



Washtenaw County Environmental Health Department

705 N. Zeeb Rd., P.O. Box 8645
Ann Arbor, Michigan 48107-8645
Phone (734) 222-3800
Fax (734) 222-3930

http://eWashtenaw.org

WEL

New

PRJ2015-02285

ISSUE DATE:
12/17/2015

EXPIRE DATE:
12/17/2016

Well Permit #: WEL2015-00475

Parcel Number: A -01-13-400-004

Site Address: 10690 SIX MILE ROAD

Township: Salem Twp

WORKING COPY

PROJECT NAME: COMMERCIAL

PROJECT DESCRIPTION: NEW WELL PERMIT FOR NEW COMMERCIAL BLDG - MAINTENANCE SHED TO SERVE UP TO 8 TRANSIENT EMPLOYEES.

Directions to site:

Property Owner:

VEOLIA ES ARBOR HILLS LANDFILL INC
10599 W FIVE MILE RD
NORTHVILLE, MI 48168

Permit Applicant:

CORNERSTONE ENVIRONMENTAL
TYLER SCHMIDT
39395 W TWELVE MILE RD
FARMINGTON HILLS, MI 48331

This permit is to install a potable water well in the approved location shown on the attached plot plan and in accordance with applicable County regulations and Michigan Water Well Construction and Pump Installation Code, Part 127, Act 368. No newly drilled wells are to be used for potable purposes until final approval is received.

Type of Work : New

Type of Well : Type III

Time of Sale related : No

Well First Area : Yes

Provide water samples for the following :

Water samples must be collected in approved laboratory bottles and processed by a laboratory certified by the State of Michigan for the type of test requested. Sample results must be within acceptable ranges and be provided prior to final approval.

- Arsenic
- Coliform
- Coliform
- Nitrates

* OVER ->

This permit may be transferred to a new property owner if a written request by both parties is submitted to this Division prior to the expiration date. NOTE - this permit is NOT transferrable to another property.

Sanitarian: Doris Rae Bernbeck Date: _____

12/17/15 4:33PM



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PERMIT CONDITIONS

- 1 Currently, there is a 10,000 gallon above ground storage tank located 450' from the approved well location. A deviation from the required 800 feet minimum isolation distance to a Type III well from such a source of potential contamination may be granted provided that the following conditions are met.
2 The well shall be a minimum of 450 feet from the 10,000 gallon above ground storage tank located to the Northwest of the approved well location.
3 The well must be drilled to Part 201 specifications including: steel casing, neat cement grout, and copper service line. See attached specifications.
4 A protected aquifer is required. A protected aquifer has at least a 10 foot thick layer of clay below any sand formation receiving onsite sewage.
5 Submit a well log from a registered well driller. Wells drilled on metes and bounds parcels must have a minimum yield of 7 gpm.
6 This well will serve a new maintenace shed that replaces same on the south side of Six Mile Rd. The old well at the old maintenance shed must be properly abandoned by a registered well drilling contractor.
7 Submit a safe arsenic sample.
Submit a safe nitrate sample.
Submit two (2) consecutive safe coliform bacteria samples. Samples shall be collected from the well or well facility 24 hours apart.
* All samples must be collected after well is connected to the distribution system. All samples must be analyzed by Washtenaw County or other certified laboratory.
** Water from the system shall NOT be used until both safe coliform samples have been received.
8 The existing gravel pad that the storage tank sits on must be replaced with a concrete pad underneath the tank and loading areas. The pad will be constructed with raised borders around the perimeter of the pad to detect and contain slow drips and filling spills.
9 Prior to final approval a final inspection will be required to confirm location of the well and concrete pad.

1-26-16 Randy Spallen - well grouting insp. - Overcast + 34°F
Pearson Well Drilling out of Lake City (Drill operator: Ben Pearson)
well 218' deep
Guidobono Concrete out of Brighton supplied the grout - neat cement
- Observed concrete grout at ground surface after being pumped from the bottom up via a removable metal tremie pipe (at +/- 180')

This permit may be transferred to a new property owner if a written request by both parties is submitted to this Division prior to the expiration date.
NOTE - this permit is NOT transferrable to another property.



Water Well And Pump Record



Completion is required under authority of Part 127 Act 368 PA 1978.

Failure to comply is a misdemeanor.

Import ID:

Tax No: A-01-13-400-004		Permit No: WEL-2015-00478		County: Washtenaw		Township: Salem		
Well ID: 81000021509				Town/Range:	Section:	Well Status:	WSSN:	Source ID/Well No:
				01S 07E	12	Active		
Elevation:				Distance and Direction from Road Intersection:				
Latitude: 42.40726				Twelve Mile Road				
Longitude: -83.55602				Well Owner: Veolia ES Arbor Hills Landfill				
Method of Collection: GPS Std Positioning Svc SA Off				Well Address:		Owner Address:		
				39395 West Twelve Mile Farmington Hills, MI 48331		10599 West Five Mile Northville, MI 48168		

Drilling Method: Rotary	Well Use: Type III public	Pump Installed: Yes	Pump Installation Only: Yes
Well Depth: 218.00 ft.	Date Completed: 1/26/2016	Pump Installation Date: 1/26/2016	HP: 5.00
Well Type: New		Manufacturer: Goulds	Pump Type: Submersible
Casing Type: Steel - black	Height: 1.50 ft. above grade	Model Number: 55GS50	Pump Capacity: 55 GPM
Casing Joint: Threaded & coupled		Drop Pipe Length: 160.00 ft.	Pump Voltage: 230
Casing Fitting: None		Drop Pipe Diameter: 2.00 in.	Drilling Record ID:
Diameter: 5.00 in. to 218.00 ft. depth		Draw Down Seal Used: No	
Borehole: 8.75 in. to 220.00 ft. depth		Pressure Tank Installed: No	
		Pressure Relief Valve Installed: No	

Static Water Level: 90.00 ft. Below Grade	Yield Test Method: Air	Formation Description	Thickness	Depth to Bottom
Well Yield Test: 2.50 hrs. at 100 GPM		Brown Clay & Gravel Sandy	12.00	12.00
		Sand & Gravel W/Cobbles Coarse	40.00	52.00
		Gray Clay	5.00	57.00
Screen Installed: Yes	Filter Packed: Yes	Gravel	3.00	60.00
Screen Diameter: 5.00 in.	Blank: 0.00 ft. Above	Gray Clay & Gravel Sandy	61.00	111.00
Screen Material Type: Stainless steel-wire wrapped		Sand Silty	9.00	120.00
Slot Length Set Between		Gray Clay Gravel Sand Stringers	52.00	172.00
15.00 10.00 ft. 208.00 ft. and 218.00 ft.		Gray Clay	14.00	186.00
Fittings: Neoprene packer		Clay & Sand Silty	12.00	198.00
		Gray Clay	9.00	207.00
		Sand & Gravel Coarse	13.00	220.00

Well Grouted: Yes	Grouting Method: Grout pipe outside casing	Geology Remarks:	
Grouting Material: Neal cement	Bags: 40.00 Additives: None Depth: 5.00 ft. to 200.00 ft.		
Wellhead Completion: Pitless adapter			

Nearest Source of Possible Contamination:	Drilling Machine Operator Name: Ben Pearson
Type: Fuel tank	Employment: Employee
Distance: 450 ft.	Pump Installer: Ben Pearson
Direction: Northwest	Contractor Type: Water Well Drilling Contractor Reg No: 57-1943
	Business Name: Pearson Drilling Co
	Business Address: 6100 W Blue Road, Lake City, MI, 49651
	Water Well Contractor's Certification
	This well/pump was constructed under my supervision and I hereby certify that the work complies with Part 127 Act 368 PA 1978 and the well code.
	Signature of Registered Contractor: <i>Ben Pearson</i> Date: 2-23-16

General Remarks: Tank will be installed when building is enclosed. Constant pressure system (230 volt, 3 phase motor) Goulds 3AS50 Controller

Other Remarks:

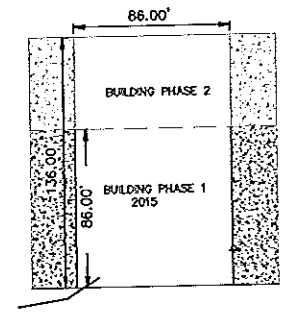
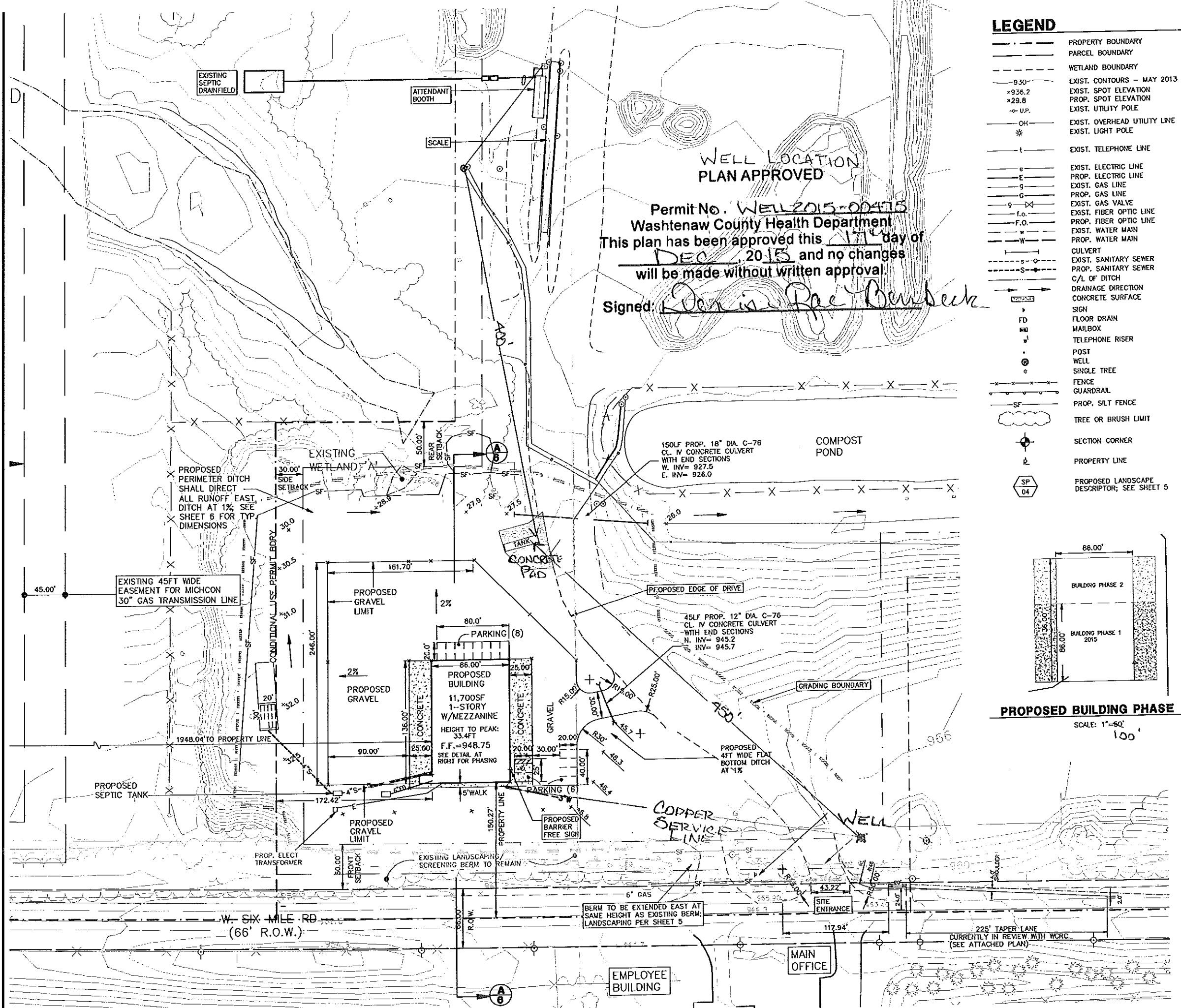
LEGEND

- - - - - PROPERTY BOUNDARY
- - - - - PARCEL BOUNDARY
- - - - - WETLAND BOUNDARY
- 930 - EXIST. CONTOURS - MAY 2013
- × 935.2 EXIST. SPOT ELEVATION
- × 29.8 PROP. SPOT ELEVATION
- U.P. EXIST. UTILITY POLE
- OH EXIST. OVERHEAD UTILITY LINE
- * EXIST. LIGHT POLE
- - - - - EXIST. TELEPHONE LINE
- - - - - EXIST. ELECTRIC LINE
- - - - - PROP. ELECTRIC LINE
- - - - - EXIST. GAS LINE
- - - - - PROP. GAS LINE
- - - - - EXIST. GAS VALVE
- - - - - EXIST. FIBER OPTIC LINE
- - - - - PROP. FIBER OPTIC LINE
- - - - - EXIST. WATER MAIN
- - - - - PROP. WATER MAIN
- - - - - CULVERT
- - - - - EXIST. SANITARY SEWER
- - - - - PROP. SANITARY SEWER
- - - - - C/L OF DITCH
- - - - - DRAINAGE DIRECTION
- - - - - CONCRETE SURFACE
- ▲ SIGN
- FD FLOOR DRAIN
- MB MAILBOX
- ↑ TELEPHONE RISER
- POST
- WELL
- SINGLE TREE
- × × × × × FENCE
- × × × × × GUARDRAIL
- - - - - PROP. SILT FENCE
- ☁ TREE OR BRUSH LIMIT
- ⊙ SECTION CORNER
- ⊙ PROPERTY LINE
- SP PROPOSED LANDSCAPE
- 04 DESCRIPTOR; SEE SHEET 5

WELL LOCATION PLAN APPROVED

Permit No. WELL 2015-00475
 Washtenaw County Health Department
 This plan has been approved this 17th day of DEC, 2015 and no changes will be made without written approval.

Signed: Dennis Rae Bensbeck



Well at 58' drilled
 78' gate post
 6 mile Rd.



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SEW2015-00425

SEW
New

PRJ2015-02285

Sewage Permit #: SEW2015-00425

ISSUE DATE:
3/1/2016
EXPIRE DATE:
3/1/2018

Parcel Number: A -01-13-400-004
 Site Address: 10690 SIX MILE ROAD
 Township: Salem Twp *WORKING COPY*

PROJECT NAME: COMMERCIAL

Description: NEW SEWAGE PERMIT FOR NEW COMMERCIAL BLDG - MAINTENANCE SHED SERVING UP TO 8 TRANSIENT EMPLOYEES.

Directions to site:

Property Owner:

VEOLIA ES ARBOR HILLS LANDFILL INC
 10599 W FIVE MILE RD
 NORTHVILLE, MI 48168

Permit Applicant:

CORNERSTONE ENVIRONMENTAL
 TYLER SCHMIDT
 39395 W TWELVE MILE RD
 FARMINGTON HILLS, MI 48331
 PH1 630-633-5855
 EML TYLER.SCHMIDT@CORNERSTONEEG.COM

This permit is for a non - residential dwelling with a design flow of GPD :

Type of Disposal System: Conventional
 Bed Size: 20 Feet By 30 Feet
 Bed Area: 600 Sq. Ft.

Number of Bedrooms: / Baths:
 PreTreatment: N/A
 Drainfield Elevation: Below Grade

Type of Flow: Gravity
 Time of Sale Related:
 Effluent Filter: Required

Tank Tightness Test: Not Required
 Type of Parcel: Metes and Bounds / Nonresidential
 Type of Water Supply : Type II or III well

[1] New Septic Tank(s)
 [0] Existing Septic Tank(s)

Total Capacity (new): 1,500 gallons
 Total Capacity (existing): 0 gallons

The system is to be constructed in accordance with the permit condition below, the approved plot plan, the General Construction Requirements, and the Engineering Guidelines for Onsite Sewage Systems. This permit must be posted on-site in the vicinity of the septic system installation. No changes to this permit may be made unless authorized by the Health Officer. The system must be installed by a Washtenaw County Certified Contractor.

PERMIT CONDITIONS

- Maintain at least 100 feet of isolation from the new drainfield to all wells and 50 feet from septic tank(s) to all wells.
- Excavate to sand at 2-3 feet.
- Call for excavation inspection prior to backfilling. Any wet excavations should be pumped dry to allow for inspection and soils should be "roughed up" to allow for better drainage.
- Install drainfield header invert no lower than 2 feet below existing grade.
- Complete the installation of the septic system and call for inspection prior to covering any portion.
- Additional inspections may be required. If required, a \$115 fee must be paid prior to inspection. Due to proposed grading at this site, a final grade inspection may be required. To be determined at the time of the final inspection.

This permit is the sole property of the owner. This permit may be transferred to a new property owner if a written request by both parties is submitted to this division prior to the permit expiration date. NOTE - this permit is NOT transferrable to another property.

Sanitarian: *Denise Rae Bernbeck* Date: *3/1/16*

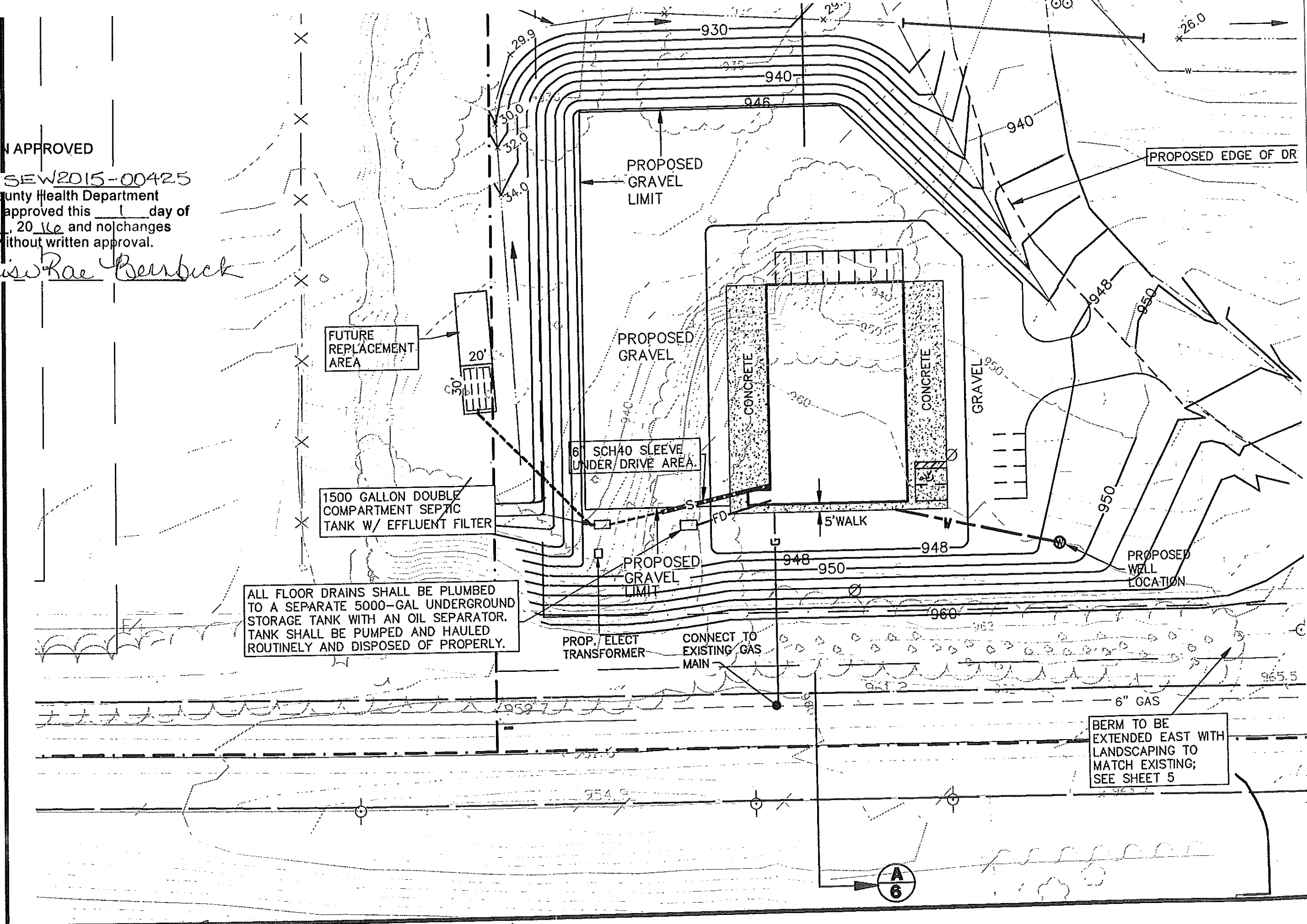
Issue Date: 3/1/2016
 Expire Date: 3/1/2018

PLAN APPROVED

Permit No. SEW2015-00425
Washtenaw County Health Department
This plan has been approved this 1 day of
MARCH, 2016 and no changes
will be made without written approval.

Signed: Denise Rae Berbeck

FC:101418VACAC:DWG:2014\Main-51601\Final Site Plan\01418VAC.dwg, Layout1, 2/20/2015 11:46:39 AM, BAC, MCLLC PDF.pc3



SCALE
1" = 60'

10690 W. SIX MILE RD.
ADVANCED DISPOSAL SERVICES

