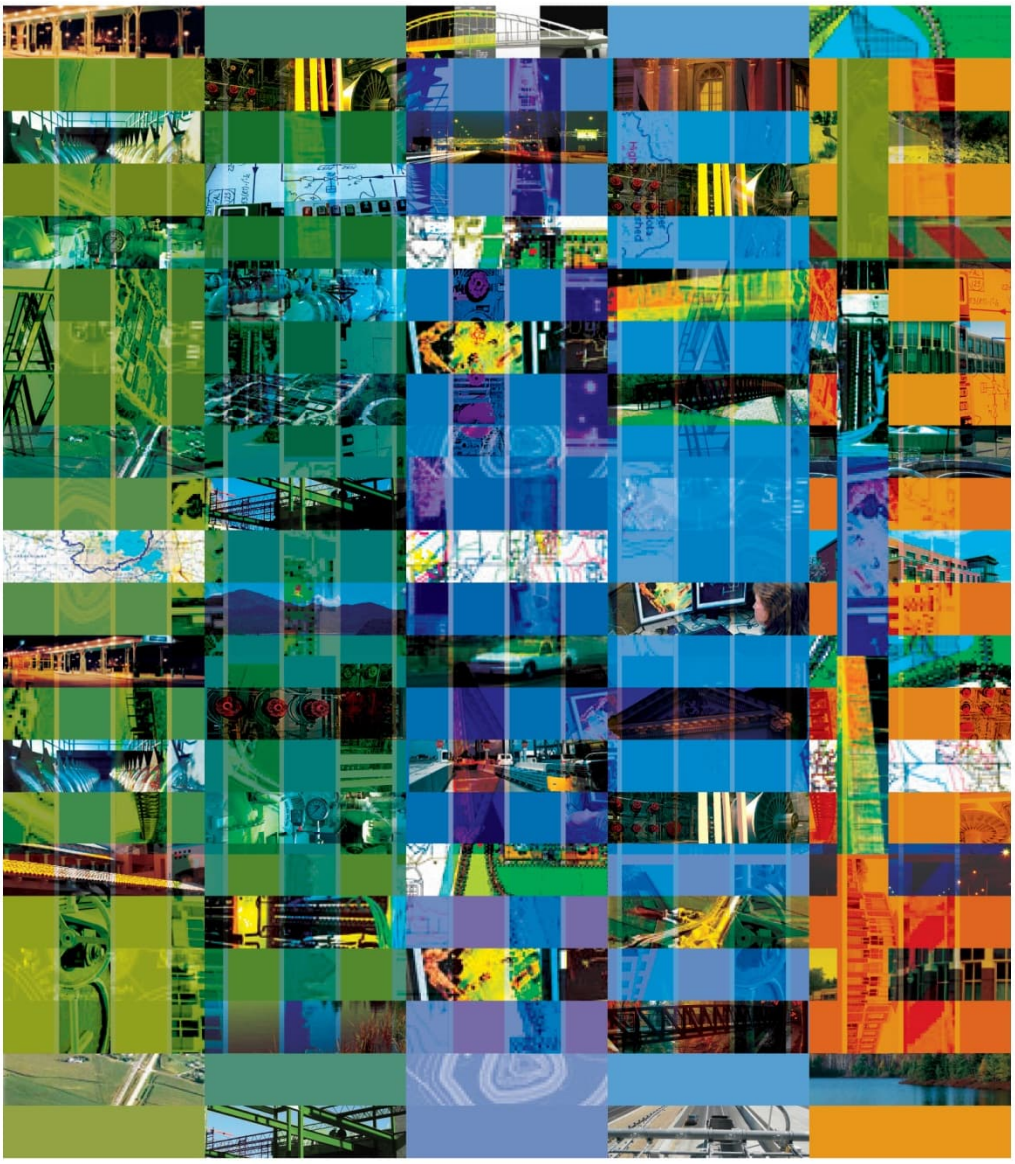
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Department of Public Works Site Evaluation Summary Report



Report

Village of

Shorewood, WI

August 2025

STRAND ASSOCIATES®

Report for

Village of Shorewood, Wisconsin

Department of Public Works Site Evaluation Summary Report



Prepared by:

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August 2025

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SECTION 1
INTRODUCTION

1.01 PURPOSE AND SCOPE

The Village of Shorewood, Wisconsin (Village) is evaluating the existing Department of Public Works (DPW) site for redevelopment as a DPW site or potentially relocating its operations to a different location and selling the current property for development. The Village DPW site is a 3.3-acre site located at 3801 North Morris Boulevard, which includes five buildings and a waste transfer station. Refer to the *Village of Shorewood, Department of Public Works Facility Needs & Site Selection Study Final Draft* prepared by Barrientos Design & Consulting on May 1, 2023, included as Appendix A, for additional information on the existing DPW site.

The scope of this report is to evaluate the following items at the existing DPW site:

1. Review alternatives for replacement of the existing retaining wall on the east side of the site including corresponding with We Energies for alternatives to relocate the overhead utilities located adjacent to the retaining wall.

2. Review of the Wisconsin Remediation and Redevelopment Database files related to contamination at the DPW site.

3. Summarize current and future stormwater management criteria for site development.

4. Summarize existing sanitary sewer and water services for the site.

5. Prepare Opinions of Probable Costs (OPC) for the retaining wall alternatives, contaminated soils, and stormwater requirements as well as demolition of buildings and structures at the site. OPCs included in the report were developed using first quarter, 2025 cost information and do not include escalation or inflation considerations. OPC information is being provided as a general guidance only and was developed based on experience and cost information provided by contractors for items indicated in the report.

1.02 RELATED REPORTS

1. *Village of Shorewood, Department of Public Works Facility Needs & Site Selection Study Final Draft*, Barrientos Design & Consulting, May 1, 2023.

2. *Village of Shorewood, Department of Public Works Warehouse Building Condition Assessment*, Strand Associates, Inc.® (Strand), February 2025.

1.03 ABBREVIATIONS AND DEFINITIONS

ALTA	American Land Title Association National Society of Professional Surveyors
BMP	Best Management Practice
BRRTS	Bureau for Remediation and Redevelopment Tracking System
CY	cubic yards
DPW	Department of Public Works
EA	each
GIS	geographic information system
gpm	gallons per minute
LS	lump sum
MMSD	Milwaukee Metropolitan Sewerage District
OPC	Opinion of Probable Costs
psi	pounds per square inch
SF	square feet
Strand	Strand Associates, Inc.®
SWMP	Stormwater Management Plan
SY	square yards
TSS	total suspended solids
Village	Village of Shorewood, Wisconsin
WDNR	Wisconsin Department of Natural Resources

SECTION 2
GENERAL SITE CONDITIONS

2.01 GENERAL SITE CONDITIONS

The existing DPW site is located at 3801 North Morris Boulevard. The following is a general description of the property. Additional detailed information is shown on the Plat of Survey with Topography included in Appendix B and the American Land Title Association National Society of Professional Surveyors (ALTA) Land Title Survey included in Appendix C.

An Overall Site Plan is shown on Figure 2.01-1. The site contains four property parcels totaling approximately 3.3 acres in size. Residential properties are located along the east and south property lines. A We Energies substation is located to the north. The Oak Leaf Recreational Trail is adjacent to the west property line, which parallels the Milwaukee River beyond. There are five primary-use buildings located on the site that serve various DPW needs as well as a waste transfer station. A detailed description of the existing buildings and uses is included in the previously completed *Village of Shorewood Department of Public Works Facility Needs & Site Selection Study Final Draft* dated March 1, 2023, included in Appendix A. The parking lot and areas surrounding the buildings are generally covered in asphalt and concrete pavement, as shown in Figure 2.01-2. Contaminated soils are known to exist at the site. Additional information on contaminated soils are included in Section 4.



Figure 2.01-2 Concrete and Asphalt Site Pavement



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OVERALL SITE

DEPARTMENT OF PUBLIC WORKS SITE EVALUATION SUMMARY REPORT
VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

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FIGURE 2.01-1
3646.048

An existing retaining wall extends along most of the east side of the property. The retaining wall separates the higher grades along the adjacent residential properties from the lower grades located within the DPW property. The wall is constructed of various materials with varying heights. A more detailed description of the retaining wall and photographs are included in Section 3. We Energies utility lines and associated poles are located east of the retaining wall and are located on the adjacent properties. The associated overhead electric wires span over the northeast corner of the property.

There are 21 encroachments identified on the ALTA Land Title Survey. The encroachments identify locations where existing improvements may cross property lines. The following is a general summary of the encroachments identified on the ALTA Land Title Survey.

1. Encroachments along the north property line include a fence that extends approximately 2.9 to 3.8 feet over the property line.

2. Encroachments along the east property line include portions of fences and retaining walls that extend approximately 0.2 to 3.7 feet over the property line.

3. Overhead electrical wires extend over the northeast corner of the property.

4. The Upper Garage Building located along the east side of the property extends approximately 0.4 to 0.5 foot over the property line.

5. Encroachments along the south property line include a fence located approximately 0.7 foot over the property line and overhead electrical wires extending approximately 2.5 feet over the property line.

6. Encroachments along the west property line include fences, asphalt, concrete, and a retaining wall adjacent to the existing Warehouse Building that extend approximately 13.3 feet west of the property line.

7. At the northwest corner of the property, a fence extends approximately 2.4 feet west of the property line.

There are four easements identified on the ALTA Land Title Survey that affect the property by location. The following is a general summary of the easements identified on the ALTA Land Title Survey with additional title information available in Appendix D and shown in Figure 2.01-1.

1. A railroad easement exists along the northern perimeter of the property.

2. There is a 15-foot-wide ingress/egress easement at the north end of the property at the access location to the adjacent We Energies substation. This easement may no longer be applicable. The easement description indicates the easement was for access to a residence (currently referred to as the Annex Building) that has been purchased by the Village. It is recommended that the applicability of the easement be reviewed by the Village and potentially terminated if it is no longer applicable.

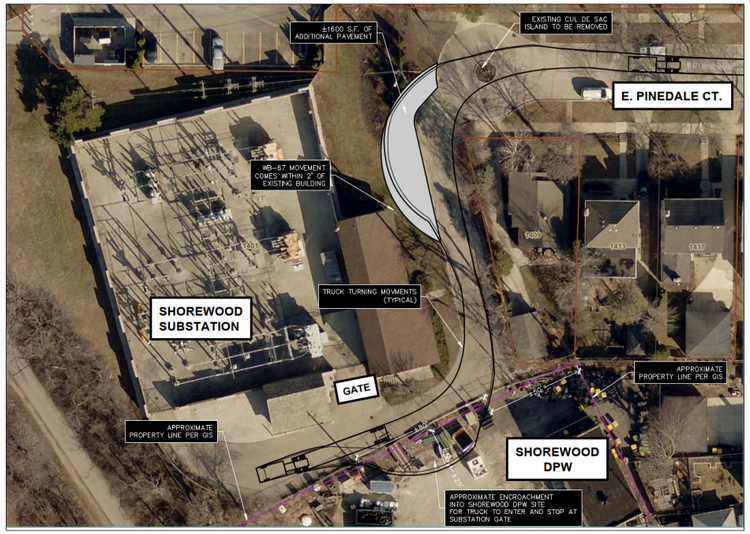
3. An easement with We Energies exists that grants access through the site to the substation property to the north.

4. There is a conservation easement for two 5,000-gallon tanks to store rainwater from roof runoff on the north and south sides of the Upper Garage Building. The conservation easement is a 10-year easement that expires January 31, 2026.

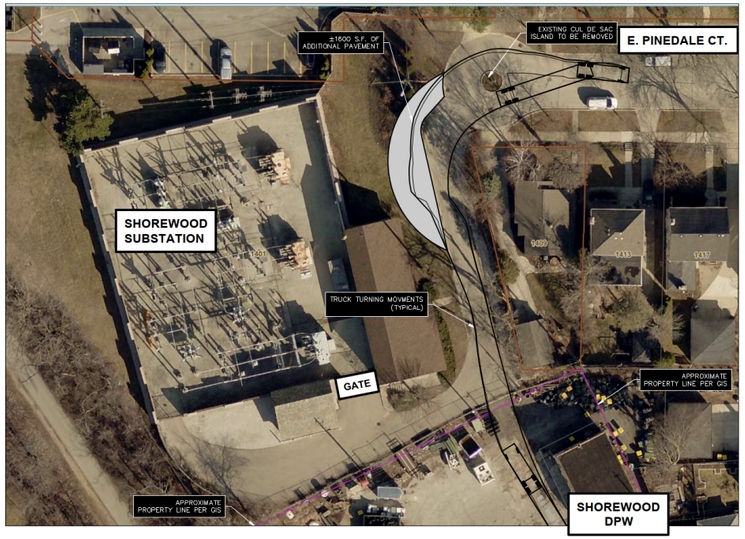
Regarding easement No. 3, We Energies was contacted to discuss terminating its easement through the DPW site. We Energies uses the easement to access the substation to the north of the DPW site. We Energies has an alternative access point to the substation from East Pinedale Court; however, the access road is currently not suitable for a semitruck pulling a 53-foot trailer due to inadequate turning radii and a slope of 3.3 percent, which is greater that the required 2 percent maximum slope. We Energies reviewed acceptable turning radii and grades and determined that the required access road modifications include lowering the cul-de-sac by 3 feet to achieve the required 2 percent maximum slope for the access road, widening the access road in various locations to improve turning radii, and We Energies obtaining an easement on the north end of the DPW site to widen the access road. Refer to Figure 2.01-3 for draft access road layouts provided by We Energies. Lowering the cul-de-sac would potentially impact adjacent properties on East Pinedale Court and likely require relaying or lowering utilities such as water main, storm sewer, and sanitary sewer. In addition, overhead utilities along the east side of the substation will require relocation to accommodate transformer deliveries. We Energies also said that modifying the access road to accommodate a semitruck and 53-foot trailer would still require the semitruck and 53-foot trailer to back out of the access road, which would be difficult and not desirable for We Energies. Costs associated with the modifications were not developed because We Energies was not going to agree to terminate the existing easement.

As part of the environmental investigation completed in 2002, soil borings were collected east of the Warehouse Building and west of the Main Building. Based on the soil borings, the underlying soils are variable throughout the site and include sands, gravels, silts, and clays. Because the soil borings were collected for the environmental investigation, no information regarding the suitability of soils to support structures or pavement is presented. Refer to Appendix E for additional information. A new updated geotechnical investigation report and recommendations will likely be needed for any new proposed development at the site.

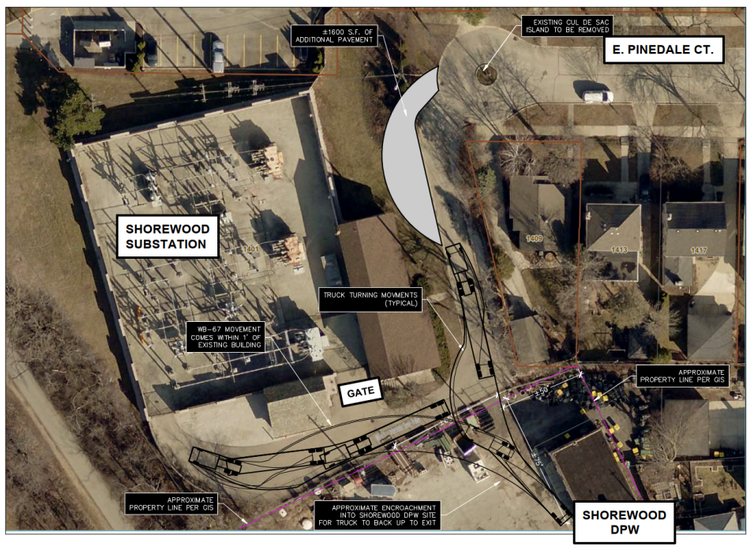
Figure 2.01-3 Required We Energies Access Road Modifications from East Pinedale Court



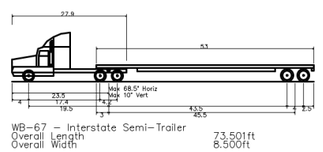
SEMI-FLATBED TRAILER ENTERING SUB STATION PROPERTY TO GATE FROM E. PINEDALE CT. :
ACCESS VEHICLE WILL REQURE THE CUL DE SAC MEDIAN TO BE REMOVED, AN EXPANDED ENTRANCE AREA AND AREA WITHIN THE SHOREWOOD DPW LOT TO ACCESS THE SUB STATION.



SEMI-FLATBED TRAILER ENTERING SUB STATION PROPERTY NEAR GATE FROM SHOREWOOD DPW. :
ACCESS VEHICLE LIMITS THE AMOUNT OF TURNING MOVEMENTS BY PULLING STRAIGHT FROM THE SHOREWOOD DPW AND PROVIDES ACCESS NEAR THE GATE FOR LOADING/UNLOADING AND THEN EXITS OUT TO E. PINDALE CT.



SEMI-FLATBED TRAILER EXITING SUB STATION PROPERTY FROM GATE TO E. PINEDALE CT. :
ACCESS VEHICLE WILL HAVE TO REVERSE INTO THE SHOREWOOD DPW LOT TO EXIT SAFELY OUT THE EXPANDED E. PINEDALE CT. ENTRANCE.



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P. 262.513.0666

CLIENT: We Energies

CLIENT ADDRESS:
333 W. EVERETT ST. -A249
MILWAUKEE, WI 53203

PROJECT:
SHOREWOOD SUBSTATION

PROJECT LOCATION:
1401 E. PINEDALE CT.
SHOREWOOD, WI 53211

PLAN MODIFICATIONS:

#	Date:	Description:
1	06.24.25	SUBMITTAL TO CLIENT
2	06.25.25	SUBMITTAL TO CLIENT

Designed By: R.S.S.
Reviewed By: C.A.J.
Approved By: C.A.J.

SHEET TITLE:
SHOREWOOD SUBSTATION ACCESS ANALYSIS

SHEET NUMBER:
C1.1

JSD PROJECT NO: 25-15576

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2.02 OPC

Budgetary OPCs were prepared for demolition of the existing buildings and structures located on-site; refer to Table 2.02-1. Budgetary costs for project elements were provided by Terra Engineering & Construction Corporation and Holton Brothers, Inc. Costs have been included in the OPC for complete removal of buildings and structures, including belowgrade foundation elements, site asphalt and concrete pavement, various site structures and appurtenances, rough grading at completion of demolition activities, and technical services and contingencies. The OPC for removal of site buildings, structures, and pavement is anticipated to be approximately $430,000. Additional costs associated with handling of contaminated soils is included in Section 4.

Item	Unit of Measure	Quantity	Unit Price	Total Price
Main Building Demolition	LS	1	$79,000	$79,000
Warehouse Building Demolition	LS	1	$31,000	$31,000
Upper Garage Building Demolition	LS	1	$58,000	$58,000
Salt Shed Building Demolition	LS	1	$9,000	$9,000
Annex Building Demolition	LS	1	$12,000	$12,000
Demolition of Site Structures, Appurtenances, and Pavement	SY	16,000	$6	$96,000
Site Restoration Grading	LS	1	$25,000	$25,000
			Subtotal	**$310,000**
			Contingencies and Technical Services at 40 Percent	$120,000
			Total Capital Costs	**$430,000**

Notes: LS=lump sum
SY=square yard

Table 2.02-1 OPC for Demolition of Site Structures

Holton Brothers, Inc. provided a $160,000 OPC for miscellaneous masonry tuckpointing and concrete repairs for the Main Building (including the boiler stack), Upper Garage Building, and Annex Building (if they are to remain). While an existing facility condition assessment is outside the scope of the current report, this information is being provided for completeness, as it was provided by Holton Brothers, Inc. through the course of its on-site observations. Similarly, Strand issued the *Village of Shorewood, Department of Public Works Warehouse Building Condition Assessment* to the Village that included an OPC cost of approximately $200,000 to $300,000 for structural repairs to the Warehouse Building (if it were to remain).

SECTION 3
RETAINING WALL EVALUATION

3.01 EXISTING CONDITIONS

The east side of the DPW property contains a retaining wall consisting of various heights and materials. An overview map of the retaining wall is included as Figure 3.01-1. The Village has provided historical information from the years 1999 and 2000 regarding the retaining walls. These documents are included in Appendix F. The provided documents appear to indicate that the historical opinion of the Village was that the retaining walls were owned by the private property owners, and they were responsible for maintenance of the walls. Repairs are discussed in these documents but is unclear whether the repairs would be publicly or privately funded.

The following paragraphs provide a summary of observations made during 2024 site visits to review the existing retaining walls and subsequent recommendations. Observations and recommendations were made in conjunction with Terra Engineering & Construction Corporation, a contractor specializing in earth retention support systems, such as retaining walls. Recommendations are based on visual observations only made at the time of visits. Original construction drawings for the retaining walls were not made available and, therefore, age, material strengths, and construction methods for the retaining walls are unknown, and structural analysis not performed.

The southern portion of the wall is a concrete block retaining wall in good condition with some bowing observed but no immediate concerns. Figure 3.01-2 is a photograph of the southern limits of the wall. Some bowing is observed by the tree.



Figure 3.01-2 Southern Extents of the Retaining Wall



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RETAINING WALL ALTERNATIVES

DEPARTMENT OF PUBLIC WORKS SITE EVALUATION SUMMARY REPORT
VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

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FIGURE 3.01-1
3646.048

The next section of the wall traveling south to north is located behind and east of the Main Building. The retaining wall begins as an approximately 7- to 8-foot-high concrete block wall installed on a reinforced concrete base section and is in good condition. A chain link fence is installed on the concrete blocks. There are typically 2 to 4 feet between the wall and the Main Building. There are overhead utilities above this section of the retaining wall. The southern corner of the wall where the wall turns east is located 0.5 foot onto private property. See Figure 3.01-3 for a photograph of the wall in this area.

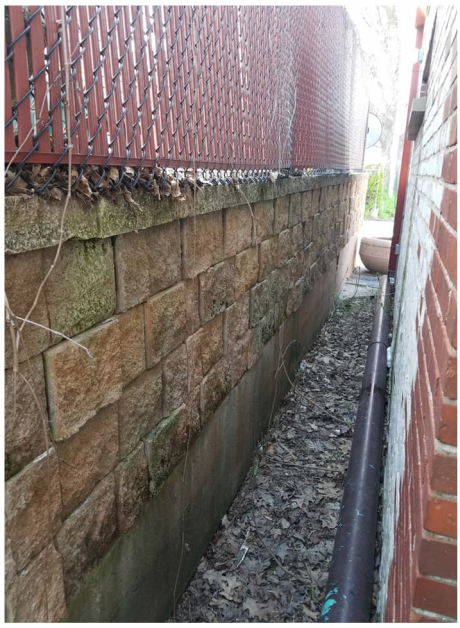


Figure 3.01-3 Block Retaining Wall East of Main Building

After the block retaining wall, the wall transitions to a varying height (typically less than 4 feet high), reinforced concrete wall with a chain link fence installed above the wall. In most sections of the wall, the backyards of adjacent properties have been filled with soil or rubble, and the chain link fence is also serving as a retaining wall, which is not its intended use. The fence is touching a heating and ventilation hood attached to the Main Building, which is helping to hold the fence in place. The heating and ventilation hood is not designed to support fences. Sections of the wall are failing in several locations with most of the failure locations where the chain link fence posts are embedded in the wall. Refer to Figures 3.01-4 and 3.01-5 for photographs of the wall in this section. This section of the wall is in poor condition and is too short based on the adjacent property ground surface elevations. This section of the wall is recommended to be replaced.



Figure 3.01-4 Concrete and Chain Link Fence Retaining Wall East of Main Building



Figure 3.01-5 Failing Sections of the Concrete and Chain Link Fence Retaining Wall East of Main Building

The next section of retaining wall is located north of the Main Building and south of the Upper Garage Building. This section of retaining wall includes a varying height reinforced concrete wall with a chain link fence installed above it. The chain link fence is serving as a retaining wall along several sections of the wall, which is not its intended use. The wall is also being used by DPW for material storage areas. There are two residential garages adjacent to this section of wall that are within 5 feet of the property line. The retaining wall also extends 0.5 foot onto private property for a portion of this section. See Figures 3.01-6 and 3.01-7 for photographs of the wall. This section of the wall is failing in several locations and is recommended to be replaced.



Figure 3.01-6 Concrete and Chain Link Fence Retaining Wall North of the Main Building



Figure 3.01-7 Debris Behind the Concrete and Chain Link Fence Retaining Wall East of DPW Building

The Upper Garage Building east wall is the retaining wall for the section of the wall. This wall is in fair condition. Portions of the Upper Garage Building are located 0.4 to 0.5 foot onto the adjacent property. There are four residential garages located within 4 feet of the east wall of the Upper Garage Building. There are also utility lines located above the Upper Garage Building east wall. Photographs of the retaining wall in the Upper Garage Building are shown in Figure 3.01-8.



Figure 3.01-8 Retaining Wall within the Upper Garage Building

The next section of retaining wall starts as an approximately 11-foot-high block retaining wall that transitions to a similar height wooden timber retaining wall. A garage is located on top of the wall in this section, and a wooden balcony on the backside of the garage is in the section of the wall that jogs to the east. Portions of the retaining wall in this section are 1 to 1.3 feet onto the adjacent property. See Figure 3.01-9 for photographs of the wall in this section. After the wood timber section, the wall transitions to an approximately 4-foot-high concrete block wall and then a lower height, flat stone retaining wall. See Figure 3.01-10 for photographs of this section. Because of the proximity of the garages and poor condition of the wall in locations, this wall is recommended to be replaced.



Figure 3.01-9 Retaining Wall North of the Upper Garage Building



Figure 3.01-10 Retaining Wall North of the Upper Garage Building Block Retaining Wall

The last section of retaining wall transitions into the east wall of the Annex Building. The Annex Building is used by DPW for miscellaneous storage of items such as electronics for recycling, and should be evaluated for demolition. If the Annex Building is demolished, a retaining wall could be installed or the ground could be sloped so a retaining wall would not be required.

3.02 ALTERNATIVES EVALUATION

The retaining wall alternatives evaluation is divided into three sections: the Main Building, the section between the Main and Upper Garage Buildings, and the section between the Upper Garage and Annex Buildings. The types of retaining wall that could be considered for each segment include the following:

1. Reinforced concrete.
2. Reinforced concrete foundation wall with concrete block above the foundation wall.
3. Sheet piling with façade.
4. H pile with lagging.

A. Main Building

Because of land constraints, it is anticipated that the retaining wall adjacent to the Main Building would be removed and replaced in generally the same location, except shifted west where the retaining wall is currently located on adjacent property to move the retaining wall onto Village property (if the Village assumes ownership of the wall). It is also assumed that the Village will obtain easements from the adjacent property owners to allow tiebacks into the adjacent properties and access to the wall to excavate and remove the existing and install the new wall. It is assumed that the five garages adjacent to the retaining wall will require earth retention support during construction. The new wall is anticipated to be approximately 190 feet long and 6 to 7 feet above grade. The We Energies utility lines are assumed to remain in place and energized. Figure 3.01-1 shows the extents of this segment of retaining wall.

Due to access constraints and the overhead utility lines, a sheet or H-pile retaining wall may not be cost-effective for this segment because the equipment required to drive the piles will encroach on the 10-foot working clearance around the energized power lines required by We Energies. For these areas, a segmented block wall would be required, consisting of removal of the existing retaining wall, open cut excavation into the neighboring properties, placement of lightweight fill, and construction of a new modular block wall. A modular block wall is included in Tables 3.04-1 through 3.04-3.

B. Segment Between the Main and Upper Garage Buildings

Replacement of the retaining wall between the Main and Upper Garage Buildings is planned to include leaving the existing retaining wall in place and installing a new retaining wall west of the existing wall. Installing a new retaining wall west of the existing wall will allow access to the wall from the DPW property and minimize the need for temporary support of existing garages, which are within 4 feet of the existing wall. The annular space between the new and existing wall is planned to be filled with compacted fill. For this segment, access to adjacent properties may not be required; however, easements for tiebacks may be required. For the cost analysis, a retaining wall consisting of H-pile with lagging is included because this is likely the most cost-effective option.

C. Segment Between the Upper Garage and Annex Buildings

Replacement of the retaining wall between the Upper Garage and Annex Buildings is also planned to include leaving the existing retaining wall in place and installing a new retaining wall west of the existing wall, similar to the segment between the Main Building and Upper Garage. For the cost analysis, a retaining wall consisting of H-pile with lagging is included because this is likely the most cost-effective option.

3.03 WE ENERGIES UTILITY LINE RELOCATION ANALYSIS

We Energies owns and operates overhead electrical lines that are located immediately east of the DPW site. The overhead electrical lines provide power to the DPW site, adjacent properties to the east, and properties to the south. Time Warner Cable and AT&T also have utility lines located on the utility poles. There is an Occupational Safety and Health Administration-required 10-foot working clearance around the overhead electrical lines that increases the difficulty of retaining wall construction. There is no working clearance requirement around the Time Warner Cable and AT&T utility lines.

On October 10, 2024, Strand and the Village met with representatives from We Energies at the DPW site to discuss future uses at the DPW site and potential relocation of the We Energies electrical lines and poles. On March 12, 2025, We Energies provided an electrical facility relocation estimate and relocation plan that are included in Appendix G.

On April 1, 2025, Strand and the Village met with representatives from We Energies to discuss the proposed relocation plan. We Energies said that, currently, there is one electrical circuit that provides power to the DPW site, adjacent properties to the east, and properties to the south. We Energies indicated the proposed plan is to install a new overhead single-phase circuit in approximately the same location as existing for the DPW site and adjacent properties to the east, and route a three-phase electrical circuit for the properties to the south of the DPW site through an existing duct bank beneath North Morris Boulevard. The benefit to the DPW site with the proposed relocation plan is the new overhead single-phase circuit for the DPW site and adjacent properties could be installed in phases or isolated more easily than the current circuit to allow sections of it to be taken out of service to replace the retaining wall.

We Energies also reviewed an alternative to supply power to the DPW site with an underground circuit. This alternative was not cost effective because of the properties to the east that require power from the same circuit. In this alternative, transformers would be required at the properties; therefore, either a pole-mounted transformer or a surface-mounted transformer on a concrete pad will still be required for the properties, eliminating the majority of the benefit associated with an underground circuit. We Energies also indicated that properties to the east cannot be cost effectively fed from North Morris Boulevard because easements would be required to route the conduit and wire from North Morris Boulevard to the back of the property, and each property would require either a pole- or surface-mounted transformer in the back yard. In addition, the existing private electrical service would require rewiring, adding cost for the private property owner.

We Energies provided a cost of $2,741,000 for the aboveground relocation work and did not provide a cost for the belowground relocation work because it was more expensive, requires easements from private property owners, and requires rewiring of private electrical services. A more detailed breakdown of the cost was requested but was not provided by We Energies before this report was completed. We Energies indicated that the cost does include replacement of two other circuits/wiring currently in the duct bank with wiring that has higher heat resistance due to heat concerns associated with adding an additional electrical circuit to the duct bank. We Energies indicated the cost of the copper wire is a large portion of the costs along with poles and labor. We Energies provided several caveats with its costs that were discussed. We Energies indicated that no private property electrical service rewires or electrician costs would be necessary with the proposed plan. We Energies indicated no betterment of We Energies facilities are included in the plan, meaning that only work necessary for the relocation is included. We Energies indicated that costs to relocate Charter/Spectrum and AT&T utilities would be additional costs and would have to be provided by Charter/Spectrum and AT&T. AT&T has telephone and fiber-optic facilities on the utility poles. The costs to relocate Charter/Spectrum and AT&T utilities were not obtained as part of this report but would be expensive based on preliminary correspondence with Charter/Spectrum and AT&T. There are no specific working clearance requirement around the Charter/Spectrum and AT&T facilities.

Because of the significant cost associated with the relocation plan, We Energies indicated that it is possible to temporarily relocate or de-energize sections of the existing circuit while sections of the retaining wall are being constructed. This would allow a contractor to work within 10 feet of the We Energies wires. We Energies indicated that it is difficult to provide a price at this point for the temporary work and recommended working with the selected contractor to develop a plan after a retaining wall design is complete. We Energies indicated a budgetary cost for a temporary relocation in one location is estimated to be approximately $100,000. For budgetary purposes it is assumed that five relocations are required for a total budgetary cost for We Energies work of $500,000 for the temporary relocation approach.

3.04 OPC

Budgetary OPCs were prepared for each retaining wall segment. Budgetary retaining wall replacement costs were provided by Terra Engineering & Construction Corporation. Costs have been included in the OPCs for easements, private property restoration, and technical services and contingencies.

Table 3.04-1 summarizes the OPC for the replacement of the retaining wall, assuming an H-pile with a lagging retaining wall. The OPC assumes that the We Energies utility lines and poles and the Main Building remain in place. Table 3.04-2 summarizes the OPC for the replacement of the retaining wall assuming the We Energies utility lines and poles are removed but the Main Building remains. Table 3.04-3 summarizes the OPC for the replacement of the retaining wall, assuming the We Energies utility lines and poles and Main Building are removed.

The budgetary OPC to replace the retaining wall, assuming the We Energies utility lines and poles, Upper Garage Building, and Main Building remain is approximately $1,600,000. If the We Energies utility lines and poles are removed, the OPC is reduced by approximately $100,000. If the We Energies utility lines and poles and Main Building are removed, the OPC is reduced by approximately $250,000.

If the Upper Garage Building is demolished as described in Section 2 of this report, a new H-pile retaining wall with lagging is anticipated to be needed where the existing building is removed. The cost for this additional length of wall is approximately $200,000. This cost is not included in Tables 3.04-1 through 3.04-3.

Item	Unit of Measure	Quantity	Unit Price	Total Price
Retaining Wall–All Segments	LS	1	$550,000	$550,000
Earth Retention System–Garages	EA	5	$20,000	$100,000
Easements	LS	1	$100,000	$100,000
Private Property Restoration	LS	1	$50,000	$50,000
			Subtotal	**$800,000**
			Contingencies and Technical Services at 40 Percent	$320,000
			Total Capital Costs	**$1,120,000**
			We Energies Costs	$500,000
			Total Costs	**$1,620,000**

EA=each

Table 3.04-1 OPC for Retaining Wall Replacement–We Energies Utility Lines and Poles and Main Building Remain

Item	Unit of Measure	Quantity	Unit Price	Total Price
Retaining Wall–All Segments	LS	1	$460,000	$460,000
Earth Retention System–Garages	EA	5	$20,000	$100,000
Easements	LS	1	$100,000	$100,000
Private Property Restoration	LS	1	$50,000	$50,000
			Subtotal	**$710,000**
			Contingencies and Technical Services at 40 Percent	$280,000
			Total Capital Costs	**$1,000,000**
			We Energies Costs	$500,000
			Total Costs	**$1,500,000**

Table 3.04-2 OPC for Retaining Wall Replacement–We Energies Utility Lines and Poles Removed, Main Building Remains

Item	Unit of Measure	Quantity	Unit Price	Total Price
Retaining Wall–All Segments	LS	1	$420,000	$420,000
Earth Retention System–Garages	EA	5	$20,000	$100,000
Easements	LS	1	$100,000	$100,000
Private Property Restoration	LS	1	$0	$0
			Subtotal	**$620,000**
			Contingencies and Technical Services at 40 Percent	$250,000
			Total Capital Costs	**$870,000**
			We Energies Costs	$500,000
			Total Costs	**$1,370,000**

Table 3.04-3 OPC for Retaining Wall Replacement–We Energies Utility Lines and Poles and Main Building Removed

SECTION 4
ENVIRONMENTAL REVIEW

4.01 EXISTING ENVIRONMENTAL INFORMATION SUMMARY

There are known residual soil impacts and groundwater contamination, from petroleum contamination from underground storage tanks and associated piping, that are above Chapter NR 140 enforcement standards at the Village DPW site that are documented in the Wisconsin Remediation and Redevelopment Database files that are available online under the Bureau for Remediation and Redevelopment Tracking System (BRRTS) No. 03-41-001238 with a case closure date of August 12, 2009. See Appendix E for the closure report. Pavement, an engineered cover, or soil barrier must be maintained over the impacted soil, and changes to the barrier are required to be approved by the Wisconsin Department of Natural Resources (WDNR). The Village is required to maintain and perform an annual inspection of the pavement surface over the contaminated groundwater plume and soils to prevent direct human contact with the residual soil contamination. Structural impediments also existed at the time that environmental sampling was completed. If the structural impediments are removed, additional investigation is required to be completed in these areas, as shown in Figure 4.01-1. There are groundwater monitoring wells, soil vapor extraction system, and air sparging wells that are abandoned at the site.

A. Soil Excavation

Soil excavated from within the DPW site may be contaminated and should be tested. Soil that is contaminated must be properly managed. See Figure 4.01-1 for the estimated locations with petroleum-impacted material. The impacted area extends west of the DPW site. The WDNR is required to be notified before any excavation, and written approval from the WDNR should be obtained before proceeding with excavation. The following activities should be completed if excavation is completed:

1. Test or field screen to determine whether the site is contaminated. Notify the WDNR if contamination is found.

2. Complete a waste characterization analysis.

3. Haul contaminated soils off-site for landfill disposal, or, if approved by the WDNR, put soils back in the trench/reuse on-site, to the extent practicable (coordinate planned reuse with WDNR).

    a. Reuse within the same area of contamination (do not spread it) or implement other WDNR-approved soil management methods, which may include removal from the site.

    b. Place the soil at a similar elevation.



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SUMMARY OF THE ESTIMATED LIMITS OF IMPACTED SOIL

DEPARTMENT OF PUBLIC WORKS SITE EVALUATION SUMMARY REPORT
VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

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FIGURE 4.01-1
3646.048

B. Structural Impediment

The structural impediment indicated in the BRRTS closure report is the southwest corner of the Main Building. An environmental site investigation is required to be completed in the location of the Main Building if the building is removed. The site investigation requires coordinating with the WDNR and conducting an investigation of the degree and extent of contamination. The investigation would likely require 1 to 2 days of field work to complete geoprobe borings or temporary wells and collect soil and groundwater samples. A budgetary cost for the work is approximately $25,000 (geoprobe, analytical fees, and engineering fees).

C. Groundwater Impacts

Groundwater impacts are documented in the BRRTS closure report, and the estimated limits are shown in Figure 4.01-1. Groundwater extracted from the site should be sampled and managed in compliance with applicable statutes and rules.

4.02 OPC FOR IMPACTED SOIL DISPOSAL

An OPC for impacted soil disposal was developed assuming soil contamination is from approximately 2 feet below the ground surface to the groundwater table. The depth to the groundwater in the contaminated area is typically 7 to 14 feet. The groundwater elevation data is from 1991 to 2004. The identified area of impacted soils is approximately 16,500 square feet (SF) with an estimated average impacted soils depth of 9 feet (5,500 cubic yards [CY] or 11,550 tons). Assuming landfill disposal of soils, the cost to dispose of 11,550 tons of impacted soil at $60 per ton is $690,000.

SECTION 5
STORMWATER MANAGEMENT

5.01 STORMWATER MANAGEMENT

Stormwater requirements for redevelopment of the site are defined in Section 250.12-1 of the Village Municipal Code. The Village has adopted by reference the current publication of Chapter 13 Surface Water and Stormwater of the Milwaukee Metropolitan Sewerage District (MMSD) Rules and the current publication of Chapter NR 151, Wisconsin Administrative Code, Runoff Management, Subchapter III, Non-Agricultural Performance Standards. In addition, Section 250.13 A.(2) of the Village Municipal Code requires that the Stormwater Management Plan (SWMP) should consider an analysis of at least two green infrastructure Best Management Practices (BMP) appropriate for the site, as compared to the use of traditional BMPs only. If green infrastructure BMPs are not proposed, the analysis should include a State of Wisconsin professional engineer's statement as to why green infrastructure BMPs are not suitable or recommended for the SWMP.

The existing site consists of approximately 3.2 and 0.1 acres of impervious and pervious surface, respectively. Figure 5.01-1 shows the drainage area tributary to the DPW site.

A. MMSD Rules Chapter 13

Based on Chapter 13 of the MMSD Rules Section 13.301 (2), the site is subject to runoff management because the redevelopment will disturb an area larger than 2 acres. The site will be required to have a reduction to the existing runoff release rate of 10 percent because the site is disturbing between 2 and 3.5 acres. Chapter 13 Section 13.302 (4) does indicate that the runoff release rate may be reduced by an amount less than required by Chapter 13 Section 13.302 (3)(b) when conditions make compliance unreasonable. Relevant conditions include, but are not limited to: soil contamination, groundwater contamination, land use requirements, land availability, opportunities for off-site management, construction delays, marginal costs, and the availability of financing. In this case, redevelopment shall achieve the greatest practicable reduction.

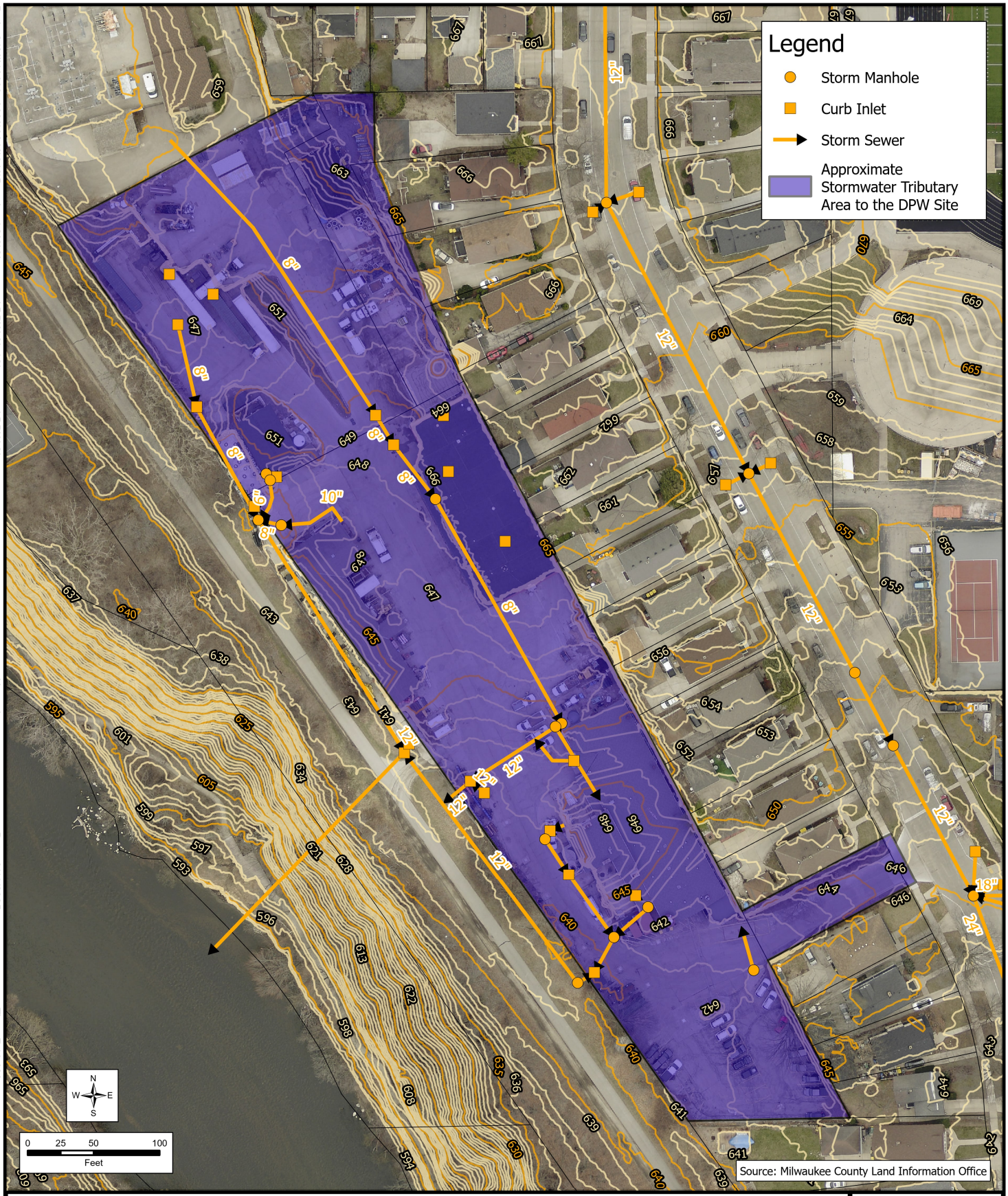
B. WDNR NR 151

Chapter NR 151, Section 151.12(5)(a)4. states the following:

> "For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40 percent total suspended solids reduction to meet the requirements of this subdivision. There is an exemption for this requirement in NR151.12 (2)(c) that a redevelopment post-construction site with no increase in exposed parking lots or roads is exempt. Based on a final site plan the site may be exempt from NR 151 requirements."

Chapter NR 151, Section 151.12(5)(b)1. for peak runoff discharge rates does not apply to redevelopment sites.

Chapter NR 151, Section 151.12(5)(c) for site infiltration does not apply to redevelopment sites.



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APPROXIMATE STORMWATER TRIBUTARY AREA TO THE DPW SITE

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VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

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FIGURE 5.01-1
3646.048

C. Summary

Based on the previous information, stormwater management may be required for 40 percent total suspended solids (TSS) reduction and 10 percent reduction to the existing runoff release rate. A preliminary water quality and quantity analysis was performed to estimate the approximate storage volume and permanent pool surface area that would be required if a wet pond is used to meet the site's stormwater requirements. If the proposed site has 3 acres of impervious area and 0.3 acres of pervious area, the wet pond would need to be designed to have approximately 6,750 cubic feet of storage volume and 1,000 SF of permanent pool surface area to reduce the existing runoff release rate by 10 percent and TSS by 40 percent. A pond of this size would cost approximately $75,000 to $100,000. Bioretention or underground storage basins could also be used to meet the reduction requirements instead of a pond. The SWMP should consider an analysis of at least two green infrastructure BMPs appropriate for the site, as compared to the use of traditional BMPs only. The type and size of the stormwater management facilities are dependent on the site development. It should also be noted that a liner may be required below stormwater management facilities due to impacted soils being present at the site.

The 10 percent reduction of the existing runoff release rate may be met by reducing the site's impervious area. Preliminary calculations show that the requirement would be met if the site's impervious area is reduced to 2.1 acres and the pervious area is increased to 1.2 acres. In this case, the water quality reduction would still be required and could be met using bioretention basins or swales, hydrodynamic separators, or other proprietary stormwater quality devices instead of a larger stormwater BMP, such as a wet pond.

SECTION 6
SITE UTILITIES

6.01 VILLAGE-OWNED SITE UTILITIES

This section summarizes the Village-owned utilities at the existing DPW site including sanitary sewer, storm sewer, and water main, and privately owned utilities including natural gas, electric, and telephone. Figure 6.01-1 shows the existing utilities based on the Village's geographic information system (GIS) data and the ALTA Land Title Survey included in Appendix C.

A. Sanitary Sewer

The DPW site is located within two sewersheds (SH5002 and SH5003) shown in Figure 6.01-2. The sanitary sewer system within the DPW site includes an 8-inch vitrified clay sanitary sewer along the west side of the site that connects into an 8-inch interceptor at the entrance to the DPW site along North Morris Boulevard. There are 6-inch services to the Main Building, Upper Garage Building, storage area north of the Upper Garage Building, and Transfer Station. The sewer was last televised on September 1, 2020. The televising reports indicated one sag and two cracks in the four segments of sewer. The televising reports are included in Appendix H. The Plat of Survey included in Appendix B also includes tables with manhole depths, pipe sizes, and some pipe materials.

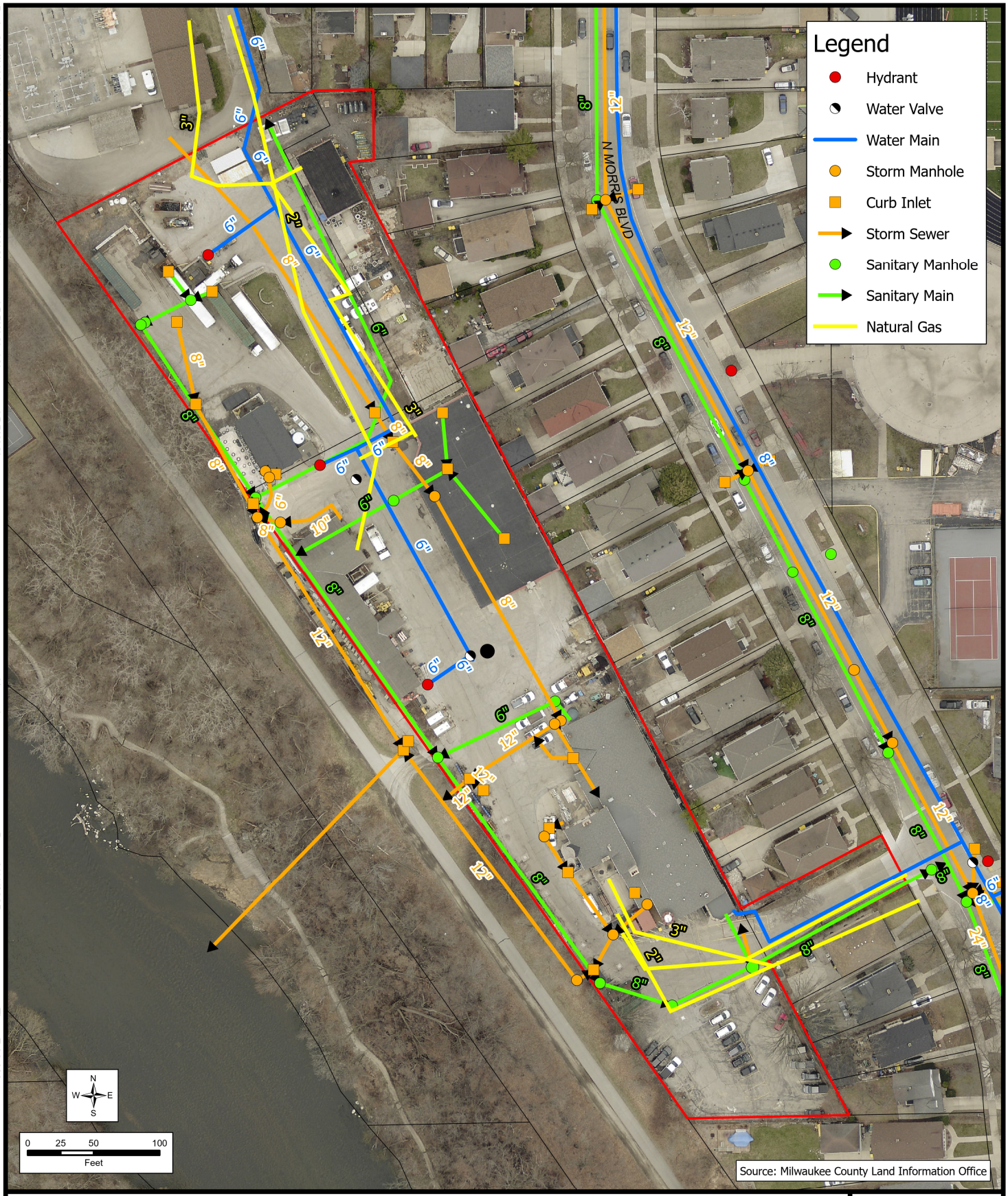
The available capacity for future development based on correspondence provided by MMSD is 106,176 and 880 gallons per minute (gpm) for sewersheds SH5002 and SH5003, respectively. Approximately 0.6 and 2.7 acres of the DPW site are located within sewersheds SH5002 and SH5003, respectively. Based on e-mail correspondence with MMSD, included in Appendix I, excess flow from sewershed SH5002 can be transferred to sewershed SH5003.

B. Storm Sewer

The storm sewer system within the DPW site includes inlets, manholes, and 6-, 8-, 10-, and 12-inch sewers that convey storm water to a 30-inch storm sewer to an outfall in the Milwaukee River to the west of the DPW site, as shown in Figure 6.01-1.

C. Water Main

The DPW site is served by a 6-inch ductile iron water main that was installed in 2015 and enters in the northeast corner of the site and terminates at a fire hydrant on the south end of the Warehouse Building. The building's services are not shown on GIS; however, it is assumed that there are water services to each building. Based on the ALTA survey, the water service for the Main Building is from the water main on North Morris Boulevard and is located beneath the driveway to the DPW facility. The water pressure in the Main Building is approximately 60 pounds per square inch (psi). For new site development, a 6-inch water main is required for fire protection.



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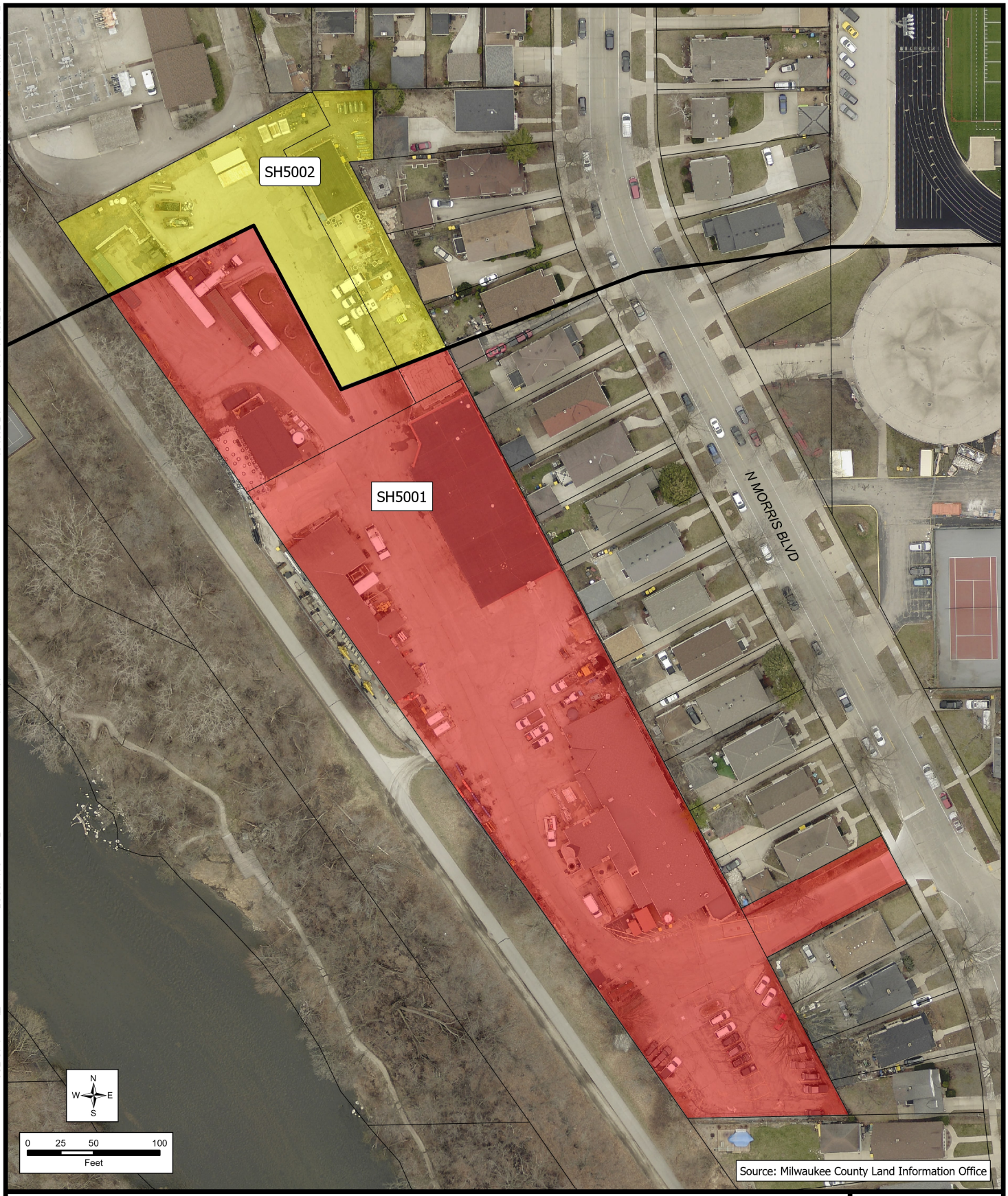
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EXISTING SITE UTILITIES

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VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

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FIGURE 6.01-1
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SEWERSHEDS

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VILLAGE OF SHOREWOOD
MILWAUKEE COUNTY, WISCONSIN

STRAND ASSOCIATES®

FIGURE 6.01-2
3646.048

6.02 PRIVATELY OWNED SITE UTILITIES

This section summarizes the privately owned utilities at the existing DPW site including natural gas, electric, and telephone.

A. Natural Gas

Based on the ALTA survey, natural gas enters the site at the entrance driveway along North Morris Boulevard and continues to a natural gas regulator on the west side of the Main Building. There are 2- and 3-inch natural gas services that enter the site from the north and serve the Warehouse and Upper Garage Buildings. The natural gas regulator for the Warehouse and Upper Garage Buildings is located on the north side of the Upper Garage Building.

B. Electric

There are overhead electrical lines along the northeast corner of the site and east of the site. No buried electrical lines are noted on the ALTA survey. The site is served via the overhead electrical lines located east of the site. The electric meter is located in the Main Building. Buried electrical lines exist throughout the site for outdoor lighting and feeds to buildings or equipment.

C. Telephone, Communication, and Cable

There are overhead telephone, communication, and cable lines east of the site. No buried telephone, communication, or cable lines are noted on the ALTA survey. The site is served via the overhead lines located east of the site through the Main Building.

SECTION 7
SUMMARY

7.01 SUMMARY

The Village is evaluating the existing DPW site for redevelopment as a DPW site or potentially relocating DPW operations to a different location and selling the current property for development. The Village DPW site is a 3.3-acre site located at 3801 North Morris Boulevard, which includes five buildings and a waste transfer station.

A. General Site Conditions

A Plat of Survey with topography and ALTA Land Title Survey were provided by the Village that identify existing easements and encroachments. There are 21 encroachments identified on the ALTA Land Title Survey. The encroachments identify locations where existing improvements may cross property lines. The encroachments are generally less than 4 feet with the largest encroachment being approximately 13.3 feet along the west property line where DPW site fencing extends beyond the property line.

There are four easements identified on the ALTA Land Title Survey that affect the property by location. A railroad easement exists along the northern perimeter of the property. The is a 15-foot-wide ingress/egress easement at the north end of the property at the access location to the adjacent We Energies substation. An easement with We Energies exists that grants access through the site to the substation property to the north. There is a conservation easement for two 5,000-gallon tanks to store rainwater from roof runoff on the north and south sides of the Upper Garage Building. The conservation easement is a 10-year easement that expires on January 31, 2026.

Budgetary OPCs were prepared for demolition of the existing buildings and structures located on the site and are summarized in Table 7.01-1.

Item	Unit of Measure	Quantity	Unit Price	Total Price
Main Building Demolition	LS	1	$79,000	$79,000
Warehouse Building Demolition	LS	1	$31,000	$31,000
Upper Garage Building Demolition	LS	1	$58,000	$58,000
Salt Shed Building Demolition	LS	1	$9,000	$9,000
Annex Building Demolition	LS	1	$12,000	$12,000
Site Structures, Appurtenances, and Pavement Demolition	SY	16,000	$6.00	$96,000
Site Restoration Grading	LS	1	$25,000	$25,000
			Subtotal	**$310,000**
			Contingencies and Technical Services at 40 Percent	$120,000
			Total Capital Costs	**$430,000**

Table 7.01-1 OPC for Demolition of Site Structures

Holton Brothers Construction provided a $160,000 OPC for miscellaneous masonry tuckpointing and concrete repairs for the Main Building (including the boiler stack), Upper Garage Building, and Annex Building (if they are to remain). Similarly, Strand issued the Warehouse Building condition assessment report to the Village that included an OPC cost of approximately $200,000 to $300,000 for structural repairs to the Warehouse Building (if it were to remain).

B. Retaining Wall Evaluation

The east side of the DPW property contains a retaining wall consisting of various heights and materials. Based on historical documents provided by the Village, it appears that the historical opinion of the Village was that the retaining walls were owned by the private property owners, and they were responsible for maintenance of the walls. The condition of the wall varies with some locations in poor condition and other locations in fair condition. Replacement of the wall is recommended. There are overhead utility lines above the majority of the retaining wall. The owner of the utility lines is We Energies. We Energies reviewed alternatives to potentially relocate the utility lines. The estimated cost to install new electrical lines beneath North Morris Boulevard in an existing ductbank to serve customers south of the DPW site and provide overhead single-phase power to the DPW site and adjacent properties is $2,741,000. Because of the costs associated with relocating the electrical lines and because overhead lines will still remain, it is assumed that the utility lines are not relocated and the Main Building remains. An OPC for retaining wall replacement is summarized in Table 7.01-2.

Item	Unit of Measure	Quantity	Unit Price	Total Price
Retaining Wall–All Segments	LS	1	$550,000	$550,000
Earth Retention System–Garages	EA	5	$20,000	$100,000
Easements	LS	1	$100,000	$100,000
Private Property Restoration	LS	1	$50,000	$50,000
			Subtotal	**$800,000**
			Contingencies and Technical Services at 40 Percent	$320,000
			Total Capital Costs	**$1,120,000**
			We Energies Costs	$500,000
			Total Costs	**$1,620,000**

Table 7.01-2 OPC for Retaining Wall Replacement–We Energies Utility Lines and Poles and Main Building Remain

C. Environmental Review

There are known residual soil impacts and groundwater contamination, from petroleum contamination from underground storage tanks and associated piping, that are above Chapter NR 140 enforcement standards at the Village DPW site. Pavement, an engineered cover, or soil barrier must be maintained over the impacted soil and changes to the barrier are required to be approved by WDNR. Soil excavated from within the DPW site may be contaminated and should be tested. Soil that is contaminated must be properly managed, which may include landfill disposal. Structural impediments also existed at the time that environmental sampling was completed. If the structural impediments are removed, additional investigation is required to be completed in these areas.

The identified area of impacted soils is approximately 16,500 SF, with an estimated average impacted soils depth of 9 feet (5,500 CY or 11,550 tons). Assuming landfill disposal of soils, the cost to dispose of 11,550 tons of impacted soil at $60 per ton is $690,000.

D. Stormwater Management

Stormwater requirements for redevelopment of the site are defined in Section 250.12-1 of the Village Municipal Code. The Village has adopted by reference the current publication of Chapter 13 Surface Water and Stormwater of the MMSD Rules and the current publication of Chapter NR 151, Wisconsin Administrative Code, Runoff Management, Subchapter III, Non-Agricultural Performance Standards. The existing site consists of 3.2 and 0.1 acres of impervious and pervious surface, respectively. Based on Chapter 13 of the MMSD Rules Section 13.301 (2) and NR 151, stormwater management may be required for 10 percent reduction to the existing runoff release rate and 40 percent TSS reduction. The type and size of the stormwater management facilities is dependent on the site development. It should also be noted that a liner may be required below stormwater management facilities due to impacted soils being present at the site. A budgetary cost range for stormwater management for a new development is $75,000 to $100,000.

E. Site Utilities

The sanitary sewer system within the DPW site includes an 8-inch vitrified clay sanitary sewer along the west side of the site that connects into an 8-inch interceptor at the entrance to the DPW site along North Morris Boulevard. The DPW site is located within two sewersheds (SH5002 and SH5003). The available capacity for future development based on correspondence provided by MMSD is 106,176 and 880 gpm for sewersheds SH5002 and SH5003, respectively. Based on e-mail correspondence with MMSD, excess flow from sewershed SH5002 can be transferred to sewershed SH5003.

The storm sewer system within the DPW site includes inlets, manholes, and 6-, 8-, 10-, and 12-inch sewers that convey storm water to a 30-inch storm sewer to an outfall in the Milwaukee River to the west of the DPW site.

The DPW site is served by a 6-inch ductile iron water main that was installed in 2015 and enters in the northeast corner of the site and terminates at a fire hydrant on the south end of the Warehouse Building. The water pressure in the Main Building is approximately 60 psi.

Private utilities at the DPW site include natural gas, electric, and telephone.

APPENDIX A–BARRIENTOS DESIGN & CONSULTING DEPARTMENT OF PUBLIC WORKS FACILITY NEEDS AND SITE SELECTION STUDY

VILLAGE OF SHOREWOOD

Department of Public Works

Facility Needs & Site Selection Study

May 1, 2023 Final Draft



Shorewood

BARRIENTOS design & consulting

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SECTION 1
EXECUTIVE SUMMARY

This report was conducted to define the facility needs for a new Department of Public Works Garage (DPW), assess various candidate site options, and develop conceptual level design for a new DPW at the selected options.

The Architect, Barrientos Design & Consulting, was retained for this study and their work was executed in three Phases:

1. Facility Needs Assessment
2. Site Evaluation
3. Conceptual Design

The study effort started end of November, 2022 and concluded in May of 2023.

BACKGROUND

The current DPW Garage is located on Morris Blvd and has been operating there since 1928 with various additions over the years. Over the intervening 90 years, DPW's operations, shop practices, fleet composition and sizing, staffing size, public levels of service and storage methods have all changed. The parcel's narrow configuration has a 19' drop in elevation from north to south and deters from a time efficient and safe DPW facility.

Six prior studies of the DPW Garage facility all concluded that the facility merited being replaced or rebuilt to better maintain current levels of service. With this study, the Village wishes to move forward and put forth a concise rationale for choosing a redevelopment option.

Operationally, the Shorewood Department of Public Works is comprised of three Divisions: Field Services, Utilities, and Fleet & Facilities. The largest Division is the Services Division, which includes collections, forestry, park and landscape maintenance, and street maintenance. The Utilities Division maintains the Village-owned water distribution and sewer collections systems. The Fleet & Facilities Division is responsible for maintenance of the Village's fleet (DPW, PD, Inspections) as well as streetlights, traffic signal systems, signs, and barricade/traffic control maintenance.

PHASE ONE
FACILITY NEEDS ASSESSMENT

The facilities needs assessment established the design criteria for a new DPW facility including the buildings and yard functions. Through onsite observations and staff interviews the study tabulated the fleet, shop equipment, bulk materials, and the staffing structure. Applying industry standards and best practices, the study recommended the following sizes for the main DPW Garage functions:

Heated Parking Garage	25,774 SF
Repair Garage	6,282 SF
Trades & Services	5,588 SF
Truck Wash	2,152 SF
Crew Quarters	2,485 SF
Administration	2,148 SF
Total Main Garage	**44,802 SF**

In addition, utility building and yard facilities were recommended to be sized as follows:

Tempered Storage	10,097 SF
Salt Shed, Brine Tanks	3,220 SF
Transfer Station	15,000 SF
Yard Storage	24,076 SF
Employee/Visitor Parking	30 private vehicles

Combined, the total acreage required for the buildings and yard functions are recommended to be **5.5 acres**. These square footages, yard features and general architectural requirements are the basis of design for evaluating the candidate parcels and the development of conceptual designs.

In order to guide evaluation of the various site options, a site selection criteria ranking matrix was established. These thirteen criteria involved factors ranging from building size, to site features, and to economic/community impact.

PHASE TWO
SITE EVALUATION

This Phase involved evaluating four sites for redevelopment of the DPW facilities. These sites included:

1. **N. Morris Blvd,** the current site of 3.24 acres
2. **N. Holton Ave,** previously owned by a manufacturer. Currently demolished for reuse.
3. **E. Vienna Ave,** previously owned by a manufacturer. Currently demolished for reuse.
4. **N. Humboldt Ave**, current vacant manufacturer building resides on site.

All of these sites were assessed for meeting the design criteria of; building layout, acreage needed, topography, roadways, utilities, economic development, demolition, and environmental hazards history. Following Board meetings and community presentations, Barrientos recommended pursuing E Vienna Ave based on its highest numerical ranking.

PHASE THREE
CONCEPT DESIGN & SITE RANKING

The Conceptual Design Phase involved taking the established design criteria and developing test-fit arrangements at each site. These arrangement plans focused on the overall site layout, building configuration, major building functions, yard functions, site circulation and relationship to the surrounding parcels and roadways.

Given the scope of the Concept Design effort, Barrientos did not define nor cost out the issues of; land purchase costs, hazardous materials removal, demolition of existing buildings, soils and existing foundations locations, retaining wall design, utility capacities, zoning and planning approvals, stormwater management systems and inter-municipal cooperation.

Briefly, the four conceptual design options had these features:

1. **N. Morris Blvd** has two options, one option splits operations between N Morris Blvd and a new site and the second option keeps all operations remaining on the existing site. Yard and cold storage, the transfer station, and public drop off would remain on the existing site while the new facility would be built elsewhere. The second option of keeping all operations on the existing site would

require extensive site work and would create less than desirable site circulation.

2. **N. Holton Avenue** would require the partial purchase of the parcel to its direct south to allow for the optimal site size. Currently the sale disposition of the site is uncertain.
3. **E. Vienna Avenue** would require the partial purchase of the parcel to its direct south and northwest to allow for the optimal site size. The site would require extensive site work and development for the construction of a new facility.

Cost estimates were developed for the building construction only as insufficient data existed for identifying the costs for the site issues listed above. Cost estimates for the Main DPW Building were **$12.9 million**, for the Tempered Storage and Yard facilities the estimate was **$2.6 million**. Total building construction cost was estimated at **$15.5 million**.

Sustainable design approaches were briefly explored, however, until further building and site design occurs, quantifiable analysis is not possible at this stage.

BOARD AND COMMUNITY INVOLVEMENT

A key component of this study was creating a communication workplan outlining the engagement process with the Board and the community at large. Throughout the study's five months, Barrientos presented to the Board five times and then a final presentation was made in June. As Barrientos completed each Phase of work, Board presentations were made to inform, engage and at certain times, request approvals.

Similarly, the study involved three community workshops held at the DPW Garage on Morris Blvd. For each community workshop stakeholders and Village residents were notified in advance, questionnaires were handed out, and the project team summarized the recommendations for each Phase of work.

Input from community members has been documented in this report and this helped inform the project team on the concerns, vision, and priorities of the Village's residents. In general, the community was supportive of the recommended design criteria, the evaluation of the sites and the option to move to a parcel just across the municipal border in the Capitol Drive area.

Prompted by Board member comments, the project team also started discussion with Milwaukee County and Milwaukee City public works officials to explore sharing of DPW facilities. These initial meetings revealed

a high-level of interest from these two agencies and a desire to continue discussion of feasibility at the operational level.

NEXT STEPS

On the prioritized parcels Barrientos recommends the Village conduct a Preliminary Design of the site and buildings to further analyze the features and costs of each option. In addition, the Morris Blvd site needs to have disposition costs further identified for both a possible Garage redevelopment scenario and a sale to private developers for other land uses.

For site engineering, the Preliminary Design will advance the concept layouts into preliminary engineering of these elements; grading, paving, stormwater management, utilities, retaining walls and Village Engineering requirements.

Architecturally, the Preliminary Design effort will advance the design development of the shop equipment, room features, building heights, door and window openings, architectural materials, structural assembly, heating requirements, power loads, water and sanitary flows, compliance with Design Review Board and Plan Commission requirements, building code review, and sustainable applications.

The architectural/engineering team will also review and incorporate the results of environmental, demolition contractor, geotechnical and survey data developed by others. Their analysis will inform the team of constraints and opportunities of the sites and will lead to plan adjustments.

With the Preliminary Design completed, the Architect will retain a Construction Manager to develop a detailed cost estimate of the full project costs. If the Village retains a realtor, then the Architect will adjust the cost estimates with those up-to-date market costs.

Throughout Preliminary Design the Architect will continue with the community hearings, exploring sustainable green opportunities, and advancing designs for further detailed cost estimating.

Finally, the Preliminary Design process will continue the discussions with Milwaukee County and Milwaukee City to further define what levels of facility sharing and cooperation are feasible.

METHODOLOGY & SCOPE

The project team consisted of the Village Manager, DPW Director, DPW Superintendent, Planning and Development Director, and Barrientos Design. The project team met regularly every two weeks from end of November, 2022 through April of 2023.

The scope of each Phase was as follows:

Phase One defined Facility Needs by compiling staff and fleet data, interviewing supervisory staff, and observing DPW operations. The existing spaces were tabulated and compared with optimal space needs, which are developed with Barrientos' knowledge of garage design standards and future industry trends. From the space needs tabulation, a recommended building and site plan were developed graphically to show the DPW facility without site constraints. Finally, site selection criteria was discussed with the Village Board to weigh each criterion's importance to the project and community.

Phase Two involved a Site Evaluation phase, where potential sites were identified, assessed, and ranked according to the chosen selection criteria. The highest-ranking site options were further developed with test-fit arrangement plans. To make a decision on which site to develop further, each was evaluated on its benefits and drawbacks.

Public involvement meetings were conducted to educate the community about Public Works facility needs, and to gather community feedback on the test-fit site options. Community feedback and comments are summarized at the end of this section. With community feedback, the Village Board then prioritized the three site options to be developed in the conceptual planning phase.

Phase Three involved Conceptual Planning with each option. This included assessing for site planning and engineering factors. Plans were developed to a schematic level, demonstrating how the facility program could be achieved. Benefits and drawbacks were identified, and a high-level cost estimate was provided for the proposed buildings. The information was presented to the Village Board and community stakeholders and the three options were assessed for their merits.

DPW LEVELS OF SERVICES

The Department of Public Works facility houses and supports the execution of various services mandated by the Board. These levels of services have an impact on the facility requirements as they each involve staff, vehicles, shop equipment, storage items and yard usage. Listed here are all services from the categories of public health, public safety, core, primary, and secondary services.

* required by law or regulatory permit
^ service contracted in whole or part

Services Necessary for Public Health

- Residential curbside refuse collection
- Street & park can refuse collection
- Sewer collection system maintenance
    - Inspect, clean & root sewers
    - Clean catch basins*
    - Sewer system rat abatement
- Water distribution system maintenance
    - Repair main & service breaks^
    - Drinking water testing (bacteria, lead & copper, disinfectant by-products, unregulated contaminants) *
    - Hydrant flushing*
- Beach water testing

In Support of Public Safety

- Salt/plow streets, alleys and Village-owned walks
- Install & maintain hydrants
- Street light maintenance
- Traffic signal maintenance
- Street, alley, and sidewalk maintenance
- Pavement marking^
- Signage maintenance
- Street tree removals, stumping and planting
- Hazard tree assessments
- Building structure maintenance
- Park infrastructure maintenance including play structures

Core Services

- DPW fleet & equipment maintenance
- Police Department fleet maintenance
- Inspection Department vehicle maintenance
- Curbside recycling collection
- Street tree pruning
- Streetscape maintenance
- Street/alley reconstruction
- HVAC system maintenance public buildings
- Building equipment maintenance
- Exterior hardscape maintenance
- Water meter system maintenance
- Water valve exercise and replacement
- Asset management and infrastructure planning
- Contract administration
- Litter pickup and control in parks and public spaces

Primary Services directly support the core services; without these services, the Core Service would be adversely affected.

- Bulk leaf collection
- Street sweeping
- Streetscape maintenance
- Park landscape maintenance
- Turf maintenance
- Village Center Landscape Maintenance
- Parking Lot Landscaping & Maintenance
- EAB Management
- GIS Records Management
- Crack filling^
- Street repair of utility excavations
- Salt/Plow Parking Lots
- Bus Stop snow removal
- Cross Walk snow removal
- Street Amenities (benches, bike racks, refuse & recycling cans) Maintenance
- Business District landscape maintenance
- Transfer Station Maintenance
- DPW Fuel Station Maintenance

- DPW Vehicle Set-up
- Electrical Maintenance in Public Buildings
- Election Support
- Window Cleaning
- Carpet Cleaning^
- Annual Sewer and manhole rehabilitation
- Sewer inspection (TV) program
- Rebuild catch basins & manholes
- Biofilter structure maintenance
- Underground utility locates
- Natural area stewardship and trail maintenance
- Invasive species control
- Stormwater management, public outreach and education

Secondary Services are those activities that contribute to the quality of life but have no effect on public health or safety and do not directly support the Core Services.

- Curbside brush collection
- Refuse special collections
- Recycling drop-off center
- Used motor oil and engine coolant collection
- Collection of street & park recycling cans
- Residential refuse drop-off (Saturday compactor)
- Beach cleaning
- Athletic field and facility maintenance
- Seasonal lighting
- Irrigation system maintenance
- Event Barricades
- Special Event Support
- Village Celebrations support

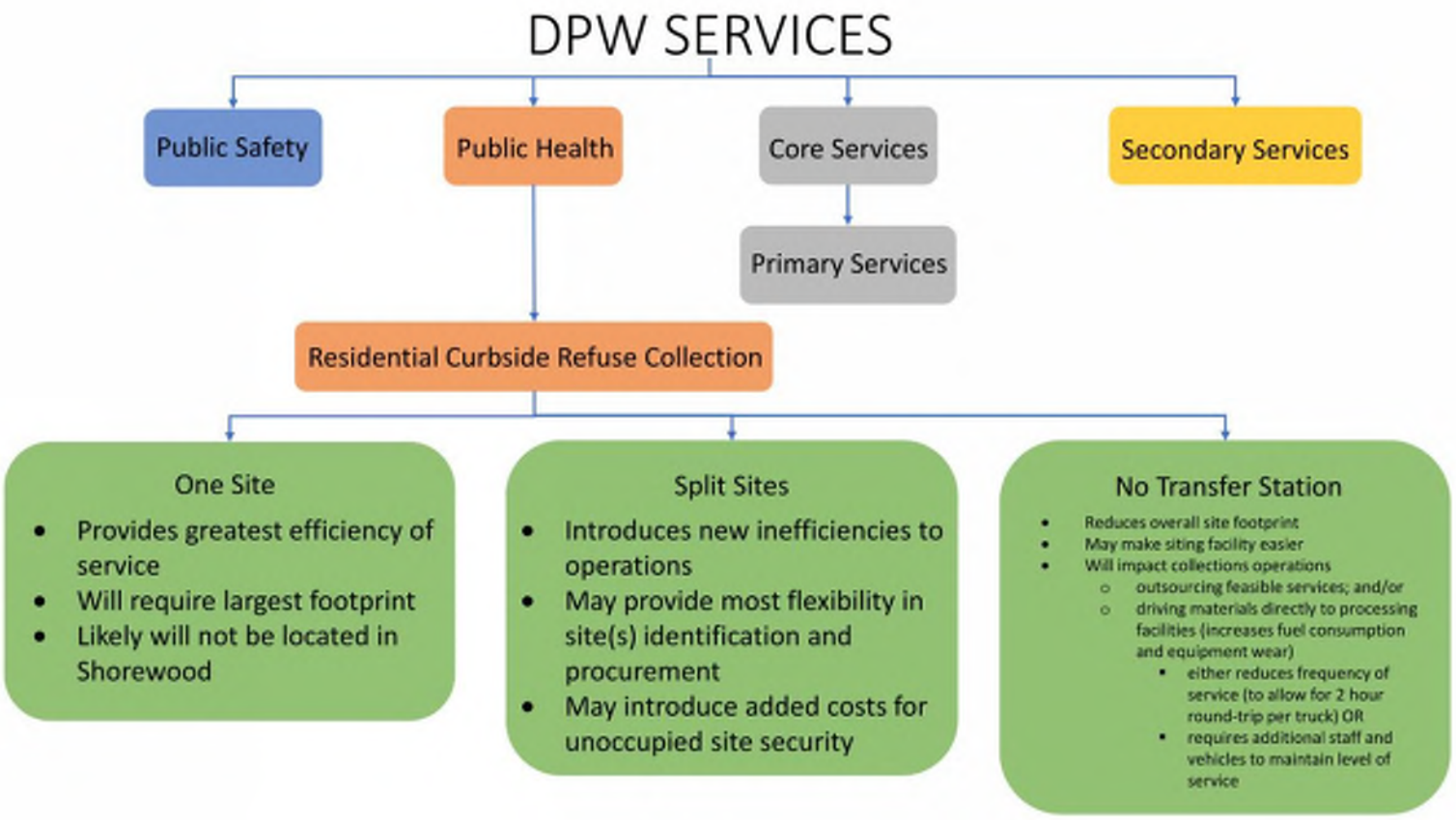
MAINTAINING THE TRANSFER STATION IN THE PROGRAM

During the course of this study, the requirement for having the Transfer Station came up for review with the Board and at community workshops. The Public Works Director presented various options and analyses for maintaining or separating the Transfer Station from this new facility program.

The general discussion leaned toward keeping the Refuse Collection within DPW services, versus contracting out, and that a Transfer Station should be part of the program.

While reasons where identified for keeping the Transfer Station with the whole facility, there was openness to splitting that function to a nearby, yet distinct site.

For this study's facility definition, we have assumed that Refuse Collection and the Transfer Station will stay in the development program.



SECTION 2
PHASE ONE - FACILITY NEEDS ASSESSMENT

Phase One defined Facility Needs by compiling staff and fleet data, interviewing supervisory staff, and observing DPW operations. The existing spaces were tabulated and compared with optimal space needs, which are developed with Barrientos' knowledge of garage design standards and future industry trends.

From the space needs tabulation, a recommended building and site plan were developed graphically to show the DPW facility without site constraints. Finally, site selection criteria was discussed with the Village Board to weigh each criterion's importance to the project and community.

The data was tabulated into spreadsheets based on the observed operations. These figures generated a recommended building and site plan without any site constraints. This facility definition became the basis of design for the building and site design. Finally, the existing space was compared to the recommended space needs, graphically depicting the existing site plan versus the recommended site plan.

EXISTING DPW OPERATIONS & FACILITY USAGE

The Shorewood Department of Public Works is currently located at 3801 N. Morris Boulevard. The site is comprised of four parcels totaling to three acres with five buildings dating back as far as 1928. In the last few decades, a patchwork of building additions and temporary repairs have been added to maintain the facility. The facilities have many operational inefficiencies, and it was never intended to house the type of operations it handles today.

Public Works is comprised of three Divisions: Services, Utilities, and Fleet & Facilities. The largest Division is the Services Division, which includes collections, forestry, park and landscape maintenance, and street maintenance. The Utilities Division maintains the Village-owned water distribution and sewer collections systems. The Fleet & Facilities Division is responsible for maintenance of the Village's fleet (DPW, PD, Inspections) as well as streetlights, traffic signal systems, signs, Village buildings, and barricade/traffic control maintenance.

There are two heated buildings: the Main Building which houses the repair shop equipment, building maintenance and carpentry shop, sign shop, electrical shop, water meter testing, forestry and parks office, administration offices, and crew quarters. The second building is the Upper Garage which houses most of the fleet's vehicles. There are three non-heated buildings: Cold Storage Warehouse Building which serves as storage space for forestry & parks, electrical, and sewer & water; the Annex is used for miscellaneous storage; and the 400-ton Salt Shed.

In 1991, a major fire in the congested and non-sprinklered Upper Garage destroyed the majority of the departments fleet. The building was rebuilt with the existing walls and a new roof and is now sprinklered. However, it is still extremely cramped with four rows of trucks stacked consecutively and with no drive aisle. This is uncommon in standard facilities and creates hours of staff inefficiencies due to added time maneuvering trucks each day.

The most pressing space needs identified include crew quarters, heated and tempered parking for fleet vehicles, a pull through truck-wash, and expanded repair shop space. With improved fleet parking spaces and an easy-to-use wash bay, trucks will extend their useful lifespan and require less maintenance. Better crew quarters contribute to making staff more efficient, improves employee satisfaction, and retention.

EXISTING DPW FACILITIES INVENTORY

Main Building

- Constructed: 1928 & remodeled in 1980
- Masonry Building (sprinklered)
- Heated
- 13,700 SF

Upper Fleet Garage

- Constructed: Original construction 1935, rebuilt after fire 1991
- Masonry Building (sprinklered)
- Heated
- 7,760 SF

Cold Storage Water & Sewer Building

- Constructed: 1935
- Masonry Building (non-sprinklered)
- 4,200 SF

Salt Shed

- Wood Frame (non-sprinklered)
- 1,400 SF

Annex

- Masonry/Wood Frame Building (non-sprinklered)
- 1,400 SF

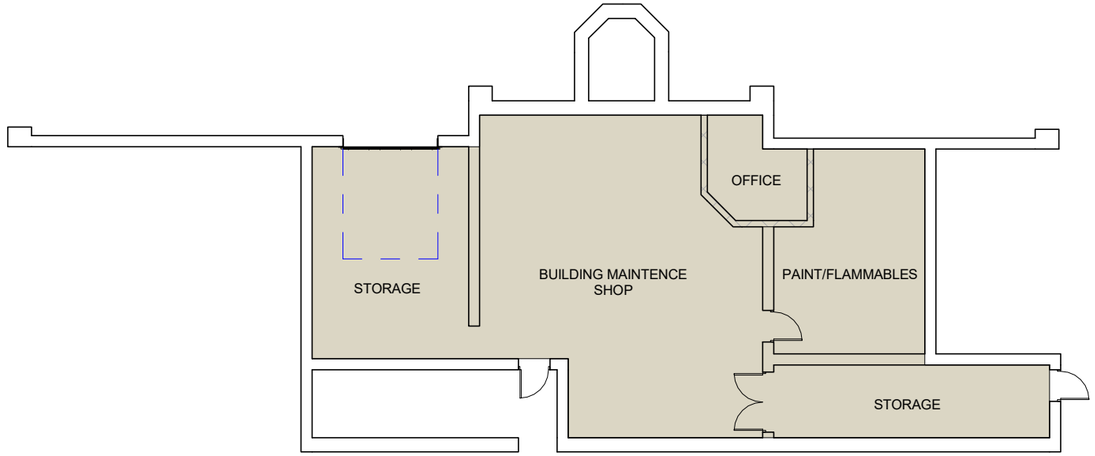
Yard Facilities

- Truck Scale
- Recycle Drop-Off
- Fuel Station
- Salt Shed
- Salt Brine Storage
- Waste Transfer Station
- Employee/Visitor Parking

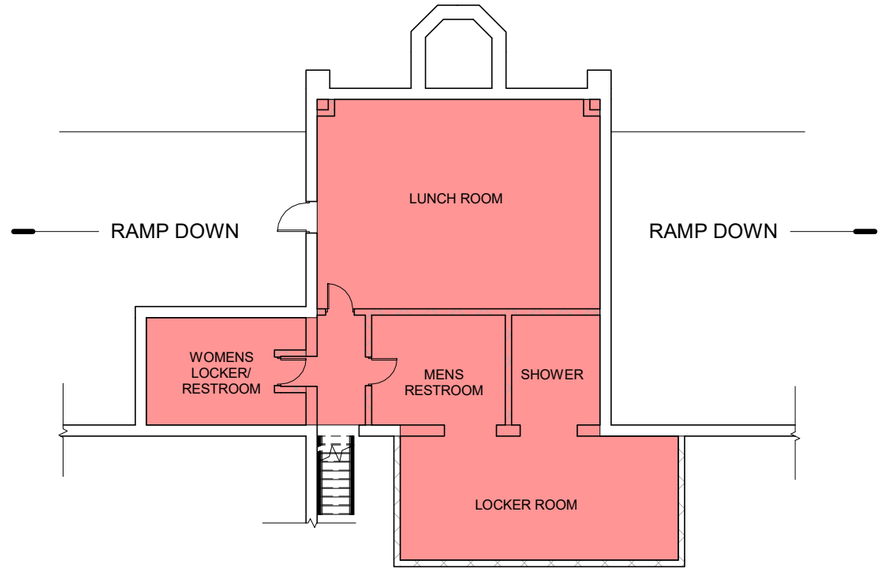
KEY

- ADMINISTRATION
- CREW
- HEATED GARAGE
- REPAIR GARAGE
- PARTS STORAGE
- TRUCK WASH
- SIGN SHOP
- BUILDING MAINTENANCE
- METER TESTING

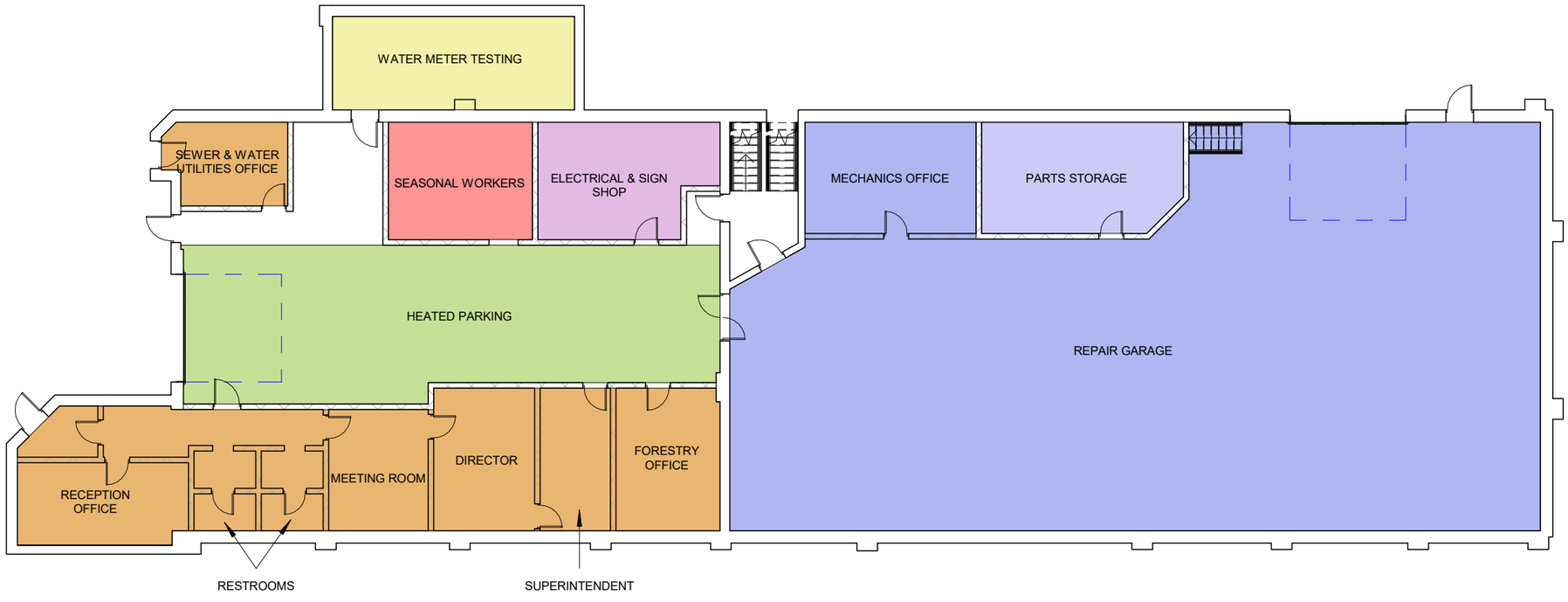
- TEMPERED STORAGE
- COLD STORAGE
- SHEDS



BASEMENT



SECOND FLOOR



FIRST FLOOR

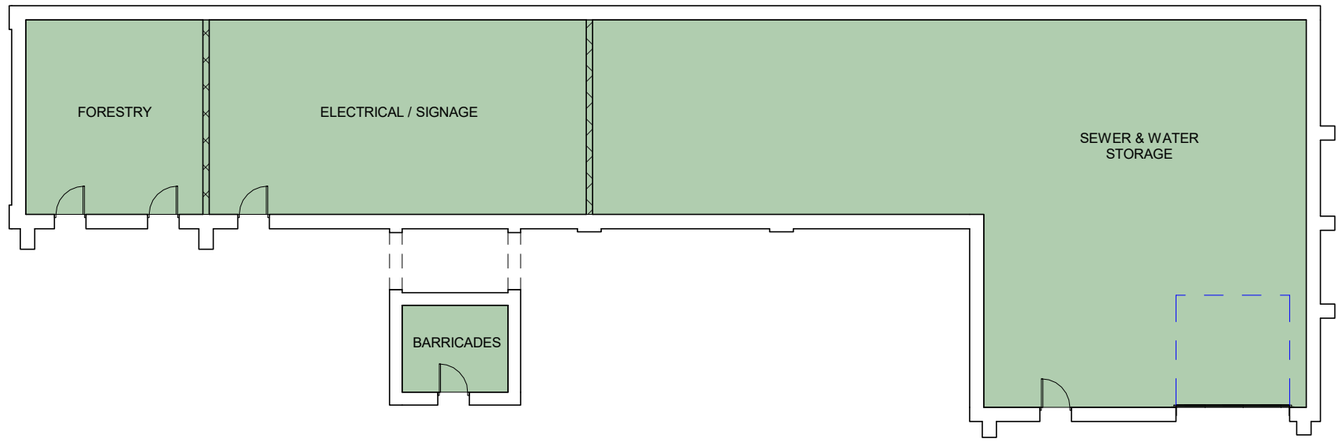
Shorewood DPW Study

1 A801A EXISTING PLAN - MAIN BUILDING
1/16" = 1'-0"

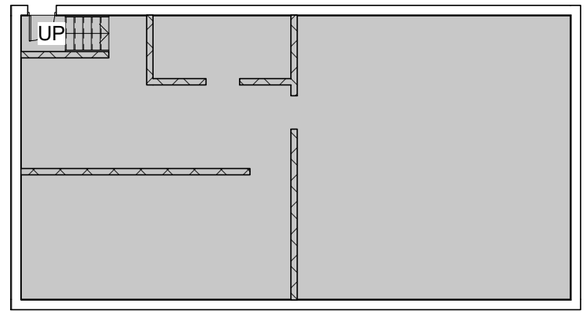
BARRIENTOS design & consulting

KEY

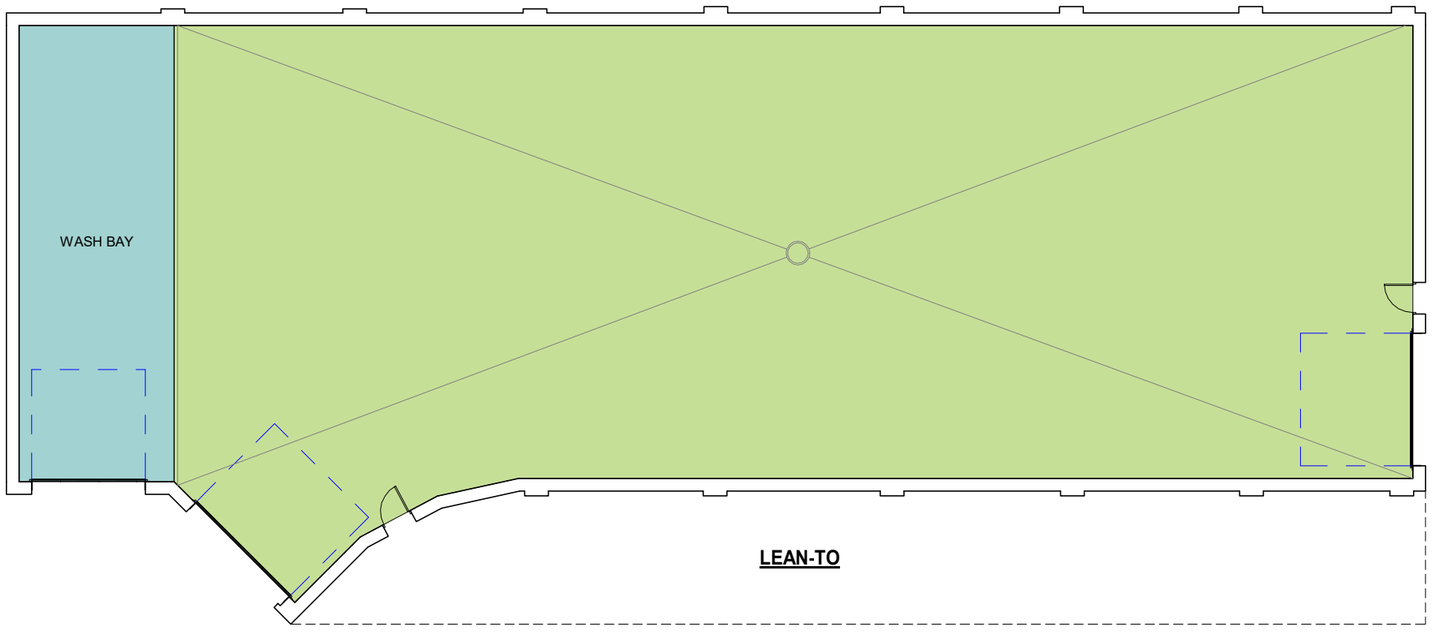
- ADMINISTRATION
- CREW
- HEATED GARAGE
- REPAIR GARAGE
- PARTS STORAGE
- TRUCK WASH
- SIGN SHOP
- BUILDING MAINTENANCE
- METER TESTING
- TEMPERED STORAGE
- COLD STORAGE
- SHEDS



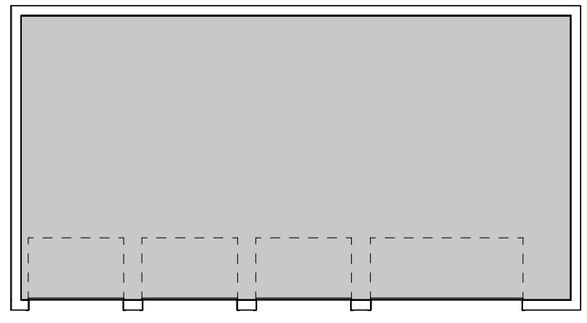
WATER WAREHOUSE



ANNEX SECOND FLOOR



UPPER GARAGE



ANNEX FIRST FLOOR

Shorewood DPW Study

1 A801B EXISTING PLAN - UPPER GARAGE, COLD STORAGE WATER & SEWER, AND ANNEX
1/16" = 1'-0"

BARRIENTOS design & consulting

EXISTING BUILDING USES

Main Building

The Main Building includes the public works administration office, crew facilities (locker and lunchrooms), building maintenance shop, electrical/sign shops, and forestry/utility offices.

The lower garage consists of one aisle with an overhead door which can accommodate two smaller pickup trucks. In addition to overnight parking, this area is used for work planning and daily tasks are scheduled on a job board. The space also includes the time clock/work log station (photo 60). Tasks in this section of the building often overlap causing operational inefficiencies.

The Forestry crew currently uses its allocated space as a work area where employees perform saw maintenance and blade sharpening. This produces unwanted oil, gas, and fumes in a space meant for office work (photo 59). The Departments seasonal workers use a repurposed storage area for their lockers.

The lower level of the former incinerator area houses the building maintenance shop. This area is the workspace for employees charged with maintenance tasks for maintaining the Village's nine public buildings. This also includes equipment and tool storage (photo 55). While an undersized overhead door provides some direct access to the facility, access and storage in this space is inadequate.

The electrical and sign shop is a shared space with two workstations on the first floor. It is undersized with inadequate storage (photo 56).

The Utility work area includes two offices each with a workstation and computer. The larger of the two spaces includes a water meter test bench with inadequate storage.

The lunchroom & locker rooms are on the second floor of the previous incinerator building. The men's locker room & shower is undersized and is non-functional. The lunchroom, which includes a kitchenette, is used for activities such as large meetings, laundry, and the lunch space, all of these spaces should be separated per code (photo 58). Currently, the lack of large gathering space requires meetings of more than four people to be held in the lunchroom.

Repair Garage

The Repair Garage is attached to the rear of the Main Building. Vehicle access is via an overhead door on the west side of the building. The Repair Garage is extremely undersized for the facility's needs. Currently, it includes one drive on lift which cannot be operated at full height due to the ceiling limits. This causes the mechanic to struggle ergonomically for certain tasks and is unsafe and inefficient (photo 49). The overhead door height is not tall enough for the fleet's larger vehicles and requires necessary repairs to occur either outside the shop or outsourced. Bulk fluid is stored in the open creating a fire & flooding hazard (photo 46). Tire equipment is stored and operated next to the overhead door (photo 52).

Dedicated space in the Repair Garage is used for a shared fabrication and welding alcove which includes several pieces of equipment and a large workspace used by all task groups (photo 50). At night, the remaining Repair Garage floor space is used to park three to four vehicles (photo 47). The mechanic's office is located just off the garage and includes two workstations (photo 53). Parts storage is spread over two levels within the Repair Garage. The entire space has poor ventilation, little to no floor drainage, and inadequate repair space which hampers fleet maintenance operations and impacts the efficiency of the Departments work.

Upper Garage

The Upper Garage building is located north of the Main Garage and houses the majority of the Department's fleet. The building has three overhead doors, one used for a pull-in truck wash bay (photo 30) and two for vehicle access. The wash bay is a later addition to the building and does not have proper floor drainage. In addition, it is undersized causing larger vehicles to either be washed outside or partially inside the bay. The garage space is inadequate and requires trucks to be parked nose-to-toe with no drive aisle; this is not common in standard facilities resulting in significant staff time maneuvering trucks at the start and end of each day resulting in work time lost (photo 31).

Cold Storage Warehouse Building

The Cold storage Warehouse building is located on the west end of the site bordering the Oak Leaf bike trail (photo 17). This building's interior is divided into three areas with makeshift plywood walls creating separate storage space for forestry and parks, electrical and signage, and water distribution and sewer collections systems (photo 21-24). All these areas are undersized and cause site circulation congestion. The sewer and water

storage is the largest space in this building and serves as storage for equipment, two skid steers, a pickup truck, and stock pipes. Outside the building is barricade storage and light posts in the front and construction material in the back. This outside storage interferes with vehicles & employee circulation (photo 18).

Annex

The Annex building is a former residence which was purchased by the Village in the late 1990's and converted for storage (photo 43). It is in poor condition and should be demolished regardless of the outcome of this report. The upper floor stores miscellaneous items and includes old Christmas decorations, benches, and seasonal signage. The lower level is accessed through four separate overhead doors. These spaces are used for miscellaneous storage, most notably electronic items for recycling (photo 44).

Salt Shed

The salt shed is significantly undersized and can hold approximately 400 tons, generally only half a season's worth of salt. This often requires storage of salt in a bin built to contain excavation spoils. In addition to disrupting the operations which require large excavations (water main and sewer repair), salt stored in this manner has the potential to runoff in violation of DNR guidelines (photo 33). Brine, currently purchased from Whitefish Bay, is stored outside in a tank adjacent to the shed (photo 35).

Site

Generally, the site is configured in a narrow and long configuration along a north-south orientation. The main access is on the south end off of Morris Blvd, and there is maintenance access to the Oak Leaf Trail. At the north end adjacent to the We Energies station, there is no vehicle access allowed.

Upon entering the site there are multiple functions crowding the entrance yard. This includes, the truck scale, employee parking, public/visitor parking, recycling drop off, the lower garage entrance, crew entrance door, and finally the main administrative entrance.

The truck scale is undersized for larger vehicles that use the site such as those from Whitefish Bay (photo 2). Its current location is required because it needs to be in front of the administration offices for the recording of the scale's numbers. This location turns out to be in a less than optimal spot as people unintentionally drive over it resulting in excess wear

and tear. Following that is the public drop off for recycling and oil waste. These are located at the front of the site to prevent unwanted disruption by the public (photo 6-7).

Plows are stored along the west fence line. Storing plows outside is atypical and can cause excess weather wear as well as make site circulation tight (photo 12). The location of the two 2,000-gallon fuel tanks (unleaded & diesel) cause circulation issues when someone is fueling up (photo 15). Behind the Cold Storage Warehouse building is more miscellaneous site storage which includes things like construction materials and pipes (photo 20). North of the Main Building is the generator, cold/hot patch, and vehicle storage. Due to the lack of heated garage space, many of these vehicles are stored outside in opposition to industry standards.

Along the Upper Garage is a lean-to where bulk material bins are located. Because of the narrowness of the site, circulation backups are common when loaders are moving material (photo 26). North of the Upper Garage is a gravel holding bed for the forestry department to store unplanted trees (photo 29). In addition, refuse carts and street cans are stored along that north side. Next to the transfer station compactors is more public drop off containers specifically for appliances and tires.

Finally, the transfer station is located at the northwest end of the site (photo 38). Located here is the process of transferring the Village's residential waste that is collected throughout the week into trailers to be transported off site. Five trailers need to be parked in this area while not being operated. When these trailers come to pick up waste, they can cause a large backup on the site as they are not able to easily back up into the compactor forcing them to do a series of three-point turns. Overall, the size and shape of this site makes circulation and operations difficult and poses challenges for the Village for future facility growth and development at the existing site.

EXISTING SITE CONDITIONS

The Morris Blvd site is located amongst non-compatible land uses. To the east are two-family residences, a School further to the east, residences to the south, and to the west, the Milwaukee County Oak Leaf Trail, a major recreational corridor. The roads leading up to the facility are residential grade in terms of sizing and traffic volume.

The configuration of the land is a long, narrow parcel that only allows for vehicle storage buildings on one side. Even with the buildings pressed against one line, there is insufficient turning space for truck traffic. The topography of the site has an elevation drop of 19’ from north to south necessitating a series of paved platforms with steep inclines for heavy trucks. Finally, the retaining wall to the east does not reach up high enough to retain the private yard’s soil and structurally the disparate walls are in poor condition.

Existing utilities and easements further constrict redevelopment of the site with the We Energies powerline easement along the eastern edge.

Finally, the paving condition is poor with deteriorated patches throughout and stormwater management is poor allowing sediments to run off the site down to the Oak Leaf Trail.

EXISTING DPW FACILITIES

Photo 1



Main exterior historic facade from 1928.

Photo 2



Scale is in a poor spot for circulation and shouldn't be driven over in daily use.

Photo 3



Main entrance with homes on either side.

Photo 4



Visitor & employee parking adequate.

Photo 5



Pump houses previously used to house monitoring wells for site remidiation and now used as community storage (Mens club).

Photo 6



Community recycling/trash/oil drop off adequate and close to entrance.

Photo 7



Oil drop off disrupts flow of fleet traffic into yard.

Photo 8



Ramp previously used into incinerator room, leaks to building maintenance shop below.

Photo 9



Retaining wall condition along building.

Photo 10



Pavement condition is poor due to age and inefficient storm water drainage.

Photo 11



Building maintenance shop entrance overhead door is undersized and can only fit very small vehicles.

Photo 12



Outdoor plow storage constricts driving area of the main circulation isle and effects lifespan of flow being left in the weather.

Photo 13



Main building rear previously used as a ramp into incinerator room and now wall opening has been patched.

Photo 14



Repair garage undersized door and height is not adequate for fleets largest vehicles to be repaired indoors.

Photo 15



Fuel (2) 2,000 gallon tanks (diesel, petrol) adequate size but location on site is disruptive to flow. A cover and spill containment would be preferable.

Photo 16



Emergency generator adequate

Photo 17



Cold Storage Sewer & Water Building cold storage space is limited.

Photo 18



Outdoor traffic sign storage should be housed indoors away from unnecessary weather damage.

Photo 19



Cold Storage Sewer & Water Building entrance floods due to site storm-water grading & management.

Photo 20



Old loading dock used for overflow site storage. Dock piers are nearing the end of their lifespan.

Photo 21



Water/Sewer storage undersized and requires maneuvering vehicles and storage to access stored items.

Photo 22



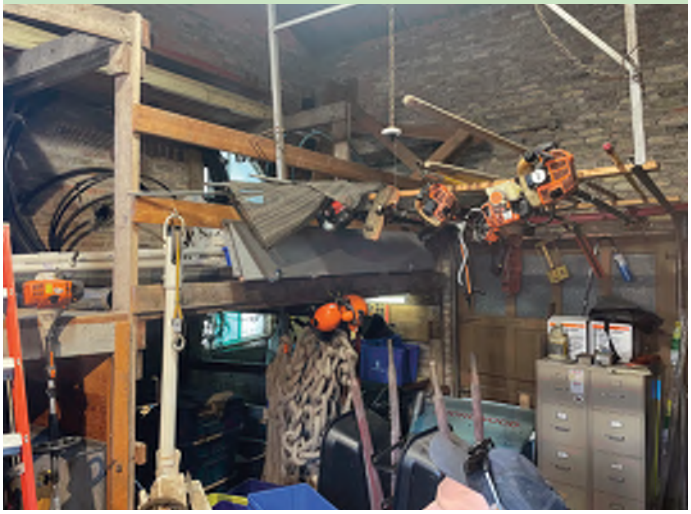
Water/Sewer storage

Photo 23



Electric storage could benefit from an overhead door for small vehicles access.

Photo 24



Forestry storage could benefit from an overhead door for small vehicles to access.

Photo 25



Upper garage had a major fire in 1991 causing a lose of most of DPW's fleet and equipment. It was rebuilt with the existing walls and new roof and is now sprinklered.

Photo 26



Bulk storage more bins are recommended and at a less distributive site location.

Photo 27



Rain collection two 3,000 gallon collection tanks provide water for irrigation and any off site tasks.

Photo 28



Site main drive isle is undersized and makes it difficult to circulate the site efficiently and effectively.

Photo 29



Outdoor storage typically is used to store an average of 12 fleet vehicles.

Photo 30



Indoor wash bay is undersized for larger vehicles which end up sticking out of the overhead door. Wash fluid is not contained properly and spills out of the bay.

Photo 31



Upper garage has (4) isles of fleet vehicles stacked behind one another. This is very inefficient, typical garages have a drive isle with access to each truck.

Photo 32



Upper garage

Photo 33



Salt shed has a capacity of 400 tons and is undersized. Bin adjacent to shed is used for overflow salt which is problematic with DNR regulation.

Photo 34



Calcium chloride applicator

Photo 35



Brine salt making is a tedious process with equipment stored in various places making workflow inefficient.

Photo 36



Rear salt shed foundation is failing and shed lacks typical bracing seen in new salt sheds.

Photo 37



Separator tank holds sewer spoils from vaccum truck.

Photo 38



Waste management trailers are 53' long and drop off 3-5 times a day. To back in they have to make a large 'Y' turn taking up space in the whole yard slowing other facilities functions.

Photo 39



Waste management truck/trailer

Photo 40



Waste management truck/trailer

Photo 41



Compactors

Photo 42



Tire, metal & appliances storage being at the back of the site can be disruptive when the public is allowed to drive through the site.

Photo 43



Annex building was annexed into the site. It was previously a residential garage but now it serves as a misc. storage.

Photo 44



Annex stores recycled electronics dropped off by the public and other misc. DPW items.

Photo 45



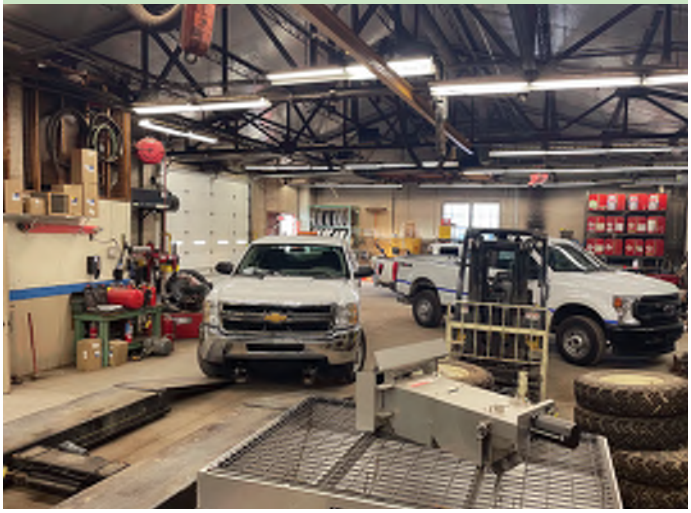
Annex storage

Photo 46



Bulk fluid storage is sufficient in size of storage but should be stored in a separate room for safety precautions.

Photo 47



Repair garage is very undersized and needs 2 more repair bays and an equipment lift. Vehicles are stored after hours due to lack of conditioned space elsewhere.

Photo 48



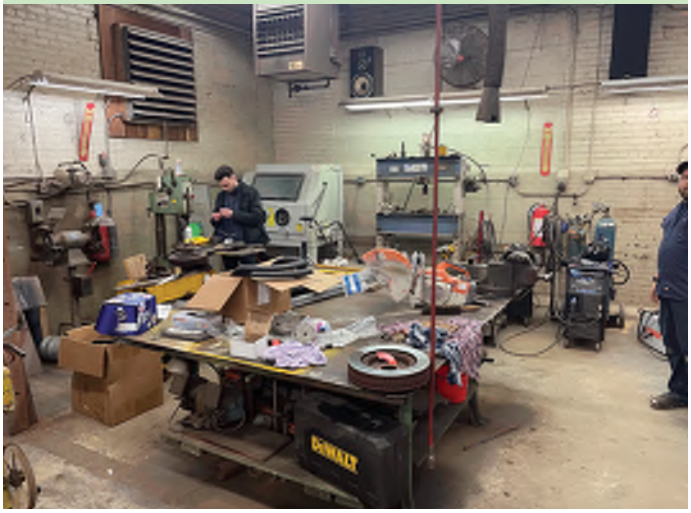
Parts storage is adequately sized and is on two floors.

Photo 49



Drive on lift is not adequately sized for every vehicle and makes it difficult to work on suspension and wheels. Building height restricts the lift from operating at full height.

Photo 50



Part fabrication shared space by all facilities. Would operate more smoothly if each facility had their own shop.

Photo 51



Roof truss and overhead crane is too low and can be difficult to operate on taller vehicles.

Photo 52



Tire repair is adequate.

Photo 53



Mechanics & Facilities Foreman office

Photo 54



Sign storage is located wherever there is usable space over multiple locations.

Photo 55



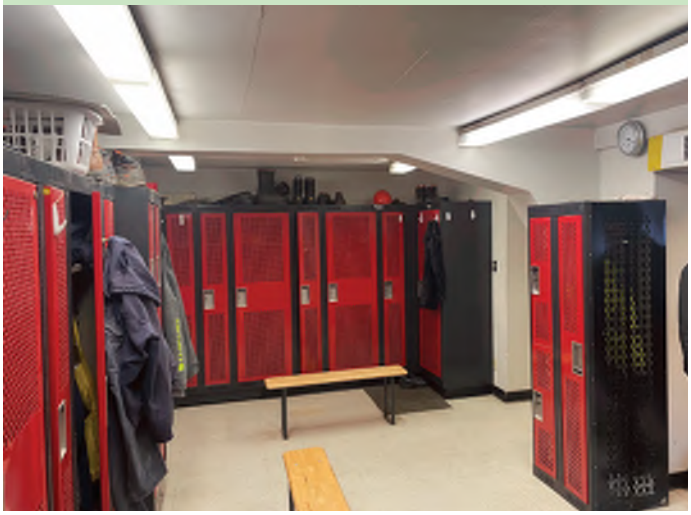
Building maintenance shop is adequately sized and is mainly used for wood fabrication. Includes flammable and paint storage in a separate room.

Photo 56



Electrical & Sign Shop

Photo 57



Locker rooms are undersized and need more space for bathrooms & showers.

Photo 58



Lunch room is not ADA accessible and serves as main meeting space.

Photo 59



Forestry Office

Photo 60



Work log station should be located in the lunch room and have work stations for training and clocking time.

FACILITY DESIGN CRITERIA

Based on Barrientos' expertise and knowledge of industry standards, the team produced recommendations for architectural and material standards for Shorewood's DPW operations. This includes design criteria for shop layouts, parking and bay sizing, storage areas, ceiling heights, overhead doors, drive lane widths and clearances, major fixed equipment layouts, and site facility needs.

Heated Parking Garage

To accommodate the department's fleet dimensions the underside of the garage's trusses should be a minimum of 21' to allow larger truck bays to clear truck beds vertical position and a 14' clear where pick-ups are parked. Heavy-duty stalls are 40' x 14', medium-duty stalls are 30' x 12', and light-duty stalls are 24' x 10' with 26' driving aisles between parking rows.

Based on Shorewood's fleet size and composition, we recommend 40 parking stalls in the heated vehicle garage. Overhead doors size recommendations are 18' wide by 16' high. The floor should be concrete with liquid densifier, walls should be precast concrete or block, and ceilings should be metal deck with exposed trusses. Plumbing needs include hand wash sinks, eye wash station, hose bibs, trench drain, and catch basin.

Truck Wash

The function of the wash bay is to clean vehicles via a pull through bay with an underbody wash system and high-pressure hoses mounted to spray guns. An adjacent equipment room is required for fluid pumps and tanks. Floors should be concrete with liquid densifier, walls should be precast concrete or block sprayed with epoxy, and ceilings should be exposed precast.

Repair Garage

Functions of the Repair Garage include welding and machining of parts and vehicle access for direct repair. Barrientos recommends four service bays consisting of two heavy-duty bays, one light-duty bay, and a small engine bay. Vehicle lifting equipment needed includes a two-post lift, mobile columns, and a drive on lift.

Designated areas for tire repair, mobile column storage, parts storage, and material stock racks should be provided. Also, a shared fabrication and

welding alcove should be designated. Floors should be concrete with liquid densifier, walls should be precast concrete or block, and ceilings should be metal deck with exposed trusses.

Natural lighting should provide most of the ambient light supplemented by task lighting at workspaces. Plumbing needs include a floor drain at overhead doors, laundry sink, bulk fluid reels for grease, oils, water, and air. A separate bulk fluid storage room should be included with an in-ground overfill trench. The mechanics office should be situated to allow visual observation of the Repair Garage space. The Repair Garage should be adjacent to the vehicle parking area.

Sign Shop

The Sign Shop provides a space for the creation of signs through a computerized plotting system. There should be storage for signs and workspace.

Electrical Shop

The electrical shop is needed for all electrical purposes within the village including maintenance of street lighting and traffic lighting systems.

Building Maintenance

The building maintenance shop should provide sufficient space for the staff work area, equipment, and tools.

Forestry & Parks Office

The forestry space should provide an office work area separate from equipment storage and maintenance space.

Utilities

The Utility area should include multiple workstations with sufficient equipment and supply storage and include dedicated space for a meter test bench with appropriate plumbing. Adequate workspace and storage is necessary for all of the shops and vehicle access through an overhead door is needed for maximum efficiency. Floors should be concrete with liquid densifier, walls should be precast concrete or block, and ceilings should be metal deck with exposed trusses.

Crew Area

The crew area should include a large assembly space, lunchroom facilities with a kitchenette, a timeclock area with PC access for those employees without a dedicated desk, and male and female locker rooms. Ceiling heights should be 9’ with corridor heights at 9’ 6” and assembly room height at 10’. Fixed equipment includes counters, cabinets, kitchen appliances, washer/dryer, 2’ x 2’ lockers, common closet for PPE gear, and accessible compliant fixtures. Walls should be concrete masonry units and ceilings should be 2’ x 2’ acoustical ceiling tiles or gypsum board.
The crew area should be separated from vehicle parking to minimize acoustics, dust, and odors. The crew space should be near the main vehicle parking for employee access, as well as near staff parking stalls and the administrative area.

Administration

The administrative area includes functions of reception, conferencing / collaborating, and individual offices. Ceiling heights in offices should be 9’ with lobby and corridor heights at 9’6” or higher. Walls should be steel stud covered with gypsum board and ceilings should be 2’ x 2’ acoustical ceiling tiles. This function will be adjacent to visitor parking stalls with visual lines to main entry traffic flow. It should also be near the assembly and locker rooms. The administrative area should be separate from the Repair Garage to minimize noise, vibrations, dust, and odors.

Building Services

Space is needed to address the heating, electrical, and water needs of the building. This space would include all mechanical, fire suppression, janitorial, and generator equipment.

Tempered Storage

This space is for equipment, storage, and workspace for all Divisions which might not necessarily require heating year-round. Tempered Storage does not get any colder than 55 degrees. Floors should be concrete with liquid densifier, walls should be precast concrete or block, and ceilings should be metal deck with exposed trusses.

Salt Shed

The salt shed should hold an entire season's salt inventory – approximately 800 tons. The construction should be concrete floor, wood walls, and the roof should be wooden truss.

Fuel Station

The fuel station dispenses fuel to the Village's fleet and consists of two, 2,000-gallon tanks, one each for diesel and unleaded. There should be two fuel dispensers, one for each fuel type along with a diesel exhaust fluid (DEF) tank. A canopy should be provided to protect the fueling area from weather conditions and the design should include appropriate containment and spill control.

Transfer Station

The transfer station supports the refuse and yard waste operations and includes two compactor units. Additional space is needed to accommodate up to five 53-foot trailers which may be on site at any given point. A 10-foot-high ramp should be provided to allow trailers to unload into the compactors and transfer waste to collections vehicles.

Yard Storage

Yard storage needs to be a fenced area for security. This area should include bulk material bins of 24' x 24' space constructed with concrete masonry block, waste and recycling cart storage, material/excess storage, space for an outdoor generator, forestry holding bed, temporary holding space for forestry functions (logs or chippings), hot/cold patch storage, slurry and spoils, space for refuse carts/street cans, traffic storage, construction storage and a dewatering area for sewer utility functions.

RECOMMENDED FACILITY DESIGN CRITERIA

The recommended facility design criteria for the Shorewood Department of Public Works are configured in the following tables. Sizing was determined based on administration, crew, and fleet counts, DPW crew input and Barrientos Design industry garage design standards.

The breakdown of square footage by major functional area is:

Heated Parking Garage	25774 SF
Repair Garage	6282 SF
Trades & Services	5588 SF
Truck Wash	2152 SF
Crew Quarters	2485 SF
Administration	2148 SF
Total Main Garage	**44802 SF**

In addition, utility building and yard facilities were recommended to be sized as follows:

Tempered Storage	10097 SF
Salt Shed Brine Tanks	3220 SF
Transfer Station	15000 SF
Yard Storage	24076
Employee/Visitor Parking	30 private vehicles

For site design criteria, it was established that the site needed the following features:

1. 5 to 6 acres size for the buildings and yard functions.
2. Topographically a relatively flat site. No more than a 7% slope (7' rise over a 100' run)
3. Surrounding roads that can handle heavy truck weights and their turning radius.
4. 80' minimum clearance in front of each overhead door to allow heavy trucks to line up for approach.
5. Multiple access points to allow traffic separation of crew trucks from vendors, the public and other non-DPW vehicles.
6. Utility service hook-ups and capacity to house a stormwater detention basin, above or below ground.

The Optimal Space Needs calls for **81,777 SF** of total facilities, a **70% increase** over the existing **57,000 SF**. The optimal plan calls for more fleet

vehicles to be stored in Heated Parking and a tempered storage for remaining vehicles, storage, and equipment.

From the space needs breakdown, a recommended optimal floor plan was developed which effectively captures the working relationships of daily activities at the shop. It shows specific program adjacencies of a highly effective DPW facility.

The recommended plan is a conceptual floor plan showing major rooms, parking stalls, fixed equipment, doorways, and room sizes. It also documents the key relationships between the rooms, their grouping for environmental needs, and traffic flow. For each candidate site, the Garage and Yard plans were adjusted for their given parcel configuration.

Our space needs recommendations are analyzed and summarized in these following charts and diagrams:

- Vehicle & Equipment Parking Stall Allocation
- Fleet Diagram
- Staff Breakdown
- Recommended Room Program
- Summary of DPW Recommended SF by Function
- Comparison of Existing to recommended SF
- Relationship Diagram
- Recommended Floor Plan

VEHICLE & EQUIPMENT PARKING STALL ALLOCATION

Village of Shorewood DPW Facilities
Heated, Tempered & Cold Storage Equipment Pieces Needing Assigned Space

Vehicle Types & Stall Allotments

H = Heavy	42' x 14'	
M = Medium	30' x 12'	Heated = Heated and Ventilated, Concrete Floors, Floor Drains, Windows
L = Light	24' x 10'	Tempered = Heated to 55', Concrete Floors, no Ventilation or Floor Drains
E = Equipment	10' x 10'	Cold = An Uninsulated Shed with Concrete Floors, no Drains

VILLAGE OF SHOREWOOD DPW FACILITY

Unit Number	Year	Description	Model	Division	Stall Allotment	Heated	Tempered	Cold
71	2018	**MACK GARBAGE TRUC**	REFUSE COLLECTIONS 20 C	DPW	H	1		
72	2018	**MACK GARBAGE TRUC**	REFUSE COLLECTIONS 20 C	DPW	H	1		
73	2018	**MACK GARBAGE TRUC**	REFUSE COLLECTIONS 20 C	DPW	H	1		
74	2018	**MACK GARBAGE TRUC**	REFUSE COLLECTIONS 20 C	DPW	H	1		
65	2007	**FORESTRY-BUCKET TRUCK**	VERSALIFT AERIAL	DPW	H	1		
58	2008	**7 CY DUMP TRUCK**	INTERNATIONAL 7300	DPW	H	1		
59	2008	**7 CY DUMP TRUCK**	INTERNATIONAL 7300	DPW	H	1		
55	2020	**10 CY DUMP TRUCK**	WESTERN STAR 4700 SB	DPW	H	1		
54	2019	**10 CY DUMP BODY**	WESTERN STAR 4700 SB	DPW	H	1		
64	2020	**JET/VACUUM**	FREIGHTLINER	SEWER	H	1		
63	2022	**LEAF COLLECTION**	FREIGHTLINER M2-106	SEWER	H	1		
63	2022	**LEAF COLLECTION**	FREIGHTLINER M2-106	SEWER	H	1		
57	2007	**7 CY DUMP TRUCK**	GMC 7500 TRUCK	DPW	H	1		
50	2014	**HOOK LIFT W/8 CY DUMP**	INTERNATIONAL 4300	FORESTRY	H	1		
44	2016	**2 TON SERVICE TRUCK**	FORD-550	FORESTRY	H	1		
56	2005	**7 CY DUMP TRUCK**	CHEVY TRUCK	DPW	H	1		
				Total Heavy Parking:		16	0	0
70	2005	**OTTAWA SPOTTER**	SPECIALTY EQUIPMENT	DPW	M	1		
36	2002	**1 TON FLAT BED TRUCK**	FORD-350 W/ UTILITY BODY	DPW	M	1		
34	2012	**2.5 CY DUMP TRUCK**	GMC 3500 W/DUMP BODY	DPW	M	1		
33	2001	**1 TON SERVICE TRUCK**	FORD 350 W/ NEW FLATBED	DPW	M	1		
32	2012	**2 TON BUCKET TRUCK**	FORD 550 VERSALIFT	DPW	M	1		
63	2022	**SREET SWEEPER**	GLOABAL R3 AIR SWEEPER	SEWER	M	1		
31	2012	**UTILITY TRUCK**	GMC STEP VAN	SEWER	M	1		
91	2022	**BACKHOE/LOADER W/BREAKER**		UTILITY/SEWER	M	1		
90	2019	**JCB 3CX COMPACT TRACTOR BACKHOE**		DPW	M	1		
93	2017	**WHEEL LOADER**	CATERPILAR 926M	DPW	M	1		
				Total Medium Parking:		10	0	0
47	2007	**6 CY DUMP TRUCK**	FORD TRUCK	FORESTRY	L	1		
45	2019	**5 CY DUMP**	FORD F-350	DPW	L	1		
39	2019	**1 TON SERVICE TRUCK**	FORD F-350	DPW	L	1		
38	1998	**3/4 TON PICK-UP TRUCK**	CHEVY TRUCK	DPW	L	1		
30	2011	**3/4 TON PICK-UP TRUCK**	CHEVY SILVERADO	DPW	L	1		
26	2014	**ASST DPW DIRECTOR**	CHEVY EQUINOX	DPW	L	1		
25	2013	**DPW DIRECTOR**	CHEVY EQUINOX	DPW	L	1		
24	2008	**COMPACT PICK-UP TRUCK**	CHEVY COLORADO	DPW	L	1		
22	2009	**COMPACT PICK-UP TRUCK**	CHEVY COLORADO	DPW	L	1		
37	2010	**UTILITY TRUCK**	CHEVY	WATER	L	1		
35	2015	**3/4 TON UTILITY TRUCK**	CHEVY SILVERADO 2500	WATER	L	1		
		VAN	E450	DPW	L	1		
92	2018	**SKID STEER**	CASE SV185	WATER	L	1		
94	2022	**SKID STEER**	NEW HOLLAND L220	DPW	L	1		
88	2009	**MT6 TRACTOR**		DPW	L		1	
				Total Light Parking:		14	1	0

VEHICLE & EQUIPMENT PARKING STALL ALLOCATION

Village of Shorewood DPW Facilities
Heated, Tempered & Cold Storage Equipment Pieces Needing Assigned Space

Vehicle Types & Stall Allotments

H = Heavy	42' x 14'	
M = Medium	30' x 12'	Heated = Heated and Ventilated, Concrete Floors, Floor Drains, Windows
L = Light	24' x 10'	Tempered = Heated to 55', Concrete Floors, no Ventilation or Floor Drains
E = Equipment	10' x 10'	Cold = An Uninsulated Shed with Concrete Floors, no Drains

VILLAGE OF SHOREWOOD DPW FACILITY

Unit Number	Year	Description	Model	Division	Stall Allotment	Heated	Tempered	Cold
81	1996	**SULLAIR COMPRESSOR**		DPW	E		1	
82	2012	**SPALDING HOT PATCH TRAILER**		DPW	E		1	
85	2010	**BANDIT CHIPPER**		DPW	E		1	
86	2016	**BANDIT CHIPPER**		DPW	E		1	
87	2020	**STUMP CUTTER**	RAYCO	DPW	E		1	
95	2015	**GLP 050 FORKLIFT**		DPW	E	1		
96	2021	**VOLVO LOADER**		DPW	E		1	
99	2019	**ASPHALT ROLLER**	BOMAG BW900-50	DPW	E		1	
100	2016	**HUBOTA RTV 1100**		DPW	E		1	
102	2021	**KUBOTA TRACTOR W/BUCKET**		DPW	E		1	
102A	2001	**BARBER SURFRAKE**	MODEL 400	DPW	E		1	
200	2005	**GATOR 4X4 TRUCK**		DPW	E		1	
300	2011	**KUBOTA RTV 900**		DPW	E		1	
400	2015	**GATOR 4X4 TRUCK**		DPW	E		1	
	2014	**TRENCH BOX - SAFETY DEVICE**		UTILITY	E		1	
80	2017	**AIR COMPRESSOR**	SULLAIR DPQ185	SEWER	E		1	
				Total Equipment Parking:		**1**	**15**	**0**

VEHICLE & EQUIPMENT PARKING STALL ALLOCATION

Village of Shorewood DPW Facilities

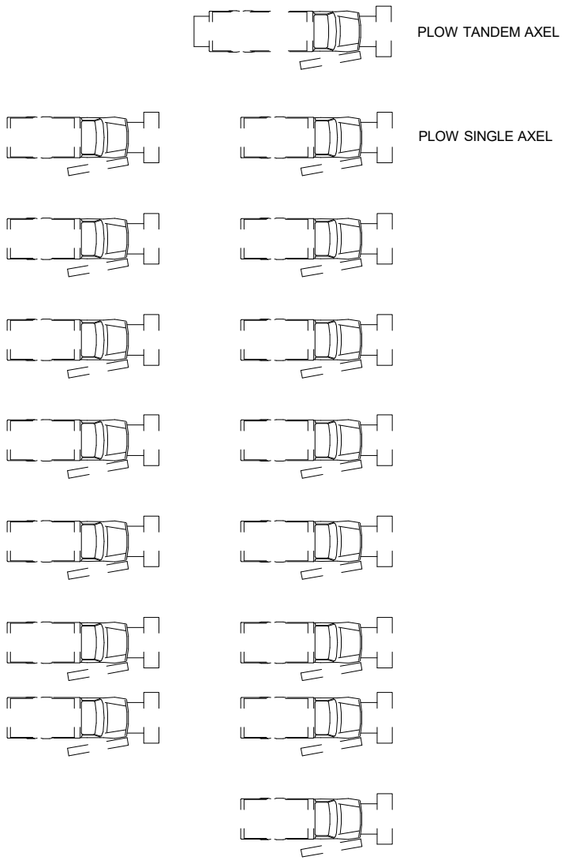
Heated, Tempered & Cold Storage Equipment Pieces Needing Assigned Space

VEHICLE & EQUIPMENT SUMMARY

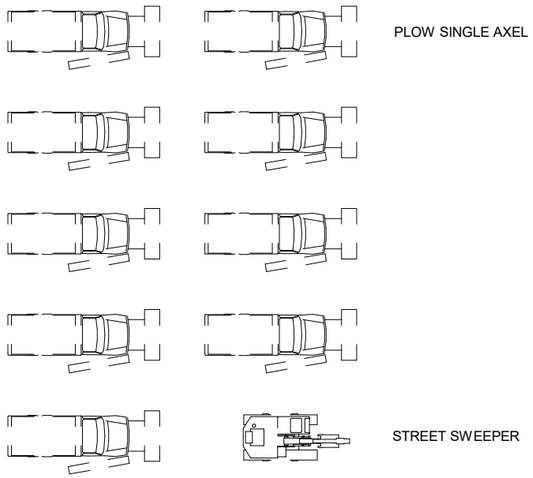
Type		Vehicle Size	Typical Type	Stall Size	Heated	Tempered	Cold	Current Total Vehicles
H		Heavy	Plow, Haul, Tandem	42' x 14'	16	0	0	16
M		Medium	Loader, Utility Truck, Water/Fuel Trucks	30' x 12'	10	0	0	10
L		Light	Crew Cabs, Tractors, Pick Ups	24' x 10'	14	1	0	15
E		Field Equipment	Rollers, Blowers, Compressors	10' x 10'	1	15	0	16
Total Vehicle Parking:					41	16	0	57

FLEET DIAGRAM

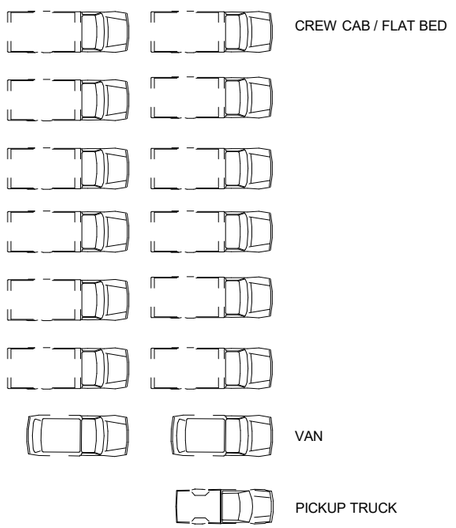
HEAVY DUTY (16)



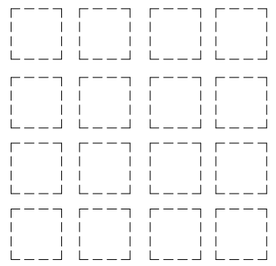
MEDIUM DUTY (10)



LIGHT DUTY (15)



EQUIPMENT (16)



BARRIENTOS design & consulting

STAFF BY DIVISION - DPW DEPARTMENT

Village of Shorewood DPW Facilities

Division	Staffing Classifications & Staff Count				
	Director/ Superintendents/ Administrators	Supervisors/ Lead Foremen /Admin Assts-Specialists	Operators/Mech's/ Tech's/ Specialists	FT Staff Total	Seasonal/ PTE
Administration	2	1	0	**3**	0
Services Division	0	1	8	**9**	0
Utility Division	1*	1	5	**7**	0
Fleet & Facilities Division	0	1	3	**4**	0
Seasonal	0	0	0	**0**	8
Staffing Totals	**3**	**4**	**16**	**23**	**8**

*Projected

RECOMMENDED ROOM PROGRAM FOR DPW G

Village of Shorewood DPW Facilities

MAIN SHOP BUILDING

FUNCTION AREA/ Room	X'	Y'	Net SF/Station	# of Stalls	Net Useable SF	Circulation & Wall Allow.	Gross SF	Occupancy Notes / Room Configuration X'	Y'
Heated Vehice Parking						15%		All Divisions	
Heavy Parking Stall	40	14	560	16	8,960			All Plow, Haule, Tandem Trucks	
Medium Parking Stall	30	12	360	10	3,600			All Loaders, Utility Trucks, Water/Fuel Trucks	
Light Parking Stall	24	10	240	14	3,360			All Crew Cabs & Pickups, future electrical charging stations	
Small Equipment Stall	10	10	100	1	100			Forklift	
Drive Aisle	26	220	5720	1	5,720				
Electrical Charging Station Equipment	16	12	192	1	192			Outfit space at each vehicle for future electric charging	
Field Equipment Storage	24	20	480	1	480			Includes Secured Field Tools, Yard Tools. First floor	
SUBTOTAL				**44**	22,412	3,362	**25,774**	190	136
Truck Wash						10%			
Manual Wash Bay	60	30	1800	1	1,800			Drive through manual wash bay with underbody wash & high pressure sprayers	
Wash Bay Closet	12	13	156	1	156			Equipment for underbody wash & high pressure washer	
SUBTOTAL				**2**	1,956	196	**2,152**	90	24
Repair Garage						10%		Each mechanic gets 2 bays	
Heavy Duty Bay	56	24	1344	2	2,688			1 Mechanic, two post lift and mobile column bay	
Light Duty Bay	30	22	660	1	660				
Small Engine Service Bays	20	15	300	1	300				
Parts Storage	20	24	480	1	480			Smaller vehicle replacement parts, first floor	
Battery/Charging Equipment Room	11	12	132	1	132				
Fabrication / Welding Alcove	20	27	540	1	540			Drill presses, band saws, hydraulic repair, etc. shared with other departments	
Material Stock Racks	16	15	240	1	240				
Mechanics Office	12	12	144	1	144				
Tire Shop	15	15	225	1	225				
Mobile Col. Lift Storage	11	10	110	1	110			1 sets (4), 4 x 4 per lift.	
Bulk Fluids Storage	16	12	192	1	192			Waste oil and lube tanks, racks and barrels	
SUBTOTAL				**12**	5,711	571	**6,282**	110	57
Trades & Services						10%			
Building Maintence & Carpentry Shop	33	60	1980	1	1,980			Work space, storage, paint storage & bay	
Sign Shop	25	20	500	1	500			Printing of Signs, 1 workbench, small shelving for storage, share space with electrical	
Electrical	25	20	500	1	500			Streetlights, Signals & Signs, Storage, includes office for 1 employee, share with sign shop	
Water Meter Testing Shop	35	30	1050	1	1050			2 worksations, 6 employees, Includes office for 1 employees	
Forestry & Parks	35	30	1050	1	1,050			Includes office with 2 workstations, 4 work benches outside of office, and storage	
SUBTOTAL				**5**	5,080	508	**5,588**	90	62
Crew Quarters						25%			
Crew Assembly/ Lunchroom	30	30	900	1	900			22 people seated in rows at 15 sf per person	
Kitchenette/Vending	12	8	96	1	96			Counters with Sinks, MW, Refrig, W/D, Ice	
Laundry Room	5	8	40	1	40			Washer & dryer	
Men's Locker Room	20	22	440	1	440			19 Employees, 19 Lockers, 15 SF Per Locker, includes shower and restroom	
Women's Locker Room	17	16	272	1	272			5 lockers, allow 15 SF per locker, includes shower and restroom	
Seasonal Employee Lockers	13	8	104	1	104			Seasonal Employees, Each with half of a locker & Cubby, 9 Lockers	
Open PC Carrel / Charging	10	4	40	1	40				
PPE Storage	5	8	40	1	40			Lockable cabinets (hemlets, vests, etc.), on first floor	
Janitorial Closet	7	8	56	1	56				
SUBTOTAL				**9**	1,988	497	**2,485**	50	50

DPW Administrative Areas						30%				
Reception Lobby / Vestibule	12	12	144	1	144					
Directors Office	14	14	196	1	196			Leeann Butschlick		
Secretary Office	12	10	120	1	120			Kate Strattner		
Superintendent Office	14	14	196	1	196			Dan Heyen		
Utilities Director Office	14	14	196	1	196			Projected		
Flex Office	12	10	120	1	120					
Restrooms	8	8	64	1	64			For Visitors & Admin., don't enter lockerooms		
Admin Kitchenette	8	6	48	1	48			Separate Admin Breakroom. Include Kitchenette		
Admin Conference Meeting Room	18	14	252	1	252			12 people at 15 sf per person with flexible furniture		
War Room	14	14	196	1	196			Informal meeting space		
Copy, Office Equipment, Files	6	10	60	1	60					
Admin Archive Records & IT Closet	6	10	60	1	60			Old records, blueprints, history. Etc.		
SUBTOTAL				**12**	1,652	496	**2,148**	90		24
Building Services						10%				
Mechanical Room	12	12	144	1	144					
Electrical Panel Closet	8	12	96	1	96					
Water, Fire Suppression Pumps	10	10	100	1	100					
SUBTOTAL				**3**	340	34	**374**	20		19
								X'		Y'
Total Main Shop Building Square Footage							**44,802**	440		102

YARD STORAGE BUILDINGS

Tempered Parking & Equipment						15%			
Light Parking Stall	20	10	200	1	200				
Equipment Stall	10	10	100	15	1,500			For seasonal equipment, dedicated space on ends of garage	
Plows, Blades, Attachments	20	20	400	1	400			General Storage, majority of plows stored in front of vehicles	
Traffic Controls Storage	20	20	400	1	400			General Storage	
Construction Equipment	20	20	400	1	400			General Storage	
Palleted Bulk Storage	20	12	240	1	240			General Storage	
Sewer & Water Storage	40	56	2240	1	2,240				
Forestry Storage	20	40	800	1	800			Lockable storage for chainsaws, locked pesticide cabinet, worksation with sink	
Drive Aisle	20	130	2600	1	2,600				
SUBTOTAL			7380	23	8,780	1,317	**10,097**	100	101

Salt Shed						5%			
Salt Storage	60	40	2400	1	2,400			1000 tons	
Salt Brine Tanks	20	20	400	1	400			Could be outside.	
SUBTOTAL			2800	2	2,800	420	**3,220**	120	27
Total Yard Storage Buildings							**13,317**		

Total DPW Facility Square Feet - Heated & Tempered							**58,119**		

DEDICATED YARD SPACE

Fuel Depot						5%			
Fueling Stations	12	12	144	1	144			Includes 2 Fueling Dispensers and Canopy	
Tanks Storage	5	12	60	2	120			2, 2,000 Gallon Tanks (1 Diesel, 1 Unleaded)	
Def Fueling Tank	10	10	100	1	100			Adjacent/Indoors to heated parking	
SUBTOTAL			304	4	364	55	**419**	100	4

Yard Storage						5%			
Logs and Chips	15	10	150	3	450			Forestry, leaf compost, traffic bond, sand	
Water/Utility Matinence	10	10	100	1	100				
Generator	16	10	160	1	160				
Bulk Bins	24	24	576	8	4,608			Chips, stone, recycled concrete, top soil (shared), mulch, logs, & extra	
Seperator	8	20	160	1	160			Needs drainage	
Forestry Holding Bed	40	40	1600	1	1,600			Gravel bed for trees, needs water and electricity	
Compactor*	20	75	1500	5	7,500			5 trailers, 2 in the bays and 3 outside	
Recycling/Oil Drop Off	20	12	240	1	240				
Cold Patch	12	15	180	1	180			Minimum width 12'	
Hot Patch	12	15	180	1	180			Minimum width 12'	
Slurry	12	15	180	1	180			Minimum width 12'	
Dirt Spoils Bin	15	30	450	1	450			Needs special drain, atleast 6' walls	
Refuse Carts/Street Cans	30	50	1500	1	1,500			Collections, 200-260 would prefer to be covered	
Traffic Storage	12	22	264	1	264				
Public Drop off	30	60	1800	1	1,800			6 pallete sized bins, 2 bins	
Construction Storage	10	30	300	1	300				
Scale*	12	50	600	1	600				
Salt Brine Storage	20	15	300	1	300				
Rain Collection	20	20	400	1	400				
Transfer Station	100	150	15000	1	15,000			2 compactors and 5 trailers with 2 below grade bays	
SUBTOTAL			10240	31	35,972	5,396	**41,368**	100	414
Total Yard Storage							**41,786**		

SUMMARY OF DPW OPTIMAL SF BY FUNCTION

Village of Shorewood DPW Facilities

MAIN SHOP BUILDING

FUNCTIONAL AREA	Optimal SF	% of Overall SF
Heated Vehice Parking	25,774	58%
Truck Wash	2,152	5%
Repair Garage	6,282	14%
Trades & Services	5,588	12%
Crew Quarters	2,485	6%
DPW Administrative Areas	2,148	5%
Building Services	374	1%
Total Main Shop Building SF	**44,802**	

YARD BUILDINGS

FUNCTIONAL AREA	Optimal SF	% of Overall SF
Tempered Storage Parking & Equipment	10,097	76%
FUNCTIONAL AREA	**Optimal SF**	**% of Overall SF**
Salt Cold Storage	3,220	24%
Total Yard Building SF	**13,317**	
Total Building SF	**58,119**	

YARD STORAGE

FUNCTIONAL AREA	Optimal SF	% of Overall SF
Yard Storage	41,368	73%
Fuel Station	419	1%
Transfer Station	15,000	26%
Total Yard Storage SF	**56,786**	

COMPARISON OF EXISTING TO OPTIMAL SQUARE FEET

Village of Shorewood DPW Facility

DPW MAIN SHOP BUILDING

FUNCTIONAL AREA	Optimal SF	Existing SF	Add'l SF	% of Change
Heated Vehice Parking	25,774	6,428	19,346	301%
Truck Wash	2,152	785	1,367	174%
Repair Garage	6,282	4,315	1,967	46%
Trades & Services	5,588	2,562	3,026	118%
Crew Quarters	2,485	1,883	602	32%
DPW Administrative Areas	2,148	1,500	648	43%
Building Services	374	68	306	450%
Total Main Shop Building SF	**44,802**	**17,541**	**27,261**	**155%**

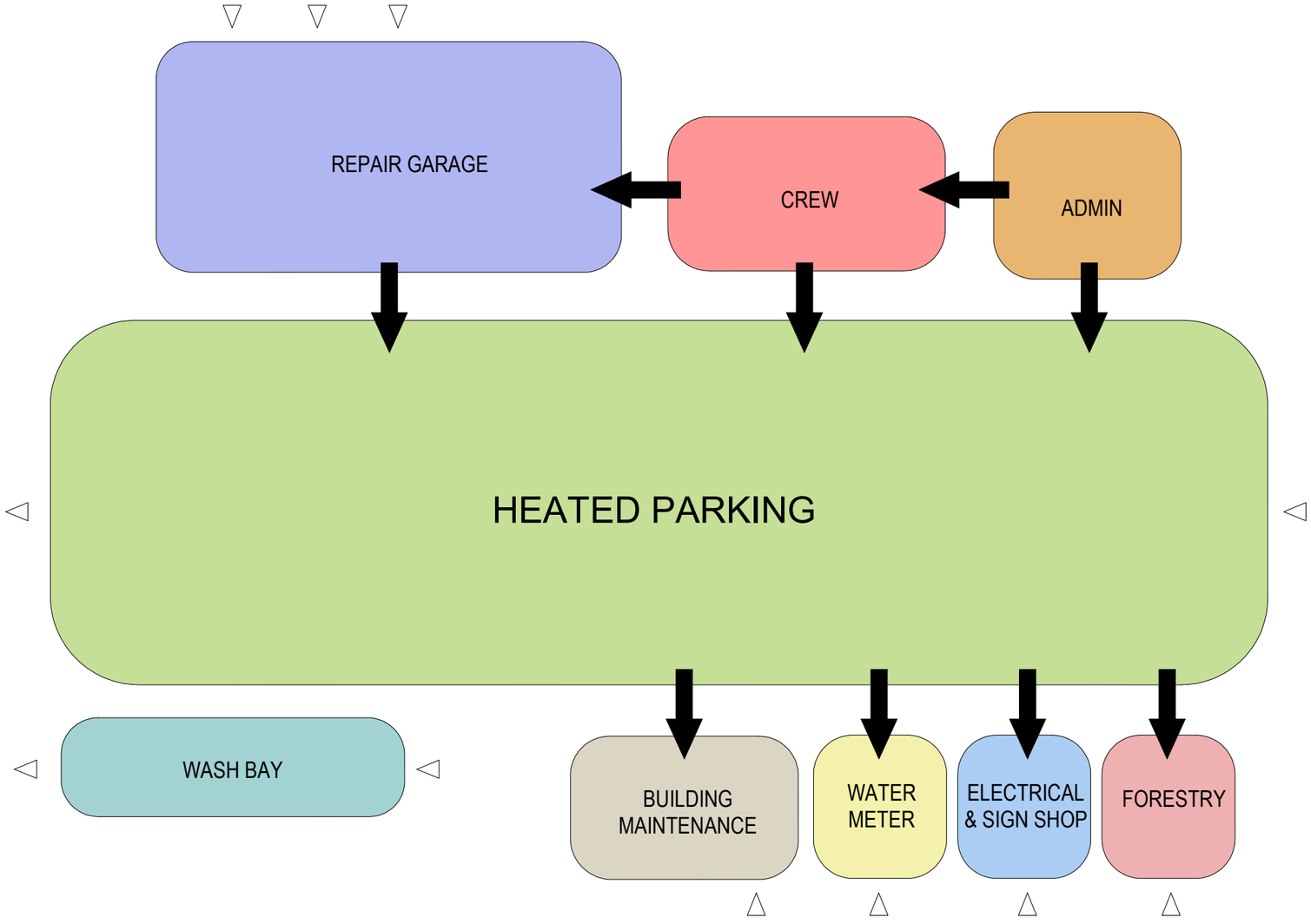
TEMPERED STORAGE BUILDINGS

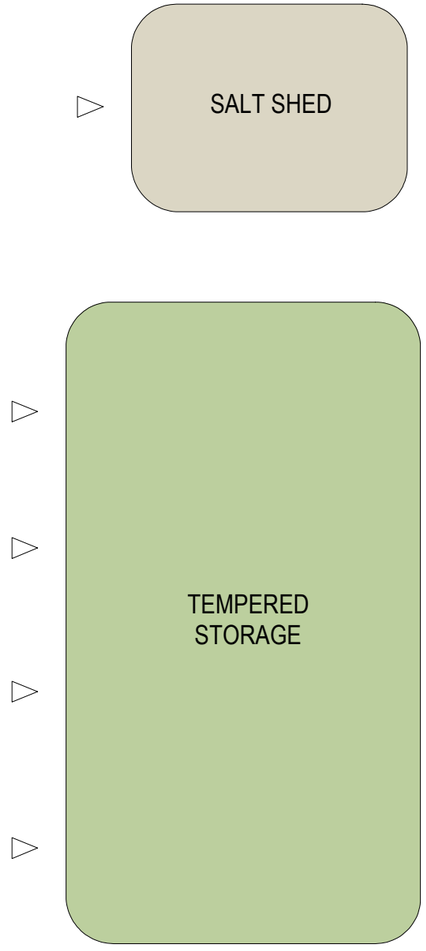
FUNCTIONAL AREA	Optimal SF	Existing SF	Add'l SF	% of Change
Tempered Parking & Equipment	10,097	3,560	6,537	184%
Salt Shed	3,220	1,400	1,820	130%
Total Tempered Storage SF	**10,097**	**3,560**	**6,537**	**184%**
Heated & Tempered Building Subtotal SF	**54,899**	**21,101**	**33,798**	**160%**

YARD STORAGE

FUNCTIONAL AREA	Optimal SF	Existing SF	Add'l SF	% of Change
Yard Storage	26,368	19,434	6,934	36%
Transfer Station	15,000	15,086	0	0%
Yard Storage & Transfer Station	**41,368**	**34,520**	**6,934**	**36%**

Summary	Optimal SF	Existing SF	Add'l SF	% of Change
Total DPW Facilities SF	**99,487**	**57,021**	**42,552**	**75%**





KEY

- ADMINISTRATION **2,173 SF**
- CREW **2,650 SF**
- HEATED GARAGE **28,930 SF**
- REPAIR GARAGE **6,550 SF**
- TRUCK WASH **2,287 SF**
- FORESTRY & PARKS **1,080 SF**
- BUILDING MAINTENANCE **2,015 SF**
- METER TESTING **1,080 SF**
- ELECTRICAL/SIGNAGE **1,080 SF**

TOTAL: **47,845 SF**

- TEMPERED STORAGE **11,620 SF**
- SALT SHED **1,000 TONS**

TOTAL: **14,020 SF**

YARD STORAGE **24,076 SF**

TOTAL BUILDINGS: **61,865 SF**
SITE: **5.48 ACRES**

Shorewood DPW Study

1 / A821 RELATIONSHIP DIAGRAM
1/32" = 1'-0"

BARRIENTOS design & consulting



Shorewood DPW Study

1 / A803 RECOMMENDED FLOOR PLAN
3/64" = 1'-0"

BARRIENTOS design & consulting

OPERATIONAL EFFICIENCIES GAINED

The following tables identify operational efficiencies that will be obtained through a new DPW Facility.

Columns identify the operational efficiency goal attained, the design response, current inefficiencies, and the illustration of the problem. This layout occurs for the following DPW functions.

- Site, Yard & Traffic
- Health safety and welfare
- Parking Garage
- Trades & Services
- Fleet Repair
- Crew Support
- Administration

PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
SITE, YARD & TRAFFIC			
Provide a safe exit and entrance off street and separate out private vehicles. Prevent vehicle accidents.	Clearly demarcated entries with separation of DPW trucks from private vehicles.	Drive aisle entering site from N Morris Blvd. Private traffic mingles with DPW Trucks upon entry and exiting.	
Public drop-off functions are separated from other DPW operations. Minimize private vehicles onsite.	Design a separate public entrance way for trash/recycling drop-off.	Public utilizes drop off zones located at the west side of site which disrupts workflow and is a risk hazard.	
Allow vendors and deliveries to occur without impeding DPW operations.	Distinct loading area and dock for semi-sized vehicles with sufficient parking and turnaround space.	Delivery services mix with DPW traffic flow. Unloading block circulation.	
Fueling activity is laid out for Village-wide fleet to access.	Fueling Station is positioned to have sufficient space for vehicle circulation.	When trucks fuel, access to rest of the site is constrained.	

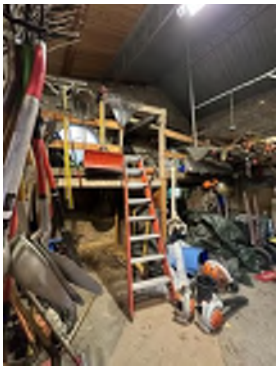
PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
Provide clear and distinct traffic patterns for trucks around buildings and Yard functions. Prevent accidents and drive blockages.	Provide a minimum clearance of 100' between buildings. Trucks approach overhead doors straight on or at 90' before turning and then making a straight turn.	Many blind spots for drivers on current site. Tight turning to make corners.	
Allow space for truck to turn into overhead doors beforehand and then enter in straight. Minimize door hits.	90' minimum clearance outside each overhead door allows truck to turn 90' and enter in door straight.	Many overhead doors require a truck to jockey in before entering. Overflow truck parking blocks overhead door exiting.	
Provide centralized inventory control of site stock. Protect certain materials from snow and freezing up.	Covered stockpiles sized for each Division's needs within one Yard. Created gated areas for each Division's material.	Many Division's stock material across the site which can have overlap or constrain yard flow.	
Minimize noise and smell impact on residence from salt loading, trucks backing up, vehicle fumes, and refuse collection debris.	New DPW Yard is placed in a site adjacent to industrial and business uses.	Current DPW is wedged between the Oak Leaf recreational trail and the backyards of 23 residential properties.	

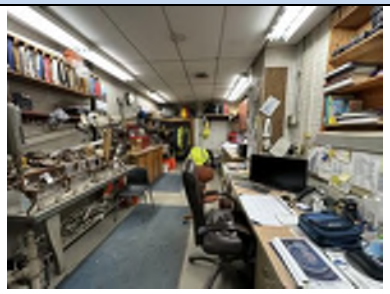
PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
INTERNAL ENVIRONEMNTS: HEALTH SAFETY & WELFARE			
Provide particulate-free air to mechanics and operators. Minimize sick days, illnesses, and time loss.	Design HVAC system to provide 4 air exchanges per hour and point-source exhaust to capture sawdust, paint, welding and tailpipe exhaust.	Undersized, outdated and partially operating HVAC system does not adequately remove odors, particulates and exhaust creating a respiratory hazard and dark, sooted interiors.	
Provide walking paths free of obstructions. Minimize accidents from hitting objects and slipping	Designated walking paths in Garage and Shops. Parking stalls that allow staff to walk around truck and properly sized drive aisles.	Walking clearance between trucks is tight and full of obstruction from the implements.	
PARKING GARAGE: GENERAL OBJECTIVES			
Provide sufficient stall count, size and layout to enhance the longevity of the vehicles, the amount of time to access them. Extend the life of the vehicles. Decrease the amount of time to prepare vehicle for use.	Number of stalls provided matches DPW fleet size and composition.	The number and size of the current stalls are undersized so trucks are kept outside in the elements and exposed to theft/vandalism and excess weather wear.	

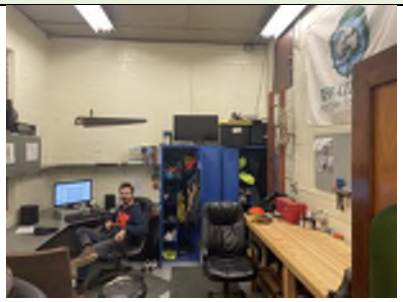
PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
Provide internal drive aisles with sufficient width to back in and out of stall, and for truck to travel free of obstructions	Drive aisles are 26' wide to allow room to pull into and to back out of stall. Also, room to temporarily park a truck in the drive aisle without blocking the aisle. There will be no time expended in clearing out a path for a vehicle	The drive aisle is used for vehicle parking, and this blocks the whole Garages traffic flow. Operators expend time in the morning sorting out vehicles in order to access one.	
Provide height clearance above trucks to beds and maintenance can be undertaken.	Underside of structure allows for a 21’ clear ceiling. Trucks can fully extend their beds for washing and testing.	Operators are limited on where they can extend their truck beds, buckets or ladders. Ceiling elements such as joists and ducts have been hit.	
Provide Truck/Equipment Wash Bay that is easily accessible and properly equipped. Provide proper number of wash bays for fleet size.	Distinct Truck/Wash bays provided outside of Parking Garage and in line with traffic pattern.	Wash bay is not large enough to fit most vehicles causing them to stick out. Currently no proper drainage is used and wash fluids are exposed to rest of garage.	
Sufficient area for field equipment.	Storage rooms specifically designed for bulk equipment and separately, field tools.	Storage areas are in various locations around the yard and in areas that are hard to access the items.	

PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
TRADES & SERVICES			
Provide adequate workspace for building repair trades.	Trades workshop for electrical and sign shop, forestry, water meter testing shop, and building maintenance.	Lack of adequate space for all the building trade activities.	
Provide more stock storage.	Storage areas allocated for shelving and stocking of daily used materials.	Cannot keep sufficient quantities or types of inventory needed in their Shop.	
Provide adequate storage levels for stock of signage material.	Shelving, cubbies, and racks provided in storage areas adjacent to sign making equipment.	Lack of storage space.	
Provide sufficient workbench space.	A distinct workbench for light pole work that can handle a light pole lying down. Provide overhead conveyance to transport poles and other heavy items.	Currently no work bench space for signal poles.	

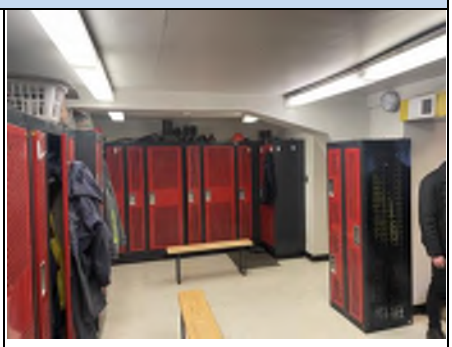
PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
Provide workbench area to repair items.	Separate workbench and space provided.	Workbench can create unwanted noise, dust, and oil in a space intended for office and workstations.	
Provide sufficient storage and shelving space.	Larger storage rooms for stock items, from small bolts to boxes to bulk items.	Storage areas that are filled and not allowing crews to store proper amount of inventory.	
Provide separate storage of paints, solvents, thinners and aerosol to minimize explosion hazards.	Combined room for all low hazard liquids and aerosols.	Solvents, paints, aerosols and other field applications are kept in various cabinets throughout Garage.	
FLEET REPAIR			
Service bays that fit Villages largest vehicles so technicians can work on them unimpeded by blockages.	Heavy duty service bays that are deep and wide enough 42'x14'. Enough ceiling clearance to extend beds.	Only one drive on lift is currently used which makes certain repairs not possible. Ceiling height is too low so lift cant be fully raised.	

PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
Provide vehicle lifting equipment along with exhaust control	Repair bays outfitted with various vehicle lifts, tailpipe exhausts, space for portable welders, lubrication reels and an overhead crane.	Repairs bays that are too small to handle all the equipment necessary to work on a wide variety of equipment pieces.	
Provide equipment for Operators to undertake maintenance.	Provide four bays for repairs. Two heavy, one medium, one light.	Currently the Mechanic only has a single drive-on lift which cannot fit several of the fleets vehicles and only allows for one vehicle to be repaired at a time.	
Provide clear access to Lube Rack and place adjacent to Repair Garage.	Lube Rack located out of parking stall area and with sufficient approach and exiting clearance. Place adjacent to Repair Garage.	Lube rack is not adjacent to current repair bay and drive-on lift.	
Hazardous stock needs separate room for exhaust and spill control.	Separate storage rooms or closets for oils, paints, thinners, aerosols along with proper ventilation.	Bulk oils and fluids are stored in area open to repair activities.	
Specialized small engine repair bay to handle the numerous small items that crews use in the field.	A small engine repair bay that has both a light duty lift and a small engine table lift. Storage area for repair stock.	No small repair lift. Repairs done in main shop floor.	

PUBLIC WORKS GARAGE OPERATIONAL EFFICIENCIES GAINED

OPERATIONAL EFFICIENCY GOAL ATTAINED	DESIGN RESPONSE	CURRENT INEFFICIENCIES	ILLUSTRATION OF PROBLEM
CREW SUPPORT			
Centralized, private and gender separate lockers with sufficiently sized lockers.	Lockers at least 2' wide and provisions personal field gear. Bathrooms and showers included in locker rooms.	Locker rooms are outdated, showers are not used.	
Centralized Assembly, Break and lunch area.	One multi-purpose assembly room that handles morning assembly, break and lunch. Safety training room adjacent or with a moveable partition wall.	The current assembly room is not furnished in a way to be multipurpose. Difficult to conduct meetings or safety training.	
ADMINISTRATION			
Appropriately sized space for meeting and conferences.	One multi-purpose conference room sized to fit 12 people.	Current conference room is undersized to fit only 4 people and has no TV for presentation purposes.	
Office functions are separated from repair/fleet functions.	Distinct thresholds between office and repair programs. Relationship between administration, crew, and repair/fleet.	The functions of administration, crew, and repair/fleet overlap with each other.	

SECTION 3
PHASE TWO - SITE EVALUATION

The initial review process for the site evaluation identified three site locations, plus the existing Morris Blvd site. Barrientos based their new evaluations on realtor listings, word of mouth from the Village, and site visits and mapping observations of viable land for future development.

The sites were further reviewed for roadway access, topography, zoning, stormwater, utility capacity, and time & distance to nearby major roadways. Each site's benefits and drawbacks were discussed and listed in the following pages.

For each of the four candidate parcels, Barrientos created site plans based on County GIS mapping. These maps indicate property lines, roadways, curb-cuts, existing buildings, contours, zoning, vegetation, surrounding land uses, and wetland indicators.

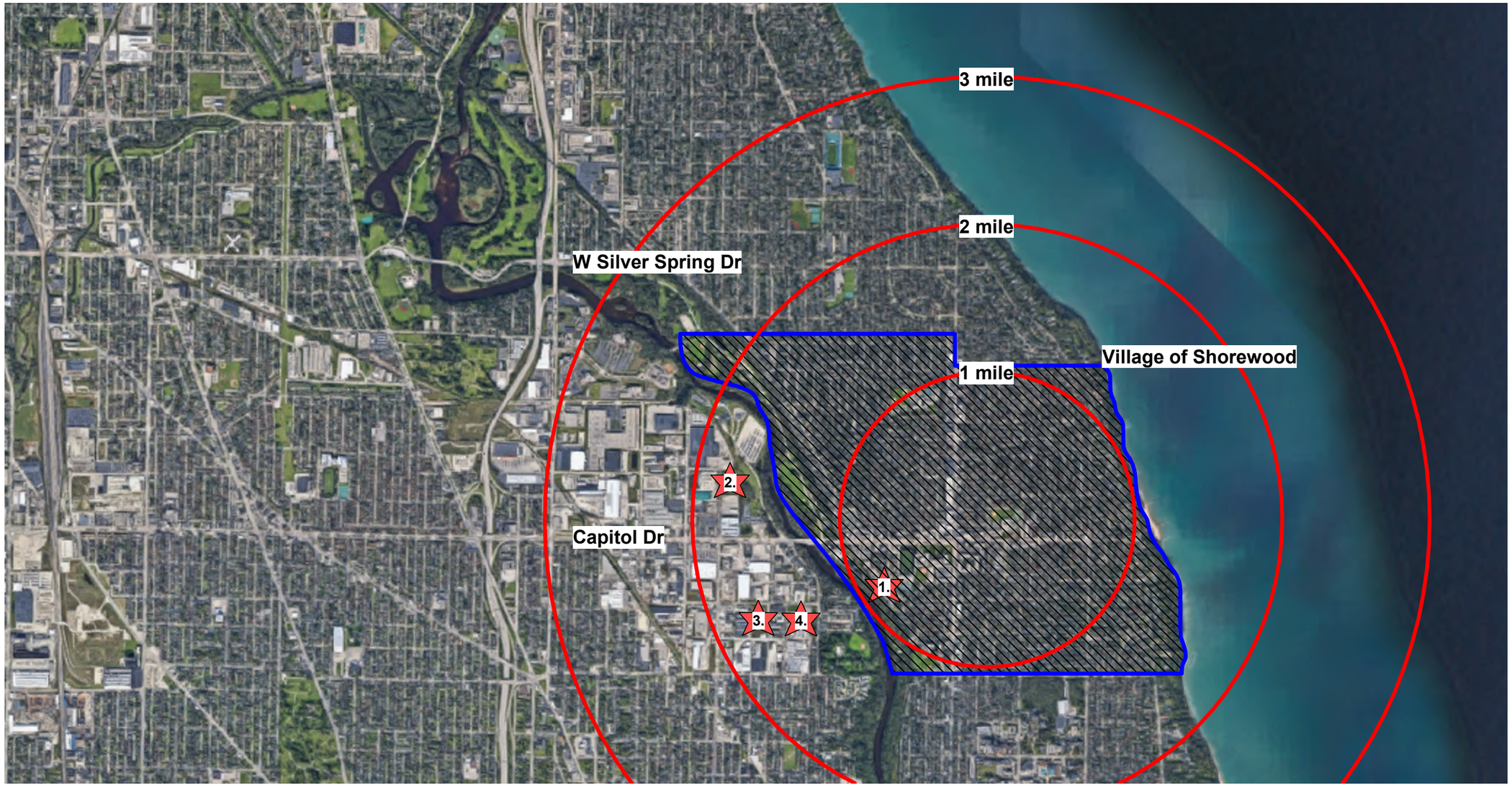
For each site, a test-fit arrangement plan was developed showing a recommended building footprint, associated yard facilities, and paved areas. Key operational issues were identified on the plans including: traffic patterns, street access, yard storage area, vehicle circulation, relationship between building and yard functions, public and vendor traffic separation, and site security.

SITE SELECTION CRITERIA

The following Selection Criteria provided a methodology for comparison of each of the different site options. The ratings for each of the criteria are scored using a five-point rating system with a rating of five being the most beneficial to the Village. Each selection criteria received a Weighting Factor to highlight its importance in the selection process.

More important criteria received a higher weighting factor. Criteria of less significance to the Village that can be more easily mitigated during the design or construction phase, received a lower Weighting Factor.

Criteria 1 – Meets Building and Yard Program – Space on the site for the building at recommended configuration and necessary yard/tempered Storage.
Criteria 2 – Vehicle Circulation and Adjacencies – Space on the site for vehicles to navigate safely and efficiently.
Criteria 3 – Distance to Capitol Dr & N Oakland Ave
(Village Center).
Criteria 4 – Appropriate parcel configuration – Site shape enables the program to work optimally.
Criteria 5 – Reasonable Site Development Costs.
Criteria 6 – Adequate Area for Expansion – Space on the site for expansion of the main building footprint and site functions including potential operation changes in the future.
Criteria 7 – Street Capacity and Access – Sufficient to handle heavy truck loads and volume including ease of making curb cuts and acceleration and deceleration lanes. Also included in this criterion is the amount of site frontage for the preferred number of vehicle access points on and off the site.
Criteria 8 – Cost to Purchase – Including demolition and environmental clean-up costs.
Criteria 9 – Infrastructure and Improvement Costs – including utilities and the net effect of potential cost sharing.
Criteria 10 – Historic Preservation – Impact on preservation of historic values of current site.
Criteria 11 – Economic/Environmental Justice – The buildings ability to fit into the land use plan that the jurisdiction has developed for the selected site.
Criteria 12 – Traffic Impact – Impact on surrounding traffic based on street sizes and capacity.
Criteria 13 – Grading – Ability to grade site properly for program's needs.



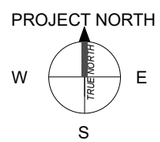
SITES:

1. 3801 N Morris Blvd
3.25 Acres
Public Building Zoning

2. 4132 N Holton St
3.71 Acres
Light Industrial

3. 701 E Vienna Ave
4.18 Acres
Light Industrial

4. 3701 N Humboldt Blvd
8.83 Acres
Industrial



INTIAL SITE EVALUATION
SITE #1

3801 N Morris Blvd

Site #1 is the DPWs existing site comprised of four parcels totaling to three acres and five buildings. It is located off Morris Blvd and is the only site in this study that is available within the Villages boundaries. Directly to the north of the site is a We Energies substation, to the west is the Milwaukee County Parks Oak Leaf recreational trail, and to the east are residential properties.

Constricting factors for this site include the steep grade change, a narrow and long site shape and small acreage. From the south to north, the grade level increases vertically by 19 feet and will require grading level platforms so the trucks can exit a long garage structure at the same height from end to end.

If this site were to be reused, replacing or removing the retaining wall on the east side of the site must be considered. The construction and state of the existing retaining wall is in disrepair and in danger of collapse. Any new site development will likely require rebuilding of the 637' long concrete retaining wall.

The site has a long narrow shape that requires trucks to maneuver through narrow passages, make extensive turns to make an entry and load material, and cross traffic patterns with other functions. Any new buildings on this site will decrease the truck driving lane and turning radii.

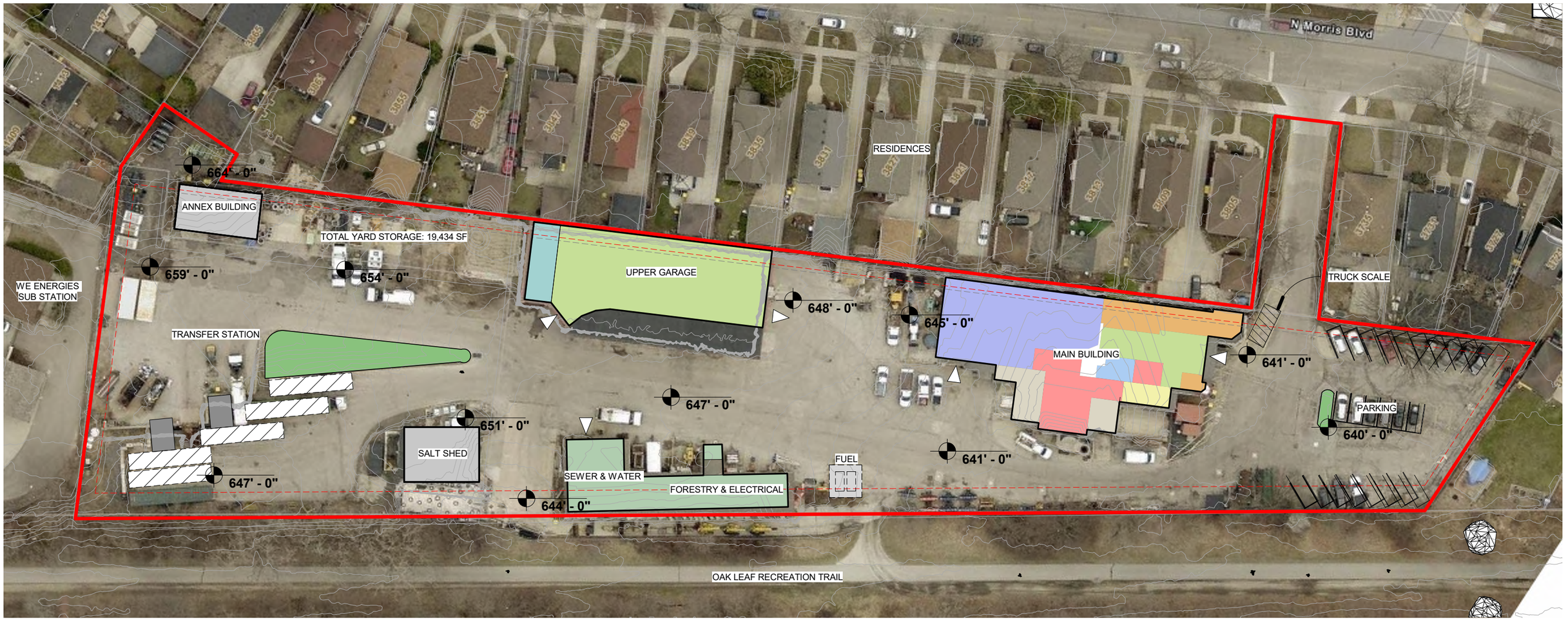
With only one entrance and exit, several blind spots occur with employees, vendors and visitors. Lastly, the site is 3.25 acres which based on our space needs assessment is nearly 2 acres too small for the Villages optimal building and yard operations.



1.

3801 N Morris Blvd

- Existing Site
- Public Building Zoning
- 3.25 Acres
- 2 min drive to Village center



1 A802 EXISTING SITE
1" = 60'-0"

Shorewood DPW Study

KEY

- ADMINISTRATION **1,500 SF**
- CREW **1,882 SF**
- HEATED GARAGE **6,428 SF**
- REPAIR GARAGE **4,315 SF**
- TRUCK WASH **785 SF**
- FORESTRY & PARKS **1,050 SF**
- BUILDING MAINTENANCE **1,950**
- METER TESTING **330 SF**
- ELECTRICAL/SIGNAGE **280 SF**
- TEMPERED STORAGE **3,560 SF**
- SHEDS **1,400 SF**
- YARD STORAGE **19,434 SF**

BARRIENTOS design & consulting

SITE #2

4132 N Holton St

Site #2 is located off N Holton St just outside of the Villages municipal border. It is 3.7 acres which is 0.5 acres bigger than the existing site. The site has a grade change of 10 feet from West to East. Located east of the site is the Milwaukee River which would need to be taken into consideration when working with run off.

To the south is a lot that could be purchased by the Village; expanding the acreage to 5. The addition of this parcel would allow enough land for DPW & Transfer station operations. Currently the site is zoned as Light Industrial and is owned by the City of Milwaukee.

The site has many positive attributes for a DPW Garage operation including: sufficient site acreage for all DPW services, a site that can be easily graded, a four minute drive to the Village center, a streetside that could allow multiple access points, compatible industrial and yard storage properties, streets that can handle truck traffic, no surrounding residential/neighborhood/ educational uses that may conflict with the yard operation's, likely sufficient utility service in right of way, and relative isolation to the east with a downhill slope toward the Milwaukee River.

As of February 2023, the property has not been sold. It has been communicated by Milwaukee Department of City Development (DCD) that Spike Brewery had announced development plans to build there in May 2022.

Milwaukee DCD also communicated that the site has environmental contamination issues and will require hazardous materials cleanup.



Site 2
4132 N Holton St

- For sale by City of Milwaukee
- Light Industrial Zoning
- 3.71 Acres
- 4 min (1.1 Miles) drive from Village center



Shorewood DPW Study

1 A823 NEW SITE - N Holton St
1" = 100'-0"

BARRIENTOS design & consulting

SITE #3

701 E Vienna Ave

Site #3 is located off E Vienna Ave just outside of the Villages municipal boundary. At 4.18 acres, it is nearly one acre larger than the existing site, but under the 5-acre recommendation.
There are two additional adjacent parcels that appear to be underutilized. The two parcels are respectively 0.94 and 0.3 acres in size. The three parcels have a combined total acreage of 5.44 which would meet the DPW facility program.

The site's configuration is a desirable shape and has three accessible roads for vehicle access. Currently, the site is zoned as industrial and is for sale by the owner. Two nearly 20-foot mounds currently exist on either end with dense/overgrown population across the entirety.

The site has many positive attributes for a DPW Garage operation including: sufficient site acreage for all DPW services, a site that can be easily graded, a four minute drive to the Village center, a streetside that could allow multiple access points, compatible industrial and yard storage properties, streets that can accommodate large truck traffic, no surrounding residential/neighborhood/ educational uses that may conflict with the yard operation's, and the likelihood of sufficient utility service in right of way.



Site 3

701 E Vienna Ave

- For sale by owner
- Industrial Zoning
- 4.18 Acres
- 4 min (1 Mile) drive from Village center



1 A813 NEW SITE - 701 VIENNA
1" = 100'-0"

BARRIENTOS design & consulting

SITE #4

3701 N Humboldt Blvd

Site #4 is located off N Humboldt Blvd just outside of the Villages municipal boundary. It is the largest site at 8.83 acres, over 5 acres larger than the existing site. The Humboldt site has an abandoned industrial facility owned by the company Tramo. It is not for sale as of February 2023.

Street access is available on three sides of the parcel. If the Village were to develop on this site, the largest consideration may be the demolition costs of the existing building, which is estimated at 140,000 SF. This is the only site that would allow for future expansion.

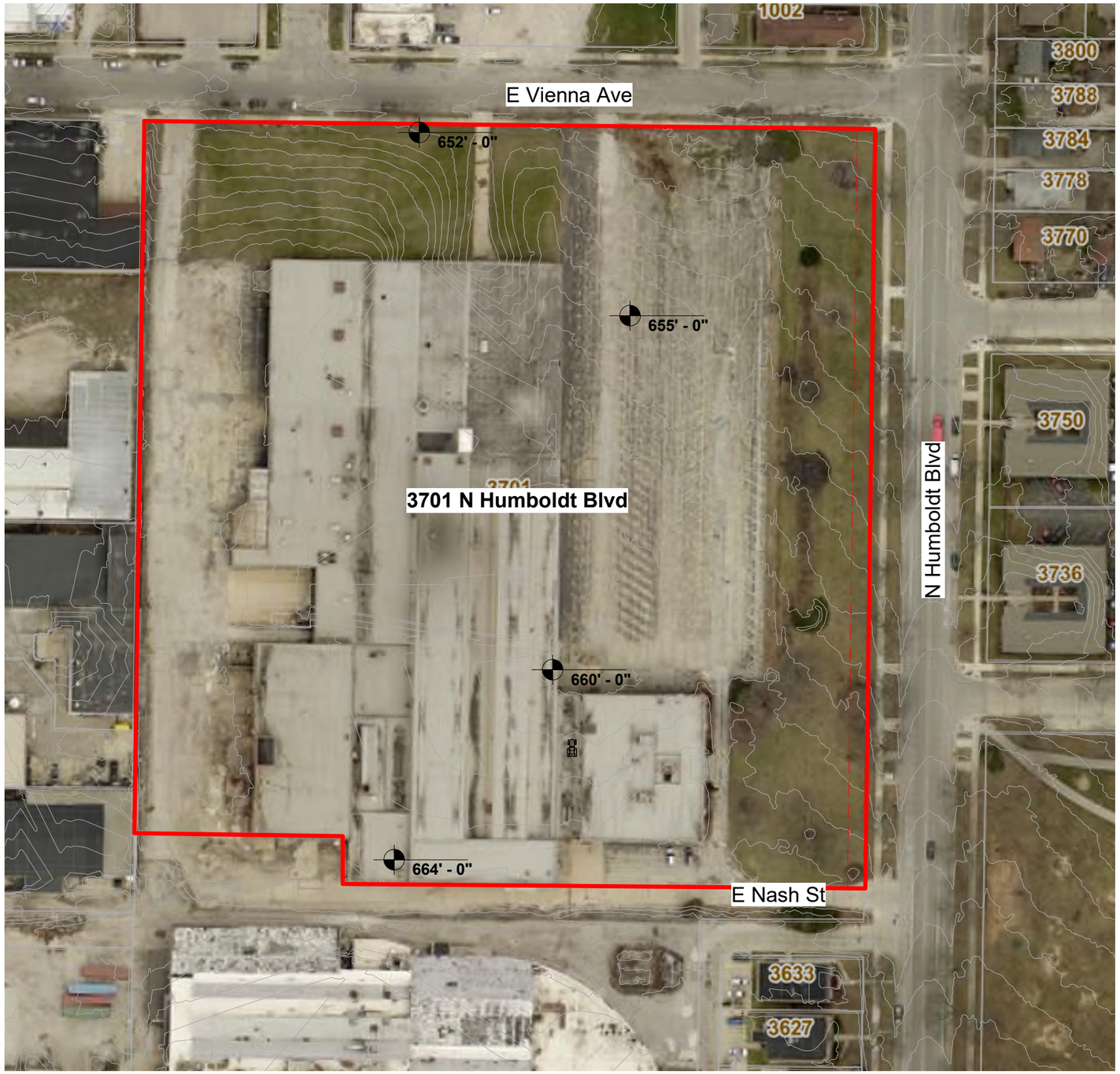
The site has many positive attributes for a DPW Garage operation including: more than sufficient site acreage for all DPW services, a site that can be easily graded follow demolition, a four minute drive to the Village center, a streetside that could allow multiple access points, compatible industrial and yard storage properties, streets that can accommodate large truck traffic, no surrounding residential/neighborhood/ educational uses that may conflict with the yard operation's, and the likelihood of sufficient utility service in the right of way.

Drawbacks include the required demolition of the large structure and potential environmental clean-up.



Site 4
3701 N Humboldt Blvd

- Vacant
- Not actively listed for sale
- Industrial Zoning
- 8.83 Acres
- 4 min (1 Mile) drive from Village center



1 A825 NEW SITE - HUMBOLDT
1" = 100'-0"

BARRIENTOS design & consulting

INITIAL TEST FIT AND BENEFIT/DRAWBACKS

Test fits of the recommended DPW facilities program on each of the sites follow. It is assumed all sites are demolished to allow construction of a new flat site. In these test fits setbacks, ingress/egress, circulation lanes, daily vehicle/employee workflow, building adjacencies, and yard storage were all taken into consideration.

Each of the following sites are broken up into two options to take in account the scenario of splitting tempered storage, the transfer station, and the majority of yard storage from a Main Garage development.

The transfer station is the only program from DPW provided services that was considered for relocation or removal due to its large footprint.

SITE #1
Option 1A

3801 N Morris Blvd

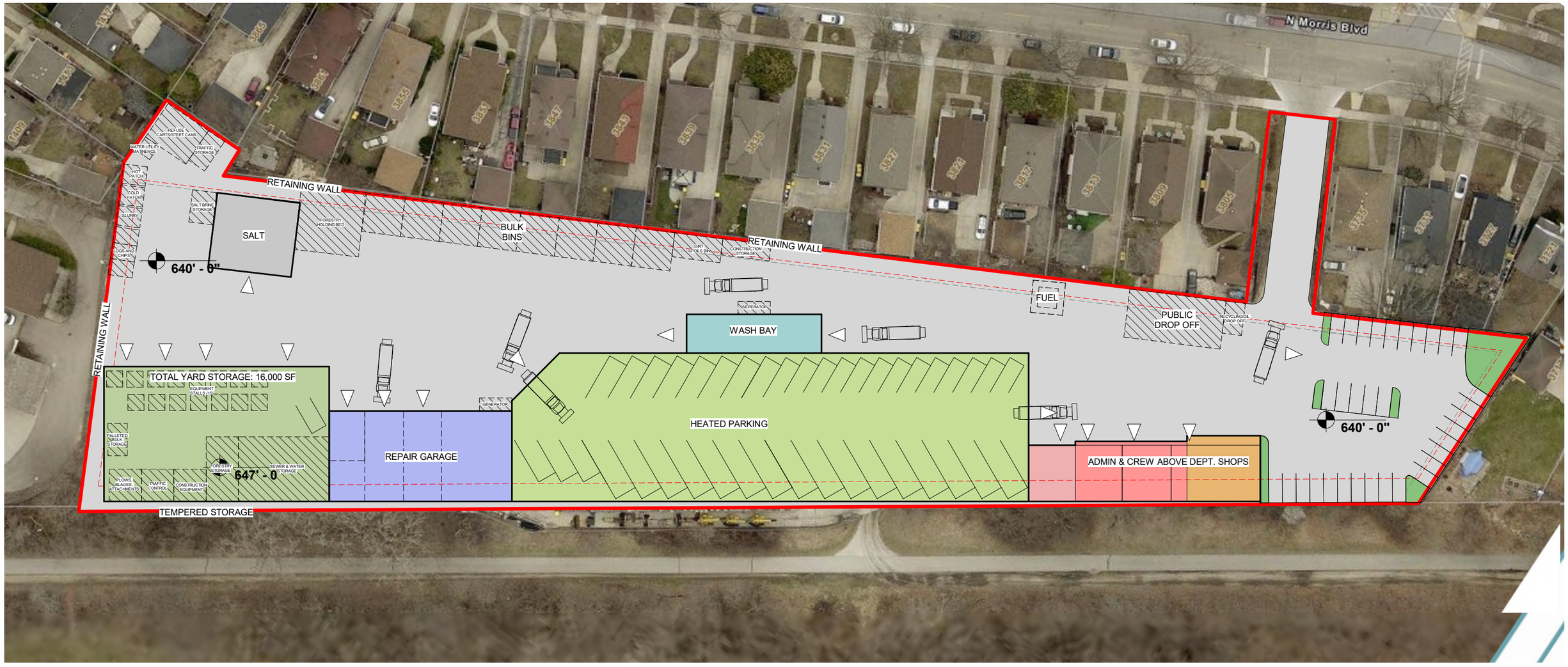
Option 1A looks at demolition of the existing site and rebuilding a new facility with the recommended square footage based on the facility needs assessment. Because of the site's size and configuration, the transfer station is not included in this option.

Option Benefits

- Operations stay in Shorewood
- New facilities will be up to code and sized properly based on DPW's needs

Option Drawbacks

- Transfer station must be moved or eliminated
- High redevelopment costs of existing site
- Demolition of existing buildings
- Poor vehicle and site circulation
- Underground stormwater management to be considered



1 / A805 EXISTING SITE - OPTION 1A
1" = 60'-0"

Shorewood DPW Study

KEY

- ADMINISTRATION **1,737 SF**
- CREW **2,485 SF**
- HEATED GARAGE **25,774 SF**
- REPAIR GARAGE **6,282 SF**
- TRUCK WASH **2,152 SF**
- FORESTRY & PARKS **1,050 SF**
- BUILDING MAINTENANCE **1,980**
- METER TESTING **1,050 SF**
- ELECTRICAL/SIGNAGE **1,000 SF**
- TEMPERED STORAGE **10,097 SF**
- SALT SHED **2,400 SF**
- YARD STORAGE **20,000 SF**

NO TRANSFER STATION

BARRIENTOS design & consulting

SITE #1
Option 1B

3801 N Morris Blvd

Option 1B proposes splitting DPW operations between two sites. Functions that would be kept at the existing site include tempered storage, the transfer station, and the majority of yard storage. All other functions would be moved.

Option Benefits

- New facilities will be up to code and sized properly based on DPW's needs
- Existing site's buildings could remain
- No high redevelopment costs on existing site
- Transfer station will stay
- DPW operations can continue to operate as is during construction

Option Drawbacks

- Operations will be split between two sites
- DPW staff will have to maintain two sites
    - Lack of security



TEMPERED STORAGE
11,105 SF

HEATED VEHICLE PARKING
7,215 SF

COLD STORAGE
3,700 SF

Shorewood DPW Study

1 / A834 EXISTING SITE - OPTION 1B
1" = 60'-0"

BARRIENTOS design & consulting

SITE #2
Option 2A

4132 N Holton St

Option 2A proposes the construction of the primary facility on site 2, however, due to the site's limited size of only 3.8 acres, certain functions such as yard storage, tempered storage, and the transfer station would need to be relocated to an alternate location. The relocation of these functions could take place either on the existing Department of Public Works site or a new site.

This design incorporates multiple access points along Holton Street, each designated for a distinct purpose, namely administration and crew, repair garage and trades/services shops, and the transfer station and main vehicle entrance and exit. To maintain a degree of separation from the surrounding Department of Public Works operations and enhance the site's aesthetic, the administration and crew functions are situated at the northwest corner of the site.

Option Benefits

- New facilities will be up to code and sized properly
- Efficient operations workflow and site circulation
- Existing site’s buildings could remain
- Transfer station remains at N Morris site
- DPW operations can remain during construction

Option Drawbacks

- Site may be contaminated
- Underground stormwater management to be considered
- Located outside of Village of Shorewood
- Operations will be split between two sites
- DPW staff will have to maintain two sites
    - Lack of security
- Potentially high site development costs



Shorewood DPW Study

1 A833 NEW SITE - N Holton St - OPTION 2A

1" = 50'-0"

BARRIENTOS design & consulting

SITE #2
Option 2B

4132 N Holton St

To include all the DPW's existing services with their recommended sizes, this option would have to include the purchase of 1.3 acres of the site directly south of 4132 N Holton St. This purchase increases the site's size from 3.8 acres to 5.1 acres which allows enough space for required vehicle circulation and operations.

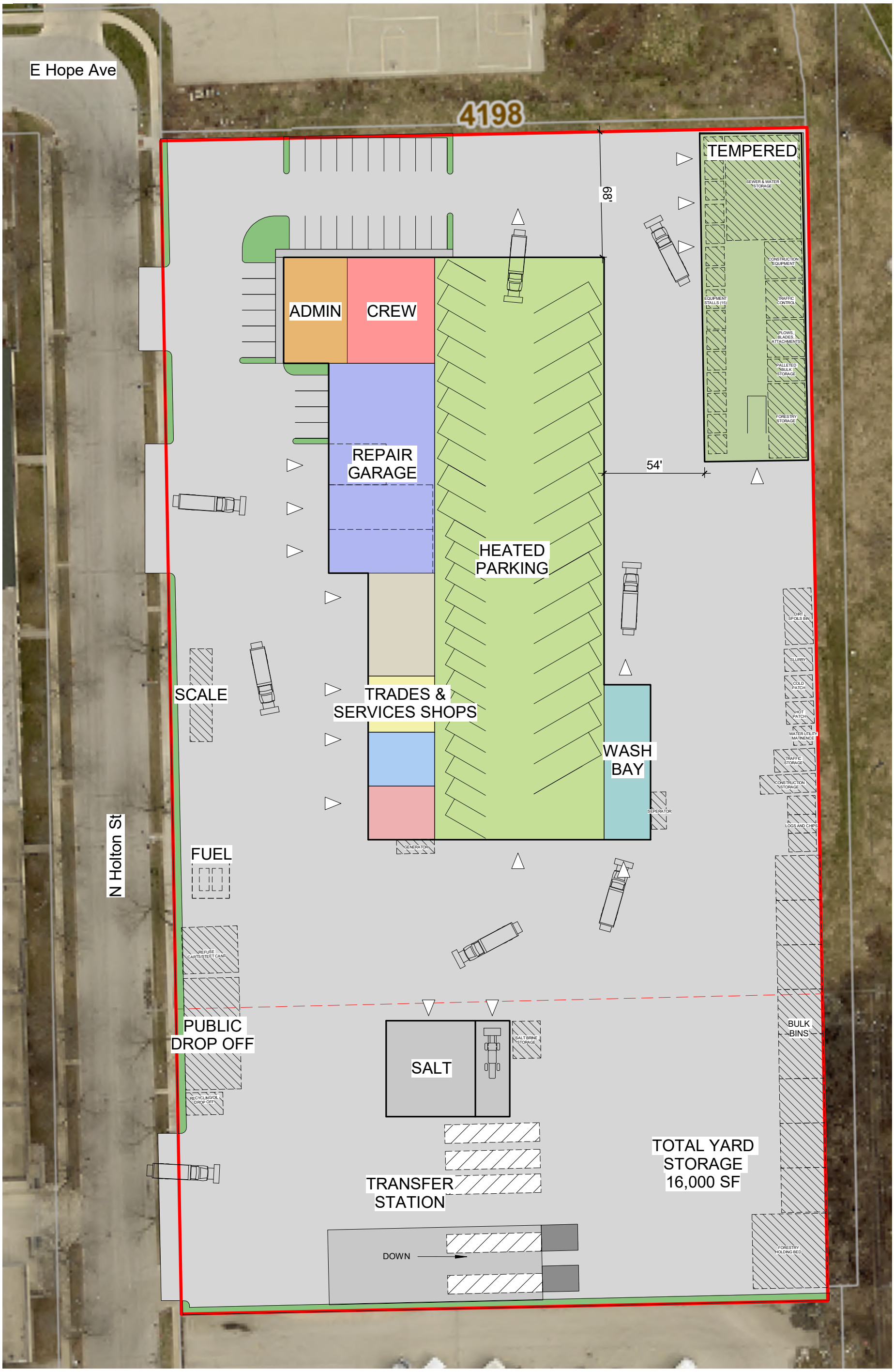
This design has access points along Holton St dedicated for administration and crew, repair garage and trades/services shops, and the transfer station with main vehicle entrance and exit. The administration and crew functions and parking are located at the northwest corner of the site to separate from surrounding DPW operations.

Option Benefits

- New facilities will be up to code and sized properly based on DPW's needs
- Efficient operations workflow and site circulation
- Existing site's buildings could remain
- Transfer station included
- DPW operations can remain during construction
- All DPW operations remain on one site

Option Drawbacks

- Requires partial purchase of property to the south
- Site may be contaminated
- Underground stormwater management to be considered
- Located outside of Village of Shorewood
- Potentially high site development costs



Shorewood DPW Study

1 A829 NEW SITE - N Holton St OPTION 2B

1" = 50'-0"

BARRIENTOS design & consulting

SITE #3
Option 3A

701 E Vienna Ave

To include all of the DPW's existing services with their recommended sizes, this option would require the purchase of 0.94 acres of land from the site directly west of 701 E Vienna Ave along with the entire purchase of the site to the southeast which is 0.3 acres. This purchase increases the sites size from 4.18 acres to 5.44 acres.

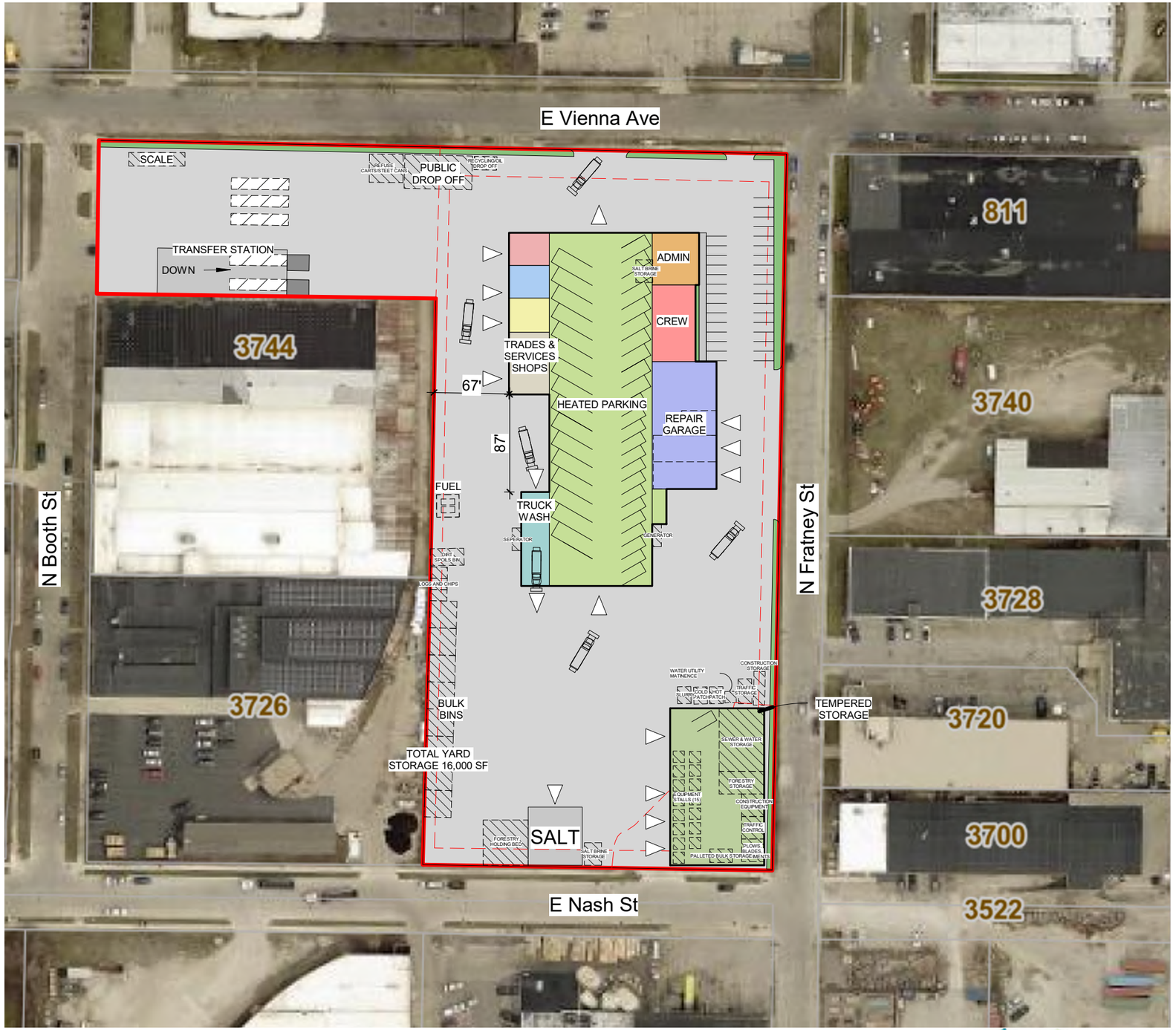
This design has four curb cuts, one off N Booth St for the transfer station, two off E Vienna Ave for trades and services, administration/ crew, and main vehicle entrance and exit. The fourth curb cut is off N Fratney St for the repair garage and all other site needs. The administration and crew functions and parking are located at the northeast corner of the site to separate from surrounding DPW operations. The site's yard functions are located on the south end of the site.

Option Benefits

- New facilities will be up to code and sized properly based on DPW's needs
- Efficient operations workflow and site circulation
- Existing site's buildings could remain
- Transfer station included
- DPW operations can remain during construction
- All DPW operations remain on one site

Option Drawbacks

- Requires partial purchase of property to the northwest and full purchase of the property to the southeast
- Site may be contaminated
- Underground stormwater management to be considered
- Located outside of Village of Shorewood
- Potentially high site development costs



Shorewood DPW Study

1 A826 NEW SITE - 701 VIENNA OPTION 3A
1" = 100'-0"

BARRIENTOS design & consulting

SITE #3
Option 3B

701 E Vienna Ave

Option 3B proposes the construction of the primary facility on site 3, however, due to the site's limited size of only 4.18 acres, certain functions such as yard storage, tempered storage, and the transfer station would need to be relocated to an alternate location or eliminated completely. The relocation of these functions could take place either on the existing Department of Public Works site or a new site entirely.

This design features three curb cuts, with two positioned along E Vienna Ave catering to the main fleet and administration and crew, and another situated along N Fratney St serving as the entry and exit point for fleet maintenance. A fourth curb cut on E Nash St provides additional access to the site. Notably, the salt storage and fuel station are positioned towards the rear of the site while the administration and crew areas are located at the northeast corner.

Option Benefits

- New facilities will be up to code and sized properly based on DPW's needs
- Efficient operations workflow and site circulation
- Existing site's buildings could remain
- Transfer station remains at N Morris site
- DPW operations can remain during construction

Option Drawbacks

- Site may be contaminated
- Underground stormwater management to be considered
- Located outside of Village of Shorewood
- Potentially high site development costs
- Operations will be split between two sites
- DPW staff will have to maintain two sites
    - Lack of security



Shorewood DPW Study

NO TRANSFER STATION

1 A826 NEW SITE - 701 VIENNA OPTION 3B
1" = 100'-0"

BARRIENTOS design & consulting

SITE #4
Option 4

3701 N Humboldt Blvd

Option 4 is 8.83 acres, making it the largest site. Currently, the site is occupied with a vacant warehouse which would have to be demolished for this proposed design.

This design includes green space to help improve curb appeal along N Humboldt Blvd and E Vienna Ave. The administration and crew functions and parking are located at the northeast corner of the site while the yard functions are in the southwest quadrant. Because of the amount of impermeable space on this site, storm water management will have to be considered.

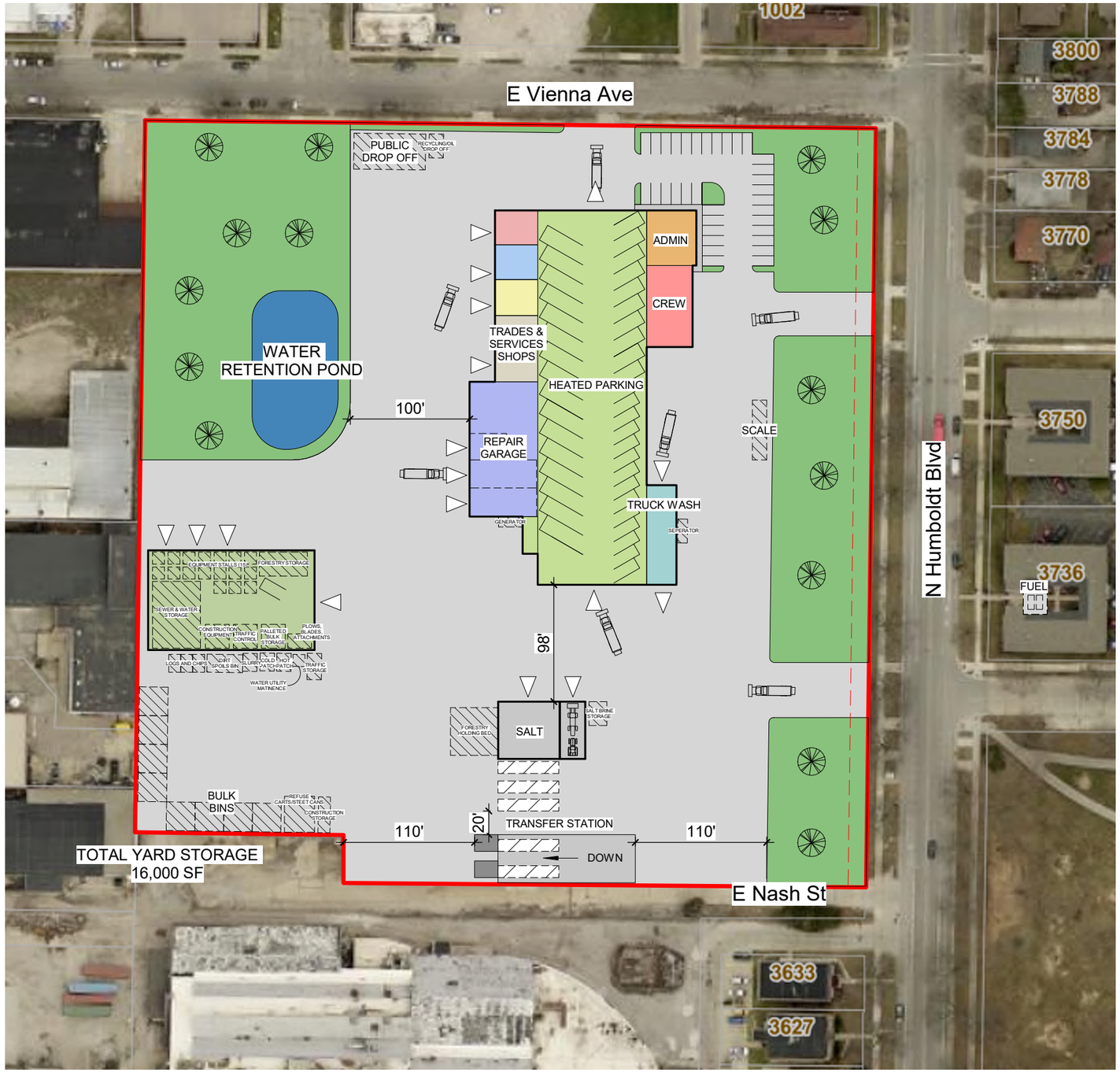
This site only has three curb cuts, one off E Vienna Ave and two off N Humboldt Blvd which all can be used for all of the DPW's operations. Of all sites, this one has the most room for future expansion for the Village.

Option Benefits

- New facilities will be up to code and sized properly based on DPW's needs
- Efficient operations workflow and site circulation
- Existing site's buildings could remain
- Transfer station included
- DPW operations can remain during construction
- All DPW operations remain on one site
- Largest site, room for future expansion
- Site space for stormwater alleviation
- Unused site space can be parceled off and sold

Option Drawbacks

- Site may be contaminated
- Located outside of Village of Shorewood
- Potentially high site development costs
- Currently not listed for sale
- Existing site and structure would have to be demolished



Shorewood DPW Study

1 A827 NEW SITE - HUMBOLDT OPTION 4

1" = 100'-0"

BARRIENTOS design & consulting

COMMUNITY WORKSHOPS & BOARD PRESENTATIONS

At the onset of study initiation, a communications workplan was established that scheduled out the sequence and dates of the major communications. These communications included Board meetings, community workshops, Village Manager's Memos, website updates and interviews with local media.

The project team presented to the Board five times during the study process and concluded with one final presentation. Following three of the Village Board meetings, community workshops were held at the DPW facility on Morris Blvd. Once community input was received, the project team summarized this data and presented it to the Board.

At each community workshop, the goal was to educate community members on progress and obtain input on the community's reactions, ideas, and priorities. Prior to each workshop date, the project team issued emails to all the identified stakeholders, and posted notices of the workshop on the Village Manager Memo and Village website. A flyer with questions was handed to all attendees so they could write out their comments.

COMMUNITY WORKSHOPS

WORKSHOP 1

The first workshop was held January 25th to present and discuss building and site design criteria and receive feedback on site selection criteria. It was held in the Repair Garage at Morris Blvd with a PowerPoint presentation of the Architect's space recommendations. Following a thirty-minute presentation, another twenty minutes of questions and comments followed.

The Community's comments demonstrated understanding and supportive of the Architect's recommendations with the following questions brought forth:

Stakeholder: You discuss future expansion in the site selection criteria, what would this look like?
Barrientos: In previous projects we have made design decisions to allow for a garage wall to be demolished and bumped out for future expansion. We have also in cases designed tempered storages to be oversized for future equipment, materials, or vehicles.

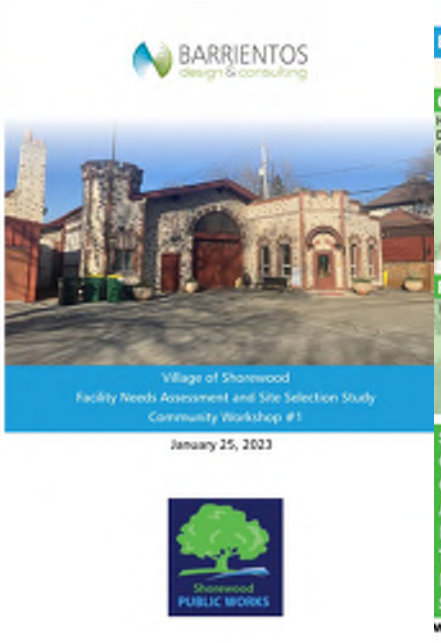
Board Member: Can the DPW operate between two sites?
Barrientos: Typically, staff prefer to keep all services and storage on the same site for convenience but on previous projects when we have multiple sites we have separated the functions when large parcels are not available. These same decisions will be considered in this study.

Board Member: Does the recommended floor plan allow the DPW to expand on their provided services?
Barrientos: Our facility and space needs assessment only considers the recommended space needed for all existing operations and services. Any additional services to be considered would be a decision to be made by the Village Board and decided during schematic design.

Stakeholder: How many times are vehicles coming in and out of the current site?
Barrientos: Based on discussions with DPW staff, 15 vehicles are typically out at any given time. For residential curbside refuse collection Whitefish Bay drops off around three times a day and Shorewood drops off once a day.

Stakeholder: What would the effort towards historical preservation look like?
Barrientos: If the DPW facility was to remain on its current site, an option will be considered in keeping the façade of the main building for its historical relevance. Otherwise, if operations where to move the existing site has the potential to be repurposed for other uses.

Below is a sample of the workshop handouts along with a photo.







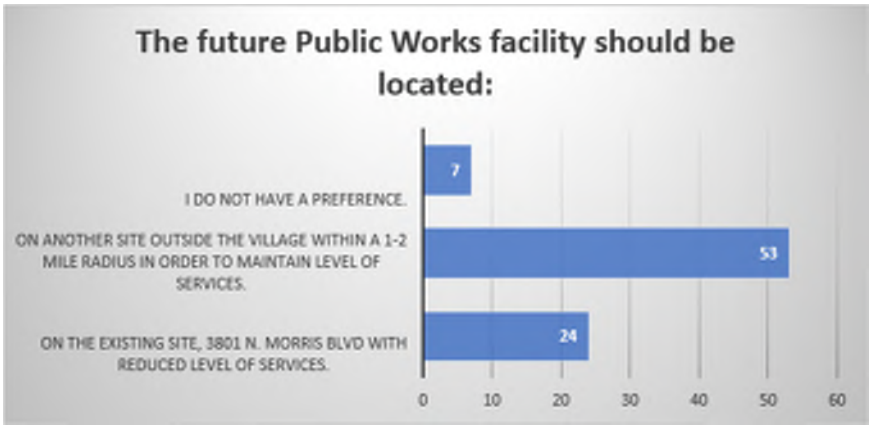
WORKSHOP 2

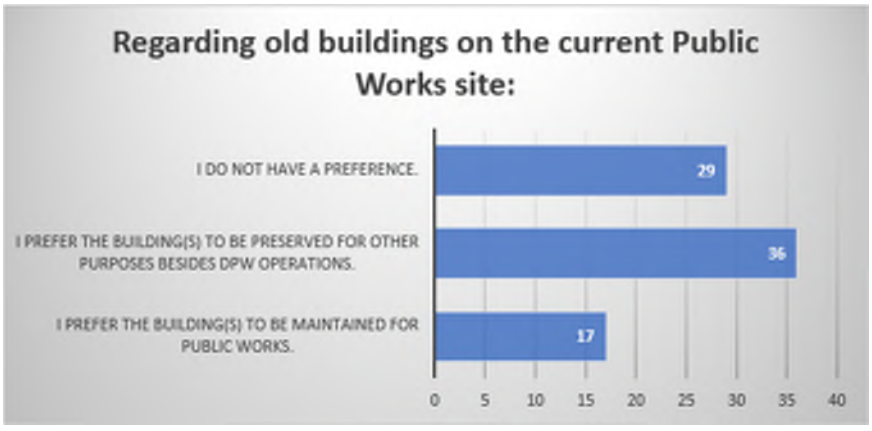
The second workshop was held February 23rd to present and discuss site evaluations and test fits.

Barrientos walked through each of the sites discussing things pertaining to existing use, constricting factors, previous owners/development, environmental concerns, grading, acreage, and current zoning.

Following that, discussion and presentation of the initial test fits and their benefits and drawbacks occurred.

Following the workshop, a survey was sent out to community members and stakeholders inquiring about where the new Public Works facility should be located and what should happen to the existing site and buildings. The results are as follows:





Based on the results of the survey, 65% of the public responses would like the Villages Public Works facility to be moved outside of the Village within a 1-2 mile radius to maintain the current level of services. Regarding the existing site, there was a wide variety of answers, but a majority agreed that the existing site should be used for other uses besides the DPW.

A vast majority of the public shares the sentiment expressed by this resident, "having the DPW at the current site does not seem to be the best and highest use. The property backs right up to the Oak Leaf Trail and that is a desirable location for some type of development (private/public/residential/commercial) that takes advantage of that access. It would also be fantastic if it was developed in such a way that would add to the tax base in Shorewood."

In general, the public consensus is that they desire a modern facility for the DPW and envision repurposing the current site. Many individuals expressed their creativity in imagining the potential future of the existing location for the benefit of the Village of Shorewood.

WORKSHOP 3

The third workshop was held March 23rd to present the conceptual plans developed at the four sites. Barrientos presented site plans, diagram floor plans, aerial images of the surrounding site and written analysis of the features and benefits of each location.

Generally, comments and feedback provided by the public were supportive of the concept plans. Residents also expressed support in traveling an extra 5 minutes for drop-off.

In addition to the Architect's presentation, the Public Works Director presented an analysis of refuse collection service levels and the use of the Transfer Station.

Community input was supportive of the site and building plans along with assessment that E Vienna Avenue met the DPW facility needs the best.

SITE SELECTION MATRIX & RECOMMENDATION

In following with the site options generated and the analysis conducted, the four candidate sites were numerically rated and ranked. Site 3, Vienna Avenue, came up with the highest ranking and is the recommended site for further consideration.

Note that these recommendations are to be taken as priority levels for the Village consider. If one site is later deemed undevelopable, then the Village could move onto the second highest ranked site.

Site Selection Criteria Matrix

	Criteria Weighting Factor	Site 1 N Morris Blvd		Site 2 N Holton St		Site 3 E Vienna Ave		Site 4 N Numboldt Blvd	
		Non-Weighted Rating	Weighted Rating	Non-Weighted Rating	Weighted Rating	Non-Weighted Rating	Weighted Rating	Non-Weighted Rating	Weighted Rating
Criteria 1 **Meets Building and Yard Program**	1.5	3.0	4.5	5.0	7.5	5.0	7.5	5.0	7.5
Criteria 2 **Vehicle Circulation and Adjacencies**	1.5	1.0	1.5	4.0	6.0	5.0	7.5	5.0	7.5
Criteria 3 **Distance to Capitol Dr & N Oakland Ave**	1.5	5.0	7.5	4.0	6.0	4.0	6.0	4.0	6.0
Criteria 4 **Appropiate Parcel Configuration**	1.5	1.0	1.5	5.0	7.5	5.0	7.5	5.0	7.5
Criteria 5 **Reasonable Site Development Costs**	1.5	1.0	1.5	2.0	3.0	3.0	4.5	1.0	1.5
Criteria 6 **Adequate Area for Expansion**	1.4	0.0	0.0	2.0	2.8	5.0	7.0	5.0	7.0
Criteria 7 **Street Capacity and Access**	1.4	1.0	1.4	4.0	5.6	5.0	7.0	5.0	7.0
Criteria 8 **Cost to Purchase**	1.3	5.0	6.5	4.0	5.2	4.0	5.2	1.0	1.3
Criteria 9 **Infrastructure and Improvement Costs**	1.2	1.0	1.2	3.0	3.6	3.0	3.6	1.0	1.2
Criteria 10 **Historic Preservation**	1.2	0.0	0.0	5.0	6.0	5.0	6.0	5.0	6.0
Criteria 11 **Economic/Enviromental Justice**	1.2	3.0	3.6	4.0	4.8	5.0	6.0	3.0	3.6
Criteria 12 **Traffic Impact**	1.1	2.0	2.2	5.0	5.5	5.0	5.5	4.0	4.4
Criteria 13 **Grading**	1.0	1.0	1.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Ranking		24.0	32.4	50.0	66.5	57.0	76.3	47.0	63.5

RECOMMENDED SITE

Based on the Site Selection Criteria, each of the four sites were numerically evaluated in a matrix and assigned a value related to suitability for the new DPW Facility.

The site with the highest score is Site 3, E Vienna Ave.

Site 1, N Morris Blvd is still located in the Village, but is not suitable for DPW operations. Because of the sites grading, existing buildings, and parcel configuration, the costs of a new facility would far outweigh its benefits.

Site 2, N Holton St has a desirable size and configuration but limited area for expansion. The previous owners have had to invest millions in addressing soil contamination.

Site 3, E Vienna Ave meets requirements of building/yard program and space needs. It is the only property for sale and is priced at $600,000 ($ 143,540 per acre). Based on Barrientos' analysis and the site selection matrix results this site is the most successful and should be chosen by the Village Board to move forward.

Site 4, The N Humboldt Blvd option is the largest, with a vacant 140,000 square foot factory building. However, there will be high demolition and site development costs. Moreover, since it's situated off Humboldt Blvd, there is a risk of conflicting land use with the neighboring residential properties. Although this option provides ample space for growth and expansion, the expenses associated with site preparation and redevelopment outweigh its benefits.

Following previous Village Board discussions on March 6th, the board decided to eliminate Site 4, N Humboldt Blvd. Several reasons were used to support this decision: the site is too large for the Village's needs so they would be overpaying for unused space; the existing building would have to be demolished which assumes a high-cost impact, and lastly the site is currently not listed for sale.

SECTION 4
PHASE THREE - CONCEPTUAL DESIGN PLANS

The three final sites: Morris Blvd, E Vienna Ave, and N Holton St were taken to a conceptual level by incorporating several key elements in the site plans. Room layouts were established, defining the boundaries of the different spaces, and providing a clear understanding of the available areas. Curb cuts were identified, ensuring proper access to and from the site. Vegetation was also considered and included in the plans, with landscaping added. Fenced areas and gate locations were added to provide security and privacy where necessary.

Lastly, proposed topography and civil changes were incorporated to ensure the site is considering any natural elevation changes and accommodating any grading or drainage requirements.

Illustration of the site plans are provided in the following sections. For the Morris and Vienna sites, 3D renderings were developed to show building and site layouts, massing, building heights, overhead door locations and truck circulation.

SITE #1
N Morris Blvd

Based on preliminary data and evaluation of Site 1, the following engineering factors were assessed:

Site 1 has nearly 20’ of grade change from south to north. To construct a new building on this site and regrade, it would have to either be cut or filled. Based on the proposed design, the site would have to be cut and a large amount of soil would have to be removed.

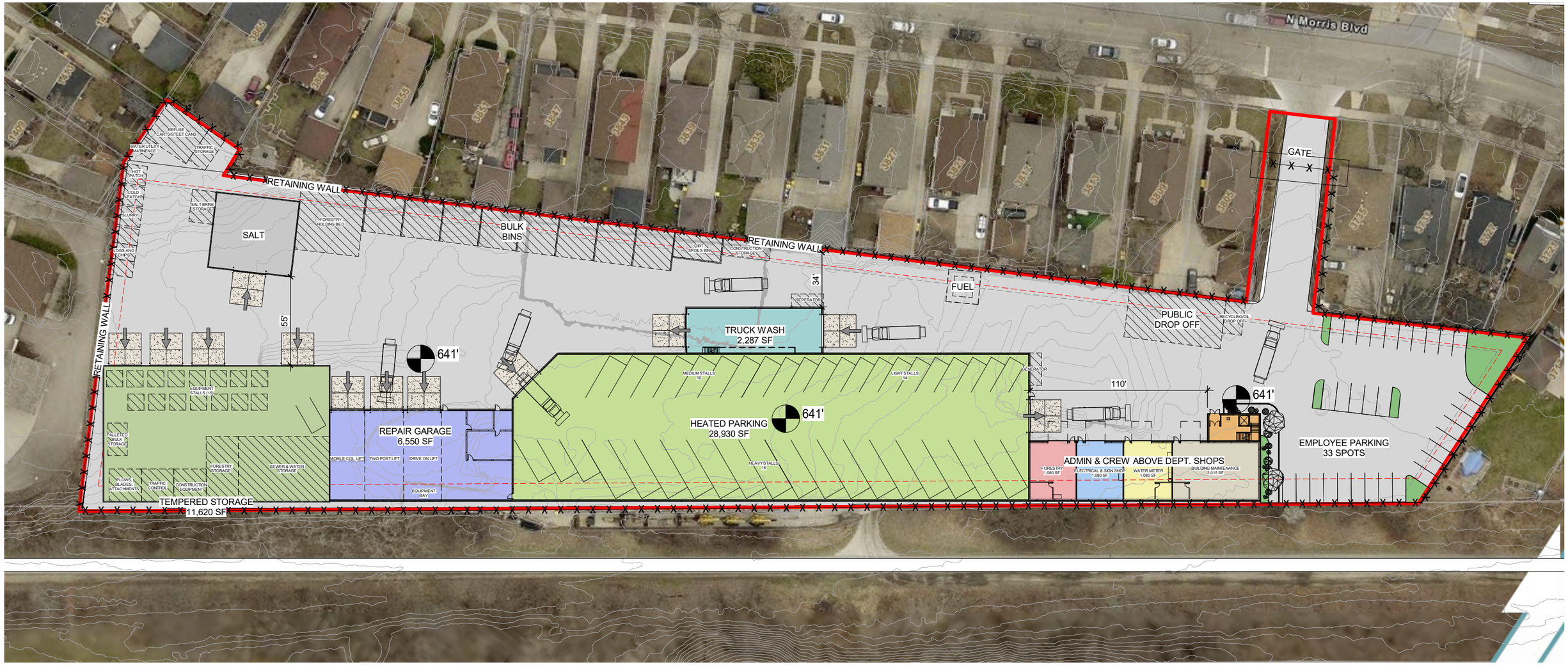
The existing retaining wall is a combination of concrete and fences. In new construction, it is assumed a new retaining wall would consist of a steel sheet wall pounded into the earth and tiebacks into the adjacent properties. With a higher-grade change between the DPW Yard and the properties to the east, a whole new retaining wall structure would rise 18’ above grade.

Due to the history of operations, it is likely that the soil on the site is contaminated, necessitating remediation.

Once the site is flattened for new construction, grading around the new building will have to slope down to accommodate storm water runoff. Currently, the site has several access points for MMSD (Milwaukee Metropolitan Sewer District) which would have to be analyzed to determine whether they need to be relocated or abandoned.

With rebuilding the entire site, the existing buildings will have to be demolished. Assuming the buildings may have hazardous materials such as asbestos, proper disposal of these materials must be considered. The scale and fuel station can either be relocated to the new site or removed completely.

Stormwater retention will have to be considered and will be routed back into MMSD infrastructure or the site will need an underground retention system.
Since utilities are available at the site, they will not require reconnection. However, We Energies’ power line easement along the east edge of the property will pose design constraints.



1 A805 OPTION 1A - EXISTING SITE
1" = 60'-0"

Shorewood DPW Study

KEY

- ADMINISTRATION **2,173 SF**
- CREW **2,650 SF**
- HEATED GARAGE **28,930 SF**
- REPAIR GARAGE **6,550 SF**
- TRUCK WASH **2,287 SF**
- FORESTRY & PARKS **1,080 SF**
- BUILDING MAINTENANCE **2,015 SF**
- METER TESTING **1,080 SF**
- ELECTRICAL/SIGNAGE **1,080 SF**

TOTAL: **47,845 SF**

- TEMPERED STORAGE **11,620 SF**
- SALT SHED **1,000 TONS**

TOTAL: **14,020 SF**

- YARD STORAGE **24,076 SF**

TOTAL BUILDINGS: **61,865 SF**
SITE: **5.48 ACRES**

BARRIENTOS design & consulting



Option 1A - N Morris Blvd

BARRIENTOS design & consulting



Option 1A - N Morris Blvd

BARRIENTOS design & consulting



Option 1A - N Morris Blvd

BARRIENTOS design & consulting



TEMPERED STORAGE
11,105 SF

HEATED VEHICLE PARKING
7,215 SF

COLD STORAGE
3,700 SF

Shorewood DPW Study

1 / A834 OPTION 1B/2A/3B - 3801 N Moris Blvd
1" = 60'-0"

BARRIENTOS design & consulting

SITE #2
N Holton St

Based on preliminary data and evaluation of Site 2, the following engineering factors were assessed:

Site 2 has a 10’ elevation change from west to east. The site will have to be filled with soil to create a flat pad for the new building while creating a swale to alleviate storm water run-off.

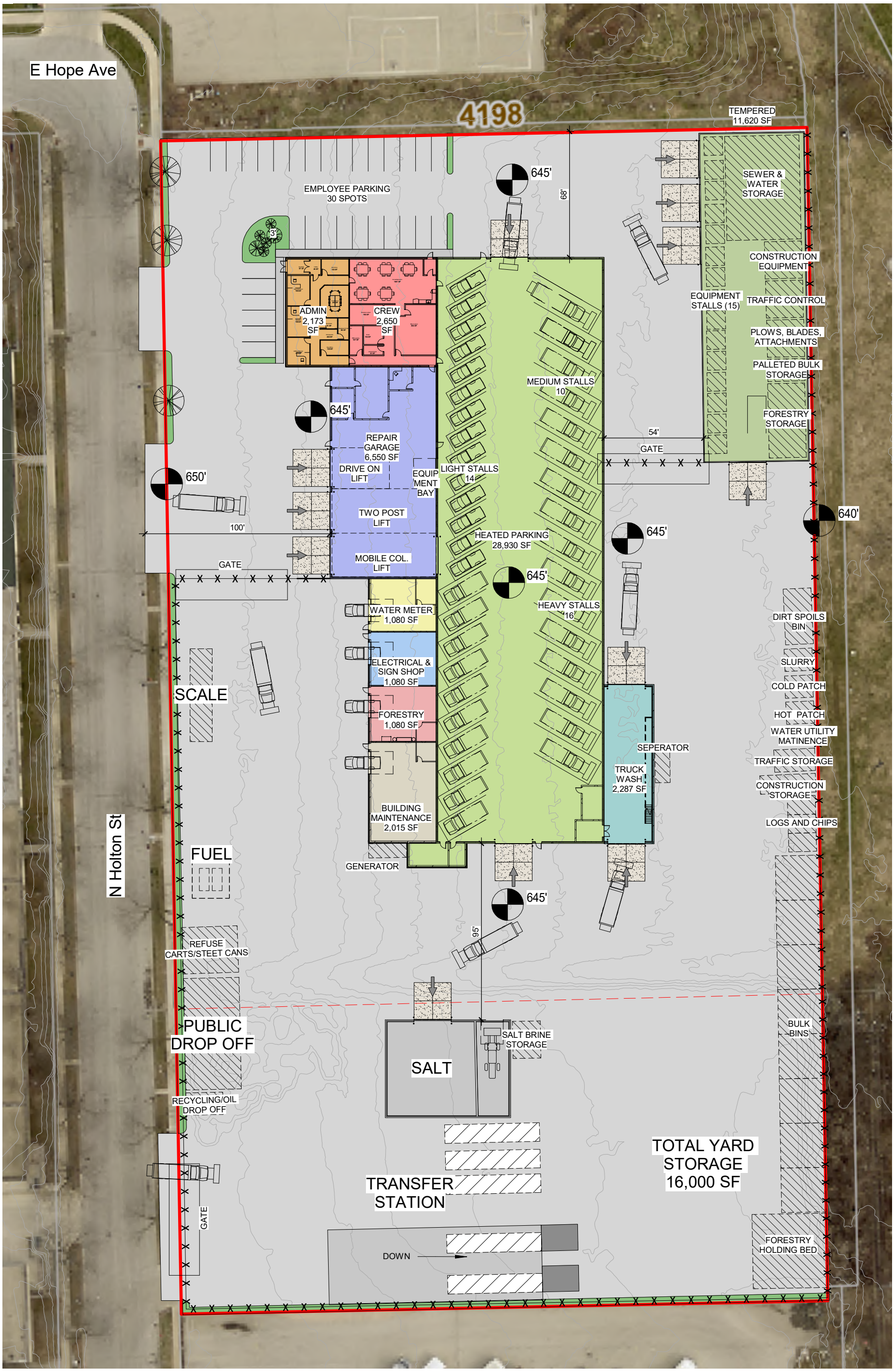
Previously this site went through a $14 million EPA-led Superfund environmental cleanup and still has lingering issues related with hot spots. Because of this, soil boring would have to be conducted and analyzed to determine soil contamination. This will likely lead to a soils management effort for removal of contaminated areas.

Per MMSD requirements, with more than 2 acres being disturbed and developed, site development will require stormwater retention either at grade or underground.

No utilities are currently routed to this site so extension of utility services are necessary.

The existing road of N Holton St has enough capacity for DPW vehicles. Several curb cuts will be created for entry and exit ways. Barrientos does not foresee issues with obtaining curb cut permits at this location.

To fit the entirety of the DPWs operations, the Village would need to purchase a portion of the property to the south. This property is currently owned by the Business Life Storage. Demolition of existing pavement would occur for construction of new foundations for the salt storage and transfer station loading bay.



Shorewood DPW Study

1 A829 OPTION 2B - N Holton St

1" = 50'-0"

BARRIENTOS design & consulting

SITE #3
E Vienna Ave

Based on preliminary data and evaluation of Site 3, the following engineering factors were assessed:

Based on visual and GIS observation previous remains of demolition exist onsite. Because of this, there are two 15’ tall mounds of soil roughly 20,000 square feet each. There will be extensive work to flatten the site for building use.

The overall site increases in grade by 10’ from the northeast corner to the southwest corner. A flat building pad will have to be graded with a swale around the perimeter to aid in storm water run-off.

Environmental investigation and remediation has been occurring at this site for 23 years and is substantially completed by the current owner. Depending on the progress, effort for remediation may be significantly lower than the other two sites.

Per MMSD requirements, with more than 2 acres being disturbed site development will require a stormwater retention system, either at grade or vaulted underground.

In order to facilitate site development, utilities will need to be extended.

The existing roads E Vienna Ave, N Fratney St, and E Nash St all have the capacity for DPW vehicles. Several curb cuts would have to be created for entry and exit ways. Barrientos sees no issue in obtaining permits for curb cuts.

To fit the entirety of the DPW’s operations, one full parcel and one partial parcel would additionally need to be purchased. The first property is to the northwest totaling 0.94 acres. This property is currently owned by the business JJB Home Improvements. Partial demolition of existing pavement and building would occur to allow the construction for the transfer station.

The second property to be purchased is to the southeast of the site and is 0.3 acres. It is currently owned by Sustar Woodworks and the entire building and pavement would need to be demolished to allow the construction of a new tempered storage building. Both properties appear to be underutilized and lacking recent capital improvement.

KEY

- ADMINISTRATION **2,173 SF**
- CREW **2,650 SF**
- HEATED GARAGE **28,930 SF**
- REPAIR GARAGE **6,550 SF**
- TRUCK WASH **2,287 SF**
- FORESTRY & PARKS **1,080 SF**
- BUILDING MAINTENANCE **2,015 SF**
- METER TESTING **1,080 SF**
- ELECTRICAL/SIGNAGE **1,080 SF**

TOTAL: **47,845 SF**

- TEMPERED STORAGE **11,620 SF**
- SALT SHED **1,000 TONS**

TOTAL: **14,020 SF**

- YARD STORAGE **24,076 SF**

TOTAL BUILDINGS: **61,865 SF**
SITE: **5.48 ACRES**



Shorewood DPW Study

1 / A826 OPTION 3A - E Vienna Ave
1" = 100'-0"

PROJECT NORTH
W E S
TRUE NORTH

BARRIENTOS design & consulting

Option 3A - E Vienna Ave



BARRIENTOS design & consulting

Option 3A - E Vienna Ave



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Option 3A - E Vienna Ave



COST ESTIMATE

Costs were developed for the construction of the new buildings.
Given the scope of the Concept Design effort, Barrientos did not define nor cost out the issues of:

- Land purchase costs
- Hazardous materials removal
- Demolition of existing buildings
- Soils and existing foundations locations
- Retaining wall design
- Utility capacities
- Zoning and planning approvals
- Stormwater management systems
- Inter-municipal cooperation

For developing the cost estimate, Barrientos retained a Construction Management firm, Kraus Anderson to provide this in detail. The total for building costs were $15.4 million.

MAIN GARAGE BUILDING

	Cost of Buildings
Main Building	$ 12,886,461
Total	**$ 12,886,461**
GSF	47,845
Cost per GSF	**$ 269.34**
Soft Cost (6.86%)	$ 884,011.22

STORAGE AND YARD FACILITIES

	Cost of Buildings
Tempered Storage (PEMB)	$ 1,649,093
Salt Shed	$ 569,312
Fuel Station	$ 300,000
Total	**$ 2,518,405**
GSF	14,000
Cost per GSF	**$ 179.89**
Soft Cost (6.86%)	$ 172,762.55

THE GARAGE OF THE FUTURE



The Village's investment in the new DPW Garage will be a once in a generation opportunity as this facility will likely stay in place just as long as the current one has. But the reality is that DPW practices, fleet composition and shop technology will continuously change over the decades. Cumulatively, all these forces will outdate the building and site layout over time. To adapt to these changes, most DPW's make small additions and shifts in their yard usage that when taken as a whole, lead to an ill-fitting layout.

It is essential that the building planning process look out into the future and anticipate what operational changes may impact the building ten to thirty years out. For the Villages consideration, Barrientos identified key trend influencers that will impact the Villages garage of the future.

Electrification of the Fleet

With most light-duty truck manufacturers declaring the end of combustion engine production around 2035, and switching to electric vehicles, the push is on the user side to change up facilities and adapt to this new trend.

DPW facilities will need more power, transformers, electric service panels, charging stations, solar panel charging, static-free service bays, battery removal cranes, diagnostic equipment and cleaner shop environments. In addition, technical personnel will need to be trained to transition from being mechanics to being electricians. This will lead to the need for continuous training and training rooms to conduct this onsite.

Autonomous Equipment, Drones, Robotics

The level of utility and independence that robots and autonomous equipment will soon reach a high and practical level for field and shop applications. This will lead to dedicated and secure storage space, environmentally controlled workbenches, rapid charging stations and piloting control stations.

Telematics, GIS, Workflow Automation

This technology will empower frontline field crews to check in remotely and report directly to a jobsite without having to come into the Main Garage. At the same time, it will allow the crew to enter and track service orders from initiation to completion. Similarly, with GIS applications and cameras on all trucks, there will be a greater demand for electrical workshop and control center rooms.

Specialized, Heavy Trucks, and Specialty Shops

The trend of larger, more equipped, and more computerized trucks will continue rendering many parking garages too short to park their vehicles. As the fleet gets more complex, a greater variety of vehicle lifts will be required to handle the different axle configurations and tonnage.

One downside to all this electronic equipment on trucks is the greater hazard of their being electrical or battery fires. These are not easily extinguished and will require specialized fire suppression systems, such as halon.

Attraction and Retention of Staff / Increased Training Facilities

Everyone is fighting to attract talent and there are unfilled positions within every DPW. The quality of the workspace the Village provides to its crews and technicians is one key attractant the Village can offer prospective recruits.

Given this hiring challenge, shops will need to provide a workplace that is safe, ergonomically supportive, well-lit, highly ventilated, organized, clean, and with locker facilities that provide a sense of cleanliness, privacy and safety.

Continuous training of the staff to make them multi-disciplined, and to keep them up with technology changes will require dedicated classrooms suitable for adult learning.

Consolidation, Inter-Agency Cooperation

With Garage facilities reaching $300 a square foot in cost, the push to make the most out of community's investment will be paramount. Administrators, financial directors and elected officials will all seek to leverage their dollar investment and spread its utilization.

Anticipate a greater push to have inter-agency cooperation and sharing of DPW facilities primarily on yard facilities. Even internally, municipalities will seek to join many departments that have field operations and maintenance functions into a new DPW Garage.

Sustainability and Resilience

The prioritization of being carbon-neutral, net-zero energy and sustainable to the environment continues at a fast pace. Many communities have enacted sustainability goals for 2050 requiring department operations to follow suit.

In addition to sustainability, resilience to major hazard events and extreme weather are all pushing for buildings to be fortified beyond current building codes. As a DPW operation, it is essential for the yard and building to bounce back to operational life shortly after a hazard event.

Future facilities will have alternative energy applications, larger and safely placed emergency generators, natural ventilation and lighting built-in, storage of potable water, closer integration with emergency management resources, and stronger building wall and roofs that can withstand heavy wind forces and flying objects.

TEMPORARY QUARTERS

Temporary quarters will be required for the DPW operations during the period in which the option involving Morris Blvd site is being rebuilt.

Based on Barrientos observation, the ideal location for the temporary quarters would be no more than two miles from the intersection of Oakland and Capitol. This location will provide convenient access to the DPW operations' usual work sites.

The temporary quarters should be appropriately sized to accommodate the needs of the DPW operations during the 16-month period. Specifically, the quarters should require 40-50,000 SF of heated space for parking trucks, containing trade shops, crew quarters, and supervisory offices. Additionally, another 10,000 SF of warehouse-type tempered storage space that could be detached from this main building should also be required.

Based on our analysis, we estimate that the cost of acquiring and maintaining the temporary quarters will be approximately $7-8/SF plus utilities. Leasing costs would be from $350,000-420,000, plus relocation costs and labor effort involved. Additionally, costs associated with utilities, security, insurance, and maintenance must also be considered. The exact costs will depend on various factors, including the location, size, and duration of the lease or purchase.

Given the tight supply on the market, very few property owners are willing to consider shorter-term leases (sub 3 years). It is possible that the Village could find a shorter-term option, but given the finite geographical area, it will likely limit the options. It is too soon to predict what the availability will be in 2024 as the spaces that are on the market right now are limited, and are expected to be absorbed. Therefore, it really is a function of what, if any turnover there is within the area.

Overall, temporary quarters will be required for the DPW operations during the period in which the option involving Morris Blvd site is being rebuilt. Careful consideration of all factors must be taken to ensure that the most cost-effective and efficient solution is chosen.

NEXT STEPS & PRELIMINARY DESIGN

The next steps for the Village are to prioritize the concept options and advance one or more to a Preliminary Design level.
The Preliminary Design process will also initiate a greater level of site investigation and site engineering along with identification of required permits and approvals.

Items that were not part of this Concept Design effort will now need to be analyzed and cost out. This includes the retaining wall structures, utility relocation and new connections, stormwater management plans, hazardous materials identification, demolition costs, and planning discussions with city engineering officials.

At the same, the Village should explore opportunities to share capital facilities related to the DPW Garage with surrounding municipalities. Identified municipal participants include the City of Milwaukee and Milwaukee County.

A Preliminary Design tasks involve:

1. Advance building design to a preliminary design level. New building design would include floor plans, elevations, sections, initial building engineering and identify utility needs.
2. Develop site engineering concept plans for grading, paving, stormwater management, utilities along with initial permitting assessment.
3. Review engineering aspects of each option including traffic impact, curb-cuts, utility upgrades, stormwater permits, and any zoning ordinance impacts.
4. Procure investigations for soils exploration. Alta survey, and environmental remediation assessments. Identify any extenuating conditions for soils, demolition, clean-up, and foundation issues that may affect costs, permitting and layout issues.
5. Meet with targeted property owners for an initial indication of willingness to sell and at what price.
6. Meet with City Planning and review zoning ordinances, land-use, and community development compatibility of proposed garage plans.
7. Meet with City and County public works officials to continue discussions on collaboration and sharing of DPW facilities.
8. Develop detailed cost estimates that captures construction and soft costs.

9. Outline a development schedule of how long the permitting, design, and construction packages will take.

We estimate the Preliminary Design effort analysis to take place over 6 months.

In the Appendix are the scope of works from Barrientos Design and Strand Associates for executing the Preliminary Design effort.

Appendix

- Strand and Barrientos Preliminary Design proposal
- Sustainability Approach
- Industry standard photos

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April 28, 2023

Ms. Rebecca Ewald
Village Administrator
Village of Shorewood
3930 N. Murray Avenue

RE: PUBLIC WORKS FACILITY PRELIMINARY DESIGN
Architectural & Engineering Services Amendment - 1 R2

Dear Rebecca,

In following with our current contract for the DPW Garage evaluation, Barrientos Design & Consulting, Inc. is pleased to present this Amendment One for Preliminary Design services. This Amendment One will advance the Concept Design of the finalist sites to a Preliminary Design level. This effort is intended to assist the Village in determining which site is the most suitable for development of a new DPW facility.

BACKGROUND

To date Barrientos Design has developed space needs defining the architectural needs for a new DPW facility, conducted a site identification and assessment of five sites, and began a Concept Design phase on three candidate sites. For reference on the building and site program, please see the attached Exhibit 2 – Conceptual Site Plans.

Following completion of this Concept scope, these issues needed further analysis; hazardous materials, soils conditions, site retaining structures, stormwater management approaches, utility connections, architectural and engineering permits, demolition costs, cost to purchase land, and opportunities for inter-municipality cooperation. All these items will have an impact on layout efficiency and the construction costs.

Moving forward, the Village wishes to continue assessment of the following sites:

1. 3801 N. Morris Blvd, existing DPW Facility
2. 4132 N. Holton Street
3. 701 E. Vienna Avenue

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PRELIMINARY DESIGN TASKS & DELIVERABLES

For all three sites, Barrientos Design will develop Preliminary designs of the building and sitework to a 20% level. Our professional design services will include architectural, civil, mechanical and electrical engineering and we will also coordinate the work of environmental engineering, geotechnical engineering, and the site survey. We will subcontract civil engineering services with Strand Associates and their discipline-specific scope of work is in the attached Exhibit 1.

Specific Preliminary Design tasks and deliverables will include:

1. Assist the Village with the procurement of site survey covering boundaries, topography, above grade structures and utilities.
2. Assist Village with the procurement of geotechnical services for a preliminary subsurface exploration.
3. Assist the Village in procuring environmental hazards survey of the site, Phase 1 and Phase 2.
4. Procure a demolition contractor's assessment and quote for structures demolition.
5. Develop a detailed base plan of the parcel and adjacent land.
6. Create base site plan documenting,
    a. Property lines and existing building footprints
    b. Utility connections: water, sewer, storm, electric and gas.
    c. Topography
    d. Utility connections and capacities
    e. Stormwater drainage patterns
    f. Roadways, curb-cuts and sidewalks
    g. Foundations, that may stay in place.
    h. Trees and other landscape features
    i. Soils conditions, stability and bearing capacity.
    j. Hazardous areas on site
    k. Integration with neighboring land uses
    l. Economic development and land use compatibility
7. Review zoning ordinances, land use conformance, Architectural Plan Commission, State Building Codes, stormwater management and City Engineering requirements.
8. Initiate and coordinate Civil Engineer's work described in Exhibit 2
9. Review with DPW staff, the facility requirements established in prior planning efforts and determine if the design program needs to be

updated. Review all major elements of the program to verify items are still needed or appropriately sized.

10. Advance the shop equipment program to specific pieces and items to be used in the design. Select with the mechanics, equipment products, features and models to be incorporated into the plan for items such as, lifts, overhead cranes, bulk fluid reels, welders, shop equipment, truck wash and fuel station.
11. Update the Building and Site Plan with the above site, regulatory and staff input.
12. Review and select major building assembly and components such as exterior walls, roofing, structures, flooring, windows, and interior construction.
13. For the buildings to remain, determine extent of remodeling and upgrading required for new uses.
14. Review and select major building engineering systems such as HVAC, electrical, and plumbing.
15. Similarly, for the sitework, review and select major systems for items such as parking, fueling station, fencing and paving.
16. Conduct meetings with City engineering for traffic, roadway and utilities impact and conformance.
17. Correspond with Utilities representatives for location, capacity, condition, and ability handle loads required by the new facility.
18. Conduct meetings with City planning staff for architectural review commission requirements and any aesthetic building and site requirements.
19. Initiate a sustainable applications analysis for land, water, energy, materials usage, and interior environments. Recommend applications best suited for the DPW facility and provide ROI analysis.
20. Develop Preliminary Design documents, an equivalent of 20% of a Final Design. Design documents to include plans and technical narratives for:
    a. Architecture
    b. Maintenance Equipment
    c. Truck wash and Fueling Station
    d. 3D rendering of the building and site
    e. Foundation and superstructure
    f. Grading
    g. Pavement
    h. Drainage and Stormwater
21. Develop system description narratives for these systems:
    a. HVAC
    b. Electrical

c. Plumbing
d. Civil/site system of grading, paving, stormwater and utilities.

22. Develop cost estimate based on quantity take-off from plans. Barrientos Design will engage a Construction Manager to develop cost estimates and they will selectively soft-bid out key construction packages.
23. Develop a probable Final Design schedule identifying design phase timelines, milestones, permitting submittals and client reviews. Prepare a preliminary construction schedule. Identify bid items that are long-lead and recommend an early bid package list.
24. Submit final Preliminary Design package to the Village in a report format. We will provide up to four Village Board presentations.
25. Prepare and conduct two Community Workshops.
26. Develop and participate in a Communications Workplan
27. Meet with DPW representative from Milwaukee City and County to explore facility cooperation. Document discussions, feasibility, constraints and next steps.
28. Prepare a PowerPoint presentation and conduct a presentation summarizing the Preliminary Design scope, assembly, materials, equipment, costs, schedule a permitting timeline. Provide up to two technical presentations of the Preliminary Design.

Our services do not include surveys (including CSM's or ALTA), geotechnical, environmental, traffic engineering, landscape design, and zoning variances.

SCHEDULE

Barrientos Design will complete the Preliminary Design over a four-month time. We are assuming that RFPs for survey, geotechnical and environmental clean-up will be issued and awarded within five weeks of notice to proceed.

FEE

Barrientos Design proposes to provide this Amendment One for a lump-sum fee of $136,265. This fee includes Strand Associates' scope of work in the attached Exhibit.

Reimbursables will include travel to the site and reproductions distributed to the Village. Terms and conditions will follow those set forth by the Village of Shorewood.

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design & consulting

We look forward to advancing this project to the next level of realization.

Sincerely,

BARRIENTOS DESIGN & CONSULTING, INC.

Norman Barrientos

Norman Barrientos, AIA, LEED AP, President

ACCEPTANCE

VILLAGE OF SHOREWOOD

Rebecca Ewald
Village Administrator

Date

EXHIBIT 1

Strand Associates, Inc.®
910 West Wingra Drive
Madison, WI 53715
(P) 608.251.4843
www.strand.com

April 18, 2023

Mr. Norman Barrientos, AIA
Principal Architect
Barrientos Design & Consulting, Inc.
205 West Highland Avenue, Suite 303
Milwaukee, WI 53203

Re: Proposal for the Village of Shorewood Department of Public Works Facility Preliminary Site Design

Dear Norman,

On behalf of Strand Associates, Inc.®, thank you for this opportunity to submit our proposed level of effort for the Village of Shorewood's Department of Public Works (DPW) Facility Preliminary Site Design. The desired result of the project is to analyze conceptual plans for three proposed sites to help the Village choose a site(s) and corresponding layout for the Village of Shorewood's DPW Facility. Our scope of services for this preliminary design phase includes review of the three sites and development of a letter narrative document summarizing site impacts and construction elements needed to accommodate the proposed buildings and improvements. This document will be used by Barrientos, in conjunction with its preliminary building design documents, to generate an estimated total construction cost for each site. We understand Barrientos intends to team with a construction management company for the cost estimating portion of the project. Preliminary site layout drawings provided by Barrientos will be used in review and development of the letter narrative for each site. It is anticipated that the site layouts will be used, as shown on the preliminary documents, without major deviations. Additional drawing development by our firm is not anticipated. A single layout will be reviewed at each site except for 3801 North Morris Boulevard and 4132 North Holton Street, which will have one additional combined layout.

We will provide preliminary site design services for the following sites:

- Site #1 – Existing Shorewood DPW – 3801 North Morris Boulevard, Shorewood, WI 53211
- Site #2 – 4132 North Holton Street, Milwaukee, WI 53212
- Site #3 – 701 East Vienna Avenue, Milwaukee, WI 53212

Preliminary Site Design Will Help Determine Which Location Best Suites the Village's Needs

We are uniquely suited to help the Village determine which DPW site fits its needs. Being the Village Engineer, we are very familiar with the Village's requirements as well as potential site-specific requirements that we have seen in the past. Our work with and within the City of Milwaukee and Milwaukee Metropolitan Sewer District (MMSD) has also familiarized us with other applicable jurisdictional requirements. This will help us to provide an accurate depiction of jurisdictional needs, permit processes, and timelines.

Scope of Services

Site design services shall include the following elements for each of the site layouts.

- **Task 1: Review Jurisdictional Needs**
  Review Barrientos-provided site layouts for stormwater, utility, parking, public and fire apparatus access, greenspace and landscaping needs, and setbacks for jurisdictional compliance. Jurisdictional review will include the following agencies:
  - Village of Shorewood
  - City of Milwaukee
  - MMSD

- Wisconsin Department of Natural Resources (WDNR)
- Additional agencies having jurisdiction as identified during preliminary design phase (i.e., the City of Milwaukee Department of City Development)

- **Task 2: Develop Permit Needs and Preliminary Permit Review Times**
  - Review permit needs for each site based on jurisdictional reviews.
  - Develop anticipated permitting review times by agencies.

- **Task 3: Review Stormwater Management, Grading, and Pavements Needs**
  - Visit site to review site features and existing conditions.
  - Review site layouts as shown on Barrientos-provided preliminary documents and review existing contours from publicly accessible geographic information system (GIS) systems. Develop a description of preliminary stormwater and grading needs.
  - Develop description of typical pavement structure. It is anticipated that all sites will have asphalt pavement.
  - Develop summary of new retaining wall needs along the north side of the Morris Boulevard site.
  - Coordinate with the MMSD regarding relocation of a MMSD rain gauge located at the Morris Boulevard site.

- **Task 4: Identify Potential Utility Service Connections**
  - Gather information from GIS and Village-provided record drawings, if applicable, to help identify potential utility service connections for each site.

- **Task 5: Attend Meetings**
  - Participate in up to three in-person meetings with Barrientos during preliminary design. Incorporate review comments into documents, as appropriate.
  - Participate in one, in-person review meeting with the Village.
    - Prepare presentation materials and present summary documents to the Village of Shorewood.
    - Incorporate review comments into final documents, as appropriate.

- **Task 6: Develop Letter Narratives and Document Summarizing Site Impacts**
  - Develop a letter narrative for each site summarizing the jurisdictional needs, permit needs and schedule, stormwater management needs, grading and pavement needs, and preliminary utility service connections.
  - Include estimated quantities for site elements that are not already shown on Barrientos-provided drawings.

Compensation

The scope of services can be provided for an estimated fee of $27,400 to be billed on a lump sum basis.

Task	Description	Fee
1	Review Jurisdictional Needs	$4,200
2	Develop Permit Needs and Preliminary Permit Schedule	$900
3	Review Stormwater Management, Grading, and Paving Needs	$8,500
4	Identify Potential Utility Service Connections	$2,000
5	Attend Meetings	$5,500
6	Develop Letter Narratives and Document Summarizing Site Impacts	$6,300
	Total	**$27,400**

Optional Additional Services

If requested, we can provide additional preliminary site design services for review of operational issues and functional use of the sites. Consideration of such elements may include the following:

- Traffic patterns
- Street access
- Yard storage area
- Vehicle circulation
- Relationship between building and yard functions
- Public and department traffic separation
- Site security
- Perimeter separation or noise control walls

Service Items Not Included

Service elements not included follow:

- Environmental reviews and testing, including a Phase 1 Environmental Site Assessment
- Site survey services
- Development of opinion of probable construction cost
- Landscape architecture and landscape design
- Site lighting and electrical design

Schedule

It is anticipated that services will start June 1, 2023, and will be completed by August 31, 2023.

Please feel free to call with questions. An agreement will be prepared and routed for signature if Barrientos finds this proposal acceptable.

Sincerely,

STRAND ASSOCIATES, INC.®

Nicole L. Wellenstein

Christopher T. Bolle, P.E.

P230.258/NLW:mah

SUSTAINABILITY APPROACH

The Concept Design effort involved assessing sustainable building applications that are appropriate for this scale of project.

As LEED Accredited professionals, Barrientos recommends the Village apply the principles established by the US Green Building Council, regardless of whether an application for rating is submitted. The Building Council has researched approaches to sustainability for general building use and their recommended applications are an accepted industry standard.

The major categories of building and site sustainability that can be applied to the Village of Shorewood's DPW Facility are:

Location and Transportation

1. Developing parking stalls for alternative fuel vehicles
2. Provide bicycle facilities
3. Provide reduced footprint parking stalls

Sustainable Sites

1. Stormwater management using extensive bio-swales
2. Creation of open spaces
3. Treating stormwater with a retention pond
4. Managing the heat island effect with material selection.
5. Limiting light pollution by reducing fixtures and selecting reduced light pollution fixtures

Water Efficiency

1. Permeant metering of potable water for two or more individual systems (indoor fixtures, domestic hot water, irrigation or boiler).
2. Install reduced use fixtures and fittings.
3. Develop a goal for reduced water use and/or recycling

Energy and Atmosphere

1. Enhanced commissioning of HVAC and/or building envelope.
2. High efficient building systems or systems that assist in offsetting the buildings energy footprint. These systems include,
    a. Geothermal Heating and Cooling

    b. Solar PV panels
    c. Solar Hot Water
3. Investing in renewable energy production that would be sold back to the power companies.
4. Optimize performance of the building envelope. Increase wall and roof insulation, glazing performance and high speed vehicle doors.

Material and Resources

1. Specifying project goals for construction waste and recycling.
2. Prioritizing local, long lasting building material.
3. Disclosing all building products and sources of raw materials.

Indoor Environmental Quality

1. Use enhanced mechanical systems to reduce cross contamination of exhaust from garage, increase filtration and install entryway systems to capture dirt and other airborne particulates from entering the building.
2. Use of natural lighting to improve safety and quality of workspace.
3. Create outdoor views
1. Enhance indoor air quality and use low VOC materials.
2. Natural ventilation design calculations

In the next steps of Preliminary Design, these applications will be sized for the building footprint established, have a system selected, and cost out. From this cost, the initial investment, compared against the performance gained over the years, the return on investment can be calculated.

INDUSTRY STANDARD FOR GARAGES



TRUCK PARKING

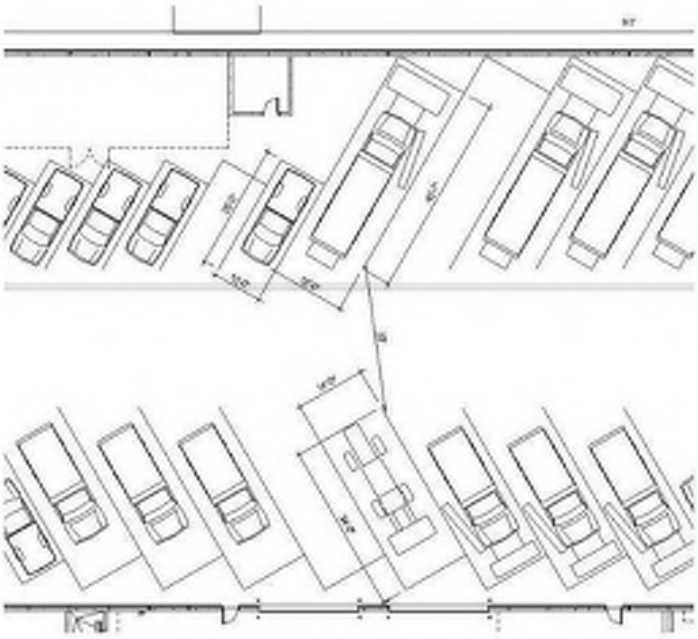
- Heavy duty
- Light duty
- Equipment wash
- Air/water

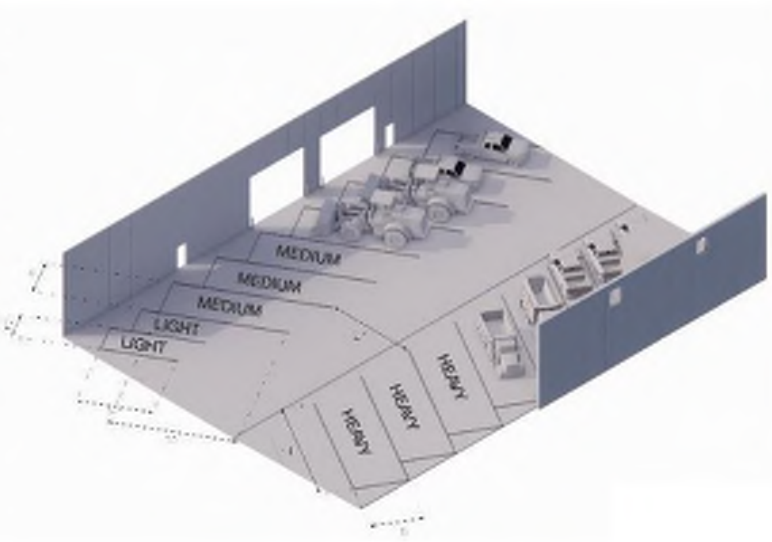






HEATED PARKING





REPAIR GARAGE & SHOPS

- Defining your level of service
- Heavy & light duty
- Fabrication/welding
- Bulk fluid storage
- Tire Shop

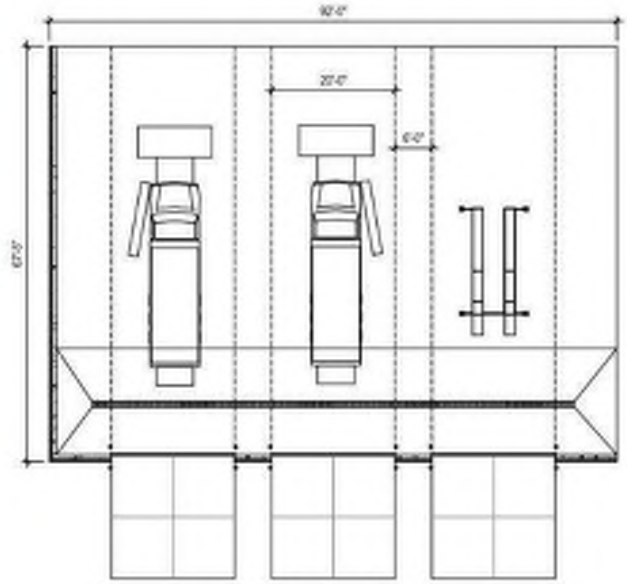


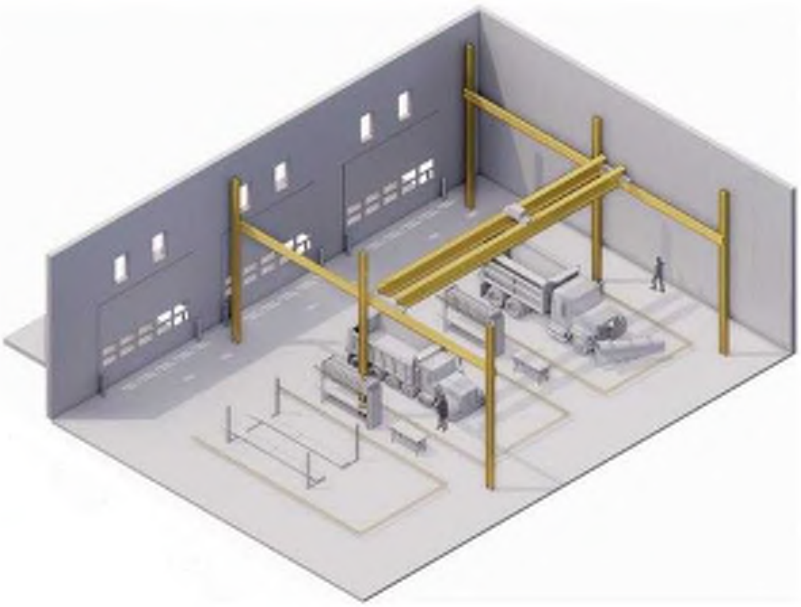




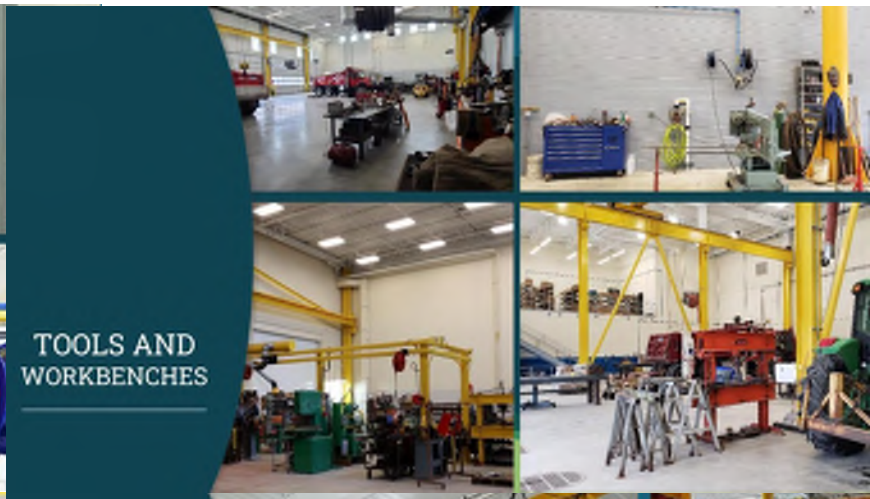


REPAIR GARAGE – PULL IN











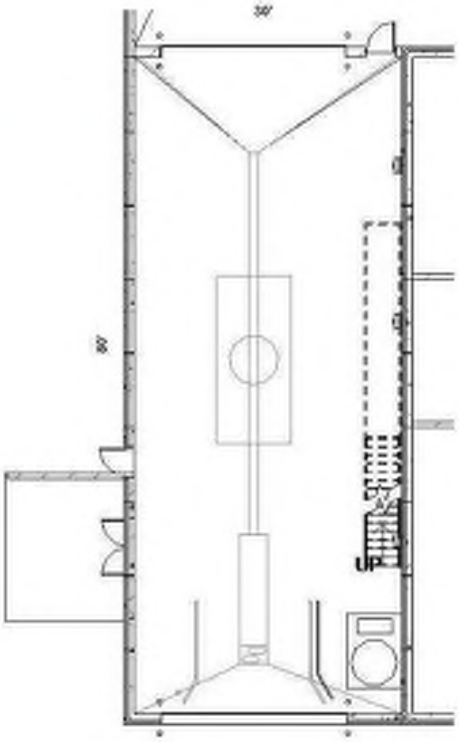




TRUCK WASH

Manual vs automatic
Parts washer
Tank storage

WASH BAY





INVENTORY PARTS & BULK

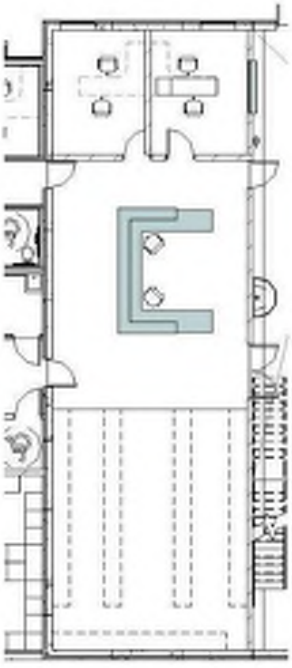
- Store Clerk counter
- Mechanic's station
- Catalogue ordering
- Vehicle parts
- Field tools
- PPE gear
- Tire Storage
- Vendor Loading

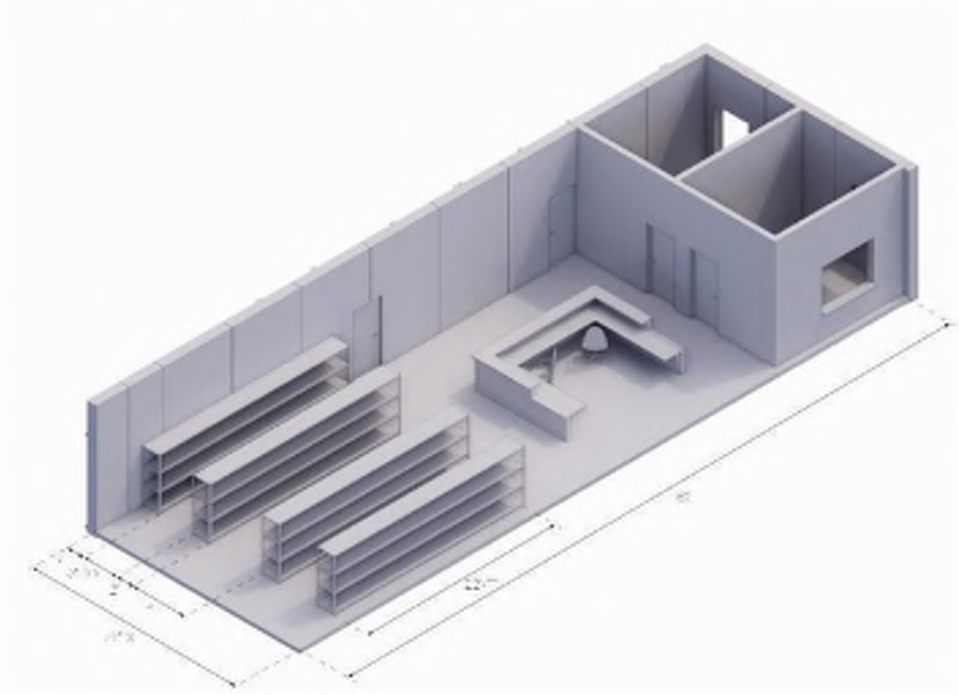






PARTS STORAGE



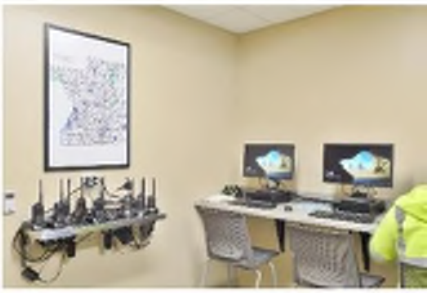


CREW

- Lockers, restrooms
- Assembly/lunch
- Safety training
- Employee fitness
- Washer/dryer







YARD FACILITIES













APPENDIX B
PLAT OF SURVEY WITH TOPOGRAPHY

PLAT OF SURVEY
WITH TOPOGRAPHY

CHAPUT LAND SURVEYS

CLIENT
Village of Shorewood.

SITE ADDRESS
1349/1347 E. Pinedale Court

3801 N. Morris Blvd, Shorewood, Wisconsin.

Morris Boulevard

LEGAL DESCRIPTION
Parcel 1:
That part of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:
Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4;
thence South 27 degrees 20' 39" East 627.38 feet to the point of beginning;
thence South 62 degrees 39' 22" West 40 feet;
thence South 27 degrees 20' 38" West 222.80 feet;
thence North 62 degrees 30' 22" East 40 feet;
thence North 27 degrees 20' 38" West 222.80 feet to the place of beginning.
Lot 6, excepting the West 135 feet thereof as measured along the North line thereof in Block 3 in Harder Hughes Subdivision of High School Terrace, being a part of the Northeast 1/4 of Section 9, Township 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin.

Parcel 2:
That part of the N.E.1/4 of Section 9, T. 7,N., R. 22 E. in the Village of Shorewood, Milwaukee County, Wisconsin.
Commencing at the Northeast corner of said Section 9,
thence South 89° 12' 00" West along the North line of Section 9, 1801.14 feet;
thence South 27° 20' 38" East along the Westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the Northwest corner of Lot 6 Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described;
thence South 62° 39' 22" West (at right angles to Westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the Easterly line of the Chicago Northwestern Railway right-of-way;
thence South 34° 50' East along the Easterly right-of-way line of said railway; 252.11 feet to the North line of the present village property;
thence North 62° 39' 22" East along the North line of village property 143.58 feet to a point;
thence North 27° 20' 38" West along a line which is 40 feet Westerly of and parallel to the Westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point;
thence North 62° 39' 22" East 40 feet to the Westerly line of Harder Hughes Subdivision of High School Terrace;
thence North 27° 20' 38" West along the Westerly line of Harder Hughes Subdivision of High School Terrace 27.16 feet to the place of beginning.

Parcel 3:
Parts of Government Lot 1 in the North ½ of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, bounded and described as follows:
Commencing at the Northeast corner of the NE 1/4 of Section 9 in Township Number 7 North, Range 22 East,
thence South 89°12'00'' West 1801.14 feet;
thence South 27°20'38'' East 1110.54 feet to Place of Beginning of the land to be described;
thence South 62° 30' 22" West 150.27 feet to the East line of Right of Way of the Chicago and Northwestern Railway;
thence South 34°48' 05" East along the East line of said Right of Way 315.20 feet; thence North 89°11' 55" East 122.25 feet;
thence North 27° 20' 38'' West 367.16 feet to the place of beginning, all in the Village of Shorewood, Milwaukee County, Wisconsin.

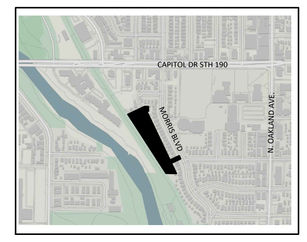
Also

That part of Lot 1 in the North 1/2 of the Northeast 1/4 of Section, 9, in Township 7 North, Range 22 East, bounded and described as follows: Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4 Section; thence South 27° 20' 38" East 850.18 feet to the place of beginning of the land to be described; thence South 27° 20' 38" East 260.36 feet; thence South 62° 39' 22" West 150.27 feet to a point in the East Right-of-way line of the Chicago and Northwestern Railway Company; thence North 34° 48' 05" West along said Right-of-way 262.59 feet; thence North 62° 39' 22" East 184.35 feet to the place of beginning.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System NAD83(2011) (South Zone), in which the North line of the NE 1 /4 bears N88°51'03"E.

VERTICAL DATUM
Vertical Datum is based on NORTH AMERICAN VERTICAL DATUM OF 1988(12)

STARTING BENCHMARK: 634.59
REFERENCE MARK AND REFERENCE BENCHMARK
CONCRETE MONUMENT AT THE SE COR OF THE NE 1/4, SEC. 9, T7N, R22E

VICINITY MAP


LEGEND OF SYMBOLS & ABBREVIATIONS

SANITARY MANHOLE	FIBER OPTIC MARKER	SIGN
STORM MANHOLE	FIBER OPTIC MANHOLE/VAULT	MAIL BOX
CLEANOUT	TELEPHONE PEDESTAL	FLAG POLE
CURB INLET	TELEPHONE MANHOLE/VAULT	BOLLARD
STORM INLET	TELEPHONE MARKER	CROSS CUT
CATCH BASIN	TRANSFORMER	IRON PIPE
LATERAL	ELECTRIC METER/PEDESTAL	IRON REBAR/ROD
UNKNOWN MANHOLE	ELECTRIC MANHOLE/VAULT	MAG NAIL
WELL	CABLE TV RISER/BOX CABLE	SECTION MONUMENT
HYDRANT	TV MANHOLE/VAULT	BENCH MARK
WATER VALVE	GAS VALVE	CONIFER TREE
DOWN SPOUT	GAS METER	DECIDUOUS TREE
SPRINKLER VALVE	GAS MARKER	BUSH
WATER SHUT OFF	AIR CONDITIONING UNIT	WETLAND SYMBOL
STANDPIPE	VENT	DIRECTIONAL ARROW
WATER MANHOLE	UTILITY POLE	SPOT ELEVATION
FLOOD LIGHT	GUY WIRE	HANDICAP STALL
LIGHT POLE	TRAFFIC SIGNAL POLE	DUMPSTER
VAULT UNKNOWN		

SANITARY SEWER	CL. =CENTERLINE
STORM SEWER	CONC. =CONCRETE
WATER MAIN	EL. =ELEVATION
FIBER OPTIC LINE	EXT. =EXISTING
TELEPHONE LINE	INV. =INVERT
ELECTRIC LINE	MON. =MONUMENT
OVERHEAD WIRES	P.O.B. =POINT OF BEGINNING
CABLE TELEVISION	P.O.C. =POINT OF COMMENCEMENT
GAS MAIN	R.O.W =RIGHT OF WAY
WETLANDS	SEC. =SECTION
TREE LINE	SQ. FT. =SQUARE FEET
NO ACCESS	W/ =WITH
	(R) =RECORDED AS
	(D) =DEEDED AS

CATCH BASINS, INLETS & MANHOLES

Point No.	Description	Connects To	Direction	Size	Material	Depth / Invert (ft)	Elevation (ft)	General Condition & Comments
5115	RIM						648.06	CATCH-BASIN-ROUND
	PIPE		N	8"	PVC	3.25	644.81	
	PIPE		S	8"	PVC	3.45	644.61	
	SUMP					5.75	638.86	SUMP
5127	RIM						649.22	CATCH-BASIN-ROUND
	PIPE	OFFSITE	N	8"	PVC	3.45	645.77	
		5115	S	8"	PVC	3.50	645.72	
5800	RIM						645.98	CATCH-BASIN-ROUND
	PIPE		NE	8"	PVC	7.40	638.58	
	PIPE		SW	8"	PVC	8.00	637.98	
5810	RIM						646.34	
	PIPE		S	8"	PVC	6.05	640.29	
6115	RIM						643.84	CATCH-BASIN-SQUARE
	PIPE		SW	8"	PVC	2.90	640.94	
	PIPE				SUMP	4.05	639.79	
					WATER	2.75	641.09	
6996	RIM						641.01	
			N	12"		8.25	632.76	
			S	12"		8.25	632.76	
			E	3"		1.45	639.56	
		RIVER	W	FUNNEL		13	628.01	
7020	RIM						641.91	CATCH-BASIN-SQUARE
	PIPE		E	12"		2.6	639.31	FILLED WITH SEDIMENT
10345	RIM						639.64	CATCH-BASIN-ROUND
	PIPE	10366	E	6"	PVC	4.55	635.09	
	PIPE	6965	W	6"	PVC	4.55	635.09	
10618	RIM						645.30	CATCH BASIN S IN ROAD
10865	RIM						640.63	CATCH-BASIN-SQUARE
	PIPE	10863	N	6"	PVC	1.7	638.93	
	PIPE	10366	S	8"		1.85	638.78	
	PIPE	BLD	E	6"		1.85	638.78	
10862	RIM						640.99	CATCH-BASIN-SQUARE
	PIPE		S	6"		1.3	639.69	ELBOWS TO 10863
	SUMP					3.1	637.89	
	WATER					1.8	639.19	
10877	RIM						640.71	CATCH-BASIN-SQUARE
	PIPE	6549	E	12"		3.45	637.26	
	PIPE	10878	S	12"		3.2	637.51	
			W	12"		3.55	637.16	
10878	RIM						640.69	CATCH-BASIN-SQUARE
	PIPE	10877	NW	FUNNEL		2.8	637.89	

STORM MANHOLES

Point No.	Description	Connects To	Direction	Size	Material	Depth / Invert (ft)	Elevation (ft)	General Condition & Comments
5954	RIM						649.84	STORM MH
	PIPE	5955	N	8"	PVC	9.35	640.49	
	PIPE		E	8"	PVC	6.30	643.54	
					BOTTOM	12.30	637.54	
					WATER	9.35	640.49	
5955	RIM						650.13	STORM MH
	PIPE	5954	S	8"	PVC	10.00	640.13	
					BOTTOM	15.95	634.18	
			SE	8"		13.45	636.68	WATER COVERED
			SE	12"		14.65	635.48	WATER COVERED
6112	RIM						643.93	STORM MH
	PIPE		N	10"	PVC	7.90	636.03	
	PIPE		E	8"	CLAY	7.80	636.13	
	PIPE		S	12"	PVC	7.95	635.98	
	PIPE		SE	8"	PVC	3.35	640.58	
10215	RIM						642.74	STORM MH
	PIPE	BLD	N	6"	CLAY	3.8	638.94	
	PIPE	BLD	E	6"	CLAY	3.8	638.94	
	PIPE		S	4"	PVC	3.05	639.69	
	PIPE		SW	4"	PVC	3.75	638.99	
	PIPE		W	4"	IRON	3.3	639.44	
6774	RIM						654.44	STORM MH
	PIPE	OFFSITE	N	8"	PVC	4.1	650.34	
	PIPE	OFFSITE	E	4"	PVC	3.7	650.74	
	PIPE		S	8"	PVC	4.25	650.19	
	PIPE	OFFSITE	W	4"	PVC	3.9	650.54	
6965	RIM						640.24	STORM MH
	PIPE	10345		12"	IRON	5.3	634.94	
	PIPE			12"	IRON	5.63	634.61	
	PIPE			12"	IRON	5.6	634.64	
10356	RIM						645.43	STORM MH
	PIPE		E	8"		25.3	620.13	
	PIPE	10351	W	8"		16.3	629.13	
	PIPE		W	8"		25.3	620.13	
10366	RIM						640.81	STORM MH
	PIPE	10865	N	6"	PVC	3.04	637.77	
	PIPE	10215	E	4"	PVC	4.95	635.86	
	PIPE	10345	W	6"	PVC	5.13	635.68	
10633	RIM						645.29	STORM MH IN ROAD
10634	RIM						644.98	STORM MH IN ROAD
10863	RIM						640.83	STORM MH
	PIPE	10862	E	6"	PVC	1.7	639.13	
	PIPE	10865	S	6"		1.65	639.18	

SANITARY MANHOLES

Point No.	Description	Connects To	Direction	Size	Material	Depth / Invert (ft)	Elevation (ft)	General Condition & Comments
5815	RIM						647.22	SANITARY MH
	UNDER TRAILER	NO ACCESS						NO ACCESS
6104	RIM						643.96	SANITARY MH
	PIPE		N	8"	CLAY	8.60	635.36	
	PIPE		E	6"	CLAY	8.40	635.56	
	PIPE		S	8"	CLAY	8.60	635.36	
6107	RIM						644.25	SANITARY MH
	PIPE		SE	10"	PVC	2.45	641.80	
	PIPE		NW	8"	PVC	2.75	641.50	
					SUMP	5.02	639.23	
6107	RIM						644.25	SANITARY MH
	PIPE		SE	10"	PVC	2.45	641.80	
	PIPE		NW	8"	PVC	2.75	641.50	
					SUMP	5.02	639.23	
6549	RIM						645.76	SANITARY MH
	PIPE	BLD	S	6"		10.60	635.16	
	PIPE	10877	W	6"		10.60	635.16	FLOWS WEST
8000	RIM	5787					646.95	SANITARY MH
	PIPE		E	6"	PVC	7.7	639.25	
	PIPE		S	8"	PVC	7.85	639.10	
10347	RIM						640.06	SANITARY MH
	PIPE	10881	N	6"		7.75	632.31	
	PIPE	10349	SE	6"		7.9	632.16	
10349	RIM						640.37	SANITARY MH
	PIPE	10351	E	6"		8.7	631.67	
	PIPE	10347	NW	6"		8.7	631.67	
10351	RIM						640.95	SANITARY MH
	PIPE	10224	NW	8"		4.12	636.83	
	PIPE	10356	E	8"		4.02	636.93	
10881	RIM						641.03	SANITARY MH
	PIPE		N	8"	PVC	7.18	633.85	
	PIPE		E	6"		6.9	634.13	
			S	8"		7.2	633.83	FLOWS SOUTH

STRUCTURES UNKNOWN

Point No.	Description	Connects To	Direction	Size	Material	Depth / Invert (ft)	Elevation (ft)	General Condition & Comments
5787	RIM			UNKNOWN MH				NO ACCESS
								BOLTED SHUT
6097	RIM			UNKNOWN MH			647.71	UNKNOWN
6416	RIM			UNKNOWN MH			646.90	

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 Inch = 30 ft.

I Certify that I have surveyed the above described property (Property), and the above map is correct to the best of my professional knowledge and belief and shows the size and location of the Property, its exterior boundaries, the location and dimensions of all visible structures thereon, boundary fences, apparent easements and roadways and visible encroachments, if any. This survey is made for the exclusive use of the present owners of the Property, and also those who purchase, mortgage, or guarantee the title thereto, within one (1) year from date hereof.

Date: October 18, 2024

WISCONSIN ALLEN J. SCHNEIDER S-2194 GREENFIELD WI LAND SURVEYOR

Allen J. Schneider
Professional Land Surveyor
Registration Number S-2194

SHEET 2 OF 2

Date	Revision description	
Nov. 7, 2024	Updated Easements	lpm
Mar. 10 2025	Updated Encroachment Table	lpm

CHAPUT LAND SURVEYS
234 W. Florida Street
Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com

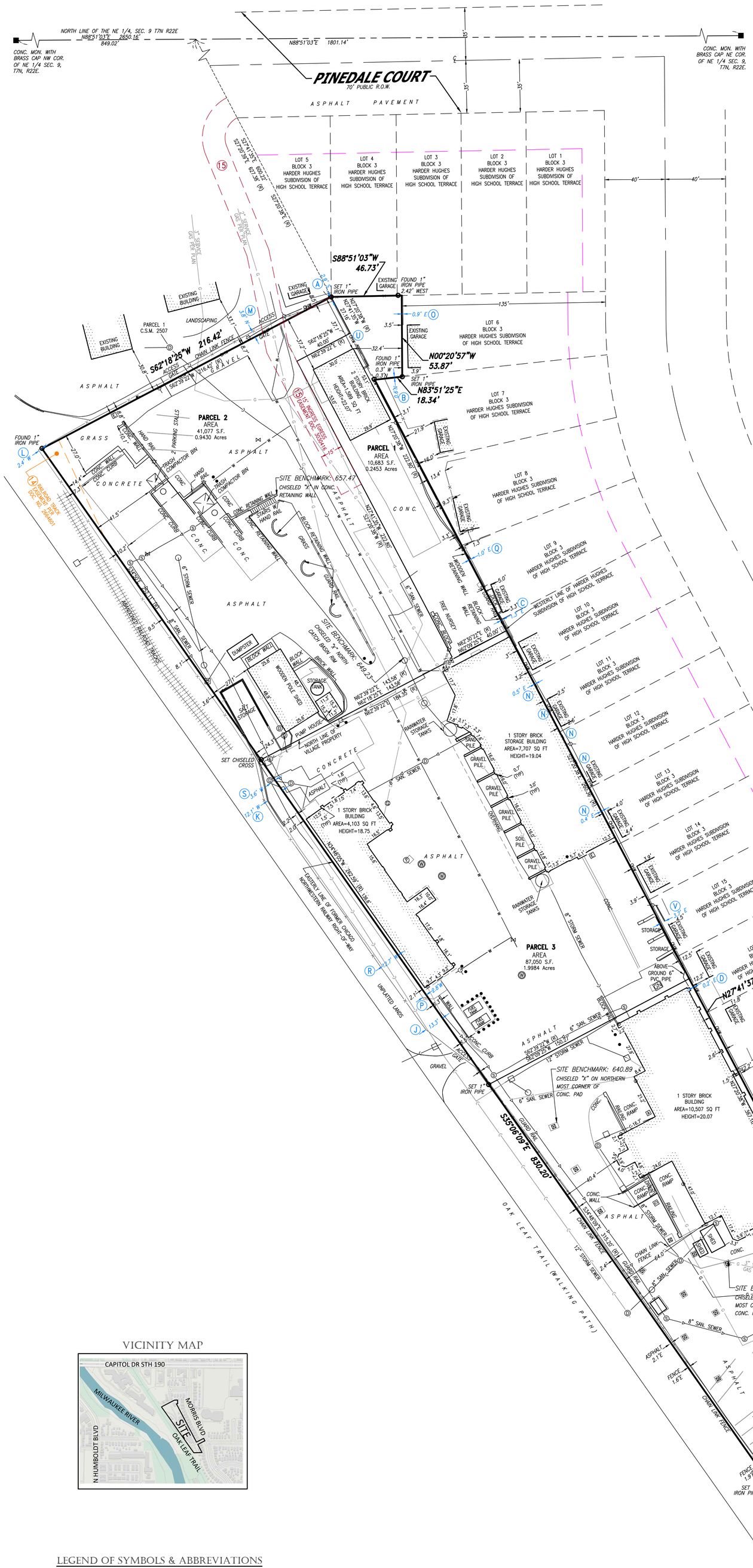
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DRAFTED BY: lpm

Drawing No. 5965.00

APPENDIX C
LAND TITLE SURVEY

ALTA/NSPS
LAND TITLE SURVEY



ENCROACHMENT TABLE

A	FENCE 2.9' SOUTH OVER PROPERTY LINE
B	FENCE 0.6' NORTH OVER PROPERTY LINE
C	FENCE 1.3' EAST OVER PROPERTY LINE
D	FENCE 0.2' EAST OVER PROPERTY LINE
E	RETAINING WALL 0.5' EAST OVER PROPERTY LINE
F	RETAINING WALL EXTENDS 0.5' SOUTH INTO SURVEYED PROPERTY
G	FENCE 1.3' NORTH INTO SURVEYED PROPERTY
H	FENCE 0.7' EAST OVER PROPERTY LINE
I	FENCE 0.4' SOUTH OVER PROPERTY LINE
J	FENCE 13.3' WEST OVER PROPERTY LINE
K	RETAINING WALL 12.1' WEST OVER PROPERTY LINE
L	FENCE 2.4' WEST OVER PROPERTY LINE
M	FENCE 3.8' NORTH OVER PROPERTY LINE
N	BUILDING 0.4'-0.5' EAST OVER PROPERTY LINE
O	FENCE 0.9' EAST OVER PROPERTY LINE
P	ASPHALT 2.8' WEST OVER PROPERTY LINE
Q	RETAINING WALL 1.0' EAST OVER PROPERTY LINE
R	CONCRETE DRIVE 12.7' WEST OVER PROPERTY LINE
S	ASPHALT EDGE 3.6' WEST OVER PROPERTY LINE
T	OVERHEAD ELECTRIC WIRES 2.5' NORTH OVER PROPERTY LINE
U	OVERHEAD ELECTRIC WIRES 47.3' WEST OVER PROPERTY LINE
V	RETAINING WALL 3.7' EAST OVER PROPERTY LINE

CLIENT
Village of Shorewood.

SITE ADDRESS
1349/1347 E. Pinedale Court

3801 N. Morris Blvd, Shorewood, Wisconsin.

Morris Boulevard

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thence South 27 degrees 20' 38" West 222.80 feet;
thence North 62 degrees 30' 22" East 40 feet;
thence North 27 degrees 20' 38" West 222.80 feet to the place of beginning.
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thence South 27° 20' 38" East along the Westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the Northwest corner of Lot 6 Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described;
thence South 62° 39' 22" West (at right angles to Westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the Easterly line of the Chicago Northwestern Railway right-of-way;
thence South 34° 50' East along the Easterly right-of-way line of said railway; 252.11 feet to the North line of the present village property;
thence North 62° 39' 22" East along the North line of village property 143.58 feet to a point;
thence North 27° 20' 38" West along a line which is 40 feet Westerly of and parallel to the Westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point;
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Commencing at the Northeast corner of the NE 1/4 of Section 9 in Township Number 7 North, Range 22 East,
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thence South 62° 30' 22" West 150.27 feet to the East line of Right of Way of the Chicago and Northwestern Railway;
thence South 34°48' 06" East along the East line of said Right of Way 315.20 feet; thence North 89°11' 55" East 122.25 feet;
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Also

That part of Lot 1 in the North 1/2 of the Northeast 1/4 of Section, 9, in Township 7 North, Range 22 East, bounded and described as follows: Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4 Section; thence South 27° 20' 38" East 850.18 feet to the place of beginning of the land to be described;
thence South 27° 20' 38" East 260.36 feet; thence South 62° 39' 22" West 150.27 feet to a point in the East Right-of-way line of the Chicago and Northwestern Railway Company; thence North 34° 48' 05" West along said Right-of-way 262.59 feet; thence North 62° 39' 22" East 184.35 feet to the place of beginning.

Parcel 4:
Lot Number 21 in Block 3 Harder-Hughes Subdivision of High School Terrace, being a subdivision in the Northeast 1/4 of Section 9, Township 7 North of Range 22 East in the Village of Shorewood., Milwaukee County, Wisconsin.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System NAD83(2011) (South Zone), in which the North line of the NE 1 /4 bears N88°51'03"E.

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CO-15397 Revision A, Commitment date of August 6, 2024 which lists the following easements and/or restrictions from schedule B-II:

1, 6, 7 & 8 visible evidence shown, if any.

2, 3, 4, 5, 9, 16, 17, 21, & 22 not survey related.

12. Restrictions as show on Harder Hughes Subdivision of High School Terrace Plat. Reference is hereby made to said document for full particulars. Affects property by location, shown.

13. Covenants, conditions, restrictions and easements contained in the Warranty Deed recorded on November 19, 1945, as Document No. 2595535. (Parcel 2) Does not affect property by location, not shown.

14. Easement in favor of John P. Druecker, his heirs and assigns for purpose of access AND Easement in favor of Chicago and Northwestern Railway Company for the right to construct, maintain and operate a railroad track contained in Warranty Deed between Edward E. Hess ad Hilda Hess, his wife and the Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation recorded September 18, 1946 as Document No. 2664601. (Parcel 2) 14(a) - Does not affect property by location, superceded by exception 15. 14(b) - Affects property by location, shown.

15. Covenants, conditions, restrictions and easements contained in the document recorded on June 7, 1951, as Document No. 3030416. (Parcel 2) Benefits property by location, shown.

16. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document from Village of Shorewood to Wisconsin Electric Power Company, for purpose of ingress and egress, recorded May 22, 1975 as Document No. 4917114. (Parcel 4) Affects Parcels 1-4, grants access through Parcels 1-4 to the property to the North.

17. Easement Assignment by and between Wisconsin Electric Power Company, a Wisconsin corporation, doing business as We Energies as Assignor and American Transmission Company LLC, a Wisconsin limited liability company as Assignee recorded on April 4, 2008 as Document No. 9581345. Does not affect property by location, not shown.

18. Limited Term Conservation Easement by the Village of Shorewood as the Landowner to Milwaukee Metropolitan Sewerage District, a special-piurpose municipal corporation as the Easement Holder recorded January 15, 2016 as Document No. 10532883. (Parcel 2) The location cannot be determined from the record document.

TABLE "A" ITEMS
3. According to the flood insurance rate map of the County of Milwaukee, Community Panel No.55079C0084E, effective date of September 26, 2008, this site falls in Zone X (Areas determined to be outside the 0.2% annual chance floodplain).
4. The Land Area of the subject property is 143,679 square feet or 3.2984 acres.
6(a)(b). A zoning report has not been provided.
9. There are 23 regular parking spaces and 1 handicap spaces marked on this site.
11(b). Evidence of underground utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility locate. Ticket Number 20243711515. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.
20(b). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.

VICINITY MAP

LEGEND OF SYMBOLS & ABBREVIATIONS

SANITARY MANHOLE	FIBER OPTIC MARKER	SIGN
STORM MANHOLE	FIBER OPTIC MANHOLE/VAULT	MAIL BOX
CLEANOUT	TELEPHONE PEDESTAL	FLAG POLE
CURB INLET	TELEPHONE MANHOLE/VAULT	BOLLARD
STORM INLET	TELEPHONE MARKER	CROSS CUT
CATCH BASIN	TRANSFORMER	IRON PIPE
LATERAL	ELECTRIC METER/PEDESTAL	IRON REBAR/ROD
UNKNOWN MANHOLE	ELECTRIC MANHOLE/VAULT	MAG NAIL
WELL	CABLE TV RISER/BOX CABLE	SECTION MONUMENT
HYDRANT	TV MANHOLE/VAULT	BENCH MARK
WATER VALVE	GAS VALVE	CONIFER TREE
DOWN SPOUT	GAS METER	DECIDUOUS TREE
SPRINKLER VALVE	GAS MARKER	BUSH
WATER SHUT OFF	AIR CONDITIONING UNIT	WETLAND SYMBOL
STANDPIPE	VENT	DIRECTIONAL ARROW
WATER MANHOLE	UTILITY POLE	SPOT ELEVATION
FLOOD LIGHT	GUY WIRE	HANDICAP STALL
LIGHT POLE	TRAFFIC SIGNAL POLE	DUMPSTER
VAULT UNKNOWN		

SANITARY SEWER	
STORM SEWER	
WATER MAIN	
FIBER OPTIC LINE	
TELEPHONE LINE	
ELECTRIC LINE	
OVERHEAD WIRES	
CABLE TELEVISION	
GAS MAIN	
WETLANDS	
TREE LINE	
NO ACCESS	

CL.	=CENTERLINE
CONC.	=CONCRETE
EL.	=ELEVATION
EXT.	=EXISTING
INV.	=INVERT
MON.	=MONUMENT
P.O.B.	=POINT OF BEGINNING
P.O.C.	=POINT OF COMMENCEMENT
R.O.W	=RIGHT OF WAY
SEC.	=SECTION
SQ. FT.	=SQUARE FEET
W/	=WITH
(R)	=RECORDED AS
(D)	=DEEDED AS

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

To: Chicago Title Insurance Company
Village of Shorewood as to Parcel 1
Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation as to Parcel 2
Village of Shorewood, Milwaukee County, Wisconsin, a MMunicipala Corporation as to Parcel 3
Village of Shorewood, a municipal corporation, located in Milwaukee County, Wis. as to Parcel 4

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6, 7(a), 7(b)(1), 7(c), 8, 9, 11(b), 19 and 20(b) of Table A thereof. The field work was completed on October 6, 2024.

Date of Map: October 18, 2024

WISCONSIN ALLEN J. SCHNEIDER S-2194 GREENFIELD WI LAND SURVEYOR

Allen J. Schneider
Professional Land Surveyor
Registration Number S-2194

SHEET 1 OF 2

No.	Date	Revision description	
1	Nov. 7, 2024	Updated Easements	lpm

CHAPUT LAND SURVEYS
234 W. Florida Street
Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com

This document is an instrument of professional service, and may be protected by the surveyors work product doctrine or surveyor / client privilege. The information shown hereon is intended solely for the use of the client and client directed third parties. Chaput Land Surveys is a division of Pinnacle Engineering Group.

DRAFTED BY: lpm Drawing No. 5965.00

CHAPUT LAND SURVEYS

APPENDIX D
TITLE DOCUMENTS

Title Document CO-15397 - Commitment Rev-A

ALTA COMMITMENT FOR TITLE INSURANCE

issued by:

CHICAGO TITLE INSURANCE COMPANY

Commitment Number:

CO-15397
Revision A

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, Chicago Title Insurance Company, a Florida corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within one hundred eighty (180) days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Chicago Title Insurance Company

By:

Michael J. Nolan, President

Attest:

Marjorie Nemzura, Secretary

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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AMERICAN LAND TITLE ASSOCIATION

Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

ISSUING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Title Officer: Craig Koller Chicago Title Company 20825 Swenson Dr., Suite 200 Waukesha, WI 53186 Phone: 2627963879 Main Phone: (262)796-3800 Email: Craig.Koller@ctt.com	

Order Number: CO-15397

SCHEDULE A

1. Commitment Date: August 6, 2024
2. Policy to be issued:

   (a) ALTA Owner's Policy 2021 w-WI Mod
   Proposed Insured: Purchaser with contractual rights under a purchase agreement with the vested owner
   Proposed Amount of Insurance: $15,000.00
   The estate or interest to be insured: Fee Simple

3. The estate or interest in the Land at the Commitment Date is:

   Fee Simple

4. The Title is, at the Commitment Date, vested in:

   Village of Shorewood as to Parcel 1
   Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation as to Parcel 2
   Village of Shorewood, Milwaukee County, Wisconsin, a Municipal Corporation as to Parcel 3
   Village of Shorewood, a municipal corporation, located in Milwaukee County, Wis. as to Parcel 4

5. The Land is described as follows:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Countersigned By:

Craig Koller
Authorized Officer or Agent

END OF SCHEDULE A

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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EXHIBIT "A"
Legal Description

Parcel 1:
That part of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:
Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4;
thence South 27 degrees 20' 39" East 627.38 feet to the point of beginning;
thence South 62 degrees 39' 22" West 40 feet;
thence South 27 degrees 20' 38" West 222.80 feet;
thence North 62 degrees 30' 22" East 40 feet;
thence North 27 degrees 20' 38" West 222.80 feet to the place of beginning.

Lot 6, excepting the West 135 feet thereof as measured along the North line thereof in Block 3 in Harder Hughes Subdivision of High School Terrace, being a part of the Northeast 1/4 of Section 9, Township 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin.

Tax Key: 275-8994-000
Address: 1349/1347 E. Pinedale Court

Parcel 2:
That part of the N.E.1/4 of Section 9, T. 7,N., R. 22 E. in the Village of Shorewood, Milwaukee County, Wisconsin.
Commencing at the Northeast corner of said Section 9,
thence South 89° 12' 00" West along the North line of Section 9, 1801.14 feet;
thence South 27° 20' 38" East along the Westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the Northwest corner of Lot 6 Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described;
thence South 62° 39' 22" West (at right angles to Westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the Easterly line of the Chicago Northwestern Railway right-of-way;
thence South 34° 50' East along the Easterly right-of-way line of said railway; 252.11 feet to the North line of the present village property;
thence North 62° 39' 22" East along the North line of village property 143.58 feet to a point;
thence North 27° 20' 38" West along a line which is 40 feet Westerly of and parallel to the Westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point;
thence North 62° 39' 22" East 40 feet to the Westerly line of Harder Hughes Subdivision of High School Terrace;
thence North 27° 20' 38" West along the Westerly line of Harder Hughes Subdivision of High School Terrace 27.16 feet to the place of beginning.

Tax Key: 275-8995-000
Address: 3801 N. Morris Boulevard

Parcel 3:
Parts of Government Lot 1 in the North ½ of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, bounded and described as follows:
Commencing at the Northeast corner of the NE 1/4 of Section 9 in Township Number 7 North, Range 22 East,
thence South 89°12'00" West 1801.14 feet;
thence South 27°20'38" East 1110.54 feet to Place of Beginning of the land to be described;
thence South 62° 30' 22" West 150.27 feet to the East line of Right of Way of the Chicago and Northwestern Railway;
thence South 34°48' 06" East along the East line of said Right of Way 315.20 feet;

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thence North 89°11' 55" East 122.25 feet;
thence North 27° 20' 38" West 367.16 feet to the place of beginning, all in the Village of Shorewood, Milwaukee County, Wisconsin.

ALSO

That part of Lot 1 in the North 1/2 of the Northeast 1/4 of Section, 9, in Township 7 North, Range 22 East, bounded and described as follows: Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4 Section; thence South 27° 20' 38" East 850.18 feet to the place of beginning of the land to be described; thence South 27° 20' 38" East 260.36 feet; thence South 62° 39' 22" West 150.27 feet to a point in the East Right-of-way line of the Chicago and Northwestern Railway Company; thence North 34° 48' 05" West along said Right-of-way 262.59 feet; thence North 62° 39' 22" East 184.35 feet to the place of beginning.

Tax Key: 275-8984-000

Parcel 4:
Lot Number 21 in Block 3 Harder-Hughes Subdivision of High School Terrace, being a subdivision in the Northeast 1/4 of Section 9, Township 7 North of Range 22 East in the Village of Shorewood., Milwaukee County, Wisconsin.

Tax Key: 275-1116-000
Address: Morris Boulevard

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SCHEDULE B, PART I - Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

   Furnish for recordation a Warranty Deed as set forth herein,Village of Shorewood as to Parcel 1, Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation as to Parcel 2, Village of Shorewood, Milwaukee County, Wisconsin, a MMuniciapla Corporation as to Parcel 3, Village of Shorewood, a municipal corporation, located in Milwaukee County, Wis. as to Parcel 4, grantor, Purchaser with contractual rights under a purchase agreement with the vested owner, grantee.

5. The proposed conveyance from the Village of Shorewood must be executed by the Village President and Village Clerk unless we are provided with a Village Board Resolution providing otherwise.

6. The Proposed Policy Amount(s) must be increased to the full value of the estate or interest being insured, and any additional premium must be paid at that time. An Owner's policy should reflect the purchase price or full value of the Land. A Loan Policy should reflect the loan amount or value of the property as collateral. Proposed Policy Amount(s) will be revised and premiums charged consistent therewith when the final amounts are approved.

7. For each policy to be issued as identified in Schedule A, Item 2; the Company shall not be liable under this commitment until it receives a designation for a Proposed Insured, acceptable to the Company. As provided in Commitment Condition 4, the Company may amend this commitment to add, among other things, additional exceptions or requirements after the designation of the Proposed Insured.

8. The Company should be furnished with satisfactory affidavits of the present owner and purchaser stating that no unpaid commissions are owed in favor of any real estate broker for the property, pursuant to Wisconsin Statutes. No broker lien or notice of intent to file lien has been recorded as of the effective date of this commitment to insure.

9. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

END OF SCHEDULE B, PART I

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SCHEDULE B, PART II - Exceptions

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.

   Note: Exception 1 will be removed only if no intervening matters appear of record between the effective date of this commitment and the recording of the instruments called for at Item 3 of Schedule B-I, or if a gap endorsement is issued in conjunction with this commitment and the requirements for the issuance of "gap" coverage as described in the endorsement are met, including the payment of the premium.

2. Special taxes or assessments, if any, payable with the taxes levied or to be levied for the current and subsequent years.

   Note: Exception 2 will be removed only if the Company receives written evidence from the municipality that there are no special assessments against the land, or that all such items have been paid in full.

3. Liens, hook-up charges or fees, deferred charges, reserve capacity assessments, impact fees, or other charges or fees due and payable on the development or improvement of the land, whether assessed or charged before or after the Date of Policy.

   The Company insures the priority of the lien of the insured mortgage over any such lien, charge or fee.

   Note: Exception 3 will be removed only if the Company receives (1) written evidence from the municipality that there are no deferred charges, hookup fees, or other fees or charges attaching to the property; (2) evidence that the land contains a completed building; and (3) a statement showing that the land has a water and sewer use account . If the land is vacant, this exception will not be removed.

4. Any lien, or right of a lien, for services, labor or material heretofore furnished, imposed by law and not shown by the Public Records.

   Note: Contact the Company for information on the deletion of this exception.

5. Rights or claims of parties in possession not shown by the public records.

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SCHEDULE B, PART II - Exceptions
(continued)

Note: Exception 5 will be removed only if the Company receives the Owner's Affidavit on the form furnished by the Company. If the affidavit shows that there are tenants, Exception 5 will be replaced by an exception for the rights of the tenants disclosed by the Affidavit.

6. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land.

7. Easements or claims of easements not shown by the public records.

8. Any claim of adverse possession or prescriptive easement.

Note: Exceptions 6, 7 and 8 will be removed only if the Company receives an original survey which (1) has a current date, (2) is satisfactory to the Company, and (3) complies with current ALTA/NSPS Minimum Survey Standards or Wisconsin Administrative Code AE-7 together with the certification agreed on between the Wisconsin Land Title Association and the Wisconsin Society of Land Surveyors on April 1, 1974. If the survey shows matters which affect the title to the property, Exceptions 6, 7 and 8 will be replaced by exceptions describing those matters.

9. General taxes for the year 2024, not yet due and payable.

10. Public or private rights, if any, in such portion of the subject premises as may be presently used, laid out or dedicated in any manner whatsoever, for street, highway and/or alley purposes.

11. Possible reassessment of taxes due to the fact that the Land has not been assessed for taxation for 2023 and prior year(s) on the grounds that they are exempt although there is nothing of record to show cause why said Land should be entitled to be exempt for taxation.

12. Restrictions as show on Harder Hughes Subdivision of High School Terrace Plat. Reference is hereby made to said document for full particulars.

13. Covenants, conditions, restrictions and easements containeed in the Warranty Deed recorded on November 19, 1945, as Document No. 2595535. (Parcel 2)

14. Easement in favor of John P. Druecker, his heirs and assigns for purpose of access AND Easement in favor of Chicago and Northwestern Railway Company for the right to construct, maintain and operate a railroad track contained in Warranty Deed between Edward E. Hess ad Hilda Hess, his wife and the Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation recorded September 18, 1946 as Document No. 2664601. (Parcel 2)

15. Covenants, conditions, restrictions and easements contained in the document recorded on June 7, 1951, as Document No. 3030416. (Parcel 2)

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SCHEDULE B, PART II - Exceptions
(continued)

16. Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document from Village of Shorewood to Wisconsin Electric Power Company, for purpose of ingress and egress, recorded May 22, 1975 as Document No. 4917114. (Parcel 4)

17. Easement Assignment by and between Wisconsin Electric Power Cmpany, a Wisconsin corporation, doing business as We Energies as Assignor and American Transmission Company LLC, a Wisconsin limited liability company as Assignee recorded on April 4, 2008 as Document No. 9581345.

18. Limited Term Conservation Easement by the Village of Shorewood as the Landowner to Milwaukee Metropolitan Sewerage District, a special-piurpose municipal corporation as the Easement Holder recorded January 15, 2016 as Document No. 10532883. (Parcel 2)

19. Rights and easements, if any, in and to any and all railroad switches, sidetracks, spur tracks, and rights of way located upon or appurtenant to the Land.

20. Possible homestead and marital property rights of the spouse(s) of the insured if the proposed deed is to run to a married individual(s).

END OF EXCEPTIONS

NOTES

Note A: Vesting Instrument(s): Document No. 7607491 as to Parcel 1

Note B: Vesting Instrument(s): Document No. 2664601 as to Parcel 2

Note C: Vesting Instrument(s): Document No. 1709129 as to Parcel 3

Note D: Vesting Instrument(s): Document No. 1888806 as to Parcel 4

Note E: Special assessment letters, water bill and tax bill have NOT been ordered at this time. Please contact your title officer at least 15 days prior to your closing date if you wish them to be ordered at that time.

END OF NOTES

END OF SCHEDULE B, PART II

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COMMITMENT CONDITIONS

1. DEFINITIONS

a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.

b. "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.

c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.

d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.

e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.

f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.

g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.

h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.

i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.

j. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.

2. If all of the Schedule B, Part I-Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

a. the Notice;

b. the Commitment to Issue Policy;

c. the Commitment Conditions;

d. Schedule A;

e. Schedule B, Part I-Requirements;

f. Schedule B, Part II-Exceptions; and

g. a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:

i. comply with the Schedule B, Part I-Requirements;

ii. eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or

iii. acquire the Title or create the Mortgage covered by this Commitment.

b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.

c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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AMERICAN LAND TITLE ASSOCIATION

(continued)

d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.

e. The Company is not liable for the content of the Transaction Identification Data, if any.

f. The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I-Requirements have been met to the satisfaction of the Company.

g. The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM

a. Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.

b. Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.

c. This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.

d. The deletion or modification of any Schedule B, Part II-Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.

e. Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.

f. When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. CLAIMS PROCEDURES

This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.

10. CLASS ACTION

ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.

11. ARBITRATION – INTENTIONALLY DELETED

END OF CONDITIONS

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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AMERICAN LAND TITLE ASSOCIATION

Title Document
2595535

THIS INDENTURE, Made this 16th day of November, A. D., 1945, between Louis W. Sanders and Ottilia Sanders, his wife, parties of the first part, and Edward E. Hess, party of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, to them in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, have given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents do give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, his heirs and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

L1

That part of the North East 1/4 of Section 9, Town 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:

Commencing at a point in the North line of said 1/4 Section, one thousand eight hundred thirty-two and ninety-four one-hundredths (1832.94) feet, South 89° 12' West of the North East corner of said 1/4 Section; thence South 0° 48' East, one hundred forty-six and no one-hundredths (146.00) feet to the place of commencement of the land about to be described; thence South 0° 48' East, seventy-one and no one-hundredths (71.00) feet to a point; thence South 89° 12' West and parallel to the North line of said 1/4 Section, sixty-three and eight one-hundredths (63.08) feet to the Easterly line of the old Lake Shore Division of the Chicago and Northwestern Railway Co. Right-of-way; thence North 19° 07' West and along said East line of said Right-of-way, seventy-four and eighty-one-hundredths (74.80) feet to a point which is one hundred forty-six and no one-hundredths (146.00) feet south of the North line of said 1/4 Section; thence North 89° 12' East and parallel to said North line, eighty-six and forty-eight one-hundredths (86.48) feet to the place of commencement.

Also that part of the North East 1/4 of Section 9, Township 7 North, Range 22 East, in the County of Milwaukee, State of Wisconsin, bounded and described as follows:

Commencing at a point which is 1801.14 feet South 89° 12' West of and 242.56 feet South 27° 20' 38" East of the North East Corner of said North East 1/4 Section; thence South 27° 20' 38" East 384.82 feet; thence South 62° 39' 22" West 40 feet; thence South 27° 20' 38" East 222.80 feet; thence South 62° 39' 22" West 144.35 feet to a point in the Easterly right of way line of the Chicago & Northwestern Railway Co.; thence North Westerly along

said Easterly right of way line to a point which is 217.0 feet South of the North line of said North East 1/4 Section; thence North 89° 12' East 63.08 feet; thence South 0° 48' 00" East 145.0 feet; thence North 89° 12' East 75.0 feet; thence North 0° 48' 00" West 145 feet; thence North 89° 12' East 64.93 feet to the place of beginning.

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said parties of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to his heirs and assigns FOREVER.

And the parties of the first part, Louis W. Sanders and Ottilia Sanders, his wife, for themselves, their heirs, executors, administrators and assigns, have given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents do give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, his heirs and assigns forever, a perpetual easement over, along and upon the west Fourteen and one-half (14½) feet of that certain parcel of real estate situated in the County of Milwaukee, State of Wisconsin, described as follows, to-wit:

That part of the North East 1/4 of Section 9, Town 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:

Commencing at a point in the North line of said 1/4 Section, one thousand eight hundred thirty-two and ninety-four one hundredths (1832.94) feet, South 89° 12' West of the North East corner of said 1/4 Section; thence south 0° 48' East, eighty-seven and no one-hundredths (87.0) feet to the place of commencement of the land about to be described; thence South 0° 48' East, fifty-nine and no one-hundredths (59.00) feet to a point; thence South 89° 12' West, and parallel to the North line of said 1/4 Section, eighty-six and forty-eight one-hundredths (86.48) feet to the East line of the right-of-way of the Old Lake Shore Division of the Chicago and Northwestern Railway Co.; thence North 19°

07' West and along said East line of said Right-of-way, sixty-two and twenty one-hundredths (62.20) feet to a point which is eighty-seven and no one-hundredths (87.00) feet South of the North line of said 1/4 Section; thence North 89° 12' East and parallel to said North line one hundred six and one one-hundredths (106.01) feet to the place of commencement,

which parcel of real estate is contiguous to and adjoins the lands, title to which is hereby conveyed, for vehicular driveway purposes so that the party of the second part, his heirs and assigns, shall forever have free access to the lands, title to which is hereby conveyed, from Capitol Drive and along and upon the west Fourteen and one-half feet of said parcel of real estate, hereinabove specifically described, which is contiguous to and adjoins the lands, title to which is hereby conveyed, by vehicle and by foot, the said parties of the first part, for themselves, their heirs, executors, administrators and assigns hereby specifically granting to the party of the second part, his heirs, executors, administrators and assigns, forever, the further right to keep, maintain, repair and improve a driveway on and along the west side of said parcel of real estate, Fourteen and one-half (14½) feet, in width, the said parties of the first part, however, reserving unto themselves, their heirs, executors, administrators and assigns, the perpetual right to use said fourteen and one-half (14½) feet of said parcel of real estate as a vehicular driveway and for travel by foot.

TO HAVE AND TO HOLD the easement above described unto the said party of the second part and to his heirs and assigns forever.

And the parties of the first part do hereby further covenant and agree that the party of the second part, his heirs and assigns shall also have free access by foot, from Capitol Drive to the lands, title to which is conveyed by this deed, over, along and upon the east one-half (1/2) of the parcel of real estate, described as follows, to-wit:

That part of the North East 1/4 of Section 9, Town 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:

Commencing at a point in the North line of said 1/4 Section, one thousand eight hundred thirty-two and ninety-four one hundredths (1832.94) feet, South 89° 12' West of the North East corner of said 1/4 section; thence south 0° 48' East, eighty-seven and no one-hundredths (87.0) feet to the place of commencement of the land about to be described; thence South 0° 48' East, fifty-nine and no one-hundredths (59.00) feet to a point; thence South 89° 12' West, and parallel to the North line of said 1/4 Section, eighty-six and forty-eight one-hundredths (86.48) feet to the East line of the right-of-way of the Old Lake Shore Division of the Chicago and Northwestern Railway Co.; thence North 19° 07' West and along said East line of said Right-of-way, sixty-two and twenty one-hundredths (62.20) feet to a point which is eighty-seven and no one-hundredths (87.00) feet South of the North line of said 1/4 Section; thence North 89° 12' East and parallel to said North line one hundred six and one one-hundredths (106.01) feet to the place of commencement,

which parcel of real estate is contiguous to and adjoins the parcels of land, title to which is conveyed by this deed, so long as no building or buildings may be erected on the east one-half (1/2) of said parcel of real estate, hereinabove particularly described, by the parties of the first part, their heirs, executors, administrators or assigns, in which event the right of access by foot, hereby granted, shall cease and terminate.

And the said Edward E. Hess, the party of the second part, for himself, his heirs, executors, administrators and assigns, does hereby covenant and agree with the parties of the first part that John P. Druecker, who is the owner of a certain parcel of real estate adjoining and contiguous on the southeast to the parcels of land, title to which is hereby conveyed, his heirs, assigns and invitees, shall forever have the right to cross over and upon the parcels of land, title to which is hereby conveyed, by vehicle and by foot, for the sole purpose of gaining access to and egress from the parcel of land now owned by the said John P. Druecker, which adjoins and is contiguous to the parcel of real estate, title to which is hereby conveyed, on the southeast, provided however, that the party of the second part, his heirs and assigns, shall designate the portion of

the lands over which the said John P. Druecker, his heirs, assigns and invitees may travel. Said right shall cease and terminate when and if the said John P. Druecker, his heirs and assigns, shall acquire access to the parcel of real estate now owned by the said John F. Druecker from any public highway.

And whereas, the portion of the building which is located on the lands, title to which is hereby conveyed, is attached to a building commonly known and described as a service station, situated and located on the parcel of real estate described as follows, to-wit:

> That part of the North East 1/4 of Section 9, Town 7 North, Range 22 East, in the Village of Shorewood, Milwaukee County, Wisconsin, bounded and described as follows, to-wit:
>
> Commencing at a point in the North line of said 1/4 Section, one thousand eight hundred thirty-two and ninety-four one-hundredths (1832.94) feet, South 89° 12' West of the North East corner of said 1/4 Section; thence south 0° 48' East, eighty-seven and no one-hundredths (87.0) feet to the place of commencement of the land about to be described; thence South 0° 48' East, fifty-nine and no one-hundredths (59.00) feet to a point; thence South 89° 12' West, and parallel to the North line of said 1/4 Section, eighty-six and forty-eight one-hundredths (86.48) feet to the East line of the right-of-way of the Old Lake Shore Division of the Chicago and Northwestern Railway Co.; thence North 19° 07' West and along said East line of said Right-of-way, sixty-two and twenty one-hundredths (62.20) feet to a point which is eighty-seven and no one-hundredths (87.00) feet South of the North line of said 1/4 Section; thence North 89° 12' East and parallel to said North line one hundred six and one one-hundredths (106.01) feet to the place of commencement,

and is separated from said building commonly known and described as a service station, as aforesaid, by a common wall comprising the south wall of said building, commonly known as a service station, and the north wall of the building on the lands, title to which is hereby conveyed,

Now, Therefore, the parties of the first part and the party of the second part do mutually agree that the common wall now dividing said building, commonly known as a service station, and the building attached thereto, located on the lands, title to which is hereby conveyed, shall become and remain a party wall and the common property of the parties of the first part and the party of

the second part, their respective heirs and assigns, so that either of them shall be at liberty to use said wall as a party wall, and to carry up the buildings on their respective sides of said wall to any height permitted by law, and for that purpose they may extend the height of said wall, add to said wall in height, depth or thickness, and in case of damage may repair the same, or in case of destruction may rebuild said wall.

This deed is given pursuant to, in compliance with and in performance of a land contract between the grantors and the grantee, dated and acknowledged on September 10th, 1941, received for recording in the office of the Register of Deeds in and for Milwaukee County, State of Wisconsin, on September 10, 1941, and recorded as Document No. 2333849.

AND THE SAID Louis W. Sandersand Ottilia Sanders, his wife, for themselves, their heirs, executors and administrators, do covenant, grant, bargain and agree to and with the said party of the second part, his heirs and assigns, that at the time of the ensealing and delivery of these presents they are well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever, except laws, zoning and other ordinances, recorded and unrecorded, regulating and restricting the use of said premises, and except any liens of incumbrances created by the act or default of the party of the second part, his heirs, legal representatives or assigns, and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, his heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, they will forever WARRANT AND DEFEND.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals this 16th day of November, A. D., 1945.

Louis W. Sanders (SEAL)
Louis W. Sanders

Ottilia Sanders (SEAL)
Ottilia Sanders

Signed and sealed in presence of

Robert P. Crowley
Robert P. Crowley

Frances E. Felten
Frances E. Felten

STATE OF WISCONSIN)
) ss.
MILWAUKEE COUNTY)

Personally came before me this 16 day of November, A. D., 1945, the above named Louis W. Sanders and Ottilia Sanders, his wife, to me known to be the persons who executed the foregoing instrument and acknowledged the same.

Robert P. Crowley
Notary Public, Milwaukee County, Wis.
My commission expires: Feb 24, 1946
Robert P. Crowley

NOV-19-45 2.9 A RE DE

25955535

LOUIS W. SANDERS and
OTTILIA SANDERS, his wife,

To

EDWARD E. HESS

WARRANTY DEED

REGISTER'S OFFICE } SS.
Milwaukee County, Wis.
RECEIVED
for record NOV 19 1945 at 8:30
A. M. and recorded in vol. 2174 Deeds
Page 13 & 19 and
Register's Fee $1.10
REGISTER OF DEEDS

ELMER W. ROLLER
ATTORNEY AT LAW
TELEPHONE MARQUETTE 5171
212 WEST WISCONSIN AVENUE
MILWAUKEE 3, WISCONSIN

Return to

Title Document
2664601

THIS INDENTURE, Made this 31st day of August, A.D., 1946, between Edward E. Hess and Hilda Hess, his wife, parties of the first part, and the Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation, party of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Four Thousand Nine Hundred Seventy-five Dollars ($4,975.00) to them in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its heirs and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

That part of the N.E.¼ of Section 9, T. 7, N., R. 22 E. in the Village of Shorewood, commencing at the northeast corner of said Section 9, thence south 89° 12' 00" west along the north line of Section 9, 1801.14 feet; thence south 27° 20' 38" east along the westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the northwest corner of Lot 6 Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described: Thence south 62° 39' 22" west (at right angles to westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the easterly line of the Chicago Northwestern Railway right-of-way; thence south 34° 50' east along the easterly right-of-way line of said railway; 252.11 feet to the north line of the present village property; thence north 62° 39' 22" east along the north line of village property 143.58 feet to a point; thence north 27° 20' 38" west along a line which is 40 feet westerly of and parallel to the westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point; thence north 62° 39' 22" east 40 feet to the westerly line of Harder Hughes Subdivision of High School Terrace; thence north 27° 20' 38" west along the westerly line of Harder Hughes Subdivision of High School Terrace 27.16 feet to the place of beginning; containing 0.943 acre.

Subject to the following easements, to-wit:

(a) A 15 foot easement, in favor of John P. Druecker, his heirs and assigns for the purpose of gaining access to an egress from, by vehicle and by foot, to the parcel of land owned by John P. Druecker his heirs, assigns, and invitees, which adjoins and is contiguous to the parcel of land herein conveyed and which easement is described as follows:

> Commencing at a point 40 feet S. 62° 39' 22" W. of the northwest corner of lot 6 block 3 Harder Hughes Subdivision of High School Terrace thence S. 27° 20' 38" E. along the westerly line and westerly line extended of John P. Druecker property to a point 15 feet more or less south of the southerly end of garage and dwelling on the northerly end of the Druecker property, thence S. 62° 39' 22" w 15 feet, thence N. 27° 20' 38" W. 104.16 feet, thence N. 62° 39' 22" E. 15 feet to the place of beginning.

(b) Easement in favor of Chicago and Northwestern Railway Company to a triangular parcel of land for the right to construct, maintain and operate thereon a railroad track which easement is described as follows:

> Commencing at a point 204.01 feet S. 62° 39' 22" W. of the northwest corner of lot 6 block 3 Harder Hughes Subdivision of High School Terrace Subdivision thence S. 24° 55' 47" E. 71.56 feet to the easterly right of way line of the Chicago and Northwestern Railway, thence N. 34° 50' W. along the easterly line of said right of way 72.11 feet, thence N. 62° 39' 22" E. 12.41 feet to the place of beginning.

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said parties of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to its heirs and assigns FOREVER.

AND THE SAID Edward E. Hess and Hilda Hess, his wife, for their heirs, executors and administrators, do covenant, grant, bargain and agree to and with the said party of the second part, its heirs and assigns, that at the time of the ensealing and delivery of these presents they were well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever, and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, its heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, they will forever WARRANT AND DEFEND.

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals this 31st day of ~~September~~ August, A.D., 1946.

Signed and Sealed in Presence Of

Elmer W. Roller

Edgar H. Wagner

Edward E. Hess (SEAL)
Edward E. Hess

Hilda Hess (SEAL)
Hilda Hess

(SEAL)

STATE OF WISCONSIN)
) ss.
MILWAUKEE COUNTY)

Personally came before me, this 31st day of August A.D., 1946, the above named Edward E. Hess and Hilda Hess, his wife, to me known to be the persons who executed the foregoing instrument and acknowledged the same.

Elmer W. Roller
Notary Public, Milwaukee County, Wisconsin.

My Commission expires Nov. 24th A.D., 1946

2664601

REGISTER'S OFFICE } SS.
Milwaukee County, Wis. }
RECEIVED
for record SEP 18 1946 at 3:10 P.M., and recorded in vol. 2287 Deeds Page 239
REGISTER OF DEEDS

SEP-18-46 279149 • 2664601 B RE DE

John L. Grieve
Grieve, Clark & Grieve
3430 N. Milwaukee Ave.
Milwaukee 11, Wis.
150.

Title Document
3030416

WHEREAS, Querin F. Wilda and Rose Wilda, his wife, hereinafter referred to as parties of the first part, are the purchasers of and are now the owners of the following described premises, to-wit:

That part of the North East One-quarter (1/4) of Section numbered Nine (9), in Township numbered Seven (7) North, Range numbered Twenty-two (22) East, in the Village of Shorewood, bounded and described as follows, to-wit: Commencing at a point on the North line which is 1801.14 feet West of the North East corner of said North East 1/4; thence South 27° 20' 38" East 627.38 feet to the point of beginning; thence, South 62° 39' 22" West 40 feet; thence South 27° 20' 38" East 222.80 feet; thence North 62° 39' 22" East 40 feet; thence North 27° 20' 38" West 222.80 feet to the place of beginning,

and,

The Village of Shorewood, a municipal corporation, hereinafter referred to as party of the second part, is the owner of property immediately contiguous to the foregoing described property of the parties of the first part and which is subject to the following easement, to-wit:

A Fifteen (15) foot easement in favor of John P. Druecker, his heirs and assigns, for the purpose of gaining access to and egress from, by vehicle and by foot to the foregoing described parcel of land owned by John P. Druecker, his heirs, assigns and invitees and which easement is described as follows:

Commencing at a point 40 feet S. 62° 39' 22" W. of the northwest corner of lot 6 block 3 Harder Hughes Subdivision of High School Terrace thence S. 27° 20' 38" E. 104.16 feet along the westerly line and westerly line extended of John P. Druecker property to a point 15 feet more or less south of the southerly end of garage and dwelling on the northerly end of the Druecker property, thence S. 62° 39' 22" W. 15 feet, thence N. 27° 20' 38" W. 104.16 feet, thence N. 62° 39' 22" E. 15 feet to the place of beginning.

And which rights of ingress and egress are further provided for in a Warranty Deed executed by Louis W. Sanders and Ottilia Sanders, his wife, to Edward E. Hess, dated November 16, 1945, and recorded in the Register of Deeds Office of Milwaukee County on November 19, 1945, in Volume 2174 of Deeds, Pages 13 to 19,

D783-4

NELY 15' & NLY 104.16' of D786-A

inclusive, as Document No. 2595535, and which provides that said rights of ingress and egress shall cease and terminate when and if the said John P. Druecker, his heirs and assigns, shall acquire access to the parcel of real estate now owned by the said John P. Druecker from any public highway, and

WHEREAS, the party of the second part is ready, willing and able to give to the parties of the first part ingress and egress to their said property by providing access thereto to East Pinedale Court, a public street and highway, on condition that said parties of the first part abandon and quit claim all their rights in and to the existing easement as hereinbefore described.

NOW, THEN, for and in consideration of these presents, and other good and valuable consideration, each to the other in hand paid, the party of the second part does hereby grant and convey in favor of the parties of the first part, their heirs and assigns, easement rights for the purpose of gaining access to and ingress from, by vehicle and by foot, to the premises by them owned as hereinbefore described, but with usage rights in common with the party of the second part which shall be under no duty to maintain the same, and which easement is described as follows, to-wit:

Commencing at a point on the westerly line of Harder-Hughes Subdivision of High School Terrace, 15' N. 27° 20' 38" W. of the intersection of the south line of E. Pinedale Court and the westerly line of Harder Hughes Subdivision; thence N. 27° 20' 38" W. along said subdivision line, 15'; thence southwesterly along a curved line (whose center is to the southeast and whose radius is 30 feet, the long chord of which curve is 40.34 feet, and bears S. 20° 24' 22" W.) 44.24 feet; thence S. 21° 50' 38" E. 72.36 feet; thence S. 11° 11' 22" E.. 65.43 feet; thence S. 27° 20' 38" E. 106.29 feet; thence N. 62° 39' 22" E. 15 feet; thence N. 27° 20' 38" W. 104.16 feet; thence N. 11° 11' 22" W. 64.70 feet; thence 21° 50' 38" W. 73.76 feet; thence northeasterly along a curved line (whose center is to the northeast and whose radius is 15' the long chord of which curve is 20.17 feet and bears N. 20° 24' 22" E.) 22.12 feet to the place of beginning.

The parties of the first part, themselves, their heirs and assigns, do hereby forever release and quit claim all easement rights by them possessed or owned or acquired by them as the purchasers and grantees of the aforesaid property of John P. Druecker or the John P. Druecker estate and which easement rights as hereby waived and abandoned are fully described and set forth in that certain Warranty Deed executed by Louis W. Sanders and Ottilia Sanders, his wife, to Edward E. Hess dated November 16, 1945, and recorded in the Office of the Register of Deeds in and for Milwaukee County, on November 19, 1945, in Volume 2174 of Deeds, Pages 13 to 19, inclusive, as Document No. 2595535.

IN WITNESS WHEREOF, the said parties of the first part and the party of the second part have hereunto set their hands and seals this 12th day of March, 1951.

In Presence of:

Mae A. Noll

Wilbert J. Reimer

Leone Noll

Francis G. Daley

Querin F. Wilda (SEAL)

Rose Wilda (SEAL)
Rose Wilda, his wife
Parties of the First Part.

VILLAGE OF SHOREWOOD

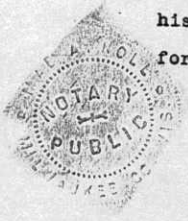
By John J. Cary
President
John J. Cary

Countersigned:

By John L. Jones
Clerk John L. Jones
Party of the Second Part.

STATE OF WISCONSIN :
SS
MILWAUKEE COUNTY :

Personally came before me this 12th day of March, 1951, the above named Querin F. Wilda and Rose Wilda, his wife, to me known to be the persons who executed the foregoing instrument and acknowledged the same.



Mae A. Noll
Mae A. Noll
Notary Public, Milwaukee County, Wis.
My Commission expires April 18, 1954

STATE OF WISCONSIN :
SS
MILWAUKEE COUNTY :

Personally came before me this 19th day of March, 1951, the above named John J. Cary and John L. Jones, respectively the President and Clerk of the Village of Shorewood, to me known to be such officers and acknowledged that they executed the foregoing instrument as such officers of said Village and by its authority.



Leone Noll
Leone Noll
Notary Public, Milwaukee County, Wis.
My Commission expires April 8, 1951

NE 9-3-22

3030416

RETURN TO
QUERIN F WILDA
507 N BERKELEY BLVD
MILWAUKEE WIS

W

JUN-7-51 317770 3030416 D Rec

REGISTER'S OFFICE } ss.
Milwaukee County, Wis.
RECEIVED
for record JUN - 7 1951 at 11 o'clock A.M., and recorded in vol. 2889 Deeds
Page 496
REGISTER OF DEEDS

120

D7B3-4-7-8 MB

Title Document
6775929 PROCEEDS
ASGN

ASSIGNMENT OF PECFA PROCEEDS

FOR VALUE RECEIVED, the undersigned Village of Shorewood, Wisconsin, a Municipal Corporation (the "Assignor"), for itself and its successors and assign, does hereby pledge and assign to First Wisconsin National Bank of Sheboygan ("Bank") and grant Bank a security interest and lien in and to all of Assignor's rights, title and interest to proceeds or other amounts due Assignor under Section 101.143 Wis. Stats., or other applicable statutes or regulations in connection with the real estate described below ("PECFA Proceeds"). Such PECFA Proceeds are due or will become due Assignor as a result of a remedial action related to contamination caused by petroleum products on the following described real estate:

(See attached Addendum for Legal Description)

This Assignment is made to induce Bank to make loans to Assignor to conduct the remedial activity described above and secures payment of all debts, obligations, and liabilities of Assignor to Bank arising under or pursuant to any indebtedness of Assignor to Bank, including without limitation, that Line of Credit Note and Revocable Line of Credit Letter Agreement dated September 8, 1992 for $1,000,000.00 (the "Obligations"); and the rights of the Bank to receive such PECFA Proceeds shall continue until the Obligations are discharged by actual payment thereof, and shall not be invalidated, impaired, or cease so long as the Obligations remain unpaid.

None of the following shall affect the liabilities of Assignor under this Assignment, or the rights of Bank with respect to the PECFA Proceeds: (a) Acceptance or retention by Bank of other property or interests as security for the Obligations, or for the liability of any person other than Assignor with respect to the Obligations; (b) the release of all or any other security for any of the Obligations; (c) any release, extension, renewal, modification or compromise or any of the Obligations or the liability of any obligor thereon; or (d) failure by Bank to resort to other security or any person liable for any Obligations before restoring to the PECFA Proceeds.

Assignor warrants that it is the owner of the real estate and improvements described above free and clear of all liens, encumbrances, or security interests other than (list all prior encumbrances; if none listed, then there are none).

NONE

Assignor further represents that it has not heretofore made any transfer or assignment of the PECFA Proceeds or of any right to interest therein and agrees that it will not in the future make any transfer or assignment thereof.

Assignor covenants and agrees that it will cause the remedial action giving rise to the PECFA Proceeds to be completed in accordance with applicable statutes and regulations and will promptly sign and file all reports and forms required under such statutes and regulations in order to cause the PECFA Proceeds to be paid. If Assignor does not promptly sign and file such reports or forms upon Bank's request, and in any event after a default under any of the Obligations, any officer of Bank is authorized and irrevocably appointed as Assignor's attorney in Assignor's name to produce, sign and file any such reports or forms, and to endorse the name of Assignor upon any instrument representing PECFA Proceeds. All such acts of such attorney are ratified and approved and she or he is not liable for any act or omission or for any error of judgment or mistake of fact or law. If the remedial action is not continued for a period of 15 consecutive days, and is not recommenced within five days after notice from Bank of such 15 days inactivity, then Bank may (but need not) cause the remedial action to be completed and any costs associated therewith (including Bank's attorney's fees) shall be

1400

part of the Obligations and bear interest at the highest post-default rate stated in any evidence of the Obligations. Bank shall not be liable for any damage or injury to property or persons if it causes such work to be performed and shall be deemed a joint venturer or partner of Assignor. Assignor will indemnify and hold Bank harmless from any liability, claim, cost, or obligation arising out of any work performed by Assignor or caused to be performed by Bank as above.

Assignor hereby irrevocably authorizes and directs that the PECFA Proceeds be paid directly to Bank, if allowed by law, and that all person may rely on this authority until Bank notifies such persons that it no longer claims an interest in the PECFA Proceeds. If such direct payment is not allowed by law, the Assignor agrees to remit such proceeds to Bank within five business days after Assignor's receipt of such amounts.

Assignor waives acceptance of this Assignment by Bank.

The validity, construction, and enforcement of this Assignment are governed by the laws of the State of Wisconsin. Invalidity of any provision of this Assignment shall be affect the validity of any other provision. This Assignment is not intended to and does not grant or create a lien or encumbrance on the real estate or improvements described herein. All remedies herein and in any other evidence of or security for Obligations are cumulative.

The Assignment assigns the PECFA Proceeds when and as such PECFA Proceeds arise. The rights granted hereunder may not be foreclosed under Wisconsin law.

Effective this 11th day of November, 1992.

Village of Shorewood, Wisconsin

By: Michael R Schulte
Michael R. Schulte,
Village President

By: Robert W Ries
Robert W. Ries, Village
Clerk/Treasurer

6775929
REGISTER'S OFFICE } SS
Milwaukee County, WI }
RECORDED AT 8:00 AM
JUN 10 1993
REEL 3052 IMAGE 97 to 95 incl.
REGISTER OF DEEDS

6775929
RECORD 14.00

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) SS.
COUNTY OF MILWAUKEE)

This instrument was acknowledged before me on November 11, 1992, by Michael R. Schulte and Robert W. Ries, as Village President and Village Clerk/Treasurer, respectively of the Village of Shorewood, Wisconsin.

NOTARY PUBLIC
THOMAS S. BAKALARSKI
STATE OF WISCONSIN

Thomas S Bakalarski
Notary Public, Milwaukee County, WI
My Commission: 8-5-93

This instrument was drafted by:
Michael Qualio
Return to:
Firstar Bank - Sheboygan
P.O. Box 328, Sheboygan, WI 53082

PARCEL I

Lot 21 in Block 3, Harder-Hughes Subdivision of High School Terrace, being a subdivision in the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, in the Village of Shorewood.

Tax Key No. 275-1116-116

PARCEL II

That part of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, in the Village of Shorewood, commencing at the Northeast corner of said Section 9, thence South 89° 12' 00" West along the North line of Section 9, 1801.14 feet; thence South 27° 20' 38" East along the Westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the Northwest corner of Lot 6, Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described; thence South 62° 39' 22" West (at right angles to Westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the Easterly line of the Chicago Northwestern Railway right-of-way; thence South 34° 50' East along the Easterly right-of-way line of said railway; 252.11 feet to the North line of the present village property; thence North 62° 39' 22" East along the North line of village property 143.58 feet to a point; thence North 27° 20' 38" West along a line which is 40 feet Westerly of and parallel to the Westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point; thence North 62° 39' 22" East 40 feet to the Westerly line of Harder Hughes Subdivision of High School Terrace; thence North 27° 20' 38" West along the Westerly line of Harder Hughes Subdivision of High School Terrace 27.16 feet to the place of beginning; except that part conveyed in Warranty Deed executed by and between Arthur E. Koski and Sue R. Koski, his wife, and John Schaber and Rose H. Schaber, his wife, dated August 14, 1967, and recorded in the Register of Deeds office for Milwaukee County, on August 18, 1967, on Reel 375, Image 1022, as Document No. 4338248.

Tax Key No. 275-8995-995

PARCEL III

Parts of Lot 1 in the North 1/2 of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, bounded and described as follows: Commencing at the Northeast corner of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, thence South 89° 12' 00" West 1801.14 feet; thence South 27° 20' 38" East 1110.54 feet to the place of beginning of the land to be described; thence South 62° 30' 22" West 150.27 feet to the East line of Right-of-way of the Chicago and Northwestern Railway; thence South 34° 48' 09" East along the East line of said Right-of-way 315.20 feet; thence North 89° 11' 55" East 122.25 feet; thence North 27° 20' 38" West 367.16 feet to the place of beginning, containing one acre, in the Village of Shorwood.

ALSO

That part of Lot 1 in the North 1/2 of the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, bounded and described as follows: Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 14/ Section; thence South 27° 20' 38" East 850.18 feet to the place of beginning of the land to be described; thence South 27° 20' 38" East 260.36 feet; thence South 62° 39' 22" West 150.27 feet to a point in the East Right-of-way line of the Chicago and Northwestern Railway Company; thence North 34° 48' 05" West along said Right-of-way 262.59 feet; thence North 62° 39' 22" East 184.35 feet to the place of beginning.

Tax Key No. 275-8984-984

PARCEL IV

Parcel C of Certified Survey Map No. 3012 being a Subdivision of Parcels A, B, and C of Certified Survey Map No. 2314, being a part of Government Lot 2 in the Northeast 1/4 of Section 9, in Township 7 North, Range 22 East, in the Village of Shorewood, recorded in the Register of Deeds office for Milwaukee County, on February 22, 1977, on Reel 994, Images 1253 to 1256 inclusive, as Document No. 5077723.

Tax Key No. 275-8987-003

Title Document
9581345

10

09581345

DOC.# 09581345

REGISTER'S OFFICE | SS
Milwaukee County, WI

RECORDED 04/04/2008 08:52AM

JOHN LA FAVE
REGISTER OF DEEDS
AMOUNT: 29.00

EASEMENT ASSIGNMENT

Document Number | Document Title

Recording Area

Name and Return Address
American Transmission Company
Attn Real Estate Department
PO Box 47
Waukesha, WI 53187-0047

PIN

This Easement Assignment ("Assignment") is made by and between Wisconsin Electric Power Company, a Wisconsin corporation, doing business as We Energies ("Assignor"), whose address is 231 West Michigan Street, Milwaukee, Wisconsin 53203, and American Transmission Company LLC, a Wisconsin limited liability company ("Assignee"), whose address is N19 W23993 Ridgeview Parkway West, Waukesha, Wisconsin 53188

Assignor hereby assigns to Assignee all of Assignor's right, title and interest in and to the easement attached as Exhibit C ("Easement") Also included are Assignor's appurtenant rights, privileges and easements thereunto belonging, if any, in and to streets, roads, avenues, highways and lake and river bottoms adjoining the real property described in such Easement to the extent that any of the foregoing constitute real property of Assignor under applicable federal, state or local law, rule, regulation or governmental requirement of any kind to the extent appurtenant to such Easement This Assignment is made subject to Section 196 485(5)(c)1 of the Wisconsin Statutes as created by 1999 Wis Act 9 (as may be amended from time to time, and successor and replacement statutes thereto)

This Assignment, and the rights, obligations and interests assigned hereby shall be perpetual and shall run with the lands described within the Easement identified on Exhibit C, and shall be binding upon and inure to the benefit of Assignor and Assignee and each and all of their respective successors and assigns This Assignment shall be construed in accordance with the laws of the State of Wisconsin

This Assignment may be executed in one or more counterparts, all of which when taken together, shall constitute one and the same instrument

This Assignment is made as of the 1st day of January, 2001

[SIGNATURES AND ACKNOWLEDGMENTS ON FOLLOWING PAGES]

ASSIGNOR:
WISCONSIN ELECTRIC POWER COMPANY,
a Wisconsin corporation, doing business as We Energies

By _____
Name James T Raabe
Title Manager of Property Management

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) SS
COUNTY OF MILWAUKEE)

Personally came before me this 25TH day of March, 2008, the above-named James T Raabe, as Manager of Property Management of Wisconsin Electric Power Company, a Wisconsin corporation, doing business as We Energies, to me known to be the person who executed the foregoing instrument in such capacity and acknowledged the same

_____
Name DOUGLAS J. FABIO
Notary Public, Wisconsin
My Commission expires on FEBRUARY 1, 2009

[ADDITIONAL SIGNATURE AND ACKNOWLEDGMENT ON FOLLOWING PAGE]

ASSIGNEE:
AMERICAN TRANSMISSION COMPANY, LLC,
a Wisconsin limited liability company

By: ATC Management Inc., its Manager

By: Teresa M. Kochaver
Name Teresa M Kochaver
Title Manager, Real Estate

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) SS
COUNTY OF BROWN)

Personally came before me this 24th day of March, 2008, the above-named Teresa M Kochaver, as the Manager, Real Estate of ATC Management Inc, Manager of American Transmission Company LLC, a Wisconsin limited liability company, to me known to be the person who executed the foregoing instrument in such capacity and acknowledged the same

Patricia R Sherman
Patricia R. Sherman
Notary Public, Wisconsin
My Commission expires January 16, 2011

PATRICIA R. SHERMAN NOTARY PUBLIC STATE OF WISCONSIN

This instrument was drafted by Kim Stratton on behalf of American Transmission Company, PO Box 47, Waukesha, Wisconsin 53187-0047

#89649

REC. 9137 1149

F ✓

FOR AND IN CONSIDERATION of the sum of One Dollar ($1.00) and other good and valuable consideration to it paid, the receipt whereof is hereby acknowledged, MILWAUKEE COUNTY, a municipal corporation, party of the first part, does hereby give and grant to

WISCONSIN ELECTRIC POWER COMPANY

a Wisconsin corporation, party of the second part, its successors and assigns, the right, permission and authority to construct, install, operate, maintain and replace conduit and cables underground, together with manholes and other appurtenant equipment, all for the purpose of transmitting electric energy upon, in and under two (2) strips of land ten (10) feet in width, being a part of the premises of grantor in the Northeast one-quarter (NE 1/4) of Section Nine (9), Township Seven (7) North, Range Twenty-two (22) East, Village of Shorewood, Milwaukee County, Wisconsin, the center line of said strips of land being described on the Exhibit "A" and shown on the Exhibit "B" attached hereto and made a part hereof.

The right, permission and authority is also granted by the party of the first part for said party of the second part to enter upon said strips of land for the purpose of exercising the rights herein acquired, and the right, permission and authority to enter in a reasonable manner upon the property of the party of the first part outside of said strips of land for construction and maintenance purposes and for access to said strips of land, but said party of the second part agrees to restore the premises of the party of the first part, including said strips of land, as nearly as is reasonably possible, to the condition existing prior to such entry, or arrange for such restoration at party of the second parts expense.

The party of the first part covenants and agrees that no structures will be erected on said strips of land, and the party of the first part further covenants and agrees that the elevation of the existing ground surface within said strips of land will not be altered so as to interfere with or endanger the facilities of the party of the second part, nor cause said facilities to be in violation of any applicable laws and governmental regulations.

4985377

AT 11:02 AM

on 913 in 1149 to

EXHIBIT C PAGE 1 OF 7

It is understood that during the time said transmission line facilities are located on the premises of the party of the first part pursuant to this grant, Wisconsin Electric Power Company, its successors and assigns, will indemnify, save harmless and defend the party of the first part, its successors and assigns, from and against any and all claims, liabilities, losses, costs, damages or expenses (including reasonable attorney's fees) for injury or death to any person by whomsoever sustained and/or for damage to any property by whomsoever owned, caused by, arising out of, incidental to, or in any manner connected with the installation, operation and maintenance of the aforesaid transmission line facilities; excepting, however, any claims or actions arising out of the negligence or willful acts on the part of the party of the first part, its successors or assigns, employees and agents.

The party of the second part covenants and agrees that upon abandonment by the party of the second part, its successors or assigns, of the aforesaid easement, over and across the above described premises of the party of the first part, for the use and purposes heretofore set forth, the rights acquired by the party of the second part hereunder shall cease and be terminated and shall revert to and be revested in the party of the first part, its successors and assigns, and the party of the second part shall, without cost to the party of the first part, remove and/or abandon at its sole discretion the aforesaid conduit, cables, manholes and other appurtenant equipment, and the party of the second part shall repair any damage caused by such removal and/or abandonment and restore the premises, as nearly as possible, to the condition existing prior to the grant of this easement.

This grant of easement shall be binding upon or inure to the benefit of the successors and assigns of all parties hereto.

IN WITNESS WHEREOF the said MILWAUKEE COUNTY, by appropriate action of its Board of Supervisors, has caused these presents to be signed by its _____Chairman and attested to by its _____County Clerk, and its corporate seal to be hereunto affixed this 8TH day of OCTOBER, 1975.

HLG .913MAC1155

In Presence of:

MILWAUKEE COUNTY

Marie H. Sontag

APPROVED FOR DESCRIPTION
ENGINEERING DIV.
COUNTY D. P. W.

William F. O'Donnell, Chairman, County Board of Supervisors

ATTEST:

Shirley A. Trawicki

By Thomas E. Zablocki

Shirley A. Trawicki

Thomas E. Zablocki, County Clerk

STATE OF WISCONSIN)
: SS
MILWAUKEE COUNTY)

Personally came before me this 8TH day of OCTOBER, 1975, WILLIAM F. O'DONNELL, Chairman, County Board of Supervisors, and THOMAS E. ZABLOCKI, County Clerk, of the above named municipal body corporate, MILWAUKEE COUNTY, known to me to be the persons who executed the foregoing instrument and to me known to be such Chairman and County Clerk of said municipal body corporate and acknowledged that they executed the foregoing instrument as such officers, as the deed of said corporate body by its authority and pursuant to Resolution No. 75-624 adopted by its Board of Supervisors on July 15, 1975.

Arnold A. Ode

Notary Public, MILWAUKEE County, Wis.

My commission expires 2-26-78

APPROVED
INITIALS DATE
12/2/75

PARCEL 1

Commencing at the Northeast corner of the Northeast one-quarter (NE 1/4) of Section Nine (9), Township Seven (7) North, Range Twenty-two (22) East, Village of Shorewood, Milwaukee County, Wisconsin; running thence South eighty-eight degrees fifty-one minutes eighteen seconds West (S.88°51'18"W.) along the north line of said Section Nine (9) a distance of one thousand eight hundred thirty-two and sixty-four hundredths (1832.64) feet to a point; running thence South one degree eight minutes forty-two seconds East (S.1°08'42"E.) a distance of three hundred sixty-two and no one-hundredths (362.00) feet to a point; running thence South eighty-eight degrees fifty-one minutes eighteen seconds West (S.88°51'18"W.) a distance of fifteen and sixteen hundredths (15.16) feet to a point; running thence South fifty-four degrees forty-nine minutes eighteen seconds West (S.54°49'18"W.) a distance of fifty-one and eighty-four hundredths (51.84) feet to a point in the northeasterly line of the former Chicago and North Western Transportation Company right of way; running thence South thirty-five degrees ten minutes forty-two seconds East (S.35°10'42"E.) along the northeasterly line of the former Chicago and North Western Transportation Company right of way a distance of seventeen and ninety-three hundredths (17.93) feet to the point of beginning of the center line of a ten (10) foot easement strip; running thence North sixty-six degrees thirty minutes forty-two seconds West (N.66°30'42"W.) a distance of forty-one and seventy-four hundredths (41.74) feet; running thence Northwesterly a distance of twenty-seven and thirty-four hundredths (27.34) feet along the arc of a curve whose center lies to the east, whose radius is fifty and no one-hundredths (50.00) feet and whose chord bears North forty-five degrees fifty minutes forty-two seconds West (N.45°50'42"W.) a distance of twenty-seven and no one-hundredths (27.00) feet to a point; running thence North thirty-five degrees ten minutes forty-two seconds West (N.35°10'42"W.) parallel with and twenty-nine (29) feet southwesterly of, measured at right angles to, the northeasterly line of the former Chicago and North Western Transportation Company right of way a distance of two hundred forty-two and ninety hundredths (242.90) feet to a point; running thence Northwesterly a distance of twenty-nine and forty-five hundredths (29.45) feet along the arc of a curve whose center lies to the east, whose radius is

EXHIBIT "A"

fifty and no one-hundredths (50.00) feet and whose chord bears North eighteen degrees eighteen minutes seventeen seconds West (N.18°18'17"W.) a distance of twenty-nine and two one-hundredths (29 02) feet to a point, running thence North one degree twenty-five minutes fifty-two seconds West (N.1°25'52"W.) a distance of seventy-three and thirty-eight hundredths (73.38) feet to the point of termination of said center line in the south line of East Capitol Drive, said point being four and sixty-one hundredths (4.61) feet westerly from the easterly line of the former Chicago and North Western Transportation Company right of way, measured along the south line of East Capitol Drive.

PARCEL 2

Commencing at the Northeast corner of the Northeast one-quarter (NE 1/4) of Section Nine (9), Township Seven (7) North, Range Twenty-two (22) East, Village of Shorewood, Milwaukee County, Wisconsin; running thence South eighty-eight degrees fifty-one minutes eighteen seconds West (S.88°51'18"W.) along the north line of said Northeast one-quarter (NE 1/4) of Section Nine (9) a distance of one thousand eight hundred thirty-two and sixty-four hundredths (1832.64) feet to a point; running thence South one degree eight minutes forty-two seconds East (S.01°08'42"E.) a distance of three hundred sixty-two and no one-hundredths (362.00) feet to a point; running thence South eighty-eight degrees fifty-one minutes eighteen seconds West (S.88°51'18"W.) a distance of fifteen and sixteen hundredths (15.16) feet to a point; running thence South fifty-four degrees forty-nine minutes eighteen seconds West (S 54°49'18"W.) a distance of fifty-one and eighty-four hundredths (51.84) feet to a point in the northeasterly line of the former Chicago and North Western Transportation Company right of way; running thence South thirty-five degrees ten minutes forty-two seconds East (S.35°10'42"E.) along the northeasterly line of the former Chicago and North Western Transportation Company right of way a distance of eighty-eight and fifty-nine hundredths (88.59) feet to the point of beginning of the center line of a ten (10) foot easement strip, running thence North fifty-nine degrees fifty-two minutes twenty-five seconds West (N.59°52'25"W.) a distance of one hundred seventy-six and sixty-one hundredths (176.61) feet to a point, running thence Northwesterly a distance of forty-three and ten hundredths (43.10) feet along the arc of a curve whose center

lies to the east, whose radius is one hundred and no one-hundredths (100.00) feet, and whose chord bears North forty-seven degrees thirty-one minutes thirty-four seconds West (N.47°31'34"W.) a distance of forty-two and seventy-seven hundredths (42.77) feet to a point, running thence North thirty-five degrees ten minutes forty-two seconds West (N.35°10'42"W.) parallel with and seventeen and seven one-hundredths (17 07) feet northeasterly of, measured at right angles to, the southwesterly line of the former Chicago and North Western Transportation Company right of way a distance of forty-five and fifty-eight hundredths (45.58) feet to a point; running thence Northwesterly a distance of thirteen and forty-seven hundredths (13.47) feet along the arc of a curve whose center lies to the west, whose radius is one hundred and no one-hundredths (100.00) feet, and whose chord bears North thirty-nine degrees two minutes twelve seconds West (N.39°02'12"W.) a distance of thirteen and forty-six hundredths (13 46) feet to a point; running thence North forty-two degrees fifty-three minutes forty-one seconds West (N.42°53'41"W.) a distance of one hundred fifteen and thirty-eight hundredths (115.38) feet to the point of termination of said center line in the southwesterly line of the former Chicago and North Western Transportation Company.

913 1153

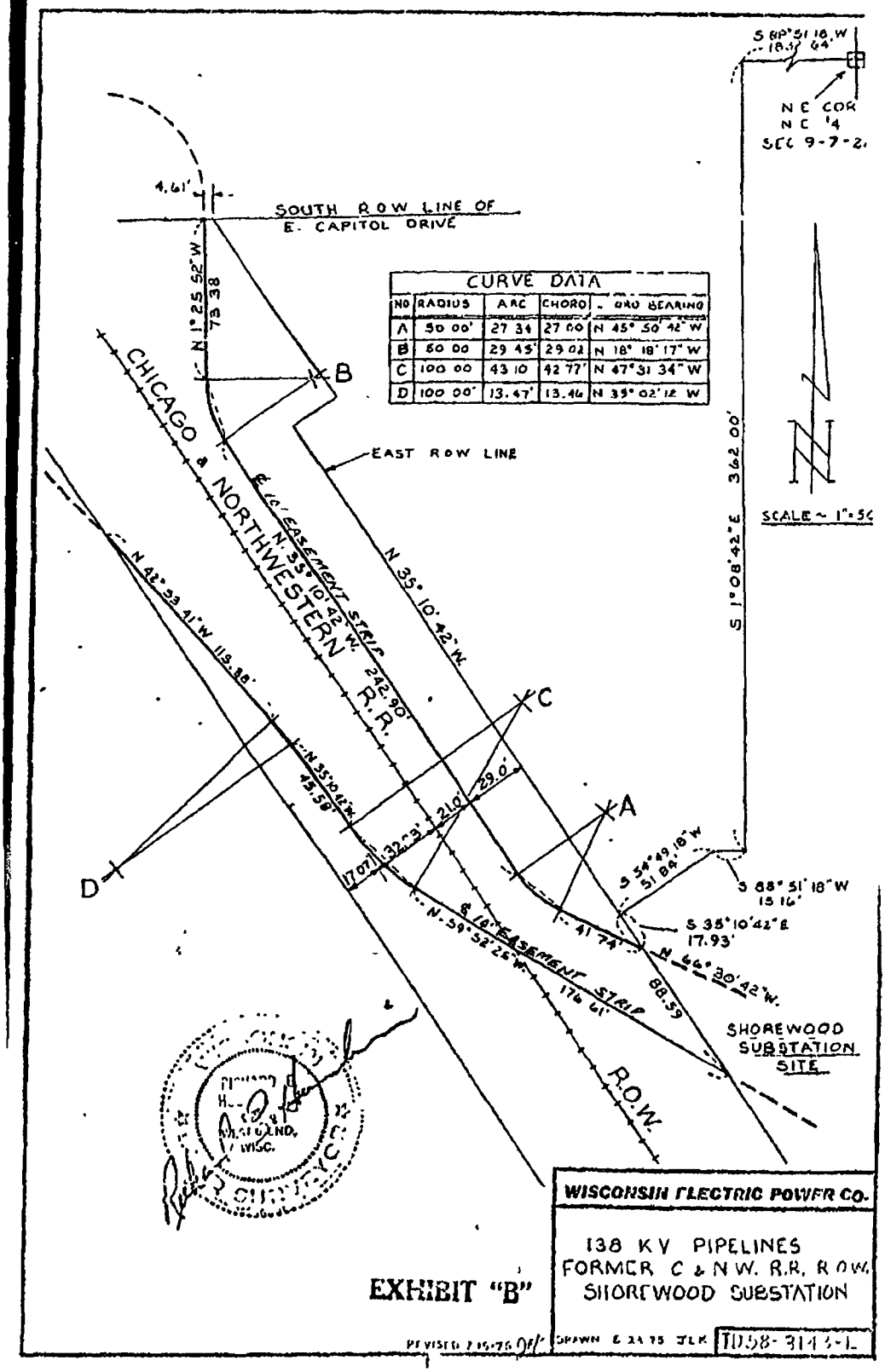


EXHIBIT C PAGE 7 OF 7

Title Document
10532883

DOC.# 10532883
RECORDED
01/15/2016 02:01PM
JOHN LA FAVE
REGISTER OF DEEDS
Milwaukee County, WI
AMOUNT: $30.00
FEE EXEMPT #: 0
0
***This document has been electronically recorded and returned to the submitter. **

LICENSED TO CHICAGO TITLE AGENCY FOR ISSUANCE OF LICENSEE'S OWN POLICY ONLY - NOT FOR RESALE OR ANY OTHER TRANSFER

LIMITED TERM CONSERVATION EASEMENT

This LIMITED TERM CONSERVATION EASEMENT is granted on the 1st day of February 2016 by the Village of Shorewood (the Landowner) to the Milwaukee Metropolitan Sewerage District, a special-purpose municipal corporation established under Wis. Stat. § 200.21 *et seq.* (the Easement Holder).

RECITALS

A. Property. The Landowner is the sole owner of property located in Milwaukee County, Wisconsin, which is described in Exhibit A and depicted on a map shown in Exhibit C (the Property). The property is at 3801 North Morris Boulevard, Wisconsin 53211.

This Limited Term Conservation Easement applies only to certain areas of the Property that have conservation value. These areas contain infrastructure designed to capture and hold stormwater in place to reduce the quantity and improve the quality of runoff (Green Infrastructure). Exhibit B shows the areas within the property that are subject to this Limited Term Conservation Easement.

Recording Area

Name and Return Address:

Milwaukee Metropolitan
Sewerage District
Attention: Delbert Dettmann
260 West Seeboth Street
Milwaukee, Wisconsin 53204

Parcel Identification Number:
Portion of:
275-8995-000

B. Conservation Values. In its present state, the Property has conservation value because it has the following Green Infrastructure: two 5,000 gallons tanks that capture roof runoff for beneficial reuse. This Green Infrastructure provides a total retention capacity of 10,000 gallons.

C. Baseline Documentation. The condition of the Property, and specifically the Green Infrastructure, is further documented in an inventory of relevant features, characteristics, and Conservation Values, which is on file at the office of the Easement Holder and incorporated into this Conservation Easement by reference. This Baseline Report consists of reports, maps, photographs and other documentation that both parties agree provides an accurate representation of the condition of the Property at the time of the conveyance of this Easement and which is intended to serve as an objective, but not exclusive, baseline for monitoring compliance with the terms of this Easement.

LICENSE AGREEMENT FOR PUBLIC USE ONLY. NOT FOR COMMERCIAL USE OR ANY OTHER BULK TRANSFER

D. Public Policies. The Preservation of the Conservation Values of the Property will serve the public policy set forth in Section 700.40 of the Wisconsin Statutes, which provides for the creation and conveyance of conservation easements to protect the natural, scenic and open space values of real property; assure its availability for agriculture, forestry, recreation or open space uses; protect natural resources; maintain or enhance air and water quality; and preserve archaeological sites.

E. Qualified Organization. The Easement Holder is qualified to hold conservation easements under Section 700.40(1)(b) because it is a governmental body empowered to hold an interest in real property under the laws of the State of Wisconsin.

F. Conservation Intent. The Landowner and Easement Holder share the common purpose of preserving the Conservation Values for a period of ten years. The Landowner intends to place restrictions on the use of the Property to protect those Conservation Values. In addition, the Landowner intends to convey to the Easement Holder and the Easement Holder agrees to accept the right to monitor and enforce these restrictions.

G. Funding Provided by Easement Holder. The Easement Holder has provided funding to the Landowner for the installation of the Green Infrastructure. The Landowner acknowledges the receipt and sufficiency of this funding.

GRANT OF CONSERVATION EASEMENT

In consideration of the facts recited above, the mutual covenants contained in this Easement, the funding provided by the Easement Holder, and the provisions of Section 700.40 of the Wisconsin Statutes, the Landowner voluntarily grants and conveys to the Easement Holder a Conservation Easement (the Easement) for a period of ten years over, in, and to the Property. This Easement consists of the following terms, rights and restrictions:

1. Purpose. The purpose of this Easement is to require the Landowner to keep, preserve, and maintain the Green Infrastructure installed on the Property, which consists of two 5,000 gallons tanks that capture roof runoff for beneficial reuse, providing a total retention capacity of 10,000 gallons.

2. Effective Dates. This Easement becomes effective on February 1, 2016, and terminates on January 31, 2026.

3. Recording of Easement. The Easement Holder will record this Easement at the Easement Holder's expense.

4. Operation and Maintenance. The Landowner will operate and maintain the Green Infrastructure so that it remains functional for the entire term of this Easement. The Landowner is solely responsible for operation, maintenance, and evaluating performance.

5. Additional Reserved Rights of the Landowner. The Landowner retains all rights associated with ownership of the Property, including the right to use the Property, and invite others to

use the Property, in any manner that is not expressly restricted or prohibited by the Easement or inconsistent with the purpose of the Easement. However, the Landowner may not exercise these rights in a manner that would adversely impact the Conservation Values of the Property.

The Landowner expressly reserves the right to sell, give, bequeath, mortgage, lease, or otherwise encumber or convey the Property, provided that:

5.1 The encumbrance or conveyance is subject to the terms of this Easement.

5.2 The Landowner incorporates the terms of this Easement by reference in any subsequent deed or other legal instrument by which the Landowner transfers any interest in all or part of the Property.

5.3 The Landowner notifies the Easement Holder of any conveyance in writing within fifteen days after the conveyance and provides the Easement Holder with the name and address of the recipient of the conveyance and a copy of the legal instrument transferring rights.

5.4 Failure of the Landowner to perform any act required in Subparagraphs 5.2 and 5.3 does not impair the validity of this Easement or limit its enforceability in any way.

6. **Easement Holders Rights and Remedies.** To accomplish the purpose of this Easement, the Landowner expressly conveys to the Easement Holder the following rights and remedies:

6.1 Preserve Conservation Values. The Easement Holder has the right to preserve and protect the Conservation Values of the Property.

6.2 Prevent Inconsistent Uses. The Easement Holder has the right to prevent any activity or use of the Property that is inconsistent with the purpose of this Easement and to require the restoration of areas or features of the Property that are damaged by any inconsistent activity or use, pursuant to the remedies set forth below.

6.3 Enter the Property. The Easement Holder has the right to enter the Property to: inspect it and monitor compliance with the terms of this Easement; obtain evidence for use in seeking judicial or other enforcement of the Easement; and otherwise exercise its rights under the Easement. The Easement Holder will: provide prior notice to the Landowner before entering the Property, comply with all of the Landowner's safety rules, and avoid unreasonable disruption of the Landowner's business activities.

7. **Remedies for Violations.** The Easement Holder has the right to enforce the terms of this Easement and prevent or remedy violations through appropriate legal proceedings.

LICENSE TO DUPLICATE THIS AND/OR SIMILAR LICENSE RIGHTS OWNED BY LANDTRUST TRANSFER

LICENSED TO CHICAGO TITLE INSURANCE COMPANY FOR JLK TRANSFER

7.1 Notice of Problems. If the Easement Holder identifies problems with the green infrastructure, then the Easement Holder will initially attempt to resolve the problems collaboratively. The Easement Holder will notify the Landowner of the problems and request remedial action within a reasonable time.

7.1 Notice of Violation and Corrective Action. If the Easement Holder determines that a violation of the terms of this Easement has occurred or is threatened, the Easement Holder will give written notice of the violation or threatened violation and allow at least thirty (30) days to correct the violation. If the Landowner fails to respond, then the Easement Holder may initiate judicial action. The requirement for an initial notice of violation does not apply if, in the discretion of the Easement Holder, immediate judicial action is necessary to prevent or mitigate significant damage to the Property or if good faith efforts to notify the Landowner are unsuccessful.

7.2 Remedies. When enforcing this Easement, the Remedies available to the Easement Holder include: temporary or permanent injunctive relief for any violation or threatened violation of the Easement, the right to require restoration of the Green Infrastructure to its condition at the time of the conveyance of this Easement, specific performance or declaratory relief, and recovery of damages resulting from a violation of the Easement or injury to any of the Conservation Values of the Property.

7.3 Non-Waiver. A delay or prior failure of the Easement Holder to discover a violation or initiate enforcement proceedings does not waive or forfeit the right to take any action necessary to assure compliance with the terms of this Easement.

7.4 Waiver of Certain Defenses. The Landowner hereby waives any defense of laches, such as failure by the Easement Holder to enforce any term of the Easement, or estoppel, such as a contradictory statement or action on the part of the Easement Holder.

7.5 Acts Beyond Landowner's Control. The Easement Holder may not bring any action against the Landowner for any injury or change in the Property resulting from causes beyond Landowner's control, including, but not limited to, natural disasters such as fire, flood, storm, natural earth movement and natural deterioration, or prudent actions taken by the Landowner under emergency conditions to prevent or mitigate damage from such causes, provided that the Landowner notifies the Easement Holder of any occurrence that has adversely impacted or interfered with the purpose of the Easement.

8. General Provisions.

8.1 Amendment. The Landowner and Easement Holder may amend this Easement in a written instrument executed by both parties and recorded in the Office of the Register of Deeds for the county in which the Property is located, provided that no amendment shall be allowed if, in the judgment of the Easement Holder, it:

a. diminishes the Conservation Values of the Property,

b. is inconsistent with the purpose of the Easement,

c. affects the duration of the Easement, or

d. affects the validity of the Easement under Section 700.40 of the Wisconsin Statutes.

8.2 Assignment. The Easement Holder may convey, assign or transfer its interests in this Easement to a unit of federal, state or local government or to an organization that is (a) qualified within the meaning of Section 170(h)(3) of the Internal Revenue Code and in the related regulations or any successor provisions then applicable, and (b) qualified to hold conservation easements under Section 700.40 of the Wisconsin Statutes. As a condition of any assignment or transfer, any future holder of this Easement is required to carry out its purpose for the remainder of its term. The Easement Holder will notify the Landowner of any assignment at least thirty (30) days before the date of such assignment. However, failure to give such notice does not affect the validity of assignment or limit its enforceability in any way.

8.3 Captions. The captions in this Easement have been inserted solely for convenience of reference and are not part of the Easement and have no effect on construction or interpretation.

8.4 Controlling Law and Liberal Construction. The laws of the State of Wisconsin govern the interpretation and performance of this Easement. Ambiguities in this Easement shall be construed in a manner that best effectuates the purpose of the Easement and protection of the Conservation Values of the Property.

8.5 Counterparts. The Landowner and Easement Holder may execute this Easement in two or more counterparts, which shall, in the aggregate, be signed by both parties. Each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

8.6 Entire Agreement. This instrument sets forth the entire agreement of the Landowner and Easement Holder with respect to this Easement and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein.

8.7 Extinguishment. This Easement may be terminated or extinguished prior to the expiration of its term, whether in whole or in part, only through judicial proceedings in a court of competent jurisdiction. Furthermore, the Easement may be extinguished only under the following circumstances: (a) all or part of the Property is taken by exercise of the power of eminent domain or acquired by purchase in lieu of condemnation, or (b) the Landowner and Easement Holder agree that a subsequent,

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unexpected change in the condition of or surrounding the Property makes accomplishing the purpose of the Easement impossible.

8.8 Joint Obligation. The obligations imposed by this Easement upon the Landowner are joint and several.

8.9 Ownership Responsibilities, Costs and Liabilities. The Landowner retains all responsibilities and will bear all costs and liabilities related to the ownership of the Property, including, but not limited to, the following:

a. *Operation, upkeep and maintenance.* The Landowner is responsible for the operation, upkeep and maintenance of the Property.

b. *Control.* In the absence of a judicial decree, nothing in this Easement establishes any right or ability in the Easement Holder to:

(i) exercise physical or managerial control over the day-to-day operations of the Property;

(ii) become involved in the management decisions of the Landowner regarding the generation, handling or disposal of hazardous substances; or

(iii) otherwise become an operator of the Property within the meaning of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), or similar laws imposing legal liability on the owner or operator of real property.

c. *Permits.* The Landowner remains solely responsible for obtaining applicable government permits and approvals for any construction or other activity or use permitted by this Easement, and all such construction, other activity, or use shall be undertaken in accordance with applicable federal, state and local laws, regulations and requirements.

d. *Indemnification.* The Landowner releases and will hold harmless, indemnify, and defend the Easement Holder and its members, directors, officers, employees, agents and contractors and the heirs, personal representatives, successors and assigns of each of them (collectively "Indemnified Parties") from and against any and all liabilities, penalties, fines, charges, costs, losses, damages, expenses, causes of action, claims, demands, judgments or administrative actions, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with:

(i) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause,

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unless due solely to the negligence of any of the Indemnified Parties;

(ii) the violation or alleged violation of, or other failure to comply with, any state, federal or local law, regulation, including without limitation, CERCLA, by any person other than the Indemnified Parties, in any way affecting, involving or related to the Property;

(iii) the presence or release in, on, from, or about the Property, at any time of any substance now or hereafter defined, listed, or otherwise classified pursuant to any federal, state, or local law, regulation, or requirement as hazardous, toxic, polluting, or otherwise contaminating to the air, water, or soil, or in any way harmful or threatening to human health or the environment, unless caused solely by any of the Indemnified Parties.

e. *Taxes*. The Landowner shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "Taxes"), including any taxes imposed upon or incurred as a result of this Easement, and shall furnish the Easement Holder with satisfactory evidence of payment upon request.

8.10 Recording. The Easement Holder shall record this Easement in the Office of the Register of Deeds for the county in which the Property is located, and may re-record it or any other document necessary to protect its rights under this Easement.

8.11 Severability. If any provision or specific application of this Easement is found to be invalid by a court of competent jurisdiction, then the remaining provisions or specific applications of this Easement shall remain valid and binding.

8.12 Successors. This Easement is binding upon, and inures to the benefit of, the Landowner and Easement Holder and their respective personal representatives, heirs, successors and assigns, and shall continue as a servitude running with the Property for the term of the Easement.

8.13 Terms. The terms "Landowner" and "Easement Holder," wherever used in this Easement, and any pronouns used in their place, mean either masculine or feminine, singular or plural, and include Landowner's and Easement Holder's respective personal representatives, heirs, successors, and assigns.

8.14 Warranties and Representations. The Landowner warrants and represents that:

a. The Landowner and Property are in compliance with all federal, state and local laws, regulations, and requirements applicable to the Property and its use;

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LICENSED TO CHICAGO TITLE AND NOT FOR SUBLICENSE, RELICENSE OR ANY OTHER BULK TRANSFER

b. No civil or criminal proceedings or investigations are pending or threatened that would in any way affect, involve, or relate to the Property. No facts or circumstances exist that the Landowner might reasonably expect to form the basis for any proceedings, investigations, notices, claims, demands or orders; and

c. The person signing this Easement has authority to grant this Conservation Easement to the Easement Holder.

GRANT OF INTEREST TO EASEMENT HOLDER

As the Village Manager of the Village of Shorewood, I execute the foregoing Limited Term Conservation Easement and acknowledge the same on this 7th day of January, 2016

By: _____
Chris Swartz
Village Manager
Village of Shorewood

STATE OF WISCONSIN

MILWAUKEE COUNTY

On this 7 day of JANUARY, 2016, the person known as Chris Swartz came before me and executed the foregoing instrument and acknowledged the same.

_____
Signature of Notary Public Teri Repins

Notary Public, State of WISCONSIN

My Commission expires 11-18-17.

NOTARY PUBLIC TERI REPINS STATE OF WISCONSIN

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NOT FOR SUBLICENSE/RESALE
OTHER BULK TRANSFER

ACCEPTANCE OF EASEMENT HOLDER'S INTEREST

The foregoing Limited Term Conservation Easement is accepted by the Milwaukee Metropolitan Sewerage District on this 13th **day of** January, 20 16.

By: _____
Kevin L. Shafer, P.E.
Executive Director

Approved as to Form: _____
Attorney for the District
Thomas A. Nowicki

STATE OF WISCONSIN

MILWAUKEE COUNTY

On this 13th **day of** January, 20 16, **the person known as** Kevin L Shafer **came before me and executed the foregoing instrument and acknowledged the same.**

_____
Signature of Notary Public Anna Kettlewell

Notary Public, State of Wisconsin

My Commission is expires 6-12-16.

ANNA KETTLEWELL NOTARY PUBLIC STATE OF WISCONSIN

Thomas A. Nowicki, Staff Attorney, Milwaukee Metropolitan Sewerage District, drafted this conservation easement.

ATTACHMENTS

EXHIBIT A Description of the Property

EXHIBIT B Green Infrastructure Map

EXHIBIT C Vicinity Map

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EXHIBIT A

DESCRIPTION OF THE PROPERTY

That part of the Northeast ¼ of Section 9, town 7 North, Range 22 East, in the Village of Shorewood, County of Milwaukee, State of Wisconsin, bounded and described as follows:

Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast ¼; thence south 27°-20'-39" East, 627.38 feet to the point of beginning; thence South 62°-39'-22" West, 40.0 feet; thence South 27°-20'-38" East, 222.80 feet; thence North 62°-30'-22" East, 40.00 feet; thence North 27°-20'-38" West, 222.80 feet to the place of beginning. Lot 6, excepting the East 135 feet thereof as measured along the North line thereof in Block 3 in Harder Hughes Sub. Of High School Terrace, being a part of the Northeast ¼ of Section 9, Town 7 North, Range 21 East, Village of Shorewood, County of Milwaukee, State of Wisconsin. Containing 0.246 Acres more or less.

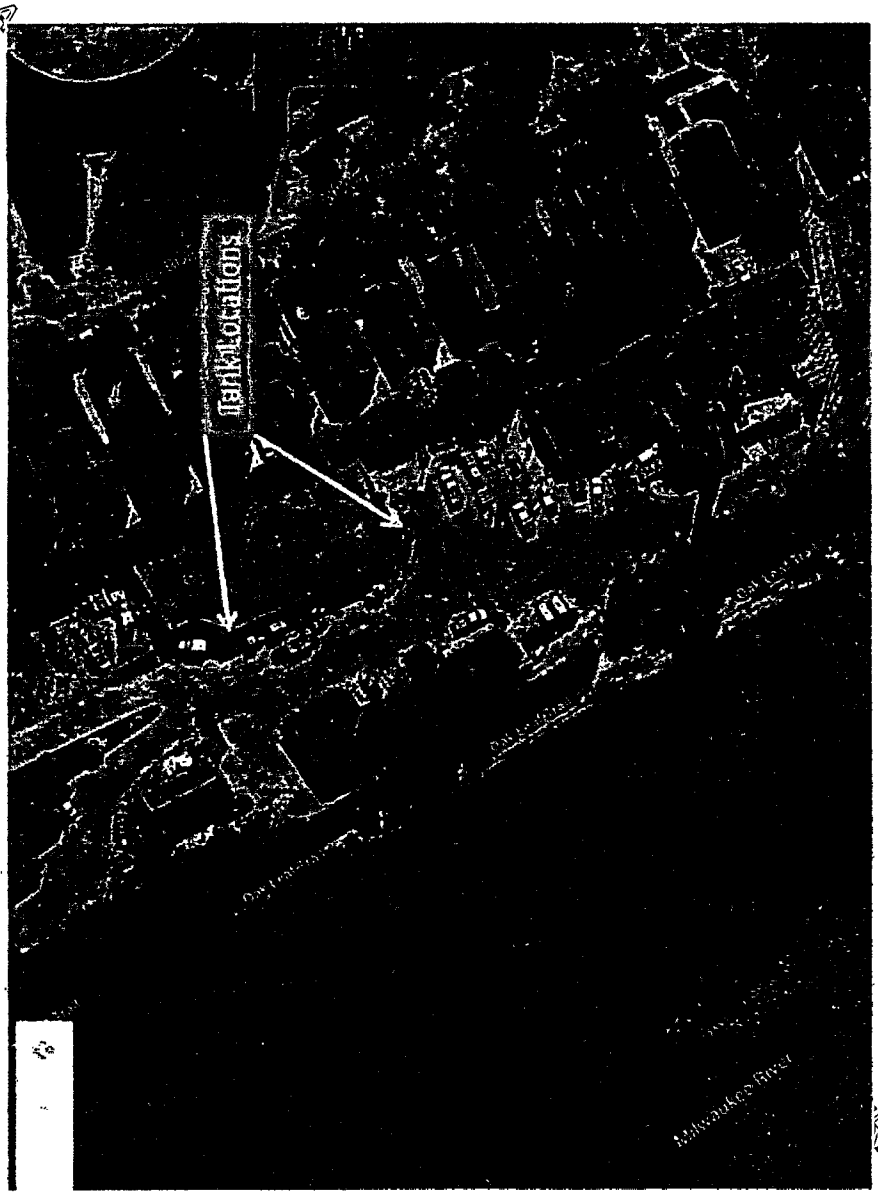
Tax Key Number: 275-8995-000

Address: 3801 North Morris Boulevard, Wisconsin 53211

LICENSED TO CHICA

EXHIBIT B

GREEN INFRASTRUCTURE MAP

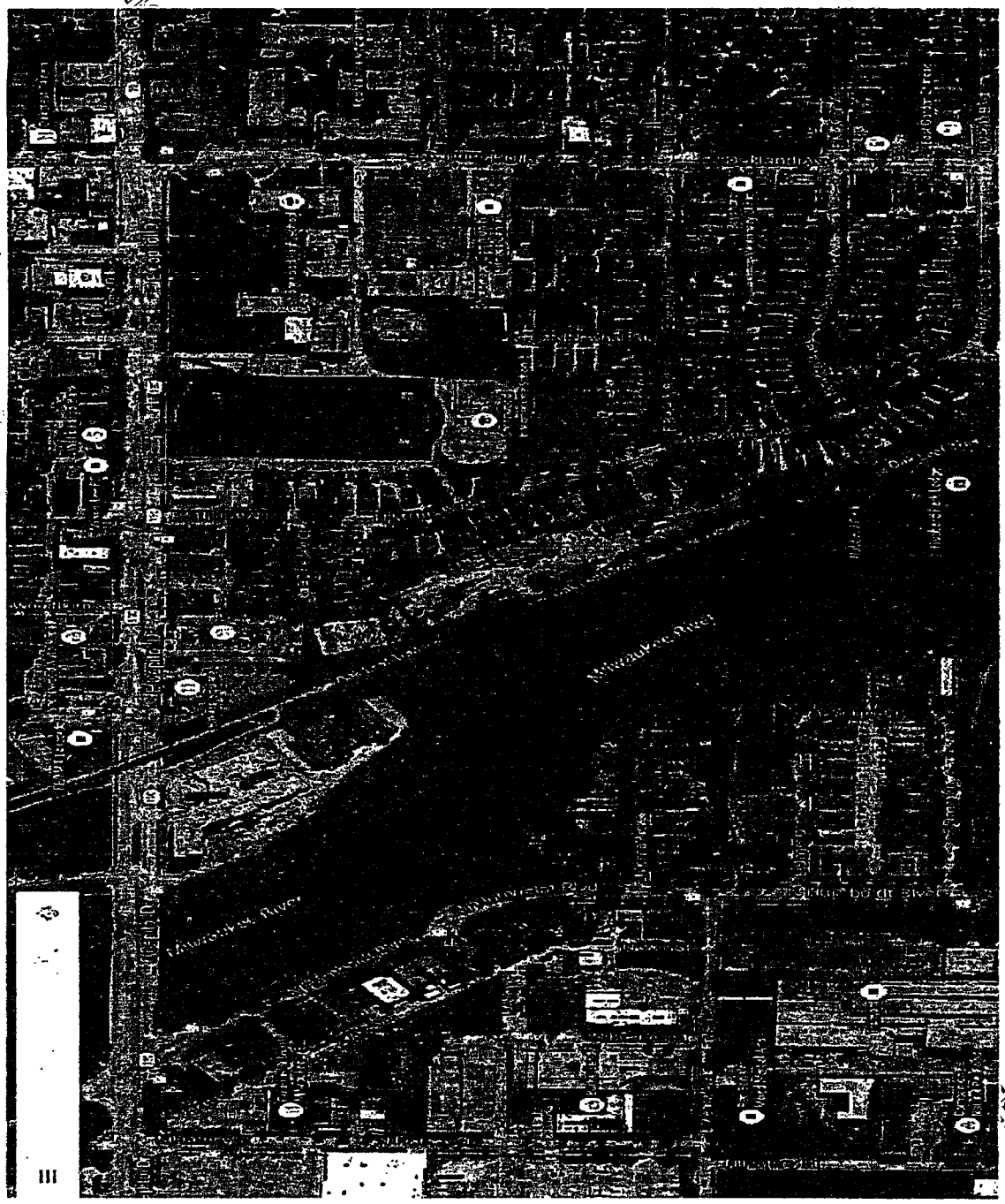


RANSFER

LICENSED TO CHI

EXHIBIT C

VICINITY MAP



Title Document
49167114

REEL 853 IMAGE 442

4917114

FOR AND IN CONSIDERATION of the sum of One Dollar ($1.00) the receipt whereof is hereby acknowledged, VILLAGE OF SHOREWOOD does hereby grant to WISCONSIN ELECTRIC POWER COMPANY the right, permission and authority to enter upon the lands of Village of Shorewood for the purpose of ingress and egress upon, over and across that part of said Village's premises described as follows:

Lot Twenty-one (21) in Block Three (3), HARDER-HUGHES SUBDIVISION OF HIGH SCHOOL TERRACE, being a Subdivision of a part of the Northeast one-quarter (NE 1/4) of Section Nine (9), Township Seven (7) North, Range Twenty-two (22) East, Village of Shorewood, Milwaukee County, Wisconsin, and all that part of the Northeast one-quarter (NE 1/4) of said Section Nine (9), owned by said Village, lying easterly of the Chicago and North Western Transportation Company right of way, westerly of HARDER-HUGHES SUBDIVISION OF HIGH SCHOOL TERRACE, southerly of East Pinedale Court and northerly of the south line of Lot One (1), Block Three (3) extended west of HARDER-HUGHES SUBDIVISION OF HIGH SCHOOL TERRACE.

Such entry shall be limited to the initial construction of the substation facilities of Wisconsin Electric Power Company to be located north of and contiguous to the lands owned by the Village of Shorewood and/or at such times as an emergency exists which requires the use of the Village premises for access to Wisconsin Electric Power Company's land. All other routine entries to Wisconsin Electric Power Company's property shall be made from East Pinedale Court located at the northeast corner of Wisconsin Electric Power Company's land. It is understood and agreed that no vehicles will be parked or stored at any time on property of the Village of Shorewood pursuant to this agreement.

In the event Wisconsin Electric Power Company damages the fences, locks, driveway or other property of the Village while entering or leaving premises of the Village, Wisconsin Electric Power Company shall restore said premises to a condition as nearly as possible to the condition as existed prior to such entry or pay the Village the full cost of such damages upon presentation of a bill therefor.

4917114

REGISTER'S OFFICE } ss
Milwaukee County, Wis.
RECORDED AT 2:00 PM
ON MAY 22 1975 IN
Reel 853 image 442 to 444 incl.
REGISTER OF DEEDS Wm. A. Burgh

MAY-22-75 61797 • 4917114 B CAREC

This is a non-exclusive easement and the rights herein granted shall not interfere with or impair the Village of Shorewood from the use and enjoyment of its premises.

This agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, said VILLAGE OF SHOREWOOD has caused these presents to be executed by its Village President and attested to by its Village Clerk and its corporate seal to be hereunto affixed this 14th day of May, 1975, and said WISCONSIN ELECTRIC POWER COMPANY has caused these presents to be executed by its Executive Vice President and attested to by its Ass't. Secretary and its corporate seal to be hereunto affixed this 9th day of May, 1975.

In Presence of:

Alvin R. Meyer

Marguerite E. Berg

Delores Gryczkowski

Joan Germundsen

VILLAGE OF SHOREWOOD

By Chester F. Krizek, Village President

ATTEST:

By Robert M. Stoffel, Village Clerk

WISCONSIN ELECTRIC POWER COMPANY

By Sol Burstein, Executive Vice President

ATTEST:

By J. H. Goetsch, Assistant Secretary

REEL 853 IMAGE 444

STATE OF WISCONSIN)
) SS
Milwaukee COUNTY)

Personally came before me, this 14th day of May, 1975, Chester F. Krizek, Village President, and Robert M. Stoffel, Village Clerk, of the above named municipal corporation, VILLAGE OF SHOREWOOD, to me known to be the persons who executed the foregoing instrument and to me known to be such Village President and Village Clerk of said municipal corporation and acknowledged that they executed the foregoing instrument as such officers, as the deed of said municipal corporation, by its authority, and pursuant to Resolution File No. 75-3 adopted by its Village Board on February 17, 1975.

Alvin R. Meyer
Notary Public, Milwaukee Co., Wis.
My commission ~~expires~~ is permanent

STATE OF WISCONSIN)
) SS
MILWAUKEE COUNTY)

Personally came before me, this 9th day of May, 1975, Sol Burstein, Executive Vice President, and J. H. Goetsch, Asst. Secretary, of the above named corporation, WISCONSIN ELECTRIC POWER COMPANY, known to me to be the persons who executed the foregoing instrument, and to me known to be such Executive Vice President and Asst. Secretary of said corporation, and acknowledged that they executed the foregoing instrument as such officers, as the deed of said corporation, by its authority.

Otis F. Koske
Notary Public, Milwaukee Co., Wis.
My commission expires Jan. 15, 1978

THIS INSTRUMENT WAS DRAFTED BY THOMAS R. HAMILTON ON BEHALF OF WISCONSIN ELECTRIC POWER COMPANY

Title Document
Harder Hughes Subd
of H. S. Terrace Plat

B-45 P-18

HARDER HUGHES SUBDIVISION OF
HIGH SCHOOL TERRACE

BEING A SUBDIVISION IN THE N.E.¼ SEC.9
T.7 N. R.22 E. VILLAGE OF SHOREWOOD

SCALE 1 IN = 50 FT.

THIS DRAWING WAS REDUCED TO SCALE 1" = 80'

STATE OF WISCONSIN } ss.
COUNTY OF MILWAUKEE }

We, T.F. Buckley and H.A. Schmitt, surveyors, doing business as the The North Shore Engineering Company, do hereby certify that we have surveyed, subdivided and mapped Harder-Hughes Subdivision of High School Terrace, in the Northeast One-Quarter Section Nine, Town Seven, North Range Twenty-two East, in the Village of Shorewood, Milwaukee County, Wisconsin.

The land surveyed, subdivided and mapped being described as follows: Commencing at the Northeast ¼ Section 9, Township 7 North, Range 22 East, Thence South 89° 12' 00" West along the North line of said Northeast ¼ section line 1132.60 feet to the place of beginning, thence South 89° 12' West along said North line 668.54 feet thence South 27° 20' 38" East 1343.26 feet, thence North 62° 39' 22" East 120 feet, thence North 27° 20' 38" West 120 feet, thence North and parallel to the East line of said Northeast ¼ Section line 1040.79 feet to the place of beginning.

That we made such survey, subdivision and map at the order and direction of the Harder-Hughes Realty Company. That the attached map is a correct representation of all exterior boundaries of land surveyed and the divisions made thereon. That in surveying, subdividing and mapping the same we have complied with the me provisions of Chapter 236 of the revised statutes.

H.A. Schmitt
T.F. Buckley
SURVEYORS

STATE OF WISCONSIN } ss.
COUNTY OF MILWAUKEE }

On the 29 day of December, 1927, personally before me came T.F. Buckley and H.A. Schmitt, to me known to be the persons who executed the foregoing instrument, and acknowledged the same.

Geo. J. Bagemihl
Notary Public, Milwaukee County, Wisconsin.
My Commission expires June 21. 1931

Notary Public Seal

STATE OF WISCONSIN } ss.
COUNTY OF MILWAUKEE }

Harder-Hughes Realty Company, a corporation duly created, organized, under and by virtue of the laws of the State of Wisconsin, hereby certifies that said company caused the land described in the foregoing survey of T.F. Buckley and H.A. Schmitt, the surveyors thereof, to be surveyed, subdivided and mapped as represented on the within map.

In testimony whereof the said Company has caused this certificate to be signed by Charles L. Harder its President and Orvin R. Hughes its Secretary, and its corporate seal to be hereunto affixed this 31st day of December 1927.

Charles L. Harder PRESIDENT
Orvin R. Hughes SECRETARY

Signed and Sealed in presence of
C.E. Hammersley
H.A. Schmitt

Company Corporate Seal

STATE OF WISCONSIN } ss.
COUNTY OF MILWAUKEE }

On the 31st day of December 1927, personally before me came Charles L. Harder and Orvin R. Hughes, to me known to be the persons who executed the foregoing instrument and being by me duly sworn declared that said Charles L. Harder and Orvin R. Hughes are President and Secretary respectively of the Harder-Hughes Realty Company, a corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, that by authority of its Board of Directors they acknowledged said instrument to be the free act and deed of said corporation.

Charles E. Hammersley
Notary Public, Milwaukee County, Wis.
My Commission expires August 10-1930.

Notary Public Seal

STATE OF WISCONSIN }
MILWAUKEE COUNTY } ss
VILLAGE OF SHOREWOOD }

WHEREAS, the Harder-Hughes Realty Company has presented a proposed plat of certain land in the Northeast one-quarter (N.E. ¼) Section Nine (9) Township Seven (7) North Range 22 East, in the Village of Shorewood, Milwaukee County, State of Wisconsin, known as Harder-Hughes Subdivision of High School Terrace; and

WHEREAS the plat conforms to the plans of this Village for platting and conforms to the Village ordinances and the Statutes of Wisconsin.

NOW, THEREFORE, BE IT RESOLVED that the plat known as Harder-Hughes Subdivision of High School Terrace being a subdivision in said village as proposed, be and the same is hereby accepted and approved.

Dated at Shorewood, Milwaukee County, Wisconsin, this 3rd day of January, 1928.

Passed and adopted this 3rd day of January, 1928.

W.J. Hubbard
President

Village Seal

COUNTERSIGNED
Theodore B. Olsen
Clerk

STATE OF WISCONSIN } ss
MILWAUKEE COUNTY }

THEODORE B. OLSEN, being first duly sworn on oath deposes and says that he is and for more than one year last past has been the duly elected, qualified and acting clerk of the Village of Shorewood, Milwaukee County, Wisconsin, that the annexed is a true and correct copy of a resolution passed and adopted by the Village Board of said Village on the 3rd day of January, 1928, approving the plat of Harder-Hughes Subdivision of High School Terrace; that hereunto annexed is the said Harder-Hughes Subdivision of High School Terrace

Theodore B. Olsen

Subscribed and Sworn to before me this 7th day of January, A.D. 1928.

E.L. Mc Gee
Notary Public, Milwaukee County Wis.
My Commission expires June 8, 1931.

Village Seal

STATE OF WISCONSIN MILWAUKEE COUNTY VILLAGE OF SHOREWOOD

Be It Resolved by the Village Board of the Village of Shorewood, Milwaukee County, Wisconsin, that the plat known as Harder Hughes Subdivision of High School Terrace furnished by the Harder-Hughes Realty Company and drawn on muslin backed paper, be and the same is hereby directed to be substituted for the tracing of said Harder-Hughes Subdivision of High School Terrace accepted and approved by the said Village Board of Shorewood, Milwaukee County, Wisconsin on the 3rd day of January, 1928.

Be it further resolved that the acceptance and approval given to the copy aforesaid of the Harder-Hughes Subdivision of High School Terrace on tracing cloth on the 3rd day of January 1928 shall apply and such acceptance and approval is hereby given, to the muslin backed copy of Harder-Hughes Subdivision of High School Terrace which last named copy conforms in all respects to the original drawing on tracing cloth, accepted and approved January 3, 1928.

PASSED AND ADOPTED by the Village Board of Shorewood, Milwaukee County, Wisconsin, this 6th day of February, 1928.

Charles F. Smith
Acting President

Village Seal

COUNTERSIGNED
Theodore B. Olsen
Clerk

STATE OF WISCONSIN } ss.
MILWAUKEE COUNTY }

THEODORE B. OLSEN, being first duly sworn, on oath deposes and says that he is and for more than one year last past has been the duly elected, qualified and acting Clerk of the Village of Shorewood, Milwaukee County, Wisconsin; that the annexed is a true and correct copy of a resolution passed and adopted by the Village Board of said Village on the 6th day of February, 1928, approving the plat of Harder-Hughes Subdivision of High School Terrace, that hereunto annexed is the said plat of Harder-Hughes Subdivision of High School Terrace.

Theodore B. Olsen

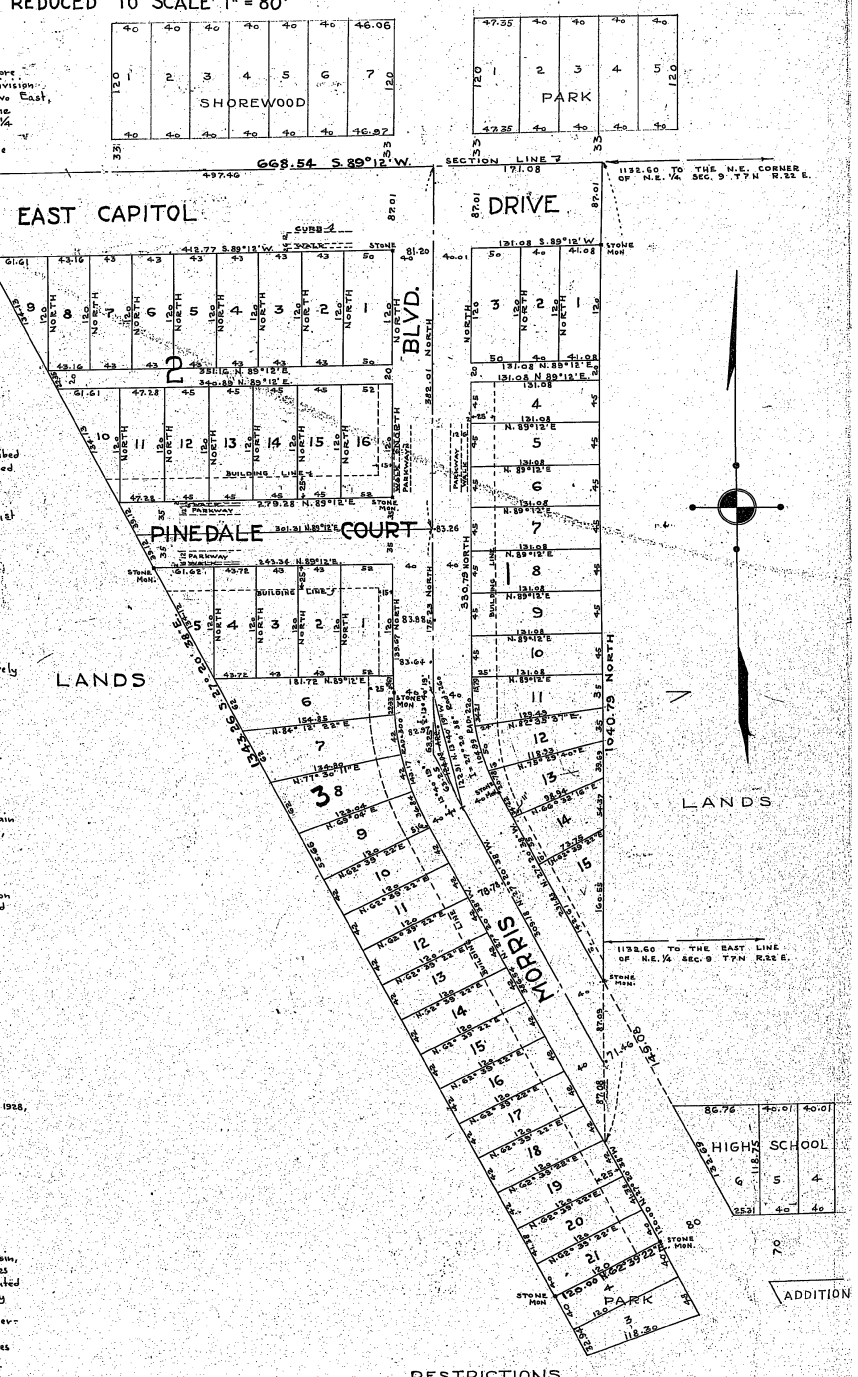
Subscribed and Sworn to before me this 9th day of February A.D. 1928.

E.L. Mc Gee
Notary Public, Milwaukee County, Wis.
My Commission expires June 8, 1931.

Village Seal

RECORDED FEB. 11, 1928. at 8:55 o'clock A.M.
Phillip C. Weatherl Register
1588587

114/316



RESTRICTIONS

USE OF LOTS

1. ALL LOTS IN THE SUBDIVISION TO BE USED IN ACCORDANCE WITH THE ZONING ORDINANCE OF THE VILLAGE OF SHOREWOOD AND WITH THE RESTRICTIONS OF RECORD.

BUILDING SET BACK LINES

2. (A) LOTS 4 TO 10 INCLUSIVE BLOCK 1, LOTS 10 TO 16 INCLUSIVE BLOCK 2, AND LOTS 1 TO 20 INCLUSIVE BLOCK 3 TO HAVE A FRONT SET BACK OF 25 FEET AND LOTS 11 TO 15 INCL. BLK. 1 AS INDICATED ON PLAT.

(B) LOT 1 BLOCK 3 AND LOT 16 BLOCK 2 TO HAVE A SIDE SET BACK OF 15 FEET.

GRADE OF LOTS

3. THE GROUND LINE OF LOTS 4 TO 15 INCLUSIVE BLOCK 1, LOTS 10 TO 16 BLOCK 2 AND LOTS 1 TO 20 BLOCK 3, AT THE FRONT BUILDING LINE SHALL NOT EXCEED TWO FEET ABOVE THE ESTABLISHED GRADE OF THE FRONT LOT LINE OPPOSITE THE CENTER OF THE BUILDING.

SIZE OF LOTS

4. NO LOTS CAN BE MADE SMALLER THAN ORIGINALLY PLATTED NOR CHANGED IN DIRECTION AT CORNERS TO FACE A DIFFERENT STREET THAN ORIGINALLY PLATTED

BUILDING COSTS

5. ONE FAMILY RESIDENCE BUILDING SHALL NOT BE ERECTED WHICH SHALL COST LESS THAN $ 6500.00
TWO FAMILY RESIDENCE BUILDING SHALL NOT BE ERECTED WHICH SHALL COST LESS THAN $ 9500.00

6 IT IS HEREBY UNDERSTOOD AND AGREED THAT EACH LOT OWNER IN THIS SUBDIVISION WITH THE EXCEPTION OF LOTS 1 TO 3 INCLUSIVE, BLOCK 1 AND LOTS 1 TO 9 INCLUSIVE BLOCK 2 AGREES TO HAVE THE VILLAGE OF SHOREWOOD PLACE UPON THE TAX ROLL THE COST OF FURNISHING AND PLANTING A GROUP OF SHRUBS IN THE PARKWAY SPACE BETWEEN THE SIDEWALK AND CURB.

APPENDIX E
WDNR CLOSURE REPORT

GIS REGISTRY
Cover Sheet

May, 2009
(RR 5367)

Source Property Information

CLOSURE DATE: Aug 12, 2009

BRRTS #: **03-41-001238**

FID #: 241218230

ACTIVITY NAME: SHOREWOOD VIL MUNICIPAL YARD

DATCP #:

PROPERTY ADDRESS: 3801 North Morris Boulevard

COMM #: 53211221901

MUNICIPALITY: Shorewood

PARCEL ID #: 275-8995-000, 275-8984-000, 275-116-000

***WTM COORDINATES:**

X: **691546** Y: **292511**

** Coordinates are in WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

- (•) Approximate Center Of Contaminant Source
- ( ) Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

- [X] Groundwater Contamination > ES *(236)*
  - [X] Contamination in ROW
  - [X] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*
- [X] Soil Contamination > *RCL or **SSRCL *(232)*
  - [X] Contamination in ROW
  - [X] Off-Source Contamination

  *(**note:** for list of off-source properties see "Impacted Off-Source Property")*

Land Use Controls:

- [ ] N/A (*Not Applicable*)
- [ ] Soil: maintain industrial zoning *(220)*

  *(**note:** soil contamination concentrations between non-industrial and industrial levels)*
- [X] Structural Impediment *(224)*
- [X] Site Specific Condition *(228)*
- [X] Cover or Barrier *(222)*

  *(**note:** maintenance plan for groundwater or direct contact)*
- [ ] Vapor Mitigation *(226)*
- [ ] Maintain Liability Exemption *(230)*

  *(**note:** local government or economic development corporation)*

Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? *(234)*

(•) Yes ( ) No ( ) N/A

** Residual Contaminant Level*
***Site Specific Residual Contaminant Level*

State of Wisconsin
Department of Natural Resources
http://dnr.wi.gov

GIS Registry Checklist

Form 4400-245 (R 4/08)

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-41-001238 PARCEL ID #: 275-8995-000, 275-8984-000, 275-116-000

ACTIVITY NAME: Village of Shorewood Public Works Yard WTM COORDINATES: X: 691546 Y: 292511

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

☒ **Closure Letter**

☒ **Maintenance Plan** *(if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)*

☒ **Conditional Closure Letter**

☐ **Certificate of Completion (COC)** for VPLE sites

SOURCE LEGAL DOCUMENTS

☒ **Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

☒ **Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map *for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map.* (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).

Figure #: 1, 2, 3 **Title: Village of Shorewood, Harder Hughes Subdivision of High School Terrace**

☒ **Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 8.5 x 14 inches unless the map is submitted electronically.

☒ **Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
Note: *Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.*

Figure #: 1 **Title: Site Location Map**

☒ **Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.

Figure #: 1 **Title: Site Plan Map**

☒ **Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL)as determined under s. NR 720.09, 720.11 and 720.19.

Figure #: 6 **Title: Soil Quality Map**

BRRTS #: 03-41-001238 ACTIVITY NAME: Village of Shorewood Public Works Yard

MAPS (continued)

☐ **Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: 3 **Title: Geological Cross Section Location Map**

Figure #: 4 & 5 **Title: Geologic Cross Section A-A' and B-B'**

☒ **Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.
Note: *This is intended to show the total area of contaminated groundwater.*

Figure #: 9A **Title: Groundwater Quality Map**

☒ **Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more then 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 7A **Title: Water Table Contour Map 10-24-04**

Figure #: 7B **Title: Water Table Contour Map 4-16-03**

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 8.5 x 14 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

☒ **Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.
Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: 2 **Title: Soil Analytical Results (Pre-Remediation) Shorewood Public Works Yard**

☒ **Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 2 & 3 **Title: Groundwater Quality Results Shorewood Public Works Yard**

☒ **Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: 1 **Title: Depth to Groundwater & {Product Measurements Shorewood Public Works Yard**

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.
Note: *If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.*

☒ **Not Applicable**

☐ **Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.
Note: *If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.*

Figure #: **Title:**

☐ **Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

☐ **Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

☐ **Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-41-001238 ACTIVITY NAME: Village of Shorewood Public Works Yard

NOTIFICATIONS

Source Property

☐ **Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

☒ **Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.
Note: *Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.*

Number of "Off-Source" Letters: 1

☐ **Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.

☐ **Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies).** This does not apply to right-of-ways.
Note: *If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*

☒ **Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

Number of "Governmental Unit/Right-Of-Way Owner" Letters: 1

State of Wisconsin
Department of Natural Resources
http://dnr.wi.gov

Impacted Off-Source Property Information

Form 4400-246 (R 3/08)

This fillable form is intended to provide a list of information that must be submitted for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request (Section H). The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-41-001238

ACTIVITY NAME: SHOREWOOD VIL MUNICIPAL YARD

ID	Off-Source Property Address	Parcel Number	WTM X	WTM Y
A	Parcel West of Village of Shorewood Public Works Yard(3801 N. Morris Blvd)	275-8997-001	691510	292533
B				
C				
D				
E				
F				
G				
H				
I				

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Matthew J. Frank, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128
FAX 414-263-8606
Telephone 414-263-8500
TTY Access via relay - 711

August 12, 2009

Village of Shorewood
Attn: Leeann Butschlick, Director of Public Works
3801 North Murray Avenue
Shorewood, WI 53211-2219

Subject: Final Case Closure with Land Use Limitations or Conditions for the Village of Shorewood Public Works Yard 3801 North Morris Boulevard Shorewood, WI

FID: 03-41-001238
FID: 241218230
PECFA: 53211-2219-01

Dear Ms Butschlick:

On February 16, 2008, the Wisconsin Department of Natural Resources Southeast Regional Closure Committee ("the Department") reviewed the above referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On February 20, 2006, you were notified that the Closure Committee had granted conditional closure to this case.

On August 4, 2009, the Department received correspondence indicating that you have complied with the requirements of closure. The groundwater monitoring well abandonment forms, revised Building and Pavement Barrier Maintenance Plan, USGS topographic map, and Parcel ID numbers were submitted to the Department.

Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

GIS Registry

The conditions of case closure set out below in this letter require that your site be listed on the Remediation and Redevelopment Program's GIS Registry. The specific reasons are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed
- If a structural impediment that obstructs a complete site investigation or cleanup is removed or modified, additional environmental work must be completed
- Pavement, an engineered cover or a soil barrier must be maintained over contaminated soil and the state must approve any changes to this barrier
- Groundwater contamination is present above Chapter NR 140 enforcement standards

Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at http://dnr.wi.gov/org/aw/rr/gis/index.htm. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line http://dnr.wi.gov/org/water/dwg/3300254.pdf or at the web address listed above for

the GIS Registry.

Closure Conditions

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which the current property owner and any subsequent property owners must adhere. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. It is the Department's intent to conduct inspections in the future to ensure that the conditions included in this letter including compliance with referenced maintenance plans are met.

Remaining Residual Soil Contamination and Structural Impediments

Residual soil contamination remains at the locations indicated on the enclosed Soil Quality Map, Figure 6, as indicated in the information submitted to the Department of Natural Resources. If soil in the specific locations described above is excavated in the future, then pursuant to ch. NR 718 or, if applicable, ch. 289, Stats., and chs. 500 to 536, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains.

Structural impediments existing at the time of cleanup, the DPW Main Garage, made complete investigation and remediation of the soil contamination on this property impracticable. Pursuant to s. 292.12(2)(b), Wis. Stats., if the structural impediments on this property that are described above are removed, the property owner shall conduct an investigation of the degree and extent of petroleum and metal contamination.

For both remaining residual soil contamination and structural impediments, if contamination is found at that time, the Wisconsin Department of Natural Resources shall be immediately notified and the contamination shall be properly remediated in accordance with applicable statutes and rules. If soil in the specific locations described above is excavated, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

Cover or Barrier

Pursuant to s. 292.12(2)(a), Wis. Stats., the pavement and building foundation that currently exists in the location shown on the attached map shall be maintained in compliance with **the attached maintenance plan** in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

The attached maintenance plan and inspection log are to be kept up-to-date and on-site, and the inspection log need only be submitted to the Department upon request.

Prohibited Activities

The following activities are prohibited on any portion of the property where [pavement, a building foundation, soil cover, engineered cap or other barrier] is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or placement of a building or other structure.

Remaining Residual Groundwater Contamination

Groundwater impacted by petroleum-related contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present both on the contaminated property and off the contaminated property; see enclosed Groundwater Quality Map Figure 9A. Off-property owners have been notified of the presence of groundwater contamination. For more detailed information regarding the locations where groundwater samples have been collected (i.e., monitoring well locations) and the associated contaminant concentrations, refer to the Remediation and Redevelopment Program's GIS Registry at the RR Sites Map page at http://dnr.wi.gov/org/aw/rr/gis/index.htm.

The Department appreciates the actions you have taken to investigate and remediate the contamination at this site. If you have any questions or comments, please feel free to contact John J. Hnat at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment Program Assistant Vicky Stovall (414-263-8688) at the above address.

Sincerely,

James A. Schmidt
Remediation and Redevelopment Team Supervisor
Southeast Region

Enclosures: Sigma Environmental Village of Shorewood Soil Quality Map, Figure 6, 10.21.2002
Sigma Environmental Village of Shorewood Groundwater Quality Map, Figure 9A, 8.26.2003
Building and Pavement Barrier Maintenance Plan, July 2009

C: Ross Creighton, Sigma Environmental
WDNR SER Files

BUILDING AND PAVEMENT BARRIER MAINTENANCE PLAN

VILLAGE OF SHOREWOOD PUBLIC WORKS YARD

July 2009

Property Located at: 3801 North Morris Boulevard, Shorewood, Wisconsin

FID #241218230 BRRTS #03-41-001238

TAX #275-8984-000

Parts of Lot numbered One (1) in the North One-half (N. ½) of the North East One-quarter (N.E. ¼) of Section numbered Nine (9), in Township numbered Seven (7) North, of Range numbered Twenty-two (22) East, bounded and described as follows:

Commencing at the North East corner of the North East Quarter (N.E. ¼) Section numbered Nine (9), in Township numbered Seven (7) North, of Range Twenty-two (22) East, thence South 89°12'00" West 1801.14 feet; thence South 27° 20' 38" East 1110.54 feet to the place of beginning of the land to be described; thence South 63° 30' 22" West 150.27 feet to the East line of Right of Way of the Chicago and Northwestern Railway; thence south 34° 48' 05" East along the East line of said Right of Way 315.20 feet; thence North 89° 11' 55" East 122.25 feet; thence North 27° 20' 38" West 367.16 feet to the place of beginning, containing one acre, in the Village of Shorewood, Milwaukee, County, Wisconsin.

Introduction

This document is the Maintenance Plan for a pavement barrier at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing building and other paved surfaces occupying the area over the contaminated plume or soil on-site. The contaminated groundwater plume is impacted by intermittent residual free product at SVE-11 and benzene in wells east of the Department of Public Works Main Garage. The location of the paved surfaces to be maintained in accordance with this Maintenance Plan, as well as the impacted groundwater plume is identified in the attached map (Exhibit A).

Cover and Building Barrier Purpose

The paved surfaces over the contaminated groundwater plume and intermittent free product serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

Annual Inspection

The paved surfaces overlying the contaminated groundwater plume and as depicted in Exhibit A will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause exposure to underlying soils. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed will be documented. A log of the inspections and any repairs will be maintained by the property owner and is included as Exhibit B, Cap Inspection Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log and a copy of the inspection log will be kept on site.

Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling operations or they can include larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces overlying the contaminated groundwater plume are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information

November 2005

Site Owner and Operator:	Village of Shorewood, Milwaukee County, Wisconsin, a Municipal Corporation Mr. James Bartnicki or Mr. Chris Swartz 3930 N. Murray Avenue Shorewood, WI 53211 (414) 847-2650
Consultant:	Sigma Environmental Services, Inc. Ross Creighton 1300 W. Canal Street Milwaukee, WI 53233 (414) 643-4200
WDNR:	Mr. John Hnat 2300 N. Martin Luther King Drive Milwaukee, WI 53212 (414) 263-8644

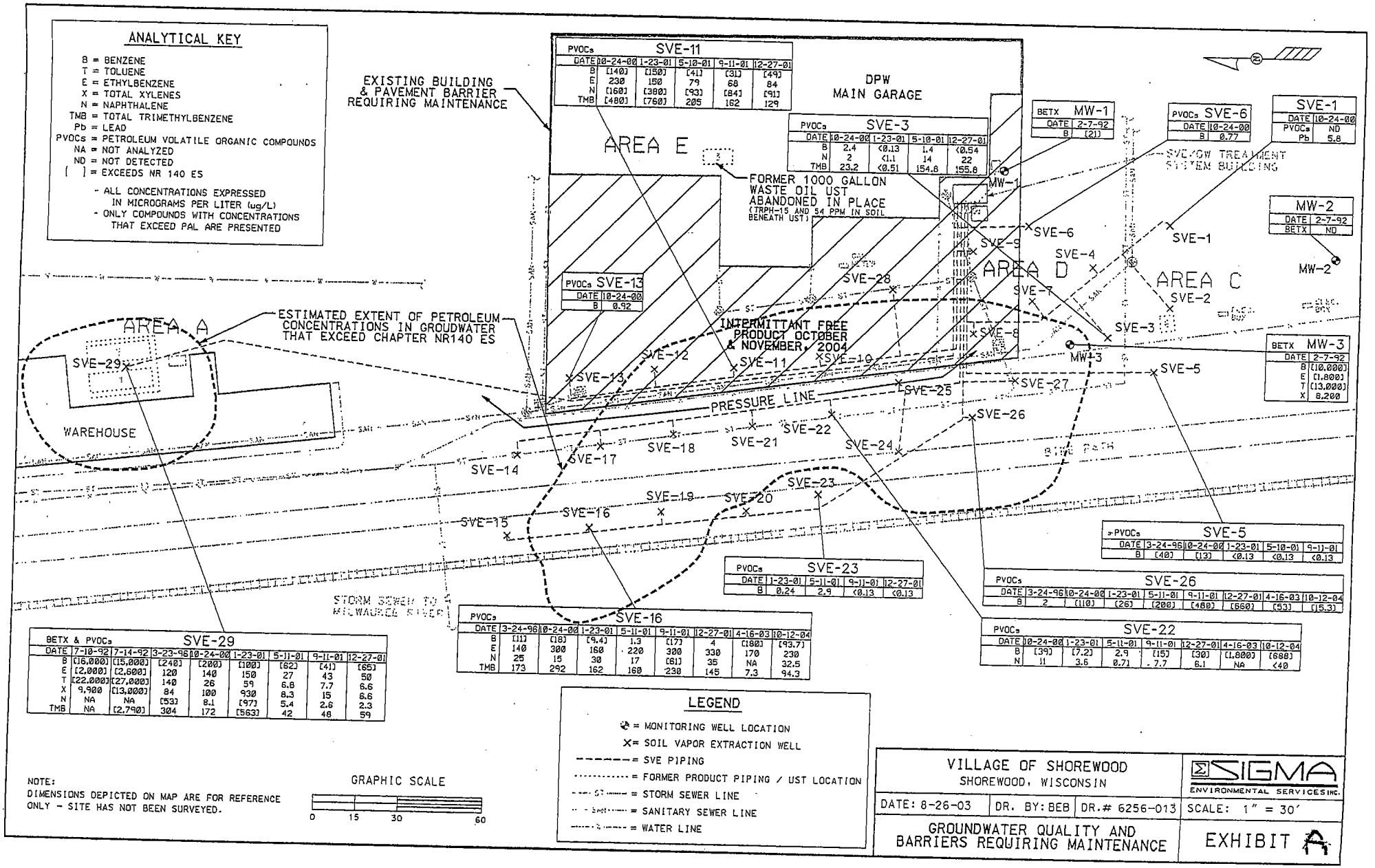

ANALYTICAL KEY
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
N = NAPHTHALENE
TMB = TOTAL TRIMETHYLBENZENE
Pb = LEAD
PVOCs = PETROLEUM VOLATILE ORGANIC COMPOUNDS
NA = NOT ANALYZED
ND = NOT DETECTED
[ ] = EXCEEDS NR 140 ES
- ALL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER (ug/L)
- ONLY COMPOUNDS WITH CONCENTRATIONS THAT EXCEED PAL ARE PRESENTED
EXISTING BUILDING & PAVEMENT BARRIER REQUIRING MAINTENANCE
DPW MAIN GARAGE
AREA E
FORMER 1000 GALLON WASTE OIL UST ABANDONED IN PLACE (TRPH-15 AND 54 PPM IN SOIL BENEATH UST)
AREA A
AREA D
AREA C
ESTIMATED EXTENT OF PETROLEUM CONCENTRATIONS IN GROUDWATER THAT EXCEED CHAPTER NR140 ES
INTERMITTANT FREE PRODUCT OCTOBER & NOVEMBER, 2004
PRESSURE LINE
WAREHOUSE
BIKE PATH
STORM SEWER TO MILWAUKEE RIVER
SVE/GW TREATMENT SYSTEM BUILDING
SVE-1
SVE-2
SVE-3
SVE-4
SVE-5
SVE-6
SVE-7
SVE-8
SVE-9
SVE-10
SVE-11
SVE-12
SVE-13
SVE-14
SVE-15
SVE-16
SVE-17
SVE-18
SVE-19
SVE-20
SVE-21
SVE-22
SVE-23
SVE-24
SVE-25
SVE-26
SVE-27
SVE-28
SVE-29
MW-1
MW-2
MW-3
PVOCs SVE-11
DATE 10-24-00 1-23-01 5-10-01 9-11-01 12-27-01
B [140] [150] [41] [3] [49]
E 230 150 79 68 84
N [160] [380] [93] [84] [91]
TMB [480] [760] 205 162 129
PVOCs SVE-3
DATE 10-24-00 1-23-01 5-10-01 12-27-01
B 2.4 <0.13 1.4 <0.54
N 2 <1.1 14 22
TMB 23.2 <0.51 154.6 155.6
PVOCs SVE-13
DATE 10-24-00
B 0.92
BETX MW-1
DATE 2-7-92
B [21]
PVOCs SVE-6
DATE 10-24-00
B 0.77
SVE-1
DATE 10-24-00
PVOCs ND
Pb 5.8
MW-2
DATE 2-7-92
BETX ND
BETX MW-3
DATE 2-7-92
B [10,000]
E [1,800]
T [13,000]
X 8,200
PVOCs SVE-5
DATE 3-24-96 10-24-00 1-23-01 5-10-01 9-11-01
B [40] [13] <0.13 <0.13 <0.13
PVOCs SVE-26
DATE 3-24-96 10-24-00 1-23-01 5-11-01 9-11-01 12-27-01 4-16-03 10-12-04
B 2 [110] [26] [200] [480] [660] [53] [5.3]
PVOCs SVE-22
DATE 10-24-00 1-23-01 5-11-01 9-11-01 12-27-01 4-16-03 10-12-04
B [39] [7.2] 2.9 [15] [30] [1,800] [688]
N 11 3.6 0.71 7.7 6.1 NA <40
PVOCs SVE-23
DATE 1-23-01 5-11-01 9-11-01 12-27-01
B 0.24 2.9 <0.13 <0.13
PVOCs SVE-16
DATE 3-24-96 10-24-00 1-23-01 5-11-01 9-11-01 12-27-01 4-16-03 10-12-04
B [11] [18] [9.4] 1.3 [17] 4 [180] [93.7]
E 140 300 160 220 300 330 170 230
N 25 15 30 17 [61] 35 NA 32.5
TMB 173 292 162 160 230 145 7.3 94.3
BETX & PVOCs SVE-29
DATE 7-10-92 7-14-92 3-23-96 10-24-00 1-23-01 5-11-01 9-11-01 12-27-01
B [16,000] [15,000] [240] [200] [100] [62] [41] [65]
E [2,000] [2,600] 120 140 150 27 43 50
T [22,000] [27,000] 140 26 59 6.8 7.7 6.6
X 9,900 [13,000] 84 100 930 8.3 15 6.6
N NA NA [53] 8.1 [97] 5.4 2.6 2.3
TMB NA [2,790] 304 172 [563] 42 48 59
LEGEND
= MONITORING WELL LOCATION
= SOIL VAPOR EXTRACTION WELL
= SVE PIPING
= FORMER PRODUCT PIPING / UST LOCATION
= STORM SEWER LINE
= SANITARY SEWER LINE
= WATER LINE
NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.
GRAPHIC SCALE
0 15 30 60
VILLAGE OF SHOREWOOD
SHOREWOOD, WISCONSIN
SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 8-26-03
DR. BY: BEB
DR.# 6256-013
SCALE: 1" = 30'
GROUNDWATER QUALITY AND BARRIERS REQUIRING MAINTENANCE
EXHIBIT A

Exhibit B
Barrier INSPECTION LOG

Inspection Date	Inspector	Condition of Cap	Recommendations	Have Recommendations from previous inspection been implemented?

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128
FAX 414-263-8606
Telephone 414-263-8500
TTY Access via relay - 711

February 20, 2006

Mr. James Bartnicki
Village of Shorewood Director of Public Works
3801 North Morris Boulevard
Shorewood, WI 53211-0016

Subject: Conditional Closure for the Village of Shorewood Public Works Yard, 38901 North Morris Boulevard, Shorewood, WI

FID: 241218230
BRRTS: 03-41-001238
PECFA: 53211-2219-01-A

Dear Mr. Bartnicki:

On February 16, 2006, the Wisconsin Department of Natural Resources reviewed your request for closure of the case described above. Additional information requested in the Department's letter dated July 8, 2005, was submitted by Sigma Environmental and received on February 6, 2006. The Department reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the Department has determined that the petroleum contamination from the underground storage tanks and associated piping located onsite appears to have been investigated and remediated to the extent practicable under site conditions. Your case meets the screening criteria of s. NR 746.07 or s. NR 746.08, Wis. Adm. Code, and the requirements of ch. NR 726, Wis. Adm. Code and will be closed if the following conditions are satisfied:

1. The groundwater monitoring wells and any soil vapor extraction system, air sparging wells, and/or other remediation system wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Admin. Code. Documentation of well abandonment must be submitted to this office on Form 3300-5B found at www.dnr.state.wi.us/org/water/dgw/gw within 60-days on receipt of this letter as required in s. NR 726.05(8)(a)1 and s. NR 141.25 Wis. Admin. Code. The Department requires the abandonment of these wells before issuing a final closure letter.

2. The Department has reviewed and approved the draft Deed Restriction and the Building and Pavement Barrier Maintenance Plan document for completeness, you will need to sign it if you own the property, or have the appropriate property owner sign it, and have it recorded by the Milwaukee County Register of Deeds. **Then you must submit a copy of the recorded document, with the recording information stamped on it, to me within 30 days of receiving the final, approved deed document from the Department.** Please be aware that if a deed restriction is recorded for the wrong property because of an inaccurate legal description or parcel identification number that you have provided, you will be responsible for recording corrected documents at the Register of Deeds Office. Deed Restrictions shall be signed and recorded for the

property within 90-days on receipt of conditional closure letters as specified in s. NR 726.05(8)(b), Wisconsin Administrative Code.

3. There is one correction to the Building and Pavement Barrier Maintenance Plan before you file the document as follows:

    - Under Annual Inspection, delete the last sentence, "A copy of the inspection log will be sent to the Wisconsin Department of Natural Resources ("WDNR") at least annually after every inspection, unless otherwise directed in the case closure letter." Copies do not have to be sent to the Department, but should be available for reviewing at later dates.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the GIS Registry. To review the site on the GIS Registry web page, visit http://maps.dnr.state.wi.us/brrts.

If this is a PECFA site, section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

If you have any questions or comments, please feel free to contact me at the above address or at (414) 263-8644. Please refer to the FID number at the top of this letter in any future correspondence. Future correspondence should be sent directly to the Remediation and Redevelopment Program Assistant Vicky Stovall (414-263-8688) at the above address.

Sincerely,

John J. Hnat, P. G.
Senior Hydrogeologist
Southeast Region
Remediation and Redevelopment

C: Monica Weiss, Commerce
Ross Creighton, Sigma Environmental
WDNR SER Files

J. DRUECKER SONS' CO. TO VILLAGE OF SHOREWOOD

WARRANTY DEED - By Corporation STATE OF WISCONSIN. Form No. 2 Made by Gilkerson Law Co., 1929 T. W.

This Indenture, Made this 19th day of April A. D., 1929, between J. DRUECKER SONS' COMPANY a Corporation organized and existing under and by virtue of the laws of the State of Wisconsin, located at Shorewood party of the first part, and VILLAGE OF SHOREWOOD, Milwaukee County, Wisconsin, a Municipal Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin party of the second part.

Witnesseth, That the said party of the first part, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained and sold, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its successors and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, a part of Parts of Lot numbered One (1) in the North One-half (N.½) of the North East One-quarter (N.E.¼) of Section numbered Nine (9), in Township numbered Seven (7) North, of Range numbered Twenty-two (22) East, bounded and described as follows:

Commencing at the North East corner of the North East Quarter (N.E.¼) of Section numbered Nine (9), in Township numbered Seven (7) North, of Range Twenty-two (22) East, thence South 87°10'00" West 1901.14 feet; thence South 27°20'38" East 1110.54 feet to the place of beginning of the land to be described; thence South 62°30'22" West 150.27 feet to the East line of Right of Way of the Chicago and Milwaukee Railway; thence South 34°48'05" East along the East line of said Right of Way 315.28 feet; thence North 87°11'55" East 122.25 feet; thence North 27°20'38" West 357.16 feet to the place of beginning, containing one acre, in the Village of Shorewood, Milwaukee County, Wisconsin.

Together with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises and their hereditaments and appurtenances.

To have and to hold the said premises as above described with the hereditaments and appurtenances unto the said party of the second part, and its successors and assigns FOREVER.

And the said J. DRUECKER SONS' COMPANY party of the first part, for itself and its successors, does covenant, grant, bargain and agree to and with the said party of the second part, and its successors and assigns, that at the time of the ensealing and delivery of these presents it is well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever.

and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, it will forever WARRANT and DEFEND.

In Witness Whereof, the said J. DRUECKER SONS' COMPANY party of the first part, has caused these presents to be signed by JOHN P. DRUECKER its President, and countersigned by LOUIS W. SANDERS its Secretary, at Shorewood Wisconsin, and its corporate seal to be hereunto affixed this 19th day of April A. D., 1929.

Signed and Sealed in Presence of

Lillian Jaeger

Maurice A. McCabe

Imp. Corporate Seal

J. DRUECKER SONS' COMPANY Corporate Name.

John P. Druecker President.

Louis W. Sanders Secretary.

State of Wisconsin, } ss.
Milwaukee County. }

Personally came before me, this 19th day of April A. D., 1929. JOHN P. DRUECKER President, and LOUIS W. SANDERS Secretary of the above named Corporation, to me known to be the persons who executed the foregoing instrument and to me known to be such President and Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Received for Record this 15 day of June A. D. 19 29 at 10:40 o'clock A.M.

Phillip C. Westfahl Register.

Imp. Notarial Seal

Notary Public County, Wis.

My Commission expires A. D., 19

No. 1709129

HARDER-HUGHES REALTY CO. TO VILLAGE OF SHOREWOOD

WARRANTY DEED - By Corporation STATE OF WISCONSIN, Form No. 3

This Indenture, Made this 6th day of August, A. D., 1928, between Harder-Hughes Realty Co. a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Shorewood, Wisconsin, party of the first part, and Village of Shorewood, a municipal corporation, located in Milwaukee County, Wis, party of the second part.

Witnesseth, That the said party of the first part, for and in consideration of the sum of One dollar and other good and valuable considerations to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its successors and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

Lot numbered Twenty-one (21) in Block numbered Three (3), Harder-Hughes Subdivision of High School Terrace, being a subdivision in the Northeast One-quarter (N.E.¼) of Section Nine (9), Township Seven (7) North of Range Twenty-two (22) East, in the Village of Shorewood.

Together with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

To Have and to Hold the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to its successors and assigns FOREVER.

And the Said Harder-Hughes Realty Co. party of the first part, for itself and its successors, does covenant, grant, bargain and agree to and with the said party of the second part, its successors and assigns, that at the time of the ensealing and delivery of these presents it is well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever.

and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, it will forever WARRANT and DEFEND.

In Witness Wherreof, the said Harder-Hughes Realty Co. party of the first part, has caused these presents to be signed by Charles L. Harder its President, and countersigned by Orrin R. Hughes its Secretary, at Shorewood, Wisconsin, and its corporate seal to be hereunto affixed, this 6th day of August, A. D. 1928.

Signed and Sealed in Presence of
C. E. Hammersley
Theodore B. Olson

Imp. Corporate Seal

Harder-Hughes Realty Co. Corporate Name
Charles L. Harder President
COUNTERSIGNED:
Orrin R. Hughes Secretary

State of Wisconsin, Milwaukee County, ss.

Personally came before me, this 6th day of August, A. D. 1928, Charles L. Harder President, and Orrin R. Hughes Secretary of the above named Corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Imp. Notarial Seal

Charles E. Hammersley
Notary Public, Milwaukee County, Wis.
My Commission expires August 10, A. D. 1930

Received for Record this 21 day of Jan. A. D. 1932 at 9:15 o'clock A. M.
Phillip C. Westphal Register. No. 1286806

BURKE & KAITKUS, INC. TO NELLIE BETEHIA

WARRANTY DEED - By Corporation STATE OF WISCONSIN, Form No. 3

This Indenture, Made this 20th day of January, A. D. 1932, between Burke & Kaitkus, Inc. a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Milwaukee, Wisconsin, party of the first part, and Nellie Betehia, party of the second part.

Witnesseth, That the said party of the first part, for and in consideration of the sum of One ($1.00) Dollar and other good and valuable considerations to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, her heirs and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

A piece of land in the Southeast Quarter (SE¼) of Section numbered Thirty-one (31) in Township numbered Seven (7) North, of Range numbered Twenty-one (21) East, in the Town of Wauwatosa, described as follows: Commencing at a point which is 45 feet East of and 1919.32 feet North of the Southwest corner of said Quarter Section; thence East 126.17 feet; thence South 80 feet; thence West 126.23 feet; thence North 80 feet to the place of beginning, the same being a fraction of an acre and also known as Lots 2 and 3 in Block 4 in the tentative approved plat of Greenfield Gardens Subdivision.

Together, with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said party of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

To Have and to Hold the said premises as above described, with the hereditaments and appurtenances, unto the said party of the second part, and to her heirs and assigns FOREVER.

And the Said Burke & Kaitkus, Inc. party of the first part, for itself and its successors, does covenant, grant, bargain and agree to and with the said party of the second part, her heirs and assigns, that at the time of the ensealing and delivery of these presents it is well seized of the premises above described, as of a good, sure, perfect, absolute and indefeasible estate of inheritance in the law, in fee simple, and that the same are free and clear from all incumbrances whatever, except existing mortgage indebtedness now on record in the amount of about $5,000.00; also all outstanding taxes and any and all other liabilities against the above described property.

and that the above bargained premises in the quiet and peaceable possession of the said party of the second part, her heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof, it will forever WARRANT and DEFEND.

In Witness Wherreof, the said Burke & Kaitkus, Inc. party of the first part, has caused these presents to be signed by David S. Burke its President, and countersigned by A. A. Kaitkus its Secretary, at Milwaukee, Wisconsin, and its corporate seal to be hereunto affixed, this 20th day of January, A. D. 1932.

Signed and Sealed in Presence of
Sydney N. Leshin
Norman B. Silver

Imp. Corporate Seal

BURKE & KAITKUS, INC. Corporate Name
David S. Burke President
COUNTERSIGNED:
A. A. Kaitkus Secretary

State of Wisconsin,

THIS INDENTURE, Made this 21st day of August A.D., 1946, between Edward E. Hess and Hilda Hess, his wife, parties of the first part, and the Village of Shorewood of Milwaukee County, Wisconsin, a Municipal Corporation, party of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Four Thousand Nine Hundred Seventy-five Dollars ($4,975.00) to them in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released, aliened, conveyed and confirmed, and by these presents does give, grant, bargain, sell, remise, release, alien, convey and confirm unto the said party of the second part, its heirs and assigns forever, the following described real estate, situated in the County of Milwaukee and State of Wisconsin, to-wit:

That part of the N.E.¼ of Section 9, T. 7, N., R. 22 E. in the Village of Shorewood, commencing at the northeast corner of said Section 9, thence south 89° 12' 00" west along the north line of Section 9, 1801.14 feet; thence south 27° 20' 38" east along the westerly line of Harder Hughes Subdivision of High School Terrace 600.22 feet to the northwest corner of Lot 6 Block 3 Harder Hughes Subdivision of High School Terrace the place of beginning of the land to be described: Thence south 62° 39' 22" west (at right angles to westerly line of Harder Hughes Subdivision of High School Terrace) 216.42 feet to the easterly line of the Chicago Northwestern Railway right-of-way; thence south 34° 50' east along the easterly right-of-way line of said railway; 252.11 feet to the north line of the present village property; thence north 62° 39' 22" east along the north line of village property 143.58 feet to a point; thence north 27° 20' 38" west along a line which is 40 feet westerly of and parallel to the westerly line of Harder Hughes Subdivision of High School Terrace 222.80 feet to a point; thence north 62° 39' 22" east 40 feet to the westerly line of Harder Hughes Subdivision of High School Terrace; thence north 27° 20' 38" west along the westerly line of Harder Hughes Subdivision of High School Terrace 27.16 feet to the place of beginning; containing 0.943 acre.

Subject to the following easements, to-wit:

(a) A 15 foot easement, in favor of John P. Druecker, his heirs and assigns for the purpose of gaining access to an egress from, by vehicle and by foot, to the parcel of land owned by John P. Druecker his heirs, assigns, and invitees, which adjoins and is contiguous to the parcel of land herein conveyed and which easement is described as follows:

Commencing at a point 40 feet S. 62° 39' 22" W. of the northwest corner of lot 6 block 3 Harder Hughes Subdivision of High School Terrace thence S. 27° 20' 38" E. along the westerly line and westerly line extended of John P. Druecker property to a point 15 feet more or less south of the southerly end of garage and dwelling on the northerly end of the Druecker property, thence S. 62° 39' 22" W 15 feet, thence N. 27° 20' 38" W. 104.16 feet, thence N. 62° 39' 22" E. 15 feet to the place of beginning.

(b) Easement in favor of Chicago and Northwestern Railway Company to a triangular parcel of land for the right to construct, maintain and operate thereon a railroad track which easement is described as follows:

Commencing at a point 204.01 feet S. 62° 39' 22" W. of the northwest corner of lot 6 block 3 Harder Hughes Subdivision of High School Terrace Subdivision thence S. 24° 55' 47" E. 71.56 feet to the easterly right of way line of the Chicago and Northwestern Railway, thence N. 34° 50' W. along the easterly line of said right of way 72.11 feet, thence N. 62° 39' 22" E. 12.41 feet to the place of beginning.

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging or in any wise appertaining; and all the estate, right, title, interest, claim or demand whatsoever, of the said parties of the first part, either in law or equity, either in possession or expectancy of, in and to the above bargained premises, and their hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises as above described with the hereditaments and appurtenances, unto the said party of the second part, and to its heirs and assigns FOREVER.

AND THE SAID Edward E. Hess and Hilda Hess, his wife,

for their heirs, executors and administrators do covenant,

grant, bargain and agree to and with the said party of the

second part, its heirs and assigns, that at the time of the

ensealing and delivery of these presents they were well seized

of the premises above described, as of a good, sure, perfect,

absolute and indefeasible estate of inheritance in the law, in

fee simple, and that the same are free and clear from all in-

cumbrances whatever, and that the above bargained premises in

the quiet and peaceable possession of the said party of the

second part, its heirs and assigns, against all and every

person or persons lawfully claiming the whole or any part

thereof, they will forever WARRANT AND DEFEND.

IN WITNESS WHEREOF, the said parties of the first

part have hereunto set their hands and seals this 31st day

of August, A.D., 1946.

Signed and Sealed in Presence of

Edward E. Hess (SEAL)

Edward E. Hess

Elmer W. Rohler

Hilda Hess (SEAL)

Hilda Hess

Elmer W. Rohler (SEAL)

STATE OF WISCONSIN)
) ss.
MILWAUKEE COUNTY)

Personally came before me, this 31st day of August

A.D., 1946, the above named Edward E. Hess and Hilda Hess, his

wife, to me known to be the persons who executed the foregoing

instrument and acknowledged the same.

Elmer W. Rohler

Elmer W. Rohler

Notary Public, Milwaukee County,

Wisconsin.

My Commission expires Nov. 24th A.D.,

Received for record the 1st day of September A.D. 1946 at 8:45 A.M. and recorded in Volume 2967 of Records on page 224

REGISTER'S OFFICE, Milwaukee County, Wis.

2646801

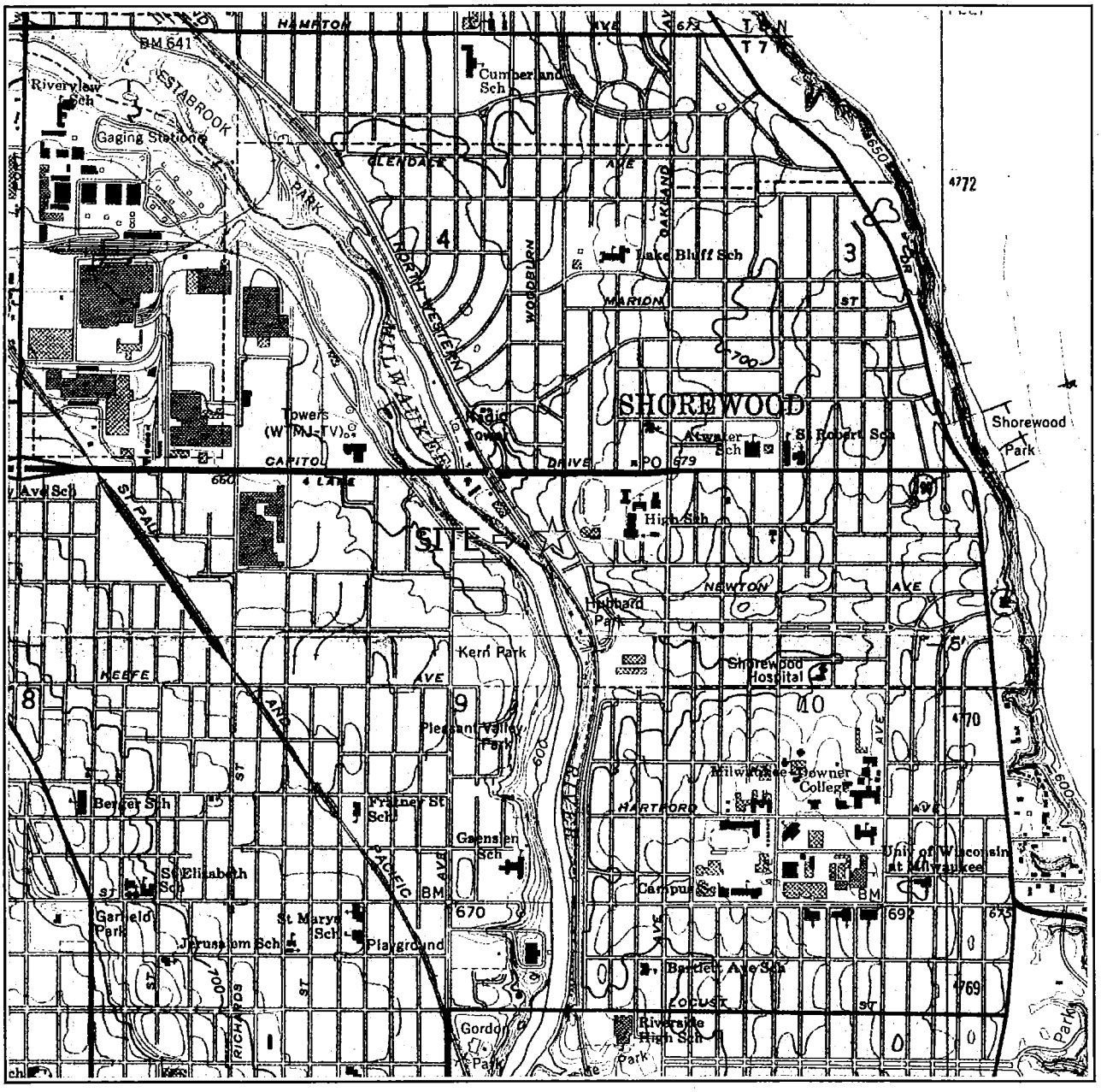
Village of Shorewood, the responsible party for the property located at, 3801 N. Morris Blvd., Shorewood, Wisconsin, states that the legal description provided to the Wisconsin Department of Natural Resources (and attached to this statement) for case file reference 03-41-001238 is complete and accurate to the best of our knowledge.

James J. Zgrodl

Signature of Representative for Responsible Party:

December 20, 2002

Date:



NW ¼ of the NE ¼ of Sec. 9, T7N, R22E Adapted from U.S.G.S. 7.5 minute series, Milwaukee, Wisconsin, quadrangle dated 1958 (photorevised 1971).

SCALE 1:24000

1 0 ½ 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

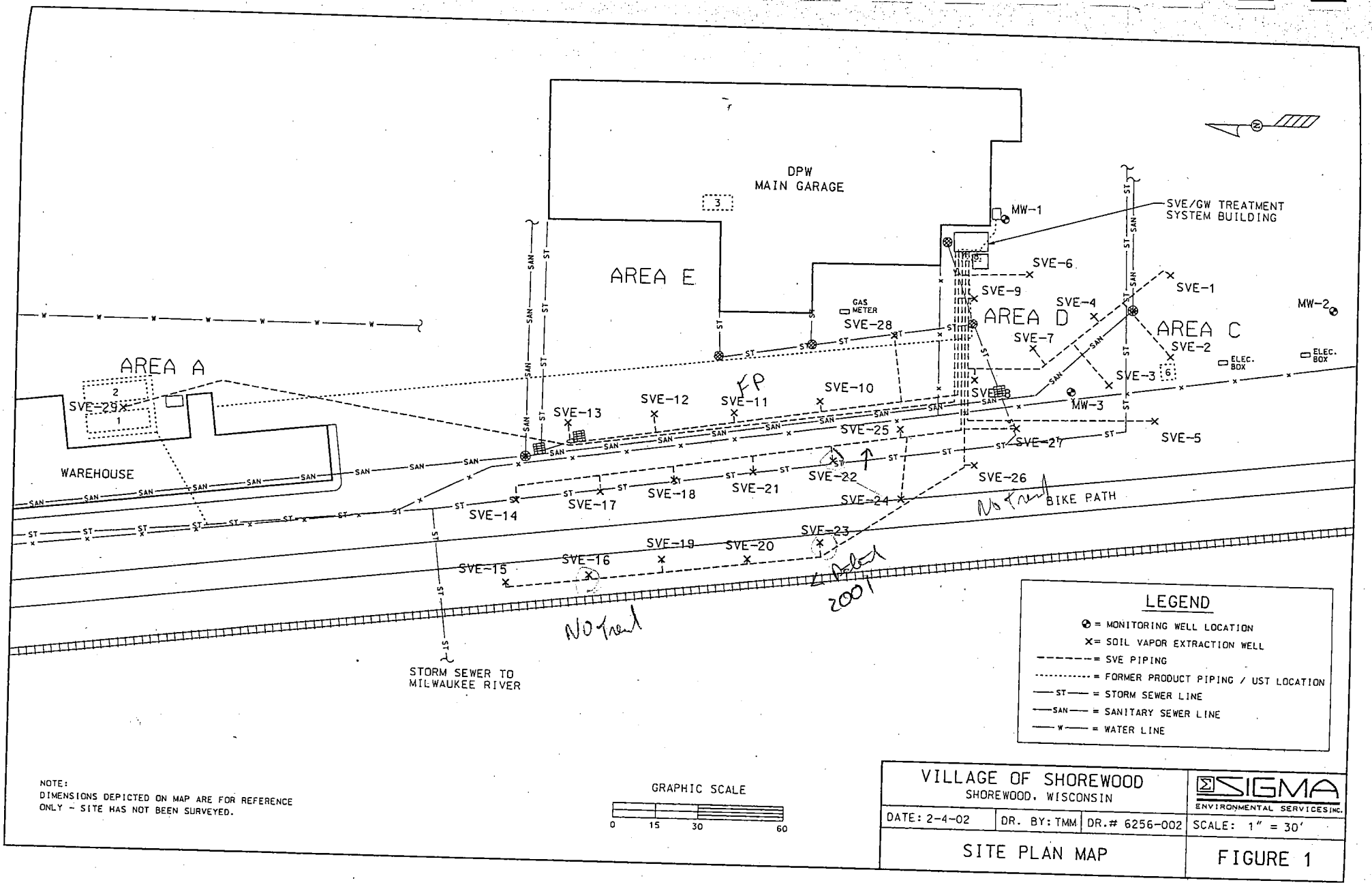
CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

N

Figure 1. Site Location Map
Village of Shorewood, Public Works Yard
3801 N. Morris Blvd., Shorewood, Wisconsin

SIGMA ENVIRONMENTAL SERVICES INC.

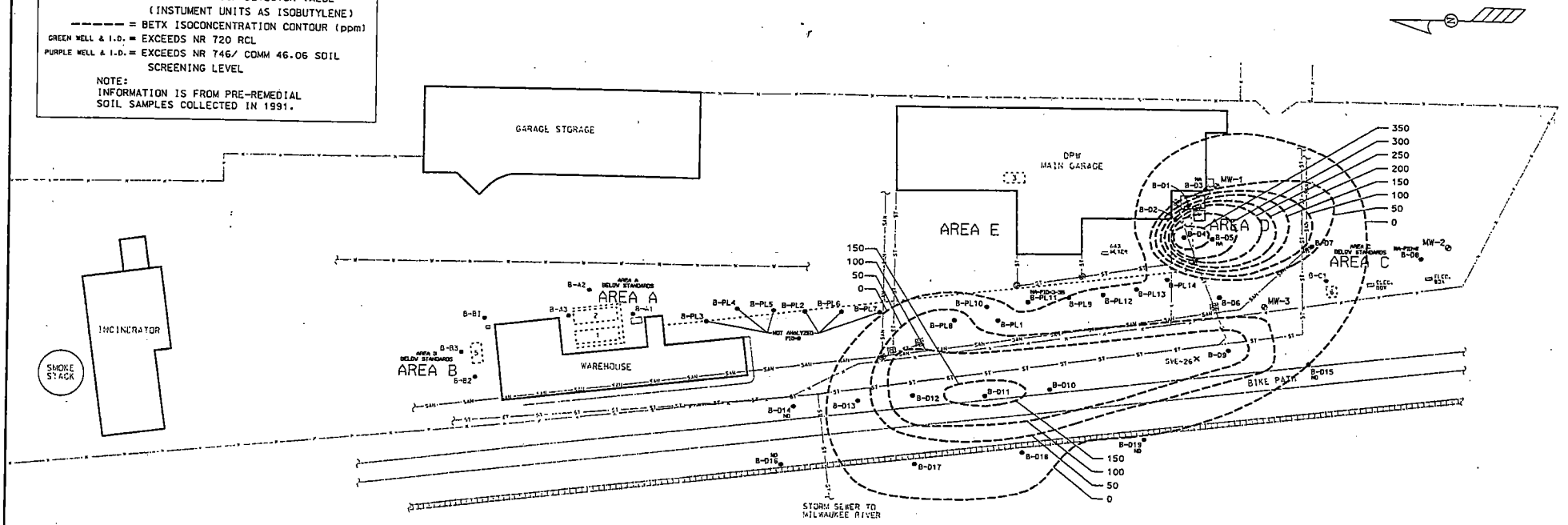
6256fig1.ppt


DPW
MAIN GARAGE
3
AREA E
AREA A
AREA D
AREA C
MW-1
MW-2
MW-3
SVE/GW TREATMENT
SYSTEM BUILDING
GAS
METER
ELEC.
BOX
ELEC.
BOX
SVE-1
SVE-2
SVE-3
SVE-4
SVE-5
SVE-6
SVE-7
SVE-9
SVE-10
SVE-11
SVE-12
SVE-13
SVE-14
SVE-15
SVE-16
SVE-17
SVE-18
SVE-19
SVE-20
SVE-21
SVE-22
SVE-23
SVE-24
SVE-25
SVE-26
SVE-27
SVE-28
SVE-29
WAREHOUSE
BIKE PATH
STORM SEWER TO
MILWAUKEE RIVER
LEGEND
= MONITORING WELL LOCATION
= SOIL VAPOR EXTRACTION WELL
= SVE PIPING
= FORMER PRODUCT PIPING / UST LOCATION
= STORM SEWER LINE
= SANITARY SEWER LINE
= WATER LINE
GRAPHIC SCALE
0
15
30
60
NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE
ONLY - SITE HAS NOT BEEN SURVEYED.
VILLAGE OF SHOREWOOD
SHOREWOOD, WISCONSIN
SIGMA
ENVIRONMENTAL SERVICES, INC.
DATE: 2-4-02
DR. BY: TMM
DR.# 6256-002
SCALE: 1" = 30'
SITE PLAN MAP
FIGURE 1

SOIL QUALITY DATA

NA = NOT ANALYZED
ND = BETX & TPH NOT DETECTED
PID = PHOTOIONIZATION DETECTOR VALUE (INSTUMENT UNITS AS ISOBUTYLENE)
------ = BETX ISOCONCENTRATION CONTOUR (ppm)
GREEN WELL & I.D. = EXCEEDS NR 720 RCL
PURPLE WELL & I.D. = EXCEEDS NR 746/ COMM 46.06 SOIL SCREENING LEVEL

NOTE:
INFORMATION IS FROM PRE-REMEDIAL SOIL SAMPLES COLLECTED IN 1991.



LEGEND

- ● = SOIL BORING LOCATION (HYDRO-SEARCH)
- ⊘ = MONITORING WELL LOCATION
- × = SOIL VAPOR EXTRACTION WELL
- —x— = FENCE
- —ST— = STORM SEWER LINE
- —SAN— = SANITARY SEWER LINE
- —W— = WATER LINE
- ..... = FORMER PRODUCT PIPING / UST LOCATION

GRAPHIC SCALE

0 25 50 100

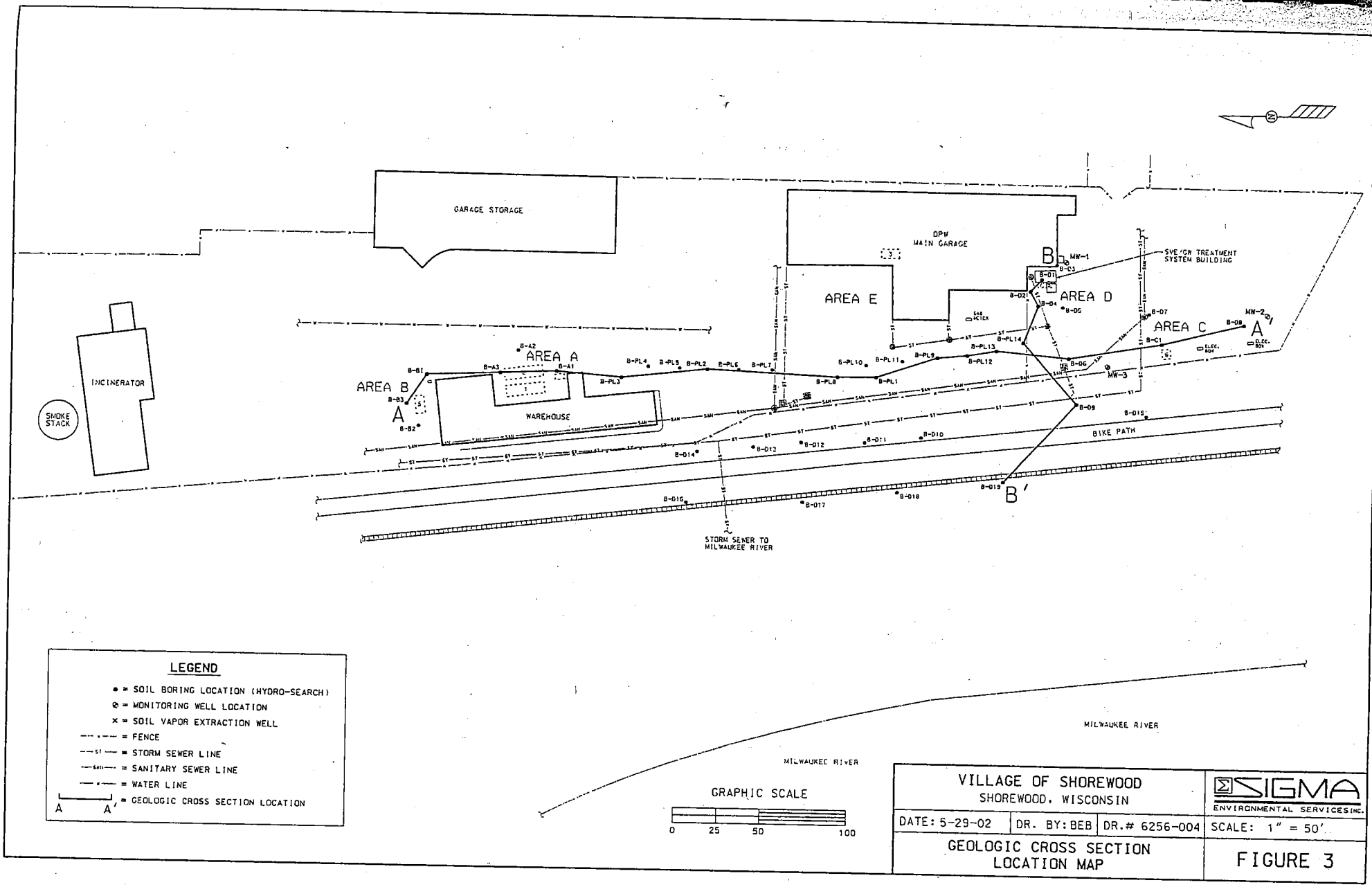
VILLAGE OF SHOREWOOD
SHOREWOOD, WISCONSIN

SIGMA ENVIRONMENTAL SERVICES INC.

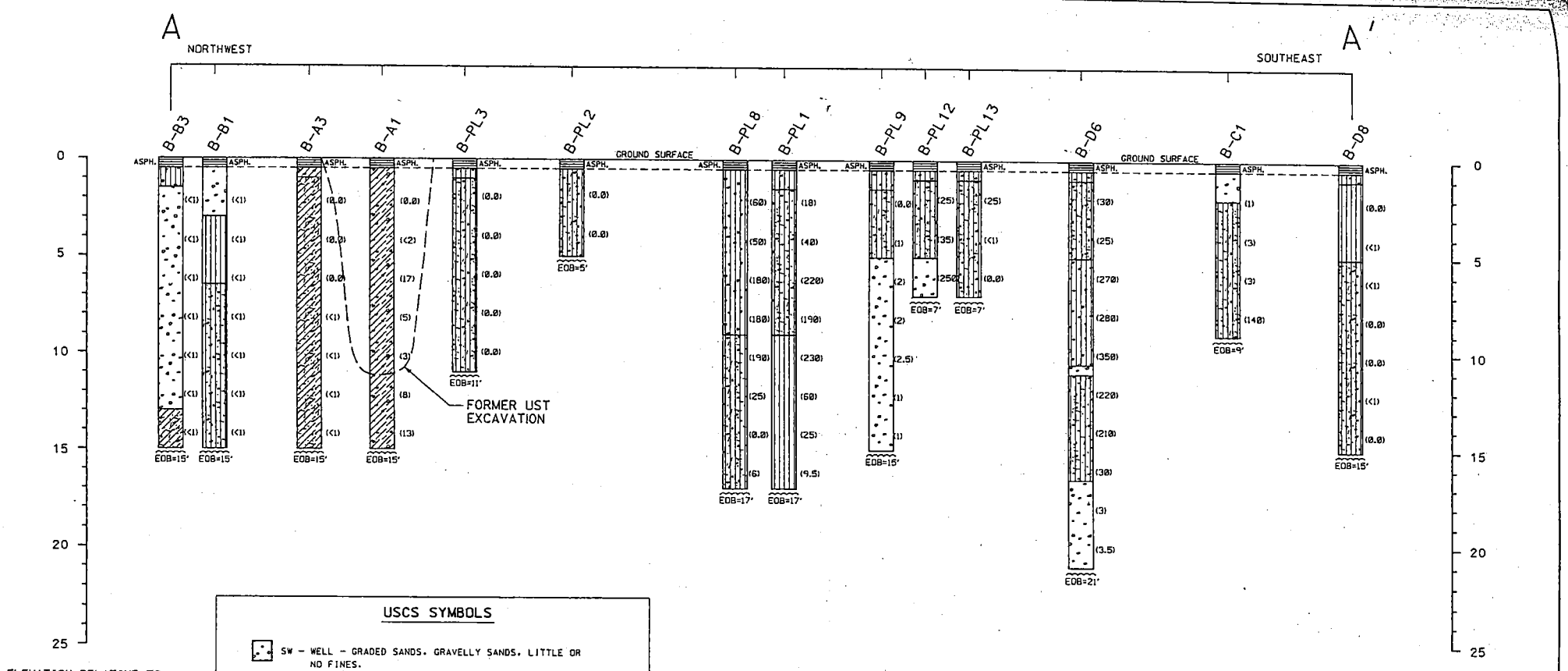
DATE: 10-21-02	DR. BY: BEB	DR.# 6256-008	SCALE: 1" = 50'

SOIL QUALITY MAP

FIGURE 6



VILLAGE OF SHOREWOOD SHOREWOOD, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 5-29-02	DR. BY: BEB	DR.# 6256-004	SCALE: 1" = 50'
GEOLOGIC CROSS SECTION LOCATION MAP			FIGURE 3

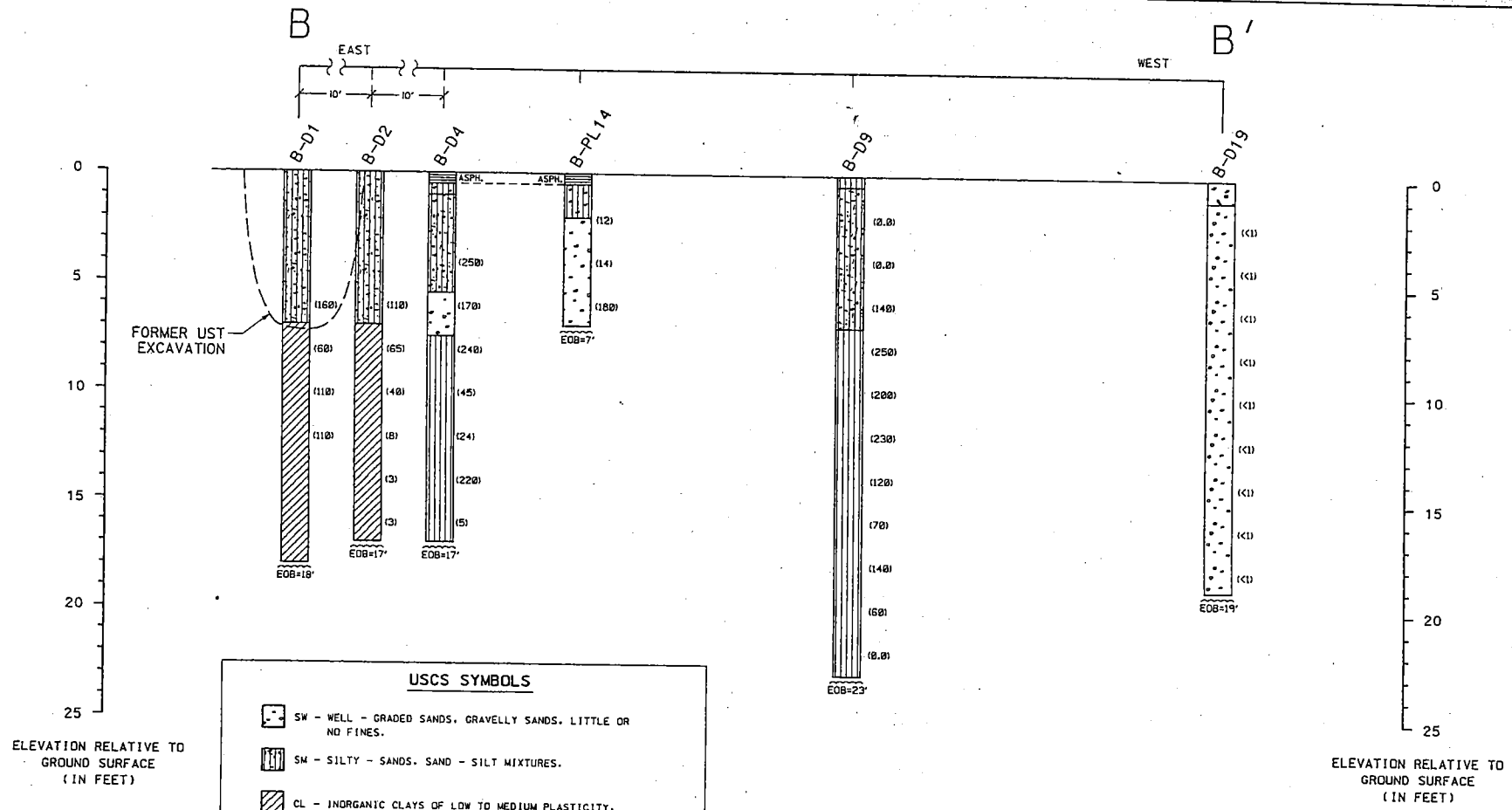


USCS SYMBOLS

- SW – WELL – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SM – SILTY – SANDS, SAND – SILT MIXTURES.
- SC – CLAYEY SANDS, SAND – CLAY MIXTURES
- ML – INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
- GM – SILTY GRAVELS, GRAVEL – SAND– SILT MIXTURES.
- GC – CLAYEY GRAVELS, GRAVEL – SAND – CLAY MIXTURES.

NOTES:
1. HORIZONTAL SCALE 1" = 40', VERTICAL SCALE 1" = 5'.
2. ( ) = PHOTOIONIZATION DETECTOR (PID) VALUE SHOWN IN INSTRUMENT UNITS AS ISOBUTYLENE

VILLAGE OF SHOREWOOD SHOREWOOD, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 5-30-02	DR. BY: BEB	DR.# 6256-005	SCALE: SEE NOTES
GEOLOGIC CROSS SECTION A – A'			FIGURE 4

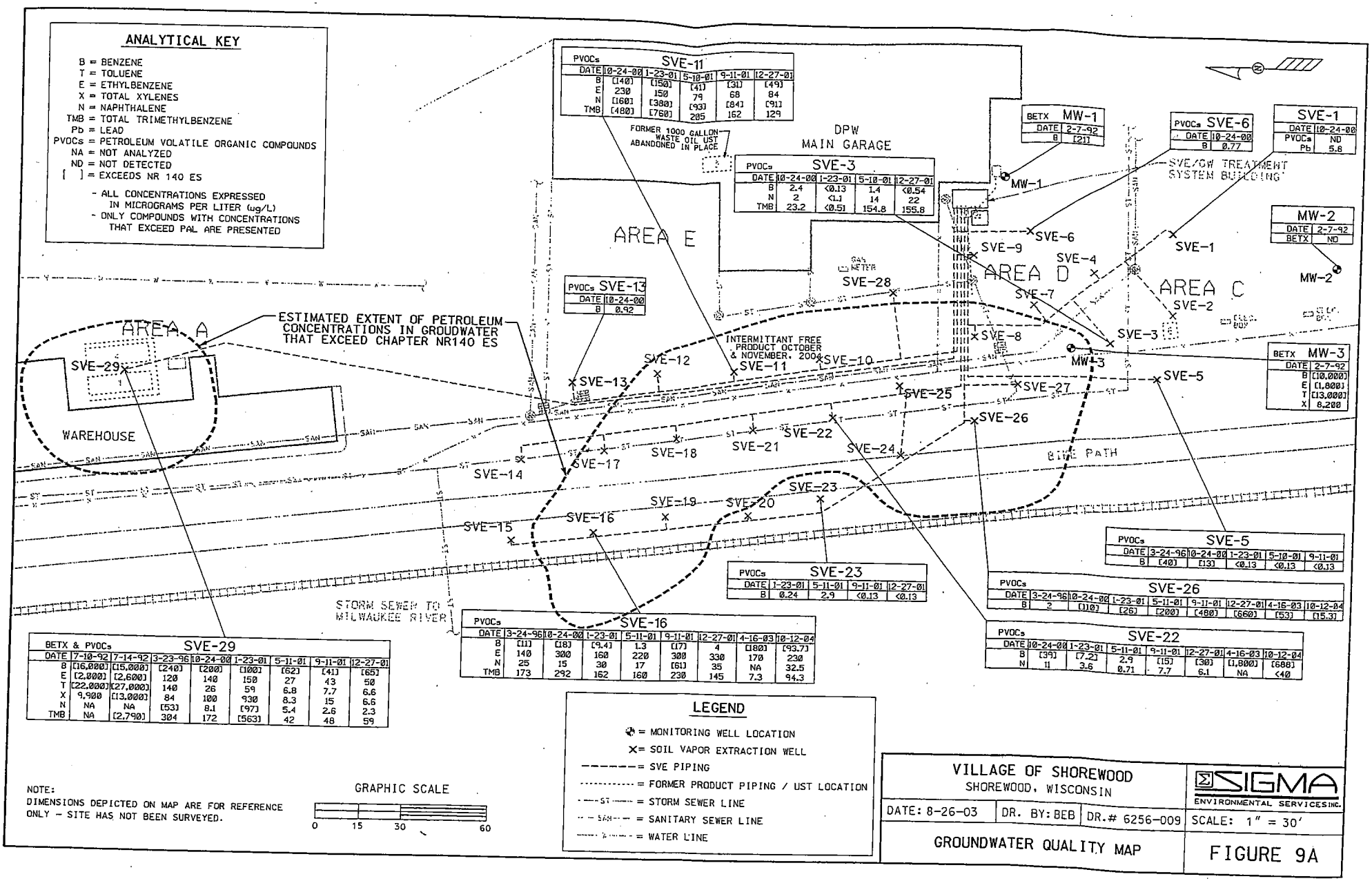


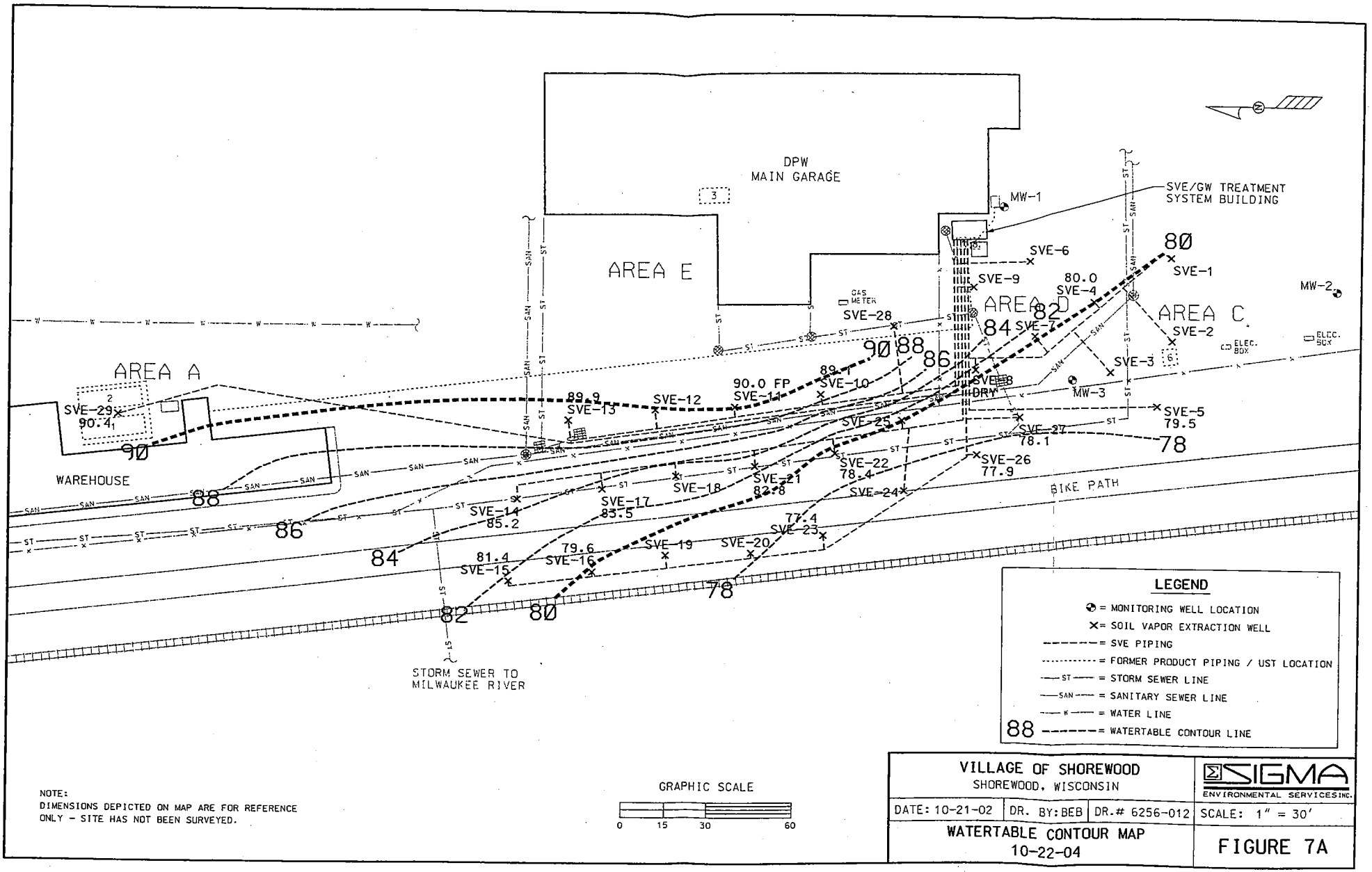
USCS SYMBOLS

- SW – WELL – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SM – SILTY – SANDS, SAND – SILT MIXTURES.
- CL – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SAND CLAYS, SILTY CLAYS, LEAN CLAYS.
- ML – INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
- GM – SILTY GRAVELS, GRAVEL – SAND– SILT MIXTURES.
- GW – WELL – GRADED GRAVELS, GRAVEL – SAND MIXTURES LITTLE OR NO FINES.

NOTES:
1. HORIZONTAL SCALE 1" = 20', VERTICAL SCALE 1" = 5'.
2. ( ) = PHOTOIONIZATION DETECTOR (PID) VALUE SHOWN IN INSTRUMENT UNITS AS ISOBUTYLENE

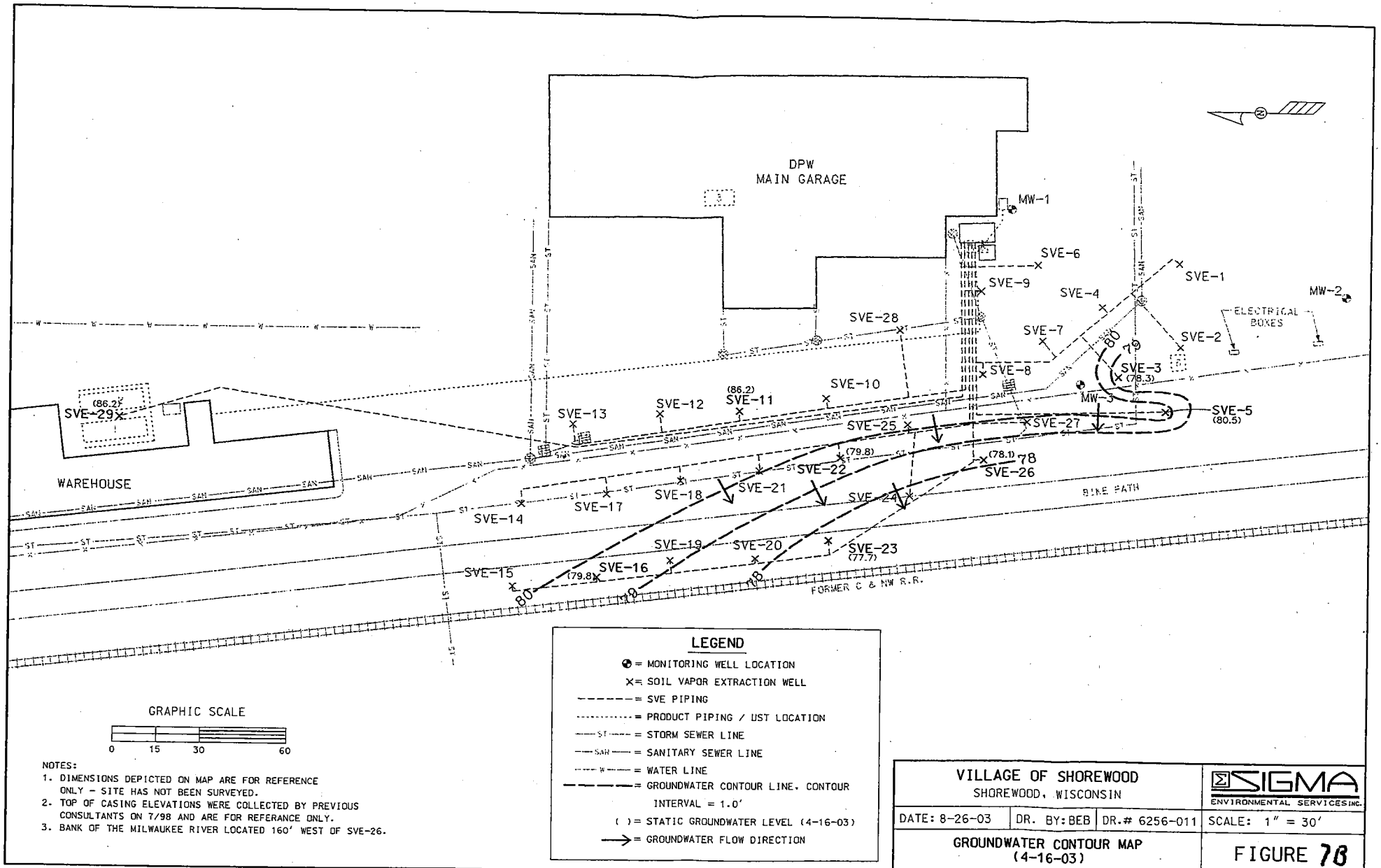
VILLAGE OF SHOREWOOD SHOREWOOD, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 5-30-02	DR. BY: BEB	DR.# 6256-006	SCALE: SEE NOTES
GEOLOGIC CROSS SECTION B – B'			FIGURE 5


ANALYTICAL KEY
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
N = NAPHTHALENE
TMB = TOTAL TRIMETHYLBENZENE
Pb = LEAD
PVOCs = PETROLEUM VOLATILE ORGANIC COMPOUNDS
NA = NOT ANALYZED
ND = NOT DETECTED
[ ] = EXCEEDS NR 140 ES
- ALL CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER (ug/L)
- ONLY COMPOUNDS WITH CONCENTRATIONS THAT EXCEED PAL ARE PRESENTED
SVE-11
PVOCs
DATE | 10-24-00 | 1-23-01 | 5-10-01 | 9-11-01 | 12-27-01
B | [140] | [150] | [41] | [31] | [49]
E | 230 | 150 | 79 | 68 | 84
N | [160] | [380] | [93] | [84] | [91]
TMB | [480] | [760] | 205 | 162 | 129
FORMER 1000 GALLON WASTE OIL UST ABANDONED IN PLACE
DPW MAIN GARAGE
SVE-3
PVOCs
DATE | 10-24-00 | 1-23-01 | 5-10-01 | 12-27-01
B | 2.4 | <0.13 | 1.4 | <0.54
N | 2 | <1.1 | 14 | 22
TMB | 23.2 | <0.51 | 154.8 | 155.8
BETX MW-1
DATE | 2-7-92
B | [21]
PVOCs SVE-6
DATE | 10-24-00
B | 0.77
SVE-1
DATE | 10-24-00
PVOCs | ND
Pb | 5.8
SVE/GW TREATMENT SYSTEM BUILDING
MW-2
DATE | 2-7-92
BETX | ND
AREA E
AREA D
AREA C
AREA A
SVE-13
DATE | 10-24-00
B | 0.92
ESTIMATED EXTENT OF PETROLEUM CONCENTRATIONS IN GROUDWATER THAT EXCEED CHAPTER NR140 ES
INTERMITTANT FREE PRODUCT OCTOBER & NOVEMBER, 2004
BETX MW-3
DATE | 2-7-92
B | [10,000]
E | [1,800]
T | [13,000]
X | 8,200
WAREHOUSE
BIKE PATH
STORM SEWER TO MILWAUKEE RIVER
SVE-29
BETX & PVOCs
DATE | 7-10-92 | 7-14-92 | 3-23-96 | 10-24-00 | 1-23-01 | 5-11-01 | 9-11-01 | 12-27-01
B | [16,000] | [15,000] | [240] | [200] | [100] | [62] | [41] | [65]
E | [2,800] | [2,600] | 120 | 140 | 150 | 27 | 43 | 50
T | [22,000] | [27,000] | 140 | 26 | 59 | 6.8 | 7.7 | 6.6
X | 9,900 | [13,000] | 84 | 100 | 930 | 8.3 | 15 | 6.6
N | NA | NA | [53] | 8.1 | [97] | 5.4 | 2.6 | 2.3
TMB | NA | [2,790] | 304 | 172 | [563] | 42 | 48 | 59
SVE-16
PVOCs
DATE | 3-24-96 | 10-24-00 | 1-23-01 | 5-11-01 | 9-11-01 | 12-27-01 | 4-16-03 | 10-12-04
B | [11] | [18] | [9.4] | 1.3 | [17] | 4 | [180] | [93.7]
E | 140 | 300 | 160 | 220 | 300 | 330 | 170 | 230
N | 25 | 15 | 30 | 17 | [61] | 35 | NA | 32.5
TMB | 173 | 292 | 162 | 160 | 230 | 145 | 7.3 | 94.3
SVE-23
PVOCs
DATE | 1-23-01 | 5-11-01 | 9-11-01 | 12-27-01
B | 0.24 | 2.9 | <0.13 | <0.13
SVE-5
PVOCs
DATE | 3-24-96 | 10-24-00 | 1-23-01 | 5-10-01 | 9-11-01
B | [40] | [13] | <0.13 | <0.13 | <0.13
SVE-26
PVOCs
DATE | 3-24-96 | 10-24-00 | 1-23-01 | 5-11-01 | 9-11-01 | 12-27-01 | 4-16-03 | 10-12-04
B | 2 | [110] | [26] | [200] | [480] | [660] | [53] | [15.3]
SVE-22
PVOCs
DATE | 10-24-00 | 1-23-01 | 5-11-01 | 9-11-01 | 12-27-01 | 4-16-03 | 10-12-04
B | [39] | [7.2] | 2.9 | [15] | [30] | [1,800] | [688]
N | 11 | 3.6 | 0.71 | 7.7 | 6.1 | NA | <40
LEGEND
= MONITORING WELL LOCATION
= SOIL VAPOR EXTRACTION WELL
= SVE PIPING
= FORMER PRODUCT PIPING / UST LOCATION
= STORM SEWER LINE
= SANITARY SEWER LINE
= WATER LINE
NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.
GRAPHIC SCALE
0 15 30 60
VILLAGE OF SHOREWOOD
SHOREWOOD, WISCONSIN
SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 8-26-03
DR. BY: BEB
DR.# 6256-009
SCALE: 1" = 30'
GROUNDWATER QUALITY MAP
FIGURE 9A



NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.

VILLAGE OF SHOREWOOD SHOREWOOD, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 10-21-02	DR. BY: BEB	DR.# 6256-012	SCALE: 1" = 30'
WATERTABLE CONTOUR MAP 10-22-04			FIGURE 7A



LEGEND

- = MONITORING WELL LOCATION
- = SOIL VAPOR EXTRACTION WELL
- = SVE PIPING
- = PRODUCT PIPING / UST LOCATION
- = STORM SEWER LINE
- = SANITARY SEWER LINE
- = WATER LINE
- = GROUNDWATER CONTOUR LINE, CONTOUR INTERVAL = 1.0'
- ( ) = STATIC GROUNDWATER LEVEL (4-16-03)
- = GROUNDWATER FLOW DIRECTION

NOTES:
1. DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE HAS NOT BEEN SURVEYED.
2. TOP OF CASING ELEVATIONS WERE COLLECTED BY PREVIOUS CONSULTANTS ON 7/98 AND ARE FOR REFERANCE ONLY.
3. BANK OF THE MILWAUKEE RIVER LOCATED 160' WEST OF SVE-26.

VILLAGE OF SHOREWOOD SHOREWOOD, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 8-26-03	DR. BY: BEB	DR.# 6256-011	SCALE: 1" = 30'
GROUNDWATER CONTOUR MAP (4-16-03)			FIGURE 7B

TABLE 2
SOIL ANALYTICAL RESULTS
(Pre-Remediation)
SHOREWOOD PUBLIC WORKS YARD
Project #6256

Sample ID	Area A			Area B			Area C	Soil Standards	
	B-A1	B-A2	B-A3	B-B1	B-B2	B-B3	B-C1	NR 720	COMM 46.06/NR 746
Sample Interval (ft)	7 - 9'	7 - 9'	7 - 9'	7 - 9'	7 - 9'	7 - 9'	5 - 7'	Generic RCL	Soil Screening
Date Collected	04/04/1991	04/05/1991	04/05/1991	04/08/1991	04/08/1991	04/08/1991	04/08/1991		Level
Parameter									
PID	5 - 7' 17	0	0	<1	3 - 5' 80	<1	140	NE	NE
Benzene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0055	8.5
Ethylbenzene	0.16	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	2.9	4.6
Toluene	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	1.5	38
Xylenes	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	0.13	4.1	42
Total BETX *	0.16	0.0	0.0	0.0	0.77	0.0	0.13	NE	NE
Total Petroleum Hydrocarbons	<5 **	<5 **	<5 **	<5 **	7 **	<5 **	<5 **	NE	NE
Lead	11	15	11	7	10	5	<3	50/500 (1)	NE
Flashpoint	>140	>140	>140	>140	>140	>140	>140	NE	NE
Free Liquids	None	None	None	None	None	None	None	NE	NE
pH	7.43	7.73	7.81	7.85	9.39	7.84	7.83	NE	NE
% Total Solids	84.5	82.4	85.1	82.5	89.8	84.7	89.4	NE	NE

KEY:

All values in parts per million (ppm)

Information is from "Remedial Investigation for Underground Storage Tanks, Results & Recommendations Report," HSI, July 1991

BETX = Benzene, Ethylbenzene, Toluene, Xylene

NE = Not Established

PID = Photoionization Detector Reading (instrument unit readings relative to 100 ppm isobutylene calibration gas)

RCL = Residual Contaminant Level for protection of groundwater pathway

(1) = Non-Industrial RCL = 50 mg/kg, Industrial RCL = 500 mg/kg

< = Not Detected above indicated concentration

* = Sum of Concentrations

** = Concentration based on a gasoline standard using the State of California Method

*** = Concentration based on a fuel oil standard using the State of California Method

BOLD = Detected concentration exceeds NR 720 Generic RCL for protection groundwater pathway

BOLD = Detected concentation exceeds COMM 46.06 / NR 746 Soil Screening Levels

11/25/2002

TABLE 2
SOIL ANALYTICAL RESULTS
(Pre-Remediation)
SHOREWOOD PUBLIC WORKS YARD
Project #6256

Sample ID	Area D																	Soil Standards	
Sample Interval (ft)	B-D1	B-D2	B-D4	B-D6	B-D7	B-D9	B-D10	B-D11	B-D12	B-D13	B-D14	B-D15	B-D16	B-D17	B-D18	B-D19		NR 720	COMM 46.06/NR 746
Date Collected	5 - 7'	5 - 7'	5 - 7'	7 - 9'	7 - 9'	7 - 9'	9 - 11'	7 - 9'	9 - 12'	9 - 11'	9 - 11'	7 - 9'	7 - 9'	9 - 11'	9 - 11'	9 - 11'		Generic RCL	Soil Screening
Parameter	04/03/1991	04/03/1991	04/03/1991	04/04/1991	04/04/1991	04/09/1991	04/16/1991	04/16/1991	04/16/1991	04/16/1991	04/17/1991	04/17/1991	04/17/1991	04/17/1991	04/17/1991	04/18/1991			Level
PID	160	110	3 - 5' 250	9 - 11' 350	3 - 5' 220	250	300	300	250	250	0	2	0	220	250	<1		NE	NE
Benzene	**0.9**	**2.6**	**3.0**	**0.67**	**1.3**	**6.1**	**5.5**	**7.2**	**16**	**0.87**	<0.05	<0.05	<0.05	**1.5**	<0.05	<0.05		0.0055	8.5
Ethylbenzene	**5.9**	**18**	**110**	**4.8**	**19**	**13**	**18**	**13**	**15**	1.2	<0.05	<0.05	<0.05	**3.4**	0.58	<0.05		2.9	4.6
Toluene	**4.9**	**7.0**	**17**	**13**	1.4	**25**	**18**	**23**	**23**	0.61	<0.05	<0.05	<0.05	**7.1**	0.20	<0.05		1.5	38
Xylenes	**21**	**66**	**290**	**18**	**40**	**77**	**91**	**130**	**60**	**8.7**	<0.05	<0.05	<0.05	**15.3**	**4.2**	<0.05		4.1	42
Total BETX *	32.7	93.6	420	36.47	61.7	121.1	132.5	173.2	114	11.38	0	0	0	27.3	4.98	0		NE	NE
Total Petroleum Hydrocarbons	320 **	1,000 **	4,400 **	230 **	760 **	290 **	740 **	930 **	440 **	56 **	<5 **	<5 **	<5 **	98 **	250 ***	<5 **		NE	NE
Lead	43	18	27	9	10	16	8	8	22	6	3	<3	6	6	3	4		50/500 (1)	NE
Flashpoint	>140	>140	104	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140	>140		NE	NE
Free Liquids	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None		NE	NE
pH	7.59	7.52	7.63	8.26	7.77	7.76	7.80	7.77	7.84	7.82	7.85	7.96	7.70	7.82	7.80	7.96		NE	NE
% Total Solids	86.9	87.0	84.7	88.7	91.1	91.9	88.2	89.4	86.8	93.4	88.7	90.6	86.4	89.9	85.4	90.6		NE	NE

KEY:

All values in parts per million (ppm)
Information is from "Remedial Investigation for Underground Storage Tanks, Results & Recommendations Report," HSI, July 1991

BETX = Benzene, Ethylbenzene, Toluene, Xylene
NE = Not Established
PID = Photoionization Detector Reading (instrument unit readings relative to 100 ppm isobutylene calibration gas)
RCL = Residual Contaminant Level for protection of groundwater pathway
(1) = Non-Industrial RCL = 50 mg/kg, Industrial RCL = 500 mg/kg
< = Not Detected above indicated concentration
* = Sum of Concentrations
** = Concentration based on a gasoline standard using the State of California Method
*** = Concentration based on a fuel oil standard using the State of California Method

BOLD = Detected concentration exceeds NR 720 Generic RCL for protection groundwater pathway
BOLD = Detected concentation exceeds COMM 46.06 / NR 746 Soil Screening Levels

TABLE 2
SOIL ANALYTICAL RESULTS
(Pre-Remediation)
SHOREWOOD PUBLIC WORKS YARD
Project #6256

	Area - Pressure Line							Soil Standards	
Sample ID	B-PL1	B-PL8	B-PL9	B-PL10	B-PL12	B-PL13	B-PL14	NR 720	COMM 46.06/NR 746
Sample Interval (ft)	7 - 9'	9 - 11'	7 - 9'	3 - 5'	5 - 7'	3 - 5'	5 - 7'	Generic RCL	Soil Screening
Date Collected	04/04/1991	04/05/1991	04/05/1991	04/08/1991	04/08/1991	04/08/1991	04/08/1991		Level
Parameter									
PID	9 - 11' 230	180	9 - 11' 2.5	5 - 7' 17	250	1 - 3' 25	180	NE	NE
Benzene	**0.33**	**5.5**	**0.05**	**0.11**	**0.09**	**0.06**	**0.10**	0.0055	8.5
Ethylbenzene	**4.1**	**12**	<0.05	<0.05	0.99	<0.05	0.91	2.9	4.6
Toluene	**8.2**	**11**	0.06	<0.05	0.29	<0.05	0.10	1.5	38
Xylenes	**17**	**51**	0.07	<0.05	1.7	<0.05	0.64	4.1	42
Total BETX *	29.63	79.5	0.18	0.11	3.07	0.06	1.75	NE	NE
Total Petroleum Hydrocarbons	280 **	200 **	<5 **	<5 **	120 **	<5 **	300 **	NE	NE
Lead	7	5	7	9	**67**	12	6	50/500 (1)	NE
Flashpoint	89.6	>140	>140	>140	>140	>140	>140	NE	NE
Free Liquids	None	None	None	None	None	None	None	NE	NE
pH	7.96	7.76	7.87	7.53	7.75	7.71	7.72	NE	NE
% Total Solids	90.2	84.5	88.1	87.1	84.3	82.9	85.0	NE	NE

KEY:

All values in parts per million (ppm)
Information is from "Remedial Investigation for Underground Storage Tanks, Results & Recommendations Report," HSI, July 1991

BETX = Benzene, Ethylbenzene, Toluene, Xylene
NE = Not Established
PID = Photoionization Detector Reading (instrument unit readings relative to 100 ppm isobutylene calibration gas)
RCL = Residual Contaminant Level for protection of groundwater pathway

(1) = Non-Industrial RCL = 50 mg/kg, Industrial RCL = 500 mg/kg
< = Not Detected above indicated concentration
* = Sum of Concentrations
** = Concentration based on a gasoline standard using the State of California Method
*** = Concentration based on a fuel oil standard using the State of California Method

BOLD = Detected concentration exceeds NR 720 Generic RCL for protection groundwater pathway
BOLD = Detected concentation exceeds COMM 46.06 / NR 746 Soil Screening Levels

TABLE 2
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-16 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
03/24/1996	**11**	**140**	NA	**25**	1.2	120	53	**173**	220	NA	NA	570.2
10/24/2000	**18**	**300**	<0.47	**15**	12	290	2	**292**	61	<5	3200	698.0
01/23/2001	**9.4**	**160**	<3.2	**30**	6.7	150	12	**162**	150	NA	NA	518.1
05/11/2001	**1.3**	**220**	<0.78	**17**	2.6	160	<1.1	**160**	93	NA	NA	493.9
09/11/2001	**17**	**300**	<0.8	**61**	6.3	220	10	**230**	190	NA	NA	804.3
12/27/2001	**4**	**330**	<2.2	**35**	5.8	140	4.6	**145**	120	NA	NA	639.4
04/16/2003	**180**	**170**	7.7	NA	2.9	7.3	<0.38	7.3	5.3	NA	NA	373.2
10/12/2004	**93.7**	**230**	7.12	**32.5**	55.5	78.4	15.9	94.3	245	NA	NA	758.1

SVE-22 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**39**	75	<0.47	**11**	77	47	2	49	160	<5	900	411.3
01/23/2001	**7.2**	24	<0.16	3.6	44	14	3.2	17.2	81	NA	NA	177.0
05/11/2001	**2.9**	3.5	<0.16	0.71	1.8	3.1	0.82	3.92	8.2	NA	NA	21.0
09/11/2001	**15**	50	<0.20	7.7	62	41	5.7	46.7	140	NA	NA	321.4
12/27/2001	**30**	45	<0.42	6.1	100	33	3.7	36.7	120	NA	NA	337.8
04/16/2003	**1800**	<4.4	<4.6	NA	39	<5.0	<3.8	<8.8	<7.8	NA	NA	1839.0
10/12/2004	**688**	<25.0	<2.56	<40.0	<25.0	28.0	<25.0	28.0	<25.0	NA	NA	744.0

KEY:

NA	= Not Analyzed
ND	= Not Detected
NS	= No Standard Established
<	= Not Detected above indicated concentration
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits
TMB	= Trimethylbenzene
MTBE	= Methyl Tertiary Butyl Ether
PVOCs	= Petroleum Volatile Organic Compounds
ug/L	= Micrograms per liter
BOLD	= Detected Concentration exceeds NR 140 ES
BOLD	= Detected Concentration exceeds NR 140 PAL

TABLE 2
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-23 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
01/23/2001	0.24	<0.22	<0.16	<1.1	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.2
05/11/2001	**2.9**	2.8	<0.16	<0.46	1.8	1.3	<0.29	1.3	4.2	NA	NA	13.0
09/11/2001	<0.13	<0.22	<0.16	<0.46	<0.20	<0.22	<0.29	<0.51	0.35	NA	NA	0.4
12/27/2001	<0.13	<0.22	<0.16	<0.46	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.0

SVE-26 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
03/24/1996	**2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2
10/24/2000	**110**	0.61	3	<0.53	0.79	0.41	<0.63	0.41	1.4	<5	160	116.2
01/23/2001	**26**	<0.22	1.4	<1.1	<0.20	<0.22	<0.29	<0.51	0.25	NA	NA	27.7
05/11/2001	**200**	<0.44	<0.32	<0.62	<0.40	<0.44	<0.58	<1.02	<0.46	NA	NA	200.0
09/11/2001	**480**	3.3	<0.32	<0.92	0.9	<0.44	<0.58	<1.02	<0.46	NA	NA	484.2
12/27/2001	**660**	9	4	<2.3	<1.0	<1.1	<1.4	<2.5	<1.2	NA	NA	673.0
04/16/2003	**53**	<0.22	<0.23	NA	<0.11	<0.25	<0.19	<0.44	<0.39	NA	NA	53.0
10/12/2004	**15.3**	<5.00	0.671	NA	<5.00	<5.00	<5.00	<10.0	<5.00			

KEY:

NA	= Not Analyzed	TMB	= Trimethylbenzene
ND	= Not Detected	MTBE	= Methyl Tertiary Butyl Ether
NS	= No Standard Established	PVOCs	= Petroleum Volatile Organic Compounds
<	= Not Detected above indicated concentration	ug/L	= Micrograms per liter
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards	**BOLD**	= Detected Concentration exceeds NR 140 ES
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits	**BOLD**	= Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

MW-1 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
02/07/1992	**21**	18	NA	NA	16	NA	NA	NA	82	NA	NA	137.0

MW-2 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
02/07/1992	ND	ND	NA	NA	ND	NA	NA	NA	ND	NA	NA	0.0

MW-3 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
02/07/1992	**10000**	**1800**	NA	NA	**13000**	NA	NA	NA	**8200**	NA	NA	33000.0

KEY:

NA	= Not Analyzed
ND	= Not Detected
NS	= No Standard Established
<	= Not Detected above indicated concentration
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits

TMB	= Trimethylbenzene
MTBE	= Methyl Tertiary Butyl Ether
PVOCs	= Petroleum Volatile Organic Compounds
ug/L	= Micrograms per liter
BOLD	= Detected Concentration exceeds NR 140 ES
BOLD	= Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-1 (ug/l)	PVOCs									Dissolved Lead	Gasoline Range Organics	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes			
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	<0.39	<0.40	<0.47	<0.53	<0.37	<0.4	<0.63	<1.03	<1.4	**5.8**	<100	0.0

SVE-3 (ug/l)	PVOCs									Dissolved Lead	Gasoline Range Organics	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes			
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**2.4**	17	<0.47	2	2.9	21	2.2	23.2	7.7	<5	560	55.2
01/23/2001	<0.13	<0.22	<0.16	<1.1	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.0
05/10/2001	**1.4**	120	3.3	**14**	5.2	150	4.8	**154.8**	55	NA	NA	353.7
12/27/2001	<0.54	83	<1.3	**22**	5.2	150	5.8	**155.8**	62	NA	NA	328.0

SVE-5 (ug/l)	PVOCs									Dissolved Lead	Gasoline Range Organics	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes			
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
03/24/1996	**40**	3.7	NA	NA	44	6.3	2.6	8.9	7.7	NA	NA	104.3
10/24/2000	**13**	1.2	<0.47	<0.53	0.4	0.91	<0.63	0.91	<1.4	<5	<100	15.5
01/23/2001	<0.13	<0.22	<0.16	<1.1	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.0
05/10/2001	<0.13	3.5	<0.16	<0.46	<0.20	0.84	<0.29	0.84	0.51	NA	NA	4.9
09/11/2001	<0.13	<0.22	<0.16	<0.46	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.0

KEY:

NA = Not Analyzed
ND = Not Detected
NS = No Standard Established
< = Not Detected above indicated concentration
NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits

TMB = Trimethylbenzene
MTBE = Methyl Tertiary Butyl Ether
PVOCs = Petroleum Volatile Organic Compounds
ug/L = Micrograms per liter
BOLD = Detected Concentration exceeds NR 140 ES
BOLD = Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-6 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**0.77**	0.72	<0.47	<0.53	<0.37	0.55	<0.63	0.55	<1.4	<5	<100	2.0

SVE-11 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**140**	**230**	<0.47	**160**	40	360	120	**480**	590	<5	3,300	1640.0
01/23/2001	**150**	**150**	<32	**380**	72	510	250	**760**	510	NA	NA	2022.0
05/10/2001	**41**	79	<0.80	**93**	22	150	55	**205**	270	NA	NA	710.0
09/11/2001	**31**	68	<1.6	**84**	16	100	62	**162**	220	NA	NA	581.0
12/27/2001	**49**	84	<0.16	**91**	20	78	51	**129**	210	NA	NA	583.0

SVE-13 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**0.92**	4.2	<0.47	<0.53	1	1.9	<0.63	1.9	2.4	<5	<100	10.4

KEY:

NA	= Not Analyzed
ND	= Not Detected
NS	= No Standard Established
<	= Not Detected above indicated concentration
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits

TMB	= Trimethylbenzene
MTBE	= Methyl Tertiary Butyl Ether
PVOCs	= Petroleum Volatile Organic Compounds
ug/L	= Micrograms per liter
BOLD	= Detected Concentration exceeds NR 140 ES
BOLD	= Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-16 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
03/24/1996	**11**	**140**	NA	**25**	1.2	120	53	**173**	220	NA	NA	570.2
10/24/2000	**18**	**300**	<0.47	**15**	12	290	2	**292**	61	<5	3200	698.0
01/23/2001	**9.4**	**160**	<3.2	**30**	6.7	150	12	**162**	150	NA	NA	518.1
05/11/2001	**1.3**	**220**	<0.78	**17**	2.6	160	<1.1	**160**	93	NA	NA	493.9
09/11/2001	**17**	**300**	<0.8	**61**	6.3	220	10	**230**	190	NA	NA	804.3
12/27/2001	**4**	**330**	<2.2	**35**	5.8	140	4.6	**145**	120	NA	NA	639.4

SVE-22 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
10/24/2000	**39**	75	<0.47	**11**	77	47	2	49	160	<5	900	411.3
01/23/2001	**7.2**	24	<0.16	3.6	44	14	3.2	17.2	81	NA	NA	177.0
05/11/2001	**2.9**	3.5	<0.16	0.71	1.8	3.1	0.82	3.92	8.2	NA	NA	21.0
09/11/2001	**15**	50	<0.20	7.7	62	41	5.7	46.7	140	NA	NA	321.4
12/27/2001	**30**	45	<0.42	6.1	100	33	3.7	36.7	120	NA	NA	337.8

KEY:

NA	= Not Analyzed	TMB	= Trimethylbenzene
ND	= Not Detected	MTBE	= Methyl Tertiary Butyl Ether
NS	= No Standard Established	PVOCs	= Petroleum Volatile Organic Compounds
<	= Not Detected above indicated concentration	ug/L	= Micrograms per liter
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards	**BOLD**	= Detected Concentration exceeds NR 140 ES
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits	**BOLD**	= Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-23 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
01/23/2001	0.24	<0.22	<0.16	<1.1	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.2
05/11/2001	**2.9**	2.8	<0.16	<0.46	1.8	1.3	<0.29	1.3	4.2	NA	NA	13.0
09/11/2001	<0.13	<0.22	<0.16	<0.46	<0.20	<0.22	<0.29	<0.51	0.35	NA	NA	0.4
12/27/2001	<0.13	<0.22	<0.16	<0.46	<0.20	<0.22	<0.29	<0.51	<0.23	NA	NA	0.0

SVE-26 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
03/24/1996	**2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2
10/24/2000	**110**	0.61	3	<0.53	0.79	0.41	<0.63	0.41	1.4	<5	160	116.2
01/23/2001	**26**	<0.22	1.4	<1.1	<0.20	<0.22	<0.29	<0.51	0.25	NA	NA	27.7
05/11/2001	**200**	<0.44	<0.32	<0.62	<0.40	<0.44	<0.58	<1.02	<0.46	NA	NA	200.0
09/11/2001	**480**	3.3	<0.32	<0.92	0.9	<0.44	<0.58	<1.02	<0.46	NA	NA	484.2
12/27/2001	**660**	9	4	<2.3	<1.0	<1.1	<1.4	<2.5	<1.2	NA	NA	673.0

KEY:

NA	= Not Analyzed
ND	= Not Detected
NS	= No Standard Established
<	= Not Detected above indicated concentration
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits
TMB	= Trimethylbenzene
MTBE	= Methyl Tertiary Butyl Ether
PVOCs	= Petroleum Volatile Organic Compounds
ug/L	= Micrograms per liter
BOLD	= Detected Concentration exceeds NR 140 ES
BOLD	= Detected Concentration exceeds NR 140 PAL

TABLE 3
GROUNDWATER QUALITY RESULTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

SVE-29 (ug/l)	PVOCs									Dissolved	Gasoline	Total PVOCs
Date	Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	1,2,4 TMB	1,3,5 TMB	Total TMB	Xylenes	Lead	Range Organics	
NR 140 ES	5	700	60	40	1000	NS	NS	480	10000	15	NS	
NR 140 PALs	0.5	140	12	8	200	NS	NS	96	1000	1.5	NS	
07/10/1992	**16000**	**2000**	NA	NA	**22000**	NA	NA	NA	**9900**	NA	NA	49900.0
07/14/1992	**15000**	**2600**	NA	NA	**27000**	2200	590	**2790**	**13000**	NA	NA	60390.0
03/23/1996	**240**	120	5	**53**	140	220	84	**304**	84	NA	NA	946.0
10/24/2000	**200**	**140**	<0.47	**8.1**	26	160	12	**172**	100	NA	2200	646.1
01/23/2001	**100**	**150**	<1.6	**97**	59	470	93	**563**	930	NA	NA	1899.0
05/11/2001	**62**	27	<0.80	5.4	6.8	42	<1.4	42	8.3	NA	NA	151.5
09/11/2001	**41**	43	<0.52	2.6	7.7	47	0.53	47.53	15	NA	NA	156.8
12/27/2001	**65**	50	<1.1	2.3	6.6	59	0.33	59.33	6.6	NA	NA	189.8

KEY:

NA	= Not Analyzed
ND	= Not Detected
NS	= No Standard Established
<	= Not Detected above indicated concentration
NR 140 ES	= Wisconsin Administrative Code, Chapter NR 140 Enforcement Standards
NR 140 PAL	= Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limits
TMB	= Trimethylbenzene
MTBE	= Methyl Tertiary Butyl Ether
PVOCs	= Petroleum Volatile Organic Compounds
ug/L	= Micrograms per liter
BOLD	= Detected Concentration exceeds NR 140 ES
BOLD	= Detected Concentration exceeds NR 140 PAL

TABLE 1
DEPTH TO GROUNDWATER and PRODUCT MEASUREMENTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

Well	Date	Well Depth (ft bgs)	Assumed Elevation (based on nearby boring elevations)	Depth to Water (ft bgs)	Water Table Elevation Estimated (site datum)
MW-1	12/26/1991	15.00		5.71	
	01/31/1992			6.51	
	02/06/1992			6.65	
	02/07/1992			6.70	
MW-2	12/26/1991	22.50		11.72	
	01/31/1992			12.43	
	02/06/1992			12.50	
	02/07/1992			12.98	
MW-3	12/26/1991	25.00		13.33	
	01/31/1992			13.81	
	02/06/1992			13.82	
	02/07/1992			14.20	
SVE-3	01/23/2001	25.45	95.5	13.46	82.0
	05/10/2001			5.35	90.2
	09/11/2001			NM	NM
	12/27/2001			7.31	88.2
	4/16/2003			17.22	78.3
	10/12/2004	NM-below dumpster		NM	NM
	10/22/2004				
SVE-4	10/22/2004		96.5	16.54	80.0
SVE-5	01/23/2001	21.30	95.8	11.94	83.9
	05/10/2001			7.06	88.7
	09/11/2001			12.51	83.3
	12/27/2001			11.52	84.3
	4/16/2003			15.32	80.5
	10/12/2004	No measurable product		16.20	79.6
	10/22/2004	No measurable product		16.30	79.5
SVE-8	10/22/2004		95.7	dry 12.90	
SVE-10	10/22/2004	No measurable product	96.4	7.27	89.1
	12/9/2004	No measurable product		5.50	90.9
SVE-11	01/23/2001	13.65	97.7	8.53	89.2
	05/10/2001			5.59	92.1
	09/11/2001			8.33	89.4
	12/27/2001			7.49	90.2
	4/16/2003			11.48	86.2
	10/12/2004	Product 7.45, Water 7.56		**7.56**	**90.1**
Sock installed	**10/22/2004**	Product 7.65, Water 7.67		**7.67**	**90.0**
Sock removed	11/3/2004	No measurable product		6.92	90.8
Sock installed	**11/15/2004**	Product 7.48, Water 7.50		**7.50**	**90.2**
Sock removed	12/9/2004	No measurable product		6.00	91.7
SVE-12	10/22/2004	No measurable product	96.8	8.98	87.8
	11/15/2004	No measurable product		9.79	87.0
	12/9/2004	No measurable product		5.90	90.9
SVE-13	10/22/2004	No measurable product	97.0	7.10	89.9
SVE-14	10/22/2004	No measurable product	97.3	12.15	85.2
SVE-15	10/22/2004	No measurable product	96.8	15.44	81.4

Notes:
ft bgs = feet below ground surface
NM = Not Measured
Bold = Measurable Product Present

Survey information for SVE wells was not available, therefore elevations were estimated/interpolated using elevation information from the initial 50 borings installed at the site.

Elevation measurements from wells SVE-25 and SVE12 were anomolous with surrounding elevations and were excluded from the 10-22-05 water table contour map.

TABLE 1
DEPTH TO GROUNDWATER and PRODUCT MEASUREMENTS
SHOREWOOD PUBLIC WORKS YARD
Project #6256

Well	Date	Well Depth (ft bgs)	Assumed Elevation (based on nearby boring elevations)	Depth to Water (ft bgs)	Water Table Elevation Estimated (site datum)
SVE-16	01/23/2001	27.45	96.8	9.43	87.4
	05/10/2001			9.32	87.5
	09/11/2001			10.31	86.5
	12/27/2001			9.73	87.1
	4/16/2003			17.05	79.8
	10/12/2004	No measurable product		17.12	79.7
	10/22/2004	No measurable product		17.23	79.6
SVE-17	10/22/2004	No measurable product	97.3	13.76	83.5
SVE-18	11/15/2004	Equip. Obstructing Well			
SVE-21	10/22/2004	No measurable product	97.0	14.16	82.8
	11/15/2004	No measurable product		13.71	83.3
	12/9/2004	No measurable product		11.11	85.9
SVE-22	01/23/2001	26.50	96.3	8.93	87.4
	05/10/2001			7.23	89.1
	09/11/2001			11.61	84.7
	12/27/2001			11.22	85.1
	4/16/2003			16.46	79.8
	10/12/2004	No measurable product		17.20	79.1
	10/22/2004	No measurable product		17.95	78.4
	11/3/2004	No measurable product		16.48	79.8
	11/15/2004	No measurable product		17.30	79.0
	12/9/2004	No measurable product		15.35	81.0
SVE-23	01/23/2001	27.20	96.0	15.33	80.7
	05/10/2001			11.69	84.3
	09/11/2001			16.83	79.2
	12/27/2001			16.27	79.7
	4/16/2003			18.26	77.7
	10/12/2004	No measurable product		18.55	77.5
	10/22/2004	No measurable product		18.65	77.4
SVE-25	10/22/2004	No measurable product	96.3	19.78	76.5
	11/15/2004	No measurable product		19.50	76.8
	12/9/2004	No measurable product		17.38	78.9
SVE-26	01/23/2001	19.65	95.8	15.94	79.9
	05/10/2001			13.35	82.5
	09/11/2001			16.71	79.1
	12/27/2001			16.68	79.1
	4/16/2003			17.72	78.1
	10/12/2004	No measurable product		18.55	77.3
	10/22/2004	No measurable product		17.95	77.9
SVE-27	10/22/2004	No measurable product	95.3	17.25	78.1
SVE-29	01/23/2001	19.10	102.9	11.53	91.4
	05/10/2001			10.89	92.0
	09/11/2001			10.60	92.3
	12/27/2001			11.67	91.2
	4/16/2003			16.67	86.2
	10/12/2004	No measurable product		12.41	90.5
	10/22/2004	No measurable product		12.50	90.4

Notes:
ft bgs = feet below ground surface
NM = Not Measured
Bold = Measurable Product Present

Survey information for SVE wells was not available, therefore elevations were estimated/interpolated using elevation information from the initial 50 borings installed at the site.

Elevation measurements from wells SVE-25 and SVE12 were anomolous with surrounding elevations and were excluded from the 10-22-05 water table contour map.

State of Wisconsin
Department of Natural Resources
http://dnr.wi.gov

Impacted Off-Source Property Information

Form 4400-246 (R 3/08)

This fillable form is intended to provide a list of information that must be submitted for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request (Section H). The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-41-001238

ACTIVITY NAME: SHOREWOOD VIL MUNICIPAL YARD

ID	Off-Source Property Address	Parcel Number	WTM X	WTM Y
A	Parcel West of Village of Shorewood Public Works Yard(3801 N. Morris Blvd)	275-8997-001	691510	292533
B				
C				
D				
E				
F				
G				
H				
I				

RIGHT-OF-WAY

SIGMA
ENVIRONMENTAL SERVICES INC.

220 East Ryan Road
Oak Creek, WI 53154-4533
414-768-7144
FAX: 414-768-7158

December 26, 2002

Project Reference #6256

Mr. James Bartnicki
Director of Public Works
Village of Shorewood
3930 N. Murray Avenue
Shorewood, WI 53211

RE: **Notice of Dissolved Petroleum Impacts Within Public Street or Right-of-Way**
Village of Shorewood - Public Works Yard
3801 N. Morris Blvd.
Shorewood, Wisconsin

Dear Mr. Bartnicki:

On behalf of the Village of Shorewood, Sigma Environmental Services, Inc. (Sigma) is notifying the Village of Shorewood, Director of Public Works regarding the presence of dissolved petroleum hydrocarbon impacts in soil and groundwater located in the southwest portion of the Village Public Works Yard. Sigma has petitioned the Wisconsin Department of Commerce (COMM) for case closure for the site, conditional upon filing of the appropriate GIS registry information and notifying municipal authorities of petroleum impacts extending into public right-of-ways.

Sigma is notifying your department pursuant to Wisconsin Administrative Code, Chapter NR 726.05 (2)(b)(4), of the potential presence of soil and groundwater impacts beneath portions of the Village Yard Property, which may exceed applicable Wisconsin Administrative Code, Chapter NR 140 groundwater standards and Chapter NR 720 soil standards.

Sigma has enclosed soil and groundwater quality maps showing the estimated extent of affected soil (based on pre-remediation sampling) and monitoring well locations with the extent of dissolved benzene, naphthalene, and trimethylbenzenes detected during a December 2001 sampling event. Petroleum impacted groundwater above Wisconsin Administrative Code, Chapter NR 140 enforcement standards is present at the west edge of the Village Yard property. Review of investigation, remediation, and monitoring data indicates that the groundwater contaminant plume is generally stable or receding and that natural attenuation will likely restore the groundwater to NR140 standards within a reasonable period of time.

If future construction activities disturb soil in the vicinity of the above referenced site, the excavated soil may be considered a solid waste and require proper characterization and/or disposal. In addition, if future construction activities require dewatering, or if groundwater is to be otherwise extracted in the vicinity of the above referenced site, the groundwater shall be sampled and managed in compliance with applicable statutes and rules.

If you have any questions or comments, please contact us at (414) 768-7144.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES,

Ross M. Creighton, P.G. CHMM
Project Hydrogeologist

Joshua Neudorfer, CHMM
Senior Consultant / Hydrogeologist

cc: James J. Lynch – Village of Shorewood

OFF-SOURCE
A
PROPERTY

SIGMA
ENVIRONMENTAL SERVICES INC.

220 East Ryan Road
Oak Creek, WI 53154-4533
414-768-7144
FAX: 414-768-7158

December 26, 2002

Project Reference #6256

Ms. Susan Baldwin
Milwaukee County Parks Director
9480 W. Watertown Plank Road
Wauwatosa, WI 53226

RE: **Notice of Dissolved Petroleum Impacts**
On County Land (Parcel 275-8997-001)
Immediately West of the Village of Shorewood Public Works Yard
3801 N. Morris Blvd.
Shorewood, Wisconsin

Dear Ms. Baldwin:

On behalf of the Village of Shorewood, Sigma Environmental Services, Inc. (Sigma) is notifying the Milwaukee County Parks Department of the apparent presence of dissolved petroleum hydrocarbon impacts within soil and groundwater located along the western property line of the Village Public Works Yard (west of the intersection of Morris Boulevard and Beverly Road). The land was a former railroad right of way and is currently used as a bicycle path. Sigma has petitioned the Wisconsin Department of Commerce (COMM) for case closure for the site, conditional upon filing of the appropriate GIS registry information and notifying municipal authorities of petroleum impacts extending onto adjacent properties or into public right-of-ways.

Sigma is notifying your department pursuant to Wisconsin Administrative Code, Chapter NR 726.05 (2)(b)(4), of the presence of apparent soil and groundwater impacts beneath the bike path area, which may exceed applicable Wisconsin Administrative Code, Chapters NR 720 and NR 140 standards for soil and groundwater.

Sigma has attached soil and groundwater quality maps showing the estimated extent of affected soil (based on pre-remediation sampling) and monitoring well locations and the extent of dissolved benzene, naphthalene, and trimethylbenzenes detected during a December 2001 sampling event. Petroleum impacted groundwater above Wisconsin Administrative Code, Chapter NR 140 enforcement standards is present near the east edge of the property adjacent to the southwest corner of the Village of Shorewood Public Works Yard (west of the intersection of Morris Boulevard and Beverly Road). Review of recent investigation, remediation and monitoring data indicates that the groundwater contaminant plume is generally stable or receding and that natural attenuation will likely restore the groundwater to NR140 standards within a reasonable period of time.

OFF-SOURCE
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PROPERTY

If future construction activities disturb soil in the vicinity of the above referenced site, the excavated soil may be considered a solid waste and require proper characterization and/or disposal. In addition, if future construction activities require dewatering, or if groundwater is to be otherwise extracted in the vicinity of the above referenced site, the groundwater shall be sampled and managed in compliance with applicable statutes and rules.

If you have any questions or comments, please contact us at (414) 768-7144.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES,

Ross M. Creighton, P.G., CHMM
Project Hydrogeologist

Joshua Neudorfer, CHMM
Senior Consultant / Hydrogeologist

Attachments

cc: Gary Mick – Milwaukee County
Mark Ryan – County Clerk
Jim Lynch – Village of Shorewood

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PROPERTY

County Property

AWARD OF DAMAGES
(Fee Simple Title)

By: Milwaukee County Board of Supervisors
Section 32.05 Stats.

This award of damages is made pursuant to a relocation order of the County Board of Supervisors of Milwaukee County, dated May 7, 1974, and filed in the office of the County Clerk of Milwaukee County for the purpose of laying out, constructing and maintaining a Mass Transit Way in the County of Milwaukee.

Milwaukee County has determined it necessary to acquire for the purpose set forth in and in accordance with said relocation order, a parcel of real estate, and/or rights therein as hereinafter set forth, in and to which the following persons have an interest:

Sidney Levy (owner)

Chicago and North Western Transportation Company (owner)

The interest acquired by this award is for fee title in and to a parcel of real estate described as follows, to-wit:

In the City of Milwaukee, Milwaukee County, Wisconsin

Parcel I

A strip of land 100 feet in width extending over and across Lots numbered Fourteen (14), Fifteen (15), and Sixteen (16), in the Southeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East of the Fourth Principal Meridian, said strip of land being 50 feet in width on each side of the center line of the main track of the Northwestern Union Railway Company (now the Chicago and North Western Transportation Company), as said main track center line was originally located and established, except that portion of said strip lying East of the West line of North Bartlett Street and excepting therefrom that part thereof taken for the opening of North Newhall Street.

Parcel II

All of Lots numbered Two (2), Three (3), Six (6), Seven (7), Ten (10), Eleven (11), Fourteen (14), Fifteen (15), Eighteen (18), Nineteen (19), and Twenty-two (22), in Block numbered Two Hundred Thirteen (213), in (C. H. Larkin's) Subdivision into Lots of Lot numbered Thirteen (13) in the Southeast One-quarter (1/4) of Section numbered Sixteen (16), in Township numbered Seven (7) North, Range numbered Twenty-two (22) East, excepting therefrom that part thereof lying East of a line 50 feet Easterly of, measured at right angles, and parallel with the center line of the railroad of Chicago and North Western Transportation Company.

OFF-SOURCE
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PROPERTY

Parcel III

All that part of vacated North Newhall Street, bounded and described as follows: Commencing at the Northwest corner of Block numbered Two Hundred Thirteen (213) in (C. H. Larkin's) Subdivision into Lots of Lot numbered Thirteen (13) in the Southeast One-quarter (1/4) of Section numbered Sixteen (16) in Township numbered Seven (7) North, Range numbered Twenty-two (22) East; thence South along the West line of said Block 213 and its extension 300 feet to a point 10 feet South of the Southwest corner of said Block 213; thence Northwesterly 303.65 feet to a point in the South line of East Bradford Avenue 47 feet West of the Northwest corner of said Block 213; thence East 47 feet to the point of beginning.

Parcel IV

All of Block numbered Four (4) in Casper and Hoff's Subdivision No. 2 of a part of Lot numbered Ten (10) in the Southeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, of the Fourth Principal Meridian.

Parcel V

Those parts of Lots numbered Eleven (11) and Twelve (12) in the Southeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, lying Northerly of the North line of East Bradford Street, Easterly of the East line, extended Northerly, of North Cambridge Avenue (formerly Larkin Street), and Westerly of a line parallel with and distant 50 feet Northeasterly, measured at right angles, from the center line of the main track of the Chicago and North Western Transportation Company, as said main track center line was originally located and established.

Parcel VI

A strip of land, 100 feet in width extending over and across the South half of Lot numbered Ten (10) in the Southeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, said strip of land being 50 feet in width on each side of the original main track center line.

Parcel VII

A strip of land, 100 feet in width extending over and across Lots numbered Five (5), Six (6), Seven (7), Eight, (8), Nine (9), and that part of Lot numbered Ten (10) lying North of the North line of East Belleview Place, in the Southeast One-quarter (1/4) and the Northeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, said strip of land being 50 feet in width on each side of said original main track center line, and lying Southerly of the South line of East Locust Street (formerly Folsom Place).

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PROPERTY

Parcel VIII

A strip of land 100 feet in width extending over and across Lots numbered One (1), Two (2), Three (3), and that part of Lot numbered Four (4) lying Northerly of the North line of East Locust Street (formerly Folsom Place) in the Northeast One-quarter (1/4) of Section numbered Sixteen (16), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, said strip of land being 50 feet in width on each side of said original main track center line.

Parcel IX

A strip of land 100 feet in width extending over and across Fractional Lots numbered Three (3) and Four (4) in the Southeast One-quarter (1/4) of Section numbered Nine (9), Township numbered Seven (7) North, Range numbered Twenty-two (22) East of the Fourth Principal Meridian, said strip of land being 50 feet in width on each side of the center line of the main track of the Chicago and North Western Transportation Company as said main track center line was originally located and established over and across said Southeast 1/4 of Section 9, and the Easterly line of said strip of land being also the Westerly line of North Cambridge Avenue.

In Shorewood and Whitefish Bay, Milwaukee County, Wisconsin

Parcel X

A strip of land 100 feet in width extending over and across Lots numbered One (1) and Two (2) in the Northeast One-quarter (1/4) of Section numbered Nine (9), Township numbered Seven (7) North, Range numbered Twenty-two (22) East of the Fourth Principal Meridian, said strip of land being 50 feet in width on each side of the center line of the main track of the Chicago and North Western Transportation Company as said main track center line was originally located and established over and across said Northeast One-quarter (1/4) of Section 9, and lying Southerly of the South line of the North 75 feet of said Northeast 1/4 of Section 9.

Parcel XI

That part of Lot numbered One (1) in the Northeast One-quarter (1/4) of Section numbered Nine (9), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, bounded and described as follows: Beginning at a point on the South line of the North 75 feet of said Northeast 1/4 of Section 9, distant 70 feet Northeasterly, measured radially, from said original main track center line; thence Southeasterly parallel with said original main track center line a distance of 100 feet; thence Southwesterly at right angles to the last described course a distance of 20 feet; thence Northwesterly parallel with said original main track center line to a point on the south line of the North 75 feet of said Northeast 1/4 of Section 9; thence Easterly along said South line to the point of beginning.

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Parcel XII

That part of Lot numbered Two (2) in the Northeast One-Quarter (1/4) of Section numbered Nine (9), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, bounded and described as follows: Commencing at the intersection of the North line of said Lot 2 and said original main track center line; thence Southeasterly along said original main track center line a distance of 636 feet; thence Southwesterly radial to the last described course a distance of 50 feet; thence Southeasterly parallel with said original main track center line a distance of 125 feet to the point of beginning of the parcel of land herein described; thence Southwesterly along a straight line a distance of 44.5 feet to a point distant 70 feet Southwesterly, measured radially, from said original main track center line; thence Southeasterly parallel with said original main track center line a distance of 269 feet; thence Southeasterly along a straight line a distance of 63 feet to a point distance 50 feet Westerly, measured radially, from said original main track center line; thence Northerly and Northwesterly parallel with said original main track center line to the point of beginning.

Property between Capitol Drive and Hampton Road - Villages of Shorewood and Whitefish Bay, Milwaukee County, Wisconsin

Parcel XIII

A strip of land 100 feet in width extending over and across the Northwest One-quarter (1/4), the East half of the Southwest One-quarter (1/4), and the Southwest One-quarter (1/4) of the Southeast One-quarter (1/4) (lying North of the North line of East Capitol Drive), of Section numbered Four (4), Township numbered Seven (7) North, Range numbered Twenty-two (22) East of the Fourth Principal Meridian, said strip of land being 50 feet in width on each side of the center line of the main track of the Northwestern Union Railway Company (now the Chicago and North Western Transportation Company), as said main track center line was originally located and established over and across said Northwest 1/4, the East half of the Southwest 1/4, and the Southwest 1/4 of the Southeast 1/4 of Section 4.

Parcel XIV

A strip of land 100 feet in width extending over and across that part of the Northeast One-quarter (1/4) of the Northeast One-quarter (1/4) of Section numbered Five (5), Township numbered Seven (7) North, Range numbered Twenty-two (22) East, lying Southerly of the South line of the North 57 feet thereof, said strip of land being 50 feet in width on each side of the center line of the main track of the Chicago and North Western Transportation Company as originally located and established over and across said Northeast 1/4 of the Northeast 1/4 of Section 5.

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Together with and including all of owners' right, title and interest, if any, in and to:

1) Bridges presently located upon the above-described real estate; and

2) The following additional bridges presently spanning Locust Street (Folsom Place), E. Belleview Place, E. Bradford Street and E. Capitol Drive.

Subject to an easement for the Railroad in, upon, over and under the described real estate for the following purposes:

a) For the railroad tracks now located on the above-described real estate, together with the right to use, occupy and enjoy strips of land of sufficient width and in no case less than 18 feet in width, being 9 feet in width on each side of the center line of said tracks, as presently located or as relocated on sites designated by the condemnor as hereinafter provided, for the maintenance, use, operation, repair, renewal and reconstruction of said tracks;

b) For the maintenance, use, repair, renewal and reconstruction of bridges and the approaches thereto, and of the buildings and other properties and facilities of the Railroad.

c) For ingress and egress of persons, vehicles and equipment for all purposes of (a) and (b) above.

The tracks, bridges, approaches, buildings and other properties and facilities referred to in (a) and (b) above are hereinafter referred to as the "facilities." Chicago and Northwestern Transportation Company, its successors and assigns, are herein collectively referred to as "Railroad."

In the event the Railroad either permanently abandons use of all or a part of the facilities by removal thereof at its expense, or serves written notice upon condemnor of abandonment of all or a part of such facilities in place, or relocates its operations in whole or in part upon condemnor's demand as hereinafter provided, this easement shall terminate to the extent the facilities are removed, abandoned or relocated as the case may be. All abandoned facilities shall become the property of the condemnor.

Railroad shall, upon written demand of condemnor, relocate all or a portion of the operations described in (a), (b) and (c) above to a substitute unencumbered easement granted by the condemnor and at Railroad's option either 1) remove all its facilities from the area sought to be relocated, or 2) remove from said area some of its facilities and abandon the remainder, or 3) abandon its facilities in said area;

OFF-SOURCE
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PROPERTY

provided that the substitute easement shall enable the Railroad to continue to operate in a safe and efficient manner and in accordance with the requirements of any governmental agency having jurisdiction thereover, and provided further that the condemnor shall pay the entire cost for relocation of Railroad's operations. If as result of the nature of the use of the lands acquired by condemnor, or as result of such a relocation fencing of the original or any substitute easement is necessary to provide an efficient and safe operation, or is required by governmental agencies having jurisdiction over Railroad's operations, then the cost of installing and maintaining such fencing shall be paid by condemnor. Railroad is not relieved from obligations, if any, to maintain bridges along any portion of its right-of-way over which its operations continue.

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PROPERTY

Said parcel of real estate and/or interest therein will be occupied by the County of Milwaukee on August 16, 19 77.

Milwaukee County having complied with all jurisdictional requirements pursuant to law hereby makes this award of damages to the above said persons having an interest in said parcel of real estate, in the sum of One Million One Hundred Thousand and 00/100 ($1,100,000.00) Dollars for the acquisition of said parcel of real estate and/or interest therein as hereinbefore set forth. Said consideration is payment in full for the property described herein and includes full compensation for the items of damage set forth in Chapter 32, Wisconsin Statutes, assuming the completion of the improvements contemplated by the relocation order or orders upon which this award is based.

MILWAUKEE COUNTY, a municipal body corporate

By Wm. E. Weaux
William E. Weaux - First Vice Chairman of Milwaukee County Board of Supervisors

By
Richard H. Sussler, Jr.
Deputy County Clerk

Dated at Milwaukee, Wisconsin, this 13 day of October, 19 77.

This instrument was drafted by the Milwaukee County Department of Public Works.

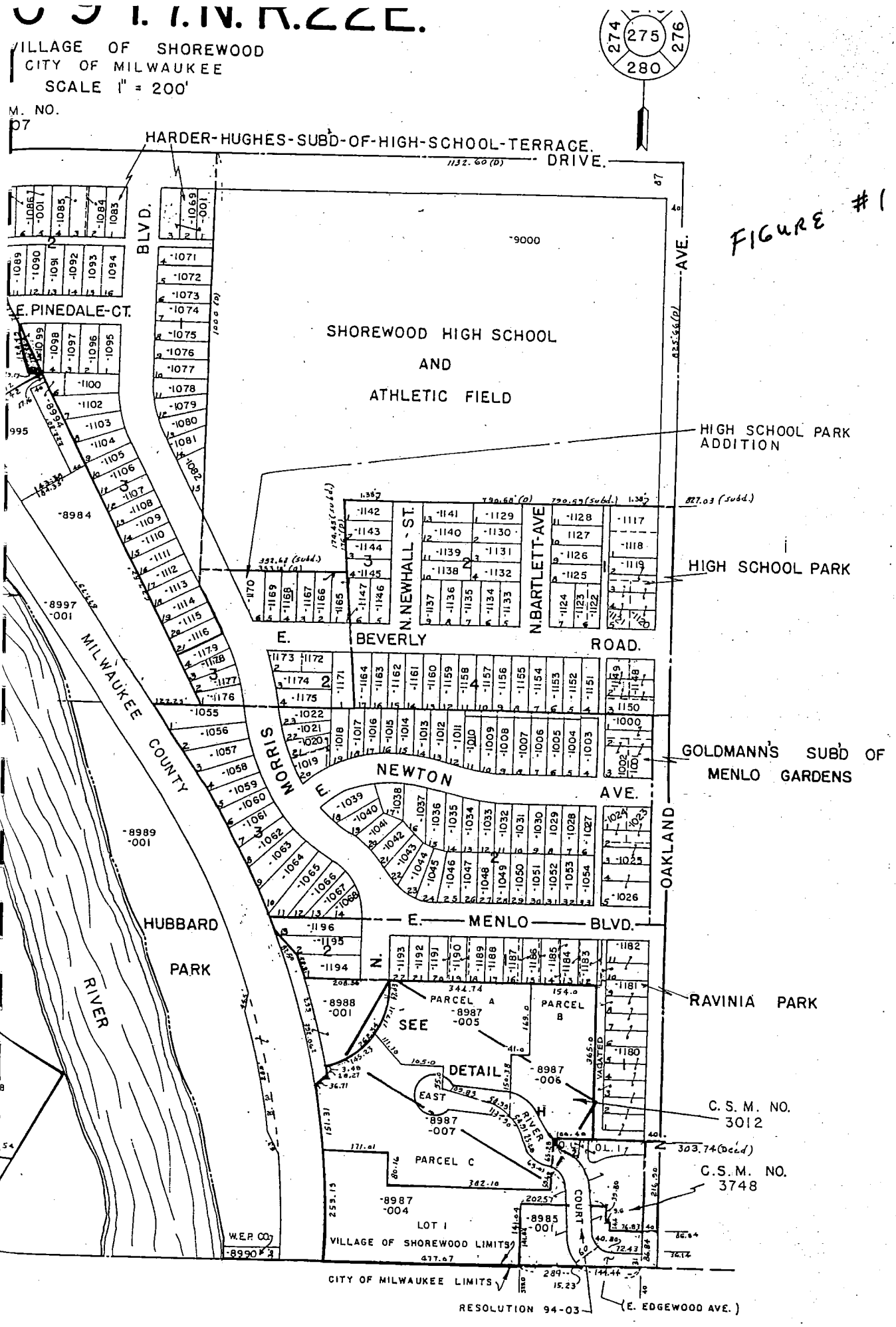
Parcel MW-1-00-1

Mass Transit Way

ZK

OFF-SOURCE
A
PROPERTY

FIGURE #1



OFF-SOURCE
A
PROPERTY

B-45 P-18

HARDER HUGHES SUBDIVISION OF HIGH SCHOOL TERRACE

BEING A SUBDIVISION IN THE N.E. ¼ SEC. 9
T.7N. R.22E. VILLAGE OF SHOREWOOD

SCALE 1 IN. = 50 FT.
THIS DRAWING WAS REDUCED TO SCALE 1" = 80'

STATE OF WISCONSIN }
COUNTY OF MILWAUKEE }

Engineering Company, ... of High School Terrace ... in the Village of Shorewood, Milwaukee ...

The land surveyed, subdivided ... Section 9, Township 7 North, Range ... Northeast ¼ section line ... feet, thence South ... North 27° 20' 38" West ... ¼ Section line ... feet ...

That we made said survey, ... Realty Company. That the attached ... land surveyed and the divisions made ... we have complied with the provisions of ...

H.A. Schmill
Surveyors

STATE OF WISCONSIN }
COUNTY OF MILWAUKEE }

On this ... day of December, ... personally before me ... H.A. Schmill, to me known to be ... the same.

Notary Public, Milwaukee County, Wisconsin
My Commission expires ...

STATE OF WISCONSIN }
COUNTY OF MILWAUKEE }

... virtue of the laws of the State of Wisconsin ... in the foregoing Survey ... F.B. ... and A.S. ... and mapped as represented ...

In testimony whereof the said Company ... its President and Owen R. Hughes, its Secretary ... day of December, 1937.

Signed and Sealed in presence of
C.E. Hammersley
H.A. Schmill

Charles L. Harder, PRESIDENT
Owen R. Hughes, SECRETARY

STATE OF WISCONSIN }
COUNTY OF MILWAUKEE }

On this ... day of December, ... personally ... Owen R. Hughes, to me known ... sworn declared that said Charles L. Harder ... of the Harder-Hughes Realty Company ... of the laws of the State of Wisconsin, and that ... corporate seal of said corporation, that by authority ... said instrument to be ... free act and deed ...

Notary Public, Milwaukee County, Wisconsin
My Commission expires ...

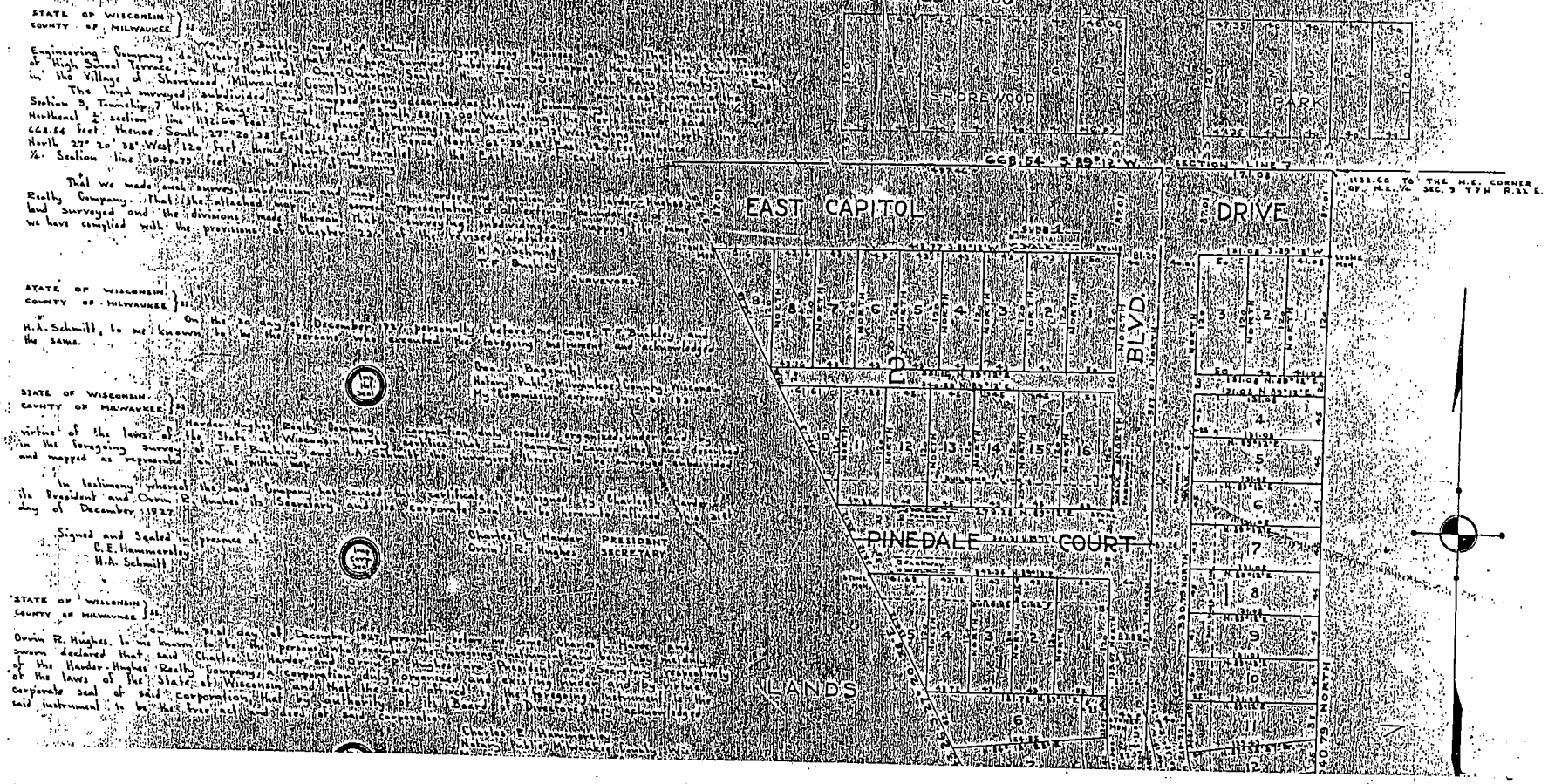


Figure # 02

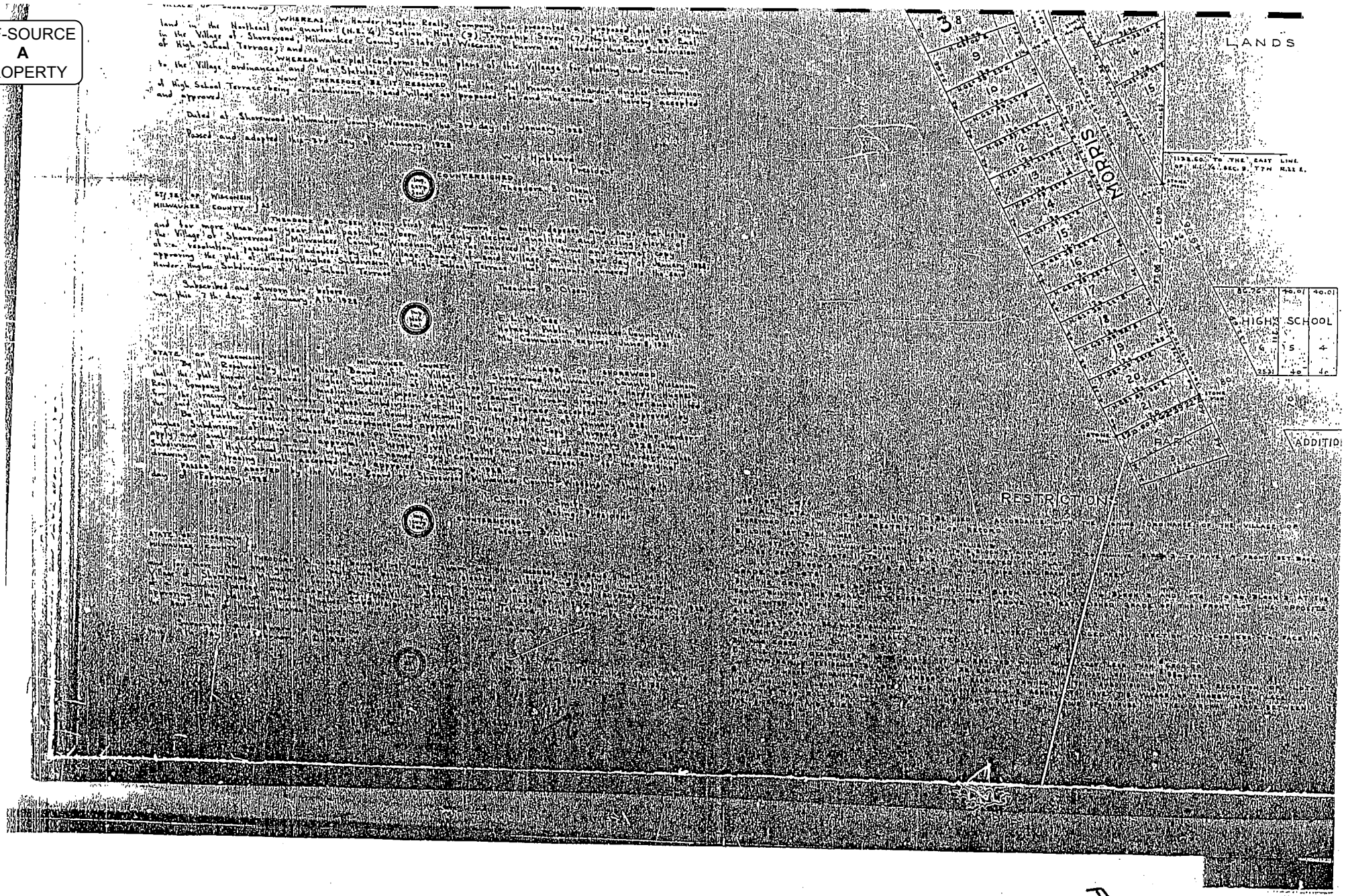

OFF-SOURCE
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PROPERTY
LANDS
SIDRON
HIGH SCHOOL
RESTRICTION

Figure # 3

APPENDIX F
RETAINING WALL HISTORICAL DOCUMENTS

MEMORANDUM

March 8, 2000

Shorewood

TO: Raymond Pollen, Village Attorney
James Bartnicki, Director of Public Works
James Swenson, Assistant Director of Public Works
James Lynch, Director of Community Development
William Raasch, Assistant Building Inspector

FROM: Edward C. Madere, Village Manager

COPY TO: Leeann Butschlick, Assistant to the Manager
Thomas Feierstein, Assistant Building Inspector
Penny Wisth, DCD Secretary
Monica Merkel, DPW Secretary

RE: Retaining Wall Adjacent to DPW Property

Thank you for meeting on March 7, 2000, to continue our ongoing review of the retaining wall adjacent to the DPW property.

It is my understanding that at our meeting we decided to do the following:

1. Bartnicki, Swenson, and Lynch will decide what the grade of the property between the vehicle storage building and the north annex building should be after the small annex building is razed.

2. Bartnicki will retain the services of the engineering consultant from Kenosha (I can't remember the firm's name) to do the following:

   A. Review future layout of public works yard between the vehicle storage building and the north annex.

   B. Propose options for new retaining wall to include costs.

   C. Determine whether Mr. Dalton's property can be regraded and the existing wall eliminated. Estimated cost should be included.

3. Bill Raasch will notify the property owners that the Village is retaining an engineering firm and reviewing options for a new retaining wall. It is the intent of the Village to contact the property owners in another 30 days or so to schedule a meeting and present information.

Please let me know if there are any other items that we agreed to do which I have omitted.

Thank you for your assistance. Please let me know if you have any questions.

ECMcfs
11j.60

MEMORANDUM

February 23, 2000

TO: Village Board

FROM: Edward C. Madere, Village Manager

COPY TO: Raymond Pollen, Village Attorney
James J. Lynch, Director of Community Development
James Bartnicki, Director of Public Works
William Raasch, Assistant Building Inspector

RE: Update - Retaining Wall Adjacent to DPW Property

As you may recall from last year's tour, the retaining wall adjacent to the northeast side of public works yard is in a significant state of deterioration. In 1999, the Village had an engineering study done which presented several options for improving the wall. These ranged from around $42,000 to nearly $70,000.

The wall is located at the rear of four residential properties. All these properties benefit from the wall to one degree or another. In some cases, the wall is retaining the rear yard and in some cases it is retaining both the rear yard and a garage. The four properties are duplexes and are all used as income. Only one of the four property owners lives on the property.

Village staff invited residents to a meeting last Tuesday evening to review the above. After a review, response to questions, etc., the Village indicated that it would develop retaining wall cost estimates for each of the properties, explore low interest loans, and look at various options for wall repair. Residents were also invited to contact Mr. Bartnicki to view the wall from DPW property. We plan to meet again in about a month.

Staff also indicated that under the law, it was believed that the Village could incur engineering cost and supervise the construction of the retaining wall if it covered all the properties.

The Village also indicated that it would delay, for the time being, the removal of the small two-story brick building immediately north of the garage.

On the reverse of this memo is a property survey showing the area in question.

Please let me know if you have any questions concerning the above.

ECMcfs

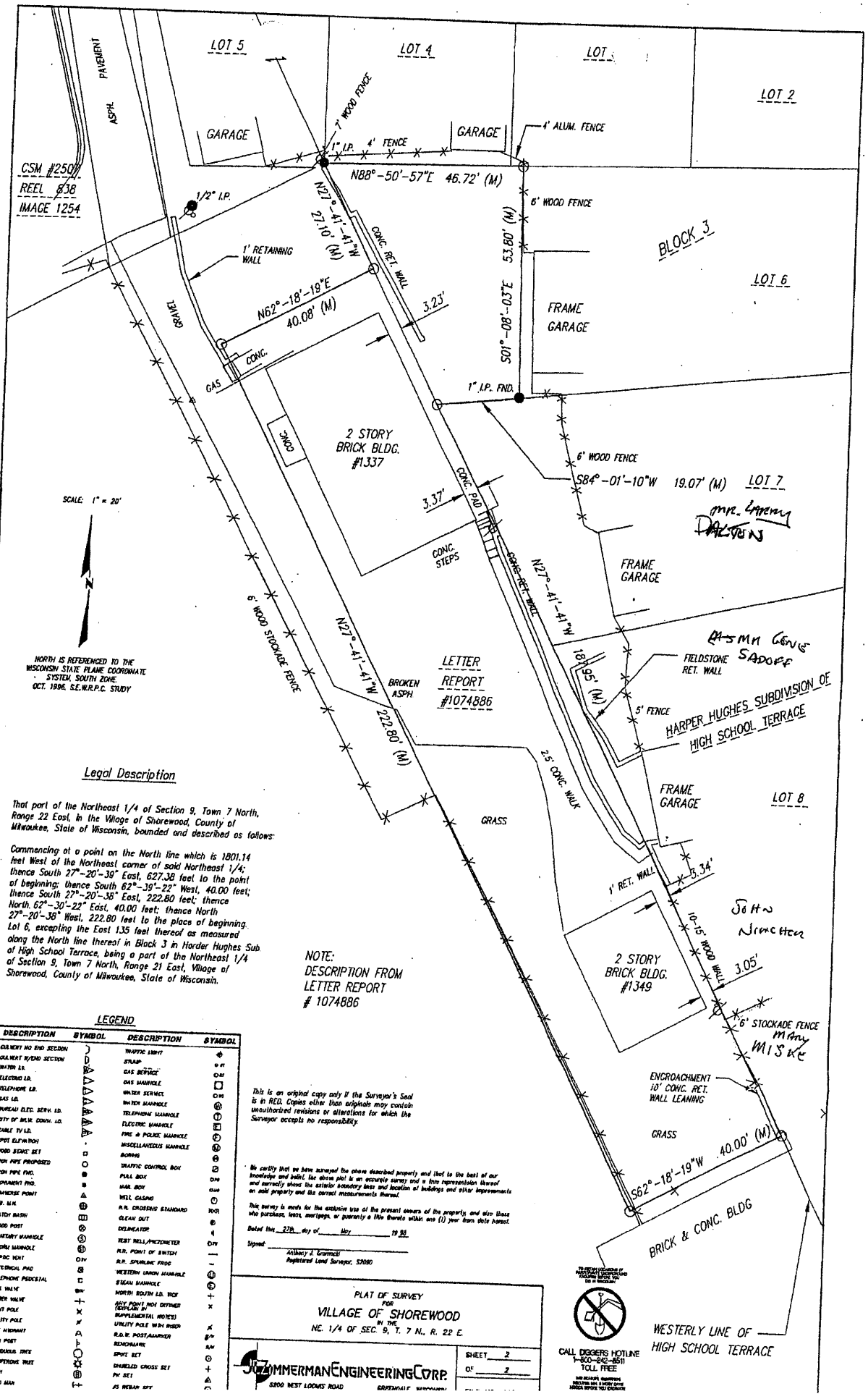
11j.30

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name Ray Pollen

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000	OK	
Wednesday, February 16, 2000		Cannot
Thursday, February 17, 2000		Cannot
Tuesday, February 22, 2000	OK	
Wednesday, February 23, 2000	OK	
Thursday, February 24, 2000	OK	



Legal Description

That part of the Northeast 1/4 of Section 9, Town 7 North, Range 22 East, in the Village of Shorewood, County of Milwaukee, State of Wisconsin, bounded and described as follows:

Commencing at a point on the North line which is 1801.14 feet West of the Northeast corner of said Northeast 1/4; thence South 27°-20'-38" East, 627.38 feet to the point of beginning; thence South 62°-39'-22" West, 40.00 feet; thence South 27°-20'-38" East, 222.80 feet; thence North 62°-39'-22" East, 40.00 feet; thence North 27°-20'-38" West, 222.80 feet to the place of beginning. Lot 6, excepting the East 1.35 feet thereof as measured along the North line thereof in Block 3 in Harder Hughes Sub. of High School Terrace, being a part of the Northeast 1/4 of Section 9, Town 7 North, Range 21 East, Village of Shorewood, County of Milwaukee, State of Wisconsin.

NOTE: DESCRIPTION FROM LETTER REPORT # 1074886

LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
CULVERT W/O END SECTION		TRAFFIC LIGHT	
CULVERT W/END SECTION		STUMP	
WATER S.B.		GAS SERVICE	
ELECTRIC S.B.		GAS MANHOLE	
TELEPHONE S.B.		WATER SERVICE	
GAS S.B.		WATER MANHOLE	
BUREAU ELEC. SERV. S.B.		TELEPHONE MANHOLE	
CITY OF MILW. COMM. S.B.		ELECTRIC MANHOLE	
CABLE TV S.B.		FIRE & POLICE MANHOLE	
SPOT ELEVATION		MISCELLANEOUS MANHOLE	
WOOD STAKE SET		BORING	
IRON PIPE PROPOSED		TRAFFIC CONTROL BOX	
IRON PIPE FND.		MAIL BOX	
MONUMENT FND.		MAIL BOX	
IMMERSE POINT		WELL CASING	
C.B. M.H.		R.R. CROSSING STANDARD	
CATCH BASIN		CLEAN OUT	
WOOD POST		DELINEATOR	
SANITARY MANHOLE		TEST WELLS/PIEZOMETER	
STORM MANHOLE		R.R. POINT OF SWITCH	
SEPTIC VENT		R.R. SPURLINE/ FROG	
ELECTRICAL PAD		WESTERN UNION MANHOLE	
TELEPHONE PEDESTAL		STEAM MANHOLE	
GAS VALVE		NORTH SOUTH I.D. BOX	
WATER VALVE		MISC. POINT NOT DEFINED (EXPLAIN IN SUPPLEMENTAL NOTES)	
LIGHT POLE		UTILITY POLE WITH RISER	
UTILITY POLE		R.O.W. POST/MARKER	
FIRE HYDRANT		REMONUMENT	
SIGN POST		SPIKE SET	
DECIDUOUS TREE		SHURELED CROSS SET	
CONIFEROUS TREE		PK SET	
BUSH		AS MEBAR SET	
DEAD MAN			

This is an original copy only if the Surveyor's Seal is in RED. Copies other than originals may contain unauthorized revisions or alterations for which the Surveyor accepts no responsibility.

I do certify that we have surveyed the above described property and that to the best of our knowledge and belief, the above plat is an accurate survey and a true representation thereof and correctly shows the exterior boundary lines and location of buildings and other improvements on said property and the correct measurements thereof.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, lease, mortgage, or guaranty a title thereto within one (1) year from date hereof.

Dated this 27th day of May 19 96

Signed: Anthony J. Grammatt
Registered Land Surveyor, S2080

PLAT OF SURVEY
FOR
VILLAGE OF SHOREWOOD
IN THE
NE. 1/4 OF SEC. 9, T. 7 N., R. 22 E.

ZIMMERMAN ENGINEERING CORP.
5300 WEST LOOMIS ROAD GREENDALE, WISCONSIN

SHEET 2 OF 2

CALL DIGGERS HOTLINE 1-800-242-8511 TOLL FREE

Shorewood

MEMO

TO: Raymond Pollen, Village Attorney

FROM: William A. Raasch
Assistant Building Inspector

SUBJECT: Retaining Wall at Shorewood Department of Public Works

DATE: January 16, 2001

Jim Bartnicki and I have secured cost estimates from at least two contractors relative to various options to install a retaining wall along the east Department of Public Works property line and are currently waiting for a quote from Wisconsin Electric relative to the cost of protecting two utility poles and associated power lines along that same property boundary.

This information is to be shared with the property owners adjacent to the Department of Public Works at a future meeting. We would also like to be able to advise them regarding any long-term financing which the Village could provide them to lessen the cost impact they would be facing. You may recall that there was some question at one of our earlier meetings regarding the legality of the Village providing such assistance to these few property owners.

I would appreciate having your opinion as to the question of legality and the proper approach to take in this matter as part of our preparation for an anticipated meeting with the property owners.

Thank you for your assistance in this matter.

WAR:pw

DOC116

Shorewood

March 9, 2000

John Niemczyk
4411 N. Lake Drive
Shorewood, WI 53211

Dear Mr. Niemczyk:

This letter will serve as a follow-up to our meeting on Tuesday, February 22, 2000, at which we discussed the Village's intentions with regard to newly-acquired property contingent with the property you own on North Morris Boulevard.

Staff has met to discuss the retaining wall and has reviewed the area in an effort to seek the most economical alternative to the replacement of the wall segments with a more substantial continuous structure. We have sought the services of an independent engineering consultant to give us advice regarding the best alternatives for wall construction as well as for the construction of an equipment shelter which our Department of Public Works would like to install on the newly-acquired property.

We will advise you regarding those alternatives and any cost estimates once the consultant has had an opportunity to review the area and prepare his report. We will then arrange a meeting for the continuation of our discussion of the retaining wall replacement.

Please contact us if you have any questions about this matter.

Sincerely,

William A. Raasch
Assistant Building Inspector

WAR:pw

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney ✓
James J. Lynch, Director, Department of Community Development
James Bartnicki, Director, DPW
James Swenson, Assistant Director, DPW

WALL1

Patricia Filroe

- phone (W) 964-2839 (7:20)

1409 E Pinedale

- 6" of garage encroaches onto the VIg property

advised

- we will Not enforce
- we will Not force move
- if Changes to garage
  - any New Structure Must comply

MEMORANDU..

March 27, 2001

Shorewood

TO: James Bartnicki, Director of Public Works
William Raasch, Assistant Building Inspector

FROM: Edward C. Madere, Village Manager

COPY TO: Raymond Pollen, Village Attorney
James Swenson, Assistant Director of Public Works
James Lynch, Director of Community Development

RE: DPW Retaining Wall

Following is my understanding of the conclusions that we reached at our meeting of March 23, 2001, regarding the above:

The Electric Co. has indicated that to temporary relocate the power lines adjacent to the retaining wall will cost $25,000. If the wall is reconstructed three feet west of its current location, there will be no electrical line relocations necessary, saving the relocation charge.

Estimates from Edgerton Construction indicate that the cost of reconstructing the wall using steel sheet pile will cost $47,000. This is significantly less than the other alternatives, and would have an estimated life of 50+ years.

It was noted that Mr. Dalton, the owner of the property furthest north, has been opposed to paying any of the costs for the retaining wall. It was suggested that the Village consider paying for his portion of the retaining wall in exchange for him donating a piece of the rear yard from his property.

Bill will recalculate the individual owner cost based on a percentage of the total wall, that is, both height as well as length. Two calculations will be made–one which would include Mr. Dalton's property, and the second which would only include the three southern properties.

When the calculations have been completed, it was suggested that a meeting be held to include Mr. Pollen to finalize our strategy in this matter and then to schedule a meeting with the affected property owners shortly thereafter.

Please let me know if you have any questions concerning the above.

ECMcfs
11q.74

Shorewood

March 18, 1999

MEMO

TO: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James Bartnicki, Director, DPW

FROM: James J. Lynch, Director
Department of Community Development

COPY: James Swenson, Assistant Director, DPW
William A. Raasch, Assistant Building Inspector

SUBJECT: Private Retaining Wall in Rear of DPW Yard

For over ten years, the Department of Community Development has been involved in some action with a number of private property owners to repair various parts of a retaining wall along the east border of what is now the Department of Public Works rear yard. For most of the time mentioned above, the area adjacent to the retaining wall was owned by a private party (Donna Groh). Attached to this memo is a chronology of various correspondence/events regarding this issue.

To summarize the situation, the grade level between the rear yards of the properties on the west side of North Morris Boulevard from Pinedale Court south to Beverly Road is higher than the adjacent grade in the Department of Public Works yard. The difference in elevation varies from a few feet to approximately 12 feet. To accomplish this grade change, a series of retaining walls made of various materials, designs, and heights was constructed by the private property owners on North Morris Boulevard. There exists no accurate record that establishes when the various parts of the wall were originally built or who built them. Surveys of the various properties indicate that the walls exist (for the most part) on various private properties adjacent to the Department of Public Works yard. The problem associated with this situation is that at several locations the retaining wall is failing. If these wall sections fail completely, they will present a danger to other parts of the properties that they retain. They may also present a danger to materials and workers in the Department of Public Works yard.

To date, the Department of Community Development has cited the owners of the failing wall segments individually and at different times. Each time a citation was issued, Section 9-709C of the Shorewood housing code was cited. This section states in part:

> "Every fence and every other non-dwelling structure shall be kept in a good state of maintenance and repair by the owner thereof or shall be removed."

In this case, removal of the failed wall segments is not an option since the detached garages of these properties are literally held up by the wall. In reviewing the collective files on this wall, it is my conclusion that a piecemeal approach will never result in a long-term permanent solution to the problem. Based on the foregoing explanation, I suggest that staff meet and discuss what options there are to implementing a long-term repair to the wall as well as what legal authority is available to the Village to achieve compliance with the recommended solution.

On the attached calendar for the next few weeks, please indicate your availability for a meeting. Based on your response, a date will be established. If you have any questions or suggest that certain specific information be made available for the meeting, please let me know.

JJL:pw

DPWWALL1

Correspondence\ directed to the two property owners whose portions of the retaining wall were in question began in June, 1990, and proceeded as follows:

June 5, 1990	William Raasch letter to Kevin Travis, owner of 3851-53 N. Morris regarding condition of wall and advice of responsibility to repair his portion. No response from owner.
June 5, 1990	William Raasch letter to Eugene Saathoff, owner of 3855-57 N. Morris regarding condition of wall and responsibility to repair his portion.
June 14, 1990	Letter from Sisolak & Labros, attorneys for Eugene Saathoff
June 26, 1990	William Raasch letter to Sisolak & Labros as response to claims of exemption from responsibility
June 27, 1990	William Raasch letter to Kevin Travis, second notice.
July 13, 1990	Letter from Sisolak & Labros.
July 30, 1990	William Raasch letter to Kevin Travis; third notice, sent certified mail.
August 15, 1990	William Raasch memo to Alvin R. Meyer, Village Attorney referring matter to him due to lack of response by Kevin Travis.
July 17, 1991	William A. Raasch letter to Kevin Travis. William A. Raasch letter to Eugene Saathoff. William A. Raasch letter to Sisolak & Labros.
March 25, 1992	Code compliance orders written as part of Shorewood's "time of sale" program, including order to repair wall section at 3951-53 N. Morris (Kevin Travis).
August 12, 1992	William Raasch conducted multiple inspections around this date to monitor progress of minimal repair done by Mr. Travis. Most loose material had been removed and replaced with engineered landscape stone over what appeared to be stable portion of older wall.

July 1, 1993	James J. Lynch letter to Ms. Groh regarding intention to seek an independent evaluation of retaining wall.
July 5, 1993	Site visit and report generated by Buettner & Associates (self-explanatory).
August 25, 1993	William Raasch letter to John Niemczyk, new owner of 3851-53 N. Morris Boulevard with copy of report.
September 1993	Concrete brick and mortar upper wall replacement made at smaller end adjacent to 3855-57 N. Morris, Eugene Saathoff, owner.

In 1994 and 1995, several site inspections were conducted by William Raasch to determine status of wall in general as well as condition of repaired areas.

In 1996, Mr. Niemczyk applied for a permit to construct a substantial replacement retaining wall, but weather conditions prevented an immediate start.

Wall construction commenced in 1997 (early spring), at which time Ms. Groh indicated that she would dispute property boundary with Mr. Niemczyk.

Addendum to Chronology

Reference: Retaining Wall Adjacent to 1347-49 E. Pinedale Court

- In 1998, Ms. Donna Groh elected to sell her property and the Village of Shorewood purchased it.
- John Niemczyk had completed construction of his new pressure-treated timber retaining wall (portion of wall spanning the rear property line at 3851-53 N. Morris Boulevard).
- Letter to Mr. Gene Saathoff regarding condition of and need to replace his portion of retaining wall at 3855-57 N. Morris Boulevard from James Lynch, dated October 22, 1998.
- Construction proposal copy received (Verette Construction) from Gene Saathoff dated November 1, 1998.
- Follow-up letter to Gene Saathoff from W. A. Raasch dated December 22, 1998. Subsequent phone response from Gene Saathoff to James Lynch with information about bid from Niemczyk, etc.
- Memo from James Bartnicki to James Lynch dated February 22, 1999

WAR:pw

PINEDALE

2/22/00

LARRY DALTON
3861-63 N. MORRIS

Gene Saathoff
3855-57 N. Morris

JOHN DIMEETK
3851-53 N. MORRIS

Mary Miske
3847-49 N Morris

JIM BARTNICKI, DIRECTOR DPW
963-6999

EDWARD L. MADERE, VILLAGE MANAGER
963.6980

BILL RAASCH, BUILDING INSPECTOR
963-6983

JIM LYNCH, DIRECTOR COMMUNITY DEV
963-6983

RAY POLLEN, VILLAGE ATTORNEY
271-7722

Shorewood

April 23, 1999

John Penshorn, President
J. C. Zimmerman Engineering
5200 W. Loomis Road
Greendale, WI 53129

Dear Mr. Penshorn:

This letter is to accept your proposal of April 21, 1999 for the provision of professional services associated with a retaining wall in the Department of Public Works yard. After discussing the subject wall, Village staff has concluded that the wall should be designed as a separate stand alone structure. Other improvements within the Department of Public Works yard can also be looked at but on an independent basis. These improvements would then include removal of the south residential structure on the newly-acquired property, the possible re-grading and paving of the area, and the establishment of a covered storage facility in the general location. It was staff's conclusion that by separating the two improvements, the Village would not expose itself to liabilities associated with the long-term maintenance of the wall, which is felt to be the responsibility of the adjacent private property owners.

Please develop a schedule for proceeding with this project and advise me at your earliest convenience. We are obviously anxious to proceed as some aspects of the project may fall within the capitol improvements for the coming budget season.

If you have any questions prior to proceeding with your schedule for the work, please give me a call at the Department of Community Development, 963-6983.

Sincerely,

James J. Lynch, Director
Department of Community Development

JJL:pw

c: Edward C. Madere, Village Manager
James Bartnicki, Director, DPW
James Swenson, Assistant Director, DPW
Leeann Butschlick, Assistant to the Manager

DPWWALL2

(2-22-2000) retaining wall mtg

* special assessment
  - Vlg doesn't own

* issue a Raze orders (x 4)
  - declaration danger to neighboring prop.
  - 4 separate Solutions -

* Vlg can't fix ; Can't pay for ; Can assist

* former lumberyard bldgs. must be taken down [dangerous] - propping up

* wall deteriorating must be taken down [dangerous]

Village of Shorewood

Predesign Analysis and Cost Estimate

Department of Public Works Property Improvements

J.C. Zimmerman Engineering

June 8, 1999

J.C. ZIMMERMAN ENGINEERING

June 8, 1999

Mr. James J. Lynch
Director, Department of Community Development
3801 N. Morris Blvd.
Shorewood, WI 53211-00166

Dear Mr. Lynch:

J. C. Zimmerman Engineering is pleased to submit the attached report titled "Predesign Analysis and Cost Estimate for the Village of Shorewood, Department of Public Works Property Improvements".

I am available to present this report to appropriate Village personnel at your direction. At that time, I will of course answer questions from those present. Please give me a call at your earliest convenience if you have any questions about the report and also to schedule the meeting date.

Sincerely,

J.C. ZIMMERMAN ENGINEERING CORP.

Mark W. Beyer, P.E.
Vice President of Operations

J.C. Zimmerman Engineering Corp.
Municipal/Transportation Engineers Since 1959
5200 W. Loomis Road, Greendale, WI 53129 • (414) 421-5200 • FAX (414) 421-8842 • (800) 524-3032 • jcz@execpc.com

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Property Analysis
- Eastern property border
- General sitework
- Other improvements

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Preliminary Schedule

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Exhibits

- Site Plan
- Retaining Wall Placement
- Typical Retaining Wall Cross-sections
- Site Photographs

Background

At the request of the Director of Community Development for the Village of Shorewood, J. C. Zimmerman has completed an analysis of various improvements proposed for the Village of Shorewood Department of Public Works property. Engineering services included:

- Property inspection and evaluation of site conditions.
- Field measurements.
- Develop design options for site improvements.
- Constructability analysis.
- Cost estimate.

The report includes a preliminary design, discussion of options, and a cost estimate for various construction scenarios and facility improvements. Improvements include the following:

1. Demolition, on-site and off-site structures.
2. Site work including excavation, grading, paving, drainage.
3. Retaining wall.
4. Building/Shelter.
5. Material storage bunkers.

Property Analysis

East Property Border

The Department of Public Works borders a residential area directly to the east. The property boundary consists of a series of retaining walls which vary in elevation and type. The retaining walls are owned and maintained by the residential property owners as the walls are not on Village property. Walls have been constructed of wood, concrete, and stone.

The existing retaining walls raise numerous issues of concern. Concerns are as follows:

1. Some walls are unstable and are beginning to collapse onto Village property.
2. Some of the walls and sidewalk are constructed on Village property.
3. Wall structural integrity is suspect and unknown (no approved design criteria)
4. Erosion is occurring.
5. The wall structures raise numerous safety issues. Collapse and falling from the top onto Village property.
6. The walls are aesthetically unpleasant.

A retaining wall should offer long life, be structurally sound meeting functional requirements, be constructed of quality material, meet safety requirements, offer reasonable constructability, and the cost should be consistent with the intended use. Two wall types, which meet these criteria, are a concrete block wall with tiebacks, and a reinforced poured concrete wall.

Four retaining wall options analyzed include:

Option A	Concrete wall, located on residential property.
Option B	Block wall, located on residential property.
Option C	Concrete wall, located on Village property.
Option D	Block wall, located on Village property.

A concrete block wall offers ease and flexibility in construction technique with backfill occurring as construction progresses. This wall type requires approximately 12 feet of workable space for structural tie back systems. A concrete block wall is attractive and cost effective. This wall type can be constructed on private or Village property and is shown on the attached drawing as Option A and C.

A reinforced, poured concrete wall is an acceptable wall type. A concrete wall requires space for excavation with acceptable cutback slopes and room to place formwork. Concrete walls offer a very long life with proven durability and performance. This wall type can be constructed on private or Village property and is shown on the attached drawing as Option B and D.

Depending on wall placement, adjoining properties to the east may be affected. Existing retaining walls, fences and some structures will require demolition. Shoring and or bracing system costs outweigh replacement cost. See Options A thru D Cost Estimate for wall option and demolition detail.

Selection of an Option should be made after the Village considers and evaluates other non-physical site issues that are not part of this report.

Demolition

The site has two areas that may require demolition if improvements proceed. On-site demolition would include a two story brick and concrete abandoned building and a built-up sidewalk with adjoining stone and broken concrete wall. If Option A or B were to proceed, demolition would be required off-site on residential property. Demolition would include existing retaining walls, a collapsing concrete wall, one tree, residential fencing, garage and grass yard space.

Demolition costs for items on residential property are listed as part of the cost estimates for Options A and B. Demolition on Village property should not occur before a retaining wall construction schedule is known since the items to be demolished are helping to hold some of the existing retaining walls in place.

Site Work

Project site work on Village property is required for the following:

- Excavation of high areas and unsuitable surface material. This will allow the site to properly drain and to create usable space for Department of Public Works operations.
- Crushed aggregate fill to create a suitable sub-base.
- Asphalt paving.

(see site work cost elements)

Other Improvements

The Village property has available space for placement of a 40' by 60' or 40' by 80' covered structure. A pre-engineered metal frame structure with metal roof offers highest value. Wood frame "pole" type structures are comparable in cost but offer higher maintenance, insurance, and shorter life. An 18 foot eve height will allow free movement of DPW equipment in and out. Other features would include concrete filled steel bollards, and wall mount lighting.

Material storage areas can be constructed in the yard space adjacent to the covered structure. Precast concrete "L" interlock panels can be utilized to create three 18' by 15' bunkers that are ten or twelve feet high. Precast panels offer several advantages over cast in-place units. Advantages include flexibility to adjust bunker size and ability to relocate as operational needs change.

Cost Estimate

Contractor mobilization and general conditions		$ 2,000
Demolition		
Building	15,000 C.F.	4,500
Tree	14" – 1 EA.	200
Sidewalk	85 L.F.	850
Infringing stone wall	320 S.F.	960
Concrete wall (leaning)	240 S.F.	1,000
General Site Excavation	178 C.Y.	890
Sidewalk Area Excavation	55 C.Y.	275
Disposal	550 C.Y.	5,500
Subtotal		$16,175

Construct Wall

Option A - Block Wall on Residential Property

Temporary Fence - Top		$ 500
Demo stone walls	400 S.F.	1,200
Demo wood walls	450 S.F.	300
Demo porch, fence, garage	1 EA.	2,500
Erosion Control		200
Excav. slope cutback & stockpile	500 C.Y.	2,500
Excav. wall footing		200
Wall	2300 S.F.	23,000
Pipe	160 L.F.	800
Granular fill	150 C.Y.	2,250
Soil backfill	350 C.Y.	2,000
Seeding		150
6' chain link fence		2,400
Subtotal		$38,000

Option B – Concrete Wall on Residential Property

Temporary Fence – Top		$ 500
Demo stone walls	400 S.F.	1,200
Demo wood walls	450 S.F.	300
Demo porch, fence, garage	1 EA.	2,500
Erosion Control		200
Excav. slope, cutback & stockpile	550 C.Y.	2,600
Excav. wall footing		200
Wall	2300 S.F.	33,900
Pipe	160 L.F.	800
Granular fill	150 C.Y.	2,250
Soil backfill	400	2,000
Seeding		150
6" Chain Link Fence		2,400
Subtotal		$48,490

Option C - Block Wall on Village Property – 10' Set Back

Excav. wall footing		$ 200
Wall (2' lower)		19,800
Pipe	160 L.F.	800
Granular fill	150 C.Y.	2,250
Soil fill	325 S.Y.	1,625
Soil backfill (from on-site)	250 C.Y.	1,000
Less soil and stone wall disposal		<2,200>
Gravel top 10 ft wide	1600 S.F.	750
6" Chain Link Fence		2,400
Subtotal		$26,625

Option D – Concrete Wall on Village Property – 3' Set Back

Excav. wall footing		$ 200
Wall (2' lower)		30,830
Pipe	160 L.F.	800
Granular fill	150 C.Y.	2,250
Soil backfill (from on-site)		1,000
Less soil and stone wall disposal		<2,200>
Gravel top		300
6" Chain Link Fence		2,400
Subtotal		$35,580

Site Grading	6,400 S.F.	$ 1,000	
Granular subbase	6,400 S.F.	4,736	
Asphalt paving	6,400 S.F.	6,080	or
Concrete paving	6,400 S.F.	19,200	
Material storage bunkers (precast & sections)	114 L.F.	$ 8,550	
Pre-engineered metal building, no walls 40' x 60' 18', 12:1 Roof slope		$28,800	
Column guards (metal pipe/conc. filled)	10 EA.	3,000	
Elec. allowance (wall pre-building maint. yard lighting)	2 EA.	1,200	
Subtotal		$53,000 - $67,000	

Cost Summary

Mob., Demob., GC's	$ 2,000
Demo & site prep.	16,175
Wall	27,000 – 49,000
Subbase/Paving	12,000 – 25,000
Bunkers	8,550
Building (40 x 60)	33,000
Total (Depending on choices)	$98,725 - $133,725
Engineering, Survey, Testing, Design, Inspection	$10,000
Contingency (recommend)	$15,000

Notes:

1. Wall construction using driven piles is cost prohibitive. Approx. $75,000.
2. Option C & D requires permit to backfill against property owner walls.
3. It is not known by the engineer at this time whether retaining wall improvements will be public or privately funded.

Assumptions:

- Soil bearing capacity minimum 3,000 psi.
- No underground obstructions or utility lines are encountered.
- Private fencing and garage will be lost.
- Private wooden retaining wall behind Village parking and maintenance building remains as it now is.
- No required zoning setback for retaining wall (or waived).

Estimate Exclusions:

- Shoring and bracing of private structures during excavation and construction.
- Restoration and/or payment for destruction or alteration of private walls, structures, porches, fencing, yards, lawn and landscaping.
- Costs to obtain easements to construct on private property.
- Legal fees.
- Design, Survey, Geotechnical Testing
- Project and Construction Management

Preliminary Schedule

Permitting	4 to 20 weeks
Site survey, soil borings, final design	4 weeks
Procure suppliers and contractors - Bid Phase activities	2 weeks

Block and steel lead times will generally be 4 to 6 weeks

Construction	4 weeks

Asphalt paving can occur until November 25, 1999 or begin again in March of 2000.

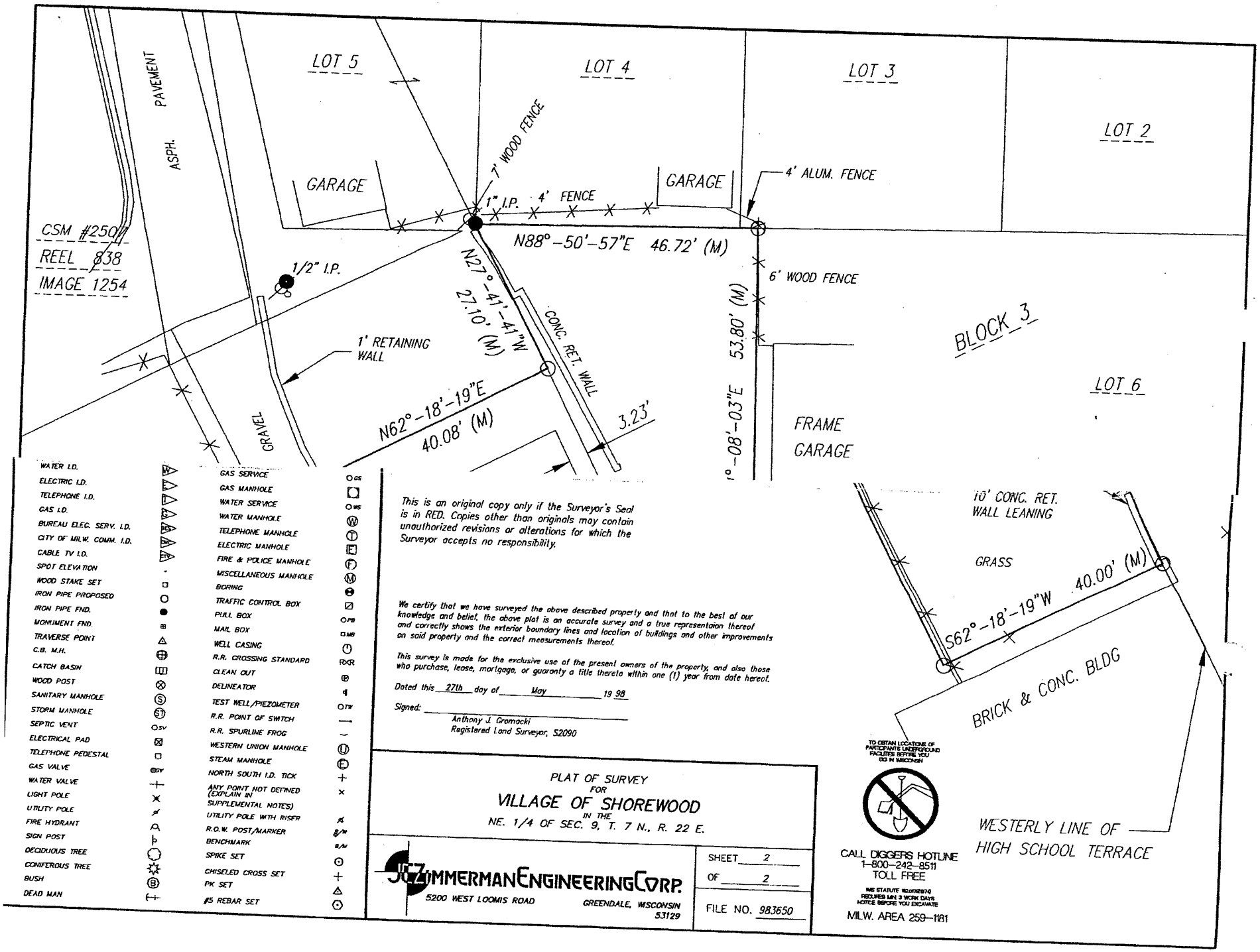
Conclusions

Selective demolition, construction of retaining wall, paving, and construction of storage facilities will offer the Village of Shorewood a usable and safe property. The Department of Public Works operations will benefit with an expanded and improved facility. Retaining wall systems offer a permanent, attractive, and structurally stable solution to maintaining the adjoining property elevation differentials.

(Conclusions – continued)

Retaining wall Option A and B will directly impact adjoining property owners as construction excavation requirements will require demolition and excavation of adjoining private property. The site contains adequate space for other facilities, and DPW traffic movement. All proposed site construction improvements will allow drainage to follow existing patterns.

The Village of Shorewood will determine the final scope of work and placement of facilities based on J.C. Zimmerman's analysis and cost estimate, and other issues investigated by the Village. This report lists cost by item. As scope choices are made, the selected items should be subtotaled to arrive at project cost.



WATER I.D.
ELECTRIC I.D.
TELEPHONE I.D.
GAS I.D.
BUREAU ELEC. SERV. I.D.
CITY OF MILW. COMM. I.D.
CABLE TV I.D.
SPOT ELEVATION
WOOD STAKE SET
IRON PIPE PROPOSED
IRON PIPE FND.
MONUMENT FND.
TRAVERSE POINT
C.B. M.H.
CATCH BASIN
WOOD POST
SANITARY MANHOLE
STORM MANHOLE
SEPTIC VENT
ELECTRICAL PAD
TELEPHONE PEDESTAL
GAS VALVE
WATER VALVE
LIGHT POLE
UTILITY POLE
FIRE HYDRANT
SIGN POST
DECIDUOUS TREE
CONIFEROUS TREE
BUSH
DEAD MAN

GAS SERVICE
GAS MANHOLE
WATER SERVICE
WATER MANHOLE
TELEPHONE MANHOLE
ELECTRIC MANHOLE
FIRE & POLICE MANHOLE
MISCELLANEOUS MANHOLE
BORING
TRAFFIC CONTROL BOX
PULL BOX
MAIL BOX
WELL CASING
R.R. CROSSING STANDARD
CLEAN OUT
DELINEATOR
TEST WELL/PIEZOMETER
R.R. POINT OF SWITCH
R.R. SPURLINE FROG
WESTERN UNION MANHOLE
STEAM MANHOLE
NORTH SOUTH I.D. TICK
ANY POINT NOT DEFINED (EXPLAIN IN SUPPLEMENTAL NOTES)
UTILITY POLE WITH RISER
R.O.W. POST/MARKER
BENCHMARK
SPIKE SET
CHISELED CROSS SET
PK SET
#5 REBAR SET

This is an original copy only if the Surveyor's Seal is in RED. Copies other than originals may contain unauthorized revisions or alterations for which the Surveyor accepts no responsibility.

We certify that we have surveyed the above described property and that to the best of our knowledge and belief, the above plat is an accurate survey and a true representation thereof and correctly shows the exterior boundary lines and location of buildings and other improvements on said property and the correct measurements thereof.

This survey is made for the exclusive use of the present owners of the property, and also those who purchase, lease, mortgage, or guaranty a title thereto within one (1) year from date hereof.

Dated this 27th day of May 19 98

Signed: _____
Anthony J. Gromacki
Registered Land Surveyor, S2090

PLAT OF SURVEY
FOR
VILLAGE OF SHOREWOOD
IN THE
NE. 1/4 OF SEC. 9, T. 7 N., R. 22 E.

ZIMMERMAN ENGINEERING CORP.
5200 WEST LOOMIS ROAD GREENDALE, WISCONSIN 53129

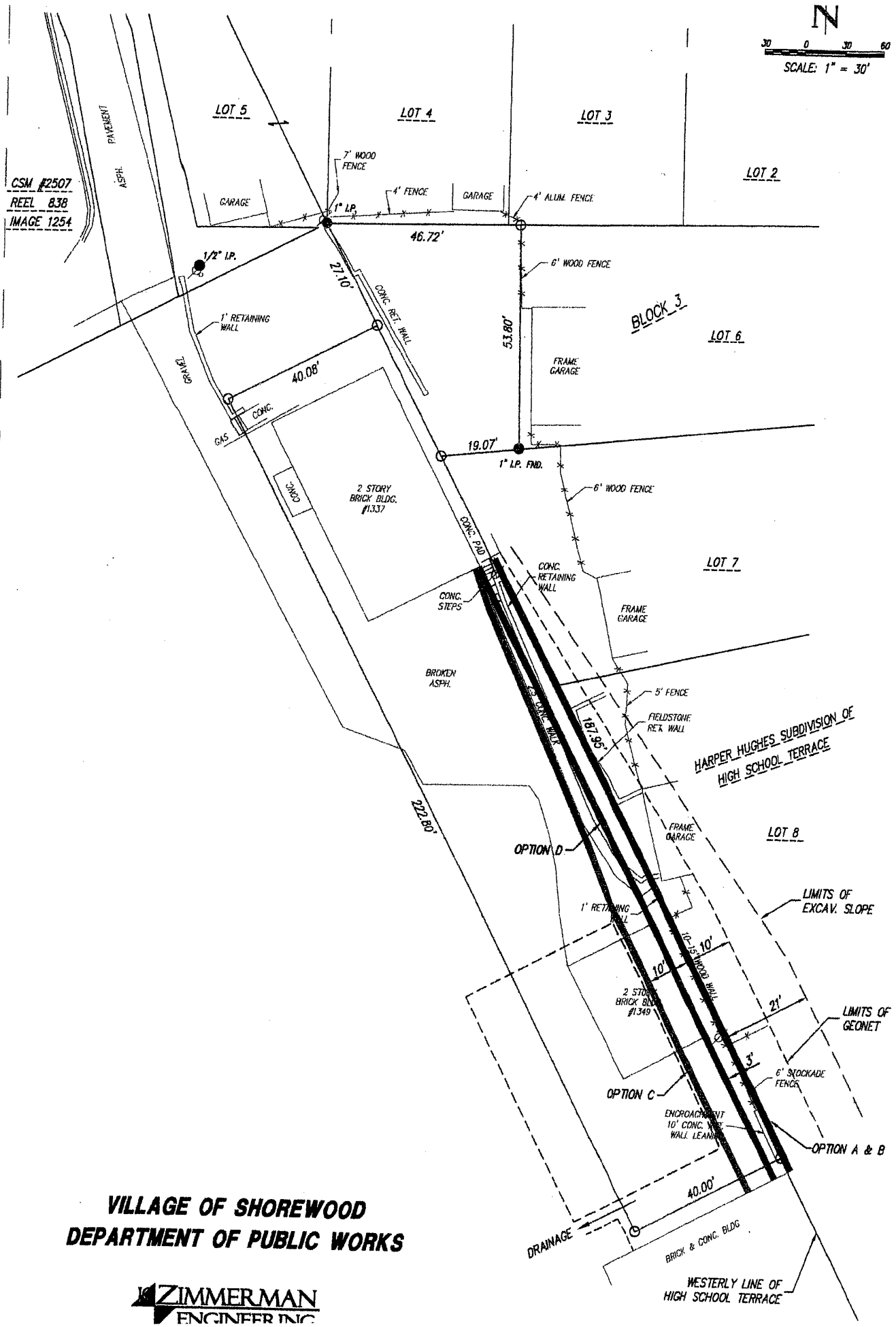
SHEET 2
OF 2
FILE NO. 983650

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

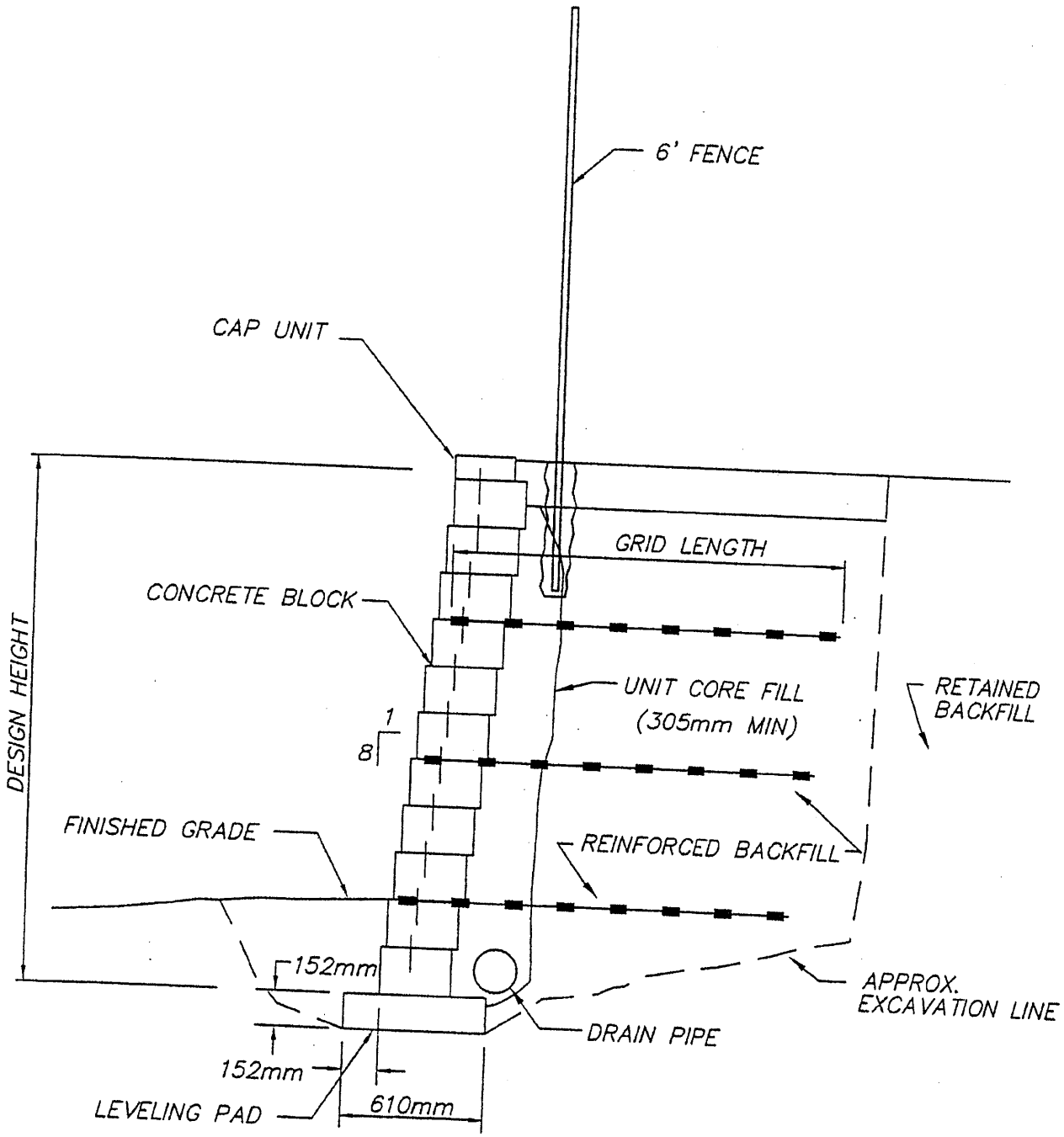
WI STATUTE 182.0175(1974) REQUIRES MIN 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

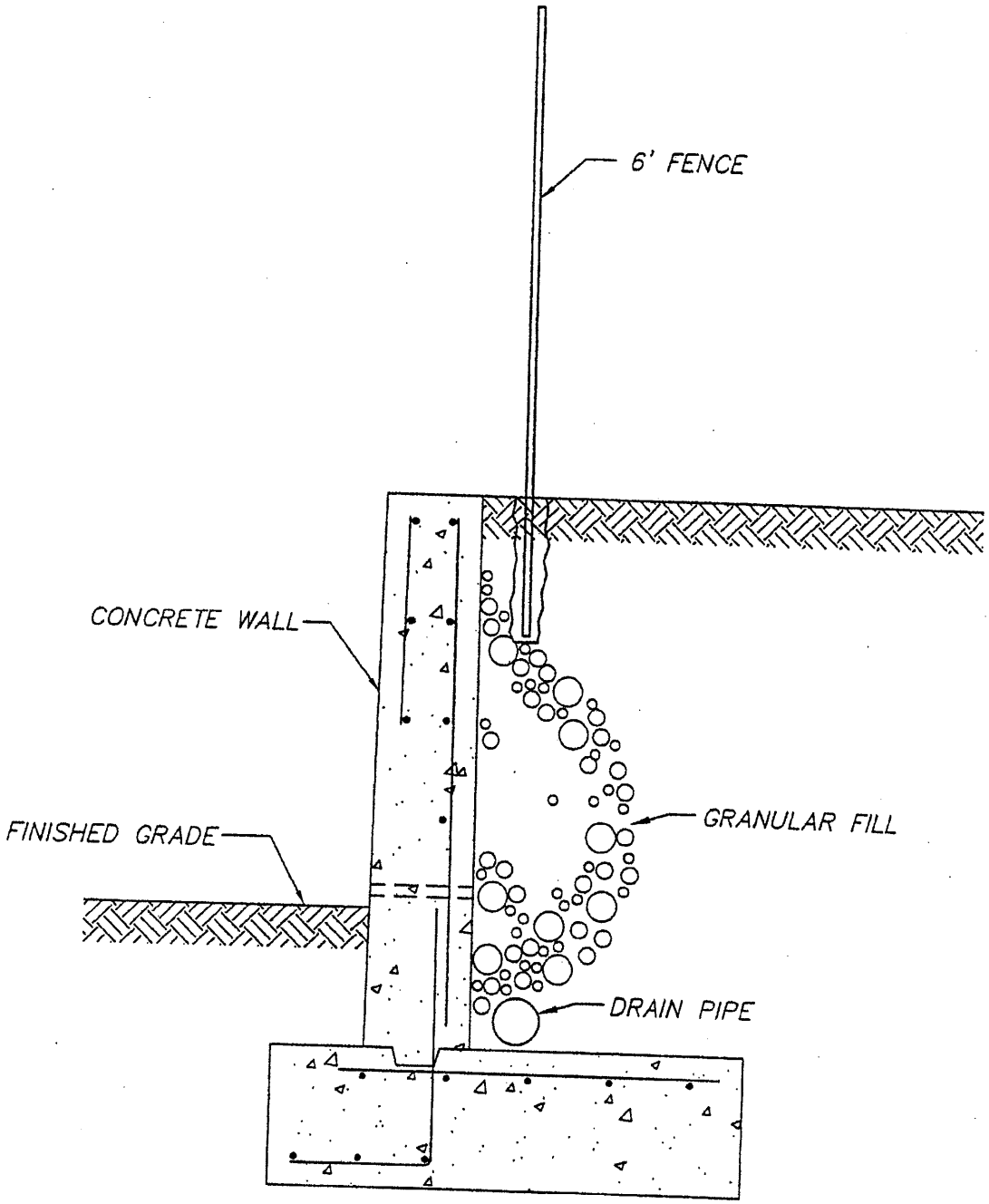


VILLAGE OF SHOREWOOD
DEPARTMENT OF PUBLIC WORKS

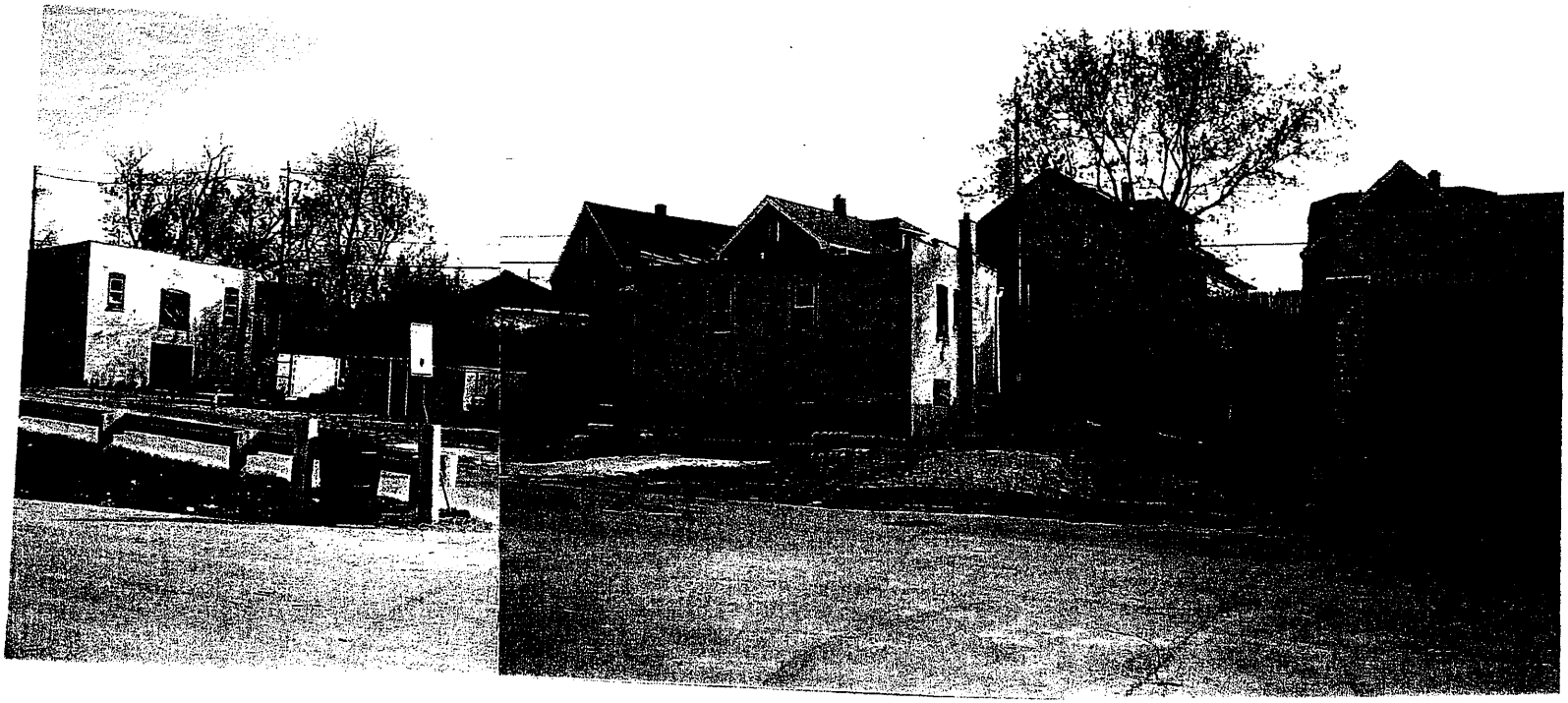
ZIMMERMAN ENGINEERING



CONCRETE BLOCK RETAINING WALL
CROSS SECTION



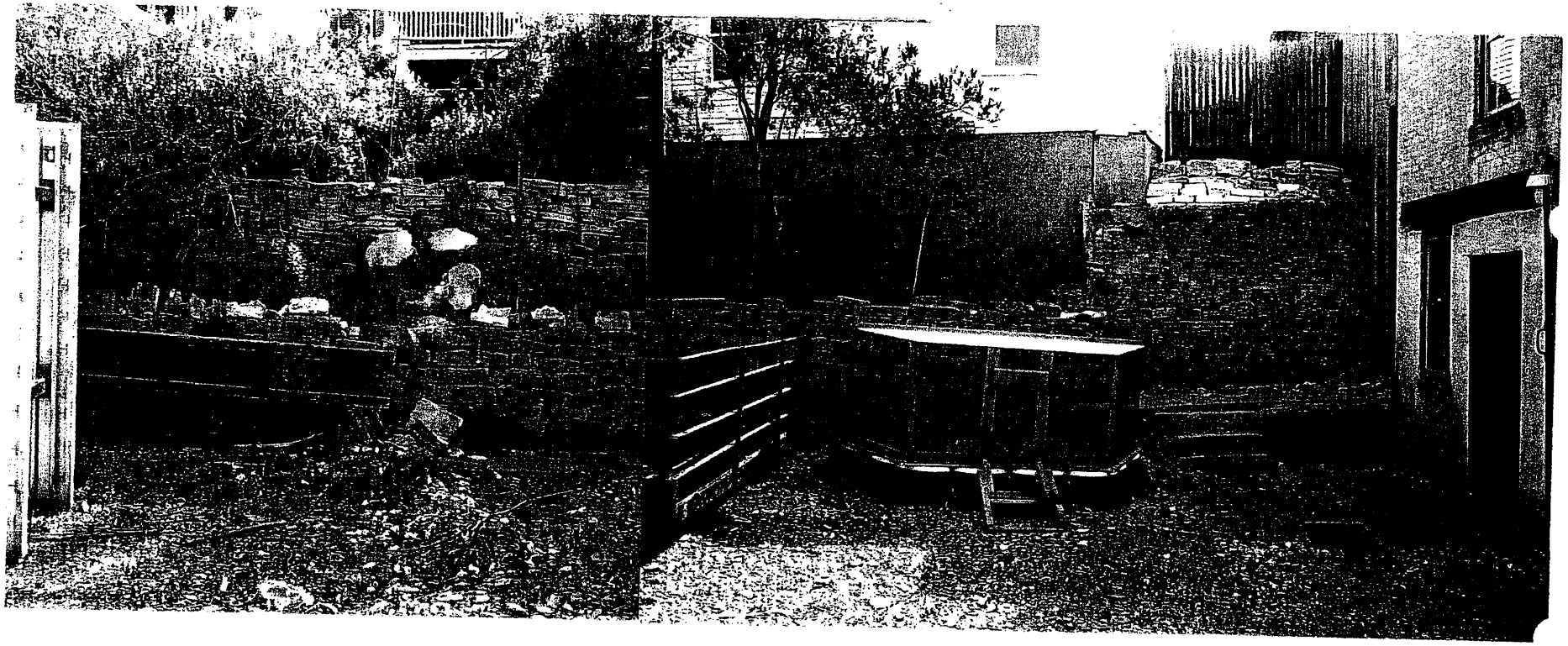
CONCRETE RETAINING WALL
CROSS SECTION



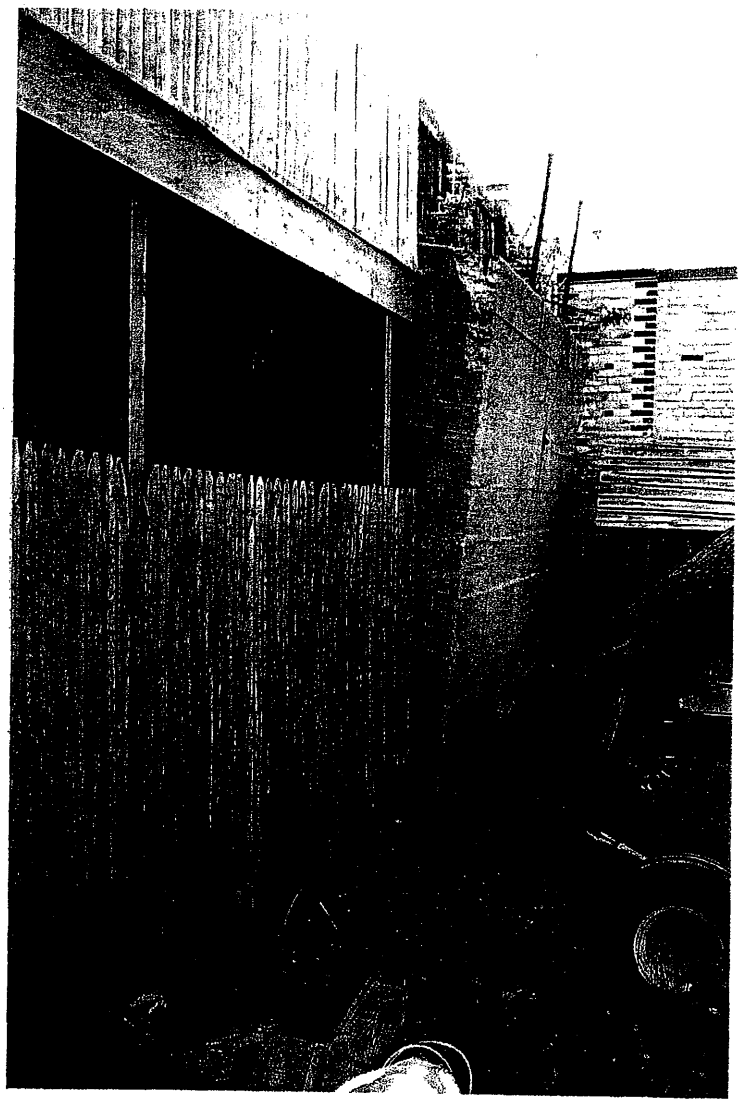
Village of Shorewood, DPW Property Looking East



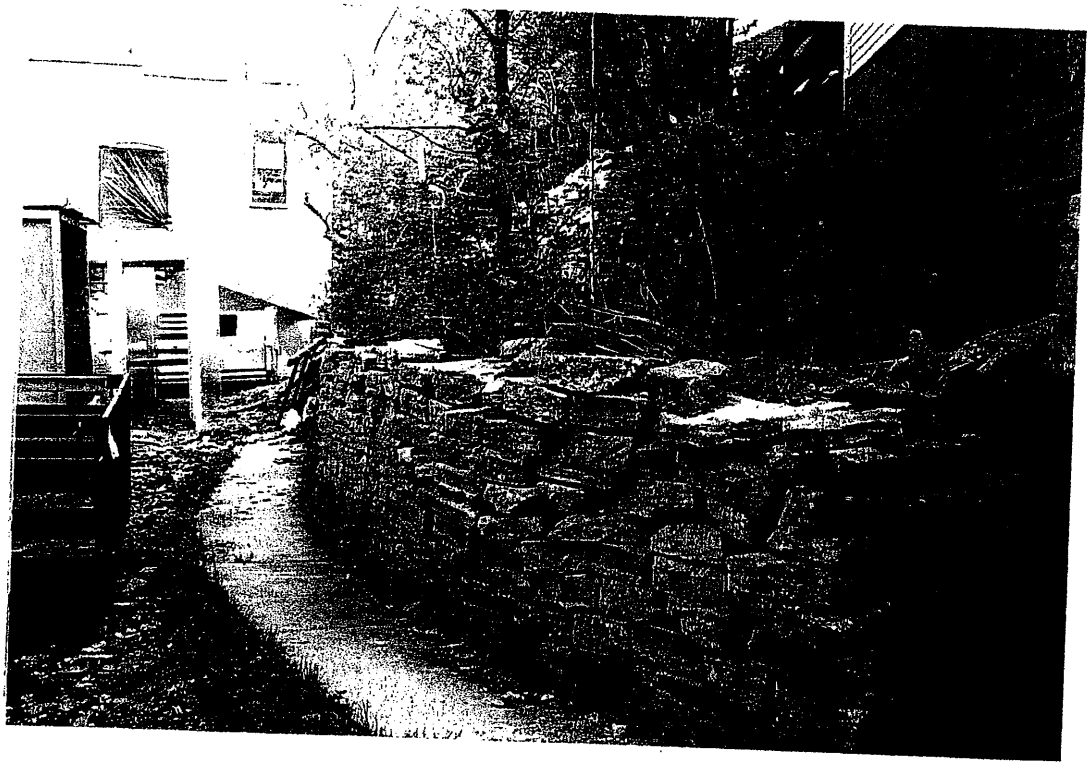
Village of Shorewood, DPW Property, East Wall Condition



Village of Shorewood, DPW Property, East Wall Condition



Collapsing Concrete Wall



Sidewalk Area



Wood Wall and Erosion

Shorewood

MEMO

TO: James J. Lynch, Director
Department of Community Development

FROM: William A. Raasch, Assistant Building Inspector

COPIES: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James Bartnicki, Director, DPW
James Swenson, Assistant Director, DPW

SUBJECT: Retaining Wall at Northeast Corner of DPW Yard

The accompanying sheet shows data relating to the properties located at 3847-49, 3951-53, 3955-57, and 3961-63 N. Morris Boulevard which are contingent with property located at the northeast end of the DPW yard and a projected retaining wall between the Village property and these properties as discussed during our meeting on Tuesday, January 11, 2000.

In addition to ownership and tenancy information, we attempted to break down the projected retaining wall into segments representing percentage of ownership for each of the property owners. We then listed the costs per owner based on those approximate percentages following each of the four options stated in the J. C. Zimmerman Engineering Pre-design Analysis and Cost Estimate dated June 8, 1999.

After reviewing and discussing the Zimmerman analysis, I strongly believe that alternative design concepts should be considered for the construction of that wall which may or may not include a design combining a retaining wall with elements of Jim Bartnicki's desired storage structure. If such a combination proves structurally and economically feasible, the property owners could then be charged only for those elements which comprise the wall and wall support. It is my feeling that such an alternate design might reduce the necessity for extensive excavation and/or removal of structures on the private property at the higher grade level.

I agree with comments made at our January 11th meeting that a preliminary discussion, with all neighbors attending, to describe our goals and disseminate information gathered toward the construction of the retaining wall would be useful in gaining their cooperation.

Shorewood

February 3, 2000

Gene Lon Satthoff
1102 E. Congress Street
Shorewood, WI 53211

Dear Mr. Satthoff:

Thank you for your response to our January 26th letter which requested your input on a date for a February meeting to discuss the retaining wall at the west end of the property which you own on North Morris Boulevard.

Per your responses, the meeting will be held in the Shorewood Village Hall Second Floor Committee Room at 7 P.M. on Tuesday, February 22, 2000.

We look forward to seeing you at the meeting, and thank you for your timely response.

Sincerely,

William A. Raasch

William A. Raasch
Assistant Building Inspector

WAR:pw

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney ✓
James J. Lynch, Director, Department of Community Development
James Bartnicki, Director, DPW
James Swenson, Assistant Director, DPW

MORRIS6

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name Ray Pollen

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000	OK	
Wednesday, February 16, 2000		Cannot
Thursday, February 17, 2000		Cannot
Tuesday, February 22, 2000	OK	
Wednesday, February 23, 2000	OK	
Thursday, February 24, 2000	OK	

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name Gene Saathoff

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000		
Wednesday, February 16, 2000	X	
Thursday, February 17, 2000	X	
Tuesday, February 22, 2000	X	
Wednesday, February 23, 2000	X	
Thursday, February 24, 2000	X	

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name MARY C. MISKE

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000	X	
Wednesday, February 16, 2000		X
Thursday, February 17, 2000	X	
Tuesday, February 22, 2000	X	
Wednesday, February 23, 2000		X
Thursday, February 24, 2000		X

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name LARRY DALTON

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000	✓	
Wednesday, February 16, 2000		✓
Thursday, February 17, 2000	✓	
Tuesday, February 22, 2000	✓	
Wednesday, February 23, 2000	✓	
Thursday, February 24, 2000	✓	

MORRIS BOULEVARD RETAINING WALL MEETING

POLLING SHEET

Your Name John Niemczyk

Proposed Meeting Date	Yes, can attend	No, cannot attend
Tuesday, February 15,2000		
Wednesday, February 16, 2000		
Thursday, February 17, 2000		
Tuesday, February 22, 2000		
Wednesday, February 23, 2000		
Thursday, February 24, 2000		

DPW Retaining wall

☆ 1-11-2000 (Mtg. Madea, Lynch, Bartnicki, Swanson,

- Retaining wall -

- Nuisance

*(1) Notice

*(2) Removal

*(3) lateral support

*(4) special assessment

Shorewood

January 26, 2000

RE: Property Located at 3861-63 N. Morris Boulevard

Larry and Londa Dalton
9645 N. Range Line Road
Mequon, WI 53092-5601

Dear Mr. & Ms. Dalton:

The purpose of this letter is to request a meeting with you and the owners of three properties adjacent to your property at the above address to discuss a long-term, more permanent repair to a retaining wall which supports the west setback and structures at a higher grade level than the property which it abuts to the west. The meeting will be held at the Shorewood Village Hall Committee Room, 3930 N. Murray Avenue.

The Village of Shorewood recently purchased a parcel of land at the property formerly known as 1347-49 E. Pinedale Court. The east property line of this property is contingent with your property as well as with three other adjacent properties. We would also like to discuss with you a recent property and pre-design analysis conducted on behalf of the Village by J. C. Zimmerman Engineering, since it is the Village's intention to make changes in the area adjacent to the wall so that the Shorewood Department of Public Works can use the property more efficiently. It is felt that the current condition of the wall is such that health and safety concerns exist regarding the use of the DPW yards.

Please review the enclosed polling sheet and indicate which dates would suit your calendar so that a date can be chosen which accommodates everyone's schedule. All meeting dates would involve a 7:00 P.M. meeting time. Please return the polling sheet to us in the enclosed return envelope by February 4, 2000, after which we will notify all parties concerned of the date chosen.

Thank you for your consideration of the above and for your cooperation in this matter.

Sincerely,

William A. Raasch

William A. Raasch
Assistant Building Inspector

WAR:pw

enc

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James J. Lynch, Director, Department of Community Development

MORRISS

Shorewood

January 26, 2000

RE: Property Located at 3847-49 N. Morris Boulevard

Mary C. Miske
3847 N. Morris Boulevard
Shorewood, WI 53211

Dear Ms. Miske:

The purpose of this letter is to request a meeting with you and the owners of three properties adjacent to your property at the above address to discuss a long-term, more permanent repair to a retaining wall which supports the west setback and structures at a higher grade level than the property which it abuts to the west. The meeting will be held at the Shorewood Village Hall Committee Room, 3930 N. Murray Avenue.

The Village of Shorewood recently purchased a parcel of land at the property formerly known as 1347-49 E. Pinedale Court. The east property line of this property is contingent with your property as well as with three other adjacent properties. We would also like to discuss with you a recent property and pre-design analysis conducted on behalf of the Village by J. C. Zimmerman Engineering, since it is the Village's intention to make changes in the area adjacent to the wall so that the Shorewood Department of Public Works can use the property more efficiently. It is felt that the current condition of the wall is such that health and safety concerns exist regarding the use of the DPW yards.

Please review the enclosed polling sheet and indicate which dates would suit your calendar so that a date can be chosen which accommodates everyone's schedule. All meeting dates would involve a 7:00 P.M. meeting time. Please return the polling sheet to us in the enclosed return envelope by February 4, 2000, after which we will notify all parties concerned of the date chosen.

Thank you for your consideration of the above and for your cooperation in this matter.

Sincerely,

William A. Raasch

William A. Raasch
Assistant Building Inspector

WAR:pw

enc

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James J. Lynch, Director, Department of Community Development

Shorewood

January 26, 2000

RE: Property Located at 3851-53 N. Morris Boulevard

John Niemczyk
4411 N. Lake Drive
Shorewood, WI 53211

Dear Mr. Niemczyk:

The purpose of this letter is to request a meeting with you and the owners of three properties adjacent to your property at the above address to discuss a long-term, more permanent repair to a retaining wall which supports the west setback and structures at a higher grade level than the property which it abuts to the west. The meeting will be held at the Shorewood Village Hall Committee Room, 3930 N. Murray Avenue.

The Village of Shorewood recently purchased a parcel of land at the property formerly known as 1347-49 E. Pinedale Court. The east property line of this property is contingent with your property as well as with three other adjacent properties. We would also like to discuss with you a recent property and pre-design analysis conducted on behalf of the Village by J. C. Zimmerman Engineering, since it is the Village's intention to make changes in the area adjacent to the wall so that the Shorewood Department of Public Works can use the property more efficiently. It is felt that the current condition of the wall is such that health and safety concerns exist regarding the use of the DPW yards.

Please review the enclosed polling sheet and indicate which dates would suit your calendar so that a date can be chosen which accommodates everyone's schedule. All meeting dates would involve a 7:00 P.M. meeting time. Please return the polling sheet to us in the enclosed return envelope by February 4, 2000, after which we will notify all parties concerned of the date chosen.

Thank you for your consideration of the above and for your cooperation in this matter.

Sincerely,

William A. Raasch

William A. Raasch
Assistant Building Inspector

WAR:pw

enc

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James J. Lynch, Director, Department of Community Development

MORRIS5

Shorewood

January 26, 2000

RE: Property Located at 3855-57 N. Morris Boulevard

Gene Lon Satthoff
1102 E. Congress Street
Shorewood, WI 53211

Dear Mr. Satthoff:

The purpose of this letter is to request a meeting with you and the owners of three properties adjacent to your property at the above address to discuss a long-term, more permanent repair to a retaining wall which supports the west setback and structures at a higher grade level than the property which it abuts to the west. The meeting will be held at the Shorewood Village Hall Committee Room, 3930 N. Murray Avenue.

The Village of Shorewood recently purchased a parcel of land at the property formerly known as 1347-49 E. Pinedale Court. The east property line of this property is contingent with your property as well as with three other adjacent properties. We would also like to discuss with you a recent property and pre-design analysis conducted on behalf of the Village by J. C. Zimmerman Engineering, since it is the Village's intention to make changes in the area adjacent to the wall so that the Shorewood Department of Public Works can use the property more efficiently. It is felt that the current condition of the wall is such that health and safety concerns exist regarding the use of the DPW yards.

Please review the enclosed polling sheet and indicate which dates would suit your calendar so that a date can be chosen which accommodates everyone's schedule. All meeting dates would involve a 7:00 P.M. meeting time. Please return the polling sheet to us in the enclosed return envelope by February 4, 2000, after which we will notify all parties concerned of the date chosen.

Thank you for your consideration of the above and for your cooperation in this matter.

Sincerely,

William A. Raasch
Assistant Building Inspector

WAR:pw

enc

c: Edward C. Madere, Village Manager
Raymond Pollen, Village Attorney
James J. Lynch, Director, Department of Community Development

MORRIS5

APPENDIX G
WE ENERGIES UTILITY LINE RELOCATION INFORMATION

We Energies
North Service Center
5400 N Green Bay Ave
Milwaukee, WI 53209
www.we-energies.com

March 11, 2025

Ms. Rebecca Ewald
Village Manager
Village of Shorewood
3930 N. Murray Avenue
Shorewood, WI 53211

Subject: Preliminary estimate for Electric Facility Relocation – Department of Public Works located at 3801 N Morris Blvd, Shorewood in the Village of Shorewood, WR 5046245.

Dear Rebecca:

Thank you for contacting We Energies regarding your potential project to relocate overhead electric lines to allow you to repair your retaining wall. At your request we have prepared a preliminary estimate for electric facility relocation at the site listed above.

In order to accommodate this project, it will be necessary for We Energies to relocate overhead electric facilities that are in conflict. This work has been determined to be compensable due to existing land rights.

Please review the following estimated cost information:

- The **estimated** cost for relocating primary overhead facilities to underground and rebuild primary overhead facilities along the retaining walls: **$2,741,000**
- This estimate does not include electric service rewires or electrician costs.
- This estimate contains no betterment of We Energies facilities.
- The estimated cost applies only to our electric facilities and includes service wires to individual residences and businesses along the distribution route.
- Erosion control measures and cost for obtaining environmental permits (if required) have not been included in this preliminary estimate.
- Additional charges may apply for any costs to obtain easements.
- Additional charges may apply if we find unusual or unforeseen conditions during the relocation.
- Additional charges will apply if installation is required between December 1 and March 31.

- This estimate is valid for 90 days from the date of this letter.
- **The preliminary estimate is prepared for your budgeting purposes; this is not the final cost**. It is based on the information you provided to We Energies. A formal cost letter will be provided if you chose to move forward with this work and payment will be required before We Energies' work begins.

Please also note these terms and conditions:

Property owner notification: You are responsible for arranging for an electrician to prepare the service entrances to accept a new underground service.

Other utilities: Costs associated with relocating other utilities' services on our poles are not included in this quote. If you need to relocate other utilities, you are responsible for notifying and negotiating the cost for phone and cable relocation. We offer to work with both utilities to relocate their equipment. We must maintain their facilities on our poles until replacement service is provided. At that point in time, our poles are removed.

Restoration: After our construction activity is complete, we replace the excavated soil and mound in the affected area. Any additional restoration charges are not included in this preliminary estimate. Review our surface restoration practices at www.we-energies.com/home/surfacerestore.

Permissions: Right-of-way permissions and easements must be obtained before the project begins.

Construction: Relocation typically takes between 8 and 12 weeks following the date the agreement is signed and payment is received. This timeframe can be longer depending on weather, crew availability and material lead times.

Feel free to contact me with any questions at 262-552-3296. I look forward to working with you to make your project a success.

Sincerely,

Rhonda Whyte

Rhonda Whyte

We Energies Service Manager - NSCG

cc: Frances Hardrick, We Energies – Principal Representative Local Affairs

ELECTRIC WORK REQUEST

5046245

☐ C ☐ T ☒ V: Shorewood

CUST/PROJ NAME: Village of Shorewood

PROJECT LOCATION: 3801 N Morris Blvd

PREPARED BY: Nick Schafer (D)

E-MAIL: Nicholas.Schafer@WE-Energies.com

OFFICE #: _____ CELL #: 262-748-4994

PROJECT ID: _____ IO #: 76768

OPERATING MAPS: 4266-7700-02

EXISTING FEEDER: W62862

PROPOSED FEEDER: W62862

T-R-S - ¼Q: T7N R22E Sec. 9NE CGS#: _____

TYPE OF WORK:

☐ CONVERSION __ kV to __ kV
☐ CABLE REPLACEMENT
☐ FEEDER CUT
☐ PAVING RELOCATION
☐ REBUILD
☒ OTHER Customer Requested Relocation - Estimate

STAKING REQUIREMENTS:

☒ SURVEYOR ☐ STAKED
☐ DESIGNER ☐ NOT NEEDED

RESTORE PRIVATE PROPERTY:

☐ YES ☒ NO

1PHASE OH FOOTAGE: _____ 3PHASE OH FOOTAGE: _____
1PHASE DB FOOTAGE: _____ 3PHASE DB FOOTAGE: _____
MUG CONDUIT FOOTAGE: _____ MUG CABLE FOOTAGE: _____
OF POLE INSTALLATIONS/REPLACEMENTS: _____
OF URD EQUIPMENT INSTALLATIONS/REPLACEMENTS: _____

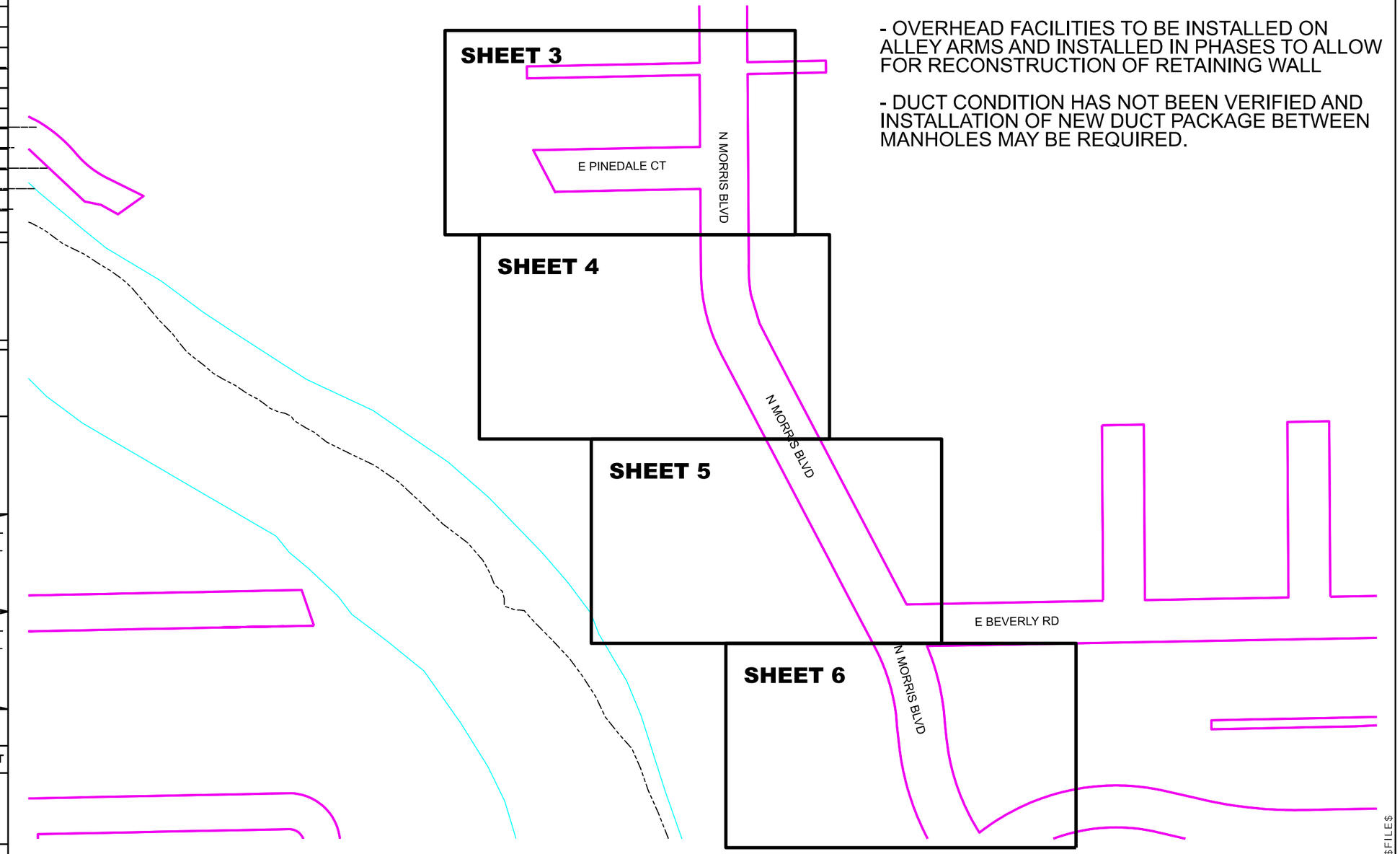
~~JU COMPANY _____~~
~~PROJECT #: _____~~
~~CONSTRUCTION CONTACT: _____~~
~~PHONE # _____ , CELL # _____~~
~~EMAIL _____~~

~~JU COMPANY _____~~
~~PROJECT #: _____~~
~~CONSTRUCTION CONTACT: _____~~
~~PHONE # _____ , CELL # _____~~
~~EMAIL _____~~

RAILROAD PERMITTING/FLAGGING REQUIRED ☐ YES ☒ NO
RR NAME _____

☐ **THIS IS A JUMPP PROJECT** ☒ **THIS IS NOT A JUMPP PROJECT**

☒ ROW TO OBTAIN EASEMENT / ADD EASEMENT. SURVEYOR TO STAKE C/L AND MARK WIDTH OF EASEMENT ON STAKE.
☒ ROW TO CONTACT CST/DESIGNER FOR EASEMENT REQ'S.
☐ NO NEW EASEMENTS REQUIRED



CONSTRUCTION NOTES:

- OVERHEAD FACILITIES TO BE INSTALLED ON ALLEY ARMS AND INSTALLED IN PHASES TO ALLOW FOR RECONSTRUCTION OF RETAINING WALL

- DUCT CONDITION HAS NOT BEEN VERIFIED AND INSTALLATION OF NEW DUCT PACKAGE BETWEEN MANHOLES MAY BE REQUIRED.

$FILE$

EROSION CONTROL NOTES

☒ IF DISTURBANCE OCCURS IN SUMMER, FINAL STABILIZATION SHALL BE PERMANENT SEED AND PROPERLY ANCHORED MULCH, UNLESS NOTED. IF DISTURBANCE OCCURS IN WINTER, TEMPORARY STABILIZATION SHALL BE SOIL STABILIZER, UNLESS NOTED. FINAL STABILIZATION IS REQUIRED IN SPRING.
☐ IF DISTURBANCE OCCURS WITHIN THE SLOPE INTERCEPT, FINAL STABILIZATION SHALL BE SOIL STABILIZER, UNLESS NOTED. IF DISTURBANCE OCCURS OUTSIDE THE SLOPE INTERCEPT, FINAL STABILIZATION SHALL BE PERMANENT SEED AND PROPERLY ANCHORED MULCH, UNLESS NOTED.
☐ IF DISTURBANCE OCCURS IN AGRICULTURAL FIELDS, SOIL SEGREGATION WILL NEED TO TAKE PLACE TO RETURN FIELDS TO PRE-CONSTRUCTION SOIL STRATIFICATION AND TO PRE-CONSTRUCTION ELEVATIONS.
☐ DEPENDING ON THE TIME OF YEAR AND WEATHER CONDITIONS, CONSIDER USING PLATES/MATS IN WETLANDS OR CROSSING DITCHES.
☐ STOCKPILE MATERIALS SHALL BE PLACED UPSLOPE FROM EXCAVATION. IF STOCKPILE MATERIALS MUST BE PLACED DOWNSLOPE OF EXCAVATION, PROTECT STOCKPILES WITH 12" WATTLES.
☐ PROJECT SPECIFIC EROSION CONTROL NOTES: _____

WR 5046245

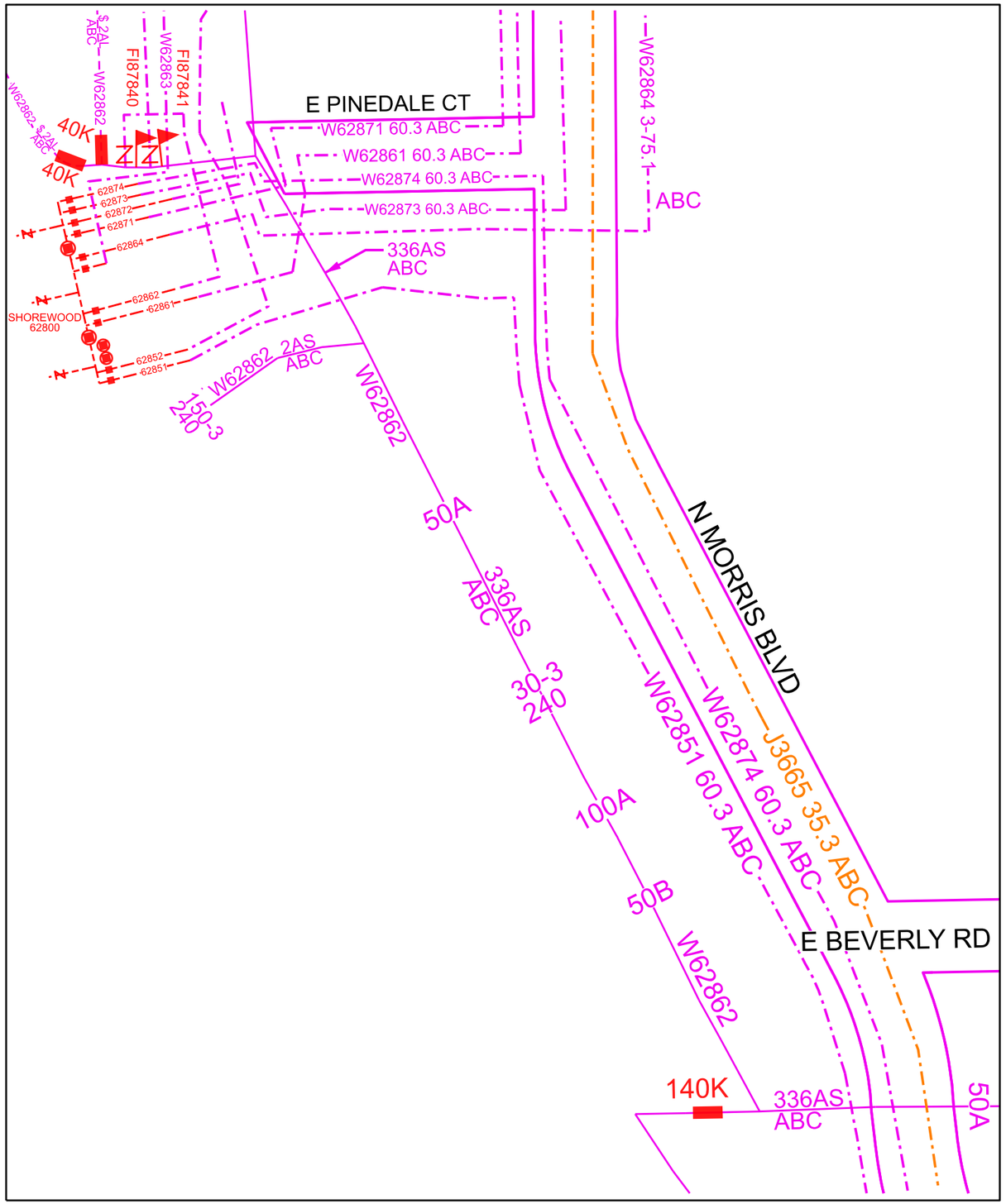
REV.	DESCRIPTION	BY	DATE
0	SKETCH FOR PRELIMINARY ESTIMATE	NS	01/28/25
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Printed $DATE$ $TIME$

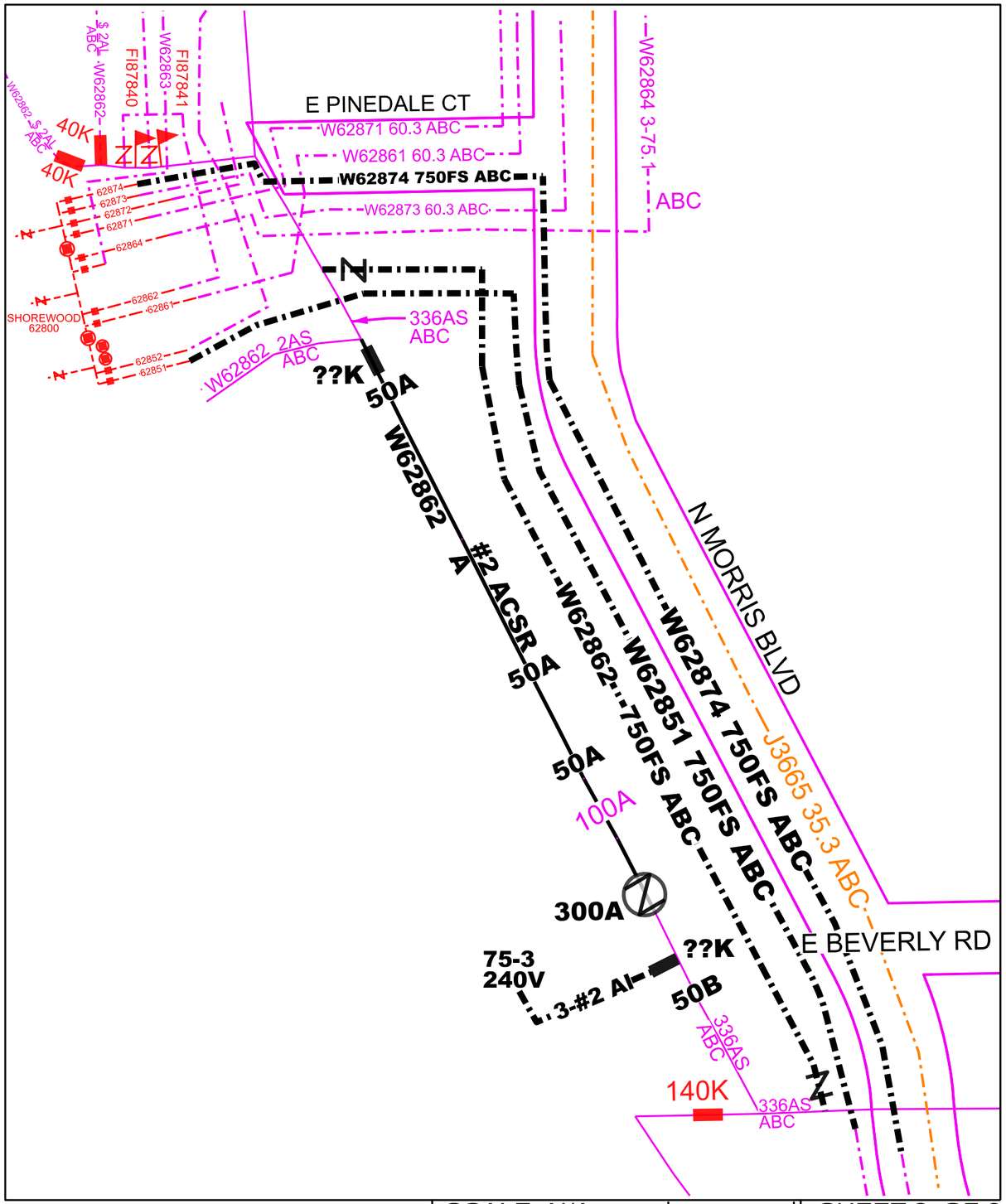
ELECTRIC WORK REQUEST

5046245

EXISTING FEEDER W62862
NOT FIELD VERIFIED



PROPOSED FEEDER W62862



SCALE N/A

SHEET 2 OF 6

Printed $DATE$ $TIME$

Printed $DATE$ $TIME$

ELECTRIC WORK REQUEST

5046245

CABLE KEY:

1 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62862
2 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62851
3 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62874

4 = 600 KCM Cu, 3/C. PL, Jkt W62851
5 = 600 KCM Cu, 3/C, PL, Jkt W62874

N

1325
02U7649
150-3
120/208V
$ 2AL
MH75-549
1402
1406
1410
1414
1416
3901
W3 N
147'
70-7717
55-
MH75-520
6'x12'x6'
9x STRAIGHT JOINTS
20'
259'
E PINEDALE CT
MH3754
MH75-518
MH75-519
10'x17'x6'
9x STRAIGHT JOINTS
3904
3900
3876
3872
3868
3864
3858
3854
3848
S1
S2
S3
W7 S8
88'
70-7718
55-
10-03412
55-2
MH75-523
10-03411
55-2
25-
55-3
XXX-XX.X
MH75-533
10'x18'x6'
3x STRAIGHT JOINTS
1401
SHOREWOOD
62800
1409
1413
1417
1421
3873
112'
212'
N MORRIS BLVD
W7 S8
130'
128'
S8
MH75-522
14'x14'x6'
3x STRAIGHT JOINTS
75-4170
0-
68'
W3 N
25'
W3 S8
39'
W3 S8
??K
70-2877
50-
54-5471
35-
3865
118'
W7 S8
NO TAG
30-
78-3532
45-0
150-3
240
MH75-521
10'x18'x6'
6x STRAIGHT JOINTS
(61-1667
45-
25-
55-3
XXX-XX.X
3863
3861
66'
S3
57'
S3
76'
S1
58'
S1
POLE 61-1667 LOCATED ON PARCEL 1
MH3753
6'x15'x6'
9x STRAIGHT JOINTS

SHEET 4

SCALE 1" = 40'

Printed $DATE$ $TIME$

ELECTRIC WORK REQUEST

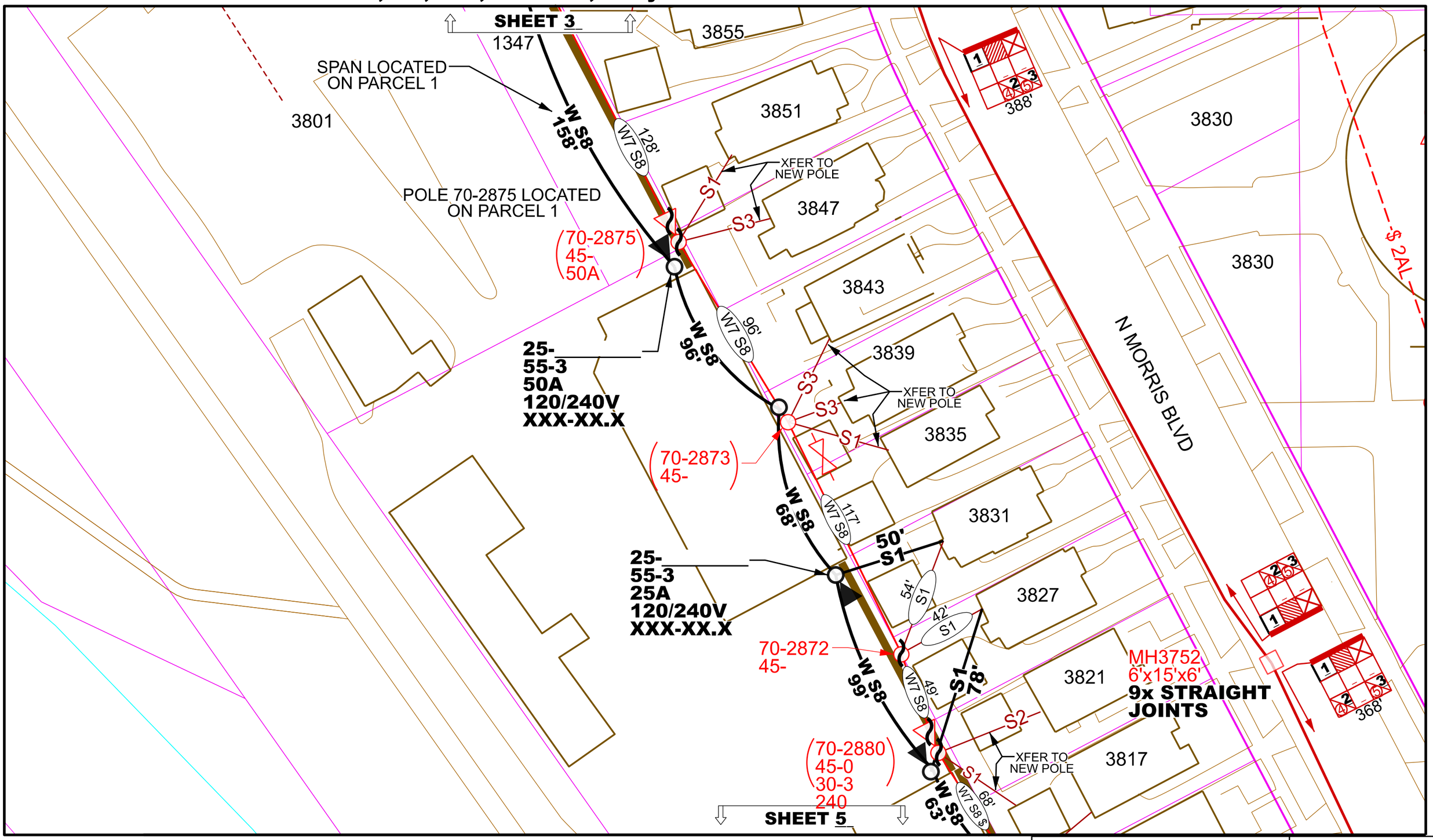
5046245

CABLE KEY:

1 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62862
2 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62851
3 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62874

4 = 600 KCM Cu, 3/C. PL, Jkt W62851
5 = 600 KCM Cu, 3/C, PL, Jkt W62874

N



SCALE 1" = 40'

SHEET 4 OF 6

Printed $DATE$ $TIME$

ELECTRIC WORK REQUEST

5046245

CABLE KEY:

1 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62862
2 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62851
3 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62874

4 = 600 KCM Cu, 3/C. PL, Jkt W62851
5 = 600 KCM Cu, 3/C, PL, Jkt W62874

N

SHEET 4

5'
S3

24-9805
45-3
100A

5'
$

S3 S5

S1
13'

W7 S8
85'

50'
S1

45'
S3

W S8
134'

3813
3809
3805
(70-2871
45-0
50B)

S3
99'

VACANT

3735

3731

3727

3800
1502
1506
1510

N MORRIS BLVD

E BEVERLY RD

TERMINATE:
METER PED.
200A? 3Ø 3W
240V

25U
75-3
240V

94'
W16
1-4" FLEX

W S8
42'

W7 S8
93'

300A

S1

W7 S8
44'
SLACK

??K

71-9795
45'-

70-5869
45'-

W7 S8
79'

MH3751
6'x15'x6'
9x STRAIGHT
JOINTS

3730
S2
S1
3726 G

3721
S3
103'
W7 S8

60'
111

3722
71-9677
45-
63'
W7 S8

W7 S8
75'

3718

71-9792
40-

60'
W N

71-9793
40-

60'
W S8

71-9794
45-

3717

71-9796
45-

67'
W N

88T2859
0-

3713

S3

3714

25-
55-3
XXX-XX.X

3708

SHEET 6

SCALE 1" = 40'

SHEET 5 OF 6

Printed $DATE$ $TIME$

ELECTRIC WORK REQUEST

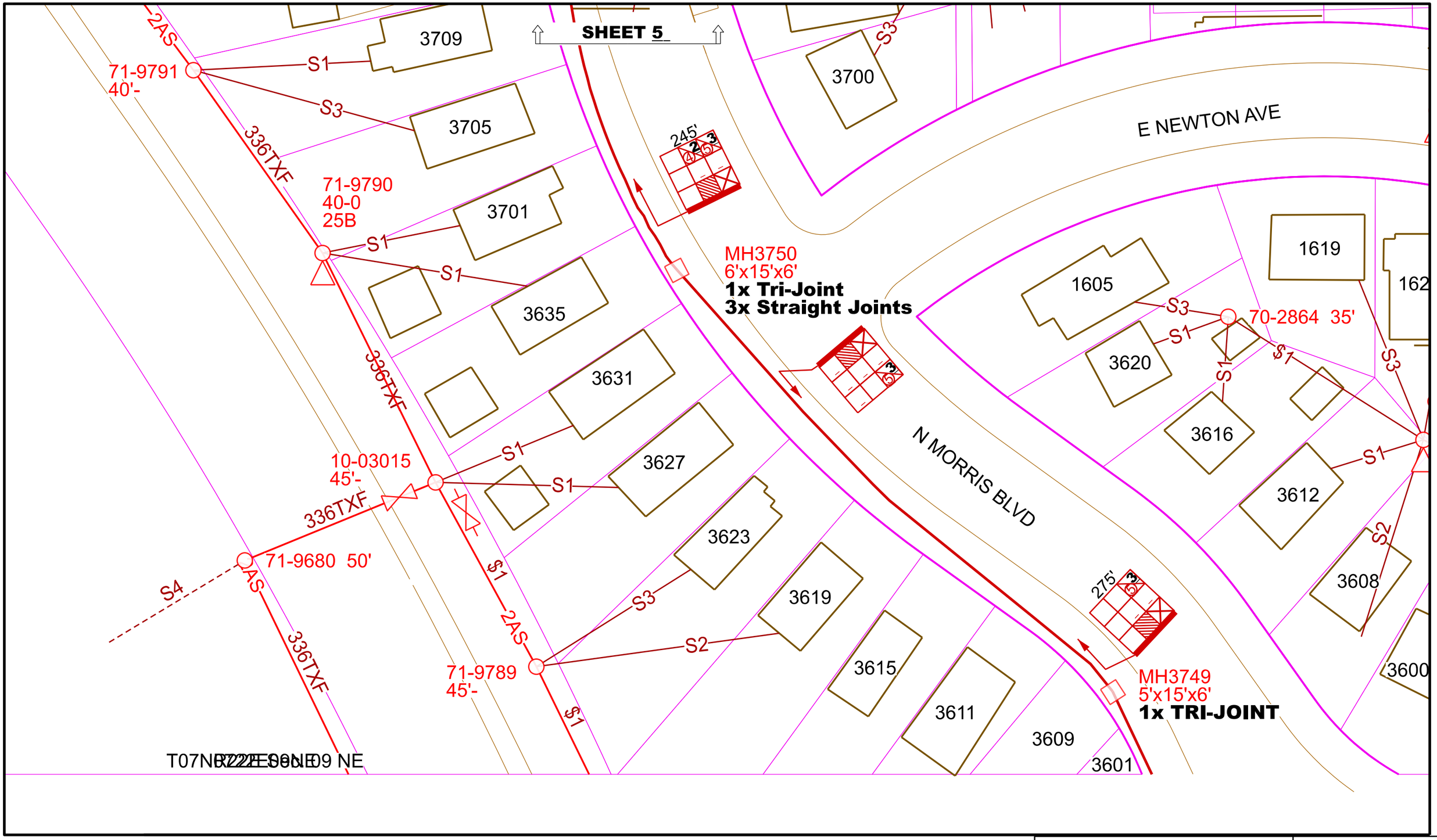
5046245

CABLE KEY:

1 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62862
2 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62851
3 = 3-750 Cu, 1/C, EPR, FSCN/Jkt, P-Lay W62874

4 = 600 KCM Cu, 3/C. PL, Jkt W62851
5 = 600 KCM Cu, 3/C, PL, Jkt W62874

N



SCALE 1" = 40'

SHEET 6 OF 6

Printed $DATE$ $TIME$

WE ENERGIES - ELECTRIC OPERATIONS

CLEARANCE NOTES:

-LOCATION OF OBSTRUCTIONS ARE FROM RECORDS AND MUST BE VERIFIED IN THE FIELD.
-MAINTAIN 2' MIN. CLEARANCE BETWEEN OUTSIDE FACE OF MANHOLE & BELL OF PIPE.
-THIS APPLIES TO GAS AND WATER MAINS.
-MAINTAIN 2' MIN. VERTICAL CLEARANCE AT CROSSINGS OF SEWER OR WATER MAINS.
-MAINTAIN 5' MIN. HORIZONTAL DIST. BETWEEN CONDUIT AND SEWER.
-MAINTAIN 3' MIN. HORIZONTAL DIST. BETWEEN CONDUIT AND WATER MAINS.

NOTE - CLEARANCES SHOWN ARE MINIMUM DISTANCES - REFERENCE PERMITS FOR SPECIFIC CLEARANCE REQUIREMENTS. ADDITIONAL UNDERGROUND INFORMATION ON EXCAVATION, BACKFILLING AND CLEARANCES CAN BE FOUND IN STD. 281-02.

STANDARD WIRE KEY

OVERHEAD PRIMARY
E, F, H, Q, R, W, X or Z

Z	1 #2 ACSR
Z1	1 #1/0 ACSR
Z2	1 #3/0 ACSR
Z3	3 #2 ACSR
Z4	3 #1/0 ACSR
Z5	3 #3/0 ACSR
Z7	3 #336 ACSR
Z9	SPECIAL LIST ON SKETCH
Z10	1 WIRE REMOVAL
Z11	2 WIRE REMOVAL
Z12	3WIRE REMOVAL

DIRECT BURY PRIMARY - E, F, H, Q, R, W, X or Z

Z13	1 #1 AL 25KV	X22	1 #2 Cu 15kV
Z14	3 #1 AL 25KV	X23	3 #2 Cu 15kV
Z15	3 #500 AL 28KV	Z24	1 #2 Cu 25kV
X16	1 #2 AL 15KV	Z25	3 #2 Cu 25kV
X17	3 #2 AL 15KV	X26	3 #500 Cu 15kV
X18	3 #500 AL 15KV	Z27	3 #500 Cu 28kV
R19	3 #1/0 AL 35KV	Z28	3 #750 Cu 28kV
R20	3 #750 AL 35KV	Z29	SPECIAL - LIST ON SKETCH
Z21	3 #750 AL 28KV		

NEUTRAL

N	1-#2 ACSR
N1	1-#1/0 ACSR
N2	1-#3/0 ACSR
N3	1-#4/0 AL
N4	1-#336 ACSR
N5	REMOVAL

GUYING

G	1/4" ARM GUY
G1	5/16" ARM GUY
G2	3/8" ARM GUY
G3	5/16" POLE GUY
G4	3/8" POLE GUY
G5	7/16" POLE GUY

SECONDARY - 1PHASE

S	6DX
S1	4 TX
S2	2 TX
S3	1/0 TXR
S4	3/0 TXR
S5	350 TXR
S6	750 TXR
S7	1/0 TXF
S8	4/0 TXF
S9	336 TXR
S10	750 TXF
S11	3 WIRE REMOVAL
S12	3 WIRE MAIN
S14	6DX CIC
S15	1/0TX CIC

SECONDARY - 3PHASE

$	1/0 TXF
$1	4/0 TXF
$2	336 TXF
$3	3/0 TX
$4	350 TX
$5	750 TX
$6	1/0 QXF
$7	3/0 QXF
$8	350 QXR
$9	750 QXR
$10	3 WIRE REMOVAL
$11	3/0 QXR
$12	4 WIRE REMOVAL

EROSION CONTROL LEGEND

ENV 8, 27	APPROXIMATE LOCATION FOR UNDERGROUND FACILITY EXCAVATION
A/B/C/D	INLET PROTECTION, TYPE
	12" WATTLE or 12"/20" SEDIMENT LOG or 9.5"/20" EROSION EEL
	STONE DITCH CHECK
	ROCK BAG
	MULCH
	SOIL STABILIZER, TYPE B
	EROSION MAT CLASS I, TYPE A
	EROSION MAT CLASS I, TYPE B
	EROSION MAT CLASS I, TYPE A URBAN
	EROSION MAT CLASS I, TYPE B URBAN
	EROSION MAT CLASS II
	EROSION MAT CLASS III
	VEGETATIVE BUFFER
	TRACKING PAD
	TIMBER MAT
	SILT FENCE
DW	APPROXIMATE DEWATERING BASIN LOCATION
	SURFACE WATER FLOW

WE ENERGIES WORK REQUEST ENVIRONMENTAL NOTES (Notes 1 through 7 apply to ALL work requests)

General

1. If WDNR and/or USACE permits were obtained for the project, all permit conditions shall be met during construction of the project.

Erosion Control

2. If soil disturbance occurs on slopes or channels/ditches leading to wetlands or waterways, or within wetlands, the disturbed areas shall be stabilized and appropriate erosion control Best Management Practices (BMP's) shall be implemented.
3. Erosion Control BMR's shall meet or exceed the approved WDNR Storm Watter Management Technical Standards (http://dnr.wi.gov/topic/stormwater/standards/const_standards.html). Refer to We Energies Construction Site Sediment and Erosion Control Standards.
4. Inspect installed erosion control BMP's at least one time per week and after ½" rain events: repair as necessary.
5. When temporary stabilization is required (e.g. for winter or short-term construction) prior to final restoration, soil stabilizer shall be installed wherever possible. Erosion mat shall be used temporarily only where appropriate, in accordance with state standards, and when approved by the Operations Supervisor.

Contaminated Soils

6. Whenever soil exhibiting obvious signs of contamination (e.g., discoloration, petroleum or solvent odor, free liquids other than water, buried containers or tanks, or other obvious signs of environmental impacts) is encountered during excavation or installation, cease work immediately, take appropriate immediate precautions to ensure worker health and safety, and contact the Operations Supervisor or Inspector.

Spills

7. If an oil spill occurs during construction, call the Environmental Incident Response Team (EIRT) at 414-430-3478:
   a. Any quantity of oil is spilled into surface water;
   b. Any oil spill greater than 50 ppm PCB into a sewer, vegetable garden, or grazing land;
   c. Any oil spill containing greater than 500 ppm PCB;
   d. Five gallons or more of oil spilled to the ground;
   e. Any oil spill involving a police department, fire department, DNR, or concerned property owner.

Notes 8 through 27 apply as noted at specific points within each work request:

Dewatering

8. Dewatering of pits or trenches shall be done in accordance with state standards. Use an approved sediment bag, a straw bale dewatering basin, a combination of both, or equivalent.

Wetlands

9. As much as practicable, the majorityof the work shall be staged from the public roadways and road shoulders, keeping equipment out of adjacent wetlands.
10. All work shall be conducted to minimize soil disturance. No rutting will be allowed within the wetlands.
11. If soils are not frozen or stable to a point that avoids rutting, timber mats, mud tracks, or equivalent shall be utilized to access pole locations.
12. Excavated soils cannot be stockpiled in wetlands.
13. All excess spoils shall be removed from wetlands and placed in a suitable upland location.
14. Trenching and pit excavations within wetlands shall include soil segregation to facilitate restoration of pre-construction soil stratification, and restoration to pre-construction elevations.
15. Poles scheduled to be removed, and that occur within wetland, shall be cut at the ground surface.

Waterways

16. No work can be performed within the banks or below the ordinary high watermark of any navigable waterways/streams.
17. No crossing of navigable waterways with equipment can occur. Foot traffic is allowed.
18. Any disturbed soil within 75-feet of the ordinary high water mark of any navigable waterways/streams shall be stabilized within 24 hours of construction completion.

Threatened and Endangered Species

19. Threatened or endangered species are known to occur in the work area. It is illegal to harass, harm, or kill a protected species under state and federal regulations. Proper precautions shall be taken to ensure harm to individuals is avoided.
20. In order to protect the threatened or endangered species, work must be conducted between November 5 and March 15.
21. Exclusion fencing must be installed at the work area prior to March 15.
22. A qualified biologist must be present when conducting work at this location.

Invasive Species

23. State regulated invasive species are known to occur in the work area. Reasonable precautions are legally required to prevent the spread of these species. The Wisconsin Council on Forestry Transportation and Utility Rights-of Way Best Management Practices should be followed: (http://council.wisconsinforestry.org/invasives/transportation/).

Cultural and Historical Resources, cont.

24. The project is within or adjacent to an area that is identified by the State of Wisconsin as potentially having Native American artifacts, burial mounds or burial sites, which could be encountered during construction.
25. If human bone or any artifacts are discovered during construction, work must cease immediately. Contact the Environmental Department who will contact the State Burial Sites Preservation Office and determine the next steps that must be taken in order to comply with state law. Work at that site MAY NOT PROCEED until the Environmental Department authorizes it.
26. A "qualified archaeologist," as specified under Wis. Stats 157.70 (1) (i) and Wis. Admin. Code HS 2.04 (6), must be present to monitor all ground disturbing activities.

Frac-out Contingency Plan

27. A frac-out contingency plan shall be on-site and implemented accordingly. The contingency plan shall incorporate the following components.
   a. Continuously inspect the bore paths for frac-outs in order to respond quickly and appropriately.
   b. Containment materials (e.g. silt fence, straw bales, sand bags, etc.) shall be on site and available should a frac-out occur.
   c. A vac truck shall be accessible on short notice in order to respond quickly to a frac-out.

Appendix A

APPENDIX H
SANITARY SEWER TELEVISING REPORTS

WinCan

Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
9/1/2020			**733**	**000**	**SAN6-SAN7**
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
		Downstream		**255.2 '**	**255.2 '**

City:	**Shorewood**	Drainage Area:		Upstream MH:	**SAN6**
Street:	**YARD**	Media Label:		Up Rim to Invert:	**0.0**
Location Code:		Flow Control:		Downstream MH:	**SAN7**
Location Details:		Sheet Number:		Down Rim to Invert:	**0.0**
Pipe shape:	**Circular**	Sewer Use:		Total gallons used:	**0.0**
Pipe size:	**8 "**	Sewer Category:	**SEC**	Joints passed:	**0**
Pipe material:	**Vitrified Clay Pipe**	Purpose:		Joints failed:	**0**
Lining Method:		Owner:			

Additional Info:



1:1926	Distance		Code	Observation	Counter	Photo	Grade
SAN6							
	0.00		MWL	Water Level, 0% of the vertical dimension	00:00:00		
	0.00		AMH	Manhole / SAN6	00:00:00		
	49.69		TFA	Tap Factory Made Active at 10 o'clock, 6inch dim	00:01:50		
	210.74	S01	MWLS	Water Level, Sag in pipe, 15% of the vertical dimension, Start	00:07:22		
	255.18	F01	MWLS	Water Level, Sag in pipe, 15% of the vertical dimension, Finish	00:11:01		S2
SAN7	255.18		AMH	Manhole / SAN7	00:11:07		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2900	0000	18.0	0.0	18.0	2.0	0.0	2.0

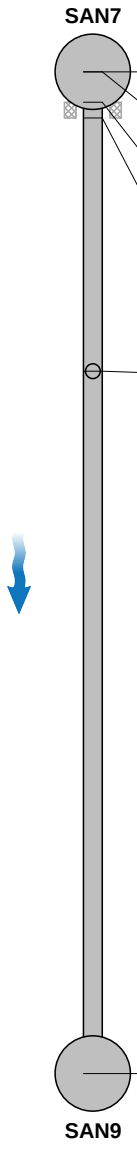
WinCan

Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
9/1/2020			**733**	**000**	**SAN7-SAN9**
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
		Downstream		**198.0 '**	**198.0 '**

City:	**Shorewood**	Drainage Area:		Upstream MH:	**SAN7**
Street:	**YARD**	Media Label:		Up Rim to Invert:	**0.0**
Location Code:		Flow Control:		Downstream MH:	**SAN9**
Location Details:		Sheet Number:		Down Rim to Invert:	**0.0**
Pipe shape:	**Circular**	Sewer Use:		Total gallons used:	**0.0**
Pipe size:	**8 "**	Sewer Category:	**SEC**	Joints passed:	**0**
Pipe material:	**Vitrified Clay Pipe**	Purpose:		Joints failed:	**0**
Lining Method:		Owner:			

Additional Info:



1:1495	Distance		Code	Observation	Counter	Photo	Grade
	0.00		MWL	Water Level, 0% of the vertical dimension	00:00:00		
	0.00		AMH	Manhole / SAN7	00:11:07		
	6.02	S01	CL	Crack Longitudinal at 6 o'clock, Start	00:00:03		
	9.12	F01	CL	Crack Longitudinal at 6 o'clock, Finish	00:00:19		S2
	59.17		TFA	Tap Factory Made Active at 12 o'clock, 6inch dim	00:01:55		
	198.00		AMH	Manhole / SAN9	00:06:36		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2100	0000	2.0	0.0	2.0	2.0	0.0	2.0

WinCan

Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
9/1/2020			**0705**	**732**	**SAN9-SAN10**
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
		Downstream		**51.4 '**	**51.4 '**

City:	**Shorewood**	Drainage Area:		Upstream MH:	**SAN9**
Street:	**yard**	Media Label:		Up Rim to Invert:	**0.0**
Location Code:		Flow Control:		Downstream MH:	**SAN10**
Location Details:		Sheet Number:		Down Rim to Invert:	**0.0**
Pipe shape:	**Circular**	Sewer Use:		Total gallons used:	**0.0**
Pipe size:	**8 "**	Sewer Category:	**SEC**	Joints passed:	**0**
Pipe material:	**Vitrified Clay Pipe**	Purpose:		Joints failed:	**0**
Lining Method:		Owner:			

Additional Info:



1:389	Distance	Code	Observation	Counter	Photo	Grade
SAN9						
	0.00	MWL	Water Level, 5% of the vertical dimension	00:00:00		
	0.00	AMH	Manhole / SAN9	00:06:36		
	51.41	AMH	Manhole / SAN10	00:01:39		
SAN10						

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0.0	0.0	0.0	0.0	0.0	0.0

WinCan

Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
9/1/2020			**0705**	**732**	**SAN10-SAN11**
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
		Downstream		**217.1 '**	**217.1 '**

City:	**Shorewood**	Drainage Area:		Upstream MH:	**SAN10**
Street:	**yard**	Media Label:		Up Rim to Invert:	**0.0**
Location Code:		Flow Control:		Downstream MH:	**SAN11**
Location Details:		Sheet Number:		Down Rim to Invert:	**0.0**
Pipe shape:	**Circular**	Sewer Use:		Total gallons used:	**0.0**
Pipe size:	**8 "**	Sewer Category:	**SEC**	Joints passed:	**0**
Pipe material:	**Vitrified Clay Pipe**	Purpose:		Joints failed:	**0**
Lining Method:		Owner:			
Additional Info:					



1:1639 Distance	Code	Observation	Counter	Photo	Grade
0.00	MWL	Water Level, 5% of the vertical dimension	00:00:00		
0.00	AMH	Manhole / SAN10	00:01:39		
74.75	TFA	Tap Factory Made Active at 10 o'clock, 6inch dim	00:02:12		
217.13	AMH	Manhole / SAN11	00:05:57		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0.0	0.0	0.0	0.0	0.0	0.0

WinCan

Section Pictures - 9/1/2020 - SAN10-SAN11

City	Street	Date	Pipe Segment Reference	Nr.
Shorewood	**yard**	**9/1/2020**	**SAN10-SAN11**	**130**



SAN10-SAN11_bd657e49-75b7-4ad7-8ed5-17ce9c5498c9_20200901_141927_739.jpg, 00:02:12, 74.75ft
Tap Factory Made Active at 10 o'clock, 6inch dim

APPENDIX I
MMSD CORRESPONDENCE–SANITARY SEWER

Bzdusek, Phil

From: Gautier, Stephane <SGautier@mmsd.com>
Sent: Wednesday, August 7, 2024 4:05 PM
To: Bzdusek, Phil
Subject: RE: [EXT] Village of Shorewood - Available Flow Allocation

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Hello Phil,

As the nearby sewershed has some capacity and is connected to the SH5002, you don't need to convey the additional flow.
Our capacity numbers are for estimation, and I can trade with another sewershed if needed.

Thank you

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

Stéphane Gautier
Project engineer | MMSD
P: 414-225-2219
E: sgautier@mmsd.com

www.mmsd.com

From: Bzdusek, Phil <Phil.Bzdusek@strand.com>
Sent: Wednesday, August 7, 2024 3:20 PM
To: Gautier, Stephane <SGautier@mmsd.com>
Subject: RE: [EXT] Village of Shorewood - Available Flow Allocation

It is the existing DPW yard. 3801 North Morris Boulevard. It looks like it straddles SH5002 and SH5003. Right now, there are no developments on the table they are just looking to see how developable the site could be if they moved DPW to a different location.



Phil

From: Gautier, Stephane <SGautier@mmsd.com>
Sent: Wednesday, August 7, 2024 3:07 PM
To: Bzdusek, Phil <Phil.Bzdusek@strand.com>
Subject: RE: [EXT] Village of Shorewood - Available Flow Allocation

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Hello Phil,

What is the address or location of that project?

Stéphane Gautier
Project engineer | MMSD
P: 414-225-2219
E: sgautier@mmsd.com

www.mmsd.com

From: Bzdusek, Phil <Phil.Bzdusek@strand.com>
Sent: Wednesday, August 7, 2024 2:56 PM
To: Gautier, Stephane <SGautier@mmsd.com>
Subject: RE: [EXT] Village of Shorewood - Available Flow Allocation

Stephane,

If the village had a development that exceeded the 880 gpd allocation in SH5003 what would be their options for increasing their available flow in that basin? Could they convey additional flow by gravity or pump to SH5002 essentially changing the sewershed? Are there other options?

Phil

From: Gautier, Stephane <SGautier@mmsd.com>
Sent: Wednesday, August 7, 2024 2:36 PM
To: Bzdusek, Phil <Phil.Bzdusek@strand.com>
Subject: RE: [EXT] Village of Shorewood - Available Flow Allocation

[EXTERNAL EMAIL]: Verify sender before opening links or attachments.

Hello Phil,

I've attached the 2 Excel reports for these sewersheds.
Let me know if you need anything else.

Thank you

Stéphane Gautier
Project engineer | MMSD
P: 414-225-2219
E: sgautier@mmsd.com

www.mmsd.com

From: Bzdusek, Phil <Phil.Bzdusek@strand.com>
Sent: Wednesday, August 7, 2024 2:33 PM
To: Gautier, Stephane <SGautier@mmsd.com>
Subject: [EXT] Village of Shorewood - Available Flow Allocation

Stephan,

As discussed, if you can send the available flow allocations for Basins SH5002 and SH5003 in the Village of Shorewood that would be appreciated. Thanks,

Phil

Phil Bzdusek, P.E.
Strand Associates, Inc.®
414.271.0771 ext. 1505
phil.bzdusek@strand.com | www.strand.com
P.E. (WI)

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