

# **ACT 381 COMBINED BROWNFIELD PLAN**

## **TO CONDUCT ELIGIBLE DEQ RESPONSE AND/OR MSF NON-ENVIRONMENTAL ACTIVITIES**

**GENERAL TRUCKING  
NORTHWEST CORNER OF EAST HAMLIN ROAD AND DEQUINDRE ROAD  
Rochester Hills  
Brownfield Redevelopment Authority**

**July 16, 2014**

Approved by the Rochester Hills Brownfield Redevelopment Authority June 19, 2014

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## **1.0 INTRODUCTION**

### **1.1 Proposed Redevelopment and Future Use**

The proposed project consists of constructing an industrial development at the northwest corner of Hamlin Road and Dequindre Road in Rochester Hills, Oakland County, Michigan. General Trucking, Inc. intends to redevelop the property into commercial use for warehousing and truck/trailer storage. Redevelopment plans include the construction of a 40,000 square foot building, which will be surrounded by landscaping. The proposed building will be a single-story slab-on-grade steel framed structure. New access drives, parking lots, and truck parking areas will also be constructed in conjunction with the project. Also, a detention pond will be constructed within the north end of the subject property.

It is anticipated that 14 office positions and 70 drivers will be retained from the current location and an additional 3-5 new office positions and 10 new drivers will be added following redevelopment.

Anticipated total cost and private investment for this project is estimated around approximately \$4.0 Million, including land acquisition.

### **1.2 Eligible Property Information**

The property comprising the eligible property consists of one parcel, which is currently being split from a larger parent parcel. The property is considered "eligible property" as defined by Act 381, Section 2 because (a) the Property was previously utilized or is currently utilized for a commercial purpose; (b) it is located within the City of Rochester Hills, a qualified local governmental unit under Act 381, as amended; and (c) the Property is determined to be a "facility" as further described in this plan.

#### **1.2.1 Location/Address - Includes legal description(s) as shown on deed**

Address	Northwest corner of East Hamlin Road and Dequindre Road, Rochester Hills, Oakland County, Michigan
Parcel ID	70-15-24-401-041
Size	One parcel containing approximately 10.92 acres (parent parcel is approximately 18.42 acres)
Legal Description	Proposed Parcel B: Part of the Southeast ¼ of Section 24, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, described as: Commencing at the East ¼ corner of said Section 24; thence along the East line of said Section 24 South 00 degrees 09 minutes 04 seconds West 1451.48 feet to the point of beginning; thence continuing along said East line South 00 degrees 09 minutes 04 seconds West 1208.62 feet to the Southeast corner of said Section 24; thence along the South line of said Section 24, North 89 degrees 34 minutes 00 sections West 405.15 feet; thence North 00 degrees 09 minutes 04 seconds East 1208.62 feet; thence South 89 degrees 34 minutes 00 seconds East 405.15 feet to the point of beginning. A proposed parcel map is provided in Figure 2.

### **1.2.2 Current Ownership**

The subject property is currently owned by Nichols Investment Properties, LLC; 490 Martell Drive, Bloomfield Hills, MI 48304. Nichols Investment Properties, LLC purchased the property in February 2002.

Contact Person: Jim Nichols  
Phone: 248-703-4354  
Email: [janichols@sprynet.com](mailto:janichols@sprynet.com)

### **1.2.3 Proposed Future Ownership**

General Trucking, Inc., located at 24121 Mound Road, Warren, Michigan 48091, intends to purchase the subject property for redevelopment into a warehouse with truck/trailer storage.

Contact Person: Emil Jakupovic  
Phone: 586-757-4255  
Email: [emil@generaltrucking.net](mailto:emil@generaltrucking.net)

### **1.2.4 Delinquent Taxes, Interest, and Penalties**

There are no delinquent taxes for the subject property as of the completion of this report.

### **1.2.5 Existing and Proposed Future Zoning for Each Eligible Property**

The subject property is currently zoned I: Industrial. It is proposed that the zoning remain unchanged.

## **1.3 Historical & Previous Use and Ownership of Each Eligible Property**

Original development of the subject property occurred prior to 1937 for agricultural purposes. Agricultural operations ceased between 1940 and 1949, and the northern portion of the property was converted into a gravel pit by 1949. The remainder of the property was utilized as a gravel pit until the 1960s. Landfill operations (Sandfill Landfill #2) began at the property in 1968, and continued until approximately 1977. A steel slag sand/clay engineered cap was reportedly placed on the property in 1977, and the property has been vacant land since closure of the landfill in 1977. The property has been owned by Nichols Investment Properties, LLC, since February 2002, and was formerly owned by the Advisory Firm prior to that time.

## **1.4 Current Use of Each Eligible Property**

The property is currently vacant land.

## **1.5 Summary of Liability**

Michigan Department of Environmental Quality (MDEQ) Solid Waste Division has no jurisdiction over the closed Sandfill Landfill #2, based on the age and closure of the former landfill. MDEQ Remediation and Redevelopment Division (RRD) will only require that due care obligations

associated with the former landfilling operations be complied with. No other obligations are required for a new owner of the Sandfill Landfill #2.

The United States Environmental Protection Agency (USEPA) Region V has no additional requirements for the former Sandfill Landfill #2. Since the generated waste is pre-1978 and no source was identified during investigation activities with concentrations greater than 50 parts per million (ppm), the PCB waste would not be regulated under Federal Toxic Substances Control Act (TSCA). Therefore, the subject property would not require TSCA closure for the PCB concentrations identified in the subsurface/landfilling waste.

## **1.6 Summary of Environmental Study Documents**

PM Environmental, Inc. (PM) reviewed the following reports pertaining to previous environmental investigations completed at the subject property:

- Brownfield Redevelopment Assessment (BFRA) Report, February 26, 2001, MDEQ
- Baseline Environmental Assessment (BEA), January 13, 2003, Atwell-Hicks, Inc. (AHI)
- Phase II Environmental Site Assessment (ESA), September 16, 2013, PM
- Phase I ESA, July 26, 2013, PM
- Phase II ESA, September 16, 2013, PM
- Summary of Landfill Review, December 13, 2013, PM
- BEA, January 24, 2014, PM
- Documentation of Due Care Compliance (DDCC), January 24, 2014, PM

PM reviewed a BFRA Report completed for the subject property by the MDEQ in February 2001. The subsequent subsurface investigation assessed the former Sandfill Landfill #2, which includes the subject property and current north adjoining property. As part of the investigation, four surficial soil samples were taken from the current subject property, and four temporary monitoring wells were installed. Analytical results identified concentrations of metals in soil and groundwater samples above MDEQ Part 201 Residential and Nonresidential Drinking Water Protection (DWP) and Groundwater Surface Water Interface Protection (GSIP) cleanup criteria. Analytical results also identified concentrations of metals and lindane in groundwater samples above MDEQ Part 201 Residential and Nonresidential Drinking Water (DW) and/or Groundwater Surface Water Interface (GSI) cleanup criteria. Lastly, the report documents that a steel slag/clay cap was placed on the property in 1977 during closure of the landfill. The structural integrity of the landfill cap is unknown.

PM also reviewed a January 2003 BEA report completed by AHI. The BEA documents a Phase II ESA was completed by Clayton Environmental Consultants in October 1998 at the subject property. A copy of the Phase II ESA was not available for review as part of this site investigation. However, the BEA report documented that six soil borings were advanced by Clayton on the current subject property (the report also assessed the current north adjoining property). AHI reported that select soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and/or Michigan 10 Metals. Analytical results reportedly identified soil and groundwater contamination above MDEQ Part 201 Residential cleanup criteria.

The BEA report also documented a Phase II ESA was completed by AHI in December 2002, which included four additional soil borings, and documented two methane monitoring wells were installed in the southeastern portion of the subject property. Select soil samples were analyzed for VOCs, SVOCs, PCBs, and/or Michigan 10 Metals. Analytical data tables were not included in the report provided to PM. However, the BEA report indicated that concentrations of VOCs were identified on the subject property above MDEQ Part 201 Residential and Nonresidential DW and DWP cleanup criteria. Various concentrations of metals were also identified in soil samples above Part 201 Residential and Nonresidential DWP and SDC cleanup criteria. Additionally, analytical results identified concentrations of PCBs in a soil sample (SB-3) in the central portion of the subject property above Part 201 Residential and Nonresidential SDC cleanup criteria.

Lastly, concentrations of methane were identified in two monitoring wells located in the southeastern portion of the property. Concentrations of methane in one of the monitoring wells were identified above MDEQ acceptable soil gas concentrations. Additionally, methane concentrations were identified in monitoring wells approximately 100 feet north of the subject property significantly above MDEQ acceptable soil gas concentrations.

Review of previous site investigations completed at the property between 1998 and 2002 documents that soil and groundwater contamination is present above current MDEQ Part 201 Residential and Nonresidential cleanup criteria. Analytical results from previous subsurface sampling activities identified concentrations of VOCs, lindane, PCBs, and metals above MDEQ Part 201 Residential and Nonresidential DWP and SDC cleanup criteria.

PM performed a Phase I ESA for the subject property, dated July 26, 2013, in conformance with the scope and limitations of ASTM Practice E 1527-05 (i.e., the 'ASTM Standard').

The following onsite RECs were identified:

- The subject property operated as the Sandfill Landfill #2 from 1968 until 1977. Review of previous site investigations of former landfill operations completed at the property between 1998 and 2002 document that soil and groundwater contamination is present above current MDEQ Part 201 Residential and Nonresidential Generic Cleanup Criteria. Analytical results of previous subsurface sampling identified concentrations of VOCs, PCBs, and metals above MDEQ Part 201 DWP and SDC cleanup criteria. Based upon these analytical results, the subject property would be classified as a "facility," as defined by Part 201 of P.A. 451 of the Michigan Natural Resources Environmental Protection Act (NREPA), as amended. The purchaser would be eligible to complete a BEA for the subject property.
- Review of previous site investigations of former landfill operations documents the horizontal extent of PCB contamination on the subject property has not been adequately defined. Previous subsurface investigations documented concentrations of PCBs in a soil sample above MDEQ Part 201 Nonresidential SDC cleanup criteria. The potential exists for additional PCB impact to be present on the subject property. The PCB impact previously identified at the subject property and any potential additional impact would also likely be regulated under the Federal TSCA.

- Review of previous site investigations of former landfill operations documents adequate sampling has not been completed to delineate a methane plume identified on the subject property and north adjoining property. Analytical results of soil gas sampling conducted in 2002 identified concentrations of methane in the southeastern portion of the subject property above MDEQ acceptable soil gas concentrations. Additionally, methane concentrations were identified in monitoring wells north of the subject property significantly above MDEQ acceptable soil gas concentrations. The potential exists for elevated concentrations of methane to be present in areas of the subject property not previously assessed above current MDEQ acceptable soil gas concentrations.

The following adjoining and/or nearby RECs were identified:

- The west adjoining property, which is known as the former J&L Landfill, has been identified as a National Priority List (i.e. Superfund) site, a Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site, and a Brownfield site. Review of previous site investigations for this property documented concentrations of VOCs and metals above MDEQ Part 201 Residential cleanup criteria. Based on documented regional groundwater flow to the northeast towards the subject property, the potential exists for contamination from this former landfill to have migrated onto the subject property.
- A nearby property, historically known as the former Sandfill Landfill No. 1 site located approximately 250 feet west of the subject property, is identified as a State Hazardous Waste Site (SHWS), CERCLIS site, and a BEA site. PM reviewed MDEQ file information for this property, which documented soil contamination throughout the property, including various concentrations of gasoline range VOCs, polynuclear aromatic hydrocarbons (PNAs), and/or metals above MDEQ Part 201 Residential and Nonresidential DWP and/or Groundwater to Surface Water Interface Protection (GSIP) cleanup criteria. Additionally, groundwater analytical results identified gasoline range VOCs, PNAS, and metals above MDEQ Part 201 Residential and Nonresidential DW and/or GSI cleanup criteria. Based on the documented contamination, the close proximity to the subject property (approximately 250 feet), and documented regional groundwater flow to the east and/or northeast (towards the subject property), the potential exists for contamination from this property to have migrated onto the subject property.

On August 28-30, 2013, PM completed a Phase II ESA scope of work consisting of advancing 16 soil borings (SB-1 through SB-16), installing 10 temporary monitoring wells ((TMW-1, TMW-2, TMW-3, TMW-8, and TMW-10 through TMW-15), installing 13 soil gas points (SG-1, SG-2, SG-3, SG-7 through SG-16), and collecting soil, groundwater, and soil gas samples for laboratory analysis to investigate the RECs identified in the Phase I ESA prepared by PM. A BEA was completed in January 2014 by PM, which documented exceedances of the Part 201 Residential and Nonresidential DWP/DW and GSIP/GSI and Residential SDC cleanup criteria in soil and groundwater samples collected from the subject property by PM, the subject property is considered a facility under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder. In addition, methane concentrations were identified at the subject property in soil gas samples above screening levels.

On December 10, 2013, PM completed a Summary of Landfill Review for the proposed development. PM contacted the MDEQ and USEPA to discuss further obligations of an owner purchasing and redeveloping a former landfill. The subject property is part of the former Sandfill Landfill #2, which was closed in 1977 per Act 87.

The MDEQ Solid Waste Division has no jurisdiction over the closed Sandfill Landfill #2, based on the age and closure of the former landfill. The only items that the Solid Waste Division will require during ownership/redevelopment activities are the following:

- Impacted material removed from the subject property must be disposed of at a current Type II landfill or higher under appropriate waste manifest; and/or
- Impacted material/waste is being relocated to other portions of the property, a Consent Order must be granted through the Solid Waste Division.

MDEQ RRD will only require due care obligations. No other obligations are required for a new owner of the Sandfill Landfill #2. Therefore, a BEA for the purchasing entity, which provided liability protection from the existing contamination was prepared. In addition, a DDCC was prepared outlining the following due care obligations/response activities:

- Any subsurface construction will be planned and implemented in a manner as to not increase offsite migration along subsurface utility, sewer, or structure corridors (i.e., lining of utilities, installing cut-off walls at the property boundaries);
- Written notices will be provided to easement holders of record, utility franchise holders of record, and the owners and/or operators of all public utilities that serve the subject property regarding the presence of soil, groundwater, and soil gas contamination exceeding the Part 201 Nonresidential Cleanup Criteria prior to construction activities;
- Monitor methane concentrations during construction activities and excavate soils in accordance with DEQ guidelines;
- Install a methane mitigation system during construction activities for the proposed subject building that would consist of a vapor barrier under the proposed building foundation with passive venting;
- Install methane monitoring devices within the subject building following construction;
- Maintain at least 6-inches of cover (i.e., asphalt, concrete, pond liner, grass, gravel) throughout the property; and
- Do not install water wells on the property for any purpose.

In addition, USEPA Region V has no additional requirements for the former Sandfill Landfill #2. Since the generated waste is pre-1978 and no source was identified during investigation activities with concentrations greater than 50 parts per million (ppm), the PCB waste would not be regulated under TSCA. Therefore, the subject property would not require TSCA closure for the PCB concentrations identified in the subsurface.

The MDEQ and EPA will not require additional obligations to owners of the Former Sandfill Landfill #2 beyond due care/continuing obligations onsite. There are no requirements for offsite monitoring or no specific landfill concerns/requirements to a prospective owner of the Sandfill Landfill #2.

## 1.7 Summary of Environmental/Brownfield Conditions

As previously stated a BEA, completed in January 2014 by PM, report documented exceedances of the Part 201 Residential and Nonresidential DWP/DW and GSIP/GSI and Residential SDC cleanup criteria in soil and groundwater samples collected from the subject property by PM, the subject property is considered a facility under Part 201 of P.A. 451, as amended, and the rules promulgated thereunder. In addition, methane concentrations were identified at the subject property in soil gas samples above screening levels.

Soil samples were collected for laboratory analysis based on the highest photoionization detector (PID) field screening measurements, noticeable evidence of contamination (i.e., discoloration or odors), or from the likely source depths. Nine soil samples and ten groundwater sample were submitted for laboratory analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) or polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs), and Michigan 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc), or some combination thereof. Thirteen soil gas samples were submitted for laboratory analysis of methane and/or VOCs.

### Summary of Soil and Groundwater Exceedences

Location (Total Depth in feet bgs)	Sample Depth (feet bgs)	Analysis	Objectives	Soil Exceedance	Groundwater Exceedance
SB/TMW-1 (20.0)	<b>Groundwater</b> 4.73-9.73	VOCs, SVOCs, PCBs, MI 10 Metals	Assess former west adjoining landfills.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs</b>
SB/TMW-2 (20.0)	<b>Soil</b> 3.0-4.0	VOCs, SVOCs, PCBs, MI 10 Metals	Assess former west adjoining landfills.	<b>Res and Nonres DWP: arsenic; GSIP: ethyl benzene, arsenic, copper, and selenium; Res SDC: arsenic</b>	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs, and barium</b>
	<b>Groundwater</b> 7.42-12.42				
SB/TMW-3 (20.0)	<b>Groundwater</b> 8.61-13.61	VOCs, SVOCs, PCBs, MI 10 Metals	Assess former west adjoining landfills.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs, and barium</b>
SB-4 (20.0)	<b>Soil</b> 4.0-5.0	PCBs	Further assess PCBs previously identified	NONE	Not Applicable
SB-5 (20.0)	<b>Soil</b> 5.0-6.0	PCBs	Further assess PCBs previously identified	NONE	Not Applicable

**Combined Brownfield Plan for the Proposed Industrial Development**  
**Located at Northwest Corner of East Hamlin Road and Dequindre Road, Rochester Hills, Michigan**  
**PM Environmental, Inc. Project No. 02-3280-4, July 16, 2014**

<b>Location (Total Depth in feet bgs)</b>	<b>Sample Depth (feet bgs)</b>	<b>Analysis</b>	<b>Objectives</b>	<b>Soil Exceedance</b>	<b>Groundwater Exceedance</b>
SB-6 (20.0)	<b>Soil</b> 6.0-7.0	PCBs	Further assess PCBs previously identified	NONE	Not Applicable
SB-7 (20.0)	<b>Soil</b> 5.0-6.0	PCBs	Further assess PCBs previously identified	NONE	Not Applicable
SB/TMW-8 (20.0)	<b>Groundwater</b> 3.61-8.61	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	NONE	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs</b>
SB-9 (20.0)	<b>Soil</b> 6.0-7.0	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	<b>Res and Nonres DWP: arsenic; GSIP: chlorobenzene and arsenic</b>	Not Applicable
SB/TMW-10 (25.0)	<b>Soil</b> 9.0-10.0	VOCs, PNAs, PCBs, MI 10 Metals	Assess drum storage area and former landfilling operations.	<b>Res and Nonres DWP: various VOCs and arsenic; GSIP: various VOCs, PNAs, arsenic and copper; Res SDC: arsenic TSCA: PCBs</b>	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs, and barium</b>
	<b>Groundwater</b> 7.83-12.83				
SB/TMW-11 (20.0)	<b>Soil</b> 6.0-7.0	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	<b>Res and Nonres DWP: various VOCs; GSIP: various VOCs, PNAs, and selenium</b>	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs</b>
	<b>Groundwater</b> 6.75-11.75				
SB/TMW-12 (20.0)	<b>Groundwater</b> 7.91-12.91	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs, and barium</b>
SB/TMW-13 (20.0)	<b>Groundwater</b> 8.81-13.81	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs; GSI: chromium</b>
SB/TMW-14 (20.0)	<b>Groundwater</b> 8.13-13.13	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs, and barium</b>



<b>Location (Total Depth in feet bgs)</b>	<b>Sample Depth (feet bgs)</b>	<b>Analysis</b>	<b>Objectives</b>	<b>Soil Exceedance</b>	<b>Groundwater Exceedance</b>
SB/TMW-15 (25.0)	<b>Groundwater</b> 9.45-14.45	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	Not Applicable	<b>Res and Nonres DW and GSI: Various VOCs and SVOCs/PNAs; GSI: chromium</b>
SB-16 (20.0)	<b>Soil</b> 11.0-12.0	VOCs, PNAs, PCBs, MI 10 Metals	Assess former landfilling operations.	NONE	Not Applicable

*Res = Residential; Nonres = Nonresidential*

**The soil analytical results are summarized below.**

Various concentrations of VOCs were detected in the soil samples collected at SB-2, SB-9, SB-10, and SB-11 above Part 201 Residential and Nonresidential DWP and GSIP cleanup criteria. No concentrations of VOCs were identified in the remaining soil sample collected at SB-16 above laboratory method detection limits (MDLs).

Concentrations of 2-methylnaphthalene, naphthalene and phenanthrene were detected in the soil sample collected at SB-10 above Part 201 GSIP cleanup criteria. A concentration of naphthalene was detected in the soil sample collected at SB-11 above Part 201 GSIP cleanup criteria. A concentration of pyrene was detected in the soil sample collected at SB-12, below the most restrictive Part 201 Residential cleanup criteria. No concentrations of PNAs were identified in the remaining soil samples collected at SB-9 and SB-16 above laboratory MDLs.

A concentration of PCBs was detected in the soil sample collected from SB-10 below the most restrictive Part 201 Residential cleanup criteria, but above TSCA standards. Various concentrations of PCBs were detected in soil samples SB-2, SB-6, SB-7, and SB-11 below the most restrictive Part 201 Residential cleanup criteria and TSCA standards. No concentrations of PCBs were detected in the remaining four soil samples above laboratory MDLs.

However, USEPA Region V has no additional requirements for the former Sandfill Landfill #2. Since the generated waste is pre-1978 and no source was identified during investigation activities with concentrations greater than 50 ppm, the PCB waste would not be regulated under Federal TSCA. Therefore, the subject property would not require TSCA closure for the PCB concentrations identified in the subsurface/landfilling waste.

Concentrations of arsenic were detected in the soil samples collected at SB-2 and SB-10 above Part 201 Residential SDC cleanup criteria. Concentrations of arsenic were detected in the soil samples collected at SB-2, SB-9 and SB-10 above Part 201 Residential and Nonresidential DWP and GSIP cleanup criteria. Concentrations of copper were detected in soil samples collected at SB-2 and SB-10 and concentrations of selenium were detected in the soil samples collected at SB-2 and SB-11 above Part 201 Residential GSIP cleanup criteria. Concentrations of the remaining metals were detected below laboratory MDLs, Statewide Default Background Levels (SDBLs), or the most restrictive Part 201 Residential cleanup criteria.

Previous investigations conducted between October 1999 and January 2003 consisted of installing 21 soil borings/temporary monitoring wells and collecting soil, groundwater, and soil gas samples for laboratory analysis. The analytical results detected VOCs and metals in soil samples above Part 201 Residential and Nonresidential DWP and GSIP cleanup criteria throughout the property. Arsenic and lead was detected above Part 201 Residential SDC cleanup criteria throughout the property. And PCBs were detected in soil sample SB-3 located in the central portion of the property above Part 201 Residential SDC cleanup criteria and TSCA levels.

Based on the historical use and size of the subject property, other areas of impact may be present that was not assessed by PM and others.

**The groundwater analytical results are summarized below.**

Various concentrations of VOCs were detected in each of the groundwater samples collected at the subject property above Part 201 Residential and Nonresidential DW and GSI cleanup criteria.

A concentration of bis(2-ethylhexyl)phthalate was detected in the groundwater samples collected at TMW-1 and TMW-3 above Part 201 Residential and Nonresidential DW cleanup criteria. Various concentrations of PNAs were detected in the groundwater samples collected at the subject property above Part 201 GSI cleanup criteria, with the exception of TMW-14.

No concentrations of PCBs were detected in any of the groundwater samples collected from the subject property above laboratory MDLs.

Concentrations of barium were detected in the groundwater samples collected at TMW-2, TMW-3, TMW-10, TMW-12, and TMW-14 above Part 201 Residential and Nonresidential DW and GSI cleanup criteria. Concentrations of chromium were detected in the groundwater samples collected at TMW-13 and TMW-15 above Part 201 GSI cleanup criteria. Concentrations of the remaining metals were detected below laboratory MDLs or the most restrictive Part 201 Residential cleanup criteria.

Previous investigations conducted between October 1999 and January 2003 consisted of installing 21 soil borings/temporary monitoring wells and collecting soil, groundwater, and soil gas samples for laboratory analysis. The analytical results detected VOCs and metals in groundwater samples above Part 201 Residential and Nonresidential DW and GSI cleanup criteria throughout the property.

Based on the historical use and size of the subject property, other areas of impact may be present that was not assessed by PM and others.

**Summary of Soil Gas Exceedences**

Location	Sample Depth	Analysis	Objectives	Soil Gas Exceedance
SG-1	4.5-5.0	VOCs and Methane	Assess former west adjoining landfill.	NONE

Location	Sample Depth	Analysis	Objectives	Soil Gas Exceedance
SG-2	9.0-9.5	VOCs and Methane	Assess former west adjoining landfill.	NONE
SG-3	9.5-10.0	VOCs and Methane	Assess former west adjoining landfill.	NONE
SG-7	7.0-7.5	Methane	Assess former landfilling operations on the site.	NONE
SG-8	5.0-5.5	Methane	Assess former landfilling operations on the site.	NONE
SG-9	5.0-5.5	Methane	Assess former landfilling operations on the site.	NONE
SG-10	8.5-9.0	Methane	Assess former landfilling operations on the site.	NONE
SG-11	9.5-10.0	Methane	Assess former landfilling operations on the site.	NONE
SG-12	9.0-9.5	Methane	Assess former landfilling operations on the site.	NONE
SG-13	11.0-11.5	Methane	Assess former landfilling operations on the site.	NONE
SG-14	9.0-9.5	Methane	Assess former landfilling operations on the site.	NONE
SG-15	10.75-11.25	Methane	Assess former landfilling operations on the site.	<b>Methane</b>
SG-16	11.5-12.0	Methane	Assess former landfilling operations on the site.	NONE

**The soil gas analytical results are summarized below.**

A concentration of methane was detected in the soil gas sample collected at SG-15 above the soil gas screening levels, and the lower explosivity limit (LEL) and upper explosivity limit (UEL). No concentrations of methane were detected in the remaining 12 soil gas samples above laboratory MDLs. Soil boring SB/SG-15 is located along the northern property boundary, which is approximately 800 feet north of the proposed building. However, additional pockets of methane could be present in areas of the property that were not assessed.

Concentrations of various VOCs were identified in the three soil gas samples below Nonresidential Screening Levels.

Previous investigations conducted between October 1999 and January 2003 consisted of installing 21 soil borings/temporary monitoring wells and collecting soil, groundwater, and soil gas samples for laboratory analysis. The analytical results detected methane in the southeast portion of the property above vapor screening levels.

Based on the historical use and size of the subject property, other areas of impact may be present that was not assessed by PM and others.

BEA text and tables are provided in Attachment C of this work plan, figures of sampling locations are provided as Figure 3 and 4 of this work plan.

## **1.8 Summary of Functionally Obsolete Blighted and/or Historic Conditions**

Not applicable to this project.

## **1.9 Summary of Historic Qualities**

Not applicable to this project.

## **2.0 DESCRIPTION OF COSTS & SCOPE OF WORK**

Tax Increment Financing revenues will be used to reimburse the costs of “eligible activities” (as defined by Section 2 of Act 381, as amended) as permitted under the Brownfield Redevelopment Financing Act that include: Baseline Environmental Site Assessments, Due Care Activities, Additional Response Activities, and preparation of a Brownfield Plan as described in this work plan. A complete listing of these activities is included in Table 1 of this work plan.

The following eligible activities and budgeted costs are intended as part of the development of the property and are to be financed solely by the developer. The Authority is not responsible for any cost of eligible activities and will incur no debt.

### **2.1 DEQ Eligible Activities**

#### **2.1.1 Baseline Environmental Assessment**

Baseline Environmental Assessment activities include Phase I ESA, Phase II ESA, Baseline Environmental Assessment, and Documentation of Due Care Compliance at a total cost of \$26,300.

#### **2.1.2 Due Care**

Installation of a composite spray applied vapor intrusion barrier is proposed (Geo-Seal, Liquid Boot, or equivalent) during construction that is compatible with the soil, groundwater, and vapor impact identified equipped with an integrated passive venting system to prevent methane migration into the subject building. This will further prevent the potential flammability and explosion hazards from the known methane. Design and installation of a methane venting system, vapor barrier in the building, along with post-installation operation and maintenance and verification testing is estimated at approximately \$134,400.

Installation of an engineered barrier in the proposed detention basin is required to eliminate risk of exposure with impacted subsurface material at an estimated cost of \$10,000.

Utility corridors on the subject property may represent pathways for offsite contaminant migration. Therefore, a non-permeable lining may be installed within the concrete storm sewers to ensure that any contaminants from the overlying slag cap cannot penetrate storm waters that could be discharged offsite. Additionally, to prevent offsite migration of contamination along subsurface utility corridors, slurry walls (or cut-off walls) will be installed within the utility corridors at the property boundaries. This cost is estimated at \$20,000 for both the utility corridor lining and slurry wall installation.

### **2.1.3 Additional Response Activities**

The work plan proposes transport and disposal of contaminated soils/slag at building footings and utility runs estimated at approximately \$7,655 TY and an estimated cost of \$200,280.

The existing fill soils due to the property's history as a landfill are not suitable for support of conventional shallow foundations, as documented in the Geotechnical Report provided in Attachment D of this work plan. Additionally, due to the estimated 6 foot slag cap, foundations cannot go below 5 feet to ensure the cap is not penetrated. Removal of the unsuitable fill soils is considered cost prohibitive based on the depths of the material. Therefore, helical piers and a grade beam system foundation are required to address the unstable fill on the property. A helical pier is a steel shaft, usually square with helices, similar to a large screw that provides a foundation support when challenging soil conditions prohibit a traditional foundation system. The Helical Pier and Grade Beam Foundation System will help prevent settling when the weights from trucks are applied. These activities are required to maintain the integrity of the existing cap as an additional response activity to meet due care. The anticipated cost for installation is approximately \$207,500. These are costs that would not be incurred on a greenfield property or a property not formerly utilized as a landfill.

A Geo-Grid system will also be installed on the property to reinforce soils and other materials to reduce the impact of settling caused by unstable fill (landfill waste) on the property at an estimated cost of \$56,250. Furthermore, excavations cannot extend below the estimated 5-6 foot slag cap requiring lift stations for the sanitary and storm utilities on the property at an estimated cost of \$20,000. These activities are required to maintain the integrity of the existing cap as an additional response activity to meet due care.

### **2.1.4 Develop/Prepare Brownfield Plan and Work Plan**

Preparation of Brownfield Plan and associated activities (e.g. meetings with Rochester Hills Brownfield Redevelopment Authority (RHBRA), etc.) at a cost of approximately \$20,000.

## **2.2 MSF Eligible Activities**

MSF Eligible Activities are not applicable to this work plan.

## **2.3 Local Only Eligible Activities**

Local Only Eligible Activities are not included in this work plan.

## **3.0 TAX INCREMENT REVENUE ANALYSIS**

### **3.1 Estimate of Captured Taxable Value and Tax Increment Revenues**

Incremental taxes on real property included in the redevelopment project will be captured under this Brownfield Plan to reimburse eligible activity expenses. Tax increment revenue capture is estimated to begin in 2015. The effective base taxable value of the land and real property is \$13,110; no personal property is associated with the site. The estimated taxable value of the completed development is \$800,000 estimated to begin in 2015. Tax increment revenue assumes a one-year phase-in for completion of the redevelopment, which has been

incorporated into the tax impact and cash flow assumptions for this work plan. An annual increase in taxable value of 1% has been used for calculation of future tax increments in this work plan.

The RHBRA will capture 3% of captured taxes annually and continue capturing tax increment revenues for 5 years following payback, to build the Local Site Remediation Revolving Fund (LSRRF). The estimated captured taxable value and tax increment revenues for the Property and millages levied by the taxing jurisdictions for each year of the work plan are presented in Table 2.

### **3.2 Method of Financing and Description of Advances Made by the Municipality**

Redevelopment activities at the property will be initially funded by General Trucking, Inc.

Costs for eligible activities funded by General Trucking will be repaid under the Michigan brownfield redevelopment financing program with incremental taxes generated by the future development of the property. No advances will be made by the municipality for this project.

### **3.3 Maximum Amount of Note or Bonded Indebtedness**

The City of Rochester Hills will not incur a financial note or bonded indebtedness for this project. Therefore, a reporting on indebtedness is not required.

### **3.4 Duration of Brownfield Plan**

The duration of this work plan should be not less than the period required to reimburse all eligible activities plus five years for additional capture to build the LSRRF. The approval date of the Brownfield Plan by the City Council will mark the beginning of the reimbursement period, unless modified at the discretion of the City as allowed under Act 381.

The RHBRA has limited TIF capture for the developer to the maximum approved amount of eligible activities (including contingency) or twenty-four years, whichever occurs first. In no event, however, shall this work plan extend beyond the capture period for the City's local revolving loan fund, or the maximum term of 30 years allowed by Section 13 of Act 381 for the duration of this work plan.

Unless otherwise agreed to in writing by the RHBRA, this Plan will expire and no longer be valid if the applicant does not execute a Reimbursement Agreement within one hundred and eighty days of the date the Plan is approved by City Council. To remain eligible for the approved incentives, eligible activities must start within eighteen months of Plan approval, construction must start within five years of the executed Reimbursement Agreement, and construction must be completed within three years of the estimated completion date.

### **3.5 Estimated Impact of Tax Increment Financing on Revenues of Taxing Jurisdictions**

Local tax capture will be limited to the proportional share of the captured millages as described in the RHBRA policies.

Tax increments are projected to be captured and applied to (i) reimbursement of eligible activity costs and payment of RHBRA administrative and operating expenses, and (ii) make deposits into the RHBRA's LSRRF, as follows:

<b>Total Activities Funded by TIF</b>	<b>Estimated Costs</b>
Developer Reimbursement (including a 15% contingency)	\$ 759,573
Capture for Local Site Remediation Revolving Fund	\$ 216,143
RHBRA Administrative Fees	\$ 52,169
<b>Total</b>	<b>\$ 1,027,885</b>

Taxes will continue to be generated to taxing jurisdictions on local captured millages and state school millages at the base taxable value of \$13,110 throughout the duration of this plan totaling approximately \$16,327 or \$563 annually as presented in the table below.

<b>Local Tax Millages</b>		
County Operating	4.19	\$ 55
OAK INT SD	3.3690	\$ 44
OCC	1.5844	\$ 21
County PK & REC	0.2415	\$ 3
HCMA	0.2146	\$ 3
City Millages	9.3412	\$ 122
<b>Total Local Taxes (capturable)</b>	<b>18.9407</b>	<b>\$ 248</b>
<b>School Millages</b>		
School Operating	18.0000	\$ 236
SET (only 3 millages are available for BF TIF capture)	6.0000	\$ 79
<b>Total School Taxes</b>	<b>24.0000</b>	<b>\$ 315</b>
<b>Total Local and School Taxes</b>	<b>42.9407</b>	<b>\$ 563</b>

Non-capturable millages will see an immediate increase in tax revenue following redevelopment and will provide anticipated new tax revenue of \$192,391 throughout the duration of this plan.

For a complete breakdown of the captured millages and developer reimbursement please see Table 2.

#### **4.0 INFORMATION REQUIRED BY SECTION 15(15) OF THE STATUTE FOR NON-ENVIRONMENTAL ACTIVITIES** (required for work plans submitted for MSF consideration)

While this section is not required for non-MSF work plans, it has been completed for the benefit of the City of Rochester Hills.

**4.1 How are the individual activities included in the work plan sufficient to complete the eligible activity?**

Redevelopment of the property, which has been vacant since 1977, will bring new business and create jobs for the City of Rochester Hills. All due care and additional response activities will bring the property to successful reuse.

**4.2 How is each individual activity included in the work plan required to complete the eligible activity?**

To properly redevelop the property for its intended use, the individual activities included in this work plan are required to complete the eligible activity. The installation of methane venting system and vapor barrier and an engineered barrier in the proposed detention pond are required to meet due care obligations. Transport and disposal of contaminated soils, installation of a Geo-Grid, installation of lift stations, and a helical piers and grade beam system are required as a response activity due to the property's history as a landfill for successful reuse.

**4.3 How were the costs for each individual activity determined to be reasonable?**

Eligible activity costs were either based on real cost bids or were determined by the development team and subcontractors based on prior experience. Available bids are provided as Attachment E in this work plan.

**4.4 What is the overall benefit to the public?**

The completion of this redevelopment will increase the taxable value of the property by an estimated \$786,890 and promote additional private investment in this area of Rochester Hills. Additionally, the proposed development will bring additional jobs to the City. The development will also assist in satisfying the economic development study conducted by the City, which aimed to bring this former landfill property to successful reuse.

**4.5 To what extent will vacant buildings be reused and redevelopment of blighted property occur?**

Currently, there are no buildings on the property; therefore, this section is not applicable.

**4.6 How many and what type of jobs will be created by the project?**

It is anticipated that 14 office positions and 70 drivers will be retained from the current location and an additional 3-5 new office positions and 10 new drivers will be added following redevelopment.

Office positions consist of sales, marketing, dispatching, warehouse staff, and executives/managers.

It is anticipated that approximately 115-130 temporary construction jobs will be created including the General Contractor, Architectural, Engineering, and Construction.



**4.7 Is the eligible property in an area of high unemployment?**

According to City Data, the City of Rochester Hills Unemployment Rate was 5.1% in July 2013.

**4.8 What is the level and extent of contamination alleviated by or in connection with the eligible activities?**

The eligible activities will be conducted to address Due Care Obligations and Additional Response activities in relation to the contamination found on the property. All eligible activities are a result of the property being contaminated.

**4.9 What is the level of private sector contribution to the project?**

100% of the project is being funded by the private sector up front.

**4.10 If a greenfield site was considered, what is the cost gap between the site and a similar greenfield site? Alternatively, what extraordinary costs for this site are related to it being a brownfield?**

A greenfield site was not considered for this project.

The costs included in this work plan of \$737,573 are all costs that are above what would be required on a greenfield site and are related to the brownfield status of this site.

**4.11 If the developer or projected occupant of the new development is moving from another location in this state, will the move create a brownfield?**

The projected occupant is moving their operations from their current leased location in the City of Warren as it does not meet the needs of their growing business. This property is, however, desirable for new tenants and is currently in an industrial area that will be easily leased to another firm.

**4.12 Provide project pro forma, financial statements or other acceptable documentation, which demonstrates that the project is financially and economically sound.**

A project pro-forma and financials are provided in Attachment F of this Work Plan.

**4.13 Identify the amount of all other anticipated state or local incentives that directly or indirectly benefit this project.**

No other state or local incentives are anticipated for this project.

**4.14 Provide any additional information you want MSF to consider while reviewing this work plan.**

No additional information.

## **5.0 SCHEDULE OF ACTIVITIES**

### **5.1 Schedule**

April - July 2014:

Brownfield Plan Application and Approval  
Engineering and Site Plan Approvals  
Permit Applications and Approvals

June – December 2014:

Site Construction (geo-grid, lift stations etc.)  
Foundations & Auger Piles  
Steel & Enclosure  
Methane Vapor Barrier Installation and Venting  
Interior Finishes

A full project schedule is provided as Attachment F of this Work Plan.

## **6.0 ESTIMATED COSTS**

### **6.1 Summary of Total Project Costs**

A full listing of eligible brownfield activities is provided in Table 1 and a listing of project costs is provided in Attachment F with the project pro-forma and financials.

### **6.2 Sources and Uses of Incentives and Funds**

A listing of sources and uses are provided in Attachment F. No incentives are available for this project up front and are on a reimbursement basis only.

### **6.3 Summary of Relocation Actions**

#### **6.3.1 Estimates of Residents and Displacement of Individuals/Families**

Not applicable to this project.

#### **6.3.2 Plan for Relocation of Displaced Persons**

Not applicable to this project.

#### **6.3.3 Provisions for Relocation Costs**

Not applicable to this project.

#### **6.3.4 Strategy for Compliance with Michigan's Relocation Assistance Law**

Not applicable to this project.

**6.4 Description of Proposed Use of Local Site Remediation Revolving Fund**

Not applicable to this project.

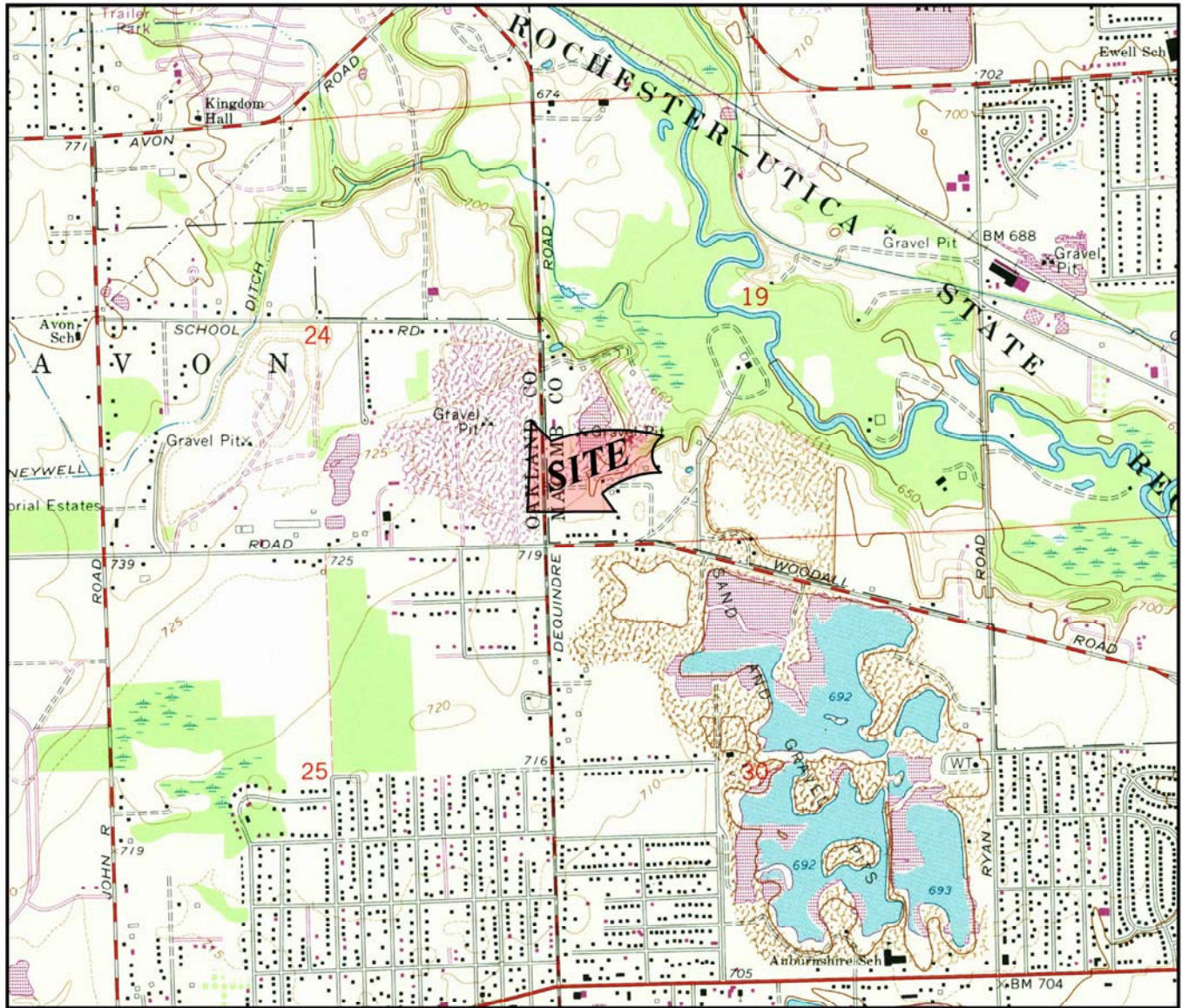
**6.5 Other Material that the Authority or Governing Body Considers Pertinent**

No additional material attached.

# FIGURES

# **Figure 1**

## **Scaled Property Location Map**



## OAKLAND COUNTY

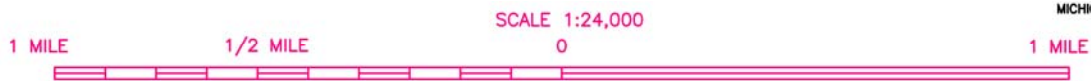
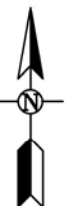
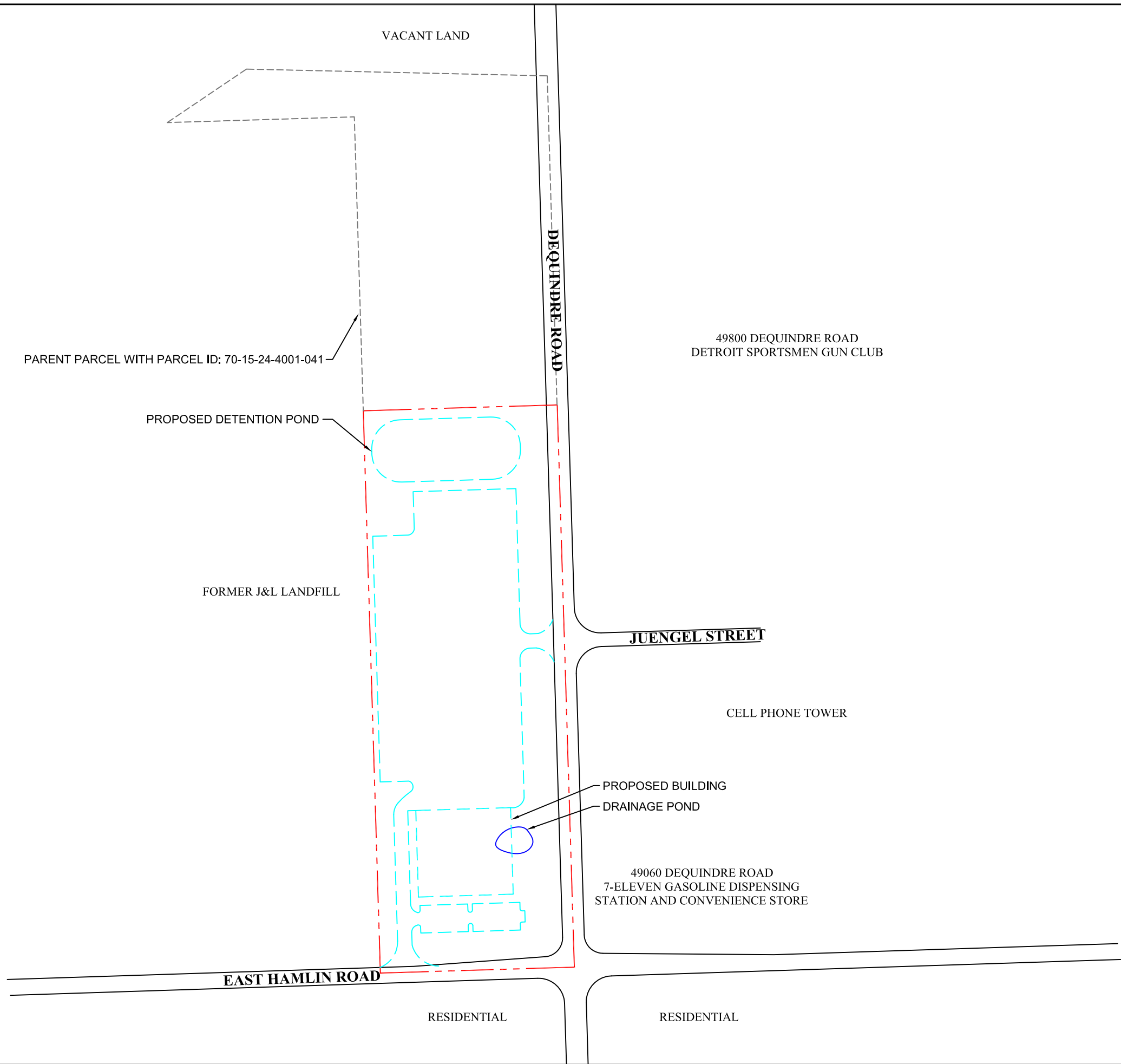


FIGURE 1  
PROPERTY VICINITY MAP  
USGS, 7.5 MINUTE SERIES  
UTICA, MI QUADRANGLE, 1968. PHOTO REVISED 1973.



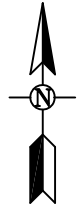
## **Figure 2**

**Eligible Property Map(s)**



**LEGEND:**

- SUBJECT PROPERTY
- PARCEL / LOT BOUNDARIES
- PROPOSED SITE FEATURES



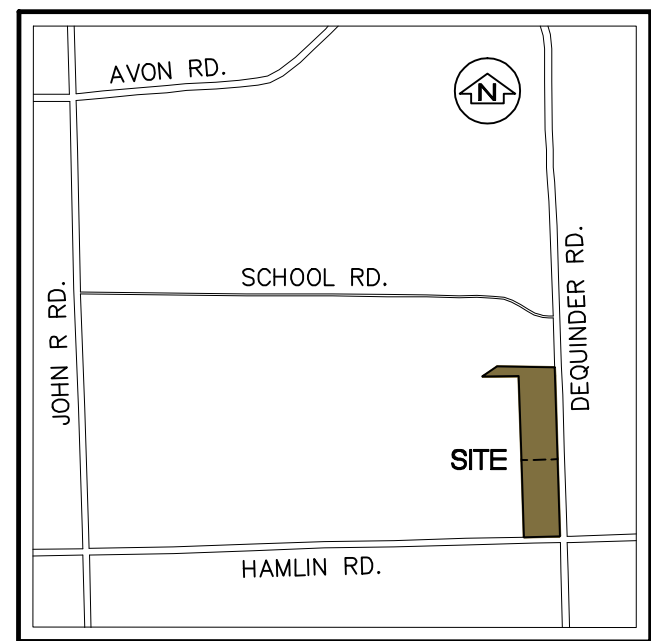
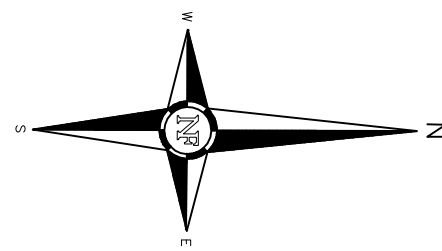
**FIGURE 2**

GENERALIZED DIAGRAM OF THE SUBJECT  
PROPERTY AND ADJOINING PROPERTIES

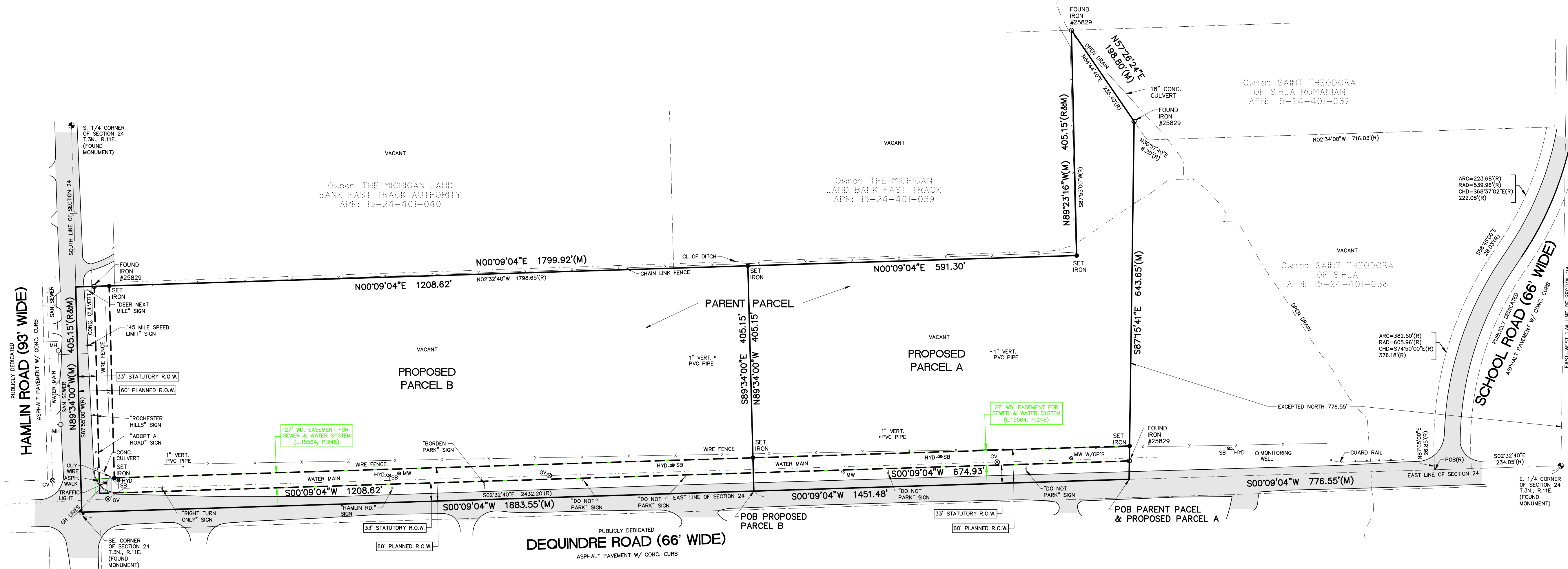
PROJ: PROPOSED INDUSTRIAL DEVELOPMENT  
NORTHWEST CORNER OF  
EAST HAMLIN ROAD AND DEQUINDRE ROAD  
ROCHESTER HILLS, MI

THIS IS NOT A LEGAL SURVEY	DRN BY: TS/MM	DATE: 9/6/2013
VERIFY SCALE 0 220'	CHKD BY: RF/JR	SCALE: 1" = 220'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	FILE NAME:	02-3280-3F02R00



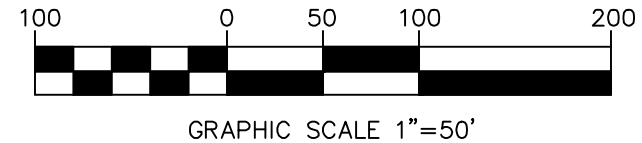


LOCATION MAP



**LEGEND**

- ASPH = Asphalt
- C = Cable
- CATV = Cable TV/Box/Riser
- CB = Catch Basin
- CO = Clean Out
- CONC = Concrete
- E = Electric
- EM = Electric Meter
- EC = Electric Conduit/Riser
- F.I. = Found Iron
- G = Gas
- GL = Ground Light
- GP = Guard Post
- GV = Gate Valve
- HYD = Hydrant
- LP = Light Pole
- L/S = Landscape
- MH = Manhole
- MON. = Monument
- MW = Monitor Well
- OH LINES = Overhead Lines
- P = Phone/Box/Riser
- PH = Physically Handcapped
- P/V = Post Indicator Valve
- P/L = Property Line
- PM = Parking Meter
- ROW = Right of Way
- SAN = Sanitary Sewer
- SB = Stop Box (Water)
- S.I. = Set Iron
- SO = Shutoff (Water)
- STM = Storm Sewer
- TRANS = Transformer
- UP = Utility Pole
- WM = Water Main
- (R) = Record Measurement
- (M) = Surveyed Measurement
- (C) = Calculated



**LEGAL DESCRIPTIONS**

Land described as follows: City of Rochester Hills, County of Oakland, State of Michigan

Part of the Southeast 1/4 of Section 24, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, described as: Beginning at a point on the East line of said Section 24, distant South 02 degrees 32 minutes 40 seconds East 234.05 feet from the East 1/4 corner of said Section 24; thence South 02 degrees 32 minutes 40 seconds East 2432.20 feet along said East line to the Southeast corner of said Section 24; thence South 87 degrees 55 minutes 00 seconds West 405.15 feet along the South line of said Section 24; thence North 02 degrees 32 minutes 40 seconds West 1798.65 feet, thence South 87 degrees 55 minutes 00 seconds West 405.15 feet; thence North 54 degrees 44 minutes 40 seconds East 235.40 feet; thence North 30 degrees 57 minutes 04 seconds East 6.20 feet; thence North 02 degrees 34 minutes 00 seconds West 716.03 feet; thence along the South Right of Way line to School Road (66.0 feet wide) on a curve to the right, Radius = 539.96 feet, Chord bears South 68 degrees 37 minutes 02 seconds East 222.08 feet, an Arc distance of 223.68 feet and South 56 degrees 45 minutes 00 seconds East 28.03 feet and on a curve to the left, Radius = 605.96 feet, Chord bears South 74 degrees 50 minutes 00 seconds East 376.18 feet, on Arc distance of 382.50 feet and North 87 degrees 05 minutes 00 seconds East 26.85 feet to the point of beginning, EXCEPT the North 776.55 feet, as measured from the East and West 1/4 line of Section 24, thereof.

Tax Parcel No.: 15-24-401-041

**PARENT PARCEL - DESCRIPTION AS SURVEYED:**

Part of the Southeast 1/4 of Section 24, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, described as: Beginning at a point on the East line of said Section 24, distant South 00 degrees 09 minutes 04 seconds West 776.55 feet from the East 1/4 corner of said Section 24; thence continuing along said line South 00 degrees 09 minutes 04 seconds West 1883.55 feet to the Southeast corner of said Section 24; thence along the South line of said Section 24, North 89 degrees 34 minutes 00 seconds West 405.15 feet; thence North 00 degrees 09 minutes 04 seconds East 1799.92 feet; thence North 89 degrees 23 minutes 16 seconds West 405.15 feet; thence North 57 degrees 28 minutes 24 seconds East 198.80 feet; thence South 87 degrees 15 minutes 41 seconds East 643.65 feet to the point of beginning.

**PROPOSED PARCEL A:**

Part of the Southeast 1/4 of Section 24, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, described as: Commencing at the East 1/4 corner of said Section 24; thence along the East line of said Section 24 South 00 degrees 09 minutes 04 seconds West 776.55 feet to the point of beginning; thence continuing along said East line South 00 degrees 09 minutes 04 seconds West 674.93 feet; thence North 89 degrees 34 minutes 00 seconds West 405.15 feet; thence North 00 degrees 09 minutes 04 seconds East 591.30 feet; thence North 89 degrees 23 minutes 16 seconds East 198.80 feet; thence South 87 degrees 15 minutes 41 seconds East 643.65 feet to the point of beginning.

**PROPOSED PARCEL B:**

Part of the Southeast 1/4 of Section 24, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, described as: Commencing at the East 1/4 corner of said Section 24; thence along the East line of said Section 24 South 00 degrees 09 minutes 04 seconds West 1451.48 feet to the point of beginning; thence continuing along said East line South 00 degrees 09 minutes 04 seconds West 1208.62 feet to the Southeast corner of said Section 24; thence along the South line of said Section 24, North 89 degrees 34 minutes 00 seconds West 405.15 feet; thence North 00 degrees 09 minutes 04 seconds East 1208.62 feet; thence South 89 degrees 34 minutes 00 seconds East 405.15 feet to the point of beginning.

**FLOOD HAZARD NOTE**

The Property described on this survey does not lie within a Special Flood Hazard Area as defined by the Federal Emergency Management Agency; the property lies within Zone X of the Flood Insurance Rate Map identified as Map No. 26125C0413F bearing an effective date of 9-29-2006.

**NOTES**

All easements on this survey were obtained from Title Commitment No. 63-13306204-SCM, with an effective date of 3-13-2013, issued by Seaver Title Agency, LLC.

**SITE DATA**

Gross Land Area: 800,337 Square Feet or 18.373 Acres.  
Parent Parcel: 310,672 Square Feet or 7.132 Acres.  
Proposed Parcel A: 489,665 Square Feet or 11.241 Acres.

To 33' Statutory R.O.W. line:  
Parent Parcel: 725,838 Square Feet or 16.663 Acres.  
Proposed Parcel A: 288,377 Square Feet or 6.620 Acres.  
Proposed Parcel B: 437,461 Square Feet or 10.043 Acres.

To 60' Master Planned R.O.W. line:  
Parent Parcel: 666,507 Square Feet or 15.301 Acres.  
Proposed Parcel A: 270,103 Square Feet or 6.201 Acres.  
Proposed Parcel B: 396,404 Square Feet or 9.100 Acres.

**CERTIFICATE OF SURVEY**

WE HEREBY CERTIFY THAT WE HAVE SURVEYED THE PROPERTY HEREIN DESCRIBED AND THAT WE HAVE PLACED MARKER IRONS AT THE CORNERS OF THE PARCEL OR AS INDICATED IN THE ABOVE SKETCH.

KEVIN NAVAROLI, PLS  
NO. 53503  
DATE: 05-13-2013  
REV: 05-15-2013  
05-23-2013



**PROJECT LOCATION**

**NW CORNER OF  
HAMLIN & DEQUINDRE**  
Part of the SE. 1/4 of  
Section 24, T.3N., R.11E.,  
City of Rochester Hills,  
Oakland County, MI

**SHEET**

**LAND DIVISION**

**REVISIONS**

05-13-2013 ORIGINAL DATE  
05-15-2013 REV. PER CLIENT  
05-23-2013 REV. PER CLIENT

**DRAWN BY:**

**A.G.**

**APPROVED BY:**

**K.N./R.FRAUS**

**EMAIL:**

**rfraus@nowakfraus.com**

**DATE ISSUED:**

**05-13-2013**

**SCALE:**

**1"=100'**

**NFE JOB NO.**

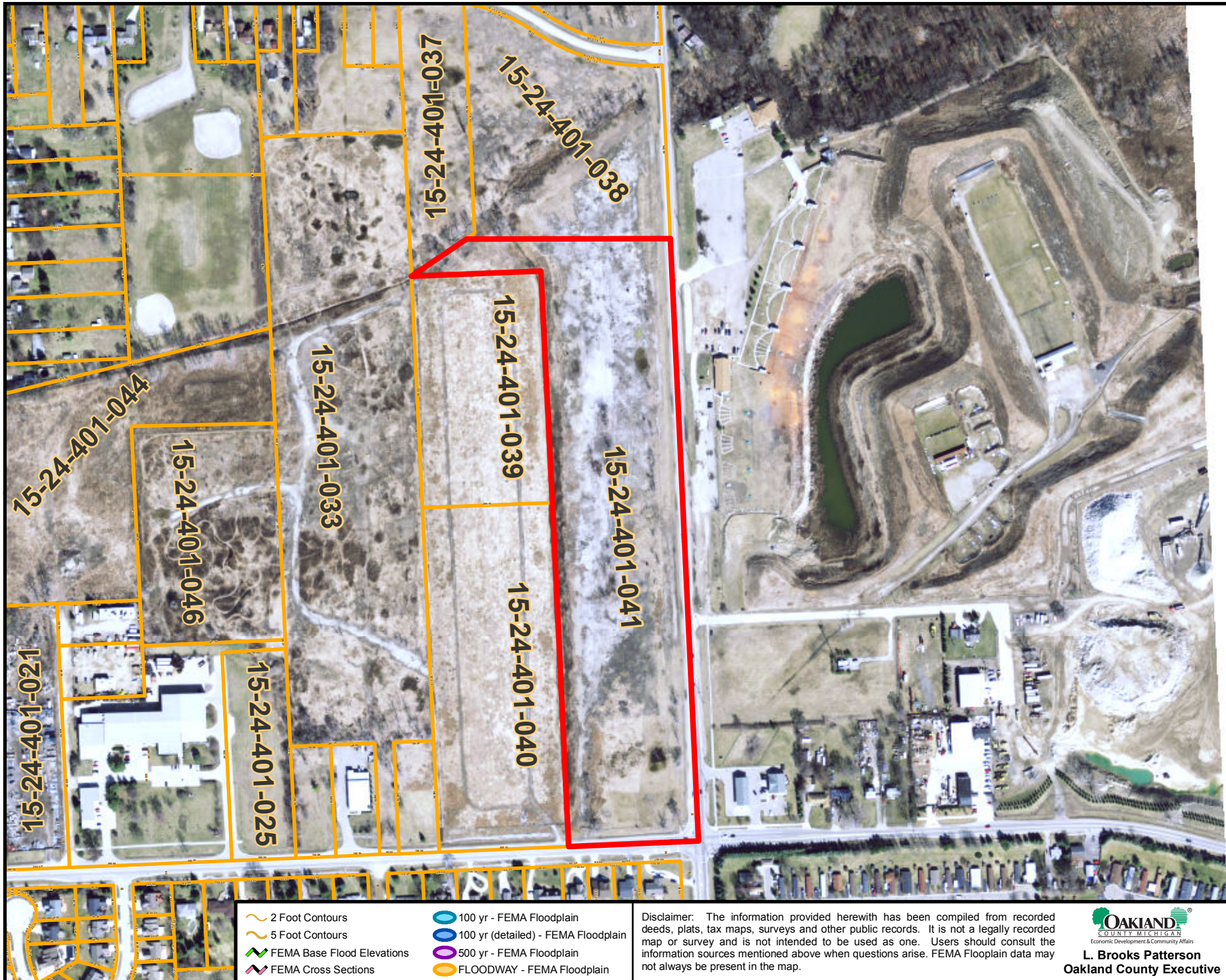
**H459**

**SHEET NO.**

**1**



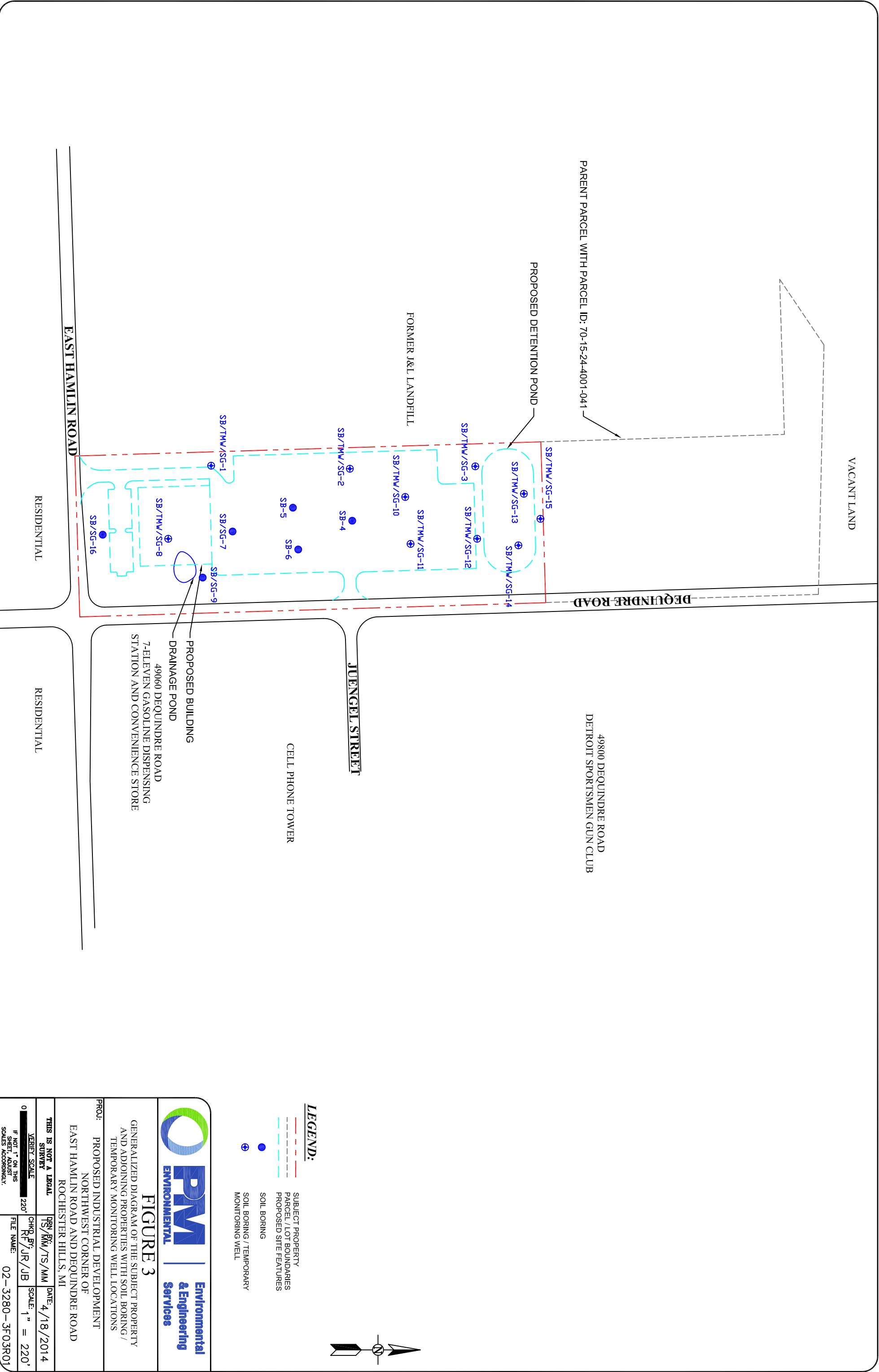
# Map w Adjoining



## **Figure 3**

### **Sampling Location Map**





## **Figure 4**

**Map(s) and Soil Boring Logs  
of Known Extent of Vertical  
& Horizontal Contamination**



TMW-15	
8/30/2013	SCREEN
9.45-14.45'	17
CHLOROB	6
1,2-DCB	1
1,4-DCB	35
DIETHYL ETHER	26
E	5
ISOP	13
NAPH	6
n-PROP	4
p-ISOPT	390
TETRAHYDROFURAN	2
T	17
1,2,3-TMB	4
1,2,4-TMB	4
1,3,5-TMB	74
X	25
OTHER VOCs	<MDL
2-M	11
NAPH	<MDL
OTHER PNAs	<MDL
PCBs	<MDL
As	3
Ba	700
Cr	18
Zn	30
OTHER METALS	<MDL

TMW-13	
8/30/2013	SCREEN
8.81-13.81'	7
CHLOROB	10
1,4-DCB	2
E	5
ISOP	6
2-M	23
NAPH	18
n-PROP	5
1,2,3-TMB	33
X	9
OTHER VOCs	<MDL
2-M	9
NAPH	4
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	500
Cr	12
Zn	30
OTHER METALS	<MDL

TMW-14	
8/30/2013	SCREEN
8.13-13.13'	22
CHLOROB	33
E	52
ISOP	27
n-PROP	22
TETRAHYDROFURAN	280
T	29
1,2,3-TMB	110
1,2,4-TMB	14
1,3,5-TMB	880
X	14
OTHER VOCs	<MDL
NAPH	6
OTHER PNAs	<MDL
PCBs	<MDL
As	4
Ba	1,500
Cd	0.2
Cr	8
Zn	10
OTHER METALS	<MDL

TMW-8	
8/28/2013	SCREEN
3.61-8.61'	9
CHLOROB	30
1,4-DCB	7
E	2
ISOP	7
n-PROP	800
p-ISOPT	3
T	2
1,2,3-TMB	3
1,2,4-TMB	18
1,3,5-TMB	1
X	65
OTHER VOCs	<MDL
NAPH	310
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	200
Zn	10
OTHER METALS	<MDL

TMW-10	
8/30/2013	SCREEN
7.83-12.83'	22
CHLOROB	26
1,2-DCB	2
1,4-DCB	10
DIETHYL ETHER	20
ISOP	6
NAPH	16
n-BUTYL B	1
sec-BUTYL B	7
T	1
1,2,3-TMB	29
1,2,4-TMB	81
1,3,5-TMB	2
X	100
OTHER VOCs	<MDL
BIS(2-E)	7
2-M	19
NAPH	19
PHENYTON	16
OTHER PNAs	<MDL
PCBs	<MDL
As	3,900
Ba	6
Cr	20
Zn	20
OTHER METALS	<MDL

TMW-2	
8/29/2013	SCREEN
7.42-12.42'	16
CHLOROB	21
1,4-DCB	8
DIETHYL ETHER	36
E	1
ISOP	8
2-M	8
NAPH	70
n-BUTYL B	1
n-PROP	10
p-ISOPT	1
sec-BUTYL B	1
TETRAHYDROFURAN	33
1,2,4-TMB	5
X	12
OTHER VOCs	<MDL
FACE	14
DIENZOFURAN	9
FL	3
E	3
2-M	13
NAPH	60
Ph	20
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	2,100
Cr	8
Zn	20
OTHER METALS	<MDL

TMW-1	
8/28/2013	SCREEN
4.73-9.73'	10
CHLOROB	6
1,2-DCB	18
DIETHYL ETHER	6
E	1
ISOP	3
n-PROP	2
1,2,4-TMB	5
X	7
OTHER VOCs	<MDL
BIS(2-E)	14
PHENYTON	14
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	300
Cr	7
Zn	7
OTHER METALS	<MDL

TMW-3	
8/29/2013	SCREEN
8.61-13.61'	29
1,4-DCB	11
DIETHYL ETHER	13
E	6
ISOP	10
2-M	44
NAPH	7
n-PROP	7
sec-BUTYL B	1
TETRAHYDROFURAN	7
T	1
1,2,3-TMB	29
1,2,4-TMB	81
1,3,5-TMB	2
X	100
OTHER VOCs	<MDL
BIS(2-E)	20
2-M	7
NAPH	19
PHENYTON	16
OTHER PNAs	<MDL
PCBs	<MDL
As	1
Ba	2,800
Cr	0.2
Zn	40
OTHER METALS	<MDL

TMW-11	
8/29/2013	SCREEN
8.75-11.75'	6
CHLOROB	12
1,4-DCB	5
E	2
ISOP	8
NAPH	19
n-BUTYL B	1
n-PROP	9
p-ISOPT	7
sec-BUTYL B	1
T	4
1,2,3-TMB	13
1,2,4-TMB	80
1,3,5-TMB	2
X	85
OTHER VOCs	<MDL
NAPH	11
2-M	20
OTHER PNAs	<MDL
PCBs	<MDL
As	1
Ba	800
Cr	8
Zn	20
OTHER METALS	<MDL

TMW-12	
8/29/2013	SCREEN
7.91-12.91'	6
CHLOROB	12
1,4-DCB	2
E	2
ISOP	8
NAPH	20
n-BUTYL B	1
n-PROP	9
p-ISOPT	6
sec-BUTYL B	3
T	14
1,2,3-TMB	2
1,2,4-TMB	2
1,3,5-TMB	85
X	85
OTHER VOCs	<MDL
NAPH	13
Ph	2
OTHER PNAs	<MDL
PCBs	<MDL
Ba	1,400
Zn	20
OTHER METALS	<MDL

TMW-13	
8/30/2013	SCREEN
8.13-13.13'	22
CHLOROB	33
E	52
ISOP	27
n-PROP	22
TETRAHYDROFURAN	280
T	29
1,2,3-TMB	110
1,2,4-TMB	14
1,3,5-TMB	880
X	14
OTHER VOCs	<MDL
NAPH	6
OTHER PNAs	<MDL
PCBs	<MDL
As	4
Ba	1,500
Cd	0.2
Cr	8
Zn	10
OTHER METALS	<MDL

TMW-14	
8/30/2013	SCREEN
8.13-13.13'	22
CHLOROB	33
E	52
ISOP	27
n-PROP	22
TETRAHYDROFURAN	280
T	29
1,2,3-TMB	110
1,2,4-TMB	14
1,3,5-TMB	880
X	14
OTHER VOCs	<MDL
NAPH	6
OTHER PNAs	<MDL
PCBs	<MDL
As	4
Ba	1,500
Cd	0.2
Cr	8
Zn	10
OTHER METALS	<MDL

TMW-8	
8/28/2013	SCREEN
3.61-8.61'	9
CHLOROB	30
1,4-DCB	7
E	2
ISOP	7
n-PROP	800
p-ISOPT	3
T	2
1,2,3-TMB	3
1,2,4-TMB	18
1,3,5-TMB	1
X	65
OTHER VOCs	<MDL
NAPH	310
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	200
Zn	10
OTHER METALS	<MDL

TMW-10	
8/30/2013	SCREEN
7.83-12.83'	22
CHLOROB	26
1,2-DCB	2
1,4-DCB	10
DIETHYL ETHER	20
ISOP	6
NAPH	16
n-BUTYL B	1
sec-BUTYL B	7
T	1
1,2,3-TMB	29
1,2,4-TMB	81
1,3,5-TMB	2
X	100
OTHER VOCs	<MDL
BIS(2-E)	7
2-M	19
NAPH	19
PHENYTON	16
OTHER PNAs	<MDL
PCBs	<MDL
As	3,900
Ba	6
Cr	20
Zn	20
OTHER METALS	<MDL

TMW-2	
8/29/2013	SCREEN
7.42-12.42'	16
CHLOROB	21
1,4-DCB	8
DIETHYL ETHER	36
E	1
ISOP	8
2-M	8
NAPH	70
n-BUTYL B	1
n-PROP	10
p-ISOPT	1
sec-BUTYL B	1
TETRAHYDROFURAN	33
1,2,4-TMB	5
X	12
OTHER VOCs	<MDL
FACE	14
DIENZOFURAN	9
FL	3
E	3
2-M	13
NAPH	60
Ph	20
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	2,100
Cr	8
Zn	20
OTHER METALS	<MDL

TMW-1	
8/28/2013	SCREEN
4.73-9.73'	10
CHLOROB	6
1,2-DCB	18
DIETHYL ETHER	6
E	1
ISOP	3
n-PROP	2
1,2,4-TMB	5
X	7
OTHER VOCs	<MDL
BIS(2-E)	14
PHENYTON	14
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	300
Cr	7
Zn	7
OTHER METALS	<MDL

TMW-3	
8/29/2013	SCREEN
8.61-13.61'	29
1,4-DCB	11
DIETHYL ETHER	13
E	6
ISOP	10
2-M	44
NAPH	7
n-PROP	7
sec-BUTYL B	1
TETRAHYDROFURAN	7
T	1
1,2,3-TMB	29
1,2,4-TMB	81
1,3,5-TMB	2
X	100
OTHER VOCs	<MDL
BIS(2-E)	20
2-M	7
NAPH	19
PHENYTON	16
OTHER PNAs	<MDL
PCBs	<MDL
As	1
Ba	2,800
Cr	0.2
Zn	40
OTHER METALS	<MDL

TMW-11	
8/29/2013	SCREEN
8.75-11.75'	6
CHLOROB	12
1,4-DCB	5
E	2
ISOP	8
NAPH	19
n-BUTYL B	1
n-PROP	9
p-ISOPT	7
sec-BUTYL B	1
T	4
1,2,3-TMB	13
1,2,4-TMB	80
1,3,5-TMB	2
X	85
OTHER VOCs	<MDL
NAPH	11
2-M	20
OTHER PNAs	<MDL
PCBs	<MDL
As	1
Ba	800
Cr	8
Zn	20
OTHER METALS	<MDL

TMW-12	
8/29/2013	SCREEN
7.91-12.91'	6
CHLOROB	12
1,4-DCB	2
E	2
ISOP	8
NAPH	20
n-BUTYL B	1
n-PROP	9
p-ISOPT	6
sec-BUTYL B	3
T	14
1,2,3-TMB	2
1,2,4-TMB	2
1,3,5-TMB	85
X	85
OTHER VOCs	<MDL
NAPH	13
Ph	2
OTHER PNAs	<MDL
PCBs	<MDL
Ba	1,400
Zn	20
OTHER METALS	<MDL

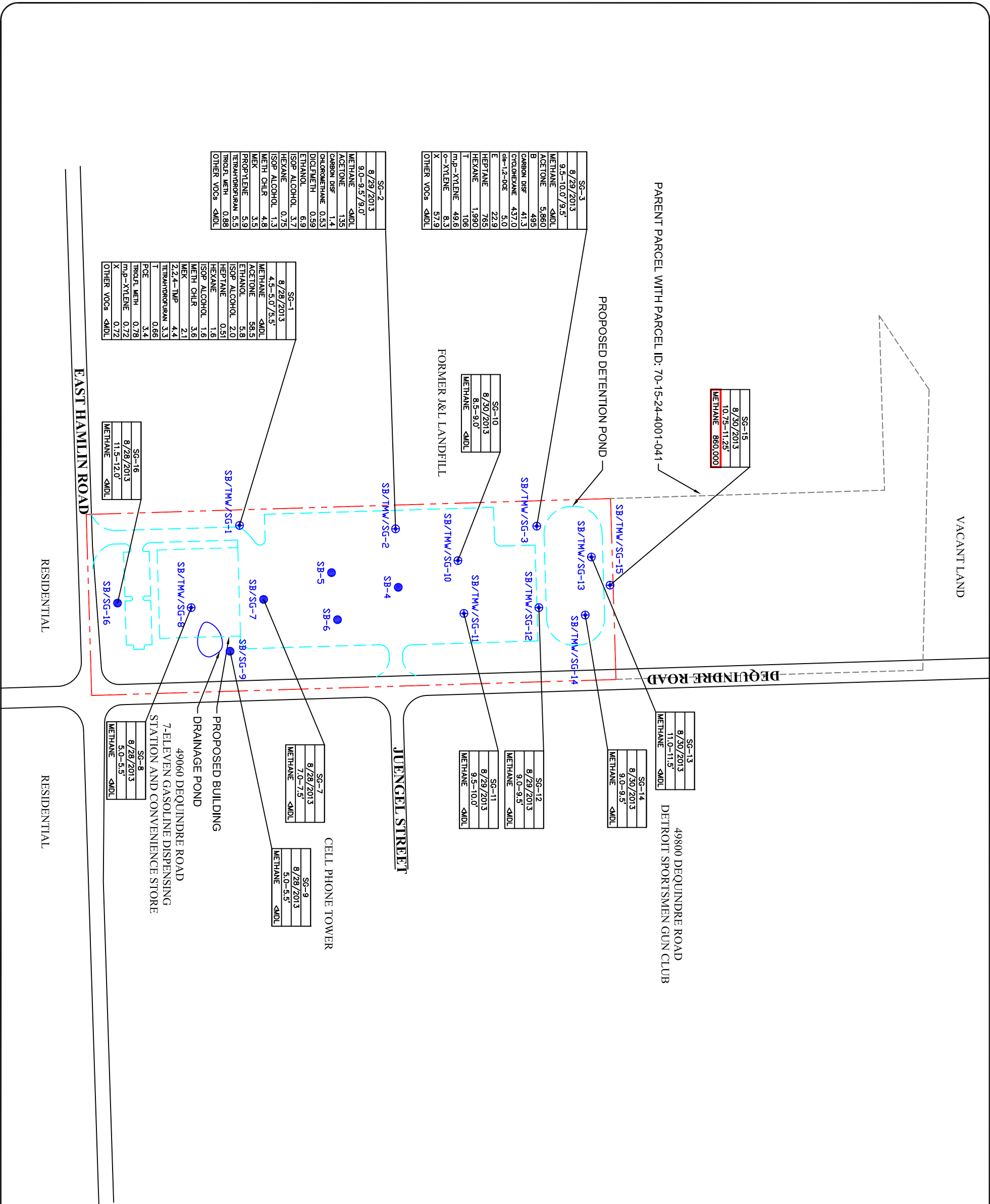
TMW-13	
8/30/2013	SCREEN
8.13-13.13'	22
CHLOROB	33
E	52
ISOP	27
n-PROP	22
TETRAHYDROFURAN	280
T	29
1,2,3-TMB	110
1,2,4-TMB	14
1,3,5-TMB	880
X	14
OTHER VOCs	<MDL
NAPH	6
OTHER PNAs	<MDL
PCBs	<MDL
As	4
Ba	1,500
Cd	0.2
Cr	8
Zn	10
OTHER METALS	<MDL


TMW-14	
8/30/2013	SCREEN
8.13-13.13'	22
CHLOROB	33
E	52
ISOP	27
n-PROP	22
TETRAHYDROFURAN	280
T	29
1,2,3-TMB	110
1,2,4-TMB	14
1,3,5-TMB	880
X	14
OTHER VOCs	<MDL
NAPH	6
OTHER PNAs	<MDL
PCBs	<MDL
As	4
Ba	1,500
Cd	0.2
Cr	8
Zn	10
OTHER METALS	<MDL

TMW-8	
8/28/2013	SCREEN
3.61-8.61'	9
CHLOROB	30
1,4-DCB	7
E	2
ISOP	7
n-PROP	800
p-ISOPT	3
T	2
1,2,3-TMB	3
1,2,4-TMB	18
1,3,5-TMB	1
X	65
OTHER VOCs	<MDL
NAPH	310
OTHER PNAs	<MDL
PCBs	<MDL
As	2
Ba	200
Zn	10
OTHER METALS	<MDL

TMW-10	
8/30/2013	SCREEN
7.83-12.83'	22
CHLOROB	26
1,2-DCB	2
1,4-DCB	10
DIETHYL ETHER	20
ISOP	6
NAPH	16
n-BUTYL B	1
sec-BUTYL B	7
T	1
1,2,3-TMB	29
1,2,4-TMB	81
1,3,5-TMB	2
X	100
OTHER VOCs	<MDL
BIS(2-E)	7
2-M	19
NAPH	19
PHENYTON	16
OTHER PNAs	<MDL
PCBs	<MDL
As	3,900
Ba	6
Cr	20
Zn	20
OTHER METALS	<MDL

||
||
||





PM

Environmental

Environmental

& Engineering

Services

FIGURE 4.2

SOIL BORING/TEMPORARY MONITORING  
WELL/SOIL GAS SAMPLE LOCATION MAP WITH  
SOIL GAS ANALYTICAL RESULTS

PROJ: PROPOSED INDUSTRIAL DEVELOPMENT  
NORTHWEST CORNER OF  
EAST HAMLIN ROAD AND DEQUINDRE ROAD  
ROCHESTER HILLS, MI

THIS IS NOT A LEGAL  
SURVEY

VERIFY SCALE

PER. BY: /MM/TJ/MM

DATE: 4/18/2014

CHKD BY: /JR/JB

SCALE: 1" = 220'

FILE NAME: 02-3280-3F05R00

0

IF NOT 1" ON THIS  
MAP, USE  
SCALES ACCORDINGLY.





## Boring Log .

**Project No.:** 02-6176-1

**Boring No.:** SB-1

**Project Name:** Commercial Property

**Date Drilled:** 05/07/2013

**Facility ID#:**

**Drill Rig:** 5400

**Logged By:** BTL

**Sampling Method:** Grab

SUBSURFACE PROFILE			SAMPLE			No Well Installed
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	
0		Ground Surface				
		<b>GRAVEL</b>		-	0.0	
		<b>CL- (Medium Stiff) CLAY (moist)</b> Brown and Black, with trace fine sand	SS-1	-	0.0	
2		<b>CL- (Stiff) CLAY (moist)</b> Brown	1.0' - 2.0'	-	0.0	
4				-	0.0	
6				-	0.0	
8				-	0.0	
10				-	0.0	
12		<b>CL- (Stiff) CLAY (moist)</b> Gray		-	0.0	
14				-	0.0	
16				-	0.0	
				-	0.0	
				-	0.0	
				-	0.0	
				-	0.0	
				-	0.0	
				-	0.0	

**Completion Notes:** EOB @ 16' bgs. Hole filled with Soil Cuttings and Bentonite

- The indicated stratification lines are approximate in situ.  
The transitions between materials may be gradual.
- Boring backfilled with natural soils unless otherwise noted.



# Well Log .

**Project No.:** 02-6176-1

**Well No.:** SB/TMW-2

**Project Name:** Commercial Property

**Date Drilled:** 05/07/2013

**Facility ID#:**

**Drill Rig:** 5400

**Logged By:** BTL

**Sampling Method:** Grab

SUBSURFACE PROFILE			SAMPLE			Groundwater Well Completion Details
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	
0		Ground Surface				<p>1" PVC Casing</p> <p>1" 10-Slot PVC Screen</p> <p>Ground Surface</p> <p>2.11'</p> <p>Approximate Water Level (3.19')</p> <p>7.11'</p>
		<b>GRAVEL</b>		-	0.0	
2		<b>CL- (Medium) CLAY (moist to wet)</b> Black, with trace fine sand		-	0.0	
				-	0.0	
4		<b>CL- (Stiff) CLAY (moist)</b> Brown		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	

**Completion Notes:** EOB @ 12' bgs. Hole filled with Soil Cuttings and Bentonite

- The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
- Boring backfilled with natural soils unless otherwise noted



# Well Log .

**Project No.:** 02-6176-1

**Well No.:** SB/TMW-3

**Project Name:** Commercial Property

**Date Drilled:** 05/07/2013

**Facility ID#:**

**Drill Rig:** 5400

**Logged By:** BTL

**Sampling Method:** Grab

SUBSURFACE PROFILE			SAMPLE			Groundwater Well Completion Details
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	
0		Ground Surface				<p>1" PVC Casing 1" 10-Slot PVC Screen</p> <p>0.00' Ground Surface</p> <p>Approximate Water Level (2.49')</p> <p>4.55'</p>
		<b>GRASS and TOPSOIL</b>		-	0.0	
		<b>SW- (Loose) SAND (wet to saturated)</b> Gray, fine		-	0.0	
2				-	0.0	
				-	0.0	
4		<b>CL- (Medium Stiff) CLAY (moist)</b> Brown		-	0.0	
				-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12						

**Completion Notes:** EOB @ 12' bgs. Hole filled with Soil Cuttings and Bentonite

- The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
- Boring backfilled with natural soils unless otherwise noted



## Well Log .

**Project No.:** 02-6176-1

**Well No.:** SB/TMW-4

**Project Name:** Commercial Property

**Date Drilled:** 05/07/2013

**Facility ID#:**

**Drill Rig:** 5400

**Logged By:** BTL

**Sampling Method:** Grab

SUBSURFACE PROFILE			SAMPLE			Groundwater Well Completion Details
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	
0		Ground Surface				<p>1" PVC Casing 1" 10-Slot PVC Screen</p> <p>0.00' Ground Surface</p> <p>Approximate Water Level (2.91')</p> <p>5.00'</p>
	ASPHALT			-	0.0	
	GRAVEL			-	0.0	
	CL- (Medium Stiff) CLAY (moist) Brown and Gray			-	0.0	
2				-	0.0	
	SW- (Loose) SAND (wet to saturated) Brown, fine			-	0.0	
4				-	0.0	
	CL- (Stiff) CLAY (moist) Brown and Gray			-	0.0	
6				-	0.0	
				-	0.0	
8				-	0.0	
				-	0.0	
10				-	0.0	
				-	0.0	
12				-	0.0	

**Completion Notes:** EOB @ 12' bgs. Hole filled with Soil Cuttings and Bentonite

- The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
- Boring backfilled with natural soils unless otherwise noted



## Well Log .

**Project No.:** 02-6176-1

**Well No.:** SB/TMW-5

**Project Name:** Commercial Property

**Date Drilled:** 05/07/2013

**Facility ID#:**

**Drill Rig:** 5400

**Logged By:** BTL

**Sampling Method:** Grab

SUBSURFACE PROFILE			SAMPLE			Groundwater Well Completion Details
Depth (ft.)	Boring Profile	Description and Comments	Sample # Depth	Blow Counts	PID (ppm)	
0		Ground Surface				
	ASPHALT			-	0.0	
	CL- (Medium) CLAY (moist) Brown			-	0.0	
	SP- (Loose) SAND (saturated) Brown, fine			-	0.0	
2				-	0.0	
	CL- (Stiff) CLAY (moist) Brown and Gray			-	0.0	
4				-	0.0	
				-	0.0	
6						

**Completion Notes:** EOB @ 5' bgs. Hole filled with Soil Cuttings and Bentonite

1. The indicated stratification lines are approximate in situ. The transitions between materials may be gradual.
2. Boring backfilled with natural soils unless otherwise noted

## **Figure 5**

### **Color Site Photographs**



## Photographs From Site Reconnaissance

PM Project No. 02-3280-2

Location: Northwest corner of East Hamlin Road and Dequindre Road,  
Rochester Hills, Michigan

### Photograph 1



View of the subject property facing northeast

### Photograph 2



View of the subject property facing northwest





**Photographs From Site Reconnaissance**

**PM Project No. 02-3280-2**

**Location: Northwest corner of East Hamlin Road and Dequindre Road,  
Rochester Hills, Michigan**

**Photograph 3**



View of the northern portion of the subject  
property facing southwest

**Photograph 4**

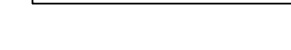


View of the drainage pond in the southeastern  
portion of the property



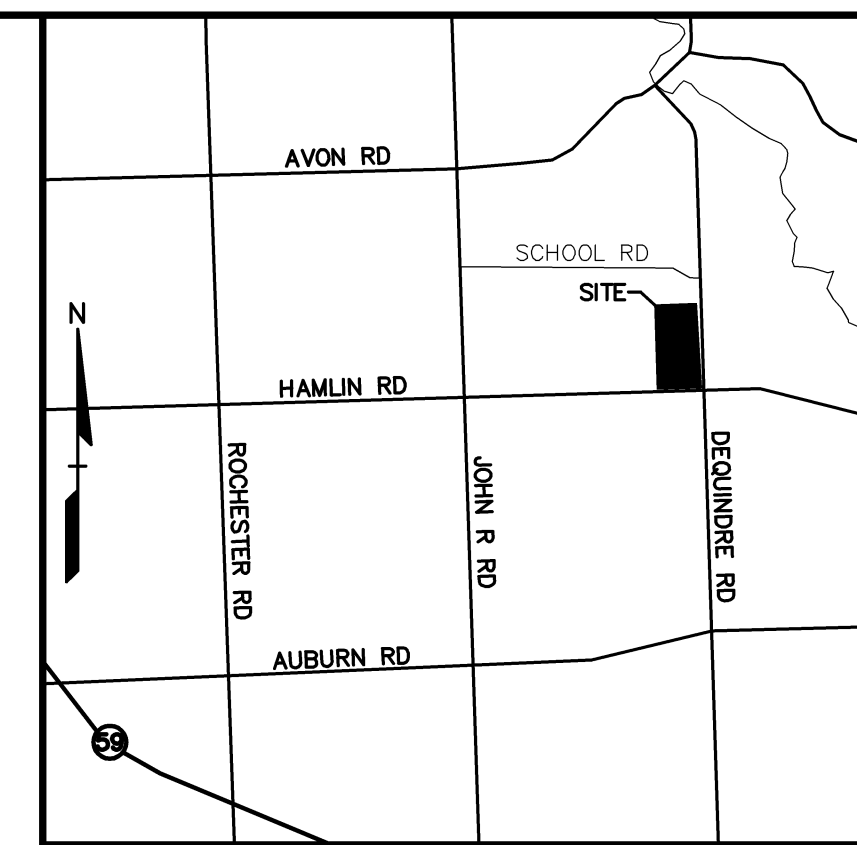
## **Figure 6**

### **Redevelopment Project Renderings/Elevations**



## **Figure 7**

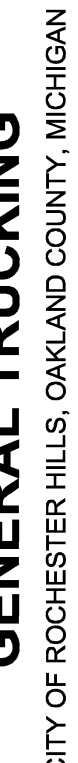
**Engineering Site Plan(s) or Site Plan(s)**



## REVISIONS

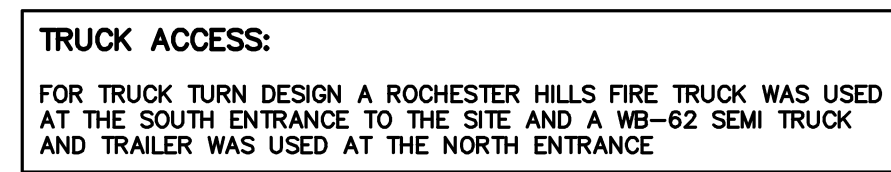
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DES.	SAS	DN.	DRW	SUR.	PEA	P.M.	SAS
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## P-1.1



XREF: S:\PROJECTS\2014\2014036\DWG\12144 TOPOBASE.DWG  
XREF: S:\PROJECTS\2014\2014036\DWG\CONSTRUCTION\CBASE-14036.DWG  
YREF: S:\PROJECTS\2014\2014036\DWG\CONSTRUCTION\TRK-14036.DWG

**SITE DATA TABLE:**

LAND AREA:  
GROSS = 18.37 ACRES  
GROSS (PARCEL SPLIT) = 10.93 ACRES  
NET (TO PROPOSED R.O.W.) = 8.83 ACRES

PROPOSED BUILDING AREA (GROSS):  
TOTAL BUILDING AREA = 40,000 S.F.  
WAREHOUSE AREA = 26,000 S.F.  
SHOP AREA = 6,000 S.F.  
OFFICE AREA = 8,000 S.F.

**ZONING INFO:**  
I - INDUSTRIAL

REQUIRED:	PROVIDED:
50'	157.00'
50'	88.28'
50'	83.87'
50'	817.48'

Notes:

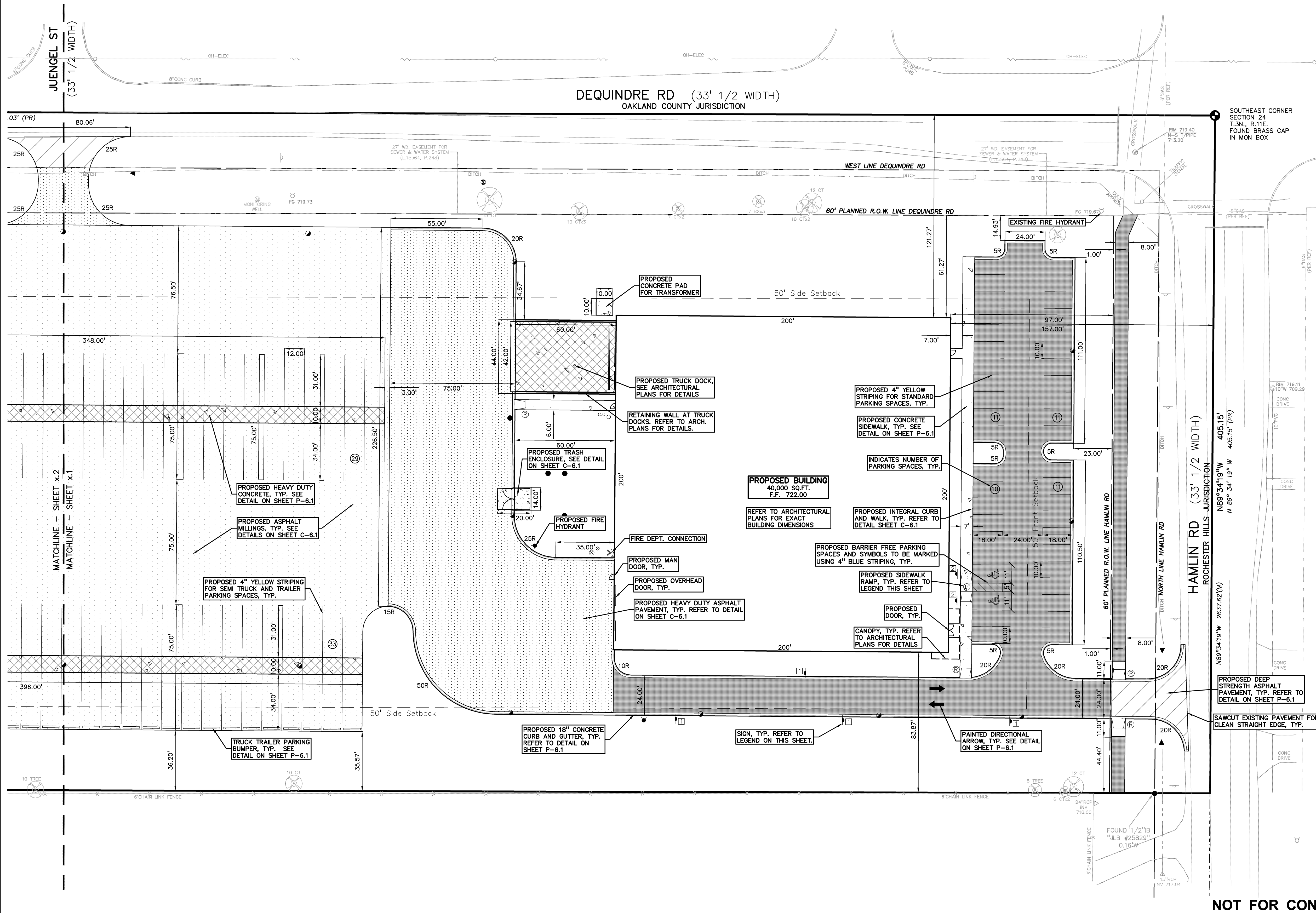
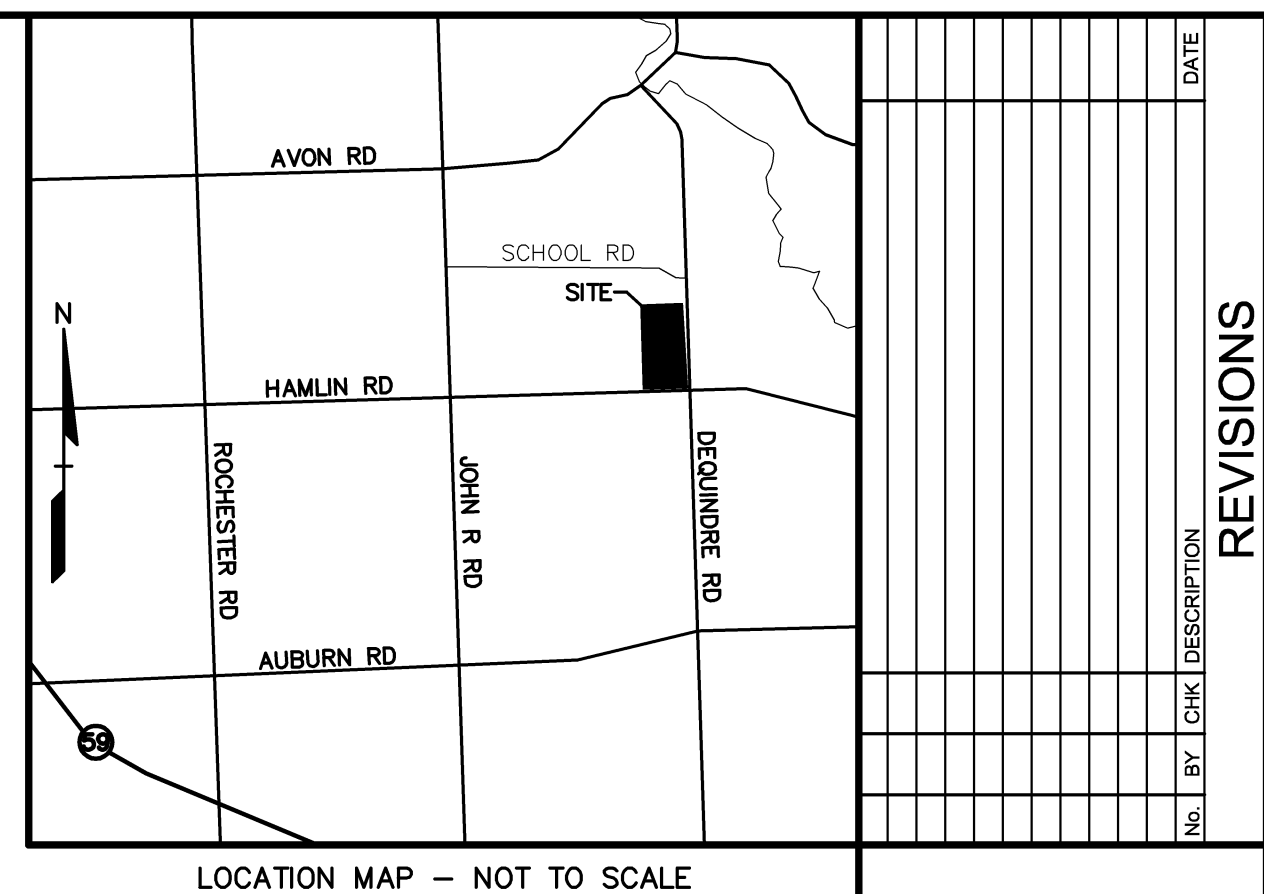
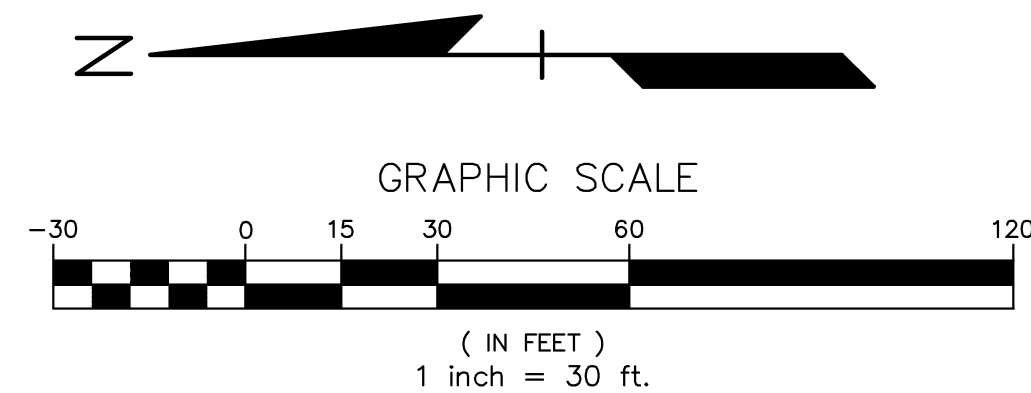
1. Maximum building height allowed is 3 stories/42 feet.
2. All roof and ground mounted mechanical equipment shall be screened from adjacent roads and properties.
3. Fire lanes shall be designated by the fire code official, and shall be conspicuously posted on both sides of the fire lane, with fire lane signs spaced not more than 100 feet apart, and in conformance with the MMUTCD.
4. All pedestrian walkways and required egress doors shall comply with Michigan Barrier Free Design Criteria.

$$\begin{aligned} 32,000 / 1,700 &= 18.8 \\ 8,000 / 350 &= 22.8 \\ 18.8 + 22.8 &= 41.6 \approx 42 \text{ SPACES REQUIRED} \end{aligned}$$

PARKING PROVIDED:  
PARKING SPACES PROVIDED = 43 SPACES  
(INCLUDING 2 HC SPACES)

**FIRE DEPARTMENT NOTES:**

- 1) CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC CHAPTER 14.
- 2) OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN CITY OF ROCHESTER HILLS BURNING PERMIT GUIDELINES. CONTACT ROCHESTER HILLS FIRE DEPARTMENT FOR PERMIT INFORMATION.  
FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 307.6.2 & 307.6.2.3.
- 3) FIRE LANCES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS SPACED NOT MORE THAN 100 FEET APART, NO STOPPING, STANDING, PARKING, FIRE LANE", AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.  
FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 506.



### LEGEND

● IRON FOUND  
 ☒ IRON SET  
 ● NAIL FOUND  
 ☒ NAIL & CAP SET  
 ☒ BRASS PLUG SET  
 ● MONUMENT FOUND  
 ☒ MONUMENT SET  
 ● SEC. CORNER FOUND  
 R RECORDED  
 M MEASURED  
 C CALCULATED



EXISTING	PROPOSED
-OH-ELEC-W-W-○<	ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
-UG-CATV-ITV>	UNDERGROUND CABLE TV, CATV PEDESTAL
○-UG-PHONE-T>	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC-ELEC-○>	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
-G-G-○>	GAS MAIN, VALVE & GAS LINE MARKER

	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE		SANITARY SEWER, CLEANOUT & MANHOLE
	STORM SEWER, CLEANOUT & MANHOLE		COMBINED SEWER & MANHOLE
	CATCH BASIN, INLET, YARD DRAIN		DITCH
	DITCH		DITCH

POST INDICATOR VALVE  
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF  
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE  
UNIDENTIFIED STRUCTURE  
SPOT ELEVATION  
CONTOUR LINE

Diagram illustrating the layout of a road intersection. The diagram shows a horizontal road with a vertical road intersecting it. The horizontal road has a fence, guard rail, street light, and sign. The vertical road has a fence, guard rail, street light, and sign. The intersection is marked with a cross. The diagram is labeled with 'A' and 'B' at the bottom corners.

	CONCRETE	STD DUTY	HEAVY DUTY	R
	ASPHALT	ASPH MILLINGS	STD DUTY	HEAVY DUTY

 GRAVEL SHOULDER
  WETLAND

<u>REFERENCE</u>	<u>DRAWINGS</u>
SANITARY SEWER	HAVE NOT RECEIVED AS OF 3-13-14
WATER MAIN	"WATER MAP - DWSM MAP #21-7" DETROIT WATER & SEWERAGE DATED 10-31-96
STORM SEWER	"LADD DRAIN IMPROVEMENTS, DWG 1 & 2 OF 7" PEA PROJ. #910 8-29-91

ELECTRIC	HAVE NOT RECEIVED AS OF 3-13-14
TELEPHONE	HAVE NOT RECEIVED AS OF 3-13-14
GAS	"CONSUMERS ENERGY QUARTER SECTION MAP #03-61-24-4" DATED 01-15-08
CATV	HAVE NOT RECEIVED AS OF 3-13-14
OTHER	"DEQUIRE & HAMLIN LIGHTING SKETCH - ROAD COMMISSION ON COUNTY TRAFFIC SAFETY DEPT" DATED 10-27-98
OTHER	"ALTA/ACSM LAND TITLE SURVEY - PARCEL 15-24-041-041" JO

**CAUTION!!**  
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CONSTRUCTION PRACTICES, CONSTRUCTION  
CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE  
AND COMPLETE RESPONSIBILITY FOR JOB SITE  
CONDITIONS DURING THE COURSE OF CONSTRUCTION  
OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS  
AND PROPERTY. THAT REQUIREMENT SHALL BE  
MAINTAINED TO APPLY CONTINUOUSLY AND NOT BE LIMITED  
TO NORMAL WORKING HOURS, AND CONSTRUCTION  
CONTRACTOR FURTHER AGREES TO DEFEND,  
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HARMLESS FROM ANY AND ALL LIABILITY, REAL OR  
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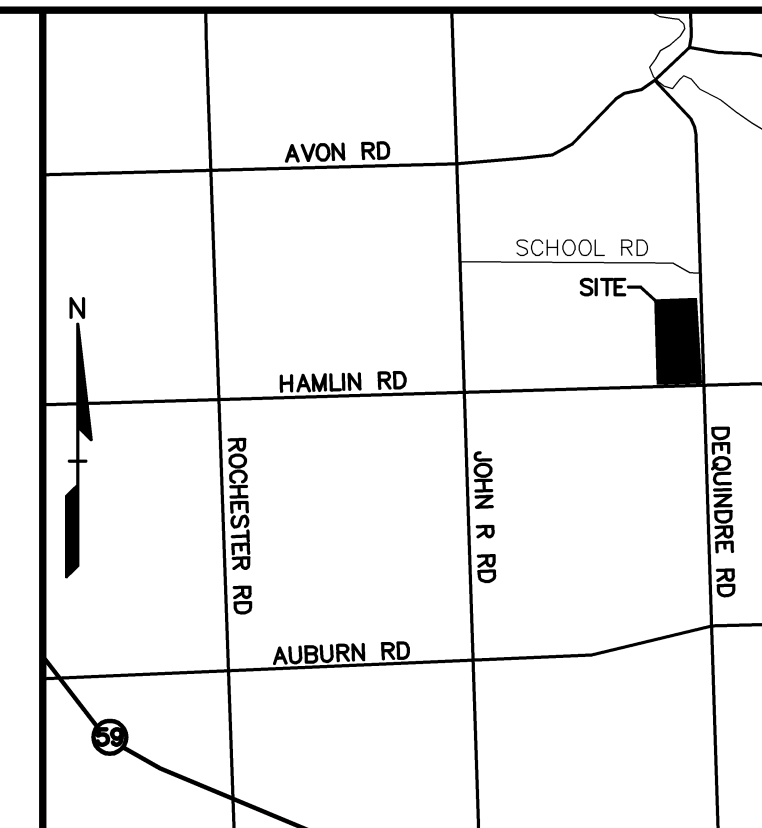
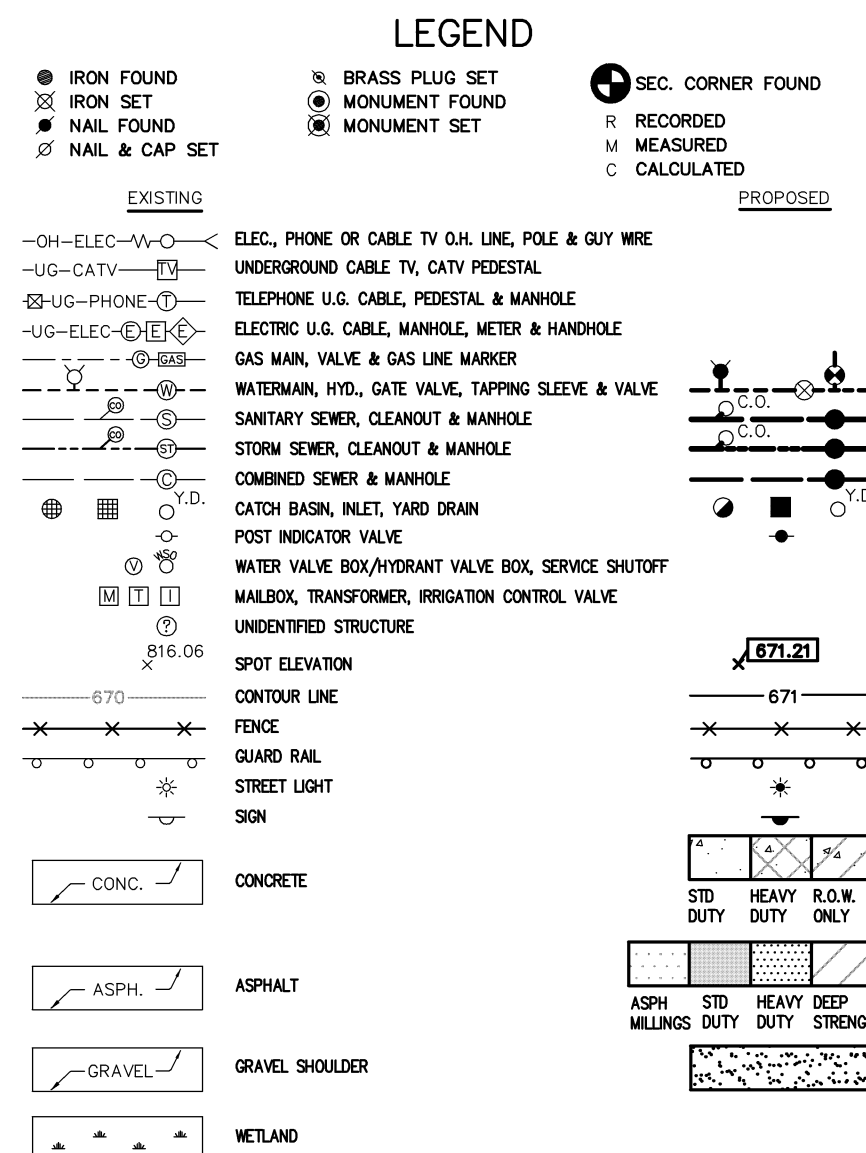
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**PRELIMINARY SITE PLAN - NORTH  
 GENERAL TRUCKING**

CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

DES.	SAS	DN	DRW	SUR.	PEA	P.M.	SAS
SAS PROJECTS\2014\20140408_GENERAL TRUCKING - 37610 Hills Tech Drive - 3.1 DISE - 140326.dwg							

ORIGINAL ISSUE DATE:  
MARCH 20, 2014

PEA JOB NO. 2014-036

SCALE: 1"=30'

DRAWING NUMBER:  
D 200

P-3.2

XREF: S:\PROJECTS\2014\2014036\DWG\12144\_TPOCBASE.DWG  
XREF: S:\PROJECTS\2014\2014036\DWG\CONSTRUCTION\CBASE-14036.DWG  
XREF: S:\PROJECTS\2014\2014036\DWG\CONSTRUCTION\TLK-14036.DWG

**NOT FOR CONSTRUCTION**

# TABLES

# **Table 1**

## **Summary of Costs for Eligible Activities**



Table 1: General Trucking Estimated Costs of Eligible Activities		
Item/Activity	Total Estimated Eligible Activity Project Costs	Comments
<b>Baseline Environmental Assessments</b>		
Phase I ESA	\$ 2,300	
Phase II ESA/BEA/DDCC	\$ 24,000	
<b>Baseline Environmental Assessments Sub-Total</b>	<b>\$ 26,300</b>	
<b>Due Care Activities</b>		
Methane Venting Systems	\$ 15,000	
Installation of engineered barrier in detention pond	\$ 10,000	
Building Vapor Barrier Design, Installation and Post-Install Operation and Maintenance and Verification Testing	\$ 119,400	
Storm Corridor Migration Barrier and Water and Sanitary Slurry Walls	\$ 20,000	
<b>Due Care Activities Sub-Total</b>	<b>\$ 164,400</b>	
<b>Additional Response Activities</b>		
Transport and disposal of contaminated soils at building footings and utility runs (approximately \$7,655 yards)	\$ 200,280	
Geo-Grid	\$ 56,250	
Lift Stations	\$ 20,000	
Helical Piers and Grade Beam System	\$ 207,500	
<b>Due Care Activities Sub-Total</b>	<b>\$ 484,030</b>	
<b>Preparation of Brownfield Plan and Act 381 Workplan</b>		
Brownfield Plan and Act 381 Work Plan*	\$ 20,000	
<b>Brownfield Plan and Act 381 Work Plan Sub-Total</b>	<b>\$ 20,000</b>	
<b>Project Sub Totals</b>	<b>\$ 694,730</b>	
15% Contingency*	\$ 64,843	Excludes cost of Brownfield Plan and Baseline Environmental Assessments
TIF Capture for Local Site Remediation Revolving Fund	\$ 216,143	3% each year of annual tax capture, plus five years following reimbursement of the applicant
RHBRA Administrative Fees	\$ 52,169	5% of taxes captured for developer reimbursement
<b>Total Cost of Eligible Activities to be Funded through TIF</b>	<b>\$ 1,027,885</b>	

## **Table 2**

**Tax Capture/  
Reimbursement Schedule(s)**

Table 2: Tax Increment Financing Estimates

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2025	2026	2027	2028	2029
Current Taxable Value 70-15-24-401-041		\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110
Estimated New Taxable Value (estimated increase of 1%/year)			\$ 800,000	\$ 800,000	\$ 808,000	\$ 816,080	\$ 824,241	\$ 832,483	\$ 840,808	\$ 849,216	\$ 857,708	\$ 866,285	\$ 874,948	\$ 883,698	\$ 892,535	\$ 901,460	\$ 910,475	\$ 919,579
Incremental Difference (New Taxes-Existing)			\$ 786,890	\$ 786,890	\$ 794,890	\$ 802,970	\$ 811,131	\$ 819,373	\$ 827,698	\$ 836,106	\$ 844,598	\$ 853,175	\$ 861,838	\$ 870,588	\$ 879,425	\$ 888,350	\$ 897,365	\$ 906,469
<b>Local Taxes - Millage</b>																		
County Operating	4.19		\$ 3,297	\$ 3,297	\$ 3,331	\$ 3,364	\$ 3,399	\$ 3,433	\$ 3,468	\$ 3,503	\$ 3,539	\$ 3,575	\$ 3,611	\$ 3,648	\$ 3,685	\$ 3,722	\$ 3,760	\$ 3,798
OAK INT SD	3.3690		\$ 2,651	\$ 2,651	\$ 2,678	\$ 2,705	\$ 2,733	\$ 2,760	\$ 2,789	\$ 2,817	\$ 2,845	\$ 2,874	\$ 2,904	\$ 2,933	\$ 2,963	\$ 2,993	\$ 3,023	\$ 3,054
OCC	1.5844		\$ 1,247	\$ 1,247	\$ 1,259	\$ 1,272	\$ 1,285	\$ 1,298	\$ 1,311	\$ 1,325	\$ 1,338	\$ 1,352	\$ 1,365	\$ 1,379	\$ 1,393	\$ 1,408	\$ 1,422	\$ 1,436
County PK & REC	0.2415		\$ 190	\$ 190	\$ 192	\$ 194	\$ 196	\$ 198	\$ 200	\$ 201.92	\$ 203.97	\$ 206.04	\$ 208.13	\$ 210.25	\$ 212.38	\$ 214.54	\$ 216.71	\$ 218.91
HCMA	0.2146		\$ 169	\$ 169	\$ 171	\$ 172	\$ 174	\$ 176	\$ 178	\$ 179	\$ 181	\$ 183	\$ 185	\$ 187	\$ 189	\$ 191	\$ 193	\$ 195
City Millages	9.3412		\$ 7,350	\$ 7,350	\$ 7,425	\$ 7,501	\$ 7,577	\$ 7,654	\$ 7,732	\$ 7,810	\$ 7,890	\$ 7,970	\$ 8,051	\$ 8,132	\$ 8,215	\$ 8,298	\$ 8,382	\$ 8,468
Total Local Taxes (capturable)	18.9407		\$ 14,904	\$ 14,904	\$ 15,056	\$ 15,209	\$ 15,363	\$ 15,520	\$ 15,677	\$ 15,836	\$ 15,997	\$ 16,160	\$ 16,324	\$ 16,490	\$ 16,657	\$ 16,826	\$ 16,997	\$ 17,169
<b>School Taxes</b>																		
School Operating	18.0000		\$ 14,164	\$ 14,164	\$ 14,308	\$ 14,453	\$ 14,600	\$ 14,749	\$ 14,899	\$ 15,050	\$ 15,203	\$ 15,357	\$ 15,513	\$ 15,671	\$ 15,830	\$ 15,990	\$ 16,153	\$ 16,316
SET	3.0000		\$ 2,361	\$ 2,361	\$ 2,385	\$ 2,409	\$ 2,433	\$ 2,458	\$ 2,483	\$ 2,508	\$ 2,534	\$ 2,560	\$ 2,586	\$ 2,612	\$ 2,638	\$ 2,665	\$ 2,692	\$ 2,719
Total School Taxes	21.0000		\$ 16,525	\$ 16,525	\$ 16,693	\$ 16,862	\$ 17,034	\$ 17,207	\$ 17,382	\$ 17,558	\$ 17,737	\$ 17,917	\$ 18,099	\$ 18,282	\$ 18,468	\$ 18,655	\$ 18,845	\$ 19,036
Total Capturable Millages	39.9407		\$ 31,429	\$ 31,429	\$ 31,748	\$ 32,071	\$ 32,397	\$ 32,726	\$ 33,059	\$ 33,395	\$ 33,734	\$ 34,076	\$ 34,422	\$ 34,772	\$ 35,125	\$ 35,481	\$ 35,841	\$ 36,205
<b>Non-Capturable Millages</b>																		
School Debt Service	6.7000		\$ 5,272	\$ 5,272	\$ 5,326	\$ 5,380	\$ 5,435	\$ 5,490	\$ 5,546	\$ 5,602	\$ 5,659	\$ 5,716	\$ 5,774	\$ 5,833	\$ 5,892	\$ 5,952	\$ 6,012	\$ 6,073
City Bond Debt	0.3648		\$ 287	\$ 287	\$ 290	\$ 293	\$ 296	\$ 299	\$ 302	\$ 305	\$ 308	\$ 311	\$ 314	\$ 318	\$ 321	\$ 324	\$ 327	\$ 331
Zoo Authority	0.1000		\$ 79	\$ 79	\$ 79	\$ 80	\$ 81	\$ 82	\$ 83	\$ 84	\$ 84	\$ 85	\$ 86	\$ 87	\$ 88	\$ 89	\$ 90	\$ 91
Art Institute	0.2000		\$ 157	\$ 157	\$ 159	\$ 161	\$ 162	\$ 164	\$ 166	\$ 167	\$ 169	\$ 171	\$ 172	\$ 174	\$ 176	\$ 178	\$ 179	\$ 181
Total Non-Capturable Millages	7.3648		\$ 5,795	\$ 5,795	\$ 5,854	\$ 5,914	\$ 5,974	\$ 6,035	\$ 6,096	\$ 6,158	\$ 6,220	\$ 6,283	\$ 6,347	\$ 6,412	\$ 6,477	\$ 6,543	\$ 6,609	\$ 6,676
Total Capturable and Non-Capturable Millages	47.3055		\$ 37,224	\$ 37,224	\$ 37,603	\$ 37,985	\$ 38,371	\$ 38,761	\$ 39,155	\$ 39,552	\$ 39,954	\$ 40,360	\$ 40,770	\$ 41,184	\$ 41,602	\$ 42,024	\$ 42,450	\$ 42,881
Annual Incremental Local Taxes			\$ 14,904	\$ 14,904	\$ 15,056	\$ 15,209	\$ 15,363	\$ 15,520	\$ 15,677	\$ 15,836	\$ 15,997	\$ 16,160	\$ 16,324	\$ 16,490	\$ 16,657	\$ 16,826	\$ 16,997	\$ 17,169
Annual Incremental School Taxes			\$ 16,525	\$ 16,525	\$ 16,693	\$ 16,862	\$ 17,034	\$ 17,207	\$ 17,382	\$ 17,558	\$ 17,737	\$ 17,917	\$ 18,099	\$ 18,282	\$ 18,468	\$ 18,655	\$ 18,845	\$ 19,036
RHBRA Administrative Fee (5% of captured taxes)			\$ 1,571	\$ 1,571	\$ 1,587	\$ 1,604	\$ 1,620	\$ 1,636	\$ 1,653	\$ 1,670	\$ 1,687	\$ 1,704	\$ 1,721	\$ 1,739	\$ 1,756	\$ 1,774	\$ 1,792	\$ 1,810
Annual Incremental Local Taxes (after Admin Fee)			\$ 13,333	\$ 13,333	\$ 13,468	\$ 13,605	\$ 13,744	\$ 13,883	\$ 14,024	\$ 14,167	\$ 14,311	\$ 14,456	\$ 14,603	\$ 14,751	\$ 14,901	\$ 15,052	\$ 15,205	\$ 15,359
Annual Combined Taxes for Capture After Admin. Fees			\$ 29,857	\$ 29,857	\$ 30,161	\$ 30,468	\$ 30,777	\$ 31,090	\$ 31,406	\$ 31,725	\$ 32,047	\$ 32,373	\$ 32,701	\$ 33,033	\$ 33,369	\$ 33,707	\$ 34,049	\$ 34,395
Total Cumulative Incremental Taxes After Admin. Fees (School and Local)			\$ 29,857	\$ 59,715	\$ 89,876	\$ 120,344	\$ 151,121	\$ 182,211	\$ 213,617	\$ 245,342	\$ 277,389	\$ 309,762	\$ 342,463	\$ 375,496	\$ 408,865	\$ 442,572	\$ 476,621	\$ 511,016
<b>Local Site Remediation Revolving Fund Capture*</b>																		
MDEQ School Taxes			\$ 496	\$ 496	\$ 501	\$ 506	\$ 511	\$ 516	\$ 521	\$ 527	\$ 532	\$ 538	\$ 543	\$ 548	\$ 554	\$ 560	\$ 565	\$ 571
Local Taxes			\$ 400	\$ 400	\$ 404	\$ 408	\$ 412	\$ 416	\$ 421	\$ 425	\$ 429	\$ 434	\$ 438	\$ 443	\$ 447	\$ 452	\$ 456	\$ 461
Total			\$ 896	\$ 896	\$ 905	\$ 914	\$ 923	\$ 933	\$ 942	\$ 952	\$ 961	\$ 971	\$ 981	\$ 991	\$ 1,001	\$ 1,011	\$ 1,021	\$ 1,032
<b>MDEQ Environmental Reimbursed Expenses</b>																		
MDEQ School Taxes			\$ 16,029	\$ 16,029	\$ 16,192	\$ 16,356	\$ 16,523	\$ 16,691	\$ 16,860	\$ 17,031	\$ 17,204	\$ 17,379	\$ 17,556	\$ 17,734	\$ 17,914	\$ 18,096	\$ 18,279	\$ 18,465
Local Taxes (following Administrative Fee)			\$ 12,933	\$ 12,933	\$ 13,064	\$ 13,197	\$ 13,331	\$ 13,467	\$ 13,604	\$ 13,742	\$ 13,881	\$ 14,022	\$ 14,165	\$ 14,308	\$ 14,454	\$ 14,600	\$ 14,749	\$ 14,898
Unreimbursed Eligible Expenses			\$ 759,573	\$ 730,611	\$ 701,649	\$ 672,393	\$ 642,840	\$ 612,986	\$ 582,828	\$ 552,365	\$ 521,591	\$ 490,506	\$ 459,104	\$ 427,384	\$ 395,342	\$ 362,974	\$ 330,278	\$ 297,250
3 Mills from SET to State Brownfield Fund	3.0000		\$ 2,361	\$ 2,361	\$ 2,385	\$ 2,409	\$ 2,433	\$ 2,458	\$ 2,483	\$ 2,508	\$ 2,534	\$ 2,560	\$ 2,586	\$ 2,612	\$ 2,638	\$ 2,665	\$ 2,692	\$ 2,719

Tax Ratio	
School Tax	53%
Local Tax	47%

MDEQ Eligible activity school/local			
	School	Local	Total
MDEQ	\$419,815	\$339,758	\$ 759,573

Table 2: Tax Increment Financing Estimates

		2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
Current Taxable Value 70-15-24-401-041		\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	\$ 13,110	
Estimated New Taxable Value (estimated increase of 1%/year)		\$ 928,775	\$ 938,063	\$ 947,444	\$ 956,918	\$ 966,487	\$ 976,152	\$ 985,914	\$ 995,773	\$ 1,005,730	\$ 1,015,788	\$ 1,025,946	\$ 1,036,205	\$ 1,046,567	
Incremental Difference (New Taxes-Existing)		\$ 915,665	\$ 924,953	\$ 934,334	\$ 943,808	\$ 953,377	\$ 963,042	\$ 972,804	\$ 982,663	\$ 992,620	\$ 1,002,678	\$ 1,012,836	\$ 1,023,095	\$ 1,033,457	
<b>Local Taxes - Millage</b>															
County Operating	4.19	\$ 3,837	\$ 3,876	\$ 3,915	\$ 3,955	\$ 3,995	\$ 4,035	\$ 4,076	\$ 4,117	\$ 4,159	\$ 4,201	\$ 4,244	\$ 4,287	\$ 4,330	\$ 109,456
OAK INT SD	3.3690	\$ 3,085	\$ 3,116	\$ 3,148	\$ 3,180	\$ 3,212	\$ 3,244	\$ 3,277	\$ 3,311	\$ 3,344	\$ 3,378	\$ 3,412	\$ 3,447	\$ 3,482	\$ 88,009
OCC	1.5844	\$ 1,451	\$ 1,465	\$ 1,480	\$ 1,495	\$ 1,511	\$ 1,526	\$ 1,541	\$ 1,557	\$ 1,573	\$ 1,589	\$ 1,605	\$ 1,621	\$ 1,637	\$ 41,389
County PK & REC	0.2415	\$ 221.13	\$ 223.38	\$ 225.64	\$ 227.93	\$ 230.24	\$ 232.57	\$ 234.93	\$ 237.31	\$ 239.72	\$ 242.15	\$ 244.60	\$ 247.08	\$ 249.58	\$ 6,309
HCMA	0.2146	\$ 197	\$ 198	\$ 201	\$ 203	\$ 205	\$ 207	\$ 209	\$ 211	\$ 213	\$ 215	\$ 217	\$ 220	\$ 222	\$ 5,606
City Millages	9.3412	\$ 8,553	\$ 8,640	\$ 8,728	\$ 8,816	\$ 8,906	\$ 8,996	\$ 9,087	\$ 9,179	\$ 9,272	\$ 9,366	\$ 9,461	\$ 9,557	\$ 9,654	\$ 244,021
Total Local Taxes (capturable)	18.9407	\$ 17,343	\$ 17,519	\$ 17,697	\$ 17,876	\$ 18,058	\$ 18,241	\$ 18,426	\$ 18,612	\$ 18,801	\$ 18,991	\$ 19,184	\$ 19,378	\$ 19,574	\$ 494,790
<b>School Taxes</b>															
School Operating	18.0000	\$ 16,482	\$ 16,649	\$ 16,818	\$ 16,989	\$ 17,161	\$ 17,335	\$ 17,510	\$ 17,688	\$ 17,867	\$ 18,048	\$ 18,231	\$ 18,416	\$ 18,602	\$ 470,216
SET	3.0000	\$ 2,747	\$ 2,775	\$ 2,803	\$ 2,831	\$ 2,860	\$ 2,889	\$ 2,918	\$ 2,948	\$ 2,978	\$ 3,008	\$ 3,039	\$ 3,069	\$ 3,100	\$ 78,369
Total School Taxes	21.0000	\$ 19,229	\$ 19,424	\$ 19,621	\$ 19,820	\$ 20,021	\$ 20,224	\$ 20,429	\$ 20,636	\$ 20,845	\$ 21,056	\$ 21,270	\$ 21,485	\$ 21,703	\$ 548,585
Total Capturable Millages	39.9407	\$ 36,572	\$ 36,943	\$ 37,318	\$ 37,696	\$ 38,079	\$ 38,465	\$ 38,854	\$ 39,248	\$ 39,646	\$ 40,048	\$ 40,453	\$ 40,863	\$ 41,277	\$ 1,043,374
<b>Non-Capturable Millages</b>															
School Debt Service	6.7000	\$ 6,135	\$ 6,197	\$ 6,260	\$ 6,324	\$ 6,388	\$ 6,452	\$ 6,518	\$ 6,584	\$ 6,651	\$ 6,718	\$ 6,786	\$ 6,855	\$ 6,924	\$ 175,025
City Bond Debt	0.3648	\$ 334	\$ 337	\$ 341	\$ 344	\$ 348	\$ 351	\$ 355	\$ 358	\$ 362	\$ 366	\$ 369	\$ 373	\$ 377	\$ 9,530
Zoo Authority	0.1000	\$ 92	\$ 92	\$ 93	\$ 94	\$ 95	\$ 96	\$ 97	\$ 98	\$ 99	\$ 100	\$ 101	\$ 102	\$ 103	\$ 2,612
Art Institute	0.2000	\$ 183	\$ 185	\$ 187	\$ 189	\$ 191	\$ 193	\$ 195	\$ 197	\$ 199	\$ 201	\$ 203	\$ 205	\$ 207	\$ 5,225
Total Non-Capturable Millages	7.3648	\$ 6,744	\$ 6,812	\$ 6,881	\$ 6,951	\$ 7,021	\$ 7,093	\$ 7,165	\$ 7,237	\$ 7,310	\$ 7,385	\$ 7,459	\$ 7,535	\$ 7,611	\$ 192,391
Total Capturable and Non-Capturable Millages	47.3055	\$ 43,316	\$ 43,755	\$ 44,199	\$ 44,647	\$ 45,100	\$ 45,557	\$ 46,019	\$ 46,485	\$ 46,956	\$ 47,432	\$ 47,913	\$ 48,398	\$ 48,888	\$ 1,235,766
Annual Incremental Local Taxes		\$ 17,343	\$ 17,519	\$ 17,697	\$ 17,876	\$ 18,058	\$ 18,241	\$ 18,426	\$ 18,612	\$ 18,801	\$ 18,991	\$ 19,184	\$ 19,378	\$ 19,574	\$ 494,790
Annual Incremental School Taxes		\$ 19,229	\$ 19,424	\$ 19,621	\$ 19,820	\$ 20,021	\$ 20,224	\$ 20,429	\$ 20,636	\$ 20,845	\$ 21,056	\$ 21,270	\$ 21,485	\$ 21,703	\$ 548,585
RHBRA Administrative Fee (5% of captured taxes)		\$ 1,829	\$ 1,847	\$ 1,866	\$ 1,885	\$ 1,904	\$ 1,923	\$ 1,943	\$ 1,962	\$ 1,982	\$ 2,002	\$ 2,023	\$ 2,043	\$ 2,064	\$ 52,169
Annual Incremental Local Taxes (after Admin Fee)		\$ 15,515	\$ 15,672	\$ 15,831	\$ 15,992	\$ 16,154	\$ 16,317	\$ 16,483	\$ 16,650	\$ 16,819	\$ 16,989	\$ 17,161	\$ 17,335	\$ 17,511	\$ 442,621
Annual Combined Taxes for Capture After Admin. Fees		\$ 34,744	\$ 35,096	\$ 35,452	\$ 35,812	\$ 36,175	\$ 36,541	\$ 36,912	\$ 37,286	\$ 37,664	\$ 38,045	\$ 38,431	\$ 38,820	\$ 39,213	\$ 991,206
Total Cumulative Incremental Taxes After Admin. Fees (School and Local)		\$ 545,760	\$ 580,856	\$ 616,308	\$ 652,119	\$ 688,294	\$ 724,835	\$ 761,747	\$ 799,033	\$ 836,697	\$ 874,742	\$ 913,173	\$ 951,993	\$ 991,206	
Local Site Remediation Revolving Fund Capture*															
MDEQ School Taxes		\$ 577	\$ 583	\$ 589	\$ 595	\$ 601	\$ 607	\$ 613	\$ 619	\$ 20,845	\$ 21,056	\$ 21,270	\$ 21,485	\$ 21,703	\$ 119,625
Local Taxes		\$ 465	\$ 470	\$ 475	\$ 480	\$ 485	\$ 490	\$ 494	\$ 499	\$ 16,819	\$ 16,989	\$ 17,161	\$ 17,335	\$ 17,511	\$ 96,519
Total		\$ 1,042	\$ 1,053	\$ 1,064	\$ 1,074	\$ 1,085	\$ 1,096	\$ 1,107	\$ 1,119	\$ 37,664	\$ 38,045	\$ 38,431	\$ 38,820	\$ 39,213	\$ 216,144
MDEQ Environmental Reimbursed Expenses															
MDEQ School Taxes		\$ 18,652	\$ 18,841	\$ 19,032	\$ 19,225	\$ 19,420	\$ 19,617	\$ 19,816	\$ 10,872						\$ 419,815
Local Taxes (following Administrative Fee)		\$ 15,049	\$ 15,202	\$ 15,356	\$ 15,512	\$ 15,669	\$ 15,828	\$ 15,988	\$ 9,806						\$ 339,758
Unreimbursed Eligible Expenses		\$ 230,186	\$ 196,143	\$ 161,754	\$ 127,017	\$ 91,928	\$ 56,483	\$ 20,678	\$ -						\$ 759,573
3 Mils from SET to State Brownfield Fund	3.0000	\$ 2,747	\$ 2,775	\$ 2,803	\$ 2,831	\$ 2,860	\$ 2,889	\$ 2,918	\$ 2,948	\$ 2,978	\$ 3,008	\$ 3,039	\$ 3,069	\$ 3,100	\$ 78,369

LSRRF Tax Capture Summary		
MDEQ/School	\$ 119,625	55%
Local	\$ 96,519	45%
Total	\$ 216,144	100%

24 Years Estimated Reimbursement

# **ATTACHMENTS**

# **Attachment A**

## **Resolution(s) Approving**

**(To be developed and provided to State following approval of local plan)**

# **Attachment B**

## **Development Reimbursement Agreement**

(To be developed and provided to State following approval of local plan)

# **Attachment C**

## **Report on Geotechnical Investigation**



**Report of Geotechnical Investigation**

**Proposed Industrial Development  
Hamlin Road and Dequindre Road  
Rochester Hills, Michigan**

**Prepared for:**

**J.B. Donaldson Company, Inc.  
37720 Hills Tech Drive  
Farmington Hills, Michigan 48331**

**G2 Project No. 130460  
June 12, 2013**



June 12, 2013

Mr. Mike Fellows  
JB Donaldson Company  
37720 Hills Tech Drive  
Farmington Hills, Michigan 48331

RE: Report of Geotechnical Investigation  
Proposed Industrial Development  
Hamlin Road and Dequindre Road  
Rochester Hills, Michigan 48118  
G2 Project No. 130460


Dear Mr. Fellows,


We have completed the geotechnical investigation for the proposed industrial development located at the northwest corner of Hamlin Road and Dequindre Road in Rochester Hills, Michigan. This report presents the results of our observations and analysis and our recommendations for earthwork operations, foundation and pavement design, and construction considerations as they relate to the geotechnical conditions on site.

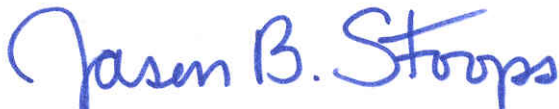
We appreciate the opportunity to be of service to JB Donaldson Company, Inc and look forward to discussing the recommendations presented. In the meantime, if you have any questions regarding our report or any other matter pertaining to the project, please contact us.

Sincerely,

**G2 Consulting Group, LLC**

  
Michael L. Evans, E.I.T.  
Project Engineer

  
Noel J. Hargrave-Thomas, P.E.  
Principal

  
Jason B. Stoops, P.E.  
Project Manager

MLE/JMC/BJW/ljv

Enclosures

Geotechnical & Geoenvironmental  
Engineering Services  
1866 Woodslee Street  
Troy, Michigan 48083  
248.680.0400  
FAX 248.680.9745



## **EXECUTIVE SUMMARY**

The proposed project consists of constructing an industrial development at the northwest corner of Hamlin Road and Dequindre Road in Rochester Hills, Michigan. The proposed building will be a single-story slab-on-grade steel framed structure with an approximate building footprint of 30,000 square feet. New access drives, parking lots, and truck parking areas will also be constructed in conjunction with the project. Also, a detention pond will be constructed within the north end of the site.

Approximately 6 to 12 inches of silty clay topsoil are present at the ground surface of borings B-1 through B-4. Approximately 9 to 14 inches of crushed concrete is present at the ground surface of borings B-5 through B-7. Fill soils, consisting of medium to hard silty clay and very loose to medium compact silty sand, sand, and clayey sand, underlies the topsoil and crushed concrete. The fill soils extend to depths ranging from 21 to 27 feet below the ground surface within borings B-1 through B-3. Within borings B-4 through B-7 the fill soils extend to the explored depths ranging from 10 to 15 feet below the ground surface. Native medium compact to compact silty sand underlies the fill soils within borings B-1 through B-3 and extends to the explored depths ranging from 35 to 40 feet. Groundwater was encountered at depths ranging from 10 inches to 21 feet within each of the borings during drilling operations. Upon completion of the drilling operations, groundwater was observed at 14 inches within boring B-6 and 4 feet within boring B-7. No ground water was observed within borings B-1 through B-5 upon completion of the drilling operations.

The existing fill soils are not suitable for support of the foundations and marginally suitable for support of floor slabs provided grades are not raised more than 1 foot. Removal of the unsuitable fill soils is considered cost prohibitive based on the depths of the material.

We recommend the proposed structure be supported on a deep foundation system. Based on our analysis of the existing soil conditions and the anticipated structural loads, we recommend the structure be supported on 10-inch nominal diameter driven timber pile. We performed static pile analyses for a 10-inch nominal diameter timber pile bearing at a depth of 40 feet approximately 13 feet into the native silty sand soils. Based on the static pile analyses, we anticipate a pile capacity of 40 kips.

Once the pile driving operations are complete, grade beams and/or pier caps will be required to transfer the building loads to the foundation system. Exterior grade beams and pier caps must extend to a minimum depth of 3-1/2 feet below finished grade for protection from frost penetration.

Provided some floor slab settlement can be tolerated and grades will not be raised by more than 1 foot, the existing soils may be left in place for support of the floor slab following satisfactory completion of proof-rolling operations as described in the site preparation section of this report. If floor slab settlement cannot be tolerated, a structural floor slab will be required. Floor slabs supported by the existing fill may be designed using a subgrade modulus of up to 90 pci.

This summary is not to be considered separate from the entire text of this report, with all the conclusions and qualifications mentioned herein. Details of our analysis and recommendations are discussed in the following sections and in the Appendix of this report.



## **PROJECT DISCRIPTION**

The proposed project consists of constructing an industrial development at the northwest corner of Hamlin Road and Dequindre Road in Rochester Hills, Michigan. The proposed building will be a single-story slab-on-grade steel framed structure with an approximate building footprint of 30,000 square feet. New access drives, parking lots, and truck parking areas will also be constructed in conjunction with the project. Also, a detention pond will be constructed within the north end of the site.

At the time of our investigation, actual building loads were not available. We anticipate single column loads will range from 100 to 200 kips and wall loads will range from 3 to 5 kips per linear foot. In addition, the proposed finished floor and final site grades were not available; however, we anticipate that the finished floor elevation will be at or near the existing site grades. When proposed loading conditions and finished grades have been determined, G2 Consulting Group, LLC (G2) should be notified so that we may review the recommendations presented within this report.

## **SCOPE OF SERVICES**

The field operations, laboratory testing, and engineering report preparation were performed under the direction and supervision of a licensed professional engineer. Our services were performed according to generally accepted standards and procedures in the practice of geotechnical engineering. Our scope of services for this project is as follows:

1. We drilled a total of seven (7) soil borings. Borings B-1 through B-3 were located within the footprint of the proposed building. The building borings were supposed to extend to a depth of 20 feet; however, unsuitable fill soils were encountered to the proposed depths. Therefore, borings B-1 and B-2 extended to a depth of 35 feet below the existing grade. Boring B-3 extended to a depth of 40 feet below the existing grade. Borings B-4 through B-6 were located within the proposed truck parking areas and extended to a depth of 10 feet below the existing grade. Boring B-7 was located within the proposed detention basin and extended to a depth of 15 feet below the existing grade.
2. We performed laboratory testing on representative samples obtained from the soil borings. Laboratory testing included visual engineering classification, natural moisture content, organic matter content (loss-on-ignition), and unconfined compressive strength determinations.
3. We prepared this engineering report. Our report includes recommendations regarding the foundation type suitable for the soil conditions encountered, allowable bearing capacity of the anticipated bearing soil layer, estimated settlement, floor slab and pavement recommendations, and construction considerations related to the geotechnical conditions at the site.

## **FIELD OPERATIONS**

JB Donaldson Company, Inc., in conjunction with G2, selected the number, depth, and location of the soil borings based on the proposed building location. The soil boring locations were determined in the field by measuring from existing site features using conventional taping methods and staked by a representative of G2 prior to drilling operations. The drilling contractor encountered auger refusal within boring B-7 at a depth of 8-1/2 feet below the ground surface; therefore, the boring location was offset 20



feet to the east. The approximate soil boring locations are shown on the Soil Boring Location Plan, Plate No. 1. Ground surface elevations were not available at the time of this report.

The soil borings were drilled using a truck-mounted rotary drilling rig and an ATV drilling rig. Continuous-flight, 2-1/4 inch, inside diameter, hollow-stem augers were used to advance the boreholes to the explored depths. Within each soil boring, soil samples were obtained at intervals of 2-1/2 feet within the upper 10 feet and at intervals of 5 feet below a depth of 10 feet. Soil samples were obtained by the Standard Penetration Test method (ASTM D 1586), which involves driving a 2-inch diameter split-spoon sampler into the soil with a 140-pound weight falling 30 inches. The sampler is generally driven three successive 6-inch increments with the number of blows for each increment recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N). Blow counts for each 6-inch increment and the resulting N-values are presented on the individual soil boring logs.

The soil samples were placed in sealed containers in the field and brought to our laboratory for testing and classification. During the field operations, the drilling crew maintained logs of the encountered subsurface conditions, including changes in stratigraphy and observed groundwater levels. The final boring logs are based on the field logs supplemented by laboratory soil classification and test results. After completion of drilling operations, the boreholes were backfilled with excavated material.

## **LABORATORY TESTING**

Representative soil samples were subjected to laboratory testing to determine soil parameters pertinent for foundation design, slab-on-grade design, pavement design, and site preparation. An experienced geotechnical engineer classified the samples in general conformance with the Unified Soil Classification System.

Laboratory testing included natural moisture content, organic matter content (loss-on-ignition), and unconfined compressive strength determinations. The organic matter content of representative samples was determined in accordance with ASTM Test Method D 2974, "Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils". The unconfined compressive strengths were determined by using a spring loaded hand penetrometer. The hand penetrometer estimates the unconfined compressive strength to a maximum of 4-1/2 tons per square foot (tsf) by measuring the resistance of the soil sample to the penetration of a calibrated spring loaded cylinder.

The results of the moisture content, organic matter content, and unconfined compressive strength tests are indicated on the soil boring logs at the depths the samples were obtained. We will hold the soil samples for 60 days from the date of this report. If you would like us to retain the samples beyond this date, or you would like the samples, please let us know.

## **SITE CONDITIONS**

The proposed site is located at the northwest corner of Hamlin Road and Dequindre Road in Rochester Hills, Michigan. The site is generally open and covered with grass, shrubs, trees, and miscellaneous concrete and asphalt debris. Ground surface elevations were not available at the time of this investigation; however, the site appears to be relatively flat. The surrounding properties are generally



commercial in nature. A landfill bounds the property to the west. Hamlin Road bounds the property to the south while Dequindre Road bounds the property to the east.

## **SOIL CONDITIONS**

Approximately 6 to 12 inches of silty clay topsoil are present at the ground surface of borings B-1 through B-4. Approximately 9 to 14 inches of crushed concrete is present at the ground surface of borings B-5 through B-7. Fill soils, consisting of silty clay, silty sand, sand, and clayey sand with trace organic matter and miscellaneous debris, underlies the topsoil and crushed concrete. The fill soils extend to depths ranging from 21 to 27 feet below the ground surface within borings B-1 through B-3. Within borings B-4 through B-7 the fill soils extend to the explored depths ranging from 10 to 15 feet below the ground surface. Native silty sand underlies the fill soils within borings B-1 through B-3 and extends to the explored depths ranging from 35 to 40 feet.

The cohesive fill in the upper 10 feet is stiff to hard in consistency with moisture contents ranging from 11 to 20 percent, unconfined compressive strengths ranging from 2,000 to 9,000 pounds per square foot, and an organic matter content of 2.8 percent. The cohesive fill below 10 feet within boring B-1 is medium in consistency with moisture contents ranging from 17 to 21 percent, an unconfined compressive strength of 1,000 pounds per square foot, and an organic matter content of 2.5 percent. The granular fill is very loose to medium compact with Standard Penetration N-values ranging from 3 to 22 blows per foot and an organic matter contents ranging from 2.3 to 15.8 percent. The native silty sand is medium compact to compact with Standard Penetration N-values ranging from 17 to 38 blows per foot.

The stratification depths shown on the soil boring logs represent the soil conditions at the boring locations. Variations may occur between borings. Additionally, the stratigraphic lines represent the approximate boundaries between soil types. The transitions may be more gradual than what are shown. We have prepared the boring logs on the basis of laboratory classification and testing as well as field logs of the soils encountered.

The Soil Boring Location Plan, Plate No. 1, and Soil Boring Logs, Figure Nos. 1 through 7, are presented in the Appendix. The soil profiles described above are generalized descriptions of the conditions encountered at the boring locations. General Notes Terminology defining the nomenclature used on the boring logs and elsewhere in this report is presented on Figure No. 8.

## **GROUNDWATER CONDITIONS**

Groundwater observations were obtained during and upon completion of the drilling operations. Groundwater was encountered at depths ranging from 10 inches to 21 feet within the borings during drilling operations. Upon completion of the drilling operations, groundwater was observed at 14 inches within boring B-6 and 4 feet within boring B-7. No groundwater was observed within borings B-1 through B-5 upon completion of the drilling operations.

Fluctuations in groundwater levels should be anticipated due to seasonal variations and following periods of prolonged precipitation. It should be noted that groundwater observations made during drilling operations in predominantly cohesive soils are not necessarily indicative of the static groundwater level.



This is due to the low permeability of such soils and the tendency of drilling operations to seal off the natural paths of groundwater flow.

## **SITE PREPARATION**

The existing fill soils are not suitable for support of the foundations and marginally suitable for support of floor slabs provided grades are not raised more than 1 foot. Removal of the unsuitable fill soils is considered cost prohibitive based on the depths of the material.

We anticipate earthwork operations will consist of removing the vegetation, topsoil, and miscellaneous debris within the proposed building and pavement areas, fine grading to achieve the design subgrade elevation, proof-rolling the subgrade soils, excavating for utilities and foundations, and preparing the subgrade for support of floor slabs and pavements. We recommend all earthwork operations be performed in accordance with comprehensive specifications and be properly monitored in the field by qualified geotechnical engineers and technicians.

At the start of earthwork operations, the existing vegetation, topsoil, and miscellaneous debris should be removed in their entirety. Once the design subgrade elevation has been achieved, the exposed subgrade within the building and pavement areas, anticipated to consist of cohesive and granular fill soils, should be inspected and proof-rolled with a heavy rubber-tired vehicle, such as a loaded single-axle dump truck. The exposed subgrade should be visually evaluated for instability and/or unsuitable soil conditions. Any unstable or unsuitable areas noted should be removed and replaced with engineered fill.

Engineered fill should be free of organic matter, frozen soil, clods, or other harmful material. Engineered fill should be placed in uniform horizontal layers, not more than 9 inches in loose thickness. The engineered fill should be compacted to achieve a density of at least 95 percent of the maximum dry density as determined by the Modified Proctor compaction test (ASTM D 1557). All engineered fill material should be placed and compacted at approximately the optimum moisture content. Frozen material should not be used as fill, nor should fill be placed on a frozen subgrade.

## **FOUNDATION RECOMMENDATIONS**

The existing fill soils are not suitable for support of conventional shallow foundations. We recommend the proposed structure be supported on a deep foundation system. Based on anticipated building loads and the existing soil conditions, we recommend the structure be supported on 10-inch nominal diameter driven timber pile. We performed static pile analyses for a 10-inch nominal diameter timber pile bearing at a depth of 40 feet approximately 13 feet into the native silty sand soils. Based on the static pile analyses, we anticipate a pile capacity of 40 kips. Other pile lengths and capacities may be determined after building loading conditions are determined.

Once the pile driving operations are complete, grade beams and/or pier caps will be required to transfer the building loads to the foundation system. Exterior grade beams and pier caps must extend to a minimum depth of 3-1/2 feet below finished grade for protection from frost penetration.

Prior to the installation of the piles, a Wave Equation Analysis for Piles (WEAP) should be performed by a qualified geotechnical engineer to establish the required driving resistance indicative of the design pile



capacity. The WEAP will consider the subsurface conditions, pile section, and contractor selected pile hammer.

If the recommendations outlined in this report are adhered to, total and differential settlements for the completed structure should be within 1 inch and ½ inch, respectively. We expect settlements of these magnitudes are within tolerable limits for the type of structure proposed. We recommend a qualified geotechnical engineer be on site during construction to observe construction operations, soil conditions and verify the adequacy of the soils during pile driving operations.

## **FLOOR SLAB RECOMMENDATIONS**

The existing fill soils contain organic matter and were not placed in a controlled manner. Provided some floor slab settlement can be tolerated and grades will not be raised by more than 1 foot, the existing soils may be left in place for support of the floor slab following satisfactory completion of proof-rolling operations as described in the site preparation section of this report. If floor slab settlement cannot be tolerated, a structural floor slab will be required. Floor slabs supported by the existing fill may be designed using a subgrade modulus of up to 90 pci.

We recommend that at least 4 inches of clean coarse sand or pea gravel be placed between the subgrade and the bottom of the floor slab for use as a capillary break to reduce moisture transmission through the concrete floors and to reduce the potential for concrete curling. If moisture sensitive floor coverings are planned or if greater protection against vapor transmission is desired, a vapor barrier consisting of 10 mil plastic sheeting, or equivalent, may be placed on the sand layer beneath floor slabs. The floor slab should be isolated from the foundation system to allow for independent movement.

## **PAVEMENT RECOMMENDATIONS**

We understand the pavement areas will include access drives on the east and south sides of the site. A car parking lot will be constructed south of the proposed building with a truck storage lot on the north side of the proposed building. Proposed pavement grades were not available at the time of this report; however, we anticipate the proposed pavement surface will be at similar elevations as the existing grade. We anticipate the existing silty clay and clayey sand fill within the proposed pavement areas will be suitable for support of the proposed pavements. Silty clay and clayey sand fill soils are considered poor for direct support of pavement structures, have poor drainage characteristics, are susceptible to frost heave, and may become unstable under the repeated loading typical of pavement construction operations.

We performed pavement design analyses in accordance with the “AASHTO Guide for Design of Pavement Structures”. We understand traffic within the southern parking lot will consist of solely of passenger vehicles. The northern truck storage lot will consist of primarily of semi-trucks and trailers. Based on the anticipated traffic, we have designed a light duty pavement section and a heavy duty pavement section. The light duty pavement section is based on an estimated 50,000 18-kip equivalent single-axle loads (ESALS) over a 20-year design life. The heavy duty pavement section is based on an estimated 150,000 18-kip ESALS. For evaluation purposes, we estimated a serviceability loss of 2.0, a standard deviation of 0.45, a reliability factor of 0.80, and an effective roadbed soil resilient modulus of 7,000 psi. If any actual traffic volume information becomes available, G2 Consulting Group should be notified so we can reevaluate our recommendations.





Based on the results of our analyses, we recommend a minimum pavement design section for the new light duty bituminous pavement section, consisting of 1-1/2 inches of 1100T bituminous concrete wearing course, and 2 inches of 1100L bituminous concrete leveling course supported on a minimum of 8 inches of MDOT 21AA dense-graded aggregate base. We recommend a minimum pavement design section for the new heavy duty bituminous pavement section, consisting of 2 inches of 1100T bituminous concrete wearing course, and 2-1/2 inches of 1100L bituminous concrete leveling course supported on a minimum of 10 inches of MDOT 21AA dense-graded aggregate base. We recommend that a Tensar Tri-ax geo-grid be placed below the MDOT 21AA dense-graded aggregate base atop the subgrade.

All pavement materials are specified within the 2012 Standard Specifications for Construction from the Michigan Department of Transportation. The bituminous pavement materials are described in Section 501 and can be assigned a structural coefficient number of 0.37. Any imported aggregate base course materials was assigned a structural coefficient number of 0.14.

Large front-loading refuse trucks can impose significant concentrated wheel loads within trash dumpster pick-up areas. This type of loading can result in rutting of asphalt pavements and ultimately in failure. Therefore, we recommend reinforced concrete pavement at least 8 inches in thickness be used in these areas. The concrete pad should be large enough to support the entire refuse truck during pick-up operations.

Proper drainage is considered to be an important consideration for pavement design on cohesive soils. We recommend edge drains be provided around the perimeter of any proposed landscaped islands and along curbs, since they can become a source of water infiltration into the pavement subgrade. Such drains should be connected to nearby catch basins. In addition, we recommend finger drains be installed at the catch basin locations. A minimum of four (4) finger drains should extend a minimum of 15 feet outward from each catch basin. The pavement and subgrade should be properly sloped to promote effective surface and subsurface drainage and prevent water from ponding. We also recommend pavement subbase material consist of non-frost-susceptible aggregates.

We recommend catch basins and manholes be placed along curb lines and not in the center of parking areas. This will reduce future pavement rehabilitation costs by allowing pavement overlays without milling the entire pavement area.

Regular timely maintenance should be performed on the bituminous pavement to reduce the potential deterioration associated with moisture infiltration through surface cracks. The owner should be prepared to seal the cracks with a hot-applied elastic crack filler as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade soils.

## **BELOW-GRADE WALL RECOMMENDATIONS**

Below-grade retaining walls in the loading dock areas should be designed to withstand lateral earth pressures due to backfilled soils and adjacent traffic loads. Below-grade walls considered to be fixed at the top should be designed on the basis of at-rest lateral earth pressures corresponding to an equivalent fluid pressure of 55 pounds per square foot per foot of depth for drained backfill soil conditions. Free-standing walls may be designed using an active earth pressure of 35 pounds per square foot per foot of depth for drained backfill conditions.



Loading dock wall backfill should consist of MDOT Class II sand to maintain drained conditions. Weep holes, or other drainage measures, should be constructed at the base of any below-grade truck well to allow the backfill behind the wall to drain. This will prevent entrapment of water within the granular backfill behind retaining walls and prevent hydrostatic pressure from building behind the wall. Weep holes should be spaced no greater than every 4 lineal feet of wall and should be located near the base of the wall.

## **DETENTION POND RECOMMENDATIONS**

We understand a storm water detention pond will be constructed within the norther portion of the proposed site. Proposed site grades were not available at the time of the investigation; however, we anticipate the storm water detention pond will have an approximate maximum depth of 5 feet below existing grades. Soil conditions at the bottom of the anticipated basin depth consist of cohesive fill. These soils are relatively impermeable and will not allow for storm water to drain freely. An outlet structure would have to be constructed within the basin. Otherwise, the existing cohesive soils are highly suitable for the construction of a detention system. We anticipate the cohesive soils would have hydraulic conductivities ranging from  $1.0 \times 10^{-6}$  cm/s to  $1.0 \times 10^{-7}$  cm/s.

## **CONSTRUCTION CONSIDERATIONS**

We anticipate utility excavations will extend to depths of 5 to 7 feet below finished grades. Groundwater was encountered at depths ranging from 10 inches to 21 feet within each of the borings during drilling operations. Therefore, significant groundwater accumulations should be anticipated in construction excavations extending below these depths. In addition, caving and/or sloughing of the granular fill soils should be anticipated during excavation operations.

For grade beam, pier cap, and truck dock excavations, we anticipate the groundwater can be controlled with properly constructed sumps and pumps. Water should not be allowed to pond in construction excavations. The contractor should be prepared to over-excavate and form grade beams and pier caps within the granular fill soils. The sides of grade beams and pier caps should be constructed straight and vertical to reduce the risk of frozen soil adhering to the concrete and raising the foundations.

We recommend a maximum slope of 1 horizontal units to 1 vertical unit (1H:1V) for excavations within the stiff to hard cohesive fill soils for excavations that extend below a depth of 5 feet. We recommend a maximum slope of 2 horizontal units to 1 vertical unit (2H:1V) for excavations within the very loose to medium compact granular fill soils for excavations that extend below a depth of 5 feet. All excavations should be safely sheeted, shored, sloped, or braced in accordance with MI-OSHA requirements. If material is stored or equipment is operated near an excavation, lower angle slopes or stronger shoring must be used to resist the extra pressure due to the superimposed loads.

## **GENERAL COMMENTS**

We have formulated the evaluations and recommendations presented in this report relative to site preparation and foundations on the basis of data provided to us relating to the location, type, and grade for the proposed site. Any significant change in this data should be brought to our attention for review and evaluation with respect to the prevailing subsurface conditions.



The scope of the present investigation was limited to evaluation of subsurface conditions for the support of the building foundation and other related aspects of the development. No chemical, environmental, or hydrogeological testing or analyses were included in the scope of this investigation. If changes occur in the design, location, or concept of the project, the conclusions and recommendations contained in this report are not valid unless G2 Consulting Group, LLC reviews the changes. G2 Consulting Group, LLC will then confirm the recommendations presented herein or make changes in writing.

We have based the analysis and recommendations submitted in this report upon the data from soil borings performed at the approximate locations shown on the Soil Boring Location Plan, Plate No. 1. This report does not reflect variations that may occur between the actual boring locations and the actual structure locations. The nature and extent of any such variations may not become clear until the time of construction. If significant variations then become evident, it may be necessary for us to re-evaluate our report recommendations.

Soil conditions at the site could vary from those generalized on the basis of soil borings made at specific locations. It is, therefore, recommended that G2 Consulting Group, LLC be retained to provide soil engineering services during the site preparation, excavation, and foundation construction phases of the proposed project. This is to observe compliance with the design concepts, specifications, and recommendations. Also, this allows design changes to be made in the event that subsurface conditions differ from those anticipated prior to the start of construction.

## **APPENDIX**

Soil Boring Location Plan

Plate No. 1

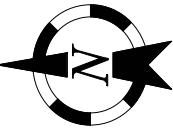
Soil Boring Logs

Figure Nos. 1 through 7


General Notes


Figure No. 8





**Legend**

 Soil Borings drilled by Strata Drilling, Inc. on May 30, 2013 and June 4, 2013

Soil Boring Location Plan		
Proposed Industrial Building Hamlin Road and Dequindre Road Rochester Hills, Michigan		
	Project No. 130460	
	Drawn by: MLE	
	Date: 6/10/13	Plate No. 1
	Scale: NTS	



Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A Longitude: N/A



Soil Boring No. **B-1**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Clay (11 inches)	0.9		3 5 8	13	11.9		9000*
5		Fill: Very Stiff to Hard Gray Silty Clay with trace sand and gravel	5	S-2	3 4 6	10	12.4		9000*
			8.0	S-3	2 3 5	8	14.2		7000*
10			10	S-4	3 3 4	7	19.5		2000*
15		Fill: Medium to Stiff Gray Silty Clay with trace sand, gravel, wood debris, brick fragments, and organic matter (Organic Matter Content @ 15' = 2.5%)	15	S-5	1 2 2	4	21.2		1000*
20			20	S-6	3 3 5	8	17.4		1000*
			21.0						
25			25	S-7	5 12 17	29			
30		Medium Compact to Compact Brown Silty Sand with trace gravel	30	S-8	6 14 24	38			
35			35.0	S-9	7 10 13	23			
		End of Boring @ 35ft							

Total Depth: 35ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 21 feet during drilling

Notes:  
Borehole collapsed at 21 ft after auger removal  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 1

SOIL / PAVEMENT BORING 130460.GPJ G2 CONS.GDT 6/14/13

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A

Longitude: N/A



Soil Boring No. **B-2**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Clay (10 inches)	0.8						
		Fill: Very Stiff Dark Brown Silty Clay with trace sand, gravel, occasional sand seams, and organic matter content (Organic Matter Content = 3.8%)	3.0	S-1	4 3 3	6	10.7		7000*
5			5	S-2	2 8 3	11			
				S-3	3 8 6	14			
10			10	S-4	2 7 5	12			
		Fill: Medium Compact Dark Brown and Black Silty Sand with trace gravel, clay, and wood, glass, and plastic debris (Organic Matter Content @ 10' = 15.8%)							
15			15	S-5	5 8 3	11			
20			20	S-6	4 3 12	15			
25			24.0	S-7	6 9 11	20			
30		Medium Compact Brown Silty Sand with trace gravel	30	S-8	7 8 9	17			
35			35.0	S-9	7 9 9	18			
		End of Boring @ 35ft							

Total Depth: 35ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 7 feet during drilling

Notes:  
Borehole collapsed at 11 ft after auger removal  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 2

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A

Longitude: N/A



Soil Boring No. **B-3**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Clay (12 inches)	1.0		4				
		Fill: Very Stiff Dark Brown Silty Clay with trace sand, gravel, occasional sand seams, and plastic debris	3.0	S-1	4 3	7	17.4		4000*
5		Fill: Loose to Medium Compact Dark Brown and Black Silty Sand with trace clay, gravel, brick fragments, and wood, glass, and plastic debris (Organic Matter Content @ 5' = 2.3%)	5	S-2	2 4 2	6			
				S-3	3 3 4	7			
10			10	S-4	3 6 9	15			
			13.0						
15		Fill: Very Loose to Loose Dark Brown and Black Silty Sand with trace clay, gravel, brick fragments, and wood, glass, and plastic debris	15	S-5	3 2 1	3			
20			20	S-6	6 6 3	9			
25		Medium Compact to Compact Brown Silty Sand with trace gravel	25	S-7	3 4 3	7			
30			30	S-8	7 12 14	26			
35			35	S-9	6 13 19	32			

Total Depth: 40ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 7-1/2 feet during drilling

Notes:  
Borehole collapsed at 14 ft after auger removal  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 3a



Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A Longitude: N/A



Soil Boring No. **B-3**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
40		Medium Compact to Compact Brown Silty Sand with trace gravel <i>(continued)</i>	40.0	S-10	7 12 15	27			
45		End of Boring @ 40ft	45						
50			50						
55			55						
60			60						
65			65						
70			70						

Total Depth: 40ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 7-1/2 feet during drilling

Notes:  
Borehole collapsed at 14 ft after auger removal  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 3b

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A Longitude: N/A



Soil Boring No. **B-4**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Silty Clay (6 inches)	0.5						
		Fill: Very Stiff Dark Brown Silty Clay with trace sand and gravel	3.0	S-1	3 4 3	7	17.8		7000*
5		Fill: Medium Compact Black Sand with trace silt, gravel, glass and plastic debris, and organic matter (Organic Matter Content = 5.5%)	6.0	S-2	2 5 15	20			
		Fill: Loose to Medium Compact Dark Brown Clayey Sand with trace silt, gravel, brick fragments, and wood and plastic debris	10.0	S-3	2 11 10	21			
10			10.0	S-4	6 7 3	10			
		End of Boring @ 10ft							
15			15						
20			20						
25			25						
30			30						
35			35						

Total Depth: 10ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 7-1/2 feet during drilling

Notes:  
\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Figure No. 4

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A

Longitude: N/A



Soil Boring No. **B-5**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Fill: Crushed Concrete (9 inches)	0.8						
		Fill: Very Stiff Dark Brown Silty Clay with trace sand, gravel, and occasional sand seams	3.0	S-1	6 3 4	7	14.3		5000*
5		Fill: Medium Compact Dark Brown Sand with trace silt and gravel	5	S-2	12 6 5	11			
		Fill: Medium Compact Dark Brown Clayey Sand with trace silt, gravel, brick fragments, and wood and plastic debris	7.0	S-3	10 5 6	11			
10			10.0	S-4	3 7 4	11			
		End of Boring @ 10ft							
15			15						
20			20						
25			25						
30			30						
35			35						

Total Depth: 10ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 7 feet during drilling

Notes:  
Borehole collapsed at 2 ft after auger removal  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 5

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

Latitude: N/A

Longitude: N/A



Soil Boring No. **B-6**

Consulting Group, LLC

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Fill: Crushed Concrete (10 inches)	0.8		4				
		Fill: Loose Brown Clayey Sand with trace silt and gravel	3.0	S-1	3	6			
5		Fill: Very Stiff Gray Silty Clay with trace sand and gravel	5.5	S-2	5	10	15.5		4500*
		Fill: Medium Compact Dark Brown Clayey Sand with trace silt, gravel, and wood and plastic debris		S-3	5				
					8	12			
10			10.0	S-4	4				
					12	22			
					10				
		End of Boring @ 10ft							
15			15						
20			20						
25			25						
30			30						
35			35						

Total Depth: 10ft  
Drilling Date: June 4, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Water Level Observation:  
Groundwater encountered at 10 inches during drilling; 14 inches upon completion

Notes:  
Borehole collapsed at 2 ft after auger removal  
\* Calibrated Hand Penetrometer

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 6

Project Name: Proposed Industrial Development

Project Location: Hamlin and Dequindre  
Rochester Hills, Michigan

G2 Project No. 130460

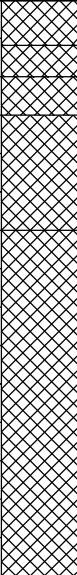






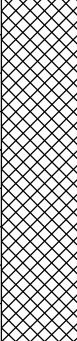
Latitude: N/A

Longitude: N/A



Soil Boring No. **B-7**

Consulting Group, LLC

SUBSURFACE PROFILE					SOIL SAMPLE DATA									
DEPTH (ft)	PRO- FILE	GROUND SURFACE ELEVATION: N/A			DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/ 6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)			
5		 Fill: Crushed Concrete (14 inches) 			5	S-1	5	9						
		5												
		Fill: Slag Like Material 				4								
		Fill: Loose Reddish Brown Silty Sand with trace clay and gravel 				3	8	19.0	2000*					
		Fill: Stiff Gray Silty Clay with trace sand, gravel, and plastic debris 				4								
10		Fill: Loose to Medium Compact Dark Brown and Black Clayey Sand with trace silt, gravel, brick fragments, and wood, glass, and plastic debris 			10	S-3	4	8						
15						15.0	15					S-4	6	21
												14		
						7								
							5	19						
							6							
						S-5	13							
		End of Boring @ 15ft												
20					20									
25					25									
30					30									
35					35									

Total Depth: 15ft  
Drilling Date: May 30, 2013  
Inspector:  
Contractor: Strata Drilling, Inc.  
Driller: B. Sienkiewicz

Water Level Observation:  
Groundwater encountered at 14 inches during drilling; 4 feet upon completion

Notes:  
\* Calibrated Hand Penetrometer

Drilling Method:  
2-1/4 inch inside diameter hollow stem augers

Excavation Backfilling Procedure:  
Borehole backfilled with auger cuttings

Figure No. 7

## GENERAL NOTES TERMINOLOGY

Unless otherwise noted, all terms herein refer to the Standard Definitions presented in ASTM 653.

PARTICLE SIZE		CLASSIFICATION	
Boulders	- greater than 12 inches	The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows:	
Cobbles	- 3 inches to 12 inches		
Gravel	- Coarse - 3/4 inches to 3 inches		
	- Fine - No. 4 to 3/4 inches		
Sand	- Coarse - No. 10 to No. 4		
	- Medium - No. 40 to No. 10	<b>Second Major Constituent</b>	<b>Minor Constituent</b>
	- Fine - No. 200 to No. 40	<b>(percent by weight)</b>	<b>(percent by weight)</b>
		Trace - 1 to 12%	Trace - 1 to 12%
Silt	- 0.005mm to 0.074mm	Adjective - 12 to 35%	Little - 12 to 23%
Clay	- Less than 0.005mm	And - over 35%	Some - 23 to 33%

### COHESIVE SOILS

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with the other major soil constituent as modifier, i.e. sandy clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils, i.e. silty clay, trace sand, little gravel.

Consistency	Unconfined Compressive	Approximate Range of (N)
	Strength (psf)	
Very Soft	Below 500	0 - 2
Soft	500 - 1,000	3 - 4
Medium	1,000 - 2,000	5 - 8
Stiff	2,000 - 4,000	9 - 15
Very Stiff	4,000 - 8,000	16 - 30
Hard	8,000 - 16,000	31 - 50
Very Hard	Over 16,000	Over 50

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon the Standard Penetration Resistance (N).

Density Classification	COHESIONLESS SOILS	Approximate Range of (N)
	Relative Density %	
Very Loose	0 - 15	0 - 4
Loose	16 - 35	5 - 10
Medium Compact	36 - 65	11 - 30
Compact	66 - 85	31 - 50
Very Compact	86 - 100	Over 50

Relative Density of cohesionless soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

### SAMPLE DESIGNATIONS

AS -	Auger Sample – Cuttings directly from auger flight
BS -	Bottle or Bag Samples
S -	Split Spoon Sample - ASTM D 1586
LS -	Liner Sample with liner insert 3 inches in length
ST -	Shelby Tube sample - 3 inch diameter unless otherwise noted
PS -	Piston Sample - 3 inch diameter unless otherwise noted
RC -	Rock Core - NX core unless otherwise noted

STANDARD PENETRATION TEST (ASTM D 1586) - A 2.0 inch outside-diameter, 1-3/8 inch inside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

# **Attachment D**

## **Available Project Bid Documents**



## Proposal

5791 A

Page No. 1 of 3

4964 Technical Dr.  
Milford, Michigan 48381  
Phone: (248) 714-5486  
Fax: (248) 714-5249

Date: 4/16/2014

### PROPOSAL SUBMITTED TO:

J.B. Donaldson Co.  
37610 Hills Tech Drive  
Farmington Hills, MI 48332  
Attn: Joe Jendrusik

### PROJECT:

General Trucking

We hereby submit specifications and estimates to furnish all labor, material, equipment, and insurance to provide the following:

Print Date: 3/15/2014

### BUDGET VALUES ONLY

#### EARTHWORK:

##### Site:

Silt Fence	2,800 SF
Mud Mat	1
Saw / Demo Curb & Pavement	LS
Clear / Grubb Site	LS
Strip / Stockpile Topsoil	6,450 CY
Cut	7,920 CY
Fill	2,660 CY
Berm Surplus Spoils	8,592 HY
Pond 3126 Hard Yards	4,700 TY
Backfill Foundations @ Truck Dock	200 TNS
6" Stone Building Pad	34,000 SF
Prep Site For Concrete +/- .10	4,800 SF
Excavate Truck Well	LS
Prep For Curbs +/- .10	1,300 LF
Prep For Asphalt Sub-Base +/- .10	60,390 SF
Re-Distribute Topsoil	1,400 CY
Final Grade Greenbelts	112,686 SF
Final Grade Pond	LS
Erosion Control	BY OTHERS
Seed / Mulch	BY OTHERS
Signage / Traffic	INC
Place / Compact Millings - FURNISHED BY OTHERS	133,000 SF
Street Sweeping	INC

← CLASS 4 DUMP

**EARTHWORK SUBTOTAL: \$ 138,280.00**

CONTINUED ON NEXT PAGE

We hereby propose to furnish labor and materials - complete in accordance with the above specifications, for the sum of:

dollars (\$) with payments to be made as follows:

All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner according to standard practices.

Any alteration or deviation from above specifications involving extra costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

Authorized Signature:

Raymond Merlo

NOTE:

This proposal may be withdrawn by us if not accepted within 30 days.





## Proposal

5791 A

Page No. 2 of 3

4964 Technical Dr.  
Milford, Michigan 48381  
Phone: (248) 714-5486  
Fax: (248) 714-5249

Date: 4/16/2014

**PROPOSAL SUBMITTED TO:**

J.B. Donaldson Co.  
37610 Hills Tech Drive  
Farmington Hills, MI 48332  
Attn: Joe Jendrusik

**PROJECT:**

General Trucking

We hereby submit specifications and estimates to furnish all labor, material, equipment, and insurance to provide the following:

*Continued from previous page.*

Print Date: 3/15/2014

**Storm:**

12" RCP	1,215 FT
15" RCP	685 FT
12" Culvert	275 FT
Storm Catch Basin	14
Storm Man Hole	4
Outlet Control Structure	2
End Sections	4
Rip Rap	4
Storm Force Main	640 LF
Storm Pump	<del>2400</del> BUDGET
8" PVC Roof Conductors	90 LF
Sand - In	1,645 TN
Dirt - Out - Stockpile	1,754 TY

**STORM SUBTOTAL:** \$ 138,240.00 ✓

**Water:**

Hydrants	2
16" x 8" TSV & Well	1
8" DI	360 LF
6" DI	80 LF
6" Valve Box	1
2" Stop Box	2
2" "K" Copper	120 LF
2" Tap	1
Sand - In	350 TN
Dirt - Out	350 TY

**WATER SUBTOTAL:** \$ 39,400.00 ✓

CONTINUED ON NEXT PAGE

We hereby propose to furnish labor and materials - complete in accordance with the above specifications, for the sum of:

dollars (\$) with payments to be made as follows:

All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

Authorized Signature:

Raymond Merlo

NOTE:

This proposal may be withdrawn by us if not accepted within 30 days.



## Proposal

5791 A

Page No. 3 of 3

4964 Technical Dr.  
Milford, Michigan 48381  
Phone: (248) 714-5486  
Fax: (248) 714-5249

Date: 4/16/2014

### PROPOSAL SUBMITTED TO:

J.B. Donaldson Co.  
37610 Hills Tech Drive  
Farmington Hills, MI 48332  
Attn: Joe Jendrusik

### PROJECT:

General Trucking

We hereby submit specifications and estimates to furnish all labor, material, equipment, and insurance to provide the following:

*Continued from previous page.*

Print Date: 3/15/2014

### Sanitary:

2" Force Main	1,080 LF
8" PVC	190 LF
Sanitary Man Hole	1
Clean - Out	1
Tap Existing	1
Directional Bore	70 LF
Sanitary Lift Pump	1 (BUDGET) \$ 10,000.00
Sand - In	130 TNS
Dirt - Out - Stockpile	150 TY

CLASS II  
DUMP

**SANITARY SUBTOTAL: \$ 47,310.00**

**EARTHWORK & UNDERGROUND UTILITY TOTAL: \$ 363,230.00**

### NOTE:

Utility Spoils  
Surplus Spoils From Balance

2,245 TY  
4,700 TY  
Total: 6,945 TY

EARTHWORK  
CLASS II  
SPOILS

X 22" per TY

### BY OTHERS:

Layout/Testing/Engineering/Permits/Fees/Bonds/Special Insurances/As Builts/  
Dewatering/Subgrade Undercuts/Removal of Hidden Obstructions/Handling  
Handling Contaminated Material/Winter Conditions and Protection/Handling  
of Others Spoils/Landscaping/Sod, Seed, or Mulch/Hand Raking Of Topsoil/  
Aggregate Base Under Asphalt or Curb and Gutter/Foundation Excavation  
Or Backfill/Tipping or Dump Fees/Quantities Not Listed/Termite Control/Phone,  
Gas, or Electrical Work/Importing Fill or Topsoil/Screening Topsoil.

\$152,790<sup>00</sup>

We hereby propose to furnish labor and materials - complete in accordance with the above specifications, for the sum of:

dollars (\$) with payments to be made as follows:

All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner according to standard practices.

Any alteration or deviation from above specifications involving extra costs, will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

Authorized Signature:

Raymond Merlo

NOTE:

This proposal may be withdrawn by us if not accepted within 30 days.

**Proposal  
K & W Concrete  
Construction, Inc.**

**9805 Cranbrook Court  
Romeo, Michigan 48065**

**Phone # 586-752-9493**

**Fax # 586-752-6089**

**Email [www.westlaket@comcast.net](mailto:www.westlaket@comcast.net)**

Proposal Submitted to:  
JB Donaldson Company  
37720 Hills Tech Drive  
Farmington Hills, MI. 48331

Date: 4-5-14

Job Name:  
**General Trucking**

**Attn. Joseph Jendrusik**

Item	Foundations for Main Building	Charges
1	Excavate and pour 9 interior pile caps and 13 exterior pile caps with #5 bar 1 foot on center each way. Excavate and pour exterior trench footing with two #5 bar top and bottom. Set and grout anchor bolts. Excavate and pour 9 interior and 9 exterior column pads with #5 bar 1 foot on center each way. Excavate, form and pour truck well spread footings and walls with #5 bar 1 foot on center each way in spread footing and 1 foot on center each way on each face. Excavate and pour dumpster footing back fill truck well walls with sand. No Helical piers included.	\$84,014.00 ✓
2	Truck wash footings	\$8,867.00
3	Spoils to be hauled away by others. 710 yards ← CLASS 1 x 22 = 31,240	
<b>Floors</b>		
1	Pour and finish 40,000 square foot floor with 6" concrete, 2.9 wire mesh, perimeter insulation, expansion, 10 mill vapor barrier, sealer and saw cut.	\$122,504.00 ✓
2	Form and pour 3 dock levelers	\$2,100.00 ✓
3	Set and fill 6 bumper posts	\$600.00 ✓
4	Pour and finish 3,000 square foot mezzanine with 4" concrete, 2.9 wire mesh, pan steps and concrete pump.	\$8,867.00 ✓
5	Pour and finish 2,000 sq. ft. Truck Wash floor with 8" concrete 2.9 wire mesh, perimeter insulation, expansion, sealer and saw cut Trench drain by others.	\$8,616.00 ✓
<b>Site concrete</b>		
1	2,348 square feet of walks	\$7,485.00 ✓
2	2,520 square foot truck well	\$8,064.00 ✓
3	289 square foot dumpster pad	\$900.00 ✓
4	9,000 square feet of Dolly strip	\$28,800.00 ✓
5	100 square foot transformer pad	\$400.00 ✓
6	1,554 feet of curb and gutter	\$19,425.00 ✓
<b>Total</b>		<b>\$300,642.00</b>

**Unpaid balances are subject to a late payment charge of 2% per month (24% per annum).**

# CONTRACTORS WATERPROOFING SYSTEMS

P.O. Box 176  
Cheney, KS 67025

103 W. 2<sup>nd</sup> Avenue  
Cheney, KS 67025

Phone (316)540-6166 Fax (316)540-6168  
contractorswaterproofing@yahoo.com

March 19, 2014

TO: Jennifer Ritchie

PROJECT: General Trucking

SCOPE OF WORK: PROPOSAL FOR THE INSTALLATION OF GEO-SEAL<sup>®</sup> VAPOR INTRUSION BARRIER AND GEO-SEAL VAPOR VENT

We propose to furnish labor and materials for the Geo-Seal Vapor Intrusion Barrier and Geo-Seal Vapor Vent per manufacturer's details.

## PRICE:

Name	Approximate SF	Price Total
Geo-Seal Vapor Intrusion Barrier & Vapor Vent	32,000 sf	\$94,400.00
1 Mobilization	Yes	\$0.00
All Penetrations	Yes	\$0.00
Smoke Verification Testing	Yes	\$0.00
<b>Total</b>		<b>\$94,400.00</b>

# CONTRACTORS WATERPROOFING SYSTEMS

P.O. Box 176  
Cheney, KS 67025

103 W. 2<sup>nd</sup> Avenue  
Cheney, KS 67025

Phone (316)540-6166 Fax (316)540-6168  
contractorswaterproofing@yahoo.com

Geo-Seal System includes:

- Geo-Seal BASE Layer (HPDE/Geotextile layer)
- 60 Mils of Geo-Seal CORE
- Geo-Seal BOND Layer (HDPE/Geotextile layer)
- Geo-Seal Vapor-Vent Poly Trenchless venting system includes 825' venting & 6 vent risers
- Price includes sales tax and freight cost
- Length of time for installation of Geo-Seal, Vapor-Vent and verification testing is **11 Days**

## QUALIFICATIONS

- 1) Placement, compacting and preparation of substrate by others. Subgrade should be prepared per manufacturer's specifications.
- 2) Gas monitoring equipment by others.
- 3) Any additional protection course including sand, by others.
- 4) Not responsible for damage caused by others or the elements.
- 5) Vent risers to 12" above top of slab, all above by others.
- 6) If power equipment is needed to install vapor vent due to substrate hardness, there will be an additional charge.
- 7) Contractor must accept substrate grade and vent riser locations before vapor barrier installation.
- 8) Conduit and pipe clusters to have mud slab extending 6" out.
- 9) No concrete cutting or boring included in this bid.
- 10) Bid based upon (1) one move-in.
- 11) Bid based on approximate square footage; if
- 12) Area to be sealed must be graded to allow access by truck.
- 13) This bid is to become part of contract.
- 14) There shall be no retainage withheld or retainage to be paid 30 days after floor is poured.
- 15) Bonds not included.
- 16) Pricing based upon non-union and non-prevailing wage rates
- 17) Sales tax has been calculated at \_7.75\_%, anything over this will be added to the price.
- 18) Contractors Waterproofing is trained and certified by Land Science Technologies for the installation of the Geo-Seal and Vapor-Vent system
- 19) Manufacturer's warranty options will be furnished upon request
- 20) Manufacturer's warranties are issued **once** payments are received
- 21) Pricing is held for 60 days from date of bid

If you have any questions, please call me.

Sincerely,

Michael Downey, Owner

Contractors Waterproofing Systems

**CONTRACTORS WATERPROOFING SYSTEMS**

# **Attachment E**

## **Project Pro-Forma and Financials**



## Sources and Uses

Sources	Amount	Uses	Amount
Equity Financing	\$ 500,000.00	Acquisition	\$ 400,000.00
Permanent Financing	\$ 3,415,000.00	Construction of New Building	\$ 3,453,500.00
		Soft Costs	\$ 241,500.00
		New Equipment	\$ 50,000.00
Funding Gap	\$ 230,000.00	Developer Fee	NA
<b>Total Sources of Capital</b>	<b>\$ 4,145,000.00</b>	<b>Total Uses of Capital</b>	<b>\$ 4,145,000.00</b>



**General Trucking**  
**COMMITTED COST REPORT - JB DONALDSON COMPANY PURCHASE ORDER**

SPEC SEC	DESCRIPTION	ORIGINAL BUDGET		REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED		PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS 122,425	SUBCONTRACTOR
		CORE & SHELL	TENANT					CORE & SHELL	TENANT						
1400	QUALITY CONTROL	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0.00	
2060	SITE CLEARING AND GRUBBING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
2200	EARTHWORK	\$332,310	\$0	\$0	\$0	\$0	\$332,310	\$0	\$0	\$0	\$0	\$0	\$332,310	\$0.00	
2511	ASPHALT PAVING	\$352,220	\$0	\$0	\$0	\$0	\$352,220	\$0	\$0	\$0	\$0	\$0	\$352,220	\$0.00	
2513	CONCRETE PAVING	\$65,074	\$0	\$0	\$0	\$0	\$65,074	\$0	\$0	\$0	\$0	\$0	\$65,074	\$0.00	
2520	SITE WALLS & FENCING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
2600	SITE UTILITIES	\$341,663	\$0	\$0	\$0	\$0	\$341,663	\$0	\$0	\$0	\$0	\$0	\$341,663	\$0.00	
2900	LANDSCAPE & IRRIGATION	\$67,561	\$0	\$0	\$0	\$0	\$67,561	\$0	\$0	\$0	\$0	\$0	\$67,561	\$0.00	
3310	CONCRETE FOUNDATIONS	\$247,500	\$0	\$0	\$0	\$0	\$247,500	\$0	\$0	\$0	\$0	\$0	\$247,500	\$0.00	
3320	CONCRETE SLABS	\$145,971	\$0	\$0	\$0	\$0	\$145,971	\$0	\$0	\$0	\$0	\$0	\$145,971	\$0.00	
4100	MASONRY	\$153,000	\$0	\$0	\$0	\$0	\$153,000	\$0	\$0	\$0	\$0	\$0	\$153,000	\$0.00	
5100	STRUCTURAL STEEL	\$501,432	\$0	\$0	\$0	\$0	\$501,432	\$0	\$0	\$0	\$0	\$0	\$501,432	\$0.00	
6100	CARPENTRY & MILLWORK	\$83,950	\$0	\$0	\$0	\$0	\$83,950	\$0	\$0	\$0	\$0	\$0	\$83,950	\$0.00	
7500	ROOFING & SCREENING	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0.00	
8100	DOORS & HARDWARE	\$12,750	\$0	\$0	\$0	\$0	\$12,750	\$0	\$0	\$0	\$0	\$0	\$12,750	\$0.00	
8410	ALUM ENTRANCES & STOREFRONT	\$48,000	\$0	\$0	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0	\$48,000	\$0.00	
8900	WINDOWS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
9600	FLOORING	\$24,750	\$0	\$0	\$0	\$0	\$24,750	\$0	\$0	\$0	\$0	\$0	\$24,750	\$0.00	
9900	PAINTING & WALLCOVERINGS	\$17,500	\$0	\$0	\$0	\$0	\$17,500	\$0	\$0	\$0	\$0	\$0	\$17,500	\$0.00	
10160	TOILET PARTITIONS & ACCESSORIES	\$12,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000	\$0.00	
10350	Dock Doors and Equipment	\$33,800	\$0	\$0	\$0	\$0	\$33,800	\$0	\$0	\$0	\$0	\$0	\$33,800	\$0.00	
10400	INTERIOR & EXT SIGNAGE	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0.00	
14200	NA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
15200	PLUMBING	\$55,000	\$0	\$0	\$0	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000	\$0.00	
15300	FIRE PROTECTION	\$90,000	\$0	\$0	\$0	\$0	\$90,000	\$0	\$0	\$0	\$0	\$0	\$90,000	\$0.00	
15500	HVAC	\$88,000	\$0	\$0	\$0	\$0	\$88,000	\$0	\$0	\$0	\$0	\$0	\$88,000	\$0.00	
16000	ELECTRICAL	\$288,000	\$0	\$0	\$0	\$0	\$288,000	\$0	\$0	\$0	\$0	\$0	\$288,000	\$0.00	
SUBTOTAL COST #1		\$3,005,481	\$0	\$0	\$0	\$0	\$3,005,481	\$0	\$0	\$0	\$0	\$0	\$3,005,481	\$0.00	
	CONTINGENCY	\$118,868	\$0	\$0	\$0	\$0	\$118,868	\$0	\$0	\$0	\$0	\$0	\$118,868	\$0.00	
	GENERAL CONDITIONS & STAFFING	\$120,000	\$0	\$0	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$120,000	\$0.00	
	WINTER PROTECTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
SUBTOTAL COST #2		\$3,244,349	\$0	\$0	\$0	\$0	\$3,244,349	\$0	\$0	\$0	\$0	\$0	\$3,244,349	\$0.00	
	BUILDING PERMIT	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0.00	
	TAP FEES & ASSESSMENTS	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0.00	
	Gas and Electric Company Charges	\$6,500	\$0	\$0	\$0	\$0	\$6,500	\$0	\$0	\$0	\$0	\$0	\$6,500	\$0.00	
	SURVEY & LAYOUT	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0.00	
	CIVIL ENGINEERING	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0.00	
	ARCHITECT	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0.00	
	BROKER FEE	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0.00	
	Engineering Review / Inspections	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0.00	
	Pre-Development Fees	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0.00	
	BUILDERS RISK	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00	
SUBTOTAL COST #3		\$3,485,849	\$0	\$0	\$0	\$0	\$3,485,849	\$0	\$0	\$0	\$0	\$0	\$3,485,849	\$0.00	
	OH&P	\$209,151	\$0	\$0	\$0	\$0	\$209,151	\$0	\$0	\$0	\$0	\$0	\$209,151	\$0.00	
SUBTOTAL JBDC PURCHASE ORDER		\$3,695,000	\$0	\$0	\$0	\$0	\$3,695,000	\$0	\$0	\$0	\$0	\$0	\$3,695,000	\$0.00	



## JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
1400	QUALITY CONTROL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Allowance	
1	Site Testing Allowance	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0				
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000			
2060	SITE CLEARING AND GRUBBING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Remove Trees, Grind Stumps (NA)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			NA	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
2200	EARTHWORK	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Earthwork	\$138,280	\$0	\$0	\$0	\$0	\$138,280	\$0	\$0	\$0	\$0	\$0			Merlo	
2	Silt Fence	in abv	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Merlo	
3	Importation	in abv	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Merlo	
4	Exportation to Class II (Earthwork & Utilities)	\$152,790	\$0	\$0	\$0	\$0	\$152,790	\$0	\$0	\$0	\$0	\$0			Merlo	
4	Pond Barrier System	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0			PME Budget	
5	Exportation to Class II (Foundations)	\$31,240	\$0	\$0	\$0	\$0	\$31,240	\$0	\$0	\$0	\$0	\$0			K & W / Merlo	
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$332,310	\$0	\$0	\$0	\$0	\$332,310	\$0	\$0	\$0	\$0	\$0	\$332,310			
2511	ASPHALT PAVING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Asphalt Paving (HD and Light Paving Areas)	\$295,970	\$0	\$0	\$0	\$0	\$295,970	\$0	\$0	\$0	\$0	\$0			Nagle Paving	
2	10" Stone & Millings (including millings)	in abv	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			Nagle Paving	
3	Geo Grid	\$56,250	\$0	\$0	\$0	\$0	\$56,250	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$352,220	\$0	\$0	\$0	\$0	\$352,220	\$0	\$0	\$0	\$0	\$0	\$352,220			
2513	CONCRETE PAVING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Curb and Gutter	\$19,425	\$0	\$0	\$0	\$0	\$19,425	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
2	Truck Dolly Strip	\$28,800	\$0	\$0	\$0	\$0	\$28,800	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
3	8" Conc. Truckwells	\$8,064	\$0	\$0	\$0	\$0	\$8,064	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
4	Pads	\$1,300	\$0	\$0	\$0	\$0	\$1,300	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
5	4" concr sidewalks	\$7,485	\$0	\$0	\$0	\$0	\$7,485	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$65,074	\$0	\$0	\$0	\$0	\$65,074	\$0	\$0	\$0	\$0	\$0	\$65,074			

## JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
2520	SITE WALLS & FENCING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	No retaining walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			NA	
2	Fencing estimate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			NA	
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
2600	SITE UTILITIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Storm	\$82,240	\$0	\$0	\$0	\$0	\$82,240	\$0	\$0		\$0	\$0			Merlo	
1	Storm Lift Station / Pump	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0		\$0	\$0			Merlo	
2	Water	\$37,400	\$0	\$0	\$0	\$0	\$37,400	\$0	\$0	\$0	\$0	\$0			Merlo	
3	Sanitary	\$35,310	\$0	\$0	\$0	\$0	\$35,310	\$0	\$0	\$0	\$0	\$0			Merlo	
3	Utility Corridor & Slurry Walls	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0			Merlo	
3	Sanitary Lift Station / Pump	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0			JBD Allowance	
4	Int storm with interceptor	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0			JBD Allowance	
5	Down spout tie in	\$2,313	\$0	\$0	\$0	\$0	\$2,313	\$0	\$0	\$0	\$0	\$0			JBD Allowance	
6	Methane System PM Costs	\$94,400	\$0	\$0	\$0	\$0	\$94,400	\$0	\$0	\$0	\$0	\$0			PME Estimate	
7	Methane Venting Balance	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0			PME Estimate	
8	Methane Design	\$25,000	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0			JBD Allowance	
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$341,663	\$0	\$0	\$0	\$0	\$341,663	\$0	\$0	\$0	\$0	\$0	\$341,663			
2900	LANDSCAPE & IRRIGATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Base Landscape	\$67,561	\$0	\$0	\$0	\$0	\$67,561	\$0	\$0	\$0	\$0	\$0			Backer Landscaping	
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$67,561	\$0	\$0	\$0	\$0	\$67,561	\$0	\$0	\$0	\$0	\$0	\$67,561			
3310	CONCRETE FOUNDATIONS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Trenched foundations	\$40,000	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
1	Grade Beam due to Soil Conditions	\$48,000	\$0	\$0	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
2	Piers	in above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
3	Truckwell	in above	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
4	Auger Piles	\$159,500	\$0	\$0	\$0	\$0	\$159,500	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$247,500	\$0	\$0	\$0	\$0	\$247,500	\$0	\$0	\$0	\$0	\$0	\$247,500			
3320	CONCRETE SLABS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Building Slab 6"	\$122,504	\$0	\$0	\$0	\$0	\$122,504	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
2	Dock Levelers	\$2,100	\$0	\$0	\$0	\$0	\$2,100	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
3	Mezz Slab	\$8,867	\$0	\$0	\$0	\$0	\$8,867	\$0	\$0	\$0	\$0	\$0			K & W Concrete	
6	Bollards (18)	\$12,500	\$0	\$0	\$0	\$0	\$12,500	\$0	\$0	\$0	\$0	\$0			JBD Budget	
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$145,971	\$0	\$0	\$0	\$0	\$145,971	\$0	\$0	\$0	\$0	\$0	\$145,971			

## JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
4100	MASONRY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Ext walls, openings	\$95,000	\$0	\$0	\$0	\$0	\$95,000	\$0	\$0	\$0	\$0	\$0			Great Lakes Masonry	
3	office demising wall	\$36,000	\$0	\$0	\$0	\$0	\$36,000	\$0	\$0	\$0	\$0	\$0			Masonry Developers	
4	Clean and caulk	\$12,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5	Insulation	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$153,000	\$0	\$0	\$0	\$0	\$153,000	\$0	\$0	\$0	\$0	\$0	\$153,000			
5100	STRUCTURAL STEEL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	structural (PEMB)	\$221,432	\$0	\$0	\$0	\$0	\$221,432	\$0	\$0	\$0	\$0	\$0			NuCur	
2	erection	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	insulation	\$40,000	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4	Misc Metals	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
6	Canopy	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$501,432	\$0	\$0	\$0	\$0	\$501,432	\$0	\$0	\$0	\$0	\$0	\$501,432			
6100	CARPENTRY & MILLWORK	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Interior carpentry	\$52,000	\$0	\$0	\$0	\$0	\$52,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	Cabinet and sill allowance	\$12,500	\$0	\$0	\$0	\$0	\$12,500	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4	ACT Ceilings	\$19,450	\$0	\$0	\$0	\$0	\$19,450	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$83,950	\$0	\$0	\$0	\$0	\$83,950	\$0	\$0	\$0	\$0	\$0	\$83,950			
7500	ROOFING & SCREENING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Roofing (in PEPM)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	RTU screening	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000			
8100	DOORS & HARDWARE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Base door package	\$12,750	\$0	\$0	\$0	\$0	\$12,750	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	Assume 15 doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$12,750	\$0	\$0	\$0	\$0	\$12,750	\$0	\$0	\$0	\$0	\$0	\$12,750			

# JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
8410	ALUM ENTRANCES & STOREFRONT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Vestibule & Clearstory Windows	\$48,000	\$0	\$0	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0			CVP	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$48,000	\$0	\$0	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0	\$48,000			
8900	WINDOWS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Exterior glass, punched in 08410		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			CVP	
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
9600	FLOORING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Carpet	\$15,750	\$0	\$0	\$0	\$0	\$15,750	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	includes ceramic in restrooms	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3	kitchen, storage and IT rooms	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4	Ceramic/Granite in lobby	\$9,000	\$0	\$0	\$0	\$0	\$9,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$24,750	\$0	\$0	\$0	\$0	\$24,750	\$0	\$0	\$0	\$0	\$0	\$24,750			
9900	PAINTING & WALLCOVERINGS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
2	Shop area masonry walls ext	\$7,500	\$0	\$0	\$0	\$0	\$7,500	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3	Office areas ext and int	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$17,500	\$0	\$0	\$0	\$0	\$17,500	\$0	\$0	\$0	\$0	\$0	\$17,500			
10160	TOILET PARTITIONS & ACCESSORIES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	2 pair of main restrooms	\$12,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$12,000	\$0	\$0	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000			

## JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
10350	Dock Doors and Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	OHD	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	Levelers	\$22,200	\$0	\$0	\$0	\$0	\$22,200	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3	Shelters	\$6,600	\$0	\$0	\$0	\$0	\$6,600	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$33,800	\$0	\$0	\$0	\$0	\$33,800	\$0	\$0	\$0	\$0	\$0	\$33,800			
10400	INTERIOR & EXT SIGNAGE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Code signage allowance	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000			
14200	ELEVATOR	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	NA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			NA	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
15200	PLUMBING	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Base Plumbing	\$55,000	\$0	\$0	\$0	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$55,000	\$0	\$0	\$0	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000			
15300	FIRE PROTECTION	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	Fire Supession	\$70,000	\$0	\$0	\$0	\$0	\$70,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5	Fire Alarm / Methane System	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$90,000	\$0	\$0	\$0	\$0	\$90,000	\$0	\$0	\$0	\$0	\$0	\$90,000			

# JB DONALDSON COMPANY

4.22.14

SPEC SEC	DESCRIPTION	ORIGINAL CORE/SHELL	BUDGET TENANT	REALLOCATE BUDGET	PENDING CHANGES	APPROVED CHANGES	REVISED BUDGET	CONTRACTS AWARDED CORE / SHELL	TENANT	PENDING COMMITMENTS	REMAINING TO AWARD	PROJECTED TOTAL	UNDERRUN (OVERRUN)	SF COSTS	SUBCONTRACTOR	CONTROL NUMBER
15500	HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	HVAC offices	\$56,000	\$0	\$0	\$0	\$0	\$56,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	Shop	\$32,000	\$0	\$0	\$0	\$0	\$32,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
4		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$88,000	\$0	\$0	\$0	\$0	\$88,000	\$0	\$0	\$0	\$0	\$0	\$88,000			
16000	ELECTRICAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
1	office	\$70,000	\$0	\$0	\$0	\$0	\$70,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
2	shop	\$128,000	\$0	\$0	\$0	\$0	\$128,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
3	Light Poles	\$48,000	\$0	\$0	\$0	\$0	\$48,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
4	DTE Transformer & Fee	\$42,000	\$0	\$0	\$0	\$0	\$42,000	\$0	\$0	\$0	\$0	\$0			JBD Budget	
5		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
6		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
7		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
8		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
9		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
10		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
TOTAL BUDGET		\$288,000	\$0	\$0	\$0	\$0	\$288,000	\$0	\$0	\$0	\$0	\$0	\$288,000			

Small Business - North West  
29201 Telegraph Road  
Suite 611  
Southfield, MI 48034  
(248) 223-4413  
mhetherwick@comerica.com

**Matthew Hetherwick**  
Vice President

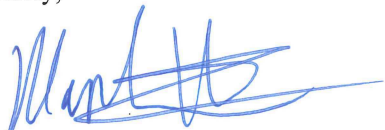
April 21, 2014

To whom it may concern,

This letter is to confirm that General Trucking, Inc. based out of Warren, MI has been a client of Comerica Bank since 2012 and is in good standing.

The owners of the company have brought it to our attention their intentions to build a new headquarters in Rochester Hills. We are currently reviewing the information in hopes of financing the project.

Sincerely,



Matthew Hetherwick  
Vice President  
Comerica Bank

## **Attachment E Cont.**

**Project Pro-Forma and Financials  
MEDC Template – NO Tax Increment Financing**



# REVENUE

Development Name: General Trucking - NO TIF  
 City/Township/Village: Rochester Hills  
 County: Oakland  
 Construction Type: Adaptive Reuse/New Construction  
 Property Type: Other

Fill in all blue shaded input cells

YES ▼

**\*CONFIDENTIAL\***

This worksheet is utilized as an input page only with information being utilized to populate information within the "Proforma" and "Cash Flow" worksheets.

## DEVELOPMENT INCOME ASSUMPTIONS

RESIDENTIAL RENTS								
Unit Type	# Units	Baths	Sq. Ft.	Mo. Rent	Gross Ann. Rent	Vacancy Loss	Net Ann. Rent	Total Sq. Ft.
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
TOTALS:					\$0	\$0	\$0	0

RESIDENTIAL ASSUMPTIONS	Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Rent Increase	2.0%	2.0%	2.0%
Vacancy Rate	Stabilized		
	5.0%		

COMMERCIAL/OFFICE RENTS					
Description	Sq. Ft.	Rent/Sq. Ft.	Gross Ann. Rent	Vacancy Loss	Net Ann. Rent
Facility and parking	40,000	\$5.50	\$220,000	\$0	\$220,000
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
TOTALS:	40,000		\$220,000	\$0	\$220,000

COMMERCIAL ASSUMPTIONS	Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Rent Increase	1.5%	1.5%	1.5%
Vacancy Rate	Stabilized		
	0.0%		

OTHER INCOME AND ASSUMPTIONS (including hotels)			Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Description	Monthly Income	Annual Income			
Parking	\$3,000	\$36,000	1.5%	1.5%	1.5%
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
TOTALS:	\$3,000	\$36,000			

# STABILIZED OPERATING STATEMENT

**Development Name:** General Trucking - NO TIF  
**City/Township/Village:** Rochester Hills  
**County:** Oakland  
**Construction Type:** Adaptive Reuse/New Construction  
**Property Type:** Other

Fill in all blue shaded input cells

YES ▼

**\*CONFIDENTIAL\***

This worksheet is utilized to proforma out the stabilized operations of the project utilizing the projected initial rental rates, the stabilized vacancy rates, and the anticipated full operating expenses of the project.

## DEVELOPMENT INCOME

		% Gross	% Eff.
Annual Gross Residential Rental Income	\$0	0.0%	0.0%
Annual Gross Commercial Rental Income	\$220,000	85.9%	85.9%
Annual Other Income	\$36,000	14.1%	14.1%
<b>Gross Income</b>	<b>\$256,000</b>	<b>100.0%</b>	<b>100.0%</b>
Vacancy Loss (Residential and Commercial)	\$0	0.0%	0.0%
<b>Net Rent Potential</b>	<b>\$256,000</b>	<b>100.0%</b>	<b>100.0%</b>

## DEVELOPMENT OPERATING EXPENSES

DEVELOPMENT OPERATING EXPENSES			% Gross	% Eff.	Inflation Factor
Administrative Expenses	+	\$5,000	2.0%	2.0%	3.0%
Management Fees			0.0%	0.0%	
Office Payroll			0.0%	0.0%	
Payroll Taxes			0.0%	0.0%	
Benefits/Worker's Comp.			0.0%	0.0%	
Advertising/Marketing			0.0%	0.0%	
Legal /Accounting		\$5,000	2.0%	2.0%	
General Office			0.0%	0.0%	
Other:			0.0%	0.0%	
Other:			0.0%	0.0%	
Utilities	+	\$0	0.0%	0.0%	3.0%
Electricity			0.0%	0.0%	
Fuel			0.0%	0.0%	
Water & Sewer	-		0.0%	0.0%	
Maintenance/Non-Capitalized Repairs	+	\$0	0.0%	0.0%	3.0%
Maintenance/Janitorial Payroll			0.0%	0.0%	
Janitorial Supplies			0.0%	0.0%	
Extermination			0.0%	0.0%	
Rubbish Removal			0.0%	0.0%	
Snow Removal			0.0%	0.0%	
Lawn/Tree Maintenance			0.0%	0.0%	
Parking Lot Repairs			0.0%	0.0%	
Painting/Decorations/Cleaning			0.0%	0.0%	
Heating & Air Repairs			0.0%	0.0%	
Plumbing/Electrical Repairs			0.0%	0.0%	
Elevator Maintenance			0.0%	0.0%	
Vehicle/Equipment Maintenance			0.0%	0.0%	
Security			0.0%	0.0%	
Other:			0.0%	0.0%	
Other:	-		0.0%	0.0%	
Real Estate Taxes		\$40,000	15.6%	15.6%	3.0%
Tax Abatement			0.0%	0.0%	
Property & Liability Insurance			0.0%	0.0%	3.0%
Reserve Requirements			0.0%	0.0%	3.0%
Other:			0.0%	0.0%	3.0%
Other:			0.0%	0.0%	3.0%
Total Expenses		\$45,000	17.6%	17.6%	
Cash Flow Available for Debt Service / NOI		\$211,000	82.4%	82.4%	
Amortizing Loans					
Loan 1 DS: Mortgage		\$218,601	85.4%	85.4%	
Loan 2 DS: xxx		\$0	0.0%	0.0%	
CRP Loan Debt Service		\$0	0.0%	0.0%	
Cash Flow Available for Distribution		(\$7,601)	-3.0%	-3.0%	
Debt Service Coverage Ratio		0.97			

Required  
DSCR

LOAN TERMS	Loan Amount	Term Yrs.	Amort. Yrs.	Interest Rate	Refi. Rate
Mortgage	\$3,415,000	10	25	4.00%	6.00%
xxx		5	20	5.50%	7.50%
	Override				
	\$0 (if requesting a grant input \$0)				
CRP Conventional Loan	\$0	5	20	1.00%	3.00%

## DEVELOPMENT BUDGET

Development Name: General Trucking - NO TIF  
City/Township/Village: Rochester Hills  
County: Oakland  
Construction Type: Adaptive Reuse/New Construction  
Property Type: Other

Fill in all blue shaded input cells

YES ▼

**\*CONFIDENTIAL\***

This worksheet is utilized to input the total Sources & Uses for the project from acquisition to construction completion. In addition, the maximum amount of MCRP incentive the project is eligible for is calculated.

TOTAL DEVELOPMENT COSTS		
Acquisition	Amount	% of TDC
Land	\$400,000	9.65%
Building(s)		0.00%
Demolition		0.00%
Other:		0.00%
<b>Subtotal Acquisition</b>	<b>\$400,000</b>	<b>9.65%</b>

Construction Costs			Ineligible		Eligible Basis	
			Amt.			
Site Work	+	\$1,158,828	27.96%	\$0	\$1,158,828	
Environmental Mitigation			0.00%	\$0	\$0	
Earth Work/Demolition		\$332,310	8.02%	\$0	\$332,310	
Roads/Walks		\$417,294	10.07%	\$0	\$417,294	
Site Utilities		\$341,663	8.24%	\$0	\$341,663	
Site Improvements			0.00%	\$0	\$0	
Landscaping		\$67,561	1.63%	\$0	\$67,561	
Irrigation			0.00%	\$0	\$0	
Other:			0.00%	\$0	\$0	
Structures	+	\$1,846,653	44.55%		\$1,846,653	
Building Concrete/Masonry		\$546,471	13.18%		\$546,471	
Carpentry		\$83,950	2.03%	\$0	\$83,950	
Roofing/Metal/Siding/Insulation/Caulking		\$521,432	12.58%	\$0	\$521,432	
Doors/Windows/Glass		\$12,750	0.31%	\$0	\$12,750	
Drywall/Acoustical			0.00%	\$0	\$0	
Flooring		\$24,750	0.60%	\$0	\$24,750	
Cabinets/Countertops/Applicances			0.00%	\$0	\$0	
Painting/Decorating/Furnishings		\$34,500	0.83%	\$0	\$34,500	
Plumbing/Electrical/Fire Protection		\$433,000	10.45%	\$0	\$433,000	
HVAC		\$88,000	2.12%	\$0	\$88,000	
Accessory Buildings/Garages			0.00%	\$0	\$0	
Elevators/Special Equipment		\$33,800	0.82%	\$0	\$33,800	
Tenant Upgrades			0.00%	\$0	\$0	
Other: Quality Control		\$20,000	0.48%	\$0	\$20,000	
Other: Alum. Entrances/Storefront	-	\$48,000	1.16%	\$0	\$48,000	
General Requirements		\$120,000	2.90%	\$0	\$120,000	
Builder's Overhead			0.00%	\$0	\$0	
Builder's Profit			0.00%	\$0	\$0	
Site Security			0.00%	\$0	\$0	
Permits/Tap Fees/Bond/Cost Certification		\$50,000	1.21%	\$0	\$50,000	
Construction Contingency		\$118,868	2.87%	\$0	\$118,868	
Other: New Equipment		\$50,000	1.21%	\$0	\$50,000	
Subtotal Construction Costs		\$3,344,349	80.68%			
Professional Fees						
Architectural & Engineering		\$70,000	1.69%	\$0	\$70,000	
Survey		\$15,000	0.36%	\$0	\$15,000	
Legal/Accounting			0.00%	\$0	\$0	
Environmental Studies/Soiling Testing			0.00%	\$0	\$0	
Market Study			0.00%	\$0	\$0	
Appraisal			0.00%	\$0	\$0	
Cost Certification			0.00%	\$0	\$0	
Other: Gas/Electric Co. Fees		\$6,500	0.16%	\$0	\$6,500	
Subtotal Professional Fees		\$91,500	2.21%			
				Total Eligible Basis	Max. CRP Investment	
				\$3,435,849	\$858,962	

Total Eligible Basis \$3,435,849  
Max. CRP Investment \$858,962

TOTAL DEVELOPMENT SOURCES		
Senior Debt	Amount	% of TDC
Mortgage	\$3,415,000	82.39%
xxx	\$0	0.00%
xxx	\$0	0.00%
CRP Conventional Loan	\$0	0.00%
<b>Subordinate Debt/Grants</b>		
CRP Subordinate Loan/Grant		0.00%
Other:		0.00%
Other:		0.00%
Other:		0.00%
<b>Deferred Fees/Cash Equity</b>		
Deferred Developer Fees		0.00%
Other Deferred Related Party Fees		0.00%
Deferred Consulting Fees		0.00%
Cash Equity Owner	\$500,000	12.06%
Land/Building Contribution Owner		0.00%
TIF Contributions		0.00%
Other:		0.00%
Other:		0.00%
<b>TOTAL DEVELOPMENT SOURCES</b>	<b>\$3,915,000</b>	<b>94.45%</b>

Construction Financing		
Construction Loan:	xxx	\$0 0.00%
Interest Rate:	0.00%	

Sources & Uses		
Total Development Costs	\$4,145,000	
Total Development Sources	\$3,915,000	
<b>Surplus/(Gap)</b>	<b>(\$230,000)</b>	

Other Calculations			
Rental S.F.	40,000	Construct Cost /S.F.	Develop Cost/S.F.
Other S.F.		\$83.61	\$103.63
Total S.F.	40,000		
Cash Equity	\$500,000		12.06%
Land/Building Contribution	\$0		0.00%
<b>Owner Contribution</b>	<b>\$500,000</b>		<b>12.06%</b>
Cash IRR		2.1%	
Avg. Annual Cash on Cash Return		5.0%	
Owner Equity IRR		2.1%	
Avg. Annual Return on Owner Equity		5.0%	





# DEVELOPER INVESTMENT RETURNS

Fill in all blue shaded input cells

Development Name: General Trucking - NO TIF

City/Township/Village: Rochester Hills

County: Oakland

Construction Type: Adaptive Reuse/New Construction

Property Type: Other

YES



**\*CONFIDENTIAL\***

This worksheet utilized to calculate a rough estimate of anticipated developer return. In addition, a proposed sales date and other owner cash investments in the project following construction completion can be entered on this worksheet.

Property Sales Assumptions	
Capitalization Rate	9.00%
Year of Sale	25
Sale Expenses (% of sale price)	5.0%

## Developer Return Analysis

Year	Cash Investment	Net Developer Fees Rec'd	Cash flow	Sale Proceeds	Net Cash Investment	Land/Building Investment	Net Developer Investment	Cash on Cash Return	Return on Owner Equity
0	\$500,000	\$0	\$0	\$0	(\$500,000)	\$0	(\$500,000)		
1		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
2		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
3		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
4		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
5		\$0	\$2,460	\$0	\$2,460	\$0	\$2,460	0.5%	0.5%
6		\$0	\$5,017	\$0	\$5,017	\$0	\$5,017	1.0%	1.0%
7		\$0	\$7,588	\$0	\$7,588	\$0	\$7,588	1.5%	1.5%
8		\$0	\$10,175	\$0	\$10,175	\$0	\$10,175	2.0%	2.0%
9		\$0	\$12,777	\$0	\$12,777	\$0	\$12,777	2.6%	2.6%
10		\$0	\$15,392	\$0	\$15,392	\$0	\$15,392	3.1%	3.1%
11		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
12		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
13		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
14		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
15		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
16		\$0	\$0	\$0	\$0	\$0	\$0	0.0%	0.0%
17		\$0	\$2,399	\$0	\$2,399	\$0	\$2,399	0.5%	0.5%
18		\$0	\$5,105	\$0	\$5,105	\$0	\$5,105	1.0%	1.0%
19		\$0	\$7,820	\$0	\$7,820	\$0	\$7,820	1.6%	1.6%
20		\$0	\$10,542	\$0	\$10,542	\$0	\$10,542	2.1%	2.1%
	\$500,000	\$0	\$79,274	\$0	\$79,274	\$0	\$79,274	0.63%	0.63%

IRR = -12.54%

IRR = -12.54%

## Calculation of Sales Proceeds

Net Operating Income (year before sale)	#REF!
Capitalization Rate	9.00%
Real Estate Value	#REF!
Less: Sale Expenses	#REF!
<b>Net Sale Proceeds</b>	<b>#REF!</b>
Less: Outstanding Debt	
Mortgage	#REF!
xxx	#REF!
xxx	#REF!
CRP Conventional Loan	#REF!
Other Debt Obligations	
Proceeds Available for Distributions	#REF!

## **Attachment E Cont.**

**Project Pro-Forma and Financials  
MEDC Template – With Tax Increment Financing**

REVENUE

Development Name: General Trucking - With TIF

City/Township/Village: Rochester Hills

County: Oakland

Construction Type: Adaptive Reuse/New Construction

Property Type: Other

Fill in all blue shaded input cells

YES

▼

**\*CONFIDENTIAL\***

This worksheet is utilized as an input page only with information being utilized to populate information within the "Proforma" and "Cash Flow" worksheets.

DEVELOPMENT INCOME ASSUMPTIONS

RESIDENTIAL RENTS								
Unit Type	# Units	Baths	Sq. Ft.	Mo. Rent	Gross Ann. Rent	Vacancy Loss	Net Ann. Rent	Total Sq. Ft
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
					\$0	\$0	\$0	0
TOTALS:					\$0	\$0	\$0	0

RESIDENTIAL ASSUMPTIONS	Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Rent Increase	2.0%	2.0%	2.0%
	Stabilized		
Vacany Rate	5.0%		

COMMERCIAL/OFFICE RENTS					
Description	Sq. Ft.	Rent/Sq. Ft.	Gross Ann. Rent	Vacancy Loss	Net Ann. Rent
Facility and parking	40,000	\$5.50	\$220,000	\$0	\$220,000
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
			\$0	\$0	\$0
TOTALS:	40,000		\$220,000	\$0	\$220,000

COMMERCIAL ASSUMPTIONS	Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Rent Increase	1.5%	1.5%	1.5%
	Stabilized		
Vacany Rate	0.0%		

OTHER INCOME AND ASSUMPTIONS (Including hotels)			Year 2 Inflation Factor	Year 3 Inflation Factor	Future Inflation Factor
Desrciption	Monthly Income	Annual Income			
Parking	\$3,000	\$36,000	1.5%	1.5%	1.5%
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
		\$0			
TOTALS:	\$3,000	\$36,000			



# STABILIZED OPERATING STATEMENT

Development Name: General Trucking - With TIF  
City/Township/Village: Rochester Hills  
County: Oakland  
Construction Type: Adaptive Reuse/New Construction  
Property Type: Other

Fill in all blue shaded input cells

YES

**\*CONFIDENTIAL\***

This worksheet is utilized to proforma out the stabilized operations of the project utilizing the projected initial rental rates, the stabilized vacancy rates, and the anticipated full operating expenses of the project.

## DEVELOPMENT INCOME

		% Gross	% Eff.
Annual Gross Residential Rental Income	\$0	0.0%	0.0%
Annual Gross Commercial Rental Income	\$220,000	85.9%	85.9%
Annual Other Income	\$36,000	14.1%	14.1%
<b>Gross Income</b>	<b>\$256,000</b>	<b>100.0%</b>	<b>100.0%</b>
Vacancy Loss (Residential and Commercial)	\$0	0.0%	0.0%
<b>Net Rent Potential</b>	<b>\$256,000</b>	<b>100.0%</b>	<b>100.0%</b>

## DEVELOPMENT OPERATING EXPENSES

DEVELOPMENT OPERATING EXPENSES		% Gross	% Eff.	Inflation Factor	
Administrative Expenses	+	\$5,000	2.0%	2.0%	3.0%
Management Fees			0.0%	0.0%	
Office Payroll			0.0%	0.0%	
Payroll Taxes			0.0%	0.0%	
Benefits/Worker's Comp.			0.0%	0.0%	
Advertising/Marketing			0.0%	0.0%	
Legal /Accounting		\$5,000	2.0%	2.0%	
General Office			0.0%	0.0%	
Other:			0.0%	0.0%	
Other:			0.0%	0.0%	
Utilities	+	\$0	0.0%	0.0%	3.0%
Electricity			0.0%	0.0%	
Fuel			0.0%	0.0%	
Water & Sewer	-		0.0%	0.0%	
Maintenance/Non-Capitalized Repairs	+	\$0	0.0%	0.0%	3.0%
Maintenance/Janitorial Payroll			0.0%	0.0%	
Janitorial Supplies			0.0%	0.0%	
Extermination			0.0%	0.0%	
Rubbish Removal			0.0%	0.0%	
Snow Removal			0.0%	0.0%	
Lawn/Tree Maintenance			0.0%	0.0%	
Parking Lot Repairs			0.0%	0.0%	
Painting/Decorations/Cleaning			0.0%	0.0%	
Heating & Air Repairs			0.0%	0.0%	
Plumbing/Electrical Repairs			0.0%	0.0%	
Elevator Maintenance			0.0%	0.0%	
Vehicle/Equipment Maintenance			0.0%	0.0%	
Security			0.0%	0.0%	
Other:			0.0%	0.0%	
Other:	-		0.0%	0.0%	
Real Estate Taxes		\$40,000	15.6%	15.6%	3.0%
Tax Abatement		(\$30,000)	-11.7%	-11.7%	
Property & Liability Insurance			0.0%	0.0%	3.0%
Reserve Requirements			0.0%	0.0%	3.0%
Other:			0.0%	0.0%	3.0%
Other:			0.0%	0.0%	3.0%
Total Expenses		\$15,000	5.9%	5.9%	
Cash Flow Available for Debt Service / NOI		\$241,000	94.1%	94.1%	
Amortizing Loans					
Loan 1 DS: Mortgage		\$218,601	85.4%	85.4%	
Loan 2 DS: xxx		\$0	0.0%	0.0%	
CRP Loan Debt Service		\$0	0.0%	0.0%	
Cash Flow Available for Distribution		\$22,399	8.7%	8.7%	
Debt Service Coverage Ratio		1.10			

Required  
DSCR

LOAN TERMS	Loan Amount	Term Yrs.	Amort. Yrs.	Interest Rate	Refi. Rate
Mortgage	\$3,415,000	10	25	4.00%	6.00%
xxx		5	20	5.50%	7.50%
	Override				
	\$0 (if requesting a grant input \$0)				
CRP Conventional Loan	\$0	5	20	1.00%	3.00%

## DEVELOPMENT BUDGET

Development Name: General Trucking - With TIF  
City/Township/Village: Rochester Hills  
County: Oakland  
Construction Type: Adaptive Reuse/New Construction  
Property Type: Other

Fill in all blue shaded input cells

YES ▼

**\*CONFIDENTIAL\***

This worksheet is utilized to input the total Sources & Uses for the project from acquisition to construction completion. In addition, the maximum amount of MCRP Incentive the project is eligible for is calculated.

TOTAL DEVELOPMENT COSTS		
Acquisition	Amount	% of TDC
Land	\$400,000	9.65%
Building(s)		0.00%
Demolition		0.00%
Other:		0.00%
Subtotal Acquisition	\$400,000	9.65%

Construction Costs				Ineligible		Eligible Basis	
				Amt.			
Site Work	+	\$1,158,828	27.96%	\$0		\$1,158,828	
Environmental Mitigation			0.00%	\$0		\$0	
Earth Work/Demolition		\$332,310	8.02%	\$0		\$332,310	
Roads/Walks		\$417,294	10.07%	\$0		\$417,294	
Site Utilities		\$341,663	8.24%	\$0		\$341,663	
Site Improvements			0.00%	\$0		\$0	
Landscaping		\$67,561	1.63%	\$0		\$67,561	
Irrigation			0.00%	\$0		\$0	
Other:			0.00%	\$0		\$0	
Structures	+	\$1,846,653	44.55%	\$0		\$1,846,653	
Building Concrete/Masonry		\$546,471	13.18%	\$0		\$546,471	
Carpentry		\$83,950	2.03%	\$0		\$83,950	
Roofing/Metal/Siding/Insulation/Caulking		\$521,432	12.58%	\$0		\$521,432	
Doors/Windows/Glass		\$12,750	0.31%	\$0		\$12,750	
Drywall/Acoustical			0.00%	\$0		\$0	
Flooring		\$24,750	0.60%	\$0		\$24,750	
Cabinets/Countertops/Applicances			0.00%	\$0		\$0	
Painting/Decorating/Furnishings		\$34,500	0.83%	\$0		\$34,500	
Plumbing/Electrical/Fire Protection		\$433,000	10.45%	\$0		\$433,000	
HVAC		\$88,000	2.12%	\$0		\$88,000	
Accessory Buildings/Garages			0.00%	\$0		\$0	
Elevators/Special Equipment		\$33,800	0.82%	\$0		\$33,800	
Tenant Upgrades			0.00%	\$0		\$0	
Other: Quality Control		\$20,000	0.48%	\$0		\$20,000	
Other: Alum. Entrances/Storefront	-	\$48,000	1.16%	\$0		\$48,000	
General Requirements		\$120,000	2.90%	\$0		\$120,000	
Builder's Overhead			0.00%	\$0		\$0	
Builder's Profit			0.00%	\$0		\$0	
Site Security			0.00%	\$0		\$0	
Permits/Tap Fees/Bond/Cost Certification		\$50,000	1.21%	\$0		\$50,000	
Construction Contingency		\$118,868	2.87%	\$0		\$118,868	
Other: New Equipment		\$50,000	1.21%	\$0		\$50,000	
Subtotal Construction Costs		\$3,344,349	80.68%				
Professional Fees							
Architectural & Engineering		\$70,000	1.69%	\$0		\$70,000	
Survey		\$15,000	0.36%	\$0		\$15,000	
Legal/Accounting			0.00%	\$0		\$0	
Environmental Studies/Soiling Testing			0.00%	\$0		\$0	
Market Study			0.00%	\$0		\$0	
Appraisal			0.00%	\$0		\$0	
Cost Certification			0.00%	\$0		\$0	
Other: Gas/Electric Co. Fees		\$6,500	0.16%	\$0		\$6,500	
Subtotal Professional Fees		\$91,500	2.21%				

Total Eligible Basis \$3,435,849  
Max. CRP Investment \$858,962

TOTAL DEVELOPMENT SOURCES		
Senior Debt	Amount	% of TDC
Mortgage	\$3,415,000	82.39%
xxx	\$0	0.00%
xxx	\$0	0.00%
CRP Conventional Loan	\$0	0.00%
Subordinate Debt/Grants		
CRP Subordinate Loan/Grant		0.00%
Other:		0.00%
Other:		0.00%
Other:		0.00%
Deferred Fees/Cash Equity		
Deferred Developer Fees		0.00%
Other Deferred Related Party Fees		0.00%
Deferred Consulting Fees		0.00%
Cash Equity Owner	\$500,000	12.06%
Land/Building Contribution Owner		0.00%
TIF Contributions		0.00%
Other:		0.00%
Other:		0.00%
TOTAL DEVELOPMENT SOURCES	\$3,915,000	94.45%

Construction Financing		
Construction Loan:	xxx	\$0 0.00%
Interest Rate:	0.00%	

Sources & Uses		
Total Development Costs	\$4,145,000	
Total Development Sources	\$3,915,000	
Surplus/(Gap)	(\$230,000)	

Other Calculations			
Rental S.F.	40,000	Construct Cost /S.F.	Develop Cost/S.F.
Other S.F.		\$83.61	\$103.63
Total S.F.	40,000		
Cash Equity		\$500,000	12.06%
Land/Building Contribution		\$0	0.00%
Owner Contribution		\$500,000	12.06%
Cash IRR		2.1%	
Avg. Annual Cash on Cash Return		5.0%	
Owner Equity IRR		2.1%	
Avg. Annual Return on Owner Equity		5.0%	





# DEVELOPER INVESTMENT RETURNS

Fill in all blue shaded input cells

Development Name: General Trucking - With TIF  
City/Township/Village: Rochester Hills  
County: Oakland  
Construction Type: Adaptive Reuse/New Construction  
Property Type: Other

YES 

**\*CONFIDENTIAL\***

This worksheet utilized to calculate a rough estimate of anticipated developer return. In addition, a proposed sales date and other owner cash investments in the project following construction completion can be entered on this worksheet.

Property Sales Assumptions	
Capitalization Rate	9.00%
Year of Sale	25
Sale Expenses (% of sale price)	5.0%

## Developer Return Analysis

Year	Cash Investment	Net Developer Fees Rec'd	Cash flow	Sale Proceeds	Net Cash Investment	Land/Building Investment	Net Developer Investment	Cash on Cash Return	Return on Owner Equity
0	\$500,000	\$0	\$0	\$0	(\$500,000)	\$0	(\$500,000)		
1		\$0	\$22,399	\$0	\$22,399	\$0	\$22,399	4.5%	4.5%
2		\$0	\$24,889	\$0	\$24,889	\$0	\$24,889	5.0%	5.0%
3		\$0	\$27,396	\$0	\$27,396	\$0	\$27,396	5.5%	5.5%
4		\$0	\$29,920	\$0	\$29,920	\$0	\$29,920	6.0%	6.0%
5		\$0	\$32,460	\$0	\$32,460	\$0	\$32,460	6.5%	6.5%
6		\$0	\$35,017	\$0	\$35,017	\$0	\$35,017	7.0%	7.0%
7		\$0	\$37,588	\$0	\$37,588	\$0	\$37,588	7.5%	7.5%
8		\$0	\$40,175	\$0	\$40,175	\$0	\$40,175	8.0%	8.0%
9		\$0	\$42,777	\$0	\$42,777	\$0	\$42,777	8.6%	8.6%
10		\$0	\$45,392	\$0	\$45,392	\$0	\$45,392	9.1%	9.1%
11		\$0	\$16,372	\$0	\$16,372	\$0	\$16,372	3.3%	3.3%
12		\$0	\$19,015	\$0	\$19,015	\$0	\$19,015	3.8%	3.8%
13		\$0	\$21,669	\$0	\$21,669	\$0	\$21,669	4.3%	4.3%
14		\$0	\$24,336	\$0	\$24,336	\$0	\$24,336	4.9%	4.9%
15		\$0	\$27,013	\$0	\$27,013	\$0	\$27,013	5.4%	5.4%
16		\$0	\$29,701	\$0	\$29,701	\$0	\$29,701	5.9%	5.9%
17		\$0	\$32,399	\$0	\$32,399	\$0	\$32,399	6.5%	6.5%
18		\$0	\$35,105	\$0	\$35,105	\$0	\$35,105	7.0%	7.0%
19		\$0	\$37,820	\$0	\$37,820	\$0	\$37,820	7.6%	7.6%
20		\$0	\$40,542	\$0	\$40,542	\$0	\$40,542	8.1%	8.1%
	\$500,000	\$0	\$621,985	\$0	\$621,985	\$0	\$621,985	4.98%	4.98%

IRR = 2.12%

IRR = 2.12%

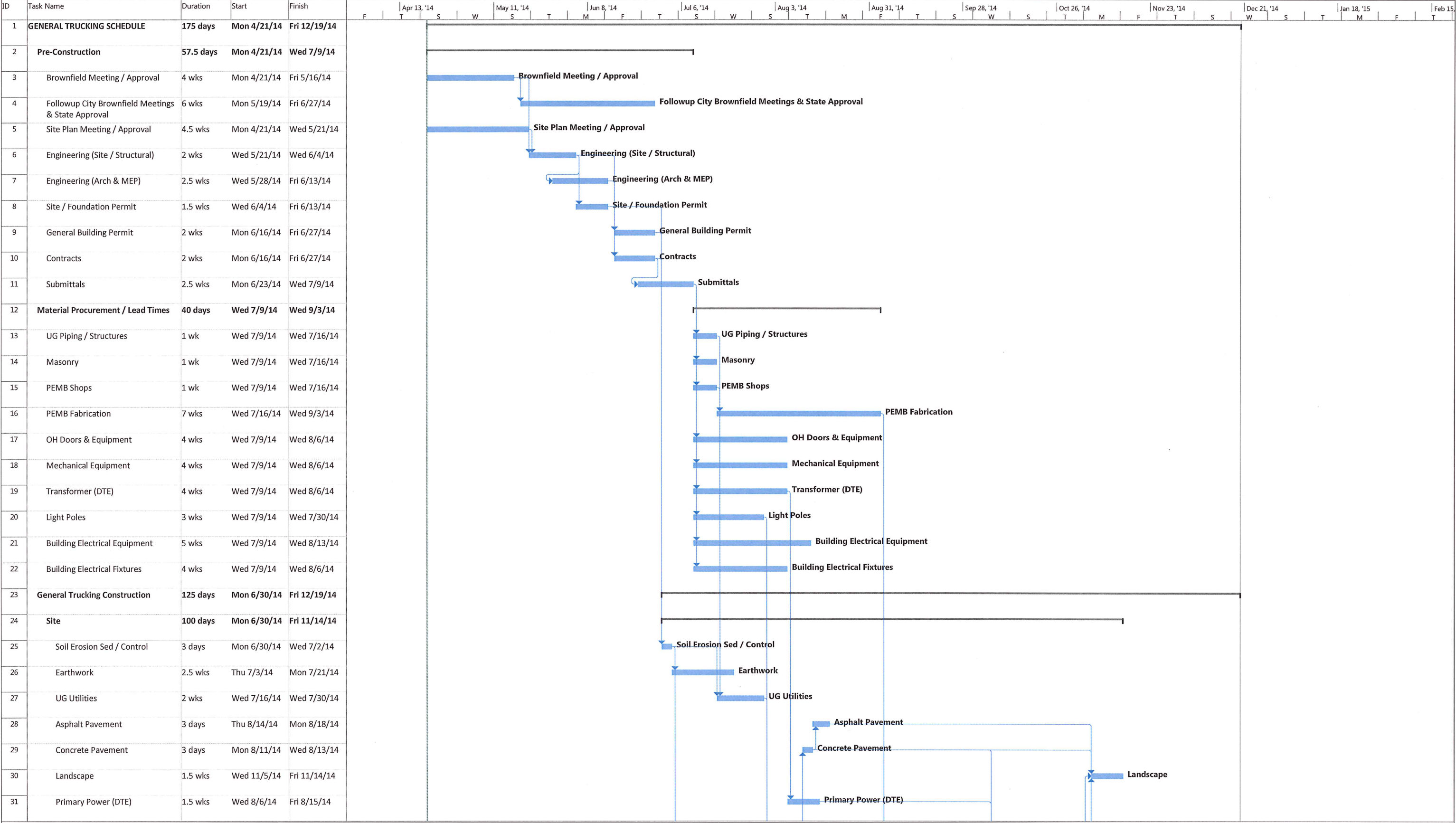
## Calculation of Sales Proceeds

Net Operating Income (year before sale)	#REF!
Capitalization Rate	9.00%
Real Estate Value	#REF!
Less: Sale Expenses	#REF!
<b>Net Sale Proceeds</b>	<b>#REF!</b>
Less: Outstanding Debt	
Mortgage	#REF!
xxx	#REF!
xxx	#REF!
CRP Conventional Loan	#REF!
Other Debt Obligations	
Proceeds Available for Distributions	#REF!

# **Attachment F**

## **Preliminary Project Schedule**

GENERAL TRUCKING PRELIMINARY SCHEDULE



Project: General Trucking JBD  
Date: Mon 4/21/14

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress



GENERAL TRUCKING PRELIMINARY SCHEDULE

