Groot Industries, Inc.

2500 Landmeier Road
Elk Grove Village, IL 60007
Phone: 773/242-1977
Fax: 773/601-8639
www.groot.com

June 21, 2013

Ms. Linda M. Lucassen
Mayor, Village of Round Lake Park
203 E. Lake Shore Drive
Round Lake Park, IL 60073

Ms. Cindy Fazekas
Village Clerk, Village of Round Lake Park
203 E. Lake Shore Drive
Round Lake Park, IL 60073

Re: Groot Industries Lake Transfer Station
Application for Local Siting Approval

Dear Mayor Lucassen and Ms. Fazekas:

As of this date, we are filing twenty copies of an application for Local Siting Approval for the Groot Industries Lake Transfer Station, each with a searchable copy of the application on a CD in portable document format (.pdf). We are also filing three hard copies of the engineering drawings in large-scale format. Finally, please find enclosed our filing fee in the form of a check in the amount of One Hundred Thousand Dollars ($100,000).

This application requests approval to develop a solid waste transfer station on property located at 201 Porter Drive, in the northeast corner of Illinois Route 120 (Belvidere Road) and Porter Drive within the corporate limits of the Village of Round Lake Park, Illinois. The facility will be used for the consolidation and transfer of municipal solid waste generated in the Village of Round Lake Park and Lake County. The proposed transfer station will accept only non-hazardous municipal waste, landscape waste, and source separated recyclables, pursuant to permits issued by the Illinois Environmental Protection Agency. No hazardous waste will be accepted.

On behalf of Groot Industries, Inc., I would like to thank you and the members of the Village Board for your careful consideration of this Application. We look forward to an open and informative review process.

Very Truly Yours,
Groot Industries, Inc.

Larry Groot
President

Groot Industries Lake Transfer Station
Village of Round Lake Park, Illinois

Application for Local Siting Approval
Submitted to the Village of Round Lake Park

SUBMITTED BY:

GROOT

PREPARED BY:

Groot Industries, Inc.

CB&I

June 2013

TABLE OF CONTENTS

TABLE OF CONTENTS

GROOT INDUSTRIES LAKE TRANSFER STATION

APPLICATION FOR LOCAL SITING APPROVAL

EXECUTIVE SUMMARY

SECTION 1.0 NEED

SECTION 2.0 HEALTH, SAFETY, AND WELFARE

SECTION 2.1 INTRODUCTION

SECTION 2.2 SITE LOCATION

TABLE OF CONTENTS
(CONTINUED)

SECTION 2.2 SITE LOCATION (Continued)

SECTION 2.3 SITE DESIGN

SECTION 2.4 OPERATIONS

TABLE OF CONTENTS
(CONTINUED)

SECTION 2.4 OPERATIONS (Continued)

SECTION 3.0 SURROUNDING LAND USE AND PROPERTY VALUE ASSESSMENT

SECTION 3.1 LAND USE AND PLANNING ANALYSIS

SECTION 3.2 REAL ESTATE IMPACT EVALUATION

TABLE OF CONTENTS
(CONTINUED)

SECTION 3.2 REAL ESTATE IMPACT EVALUATION (Continued)

TABLE OF CONTENTS
(CONTINUED)

SECTION 8.0 PLAN CONSISTENCY

SECTION 9.0 REGULATED RECHARGE

LIST OF DRAWINGS

LIST OF APPENDICES

LIST OF APPENDICES
(CONTINUED)

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

Groot Industries, Inc. requests that the Village of Round Lake Park approve this Application for Local Siting Approval ("Application") to develop a solid waste transfer station within the Village of Round Lake Park, to be known as the Lake Transfer Station. This Application is being submitted pursuant to the requirements of Section 39.2 of the Illinois Environmental Protection Act ("Act") and the Village of Round Lake Park Pollution Control Facility Siting Ordinance ("Siting Ordinance").

The proposed Lake Transfer Station is approximately 3.9 acres in size and is located at 201 Porter Drive, in the northeast corner of Illinois Route 120 (Belvidere Road) and Porter Drive within the corporate limits of the Village of Round Lake Park, Illinois. The facility is proposed to be owned and operated by Groot Industries, Inc.

The Lake Transfer Station is a modern facility that has been designed to accept 750 tons of municipal solid waste during a typical operating day, including source-separated recyclables and landscape waste. Waste materials will be temporarily stored, consolidated, and further transfer to approved disposal sites. Source separated recyclables will be transferred for processing and composting facility end markets. No treatment, storage, or disposal of hazardous waste will occur at the Lake Transfer Station.

Figure E-1
Rendering of Proposed Lake Transfer Station Looking East-Southeast from Porter Drive

The proposed transfer station development includes the construction of an approximately 27,800 square foot transfer station building and a scale house of approximately 270 square feet, installation of a facility scale, paving of all access drives and interior circulation routes and construction of a stormwater bio-swale measuring approximately 370 feet in length along the northern limits of the property. Screening will be provided along Porter Drive and Route 120 with the construction of berms and the use of landscape plantings.

A conceptual site plan showing the details of the proposed Lake Transfer Station is included as Drawing No. D5. The facility design has also considered site and building layouts; security; vehicle queuing; odor, litter, noise, vector and dust control; wastewater conveyance; and a plan for dealing with fires or other emergency situations.

All inbound waste collection vehicles will be required to remain fully enclosed or covered until positioned within the transfer station building. Moreover, all waste materials received at the proposed transfer station will be discharged and loaded into transfer trailers completely within the transfer station building.

Figure E-2
Rendering of Tipping Floor

Demonstration of Compliance with the Nine Siting Criteria

The permitting of a transfer station in Illinois is a two-step process, requiring both "siting approval" from the local governing authorities and permit approval from the IEPA. Siting approval is a precondition to obtaining a permit from the IEPA.

At the local level, the siting process is governed by Section 39.2 of the Act. Section 39.2(a) provides that local governing authorities are to consider nine (9) criteria in determining whether to grant siting approval. These are the exclusive siting criteria.

Siting approval shall be granted if the proposed transfer station meets the nine criteria. The nine siting criteria are:

1. the facility is necessary to accommodate the waste needs of the area it is intended to serve;

2. the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected;

3. the facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property;

4. the facility is located outside the boundary of the 100 year flood plain;

5. the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents;

6. the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows;

7. if the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility which includes notification, containment and evacuation procedures to be used in case of an accidental release;

8. if the facility is to be located in a county where the county board has adopted a solid waste management plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan; for purposes of this criterion (viii), the "solid waste management plan" means the plan that is in effect as of the date the application for siting approval is filed; and

9. If the facility will be located within a regulated recharge area, any applicable requirements specified by the Board for such areas have been met.

Section 39.2(a) of the Act also provides that the local governing authority may consider as evidence the previous operating experience and past record of convictions or admissions of violations of the applicant (and any subsidiary or parent) in the field of solid waste management when considering Criteria 2 and 5 above.

To demonstrate compliance with the nine siting criteria in Section 39.2(a) of the Act, as well as other requirements of the Siting Ordinance and statutes governing siting of a transfer station, Groot Industries has included the following materials with its Application:

- A report by Shaw Environmental, Inc. (Shaw), which concludes that the Lake Transfer Station is necessary to accommodate the waste needs of the area it intends to serve. This report is presented within Section 1 of the Application.

- A report by Shaw concerning the design, location and operation of the Lake Transfer Station, which establishes that the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected. This report is presented within Section 2 of the Application.

- Reports by The Lannert Group and Poletti and Associates, Inc., which conclude that the Lake Transfer Station is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property. These reports are presented under Section 3 of the Application.

- A report by Shaw and other materials, which demonstrate that the Lake Transfer Station is not located within the 100-year flood plain. These materials are presented under Section 4 of the Application.

- A report by Shaw and other materials concerning the plan of operation for the Lake Transfer Station, which establish that the plan of operation is designed to minimize the danger to the surrounding area from fires, spills, or other operational accidents. These materials are presented under Sections 2 and 5 of the Application.

- A report by Kenig, Lindgren, O'Hara, Aboona, Inc., which concludes that the traffic patterns to and from the Lake Transfer Station are so designed as to minimize the impact on existing traffic flows. This report is presented under Section 6 of the Application.

- A statement by Groot Industries, Inc. that it will not be transferring, treating, storing or disposing of hazardous waste at the Lake Transfer Station. This statement is presented under Section 7 of the Application.

- A report by Shaw which concludes that the Lake Transfer Station is consistent with the Village of Round Lake Park Solid Waste Management Plan. This report is presented under Section 8 of the Application.

- A report by Shaw demonstrating that the Lake Transfer Station is not located in a regulated recharge area. This report is presented under Section 9 of the Application.

Reasons Supporting Granting of Siting Approval

With over 600 employees, Groot is the largest independent provider of solid waste management services in Illinois, and is among the largest privately held solid waste companies in the United States. Groot and its subsidiary companies have provided solid waste collection and other vital public services to northeastern Illinois municipalities and businesses since 1914. Throughout its nearly 100 year history, Groot has proven itself a responsible and reliable company, as well as a stable employer.

In 2010, Groot made Round Lake Park home to the Groot North Facility. Groot North is an approximately 10-acre adapted redevelopment of the abandoned Stock Lumber Supply Yard located at 40 South Porter Drive, and serves as headquarters for Groot's waste hauling operations in Lake County. While many communities spend significant resources marketing and negotiating for the redevelopment of idled industrial properties, Groot identified and redeveloped the Groot North Facility at its own expense, and has brought approximately 80 jobs to Round Lake Park during a difficult economic environment. In addition, Groot has recently installed a compressed natural gas (CNG) fueling station at the Groot North Facility to support the conversion and fueling of their collection fleet with alternative fuels. Groot has quickly proven itself to be a pro-active and progressive corporate citizen within the Round Lake Park community.

Figure E-3
View of Groot North Facility Looking Northwest

Groot is also concurrently seeking to develop the Groot Eco-Campus construction and demolition debris recycling facility (Illinois Environmental Protection Agency Permit Log No. 2012-463) on the approximately 14 acre parcel located immediately south of the existing Groot North Facility on Porter Drive.

As a pro-active and environmentally friendly initiative, the Eco-Campus seeks to recycle and divert construction and demolition commodities such as concrete, wood, cardboard and asphalt shingles from landfilling. This facility will provide area citizens with infrastructure vital to advancing the comprehensive recycling of construction and demolition commodities within Round Lake Park and area communities. Moreover, the Eco-Campus would support additional employment opportunities for area residents.

Figure E-4
View of Eco-Campus
Looking Southwest

The proposed Lake Transfer Station has been strategically located proximate to the existing Groot North hauling facility and the Groot Eco-Campus on Porter Drive. The logical aggregation of these sister facilities will not only support additional employment opportunities within Round Lake Park and increase overall waste collection system efficiency, but it will reduce total vehicle miles over the road, reduce total air emissions, conserve fuel, and reduce dependency on foreign oil. Furthermore, communities in the service area have relied primarily on in-county landfills to dispose of their waste. However, the two in-county landfills are nearing capacity and replacement capacity is being developed further from the service area. As a result, waste will be transported to more distant landfills for disposal. Siting and development of the proposed Lake Transfer Station will provide Round Lake Park with a safe, cost effective, comprehensive and long-term solution for the management of waste now and into the future.

Figure E-5
Rendering of Proposed Lake Transfer Station Looking Northeast

Finally, as set forth more fully in the materials submitted with this Application, the Lake Transfer Station satisfies the requirements of the Siting Ordinance and the nine criteria contained in Section 39.2(a) of the Act. Specifically, the Lake Transfer Station:

1. is necessary to accommodate the waste needs of the area it is intended to serve;
2. is so designed, located and proposed to be operated that the public health, safety and welfare will be protected;
3. is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of surrounding property;
4. is located outside the boundary of the 100-year floodplain;
5. has a plan of operation that is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents;
6. has traffic patterns to and from the facility that are so designed as to minimize the impact on existing traffic flows;
7. will not be treating, storing, or disposing of hazardous waste;
8. is consistent with the Village of Round Lake Park Solid Waste Management Plan; and
9. is not located in a regulated recharge area.

Request for Siting Approval

Supported by the information contained within this Application, Groot Industries, Inc. respectfully requests that the Village of Round Lake Park grant local siting approval for the development of the proposed Lake Transfer Station.

Figure E-6
Rendering of Proposed Lake Transfer Station Looking Northwest

SECTION 1

NEED

1.0 NEED

Criterion (i) of Section 39.2 (a) of the Illinois Environmental Protection Act ("Act") requires that an applicant for local siting approval of a pollution control facility demonstrate that:

> *the facility is necessary to accommodate the waste needs of the area it is intended to serve.* (415 ILCS 5/39.2)

Transfer stations are designated as pollution control facilities by the Act. Section 1 of this application demonstrates that the proposed Groot Industries Lake Transfer Station is necessary to accommodate the waste needs of the area it is intended to serve.

Introduction

The Groot Industries Lake Transfer Station is a proposed transfer station where loads of waste from collection vehicles will be consolidated into larger loads for transport to a disposal facility. In addition, the facility will receive source-separated recyclables and landscape waste for transport to processing and composting facilities, reducing the volume of waste requiring landfill disposal.

The proposed transfer station will be located within the Village of Round Lake Park at the northeast corner of Illinois Route 120 (Belvidere Road) and Porter Drive. The facility will be owned and operated by Groot Industries, Inc.

The proposed transfer station is intended to typically receive, process and transfer 750 tons per day (tpd) of municipal waste, source-separated recyclables and landscape waste generated by residential, commercial, and light industrial sources. Incoming materials will be delivered to the proposed transfer station by Groot Industries and other third-party haulers.

As demonstrated in this report, the proposed transfer station is necessary to accommodate the waste needs of its intended service area. This conclusion is supported by the following:

- The service area currently generates significant quantities of waste requiring disposal. Waste quantities are projected to increase in the future as a result of continued population and employment growth in the proposed service area.
- Historically, communities in the service area have relied primarily on in-county landfills to dispose of their waste. The two in-county landfills are nearing capacity, however, and replacement capacity is being developed further from the service area. As a result, waste will be transported to more distant landfills for disposal.
- There are no transfer stations located within the service area. The majority of the service area is not conveniently served by existing transfer stations (located outside the service area), and waste must be direct hauled in collection vehicles to existing landfills or transfer stations.
- The proposed transfer station is necessary to ensure that waste is transported to more distant landfills in an economic manner.

- The proposed facility will enable more cost-effective collection and disposal of waste, enhance competition for transfer and disposal services, and result in the payment of significant host fees to the community.

Service Area

The proposed transfer station is intended to provide transfer capacity for waste generated in Lake County. The proposed service area is depicted on Figure 1-1.

Data Sources

Data for the analysis in this report was collected from several sources. These sources include:

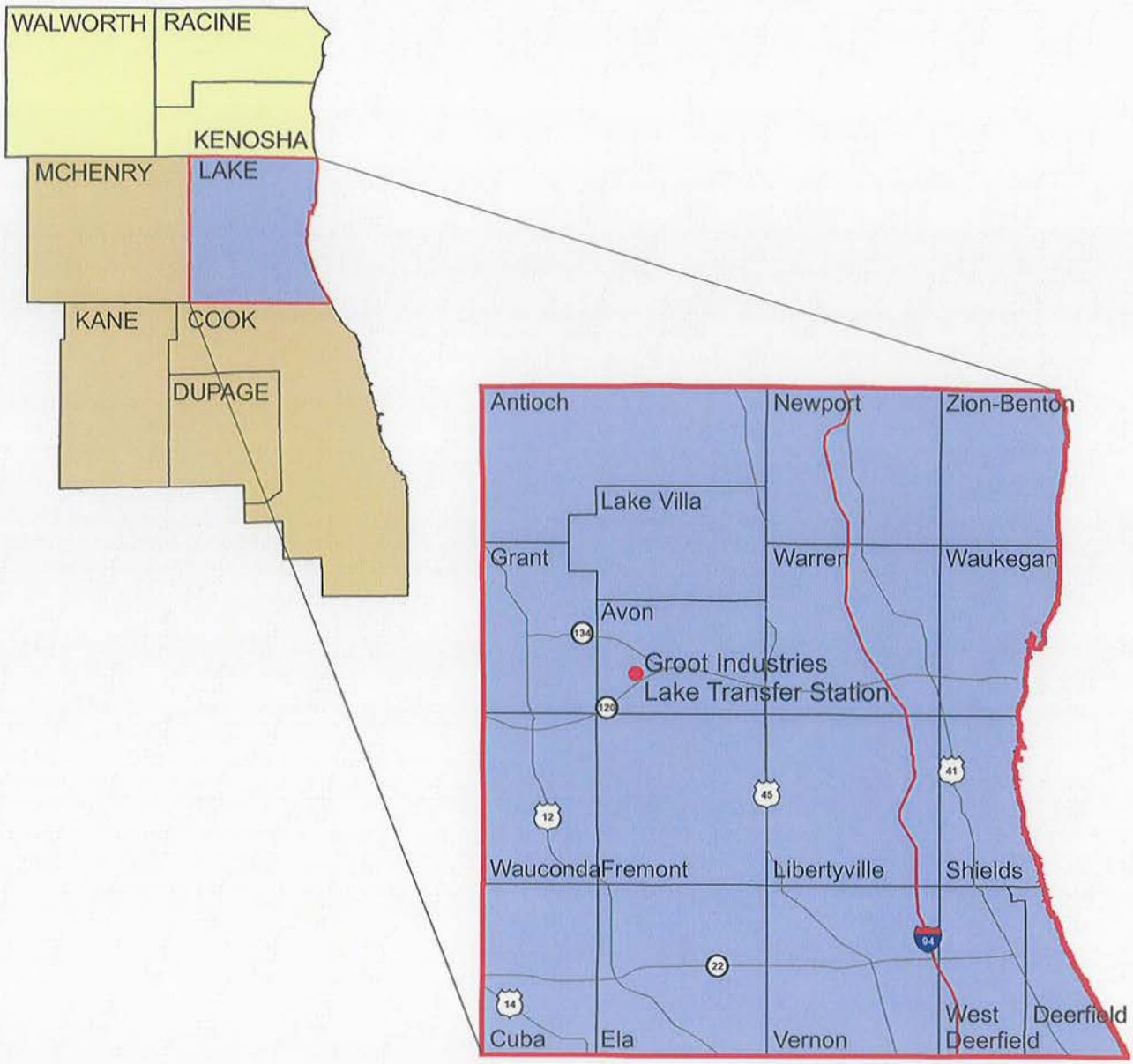
- Data on population, number of households, and employment from the U.S. Census Bureau, the Chicago Metropolitan Agency for Planning (formerly the Northeastern Illinois Planning Commission), and the Illinois Department of Employment Security. This demographic information is necessary for estimating current and future waste quantities.

- Data on solid waste disposal quantities and landfill capacity from the Illinois Environmental Protection Agency (IEPA). An annual report is published by the IEPA which monitors the landfills in every county in the state, including the amount of waste disposed at the landfills and their remaining capacity.

- Data on solid waste disposal quantities from the Indiana Department of Environmental Management (IDEM), the Michigan Department of Environmental Quality (MDEQ), and the Wisconsin Department of Natural Resources (WDNR). These agencies monitor disposal trends in Indiana, Michigan, and Wisconsin, respectively.

- County solid waste management plans and needs assessments. These reports provide historical information on estimated waste quantities and waste handling methods in the counties comprising the service area.

PROPOSED SERVICE AREA



LEGEND

- Service Area
- Proposed Transfer Station
- Political Township Boundary

FIGURE 1-1

Demographics

U.S. Census data and published projections of population, households, and employment for the service area during the period 1980-2040 are presented in Figure 1-2 and Appendix G.1. Demographic projections were obtained from the Chicago Metropolitan Agency for Planning (CMAP, formerly the Northeastern Illinois Planning Commission).

The service area is currently highly developed and is projected to experience modest growth in these demographic sectors between 2010 and 2040. Population within the service area is projected to increase from approximately 703,462 in 2010 to approximately 953,674 in 2040, an increase of approximately 36 percent, or approximately 1 percent per year[1]. The number of households is projected to increase by 35 percent, from 241,712 in 2010 to 326,763 in 2040. Employment is projected to increase over this period as well, rising 47 percent from approximately 319,409 in 2010 to approximately 470,937 in 2040.

[1] By comparison, Illinois's statewide population is projected to increase 0.7 percent per year between 2010 and 2030 (the most distant period for which statewide projections are currently available).

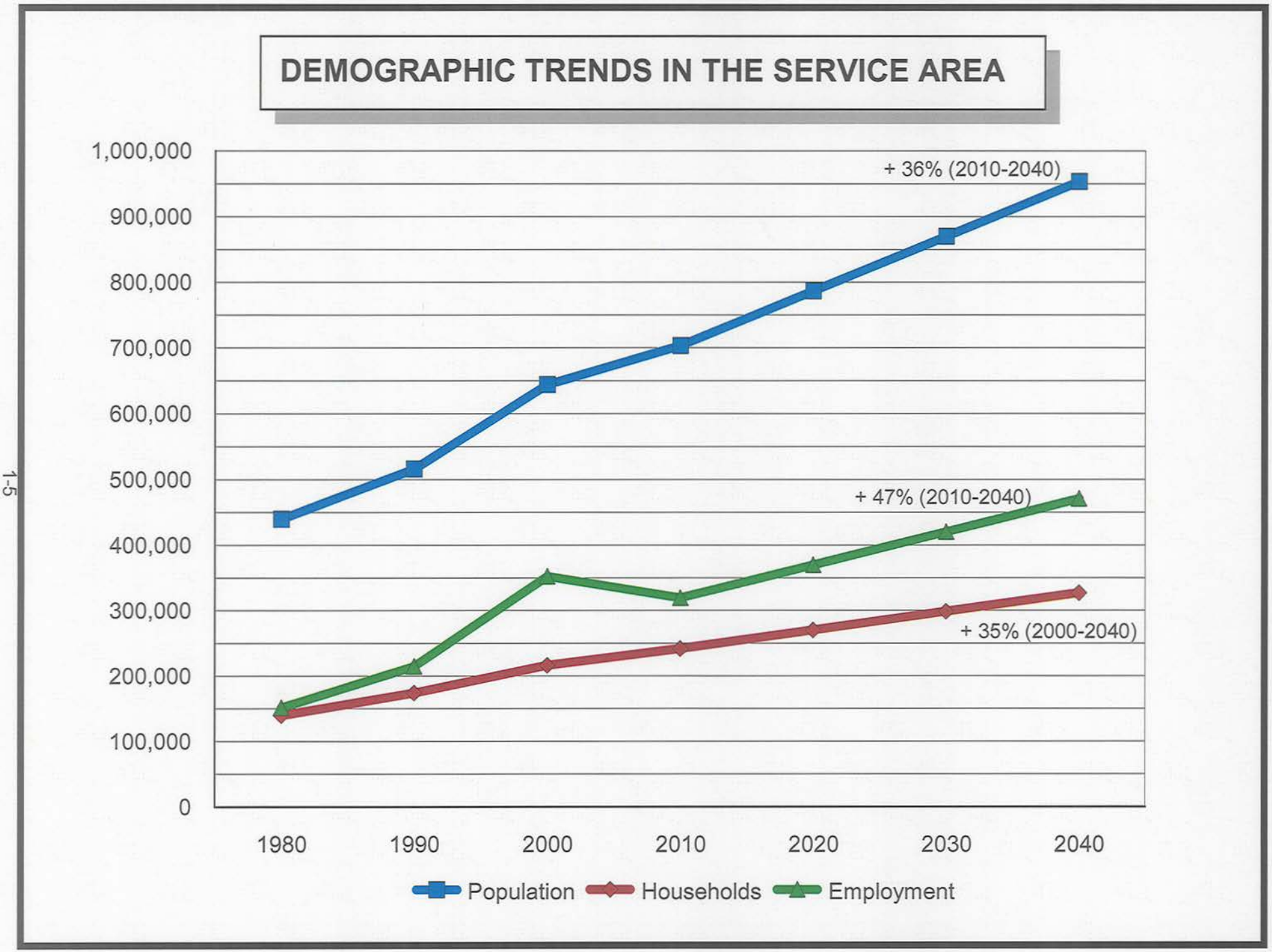

DEMOGRAPHIC TRENDS IN THE SERVICE AREA
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
+ 36% (2010-2040)
+ 47% (2010-2040)
+ 35% (2000-2040)
1980
1990
2000
2010
2020
2030
2040
Population
Households
Employment

FIGURE 1-2

Trends in the Waste Disposal System

The service area has historically relied upon the private sector to provide solid waste management services. Residential and commercial waste has typically been collected by private hauling companies, then disposed in landfills that are owned and operated by the private sector. Residents and businesses have also contracted with private companies to provide other waste services such as recycling and landscape waste composting.

There are no transfer stations currently permitted to operate within the proposed service area. Existing landfills within the service area are nearing capacity and will not provide long-term disposal capacity. All waste disposed by the service area must be direct hauled in collection vehicles to existing landfills or to transfer stations located outside the service area.

By granting siting approval of the proposed facility, the Village will enable Groot to continue to provide cost efficient hauling, transfer, and waste disposal services for its customers and other haulers serving the residents, businesses and local municipalities within the service area. The convenient location of the proposed transfer station to waste generators within the service area is particularly important given the high price for diesel fuel and declining landfill capacity near the service area.

Historical Trends

Lake County has historically disposed of the majority of the municipal waste generated within its borders by landfilling at three principal facilities: the Advanced Disposal Services (ADS) Zion Landfill and Countryside Landfill located in Lake County, and the Pheasant Run Landfill located in Kenosha County, Wisconsin (see Figure 1-3). These three landfills were located within 22 miles of the centroid[2] of the service area for the Groot Industries Lake Transfer Station.

When Lake County developed its initial Solid Waste Management Plan in 1989, the County recommended developing an incinerator, an ash monofill, a municipal waste landfill, and a construction and demolition debris landfill within the County to provide for the long-term management of waste disposed by the County. When the Plan was updated in 1994, the County had shifted its focus, and identified the goal of securing contracts for disposal capacity with the three privately owned and operated landfills serving the County. In the mid-1990s, Lake County negotiated 20-year disposal agreements with each of the landfills, fulfilling this goal.

Because the County had secured disposal capacity for an extended period of time, transfer stations were addressed in subsequent Plan Updates but were not historically viewed as a necessary component of the County's solid waste system. Anticipating conditions could change over time, the County stated that the need for transfer stations would be reevaluated in the future.

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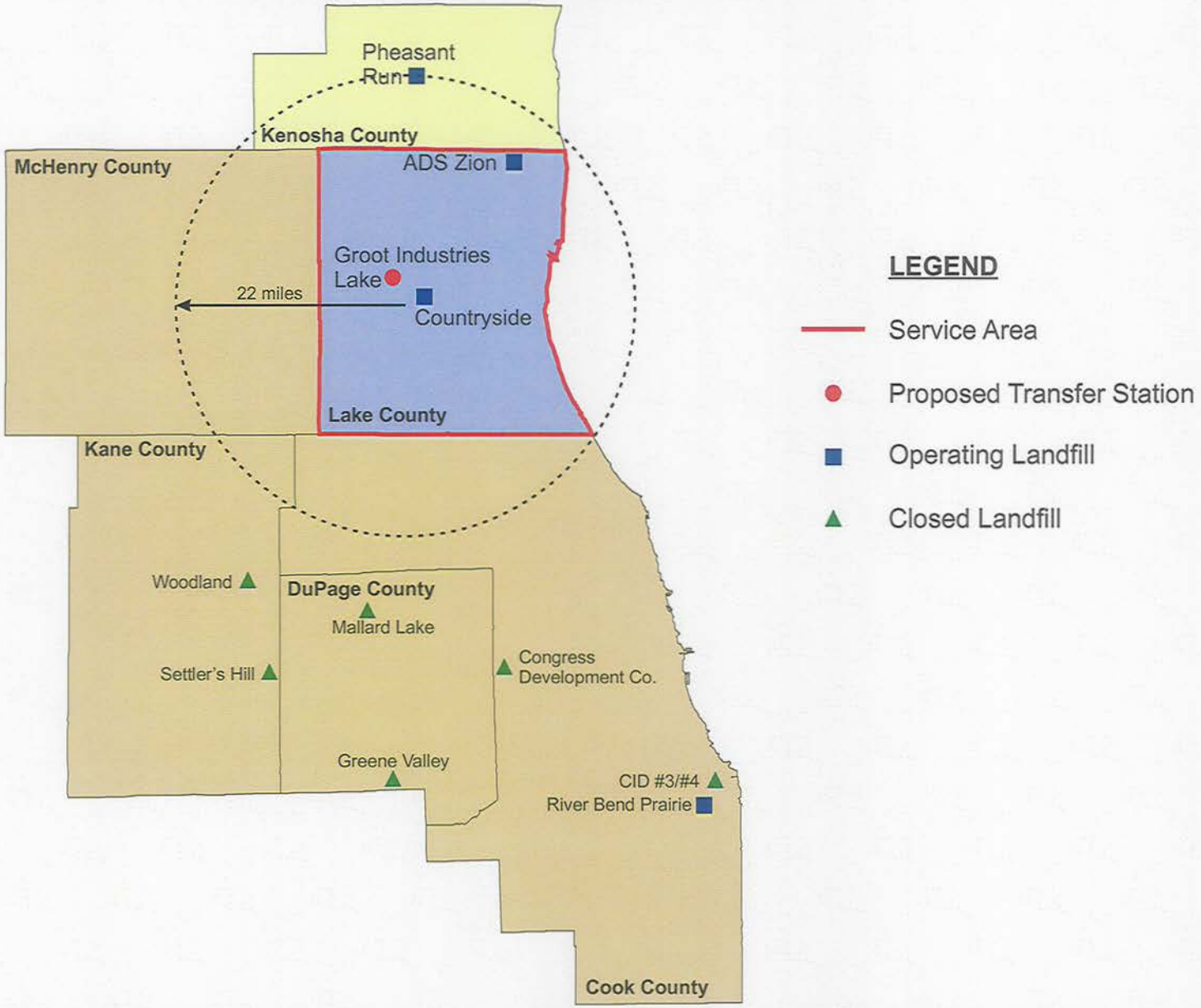
[2] The waste centroid represents the "average" location at which the waste from the service area is disposed, based on the spatial distribution of population. The centroid of the service area is approximately located at the intersection of Buckley Road (IL Rt. 137) and North Milwaukee Avenue (US Rt. 45) in Libertyville.

AREA LANDFILL FACILITIES



Not to scale.

FIGURE 1-3

As will be discussed later in this section, new disposal capacity is increasingly being located further from the service area, and existing landfills with appreciable remaining capacity are located further from the service area than the facilities that the service area has historically relied upon. As existing landfills reach capacity and close, waste will be increasingly exported from the service area for disposal. Increased haul distances and high fuel prices add to the cost of managing waste, and transfer stations are needed to mitigate these impacts. Transfer stations have been recognized as a possible option in a long-term waste management system for Lake County and are increasingly relied upon by surrounding counties as well to provide a cost-effective and efficient method to transport waste to distant landfills.

Current and Future Trends

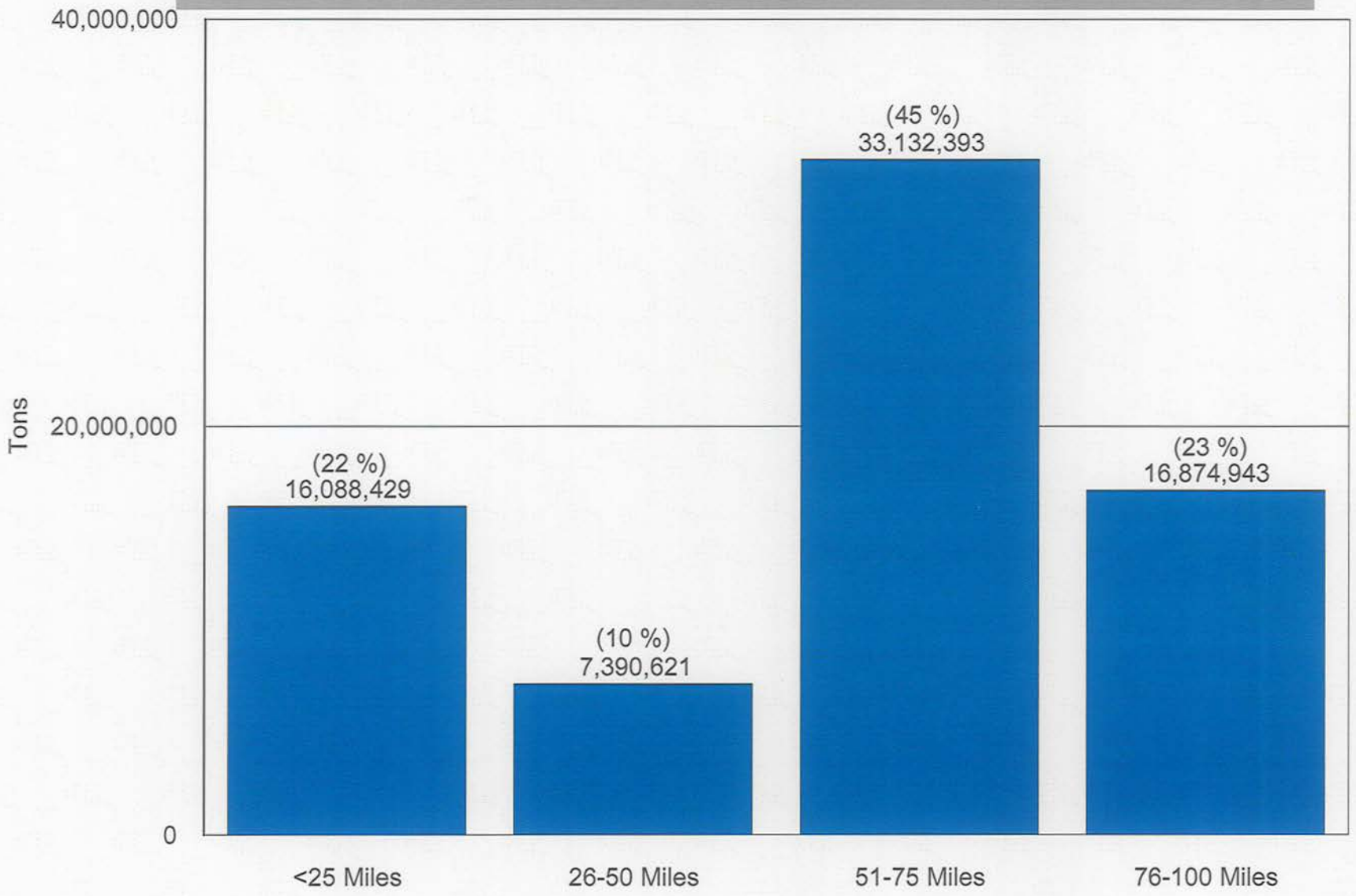
Since securing disposal agreements with the in-county and nearby landfills, the County has updated its Solid Waste Management Plan every five years and consistently reiterated its desire to maintain disposal agreements with the landfills. However, the disposal commitments with Countryside Landfill and ADS Zion Landfill have been exhausted.

ADS Zion Landfill secured local siting approval for an expansion in 2010 and received an IEPA permit for a portion of the expansion in 2011[1]. The landfill owner, through a host agreement with Lake County and the Solid Waste Agency of Lake County, has committed to providing up to six years of guaranteed disposal capacity to the County at the expanded landfill, through 2017. With no additional expansion of the in-county landfills proposed, existing capacity is projected to be exhausted by the end of 2027.

As landfills in the region reach capacity and close, new disposal facilities are increasingly being located further from the region. Transfer stations are necessary to enable waste to be transported in a cost effective manner. The landfills historically utilized by Lake County were located 5 to 22 miles from the centroid of the service area, as presented in Table 1-1. As noted previously, these landfills have limited capacity remaining. By comparison, the majority of remaining landfill capacity[2] (approximately 68 percent) is located more than 50 miles from the centroid of the service area, more than three times the average distance to the disposal facilities historically serving Lake County (refer to Figure 1-4).

1 A permit application for the remainder of the expansion is currently pending with the IEPA.
2 Considers landfills within 100 miles of the service area centroid.

LANDFILL CAPACITY VS. DISTANCE FROM SERVICE AREA



Notes:
1. Distances are over-the-road distances measured from the service area centroid.
2. Capacity includes the capacity sited, but not yet permitted, at ADS Zion Landfill and Winnebago Landfill.

Source:
1. Annual landfill capacity data reported by IEPA, IDEM, and WDNR.

FIGURE 1-4

TABLE 1-1. DISTANCES TO LANDFILLS HISTORICALLY SERVING LAKE COUNTY		
Facility	Location	Approximate One-Way Distance (miles)
Countryside Landfill	Grayslake, Illinois	5
ADS Zion Landfill	Zion, Illinois	16
Pheasant Run Landfill	Bristol, Wisconsin	22
Average		14

Notes:
1. Distances are over-the-road distances, not straight-line distances.
2. Distances measured from centroid of service area.

Due to rising fuel costs, increased distances to landfills, and growing quantities of waste disposed by the service area, transfer stations will need to be developed within the service area to provide cost-efficient waste disposal services.

Lake County completed a feasibility study in 2002 regarding the applicability of transfer stations as a method of managing its waste in the future. The feasibility study ultimately concluded that transfer stations may offer a number of benefits to Lake County, including lower costs of transport and disposal, greater opportunities for material recovery, increased competition, and flexibility of collection, transport and disposal options.

The 2004 Plan Update recognized that more transfer stations were being developed in the state, and particularly in more developed areas, noting their prevalence within the Chicago region:

> *The use of transfer stations is increasing, particularly near major metropolitan areas. In 2002, the Chicago region had 59 active transfer stations moving 5.7 million ton of garbage.* (Lake County, 2004, page 2-11)

The County also recognized that the existing landfills may not continue to provide the long-term capacity they historically have relied on. The 2004 Plan Update therefore addressed the possibility of the development of transfer stations in Lake County to provide access to long-term disposal capacity:

> *This is the first Plan Update for which 20 years of landfill capacity are not guaranteed from the three major landfills that serve the Agency Planning Area. This highlights the need for SWALCO to obtain additional landfill capacity within the next 20 years in order to satisfy projected demand. Additional landfill capacity may be obtained through the expansion or development of landfills in or near Lake County or through the establishment of solid waste transfer stations in order to transport waste to other landfills that are located farther away.* (Lake County, 2004, page 3-32, emphasis added)

No additional landfill capacity was secured during the subsequent five year period. The County's most recent Plan Update clearly recognizes the need to identify future disposal options to meet its waste disposal needs:

> *The 2009 Plan Update recommendations regarding final disposal are reflective of a realization that Lake County needs to start seriously considering long-term options for managing its waste requiring disposal.* (Lake County, 2009, page 4-1)

Transfer stations were identified in the 2009 Plan Update as a potential future option to meet Lake County's disposal needs. Notably, the County has not indicated a preferred option and has chosen to rely on the private sector and units of local government such as the Village of Round Lake Park to select future options:

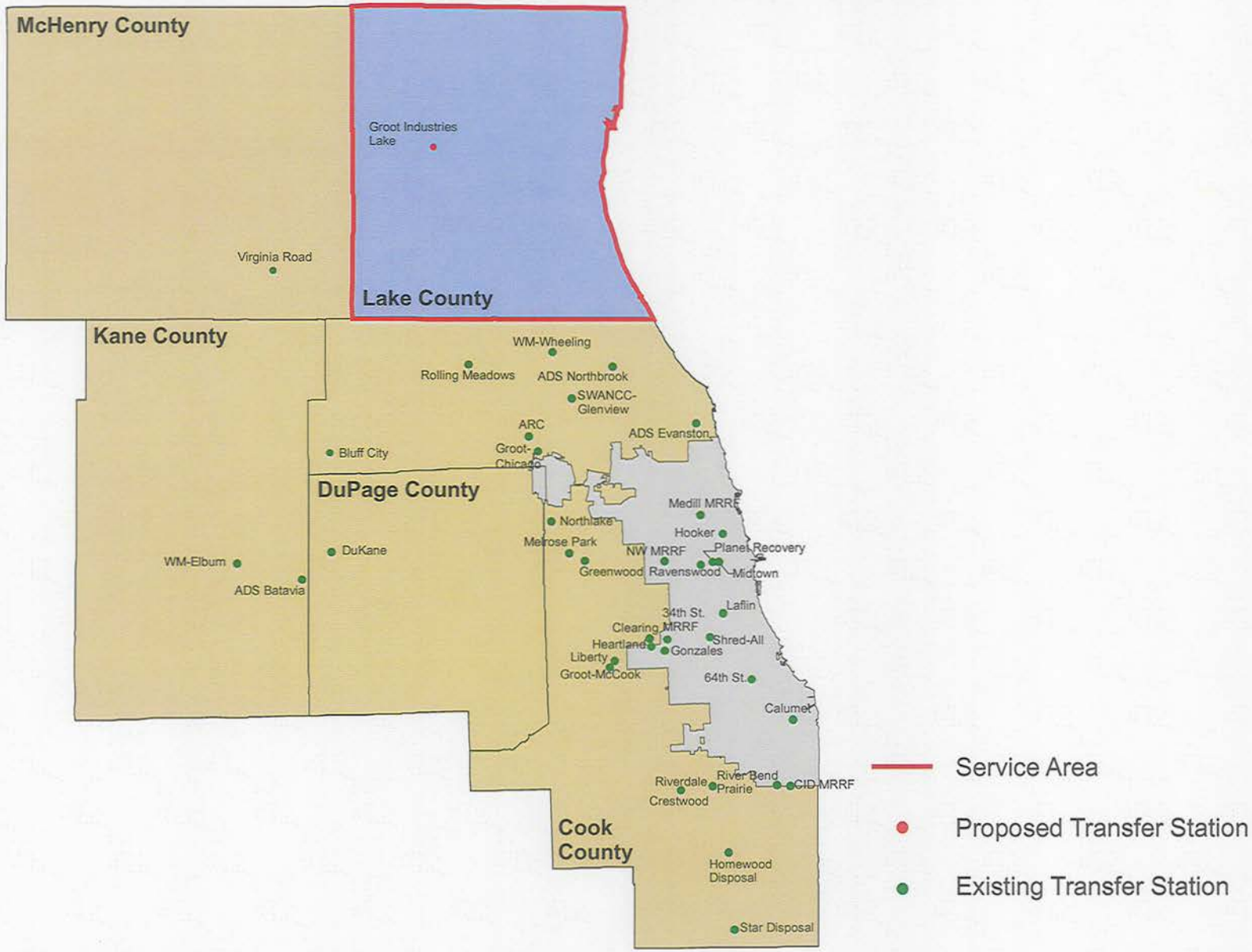
> *The 2009 Plan Update has intentionally not selected a preferred disposal option, in favor of allowing the private sector and/or SWALCO and other units of local government the flexibility to propose and develop a disposal option that is superior to Lake County's current disposal method, which is totally reliant on landfilling.* (Lake County, 2009, page 4-3)

In 2012, the Village of Round Lake Park identified its preferred disposal option, adopting a solid waste management plan recommending the development of a transfer station within its borders:

> *At this time, the Village's preferred disposal technology is landfilling at regional landfills…The Village desires the development of a transfer station within its corporate limits to provide cost-effective consolidation and transport of waste to regional landfills for disposal.* (Village of Round Lake Park, 2012, page 9, emphasis added)

Densely populated areas such as the City of Chicago and Cook County have a well-established network of transfer stations. In recent years, other counties within the Chicago metropolitan area sought to develop transfer stations to facilitate the transport of waste to increasingly distant landfills as the local landfills they historically relied on have neared or reached closure. Only a few facilities have been developed in these counties to date (see Figure 1-5).

METRO-AREA TRANSFER STATIONS



Not to scale.

FIGURE 1-5

Kane County resolved that it would not site additional landfills in the County following the closure of the Settler's Hill and Woodland Landfills, as indicated in its 1997 Plan Update. Again, notably, Kane County instead chose to rely on the private sector to develop transfer stations to export waste to distant landfills:

> *The County has revised its disposal strategy, and is opposed to any new or expanded landfill activities within Kane County. Instead, the County supports a series of transfer stations to meet its solid waste needs.* (Kane County, 1997, page 6-1)

> *The County views transfer stations as a viable alternative for meeting the future solid waste disposal needs of its residents and businesses. Kane County does not intend to pursue the development of a County-owned transfer station. Rather, the County will rely on private sector proposals to develop a transfer station network in response to market demand. A network of transfer stations operated by different waste haulers will serve to create sufficient competition in the private sector to ensure competitive pricing and high service quality in both the residential and commercial sectors.* (Kane County, 2004, page 29, emphasis added)

Only one transfer station has been developed in Kane County since the County resolved to site no additional landfills.

McHenry County has exported its waste to out-of-county landfills for many years by direct haul. Recognizing that in-county landfill capacity was not likely to be developed and waste would continue to be exported to increasingly distant out-of-county landfills, the 1997 Update to the McHenry County Plan considered the development of transfer stations to manage McHenry County's waste:

> *Travel distances between the county population centroid and the facilities currently used in the adjacent counties can range from > 20 to 50 miles. This distance warrants the consideration of waste consolidation and transfer haul of county waste. There are currently no transfer stations in the County.* (Camp, Dresser & McKee, Inc., 1997, page 4-7)

McHenry County reiterated its support of transfer stations in the 2002 Update to the McHenry County Plan:

> *As the capacity of existing landfills continues to decrease, the waste destined to be disposed of in landfills will be shipped further from the County to landfills with remaining capacity. This scenario will most certainly raise disposal fees for the citizens of McHenry County; perhaps significantly.* (McHenry County Department of Planning & Development, 2002, page 8)

> *The County has chosen to allow private firms to manage the disposal of waste in McHenry County. As such, the development of a transfer station would need to be initiated by a private firm.* (McHenry County Department of Planning & Development, 2002, page 34)

> *Encourage the development of transfer stations in McHenry County.* (McHenry County Department of Planning & Development, 2002, page 35, emphasis added)

In the 10 years since McHenry County formally recommended the development of transfer stations within the County, only one facility has been sited and is operating.

Lake County has recognized the extended time it takes to site, permit, and develop new solid waste facilities and encourages the planning of new facilities now:

> *Given the time necessary to site, permit and construct new disposal facilities it was determined that the 2009 Plan Update needed to provide guidance to Lake County citizens, local stakeholders and the private sector on the long-term disposal options being considered by SWALCO and Lake County. One of the primary purposes of the planning process is to make sure new facilities and/or programs are in place prior to existing facilities closing.* (Lake County, 2009, page 4-1)

This planning policy is supported by the demand for disposal capacity and the limited existing capacity available to the County, as quantified and discussed in the following sections.

Projections of Waste Requiring Disposal from the Service Area

To assess the waste needs of the service area, it is necessary to quantify the amount of waste which is generated by the service area and requires disposal. This is calculated based on service area population projections and the amount of waste each person generates daily for disposal.

Annual per capita disposal rates for years 1996 through 2011 are calculated in Appendix G.2. The per capita waste disposal rate represents waste which requires landfill disposal after recycling and landscape waste diversion activities, as those materials are not landfilled. Waste has been disposed in the proposed service area at rates of up to 7.9 pounds per capita per day (pcd) from residential, commercial and light industrial sources during this period, with an average disposal rate of 7.2 pcd over the past 16 years. In 2011, residents and businesses in the proposed service area disposed of 6.1 pcd of waste.

Assuming waste disposal rates remain at the 2011 rate of 6.1 pcd, average waste quantities will increase from 2,899 tpd in 2015 to 3,550 tpd in 2035 (see Appendix G.3). These projections likely understate future waste quantities, because historically per capita waste disposal rates have been greater than 6.1 pcd. Assuming a per capita disposal rate of 7.2 pcd, the average disposal rate observed over the period 1996-2011, average waste quantities will increase from 3,422 tpd in 2015 to 4,191 tpd in 2035.

These projections represent average daily disposal quantities over the course of a year and do not reflect the impact of seasonal peaks in disposal. Waste volumes are generally higher than average during the months of April through October, with waste receipts exceeding the monthly average by a minimum of 15 to 20 percent. On a daily basis, actual waste quantities requiring disposal from the service area may exceed the daily averages calculated in Appendix G.3 and stated above.

Adequate transfer capacity must be available to meet the disposal needs of the service area, taking into account existing disposal quantities, seasonal peaks in waste disposal, and growth in population and disposal rates.

The U.S. EPA, other industry sources, and Lake County have recognized the importance of considering seasonal fluctuations and peak waste flows when planning a transfer station:

> *In general, it is best to build a facility to accommodate present and projected maximum volumes and peak flows...* (U.S. EPA, 2002, page 9)

> *Waste flows can fluctuate hourly, daily and on a seasonal basis…These daily and seasonal peak flows increase the need for waste handling and storage capacity, and these periods should be considered.* (SWANA, 2010, page 3-4)

> *Storage capacity within a transfer station serves several purposes, including: ...buffering daily and seasonal peaks;...providing a contingency for management facilities which may be closed for maintenance or repairs or during bad weather...* (Hickman, Jr., 2000, page 368)

> *The transfer station should be designed to consider peak hourly deliveries, average daily deliveries, peak daily deliveries, and seasonal variations in waste.* (CDM, 2002, page 4-6)

As has been discussed, there are no transfer stations operating within the proposed service area. Existing solid waste transfer stations located outside the service area serve only a small portion of the service area. Landfills located in the service area have limited remaining capacity and will not provide long-term disposal for the service area's waste. As a result, without development of a local transfer station, waste from the service area will ultimately be direct hauled in collection vehicles to distant transfer stations or disposal facilities.

Existing Transfer and Disposal Capacity

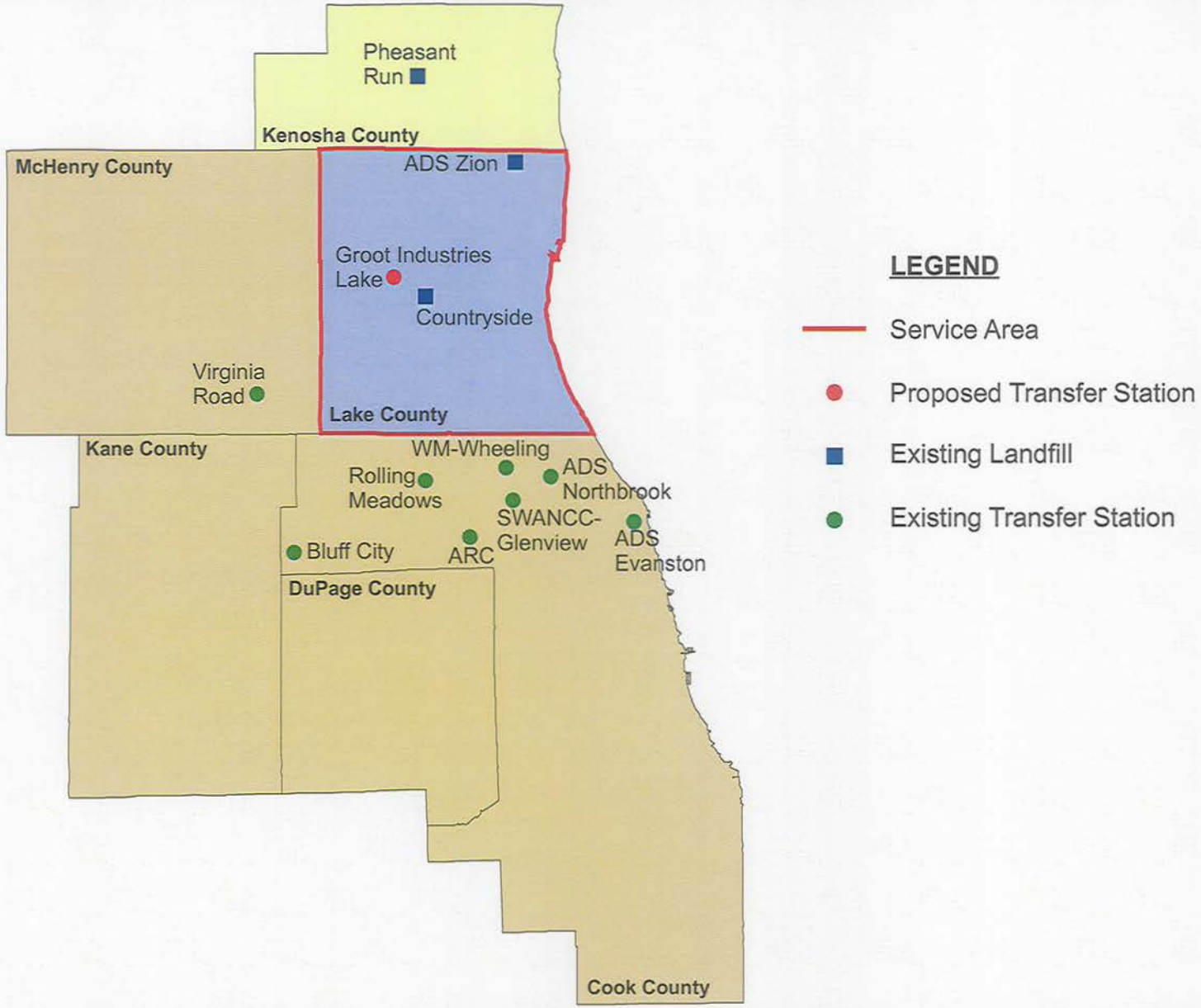
The previous section addressed the demand for transfer capacity in the proposed service area by quantifying the projected tonnages of waste disposed. This section evaluates the supply of existing transfer station capacity that may be available to the proposed service area. As will be demonstrated, landfills in the service area will reach capacity in the near future and there is insufficient transfer capacity to meet the immediate and future needs of the service area. Hence there is a clear need for the proposed Groot Industries Lake Transfer Station.

Existing Transfer Capacity

No transfer stations are currently permitted to operate within the Groot Industries Lake Transfer Station's proposed service area. Eight permitted transfer stations located outside the proposed service area, shown on Figure 1-6, may serve portions of the service area, based on the service areas of these existing facilities:

- ARC Transfer in Mt. Prospect
- Bluff City Transfer Station in Elgin
- Rolling Meadows Transfer Station in Rolling Meadows
- SWANCC-Glenview Transfer Station in Glenview
- ADS Evanston Transfer Station in Evanston
- ADS Northbrook Transfer Station in Northbrook
- Virginia Road Transfer Station in Crystal Lake
- WM-Wheeling Transfer Station in Wheeling

LANDFILLS AND TRANSFER STATIONS AVAILABLE TO THE SERVICE AREA



Not to scale.

FIGURE 1-6

However, the capacity of these facilities is not exclusively available to the proposed service area. This is because existing facilities also serve communities located outside the service area of the proposed transfer station (i.e., the service areas of existing facilities only partially overlap with the service area of the proposed transfer station).

The amount of existing transfer station capacity that may be available to the proposed transfer station's service area was calculated considering this overlap in service areas of the competing facilities. The following procedure was used (refer to Appendix G.4 for the detailed analysis):

1. The service area of each existing transfer station was identified. Existing transfer stations with service areas overlapping the proposed transfer station's service area were considered to potentially be available to the proposed transfer station's service area.

2. The population within each existing transfer station's service area was calculated based on 2010 Census populations.

3. The population within the area of overlap of the existing transfer station's service area with the proposed transfer station's service area was calculated.

4. The ratio of the population in the area of overlap to the total population of the existing transfer station's service area was calculated. This ratio represents the fraction of the existing transfer station's capacity that may be available to the proposed transfer station's service area.

5. The fractional capacities of each of the existing transfer stations were summed to calculate the estimated amount of transfer capacity available to the proposed transfer station's service area.

Utilizing this procedure, it was determined that the eight transfer stations with service areas overlapping the proposed transfer station's service area are estimated to provide 719 tpd of capacity for municipal waste to the proposed Groot Industries Lake Transfer Station service area. This estimate is conservative because it makes no reduction in capacity at existing facilities for receipt of recyclables or landscape wastes; facilities that receive these materials therefore have less capacity available to handle the disposed waste stream[3].

As shown in Table 1-2, the service area is projected to require the disposal of approximately 2,899 tpd of waste on average in the year 2015, increasing to 3,550 tpd in 2035 (assuming lower 2011 disposal rates). Hence, the service area faces an immediate transfer capacity deficit of 2,180 tpd in 2015 and 2,831 tpd in 2035 under conservative forecasts of waste quantities. Moreover, if per capita disposal rates return to their historical average levels, the projected capacity deficit will be even greater, ranging from 2,703 tpd in 2015 to 3,472 in 2035.

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[3] For instance, an average of 6-8 percent (70 tpd) of incoming waste received annually at SWANCC-Glenview Transfer Station is comprised of landscape waste. an estimated 6 percent (120 tpd) of waste received at Bluff City Transfer Facility may be comprised of source-separated recyclables and landscape wastes

As the Groot Industries Lake Transfer Station is proposed to receive an average of 750 tpd of waste, recyclables and landscape waste, the facility would provide the service area with some, but not all, of the transfer capacity needed to address the projected deficit.

TABLE 1-2. SUMMARY OF IMMEDIATE AND FUTURE TRANSFER CAPACITY DEFICIT

	Tons Per Day (tpd)	
	2015	2035
Available Transfer Capacity	719	
Waste Requiring Disposal		
2011 Disposal Rate (6.1 pcd)	2,899	3,550
Average Disposal Rate (7.2 pcd)	3,422	4,191
Transfer Capacity Deficit		
2011 Disposal Rate (6.1 pcd)	2,180	2,831
Average Disposal Rate (7.2 pcd)	2,703	3,472

Existing Disposal Capacity

Two landfills are currently permitted to operate within the proposed service area and receive waste by direct haul from Lake County. A third landfill in Wisconsin has also historically received waste by direct haul from Lake County. The location of landfills serving the service area is shown on Figure 1-6. Existing landfills which may currently receive waste by direct haul from the service area include:

- Countryside Landfill (Lake County): The Countryside Landfill has a remaining capacity of approximately 9 years as of January 1, 2013, based on remaining capacity as of December 31, 2012 and average annual waste received from 2008 through 2012. This landfill will have approximately 6 years of remaining capacity when the proposed Groot Industries Lake Transfer Station begins operating.

- ADS Zion Landfill (Lake County): The ADS Zion Landfill has a remaining capacity of approximately 20 years as of January 1, 2013, based on remaining capacity as of December 31, 2012 (including pending expansion capacity) and average annual waste received from 2008 through 2012. This landfill will have approximately 17 years of remaining capacity when the proposed Groot Industries Lake Transfer Station begins operating.

- Pheasant Run Recycling and Disposal Facility (Kenosha County, Wisconsin): The Pheasant Run RDF historically received a large amount of waste from Lake County and other counties in Illinois. However, following an increase in state-imposed tipping fees in 2009, the quantity of Illinois waste disposed at the landfill dropped significantly. In 2011 and 2012, the landfill received less than 100 tons of waste per day, on average, from Illinois. It is not expected that the Pheasant Run RDF will provide significant disposal capacity for Illinois-generated waste in the future.

The two in-county landfills will have an aggregate remaining capacity of approximately 12 years (and possibly less) when the Groot Industries Lake Transfer Station begins operating

in mid-2015, and therefore will not provide long-term disposal capacity to the proposed service area. Additionally, because a transfer station is not a permanent disposal facility, the existing landfills and the proposed transfer facility will act as complementary, not competing, facilities. As discussed in the following section, the Groot Industries Lake Transfer Station is conveniently located near the centroid of waste generation within its proposed service area, thereby providing significant transportation and cost efficiencies compared to competing facilities.

Economic Benefits

Numerous economic benefits result from the operation of transfer stations such as the proposed Groot Industries Lake Transfer Station. These benefits include:

- Increased efficiency of the collection and disposal system;
- Enhanced competition for transfer and disposal services; and
- Host community benefits.

Collection and Disposal System Efficiency

Transfer stations serve to increase the efficiency of the waste collection and disposal system. As noted by U.S. EPA:

> *The primary reason for using a transfer station is to reduce the cost of transporting waste to disposal facilities. (U.S. EPA, 2002, page 3)*

Transfer stations increase the efficiency of the waste collection and disposal system because:

- The transfer station is located near waste generators; and
- The cost to transfer haul waste is less than the cost to direct haul waste to landfills.

Location

The proposed transfer station will be located close to the centroid of waste generation for the service area. The centroid represents the "average" location at which waste from the service area is generated, based on the spatial distribution of population. The centroid is estimated to be near the intersection of Buckley Road and North Milwaukee Avenue in Libertyville, approximately 7 miles from the proposed transfer station location. As shown on Figure 1-7, the proposed transfer station will be located much closer to the waste disposal centroid than any existing, permitted transfer station.

Currently, the nearest transfer station is located approximately 14 miles from the centroid of waste disposal within the service area. Collection vehicles, therefore, must travel at least 14 miles from the waste generator to facilities located outside the service area. Assuming collection vehicles travel at an average speed of 30 mph, a single trip to a transfer station located 14 miles away will require 56 minutes to travel to and from the facility (excluding time spent at the facility). Alternatively, collection vehicles utilizing the proposed transfer station, which is located approximately 7 miles from the waste centroid, will require approximately 28 minutes to travel to and from the facility (excluding time spent at the facility), resulting in a time savings of approximately 28 minutes per round trip, on average. As a result, collection (i.e., packer and roll-off) vehicles are able to spend more time collecting waste and less time transporting it, thereby increasing the efficiency of the collection system.

On a daily basis, typical residential packer collection vehicles make two trips to a transfer station or disposal site to tip their load and work a 10-hour shift. Utilizing the proposed facility may therefore result in a time savings of approximately 1 hour per day and increase efficiency by approximately 10 percent. Commercial packer collection vehicles typically make up to 4 trips to a transfer station or disposal site per day to tip their loads, while roll-off collection vehicles make up to 5 trips per day. The calculated increases in efficiency for these types of loads would range from 20 percent to 25 percent. These efficiency increases will help to offset increased costs associated with escalating labor and operating costs and increased transportation distances.

DISTANCES TO NEAREST TRANSFER STATIONS AND LANDFILLS

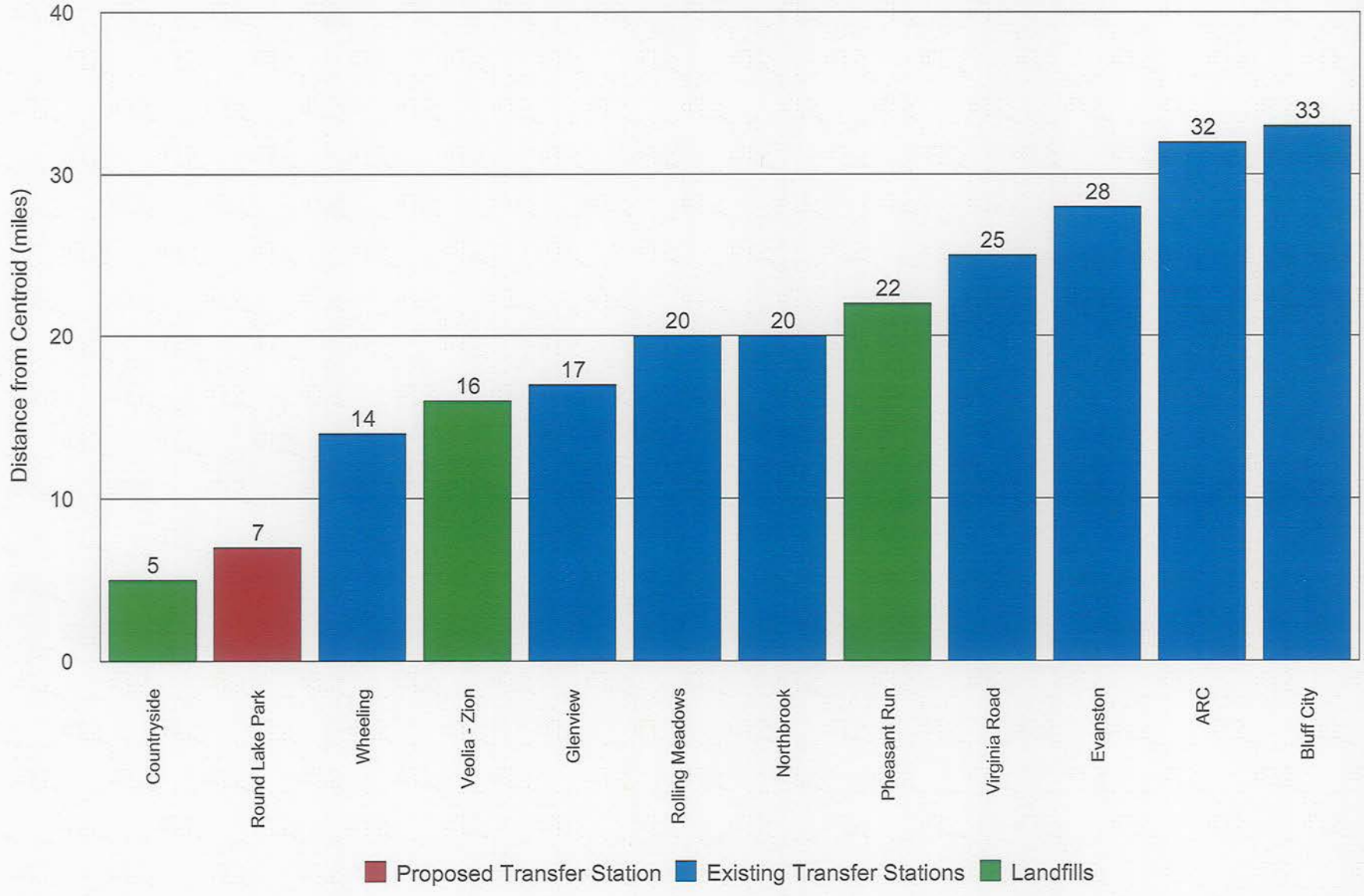

FIGURE 1-7

Cost Considerations

Costs which must be considered when evaluating the feasibility of developing a transfer station include:

- Transportation costs, including equipment, fuel and labor costs; and
- Transfer station capital and operating costs.
- Transfer vehicles accommodate larger loads than packer or roll-off collection vehicles[4]. An average payload for a transfer trailer is 24 tons, whereas an average load for a packer vehicle is 8 tons and an average load for a roll-off vehicle is 4 tons (average loads of commingled recyclables and landscape wastes also are within the range of 4 to 8 tons). Transfer vehicles also typically have lower capital costs than packer or roll-off vehicles[5]. The per ton equipment cost is therefore significantly lower for a transfer vehicle than for collection vehicles.
- Transfer vehicles also have greater fuel efficiency than packer vehicles. Transfer vehicles typically get 4-5 miles per gallon, versus 2-4 miles per gallon for packer vehicles. Per mile and per ton fuel costs are therefore lower for a transfer vehicle than a packer vehicle. Based on recent fuel cost information from the Energy Information Administration (a division of the U.S. Department of Energy), as shown in Figure 1-8, diesel fuel costs have more than doubled over the past decade. The rising cost in fuel is ultimately passed to residents and businesses. Because transfer vehicles have greater fuel efficiency when compared with collection vehicles, cost increases will be minimized with use of a transfer station.

Additional benefits are afforded by the use of transfer vehicles to haul waste to distant landfills. These benefits include:

- Reduced overall fleet maintenance costs. The gravel haul roads and other rough terrain of a landfill cause considerable wear and tear on vehicles utilizing landfills. Transfer haul results in fewer truck trips to the landfill and minimizes the potential for damage to more costly collection vehicles.
- Reduced road wear. Transfer haul results in fewer truck trips required to deliver waste to the landfill.

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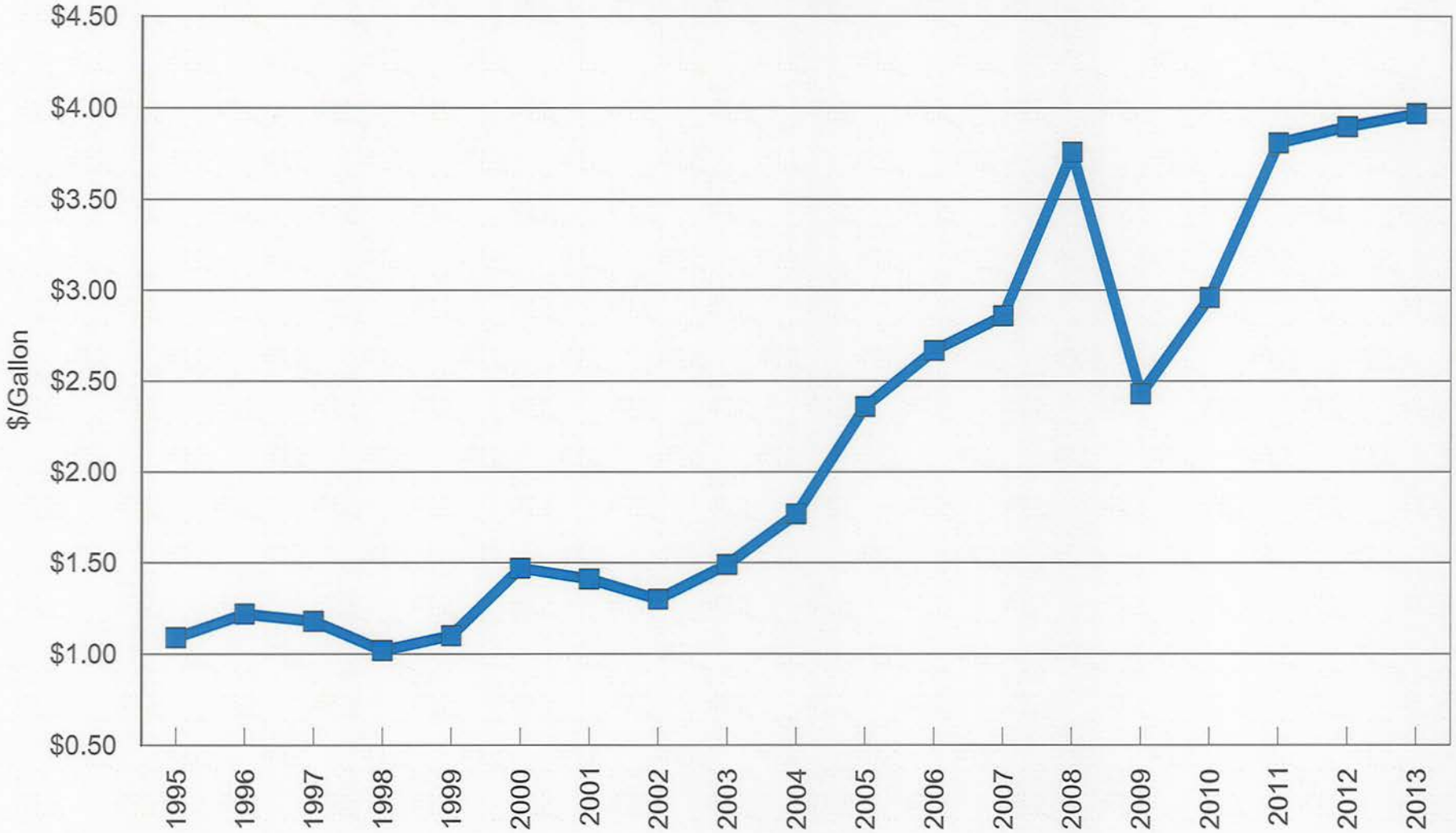
4 A packer vehicle is a closed-body truck (20-40 cubic yards) that collects residential waste from the curb and commercial waste from small dumpster containers. A roll-off vehicle collects and hauls waste in large dumpster containers (10-40 cubic yards) that are typically observed behind large commercial establishments or at construction sites. A transfer vehicle consists of a semi-tractor and open top transfer trailer (90 - 110 cubic yards).

5 A transfer tractor and trailer cost approximately $110,000 to $130,000. A rear-loading packer collection vehicle costs approximately $160,000 to $180,000, while a front-loading collection vehicle costs approximately $175,000 to $235,000. A roll-off collection vehicle costs approximately $110,000 to $170,000.

MIDWEST DIESEL FUEL PRICES



Note:
1. 2013 data reflects monthly average through April.

Source:
1. U.S. Department of Energy, Energy Information Administration (http://www.eia.gov/petroleum/gasdiesel/)

FIGURE 1-8

- Greater flexibility in selecting which disposal facility to utilize. Transfer vehicles enable waste to be transported more efficiently over greater distances so that more distant regional landfills, which often charge a lower tipping fee than facilities located closer to the metropolitan area or with restricted service areas, can be utilized. The lower landfill tipping fees at these more remotely located landfills can offset the increased transportation costs to haul waste over greater distances.

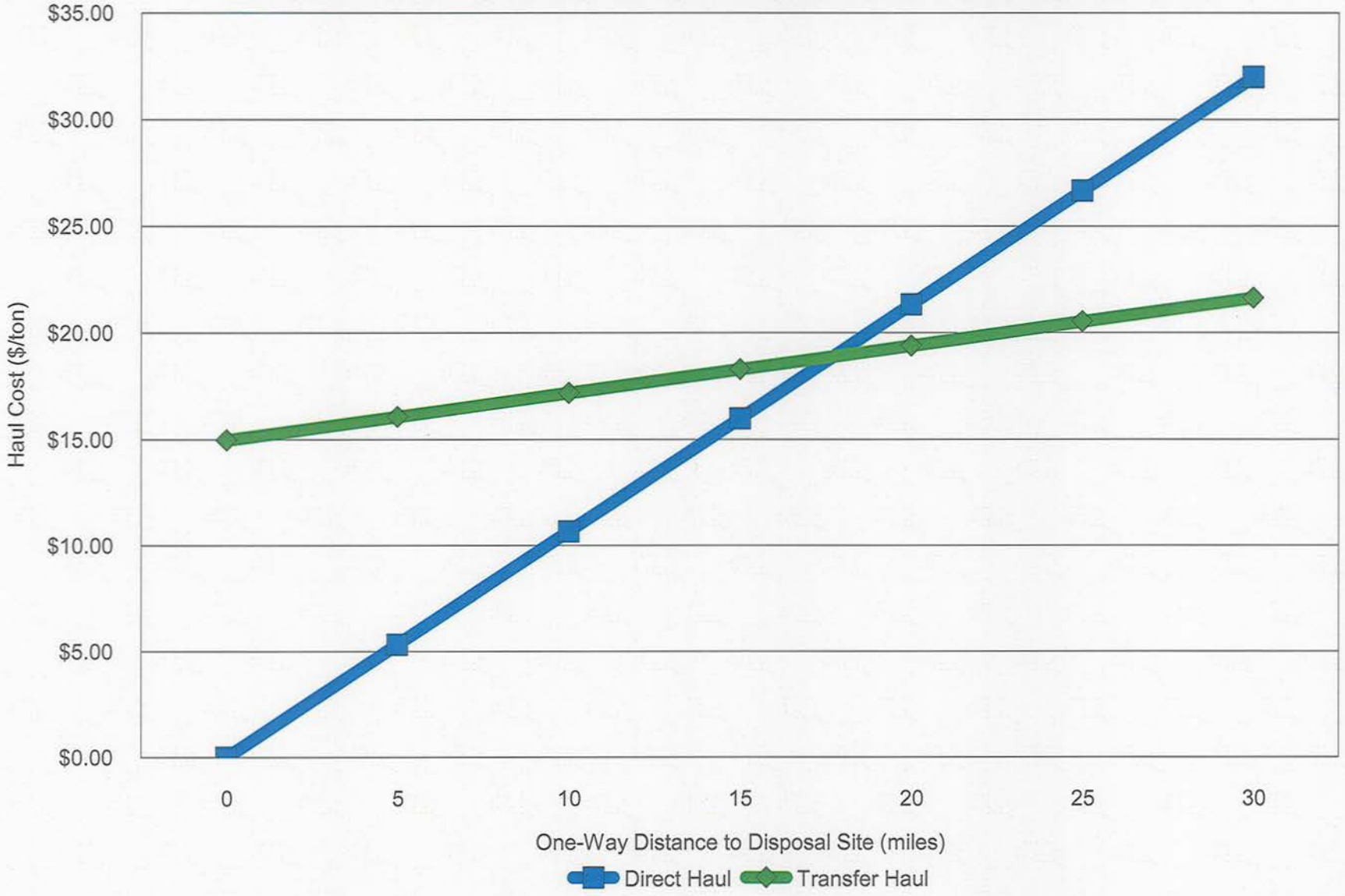
It is estimated that the cost to operate a transfer vehicle is $80 per hour. By comparison, the cost to operate a packer vehicle is estimated at $110 per hour, and the cost to operate a roll-off vehicle is estimated at $100 per hour (refer to Appendix G.5). Given the approximate payloads of these vehicles, on an hourly basis transfer vehicles cost $3.33 per ton to operate, packer vehicles cost $13.75 per ton and roll-off vehicles cost $25.00 per ton. Clearly, the cost to transport a ton of waste in a transfer vehicle is significantly less than the cost to transport that same ton of waste in a packer or roll-off collection vehicle over a given distance.

The lower transportation costs achieved by transfer vehicles, however, must be weighed against the cost to construct and operate the transfer station. It is estimated that a transfer station with the design parameters of the proposed transfer station has an approximate capital and operating cost of $14.97 per ton, as presented in Appendix G.5.

Based on the estimated transportation costs and the per ton cost of the proposed transfer station, a comparison of direct haul in collection vehicles versus transfer haul was made assuming various haul distances, as shown on Figure 1-9 and in Appendix G.5. The distance on the graph represents the one-way distance from the proposed transfer station to the final disposal site. Both direct haul and transfer haul costs assume an average vehicle speed of 30 miles per hour in local traffic. The point at which the lines representing direct haul and transfer haul cross is termed the "break-even" distance. Beyond this distance, direct haul in collection vehicles becomes more expensive than transfer haul. For the proposed transfer station the break-even distance is approximately 18 miles.

Only two permitted transfer stations are operating within the break even distance of 18 miles. However, these facilities are located more than twice as far from the centroid of the proposed service area as the Groot Industries Lake Transfer Station. The proposed Groot Industries Lake Transfer Station is therefore the most convenient facility to serve the proposed service area.

COSTS OF DIRECT HAUL VERSUS TRANSFER HAUL



Note: Direct haul refers to transportation of waste in packer and roll-off vehicles.

FIGURE 1-9

Competition

Development of the proposed transfer station will promote competition for disposal services within the service area. Competition benefits consumers by ensuring lower prices and higher quality service. Lake County's 2002 transfer station feasibility study identified increased competition for waste collection and disposal services as a key reason for developing transfer stations in Lake County:

> Furthermore, major consolidation and restructuring on the national scale in the solid waste industry is being observed as private firms try to improve performance through larger economies-of-scale and increased market penetration. This trend is reflected at the local level as due to recent consolidations, Lake County waste is currently being accepted by three landfills owned by two companies. Therefore, the inclusion of solid waste transfer as an option in the Lake County SWMP would allow for enhanced competition, promote flexibility, and potentially benefit the residents of Lake County by providing competitively priced collection and disposal alternatives. (CDM, 2002, page 5-1, emphasis added)

Host Benefits

In planning for the proposed transfer station, the applicant has executed a Host Community Agreement with the Village of Round Lake Park (see Appendix C). The host agreement contains provisions for numerous economic benefits to be provided to the Village, including the following:

- Payment of a per-ton host fee for waste received at the facility. The initial host fee will be $1.60 per ton. At a proposed throughput of 750 tpd, host fees are projected to exceed $343,000 per year. Host fees will be adjusted annually as described in the agreement based on the Consumer Price Index.

- Payment of an additional host fee of $0.15 per ton during any period in which Groot Industries is the Village's exclusive residential waste collector.

- Paving of Porter Drive from Route 120 to Route 134 during the first year of operation of the transfer station.

- Free disposal of waste from Village festivals and events.

In addition, Groot has committed to use all reasonable efforts to ensure the facility operates for a minimum of 20 years, ensuring long-term access to transfer and disposal capacity for the Village of Round Lake Park and the whole of Lake County.

Groot has also executed Host Community Agreements with Lake County and the Solid Waste Agency of Lake County (see Appendix C). The host agreements with the County and SWALCO provide for the payment of a host fee to each entity of $0.45 per ton for the first 600 tpd received at the facility and $0.55 per ton for all additional tons. At a proposed typical throughput of 750 tpd, host fees are projected to exceed $100,000 per year to Lake County and $100,000 per year to SWALCO. Host fees will be adjusted annually as described in the agreements based on the Consumer Price Index.

Conclusions

Based on the analysis contained in this report, the Groot Industries Lake Transfer Station is necessary to accommodate the waste needs of the service area. This conclusion is supported by the following facts:

- The service area is projected to experience continued growth in population, households and employment.
- As a result of population growth and increasing rates of disposal, there will be increased quantities of waste to be managed.
- Many of the landfills the service area has historically relied on have either reached closure or will close in the near future. New landfill capacity is being developed further from the service area. Landfills in Lake County are projected to close within approximately 12 years of the start of operations of the transfer station.
- The majority (68 percent) of remaining landfill capacity is located more than 50 miles from the centroid of the service area, more than tripling the distance to historical facilities. Increasing haul distances, in addition to high fuel prices, increase the cost to manage waste and support the need for transfer stations to mitigate these impacts.
- No transfer stations are currently permitted to operate within the service area. The service area is faced with an immediate transfer capacity deficit of 2,180 tpd under conservative, average conditions and a future deficit of 2,831 tpd. The transfer capacity deficit is even greater during peak seasonal periods and would increase further if disposal rates return to their historically higher rates.
- The Groot Industries Lake Transfer Station is located approximately 7 miles from the centroid of waste generation in the service area. By comparison, the nearest existing transfer station is located approximately 14 miles from the centroid of the service area. As stated above, the majority of landfills with appreciable remaining capacity are located more than 50 miles from the centroid of the service area. The Groot Industries Lake Transfer Station will therefore be conveniently located to waste generators and waste haulers within the service area.
- The development of the Groot Industries Lake Transfer Station will result in economic benefits including:
  - More efficient collection and transportation of waste;
  - Enhanced competition for waste transfer services within the service area; and
  - Host fees paid to the Village of Round Lake Park, Lake County, and SWALCO.

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SECTION 2

HEALTH, SAFETY, AND WELFARE

SECTION 2.1

INTRODUCTION

2.1 INTRODUCTION

Introduction

Criterion 2 of Section 39.2(a) of the Illinois Environmental Protection Act ("Act") requires that an applicant for local siting approval of a pollution control facility demonstrate that:

> *the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected.*

This section demonstrates that the Groot Industries Lake Transfer Station is designed, located and proposed to be operated so that the public health, safety and welfare will be protected.

The proposed transfer station property is currently undeveloped and is zoned as industrial. The proposed transfer station development includes the construction of an approximately 27,800 square foot transfer station building and a scale house of approximately 270 square feet, installation of inbound and outbound scales, paving of all access drives and interior circulation routes and construction of a stormwater bio-swale measuring approximately 370 feet in length along the northern limits of the property which conveys stormwater into a sedimentation basin prior to off-site discharge.

The operating plan for the proposed transfer station addresses procedures for waste handling, load checking, cleaning, litter control, vector control, odor control, noise control and recordkeeping.

This section of the application is further divided into three subsections, which include: 1) location, 2) design and 3) operation and addresses requirements of the Village of Round Lake Park Pollution Control Facility Siting Ordinance in addition to Criterion 2 of Section 39.2 of the Act.

SECTION 2.2

LOCATION

2.2 SITE LOCATION

Site Location

The proposed Groot Industries Lake Transfer Station ("proposed transfer station") is located in the southeast quarter of the southwest quarter of the southwest quarter of Section 28, Township 45 North, Range 10 East of the Third Principal Meridian, Avon Township, in Lake County, Illinois. The proposed transfer station site is located at 201 Porter Drive, in the northeast corner of Illinois Route 120 (Belvidere Road) and Porter Drive within the corporate limits of the Village of Round Lake Park, Illinois. The location of the proposed transfer station is shown on Figures 2.2-1 and 2.2-2, and on Drawing No. D2.

Current Property Use and Existing Site Conditions

The proposed transfer station property is currently industrially zoned and is used for agriculture. Section 3 of this application contains photos depicting existing site conditions.

Identification of Property Owners

The property on which the proposed transfer station will be located is owned by Groot Industries, Inc. Proof of property ownership is contained in Appendix D.

Plat of Survey with Existing Conditions

A Plat of Survey and legal description for the proposed transfer station property is shown on Drawing No. D3 and provided in Appendix E. The proposed transfer station site is approximately 3.9 acres in size. As shown on Drawing No. D3, there are no existing structures on the property.

Existing Topography of Site

The current site topography is depicted on Drawing No. D4. The property is currently used as farmland and is generally flat, with the elevation of the property ranging from 795 feet above mean sea level (MSL) on the west, transitioning to 793 feet above MSL in the central portion of the site, and returning to 795 feet above MSL on the east.

Existing Utilities

There are no utilities currently in existence within the facility boundary.

Location Standards

Residential Properties

Section 22.14 of the Illinois Environmental Protection Act ("Act") provides that a garbage transfer station may not be established within 1,000 feet of the nearest property zoned for primarily residential uses or within 1,000 feet of any dwelling.

The proposed transfer station will be located in an I-1 Zoning District within the corporate limits of the Village of Round Lake Park. The nearest residentially zoned property is located more than 1,500 feet to the northeast of the proposed transfer station in Hainesville, and the nearest dwelling is located over 1,000 feet west of the proposed transfer station (Refer to Figure 2.2-3 and Appendix H). As such, the proposed transfer station complies with Section 22.14 of the Act.

PROJECT LOCATION

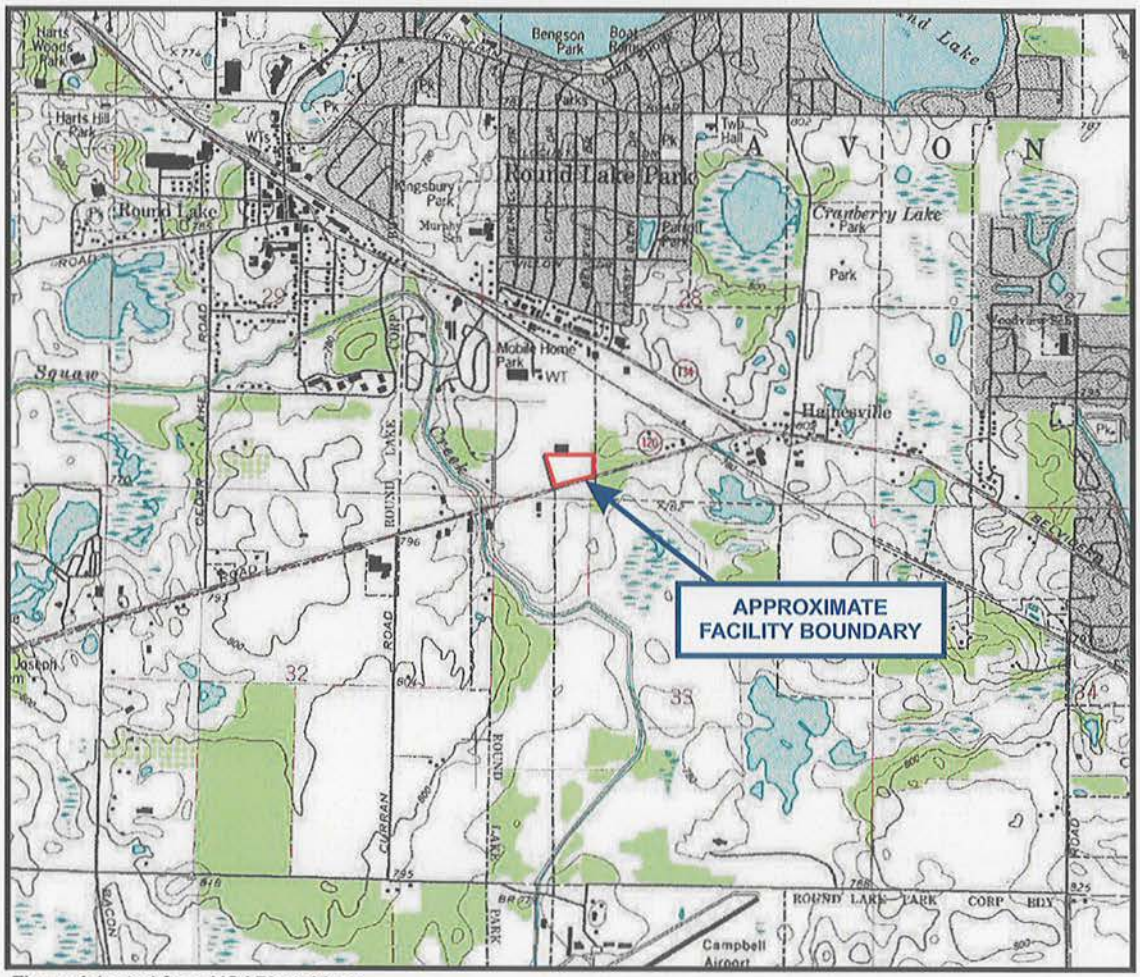

Figure Adapted from USAPhotoMaps.

CB&I	GROOT INDUSTRIES LAKE TRANSFER STATION		
	FIGURE 2.2-1 SITE LOCATION ON USGS TOPOGRAPHY		
	APPROVED BY: MNF	PROJ. NO.: 147312	DATE: MAY 2013

PROJECT LOCATION

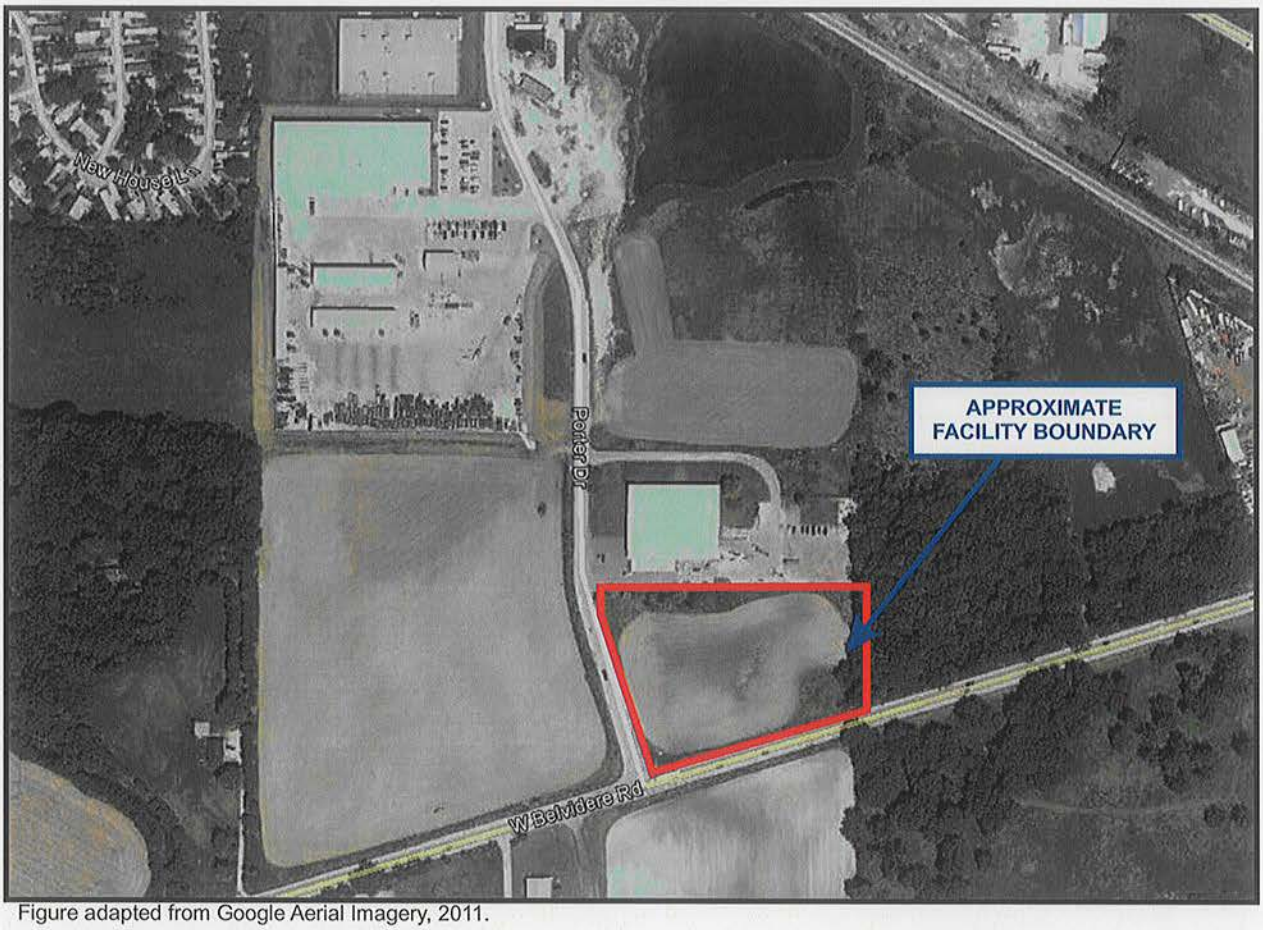

Figure adapted from Google Aerial Imagery, 2011.

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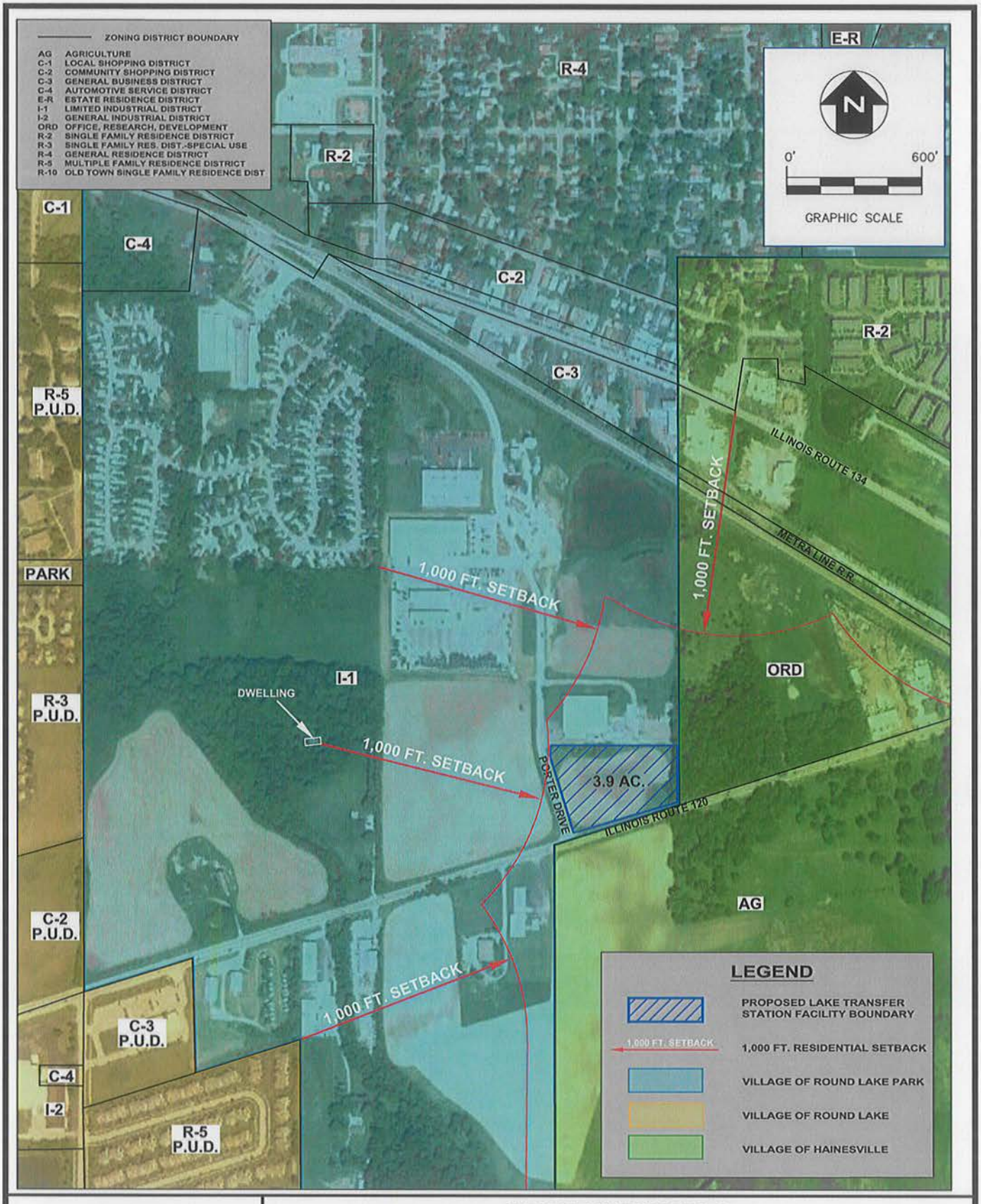
GROOT INDUSTRIES
LAKE TRANSFER STATION

FIGURE 2.2-2
SITE LOCATION ON AERIAL PHOTOGRAPHY

APPROVED BY: MNF	PROJ. NO.: 147312	DATE: MAY 2013



GROOT INDUSTRIES
LAKE TRANSFER STATION

FIGURE 2.2-3
RESIDENTIAL PROPERTY AND DWELLING SETBACK DEMONSTRATION

APPROVED BY: DGA	PROJ. NO.: 147312	DATE: MAY 2013

T:\AutoCAD\Projects\Groot\Round Lake Park\TransferStation\Figures\Figure H-1 Residential Setback.dwg, 4/23/2013 2:53:34 PM

100-Year Floodplain Limits

Flood Insurance Rate Maps (FIRMs) issued by the Federal Emergency Management Agency were reviewed to determine the location of the proposed transfer station relative to the 100-year floodplain. Based on information contained on the FIRMs, the proposed transfer station is not located within the 100-year floodplain. Documentation and further discussion are provided in Section 4 of this application.

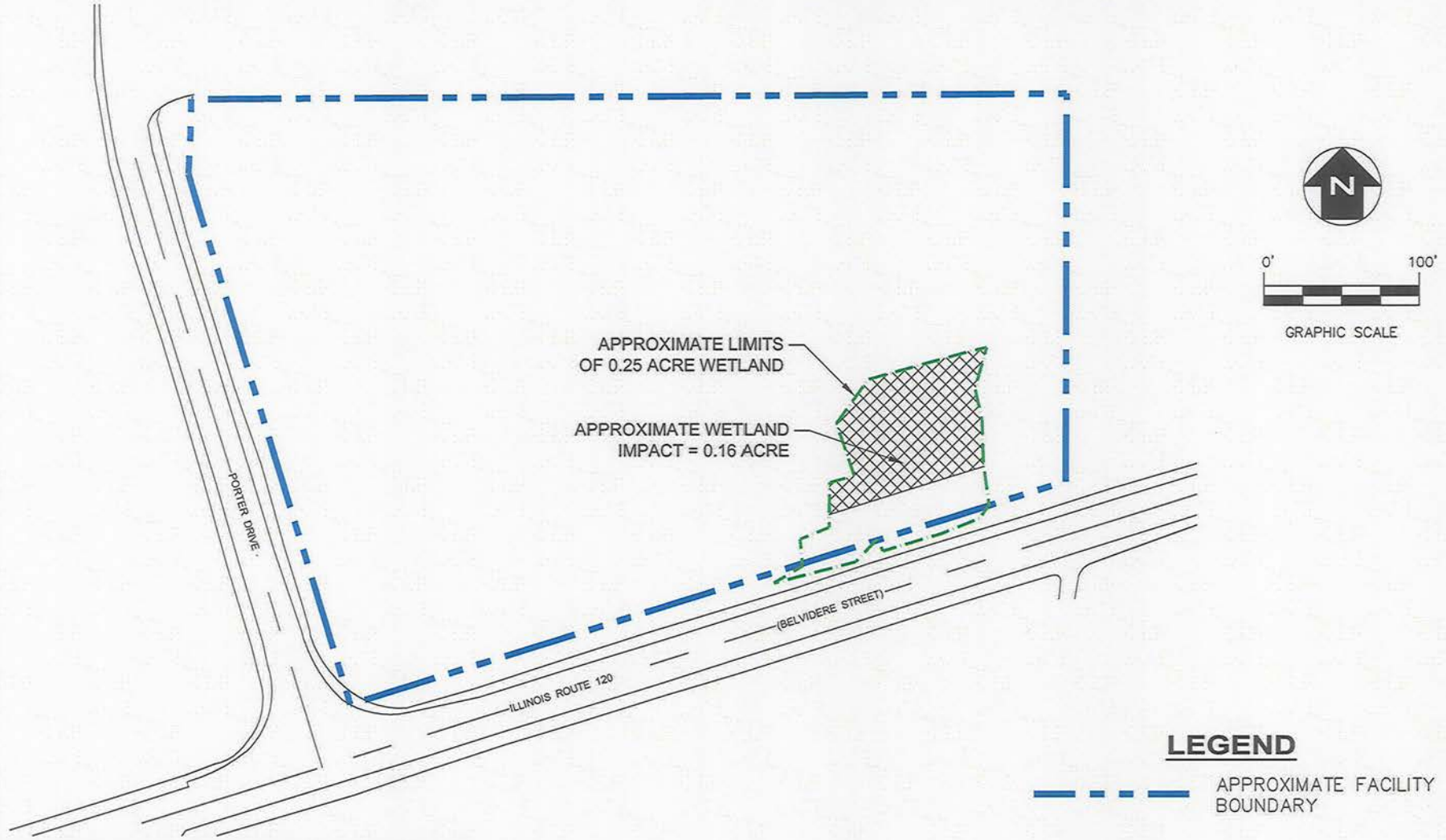
Wetland Location Documentation

On May 6, 2013, Shaw completed a wetland delineation and assessment of the proposed transfer station site. The purpose of the delineation was to determine whether any jurisdictional wetlands, Waters of the United States, or Isolated Waters of Lake County (IWLC) exist on site. An Isolated Water of Lake County is any water, including lakes, ponds, streams, farmed wetlands, or wetlands that are not under U.S. Army Corps of Engineers jurisdiction.

At the time of the Shaw's wetland delineation and assessment site visit, the project site consisted of agricultural land, cropped in corn the past year. One 0.25-acre wetland area was identified during the site investigation. A Routine Wetland Assessment Report was submitted to the Lake County Stormwater Management Commission (LCSMC) on May 9, 2013 requesting a jurisdictional determination of the identified wetland. A copy of the report in included in Appendix Q. The wetland delineation was verified by the LCSMC and United States Army Corps of Engineers on May 16, 2013. The surveyed boundary of the identified wetlands is documented on Figure 2.2-4.

Based on a May 17, 2013 letter from LCSMC, the wetland was determined to be an IWLC subject to regulation by LCSMC under the Lake County Watershed Development Ordinance (WDO). By definition, because the wetland was determined to be an IWLC, it is not a jurisdictional wetland or Water of the U.S., and is therefore not federally regulated. The LCSMC wetlands determination and delineation verification is valid for a period of three (3) years from the date of the LCSMC May 17, 2013 letter. A copy of the determination letter in included in Appendix Q.

The LCSMC will require a Watershed Development Permit (WDP) prior to filling any IWLC. As such, a WDP will be obtained from the LCSMC prior to site development. The permit requirements may include either the purchase of mitigation credits or wetland mitigation development, as described in the Lake County Watershed Development Ordinance. Based on Article IV, Section E. of the WDO, the impacts to the onsite wetland are anticipated to constitute a Category I wetland impact, because the wetland is less than 1.0-acre and is not a high-quality aquatic resource. Category 1 wetland impacts must be mitigated on a 1.5:1 replacement ratio. Based on the anticipated disturbance of 0.16 acres of the 0.25-acre wetland with development of the transfer station, approximately 0.24 acres are proposed be replaced under a mitigation plan.



GROOT INDUSTRIES
LAKE TRANSFER STATION

FIGURE 2.2-4
WETLAND EXHIBIT

DRAWN BY: LJC	APPROVED BY: DAM	PROJ. NO.: 147312	DATE: MAY 2013

Archaeologic or Historic Sites

The Illinois Historic Preservation Agency (IHPA) was contacted to determine if any significant historic, architectural or archaeological resources are located within the area of the proposed transfer station. The IHPA has determined that no significant resources are located within the area of the proposed transfer station. A copy of the IHPA correspondence is provided in Appendix I.

Endangered Species

The Illinois Nature Preserves Commission was contacted to determine if any threatened or endangered species are present on or near the proposed transfer station site and whether there are any natural areas in the vicinity of the site. The Natural Heritage Database was reviewed for the presence of endangered and threatened species, Illinois Natural Area Inventory (INAI) sites and/or dedicated Illinois Nature Preserves within the vicinity of the proposed transfer station. According to the Illinois Nature Preserves Commission, there are no endangered or threatened species, INAI sites or dedicated Nature Preserves present in the project area that would be negatively impacted by development of the transfer station. A copy of the Illinois Nature Preserves Commission correspondence is provided in Appendix J.

Additionally, the State of Illinois Ecological Compliance Assessment Tool (EcoCAT) was accessed for records of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, and registered Land and Water Reserves. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Illinois Department of Natural Resources (IDNR) has evaluated this information and concluded that adverse effects to these resources are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 was terminated. A copy of the EcoCAT consultation and IDNR correspondence is provided in Appendix J.

Wild and Scenic Rivers

There are no rivers designated for protection under the National Wild and Scenic Rivers Act within the proposed facility watershed.

The only river in Illinois classified as wild and/or scenic on the National System List is the Middle Fork of the Vermillion River which is located approximately 130 miles from the proposed transfer station (http://www.rivers.gov/documents/rivers-table.pdf, accessed May 2013).

Airports

The proposed transfer station will be located more than 5,500 feet from Campbell Airport as depicted in Figure K-1 (Appendix K) and is located outside of the Runway Protection Zone of this airport. As the proposed transfer station is located outside of the 5,000 foot separation recommended by the Federal Aviation Administration (FAA) for airports serving piston-powered aircraft (Campbell Airport) and will be an indoor waste handling facility, the proposed transfer station is not considered incompatible with safe operation of Campbell Airport in accordance with FAA advisory guidance. Prior to commencing operations, Campbell Airport, the FAA, and the Illinois Department of Aviation will be notified.

SECTION 2.3

DESIGN

2.3 SITE DESIGN

The site plan for the proposed Groot Industries Lake Transfer Station is shown on Drawing No. D5. The proposed transfer station development includes the construction of an approximately 27,800 square foot transfer station building and a scale house of approximately 270 square feet, installation of a facility scale, paving of all access drives and interior circulation routes, and construction of a stormwater bio-swale measuring approximately 370 feet in length along the northern limits of the property. Screening will be provided along Porter Drive and Route 120 with the construction of berms and the use of landscape plantings.

Site Access

Ingress and egress to/from the proposed transfer station will be provided by a two-way access drive located in the northwest corner of the facility along the easterly right-of-way of Porter Drive, as shown on Drawing No. D5. This access drive will be approximately 70 feet wide. The egress portion of the site access has been designed to accommodate two lanes of traffic, offering a separate right-turn lane and left turn lane.

This access has been designed with sufficient turning radii to accommodate the various vehicles accessing or departing the proposed transfer station, including employee vehicles, single-unit waste collection vehicles, semi-trailer transfer vehicles, and emergency vehicles, ensuring safe ingress and egress. A traffic plan for the facility is illustrated in Drawing No. D6.

Proposed Transfer Building

The transfer station building will consist of an approximately 27,800 square foot concrete and steel structure enclosing an approximately 21,960 square foot tipping floor. The transfer station building will have a generally rectangular footprint, with the exception of the north wall line which parallels the north facility boundary. The building has a maximum width of approximately 203 feet and a maximum length of approximately 160 feet. The building will have an eave height of approximately 40 feet (excluding clerestories). The transfer station building floor plan is shown on Drawing No. D7.

The transfer station building is shown in elevation views on Drawings Nos. D8 and D9, and rendered from various perspectives on Drawing No. D10. The roof of the transfer station building will consist of structural steel that spans the tipping floor in a north to south fashion. Portions of the exterior walls of the building will consist of cast-in-place concrete to a height of approximately 16 feet, upon which a steel-framed building, will be erected. Two 24-foot wide by 24-foot high overhead doors will be located along each the east and west building elevations to allow vehicular access to and from the tipping floor. Two, 14-foot wide by 15-foot high, overhead doors will provide ingress and egress to/from the primary drive-through transfer trailer loading bay and tarping station. A second alternate loading bay will be accessible through a 14-foot wide by 15-foot high overhead door from the west side of the building.

The tipping floor and pushwalls will consist of cast-in-place reinforced concrete. The tipping floor will be 12-inch thick slab-on-grade concrete with saw-cut control joints. Embedded synthetic water stops will be installed at all control joint locations. The tipping floor will gently slope toward a series of floor drains located in the south central portion of the tipping floor in order to collect any incidental liquids. Additionally, trench drains will be located

along the interior southern wall of the transfer building and at the doorlines of the transfer trailer loading bays. The approximate location of the floor drains is indicated in Appendix N.3. The floor drains will be routed to a triple-trap oil/water/grit separator to remove grit, suspended solids and oils/greases prior to discharge into the sanitary sewer (or holding tank as necessary).

To provide efficient stockpiling areas for incoming materials, 16-foot high by a minimum of 18-inch thick concrete pushwalls will be constructed along the northern two thirds of both the western and eastern tipping floor walls, as well as an approximate 28 foot segment extending eastward from the southern end of the western pushwall. A 16-foot high pushwall will also be located along the northern portion of the tipping floor, with the exception of the areas immediately adjacent to the transfer trailer loading bays which will be constructed with pushwalls that are approximately 8 feet high with curb deflectors as shown on Drawing Nos. D7 and D11.

The transfer trailer loading bays and tarping station will be located along the northern wall of the transfer station building. Axle scales will be installed within each loading bay to weigh transfer trailers as they are being loaded. The transfer trailer loading bays will be constructed at tipping floor grade. Transfer trailers will be top-loaded using an excavator equipped with a hydraulic grapple and elevated cab.

The primary drive-through transfer trailer loading bay has been designed to include a transfer trailer tarping station along its centerline axis. The tarping station consists of a 3-foot wide (stairway accessible) elevated catwalk to be situated along both flanks of a transfer trailer. The catwalks will be constructed at a height of 10 feet, enabling personnel to readily access and tarp the top of a transfer trailer. The inclusion of this tarping station enables transfer trailers to be fully tarped more easily while still within the confines of the transfer station building. An electronic ticket printer is anticipated to be installed at the tarping station and connected to the axle scales within the loading bays to enable load tickets to be signed and printed as necessary prior to loaded transfer trailers exiting the proposed transfer station. In addition, the facility has been designed with an alternate loading bay that could be used for the loadout of municipal solid waste as necessary. However, it is anticipated that the alternate loading bay will primarily be used for the loadout of recyclables and/or landscape waste.

Access Roads and Interior Traffic Circulation

Access drives and interior traffic circulation routes will be paved. Access to the proposed transfer station will be accomplished as discussed previously. Interior traffic circulation, including the arrival, unloading and departure of collection vehicles, as well as the arrival, loading and departure of transfer trailers, will follow the patterns shown on Drawing No. D6.

Pavement in the area of access drives and interior traffic circulation routes will be comprised of an approximately 6-inch to 12-inch aggregate subbase course, a 9-inch bituminous concrete base course, a 2.5-inch bituminous concrete binder course and a 1.5-inch bituminous concrete surface course. The pavement design will be finalized based on the results of the geotechnical analysis which will be conducted as part of the final development package of the proposed transfer station.

Facility Vehicle Scales

A vehicle scale will be located at the northern edge of the facility near the facility entrance, as shown on Drawing No. D5. Upon entering the facility, inbound collection vehicles will

travel south and maneuver around the transfer station building prior to being weighed. Vehicle movement across the scale will be from east to west. The weighed vehicles will then again circle the transfer building and enter the building from east to west. If a collection vehicle is already on the scale, additional inbound collection vehicles will queue prior to accessing the scale. Groot Industries will require all commercial haulers utilizing the facility to receive a vehicle tare weight which will be maintained on-file at the scalehouse. Vehicles for which a facility tare weight is not on record will be directed to the facility scale prior to exiting the facility.

Two axle scales will be located in each of the two transfer trailer loading bays. These axle scales will be utilized to obtain and log the weight of waste being removed from the site and to assure that the legal weight limits of the area roadways will not be exceeded.

Parking Facilities

Paved parking areas will be provided to accommodate the projected number of employees at the proposed transfer station as well as visitors to the transfer station. A total of 13 employee and visitor parking spaces will be provided adjacent to the west elevation of the transfer station building and in the northeast corner of the site, as shown on Drawing No. D5. Parking has been designed with two spaces dedicated to each of the six employees in order to accommodate for shift changes. Additionally, one handicap space has also been provided.

Office or Other Facility Structures

Office space will be provided within the scale house, located at the northern edge of the transfer station building near the site entrance. This structure will be approximately 27 feet in length and 10 feet in width and will serve the administrative needs of the proposed transfer station. Support facilities such as bathrooms, a break room, and a mechanical/storage area are provided within an attached enclosed portion of the building west of the tipping floor.

Security Measures to be Implemented

A security plan will be implemented at the site, which will include walls, fencing and lockable gates. Lockable gates located at the facility entrance will control access to the facility. The north and east site boundaries, as well as the majority of the west site boundary will be proposed within an 8-foot high chain link fencing, thereby preventing unauthorized access to the facility. The southern boundary of the facility will include a retaining wall behind a landscaped berm. A 6-foot high fence will be located on top of the retaining wall. The extent of site fencing and retaining walls is shown on Drawing D5.

Additionally, all on-site equipment will be secured at the end of each operating day and parked within the transfer station building. Access gates will be locked to prevent unauthorized access when the proposed transfer station is not operating. Local emergency authorities will be provided with a key to the proposed transfer station so that access may be obtained in the event of an emergency.

The perimeter of the proposed transfer station will be inspected routinely to ensure site security is maintained.

Stormwater Management Design

Stormwater at the proposed facility will be managed in conjunction with the overall Ferdinand Industrial Park stormwater management system. In December 2004, the Lake County Stormwater Management Commission (LCSMC) granted Watershed Development Permit #04-41-159, which allowed the collective stormwater detention and control of multiple parcels within the Industrial Park prior to discharge to Squaw Creek. The use of the Regional Detention Basin allows individual developments flexibility in using off-site detention and controls. A copy of the Proposed Regional Stormwater Detention Design and permit approval from the LCSMC is provided in Appendix L.6.

The proposed facility described within this Application represents the intended design of the transfer station, including salient stormwater management features. The stormwater management system for the proposed transfer station has been developed based on sound engineering and stormwater best management practices (BMPs). Prior to development of the transfer station, demonstration will be made to the Lake County Stormwater Management Commission that the proposed development will function in accordance with the existing Watershed Development Permit #04-41-159 and authorization will be obtained. The stormwater management features may be modified, as requested, based on LCSMC comments during permitting.

Proposed Conditions

The site plan, as shown on Drawing No. D5, has been designed to route on-site stormwater surface flow to a stormwater bioswale located along the northern property line of the site. Stormwater will then be directed to a stilling basin in the northwest corner of the site prior to discharge through a drainage outlet structure. The outlet structure incorporates an integral sluice gate followed by an oil/water/grit separator. Stormwater will then pass through a minimum 30-inch stormwater drainage pipe from the site and will then enter one of two parallel 42-inch drainage pipes to the Regional Detention Pond, located approximately 850 feet north of the site.

Stormwater Best Management Practices

Stormwater BMPs are a combination of design and operating features which are implemented as a means to further improve the quality of surface water runoff generated during storm events. The design and operating plan of the proposed transfer station incorporates features intended to protect or improve the quality of stormwater runoff from the proposed transfer station property.

The facility incorporates a vegetated bioswale in order to pre-treat stormwater and promote sedimentation prior to off-site discharge. Bioswales are alternatives to conventional storm sewers because they attenuate low magnitude stormwater events. The bioswale for this facility has been sized to accommodate the 100-year storm event.

Bioswales improve water quality by filtering the first flush of stormwater runoff and filtering the large storm events. The use of bioswales are a principal component of low impact development (LID) because they mimic the natural infiltration based hydrology. Other advantages of bioswales include:

- Protection of local and regional water quality by reducing sediment and nutrient loads of stormwater runoff;

- Reduction of the potential for flooding;

- Reduction of frequent high and low flows associated with surface runoff, stabilizing stream flow volumes by restoring groundwater discharges into receiving waters; and

- Reduction of channel erosion by reducing the frequent surges/ bounces of higher flows from storm sewer discharges.

The bioswale has been designed for low maintenance with hydrophilic vegetation and is approximately 12-feet wide. In order to maximize the bottom channel width, the sidewalls will be vertical engineered walls. This design feature allows maximum stormwater flow over the bottom channel vegetation, improving sedimentation.

At the west terminus of the bioswale, stormwater will enter a small stilling basin that allows a further reduction in stormwater velocity, allowing for sediment knock-out and improved water quality. The stilling basin will contain hydrophilic vegetation that can support periods of inundation. Due to the fact that the stilling basin is not intended to provide significant detention capabilities, it is conservatively not included within the stormwater model.

All surface water collected by the stormwater management system will be directed through an oil/water/grit separator prior to discharge from the facility. The structure will be located both within the stilling basin and in-line with the stormwater discharge pipes. A detail of a typical unit for this purpose is provided in Drawing No. D11. In addition, a sluice gate is to be installed as part of the drainage outlet structure, which will enable facility personnel to prevent spills from being discharged from the property.

Stormwater Modeling

The bioswale and discharge piping were sized to handle the maximum anticipated strormwater discharge rates associated with the 100-year storm event. Stormwater modeling was conducted using the computer program, HEC-HMS, which is developed and distributed by U.S. Army Corps of Engineers. Various parameters, such as rainfall intensity hyetographs, drainage areas, curve numbers, lag times, and Manning's coefficients are entered into the program. Calculations to determine these parameters are described within Appendic L.1 through L.3.

The stormwater discharge for the 100 year storm event for the entire facility was modeled as one subcatchment (watershed) area. The facility was assumed to be approximately 68% impervious, which includes all paved areas and building rooftops. The remaining property was modeled pervious, and generally includes the bioswale, stilling basin, and landscaping areas.

Runoff from the entire facility was conservatively assumed to pass through the entire bioswale and stormwater discharge pipe. Due to the fact that the stilling basin is not intended to provide significant detention capabilities, its detention capacity was conservatively not included within the stormwater model. The bioswale and stormwater discharge piping were modeled in HEC-HMS and determined to be appropriately sized. The model results and calculations demonstrating that this system has been appropriately sized are provided in Appendix L.4 and L.5.

Storm Water Pollution Prevention Plan (SWPPP)

A Storm Water Pollution Prevention Plan (SWPPP) has been developed for the proposed transfer station and is included in Appendix L.7. This plan, which will be required for future National Pollutant Discharge Elimination System (NPDES) permitting, will 1) serve to identify potential sources of pollution which may be associated with construction and operation of the proposed transfer station, 2) describe and ensure the implementation of practices which are to be used to minimize the constituents in stormwater discharges associated with construction and operation of the proposed transfer station, and 3) assure compliance with the terms and conditions of a NPDES permit. Some of the activities include:

- All waste tipping and handling operations will be conducted completely within the transfer station building;
- Liquids generated and collected on the tipping floor and within the loading bays will be directed through an oil/water/grit separator prior to discharging to the sanitary sewer system (or holding tank);
- On-site vehicle maneuvering areas will be routinely swept during operations;
- The catch basin and the oil/water/grit separator will be cleaned on a regular basis;
- Stormwater will be tested in accordance with the requirements of the NPDES permit to ensure that all systems are functioning properly;
- Employees will be trained to identify situations which may cause exposure of waste or other materials to stormwater runoff; and
- The proposed transfer station will operate in accordance with its NPDES permit.

Also included in the SWPPP are soil erosion and sedimentation control procedures to be implemented during and after development of the proposed transfer station. Procedures such as installing silt fencing, straw bale filters, temporary seeding and other methods will be used during construction of the proposed transfer station. Moreover, all non-paved areas of the proposed transfer station will be vegetated and landscaped upon completion so as to provide long-term erosion protection.

SECTION 2.4

OPERATION

2.4 OPERATIONS

This section describes the plan of operations for the proposed transfer station. The plan of operations details waste acceptance and handling procedures, nuisance control procedures, staffing and equipment requirements, cleaning procedures and closure plan for the proposed transfer station.

Hours of Operation

The proposed transfer station is requesting approval to operate 24 hours per day, 7 days per week in order to provide operational flexibility to accommodate overnight deliveries of waste, if necessary.

It is anticipated that the proposed transfer station will typically receive and transfer the majority of incoming waste from 4:00 AM to 8:00 PM Monday through Friday, and 4:00 AM to 12:00 PM Saturday. The proposed transfer station will typically be closed on Sundays and on the following holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

Quantity of Waste Accepted

The proposed transfer station is anticipated to accept and transfer 750 tons per day of municipal waste, landscape waste, and recyclables during a typical operating day, with the ability to conservatively process a 20 percent increase in the typical daily throughput. Municipal waste will constitute a majority of the incoming materials.

Identification of Acceptable Waste Types

The proposed transfer station will accept municipal waste, landscape waste, and source separated recyclables, including office paper, newspaper, cardboard, aluminum, glass and plastics, may also be received at the proposed transfer station. Per the Host Community Agreement between Groot Industries and the Village of Round Lake Park, municipal waste is defined as garbage, general household and commercial waste, industrial lunchroom or office waste, landscape waste, construction or demolition debris, in accordance with Section 3.290 of the Act. Further, the term municipal waste does not include any: 1) hazardous substance, as defined by Section 3.215 of the Act, 2) hazardous waste, as defined by Section 3.220 of the Act, 3) industrial process waste, as defined by Section 3.235 of the Act, 4) pollution control waste, as defined by Section 3.335 of the Act, 5) sludge, as defined by Section 3.465 of the Act, or 6) special waste, as defined by Section 3.475 of the Act. Municipal Waste includes non-hazardous industrial wastes. Municipal waste materials will be considered wastes upon both acceptance and transfer. Source separated recyclables will not be considered wastes and will be transferred from the facility to appropriate recycling end use markets.

A sign will be posted at the entrance indicating acceptable waste types and identifying unauthorized wastes.

The following materials are considered unauthorized waste and will not be accepted at the proposed transfer station:

- Regulated hazardous wastes (as defined by Section 3.220 of the Act)
- Regulated and manifested special wastes (as defined by Section 3.475 of the Act)
- Soils
- Industrial process wastes
- Sludge
- Used motor oil
- Pollution control wastes
- Regulated PCB wastes
- Potentially infectious medical wastes (as defined by Section 3.360 of the Act)
- Liquid wastes (including bulk liquids)
- Universal wastes (as defined by 35 Ill. Admin. Code 733)
- Regulated asbestos-containing materials
- Source, special or by-product nuclear materials
- Radioactive wastes (both high and low level)
- Transuranic wastes
- Lead-acid (automotive) batteries
- White goods
- Bulk loads of whole tires (incidental tires received at the proposed transfer station will be segregated and stored for pickup by an off-site recycler)

Except for white goods, tires, and lead-acid batteries, unauthorized wastes will be removed from the proposed transfer station within 24 hours of discovery. White goods, tires and lead-acid batteries will be removed from the proposed transfer station when small containers dedicated to these materials to be located along the northern boundary of the tipping floor adjacent to the two transfer trailer loading bays (as shown on Drawing No. D7) reach capacity.

Facility Staffing

The proposed transfer station will be staffed with the necessary number of employees to safely and efficiently operate the facility as described herein. Based on the proposed operations and assuming two or three operating shifts per day, the following staff are anticipated:

- Facility Manager (1 total)
- Equipment operator (2 per operating shift, 4-6 total)
- Scale clerk (1 per operating shift, 2-3 total)
- Laborer (2 per operating shift, 4-6 total)

The staffing projections may be modified as necessary to maintain safe and efficient operations at the proposed transfer station.

Waste Transfer Operational Plan

The sequence of typical tipping operations at the facility is outlined as follows:

1. Inbound waste collection vehicles will enter the facility from Porter Drive at the facility access drive as shown on Drawing No. D5. The inbound collection vehicles

will then bear south and proceed counter-clockwise around the transfer station building and access the facility platform scale located along the northern limits of pavement as shown on Drawing No. D5. Vehicle movement across the platform scale will be from east to west.

2. After receiving an inbound weight, collection vehicles will once again proceed counter-clockwise around the south of the transfer building and access the tipping floor through the northernmost access door located on the southeast corner of the transfer building. The collection vehicle driver will then proceed to the appropriate area of the tipping floor.

3. On the tipping floor the collection vehicle driver will back the vehicle into the designated tipping area. Any vehicle untarping that may be required will only be performed within the transfer station building.

4. The collection vehicle will discharge its contents onto the tipping floor. Waste unloading will be monitored by the front-end loader operator and also through video surveillance.

5. When the collection vehicle has completed unloading, the vehicle will be cleaned of any stray waste and secured before exiting the building by way of one of the west overhead doorways located on the southwest corner of the transfer station building.

6. Collection vehicles that do not require a tare (empty) weight will not have to be weighed prior to exiting the facility. This will be the case for the majority of collection vehicles utilizing the facility. Groot Industries will require all commercial haulers utilizing the facility to receive a vehicle tare weight which will be maintained on-file at the scalehouse. Collection vehicles that do require a tare weight will proceed in a counter-clockwise direction around the site in order to access the facility platform scale to be weighed. Following the tare weight being recorded, the collection vehicle will depart the facility by way of the exit drive in the northwest corner of the site onto Porter Drive.

The sequence of typical transfer operations at the facility is outlined as follows:

1. Empty transfer trailers will enter the facility from Porter Drive at the facility entrance in the northwest corner of the site as shown on Drawing No. D5. In the event that empty transfer trailers arrive at the proposed transfer station while the loading bay is occupied, transfer trailer queuing is available behind the primary loading bay and along the southern boundary of the site. When a loading bay becomes available, an empty transfer trailer will be positioned within that loading bay to be loaded.

2. A front-end loader (Caterpillar 966G or equivalent) will be utilized to consolidate discharged materials on the tipping floor. The process of moving and consolidating the various waste materials unloaded on the tipping floor provides the front-end loader operator additional opportunity to inspect for unauthorized wastes.

3. An excavator with an extended cab, fitted with a hydraulically-operated grapple, will load waste material into transfer trailers positioned in the loading bays within the northern limits of the building. Under routine conditions, this process requires approximately 6 minutes to load a transfer trailer to capacity. The loading bays will be equipped with axle scales linked to wall-mounted weight indicator displays. The

weight indicators enable the grapple operator to efficiently load transfer trailers to maximum payload, without exceeding permissible roadway weight limits.

4. The primary drive-through loading bay will be equipped with a trailer tarping area constructed parallel with the loading bay as shown on Drawing No. D7. This configuration allows loaded transfer trailers to pull forward and be tarped, while remaining fully within the building. Moreover, this design allows for the simultaneous loading of the next empty trailer, while tarping takes place, as the loading area of the bay will have been vacated. The trailer tarping station will be equipped with stair-accessible elevated catwalks located along each flank of the trailer, which allows the driver or facility personnel to remove incidental debris from the top rails of the trailer and deploy the trailer tarp. Trailer tarping under these conditions is anticipated to typically require approximately 5 minutes to complete. Tarping of transfer trailers using the alternate loading bay will be conducted prior to exiting the building.

5. Transfer trailers will exit the building when fully tarped. Transfer trailers may obtain a load ticket through a remote ticket printer installed at the tarping area. The ticket printer will be connected to the pit scales within the loading bays.

Waste Volume Throughput Analysis

The waste processing capability of the proposed transfer station is determined by four operating factors:

- Incoming waste delivery rates;
- Processing time to empty collection vehicles;
- Loading rates into waiting transfer vehicles; and
- Tipping floor size and stockpiling capacity.

In order to confirm waste processing adequacy, a throughput analysis was conducted which evaluated each of the operating factors above. The analysis demonstrates that the facility has the ability to easily process the anticipated typical waste throughput of 750 tons per day with available capacity to conservatively process a 20 percent increase in the typical daily throughput.

Collection Vehicle Processing Times

Estimates for both typical and maximum times required to process collection vehicles are shown in Table 2.4-1. Utilizing known collection vehicle processing times, the waste arrival frequency was evaluated to verify that the proposed transfer station can process the projected number of trucks which will be arriving hourly.

Peak Operating Hour

Hourly projections of the number of collection vehicles that will access the proposed transfer station are provided in Appendix M.1. These projections demonstrate that the maximum number of inbound collection vehicles will be observed between the hours of 10:00 A.M. and 11:00 A.M. As many as 15 collection vehicles are projected to arrive at the proposed transfer station during the typical peak operating hour.

TABLE 2.4-1. APPROXIMATE COLLECTION VEHICLE PROCESSING TIMES		
Activity	Approximate Typical Time Required	Approximate Maximum Time Required
Enter Facility and Circle to Scale (Approx. 1,135 feet at 10 miles per hour)	1 minute 30 seconds	2 minutes
Weigh-In	30 seconds	1 minute
Circle to enter the building from the rear (Approx. 825 feet at 10 miles per hour)	1 minute	1 minute 30 seconds
Move onto tipping floor, unfasten hopper locking mechanisms and/or untarp the load.	1 minute	3 minutes
Discharge waste	2 minutes	5 minutes
Lower hopper or hoist, secure the equipment, and exit the building	1 minute	2 minutes
Proceed to the facility exit (415 ft) or circle back to cross the scale (if necessary) and exit (Approx. 1,105 feet at 10 miles per hour).	30 seconds	2 minutes
Approximate Total Time On-Site	7 minutes 30 seconds	16 minutes 30 seconds
Note: Maximum processing times also reflect vehicle processing times in which the vehicle is equipped with a dual hopper		

Scale Capacity Adequacy

The first area to be evaluated is the inbound scale. All 15 collection vehicles arriving during the typical peak hour will be required to cross the inbound scale. Assuming that all 15 collection vehicles require the maximum projected time to enter the proposed Facility and cross the scale (3 minutes as shown in Table 2.4-1), the scale will be utilized for:

(15 vehicles) X (3 minutes per vehicle) = a maximum of 45 minutes during the peak hour

The inbound scale can therefore comfortably process all of the incoming collection vehicles during the anticipated peak operating hour. This analysis is conservative because it assumes peak hourly traffic volumes and all incoming collection vehicles will require the maximum amount of scale processing time.

Should collection vehicles not arrive at an even distribution throughout the peak hour, the proposed transfer station has been designed with adequate queuing area to accommodate at a minimum of 15 inbound collection vehicles (the entire typical peak hourly throughput) and is shown in Appendix M.3. The proposed transfer station can therefore accommodate incoming vehicles during the peak hour without causing backups onto exterior roadways. Furthermore, the location of the inbound queuing area enables transfer trailer vehicles, and other vehicles as necessary, full access into the transfer station.

Vehicle queuing capacity for outbound vehicles is available. However, a majority of collection vehicles will not require a tare weight prior to exiting the proposed transfer station. Groot Industries will require all commercial haulers utilizing the facility to receive a vehicle tare weight which will be maintained on-file at the scalehouse.

Tipping Lane Capacity Adequacy

The tipping floor comfortably provides lanes for three collection vehicles to discharge onto the tipping floor simultaneously, as shown on Drawing No. D6.

Utilizing a typical vehicle processing time of approximately 4 minutes per vehicle, as shown in Table 2.4-1 (including moving onto the tipping floor, maneuvering into position, untarping the load, discharging waste, lowering and securing the vehicle hopper or hoist, and exiting the building), the peak facility hour can accommodate 45 collection vehicles:

- 60 minutes x 3 tipping lanes / 4 minutes per vehicle = 45 vehicles that can discharge waste during the peak hour.

To be conservative, the analysis was also conducted assuming that all of the waste collection vehicles require the maximum length of processing time during the peak hour. As indicated in Table 2.4-1, the maximum estimated processing time for a collection vehicle is 10 minutes. Assuming that all collection vehicles require the maximum projected time to be processed, the typical peak facility hour can accommodate 18 vehicles:

- 60 minutes x 3 tipping lanes / 10 minutes per vehicle = 18 vehicles that can discharge waste during the peak hour.

As many as 15 collection vehicles are projected to arrive at the proposed transfer station during the peak operating hour. The proceeding calculations indicate that the proposed facility can process three times more than the entire typical peak hour collection vehicle throughput across the tipping floor under typical conditions (a maximum of 45 collection vehicles). Furthermore, even when it is assumed that every truck that is processed through the facility during the peak hour takes the maximum time to be processed (an extremely conservative assumption), it has been demonstrated that the facility will have excess tipping floor capacity that can accommodate a 20% increase in the typical peak hourly throughput.

The facility has been designed to accommodate queuing for at least 15 inbound collection vehicles (the entire peak hourly throughput) as presented in Figure M.3-1 in Appendix M.3.

Transfer Trailer Loadout Capacity

The transfer trailer loading process typically requires approximately 6 minutes to complete when loading with a grapple-equipped excavator. Therefore, approximately 10 transfer trailers may be loaded per hour in the primary loading bay. The analysis contained in Appendix M.1 demonstrates that all waste may be loaded out of the proposed transfer station daily assuming a maximum loadout rate of 4 trailers per hour (96 tons, assuming 24

tons per load). This analysis demonstrates that adequate loadout capacity is available at the proposed transfer station. In addition, the facility has been designed with an alternate loading bay that may be used for the loadout of municipal solid waste as necessary. However, it is anticipated that the alternate loading bay will primarily be used for the loadout of recyclables and/or landscape waste.

In the event that empty transfer trailers arrive at the proposed transfer station while the loading bay is occupied, transfer trailer queuing is available behind the primary loading bay and along the southern boundary of the site. Additionally, the facility has storage for up to 22 empty trailers as demonstrated on Figure M.3-1 in Appendix M.3. These staging areas are located to minimize conflict with the movement of collection vehicles entering and exiting the building.

Tipping Floor Stockpiling Capacity

Throughout the operating day, incoming materials may be temporarily stockpiled on the tipping floor before being loaded into a transfer trailer. This may occur: 1) when an empty transfer trailer is not available, or 2) during peak hours, when more incoming material may arrive at the facility than is loaded within the same hour. The tipping floor has been designed to provide temporary storage space for material during these periods, as shown in Appendix M.2. As the incoming material volumes decrease, the excavator will continue to load transfer vehicles and reduce the temporarily stockpiled material. No material will remain on the tipping floor overnight when the proposed transfer station is not operating, and if the facility is operating 24 hours per day all waste will be removed from the tipping floor at least once during the operating day to allow cleaning of the tipping floor.

A highly conservative analysis was prepared which demonstrates that the tipping floor may be expected to store as much as approximately 200 tons of material during the operating day. This volume is less than the available stockpile capacity of 288 tons, as calculated in Appendix M.2. The 288 tons of material capacity on the tipping floor is depicted in Figure M.2-1, assuming that this material is all municipal solid waste. Figure M.2-2 provides a scenario that includes storage of at more than 20 tons of recyclables (10% of typical maximum hourly total), 20 tons of landscape waste (10% of typical maximum hourly total), and enough storage for at more than 160 tons of municipal solid waste (80% of typical maximum hourly total). This scenario utilizes movable concrete block walls to establish multiple, discreet, storage areas and provides sufficient capacity for more than a 20% increase in the typical daily throughput.

This analysis shows that under both operating scenarios, there exists sufficient area on the tipping floor to stockpile incoming materials without interfering with safe tipping and unloading activities on the tipping floor. This is a very conservative analysis as temporary storage of this amount of material will only be necessary under the assumption that it will be loaded out at the anticipated rate of four transfer trailers in the peak hour. As previously described, approximately 10 transfer trailers could be loaded per hour in the primary loading bay if necessary.

Overnight Storage of Waste on Site

All municipal waste, landscape waste, and/or recyclables will be removed from the tipping floor and loaded into transfer trailers prior to the end of the operating day, if the proposed transfer station is not operating 24 hours per day. Therefore, no waste materials will typically remain on the tipping floor overnight when the facility is unattended. During periods when the proposed transfer station is operating 24 hours per day, waste may be delivered and/or loaded out overnight.

Waste may be kept temporarily in transfer trailers for no more than 24 hours (except on weekends and holidays), provided that such trailers are stored indoors and suitably covered. Empty transfer trailers may be stored outdoors for no more than 24 hours (except on weekends and holidays).

Hauler Pre-Approval

Commercial haulers will be subject to a pre-approval process before being granted access to the facility. This process will require haulers to: 1) properly instruct their drivers to identify and reject unauthorized wastes at the point of collection, 2) familiarize drivers with the operations of the proposed transfer station, and 3) accept responsibility for costs associated with the proper management of unacceptable materials, should they deliver them to the transfer station. The up-front establishment of the responsibilities and expectations of haulers has historically proven effective in preventing the deliveries of unauthorized wastes.

Waste Screening / Load Checking Procedures

The facility will only accept non-hazardous municipal waste, landscape waste, and source separated recyclables. The facility will implement methods including hauler pre-approval, waste screening procedures, and random load checking to detect and prevent the acceptance or disposal of the unacceptable wastes previously listed. Facility personnel will be trained to identify unacceptable waste.

Incoming loads at the proposed transfer station will be subject to inspection for unauthorized materials at three points during the unloading / loading process. These inspections are conducted:

1. At the scale house by the scale attendant;
2. By the front-end loader operator during the consolidation of waste materials; and
3. By the excavator operator during the loading of transfer trailers.

All waste collection vehicles entering the proposed transfer station will be required to weigh in at the inbound scale. The scale attendant will obtain the name of the hauler, the vehicle identification number, the weight of the load, the date and time of arrival, and the type of material delivered. To monitor waste vehicles for radioactive materials, a radioactive material detection system will be installed at the scale house. Moreover, a video camera will be mounted at the scale house and tipping floor to allow the scale attendant or Facility Manager to view the transfer trailer contents. The scale attendant will reject or deny access to any vehicle known or suspected to be hauling unacceptable wastes or to any vehicle operating in an unsafe or untarped condition.

Waste materials will be visually inspected during discharge onto the tipping floor by the front-end loader operator. Vehicles identified as discharging unacceptable waste will be directed to cease unloading. If the material has already been unloaded on the tipping floor, it will be loaded back into the vehicle and returned to the generator. Waste material that cannot be returned to the generator will be separated from the remainder of the waste on the tipping floor and placed into containers dedicated specifically for the temporary storage of unacceptable wastes. These containers will be of steel construction and will be kept within the facility. The unacceptable waste will be handled and disposed of in accordance with the appropriate regulations governing the disposal of such wastes.

If the unacceptable waste is suspected to be hazardous in nature, the waste will be isolated and the driver delivering the waste will be questioned as to its source. If the waste is determined to be hazardous by the management, the Facility Manager will notify the appropriate agencies and as necessary to ensure that the waste is handled properly.

Haulers who deliver unacceptable waste materials will be subject to additional scrutiny on subsequent deliveries. These measures will include questioning the driver and visually inspecting the load on the tipping floor. Haulers or drivers who repeatedly attempt to deliver unacceptable wastes to the proposed transfer station will be prohibited from using the facility.

Random Load Checking

In addition to the waste screening and load checking procedures discussed above, an additional random load checking program will be implemented. A designated inspector trained to identify unauthorized materials (typically the loader operator) will inspect at least three random loads of solid waste delivered to the facility on a random day each week. These loads will be directed to an isolated area of the tipping floor, where they will be inspected. The driver will remain present during the inspection. The inspector will record the transporter's name, driver's name, license plate number, truck unit number, date and time. The load inspector will visually scan the load as it discharges from the truck and as it is spread on the tipping floor. Once all the waste has been deposited and spread out, the inspector will document whether unacceptable waste was encountered. All inspection forms will be maintained in the scale house.

This type of random inspection is generally implemented at final disposal facilities such as landfills. However, this additional load checking feature has been incorporated into the operating plan for the proposed transfer station as an additional protective measure and deterrent to the delivery of unacceptable materials, as well as to monitor the effectiveness of the waste screening procedures.

Equipment Requirements

The following equipment is anticipated to be utilized to conduct operations at the proposed transfer station:

- Front-end loader (CAT 966G or similar)
- Grapple Excavator (CAT 330C MH, M322D MH, or similar)
- Street sweeper

Equipment will be routinely maintained in accordance with the manufacturer's specifications. In the event of equipment failure, replacement equipment may be obtained from another Groot facility in the area. Alternatively, replacement equipment may be rented from a local equipment dealer.

Facility Cleaning Procedures

Daily cleaning procedures at the proposed transfer station will include cleaning of the tipping floor and transfer trailer loading bays within the transfer station building and cleaning of interior traffic circulation drives outside of the transfer station building.

On a daily basis, the tipping floor will be cleared of waste and the tipping floor and transfer trailer loading bays will be mechanically swept daily to prevent the accumulation of debris or residues. In addition, the pushwalls will be periodically cleaned with a pressure washer. A disinfectant may be used within the washwater to control odors, if necessary. All water from the washdown of the transfer station building will be collected by the floor drain system and conveyed to the sanitary sewer system (or holding tank).

Interior traffic circulation drives and access drives will be mechanically swept as needed to prevent the accumulation of dust and debris on the roadways or the tracking of such materials offsite.

Fueling Procedures

On-site equipment will be fueled by a fueling service. Fueling will be scheduled to occur during off-peak hours so as not to interfere with operations of the proposed transfer station. Collection vehicles and transfer vehicles accessing the proposed transfer station will be fueled at off-site fueling locations. More detailed fueling procedures are provided in Section 5 of this application and the Health and Safety Plan located in Appendix P.

Litter Control Procedures

The proposed transfer station has been designed and is proposed to be operated to minimize litter. Collection vehicles accessing the proposed transfer station will be required to be fully enclosed, covered, or use other means to prevent litter from being blown from the vehicles during travel. All inbound waste collection vehicles will be required to remain fully enclosed or covered until positioned within the transfer station building. Moreover, all waste materials received at the proposed transfer station will be discharged and loaded into transfer trailers completely within the transfer station building.

To further minimize the potential for litter, the transfer station building has been designed with a transfer trailer tarping area, as shown on Drawing No. D7, enabling transfer trailers to be fully tarped more easily before exiting the transfer station building.

In the unlikely event that any litter escapes the transfer station building or is tracked on-site, additional features of the proposed transfer station will prevent litter from escaping the site. One employee per shift will be responsible for patrolling the proposed transfer station periodically throughout the operating day to collect any litter present on the site. In addition, the proposed transfer station will be surrounded by an 8-foot high fence or a retaining wall topped with a 6-foot fence, both of which will aid in intercepting litter prior to it leaving the site.

In addition, Groot Industries will routinely patrol and remove litter from all public roadway rights-of-way within 1,500 feet of the facility and from private property within 500 feet of these roads with the permission of the property owners.

Vector Control Procedures

Several design and operational features have been incorporated into the proposed transfer station to minimize the potential to attract vectors. These features include:

- The design of the transfer station building minimizes refuge for vectors;
- All exposed waste will be contained within the transfer station building;

- Waste will be transferred on a first-in, first-out basis. As such, waste material will remain at the proposed transfer station for only a short period of time before being processed and removed;

- The tipping floor will be free of waste materials on a daily basis, thereby minimizing the potential build-up of any residues which may potentially attract vectors;

- Loaded transfer trailers that are stored overnight at the proposed transfer station will be fully tarped and will be removed from the proposed transfer station at the start of the following operating day. These trailers will be parked within the transfer station building; and

- A professional exterminator will inspect the proposed transfer station on a monthly basis, at a minimum, and will employ exterminating measures if needed.

Dust Control Procedures

All access drives, parking areas, storage areas and vehicle-maneuvering areas within the facility will be paved. Mud and dust tracked onto the property will be removed with a street sweeper on a routine basis. Additionally, all public roads and right-of-ways within, at a minimum, one thousand feet of the Lake Transfer station will be swept at least once daily. In addition, a misting system shall be provided to help mitigate dust inside the transfer building.

Odor Control Procedures

Multiple design and operational features will be incorporated into the proposed transfer station to control the potential for odors. These features include:

- All waste tipping operations will be conducted within the transfer station building;

- The tipping floor will be cleared of waste on a daily basis;

- Waste materials will be continually transferred throughout the operating day on a first-in, first-out basis. As such, waste materials received at the proposed transfer station will typically be removed within hours of receipt;

- Incoming waste which exhibits an unusually strong odor will not be temporarily stockpiled on the tipping floor, but will be immediately loaded into a transfer trailer for immediate removal from the proposed transfer station; and

- Customers which are found to habitually deliver wastes which exhibit unusually strong odors will be denied access to the proposed transfer station.

- In the event that incoming waste is particularly odorous, an odor neutralizer will be dispersed through the facility misting system. As the mist contacts the waste, the neutralizer will counteract the odor emanating from the waste. Any odor neutralizer will be non-toxic to protect the safety of employees and visitors.

- In order to further improve indoor air quality, drivers of transfer vehicles located within the loading bay will be required to shut off their engines while being loaded to reduce vehicle exhaust levels within the transfer station building.

Noise Control Procedures

Noise associated with the operation of the proposed transfer station includes vehicular traffic, equipment, and safety signals on mobile equipment. The design and location of the proposed transfer station inherently minimizes the potential for noise-related concerns. These design and location features include:

- The proposed transfer station is located within an industrial area which routinely conducts truck loading and unloading, operates heavy equipment and receives truck traffic on a year-round basis. The proposed transfer station is expected to have noise characteristics which will be similar to those generated by existing industrial uses;

- Noise levels outside of the transfer station building will be minimized since collection vehicle unloading and transfer trailer loading will be conducted within the confines of the transfer station building;

- The proposed transfer station bay doors will remain closed each day between the hours of 4:00 a.m. and 8:00 a.m. and will only be opened during this time period to allow for the arrival and departure of vehicles. The transfer station will be equipped with high performance rubber doors that will automatically open and close as collection and transfer vehicles enter and leave the building during these hours;

- All on-site equipment will be equipped with mufflers and the lowest decibel backup alarms allowable and will utilize other sound-suppressing devices, as required, for compliance with applicable State statutes and regulations;

- A routine maintenance program will be followed to ensure all on-site equipment is kept in good working order; and

- The proposed transfer station is located in an Industrial district. It will be buffered by industrial uses to the north and west, by a forested area to the east, and by State Highway 120 and farmland to the south. These uses separate the proposed transfer station from residential uses and ensure that noise from the operation of the proposed transfer station does not impact residential uses.

Record Keeping Procedures

Records to be retained at the proposed transfer station will include the following, at a minimum:

- All information submitted to the IEPA
- All appropriate permits or licenses
- Daily and quarterly waste receipts and scale weights
- Tonnage of each material category processed
- Disposal tickets and logs
- Daily equipment reports
- Load checking records
- Training procedures and records

- Emergency logs
- Regulatory inspection reports
- Vector control inspections and reports
- Facility cleaning records
- Vehicles utilizing the facility including date, gross vehicle weight, and hauling company
- Closure plan

These records will be maintained at the proposed transfer station for a minimum of two years and will be available to the Village upon request.

Wastewater Generation and Handling

Wastewater at the proposed transfer station will be generated primarily by two sources: 1) washwater from cleaning of the transfer station, and 2) sanitary wastewater from employee facilities.

Washwater generated by the cleaning of the transfer station will be collected by the building's floor drain system. Approximately 288 gallons of washwater are anticipated to be generated, as calculated in Appendix N.1. In addition, approximately 270 gallons of sanitary wastewater are projected to be generated from employee facilities at the proposed transfer station, as calculated in Appendix N.2.

All wastewater will be discharged to the sanitary sewer system (or holding tank). The applicant will secure any necessary sewer connection permits during development of the proposed transfer station. The conceptual wastewater management system is presented in Appendix O.3.

Final Closure

Final closure of the proposed transfer station will consist of the following activities:

- Removal of all waste from the transfer station building;
- Cleaning of the transfer station building and equipment;
- Removal of all equipment; and
- Preparation and submittal of closure documentation to the IEPA.

Closure activities will be initiated within 30 days of the declaration of the acceptance of the last load of waste, or within 30 days of notification of closure, whichever is less. No waste will be accepted at the proposed transfer station after either of the two above mentioned activities. Access gates will be secured and signs will be posted which indicate that the proposed transfer station is closed and is no longer accepting waste.

Waste Removal

All waste materials are anticipated to be removed from the proposed transfer station by the close of operations on a daily basis if the proposed transfer station is not operating 24 hours per day. Therefore, no waste materials will typically remain on the tipping floor overnight when the facility is unattended. As such, a routine final closure scenario would likely not require the removal of waste from the transfer station building.

However, under the unlikely circumstance that the proposed transfer station would require an immediate, premature, closure in the midst of an operating day, it is possible that waste material may remain on the tipping floor which would require transfer and final disposal. Therefore, conservatively assuming that the total typical daily volume of waste has been received and no waste has been transferred from the proposed transfer station during the operating day, 750 tons of waste could require transfer and disposal.

Equipment Cleaning

After all waste has been removed from the transfer station building, all areas and equipment which contacted waste will be thoroughly cleaned. Such areas include, but will not be limited to, the tipping floor, stockpile areas, the loading bays and pushwalls.

Equipment Removal

After the proposed transfer station has been cleaned, the front-end loader, excavator, street sweeper, and any other on-site equipment will be removed from the proposed transfer station for beneficial reuse or resale.

Closure Cost Estimate

The premature final closure cost is estimated at $36,700 as shown in Table 2.4-2. This estimate includes removal and disposal of 750 tons of waste, transfer station building and equipment cleaning and closure certification. As previously stated, under routine closure conditions, no waste would be required to be removed from the proposed transfer station. In this case, the closure cost is estimated to be $6,700.

TABLE 2.4-2. CLOSURE COST ESTIMATE

Activity	Quantity	Unit Cost	Actual Cost
Waste Removal	750 tons	$ 40/ton	$ 30,000
Equipment Cleaning	15 hours	$ 60/hour	$ 900
Building Cleaning	30 hours	$ 60/hour	$ 1,800
Certification of Closure	1 lump sum	$ 4,000	$ 4,000
TOTAL			$ 36,700

SECTION 3

SURROUNDING LAND USE AND PROPERTY VALUE ASSESSMENT

SECTION 3.1

LAND USE AND PLANNING ANALYSIS

Land Use and Planning Analysis

Groot Industries
Lake Transfer Station

Project No. 1003

Prepared For:

Groot Industries, Inc.
2500 Landmeier Road
Elk Grove Village, Il 60007

Prepared By:

The Lannert Group, Inc.
215 Fulton Street
Geneva, IL 60134

May 2013

Table of Contents

1. Executive Summary

The Illinois Environmental Protection Act ("Act"), 415 ILCS 5/1, *et seq.*, contains requirements for local siting approval of new pollution control facilities. Section 39.2(a) of the Act provides nine criteria that must be satisfied as part of the local siting approval process. Criterion 3, at Section 39.2(a)(3) of the Act, requires the applicant to demonstrate that the proposed Groot Industries Lake Transfer Station:

> "is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of surrounding property."

The Lannert Group, Inc. (TLG) was retained by Groot Industries, Inc. to undertake an independent analysis to determine if the proposed Lake Transfer Station (Subject Site) is located so as to minimize incompatibility with the character of the surrounding area, and therefore, satisfies the first part of Criterion 3. The benchmark for Criterion 3 is to demonstrate that the impact is minimized within the context and relationship to the established character of the area. TLG was also asked to prepare a Landscape Plan for the Subject Site. Based on its analysis, TLG has determined that this use minimizes the impact on the character of the surrounding area, based upon the following findings:

Findings

- The Subject Site is located in a I-1 Industrial district within the Village of Round Lake Park.
- The character of the immediate area surrounding the site has been defined by industrial uses that have been established over the past years. The proposed transfer station development will not alter this existing land use pattern.
- The major land use in the area continues to be open space.
- The Route 120 corridor (Belvidere Street) is an appropriate land use buffer along the south property line.
- Open space and industrial land uses account for 59% of the area within a one mille radius of the proposed site.
- No residential zoned property is located within the 1,000' setback requirement of 415 ILCS 22.14.
- Residential uses account for approximately 37% of the study area and occur within established neighborhood areas; removed from any major impact of the proposed transfer station site.
- The proposed transfer station development will be blocked by an existing structure on the north, a forested area on the east, and by berms and plantings along the roadway frontages (west and south).

Based on our analysis and findings, it is the opinion of the Lannert Group, Inc., that the Lake Transfer Station, as proposed, minimizes the impact on the character of the surrounding area and satisfies the requirements of 415 ILCS 5/39.2(a)(3).

2. Introduction and Methodology

The Lannert Group, Inc. was retained by Groot Industries, Inc. to perform an independent analysis to determine if the proposed Subject Site satisfies the requirements of Criterion 3 of Section 39.2(a) of the Act, such that the Subject Site is located so as to minimize incompatibility with the character of the surrounding area.

Methodology

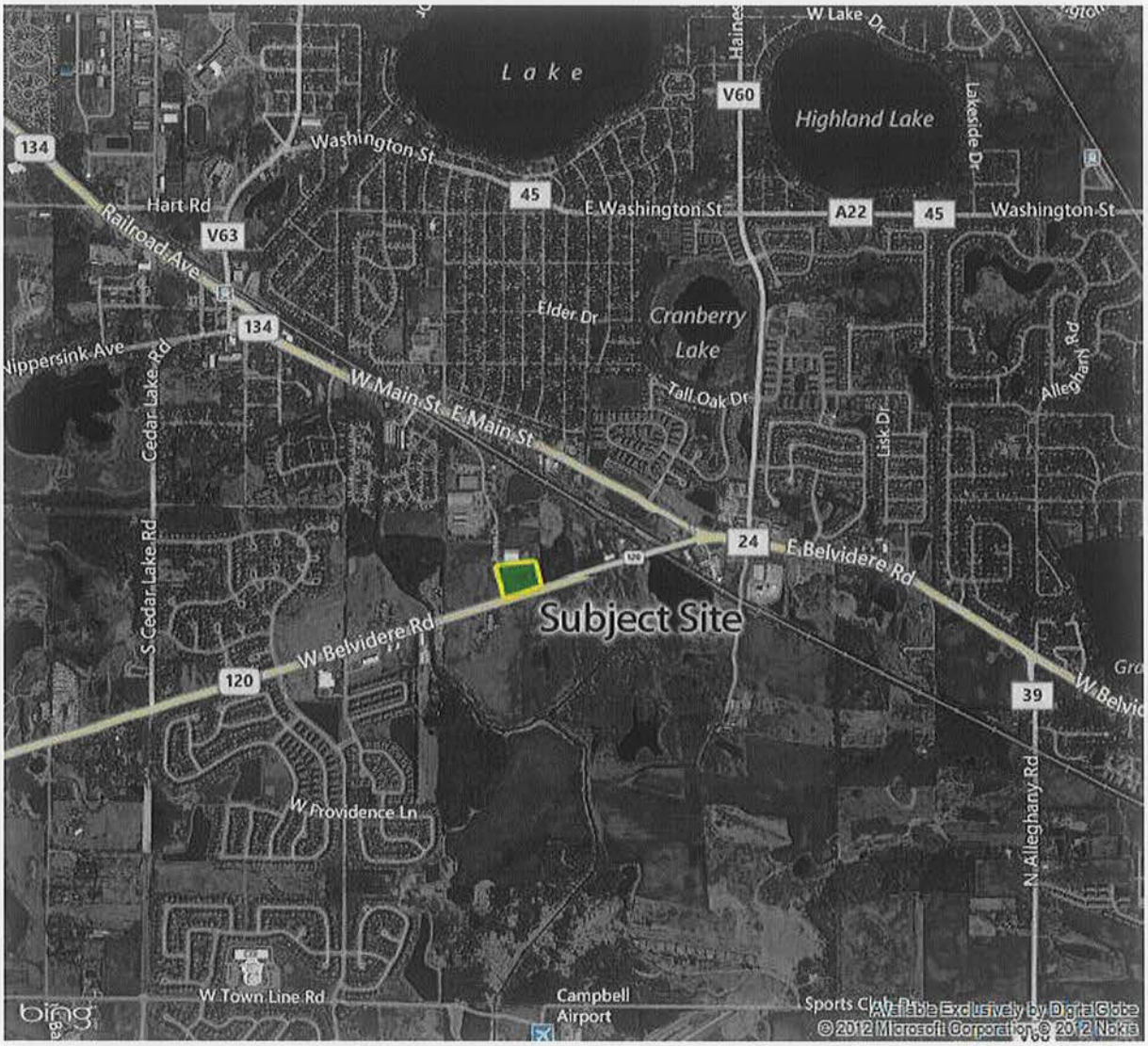
This study concentrates on general land use issues and is not intended to encompass the operational or engineering issues associated with the proposed Subject Site.

This study evaluates the various planning issues that are commonly utilized to make determinations of land use compatibility. Specific attention was given to land use and zoning within a one mile radius of the Subject Site. A second one-half mile study area was evaluated in order to focus more specifically within the corporate limits of the village. The general context of the property location is south of State Highway 134 (East/West Main Street) and the Metra Rail Line, east of South Cedar Lake Road, west of Allenganey Road, and north of West Town Line Road. The Subject Site is specifically located at the intersection of Porter Road and State Route 120 in the Village of Round Lake Park. (*Figure 1, Location Map)* The documents and research material supporting the work of TLG includes aerial photography and the zoning ordinance, zoning map, and the comprehensive plan for the Villages of Grayslake, Hainesville, Round Lake and Round Lake Park. Current Lake County GIS information and the Route 120 Corridor Planning Council Study, was also incorporated. TLG conducted field investigations and took photographs of the Subject Site and its environs from 2010 through 2013 to confirm land uses and become familiarized with the site and surrounding area. A detailed site investigation was made within the context of the immediate neighborhood adjacent to the proposed site and in the context of the one mile study area.

Location, Background and Proposed Activity

The proposed Subject Site is located within the municipal limits of the Village of Round Lake Park, in an I-1, Industrial zoning district.

The overall property consists of approximately 3.9 acres. The proposed Facility will consist of the transfer building, which includes a tipping floor and transfer trailer loading bays, scale house, staff and employee parking, a transfer trailer queuing area, and landscape features. Access will enter from Porter Road into the Subject Site. The Facility will generally operate Monday through Friday and on Saturday. The Facility capacity will typically transfer approximately 750 tons per day. The proposed transfer site will accept non-hazardous municipal solid waste; as approved by the Illinois Environmental Protection Agency. Waste materials banned by the Illinois Environmental Protection Act will not be accepted for disposal. All transfer of municipal solid waste will take place inside the building.



SUBJECT SITE LOCATION MAP
(FIGURE 1)

3. Existing Surrounding Land Use

The purpose of this section is to analyze and evaluate the compatibility of the existing land uses within a one mile radius of the Subject Site. In general, the study area boundary lies south of Washington Street/Midland Drive, west of Allenganey Road, east of South Cedar Lake Road, and north of West Town Line Road. Criterion 3 requires an analysis of the "character of the surrounding area" (see 415 ILCS 5/39.2(a)(3). The term "character" denotes the broad general nature and attributes of each type of land use. Each land use has its own unique characteristics that are readily distinguishable from one another. There are several forms of land use that are suited for serving as buffers or transitions between uses of different intensities. The most common forms of land use utilized for buffering or transitional purposes include open space, natural features and man-made facilities, such as roads, railroads, and buildings of similar uses.

The character of the study area is mixed. The one mile study area includes small parcels in Lake County, and the Villages of Grayslake, Hainesville, Round Lake, and Round Lake Park. The historical character of these communities has developed from the north to the south. The older historical neighborhoods are centered around the lakes and natural features, while the more recent developments occurred on the farm land to the south. These development concepts are reflected in the plans and ordinances of each community.

Exhibit 1, (*Land Use Aerial*) graphically shows the land use patterns within the study area. This exhibit was prepared using an aerial photo and referencing community-zoning maps. It was verified by a window shield checking of the areas. The predominant land uses are shown in color. The land use patterns that are developed within the one mile study area tend to be homogenous by group. Historically, the growth of suburban communities grouped similar uses together. Lot by lot development resulted as a by-product. Mixed-use, master planned community developments are a recent development pattern south of Route 134 and the Metra line. The color-coded Land Use Plan visually focuses on this development pattern.

As a further analysis of the existing character, land use ratios were calculated to quantify uses within the study area. Development within the study area was defined by a general use category, such as: open space, residential, industrial/manufacturing, commercial, and office. Each use was then measured in terms of area (in acres) and percentages of the whole study area were calculated to determine which land use dominates the study area. The results are as follows:

Land Use Ratios

Use	Acres	Percentage
Open Space (Parks, vacant, agriculture)	1,223	55%
Residential	824	37%
Commercial/Office	89	4%
Industrial/Manufacturing	87	4%
Total	2,223	100%

Open space uses are the largest single category; comprising 55% of the land within one mile of the Subject Site. Residential uses comprise the next largest percentage (37%) of the total. Commercial, office, and industrial uses, when grouped together, account for 8% within the adjacent communities. As shown on the Land Use Exhibit, these combined uses are mostly located along the major roadways in the area.

Findings:

- The character of the immediate surrounding area is defined by industrial and open space uses consisting of approximately 59%. Open Space uses are reflective of the agriculture lands south of the villages. The proposed transfer station development will not impact this existing land use feature.
- The existing building on the north and the forested area on the east of the site serve as physical barriers that buffer the Facility from adjoining uses.
- Residential uses account for 37% of the one mile study area and occur within historically established neighborhood areas and recent master planned communities and are removed from the impact of the proposed Facility.
- The Route 120 (Belvidere Street) corridor, and the Porter Road right-of-ways and plantings, are appropriate land use buffers that transition on the west and south into the surrounding undeveloped areas.

4. Site Photographs

Site photographs were taken to illustrate the character of the area. Exhibits 2, 3, and 4 (*Off -Site Views*), show fifteen (15) photographs with descriptions, and a photograph location map. These pictures represent the character of the adjacent area, on-site conditions, and depict the context of the existing character established in the area. The photographs demonstrate that the proposed building is compatible with the adjacent uses.

Three groupings of photographs were taken to evaluate the context of the area. The first group (1 through 5) shows the character of the area west of the Site along Route 120. From these vantage points, the Subject Site is not readily visible. The second group of photographs (6 through 10), were taken generally at the intersection of Route 120 and Porter Road, east and west of the site along the Belvidere Road corridor. The open farm land, right-of-way plantings, and mature vegetation within the area are shown. The third group of photographs (11 through 15), were taken along the Porter Drive corridor and illustrate that the intervening buildings, uses, and distances, eliminate views from many vantage points. All of the photographs demonstrate that the impact is minimized based upon the context of the area.

View 1
This photo was taken from the commercial driveway looking west along Route 120. The hedgerow plantings and residential subdivisions in Round Lake Park are shown.

View 2
This photo was taken from the commercial driveway looking north to the abandoned farmstead and woodland.

View 3
This photo was taken from the commercial driveway looking east toward the Subject Site. The mature vegetation and rolling property is shown, and the site is not visible.

View 4
This photo was taken from the industrial driveway, looking west. The mature vegetation and rolling topography is shown. The residential areas within the corporate limits of Round Lake are not seen from this vantage point.

View 5
This photo was taken from the industrial driveway, looking north. The Groot North Hauling Facility and village water tower are shown.

View 6
This photo was taken from the industrial driveway, looking southeasterly. The open/agricultural land and wood lot is shown.

View 7
This photo was taken from Route 120 west of the Porter Avenue intersection looking northeast toward the site. The recent construction of the gypsum warehouse and the existing vegetation on their lot can be seen.

View 8
This photo was taken on Porter Avenue at the intersection with Route 120, looking north. The village water tower can be seen.

View 9
This photo was taken from the commercial driveway on Route 120, looking west. The mature vegetation along the roadway is shown.

View 10
This photo was taken from the commercial driveway, looking east. The Route 120 corridor is shown with the open/agricultural land to the south.

View 11
This photo was taken from the intersection of Main Street and Greenwood Drive looking southeast toward the site. The existing railroad in the foreground and the village water tower in the background are shown.

View 12
This photo was taken on the north driveway of the Groot North Hauling Facility, looking south. The new gypsum building construction is shown west of the existing building, north of the proposed Facility.

View 13
This photo was taken from the south property line of the Groot North Hauling Facility, looking northwest. The transport trailer parking and storage are shown.

View 14
This photo was taken from the south property line of the Groot North Hauling Facility, looking south. The recent gypsum building expansion is depicted.

View 15
This photo was taken from the intersection of Porter Drive and Route 120, looking east. The eisting off-site mature vegetation on the north and east property lines, and the tree canopy along the Belvidere right-of-way is shown.

5. Zoning

Section 39.2(g) of the Illinois Environmental Protection Act provides that *local zoning or other land use requirements are not applicable to the local siting process*. However, local zoning classifications are helpful when reviewing existing land uses of surrounding properties and determining how such properties may be developed in the future. Therefore, although the zoning classifications referenced in this report are not determinative of an evaluation under Criterion 3, TLG has included a discussion of local zoning classifications to further illustrate minimized incompatibility with the character of the surrounding area.

The study area for the local zoning analysis is shown on Exhibit 5 (*Zoning Aerial*). This area encompasses approximately 2,223 acres within Lake County and the corporate limits of the Villages Grayslake, Hainesville, Round Lake and Round Lake Park; the same study area as defined in the Land Use Exhibit. The primary documents used in this analysis include an aerial photograph, and copies of the online zoning maps of the adjacent villages and Lake County GIS maps.

Subject Site Zoning

The Subject Site can be seen on Exhibit 5 (*Zoning Aerial*). The Subject Site is located in the Village of Round Lake Park within a I-1, Industrial District. The I-1, Industrial District permits several categories of use including the following: manufacturing, wholesaling, and warehousing activities. The Village of Round Lake Park Zoning Ordinance does not designate a transfer facility as a permitted or special use in any zoning district. However, "All manufacturing and industrial activities, including fabrication, processing, assembly, disassembly, repairing, recycling, cleaning, servicing, sorting, testing, packaging and storage of materials, products and goods that can be conducted wholly within enclosed buildings or structures" are allowed in the I-1 District. The proposed transfer station is similar in use, character, and intensity to the allowable uses described in the I-1 text.

Zoning Adjacent to the Lake Transfer Station Site

TLG analyzed zoning classifications adjacent to and surrounding the Subject Site for the purposes of evaluating the minimization the Subject Site with surrounding zoning. Specifically, TLG analyzed zoning classifications within a one mile radius from the Subject Site.

Within a one mile radius of the Subject Site, there are twenty-nine (29) general zoning classifications located in five (5) separate planning jurisdictions. The Village of Hainesville incorporates the most area in the study (972 acres); followed by the Village of Round Lake with 650 acres. Grayslake, generally outside the study area, and Lake County (with scattered remnant parcels) have the least acreage combined (58 acres). The Village of Round Lake Park is the most balanced with 543 acres; comprised of 261 acres residential, 28 acres commercial, and 254 acres industrial. All of these zoning districts are depicted on Exhibit 5 (*Zoning Aerial*) by district line and summary table.

The zoning of the proposed transfer station facility and the surrounding area is I-1, Industrial District. This zoning has been established historically and is appropriately positioned as a result of the established roadway system grid pattern and existing built environment. There are no residentially zoned areas within the mandated minimum setback of 1,000 feet from the Subject site. An analysis of the existing zoning and the permitted uses within a one mile study radius of the Subject Site, indicates that the existing uses have been established for many years and continued growth is anticipated as planned.

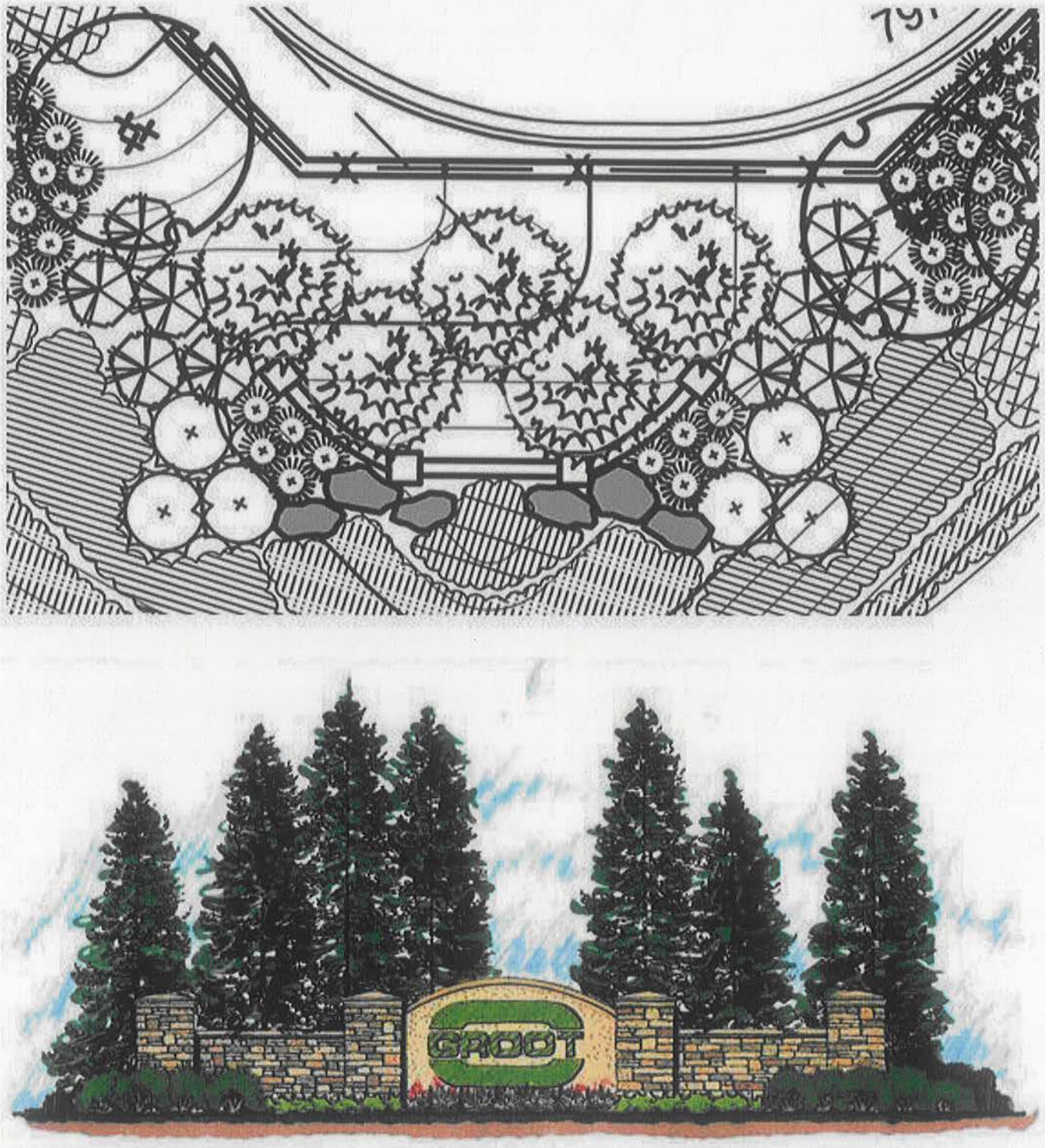
Based on the zoning analysis, it is the opinion of TLG that the proposed use for the Subject Site, lying within an I-1, Industrial District, minimizes incompatibility with the zoning uses adjacent to the site. The future uses that may be contemplated by the surrounding jurisdictions are buffered by mature vegetation and natural environmental features that will minimize impact.

Findings:

- The Subject Site is located in a, I-1, Industrial District within the Village of Round Lake Park.
- Adjacent zoning in the immediate neighborhood is compatible with the proposed use.
- Residential uses have been successfully integrated within the study area. No residentially zoned property is located within the 1,000' setback requirement.
- Industrial and agricultural zoning classifications comprise approximately 41% of the study area.

6. Site Plan and Landscape Plan

The Site Plan depicting the new transfer station building location is shown on Exhibit 6 (*Site Plan and Landscape Plan*). The Site and Landscape Plan have been designed to accommodate traffic flow on and off site as well as to enhance the streetscape element along Route 120 and Porter Road. Additionally, plantings consisting of native shrubs, perennials, and grasses, will frame the proposed sign (*Figure 2, Entry Signage Detail*). The landscape concept provides for berms and plantings adjacent to the street right-of-ways. A natural undulating berm frames the Porter Road entrance and increases in height as it extends to the south and the Route 120 intersection. The berm and plantings along Belvidere Street (Route 120) have been accomplished by incorporating a retaining wall into the solution. Increased setbacks on the north side of Route 120 have been anticipated and when coupled with the design objective of the continuous berm and plantings (with a minimum height of five (5) feet), dictated the solution. The natural plantings have been purposely arranged to enhance the undulation. These planting beds allow for increased vertical slopes as well as a more visual streetscape appearance. The focal point of the landscape design is the corner berm, sign, and plantings. This feature minimizes the impact of the Facility at the intersection and can anchor future streetscape improvements. The entry signage feature is detailed on Figure 2 to clearly demonstrate the enhanced streetscape concept. The plant list, comprised of botanical names, common names, and size, are provided for clarity. The final selection of plant material specification will be designated at the time of installation; due to the season, weather, and plant availability. Off-site vegetation along the north and east perimeter of the Subject Site exists. This vegetation fully buffers the Facility during the vegetative season, and their bio-mass provides filtered views during the non-vegetative periods.



ENTRY SIGNAGE DETAIL
(FIGURE 2)

7. Computer Models

Computer models provide the opportunity to project the future construction into the photograph and evaluate the potential impact. This process begins with on-site digital photography of the existing conditions taken during the field inspections stage of the analysis. The location of the viewshed photography is selected to most clearly depict the constructed Facility. Vantage points with views from public access areas are selected around the Facility to evaluate the appearance. Data is collected for each viewshed photograph, including GPS positioning, compass bearing, time/date/seasonal information, and camera specifics (camera elevation, lens angle, aperture, shutter speed, ISO, etc.). Using this data and the latest available aerial photography images, the location and positioning of each viewshed photograph can then be accurately mapped.

A virtual 3D computer model is built of the proposed Facility, taken from the architectural and engineering drawings; including the landscape plan features. This model is built using the most current CAD and topographic data, as well as the latest in CAD and 3D modeling applications. Virtual lighting and cameras are placed on the 3D computer model to exactly match the view locations, directions, camera setting, and site conditions of the original on-site digital viewshed photography. Using physics-based light rendering software, photorealistic images are generated from each of these virtual camera locations. These "virtual photographs" are then blended with original on-site digital viewshed photography into a final composite image which accurately illustrates the future proposed view. Exhibit 7 *(Computer 3-D Models)* show selected views along the perimeter of the proposed Facility. View One is located west of the intersection of Porter Road and Route 120 and illustrates the enhanced streetscape corridor treatment. View Two, looking southeast into the site at the entrance from Porter Road, shows the berm, plantings, and fencing.

8. Findings

In the preparation of this report, TLG analyzed zoning maps, zoning ordinances, land use patterns, aerial photographs, site photographs, and surveyed land uses within the study area to determine the character and trend of land development in the area surrounding the Subject Site. Based on these reviews, exhibits, experience and analysis, it is the professional opinion of TLG that the proposed Facility, when constructed with the proposed improvements and landscape plans, minimizes the impact on the character of the surrounding area. Our conclusions supporting this finding are summarized as follows:

- The Subject Site is located in a I-1 Industrial district within the Village of Round Lake Park.
- The character of the immediate area surrounding the site has been defined by industrial uses that have been established over the past years. The proposed transfer station development will not alter this existing land use pattern. The major land use in the area continues to be open space.
- The Route 120 corridor (Belvidere Street) is an appropriate land use buffer along the south property line.
- Open space and industrial land uses account for 59% of the area within a one mille radius of the proposed site.
- No residential zoned property is located within the 1,000' setback requirement of 415 ILCS 22.14.
- Residential uses account for approximately 37% of the study area and occur within established neighborhood areas; removed from any major impact of the proposed transfer station site.

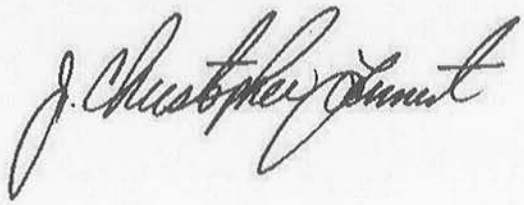
- The proposed transfer station development will be blocked by an existing structure on the north, a forested area on the east, and by berms and plantings along the roadway frontages (west and south).

- The proposed transfer station development will be buffered by an existing structure on the north, a forested area on the east, and by berms and plantings along the roadway frontages.

9. Conclusion

Based on our land use analysis and findings, it is the opinion of The Lannert Group, Inc., that the proposed Groot Industries Lake Transfer Station minimizes the impact on the character of the surrounding area and, therefore, satisfies the first part of Criterion 3 of Section 39.2(a) of the Act.

J. Christopher Lannert, President
The Lannert Group, Inc.



May 2013

10. Appendix

Municipal and County Resources

Village of Round Lake Park
Zoning Ordinance
Zoning Map
Comprehensive Plan

Village of Round Lake
Zoning Ordinance (Re-adopted 2008 plan for 2010)
Zoning Map

Village of Hainesville
Zoning Ordinance (Adopted 2005)
Zoning Map
Comprehensive Plan

Village of Grayslake
Zoning Ordinance (Revised 2012)
Zoning Map

Lake County
Zoning Map (Current G.I.S. Postings)
Route 120 Corridor Planning Council (Adopted 2009)

Exhibits
Exhibit 1, (*Land Use Aerial*)
Exhibit 2, (*Off-Site Views*)
Exhibit 3, (*Off-Site Views*)
Exhibit 4, (*Off-Ste Views*)
Exhibit 5, (*Zoning Aerial*)
Exhibit 6, (*Site and Landscape Plan)*
Exhibit 7, (*Computer 3-D Models)*

LEGEND

- SUBJECT SITE
- ONE-HALF MILE STUDY AREA
- ONE MILE STUDY AREA
- COMMERCIAL LAND USE
- RESIDENTIAL LAND USE
- INDUSTRIAL LAND USE
- AGRICULTURE/ OPEN SPACE

LAND USE SUMMARY- 1/2 MILE RADIUS

VILLAGE OF ROUND LAKE PARK	AC.	%
COMMERCIAL	16	3%
RESIDENTIAL	51	9%
INDUSTRIAL	45	7%
AGRICULTURE/ OPEN SPACE	142	23%
SUBTOTAL	*254*	*42%*

VILLAGE OF ROUND LAKE	AC.	%
COMMERCIAL	3	<1%
RESIDENTIAL	31	5%
INDUSTRIAL	3	<1%
AGRICULTURE/ OPEN SPACE	23	5%
SUBTOTAL	*60*	*10%*

VILLAGE OF HAINESVILLE	AC.	%
COMMERCIAL	27	4%
RESIDENTIAL	35	6%
INDUSTRIAL	10	2%
AGRICULTURE/ OPEN SPACE	224	36%
SUBTOTAL	*296*	*48%*

VILLAGE OF GRAYSLAKE	AC.	%
COMMERCIAL	0	0%
RESIDENTIAL	0	0%
INDUSTRIAL	0	0%
AGRICULTURE/ OPEN SPACE	0	0%
SUBTOTAL	*0*	*0%*

LAKE COUNTY	AC.	%
COMMERCIAL	0	0%
RESIDENTIAL	0	0%
INDUSTRIAL	4	<1%
AGRICULTURE/ OPEN SPACE	1	<1%
SUBTOTAL	*5*	*<1%*

TOTAL	615 AC	100%

LAND USE SUMMARY- 1 MILE RADIUS

VILLAGE OF ROUND LAKE PARK	AC.	%
COMMERCIAL	13	1%
RESIDENTIAL	254	12%
INDUSTRIAL	47	2%
AGRICULTURE/ OPEN SPACE	229	10%
SUBTOTAL	*543*	*25%*

VILLAGE OF ROUND LAKE	AC.	%
COMMERCIAL	21	1%
RESIDENTIAL	388	18%
INDUSTRIAL	11	<1%
AGRICULTURE/ OPEN SPACE	230	10%
SUBTOTAL	*650*	*29%*

VILLAGE OF HAINESVILLE	AC.	%
COMMERCIAL	55	3%
RESIDENTIAL	179	8%
INDUSTRIAL	19	1%
AGRICULTURE/ OPEN SPACE	719	32%
SUBTOTAL	*972*	*44%*

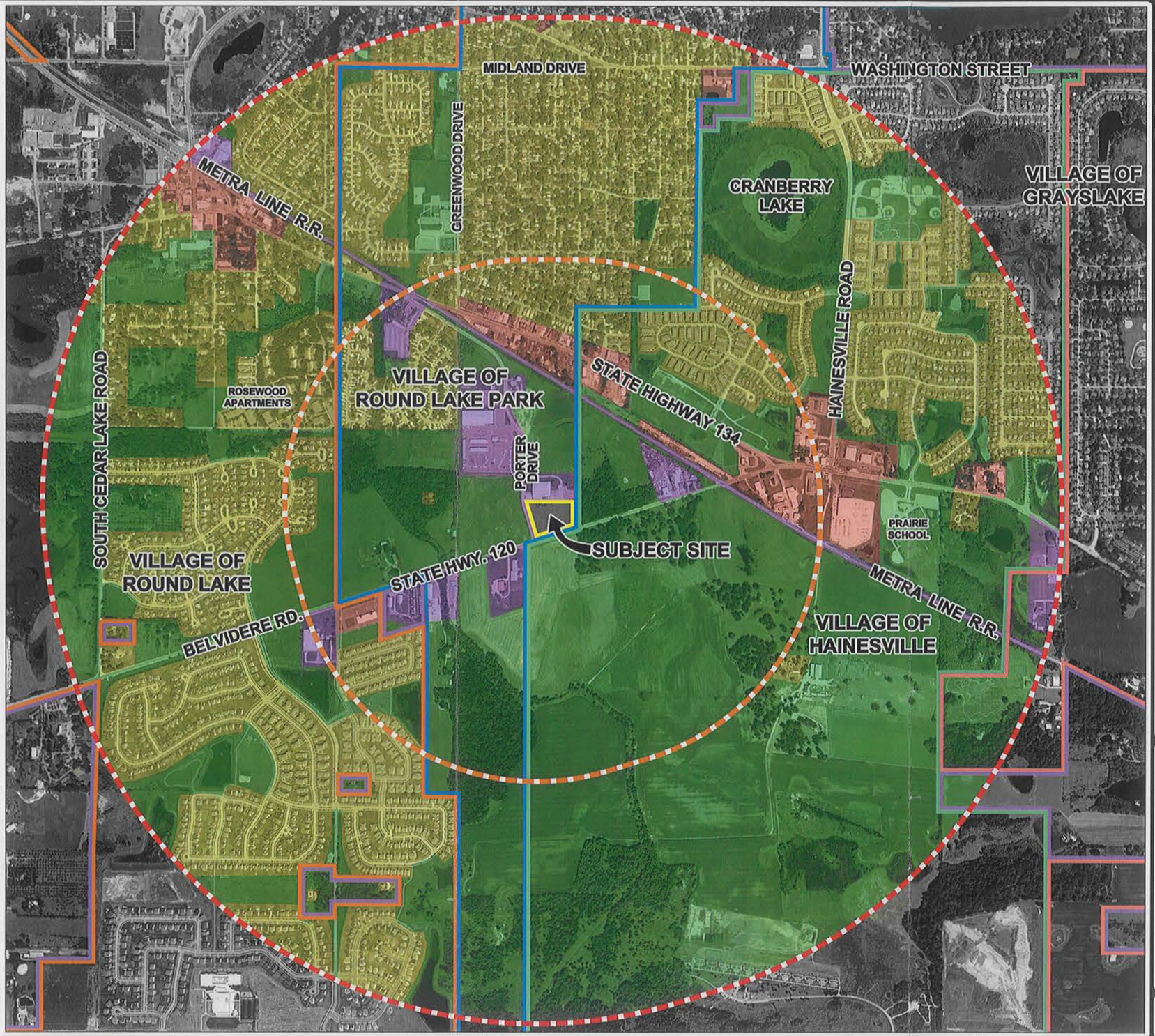
VILLAGE OF GRAYSLAKE	AC.	%
COMMERCIAL	0	0%
RESIDENTIAL	0	0%
INDUSTRIAL	6	<1%
AGRICULTURE/ OPEN SPACE	26	1%
SUBTOTAL	*32*	*1%*

LAKE COUNTY	AC.	%
COMMERCIAL	0	0%
RESIDENTIAL	3	<1%
INDUSTRIAL	4	<1%
AGRICULTURE/ OPEN SPACE	19	1%
SUBTOTAL	*26*	*1%*

TOTAL	2223 AC	100%

ZONING INFORMATION OBTAINED FROM:
ROUND LAKE ZONING MAP (3/17/08), ROUND LAKE PARK ZONING MAP
HAINESVILLE ZONING MAP (5/27/05), GRAYSLAKE ZONING MAP (5/1/08)

AERIAL PHOTOGRAPHY OBTAINEID FROM:
AERIALS EXPRESS, LLC.
7855 S. RIVER PARKWAY, SUITE 211. TEMPE, AZ 852!84



JOB NO.: 1003
DATE: 05.25.10
REVISIONS:
DRAWN BY: TRC

GROOT INDUSTRIES, INC.
LAKE TRANSFER STATION
2500 LANDMEIER ROAD
ELK GROVE VILLAGE, ILLINOIS 60007
847-734-6400

Lannert Group
Landscape Architecture • Planning • Community Consulting
215 Fulton Street
Geneva, Illinois 60134
(630) 208-8088
Fax (630) 208-8050
http://www.lannert.com
tlg @ lannert.com

LAND USE AERIAL

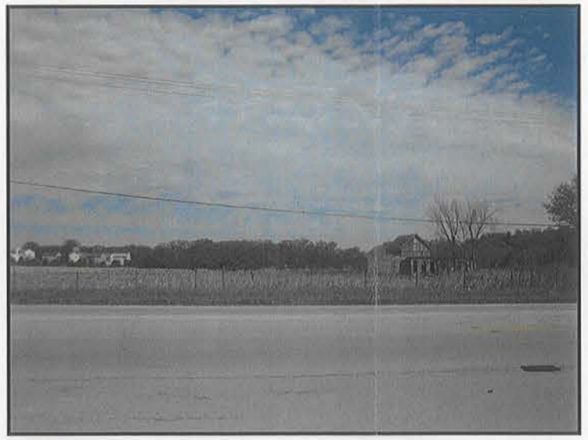
SCALE 1"=500'

NORTH

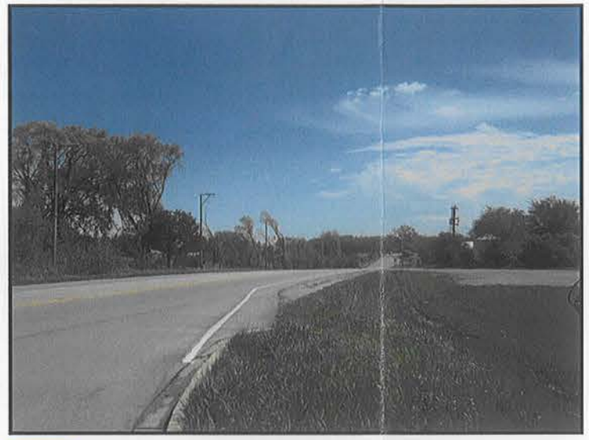
SHEET NUMBER 1
1 OF 7

DRAWING NAME: S:\Project Files\Active Jobs\1003\Drawing Data\2012 UPDATED SET-USE THIS\A-Exhibits\01-Land Use Aerial.dwg DATE PRINTED: Oct 31, 2012 - 10:39am

1 PHOTO TAKEN FROM THE COMMERCIAL DRIVEWAY LOOKING WEST ALONG ROUTE 120. THE HEDGEROW PLANTINGS & RESIDENTIAL SUBDIVISIONS IN ROUND LAKE PARK ARE SHOWN.



2 PHOTO TAKEN FROM THE COMMERCIAL DRIVEWAY LOOKING NORTH TO THE ABANDONED FARMSTEAD & WOODLAND



3 PHOTO TAKEN FROM THE COMMERCIAL DRIVEWAY LOOKING EAST TOWARD THE SUBJECT SITE. THE MATURE VEGETATION & ROLLING PROPERTY IS SHOWN.

4 PHOTO TAKEN FROM THE INDUSTRIAL DRIVEWAY LOOKING WEST. THE MATURE VEGETATION AND ROLLING TOPOGRAPHY IS SHOWN.

5 PHOTO TAKEN FROM THE INDUSTRIAL DRIVEWAY LOOKING NORTH. THE GROOT TRANSPORTATION FACILITY & VILLAGE WATER TOWER ARE SHOWN.

LOCATION MAP
NOT TO SCALE

NORTH

JOB NO.: 1003
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847-734-6400

Lannert Group
Landscape Architecture • Planning • Community Consulting
215 Fulton Street
Geneva, Illinois 60134
(630) 208-8088
Fax (630) 208-8050
http://www.lannert.com
llg @ lannert.com

OFF-SITE VIEWS

NORTH

SHEET NUMBER 2
2 OF 7

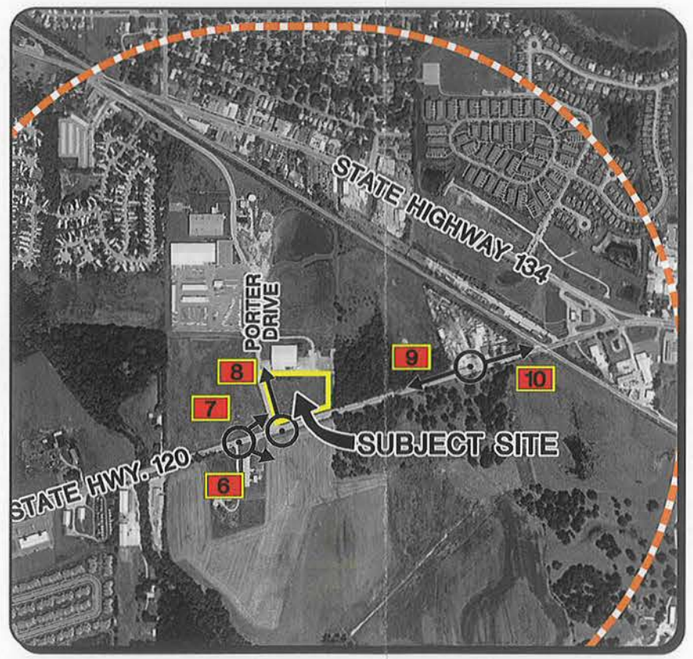
6 PHOTO TAKEN FROM THE INDUSTRIAL DRIVEWAY LOOKING SOUTH. THE OPEN / AGRICULTURAL LAND AND WOOD LOT IS SHOWN.

7 PHOTO TAKEN FROM ROUTE 120 WEST OF THE PORTER AVENUE INTERSECTION, LOOKING NORTHEAST. THE NEW GYPSUM WAREHOUSE AND THE EXISTING VEGETATION ON THEIR LOT IS SHOWN.

8 PHOTO TAKEN ON PORTER AVENUE AT THE INTERSECTION WITH ROUTE 120 LOOKING NORTH. THE VILLAGE WATER TOWER CAN BE SEEN.

9 PHOTO TAKEN FROM THE COMMERCIAL DRIVEWAY ON ROUTE 120 LOOKING WEST. THE MATURE VEGETATION ALONG THE ROADWAY IS SHOWN.

10 PHOTO TAKEN FROM THE COMMERCIAL DRIVEWAY LOOKING EAST. THE ROUTE 120 CORRIDOR IS SHOWN WITH THE OPEN / AGRICULTURE LAND TO THE SOUTH.



LOCATION MAP
NOT TO SCALE

NORTH

JOB NO.: 1003
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ELK GROVE VILLAGE, ILLINOIS 60007
847-734-6400

Lannert Group
Landscape Architecture ▪ Planning ▪ Community Consulting
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Geneva, Illinois 60134
(630) 208-8068
Fax (630) 208-8050
http://www.lannert.com
tlg @ lannert.com

OFF-SITE VIEWS

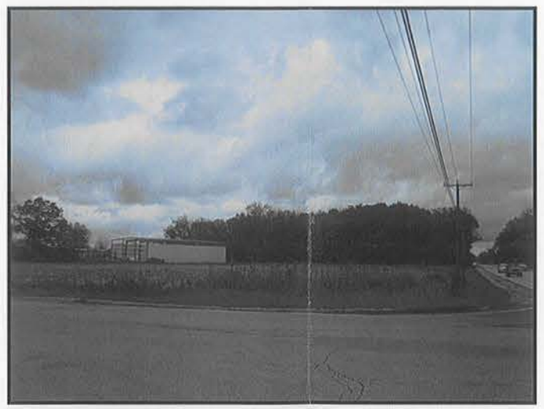
SHEET NUMBER
3
3 OF 7

11 PHOTO TAKEN FROM THE INTERSECTION OF MAIN STREET & GREENWOOD DRIVE LOOKING SOUTHEAST TOWARD THE SITE. THE EXISTING RAILROAD IN THE FOREGROUND AND THE VILLAGE WATER TOWER IN THE BACKGROUND ARE SHOWN.

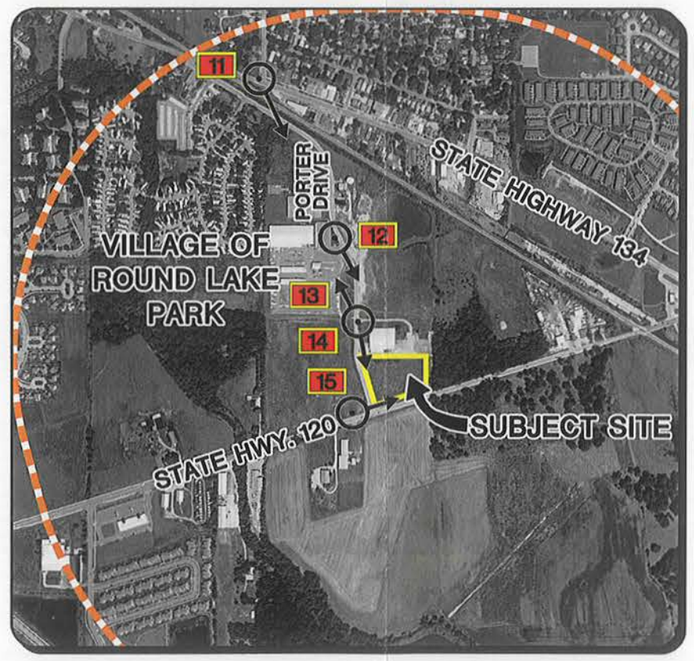
12 PHOTO TAKEN FROM THE NORTH DRIVE OF THE GROOT NORTH HAULING FACILITY LOOKING SOUTH. THE NEW GYPSUM WAREHOUSE IS SHOWN NORTH OF THE PROPOSED FACILITY.

13 PHOTO TAKEN FROM THE SOUTH PROPERTY LINE OF THE GROOT NORTH HAULING FACILITY LOOKING NORTHWEST.

14 PHOTO TAKEN FROM THE SOUTH PROPERTY LINE OF THE GROOT NORTH HAULING FACILITY LOOKING SOUTH. THE RECENT GYPSUM BUILDING EXPANSION IS DEPICTED.



15 PHOTO TAKEN FROM THE INTERSECTION OF PORTER DRIVE AND ROUTE 120 LOOKING EAST. THE EXISTING OFF-SITE MATURE VEGETATION ON THE EAST AND NORTH PROPERTY LINE, AND THE TREE CANOPY ALONG THE ROUTE 120 RIGHT-OF-WAY IS SHOWN.



LOCATION MAP
NOT TO SCALE
NORTH

JOB NO.: 1003
DATE: 05.25.10
REVISIONS:
DRAWN BY: TRC

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2500 LANDMEIER ROAD
ELK GROVE VILLAGE, ILLINOIS 60007
847-734-6400

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OFF-SITE VIEWS

NORTH

SHEET NUMBER
4
4 OF 7

LEGEND

- SUBJECT SITE
- ONE-HALF MILE STUDY AREA
- ONE MILE STUDY AREA
- ZONING DISTRICT BOUNDARY

ZONING SUMMARY- 1/2 MILE RADIUS

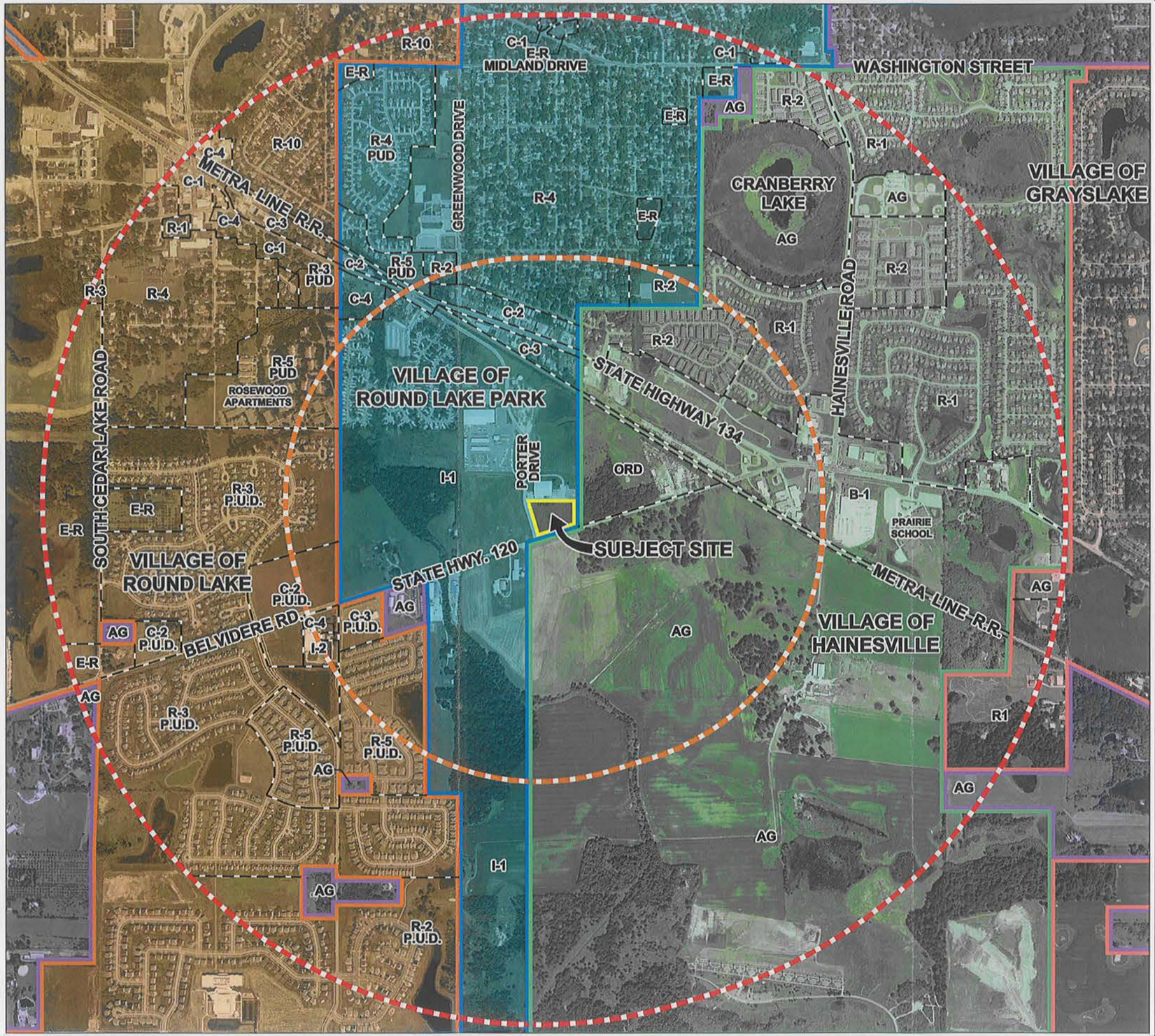
		AC.	%
VILLAGE OF ROUND LAKE PARK			
C-1	LOCAL SHOPPING DISTRICT		
C-2	COMMUNITY SHOPPING DISTRICT		
C-3	GENERAL BUSINESS DISTRICT		
C-4	AUTOMOTIVE SERVICE DISTRICT	19	3%
E-R	ESTATE RESIDENCE DISTRICT LIMITED		
R-2	RESIDENCE DISTRICT GENERAL		
R-4	RESIDENCE DISTRICT MULTIPLE FAMILY		
R-5	RESIDENCE DISTRICT	29	5%
I-1	INDUSTRIAL DISTRICT	206	34%
	SUBTOTAL	254	42%
VILLAGE OF ROUND LAKE			
C-1	LOCAL SHOPPING DISTRICT		
C-2	COMMUNITY SHOPPING DISTRICT		
C-3	GENERAL BUSINESS DISTRICT		
C-4	AUTOMOTIVE SERVICE DISTRICT ESTATE	13	2%
E-R	RESIDENCE DISTRICT		
R-1	SINGLE FAMILY RESIDENCE DISTRICT		
R-2	SINGLE FAMILY RESIDENCE DISTRICT		
R-3	SINGLE FAMILY RES. DIST. - SPECIAL USE		
R-4	GENERAL RESIDENCE DISTRICT MULTIPLE		
R-5	FAMILY RESIDENCE DISTRICT OLD TOWN		
R-10	SINGLE FAMILY RESIDENCE DIST.	44	7%
I-2	GENERAL INDUSTRIAL DISTRICT	3	1%
	SUBTOTAL	60	10%
VILLAGE OF HAINESVILLE			
B-1	BUSINESS	51	8%
R-1	SINGLE FAMILY, RESIDENTIAL		
R-2	SINGLE FAMILY, DUPLEX TOWNHOUSE	40	6%
ORD	OFFICE, RESEARCH, DEVELOPMENT	28	5%
AG	AGRICULTURE	177	29%
	SUBTOTAL	296	48%
VILLAGE OF GRAYSLAKE			
AG	AGRICULTURE	0	0%
R1	RESIDENTIAL 1	0	0%
	SUBTOTAL	0	0%
LAKE COUNTY			
AG	AGRICULTURAL	5	<1%
	SUBTOTAL	5	<1%
TOTAL		615 AC	100%

ZONING SUMMARY- 1 MILE RADIUS

		AC.	%
VILLAGE OF ROUND LAKE PARK			
C-1	LOCAL SHOPPING DISTRICT		
C-2	COMMUNITY SHOPPING DISTRICT		
C-3	GENERAL BUSINESS DISTRICT		
C-4	AUTOMOTIVE SERVICE DISTRICT	28	1%
E-R	ESTATE RESIDENCE DISTRICT LIMITED		
R-2	RESIDENCE DISTRICT GENERAL		
R-4	RESIDENCE DISTRICT MULTIPLE FAMILY		
R-5	RESIDENCE DISTRICT	261	12%
I-1	INDUSTRIAL DISTRICT	254	12%
	SUBTOTAL	543	25%
VILLAGE OF ROUND LAKE			
C-1	LOCAL SHOPPING DISTRICT		
C-2	COMMUNITY SHOPPING DISTRICT		
C-3	GENERAL BUSINESS DISTRICT		
C-4	AUTOMOTIVE SERVICE DISTRICT ESTATE	64	3%
E-R	RESIDENCE DISTRICT		
R-1	SINGLE FAMILY RESIDENCE DISTRICT		
R-2	SINGLE FAMILY RESIDENCE DISTRICT		
R-3	SINGLE FAMILY RES. DIST. - SPECIAL USE		
R-4	GENERAL RESIDENCE DISTRICT MULTIPLE		
R-5	FAMILY RESIDENCE DISTRICT OLD TOWN		
R-10	SINGLE FAMILY RESIDENCE DIST.	581	26%
I-2	GENERAL INDUSTRIAL DISTRICT	5	<1%
	SUBTOTAL	650	29%
VILLAGE OF HAINESVILLE			
B-1	BUSINESS	132	6%
R-1	SINGLE FAMILY, RESIDENTIAL		
R-2	SINGLE FAMILY, DUPLEX TOWNHOUSE	226	10%
ORD	OFFICE, RESEARCH, DEVELOPMENT	28	1%
AG	AGRICULTURE	586	27%
	SUBTOTAL	972	44%
VILLAGE OF GRAYSLAKE			
A-G	AGRICULTURE	4	<1%
R1	RESIDENTIAL 1	28	1%
	SUBTOTAL	32	1%
LAKE COUNTY			
AG	AGRICULTURAL	26	1%
	SUBTOTAL	26	1%
TOTAL		2223 AC	100%

ZONING INFORMATION OBTAINED FROM:
ROUND LAKE ZONING MAP (3/17/08), ROUND LAKE PARK ZONING MAP (
HAINESVILLE ZONING MAP (5/27/05), GRAYSLAKE ZONING MAP (5/1/08)

AERIAL PHOTOGRAPHY OBTAINED FROM:
AERIALS EXPRESS, LLC.
7855 S. RIVER PARKWAY, SUITE 211. TEMPE, AZ 85284



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ZONING AERIAL

NORTH

SCALE 1"=500'

SHEET NUMBER
5
5 OF 7

BIOSWALE/ WETLAND SEED MIX
FLOOD TOLERANT CONIFER TREES, TYP.
FLOOD TOLERANT SHADE TREES, TYP.
795.5
797.5
SCALE
SCALE HOUSE
16' CLEARANCE FOR SCALE BYPASS
ORNAMENTAL GRASS, TYP.
CONIFEROUS TREE, TYP.
SHADE TREE, TYP.
EXISTING TREES ON ADJOINING PROPERTY
798.70
CONCRETE WALL W/ 3' CHAINLINK FENCE
PARKWAY TREES (OPTIONAL)
BERM TO COVER STREET SIDE OF WALL. 5-6' HT.
ORNAMENTAL TREE, TYP.
CONIFEROUS SHRUBS, TYP.
SMALL CONIFER TREES
PROPERTY IDENTIFICATION MONUMENT
ANNUALS, TYP.
PERENNIALS/ GROUNDCOVER, TYP.
OUTCROPPING STONES, TYP.
797.0
PORTER DRIVE
IL. ROUTE 120 (BELVIDERE STREET)

SUGGESTED PLANT LIST - (continued)

	LATIN NAME	COMMON NAME	SIZE	CONDITION
ORNAMENTAL GRASSES	Calamagrostis 'K. Forerster'	Feather Reed Grass	1 Gal.	Cont.
	Miscanthus sinsensis	Maidenhair Grass	1 Gal.	Cont.
	Panicum virgatum	Switchgrass	1 Gal.	Cont.
PERENNIALS	Agastache	Hyssop	1 Gal.	Cont.
	Coreopsis verticill. 'Zagreb'	Zagreb Coreopsis	1 Gal.	Cont.
	Echinacea purpurea	Purple Cone Flower	1 Gal.	Cont.
	Geranium 'Rozanne'	Rozanne Geranium	1 Gal.	Cont.
	Rudbeckia fulgida	Black Eyed Susan	1 Gal.	Cont.
	Euonymus f. 'Coloratus'	Purple Wintercreeper	Flat	Plug
	Sedum kamtschaticum	Kamtschaticum Sedum	Flat	Plug

SUGGESTED PLANT LIST

	LATIN NAME	COMMON NAME	SIZE	CONDITION
SHADE TREES (Incl. Parkway)	Acer ruburm	Red Maple	2.5" Cal.	B&B
	Alnus glutionsa	Common Alder	8' Ht.	B&B
	Betula nigra 'Heritage'	River Birch	8' Ht.	B&B
	Gleditsia tricanthos inermis	Honey Locust	2.5" Cal.	B&B
	Quercus rubra	Red Oak	2.5" Cal.	B&B
CONIFER TREES	Picea pungens	Blue Spruce	8' Ht.	B&B
	Pinus strobus	White Pine	8' Ht.	B&B
	Thuja occidentalis	Arborvitae	8' Ht.	B&B
CONIFER TREES (Flood tolerant)	Taxodium distichum	Bald Cypress	8' Ht.	B&B
	Metasequoia glyptostob.	Dawn Redwood	8' Ht.	B&B
ORNAMENTAL TREES	Cercis canadensis	Redbud	6' Ht.	B&B
	Malus spp.	Crabapple	6' Ht.	B&B
DECIDUOUS SHRUBS	Hydrangea arborescens	Hydrangea	24" Ht.	Cont.
	Rhus typhina 'Bailtiger'	Tiger Eyes Sumac	24" Ht.	Cont.
	Rosa 'Dwarf Pavement'	Dwarf Pavement Rose	24" Ht.	Cont.
	Syringia meyeri 'Palibin'	Dwarf Lilac	24" Ht.	Cont.
	Viburnum dentatum	Arrowwood Viburnum	24" Ht.	Cont.
CONIFEROUS SHRUBS	Juniperus chinensis 'Kallay'	Kallay Juniper	24" Ht.	Cont.
	Pinus mugo 'Dwarf'	Dwarf Mugo Pine	24" Ht.	Cont.

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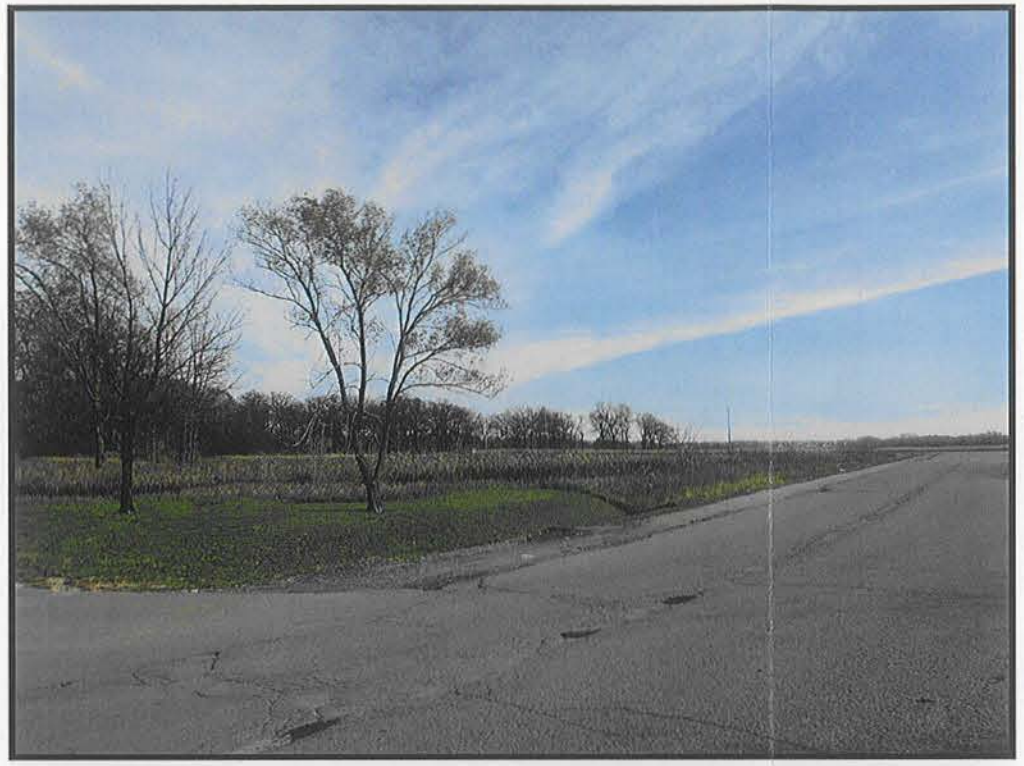
SITE / LANDSCAPE PLAN

NORTH
SCALE 1"=20'
0' 10' 20' 40' 60'

SHEET NUMBER
6
6 OF 7

1 BEFORE- VIEW AT INTERSECTION OF ROUTE 120 AND PORTER DRIVE LOOKING EAST



2 BEFORE- VIEW ON PORTER DRIVE LOOKING INTO FACILITY

1 AFTER

2 AFTER

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COMPUTER 3D MODELS

NORTH

SHEET NUMBER 7
7 OF 7

SECTION 3.2

REAL ESTATE IMPACT EVALUATION

A LAND USE COMPATIBILITY AND REAL ESTATE IMPACT STUDY FOR THE PROPOSED GROOT INDUSTRIES LAKE TRANSFER STATION ROUND LAKE PARK, ILLINOIS

Prepared for
Groot Industries, Inc.

Prepared by

POLETTI AND ASSOCIATES, INC.
302 West Clay Street
Suite 100
Collinsville, Illinois
618/344-3270

May, 2013

TABLE OF CONTENTS

EXECUTIVE SUMMARY

At the request of Groot Industries, Inc., Poletti and Associates, Inc. has undertaken a study of the proposed Groot Industries Lake Transfer Station ("Facility") for the purpose of determining its compliance with the applicable standards of the State of Illinois as set forth in the Illinois Environmental Protection Act, 415 ILCS 5/39.2 (a)(iii). Inspection of the proposed site occurred during the period between September 2012 and March 2013. The date of the report is May 10, 2013 with the effective date of the opinion being May 10, 2013.

The purpose of this report is to determine whether the Facility is so located as to minimize the effect on the value of surrounding property.

The procedure followed in the analysis is follows:

1. A preliminary on-site inspection of the subject property and the surrounding area was performed.

2. The accumulation and review of various documents, including portions of the Application for Site Location Approval to be submitted to the Round Lake Park Village Board, land use exhibits, aerial photographic maps, local and regional roadway maps, and other materials related to the topic of waste and recyclables management with published literature.

3. Meetings and telephone conferences with representatives of Groot Industries, Inc., Shaw Environmental, Inc (a CB&I company), and the Lannert Group were conducted.

4. A review and analysis of property transactions in the areas surrounding the Glenview Transfer Station in, Glenview, Illinois, the Elburn Transfer Station in Elburn, Illinois, and the Bluff City Transfer Facility in Elgin, Illinois was completed.

Based upon analysis and evaluation of the subject property, the surrounding area, and the data contained within this report, it is concluded that the Facility will be so located as to minimize the effect on the value of the surrounding property.

The details of the analysis and the factors considered in reaching this conclusion are found on the following pages.

INTRODUCTION

This report provides an evaluation of the Facility for the purpose of determining whether the request meets the criterion set forth in Section 39.2 (a) (iii) of the Illinois Environmental Protection Act. Specifically, this report will determine whether the Facility is located so as to minimize the effect on the value of surrounding property.

LOCATION

The site is located within the Village of Round Lake Park, Illinois. The property contains approximately 3.9 acres situated on the northeast corner of the intersection of West Belvidere Road (Illinois Route 120) and Porter Drive. The site is currently vacant.

SCOPE OF THE CONSULTING REPORT

The purpose of this report is to determine if the Facility is so located as to minimize the effect on the value of surrounding property. The following steps were taken to make this determination.

1. A review was made of the published literature concerning the effect of transfer stations on surrounding property values.

2. An examination was made of the topographical quadrangle, the Village of Round Lake Park Zoning Ordinance, the Village of Round Lake Park Zoning Map, and Facility plan.

3. Representatives of Groot Industries, Inc., Shaw Environmental Inc., (a CB&I Company), and the Lannert Group were interviewed concerning general design and operating specifics.

4. Peter J. Poletti inspected the subject property as well as land uses within the area.

5. A personal reconnaissance was also made of the area surrounding three operating transfer stations in the suburban Chicagoland market. The existing transfer stations that were considered in this analysis are the Glenview Transfer Station in, Glenview, Illinois, the Elburn Transfer Station in Elburn, Illinois, and the Bluff City Transfer Facility in Elgin, Illinois.

6. The records of the sale transactions were obtained from the Cook County Assessor's Office, the Wheeling Township Assessors Office, the Hanover Township Assessor's Office, the Kane County Supervisor of Assessments Office, and the Blackberry Township Assessor's Office.

METHODOLOGY

There is no transfer facility currently on the subject property. Consequently, it is most appropriate to evaluate similar operating waste transfer facilities within the region to form an opinion as to if these operating waste transfer facilities have minimized the effect on surrounding property values. For this purpose, the Glenview Transfer Station in Glenview, Illinois, the Elburn Transfer Station in Elburn, Illinois, and the Bluff City Transfer Facility in Elgin, Illinois were selected for evaluation.

A widely accepted approach to analyzing potential effect on surrounding property values is to establish a target and control areas as the basis for analysis. For the purposes of this study, the target area is a zone in proximity to an operating transfer facility and is determined by professional experience that incorporates attributes of

distance, visibility, and intervening land uses. The control area is a region removed from the target area and the operating transfer facility and is defined by professional experience such that property values would not be affected by the use under study. A statistical evaluation can then be made concerning sale prices between properties in the target and control areas to assess effect an operating transfer facility exhibits on property values.

The methodology employed in this report uses accepted practices of the real estate valuation profession assuming free-market conditions, the basis of which is the use of arm's length transactions. As such, transactions that were not considered to be arm's length were removed from analysis. An arm's length sale is defined as: "A transaction freely arrived at in the open market, unaffected by abnormal pressure or by the absence of normal competitive negotiation as might be true in the case of a transaction between related parties". [Boyce] A non-arm's length sale is considered to not be indicative of the true market value of a property. Examples of sales that are considered to be non-arm's length are: (1) between related family members; (2) forced sales such as foreclosure, divorce, bankruptcy, or condemnation proceedings; (3) to governmental entities which have the power of eminent domain; or (4) involve buyers or sellers with an extenuating, publically known motivation to purchase or sell a specific property. An example of this type of sale is a transaction involving a job transfer.

The analysis used in this report consists of comparison of average prices and multiple regression modeling of sale prices for properties within the target and control areas for the three case studies. Comparison of averages is a technique that statistically compares the average prices paid for properties in the target and control areas. Multiple regression modeling is used to isolate the effect on value of discreet property characteristics for properties within the target and control areas.

For the comparison of average prices as well as regression modeling, the research hypothesis assumes that there is a statistically measurable difference between values in the target area and those in the control area for the case studies considered. The test of this hypothesis is the t statistic at the 95 percent confidence level. If the calculated t exceeds the standard t from the t statistic table, then the hypothesis that there is a statistically significant difference between the two areas is accepted. If the calculated t does not exceed the standard t from the t statistic table, then the research hypothesis is rejected and there is not a statistically significant difference between the target and the control area.

REVIEW OF LITERATURE

There are few studies concerning transfer station effects on surrounding property values within the literature. Among the most recent and visible is a 2012 document entitled "Potential Impacts of Proposed Waste Transfer Station near Carbondale [Colorado]" tendered by BBC Research and Consulting (Denver, CO). Review of this document revealed that BBC did not independently conduct any market evaluations in or around transfer station sites, but merely applied in total the findings of a 2006 study conducted in the country of Israel to the proposed development in Carbondale, Colorado. This study entitled "Measuring Externalities of Waste Transfer-Station Using Hedonic Prices: Case Study: Israel" uses a Hedonic pricing model to study four existing transfer stations located within Israel. The conclusion from this study indicated that a transfer station negatively affected property values up to 2.8 kilometers (1.75 miles) from the facility, with an increase in value of $5,000 per kilometer removed from the facility.

Review of the study conducted in Israel reveals serious deficiencies in the design of the study that negates its reliability or its usefulness to apply to transfer station facilities in a general sense. First, three of the four transfer stations evaluated in the 2006 Israeli study conducted waste transfer operations outside in the open air, and that only one station [Rishon-Leziyyon] was an enclosed facility where transfer operations take place inside of a building. In this study [Eshert, 2007 "Measuring Externalities", Table 1 p. 12] the authors note that the enclosed facility was the only one of the four without citizen complaints associated with it. Secondly, and perhaps most importantly, the authors have used radial distance from the facility to measure effect. This variable necessarily assumes a homogenous area where all amenities (or dis-amenities) are equal in all directions. This is an over-simplistic assumption that does not represent the actual facts present on the landscape. In reality, property values do not increase or decrease from a given land use in a radial pattern but rather are affected by a number of factors including distance to work, distance to shopping, transportation systems, and quality of schools among a wide variety of amenities present in each locale. The authors even allude to this shortcoming of their analysis when they deleted distance from the central business district as a variable affecting value [Eshert, 2007 "Measuring Externalities" p. 17, Footnote 10]. Furthermore, in their conclusion, they note that three of the four transfer stations evaluated in their study are located in industrial areas where residents have a range of disamenities from multiple sources and that the model may "overemphasize the damages created by the facility." [Eshert 2007 "Measuring Externalities"]

Other inherent defects within the construction of their analytical model is their choice to compare asking prices rather than selling prices, the inclusion of apartment and single-family residences (which are entirely different markets in terms of assigning

valuation and buyer motivations) in the same statistical model, and the use of an Israeli government community ranking system for socio-economic characteristics that ranges between 1 and 20. The authors define this latter variable as "CLUSTER" within their model, and chose to weight its importance as a direct, linear relationship between communities. Doing so implies in their statistical model that a community with a rank of 10 is ten times as desirable as a community with a rank of 1, which does not appear to the intended basis of applying the Israeli community ranking system. This misapplication will systematically distort the relationships of the variables leading to false conclusions concerning the statistical significance of the independent variables evaluated. The combination of the above mentioned factors raises questions as to the validity of the results from this study.

An investigation by J.R. Kimball and William C. Weaver of a Texas transfer station published in the Appraisal Journal in January of 1983 discusses the impact of solid waste transfer stations on surrounding areas. Their study relied on a combination of sales around facilities and survey data from surrounding property owners concerning the facilities impact on the character of the area. Kimball and Weaver concluded that there is no evidence of a negative impact on the surrounding property values as a result of a properly run transfer facility.

There have been several studies of transfer stations in the Chicago area. William A. McCann and Associates of Chicago did a study in 1997 of the impact on property values surrounding the proposed BFI DuKane Transfer Station. This transfer facility is located near the intersection of Powis Road and Illinois 64 in West Chicago. McCann's study primarily consisted of a review of development in the area and a comparison of appreciation rates in a target area (an area proximate to an operating facility) versus appreciation rates in two control areas. Appreciation rates between the areas were similar and McCann reached the conclusion that there would be no measurable impact. This facility is now owned and operated by the applicant.

Integra Realty Resources of Chicago did a study in 2003 for the proposed West DuPage Recycling and Transfer Facility. This proposed transfer facility is to be located on the east side of Powis Road just north of Illinois 64 in Wayne Township, DuPage County. Integra's study primarily consisted of a review of development in the area and a comparison of appreciation rates in target areas surrounding operating transfer facilities versus appreciation rates in control areas. Appreciation rates between the areas were similar and Integra reached the conclusion that there would be no measurable impact.

Integra Realty Resources of Chicago also did a study in 2004 for the proposed Bluff City Transfer Facility to be located in Elgin, Illinois. This transfer facility is located east of Gifford just south of U. S. Route 20. Integra's study primarily consisted of a review of development in the area and a comparison of appreciation

rates in target areas surrounding the operating Onyx transfer station in Rolling Meadows and Northbrook Illinois versus appreciation rates in control areas. Appreciation rates between the areas were similar and Integra reached the conclusion that there would be no measurable impact from the proposed Bluff City Transfer Station.

Integra Realty Resources of Chicago also did a study in 2005 for the proposed Northlake City Transfer Facility to be located in Northlake, Illinois. Like their 2003 and 2004 studies, Integra's study primarily consisted of a review of development in the area and a comparison of appreciation rates in target areas surrounding the operating transfer stations in comparison to control areas. Appreciation rates between the areas were similar and Integra reached the conclusion that there would be no measurable impact from the proposed Northlake Transfer Station.

DESCRIPTION OF THE PROPOSED TRANSFER STATION

The proposed Groot Industries Lake Transfer Station will occupy 3.9 acres on the northeast corner of West Belvidere Road (Illinois Highway 120) and Porter Drive in Round Lake Park, Illinois. The facility will accept non-hazardous municipal solid waste for transfer to a landfill for final disposal. Recyclable commodities may also be aggregated at the Facility for transfer to end markets.

The transfer of waste and processing of recyclables will be performed within a proposed approximately 30,000 square foot cast in place and precast concrete building with an approximate maximum height of 40 feet. The primary access into the building for transfer operations will be oriented parallel to Illinois Highway 120 and approximately perpendicular to Porter Drive to generally screen operations internal to the building from passing traffic. The facility design, orientation, landscaping screening, and buffers will present as the Facility as a typical industrial or commercial development from the view of the traffic along West Belvedere Road and Porter Drive.

Additional proposed improvements located on the property include a scale and a scale house to weigh and screen incoming deliveries, fencing, and additional landscaping to aesthetically buffer operations from public right of ways.

PHYSICAL CHARACTERISTICS OF THE SUBJECT PROPERTY

ACCESS AND FRONTAGE

The proposed facility is located on the northeast corner of West Belvedere Road and Porter Drive. Vehicle access to the facility will be from Porter Drive.

TOPOGRAPHY

The site topography is essentially level and is very similar to that of other areas of Round Lake Park.

UTILITIES

Water and sewer in the immediate neighborhood is supplied by the Village of Round Lake Park. Electricity is provided by Commonwealth Edison with telephone service furnished by Ameritech.

ZONING

The site is zoned I-Industrial by the Village of Round Lake Park. The Act establishes uniform siting criteria to be applied by counties and municipalities and specifically prohibits the application of local zoning or other local land use regulations to siting requests [415 ILCS 5/39.2(g)].

ECONOMIC AND SOCIAL DATA - ROUND LAKE PARK, ILLINOIS

The subject property is located in the Village of Round Lake Park in the northeast portion of Illinois (see Fig. 1). The area is located approximately forty miles northwest of the central business district of Chicago, Illinois.

TRANSPORTATION CONNECTIONS

Illinois Route 134 and Illinois Route 120 pass through the corporate limits of Round Lake Park. U.S. Route 12 is a primary north-south corridor and is located approximately 4 miles to the west of Round Lake Park. U.S. Route 45 is a similar north-south corridor and is located approximately 5 miles east of Round Lake Park. Illinois Route 60 also severs the extreme southern portions of Round Lake Park. Overall, highway connections for Round Lake Park are considered typical for the area. The Village is served locally by a private airport. Regular commercial air transport is available at O'Hare International Airport, which is located 27 miles southeast of the Village. Round Lake Park is also serviced by both commuter and freight rail service via the Canadian National Railroad line.

FIGURE 1: LOCATION MAP

1000 500 0 1000 2000 3000

NORTH

POPULATION

Round Lake Park has a growing population increasing from 6,038 in 2000 to 7,505 people in 2010 (see Table 1).

Table 1: Population of Round Lake Park and Nearby Communities.

Jurisdiction	1990	2000	% Inc.	2010	% Inc.
City/Village:					
Round Lake Park:	4,045	6,038	49.3%	7,505	24.3%
Round Lake:	3,550	5,842	64.6%	18,269	212.7%
Round Lake Beach:	16,434	25,859	57.4%	28,175	9.0%
Round Lake Hghts:	4,049	1,347	-66.7%	2,678	98.8%
Grayslake:	7,388	18,506	150.5%	20,957	13.2%
Hainesville:	134	2,129	1488.8%	3,597	69.0%
Lake Villa:	2,857	5,864	105.3%	8,741	49.1%
Venetian Village:	3,133	3,082	-1.6%	2,826	-8.3%
Viola:	964	956	-0.8%	955	-0.1%
Township:					
Avon:	35,989	54,957	52.7%	65,001	18.3%
Fremont:	14,280	23,955	67.8%	32,337	35.0%
Grant:	14,423	17,397	20.6%	26,523	52.5%
Lake Villa:	29,764	33,721	13.3%	40,276	19.4%
Libertyville:	42,436	48,904	15.2%	53,139	8.7%
Wauconda:	12,859	16,387	27.4%	21,730	32.6%
Other:					
Lake County:	516,418	644,356	24.8%	703,462	9.2%
Illinois:	11,430,602	12,419,293	8.6%	12,830,632	3.3%

Source: US Census.

The growth in population of Round Lake Park is reflective of the population growth in Lake County in general over the last twenty years. For instance, the population of Avon Township increased from 54,956 in 2000 to 65,001 in 2010 or 18 percent while Lake County increased from 644,356 in 2000 to 703,462 in 2010 or 9 percent. The growth in population indicates a pattern of out migration from the central city areas of greater Chicago Metropolitan area during the period from 1990 through 2010.

ECONOMIC DEVELOPMENT

Overall demand for commercial as well as residential development in Round Lake Park has been reduced since 2008 when compared to the previous two decades, and is reflective of the general trend that has affected the nation as a whole. While vacant land suitable for subdivision development remains in Round Lake Park, the current pattern of residential development consists of either building on or in filling existing lots or remodeling of existing structures. New commercial construction has generally been limited to small offices or stores. The businesses that have developed in the village are of the general free-standing type development.

SOCIAL DEVELOPMENT

Round Lake Park is part of the School District 46, which also includes the communities of Grayslake, Hainesville, Lake Villa, Round Lake, Round Lake Beach, and Third Lake. The district has an early childhood learning center, six neighborhood elementary schools, one middle school, and one high school. In addition, there are several private or parochial schools. Locally, the College of Lake County provides associates degrees for those wishing to continue education beyond the high school. Universities and colleges within a 50 mile radius include Northwestern University, University of Chicago, Northeastern Illinois University, DePaul University, Loyola University, and Northern Illinois University among others. Several denominations of churches are situated in the area.

CONCLUSION

The Village of Round Lake Park is a multi-faceted commercial and residential community. The community has typical transportation connections for the region. There are a number of various retail establishments both within the community and the adjoining communities that provide the frequently demanded retail needs of the local population.

FEATURES TO MINIMIZE THE EFFECT ON PROPERTY VALUE

An important consideration in the evaluation of criterion (iii) is the Facility's proposed features as well as the context of existing surrounding features to minimize the Facility's impact on surrounding property values. Features located within the Facility boundary include the orientation of the transfer building, a bio swale, an earthen screening berm, and various plantings while off-site features include existing buildings, tree lines, road right of ways, and intervening land uses that soften and minimize effect. These features are described in greater detail in the following paragraphs.

There are several factors which lend to minimize the impact on surrounding property values. The building's orientation minimizes off-site views into the transfer building. Porter Drive is an industrial access road. This buffering of views of operations is further enhanced by the earthen screening berm and associated vegetative plantings along this undulating berm. The plantings will consist of over-story trees, evergreens, ornamentals, and native shrubs and grasses that are intended to buffer the building and initiate the street scape corridor. Views from Porter Drive will also be buffered by plantings at the entrances to the property.

The property is located in an area that is zoned and developed for industrial purposes. Properties to the north, east, and south consist of industrial uses or open space/agricultural lands. The buildings nearest the Facility are industrial buildings and are generally oriented toward the street on which those building are located. Due to the orientation of those buildings, the general lack of direct views, the typical arrangement of offices within the buildings, and the size of the lots, views of the Facility from these buildings are minimized.

The subject property is located such that the most proximate residential areas are an industrially zoned mobile home park located to the northwest and several town home units located along Buckingham Drive and Chatham Lane. Views of the proposed facility from the mobile home park are limited by a combination of distance, buildings located on the Groot North Maintenance Facility property, and intermediate vegetation and topography. The views from the town home units are buffered by a combination of distance, an Illinois State highway, intervening buildings and existing vegetation. The properties to the west of the subject property are buffered by a combination of distance and intermediate vegetation. With the exception of a single house, the closest residentially zoned units to the west are located on South Wild Spring Road and separated from the subject property by open space and buffered from views of the operations by a combination of distance, and intermediate vegetation.

In summary, the aforementioned combination of distance, on-site plantings, off-site vegetation, and intermediate land uses will limit visibility of the Facility from the surrounding roads as well as from

residential properties. All of these factors tend to minimize the potential impact on surrounding property values.

CASE STUDY EVALUATION

As discussed previously, there is no transfer facility currently on the subject property. Consequently, it is most appropriate to evaluate similar operating waste transfer facilities within the region to form an opinion as to if these operating waste transfer facilities have minimized the effect on surrounding property values. For this purpose, the Glenview Transfer Station in Glenview, Illinois, the Elburn Transfer Station in Elburn, Illinois, and the Bluff City Transfer Facility in Elgin, Illinois were selected for evaluation. These facilities were selected for evaluation as they were determined to be comparable to the proposed Groot Industries Lake Transfer Station in terms of setting, method of transfer, and development characteristics. The three case studies are presented as follows:

GLENVIEW TRANSFER STATION

The Glenview Transfer Station is located on the east side of North River (U.S. Route 45) between East Central Road and East Gregory Avenue in Glenview, Illinois. Transfer operations take place within an approximately 80,000 square foot cast in place concrete and precast concrete building. The facility is owned by the Solid Waste Agency of Northern Cook County (SWANCC) has been operated by Groot Industries since operations began in 1994. The approximately 7 acre facility is permitted to accept up to 3,000 tons of municipal solid waste (MSW) per day.

The transfer facility is located in a small industrial zoned enclave between the Des Plaines River and River Road. There is a mixture of land uses in the area to the west of River Road. The Santuario Shrine of Our Lady of Guadalupe complex, which in addition includes Maryville Academy and a number of social service providers, is located immediately west of the transfer station. Northwest of the transfer station is an area primarily composed of single-family homes of varying age, and is currently experiencing redevelopment. Redevelopment in this area primarily consists of the demolition of older existing homes and constructing larger single-family residences in their place. Purchase prices for these homes generally range between $250,000 and $375,000. Land uses fronting the west side of River Road include a new row house complex and existing commercial establishments.

The target study area chosen for the Glenview Transfer Station comprises the residential area most proximate to the transfer facility and is located west of River Road, north of East Gregory Avenue, south of Kensington Road and east of the Canadian National Railroad Track. The control area was defined as the area located north of the target area lying west of River Road, north of Kensington Road, east of the Canadian National Railroad tracks and south of Euclid Avenue. The control area was developed shortly after the target area, with homes

exhibiting purchase prices similar to that of the target area. The target and control areas for this study are shown in Figure 2.

Sale transactions were obtained from Wheeling Township Assessors Office, the Cook County Assessor's Office, and Cook County Recorder of Deeds. There were a total of 131 single-family residential sales that occurred with 44 sales in the target area and the remaining 87 sales in the control area (see Appendix I-a) that occurred between January 2010 and December of 2012.

Transactions that were not considered to be arm's length were removed from the sample set. In addition to the non-arm's length sales, all properties listed by the Cook County Assessor's office as multi-level where removed from the data set. This property type has dissimilar pricing levels than tradition one and two story homes, and thus not considered comparable. Also removed from the data set were Sales 67 and 68 from the control area, as these transactions represent a resale within 6 months of the initial purchase. There were a total of 69 arm's length sales that occurred over this time frame with 31 sales occurring in the target area and 38 sales occurring within the control area. These arm's length sales and their characteristics are summarized in Appendix I-b.

This data was reviewed using a comparison of the overall average prices and a multiple regression analysis within the target and control areas to determine if there was a statistically significant effect on property values.

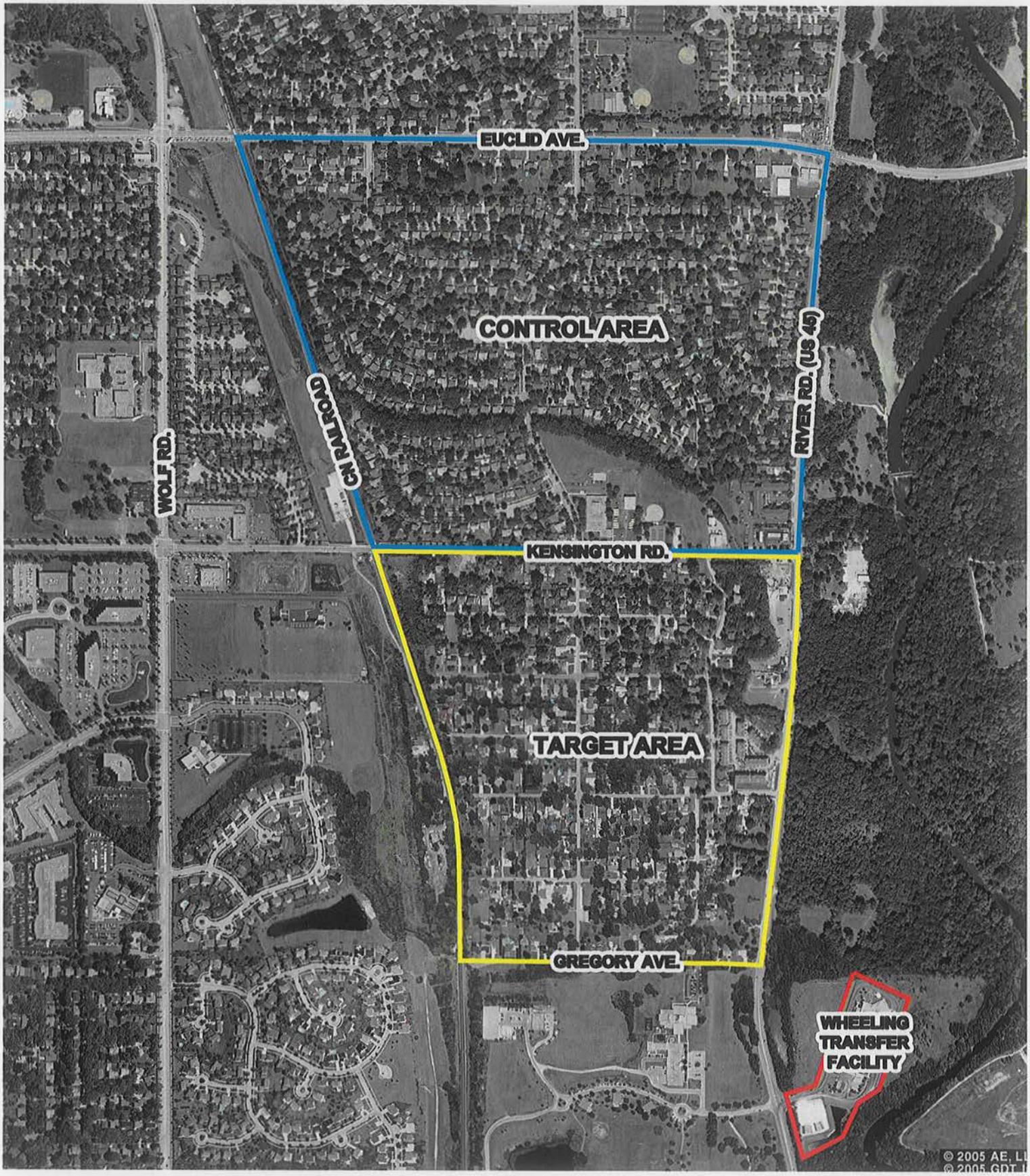

FIGURE 2: GLENVIEW ANALYSIS

800 400 0 800 1600 2400

NORTH

Comparison of Overall Averages

A comparison was made of the overall averages within the target area and control area. There were a total of 31 sales in the target area and 38 sales in the control area. The average sale price per square foot was determined to be $162.01 in the target area and $154.33 in the control area, for a calculated difference of $7.68 per square foot (see Table 2). A statistical comparison was made of the averages for the groups to ascertain if this was a statistically significant difference between the indicated prices. The calculated *t* statistic for the sample was 0.889. The standard *t* statistic for 67 degrees of freedom applicable is 1.670. Since the calculated *t* statistic of 0.889 is less than the standard *t* of 1.670, the research hypothesis that there is a difference in value between the target and control areas is rejected, it is concluded that there is no statistically significant difference between these two averages at a 95 percent confidence interval.

Table 2: Comparison of Averages in Target and Control Areas.

Sample	Sample Size	Degrees of Freedom	Sample Average	Sum of Squares	Standard Deviation
Target:	31	30	$162.01	28,851	31.0
Control:	38	37	$154.33	56,514	39.1
Total:	69	67		85,365	

Variance:	1274.11
Variance of Difference of Averages:	74.63
Standard Deviation:	8.64
Calculated *t* =	0.889
Standard *t* at 95% 68 Degrees of Freedom:	1.670

Multiple Regression Analysis

As discussed in study methodology, a multiple regression analysis was also conducted to further evaluate properties in the target and control areas. For this analysis, the sale price is held as the dependent variable with the independent variables evaluated presented in Table 3.

As shown in Table 3, the associated *t* statistic for the proximity variable is -0.431. The standard *t* statistic for 57 degrees of freedom applicable in this case is 1.671. Since the associated *t* statistic is less than the standard *t* statistic, the hypothesis is rejected and it is concluded that there is no statistically significant difference in the sale prices of homes in the target and control areas.

Table 3: Summary of Regression Analysis (Glenview).

Item:	Measure
Multiple R:	0.701
R Square	0.492
Adjusted R Square:	0.394
Standard Error:	27.745
Observations:	69

Source:	Deg. Of Free.
Regression:	11
Standard Error of Estimate:	1
Residual:	57

Ind. Variables:	Coefficients	Standard Error	*t* Stat
Intercept	1,642.704	475.598	3.454
Proximity:	-3.173	7.368	-0.431
Size:	-0.020	0.009	-2.244
Sale Date	-0.036	0.011	-3.158
Age:	-0.218	0.284	-0.770
Brick:	4.652	10.000	0.465
Full Basement:	20.798	29.534	0.704
Partial Basement:	1.852	29.850	0.062
Rec. Room:	2.488	9.303	0.267
Garage:	19.147	7.346	2.606
Baths:	-13.205	7.437	-1.776
Fireplace:	9.033	8.530	1.059
Standard *t* Statistic at 57 Degrees of Freedom:			1.671

ELBURN TRANSFER STATION

The Elburn Transfer Station is located in a small industrial park between Keslinger Road and the Union Pacific Railroad line just southeast of LaFox, Illinois. This facility is approximately four to five acres in size, and conducts waste transfer operations within a concrete and metal panel building. The station is owned and operated by Waste Management of Illinois, Inc. and has historically accepted up to approximately 850 tons of waste per day. The facility has been in operation since 1992.

The Mill Creek Elementary school and the Greenfields of Geneva Extended Care Facility are located immediately south of Keslinger Road in the area most proximate to the transfer facility. To the immediate south of the elementary school and the extended care facility is the Mill Creek Subdivision complex. The Mill Creek Subdivision complex consists of a combination of single-family and townhouse developments. Prices for these houses vary depending upon selected size and amenities, with prices generally ranging between $300,000 and $400,000. Other land uses in the area include a considerable amount of open space, the LaFox Metra train station, a school bus maintenance facility, a landscaping firm and several light industrial developments.

The target and control study areas chosen for the Elburn facility evaluation are both portions of the Mill Creek subdivision. The entire Mill Creek subdivision complex was developed after the Elburn Transfer Station was operating. The target area utilized in the analysis is the area bounded by School House and Friendship Way Roads on the north, King Drive to the west, Wellington Way and Sulley drives on the south and East Curtis Square on the east. The control area utilized includes the area bounded by Armstrong Lane, Dobson Lane, Sulley Drive/Square, Terney Square, and Howard Square. An evaluation was made of single-family residential sales from January 2008 through December of 2012 in both the target and control areas. The target and control areas for this study are shown in Figure 2.

Sale transactions were obtained from Kane County Supervisor of Assessments Office with property record card information provided by the Blackberry Township Assessors Office. There were a total of 237 single-family residential sales that occurred with 177 sales in the target area and the remaining 60 sales in the control area (see Appendix II-a) that occurred between January 2008 and December of 2012. Transactions that were not considered to be arm's length were removed from the sample set. Additionally, several other sales were removed from the analysis due to their atypical characteristics. Sales 94, 95, and 96 were omitted from the data set because they included an additional lot in the purchase. Sales 137 and 211 were omitted because these properties included an in-ground pool. Sale 122 was omitted from the analysis because it was the only property in the data set to have a partial rather than a full basement. Sales 157 and 158 and Sales 187 and 188 were removed from the data set as these

transactions were re-sales within six months of purchase. Sale 17 was also removed from the data set because it exhibited an anomalously high per square foot sales price when compared to other sales throughout the sample. There were a total of 202 arm's length/non-anomalous sales that occurred over this time frame with 152 sales in the target Area and 50 sales within the control area. These sales and their characteristics are summarized in Appendix II-b).

This data was reviewed using a comparison of the overall average prices and a multiple regression analysis within the target and control areas to determine if there was a statistically measurable effect on property values.

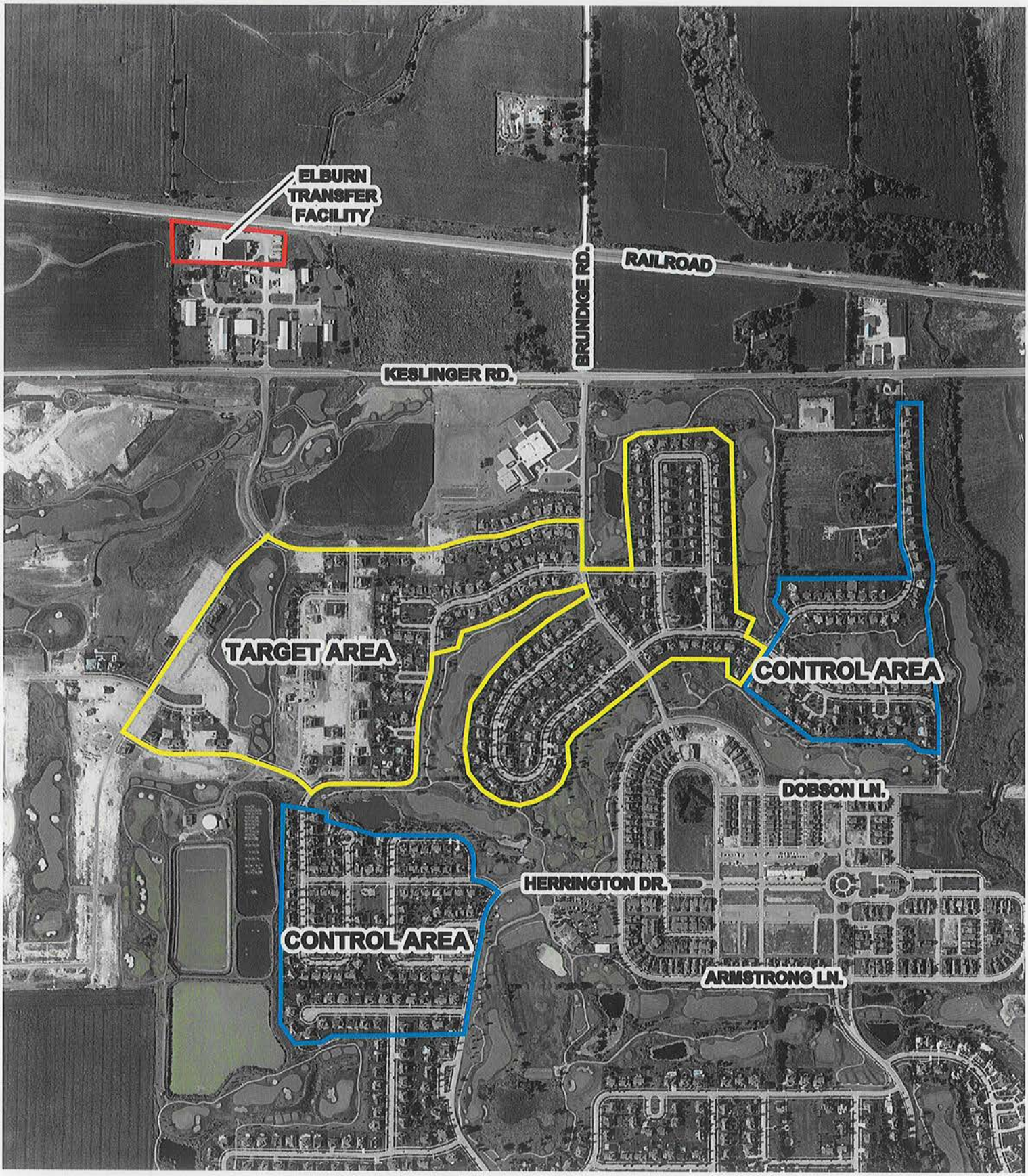

FIGURE 3: ELBURN ANALYSIS

800 400 0 800 1600 2400

NORTH

Evaluation of Overall Averages

An evaluation was made of the overall averages within the target area and control area. There were a total of 152 sales in the target area and 50 sales in the control area. The average sale price per square foot was calculated to be $139.79 in the target area and $138.72 in the control area, or a difference of $1.07 per square foot (see Table 4). A statistical comparison was made of the averages for the groups to ascertain if there existed a statistically significant difference between the indicated prices. The calculated *t* statistic for the sample was 0.307. The standard *t* statistic for 200 degrees of freedom applicable is 1.650. Since the calculated *t* statistic of 0.307 is less than the standard *t* of 1.650, the research hypothesis that there is a difference in value between the target and control areas is rejected, it is concluded that there is no statistically significant difference between these two averages at a 95 percent confidence interval.

Table 4: Comparison of Averages in Target and Control Areas.

Sample	Sample Size	Degrees of Freedom	Sample Average	Sum of Squares	Standard Deviation
Target:	152	151	$139.79	38,199	15.9
Control:	50	49	$138.72	52,890	32.9
Total:	202	200		91,090	

Variance:	455.45
Variance of Difference of Averages:	12.11
Standard Deviation:	3.48
Calculated *t* =	0.307
Standard *t* at 95% 200 Degrees of Freedom:	1.650

Multiple Regression Analysis

As discussed in study methodology, a multiple regression analysis was also conducted to further evaluate properties in the target and control areas. For this analysis, the sale price is held as the dependent variable with the independent variables evaluated presented in Table 5.

In Table 5, the associated *t* statistic for the proximity variable is -0.949. The standard *t* statistic for 190 degrees of freedom applicable in this case is 1.650. Since the associated *t* statistic is less than the standard *t* statistic, the hypothesis is rejected and it is concluded that there is no statistically significant difference in the sale prices of homes in the target and control areas.

Table 5: Summary of Regression Analysis (Elburn).

Source:	Deg. Of Free.
Regression:	11
Standard Error of Estimate:	1
Residual:	190

Ind. Variables:	Coefficients	Standard Error	*t* Stat
Intercept	551.144	60.908	9.049
Proximity:	-2.567	2.705	-0.949
Size:	-0.026	0.003	-7.698
Sale Date:	-0.009	0.002	-6.040
Age:	-0.145	0.253	-0.573
Basement Fin.:	0.010	0.002	4.102
Garage:	11.036	2.138	5.162
Baths:	3.270	2.007	1.629
Fireplace:	-2.743	3.187	-0.861
Golf Course:	6.084	2.177	2.795
Open Space:	6.409	5.799	1.105
Standard *t* Statistic at 190 Degrees of Freedom:			1.650

BLUFF CITY TRANSFER FACILITY

The Bluff City Transfer Facility is located east of Gifford Road just north of the former Illinois Central (now Canadian National) Railroad line. The facility is owned and operated by Waste Management of Illinois, Inc., is approximately 15 acres in size and has been in operation since 2007. Waste transfer operations are conducted within a concrete and metal framed building on a tipping floor of approximately 30,000 to 35,000 square feet. The facility is approved to transfer 2,000 tons per day.

The Bluff City Transfer Facility is located in a mixed-use area with industrial properties located north and east of Spaulding and Gifford Roads, with residential uses dominating remaining areas. Newer residential units are located west of Gifford Road, south of Spaulding Road, and east of the former Elgin Joliet and Eastern (now Canadian National) Railroad line. Prices for these houses generally range between $225,000 and $400,000 in the area.

The study evaluating the Bluff City Transfer Facility consisted of comparing single-family residential sales from January 2008 through December of 2012 in the target and control areas. The target and control areas for this study are shown in Figure 4.

Sale transactions were obtained from Hanover Township Assessors Office, the Cook County Assessor's Office, and Cook County Recorder of Deeds. There were a total of 242 single-family residential sales that occurred with 55 sales occurring in the target area and the remaining 188 sales occurring in the control area (see Appendix III-a). Transactions that were not considered to be arm's length were removed from the sample set. There were a total of 177 arm's length sales that occurred over this time frame with 47 sales occurring in the target Area and 130 sales occurring within the control area. These arm's length sales and their characteristics are summarized in Appendix III-b).

This data was reviewed using a comparison of the overall average prices and a multiple regression analysis within the target and control areas.

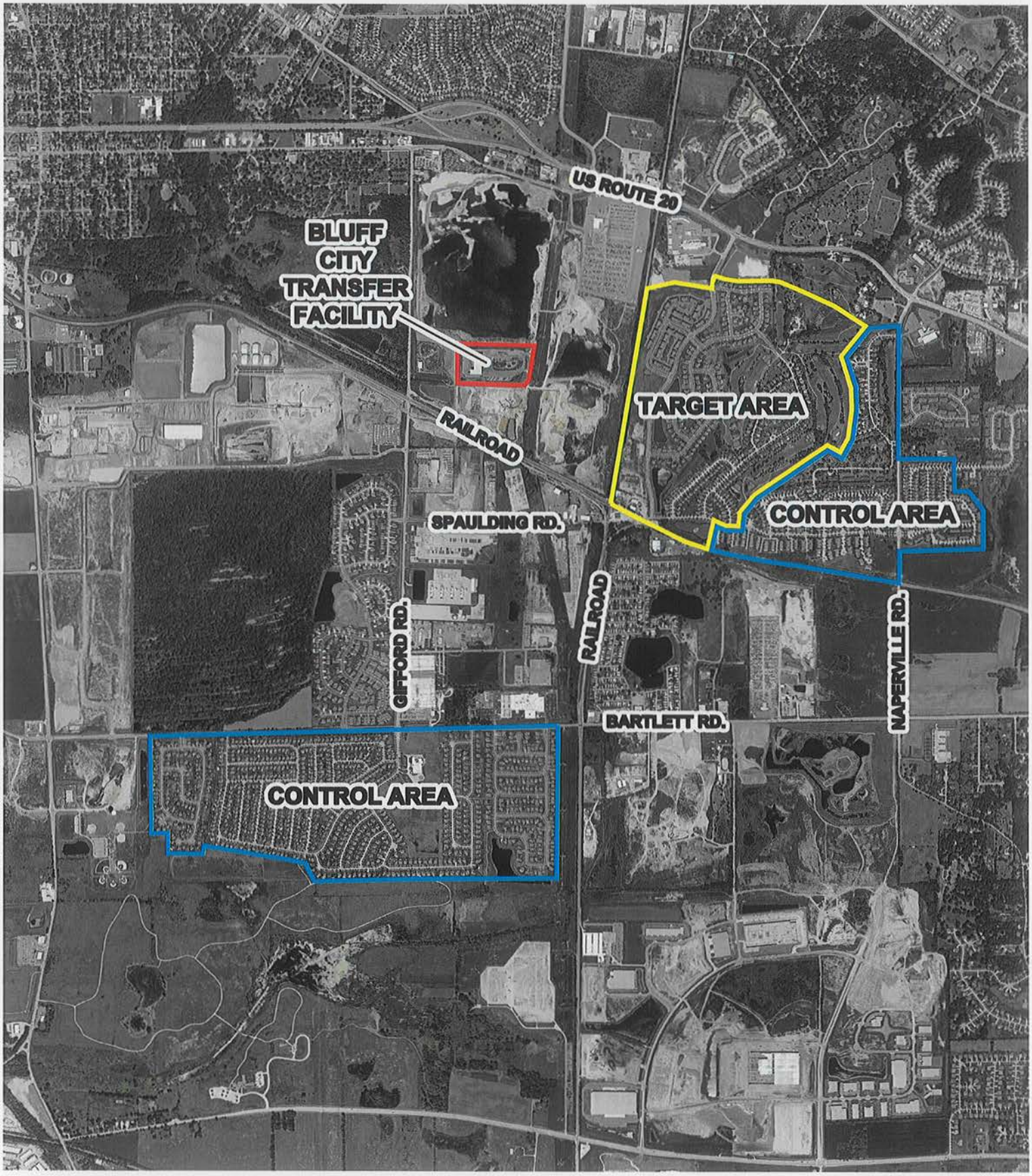

FIGURE 4: BLUFF CITY ANALYSIS

2000 1000 0 2000 4000 6000

NORTH

Comparison of Overall Averages

A comparison was made of the overall averages within the target area and control area. There were a total of 47 sales in the target area and 129 sales in the control area. The average sale price per square foot was calculated as $134.29 in the target area and $137.76 in the control area, or a difference of $3.47 per square foot (see Table 6). A statistical comparison was made of the averages for the groups to ascertain if this was a statistically significant difference between the indicated prices. The calculated *t* statistic for the sample was 0.809. The standard *t* statistic for 174 degrees of freedom applicable is 1.655. Since the calculated *t* statistic of 0.809 is less than the standard *t* of 1.655, the research hypothesis that there is a difference in value between the target and control areas is rejected, it is concluded that there is no statistically significant difference between these two averages at a 95 percent confidence interval.

Table 6: Comparison of Averages in Target and Control Areas.

Sample	Sample Size	Degrees of Freedom	Sample Average	Sum of Squares	Standard Deviation
Target:	47	46	$134.29	18,261	19.9
Control:	129	128	$137.76	92,038	26.8
Total:	176	174		110,299	

Variance:	633.90
Variance of Difference of Averages:	18.40
Standard Deviation:	4.29
Calculated *t* =	-0.809
Standard *t* at 95% 174 Degrees of Freedom:	1.655

Multiple Regression Analysis

As discussed in study methodology, a multiple regression analysis was also conducted to further evaluate properties in the target and control areas. For this analysis, the sale price is held as the dependent variable with the independent variables evaluated presented in Table 7.

In Table 7, the associated *t* statistic for the proximity variable is 1.250. The standard *t* statistic for 165 degrees of freedom applicable in this case is 1.655. Since the associated *t* statistic is less than the standard *t* statistic, the hypothesis is rejected and it is concluded that there is no statistically significant difference in the sale prices of homes in the target and control areas.

Table 7: Summary of Regression Analysis (Bluff City).

Item:	Measure
Multiple R:	0.800
R Square	0.640
Adjusted R Square:	0.618
Standard Error:	15.540
Observations:	176

Source:	Deg. Of Free.
Regression:	11
Standard Error of Estimate:	1
Residual:	164

Ind. Variables:	Coefficients	Standard Error	*t* Stat
Intercept	965.708	90.987	10.614
Proximity:	3.317	2.993	1.108
Size:	-0.038	0.004	-10.961
Sale Date:	-0.019	0.002	-8.263
Age:	-1.441	0.365	-3.945
Full Base.:	7.323	5.115	1.432
Partial Base:	8.593	5.791	1.484
Rec. Room:	0.836	4.642	0.180
Garage:	4.743	3.165	1.499
Bath:	7.612	4.396	1.732
Fireplace:	2.420	2.670	0.906
Standard *t* Statistic at 164 Degrees of Freedom:			1.655

CONCLUSION

The proposed Groot Industries Lake Transfer Station is located at the intersection of Porter Drive and Illinois 120. The topography of the area is generally level with a minimum of topographical relief. The subject property is located within an industrial zoned area with industrial uses being located to the north and northwest of the property with additional commercial and industrial uses fronting Illinois 120 to the southwest.

The Facility will be buffered by a combination of distance, industrial buildings, intermediate natural vegetation, and other intervening land uses. The physical orientation of the building, as well as proposed on-site plantings and screening buffers will minimize views of operations from surrounding properties and right of ways. Transfer of materials will take place within the proposed transfer building. In addition to the on-site measures being taken, there are also off-site characteristics that minimize the effect on the value of surrounding properties. This includes intervening land uses, vegetation, and distances from the nearest residential units. All of the above items contribute to the visual buffering of the Facility and the minimization of the effect on property values.

Poletti and Associates also completed a quantitative analysis evaluating sale prices of properties both near and removed from the currently operating Glenview Transfer Station in Glenview, Illinois, the Elburn Transfer Station in Elburn, Illinois, and the Bluff City Transfer Station in Elgin Illinois. This analysis considered both an evaluation of averages between a target and control area as well as a multiple regression analysis for these three facilities. These analyses demonstrate that there is no statistically significant difference in sales prices of the residential areas most proximate to these three operating transfer facilities from areas further removed.

Therefore, after conducting the study contained herein, it is my opinion that as of May 10, 2013 the proposed Groot Industries Lake Transfer Station is located so as to minimize the effect on the value of surrounding property.

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RESUME
OF PETER J. POLETTI, JR.

I. EDUCATION:

1963-1966: Collinsville High School, Collinsville, Illinois.

1966-1971: University of Illinois, Urbana, Illinois. Bachelor of Science Degree, Forest Management.

1976-1982: Southern Illinois University at Edwardsville, Edwardsville, Illinois. Master of Arts Degree in Cultural Geography.

1982-1989: St. Louis University, St. Louis, Missouri. Doctor of Philosophy Degree in American Studies.

II. WORK EXPERIENCE:

1987-Present: President of Poletti and Associates, Inc., Collinsville, IL.

1989 - 1999: Assistant Professor of Geography, Department of Economics and Geography, University of Missouri-St. Louis.

1981 - 1989: Instructor of Geography, Department of Economics and Geography, University of Missouri - St. Louis, Missouri.

1981 - 1982: Adjunct Instructor of Geography, Harris-Stowe State College, St. Louis, Missouri.

1977 - Present: Elected Township Assessor, Collinsville Township, Madison County, Illinois.

1973-1977: Draftsman, Madison County Courthouse, Edwardsville, Illinois.

III. MEMBERSHIPS AND OFFICES:

Member-Appraisal Institute.

Member-International Association of Assessing Officers.

President-Society of Real Estate Appraisers; Chapter 152; 1987-89.

President-Madison County Township Assessor's Association- 1979 to 1986.

Member-Illinois Township Assessors Association.

Member-Certified Illinois Assessing Officials Association.

Member-Edwardsville-Collinsville Board of Realtors.

Member-Regional Panel, Standards of Professional Practice, Appraisal Institute, 1987 to present.

Member-Chapter 12, Education Committee, Appraisal Institute, 1987 to 1990.

Member-Association of American Geographers.

Member-National Council for Geographic Education.

Member-Gamma Theta Upsilon Honorary Fraternity.

IV. CERTIFICATIONS AND DESIGNATIONS:

Certified General Appraiser, State of Illinois, Certificate/License No. 553-000415.
Certified General Appraiser, State of Missouri, Certificate/License No. RA 001663.
Certified General Appraiser, State of Iowa, Certificate/License No. 328402075.
Certified General Appraiser, State of Tennessee, Certificate/License No. CG-1250.
Certified General Appraiser, Commonwealth of Kentucky, Certificate/License No. 001271.
Certified General Appraiser, State of Indiana, Certificate/License No. CG49400309.
Certified General Appraiser, State of Arkansas, Certificate/License No. CG1481N.
Certified General Appraiser, State of Wisconsin Certificate/License No. 1026-010

MAI designation of the Appraisal Institute.
Certified Assessment Evaluator Designation of the International Association of Assessing Officers.
Certified Illinois Assessing Officer.
Certified Instructor for the Illinois Property Institute. Basic, Income, Shopping Center, Grain Elevator Courses.
Certified Instructor for the Appraisal Institute. Case Studies in Real Estate and Report Writing and Valuation Analysis.

V. APPRAISAL COURSES:

Appraisal Institute; Online Appraising Blue Prints and Specifications, 2006.
Appraisal Institute; Introduction to GIS Application for Real Estate Appraisal, 2005.
Appraisal Institute; Online Valuation of Detrimental Condition in Real Estate, 2005
Appraisal Institute; Appraising the Tough ones: Case Studies in Complex Residential Valuation, 2004
Appraisal Institute; The Road Less Traveled: Special Purpose Properties, 2004.
Appraisal Institute; Business Practice and Ethics, 2003.
Appraisal Institute; 15 Hours National USPAP Course, 2003.
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Society of Real Estate Appraisers; Course 202: Applied Income Property Valuation, 1985.
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VI. LIST OF PRIOR CLIENTS:

Abnet, LLC, Olney, Maryland.
Allied Signal Corporation, Metropolis, Illinois.
Appraisal Management Company, Canton, Massachusetts.
Bank of Edwardsville Branch, Collinsville, Illinois.
Bernard and Davison, Attorneys, Granite City, Illinois.
Bi-State Development Authority, St. Louis, Missouri.
Bo Bueckman Ford, Ellisville, Missouri.
Boatmen's Bank, St. Louis, Missouri.
Boatmen's Bank, Hillsboro, Illinois.
Burlington Bank and Trust, Burlington, Iowa
Capri Sun, Inc., Granite City, Illinois.
Central Bank, Fairview Heights, Illinois
Citicorp Mortgage Co., St. Louis, Missouri.
City Attorney's Office, Lincoln, Nebraska.
City of Edwardsville, Edwardsville, Illinois.
City of Granite City, Granite City, Illinois.
City of Highland, Highland, Illinois.
City of St. Peters, St. Peters, Missouri.
Collinsville Building and Loan, Collinsville, Illinois.
Columbia Quarry Company, Columbia, Illinois.
Community First Bank, Fairview Heights, Illinois.
Crowder and Scoggins, Attorneys, Columbia, Illinois
Crowder and Taliana, Attorneys, Edwardsville, Illinois.
Delivery Network Warehouse Company, Madison, Illinois.
Derango & Vetter, Attorneys, Belleville, Illinois.
Dunham, Bowman and Leskera, Collinsville, Illinois.

Du Quoin State Bank, Du Quoin, Illinois.
Exxon Coal and Mineral, Carlinville, Illinois.
Family Credit Connection, Schaumburg, Illinois.
Farmers Home Administration, Champaign, Illinois.
First Bank, Minneapolis, Minnesota.
First Bank Mortgage, Clayton, Missouri.
First Bank of Illinois, O'Fallon, Illinois.
First Bank of Illinois, Salem, Illinois.
First Federal Savings, Bloomington, Illinois.
First National Bank, Sikeston, Missouri.
First of America Bank, Springfield, Illinois.
Hawkeye Bank of Clinton County, Clinton, Iowa.
H & R Block Mortgage, Pleasanton, California.
Hinshaw & Culbertson, Attorneys, Belleville, Illinois.
Home Federal Savings and Loan, Collinsville, Illinois.
Home Telephone Company, St. Jacob, Illinois.
Illinois American Water Company, Belleville, Illinois.
Illinois Power Company, Decatur, Illinois.
Illinois State Bank, Lake in the Hills, Illinois.
Invenergy, LLC, Chicago, Illinois.
ITT Small Business Finance Corporation, St. Louis, MO..
JBL Limited, Alton, Illinois.
J.R. Kelley Company, Collinsville, Illinois.
Jefferson Bank and Trust, St. Louis, Missouri.
Ralph Korte Construction Co., Highland, Illinois.
Laidlaw Waste Systems (Madison), Roxana, Illinois.
Levy and Levy, Attorneys, Collinsville, Illinois.
Long Beach Mortgage Company, Rolling Meadows, Illinois.
Lueders, Robertson and Konzen, Attorneys, Granite City, IL
Madison County Transit Authority, Granite City, Illinois.
Maedge Trucking Co., Marine, Illinois.
Magna Bank, NA, Belleville, Illinois.
Mark Twain Bank, St. Louis, Missouri.
MCCormack Baron & Associates, Inc., St. Louis, Missouri.
Mercantile Bank, St. Louis, Missouri.
Midwest Waste, Cahokia, Illinois.
Moore Research, Inc., St. Louis, Missouri.
NationsBank, St. Louis, Missouri.
Navy Federal Credit Union, Cleveland, Ohio.
Norfolk-Southern Corporation, Atlanta, Georgia.
Ogle County Supervisor, Oregon, Illinois.
Peoria Disposal Company, Peoria, Illinois.
Onyx Waste Services Midwest, Inc., Batavia, Illinois.
RECOLL Management Corporation, Boston, Massachusetts.
Erin E. Reilly, Attorney, Edwardsville, Illinois.
Republic Services, Inc., Ft. Lauderdale, Florida
Richard McGovern, Attorney, Belleville, Illinois.
Ross Construction Co., Granite City, Illinois.
Sears Mortgage Corporation, St. Louis, Missouri.
Sears, Roebuck and Company, Chicago, Illinois.
Shell Oil Company, Wood River, Illinois.
Service Corporate Mortgage, Naperville, Illinois.

Southern Illinois Regional Landfill, Desoto, Illinois.
Speed Lube, Inc., Highland, Illinois.
Stifel, Nicolaus & Company, Belleville, Illinois.
Stobbs and Sinclair, Attorneys, Alton, Illinois.
Town and Country Mortgage, Chesterfield, Missouri.
Tri-City Port District, Granite City, Illinois.
Tri-Township Library District, Troy, Illinois.
Harry J. Sterling, Attorney, Fairview Heights, Illinois.
Dean Sweet, Attorney, Wood River, Illinois.
United Illinois Bank, Collinsville, Illinois.
United Missouri Bank, St. Louis, Missouri.
US Can Company, Danville, Illinois.
US Postal Service, Overland Park, Kansas.
Waste Management of Illinois, Inc., Downers Grove, Illinois.
Weaver, Boos & Gordon, Inc., Chicago, Illinois.
Wolf Construction Company, Granite City, Illinois.

APPENDICES

APPENDIX I: Glenview Sales Data.

Appendix Ia: All Single-Family House Sales; Glenview Transfer Station.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/Ft^2	Notes
Target Area:													
1	03 36 101 004 1715	E. Foundry	Beck/Samperio	Schubkegel	1012435020	Apr-10	$245,000	2SF	2,430	1938	WD	$100.82	
2	03 36 101 019 1723	E. Kensington	US Bank	Varagic	1115255038	May-11	$190,000	MLFB	1,224	1978	SPWD	$155.23	Bnk Sale
3	03 36 101 031 260	Lee	Vojoic	Marcus	1234817025	Oct-12	$425,000	2SB	2,847	1999	WD	$149.28	
4	03 36 103 005 138	E. Bonnie Brae	JPMorgan Chase	Kolbiarz	1030544011	Sep-10	$267,000	1SF	1,042	1964	SPWD	$256.24	Bnk Sale
5	03 36 103 031 130	E. Bonnie Brae	Deutsche Bnk.	Pernak	1117122037	May-11	$207,000	MLFB	1,371	1986	SPWD	$150.98	Bnk Sale
6	03 36 105 003 142	Morrison	BAC Home Lns.	Mazurek	1016726005	Jun-10	$211,000	1SB	1,280	1956	SPWD	$164.84	Bnk Sale
7	03 36 105 014 137	Hill	Klapper	Ramage	1128012020	Sep-11	$505,000	2SB	2,675	2009	WD	$188.79	
8	03 36 106 022 147	E. Gregory	Mejia	Karasinski	1204622002	Jan-12	$200,000	2SFB	1,583	1978	WD	$126.34	
9	03 36 108 002 640	Kylemore	Maciaszek	Chotiyanonta	1222735109	Jul-12	$418,000	2SF	2,420	1994	WD	$172.73	
10	03 36 108 006 680	Kylemore	Comm. Sav. Tr.	Madathil	1224234027	Aug-12	$413,000	2SFB	2,475	1993	TD	$166.87	
11	03 36 108 027 651	Longford	Sanchez	Alremaizan	1125140015	Aug-11	$500,000	2SFB	2,685	1997	WD	$186.22	
12	03 36 108 035 645	Castlerea	Baxa	Kocovski	1203333010	Jan-12	$380,000	1SFB	2,319	1997	WD	$163.86	
13	03 36 110 017 1321	Middleton	Half	Kropp	1002105148	Jan-10	$584,000	2SFB	2,944	1997	WD	$198.37	
14	03 36 111 016 630	Dursey	Riportella	Ferrante	1119433082	Jun-11	$400,000	1SFB	2,319	1997	TD	$172.49	
15	03 36 201 001 267	N. Lee	Baczewski	Bachmann	1004140141	Jan-10	$200,000	2SF	811	1939	WD	$246.61	Repo Sale
16	03 36 201 009 123	E. Bonnie Brae	Salerno	Burton	1231126226	Oct-12	$178,000	1SFB	1,077	1962	WD	$165.27	
17	03 36 202 003 124	E. Bonnie Brae	Knurowski Tr.	Fletter	1114412117	May-11	$310,000	1SB	1,450	1967	TD	$213.79	
18	03 36 202 018 251	Lee	INA Bank	Swalkowske	1035603053	Nov-10	$467,000	2SB	2,525	2010	SPWD	$184.95	Bnk Sale
19	03 36 206 007 129	Hill	Thal Tr.	Kravtsov	1213504051	Apr-12	$170,000	1SF	1,037	1957	TD	$163.93	
20	03 36 206 022 117	Hill	Siedlecki	Trzeciak	1226233139	Aug-12	$310,000	2SFB	2,282	1993	WD	$135.85	
21	03 36 207 022 214	Graylynn	Robins	Alexander	1007826017	Mar-10	$260,000	2SF	2,177	1933	WD	$119.43	
22	03 36 208 008 225	Graylynn	Lewis	Daidone	1222935023	Jul-12	$165,000	1SF	1,180	1953	WD	$139.83	
23	03 36 208 013 215	Graylynn	Dellamano	Schoeck	1209449036	Apr-12	$212,000	2SF	2,144	1929	WD	$98.88	
24	03 36 302 015 774	Therese	Citibank	Lazar	1115155026	May-11	$150,000	1SFB	1,308	1963	SPWD	$114.68	Bnk Sale
25	03 36 302 019 693	Mark	Santucci	Bencal	1120833048	Jun-11	$200,000	1SB	1,308	1964	WD	$152.91	
26	03 36 302 020 701	Mark	Fiedler Tr.	Ardelean	1219304019	Jul-12	$217,000	1SFB	1,359	1964	WD	$159.68	
27	03 36 302 025 741	Mark	Mittl	Rognstad	1009640046	Mar-10	$290,000	1SB	1,363	1964	TD	$212.77	
28	03 36 302 027 757	Mark	Carmelite Mon.	Barrientos	1216626146	May-12	$215,000	MLFB	1,409	1964	WD	$152.59	ML
29	03 36 302 029 773	Mark	Tarenski	Klimkiewicz	1129733123	Sep-11	$190,000	1SFB	1,372	1964	WD	$138.48	
30	03 36 303 003 695	Therese	Fozkos	Boyle	1221418039	Jul-12	$197,000	1SFB	1,297	1963	WD	$151.89	
31	03 36 304 011 818	Timothy	Pacosi	Roese	1019519026	Jul-10	$282,500	MLFB	1,256	1968	WD	$224.92	ML
32	03 36 305 004 873	Madelyn	Keslinke	Compton	1016955030	Jun-10	$270,000	MLFB	2,202	1969	WD	$122.62	ML
33	03 36 305 005 865	Madelyn	Vincent Tr.	Swanquist	1116148025	May-11	$199,900	1SFB	1,528	1963	ED	$130.82	
34	03 36 305 007 849	Madelyn	Park Nat. Bk	Melesio	1208734035	Mar-12	$160,000	1SFB	1,297	1963	TD	$123.36	
35	03 36 306 010 696	Madelyn	Angeles	Pogorzelska	1208612118	Feb-12	$170,000	MLB	1,431	1965	WD	$118.80	ML

Appendix Ia: continued on next page.

Appendix Ia: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/Ft^2	Notes
36	03 36 306 013 720	Madelyn	Lee	Bare	1012711084	Apr-10	$305,000	1SFB	1,431	1964	WD	$213.14	
37	03 36 306 017 752	Madelyn	Katsafouros	Wojtanowicz	1226833054	Aug-12	$240,000	MLF	1,305	1965	WD	$183.91	ML
38	03 36 306 018 760	Madelyn	Eggleston	Eliason	1219412036	Jun-12	$264,500	MLB	1,431	1965	WD	$184.84	ML
39	03 36 307 022 734	Mark	Kowalski	Augustyn	1226926013	Sep-12	$275,000	1SFB	1,456	1963	WD	$188.87	
40	03 36 307 025 758	Mark	Kowalski Tr.	Yuvashev	1218822025	Jun-12	$230,000	1SFB	1,297	1963	TD	$177.33	
41	03 36 308 039 681	Kenmare	Liakopoulos	Lensink	1111233133	Apr-11	$475,000	2SF	2,754	1994	TD	$172.48	
42	03 36 309 005 710	Waterford	Jerome Senesac	Massari	1215834027	May-12	$439,000	2SFB	2,782	1994	WD	$157.80	
43	03 36 309 025 1151	Kylemore	Circolone	Mathew	1026555006	Sep-10	$485,000	2SFB	2,475	1994	WD	$195.96	
44	03 36 311 034 981	Carlow	Gabryszewski	Amidei	1234033026	Nov-12	$400,000	1SB	2,173	1994	WD	$184.08	
Average:												$165.53	
Control Area:													
45	03 25 101 038 1334	N. Indigo	Hurdogan	Friel	1025235054	Aug-10	$222,000	MLFB	1,475	1968	WD	$150.51	ML
46	03 25 101 039 1332	N. Indigo	Hoe	Paschalis	1034212064	Nov-10	$195,000	MLFB	1,634	1968	WD	$119.34	ML
47	03 25 101 062 1770	E. Euclid	Wells Fargo	Werner	1206704211	Feb-12	$211,000	1SB	1,620	1974	SPWD	$130.25	Bnk Sale
48	03 25 101 064 1766	E. Euclid	Zaprzalks	Reif	1118733057	Jun-11	$206,000	1SFB	1,957	1971	WD	$105.26	
49	03 25 102 001 1437	N. Mandel	Reldco Homes	Miller	1201119005	Dec-11	$321,000	1SB	1,807	1971	WD	$177.64	
50	03 25 102 027 1433	N. Mandel	Bolsinga Tr.	Fakhouri	1002141051	Jan-10	$255,500	MLFB	1,634	1969	TD	$156.36	ML
51	03 25 104 010 1758	E. Carib	FNMA	Ashbrook	1020126061	Jun-10	$200,000	1SFB	1,326	1969	SPWD	$150.83	Bnk Sale
52	03 25 104 028 1749	E. Wood	Kozil	Doyle	1033429101	Nov-11	$285,000	MLFB	1,475	1970	WD	$193.22	ML
53	03 25 104 035 1763	E. Wood	Schmidt	Eckl	1029435136	Oct-10	$312,500	1SFB	1,326	1970	WD	$235.67	
54	03 25 105 019 1745	E. Carib	Ruffolo	Baker	1229301022	Oct-12	$280,000	1SFB	1,326	1969	WD	$211.16	
55	03 25 105 028 1763	E. Carib	Meyer	Noto	1203433080	Feb-12	$345,000	2SFB	3,004	1969	WD	$114.85	
56	03 25 107 014 1767	E. Tano	Messmer	Wright	1010911061	Mar-10	$265,000	1SB	1,375	1967	TD	$192.73	
57	03 25 107 027 1742	E. Corktree	Drozd	Domanski	1021610003	Jul-10	$285,000	MLFB	1,444	1966	WD	$197.37	ML
58	03 25 111 007 1326	N. Peartree	Martin Tr.	Alvarado	1219542096	Jul-12	$252,000	1SFB	1,375	1967	WD	$183.27	
59	03 25 112 011 1331	N. Peachtree	Zimmerman	Jacobs	1006904007	Feb-10	$322,000	MLFB	1,864	1967	WD	$172.75	ML
60	03 25 117 007 1325	N. Peachtree	Costello	Virant	1012741074	Apr-10	$322,000	MLF	1,365	1968	WD	$235.90	ML
61	03 25 117 012 1761	E. Corktree	Lococo	Olivia	1018740130	Jun-12	$320,000	2SFB	3,152	1973	WD	$101.52	
62	03 25 117 014 1765	E. Corktree	Heintzelman	Rumas	1217935045	Jun-12	$315,000	MLF	1,565	1969	WD	$201.28	ML
63	03 25 117 025 1800	E. Cree	Slosar	Akamphuber	1033603044	Oct-10	$365,000	2SFB	1,941	1967	WD	$188.05	
64	03 25 118 008 1815	E. Camp McDonal	Aldrich	Khan	1204826002	Feb-12	$255,000	MLF	1,609	1969	WD	$158.48	ML
65	03 25 118 031 1804	E. Wood	Kopke	Bosack	1016541126	Jun-10	$330,000	1SF	2,066	1968	WD	$159.73	
66	03 25 119 037 1411	N. Columbine	Toppebana	Lehman	1014049022	May-10	$225,000	MLFB	1,342	1968	WD	$167.66	ML
67	03 25 120 003 1833	E. Sitka	DNV Prop.	Paraskevas	1109555027	Apr-11	$347,500	2SF	1,941	1968	WD	$179.03	Flip
68	03 25 120 003 1833	E. Sitka	Martin	DNV Prop.	1030549000	Nov-10	$170,000	2SF	1,941	1968	WD	$87.58	Flip
69	03 25 120 011 1811	E. Sitka	Hoffmann	Duda	1228412110	Oct-12	$300,000	2SF	2,101	1968	TD	$142.79	
70	03 25 123 008 1300	N. Burning Bush	Johnson	Spillson	1027733101	Oct-10	$342,500	MLFB	1,609	1969	WD	$212.87	ML

Appendix Ia: continued on next page.

Appendix Ia: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/Ft^2	Notes
71	03 25 123 030 1810	E. Euclid	Olszewski etal	Kwan	1032826150	Oct-10	$242,000	MLF	1,609	1969	WD	$150.40	ML
72	03 25 123 045 1308	N. Pima	Hellstedt	Palmisano	1024540146	Aug-10	$263,000	MLF	1,544	1968	TD	$170.34	ML
73	03 25 203 003 1404	N. Burning Bush	Makris	Victorn	1235233101	Dec-12	$215,000	MLF	1,340	1965	WD	$160.45	ML
74	03 25 203 004 1406	N. Burning Bush	Edsey	Gonzaga	1213504199	May-12	$275,000	MLFB	1,443	1964	WD	$190.58	ML
75	03 25 204 023 1914	E. Wood	Stepaniants	Federov	1229057283	Oct-12	$185,000	1SF	1,432	1964	WD	$129.19	
76	03 25 205 001 1905	E. Wood	Kim	Motyka	1217955039	Jun-12	$250,000	2SFB	2,440	1965	WD	$102.46	
77	03 25 205 002 1416	N. Boro	Jakubik	Wicha	1027822082	Sep-10	$220,000	MLFB	1,170	1964	WD	$188.03	ML
78	03 25 205 020 1901	E. Wood	Wiktor	Solis	1235301007	Dec-12	$250,000	MLFB	1,170	1965	WD	$213.68	ML
79	03 25 206 012 1403	N. Boro	Gorny/Czarnicka	Maksymiuk/Kose	1109645007	Apr-11	$222,000	2SF	1,718	1964	WD	$129.22	
80	03 25 207 017 1413	N. Lama	Palka	Jarczyk	1213949028	May-12	$225,000	2SFB	1,828	1964	WD	$123.09	
81	03 25 207 020 1915	E. Wood	Braun	Kozel	1219412109	Jul-12	$257,000	MLF	1,390	1965	WD	$184.89	ML
82	03 25 208 001 1901	E. Tano	Mallo Ex.	Vega	1022435139	Jul-10	$237,000	MLFB	1,170	1964	ED	$202.56	ML
83	03 25 208 002 1341	N. Burning Bush	Duda	Boone	1224426159	Aug-12	$255,000	1SFB	1,410	1965	WD	$180.85	
84	03 25 209 013 1331	N. Lama	1st nat. Bnk	Slosar	1008826280	Mar-10	$457,500	2SFB	3,042	1983	TD	$150.39	
85	03 25 209 016 1325	N. Lama	Stuart	Chwala	1231312032	Nov-12	$253,000	1SB	2,180	1982	WD	$116.06	
86	03 25 209 017 1323	N. Lama	Grippo	Arana	1203204085	Feb-12	$390,000	2SFB	3,055	1986	TD	$127.66	
87	03 25 209 021 2004	Pin Oak	Schuler	Rizzo	1221541057	Aug-12	$350,000	1SB	2,180	1984	WD	$160.55	
88	03 25 209 030 2019	Celtic Glen	Pac. Global Bnk	Sandoval	1123042083	Jul-11	$480,000	2SB	2,983	2009	SPWD	$160.91	Bnk Sale
89	03 25 210 002 1424	N. Park	Fuller	Kelley	1216412029	Jun-12	$228,000	1SF	1,564	1965	WD	$145.78	
90	03 25 210 009 1410	N. Park	NBT-SFR,	Babinski	1231426107	Nov-12	$92,000	1SFB	1,291	1965	WD	$71.26	Bnk Sale
91	03 25 211 002 1407	N. Sauk	Welmering	Timiljine	1209449034	Apr-12	$200,000	1SFB	1,190	1964	WD	$168.07	
92	03 25 211 002 1403	N. Park	FHLN	Acquaviva	1208635032	Mar-12	$190,000	MLFB	1,170	1964	SPWD	$162.39	Bnk Sale
93	03 25 211 006 1411	N. Park	Telson	White	1007822082	Mar-10	$278,000	MLFB	1,236	1965	WD	$224.92	ML
94	03 25 211 014 1427	N. Park	Stempien	Hemmer	1202704012	Jan-12	$330,000	MLFB	1,390	1965	WD	$237.41	ML
95	03 25 213 006 2001	E. Chinkapin Oa	Nauyalis	Matthew	1218055072	Jun-12	$399,500	2SFB	2,451	1982	WD	$162.99	
96	03 25 213 018 1923	Burr Oak	Heinz	Tran	1226912080	Sep-12	$301,599	2SFB	2,348	1983	WD	$128.45	
97	03 25 302 003 1807	E. Euclid	FMNA	Ceisel	1016735146	May-10	$149,625	1SF	1,478	1954	SPWD	$101.23	Bnk Sale
98	03 25 302 004 1809	E. Euclid	Winton Tr.	Karalis	1027449041	Sep-10	$294,000	MLFB	1,849	1966	WD	$159.00	ML
99	03 25 302 010 1821	E. Euclid	Musso	Lesniak	1029333038	Oct-10	$550,000	1.5SF	2,197	1921	WD	$250.34	
100	03 25 303 012 925	N. Quince	Chao	Tugade	1035440008	Dec-10	$230,000	MLF	1,326	1969	WD	$173.45	ML
101	03 25 303 047 939	Quince	Chen	Rice	1210104020	Oct-11	$308,000	2SFB	1,728	1971	WD	$178.24	
102	03 25 304 006 1819	W. Azalea	FNMA	Porowska	1114740105	May-11	$230,000	MLF	1,382	1968	SPWD	$166.43	Bnk Sale
103	03 25 304 022 1814	N. Basswood	Bovin Ex.	LLC	1300726052	Dec-12	$180,000	MLFB	1,613	1968	EXD	$111.59	ML
104	03 25 305 006 1827	N. Basswood	Chicago Tit.	Mau	1102440199	Dec-10	$270,000	MLF	1,391	1967	TD	$194.10	ML
105	03 25 305 010 1819	N. Basswood	Petrovich	Santacruz	1023233019	Jul-10	$150,000	1SFB	1,506	1966	WD	$99.60	
106	03 25 305 024 920	N. Quince	Ferstand	Jarzabek	1231910051	Nov-12	$315,000	MLF	1,752	1970	WD	$179.79	ML
107	03 25 305 039 1002	N. Burning Bush	Schleiter Tr.	Brody	1216735106	Jun-12	$261,500	2SF	2,478	1969	WD	$105.53	
108	03 25 306 008 1817	E. Bittersweet	Kuminowski	Badami	1033540111	Nov-10	$350,000	MLF	1,244	1970	WD	$281.35	ML
109	03 25 306 008 1817	E. Bittersweet	Spielmann Est.	Kuminowski	1020312118	Jul-10	$195,000	MLF	1,244	1970	ED	$156.75	ML

Appendix Ia: continued on next page.

Appendix Ia: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/Ft^2	Notes
110	03 25 306 013 1807	Bittersweet	Ruzkowski	Jablonski	1226156000	Sep-12	$360,000	2SFB	2,520	1971	WD	$142.86	
111	03 25 306 014 1805	E. Bittersweet	Trout	Schochet	1110241053	Apr-11	$252,000	MLFB	1,752	1970	WD	$143.84	ML
112	03 25 307 025 1818	Apache	Lange Tr.	Brunetti	1210911088	Apr-12	$310,000	2SFB	2,548	1970	TD	$121.66	
113	03 25 310 015 1709	Independence	Intercounty Jud	Canulli	1032118060	May-10	$38,975	2SFB	2,144	1990	JD	$18.18	Bnk Sale
114	03 25 310 033 1702	Freedom	FHLN	Kofler	1107411110	Feb-11	$336,000	2SFB	2,679	1990	SPWD	$125.42	Bnk Sale
115	03 25 310 056 813	Heritage	Wells Fargo	Augustynski	1009240129	Mar-10	$295,000	2SFB	2,679	1991	SPWD	$110.12	Bnk Sale
116	03 25 311 011 820	Heritage	Sacros	Sia	1103141169	Jan-11	$345,000	2SF	1,853	1991	WD	$186.18	
117	03 25 311 030 1106	Heritage	Shah	Jacinto	1201112179	Dec-11	$362,500	2SFB	2,679	1991	WD	$135.31	
118	03 25 402 015 1902	E. Ivy	Franks Tr.	Makowski	1225849012	Sep-12	$210,000	MLF	1,254	1966	TD	$167.46	ML
119	03 25 402 025 2004	E. Ivy	Watkins	Heppe	1211442098	Apr-12	$257,000	1SFB	1,255	1966	WD	$204.78	
120	03 25 402 034 2022	E. Ivy	Karam	Grimpe	1201331114	Jan-12	$325,000	MLFB	1,851	1967	WD	$175.58	ML
121	03 25 403 004 2009	E. Ivy	Santa Cruz	Kuruvilla	1016126195	May-10	$440,000	2SF	2,569	1967	WD	$171.27	
122	03 25 404 012 918	N. Sumac	Feygin/Lurue	Zozienicki	1011050037	Mar-10	$270,000	MLFB	1,116	1970	WD	$241.94	ML
123	03 25 405 001 1900	E. Hopi	FHLN	Psiuk	1229701027	Oct-12	$271,000	2SB	2,355	1966	SPWD	$115.07	Bnk Sale
124	03 25 406 003 2005	E. Kiowa	Karsen	Singh	1023733050	Aug-10	$317,000	2SFB	1,906	1970	WD	$166.32	
125	03 25 406 007 920	N. Pecos	O'Donnell	Matteucci	1235333043	Dec-12	$341,500	MLFB	1,267	1966	WD	$269.53	ML
126	03 25 406 010 914	N. Pecos	Domeracki	Tripple	1029333049	Sep-10	$269,000	MLFB	1,516	1966	WD	$177.44	ML
127	03 25 406 017 2012	E. Hopi	Ferguson Tr.	Prueser	1206926059	Mar-12	$233,000	1SFB	1,072	1966	TD	$217.35	
128	03 25 406 030 921	N. Sumac	FHLN	Cho	1111611193	Apr-11	$249,000	2SF	2,104	1970	SPWD	$118.35	Bnk Sale
129	03 25 408 011 911	N. Moki	Long	Steinbrunner	1122741051	Jun-11	$272,500	MLF	1,604	1972	WD	$169.89	ML
130	03 25 408 016 2018	E. Hope	Watson	Herrmann	1113650027	May-11	$255,000	2SFB	2,304	1972	WD	$110.68	
131	03 25 409 001 2017	E. Hopi	Francis	Avina	1232047051	Nov-12	$220,000	2SF	1,604	1971	WD	$137.16	
Average:												$161.52	

Appendix Ib: Characteristics of Arm's Length Single-Family House Sales; Glenview Transfer Station.

Sale	Parcel	Address	Sale Date	Sale Price	Style	Size	Age	Base./Fin.	Gar.	Baths	FP	$/Ft^2
1	03 36 101 004	1715 E. Foundry	Apr-10	$245,000	2SF	2,430	1938	Part/0	0.0	2.5	0	$100.82
3	03 36 101 031	260 Lee	Oct-12	$425,000	2SB	2,847	1999	Part/Rec	2.0	2.5	1	$149.28
7	03 36 105 014	137 Hill	Sep-11	$505,000	2SB	2,675	2009	Full/0	2.0	2.5	1	$188.79
8	03 36 106 022	147 E. Gregory	Jan-12	$200,000	2SFB	1,583	1978	Part/Rec	2.0	1.5	0	$126.34
9	03 36 108 002	640 Kylemore	Jul-12	$418,000	2SF	2,420	1994	Full/0	2.0	2.5	1	$172.73
10	03 36 108 006	680 Kylemore	Aug-12	$413,000	2SFB	2,475	1993	Full/0	2.0	2.5	1	$166.87
11	03 36 108 027	651 Longford	Aug-11	$500,000	2SFB	2,685	1997	Full/0	3.0	2.5	1	$186.22
12	03 36 108 035	645 Castlerea	Jan-12	$380,000	1SFB	2,319	1997	Full/0	3.0	2.0	1	$163.86
13	03 36 110 017	1321 Middleton	Jan-10	$584,000	2SFB	2,944	1997	Full/0	3.0	2.5	1	$198.37
14	03 36 111 016	630 Dursey	Jun-11	$400,000	1SFB	2,319	1997	Part/0	2.0	2.0	1	$172.49
16	03 36 201 009	123 E. Bonnie Brae	Oct-12	$178,000	1SFB	1,077	1962	Part/0	0.0	1.0	0	$165.27
17	03 36 202 003	124 E. Bonnie Brae	May-11	$310,000	1SB	1,450	1967	Full/Rec	3.0	3.5	2	$213.79
19	03 36 206 007	129 Hill	Apr-12	$170,000	1SF	1,037	1957	Full/0	2.0	1.0	0	$163.93
20	03 36 206 022	117 Hill	Aug-12	$310,000	2SFB	2,282	1993	Full/0	2.5	2.5	1	$135.85
21	03 36 207 022	214 Graylynn	Mar-10	$260,000	2SF	2,177	1933	Part/0	2.5	3.5	1	$119.43
22	03 36 208 008	225 Graylynn	Jul-12	$165,000	1SF	1,180	1953	Part/0	1.5	1.0	0	$139.83
23	03 36 208 013	215 Graylynn	Apr-12	$212,000	2SF	2,144	1929	Part/0	0.0	2.5	0	$98.88
25	03 36 302 019	693 Mark	Jun-11	$200,000	1SB	1,308	1964	Full/0	2.0	1.5	0	$152.91
26	03 36 302 020	701 Mark	Jul-12	$217,000	1SFB	1,359	1964	Full/Rec	2.0	1.0	0	$159.68
27	03 36 302 025	741 Mark	Mar-10	$290,000	1SB	1,363	1964	Full/0	2.0	1.5	1	$212.77
29	03 36 302 029	773 Mark	Sep-11	$190,000	1SFB	1,372	1964	Full/Rec	2.0	2.0	0	$138.48
30	03 36 303 003	695 Therese	Jul-12	$197,000	1SFB	1,297	1963	Full/0	1.0	1.5	0	$151.89
33	03 36 305 005	865 Madelyn	May-11	$199,900	1SFB	1,528	1963	Full/0	1.5	1.5	1	$130.82
34	03 36 305 007	849 Madelyn	Mar-12	$160,000	1SFB	1,297	1963	Part/0	1.5	1.0	0	$123.36
36	03 36 306 013	720 Madelyn	Apr-10	$305,000	1SFB	1,431	1964	Full/0	2.0	1.5	1	$213.14
39	03 36 307 022	734 Mark	Sep-12	$275,000	1SFB	1,456	1963	Full/0	2.0	2.0	1	$188.87
40	03 36 307 025	758 Mark	Jun-12	$230,000	1SFB	1,297	1963	Full/Rec	1.0	1.5	0	$177.33
41	03 36 308 039	681 Kenmare	Apr-11	$475,000	2SF	2,754	1994	Full/0	2.0	2.5	1	$172.48
42	03 36 309 005	710 Waterford	May-12	$439,000	2SFB	2,782	1994	Full/0	2.0	2.5	1	$157.80
43	03 36 309 025	1151 Kylemore	Sep-10	$485,000	2SFB	2,475	1994	Part/0	3.0	2.5	1	$195.96
44	03 36 311 034	981 Carlow	Nov-12	$400,000	1SB	2,173	1994	Full/0	2.0	1.5	1	$184.08
Average:												$162.01
Control:												
48	03 25 101 064	1766 E. Euclid	Jun-11	$206,000	1SFB	1,957	1971	Part/Rec	1.0	2.0	1	$105.26
49	03 25 102 001	1437 N. Mandel	Dec-11	$321,000	1SB	1,807	1971	Full/Rec	2.0	2.0	0	$177.64
53	03 25 104 035	1763 E. Wood	Oct-10	$312,500	1SFB	1,326	1970	Full/0	2.0	2.0	0	$235.67
54	03 25 105 019	1745 E. Carib	Oct-12	$280,000	1SFB	1,326	1969	Full/0	2.0	1.5	0	$211.16
55	03 25 105 028	1763 E. Carib	Feb-12	$345,000	2SFB	3,004	1969	Full/Rec	2.0	2.5	1	$114.85
56	03 25 107 014	1767 E. Tano	Mar-10	$265,000	1SB	1,375	1967	Part/0	2.0	1.5	0	$192.73
58	03 25 111 007	1326 N. Peartree	Jul-12	$252,000	1SFB	1,375	1967	Full/0	2.0	1.0	0	$183.27
61	03 25 117 012	1761 E. Corktree	Jun-12	$320,000	2SFB	3,152	1973	Part/0	2.0	2.5	1	$101.52
63	03 25 117 025	1800 E. Cree	Oct-10	$365,000	2SFB	1,941	1967	Full/0	2.0	2.5	0	$188.05
65	03 25 118 031	1804 E. Wood	Jun-10	$330,000	1SF	2,066	1968	Part/0	2.0	2.5	1	$159.73
69	03 25 120 011	1811 E. Sitka	Oct-12	$300,000	2SF	2,101	1968	Full/Rec	2.0	2.5	1	$142.79
75	03 25 204 023	1914 E. Wood	Oct-12	$185,000	1SF	1,432	1964	Full/0	2.0	2.5	0	$129.19

Appendix Ib: Continued on Next Page.

Sale	Parcel	Address	Sale Date	Sale Price	Style	Size	Age	Base./Fin.	Gar.	Baths	FP	$/Ft^2
76	03 25 205 001	1905 E. Wood	Jun-12	$250,000	2SFB	2,440	1965	Part/Rec	2.0	3.5	0	$102.46
79	03 25 206 012	1403 N. Boro	Apr-11	$222,000	2SF	1,718	1964	Part/Rec	1.0	2.5	1	$129.22
80	03 25 207 017	1413 N. Lama	May-12	$225,000	2SFB	1,828	1964	Part/0	1.0	2.5	1	$123.09
83	03 25 208 002	1341 N. Burning Bush	Aug-12	$255,000	1SFB	1,410	1965	Full/0	2.0	1.5	0	$180.85
84	03 25 209 013	1331 N. Lama	Mar-10	$457,500	2SFB	3,042	1983	Part/0	2.0	3.5	1	$150.39
85	03 25 209 016	1325 N. Lama	Nov-12	$253,000	1SB	2,180	1982	Full/0	2.0	2.0	0	$116.06
86	03 25 209 017	1323 N. Lama	Feb-12	$390,000	2SFB	3,055	1986	Full/0	2.0	3.5	1	$127.66
87	03 25 209 021	2004 Pin Oak	Aug-12	$350,000	1SB	2,180	1984	Full/0	2.0	2.0	1	$160.55
89	03 25 210 002	1424 N. Park	Jun-12	$228,000	1SF	1,564	1965	Slab	2.5	2.5	0	$145.78
91	03 25 211 002	1407 N. Sauk	Apr-12	$200,000	1SFB	1,190	1964	Full/0	2.0	1.5	0	$168.07
95	03 25 213 006	2001 E. Chinkapin Oa	Jun-12	$399,500	2SFB	2,451	1982	Full/0	2.0	2.5	1	$162.99
96	03 25 213 018	1923 Burr Oak	Sep-12	$301,599	2SFB	2,348	1983	Full/0	2.0	2.5	1	$128.45
99	03 25 302 010	1821 E. Euclid	Oct-10	$550,000	1.5SF	2,197	1921	Full/0	2.0	1.5	1	$250.34
101	03 25 303 047	939 Quince	Oct-11	$308,000	2SFB	1,728	1971	Part/Rec	2.0	2.5	1	$178.24
105	03 25 305 010	1819 N. Basswood	Jul-10	$150,000	1SFB	1,506	1966	Part/0	1.5	2.5	0	$99.60
107	03 25 305 039	1002 N. Burning Bush	Jun-12	$261,500	2SF	2,478	1969	Part/0	2.0	2.5	1	$105.53
110	03 25 306 013	1807 Bittersweet	Sep-12	$360,000	2SFB	2,520	1971	Part/0	2.0	2.5	0	$142.86
112	03 25 307 025	1818 Apache	Apr-12	$310,000	2SFB	2,548	1970	Part/0	2.0	2.5	1	$121.66
116	03 25 311 011	820 Heritage	Jan-11	$345,000	2SF	1,853	1991	Full/0	2.0	1.0	0	$186.18
117	03 25 311 030	1106 Heritage	Dec-11	$362,500	2SFB	2,679	1991	Full/0	2.0	2.5	1	$135.31
119	03 25 402 025	2004 E. Ivy	Apr-12	$257,000	1SFB	1,255	1966	Part/0	2.0	2.5	0	$204.78
121	03 25 403 004	2009 E. Ivy	May-10	$440,000	2SF	2,569	1967	Part/Rec	2.0	2.5	1	$171.27
124	03 25 406 003	2005 E. Kiowa	Aug-10	$317,000	2SFB	1,906	1970	Part/0	2.0	2.0	0	$166.32
127	03 25 406 017	2012 E. Hopi	Mar-12	$233,000	1SFB	1,072	1966	Part/Rec	2.5	2.0	0	$217.35
130	03 25 408 016	2018 E. Hope	May-11	$255,000	2SFB	2,304	1972	Part/0	2.0	3.5	1	$110.68
131	03 25 409 001	2017 E. Hopi	Nov-12	$220,000	2SF	1,604	1971	Part/0	2.0	1.5	1	$137.16
Average:												$154.33

APPENDIX II: Elburn Sales Data.

Appendix IIa: All Single-Family House Sales; Elburn Transfer Station.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
Target Area:													
1	11 12 128 001	39w743 Schoolhouse	Fox Dev	Chisholm	2007K053990	May-07	$400,000	2SF	2,833	2006	WD	$141.19	
2	11 12 128 002	39w731 Schoolhouse	Fox Dev	Hatton	2007K076327	Jul-07	$392,000	2SF	2,696	2007	WD	$145.40	
3	11 12 128 003	39w671 Schoolhouse	Fox Dev	Vogt	2007K077077	Jul-07	$373,000	2SF	2,500	2007	WD	$149.20	
4	11 12 128 004	39w697 Schoolhouse	Fox Dev	Kozlowski	2008K022633	Mar-08	$356,500	2SF	2,577	2007	WD	$138.34	
5	11 12 128 004	39w697 Schoolhouse	Lilly Tr	Mertes	2010K021545	Mar-10	$355,000	2SF	2,577	2007	WD	$137.76	
6	11 12 128 004	39w697 Schoolhouse	Kozlowski	Marie Tr	2009K082154	Oct-09	$358,500	2SF	2,577	2007	DT	$139.12	
7	11 12 128 005	39w687 Schoolhouse	ShoDeen Res	Femia	2009K094199	Dec-09	$335,000	2SF	2,253	2009	WD	$148.69	
8	11 12 128 006	39w679 Schoolhouse	Fox Dev	Samples	2007K115589	Nov-07	$390,500	2SF	2,681	2007	WD	$145.65	
9	11 12 128 007	39w667 Schoolhouse	Fox Dev	Manshreck	2007K015042	Jan-07	$376,000	2SF	2,730	2006	WD	$137.73	
10	11 12 128 008	39w657 Schoolhouse	Hammond	Riefke	2012078228	Nov-12	$328,000	1SF	2,021	2007	WD	$162.30	
11	11 12 128 008	39w657 Schoolhouse	Fox Dev	Hammond	2007K101144	Oct-07	$403,000	1SF	2,021	2007	WD	$199.41	
12	11 12 128 009	39w637 Schoolhouse	Momtazee	Mercier	2010K077161	Oct-10	$354,000	2SF	2,808	2006	WD	$126.07	
13	11 12 129 001	39w616 Schoolhouse	Laurie	Carter	2012K048599	Jul-12	$235,000	2SF	1,871	1997	WD	$125.60	
14	11 12 130 003	39w585 Schoolhouse	Buchholz	Loiacono	2007K071743	Jun-07	$383,000	2SF	2,758	1998	WD	$138.87	
15	11 12 130 006	39w553 Schoolhouse	Weich. Relo	Hecker	2008K064184	Jul-08	$338,000	2SF	2,202	1998	SPWD	$153.50	Relo
16	11 12 130 006	39w553 Schoolhouse	Curry	Weich. Relo	2008K064183	Jul-08	$338,000	2SF	2,202	1998	WD	$153.50	Relo
17	11 12 151 008	0n678 King	Fox Dev	Matuska	2008K094046	Dec-08	$436,000	1SF	1,972	2008	WD	$221.10	Open
18	11 12 151 009	0n664 King	Fox Dev	Power	2009K023746	Mar-09	$438,000	2SF	2,858	2009	WD	$153.25	Open
19	11 12 151 010	0n654 King	Fox Dev	Navigato	2007K103429	Oct-07	$466,500	2SF	3,402	2007	WD	$137.13	Open
20	11 12 152 005	0n685 King	ShoDeen Res	Wauters	2012K017210	Mar-12	$379,500	2SF	2,488	2007	WD	$152.53	Golf
21	11 12 152 006	0n665 King	ShoDeen Res	Chojnacki	2011K070893	Nov-11	$385,000	1SF	2,026	2006	WD	$190.03	Golf
22	11 12 152 016	0n591 Berkshire	Fox Dev	Bluemond	2008K000708	Dec-07	$450,167	2SF	2,876	2007	WD	$156.53	Golf
23	11 12 152 017	0n581 Berkshire	Fox Dev	Dieken	2008K061556	Jul-08	$355,051	2SF	2,710	2008	WD	$131.02	Golf
24	11 12 152 018	39w932 Berkshire	ShoDeen Res	O'Leary	2009K074259	Sep-09	$408,000	2SF	2,600	2009	WD	$156.92	Golf
25	11 12 153 001	40w011 Berkshire	Peterson	Odonnell	2012K063240	Jul-12	$360,000	2SF	2,723	2010	WD	$132.21	
26	11 12 153 001	40w011 Berkshire	ShoDeen Res	Peterson	2010K060697	Sep-10	$375,000	2SF	2,723	2010	WD	$137.72	
27	11 12 153 002	40w003 Berkshire	Wyatt	Sharp	2010K059241	Aug-10	$375,000	2SF	2,834	2007	WD	$132.32	
28	11 12 153 002	40w003 Berkshire	Fox Dev	Wyatt	2007K065224	Jun-07	$435,000	2SF	2,834	2007	WD	$153.49	
29	11 12 153 003	39w985 Berkshire	Fox Dev	Fiore	2007K070608	Jun-07	$377,000	2SF	2,512	2007	WD	$150.08	
30	11 12 153 004	39w975 Berkshire	Fox Dev	Foley	2008K031168	Apr-08	$360,000	2SF	2,713	2008	WD	$132.69	
31	11 12 153 005	39w955 Berkshire	Donahue	Bedathur	2012K073065	Oct-12	$354,000	2SF	2,552	2007	WD	$138.71	
32	11 12 153 005	39w955 Berkshire	Fox Dev	Donahue	2007K050863	May-07	$355,000	1SF	2,552	2007	WD	$139.11	
33	11 12 153 006	39w935 Berkshire	Fox Dev	Klemm	2007K073370	Jul-07	$430,000	2SF	2,795	2007	WD	$153.85	
34	11 12 153 007	0n571 Berkshire	ShoDeen Res	Szopinski	2009K074242	Sep-09	$385,000	2SF	2,600	2009	WD	$148.08	
35	11 12 153 008	40w032 Wellington	ShoDeen Res	Kiley	2010K013077	Feb-10	$360,000	2SF	2,680	2009	WD	$134.33	
36	11 12 153 008	40w032 Wellington	Kiley	Vankleeck	2013K003666	Dec-12	$368,000	2SF	2,680	2009	WD	$137.31	
37	11 12 153 009	40w012 Wellington	Fox Dev	Gregory	2007K061509	Jun-07	$391,500	2SF	2,580	2007	WD	$151.74	
38	11 12 153 010	39w994 Wellington	Fox Dev	Swierczewski	2007K091548	Aug-07	$401,000	2SF	2,760	2007	WD	$145.29	
39	11 12 153 011	39w984 Wellington	Fox Dev	Rybarczyk	2007K071993	Jul-07	$339,500	2SF	2,551	2007	WD	$133.09	
40	11 12 153 011	39w984 Wellington	Rybarczyk	Weich. Relo	2008K062588	Jun-08	$320,000	2SF	2,551	2007	WD	$125.44	Relo

Appendix IIa: continued on next page.

Appendix IIa: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
41	11 12 153 012	39w974 Wellington	ShoDeen Res	Wood	2011K057676	Sep-11	$398,000	2SF	2,726	2011	WD	$146.00	
42	11 12 153 013	39w964 Wellington	ShoDeen Res	Ferris	2010K084603	Nov-10	$350,000	2SF	2,486	2010	WD	$140.79	
43	11 12 153 014	39w944 Wellington	Fox Dev	Mathias	2007K126230	Dec-07	$360,000	2SF	2,693	2007	WD	$133.68	
44	11 12 153 015	39w924 Wellington	Fox Dev	Frederick	2007K069196	Jun-07	$380,500	2SF	2,540	2007	WD	$149.80	
45	11 12 153 016	39w914 Wellington	ShoDeen Res	Anderson	2009K079518	Oct-07	$390,000	2SF	2,678	2009	WD	$145.63	Golf
46	11 12 153 017	39w904 Wellington	Fox Dev	Alcaraz	2008K050846	Jun-08	$375,000	2SF	2,859	2008	WD	$131.16	Golf
47	11 12 154 001	39w993 Wellington	ShoDeen Res	Remol	2009K073863	Sep-09	$365,000	2SF	2,725	2009	WD	$133.94	Golf
48	11 12 170 001	39w861 Schoolhouse	Fox Dev	Savoni	2009K012339	Feb-09	$342,000	2SF	2,686	2008	WD	$127.33	Open
49	11 12 170 002	39w851 Schoolhouse	ShoDeen Res	Belmont	2009K067723	Sep-09	$343,500	2SF	2,549	2009	WD	$134.76	
50	11 12 170 004	39w811 Schoolhouse	Fox Dev	Brici	2008K062362	Jul-08	$316,000	2SF	2,498	2008	WD	$126.50	
51	11 12 170 006	39w797 Schoolhouse	Fox Dev	Werner	2007K080807	Jul-07	$393,000	2SF	2,631	2006	WD	$149.37	
52	11 12 170 007	0n716 Bowdish	Fox Dev	O'Connor	2007K011230	Jan-07	$437,000	2SF	2,849	2006	WD	$153.39	Golf
53	11 12 170 010	39w802 Bowdish	Fox Dev	Delaney	2008K000077	Dec-07	$337,500	2SF	2,472	2007	WD	$136.53	
54	11 12 170 010	39w802 Bowdish	Delaney	Sopcak	2011K079058	Nov-11	$285,000	2SF	2,472	2007	WD	$115.29	
55	11 12 170 012	0n700 Bowdish	Wolski	Boleyn	2010K001996	Nov-09	$355,000	2SF	2,594	2006	WD	$136.85	Golf
56	11 12 170 012	0n700 Bowdish	Boleyn	Copeland	2012K000361	Oct-11	$350,000	2SF	2,594	2006	WD	$134.93	Golf
57	11 12 170 014	0n680 Bowdish	Fox Dev	Blake	2007K017964	Feb-07	$362,500	2SF	2,631	2007	WD	$137.78	Golf
58	11 12 170 014	0n680 Bowdish	Blake	Brennan	2011K020673	Mar-11	$295,000	2SF	2,631	2007	WD	$112.12	Golf
59	11 12 170 016	0n660 Bowdish	Fox Dev	Hubbard	2007K019895	Feb-07	$366,000	2SF	2,697	2007	WD	$135.71	Golf
60	11 12 170 016	0n660 Bowdish	Hubbard	Chadwick	2010K087198	Aug-10	$325,000	2SF	2,697	2007	WD	$120.50	Golf
61	11 12 170 016	0n660 Bowdish	Chadwick	Naering	2012K022498	Apr-12	$333,000	2SF	2,697	2007	WD	$123.47	Golf
62	11 12 170 019	0n624 Bowdish	Fox Dev	Joniak	2007K101194	Sep-07	$370,500	2SF	2,701	2007	WD	$137.17	Golf
63	11 12 170 019	0n624 Bowdish	Joniak	Priest	2012K012433	Feb-12	$337,000	2SF	2,701	2007	WD	$124.77	Golf
64	11 12 170 022	0n592 Bowdish	Fox Dev	Simon	2007K100478	Sep-07	$341,000	2SF	2,585	2007	WD	$131.91	Golf
65	11 12 170 023	0n582 Bowdish	Fox Dev	Schwartz	2007K114872	Nov-07	$385,500	2SF	2,676	2007	WD	$144.06	Golf
66	11 12 170 024	0n572 Bowdish	ShoDeen Res	Wang	2009K090746	Nov-09	$320,000	2SF	2,626	2009	WD	$121.86	
67	11 12 170 025	0n552 Bowdish	ShoDeen Res	Hartz	2010K021480	Mar-10	$393,000	2SF	2,822	2010	WD	$139.26	Golf
68	11 12 173 001	0n699 Bowdish	Fox Dev	Mack	2007K125859	Dec-07	$328,500	2SF	2,445	2007	WD	$134.36	
69	11 12 173 002	0n689 Bowdish	Fox Dev	Renda	2007K104043	Oct-07	$335,000	2SF	2,695	2007	WD	$124.30	
70	11 12 173 002	0n689 Bowdish	Renda	Diederich	2012K017222	Mar-12	$359,000	2SF	2,695	2007	WD	$133.21	
71	11 12 173 003	0n679 Bowdish	ShoDeen Res	Hyslop	2010K012349	Feb-10	$295,000	2SF	2,305	2010	WD	$127.98	
72	11 12 173 004	0n669 Bowdish	Fox Dev	Malsimuk	2008K047749	Jun-08	$300,500	2SF	2,494	2008	WD	$120.49	
73	11 12 173 005	0n659 Bowdish	ShoDeen Res	Woltering	2009K086563	Nov-09	$341,000	2SF	2,558	2009	WD	$133.31	
74	11 12 173 006	0n649 Bowdish	ShoDeen Res	Parenza	2012K009494	Feb-12	$341,000	2SF	2,637	2012	WD	$129.31	
75	11 12 173 007	0n629 Bowdish	ShoDeen Res	Altman	2010K024210	Apr-10	$305,000	2SF	2,313	2010	WD	$131.86	
76	11 12 173 007	0n629 Bowdish	Altman	Emerson	2012K037873	Apr-12	$300,000	2SF	2,313	2010	WD	$129.70	
77	11 12 173 008	0n619 Bowdish	Fox Dev	Gassmann	2007K042271	Apr-07	$329,500	2SF	2,644	2006	WD	$124.62	
78	11 12 173 009	0n609 Bowdish	Fox Dev	Juntunen	2007K118828	Sep-08	$299,000	2SF	2,593	2007	WD	$115.31	
79	11 12 173 009	0n609 Bowdish	Juntunen	Bush	2010K027553	Jan-10	$305,000	2SF	2,593	2007	WD	$117.62	
80	11 12 173 010	0n593 Bowdish	Fox Dev	Macy	2008K000059	Sep-08	$299,000	2SF	2,260	2007	WD	$132.30	
81	11 12 173 010	0n593 Bowdish	Macy	Velarde	2011K058659	Aug-11	$272,500	2SF	2,260	2007	WD	$120.58	
82	11 12 173 011	0n583 Bowdish	Fox Dev	Lewis	2007K122900	Dec-07	$317,000	2SF	2,082	2007	WD	$152.26	
83	11 12 173 012	0n573 Bowdish	Fox Dev	Harrison	2008K075436	Sep-08	$325,000	2SF	2,605	2008	WD	$124.76	
84	11 12 173 014	0n543 Bowdish	ShoDeen Res	Zuleta	2011K020232	Mar-11	$320,000	2SF	2,587	2011	WD	$123.70	
85	11 12 173 015	0n533 Bowdish	ShoDeen Res	Levin	2010K021065	Mar-10	$350,000	2SF	2,834	2010	WD	$123.50	

Appendix IIa: continued on next page.

Appendix IIa: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
86	11 12 173 016 0n523	Bowdish	Fox Dev	Pell	2008K068241	Aug-08	$353,500	1SF	2,042	2008	WD	$173.11	
87	11 12 173 017 0n513	Bowdish	Fox Dev	Browne	2007K023150	Feb-07	$338,000	2SF	2,350	2007	WD	$143.83	
88	11 12 173 020 0n696	Fieldstone	Fox Dev	Bradley	2007K070604	Jun-07	$400,500	2SF	2,551	2007	WD	$157.00	
89	11 12 173 021 0n686	Fieldstone	ShoDeen Res	Torres	2009K033323	May-09	$305,000	1SF	2,026	2009	WD	$150.54	
90	11 12 173 025 0n636	Fieldstone	Fox Dev	Cote	2008K088681	Nov-08	$354,000	1SF	2,095	2008	WD	$168.97	
91	11 12 173 027 0n616	Fieldstone	ShoDeen Res	Bishop	2009K049157	Jun-09	$424,500	2SF	2,805	2009	WD	$151.34	
92	11 12 173 035 0n524	Fieldstone	Fox Dev	Wojtkow	2007K092467	Aug-07	$371,000	2SF	2,568	2007	WD	$144.47	
93	11 12 173 035 0n524	Fieldstone	Wojtkow	Elliff	2010K032092	Apr-10	$350,000	2SF	2,568	2007	WD	$136.29	
94	11 12 173 018 0n503	Bowdish	Fox Dev	Gustafson	2007K097249	Sep-07	$424,500	2SF	2,889	2007	WD	$146.94	Xtra Lot
95	11 12 173 018 0n503	Bowdish	Gustafson	Horn	2012K052973	Aug-12	$359,000	2SF	2,889	2007	WD	$124.26	Xtra Lot
96	11 12 173 037 0n502	Fieldstone	ShoDeen Res	Dodds	2012K007630	Feb-12	$388,500	2SF	2,761	2012	WD	$140.71	Xtra Lot
97	11 12 174 001 0n747	Fieldstone	Fox Dev	Sovik	2007K082065	Jul-07	$395,000	2SF	2,572	2007	WD	$153.58	
98	11 12 174 002 0n757	Fieldstone	Fox Dev	Flora	2008K076295	Oct-08	$315,000	2SF	2,076	2008	WD	$151.73	
99	11 12 174 002 0n757	Fieldstone	Chicago TLT	Larocco	2012K089596	Dec-12	$285,000	2SF	2,076	2008	TRD	$137.28	
100	11 12 174 004 0n737	Fieldstone	ShoDeen Res	Lindenfelser	2009K038793	May-09	$346,000	2SF	2,668	2009	WD	$129.69	
101	11 12 174 005 0n727	Fieldstone	ShoDeen Res	Tawzer	2009K040740	May-09	$330,000	2SF	2,549	2008	WD	$129.46	
102	11 12 174 005 0n727	Fieldstone	Tawzer	Nerstad	2012K054401	Aug-12	$320,000	2SF	2,549	2008	WD	$125.54	
103	11 12 174 006 0n697	Fieldstone	Fox Dev	Kilcoyne	2008K091238	Dec-08	$332,000	2SF	2,647	2008	WD	$125.43	
104	11 12 174 006 0n697	Fieldstone	Kilcoyne	Weich. Relo	2009K075860	May-09	$300,000	2SF	2,647	2008	WD	$113.34	Relo
105	11 12 174 006 0n697	Fieldstone	Weich. Relo	Haughan	2009K075861	Sep-09	$300,000	2SF	2,647	2008	WD	$113.34	Relo
106	11 12 174 007 0n687	Fiedlstone	Fox Dev	Zaccagnini	2008K080347	Oct-08	$344,000	2SF	2,551	2008	WD	$134.85	
107	11 12 174 008 0n677	Fieldstone	Fox Dev	Koppenhoefer	2008K043185	May-08	$326,500	2SF	2,703	2008	WD	$120.79	
108	11 12 174 009 0n667	Fieldstone	Fox Dev	Johansen	2007K109017	Oct-07	$313,500	1SF	2,019	2007	WD	$155.27	
109	11 12 174 012 0n637	Fieldstone	Fox Dev	Brueschke	2007K012989	Jan-07	$376,000	2SF	2,727	2007	WD	$137.88	
110	11 12 174 012 0n637	Fieldstone	Mack	Goyke	2010K072672	Dec-12	$325,000	2SF	2,727	2007	WD	$119.18	
111	11 12 174 014 0n617	Fieldstone	ShoDeen Res	Wigdzinski	2011K021075	Mar-11	$345,000	2SF	2,684	2011	WD	$128.54	
112	11 12 174 015 0n597	Fieldstone	ShoDeen Res	Migliore	2010K079083	Nov-10	$298,000	2SF	2,574	2010	WD	$115.77	
113	11 12 174 016 0n587	Fieldstone	Fox Dev	Mielke	2007K118835	Dec-07	$367,500	2SF	2,697	2007	WD	$136.26	
114	11 12 174 017 0n567	Fieldstone	Fox Dev	Ayers	2007K062504	Jun-07	$315,500	2SF	2,182	2007	WD	$144.59	
115	11 12 174 018 0n557	Fieldstone	Fox Dev	Headrick	2008K069288	Aug-08	$331,500	2SF	2,523	2008	WD	$131.39	
116	11 12 174 019 0n541	Fieldstone	ShoDeen Res	Walters	2010K081397	Nov-10	$337,500	2SF	2,761	2010	WD	$122.24	
117	11 12 174 020 0n531	Fieldstone	ShoDeen Res	Farhat	2010K007773	Jan-10	$305,000	2SF	2,334	2009	WD	$130.68	
118	11 12 174 021 0n529	Fieldstone	Fox Dev	Fostiak	2007K101633	Sep-07	$297,000	2SF	2,261	2007	WD	$131.36	
119	11 12 174 023 0n501	Fieldstone	ShoDeen Res	Barnes	2010K066107	Oct-10	$380,000	2SF	2,736	2010	WD	$138.89	Flip
120	11 12 174 023 0n501	Fieldstone	Barnes	Fedewa	2011K028893	Mar-11	$340,000	2SF	2,736	2010	WD	$124.27	Flip
121	11 12 175 002 39w718	Green	Baumgartner	Anderson	2011K051783	Aug-11	$325,000	2SF	2,673	1997	WD	$121.59	
122	11 12 175 007 39w640	Sulley	Foster Bk	Spindle	2012K008842	Feb-12	$225,000	2SF	2,222	1997	WD	$101.26	Part. Base
123	11 12 176 008 39w619	Sulley	RDG Fund	Larson	2010K063963	Sep-10	$265,000	2SF	2,222	1997	WD	$119.26	Golf
124	11 12 176 013 39w555	Sulley	Ruhlig	Pickerill	2011K048719	Aug-11	$300,000	2SF	2,423	1997	WD	$123.81	Golf
125	11 12 176 014 39w543	Sulley	Leung	Stras	2007K080843	Jul-07	$328,000	2SF	2,327	1997	WD	$140.95	Golf
126	11 12 176 015 39w525	Sulley	Ortiz	Black	2013K003442	Sep-12	$250,000	2SF	2,154	1997	WD	$116.06	Golf
127	11 12 176 016 39w665	Sulley	Gustafson	Donovan	2009K073944	Sep-09	$350,000	2SF	2,361	1996	WD	$148.24	Golf
128	11 12 177 003 0n640	Titus	Belloli	Greiner	2008K073086	Sep-08	$347,000	2SF	2,361	1997	WD	$146.97	
129	11 12 177 003 0n640	Titus	Greiner	Saltzman	2012K035820	May-12	$317,500	2SF	2,361	1997	WD	$134.48	
130	11 12 177 008 0n614	Titus	Morphis	Falco	2011K054553	Sep-11	$285,000	2SF	2,371	1997	WD	$120.20	

Appendix IIa: continued on next page.

Appendix IIa: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
131	11 12 178 004	0n662 W. Weaver	Lavoy	Wigdahl	2012K046514	Jun-12	$423,500	1.5SF	2,626	2000	WD	$161.27	Golf
132	11 12 178 010	0n592 W. Weaver	Rauckhorst T:	Mathews	2009K088937	Aug-08	$405,000	2SF	3,093	1999	TRD	$130.94	Golf
133	11 12 178 012	0n562 W. Weaver	Smith	Moore	2009K048567	Jun-09	$370,000	2SF	3,228	1999	WD	$114.62	Golf
134	11 12 178 014	0n532 W. Weaver	Voss	Maxwell		Jan-08	$443,000	2SF	2,961	1998	WD	$149.61	Golf
135	11 12 178 014	0n532 W. Weaver	Maxwell	Lehmann	2011K032974	May-11	$405,000	2SF	2,961	1998	WD	$136.78	Golf
136	11 12 180 007	0n524 Sulley	Anderson	LePore	2007K097095	Sep-07	$329,500	2SF	1,898	1999	WD	$173.60	
137	11 12 180 008	0n502 Sulley	Desilets	Cook	2007K062457	Apr-07	$355,000	2SF	2,370	1999	WD	$149.79	Pool
138	11 12 181 002	0n651 W. Weaver	Britt	Prud Relo	2009K060755	Jul-08	$327,000	2SF	2,440	1998	WD	$134.02	Relo
139	11 12 181 002	0n651 W. Weaver	Prud Relo	Mocchi	2009K060756	Aug-08	$327,000	2SF	2,440	1998	WD	$134.02	Relo
140	11 12 181 016	0n551 W. Weaver	Zellmer	Lyke	2008K066151	Aug-08	$435,000	2SF	2,547	1999	WD	$170.79	
141	11 12 203 003	39w372 W. Curtis	Perez	Bidanset	2007K063084	Jan-07	$388,000	2SF	2,702	2000	WD	$143.60	Golf
142	11 12 203 009	0n812 W. Curtis	Buttitta	Mason	2011K038260	Jun-11	$418,000	2SF	2,847	2000	TRD	$146.82	Golf
143	11 12 203 010	0n796 W. Curtis	Nussbaum	Zonts	2007K069821	May-07	$391,000	2SF	2,673	2000	WD	$146.28	Golf
144	11 12 203 012	0n756 W. Curtis	Gangi	Cisco	2007K051849	May-07	$427,500	2SF	2,713	2000	WD	$157.57	Golf
145	11 12 204 001	39w362 E. Curtis	Sorce	Kaskov	2012K052235	Jul-12	$335,000	1.5SF	2,634	2000	WD	$127.18	Golf/FlipFl
146	11 12 204 001	39w362 E. Curtis	Mohammed	Sorce	2012K019128	Mar-12	$239,000	1.5SF	2,634	2000	WD	$90.74	Golf/Sherif
147	11 12 204 003	39w332 E. Curtis	Schlenker	Bonnike	2010K018380	Mar-10	$363,500	2SF	2,650	1999	WD	$137.17	Golf
148	11 12 205 016	0n855 W. Curtis	Duke	Oldham	2010K047091	Jun-10	$350,000	2SF	2,790	1999	WD	$125.45	
149	11 12 205 027	0n806 E. Curtis	Preston	Drew	2012K020566	Mar-12	$350,000	2SF	2,611	1999	WD	$134.05	
150	11 12 205 028	0n790 E. Curtis	Mundo	Stras	2007K052367	Apr-07	$331,500	2SF	2,278	1999	WD	$145.52	
151	11 12 205 028	0n790 E. Curtis	Risberg	Tolle	2010K066476	Jul-10	$325,000	2SF	2,278	1999	WD	$142.67	
152	11 12 205 029	0n770 E. Curtis	Rothschild	Estabrook	2011K047326	Jul-11	$290,000	2SF	2,179	1999	WD	$133.09	
153	11 12 205 030	0n758 E. Curtis	Taylor	Raider	2011L060722	Sep-11	$320,000	2SF	2,302	1999	WD	$139.01	
154	11 12 253 002	0n681 W. Weaver	Weichert Re	Nelson	2012K042117	Jun-12	$341,000	2SF	2,744	1996	WD	$124.27	Relo
155	11 12 253 002	0n681 W. Weaver	Conroy	Weichert Rel	2012K042116	Jan-12	$341,000	2SF	2,744	1996	WD	$124.27	Relo
156	11 12 253 003	0n664 E. Weaver	Stras	Evans	2007K040049	Mar-07	$387,000	2SF	2,138	1996	WD	$181.01	
157	11 12 253 003	0n664 E. Weaver	Evans	N P Dodge	2008K060814	Jul-08	$355,000	2SF	2,138	1996	WD	$166.04	Flip
158	11 12 253 003	0n664 E. Weaver	N P Dodge	Szklarek	2008K060815	Jul-08	$355,000	2SF	2,138	1996	WD	$166.04	Flip
159	11 12 253 003	0n664 E. Weaver	Szklarek	Barthel	2012K069185	Oct-12	$315,000	2SF	2,138	1996	WD	$147.33	
160	11 12 255 008	0n718 W. Curtis	Beran	Mocchi	2009K067092	Aug-09	$345,000	2SF	2,480	1999	WD	$139.11	
161	11 12 255 010	0n698 W. Curtis	Bailey	Buck	2011K068402	Oct-11	$345,000	2SF	2,789	1998	WD	$123.70	
162	11 12 257 001	0n747 E. Curtis	Knott Tr	Abate Tr	2012K008849	Feb-12	$331,500	1SF	1,999	1998	DT	$165.83	Golf
163	11 12 258 002	39w393 Weaver	Meguiar	Coronado	2008K068684	Dec-07	$300,000	2SF	1,763	1999	WD	$170.16	Golf
164	11 12 258 004	39w373 Weaver	Gregory	Farber	2009K042351	May-09	$382,000	2SF	2,678	1998	WD	$142.64	Golf
165	11 12 258 004	39w373 Weaver	Farber	Moses	2010K050932	Jul-10	$377,000	2SF	2,678	1999	WD	$140.78	Golf
166	11 12 258 004	39w373 Weaver	Moses	Paragon Relo	2011K076821	Oct-11	$330,000	2SF	2,678	1999	WD	$123.23	Golf/Relo
167	11 12 258 004	39w373 Weaver	Paragon Re	Juan	2011K076822	Dec-11	$330,000	2SF	2,678	1999	WD	$123.23	Golf/Relo
168	11 12 258 005	39w363 Weaver	Barnes	Raumschuh	2011K051578	Aug-11	$307,000	2SF	2,193	1999	WD	$139.99	Golf
169	11 12 258 006	39w355 Weaver	Birkinbine	Hauth	2011K075439	Dec-11	$328,000	1.5SF	2,121	1998	WD	$154.64	Golf
170	11 12 277 008	39w118 Weaver	House	Fandel	2010K075360	Oct-10	$307,500	2SF	1,753	1998	WD	$175.41	Golf
171	11 12 277 011	39w084 Weaver	Vieau	Flaherty	2012K004943	Jan-12	$252,000	2SF	2,069	1998	WD	$121.80	Golf

Appendix IIa: continued on next page.

Appendix IIa: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
172	11 12 278 012	39w091 Weaver	Seagren	Bice	2007K077412	Jun-07	$342,000	2SF	1,779	1999	WD	$192.24	
173	11 12 280 001	0n517 King	Fox Dev	Bagaconza	2007K081901	Jul-07	$349,000	2SF	2,559	2007	WD	$136.38	
174	11 12 326 003	0n512 W. Weaver	Cote	Welch	2008K059841	Jun-08	$470,000	2SF	2,682	1997	WD	$175.24	Golf
175	11 12 326 003	0n512 W. Weaver	Welch Tr	Weichert Rel	2010K087456	Apr-10	$395,000	2SF	2,682	1997	TRD	$147.28	Golf/Relo
176	11 12 326 003	0n512 W. Weaver	Weichert Re	Snyder	2010K087457	Nov-10	$357,000	2SF	2,682	1997	SPWD	$133.11	Golf/Relo
177	11 12 326 005	0n504 W. Weaver	Galusha	Houk	2010K040119	Jun-10	$394,000	2SF	2,850	1998	WD	$138.25	Golf Course
Average:												$139.26	
Control Area													
178	11 11 353 008	39w790 Carney	Mendez	Monroe	2008K088052	Nov-08	$450,000	2SF	3,473	2004	WD	$129.57	Golf
179	11 11 379 007	39w715 Carney	Turner	Westra	2009K014272	Aug-08	$472,500	2SF	3,047	2005	WD	$155.07	Golf
180	11 12 226 012	0n865 Bartlett	Amer Bk & Tr	Weisserth	2012K029904	May-12	$355,000	2SF	3,053	2005	WD	$116.28	Golf
181	11 12 255 005	39w411 Sulley	Schmalz	Fleming	2008K042495	May-08	$495,000	2SF	3,297	1999	WD	$150.14	
182	11 12 258 019	39w223 Acres	Twitty	Knierbein	2007K052269	Apr-07	$419,000	2SF	2,394	1999	WD	$175.02	Golf
183	11 12 258 019	39w223 Acres	Knierbein	Moore	2012K047102	Jun-12	$335,000	2SF	2,394	1999	WD	$139.93	Golf
184	11 12 278 010	39w111 Platt	McGhee	N P Dodge	2012K002968	Nov-11	$341,000	2SF	2,615	1998	WD	$130.40	Relo
185	11 12 278 010	39w111 Platt	N P Dodge	Rees	2012K002969	Dec-11	$341,000	2SF	2,615	1998	WD	$130.40	Relo
186	11 12 302 003	0n440 Sulley	Colburn	Kacuba	2008K005330	Jan-08	$320,000	2SF	1,811	1999	WD	$176.70	
187	11 12 302 003	0n440 Sulley	Kacuba	Primacy	2009K089959	Jul-09	$279,500	2SF	1,811	1999	WD	$154.33	Flip
188	11 12 302 003	0n440 Sulley	Primacy	Skinner	2009K089960	Oct-09	$253,000	2SF	1,811	1999	WD	$139.70	Flip
189	11 12 302 005	0n420 Sulley	Overcash	Smith	2007K087476	Aug-07	$362,500	2SF	2,420	1999	WD	$149.79	
190	11 12 302 005	0n420 Sulley	Smith	McGowan	2010K049453	Apr-10	$317,500	2SF	2,420	1999	WD	$131.20	
191	11 12 302 006	0n400 Sulley	Foster	Bowman	2009K075856	Jul-09	$305,000	2SF	2,322	1999	WD	$131.35	
192	11 12 303 001	0n350 Sulley	Burnett	Toma	2010K027014	Apr-10	$278,000	2SF	2,256	1997	WD	$123.23	
193	11 12 303 004	0n320 Sulley	Tolley	Avery	2010K040780	Jun-10	$330,000	2SF	2,339	1999	WD	$141.09	
194	11 12 303 009	0n284 Sulley	Gray	Majewski	2011K053965	Aug-11	$240,000	2SF	2,297	1996	WD	$104.48	
195	11 12 327 002	0n445 Sulley	Fields	Kuglich	2012K082709	Nov-12	$305,000	2SF	2,425	1995	WD	$125.77	
196	11 12 327 006	39w784 Terney	N Star Tr	Koenig	2009K014281	Dec-08	$290,000	2SF	2,302	1996	TRD	$125.98	
197	11 12 329 007	39w694 Terney	Huling	Giaimo	2009K063399	Aug-09	$320,000	2SF	2,254	1995	WD	$141.97	
198	11 12 329 008	39w684 Terney	Warcup	Titus	2012K039727	Jun-12	$315,000	2SF	2,349	1995	WD	$134.10	
199	11 12 329 009	39w674 Terney	Little	Forni	2010K036564	May-10	$279,000	2SF	2,302	1996	WD	$121.20	
200	11 12 330 005	0n325 Sulley	Hyslop	Spry	2009K080901	Oct-09	$362,500	2SF	2,506	1998	WD	$144.65	
201	11 12 330 007	0n305 Sulley	Julien	Gniewosz	2009K036379	Apr-09	$300,000	2SF	2,197	1998	WD	$136.55	
202	11 12 330 009	0n342 Sulley	Schuetz	Prud Relo	2012K064029	Mar-12	$260,000	2SF	2,393	1996	WD	$108.65	Relo
203	11 12 330 009	0n342 Sulley	Prud Relo	Bagwell	2012K064030	Aug-12	$260,000	2SF	2,393	1996	WD	$108.65	Relo
204	11 12 331 002	0n333 Sulley	Goldstein	Regole	2011K024937	Jan-11	$279,000	2SF	2,163	1997	WD	$128.99	Open
205	11 12 331 005	0n303 Sulley	Carberry	Adkins	2008K071600	Aug-08	$326,500	2SF	2,406	1996	WD	$135.70	
206	11 12 331 006	0n293 Sulley	Cartus Fin	Noroozi	2007K041565	Jan-07	$336,000	2SF	2,462	1996	WD	$136.47	
207	11 12 331 006	0n293 Sulley	Noroozi Tr	Grothjan	2011K034447	Jun-11	$285,000	2SF	2,462	1996	TRD	$115.76	
208	11 12 332 001	39w697 Terney	Sirva Relo	Egan	2007K028771	Feb-07	$355,000	2SF	2,259	1998	WD	$157.15	
209	11 12 332 015	39w682 Harvey	Landamerica	Gross	2007K019784	Jan-07	$315,000	2SF	2,403	1995	SPWD	$131.09	Bank
210	11 12 333 002	39w651 Harvey	Nguyen	Weaver	2007K096257	Aug-07	$305,000	2SF	2,249	1998	WD	$135.62	

Appendix IIa: continued on next page.

Appendix IIa: continued.

Sale	Parcel	Address	Grantor	Grantee	Doc #	Sale Date	Sale Price	Style	Size	Age	Deed	$/FT^2	Notes
211	11 12 352 001	39w828 Benton	Dibartolo	Belloli	2008K091936	Oct-08	$510,000	2SF	2,884	2003	WD	$176.84	Pool
212	11 12 352 003	39w800 Benton	Donnay	Glover	2008K075518	Jan-08	$465,000	2SF	2,943	2003	WD	$158.00	
213	11 12 352 007	39w825 Benton	Mizera	Fordham	2010K066149	Sep-10	$410,000	2SF	2,848	2003	WD	$143.96	Open
214	11 12 353 002	39w900 Carney	Hewick	Warcup	2012K033870	May-12	$415,000	2SF	3,153	2004	WD	$131.62	Golf
215	11 12 354 002	39w893 Carney	Engberg	Walter	2008K062203	Jul-08	$520,000	2SF	3,320	2005	WD	$156.63	Golf
216	11 12 354 002	39w893 Carney	Walter	Nettles Tr	2011K055941	Aug-11	$460,000	2SF	3,320	2005	DT	$138.55	Golf
217	11 12 354 006	39w813 Carney	BTilly	Pulford	2008K047301	Oct-07	$465,000	2SF	3,292	2005	WD	$141.25	Golf
218	11 12 354 008	39w795 Carney	Reynolds	Timko	2009K078617	Oct-09	$499,000	2SF	3,374	2005	WD	$147.90	Golf
219	11 12 377 002	39w660 Benton	Timko	Prud Relo	2008K054977	Feb-08	$417,000	2SF	2,771	1997	WD	$150.49	Relo
220	11 12 377 004	39w762 Benton	Kearney	Greif	2008K072634	Aug-08	$443,000	2SF	2,959	2003	WD	$149.71	
221	11 12 377 005	39w742 Benton	Fowler	Adair	2010K042974	Jun-10	$460,000	2SF	3,019	2003	WD	$152.37	
222	11 12 377 007	39w702 Benton	Heimbuch	Thompson	2011K046734	Jul-11	$415,000	2SF	3,184	2003	WD	$130.34	
223	11 12 377 009	39w660 Benton	Prud Relo	Myatt	2008K054978	Feb-08	$417,000	2SF	2,771	1997	WD	$150.49	Relo
224	11 12 378 001	39w673 Benton	McCaffrey	Macritchie	2008K068109	Jun-08	$490,000	2SF	3,240	2002	WD	$151.23	
225	11 12 378 003	39w653 Benton	Schoembs	Perrotta	2012K061870	Jul-12	$375,000	2SF	3,143	2002	WD	$119.31	
226	11 12 378 008	0n120 Yates	Kornas	Van Rensburg	2012K048153	Jul-12	$360,000	2SF	2,522	1997	WD	$142.74	
227	11 12 378 011	39w664 Carney	McGee	Watson	2009K079173	Sep-09	$465,000	2SF	2,718	1999	WD	$171.08	
228	11 12 378 012	0n199 Holland	Bjornstad	Mikuliza	2007K120468	Nov-07	$390,000	2SF	2,866	2003	WD	$136.08	
229	11 12 378 014	0n169 Holland	Jamroz	Gitaadji	2010K051464	Aug-10	$427,500	2SF	3,049	2003	WD	$140.21	
230	11 12 378 018	0n079 Holland	Eckstrom	Hemphill	2009K037509	May-08	$385,000	2SF	3,123	2003	WD	$123.28	
231	11 12 378 018	0n079 Holland	Hemphill	Morrissey	2012K044581	Jul-12	$378,000	2SF	3,123	2003	WD	$121.04	
232	11 12 378 019	0n069 Holland	Schooley Tr	O'Brien	2009K050418	Jun-09	$440,000	2SF	3,563	2003	TRD	$123.49	
233	11 12 378 019	0n069 Holland	O'Brien	Joniak	2012K014160	Feb-12	$408,000	2SF	3,563	2003	WD	$114.51	
234	11 12 379 006	39w735 Carney	Pasquini	Noonan	2012K067237	Sep-12	$469,000	2SF	3,340	2005	WD	$140.42	
235	11 12 382 001	39w711 Benton	Jenkins	Morgan	2008K073929	Aug-08	$485,000	2SF	3,186	2003	WD	$152.23	
236	11 12 382 002	0n180 Holland	Hyler Tr	O'Malley	2010K044812	Jun-10	$523,000	2SF	2,975	2003	WD	$175.80	Golf
237	11 12 382 005	0n120 Holland	Weber	Poskonka	2009K046781	Jun-09	$400,000	2SF	3,613	2003	WD	$110.71	Golf
Average:												$138.62	

Appendix IIb: Characteristics of Arm's Length Single-Family House Sales; Elburn Transfer Station.

Sale	Parcel	Address	Sale Date	Sale Price	Size	Age	Base. Fin.	Gar.	Baths	FP	$/Ft^2	Golf	Open Space
Target Area:													
1	11 12 128 001	39w743 Schoolhouse	May-07	$400,000	2,833	2006	0	3	2.5	1	$141.19	0	0
2	11 12 128 002	39w731 Schoolhouse	Jul-07	$392,000	2,696	2007	0	3	3	1	$145.40	0	0
3	11 12 128 003	39w671 Schoolhouse	Jul-07	$373,000	2,500	2007	0	3	2.5	1	$149.20	0	0
4	11 12 128 004	39w697 Schoolhouse	Mar-08	$356,500	2,577	2007	0	3	2.5	1	$138.34	0	0
5	11 12 128 004	39w697 Schoolhouse	Mar-10	$355,000	2,577	2007	0	3	2.5	1	$137.76	0	0
6	11 12 128 004	39w697 Schoolhouse	Oct-09	$358,500	2,577	2007	0	3	2.5	1	$139.12	0	0
7	11 12 128 005	39w687 Schoolhouse	Dec-09	$335,000	2,253	2009	0	3	2.5	1	$148.69	0	0
8	11 12 128 006	39w679 Schoolhouse	Nov-07	$390,500	2,681	2007	0	3	3.5	1	$145.65	0	0
9	11 12 128 007	39w667 Schoolhouse	Jan-07	$376,000	2,730	2006	0	3	2.5	1	$137.73	0	0
10	11 12 128 008	39w657 Schoolhouse	Nov-12	$328,000	2,021	2007	0	3	2	1	$162.30	0	0
11	11 12 128 008	39w657 Schoolhouse	Oct-07	$403,000	2,021	2007	0	3	2	1	$199.41	0	0
12	11 12 128 009	39w637 Schoolhouse	Oct-10	$354,000	2,808	2006	0	2	4	1	$126.07	0	0
13	11 12 129 001	39w616 Schoolhouse	Jul-12	$235,000	1,871	1997	0	2	2.5	0	$125.60	0	0
14	11 12 130 003	39w585 Schoolhouse	Jun-07	$383,000	2,758	1998	0	2	2.5	1	$138.87	0	0
17	11 12 151 008	0n678 King	Dec-08	$436,000	1,972	2008	0	2	2	1	$221.10	0	1
18	11 12 151 009	0n664 King	Mar-09	$438,000	2,858	2009	0	3	4	1	$153.25	0	1
19	11 12 151 010	0n654 King	Oct-07	$466,500	3,402	2007	0	2	2.5	1	$137.13	0	1
20	11 12 152 005	0n685 King	Mar-12	$379,500	2,488	2007	0	3	3.5	1	$152.53	1	0
21	11 12 152 006	0n665 King	Nov-11	$385,000	2,026	2006	0	3	3	1	$190.03	1	0
22	11 12 152 016	0n591 Berkshire	Dec-07	$450,167	2,876	2007	0	3	2.5	1	$156.53	1	0
23	11 12 152 017	0n581 Berkshire	Jul-08	$355,051	2,710	2008	0	3	2.5	1	$131.02	1	0
24	11 12 152 018	39w932 Berkshire	Sep-09	$408,000	2,600	2009	0	3	2.5	1	$156.92	1	0
25	11 12 153 001	40w011 Berkshire	Jul-12	$360,000	2,723	2010	0	3	2.5	1	$132.21	0	0
26	11 12 153 001	40w011 Berkshire	Sep-10	$375,000	2,723	2010	0	3	2.5	1	$137.72	0	0
27	11 12 153 002	40w003 Berkshire	Aug-10	$375,000	2,834	2007	0	2	4	1	$132.32	0	0
28	11 12 153 002	40w003 Berkshire	Jun-07	$435,000	2,834	2007	0	2	4	1	$153.49	0	0
29	11 12 153 003	39w985 Berkshire	Jun-07	$377,000	2,512	2007	0	3	2.5	0	$150.08	0	0
30	11 12 153 004	39w975 Berkshire	Apr-08	$360,000	2,713	2008	0	3	3	0	$132.69	0	0
31	11 12 153 005	39w955 Berkshire	Oct-12	$354,000	2,552	2007	0	2	2.5	0	$138.71	0	0
32	11 12 153 005	39w955 Berkshire	May-07	$355,000	2,552	2007	0	2	2.5	0	$139.11	0	0
33	11 12 153 006	39w935 Berkshire	Jul-07	$430,000	2,795	2007	0	3	3.5	1	$153.85	0	0
34	11 12 153 007	0n571 Berkshire	Sep-09	$385,000	2,600	2009	0	3	2.5	1	$148.08	0	0
35	11 12 153 008	40w032 Wellington	Feb-10	$360,000	2,680	2009	0	3	3.5	1	$134.33	0	0
36	11 12 153 008	40w032 Wellington	Dec-12	$368,000	2,680	2009	0	3	3.5	1	$137.31	0	0
37	11 12 153 009	40w012 Wellington	Jun-07	$391,500	2,580	2007	0	3	2.5	1	$151.74	0	0
38	11 12 153 010	39w994 Wellington	Aug-07	$401,000	2,760	2007	0	3	5	1	$145.29	0	0
39	11 12 153 011	39w984 Wellington	Jul-07	$339,500	2,551	2007	0	2	2.5	1	$133.09	0	0
41	11 12 153 012	39w974 Wellington	Sep-11	$398,000	2,726	2011	0	3	4.5	1	$146.00	0	0
42	11 12 153 013	39w964 Wellington	Nov-10	$350,000	2,486	2010	0	3	2	1	$140.79	0	0
43	11 12 153 014	39w944 Wellington	Dec-07	$360,000	2,693	2007	0	3	3	1	$133.68	0	0
44	11 12 153 015	39w924 Wellington	Jun-07	$380,500	2,540	2007	0	3	2.5	0	$149.80	0	0
45	11 12 153 016	39w914 Wellington	Oct-07	$390,000	2,678	2009	0	3	2	1	$145.63	1	0
46	11 12 153 017	39w904 Wellington	Jun-08	$375,000	2,859	2008	0	3	2.5	1	$131.16	1	0
47	11 12 154 001	39w993 Wellington	Sep-09	$365,000	2,725	2009	0	3	2.5	1	$133.94	1	0
48	11 12 170 001	39w861 Schoolhouse	Feb-09	$342,000	2,686	2008	0	2	2.5	1	$127.33	0	1
49	11 12 170 002	39w851 Schoolhouse	Sep-09	$343,500	2,549	2009	0	2	3.5	1	$134.76	0	0
50	11 12 170 004	39w811 Schoolhouse	Jul-08	$316,000	2,498	2008	0	2	3.5	1	$126.50	0	0
51	11 12 170 006	39w797 Schoolhouse	Jul-07	$393,000	2,631	2006	0	3	2.5	1	$149.37	0	0
52	11 12 170 007	0n716 Bowdish	Jan-07	$437,000	2,849	2006	0	2	2.5	1	$153.39	1	0
53	11 12 170 010	39w802 Bowdish	Dec-07	$337,500	2,472	2007	0	2	2.5	1	$136.53	0	0
54	11 12 170 010	39w802 Bowdish	Nov-11	$285,000	2,472	2007	0	2	2.5	1	$115.29	0	0
55	11 12 170 012	0n700 Bowdish	Nov-09	$355,000	2,594	2006	0	3	2.5	1	$136.85	1	0
56	11 12 170 012	0n700 Bowdish	Oct-11	$350,000	2,594	2006	0	3	2.5	1	$134.93	1	0
57	11 12 170 014	0n680 Bowdish	Feb-07	$362,500	2,631	2007	0	2	2.5	0	$137.78	1	0
58	11 12 170 014	0n680 Bowdish	Mar-11	$295,000	2,631	2007	0	2	2.5	0	$112.12	1	0
59	11 12 170 016	0n660 Bowdish	Feb-07	$366,000	2,697	2007	0	2	2.5	1	$135.71	1	0
60	11 12 170 016	0n660 Bowdish	Aug-10	$325,000	2,697	2007	0	2	2.5	1	$120.50	1	0

Appendix IIb: Continued on Next Page.

Appendix IIb: Continued.

Sale	Parcel	Address	Sale Date	Sale Price	Size	Age	Base. Fin.	Gar.	Baths	FP	$/Ft^2	Golf	Open Space
61	11 12 170 016 0n660	Bowdish	Apr-12	$333,000	2,697	2007	0	2	2.5	1	$123.47	1	0
62	11 12 170 019 0n624	Bowdish	Sep-07	$370,500	2,701	2007	0	2	3	1	$137.17	1	0
63	11 12 170 019 0n624	Bowdish	Feb-12	$337,000	2,701	2007	0	2	3	1	$124.77	1	0
64	11 12 170 022 0n592	Bowdish	Sep-07	$341,000	2,585	2007	0	2	2.5	1	$131.91	1	0
65	11 12 170 023 0n582	Bowdish	Nov-07	$385,500	2,676	2007	0	2	2.5	1	$144.06	1	0
66	11 12 170 024 0n572	Bowdish	Nov-09	$320,000	2,626	2009	0	2	2.5	1	$121.86	0	0
67	11 12 170 025 0n552	Bowdish	Mar-10	$393,000	2,822	2010	0	2	3.5	1	$139.26	1	0
68	11 12 173 001 0n699	Bowdish	Dec-07	$328,500	2,445	2007	0	3	2.5	1	$134.36	0	0
69	11 12 173 002 0n689	Bowdish	Oct-07	$335,000	2,695	2007	0	2	3.5	1	$124.30	0	0
70	11 12 173 002 0n689	Bowdish	Mar-12	$359,000	2,695	2007	0	2	3.5	1	$133.21	0	0
71	11 12 173 003 0n679	Bowdish	Feb-10	$295,000	2,305	2010	0	2	2.5	1	$127.98	0	0
72	11 12 173 004 0n669	Bowdish	Jun-08	$300,500	2,494	2008	0	2	2.5	1	$120.49	0	0
73	11 12 173 005 0n659	Bowdish	Nov-09	$341,000	2,558	2009	0	2	2.5	1	$133.31	0	0
74	11 12 173 006 0n649	Bowdish	Feb-12	$341,000	2,637	2012	0	2	2.5	1	$129.31	0	0
75	11 12 173 007 0n629	Bowdish	Apr-10	$305,000	2,313	2010	0	2	2.5	1	$131.86	0	0
76	11 12 173 007 0n629	Bowdish	Apr-12	$300,000	2,313	2010	0	2	2.5	1	$129.70	0	0
77	11 12 173 008 0n619	Bowdish	Apr-07	$329,500	2,644	2006	0	2	2.5	1	$124.62	0	0
78	11 12 173 009 0n609	Bowdish	Sep-08	$299,000	2,593	2007	0	2	2.5	1	$115.31	0	0
79	11 12 173 009 0n609	Bowdish	Jan-10	$305,000	2,593	2007	0	2	2.5	1	$117.62	0	0
80	11 12 173 010 0n593	Bowdish	Sep-08	$299,000	2,260	2007	0	2	3	1	$132.30	0	0
81	11 12 173 010 0n593	Bowdish	Aug-11	$272,500	2,260	2007	0	2	3	1	$120.58	0	0
82	11 12 173 011 0n583	Bowdish	Dec-07	$317,000	2,082	2007	0	2	2.5	1	$152.26	0	0
83	11 12 173 012 0n573	Bowdish	Sep-08	$325,000	2,605	2008	0	2	2.5	1	$124.76	0	0
84	11 12 173 014 0n543	Bowdish	Mar-11	$320,000	2,587	2011	0	2	2.5	1	$123.70	0	0
85	11 12 173 015 0n533	Bowdish	Mar-10	$350,000	2,834	2010	0	2	3.5	1	$123.50	0	0
86	11 12 173 016 0n523	Bowdish	Aug-08	$353,500	2,042	2008	0	2	2	1	$173.11	0	0
87	11 12 173 017 0n513	Bowdish	Feb-07	$338,000	2,350	2007	0	2	2.5	1	$143.83	0	0
88	11 12 173 020 0n696	Fieldstone	Jun-07	$400,500	2,551	2007	0	3	2.5	1	$157.00	0	0
89	11 12 173 021 0n686	Fieldstone	May-09	$305,000	2,026	2009	0	2	2	1	$150.54	0	0
90	11 12 173 025 0n636	Fieldstone	Nov-08	$354,000	2,095	2008	0	2	2	1	$168.97	0	0
91	11 12 173 027 0n616	Fieldstone	Jun-09	$424,500	2,805	2009	0	2	3.5	1	$151.34	0	0
92	11 12 173 035 0n524	Fieldstone	Aug-07	$371,000	2,568	2007	0	2	2.5	1	$144.47	0	0
93	11 12 173 035 0n524	Fieldstone	Apr-10	$350,000	2,568	2007	0	2	2.5	1	$136.29	0	0
97	11 12 174 001 0n747	Fieldstone	Jul-07	$395,000	2,572	2007	0	3	2.5	1	$153.58	0	0
98	11 12 174 002 0n757	Fieldstone	Oct-08	$315,000	2,076	2008	0	2	2.5	1	$151.73	0	0
99	11 12 174 002 0n757	Fieldstone	Dec-12	$285,000	2,076	2008	0	2	2.5	1	$137.28	0	0
100	11 12 174 004 0n737	Fieldstone	May-09	$346,000	2,668	2009	0	2	2.5	1	$129.69	0	0
101	11 12 174 005 0n727	Fieldstone	May-09	$330,000	2,549	2008	0	2	3	1	$129.46	0	0
102	11 12 174 005 0n727	Fieldstone	Aug-12	$320,000	2,549	2008	0	2	3	1	$125.54	0	0
103	11 12 174 006 0n697	Fieldstone	Dec-08	$332,000	2,647	2008	0	2	3	0	$125.43	0	0
106	11 12 174 007 0n687	Fiedlstone	Oct-08	$344,000	2,551	2008	0	2	2.5	1	$134.85	0	0
107	11 12 174 008 0n677	Fieldstone	May-08	$326,500	2,703	2008	0	2	2.5	1	$120.79	0	0
108	11 12 174 009 0n667	Fieldstone	Oct-07	$313,500	2,019	2007	0	2	2	1	$155.27	0	0
109	11 12 174 012 0n637	Fieldstone	Jan-07	$376,000	2,727	2007	0	2	2.5	1	$137.88	0	0
110	11 12 174 012 0n637	Fieldstone	Dec-12	$325,000	2,727	2007	0	2	2.5	1	$119.18	0	0
111	11 12 174 014 0n617	Fieldstone	Mar-11	$345,000	2,684	2011	0	2	2.5	1	$128.54	0	0
112	11 12 174 015 0n597	Fieldstone	Nov-10	$298,000	2,574	2010	0	2	3	1	$115.77	0	0
113	11 12 174 016 0n587	Fieldstone	Dec-07	$367,500	2,697	2007	0	2	2.5	1	$136.26	0	0
114	11 12 174 017 0n567	Fieldstone	Jun-07	$315,500	2,182	2007	0	2	2.5	1	$144.59	0	0
115	11 12 174 018 0n557	Fieldstone	Aug-08	$331,500	2,523	2008	0	2	2.5	1	$131.39	0	0
116	11 12 174 019 0n541	Fieldstone	Nov-10	$337,500	2,761	2010	0	2	2.5	1	$122.24	0	0
117	11 12 174 020 0n531	Fieldstone	Jan-10	$305,000	2,334	2009	0	2	2.5	1	$130.68	0	0
118	11 12 174 021 0n529	Fieldstone	Sep-07	$297,000	2,261	2007	0	2	2.5	1	$131.36	0	0
121	11 12 175 002 39w718	Green	Aug-11	$325,000	2,673	1997	0	2	2.5	1	$121.59	0	0
123	11 12 176 008 39w619	Sulley	Sep-10	$265,000	2,222	1997	0	2	2.5	1	$119.26	1	0
124	11 12 176 013 39w555	Sulley	Aug-11	$300,000	2,423	1997	0	2	2.5	1	$123.81	1	0
125	11 12 176 014 39w543	Sulley	Jul-07	$328,000	2,327	1997	0	3	2.5	1	$140.95	1	0
126	11 12 176 015 39w525	Sulley	Sep-12	$250,000	2,154	1997	0	2	2.5	1	$116.06	1	0
127	11 12 176 016 39w665	Sulley	Sep-09	$350,000	2,361	1996	0	2	2.5	1	$148.24	1	0
128	11 12 177 003 0n640	Titus	Sep-08	$347,000	2,361	1997	0	2	2.5	1	$146.97	0	0
129	11 12 177 003 0n640	Titus	May-12	$317,500	2,361	1997	0	2	2.5	1	$134.48	0	0

Appendix IIb: Continued on Next Page.

Appendix IIb: Continued.

Sale	Parcel	Address	Sale Date	Sale Price	Size	Age	Base. Fin.	Gar.	Baths	FP	$/Ft^2	Golf	Open Space
130	11 12 177 008	0n614 Titus	Sep-11	$285,000	2,371	1997	0	2	2.5	1	$120.20	0	0
131	11 12 178 004	0n662 W. Weaver	Jun-12	$423,500	2,626	2000	1497	2	3	1	$161.27	1	0
132	11 12 178 010	0n592 W. Weaver	Aug-08	$405,000	3,093	1999	1300	3	2.5	1	$130.94	1	0
133	11 12 178 012	0n562 W. Weaver	Jun-09	$370,000	3,228	1999	0	3	3.5	1	$114.62	1	0
134	11 12 178 014	0n532 W. Weaver	Jan-08	$443,000	2,961	1998	0	2	2.5	1	$149.61	1	0
135	11 12 178 014	0n532 W. Weaver	May-11	$405,000	2,961	1998	0	2	2.5	1	$136.78	1	0
136	11 12 180 007	0n524 Sulley	Sep-07	$329,500	1,898	1999	0	2	2.5	1	$173.60	0	0
140	11 12 181 016	0n551 W. Weaver	Aug-08	$435,000	2,547	1999	0	2	2.5	1	$170.79	0	0
141	11 12 203 003	39w372 W. Curtis	Jan-07	$388,000	2,702	2000	0	2	2.5	1	$143.60	1	0
142	11 12 203 009	0n812 W. Curtis	Jun-11	$418,000	2,847	2000	1263	3	3	1	$146.82	1	0
143	11 12 203 010	0n796 W. Curtis	May-07	$391,000	2,673	2000	0	2	2.5	1	$146.28	1	0
144	11 12 203 012	0n756 W. Curtis	May-07	$427,500	2,713	2000	0	2	2.5	1	$157.57	1	0
147	11 12 204 003	39w332 E. Curtis	Mar-10	$363,500	2,650	1999	1134	2	2.5	1	$137.17	1	0
148	11 12 205 016	0n855 W. Curtis	Jun-10	$350,000	2,790	1999	0	3	2.5	1	$125.45	0	0
149	11 12 205 027	0n806 E. Curtis	Mar-12	$350,000	2,611	1999	0	2	2.5	1	$134.05	0	0
150	11 12 205 028	0n790 E. Curtis	Apr-07	$331,500	2,278	1999	1064	2	2.5	1	$145.52	0	0
151	11 12 205 028	0n790 E. Curtis	Jul-10	$325,000	2,278	1999	1064	2	2.5	1	$142.67	0	0
152	11 12 205 029	0n770 E. Curtis	Jul-11	$290,000	2,179	1999	0	2	2.5	0	$133.09	0	0
153	11 12 205 030	0n758 E. Curtis	Sep-11	$320,000	2,302	1999	0	2	2.5	1	$139.01	0	0
156	11 12 253 003	0n664 E. Weaver	Mar-07	$387,000	2,138	1996	909	2	2.5	0	$181.01	0	0
159	11 12 253 003	0n664 E. Weaver	Oct-12	$315,000	2,138	1996	909	2	2.5	0	$147.33	0	0
160	11 12 255 008	0n718 W. Curtis	Aug-09	$345,000	2,480	1999	0	2	2.5	1	$139.11	0	0
161	11 12 255 010	0n698 W. Curtis	Oct-11	$345,000	2,789	1998	0	2	2.5	1	$123.70	0	0
162	11 12 257 001	0n747 E. Curtis	Feb-12	$331,500	1,999	1998	1699	2	2	1	$165.83	1	0
163	11 12 258 002	39w393 Weaver	Dec-07	$300,000	1,763	1999	0	2	2.5	1	$170.16	1	0
164	11 12 258 004	39w373 Weaver	May-09	$382,000	2,678	1998	1142	2	2.5	1	$142.64	1	0
165	11 12 258 004	39w373 Weaver	Jul-10	$377,000	2,678	1999	1142	2	2.5	1	$140.78	1	0
168	11 12 258 005	39w363 Weaver	Aug-11	$307,000	2,193	1999	1009	2	2.5	1	$139.99	1	0
169	11 12 258 006	39w355 Weaver	Dec-11	$328,000	2,121	1998	1335	2	2.5	1	$154.64	1	0
170	11 12 277 008	39w118 Weaver	Oct-10	$307,500	1,753	1998	657	2	3.5	1	$175.41	1	0
171	11 12 277 011	39w084 Weaver	Jan-12	$252,000	2,069	1998	864	2	2.5	1	$121.80	1	0
172	11 12 278 012	39w091 Weaver	Jun-07	$342,000	1,779	1999	0	2	2.5	1	$192.24	0	0
173	11 12 280 001	0n517 King	Jul-07	$349,000	2,559	2007	0	3	2.5	1	$136.38	0	0
174	11 12 326 003	0n512 W. Weaver	Jun-08	$470,000	2,682	1997	1318	2	2.5	1	$175.24	1	0
177	11 12 326 005	0n504 W. Weaver	Jun-10	$394,000	2,850	1998	0	3	2.5	1	$138.25	1	0
Average:											$139.79	0	0
Control Area													
178	11 11 353 008	39w790 Carney	Nov-08	$450,000	3,473	2004	0	3	4	2	$129.57	1	0
179	11 11 379 007	39w715 Carney	Aug-08	$472,500	3,047	2005	0	3	3.5	1	$155.07	1	0
180	11 12 226 012	0n865 Bartlett	May-12	$355,000	3,053	2005	0	2	3.5	0	$116.28	1	0
181	11 12 255 005	39w411 Sulley	May-08	$495,000	3,297	1999	1448	3	4.5	1	$150.14	0	0
182	11 12 258 019	39w223 Acres	Apr-07	$419,000	2,394	1999	0	2	2.5	1	$175.02	1	0
183	11 12 258 019	39w223 Acres	Jun-12	$335,000	2,394	1999	0	2	2.5	1	$139.93	1	0
186	11 12 302 003	0n440 Sulley	Jan-08	$320,000	1,811	1999	0	2	2.5	1	$176.70	0	0
189	11 12 302 005	0n420 Sulley	Aug-07	$362,500	2,420	1999	0	2	2.5	1	$149.79	0	0
190	11 12 302 005	0n420 Sulley	Apr-10	$317,500	2,420	1999	0	2	2.5	1	$131.20	0	0
191	11 12 302 006	0n400 Sulley	Jul-09	$305,000	2,322	1999	0	2	2.5	1	$131.35	0	0
192	11 12 303 001	0n350 Sulley	Apr-10	$278,000	2,256	1997	934	2	3	1	$123.23	0	0
193	11 12 303 004	0n320 Sulley	Jun-10	$330,000	2,339	1999	0	2	2.5	1	$141.09	0	0
194	11 12 303 009	0n284 Sulley	Aug-11	$240,000	2,297	1996	0	2	2.5	1	$104.48	0	0
195	11 12 327 002	0n445 Sulley	Nov-12	$305,000	2,425	1995	0	2	3	1	$125.77	0	0
196	11 12 327 006	39w784 Terney	Dec-08	$290,000	2,302	1996	0	2	2.5	1	$125.98	0	0
197	11 12 329 007	39w694 Terney	Aug-09	$320,000	2,254	1995	944	2	2.5	1	$141.97	0	0
198	11 12 329 008	39w684 Terney	Jun-12	$315,000	2,349	1995	784	3	3.5	1	$134.10	0	0
199	11 12 329 009	39w674 Terney	May-10	$279,000	2,302	1996	0	2	2.5	1	$121.20	0	0
200	11 12 330 005	0n325 Sulley	Oct-09	$362,500	2,506	1998	0	3	3	1	$144.65	0	0
201	11 12 330 007	0n305 Sulley	Apr-09	$300,000	2,197	1998	0	2	2.5	1	$136.55	0	0
204	11 12 331 002	0n333 Sulley	Jan-11	$279,000	2,163	1997	0	2	2.5	1	$128.99	0	1

Appendix IIb: Continued on Next Page

Appendix IIb: Continued.

Sale	Parcel	Address	Sale Date	Sale Price	Size	Age	Base. Fin.	Gar.	Baths	FP	$/Ft^2	Golf	Open Space
205	11 12 331 005	0n303 Sulley	Aug-08	$326,500	2,406	1996	0	2	2.5	1	$135.70	0	0
206	11 12 331 006	0n293 Sulley	Jan-07	$336,000	2,462	1996	0	2	2.5	1	$136.47	0	0
207	11 12 331 006	0n293 Sulley	Jun-11	$285,000	2,462	1996	0	2	2.5	1	$115.76	0	0
208	11 12 332 001	39w697 Terney	Feb-07	$355,000	2,259	1998	0	2	2.5	1	$157.15	0	0
210	11 12 333 002	39w651 Harvey	Aug-07	$305,000	2,249	1998	0	3	2.5	2	$135.62	0	0
212	11 12 352 003	39w800 Benton	Jan-08	$465,000	2,943	2003	1456	3	2.5	1	$158.00	0	0
213	11 12 352 007	39w825 Benton	Sep-10	$410,000	2,848	2003	0	3	2.5	1	$143.96	0	1
214	11 12 353 002	39w900 Carney	May-12	$415,000	3,153	2004	0	3	3.5	1	$131.62	1	0
215	11 12 354 002	39w893 Carney	Jul-08	$520,000	3,320	2005	1142	3	3.5	1	$156.63	1	0
216	11 12 354 002	39w893 Carney	Aug-11	$460,000	3,320	2005	1142	3	3.5	1	$138.55	1	0
217	11 12 354 006	39w813 Carney	Oct-07	$465,000	3,292	2005	0	3	3.5	1	$141.25	1	0
218	11 12 354 008	39w795 Carney	Oct-09	$499,000	3,374	2005	1171	3	4.5	1	$147.90	1	0
220	11 12 377 004	39w762 Benton	Aug-08	$443,000	2,959	2003	0	3	2.5	1	$149.71	0	0
221	11 12 377 005	39w742 Benton	Jun-10	$460,000	3,019	2003	0	3	2.5	1	$152.37	0	0
222	11 12 377 007	39w702 Benton	Jul-11	$415,000	3,184	2003	1345	3	4	1	$130.34	0	0
224	11 12 378 001	39w673 Benton	Jun-08	$490,000	3,240	2002	0	3	3.5	1	$151.23	0	0
225	11 12 378 003	39w653 Benton	Jul-12	$375,000	3,143	2002	0	3	3.5	1	$119.31	0	0
226	11 12 378 008	0n120 Yates	Jul-12	$360,000	2,522	1997	0	3	2.5	1	$142.74	0	0
227	11 12 378 011	39w664 Carney	Sep-09	$465,000	2,718	1999	1314	2	4	0	$171.08	0	0
228	11 12 378 012	0n199 Holland	Nov-07	$390,000	2,866	2003	0	3	2.5	1	$136.08	0	0
229	11 12 378 014	0n169 Holland	Aug-10	$427,500	3,049	2003	0	3	2.5	0	$140.21	0	0
230	11 12 378 018	0n079 Holland	May-08	$385,000	3,123	2003	0	3	2.5	1	$123.28	0	0
231	11 12 378 018	0n079 Holland	Jul-12	$378,000	3,123	2003	0	3	2.5	1	$121.04	0	0
232	11 12 378 019	0n069 Holland	Jun-09	$440,000	3,563	2003	0	3	3.5	1	$123.49	0	0
233	11 12 378 019	0n069 Holland	Feb-12	$408,000	3,563	2003	0	3	3.5	1	$114.51	0	0
234	11 12 379 006	39w735 Carney	Sep-12	$469,000	3,340	2005	1434	3	4.5	1	$140.42	1	0
235	11 12 382 001	39w711 Benton	Aug-08	$485,000	3,186	2003	0	3	3.5	1	$152.23	0	0
236	11 12 382 002	0n180 Holland	Jun-10	$523,000	2,975	2003	0	3	2.5	1	$175.80	1	0
237	11 12 382 005	0n120 Holland	Jun-09	$400,000	3,613	2003	0	3	3	1	$110.71	1	0
Average:											$138.72		

APPENDIX III: Bluff City Sales Data.

Appendix IIIa: All Single-Family House Sales; Bluff City Transfer Facility.

Sale	Parcel No.	Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
Target Area:												
1	06 29 203 003 675 Rose	McGraw	Trevino	May-12	1216326061	$249,000	WD	2SF	1991	2,198	$113.28	
2	06 29 203 008 695 Rose	Kaczka	Rotondi	Mar-10	1010411034	$258,000	WD	1SF	1994	1,864	$138.41	
3	06 29 204 005 674 Golfers	Ronald	Furlan	Jun-08	0819305090	$363,000	TrD	2SFB	1991	2,094	$173.35	
4	06 29 204 008 662 Golfers	Lemere	Haarstad	Feb-13	1305047057	$270,000	WD	1SF	1991	1,706	$158.26	
5	06 29 207 003 696 Biltmore	Lee	Yo	May-11	1113949034	$397,500	WD	2SF	2006	2,966	$134.02	
6	06 29 207 015 1016 Balmoral	US Bank	Pulikkottil	Jun-09	0919855073	$280,000	SWD	2SF	2008	3,138	$89.23	Bank
7	06 29 208 007 680 Biltmore	Jonsson	Gustafson	Nov-12	1232533077	$347,000	WD	2SF	2007	2,748	$126.27	
8	06 29 209 004 657 Versailles	Borgardt	Digiandomenico	Sep-12	1227255126	$336,000	WD	2SF	2007	2,297	$146.28	
9	06 29 209 006 667 Versailles	Carbonara	Mehta	Aug-11	1124133132	$370,000	WD	2SF	2006	3,138	$117.91	
10	06 29 209 012 691 Biltmore	Kapoor	Johnson	Nov-10	1035056002	$340,000	WD	2SF	2006	3,138	$108.35	
11	06 29 211 017 1012 Biltmore	Wells Fargo	Gang	Jun-09	0920226069	$230,000	SWD	2SF	2008	3,138	$73.30	Bank
12	06 29 213 004 1716 Belcourt	Auroa Loan	Chen	Jan-10	1004829074	$311,000	SWD	2SF	2008	2,966	$104.86	Bank
13	06 29 213 010 1704 Belcourt	Tchorz	Jones	Jun-09	0919412138	$315,000	WD	2SF	2008	2,823	$111.58	Fore.
14	06 29 213 010 1704 Belcourt	Jud. Sales	Tchorz	Jun-09	0917031026	$155,000	SWD	2SF	2008	2,823	$54.91	Bank
15	06 29 213 011 1702 Belcourt	Craioveanu	Devathala	Oct-08	0831248009	$373,000	WD	2SF	2008	3,138	$118.87	
16	06 29 401 004 642 Golfers	Beltway Capital	Papp	Dec-10	1100455037	$235,000	SWD	2SF	1990	2,345	$100.21	Bank
17	06 29 401 009 622 Golfers	Plaga	Bradley	Nov-10	1032847090	$285,000	WD	2SF	1990	2,220	$128.38	
18	06 29 401 012 612 Golfers	Siler	Lagomarcino	Jun-10	1018826026	$300,000	WD	1SFB	1990	2,122	$141.38	
19	06 29 401 021 550 Rose	Shun	McNamara	Oct-09	0929505056	$280,888	WD	2SF	1994	2,490	$112.81	
20	06 29 402 002 635 Golfers	Polick	Striegel	Mar-08	0809540083	$250,000	WD	2SF	1991	2,220	$112.61	
21	06 29 402 006 657 Golfers	Norten	Depasquale	May-10	1016511019	$230,000	WD	1SF	1990	1,706	$134.82	
22	06 29 402 016 650 Dogleg	Brown	Alvarez	Aug-10	1025941030	$239,000	TRD	2SF	1990	1,925	$124.16	
23	06 29 403 006 541 Rose	Craig	Uddin	Mar-12	1209433014	$245,000	WD	2SF	1995	2,316	$105.79	
24	06 29 403 009 553 Rose	Paterson	Auleta	Nov-09	0932756007	$280,000	WD	2SF	1995	2,316	$120.90	
25	06 29 403 010 557 Rose	Suregrove	Mogge	Nov-10	1034141054	$248,000	WD	2SF	1993	2,220	$111.71	
26	06 29 403 018 589 Rose	Tonnesen	Squires	Jun-08	0819305070	$230,000	WD	1SF	1994	1,760	$130.68	
27	06 29 403 023 609 Rose	Smith	Walters	Jan-08	0803042026	$250,000	WD	1SF	1994	1,522	$164.26	
28	06 29 403 026 621 Rose	Judith	Giacomino	Jul-12	1222304048	$265,000	WD	2SF	1993	2,220	$119.37	
29	06 29 403 029 633 Rose	Irion	Diehl	Nov-09	0933740079	$260,000	WD	1SF	1994	1,763	$147.48	
30	06 29 404 001 621 Dogleg	Heaton	Thompson	May-08	0815134012	$355,000	WD	2SF	1991	2,316	$153.28	
31	06 29 404 010 657 Dogleg	Hansen	LaFata	Jul-09	0921033110	$280,000	WD	2SFB	1991	2,006	$139.58	
32	06 29 404 013 583 Golfers	Whalen	Clay	Mar-10	1009740047	$210,000	WD	2SFB	1992	1,760	$119.32	
33	06 29 404 017 611 Golfers	Stemke	Schlueter	Jun-10	1017612003	$237,500	WD	1SF	1992	1,520	$156.25	
34	06 29 404 018 640 Rose	Sell	Calo	Oct-09	0931433125	$300,000	WD	2SF	1993	1,925	$155.84	
35	06 29 409 020 537 Rose	Harsomghani	Chi-Man	May-10	1014626053	$260,000	WD	2SF	1998	1,956	$132.92	
36	06 29 409 021 533 Rose Lane	Weichert	Ahmed	Sep-11	1128429086	$245,000	SWD	2SF	1998	2,040	$120.10	
37	06 29 409 025 525 Rose	Augustine	Patel	Jun-12	1217304156	$210,000	WD	2SF	1999	1,956	$107.36	
38	06 29 410 007 550 Ivory	Sperandio	Kuchyt	Oct-08	0830935001	$353,500	WD	2SF	1998	1,944	$181.84	
39	06 29 410 008 546 Ivory	Lierman	Pesce	Sep-08	0827050019	$302,500	WD	2SF	1998	1,822	$166.03	

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.						Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
40	06	29	410	017	510	Ivory	Determan	Shapiro	Nov-12	1232647055	$212,000	WD	2SF	1998	1,633	$129.82	
41	06	29	410	019	502	Ivory	Bk/New York	Greda	Mar-11	1115226288	$167,000	WD	2SF	1997	1,873	$89.16	Bank
42	06	29	410	028	581	Versailles	Rios	Tay	Sep-08	0827633139	$351,000	WD	2SF	2007	2,823	$124.34	
43	06	29	410	042	637	Versailles	Meiner	Kalogara	Oct-08	0830541008	$373,000	WD	2SF	2007	2,748	$135.74	
44	06	29	410	043	641	Versailles	Arias	Parekh	Mar-10	1011215033	$340,000	WD	2SF	2006	2,966	$114.63	
45	06	29	411	004	525	Ivory	FNMA	Tomac	Mar-11	1210004097	$237,000	SWD	2SF	1998	2,048	$115.72	Bank
46	06	29	411	010	549	Ivory	Purahit	Zamiruddin	Mar-10	1009833054	$274,500	WD	2SF	1997	1,822	$150.66	
47	06	29	411	019	593	Ivory	Day	Schaal	Jun-11	1118941091	$240,000	WD	2SF	1997	1,849	$129.80	
48	06	29	411	021	532	Rose	Johnston	Volante	May-08	0816448007	$312,500	WD	2SF	1998	2,048	$152.59	
49	06	29	411	027	508	Rose	Haegeland	Visvardis	May-12	1215816054	$210,000	WD	2SF	1998	1,786	$117.58	
50	06	29	412	002	481	Rose	Zakrzewski	Guru	Aug-10	1025949066	$290,000	WD	2SF	1997	1,822	$159.17	
51	06	29	413	002	594	Ivory	Liebhart	Gryczman	May-11	1115226295	$255,000	TRD	2SF	1997	1,822	$139.96	
52	06	29	414	013	626	Biltmore	Dolan	Cones	Jun-10	1017933146	$400,000	WD	2SF	2006	3,279	$121.99	
53	06	29	414	019	650	Biltmore	Ohprecio	Patel	Oct-12	1231819045	$350,000	WD	2SF	2007	2,966	$118.00	
54	06	29	415	009	636	Versailles	Choi	Khan	Sep-08	0826805133	$408,000	WD	2SF	2007	2,297	$177.62	
55	06	29	415	016	637	Biltmore	Montague	Jarvis	Jun-12	1219249069	$348,000	WD	2SF	2007	2,958	$117.65	
Average:																$128.19	
Control Area:																	
56	06	28	205	022	1219	Gulf Keys	Ellett	Oberstab	Dec-11	1200441087	$240,000	WD	2SF	1992	2,736	$87.72	
57	06	28	303	033	1420	Snowdrift	West Suburban	Harris	May-08	0815701129	$320,000	WD	2SF	1995	1,920	$166.67	Bank
58	06	28	303	039	1444	Snow Drift	Schultz	Cooke	Aug-10	1025711023	$250,000	WD	2SF	1994	1,775	$140.85	
59	06	28	303	040	1448	Snow Drift	Baker	Morgan	Jun-09	0919756052	$320,000	QCD	2SF	1995	2,185	$146.45	No/QCD
60	06	28	303	051	1498	Golfview	FNMA	Paszkiewicz	Apr-12	1210857014	$216,000	SWD	2SF	1995	1,920	$112.50	Bank
61	06	28	304	003	480	Snowdrift	Kilberger	Becker	Jul-11	1121547030	$242,500	WD	2SF	1994	1,813	$133.76	
62	06	28	305	001	457	Snowdrift	GRP	Manzuk	Jun-08	0817118053	$250,000	SWD	2SF	1995	1,497	$167.00	Fore.
63	06	28	305	003	465	Snowdrift	Alam	Dipkumar	Sep-11	1126641004	$235,000	WD	2SF	1994	1,497	$156.98	
64	06	28	305	009	489	Snowdrift	Lowe	Vongsomehith	Aug-08	0824131150	$266,000	WD	2SF	1995	1,904	$139.71	
65	06	28	305	017	404	Monarch Bir	Brumsvold	Divora	Mar-11	1109147023	$230,000	WD	2SF	1994	1,497	$153.64	
66	06	28	306	018	410	Persimmon	FNMA	Piorkowski	Dec-11	1201019076	$184,000	SWD	2SF	1994	1,547	$118.94	Bank
67	06	28	307	003	411	Persimmon	Andrews	Ortega	Aug-10	1025655044	$262,500	WD	2SF	1994	1,497	$175.35	
68	06	28	307	006	423	Persimmon	Steiskal	Pellegrino	Sep-10	1027926097	$235,000	WD	2SF	1994	1,497	$156.98	
69	06	28	307	016	420	Snowdrift	Johnson	Vierneisel	Aug-11	1123704222	$185,000	WD	2SF	1994	1,497	$123.58	
70	06	28	307	018	408	Snow Drift	FHLM	Friedman	May-12	1216433071	$198,000	SWD	2SF	1995	1,547	$127.99	Bank
71	06	28	310	013	391	Snow Drift	Grodzki	Dziekan	Jun-12	1218512195	$115,000	WD	2SF	1995	1,425	$80.70	
72	06	28	312	004	412	Smoketree	Baia	Clayton	Nov-10	1032349040	$290,000	WD	2SF	1995	1,625	$178.46	
73	06	28	312	022	1336	Smoketee	Deutsche Bank	Neuman	Dec-08	0836519040	$220,000	SWD	2SF	1996	1,633	$134.72	Fore.
74	06	28	312	025	1324	Smoketree	Hinders	Hermonson	Apr-10	1011004021	$290,000	TRD	2SF	1995	1,873	$154.83	
75	06	28	312	026	1320	Smoketree	Wright	Deka	Jul-08	0823534102	$255,000	WD	2SF	1996	1,633	$156.15	

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.					Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
76	06	28	312	038	1264	Spaulding	Labno	Bujatin	Oct-10	1034855016	$279,000	WD	2SF	1996	1,625	$171.69	
77	06	28	313	003	410	Summersweet	Moy	Gladysz	Jul-12	1221635060	$218,000	WD	2SF	1996	1,633	$133.50	
78	06	28	313	006	422	Summersweet	Bartodzisj	Derench	Mar-08	0811540145	$260,000	WD	2SF	1996	1,813	$143.41	
79	06	28	313	025	431	Smoketree	Kim	Anderson	Aug-11	1125622085	$200,000	WD	2SF	1997	1,813	$110.31	
80	06	28	313	027	423	Smoketree	Lockhart	Peglow	Dec-10	1101026195	$235,000	WD	2SF	1995	1,873	$125.47	
81	06	28	313	032	403	Smoketree	Contreras	Gonzalez	Nov-11	1133450003	$165,000	WD	2SF	1995	1,633	$101.04	
82	06	28	314	008	433	Summersweet	Jud. Sales	Sabeh	Mar-12	1221518038	$146,000	JWD	2SF	1996	1,873	$77.95	Bank
83	06	28	314	010	441	Summersweet	Olson	Scislowicz	Apr-11	1114431052	$240,000	WD	2SF	1995	1,625	$147.69	
84	06	28	314	014	457	Summersweet	Fannin	Svlirowski	Nov-11	1132557032	$202,000	WD	2SF	1995	2,000	$101.00	
85	06	28	314	018	448	Spaulding	Aceto	Heather	Apr-08	0810540041	$347,500	WD	2SF	1997	1,625	$213.85	
86	06	28	314	018	448	Spaulding	Heather	Jelowicki	Sep-11	1127149027	$230,000	WD	2SF	1996	1,625	$141.54	
87	06	28	319	002	605	Philip	Maloney	Shah	Jul-09	0923035172	$475,000	WD	2SF	2000	2,641	$179.86	
88	06	29	405	006	407	Knoll Crest	Rudolph	Seelnacht	Jul-09	0923048040	$317,000	WD	2SF	1997	1,822	$173.98	
89	06	29	405	007	411	Knoll Crest	McCallum	Lazare	May-08	0819040215	$280,000	WD	2SF	1997	1,497	$187.04	
90	06	29	405	015	443	Knollcrest	Kowshik	Self	Jul-12	1221649046	$208,500	WD	2SF	1997	2,107	$98.96	
91	06	29	405	027	1562	Knollcrest	FNMA	Summers	Jun-12	1219435059	$235,400	SWD	2SF	1997	1,822	$129.20	Bank
92	06	29	405	037	468	Knoll Crest	Mohammed	Nolimae	Oct-09	0928847016	$245,000	WD	2SF	1997	1,944	$126.03	Fore.
93	06	29	405	037	468	Knoll Crest	Jud. Sales	Mohammed	Jul-09	0919754060	$148,000	d. Sa	2SF	1997	1,944	$76.13	Fore.
94	06	29	406	008	1553	Knoll Cres	Aurora Loan	Wanas	Apr-11	1116004085	$174,000	SWD	2SF	1996	1,497	$116.23	
95	06	29	406	010	426	Cardinal	Castle Peak Ln. T	O'Connor	Aug-12	1225442170	$187,000	SWD	2SF	1997	1,497	$124.92	Bank
96	06	29	407	002	405	Cardinal	Dueutshe Bank	Farooq	Jul-12	1222833152	$200,000	SWD	2SF	1997	1,944	$102.88	Bank
97	06	29	407	016	412	Knoll Crest	Chandrakumar	Aziz	Oct-08	0829855013	$350,000	WD	2SF	1997	2,048	$170.90	
98	06	29	409	018	1646	Scarlet	Dutton & Dutton	Dahlen	May-08	0814055052	$240,000	SWD	2SF	1998	1,497	$160.32	Fore.
99	06	31	207	004	318	Veronica	TCF Bank	Awan	Jul-11	1122933021	$356,500	SWD	2SF	2006	4,094	$87.08	Bank
100	06	31	208	012	391	Veronica	Busse	Patel	Aug-11	1123404191	$370,000	WD	2SF	2006	3,517	$105.20	
101	06	31	208	022	331	veronica	FNMA	Patel	May-11	1116611218	$287,000	SWD	2SF	2006	3,233	$88.77	Bank
102	06	31	302	002	106	Westridge	White	Doyle	Sep-11	1128641050	$225,000	WD	2SF	1998	2,092	$107.55	
103	06	31	302	005	118	Westridge	Opiela	Hancock	Jul-10	1021031071	$235,000	WD	2SF	1997	1,888	$124.47	
104	06	31	302	009	134	Westridge	Bk of America	Drozd	Nov-09	0932749038	$225,000	SWD	2SF	1997	1,598	$140.80	Fore.
105	06	31	302	018	216	Westridge	Nixon	Gilson	Jun-08	0816857052	$335,000	WD	2SF	1997	2,408	$139.12	
106	06	31	302	042	141	Hearthstone	Ernst	Guttala	Aug-08	0826235010	$325,000	WD	2SF	2003	1,859	$174.83	
107	06	31	302	045	153	Hearthstone	Faulls	Porten	Jun-12	1218041025	$271,000	WD	2SF	2003	1,783	$151.99	
108	06	31	302	047	161	Hearthstone	Deutsche Bk.	Kolterer	Feb-10	1008340123	$274,000	SWD	2SF	2003	1,783	$153.67	Bank
109	06	31	302	047	161	Hearthstone	Kolterer	Chauhan	Aug-11	1123712111	$255,000	WD	2SF	2002	1,783	$143.02	
110	06	31	302	047	161	Hearthstone	Deutsche Bk.	Kolterer	Mar-10	1008340123	$274,000	SWD	2SF	2002	1,783	$153.67	Bank
111	06	31	302	055	223	Hearthstone	Geostree	Frankel	Jul-09	0921935040	$340,000	WD	2SF	2003	2,194	$154.97	
112	06	31	302	065	265	Hearthstone	Karl	Chung	Dec-08	0834649012	$373,000	WD	2SF	2007	2,431	$153.43	
113	06	31	302	068	264	Hearthstone	Angarola	Kolodziej	Nov-10	1104534105	$300,000	d IN	2SF	2005	2,194	$136.74	
114	06	31	302	071	240	Hearthstone	Johnson	Raja	Feb-09	0905457045	$386,000	WD	2SF	2004	2,800	$137.86	

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.				Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
115	06 31 302 075	246	Field Crest		Khan	Deleonardis	Mar-12	1209735032	$307,000	WD	2SF	2006	2,800	$109.64	
116	06 31 302 080	220	Weston Ct		Adams	Chesney	Aug-12	1230449013	$342,000	WD	2SF	2006	2,911	$117.49	
117	06 31 303 005	2076	Norwich		Dinh	Dholakia	Feb-08	0806740057	$300,000	WD	2SF	2000	1,897	$158.14	
118	06 31 303 008	2004	Woodhaven		Kraus	Qureshi	Aug-08	0823811020	$323,000	WD	2SF	2000	2,347	$137.62	
119	06 31 303 017	2040	Norwich		McComb	Goetrals	Jul-10	1022835065	$244,500	WD	2SF	2000	1,896	$128.96	
120	06 31 303 018	2044	Norwich		Zorn/Katzbeck	Broderick	Aug-10	1023635088	$285,000	WD	2SF	2000	2,246	$126.89	
121	06 31 304 013	2058	Providence		Shah	Martin	Sep-12	1227034015	$281,000	WD	2SF	2001	2,351	$119.52	
122	06 31 304 015	2050	Providence		Goldstein	Sagup	Sep-09	0928847105	$280,000	WD	2SF	2001	1,897	$147.60	
123	06 31 304 025	2027	Norwich		Choma	Eder	Nov-08	0833145008	$255,000	WD	2SF	2001	2,370	$107.59	
124	06 31 304 029	2043	Norwich		Maliszewki	McCloskey Fam. T:	Sep-08	0829426198	$300,000	WD	2SF	2001	1,806	$166.11	
125	06 31 305 001	131	Westridge		Culver	Hajik	Mar-09	0909226046	$290,000	WD	2SF	1997	2,408	$120.43	
126	06 31 305 004	2072	Groveton		Deutsche Bk.	Peralta	Nov-11	1134733032	$210,000	SWD	2SF	1996	2,408	$87.21	Bank
127	06 31 305 010	2048	Groveton		Nguyen	Libreri	Nov-11	1134733063	$255,000	WD	2SF	1996	2,408	$105.90	
128	06 31 305 015	2028	Groveton		DeJesus	Baker	Nov-08	0902141057	$300,000	WD	2SF	1997	1,772	$169.30	
129	06 31 305 022	2037	Providence		Duby	Andrzejuk	Nov-11	1131919021	$191,000	WD	2SF	1999	1,597	$119.60	
130	06 31 306 021	214	Faircroft		Jacala	Sanceda	Feb-09	0907205271	$285,000	WD	2SF	1997	2,092	$136.23	
131	06 31 307 001	2061	Grovetown		Vennero	Markel	Jun-09	0917335064	$340,000	WD	2SF	1997	2,408	$141.20	
132	06 31 307 005	215	Faircroft		Mejia	Miller	May-08	0814311071	$339,900	WD	2SF	1997	2,408	$141.15	
133	06 31 307 008	227	Faircroft		FHLMA	Gardi	Nov-11	1133919120	$135,000	SWD	2SF	1995	1,888	$71.50	Bank
134	06 31 307 008	227	Faircroft		Gardi	Winfrey	Apr-12	1219412042	$270,000	WD	2SF	2001	2,351	$114.84	
135	06 31 307 018	228	Moorehead		Cartus	Staab	May-10	1023115041	$254,300	WD	2SF	1996	1,772	$143.51	
136	06 31 307 022	212	Moorehead		Litton Loan	Rogge	May-10	1014535051	$244,000	SWD	2SF	1996	1,772	$137.70	Bank
137	06 31 308 001	2039	Grovetown		Pickley	Kohl	Feb-11	1105547014	$240,000	WD	2SF	1996	1,656	$144.93	
138	06 31 308 001	2039	Groveton		Kohl	Bollinger	Nov-12	1234633076	$232,000	WD	2SF	2006	2,800	$82.86	
139	06 31 308 002	2043	Groveton		Adams	Tomsi	Jul-12	1221457298	$218,000	WD	2SF	1997	1,593	$136.85	
140	06 31 308 004	205	Moorehead		Bank/New York	Szacilowska	Jun-12	1220233085	$172,000	SWD	2SF	1997	1,561	$110.19	Bank
141	06 31 308 026	210	Cummings		FNMA	Pang	Apr-12	1210226006	$220,000	SWD	2SF	1997	2,092	$105.16	Bank
142	06 31 309 006	203	Cummings		Bobo	Mirante	Mar-10	1009131077	$218,000	WD	2SF	1996	1,888	$115.47	
143	06 31 309 030	2021	Grovetown		Buelow	Pesch	May-09	0915950010	$315,000	WD	2SF	1997	2,408	$130.81	
144	06 31 310 004	249	Norwich		Galligeal	Garland	May-08	0815005080	$310,000	WD	2SF	1997	2,092	$148.18	
145	06 31 310 006	241	Norwich		Cowhey	Peterson	Jan-08	0801740211	$316,000	WD	2SF	1997	1,888	$167.37	
146	06 31 310 014	2011	Ridgemore		Regal	Wilk	Jul-09	0920926038	$246,000	WD	1.5SF	1997	1,598	$153.94	
147	06 31 311 011	2035	Westridge		Fernandez	Brandner	Sep-12	1229142003	$220,000	WD	2SF	1997	1,772	$124.15	Short Sale
148	06 31 311 015	2019	Westridge		Lunt	Leppellere	Sep-08	0829505063	$320,000	WD	2SF	1997	1,772	$180.59	
149	06 31 312 005	151	Norwich		Talbot	Lenny	Jun-11	1120633168	$243,000	WD	2SF	2000	1,896	$128.16	
150	06 31 312 010	131	Norwich		Intercounty Jud.	Mehra	Dec-09	1002154044	$141,000	d. Sa	2SF	2000	2,347	$60.08	Fore.
151	06 31 312 010	131	Norwich		Mohammed	Shah	May-10	1015247028	$282,000	WD	2SF	1999	2,347	$120.15	
152	06 31 312 012	2007	Woodhaven		David	Fanella	Dec-12	1300341051	$284,950	WD	2SF	2000	1,897	$150.21	
153	06 31 312 012	2007	Woodhaven		Regions Bank	David	Nov-12	1230635027	$191,000	SWD	2SF	2000	1,897	$100.69	Bank
154	06 31 312 016	126	Cedarfield		Ferraro	Yevin-Lidnen	Nov-09	0932133125	$303,000	WD	2SF	2000	2,347	$129.10	
155	06 31 313 006	2113	Hearthston		Vondra	Matthew	Jun-12	1217712071	$336,000	WD	2SF	2003	2,911	$115.42	

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.				Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
156	06 31 313 012	132	Heatherston		Rawls	Denk	Jun-08	0820740188	$381,000	WD	2SF	2003	2,194	$173.66	
157	06 31 313 014	140	Heatherston		Gehrke	Patel	Nov-08	0832940130	$390,000	WD	2SF	2003	2,194	$177.76	
158	06 31 314 003	166	Fieldcrest		Larson	Ghzoli	Jun-09	0918035054	$357,700	WD	2SF	2006	2,194	$163.04	
159	06 31 314 006	154	Hillcrest		Campbell	O'Connor	Mar-12	1210035067	$238,000	WD	2SF	2006	1,783	$133.48	
160	06 31 314 017	2132	Fieldcrest		Strobel	Mjangos	Sep-12	1226942163	$300,000	WD	2SF	2006	2,658	$112.87	
161	06 31 315 004	156	Prescott		Wachovia Bank	Mammoser	May-08	0817055043	$308,500	SWD	2SF	2006	1,783	$173.02	Bank
162	06 31 315 005	160	N. Prescott		Navarez	Pugesek	Sep-12	1229848012	$225,000	WD	2SF	2006	2,431	$92.55	
163	06 31 315 006	164	Prescott		Freehling	Kujanski	Oct-09	0929326027	$290,000	WD	2SF	2006	2,431	$119.29	
164	06 31 315 009	176	Prescott		Prudential Relo.	Chawhan	Mar-08	0809455014	$339,000	WD	2SF	2003	2,194	$154.51	Relo
165	06 31 315 009	176	Prescott		Grady	Prudential Relo	Mar-08	0809455013	$339,000	WD	2SF	2003	2,194	$154.51	Relo
166	06 31 315 010	180	Prescot		FNMA	Jones	Mar-11	1109055035	$247,575	SWD	2SF	2005	1,783	$138.85	Bank
167	06 31 401 001	1992	Westridge		Alam	Goswami	Sep-08	0826331005	$285,000	WD	2SF	1997	2,092	$136.23	
168	06 31 401 005	1976	Westridge		Gardner	Michalski	Feb-10	1006441040	$318,000	WD	2SF	1996	2,408	$132.06	
169	06 31 401 011	1999	Ridgemont		Xiao	Shah	Aug-09	0926440050	$294,500	WD	2SF	1997	2,092	$140.77	
170	06 31 401 020	251	Cedarfield		Merlino	McAlpine	Jul-08	0822805337	$286,500	WD	2SF	1997	1,593	$179.85	
171	06 31 402 005	1918	Westridge		Kayifli/Memishi	Graham	Jan-10	1003512239	$285,000	WD	2SFB	2001	2,344	$121.59	
172	06 31 402 012	1946	Westridge		Skowron	Castillo	Oct-09	0929505050	$303,500	WD	2SF	2000	2,101	$144.46	
173	06 31 402 017	1991	Ridgemore		Patterson	Adams	Oct-10	1030150013	$272,000	WD	2SFB	1997	2,347	$115.89	
174	06 31 402 021	1979	Ridgemore		Wang	Blomquist	Aug-08	0836505173	$264,900	WD	2SF	1998	1,896	$139.72	
175	06 31 403 015	143	Cedarfield		HUD	Sabbadan	Nov-12	1232149026	$225,100	SWD	2SFB	2002	2,390	$94.18	Bank
176	06 31 403 023	1991	Woodhaven		Brown	Schmidt	Feb-08	0806011209	$317,000	WD	2SF	2001	1,866	$169.88	
177	06 31 404 006	1987	Westridge		Pellegrino	Almonte	Oct-11	1130512086	$299,000	WD	2SF	1996	2,420	$123.55	
178	06 31 404 012	1963	Westridge		Fifer	Yeager	Sep-12	1226856035	$310,000	WD	2SFB	2002	2,390	$129.71	
179	06 31 404 016	1943	Westridge		Casario	Casrio	May-08	0815040038	$414,000	WD	2SFB	1997	2,420	$171.07	Family
180	06 31 405 004	237	Remington		Weichert	Leisen	Oct-09	0930157105	$279,900	WD	2SF	1997	2,101	$133.22	Relo
181	06 31 405 004	237	Remington		Vakharia	Weichert Relo	Mar-09	0930157104	$313,500	WD	2SF	1997	2,101	$149.21	Relo
182	06 31 405 018	236	Edgewater		Biancaiana	Pisani	Aug-12	1227933061	$270,000	WD	2SF	1997	2,101	$128.51	
183	06 31 406 010	256	Butler		Pondel	Harper	Oct-12	1233104138	$240,000	WD	2SFB	1997	2,253	$106.52	
184	06 31 407 008	231	Butler		FNMA	Ransom	Nov-12	1235601021	$275,000	SWD	2SF	1997	2,344	$117.32	Bank
185	06 31 407 009	235	Butler		Zubinski	Lee	Apr-12	1213226130	$305,000	WD	2SF	1997	2,283	$133.60	
186	06 31 407 015	1890	Burton		Dai	Caoili	Mar-08	0810748024	$405,000	WD	2SFB	1999	2,101	$192.77	
187	06 31 407 019	1874	Burton		Yoon	Grochowski	Feb-08	0815511156	$365,000	WD	2SF	1999	2,101	$173.73	
188	06 31 407 044	164	Dallas		Dunlap	Schubmehl	May-08	0815146029	$357,000	WD	2SF	2001	2,101	$169.92	
189	06 31 407 046	156	Dallas		Johns	Isaac	Jul-08	0821242028	$348,000	WD	2SFB	2001	2,283	$152.43	
190	06 31 407 049	144	Dallas		Houdek	Houdek	Apr-12	1216549052	$0	TRD	2SFB	2000	2,144	$0.00	Trust
191	06 31 407 060	1898	Burton		Caprotti	Giltzow	Jun-09	0921649061	$311,500	WD	2SF	2000	2,101	$148.26	
192	06 31 408 013	1967	Butler		Veatch	Lyons	May-12	1215935085	$295,000	WD	2SF	1997	2,420	$121.90	
193	06 31 408 017	249	Burton		Langkamp	Singer	May-08	0815735356	$390,000	WD	2SFB	2000	2,420	$161.16	
194	06 31 408 017	249	Burton		Singer	Niaz	Oct-11	1128749043	$300,000	WD	2SF	1999	2,420	$123.97	
195	06 31 409 005	1928	Woodhaven		Wells Fargo	Patel	Mar-11	1109055038	$208,500	SWD	2SF	2001	2,145	$97.20	Bank

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.				Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
196	06 31 409 013	1960 Woodhaven	LaSalle Bank	Dillar	Mar-09	0907208359	$252,000	SWD	2SFB	2000	2,347	$107.37	Foreclosure
197	06 31 409 018	1980 Woodhaven	Saw Fam. Tr.	Wilma	Nov-12	1231342009	$280,000	WD	2SF	2000	2,347	$119.30	
198	06 31 410 002	117 Troutman	Bank/New York	Krusiec	Apr-12	1212342014	$184,499	SWD	2SF	1998	2,144	$86.05	Bank
199	06 31 410 020	1970 Southfield	Schneeweis	Zarembski	May-10	1013041025	$308,000	WD	2SF	1997	1,897	$162.36	
200	06 31 411 003	135 Troutman	DeVriese	Mehta	Feb-08	0806057057	$332,000	WD	2SFB	1998	1,897	$175.01	
201	06 31 411 012	1964 Ridgemore	Krzywy	Urzedowski	May-11	1117304005	$285,000	WD	2SF	1999	2,347	$121.43	
202	06 31 411 013	1968 Ridgemore	Visweswaran	Spizzirri	May-08	0814133086	$317,000	WD	2SF	2002	1,896	$167.19	
203	06 31 412 002	171 Dallas	Kinattummoottil	Freesemann	May-12	1215612061	$225,000	WD	2SF	2001	2,344	$95.99	Short Sale
204	06 31 412 007	151 Dallas	Jameson	Anzoldi	May-08	0814105151	$358,000	WD	2SF	2001	2,420	$147.93	
205	06 31 412 007	151 Dallas	Anzaldi	Alvi	May-10	1017404107	$317,500	WD	2SF	2000	2,420	$131.20	
206	06 31 412 008	147 Dallas	Porteous	Jennes	Aug-08	0825505010	$382,500	WD	2SF	2001	2,492	$153.49	
207	06 31 412 009	141 Dallas	Zambrycki	Zaderij	Feb-08	0807811096	$434,500	WD	2SFB	2001	2,420	$179.55	
208	06 31 413 003	227 Dallas	Moseby	Gesler	Jul-09	0921935170	$310,000	WD	2SF	2000	2,101	$147.55	
209	06 31 413 007	211 Dallas	Deleon	Nasir	Dec-11	1201222050	$270,000	WD	2SF	1999	2,101	$128.51	
210	06 31 413 013	220 Burton	Wasek	Sarullo	Mar-10	1008231077	$263,000	WD	2SF	2000	2,101	$125.18	
211	06 31 413 016	232 Burton	Collar	Nalbono	Sep-08	0829405082	$352,500	WD	2SFB	2000	2,101	$167.78	
212	06 31 414 004	129 Rushmore	Samaan	Sagadraca	Oct-10	1034333023	$324,000	WD	2SF	1999	2,101	$154.21	
213	06 31 414 014	201 Burton	Bonachela	Tate	Sep-10	1027040079	$270,000	WD	2SF	1999	2,570	$105.06	
214	06 32 301 013	167 Silbury	Mohammed	Shah	Nov-08	0835349020	$277,000	WD	2SF	2006	2,643	$104.81	Fore.
215	06 32 301 013	167 Silbury	Intercounty Jud.	Mohammed	Nov-08	0831754001	$216,000	WD	2SF	2006	2,643	$81.73	Fore.
216	06 32 301 024	211 Lillian	HSBC Bank	Recendez	Dec-11	1136239125	$215,000	SWD	2SF	2005	2,385	$90.15	Bank
217	06 32 301 025	215 Lillian	JPMC Spec. Mort	Chokski	Dec-09	1002757028	$255,000	SWD	2SF	2006	2,998	$85.06	Fore.
218	06 32 301 031	239 Lillian	Odoshoo	Patel	Dec-08	0835926060	$325,000	WD	2SF	2006	3,695	$87.96	
219	06 32 301 032	243 Lillian	Rodriguez	Manchanapalli	Dec-10	1101911012	$310,000	WD	2SF	2005	3,460	$89.60	
220	06 32 301 033	247 Lillian	Bank/New York	Parikh	Jun-09	0921040187	$229,900	SWD	2SF	2006	3,460	$66.45	Fore.
221	06 32 301 035	1701 Ariana	HSBC Bank	Shah	Jul-09	0922249085	$270,000	SWD	2SF	2006	3,460	$78.03	Fore.
222	06 32 301 044	1755 Ariana	Chicago Title	Galtone	Apr-12	1210141088	$335,000	TRD	2SF	2006	3,695	$90.66	
223	06 32 301 060	158 Stanton	Krueger	Doran	Aug-08	0824934122	$419,000	WD	2SF	2006	2,508	$167.07	
224	06 32 301 063	146 Stanton	Episcopo	Patel	Mar-12	1209511069	$265,000	WD	2SF	2006	2,944	$90.01	
225	06 32 301 066	134 Stanton	Menke	Linebrink	Feb-12	1204704094	$320,000	WD	2SF	2005	3,460	$92.49	
226	06 32 301 068	126 Bennington	Vyas	Patel	Dec-10	1101049019	$290,000	WD	2SF	2005	2,508	$115.63	
227	06 32 301 071	114 Bennington	Barthelt	Noble	May-12	1216410034	$225,000	WD	2SF	2006	2,385	$94.34	
228	06 32 302 016	120 Ruzich	U.S. Bank Tr.	Blue	Oct-12	1231426122	$230,000	SWD	2SF	2006	3,695	$62.25	Bank
229	06 32 302 020	127 Bennington	PNC Bank	Chand	Oct-11	1136233098	$253,000	SWD	2SF	2005	3,695	$68.47	Bank
230	06 32 303 011	1757 Barnett	FHLM	Akter	Aug-12	1225633012	$210,000	SWD	2SF	2006	2,944	$71.33	Bank
231	06 32 303 013	1769 Barnett	FNMA	Govani	Feb-09	0906505155	$307,000	SWD	2SF	2006	2,998	$102.40	Fore.
232	06 32 303 019	135 Stanton	Right Res. Ser.	Patel	Nov-12	1235942049	$325,000	WD	2SF	2006	2,944	$110.39	Fore.
233	06 32 303 019	135 Stanton	Inter. Jud. Sales	Right	Aug-12	1228449037	$220,501	JD	2SF	2006	2,944	$74.90	Fore.
234	06 32 304 008	1752 Dyer	Polich	Welyers	Jun-08	0818549094	$360,000	WD	2SF	2006	2,117	$170.05	

Appendix IIIa: continued on next page.

Appendix IIIa: continued.

Sale	Parcel No.				Grantor	Grantee	Sale Date	Doc. #	Sale Price	Type	Style	Age	Size	$/Ft^2	Arm's Length
235	06 32 304 013	1767 Ruzich	Ocwen Loan	Aygul	May-09	0916740015	$275,000	SWD	2SF	2006	2,508	$109.65	Fore.
236	06 32 304 016	1785 Ruzich	FHLMA	Zainab	Mar-11	1110440058	$244,500	SWD	2SF	2005	2,998	$81.55	Bank
237	06 32 304 017	1791 Ruzich	US Bank	Rabbani	Jun-10	1013126162	$319,900	SWD	2SF	2005	3,460	$92.46	Bank
238	06 32 306 002	1784 Ariana	Sales	Clary	Apr-08	0812240133	$400,000	WD	2SF	2006	3,695	$108.25	
239	06 32 306 019	226 Lillian	Sennett	Patel	Nov-09	0933740187	$320,000	WD	2SF	2006	3,695	$86.60	
240	06 32 306 027	1979 Lanyon	Ziech	Soni-Kaushik	May-11	1115708002	$290,100	WD	2SF	2005	3,460	$83.84	
241	06 32 306 029	1781 Lanyon	Bartelt	Khan	Mar-09	0911405116	$318,500	WD	2SF	2006	2,825	$112.74	
242	06 33 301 019	159 Crystal Lan	REO LLC	Truproperty Inv.	Dec-12	1235931008	$183,751	SWD	2SF	1980	2,390	$76.88	REO
Average:												$128.43	

Appendix IIIb: Characteristics of Arm's Length Single-Family House Sales; Bluff City Transfer Facility.

Sale	Parcel No.	Address	Sale Date	Sale Price	Style	Bsmt	Gar.	Age	Size	Bath	F.P.	$/Ft^2
Target:												
1	06 29 203 003	675 Rose	May-12	$249,000	2SF	Full/1	2.0	1991	2,198	2.5	1	$113.28
2	06 29 203 008	695 Rose	Mar-10	$258,000	1SF	Part/0	2.0	1994	1,864	2	1	$138.41
3	06 29 204 005	674 Golfers	Jun-08	$363,000	2SFB	Full/0	2.0	1991	2,094	2.5	1	$173.35
4	06 29 204 008	662 Golfers	Feb-13	$270,000	1SF	Part/0	2.0	1991	1,706	2	1	$158.26
5	06 29 207 003	696 Biltmore	May-11	$397,500	2SF	Full/0	3.0	2006	2,966	2.5	0	$134.02
7	06 29 208 007	680 Biltmore	Nov-12	$347,000	2SF	Full/0	2.0	2007	2,748	2.5	0	$126.27
8	06 29 209 004	657 Versailles	Sep-12	$336,000	2SF	Full/0	2.0	2007	2,297	2.5	0	$146.28
9	06 29 209 006	667 Versailles	Aug-11	$370,000	2SF	Full/0	2.0	2006	3,138	2.5	0	$117.91
10	06 29 209 012	691 Biltmore	Nov-10	$340,000	2SF	Full/0	2.0	2006	3,138	2.5	0	$108.35
15	06 29 213 011	1702 Belcourt	Oct-08	$373,000	2SF	Full/0	2.0	2008	3,138	2.5	0	$118.87
17	06 29 401 009	622 Golfers	Nov-10	$285,000	2SF	Full/0	2.0	1990	2,220	2.5	1	$128.38
18	06 29 401 012	612 Golfers	Jun-10	$300,000	1SFB	Full/0	2.0	1990	2,122	2	1	$141.38
19	06 29 401 021	550 Rose	Oct-09	$280,888	2SF	Full/0	2.0	1994	2,490	2	1	$112.81
20	06 29 402 002	635 Golfers	Mar-08	$250,000	2SF	Full/0	2.0	1991	2,220	2.5	1	$112.61
21	06 29 402 006	657 Golfers	May-10	$230,000	1SF	Part/0	2.0	1990	1,706	2	1	$134.82
22	06 29 402 016	650 Dogleg	Aug-10	$239,000	2SF	Full/0	2.0	1990	1,925	2.5	1	$124.16
23	06 29 403 006	541 Rose	Mar-12	$245,000	2SF	Full/0	2.0	1995	2,316	2.5	1	$105.79
24	06 29 403 009	553 Rose	Nov-09	$280,000	2SF	Full/0	2.0	1995	2,316	2.5	1	$120.90
25	06 29 403 010	557 Rose	Nov-10	$248,000	2SF	Full/0	2.0	1993	2,220	2.5	1	$111.71
26	06 29 403 018	589 Rose	Jun-08	$230,000	1SF	Crawl	2.0	1994	1,760	2	0	$130.68
27	06 29 403 023	609 Rose	Jan-08	$250,000	1SF	Crawl	2.0	1994	1,522	2	1	$164.26
28	06 29 403 026	621 Rose	Jul-12	$265,000	2SF	Full/0	2.0	1993	2,220	2.5	1	$119.37
29	06 29 403 029	633 Rose	Nov-09	$260,000	1SF	Full/0	2.0	1994	1,763	2	1	$147.48
30	06 29 404 001	621 Dogleg	May-08	$355,000	2SF	Full/0	2.0	1991	2,316	2	1	$153.28
31	06 29 404 010	657 Dogleg	Jul-09	$280,000	2SFB	Full/1	2.0	1991	2,006	2	1	$139.58
32	06 29 404 013	583 Golfers	Mar-10	$210,000	2SFB	Full/0	2.0	1992	1,760	2	1	$119.32
33	06 29 404 017	611 Golfers	Jun-10	$237,500	1SF	Crawl	2.0	1992	1,520	2.5	1	$156.25
34	06 29 404 018	640 Rose	Oct-09	$300,000	2SF	Full/0	2.0	1993	1,925	2.5	1	$155.84
35	06 29 409 020	537 Rose	May-10	$260,000	2SF	Full/0	2.0	1998	1,956	2.5	0	$132.92
36	06 29 409 021	533 Rose Lane	Sep-11	$245,000	2SF	Full/0	2.0	1998	2,040	2.5	0	$120.10
37	06 29 409 025	525 Rose	Jun-12	$210,000	2SF	Full/0	2.0	1999	1,956	2.5	1	$107.36
38	06 29 410 007	550 Ivory	Oct-08	$353,500	2SF	Full/1	2.0	1998	1,944	2.5	1	$181.84
39	06 29 410 008	546 Ivory	Sep-08	$302,500	2SF	Full/1	2.0	1998	1,822	2.5	1	$166.03
40	06 29 410 017	510 Ivory	Nov-12	$212,000	2SF	Full/0	2.0	1998	1,633	1.5	1	$129.82
42	06 29 410 028	581 Versailles	Sep-08	$351,000	2SF	Full/0	2.0	2007	2,823	2.5	0	$124.34
43	06 29 410 042	637 Versailles	Oct-08	$373,000	2SF	Full/0	2.0	2007	2,748	2.5	0	$135.74
44	06 29 410 043	641 Versailles	Mar-10	$340,000	2SF	Full/0	2.0	2006	2,966	2.5	0	$114.63
46	06 29 411 010	549 Ivory	Mar-10	$274,500	2SF	Full/1	2.0	1997	1,822	1.5	1	$150.66
47	06 29 411 019	593 Ivory	Jun-11	$240,000	2SF	Full/1	2.0	1997	1,849	2.5	1	$129.80
48	06 29 411 021	532 Rose	May-08	$312,500	2SF	Full/0	2.0	1998	2,048	2.5	1	$152.59
49	06 29 411 027	508 Rose	May-12	$210,000	2SF	Part/1	2.0	1998	1,786	2	1	$117.58
50	06 29 412 002	481 Rose	Aug-10	$290,000	2SF	Full/1	2.0	1997	1,822	2.5	1	$159.17
51	06 29 413 002	594 Ivory	May-11	$255,000	2SF	Full/0	2.0	1997	1,822	2.5	1	$139.96
52	06 29 414 013	626 Biltmore	Jun-10	$400,000	2SF	Full/0	2.0	2006	3,279	2.5	0	$121.99
53	06 29 414 019	650 Biltmore	Oct-12	$350,000	2SF	Full/0	2.0	2007	2,966	2.5	0	$118.00
54	06 29 415 009	636 Versailles	Sep-08	$408,000	2SF	Full/0	2.0	2007	2,297	2.5	0	$177.62
55	06 29 415 016	637 Biltmore	Jun-12	$348,000	2SF	Full/0	2.0	2007	2,958	2.5	1	$117.65
Average:												$134.29
Control:												
56	06 28 205 022	1219 Gulf Keys	Dec-11	$240,000	2SF	Part/0	2.0	1992	2,736	2.5	1	$87.72
58	06 28 303 039	1444 Snow Drift	Aug-10	$250,000	2SF	Slab	2.0	1994	1,775	2.5	0	$140.85
61	06 28 304 003	480 Snowdrift	Jul-11	$242,500	2SF	Full/0	2.0	1994	1,813	1.5	1	$133.76
63	06 28 305 003	465 Snowdrift	Sep-11	$235,000	2SF	Slab	2.0	1994	1,497	1.5	0	$156.98
64	06 28 305 009	489 Snowdrift	Aug-08	$266,000	2SF	Slab	2.0	1995	1,904	2.5	0	$139.71

Appendix IIIb: Continued on Next Page.

Appendix IIIb: Continued.

Sale	Parcel No.	Address	Sale Date	Sale Price	Style	Bsmt	Gar.	Age	Size	Bath	F.P.	$/Ft^2
65	06 28 305 017	404 Monarch Bir	Mar-11	$230,000	2SF	Full/0	2.0	1994	1,497	1.5	0	$153.64
67	06 28 307 003	411 Persimmon	Aug-10	$262,500	2SF	Slab	2.0	1994	1,497	1.5	1	$175.35
68	06 28 307 006	423 Persimmon	Sep-10	$235,000	2SF	Slab	2.0	1994	1,497	1.5	0	$156.98
69	06 28 307 016	420 Snowdrift	Aug-11	$185,000	2SF	Slab	2.0	1994	1,497	1.5	0	$123.58
71	06 28 310 013	391 Snow Drift	Jun-12	$115,000	2SF	Slab	2.0	1995	1,425	2.5	0	$80.70
72	06 28 312 004	412 Smoketree	Nov-10	$290,000	2SF	Full/0	2.0	1995	1,625	2.5	1	$178.46
74	06 28 312 025	1324 Smoketree	Apr-10	$290,000	2SF	Full/0	2.0	1995	1,873	2.5	1	$154.83
75	06 28 312 026	1320 Smoketree	Jul-08	$255,000	2SF	Full/0	2.0	1996	1,633	1.5	1	$156.15
76	06 28 312 038	1264 Spaulding	Oct-10	$279,000	2SF	Full/0	2.0	1996	1,625	2.5	1	$171.69
77	06 28 313 003	410 Summersweet	Jul-12	$218,000	2SF	Full/0	2.0	1996	1,633	1.5	1	$133.50
78	06 28 313 006	422 Summersweet	Mar-08	$260,000	2SF	Full/0	2.0	1996	1,813	1.5	1	$143.41
79	06 28 313 025	431 Smoketree	Aug-11	$200,000	2SF	Slab	2.0	1997	1,813	1.5	1	$110.31
80	06 28 313 027	423 Smoketree	Dec-10	$235,000	2SF	Full/0	2.0	1995	1,873	2.5	1	$125.47
81	06 28 313 032	403 Smoketree	Nov-11	$165,000	2SF	Slab	2.0	1995	1,633	1.5	0	$101.04
83	06 28 314 010	441 Summersweet	Apr-11	$240,000	2SF	Slab	2.0	1995	1,625	2.5	0	$147.69
84	06 28 314 014	457 Summersweet	Nov-11	$202,000	2SF	Slab	2.0	1995	2,000	2	1	$101.00
85	06 28 314 018	448 Spaulding	Apr-08	$347,500	2SF	Full/0	2.0	1997	1,625	2.5	1	$213.85
86	06 28 314 018	448 Spaulding	Sep-11	$230,000	2SF	Full/0	2.0	1996	1,625	2.5	1	$141.54
87	06 28 319 002	605 Philip	Jul-09	$475,000	2SF	Full/0	2.5	2000	2,641	2.5	1	$179.86
88	06 29 405 006	407 Knoll Crest	Jul-09	$317,000	2SF	Full/0	2.0	1997	1,822	2.5	0	$173.98
89	06 29 405 007	411 Knoll Crest	May-08	$280,000	2SF	Full/1	2.0	1997	1,497	1.5	1	$187.04
90	06 29 405 015	443 Knollcrest	Jul-12	$208,500	2SF	Full/0	2.0	1997	2,107	1.5	2	$98.96
94	06 29 406 008	1553 Knoll Cres	Apr-11	$174,000	2SF	Full/1	2.0	1996	1,497	1.5	1	$116.23
97	06 29 407 016	412 Knoll Crest	Oct-08	$350,000	2SF	Full/0	2.0	1997	2,048	2.5	1	$170.90
100	06 31 208 012	391 Veronica	Aug-11	$370,000	2SF	Full/0	3.0	2006	3,517	2.5	1	$105.20
102	06 31 302 002	106 Westridge	Sep-11	$225,000	2SF	Full/0	2.0	1998	2,092	2.5	0	$107.55
103	06 31 302 005	118 Westridge	Jul-10	$235,000	2SF	Part/0	2.0	1997	1,888	2.5	1	$124.47
105	06 31 302 018	216 Westridge	Jun-08	$335,000	2SF	Full/0	2.0	1997	2,408	2.5	1	$139.12
106	06 31 302 042	141 Hearthstone	Aug-08	$325,000	2SF	Full/0	2.0	2003	1,859	2.5	1	$174.83
107	06 31 302 045	153 Hearthstone	Jun-12	$271,000	2SF	Full/0	2.0	2003	1,783	2.5	1	$151.99
109	06 31 302 047	161 Hearthstone	Aug-11	$255,000	2SF	Full/0	2.0	2002	1,783	2.5	1	$143.02
111	06 31 302 055	223 Hearthstone	Jul-09	$340,000	2SF	Full/0	2.0	2003	2,194	2.5	1	$154.97
112	06 31 302 065	265 Hearthstone	Dec-08	$373,000	2SF	Full/0	2.0	2007	2,431	2.5	1	$153.43
113	06 31 302 068	264 Hearthstone	Nov-10	$300,000	2SF	Full/0	2.0	2005	2,194	2.5	1	$136.74
114	06 31 302 071	240 Hearthstone	Feb-09	$386,000	2SF	Full/0	3.0	2004	2,800	2.5	1	$137.86
115	06 31 302 075	246 Field Crest	Mar-12	$307,000	2SF	Full/0	3.0	2006	2,800	2.5	1	$109.64
116	06 31 302 080	220 Weston Ct	Aug-12	$342,000	2SF	Full/0	3.0	2006	2,911	2.5	1	$117.49
117	06 31 303 005	2076 Norwich	Feb-08	$300,000	2SF	Full/0	3.0	2000	1,897	2.5	0	$158.14
118	06 31 303 008	2004 Woodhaven	Aug-08	$323,000	2SF	Partial	2.0	2000	2,347	2.5	1	$137.62
119	06 31 303 017	2040 Norwich	Jul-10	$244,500	2SF	Full/0	2.0	2000	1,896	2.5	0	$128.96
120	06 31 303 018	2044 Norwich	Aug-10	$285,000	2SF	Part/0	2.0	2000	2,246	2.5	1	$126.89
121	06 31 304 013	2058 Providence	Sep-12	$281,000	2SF	Full/0	3.0	2001	2,351	2.5	1	$119.52
122	06 31 304 015	2050 Providence	Sep-09	$280,000	2SF	Full/0	2.0	2001	1,897	2.5	0	$147.60
123	06 31 304 025	2027 Norwich	Nov-08	$255,000	2SF	Full/0	2.0	2001	2,370	2.5	1	$107.59
124	06 31 304 029	2043 Norwich	Sep-08	$300,000	2SF	Partial	2.0	2001	1,806	2.5	1	$166.11
125	06 31 305 001	131 Westridge	Mar-09	$290,000	2SF	Full/0	2.0	1997	2,408	2.5	1	$120.43
127	06 31 305 010	2048 Groveton	Nov-11	$255,000	2SF	Full/0	2.0	1996	2,408	2.5	1	$105.90
128	06 31 305 015	2028 Groveton	Nov-08	$300,000	2SF	Full/0	2.0	1997	1,772	2.5	1	$169.30
129	06 31 305 022	2037 Providence	Nov-11	$191,000	2SF	Full/0	2.0	1999	1,597	2.5	0	$119.60
130	06 31 306 021	214 Faircroft	Feb-09	$285,000	2SF	Full/0	2.0	1997	2,092	2.5	0	$136.23
131	06 31 307 001	2061 Grovetown	Jun-09	$340,000	2SF	Full/0	2.0	1997	2,408	2.5	1	$141.20
132	06 31 307 005	215 Faircroft	May-08	$339,900	2SF	Full/0	2.0	1997	2,408	2.5	1	$141.15
134	06 31 307 008	227 Faircroft	Apr-12	$270,000	2SF	Full/0	3.0	2001	2,351	2.5	0	$114.84
135	06 31 307 018	228 Moorehead	May-10	$254,300	2SF	Full/0	2.0	1996	1,772	2.5	1	$143.51
137	06 31 308 001	2039 Grovetown	Feb-11	$240,000	2SF	Part/0	2.0	1996	1,656	2.5	1	$144.93

Appendix IIIb: Continued on Next Page.

Appendix IIIb: Continued.

Sale	Parcel No.	Address	Sale Date	Sale Price	Style	Bsmt	Gar.	Age	Size	Bath	F.P.	$/Ft^2
138	06 31 308 001	2039 Groveton	Nov-12	$232,000	2SF	Part/0	2.0	2006	2,800	2.5	1	$82.86
139	06 31 308 002	2043 Groveton	Jul-12	$218,000	2SF	Full/1	2.5	1997	1,593	2.5	0	$136.85
142	06 31 309 006	203 Cummings	Mar-10	$218,000	2SF	Slab	2.0	1996	1,888	2.5	1	$115.47
143	06 31 309 030	2021 Grovetown	May-09	$315,000	2SF	Full/0	2.0	1997	2,408	2.5	1	$130.81
144	06 31 310 004	249 Norwich	May-08	$310,000	2SF	Full/0	2.0	1997	2,092	2.5	0	$148.18
145	06 31 310 006	241 Norwich	Jan-08	$316,000	2SF	Full/0	2.0	1997	1,888	2.5	1	$167.37
146	06 31 310 014	2011 Ridgemore	Jul-09	$246,000	1.5SF	Full/0	2.0	1997	1,598	2.5	1	$153.94
148	06 31 311 015	2019 Westridge	Sep-08	$320,000	2SF	Full/1	2.5	1997	1,772	2.5	1	$180.59
149	06 31 312 005	151 Norwich	Jun-11	$243,000	2SF	Full/0	2.0	2000	1,896	2.5	0	$128.16
151	06 31 312 010	131 Norwich	May-10	$282,000	2SF	Full/0	3.0	1999	2,347	2.5	1	$120.15
152	06 31 312 012	2007 Woodhaven	Dec-12	$284,950	2SF	Part/0	2.0	2000	1,897	2.5	0	$150.21
154	06 31 312 016	126 Cedarfield	Nov-09	$303,000	2SF	Partial	2.0	2000	2,347	2.5	1	$129.10
155	06 31 313 006	2113 Hearthston	Jun-12	$336,000	2SF	Full/0	3.0	2003	2,911	2.5	1	$115.42
156	06 31 313 012	132 Heatherston	Jun-08	$381,000	2SF	Full/0	2.0	2003	2,194	2.5	1	$173.66
157	06 31 313 014	140 Heatherston	Nov-08	$390,000	2SF	Full/0	2.0	2003	2,194	2.5	1	$177.76
158	06 31 314 003	166 Fieldcrest	Jun-09	$357,700	2SF	Full/0	2.0	2006	2,194	2.5	1	$163.04
159	06 31 314 006	154 Hillcrest	Mar-12	$238,000	2SF	Full/0	2.0	2006	1,783	2.5	1	$133.48
160	06 31 314 017	2132 Fieldcrest	Sep-12	$300,000	2SF	Part/0	2.0	2006	2,658	2.5	1	$112.87
162	06 31 315 005	160 N. Prescott	Sep-12	$225,000	2SF	Full/0	2.0	2006	2,431	2.5	1	$92.55
163	06 31 315 006	164 Prescott	Oct-09	$290,000	2SF	Full/0	2.0	2006	2,431	2.5	1	$119.29
167	06 31 401 001	1992 Westridge	Sep-08	$285,000	2SF	Partial	2.0	1997	2,092	2.5	0	$136.23
168	06 31 401 005	1976 Westridge	Feb-10	$318,000	2SF	Part/0	2.0	1996	2,408	2.5	1	$132.06
169	06 31 401 011	1999 Ridgemont	Aug-09	$294,500	2SF	Full/0	2.0	1997	2,092	2.5	0	$140.77
170	06 31 401 020	251 Cedarfield	Jul-08	$286,500	2SF	Full/1	2.0	1997	1,593	2	0	$179.85
171	06 31 402 005	1918 Westridge	Jan-10	$285,000	2SFB	Full/0	2.0	2001	2,344	1.5	1	$121.59
172	06 31 402 012	1946 Westridge	Oct-09	$303,500	2SF	Full/0	2.0	2000	2,101	2.5	1	$144.46
173	06 31 402 017	1991 Ridgemore	Oct-10	$272,000	2SFB	Full/0	2.0	1997	2,347	2.5	1	$115.89
174	06 31 402 021	1979 Ridgemore	Aug-08	$264,900	2SF	Full/0	3.0	1998	1,896	2.5	0	$139.72
176	06 31 403 023	1991 Woodhaven	Feb-08	$317,000	2SF	Full/0	3.0	2001	1,866	2.5	1	$169.88
177	06 31 404 006	1987 Westridge	Oct-11	$299,000	2SF	Full/0	3.0	1996	2,420	2.5	1	$123.55
178	06 31 404 012	1963 Westridge	Sep-12	$310,000	2SFB	Full/0	3.0	2002	2,390	2.5	1	$129.71
182	06 31 405 018	236 Edgewater	Aug-12	$270,000	2SF	Full/0	2.0	1997	2,101	2.5	1	$128.51
183	06 31 406 010	256 Butler	Oct-12	$240,000	2SFB	Full/0	2.0	1997	2,253	2	1	$106.52
185	06 31 407 009	235 Butler	Apr-12	$305,000	2SF	Full/0	2.0	1997	2,283	2.5	1	$133.60
186	06 31 407 015	1890 Burton	Mar-08	$405,000	2SFB	Full/0	3.5	1999	2,101	2.5	1	$192.77
187	06 31 407 019	1874 Burton	Feb-08	$365,000	2SF	Full/0	3.5	1999	2,101	2.5	1	$173.73
188	06 31 407 044	164 Dallas	May-08	$357,000	2SF	Full/0	2.0	2001	2,101	2.5	1	$169.92
189	06 31 407 046	156 Dallas	Jul-08	$348,000	2SFB	Partial	2.0	2001	2,283	2.5	1	$152.43
191	06 31 407 060	1898 Burton	Jun-09	$311,500	2SF	Full/0	2.0	2000	2,101	2.5	1	$148.26
192	06 31 408 013	1967 Butler	May-12	$295,000	2SF	Full/0	2.0	1997	2,420	2.5	1	$121.90
193	06 31 408 017	249 Burton	May-08	$390,000	2SFB	Full/0	3.5	2000	2,420	2.5	1	$161.16
194	06 31 408 017	249 Burton	Oct-11	$300,000	2SF	Full/0	3.5	1999	2,420	2.5	1	$123.97
197	06 31 409 018	1980 Woodhaven	Nov-12	$280,000	2SF	Part/0	2.0	2000	2,347	2.5	1	$119.30
199	06 31 410 020	1970 Southfield	May-10	$308,000	2SF	Part/0	2.0	1997	1,897	2.5	0	$162.36
200	06 31 411 003	135 Troutman	Feb-08	$332,000	2SFB	Partial	2.0	1998	1,897	2.5	0	$175.01
201	06 31 411 012	1964 Ridgemore	May-11	$285,000	2SF	Part/0	3.0	1999	2,347	2.5	0	$121.43
202	06 31 411 013	1968 Ridgemore	May-08	$317,000	2SF	Full/0	2.0	2002	1,896	2.5	1	$167.19
204	06 31 412 007	151 Dallas	May-08	$358,000	2SF	Partial	3.0	2001	2,420	2.5	0	$147.93
205	06 31 412 007	151 Dallas	May-10	$317,500	2SF	Part/0	3.0	2000	2,420	2.5	0	$131.20
206	06 31 412 008	147 Dallas	Aug-08	$382,500	2SF	Full/1	2.0	2001	2,492	2.5	1	$153.49
207	06 31 412 009	141 Dallas	Feb-08	$434,500	2SFB	Full/0	2.0	2001	2,420	2.5	0	$179.55
208	06 31 413 003	227 Dallas	Jul-09	$310,000	2SF	Partial	2.0	2000	2,101	2.5	1	$147.55
209	06 31 413 007	211 Dallas Driv	Dec-11	$270,000	2SF	Part/0	3.0	1999	2,101	2.5	2	$128.51
210	06 31 413 013	220 Burton	Mar-10	$263,000	2SF	Full/0	3.5	2000	2,101	2.5	1	$125.18
211	06 31 413 016	232 Burton	Sep-08	$352,500	2SFB	Full/0	3.0	2000	2,101	2.5	1	$167.78

Appendix IIIb: Continued on Next Page.

Appendix IIIb: Continued.

Sale	Parcel No.	Address	Sale Date	Sale Price	Style	Bsmt	Gar.	Age	Size	Bath	F.P.	$/Ft^2
212	06 31 414 004	129 Rushmore	Oct-10	$324,000	2SF	Full/0	2.0	1999	2,101	2.5	1	$154.21
213	06 31 414 014	201 Burton	Sep-10	$270,000	2SF	Full/1	3.0	1999	2,570	2.5	1	$105.06
218	06 32 301 031	239 Lillian	Dec-08	$325,000	2SF	Full/0	3.0	2006	3,695	2.5	0	$87.96
219	06 32 301 032	243 Lillian	Dec-10	$310,000	2SF	Full/0	3.0	2005	3,460	2.5	0	$89.60
222	06 32 301 044	1755 Ariana	Apr-12	$335,000	2SF	Full/0	3.0	2006	3,695	2.5	0	$90.66
223	06 32 301 060	158 Stanton	Aug-08	$419,000	2SF	Full/0	3.0	2006	2,508	2.5	0	$167.07
224	06 32 301 063	146 Stanton	Mar-12	$265,000	2SF	Full/0	2.0	2006	2,944	2.5	0	$90.01
225	06 32 301 066	134 Stanton	Feb-12	$320,000	2SF	Full/0	3.0	2005	3,460	2.5	0	$92.49
226	06 32 301 068	126 Bennington	Dec-10	$290,000	2SF	Full/0	2.0	2005	2,508	2.5	0	$115.63
227	06 32 301 071	114 Bennington	May-12	$225,000	2SF	Full/0	3.0	2006	2,385	2.5	0	$94.34
234	06 32 304 008	1752 Dyer	Jun-08	$360,000	2SF	Full/0	2.0	2006	2,117	2.5	0	$170.05
238	06 32 306 002	1784 Ariana	Apr-08	$400,000	2SF	Full/0	3.0	2006	3,695	2.5	0	$108.25
239	06 32 306 019	226 Lillian	Nov-09	$320,000	2SF	Full/0	3.0	2006	3,695	2.5	0	$86.60
240	06 32 306 027	1979 Lanyon	May-11	$290,100	2SF	Full/0	3.0	2005	3,460	2.5	0	$83.84
241	06 32 306 029	1781 Lanyon	Mar-09	$318,500	2SF	Full/0	2.0	2006	2,825	2.5	0	$112.74
Average:												$136.88

Appendix IV: Assumptions and Limiting Conditions.

ASSUMPTIONS AND LIMITING CONDITIONS

1. The appraiser did not make a boundary survey of the property; therefore, no responsibility is assumed in connection with such matters. Sketches in this report are included only to assist the reader in visualizing the property.

2. No responsibility is assumed for matters of a legal nature affecting title to the property nor is an opinion of title rendered. The title is assumed to be good and merchantable.

3. Information furnished by others is assumed to be true, correct, and reliable. A reasonable effort has been made to verify such information; however, the appraiser assumes no responsibility for its accuracy.

4. This report considers the subject property as being under responsible ownership and competent management.

5. It is assumed that there is general compliance with all federal, state, and local environmental regulations and laws unless non-compliance is stated, defined, and considered in the consulting report.

6. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a non-conformity has been stated, defined, and considered in the consulting report.

7. It is assumed that all required licenses, consents, or other legislative or administrative authority from any local, state, or national governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.

8. It is assumed that the utilization of the land and improvements is within the boundaries or property lines.

9. Any use of this appraisal report by anyone, whomsoever, constitutes acceptance of the above and any other limiting conditions that might be outlined later herein.

GENERAL LIMITING CONDITIONS

1. The appraiser or Poletti and Associates, Inc. will not be required to give testimony or appear in court because of having made this appraisal, with reference to the property in question, unless arrangements have been previously made therefore.

2. Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the appraiser or Poletti and Associates, Inc., and, in any event, only with proper written qualification and only in its entirety.

3. The distribution of the total valuation assigned in this report between land and improvements applies only under the reported highest and best use of the property. The allocations for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used.

4. Neither all nor any part of the contents of this report, or copy thereof, shall be conveyed to the public through advertising, public relations, news, sales, or any other media without the expressed written consent and approval of the appraiser or Poletti and Associates, Inc. Nor shall the appraiser, firm, or professional organization of which the appraiser is a member be identified without the written consent of the appraiser.

PURPOSE AND INTENDED USER OF THE REPORT

The purpose of this consulting report is for incorporation in the siting application and use at the siting hearing for the proposed Groot Industries Lake Transfer Station. The intended users of this report are Groot Industries, Inc. and their representatives, the Village of Round Lake Village Board, and their representatives, and the Illinois Pollution Control Board. Use by anyone else is not permitted. The report was ordered by Douglas Allen of Shaw Environmental Inc., (a CB&I Company). The client for the report is Groot Industries, Inc.

DEFINITION OF MARKET VALUE

The purpose of the appraisal is to estimate the market value of the leased fee interest of the subject property. Market value is defined by the Uniform Standards of Professional Appraisal Practice as:

The most probable price which a property should bring in a competitive and open market sale under all conditions requisite to a fair sale, the buyer and seller, each acting prudently , knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and passing of title from buyer to seller under conditions whereby:

a) Buyer and seller are typically motivated;

b) Both parties are well informed or well advised, and each acting in what they consider their own best interest;

c) A reasonable time is allowed for exposure in an open market;

d) Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable there to; and

e) The price represents the normal consideration for the property unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Appendix V: Certificate.

CERTIFICATE

I certify that, to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct.

2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, conclusions and recommendations.

3. I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest with respect to the parties involved.

4. I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.

5. My engagement in this assignment was not contingent upon developing or reporting predetermined results.

6. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

7. I have not performed an appraisal of the subject property; an appraisal review involving the subject property; a previous appraisal consulting assignment involving the subject property; or any other service involving the subject property within the three years prior to this assignment.

8. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute.

9. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.

10. The use of this report is subject to the requirements of the Appraisal Institute and the International Association of Assessing Officers relating to review by its duly authorized representatives.

11. I have made a personal inspection of the property that is the subject of this report.

12. No one provided significant real property appraisal or appraisal consulting assistance to the person signing this certification.

13. Robert Sorensen, PhD Professor Emeritus University of Missouri St. Louis and Michael Allison, Associate Teaching Professor, University of Missouri St. Louis provided assistance with the interpretation of Hedonic Modeling in the Literature Review.

14. As of the date of this report, Peter J. Poletti has completed the continuing education program of the Appraisal Institute.

Dated: May 10, 2013

Peter J. Poletti, Jr., Ph.D.; MAI
President
Illinois Certified General Real Estate Appraiser
553.000415 Exp. 9/13

SECTION 4

FLOODPLAIN ASSESSMENT

4 FLOODPLAIN

Introduction

Criterion 4 of Section 39.2(a) of the Illinois Environmental Protection Act requires that:

> *for a facility other than a sanitary landfill or waste disposal site, the facility is located outside the boundary of the 100 year flood plain or the site is flood-proofed.*

Floodplain Location

Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency were utilized to determine the location of the proposed Groot Industries Lake Transfer Station relative to the 100-year floodplain. Specifically, FIRM Map Numbers 17097C0127 G (revised September 7, 2000) and 17097C0129 F (effective date September 3, 1997) demonstrates that the proposed transfer station is not located within the 100-year floodplain. The location of the proposed transfer station relative to the floodplain is provided on Figure 4-1.

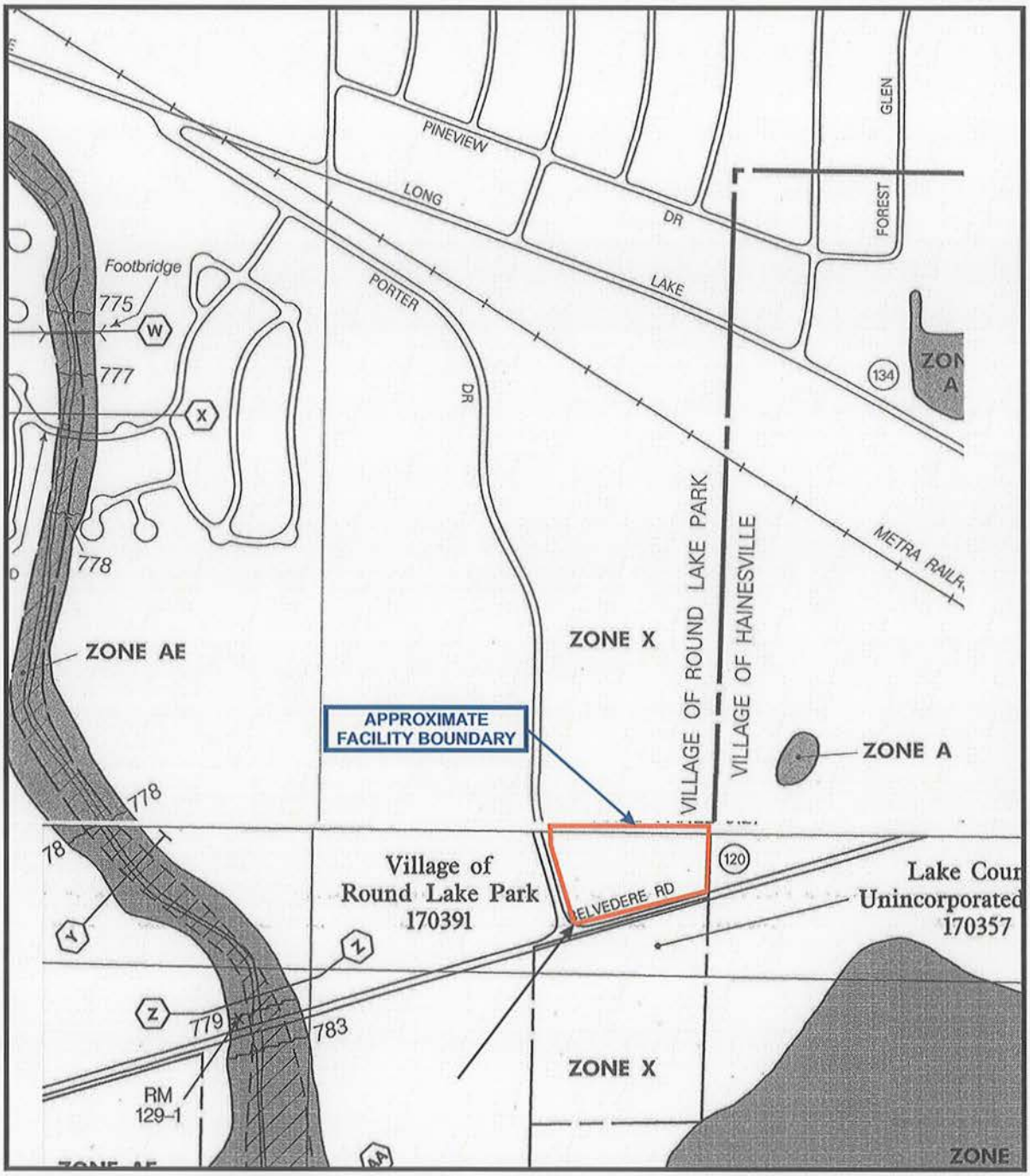


Figure adapted from FEMA Flood Insurance Rate Maps 17097C0127 G - Revised September 7, 2000 and 17097C0129 F - Effective September 3, 1997

GROOT INDUSTRIES
LAKE TRANSFER STATION

FIGURE 4-1
FLOOD INSURANCE RATE MAP

APPROVED BY: MNF	PROJ. NO.: 147312	DATE: MAY 2013

SECTION 5

CONTINGENCY PLAN

5 MINIMIZE FIRE, SPILLS, AND OTHER OPERATIONAL ACCIDENTS

Introduction

Criterion 5 of Section 39.2(a) of the Illinois Environmental Protection Act (Act) requires that an applicant for local siting approval of a pollution control facility demonstrate that:

> *the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents.*

The design and plan of operations described in Section 2 of this application for the proposed Groot Industries Lake Transfer Station incorporate numerous features to protect the public health, safety, and welfare.

A Health and Safety Plan which summarizes the procedures that will be implemented to minimize the potential for fire, spills or other operational accidents at the proposed transfer station is provided in Appendix P.1. The Health and Safety Plan also addresses fire control and prevention measures, spill control and prevention measures, accident prevention and employee training, and an operational contingency plan.

The information presented in Section 2 and in the Health and Safety Plan demonstrates that the plan of operations for the proposed Groot Industries Lake Transfer Station is designed to minimize the danger to the surrounding area from fire, spills or other operational accidents.

SECTION 6

TRAFFIC IMPACT ANALYSIS

Traffic Impact Study
Groot Industries Lake Transfer Station
Round Lake Park, Illinois

Submitted by

Kenig, Lindgren, O'Hara, Aboona, Inc.

June 6, 2013

Introduction

This report summarizes the results of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Groot Industries Lake Transfer Station to be located in Round Lake Park, Illinois. The site, which is approximately 3.9 acres in size, is located in the northeast quadrant of the intersection of IL 120 with Porter Drive within an existing business park. Access to the facility will be provided via one access drive located on Porter Drive. **Figure 1** shows an aerial photo of the subject site.

As proposed, the transfer station will typically process, on average, 750 tons of waste per day. The proposed transfer station is anticipated to typically receive and transfer waste from 4:00 A.M. to 8:00 P.M. (inbound waste will only be accepted until 5:00 P.M.) on weekdays and 4:00 A.M. to noon on Saturdays. Only municipal waste, landscape waste and recyclable materials will be accepted at the proposed transfer station.

All of the waste will be transported to the proposed transfer station via collection trucks and transported from the proposed transfer station to a distant disposal facility via transfer trailers. Transfer stations provide the means to safely and efficiently transfer waste from the local collection trucks to transfer trailers eliminating the need for collection trucks to travel to/from the landfills. It is important to note that transfer trailers transport three to six times the volume of waste than collection trucks.

As is the case with any development, transfer stations do result in an increase in traffic in the immediate vicinity of the site. However, the volume of traffic generated in any one time period is limited as the traffic generated by a transfer station is distributed throughout the entire day. Furthermore, the peak traffic periods of transfer stations typically occur during the late morning and early afternoon which do not coincide with the critical morning and evening commuter peak hours of traffic on the existing roadway system. Therefore, waste transfer stations typically generate a low volume of traffic during the critical morning and evening commuter peak periods when traffic on the roadway system is at its highest levels.

Lastly, the site of the proposed transfer station was chosen due to its proximity to the Groot Industries North Facility which is located on Porter Drive just north of the site. The existing Groot Industries North Facility is a storage and maintenance yard for Groot's waste trucks (approximately 65 to 70) and containers and will support the operation of the proposed transfer station. For example, many of the collection trucks that will deliver the waste to the proposed transfer station will be maintained and stored at the existing Groot Industries North Facility. After delivering waste to the transfer station, many collection trucks will only traverse Porter Drive as they will be parked at the Groot Industries North Facility. As such, the impact of the proposed transfer station will be further minimized as a large percentage of the traffic that will be generated by the facility is already on the area roadways and many trucks will not have to traverse the external arterial roadway system when leaving the proposed transfer station.

Site Location **Figure 1**

KLOA, Inc. was requested to conduct this study to address the sixth siting criterion provided in Section 39.2 of the Illinois Environmental Protection Act. That criterion reads as follows: "The traffic patterns to or from the facility are so designed as to minimize the impact on the existing traffic flows." Based on our review of the information and recommendations described in this study, KLOA, Inc. has determined that the proposed transfer station will comply with that siting criterion.

The following sections of this report present the following:

- Existing roadway conditions, including traffic volumes for the weekday morning and evening peak hours
- A description of the proposed transfer station
- Vehicle trip generation for the proposed transfer station
- Directional distribution of transfer station-generated traffic
- Projected traffic growth in the area including the proposed Groot Industries Eco-Campus
- Traffic analyses conducted for the weekday morning and evening peak hours assuming both existing and future conditions
- Future transportation conditions, including access to and from the proposed transfer station

Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices and existing peak hour traffic volumes.

Site Location

As indicated earlier, the site of the transfer station is located in the northeast quadrant of the intersection of IL 120 with Porter Drive within an existing business park. Land uses within the immediate vicinity of the site include the Gypsum Supply Company, the Groot Industries North Facility, the Baxter Healthcare facility and the Round Lake Park public works building to the north and northwest of the site along Porter Drive. Farms, fields and vacant land are generally located east, south and west of the site. The Villa at Timber Creek mobile home community is located further northwest of the site. Lastly, the Groot Industries Eco-Campus, a proposed construction and demolition recycling facility, is to be located in the northwest quadrant of the IL 120/Porter Drive intersection.

Existing Roadway System Characteristics

The principal roads in the vicinity of the site are described below and illustrated in **Figures 2** and **3**.

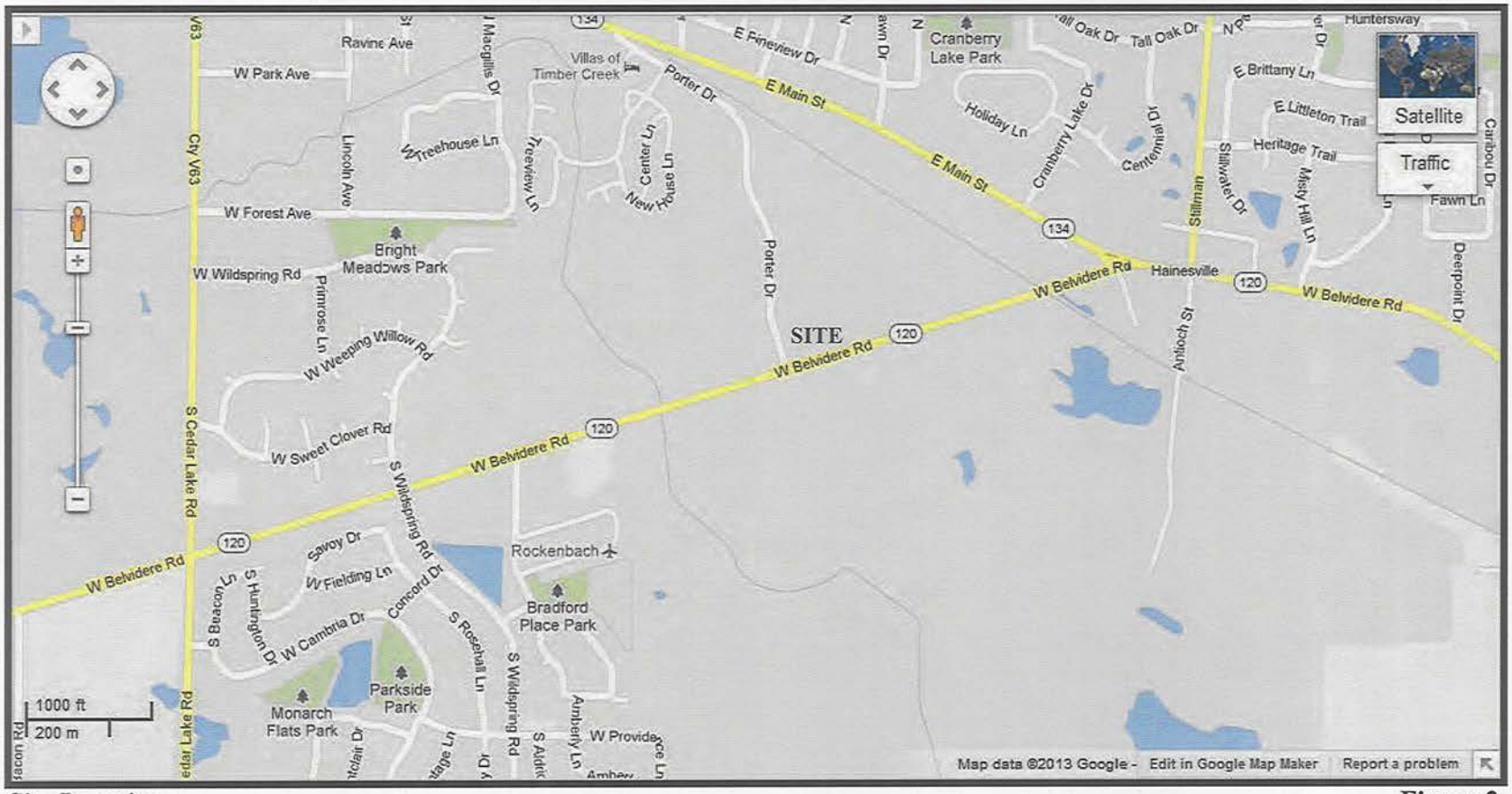
IL 120 is generally an east-west arterial roadway. In the vicinity of the site, IL 120 generally has a two-lane cross section with an at-grade crossing with the Metra-Milwaukee District North Line railroad tracks. Separate left-turn lanes are provided on IL 120 at its signalized intersections with Hainsville Road, IL 134 and Cedar Lake Road and its unsignalized intersections with Wildspring Road and Curran Road. A free flow right-turn lane is provided from westbound IL 120 to IL 134 and separate right-turn lanes are provided on IL 120 at Curan Road and Wildspring Road. IL 120 is under the jurisdiction of the Illinois Department of Transportation (IDOT) and has a posted speed limit of 50 mph west of the Metra-Milwaukee District North Line railroad tracks and a posted speed limit of 40 mph east of the same railroad tracks. IL 120 is classified as a Class II Truck Route. According to IDOT, IL 120 between IL 134 and Cedar Lake Road had a 2011 daily traffic volume of 18,100 vehicles with approximately 4.5 percent of the vehicles consisting of trucks.

IL 134 is generally a southeast-to-northwest arterial road. In the vicinity of the site, IL 134 has a two-lane cross section with an at-grade crossing with the Metra-Milwaukee District North Line railroad tracks. At its signalized intersection with IL 120, IL 134 is aligned opposite an access drive. IL 134 is under the jurisdiction of IDOT and a posted speed limit that varies between 30 and 40 mph within the vicinity of the site. According to IDOT, IL 134 east of Porter Drive had a 2011 daily volume of 9,800 vehicles with approximately four percent of the vehicles consisting of trucks.

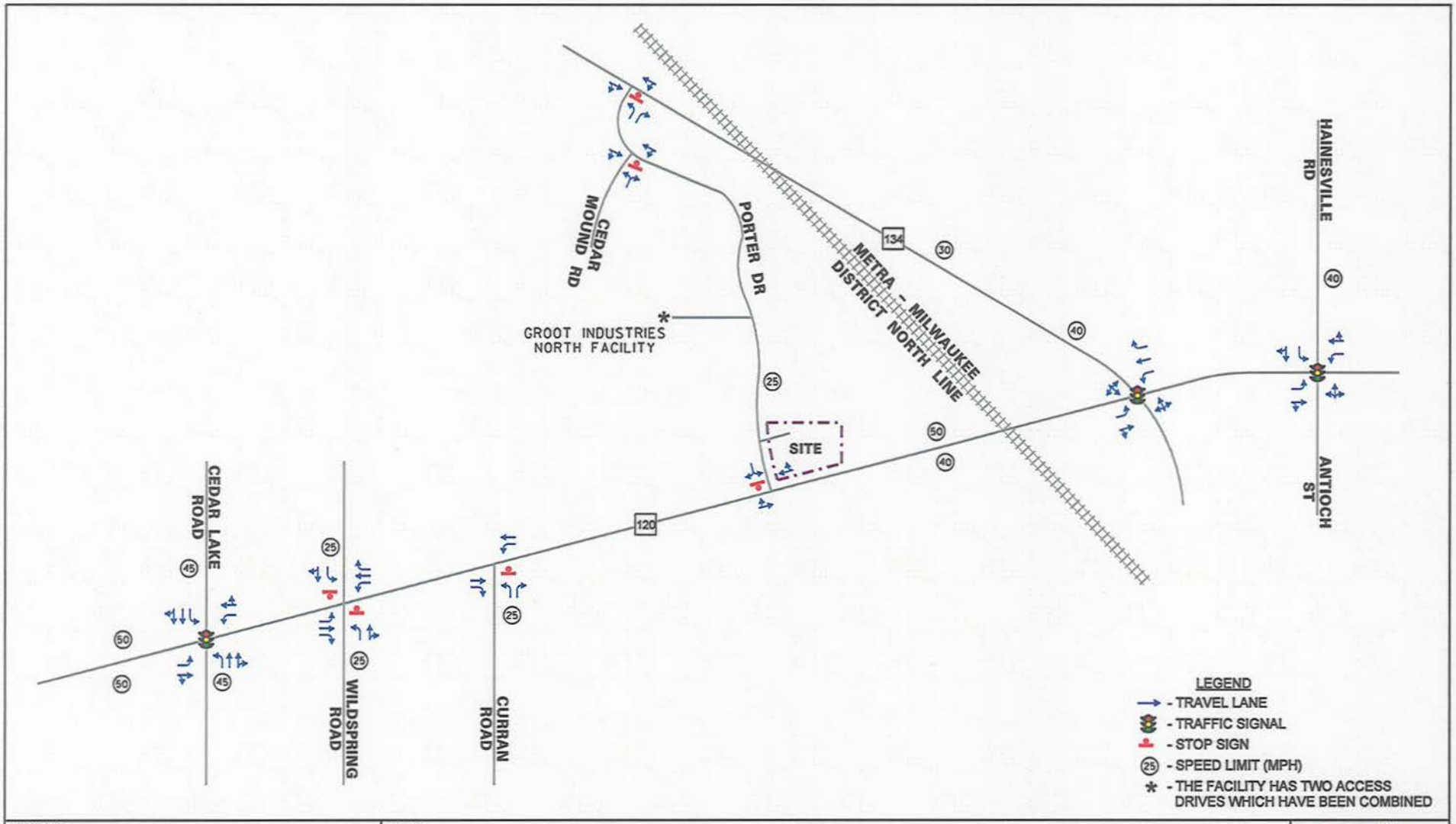
Hainesville Road is generally a north-south arterial roadway. In the vicinity of the site, Hainesville Road has a two-lane cross section with separate left-turn lanes provided at most intersections including its signalized intersection with IL 120. At its signalized intersection with IL 120, Hainesville Road is aligned opposite Antioch Street, which is a local two-lane road. Hainesville Road is under the jurisdiction of the Lake County Division of Transportation (LCDOT) and has a posted speed limit of 40 mph. According to IDOT, Hainesville Road north of IL 120 had a 2007 daily volume of 12,300 vehicles.

Cedar Lake Road is generally a north-south arterial roadway that has a two-lane cross section. At its signalized intersection with IL 120, Cedar Lake Road is widened to provide a separate left-turn lane, a through lane and a shared/through right-turn lane on both approaches. Cedar Lake Road is under the jurisdiction of LCDOT except the portion between IL 120 and Nippersink Road, which is under the jurisdiction of IDOT. The road has a posted speed limit of 45 mph within the vicinity of IL 120.

Porter Drive is generally a north-south collector road that extends between IL 134 and IL 120. It has a two-lane cross section and a posted speed limit of 25 mph. At its intersection with IL 120, Porter Drive is under stop sign control and provides a shared right-turn/left-turn lane. At its intersection with IL 134, Porter Drive is under stop sign control and provides a separate left-turn lane and a separate right-turn lane. Porter Drive is under the jurisdiction of the Village of Round Lake Park and is classified as a Class III Truck Route.



Site Location **Figure 2**



PROJECT:	TITLE:	
Lake Transfer Station Round Lake Park, Illinois	Existing Roadway Characteristics	KLOA Job No: 12-141 Figure: 3

Wildspring Road is a residential road that has a two-lane cross section. At its intersection with IL 120, both approaches of Wildspring Road are under stop sign control and provide a separate left-turn lane and a shared through/right-turn lane. Wildspring Road has a posted speed limit of 25 mph.

Curran Road is a residential road that has a two-lane cross section. At its intersection with IL 120, Curran Road is under stop sign control and provides a separate left-turn lane and a separate right-turn lane. Curran Road has a posted speed limit of 25 mph.

Cedar Mound Road is generally a north-south local road that serves the Villa at Timber Creek mobile home community. It has a two-lane cross section and is under stop sign control at its intersection with Porter Drive.

Roadway Improvements

IL 120 and Porter Drive. As part of the development of the transfer station, the following improvements are proposed at this intersection.

- IL 120 is proposed to be widened to provide a separate left-turn lane and a separate right-turn lane serving Porter Drive.

- The Porter Drive approach to IL 120 is proposed to be widened in order to provide a three-lane cross section with one northbound lane and two southbound lanes that will be striped to provide a separate left-turn lane and a separate right-turn lane.

- The intersection radiuses are proposed to be increased in order to efficiently accommodate turning transfer trailers.

Given the higher traffic volumes along IL 120 during the morning and evening peak periods and the fact that the queue from the IL 120/IL 134 intersection regularly extends beyond Porter Drive during the morning peak period, in order to further minimize the impact on existing traffic flows, it is recommended that all transfer station truck traffic be prohibited from making a left turn from Porter Drive to IL 120 from (1) 7:00 A.M. to 9:00 A.M. and (2) 3:00 P.M. to 5:00 P.M. As a result, all transfer station truck traffic will be required to make a right turn on to IL 120 when exiting Porter Drive during the morning and evening peak periods.

IL 120 with Hainsville Road. IDOT is completing a Phase I study to improve the intersection of IL 120 with Hainsville Road. The improvements are proposed to include the addition of a westbound-to-northbound right-turn lane on IL 120 and the upgrade/modernization of the traffic signal. According to IDOT, the construction of the project is currently not funded, but IDOT is attempting to obtain funding through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

IL 120 Traffic Signal Interconnect. LCDOT is currently preparing plans to interconnect all of the traffic signals along the IL 120 corridor between IL 83 and IL 134. According to LCDOT, the project is not currently funded, but LCDOT is attempting to obtain funding through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

IL 120 Corridor Study. The Route 120 Corridor Planning Council, consisting of Lake County Board members and municipal representatives, worked together to determine how to improve the IL 120 corridor. A unified vision for the future of the IL 120 transportation corridor was approved by the Corridor Planning Council in the fall of 2009. The recommendations included improving IL 120 to a four-lane, limited access highway, with a seven-mile bypass that would extend south of IL 120 generally from Almond Road west to Fish Lake Road. The next step in the process is to begin the Phase I Engineering Study. It should be noted that the proposed bypass would significantly reduce the traffic volume along IL 120 and the other roadways in the area of the site. According to the feasibility study, the daily traffic volumes on IL 120 within the vicinity of the site will be reduced with the construction of the bypass.

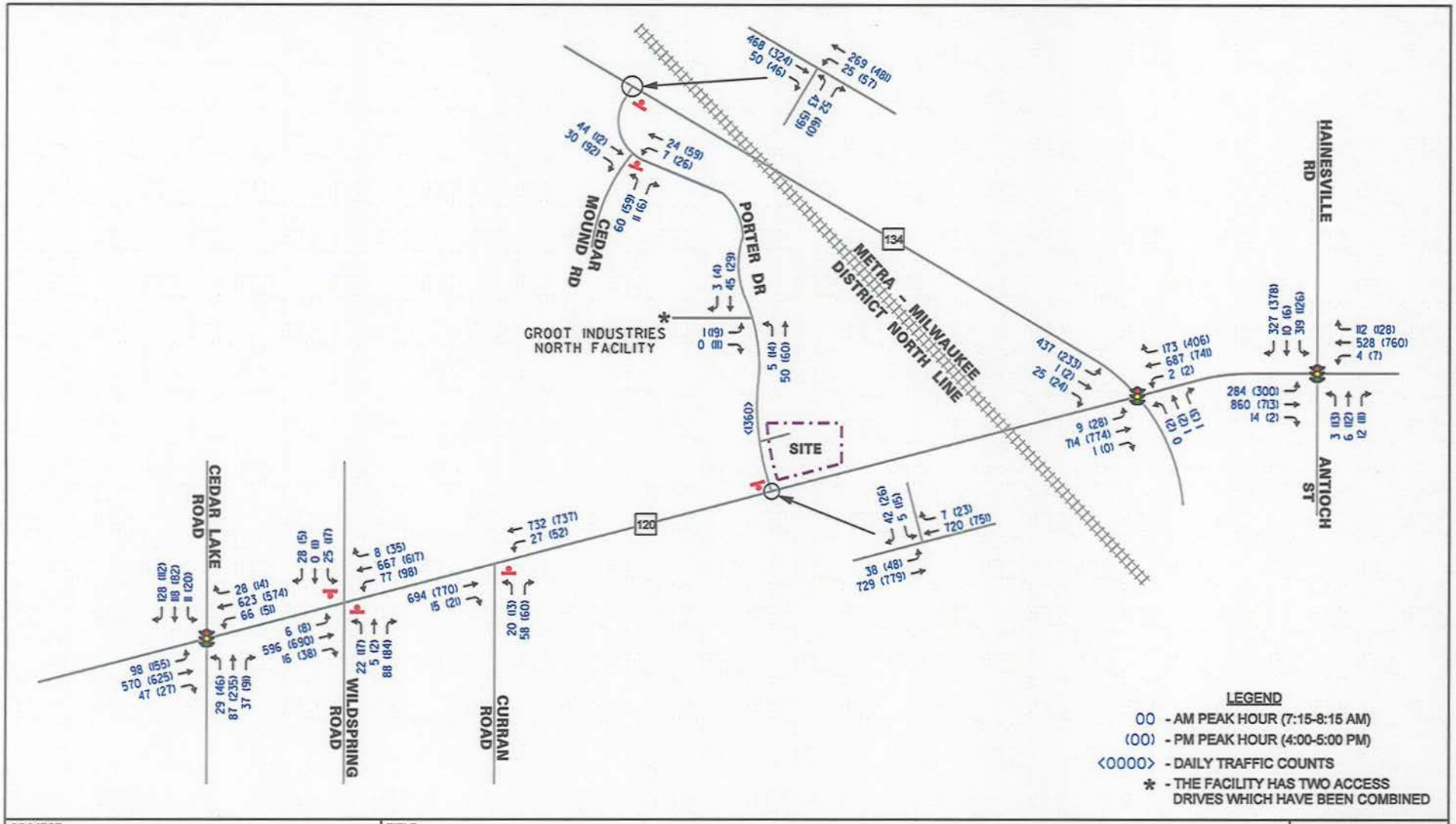
Cedar Lake Road Reconstruction Project. LCDOT is currently preparing a Phase 1 study for the reconstruction of Cedar Lake Road from just north of IL 120 to the curve just south of Nippersink Road. The purpose of the reconstruction project is to improve traffic capacity, safety and access for vehicular and pedestrian users. According to LCDOT, the Phase 1 study is scheduled to be completed in the fall of 2013 with construction scheduled for 2016.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts at the following intersections.

- IL 120 with Hainesville Road
- IL 120 with IL 134
- IL 120 with Porter Drive
- IL 120 with Curran Road
- IL 120 with Wildspring Road
- IL 120 with Cedar Lake Road
- IL 134 with Porter Drive
- Porter Drive with Cedar Mound Road
- Porter Drive with the access drives to the Groot Industries North Facility

The traffic counts were conducted in April and May during the morning (6:00 A.M. to 9:00 A.M.) and evening (3:00 P.M. to 6:00 P.M.) peak periods. In addition, counts were also conducted from 9:00 A.M. to 3:00 P.M. at the IL120/Porter Drive intersection. The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M. and the evening peak hour of traffic occurs from 4:00 P.M. to 5:00 P.M. Further, the results of the 12-hour traffic counts at the IL 120/Porter Drive intersection show that the area traffic volumes decrease significantly outside of the morning and evening commuter peak periods. For example, the traffic volumes at the IL 120/Porter Drive intersection are approximately 40 percent lower between 10:00 A.M. and 11:00 A.M. (peak period of the transfer station) compared to the evening peak hour volumes. In addition to the manual traffic counts, 24-hour machine counts were conducted on Porter Drive just north of IL 120. **Figure 4** illustrates the existing peak hour traffic volumes. The results of the traffic counts are provided in the Appendix.



PROJECT:	TITLE:	
Lake Transfer Station Round Lake Park, Illinois	Existing Peak Hour Volumes	KLOA Job No: 12-141 Figure: 4

Traffic Characteristics of the Proposed Transfer Station

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed transfer station, including the directional distribution and volumes of traffic that it will generate.

Proposed Lake Transfer Station

Groot proposes to develop a transfer station on the 3.9 acre site with access provided via one access drive located on Porter Drive. As proposed, the transfer station will typically, on average, process 750 tons of waste per day. The proposed transfer station is proposing to typically receive and transfer waste from 4:00 A.M. to 8:00 P.M. (inbound waste will only be accepted until 5:00 P.M.) on weekdays and 4:00 A.M. to noon on Saturdays. Only municipal waste, landscape waste and recyclable materials will be accepted at the proposed transfer station. The proposed transfer station will typically have twelve employees with six employees working each of two shifts.

Directional Distribution of Site Traffic

The directional distribution of future site-generated trips on the external roadways depends on several variables, including the operational characteristics of the roadway system, the ease with which drivers can travel over various sections of the roadway system without encountering congestion, and the accessibility of the roadways serving the transfer station's area of influence. It is important to note that the following truck restrictions will be implemented along Porter Drive.

- All truck traffic will be directed to use the IL 120/Porter Drive intersection except the truck traffic traveling to/from the Groot Industries North Facility or the Groot Industries Eco-Campus that are/will be located to the west and north of the subject site.

- Between the hours of (1) 7:00 A.M. and 9:00 A.M. and (2) 3:00 P.M. and 5:00 P.M., all transfer station truck traffic will be prohibited from making a left turn from Porter Drive to IL 120. As a result, all transfer station truck traffic will have to make a right turn when exiting Porter Drive. This restriction will not impact the transfer trailers from the transfer station as they will be traveling to the west on IL 120. Transfer station trucks desiring to travel to the east will generally travel westbound IL 120 to southbound Cedar Lake Road or Fairfield Road where they can access various arterial roads. All of the collection trucks and transfer trailers will utilize the arterial roadway system when traveling to/from the transfer station.

The directional distribution for the collection trucks (inbound waste) was estimated based on the intended service area of the proposed transfer station and the existing travel patterns, as determined from the traffic counts. Groot Industries has indicated that the proposed transfer station will primarily serve Lake County. The outbound waste is anticipated to be transported from the transfer station to the Winnebago Landfill located in Winnebago County, Illinois. **Table 1** illustrates the estimated directional distribution for the proposed transfer station.

Table 1
ESTIMATED DIRECTIONAL DISTRIBUTION
WITHOUT TURNING RESTRICTIONS AT PORTER DRIVE

Direction	Collection Trucks	Transfer Trailers
To and from the east on IL 120 (east of Hainesville Road)	45%	0%
To and from the west on IL 120 (west of Cedar Lake Road)	20%	100%
To and from the north on Hainesville Road	10%	0%
To and from the north on Cedar Lake Road	5%	0%
To and from the south on Cedar Lake Road	10%	0%
To and from the northwest on IL 134 (via the IL 120/IL 134 intersection)	10%	0%
Total	100%	100%

Estimated Site Traffic Generation

As proposed, the transfer station will typically process, on average, 750 tons of waste per day. However, to be conservative and ensure that the analysis was conducted based on projections that exceed the anticipated traffic volumes, all of the analyses and evaluations in this study are based on the proposed transfer station processing 900 tons of waste per day, which is approximately 20 percent more waste than what will typically be processed.

The majority of the direct haul inbound waste will be transported to the transfer station via four ton (typical payload) roll off trucks and eight ton (typical payload) packer trucks. All of the waste will be transported from the transfer station via 24 ton (typical payload) transfer trailers. The estimate of the traffic to be generated by the proposed transfer station was based on the expected daily waste that will be processed and the make-up of the type of traffic that will be transporting the waste.

In addition, the proposed transfer station will typically have a total of twelve employees with six employees working each of the two shifts. Given the shift times, the employees are expected to arrive or depart from the proposed transfer station outside of the weekday morning or evening commuter peak hours. Beyond employee and truck traffic, the proposed transfer station will generate approximately five to six trips per day due to the maintenance/service of the proposed transfer station. It is anticipated that very few, if any, of these vehicles will arrive at or depart from the proposed transfer station during weekday morning or evening commuter peak hours.

The estimate of the peak hour and daily traffic to be generated by the proposed transfer station is shown in **Table 2** and is based on the transfer station processing 750 tons and 900 tons of waste per day.

Lastly, the site of the proposed transfer station was chosen due to its proximity to the Groot Industries North Facility, which is located on Porter Drive just north of the site. The existing Groot Industries North Facility is a storage and maintenance yard for Groot's waste trucks (approximately 65 to 70) and containers and will support the operation of the proposed transfer station. For example, many of the collection trucks that will deliver the waste to the proposed transfer station will be maintained and stored at the existing Groot Industries North Facility. After delivering waste to the transfer station, many collection trucks will only traverse Porter Drive as they will be parked at the Groot Industries North Facility. As such, the impact of the proposed transfer station will be further minimized as a large percentage of the traffic that will be generated by the facility is already on the area roadways and many trucks will not have to traverse the external arterial roadway system when leaving the proposed transfer station.

Table 2
LAKE TRANSFER STATION TRIP GENERATION ESTIMATES

	Morning Peak Hour		Evening Peak Hour		Daily	
	In	Out	In	Out	In	Out
750 Tons of Waste Per Day						
Collection Trucks	9	9	6	6	111	111
Transfer Trailers	2	2	2	2	32	32
Miscellaneous Traffic	0	0	0	0	20	20
Total	11	11	8	8	163	163
900 Tons of Waste Per Day						
Collection Trucks	11	11	7	7	134	134
Transfer Trailers	3	3	3	3	38	38
Miscellaneous Traffic	0	0	0	0	20	20
Total	14	14	10	10	192	192

Notes:
- Miscellaneous traffic includes employee traffic and service and maintenance traffic.
- A large percentage of the traffic shown in the table is currently generated by the existing Groot Industries North Facility that will support the proposed transfer station.

Future Growth

In addition to the traffic generated by the proposed transfer station, this study also considered the increase in traffic due to other projected growth in the area as discussed below.

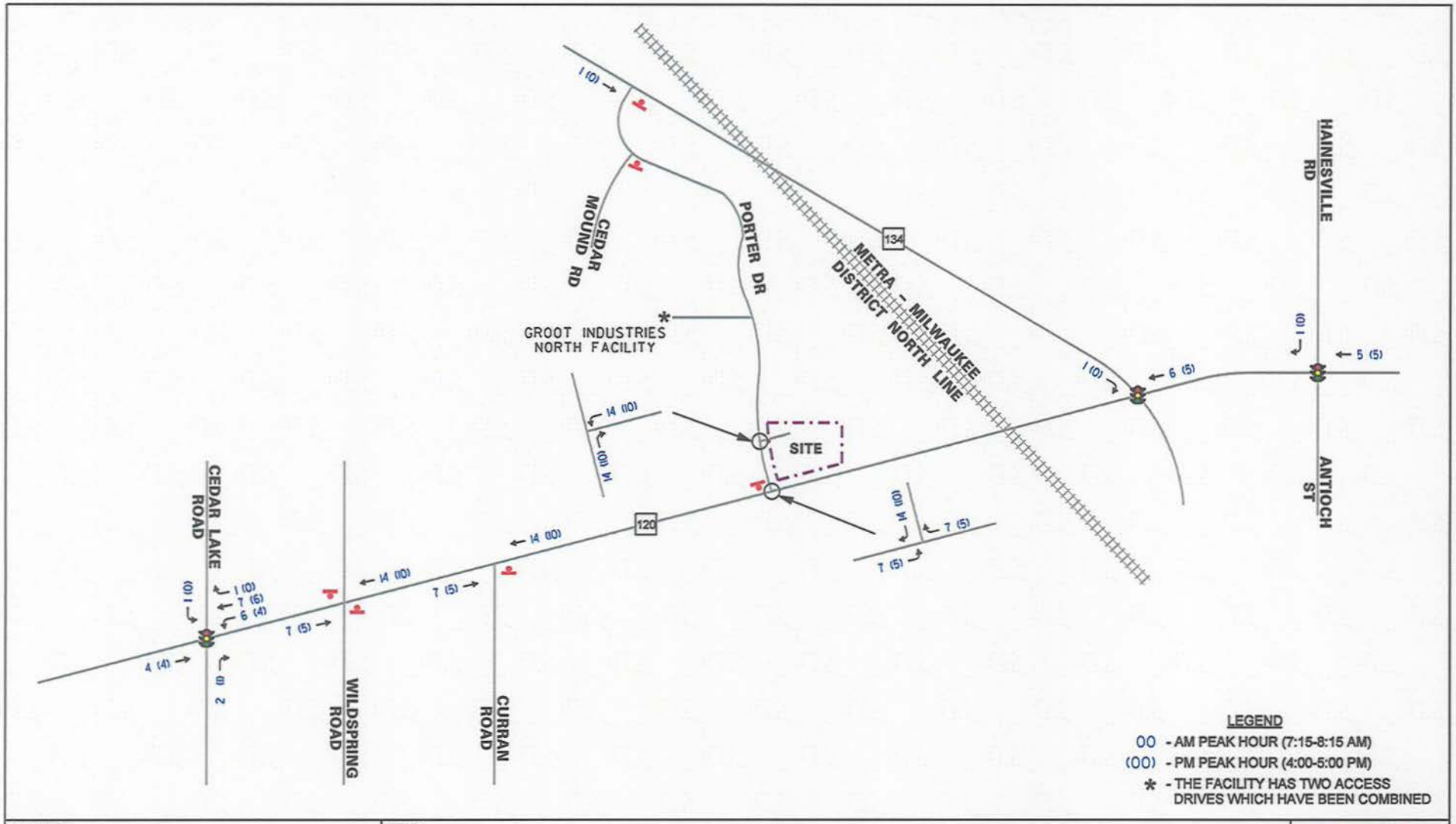
- The proposed Groot Industries Eco-Campus which is to be located in the northwest quadrant of the IL 120/Porter Drive intersection. As proposed, the recycling facility will process a maximum of 500 tons of construction and demolition materials per day. Similar to the transfer station, all truck traffic generated by the Eco-Camus will be (1) directed to use the IL 120/Porter Drive intersection, except the truck traffic traveling to/from the Groot Industries North Facility or the proposed transfer station and (2) prohibited from making a left turn from Porter Drive to IL 120 from (1) 7:00 A.M. to 9:00 A.M. and (2) 3:00 P.M. to 5:00 P.M.

- To account for other growth in the area, the existing traffic volumes were increased by an ambient growth factor. Based on the Illinois 120 Corridor feasibility study, the area is projected to experience an annual growth rate of less than 1.0 percent per year. Therefore, to obtain Year 2016 background traffic volumes (the year the transfer station is anticipated to begin operation), the existing traffic volumes were increased by three percent.

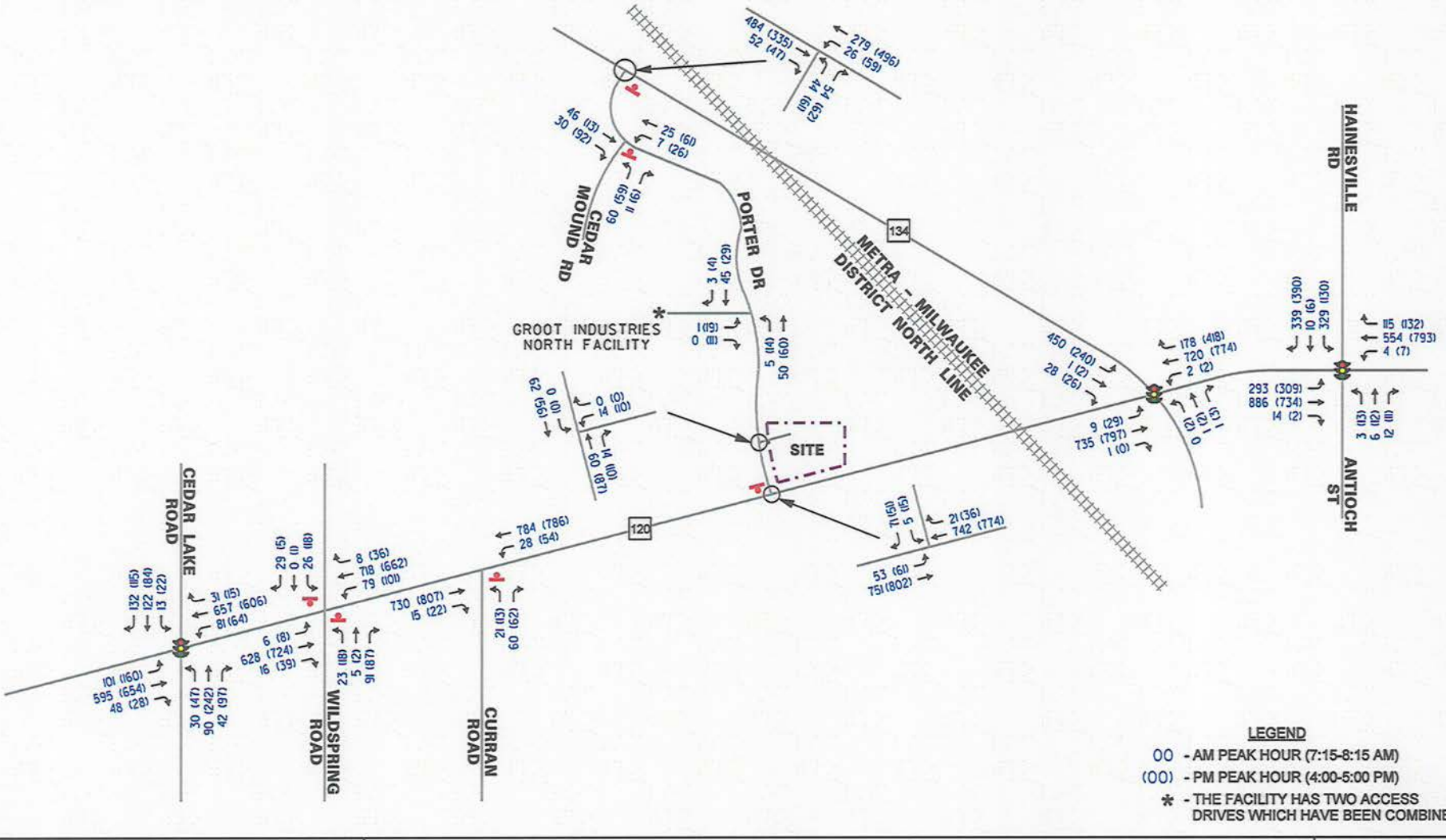
Traffic Assignment

The peak hour traffic volumes that will be generated by the proposed transfer station processing 900 tons of waste per day were assigned to the various roadways serving the site in accordance with the previously described directional distribution and assuming all transfer station and Eco-Campus truck traffic is prohibited from making a left turn from Porter Drive to IL 120 from (1) 7:00 A.M. to 9:00 A.M. and (2) 3:00 P.M. to 5:00 P.M. This provides a conservative analysis, as the proposed transfer station is projected to typically process, on average, 750 tons of waste per day. **Figure 5** illustrates the morning and evening peak hour traffic assignments for the proposed transfer station. The existing traffic volumes were added to the transfer station-generated traffic volumes and the traffic generated by other growth in the area to obtain Year 2016 projected peak hour traffic volumes, which are illustrated in **Figure 6**.

It is important to note that it was assumed that the proposed transfer station will generate all new traffic to the roadway system. No reductions were assumed for the existing truck traffic that is generated by the Groot North Facility which will be supporting the operation of the proposed transfer station. Furthermore, the study assumed that all of the trucks leaving the proposed transfer station will be traveling along the external arterial roadway system. However, again, as noted above, many of the collection trucks exiting the transfer station, particularly during the afternoon and evening, will only be traveling along Porter Drive as they will be parked at the Groot Industries North Facility. Lastly, the projected traffic to be generated by the transfer station is based on it processing 900 tons of waste per day as opposed to the projected 750 tons per day. Therefore, the traffic projections for the proposed transfer station are conservative, particularly the evening peak hour volumes.



PROJECT:	TITLE:	
Lake Transfer Station Round Lake Park, Illinois	Facility-Generated Traffic	KLOA Job No: 12-141 Figure: 5



PROJECT:	TITLE:	
Lake Transfer Station Round Lake Park, Illinois	Year 2016 Traffic Volumes	KLOA Job No: 12-141 Figure: 6

Evaluation and Recommendations

In order to evaluate the impact of the proposed transfer station, the adjacent intersections were analyzed based on the existing and future traffic on the roadway system and the access to the proposed transfer station was reviewed. From this analysis, recommendations were developed regarding the access facilities and the area roadway system.

Site Access Drive

Access to the transfer station will be provided via one access drive located on the east side of Porter Drive at the north end of the site. This access drive is proposed to provide one inbound lane and one outbound lane with the outbound lane under stop sign control. To facilitate the access of truck traffic, larger radiuses will be provided along the access drive. Based on the projected traffic volumes and the IDOT guidelines provided in the *Bureau of Design & Environmental Manual* (Figures 36-3 A and 36-F), separate left-turn or right-turn lanes are not required on Porter Drive serving the access drive.

Traffic Analysis

Traffic analyses were performed for the intersections within the study area to determine the operation of the existing roadway system, evaluate the impact of the proposed transfer station, and determine the ability of the existing roadway system to accommodate projected traffic demands. Analyses were performed for the weekday morning and evening commuter peak hours for the existing traffic volumes and Year 2016 projected traffic volumes.

The traffic analyses were performed using HCS software, which is based on the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*. The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter grade from A to F based on the average control delay experienced by vehicles passing through the intersection. Control delay is that portion of the total delay attributed to the traffic signal or stop sign control operation and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Level of Service A is the highest grade (best traffic flow and least delay), Level of Service E represents saturated or at-capacity conditions, and Level of Service F is the lowest grade (oversaturated conditions, extensive delays). For two-way stop controlled (TWSC) intersections, levels of service are only calculated for the approaches controlled by a stop sign (not for the intersection as a whole).

The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for unsignalized and signalized intersections are shown in Appendix. The results of the capacity analysis are summarized in **Table 3** for the existing traffic volumes and **Table 4** for Year 2016 projected traffic volumes. Copies of the capacity analyses are provided in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS - EXISTING TRAFFIC VOLUMES

Intersection	Morning Peak Hour LOS	Morning Peak Hour Delay	Evening Peak Hour LOS	Evening Peak Hour Delay
IL 120 with Hainesville Road[1]	D	42.8	E	75.8
IL 120 with IL 134[1]	D	35.1	C	26.5
IL 120/Porter Drive[2]	C	20.0	D	33.0
IL 120/Curran Road[3]	C	20.1	C	22.7
IL 120/Wildspring Road[3]	F	89.4	F	97.4
IL 120/Cedar Lake Road[1]	C	33.9	D	35.0
IL 134 with Porter Drive[3]	C	19.1	C	23.3
Porter Drive with Cedar Mound Road[2]	A	9.4	A	9.9
Porter Drive with Groot Industries North Facility Access Drives[2, 4]	B	10.2	B	10.2

LOS - Level of Service
Delay - Measured in Seconds
1. Represents the operation of the entire signalized intersection.
2. Represents the operation of the approach under stop sign control at the intersection.
3. Represents the operation of the left-turn movement under stop sign control at the intersection.
4. The traffic volumes at the two access drives were combined and evaluated as one access drive.

Table 4
CAPACITY ANALYSIS RESULTS – YEAR 2016 TRAFFIC VOLUMES

Intersection	Morning Peak Hour		Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL 120 with Hainesville Road[1]	D	48.1	F	85.6
IL 120 with IL 134[1]	D	38.8	C	27.6
IL 120 with Porter Drive[5]				
• Porter Drive Right-Turn Movement	C	19.1	C	18.8
• Porter Drive Left-Turn Movement	C	21.1	C	23.4
IL 120/Curran Road[3]	C	21.4	C	24.1
IL 120/Wildspring Road[3]	F	118.7	F	126.7
IL 120/Cedar Lake Road[1]	D	38.6	D	38.5
IL 134 with Porter Drive[3]	C	19.9	C	24.7
Porter Drive with Cedar Mound Road[2]	A	9.4	A	10.0
Porter Drive with Groot Industries North Facility Access Drives[2, 4]	B	10.3	B	10.3
Porter Drive with Transfer Station Drive[2]	B	10.6	B	10.6

LOS - Level of Service
Delay - Measured in Seconds
1. Represents the operation of the entire signalized intersection.
2. Represents the operation of the approach under stop sign control at the intersection.
3. Represents the operation of the left-turn movement under stop sign control at the intersection.
4. The traffic volumes at the two access drives were combined and evaluated as one access drive.
5. Assumes the intersection improvements and turn restrictions as proposed as part of the transfer station.

Traffic Evaluation

The following summarizes how the study area intersections are currently operating and are projected to operate.

IL 120 with Porter Drive. The results of the capacity analyses indicate that this intersection currently operates at a good level of service. However, during the morning peak hour the eastbound queue of vehicles from the IL 120/IL 134 intersection regularly extends to and/or past Porter Drive. When the queue does extend beyond Porter Drive, left-turn movements from Porter Drive to IL 120 are currently completed via courtesy gaps in the eastbound flow of traffic.

As part of development of the transfer station, the following improvements are proposed at this intersection.

- IL 120 is proposed to be widened to provide a separate left-turn lane and a separate right-turn lane serving Porter Drive. These improvements will provide deceleration lanes along IL 120 which will remove the slower moving/stopped vehicles that are making a turn to Porter Drive from the IL 120 through lanes.

- The Porter Drive approach to IL 120 is proposed to be widened in order to provide a three-lane cross section with one northbound lane and two southbound lanes that will be striped to provide a separate left-turn lane and a separate right-turn lane. These improvements will increase the capacity of the Porter Drive approach.

- The intersection radiuses are proposed to be increased in order to better and more efficiently accommodate turning truck traffic.

As such, the proposed intersection improvements will provide for a more orderly and efficient flow of traffic through this intersection.

Given the higher traffic volumes along IL 120 during the morning and evening peak periods and the fact that the queue from the IL 120/IL 134 intersection regularly extends beyond Porter Drive during the morning peak period, it is recommended that all transfer station and Eco-Campus truck traffic be prohibited from making a left turn from Porter Drive to IL 120 from (1) 7:00 A.M. to 9:00 A.M. and (2) 3:00 P.M. to 5:00 P.M. As a result, all transfer station and Eco-Campus truck traffic will be required to make a right turn on to IL 120 when exiting Porter Drive during the morning and evening peak periods.

It is important to note that the left-turn restriction will not impact the transfer trailers from the transfer station as they will be traveling to the west on IL 120. Further, the waste transfer station is expected to generate a limited number of collection trucks during the morning and evening peak periods. Lastly, all of the collection trucks and transfer trailers will utilize the arterial roadway system when traveling to/from the transfer station. Trucks desiring to travel to the east will generally travel westbound IL 120 to southbound Cedar Lake Road or Fairfield Road where they can access various arterial roads.

Once the facility is constructed and operating, this intersection should be monitored in the future to determine if (1) the left-turn restriction needs to be modified or can be eliminated and/or (2) if a traffic signal is warranted at this intersection.

With the proposed intersection improvements and the left-turn restriction during the peak periods, all of the movements at this intersection are projected to continue to operate at a good level of service assuming Year 2016 projected traffic volumes.

IL 120 with Hainesville Road. The results of the capacity analyses indicate that this intersection is currently operating below acceptable levels of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at its current poor level of service. Further, the capacity analyses and field observations have shown that the eastbound IL 120 and southbound Hainesville Road approaches experience extended delays and queuing during the morning peak period and the westbound IL 120 approach experiences significant delays and queuing during the evening peak period.

However, the proposed transfer station is projected to have a limited impact on the operation of this intersection, as the transfer station-generated traffic represents approximately less than one half percent of Year 2016 projected morning and evening peak hours volumes. Further, it is important to note that both IDOT and LCDOT are proposing the following improvements at this intersection.

- IDOT has completed a Phase 1 study to add a separate westbound-to-northbound right-turn lane on IL 120 and to upgrade the traffic signal.

- LCDOT is currently preparing plans to interconnect all of the traffic signals along the IL 120 corridor between IL 83 and IL 134.

While neither project is currently funded, both IDOT and LCDOT are attempting to obtain funding through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

IL 120 with IL 134. The results of the capacity analyses indicate that this intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service. However, the capacity analyses and field observations have shown that several of the approaches and/or movements experience extended delay and queuing during the peak periods, particularly eastbound IL 120. During the morning peak hour, the eastbound IL 120 queue regularly extends to and/or past Porter Drive. This is due in part to the proximity of the intersection to the IL 120/Hainesville Road signalized intersection, the IL 120 at-grade railroad crossing and the lack of a center left-turn lane or separate left-turn lanes along IL 120 and IL 134. However, the proposed transfer station is projected to have a limited impact on the operation of this intersection, as the transfer station-generated traffic represents less than one half percent of Year 2016 projected peak hour volumes.

IL 120 with Curran Road. This unsignalized intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service. The proposed transfer station will have a limited impact on the operation of this intersection.

IL 120 with Wildspring Road. The left-turn movements from the Wildspring Road to IL 120 are currently operating at a poor level of service during the morning and evening peak hours. Assuming Year 2016 projected traffic volumes, the left-turn movements are projected to continue to operate at a poor level of service. As such, during the morning and evening peak periods, the left-turn movements will continue to experience some additional delay. This is common for stop sign controlled movements along arterial roadways like IL 120. However, the proposed transfer station is projected to have a limited impact on the operation of this intersection as the transfer station-generated traffic represents approximately one percent of the 2016 projected peak hour volumes.

IL 120 with Cedar Lake Road. This signalized intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service. The proposed transfer station will have a limited impact on the operation of this intersection.

IL 134 with Porter Drive. This unsignalized intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service. It is important to note that all of the truck traffic generated by the proposed transfer station will be direct to use the IL 120/Porter Drive intersection and, as such, the proposed transfer station will have a limited impact on the operation of this intersection.

Porter Drive with Cedar Mound Road. This unsignalized intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service. All of the truck traffic generated by the proposed transfer station will be directed to use the IL 120/Porter Drive intersection and, as such, the proposed transfer station will have a minimal impact on the operation of this intersection.

Porter Drive with Groot Industries North Facility Access Drives. This unsignalized intersection is currently operating at a good level of service. Assuming Year 2016 projected traffic volumes, this intersection is projected to continue to operate at a good level of service.

Porter Drive with Site Access. The results of the capacity analyses indicate that the access drive is projected to operate at a good level of service. Therefore, the access drives will be adequate to serve the transfer station and will ensure efficient and orderly access to and from the facility with minimal interruption to the through traffic on Porter Drive.

Gap Study

A gap study was conducted at the IL 120/Porter Drive intersection. Gap studies are conducted to determine whether the traffic stream on a roadway has adequate available gaps for traffic entering or exiting a particular road or access drive. The supply of gaps was determined by a field survey conducted from 6:00 A.M. to 6:00 P.M. in May 2013 along IL 120 at Porter Drive. A copy of the gap study results are provided in the Appendix. The following types of gaps were measured.

- The gap required to make a right turn from Porter Drive to westbound IL 120 and to make a left turn from eastbound IL 120 to Porter Drive consisting of a break in the westbound flow of traffic on IL 120.

- The gap required to make a left turn from Porter Drive to eastbound IL 120 consisting of a simultaneous break in both directions of travel on IL 120.

When the gap study was conducted, the eastbound queue of vehicles from the IL 120/IL 134 intersection extended past the Porter Drive intersection during the morning peak hour. While vehicles can exit Porter Drive via courtesy gaps, the gap study assumed that there were no gaps in the eastbound traffic stream when the queue extended past Porter Drive.

The number of gaps and their duration for the westbound flow of traffic along IL 120 during the critical morning and evening peak hours when traffic on IL 120 is at its highest levels are summarized in **Table 5**. Since transfer station and Eco-Campus truck traffic will be prohibited from making a left turn from Porter Drive to IL 120, the critical gaps during the morning and evening peak periods are the gaps in the westbound direction of IL 120. The gap sizes shown in Table 5 were determined based on the recommended gap sizes and factors as outlined in the Institute of Transportation Engineers (ITE) *Traffic Engineering Handbook*, 4th Edition. ITE indicates that "typically, gaps of 6 to 9 seconds are needed to allow the critical entry into the traffic stream of a major street." These gaps sizes are consistent with those outlined in the Transportation Research Board (TRB) *Highway Capacity Manual*. A gap of nine to ten seconds is required for a single unit truck and a gap of eleven to twelve seconds is required for a semi-trailer. Based on the results of the gap study, adequate gaps are available in the IL 120 traffic stream to accommodate the traffic turning to and from Porter Drive.

Table 5
IL 120 AT PORTER DRIVE: GAP DISTRIBUTION BY SIZE AND TYPE

Gap Interval - (seconds)	Number of Gaps per Interval during the Morning Peak Hour (7:15 A.M. to 8:15 A.M.)	Number of Gaps per Interval during the Evening Peak Hour (4:00 P.M. to 5:00 P.M.)
IL 120 Westbound Gap (Right Turn Out/Left Turn In)		
6.0 to 9.9	31	48
10.0 to 13.9	18	30
14.0 to 16.9	15	9
17.0 to 19.9	3	6
20.0+	31	25

Accident Data

KLOA, Inc. obtained accident data from IDOT for the following roadway sections from January 2007 through September 2012.

- IL 120 between Wilson Road and Lake Street
- IL 134 between IL 120 and Cedar Lake Road
- Hainesville Road between IL 120 and Rollins Road
- Cedar Lake Road between IL 120 and Nippersink Road and IL 60 to Townline Road

The IDOT accident data is enclosed in the Appendix.

Conclusion and Recommendations

Based on the proposed transfer station plans and preceding traffic impact study, KLOA, Inc. has determined that the proposed transfer station will comply with Criterion 6. Given the following, it is our opinion that the traffic patterns have been designed to minimize the impact on the existing traffic flows.

- The volume of traffic generated in any one time period is limited as the traffic generated by the proposed transfer station is distributed throughout the entire day.

- The peak traffic periods of the transfer station will occur during the late morning and early afternoon, which do not coincide with the critical morning and evening commuter peak hours. Therefore, the transfer station will generate a low volume of traffic during the critical commuter morning and evening peak periods when traffic on the roadway system is at its highest levels.

- The site of the proposed transfer station was chosen due to its proximity to the Groot Industries North Facility, which is located on Porter Drive just north of the site. The existing Groot Industries North Facility is a storage and maintenance yard for Groot's waste trucks (approximately 65 to 70) and containers and will support the operation of the proposed transfer station. After delivering waste to the proposed transfer station, many collection trucks will only traverse Porter Drive as they will be parked at the Groot Industries North Facility. As such, the impact of the proposed transfer station will be further minimized as a large percentage of the traffic that will be generated by the transfer station is already on the area roadways and many trucks will not have to traverse the external arterial roadway system when leaving the proposed transfer station.

- All truck traffic generated by the proposed transfer station will be directed to use the IL 120/Porter Drive intersection, except the truck traffic traveling to/from the Groot Industries North Facility or the Groot Industries Eco-Campus that is/will be located to the west and north of the subject site. Both of these roads are classified as truck routes.

- As part of the development of the transfer station, the following improvements are proposed at the intersection of IL 120 with Porter Drive.

  - ❖ IL 120 is proposed to be widened to provide a separate left-turn lane and a separate right-turn lane serving Porter Drive.

  - ❖ The Porter Drive approach to IL 120 is proposed to be widened in order to provide a three-lane cross section with one northbound lane and two southbound lanes that will be striped to provide a separate left-turn lane and a separate right-turn lane.

  - ❖ The intersection radiuses are proposed to be increased in order to efficiently accommodate turning transfer trailers.

- Given the higher traffic volumes along IL 120 during the morning and evening peak periods and the fact that the queue from the IL 120/IL 134 intersection regularly extends beyond Porter Drive during the morning peak period, it is recommended that all transfer station truck traffic be prohibited from making a left turn from Porter Drive to IL 120 from (1) 7:00 A.M. to 9:00 A.M. and (2) 3:00 P.M. to 5:00 P.M. As a result, all transfer station truck traffic will be required to make a right turn on to IL 120 when exiting Porter Drive during the morning and evening peak periods.

- Access to the transfer station is proposed to be provided via a single access drive located on Porter Drive. The proposed design and location of the access drive will be adequate to serve the transfer station traffic and will ensure efficient and orderly access.

- With the proposed improvements at the IL 120/Porter Drive intersection and the recommended turning restrictions, the intersection capacity analyses have shown that the traffic generated by the proposed transfer station will have a limited impact on the existing roadway system. This is due to the fact that the transfer station is projected to generate a nominal volume of traffic in any one hour, particularly during the critical morning and evening commuter peak hours.

Appendix

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service	Interpretation	Delay per Vehicle (seconds)
A	Very short delay, with extremely favorable progression. Most vehicles arrive during the green phase and do not stop at all.	≤10.0
B	Good progression, with more vehicles stopping than for Level of Service A, causing higher levels of average delay.	>10 and ≤20.0
C	Light congestion, with individual cycle failures beginning to appear. Number of vehicles stopping is significant at this level though many still pass through the intersection without stopping.	>20 and ≤35
D	Congestion is more noticeable, with longer delays resulting from combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and the proportion of vehicles not stopping declines.	>35 and ≤55
E	High delays result from poor progression, high cycle lengths and high V/C ratios.	>55 and ≤80
F	Unacceptable delay occurring, with oversaturation.	>80.0

Source: *Highway Capacity Manual,* 2000.

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Average Total Delay (SEC/VEH)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Source: *Highway Capacity Manual*, 2000.

Traffic Counts and Gap Study

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Passenger Vehicles

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	20	0	4	0	2	85	0	0	0	0	0	0	0	140	3
6:15 AM	0	6	0	2	0	2	118	0	0	0	0	0	0	0	159	6
6:30 AM	0	17	0	3	0	7	152	0	0	0	0	0	0	0	163	2
6:45 AM	0	15	0	2	0	2	122	0	0	0	0	0	0	0	217	8
7:00 AM	0	8	0	3	0	1	140	0	0	0	0	0	0	0	176	6
7:15 AM	0	8	0	2	0	1	149	0	0	0	0	0	0	0	194	8
7:30 AM	0	10	0	0	0	1	189	0	0	0	0	0	0	0	175	8
7:45 AM	0	10	0	0	0	1	158	0	0	0	0	0	0	0	156	5
8:00 AM	0	8	0	1	0	1	171	0	0	0	0	0	0	0	166	13
8:15 AM	0	6	0	2	0	1	159	0	0	0	0	0	0	0	148	7
8:30 AM	0	5	0	2	0	1	119	0	0	0	0	0	0	0	159	3
8:45 AM	0	2	0	3	0	2	92	0	0	0	0	0	0	0	171	4
Totals	0	115	0	24	0	22	1654	0	0	0	0	0	0	0	2024	73

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	9	0	4	0	7	179	0	0	0	0	0	0	0	118	4
3:15 PM	0	8	0	2	0	5	189	0	0	0	0	0	0	0	162	8
3:30 PM	0	9	0	5	0	5	163	0	0	0	0	0	0	0	177	10
3:45 PM	0	6	0	4	0	4	172	0	0	0	0	0	0	0	191	14
4:00 PM	0	3	0	6	0	4	186	0	0	0	0	0	1	0	172	6
4:15 PM	0	10	0	5	0	7	150	0	0	0	0	0	0	0	203	13
4:30 PM	0	7	0	1	0	0	184	0	0	0	0	0	0	0	189	12
4:45 PM	0	3	0	1	0	3	195	0	0	0	0	0	0	0	190	13
5:00 PM	0	8	0	1	0	1	187	0	0	0	0	0	0	0	181	5
5:15 PM	0	2	0	1	0	2	198	0	0	0	0	0	0	0	195	11
5:30 PM	0	8	0	2	0	3	186	0	0	0	0	0	0	0	182	10
5:45 PM	0	5	0	4	0	3	191	0	0	0	0	0	0	0	182	5
Totals	0	78	0	36	0	44	2180	0	0	0	0	0	1	0	2142	111

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Single Unit Trucks

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	3	0
6:15 AM	0	1	0	7	0	0	3	0	0	0	0	0	0	0	3	0
6:30 AM	0	0	0	3	0	0	8	0	0	0	0	0	0	0	3	0
6:45 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	7	0
7:00 AM	0	2	0	0	0	3	4	0	0	0	0	0	0	0	4	1
7:15 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	4	0
7:30 AM	0	3	0	1	0	0	7	0	0	0	0	0	0	0	7	0
7:45 AM	0	1	0	0	0	0	12	0	0	0	0	0	0	0	7	3
8:00 AM	0	0	0	1	0	1	6	0	0	0	0	0	0	0	5	1
8:15 AM	0	1	0	0	0	0	6	0	0	0	0	0	0	0	7	2
8:30 AM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	10	0
8:45 AM	0	0	0	0	0	1	7	0	0	0	0	0	0	0	5	0
Totals	0	9	0	13	0	7	67	0	0	0	0	0	0	0	65	7

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	1	0	0	0	7	14	0	0	0	0	0	0	0	11	1
3:15 PM	0	1	0	1	0	6	8	0	0	0	0	0	0	0	13	0
3:30 PM	0	0	0	0	0	8	7	0	0	0	0	0	0	0	9	3
3:45 PM	0	1	0	0	0	7	11	0	0	0	0	0	0	0	9	2
4:00 PM	0	2	0	0	0	3	3	0	0	0	0	0	0	0	4	1
4:15 PM	0	1	0	0	0	3	9	0	0	0	0	0	0	0	4	1
4:30 PM	0	0	0	0	0	2	4	0	0	0	0	0	0	0	5	1
4:45 PM	0	0	0	0	0	1	5	0	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2	3
5:15 PM	0	0	0	0	0	2	3	0	0	0	0	0	0	0	7	1
5:30 PM	0	0	0	1	0	1	3	0	0	0	0	0	0	0	3	1
5:45 PM	0	1	0	0	0	0	4	0	0	0	0	0	0	0	3	1
Totals	0	7	0	2	0	41	73	0	0	0	0	0	0	0	72	15

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Semi-Trailers

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	5	0
Totals	0	1	0	1	0	2	29	0	0	0	0	0	0	0	17	0

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
3:15 PM	0	0	0	0	0	1	3	0	0	0	0	0	0	0	3	0
3:30 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	4	0	0	0	0	0	0	0	2	0
4:00 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	0	1	0	0	4	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
Totals	0	0	0	3	0	2	21	0	0	0	0	0	0	0	18	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Other Multi Units

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
6:15 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	2	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0
7:30 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Totals	0	1	0	1	0	2	16	0	0	0	0	0	0	0	19	0

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
4:00 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1
Totals	0	0	0	0	0	2	15	0	0	0	0	0	0	0	14	4

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Passenger Vehicles

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
9:00 AM	0	5	0	3	0	2	113	0	0	0	0	0	0	0	121	4
9:15 AM	0	3	0	2	0	2	98	0	0	0	0	0	0	0	132	5
9:30 AM	0	5	0	3	0	4	101	0	0	0	0	0	0	0	130	2
9:45 AM	0	5	0	2	0	1	97	0	0	0	0	0	0	0	133	6
10:00 AM	0	3	0	1	0	2	84	0	0	0	0	0	0	0	122	2
10:15 AM	0	2	0	4	0	2	83	0	0	0	0	0	0	0	106	2
10:30 AM	0	3	0	2	0	4	91	0	0	0	0	0	0	0	139	2
10:45 AM	0	5	0	5	0	2	94	0	0	0	0	0	0	0	97	3
11:00 AM	0	2	0	3	0	1	110	0	0	0	0	0	0	0	111	1
11:15 AM	0	5	0	3	0	4	99	0	0	0	0	0	0	0	120	5
11:30 AM	0	10	0	1	0	4	126	0	0	0	0	0	0	0	127	3
11:45 AM	0	5	0	3	0	2	92	0	0	0	0	0	0	0	133	7
12:00 PM	0	1	0	1	0	0	100	0	0	0	0	0	0	0	110	8
12:15 PM	0	6	0	2	0	6	129	0	0	0	0	0	0	0	108	3
12:30 PM	0	4	0	2	0	4	120	0	0	0	0	0	0	0	125	2
12:45 PM	0	5	0	3	0	3	112	0	0	0	0	0	0	0	98	4
1:00 PM	0	4	0	5	0	5	141	0	0	0	0	0	0	0	99	4
1:15 PM	0	6	0	1	0	4	113	0	0	0	0	0	0	0	111	5
1:30 PM	0	1	0	2	0	2	105	0	0	0	0	0	0	0	116	5
1:45 PM	0	3	0	3	0	2	118	0	0	0	0	0	0	0	113	5
2:00 PM	0	5	0	2	0	2	121	0	0	0	0	0	0	0	107	2
2:15 PM	0	2	0	0	0	5	120	0	0	0	0	0	0	0	94	3
2:30 PM	0	3	0	4	0	5	128	0	0	0	0	0	0	0	127	4
2:45 PM	0	4	0	0	0	5	162	0	0	0	0	0	0	0	125	7
Totals	0	97	0	57	0	73	2657	0	0	0	0	0	0	0	2804	94

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Single Unit Trucks

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
9:00 AM	0	0	0	1	0	2	3	0	0	0	0	0	0	0	12	2
9:15 AM	0	1	0	2	0	0	9	0	0	0	0	0	0	0	7	0
9:30 AM	0	0	0	1	0	1	6	0	0	0	0	0	0	0	6	0
9:45 AM	0	0	0	1	0	1	6	0	0	0	0	0	0	0	7	0
10:00 AM	0	2	0	1	0	1	7	0	0	0	0	0	0	0	9	1
10:15 AM	0	1	0	1	0	5	9	0	0	0	0	0	0	0	7	0
10:30 AM	0	1	0	2	0	0	4	0	0	0	0	0	0	0	7	0
10:45 AM	0	0	0	0	0	2	12	0	0	0	0	0	0	0	5	0
11:00 AM	0	3	0	0	0	4	7	0	0	0	0	0	0	0	2	0
11:15 AM	0	1	0	3	0	0	8	0	0	0	0	0	0	0	12	1
11:30 AM	0	2	0	0	0	2	9	0	0	0	0	0	0	0	10	1
11:45 AM	0	1	0	1	0	2	7	0	0	0	0	0	0	0	1	0
12:00 PM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	11	0
12:15 PM	0	0	0	1	0	0	6	0	0	0	0	0	0	0	4	0
12:30 PM	0	1	0	1	0	4	9	0	0	0	0	0	0	0	8	1
12:45 PM	0	2	0	0	0	1	4	0	0	0	0	0	0	0	4	0
1:00 PM	0	0	0	1	0	0	7	0	0	0	0	0	0	0	8	1
1:15 PM	0	1	0	2	0	1	5	0	0	0	0	0	0	0	3	0
1:30 PM	0	0	0	1	0	2	3	0	0	0	0	0	0	0	6	0
1:45 PM	0	1	0	2	0	2	8	0	0	0	0	0	0	0	9	0
2:00 PM	0	0	0	0	0	2	4	0	0	0	0	0	0	0	7	0
2:15 PM	0	1	0	1	0	0	5	0	0	0	0	0	0	0	8	0
2:30 PM	0	1	0	0	0	0	10	0	0	0	0	0	0	0	5	2
2:45 PM	0	1	0	0	0	4	11	0	0	0	0	0	0	0	6	0
Totals	0	20	0	22	0	39	162	0	0	0	0	0	0	0	164	9

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Semi-Trailers

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
9:15 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
9:30 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
9:45 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	1	0	1	5	0	0	0	0	0	0	0	4	0
10:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	5	0
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
10:45 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
11:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0
11:15 AM	0	0	0	2	0	0	4	0	0	0	0	0	0	0	5	0
11:30 AM	0	0	0	1	0	0	5	0	0	0	0	0	0	0	4	0
11:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
12:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6	0
12:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	4	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
12:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0
1:00 PM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	6	0
1:15 PM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	4	0
1:30 PM	0	0	0	0	0	1	3	0	0	0	0	0	0	0	7	0
1:45 PM	0	1	0	1	0	0	2	0	0	0	0	0	0	0	4	0
2:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
2:15 PM	0	0	0	1	0	1	1	0	0	0	0	0	0	0	3	0
2:30 PM	0	0	0	1	0	0	4	0	0	0	0	0	0	0	2	0
2:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Totals	0	2	0	8	0	4	72	0	0	0	0	0	0	0	87	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940805, 10940806, 1094081
Location: Porter Dr -- IL 120
Date: 5/1/13

Other Multi Units

	Porter Dr (Southbound)				IL 120 (Westbound)				Porter Dr (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11:15 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0
11:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	1	0
12:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	2	0	0	0	0	15	0	0	0	0	0	0	0	17	2

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940801, 10940802
Location: N Hainesville Rd -- IL 120
Date: 5/1/13

Passenger Vehicles

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	31	0	62	0	11	65	1	0	0	0	0	0	0	184	44
6:15 AM	0	50	0	59	0	4	88	2	0	0	0	2	0	2	244	51
6:30 AM	0	65	4	71	0	12	87	1	0	1	0	0	0	2	209	58
6:45 AM	0	66	6	57	0	9	92	3	0	1	0	0	0	4	228	65
7:00 AM	0	62	2	85	0	14	96	2	0	1	1	2	0	1	222	55
7:15 AM	0	75	3	83	0	27	129	0	0	3	0	0	0	3	240	56
7:30 AM	0	90	0	74	0	22	112	2	0	3	1	1	0	1	206	77
7:45 AM	0	80	5	74	0	29	123	2	0	1	2	1	0	5	171	65
8:00 AM	0	65	2	69	0	23	122	0	0	4	2	1	0	3	198	73
8:15 AM	0	80	1	41	0	23	110	1	0	1	1	0	0	2	197	86
8:30 AM	0	45	1	53	0	19	93	3	0	1	1	1	0	0	177	83
8:45 AM	0	37	0	37	0	20	97	3	0	3	1	1	0	3	175	72
Totals	0	746	24	765	0	213	1214	20	0	19	9	9	0	26	2451	785

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	89	1	32	0	31	159	3	0	3	2	4	0	0	129	42
3:15 PM	0	79	0	24	0	24	180	4	0	1	2	5	0	3	127	60
3:30 PM	0	74	0	23	0	29	160	2	0	0	1	3	0	4	149	75
3:45 PM	0	98	3	34	0	38	161	1	0	3	2	4	0	1	154	55
4:00 PM	0	91	1	26	0	26	194	1	0	3	4	2	0	0	175	81
4:15 PM	0	87	2	24	0	26	159	4	0	4	2	7	0	1	179	90
4:30 PM	0	91	1	27	0	41	173	0	0	0	3	3	0	1	141	58
4:45 PM	0	96	1	45	0	30	192	1	0	0	2	1	0	0	188	62
5:00 PM	0	105	0	33	0	31	197	4	0	1	1	2	0	0	157	90
5:15 PM	0	105	0	21	0	36	194	2	0	1	2	0	0	1	143	73
5:30 PM	0	98	1	23	0	54	173	1	0	1	0	2	0	0	154	76
5:45 PM	0	105	1	28	0	38	184	5	0	1	0	2	0	0	149	77
Totals	0	1118	11	340	0	404	2126	28	0	18	21	35	0	11	1845	839

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940801, 10940802
Location: N Hainesville Rd -- IL 120
Date: 5/1/13

Single Unit Trucks

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	4	0	1	1	0	0	0	0	0	0	0	6	0
6:15 AM	0	1	0	3	0	0	3	0	0	0	0	0	0	0	5	1
6:30 AM	0	2	0	1	0	1	2	0	0	0	0	0	0	0	2	2
6:45 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	4	1
7:00 AM	0	0	0	2	0	5	6	0	0	1	0	0	0	1	6	2
7:15 AM	0	2	0	1	0	2	2	0	0	0	0	0	0	0	5	1
7:30 AM	0	6	0	3	0	1	3	0	0	0	1	0	0	0	5	1
7:45 AM	0	2	0	6	0	5	5	0	0	0	0	0	0	0	7	1
8:00 AM	0	2	0	4	0	0	4	0	0	0	0	0	0	1	9	2
8:15 AM	0	3	0	3	0	1	6	1	0	0	0	0	0	0	6	3
8:30 AM	0	5	0	0	0	3	10	0	0	0	0	0	0	0	10	3
8:45 AM	0	1	1	1	0	3	11	0	0	1	0	0	0	0	4	1
Totals	0	25	1	29	0	22	54	2	0	2	1	0	0	2	69	18

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	5	1	1	0	0	19	1	0	0	1	1	0	0	8	1
3:15 PM	0	2	1	1	0	2	12	0	0	1	2	0	0	0	10	4
3:30 PM	0	5	0	0	0	0	12	1	0	0	1	0	0	0	8	3
3:45 PM	0	5	1	9	0	0	15	0	0	0	0	0	0	0	9	4
4:00 PM	0	0	0	0	0	2	8	0	0	2	1	0	0	0	5	1
4:15 PM	0	2	0	1	0	0	11	0	0	0	0	0	0	0	6	1
4:30 PM	0	1	0	1	0	2	8	1	0	1	0	0	0	0	4	2
4:45 PM	0	3	0	0	0	0	3	0	0	0	0	0	0	0	4	3
5:00 PM	0	3	0	0	0	2	2	0	0	0	0	0	0	0	3	0
5:15 PM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	4	1
5:30 PM	0	3	0	0	0	0	3	0	0	0	0	0	0	0	3	2
5:45 PM	0	2	0	3	0	0	3	0	0	0	0	0	0	0	7	0
Totals	0	32	3	16	0	8	101	3	0	4	5	1	0	0	71	22

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940801, 10940802
Location: N Hainesville Rd -- IL 120
Date: 5/1/13

Semi-Trilers

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
6:15 AM	0	1	0	0	0	0	4	0	0	0	0	0	0	0	7	1
6:30 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
6:45 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3	2
7:00 AM	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	5	0	0	0	0	0	0	0	2	2
7:30 AM	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	2	2
8:00 AM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	3	0
8:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	1
8:30 AM	0	0	0	0	0	1	6	0	0	0	0	0	0	0	2	1
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5	0
Totals	0	4	0	1	0	3	50	0	0	0	0	0	0	0	33	10

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	1
3:15 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0
3:30 PM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
4:00 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	6	0
4:15 PM	0	1	1	1	0	0	4	0	0	0	0	0	0	0	0	1
4:30 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0
Totals	0	5	1	3	0	0	26	0	0	1	0	0	0	0	24	4

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940801, 10940802
Location: N Hainesville Rd -- IL 120
Date: 5/1/13

Other Multi Units

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0
6:45 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	1	3
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	1	3	3
7:45 AM	0	1	0	1	0	0	1	0	0	0	0	0	0	0	4	0
8:00 AM	0	2	0	1	0	2	5	0	0	0	0	0	0	0	5	0
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	1	0	0	3	0
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1
Totals	0	10	1	6	0	3	12	1	0	1	0	1	0	1	23	11

	N Hainesville (Southbound)				IL 120 (Westbound)				N Hainesville (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3:45 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	2	3
4:00 PM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	4	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Totals	0	7	0	1	0	1	15	0	0	0	0	0	0	0	9	3

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940803, 10940804
Location: IL 134 -- IL 120
Date: 5/1/13

Passenger Vehicles

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	7	1	109	0	15	80	0	0	0	0	1	0	0	124	2
6:15 AM	0	11	0	119	0	26	117	0	0	0	0	0	0	0	175	0
6:30 AM	0	17	0	132	0	26	124	0	0	0	0	0	0	0	143	2
6:45 AM	0	4	0	85	0	30	128	0	0	0	0	0	0	0	204	1
7:00 AM	0	4	1	127	0	32	123	0	0	1	0	0	0	0	163	1
7:15 AM	0	2	0	113	0	46	163	0	0	0	1	0	0	0	184	4
7:30 AM	0	4	1	117	0	31	166	0	0	0	0	0	0	0	166	1
7:45 AM	0	8	0	83	0	43	174	1	0	1	0	0	0	0	164	2
8:00 AM	0	7	0	98	0	36	145	0	0	0	0	0	0	1	169	2
8:15 AM	0	11	0	98	0	36	161	2	0	0	0	0	0	0	186	2
8:30 AM	0	2	1	107	0	37	103	0	0	1	0	0	0	0	156	8
8:45 AM	0	5	0	69	0	33	99	0	0	0	0	0	0	0	181	2
Totals	0	82	4	1257	0	391	1583	3	0	3	1	1	0	1	2015	27

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	5	0	54	0	73	175	1	0	1	1	1	0	1	111	1
3:15 PM	0	4	0	44	0	85	187	2	0	2	0	0	0	0	147	12
3:30 PM	0	5	2	56	0	83	156	1	0	3	0	0	0	1	168	12
3:45 PM	0	3	1	45	0	84	177	3	0	1	0	0	0	0	174	6
4:00 PM	0	6	0	59	0	96	182	0	0	2	2	0	0	0	183	6
4:15 PM	0	4	2	65	0	104	158	1	0	0	0	2	0	0	205	10
4:30 PM	0	5	0	45	0	90	175	0	0	0	0	0	0	0	165	5
4:45 PM	0	8	0	49	0	102	185	1	0	1	0	0	0	0	197	5
5:00 PM	0	4	0	49	0	108	195	1	0	3	0	2	0	0	174	10
5:15 PM	0	5	0	47	0	104	188	0	0	0	0	0	0	0	180	10
5:30 PM	0	10	0	49	0	83	186	0	0	1	0	1	0	0	180	6
5:45 PM	0	9	0	60	0	104	165	0	0	0	1	0	0	0	164	8
Totals	0	68	5	622	0	1116	2129	10	0	14	4	6	0	2	2048	91

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940803, 10940804
Location: IL 134 -- IL 120
Date: 5/1/13

Single Unit Trucks

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	3	0	1	2	0	0	0	0	0	0	0	6	0
6:15 AM	0	0	0	0	0	1	4	0	0	0	0	0	0	0	7	0
6:30 AM	0	1	0	1	0	3	5	0	0	0	0	0	0	0	3	0
6:45 AM	0	1	0	1	0	0	2	0	0	0	0	0	0	0	6	0
7:00 AM	0	0	0	2	0	3	4	0	0	0	0	0	0	0	6	0
7:15 AM	0	2	0	3	0	1	2	0	0	0	0	0	0	0	4	0
7:30 AM	0	0	0	4	0	4	5	1	0	0	0	0	0	0	6	0
7:45 AM	0	0	0	2	0	1	4	0	0	0	0	0	0	0	5	0
8:00 AM	0	1	0	5	0	4	4	0	0	0	0	0	0	0	4	0
8:15 AM	0	1	0	2	0	0	7	0	0	0	0	0	0	0	8	0
8:30 AM	0	0	0	6	0	4	6	0	0	0	0	0	0	0	9	0
8:45 AM	0	1	0	1	0	7	5	0	0	0	0	0	0	0	4	0
Totals	0	7	0	30	0	29	50	1	0	0	0	0	0	0	68	0

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	1	0	3	0	3	20	0	0	0	0	0	0	0	7	0
3:15 PM	0	1	0	2	0	0	12	0	0	0	0	0	0	0	11	1
3:30 PM	0	0	0	4	0	2	13	0	0	0	0	0	0	0	7	1
3:45 PM	0	0	0	3	0	5	15	0	0	0	0	0	0	0	6	1
4:00 PM	0	1	0	3	0	4	3	0	0	0	0	0	0	0	3	1
4:15 PM	0	0	0	5	0	1	12	0	0	0	0	0	0	0	4	0
4:30 PM	0	0	0	4	0	1	6	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	0	1	0	2	5	0	0	0	0	0	0	0	3	0
5:00 PM	0	0	0	3	0	1	2	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	2	4	0	0	0	0	0	0	0	4	0
5:30 PM	0	0	0	0	0	1	5	0	0	0	0	0	0	0	4	0
5:45 PM	0	0	0	3	0	3	2	0	0	0	0	0	0	0	3	0
Totals	0	3	0	32	0	25	99	0	0	0	0	0	0	0	56	4

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940803, 10940804
Location: IL 134 -- IL 120
Date: 5/1/13

Semi-Trailers

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0	1	4	0	0	0	0	0	0	0	7	0
6:30 AM	0	0	0	1	0	2	4	0	0	0	0	0	0	0	2	0
6:45 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	3	0
7:00 AM	0	0	0	1	0	1	4	0	0	0	0	0	0	0	1	0
7:15 AM	0	1	0	1	0	1	4	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	2	0	0	3	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	3	0	2	7	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	0	1	0	2	1	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	1	0	2	6	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	1	3	0	0	0	0	0	0	0	7	0
Totals	0	1	0	12	0	13	43	0	0	0	0	0	0	0	29	0

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	1	0	4	2	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	1	0	1	4	0	0	0	0	0	0	0	5	0
3:30 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	1	0	2	4	0	0	0	0	0	0	0	2	0
4:00 PM	0	0	0	1	0	1	2	0	0	0	0	0	0	0	5	1
4:15 PM	0	0	0	0	0	1	4	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
Totals	0	0	0	4	0	11	23	0	0	0	0	0	0	0	22	1

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940803, 10940804
Location: IL 134 -- IL 120
Date: 5/1/13

Other Multi Units

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
7:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2	0
8:00 AM	0	0	0	2	0	3	1	0	0	0	0	0	0	0	4	0
8:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Totals	0	0	0	9	0	5	10	0	0	0	0	0	0	0	12	0

	IL 134 (Southbound)				IL 120 (Westbound)				IL 134 (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0
4:00 PM	0	0	0	0	0	1	6	0	0	0	0	0	0	0	3	0
4:15 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
Totals	0	0	0	3	0	8	17	0	0	0	0	0	0	0	11	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940807, 10940808
Location: South Curran Road -- IL 120
Date: 5/1/13

Passenger Vehicles

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	101	4	0	15	0	2	0	1	131	0
6:15 AM	0	0	0	0	0	0	118	2	0	6	0	1	0	1	158	0
6:30 AM	0	0	0	0	0	0	167	2	0	10	0	0	0	1	159	0
6:45 AM	0	0	0	0	0	0	132	6	0	24	0	1	0	1	215	0
7:00 AM	0	0	0	0	0	0	139	5	0	27	0	5	0	2	183	0
7:15 AM	0	0	0	0	0	0	151	8	0	16	0	6	0	4	177	0
7:30 AM	0	0	0	0	0	0	184	5	0	16	0	5	1	4	167	0
7:45 AM	0	0	0	0	0	0	167	7	0	11	0	3	0	2	147	0
8:00 AM	0	0	0	0	0	0	160	6	0	13	0	6	0	3	154	0
8:15 AM	0	0	0	0	0	0	154	14	0	18	0	1	0	1	128	0
8:30 AM	0	0	0	0	0	0	118	2	0	18	0	2	0	4	149	0
8:45 AM	0	0	0	0	0	0	94	3	0	18	0	1	0	1	160	0
Totals	0	0	0	0	0	0	1685	64	0	192	0	33	1	25	1928	0

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	170	11	0	8	0	6	0	6	109	0
3:15 PM	0	0	0	0	0	0	184	14	0	20	0	3	0	2	148	0
3:30 PM	0	0	0	0	0	0	167	6	0	16	0	0	0	1	163	0
3:45 PM	0	0	0	0	0	0	155	9	0	15	0	4	0	7	185	0
4:00 PM	0	0	0	0	0	0	177	5	0	16	0	2	0	4	172	0
4:15 PM	0	0	1	0	0	0	150	19	0	12	0	2	0	5	195	0
4:30 PM	0	0	0	0	0	0	171	17	0	15	0	4	0	9	177	0
4:45 PM	0	0	0	0	0	0	193	11	0	17	0	3	0	3	189	0
5:00 PM	0	0	0	0	0	0	189	11	0	14	0	5	0	6	157	0
5:15 PM	0	0	0	0	0	0	184	14	0	18	0	7	0	7	181	0
5:30 PM	0	0	0	0	0	0	170	18	0	15	0	4	0	5	179	0
5:45 PM	0	0	0	0	0	0	186	16	0	20	0	2	0	17	165	0
Totals	0	0	1	0	0	0	2096	151	0	186	0	42	0	72	2020	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940807, 10940808
Location: South Curran Road -- IL 120
Date: 5/1/13

Single Unit Trucks

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
6:15 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	7	0
6:30 AM	0	0	0	0	0	0	9	1	0	1	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	6	0
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8	0
7:15 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	0
7:45 AM	0	0	0	0	0	0	12	0	0	0	0	0	0	0	10	0
8:00 AM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	4	0
8:15 AM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	5	0
8:30 AM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	9	0
8:45 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	8	0
Totals	0	0	0	0	0	0	69	3	0	3	0	0	0	0	69	0

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	13	1	0	0	0	0	0	0	5	0
3:15 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	14	0
3:30 PM	0	0	0	0	0	0	6	0	0	2	0	0	0	1	6	0
3:45 PM	0	0	0	0	0	0	8	0	0	1	0	0	0	1	9	0
4:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	0	0	0	0	7	0	0	0	0	1	0	0	5	0
4:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
5:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0
5:30 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
5:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0
Totals	0	0	0	0	0	0	61	1	0	3	0	1	0	2	63	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940807, 10940808
Location: South Curran Road -- IL 120
Date: 5/1/13

Semi-Trailers

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
7:00 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	6	0	0	1	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0
8:30 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	3	1	0	0	0	0	0	0	5	0
Totals	0	0	0	0	0	0	37	1	0	1	0	0	0	1	22	0

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
3:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
Totals	0	0	0	0	0	0	17	0	0	0	0	0	0	0	25	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940807, 10940808
Location: South Curran Road -- IL 120
Date: 5/1/13

Other Multi Units

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
6:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
7:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	1	3	0
7:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	1	4	0
7:30 AM	0	0	0	0	0	0	4	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
8:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Totals	0	0	0	0	0	0	23	0	0	1	0	0	0	2	25	0

	South Curran Road (Southbound)				IL 120 (Westbound)				South Curran Road (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0
3:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
3:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0
4:00 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	6	0	0	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
Totals	0	0	0	0	0	0	23	0	0	0	0	2	0	0	18	0

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940809, 10940810
Location: S Wildspring Rd -- IL 120
Date: 5/1/13

Passenger Vehicles

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	4	0	5	0	2	96	4	0	16	0	8	0	1	111	0
6:15 AM	0	6	0	6	0	0	114	1	0	27	1	4	0	5	130	0
6:30 AM	0	3	0	8	0	1	158	4	0	31	2	6	0	2	122	0
6:45 AM	0	6	0	13	0	0	130	9	0	44	0	6	0	3	163	0
7:00 AM	2	6	1	7	0	4	126	11	0	37	3	13	0	0	150	6
7:15 AM	2	10	0	3	0	1	140	18	1	26	1	7	0	7	145	4
7:30 AM	2	9	0	8	0	2	171	21	0	18	2	7	0	2	147	1
7:45 AM	0	7	0	4	0	1	147	20	0	17	1	3	0	4	132	1
8:00 AM	1	2	0	5	0	3	148	14	0	26	1	4	0	3	127	0
8:15 AM	0	2	0	3	0	1	138	11	0	19	0	5	0	1	105	1
8:30 AM	0	2	0	6	0	2	110	7	0	30	1	5	0	4	116	2
8:45 AM	0	1	1	12	0	0	95	7	0	17	1	12	1	4	138	1
Totals	7	58	2	80	0	17	1573	127	1	308	13	80	1	36	1586	16

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	3	0	3	140	36	0	10	0	2	0	2	108	1
3:15 PM	0	3	1	2	0	6	156	27	1	14	2	6	0	6	129	0
3:30 PM	0	4	1	2	0	5	145	21	0	16	1	3	0	6	153	3
3:45 PM	0	1	0	3	0	4	135	26	0	19	1	1	0	6	170	1
4:00 PM	0	1	0	5	0	6	152	21	0	16	0	3	0	10	164	1
4:15 PM	0	0	1	4	0	10	130	21	0	30	1	3	0	10	166	1
4:30 PM	0	2	0	4	0	10	136	22	0	17	0	3	0	7	168	2
4:45 PM	0	1	0	4	0	9	152	34	0	19	1	6	0	10	168	4
5:00 PM	0	0	0	6	0	13	145	39	0	20	1	5	0	6	142	3
5:15 PM	0	3	0	5	0	10	145	29	0	23	2	6	0	15	159	4
5:30 PM	0	3	0	2	0	8	133	43	0	21	0	2	0	2	165	6
5:45 PM	0	2	1	4	0	11	136	36	0	22	0	7	0	15	153	5
Totals	0	20	4	44	0	95	1705	355	1	227	9	47	0	95	1845	31

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940809, 10940810
Location: S Wildspring Rd -- IL 120
Date: 5/1/13

Single Unit Trucks

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
6:15 AM	0	0	0	0	0	0	4	0	0	1	0	0	0	0	4	0
6:30 AM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	4	0
6:45 AM	0	0	0	0	0	0	2	1	0	1	0	0	0	0	4	0
7:00 AM	0	0	0	0	0	0	4	0	0	1	0	0	0	0	6	0
7:15 AM	0	0	0	0	0	0	4	1	0	0	0	0	0	0	4	0
7:30 AM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	7	0
7:45 AM	0	0	0	0	0	1	13	1	0	1	0	0	0	0	11	0
8:00 AM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	5	0
8:15 AM	0	0	0	1	0	0	8	2	0	0	0	1	0	0	5	0
8:30 AM	0	0	0	0	0	0	6	3	0	1	1	0	0	1	8	0
8:45 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	7	0
Totals	0	0	0	1	0	1	76	9	0	5	1	1	0	1	68	0

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	7	6	0	0	0	0	0	0	4	0
3:15 PM	0	0	0	1	0	0	9	1	0	7	0	0	0	0	10	0
3:30 PM	0	0	0	0	0	0	6	1	0	1	0	0	0	0	6	0
3:45 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	1	10	0
4:00 PM	0	1	0	0	0	0	4	0	0	0	0	1	0	1	3	0
4:15 PM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	6	0
4:30 PM	0	0	0	0	0	0	3	0	0	1	0	1	0	0	6	0
4:45 PM	0	0	0	0	0	0	5	0	0	1	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5	1
5:15 PM	0	0	0	0	0	0	3	1	0	0	0	0	0	0	6	0
5:30 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0
5:45 PM	0	0	0	0	0	1	2	1	0	1	0	0	0	0	3	0
Totals	0	1	0	1	0	1	62	10	0	11	0	2	0	2	63	1

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

Site Codes: 10940809, 10940810
Location: S Wildspring Rd -- IL 120
Date: 5/1/13

Semi Trilers

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
6:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
6:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0
Totals	0	0	0	0	0	0	29	0	0	0	0	0	0	0	16	0

	S Wildspring Rd (Southbound)				IL 120 (Westbound)				S Wildspring (Northbound)				IL 120 (Eastbound)			
Time	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left	U-Turns	Right	Thru	Left
3:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
3:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0
3:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0
4:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Totals	0	0	0	0	0	0	18	0	0	0	0	0	0	0	21	0