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**REMEDIAL ACTION PLAN
FORMER BARONS TURBO BULK STATION
235 MAIN STREET
BARONS, ALBERTA**

SEACOR JOB #H0031-093

Submitted by
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for
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EXECUTIVE SUMMARY

SEACOR Environmental Engineering Inc. (SEACOR) of Calgary, Alberta was retained by Shell Canada Products Ltd. (Shell) to prepare a remedial action plan (RAP) for the former Barons Turbo Bulk Station located at 235 Main Street in Barons, Alberta. The following report summarizes the results of previously conducted environmental site assessments and remedial activities and provides an outline remedial plan for consideration. The following RAP has been prepared in accordance with Shell document entitled, "*Retail Petroleum Marketing Site Closure and Decommissioning*", dated April 22, 1998.

This remedial plan was prepared to outline future remedial activities, including the excavation of an estimated 500 m³ of hydrocarbon-impacted soil on the east side of the site in addition to an estimated 250 m³ of hydrocarbon-impacted soil on the west side of the site. Analytical results from the previously conducted intrusive investigation indicate that these two hydrocarbon-impacted areas are distinct and separate from one another. Remedial activities may also include the placement of two reinforced polyethylene (RPE) 25 mil liners along the east wall of the east excavation and along the west wall of the west excavation (property lines) to prevent possible off-site residual hydrocarbon impacts from migrating back on-site. Upon completion of the soil excavations, the site will be returned to grade in a state that will allow future commercial development of the site. The existing office building will be demolished in order to complete remedial activities.

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1.0 INTRODUCTION

SEACOR Environmental Engineering Inc. (SEACOR) of Calgary, Alberta was retained by Shell Canada Products Ltd. (Shell) to prepare a remedial action plan (RAP) for the former Barons Turbo Bulk Station located at 235 Main Street in Barons, Alberta. The following report summarizes the results of previously conducted environmental site assessments and remedial activities and provides an outline remedial plan for consideration. The following RAP has been prepared in accordance with Shell document entitled, "*Retail Petroleum Marketing Site Closure and Decommissioning*", dated April 22, 1998.

The objective of the RAP is to provide guidance for the final remediation of the site to allow future commercial usage. Remedial activities will require two separate excavations on-site. The first excavation will take place on the west side of the site after demolition of the office building. The second excavation will take place on the east side of the site after removal of the tank farm concrete berm and the soils contained within the berm. The remedial excavations will involve the removal of all soils exceeding *Level II* criteria outlined in the Alberta Environmental Protection (AEP) document, "*Remediation Guidelines for Petroleum Storage Tank Sites*," draft, July 1994, and the disposal of these soils at an approved facility. Upon completion of the remedial excavations, both will be backfilled with appropriate soils, compacted, and resurfaced to original site conditions.

2.0 DATA SYNTHESIS

2.1 SITE HISTORY

Former on-site facilities at the Barons turbo Bulk Plant included an office building, storage warehouse, and an above-ground storage tank farm surrounded by a concrete berm. The above ground storage tanks were removed and disposed of off-site by JBA Project Engineering Ltd. (JBA) of Calgary, Alberta in April, 1997. At this time, approximately 280 m³ of soil exceeding Alberta Environmental Protection's (AEP) *Level II* Risk Management Criteria (RMC) for Fine Grained Soil (FGS) was excavated using headspace vapour levels greater than 700 ppm to guide the limits of excavation. Soil samples were collected from each wall and the base of the excavation for laboratory analysis. The analytical results determined that the soil samples collected from the north, east, and west walls and base of the excavation had BTEX concentrations below the AEP *Level II* FGS RMC. One soil sample collected from the south wall of the excavation (along the south property line) exceeded the *Level II* criteria for benzene. An RPE 15 liner was installed along the south wall of the excavation to prevent possible off-site hydrocarbon impacts from migrating back on-site. The excavation was backfilled with imported soil and clean overburden.

The hydrocarbon-impacted soil was placed on an RPE liner within the concrete berm. Prior to covering the soil with another RPE 15 liner, nitrogen-rich fertilizer was added to promote the biodegradation of hydrocarbons. Additional soil treatment was provided by turning the soil for aeration several times in 1997. Sampling of the treated soil in August 1997 determined that it had reached concentrations below AEP *Level I* FGS RMC. The treated soil was then compacted and sloped within the concrete berm of the tank farm to allow proper drainage.

2.2 ENVIRONMENTAL SITE ASSESSMENTS (1998)

2.2.1 East Side of Site

On May 15, 1998 five test pits were excavated within the bermed area of the site as illustrated in Figure 2. Hydrocarbon staining was noted in test pits 2, 3, and 4 at depths of approximately 2.0 m to 3.3 m below the surface of the stockpiled soil (the surface of the soil is approximately 1 m above ground level). Laboratory analysis of soil samples collected from TP3 and TP4 exhibited total petroleum hydrocarbon (TPH) concentrations exceeding AEP *Level II* RMC criteria on the east side of the tank farm. Results of the test pit investigations are detailed in a May 27, 1998 letter to Mr. Robert Harriott of Canadain Turbo (1993) Inc.

On June 5, 1998 eight boreholes were advanced around the perimeter of the concrete berm. Hydrocarbon staining was noted in boreholes BH98-2, BH98-4, and BH98-6 at depths ranging from 1.7 to 3.0 m below ground surface (bgs). The locations of each borehole are also illustrated on Figure 2. A summary of the field observations from

the test pit and drilling intrusive investigations is presented in Table 1. Please note that the depths listed for the test pits have been adjusted by 1.0 m to reflect the depth below ground surface (bgs) rather than the depth from the top of the stockpile.

TABLE 1: FIELD OBSERVATIONS – EAST SIDE OF SITE			
Test Pit/Borehole	Hydrocarbon Staining Interval (m bgs)	Maximum Combustible Vapour Level (ppmv)	Depth of Maximum Combustible Vapour Level (m)
TP1	none	68	0.9, 2.1
TP2	1.3 – 2.1	400	1.9
TP3	1.4 – 2.3	340	2.3
TP4	1.0 – 2.3	760	1.6
TP5	none	59	surface
BH98-1	none	70	0.8
BH98-2	1.8 – 3.0	110	2.3
BH98-3	none	66	0.3
BH98-4	1.7 – 2.1	460	1.8
BH98-5	none	62	1.5
BH98-6	2.1 – 2.4	81	2.3
BH98-7	none	100	3.8
BH98-8	none	100	3.8

Notes: • m bgs – meters below ground surface
• ppmv – parts per million volumetric

Select soil samples were submitted to Enviro-Test laboratories of Calgary, Alberta for analysis of hydrocarbon constituents. The analytical results are summarized in Table 2.

TABLE 2: SOIL ANALYTICAL RESULTS – EAST SIDE OF SITE								
Test Pit / Borehole	Depth (m)	HSVL (ppmv)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TEH (ppm)	TPH (ppm)
TP1	2.1	68	<0.01	<0.01	<0.01	<0.01	na	na
TP2	1.8	400	<0.01	<0.01	0.59	2.9	na	na
TP3	1.4	160	<0.01	<0.01	2.1	4.7	5700	<u>5890</u>
TP3	2.3	340	<0.01	<0.01	1.4	1.5	3500	3730
TP4	1.6	620	<0.01	<0.01	4.2	5.1	8100	<u>8350</u>
TP4	1.8	760	<0.01	<0.01	3.8	1.9	9100	<u>9350</u>
BH98-2	2.3	110	<0.01	<0.01	0.25	1.1	1200	1224
BH98-4	1.8	460	<0.01	0.1	1.2	3.3	4100	<u>4200</u>
BH98-4	2.3	320	0.09	0.13	1.3	2.5	2000	2049
BH98-6	2.3	81	<0.01	0.03	0.17	0.29	1900	1924
AEP RMC Level II FGS			1.5	340	400	130	ns	4000
AEP RMC Level III FGS			55	340	400	130	ns	5000

- Notes:
- m bgs – meters below ground surface
 - HSVL – headspace vapour level expressed in ppmv (parts per million by volume)
 - ppm – parts per million (milligrams per dry kilogram)
 - < - less than the analytical detection limit indicated
 - TVH – total volatile hydrocarbons (C₅ – C₉)
 - THE – total extractable hydrocarbons (C₁₀ – C₃₀)
 - TPH – total petroleum hydrocarbons (C₅ – C₃₀)
 - bold – exceeding AEP RMC Level II FGS criteria
 - n.s. – no standard
 - AEP Level II FGS RMC – moderate site sensitivity ranking for fine grained soil (FGS) as outlined in the Alberta Environmental Protection (AEP), Risk Management Criteria (RMC) document “*Remediation Guidelines for Petroleum Storage Tank Sites – July 1994*”

The analytical results determined that hydrocarbon impacts exceeded the AEP *Level II* RMC criteria for total petroleum hydrocarbons (TPH) on the east side of the site. Each of the analyzed soil samples were within the *Level II* criteria for all BTEX constituents.

2.2.2 West Side of Site

On June 5, 1998 three probeholes were advanced on the west side of the site. Evaluation of hydrocarbon impacts was based on visual and olfactory indicators; soil samples were not field-screened at regular intervals for combustible vapour levels. Hydrocarbon staining was observed in probehole PH98-9 from a depth of 2.3 m to 2.6 m bgs. Samples collected from PH98-9 at depths of 2.3 m and 3.4 m bgs had headspace vapour levels of 1600 ppmv and 3800 ppmv respectively. Laboratory analysis of these samples indicated that the AEP *Level II* FGS RMC for benzene was exceeded in the sample collected at a depth of 3.4 m. The remaining BTEX constituents and TPH concentrations were within AEP *Level II* criteria for both samples. The location of each probehole is illustrated on Figure 2.

In order to delineate hydrocarbon impacts on the west side of the site, an intrusive investigation consisting of seven boreholes was conducted on October 14, 1998. The boreholes were advanced near the west property line in the vicinity of the office building. The location of each borehole is illustrated on Figure 2. Hydrocarbon staining was observed in boreholes BH98-14, BH98-15, and BH98-17, with elevated headspace vapour levels recorded in each of these three boreholes. The remaining boreholes (BH98-12, BH98-13, BH98-16, and BH98-18) did not exhibit hydrocarbon staining and the maximum headspace vapour level recorded from these boreholes was 120 ppmv. Table 3 presents a summary of the field observations recorded for the boreholes advanced on the west side of the site.

TABLE 3: FIELD OBSERVATIONS – WEST SIDE OF SITE			
Borehole	Hydrocarbon Staining Interval (m bgs)	Maximum Combustible Vapour Level (ppmv)	Depth of Maximum Combustible Vapour Level (m)
BH98-12	none	75	4.6, 4.7
BH98-13	none	70	3.2
BH98-14	2.3 – 3.4	3500	3.4
BH98-15	2.3 – 2.7	2100	2.3
BH98-16	none	120	5.5
BH98-17	1.8 – 3.0	2750	2.4
BH98-18	none	120	0.6

Notes:

- m bgs – meters below ground surface
- ppmv – parts per million volumetric

Six soil samples were submitted to Enviro-Test Laboratories for chemical analysis of hydrocarbon constituents. Laboratory analysis indicated that BH98-14 exceeded the AEP *Level II* FGS RMC for benzene at a depth of 3.4 m bgs. All remaining analyzed constituents were within the AEP RMC *Level II* criteria. The analytical results are summarized in Table 4.

TABLE 4: SOIL ANALYTICAL RESULTS – WEST SIDE OF SITE								
Probehole / Borehole	Depth (m)	HSVL (ppmv)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TEH (ppm)	TPH (ppm)
PH98-9	2.3	1600	<0.74	<0.01	5.0	<9.3	360	1050
PH98-9	3.4	3800	29	67	21	110	180	3580
BH98-14	3.4	3500	4.2	6.1	0.87	6.0	-	-
BH98-15	2.3	2100	0.96	<0.01	4.8	9.0	120	500
BH98-16	3.7	80	<0.01	<0.01	<0.01	<0.01	-	-
BH98-17	2.4	2750	0.95	<0.01	3.6	7.1	270	530
BH98-17	5.3	500	0.61	2.0	1.1	6.4	-	-
BH98-18	3.7	105	<0.01	<0.01	<0.01	<0.01	-	-
AEP RMC <i>Level II</i> FGS			1.5	340	400	130	ns	4000
AEP RMC <i>Level III</i> FGS			55	340	400	130	ns	5000

Notes:

- m bgs – meters below ground surface
- HSVL – headspace vapour level expressed in ppmv (parts per million by volume)
- ppm – parts per million (milligrams per dry kilogram)
- < - less than the analytical detection limit indicated
- TVH – total volatile hydrocarbons (C₅ – C₉)
- THE – total extractable hydrocarbons (C₁₀ – C₃₀)
- TPH – total petroleum hydrocarbons (C₅ – C₃₀)
- bold – exceeding AEP RMC *Level II* FGS criteria
- n.s. – no standard
- AEP *Level II* FGS RMC – moderate site sensitivity ranking for fine grained soil (FGS) as outlined in the Alberta Environmental Protection (AEP), Risk Management Criteria (RMC) document "*Remediation Guidelines for Petroleum Storage Tank Sites – July 1994*"

2.3 INTERPRETATION OF DATA

The location, matrix, level, and type of contamination interpreted from the field data is summarized in Table 5

TABLE 5: SUMMARY OF SUBSURFACE HYDROCARBONS						
Area	Matrix	Level ¹	Hydrocarbon Contaminant	Depth (m)	Estimated Impacted Volume (m ³)	Reference
East Side	Soil	> Level II	diesel-based weathered hydrocarbons	1.0 – 2.5	350	TP2, TP3, TP4, BH98-4
West Side	Soil	> Level II	gasoline-based weathered hydrocarbons	2.0 – 4.0	250	PH98-9, BH98-14, BH98-15, BH98-17

- Notes:
- 1. Relative to AEP RMC *Level II* FGS criteria
 - 2. Estimated in-place soil volumes in excess of AEP *Level II* guidelines.

Residual hydrocarbons greater than the AEP *Level II* RMC are present in the fill and native soil in the vicinity of the northeast corner of the concrete tank farm berm. Total petroleum hydrocarbon (TPH) concentrations indicate that the hydrocarbon concentrations on the east side of the site are likely related to diesel fuel. The average depths of the hydrocarbons greater than the AEP *Level II* RMC range from 1.0 to 2.5 m below the ground surface. Residual hydrocarbons greater than the AEP *Level II* RMC for benzene are present in the native clay on the west side of the property. The presence of BTEX constituents indicates that the residual hydrocarbons on the west side of the site are likely related to gasoline and comprise a separate plume from that observed on the east side of the site. The estimated extent of the soils greater than AEP *Level II* RMC are shown on Figure 3.

3.0 SITE SENSITIVITY CLASSIFICATION

3.1 SENSITIVITY ASSESSMENT

A site sensitivity assessment was undertaken in accordance with the procedure outlined in Alberta Environmental Protection (AEP) document "*Remediation Guidelines for Petroleum Storage Tank Sites*" Draft July 1994. Table 6 outlines the descriptive points required to determine the sensitivity assessment.

TABLE 6: SITE SENSITIVITY FACTORS		
Factor	Site Characteristics	
Site Description	Former bulk retail station including an above ground tank farm and office building	
Land Use	Commercial	
Surrounding Land Uses	Land Use	Distance (m)
N	Residential	20
E	Residential/Commercial	20
S	Commercial	30
W	Commercial (service station)	adjacent
Groundwater Usages	No known groundwater users	
Surface Waters	None	
Nearby Underground Structures	Buried utilities (natural gas, telephone, hydro, water and sewer on and adjacent to the site)	
Other Environmental Concerns	None	
Subsurface Conditions		
Soil Type	Clay backfill in tank farm area, native soils are generally clayey silt followed by medium plastic clays and clay till overlying bedrock.	
Groundwater	Estimated at 2.0 to 3.0 m below grade. regional gradient is unknown.	

Table 7 summarizes the sensitivity for the ingestion and inhalation of contaminated soil and groundwater.

TABLE 7: SITE SENSITIVITY CLASSIFICATION

Health Concern	Receptor	Receptor Sensitivity	Likelihood of Impact	Sensitivity Ranking
Ingestion: Groundwater	Groundwater or surface water with no current or potential usage	high	low	no ranking
Inhalation:	On-site commercial buildings	medium	medium	moderate
	Residential building to the north	high	medium	moderate
	Commercial building to the east	medium	medium	moderate
	Commercial building to the south	medium	low	moderate
	Commercial building to the west	medium	medium	moderate
	Buried utilities (on and adjacent to site)	medium	high	moderate

Based on the fine-grained nature of the native soils and fill at the depths of contamination, and the moderate ranking for the soil and groundwater receptor pathways, the AEP *Level II* Risk Management Criteria (RMC) for fine-grained soils (FGS) is the appropriate criteria for the site.

4.0 SITE DECOMMISSIONING AND RESTORATION

4.1 HEALTH AND SAFETY

Health and Safety (H & S) considerations during the duration of the project are of primary concern to Shell and to SEACOR. At the request of Shell, the general contractor (JBA Project Engineering Ltd.) will provide a detailed H & S plan to remain in effect for the duration of all field activities. This plan will outline issues such as site security (day and night), individual worker's safety concerns, minimum protective clothing requirements for all individuals working on and visitors to the job site, tank and sludge removal, confined space entry, and access to any open excavations. The general contractor will be responsible for ensuring sub-contractors are aware of, and adhere to, all site H & S protocols.

As the prime environmental consultant on the project, SEACOR will maintain an implied responsibility concerning H & S issues while in attendance at the job site. Concerns identified by SEACOR personnel regarding site H & S will be brought to the attention of, and properly addressed by, the general contractor's site superintendent.

4.2 SURFACE DEMOLITION ACTIVITIES

4.2.1 Hazardous Material Survey (on-site building)

Environmental Health Professionals (EHP) of Calgary, Alberta will conduct a hazardous materials survey of the on-site building, prior to initiation of site remediation activities. The results of the assessment will be provided to the general contractor and any hazardous material must be properly disposed of as outlined in survey prior to completing the building demolition.

4.2.2 Permits, Approvals, and Site Survey

Prior to initiating site decommissioning activities, the general contractor shall contact TransAlta, Telus, Canadian Western Natural Gas, and the Village of Barons (water and sewer) to provide locations of each utility and any required disconnections. A legal site survey of the property, complete with property boundaries will be arranged by the general contractor. The general contractor shall also be responsible for obtaining all required demolition permits from the Village of Barons for the remedial program. The permits should outline the demolition and excavation work proposed and the disconnection of any utilities required at the site. Any required traffic control (on and off-site) will be the responsibility of the general contractor.

SEACOR will obtain all permits associated with the final disposal of any contaminated media including soils and groundwater. SEACOR will provide the general contractor with copies of all required permits obtained by SEACOR prior to commencing any field activities.

4.2.3 Tank Farm Concrete Berm

Prior to excavation activities, the treated soil will be removed from within the tank nest concrete berm and temporarily stockpiled on-site for later use as backfill material. The concrete berm will be removed and disposed of off-site before excavation activities commence on the west side of the site.

4.2.4 Removal and Disposal of Regulated Building Materials

As indicated in Section 4.2.1, any hazardous materials identified in the hazardous materials survey must be properly disposed of as outlined in the survey prior to completing the building demolition.

4.3 REMEDIAL SOIL EXCAVATION

4.3.1 General

Based on the sensitivity analysis, soil will be assessed in accordance to AEP's *Level II* soil and groundwater Risk Management Criteria (RMC) criteria for fine-grained soils (FGS) as specified in the AEP document "*Remediation Guidelines for Petroleum Storage Tank Sites*", Draft July 1994. Any soil greater than the *Level II* criteria will be excavated and treated off-site.

4.3.2 Groundwater Monitoring

Prior to all excavation activities, water depths will be measured in each of the monitoring wells in order to establish the local groundwater gradient. Groundwater samples will be collected from select monitoring wells to determine the presence and/or degree of hydrocarbon impacts in the groundwater.

4.3.3 Geotechnical Consultant

A geotechnical consultant may be retained to provide guidance with respect to maintaining safe excavation slope stability and/or provide compaction standards and testing for final soil compaction. The retention of a geotechnical consultant will be at the direction of SEACOR and Shell. The general contractor will be expected to follow any recommendations provided by the geotechnical consultant with respect to excavation and compaction activities.

4.3.4 Extent of Proposed Excavation

Approximately 200 m³ of clean overburden soil combined from both the east side and west side of the site will be removed and stockpiled on-site for later use. All hydrocarbon-impacted soils determined to be greater than AEP *Level II* RMC will be excavated from both areas. The proposed remedial excavation on the east side will measure approximately 22 m by 18 m and range in depth from 1.0 m to 3.0 m bgs while the excavation on the west side will measure approximately 14m by 10 m and will range in depth from 2.0 to 4.0 m. The locations of the proposed excavations are shown on Figure 3.

4.3.5 Excavation Methodology

The excavation of clean overburden soils and any impacted soils will proceed under the direction of a SEACOR field representative and the geotechnical consultant. The determination of impacted and non-impacted soils will be specified during the course of the excavation by SEACOR using field screening and laboratory analytical techniques. Non-impacted soils, including the soil currently stockpiled within the tank farm concrete berm, will

be excavated and stockpiled on-site for later use as backfill material. Soil suspected of being greater than AEP *Level II* FGS RMC criteria will be excavated and hauled to the Lethbridge Regional Landfill or the Shell Balzac Soil Treatment Facility for disposal and treatment upon receiving approval.

The general contractor shall ensure that all trucks involved in the transporting of soils suspected of being greater than AEP *Level II* RMC have appropriate approvals, and/or placarding and tarping as required under municipal and transportation of dangerous goods (TDG) regulations. This soil will not be transported off-site without prior authorization from SEACOR. In some instances soil may require temporary stock-piling on-site to allow laboratory flash point analysis, to ensure TDG compliance. It is the responsibility of both SEACOR and the general contractor to maintain records of soil volumes transported and moved on a daily basis. SEACOR and the general contractor shall ensure that the calculated volumes are agreed upon on a daily basis as well.

Walls of the excavation will be maintained at safe slope angles during the entire length of the project as directed by SEACOR and/or the geotechnical consultant. Excavation activities will also involve routine sampling of soils to determine clean-up levels.

4.3.6 Reverse Migration Liner

Following the removal of all soils suspected of being greater than AEP *Level II* RMC from the site, two oil-resistant reinforced polyethylene (or RPE) 25 mil liners may be installed along the east wall of the excavation on the east side of the property and along the west wall of the excavation on the west side of the property (property lines). The purpose of the liners will be to prevent any off-site residual hydrocarbons remaining in these areas from migrating back onto the property. The liners will extend to depths between 3.0 m and 4.5 m and have estimated lengths of 22 m along the east property line and 14 m along the west property line, although these lengths may change once subsurface conditions are more thoroughly determined.

4.3.7 Impacted Ground Water Seepage

Unless otherwise specified, all groundwater seepage into the excavation shall be considered as hydrocarbon-impacted water and will be disposed by the use a vacuum truck.

4.3.8 High Vapour Concentrations

During the course of the excavation, the possibility exists for a build-up of hydrocarbon-based vapours in the excavation. Half-face respirators with organic vapour gas canisters will be provided as needed by the general contractor.

4.4 SITE RESTORATION

4.4.1 Backfilling

Following completion of the bulk soil excavations, the site will be returned to grade level using stock-piled clean overburden soil, stockpiled treated soil from within the tank nest concrete berm, and imported backfill. The general contractor will supply the fill material upon the approval of SEACOR for suitability. It will be the responsibility of the geotechnical consultant to specify the degree of compaction upon confirmation of the backfill material to be used.

The site will be returned to within 0.3 m of final grade with imported backfill material. The final 0.3 m will be consist of granular base compacted to the requirements outlined by the geotechnical consultant.

4.4.2 Damage to Existing Structures

Upon completion of the backfilling process, the general contractor will be retained to repair any damage to surrounding structures that may have occurred during the project activities. Confirmation of the repairs and/or replacement will be determined by Shell, SEACOR, and the general contractor prior to proceeding.

4.5 PROJECT SCHEDULE

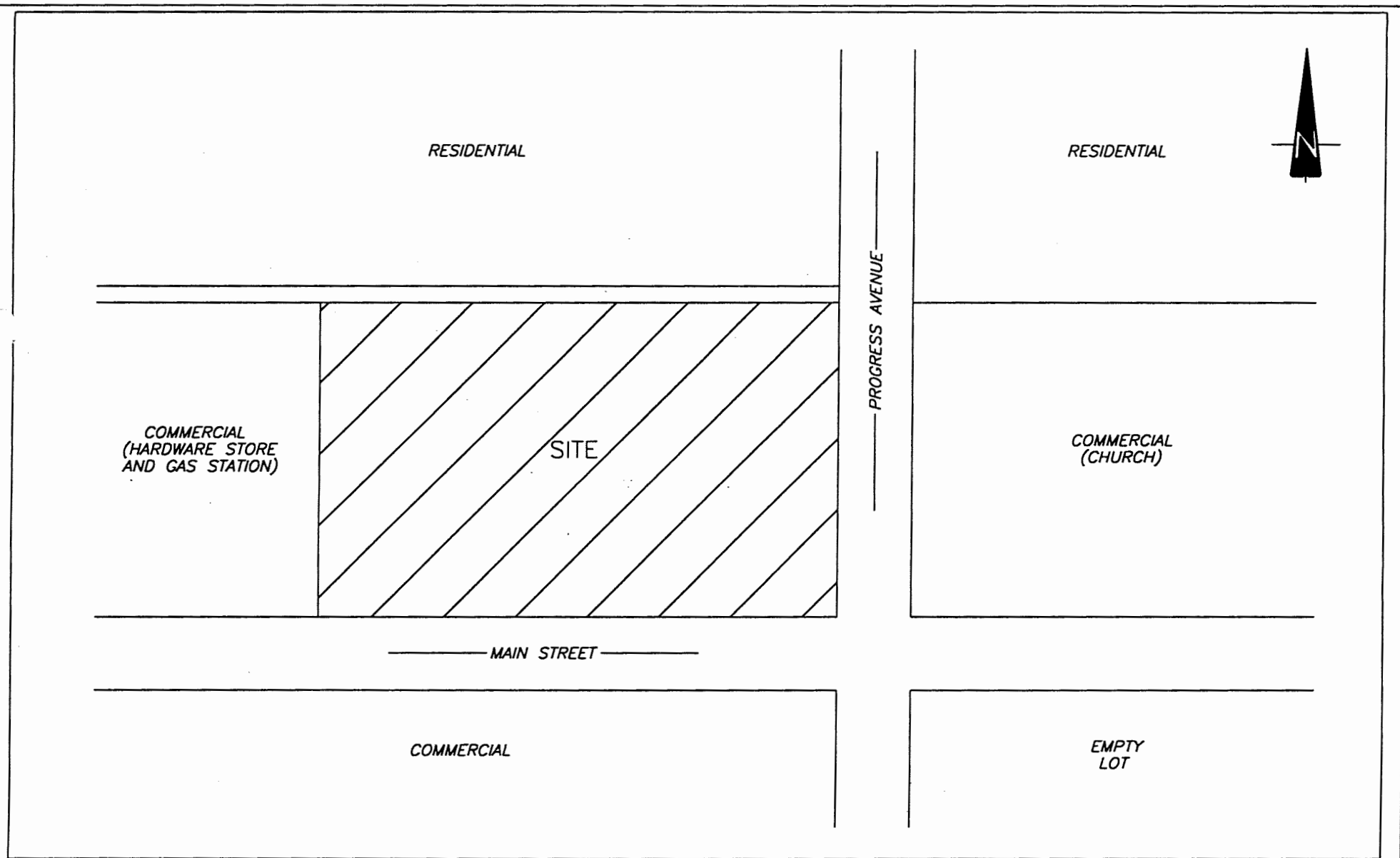
Field activities for the project are expected to begin in the late spring of 1999. Project scheduling will be finalized upon authorization from Shell to proceed with the outlined remedial activities. The field activities are expected to require approximately two weeks to complete the outlined project.

5.0 CLOSURE

The RAP outlined in this report is based on short term remedial clean-up objectives that comply with standard environmental practices. The recommendations presented herein are based on the interpretation of data collected from the field investigation and the results of the laboratory analyses of environmental works conducted during the July 1997 site investigation. The recommendations are therefore limited to the quantification of common hydrocarbon indicators in select samples at the time of the assessment. The remedial plan therefore assumes that no significant unknown conditions are present at the site that may affect the performance of the remediation plan.

This report is for the exclusive use of Shell Canada Products Ltd. and its authorized agents. Third party use of this RAP, or any reliance of, or decisions made on the information herein, is at the sole risk of the third party.

SEACOR has no obligation, contractual or otherwise, to any third persons using or relying upon this report for any reason and therefore accepts no responsibility for damage suffered by any third party as a result of the actions taken or decisions made on the basis of the information or conclusions of this report.



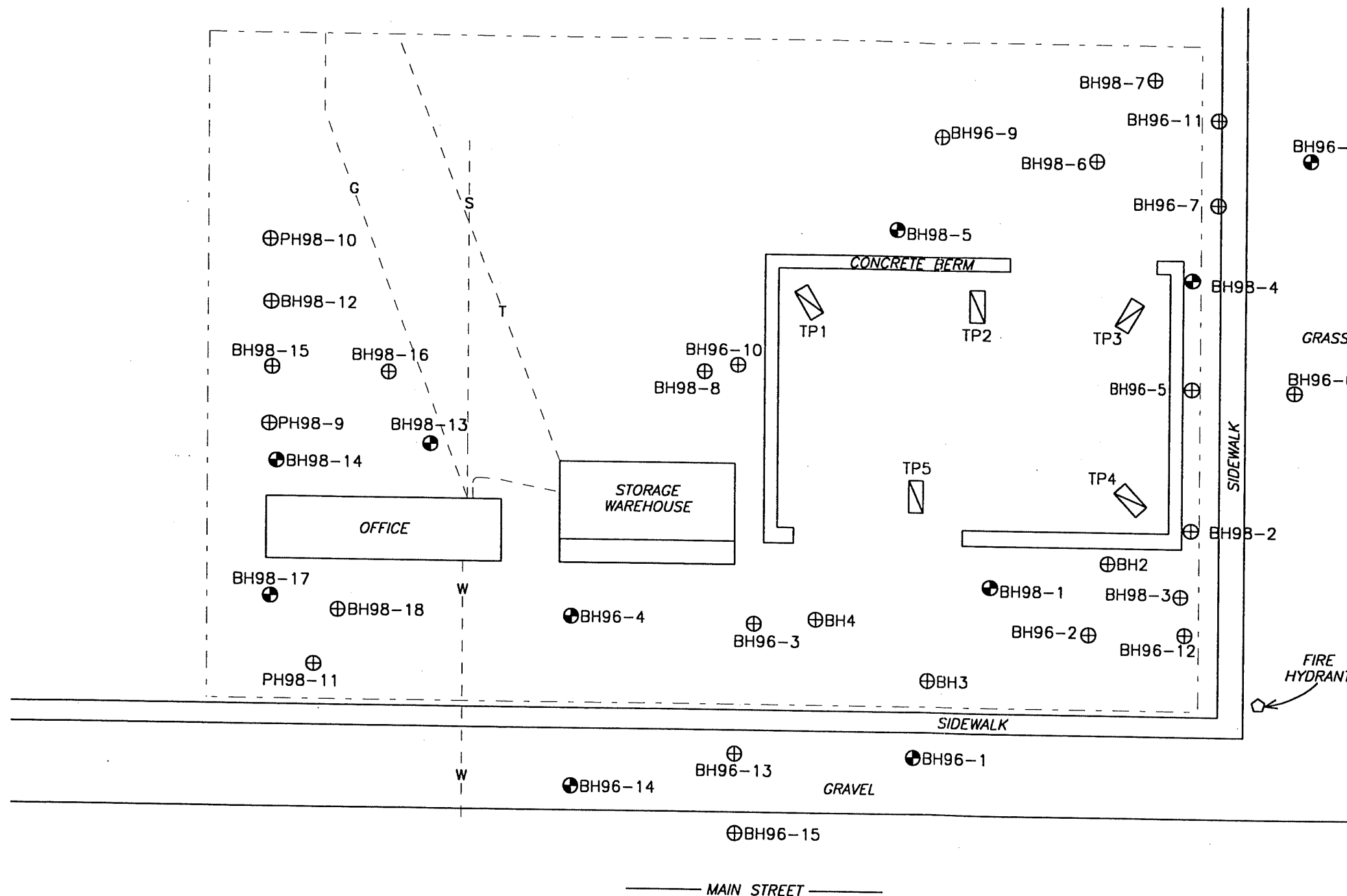
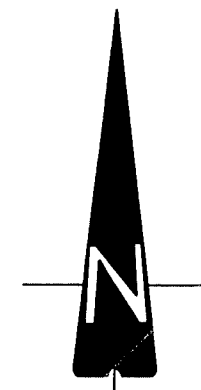
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CANADIAN TURBO (1993) INC.
BARONS TURBO BULK STATION #2520
235 MAIN STREET
BARONS, ALBERTA

SURROUNDING LAND USE PLAN

SCALE NTS	DATE 12/15/98	FILE NAME 31-93A3.DWG	MADE PRT/DAA	CHKD WDM	JOB NO. H0031-093	FIG 1
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LEGEND

- - - - - PROPERTY LINE (APPROXIMATE)
- - W - - WATER LINE (UNDERGROUND)
- - S - - SEWER LINE (UNDERGROUND)
- - G - - GAS LINE (UNDERGROUND)
- - T - - TELEPHONE LINE (UNDERGROUND)
- ⊕ BOREHOLE LOCATION
- ⊙ BOREHOLE COMPLETED AS A MONITORING WELL
- ▭ TEST PIT LOCATION

SCALE 1:250 (APPROX.)

0 5 10 15 m

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REV.	DESCRIPTION	DATE	MADE	CHKD

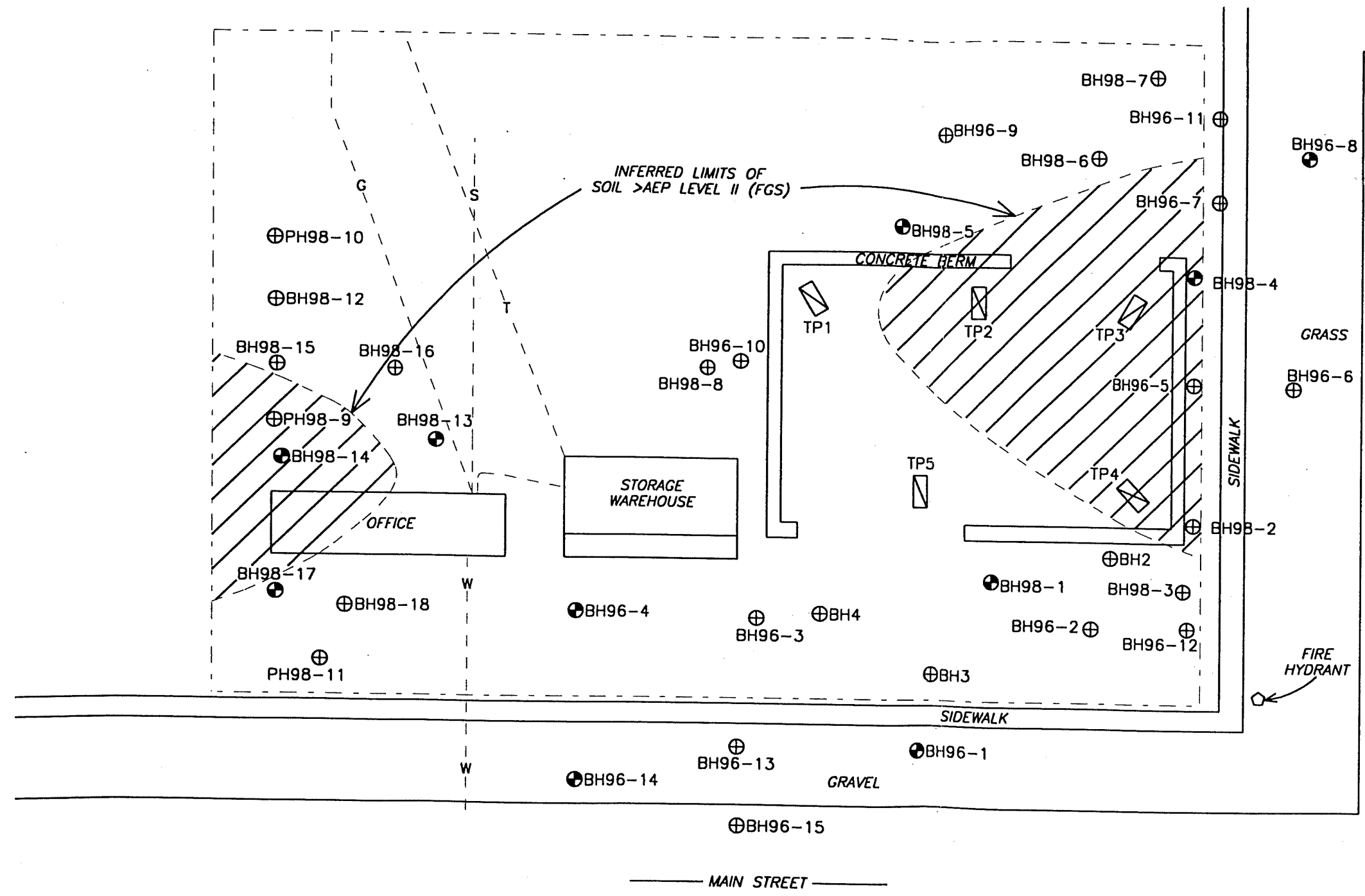
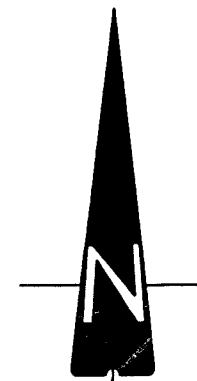
SEACOR
ENVIRONMENTAL ENGINEERING INC.

CANADIAN TURBO (1993) INC.
BARONS TURBO BULK STATION #2520
235 MAIN STREET
BARONS, ALBERTA

SITE PLAN BOREHOLE LOCATIONS

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY.
ACTUAL LOCATIONS MAY VARY AND NOT ALL
STRUCTURES ARE SHOWN.

SCALE 1:250	DATE 12/15/98	FILE NAME 31-93A4.DWG
MADE AAP/DAA	CHKD WDM	JOB NO. H0031-093
		FIG 2



LEGEND

- - - - - PROPERTY LINE (APPROXIMATE)
- W - - - WATER LINE (UNDERGROUND)
- S - - - SEWER LINE (UNDERGROUND)
- G - - - GAS LINE (UNDERGROUND)
- T - - - TELEPHONE LINE (UNDERGROUND)
- ⊕ BOREHOLE LOCATION
- ⊙ BOREHOLE COMPLETED AS A MONITORING WELL
- ▢ TEST PIT LOCATION

SCALE 1:250 (APPROX.)



5				
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2				
1				
REV.	DESCRIPTION	DATE	MADE	CHKD

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BARONS, ALBERTA

INFERRED LIMITS OF SOIL
- AEP LEVEL II (FGS)

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STRUCTURES ARE SHOWN.

SCALE 1:250	DATE 12/15/98	FILE NAME 31-93A5.DWG
MADE AAP/DAA	CHKD WDM	JOB NO. H0031-093
		FIG 3