Very Loose	0 - 4	Very Soft	0 - 2
Loose	4 - 10	Soft	2 - 4
Firm	10 - 30	Medium	4 - 8
Compact	30 - 50	Stiff	8 - 15
Very Compact	>50	Very Stiff	15 - 30
		Hard	>30

(Large particles in the soils will often significantly influence the blows per foot recorded during the penetration test)

TABLE V

Varved	Horizontal uniform layers or seams of soil(s).
Layer	Soil deposit more than 6" thick.
Seam	Soil deposit less than 6" thick.
Parting	Soil deposit less than 1/8" thick.
Laminated	Irregular, horizontal and angled seams and partings of soil(s).

TABLE VI

Rock Classification Term		Meaning
Hardness	- Soft	Scratched by fingernail
	- Medium Hard	Scratched easily by penknife
	- Hard	Scratched with difficulty by penknife
	- Very Hard	Cannot be scratched by penknife
Weathering	- Very Weathered	Judged from the relative amounts of disintegration, iron staining, core recovery, clay seams, etc.
	- Weathered	
	- Sound	

Rock Classification Term		Meaning	
Bedding	- Laminated	(<1")	Natural breaks in Rock Layers
	- Thin Bedded	(1" - 4")	
	- Bedded	(4" - 12")	
	- Thick Bedded	(12" - 36")	
	- Massive	(>36")	

(Fracturing refers to natural breaks in the rock oriented at some angle to the rock layers)

GENERAL INFORMATION & KEY TO SUBSURFACE LOGS

The Subsurface Logs attached to this report present the observations and mechanical data collected by the driller at the site, supplemented by classification of the material removed from the borings as determined through visual identification by technicians in the laboratory. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Subsurface Logs together with the recovered samples provide a basis for evaluating the character of the subsurface conditions relative to the project. The evaluation must consider all the recorded details and their significance relative to each other. Often analyses of standard boring data indicate the need for additional testing or sampling procedures to more accurately evaluate the subsurface conditions. Any evaluation of the contents of this report and recovered samples must be performed by qualified professionals. The following information defines some of the procedures and terms used on the Subsurface Logs to describe the conditions encountered, consistent with the numbered identifiers shown on the Key opposite this page.

1. The figures in the Depth column define the scale of the Subsurface Log.

2. The Samples column shows, graphically, the depth range from which a sample was recovered. See Table I for descriptions of the symbols used to represent the various types of samples.

3. The Sample No. is used for identification on sample containers and/or Laboratory Test Reports.

4. Blows on Sampler - shows the results of the "Penetration Test", recording the number of blows required to drive a split spoon sampler into the soil. The number of blows required for each six inches is recorded. The first 6 inches of penetration is considered a seating drive. The number of blows required for the second and third 6 inches of penetration is termed the penetration resistance, N.

5. Blows on Casing - Shows the number of blows required to advance the casing a distance of 12 inches. The casing size, hammer weight, and length of drop are noted at the bottom of the Subsurface Log. If the casing is advanced by means other than driving, the method of advancement will be indicated in the Notes column or under the Method of Investigation at the bottom of the Subsurface Log. Alternatively, sample recovery may be shown in this column, or other data consistent with the column heading.

6. All recovered soil samples are reviewed in the laboratory by an engineering technician, geologist or geotechnical engineer, unless noted otherwise. Visual descriptions are made on the basis of a combination of the driller's field descriptions and noted observations together with the sample as received in the laboratory. The method of visual classification is based primarily on the Unified Soil Classification System (ASTM D 2487) with regard to the particle size and plasticity (See Table No. II), and the Unified Soil Classification System group symbols for the soil types are sometimes included with the soil classification. Additionally, the relative portion, by weight, of two or more soil types is described for granular soils in accordance with "Suggested Methods of Test for Identification of Soils" by D.M. Burmister, ASTM Special Technical Publication 479, June 1970. (See Table No. III). Description of the relative soil density or consistency is based upon the penetration records as defined in Table No. IV. The description of the soil moisture is based upon the relative wetness of the soil as recovered and is described as dry, moist, wet and saturated. Water introduced into the boring either naturally or during drilling may have affected the moisture condition of the recovered sample. Special terms are used as required to describe soil deposition in greater detail; several such terms are listed in Table V. When sampling gravelly soils with a standard two inch diameter split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders and large gravel is sometimes, but not necessarily, detected by an evaluation of the casing and sampler blows or through the "action" of the drill rig as reported by the driller.

7. Rock description is based on review of the recovered rock core and the driller's notes. Frequently used rock classification terms are included in Table VI.

8. The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Solid stratification lines delineate apparent changes in soil type, based upon review of recovered soil samples and the driller's notes. Dashed lines convey a lesser degree of certainty with respect to either a change in soil type or where such change may occur.

9. Miscellaneous observations and procedures noted by the driller are shown in this column, including water level observations. It is important to realize the reliability of the water level observations depends upon the soil type (water does not readily stabilize in a hole through fine grained soils), and that any drill water used to advance the boring may have influenced the observations. The ground water level will fluctuate seasonally, typically. One or more perched or trapped water levels may exist in the ground seasonally. All the available readings should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or groundwater observation wells.

10. The length of core run is defined as the length of penetration of the core barrel. Core recovery is the length of core recovered divided by the core run. The RQD (Rock Quality Designation) is the total length of pieces of NX core exceeding 4 inches divided by the core run. The size core barrel used is also noted in the Method of Investigation at the bottom of the Subsurface Log.

DATE
START 1/17/2011
FINISH 1/17/2011
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-1
SURF. ELEV
G.W. DEPTH See Notes

PROJECT: Proposed Green Fleet Fueling Facility
PROJ. NO.: RD-10-025
LOCATION: Van Lare WWTP
Rochester, New York

DEPTH FT.		SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N		SOIL OR ROCK CLASSIFICATION	NOTES
		1	1	4				Brown-Gray SILT, occasional Silty Clay partings, occasional	
			5	8		9		fine Sand lenses, tr. roots (moist, loose, ML)	
		2	7	9				Brown fine SAND and Silt, occasional Silt partings	
			9	10		18		(moist, firm, SM)	
5		3	4	5				Brown SILT, occasional fine Sand and clay partings	
			5	8		10		(wet, loose, ML)	
		4	5	12					
			9	9		21		(firm)	
		5	2	4				Becomes Gray (moist-wet, loose)	
10			5	5		9		Contains numerous clay partings	
		6	3	5					
			3	4		8			
		7	3	4					
			6	8		10			
15		8	4	5					
			4	6		9			
		9	3	5					
			5	9		10			
		10	WOR	2				Gray Silty CLAY, tr. sand, occasional silt partings	
20			3	3		5		(moist-wet, medium, CL)	
		11	1	1					
			1	2		2		Gray SILT, numerous clay lenses and partings, tr. sand	
		12	1	1				(moist-wet, very loose, ML)	
			2	1		3			
25		13	1	1				Gray Clayey SILT, tr. sand (wet, very soft, ML-CL)	
			1	1		2			
		14	1	2					
			1	3		3		(soft)	
		15	WOR	WOR				(very soft)	
30			WOR	2		1		Gray SILT, tr. sand, tr. clay (wet, very loose, ML)	
		16	WOH	1					
			2	1		3			
		17	1	2				Gray Silty CLAY, tr. sand (moist-wet, soft, CL)	
			2	1		4			
35		18	WOH	WOH					
			2	2		2		Gray SILT, tr.-little Clay, tr. sand (wet, very loose, ML)	
		19	2	2					
			2	2		4			
		20	WOH	2				Gray Silty CLAY, tr. sand (moist-wet, soft, CL)	
40			2	2		4			

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFIED BY: Geologist

DRILLER: K. Fuller

DRILL RIG TYPE : CME - 550X

METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/17/2011
FINISH 1/17/2011
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-1
SURF. ELEV
G.W. DEPTH See Notes

PROJECT: Proposed Green Fleet Fueling Facility
PROJ. NO.: RD-10-025
LOCATION: Van Lare WWTP
Rochester, New York

DEPTH FT.		SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N		SOIL OR ROCK CLASSIFICATION	NOTES
		21	WOH / 1.5					(very soft)	
				3		WOH			
		22	3	2				Gray SILT, tr. clay, tr. sand (wet, loose, ML)	
			2	2		4			
45		23	WOH	2				Gray Silty CLAY (moist-wet, CL)	
			2	2		4		Red-Brown fine SAND and Silt, tr. clay, tr. fine gravel	
		24	5	4				(moist-wet, loose, SM)	
			8	8		12		Contains "and" Clayey Silt, little f-c Gravel (firm, SM-SC)	
		25	8	6					
50			18	13		24			
								Boring Complete at 50.0'	Freestanding water first encountered at 6.0' during overburden sampling
55									
60									
65									
70									
75									
80									

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CLASSIFIED BY: Geologist

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METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/18/2011
FINISH 1/18/2011
SHEET 1 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-2
SURF. ELEV
G.W. DEPTH See Notes

PROJECT: Proposed Green Fleet Fueling Facility
PROJ. NO.: RD-10-025
LOCATION: Van Lare WWTP
Rochester, New York

DEPTH FT.		SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N		SOIL OR ROCK CLASSIFICATION	NOTES
		1	1	4				Brown f-c SAND, little f-c Gravel, tr. silt (moist, FILL)	Possible buried "native" Topsoil horizon encountered in sample # 2
			7	8		11			
		2	5	4				Gray-Brown Clayey SILT, tr. sand, tr. organics (moist, FILL)	
			5	8		9			
5		3	7	7				Brown fine SAND and Silt (moist, firm, SM)	
			8	8		15			
		4	8	9				Brown SILT, numerous fine sand lenses, tr. clay	
			8	9		17		(moist, firm, ML)	
		5	2	5					
10			5	6		10			
		6	2	5				Becomes Mottled, Contains tr.-little Clay	
			8	5		13			
		7	3	5				(wet)	
			5	5		10			
15		8	2	3				Becomes Gray	
			7	8		10		Gray fine SAND and Silt (wet, loose, SM)	
		9	3	3					
			8	7		11		Gray SILT, little-some fine Sand, tr. clay (moist-wet, firm, ML)	
		10	2	5					
20			7	10		12			
		11	3	3				Contains slight / trace organics	
			3	2		6		Gray Silty CLAY, tr. sand (wet, medium, CL)	
		12	2	2				(soft)	
			1	1		3			
25		13	WOH / 1.5						
				2		WOH		Gray SILT, tr. sand, tr. clay (wet, very loose, ML)	
30									
		14	WOH / 1.5					Gray Silty CLAY, tr. sand (wet, very soft, CL)	
				1		WOH			
35									
		15	WOH	1				Gray SILT, tr. sand, tr. clay (wet, very loose, ML)	
			2	1		3			
40									

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METHOD OF INVESTIGATION ASTM D-1586 USING HOLLOW STEM AUGERS

DATE
START 1/18/2011
FINISH 1/18/2011
SHEET 2 OF 2

SJB SERVICES, INC.
SUBSURFACE LOG

HOLE NO. B-2
SURF. ELEV
G.W. DEPTH See Notes

PROJECT: Proposed Green Fleet Fueling Facility
PROJ. NO.: RD-10-025
LOCATION: Van Lare WWTP
Rochester, New York

DEPTH FT.	SMPL NO.	BLOWS ON SAMPLER 0/6	6/12	12/18	N	SOIL OR ROCK CLASSIFICATION	NOTES
	16	WOH	1				
		2	1		3		
45	17	WOH	5			Red-Brown Clayey SILT, little-some fine Sand, little fine Gravel (wet, stiff, ML)	
		5	5		10		
	18	8	6			Red-Brown fine SAND, some Silt, tr.-little f-c Gravel, tr. clay (moist, firm, SM)	
50		18	13		24		
	19	8	41				
		45	50/0.4		86	Gray Rock Fragments and Red-Brown fine sand, some Silt (wet, very compact)	
55						Boring Complete with Sample Spoon encountered at 51.9' and Auger Refusal encountered at 53.1'	Freestanding water recorded at 28.1' at boring completion
60							
65							
70							
75							
80							

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