U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
espanol.hud.gov

Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Grandmont-Rosedale-II

HEROS Number: 900000010269890

Responsible Entity (RE): DETROIT, PLANNING AND DEVELOPMENT DEPARTMENT
DETROIT MI, 48226

RE Preparer: Kim Siegel

State / Local Identifier: Detroit, Michigan

Certifying Officer: Julie Schneider, Director

Grant Recipient (if different than Responsible Entity):

Point of Contact:

Consultant (if applicable): ASTI ENVIROMENTAL

Point of Contact: Benjamin Buckley

Project Location: 9710-9730 Outer Drive, Detroit, MI 48223

Additional Location Information:
N/A

Direct Comments to:

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The proposed project is located at 9710-9730 West Outer Drive, Detroit, Wayne County, MI, 48226. Grandmont Rosedale Development Corporation will rehabilitate the exterior and interior of two existing, vacant, historic apartment buildings. 9710 West Outer Drive consists of six large one-bedroom apartments of 697 square feet each and four small one-bedroom apartments of 536 square feet each for a total of 10 one bedroom apartments of 6,326 square feet. 9730 West Outer Drive consists of six two-bedroom apartments of 797 square feet each, 11 one-bedroom apartments of 637 square feet each, two small one-bedroom apartments of 499 square apartments each, and four efficiency apartments of 424 square feet each for a total of 23 apartments of 14,483 square feet. All 33 apartments are to be affordable units. The rehabilitation includes window replacement, exterior repairs, interior MEP upgrades, new kitchens, and new bathroom fixtures. The existing parking lot at the rear of the property will have new lighting and new fencing. The walkways around the building are proposed to be replaced in their existing configuration.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

The purpose of this project is to create new affordable housing units within the City of Detroit by rehabilitating two existing, vacant apartment complexes. The project will address the need for more affordable housing within the City. Detroit's 2018 Multifamily Affordable Housing Strategy outlines the strong demand for multifamily affordable housing in the City and set a goal of preserving 10,000 existing affordable multifamily units and creating 2,000 affordable multifamily housing units by 2023. This project will help to meet this goal.

Existing Conditions and Trends [24 CFR 58.40(a)]:

The interiors of the existing apartments at 9710-9730 are generally in poor condition and require rehabilitation to provide quality affordable housing units. The site is currently unoccupied. The immediate surrounding area primarily consists of occupied residential housing with a commercial corridor north of the site. The project's Market Feasibility Analysis (Tab Attachment 0) indicates the housing market conditions are overall healthy and indicative of demand for affordable multifamily housing supply such as the Subject Property. Population has decreased within Wayne County, between 2000 and 2010. However, Project Market Area (PMA) has experienced moderate population decrease. The PMA consists of the Subject Property and the surrounding neighborhoods. It is estimated that the City of Detroit's population has decreased between 2010 and 2020. During the documented and estimated population decrease, rental housing stock in the PMA has been removed from the market. The PMA has experienced demolition and obsolescence of rental housing stock.

Maps, photographs, and other documentation of project location and description:

Attachment 0 - Site Map.pdf

Determination:

✓	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
	Finding of Significant Impact

Approval Documents:

7015.15 certified by Certifying Officer on:

7015.16 certified by Authorizing Officer on:

Funding Information

Grant / Project Identification Number	HUD Program	Program Name
M21MC260202	Community Planning and Development (CPD)	HOME Program

Estimated Total HUD Funded, Assisted or Insured Amount: $1,350,000.00

Estimated Total Project Cost [24 CFR 58.2 (a)(5)]: $15,266,933.00

Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.6		
Airport Hazards Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	☐ Yes ☑ No	The property is not located in a FAA-designated Airport Runway Clear Zone or Accident Potential Zone (RCZ/APZ). Coleman A. Young International Airport is approximately 11.05 miles east of the property, while the Detroit Metro

		Airport (DTW) lies 13.36 miles to the south. The proposed project is not located within an airport hazard area (Attachment A).
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	☐ Yes ☑ No	The property is not located in the Coastal Barrier Resource Area in Wayne County. No coastal barriers will be impacted by the proposed project (Attachment B).
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	☐ Yes ☑ No	The property is located in FEMA Flood Map Panel 26163C0100E, Effective Date February 2, 2012. The property is located in zone X, which represents minimal risk outside the 1- percent and 2-percent-annual-chance floodplains. Floodplain management is not required (Attachment C).
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5		
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	☐ Yes ☑ No	The entire State of Michigan is designated as ''attainment for carbon monoxide, lead, nitrogen dioxide, and particulate matter (PM10). Wayne County. The southwestern portion of Detroit is within a sulfur dioxide nonattainment area; however, it does not appear the site is located within the sulfur dioxide nonattainment area. The site is within a larger area in southeast Michigan for ozone nonattainment. The project was reviewed by Michigan Environment, Great Lakes, and Energy (EGLE) for conformance with the State Implementation Plan (SIP). EGLE determined the Project should not exceed the de minimis levels included in the federal general conformity requirements and therefore, does not require a detailed conformity analysis. The Project is in compliance with the Clean Air Act (Attachment D).
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	☐ Yes ☑ No	Review of the Wayne County Coastal Zone Management Boundary and Coastal Zone Management Area map documents the Project is not located within a designated Coastal Zone

		Management area. The Project is in compliance with the Coastal Zone Management Act (Attachment E).
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	☐ Yes ☑ No	A Phase I Environmental Site Assessment (ESA) was completed on October 30, 2020. The Phase I ESA identified no Recognized Environmental Conditions (REC's) associated with the property. An asbestos survey was completed between September 1 and 9, 2020. Asbestos Containing Material (ACM) was identified on the site. The asbestos will be abated in accordance with local, state and federal laws during construction. A Lead-Based Paint (LBP) risk assessment was completed between October 13 and 16, 2020. The lead will be abated in accordance with local, state and federal laws during construction. The property is in Wayne County, which is within Zone 3 of the EPA Radon Map for risk of indoor radon levels; Zone 3 is low potential risk for indoor radon levels (Attachment F).
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	☐ Yes ☑ No	This project involves rehabilitation of an existing building. There are no wetlands, streams or wooded habitat on or adjacent to the project. Additionally, the project is located in the highly urbanized area of the City of Detroit. A letter from the U.S. Fish and Wildlife Service dated March 17, 2022, determined that the project will have no effect on any of the endangered species known to have habitats within Wayne County. Therefore, the project will have no effect on listed species (Attachment G).
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	☐ Yes ☑ No	The project is located at an Acceptable Separation Distance (ASD) from any above-ground explosive, flammable fuels or chemicals containers according to 24 CFR 51C. A one-mile radius around the Property was searched for ASTs containing hazardous materials above-ground explosive or flammable fuels or chemicals containers. None are located

		within one-mile of the project location (Attachment H).
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	☐ Yes ☑ No	This project does not include any prime or unique farmland. The property is located within an ''urbanized area'' that has been previously developed and, therefore, is not subject to the statutory or regulatory requirements identified above, per 7 CFR 658.2(a) (Attachment I).
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	☐ Yes ☑ No	The property is located in FEMA Flood Map Panel 26163C0100E. The property is located in zone X, which represents minimal risk outside the 1- percent and 2-percent-annual-chance floodplains. Floodplain management is not required (Attachment C).
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	☐ Yes ☑ No	Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the ''Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan...,'' dated November 9, 2016, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y). Based on the information submitted to this office on 3/31/2022, we have determined a Historic Property is located within in the Area of Potential Effects (APE) for this project. The building at 9710-30 W. Outer Drive is listed on the National Register of Historic Places as part of the Rosedale Park Local Historic District. Therefore, per Stipulation V.B of the Programmatic Agreement (PA), the project shall be carried out in accordance with the Secretary of the Interior's Standards for Rehabilitation. This project has been given a Conditional No Adverse Effect determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places, as

		long at the following conditions are met: *The work is conducted in accordance with the specifications submitted to the PreservationSpecialist on 3/31/2022 *Any changes to the scope of work for the project shall be submitted to the PreservationSpecialist for review and approval prior to the start of any work *A copy of the NPS Tax Credit Part II approval is provided *Photos of the completed work are submitted to the Preservation Specialist
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	☐ Yes ☑ No	The Subject Property is near Grand River Avenue and West Outer Drive, which are considered busy roads due to their size and traffic volume. The site is also within proximity of two airports. Coleman A. Young International Airport (DET) is located approximately 11.05 miles east of the project and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not within a distance of concern. Detroit Metro Airport (DTW) is located approximately 13.38 miles south of the project and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not considered to represent a noise concern to the property. The noise for the roadway was projected to levels in 2032 and was found to be in the normally unacceptable range at 67.0 dB. The Noise Assessment is included in Attachment K. The HUD Sound Transmission Classification Assessment Tool (STraCAT) was used to determine the noise attenuation for the building walls to bring the noise levels within acceptable levels for interiors. The calculations were made from the wall assemblies the NAL was determined; units on the northeastern corner of

		building 9710. The building materials include 522 square feet of wall construction with a Sound Transmission Class (STC) rating of 51 (4x8x18" concrete block with common brick all mortared together). These units also include 8 exterior windows with a STC of 35 (approximately 3'x5' aluminum sash, double hung window each sash has one 7/16" glass panel and one storm sash glazed single strength upper sash 1 1/2" and lower sash 2 13/16" airspaces). The combined STC for this wall assembly is 41.03. The wall components will bring noise levels to acceptable interior standards of below 45 dB. No further attenuation is needed for the site (Attachment K).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	☐ Yes ☑ No	There are no sole source aquifers located in Michigan; therefore, the project will have no impact on sole source aquifers (Attachment L).
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	☐ Yes ☑ No	The project does not involve new construction. Additionally, no wetlands are present on the property according to the National Wetlands Inventory Map. Therefore, the project will have no impact on wetlands (Attachment M).
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	☐ Yes ☑ No	There are no designated Wild and Scenic Rivers in Detroit or Wayne County. Therefore, the project will not impact wild & scenic rivers (Attachment N).
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	☐ Yes ☑ No	This project consists of rehabilitation of two unoccupied apartment buildings into 33 low-income housing units. This project is intended to increase the amount of quality affordable housing options available in Detroit. The project will not have a disproportionately high adverse effect on human health or environment of minority populations

		and/or low-income populations (Attachment O).

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Impact Codes: An impact code from the following list has been used to make the determination of impact for each factor.
(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The project involves the rehabilitation of existing apartments buildings that are in compliance with existing zoning and are compatible with the surrounding neighborhood, which is a mix of single-family dwellings, multi-family buildings, and commercial structures. The project involves the renovation of existing buildings. It is not anticipated to have any significant impact on the surrounding urban environment, and it will be compatible with surrounding land uses. The surrounding land is zoned multi-family, single-family and commercial.	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	According to the web soil survey, the soil is described as Kibbie-Urban land complex, sandy substratum, 0 to 4 percent slopes and Kibbie-Urban land-Colwood complex, sandy substratum, 0 to 4 percent slopes. This type of soil is suitable for site rehabilitation. According to the Royal Oak Quadrangle 7.5-minute Topographic map, there are no measurable changes in elevation on or near the site. No drainage or slope issues are anticipated. Due to the topography of the site (low slope), erosion is not a significant concern.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		Project specifications require contractors to prevent erosion from occurring at the site during construction.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	2	The project is not adversely affected by on-site or off-site hazards or nuisances. There will be adequate on-site parking for residents, and the project will install new fencing and lighting in the parking area. The project includes replacing the existing circulation paths on the site with new accessible concrete walkways. The proposed rehabilitation is located in an established residential and commercial area and is not expected to generate significant noise. Increased noise from construction will be temporary.	
Energy Consumption/Energy Efficiency	2	The area is served by electrical and gas utilities provided by DTE Energy. There is adequate capacity to serve the new construction buildings.	
SOCIOECONOMIC			
Employment and Income Patterns	1	There will be a temporary increase in jobs related to the construction of the project. Other than construction related changes, the project will not result in a change to employment and income patterns in the area. The project may be beneficial to local businesses, as there will be an increase in households requiring goods and services.	
Demographic Character Changes / Displacement	2	The project will not change the demographics of the general area. It will provide needed affordable housing to residents of the area. The project aims to assist low-income individuals in Detroit by providing affordable apartments. The project involves the rehabilitation of existing (vacant) apartment buildings. No displacement will occur as a result of the project.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
COMMUNITY FACILITIES AND SERVICES			
Educational and Cultural Facilities (Access and Capacity)	2	The area is served by the Detroit Public Schools Community District. This project will not impact the capacity of any of these schools. Students residing in the housing would be served by Cook STEM Academy (K-6, 0.4 miles northeast of the project area), Emerson Elementary-Middle School (K-8, 1.1 miles north), and Henry Ford High School (9-12, 2.2 miles north). Regular education students in grades K-8 who reside more than 3/4 of a mile from their neighborhood school and attend their neighborhood school will receive yellow bus transportation from a designated corner stop determined by the Office of Student Transportation. Regular education students in grades 9-12 are provided City of Detroit Department of Transportation bus passes, provided that they attend their neighborhood school and live more than 1.5 miles away. Special education students will receive transportation services required by their Individualized Education Plan. The schools have adequate capacity for the potential new students. No educational facilities will be negatively affected by the proposed project. The proposed project is located in the City of Detroit, which is home to numerous major cultural facilities, including the Detroit Institute of Arts, the Motown Museum, the Detroit Children's Museum, Greenfield Village and Henry Ford Museum. The Redford Theater and the Redford branch of the Detroit Public Library provide educational and cultural opportunities in the vicinity of the project location The project will not have a negative	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		effect on any cultural facilities (Attachment P).	
Commercial Facilities (Access and Proximity)	2	The project area's main commercial corridor is Grand River Avenue. The avenue is located approximately 100 feet north of the apartment buildings, and features a large variety of commercial establishments including restaurants, markets, pharmacies, and retail stores. No commercial facilities will be negatively impacted by this project (Attachment P).	
Health Care / Social Services (Access and Capacity)	2	The project area is served by a full range of health care professionals. The Henry Ford Medical Center Detroit-Northwest is located 1.2 miles to the northeast, and the DMC Sinai Grace Hospital is located 2.6 miles to the northeast. No health care services will be negatively impacted by this project (Attachment P).	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	Dumpsters will be provided for residents to dispose of their trash. Solid waste disposal will be taken care of via a professional disposal company under contract.	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	The project will be connected to the municipal sanitary sewer service. The Detroit Water and Sewage Department (DWSD) provides service to the project area.	
Water Supply (Feasibility and Capacity)	2	The project will be connected to the municipal water service. The DWSD provides service to the project area.	
Public Safety - Police, Fire and Emergency Medical	2	The Detroit Police Department covers the city with the 8th Precinct covering the project location. The precinct offices are located at 21555 West McNichols Road, approximately 1.1 miles northwest of the property. No police services will be negatively impacted by the proposed project. The Detroit Fire Department provides fire	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		department services to the city along with basic first responder medical assistance from paramedics. The closest fire station is located at 16825 Trinity St, approximately 1 mile northwest of the project location. No fire services will be negatively impacted by the proposed project. The Emergency Medical Services Division of the Detroit Fire Department provides Emergency Medical Services to residents in the project area. The closest fire station is located at 16825 Trinity St, approximately 1 mile northwest of the project location. No fire services will be negatively impacted by the proposed project (Attachment P).	
Parks, Open Space and Recreation (Access and Capacity)	2	The proposed project is located near open spaces including parks. Stoepel Park, Hackett Playground, and Midland Bentler Playground are located within one mile of the project location (Attachment P). No open spaces will be negatively impacted by the proposed project. The project is located in the city of Detroit; there are many options for recreation available. In additional to the locally available playgrounds and parks, major roads and public transit provide easy access to major entertainment venues such as Little Caesars Area, Comerica Park, Ford Field and the Fox Theatre. No recreation facilities will be negatively impacted by the proposed project.	
Transportation and Accessibility (Access and Capacity)	2	Bus service in the city is provided by the Detroit Department of Transportation. A stop on the 3 Grand River bus route is located approximately 0.2 miles from the site on Grand River Ave. The 60 Evergreen bus route runs along Evergreen Road, and a stop on the route is located at Evergreen and	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		Midland approximately 0.3 miles away from the project location. Telegraph Road and the Southfield Freeway are major north/south thoroughfares located just to the west and east of the project location that provide connections to the I-96 Expressway. I-96 provides connections to other major highways in Detroit that together provide easy vehicular access to the surrounding region.	
NATURAL FEATURES			
Unique Natural Features /Water Resources	2	The proposed project is located in a densely developed urban area. There are no unique natural features or substantial agricultural land in the immediate vicinity of the project. Groundwater will not be affected by the proposed construction project. The city provides municipal water service to the project area. There are no sole source aquifers in the State of Michigan (Attachment L). The City of Detroit's source water comes from the Great Lakes and connecting channels (Lake Huron and the Detroit River). No water resources will be impacted by the proposed project.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	The proposed project is located in an urban area in the city of Detroit. There is no substantial wildlife habitat currently on the property. Construction activity will require the removal of select trees on the property, however these trees will be replaced, new planting beds and hedges will be installed, and the lawn areas will be restored. The project will not have a negative impact on vegetation or wildlife.	
Other Factors	2	None	

Supporting documentation

Additional Studies Performed:

Field Inspection [Optional]: Date and completed by:
Maura Gibbons 8/27/2020 12:00:00 AM

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:
1. Federal Emergency Management Agency-Map Service for Flood Rate Insurance Maps https://msc.fema.gov/portal/home 2. U.S. Fish & Wildlife Service, National Wetlands Inventory, Wetlands Mapper; http://www.fws.gov/wetlands/data/mapper.html 3. U.S. Fish & Wildlife Service, Endangered Species, Michigan County Distribution of Federally- Listed Threatened, Endangered, Proposed, and Candidate Species, https://ecos.fws.gov/ecp/report/species 4. Michigan Department of Environmental Quality, Michigan Coastal Zone Boundary Maps, http://www.michigan.gov/deq/0,4561,7-135-3313_3677_3696-90802--,00.html 5. Michigan Department of Environmental Quality, Air Quality Division, http://www.michigan.gov/deq/0,1607,7-135-3310_30151_31129---,00.html 6. US EPA Map of Radon Zones, Wayne County, Michigan, http://www.epa.gov/radon/states/michigan.html 7. City of Detroit, Multifamily Affordable Housing Strategy. 2018. 8. City of Detroit, Water Quality Report, 2018. 8. Detroit Police Department, Precincts and Neighborhood Police Officers https://detroitmi.gov/departments/police-department/precincts-and-neighborhood-police-officers

List of Permits Obtained:

Public Outreach [24 CFR 58.43]:
All historical, local and federal contacts on City of Detroit 2022 Interest Parties List were sent a copy of the Notice of Intent to Request for Release of Funds to use HUD funding for the project and were asked to comment on the project. Additionally, the EA was published in the Detroit News and the Detroit Free Press for public comment.

Cumulative Impact Analysis [24 CFR 58.32]:

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

No alternatives other than the no action alternative were considered for this project.

No Action Alternative [24 CFR 58.40(e)]

The No Action Alternative is to not rehabilitate the existing unoccupied apartment complexes. This alternative is not preferred as it fails to address the need of quality, affordable housing in the City of Detroit. Additionally, it leaves a large apartment complex vacant. The City of Detroit is focused on rehabilitating vacant buildings into updated housing in residential areas.

Summary of Findings and Conclusions:

The proposed project will renovate two vacant, historic apartment buildings and bring 33 affordable housing units to market in the City of Detroit. It will aid in filling the need for affordable housing in the city. As illustrated in the above documentation, the project is not anticipated to have an adverse effect on the surrounding environment, and the environment will not have an adverse effect on residents of the apartments. The project is compatible with the surrounding neighborhood and will have minimal impact on the existing resources and services in the area.

Mitigation Measures and Conditions [CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete

Project Mitigation Plan

Supporting documentation on completed measures

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ **No**

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

Screen Summary

Compliance Determination

The property is not located in a FAA-designated Airport Runway Clear Zone or Accident Potential Zone (RCZ/APZ). Coleman A. Young International Airport is approximately 11.05 miles east of the property, while the Detroit Metro Airport (DTW) lies 13.36 miles to the south. The proposed project is not located within an airport hazard area (Attachment A).

Supporting documentation

Attachment A - RCZ Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

1. Is the project located in a CBRS Unit?

✓ No

Document and upload map and documentation below.

Yes

Compliance Determination

The property is not located in the Coastal Barrier Resource Area in Wayne County. No coastal barriers will be impacted by the proposed project (Attachment B).

Supporting documentation

Attachment B - Coastal Barrier Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.

✓ Yes

2. Upload a FEMA/FIRM map showing the site here:

Attachment C - FEMA Floodplain Map.pdf

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

✓ No

Based on the response, the review is in compliance with this section.

Yes

4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?

Yes

✓ No

Screen Summary

Compliance Determination

The property is located in FEMA Flood Map Panel 26163C0100E, Effective Date February 2, 2012. The property is located in zone X, which represents minimal risk outside the 1- percent and 2-percent-annual-chance floodplains. Floodplain management is not required (Attachment C).

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

✓ Yes

No

Air Quality Attainment Status of Project's County or Air Quality Management District

2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

No, project's county or air quality management district is in attainment status for all criteria pollutants.

✓ Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

Carbon Monoxide

Lead

Nitrogen dioxide

✓ Sulfur dioxide

✓ Ozone

Particulate Matter, <2.5 microns

Particulate Matter, <10 microns

3. What are the *de minimis* emissions levels (40 CFR 93.153) or screening levels for the non-attainment or maintenance level pollutants indicated above

Sulfur dioxide	100.00	ppb (parts per billion)
Ozone	100.00	ppb (parts per million)

Provide your source used to determine levels here:

The source used to determine the level of ozone is the EPA's National Ambient Air Quality Standards table. Since the project is outside of the ozone transport region, the project is in the "other" category.

4. **Determine the estimated emissions levels of your project. Will your project exceed any of the de minimis or threshold emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

✓ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels.

Enter the estimate emission levels:

Sulfur dioxide	0.00	ppb (parts per billion)
Ozone	0.00	ppb (parts per million)

Based on the response, the review is in compliance with this section.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

Screen Summary

Compliance Determination

The entire State of Michigan is designated as ''attainment for carbon monoxide, lead, nitrogen dioxide, and particulate matter (PM10). Wayne County. The southwestern portion of Detroit is within a sulfur dioxide nonattainment area; however, it does not

appear the site is located within the sulfur dioxide nonattainment area. The site is within a larger area in southeast Michigan for ozone nonattainment. The project was reviewed by Michigan Environment, Great Lakes, and Energy (EGLE) for conformance with the State Implementation Plan (SIP). EGLE determined the Project should not exceed the de minimis levels included in the federal general conformity requirements and therefore, does not require a detailed conformity analysis. The Project is in compliance with the Clean Air Act (Attachment D).

Supporting documentation

Attachment D - EGLE Air Quality Letter.pdf
Attachment D - Air Quality Maps.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

Review of the Wayne County Coastal Zone Management Boundary and Coastal Zone Management Area map documents the Project is not located within a designated Coastal Zone Management area. The Project is in compliance with the Coastal Zone Management Act (Attachment E).

Supporting documentation

Attachment E - Coastal Zone Management Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Contamination and Toxic Substances

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)

1. How was site contamination evaluated? Select all that apply. Document and upload documentation and reports and evaluation explanation of site contamination below.

- ✓ American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA)
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the Above

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- ✓ No

Explain:
No REC's were identified in the Phase I ESA.

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

A Phase I Environmental Site Assessment (ESA) was completed on October 30, 2020. The Phase I ESA identified no Recognized Environmental Conditions (REC's) associated with the property. An asbestos survey was completed between September 1 and 9,

2020. Asbestos Containing Material (ACM) was identified on the site. The asbestos will be abated in accordance with local, state and federal laws during construction. A Lead-Based Paint (LBP) risk assessment was completed between October 13 and 16, 2020. The lead will be abated in accordance with local, state and federal laws during construction. The property is in Wayne County, which is within Zone 3 of the EPA Radon Map for risk of indoor radon levels; Zone 3 is low potential risk for indoor radon levels (Attachment F).

Supporting documentation

Attachment F - Radon Map.pdf
Attachment F - Phase I Environmental Site Assessment.pdf
Attachment F - Lead Survey.pdf
Attachment F - Asbestos Survey.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").	The Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq*.); particularly section 7 (16 USC 1536).	50 CFR Part 402

1. Does the project involve any activities that have the potential to affect specifies or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

✓ Yes, the activities involved in the project have the potential to affect species and/or habitats.

2. Are federally listed species or designated critical habitats present in the action area?

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat

✓ Yes, there are federally listed species or designated critical habitats present in the action area.

3. What effects, if any, will your project have on federally listed species or designated critical habitat?

✓ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat. in the action area.

Document and upload all documents used to make your determination below. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review. If negative effects cannot be mitigated, cancel the project using the button at the bottom of this screen.

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

There are Threatened and Endangered species in Wayne County. However, based on the scope of this project, the location in the highly urbanized area and the lack of critical habitat on the property, the project will have No Effect on listed species.

Screen Summary
Compliance Determination

This project involves rehabilitation of an existing building. There are no wetlands, streams or wooded habitat on or adjacent to the project. Additionally, the project is located in the highly urbanized area of the City of Detroit. A letter from the U.S. Fish and Wildlife Service dated March 17, 2022, determined that the project will have no effect on any of the endangered species known to have habitats within Wayne County. Therefore, the project will have no effect on listed species (Attachment G).

Supporting documentation

Attachment G - USFWS No Effect Letter.pdf
Attachment G - T and E Species List.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

✓ No

Yes

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

✓ Yes

3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- **Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR**
- **Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.**

If all containers within the search area fit the above criteria, answer "No." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "Yes."

✓ No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes

Screen Summary

Compliance Determination

The project is located at an Acceptable Separation Distance (ASD) from any above-ground explosive, flammable fuels or chemicals containers according to 24 CFR 51C. A one-mile radius around the Property was searched for ASTs containing hazardous materials above-ground explosive or flammable fuels or chemicals containers. None are located within one-mile of the project location (Attachment H).

Supporting documentation

Attachment H - ASD Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

Yes

✓ No

If your project includes new construction, acquisition of undeveloped land or conversion, explain how you determined that agricultural land would not be converted:

This project is located in the highly urbanized City of Detroit. There is no agricultural land in the vicinity of the project.

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

This project does not include any prime or unique farmland. The property is located within an ''urbanized area'' that has been previously developed and, therefore, is not subject to the statutory or regulatory requirements identified above, per 7 CFR 658.2(a) (Attachment I).

Supporting documentation

Attachment I - Farmland Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55

1. Do any of the following exemptions apply? Select the applicable citation? [only one selection possible]

55.12(c)(3)
55.12(c)(4)
55.12(c)(5)
55.12(c)(6)
55.12(c)(7)
55.12(c)(8)
55.12(c)(9)
55.12(c)(10)
55.12(c)(11)
✓ None of the above

2. Upload a FEMA/FIRM map showing the site here:

Attachment C - FEMA Floodplain Map.pdf

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use **the best available information** to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

Does your project occur in a floodplain?

✓ No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

The property is located in FEMA Flood Map Panel 26163C0100E. The property is located in zone X, which represents minimal risk outside the 1- percent and 2-percent-annual-chance floodplains. Floodplain management is not required (Attachment C).

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf

Threshold

Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.)
No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].
✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

Step 1 – Initiate Consultation

Select all consulting parties below (check all that apply):

Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

✓ Other Consulting Parties

✓ City of Detroit Preservation Specialist Completed

Describe the process of selecting consulting parties and initiating consultation here:

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan as amended, dated November 9, 2016, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y). Additionally, the project is greater than 0.5 acres; therefore, an archeology review is required.

Document and upload all correspondence, notices and notes (including comments and objections received below).

Was the Section 106 Lender Delegation Memo used for Section 106 consultation?

Yes
No

Step 2 – Identify and Evaluate Historic Properties

1. **Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:**
   The site is listed on the National Register of Historic Places.

   In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.

   Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
9710-30 W. Outer Drive	Listed	No	✓ Not Sensitive

Additional Notes:

2. Was a survey of historic buildings and/or archeological sites done as part of the project?

Yes

✓ No

Step 3 –Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

No Historic Properties Affected

✓ No Adverse Effect

Based on the response, the review is in compliance with this section.
Document reason for finding:

See summary below.

Does the No Adverse Effect finding contain conditions?

Yes (check all that apply)

✓ No

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

Adverse Effect

Screen Summary

Compliance Determination

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the ''Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan...,'' dated November 9, 2016, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y). Based on the information submitted to this office on 3/31/2022, we have determined a Historic Property is located within in the Area of Potential Effects (APE) for this project. The building at 9710-30 W. Outer Drive is listed on the National Register of Historic Places as part of the Rosedale Park Local Historic District. Therefore, per Stipulation V.B of the Programmatic Agreement (PA), the project shall be carried out in accordance with the Secretary of the Interior's Standards for Rehabilitation. This project has been given a Conditional No Adverse Effect determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places, as long at the following conditions are met: *The work is conducted in accordance with the specifications submitted to the PreservationSpecialist on 3/31/2022 *Any changes to the scope of work for the project shall be submitted to the PreservationSpecialist for review and approval prior to the start of any work *A copy of the NPS Tax Credit Part II approval is provided *Photos of the completed work are submitted to the Preservation Specialist

Supporting documentation

Attachment J - Section 106 Report.pdf
Attachment J - Section 106 Letter - CNAE.pdf
Attachment J - Section 106 Application.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

1. What activities does your project involve? Check all that apply:

New construction for residential use

✓ Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster
None of the above

4**. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

✓ Noise generators were found within the threshold distances.

5. **Complete the Preliminary Screening to identify potential noise generators in the**

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

✓ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here: 67

Document and upload noise analysis, including noise level and data used to complete the analysis below.

Unacceptable: (Above 75 decibels)

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels.

Check here to affirm that you have considered converting this property to a non-residential use compatible with high noise levels.

Indicate noise level here: 67

Document and upload noise analysis, including noise level and data used to complete the analysis below.

6. **HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:
The project scope involves rehabilitation; therefore, mitigation is not required. Additionally, noise attenuation measures will be incorporated to reduce the interior noise level to 45 dB.

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

The Subject Property is near Grand River Avenue and West Outer Drive, which are considered busy roads due to their size and traffic volume. The site is also within proximity of two airports. Coleman A. Young International Airport (DET) is located approximately 11.05 miles east of the project and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not within a distance of concern. Detroit Metro Airport (DTW) is located approximately 13.38 miles south of the project and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not considered to represent a noise concern to the property. The noise for the roadway was projected to levels in 2032 and was found to be in the normally unacceptable range at 67.0 dB. The Noise Assessment is included in Attachment K. The HUD Sound Transmission Classification Assessment Tool (STraCAT) was used to determine the noise attenuation for the building walls to bring the noise levels within acceptable levels for interiors. The calculations were made from the wall assemblies the NAL was determined; units on the northeastern corner of building 9710. The building materials include 522 square feet of wall construction with a Sound Transmission Class (STC) rating of 51 (4x8x18" concrete block with common brick all mortared together). These units also include 8 exterior windows with a STC of 35 (approximately 3'x5' aluminum sash, double hung window each sash has one 7/16" glass panel and one storm sash glazed single strength upper sash 1 1/2" and lower sash 2 13/16" airspaces). The combined STC for this wall assembly is 41.03. The wall components will bring noise levels to acceptable interior standards of below 45 dB. No further attenuation is needed for the site (Attachment K).

Supporting documentation

Attachment K - STraCAT Report.pdf
Attachment K - Noise Assessment.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Sole Source Aquifers

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

✓ Yes

Based on the response, the review is in compliance with this section.

No

Screen Summary

Compliance Determination

There are no sole source aquifers located in Michigan; therefore, the project will have no impact on sole source aquifers (Attachment L).

Supporting documentation

Attachment L - Sole Source Aquifer.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order

✓ No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary

Compliance Determination

The project does not involve new construction. Additionally, no wetlands are present on the property according to the National Wetlands Inventory Map. Therefore, the project will have no impact on wetlands (Attachment M).

Supporting documentation

Attachment M - Wetland Mapper.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

1. Is your project within proximity of a NWSRS river?

✓ No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.
Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

Screen Summary

Compliance Determination

There are no designated Wild and Scenic Rivers in Detroit or Wayne County. Therefore, the project will not impact wild & scenic rivers (Attachment N).

Supporting documentation

Attachment N - Wild and Scenic Rivers.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

Yes

✓ No

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

This project consists of rehabilitation of two unoccupied apartment buildings into 33 low-income housing units. This project is intended to increase the amount of quality affordable housing options available in Detroit. The project will not have a disproportionately high adverse effect on human health or environment of minority populations and/or low-income populations (Attachment O).

Supporting documentation

Attachment O - EJ Screen Report.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
espanol.hud.gov

Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Grandmont-Rosedale-II

HEROS Number: 900000010269890

Project Location: 9710-9730 Outer Drive, Detroit, MI 48223

Additional Location Information:
N/A

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:
The proposed project is located at 9710-9730 West Outer Drive, Detroit, Wayne County, MI, 48226. Grandmont Rosedale Development Corporation will rehabilitate the exterior and interior of two existing, vacant, historic apartment buildings. 9710 West Outer Drive consists of six large one-bedroom apartments of 697 square feet each and four small one-bedroom apartments of 536 square feet each for a total of 10 one bedroom apartments of 6,326 square feet. 9730 West Outer Drive consists of six two-bedroom apartments of 797 square feet each, 11 one-bedroom apartments of 637 square feet each, two small one-bedroom apartments of 499 square apartments each, and four efficiency apartments of 424 square feet each for a total of 23 apartments of 14,483 square feet. All 33 apartments are to be affordable units. The rehabilitation includes window replacement, exterior repairs, interior MEP upgrades, new kitchens, and new bathroom fixtures. The existing parking lot at the rear of the property will have new lighting and new fencing. The walkways around the building are proposed to be replaced in their existing configuration.

Funding Information

Grant Number	HUD Program	Program Name
M21MC260202	Community Planning and Development (CPD)	HOME Program

Estimated Total HUD Funded Amount: $1,350,000.00

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: $15,266,933.00

Mitigation Measures and Conditions [CFR 1505.2(c)]:
Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the

above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition

Project Mitigation Plan

Determination:

☒	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
☐	Finding of Significant Impact

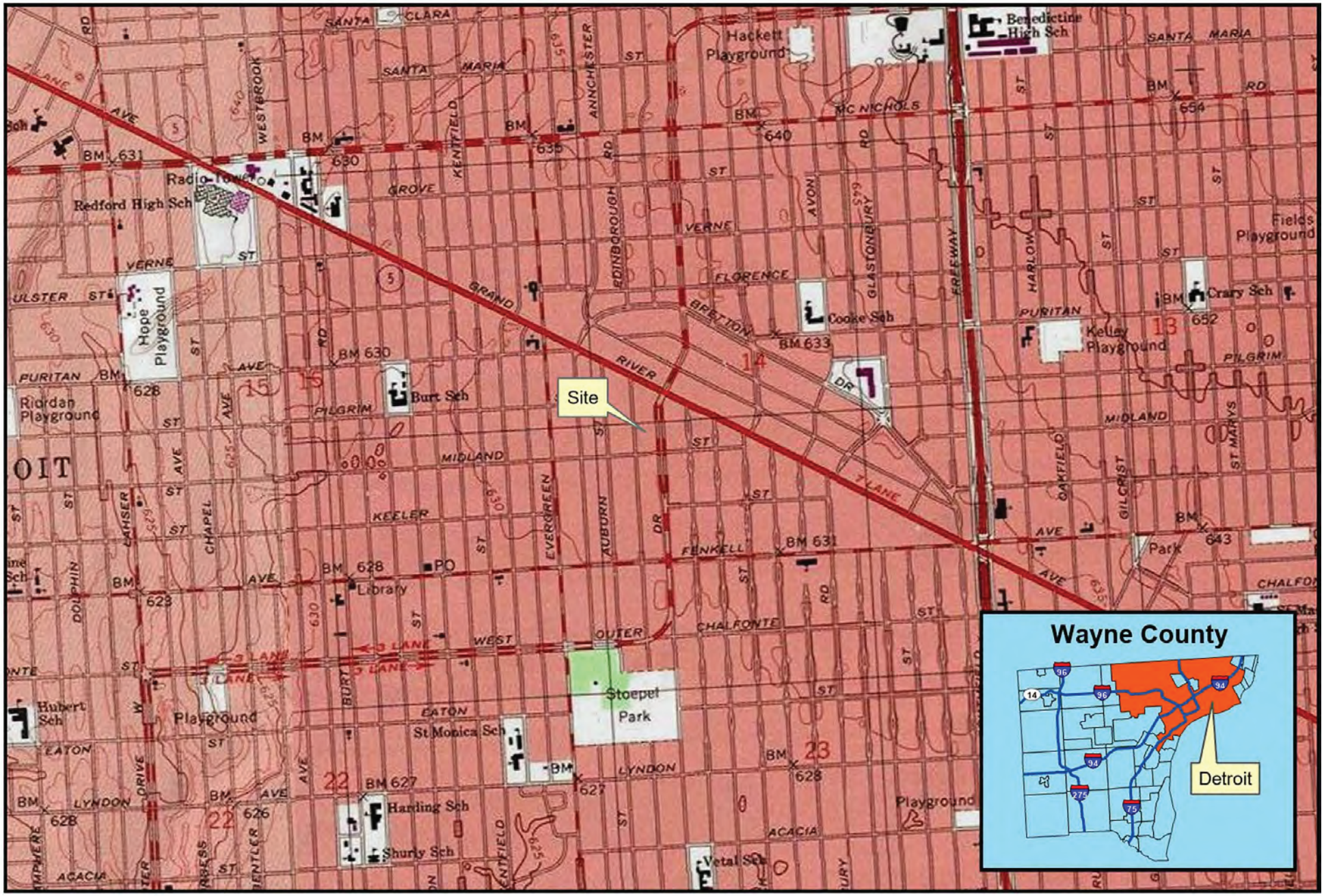
Preparer Signature: DocuSigned by: Kim Siegel 9390B097C5434FC... **Date:** 8/24/2022

Name / Title/ Organization: Kim Siegel / / DETROIT

Certifying Officer Signature: DocuSigned by: E17650515DAF4C9... **Date:** 8/24/2022

Name/ Title: Julie Schneider, Director, Housing and Revitalization Department

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environment Review Record (ERR) for the activity / project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).



9710-9730 Outer Drive West

9710-9730 W. Outer Drive
Detroit, MI

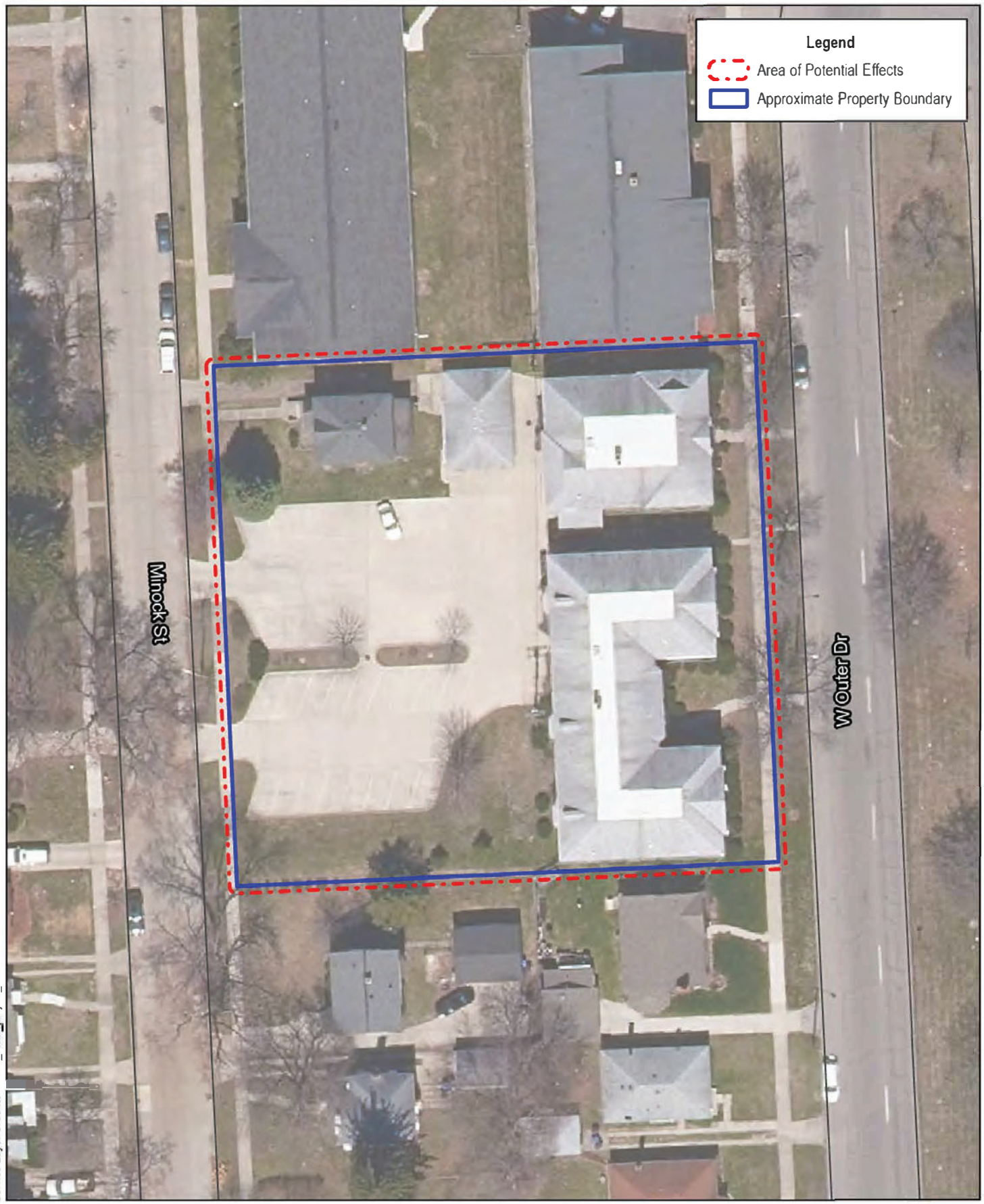
2,000 1,000 0 2,000 Feet

N

ASTI Environmental

Created for: Grandmont Rosedale Development Corporation
Created by: RMH, March 23, 2022, ASTI Project 1-11641

Site Location Map



Service Layer Credits: Detroit_RGB_projFix_sid:

9710-9730 Outer Drive West

9710-9730 W. Outer Drive
Detroit, MI

0 12.5 25 50 Feet

N

ASTI Environmental

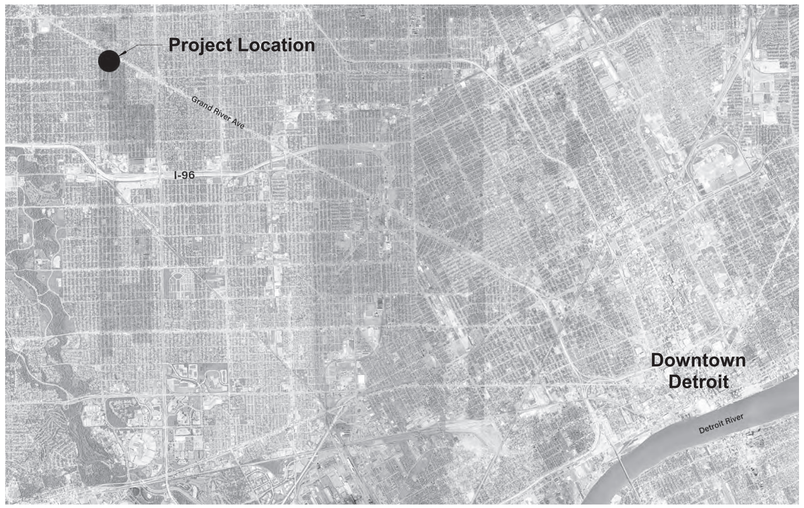
Created for: Grandmont Rosedale Development Corporation
Created by: RMH, March 23, 2022, ASTI Project 1-11641

Area of Potential Effects Map

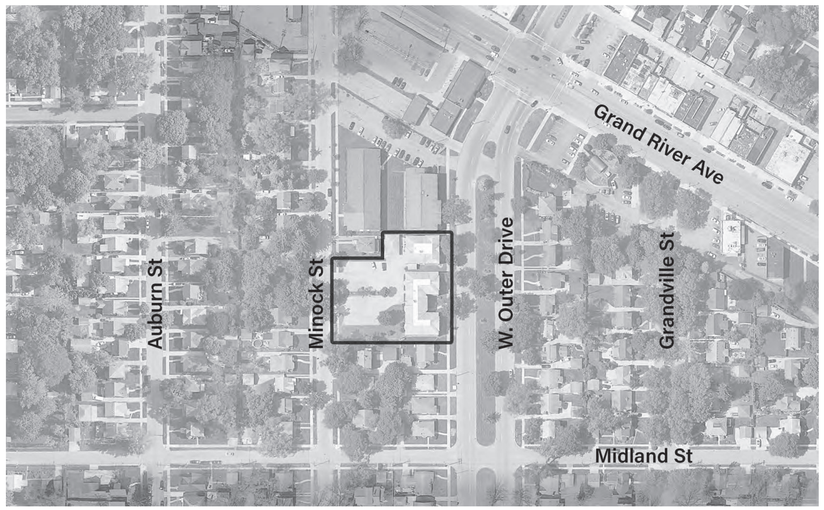
Sheet Size: 24" x 36"

Grandmont Rosedale Park Collective II

PERMIT
12/30/2021



PROJECT LOCATION



SITE MAP

SHEET INDEX

SHEET NUMBER	SHEET NAME	07/07/2021 - Schematic Design	08/11/2021 - Design Development	12/30/2021 - Permit
00 GENERAL				
AG.0.0	COVER	•	•	•
AG.0.1	CODE SUMMARY		•	•
AG.0.2	LIFE SAFETY PLANS		•	•
AG.0.3	GENERAL NOTES		•	•
AG.0.4	MOUNTING HEIGHTS AND CLEARANCES		•	•
01 CIVIL				
C-1.0	TOPOGRAPHIC SURVEY		•	•
C-2.0	DEMOLITION PLAN		•	•
C-3.0	DIMENSIONAL SITE PLAN		•	•
C-4.0	GRADING PLAN		•	•
L-1.0	LANDSCAPE PLAN		•	•
L-2.1	LANDSCAPE SPECIFICATIONS			•
L-2.2	LANDSCAPE SPECIFICATIONS			•
03 ARCHITECTURAL				
A0.1	ARCHITECTURAL SITE PLAN	•	•	•
AD1.0	LEVEL 00 DEMOLITION PLAN	•	•	•
AD1.1	LEVEL 01 DEMOLITION PLAN	•	•	•
AD1.2	LEVEL 02 DEMOLITION PLAN	•	•	•
A1.0	LEVEL 00 FLOOR PLAN	•	•	•
A1.1	LEVEL 01 FLOOR PLAN	•	•	•
A1.2	LEVEL 02 FLOOR PLAN	•	•	•
A1.3	ROOF PLAN		•	•
A2.0	LEVEL 00 REFLECTED CEILING PLAN		•	•
A2.1	LEVEL 01 REFLECTED CEILING PLAN		•	•
A2.2	LEVEL 02 REFLECTED CEILING PLAN		•	•
A3.0.1	EXTERIOR ELEVATIONS - 9730		•	•
A3.0.2	EXTERIOR ELEVATIONS - 9710		•	•
A4.0.1	WINDOW TYPES & SCHEDULE		•	•
A4.0.2	WINDOW DETAILS		•	•
A4.0.3	WINDOW DETAILS			•
A4.3.2	EXTERIOR DETAILS			•
A6.0.1	UNIT PLAN AND RCP		•	•
A6.0.2	UNIT PLAN AND RCP		•	•
A6.0.3	UNIT PLAN AND RCP		•	•
A6.0.4	UNIT PLAN AND RCP		•	•
A6.0.5	UNIT PLAN AND RCP		•	•
A6.1.0	TYPICAL UNIT KITCHENS AND BATHS		•	•
A6.1.1	TYPICAL UNIT KITCHENS AND BATHS			•
A6.3.1	INTERIOR ELEVATIONS			•
A7.1.1	DOOR SCHEDULE & DETAILS			•
A7.2.1	MATERIAL INDEX & FINISH SCHEDULE			•
A7.3.1	INTERIOR PARTITIONS			•
A7.4.1	INTERIOR DETAILS			•
A7.7.0	SIGNAGE PLAN			•
06 MECHANICAL				
M0.0	MECHANICAL LEGEND		•	•
M0.1	MECHANICAL SPECIFICATIONS			•
M0.2	MECHANICAL SPECIFICATIONS			•
MD1.0	LEVEL 00 MECHANICAL DEMOLITION PLAN			•
MD1.1	LEVEL 01 MECHANICAL DEMOLITION PLAN			•
MD1.2	LEVEL 02 MECHANICAL DEMOLITION PLAN			•
M1.0	LEVEL 00 SANITARY AND VENT PLAN			•
M1.1	LEVEL 01 SANITARY AND VENT PLAN			•
M1.2	LEVEL 02 SANITARY AND VENT PLAN			•
M2.0	LEVEL 00 DOMESTIC WATER PLAN		•	•
M2.1	LEVEL 01 DOMESTIC WATER PLAN		•	•
M2.2	LEVEL 02 DOMESTIC WATER PLAN		•	•
M3.0	LEVEL 00 HVAC PLAN		•	•
M3.1	LEVEL 01 HVAC PLAN		•	•
M3.2	LEVEL 02 HVAC PLAN		•	•
M4.0	ENLARGED HVAC PLANS		•	•
M4.1	ENLARGED HVAC PLANS			•
M4.2	ENLARGED HVAC PLANS			•
M4.3	ENLARGED HVAC PLANS			•
M5.0	MECHANICAL SCHEDULES		•	•
M6.0	MECHANICAL DETAILS			•
FP1.0	LEVEL 00 FIRE PROTECTION PLAN			•
FP1.1	LEVEL 01 FIRE PROTECTION PLAN			•
FP1.2	LEVEL 02 FIRE PROTECTION PLAN			•
07 ELECTRICAL				
E0.0	ELECTRICAL LEGEND, SHEET INDEX, TABLES, AND GENERAL NOTES		•	•
E0.1	ELECTRICAL RISER DIAGRAM		•	•
E0.2	ELECTRICAL SCHEDULES		•	•
E0.3	ELECTRICAL SCHEDULES		•	•
E1.0	SITE PLAN - ELECTRICAL		•	•
E2.0	LEVEL 00 FLOOR PLAN LIGHTING		•	•
E2.1	LEVEL 01 FLOOR PLAN LIGHTING		•	•
E2.2	LEVEL 02 FLOOR PLAN LIGHTING		•	•
E3.0	LEVEL 00 FLOOR PLAN POWER			•
E3.1	LEVEL 01 FLOOR PLAN POWER			•
E3.2	LEVEL 02 FLOOR PLAN POWER			•
E4.0	ENLARGED PLAN ELECTRICALS		•	•
E4.1	ENLARGED PLAN ELECTRICALS			•
E4.2	ENLARGED PLAN ELECTRICALS			•
E4.3	ENLARGED PLAN ELECTRICALS			•
E5.0	ELECTRICAL DETAILS			•
E6.0	ELECTRICAL SPECIFICATIONS			•

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MA ENGINEERING
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Bloomfield Hills, MI 48304
248-258-1610 phone
www.ma-engineering.com

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Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan

Registration Seal

STATE OF MICHIGAN
BENJAMIN THOMAS ELLEFSON
ARCHITECT
No. 1301068227
LICENSED ARCHITECT

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

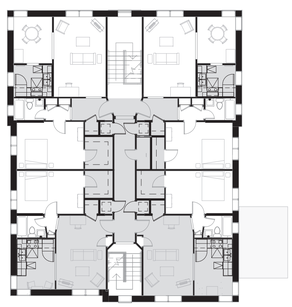
Scale:

Drawing Title
COVER

Drawing No:
AG.0.0

Sheet Size: 24" x 36"

MI REHAB CODE - LEVEL 02 ALTERATIONS - WORK AREA



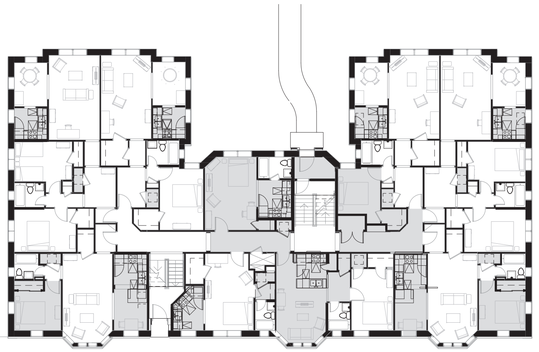
9710 W OUTER DR
FLOOR AREA 3,340 SF
50% OF FLOOR AREA 1,670 SF
WORK AREA 1,250 SF

9730 W OUTER DR
FLOOR AREA 6,730 SF
50% OF FLOOR AREA 3,365 SF
WORK AREA 1,610 SF

LEVEL 02 FLOOR PLAN - WORK AREA

1/16" = 1'-0" | 3

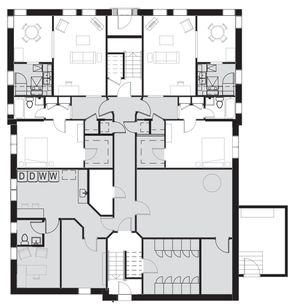
9710 W OUTER DR
FLOOR AREA 3,340 SF
50% OF FLOOR AREA 1,670 SF
WORK AREA 1,260 SF



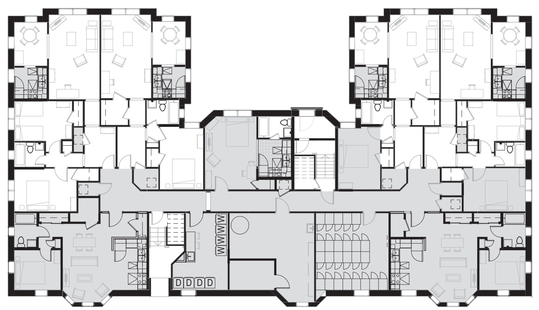
9730 W OUTER DR
FLOOR AREA 6,730 SF
50% OF FLOOR AREA 3,365 SF
WORK AREA 1,830 SF

LEVEL 01 FLOOR PLAN - WORK AREA

1/16" = 1'-0" | 2



9710 W OUTER DR
FLOOR AREA 3,340 SF
50% OF FLOOR AREA 1,670 SF
WORK AREA 1,580 SF



9730 W OUTER DR
FLOOR AREA 6,730 SF
50% OF FLOOR AREA 3,365 SF
WORK AREA 3,260 SF

LEVEL 00 FLOOR PLAN - WORK AREA

1/16" = 1'-0" | 1

PROJECT INFORMATION

9710 & 9730 W OUTER DR
DETROIT, MI 48223

EXISTING MULTIFAMILY HOUSING, BUILT 1940 & 1939
ROSEDALE PARK HISTORIC DISTRICT
PARCEL ID: 22125673.001

W OUTER DRIVE S 66 FT 50 N 66 FT 51 EXC OUTER DRIVE AS WD EDWARD J MINOCKS SUB L28 P94 PLATS, W C R 22/449 132 X 202.78A

PARCEL SPLIT IN PROGRESS (SEE DRAWINGS FOR NEW DEVELOPMENT PROPERTY LINE)

APPLICABLE CODES

2015 Michigan Rebabilitation Code	Effective December 13, 2016
2015 Michigan Building Code	Effective April 20, 2017
2015 Michigan Residential Code	Effective February 8, 2016
2015 Michigan Mechanical Code	Effective April 12, 2017
2015 Michigan Plumbing Code	Effective April 20, 2015
2014 National Electrical Code & The Michigan Part 8 Electrical Rules	Effective June 18, 2015
2015 Michigan Uniform Energy Code	Effective February 8, 2016
2021 International Building Code	
International Fire Code	
International Fuel Gas Code	
International Property Maintenance Code	
International Private Sewage Disposal Code	
NFPA 70: NEC	

BUILDING CODE SUMMARY

MICHIGAN BUILDING CODE 2015 EDITION WITH MICHIGAN REHABILITATION CODE 2015 EDITION		REMARKS
BUILDING AREA (506)	ALLOWABLE AREA: **9710:** 17,675 SF; **9730:** 20,300 SF PROVIDED: **9710:** 10,020 SF; **9730:** 20,123 SF	Two separate buildings in project. Code comments apply to both buildings unless otherwise noted.
BUILDING USE GROUP (CHAPTER 3)	RESIDENTIAL GROUP (R-2)	Both buildings are in a historic district (REHAB Chap. 12) Renovation strategy: Repair + Level 02 Alterations (Chap. 8)
TYPE OF CONSTRUCTION (CHAPTER 6)	VB	Existing construction. Brick veneer on wood stud.
FIRE SUPPRESSION PROVIDED (SECTION 903)	AUTOMATIC SPRINKLER SYSTEM THROUGHOUT, NFPA 13R	
ALLOWABLE NUMBER OF STORIES (TABLES 504.3, 504.4)	**9710:** 3 STORIES ALLOWED; **9730:** 4 STORIES ALLOWED; 3 EXISTING STORIES PROVIDED FOR EACH BUILDING	2 1/2 stories above grade existing (3 stories total)
SPECIAL PROVISIONS (HEIGHT & AREA) (SECTION 510)	N/A	
TOTAL ALLOWABLE BUILDING HEIGHT	60' ALLOWED; 35' EXISTING PROVIDED	
TABULAR FLOOR AREA PER STORY (TABLE 506.2)	7,000 SF/STORY ALLOWED	
ACTUAL FLOOR AREA PER STORY	**9710:** BASEMENT 3,340 SF; 1ST FLOOR 3,340 SF; 2ND FLOOR 3,340 SF **9730:** BASEMENT 6,730 SF; 1ST FLOOR 6,730 SF; 2ND FLOOR 6,663 SF	
TOTAL AREA	10,020 SF / 20,123 SF	
OCCUPANT LOAD PER STORY (TABLE 1004.1.2)	**9710:** BASEMENT 11; 1ST FLOOR 13; 2ND FLOOR 13 **9730:** BASEMENT 26; 1ST FLOOR 27; 2ND FLOOR 27	
TOTAL OCCUPANT LOAD	37 PEOPLE / 80 PEOPLE	
COMMON PATH OF EGRESS TRAVEL (TABLE 1006.2.1) MAXIMUM LENGTH OF EXIT TRAVEL (TABLE 1017.2)	125'-0" 250'-0"	
MAXIMUM LENGTH OF DEAD END CORRIDOR (PARA 1020.4)	50'-0"	
CAPACITY OF EGRESS COMPONENTS		
EXIT ACCESS CORRIDORS (PARA 1005.1 & TABLE 1020.2.)	0.2" PER OCCUPANT 36" MINIMUM IN MAIN CORRIDORS & WITHIN DWELLING UNITS **FOR NEW CONSTRUCTION**	MICHIGAN BUILDING CODE 2015 EDITION: **CORRIDORS** OUTSIDE OF LEVEL 02 ALTERATIONS, EXISTING TO REMAIN
STAIRWAYS (PARA 1005.3.1, 1011.2)	0.3" PER OCCUPANT 44" WIDE MINIMUM IN EACH STAIR **FOR NEW CONSTRUCTION**	MICHIGAN BUILDING CODE 2015 EDITION: ALL **STAIRWAYS** IN THE PROJECT ARE OUTSIDE OF LEVEL 02 ALTERATIONS, EXISTING TO REMAIN
DOORS (PARA 1005.3.2 & PARA 1010.1.1)	0.2" PER OCCUPANT 32" WIDE MIN. & 80" HEIGHT MIN. (REQ'D MEANS OF EGRESS) **FOR NEW CONSTRUCTION**	MICHIGAN BUILDING CODE 2015 EDITION: ALL **EGRESS DOORS** & OTHER EXIST. DOORS OUTSIDE OF LEVEL 02 ALTERATIONS, EXISTING TO REMAIN
FIRE RESISTANCE RATINGS OF EGRESS COMPONENTS		
CORRIDORS (TABLE 1020.1)	N/A, WOOD LATH & PLASTER	MICHIGAN BUILDING CODE 2015 EDITION: (1203.3) Existing door openings and corridor and stairway widths less than those specified elsewhere in this code may be approved, provided that, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or traverse the means of egress. When approved by the code official, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other approved means of egress having sufficient capacity to serve the total occupant load are provided. (1203.7) Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood or metal lath and plaster. (1203.12) Every historical building that cannot be made to conform to the construction requirements specified in the International Building Code for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an approved automatic fire-extinguishing system.
EXIT PASSAGEWAYS (PARA 1024.3)	N/A, WOOD LATH & PLASTER	
STAIR SHAFTS (PARA 1023.2)	N/A, WOOD LATH & PLASTER	
HORIZONTAL EXITS (PARA 1026.2)	N/A	
AREA OF REFUGE (PARA 1009.6.4)	NOT REQUIRED IN ALTERATIONS OF EXISTING BUILDINGS (PARA 1009.6.4 EXCEPTION #1)	
FIRE RESISTANCE RATINGS OF FIRE SEPARATIONS		
SHAFTS - OTHER THAN STAIRS (PARA 713.4)	N/A, WOOD LATH & PLASTER	MICHIGAN BUILDING CODE 2015 EDITION (1203.7) (see above)
SHAFTS - ELEVATOR LOBBY (PARA 713.14.1)	N/A	
ATRIUMS (PARA 404.6)	N/A	
FURNACE ROOMS OVER 400,000 BTU (TABLE 509)	N/A, AUTOMATIC SPRINKLER SYSTEM	
BOILER ROOMS OVER 15 PSI & 10 HP (TABLE 509)	N/A, AUTOMATIC SPRINKLER SYSTEM	
WASTE & LINEN COLLECTION ROOMS (TABLE 509)	N/A	
FIRE WALLS (TABLE 706.4)	N/A	
EXTERIOR WALLS (TABLE 602)	0-HOUR WITH FIRE SEPARATION DISTANCE GREATER THAN OR EQUAL TO 10'	MICHIGAN BUILDING CODE 2015 EDITION (1203.12) (see above)
FIRE RESISTANCE RATINGS OF STRUCTURAL ELEMENTS		
PRIMARY STRUCTURAL FRAME (TABLE 601)	0 HOUR	
INTERIOR AND EXTERIOR BEARING WALLS, COLUMNS, BEAMS, GIRDERS, TRUSSES, AND ARCHES (TABLE 601) — SUPPORTING MORE THAN ONE FLOOR, COLUMNS OR OTHER BEARING WALLS	0 HOUR EXTERIOR BEARING WALLS 0 HOUR INTERIOR BEARING WALLS	
INTERIOR AND EXTERIOR BEARING WALLS, COLUMNS, BEAMS, GIRDERS, TRUSSES, AND ARCHES (TABLE 601) — SUPPORTING A ROOF ONLY	0 HOUR	
EXTERIOR NON BEARING WALLS (TABLE 602)	0 HOUR	
INTERIOR NON-BEARING WALLS, FLOOR CONSTRUCTION, & ROOF CONSTRUCTION (TABLE 601)	0 HOUR	

OCCUPANCY: Residential R-2	OCCUPANTS: 87				(44 MALE 44 FEMALE)	
Apartment House	WATER CLOSET		LAVATORIES		BATHTUBS OR SHOWERS	DRINKING FOUNTAINS	OTHER
	MALE	FEMALE	MALE	FEMALE			
REQUIRED:	1 / Unit		1 / Unit		1 / Unit	–	*

* 1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units

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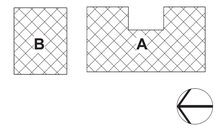
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

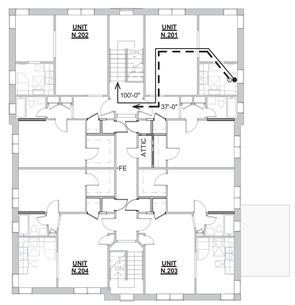
Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

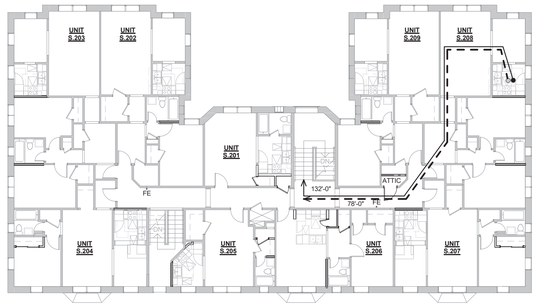
Scale: As indicated

Drawing Title
CODE SUMMARY

Drawing No:
AG.0.1

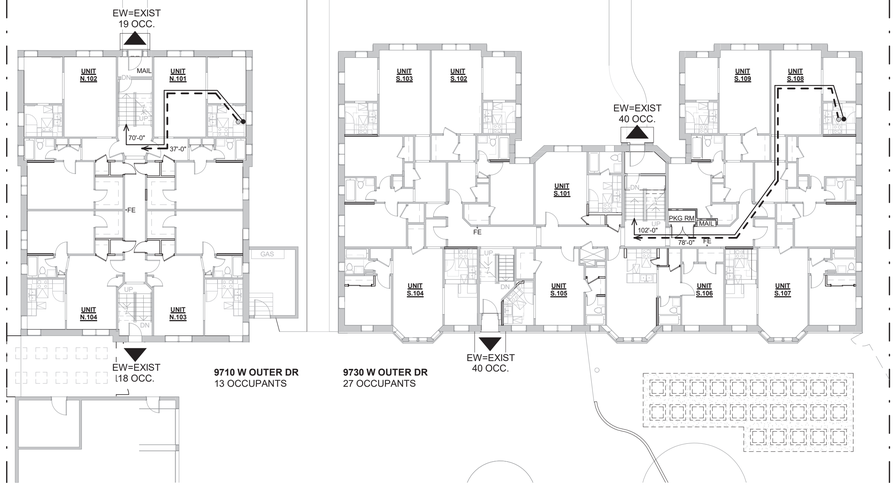


9710 W OUTER DR
13 OCCUPANTS



9730 W OUTER DR
27 OCCUPANTS

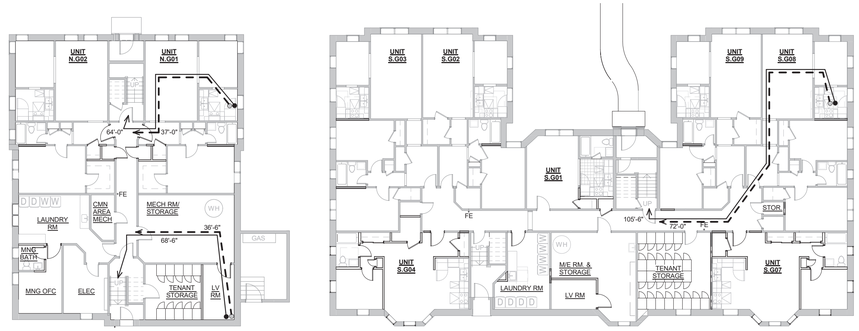
LEVEL 02 LIFE SAFETY PLAN | 1/16" = 1'-0" | 3



9710 W OUTER DR
13 OCCUPANTS

9730 W OUTER DR
27 OCCUPANTS

LEVEL 01 LIFE SAFETY PLAN | 1/16" = 1'-0" | 2



9710 W OUTER DR
11 OCCUPANTS

9730 W OUTER DR
26 OCCUPANTS

LEVEL 00 LIFE SAFETY PLAN | 1/16" = 1'-0" | 1

LIFE SAFETY PLAN LEGEND

REFER TO **AG.0.4** FOR WALL MOUNTED FIRE EQUIPMENT HEIGHTS

- FDC — FIRE DEPARTMENT CONNECTION
- FEC — FIRE EXTINGUISHER CABINET
- FE — FIRE EXTINGUISHER
- XXX'-X" — TRAVEL DISTANCE FROM THE MOST REMOTE POINT TO THE CLOSEST EXIT
- XXX'-X" — COMMON PATH OF TRAVEL
- EXIT SYMBOL
- EW=36" 225 / <300> — EGRESS WIDTH, LOAD & CAPACITY

OCCUPANT LOAD

LEVEL 00:		
RESIDENTIAL	6000/200 =	30
ACCESSORY STORAGE AND MECH	1940/300 =	7
LEVEL 01:		
RESIDENTIAL	7940/200 =	40
LEVEL 02:		
RESIDENTIAL	7940/200 =	40
TOTAL OCCUPANCY		117

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Key Plan

Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

Scale: As indicated

Drawing Title
LIFE SAFETY PLANS

Drawing No:
AG.0.2

ABBREVIATIONS

AB	ANCHOR BOLT
ABR	ABRASIVE
ABV	ABOVE
AC	ACOUSTIC/ACOUSTICAL
A/C	AIR CONDITIONING
ACC	ACCESS
ACH	AIR CONDITIONING UNIT
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM/AL	ALUMINUM
AMP	AMPERE
AMT	AMOUNT
ANCH	ANCHOR
&	AND
ANOD	ANODIZED
AP	ACCESS PANEL
APPD	APPROVED
APPROX	APPROXIMATE
ARCH	ARCHITECT/ARCHITECTURAL
ASPH	ASPHALT
ASSY	ASSEMBLY
@	AT
AUTO	AUTOMATIC
AVG	AVERAGE
B/B	BACK TO BACK
BD	BOARD
BF	BARRIER FREE
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK/BLOCKING
BLVD	BOULEVARD
BM	BEAM/BENCHMARK
BOT	BOTTOM
BR	BEDROOM/BRASS
BRG	BEARING
BRK	BRICK
BRL	BEARING PLATE
BS	BOTH SIDES
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BULL	BULLETIN
CA	COMPRESSED AIR
CAB	CABINET
CB	CATCH BASIN/CHALKBOARD
C/C	CENTER TO CENTER
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CER	CERAMIC
CF	CUBIC FEET
CFL	COUNTER FLASHING
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
CH	COAT HOOK
CI	CAST IRON
CIP	CAST IRON PIPE/CAST IN PLACE
CIR	CIRCLE/CIRCULAR
CJ	CONTROL JOINT
CL	CENTERLINE/CLASS
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNL	CHANNEL
CNTR	COUNTER
CO	CLEAN OUT/COMPANY
COL	COLUMN
COMP	COMPOSITION/COMPOSITE
CONC	CONCRETE
COND	CONDUIT
CONF	CONFERENCE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUE/CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR/CORRUGATED
CP	CONTROL PANEL
CPL	CEMENT PLASTER
CTR	CENTER/CENTERED
CW	COLDWATER
CY	CUBIC YARD
CYC	CYCLES
CYL	CYLINDER
D	DEEP/DEPTH
DB	DECIBEL
DBL	DOUBLE
DES	DESIGN
DET	DETAIL
DH	DOUBLE HUNG
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DISC	DISCONNECT
DISP	DISPENSER/DISPOSAL
DIV	DIVIDER/DIVISION
DL	DEAD LOAD
DN	DOWN
DP	DAMPPROOFING
DR	DOOR/DRAIN/DINING ROOM
DRN	DRAIN
DS	DOWN SPOUT
DT	DRAIN TILE
DUP	DUPLICATE
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EC	ELECTRICAL CONTACTOR
E/E	END TO END
EF	EACH FACE/EXHAUST FAN
EG	EXHAUST GRILLE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL/ELEV	ELEVATION/ELEVATOR
ELAST	ELASTOMERIC
ELEC	ELECTRIC/ELECTRICAL
EMER	EMERGENCY
ENCL	ENCLOSURE/ENCLOSED
ENTR	ENTRANCE/ENTRY
EP	ELECTRICAL PANEL
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQ	EQUAL/EQUIVALENT
EQUIP	EQUIPMENT
ER	EXHAUST REGISTER
ESC	ESCALATOR
EST	ESTIMATE
ETC	ETCETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EX	EXPOSED
EXC	EXCAVATED
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F	DEGREES FAHRENHEIT
FA	FIRE ALARM
FAB	FABRICATED
FACP	FIRE ALARM CONTROL PANEL
FAS	FASTENER
FD	FLOOR DRAIN
FDAPR	FIRE DAMPER
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FACTORY FINISH
F/F	FACE TO FACE/FINISH TO FINISH
FFE	FINISH FLOOR ELEVATION
FF&E	FIXTURES, FURNISHINGS & EQUIPT.
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIG	FIGURE
FIN	FINISH/FINISHED
FIN FLR/FF	FINISH FLOOR
FIXT	FIXTURE
FLASH	FLASHING
FLG	FLOORING/FLASHING/FLANGE
FLR	FLOOR
FLUOR	FLUORESCENT
FPM	FEET PER MINUTE
FPR	FIREPROOF/FIREPROOFING
FR	FIRE RETARDANT
FRM	FRAME
FS	FULL SIZE
FT	FEET/FOOT
FTG	FOOTING
FURN	FURNISH/FURNISHED
FURR	FURRING/FURRED
FUT	FUTURE
FVC	FIRE VALVE CABINET
FVS	FIRE VALVE STATION
G	GAS
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAB BAR / GYPSUM BOARD
GC	GENERAL CONTRACTOR
GENL	GENERAL
GF	GROUND FACE
GFRC	GLASS FIBER REINFORCED CONCRETE
GL	GLASS/GRID LINE
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	HIGH
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAVY DUTY
HDWD	HARDWOOD
HDWE	HARDWARE
HEX	HEXAGON
HHWR	HEATING HOT WATER RETURN
HHWS	HEATING HOT WATER SUPPLY
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT/HORSE POWER
HR	HOUR
HS	HEAT STRENGTHENED
HT	HEIGHT
HTG	HEATING
HTR	HEATER
H/V	HEATING AND VENTILATION
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HVC	HOSE VALVE CABINET
HW	HOT WATER
HWH	HOT WATER HEATER
ID	IDENTIFICATION
IE	INVERT ELEVATION
IN or "	INCH/INCHES
INCL	INCLUDE/INCLUDING
INFO	INFORMATION
INSUL	INSULATATE/INSULATION
INT	INTERIOR/INTERNAL
INTER	INTERMEDIATE
INV	INVERT
JB	JUNCTION BOX/JOINT BACKER
JC	JANITOR CLOSET
JF	JOINT FILLER
JR	JUNIOR
JST	JOIST
JT	JOINT
K	KIP (1000#)
KD	KNOCK DOWN
KIT	KITCHEN
KO	KNOCK OUT
KP	KICK PLATE
LAB	LABORATORY
LAM	LAMINATE/LAMINATED
LAV	LAVATORY
LEV	LEVEL
LF	LINEAR FEET/FOOT
LG	LONG
LH	LEFT HAND
LHRB	LEFT HAND REVERSE BEVEL
LIN	LINEAR DIFFUSER
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LP	LIGHTING PANEL/LOW POINT
LSF	LIGHT GAUGE STEEL FRAMING
LT	LIGHT/LAUNDRY TRAY
LTG	LIGHTING
LV	LOW VOLTAGE
LW	LIGHT WEIGHT
MACH	MACHINE
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MC	MEDICINE CABINET
MCC	MOTOR CONTROL CENTER
MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION
MDS	METAL DIVIDER STRIP
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MK	MARK
ML	METAL LATH
mm	MILLIMETER
MO	MASONRY OPENING
MOD	MODEL/MODULE
MOV	MOVEABLE

MT	METAL THRESHOLD
MTD	MOUNTED
MTG	MEETING
MTL	METAL/METTALIC
MULL	MULLION
N	NORTH
NA	NOT APPLICABLE
NAT	NATURAL
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NOR	NORMAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OUTSIDE AIR/OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER/OUTSIDE DIMENSION
OF	OUTSIDE FACE DIMENSION
OFF	OFFICE
OH	OPPOSITE HAND/OVERHEAD
OPER	OPERATOR/OPERATION
OPG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OZ	OUNCE
PA	PUBLIC ADDRESS
PASS	PASSAGE/PASSENGER
PBD	PARTICLE BOARD
PC	PIECE/PIECES/PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCP	PRECAST CONCRETE PANEL
PERF	PERFORATED
PERIM	PERIMETER
PERM	PERMANENT
PERP	PERPENDICULAR
PG	PAGE
PKG	PARKING
PL	PLATE/PROPERTY LINE
PLAS	PLASTER
PLAT	PLATFORM
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
PLWD	PLYWOOD
PNL	PANEL
POL	POLISHED
PORT	PORTABLE
POS	POSITION/POSITIVE
PREFAB	PREFABRICATED
PRL	PARALLEL
PROJ	PROJECT/PROJECTION
PROP	PROPERTY/PROPOSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT/PAINT
PTD	PAINTED
PTN	PARTITION
PVG	PAVING
PVC	POLYVINYLCLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
QTR	QUARTER
R	RISER
RAD or R	RADIUS
RAG	RETURN AIR GRILLE
RC	RAIN CONDUCTOR
RCP	REFLECTED CEILING PLAN
RD	ROAD/ROOF DRAIN
REBAR	REINFORCEMENT BAR
REC	RECESS
RECV	RECEIVE/RECEIVING
REF	REFER/REFERENCE
REFL	REFLECTIVE/REFLECTED
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCED/REINFORCE/MENT
REQD	REQUIRED
RET	RETURN
REV	REVISED/REVISION
RFG	ROOFING
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RTU	ROOF TOP UNIT
RV	ROOF VENTILATION
RWC	RAIN WATER CONDUCTOR
S	SOUTH/STORM/SINK
SA	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SAN	SANITARY
SB	SOIL BEARING
SC	SOLID CORE
SCHED	SCHEDULE
SD	SUPPLY DUCT/DIFFUSER
SECT	SECTION
SF	SQUARE FEET/SUPPLY FAN
SHR	SHOWER
SIM	SIMILAR
SOG	SLAB ON GRADE
SP	SPACING
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
STAG	STAGGERED
STC	SOUND TRANSMISSION CLASS
SS	STAINLESS STEEL
ST	STREET
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STOR	STORAGE
STRL	STRUCTURAL
SUB	SUBSTATION
SURF	SURFACE/SURFACING
SW	SWITCH
SYM	SYMBOL/SYMMETRICAL
SYS	SYSTEM
T	THERMOSTAT/TREAD
T/	TOP OF
TAN	TANGENT
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TEST BOARING/TOWEL BAR
TBD	TACKBOARD/TO BE DETERMINED
TD	TRENCH DRAIN
TECH	TECHNICAL
TEL	TELEPHONE
TEMP	TEMPERATURE/TEMPORARY/TEMPERED
THK	THICK/THICKNESS
THR	THRESHOLD
THRU	THROUGH/THROUGHOUT
TOS	TOP OF STEEL/TOP OF SLAB
TP	TANGENT POINT
TRAN	TRANSOM/TRANSFORMER
TS	TUBE SECTION/TUBE STEEL/
TV	TELEVISION
TW	THROUGH WALL
TYP	TYPICAL

UC	UNDERCUT
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
ULT	ULTIMATE
UNEX	UNEXCAVATED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VAC	VACUUM
VAR	VARIABLE/VARIES
VENT	VENTILATE/VENTILATION
VERT	VERTICAL/VERTICALLY
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VIT	VITREOUS
VOL	VOLUME
VR	VAPOR RETARDER
W	WIDE/WIDTH/WEST/WASTE/WATTS
W/	WITH
WC	WATER CLOSET
WD	WOOD
WH	WALL HYDRANT
WL	WORKING LINE
WM	WATER METER
WO	WINDOW OPENING
W/O	WITHOUT
WP	WATERPROOF/WEATHERPROOF
WP	WORKING POINT
WR	WATER RESISTANT
WSCT	WAINSCOT
WT	WEIGHT/WATERTIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
WGL	WIRE GLASS
YD	YARD
YP	YIELD POINT
YR	YEAR
YS	YIELD STRENGTH

MATERIAL SYMBOLS

- CONCRETE SECTION
- PRECAST CONCRETE SECTION
- CMU
- CMU SECTION
- MASONRY VENEER (SOLDIER COURSE)
- MASONRY VENEER
- MASONRY SECTION
- ALUMINUM
- STEEL
- GLASS
- ASPHALT SHINGLES
- EARTH
- GRASS
- RIGID INSULAITON (SECTION)
- EXTRUDED POLY
- MINERAL WOOL
- BATT INSULATION
- EXPANDED POLY
- PLYWOOD SECTION
- WOOD (ROUGH)
- FINISH WOOD
- ACT LAY-IN (2X2)
- ACT LAY-IN (2X2)
- GYPSUM BOARD
- CUT STONE
- GROUT

EXTERIOR WALL - NAMING CONVENTION

EW 0.0 X . #

- OPTIONAL MODIFIER
- CLADDING MATERIAL
- WALL STRUCTURE + NOMINAL THICKNESS
- EXTERIOR WALL

WALL STRUCTURE
1: METAL STUD
2: WOOD STUD
3: CMU
4: CAST-IN-PLACE CONCRETE
5: STRUCTURAL PRECAST

CLADDING MATERIAL
A: BRICK VENEER
B: CMU
C: NATURAL STONE
D: CAST STONE
E: METAL COMPOSITE MATERIAL WALL PANELS
F: METAL PLATE WALL PANELS
G: METAL WALL PANELS
H: INSULATED METAL WALL PANELS
J: ULTRA HIGH PERFORMANCE CONCRETE SIDING
K: FIBER CEMENT SIDING
L: COMPOSITE SIDING

NOTE: SEE LIFE SAFETY DRAWINGS FOR LOCATIONS OF FIRE RATED EXTERIOR WALLS

DRAWING SYMBOLS

ROOM NAME / NUMBER — Room name 101

VIEW NAME / NUMBER — View Name | 1/8" = 1'-0" | 1

NEW COLUMN GRID — H

EXISTING COLUMN GRID — H

DETAIL / PLAN CALLOUT — VIEW NUMBER ON SHEET: 1 / A101; INDICATES SHEET WHERE DRAWN; SIM; SIMILAR TO IDENTIFIED DETAIL

NORTH ARROW

SECTION INDICATION — 1 / A101 (SIM)

ELEVATION INDICATION — DIRECTION OF VIEW; NUMBER ON SHEET WHERE DRAWN; INDICATES SHEET WHERE DRAWN; 1 / A101; 2; 3; 4

LEVEL INDICATION — Name / Elevation

REVISION CLOUD IDENTIFICATION — 1

DOOR IDENTIFICATION — OPENINGS (DOOR & BORROWED LIGHT) SHALL REPEAT ROOM NUMBER ASSIGNED TO ROOM. MULTIPLE OPENINGS TO ROOM SHALL REPEAT ROOM NUMBER WITH A POSTSCRIPT LETTER FOR EACH ADDITIONAL OPENING REQUIRED. 001

101 / 101A / 101B FOR NUMBER NEEDED

WINDOW IDENTIFICATION — 1t

WALL IDENTIFICATION — 1i

DESCRIPTION STARTS AT WALL SURFACE DESIGNATED

CEILING HEIGHT — 9' - 0"

DIMENSION LINE — DIMENSION

MATCHLINE — A-101.01 / A-101.01; A-102.01 / A-102.01; SHEET NUMBER

Grandmont Rosedale Park Collective II

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INTOTO STUDIO

OWNER
GRPC 4 Limited Dividend Housing Association
Limited Partnership, a Michigan limited partnership
19800 Grand River
Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

ARCHITECT
INTOTO STUDIO LLC
6505 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

MEP ENGINEERING
MA ENGINEERING
400 S. Old Woodward Ave
Suite 100
Birmingham, MI 48009
248-258-1610 phone
www.ma-engineering.com

STRUCTURAL ENGINEERING
RESURGET ENGINEERING
4219 Woodward Ave.
Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan

Registration Seal

STATE OF MICHIGAN — BENJAMIN THOMAS ELLEFSON — ARCHITECT — No. 1301068227 — LICENSED ARCHITECT

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

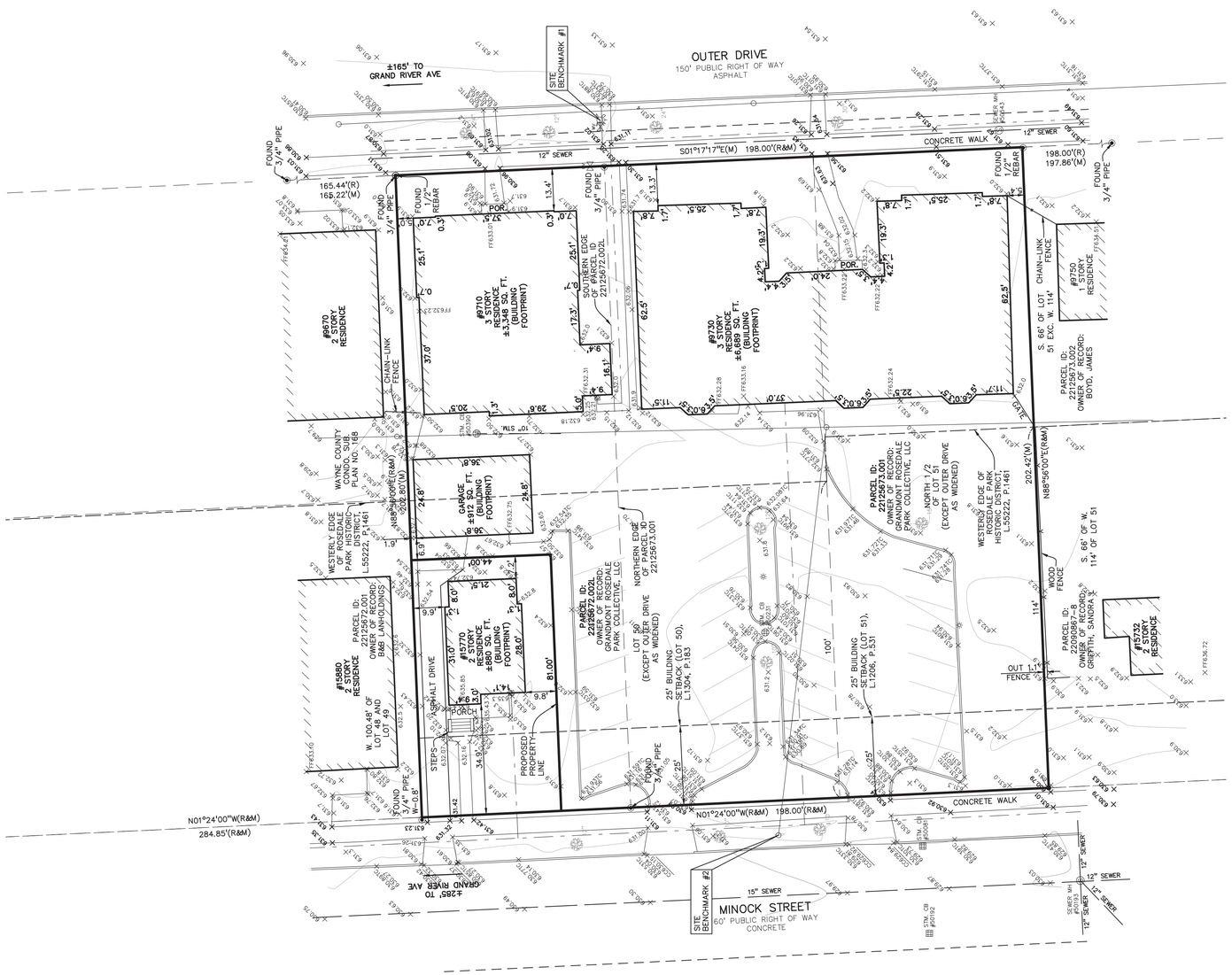
Scale: As indicated

Drawing Title

GENERAL NOTES

Drawing No:

AG.0.3



MANHOLE SCHEDULE

#	TYPE	RIM	SIZE	DIRECTION	INVERT
50081	CATCH BASIN	629.64		T/WATER	623.94
				B/STRUCTURE	623.14
50192	CATCH BASIN	629.58		T/WATER	624.43
				B/STRUCTURE	622.83
50193	SEWER MANHOLE	630.06	12	E	620.46
			12	SW	623.96
			12	W	621.01
			12	S	617.78
			15	N	617.91
50231	CATCH BASIN	630.42		B/STRUCTURE	625.72
				T/PIPE SW	627.82
50390	CATCH BASIN	632.38	10	S	629.30
50543	SEWER MANHOLE	631.54	12	N	617.89
			12	S	617.99

PARKING

HANDICAP PARKING = 0 STALLS
STANDARD PARKING = 33 STALLS

PARCEL AREA

PARCEL ID: 22125672.002L
13,380± SQUARE FEET = 0.31± ACRES
PARCEL ID: 22125673.001
26,736± SQUARE FEET = 0.61± ACRES
TOTAL
40,116± SQUARE FEET = 0.92± ACRES

BASIS OF BEARING

NORTH 01°24'00" WEST, BEING THE EASTERLY RIGHT OF WAY LINE OF MINOCK STREET, AS PLATTED.

BENCHMARK

SITE BENCHMARK #1
ARROW ON FIRE HYDRANT.
ELEVATION = 634.13' (NAVD 88)

SITE BENCHMARK #2
MAG NAIL ON UTILITY POLE.
ELEVATION = 632.09' (NAVD 88)

ZONING REGULATIONS

R1– TWO FAMILY RESIDENTIAL DISTRICT

- •MAXIMUM LOT COVERAGE – 35%
- •REQUIRED SETBACK LINE MINIMUM DIMENSIONS –
  FRONT – 20 FEET
  LEAST ONE SIDE – 4 FEET
  TOTAL TWO SIDES – 14 FEET
  REAR – 30 FEET
- •MAXIMUM HEIGHT IN FEET – 35 FEET
- •MINIMUM GROSS LOT SIZE
  AREA IN SQUARE FEET – 5,000 SQ. FT.
  WIDTH IN FEET – 50 FEET

NOTE: ALL ZONING INFORMATION IS TAKEN FROM THE CITY OF DETROIT WEBSITE & TWO ZONING LETTERS FROM THE CITY OF DETROIT DEPARTMENT OF BUILDINGS, SAFETY ENGINEERING, AND ENVIRONMENTAL, BOTH DATED SEPTEMBER 23, 2020. ALL ZONING INFORMATION MUST BE VERIFIED FOR COMPLETENESS WITH CURRENT ZONING REGULATIONS.

LEGEND

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

EXISTING

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

PROPERTY DESCRIPTION

LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE, STATE OF MICHIGAN, DESCRIBED AS:

LOT(S) 50 AND THE NORTH ONE HALF OF LOT 51, EXCEPT OUTER DRIVE AS WIDENED, EDWARD J. MINOCK'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN LIBER 28, PAGE 94 OF PLATS, WAYNE COUNTY RECORDS.

*PARCEL IDS 22125672.002L AND 22125673.001 COMBINED DESCRIBE THE SAME LEGAL DESCRIPTION AS DESCRIBED ABOVE.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT No. 911494, DATED AUGUST 21, 2020, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

9. COVENANTS, CONDITIONS, RESTRICTIONS AND OTHER PROVISIONS BUT OMITTING RESTRICTIONS, IF ANY, BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS OR NATIONAL ORIGIN AS CONTAINED IN INSTRUMENT RECORDED IN LIBER 1206, PAGE 531 (AS SHOWN), REGISTER NO. 414058, LIBER 1304, PAGE 183 (AS SHOWN), REGISTER NO. 465530 AND LIBER 5187, PAGE 64 (SEE DOCUMENT FOR TERMS AND CONDITIONS), REGISTER NO. C344848.

10. TERMS AND CONDITIONS OF RESOLUTION RECORDED IN LIBER 55222, PAGE 1461, WAYNE COUNTY RECORDS. (AS SHOWN)

11. EASEMENT(S), RESTRICTIONS AND/OR SETBACK LINES, IF ANY, AS DISCLOSED BY THE RECORDED PLAT. (NONE PLATTED)

SURVEYOR'S NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

2. THERE IS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

3. THE SURVEYOR IS UNAWARE OF ANY PROPOSED CHANGES IN STREET RIGHT OF WAY LINES. THERE IS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN:

OTHER AREA (ZONE X): AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON FLOOD INSURANCE RATE MAP: MAP NUMBER 26163C0100E, DATED FEBRUARY 02, 2012, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:

TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY:

KEM–TEC
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021

PEA GROUP WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

Grandmont Rosedale Park Collective II

9710 - 9730 W Outer Dr. Detroit, MI 48223

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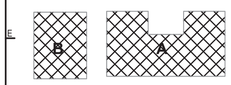
Key Plan

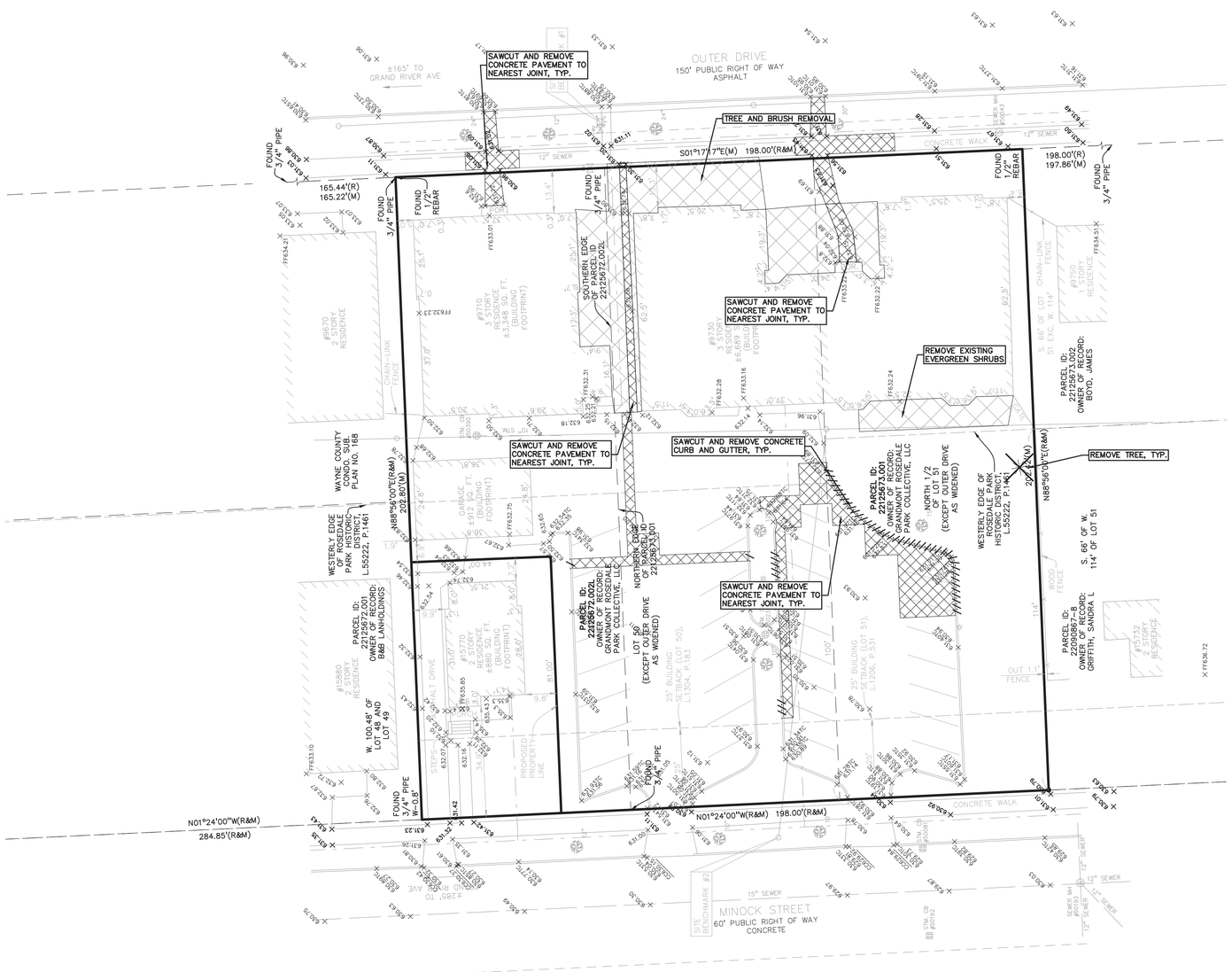


Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02
Drawn By: RW Approved By: EB
Scale: 1" = 20'

Drawing Title
TOPOGRAPHIC SURVEY
Drawing No:
C-1.0



GENERAL DEMOLITION NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:

1. ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
2. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
3. STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
5. REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
6. THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15 FEET OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
9. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.
10. ALL BUILDING GAS LEADS, METERS AND ASSOCIATED EQUIPMENT SHALL BE REMOVED AS SHOWN ON THE PLANS. COORDINATE ALL ASSOCIATED WORK WITH THE APPROPRIATE UTILITY COMPANY.
11. REMOVE ALL OVERHEAD AND UNDERGROUND ELECTRICAL LINES WITHIN THE AREA OF CONSTRUCTION AS SHOWN ON THE PLANS. COORDINATE SHUTDOWNS AND REMOVALS WITH ELECTRICAL SERVICE PROVIDER OR THE APPROPRIATE UTILITY COMPANY. (NOTE: PHONE AND CABLE T.V. SERVICES MAY ALSO BE LOCATED ON OVERHEAD LINES.)
12. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA, AS NECESSARY TO FACILITATE CONSTRUCTION. SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO ADDITIONAL COST TO THE OWNER.
13. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

DEMOLITION LEGEND:

- ITEM TO BE PROTECTED
- ITEM TO BE REMOVED
- CURB/FENCE REMOVAL
- CONCRETE PAVEMENT AND SIDEWALK REMOVAL
- AREA OR ITEMS TO BE REMOVED
- UTILITY REMOVAL
- ABANDON UTILITY
- TREE AND BRUSH REMOVAL
- TREE REMOVAL
- SAWCUT LINE

LEGEND

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

EXISTING

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- WETLAND

811 Know what's below. Call before you dig.

Grandmont Rosedale Park Collective II

9710 - 9730 W Outer Dr. Detroit, MI 48223

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OWNER
GRPC 4 Limited Dividend Housing Association Limited Partnership, a Michigan limited partnership
19800 Grand River
Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

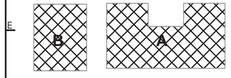
ARCHITECT
INTOTO STUDIO LLC
6505 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

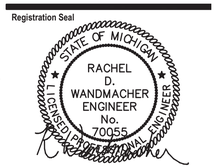
MEP ENGINEERING
MA ENGINEERING
400 S. Old Woodward Ave
Suite 100
Birmingham, MI 48009
248-258-1610 phone
www.ma-engineering.com

STRUCTURAL ENGINEERING
RESURGET ENGINEERING
4219 Woodward Ave.
Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan



Registration Seal



No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

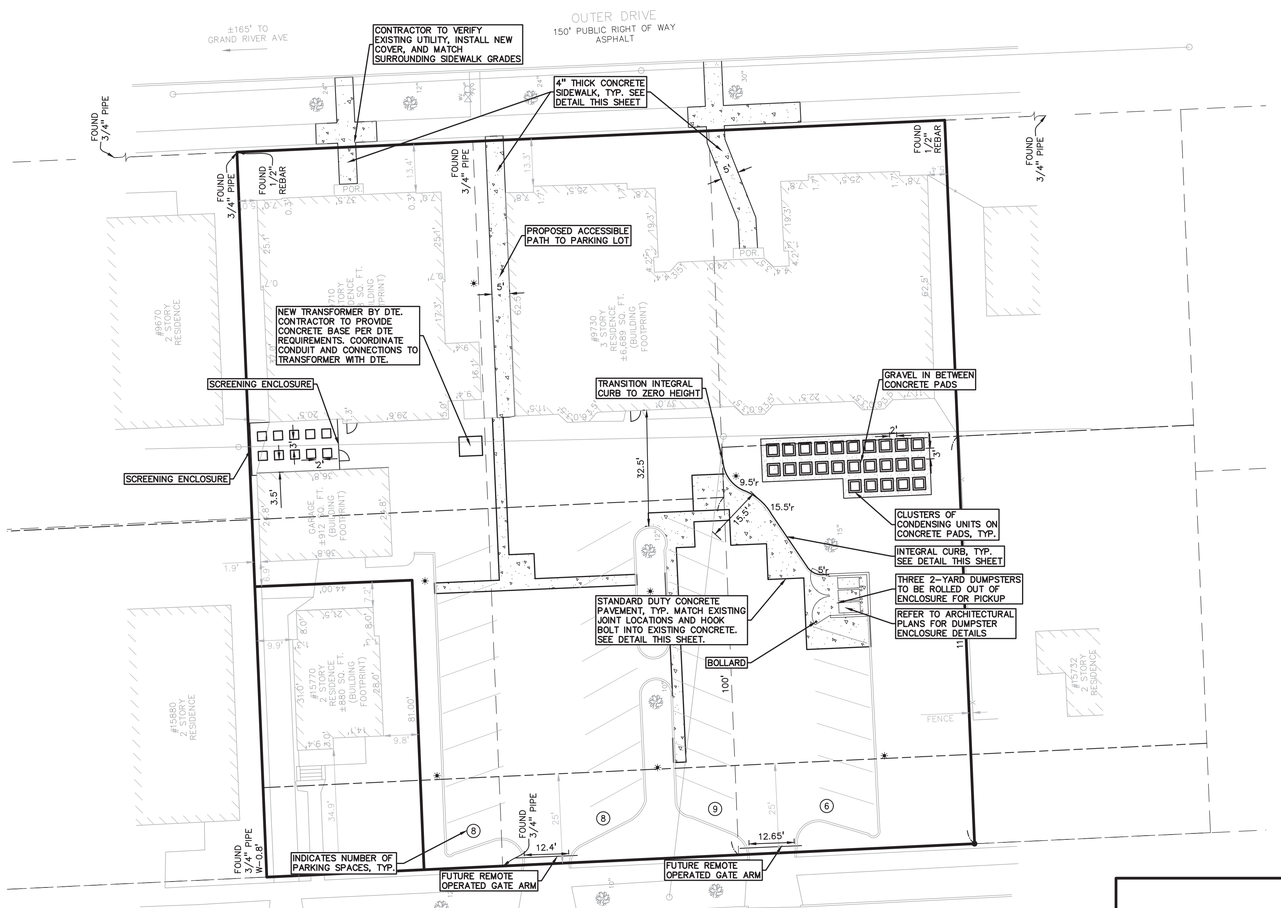
Scale: 1" = 20'

Drawing Title

DEMOLITION PLAN

Drawing No:

C-2.0



GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
3. 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
4. TRASH DISPOSAL CONSISTS OF THREE (3) 2-YARD DUMPSTERS LOCATED IN AN ENCLOSURE ON THE SOUTH SIDE OF THE SITE. THESE DUMPSTERS WILL BE ROLLED OUT OF THE ENCLOSURE AT THE TIME OF WASTE COLLECTION AND THEN RETURNED TO THE ENCLOSURE.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF DETROIT CURRENT STANDARDS AND REGULATIONS.
6. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

SITE DATA TABLE:

SITE AREA: 0.92 ACRES, NET AND GROSS

ZONING: R-1

PROPOSED USE: MULTI-FAMILY

PARKING:

PARKING SPACES: 31 TOTAL

LEGEND

EXISTING		PROPOSED
	IRON FOUND / IRON SET / NAIL FOUND / NAIL & CAP SET	
	BRASS PLUG SET / MONUMENT FOUND / MONUMENT SET	
	SEC. CORNER FOUND; R RECORDED; M MEASURED; C CALCULATED	
-OH--ELEC-	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
-UG--CATV-	UNDERGROUND CABLE TV, CATV PEDESTAL	
-UG--PHONE-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
-UG--ELEC-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
	GAS MAIN, VALVE & GAS LINE MARKER	
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
	SANITARY SEWER, CLEANOUT & MANHOLE	
	STORM SEWER, CLEANOUT & MANHOLE	
	COMBINED SEWER & MANHOLE	
Y.D.	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	C.O. / Y.D.
	POST INDICATOR VALVE	
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
M T E	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
T.B.M. 671.91	UNIDENTIFIED STRUCTURE	
670	SPOT ELEVATION	671.21
	CONTOUR LINE	671
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. ONLY
ASPH.	ASPHALT	STD DUTY / HEAVY DUTY / DEEP STRENGTH
GRAVEL	GRAVEL SHOULDER	
	WETLAND	

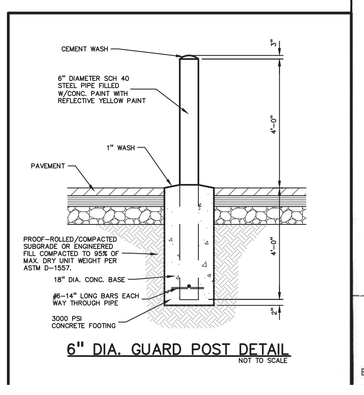
GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

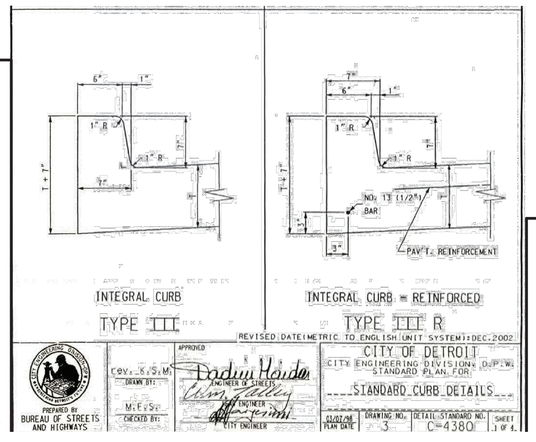
1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
6. CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
8. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
10. THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

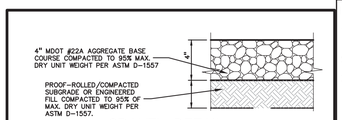
PAVING NOTES:

1. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
3. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
4. ALL EXPANSION JOINTS AND CONCRETE PAVEMENT JOINTS TO BE SEALED.
5. CONCRETE PAVEMENT JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION;
   - 5.1. WHERE PROPOSED CONCRETE ABUTS A STRUCTURE, PROVIDE A MINIMUM 1/2" EXPANSION JOINT. THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A 1/2" TO ALLOW FOR SEALING.
   - 5.2. WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT), PROVIDE 5/8" DOWELS EVERY 30" CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWELS SIZES AND SPACING MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
   - 5.3. WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK OR CURBING, PROVIDE A MINIMUM 1/2" EXPANSION JOINT.
   - 5.4. CONTROL, LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:
     - 5.4.1. 6-INCH THICK CONCRETE PAVEMENT: 12' X 12'
     - 5.4.2. 8-INCH THICK CONCRETE PAVEMENT: 15' X 15'
   - 5.5. IRREGULAR-SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
   - 5.6. IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
6. CONCRETE CURBING JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
   - 6.1. JOINTS WHEN ADJACENT TO ASPHALT PAVEMENT
     - 6.1.1. PLACE CONTRACTION JOINTS AT 10' INTERVALS
     - 6.1.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
     - 6.1.3. PLACE 1" EXPANSION JOINT:
       - 6.1.3.1. AT SPRING POINTS OF INTERSECTIONS OR ONE OF THE END OF RADIUS LOCATIONS IN A CURVE
       - 6.1.3.2. AT 400' MAXIMUM INTERVALS ON STRAIGHT RUNS
       - 6.1.3.3. AT THE END OF RADIUS AT OPPOSITE ENDS IN A CURBED LANDSCAPE ISLAND
   - 6.2. JOINTS WHEN TIED TO CONCRETE PAVEMENT
     - 6.2.1. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT
     - 6.2.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
     - 6.2.3. PLACE 1"EXPANSION JOINT OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT
     - 6.2.4. CURB AND GUTTER AND CONCRETE SHALL BE TIED TOGETHER SIMILAR TO A LONGITUDINAL LANE TIE JOINT (MDOT B1 JOINT)
   - 6.3. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT):
     - 6.3.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
     - 6.3.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY, THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS
7. CONCRETE SIDEWALK JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
   - 7.1. PLACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE WALK WHEN WIDTH IS LESS THAN 8'
   - 7.2. PLACE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS EQUAL TO 1/2 THE WIDTH OF THE WALK WHEN WIDTH IS EQUAL TO OR GREATER THAN 8'
   - 7.3. PLACE 1" EXPANSION JOINT WHERE ABUTTING SIDEWALK RAMP AND/OR RADIUS IN INTERSECTION
   - 7.4. PLACE TRANSVERSE 1/2" EXPANSION JOINT AT MAXIMUM OF 100' SPACING
   - 7.5. PLACE 1/2" EXPANSION JOINT WHEN ABUTTING A FIXED STRUCTURE, OTHER PAVEMENT (CONCRETE PAVEMENT AND DRIVE APPROACHES), UTILITY STRUCTURES, LIGHT POLE BASES AND COLUMNS

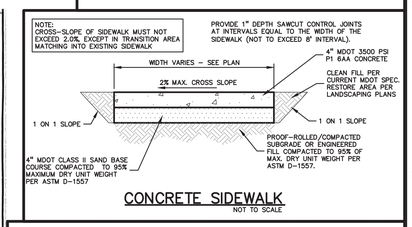


6" DIA. GUARD POST DETAIL
NOT TO SCALE

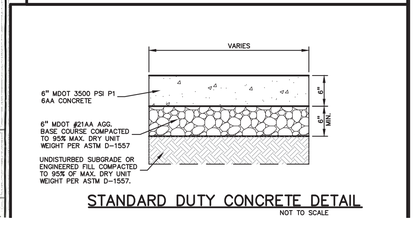




GRAVEL DETAIL
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



STANDARD DUTY CONCRETE DETAIL
NOT TO SCALE

Grandmont Rosedale Park Collective II

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Key Plan

Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

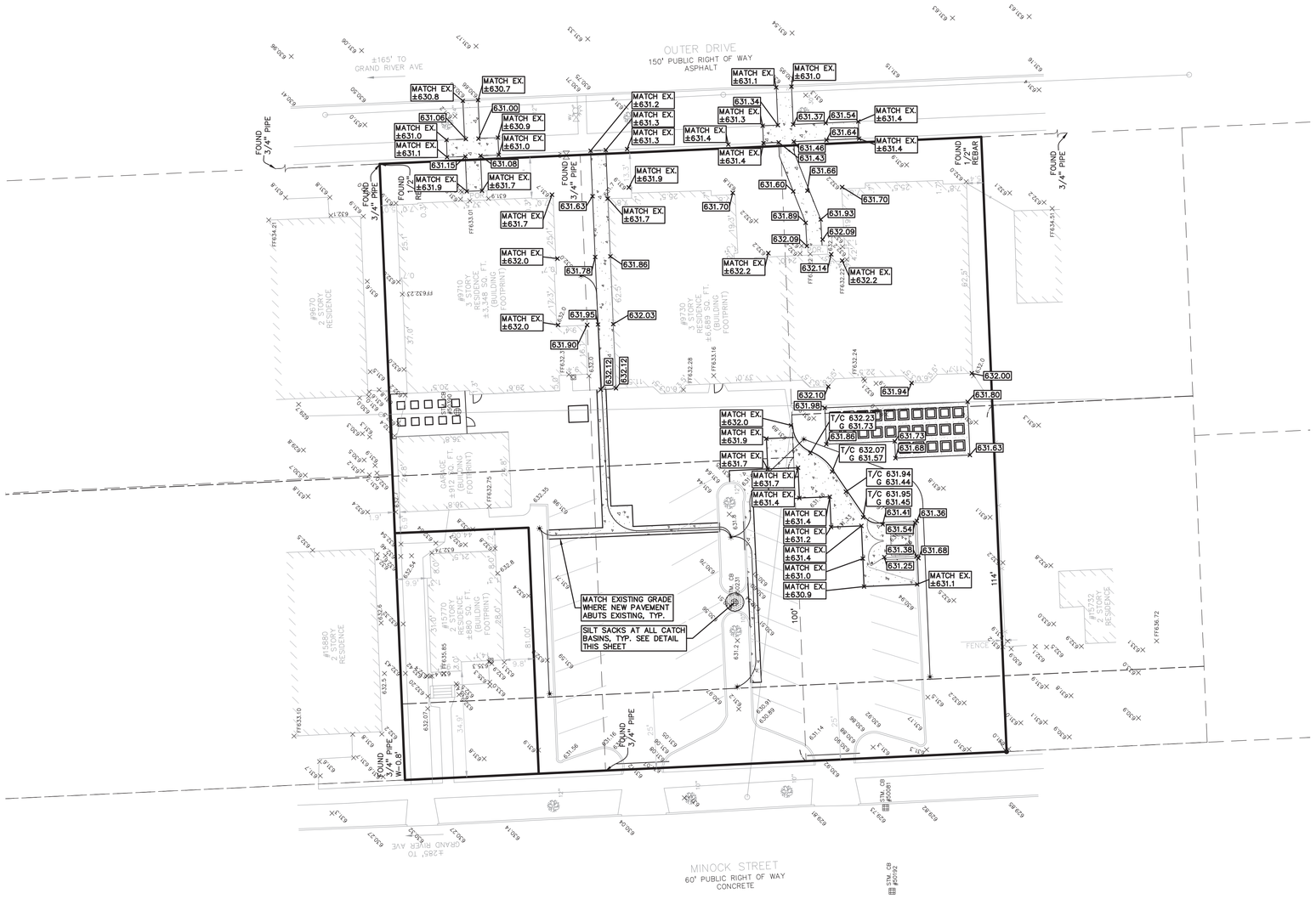
Scale: 1" = 20'

Drawing Title

DIMENSIONAL SITE PLAN

Drawing No:

C-3.0



LEGEND

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

EXISTING	PROPOSED	
		ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
		UNDERGROUND CABLE TV, CATV PEDESTAL
		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
		ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
		GAS MAIN, VALVE & GAS LINE MARKER
		WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
		SANITARY SEWER, CLEANOUT & MANHOLE
		STORM SEWER, CLEANOUT & MANHOLE
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		SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
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		SPOT ELEVATION
		CONTOUR LINE
		FENCE
		GUARD RAIL
		STREET LIGHT
		SIGN
		CONCRETE
		ASPHALT
		GRAVEL SHOULDER
		WETLAND

SYMBOLS: GRADING

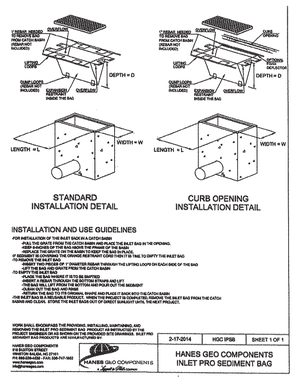
PROPOSED SPOT ELEVATION:
TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES. — 622.50

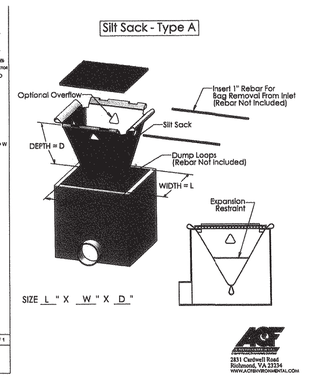
PROPOSED CONTOUR LINE — 922 —

ABBREVIATIONS:
T/C = TOP OF CURB
G = GUTTER GRADE
T/P = TOP OF PAVEMENT
T/S = TOP OF SIDEWALK
T/W = TOP OF WALL
B/W = BOTTOM OF WALL
F.G. = FINISH GRADE
RIM = RIM ELEVATION

SYMBOLS: EROSION CONTROL

STORM SEWER INLET FILTER





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Down to Earth Solutions

Professional Construction, Turf, and Landscape Supplies
▪ CIVIL SITE IMPROVEMENTS ▪ EROSION & SEDIMENT CONTROL ▪ STORMWATER MANAGEMENT ▪ LANDSCAPE ENHANCEMENTS

Geoturf® Filter Bag

Whenever accumulated water on a construction site must be pumped, utilize filter bags to ensure the water is properly filtered of silt and sediment prior to discharge into receiving bodies. Filter bags are constructed of strong, high quality nonwoven geotextile filter fabric with a fill port to accommodate a pump discharge hose. The filter bags permit a controlled outflow of water, while retaining harmful pollutants.

Size	15' x 20' x 8"
Snout Size	8"
Holding Capacity	15 Cubic Yds.

Meets the requirements of MDOT Item 208 Erosion Control Filter Bag

Grandmont Rosedale Park Collective II

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GRPC 4 Limited Dividend Housing Association Limited Partnership, a Michigan limited partnership
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Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

ARCHITECT
INTOTO STUDIO LLC
6505 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
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Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan

Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

Scale: 1" = 20'

Drawing Title
GRADING PLAN

Drawing No:
C-4.0

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE

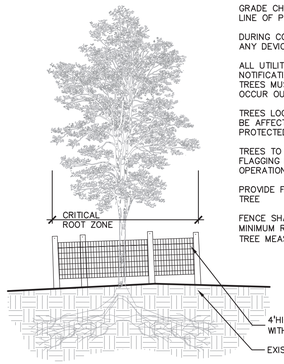
ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING

TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED

TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS

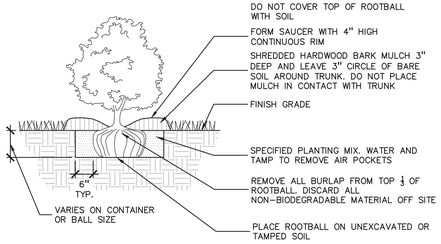
PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE

FENCE SHALL BE PLACED IN A CIRCLE WITH A MINIMUM RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND



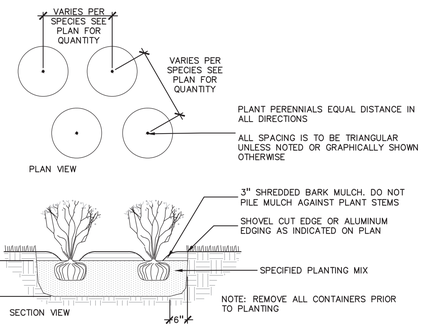
1 TREE PROTECTION DETAIL

SCALE: 1" = 3'–0"



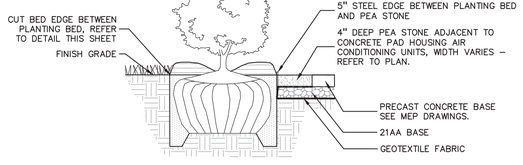
2 SHRUB PLANTING DETAIL

SCALE: 1" = 2'–0"



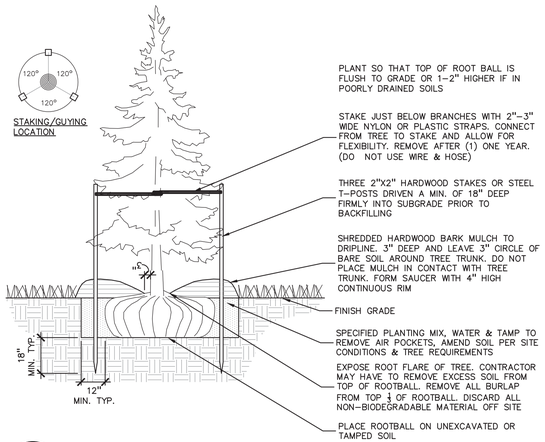
3 PERENNIAL PLANTING DETAIL

SCALE: 1" = 2'–0"



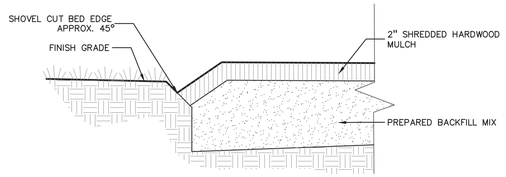
4 EDGING DETAIL

SCALE: 1" = 2'–0"



5 EVERGREEN TREE PLANTING DETAIL

SCALE: 1" = 3'–0"



6 CUT BED EDGE DETAIL

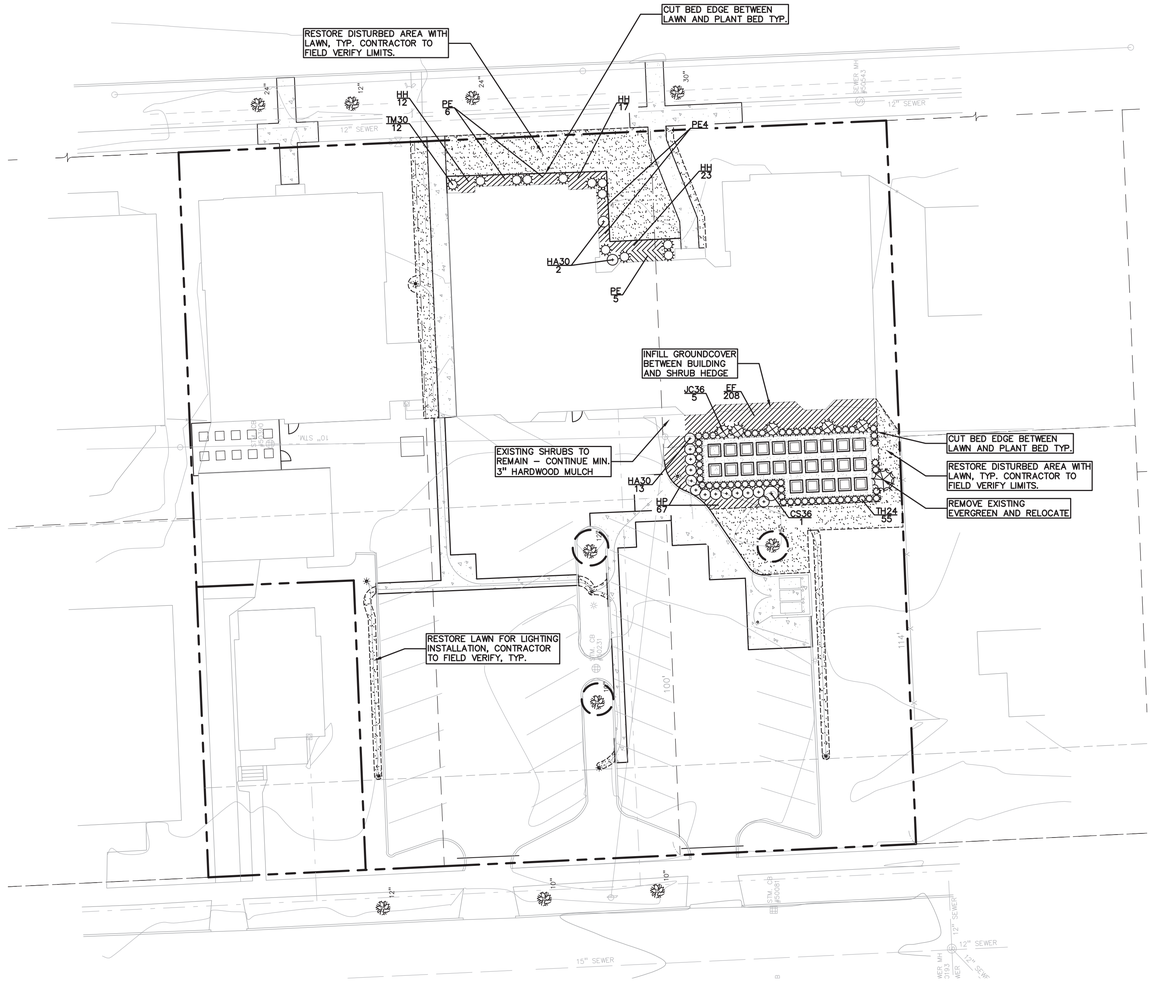
SCALE: 1" = 1'–0"

SHRUB PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
15	HA30	Annabelle Hydrangea	*Hydrangea arborescens 'Annabelle'*	30" Ht.	Cont.
5	JC36	Hetz Columnar Juniper	*Juniperus chinensis 'Hetzii Columnaris'*	36" Ht.	Cont.
1	CS36	Kelseyi Dwarf Dogwood	*Cornus sericea 'Kelseyi'*	36" Ht.	Cont.
12	TM30	Dense Yew	*Taxus x media 'Densiformis'*	30" Ht.	Cont.
55	TH24	Hicks Yew	*Taxus x media 'Hicksii'*	24" WTH & 30" Ht.	Cont.
88	TOTAL SHRUBS				

PERENNIAL PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC	SPACING
208	EF	Purpleleaf wintercreeper	*Euonymus fortunei 'coloratus'*	24 Flat	Plug	16" O.C.
89	HH	Happy Returns Daylily	*Hemerocallis 'Happy Returns'*	1 Gal.	Cont.	16" O.C.
78	HP	Pardon Me Daylily	*Hemerocallis 'Pardon Me'*	1 Gal.	Cont.	16" O.C.
5	PE	Russian Sage	*Perovskia atriplicifolia 'Littlespire'*	1 Gal.	Cont.	24" O.C.
172	TOTAL PERENNIALS					



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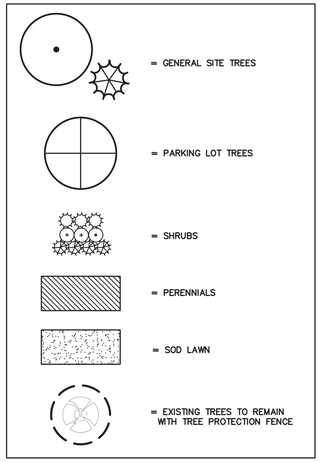

GENERAL PLANTING NOTES:

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1–800–482–7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
3. ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
8. ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
12. ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.

Grandmont Rosedale Park Collective II

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OWNER
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19800 Grand River
Detroit, MI 48223
313-387-4732 phone
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ARCHITECT
INTOTO STUDIO LLC
6505 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

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400 S. Old Woodward Ave
Suite 100
Birmingham, MI 48009
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Suite 306
Detroit, MI 48201
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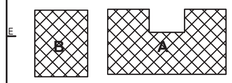
Key Plan



Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

Scale: 1" = 20'

Drawing Title

LANDSCAPE PLAN

Drawing No:

L-1.0

GENERAL LANDSCAPING REQUIREMENTS

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. General procedures and requirements for Site Work.
2. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Work. Refer to the Project Manual for Division 01 requirements.

2.0 PRODUCTS — Not Used

3.0 EXECUTION

3.1 PREPARATION

3.1.1 Protection

1. Spillage:
   A. Avoid spillage by covering and securing loads when hauling on or adjacent to public streets or highways.
   B. Remove spillage and sweep, wash, or otherwise clean project, streets, and highways.
2. Erosion Control:
   A. Take precautions necessary to prevent erosion and transportation of soil downstream, to adjacent properties, and into on–site or off–site drainage systems.
   B. Develop, install, and maintain an erosion control plan if required by law.
   C. Repair and correct damage caused by erosion.
3. Existing Plants And Features:
   A. Do not damage tops, trunks, and roots of existing trees and shrubs on site which are intended to remain.
   B. Do not use heavy equipment within branch spread. Interfering branches may be removed only with permission of Landscape Architect.
   C. Do not damage other plants and features which are to remain.

3.1.2 If specified precautions are not taken or corrections and repairs made promptly, Owner may take such steps as may be deemed necessary and deduct costs of such from monies due to Contractor. Such action or lack of action on Owner's part does not relieve Contractor from responsibility for proper protection of the Work.

END OF SECTION

LANDSCAPING PREPARATION

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. General landscape work requirements.

1.2 QUALITY ASSURANCE

1.2.1 Comply with all applicable local, state and federal requirements, regarding materials, methods of work, and disposal of excess and waste materials.

1.2.2 Obtain and pay for all required inspections, permits, and fees.

1.2.3 Provide notices required by governmental authorities.

1.3 PROJECT CONDITIONS

1.3.1 Locate and identify existing underground and overhead services and utilities within contract limit work areas. (Call Miss Dig: 1–800–482–7171 in Michigan).

1.3.2 Provide adequate means to protect utilities and services designated to remain.

1.3.3 Repair utilities damaged during site work operations at Subcontractor's expense.

1.3.4 When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.

1.3.5 Locate, protect, and maintain benchmarks, monuments, control points and project engineering reference points. Re–establish disturbed or destroyed items at Subcontractor's expense.

1.3.6 Perform landscape work operations and the removal of debris and materials to assure minimum interference with streets, walks, and other adjacent facilities.

1.3.7 Obtain governing authorities' written permission when required to close or obstruct streets, walks and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways when required by governing authorities.

1.3.8 Protect and maintain street lights, utility poles and services, traffic signal control boxes, curb boxes, valves and other services, except items designated for removal.

1.3.9 The General Contractor will occupy the premises and adjacent facilities during the entire period of construction. Perform landscape work operations to minimize conflicts and to facilitate General Contractor's use of the premises and conduct of his normal operations.

1.3.10 Perform landscape preparation work before commencing landscape construction.

1.3.11 Provide necessary barricades, coverings and protection to prevent damage to existing improvements indicated to remain.

1.3.12 Protect existing trees scheduled to remain against injury or damage including cutting, breaking or skinning of roots, trunks or branches, smothering by stockpiled construction materials, excavated materials or vehicular traffic within branch spread.

2.0 PRODUCTS

2.1 MATERIALS/EQUIPMENT

2.1.1 As selected by the General Contractor, except as indicated.

1. Tree protection:
   A. Wood fencing — Snow fencing 4' height.
   B. Posts — Steel fence post.
   C. Herbicide for lawn restoration — "Round–up" by Monsanto.

3.0 EXECUTION

3.1 EXISTING UTILITIES

3.1.1 Call "MISS DIG" 811 before construction begins. Information on the drawings related to existing utility lines and services is from the best sources presently available. All such information is furnished only for information and is not guaranteed. Excavate test pits as required to determine exact locations of existing utilities.

3.2 CLEARING

3.2.1 Locate and suitably identify trees and improvements indicated to remain.

3.2.2 Fencing/soil erosion fence is to be installed.

3.2.3 Any equipment that compacts the soil in the areas of existing trees is not allowed.

3.2.4 Protect trees scheduled to remain with 4' high snow fence per plans.

3.2.5 No vehicular traffic is permitted beneath drip line at any time. All lawn areas are to be worked by hand.

3.2.6 Clear and grub areas within contract limits as required for site access and execution of the work.

3.2.7 Remove trees, plants, undergrowth, other vegetation and debris, except items indicated to remain.

3.2.8 Treat planting and lawn areas as required with herbicide per manufacturer recommendations to kill existing vegetation prior to planting, seeding and sodding.

3.2.9 Remove stumps and roots to a clear depth of 36" below subgrades. Remove stumps and roots to their full depth within 5'0" of underground structures, utility lines, footings, and paved areas.

3.3 DISPOSAL OF WASTE MATERIALS

3.3.1 Stockpile, haul from site and legally dispose of waste materials and debris. Accumulation is not permitted.

3.3.2 Maintain disposal routes, clear, clean and free of debris.

3.3.3 On site burning of combustible cleared materials is not permitted.

3.3.4 Upon completion of landscape preparation work, clean areas within contract limits, remove tools and equipment. Site to be clear, clean and free of materials and debris and suitable for site work operations.

3.3.5 Materials, items and equipment not scheduled for reinstallation or salvaged for the General Contractor are the property of the Landscape Contractor. Remove cleared materials from the site as the work progresses. Storage and sale of Landscape Contractors salvage items on site is not permitted.

END OF SECTION

FINISH GRADING AND TOPSOIL PLACEMENT

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. Perform finish grading and topsoil placement required to prepare site for installation of landscaping as described in Contract Documents.

1.2 SUBMITTALS

1.2.1 Quality Assurance

1. Submit test on imported topsoil and on site stockpiled topsoil by independent licensed testing laboratory prior to use. Imported topsoil shall meet minimum specified requirements and be approved by Landscape Architect prior to use.
2. Provide and pay for testing and inspection during topsoil operations. Laboratory, inspection services, and Soils Engineer shall be acceptable to the Landscape Architect.
3. Submit report stating location of source of imported topsoil and account of recent use.
4. Test for pH factor, mechanical analysis, and percentage of organic content.
5. Submit test reports to General Contractor.
6. Sub–Contractor, or testing agency to make recommendations on type of quantity of additives required to establish satisfactory pH factor and supply of nutrients to bring nutrients to satisfactory level for planting.

1.3 QUALITY ASSURANCE

1.3.1 Participate in pre–installation meeting with Landscape Architect.

1.4 PROJECT CONDITIONS

1.4.1 Also see Landscape Preparation Section.

1.4.2 Protect existing trees, plants, lawns, and other features designated to remain as part of the landscaping work.

1.4.3 Promptly repair damage to adjacent facilities caused by topsoil operations. Cost of repair at Subcontractor's expense.

1.4.4 Promptly notify the General Contractor and Landscape Architect of unexpected subsurface conditions.

2.0 PRODUCTS

2.1 MATERIALS

2.1.1 Topsoil: supplied and stockpiled topsoil proposed for use must meet the testing criteria results specified. Topsoil must conform to adjustments and recommendations from the soil test and by the Landscape Architect.

2.1.2 Existing topsoil: existing topsoil from on–site stockpile shall be utilized. All processing, cleaning, and preparation of this stored topsoil to render it acceptable for use is the responsibility of the Subcontractor.

2.1.3 Provide additional topsoil as required to complete the job. Topsoil must meet testing criteria results specified.

2.1.4 All processing, cleaning, and preparation of this supplied topsoil to render it acceptable for use is the responsibility of the Subcontractor.

2.1.5 Supplied and stockpiled topsoil, shall be fertile, friable, dark in color and representative of local productive soil, capable of sustaining vigorous plant growth and free of clay lumps, subsoil, noxious weeds or other foreign matter such as stones of 1" in any dimension, roots, sticks, and other extraneous material: not frozen or muddy. PH of soil range between 5.0 and 7.5

2.1.6 Soil shall not contain more than 2 percent of particles measuring over 2.0 mm in largest size

2.1.7 Prepared topsoil shall be used in planting mixtures as specified in Trees, Plants, and Ground Cover; all beds prepared as specified.

3.0 EXECUTION

3.1 EXAMINATION

3.1.1 Do not commence work of this Section until grading tolerances specified are met.

3.2 PREPARATION

3.2.2 Prior to grading, dig out weeds from planting areas by their roots and remove from site. Before placing top soil in landscape areas, remove rocks larger than 1 inch in any dimension and foreign matter such as building rubble, wire, cans, sticks, concrete, etc.

3.2.3 Prior to placing topsoil, remove any imported base material present in planting areas down to natural subgrade or other material acceptable to Landscape Architect.

3.3 PERFORMANCE

3.3.1 Site Tolerances

1. Total Topsoil Depth —
   A. Lawn And Groundcover Planting Areas — 3 inches minimum compacted.
   B. Shrub Planting Areas — 12 inches minimum throughout entire shrub bed area.
2. Elevation of topsoil relative to walks or curbs —
   A. Seeded Lawn Areas — 1/4 inch below
   B. Sodded Lawn Areas — 1 1/2 inches below
   C. Shrub And Ground Cover Areas — 3 inches below

3.3.2 Do not expose or damage existing shrub or tree roots.

3.3.3 Redistribute approved existing top soil stored on site as a result of rough grading. Remove organic material, rocks and clods greater than 1 inch in any dimension, and other objectionable materials. Provide additional approved imported topsoil required for specified topsoil depth and bring surface to specified elevation relative to walk or curb.

3.3.4 For trees, shrubs, ground cover beds and plant mix for beds see Exterior Plants section.

3.3.5 Provide earth berming where indicated on Plans.

3.3.6 Berming to be free flowing in shape and design, as indicated, and to blend into existing grades gradually so that the toe of slope is not readily visible. Landscape Architect or General Contractor's representative to verify final contouring before planting.

3.3.7 Regardless of finish grading elevations indicated, it is intended that grading be such that proper drainage of surface water away from buildings will occur and that no low areas are created to allow ponding. Subcontractor to consult the General Contractor and Landscape Architect regarding variations in grade elevations before rough grading is completed.

3.3.8 Slope grade away from building for 12 feet minimum from walls at slope of 1/2 inch per ft minimum unless otherwise noted. High point of finish grade at building foundation shall be 6 inches minimum below finish floor level. Direct surface drainage in manner indicated on Drawings by molding surface to facilitate natural run–off of water. Fill low spots and pockets with top soil and grade to drain properly.

3.3.9 Rake all topsoil to remove clods, rocks, weeds, and debris.

3.3.10 Grade and shape area to bring surface to true uniform planes free from irregularities and to provide proper drainage and slopes per plans.

3.4 CLEANING

3.4.1 Upon completion of topsoil operations, clean areas within contract limits, remove tools, equipment, and haul all excess topsoil off–site. Site shall be clear, clean, free of debris, and suitable for site work operations.

END OF SECTION

LAWN SEEDING

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. Furnish and install seeded lawn as described in Contract Documents.

1.2 SUBMITTALS

1.2.1 Submit seed vendor's certification for required grass seed mixture, indicating percentage by weight, and percentage of purity, germination, and weed seed for each grass species.

1.3 DELIVERY AND STORAGE

1.3.1 Deliver seed and fertilizer materials in original unopened containers, showing weight, analysis, and name of manufacturer. Store in a manner to prevent wetting and deterioration.

1.4 PROJECT CONDITIONS

1.4.1 See landscape preparation section.

1.4.2 Work notification: Notify Landscape Architect of General Contractor's representative at least seven (7) working days prior to start of seeding operation.

1.4.3 Protect existing utilities, paving, and other facilities from damage caused by seeding operations.

1.4.4 Perform seeding work only after planting and other work affecting ground surface has been completed.

1.4.5 Provide hose and lawn watering equipment as required.

1.4.6 The irrigation system will be installed prior to seeding. Locate, protect, and maintain the irrigation system during seeding operations. Repair irrigation system components damaged during seeding operations at the Sub–Contractor's expense.

1.5 WARRANTY

1.5.1 See Landscape Maintenance and Warranty Section

2.0 PRODUCTS

2.1 MATERIALS

2.1.1 Topsoil for Seeded Areas: See Topsoil Placement and Drawings.

2.1.2 Lawn seeded areas: Fresh, clean and new crop seed mixture. Mixed by approved methods.

2.1.3 Seed mixture composed of the following varieties, mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

2.1.4 Irrigated Lawn Seed Mixture proportioned by volume as indicated below:

SEED TYPE	PROPORTION	PURITY	GERMINATION
Kentucky Bluegrass	50%	90%	75%
Penn Lawn Fescue	30%	95%	80%
Annual Ryegrass	20%	95%	80%

2.1.5 Non–Irrigated Seed Mixture proportioned by volume as indicated below:

SEED TYPE	PROPORTION	PURITY	GERMINATION
Penn Lawn Fescue	60%	90%	85%
Kentucky 28# Common Bluegrass	20%	90%	90%
Pennfine Perennial Rye	20%	90%	90%

2.1.6 Fertilizer: granular, non burning product composed of not less that 50% organic slow acting, guaranteed analysis professional fertilizer.

2.1.7 Ground Limestone: Used if required by soil test report: Containing not less than 85% of total carbonates and ground to such fineness that 50% will pass through a 100 mesh sieve and 90% will pass through a 20% mesh sieve.

2.1.8 Straw Mulch: Used in crimping process only. Clean oat or wheat straw well seasoned before bailing, free from mature seed–bearing status, or roots of prohibited or noxious weeds.

2.1.9 Water: Free of substance harmful to seed growth. Hoses or other methods to transpiration furnished by Sub Contractor.

3.0 EXECUTION

3.1 INSPECTION

3.1.1 Landscape Architect or General Contractor's representative must approve finish surfaces, grades, topsoil quality and depth. Do not start seeding work until unsatisfactory conditions are corrected.

3.2 PREPARATION

3.2.1 SURFACE PREPARATION

1. Seven days maximum prior to seeding, —
   A. Treat Lawn areas if required with "Round–Up" by Monsanto, per label direction to kill existing vegetation prior to seeding.
   B. Loosen topsoil areas to minimum depth of 4", dampen thoroughly, and cultivate to properly break up clods and lumps.
   C. Rake area to remove clods, rocks, weeds, roots, debris, and stones over 1" in any dimension.
   D. Grade lawn areas to smooth, free draining even surface with a loose, moderately coarse texture. Roll and rake, remove ridges, and fill depressions as required to drain.
   E. Apply limestone to supplied topsoil if required by soil test report at rate determined by the soil test, to adjust pH of topsoil to not less than 6.0 no more that 6.8. Distribute evenly by machine and incorporate thoroughly into topsoil.
   F. Apply fertilizers to indicated turf areas at a rate equal to 1 lb. of actual nitrogen 1,000 sq. ft. (43 lbs / acre).
   G. Apply fertilizers by mechanical rotary or drop type distributor, thoroughly and evenly incorporated with soil to a depth of 1" by approved method. Fertilize areas inaccessible to power equipment with hand tools and incorporate into soil.
   H. After lawn areas have been prepared, take no heavy objects over them except lawn rollers.
   I. After preparation of lawn areas and with topsoil in semi–dry condition, roll lawn planting areas in two directions at approximately right angles with water ballast roller weighing 100 to 300 lbs according to soil type.
   J. Rake or scarify and cut or fill irregularities that develop as required until area is true and uniform, free from lumps, depressions, and irregularities.
   K. Restore prepared areas to specified condition if eroded, settled or otherwise disturbed after fine grading and prior to seeding.

3.3 INSTALLATION

3.3.1 SEEDING

1. Seed lawns only between April 1, and June 1, and fall seeding between August 15, and October 15, or at such other times acceptable to Landscape Architect.
2. Seed immediately after preparation of bed. Seed indicated areas within contract Limits and areas adjoining contract limits disturbed as a result of construction operations.
3. Perform seeding operations when the soil is dry and when the winds do not exceed five(5) miles per hour velocity.
4. Apply seed with a rotary or drop type distributor. Install seed evenly by sowing equal quantities in two (2) directions, at right angles to each other.
5. Sow seed at a rate of 300 lbs./acre.
6. After seeding, rake or drag surface of soil lightly to incorporate seed into top 1/8" of soil. Roll with light lawn roller.
7. Provide soil erosion planting mat where grade conditions required to stabilize the planting area.

3.3.2 HYDRO–SEEDING

1. Hydro–seeding: The application of grass seed and a wood cellulose fiber mulch tinted green shall be accomplished in one operation by use of an approved spraying machine.
   A. Mix seed, fertilizer, and wood cellulose fiber in required amount of water to produce a homogeneous slurry. Add wood cellulous fiber after seed, water, and fertilizer have been thoroughly mixed and apply at the rate of 200 pounds per acre dry weight.
   B. For hydro–seeding, wood cellulose fiber shall be used. Silva–Fiber Mulch by Weyerhaeuer Company, Tacoma, WA (800–443–9179).
   C. Hydraulically spray material on ground to form a uniform cover impregnated with grass seed.
   D. Immediately following application of slurry mix, make separate application of wood cellulose mulch at the rate of 1,000 pounds, dry weight, per acre.
   E. Apply cover so that rainfall or applied water will percolate to underlying soil.

3.3.3 MULCHING

1. Place straw mulch on seeded areas within 24–hours after seeding.
2. Place straw mulch uniformly in a continuous blanket at a rate of 2–1/2 tons per acre, or two (2) 50 lb. bales per 1,000 sq. ft. of area. A mechanical blower may be used for straw mulch application when acceptable to the Landscape Architect.
3. Crimp straw into soil by use of a "crimper". Two passes in alternate direction required. Alternative methods on areas too small for crimper must be approved by the Landscape Architect or Owner's Representative.

3.3.3 ESTABLISH LAWN

1. Establish dense lawn of permanent grasses, free from lumps and depressions. Any area failing to show uniform germination to be reseeded; continue until dense lawn established.
2. Damage to seeded area resulting from erosion to be repaired by Sub Contractor.
3. In event Sub Contractor does not establish dense lawn during first germination period, return to project to refertilize and reseed to establish dense lawn.
4. Should the seeded lawn become largely weeds after germination, Sub Contractor is responsible to kill the weeds and reseed the proposed lawn areas to produce a dense turf, as specified.

3.4 CLEANING

3.4.1 Perform Cleaning during installation of the work and upon completion of the work to the approval of the Landscape Architect. Remove from site all excess materials, debris, and equipment. Repair damage resulting from seeding operations.

3.5 MAINTENANCE

3.5.1 See Landscape Maintenance and Warranty Section.

3.6 ACCEPTANCE

3.6.1 See Landscape Maintenance and Warranty Section.

END OF SECTION

LAWN SODDING

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. Furnish and install sodded lawn as described in Contract Documents.

1.2 QUALITY ASSURANCE

1.2.1 Sod: Comply with American Sod Producers Association (ASPA) classes of sod materials.

1.3 SUBMITTALS

1.3.1 Submit sod growers certification of grass species. Identify source location.

1.3.2 Submit manufacturer's certification of fertilizer.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Cut, deliver, and install sod within 24 hour period.

1.4.2 Do not harvest or transport sod when moisture content may adversely affect sod survival.

1.4.3 Protect sod from sun, wind, and dehydration prior to installation. Do not tear, stretch, or drop sod during handling and installation.

1.4.4 Sod which dries out before installation will be rejected.

1.5 PROJECT CONDITIONS

1.5.1 See Landscape Preparation section.

1.5.2 Work notification: Notify Landscape Architect or General Contractor's representative at least seven (7) working days prior to start of sodding operation.

1.5.3 Protect existing utilities, paving, and other facilities from damage caused by sodding operations.

1.5.4 Perform sodding work only after planting and other work affecting ground surface has been completed.

1.5.5 Restrict traffic from lawn areas until grass is established. Erect signs and barriers as required.

1.5.6 Provide hose and lawn watering equipment as required.

1.5.7 The irrigation system will be installed prior to sodding. Locate, protect, and maintain the irrigation system during sodding operations. Repair irrigation system components damaged during sodding operations at the Subcontractor's expense.

1.6 WARRANTY

1.6.1 See Landscape Maintenance and Warranty Section.

2.0 PRODUCTS

2.1 MATERIALS

2.1.1 Sod: An "approved" nursery grown blend of improved Kentucky Bluegrass varieties.

2.1.2 Sod containing Common Bermudagrass, Quackgrass, Johnsongrass, Poison Ivy, Nutsedge, Nimblewill, Canada Thistle, Timothy, Bentgrass, Wild Garlic, Ground Ivy, Perennial Sorrel, or Bramegrass weeds will not be acceptable.

2.1.3 Provide well rooted, healthy sod, free of diseases, nematodes and soil borne insects. Provide sod uniform in color, leaf texture, density, and free of weeds, undesirable grasses, stones, roots, thatch, and extraneous material; viable and capable of growth and development when planted.

2.1.4 Furnish sod, machine stripped in square pads or strips not more than 3'–0" long; uniformly 1" to 1–1/2" thick with clean cut edges. Mow sod before stripping.

2.1.5 Fertilizer: granular, non burning product composed of not less that 50% organic slow acting, guaranteed analysis professional fertilizer.

2.1.6 Type A: starter fertilizer containing 20% nitrogen, 12% phosphoric acid, and 8% potash by by weight or similar approved composition.

2.1.7 Ground Limestone: Used if required by soil test report: Containing not less than 85% of total carbonates and ground to such fineness that 50% will pass through a 100 mesh sieve and 90% will pass through a 20% mesh sieve.

2.1.8 Stakes: softwood, 3/4" x 8" long.

2.1.9 Water: Free of substance harmful to seed growth. Hoses or other methods to transpiration furnished by Sub Contractor.

2.1.10 Topsoil: see Topsoil Placement section.

3.0 EXECUTION

3.1 INSPECTION

3.1.1 Landscape Architect or General Contractor's representative must approve finish surfaces, grades, topsoil quality and depth. Do not start sodding work until unsatisfactory conditions are corrected.

3.2 PREPARATION

3.2.1 Surface Preparation:

1. Seven days maximum prior to sodding, —
   a. Treat Lawn areas if required with herbicide per manufacturer recommendations to kill existing vegetation prior to sodding.
   b. Loosen topsoil areas to minimum depth of 4", dampen thoroughly, and cultivate to properly break up clods and lumps.
   c. Rake area to remove clods, rocks, weeds, roots, debris, and stones over 1" in any dimension.
   d. Grade lawn areas to smooth, free draining even surface with a loose, moderately coarse texture. Roll and rake, remove ridges, and fill depressions as required to drain.
   e. Apply limestone to supplied topsoil if required by soil test report at rate determined by the soil test, to adjust pH of topsoil to not less than 6.0 no more that 6.8. Distribute evenly by machine and incorporate thoroughly into topsoil.
   f. Apply fertilizers to indicated turf areas at a rate equal to 1 lb. of actual nitrogen 1,000 sq. ft. (43 lbs / acre).
   g. Apply fertilizers by mechanical rotary or drop type distributor, thoroughly and evenly incorporated with soil to a depth of 1" by approved method. Fertilize areas inaccessible to power equipment with hand tools and incorporate into soil.
   h. After lawn areas have been prepared, take no heavy objects over them except lawn rollers.
   i. After preparation of lawn areas and with topsoil in semi–dry condition, roll lawn planting areas in two directions at approximately right angles with water ballast roller weighing 100 to 300 lbs.
   j. Rake or scarify and cut or fill irregularities that develop as required until area is true and uniform, free from lumps, depressions, and irregularities.
   k. Restore prepared areas to specified condition if eroded, settled or otherwise disturbed after fine grading and prior to sodding.
   l. Dampen dry soil prior to sodding.

3.3 INSTALLATION

3.3.1 Sodding:

1. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips. Do not overlay edges. Stagger strips to offset joints in adjacent course. Remove excess sod to avoid othering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains, and seeded areas.
2. Do not lay dormant sod or install sod on saturated, frozen soil.
3. Install initial row of sod in a straight line, beginning at the bottom of slopes, perpendicular to direction of the sloped area. Place subsequent rows parallel to and lightly against previously installed row.
4. Peg sod on slopes greater than 3 to 1 or in centerline of swales to prevent slippage at a rate of 2 stakes per yard of sod.
5. Water sod thoroughly with a fine spray immediately after laying to obtain moisture penetration through sod into top 4 inches of topsoil.
6. Roll with light lawn roller in two directions perpendicular to each other to ensure contact with sub grade.
7. Install sod at indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
8. Damage to sodded area resulting from erosion to be repaired by Subcontractor.

3.4 CLEANING

3.4.1 Perform Cleaning during installation of the work and upon completion of the work to the approval of the Landscape Architect. Remove from site all excess materials, debris, and equipment. Repair damage resulting from sodding operations.

3.5 MAINTENANCE

3.5.1 See Landscape Maintenance and Warranty Section.

3.6 ACCEPTANCE

3.6.1 See Landscape Maintenance and Warranty Section.

END OF SECTION

Grandmont Rosedale Park Collective II

9710 - 9730 W Outer Dr. Detroit, MI 48223

INTOTO STUDIO

OWNER
GRPC 4 Limited Dividend Housing Association Limited Partnership, a Michigan limited partnership
19800 Grand River
Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

ARCHITECT
INTOTO STUDIO LLC
6506 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

MEP ENGINEERING
MA ENGINEERING
400 S. Old Woodward Ave
Suite 100
Birmingham, MI 48009
248-258-1610 phone
www.ma-engineering.com

STRUCTURAL ENGINEERING
RESURGET ENGINEERING
4219 Woodward Ave.
Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan

Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

Scale: 1" = 20'

Drawing Title

LANDSCAPE SPECIFICATIONS

Drawing No:

L-2.1

Sheet Size: 24" x 36"

EXTERIOR PLANTS

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. Furnish and install landscaping plants as described in Contract Documents.
2. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Work. Refer to the Project Manual for Division 01 requirements.

1.2 QUALITY ASSURANCE

1.2.1 Plant names indicated, comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

1.2.2 Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

1.2.3 All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of two years.

1.2.4 Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional charge. Larger plants shall not be cut back to size indicated.

1.2.5 Provide "specimen" plants with a special height, shape, or character of growth. Landscape Subcontractor is to tag specimen trees or shrubs at the source of supply. The Landscape Subcontractor shall inspect all plant material at source prior to Landscape Architect's approval. Landscape Subcontractor shall accompany Landscape Architect on final selection trip. The Landscape Architect will inspect specimen selections for suitability and adaptability to selected location. When specimen plants cannot be purchased locally, provide sufficient photographs of the proposed specimen plants for approval.

1.2.6 Plants may be inspected and approved at the place of growth for compliance with specification requirements for quality, size, and variety.

1.2.7 Approval of plant selection at the place of growth shall not impair the right of inspection and rejection upon delivery at the site or during progress of the work.

1.2.8 Provide percolation testing by filling plant pits with water and monitoring length of time for water to completely percolate into soil. Submit test results to Landscape Architect prior to starting work.

1.2.9 Before proceeding with work, check and verify dimensions and quantities. Report variations between Drawings and site to Landscape Architect before proceeding with work of this section.

1.2.10 Plant totals are for convenience only and are not guaranteed. Verify amounts shown on Drawings. All plantings indicated on Drawings are required unless indicated otherwise.

1.3 SUBMITTALS

1.3.1 Provide and pay for material testing. Testing agency shall be acceptable to the Landscape Architect. Provide the following data:

1. The loss of weight by ignition and moisture absorption capacity shall be tested for peat moss.

1.3.2 Submit the following material samples to Landscape Architect:

1. Peat moss, shredded hardwood bark mulch, planting accessories, pre-emergent herbicides, and plant fertilizers.

1.3.3 Submit the following materials certification to Landscape Architect:

1. Topsoil source and ph value, peat moss, and plant fertilizer.

1.4 DELIVERY, STORAGE, AND HANDLING

1.4.1 Deliver fertilizer materials in original, unopened and undamaged containers showing weight, analysis, and name of manufacturer. Store in manner to prevent wetting and deterioration.

1.4.2 Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected.

1.4.3 Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration.

1.4.4 Dig, pack, transport, and handle plants with care to ensure protection against injury.

1.4.5 Inspection certificates required by law shall accompany each shipment invoice or order to stock on arrival. The certificate shall be filed with the General Contractor's representative.

1.4.6 Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, shredded hardwood bark mulch, or in a manner acceptable to the General Contractor's representative.

1.4.7 Water heeled in plantings daily.

1.4.8 No plant shall be bound with rope or wire in a manner that could damage or break the branches.

1.4.9 Cover plants transported on open vehicles with a protective covering to prevent wind burn.

1.4.10 Frozen or muddy topsoil is not acceptable.

1.5 PROJECT CONDITIONS

1.5.1 See Landscape Preparation Section.

1.5.2 Work notification: notify Landscape Architect at least seven working days prior to installation of plant material.

1.5.3 Protect existing utilities, paving, and other facilities from damage caused by landscaping operations.

1.5.4 A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the proposal form. In the event that quantity discrepancies or material omissions occur in the proposal form, Subcontractor shall notify the Landscape Architect during the proposal bidding process.

1.5.5 An irrigation system will be installed prior to planting. Locate, protect, and maintain the irrigation system during planting operations. Repair irrigation system components, damaged during planting operations, at the Landscape Subcontractor's expense.

1.5.6 The Landscape Subcontractor shall inspect existing soil conditions in all areas of the site where his operations will take place, prior to the beginning of work. It is the responsibility of the Landscape Subcontractor to notify the General Contractor's representative and the Landscape Architect in writing of any conditions which could affect the survivability of plant material to be installed.

1.6 WARRANTY

1.6.1 See Landscape Maintenance and Warranty Standards.

2.0 PRODUCTS

2.1 MATERIALS

2.1.1 Plants: Provide plants typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces.

1. Dig balled and burlapped plants with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls are not acceptable.
2. All trees shall have clay or clay loam balls. Trees with sand balls will be rejected.
3. Provide tree species that mature at heights over 25'-0" with a single, main trunk. Trees that have the main trunk forming a "v" shape are not acceptable.
4. Plants planted in rows shall be matched in form, (see specimen stock).
5. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
7. Evergreen trees shall be unsheared and branched to the ground.
8. Shrubs and small plants shall meet the requirements for spread and height indicated on the drawings.
9. Plant materials shall be subject to approval by the Landscape Architect as to size, health, quality, and character.
10. Bare root trees are not acceptable.
11. Provide plant materials from licensed nursery or grower.

2.1.2 Bare root plants: dug with adequate fibrous roots, to be covered with a uniformly thick coating of mud by being puddled immediately after they are dug or packed in moist straw or peat moss.

2.1.3 Container grown stock: grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm, and whole.

1. No plants shall be loose in the container.
2. Container stock shall not be root bound.
3. Single stemmed or thin plants will not be accepted.
4. Side branches shall be generous, well twigged, and the plant as a whole well bushed to the ground.
5. Plants shall be in a moist, vigorous condition, free from dead wood, bruises or other root or branch injuries.

2.1.4 Collected stock consists of plants growing under natural conditions in soils and climate as exist at location to be planted, in locations lending themselves to proper collecting practices. Root system (balls) to be at least twenty-five (25%) percent larger than specified for nursery grown material.

2.1.5 Specimen stock: all specimen designated plantings are to be nursery grown, fully developed, excellent quality, and typical example of the species. Plants designated to be planted in rows must be matched, symmetrical, and uniform in height, spread, caliper, and branching density.

1. Matched plantings should be obtained from the same nursery and, preferably, from the same row or line. All specimen material will be approved by the Landscape Architect at nursery.

2.1.6 Topsoil for planting mix: fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign materials with acidity range of between ph 6.0-6.8 for ericaceous plants.

2.1.7 Peat moss: brown to black in color, weed and seed free granulated raw peat.

1. Provide ASTM D2607 sphagnum peat moss with a ph below 6.0 for ericaceous plants.

2.1.8 Planting mixture Type A - trees: standard planting backfill shall be a mixture of ½native soil (excavated from plant pits), ¼topsoil, and ¼sand. Add fertilizer Type "A" and "B" to planting mixture per manufacturer's requirements. Follow planting details.

2.1.9 Planting mixture Type B for perennial flowers, groundcover beds, and ericaceous plants: planting backfill shall be a mixture of 1/3 screened topsoil, 1/3 sand and 1/3 peat. Al existing soil shall be excavated and removed. Adding fertilizer types "A" and "B" to mixture per manufacturer's requirements. Follow planting details. Planting mixture Type C for annual flower beds: same as Type "B". Submit a sample to the Landscape Architect for approval prior to installation.

2.1.10 Plant fertilizer Type A to be "Drimanure" applied per manufacturer recommendations.

2.1.11 Plant fertilizer Type B to be "14-14-14". Apply per manufacturer recommendations.

2.1.12 Bone Meal - 5 lbs. per cubic yard of soil mixes.

2.1.13 Lime to be ground dolomitic limestone, ninety-five (95%) percent passing through #100 mesh screen. Use to adjust soil pH only, under direction of Landscape Architect.

2.1.14 Sand to be clean, coarse, ungraded conforming to ASTM-C-3 for fine aggregates.

2.1.15 Anti-Desiccant: protective film emulsion providing a protective film over plant surfaces; permeable to permit transpiration. Mixed and applied in accordance with Manufacturer's instructions.

2.1.16 Shredded bark mulch shall be double processed, dark shredded hardwood bark that is clean, free of debris and sticks. Materials shall be uniform in size, shape, and texture. Submit samples to Landscape Architect for approval prior to installation. Install mulch to finish grade, level smooth, without ridges, humps, or depressions.

2.1.17 Water: free of substances harmful to plant growth. Hoses or other methods of transportation shall be furnished by Sub Contractor.

2.1.18 Stakes for staking :(3) Three Hardwood, 2" x 2" x 8'-0" long. Driven a min. of 18" deep firmly into subgrade prior to backfilling. Stakes for guying: Hardwood, 2" x 2" x 36" long.

2.1.19 Guying/staking material: Wit 2"-3" wide fabric straps, connect from tree to stake. Remove after (1) year, allow for flexibility. (Do not use wire & hose)

2.1.20 Tree wrap: standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe kraft paper weighing not less than 30 lbs. per ream, cemented together with asphalt. Secure tree wrap with biodegradable material at top and bottom. Remove after first winter.

2.1.21 Twine: two-ply jute material.

2.2 MEASUREMENTS

2.2.1 Measure height and spread of specimen plant materials with branches in their normal positions as indicated on Drawings or Plant List.

2.2.2 The measurements for height shall be taken from the ground level to the average height of the top of the plant and not the longest branch.

2.2.3 Measurement should be average of plant, not greatest diameter. For example, plant measuring 15 inches in widest direction and 9 inches in narrowest direction would be classified as 12 inch stock.

2.2.4 Plants properly trimmed and transplanted should measure same in every direction.

2.2.5 Measure caliper of trees 6 inches above surface of ground.

2.2.6 Where caliper or other dimensions of plant materials are omitted from Plant List, plant materials shall be normal stock for type listed.

2.2.7 Plant materials larger than those specified may be supplied, with prior written approval of Landscape Architect, and:

1. If complying with Contract Document requirements in all other respects.
2. If at no additional cost to Owner.
3. If sizes of roots or balls are increased proportionately.

2.2.8 The height of the trees, specified by height, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated on the drawings.

3.0 EXECUTION

3.1 INSPECTION

3.1.1 Landscape Architect or General Contractor's representative must approve proposed planting areas and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.

3.1.2 Individual plant locations shall be staked on the project site by the Landscape Contractor and approved by the Landscape Architect before any planting pits are dug. The Landscape Architect reserves the right to adjust plant material locations to meet field conditions, without additional cost to the General Contractor / Owner.

3.1.3 Accurately stake plant material according to the Drawings. Stakes shall be above grade, painted a bright color, and labeled with the name of the plant material to be installed at that location.

3.2 TIME OF PLANTING

3.2.1 Evergreen material: Plant Evergreen materials between September 1 and October 15 or in spring before new growth begins. If project requirements require planting at other times, plants shall be sprayed with anti-desiccant prior to planting operations.

3.2.2 Deciduous material: Plant deciduous materials in a dormant condition. If deciduous trees are planted in leaf, they shall be sprayed with anti-desiccant prior to planting operation.

3.2.3 Planting times other than those indicated must be acceptable to the Landscape Architect.

3.3 PREPARATION

3.3.1 General: See Landscape Preparation Section

3.3.2 Vegetation Removal

1. Strip existing grass and weeds, including roots from all bed areas leaving the soil surface one (1") inch below finish grade.
2. Herbicide: as required to prepare area for new planting applied to all ground cover, evergreen and shrubbery beds and all mulch areas before application of preemergence herbicide, per manufacture's recommendations. Clean area of all dead material after five (5) days.
3. Pre-Emergence Herbicide: applied per manufacturer recommendations to same area where "Herbicide" has been applied and to planting bed areas, after area is cleared of dead vegetation.
4. Herbicides to be applied by licensed applicator as required by the State.
5. Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide plant pits per planting details. Depth of pit shall accommodate the root system. Scarify the bottom of the pit to a depth of 6".
6. Roughen sides of excavations.
7. Provide premixed planting mixture Type "A" for use around the balls and roots of all deciduous and evergreen tree plantings.

3.3.3 Ground Cover Beds, Perennial Flower Beds, and Ericaceous Plant Beds

1. Excavate existing soil to 12" depth over entire bed area and remove soil from site. Scarify bottom of bed to a 4" depth. Set plants according to drawings and backfill entire bed with premixed planting mixture "Type B". Ground Cover shall be planted after bed has been backfilled with plant mix and mulched. Plant ground cover through mulch and into plant mix.

3.3.4 Mass Shrub Beds / Hedge Beds:

1. Excavate existing soil to 18" depth over entire bed area and remove soil from site. Scarify bottom of the bed to a 4" depth. Set plants according to drawings and Specifications. Backfill entire bed with (premixed) specified planting mixture Type "A".

3.3.5 Annual Flower Beds:

1. Excavate existing soil to 8" depth over entire bed area and remove soil from site. Scarify bottom of bed to a 4" depth. Backfill entire bed to an 8" depth with premixed planting mixture "Type B".

3.4 INSTALLATION

3.4.1 Planting shall be performed only by experienced workman familiar with planting procedures under the supervision of a qualified supervisor.

3.4.2 Planting pits shall be round, with vertical sides and flat bottoms, and sized in accordance with outlines and dimensions shown on the planting details.

3.4.3 See drawings for planting details.

3.4.4 If obstructions are encountered that are not indicated, do not proceed with planting operations until alternative plant locations have been selected and approved in writing by the Landscape Architect. Where location or spacing dimensions are not clearly shown, request clarification by the Landscape Architect.

3.4.5 Set plant material in the planting pit to proper grade and alignment.

1. Set plants upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure.
2. Set plant material so it is flush to finish grade after settling, or 1-2" higher in poorly drained soil, or as directed by Landscape Architect.
3. No filling will be permitted around the trunks or stems.
4. Do not cover top of root ball with soil.
5. Backfill pit with planting mixture. Do not use frozen or muddy mixtures for backfilling.
6. Form a ring of soil around the edge of the planting pit to retain water.

3.4.6 After balled and burlapped plants are set, tamp planting mixture around of balls and fill all voids and remove air pockets.

3.4.7 Remove all burlap, ropes, and wires from top 1/3 of balls.

3.4.8 Space ground cover plants in accordance with indicated dimensions. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 12" of trunks and shrubs and to within 6" of planting bed.

3.4.9 Spread and arrange roots of bare rooted plants in their natural position. Work in planting mixture. Do not mat roots together. Cut all broken and frayed roots before installing planting mixture.

3.4.10 Water immediately after planting.

3.4.11 Apply pre-emergent herbicide to bed areas per manufacturer's recommendations before mulching.

3.5 MULCHING

3.5.1 Mulch trees and shrub planting pits and shrub beds with shredded hardwood bark mulch 3" deep to dripline immediately after planting. Leave 3" circle of bare soil around tree trunk. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

3.5.2 Mulch shall not be placed in contact with trunks or stems.

3.5.3 Mulch ground cover beds with shredded bark mulch 2" to 3" deep prior to planting.

3.5.4 Plant ground cover through mulch.

3.6 WRAPPING, GUYING, AND STAKING

3.6.1 Inspect trees for injury to trunks, evidence of insect infestation and improper pruning before wrapping.

3.6.2 Wrap trunks of all trees spirally from bottom to top with specified tree wrap and secure in place.

3.6.3 Stake deciduous trees under 4" caliper. Stake evergreen trees under 6'-0" tall and over with metal fence post, three (3)per tree.

3.6.4 Stake/guy all trees immediately after installation. When high winds or other conditions which may effect tree survival or appearance occur during the warranty period, the Sub-Contractor shall immediately repair the staking/guying.

3.6.5 Guy deciduous trees 4" caliper and over. Stake evergreen trees 6'-0" tall and over with metal fence post, three (3) per tree.

3.6.6 All work shall be acceptable to the Landscape Architect/Owner's representative.

3.7 PRUNING

3.7.1 Remove or cut back broken, damaged, and unsymmetrical growth of new wood.

3.7.2 Multiple leader plants: preserve the leader which will best promote the symmetry of the plant. Do not prune terminal leader. Cut branches flush with the trunk of the main branch, at a point beyond a lateral shoot or bud a distance of not less than ½the diameter of the supporting branch. Make cut on an angle.

3.7.3 Prune evergreens only to remove broken or damaged branches.

3.8 MAINTENANCE

3.8.1 See Landscape Maintenance and Warranty Standards.

3.9 CLEANING

3.9.1 Perform cleaning during installation of the work and upon completion of the work. Remove from all site excess materials, soil, debris, and equipment. Repair damage resulting from planting operations.

END OF SECTION

LANDSCAPE MAINTENANCE AND WARRANTY STANDARDS

1.0 GENERAL

1.1 SUMMARY

1.1.1 Includes But Not Limited To

1. Provide maintenance for new landscaping as described in Contract Documents.
2. The requirements of the Section include a one (1) year warranty period from date of acceptance of installation performed by the General Contractor's Representative and Landscape Architect.

2.0 PRODUCTS - Not Used

3.0 EXECUTION

3.1 PERFORMANCE

3.1.1 Acceptance of Installation

1. At the completion of all landscape installation, or pre-approved portions thereof, the Landscape Subcontractor shall request in writing an inspection for Acceptance of installation in which the Landscape Subcontractor, Landscape Architect, and General Contractor's Representative shall be present.
   a. Following the acceptance inspection a punch list will be issued by the Landscape Architect.
   b. Upon completion of all punch list items, the Landscape Architect and/or General Contractor's Representative shall reinspect the project and issue a written statement of Acceptance of installation and establish the beginning of the Project Warranty Period.
   c. At the time of acceptance all plant material shall be of vigorous health.
   d. It is the responsibility of the Landscape Subcontractor to make the written request for inspection of installation in a timely fashion.
   e. If there is plant material loss prior to the Landscape Subcontractor's written request for inspection of installation, the Landscape Contractor shall make all replacements of this dead material at no additional cost These replacements are not considered to be the required one (1) replacement of dead plant material by the Landscape Subcontractor during the one (1) year project warranty period, as outlined below.
2. Landscape work may be inspected for acceptance in parts agreeable to the General Contractor's Representative and Landscape Architect provided work offered for inspection is complete, including maintenance as required.
3. For work to be inspected for partial acceptance, the Landscape Subcontractor shall provide a drawing outlining work completed and supply a written statement requesting acceptance of this work completed to date.

3.1.2 Project Warranty

1. The Project Warranty Period begins upon written preliminary acceptance of the project installation by the Landscape Architect and General Contractor's representative.
2. The Landscape Subcontractor shall guarantee trees, shrubs, ground cover beds and seeded or sodded areas through construction and for a period of one (1) year after date of Acceptance of installation against defects including death and unsatisfactory growth, except for defects resulting from neglect, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Subcontractor's control.

3.1.3 Maintenance During One (1) Year Project Warranty

1. To insure guarantee standards, the following maintenance procedures for trees, shrubs, and ground covers shall be executed during construction and for the full Project Warranty Periods.
   a. Landscape Subcontractor shall be responsible for only one (1) replacement of any plant materials during the one (1) year Project Warranty Period. These include those which are dead or in the opinion of the Landscape Architect are in an unhealthy or unsightly condition, or having lost natural shape, resulting from dieback, excessive pruning, or inadequate or improper maintenance as part of the guarantee.
   b. Prior to any replacements, Landscape Subcontractor shall review individual plants in question with Landscape Architect to determine reason for plant demise.
2. Replacements must meet the standards specified on the Landscape plans and in the specifications, i.e. quality, species of plant material and planting procedures to receive approval of replacement materials by Landscape Architect.
3. Costs for replacements are assumed part of bid quotations and therefore will not result in an additional cost to General Contractor or Landscape Architect.
4. Areas damaged as a result of replacement operation are to be restored by Landscape Subcontractor at no cost to the General Contractor or Landscape Architect.
5. The Landscape Subcontractor shall be responsible for watering all plantings through the warranty period and shall keep guy wires taut, raise tree balls which settle, furnish and apply sprays as necessary to keep the plantings free of disease and insects until the end of the warranty period.
6. The Landscape Subcontractor shall remove and replace trees, shrubs or other plants found to be dead or in unhealthy condition.
   a. Rejected plants and materials shall be removed promptly.
   b. Replacements shall be made during the following normal planting schedule.
   c. Trees and shrubs which are in doubt shall be replaced, unless, in the opinion of the Landscape Architect, it is advisable to extend Project Warranty Period for full growing Season.
7. The Landscape Contractor shall apply anti-desiccants on evergreen trees and evergreen shrub beds within 150' of major streets and drives, no later than December 1, during the one (1) year project warranty.
8. The first spring after plant installation the contractor shall check all trees to insure twine has rotted from around the trunk. If twine is still present, it shall be removed and disposed of off-site.
9. All stakes, guy wires, tree wrap paper, dead twigs and branches shall be removed from tree and plant materials at the end of this warranty period.

3.1.4 Maintenance of Seeded Lawn Areas

1. The Landscape Subcontractor shall maintain seeded lawn areas.
   a. Water, fertilize, weed, and apply chemicals until a dense lawn of permanent grasses, free from lumps and depressions or any bare spots, none of which is larger than one (1) foot of area up to a maximum of 3% of the total seeded lawn area is established.
   b. Seeded lawn that fails to show a uniform growth and/or germination shall be reseeded until a dense cover is established, regardless of what season the seed was installed.
2. The Landscape Subcontractor shall maintain and mow all lawn areas for until acceptance of installation (typically 3 mows) . When lawn reaches 3" in height it shall be cut to 2" in height.
3. The Owner assumes cutting responsibilities following the Acceptance of installation of the seeded lawn.
4. At conclusion of Project Warranty Period and after receiving Written Final Acceptance by General Contractor's representative and Landscape Architect, the Owner shall assume all seeded lawn maintenance responsibilities.

3.1.5 Maintenance of Sodded Lawn Areas

1. The Landscape Subcontractor shall maintain sodded lawn areas.
   a. Water, fertilize, spot weed, apply herbicides, fungicides, insecticides and resod until a full uniform, smooth stand of sod is knitted to topsoil, and accepted by the Landscape Architect or his or her representative.
2. Water sod thoroughly, as required to establish proper rooting.
3. Repair, rework, and resod all areas that have washed out or are eroded. Replace undesirable or dead areas with new sod.
4. Mow lawn areas once as soon as sod has rooted sufficiently and knitted to the topsoil. Cut back to 2" height. Not more than 40% of grass leaf shall be removed at any single mowing. Excess clipping to be removed by the Landscape Subcontractor. The Landscape Subcontractor shall be responsible for lawn mowing until acceptance of installation (typically 3-mows).
5. The Owner assumes mowing responsibilities following the Acceptance of installation of the sodded lawn.
6. At conclusion of Project Warranty Period and after receiving Written Final Acceptance by General Contractor's representative and Landscape Architect, the Owner shall assume all sodded lawn maintenance responsibilities.

3.1.6 Final Acceptance Upon Conclusion of the Warranty Period

1. At the conclusion of the Project Warranty Period the Landscape Subcontractor shall request a project inspection for final acceptance in which the Landscape Contractor, Landscape Architect and Owner's Representative shall be present.
2. After the inspection for final acceptance, a punch list will be issued by the Landscape Architect. Upon completion of all punch list items, the Landscape Architect and the Owner's Representative shall reinspect the project and issue a Written Statement of Final Acceptance.

END OF SECTION

NOTE: The Owners may at their option elect to utilize a Construction Manager in lieu of a General Contractor for all matters pertaining to these specifications and the site work.

Grandmont Rosedale Park Collective II

9710 - 9730 W Outer Dr. Detroit, MI 48223

INTOTO STUDIO

OWNER
GRPC 4 Limited Dividend Housing Association Limited Partnership, a Michigan limited partnership
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Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

ARCHITECT
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Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

MEP ENGINEERING
MA ENGINEERING
400 S. Old Woodward Ave
Suite 100
Birmingham, MI 48009
248-258-1610 phone
www.ma-engineering.com

STRUCTURAL ENGINEERING
RESURGET ENGINEERING
4219 Woodward Ave.
Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan

Registration Seal

No.	Date	Description
1	08/11/2021	Design Development
2	10/15/2021	HDC
3	12/30/2021	Permit

Project Number: 20.005.02

Drawn By: RW Approved By: EB

Scale: 1" = 20'

Drawing Title

LANDSCAPE SPECIFICATIONS

Drawing No:

L-2.2

8/9/2021 4:51:25 PM

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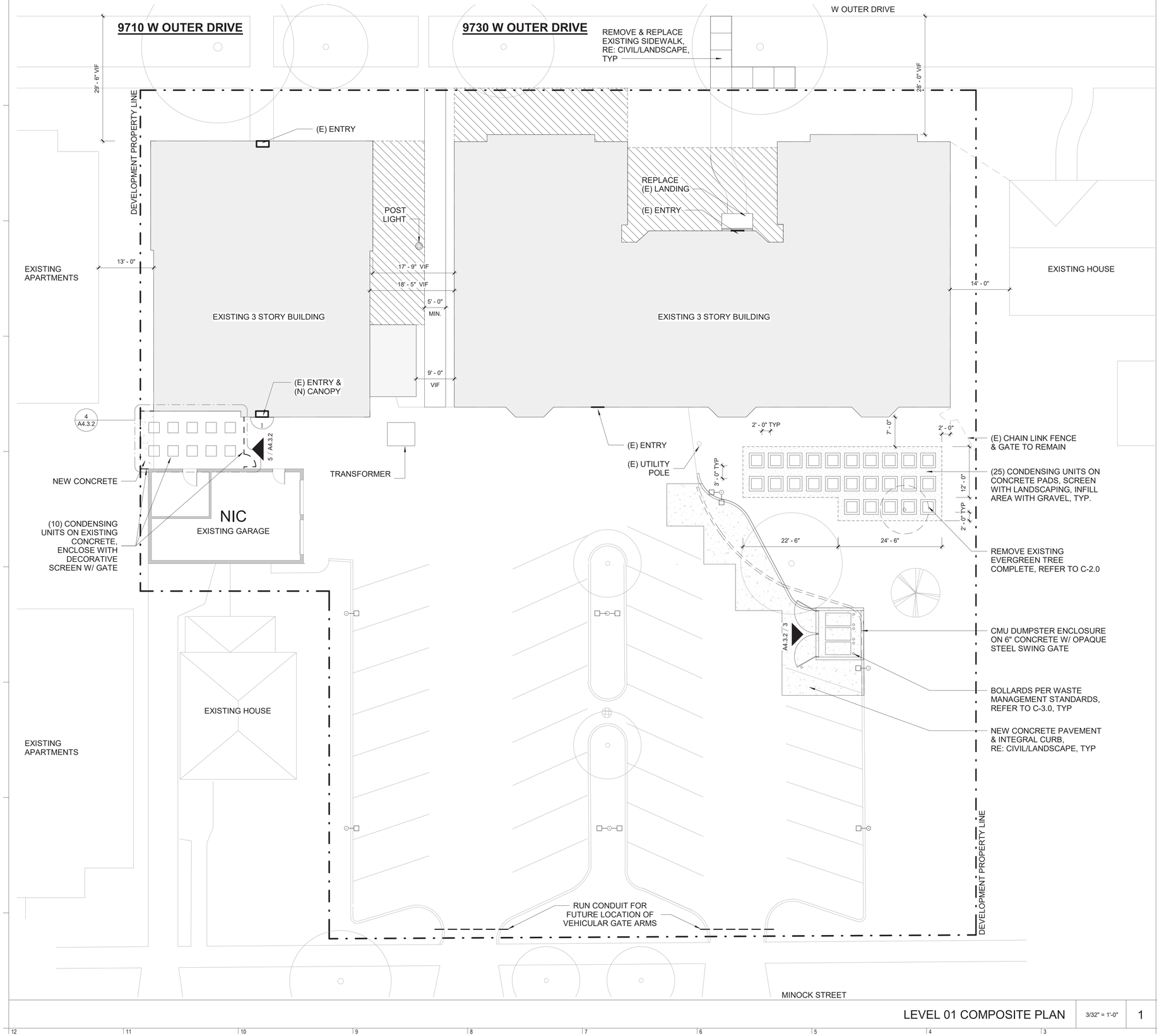

SITE PLAN LEGEND

AREA TO REGRADE

SITE LIGHTING, RE: ELECTRICAL

GENERAL SITE PLAN NOTES

1. SITE PLAN SHOWN FOR REFERENCE ONLY. REFER TO CIVIL/LANDSCAPE AND ELECTRICAL DRAWINGS AND SPECIFICATIONS
2. PARKING LOT: RESTRIPE EXISTING PARKING LOT SPACES (RE: CIVIL/LANDSCAPE)
3. LIGHTING: ALL LIGHTING TO BE LED. REMOVE EXISTING BUILDING-MOUNTED LIGHT FIXTURES AND CONDUIT, AND CLEAN/REMOVE ANY ASSOCIATED PAINT, CAULK AND MISC HARDWARE. REMOVE LIGHT FIXTURES AT ENTRY DOORS, UON. INSTALL NEW ENTRY DOOR LIGHT FIXTURES AND NEW SITE LIGHTING AT PARKING LOT. WHERE EXISTING FIXTURE IS INDICATED TO BE REFURBISHED, REMOVE FLAKING PAINT AND RUST AT EXISTING HISTORIC BUILDING-MOUNTED LIGHT FIXTURE; REPAIR AS REQUIRED AND REPAINT (RE: ELECTRICAL)
4. GRADING/LANDSCAPING: AT AREAS TO REGRADE: REMOVE EXISTING LANDSCAPING AND GRADE TO SLOPE AWAY FROM BUILDING. REPLACE WITH SIMILAR LANDSCAPING. REMOVE EXISTING LANDSCAPING WHERE OBSTRUCTING NEW AND EXISTING WINDOWS AND ENTRIES. REMOVE EXISTING TREES COMPLETE WHERE INDICATED. REMAINING LANDSCAPING TO BE MAINTAINED. PROVIDE LANDSCAPE SCREENS AT PERIMETERS OF CONDENSING UNITS, AND NEW TREES (RE: CIVIL/LANDSCAPE)
5. POWER & DATA: PROVIDE POWER AND DATA TO FUTURE LOCATION OF REMOTE-OPERATED VEHICULAR GATE ARMS (RE: ELECTRICAL & CIVIL/LANDSCAPE)
6. SIDEWALK: REMOVE AND REPLACE EXISTING SIDEWALK BETWEEN BUILDING 01 AND BUILDING 02, AND FRONT WALKWAYS AS REQUIRED. NEW SIDEWALK TO BE 5'-0" WIDTH MIN. REPAIR/REPLACE FRONT ENTRY LANDINGS (RE: CIVIL/LANDSCAPE)
7. CONDENSING UNITS: ALL CONDENSING UNITS TO BE INDIVIDUALLY STRAPPED WITH STEEL SECURITY STRAPS AND BOLTED TO CONCRETE (RE: MECHANICAL)
8. TRANSFORMER: PROVIDE PAD PER DTE STANDARDS(RE: ELECTRICAL)

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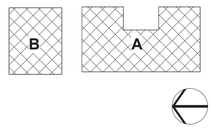
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

Scale: As indicated

Drawing Title

ARCHITECTURAL SITE PLAN

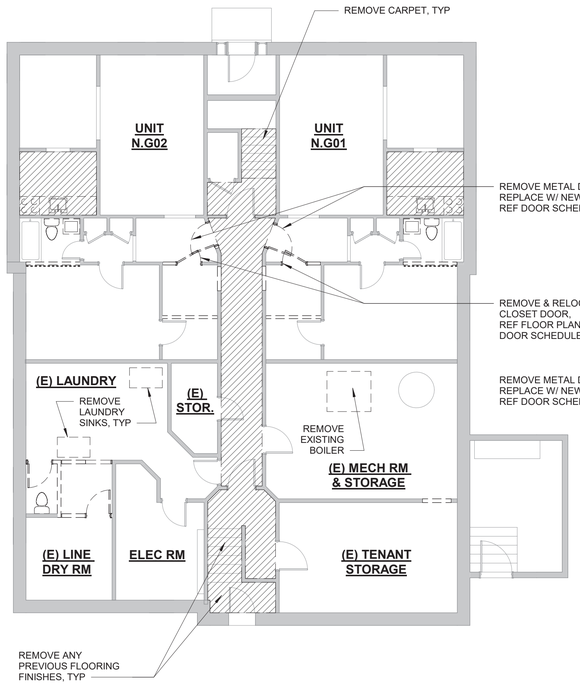
Drawing No:

A0.1

LEVEL 01 COMPOSITE PLAN | 3/32" = 1'-0" | 1

Sheet Size: 24" x 36"

9710 W OUTER DRIVE



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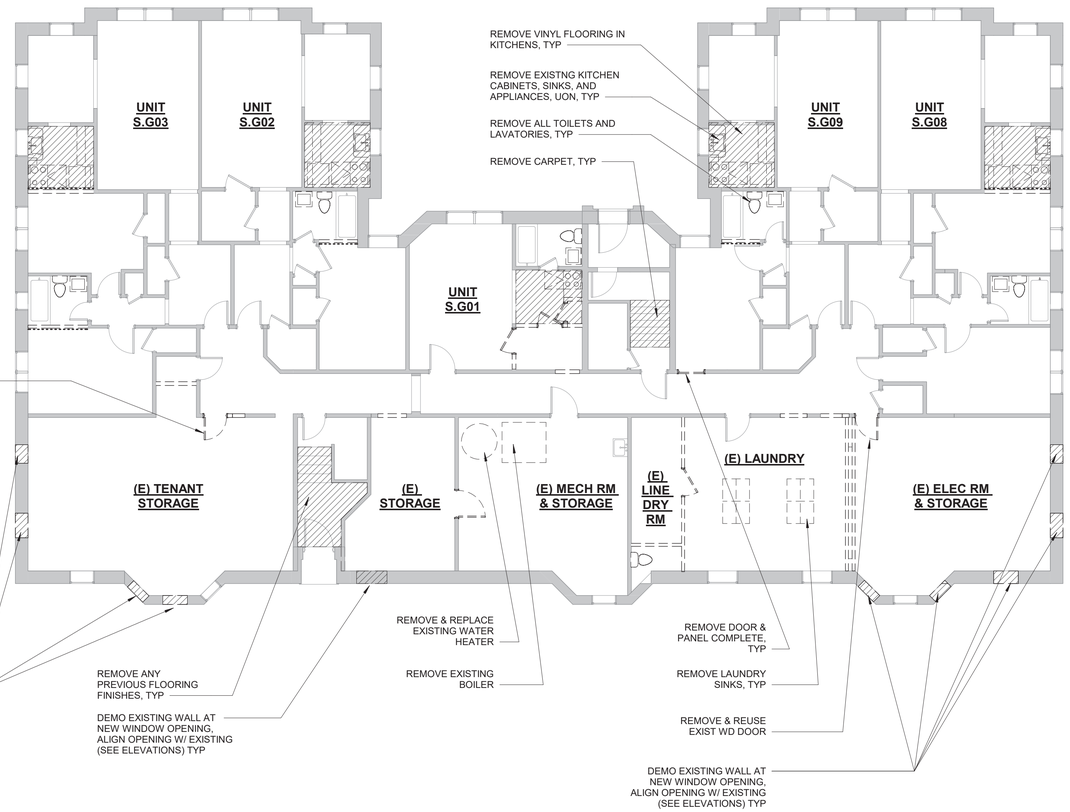

DEMOLITION LEGEND

- REMOVE WALL COMPLETE
- REMOVE SIDE OF WALL INDICATED BY HEAVY DASHED LINE, REF. NEW WORK PLANS
- EXISTING CONSTRUCTION TO REMAIN
- REMOVE DOOR AND FRAME COMPLETE
- EXISTING DOOR AND FRAME TO REMAIN
- REMOVE EXISTING CONSTRUCTION AS NOTED

DEMOLITION NOTES

1. CONTRACTOR SHALL VISIT SITE TO VERIFY ACTUAL EXTENT OF DEMOLITION PRIOR TO BID. DO NOT RELY SOLELY ON THE DRAWINGS FOR DEMOLITION SCOPE. ALL DEMOLITION REQUIRED TO CARRY OUT THE WORK OF THE CONTRACT SHALL BE PART OF THE CONTRACT. NO ADDITION TO THE CONTRACT AMOUNT WILL BE ALLOWED DUE TO FAILURE TO FIELD VERIFY DEMOLITION SCOPE OR FAILURE TO EXAMINE ALL CONTRACT DOCUMENTS.
2. VERIFY AND INVESTIGATE ALL CONDITIONS IN THE FIELD PRIOR TO STARTING DEMOLITION, NOTIFY ARCHITECT OF DISCREPANCIES. LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL UTILITY LINES PENETRATING FLOOR, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC.
3. PRIOR TO CUTTING EXISTING CONSTRUCTION, DETERMINE THE PRESENCE OF AND PROTECT ACTIVE TELECOMMUNICATION, DATA & ELECTRICAL LINES AND PIPING WHICH MAY BE DAMAGED BY SUCH CUTTING.
4. REMOVE AND REINSTALL ITEMS TO BE SALVAGED WHERE INDICATED AND WHERE ADVISED BY OWNER.
5. COORDINATE DEMOLITION WITH OWNER'S REQUIREMENTS AND OTHER CONTRACTORS RETAINED BY THE OWNER. SCHEDULE ALL DEMOLITION AND CONSTRUCTION WORK WITH DESIGNATED OWNER'S REPRESENTATIVE TO MINIMIZE DISRUPTION OF BUILDING ACTIVITIES.
6. CONTRACTOR TO FOLLOW OWNER'S REQUIREMENTS FOR ENSURING SECURITY AND SAFETY OF THE BUILDING THROUGH DEMOLITION AND CONSTRUCTION.
7. UTMOST CARE MUST BE TAKEN DURING DEMOLITION TO ENSURE THAT EXISTING CONSTRUCTION TO REMAIN IS NOT DAMAGED. REPAIR OR REPLACE EXISTING CONSTRUCTION DAMAGED BY DEMOLITION ACTIVITIES.
8. CONTRACTOR IS TO PROVIDE COMPLETE DUST PROOF ENCLOSURE IN ALL AREAS WHERE DEMOLITION IS TO OCCUR. COMPLY WITH ALL OSHA, NFPA AND OTHER APPLICABLE RULES AND REGULATIONS REGARDING DUST AND DEBRIS REMOVAL.
9. CONTROL NOISE, VIBRATION, AND ANY OTHER DISTURBING FACTORS. COORDINATE WORK HOURS WITH OWNER PRIOR TO PROCEEDING WITH THE WORK.
10. WHEN REMOVING MECHANICAL AND ELECTRICAL ITEMS, REMOVE ALL ASSOCIATED CONSTRUCTION INCLUDING FASTENERS, CABLE, RODS, ETC.
11. INVENTORY SALVAGED ITEMS: LIST SHALL INCLUDE DESCRIPTION OF ITEM, DIMENSIONS (OVERALL WIDTH, HEIGHT, DEPTH), COLOR, APPROX. WEIGHT. AND PHOTO.
12. PROVIDE CONSTRUCTION WASTE MANAGEMENT PLAN PRIOR TO THE START OF DEMOLITION. TARGET 50% RECYCLING OF CONSTRUCTION WASTE.

FLOORS

A. AT EXISTING WOOD FLOORS TO REMAIN, REMOVE ALL DEBRIS, DUST AND DIRT. CLEAN WITH WATER AND DETERGENT. REFINISH FLOORING WITH SEALER.

B. REMOVE ALL EXISTING CARPET, VINYL FLOORING, FLOORING COUPOUND AND SUBSTRATE THROUGHOUT. WHERE WOOD FLOORING EXISTS BELOW, REFER TO NOTE ABOVE.

C. AT EXISTING BATHROOMS TO REMAIN, EXISTING TILE FLOORING IS TO REMAIN AND BE REPAIRED TO EXTENT FEASIBLE.

D. AT EXISTING CONCRETE FLOORS TO REMAIN, REMOVE ANY EXISTING FLOORING COMPOUND/CARPET/TILE, GRIND AND FILL CRACKS. SEAL IN UTILITY AREAS AND POLISH IN UNITS.

WALLS / DOORS

A. WHERE EXISTING PLASTER AND CONCRETE WALLS AND COLUMNS ARE TO REMAIN: REMOVE ALL LOOSE AND PEELING PAINT BY SCRAPING. CLEAN WITH WATER AND DETERGENT. REMOVE ALL WALL TILE AT EXISTING KITCHENS

B. WHERE EXISTING BATHROOMS ARE TO REMAIN, TILE WALLS ARE TO REMAIN AND BE REPAIRED / REGLAZED WERE REQUIRED.

C. WHERE EXISTING DOORS AND FRAMES ARE TO REMAIN: REMOVE ALL LOOSE AND PEELING PAINT BY SCRAPING. CLEAN WITH WATER AND DETERGENT.

D. WHERE EXISTING WOOD WALL BASE IS TO REMAIN: REMOVE ALL LOOSE AND PEELING PAINT BY SCRAPPING. CLEAN WITH WATER AND DETERGENT.

E. REMOVE PLASTER AND SILL AT WINDOWS AND OTHER AREAS DAMAGED BY WATER. ASSESS DAMAGE TO STUD FRAMING AND/OR MASONRY BACKUP AND OTHER CONCEALED BUILDING COMPONENTS BEFORE REPAIRING.

CEILINGS

A. WHERE CEILING IS TO REMAIN: REMOVE DUST, DIRT AND DEBRIS. REMOVE ALL LOOSE AND PEELING PAINT FROM PLASTER CEILINGS BY SCRAPPING.

B. REMOVE PLASTER AT AREAS DAMAGED BY WATER, ASSESS DAMAGE TO JOISTS AND OTHER CONCEALED BUILDING COMPONENTS BEFORE REPAIRING

BATHROOMS

A. ALL TOILETS AND LAVATORIES ARE TO BE REMOVED.

B. REMOVE ALL SHOWER HEADS, SHOWER FAUCETS AND SHOWER CURTAIN RODS

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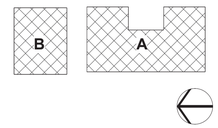
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

Scale: As indicated

Drawing Title

LEVEL 00 DEMOLITION PLAN

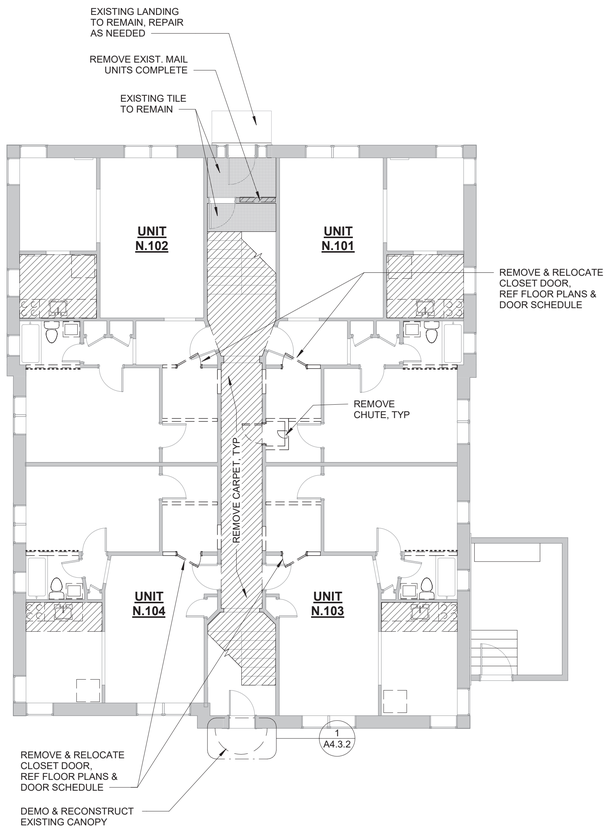
Drawing No:

AD1.0

LEVEL 00 DEMOLITION PLAN | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

9710 W OUTER DRIVE



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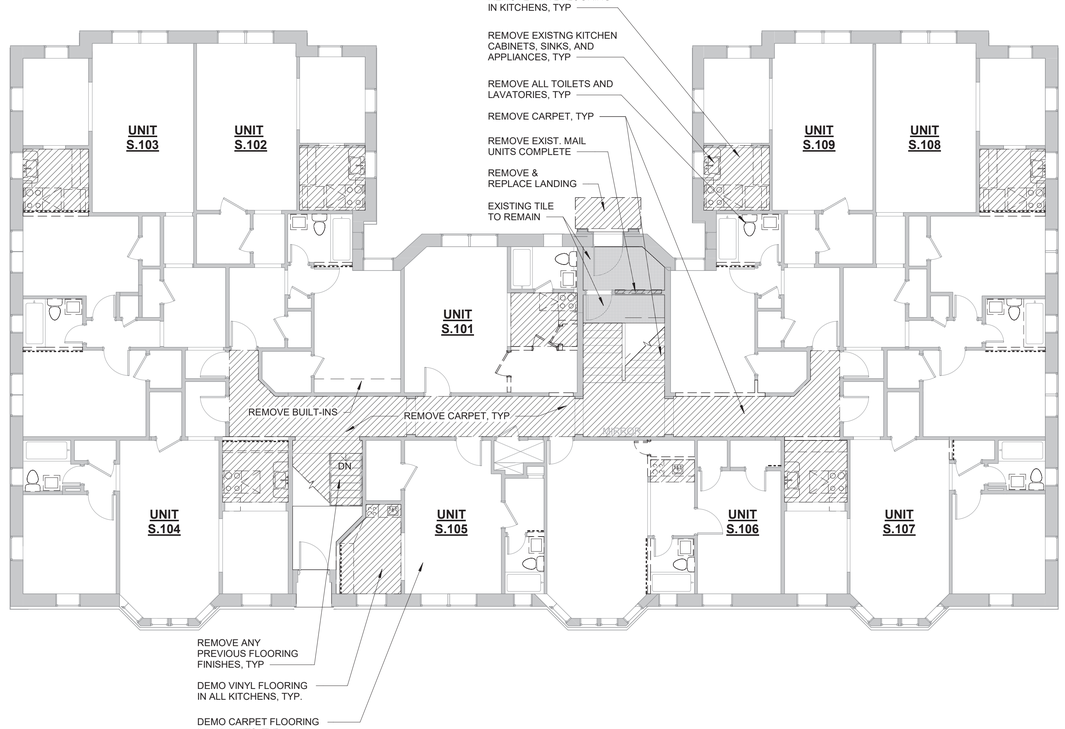

DEMOLITION LEGEND

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C. AT EXISTING BATHROOMS TO REMAIN, EXISTING TILE FLOORING IS TO REMAIN AND BE REPAIRED TO EXTENT FEASIBLE.

D. AT EXISTING CONCRETE FLOORS TO REMAIN, REMOVE ANY EXISTING FLOORING COMPOUND/CARPET/TILE, GRIND AND FILL CRACKS. SEAL IN UTILITY AREAS AND POLISH IN UNITS.

WALLS / DOORS

A. WHERE EXISTING PLASTER AND CONCRETE WALLS AND COLUMNS ARE TO REMAIN: REMOVE ALL LOOSE AND PEELING PAINT BY SCRAPING. CLEAN WITH WATER AND DETERGENT. REMOVE ALL WALL TILE AT EXISTING KITCHENS

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CEILINGS

A. WHERE CEILING IS TO REMAIN: REMOVE DUST, DIRT AND DEBRIS. REMOVE ALL LOOSE AND PEELING PAINT FROM PLASTER CEILINGS BY SCRAPPING.

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BATHROOMS

A. ALL TOILETS AND LAVATORIES ARE TO BE REMOVED.

B. REMOVE ALL SHOWER HEADS, SHOWER FAUCETS AND SHOWER CURTAIN RODS

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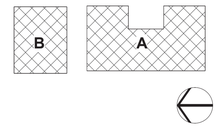


Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: As indicated

Drawing Title

LEVEL 01 DEMOLITION PLAN

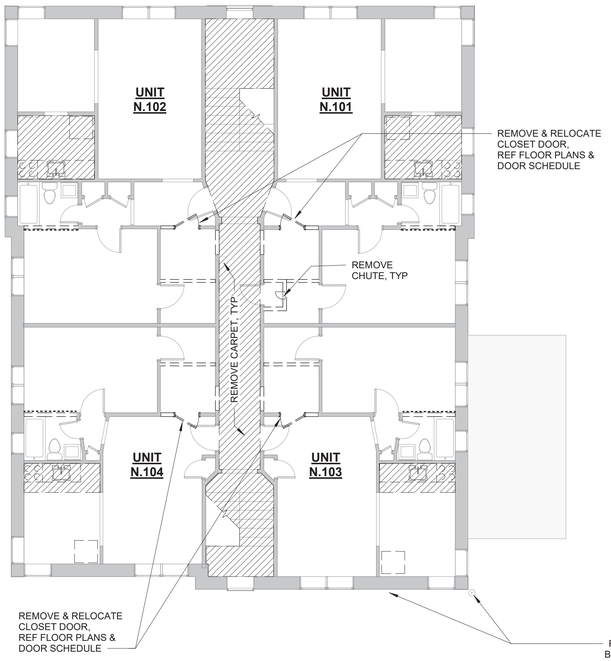
Drawing No:

AD1.1

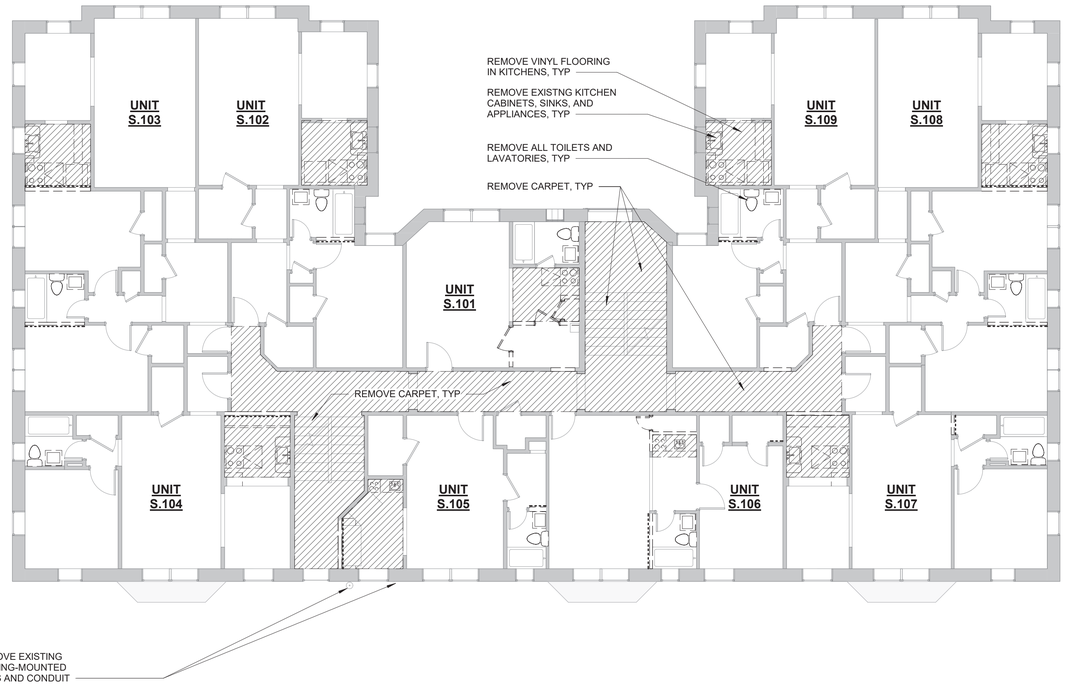
LEVEL 01 DEMOLITION PLAN | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

9710 W OUTER DRIVE



9730 W OUTER DRIVE



DEMOLITION LEGEND

- REMOVE WALL COMPLETE
- REMOVE SIDE OF WALL INDICATED BY HEAVY DASHED LINE, REF. NEW WORK PLANS
- EXISTING CONSTRUCTION TO REMAIN
- REMOVE DOOR AND FRAME COMPLETE
- EXISTING DOOR AND FRAME TO REMAIN
- REMOVE EXISTING CONSTRUCTION AS NOTED

DEMOLITION NOTES

1. CONTRACTOR SHALL VISIT SITE TO VERIFY ACTUAL EXTENT OF DEMOLITION PRIOR TO BID. DO NOT RELY SOLELY ON THE DRAWINGS FOR DEMOLITION SCOPE. ALL DEMOLITION REQUIRED TO CARRY OUT THE WORK OF THE CONTRACT SHALL BE PART OF THE CONTRACT. NO ADDITION TO THE CONTRACT AMOUNT WILL BE ALLOWED DUE TO FAILURE TO FIELD VERIFY DEMOLITION SCOPE OR FAILURE TO EXAMINE ALL CONTRACT DOCUMENTS.
2. VERIFY AND INVESTIGATE ALL CONDITIONS IN THE FIELD PRIOR TO STARTING DEMOLITION. NOTIFY ARCHITECT OF DISCREPANCIES. LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL UTILITY LINES PENETRATING FLOOR, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC.
3. PRIOR TO CUTTING EXISTING CONSTRUCTION, DETERMINE THE PRESENCE OF AND PROTECT ACTIVE TELECOMMUNICATION, DATA & ELECTRICAL LINES AND PIPING WHICH MAY BE DAMAGED BY SUCH CUTTING.
4. REMOVE AND REINSTALL ITEMS TO BE SALVAGED WHERE INDICATED AND WHERE ADVISED BY OWNER.
5. COORDINATE DEMOLITION WITH OWNER'S REQUIREMENTS AND OTHER CONTRACTORS RETAINED BY THE OWNER. SCHEDULE ALL DEMOLITION AND CONSTRUCTION WORK WITH DESIGNATED OWNER'S REPRESENTATIVE TO MINIMIZE DISRUPTION OF BUILDING ACTIVITIES.
6. CONTRACTOR TO FOLLOW OWNER'S REQUIREMENTS FOR ENSURING SECURITY AND SAFETY OF THE BUILDING THROUGH DEMOLITION AND CONSTRUCTION.
7. UTMOST CARE MUST BE TAKEN DURING DEMOLITION TO ENSURE THAT EXISTING CONSTRUCTION TO REMAIN IS NOT DAMAGED. REPAIR OR REPLACE EXISTING CONSTRUCTION DAMAGED BY DEMOLITION ACTIVITIES.
8. CONTRACTOR IS TO PROVIDE COMPLETE DUST PROOF ENCLOSURE IN ALL AREAS WHERE DEMOLITION IS TO OCCUR. COMPLY WITH ALL OSHA, NFPA AND OTHER APPLICABLE RULES AND REGULATIONS REGARDING DUST AND DEBRIS REMOVAL.
9. CONTROL NOISE, VIBRATION, AND ANY OTHER DISTURBING FACTORS. COORDINATE WORK HOURS WITH OWNER PRIOR TO PROCEEDING WITH THE WORK.
10. WHEN REMOVING MECHANICAL AND ELECTRICAL ITEMS, REMOVE ALL ASSOCIATED CONSTRUCTION INCLUDING FASTENERS, CABLE, RODS, ETC.
11. INVENTORY SALVAGED ITEMS: LIST SHALL INCLUDE DESCRIPTION OF ITEM, DIMENSIONS (OVERALL WIDTH, HEIGHT, DEPTH), COLOR, APPROX. WEIGHT. AND PHOTO.
12. PROVIDE CONSTRUCTION WASTE MANAGEMENT PLAN PRIOR TO THE START OF DEMOLITION. TARGET 50% RECYCLING OF CONSTRUCTION WASTE.

FLOORS

A. AT EXISTING WOOD FLOORS TO REMAIN, REMOVE ALL DEBRIS, DUST AND DIRT. CLEAN WITH WATER AND DETERGENT. REFINISH FLOORING WITH SEALER.

B. REMOVE ALL EXISTING CARPET, VINYL FLOORING, FLOORING COUPOUND AND SUBSTRATE THROUGHOUT. WHERE WOOD FLOORING EXISTS BELOW, REFER TO NOTE ABOVE.

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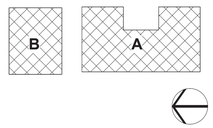
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: As indicated

Drawing Title
LEVEL 02 DEMOLITION PLAN

Drawing No:
AD1.2

LEVEL 02 DEMOLITION PLAN | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

ENLARGED PLAN SCHEDULE	
UNIT N.G01	10A/A6.0.4
UNIT N.G02	SIM 10A/A6.0.4
UNIT S.G01	1A/A6.0.1
UNIT S.G02	2A/A6.0.1
UNIT S.G03	3A/A6.0.2
UNIT S.G04	G4A/A6.0.5
UNIT S.G07	G7A/A6.0.5
UNIT S.G08	SIM 3A/A6.0.2
UNIT S.G09	SIM 2A/A6.0.1

FLOOR PLAN LEGEND

	NEW PARTITION WALL
	EXISTING PARTITION
	SMOKE PARTITION
	1 HOUR RATED WALL
— — — —	HISTORIC ARCHES TO REMAIN
— — — —	UNIT DIVISIONS
----------	CONSTRUCT/FURR OUT WALL TO HOUSE EXHAUST DUCT RISER (SEE MECH)
MH	NEW MECHANICAL CLOSET, SEE MECHANICAL DRAWINGS

GENERAL FLOOR PLAN NOTES

1. ARCH ELEV 0'-0" = EXISTING ENTRY LEVEL ELEV
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4. TYPICAL NEW DOOR FRAME TO WALL DIMENSION IS 4" UON.
5. NEW WALLS ARE TYPE A3 UON. REFER TO SHEET ***A7.3.1*** FOR PARTITION TYPES
6. REFER TO SHEET ***A7.4.1*** FOR CABINETRY AND COUNTERTOP DETAILS
7. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR EQUIPMENT PAD LOCATIONS.
8. NEW CONSTRUCTION WALLS TO BE FLUSH WITH EXISTING WHERE INDICATED.
9. PROVIDE GLASSMAT BACKER AT ALL NEW TOILET ROOM TILE WALLS.
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11. REPAIR/REPLACE IN KIND ALL WATER DAMAGED AREAS, INCLUDING PLASTER WALLS AND CEILINGS, VIF
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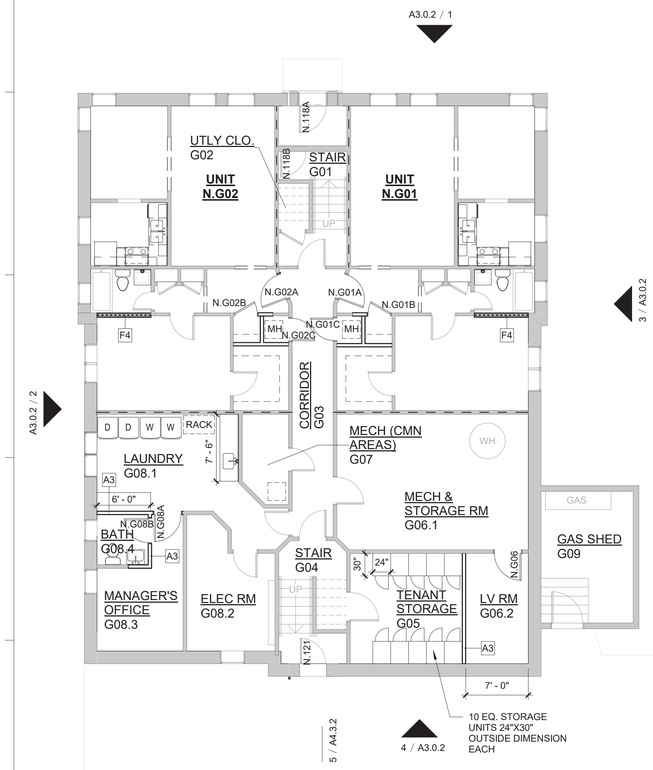
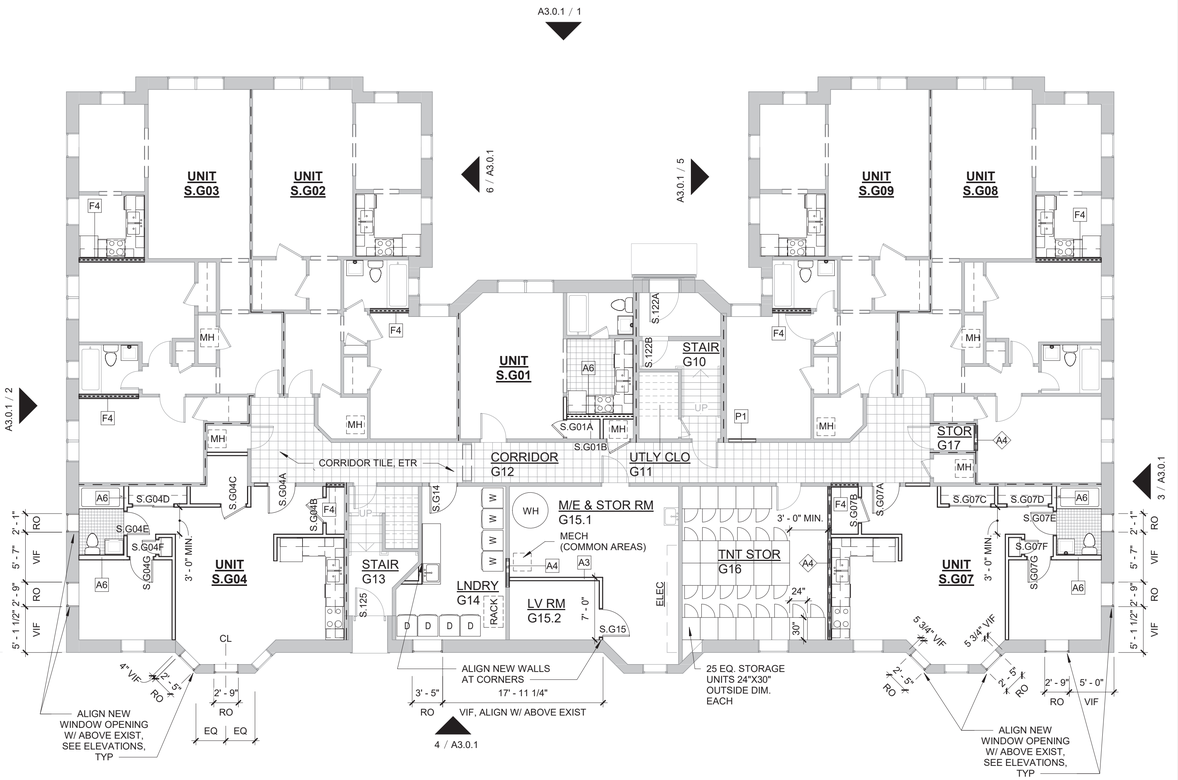
14. INSTALL PLYWOOD SHEATHING AT LOW VOLTAGE ROOMS ON WALL(S) WHERE EQUIPMENT WILL BE MOUNTED

9710 W OUTER DRIVE



9730 W OUTER DRIVE



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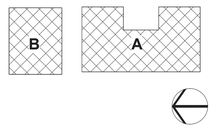


Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: 1/8" = 1'-0"

Drawing Title

LEVEL 00 FLOOR PLAN

Drawing No:

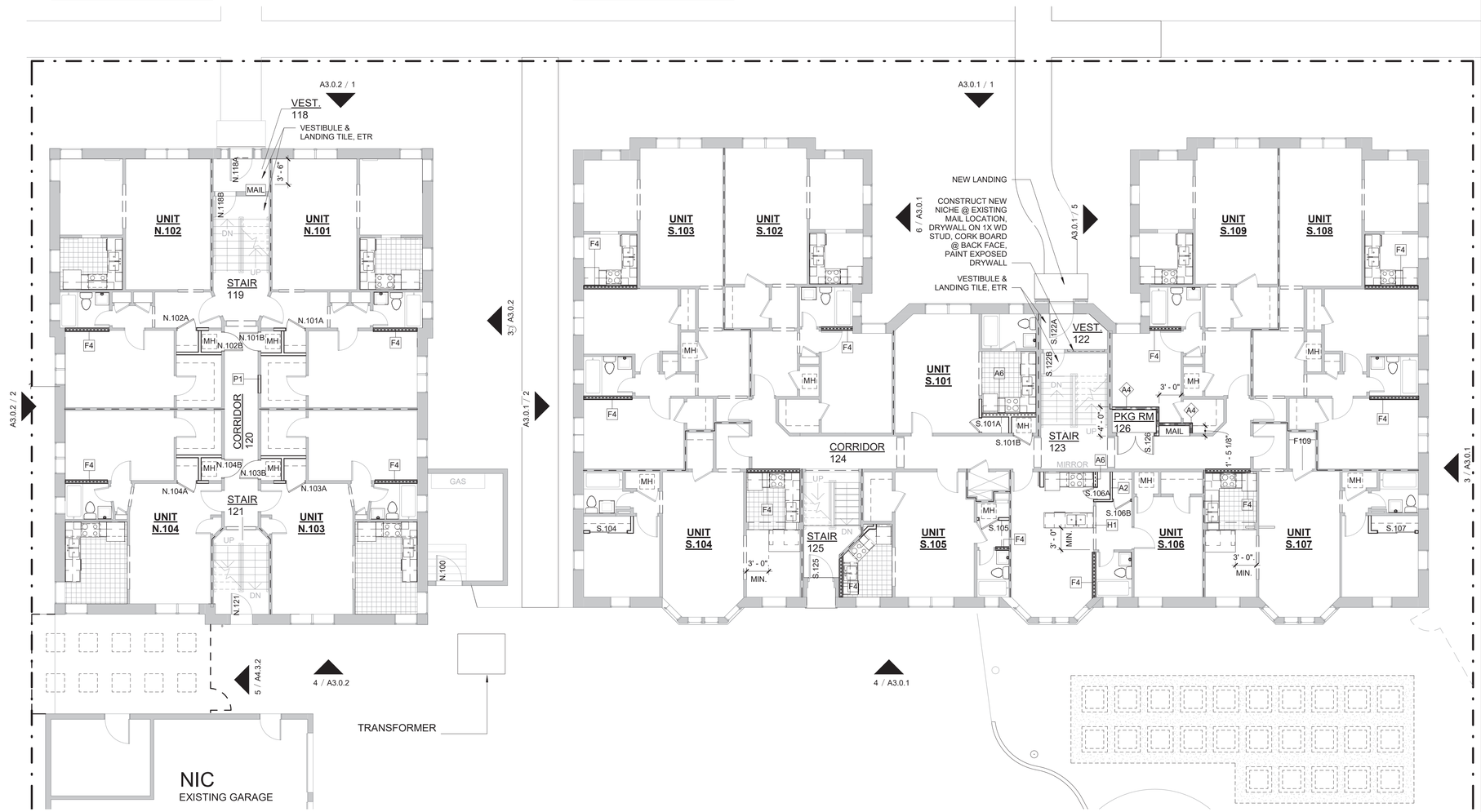
A1.0

Sheet Size: 24" x 36"

ENLARGED PLAN SCHEDULE			
UNIT N.101	10A/A6.0.4	UNIT S.104	4A/A6.0.2
UNIT N.102	SIM 10A/A6.0.4	UNIT S.105	5A/A6.0.3
UNIT N.103	13A/A6.0.4	UNIT S.106	6A/A6.0.3
UNIT N.104	SIM 13A/A6.0.4	UNIT S.107	SIM 4A/A6.0.2
UNIT S.101	1A/A6.0.1	UNIT S.108	SIM 3A/A6.0.2
UNIT S.102	2A/A6.0.1	UNIT S.109	SIM 2A/A6.0.1
UNIT S.103	3A/A6.0.2		

9710 W OUTER DRIVE

9730 W OUTER DRIVE



FLOOR PLAN LEGEND

	NEW PARTITION WALL
	EXISTING PARTITION
	SMOKE PARTITION
	1 HOUR RATED WALL
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— — — —	UNIT DIVISIONS
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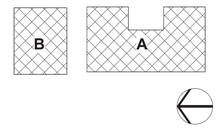

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Drawing Title

LEVEL 01 FLOOR PLAN

Drawing No:

A1.1

LEVEL 01 FLOOR PLAN | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

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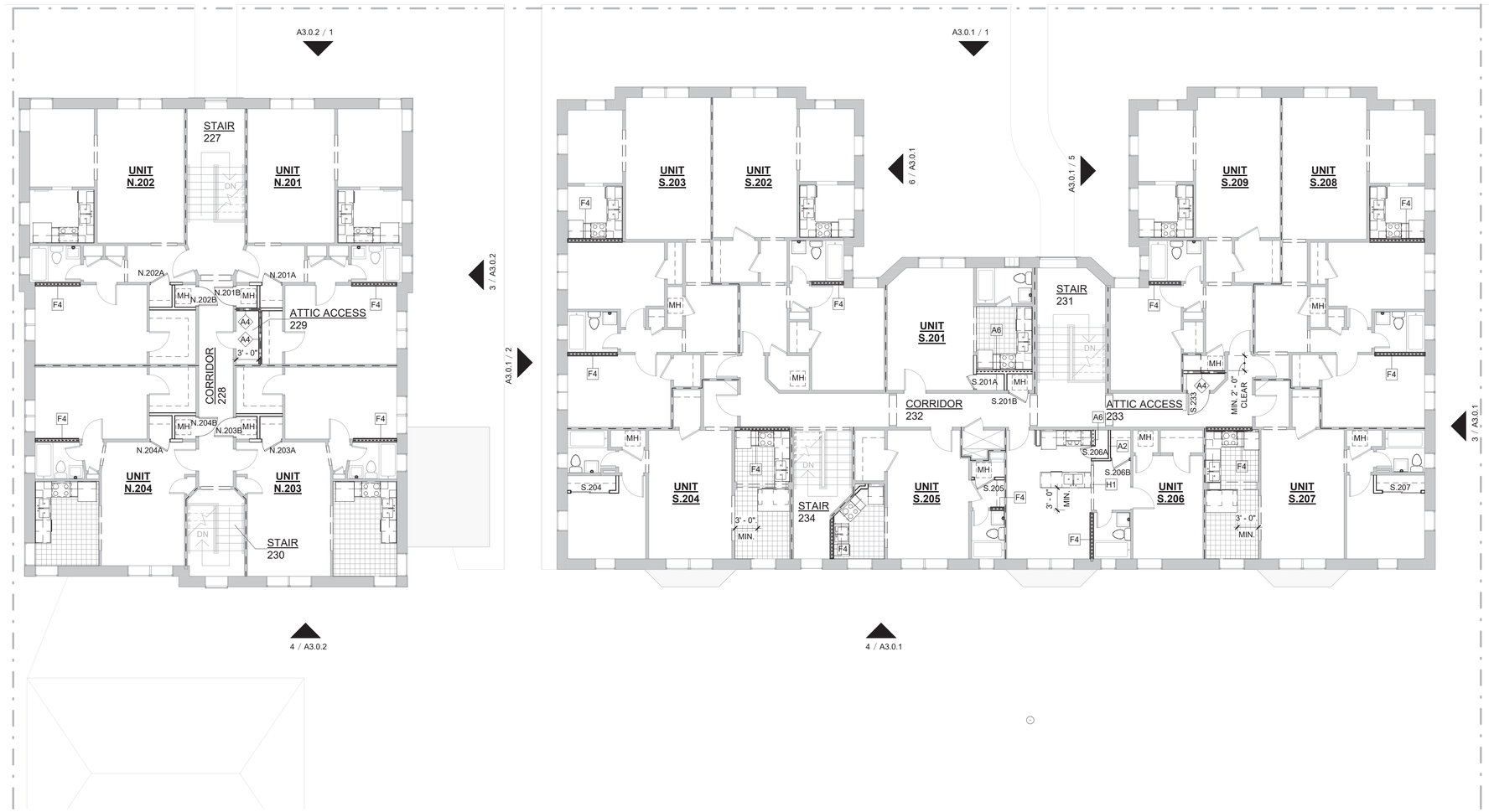
UNIT N.203	13A/A6.0.4	UNIT S.206	6A/A6.0.3
UNIT N.204	SIM 13A/A6.0.4	UNIT S.207	SIM 4A/A6.0.2
UNIT S.201	1A/A6.0.1	UNIT S.208	SIM 3A/A6.0.2
UNIT S.202	2A/A6.0.1	UNIT S.209	SIM 2A/A6.0.1
UNIT S.203	3A/A6.0.2		

9710 W OUTER DRIVE

9730 W OUTER DRIVE



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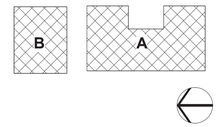

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LEVEL 02 FLOOR PLAN

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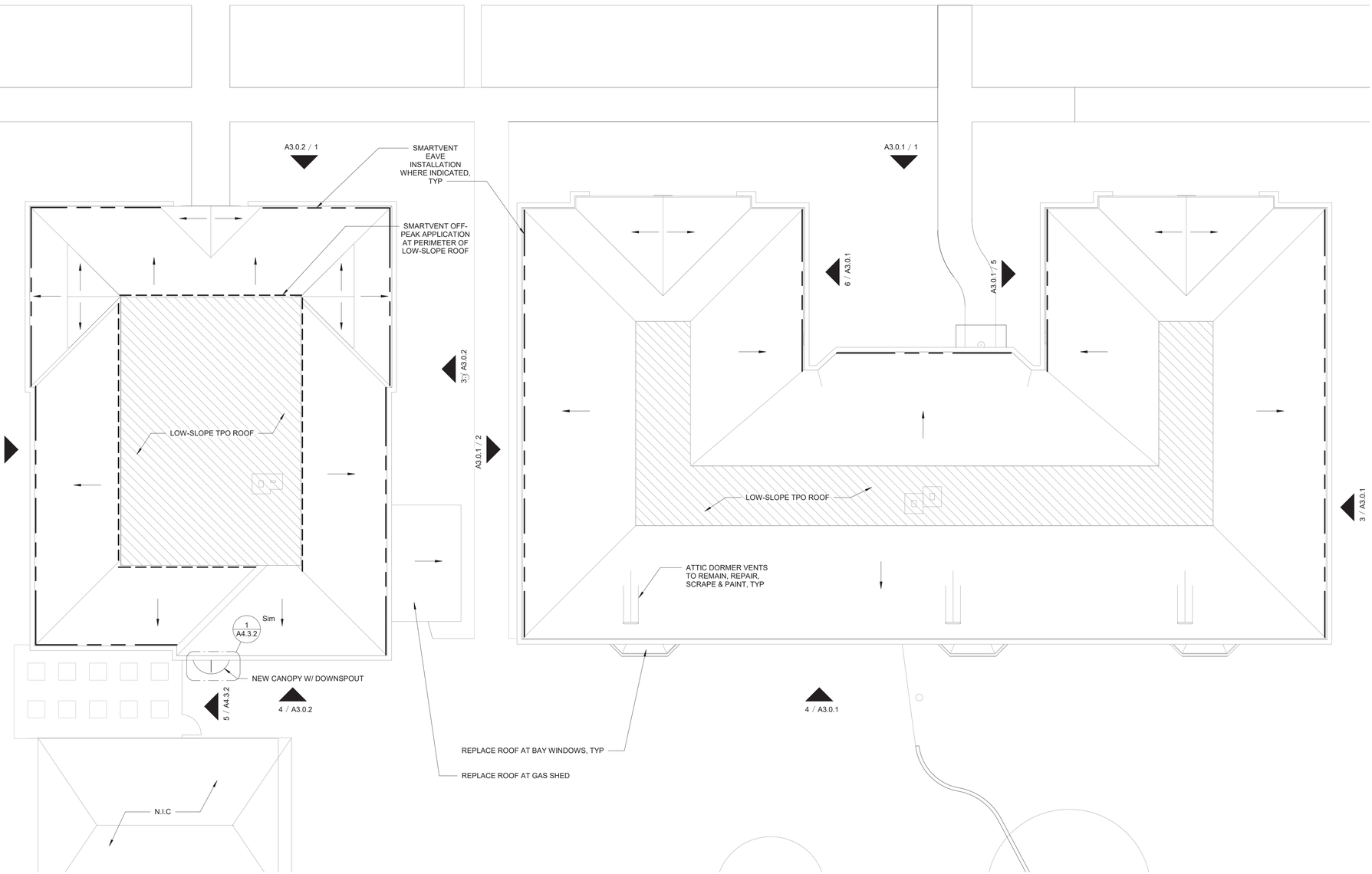
A1.2

Sheet Size: 24" x 36"



ROOF NOTES

1. REPLACE ALL EXISTING ROOFING. ROOF REPLACEMENT SCOPE INCLUDES BOTH BUILDINGS (SHINGLE ROOFS AND LOW-SLOPE ROOFS), ROOFS AT BAY WINDOWS, AND PITCHED ROOF AT SINGLE STORY GAS SHED.
   9710 ROOF +/- 3380 SF; 9730 ROOF +/- 6750 SF
2. REMOVE EXISTING ROOF SHINGLES, ROOF MEMBRANE, AND DAMAGED OR ROTTING ROOF DECK.
3. INSTALL ROOFING AND UNDERLAYMENTS ACCORDING TO MANUFACTURER'S STANDARDS INCLUDING NEW PLYWOOD SHEATHING TO MATCH EXISTING THICKNESS, ICE AND WATER SHIELD EXTENDING FROM GUTTER/ROOF EDGE TO AT LEAST 3' BEYOND THE INTERIOR WALL AND AT VALLEYS, ASPHALT ROOF SHINGLES OVER #30 ROOFING FELT, AND CONTINUOUS RIDGE VENTS AT TOP RIDGES AND HIP RIDGES.
4. BASIS OF DESIGN PRODUCTS: OWENS CORNING OAKRIDGE SHINGLES - COLOR: TBD; SMART RIDGE II BY DCI PRODUCTS; OWENS CORNING WEATHERLOCK FLEX - FLEXIBLE SELF-SEALING ICE AND WATER BARRIER
5. INSPECT EXISTING ROOF CONSTRUCTION, INCLUDING TRUSSES, PRIOR TO REPLACEMENT AND NOTIFY ARCHITECT OF ANY WATER DAMAGE TO STRUCTURAL MEMBERS
6. REPLACE ANY DAMAGED OR ROTTING WOOD AT ROOF SOFFITS, AND PAINT ALL ROOF SOFFITS .
7. LOW-SLOPE ROOFS SLOPE AT 0.5"/12" UNLESS NOTES OTHERWISE.
8. REPLACE GUTTERS AND ALL FACIA BOARD, PAINT. EXISTING DOWNSPOUTS TO REMAIN WHERE IN GOOD CONDITION, REPLACE WHERE NEEDED. ALL DOWNSPOUTS TO REMAIN TO BE SCRAPED AND RECIEVE NEW PAINT.
9. EXISTING INSULATION AT THE ATTIC FLOOR IS TO BE REPLACED WITH MINIMUM CODE REQUIRED INSULATION VALUE.
10. SALVAGE AND PROTECT EXISTING ROOF VENTS WHILE REROOFING.
11. PROVIDE DRAFTSTOPPING AT ATTIC (COMBUSTIBLE CONCEALED SPACE PER MBC SECTION 718). CONTINUOUS FIRE RATED PLYWOOD AND/ OR FIRE RATED 2X FOR DRAFTSTOPPING AT TOPS OF WALLS AT ANY OPENINGS AT ATTIC TO PREVENT MOVEMENT OF SMOKE FROM LOWER LEVELS INTO ATTIC. CONTRACTOR TO VERFIY REQUIRED LOCATIONS FOR DRAFTSTOPPING IN FIELD (RE: MECH)

ROOF PLAN | 1/8" = 1'-0" | 1

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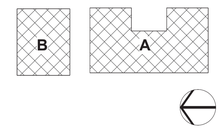
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

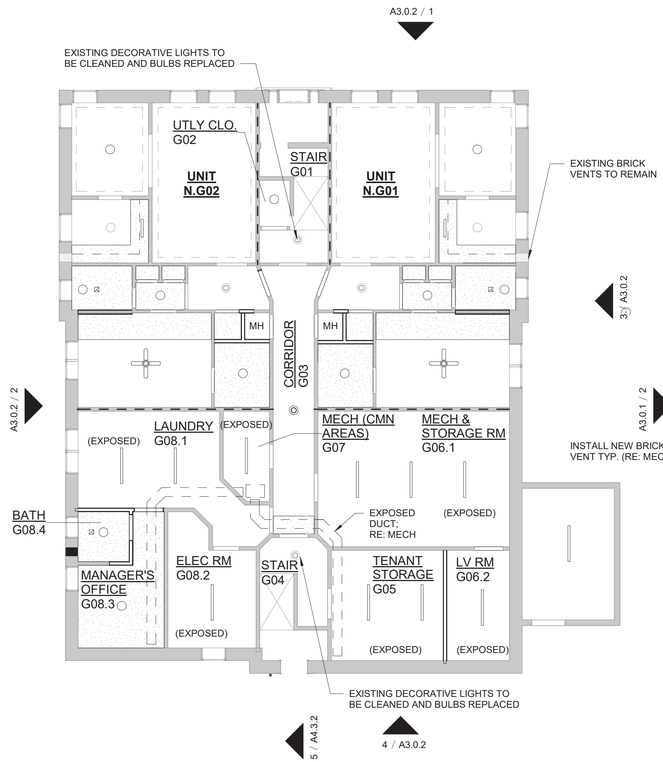
Scale: As indicated

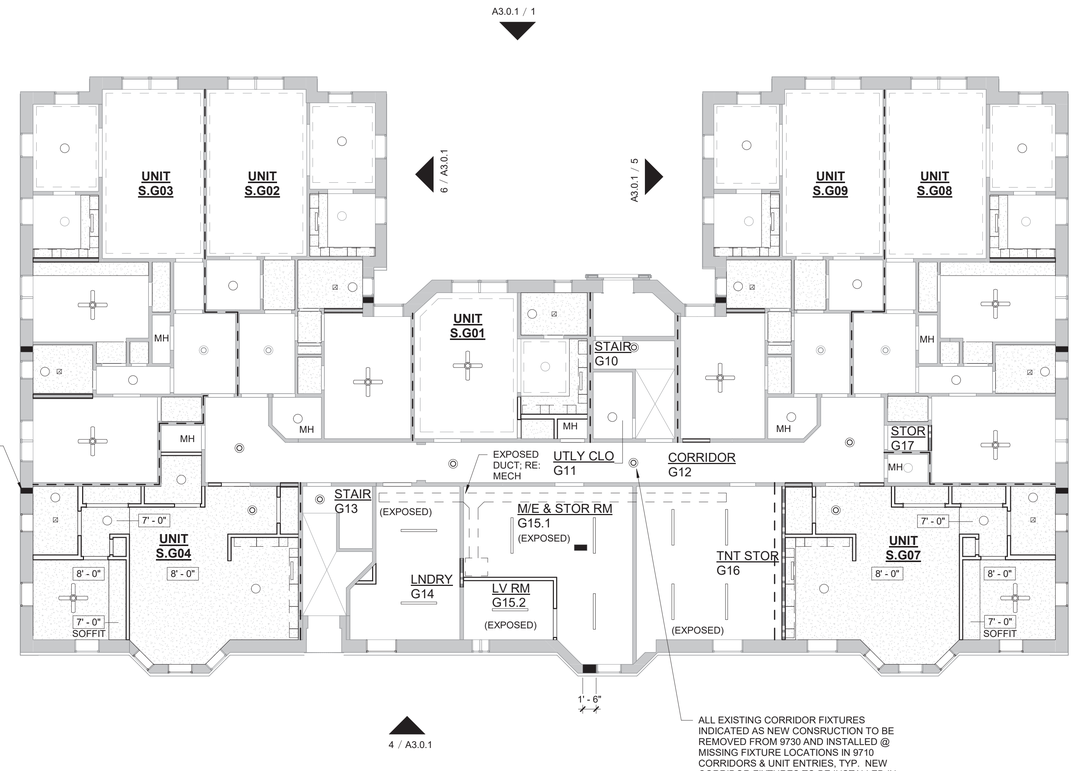
Drawing Title
ROOF PLAN

Drawing No:
A1.3

Sheet Size: 24" x 36"

ENLARGED RCP SCHEDULE	
UNIT N.G01	10B/A6.0.4
UNIT N.G02	SIM 10B/A6.0.4
UNIT S.G01	1B/A6.0.1
UNIT S.G02	2B/A6.0.1
UNIT S.G03	3B/A6.0.2
UNIT S.G04	G4B/A6.0.5
UNIT S.G07	G7B/A6.0.5
UNIT S.G08	SIM 3B/A6.0.2
UNIT S.G09	SIM 2B/A6.0.1





CEILING PLAN LEGEND

- EXISTING PLASTER CEILING
- NEW GYP. BOARD CEILING; AFF: 7'-0" UNO
- EXISTING CEILING COVES TO REMAIN
- UPPER CABINETS FOR REFERENCE
- UNIT DIVISIONS
- LINEAR SUSPENDED LIGHT
- LINEAR UNDERCABINET LIGHT
- SURFACE MOUNTED LIGHT
- DECORATIVE LIGHT
- EXISTING SURFACE MOUNTED LIGHT
- EXISTING DECORATIVE LIGHT
- CEILING FAN WITH LIGHT
- SD — CEILING MOUNTED SMOKE DETECTOR, RE: ELEC
- CEILING MOUNTED DUPLEX RECEPTACLE, RE: ELEC
- CEILING MOUNTED TELECOM, RE: ELEC
- EXIT LIGHTING W/ DIRECTIONAL ARROWS (SHADED AREAS INDICATE FACE)
- EXIT LIGHTING W/ DIRECTIONAL ARROWS (SHADED AREAS INDICATE FACE)
- EXIT LIGHTING (SHADED AREA INDICATES FACE)
- SUPPLY DIFFUSER
- RETURN DIFFUSER
- EXHAUST REGISTER
- MH — MECHANICAL CLOSET

CEILING PLAN GENERAL NOTES

1. REFER TO ARCHITECTURAL GENERAL INFORMATION SHEET FOR CEILING SYMBOLS AND ABBREVIATIONS
2. REFER TO MECHANICAL AND ELECTRICAL GENERAL INFORMATION SHEET FOR CEILING SYMBOLS AND ABBREVIATIONS
3. REFER TO FLOOR PLANS FOR PARTITION TYPE DESIGNATIONS
4. COORDINATE LOCATION OF ALL ELEMENTS WITHIN HARD CEILING WITH ARCHITECT PRIOR TO INSTALLATION
5. PROVIDE BLOCKING IN CEILING AS REQUIRED FOR DISPLAY FIXTURES, DECORATIVE LIGHT FIXTURES, CEILING HUNG EQUIPMENT, ETC.
6. CENTER ALL SMOKE DETECTORS WHEN LOCATED IN EXISTING PLASTER OR NEW GYP BD CORRIDOR CEILING
7. REPAIR/REPLACE IN KIND ALL WATER DAMAGED AREAS, INCLUDING PLASTER WALLS AND CEILINGS, VIF
8. EXISTING CEILINGS: PATCH AND REPAIR EXISTING CEILING TO MATCH ADJACENT EXISTING CONSTRUCTION AT COMPLETION OF OVERHEAD PLUMBING AND MECHANICAL WORK.
9. (SEE MECHANICAL DRAWINGS)
10. CEILING HEIGHTS ARE EXISTING, NEW SOFFITS & NEW BATHROOM, CLOSET, & UNIT HALLWAY CEILINGS ARE **[7'- 0"]** AFF UNLESS OTHERWISE NOTED
11. NEW SOFFITS ARE **[2'- 0"]** IN WIDTH UNLESS OTHERWISE NOTED
12. ALL EXISTING PLASTER CEILINGS, NEW CEILINGS, AND NEW GYPSUM BOARD SOFFITS TO TO RECEIVE PAINT **[PT-1]** ON HORIZONTAL AND VERTICAL SURFACE UNLESS OTHERWISE NOTED
13. NEW AUTOMATIC SPRINKLER SYSTEM THROUGHOUT BOTH BUILDINGS. REF: MECHANICAL SPECIFICATIONS FOR FIRE PROTECTION SYSTEM AND LOCATIONS. DOMED SPRINKLER HEAD COVERS TO MATCH SURFACE ON WHICH THEY LAY - COORDINATE WITH FIRE PROTECTION/ MECHANICAL
14. ANY DIFFUSERS LOCATED IN CEILINGS & WALLS TO MATCH COLOR OF THE SURFACE ON WHICH THEY LAY, SEE MECH DRAWINGS FOR DIFFUSERS

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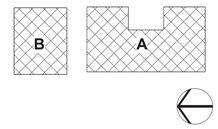
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: 1/8" = 1'-0"

Drawing Title

LEVEL 00 REFLECTED CEILING PLAN

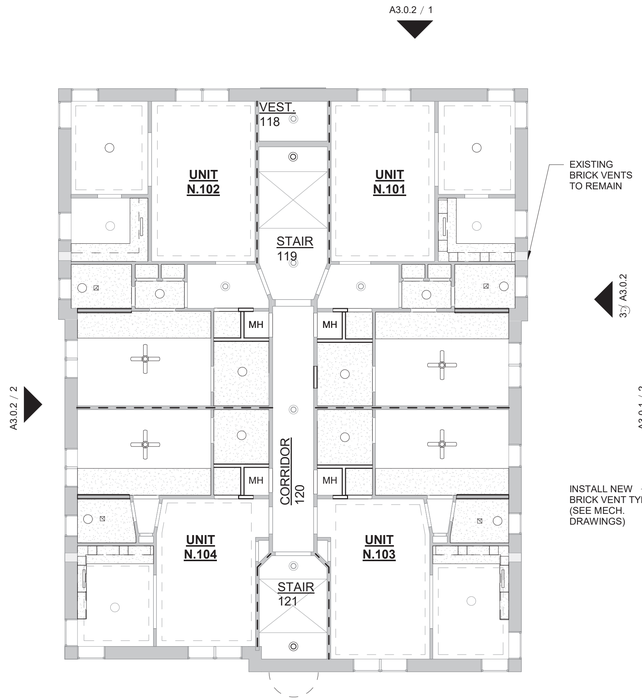
Drawing No:

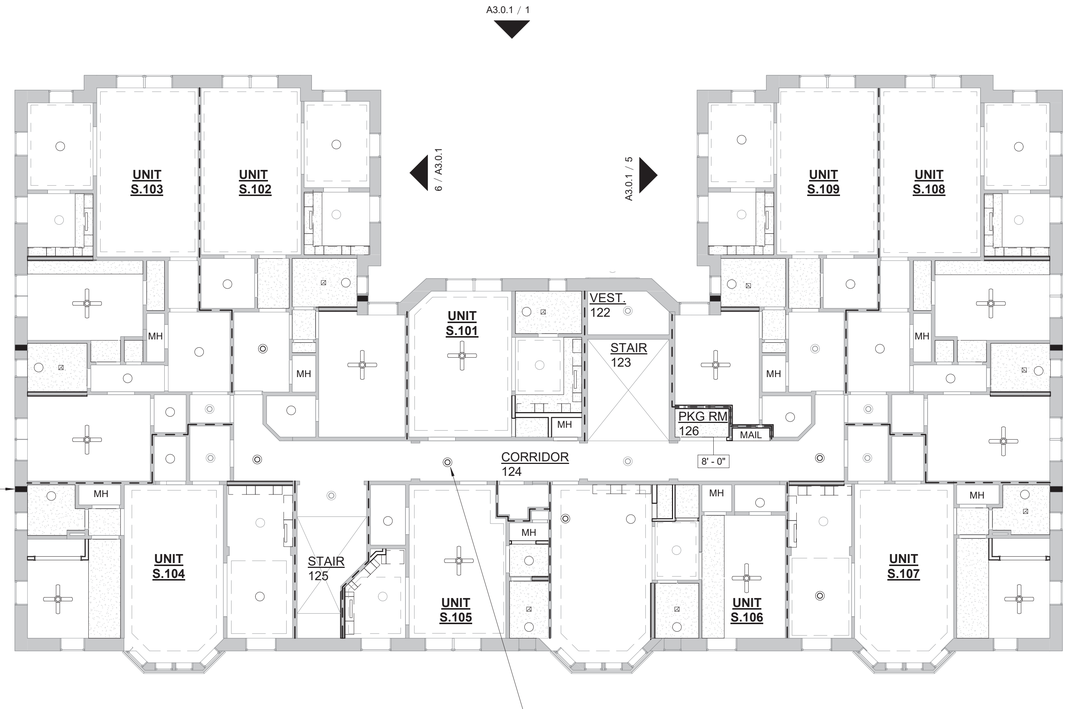
A2.0

LEVEL 00 RCP | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

ENLARGED RCP SCHEDULE			
UNIT N.101	10B/A6.0.4	UNIT S.104	4B/A6.0.2
UNIT N.102	SIM 10B/A6.0.4	UNIT S.105	5B/A6.0.3
UNIT N.103	13B/A6.0.4	UNIT S.106	6B/A6.0.3
UNIT N.104	SIM 13B/A6.0.4	UNIT S.107	SIM 4B/A6.0.2
UNIT S.101	1B/A6.0.1	UNIT S.108	SIM 3B/A6.0.2
UNIT S.102	2B/A6.0.1	UNIT S.109	SIM 2B/A6.0.1
UNIT S.103	3B/A6.0.2		





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- DECORATIVE LIGHT
- EXISTING SURFACE MOUNTED LIGHT
- EXISTING DECORATIVE LIGHT
- CEILING FAN WITH LIGHT
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- RETURN DIFFUSER
- EXHAUST REGISTER
- MH MECHANICAL CLOSET

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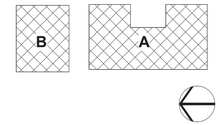
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: 1/8" = 1'-0"

Drawing Title

LEVEL 01 REFLECTED CEILING PLAN

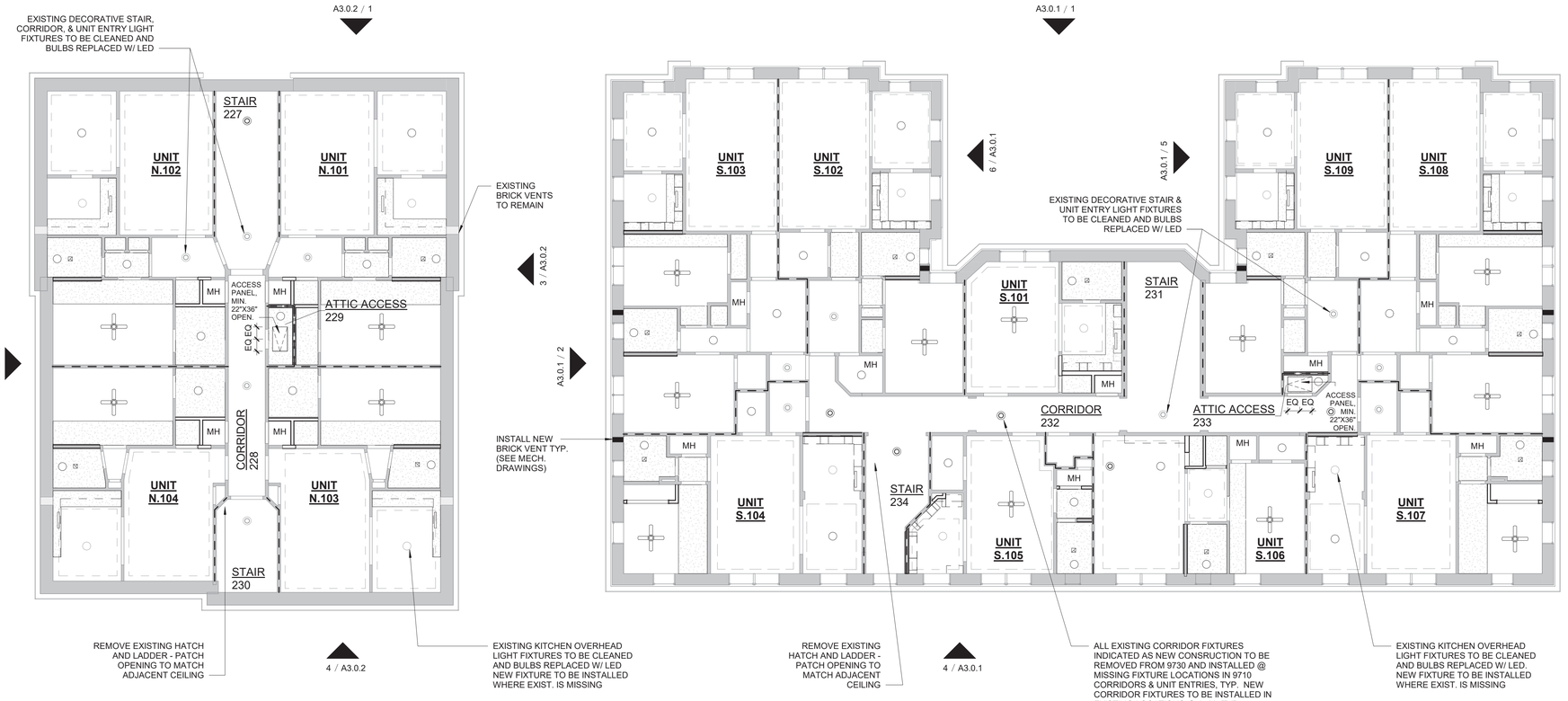
Drawing No:

A2.1

LEVEL 01 RCP | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"

ENLARGED PLAN SCHEDULE			
UNIT N.201	10B/A6.0.4	UNIT S.204	4B/A6.0.2
UNIT N.202	SIM 10B/A6.0.4	UNIT S.205	5B/A6.0.3
UNIT N.203	13B/A6.0.4	UNIT S.206	6B/A6.0.3
UNIT N.204	SIM 13B/A6.0.4	UNIT S.207	SIM 4B/A6.0.2
UNIT S.201	1B/A6.0.1	UNIT S.208	SIM 3B/A6.0.2
UNIT S.202	2B/A6.0.1	UNIT S.209	SIM 2B/A6.0.1
UNIT S.203	3B/A6.0.2		



CEILING PLAN LEGEND

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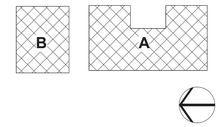
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO Approved By: INTOTO

Scale: 1/8" = 1'-0"

Drawing Title

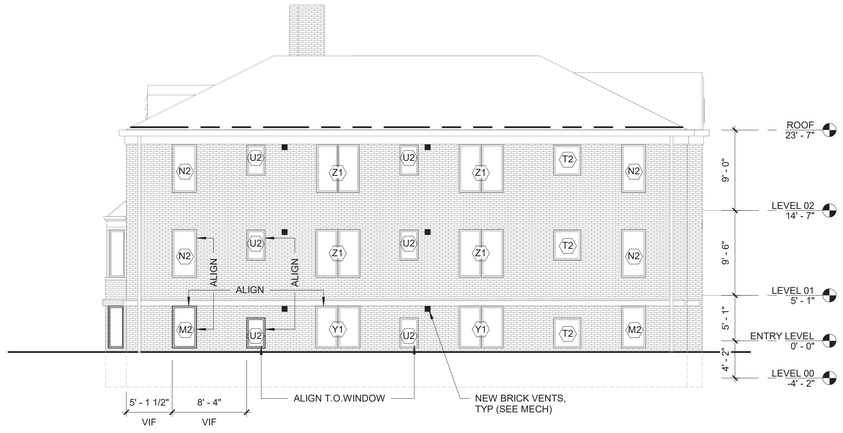
LEVEL 02 REFLECTED CEILING PLAN

Drawing No:

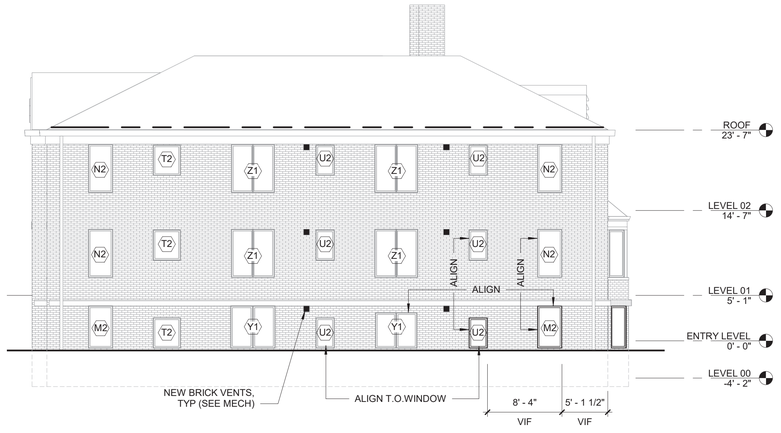
A2.2

LEVEL 02 RCP | 1/8" = 1'-0" | 1

Sheet Size: 24" x 36"



9730 SOUTH | 1/8" = 1'-0" | 3



9730 NORTH | 1/8" = 1'-0" | 2

ELEVATION LEGEND

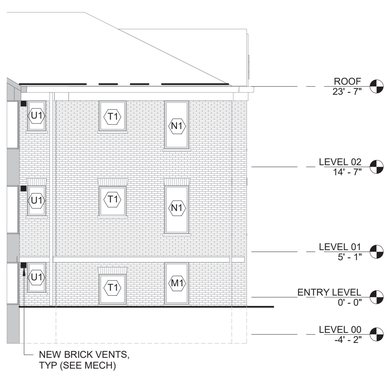
- (#) WINDOW TAG - SEE SHEET **A4.0.1** FOR WINDOW SCHEDULE
- SMARTVENT, EAVE INSTALLATION
- SMARTVENT, EAVE INSTALLATION

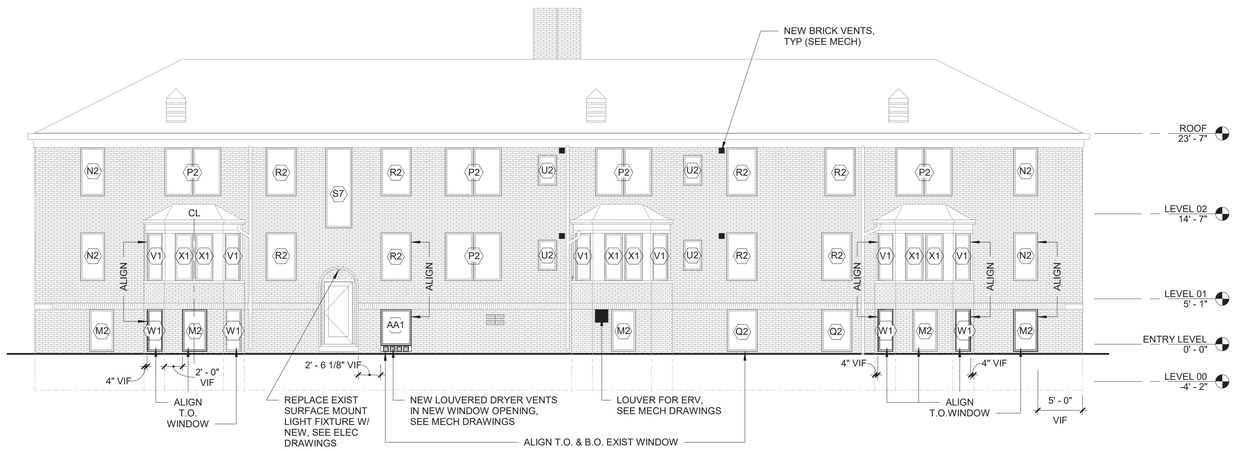
GENERAL NOTES

1. SEE WINDOW ELEVATIONS FOR MUTTIN PATTERN - SHEET **A4.0.2**
2. SEE DEMOLITION NOTES ON AD1 SHEETS
3. DOORS: ALL EXISTING EXTERIOR DOORS TO REMAIN AND TO RECIEVE NEW PAINT. ALL DOOR HARDWARE TO BE NEW / REPLACED.
4. WINDOWS: ALL EXTERIOR STORM WINDOWS TO BE REMOVED. REMOVE & REPLACE ALL WINDOWS UNO, SEE A4 SERIES
5. WALLS: CLEAN BRICK THROUGHOUT BOTH BUILDING EXTERIORS. REPOINT AND TUCK POINT AT LOCATIONS OF CRUMBLING, CRACKING, AND/OR HOLES IN MORTAR, INCLUDING AT CHIMINEY. NEW MORTAR TO MATCH EXISTING IN STRENGTH, COLOR, & PROFILE.
6. PAINT: ALL EXISTING PAINTED EXTERIOR TRIM, SIDING, ETC. TO RECEIVE NEW PAINT. REPAIR/REPLACE HISTORIC TRIM DETAILS AT FRONT ENTRY OF 9730 AND OTHER LOCATIONS AS REQUIRED BEFORE REPAINTING.
7. LIGHTING: FRONT ENTRY LIGHT AT 9730 TO BE REFURBISHED. BUILDING-MOUNTED LIGHTING TO BE REMOVED. ALL OTHER EXTERIOR LIGHTS TO BE REPLACED. REFER TO SITE PLAN FOR SITE LIGHTING AT PARKING LOT.
8. DOWNSPOUTS AND GUTTERS: EXISTING TO REMAIN, SCRAPE AND PAINT. REPLACE AND PAINT FASCIA BOARD .
9. CANOPIES: EXISTING CANOPY AT 9710 BACK ENTRY TO BE REMOVED AND REPLACED IN KIND; INSTALL NEW DOWNSPOUT AT CANOPY.
10. BRICK VENTS: INSTALL NEW BRICK VENTS IN EXISTING MASONRY WHERE INDICATED. SEE MECH DRAWINGS. PATCH/REPAIR EXISTING MASONRY AS NEEDED AS NEEDED AFTER INSTALLATION. COLOR OF BRICK VENTS TO MATCH "CLEANED" BRICK COLOR

MASONRY CLEANING NOTES:

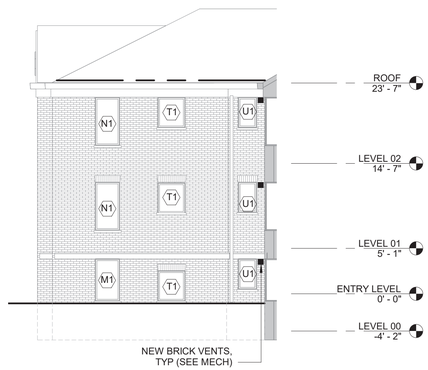
1. TO DETERMINE THE GENTLEST MEANS NECESSARY CONTRACTOR SHALL TEST THE CLEANING METHOD. BEGIN WITH 12" X12" AREAS, EXPAND TO 3'X3' AREAS. ALL TEST PATCH TO WEATHER FOR ONE MONTH.
2. START WITH LOW PRESSURE WATER (100 PSI OR BELOW). PRESSURE MAY BE INCREASED IF NECESSARY BUT PRESSURE MAY NOT EXCEED 400 PSI.
3. NON-IONIC DETERGENTS MAY BE USED IF NECESSARY.
4. ABRASIVE CLEANING, INCLUDING POWER WASHING AND WATER BLASTING, IS NOT ALLOWED.
5. CLEANING SHALL START AT THE BOTTOM OF THE WALL AND PROCEED TO THE TOP KEEPING ALL SURFACE BELOW THE AREA BEING CLEANED WET.

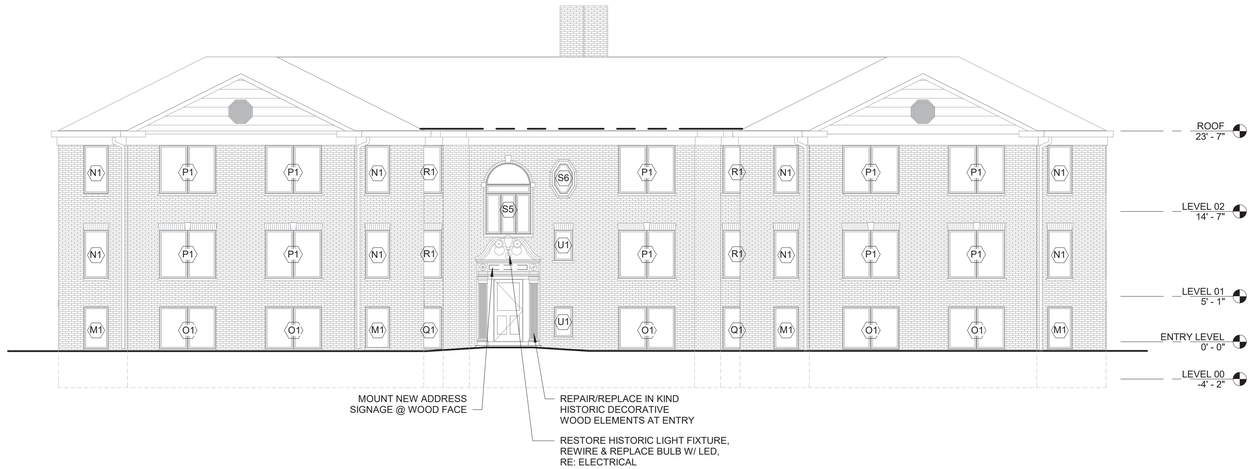




9730 SOUTH - ENTRY | 1/8" = 1'-0" | 6

9730 WEST | 1/8" = 1'-0" | 4





9730 NORTH - ENTRY | 1/8" = 1'-0" | 5

9730 EAST | 1/8" = 1'-0" | 1

Grandmont Rosedale Park Collective II

9710 - 9730 W Outer Dr. Detroit, MI 48223

INTOTO STUDIO

OWNER
GRPC 4 Limited Dividend Housing Association
Limited Partnership, a Michigan limited partnership
19800 Grand River
Detroit, MI 48223
313-387-4732 phone
313-387-5158 fax
www.grandmontrosedale.com

ARCHITECT
INTOTO STUDIO LLC
6505 Woodward Ave
Suite 200
Detroit, MI 48202
313-395-5030 phone
www.intotostudio.com

CIVIL ENGINEERING
PEA GROUP
45 W. Grand River Ave.
Suite 501
Detroit, MI 48226
313-769-5770 phone
www.peagroup.com

MEP ENGINEERING
MA ENGINEERING
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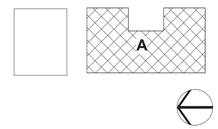
Suite 100
Birmingham, MI 48009
248-258-1610 phone
www.ma-engineering.com

STRUCTURAL ENGINEERING
RESURGET ENGINEERING
4219 Woodward Ave.
Suite 306
Detroit, MI 48201
313-315-3290 phone
www.resurget-engineering.com

Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

Scale: 1/8" = 1'-0"

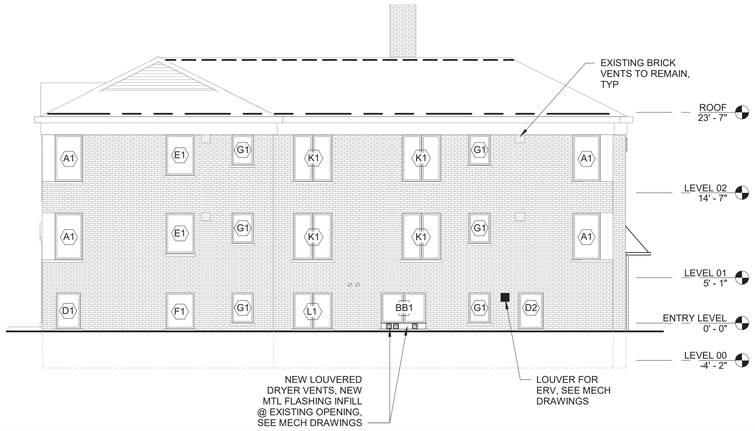
Drawing Title

EXTERIOR ELEVATIONS - 9730

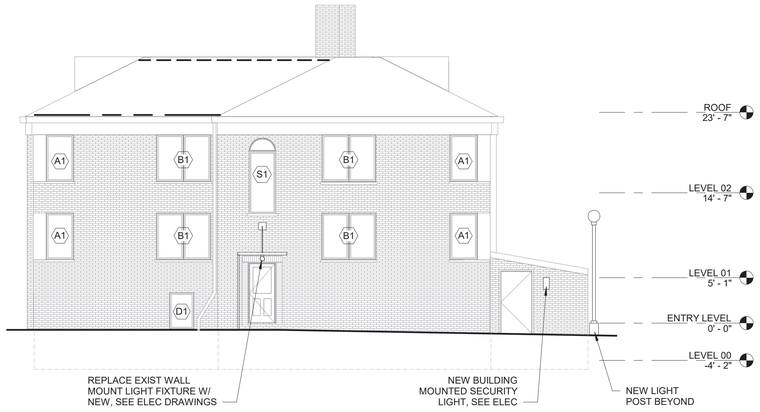
Drawing No:

A3.0.1

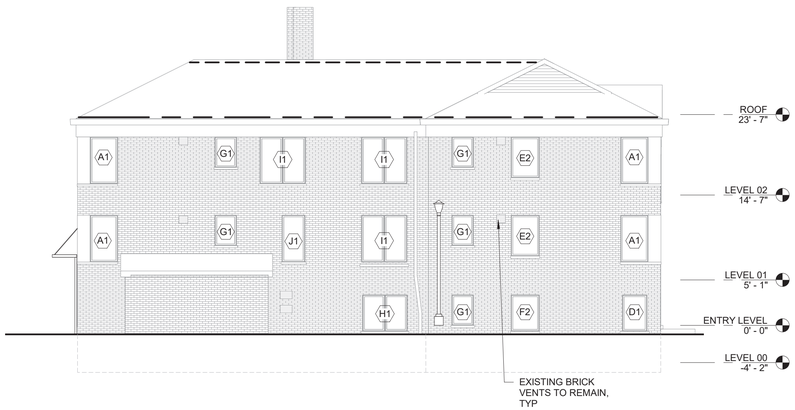
Sheet Size: 24" x 36"



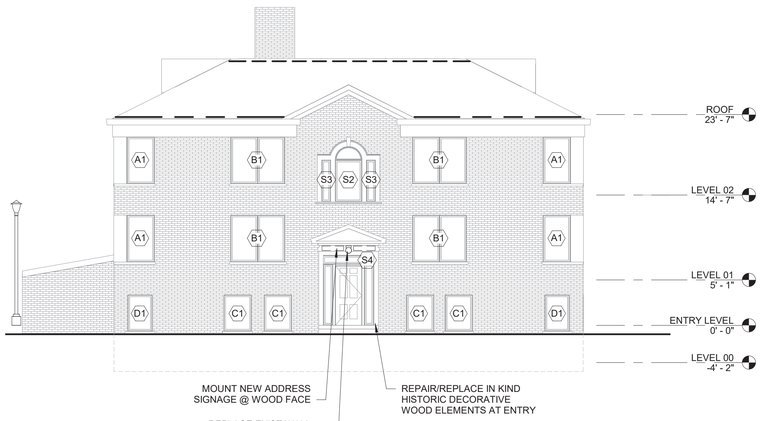
9710 NORTH | 1/8" = 1'-0" | 2



9710 WEST | 1/8" = 1'-0" | 4



9710 SOUTH | 1/8" = 1'-0" | 3



9710 EAST | 1/8" = 1'-0" | 1

ELEVATION LEGEND

- (#) WINDOW TAG - SEE SHEET **A4.0.1** FOR WINDOW SCHEDULE
- SMARTVENT, EAVE INSTALLATION
- SMARTVENT, EAVE INSTALLATION

GENERAL NOTES

1. SEE WINDOW ELEVATIONS FOR MUTTIN PATTERN - SHEET **A4.0.2**
2. SEE DEMOLITION NOTES ON AD1 SHEETS
3. DOORS: ALL EXISTING EXTERIOR DOORS TO REMAIN AND TO RECIEVE NEW PAINT. ALL DOOR HARDWARE TO BE NEW / REPLACED.
4. WINDOWS: ALL EXTERIOR STORM WINDOWS TO BE REMOVED. REMOVE & REPLACE ALL WINDOWS UNO, SEE A4 SERIES
5. WALLS: CLEAN BRICK THROUGHOUT BOTH BUILDING EXTERIORS. REPOINT AND TUCK POINT AT LOCATIONS OF CRUMBLING, CRACKING, AND/OR HOLES IN MORTAR, INCLUDING AT CHIMINEY. NEW MORTAR TO MATCH EXISTING IN STRENGTH, COLOR, & PROFILE.
6. PAINT: ALL EXISTING PAINTED EXTERIOR TRIM, SIDING, ETC. TO RECEIVE NEW PAINT. REPAIR/REPLACE HISTORIC TRIM DETAILS AT FRONT ENTRY OF 9730 AND OTHER LOCATIONS AS REQUIRED BEFORE REPAINTING.
7. LIGHTING: FRONT ENTRY LIGHT AT 9730 TO BE REFURBISHED. BUILDING-MOUNTED LIGHTING TO BE REMOVED. ALL OTHER EXTERIOR LIGHTS TO BE REPLACED. REFER TO SITE PLAN FOR SITE LIGHTING AT PARKING LOT.
8. DOWNSPOUTS AND GUTTERS: EXISTING TO REMAIN, SCRAPE AND PAINT. REPLACE AND PAINT FASCIA BOARD .
9. CANOPIES: EXISTING CANOPY AT 9710 BACK ENTRY TO BE REMOVED AND REPLACED IN KIND; INSTALL NEW DOWNSPOUT AT CANOPY.
10. BRICK VENTS: INSTALL NEW BRICK VENTS IN EXISTING MASONRY WHERE INDICATED. SEE MECH DRAWINGS. PATCH/REPAIR EXISTING MASONRY AS NEEDED AS NEEDED AFTER INSTALLATION. COLOR OF BRICK VENTS TO MATCH "CLEANED" BRICK COLOR

MASONRY CLEANING NOTES:

1. TO DETERMINE THE GENTLEST MEANS NECESSARY CONTRACTOR SHALL TEST THE CLEANING METHOD. BEGIN WITH 12" X12" AREAS, EXPAND TO 3'X3' AREAS. ALL TEST PATCH TO WEATHER FOR ONE MONTH.
2. START WITH LOW PRESSURE WATER (100 PSI OR BELOW). PRESSURE MAY BE INCREASED IF NECESSARY BUT PRESSURE MAY NOT EXCEED 400 PSI.
3. NON-IONIC DETERGENTS MAY BE USED IF NECESSARY.
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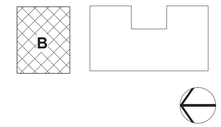
Key Plan



Registration Seal

No.	Date	Description
1	12/30/2021	PERMIT

Project Number: 20.005.02

Drawn By: INTOTO **Approved By:** INTOTO

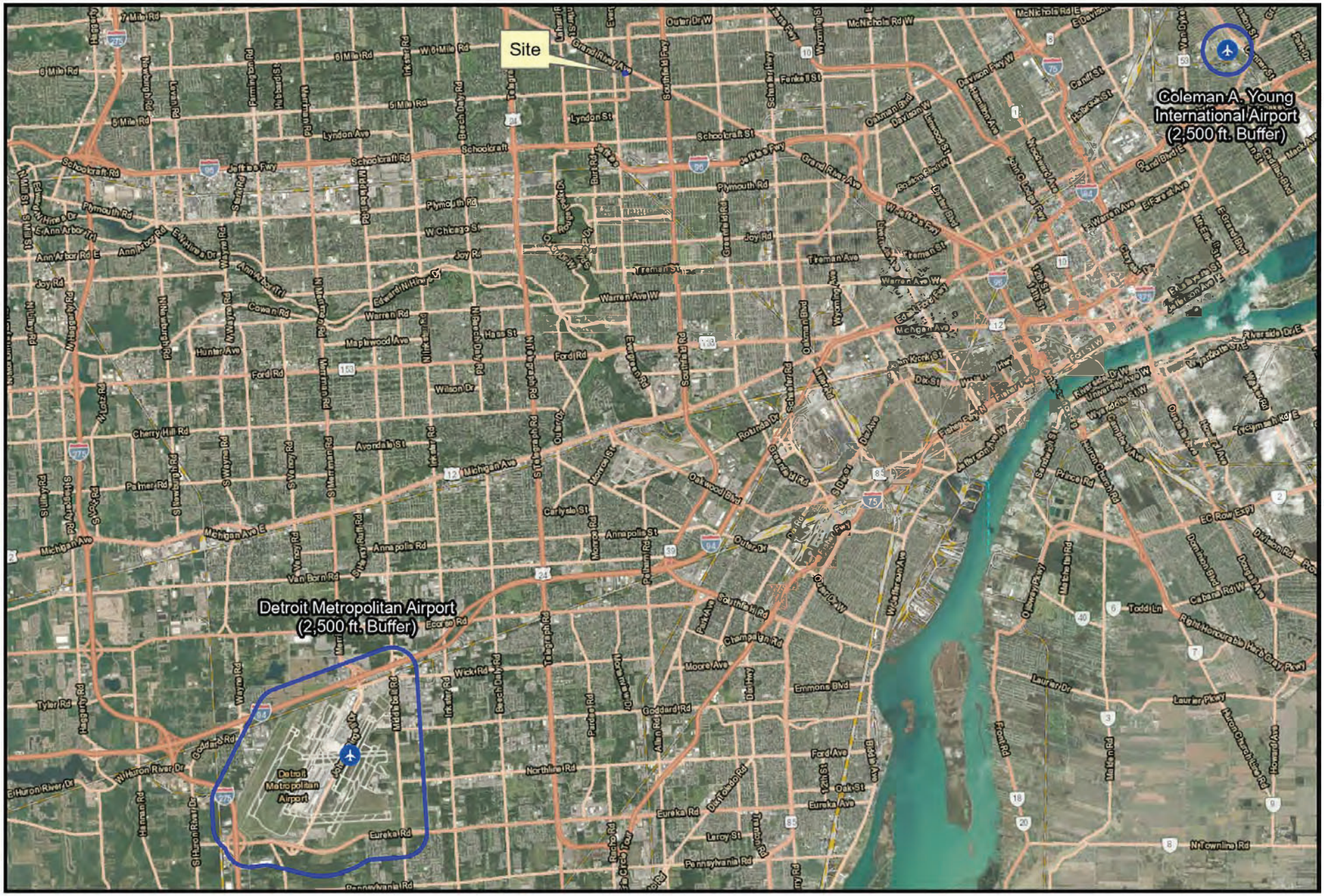
Scale: 1/8" = 1'-0"

Drawing Title

EXTERIOR ELEVATIONS - 9710

Drawing No:

A3.0.2



9710-9730 Outer Drive West

9710-9730 W. Outer Drive
Detroit, MI

0 1 2 4
Miles

N

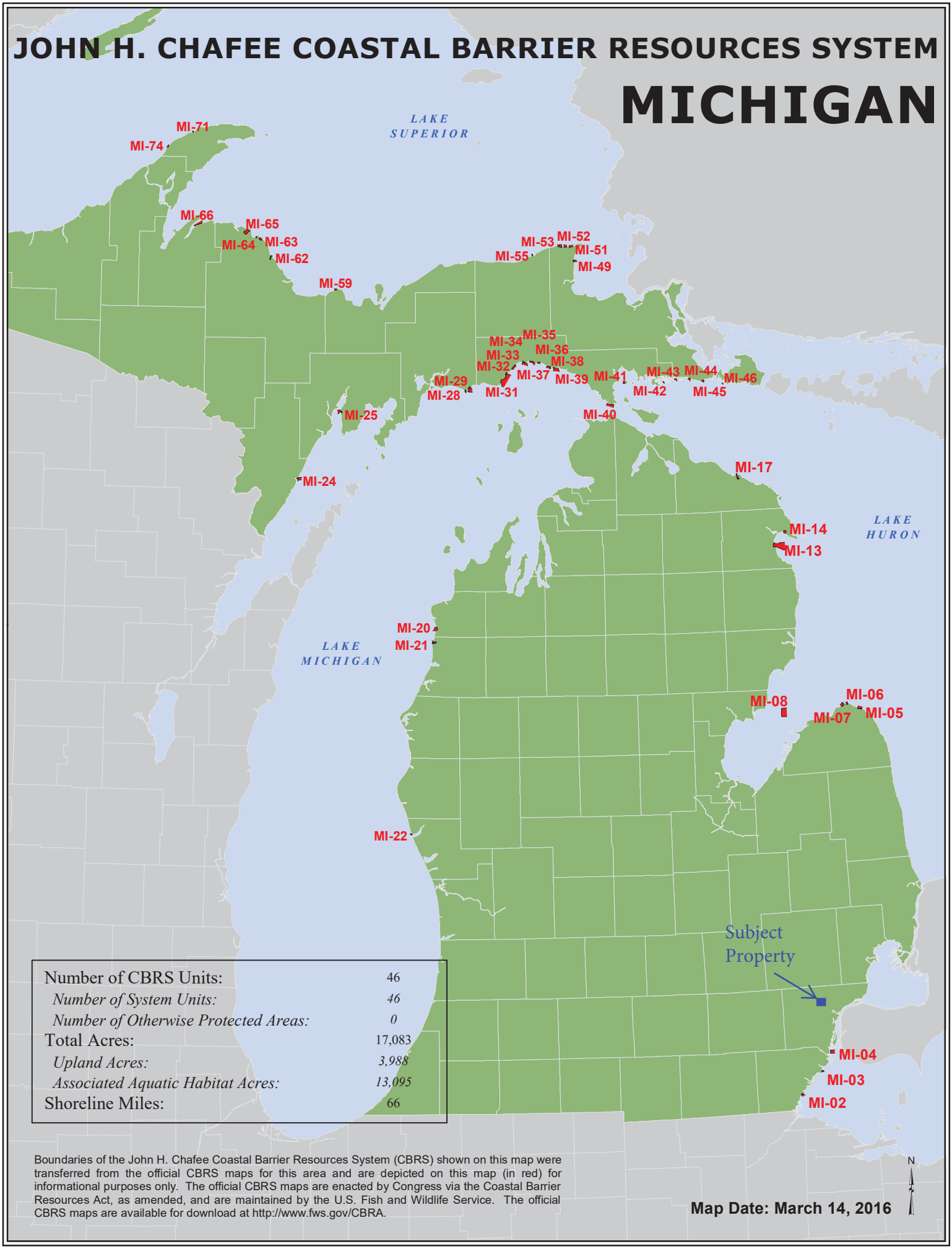
ASTI Environmental

Created for: Grandmont Rosedale Development Corporation
Created by: RMH, March 23, 2022, ASTI Project 1-11641

Airport Location Map

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

MICHIGAN



Number of CBRS Units:	46
Number of System Units:	*46*
Number of Otherwise Protected Areas:	*0*
Total Acres:	17,083
Upland Acres:	*3,988*
Associated Aquatic Habitat Acres:	*13,095*
Shoreline Miles:	66

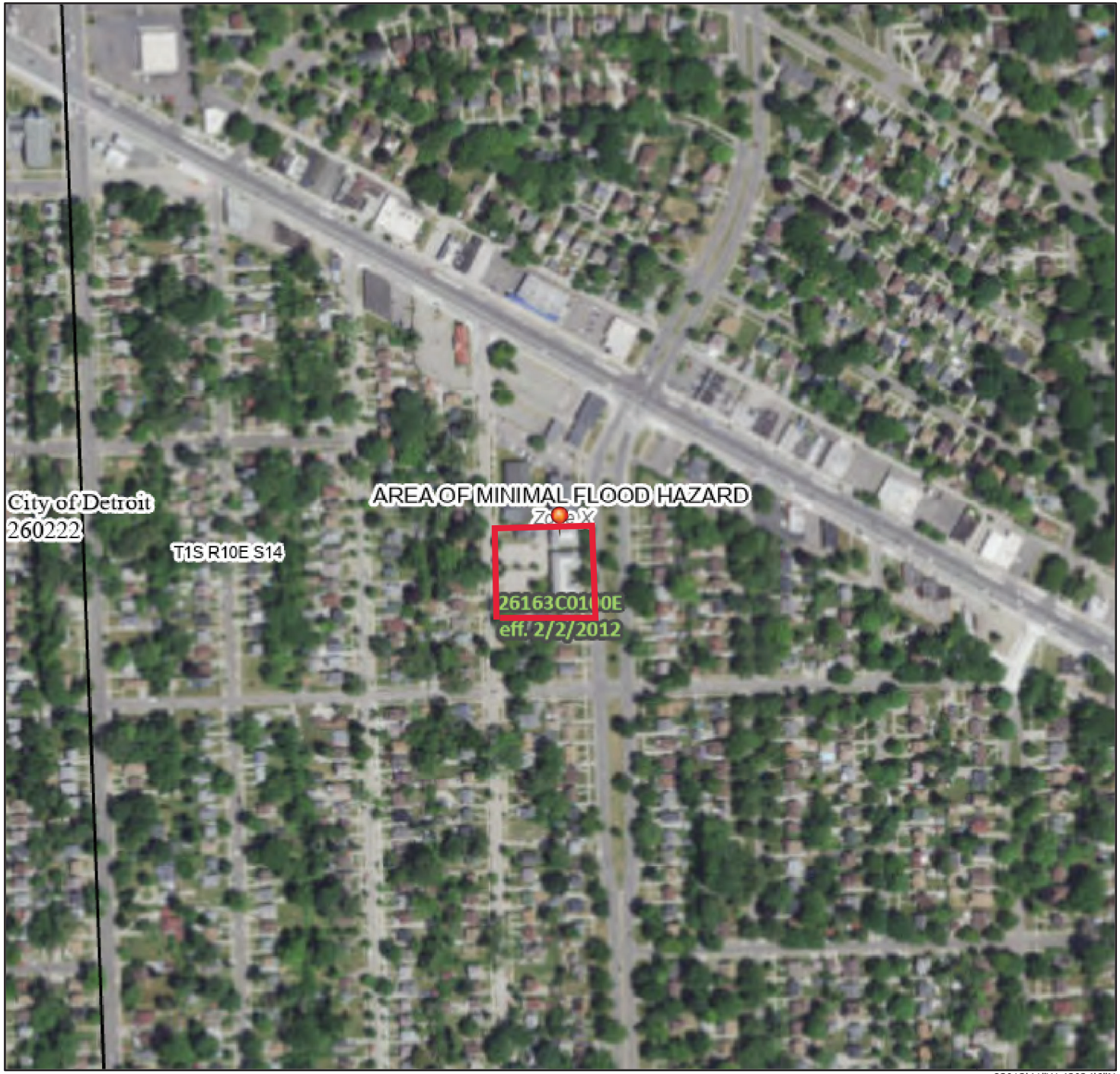
Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at http://www.fws.gov/CBRA.

Map Date: March 14, 2016

National Flood Hazard Layer FIRMette

FEMA

83°14'18"W 42°24'33"N



83°13'41"W 42°24'6"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

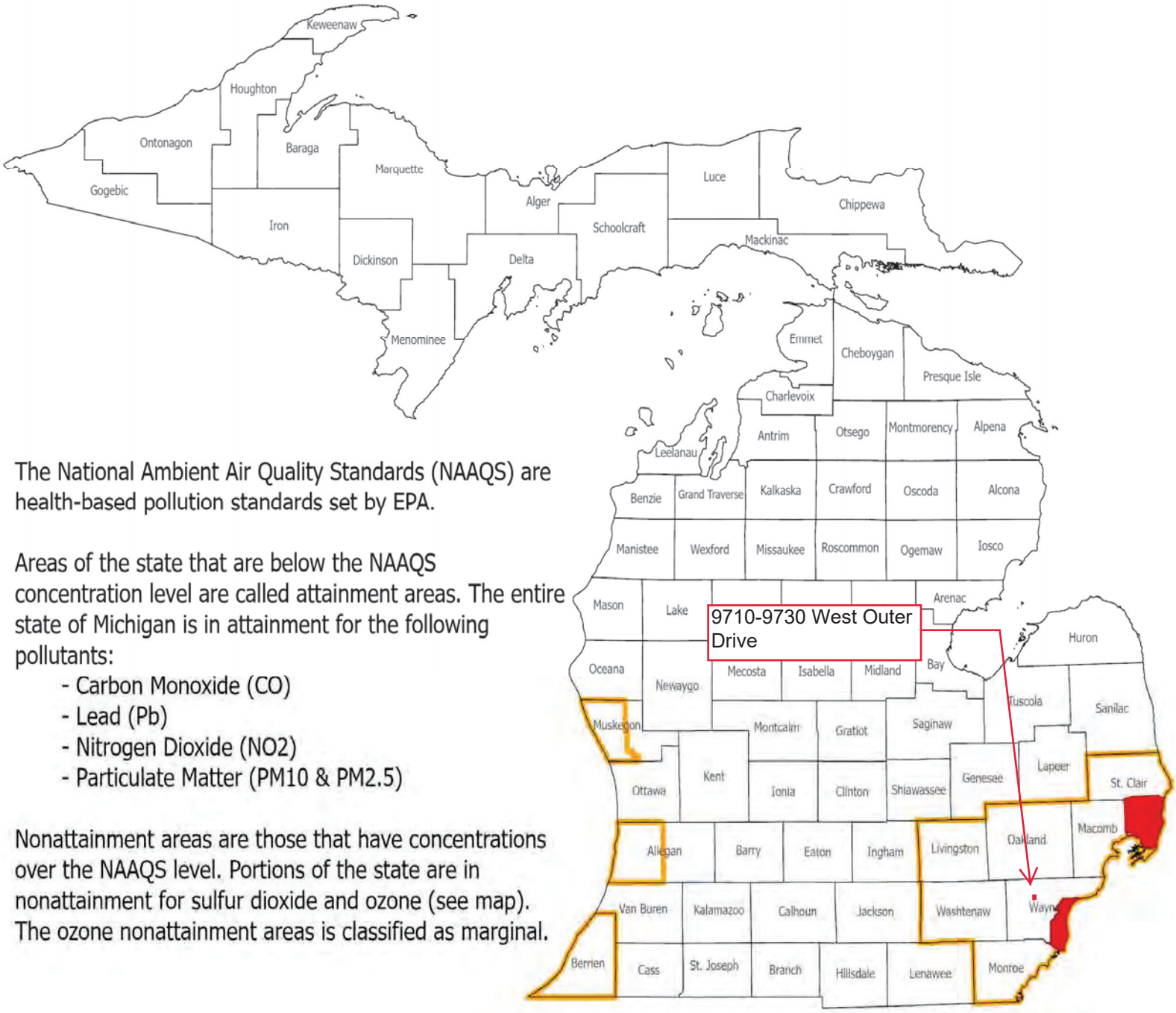
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/16/2022 at 3:50 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attainment Status for the National Ambient Air Quality Standards



The National Ambient Air Quality Standards (NAAQS) are health-based pollution standards set by EPA.

Areas of the state that are below the NAAQS concentration level are called attainment areas. The entire state of Michigan is in attainment for the following pollutants:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO2)
- Particulate Matter (PM10 & PM2.5)

Nonattainment areas are those that have concentrations over the NAAQS level. Portions of the state are in nonattainment for sulfur dioxide and ozone (see map). The ozone nonattainment areas is classified as marginal.

LEGEND

- Sulfur Dioxide Nonattainment Area
- Ozone Nonattainment Area

See Page 2 for close-up maps of partial county nonattainment areas.

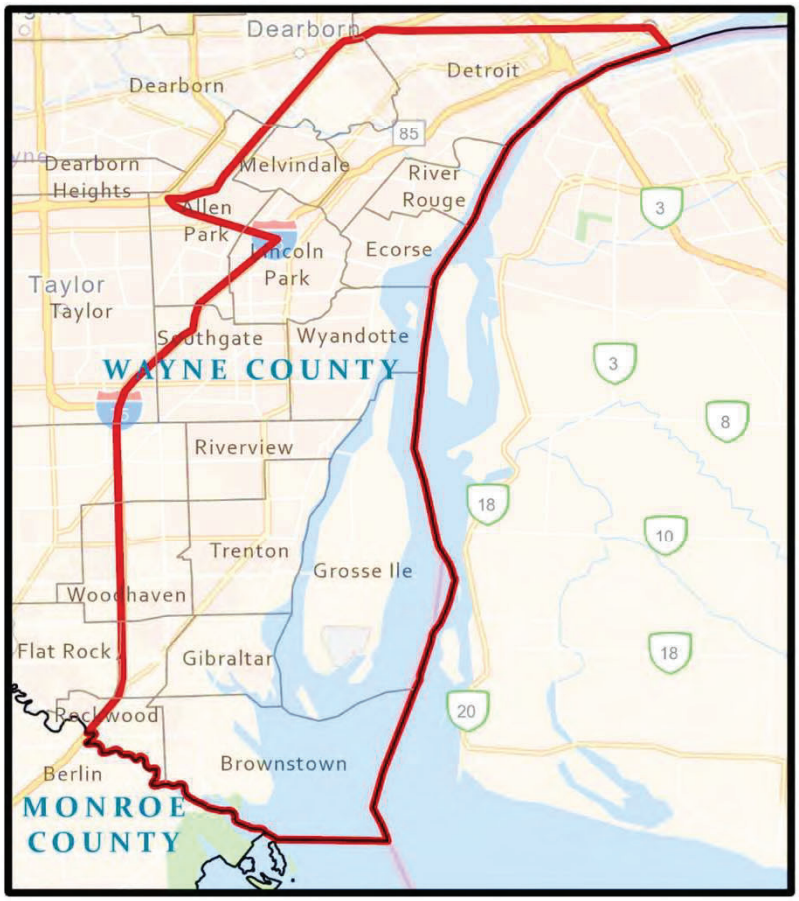
Updated February 5, 2021

Prepared by EGLE, Air Quality Division, State Implementation Plan Development Unit

Close-Up Maps of Partial County Nonattainment Areas

Sulfur Dioxide Nonattainment Areas

Wayne County Area



St. Clair County Area

Ozone Nonattainment Areas

Allegan County Area

Muskegon County Area

Updated February 5, 2021
Prepared by EGLE, Air Quality Division, State Implementation Plan Development Unit

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

March 23, 2022

Mr. Benjamin Buckley
ASTI Environmental
10448 Citation Drive
Brighton, Michigan 48116

Via Email Only

Dear Mr. Buckley:

Subject: West Outer Drive Rehabilitation Project, Detroit, MI

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has reviewed the federal regulations related to general conformity of projects with state implementation plans (SIP) for air quality. In particular, 40 Code of Federal Regulations (CFR) Section 93.150 et seq, which states that any federally funded project in a nonattainment or maintenance area must conform to the Clean Air Act requirements, including the State's SIP if they may constitute a significant new source of air pollution.

On August 3, 2018, Wayne County was designated nonattainment for the 2015 ozone standard; and thus, general conformity must be evaluated when completing construction projects of a given size and scope. EGLE is currently working to complete the required SIP submittal for this area; therefore, an alternative evaluation was completed to assess conformity. Specifically, EGLE considered the following information from the United States Environmental Protection Agency's (USEPA) general conformity guidance, which states, "historical analysis of similar actions can be used in cases where the proposed projects are similar in size and scope to previous projects."

EGLE has reviewed the West Outer Drive Rehabilitation project, proposed to be completed with federal grant monies, including the rehabilitation of the exterior and interior of two existing, vacant, historic apartment buildings. The scope of work includes window replacement, exterior repairs, and interior upgrades, new kitchens, and new bathroom fixtures. The existing parking lot at the rear of the property will have new lighting and new fencing. The walkways around the building are proposed to be replaced in their existing configuration. There is no ground disturbance associated with this project. The project location is 9710 through 9730 West Outer Drive in the city of Detroit. The project will be completed in 2023, and will likely take around 12 months to complete.

In reviewing the *"Air Quality and Greenhouse Gas Study: Uptown Orange Apartments in Orange, California,"* dated December 2012, prepared for KTGY Group, Inc. by UltraSystems Environmental, Inc., it was determined that emission levels for the project were below the de minimis levels for general conformity. The Uptown Orange

Apartments project and related parking structure construction was estimated to take 33 months to complete, would encompass an area of 5.57 acres, and included two four-story residential units with a total of 334 apartments, and two parking structures with a total of 494 and 679 parking stalls, respectively.

The size, scope, and duration of the West Outer Drive Rehabilitation project proposed for completion in Wayne County is much smaller in scale than the Uptown Orange Apartments project described above and should not exceed the de minimis levels included in the federal general conformity requirements. Therefore, it does not require a detailed conformity analysis.

If you have any questions regarding this matter, please contact me at 517-648-6314; BukowskiB@Michigan.gov; or EGLE, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760.

Sincerely,

Brianna Bukowski

Environmental Quality Analyst
Air Quality Division

cc: Mr. Michael Leslie, USEPA Region 5
Mr. Daniel Lince, Michigan State Housing Development Authority
Ms. Penny Dwoinen, City of Detroit
Ms. Becki Kenderes, Grandmont Rosedale Development Corporation

Wayne County
Grosse Point Township, Grosse Point Woods, Grosse Point Farms
Grosse Point, Grosse Point Park, and Detroit, T1S R14E
Detroit, T1S R14E, T2S R13E, andT2S R12E
River Rouge, T2S R11E

The heavy red line is the ***Coastal Zone Management Boundary***
The red hatched area is the ***Coastal Zone Management Area***.

Environmental Consulting & Technology, Inc.
1155 Brewery Park Blvd., Suite 115, Detroit, Michigan 48207

ASBESTOS SURVEY

For
Grandmont Rosedale Development Corporation

of the Property located at
9710 and 9730 West Outer Drive, Detroit, Michigan 48223

November 18, 2020

ECT No. 200532-0200

Signature(s) of Environmental Professional(s)

The dual signatory process is an integral part of Environmental Consulting & Technology, Inc.'s (ECT's) Document Review Policy No. 9.03. All ECT documents undergo technical/peer review prior to dispatching these documents to any outside entity.

The environmental assessment described herein was conducted by the undersigned employees of ECT. ECT's investigation consisted solely of the activities described in the Introduction of this report, and in accordance with the Terms and Conditions of the Standard Consulting Services Agreement signed prior to initiation of the assessment, as applicable.

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professionals as defined in §312.10 of 40 C.F.R. 312. ECT staff conducting the on-site survey, have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

This document has been authored and reviewed by the following employees:

Maura Gibbons	Michael T. Hebert
Author	Peer Review
	
Signature	Signature
November 16, 2020	November 17, 2020
Date	Date

Table of Contents

FIGURES

APPENDICES

List of Acronyms

ACM	Asbestos-Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
ASTM	American Society for Testing and Materials
ECT	Environmental Consulting & Technology, Inc.
EPA	Environmental Protection Agency
GPR	Ground Penetrating Radar
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations
LARA	Michigan Department of Labor and Regulatory Affairs
NELAP	National Environmental Laboratory Accreditation Program
NESHAP	National Emission Standards for Hazardous Air Pollutants
NREPA	Natural Resources and Environmental Protection Act
OSHA	Occupational Health and Safety Administration
PLM	Polarized Light Microscopy
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
SAP	Sampling and Analysis Plan
TEM	Transmissive Electron Microscopy
TSI	Thermal System Insulation

Definition of Terms

The terms/abbreviations used herein are compliant with definitions referenced by the U. S. EPA publication entitled, *"Asbestos Hazard Emergency Response Act"*.

"Asbestos" includes the minerals, chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite or any of these minerals that have been chemically treated and/or altered.

"Asbestos-Containing Material (ACM)" means any material containing more than 1% asbestos by weight.

"Asbestos-Containing Building Material (ACBM)" refers to surfacing, thermal system insulation, or miscellaneous building materials that are composed of asbestos of any type and in an amount greater than 1% by weight.

"Presumed Asbestos-Containing Building Material (PACM)" means thermal systems insulation and surfacing material found in buildings constructed before 1980.

"Functional Area" means a room, group of rooms, or homogeneous materials designated by a person accredited to perform inspections, prepare management plans, design abatement projects, or conduct response actions.

1.0 Introduction

Environmental Consulting & Technology, Inc. (ECT) was retained by Grandmont Rosedale Development Corporation (Client) to perform an Asbestos Survey of the two apartment buildings (referred to as the Buildings) located at 9710 and 9730 West Outer Drive, in the City of Detroit, Wayne County, Michigan (referred to as the Subject Property). The Site Location Map is provided as **Figure 1**.

The Building addressed as 9710 West Outer Drive (referred to as 9710 Building) contains approximately 9,450 square feet of floor space and contains 10 apartment units. The Building addressed as 9730 West Outer Drive (referred to as 9730 Building) contains approximately 19,086 square feet of floor space and contains 23 apartment units.

1.1 Detailed Scope of Services

ECT provided qualified labor, equipment and materials necessary to perform an Asbestos Survey of the Buildings in conformance with ECT's Standard Operating Procedures and applicable industry standards. During the inspection and assessment efforts, ECT personnel identified, inventoried, and quantified all suspected asbestos-containing materials (ACMs) associated with the Subject Property that would require abatement or special handling prior to renovation. Where prudent, physical samples of construction media suspected of containing a hazardous material (asbestos) were sampled and analyzed.

During the sampling activities, the presumed bulk asbestos samples were collected in general accordance with Asbestos Hazard Emergency Response Act (AHERA) guidelines requiring that the suspect materials be identified, located and documented, and that friable suspect materials be assessed and classified for friability and damage. Homogeneous areas were delineated and sampled during the inspection, as appropriate. Functional spaces were also identified for purposes of assessing all suspect materials and thermal system insulation (TSI). A physical assessment of friable and non-friable suspect materials was also performed.

All asbestos samples collected were submitted with chain-of-custody documentation to Fibertec Industrial Hygiene Services, Inc. (Fibertec), an analytical laboratory that is an accredited National Environmental Laboratory Accreditation Program (NVLAP) laboratory. The asbestos samples were analyzed by the Polarized Light Microscopy (PLM) method. Current Environmental Protection Agency (EPA) guidelines specify that when the initial laboratory analysis of materials detect the presence of asbestos in a quantity between one percent and less than ten percent, a verification analysis using the point counting analytical method may be considered. If the option is not exercised, the material in question will be considered as ACM.

1.2 Limitations and Exceptions

The information summarized herein is provided to the Client for their general use and distribution. ECT has performed this Asbestos Survey in a professional manner using that degree of skill and care exercised for similar projects, under similar conditions, by reputable and competent environmental consultants. Except as set forth in this report, ECT has made no independent investigation as to the accuracy or completeness of the information derived from secondary sources and has assumed that such information was accurate and

complete. As such, ECT shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the evaluation was performed.

The following rooms were occupied during the inspection, thus, were not accessible. Therefore, the occupied apartment units should be assessed prior to any redevelopment activities:

- 9710 Building: Apartment Unit G1
- 9710 Building: Apartment Unit G2
- 9730 Building: Apartment Unit 109
- 9730 Building: Apartment Unit 202

1.3 Special Notice

Pursuant to Michigan statutes, and specifically Part 305, the "Asbestos for General Industry Standard" and Part 602, the "Asbestos Standards for Construction", both standards require building owners/operators to conduct a thorough asbestos building survey if structures were constructed prior to 1981. This survey must identify the presence, location, and quantity of ACM and/or presumed asbestos-containing material (PACM) within the Buildings. Building materials presumed to contain asbestos include TSI (e.g., applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain) and surfacing material (e.g., sprayed, troweled-on, or otherwise applied to surfaces for acoustical, fireproofing, and/or other purposes). Contractors can only rebut the designation of a PACM by providing material sampling and laboratory analysis performed in accordance with Part 602, 1926. 1101 (k)(5).

2.0 Site Description

2.1 Location and Legal Description

The Subject Property is situated along the west side of West Outer Drive, between Midland Street and Grand River Avenue, in the City of Detroit, Wayne County, Michigan. Comprised of two parcels, including the eastern portion of a larger, parent parcel (#22125672.002L) and a separate whole parcel (#22125673.001), the Subject Property contains approximately 0.76 acres of land. Provided by the City of Detroit's online property records, the legal descriptions for the parcels are below:

9710 West Outer Drive - Parcel #22125672.002L: "W OUTER DRIVE N 66 FT 50 EXCEPT OUTER DRIVE AS WD EDWARD J MINOCKS SUB L28 P94 PLATS, W C R 22/449 66 X 203.06 A."

9730 West Outer Drive - Parcel #22125673.001: "W OUTER DRIVE S 66 FT 50 N 66 FT 51 EXC OUTER DRIVE AS WD EDWARD J MINOCKS SUB L28 P94 PLATS, W C R 22/449 132 X 202.78 A."

2.2 Property Description

The Subject Property is part of the Historic Rosedale Park District, located within the western portion of the City of Detroit. The surrounding area of the Subject Property is comprised predominantly of residential development, both single family residential structures and multi-tenant buildings.

2.3 General Construction

The Buildings are multi-tenant apartment structures that each contain a ground floor, two stories, and an attic. The Buildings appear to be generally constructed with homogenous building materials. The 9710 Building contains approximately 9,450 square feet of floor space and contains 10 apartment units. The 9730 Building contains approximately 19,086 square feet of floor space and contains 23 apartment units. Based on information provided by the landowner (Mr. Stephen Lange), the Buildings were constructed in 1939 and 1940.

Prior to initiating the inspection, ECT submitted a public record request through the City of Detroit Law Department to review building department records associated with the Subject Property. However, the City of Detroit Law Department had not responded to the request prior to the sampling activities.

In addition, ECT reviewed parcel assessment records provided by the City of Detroit's online property records. However, the parcel assessment record did not provide any information regarding the Buildings construction materials. No other documentation of the Subject Property was available for review prior to the inspection activities.

2.3.1 Exterior

The exterior walls of the Buildings are predominantly constructed with a brick façade, and all windows are constructed with wood frames and/or metal casements. Each Building contains two different roof types. An

angled roof with asphalt shingles covers the perimeters of the Buildings, and a flat roof with a white vinyl covering encompasses the central areas of the roofs.

2.3.2 Interior

Two different homogenous areas were identified throughout the Buildings: 1) utility rooms and 2) apartment areas. ECT further identified functional spaces by separate floor levels and designated room areas.

The utility rooms (including the electric, laundry, boiler, and locker rooms) are located within the ground floor of each Building. The utility rooms are constructed primarily with concrete block walls and concrete flooring. Plaster wall board is also located intermittently throughout the walls and ceilings of the utility rooms. Drywall was also observed in the laundry room of the 9710 Building, only. TSI in the form of Aircell pipe insulation and Magnesia/Magnesite pipe joints were observed in all utility rooms. In addition, TSI duct wrap was observed in the 9710 Building, only.

The apartment areas include the hallways and apartment units within the ground, first, and second floors. The apartment areas are predominantly constructed with plaster walls and ceilings, carpet and/or hardwood flooring, and vinyl floor covering at the kitchen areas. ECT observed 19 different variations of vinyl floor coverings throughout the kitchen apartment units. In addition, the main entrances and bathrooms are constructed with ceramic tile walls and flooring. TSI in the form of Aircell pipe insulation, Magnesia/Magnesite pipe joints, and duct wrap was observed within the ground floor hallway of the 9710 Building, and Aircell pipe insulation was observed within the kitchen wall of Room 203 of the 9710 Building. No other TSI was observed within the apartment areas.

The attics of the Buildings are constructed with wood frames and pink fiberglass insulation. White fibrous insulation was observed below the pink fiberglass layer.

2.4 Physical Condition of Building

Both Buildings are structurally sound. However, occasional areas of the shingled roofs appeared in poor condition at the time of the inspection.

In addition, numerous areas of the interior plaster (both utility room and apartment plasters) appeared damaged at the time of the inspection. Some areas of the plaster appeared to have been manually removed, and some areas of the plaster had evidence of water damage. However, most of the plaster throughout the Buildings appeared in good condition.

The TSI observed in the Buildings appeared mostly in good condition. However, it appeared that the TSI had been partially abated, as the pipe wrap was intermittently located along the pipes. Therefore, the ends of occasional pipe wraps are currently exposed.

3.0 Sampling Activities

The Buildings were inspected and surveyed on September 1 and 9, 2020. Both inspections were conducted by Ms. Maura Gibbons, who is accredited by the State of Michigan as an Asbestos Building Inspector, Accreditation No. A51771. Refer to **Appendix A**. The Site Photographs are provided as **Appendix B**.

ECT collected samples from the Buildings for asbestos analyses based upon the following: matrix, age of the material, and/or to confirm if the building material(s) contained asbestos above 1%. The samples were relinquished to Fibertec, a NVLAP laboratory, for third party analysis of asbestos pursuant to U.S. EPA Method 600/R-93/116 using the PLM method. All samples and all layers were to be analyzed until a group was defined as supporting asbestos above 1%. In total, 140 samples were collected, which were converted to 266 layers analyzed. The locations of the exterior samples are depicted on **Figure 2**, and the locations of the interior samples are depicted on Figure **3**.

3.1 Exterior

Below is a summary of the exterior building materials that were collected for asbestos analysis:

Sample ID	Matrix Description	Visual Characteristics	Location
RAS -1 through -7	Roof Asphalt Shingles	Black/Gray 2D Shingles With Underlying Black Felt	Angled Areas of Roofs
FLR -1 through -5	Flat Roof Covering	White Covering; Black Felt; and Tan Fibrous Insulation	Flat Areas of Roofs
BWC -1 through -5	Black Window Caulk	Black	Ground Floor Windows
WWC -1 through -5	White Window Caulk	White	First & Second Floor Windows
WPG -1 through -7	Windowpane Glaze	White/Gray	All Windows

3.2 Interior

The TSI samples (10DW, 10PJ, 10PW, etc.) were collected for confirmation of the presence of asbestos, thus, only two samples were collected per sample group. In addition, five fire doors were defined as presumed ACM; no samples were collected. Below is a summary of the interior building materials that were collected for asbestos analysis:

Sample ID	Matrix Description	Visual Characteristics	Location
AIN -1 through -9	Attic Insulation	White Fibrous (below Pink Fiberglass)	Attics
10DW -1 through -2	9710 Building Duct Wrap	White Fibrous Covering	Utility Rooms (Ground Floor)
10PJ -1 through -2	9710 Building Pipe Joints	White Fibrous (Magnesia)	Utility Rooms (Ground Floor)
10PW -1 through -2	9710 Building Pipe Wrap	White Fibrous (Air Cell)	Utility Rooms (Ground Floor) & Room 203 Kitchen
30PJ -1 through -2	9730 Building Pipe Joints	White Fibrous (Magnesia)	Utility Rooms (Ground Floor)
30PW -1 through -2	9730 Building Pipe Wrap	White Fibrous (Air Cell)	Utility Rooms (Ground Floor)
UPL -1 through -7	Utility Room Plaster	Gray: ¼" Thickness	Utility Rooms (Ground Floor)
APL -1 through -9	Apartment Plaster	White: ½" Thickness	Apartment Units & Hallways
DRW -1 through -3	Drywall	White: ½" Thickness	9710 Building: Laundry Room
CWT -1 through -3	Ceramic Tile & Grout	Orange/Brown and Teal	Entrance Areas: Walls and Base Cover
MS -1 through -5	Mastic of Former Floor Tiles	Black	Ground Floors
ST -1 through -3	Stair Tread Coverings	Brown Fibrous Felt	Back Staircases
#FC -1 through -3	Vinyl Floor Covering/Mastic	*See Table Below*	*See Table Below*

Below is a description of the various vinyl floor coverings of the Buildings:

#FC	Visual Characteristics	Location
1FC	Beige Sand Pattern	9730 Building Room 104: Kitchen
2FC	Orange Floral Square Border	9730 Building Room 104: Cupboards
3FC	Small Stone Pattern	9730 Building Room 103: Cupboards & 9710 Building Room 203: Kitchen & Cupboards (below 16FC)
4FC	Brown Diamond Pattern	9730 Building Room 105: Kitchen 9730 Building Room 203: Kitchen
5FC	Blue Vine Border	9730 Building Room 102: Kitchen
6FC	Brick Tile Diamond Pattern	9730 Building Room 107: Kitchen & 9710 Building Room 102: Cupboards
7FC	Off-White Squares	9730 Building Room 107: Cupboards
8FC	Blue Diamond Pattern	9730 Building Room 204: Kitchen
9FC	White Speckled Squares	9730 Building Room 108: Kitchen
10FC	Black Diamond Pattern	9730 Building Room 205: Kitchen 9730 Building Room 207: Kitchen
11FC	Orange/Teal Border	9730 Building Room 209: Kitchen
12FC	Orange Hexagon Pattern	9730 Building Room 208: Kitchen
13FC	White Square Borders	9730 Building Room 205: Closet, 9710 Building Room: 102 Cupboards, & 9710 Building Room 104: Kitchen & Cupboards
14FC	Beige Speckled Squares	9730 Building Room 206: Kitchen & 9730 Building Room 208: Cupboards
15FC	Orange/Brown Lines Pattern	9730 Building Room 206: Cupboards
16FC	Blue Floral Pattern	9710 Building Room 203: Kitchen & Cupboards
17FC	Light Teal Stripes Pattern	9710 Building Room 204: Kitchen
18FC	Thin Gray Square Borders	9710 Building Room 201: Kitchen & Cupboards
19FC	Thick Gray Square Borders	9710 Building Room 103: Kitchen

4.0 Analytical Results

The Laboratory Analytical Report is provided as **Appendix C** and summarizes the bulk material analysis with respect to the percent of asbestos, fibers, and non-fibrous materials. The samples that did not support asbestos greater than 1% were reported as "No Asbestos Detected", and no further actions are warranted for those materials.

If one of the samples in the sample group, e.g. black window caulk samples, tested positive for asbestos then the entire group of black window caulk (BWC-1 through BWC-5) is considered positive for asbestos. A summary of the type and percentage of asbestos identified is presented in the table below:

Sample Group	Description	Asbestos Type	% Asbestos
BWC	Black Window Caulk	Chrysotile	4%
WWC	White Window Caulk	Chrysotile	8%
WPG	Windowpane Glaze	Chrysotile	2%
10DW	9710 Building: Duct Wrap	Chrysotile	75%
10PJ	9710 Building: Pipe Joints (Magnesia)	Chrysotile	80%
10PW	9710 Building: Pipe Wrap (Air Cell)	Chrysotile	60%
30PJ	9730 Building: Pipe Joints (Magnesia)	Chrysotile	80%
30PW	9730 Building: Pipe Wrap (Air Cell)	Chrysotile	70%
UPL	Utility Room Plaster	Chrysotile	5%
3FC	Vinyl Floor Covering: Small Stone Pattern	Chrysotile	80%

*The floor covering (3FC) did not have any mastic/glue identified.

In addition, as described in Section 3.2, five fire doors were defined as PACM during the inspection.

5.0 Conclusions

ECT has performed this assessment in accordance with AHERA guidelines that require ACM materials be identified, located, documented, and classified. The following table provides a summary of ACMs and/or PACMs associated with the Subject Property:

Sample Group	Material	Location	Approximate Size	Type	Condition
BWC	Black Window Caulk	Ground Floor Windows	~1,341 lin ft	Non-Friable Miscellaneous Category II	Damaged
WWC	White Window Caulk	First & Second Floor Windows	~2,683 lin ft	Non-Friable Miscellaneous Category II	Damaged
WPG	Windowpane Glaze	All Windows	~7,161 lin ft	Non-Friable Miscellaneous Category II	Damaged
10DW	9710 Building: Duct Wrap	9710 Building Utility Rooms (Ground Floor)	~78 ft² (24 lin ft)	Friable TSI	Good
10PJ & 30PJ	Pipe Joints (Magnesia)	Utility Rooms (Ground Floors) & 9710 Building Room 203: Kitchen	<4" Pipes: 142 joints 8" Pipes: 41 joints	Friable TSI	Good
10PW & 30PW	Pipe Wrap (Air Cell)		<4" Pipes: ~517 lin ft 8" Pipes: ~319 lin ft	Friable TSI	Slightly Damaged/ Not Enclosed
N/A (PACM)	Fire Doors	Hallways *See* ***Figure 3***	~320 ft² (5 Doors)	Friable TSI	Good/ Enclosed
UPL	Utility Room Plaster	Utility Rooms (Ground Floors): Walls and Ceilings	~5,984 ft²	Friable Surfacing	Slightly Damaged
3FC *	Vinyl Floor Covering: Small Stone Pattern	9730 Building Room 103: Cupboards & 9710 Building Room 203: Kitchen & Cupboards (below 16FC)	~108 ft²	Non-Friable Miscellaneous Category I	Slightly Damaged

* The floor covering (3FC) did not have any mastic/glue identified.

The location of the TSI is illustrated on **Figure 4**. Below is a breakdown of the locations and sizes of the TSI identified within the Buildings:

Room Name	1' Diameter Duct	< 4" Pipe Joints	< 4" Pipe Wrap	8" Pipe Joints	8" Pipe Wrap
9710 Building					
Boiler Room	-	21 joints	102 lin ft	7 joints	49 lin ft
Locker Room	-	4 joints	28 lin ft	-	-
Laundry Room	15 lin ft	19 jonts	51 lin ft	-	-
Ground Floor: Staircases/Hallway	9 lin ft	10 joints	108 lin ft	-	-
Room 203 Kitchen	-	-	1 lin ft	-	-
9730 Building					
Electric Room	-	23 joints	42 lin ft	14 joints	51 lin ft
Laundry Room	-	33 joints	85 lin ft	-	56 lin ft
Boiler Room	-	16 joints	38 lin ft	16 joints	107 lin ft
Locker Room	-	14 joints	38 lin ft	4 joints	56 lin ft
Ground Floor: Back Staircase	-	2 joints	24 lin ft	-	-

Lastly, the following apartment units were occupied during the inspection, thus, were not accessible. Therefore, the occupied units should be assessed prior to any redevelopment activities:

- 9710 Building: Apartment Unit G1
- 9710 Building: Apartment Unit G2
- 9730 Building: Apartment Unit 109
- 9730 Building: Apartment Unit 202

FIGURES

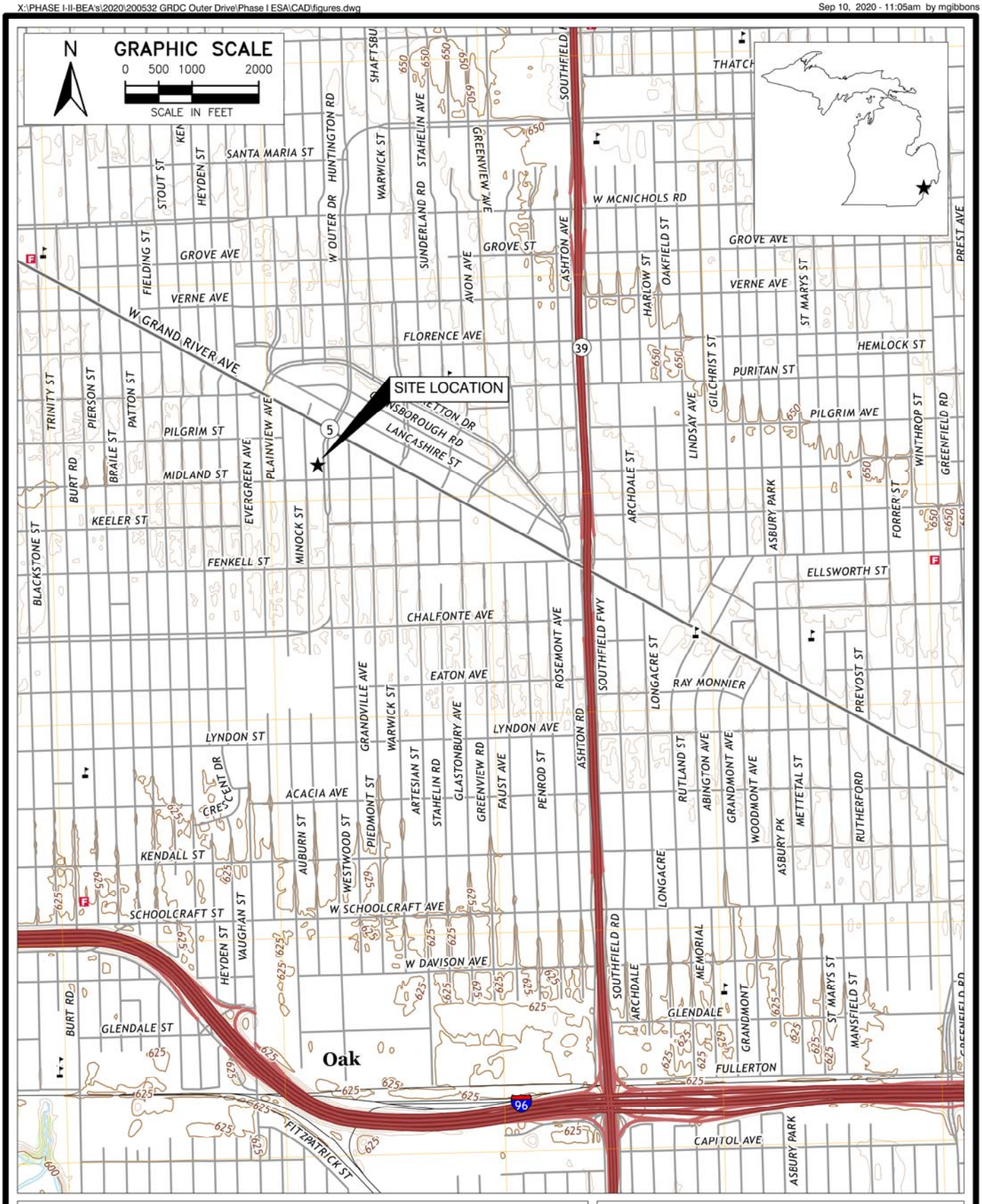


FIGURE 1.
SITE LOCATION MAP
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: USGS, ROAL OAK, MI 2019.

ECT Environmental Consulting & Technology, Inc.

LEGEND

- ● = SAMPLE LOCATION
- BWC = BLACK WINDOW CAULK
- FLR = FLAT ROOF COVERING
- RAS = ROOF ASPHALT SHINGLES
- WWC = WHITE WINDOW CAULK
- WPG = WINDOWPANE GLAZE

NOTES

RED INDICATES SAMPLE GROUP IS REGULATED AS ACM.

BWC SAMPLES WERE COLLECTED FROM GROUND FLOOR.

WWC SAMPLES WERE COLLECTED FROM 1st & 2nd FLOORS.

WPG SAMPLES WERE COLLECTED FROM ALL FLOORS

N

GRAPHIC SCALE

0 4 8 16

SCALE IN FEET

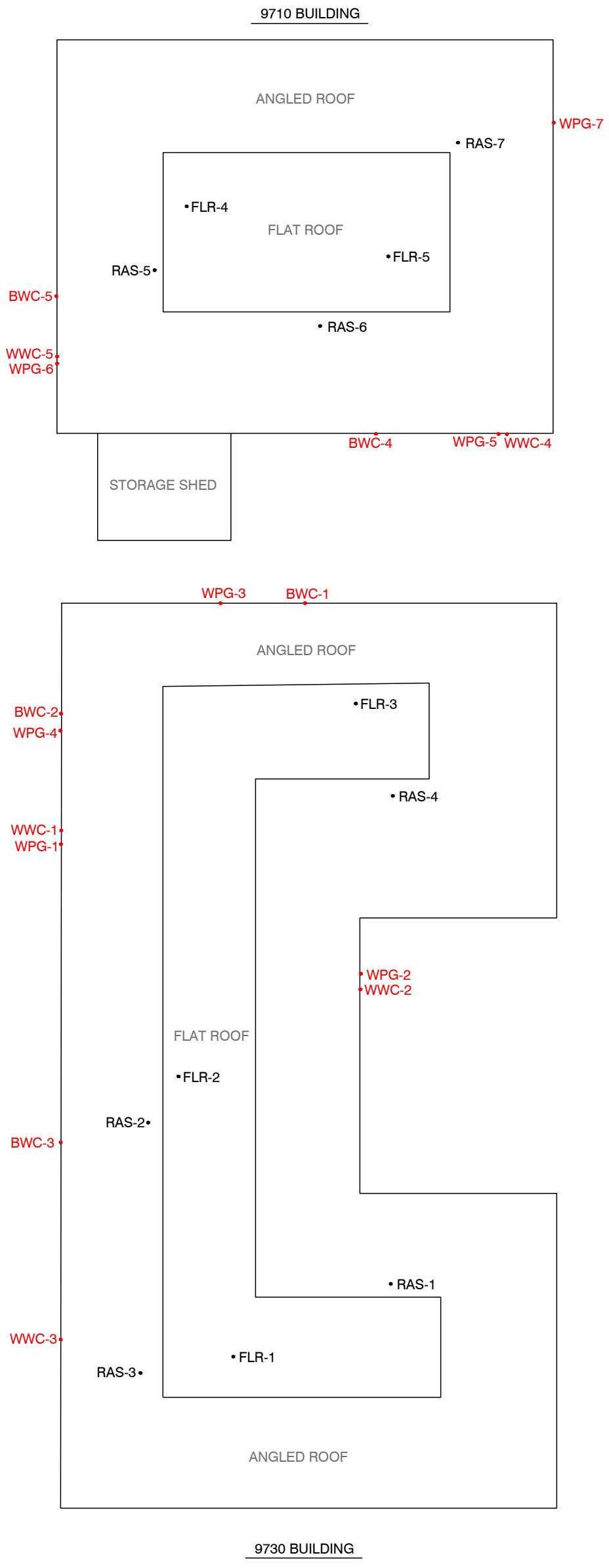


FIGURE 2.
EXTERIOR SAMPLE LOCATIONS
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: ECT, 2020.

ECT Environmental Consulting & Technology, Inc.

LEGEND

ROOM = APARTMENT HOMOGENOUS AREA
ROOM = UTILITY ROOM HOMOGENOUS AREA
= OCCUPIED/ NOT ACCESSIBLE
FD = FIRE DOOR (PACM)
• = SAMPLE LOCATION
10DW = 9710 BUILDING DUCT WRAP
10PJ = 9710 BUILDING PIPE JOINT
10PW = 9710 BUILDING PIPE WRAP
30PJ = 9730 BUILDING PIPE JOINT
30PW = 9730 BUILDING PIPE WRAP
#FC = VINYL FLOOR COVERING
AIN = ATTIC INSULATION
APL = APARTMENT PLASTER
CWT = CERAMIC TILE & GROUT
DRW = DRYWALL
MS = MASTIC
ST = STAIR TREAD COVERING
UPL = UTILITY ROOM PLASTER

NOTES

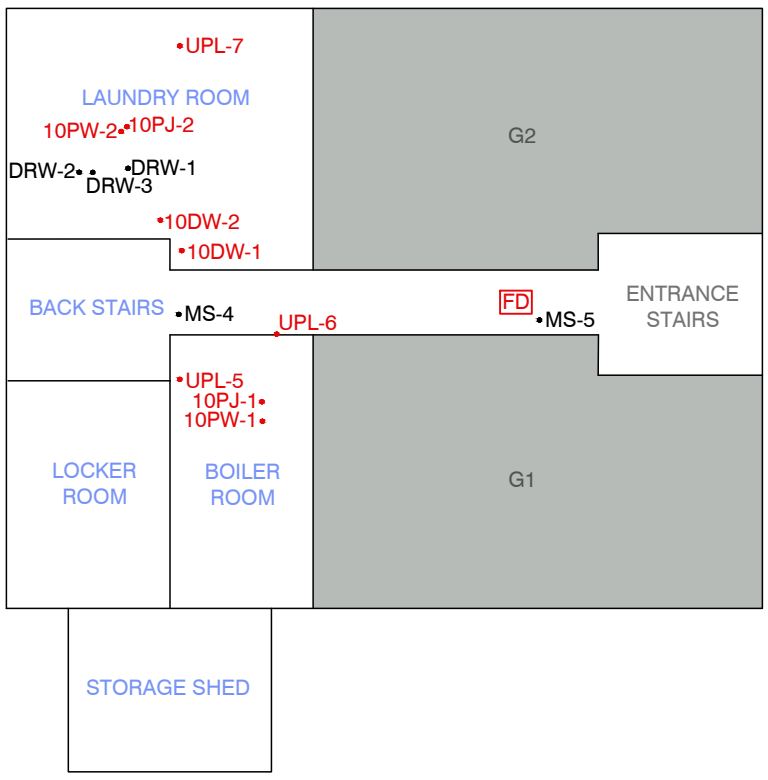
RED INDICATES SAMPLE GROUP IS REGULATED AS ACM.

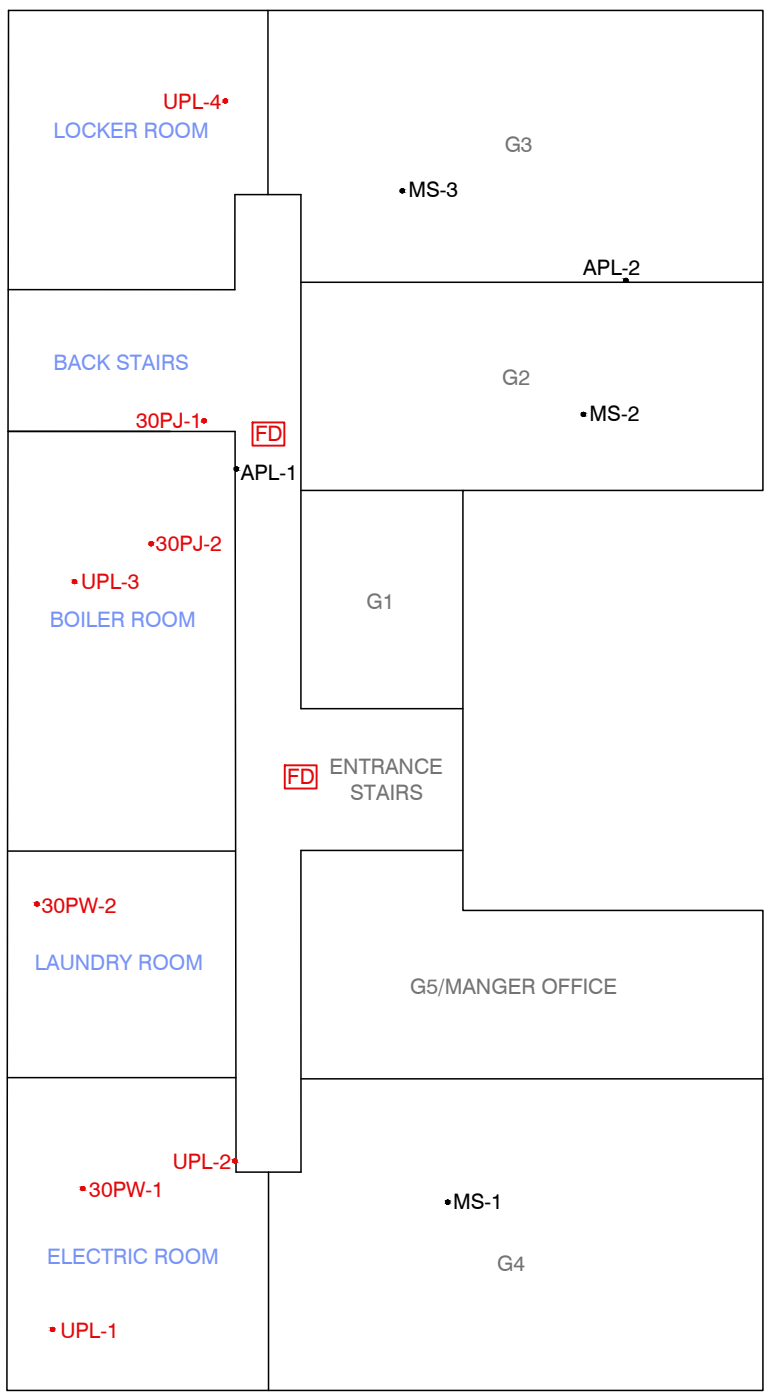
AIN SAMPLES WERE COLLECTED FROM ATTIC SPACE. AIN-1 THRU -6 WERE COLLECTED FROM 9730 BUILDING; AIN-7 THRU -9 WERE COLLECTED FROM 9710 BUILDING.

N

GRAPHIC SCALE
0 4 8 16
SCALE IN FEET

9710 BUILDING





9730 BUILDING

FIGURE 3. (SHEET 1 OF 3)
INTERIOR SAMPLE LOCATIONS: GROUND FLOOR
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: ECT, 2020.

ECT Environmental Consulting & Technology, Inc.

LEGEND

ROOM = APARTMENT HOMOGENOUS AREA
ROOM = UTILITY ROOM HOMOGENOUS AREA
= OCCUPIED/ NOT ACCESSIBLE
FD = FIRE DOOR (PACM)
• = SAMPLE LOCATION
10DW = 9710 BUILDING DUCT WRAP
10PJ = 9710 BUILDING PIPE JOINT
10PW = 9710 BUILDING PIPE WRAP
30PJ = 9730 BUILDING PIPE JOINT
30PW = 9730 BUILDING PIPE WRAP
#FC = VINYL FLOOR COVERING
AIN = ATTIC INSULATION
APL = APARTMENT PLASTER
CWT = CERAMIC TILE & GROUT
DRW = DRYWALL
MS = MASTIC
ST = STAIR TREAD COVERING
UPL = UTILITY ROOM PLASTER

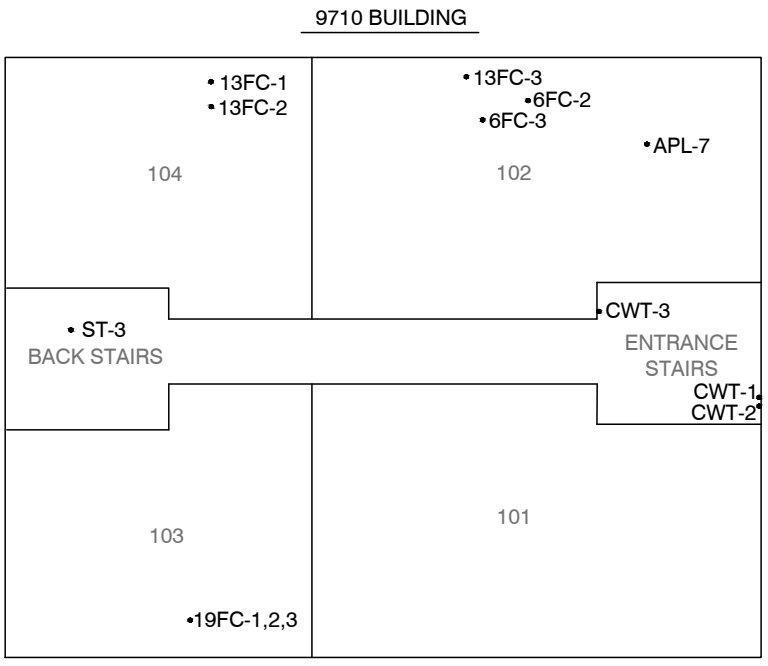
NOTES

RED INDICATES SAMPLE GROUP IS REGULATED AS ACM.

AIN SAMPLES WERE COLLECTED FROM ATTIC SPACE. AIN-1 THRU -6 WERE COLLECTED FROM 9730 BUILDING; AIN-7 THRU -9 WERE COLLECTED FROM 9710 BUILDING.

N

GRAPHIC SCALE
0 4 8 16
SCALE IN FEET



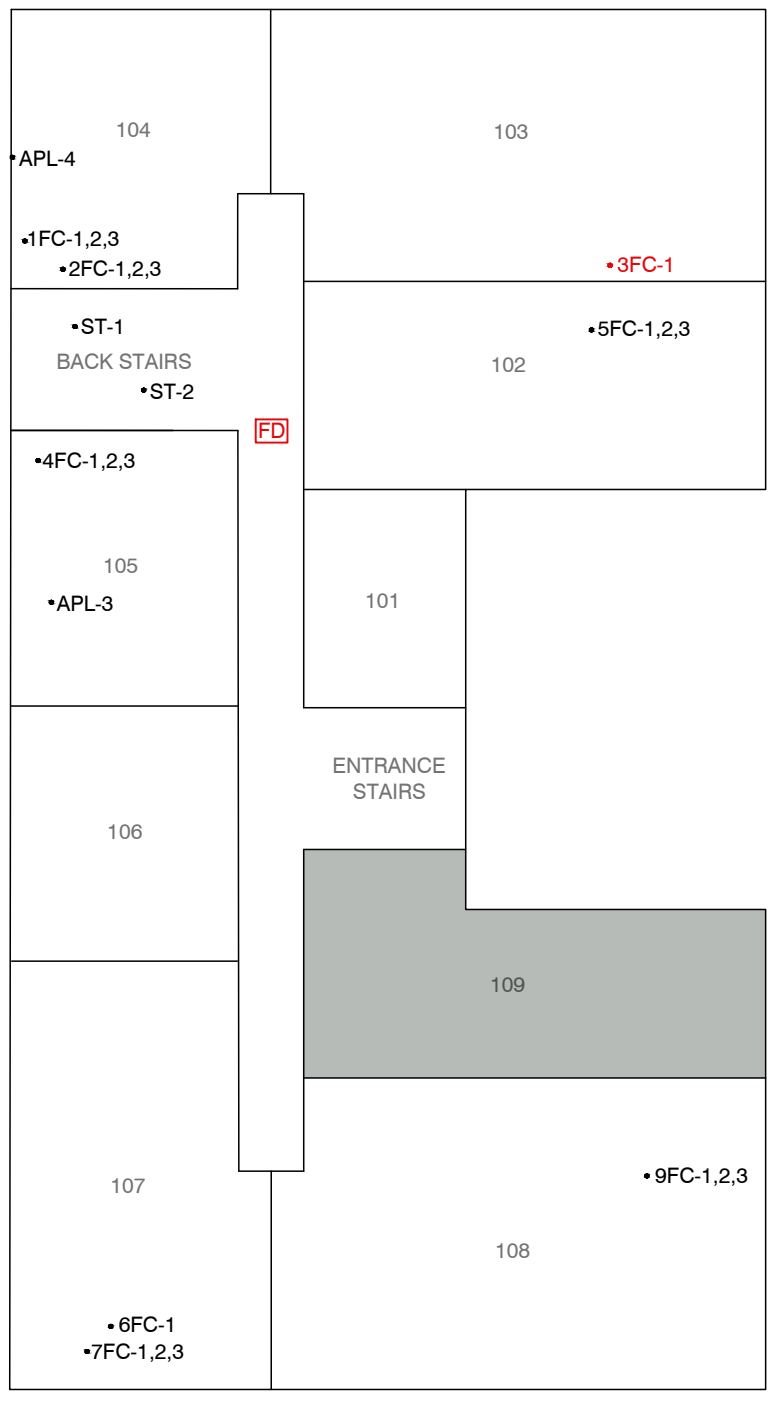


FIGURE 3. (SHEET 2 OF 3)
INTERIOR SAMPLE LOCATIONS: 1st FLOOR
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: ECT, 2020.

ECT Environmental Consulting & Technology, Inc.

LEGEND

ROOM = APARTMENT HOMOGENOUS AREA
ROOM = UTILITY ROOM HOMOGENOUS AREA
= OCCUPIED/ NOT ACCESSIBLE
FD = FIRE DOOR (PACM)
• = SAMPLE LOCATION
10DW = 9710 BUILDING DUCT WRAP
10PJ = 9710 BUILDING PIPE JOINT
10PW = 9710 BUILDING PIPE WRAP
30PJ = 9730 BUILDING PIPE JOINT
30PW = 9730 BUILDING PIPE WRAP
#FC = VINYL FLOOR COVERING
AIN = ATTIC INSULATION
APL = APARTMENT PLASTER
CWT = CERAMIC TILE & GROUT
DRW = DRYWALL
MS = MASTIC
ST = STAIR TREAD COVERING
UPL = UTILITY ROOM PLASTER

NOTES

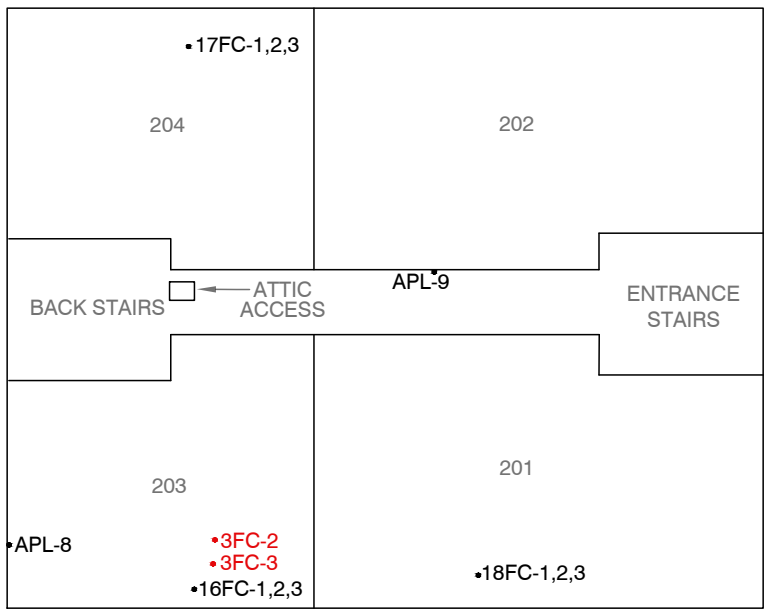
RED INDICATES SAMPLE GROUP IS REGULATED AS ACM.

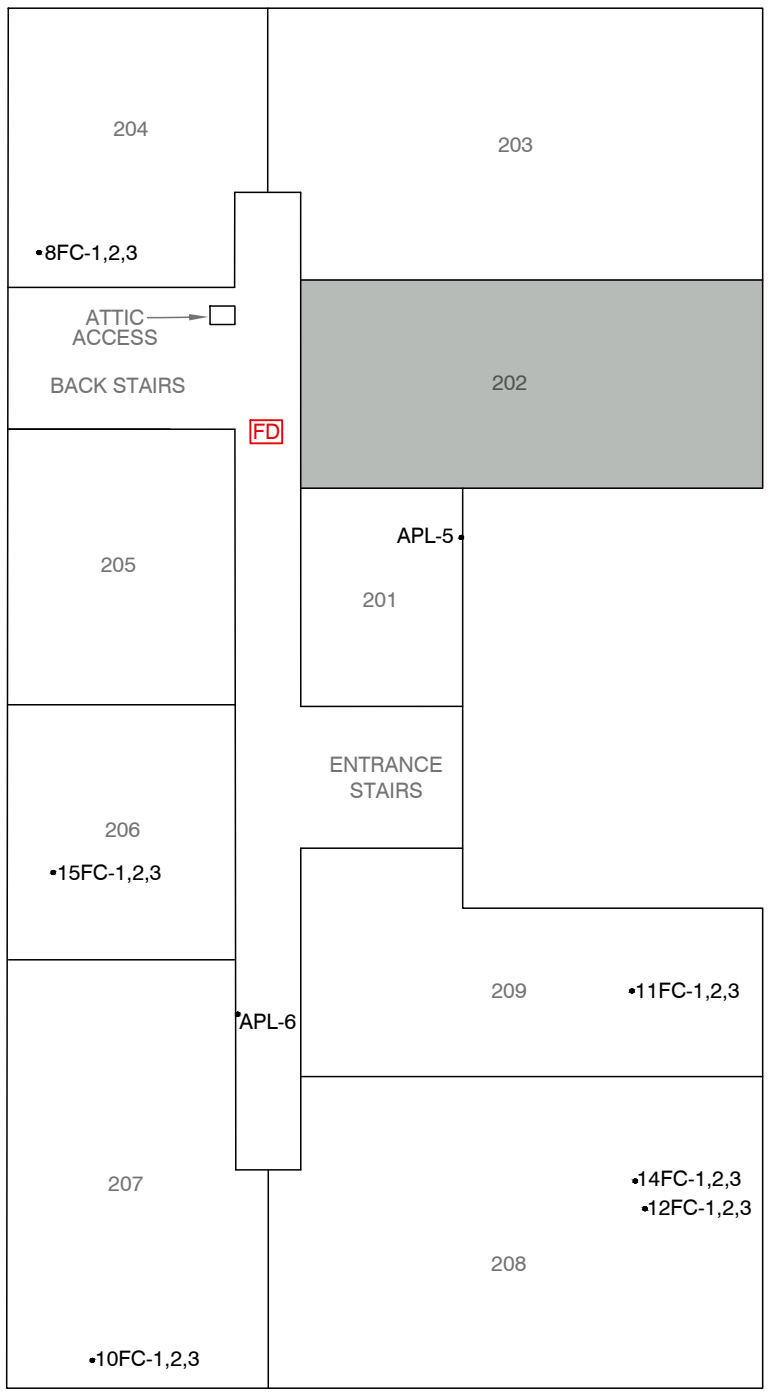
AIN SAMPLES WERE COLLECTED FROM ATTIC SPACE. AIN-1 THRU -6 WERE COLLECTED FROM 9730 BUILDING; AIN-7 THRU -9 WERE COLLECTED FROM 9710 BUILDING.

N

GRAPHIC SCALE
0 4 8 16
SCALE IN FEET

9710 BUILDING





9730 BUILDING

FIGURE 3. (SHEET 3 OF 3)
INTERIOR SAMPLE LOCATIONS: 2nd FLOOR
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: ECT, 2020.

ECT Environmental Consulting & Technology, Inc.

LEGEND

ROOM = APARTMENT HOMOGENOUS AREA
ROOM = UTILITY ROOM HOMOGENOUS AREA
= OCCUPIED/ NOT ACCESSIBLE
= TSI PIPE WRAP AND JOINTS (HORIZONTAL)
= TSI PIPE WRAP AND JOINTS (VERTICAL)
= TSI DUCT WRAP

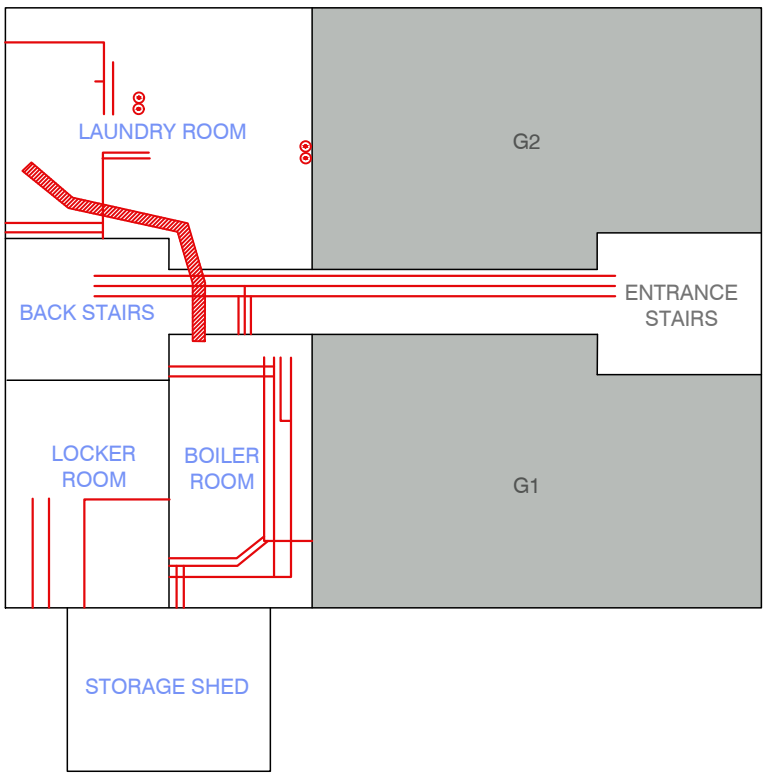
NOTES

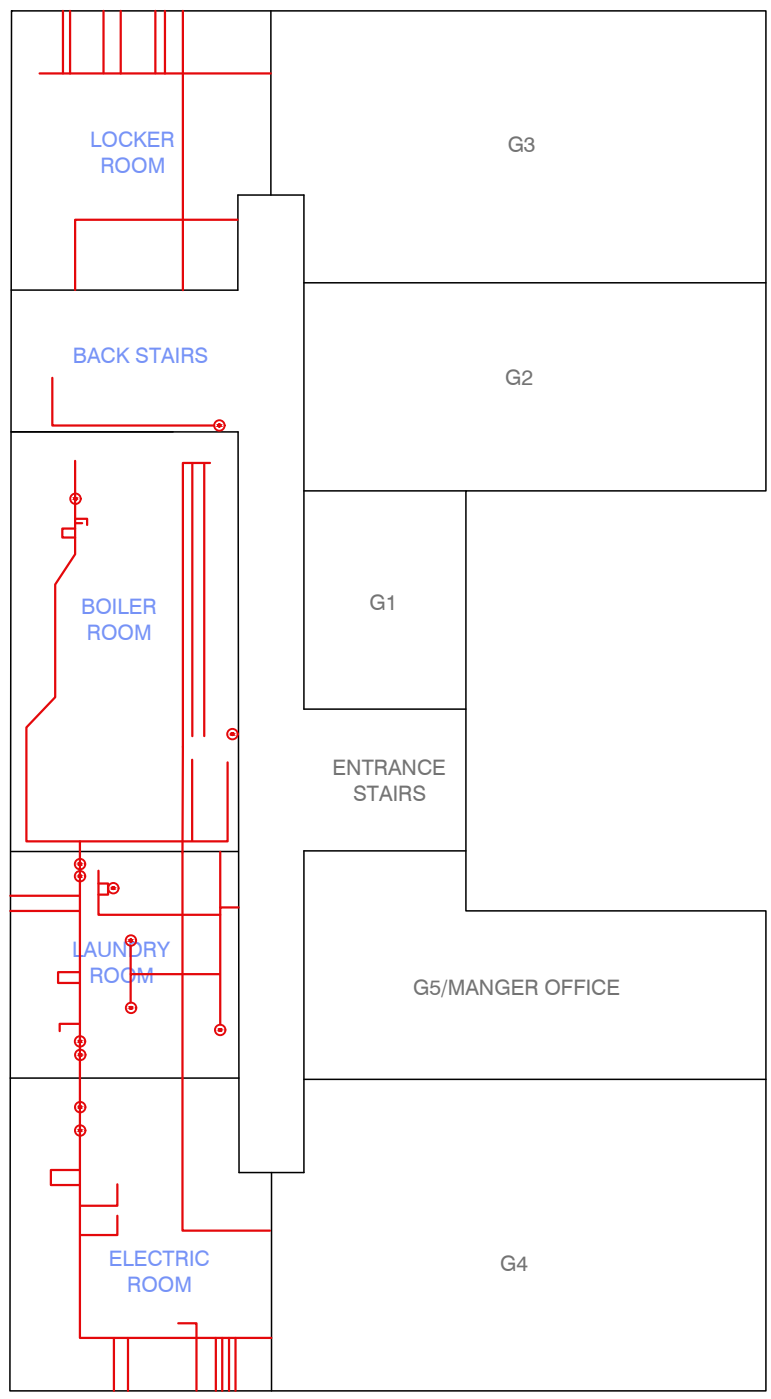
1 FOOT OF TSI PIPE WRAP IS ALSO LOCATED IN
1910 BUILDING ROOM 203: KITCHEN (OVEN WALL)

N

GRAPHIC SCALE
0 4 8 16
SCALE IN FEET

9710 BUILDING





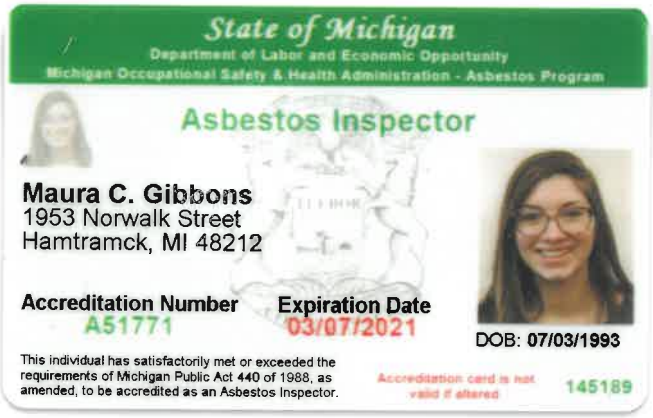
9730 BUILDING

FIGURE 4.
TSI LOCATIONS
9710 & 9730 WEST OUTER DRIVE
DETROIT, MICHIGAN 48223
Source: ECT, 2020.

ECT Environmental Consulting & Technology, Inc.

APPENDIX A

Accreditation



State of Michigan
Department of Labor and Economic Opportunity
Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Inspector

Maura C. Gibbons
1953 Norwalk Street
Hamtramck, MI 48212

Accreditation Number
A51771

Expiration Date
03/07/2021

DOB: **07/03/1993**

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

Accreditation card is not valid if altered

145189

APPENDIX B

Site Photographs

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 1	Date: 9/1/20

Direction Photo Taken:

East

Description:

Back entrance of 9730 Building.

Photo No. 2	Date: 9/1/20

Direction Photo Taken:

Northeast

Description:

Back entrances of 9730 and 9710 Buildings.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 3	Date: 9/1/20

Direction Photo Taken:

Northwest

Description:

Angled (left) and flat (right) roofs of the Buildings.

Photo No. 4	Date: 9/1/20

Direction Photo Taken:

Down

Description:

Roof Asphalt Shingles of the Buildings.

Sample Group "RAS"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 5	Date: 9/1/20

Direction Photo Taken:

Down

Description:

Flat Roof Covering of Buildings.

Sample Group "FLR"

Photo No. 6	Date: 9/1/20

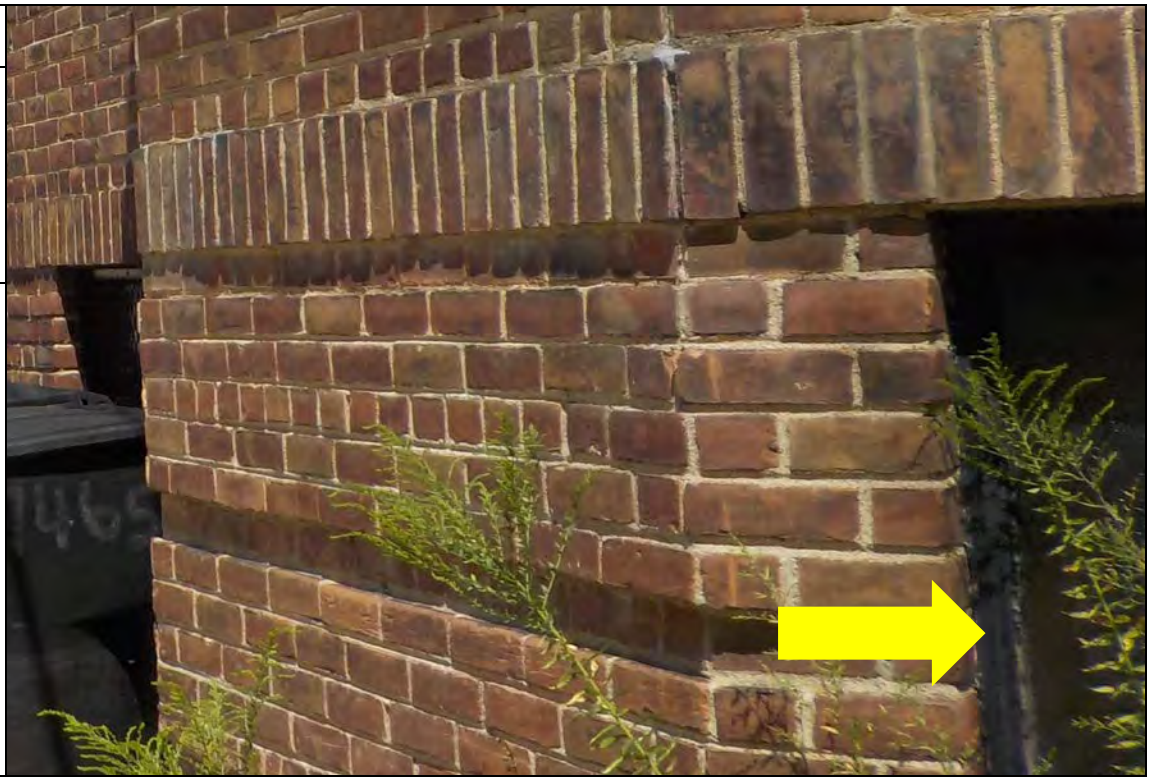
Direction Photo Taken:

East

Description:

Black Window Caulk.

Sample Group "BWC"
(ACM)



PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
7	9/1/20

Direction Photo Taken:

East

Description:

White Window Caulk.

Sample Group "WWC"
(ACM)

Photo No.	Date:
8	9/1/20

Direction Photo Taken:

East

Description:

Windowpane Glaze.

Sample Group "WPG"
(ACM)

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
9	9/1/20

Direction Photo Taken:

Southwest

Description:

General interior of utility room homogenous area.

Photo No.	Date:
10	9/1/20

Direction Photo Taken:

South

Description:

General interior of utility room homogenous area.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 11	Date: 9/9/20

Direction Photo Taken:

East

Description:

General interior of apartment homogenous area.

Photo No. 12	Date: 9/9/20

Direction Photo Taken:

North

Description:

General interior of apartment homogenous area.

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 13	Date: 9/1/20

Direction Photo Taken:

North

Description:

General interior of attic spaces.

Photo No. 14	Date: 9/1/20

Direction Photo Taken:

Down

Description:

Attic Insulation

Sample Group "AIN"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 15	Date: 9/9/20

Direction Photo Taken:

Up

Description:

9710 Building Duct Wrap.

Sample Group "10DW"
(ACM)

Photo No. 16	Date: 9/9/20

Direction Photo Taken:

Up

Description:

9710 Building Pipe Joints.

Sample Group "10PJ"
(ACM)

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 17	Date: 9/9/20

Direction Photo Taken:

Up/Northeast

Description:

9710 Building Pipe Wrap.

Sample Group "10PW"
(ACM)

Photo No. 18	Date: 9/9/20

Direction Photo Taken:

North

Description:

Pipe Wrap in 9710 Building Room 203: Kitchen.
(ACM)

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 19	Date: 9/9/20

Direction Photo Taken:

Up

Description:

9730 Building Pipe Joints.

Sample Group "30PJ"
(ACM)

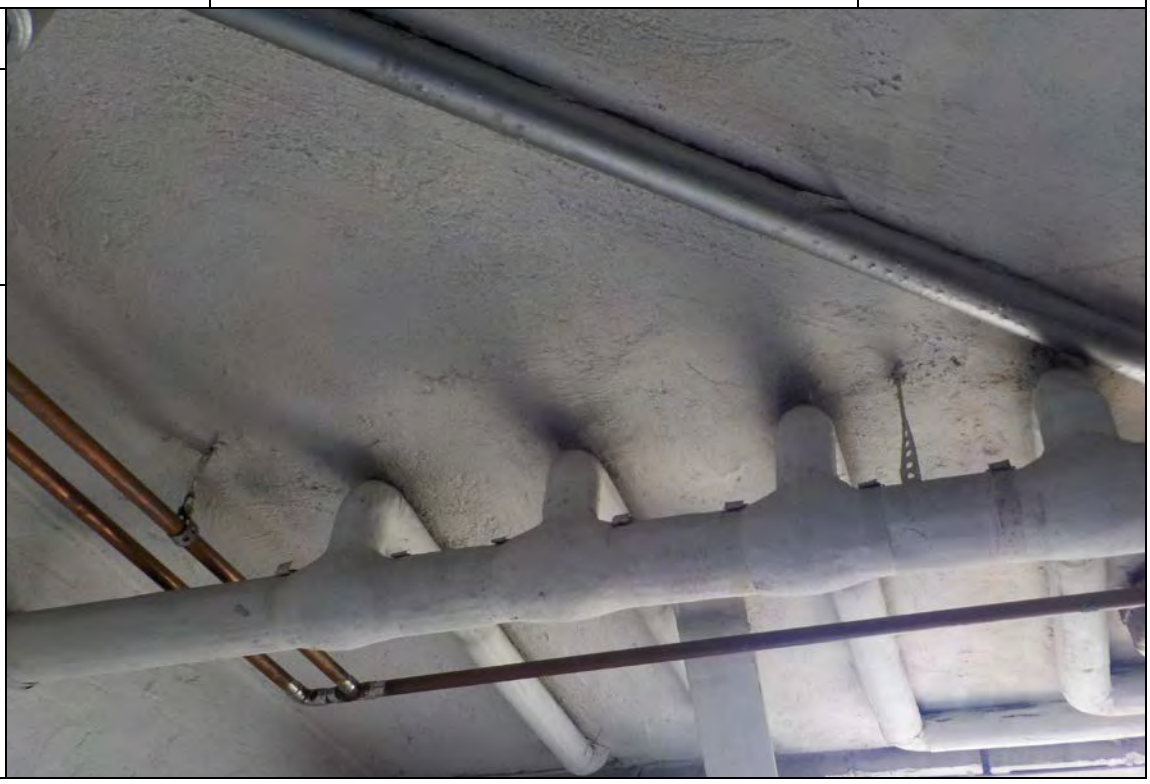


Photo No. 20	Date: 9/9/20

Direction Photo Taken:

Up

Description:

9730 Building Pipe Wrap.

Sample Group "30PW"
(ACM)

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 21	Date: 9/9/20

Direction Photo Taken:

Up

Description:

Damaged pipe wrap.

Photo No. 22	Date: 9/1/20

Direction Photo Taken:

North

Description:

Fire Doors

Not Sampled **(PACM)**

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 23	Date: 9/9/20

Direction Photo Taken:

Up

Description:

Utility Room Plaster.

Sample Group "UPL"
(ACM)

Photo No. 24	Date: 9/9/20

Direction Photo Taken:

Up

Description:

Damaged utility room plaster.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
25	9/9/20

Direction Photo Taken:

South

Description:

Apartment Plaster.

Sample Group "APL"

Photo No.	Date:
26	9/9/20

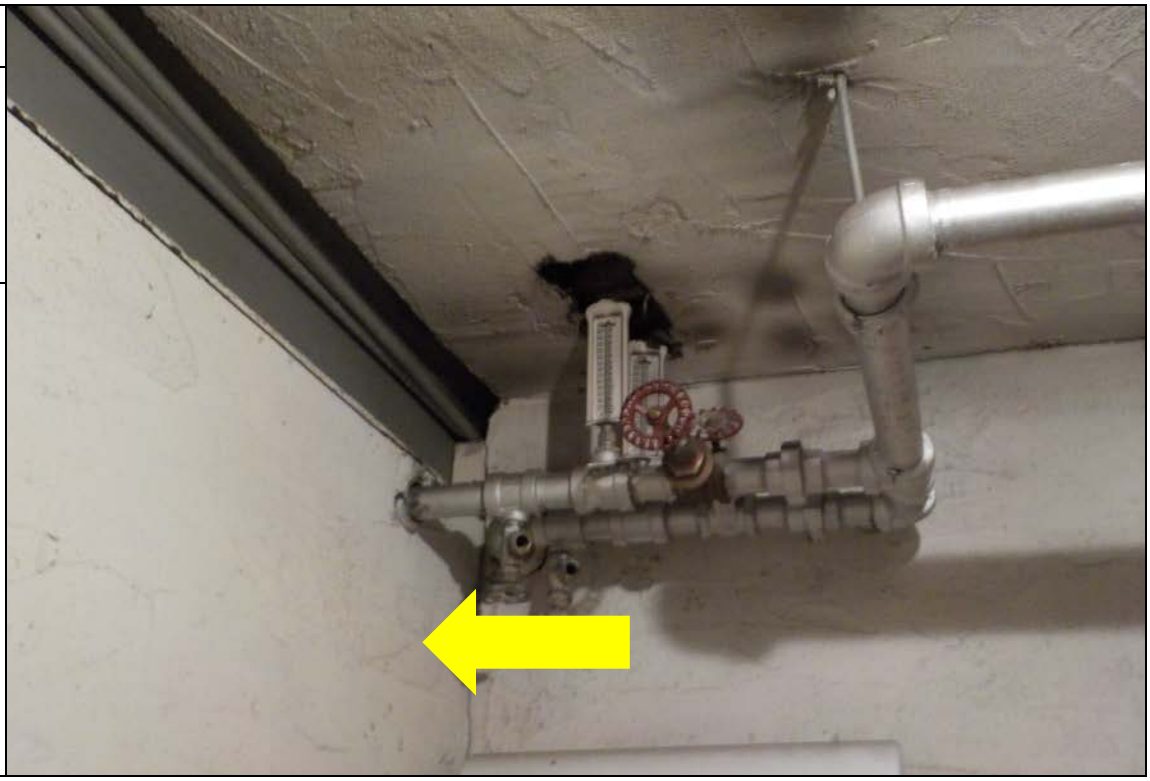
Direction Photo Taken:

West

Description:

Drywall.

Sample Group "DRW"



PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 27	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Ceramic Tile & Grout.

Sample Group "CWT"

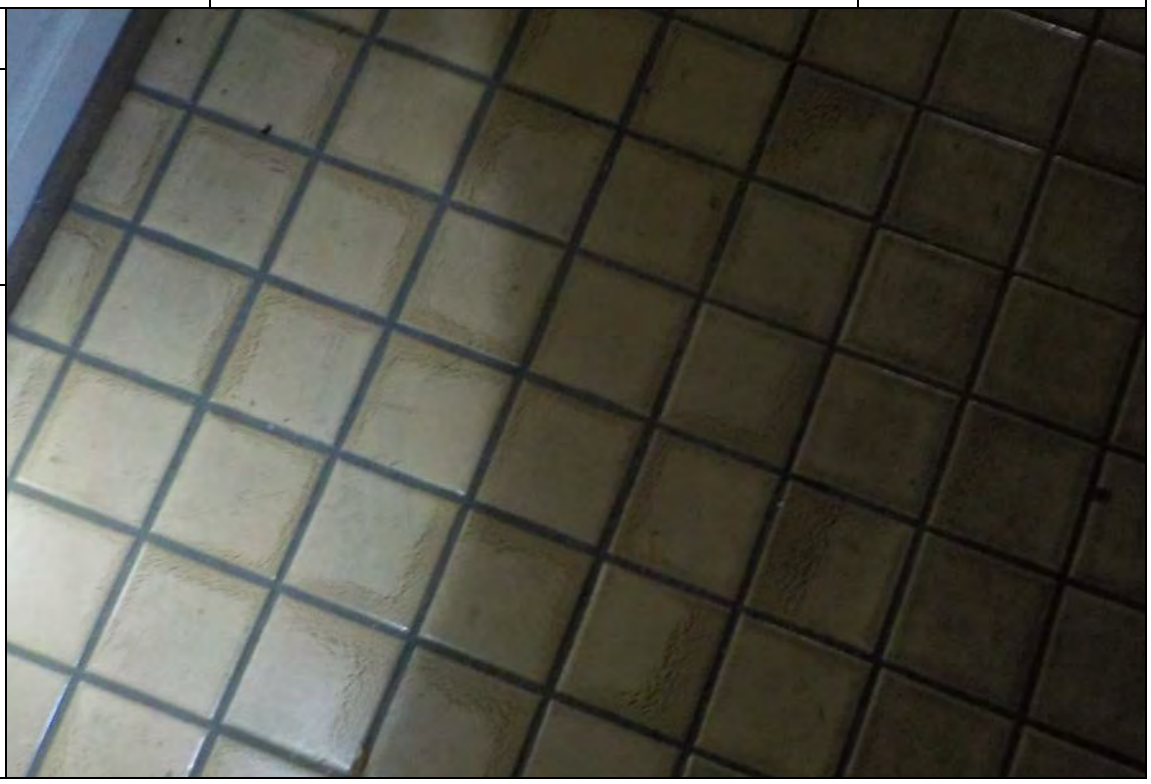


Photo No. 28	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Mastic of Former Floor Tiles.

Sample Group "MS"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
29	9/9/20

Direction Photo Taken:

Down

Description:

Stair Tread Coverings.

Sample Group "ST"

Photo No.	Date:
30	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Beige Sand Pattern.

Sample Group "1FC"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 31	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Orange Floral Square Border.

Sample Group "2FC"

Photo No. 32	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Small Stone Pattern.

Sample Group "3FC"
(ACM)

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
33	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Brown Diamond Pattern.

Sample Group "4FC"

Photo No.	Date:
34	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Blue Vine Border.

Sample Group "5FC"

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 35	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Brick Tile Diamond Pattern.

Sample Group "6FC"

Photo No. 36	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Off-White Squares.

Sample Group "7FC"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
37	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Blue Diamond Pattern.

Sample Group "8FC"

Photo No.	Date:
38	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: White Speckled Squares.

Sample Group "9FC"

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
39	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Black Diamond Pattern.

Sample Group "10FC"

Photo No.	Date:
40	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Orange/Teal Border.

Sample Group "11FC"

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 41	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Orange Hexagon Pattern.

Sample Group "12FC"

Photo No. 42	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: White Square Borders.

Sample Group "13FC"

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 43	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Beige Speckled Squares.

Sample Group "14FC"

Photo No. 44	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Orange/Brown Lines Pattern.

Sample Group "15FC"

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No. 45	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Blue Floral Pattern.

Sample Group "16FC"

Photo No. 46	Date: 9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Light Teal Stripe Pattern.

Sample Group "17FC"

ECT Environmental Consulting & Technology, Inc.

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Grandmont Rosedale Development Corporation	9710 and 9730 West Outer Drive, Detroit, Michigan 48223	200532-0200

Photo No.	Date:
47	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Thin Gray Square Borders.

Sample Group "18FC"

Photo No.	Date:
48	9/9/20

Direction Photo Taken:

Down

Description:

Floor Covering: Thick Gray Square Borders.

Sample Group "19FC"

APPENDIX C

Laboratory Analytical Report

Fibertec
industrial hygiene
services, inc.

BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos Containing Portion	Analyst
RAS 1	RAS 1	Black tabular and asphaltic material, Roof Asphalt Shingles. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
RAS 1	RAS 1	Black tabular, fibrous and asphaltic material, Roof Asphalt Shingles. Layer 2 of 2.	NAD	Non-fibrous material 40% Cellulose fibers 60%	EE
RAS 2	RAS 2	Black and white tabular, asphaltic and granular material, Roof Asphalt Shingles. Layer 1 of 3.	NAD	Non-fibrous material 98% Cellulose fibers 2%	EE
RAS 2	RAS 2	Black asphaltic, fibrous and tabular material, Roof Asphalt Shingles. Layer 2 of 3.	NAD	Non-fibrous material 35% Cellulose fibers 65%	EE
RAS 2	RAS 2	Black asphaltic and mastic material, Roof Asphalt Shingles. Layer 3 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
RAS 3	RAS 3	Black and white tabular, asphaltic and granular material, Roof Asphalt Shingles. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
RAS 3	RAS 3	Black tabular, fibrous and asphaltic material, Roof Asphalt Shingles. Layer 2 of 3.	NAD	Non-fibrous material 65% Cellulose fibers 35%	EE

Fibertec
industrial hygiene
services, inc.

BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1

NVLAP Accreditation #101510-0

Client Name: ECT

Project Name: 9710 & 9730 West Outer Drive/200532-0100

Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020

Date Submitted: 9/23/2020

Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A

C.O.C. #: N/A

Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
RAS 3	RAS 3	Black tabular, fibrous and asphaltic material, Roof Asphalt Shingles. Layer 3 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE
RAS 4	RAS 4	White and black tabular, asphaltic and granular material, Roof Asphalt Shingles. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
RAS 4	RAS 4	White tabular, fibrous and asphaltic material, Roof Asphalt Shingles. Layer 2 of 3.	NAD	Non-fibrous material 35% Cellulose fibers 65%	EE
RAS 4	RAS 4	Black tabular, asphaltic and mastic material, Roof Asphalt Shingles. Layer 3 of 3.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
RAS 5	RAS 5	Black and white tabular, asphaltic and granular material, Roof Asphalt Shingles. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
RAS 5	RAS 5	Black tabular, fibrous and asphaltic material, Roof Asphalt Shingles. Layer 2 of 3.	NAD	Non-fibrous material 35% Cellulose fibers 65%	EE
RAS 5	RAS 5	Black tabular and asphaltic material, Roof Asphalt Shingles. Layer 3 of 3.	NAD	Non-fibrous material 98% Cellulose fibers 2%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
FLR 1	FLR 1	White tabular and fibrous material, Flat Roof Covering. Layer 1 of 3.	NAD	Non-fibrous material 65% Synthetic fibers 35%	EE
FLR 1	FLR 1	Tan fibrous material, Flat Roof Covering. Layer 2 of 3.	NAD	Cellulose fibers 100%	EE
FLR 1	FLR 1	Tan and black fibrous and asphaltic material, Flat Roof Covering. Layer 3 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
FLR 2	FLR 2	White tabular and fibrous material, Flat Roof Covering. Layer 1 of 3.	NAD	Non-fibrous material 60% Synthetic fibers 40%	EE
FLR 2	FLR 2	Tan fibrous material, Flat Roof Covering. Layer 2 of 3.	NAD	Cellulose fibers 100%	EE
FLR 2	FLR 2	Black tabular, fibrous and asphaltic material, Flat Roof Covering. Layer 3 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
FLR 3	FLR 3	White tabular and fibrous material, Flat Roof Covering. Layer 1 of 3.	NAD	Non-fibrous material 65% Synthetic fibers 35%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
FLR 3	FLR 3	Tan tabular and fibrous material, Flat Roof Covering. Layer 2 of 3.	NAD	Cellulose fibers 100%	EE
FLR 3	FLR 3	Black tabular, fibrous and asphaltic material, Flat Roof Covering. Layer 3 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
FLR 4	FLR 4	White tabular and fibrous material, Flat Roof Covering. Layer 1 of 3.	NAD	Non-fibrous material 65% Synthetic fibers 35%	EE
FLR 4	FLR 4	Tan fibrous and tabular material, Flat Roof Covering. Layer 2 of 3.	NAD	Cellulose fibers 100%	EE
FLR 4	FLR 4	Black tabular, fibrous and asphaltic material, Flat Roof Covering. Layer 3 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
FLR 5	FLR 5	White tabular and fibrous material, Flat Roof Covering. Layer 1 of 3.	NAD	Non-fibrous material 65% Synthetic fibers 35%	EE
FLR 5	FLR 5	Tan fibrous and tabular material, Flat Roof Covering. Layer 2 of 3.	NAD	Cellulose fibers 100%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
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Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
FLR 5	FLR 5	Black tabular, fibrous and asphaltic material, Flat Roof Covering. Layer 3 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
BWC 1	BWC 1	Black and green tabular and paint material, Black Window Caulk. Layer 1 of 2.	Chrysotile 1%	Non-fibrous material >98% Cellulose fibers <1%	EE
BWC 1	BWC 1	Brown tabular and fibrous material, Black Window Caulk. Layer 2 of 2.	Chrysotile 4%	Non-fibrous material 94% Cellulose fibers 2%	EE
WWC 1	WWC 1	White tabular and paint material, White Window Caulk. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WWC 1	WWC 1	Tan tabular material, White Window Caulk. Layer 2 of 2.	Chrysotile 8%	Non-fibrous material 92%	EE
WPG 1	WPG 1	White tabular and paint material, Window Pane Glaze. Layer 1 of 2.	NAD	Non-fibrous material 100%	EE
WPG 1	WPG 1	White tabular material, Window Pane Glaze. Layer 2 of 2.	NAD	Non-fibrous material 100%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
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Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: TRUE

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
WPG 2	WPG 2	White tabular and paint material, Window Pane Glaze. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 2	WPG 2	Gray tabular material, Window Pane Glaze. Layer 2 of 2.	NAD	Non-fibrous material 98% Cellulose fibers 2%	EE
WPG 3	WPG 3	Black and green tabular and paint material, Window Pane Glaze. Layer 1 of 3.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
WPG 3	WPG 3	Tan tabular material, Window Pane Glaze. Layer 2 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 3	WPG 3	White tabular and powdery material, Window Pane Glaze. Layer 3 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 4	WPG 4	White paint and tabular material, Window Pane Glaze. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers <1%	EE
WPG 4	WPG 4	White and tan tabular material, Window Pane Glaze. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

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Date Sampled: 9/1/2020
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Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
WPG 5	WPG 5	White tabular and paint material, Window Pane Glaze.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 5	WPG 5	Tan tabular material, Window Pane Glaze. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 6	WPG 6	White tabular and paint material, Window Pane Glaze. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
WPG 6	WPG 6	Gray tabular material, Window Pane Glaze. Layer 2 of 2.	Chrysotile 2%	Non-fibrous material >97% Cellulose fibers <1%	EE
AIN 1	AIN 1	White fibrous material, Attic Insulation.	NAD	Mineral wool 99% Cellulose fibers 1%	EE
AIN 2	AIN 2	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 3	AIN 3	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Date Sampled: 9/1/2020
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Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
AIN 4	AIN 4	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 5	AIN 5	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 6	AIN 6	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 7	AIN 7	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 8	AIN 8	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
AIN 9	AIN 9	White fibrous material, Attic Insulation.	NAD	Non-fibrous material 1% Mineral wool 97% Cellulose fibers 2%	EE
10DW 1	10DW 1	Gray fibrous material, 9710 Duct Wrap.	Chrysotile 75%	Non-fibrous material 10% Cellulose fibers 15%	EE

Fibertec
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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A
Report Date: 10/15/2020

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
10PJ 1	10PJ 1	Gray tabular and fibrous material, 9710 Pipe Joints.	Chrysotile 80%	Non-fibrous material 18% Cellulose fibers 2%	EE
10PW 1	10PW 1	White fibrous material, 9710 Pipe Wrap.	Chrysotile 60%	Non-fibrous material 30% Cellulose fibers 10%	EE
30PJ 1	30PJ 1	White tabular and fibrous material, 9730 Pipe Joints.	Chrysotile 80%	Non-fibrous material 18% Cellulose fibers 2%	EE
30PW-1	30PW-1	White fibrous material, 9730 Pipe Wrap. Layer 1 of 2.	NAD	Non-fibrous material 10% Cellulose fibers 90%	EE
30PW-1	30PW-1	Gray tabular and fibrous material, 9730 Pipe Wrap. Layer 2 of 2.	Chrysotile 70%	Non-fibrous material 5% Cellulose fibers 25%	EE
APL 1	APL 1	Tan tabular and paint material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 1	APL 1	White tabular and powdery material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
APL 2	APL 2	White tabular and paint material, Apartment Unit Plaster. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 2	APL 2	White tabular and powdery material, Apartment Unit Plaster. Layer 2 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 2	APL 2	Gray granular material, Apartment Unit Plaster. Layer 3 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 3	APL 3	Brown tabular and fibrous material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
APL 3	APL 3	White tabular and powdery material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
APL 4	APL 4	White and cream tabular and paint material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 4	APL 4	White tabular, powdery and granular material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
APL 5	APL 5	White and cream tabular and paint material, Apartment Unit Plaster. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 5	APL 5	White tabular and powdery material, Apartment Unit Plaster. Layer 2 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 5	APL 5	Gray tabular, granular and fibrous material, Apartment Unit Plaster. Layer 3 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 6	APL 6	White tabular and powdery material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 6	APL 6	Gray tabular and granular material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 7	APL 7	Brown fibrous and tabular material, Apartment Unit Plaster. Layer 1 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
APL 7	APL 7	White tabular and powdery material, Apartment Unit Plaster. Layer 2 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
APL 7	APL 7	Gray tabular, cementitious and granular material, Apartment Unit Plaster. Layer 3 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 8	APL 8	Cream and white paint material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
APL 8	APL 8	White tabular and granular material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 9	APL 9	White tabular and powdery material, Apartment Unit Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
APL 9	APL 9	Gray tabular and granular material, Apartment Unit Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 1	UPL 1	White tabular and powdery material, Utility Room Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 1	UPL 1	Gray tabular and granular material, Utility Room Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
UPL 2	UPL 2	White tabular and powdery material, Utility Room Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 2	UPL 2	Gray tabular and granular material, Utility Room Plaster. Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 3	UPL 3	Tan tabular and paint material, Utility Room Plaster. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 3	UPL 3	Tan and gray tabular and granular material, Utility Room Plaster. Layer 2 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 3	UPL 3	Brown fibrous material, Utility Room Plaster. Layer 3 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
UPL 4	UPL 4	White tabular and granular material, Utility Room Plaster. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 4	UPL 4	Brown fibrous material, Utility Room Plaster. Layer 2 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE

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C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
UPL 4	UPL 4	Brown tabular and granular material, Utility Room Plaster. Layer 3 of 3.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
UPL 5	UPL 5	White tabular and granular material, Utility Room Plaster. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
UPL 5	UPL 5	Brown fibrous and tabular material, Utility Room Plaster. Layer 2 of 2.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
UPL 6	UPL 6	White tabular and fibrous material, Utility Room Plaster. Layer 1 of 2.	Chrysotile 5%	Non-fibrous material >94% Cellulose fibers <1%	EE
UPL 6	UPL 6	Gray tabular and granular material, Utility Room Plaster. Layer 2 of 2.	Chrysotile 2%	Non-fibrous material >97% Cellulose fibers <1%	EE
DRW 1	DRW 1	White tabular, powdery and fibrous material, Drywall Board. Layer 1 of 2.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE
DRW 1	DRW 1	Brown tabular and fibrous material, Drywall Board. Layer 2 of 2.	NAD	Non-fibrous material <1% Cellulose fibers >99%	EE

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Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
DRW 2	DRW 2	White paint material, Drywall Board. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
DRW 2	DRW 2	Brown tabular and fibrous material, Drywall Board. Layer 2 of 3.	NAD	Non-fibrous material <1% Cellulose fibers >99%	EE
DRW 2	DRW 2	White tabular, powdery and fibrous material, Drywall Board. Layer 3 of 3.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE
DRW 3	DRW 3	White tabular and paint material, Drywall Board. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
DRW 3	DRW 3	Brown fibrous and tabular material, Drywall Board. Layer 2 of 3.	NAD	Non-fibrous material <1% Cellulose fibers >99%	EE
DRW 3	DRW 3	White tabular, powdery and fibrous material, Drywall Board. Layer 3 of 3.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE
CWT 1	CWT 1	White tabular and powdery material, Ceramic Wall Tile (Entrances). Layer 1 of 3.	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE

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Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
CWT 1	CWT 1	Tan tabular and fibrous material, Ceramic Wall Tile (Entrances). Layer 2 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
CWT 1	CWT 1	Tan tabular material, Ceramic Wall Tile (Entrances). Layer 3 of 3.	NAD	Non-fibrous material 98% Cellulose fibers 2%	EE
CWT 2	CWT 2	White tabular and powdery material, Ceramic Wall Tile (Entrances). Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
CWT 2	CWT 2	Tan tabular and fibrous material, Ceramic Wall Tile (Entrances). Layer 2 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
CWT 2	CWT 2	Tan tabular material, Ceramic Wall Tile (Entrances). Layer 3 of 3.	NAD	Non-fibrous material 98% Cellulose fibers 2%	EE
CWT 3	CWT 3	Red tabular and brick material, Ceramic Wall Tile (Entrances). Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
CWT 3	CWT 3	Gray tabular and powdery material, Ceramic Wall Tile (Entrances). Layer 2 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
MS-1	MS-1	Black asphaltic and mastic material, Mastic (Former 9x9 Tiles).	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
MS 2	MS 2	Black mastic and asphaltic material, Mastic (Former 9x9 Tiles).	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
MS 3	MS 3	Black mastic and asphaltic material, Mastic (Former 9x9 Tiles).	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
MS 4	MS 4	Black mastic and asphaltic material, Mastic (Former 9x9 Tiles).	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
MS 5	MS 5	Black mastic and asphaltic material, Mastic (Former 9x9 Tiles).	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
ST 1	ST 1	Brown and red tabular material, Stair Treads. Layer 1 of 2.	NAD	Non-fibrous material 90% Cellulose fibers 10%	EE
ST 1	ST 1	Tan fibrous material, Stair Treads. Layer 2 of 2.	NAD	Non-fibrous material 2% Cellulose fibers 98%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
ST 2	ST 2	Red and brown tabular material, Stair Treads. Layer 1 of 3.	NAD	Non-fibrous material 90% Cellulose fibers 10%	EE
ST 2	ST 2	Gray tabular material, Stair Treads. Layer 2 of 3.	NAD	Non-fibrous material 90% Cellulose fibers 10%	EE
ST 2	ST 2	Tan fibrous material, Stair Treads. Layer 3 of 3.	NAD	Cellulose fibers 100%	EE
ST 3	ST 3	Red tabular material, Stair Treads. Layer 1 of 3.	NAD	Non-fibrous material 85% Cellulose fibers 15%	EE
ST 3	ST 3	Gray tabular, powdery and fibrous material, Stair Treads. Layer 2 of 3.	NAD	Non-fibrous material 85% Cellulose fibers 15%	EE
ST 3	ST 3	Tan fibrous material, Stair Treads. Layer 3 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
1FC 1	1FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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Client P.O. #: N/A
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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
1FC 1	1FC 1	White tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 57% Fibrous glass 3% Cellulose fibers 40%	EE
1FC 2	1FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
1FC 2	1FC 2	White tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 57% Fibrous glass 3% Cellulose fibers 40%	EE
1FC 3	1FC 3	White tabular and paint material, Vinyl Floor Covering. Layer 1 of 4.	NAD	Non-fibrous material 100%	EE
1FC 3	1FC 3	Tan fibrous material, Vinyl Floor Covering. Layer 2 of 4.	NAD	Non-fibrous material 1% Cellulose fibers 99%	EE
1FC 3	1FC 3	White and clear tabular material, Vinyl Floor Covering. Layer 3 of 4.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
1FC 3	1FC 3	White tabular, powdery and fibrous material, Vinyl Floor Covering. Layer 4 of 4.	NAD	Non-fibrous material 52% Cellulose fibers 45% Fibrous glass 3%	EE

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Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
2FC 1	2FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
2FC 1	2FC 1	White tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 45% Cellulose fibers 55%	EE
2FC 2	2FC 2	White and cream tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
2FC 2	2FC 2	White tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 35% Cellulose fibers 65%	EE
2FC 3	2FC 3	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
2FC 3	2FC 3	White tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
3FC 1	3FC 1	White tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
3FC 1	3FC 1	White tabular, powdery and fibrous material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
3FC 1	3FC 1	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 45% Cellulose fibers 55%	EE
3FC 2	3FC 2	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
3FC 2	3FC 2	Cream tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 2.	Chrysotile 80%	Non-fibrous material 15% Cellulose fibers 5%	EE
4FC 1	4FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
4FC 1	4FC 1	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE
4FC 2	4FC 2	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
4FC 2	4FC 2	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE
4FC 3	4FC 3	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
4FC 3	4FC 3	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 35% Cellulose fibers 60% Fibrous glass 5%	EE
5FC 1	5FC 1	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material 94% Cellulose fibers 6%	EE
5FC 1	5FC 1	Gray fibrous material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Synthetic fibers 5% Cellulose fibers 95%	EE
5FC 2	5FC 2	Gray and white tabular material, Vinyl Floor Covering. Layer 1 of 4.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
5FC 2	5FC 2	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 4.	NAD	Non-fibrous material 27% Cellulose fibers 70% Fibrous glass 3%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
5FC 2	5FC 2	Gray fibrous material, Vinyl Floor Covering. Layer 3 of 4.	NAD	Synthetic fibers 5% Cellulose fibers 95%	EE
5FC 2	5FC 2	Black tabular and mastic material, Vinyl Floor Covering. Layer 4 of 4.	NAD	Non-fibrous material 95% Cellulose fibers 5%	EE
5FC 3	5FC 3	White tabular material, Vinyl Floor Covering. Layer 1 of 4.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
5FC 3	5FC 3	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 4.	NAD	Non-fibrous material 32% Cellulose fibers 65% Fibrous glass 3%	EE
5FC 3	5FC 3	Gray fibrous material, Vinyl Floor Covering. Layer 3 of 4.	NAD	Cellulose fibers 97% Synthetic fibers 3%	EE
5FC 3	5FC 3	Brown tabular material, Vinyl Floor Covering. Layer 4 of 4.	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
6FC 1	6FC 1	White tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
6FC 1	6FC 1	Gray tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 67% Fibrous glass 3%	EE
6FC 1	6FC 1	Tan mastic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE
6FC 2	6FC 2	White tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material 97% Cellulose fibers 2% Fibrous glass 1%	EE
6FC 2	6FC 2	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 67% Fibrous glass 3%	EE
6FC 2	6FC 2	Tan mastic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 96% Cellulose fibers 4%	EE
6FC 3	6FC 3	White tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
6FC 3	6FC 3	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 67% Fibrous glass 3%	EE

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Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
6FC 3	6FC 3	Tan mastic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 92% Cellulose fibers 8%	EE
7FC 1	7FC 1	White tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
7FC 1	7FC 1	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 7% Cellulose fibers 90% Fibrous glass 3%	EE
7FC 2	7FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material 99% Cellulose fibers 1%	EE
7FC 2	7FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 7% Cellulose fibers 90% Fibrous glass 3%	EE
7FC 3	7FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering.	NAD	Non-fibrous material 7% Cellulose fibers 90% Fibrous glass 3%	EE
8FC 1	8FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
8FC 1	8FC 1	White and gray tabular, powdery and fibrous material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 60% Synthetic fibers 5% Fibrous glass 5%	EE
8FC 1	8FC 1	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 27% Cellulose fibers 70% Fibrous glass 3%	EE
8FC 2	8FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
8FC 2	8FC 2	White and gray tabular, powdery and fibrous material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 60% Synthetic fibers 5% Fibrous glass 5%	EE
8FC 2	8FC 2	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 27% Cellulose fibers 70% Fibrous glass 3%	EE
8FC 3	8FC 3	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
8FC 3	8FC 3	White and gray tabular, powdery and fibrous material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 30% Cellulose fibers 60% Synthetic fibers 5% Fibrous glass 5%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
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Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
8FC 3	8FC 3	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 27% Cellulose fibers 70% Fibrous glass 3%	EE
9FC 1	9FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
9FC 1	9FC 1	Tan tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
9FC 2	9FC 2	White paint and tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
9FC 2	9FC 2	Tan tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 1% Cellulose fibers 98% Fibrous glass 1%	EE
9FC 2	9FC 2	Brown tabular and mastic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
9FC 3	9FC 3	Clear and white tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
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Date Sampled: 9/1/2020
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Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
9FC 3	9FC 3	Tan tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 20% Cellulose fibers 80%	EE
10 FC 1	10 FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
10 FC 1	10 FC 1	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
10 FC 2	10 FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
10 FC 2	10 FC 2	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 20% Cellulose fibers 80%	EE
10 FC 3	10 FC 3	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
10 FC 3	10 FC 3	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 20% Cellulose fibers 80%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
11 FC 1	11 FC 1	Clear and white tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
11 FC 1	11 FC 1	Tan tabular and fibrous material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 20% Cellulose fibers 80%	EE
11 FC 2	11 FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
11FC 2	11FC 2	Cream fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
11 FC 3	11 FC 3	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
11 FC 3	11 FC 3	Cream fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 75%	EE
12 FC 1	12 FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
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Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
12 FC 1	12 FC 1	Cream fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
12 FC 1	12 FC 1	Brown tabular and mastic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 91% Cellulose fibers 9%	EE
12 FC 2	12 FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
12 FC 2	12 FC 2	Cream fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
12 FC 3	12 FC 3	Clear and white tabular material, Vinyl Floor Covering. Layer 1 of 2.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
12 FC 3	12 FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 2.	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
13 FC 1	13 FC 1	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
13 FC 1	13 FC 1	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 18% Cellulose fibers 75% Fibrous glass 5% Synthetic fibers 2%	EE
13 FC 1	13 FC 1	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 10% Cellulose fibers 90%	EE
13 FC 2	13 FC 2	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
13 FC 2	13 FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 20% Cellulose fibers 70% Synthetic fibers 5% Fibrous glass 5%	EE
13 FC 2	13 FC 2	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 7% Cellulose fibers 90% Fibrous glass 3%	EE
13 FC 3	13 FC 3	White and clear tabular material, Vinyl Floor Covering. Layer 1 of 3.	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
13 FC 3	13 FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer 2 of 3.	NAD	Non-fibrous material 20% Fibrous glass 5% Cellulose fibers 70% Synthetic fibers 5%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
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Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
13 FC 3	13 FC 3	Black tabular, fibrous and asphaltic material, Vinyl Floor Covering. Layer 3 of 3.	NAD	Non-fibrous material 7% Cellulose fibers 90% Fibrous glass 3%	EE
14FC 1	14FC 1	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
14FC 1	14FC 1	Gray tabular and fibrous material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE
14FC 2	14FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
14FC 2	14FC 2	Gray tabular and fibrous material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE
14FC 3	14FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
14FC 3	14FC 3	Gray tabular and fibrous material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 30% Cellulose fibers 70%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
15FC 1	15FC 1	Clear and white tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
15FC 1	15FC 1	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 18% Cellulose fibers 80% Fibrous glass 2%	EE
15FC 2	15FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
15FC 2	15FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 18% Cellulose fibers 80% Fibrous glass 2%	EE
15FC 3	15FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
15FC 3	15FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 18% Cellulose fibers 80% Fibrous glass 2%	EE
16FC 1	16FC 1	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
NVLAP Accreditation #101510-0

Client Name: ECT
Project Name: 9710 & 9730 West Outer Drive/200532-0100
Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
16FC 1	16FC 1	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 23% Cellulose fibers 75% Fibrous glass 2%	EE
16FC 2	16FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
16FC 2	16FC 2	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
16FC 3	16FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
16FC 3	16FC 3	Gray tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
17FC 1	17FC 1	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
17FC 1	17FC 1	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE

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BULK SAMPLE ANALYTICAL REPORT

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Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
17FC 1	17FC 1	White tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
17FC 1	17FC 1	White fibrous material, Vinyl Floor Covering. Layer of .	NAD	Cellulose fibers 100%	EE
17FC 2	17FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
17FC 2	17FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
17FC 2	17FC 2	White tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
17FC 2	17FC 2	White fibrous material, Vinyl Floor Covering. Layer of .	NAD	Cellulose fibers 100%	EE
17FC 3	17FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Client Name: ECT
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Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
17FC 3	17FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
17FC 3	17FC 3	White tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 100%	EE
17FC 3	17FC 3	White fibrous material, Vinyl Floor Covering. Layer of .	NAD	Cellulose fibers 100%	EE
18FC 1	18FC 1	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
18FC 1	18FC 1	Tan tabular, powdery and fibrous material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
18FC 1	18FC 1	Tan tabular and glue material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 95% Cellulose fibers 5%	EE
18FC 2	18FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
18FC 2	18FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
18FC 2	18FC 2	Tan tabular and glue material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 95% Cellulose fibers 5%	EE
18FC 3	18FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
18FC 3	18FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
19FC 1	19FC 1	White and clear tabular material, Vinyl Floor Covering. Layer of .	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
19FC 1	19FC 1	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
19FC 1	19FC 1	Tan tabular and glue material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE

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BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project # 44028-1
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Summary: 119 Submitted Bulk Samples, 266 Sample Layers Analyzed.

Date Sampled: 9/1/2020
Date Submitted: 9/23/2020
Date Analyzed: 9/28-10/14/20

Client P.O. #: N/A
C.O.C. #: N/A

Sample No.	Client I.D. No.	Description / Location	Asbestos Type	Non-Asbestos-Containing Portion	Analyst
19FC 1	19FC 1	Brown fibrous and tabular material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 5% Cellulose fibers 90% Synthetic fibers 5%	EE
19FC 2	19FC 2	White and clear tabular material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
19FC 2	19FC 2	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE
19FC 2	19FC 2	Tan glue and tabular material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 97% Cellulose fibers 3%	EE
19FC 2	19FC 2	Brown tabular and fibrous material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 5% Cellulose fibers 90% Synthetic fibers 5%	EE
19FC 3	19FC 3	White and clear tabular material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material >99% Cellulose fibers <1%	EE
19FC 3	19FC 3	Tan tabular, fibrous and powdery material, Vinyl Floor Covering. Layer of . (Non-homogeneous)	NAD	Non-fibrous material 25% Cellulose fibers 70% Fibrous glass 5%	EE

[redacted]
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Comments

Bulk samples were analyzed using the USEPA Test Method EPA/600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials and EPA-40 CFR Appendix E to Subpart 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples. The constituent percent reported represents an estimate of the area percent of the component. The test report relates only to items tested. This report is not intended to be used as a product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced, except in full, without the written approval of the laboratory. Individual sample layers are homogeneous, unless otherwise noted.

If no asbestos was detected in a sample the acronym NAD (no asbestos detected) will appear in the Asbestos Type column of the report.

Fine fibers like those in floor tile may not be discernible by this method.

Factors related to measurement uncertainty have been identified and are available up request.

Test items were received in acceptable condition unless otherwise noted. Revision 5.0 dated 08/27/19.

Approved Signatory: [redacted]

Date: 10/15/20

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Industrial Hygiene Services, Inc.
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0382
email: asbestos@fibertecihs.com

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody #

244028-1

Client Name: Environmental Consulting&Tech. (ECT)-Detroit
Contact Person: Maura Gibbons
Project Name/ Number: #200532-0100 9710 & 9730 West Outer Drive
Email distribution list: mgibbons@ectinc.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	Asbestos - PLM	PARAMETERS									HOLD SAMPLE	Remarks:
9/1/20			RAS-1 thru -7	X	7	✓											Roof Asphalt Shingles
9/1/20			FLR-1 thru -5	X	5	✓											Flat Roof Covering
9/1/20			BWC-1 thru -5	X	5	✓											Black Window Caulk
9/1/20			WWC-1 thru -5	X	5	✓											White Window Caulk
9/1/20			WPG-1 thru -7	X	7	✓											Window Pane Glaze
9/1/20			AIN-1 thru -9	X	9	✓											Attic Insulation
9/1/20			10DW-1 thru-2	X	2	✓											9710 Duct Wrap (confirmation)
9/1/20			10PJ-1 thru -2	X	2	✓											9710 Pipe Joints (confirmation)
9/1/20			10PW-1 thru -2	X	2	✓											9710 Pipe Wrap (confirmation)
9/1/20			30PJ-1 thru -2	X	2	✓											9730 Pipe Joints (confirmation)

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

X = Building Materials

Comments: Run all Layers. Stop at First Positive.

Sampled/Relinquished By: Maura Gibbons	Date/ Time 9/21/20 via UPS	Received By: U. Santana
Relinquished By: U. Santana	Date/ Time 9/23/20 11:00AM	Received By: Erik Ethy 09/28/20 16:45
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number:

Temperature upon receipt at Lab:

Please see back for terms and conditions

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Industrial Hygiene Services, Inc.
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0382
email: asbestos@fibertecihs.com

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody #

44028-1

Client Name: Environmental Consulting&Tech. (ECT)-Detroit

Contact Person: Maura Gibbons

Project Name/ Number: #200532-0100
9710 & 9730 West Outer Drive

Email distribution list: mgibbons@ectinc.com

Quote#

Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PARAMETERS: Asbestos - PLM	PARAMETERS	HOLD SAMPLE	Remarks:
9/1/20			30PW-1 thru -2	X	7	✓			9730 Pipe Wrap (confirmation)
9/1/20			APL-1 thru -9	X	9	✓			Apartment Unit Plaster
9/1/20			UPL-1 thru -7	X	7	✓			Utility Room Plaster
9/1/20			DRW-1 thru -3	X	3	✓			Drywall Board
9/1/20			CWT-1 thru -3	X	3	✓			Ceramic Wall Tile (Entrances)
9/1/20			MS-1 thru -5	X	5	✓			Mastic (Former 9x9 Tiles)
9/1/20			ST-1 thru -3	X	3	✓			Stair Treads
9/1/20			1FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			2FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			3FC-1 thru -3	X	3	✓			Vinyl Floor Covering

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

X = Building Materials

Comments: Run all Layers. Stop at First Positive.

Sampled/Relinquished By: Maura D	Date/ Time 9/21/20 via UPS	Received By: L. Sweitzer
Relinquished By: L. Sweitzer	Date/ Time 9/23/20 11:20	Received By: Erik Ellis 09/1/20 10:00
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number:

Temperature upon receipt at Lab:

Please see back for terms and conditions

Fibertec environmental services

44028-1

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Industrial Hygiene Services, Inc.
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0382
email: asbestos@fibertecihs.com

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody #

Client Name: Environmental Consulting&Tech. (ECT)-Detroit

Contact Person: Maura Gibbons

Project Name/ Number: #200532-0100
9710 & 9730 West Outer Drive

Email distribution list: mgibbons@ectinc.com

Quote#

Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PARAMETERS: Asbestos - PLM	PARAMETERS	HOLD SAMPLE	Remarks:
9/1/20			4FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			5FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			6FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			7FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			8FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			9FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			10FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			11FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			12FC-1 thru -3	X	3	✓			Vinyl Floor Covering
9/1/20			13FC-1 thru -3	X	3	✓			Vinyl Floor Covering

Matrix Code			
S	Soil	GW	Ground Water
A	Air	SW	Surface Water
O	Oil	WW	Waste Water
P	Wipe	X	Other: Specify

X = Building Materials

Deliverables	
	Level 2
	Level 3
	Level 4
	EDD

Comments: Run all Layers. Stop at First Positive.

Sampled/Relinquished By: [signature]	Date/ Time 9/21/20 via UPS	Received By: [signature]
Relinquished By: [signature]	Date/ Time 9/23/20 11:00	Received By: Erik Eikey 9:53 10/9/20
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number:

Temperature upon receipt at Lab:

Please see back for terms and conditions

Fibertec environmental services

44028-1

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
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Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody #

Client Name: Environmental Consulting&Tech. (ECT)-Detroit

Contact Person: Maura Gibbons

Project Name/ Number: #200532-0100
9710 & 9730 West Outer Drive

Email distribution list: mgibbons@ectinc.com

Quote#

Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	PARAMETERS: Asbestos - PLM	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	PARAMETERS	HOLD SAMPLE	Remarks:
9/1/20			14FC-1 thru -3	X	3	✓											Vinyl Floor Covering
9/1/20			15FC-1 thru -3	X	3	✓											Vinyl Floor Covering
9/1/20			16FC-1 thru -3	X	3	✓											Vinyl Floor Covering
9/1/20			17FC-1 thru -3	X	3	✓											Vinyl Floor Covering
9/1/20			18FC-1 thru -3	X	3	✓											Vinyl Floor Covering
9/1/20			19FC-1 thru -3	X	3	✓											Vinyl Floor Covering

Matrix Code

S	Soil	GW	Ground Water
A	Air	SW	Surface Water
O	Oil	WW	Waste Water
P	Wipe	X	Other: Specify

Deliverables

- Level 2
- Level 3
- Level 4
- EDD

X = Building Materials

Comments: Run all Layers. Stop at First Positive.

Sampled/Relinquished By: Maura	Date/ Time 9/21/20 via UPS	Received By: D. Martinez
Relinquished By: D. Martinez	Date/ Time 9/23/20 11:00	Received By: Erik Eiks 10/13/20 13:54
Relinquished By:	Date/ Time	Received By Laboratory:

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days

X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY

Fibertec project number:

Temperature upon receipt at Lab:

Please see back for terms and conditions

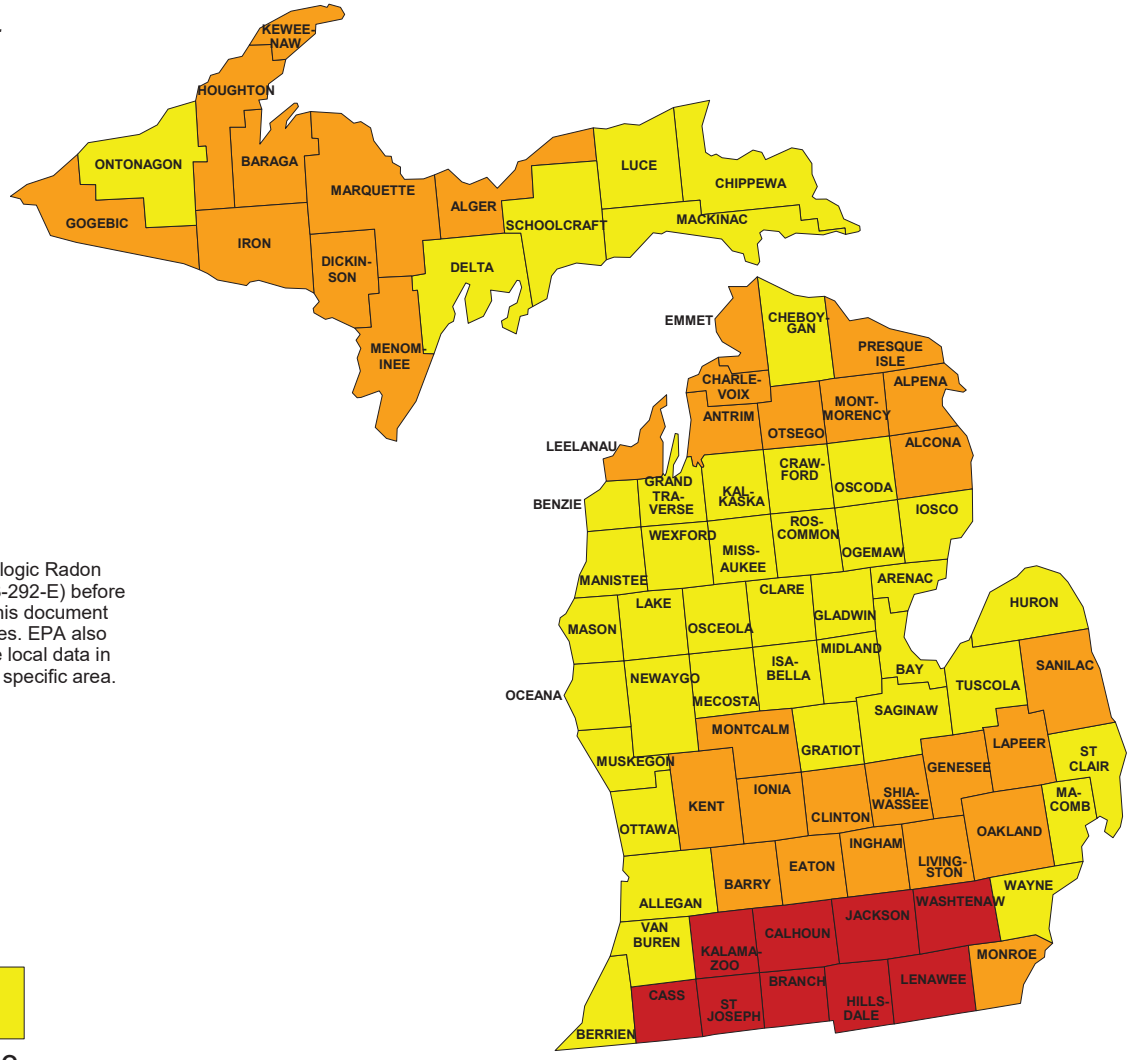
MICHIGAN - EPA Map of Radon Zones

http://www.epa.gov/radon/zonemap.html

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.

This map is not intended to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones.

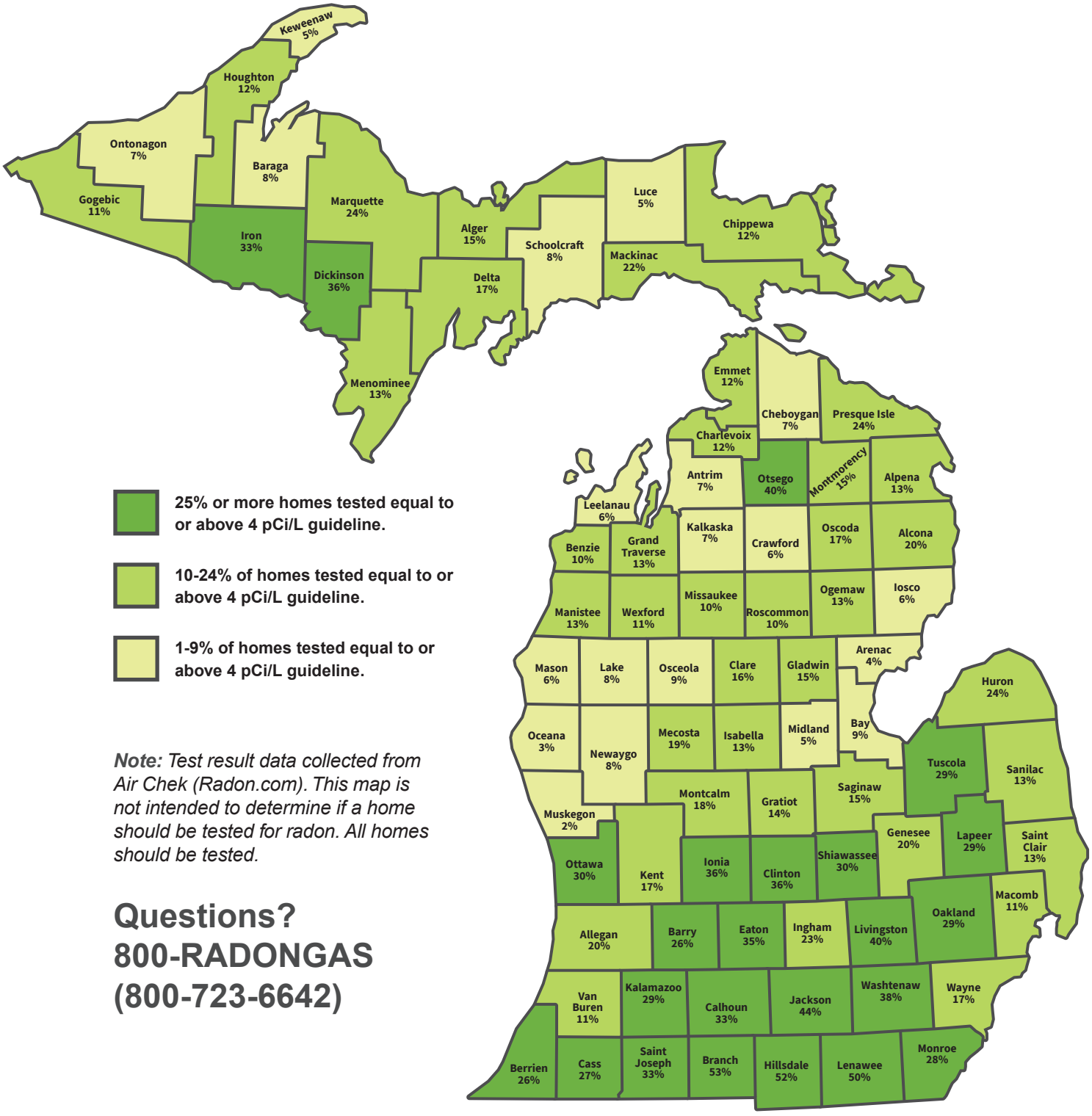
All homes should be tested, regardless of zone designation.



IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of Michigan" (USGS Open-file Report 93-292-E) before using this map. http://energy.cr.usgs.gov/radon/grpinfo.html This document contains information on radon potential variations within counties. EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.

Zone 1 Zone 2 Zone 3

Percentage of Elevated Radon Test Results by County



25% or more homes tested equal to or above 4 pCi/L guideline.

10-24% of homes tested equal to or above 4 pCi/L guideline.

1-9% of homes tested equal to or above 4 pCi/L guideline.

Note: *Test result data collected from Air Chek (Radon.com). This map is not intended to determine if a home should be tested for radon. All homes should be tested.*

Questions?
800-RADONGAS
(800-723-6642)

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

800-662-9278 | Michigan.gov/radon

12/2019

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Michigan Ecological Services Field Office
2651 Coolidge Road Suite 101
East Lansing, MI 48823-6360
Phone: (517) 351-2555 Fax: (517) 351-1443
http://www.fws.gov/midwest/EastLansing/

In Reply Refer To: March 17, 2022
Project code: 2022-0020871
Project Name: Outer Drive and Minnock Properties

Subject: Consistency letter for 'Outer Drive and Minnock Properties' for threatened and endangered species that may occur in your proposed project location consistent with the Michigan Endangered Species Determination Key (Michigan DKey)

Dear Jeremiah Roth:

The U.S. Fish and Wildlife Service (Service) received on **March 17, 2022** your effect determination(s) for the 'Outer Drive and Minnock Properties' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you determined the proposed Action will have "No Effect" on the following species.

Species	**Listing Status**	**Determination**
Eastern Massasauga (=rattlesnake) (*Sistrurus catenatus*)	Threatened	No effect
Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)	Threatened	No effect
Indiana Bat (*Myotis sodalis*)	Endangered	No effect
Northern Long-eared Bat (*Myotis septentrionalis*)	Threatened	No effect
Northern Riffleshell (*Epioblasma torulosa rangiana*)	Endangered	No effect
Piping Plover (*Charadrius melodus*)	Endangered	No effect
Red Knot (*Calidris canutus rufa*)	Threatened	No effect

Your agency has met consultation requirements for these species by informing the Service of the "No Effect" determinations. Please email a copy of this letter to MIFO_Dkey@fws.gov for our record keeping (include "No Effect for Project Name" in the subject line).

For non-Federal representatives: Please note that when a project requires consultation under section 7 of the Act, the Service must consult directly with the Federal action agency unless that

agency formally designates a non-Federal representative (50 CFR 402.08). Non-Federal representatives may prepare analyses or conduct informal consultations; however, the ultimate responsibility for section 7 compliance under the Act remains with the Federal agency. If the Federal agency concurs with your determination, the project as proposed has completed section 7 consultation. All documents and supporting correspondence should be provided to the Federal agency for their records.
Please provide sufficient project details on your project homepage in IPaC (Define Project, Project Description) to support your conclusions. Failure to disclose important aspects of your project that would influence the outcome of your effects determinations may negate your determinations and invalidate this letter. If you have site-specific information that leads you to believe a different determination is more appropriate for your project than what the Dkey concludes, you can and should proceed based on the best available information.

The Service recommends that you contact the Service or re-evaluate the project in IPaC if: 1) the scope or location of the proposed Action is changed; 2) new information reveals that the action may affect listed species or designated critical habitat in a manner or to an extent not previously considered; 3) the Action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

Bald and Golden Eagles:
Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the "taking" of bald and golden eagles and defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The Eagle Act's implementing regulations define disturb as "…to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

If the Action may impact bald or golden eagles, additional coordination with the Service under the Eagle Act may be required. For more information on eagles and conducting activities in the vicinity of an eagle nest, please visit https://www.fws.gov/midwest/eagle/. In addition, the Service developed the National Bald Eagle Management Guidelines (May 2007) in order to assist landowners in avoiding the disturbance of bald eagles. The full Guidelines are available at http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf.

If you have further questions regarding potential impacts to eagles, please contact Chris Mensing, Chris_Mensing@fws.gov or 517-351-2555.

Wetland impacts:
Section 404 of the Clean Water Act of 1977 (CWA) regulates the discharge of dredged or fill material into waters (including wetlands) of the United States. Regulations require that activities permitted under the CWA (including wetland permits issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE)) not jeopardize the continued existence of

species listed as endangered or threatened. Permits issued by the U.S. Army Corps of Engineers must also consider effects to listed species pursuant to section 7 of the Endangered Species Act. The Service provides comments to the agencies that may include permit conditions to help avoid or minimize impacts to wildlife resources including listed species. For this project, we consider the conservation measures you agreed to in the determination key and/or as part of your proposed action to be non-discretionary. If you apply for a wetland permit, these conservation measures should be explicitly incorporated as permit conditions. Include a copy of this letter in your wetland permit application to streamline the threatened and endangered species review process.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Outer Drive and Minnock Properties

2. Description

The following description was provided for the project 'Outer Drive and Minnock Properties':

> 9710-9730 West Outer Drive, Detroit, MI. The project is proposed for residential development.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.4052799,-83.23343320751849,14z

Qualification Interview

1. This determination key is intended to assist the user in the evaluating the effects of their actions on Federally listed species in Michigan. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, purposeful take for scientific purposes or to enhance the survival of a species, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes. Click yes to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

   Yes

2. Is the action the approval of a long-term (i.e., in effect greater than 10 years) permit, plan, or other action?

   No

3. Is the action being funded, authorized, or carried out by a Federal agency?

   Yes

4. Does the action involve the installation or operation of wind turbines?

   No

5. Does the action involve purposeful take of a listed animal?

   No

6. Does the action involve a new communication tower?

   No

7. Does the activity involve aerial or other large-scale application of any chemical (including insecticide, herbicide, etc.)?

   No

8. Will your action permanently affect local hydrology by impacting 1/2 acre or more of wetland; or by increasing or decreasing groundwater or surfacewater elevations?

   No

9. Will your action temporarily affect local hydrology by impacting 1/2 acre or more of wetland; or by increasing or decreasing groundwater or surfacewater elevations?

   No

10. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new storm-water outfall discharge, dams, other in-stream work, etc.)?

    No

11. Does your project have the potential to indirectly impact the stream/river or the riparian zone (e.g., cut and fill, horizontal directional drilling, hydrostatic testing, construction, vegetation removal, discharge, etc.)?

    No

12. Will your action disturb the ground or existing vegetation? This includes any off road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application, vegetation management (including removal or maintenance using equipment or chemicals), cultivation, development, etc.

    No

13. Does your action area occur entirely within an already developed area with no natural habitat or trees present? For the purposes of this question, "already developed areas" are already paved, covered by existing structures, manicured lawns, industrial sites, or cultivated cropland, AND do not contain trees that could be roosting habitat. Be aware that listed species may occur in areas with natural, or semi-natural, vegetation immediately adjacent to existing utilities (e.g. roadways, railways) or within utility rights-of-way such as overhead transmission line corridors, and can utilize suitable trees, bridges, or culverts for roosting even in urban dominated landscapes (so these are NOT considered "already developed areas" for the purposes of this question).

    Yes

14. Does the action have potential indirect effects to listed species or the habitats they depend on (e.g., water discharge into adjacent habitat or waterbody, changes in groundwater elevation, introduction of an exotic plant species)?

    No

15. [Hidden Semantic] Does the action area intersect the Indiana bat AOI?

    Automatically answered
    Yes

16. Federally listed bats infrequently use anthropogenic structures for roosting, such as buildings, barns, sheds, and bat boxes. Are bats known to be roosting in a structure that occurs within your action area?

    No

17. [Hidden Semantic] Does the action intersect the Eastern massasauga rattlesnake area of influence?

    Automatically answered
    Yes

18. [Semantic] Does the action area intersect the northern riffelshell area of influence?

    Automatically answered
    Yes

19. [Hidden Semantic] Does the action area intersect the piping plover area of influence?

    Automatically answered
    Yes

20. [Hidden Semantic] Does the action area intersect the rufa red knot area of influence?

    Automatically answered
    Yes

21. [Hidden Semantic] Does the action area intersect the area of influence for Eastern prairie fringed orchid?

    Automatically answered
    Yes

22. [Hidden Semantic] Does the action area intersect the Indiana bat area of influence?

    Automatically answered
    Yes

23. [Hidden Semantic] Does this project intersect the northern long-eared bat area of influence?

    Automatically answered
    Yes

IPaC User Contact Information

Agency: ASTI Environmental
Name: Jeremiah Roth
Address: 10448 Citation Drive, suite 100
City: Brighton
State: MI
Zip: 48116
Email jroth@asti-env.com
Phone: 8103607830

Michigan
Federally-listed Endangered and Threatened Species

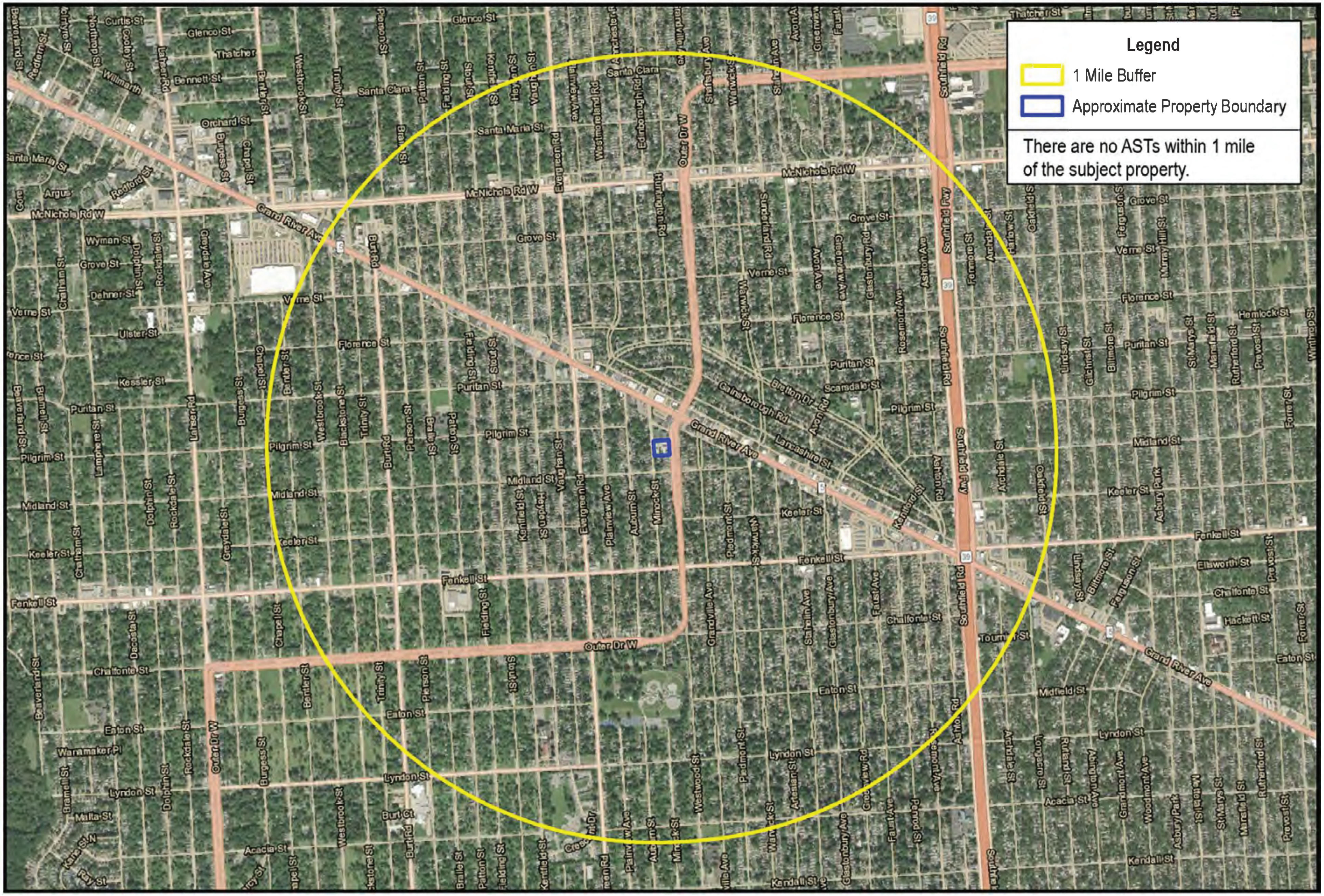
Updated October 2018

SPECIES	STATUS	COUNTIES	HABITAT
MAMMALS			
Canada lynx *(Lynx canadensis)*	Threatened	**Current distribution:** A Canada lynx was recently documented in the Upper Peninsula. The counties listed here have the highest potential for Lynx presence: Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, Schoolcraft.	Northern forests
Gray wolf *Canis lupus*	Endangered	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, Schoolcraft	Northern forested areas
Indiana bat *(Myotis sodalis)*	Endangered	Allegan, Barry, Bay, Benzie, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Ingham, Ionia, Jackson, Kalamazoo, Kent, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Manistee, Mason, Monroe, Montcalm, Muskegon, Oakland, Oceana, Ottawa, Saginaw, St. Joseph, Sanilac, Shiawassee, St. Clair, Tuscola, Van Buren, Washtenaw, and Wayne	Summer habitat includes small to medium river and stream corridors with well developed riparian woods; woodlots within 1 to 3 miles of small to medium rivers and streams; and upland forests. Caves and mines as hibernacula.
Northern long-eared bat *Myotis septentrionalis*	Threatened	Statewide	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests during spring and summer.
BIRDS			
Kirtland's warbler *Setophaga kirtlandii*	Endangered	Alcona, Alger, Antrim, Baraga, Chippewa, Clare, Crawford, Delta, Grand Traverse, Iosco, Kalkaska, Luce, Marquette, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Schoolcraft	Breeding in young jack pine
Piping plover *(Chradrius melodus)*	Endangered	Alger, Alpena, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Leelanau, Luce, Mackinac, Manistee, Mason, Muskegon, Presque Isle, Schoolcraft	Beaches along shorelines of the Great Lakes
Piping plover *(Chradrius melodus)*	Critical Habitat	Alger, Benzie, Charlevoix, Cheboygan, Chippewa, Emmet, Iosco, Leelanau, Luce, Mackinac, Mason, Muskegon, Presque Isle, Schoolcraft	Beaches along shorelines of the Great Lakes

SPECIES	STATUS	COUNTIES	HABITAT
Rufa Red knot *(Calidris canutus rufa)*	Threatened	**Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30 for the following counties:** Alcona, Alger, Allegan, Alpena, Antrim, Arenac, Baraga, Bay, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Gogebic, Grand Traverse, Houghton, Huron, Iosco, Keweenaw, Leelanau, Luce, Mackinac, Macomb, Manistee, Marquette, Mason, Menominee, Monroe, Muskegon, Oceana, Ontonagon, Ottawa, Presque Isle, Sanilac, Schoolcraft, St. Clair, Tuscola, Van Buren, Wayne **Only actions that occur in large wetland complexes during the Red knot migratory window of MAY 1 - SEPTEMBER 30 for the following counties:** Midland, Saginaw, Shiawassee	Coastal areas and large wetland complexes
Whooping crane ** (*Grus americanus*)	Non-essential experimental population	Allegan, Barry, Berrien, Jackson, Kent, Lenawee, Macomb, Oceana, Ottawa	Open wetlands and lakeshores
REPTILES			
Copperbelly water snake *(Nerodia erythrogaster neglecta)*	Threatened	Branch, Calhoun, Cass, Eaton, Hillsdale, St. Joseph	Wooded and permanently wet areas such as oxbows, sloughs, brushy ditches and floodplain woods
Eastern massasauga (*Sistrurus catenatus*)	Threatened	Alcona, Allegan, Alpena, Antrim, Arenac, Barry, Berrien, Branch, Calhoun, Cass, Cheboygan, Clare, Clinton, Crawford, Eaton, Emmett, Genesee, Grand Traverse, Hillsdale, Huron, Ingham, Ionia, Iosco, Jackson, Kalamazoo, Kalkaska, Kent, Lake, Lapeer, Lenawee, Livingston, Mackinac, Macomb, Manistee, Mason, Missaukee, Montcalm, Montmorency, Muskegon, Newaygo, Oakland, Oscoda, Presque Isle, Saginaw, St. Joseph, Shiawassee, Van Buren, Washtenaw, Wayne	Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies) open woodlands and shrublands
INSECTS			
Hine's emerald dragonfly *(Somatochlora hineana)*	Endangered	Alcona, Alpena, Mackinac, Menominee, Presque Isle	Spring fed wetlands, wet meadows and marshes; calcareous streams & associated wetlands overlying dolomite bedrock
Hungerford's crawling water beetle *(Brychius hungerfordi)*	Endangered	Charlevoix, Cheboygan, Crawford, Emmet, Montmorency, Oscoda, Otsego, Presque Isle	Cool riffles of clean, slightly alkaline streams; known to occur in five streams in northern Michigan.
Karner blue butterfly *(Lycaeides melissa samuelis)*	Endangered	Allegan, Ionia, Kent, Lake, Mason, Mecosta, Monroe, Montcalm, Muskegon, Newaygo, Oceana	Pine barrens and oak savannas on sandy soils and containing wild lupines *(Lupinus perennis)*, the only known food plant of larvae.
Mitchell's satyr *(Neonympha mitchellii mitchellii)*	Endangered	Barry, Berrien, Branch, Cass, Jackson, Kalamazoo, St. Joseph, Van Buren, Washtenaw	Fens; wetlands characterized by calcareous soils which are fed by carbonate-rich water from seeps and springs

SPECIES	STATUS	COUNTIES	HABITAT
Poweshiek skipperling (*Oarisma poweshiek*)	Endangered Critical Habitat	Hillsdale, Jackson, Lenawee, Livingston, Oakland, and Washtenaw Maps of proposed critical habitat in Michigan at www.fws.gov/midwest/endangered/insects/posk/fCHmaps/poskchMI.pdf	Wet prairie and fens
MUSSELS			
Clubshell *(Pleurobema clava)*	Endangered	Hillsdale	Found in coarse sand and gravel areas of runs and riffles within streams and small rivers
Northern riffleshell *(Epioblasma torulosa rangiana)*	Endangered	Monroe, Sanilac, Wayne	Large streams and small rivers in firm sand of riffle areas; also occurs in Lake Erie
Rayed Bean (*Villosa fabalis*)	Endangered	Oakland, St. Clair	Belle, Black, Clinton and Pine Rivers
Snuffbox (*Epioblasma triquetra*)	Endangered	Gratiot, Ionia, Kent, Livingston, Oakland, St. Clair, Washtenaw	Small to medium-sized creeks in areas with a swift current and some larger rivers
PLANTS			
American hart's tongue fern *(Asplenium scolopendrium* var. *americanun = Phyllitis japonica* ssp. *a.)*	Threatened	Chippewa, Mackinac	Cool limestone sinkholes in mature hardwood forest
Dwarf lake iris *(Iris lacustris)*	Threatened	Alpena, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Mackinac, Menominee, Presque Isle, Schoolcraft	Partially shaded sandy-gravelly soils on lakeshores
Eastern prairie fringed orchid *(Plantathera leucophaea)*	Threatened	Bay, Cheboygan, Clinton, Eaton, Genesee, Gratiot, Huron, Livingston, Monroe, Saginaw, St. Clair, St. Joseph, Tuscola, Washtenaw, Wayne	Mesic to wet prairies and meadows
Houghton's goldenrod *(Solidago houghtonii)*	Threatened	Charlevoix, Cheboygan, Chippewa, Crawford, Emmet, Kalkaska, Mackinac, Presque Isle, Schoolcraft	Sandy flats along Great Lakes shores
Lakeside daisy *(Hymenoxy acaulis var. glabra)*	Threatened	Mackinac	Dry, rocky prairie grassland underlain by limestone
Michigan monkey-flower *(Mimulus michiganesis)*	Endangered	Benzie, Charlevoix, Cheboygan, Emmet, Leelanau, Mackinac	Soils saturated with cold flowing spring water; found along seepages, streams and lakeshores
Pitcher's thistle *(Cirsium pitcheri)*	Threatened	Alcona, Alger, Allegan, Alpena, Antrim, Arenac, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Grand Traverse, Huron, Iosco, Leelanau, Mackinac, Manistee, Mason, Muskegon, Oceana, Ottawa, Presque Isle, Schoolcraft, Van Buren	Stabilized dunes and blowout areas

SPECIES	STATUS	COUNTIES	HABITAT
Small whorled pogonia *(Isotria medeoloides*)	Threatened	Berrien	Dry woodland; upland sites in mixed forests (second or third growth stage)



9710-9730 Outer Drive West

9710-9730 W. Outer Drive
Detroit, MI

0 0.25 0.5 1 Miles

N

ASTi ENVIRONMENTAL

Created for: Grandmont Rosedale Development Corporation
Created by: RMH, March 23, 2022, ASTI Project 1-11641

Acceptable Separation Distance Map

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Wayne County, Michigan

March 17, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:540 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wayne County, Michigan
Survey Area Data: Version 7, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 5, 2020—Aug 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KibuaB	Kibbie-Urban land complex, 0 to 4 percent slopes	0.1	12.2%
KibueB	Kibbie-Urban land-Colwood complex, sandy substratum, 0 to 4 percent slopes	0.9	87.8%
Totals for Area of Interest		**1.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Wayne County, Michigan

KibuaB—Kibbie-Urban land complex, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2tx7r
Elevation: 580 to 640 feet
Mean annual precipitation: 28 to 38 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 135 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Kibbie, human transported surface, and similar soils: 50 percent
Urban land: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kibbie, Human Transported Surface

Setting

Landform: Lakebeds (relict), deltas
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: Loamy human-transported material over loamy glaciolacustrine deposits

Typical profile

^Au - 0 to 9 inches: sandy loam
^Cu - 9 to 12 inches: loam
Bwb - 12 to 36 inches: silty clay loam
C - 36 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 30 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 42 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Colwood, human transported surface

Percent of map unit: 7 percent
Landform: Deltas, lakebeds (relict)
Microfeatures of landform position: Open depressions
Down-slope shape: Linear, concave
Across-slope shape: Convex, linear
Hydric soil rating: No

Anthroportic udorthents

Percent of map unit: 5 percent
Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

Rapson, human transported surface

Percent of map unit: 2 percent
Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

Freesoil, human transported surface

Percent of map unit: 1 percent
Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

KibueB—Kibbie-Urban land-Colwood complex, sandy substratum, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2v14k
Elevation: 600 to 640 feet
Mean annual precipitation: 28 to 38 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 135 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Kibbie, human transported surface, and similar soils: 45 percent
Urban land: 35 percent
Colwood, human transported surface, and similar soils: 15 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kibbie, Human Transported Surface

Setting

Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Parent material: Loamy human-transported material over loamy glaciolacustrine deposits over sandy glaciolacustrine deposits

Typical profile

^Au - 0 to 9 inches: sandy loam
^Cu - 9 to 12 inches: loam
Bwb - 12 to 36 inches: silty clay loam
C - 36 to 61 inches: silt loam
2C - 61 to 80 inches: sand

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 30 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 42 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Colwood, Human Transported Surface

Setting

Landform: Lakebeds (relict), deltas
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Loamy human-transported material over loamy glaciolacustrine deposits over sandy glaciolacustrine deposits

Typical profile

^Au - 0 to 9 inches: sandy loam
^Cu - 9 to 12 inches: loam
Bgb - 12 to 35 inches: silty clay loam
C - 35 to 62 inches: silt loam
2C - 62 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: About 24 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 42 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D

Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Minor Components

Rapson, human transported surface
Percent of map unit: 3 percent
Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Fortress family
Percent of map unit: 2 percent
Landform: Deltas, lakebeds (relict)
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

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United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

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Housing and Revitalization Department
CITY OF DETROIT

Coleman A. Young Municipal Center
2 Woodward Avenue. Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

April 4, 2022

Penny Dwoinen
City of Detroit Housing & Revitalization Department
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 908
Detroit, MI 48226

RE: **Section 106 Review of a CDBG-Funded Project Located at 9710-30 W. Outer Drive in the City of Detroit, Wayne County, Michigan**

Dear Mrs. Dwoinen,

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the "Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan…," dated November 9, 2016, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y).

Based on the information submitted to this office on 3/31/2022, we have determined a Historic Property is located within in the Area of Potential Effects (APE) for this project. The building at **9710-30 W. Outer Drive is listed on** the National Register of Historic Places as part of the Rosedale Park Local Historic District. Therefore, per Stipulation V.B of the Programmatic Agreement (PA), the project shall be carried out in accordance with the *Secretary of the Interior's Standards for Rehabilitation*.

This project has been given a **Conditional No Adverse Effect** determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places, as long at the following conditions are met:

- The work is conducted in accordance with the specifications submitted to the Preservation Specialist on 3/31/2022
- Any changes to the scope of work for the project shall be submitted to the Preservation Specialist for review and approval prior to the start of any work
- A copy of the NPS Tax Credit Part II approval is provided
- Photos of the completed work are submitted to the Preservation Specialist

Please note that the Section 106 Review process will not be complete until the above-mentioned conditions are met. If you have any questions, you may contact the Preservation Specialist at Ciavattonet@detroitmi.gov.

Sincerely,

Housing and Revitalization Department

Coleman A. Young Municipal Center
2 Woodward Avenue. Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

Tiffany Ciavattone
Preservation Specialist
City of Detroit
Housing & Revitalization Department

Housing and Revitalization Department
CITY OF DETROIT

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Submit one application for each project for which comment is requested. Consult the *Instructions for the Application for HRD Section 106 Consultation Form* when completing this application. Once application form is complete please submit via: https://app.smartsheet.com/b/form/1faa296eedac476a9fbf2ef1916ddb99, along with any supplemental attachments, up to 250MB.

I. GENERAL INFORMATION

☒ New submittal

☐ More information relating to and existing project

a. **Project Name: GRPC II (Outer Drive)**
b. **Project Municipality**: Detroit
c. **Project Address**: 9710, 9730 W. Outer Drive

II. FEDERAL AGENCY INVOLVEMENT AND RESPONSE CONTACT INFORMATION

a. **State Agency Contact (*if applicable*):** NA
Contact Name: NA
Contact Address: NA **City:** NA **Zip:** NA
Email: NA **Phone:** NA

b. **Applicant (if different than federal agency):** Grandmont Rosedale Development Corporation
Contact Name: Becki Kenderes
Contact Address: 19800 Grand River **City:** Detroit **State:** MI **Zip:** 48223
Email: becki@grandmontrosedale.com **Phone:** 313-387-4732 Ext 120

c. **Consulting Firm (if applicable):** Kidorf Preservation Consulting
Contact Name: Kristine Kidorf
Contact Address: 451 E. Ferry St **City:** Detroit **State:** MI **Zip**: 48202
Email: kristine@kidorfpreservationconsulting.com Phone: 313-300-9376

III. PROJECT INFORMATION

a. **Project Location and Area of Potential Effect (APE)**

i. **Maps.** Please indicate all maps that will be submitted as attachments to this form.

☒Street map, clearly displaying the direct and indirect APE boundaries
☐Site map
☐USGS topographic map Name(s) of topo map(s): Name(s) of topo map(s)
☒Aerial map
☒Map of photographs
☐Other: Identify type(s) of map(s)

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ii. **Site Photographs**

iii. **Describe the APE:**
The properties at 9710 and 9730 West Outer Drive. The entire property is about .3 of an acre.

iv. **Describe the steps taken to define the boundaries of the APE:**
The project is the rehabilitation of two existing apartment buildings and upgrade of an existing parking lot. The buildings will appear the same after rehabilitation, so there will be no change in the views or setting of surrounding properties. No building demolition is proposed. There is an increase of two apartment units, but that increase will not change the amount of traffic or noise in the area. There is no potential to affect any properties outside of the two apartment buildings being rehabilitated and the associated parking lot.

b. **Project Work Description**

Describe all work to be undertaken as part of the project:

Rehabilitate the exterior and interior of two existing apartment units. The rehabilitation includes window replacement, exterior repairs, and interior MEP upgrades, new kitchens, and new bathroom fixtures. The existing parking lot at the rear of the property will have new lighting and new fencing. The walkways around the building are proposed to be replaced in their existing configuration. The work has been approved by the Detroit Historic District Commission, as well as the State Historic Preservation Office and National Park Service as part of the federal historic rehabilitation tax credit process. Note that because ground disturbance is well under the half-acre, the city is not requiring archaeological review.

IV. IDENTIFICATION OF HISTORIC PROPERTIES

a. **Scope of Effort Applied**

i. **List sources consulted for information on historic properties in the project area** (including but not limited to SHPO office and/or other locations of inventory data).

SHPO records, *National Register of Historic Places, State Register of Historic Sites, City of Detroit Local Historic Districts.*

ii. Provide documentation of previously identified sites as attachments.

iii. **Provide a map** showing the relationship between the previously identified properties and sites, your project footprint and project APE.

iv. Have you reviewed existing site information at the SHPO: ☒Yes ☐ No

v. Have you reviewed information from non-SHPO sources: ☒Yes ☐ No

b. **Identification Results**

i. **Above-ground Properties**

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A. Attach the appropriate Michigan SHPO Identification Form for each resource or site 50 years of age or older in the APE. Refer to the *Instructions for the Application for SHPO Section 106 Consultation Form* for guidance on this.

B. **Provide the name and qualifications of the person who made recommendations of eligibility for the above-ground identification forms.**

Name Kristine Kidorf **Agency/Consulting Firm:** Kidorf Preservation Consulting

Is the individual a 36CFR Part 61 Qualified Historian or Architectural Historian ☒ Yes ☐ No

Are their credentials currently on file with the SHPO? ☒ Yes ☐ No

If NO attach this individual's qualifications form and resume.

ii. **Archaeology** (complete this section if the project involves temporary or permanent ground disturbance)

Submit the following information using attachments, as necessary.

A. **Attach Archaeological Sensitivity Map.**

B. **Summary of previously reported archaeological sites and surveys:**

Previously reported archaeological sites and surveys

C. **Town/Range/Section or Private Claim numbers:** town/range/section or private claim #s

D. **Width(s), length(s), and depth(s) of proposed ground disturbance(s):** Width, length, depth of proposed ground disturbance

E. **Will work potentially impact previously undisturbed soils?** ☐ Yes ☐ No

***If YES,* summarize new ground disturbance:**
Summary of new ground disturbance

F. **Summarize past and present land use:**

Summary of past and present land use

G. **Potential to adversely affect significant archaeological resources**:

☐ Low ☐ Moderate ☐ High

For moderate and high potential, is fieldwork recommended? ☐ Yes ☐ No

Briefly justify the recommendation:

Justification for recommendation of fieldwork

H. **Has fieldwork already been conducted?** ☐ Yes ☐ No

If YES:

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☐ Previously surveyed; refer to A. and B. above.
☐ Newly surveyed; attach report copies and provide full report reference here:
Full report reference

I. **Provide the name and qualifications of the person who provided the information for the Archaeology section:**

Name: Name of archaeologist **Agency/Firm:** Archaeologist's agency or firm
Is the person a 36CFR Part 61 Qualified Archaeologist? ☐ Yes ☐ No
Are their credentials currently on file with the SHPO? ☐ Yes ☐ No
If NO, attach this individual's qualifications form and resume.

Archaeological site locations are legally protected.

This application may not be made public without first redacting sensitive archaeological information.

V. DETERMINATION OF EFFECT

Guidance for applying the Criteria of Adverse Effect can be found in *the Instructions for the Application for SHPO Section 106 Consultation Form*.

a. **Basis for determination of effect**:

The rehabilitation project will meet *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Properties* and will have No Adverse Effect on 9710 and 9730 W. Outer Drive which are listed in the National Register of Historic Places as contributing properties in the Rosedale Park Historic District.

b. **Determination of effect**

☐ **No historic properties will be affected**

☒ **Historic properties will be affected** and the project will (check one):

☒ have **No Adverse Effect** on historic properties within the APE.

☐ have an **Adverse Effect** on one or more historic properties in the APE and the federal agency, or federally authorized representative, will consult with the SHPO and other parties to resolve the adverse effect under 800.6.

Applicant Signature: _____ Date: 3/29/22

Housing and Revitalization Department

Coleman A. Young Municipal Center
2 Woodward Avenue. Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

Type or Print Name: Becki Kenderes

Title: Program Director

Housing and Revitalization Department
CITY OF DETROIT

Coleman A. Young Municipal Center
2 Woodward Avenue. Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

ATTACHMENT CHECKLIST

Identify any materials submitted as attachments to the form:

☐ Additional federal, state, local government, applicant, consultant contacts

☒ Maps of project location

Number of maps attached: number of maps

☒ Site Photographs

☒Map of photographs

☐ Plans and specifications

☒ Other information pertinent to the work description: NPS Part 2 tax credit applications

☒ Documentation of previously identified historic properties

☐ Architectural Properties Identification Forms

☒ Map showing the relationship between the previously identified properties, your project footprint, and project APE

☐ Above-ground qualified person's qualification form and resume

☐ Archaeological sensitivity map

☐ Survey report

☐ Archaeologist qualifications and resume

☐ Other: Identify other attached materials

Kidorf Preservation Consulting

451 E. Ferry Street, Detroit, Michigan 48202 313-300-9376

March 14, 2022

Becki Kenderes
Grandmont Rosedale Development Corporation
19800 Grand River Avenue
Detroit, MI 48223

RE: Apartment rehabilitation, GRPC II, 9710 and 9730 West Outer Drive, Detroit, Wayne County

Dear Ms. Kenderes,

Per your request, I have prepared this report assessing the historic properties and the effect of the above project. My education and experience meet the qualifications required in 36 CFR 61 for an architectural historian. On February 11, 2021, and again on February 4, 2022, I visited the project site to evaluate the project site and surrounding area. This written report will (1) define the area of potential effects (APE); (2) identify Historic Properties within the APE; (3) evaluate the historic significance of identified properties as appropriate; and (4) assess the effects of the proposed apartment rehabilitation project on any historic properties within the APE.

DESCRIPTION OF THE PROJECT

The proposed project is to rehabilitate two adjacent apartment buildings at 9710 and 9730 West Outer Drive and improve a shared parking lot at the rear of the buildings. The properties are located in northwest Detroit, just south of Grand River Avenue on the west side of West Outer Drive. The proposed rehabilitation scope is included in the attached federal historic tax credit part 2 applications. On the exterior the roofs will receive new cladding to match the existing, deteriorated wood trim will be repaired or replaced to match the existing and painted, the masonry will be repaired to match the existing as required, the windows will be replaced, and the doors will be rehabilitated. On the 9730 building ten new window openings are proposed at the basement level in the rear of the building for the new units. On the interior the buildings will receive upgrades to electrical, mechanical, plumbing, and fire protection systems. Air conditioning will be added to the buildings. New bathroom fixtures will be installed, and the kitchens will be remodeled with new cabinets, counters, and appliances. All historic finishes such as coved ceilings, wood trim, and stairways will be maintained. The rear parking lot will be fenced, and new lighting will be installed. New air conditioner condensers will be placed in the rear of the buildings. The concrete walkways and steps around the building will be replaced to match the existing. The proposed ground disturbance does not exceed a half-acre.

Photo 1 Looking northwest at 9730 (left) and 9710 (right) West Outer Drive, February 2021

Photo 2 – Looking southwest at 9710, February 2021

Photo 3 – Detail of entrance and courtyard of 9730, February 2021

Photo 4 – Looking east at parking lot, 9730 on right, 9710 on left, February 2021

AREA OF POTENTIAL EFFECT (APE)

The APE is the properties at 9710 and 9730 West Outer Drive, including the parking lot behind the buildings. There is a house and garage directly behind 9710 that are not part of the project. As the project is the rehabilitation of existing buildings and parking lot there is limited potential for a change in

setting, atmosphere, or feeling of any surrounding properties. The buildings will appear nearly identical to the way they do presently. Although two apartment units will be added to the garden level of 9730 that is not anticipated to increase the amount of noise or traffic. No building demolition is proposed. The indirect APE was confirmed through the site visit. The project areas and indirect APE are shown on the attached street maps and aerial views that also contain a photo key for this report.

HISTORIC PROPERTIES WITHIN THE APE

The SHPO records for the APE were requested, and the *National Register of Historic Places, State Register of Historic Sites, and the Detroit Local Historic Districts* on-line information were reviewed. The buildings are contributing properties within the Rosedale Park Historic District which is listed in the National Register of Historic Places and has been locally designated by the City of Detroit. The buildings were certified as contributing to the historic district through the submittal of the federal historic rehabilitation tax credit part 1 applications. The district does not extend into the parking lot or include the house and garage behind 9710. The house and garage are not eligible for listing in the National Register of Historic Places.

Because the overall property is .3 of an acre, and ground disturbing activities will be under a half-acre, archaeological review was not requested.

Photo 5 – Looking east across W. Outer Drive at the Rosedale Park Historic District, February 2021

Photo 6 – Looking north at house and garage behind 9710, February 2021

ASSESSMENT OF EFFECTS

The proposed rehabilitation has been approved by the Detroit Historic District Commission (exterior) and the State Historic Preservation Office and National Park Service (interior and exterior) and meets *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Properties.* Therefore, the proposed rehabilitation will not adversely affect the properties at 9710 and 9730 W. Outer Drive which are contributing to the Rosedale Park Historic District which is listed in the National Register of Historic Places and locally designated by the City of Detroit.

It is my opinion that the project will have No Adverse Effect on 9710 and 9730 West Outer Drive, contributing properties to the Grandmont Rosedale Historic District, and No Adverse Effect on the Rosedale Historic District which is listed in the National Register of Historic Places and locally designated by the City of Detroit. The proposed rehabilitation will meet *The Secretary of the Interior's Standards* and will not change any characteristics that qualify the properties or district for listing in the National Register. If you have any questions or require additional information, please contact me at 313-300-9376 or at kristine@kidorfpreservationconsulting.com.

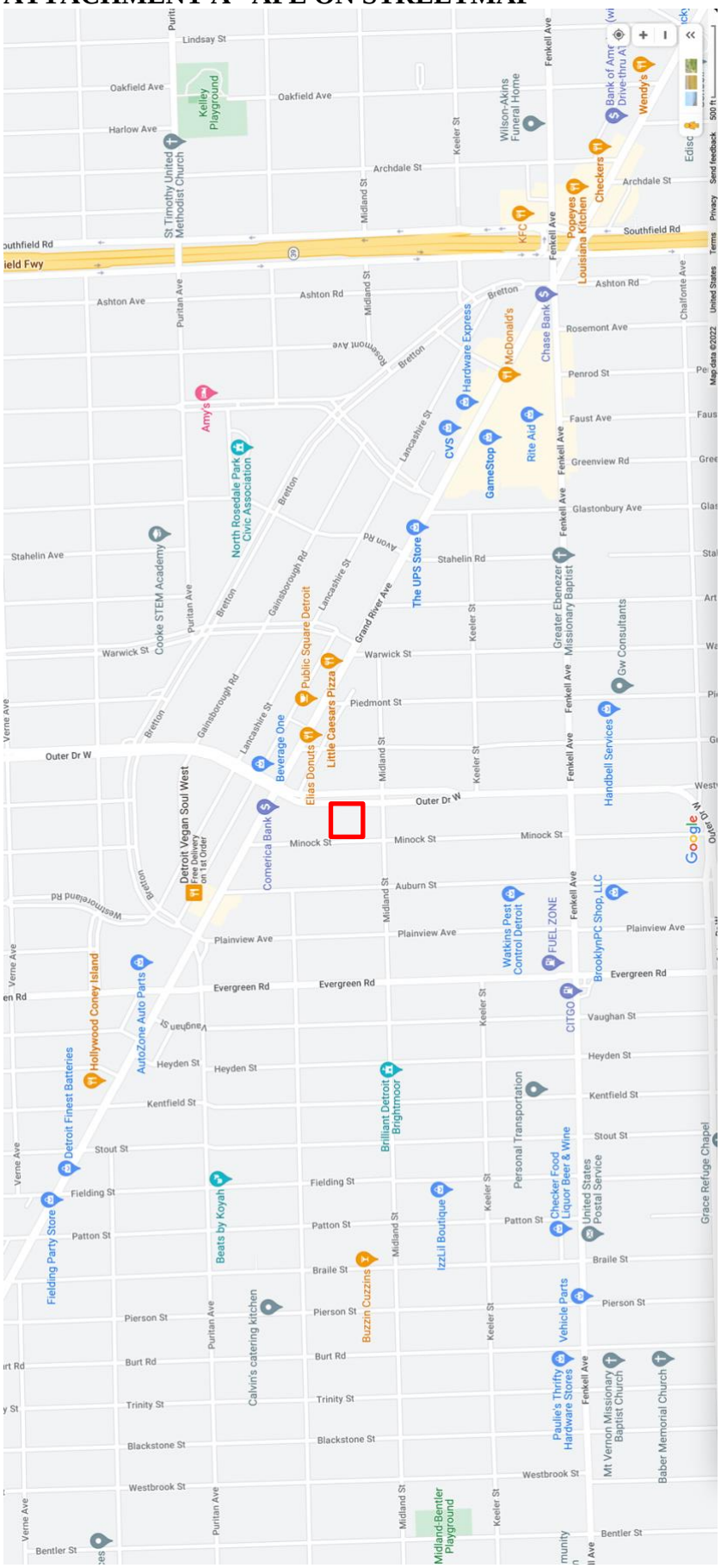
Sincerely,

Kristine M. Kidorf

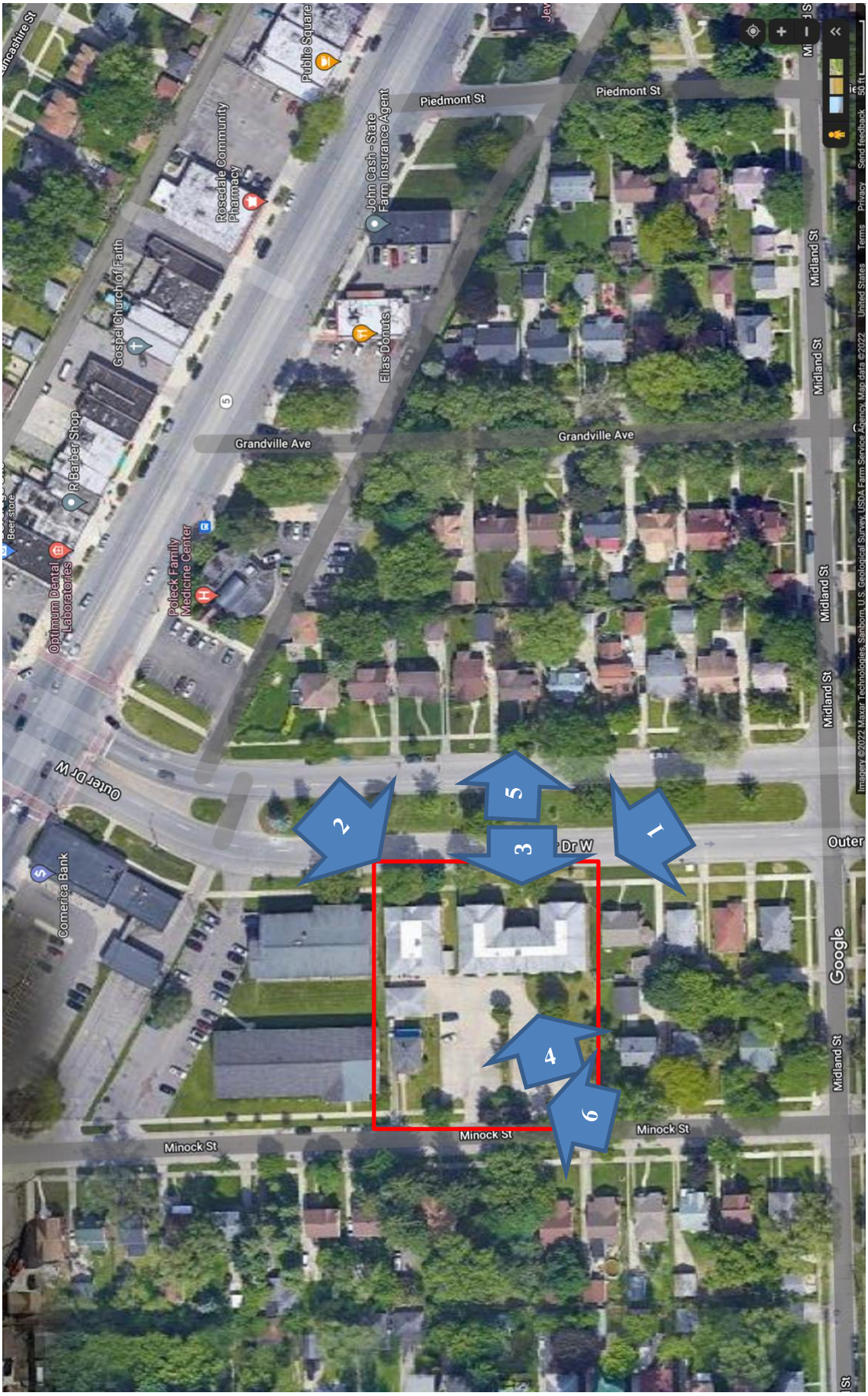
Kristine M. Kidorf
Kidorf Preservation Consulting

Attachments

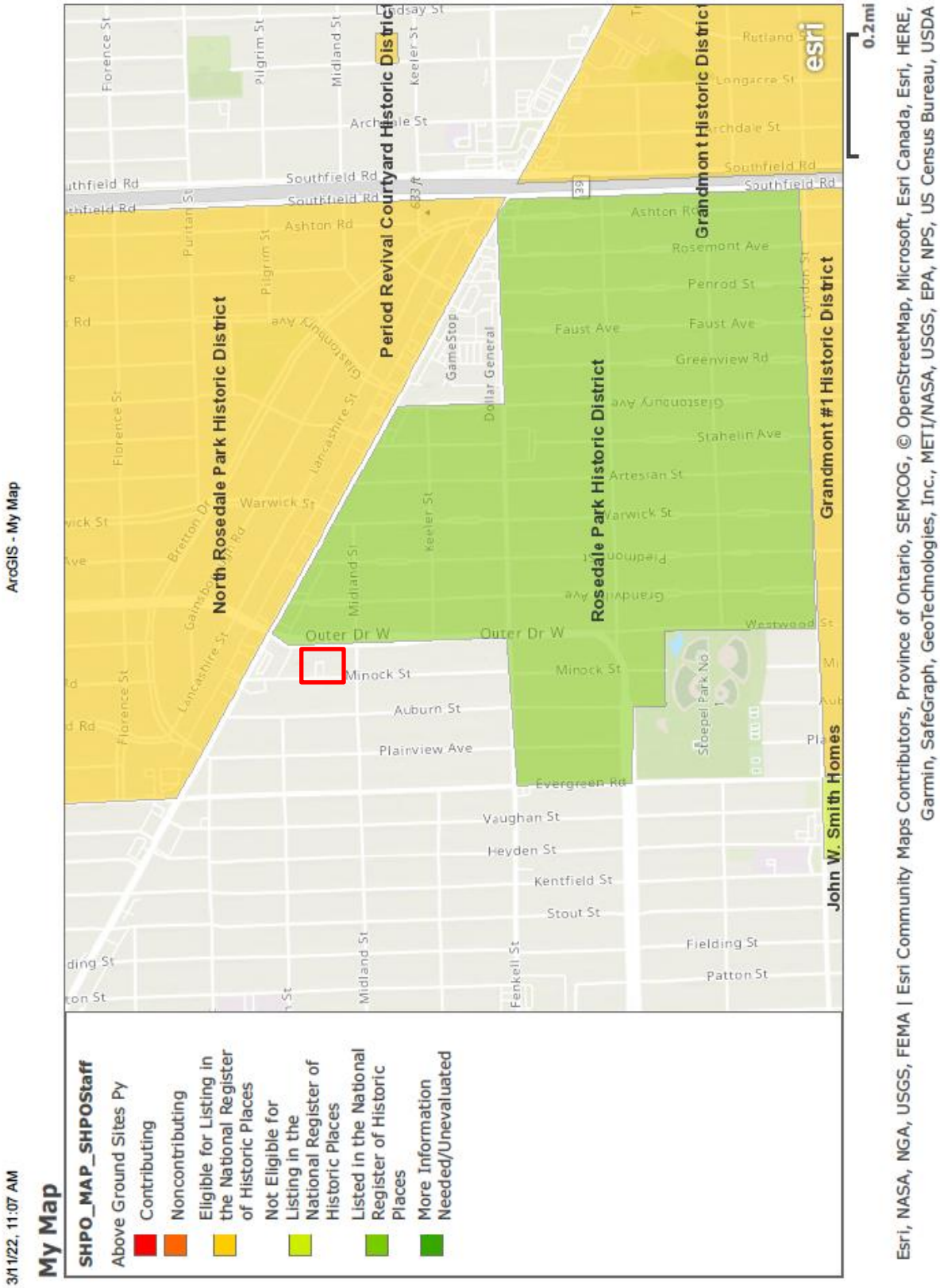
ATTACHMENT A –APE ON STREETMAP



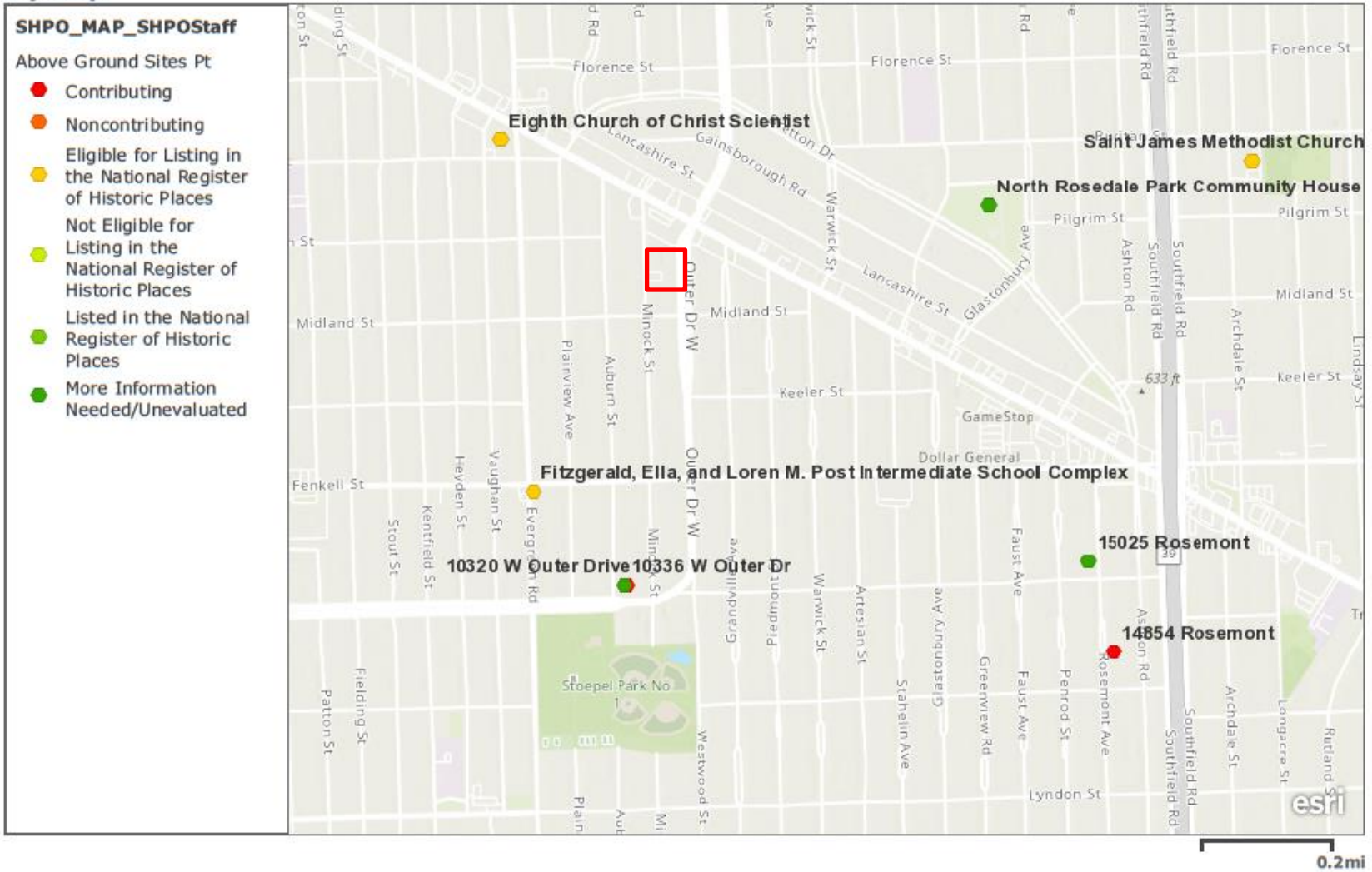
ATTACHMENT B - PHOTO KEY AND APE ON AERIAL MAP



INDIRECT APE ON SHPO PROVIDED MAPS



My Map



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HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name Colonial Apartments NPS Project Number 43249

Property Address 9710 W. Outer Drive , Detroit, MI

5. Detailed Description of Rehabilitation Work. Use this page to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 1 **Feature** Site **Date of Feature** unknown

Describe existing feature and its condition

Building is set back from the public sidewalk with a flat grassy front lawn. Shrubs are planted next to the foundation. A concrete walkway in poor condition runs from the public sidewalk to the front door. The rear of the building abuts an abandoned public alley that provides access to the rear of the building from the neighboring parking lot behind 9730 Outer Drive. There are small grassy lawns on both sides of the building.

Photo Numbers 1-5, 28-33 Drawing Numbers C3.0, L1.0

Describe work to feature

The front concrete walkway is proposed to be removed and replaced with a matching walkway in the same location and configuration. Ten condenser units are proposed to be installed on the ground behind the north half of the building in the existing alleyway. A six foot tall wood screen and gate will be erected at the south end of the units between the existing building and the neighboring garage wall in order to protect and screen the condenser units.

Number 2 **Feature** Roof **Date of Feature** 1940, unknown

Describe existing feature and its condition

The existing sloped areas of roof including the gas shed addition are clad in asphalt shingles in poor condition. A flat section of roof with no parapet is in the center of the building. Gable front pediments with louvers project from the main roof. The wood soffit and fascia, aluminum gutters and downspouts are in fair to poor condition.

The deteriorated frame of a small canopy projects over the rear door.

Photo Numbers 1-5,28-33 Drawing Numbers A1.3

Describe work to feature

The asphalt shingled areas of the roof will be replaced with new Owens Corning Oakridge asphalt shingles. The low slope roof areas will be replaced with TPO membrane roofing.

The fascia boards will be replaced with matching engineered composite trim and painted. The soffit will be replaced with matching wood soffit and painted. The gutters will be replaced with matching aluminum gutters. Downspouts will be painted, or if missing or deteriorated, replaced with matching downspouts.

The gable front pediments, including the louvers will be repaired to match the existing, scraped, and painted.

The flat metal canopy over the rear door will be reconstructed in the same location and configuration. The flat roof will have a rubber membrane with an aluminum edge. New tie rods will support the flat roof. The underside of the roof will be painted.

Number 3 **Feature** Exterior walls **Date of Feature** 1940, unknown

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name Colonial Apartments NPS Project Number 43249

Property Address 9710 W. Outer Drive , Detroit, MI

Describe existing feature and its condition

The exterior walls are clad in multi-tone red brick with limestone trim that is in fair to good condition. A small, one-story gas shed addition projects from the south side. The wood trim and decorative details are in fair condition.

Photo Numbers 1-5,28-33 Drawing Numbers A3.0

Describe work to feature

The brick masonry will be repaired to match the existing. Repairs are anticipated to be minor and any tuckpointing will use mortar that matches the existing in color, hardness, and profile. It is proposed to clean the exterior walls using the gentlest means possible. Test cleaning will be conducted. Existing brick vents will remain as is.

One new mechanical louver and two new dryer vents are proposed at the basement (garden) level on the north side of the building.

All wood trim will be scraped and painted. Any required repairs will match the existing.

Number 4 **Feature** Windows, exterior doors **Date of Feature** 1940

Describe existing feature and its condition

The majority of the existing windows are double-hung wood windows in poor condition. The exteriors have not been maintained or painted and have failing exterior putty glazing, failed corner joinery, and many of the exterior sills are fissured, showing decay and dry rot. The existing exterior storm windows are in poor condition.

The bathroom windows are narrow gauge steel double-hung windows in fair to poor condition. The existing exterior storm windows are in poor condition. The windows in the stairs are fixed radius head steel windows.

The existing doors are wood and glass and are in good condition.

Photo Numbers 1-5, 28-33 Drawing Numbers Window assessments, A4.01-4.03

Describe work to feature

It is proposed to repair the fixed radius head steel windows located in the stairways.

The wood windows are deteriorated beyond repair as noted above and the lack of thermal performance, will lead to condensation and further window deterioration, even combined with interior or exterior storms. It is proposed to replace the wood windows with Quaker H650 windows.

Although the steel double-hung windows are in fair condition, the repair of the windows is not feasible due to an inability to obtain replacement parts which are no longer manufactured. Additional concerns include poor thermal performance, leading to condensation and further window deterioration, even combined with interior or exterior storm windows. See attached window assessment by Blackberry Systems. It is proposed to replace the steel double-hung windows with Thermal Inc. 700 Series windows.

The existing doors will be painted and will receive new hardware.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name Colonial Apartments NPS Project Number 43249

Property Address 9710 W. Outer Drive , Detroit, MI

Number 5 **Feature** Interior floors **Date of Feature** 1940, unknown

Describe existing feature and its condition

The entrance vestibule and lobby have a tile floor. The stairs are wood covered with carpet. The first and second floor corridors are carpet. The basement corridor and rear stairs to the basement are old vinyl tile. The basement unit floors are carpet. The basement utility spaces are concrete. The units in the first and second floors have wood floors in the living, dining, and bedrooms. The kitchens have newer vinyl floors. The bathrooms have porcelain tile floors.

Photo Numbers 6-27, 34-35 Drawing Numbers AD1.0-1.2, A1.0-1.2

Describe work to feature

The entrance vestibule and lobby floors will be retained as is. The stairs and first and second floor corridors will have new carpet installed. The basement corridor will have the tile removed and the concrete underneath sealed. The rear stair to the basement will have the vinyl tile removed and carpet installed. The basement units will have sealed concrete floors in the living, dining, and bedrooms, resilient tile flooring in the existing kitchens, and sealed concrete in the new unit kitchens. The existing bathroom floors in the basement will remain as is. The utility spaces will have sealed concrete floors.

The units in the first and second floors will retain the existing flooring in the living, dining, bedrooms, and bathrooms. The kitchens will receive new resilient tile flooring.

Number 6 **Feature** Interior walls, interior doors **Date of Feature** 1940, unknown

Describe existing feature and its condition

The vestibule walls are a decorative board that looks like tile. The stair, corridor, and unit walls are painted plaster. Some unit types have arched openings.

Unit entrance doors and doors inside units are flush wood doors with the exception of the basement unit entry doors which are metal.

Photo Numbers 6-27, 34-35 Drawing Numbers

Describe work to feature

The existing mailboxes in the vestibule will be replaced with new mailboxes in the same location. No other work will be done to the decorative board on the vestibule walls. The stair and corridor walls will be painted.

Within the units the walls will be painted, any disturbance needed for new MEP will be repaired to match the existing. All of the kitchens will have the cabinets and appliances replaced with new cabinets, counters, and appliances. All archways will be maintained.

Existing flush wood unit entry and doors within units will remain. The metal unit entry doors in the basement will be replaced with flush wood doors that match the existing doors.

Number 7 **Feature** Interior ceilings **Date of Feature** 1940, unknown

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name Colonial Apartments NPS Project Number 43249

Property Address 9710 W. Outer Drive , Detroit, MI

Describe existing feature and its condition

The ceilings throughout the building are painted plaster. There are cove moldings in the living and dining rooms.

Photo Numbers 6-27, 34-35 Drawing Numbers AD1.0-1.2, A1.0-1.2,A2.0-2.1

Describe work to feature

The vestibule, stair, and corridor ceilings will be painted. Within the units in order to preserve the coved ceilings new painted gypsum board ceilings will be installed at 7' above the finished floor in the bathrooms and over portions of the kitchens and over portions of the bedrooms in order to accommodate HVAC ducts. Lowered ceilings will be above the tops of windows. Any disturbances due to MEP work will be repaired to match the existing.

Number 8 **Feature** MEP **Date of Feature** unknown

Describe existing feature and its condition

The plumbing, electrical, and mechanical systems do not meet current needs and standards. The building does not have air conditioning. The building does not have a sprinkler system.

Photo Numbers 6-27, 34-35 Drawing Numbers

Describe work to feature

The plumbing, toilets and sinks are proposed to be replaced. The existing heating system is proposed to be replaced with a new forced air heating and cooling system. Electrical systems will be upgraded. A sprinkler system is proposed to be installed. All MEP systems will be concealed behind new finished ceilings and soffits.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name _____ NPS Project Number 43250

Property Address 9730 W. Outer Drive aka 15770 Minnock, Detroit, MI

5. Detailed Description of Rehabilitation Work. Use this page to describe all work or create a comparable format with this information. Number items consecutively to describe all work, including building exterior and interior, additions, site work, landscaping, and new construction.

Number 1 **Feature** Site **Date of Feature** unknown

Describe existing feature and its condition

Building is set back from the public sidewalk with a flat grassy front lawn. Overgrown shrubs are located next to the foundation. A concrete walkway in poor condition runs from the public sidewalk to the front door. A second concrete walkway in poor condition abuts the north side of the building. A shallow grassy area and an asphalt paved parking lot are located behind the building. A chain link fence separates the south side of the building from the house next door.

Photo Numbers 1-4, 31-40 **Drawing Numbers** C3.0, L1.0

Describe work to feature

The front concrete walkway is proposed to be removed and replaced with a matching walkway in the same location and configuration. The walkway along the north side of the building is proposed to be removed and replaced with a new, wider concrete walkway to provide barrier-free access to the rear of the building. The foundation plantings around the building are proposed to be removed and replaced with new planting beds with new shrubbery. At the rear of the building a portion of the lawn to the side of the parking lot it is proposed to install 25 condensers sitting on concrete pads with gravel between the pads. Yew bushes will surround the gravel area to screen the condensers. Any areas of grassy lawn disturbed throughout the property will be restored to match the existing. Three new dumpsters enclosed with 6' tall CMU walls and a double gate will be constructed in the existing parking lot.

Note that some supporting documents with this submission reference a new barrier free ramp and entry at the rear of the building. Due to budget constraints that work is no longer proposed. No barrier free entrance is proposed.

Number 2 **Feature** Roof **Date of Feature** 1939, unknown

Describe existing feature and its condition

The existing sloped areas of roof, including the bay windows at the rear of the building, are clad in asphalt shingles in poor condition. A flat section of roof with no parapet is in the center of the building. Gable front dormers with louvers are located on the rear roof slope. The wood soffit, fascia, aluminum gutters and downspouts are in fair to poor condition.

Photo Numbers 1-4, 31-40 **Drawing Numbers** A1.3

Describe work to feature

The asphalt shingled areas of the roof will be replaced with new Owens Corning Oakridge asphalt shingles. The low slope roof areas will be replaced with TPO membrane

The fascia will be replaced with matching engineered composite trim and painted. The soffit will be replaced with matching wood soffit and painted. The gutters will be replaced with matching aluminum gutters. Downspouts will be painted, or if missing or deteriorated, replaced with matching downspouts.

The dormers and louvers will be repaired to match the existing, scraped, and painted.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name _____ NPS Project Number 43250

Property Address 9730 W. Outer Drive aka 15770 Minnock, Detroit, MI

Number 3 **Feature** Exterior walls **Date of Feature** 1939

Describe existing feature and its condition

The exterior walls are clad in multi-tone red brick that is in fair to good condition. The wood trim and decorative details are in fair condition.

Photo Numbers 1-4, 31-41 **Drawing Numbers** A3.0

Describe work to feature

The brick masonry will be repaired to match the existing. Repairs are anticipated to be minor and any tuckpointing will use mortar that matches the existing in color, hardness, and profile. It is proposed to clean the exterior walls using the gentlest means possible. Test cleaning will be conducted.

It is proposed to install brick vents in the rear and north and south side elevations. Vents are also proposed in the corner of the side walls of the front courtyard.

In the rear it is proposed to add 9 window openings at the basement/garden level to accommodate new living units. Openings will be aligned with the existing windows.

All wood trim will be scraped and painted. Any required repairs will match the existing.

Number 4 **Feature** Windows, exterior doors **Date of Feature** 1939

Describe existing feature and its condition

The majority of the existing windows are narrow gauge steel double-hung windows in fair to poor condition. The exterior storm windows are in poor condition. The windows in the stairs are fixed radius head steel windows.

The existing doors are wood and glass and are in good condition.

Photo Numbers 1-4, 31-41 **Drawing Numbers** Window assessments, A4.01-4.03

Describe work to feature

It is proposed to repair the fixed radius head steel windows located in the stairways.

Although the steel double-hung windows are in fair condition, the repair of the windows is not feasible due to an inability to obtain replacement parts which are no longer manufactured. Additional concerns include poor thermal performance, leading to condensation and further window deterioration, even combined with interior or exterior storm windows. See attached window assessment by Blackberry Systems. It is proposed to replace the steel double-hung windows with Thermal Inc. 700 Series windows.

It is proposed to install nine new window openings on the rear elevation at the basement/ garden level. The new windows will use the Thermal Inc. 700 Series windows to match the existing windows.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name _____ NPS Project Number 43250

Property Address 9730 W. Outer Drive aka 15770 Minnock, Detroit, MI

The existing doors will be painted and will receive new hardware.

Number 5 | Feature Interior floors | Date of Feature 1939, unknown

Describe existing feature and its condition

The entrance vestibule and lobby have a tile floor. The stairs are wood covered with carpet. The first and second floor corridors are carpet. The basement corridor is tile. The basement unit floors are deteriorated vinyl tile. The basement utility spaces are concrete. The units in the first and second floors have wood floors in the living, dining, and bedrooms. The kitchens have newer vinyl floors. The bathrooms have porcelain tile floors.

Photo Numbers 5-30, 42-72 Drawing Numbers AD1.0-1.2, A1.0-1.2, A7.2.1

Describe work to feature

The entrance vestibule and lobby floors will be retained as is. The stairs and first and second floor corridors will have new carpet installed. The basement corridor will remain as is. The basement units will have sealed concrete floors in the living, dining, and bedrooms, and resilient tile flooring in the existing kitchens. The kitchens in the new units will have sealed concrete floors. The existing bathroom floors in the basement will remain as is, the new basement unit bathrooms will have new porcelain tile floors. The utility spaces will have sealed concrete floors.

The units in the first and second floors will retain the existing flooring in the living, dining, bedrooms, and bathrooms. The kitchens will receive new resilient tile flooring.

Number 6 | Feature Interior walls, interior doors | Date of Feature 1939, unknown

Describe existing feature and its condition

The vestibule walls are a decorative board that looks like tile. The stair, corridor, and unit walls are painted plaster. Some unit types have arched openings.

Unit entrance doors and interior unit doors are flush wood doors.

Photo Numbers 5-30, 42-72 Drawing Numbers AD1.0-1.2, A1.0-1.2, A7.2.1

Describe work to feature

The existing mailboxes in the vestibule will be removed and a drywall niche will be created for a message board in the vestibule. No work will be done to the decorative board on the walls. New mailboxes will be installed in the first floor corridor to the right of the front stair. The stair and corridor walls will be painted.

Within the units the walls will be painted. New units in the basement will have painted gypsum board walls. All of the kitchens will have the cabinets and appliances replaced with new cabinets, counters, and appliances. The kitchens in unit type S.106 (2 units in building) are small single units within a passage. In those two units the kitchen will be relocated into the living room. All archways will be maintained. Any disturbance due to MEP work will be repaired to match the existing.

The unit entrance doors and doors within units will primarily remain as is. Some closet doors will be replaced with matching flush wood doors.

HISTORIC PRESERVATION CERTIFICATION APPLICATION
PART 2 – DESCRIPTION OF REHABILITATION

Historic Property Name _____ NPS Project Number 43250

Property Address 9730 W. Outer Drive aka 15770 Minnock, Detroit, MI

Number 7 **Feature** Interior ceilings **Date of Feature** 1939, unknown

Describe existing feature and its condition

The ceilings throughout the building are painted plaster. The corridor ceilings are curved, there are cove moldings in the living and dining rooms.

Photo Numbers 5-30, 42-72 Drawing Numbers AD1.0-1.2, A1.0-1.2, A2.0-2.2

Describe work to feature

The vestibule, stair, and corridor ceilings will be painted. Within the units in order to preserve the coved ceilings new painted gypsum board ceilings will be installed at 7' above the finished floor in the bathrooms and over portions of the kitchens and over portions in the bedrooms in order to accommodate HVAC ducts. Lowered ceilings will be above the tops of windows. Any disturbance due to MEP work will be repaired to match the existing.

Number 8 **Feature** MEP **Date of Feature** unknown

Describe existing feature and its condition

The plumbing, electrical, and mechanical systems do not meet current needs and standards. The building does not have air conditioning. The building does not have a sprinkler system.

Photo Numbers 5-30, 42-72 Drawing Numbers _____

Describe work to feature

The plumbing, toilets and sinks are proposed to be replaced. The existing heating system is proposed to be replaced with a new forced air heating and cooling system. Electrical systems will be upgraded. A sprinkler system is proposed to be installed. All MEP systems will be concealed behind new finished ceilings and soffits.

New brick vents are proposed for some exterior walls - see Exterior Wall section.

ADDITIONAL EXTERIOR PHOTOS – 9710 W OUTER DRIVE

North Elevation

South elevation

Central stair

 **Typical unit living and dining room**

9730 W OUTER DR ADDITIONAL PHOTOS

 **East façade and north elevation**

Rear elevation

Central stair

Typical unit living and dining room

Noise Assessment
9710-9730 West Outer Drive
Detroit, Michigan

Grandmont Rosedale Park Collective II

April 7, 2022

ASTI ENVIRONMENTAL

ASTI ENVIRONMENTAL

Noise Assessment
9710-9730 West Outer Drive
Detroit, Michigan

April 7, 2022

Report Prepared For:

Grandmont Rosedale Park Collective II
19800 Grand River Avenue
Detroit, Michigan 48223

Report Prepared By:

ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, Michigan 48116
800-395-ASTI

ASTI Project No. 1-11641

Report Prepared by:

Christopher Yelonek
Architectural Historian / Associate I

Report Reviewed by:

David Amir
Director of Redevelopment Services

ASTI ENVIRONMENTAL

TABLE OF CONTENTS

1.0 INTRODUCTION

Grandmont Rosedale Park Collective II (GRPC II) proposes the adaptive reuse utilizing funding provided from the City of Detroit of 9710-9730 West Outer Drive, Detroit, Michigan, referred to herein as “Subject Property”.

This assessment was conducted to provide the noise level and associated noise category at each designated Noise Assessment Location (NAL) at the Subject Property. This assessment does not include an evaluation of noise attenuation but general guidance is provided at the end of this assessment.

This evaluation was conducted per guidelines set forth in 24 CFR 51B. This noise analysis evaluates the Subject Property’s exposure to three major sources of noise: aircraft, roadways, and railways. If identified, additional non-transportation noise sources such as loud impulse sounds from nearby industry are also evaluated.

The following three sources of transportation noise and their applicable search distances are outlined below when evaluating noise at a site.

1. Aircraft - All military and FAA-regulated civil airfields within 15 miles of the Subject Property.
2. Roadways - Major roadways and limited access highways/freeways within 1,000 feet of the Subject Property utilizing a 10-year projection. Roadways considered are generally based on number of lanes, speed limit, presence of stop signs or lights, overall traffic counts, and/or number of medium or heavy trucks.
3. Railroad - All active railroads within 3,000 feet of the Subject Property.

The noise level calculated at a NAL is known as the day-night average sound level or DNL. A calculated DNL can fall within three categories as follow.

1. Acceptable - DNL not exceeding 65 decibels (dB)
2. Normally Unacceptable - DNL above the 65 dB threshold but not exceeding 75 dB
3. Unacceptable - DNL above 75 dB

One NAL (NAL #1) was selected on the Subject Property for this analysis based on proximity to noise sources. A map with the Subject Property boundaries and NAL location is included as Attachment A.

The following is a summary of the applicable noise sources identified at the NAL.

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A. Young International Airport	11.05 Miles
	Detroit Metropolitan Wayne County Airport	13.36 Miles
Busy Road(s)	Outer Drive West	87 Feet
	Grand River Avenue	408 Feet
Railroad(s)	None	NA
Non-Transportation	None	NA

2.0 EVALUATION OF NOISE SOURCES

2.1 Airports

Coleman A. Young International Airport is approximately 11.05 miles distant. Based on the Noise Contour Map for the airport, (Attachment B), the site is not within a distance of concern.

Detroit Metropolitan Wayne County Airport is approximately 13.36 miles distant. Based on the Noise Contour Map for the airport, (Attachment B), the site is not within a distance of concern.

Other small airfields were identified within 15 miles, but these airfields have no commercial traffic and are not likely FAA-regulated. They are not considered to represent a noise concern.

2.2 Busy Roadways

The major roadway(s) is/are:

- Outer Drive West
- Grand River Avenue

Outer Drive West is a 4-lane divided boulevard. The speed limit is 35 mph near the Subject Property. The roadway is an approximate effective distance of 87 feet from the northeastern corner of the northern building (NAL #1).

Grand River Avenue is a 4-lane road with a center/left-turn lane. The speed limit is 35 mph near the Subject Property. The roadway is an approximate effective distance of 408 feet from the northeastern corner of the northern building (NAL #1).

Traffic counts were obtained through MDOT. Projections were done through 2032. After review of the traffic count information of each street, a growth rate of 1% per year

compounded was judged appropriate as traffic levels are expected to remain relatively stable or increase slightly. Traffic projections are included in Attachment C.

2.3 Railroads

Not applicable.

2.4 Non-Transportation Sources

Not applicable.

3.0 CALCULATIONS

A Noise DNL calculator worksheet for the NAL is provided in Attachment D.

Using the HUD DNL calculator, the noise level at NAL #1, as predicted in 2032, is calculated to be 67 dB and within the Normally Unacceptable range.

4.0 CONCLUSIONS

The following is a summary of the findings of this assessment.

NAL #	Combined Source DNL (dB)	Category
1	67	Normally Unacceptable

5.0 REFERENCES

- 24 CFR Part 51 Subpart B
- The Noise Guidebook, U.S. Department of Housing and Urban Development,
- U.S. DOT
- https://mdot.ms2soft.com/
- https://fragis.fra.dot.gov/GISFRASafety/
- https://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx
- https://www.hudexchange.info/programs/environmental-review/dnl-calculator/

HUD ATTENUATION GUIDANCE

https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/

All sites whose environmental or community noise exposure exceeds the day night average sound level (DNL) of 65 decibels (dB) are considered noise-impacted areas. For new construction that is proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required by HUD environmental criteria and standards contained in Subpart B (Noise Abatement and Control) of 24 CFR Part 51. The interior standard is 45 dB.

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB.

Locations with day-night average noise levels above 75 dB have “Unacceptable” noise exposure. For new construction, noise attenuation measures in these locations require the approval of the Assistant Secretary for Community Planning and Development (for projects reviewed under Part 50) or the Responsible Entity’s Certifying Officer (for projects reviewed under Part 58). The acceptance of such locations normally requires an environmental impact statement.

The environmental review record should contain **one** of the following:

- Documentation the proposed action is not within 1000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated civil airfield.
- If within those distances, documentation showing the noise level is *Acceptable* (at or below 65 DNL).
- If within those distances, documentation showing that there’s an effective noise barrier (i.e., that provides sufficient protection).

- Documentation showing the noise generated by the noise source(s) is *Normally Unacceptable (66 – 75 DNL)* and identifying noise attenuation requirements that will bring the interior noise level to 45 DNL and/or exterior noise level to 65 DNL.

Sound Transmission Classification Assessment Tool (STraCAT)

Overview

The Sound Transmission Classification Assessment Tool (STraCAT) is an electronic version of Figures 17 and 19 in The HUD Noise Guidebook. The purpose of this tool is to document sound attenuation performance of wall systems. Based on wall, window, and door Sound Transmission Classification (STC) values, the STraCAT generates a composite STC value for the wall assembly as a whole. Users can enter the calculated noise level related to a specific Noise Assessment Location in front of a building façade and STraCAT will generate a target required attenuation value for the wall assembly in STC. Based on wall materials, the tool will state whether the composite wall assembly STC meets the required attenuation value.

How to Use This Tool

Location, Noise Level and Wall Configuration to Be Analyzed
STraCAT is designed to calculate the attenuation provided by the wall assembly for one wall of one unit. If unit exterior square footage and window/door configuration is identical around the structure, a single STraCAT may be sufficient. If units vary, at least one STraCAT should be completed for each different exterior unit wall configuration to document that all will achieve the required attenuation. Additionally, if attenuation is not based on a single worst-case NAL, but there are multiple NALs which require different levels of attenuation around the structure, a STraCAT should be completed for each differing exterior wall configuration associated with each NAL.

Exterior wall configurations associated with an NAL include those with parallel (facing) or near-parallel exposure as well as those with perpendicular exposure. When a façade has parallel or perpendicular exposure to two or more NALs, you should base the required attenuation on the NAL with the highest calculated noise level. For corner units where the unit interior receives exterior noise through two facades, the STraCAT calculation should incorporate the area of wall, window and door materials pertaining to the corner unit's total exterior wall area (i.e., from both walls).

Information to Be Entered
Users first enter basic project information and the NAL noise level that will be used as the basis for required attenuation. This noise level must be entered in whole numbers. STraCAT users then enter information on wall, window and door component type and area. Again, as noted above, the wall, window and door entries are based on one unit, and one wall (except for corner units as discussed above). The tool sums total wall square footage based on the combined area of walls, doors and windows for the façade being evaluated.

Users may input STC values for materials in one of two ways. The tool includes a dropdown menu

of common construction materials with STC values prefilled. If selected construction materials are not included in this dropdown menu, the user may also enter the STC for a given component manually. Verification of the component STC must be included in the ERR. Documentation includes the architect or construction manager's project plans showing wall material specifications. For new construction or for components that will be newly installed in an existing wall, documentation also includes the manufacturer's product specification sheet (cut sheet) documenting the STC rating of selected doors and windows.

Required STC Rating and Determination of Compliance

Finally, based on project information entered the tool will indicate the required STC rating for the wall assembly being evaluated and whether or not the materials specified will produce a combined rating that meets this requirement. Note that for noise levels above 75 dB DNL, either HUD (for 24 CFR Part 50 reviews) or the Responsible Entity (for 24 CFR Part 58 reviews) must approve the level and type of attenuation, among other processing requirements. Required attenuation values generated by STraCAT for NALs above 75 dB DNL should therefore be considered tentative pending approval by HUD or the RE.

Part I - Description

Part I - Description

Project

9710-9730 West Outer Dr.

Sponsor/Developer

Grandmont Rosedale

Location

Detroit, MI

Prepared by

B. Buckley, ASTI Env.

Noise Level

67

Date

3/29/2022

Primary Source(s)

ASTI Noise Assessment

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
4x8x18" concrete block with common brick all mortared together	522	**51**

Add new wall

	522 Sq. Feet	**51**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
3'x5' wood-framed double hung window each sash has one 7/16" glass panel and one storm sash glazed single strength upper sash 1 1/2" and lower sash 2 13/16" air spaces	8	**15**	**35**

Add new window

Door Construction Detail	Quantity	Sq Ft/Unit	STC

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	522 ft^2
Wall STC:	51

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	8	**120 ft^2**	**22.99%**
Doors:	0	**0 ft^2**	**0%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**67**
Combined STC for wall assembly:	**41.03**
Required STC rating:	**25**
Does wall assembly meet requirements?	**Yes**

Print

Part 4 - Tips

Part 4 - Tips

What do you do if the preferred wall design is not sufficient to achieve the required attenuation? Another wall design with more substantial materials will work, but may not be the most cost-effective solution. Try adding some other elements for just a little more attenuation.

For example:

- Staggering the studs in a wall offers approximately 4dB of additional protection.
- Increasing the stud spacing from 16" on center to 24" can increase the STC from 2-5dB.
- Adding a 2" air space can provide 3dB more attenuation.
- Increasing a wall's air space from 3" to 6"can reduce noise levels by an additional 5dB.
- Adding a layer of ½" gypsum board on "Z" furring channels adds 2dB of attenuation.
- Using resilient channels and clips between wall panels and studs can improve the STC from 2-5dB.
- Adding a layer of ½" gypsum board on resilient channels adds 5dB of attenuation.
- Adding acoustical or isolation blankets to a wall's airspace can add 4-10dB of attenuation.
- A 1" rockwool acoustical blanket adds 3dB to the wall's STC.
- Filling the cells of lightweight concrete masonry units with expanded mineral loose-fill insulation adds 2dB to the STC.

ATTACHMENT A

NAL Location Map

Service Layer Credits: Detroit_RGB_projFix_sid:

Minnock Park Property Lead Inspection & Risk Assessment

9710-9730 W. Outer Drive, Detroit, MI

0 12.5 25 50 Feet

N

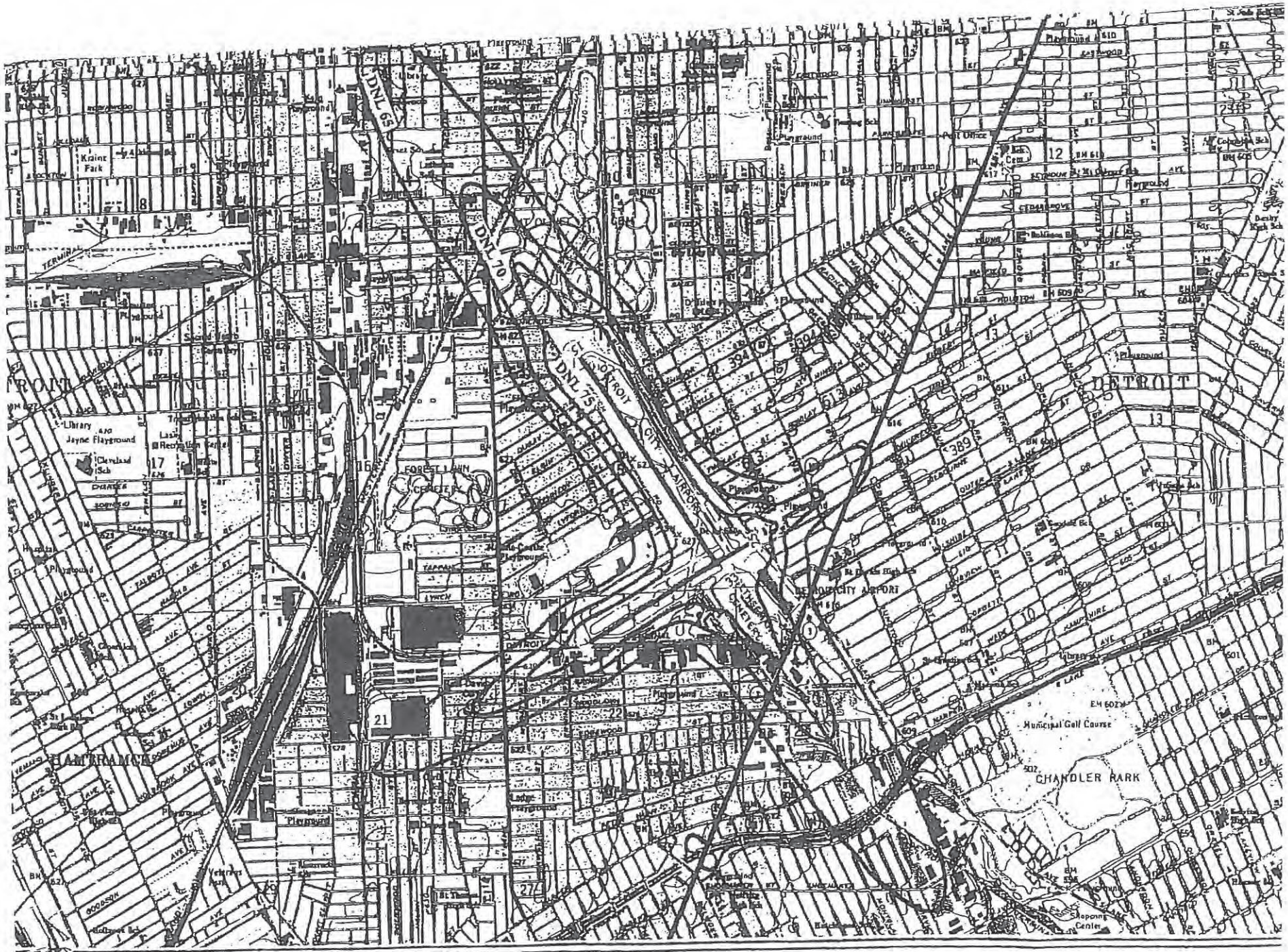
ASTI Environmental

Created for: Grandmont Rosedale Development Corporation
Created by: RMH, March 23, 2022, ASTI Project 1-11641

Noise Assessment Location Map

ATTACHMENT B

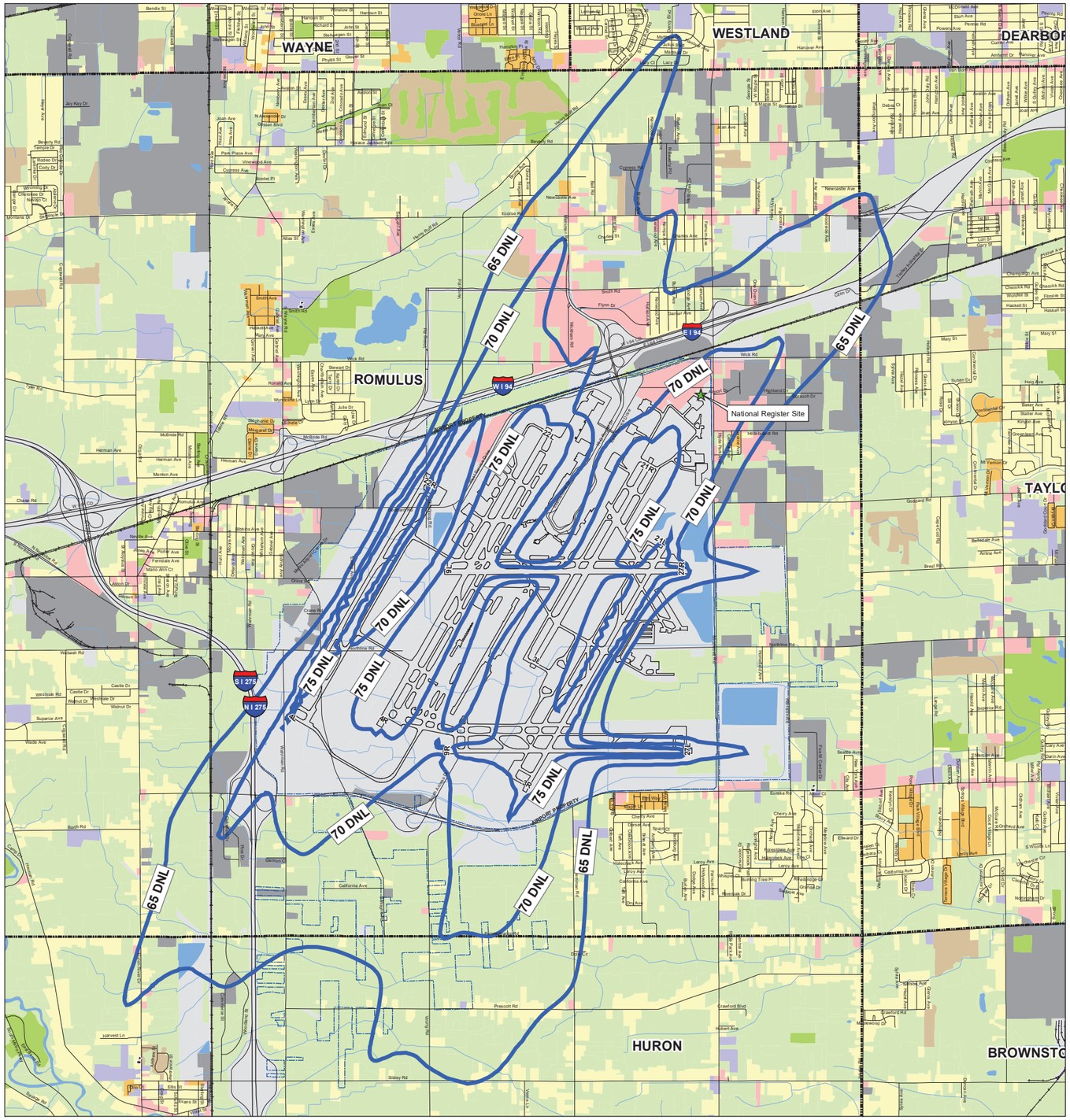
Airport Noise Contour Maps



CITY OF DETROIT
AIRPORT DEPARTMENT

1996 BASE
NOISE EXPOSURE CONTOURS

Figure D25 **Existing (2004) Noise Exposure Map**



Land Use Legend

- Single-family residential
- Residential areas with 25% or more vacant land
- Multiple-family residential
- Commercial and office
- Industrial
- Institutional
- Transportation, communication, and utility
- Under development
- Cultural, outdoor recreation, and cemetery
- Woodland and wetland
- Active agriculture
- Extractive and barren
- Grassland, and shrub
- Vacant nonresidential
- Water
- City Limits Boundary
- Schools

	Existing (2004)	
65-70 DNL	Population	Housing
Huron Township	160	60
Romulus	1,060	490
Taylor	10	10
Westland	110	50
Subtotal	1,340	610
70-75 DNL		
Romulus	40	20
Subtotal	40	20
65 DNL & Greater		
Huron Township	160	60
Romulus	1,100	510
Taylor	10	10
Westland	110	50
Subtotal	1,380	630
60 DNL & Greater*		
Dearborn Heights	1,100	360
Huron Twp.	2,460	920
Inkster	4,420	1,870
Romulus	4,340	1,810
Sumpter Twp.	40	10
Taylor	3,860	1,500
Westland	2,970	1,250
Total	19,190	7,720

Source: 2000 US Census Numbers rounded to the nearest 10 – for digits less than 5, rounded to 10.
Note: no residential uses are located in the 75 DNL and greater contours.
* includes the 65 DNL & Greater

The 65 DNL contour contains approximately 9,475 acres, 750 residential structures and 1,400 people.

The 70 DNL contour contains approximately 4,505 acres, 30 residential structures and 40 people.

The 75 DNL contour contains approximately 1,580 acres, no residential structures and no people.

Planning jurisdictions are shown on the map.

Noise measurement sites and flight tracks are depicted on the Noise Measurement Sites and Flight Tracks Maps.

Residential land use, as defined by FAR Part 150, is an incompatible use without proper sound attenuation within the 65 DNL or greater contour.

The Noise Exposure Maps and accompanying documentation for the Noise Exposure Map for Detroit Metropolitan Wayne County Airport, submitted in accordance with FAR Part 150 with the best available information, are hereby certified as true and complete to the best of my knowledge and belief.

In addition, it is hereby certified that the public was afforded the opportunity to review and comment on the document and its contents.

Signed _____ Date 3-6-06

Based on 522,641 operations.

N

0 1,000 2,000 4,000 Feet

March 1, 2006

Source: Michigan Department of Natural Resources, SEMCOG

DETROIT METROPOLITAN WAYNE COUNTY AIRPORT

ATTACHMENT C

AADT Information

Auto and Heavy Truck 10-year ADT Projections

Outer Drive West

	Cars	% Change	Trucks	% Change
2017	5945		208	
2018	5988	0.7	165	-20.7
2019	5884	-1.7	238	44.2
2020	4978	-15.4	250	5.0
	Avg % change:	-5.5	Avg % change:	9.54
	Avg % change (Last 5-yr Trend):	-5.5	Avg % change (Last 5-yr Trend):	9.54
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2032 Projections

	Cars	Trucks
2014	4978	250
2015	5028	253
2016	5078	255
2016	5129	258
2017	5180	260
2018	5232	263
2019	5284	265
2020	5337	268
2021	5390	271
2022	5444	273
2023	5499	276
2024	5554	279
2025	5609	282
2026	5665	285
2027	5722	287
2028	5779	290

Predicted 2032 Auto ADT	Predicted 2032 Truck ADT
5779	290

Auto and Heavy Truck 10-year ADT Projections

Grand River Avenue

	Cars	% Change	Trucks	% Change
2016	29919		427	
2017	30158	0.8	522	22.2
2018	30067	-0.3	613	17.4
2019	25725	-14.4	499	0.0
2020	20554	-31.6	399	-34.9
	Avg % change:	-11.4	Avg % change:	1.19
	Avg % change (Last 5-yr Trend):	-11.4	Avg % change (Last 5-yr Trend):	1.19
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2032 Projections

	Cars	Trucks
2014	20554	399
2015	20760	403
2016	20967	407
2016	21177	411
2017	21389	415
2018	21602	419
2019	21818	424
2020	22037	428
2021	22257	432
2022	22480	436
2023	22704	441
2024	22931	445
2025	23161	450
2026	23392	454
2027	23626	459
2028	23863	463

Predicted 2032 Auto ADT	Predicted 2032 Truck ADT
23863	463

ATTACHMENT D

Day-Night Level Electronic Assessments

DNL Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	1-11641, 9710-9730 W. Outer Drive
Record Date	03/16/2022
User's Name	ASTI Environmental

Road # 1 Name:	**Outer Drive West**

Road #1

Vehicle Type	Cars ☑	Medium Trucks ☐	Heavy Trucks ☑
Effective Distance	87		87
Distance to Stop Sign			
Average Speed	35		35
Average Daily Trips (ADT)	5779		290
Night Fraction of ADT	15		15
Road Gradient (%)			2
Vehicle DNL	58	0	65
Calculate Road #1 DNL	66	Reset	

Road # 2 Name: **Grand River Avenue**

Road #2

Vehicle Type	Cars ☑	Medium Trucks ☐	Heavy Trucks ☑
Effective Distance	408		408
Distance to Stop Sign			
Average Speed	35		35
Average Daily Trips (ADT)	23863		463
Night Fraction of ADT	15		15
Road Gradient (%)			2
Vehicle DNL	54	0	57
Calculate Road #2 DNL	59	Reset	

Add Road Source Add Rail Source	
Airport Noise Level	
Loud Impulse Sounds?	○ Yes ◉ No
Combined DNL for all Road and Rail sources	**67**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative** Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Office(/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Sound Transmission Classification Assessment Tool (STraCAT)

Overview

The Sound Transmission Classification Assessment Tool (STraCAT) is an electronic version of Figures 17 and 19 in The HUD Noise Guidebook. The purpose of this tool is to document sound attenuation performance of wall systems. Based on wall, window, and door Sound Transmission Classification (STC) values, the STraCAT generates a composite STC value for the wall assembly as a whole. Users can enter the calculated noise level related to a specific Noise Assessment Location in front of a building façade and STraCAT will generate a target required attenuation value for the wall assembly in STC. Based on wall materials, the tool will state whether the composite wall assembly STC meets the required attenuation value.

How to Use This Tool

Location, Noise Level and Wall Configuration to Be Analyzed
STraCAT is designed to calculate the attenuation provided by the wall assembly for one wall of one unit. If unit exterior square footage and window/door configuration is identical around the structure, a single STraCAT may be sufficient. If units vary, at least one STraCAT should be completed for each different exterior unit wall configuration to document that all will achieve the required attenuation. Additionally, if attenuation is not based on a single worst-case NAL, but there are multiple NALs which require different levels of attenuation around the structure, a STraCAT should be completed for each differing exterior wall configuration associated with each NAL.

Exterior wall configurations associated with an NAL include those with parallel (facing) or near-parallel exposure as well as those with perpendicular exposure. When a façade has parallel or perpendicular exposure to two or more NALs, you should base the required attenuation on the NAL with the highest calculated noise level. For corner units where the unit interior receives exterior noise through two facades, the STraCAT calculation should incorporate the area of wall, window and door materials pertaining to the corner unit's total exterior wall area (i.e., from both walls).

Information to Be Entered
Users first enter basic project information and the NAL noise level that will be used as the basis for required attenuation. This noise level must be entered in whole numbers. STraCAT users then enter information on wall, window and door component type and area. Again, as noted above, the wall, window and door entries are based on one unit, and one wall (except for corner units as discussed above). The tool sums total wall square footage based on the combined area of walls, doors and windows for the façade being evaluated.

Users may input STC values for materials in one of two ways. The tool includes a dropdown menu

of common construction materials with STC values prefilled. If selected construction materials are not included in this dropdown menu, the user may also enter the STC for a given component manually. Verification of the component STC must be included in the ERR. Documentation includes the architect or construction manager's project plans showing wall material specifications. For new construction or for components that will be newly installed in an existing wall, documentation also includes the manufacturer's product specification sheet (cut sheet) documenting the STC rating of selected doors and windows.

Required STC Rating and Determination of Compliance

Finally, based on project information entered the tool will indicate the required STC rating for the wall assembly being evaluated and whether or not the materials specified will produce a combined rating that meets this requirement. Note that for noise levels above 75 dB DNL, either HUD (for 24 CFR Part 50 reviews) or the Responsible Entity (for 24 CFR Part 58 reviews) must approve the level and type of attenuation, among other processing requirements. Required attenuation values generated by STraCAT for NALs above 75 dB DNL should therefore be considered tentative pending approval by HUD or the RE.

Part I - Description

Part I - Description

Project

9710-9730 West Outer Dr.

Sponsor/Developer

Grandmont Rosedale

Location

Detroit, MI

Prepared by

B. Buckley, ASTI Env.

Noise Level

67

Date

3/29/2022

Primary Source(s)

ASTI Noise Assessment

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
4x8x18" concrete block with common brick all mortared together	522	**51**

Add new wall

	522 Sq. Feet	**51**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
3'x5' wood-framed double hung window each sash has one 7/16" glass panel and one storm sash glazed single strength upper sash 1 1/2" and lower sash 2 13/16" air spaces	8	**15**	**35**

Add new window

Door Construction Detail	Quantity	Sq Ft/Unit	STC

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	522 ft^2
Wall STC:	51

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	8	**120 ft^2**	**22.99%**
Doors:	0	**0 ft^2**	**0%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**67**
Combined STC for wall assembly:	**41.03**
Required STC rating:	**25**
Does wall assembly meet requirements?	**Yes**

Print

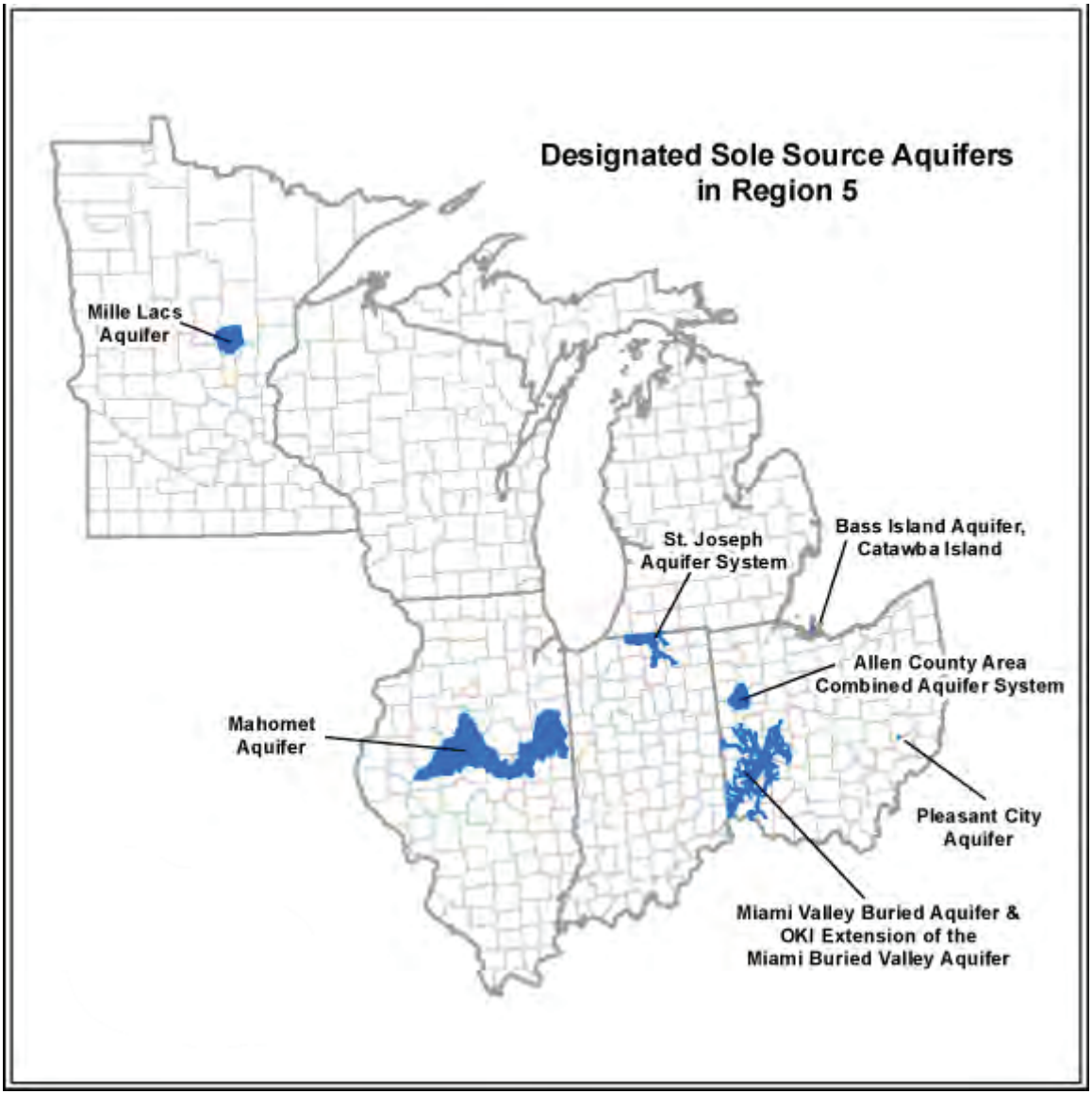
Part 4 - Tips

Part 4 - Tips

What do you do if the preferred wall design is not sufficient to achieve the required attenuation? Another wall design with more substantial materials will work, but may not be the most cost-effective solution. Try adding some other elements for just a little more attenuation.

For example:

- Staggering the studs in a wall offers approximately 4dB of additional protection.
- Increasing the stud spacing from 16" on center to 24" can increase the STC from 2-5dB.
- Adding a 2" air space can provide 3dB more attenuation.
- Increasing a wall's air space from 3" to 6"can reduce noise levels by an additional 5dB.
- Adding a layer of ½" gypsum board on "Z" furring channels adds 2dB of attenuation.
- Using resilient channels and clips between wall panels and studs can improve the STC from 2-5dB.
- Adding a layer of ½" gypsum board on resilient channels adds 5dB of attenuation.
- Adding acoustical or isolation blankets to a wall's airspace can add 4-10dB of attenuation.
- A 1" rockwool acoustical blanket adds 3dB to the wall's STC.
- Filling the cells of lightweight concrete masonry units with expanded mineral loose-fill insulation adds 2dB to the STC.


Designated Sole Source Aquifers
in Region 5
Mille Lacs
Aquifer
St. Joseph
Aquifer System
Bass Island Aquifer,
Catawba Island
Allen County Area
Combined Aquifer System
Mahomet
Aquifer
Pleasant City
Aquifer
Miami Valley Buried Aquifer &
OKI Extension of the
Miami Buried Valley Aquifer

U.S. Fish and Wildlife Service

National Wetlands Inventory

9710-9730 Outer Drive West

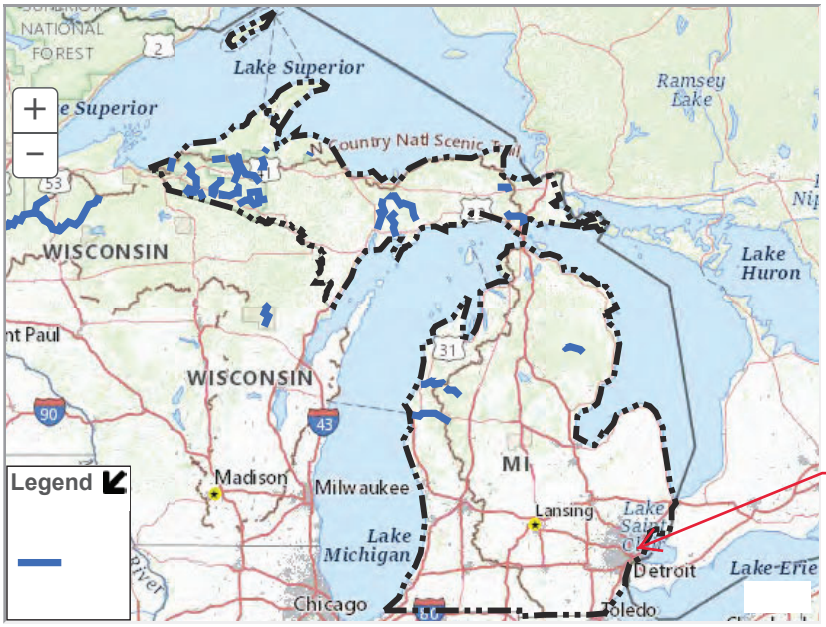
March 16, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

MICHIGAN

Michigan has approximately 51,438 miles of river, of which 656.4 miles are designated as wild & scenic—just a bit more than 1% of the state's river miles.



+ View larger map

Choose A State Go

Choose A River Go

Nourished by the fertile soils of the region, rivers of the Midwest explode with life, from great avian migrations to ancient fishes.

AuSable River
Bear Creek
Black River
Carp River
Indian River
Manistee River
Ontonagon River
Paint River
Pere Marquette River
Pine River
Presque Isle River
Sturgeon River (Hiawatha National Forest)
Sturgeon River (Ottawa National Forest)
Tahquamenon River (East Branch)
Whitefish River
Yellow Dog River

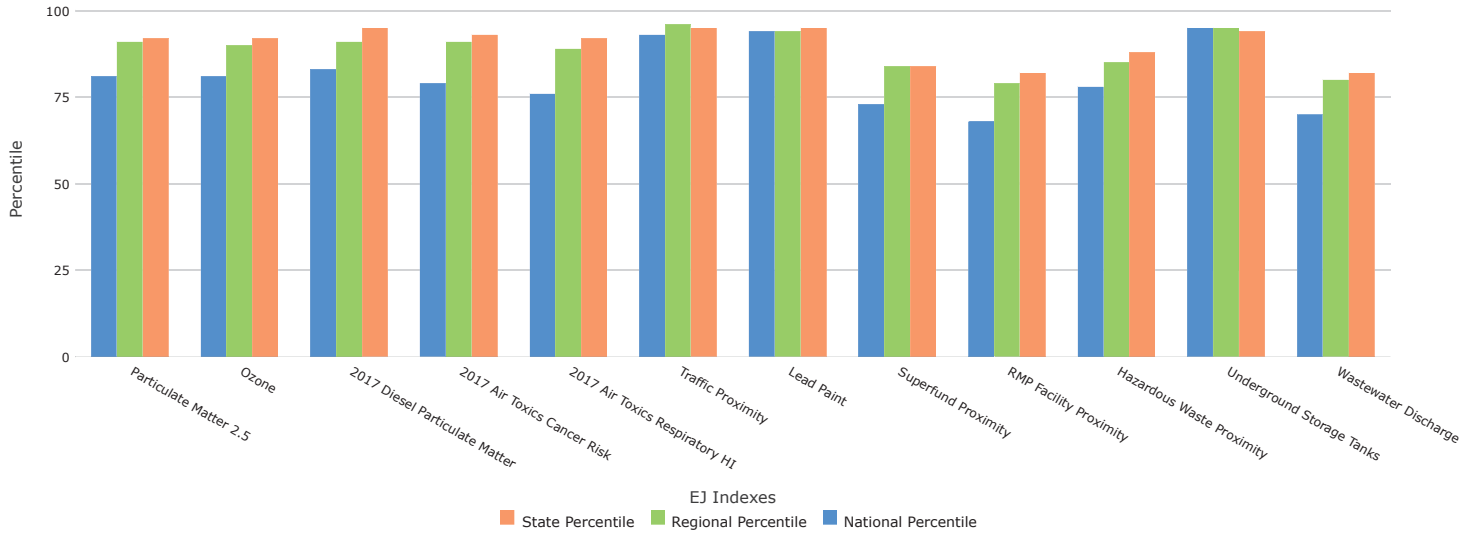
Save as PDF

EJScreen Report (Version 2.0)

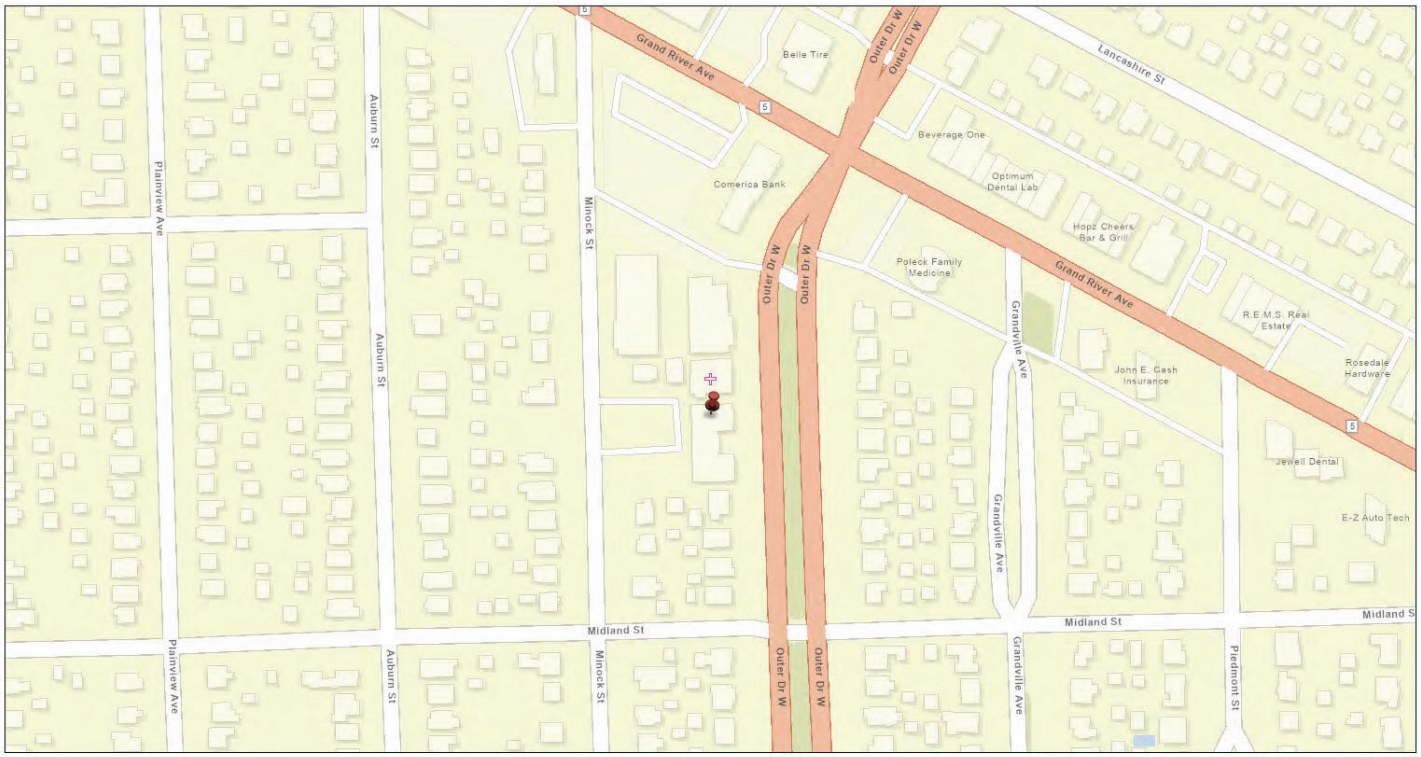
1 mile Ring Centered at 42.405286,-83.233244
MICHIGAN, EPA Region 5
Approximate Population: 19,476
Input Area (sq. miles): 3.14

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	92	91	81
EJ Index for Ozone	92	90	81
EJ Index for 2017 Diesel Particulate Matter*	95	91	83
EJ Index for 2017 Air Toxics Cancer Risk*	93	91	79
EJ Index for 2017 Air Toxics Respiratory HI*	92	89	76
EJ Index for Traffic Proximity	95	96	93
EJ Index for Lead Paint	95	94	94
EJ Index for Superfund Proximity	84	84	73
EJ Index for RMP Facility Proximity	82	79	68
EJ Index for Hazardous Waste Proximity	88	85	78
EJ Index for Underground Storage Tanks	94	95	95
EJ Index for Wastewater Discharge	82	80	70

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



This report shows the values for environmental and demographic indicators and EJScreen indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports.



April 4, 2022

Project 1

Search Result (point)

1:2,257

0 0.02 0.04 0.08 mi

0 0.03 0.07 0.13 km

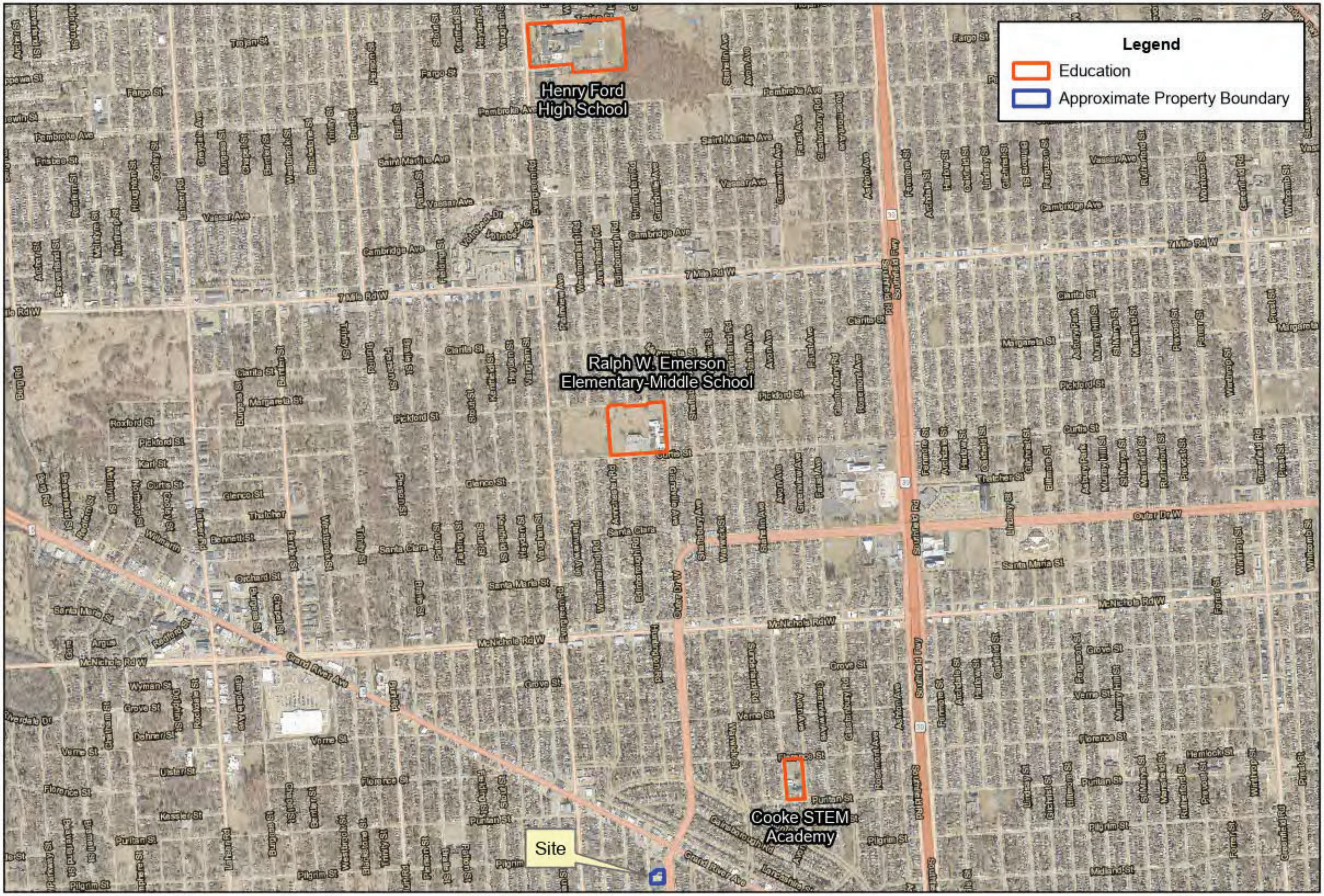
Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Pollution and Sources							
Particulate Matter 2.5 (µg/m³)	10	8.75	92	8.96	83	8.74	83
Ozone (ppb)	45.1	43.8	78	43.5	72	42.6	76
2017 Diesel Particulate Matter* (µg/m³)	0.414	0.209	96	0.279	80-90th	0.295	70-80th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	23	99	24	95-100th	29	80-90th
2017 Air Toxics Respiratory HI*	0.3	0.25	99	0.3	70-80th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	2300	830	92	610	95	710	93
Lead Paint (% Pre-1960 Housing)	0.87	0.37	92	0.37	93	0.28	96
Superfund Proximity (site count/km distance)	0.036	0.15	18	0.13	28	0.13	32
RMP Facility Proximity (facility count/km distance)	0.13	0.53	30	0.83	17	0.75	21
Hazardous Waste Proximity (facility count/km distance)	1.1	1.1	63	1.8	54	2.2	58
Underground Storage Tanks (count/km²)	16	7.3	84	4.8	91	3.9	94
Wastewater Discharge (toxicity-weighted concentration/m distance)	2.8E-05	0.41	23	9	21	12	23
Socioeconomic Indicators							
Demographic Index	67%	28%	91	28%	92	36%	88
People of Color	94%	25%	95	26%	95	40%	92
Low Income	41%	32%	70	29%	74	31%	70
Unemployment Rate	15%	6%	91	5%	93	5%	93
Linguistically Isolated	1%	2%	67	2%	62	5%	47
Less Than High School Education	10%	9%	65	10%	64	12%	55
Under Age 5	5%	6%	48	6%	44	6%	43
Over Age 64	18%	17%	62	16%	65	16%	68

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update. (https://www.epa.gov/haps/air-toxics-data-update)

For additional information, see: www.epa.gov/environmentaljustice (https://www.epa.gov/environmentaljustice)

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



Minnock Park Property Lead Inspection & Risk Assessment

9710-9730 W. Outer Drive
& 15770 Minnock St,
Detroit, MI

0 0.25 0.5 1 Miles

N

ASTi Environmental

Created for: Grandmont Rosedale Development Collective II
Created by: RMH, August 1, 2022, ASTI Project 1-11641

EA Factors - Education

Minnock Park Property Lead Inspection & Risk Assessment

9710-9730 W. Outer Drive
& 15770 Minnock St,
Detroit, MI

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EA Factors - Commercial Facilities

Minnock Park Property Lead Inspection & Risk Assessment

9710-9730 W. Outer Drive & 15770 Minnock St, Detroit, MI

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EA Factors - Healthcare

Minnock Park Property Lead Inspection & Risk Assessment

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& 15770 Minnock St,
Detroit, MI

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EA Factors - Public Safety

Minnock Park Property Lead Inspection & Risk Assessment

9710-9730 W. Outer Drive
& 15770 Minnock St,
Detroit, MI

0 0.25 0.5 1 Miles

N

ASTI Environmental

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Created by: RMH, August 1, 2022, ASTI Project 1-11641

EA Factors - Nearby Parks