



U.S. Department of Housing and Urban Development

451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Iroquois Terrace

Responsible Entity: City of River Rouge

Grant Recipient (if different than Responsible Entity): River Rouge Housing Commission

State/Local Identifier: River Rouge, Michigan

Preparer: PM Environmental

Certifying Officer Name and Title: William L. Campbell, Mayor

Grant Recipient (if different than Responsible Entity): River Rouge Housing Commission

Consultant (if applicable): PM Environmental

Direct Comments to: Office of the Mayor, 313-842-4200

Project Location: Located along Goodall Street (197, 199, 201, 205, 207, 209, 211, 224, 226, 227, 228, 229, 230, 231, 232, 234, 244, 246, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 260, 270, 271, 272, 273, 274, 275, 276, 277, 288, 289, 290, 291, 292, 293, 294, 295, 296, 299, 301, 303, 305, 307, 309, 311, 312, 313, 315, 316, 317, 318, 319, 321, 323, 324, 325, 326 Goodall Street), River Rouge, Wayne County, Michigan

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]: The project includes complete rehabilitation of the existing apartment complex. Planned project activities include high performance, energy efficient upgrades to HVAC, electrical and plumbing systems, including fixtures. Exterior activities will include repair and replacement of existing brick veneer, including tuck pointing, and repair or replacement of extant siding. Existing roofing will be replaced, and new insulated double hung vinyl windows will be installed. Exterior lighting will be upgraded. There will be some in-kind sidewalk repair. Interior rehabilitation will include fully renovated kitchens and bathrooms, new flooring, new cabinetry, security systems and new Energy Star appliances.

Site plans are included as Attachment 1, site locations maps are included as Attachment 2, and site photos are included as Attachment 3.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: _____

Funding Information

Estimated Total HUD Funded Amount: 84 Project Based Vouchers

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$7,117,107

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

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. Source documentation is included as attachment 4.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Review of the John H. Chafee Coastal Barrier Resources System Map and the U.S. Fish and Wildlife Service online Coastal Barrier Resource Mapper, documents the subject property is not located within a designated coastal barrier boundary. Source documentation is included as attachment 5.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	According to a Federal Emergency Management Agency (FEMA) floodplain map, dated October 21, 2021 (Map number 26163C0269F), the subject property is

Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]		located in "Zone X (Unshaded)", defined as areas of minimal risk outside the 100-year (1% annual chance) and 500-year (0.2% annual chance) floodplains. PM did not observe any sensitive ecological areas on the subject property, including potential wetlands, during the site reconnaissance. Furthermore, topographical features present in the subject property area are not representative of a floodplain. Documentation of the floodplain map is included as Attachment 6.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	According to the July 2023 Michigan National Ambient Air Quality Standards (NAAQS) Attainment Status Map, published by the Michigan Department of Environment, Great Lakes and Energy (EGLE) Air Quality Division (AQD), the entire State of Michigan is currently an attainment area for carbon monoxide, nitrogen dioxide, lead, and particulate matter. Wayne County is currently in non-attainment for ozone and a portion of Wayne County is in non-attainment for sulfur dioxide. Based on the lack of construction or use conversion, compliance with the State Implementation Plan (SIP) is not required. Source documentation is included as attachment 7.
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	Review of the Wayne County Coastal Zone Management map and the Coastal Zone Management Area map documents the subject property is not located within a designated Coastal Zone Management area. Source documentation is included as attachment 8.
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No <input checked="" type="checkbox"/> <input type="checkbox"/>	No high pressure buried gas lines (4" diameter or greater and 400 psi or higher) are located within 1,000 feet of the subject property.

		<p>Radon</p> <p>Review of the CDC National Environmental Public Health Tracking Network map indicates Wayne County the annual mean pre-mitigation radon measurement in tested buildings for the most recent 10-year period as 2.6 pCi/L. Additionally, PM completed a Radon Assessment of the subject buildings in March 2024 in accordance with HUD requirements. Analytical results documented all tested units were below the U.S. EPA Action Level of 4.0 pCi/L. Therefore, no additional investigation is necessary at this time.</p> <p>Asbestos</p> <p>PM completed a Pre-Renovation Asbestos Containing Materials Survey in March 2024, which included the collection of 637 samples from 355 different homogenous areas. Results included various asbestos in flooring and associated mastic, pipe insulation and fittings, window caulking, door caulking, etc. Roofing materials, mudded fittings and millboard insulation, and transite panels were assumed to contain ACM.</p> <p>Lead Based Paint</p> <p>PM completed a Lead-Based Paint Inspection and Risk Assessment Report in April 2024. Lead Dust Hazards and deteriorated LBP on door headers, address plates, and several units were identified throughout the buildings. Additionally, X-Ray Fluorescence documented LBP on door headers, address plates, window sills, walls, ceilings, and aluminum siding throughout the building. No lead soil hazards were identified.</p> <p>Phase I ESA</p> <p>PM completed a Phase I ESA in June 2023, which documented the north-central and central portions were developed with single</p>
--	--	--

		<p>family dwellings between 1941 and 1949. The dwellings were demolished and the current buildings were constructed in the 1950s and 1960s. The current buildings have been residential since construction. No onsite Recognized Environmental Conditions (RECs) were identified. However, an adjoining property (221 Goodall Street) was occupied by factory operations or unknown operations from construction in 1962 to the 1990s.</p> <p>Phase II ESA</p> <p>Based on the REC identified, a Phase II ESA was completed, which consisted of the advancement of two soil borings to 20.0 feet below ground surface (bgs) and installation of two in-boring soil gas points. No groundwater was encountered. Three soil samples and two soil-gas samples were collected and submitted for laboratory analysis for volatile organic compounds (VOCs) and/or polynuclear aromatic compounds (PNAs). Analytical results were below method detection limits (MDLs), Part 201 Generic Cleanup Criteria (GCCs), and/or Volatilization to Indoor Air Pathway screening levels. Therefore, no additional investigation is necessary.</p> <p>Source documentation: Radon map – Attachment 9 Adobe Tab: 1 Radon Survey 2 Asbestos Survey 3 Lead Based Paint Survey 4 Phase I ESA 5 Phase II ESA</p>
<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The U.S. Fish and Wildlife service provided information on locations of threatened and endangered species for the Project. In addition, a review using the U.S. Fish and</p>

		<p>Wildlife Service IPAC online system was completed. Species listed for Wayne County include: the Indiana Bat, Tricolored Bad, Rufa Red Knot, Eastern Massasauga, Northern Riffleshell, Monarch Butterfly, and the Eastern Prairie Fringed Orchid. None of the state-listed threatened or endangered species were observed at the property. No federally listed threatened or endangered species or unique features are present at the Project and no Critical Habitats are present.</p> <p>The subject property and/or general area have been developed since at least the 1940s. Given this, the Project does not appear to have an adverse effect on an endangered/threatened species or critical habitat. Source documentation is included as Attachment 10.</p>
<p>Explosive and Flammable Hazards</p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current and historical presence of aboveground storage tanks (ASTs)/55-gallon drum storage on the property.</p> <p>In accordance with HUD's Guidebook entitled "Siting of HUD-Assisted Projects Near Hazardous Facilities" (hereafter "Guidebook"), PM searched a one-mile radius around the subject property for ASTs containing flammable materials. Several nearby ASTs were identified; however, none are within a distance (i.e., greater than 800 feet) that require the calculation of acceptable separation distance (ASD) for thermal radiation and/or blast overpressure. Source documentation included as attachment 11.</p>
<p>Farmlands Protection</p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Review of the USDA Web Soil Survey indicates this Project does not affect any prime or unique farmland. The subject property is located within an "urbanized" area. Therefore, the Project is not subject to the statutory or regulatory requirements.</p>

		Source documentation included as attachment 12.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	According to a Federal Emergency Management Agency (FEMA) floodplain map, dated October 21, 2021 (Map number 26163C0269F), the subject property is located in "Zone X (Unshaded)", defined as areas of minimal risk outside the 100-year (1% annual chance) and 500-year (0.2% annual chance) floodplains. PM did not observe any sensitive ecological areas on the subject property, including potential wetlands, during the site reconnaissance. Furthermore, topographical features present in the subject property area are not representative of a floodplain. Documentation of the floodplain map is included as Attachment 6.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	A Section 106 application was submitted to the Michigan State Historic Preservation Office (SHPO) to determine if the Project will adversely impact the subject property or area of potential effect (APE). A final determination letter dated June 10, 2024, was received indicating no historic properties are affected with the project. Source documentation: Adobe Tab: 6 Section 106 Application Attachment 13 SHPO response letter
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 <input checked="" type="checkbox"/> <input type="checkbox"/>	PM completed a Desktop Noise Assessment in June 2023. One Noise Assessment Location (NAL) – southeast corner of the southern-most building - was used for analysis based on proximity to noise sources. Using the HUD DNL calculator, the combined DNL for NAL #1 was calculated as 67 decibels, which is Normally Unacceptable. All sites where 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

		<p>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. In PM's past experience with developed properties, normally unacceptable noise levels for buildings that are already developed and occupied are not automatic reasons to exclude a property.</p> <p>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 (HUD generally gives a 1 dB variance up to 76 dB).</p> <p>Source documentation: The Desktop Noise Assessment is located within Section 10.7 of the Phase I ESA (within Adobe Tab)</p>
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	There are no sole source aquifers located in Detroit or Wayne County. Source documentation is included as Attachment 14.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	PM did not observe any wet areas potentially associated with wetlands on the subject property during the site reconnaissance. In addition, review of the National Wetlands Inventory (NWI) Maps from the U.S. Fish and Wildlife Service and the EGLE Wetlands Map Viewer, did not identify any wetlands on the subject property. Any construction activities proposed in a wetland (regulated or unregulated) or in a 100-year flood plain area or where site contamination cannot be effectively remediated or mitigated are strongly discouraged and may be prohibited

		from the use of federal funds. Source documentation is included as attachment 15.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The National Wild and Scenic Rivers System map (maintained and managed by the Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service and U.S. Forest Service) were reviewed to determine if the subject property is within a designated wild and scenic river area. There are no wild or scenic rivers located within the City of Detroit or Wayne County. Source documentation is included as attachment 16.
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	This Project will not have a disproportionately high adverse effect on human health or environment of minority populations and/or low-income populations. The buildings will serve the community for quality and safe living spaces. The project is in the City of River Rouge, which is made up of 66% ethnic minorities. The project will improve the aesthetics of the area and has potential to be a catalyst for the area. No persons will be displaced due to this Project. The Project is in compliance with Executive Order 12898. Source documentation is included as attachment 17.

Field Inspection (Date and completed by): April 27, 2023, by David Balash

Summary of Findings and Conclusions: The proposed work includes a full renovation of the property, which will enhance the area and be a potential catalyst for properties in the area.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below 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
Asbestos Containing Materials	<p>PM has identified the following conclusions and recommendations:</p> <ul style="list-style-type: none"> • The results of the survey indicate that ACM were identified within the subject property, which, if impacted by renovation activities or based on condition, will require removal by a licensed abatement contractor. An asbestos abatement work plan must be put in place before asbestos removal activities. • If any ACM remain in place after renovation activities, an Operations and Maintenance (O&M) program must be put in place to manage these materials and the health hazards they pose. <p>PM notes that if additional suspect materials are identified during renovation, that these materials should be sampled to determine their characteristics (i.e., whether they must be treated as ACM or not) or assumed to be ACM and handled accordingly prior to their removal and disposal.</p> <p>PM's reporting of quantities of materials are to be interpreted as good faith estimates for contractors inspecting and bidding on project abatement and/or renovation activities; however, contractors should use their own estimates of material quantities as a basis for their project cost estimates.</p> <p>PM must be notified in advance when renovations are to start and be involved with a "project kick off meeting" with the client and contractors prior to the start of renovations. If any other materials are identified during renovation that have not already been sampled, or if the renovation plans change, PM needs to be notified immediately to provide additional guidance.</p>
Lead Based Paint	<p>PM identified lead hazards on various walls, ceilings, floors, windowsills, window troughs, exterior door headers and exterior address plates throughout the subject property. These components should be adequately cleaned, and the LBP should be stabilized as an interim control by trained staff using proper lead safe work practices. Trained staff may also replace or encapsulate these building components as an abatement option. All soil samples were less than established regulatory limits</p>

	<p>and therefore, no lead soil hazards were identified as part of this assessment.</p> <p>A a Lead Mitigation Work Plan is recommended to address any remaining LBP and lead hazards after the renovations are complete. PM can also provide clearance testing after cleaning or replacement has been completed prior to occupancy.</p> <p>As part of mitigation work, all activities should be done by a licensed abatement contractor or an U.S. EPA-certified renovator under the Renovation, Repair and Painting (RRP) rule</p>
Noise Mitigation	Completion of a STraCAT or Figure 19 to confirm the interior standard of 45 dB.

Determination:

- ☒ This categorically excluded activity/project converts to Exempt, per 58.34(a)(12) because there are no circumstances which require compliance with any of the federal laws and authorities cited at §58.5. **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR
- ☐ This categorically excluded activity/project cannot convert to Exempt because there are circumstances which require compliance with one or more federal laws and authorities cited at §58.5. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain “Authority to Use Grant Funds”** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
- ☐ This project is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Jackie Schafer

Preparer Signature: _____ Date: 6/26/2024

Name/Title/Organization: Jackie Schafer, Affordable Housing Coordinator, PM Environmental

Responsible Entity Agency Official Signature:

_____ Date: _____

Name/Title: _____

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

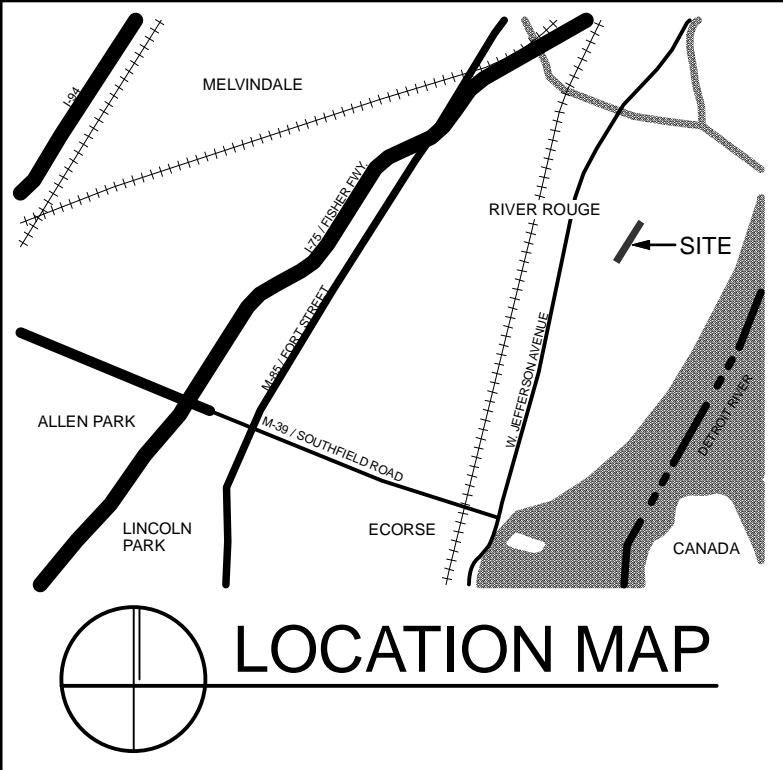
Attachment 1



River Rouge Housing Commission

Iroquois Terrace

Goodell St., River Rouge, Michigan



KEY DESIGNATION (NOT TO SCALE)

DETAIL NUMBER XXXXXX ← DRAWING TITLE

XXXXXX ← DRAWING SCALE

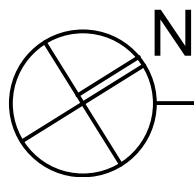
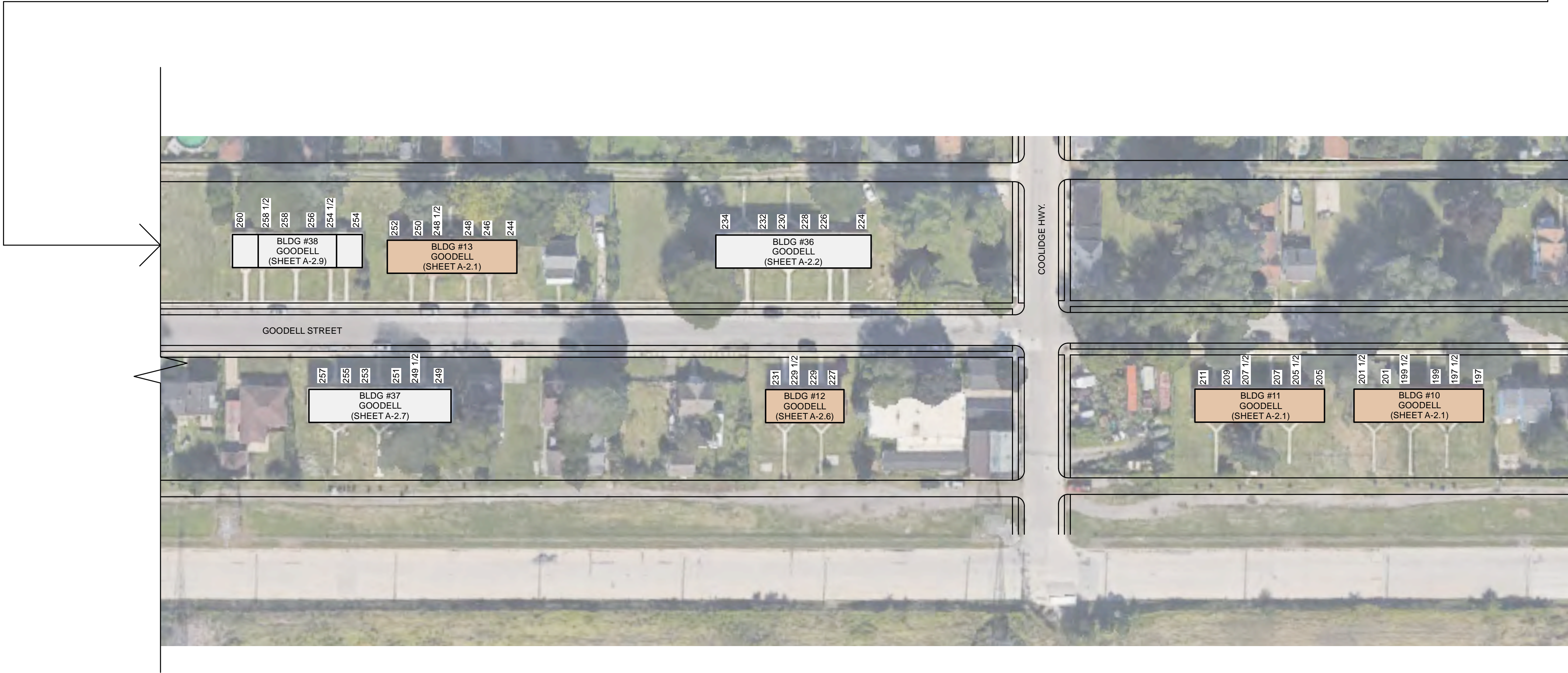
DETAIL APPEARS ON THIS SHEET NUMBER

SHEET INDEX	
A-0.0	COVER SHEET
A-1.0	IROQUOIS TERRACE ARCHITECTURAL SITE PLAN
A-2.1	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.2	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.3	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.4	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.5	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.6	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.7	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.8	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.
A-2.9	IROQUOIS TERRACE BLDG. PLANS & ELEV'S.

Owner / Sponsor:	Architect & Applicant:
RAD Conversion Specialists, LLC 120 N. Leroy Street Fenton, MI 48430	jordan london, aia, ra, president edmund london & associates, inc. 20750 civic center drive, suite 610 southfield, michigan 48076 phone: 248-353-4820 email: server@ela-architects.com
signed: _____	signed: _____



N
VICINITY MAP
SCALE: NOT TO SCALE



SITE PLAN -
IROQUOIS TERRACE
SCALE: 1" = 60'-0"



Building #18 - Front



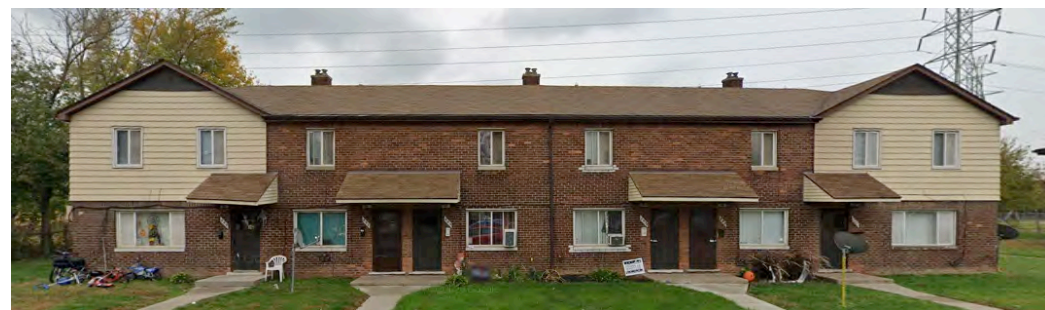
Building #18 - Rear



Building #18 - Left



Building #18 - Right



Building #15 - Front



Building #15 - Rear



Building #15 - Left



Building #15 - Right



Building #13 - Front



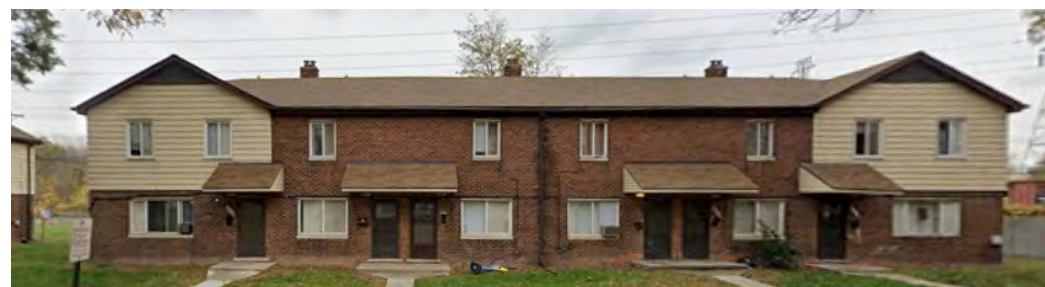
Building #13 - Rear



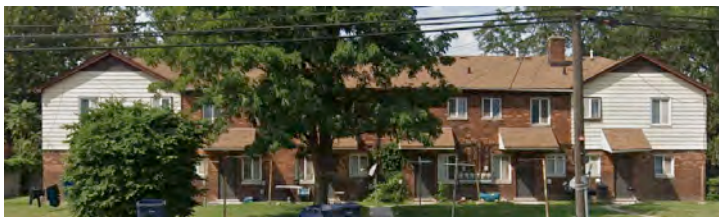
Building #13 - Left



Building #13 - Right



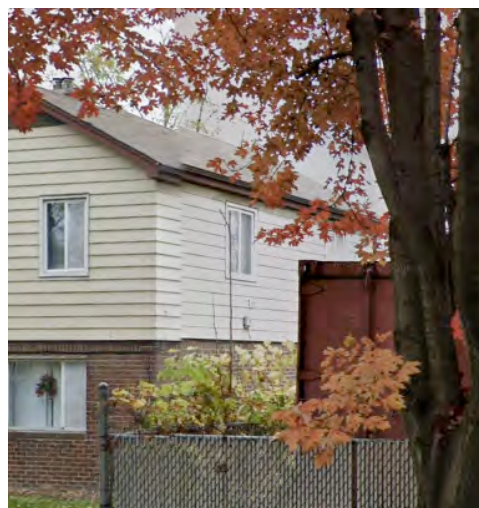
Building #11 - Front



Building #11 - Rear



Building #11 - Left



Building #11 - Right



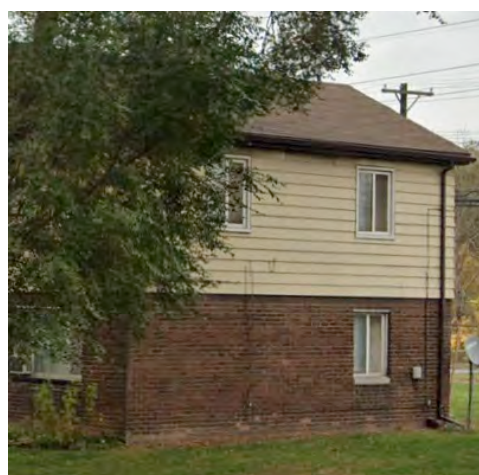
Building #10 - Front



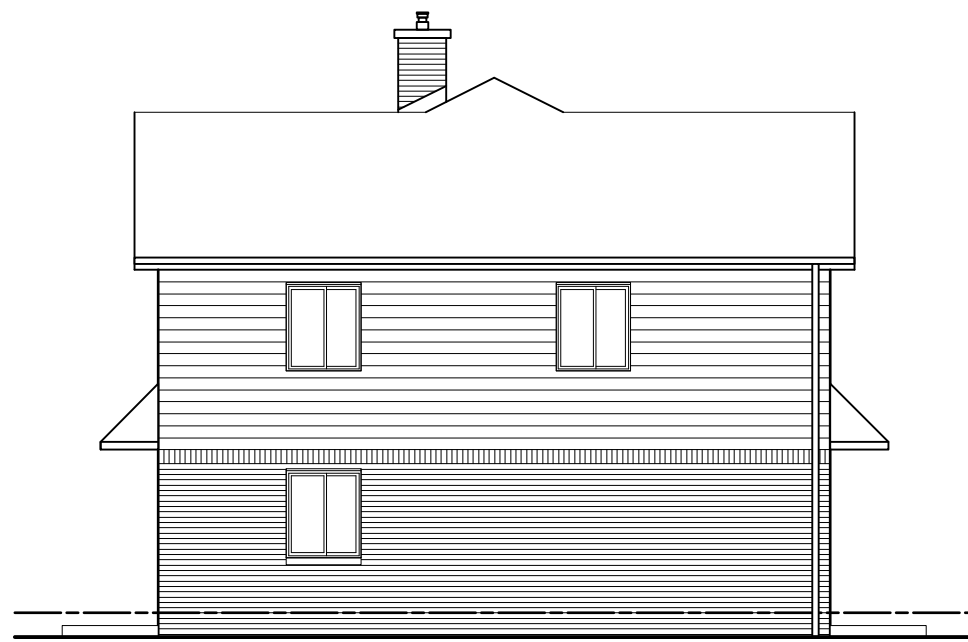
Building #10 - Rear



Building #10 - Left

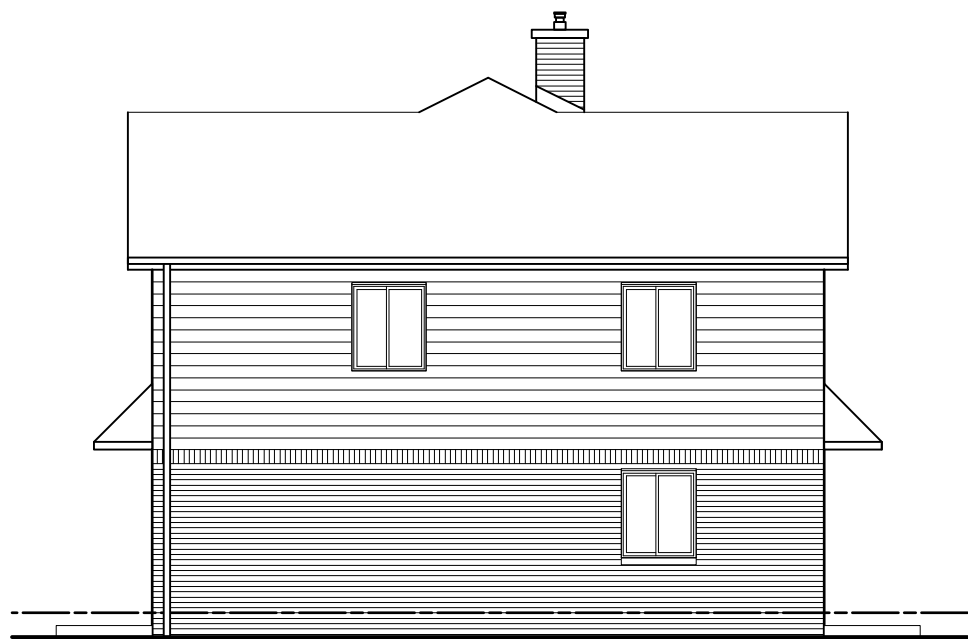


Building #10 - Right



6 LEFT ELEVATION

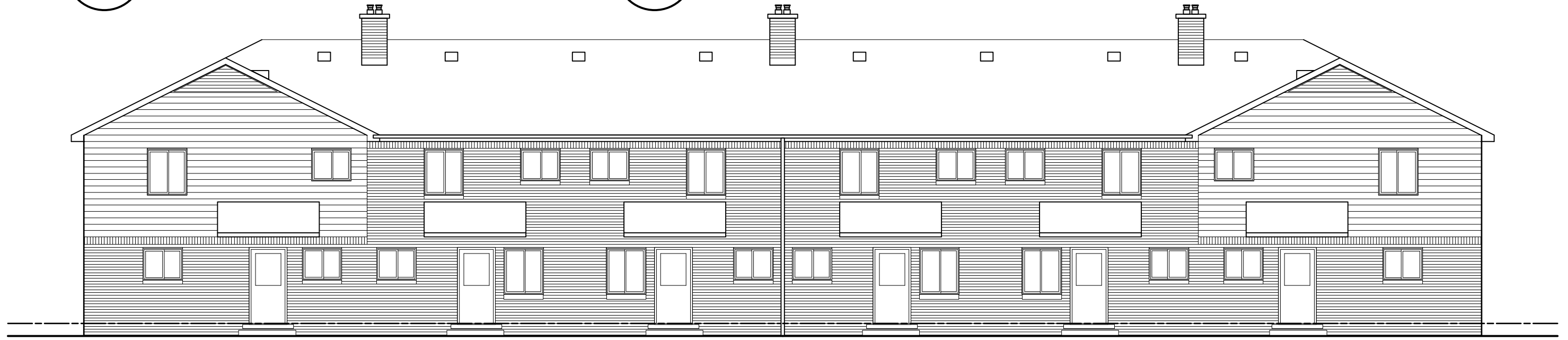
A-2.1 SCALE: 1/8" = 1'-0"



5 RIGHT ELEVATION

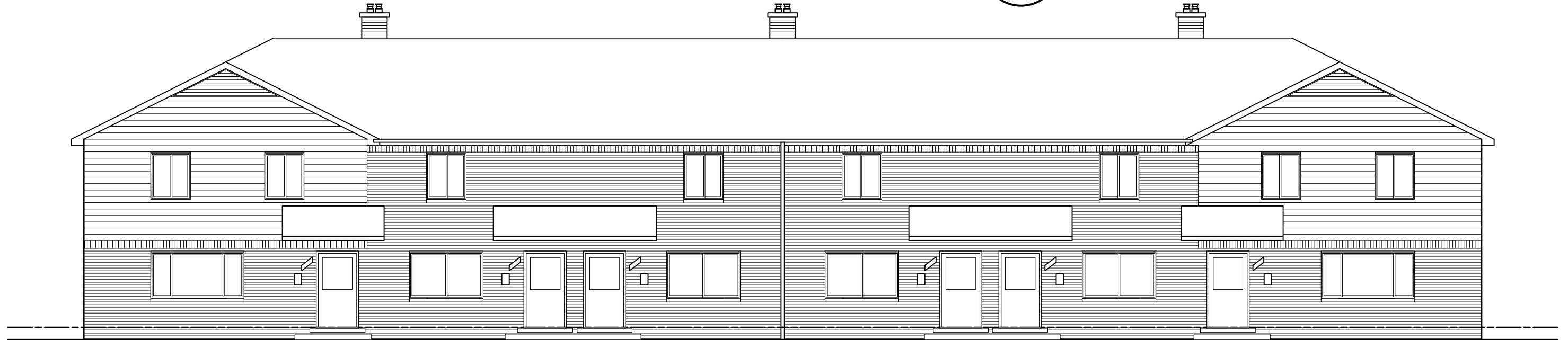
A-2.1 SCALE: 1/8" = 1'-0"

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #10
197, 197 1/2, 199, 199 1/2, 201 & 201 1/2 Goodell St.
(near Coolidge Highway St.)
Bldg #11
205, 205 1/2, 207, 207 1/2, 209 & 211 Goodell St.
(near Coolidge Highway St.)
Bldg #13
244, 246, 248, 248 1/2, 250, & 252 Goodell St.
(between Coolidge Highway St. & Maple St.)
Bldg #15
289, 291, 293, 293 1/2, 295 & 297 Goodell St.
(between Maple St. & Great Lakes St.)



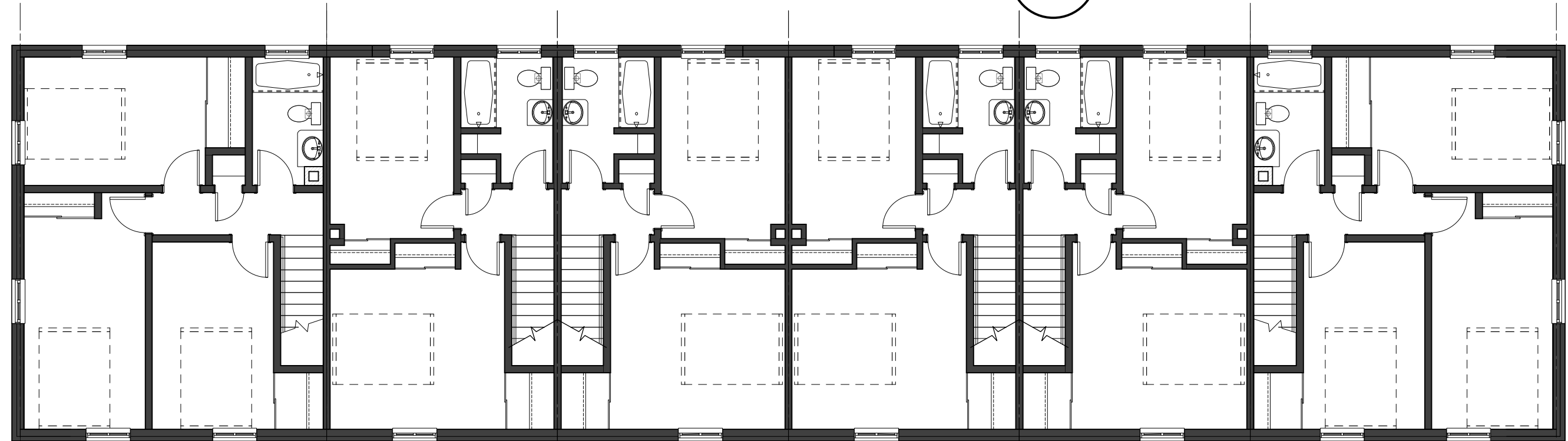
4 REAR ELEVATION

A-2.1 SCALE: 1/8" = 1'-0"



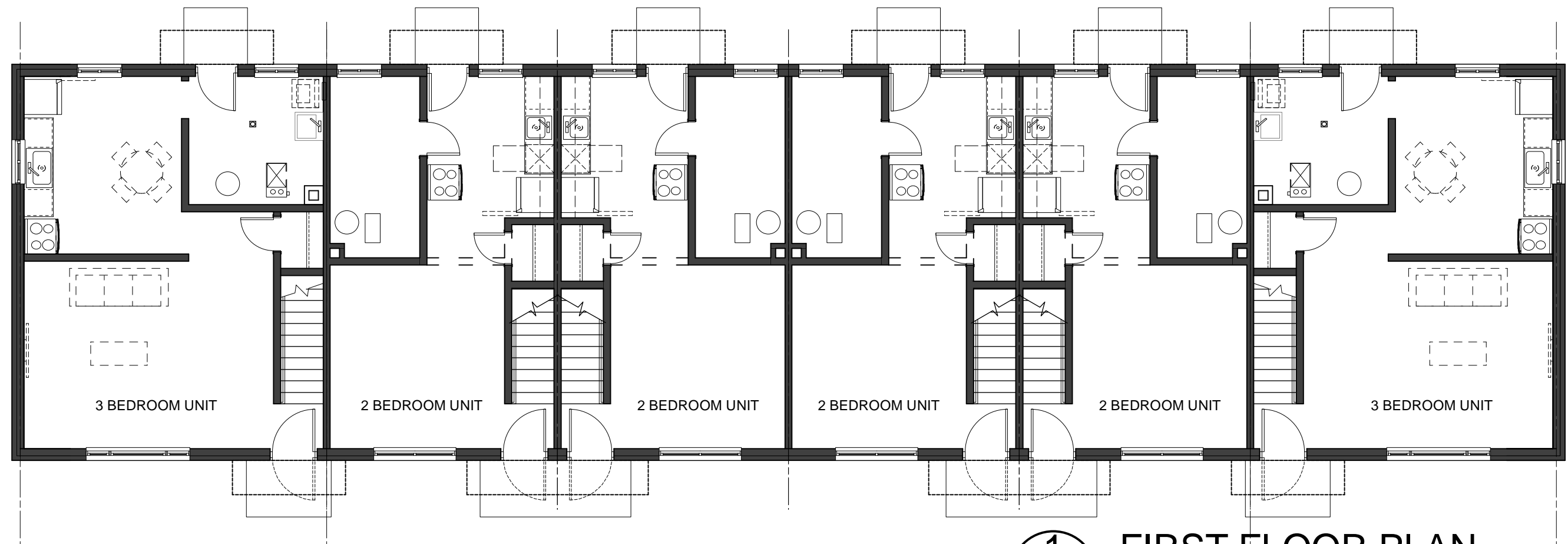
3 FRONT ELEVATION

A-2.1 SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN

A-2.1 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN

A-2.1 SCALE: 1/8" = 1'-0"

© copyright 2023 / edmund london & associates, inc. / all rights reserved



Building #39 - Front



Building #39 - Rear



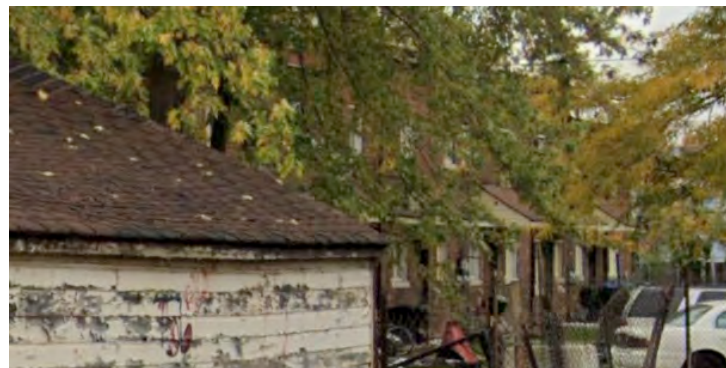
Building #39 - Left



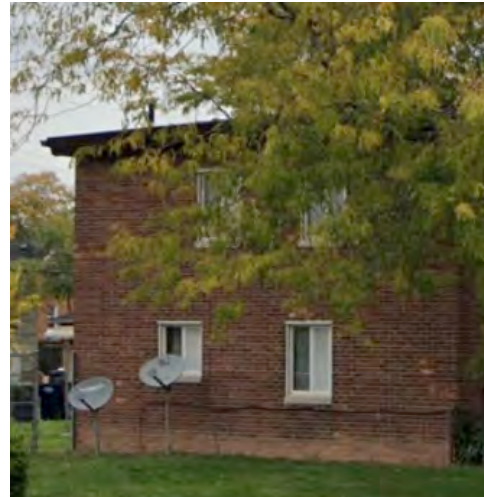
Building #39 - Right



Building #36 - Front



Building #36 - Rear

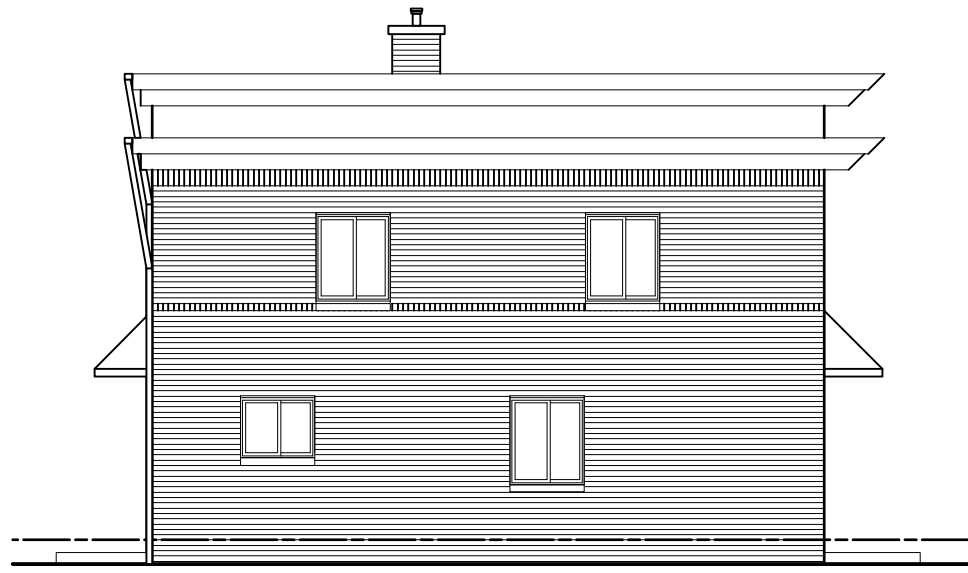


Building #36 - Left



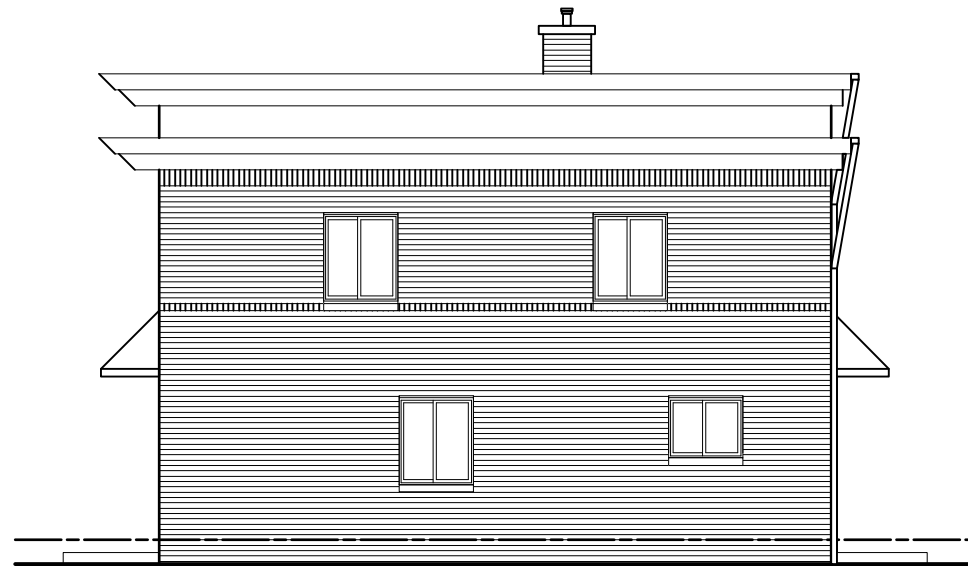
Building #36 - Right

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #36
224, 226, 228, 230, 232, & 234 Goodell St.
(between Coolidge Highway & Maple St.)
Bldg #39
299, 301, 303, 305, 307, & 309 Goodell St.
(between Maple St. & Great Lakes St.)



6 LEFT ELEVATION

A-2.2 SCALE: 1/8" = 1'-0"



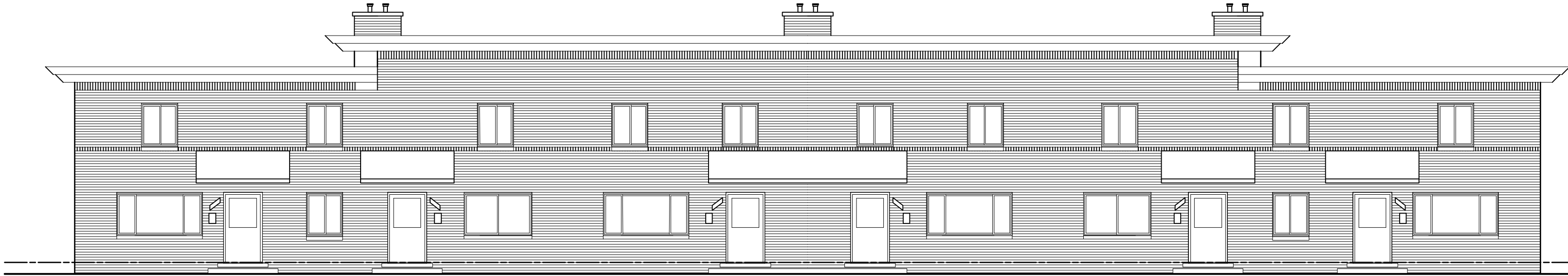
5 RIGHT ELEVATION

A-2.2 SCALE: 1/8" = 1'-0"



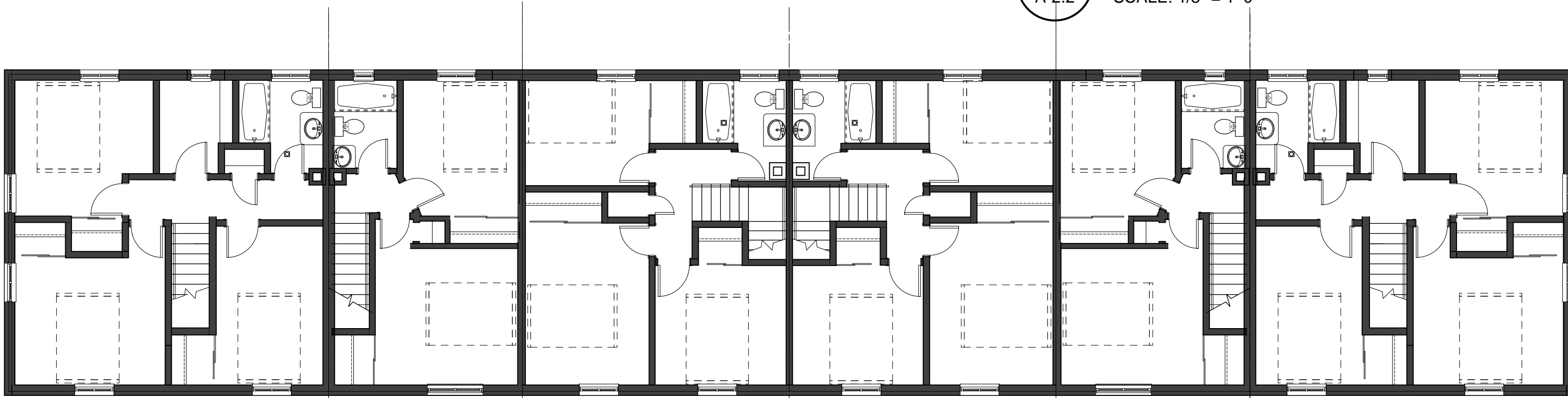
4 REAR ELEVATION

A-2.2 SCALE: 1/8" = 1'-0"



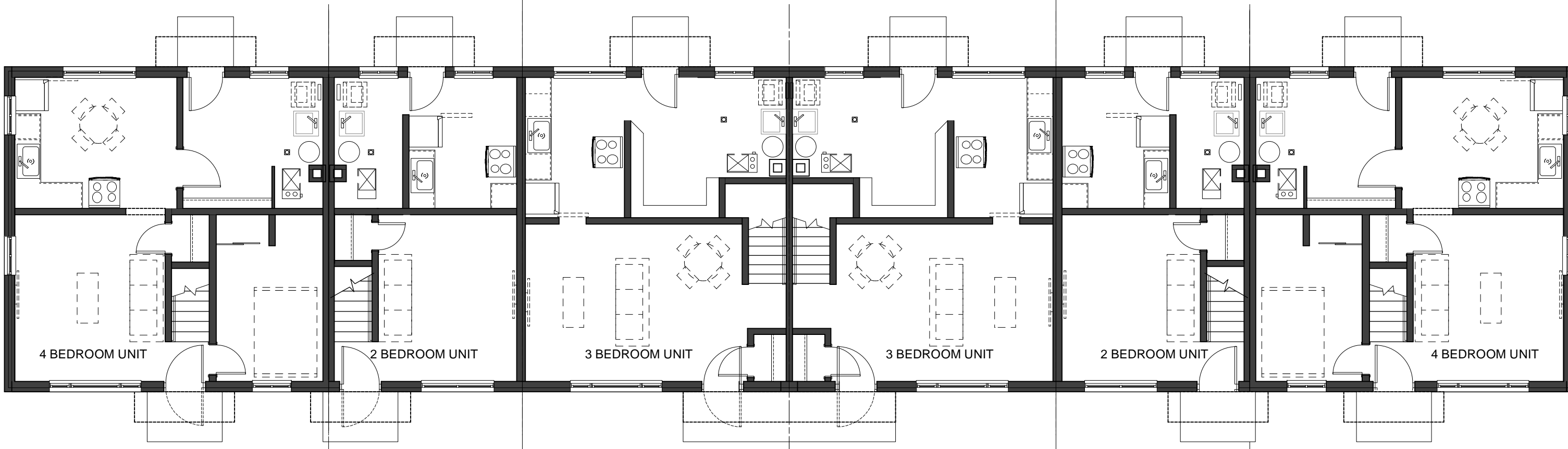
3 FRONT ELEVATION

A-2.2 SCALE: 1/8" = 1'-0"



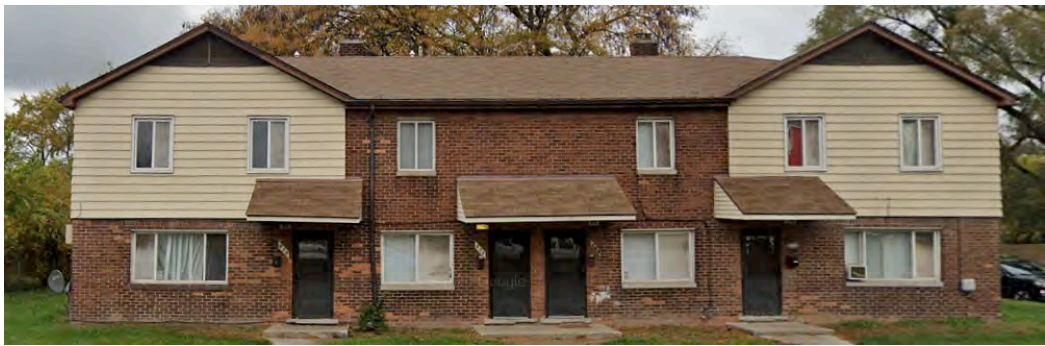
2 SECOND FLOOR PLAN

A-2.2 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN

A-2.2 SCALE: 1/8" = 1'-0"



Building #17 - Front



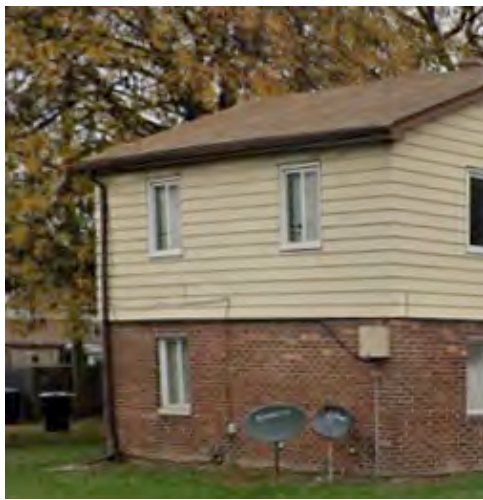
Building #14 - Front



Building #17 - Rear



Building #14 - Rear



Building #17 - Left



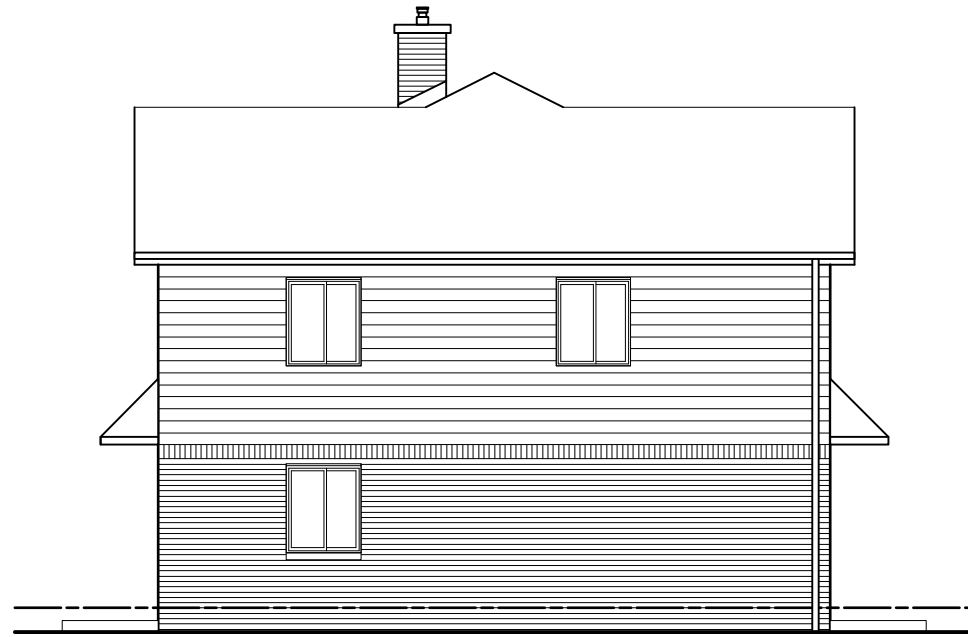
Building #14 - Left



Building #17 - Right

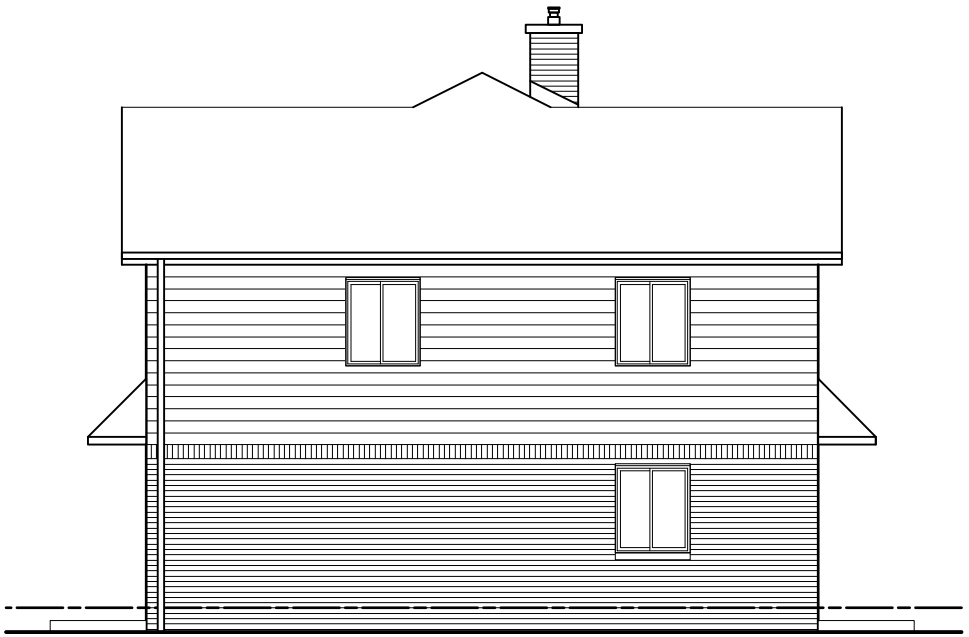


Building #14 - Right



6 LEFT ELEVATION

A-2.3 SCALE: 1/8" = 1'-0"



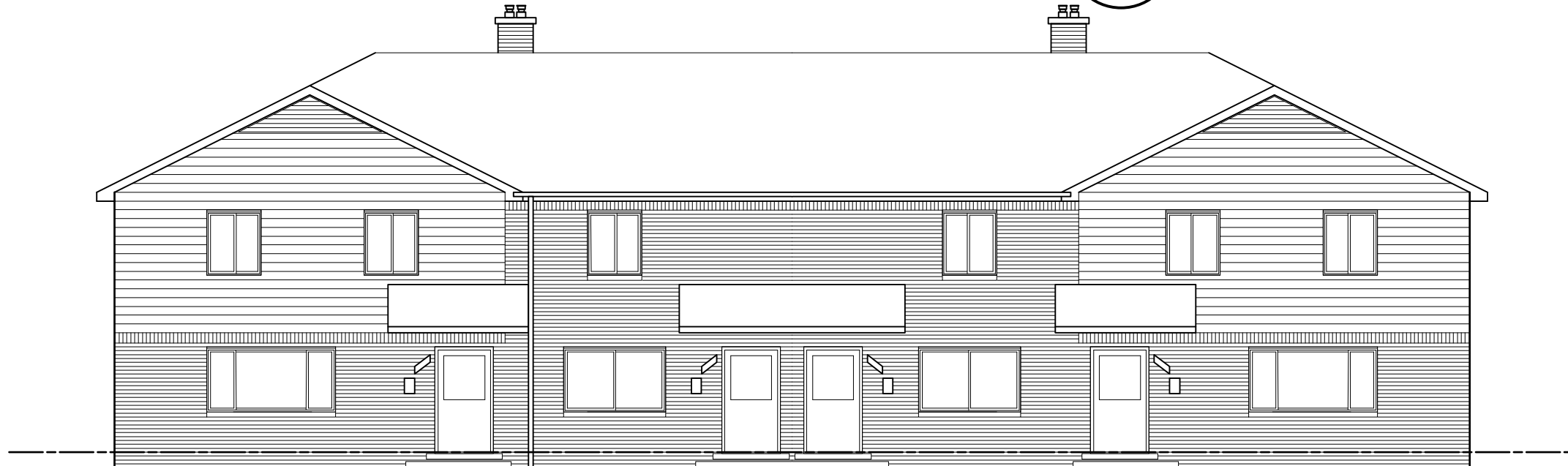
5 RIGHT ELEVATION

A-2.3 SCALE: 1/8" = 1'-0"



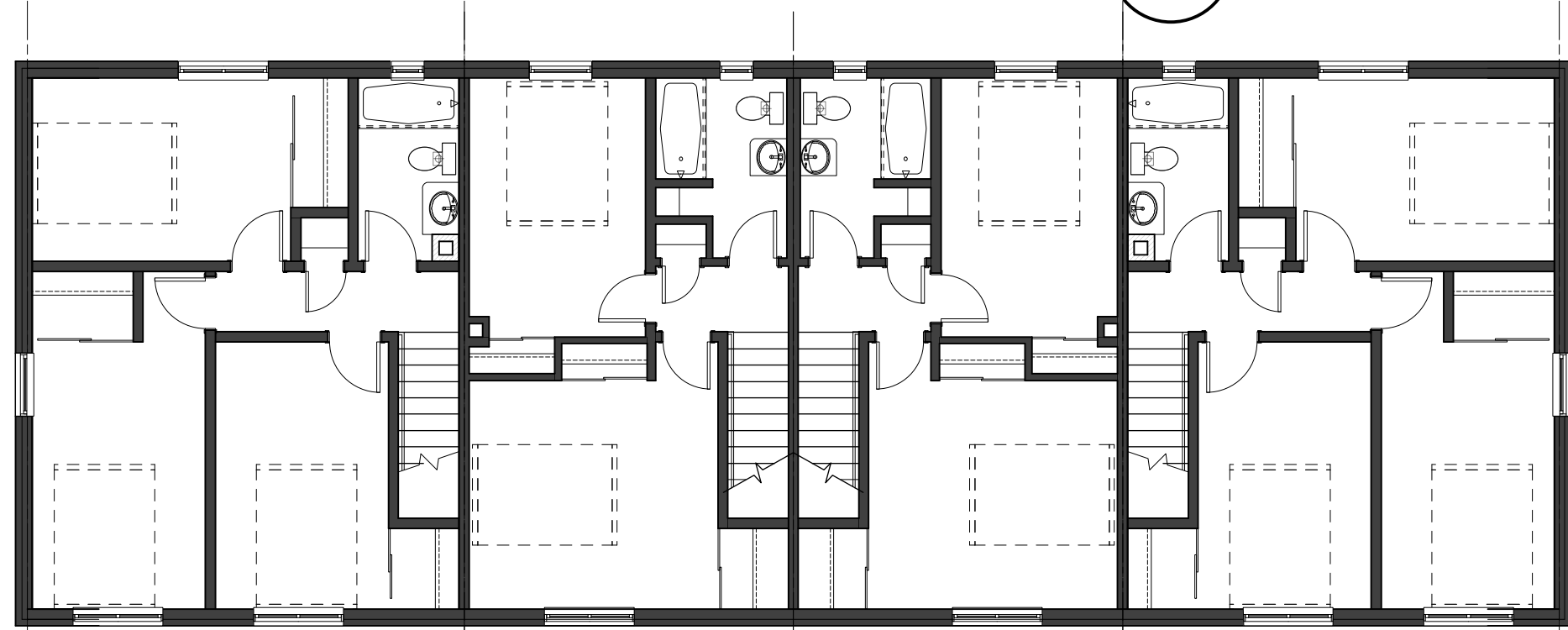
4 REAR ELEVATION

A-2.3 SCALE: 1/8" = 1'-0"



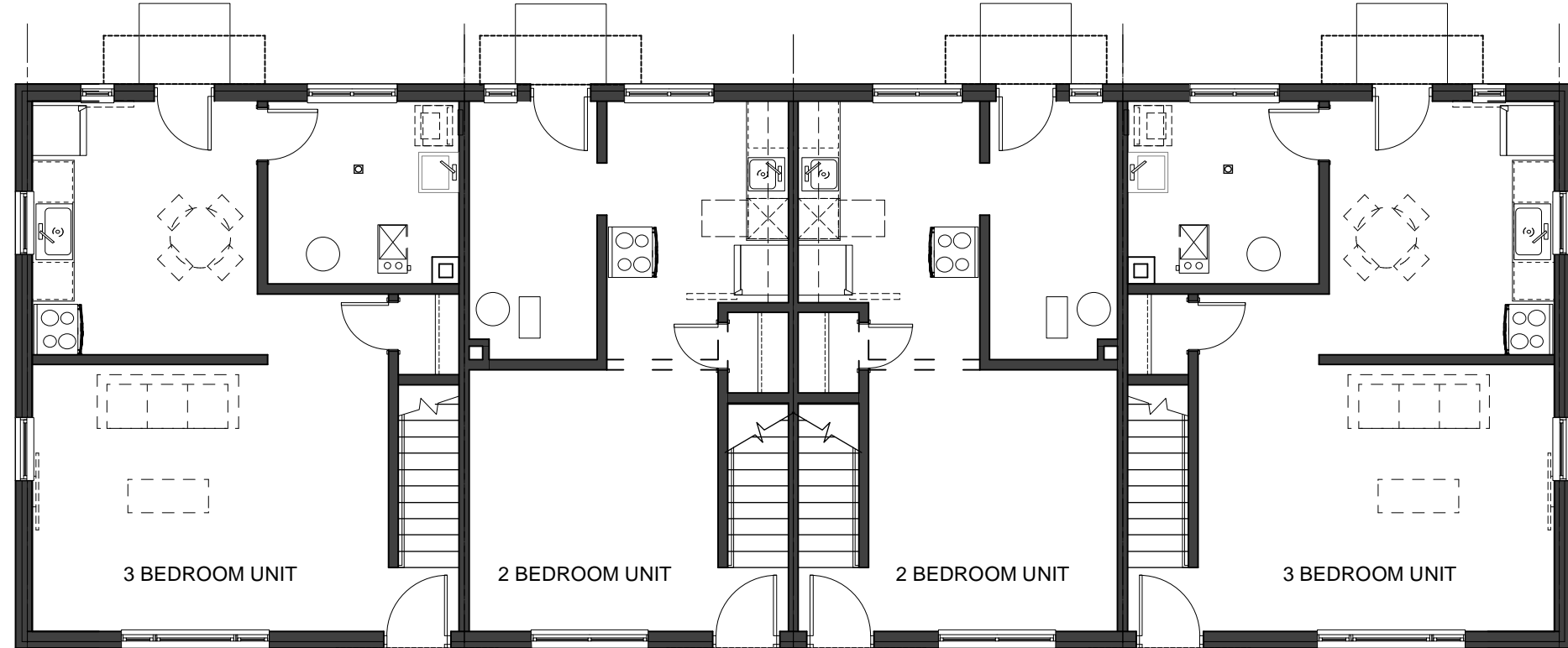
3 FRONT ELEVATION

A-2.3 SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN

A-2.3 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN

A-2.3 SCALE: 1/8" = 1'-0"

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #14
271, 273, 275 & 277 Goodell St.
(near Maple St.)
Bldg #17
270, 272, 274, & 276 Goodell St.
(near Maple St.)

edmund london & associates, inc.
architects & planners
20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

ela

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

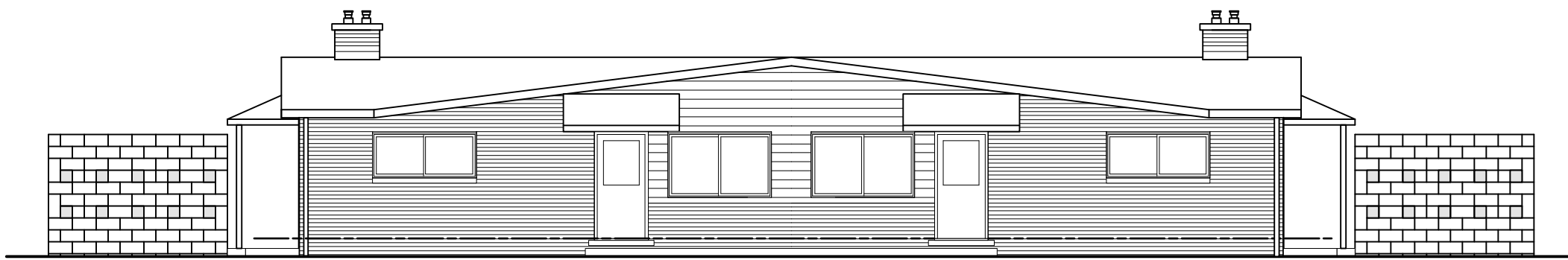
JOB NUMBER

43041

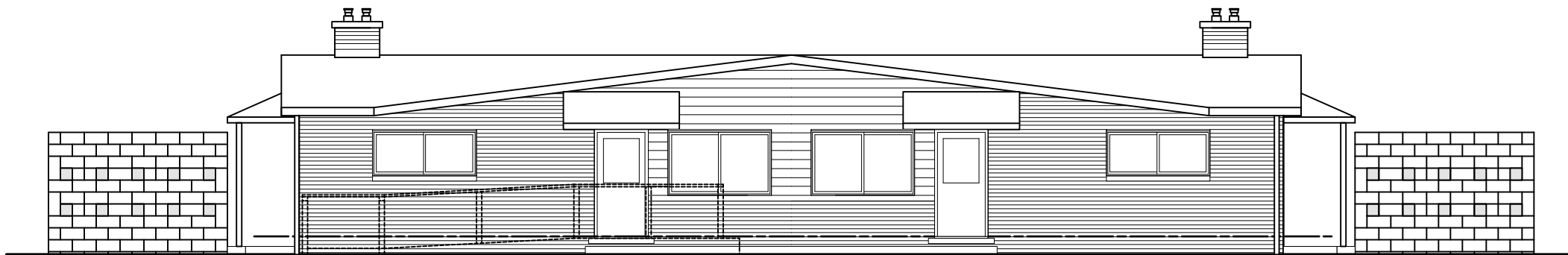
SHEET NUMBER

A-2.3

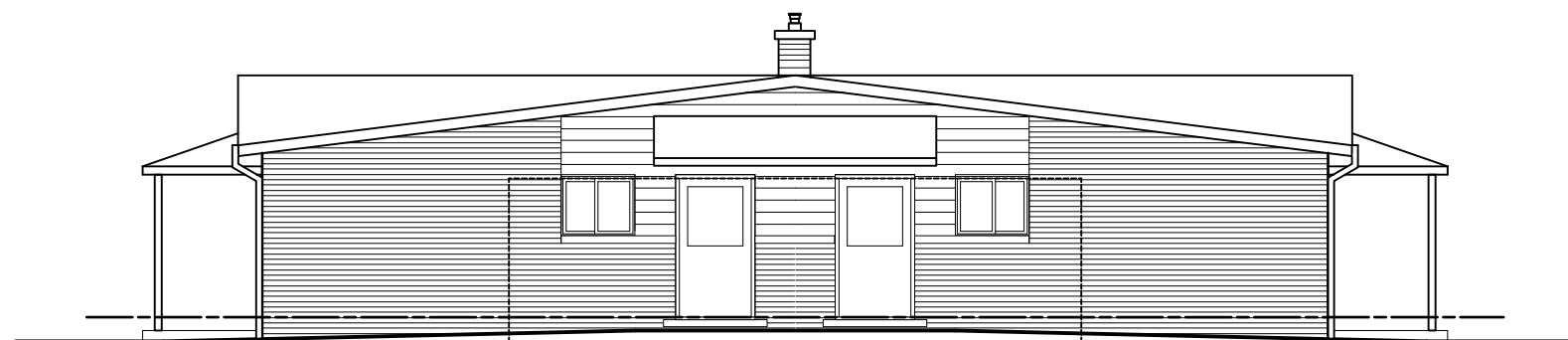
BUILDINGS INCLUDED ON THIS SHEET:
Bldg #64
324, 324 1/2, 326, & 326 1/2 Goodell
(near East Great Lakes St.)



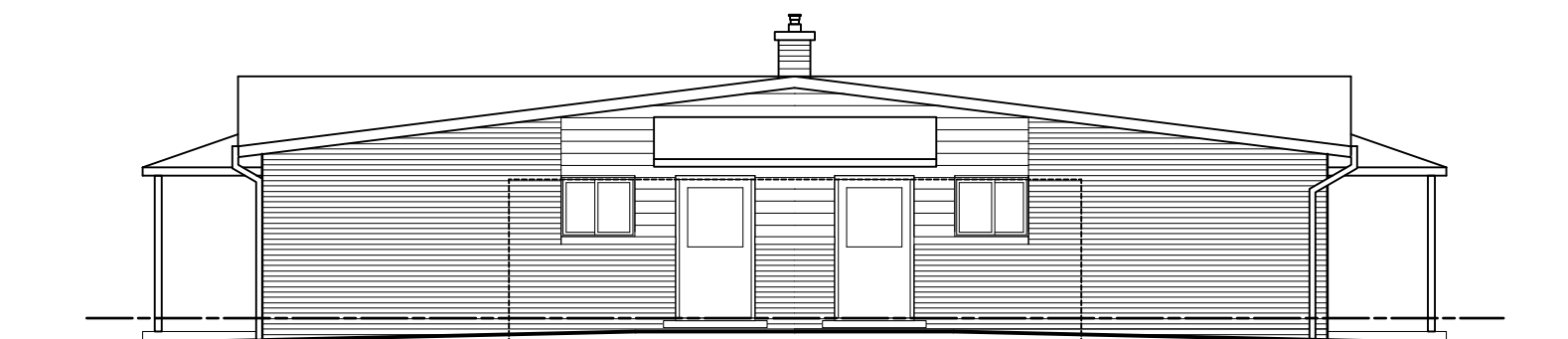
5 LEFT ELEVATION
A-2.4 SCALE: 1/8" = 1'-0"



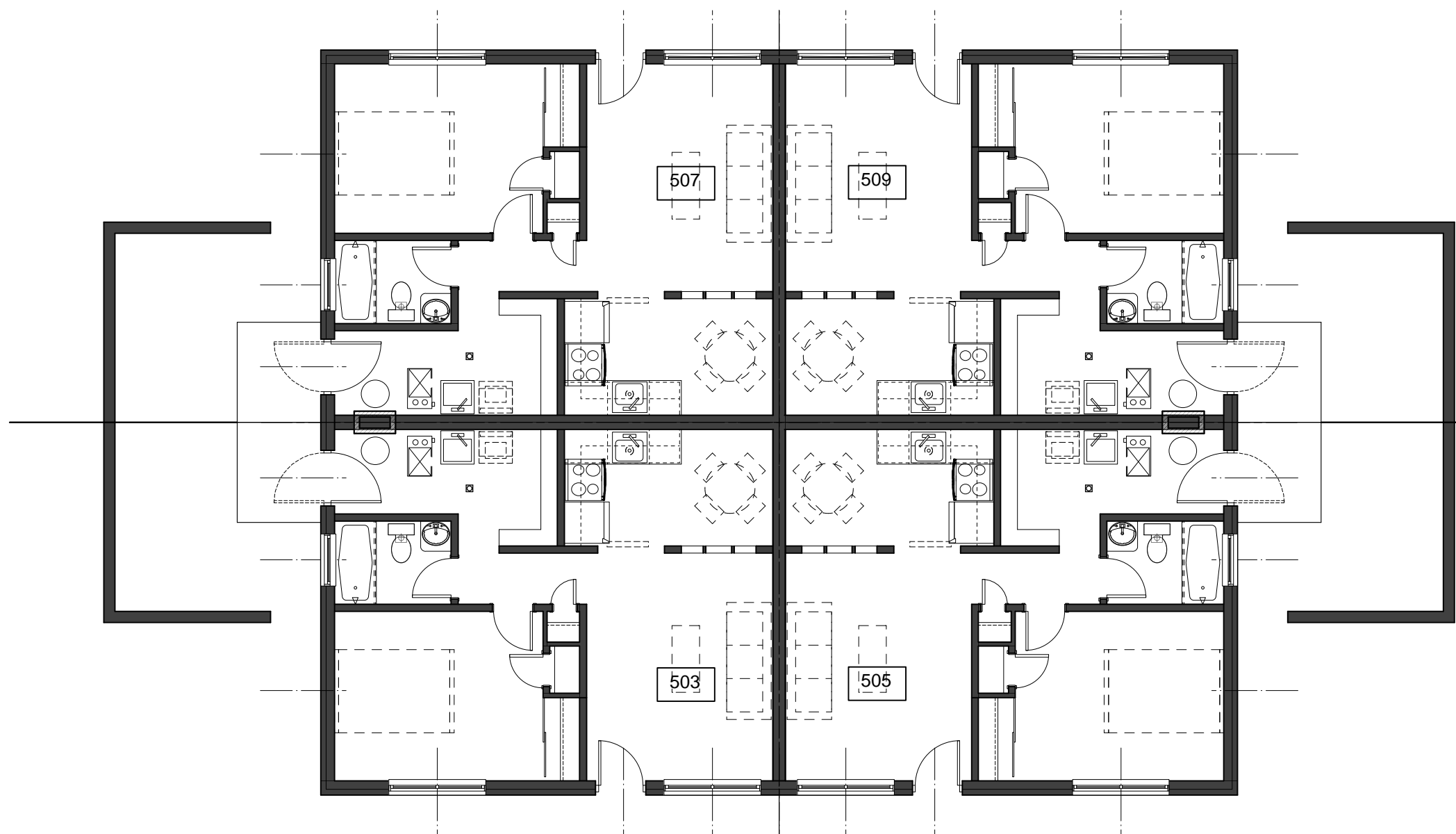
4 RIGHT ELEVATION
A-2.4 SCALE: 1/8" = 1'-0"



3 REAR ELEVATION
A-2.4 SCALE: 1/8" = 1'-0"



2 FRONT ELEVATION
A-2.4 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN
A-2.4 SCALE: 1/8" = 1'-0"



Building #64 - Front



Building #64 - Rear

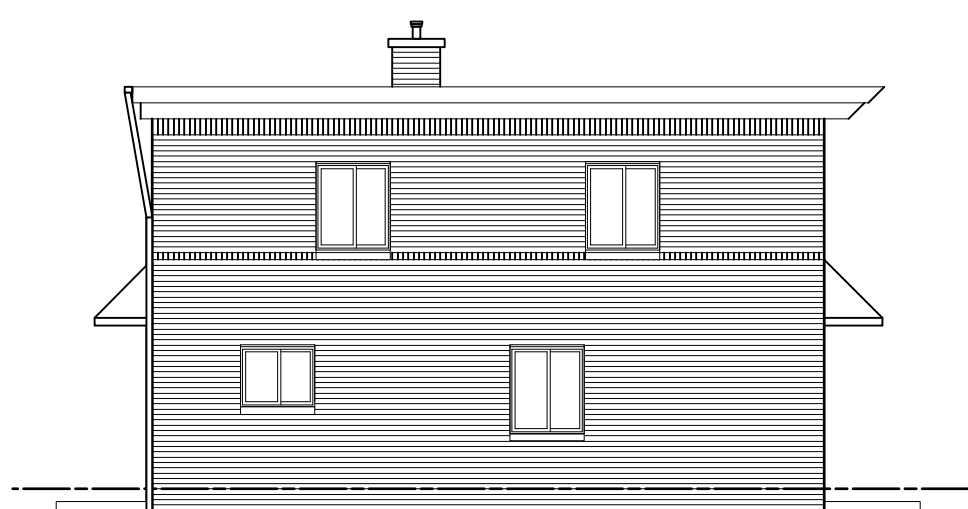


Building #64 - Left

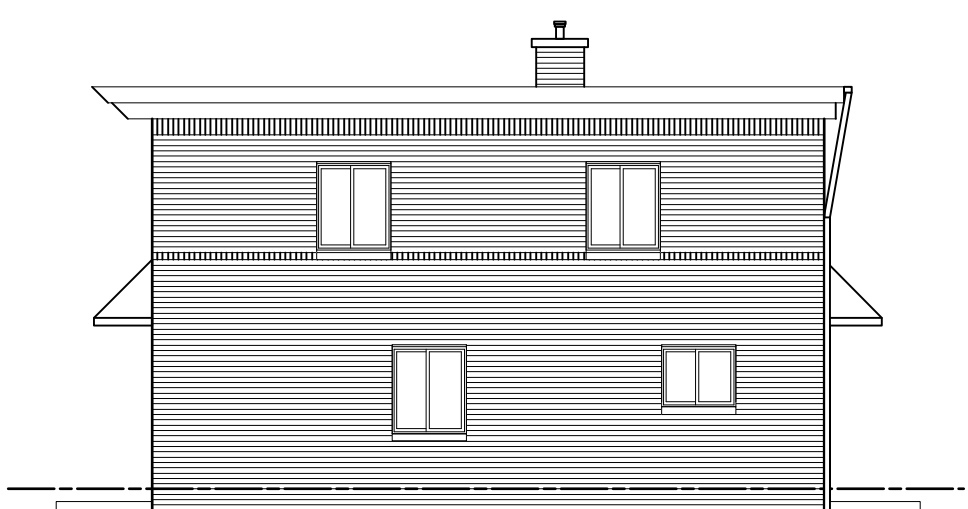


Building #64 - Right

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #40
321, 321 1/2, 323, & 325 Goodell St.
(near Great Lakes St.)



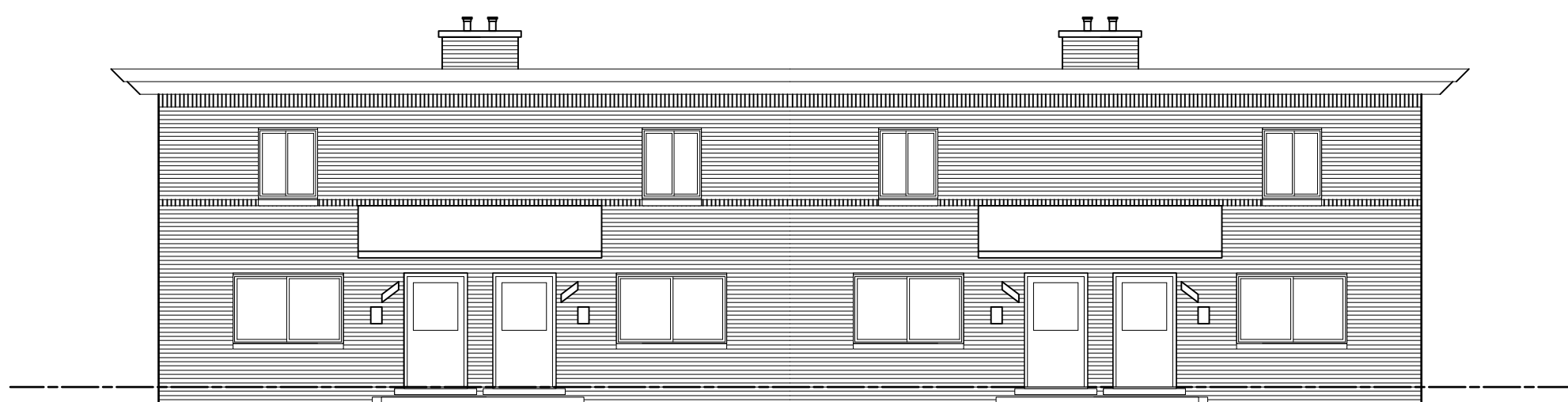
6 LEFT ELEVATION
A-2.5 SCALE: 1/8" = 1'-0"



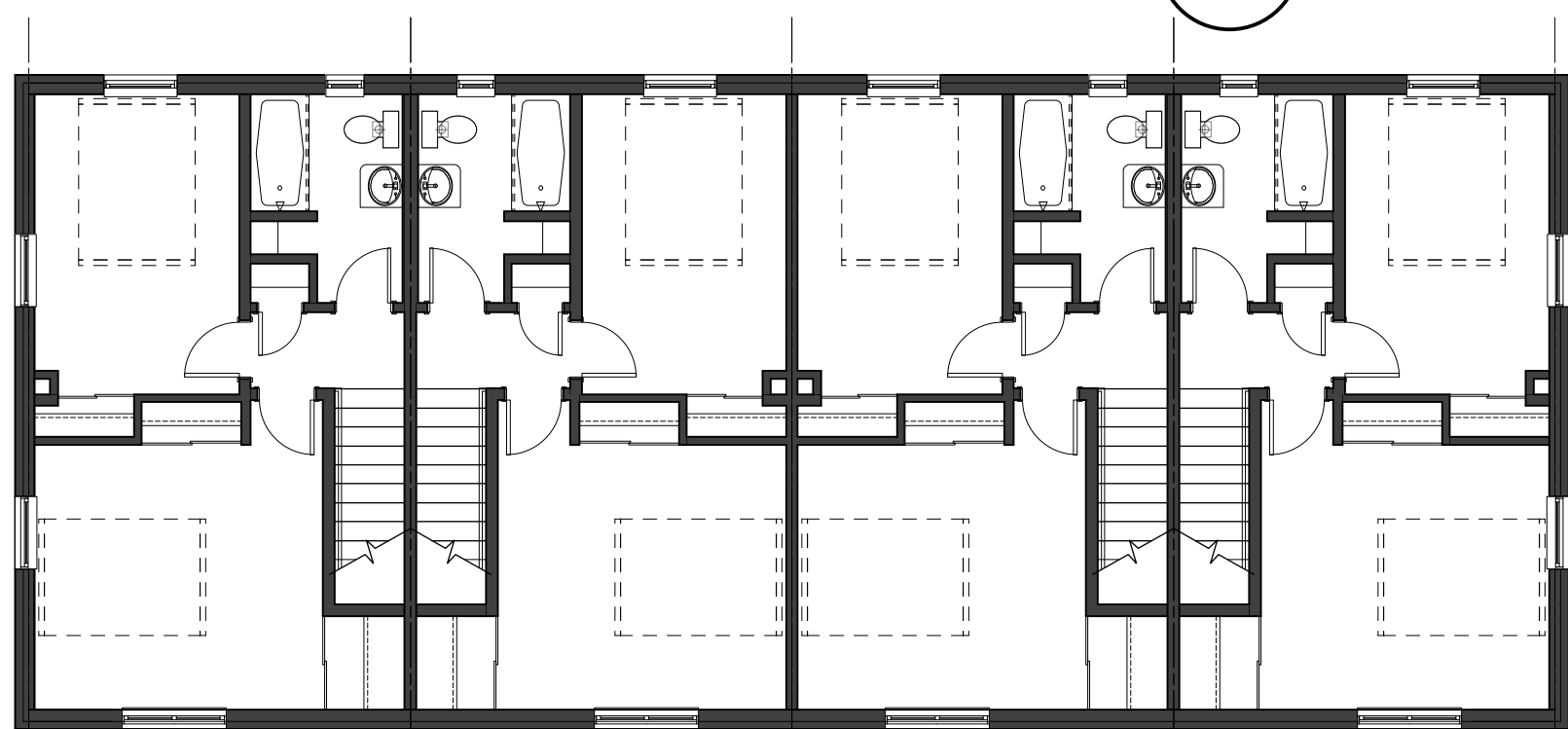
5 RIGHT ELEVATION
A-2.5 SCALE: 1/8" = 1'-0"



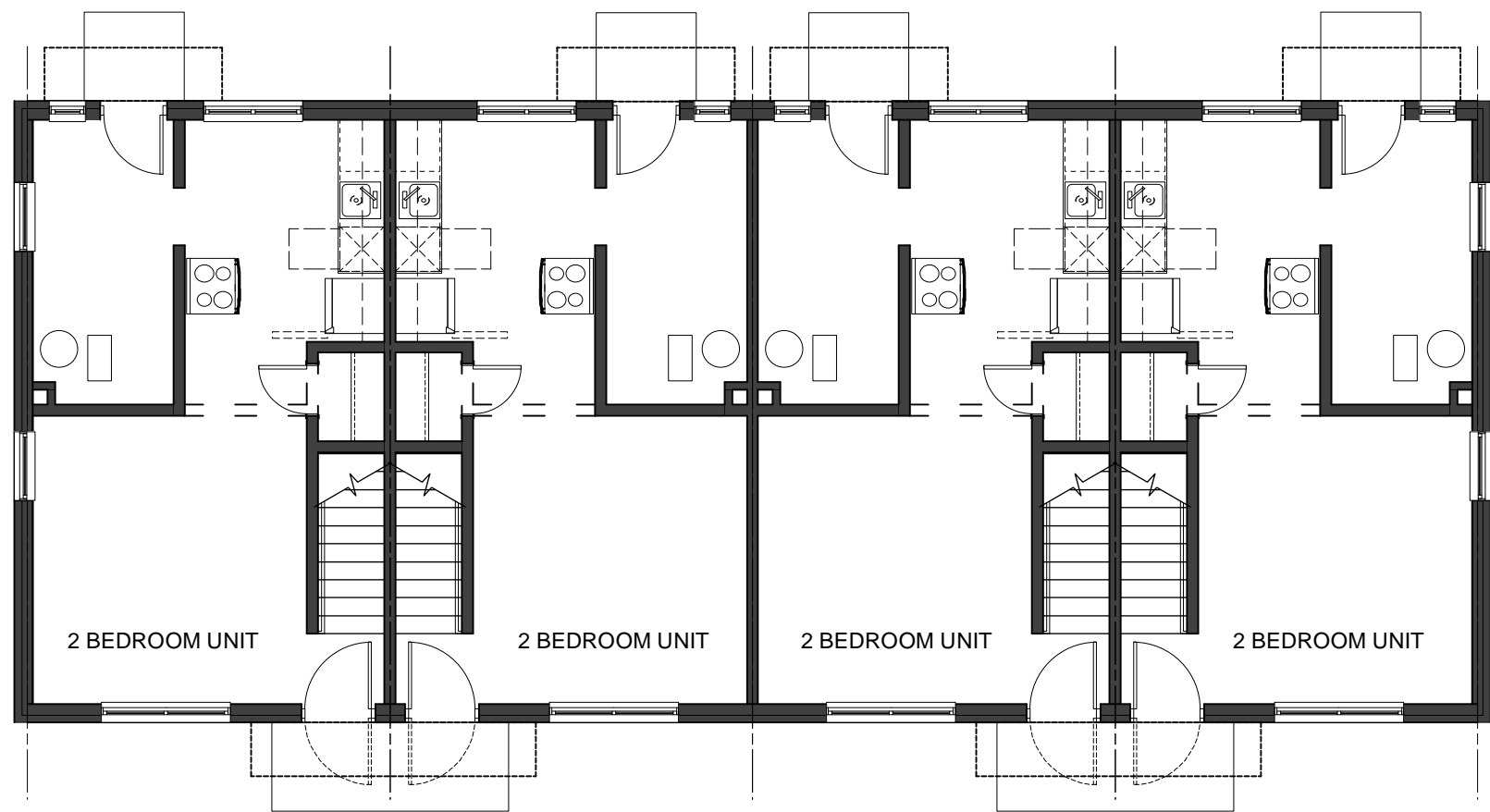
4 REAR ELEVATION
A-2.5 SCALE: 1/8" = 1'-0"



3 FRONT ELEVATION
A-2.5 SCALE: 1/8" = 1'-0"

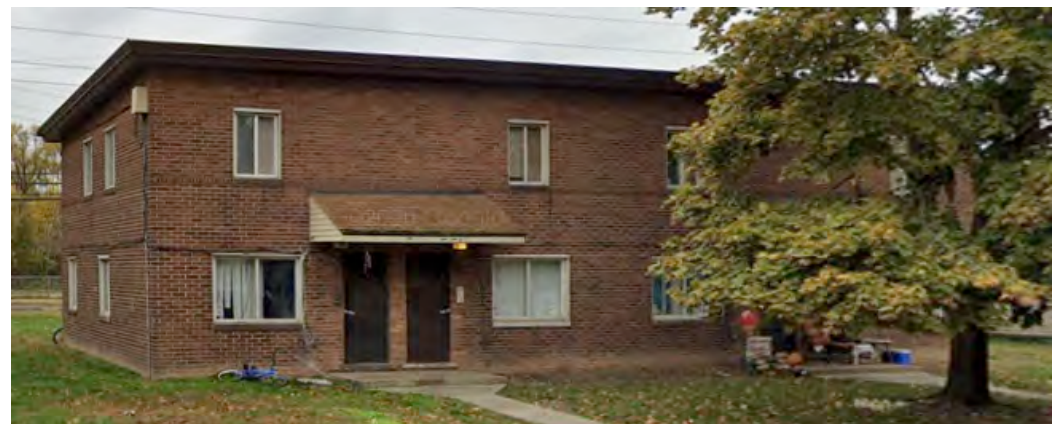


2 SECOND FLOOR PLAN
A-2.5 SCALE: 1/8" = 1'-0"

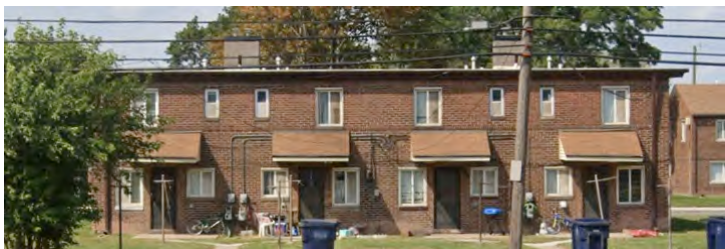


1 FIRST FLOOR PLAN
A-2.5 SCALE: 1/8" = 1'-0"

© copyright 2023 / edmund london & associates, inc. / all rights reserved



Building #40 - Front



Building #40 - Rear



Building #40 - Left



Building #40 - Right

edmund london & associates, inc.
architects & planners
20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

ela

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

JOB NUMBER

43041

SHEET NUMBER

A-2.5



Building #19 - Front



Building #19 - Rear



Building #19 - Left



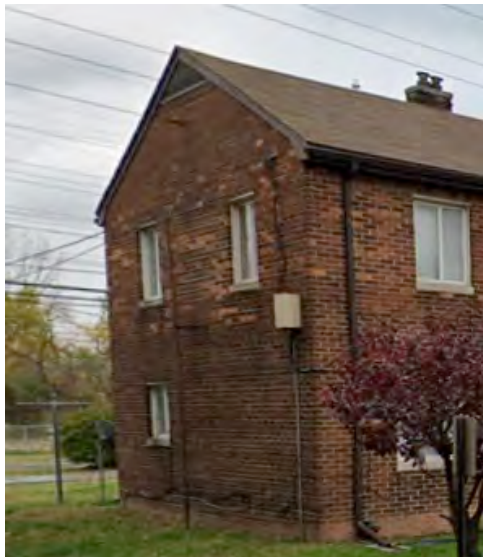
Building #19 - Right



Building #12 - Front



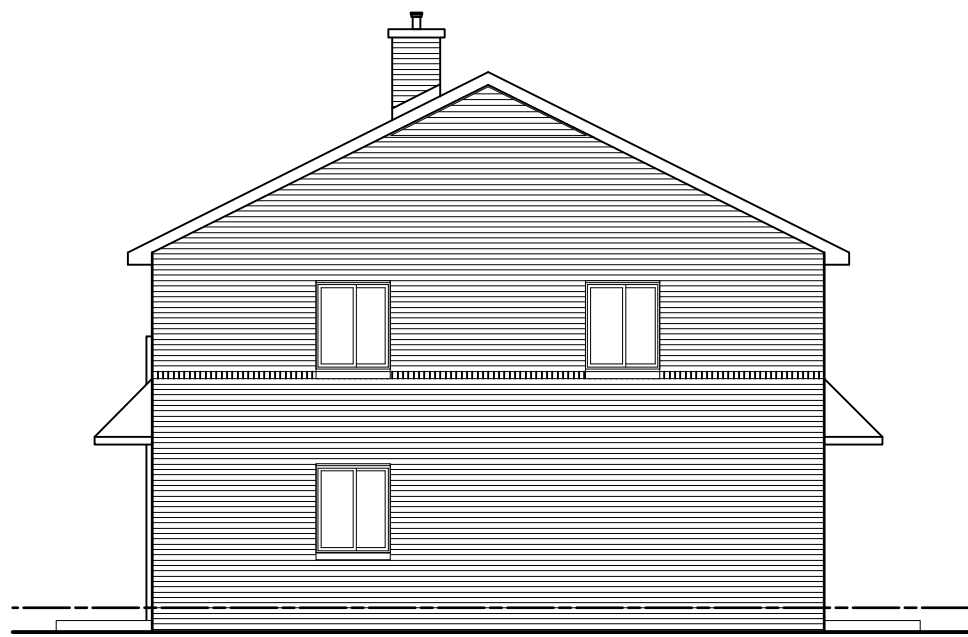
Building #12 - Rear



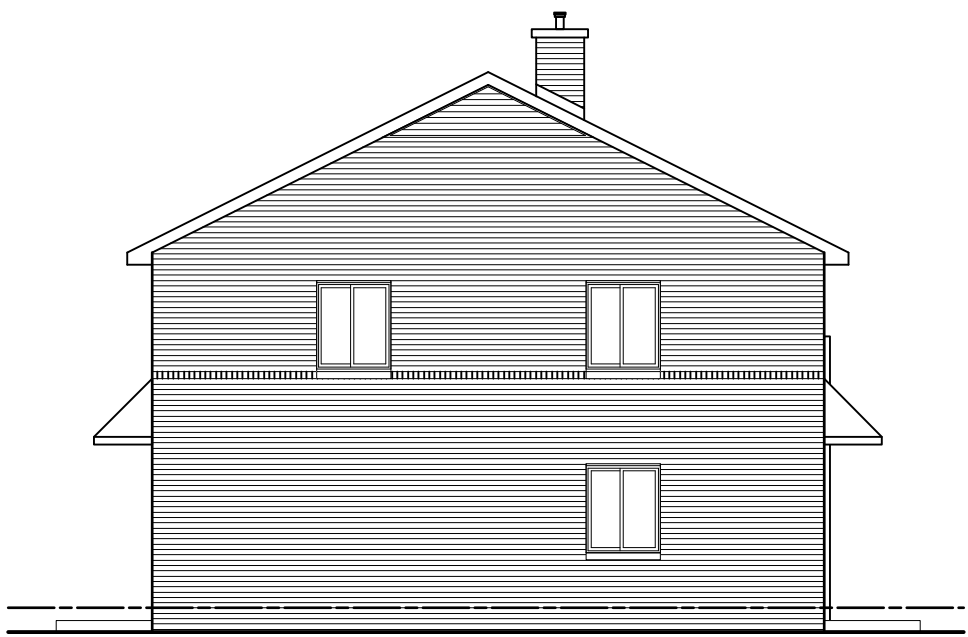
Building #12 - Left



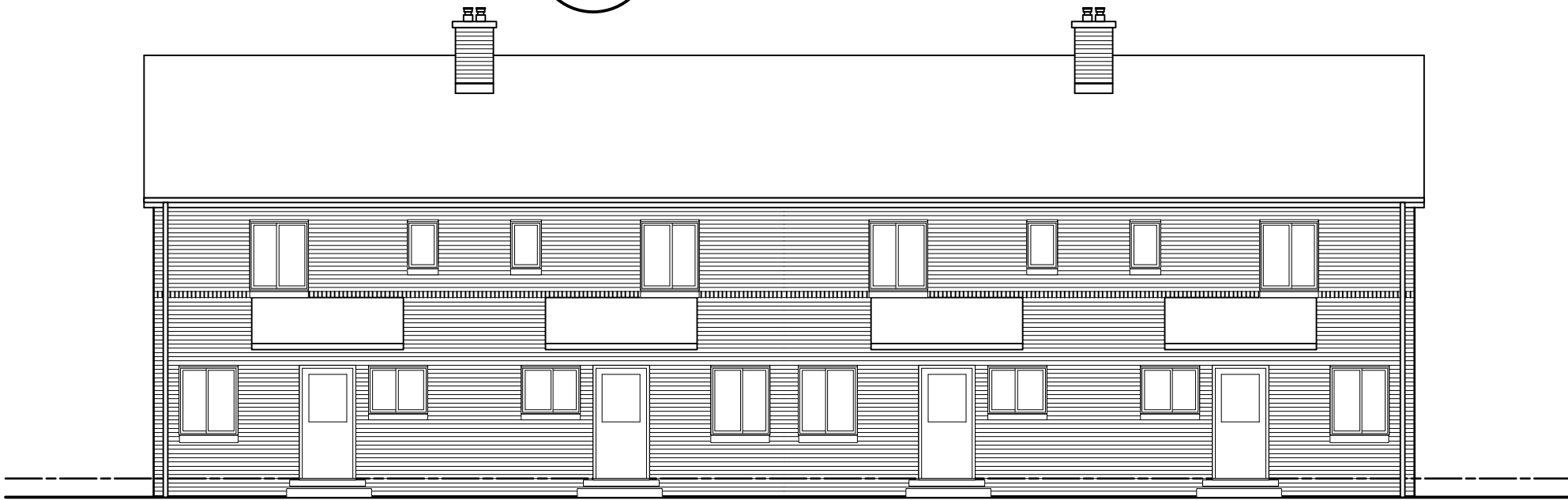
Building #12 - Right



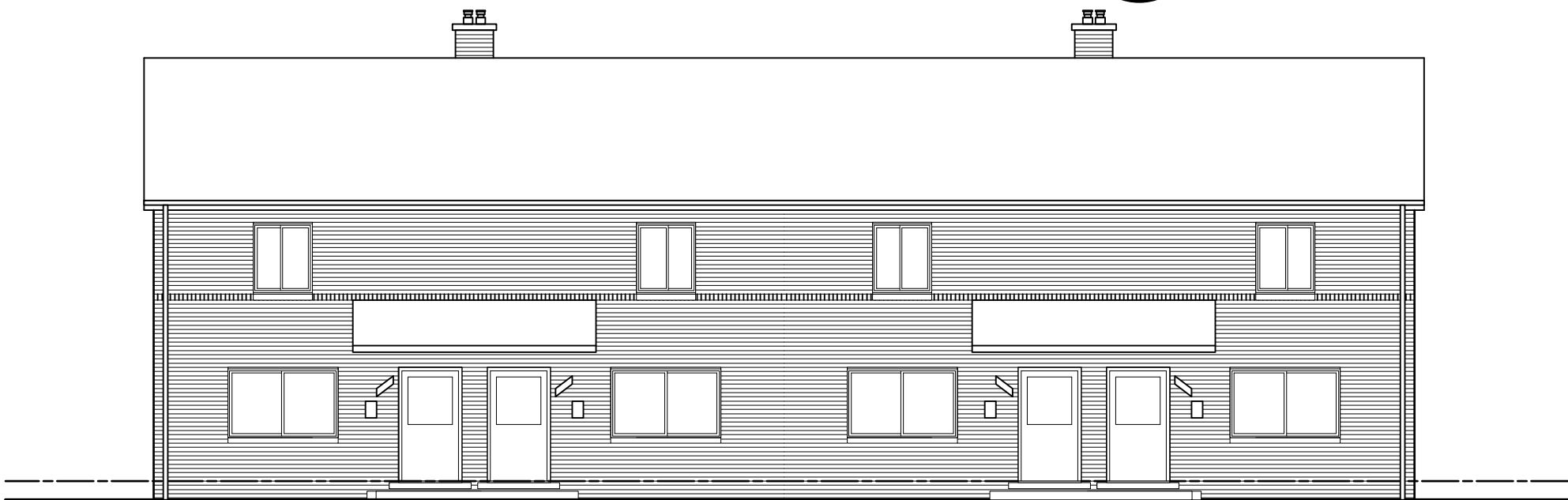
6 LEFT ELEVATION
A-2.6 SCALE: 1/8" = 1'-0"



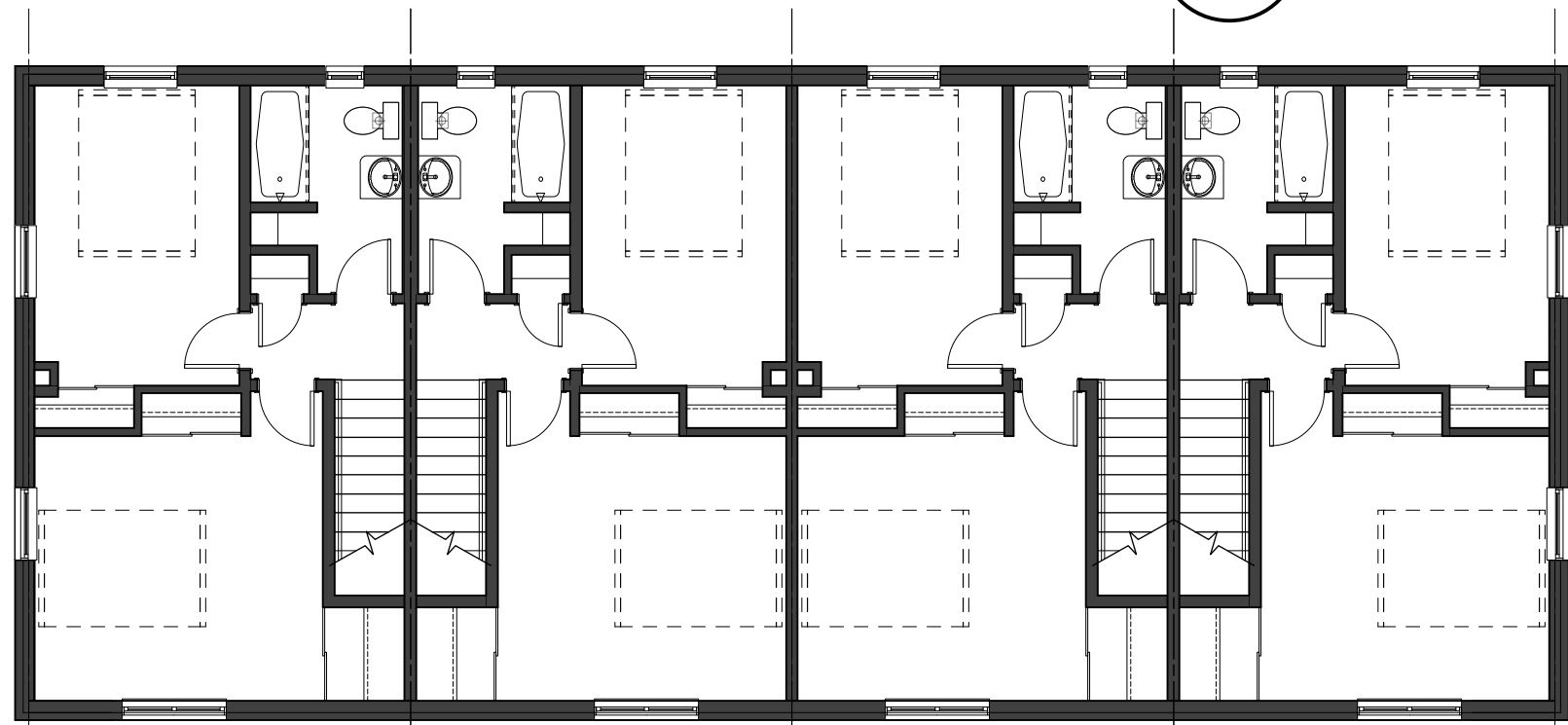
5 RIGHT ELEVATION
A-2.6 SCALE: 1/8" = 1'-0"



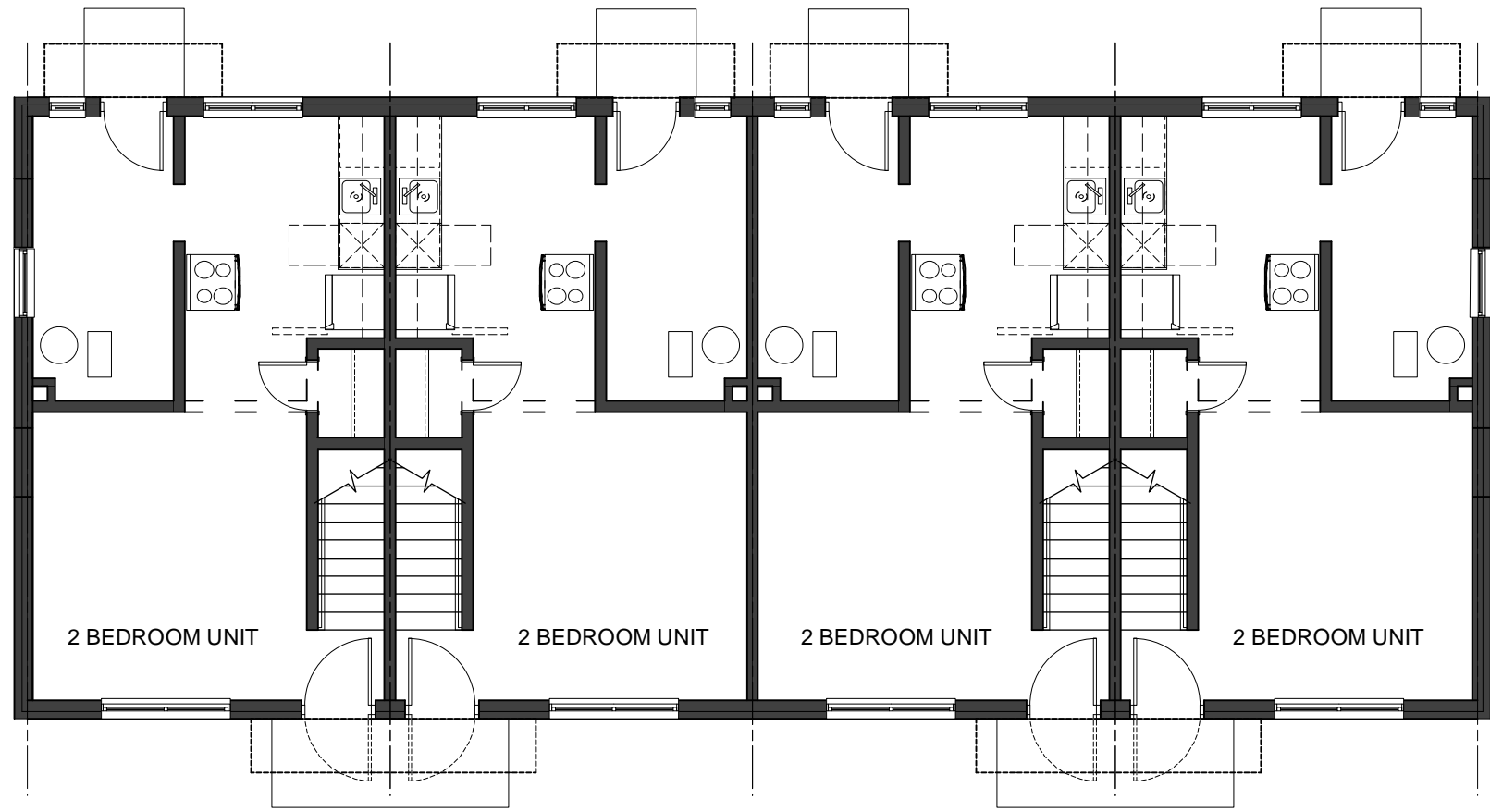
4 REAR ELEVATION
A-2.6 SCALE: 1/8" = 1'-0"



3 FRONT ELEVATION
A-2.6 SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN
A-2.6 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN
A-2.6 SCALE: 1/8" = 1'-0"

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #12
227, 229, 229 1/2 & 231 Goodell St.
(near Maple St.)
Bldg #19
312, 314, 316, & 318 Goodell St.
(near Great Lakes St.)

edmund london & associates, inc.
architects & planners
20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

ela

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

JOB NUMBER

43041

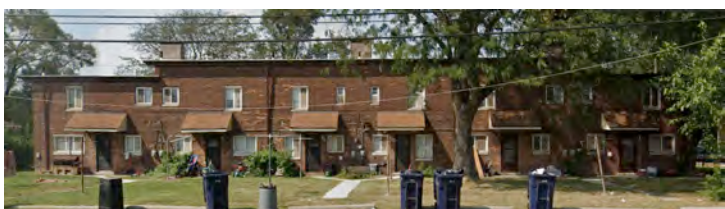
SHEET NUMBER

A-2.6

© copyright 2023 / edmund london & associates, inc. / all rights reserved



Building #37 - Front



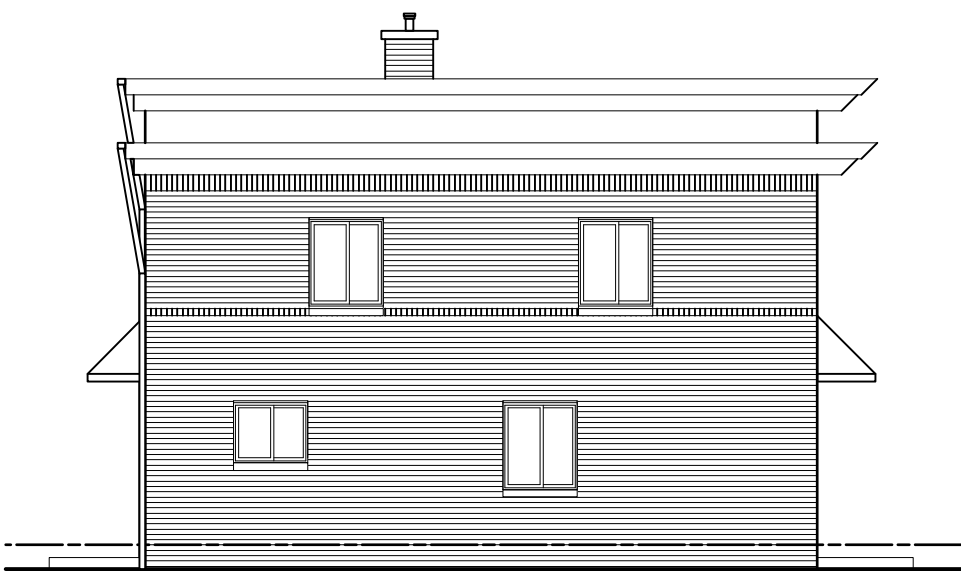
Building #37 - Rear



Building #37 - Left

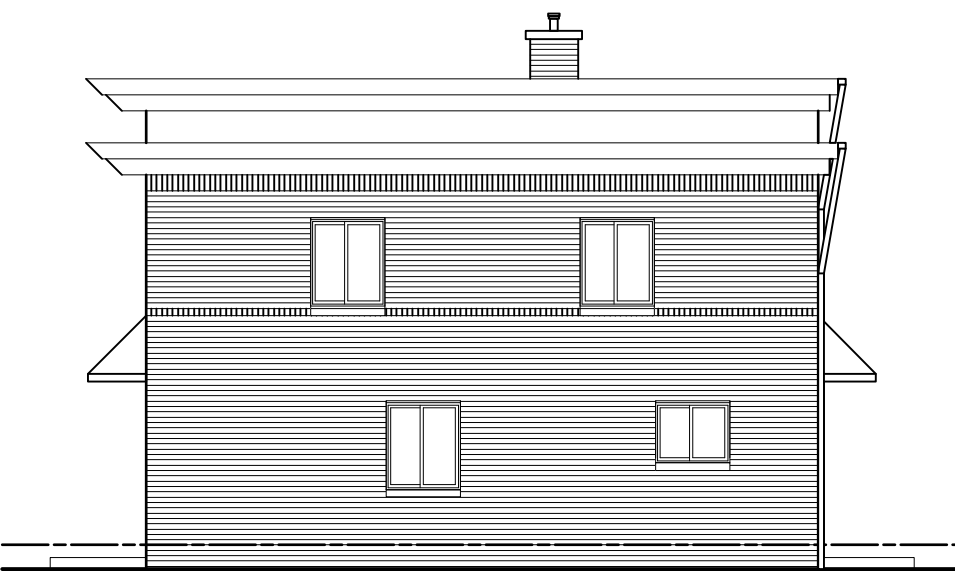


Building #37 - Right



6 LEFT ELEVATION

A-2.7 SCALE: 1/8" = 1'-0"



5 RIGHT ELEVATION

A-2.7 SCALE: 1/8" = 1'-0"

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #37
249, 249 1/2, 251, 253, 255, 257 Goodell St.
(between Coolidge Highway & Maple St.)



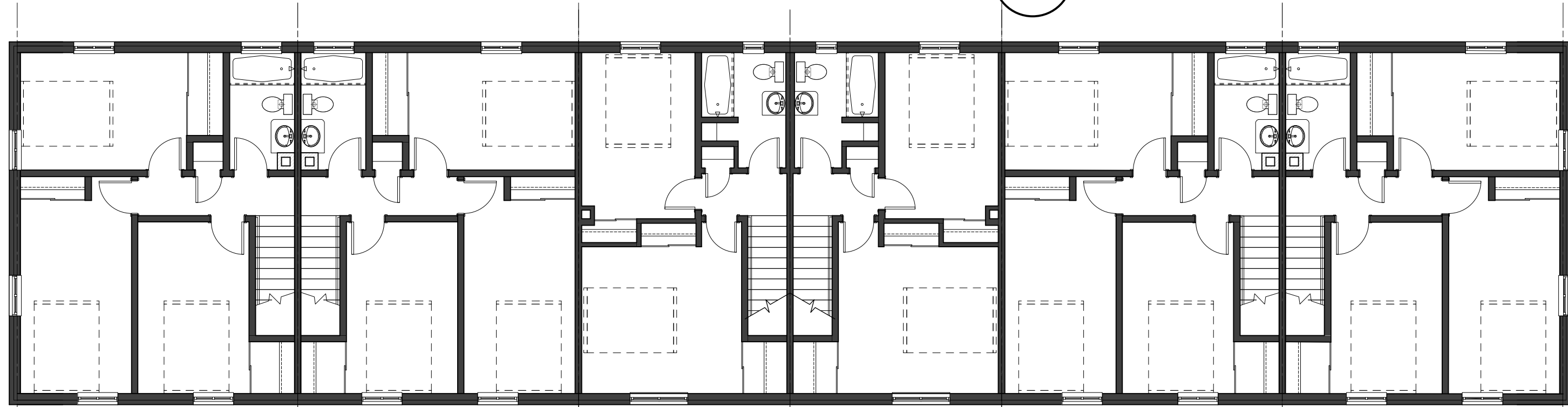
4 REAR ELEVATION

A-2.7 SCALE: 1/8" = 1'-0"



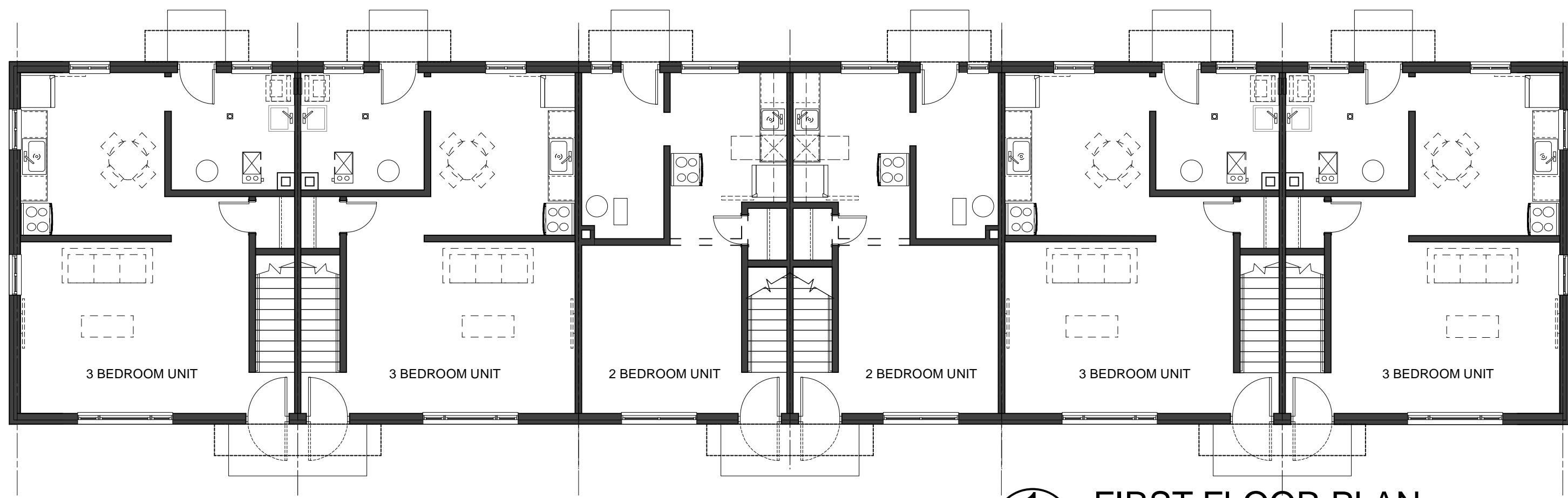
3 FRONT ELEVATION

A-2.7 SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN

A-2.7 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN

A-2.7 SCALE: 1/8" = 1'-0"

© copyright 2023 / edmund london & associates, inc. / all rights reserved

edmund london & associates, inc.
architects & planners

20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

ela

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

JOB NUMBER

43041

SHEET NUMBER

A-2.7



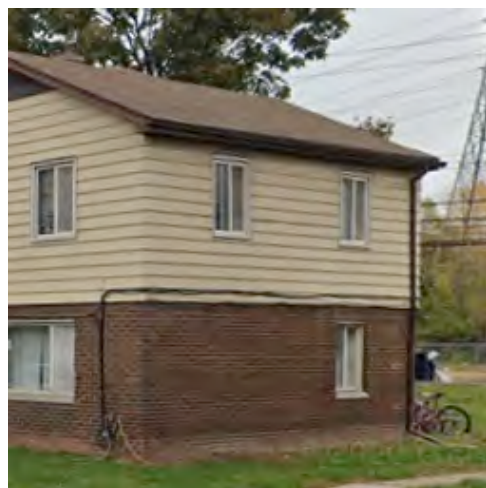
Building #16 - Front



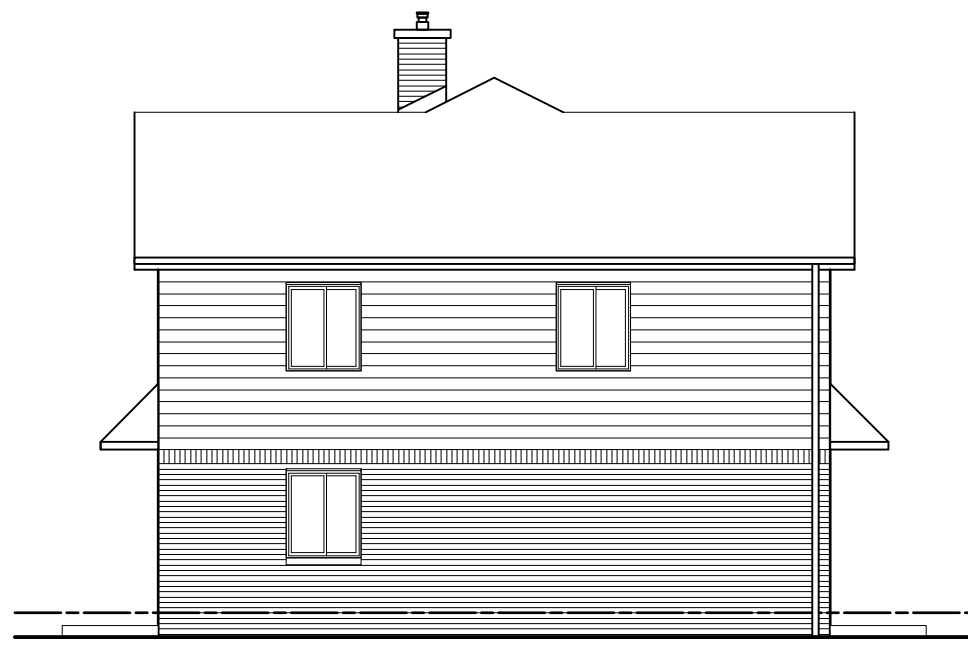
Building #16 - Rear



Building #16 - Left

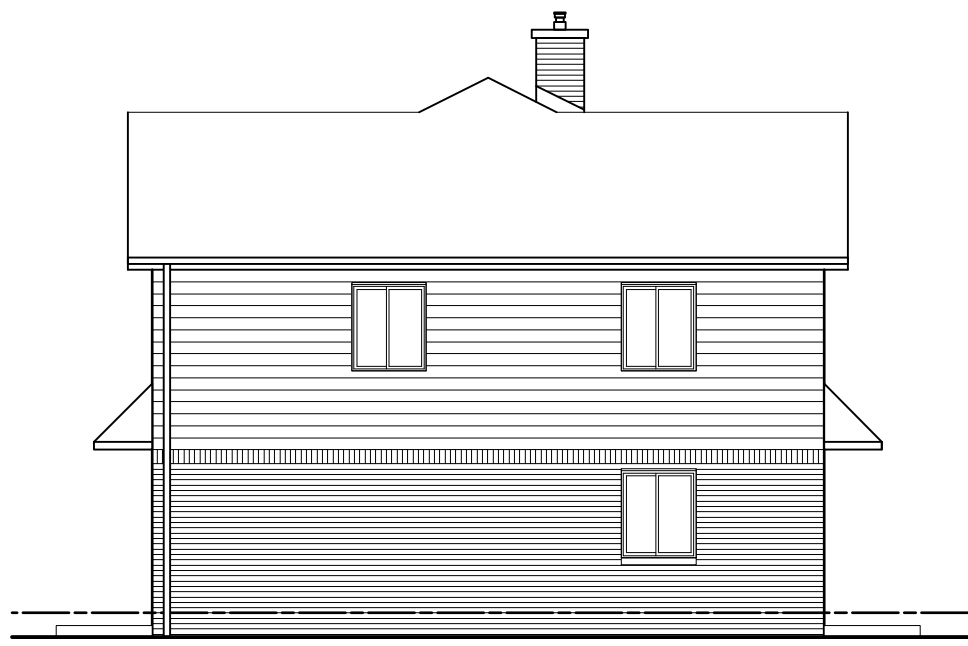


Building #16 - Right



6 LEFT ELEVATION

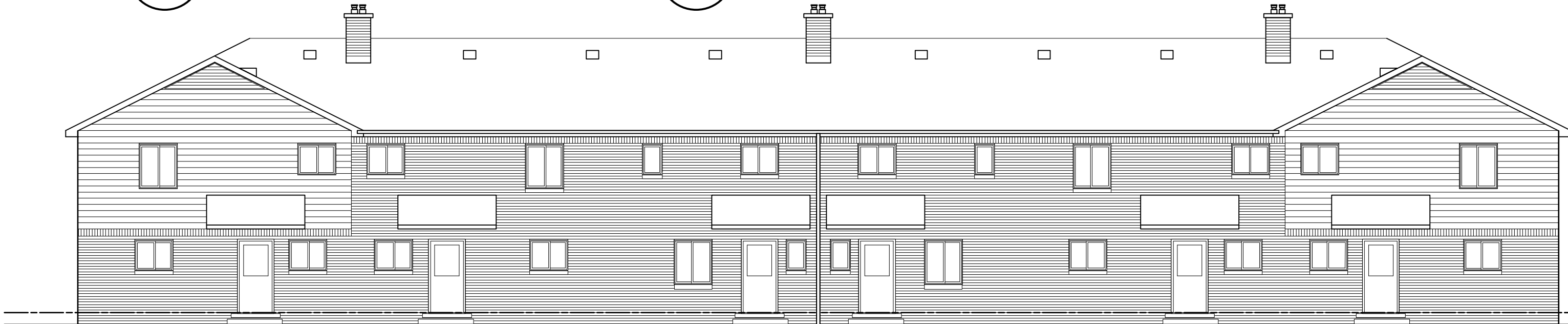
A-2.8 SCALE: 1/8" = 1'-0"



5 RIGHT ELEVATION

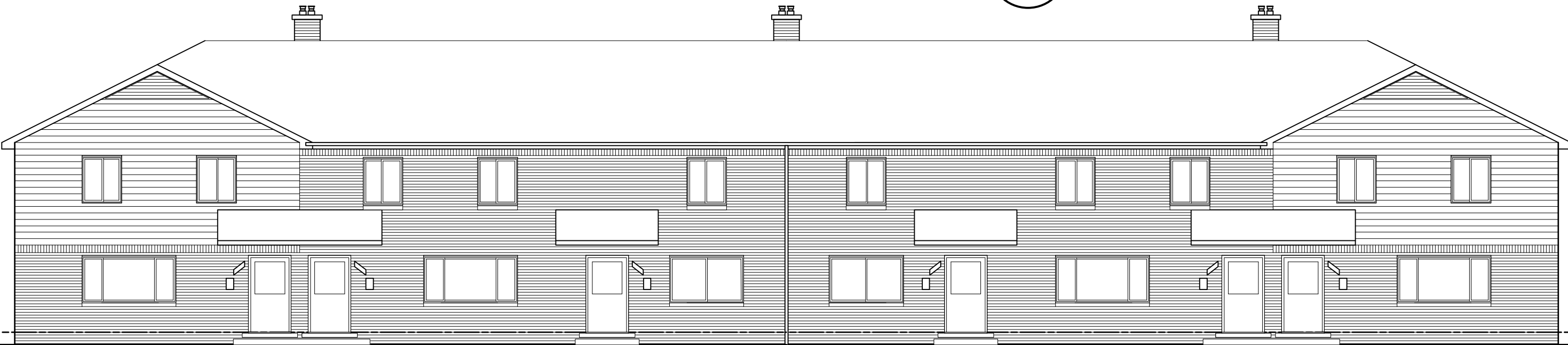
A-2.8 SCALE: 1/8" = 1'-0"

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #16
311, 313, 315, 315 1/2, 317, & 319 Goodell St.
(near Great Lakes St.)



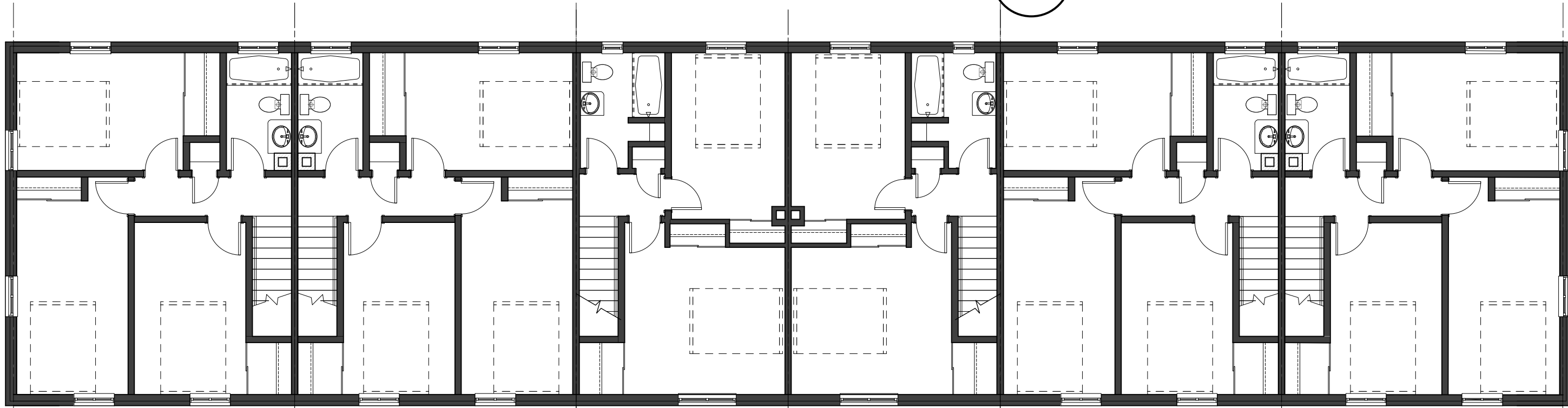
4 REAR ELEVATION

A-2.8 SCALE: 1/8" = 1'-0"



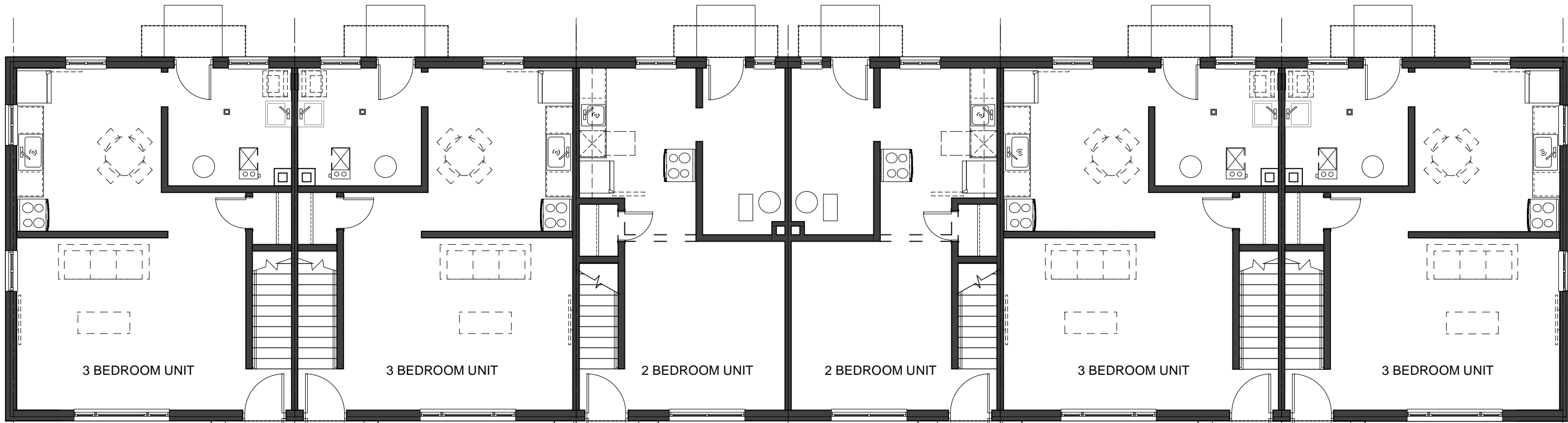
3 FRONT ELEVATION

A-2.8 SCALE: 1/8" = 1'-0"



2 SECOND FLOOR PLAN

A-2.8 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN

A-2.8 SCALE: 1/8" = 1'-0"

© copyright 2023 / edmund london & associates, inc. / all rights reserved

edmund london & associates, inc.
architects & planners

20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

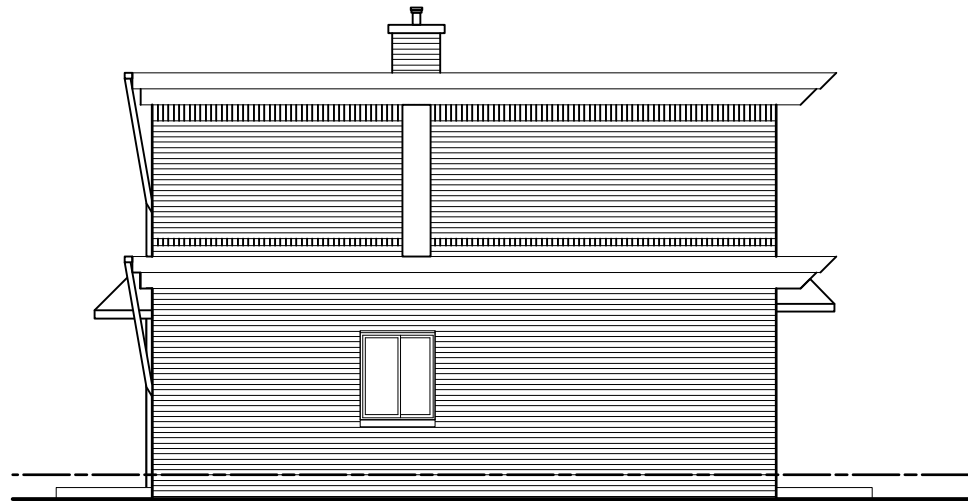
JOB NUMBER

43041

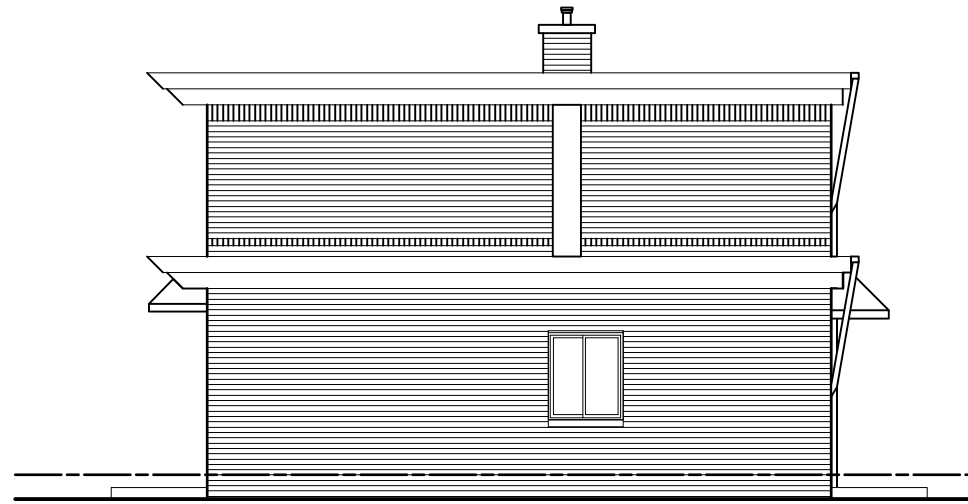
SHEET NUMBER

A-2.8

BUILDINGS INCLUDED ON THIS SHEET:
Bldg #38
254, 254 1/2, 256, 258, 258 1/2, & 260 Goodell St.
(near Maple St.)



6 LEFT ELEVATION
A-2.9 SCALE: 1/8" = 1'-0"



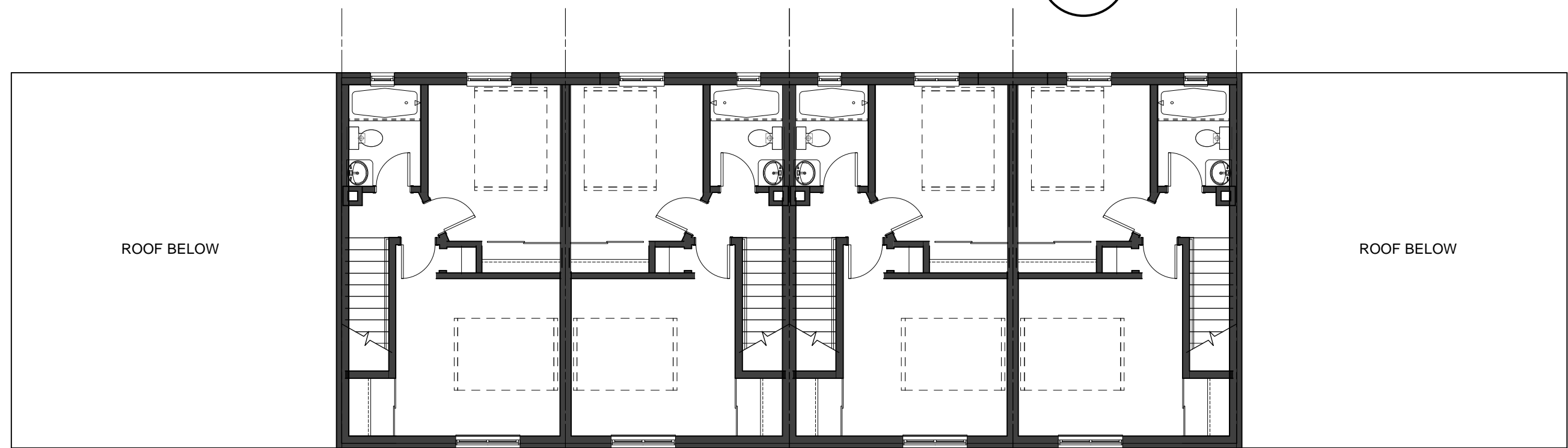
5 RIGHT ELEVATION
A-2.9 SCALE: 1/8" = 1'-0"



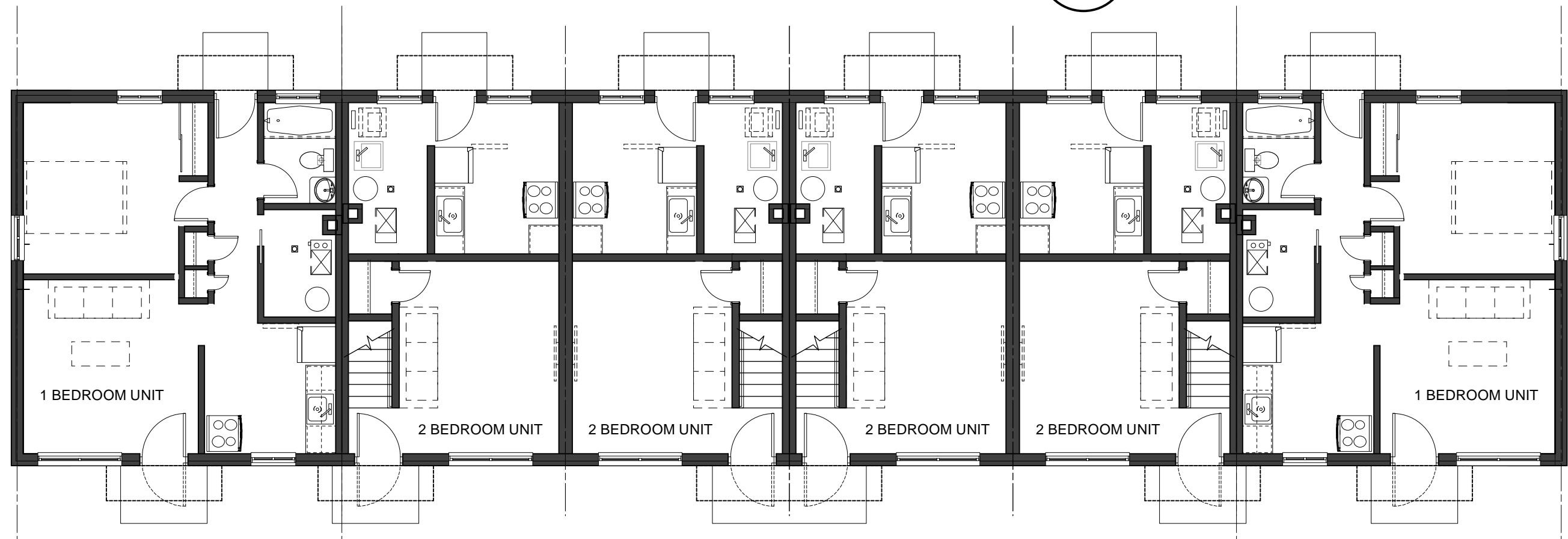
4 REAR ELEVATION
A-2.9 SCALE: 1/8" = 1'-0"



3 FRONT ELEVATION
A-2.9 SCALE: 1/8" = 1'-0"

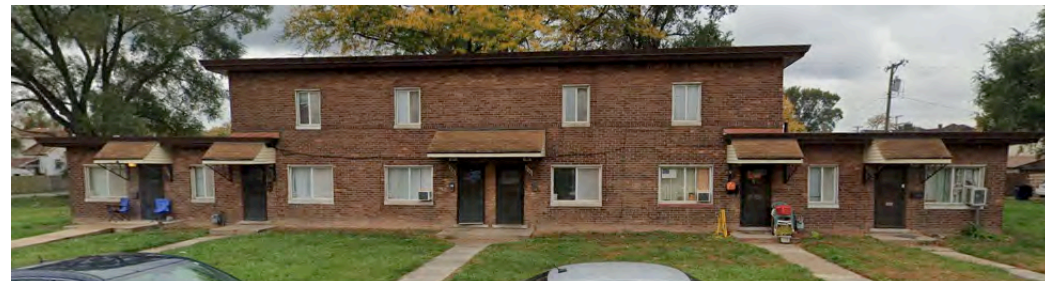


2 SECOND FLOOR PLAN
A-2.9 SCALE: 1/8" = 1'-0"



1 FIRST FLOOR PLAN
A-2.9 SCALE: 1/8" = 1'-0"

© copyright 2023 / edmund london & associates, inc. / all rights reserved



Building #38 - Front



Building #38 - Rear



Building #38 - Left



Building #38 - Right

edmund london & associates, inc.
architects & planners
20750 civic center drive, suite 610, southfield, michigan 48076
tel: 248-353-4620 email: server@ele-architects.com

ela

River Rouge Housing
Commission
River Rouge, Michigan

Iroquois Terrace
bldg. plans & elevs.

ISSUED:

DRAWN BY:
TC, MC

APPROVED BY:
RZ

JOB NUMBER

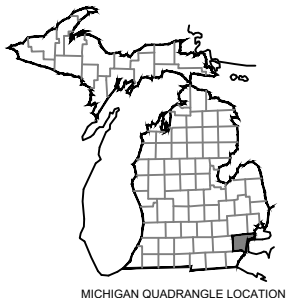
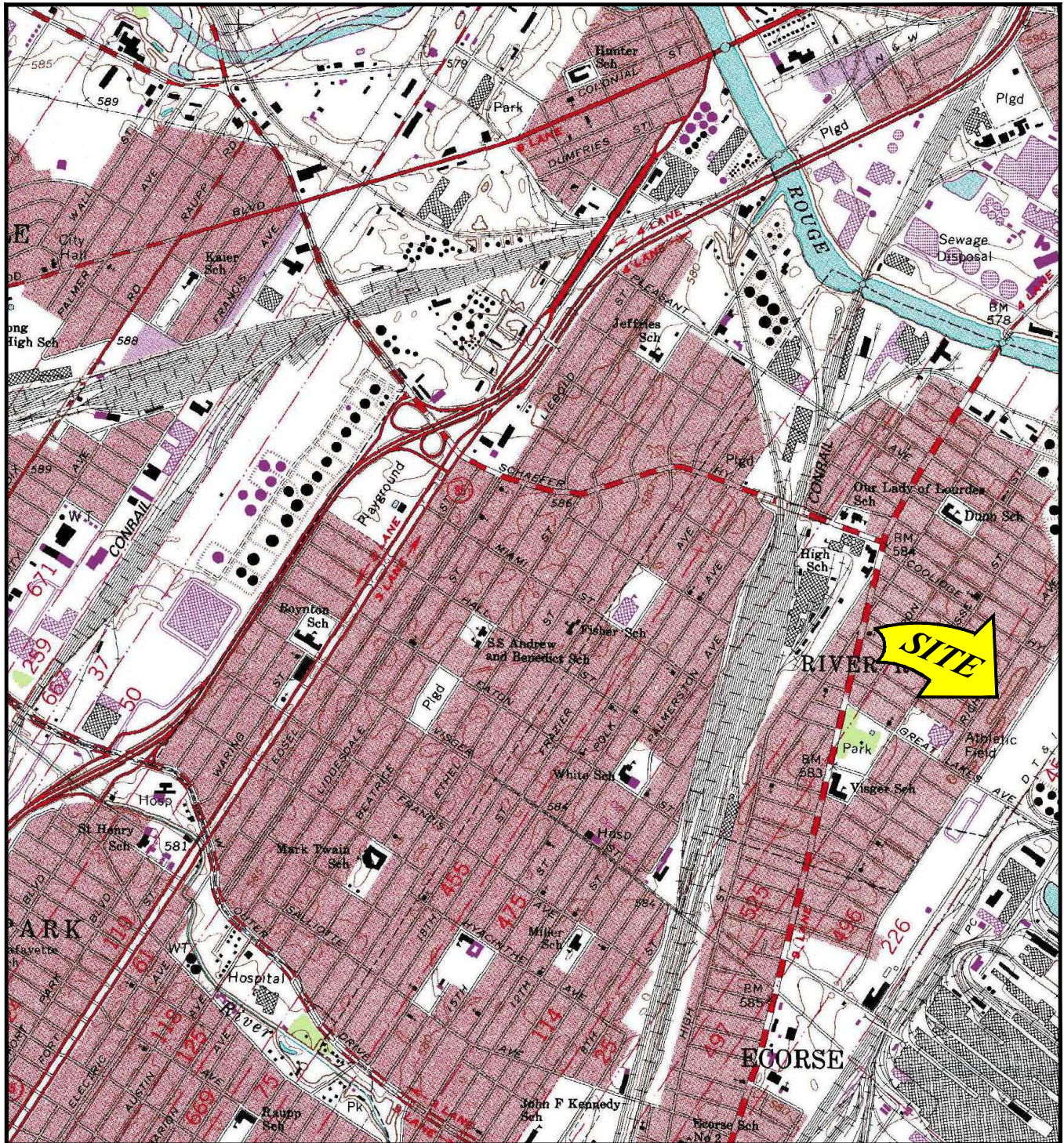
43041

SHEET NUMBER

A-2.9

Attachment 2



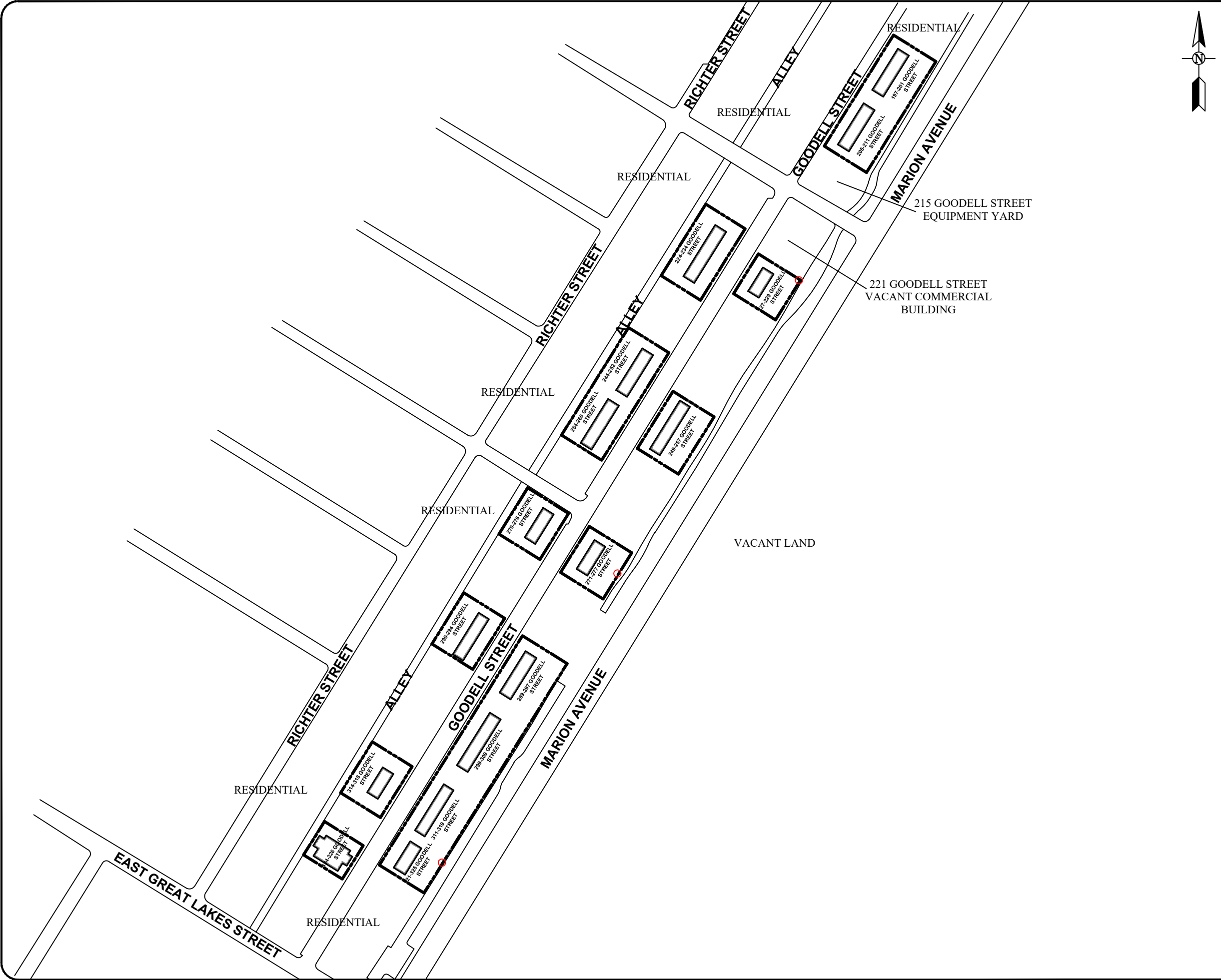


WAYNE COUNTY

FIGURE 1

PROPERTY VICINITY MAP

UNITED STATES GEOLOGICAL SURVEY, 7.5 MINUTE SERIES
DEARBORN, MI QUADRANGLE, 1968. PHOTO REVISED 1983.



LEGEND:

SUBJECT PROPERTY

POLE MOUNTED TRANSFORMER

NOTE:
1. REFERENCES: AERIAL PHOTOGRAPH FROM GOOGLE EARTH, IMAGERY DATE 8/1/2022



PM
ENVIRONMENTAL

Environmental
& Engineering
Services

FIGURE 2
SUBJECT PROPERTY AND ADJOINING PROPERTIES

PROJECT: RESIDENTIAL PROPERTIES
GOODELL STREET
RIVER ROUGE, MI

THIS IS NOT A LEGAL SURVEY	DRAWN BY: CS	DATE: 5/10/2023
VERIFY SCALE	CHECKED BY: DB	SCALE: 1" = 200'
IF NOT 1" ON THIS SHEET, ADJUST SCALES ACCORDINGLY.		
FILE NAME: 01-14676-0-002F00R00		

Attachment 3





Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 1



Typical subject building

Photograph 2



Typical subject building



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 3



Typical subject building

Photograph 4



Typical subject building



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 5



Typical unit living room

Photograph 6



Typical unit bedroom



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 7



Typical unit kitchen

Photograph 8



Typical unit laundry room/mechanical room



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 9



Typical floor drain

Photograph 10



Typical pole-mounted electrical transformer



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 11



Typical adjoining residential properties

Photograph 12



East adjoining vacant land



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 13



Adjoining equipment yard;
215 Goodell Street

Photograph 14



Adjoining vacant building;
221 Goodell Street



Photographs From Site Reconnaissance
PM Project No. 01-14676-0-0002
Location: Goodell Street, River Rouge, Michigan

Photograph 15



Adjoining city playground

Photograph 16

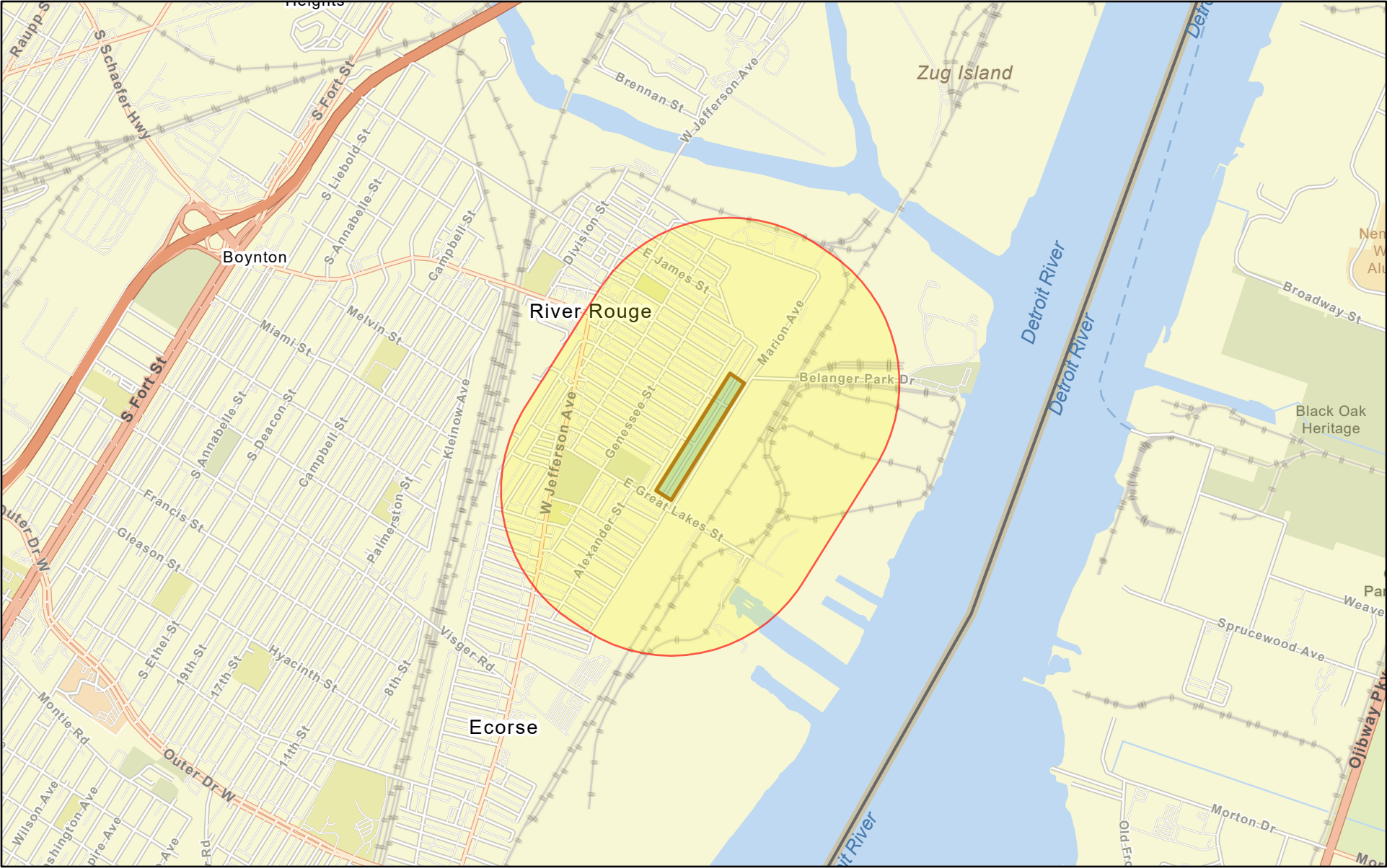


Typical adjoining residential properties

Attachment 4

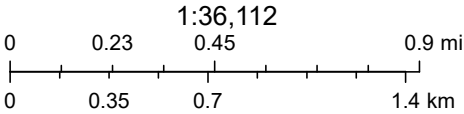


Letter ANSI A Landscape



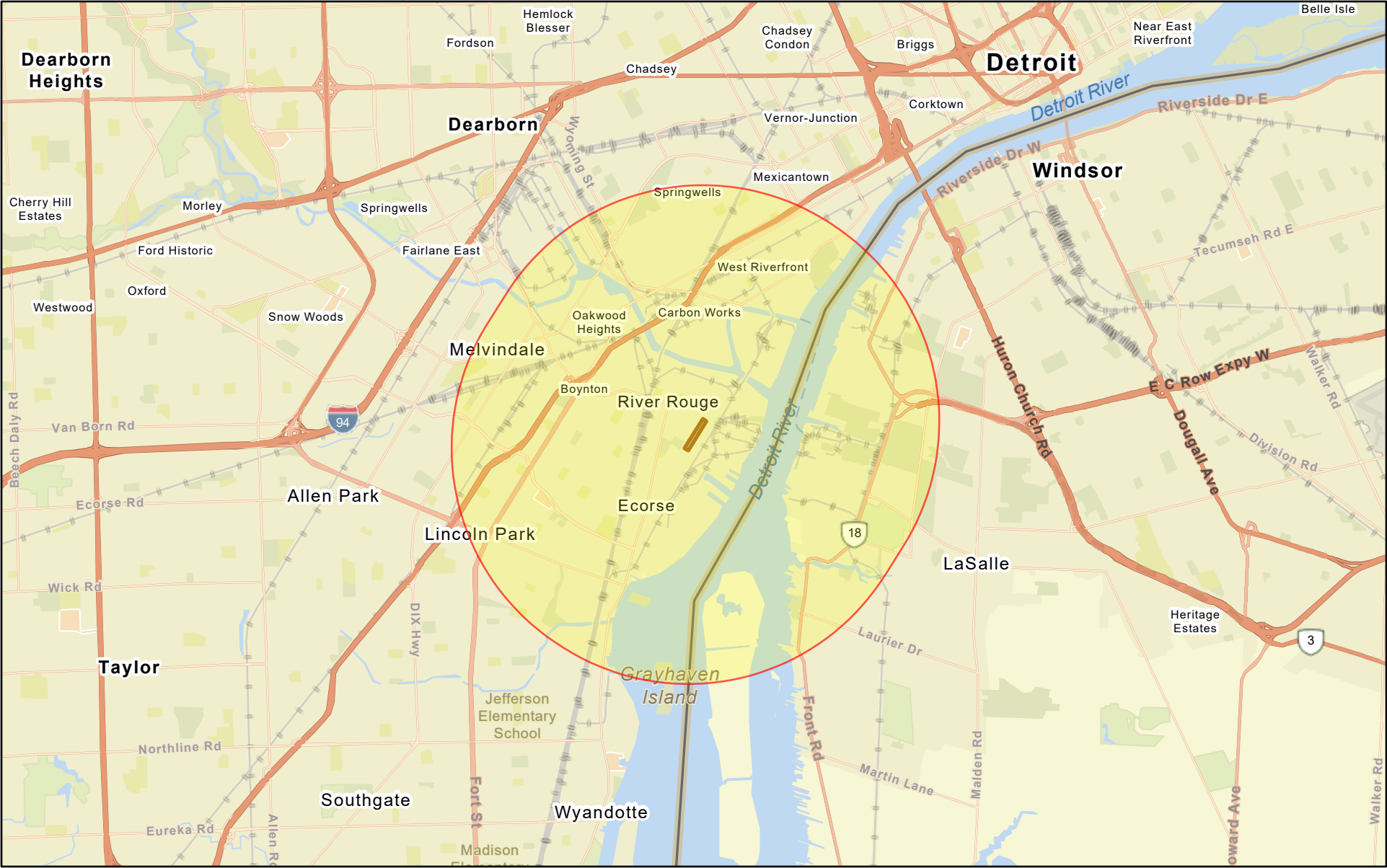
June 19, 2024

-  Project Buffer
-  Project 1




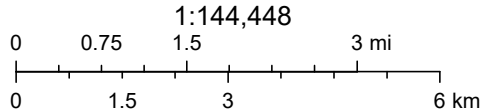
Province of Ontario, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS,

Letter ANSI A Landscape



June 19, 2024

-  Project Buffer
-  Project 1



Province of Ontario, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, EPA OEI

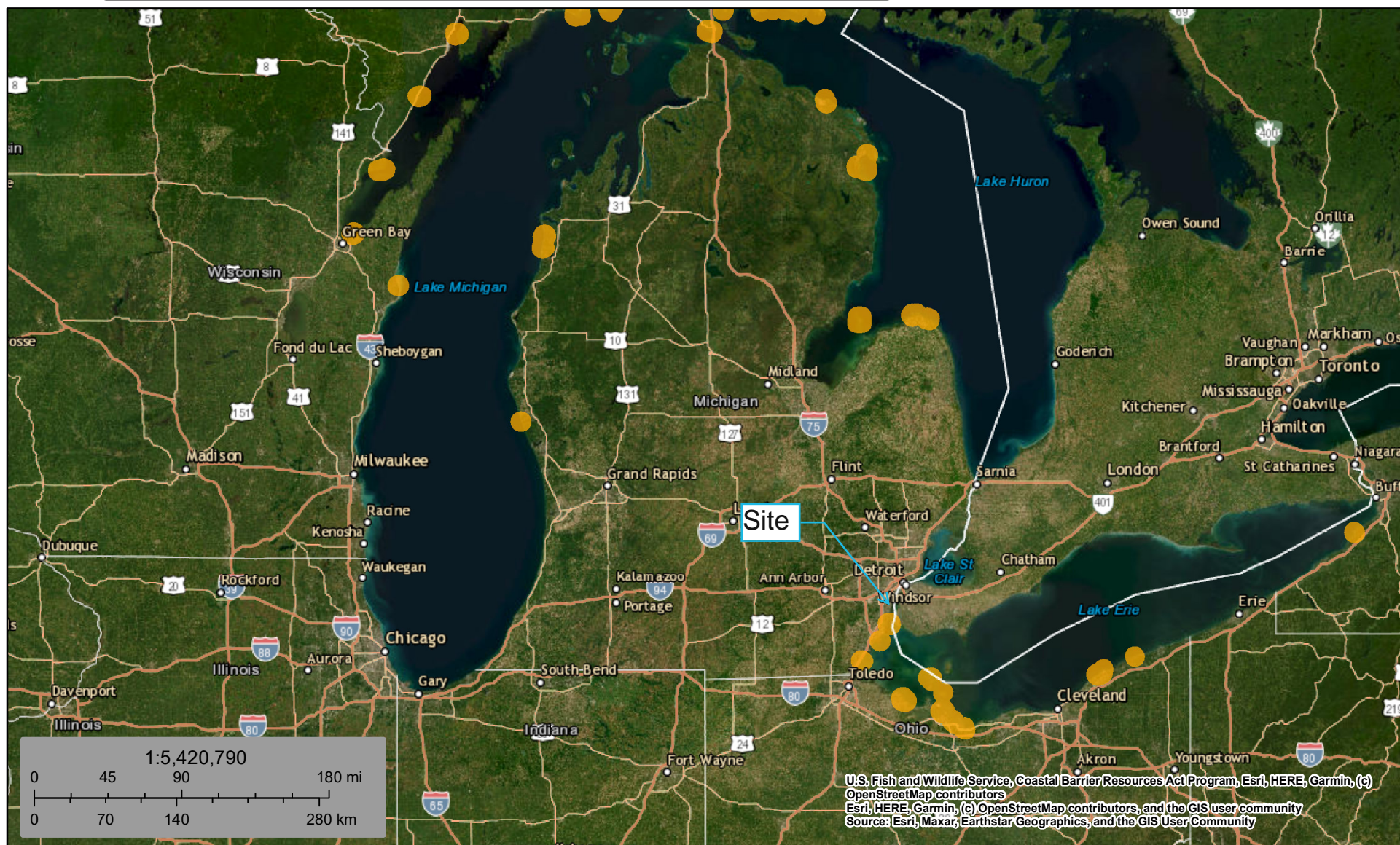
Attachment 5





U.S. Fish and Wildlife Service Coastal Barrier Resources System

CBRS



June 18, 2024



Generalized Units

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward

This page was produced by the CBRS Mapper



U.S. Fish and Wildlife Service Coastal Barrier Resources System

CBRS



June 25, 2024

CBRS Units

- Otherwise Protected Area
- System Unit

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward

This page was produced by the CBRS Mapper

Attachment 6



National Flood Hazard Layer FIRMette



83°7'58"W 42°16'16"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
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped



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 **4/6/2023 at 6:21 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.

Attachment 7



Attainment Status for the National Ambient Air Quality Standards

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

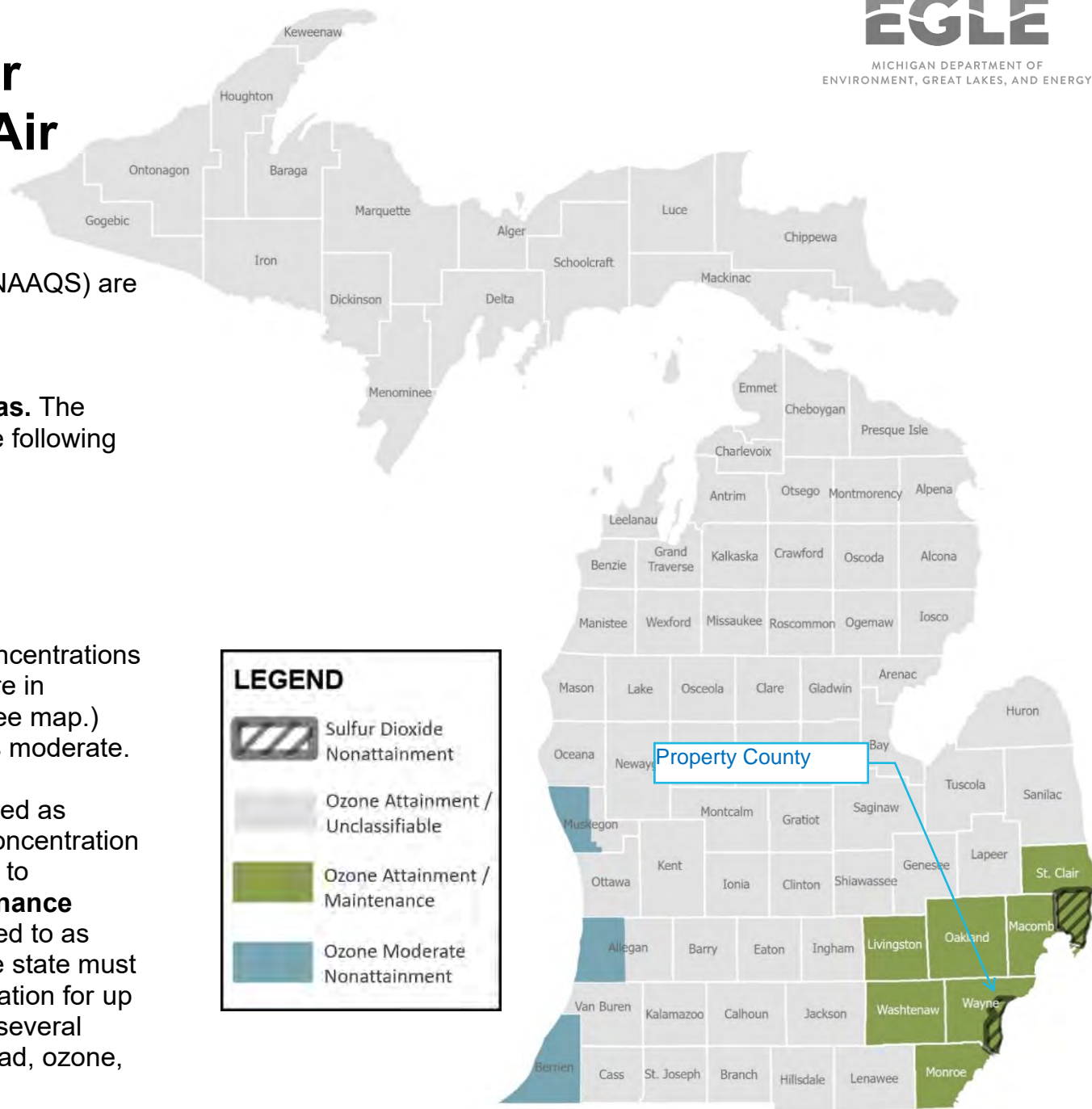
Areas of the state that are below the NAAQS concentration level are called **attainment areas**. The entire state of Michigan is in attainment for the following pollutants:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO₂)
- Particulate Matter (PM₁₀ & PM_{2.5})

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 area is classified as moderate.

Areas of the state that were previously classified as nonattainment but have since reduced their concentration levels below the NAAQS can be redesignated to attainment and are called **attainment/maintenance areas**. These areas are also commonly referred to as “attainment” after reclassification, however the state must continue monitoring and submitting documentation for up to 20 years after the redesignated. There are several maintenance areas throughout the state for lead, ozone, and particulate matter.

**For readability purposes the map only includes the most recently reclassified ozone maintenance area in southeast Michigan. For more information, please consult the [Michigan.gov/AIR](https://www.michigan.gov/AIR) webpage or contact the division directly.*



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

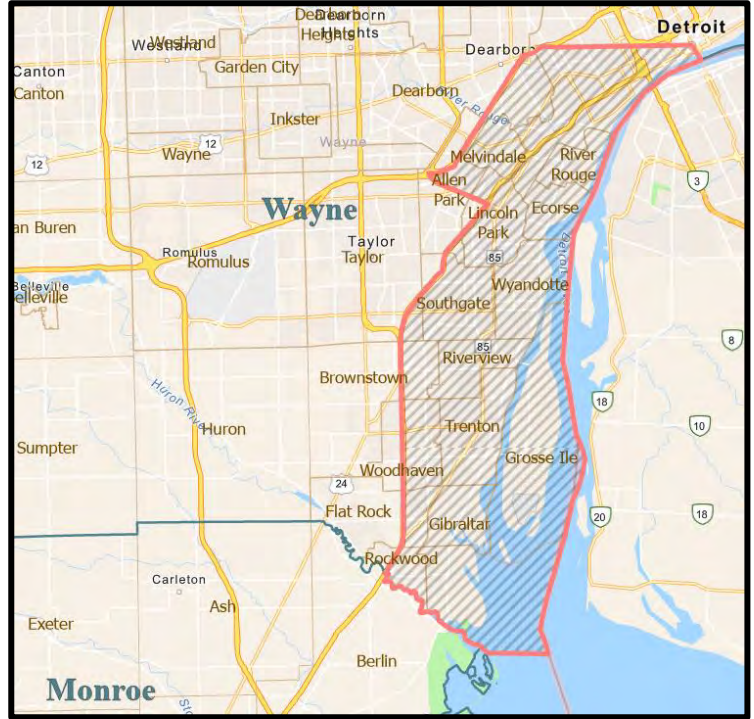
Close-Up Maps of Partial County Nonattainment Areas

Sulfur Dioxide Nonattainment Areas

St. Clair County



Wayne County



Ozone Moderate Nonattainment Areas

Allegan County



Muskegon County





Criteria Air Pollutants

CONTACT US <<https://epa.gov/criteria-air-pollutants/forms/contact-us-about-criteria-air-pollutants>>

NAAQS Table

The Clean Air Act <<https://epa.gov/clean-air-act-overview>>, which was last amended in 1990, requires EPA to set National Ambient Air Quality Standards (40 CFR part 50) for six principal pollutants ("criteria" air pollutants <<https://epa.gov/criteria-air-pollutants>>) which can be harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards. **Primary standards** provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. **Secondary standards** provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Periodically, the standards are reviewed and sometimes may be revised, establishing new standards. The most recently established standards are listed below. In some areas of the U.S., certain regulatory requirements may also remain for implementation of previously established standards <<https://epa.gov/ground-level-ozone-pollution/ozone-implementation-regulatory-actions>>.

Units of measure for the standards are parts per million (ppm) by volume, parts per billion (ppb) by volume, and micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$).

Pollutant [links to historical tables of NAAQS reviews]	Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO) < https://epa.gov/co-pollution/timeline-carbon-monoxide-co-national-ambient-air-quality-standards-naaqs >	primary	8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	
Lead (Pb) < https://epa.gov/lead-air-pollution/timeline-lead-pb-national-ambient-air-quality-standards-naaqs >	primary and secondary	Rolling 3 month average	0.15 $\mu\text{g}/\text{m}^3$ ⁽¹⁾	Not to be exceeded

Pollutant [links to historical tables of NAAQS reviews]		Primary/ Secondary	Averaging Time	Level	Form
Nitrogen Dioxide (NO ₂) < https://epa.gov/no2-pollution/timeline-nitrogen-dioxide-no2-national-ambient-air-quality-standards-naaqs >		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb ⁽²⁾	Annual Mean
Ozone (O ₃) < https://epa.gov/ground-level-ozone-pollution/timeline-ozone-national-ambient-air-quality-standards-naaqs >		primary and secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM) < https://epa.gov/pm-pollution/timeline-particulate-matter-pm-national-ambient-air-quality-standards-naaqs >	PM _{2.5}	primary	1 year	9.0 µg/m ³	annual mean, averaged over 3 years
		secondary	1 year	15.0 µg/m ³	annual mean, averaged over 3 years
		primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years

Pollutant [links to historical tables of NAAQS reviews]	Primary/ Secondary	Averaging Time	Level	Form
Sulfur Dioxide (SO ₂) < https://epa.gov/so2-pollution/timeline-sulfur-dioxide-national-ambient-air-quality-standards-naaqs >	primary	1 hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m3 as a calendar quarter average) also remain in effect.

(2) The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O₃ standards.

(4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

Menu of Control Measures for NAAQS Implementation

The Menu of Control Measures (MCM) provides state, local and tribal air agencies with the existing emission reduction measures as well as relevant information concerning the efficiency and cost effectiveness of the measures. State, local and tribal agencies will be able to use this information in developing emission reduction strategies, plans and programs to assure they attain and maintain the National Ambient Air Quality Standards (NAAQS). The MCM is a living document that can be updated with newly available or more current data as it becomes available.

- Menu of Control Measures <<https://epa.gov/criteria-air-pollutants/menu-control-measures-naaqs-implementation>>

[Criteria Air Pollutants Home](https://epa.gov/criteria-air-pollutants) <<https://epa.gov/criteria-air-pollutants>>

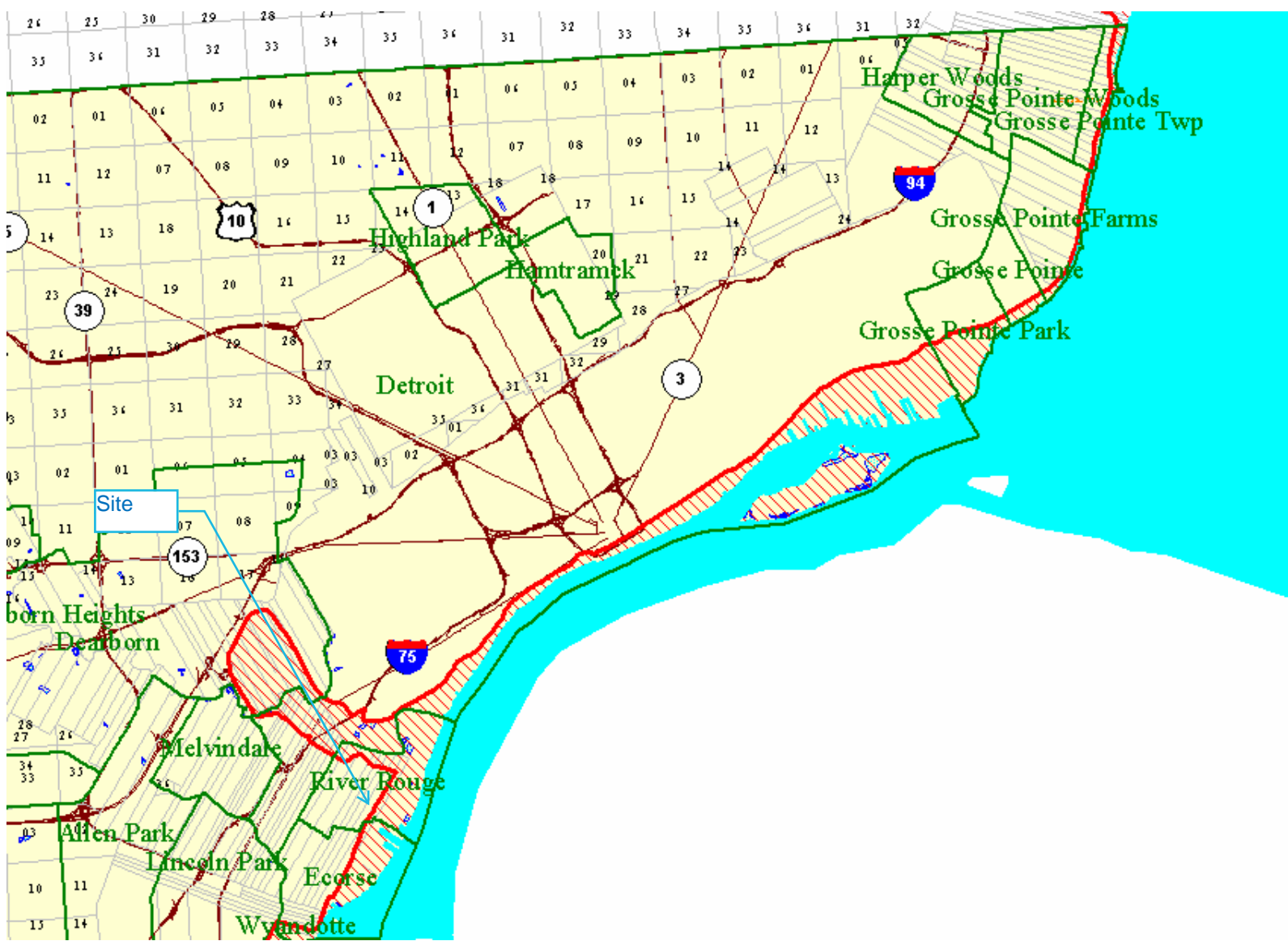
[Information by Pollutant](https://epa.gov/criteria-air-pollutants/information-pollutant) <<https://epa.gov/criteria-air-pollutants/information-pollutant>>

Attachment 8



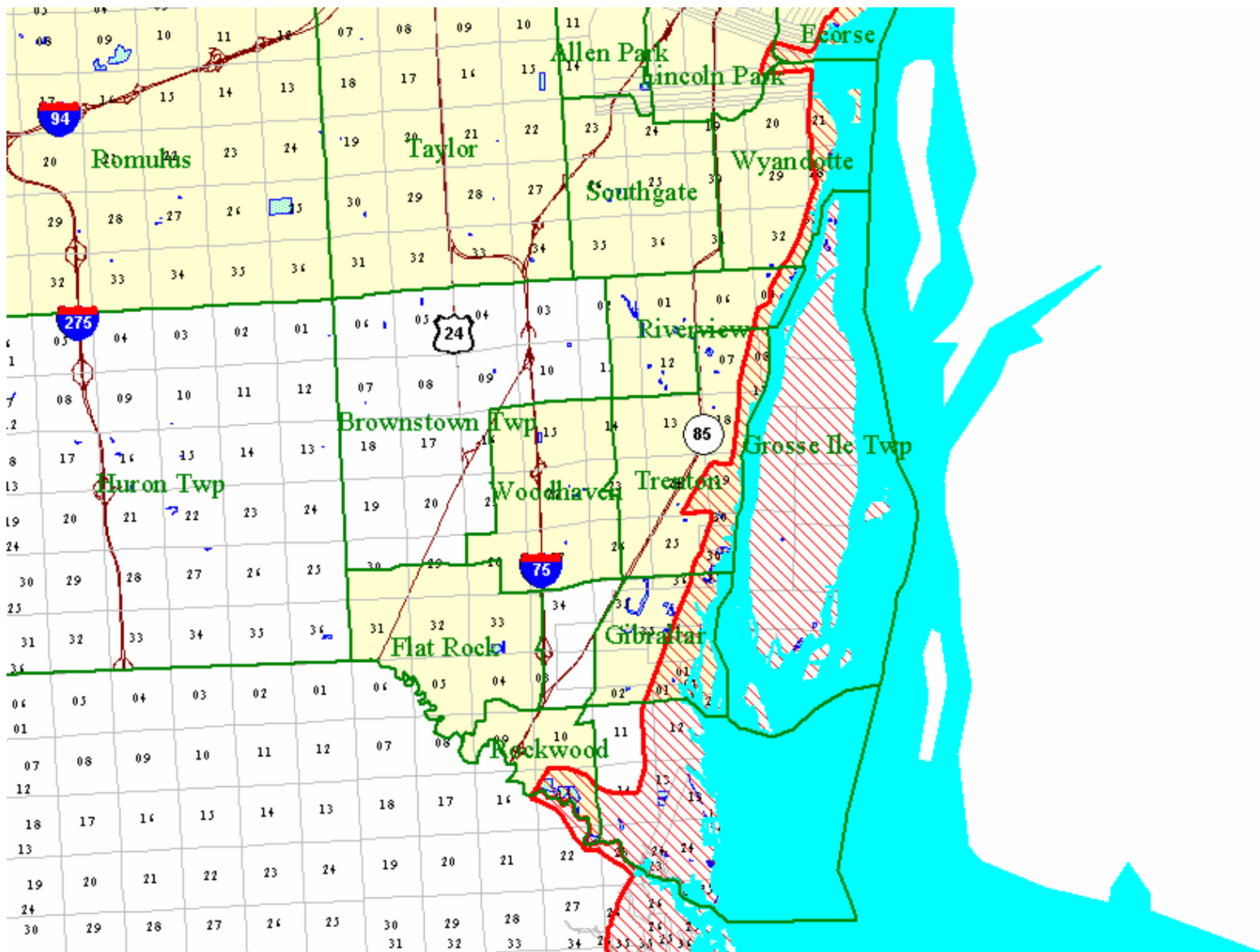
Wayne County
Grosse Pointe Township, Grosse Pointe Woods, Grosse Pointe Farms
Grosse Pointe, Grosse Pointe Park, and Detroit, T1S R14E
Detroit, T1S R14E, T2S R13E, and T2S R12E
River Rouge, T2S R11E

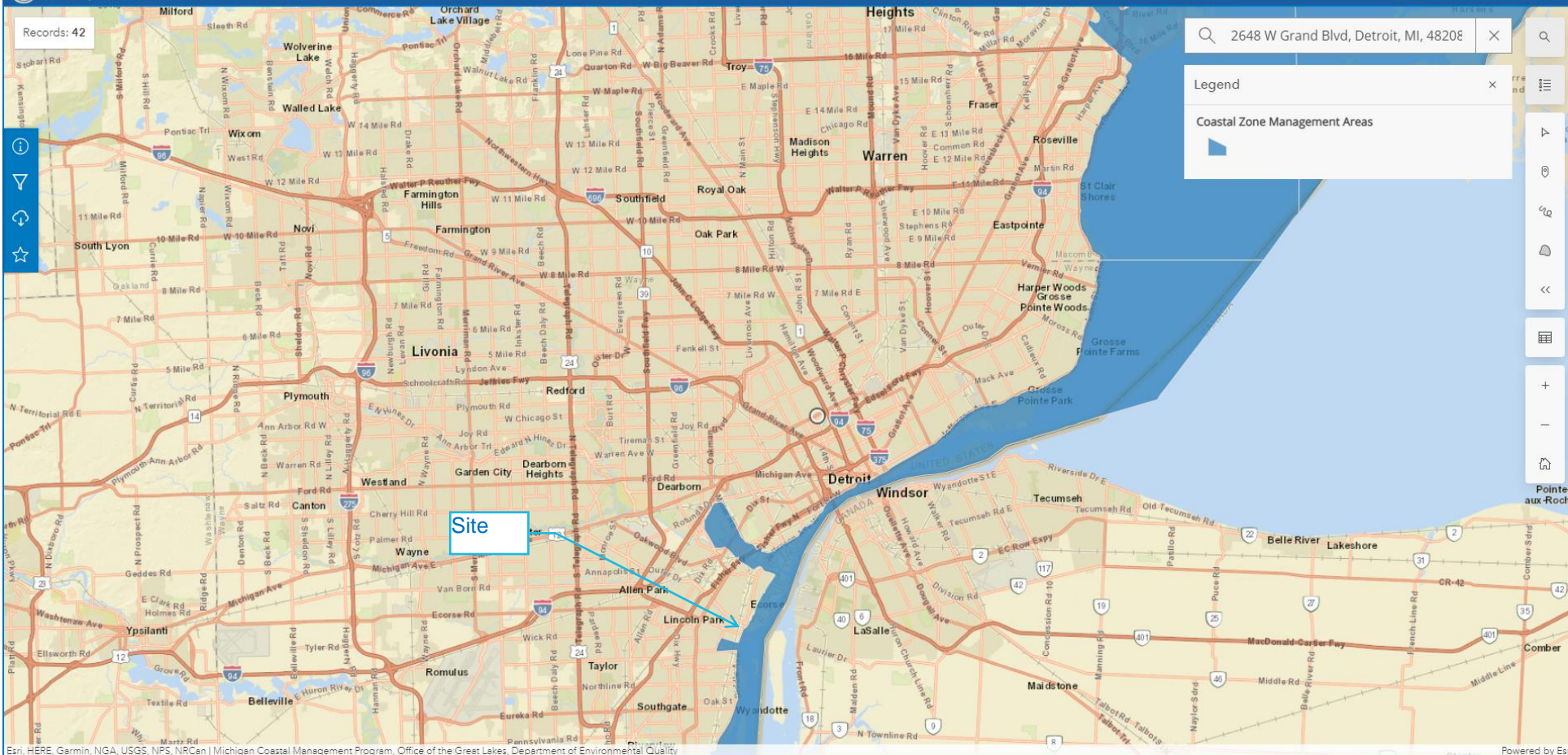
The heavy red line is the **Coastal Zone Management Boundary**
The red hatched area is the **Coastal Zone Management Area**.



Wayne County
Ecorse, Lincoln Park, Wyandotte and Riverview, T3S R11E
Trenton, T4S R11E
Rockwood, Gibraltar and Brownstown Township T5S R10E

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





Attachment 9





SELECT DATA



RADON | RADON TESTS FROM LABS | MEAN PRE-MITIGATION RADON LEVEL IN TESTED BUILDINGS OVER A 10-YEAR PERIOD | ...

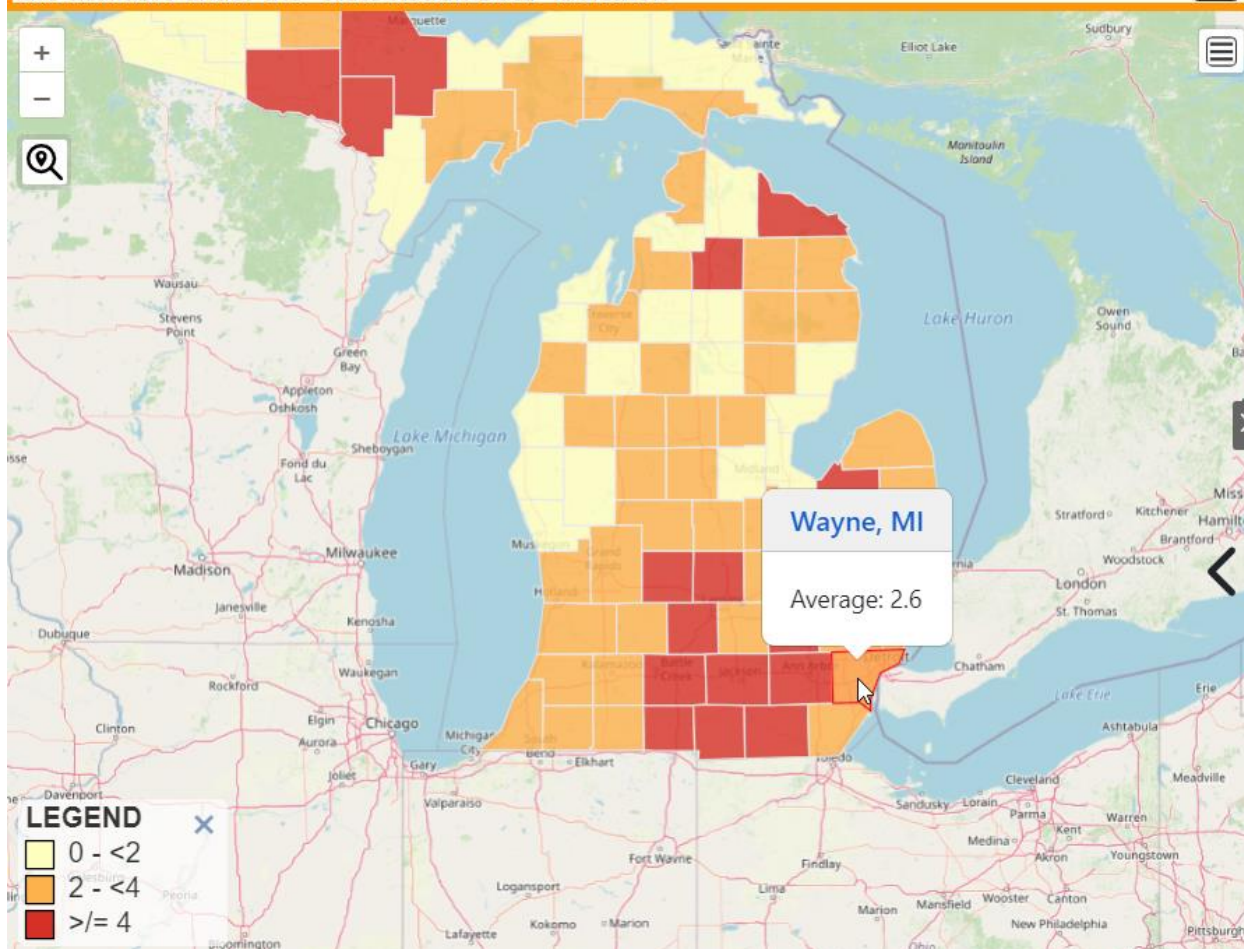


2008-2017



ABOUT DATA

To avoid duplication, do not combine data from state and lab radon datasets. KS and NJ data are available under the "State Radon Data" indicator.



Attachment 10





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



In Reply Refer To:

06/26/2024 20:39:11 UTC

Project Code: 2024-0109357

Project Name: 197-326 Goodell St, River Rouge

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Official Species List

The attached species list identifies any Federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement section 7 of the Endangered Species Act), the accuracy of this species list should be verified after 90 days. You may verify the list by visiting the IPaC website (<https://ipac.ecosphere.fws.gov/>) at regular intervals during project planning and implementation. To update an Official Species List in IPaC: from the My Projects page, find the project, expand the row, and click Project Home. In the What's Next box on the Project Home page, there is a Request Updated List button to update your species list. Be sure to select an "official" species list for all projects.

Consultation requirements and next steps

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize Federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-Federal representative) must consult with the Fish and Wildlife Service if they determine their project may affect listed species or critical habitat.

There are two approaches to evaluating the effects of a project on listed species.

Approach 1. Use the All-species Michigan determination key in IPaC. This tool can assist you in making determinations for listed species for some projects. In many cases, the determination key

will provide an automated concurrence that completes all or significant parts of the consultation process. Therefore, we strongly recommend screening your project with the **All-Species Michigan Determination Key (Dkey)**. For additional information on using IPaC and available Determination Keys, visit <https://www.fws.gov/media/mifo-ipac-instructions> (and click on the attachment). Please carefully review your Dkey output letter to determine whether additional steps are needed to complete the consultation process.

Approach 2. Evaluate the effects to listed species on your own without utilizing a determination key. Once you obtain your official species list, you are not required to continue in IPaC, although in most cases using a determination key should expedite your review. If the project is a Federal action, you should review our section 7 step-by-step instructions before making your determinations: <https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance>. If you evaluate the details of your project and conclude “no effect,” document your findings, and your listed species review is complete; you do not need our concurrence on “no effect” determinations. If you cannot conclude “no effect,” you should coordinate/consult with the Michigan Ecological Services Field Office. The preferred method for submitting your project description and effects determination (if concurrence is needed) is electronically to EastLansing@fws.gov. Please include a copy of this official species list with your request.

For all **wind energy projects**, please contact this field office directly for assistance, even if no Federally listed plants, animals or critical habitat are present within your proposed project area or may be affected by your proposed project.

Migratory Birds

Please see the “Migratory Birds” section below for important information regarding incorporating migratory birds into your project planning. Our Migratory Bird Program has developed recommendations, best practices, and other tools to help project proponents voluntarily reduce impacts to birds and their habitats. The Bald and Golden Eagle Protection Act prohibits the take and disturbance of eagles without a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <https://www.fws.gov/program/eagle-management> to help you avoid impacting eagles or determine if a permit may be necessary.

Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your consideration of threatened and endangered species during your project planning. Please include a copy of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Michigan Ecological Services Field Office

2651 Coolidge Road Suite 101

East Lansing, MI 48823-6360

(517) 351-2555

PROJECT SUMMARY

Project Code: 2024-0109357
Project Name: 197-326 Goodell St, River Rouge
Project Type: Federal Grant / Loan Related
Project Description: Redevelopment
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.2679131,-83.12780774957007,14z>



Counties: Wayne County, Michigan

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 3 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 General project design guidelines: https://ipac.ecosphere.fws.gov/project/FZC5LGXU2RCO5DN4HOGH5JXBSE/documents/generated/6982.pdf	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> This species only needs to be considered if the project includes wind turbine operations. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Rufa Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

REPTILES

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> For all Projects: Project is within EMR Range Species profile: https://ecos.fws.gov/ecp/species/2202 General project design guidelines: https://ipac.ecosphere.fws.gov/project/FZC5LGXU2RCO5DN4HOGH5JXBSE/documents/generated/5280.pdf	Threatened

CLAMS

NAME	STATUS
Northern Riffleshell <i>Epioblasma rangiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/527	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate

NAME	STATUS
No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	

FLOWERING PLANTS

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

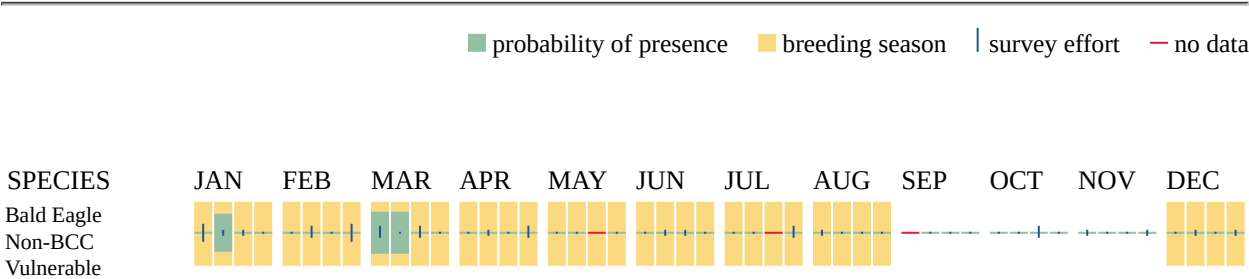
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

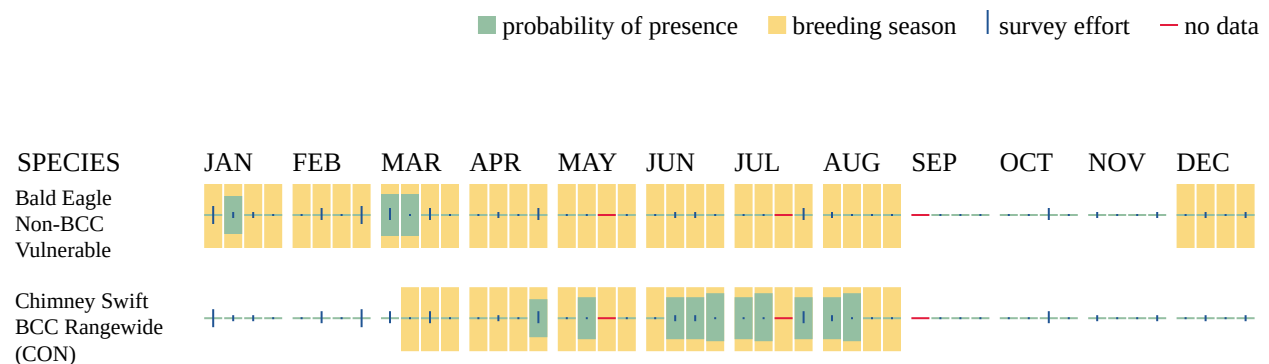
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: River Rouge city
Name: Lindsey Sorensen
Address: 2034 84th Street
City: Byron Center
State: MI
Zip: 49315
Email: sorensen@pmenv.com
Phone: 6162221777

LEAD AGENCY CONTACT INFORMATION

Lead Agency: River Rouge city



Attachment 11

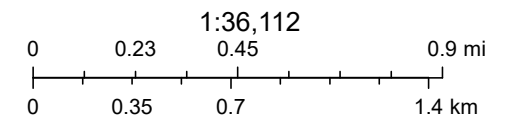


Letter ANSI A Landscape



June 18, 2024

-  Project Buffer
-  Project 1



Attachment 12





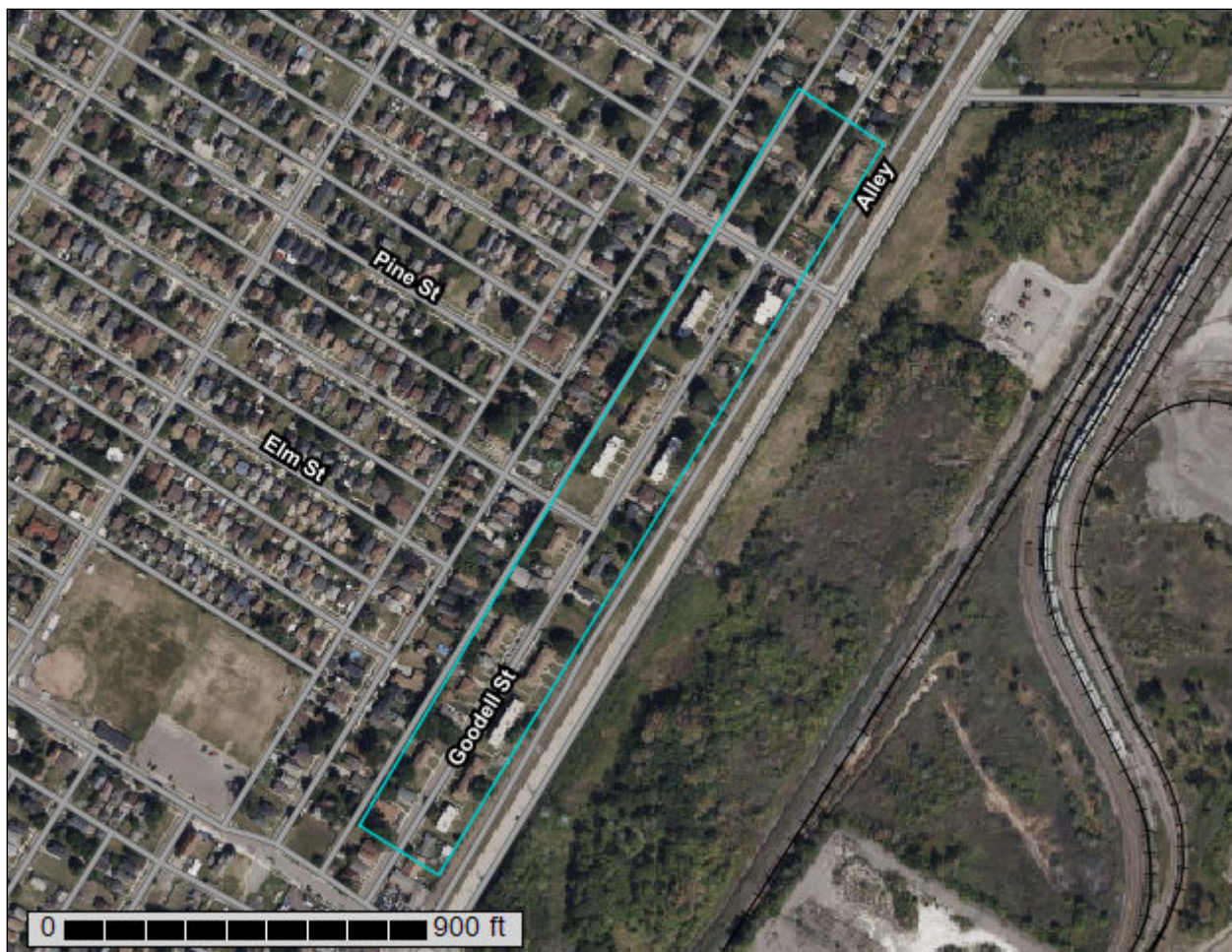
United States
Department of
Agriculture

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**



June 18, 2024

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Wayne County, Michigan.....	13
RapudB—Rapson-Urban land-Colwood complex, dense substratum, 0 to 4 percent slopes.....	13
WsnuuA—Wauseon-Urban land complex, 0 to 2 percent slopes.....	15
Soil Information for All Uses	18
Suitabilities and Limitations for Use.....	18
Land Classifications.....	18
Farmland Classification.....	18
References	24

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

Custom Soil Resource Report

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



Custom Soil Resource Report

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 9, Aug 25, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 8, 2022—Oct 4, 2022

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
RapudB	Rapson-Urban land-Colwood complex, dense substratum, 0 to 4 percent slopes	0.3	2.6%
WsnuaA	Wauseon-Urban land complex, 0 to 2 percent slopes	11.5	97.4%
Totals for Area of Interest		11.8	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

Custom Soil Resource Report

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

RapudB—Rapson-Urban land-Colwood complex, dense substratum, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2tx7b
Elevation: 570 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

Rapson, 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 Rapson, Human Transported Surface

Setting

Landform: Deltas
Down-slope shape: Linear
Across-slope shape: Convex, linear
Parent material: Sandy and loamy human-transported material over sandy glaciolacustrine deposits over loamy glaciolacustrine deposits over clayey lodgment till

Typical profile

^Au - 0 to 9 inches: sandy loam
^Cu - 9 to 12 inches: sandy loam
Bwb1 - 12 to 18 inches: sand
Bwb2 - 18 to 24 inches: sand
Cg1 - 24 to 30 inches: sand
2Cg2 - 30 to 65 inches: silt loam
3Cd - 65 to 80 inches: clay

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: 51 to 70 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 30 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 35 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: C
Ecological site: F099XY003MI - Warm Moist Sandy Depression
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: Deltas
Down-slope shape: Linear
Across-slope shape: Convex, linear
Parent material: Loamy human-transported material over loamy glaciolacustrine deposits over clayey lodgment till

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 65 inches: silt loam
2Cd - 65 to 80 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 56 to 70 inches to densic material
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 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

Custom Soil Resource Report

Ecological site: F099XY013MI - Wet Lake Plain Flats

Hydric soil rating: No

Minor Components

Anthroportic udorthents, dense substratum

Percent of map unit: 3 percent

Landform: Deltas

Down-slope shape: Linear

Across-slope shape: Convex, linear

Ecological site: F099XY007MI - Lake Plain Flats

Hydric soil rating: No

Freesoil, human transported surface

Percent of map unit: 2 percent

Landform: Deltas

Down-slope shape: Linear

Across-slope shape: Convex, linear

Ecological site: F099XY007MI - Lake Plain Flats

Hydric soil rating: No

WsnuaA—Wauseon-Urban land complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tx6x

Elevation: 570 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

Wauseon, human transported surface, and similar soils: 60 percent

Urban land: 35 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wauseon, Human Transported Surface

Setting

Landform: Deltas, backshores

Down-slope shape: Linear, concave

Across-slope shape: Concave, linear

Parent material: Loamy human-transported material over loamy till over clayey lodgment till

Typical profile

^Au - 0 to 9 inches: sandy loam

Custom Soil Resource Report

^Cu - 9 to 12 inches: loam
Ab - 12 to 22 inches: sandy loam
Bgb - 22 to 38 inches: sandy loam
Cg - 38 to 52 inches: sandy loam
2Cd - 52 to 80 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 47 to 57 inches to densic material
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 12 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 34 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: C/D
Ecological site: F099XY013MI - Wet 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

Midtown

Percent of map unit: 3 percent
Landform: Deltas, backshores
Down-slope shape: Linear, concave
Across-slope shape: Convex, linear, concave
Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Blount, human transported surface

Percent of map unit: 2 percent
Landform: Backshores, deltas
Microfeatures of landform position: Rises

Custom Soil Resource Report

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Ecological site: F099XY007MI - Lake Plain Flats

Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.


Custom Soil Resource Report Map—Farmland Classification



Custom Soil Resource Report









MAP LEGEND








Area of Interest (AOI)






 Area of Interest (AOI)








Soils



Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season









-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

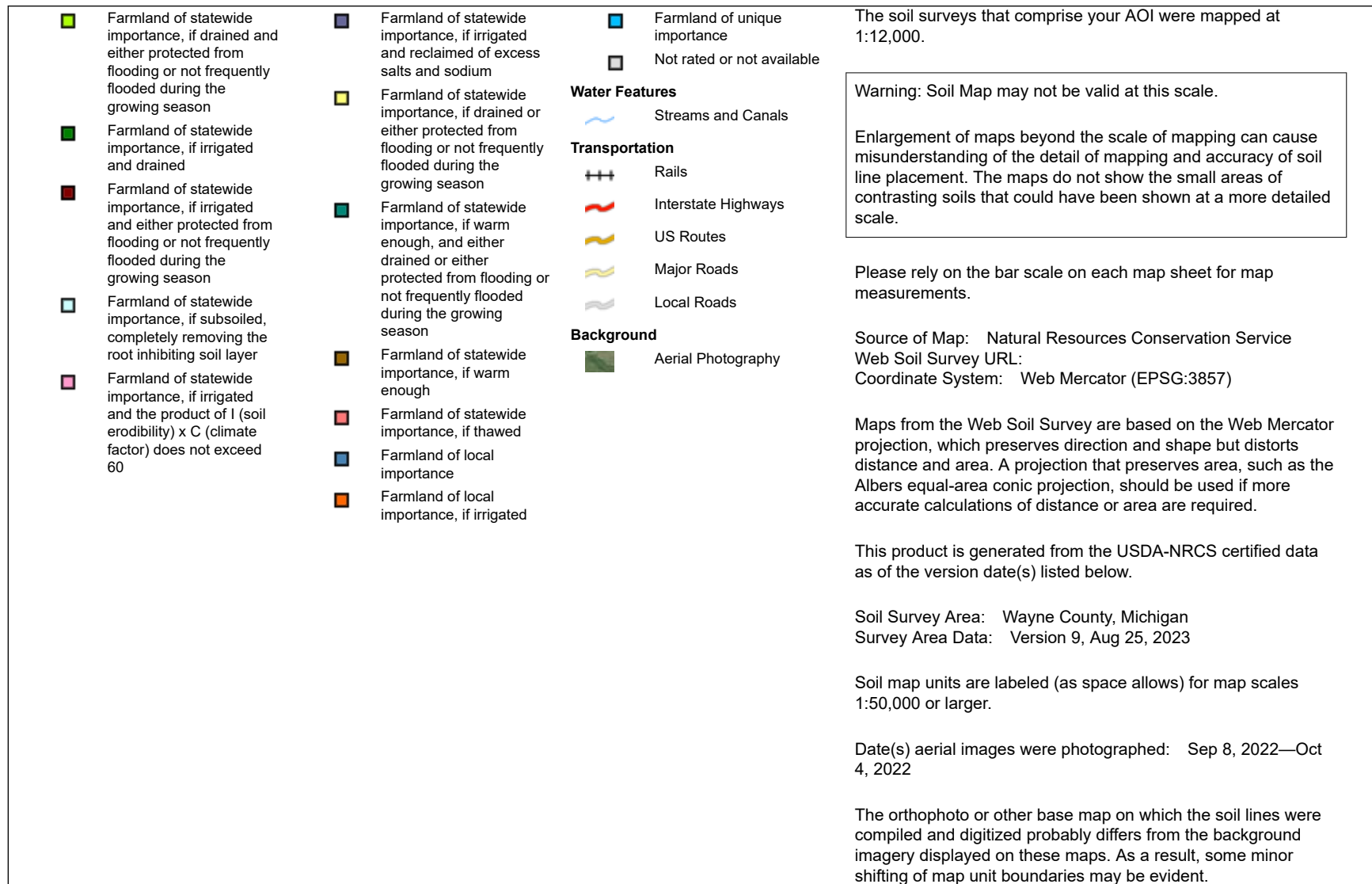
Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Custom Soil Resource Report

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	Soil Rating Points			Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Not prime farmland		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if thawed		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of local importance		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season				Farmland of local importance, if irrigated		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated						Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated

Custom Soil Resource Report



Table—Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
RapudB	Rapson-Urban land-Colwood complex, dense substratum, 0 to 4 percent slopes	Not prime farmland	0.3	2.6%
WsnuaA	Wauseon-Urban land complex, 0 to 2 percent slopes	Not prime farmland	11.5	97.4%
Totals for Area of Interest			11.8	100.0%

Rating Options—Farmland Classification

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Attachment 13





GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
MICHIGAN STRATEGIC FUND
STATE HISTORIC PRESERVATION OFFICE

QUENTIN L. MESSER, JR.
PRESIDENT

June 10, 2024

MARY WEIDEL
FIELD ENVIRONMENTAL OFFICER REGION V
US DEPT OF HOUSING AND URBAN DEVELOPMENT
477 MICHIGAN AVENUE 16TH FLOOR
DETROIT MI 48226

RE: ER24-672 Iroquois Terrace, 197-326 Goodall Street, River Rouge, Wayne County (HUD)

Dear Mary Weidel:

Under the authority of Section 106 of the National Historic Preservation Act of 1966, as amended, we have reviewed the above-cited undertaking at the location noted above. Based on the information provided for our review, it is the opinion of the State Historic Preservation Officer (SHPO) that **no historic properties are affected** within the area of potential effects of this undertaking.

This letter evidences City of River Rouge's compliance with 36 CFR § 800.4 "Identification of historic properties," and the fulfillment of City of River Rouge's responsibility to notify the SHPO, as a consulting party in the Section 106 process, under 36 CFR § 800.4(d)(1) "No historic properties affected." **If the scope of work changes in any way, please notify this office immediately. In the unlikely event that human remains, or archaeological material are encountered during construction activities related to the above-cited undertaking, work must be halted, and the Michigan SHPO and other appropriate authorities must be contacted immediately.**

We remind you that federal agency officials or their delegated authorities are required to involve the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties per 36 CFR § 800.2(d).

The National Historic Preservation Act also requires that federal agencies consult with any Indian tribe and/or Tribal Historic Preservation Officer (THPO) that attach religious and cultural significance to historic properties that may be affected by the agency's undertakings per 36 CFR § 800.2(c)(2)(ii).

The State Historic Preservation Office is not the office of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking.

If you have any questions, please contact Cassandra Nelson, Historian, at 517-648-4050 or by email at nelsonc32@michigan.gov. **Please reference our project number in all communication with this office regarding this undertaking.** Thank you for this opportunity to review and comment, and for your cooperation.

Sincerely,

Cassandra Nelson
Historian

AK:CN

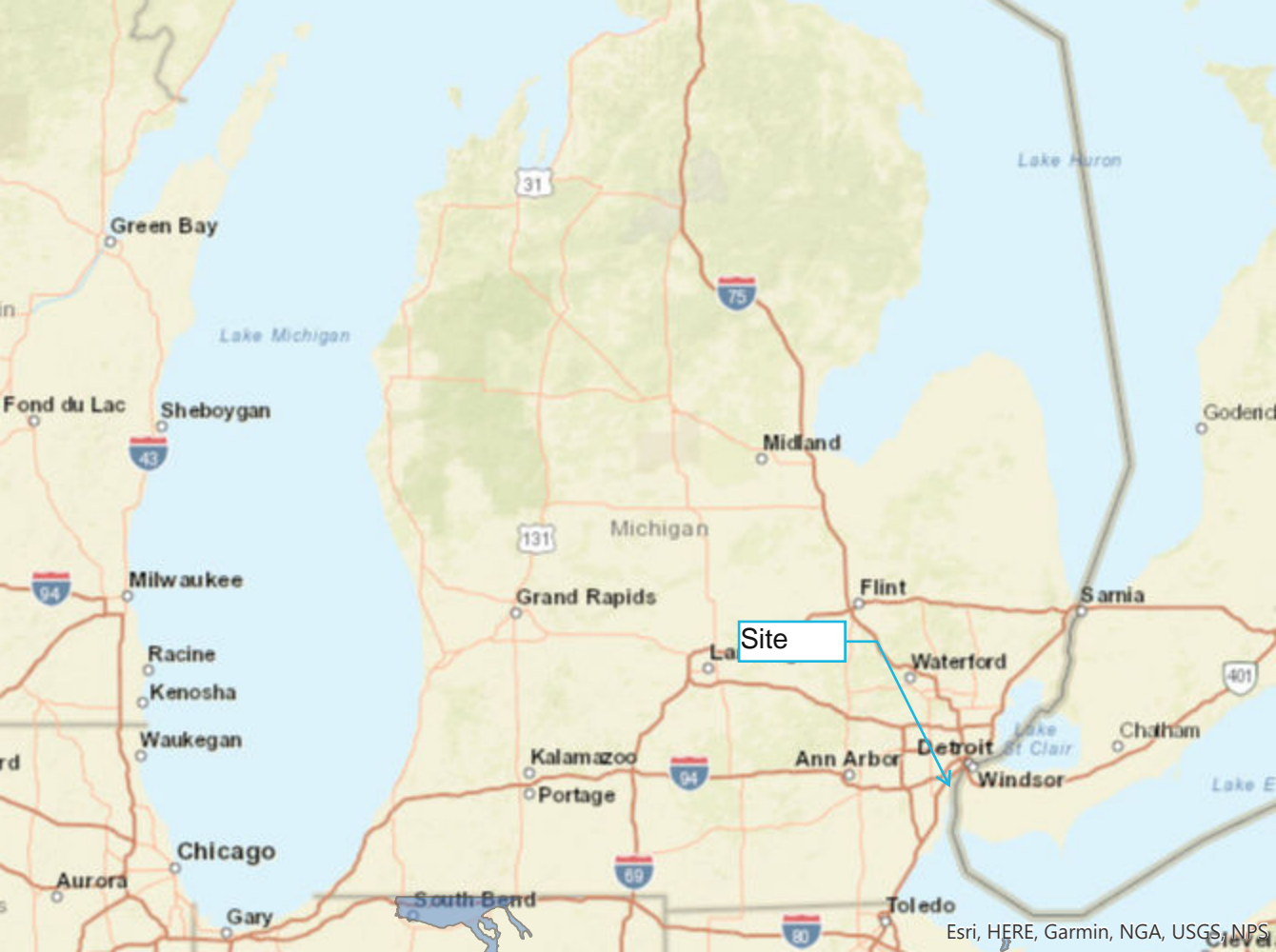
Copy: William Campbell, River Rouge
Ebony Nugin, River Rouge Housing Commission
Bob Chidester, Mannik & Smith



300 NORTH WASHINGTON SQUARE • LANSING, MICHIGAN 48913
michigan.gov/shpo • (517) 335-9840

Attachment 14





Attachment 15





U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



June 18, 2024

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine




This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

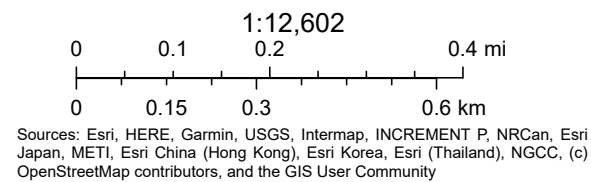
Wetlands Map Viewer



June 18, 2024

Part 303 Final Wetlands Inventory

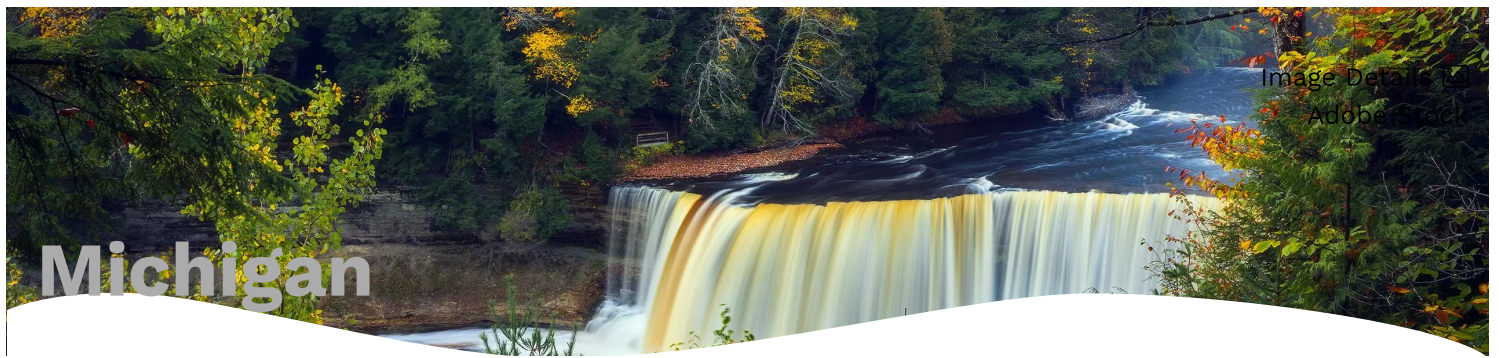
-  Wetlands as identified on NWI and MIRIS maps
-  Soil areas which include wetland soils
-  Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils



Disclaimer: This map is not intended to be used to determine the specific

Attachment 16





Even in the “Great Lakes State,” rivers play a huge role in the lives of every Michigander. From recreation to creation, Michigan’s rivers have carved paths for industries to rise and cities to thrive. The state has over 300 named rivers — several names are shared by different rivers (e.g., there are eight Pine Rivers and seven Black Rivers). In four cases, two rivers of the same name are in one county.

Michigan has approximately 51,438 miles of river, of which 656.4 miles are designated as wild & scenic — just slightly more than 1% of the state's river miles.



Attachment 17



This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

River Rouge, MI

1 mile Ring Centered at 42.265595,-83.129806

Population: 8,254

Area in square miles: 3.14

A3 Landscape

June 25, 2024

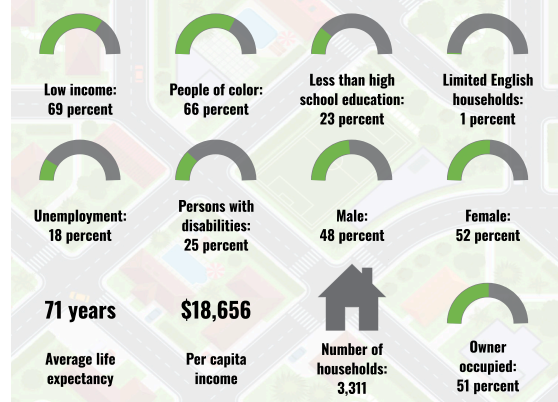
✦ Search Result (point)

Esri Community Maps Contributors, Province of Ontario
SINCOG, © OpenStreetMap, Microsoft, Esri, TomTom
Garmin, SafeGraph, GeoTechnologies, Inc., METLINAS
USGS, EPA, NPS, US Census Bureau, USDA, USFWS

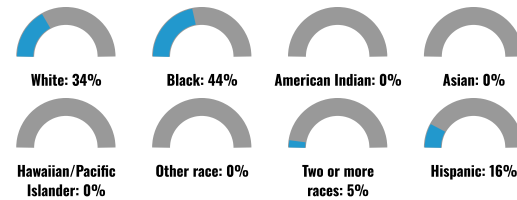
LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	89%
Spanish	11%
Total Non-English	11%

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

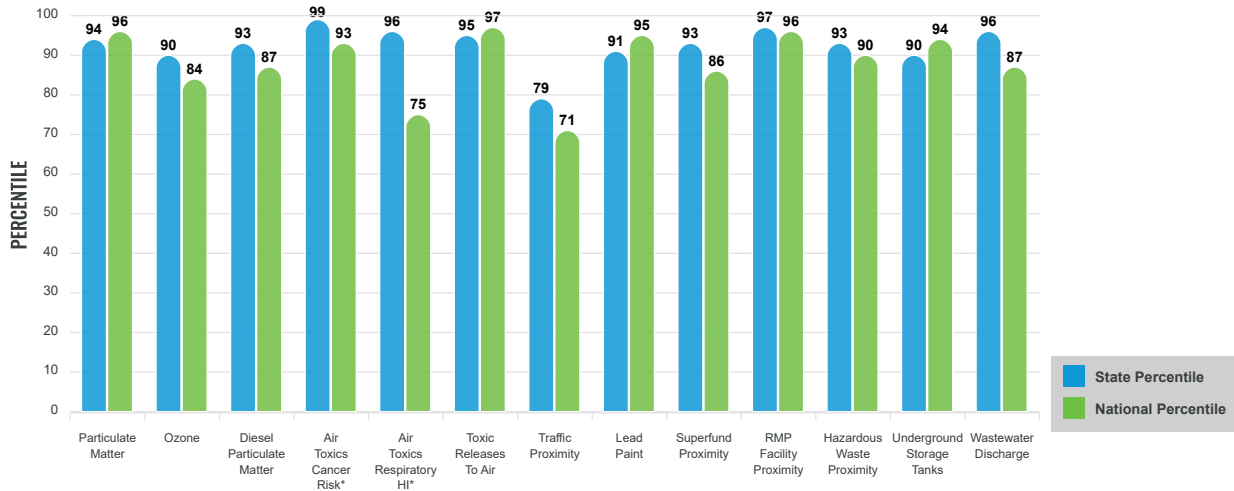
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

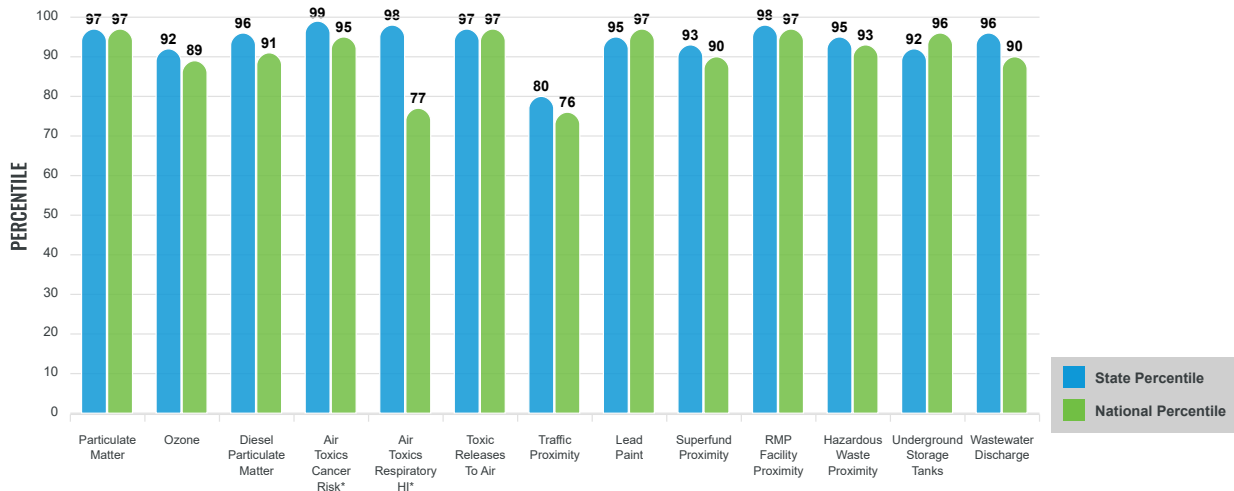
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring Centered at 42.265595,-83.129806

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	10.5	8.51	96	8.08	97
Ozone (ppb)	61.9	60	64	61.6	56
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.29	0.183	85	0.261	66
Air Toxics Cancer Risk* (lifetime risk per million)	32	19	98	25	52
Air Toxics Respiratory HI*	0.3	0.2	88	0.31	31
Toxic Releases to Air	16,000	2,500	98	4,600	95
Traffic Proximity (daily traffic count/distance to road)	58	120	47	210	43
Lead Paint (% Pre-1960 Housing)	0.78	0.38	85	0.3	90
Superfund Proximity (site count/km distance)	0.083	0.15	62	0.13	60
RMP Facility Proximity (facility count/km distance)	3.8	0.31	99	0.43	99
Hazardous Waste Proximity (facility count/km distance)	2.1	1.1	83	1.9	74
Underground Storage Tanks (count/km ²)	13	8	78	3.9	92
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.019	0.13	87	22	72
SOCIOECONOMIC INDICATORS					
Demographic Index	67%	28%	91	35%	88
Supplemental Demographic Index	27%	14%	94	14%	92
People of Color	66%	26%	87	39%	76
Low Income	69%	31%	93	31%	93
Unemployment Rate	18%	7%	92	6%	94
Limited English Speaking Households	1%	2%	78	5%	61
Less Than High School Education	23%	9%	93	12%	85
Under Age 5	5%	5%	57	6%	55
Over Age 64	11%	18%	27	17%	31
Low Life Expectancy	27%	20%	94	20%	96

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 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>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	14
Air Pollution	7
Brownfields	10
Toxic Release Inventory	8

Other community features within defined area:

Schools	5
Hospitals	0
Places of Worship	8

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for 1 mile Ring Centered at 42.265595, -83.129806

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	27%	20%	94	20%	96
Heart Disease	8.5	6.6	88	6.1	89
Asthma	15.5	11.6	94	10	99
Cancer	5.4	6.6	19	6.1	33
Persons with Disabilities	23.1%	14.6%	91	13.4%	92

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	57%	7%	99	12%	96
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	34%	14%	94	14%	92
Lack of Health Insurance	9%	5%	85	9%	62
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 42.265595, -83.129806