#### PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of July 1, 2014

SUBJECT: Glendale Condominiums Site Plan for City Council Approval

(312 Glendale Drive) File No. SP13-010

#### PROPOSED CITY PLANNING COMMISSION MOTION

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Glendale Condominiums Site Plan and Development Agreement.

#### STAFF RECOMMENDATION

Staff recommends **approval** of the site plan because it complies with applicable local, state and federal laws, ordinances, standards and regulations; limits the disturbance of natural features to the minimum necessary to allow a reasonable use of the land; and does not cause a public or private nuisance and does not have a detrimental effect on the public health, safety or welfare.

#### **LOCATION**

The site is located on the west side of Glendale Drive, three parcels south of Jackson Avenue (West Area, Allen Creek Watershed).

#### **DESCRIPTION OF PROJECT**

This project was postponed at the July 16, 2013 City Planning Commission meeting. The project has had several significant revisions since then, including a reduction in the number of units from 8 to 6, redesigned buildings, and a new stormwater system. Because of the lengthy time that has elapsed since the original petition was presented, this project is being treated as a new project, with a new staff report and a new public hearing.

<u>Development Program</u> - The petitioner proposes to demolish two single-family dwellings on this 2.54 acre site and construct 6 new two-family dwellings, for a total of 12 two-bedroom units and 22,500 square feet of floor area. Each unit would contain two garage parking spaces, and twelve additional surface spaces are provided, two of which are ADA accessible.

The site is zoned R4B (Multiple-Family Dwelling District), which allows single-family, two-family and multiple-family uses. The project is proposed as a condominium development, with individual ownership of the units and shared ownership of the land and improvements. Estimated construction cost is \$2,300,000.

Glendale Condominiums Site Plan July 1, 2014 Page 2

<u>Natural Features</u> – There are 23 landmark-sized trees on the site, seven of which are proposed to remain. Five of the 16 that would be removed require mitigation, which translates to fifteen 3" caliper trees. The remaining eleven are in poor health and did not score high enough on the landmark tree survey to warrant mitigation.

There are also two areas of steep slopes on the northern part of the site. These natural features are addressed in the Land Development Regulations under *Attachment A – Guidelines for the Protection and Mitigation of Natural Features*.

<u>Vehicular Circulation and Traffic</u> – The site will be accessed from a new curb cut on Glendale Drive, slightly north of the existing curb cut; the existing curb cut will be removed. One building will be accessed directly from this east-west drive, and the other five units from a north-south driveway spur that parallels Glendale Drive.

A traffic impact study was not required for this proposal, since the projected peak hour traffic of 6.24 trips is significantly less than the 50 trips/peak hour threshold for such a study.

<u>Pedestrian Circulation</u> – A public sidewalk will be constructed along Glendale Drive and connect to existing sidewalks to the north and south. On roughly the northern half of the site, the sidewalk will be located on the 312 Glendale property within an easement that will be conveyed to the City. This will place the sidewalk above the steep slopes on this part of the site.

On the southern half of the Glendale frontage, the sidewalk will be in the public right-of-way. Interior sidewalks have been added on one side of the driveway. There is also a pedestrian connection farther north, between buildings one and three, connecting the drive and the new public sidewalk on Glendale. In addition, there is a sidewalk connection between the end of the east/west portion of the drive and the Hillside Terrace property to the west.

Stormwater Facilities – Stormwater facilities will be located on either side of the entrance driveway: an underground basin on the north side and a surface pond on the south side. The Stormwater System Narrative, found on sheet C8.00 of the plan (excerpt attached), states that storm water falling onto impervious surfaces will be directed to catch basins, which are directed to the surface pond/basin. This pond provides both retention and detention. The difference in the volume of water generated between pre-development and post-development will be retained on site. The pond is designed to hold standing water for a maximum of 24 to 48 hours after a storm event. The retention pond/basin will also pass water to the underground stormwater system providing both retention and detention. The detention system will reduce the flow rate from that of a developed site to the slower agricultural rate before being discharged into the city storm system.

The Washtenaw County Water Resources Commissioner's office reviewed and approved the plans, and the petitioners were required to make no impact on stormwater volumes downstream from this site.

<u>Landscaping</u> – Conflicting land use buffers are provided on the north, west, and south. Right-of-way screening is located in three areas along Glendale, plus 1,855 square feet

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of vehicular use area screening and a 485 square foot bioswale. A total of 103 trees will be added to the site, which is 17 in excess of the minimum required. All landscaped areas will have an underground irrigation system.

<u>Development Agreement</u> – A development agreement has been drafted to address footing drain disconnects, public infrastructure improvements, a park contribution of \$7,440 (which the applicant has agreed to pay) and utility easements.

<u>Citizen Participation</u> – As previously reported, the petitioners held citizen participation meetings on January 15, 2013 at Cobblestone Farm and on February 12, 2013 at Eberwhite Elementary. Questions were raised at both meetings concerning the design of the project, neighborhood flooding and stormwater management, site grading, preservation of the existing trees, traffic, parking, imperviousness, viewsheds, density, and pedestrian access across the site. The petitioner's Citizen Participation Reports for both meetings are attached.

Postcard and email notices of the new public hearing have been provided to nearby residents and the neighborhood association.

#### SITE HISTORY

The property was annexed into the city in 1987, and remained unzoned until 1994. At that time a site plan was approved for a 69,363 square foot, 64-unit addition to the Hillside Terrace "convalescent home" along with the current R4B zoning. The site plan expired in 1999.

#### **SURROUNDING LAND USES AND ZONING**

|       | LAND USE                              | ZONING                                  |
|-------|---------------------------------------|---|
| NORTH | Old Orchard Condominiums              | R2A (Two-Family Dwelling District)      |
| EAST  | Single-Family Residential             | R1D (Single-Family Dwelling District)   |
| SOUTH | Single-Family Residential             | R1B (Single-Family Dwelling District)   |
| WEST  | Hillside Terrace Retirement Community | R4B (Multiple-Family Dwelling District) |

#### **ZONING COMPARISON CHART**

|  | EXISTING                                | PROPOSED                                | REQUIRED BY<br>CURRENT ZONING                        |
|--|---|---|--|
| Zoning   | R4B (Multiple Family Dwelling District) | R4B (Multiple Family Dwelling District) | R4B (Multiple Family Dwelling District)              |
| Gross Lot Area                                   | 115,011 sq ft<br>(2.64 Acres)           | 115,011 sq ft<br>(2.64 Acres)           | 14,000 sq ft MIN                                     |
| Dwelling Units                                   | 2                                       | 12                                      | 39 MAX   |
| Lot Area per Unit                                | 57,505 sq ft                            | 9,584 sq ft                             | 2,900 sq ft MIN                                      |
| Minimum Usable<br>Open Space in %<br>of Lot Area | 97.8%                                   | 80%                                     | 55% MIN  |
| Minimum Active<br>Open Space                     | NA                                      | 3,600 SF                                | 3,600 sq ft MIN (300 sq ft<br>per Dwelling Unit MIN) |
| Maximum Building<br>Height                       | 18 ft                                   | 17.5 ft                                 | 35 ft MAX  |
| Setback – Front                                  | 64.6 ft                                 | 22.4 ft                                 | 15 ft MIN<br>40 ft MAX                               |
| Setback – Side                                   | 90 ft                                   | 56.9 ft / 44.2 ft                       | 17.4 ft MIN  |
| Setback – Rear                                   | 8.2 ft                                  | 35.5 ft                                 | 35.5 ft MIN  |
| Parking –<br>Automobiles                         | 2                                       | 36 (12 in garages)                      | 18 MIN   |
| Parking – Bicycles                               | Not applicable                          | 12 class A (one per garage)             | None required for duplexes                           |

#### PLANNING BACKGROUND

The *Master Plan: Land Use Element* recommends multiple-family residential use for the site. Some of the applicable goals and objectives from the *Land Use Element* include:

Goal A: To ensure that development projects are designed and constructed in a way that preserves or enhances the integrity of natural systems.

Objective 1: Encourage developers to use innovative design techniques to help protect or enhance natural systems.

Action Statement: Support design techniques, such as clustered developments and storm water best management practices, which would minimize impacts to natural systems on and off a site.

Action Statement: Ensure that new development is consistent with the goals outlined in Chapter 4 (Natural Systems).

Goal B: To promote land use designs that reduce reliance on the automobile.

Objective 2: Improve the safety, accessibility and desirability of walking, biking or using mass transit.

Action Statement: Ensure that residential, commercial, employment and activity centers provide pedestrian and bicycle amenities, such as interior and public sidewalks, bus stops (where feasible), awnings and linkages to adjacent sites.

Objective 3: Improve transportation integration between neighborhoods.

Action Statement: Ensure barrier-free and non-motorized linkages, where possible, between neighborhoods.

Goal C: To provide a full range of housing choices (size, price, design, accessibility, etc) that meets the existing and anticipated needs of all City residents.

Goal D: To support the continued viability, health and safety of City residential neighborhoods.

Objective 1: Encourage new development and redevelopment within established residential areas to complement the design elements of the neighborhood, including size and height.

#### STAFF COMMENTS

<u>Planning</u> – Neighbors have expressed concerns to Planning staff about this iteration of the site plan. Some of these concerns include stormwater management on the site and potential impact on neighborhood flooding; the safety, aesthetics, and future maintenance of the proposed detention/retention pond near Glendale Drive; the driveway configuration; and increased traffic.

There is a one-foot wide strip along the Glendale right of way that extends past the north boundary of the site. The petitioner has agreed to administratively transfer this strip to the abutting property owner.

<u>Systems Planning</u>, <u>Engineering</u> –Footing drains from three homes are required to be disconnected in a targeted area in the vicinity of the development. This will be included in the development agreement. Also, the water main shown at the south end of the site must be shown on the plans connecting to the water main in Glendale Drive.

<u>Environmental</u> – The site is located 300 feet east of the former location of the Barnard Plating Company building at 1943 Jackson Avenue. Hillside Terrace lies between the two parcels. Barnard ceased operations in 1981, and a 1989 environmental site assessment report identified heavy metal soil contamination on that site. There is no

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identified path of travel for environmental contaminants from 1943 Jackson to 312 Glendale, such as a creek or visible soil erosion. The soil at 312 Glendale may also contain pesticides used on the orchard. It is the property owner's responsibility to follow MDEQ rules and test soils that are being removed from the site for contaminants so that they may be disposed of properly. The City does not regulate soil contamination testing, remediation, or removal.

Prepared by Jill Thacher Reviewed by Wendy Rampson 6/27/14

Attachments: Stormwater System Narrative – Excerpt (Sheet C8.00) dated 6/3/14

7/1/14 Draft Development Agreement

1/15/13 Citizen Participation Meeting Report 2/12/13 Citizen Participation Meeting Report

**Location Map** 

Zoning and Parcel Map

Aerial Photo

Sheet C1.00: Boundary/Topographic Tree Survey dated 6/3/14

Sheet SP1.00: Site Plan dated 6/3/14 Sheet L2: Landscape Plan dated 5/28/14

Sheet A5.00: Exterior Elevations, Unit A dated 5/7/14 Sheet A5.01: Exterior Elevations, Unit A dated 5/7/14

Sheet C8.00: Detention Narrative dated 6/3/14

c: Owner: Jeffrey Starman

564 S Main St, Suite 200 Ann Arbor, MI 48108

Petitioner: Glendale Orchard, LLC

564 S. Main Street, Suite 200

Ann Arbor, MI 48108

Petitioner's Agent: Bowers + Associates, Inc.

2400 S Huron Parkway Ann Arbor, MI 48104

City Attorney Systems Planning

#### STORM WATER SYSTEM NARRATIVE

The storm water management system for this site consists of three components: collection, detention/retention and discharge. The specifics of each component are as follows:

Storm water falling on the site and specifically onto the hard surfaces of the site is directed to collection points which are storm catch basins. The catch basins are sized and located to collect storm water from specific drainage areas in accordance with the requirements of the City of Ann Arbor, the Washtenaw County Water Resources Commission (WCWRC) and good engineering practice. The layout of the catch basins can be seen on Sheets C3.00 and C4.00. The drainage areas are shown on Sheet C4.00.

Once collected the storm water is conveyed underground through a piping network to a surface pond/basin. The piping network diameter and slopes have been calculated to convey the volume and rate of storm water being collected. The layout of the piping network can be seen on Sheets C3.00 and C4.00.

Prior to discharge into the surface pond/basin the water passes through a mechanical forebay. The forebay's function is to allow silts/sediments and debris to settle and be removed from the storm water stream prior to entering the pond/basin.

The above ground basin for this site has two functions. A portion of the basin will provide retention. The City and the WCWRC required that the difference in volume of water generated between pre-development and post-development be retained on site. The methodology of calculating that volume is further detailed on Sheet C8.00.

The retention volume of the surface pond is the volume below the invert of the outlet for the pond. The entire volume calculated to be retained cannot all be provided in the pond based on layout, grading and design of the site. Additional retention volume is provided in the stone below/underneath the underground detention system.

The second function of the surface basin/pond will be to pass water to the underground detention system. The underground detention system has been designed to handle the volume of water in accordance with the requirements of the WCWRC. The volume provided in this system accommodates: first flush, bank full and 100-year storm events.

The function of the underground detention system is to reduce the rate of flow from the developed site to an agricultural rate in accordance with the requirements as set forth by the City of Ann Arbor and the WCWRC. The underground detention system design and calculations are shown on Sheets C5.00 and C6.00.

A rock bed will be placed underneath the underground detention system. The voids in the rock will store the rest of the required retention volume. Water stored in the voids will be below the invert of the pipes and therefore will be retained. Water in retention will leave the site through the following methods: percolation, evaporation, transpiration. Water in the detention portion of the system will be discharged into the City storm system at a much reduced rate.

#### **GLENDALE CONDOMINIUMS DEVELOPMENT AGREEMENT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between the City of Ann Arbor, a Michigan Municipal Corporation, with principal address at 301 East Huron Street, Ann Arbor, Michigan 48107, hereinafter called the CITY; and Glendale Orchard, a limited liability company, with principal address at 564 S Main Street, Suite 200, Ann Arbor, MI 48108, hereinafter called the PROPRIETOR, witnesses that:

WHEREAS, the PROPRIETOR owns certain land in the City of Ann Arbor, described below and site planned as Glendale Condominiums, and

WHEREAS, the PROPRIETOR has caused certain land in the City of Ann Arbor, described below to be surveyed, mapped and site planned as Glendale Condominiums, and desires site plan and development agreement approval thereof, and

WHEREAS, the PROPRIETOR desires to build or use certain improvements with and without the necessity of special assessments by the CITY, and

WHEREAS, the CITY desires to insure that all of the improvements required by pertinent CITY ordinances and regulations be properly made, and that the PROPRIETOR will install these improvements prior to any permits being issued.

#### THE PROPRIETOR(S) HEREBY AGREE(S):

- (P-1) To prepare and submit to the CITY for approval plans and specifications ("the Plans") prepared by a registered professional engineer for private stormwater management systems and public sidewalks ("the Improvements") provided that no work on said Improvements shall be commenced until the Plans have been approved by the City Administrator or designee, and until such other relevant information to CITY service areas as shall be reasonably required has been provided.
- (P-2) To construct all improvements set forth in Paragraph P-1 of this Agreement in accordance with the approved Plans and to repair all defects in the improvements that occur within one year from the date of acceptance of the Improvements by the CITY, commencing on the latest date of the acceptance of any Improvements by the CITY. If the PROPRIETOR fails to construct the improvements, the CITY may send notice via first class mail to the PROPRIETOR at the address listed above requiring it to commence and complete the improvements in the notice within the time set forth in the notice. The CITY may cause the work to be completed at the expense of the PROPRIETOR, if the PROPRIETOR does not complete the work within the time set forth in the notice. Every owner of a portion of the property, including co-owners of condominium units, shall pay a pro-rata share of the cost of the work.

That portion of the cost of the work attributable to each condominium unit shall be a lien on that Property and may be collected as a single tax parcel assessment as provided in Chapter 13 of the Ann Arbor City Code.

- (P-3) To furnish, within 30 days of completion, an engineer's certificate that the construction of the public improvements set forth in Paragraph P-1 above have been completed in accordance with the specifications of the CITY in accordance with the approved plans. The engineer's certificate will cover only those items the PROPRIETOR'S engineer inspects.
- (P-4) Prior to the issuance of building permits and recording the master deed, to deposit with a mutually acceptable escrow agent fully executed documents in a form acceptable to the CITY, which will convey, upon delivery to the CITY, easements for the construction and maintenance of public utilities and public streets. The escrow agreement shall provide for delivery of the documents to the CITY solely upon the condition that the CITY has accepted the public Improvement to be conveyed by the easement.
- (P-5) To install all water mains, storm sewers, and sanitary sewers, through the first course of asphalt, pursuant to CITY approved plans and specifications, necessary to connect the site with existing CITY systems adjacent to the site prior to the issuance of any building permits.
- (P-6) To indemnify and hold the CITY harmless from any claims, losses, liabilities, damages or expenses (including reasonable attorney fees) suffered or incurred by the CITY based upon or resulting from any acts or omissions of the PROPRIETOR, its employees, agents, subcontractors, invitees, or licensees in the design, construction, maintenance or repair of any of the Improvements required under this Agreement and the approved site plan.
- (P-7) To cause to be maintained General Liability Insurance and Property Damage Insurance in the minimum amount of \$1,000,000 per occurrence and naming the CITY as named insured to protect and indemnify the CITY against any claims for damage due to public use of the public improvement(s) in the development prior to final written acceptance of the public improvement(s) by the CITY. Evidence of such insurance shall be produced prior to any construction of improvement and a copy filed with the City Clerk's Office and shall remain in full force and effect during construction of the public improvement(s) and until notice of acceptance by the CITY of the Improvements.
- (P-8) Existing, landmark and street trees shown on the site plan as trees to be saved shall be maintained by the PROPRIETORin good condition for a minimum of three years after acceptance of the public improvements by the CITY or granting of Certificate of Occupancy. Existing landmark and street trees that are determined by the CITY to be dead, dying or severely damaged due to construction activity within three years after acceptance of the public improvements or granting of Certificate of Occupancy *or final approval of the lot or unit*, shall be replaced by the PROPRIETOR as provided by Chapter 57 of the Ann Arbor City Code.
- (P-9) For the benefit of the residents of the PROPRIETOR'S development, to make a park contribution of \$7,440 to the CITY Parks and Recreation Services Unit prior to the issuance of certificates of occupancy for improvements to Virginia, Waterworks, and/or Winewood Thaler Parks.
- (P-10) To deposit, prior to any building permits being issued, a street tree planting escrow account with the Parks and Recreation Services Unit in the form of a check payable to

the City of Ann Arbor. The escrow amount shall be based on the CITY policy in effect at that time and is to include all on-site public streets. The City Administrator may authorize the PROPRIETOR to install the street trees if planted in accordance with CITY standards and specifications. If the street trees are found to be acceptable by the CITY, the escrow amount will be returned to the PROPRIETOR one year after the date of acceptance by the CITY.

- (P-11) To create an association composed of all owners of Glenwood Condominiums condominium, hereinafter called the "Association", in which membership shall be required by covenants and restrictions recorded as part of the master deed for Glenwood Condominiums. The association(s) shall be responsible for and shall execute the appropriate documents insuring perpetual maintenance and ownership of the landscape materials, exterior lighting, driveways, on-site storm water management system, and all other common elements.
- (P-12) To construct, repair and/or adequately maintain on-site storm water management system. If the PROPRIETOR fails to construct, repair and/or maintain the private storm water management system, the CITY may send notice via first class mail to the PROPRIETOR at the address listed above, requiring it to commence and complete the items stated in the notice within the time set forth in the notice. The CITY may cause the work to be completed at the expense of the PROPRIETOR if the PROPRIETOR does not complete the work within the time set forth in the notice.
- (P-13) After construction of the private on-site storm water management system, to maintain it until non-developer co-owners elect one or more directors to the Association's board of directors. Thereafter, by provision in the master deed, the Association shall own and maintain the storm water management system. Any proposed changes to the system must be approved by the City of Ann Arbor Systems Planning and Planning and Development Services Units. If the PROPRIETOR or Association, as appropriate, fails to maintain any portion of the system, the CITY may send notice via first class mail to the PROPRIETOR, or Association, at the address listed above, requiring it to commence and complete the maintenance stated in the notice within the time set forth in the notice. The CITY may cause the work to be completed at the expense of the PROPRIETOR or Association if the PROPRIETOR or Association does not complete the work, as appropriate, within the time set forth in the notice. If the CITY completes the work, and the costs remain unpaid by the Association for 60 days after notice via first class mail, the CITY may bill each condominium unit for the pro rata share of the total cost, or assess the pro rata share of those costs to each condominium unit as a single tax parcel assessment as provided in Chapter 13 of Ann Arbor City Code. Provisions for maintenance and responsibility for the storm water management system, as well as the pro rata share of each condominium unit shall be included by the PROPRIETOR in the master deed.
- (P-14) After construction of the private on-site storm water management system, to commission an annual inspection of the system by a registered professional engineer evaluating its operation and stating required maintenance or repairs, and to provide a written copy of this evaluation to the CITY Public Services Area.
- (P-15) Prior to building permits being issued, to restrict, but not prohibit, by covenants and restrictions recorded with the Washtenaw County Register of Deeds, the use of lawn care chemicals and fertilizers in order to minimize the impacts on the Huron River watershed.
- (P-16) To prepare and submit to the Planning and Development Services Unit one copy of the Master Deed, along with the required review fee, prior to issuance of building permits.

- (P-17) To design, construct, repair and maintain this development in accordance with the provisions of Chapter 119 (Noise Control) to ensure that any noise emanating from said development will not impact nearby residents or businesses. In addition, PROPRIETOR shall review existing noise sources surrounding said development and incorporate necessary design and construction techniques to ensure that future tenants will not be exposed to noise sources in violation of Chapter 119.
- (P-18) To include the elevation drawings, as submitted to City Council, as part of the approved site plan and to construct all buildings consistent with said elevation drawings. If the PROPRIETOR proposes any substantive changes to the approved building elevations, setbacks, aesthetics, or materials, that those changes be brought back to the City Council for consideration. The PROPRIETOR is required to submit signed and sealed drawings to staff reflecting the elevations, setbacks, aesthetics, materials and site plan approved by City Council.
- (P-19) To remove all discarded building materials and rubbish from the development at least once each month during construction of the development improvements, and within one month after completion or abandonment of construction.
- (P-20) Prior to application for and issuance of certificates of occupancy, to disconnect 3 footing drains, which is based upon the uses currently existing on the Property and those currently contemplated by the Site Plan in accordance with the Guidelines for Completion of Footing Drain Disconnections, Table A, and adopted by City Council, August 18, 2003 and revised November 30, 2005 (the "Guidelines"), or to provide an alternative method of mitigation that results in an equivalent amount of sanitary flow removal, in accordance with the Guidelines. In the event the actual intensity of uses contemplated by the Site Plan are either increased or decreased, City and PROPRIETOR agree to adjust the number of footing drains to be disconnected, or the amount of alternative mitigation to be provided, in accordance with the Guidelines. PROPRIETOR may be allowed to obtain partial certificates of occupancy for the development prior to the completion of all of the required footing drain disconnects on a prorated basis at the Discretion of the CITY Public Services Area. All footing drain disconnects shall be completed within the Liberty-Washington or High Level sewersheds upstream of where the development flows connect to the High Level trunkline (intersection of South First Street and West Washington Street, MH ID 71-70467).
- (P-21) PROPRIETOR is the sole title holder in fee simple of the land described below except for any mortgage, easements and deed restrictions of record and that the person(s) signing below on behalf of PROPRIETOR has (have) legal authority and capacity to enter into this agreement for PROPRIETOR.
- (P-22) Failure to construct, repair and/or maintain the site pursuant to the approved site plan and/or failure to comply with any of this approved development agreement's terms and conditions shall constitute a material breach of the Agreement and the CITY shall have all remedies in law and/or in equity necessary to ensure that the PROPRIETOR complies with the approved site plan and/or the terms and conditions of the approved development agreement. The PROPRIETOR shall be responsible for all costs and expenses including reasonable attorney fees incurred by the CITY in enforcing the terms and conditions of the approved site plan and/or development agreement.
- (P-23) In addition to any other remedy set forth in this Agreement or in law or equity, if PROPRIETOR fails to make a timely or full payments to the CITY as set forth elsewhere in the Agreement to the CITY in the agreed upon manner, any unpaid amount(s) shall become a lien,

7/1/14

as provided under Ann Arbor City Code and recorded with the Washtenaw County Register of Deeds, against the land described below and may be placed on the CITY tax roll as a single lot assessment, or if the development is converted to condominium ownership, every owner of a portion of the property shall pay a pro-rata share of the amount of the payments attributable to each condominium unit. If the unpaid amount(s), in whole or in part, has been recorded as a lien on the CITY'S tax roll and with the Washtenaw County Register of Deeds, upon payment of the amount in full along with any penalties and interest, the CITY, upon request, will execute an instrument in recordable form acknowledging full satisfaction of this condition.

(P-24) To pay for the cost of recording this Agreement with the Washtenaw County Register of Deeds, and to pay for the cost of recording all documents granting easements to the CITY.

#### THE CITY HEREBY AGREES:

- (C-1) In consideration of the above undertakings, to approve the Glendale Condominiums.
- (C-2) To use the park contribution described above for improvements to Virginia, Waterworks, and/or Winewood/Thaler Park.
- (C-4) To provide timely and reasonable CITY inspections as may be required during construction.
  - (C-5) To record this agreement with the Washtenaw County Register of Deeds.

#### **GENERAL TERMS**

Both the PROPRIETOR and the CITY agree as follows:

- (T-1) This agreement is not intended to create a contractual right for third parties.
- (T-2) This Agreement and any of its terms, conditions, or provisions cannot be modified, amended, or waived unless in writing and unless executed by both parties to this Agreement. Any representations or statements, whether oral or in writing, not contained in this Agreement shall not be binding on either party.
- (T-3) This Agreement and any of its terms or conditions shall not be assigned or transferred to any other individual or entity unless prior approval of the CITY is received. Such approval shall not be withheld unreasonably.
- (T-4) The obligations and conditions on the PROPRIETOR, as set forth above in this Agreement and in the approved site plan, shall be binding on any successors and assigns in ownership of the following described parcel:

PRT OF NW 1/4 OF SEC 30, T2S, R6E, BEG AT NE COR OF OUTLOT B, ALLMAND HEIGHTS, TH S 0 DEG 3 MIN 15 SEC E 288.14 FT, TH N 89 DEG 3 MIN 45 SEC W 1

FT, TH S 0 DEG 3 MIN 15 SEC E 50.01 FT, TH S 89 DEG 3 MIN 45 SEC E 1 FT, TH S 0 DEG 3 MIN 15 SEC E 15.72 FT, TH N 89 DEG 58 MIN 15 SEC W 207.67 FT, TH N 0 DEG 8 MIN 30 SEC W 554.92 FT, TH S 89 DEG 5 MIN 45 SEC E 208.55 FT, TH S 0 DEG 3 MIN 15 SEC E 147.87 FT, TH N 89 DEG 5 MIN 45 SEC W 1 FT, TH S 0 DEG 3 MIN 15 SEC E 50.01 FT, TH S 89 DEG 5 MIN 45 SEC E 1 FT TO POB. 2.64 AC M/L

(T-5) In addition to any other remedy in law or in equity failure to comply with all of the above paragraphs on the part of the PROPRIETOR, or any part of the approved site plan, in part or in whole, shall give the CITY adequate basis and cause to issue a stop work order for any previously-issued building permits and shall be an adequate basis and cause for the CITY to deny the issuance of any building permits, certificates of occupancy, or any other permits unless and until the CITY has notified the PROPRIETOR in writing that the PROPRIETOR has satisfactorily corrected the item(s) the PROPRIETOR has failed to perform.

(T-6) This agreement shall be interpreted, enforced and governed under the laws of the State of Michigan and Ann Arbor City Code.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day first above written.

| Witnesses:                            | CITY OF ANN ARBOR, MICHIGAN<br>301 East Huron Street<br>Ann Arbor, Michigan 48107 |
|---------------------------------------|---|
|                                       | By:<br>John Hieftje, Mayor  |
|                                       | John Frierige, Mayor  |
|                                       | Ву:   |
|                                       | Jacqueline Beaudry, City Clerk  |
| Approved as to Substance:             |   |
| Steven D. Powers, City Administrator  |   |
| Approved as to Form:                  |   |
| Stephen K. Postema, City Attorney     |   |
| Clopilon It. I Colonia, Oily / Monioy |   |

| Witness:   |  |
|--|--|
|  | By:<br>Name, Title   |
| and Jacqueline Beaudry, Clerk of the City of Ann A to be the persons who executed this foregoing inst                    | pefore me personally appeared John Hieftje, Mayor,<br>Arbor, a Michigan Municipal Corporation, to me known<br>trument, and to me known to be such Mayor and Clerk<br>executed the foregoing instrument as such officers as<br>thority. |
|  | NOTARY PUBLIC County of Washtenaw, State of Michigan My Commission Expires: Acting in the County of Washtenaw  |
| STATE OF MICHIGAN ) ) ss: County of Washtenaw )  |  |
| On this day of, 20, b me known to be the person who executed the foresthe foregoing instrument as his free act and deed. | refore me personally appeared, to going instrument, and acknowledged that he executed  |
|  | NOTARY PUBLIC County of Washtenaw, State of Michigan My Commission Expires: Acting in the County of Washtenaw  |

DRAFTED BY AND AFTER RECORDING RETURN TO: Ann Arbor Planning & Development Services Post Office Box 8647 Ann Arbor, Michigan 48107 (734) 794-6265

### Citizen Participation Meeting Report

## Proposed Condominium Development 312 Glendale Drive Ann Arbor, MI 48103

Ist Meeting

Prepared by: Bowers + Associates, Inc. 2400 S. Huron Parkway Ann Arbor, MI 48104 Ph: 734-975-2400 Fax: 734-975-2410

January 29, 2013

### Citizen Participation Meeting Report

Date: January 15, 2013 Time: 6:30 pm - 8:10 pm Location: Cobblestone Farm

#### Citizen Participants/Attendees:

Ramesh M. Ganatra Mary Cronin/John Johnson

Priscilla Parker Kathy Boris

Mark Hieber Lisa Hirsch/Tom McDonough

Terry McManus Angela Yang Ann Robins Margaret Erickson Marilee Woodworth

Josh Playnick Anne Bednar Diane Robins Andrea Stevenson Matt & Marti Keefe Larry Friedman Aron Lozo

lack Eaton Paul Takessian David Friedman Anthony Nastasi Doug Aikenhead

Susan Perry Gretchen Hahn

Karen & Roger Shambaugh

Rick & Linda Lee Austin

Nancy Smith lan Hubert Charles Dunlop Sue Woestehoff Dan Clark Sarah Jaslow Gus Teschke William Stengle Stephanie LaFortune Fred & Sally Knight

Ioan/Mike Barrett Sarah Chamberlain Daniel Cady lames Deigert Emily laffe

1807 Charlton 48103 Lynn Borset/Charles Compton 322 Virginia Ave 48103 1706 Charlton 48103 PO Box 8117 48107-8117

200 Kenwood

303 Glendale Dr 48103 1821 Jackson Ave 48103 1902 Old Orchard Ct 48103 1914 Old Orchard Ct.48103

1910 Old Orchard Ct. 48103 1729 Charlton 48103

1603 Abbott 48103 1706 Abbott Ave 48103 1900 Old Orchard Ct 48103

1812 Abbott Ave 48103 1710 Abbott Ave 48103 538 Glendale Circle 48103

408 Glendale Dr 48103 1606 Dicken 48103

585 Glendale Circle 48103 1912 Old Orchard Ct 48103

309 Glendale Dr 48103 534 Glendale Circle 48103

205 Glendale Dr. 48103

1708 Fair St. 48103 300 Virginia Ave 48103

1816 Abbott Ave 48103 1908 Old Orchard Ct 48103

1916 Old Orchard Ct 48103 555 Glendale Circle 48103

555 Glendale Circle 48103 1805 Abbott 48103

1809 Fair St 48103 313 Montgomery

2105 Abbott 48103 552 Glendale Circle 48103

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402 Glendale

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Janet Eshenroder
Gloria Oviatt
Gary Woodworth
Nathan Berent-Spillson
John & Deb Poinier
Steve Weindorf
Ann Steiner
Jane Broglio
Lauren Carlson
Greta Dongvillo
Joseph GeBott
Wendy Comstock
Carol Jacobs
Rita & Vincent Caruso

Chuck Warpehoski Howard Gold Luis Paez Chris Coombe Ann Marie Kotre Mike Anglin 579 Glendale Circle 48103 510 Glendale Circle 48103 1729 Charlton 48103 222 Virginia Ave 48103 560 Glendale Circle 48103 1425 Northbrook Drive 1809 Fair St. 48103 407 Glendale Dr 48103 1804 Abbott Ave 48103 1903 Jackson Ave 48103 1707 Charlton 48103 1803 Abbott 48103 556 Glendale Circle 48103

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### **Meeting Minutes:**

Susan Bowers opened the meeting. She stated the below clarification and description.

Clarification: Some of the postcards that were sent out by Dollar Bill Copying were incorrect. The development is going to be condominiums, not apartments. Developer was considering apartments but decided on condominiums instead.

As a point of information about the zoning ordinance for R4B. Permitted principal uses. (a) Multifamily dwellings. (b) Rooming and boarding houses and emergency shelters. (c) Any permitted principal use or special exception use of the RIC single-family dwelling district, R2A and R2B two-family dwelling districts and R3 townhouse dwelling district, subject to all the regulations of the district in which such use first occurs. By definition Dwelling, multi-family. A building containing 3 or more dwelling units arranged either side by side or I above the other. It does not specify rental or ownership as a requirement of zoning.

**Description of Project**: 4 buildings each contain 4 units. Each unit is approximately 1400 sf with 2 bedrooms and 2 baths and a full basement. Target market is empty nesters. Price point is commensurate with neighborhood.

#### Citizen Discussion

Lynn Borset commented first asking people to introduce themselves when they spoke and their address

lan Hubert asked why are developers were not here, 'stand behind it'. This was a recurring issue for many of the residents. They wanted to know who the developers were and their intentions.

Bowers + explained that there were not attending and that there are several developers and Jeff
Starman was only one of them. Two of the four developers own rental properties in Ann Arbor.

The site design was questioned, why so much asphalt, why in the front of the property facing Glendale? Why is the design the way it is?

Lynn Borset asked if site would be graded. What does that mean?

John on Charlton? Expressed concerns for the amount of asphalt and stated that there are a fair number of water problems in the neighborhood. Is there a detention pond?

Vincent Caruso then asked will it capture a 100 year storm or less? Concern with only 100 year storm. This is part of the Allen Creek Water shed. Major flooding problems with the water shed. Brought up West Park as an example. He thinks projects like this need to be beyond the normal – "current watershed is overtaxed" Wants city to step up and do more. He believes developers should be held accountable. He said the city has been asked on other projects to do a watershed study and they have refused. Wants to know how we will know if project will cause flooding downstream; there is no knowledge of the effects. Expressed concerns that we are getting 100 year rains on a regular basis now. Brought up example of Landsdowne neighborhood flooding. Mr. Caruso said we are having major climate change in rainfall and we need to plan for it. We wants city to be aware so that people downstream are not endangered.

Gretchen Hahn expressed concerns about storm water issues as well, her sump pump runs 'continually'. She is concerned about the loss of permeable land. Would like a base point of reference for water impact. So they can know how water shed will/could change in the neighborhood. She wants a baseline study, so they have something to "chase down" for impacts or changes. She believes from a contractor that has done work on her home (lowest drainage point on the street) that there is a flow problem with the city storm system. She is concerned because the project site is at one of the neighborhood highpoints in terms of elevation. Asked if impervious surface drains into road or neighbors or into the road.

Storm water management is a huge concern with neighbors. They stated the water flows down Charlton and flooding comes up thru the storm water grates on Charlton, she said there is a stream bed under Charlton(statement by Chris Coombe). Then this flooding has been know to go into resident basements in this area.

Paul Takeissian (Glendale Circle) asked if developer was responsible for just impervious surface or the entire property? Are they relying on pervious surface's to take some of the water? He said he has experienced every bad water karma known to man. One issue he presented is that 8" into the soil is clay, it doesn't allow water in. He understands the impervious surface but what about the rest of the site? Where is it going to go?

Bowers + explained that the project will handle storm water per the mandated standards by the City of Ann Arbor and Washtenaw County. We suggested contact the City Engineering department with the neighborhood storm water concerns — specifically mentioning Allison Heatley. We stated that we could not commit to a baseline study. In terms of site drainage we explained that we could not drain impervious surfaces to adjacent properties and that the driveway had a Catch Basin at the bottom that would connect to our site storm water detention system. Per discussion with the project Civil Engineer — Nowak and Fraus the storm water is released from the storm water detention system into the city's storm at an agricultural rate. What this means is that its as if the site were all Greenfield; the release rate is .15 cfs/acre. To further explain we are catching the

storm water generated on site and holding it to be released at this agricultural rate into the City of Ann Arbor's storm water system. The storm system that exists in the street does not work this way. It carries storm/rain water away at the point and time of impact. The storm water detention system holds approximately 20,000 cf of water in pipes that are 72" in diameter

The developer is responsible for storm water management for the entire 2.64 acres. There are swales to control the pervious portion of the site and control the storm water and bring it back to the project site's catch basins. Catch Basins are for both impervious and pervious portions of site.

The site is 2.64 acres. Our allowable discharge is 0.396 cfs.

To explain it, use a bathtub example.

Water runs onto the site (the faucet). Water leaves the site the drain. (0.15 cfs/acre)

Water during a rain event comes onto the site faster then it leaves, therefore the difference needs to be stored. (the tub). Or in our case the underground detention.

Lynn Borset asked to see specific grading plan. Both existing and after. She wants to understand it, the good thing about the Orchard is its shape and that kind of thing.

As many of the landmark trees that can be protected and saved will be. The existing Landmark trees on the site that will be removed due to grading will be replaced per the city of Ann Arbor Landmark tree mitigation — every inch(caliper width of landmark tree) is required to be replaced per these standards.

lan Hubert – "Look out the back of my house and see this. We saw a beautiful orchards, kids sled in the snow, play in the trees and you tell me I have to look a the back of this building now. This is an emotional reaction – this is what your doing to peoples lives. I have a problem with you telling me your going to whatever you like with this land. It's frigg'in ugly, to put it mildly. Not one person here wants to trade this beautiful view for the back of this building. That you can do whatever the hell you like on this land. What can be done about this?

Bowers response was to show them the by rights of the zoning we could build a large 32 unit building that is 3 stories tall and 35 feet high. We reminded the citizens that the property is privately owned by a group of people that have the right to develop the land.

Lynn B. – who are the developers?

Diane Robins (Old Orchard Ct.) – next door neighbor to Hubert's and have the same issue. What can be done to ameliorate the problem? "You said you were regrading the property, does that mean your knocking down the trees? My property line is next to the deck. The entire façade of the building will be blocking the entire glass back of my house"

Bowers response to proximity of buildings to property line, and how close existing residences are to existing property line; was to explain that we are within zoning. The required setback to the side property line is 12', but more importantly for the neighbors issue is the required 15' wide Landscape Buffer required by Ann Arbor. The rear property line has a 30' setback and the 15' wide Landscape Buffer. We did mention that we are saving the street trees on the northeast corner of the site and are installing a sidewalk and sidewalk easement on the project property. Landscape Buffer includes trees every 15' or fraction thereof. And 50% of the trees must be evergreen. Vehicular use areas must be screened by hedge, landform berm, wall or fence. Refuse/recycling must be screened as well.

lan Hubert – Appreciates the landscaping we are going to provide but something has to be done. I personally think it's incorrectly zoned. He also stated that I building is equivalent to approximately 3 neighborhood houses side by side. It doesn't fit in with the neighborhood in his opinion. He understood that by the zoning it could be a lot larger. Asked if rezoning is possible.

Rezoning is only possible by the owner of the property. The citizens were upset because the city was not in attendance

Several Citizens asked whether the developers we are representing have done any other projects like this in Ann Arbor. Are they new to Ann Arbor?

Edie Robins? (Old Orchard Ct) – Tends to agree with lan that if empty nesters these are not the most charming and are more likely to be occupied by Grad students, married lecturers. I could see these buildings with 2 cars not one. There are already traffic problems in this area and not enough street parking and with Jackson going to 3 lanes instead of 4. There is an issue of traffic and how many people will actually occupy these. There is also an issue with the design; my dada was a builder, the 2 outer units with windows vs. the inner units – alleys. "Will you actually sell all 16 units or will this become rental? Because many condo units in Ann Arbor have this economic problem like the big place on Liberty just around the corner. I don't think these are going to be all that attractive as mid priced condos in addition to the problem of all those cars.

lan Hubert – "This raises another good point that this land was zoned when it was originally purchased and Hillside Terrace was actually built, and then partitioned or whatever you call it in your world. That land was zoned with traffic intended to go to Jackson Road and if you look at Hillside Terrace there is a road" Believes traffic from the project parcel was intended to go to Jackson Road via Hillside Terrace. There are already traffic problems on Glendale. They will be exacerbated by this development. There are blind children in the area.

Bowers + address the issue of Hillside Terrace drive by stating that there has not been any discussion with Hillside Terrace regarding: an access easement. We will mention this idea to developer.

lan Hubert – "Now that you mention it no one from Hillside Terrace is here, why were they not invited?" They checked with some of the residents and they knew nothing of this meeting.

Bowers + clarified that the mailing list for the citizens to be notified was provided by the city of Ann Arbor. Hillside terrace was on the list but there were no specific residents just the facility that was notified.

Lynn Borset questioned the zoning of the two houses on the southern end of the property. She believed it is zoned R1B.

Bowers + has reviewed the zoning map and this parcel of land is zoned R4B.

Lisa Hirsch (Glendale Drive) – driveway is directly across from access drive. Most concerning thing for her is that we have children, blind children down the street, special needs children's and children going up and down the street, young drivers pulling right out into the road. My question is can the driveway/access drive be down here at Charlton, a four way stop so that all that traffic. It's just a way better idea than in the middle of the street where we already have speed bumps because of the traffic problem.

Bowers replied that we could try to look at relocating the drive. Drive location is based on grading issues and access to Glendale from the site such that the drive is not extremely steep.

Gretchen Hahn (Abbott and Virginia) – reiterated that there is a lot of traffic issues. She has watched people treat the stop sign at Abbott and Virginia as optional.. This project is going to enter construction just as Jackson Road construction begins and people are going to use the neighborhood as a cut thru. She referenced that MDOT did not do a traffic impact study by and now they have to live with what is going to be constructed. Concerned about traffic and people in neighborhood walking dogs, jogging and kids going down to the park. She does not want the driveway at Charlton or Abbott because they already have a lot of traffic. Wants something done to look at the neighborhood traffic flow. Asked again why traffic isn't going to Hillside Terrace – not accessible.

Bowers + reiterated that Hillside Terrace is private property and we do not have access to it.

Sue Perry (Fair Street) – her opinion is that construction might not start this year. Due to some of the issues the citizens brought up. She believes units are reasonably priced and that as a realtor there is a market for this type of unit. Her statement was to use the public hearings with the City to try and address some of the issues in the neighborhood. (sidewalks and unpaved roads, etc.)

Chris Coombe(Charlton) – questioned Citizen Participation Process. How is meeting documented? Developer is not here, city is not here. How are comments incorporated?

Bowers + by Ann Arbor City Ordinance is required to provide the Planning and Services Development unit with documentation of any meetings or discussion that are held with citizens at leas 10 business days prior to the Planning Commission public hearing on the petition. We will provide to city as required. The essence of what the ordinance requires is that citizens can be involved in the development of their neighborhood and community. Petitioners gather comments regarding their proposals so that they may respond and attempt to mitigate any real or perceived impacts their proposed development may have on the community. The city would like the meetings to facilitate communication between petitioners and interested or potentially affected citizens throughout the application review process. We audio recorded the meeting and have transcribed and summarized as best a possible

Rita Caruso (Glendale Circle) – Agree that middle units are problematic, are they condos or townhomes. Concerned about them not being sold but becoming rental properties. Does zoning prescribe rental or for sale? Concern of impact of rental on neighborhood. The Planning Process is long and everyone makes a profit but the neighbors. Attrition that occurs from long late night City meetings. She asks of the architect to make units that better fit with the neighborhood, provide screening, consider placement of units, etc. It's a neighborhood of people that love their homes and the family neighborhood.

Citizen comment "Should be single family homes, too dense"

Citizen Comment "Planning commission and city council don't live in these neighborhoods," questioned city code requiring grading changes per city code.

Cathy (Charlton) – wants a site plan that shows topography, grading, width, dimension, etc. wants more information

Bowers + emailed the site plan to all the residents email address that was provided/signed in.

Mary Cronin (Charlton) – thinks Glendale circle condos are good should be followed. What about sewage issues/back-ups that's 32 more toilets flushing.

Proposed Project must comply and meet city engineering requirements, City determines capacity. If there are current issues our recommendation is to contact the city now with concerns.

James H (Charlton) – says plan is upside down – parking should be behind like my house. Would like to see a less drastic transition at the end of the road.

Doug Aikenhead(Glendale Circle) – the density is compared to the east side of Glendale drive, this project will triple the density along Glendale drive, concern, water, sewage, traffic, landscaping and storm water, asphalt – need to scale project back

Citizen comment "less density, rendering of front elevation is not compatible with neighborhood"

Hubert – How is garbage handled? Doesn't think car park should be in the front and the dumpster in the front of the property, and all the asphalt on the site. Need to consider some other designs.

Mark Hieber (Kenwood) and Fred Knight (Glendale)—landscape architect. – stood up and present two options for the same density and different design. Key points he wanted to address: (1)access from Glendale – traffic impacts, (2) amount of impervious surface, (3) maximize open spaces, (4) maintain view of open spaces) - Showed access from Hillside Terrace and another option with access drive across from Charlton

We can look at access location off of Glendale – access from Hillside terrace is not an option.

Luis Paez (Charlton) – concerned about how much light/sunlight would be reduced or blocked from the buildings.

Sue Perry – wonders if original idea for apartments was as feeder property for Hillside Terrace if there is a common owner interest.

Greta Dongvillo (Jackson Ave) – questioned how long this zoning has been in place. She said there was movement with respect to holdings 4, 5, 6 years ago. Felt that a zoning change occurred and that no one was informed. "Sure buyer beware". But families don't know. Wanted to know how zoning was changed.

Bowers + understanding are that the property has been zoned this way for 10 years or more. Single Family homes can be in parcels of land that are zoned for multi-family.

Citizen questioned whether two houses to the south needed to be rezoned. "Used to be nice houses".

"FYI 2003 sold for \$250,000.00 sold 2 transfers prior to that do not have dollar values associated with it. Under impression that piece with two houses was separate originally."

Bowers + responded that the two parcels south of the proposed development were zoned RID but that the subject parcel is zoned R4B.

Citizen comment – want it to fit with neighborhood. Neighborhood can't have attached garages has developer considered doing detached garages?

Bowers + responded considering target market attached garages make the most sense.

Citizens questioned right of public ROW for drive – "pedestrian walkway" at the south end of property near houses. Asked about law that allows continued crossing if it has been used this way for X no. of years.

Bowers + there is no easement in the title work for the project parcel allowing a pedestrian easement. As the Architect for the project our job is collect, thoughts, ideas, concerns, wants, needs, issues, etc and present them to the developer.

2 of the 4 owners in the development own student rental properties and commercial properties in Ann Arbor. To our knowledge the developers have obtaining funding for this project.

Citizen Comment – As citizens, who bears the cost of the infrastructure" electrical, sewage, sidewalk, etc.

Developer is responsible for infrastructures connection to the site.- Electrical, Sanitary, Sidewalks on site.

Citizen - If design goes forward consideration of noise and light impact.

Only exterior lighting on project is sconce at entry doors and at side of garage doors.

Lynn Borset asked if there were any variances being requested?

Bowers + stated that we are not seeking variances.

Several citizens asked about the grading plan. How much lower is the site or how high will the buildings tower over the street level.

Bowers + stated with are within the height allowance for the zoning and that we are saving the street trees at the Northeast corner of the property.

There was citizen discussion about when the Orchard was annexed into the city and rezoned. One person commented that was because the apartments west of Hillside Terrace existed that this zoning was deemed appropriate.

Citizen asked if we could summarize the next steps. Where this goes.

Bowers + said that we would create a meeting report. This document would go to the city. We would meet with the owners and present the ideas/concerns. Prior to this meeting the plan was to submit to the City Planning department on January 28th. If everything submitted to the City Planning Department was acceptable the project would be put on the Planning Commission Agenda.

Citizen asked if "we would see the report so we know you didn't change what we said".

Bowers + replied that it was being audio recorded and notes were being taken. The plan was for submission on January 28th and then hopefully a late February Planning Commission meeting. After that it would go to City Council.

Citizens would like to be notified of other meetings. This particular person looking for natural green methods for dealing with storm water, porous paving, rain gardens, other soft natural methods to increase filtration and decrease impervious surface.

Citizens would like another meeting that they could have answers to some of the more technical storm water questions. They would like a developer to attend and someone from the city to attend. They asked for a better location for the meetings - they like Slauson Middle School. They want effective communication with the neighbors.

One citizen questioned the grading and topographic changes to the site and whether there was a code requirement to keep the rolling topography.

#### Summary of Citizen Concerns/Issues:

- Traffic Impact issues on Glendale, stops signs, speed bumps, increase traffic -children
- Parking not enough street parking and project is at bare minimum
- Views from existing properties and maximizing open space on the site
- Storm water management and existing storm water problems in the neighborhood.
- Existing Sanitary sewer issues in the neighborhood.
- What is happening with trees on site and grading.
- Density too dense. Would like less than 16 units
- Citizens feel project is unattractive
- Landscaping, loss of trees on site.
- Use of existing private driveway as walking path thru the Charlton on the west side of Hillside Terrace.
- Would like project to 'fit' better in the neighborhood they would like single family homes or duplexes.
- What is done with citizen participation meeting information?
- Condominium saturation in Ann Arbor

## Citizen Participation Meeting #2 Report

Proposed Condominium Development 312 Glendale Drive Ann Arbor, MI 48103 2<sup>nd</sup> Meeting

Prepared by:
Bowers + Associates, Inc.
2400 S. Huron Parkway
Ann Arbor, MI 48104
Ph: 734-975-2400

Fax: 734-975-2410

Updated February 12, 2013

Date: February 5, 2013 Time: 6:30 pm - 8:10 pm

Location: Eberwhite Elementary

Citizen Participants/Attendees:

David Kitchens

Mary Cronin/John Johnson
Lynn Borset/Charles Compton
Kathy Boris
Lisa Hirsch/Tom McDonough

6655 Jackson Road #84
1807 Charlton 48103
322 Virginia Ave 48103
PO Box 8117 48107-81
303 Glendale Dr 48107

Ann Robins Josh Plavnick Diane Robins Andrea Stevenson

Matt & Marti Keefe Jack Eaton David Friedman Anthony Nastasi Doug Aikenhead Rick & Linda Lee Austin

Susan Perry
Nancy Smith
lan Hubert
Kira Slovacek
Charles Dunlop
Dan Clark
Gus Teschke
Fred & Sally Knight
Huira Kopera

Rita & Vincent Caruso

Chuck Warpehoski
Howard Gold
Luis Paez
Chris Coombe
Mike Anglin
Morda Andima
Debra Wenzez
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2020Winewood 201 Pleasant Place 1507 Charlton Ave 48103 1507 Charlton 48103 549 S. First St. 48103 1713 Abbott Ave 48103 1808 Fair St 48103 1405 Charlton 48103 mecronin@sbcglobal.net LMBorset@umich.edu kathyboris@gmail.com mcdfam5@sbcglobal.net annrobins@mac.com playnick@msu.edu drobins@umich.edu andreast@umich.edu keefemi@sbcglobal.net jackcaton@live.com davidfri@umich.edu adnastasi@gmail.com daiken 160@aol.com erik.ewa@gmail.com sueperry@comcast.net nfsmitha2@hotmail.com ihube@hotmail.com kslovacek@hotmail.com cemdunlop@yahoo.com daniel.j.clark@comcast.net gusteschke@gmail.com frsaknight@aol.com chongala@yahoo.com vrcaruso@comcast.net rlochcaruso@gmail.com cwarpehoski@a2gov.org h.gold@sbcglobal.net lapaca@sbcglobal.net ccoombe@umich.edu MAnglin@a2gov.org moranchristine@yahoo.com Debra599@yahoo.com katescabin@aol.com

### Citizen participation Meeting #2 Report

Susan Bowers opened the meeting by presenting the revisions to the site plan.

Description of Project: 8 buildings each with 2 units. Each unit is approximately 1600 sf with 2 bedroom and 2 bath and a full basement. Developer will offer a loft option – this will not raise the roof line.

#### Citizen Concerns:

- 1) Storm water repeated same issues and concerns as previous meeting. Asked if we handled runoff from Hillside Terrace We don't believe there is run off to this site from Hillside. David Winters said that Hillside is hooked up to City Storm system. Used Lawton Neighborhood as an example and Development(White and Company) on Liberty where Allen's Creek had to be piped.
  - a. Discussed that the site is required to release storm water into the cities storm water system at the agricultural rate (which is a green field site). Citizen asked about urban rate (Bowers + explained that 'Urban' didn't exist and that it's the impervious surfaces and fast water issues). Citizen's were recommended to bring these issues to the cities attention.
  - b. Wanted Principal/Developer named, only contact know is Jeff Starman per tax records.
  - c. Standing water on property and streets during heavy storms was brought up.
  - d. Water flow from new sidewalk was a concern as was water from driveway.
  - e. Underground Storm Detention System has approximately 20,000 cubic feet of storage.
- 2) Sanitary Sewer back-ups a concern. Some neighbors have experienced in this neighborhood
- 3) Discussed footing drain disconnect program and that neighborhood is not on disconnect and one citizen said that city has put a moratorium on footing drain disconnect program but this has not been confirmed
- 4) Wanted Principal/Developer named, only contact know is Jeff Starman per tax records.
- 5) Projected cost of units commensurate with neighborhood. This has not been finalized with developer but will be commensurate with residences in neighborhood.
- 6) Concerns for trees on site being removed and grading. Bowers + stated that all Landmark trees are required to be replaces at "I to I" replacement value. Bowers stated by redesign on site we are able to maintain more topography and hopefully save more of the trees. Bowers + is in the process of working on landscape and grading design with Civil Engineer. Explained that grading is not planned to be extensive because of site redesign we can design better with existing conditions.
- 7) Citizen's discussed sidewalk and advantage vs. disadvantage because of water flowing off of sidewalk.
- 8) Again Citizen's questioned access thru Hillside Terrace. It was explained that Hillside Terrace is Private property and there is no easement to use the drive. Hillside's drive is not a public road, Glendale is a public road.
- 9) Neighbors suggested and discussed using this development as an opportunity to let city know about issues and concerns in neighborhood.
- 10) Landscaping of site. Explained we had to meet city Landscaping requirements as well as Landmark tree replacement. Would like to developer to consider use of Rain Gardens
- 11) Traffic concern was brought up. Speed bumps exist on Glendale. Lots of Children in the neighborhood. Very concerned development will increase traffic problems. Traffic generated per Traffic Institute is 8.32 trips per hour.

12) How will buildings look? Duplex style units. We are looking at varying the exterior finish colors for each building.

13) Concerns for parking. Design meets ordinance parking requirements. Additionally each driveway is long enough to park a car in.- but this is not allowed to count toward parking requirements for the city.

14) Citizens question number of people living in each unit. Therefore increasing traffic. Bowers + said that the target market would probably have 2 occupants per unit.

15) Timeline for Construction. Project will be built in 2 phases(a group of 4 buildings then the next group of four buildings), but probably all built at once. Anticipated Construction time is 18 months.

16) Re-design to duplexes has cost developer more because of extra sides, windows, landscaping, longer driveways, more foundations and less paving.

- 17) Citizens asking if environmental report was done on. It may be required by lender but developer has not done one at this time. The concern expressed by citizens was the proximity to Plating Factory on Jackson road that was torn down. David Kitchens—from his understanding was that when he lived at 312 Glendale(12-15 years ago) that environmental testing was done and nothing conclusive was found.
- 18) Citizen's noted that this site is in the Pall Wellhead Protection Area.

19) Citizen's questioned density of units. Increase to traffic

20) Wanted to know how tall units were? Maximum height by zoning ordinance is 35' and we have a midpoint of the roof line at 17'-6" max. Neighbors would like to see lower roofs.

21) Is developer responsible for traffic light at Glendale and Jackson/Huron? If city determines it is required because of development? Bowers + understanding is that our site is not expected to generate enough traffic to warrant the installation of the traffic signal. But this item will be reviewed by the city.

22) Explained next steps in terms of Submission to city, City Planning Commission and City Council.

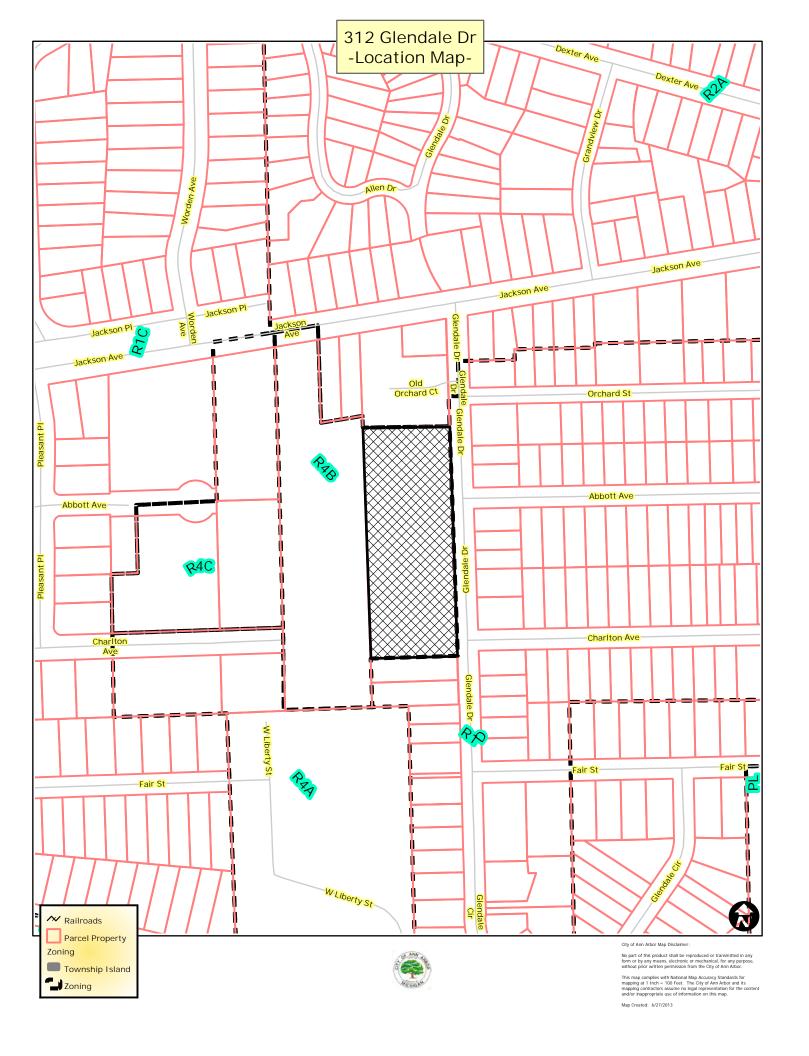
23) The existing drive way at 312 Glendale is used as a pedestrian path to Charlton west of Hillside Terrace. Citizens like this convenience. They discussed the idea of Adverse Possession for an easement. Bowers + asked if this been documented? Neighbors mentioned there is an alternate path thru the woods.

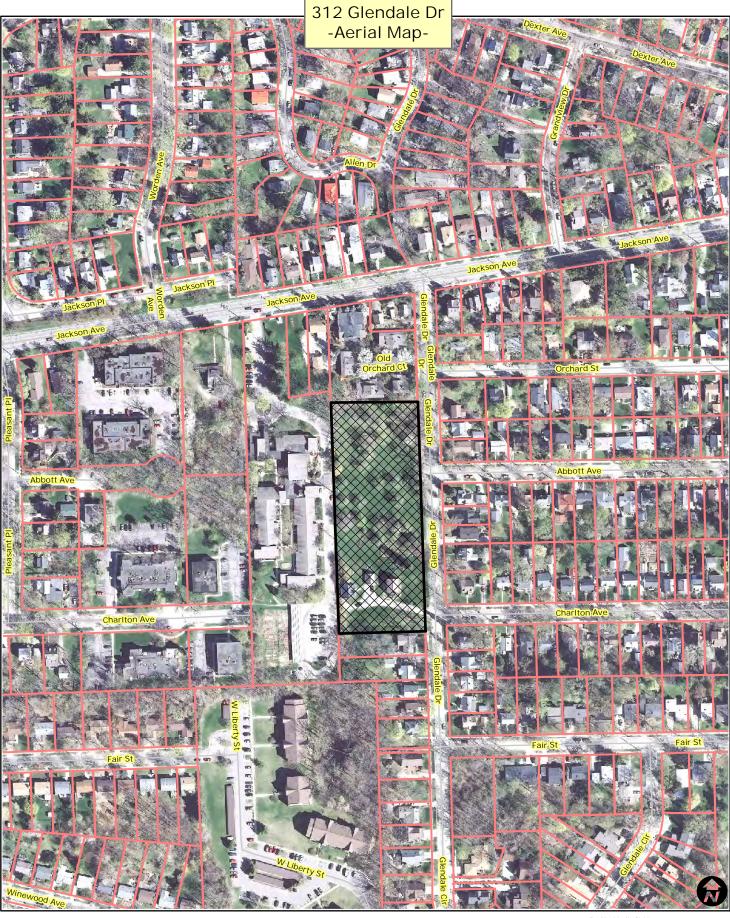
24) Citizens' asked where snow is going to be piled? Bowers + stated we will be required by the city to address this issue.

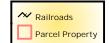
- 25) Asked if developer considered single family. Bowers + stated it was explored but determined not feasible.
- 26) Trash pick up per city of Ann Arbor Ordinance the project is required to have a dumpster because it has more than 10 units. Developer would like to try to work with the city to get curbside trash and recycling pick up.
- 27) Vince Caruso a neighbor suggested going to the city and trying to get the city to buy the land for a park. He stated there is money available in the Greenbelt fund for this. The discussion led to assessed value of land. That number was not determined.

Meeting ended.

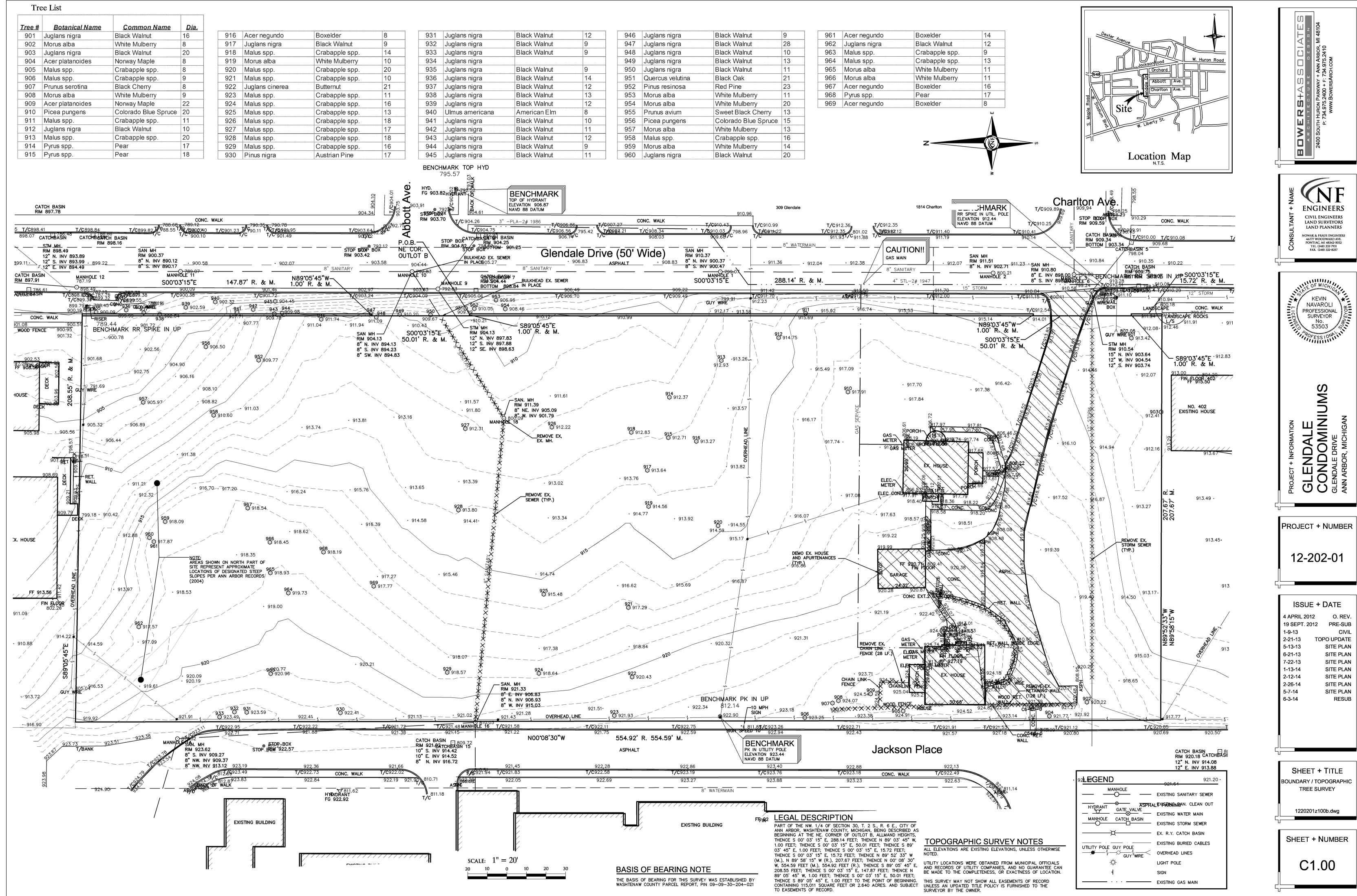
Bowers + told citizens they would be receiving the report via email again. For those signed in.











### ARCHITECT/PLANNER

**BOWERS + ASSOCIATES, INC.** 2400 S. Huron Parkway Ann Arbor, MI 48104 T: 734.975.2400

### CIVIL ENGINEER

F: 734.975.2410

NOWAK AND FRAUS 46777 Woodward Avenue Pontiac, MI 48342-5032 T: 248.332.793 I F: 248.332.8257

### LEGAL DESCRIPTION:

PART OF THE NW. I/4 OF SECTION 30, T. 2S., R. 6 E., CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN, BEING DESCRIBED AS BEGINNING AT THE NE. CORNER OF OUTLOT B, ALLMAND HEIGHTS, THENCE S 00° 03' 15" E, 288.14 FEET; THENCE N 89° 03'45" W, I.00 FEET; THENCE S 00° 03' 15" E, 50.01 FEET; THENCE S 89° 03'45" E, 1.00 FEET; THENCE S 00° 03' 15" E, 15.72 FEET; THENCE S 00° 03' 15" E, 15.72 FEET; THENCE N 89° 52' 33" W (M.), 554.92 FEET(R.), THENCE S 89° 505' 45" E, 208.55 FEET; THENCE S 00° 03'15" E. 147.87FEET; THENCE N 89° 05' 45" W, 1.00 FEET; THENCE S 00° 03' 15" E, 50.01 FEET; THENCE S 89° 05' 45" E, 1.00 FEET TO THE POINT OF BEGINNING. CONTAINING 115,011 SQUARE FEET OR 2.640 ACRES. AND SUBJECT TO

### **DEVELOPMENT PROGRAM:**

EASEMENTS OF RECORD.

THE PROPOSED PROJECT IS FOR 12 MULTI-FAMILY UNITS (THERE ARE SIX TWO-FAMILY BUILDINGS). EACH UNIT HAS IT'S OWN ENTRY, A TWO CAR GARAGE AND IS A TWO BEDROOM UNIT. THE EX. SITE HAS TWO RENTAL HOMES AND VACANT LAND FOR THE DEVELOPMENT. THE TWO EXISTING BUILDINGS ON SITE WILL BE DEMOLISHED. THE PROJECT WILL BE BUILT IN ONE PHASE, THE SOUTH GROUPING OF FOUR WILL BE BUILT FIRST THEN THE NORTH GROUP. THE PROBABLE PROJECT CONSTRUCTION COST IS \$2,300,000.00

### **COMMUNITY ANALYSIS:**

The project is a multi-family residential project that will increase the property taxes on the site and therefore contribute to the economics for the public school system. The project is fairly consistent with the surrounding uses of single family and multi-family use. The Air and Water quality should not be adversely impacted; the project is residential. The site is sloping and we will try to maintain as much of this character as possible.

# STATEMENT OF INTEREST IN LAND:

THERE ARE SEVERAL PARTNERS IN THE DEVELOPMENT. THERE IS COMMON OWNERSHIP WITH ONE OF THE PARTNERS IN THE GLENDALE PROPERTY AND HILLSIDE TERRACE TO THE WEST.

### NATURAL FEATURES:

THERE ARE 23 LANDMARK TREES AND NATURAL STEEP SLOPES ON THE SITE. SHEETS LI AND L2 INDICATE THE EXISTING TREE INVENTORY AND TREE PRESERVATION/MITIGATION PLAN. WE ARE PRESERVING THE EXISTING STREET TREES AT THE NORTH END OF THE SITE AND BRINGING THE SIDEWALK ONTO THE PROPERTY, TO PRESERVE THE CHARACTER OF THE TREES HANGING OVER THE STREET. MANY OF THE LANDMARK TREES ARE BEING REMOVED TO ACCOMMODATE THE STORM WATER MANAGEMENT SYSTEM. THEY ARE BEING REPLACED PER THE ORDINANCE. THERE ARE 23 LANDMARK TREES ON THE SITE, SEE

THERE ARE STEEP SLOPES ON THE NORTH SIDE OF THE PROPERTY PER 'MAP OF STEEPS SLOPES ANN ARBOR 2004' ALTERNATE ANALYSIS: FOR ALTERNATIVE SITE PLAN ANALYSIS, SEE SHEET SPI.00B. ALTERNATIVE (I) WAS A LOOPED DRIVE - DISTURBED TOO MUCH OF THE STEEP SLOPES AND TREES. ALTERNATIVE (2) WAS A LARGE APARTMENT STYLE BUILDING WITH PARKING BENEATH. ALTERNATIVE (3) WAS THE PROPOSED PLAN PRIOR TO WASHTENAW COUNTY WATER RESOURCE COMMISSIONER'S REVIEW REQUIREMENTS.

### TRAFFIC IMPACT:

INSTITUE OF TRANSPORTATION ENGINEERS: RESIDENTIAL: CONDOMINIUM- .52 TRIPS PER UNIT PEAK HOUR .52 TRIPS/UNIT \*12 = 6.24 TRIPS PER HOUR, DOES NOT REQUIRE A TRAFFIC STUDY LESS THAN 50 PEAK HOUR TRIPS

FoB(FOX SANDY LOAM 2-6% SLOPES) and MmC (MIAMI LOAM 6-12% SLOPES) **ACTIVE OPEN SPACE:** 

### PROVIDED

SIDEWALK NOTES: I. ALL SIDEWALK ARE TO BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING

SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED

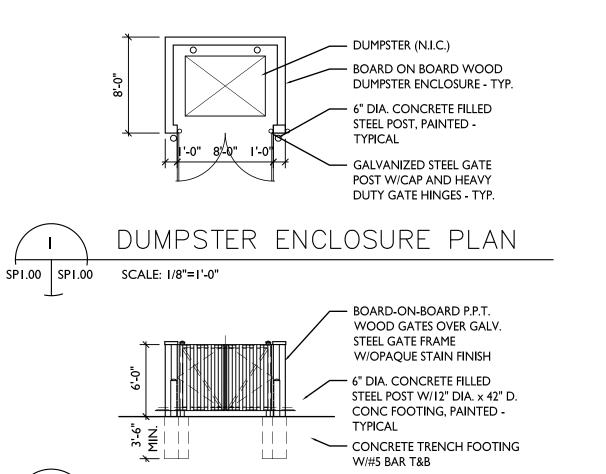
IN ACCORDANCE WITH CITY STANDARDS

### GENERAL NOTES

- I. ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO REDUCE GLARE AND SHALL BE ARRANGED TO NOT INTERFERE WITH THE VISION OF PERSONS ON ADJACENT ROADWAYS OR ADJACENT PROPERTY.
- 2. ALL SIGNS SHALL MEET LOCAL MUNICIPALITY ORDINANCE REQUIREMENTS.
- 3. BUILDINGS WILL NOT BE FIRE SUPPRESSED 4. ALL RETAINING WALLS SHALL BE THE RESPONSIBILITY OF THE DEVELOPMENT TO MAINTAIN.

### COMPARISON CHART

|   |          | COMP                                       | KISON CHART               |   |
|---|----------|--|---------------------------|---|
|   |          | EXISTING                                   | PROPOSED                  | REQUIRED  |
| Zoning                                  |          | R4B (Multiple-Family<br>Dwelling District) | R4B                       | R4B   |
| Gross Lot Area                          |          | 115,011 SF/2.64 Acres                      | 115,011 SF                | 21,780 sq ft MIN  |
| Min. Lot Ar<br>Dwelling U               |          | 57,505 SF                                  | 9,584 SF/DwellingUnit     | 2,900 sq ft MIN   |
| Min. Usable Open<br>Space in % Lot Area |          | 97.8%                                      | 80%                       | 55% MIN   |
| Min. Active<br>Space                    | Open     | 600 SF Req;d                               | 3600 SF                   | 300 sq ft per dwelling unit MIN (300 x 12 = 3600 sf Reqd')        |
| Ø                                       | Front    | 64.55'                                     | 22.42'                    | 15 ft MIN<br>40 ft MAX  |
| Setbacks                                | Side(s)  | 90.04'                                     | 56.92', 44.17'            | 12' + ((93'5"-50')'*1.5") = 17'-5"'<br>12 ft MIN / <b>17'-5</b> " |
|   | Rear     | 8.17'                                      | 31.75'                    | 30' + ((93'8-50')*1.5")= 35'6"'<br>30 ft MIN / <b>35'-6</b> "     |
| Building Area                           |          | 2,577 SF                                   | 22,500 SF                 |   |
| Min. Lot Size                           |          |  |                           | 14,000 SF   |
| Dwelling Units                          |          | 2  | 12                        |   |
| Height                                  |          | 18' Mid-point                              | 17.8' Mid-point (varies)  | 35 ft MAX   |
| Parking - Automobiles                   |          | 2 In Garage                                | 35 (24 In Garages)        | 18 spaces MIN   |
| Parking - B                             | licycles | 0  | 12 Class 'A' (In Garages) | NONE – not req'd at duplex  |
|   |          |  |                           |   |
|   |          |  |                           |   |
|   |          |  |                           |   |



DUMPSTER ENCLOSURE ELEVATION SPI.00 | SPI.00 | SCALE: I/8"=1'-0"

GLE CON GLENDA ANN ARE

12-202-01

ISSUE + DATE

SHEET + TITLE SITE PLAN

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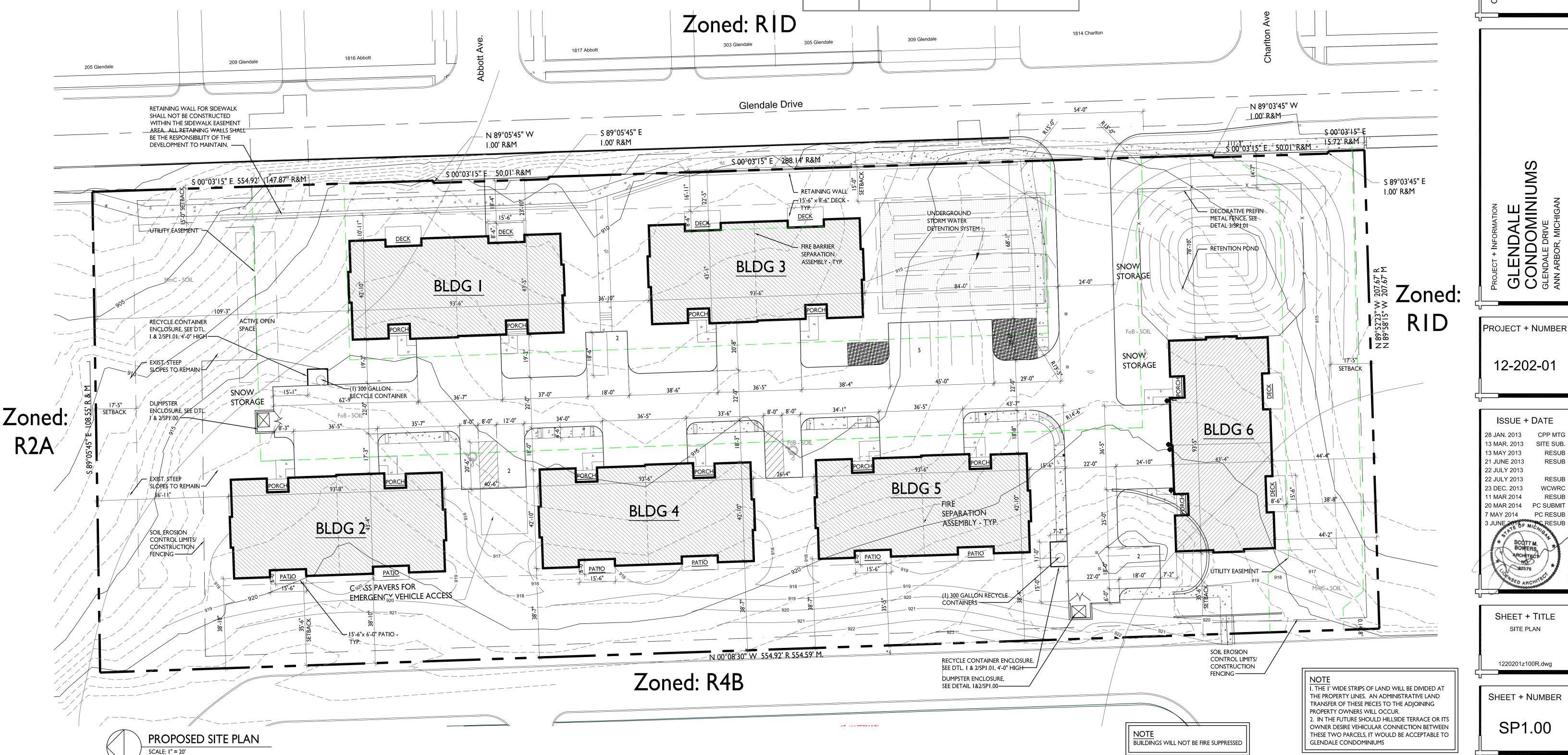
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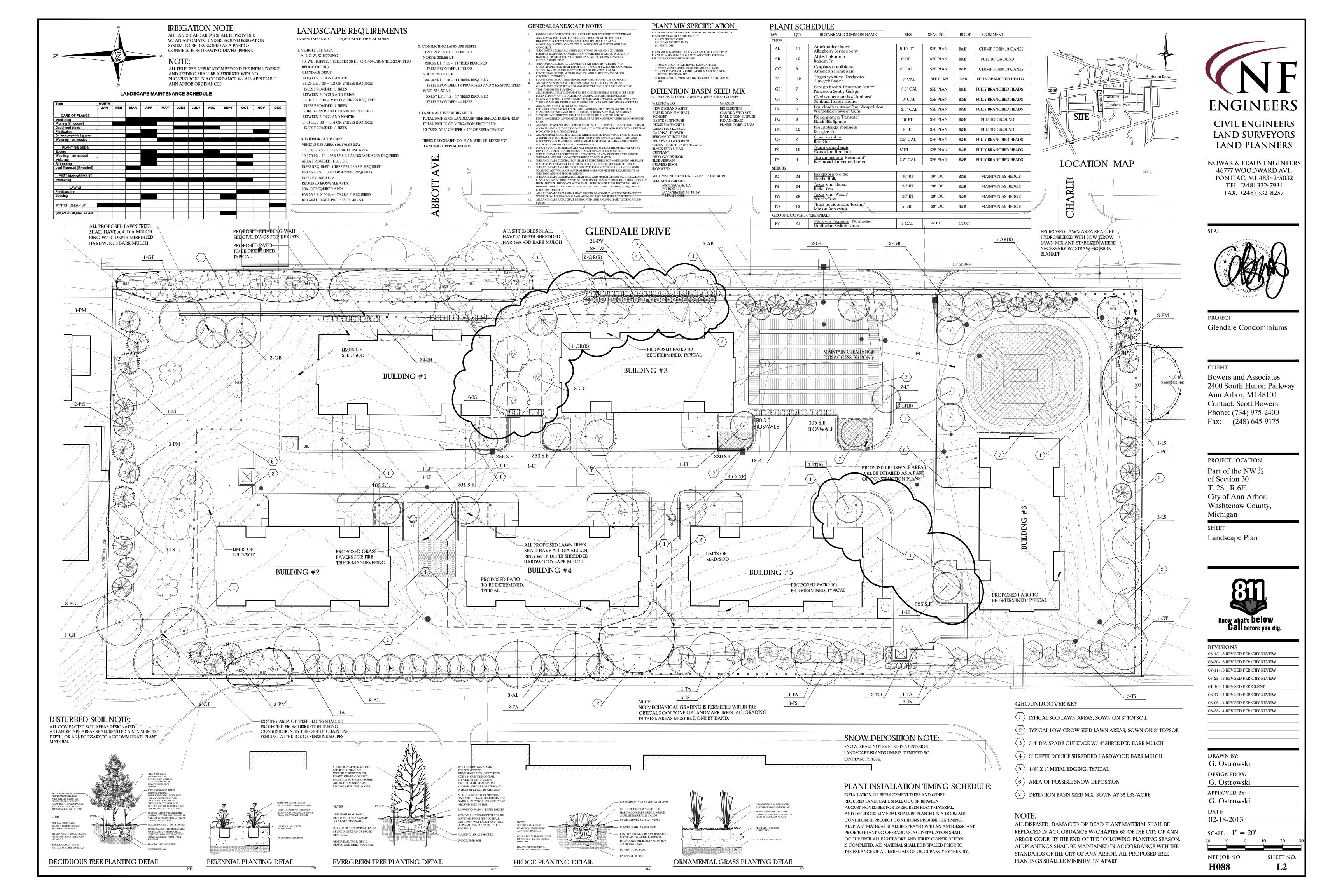
**RESUB** 

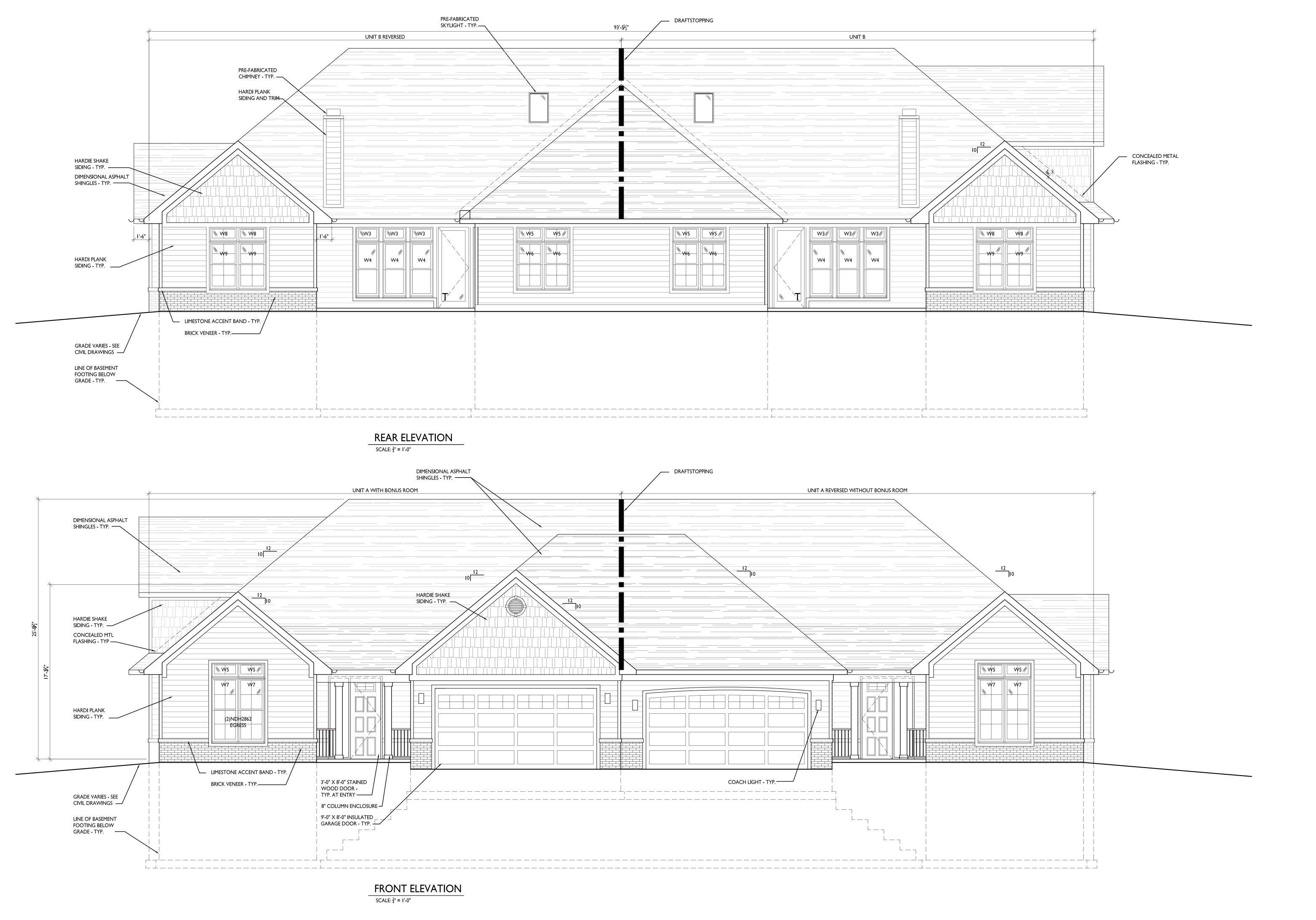
WCWRC

PC SUBMIT

**RESUB** 







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www.BowersArch.com

CONSULTANT + NAME

GLENDALE
CONDOMINIUMS
312 GLENDALE DRIVE
ANN ARBOR, MICHIGAN

PROJECT + NUMBER
12-202-01

ISSUE + DATE

14 FEB. 2013 PRE-SUBM
22 FEB. 2013 CITY SUB
25 MAR 2013
13 MAY 2013 RESUB
21 JUNE 2013 RESUB
22 JULY 2013 RESUBMIT
25 JULY 2013 O REV
18 MAR 2014 PC SUBMIT
7 MAY 2014 PC RESUB

SHEET + TITLE

EXTERIOR

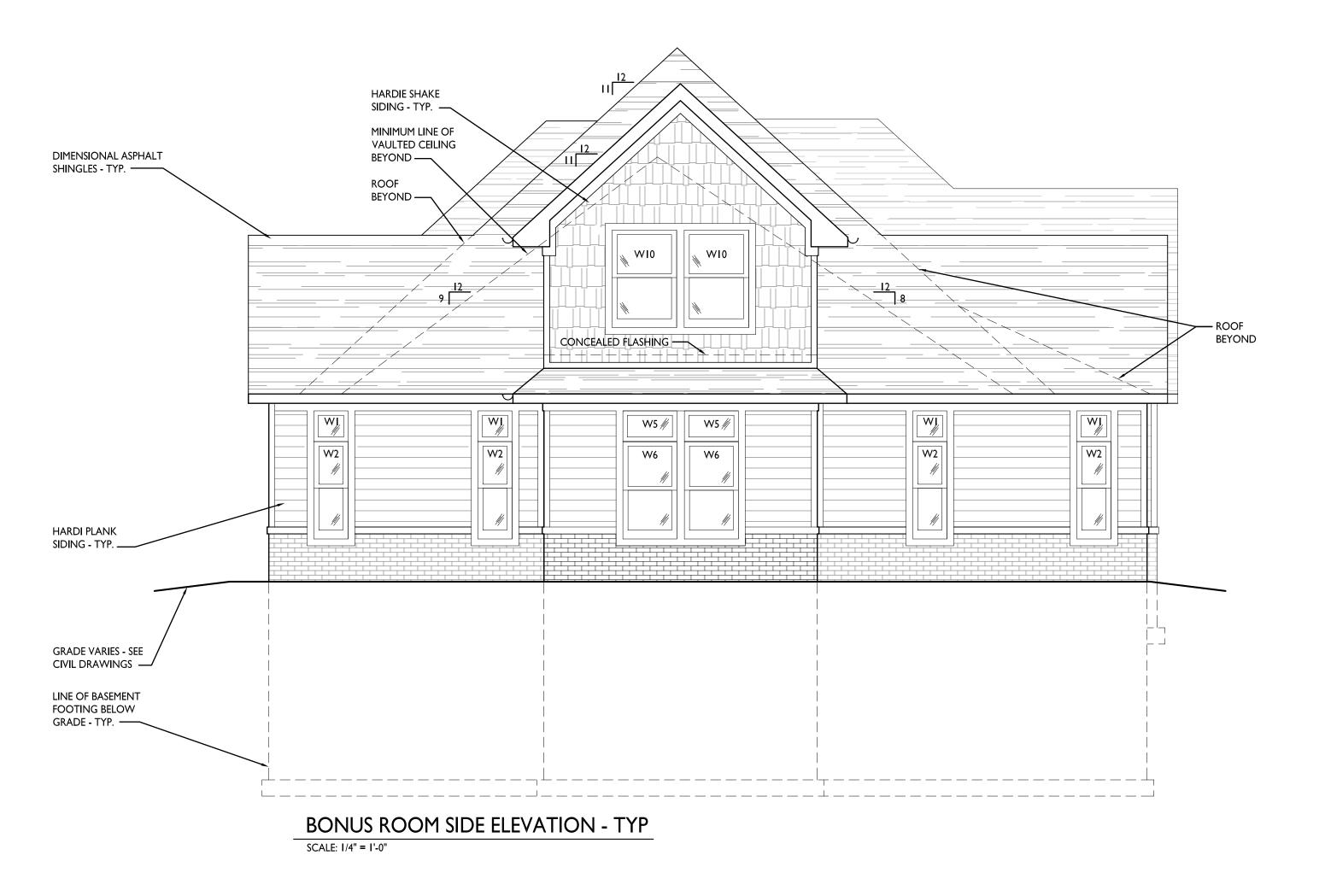
ELEVATION

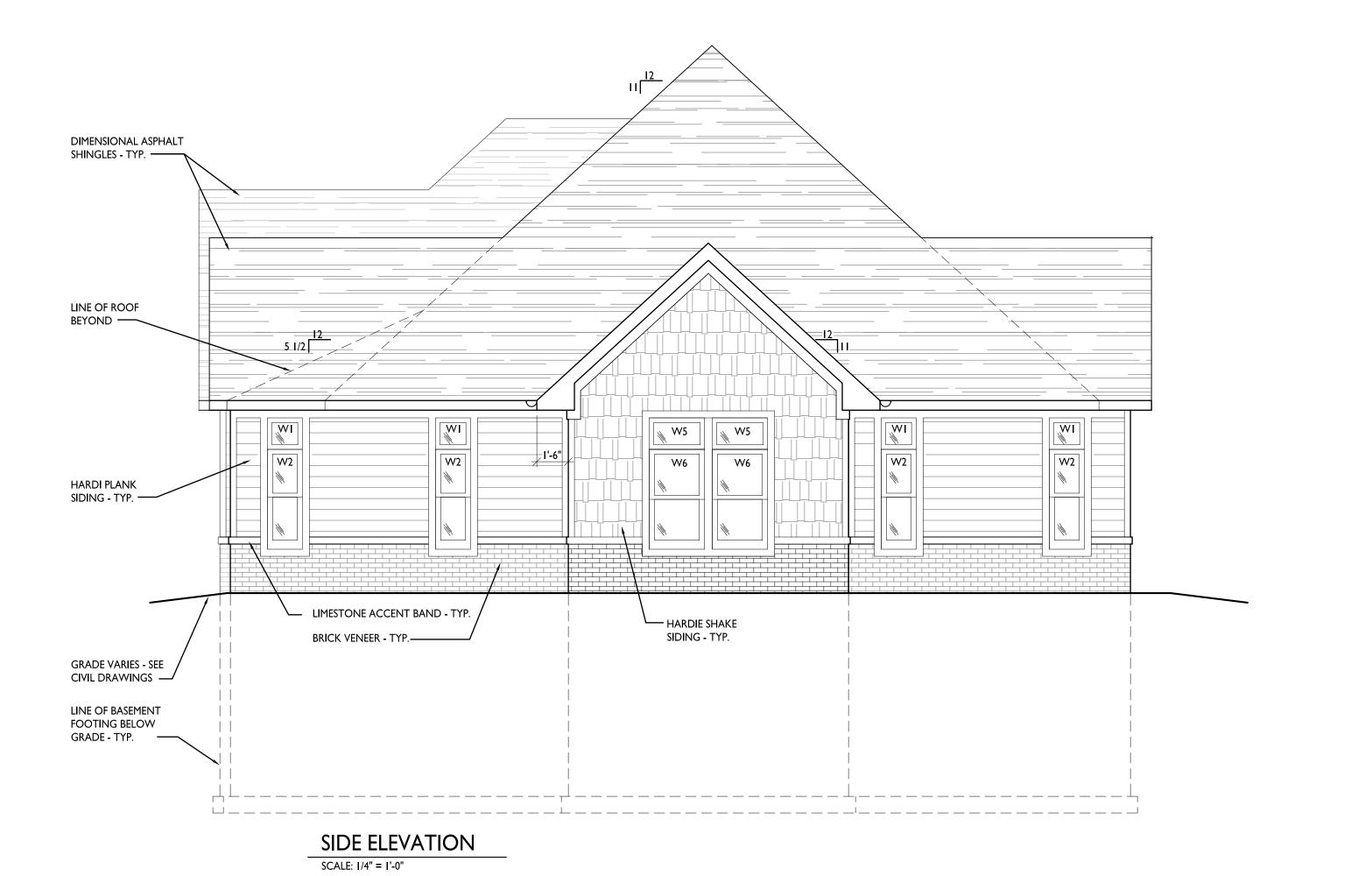
UNIT A

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SHEET + NUMBER

A5.00





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PROJECT + INFORMATION

GLENDALE

CONDOMINIUMS
312 GLENDALE DRIVE
ANN ARBOR, MICHIGAN

PROJECT + NUMBER

12-202-01

SHEET + TITLE

EXTERIOR

ELEVATIONS

UNIT A

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SHEET + NUMBER

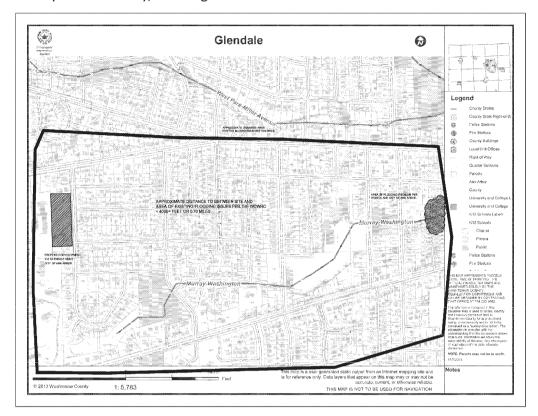
A5.01

### H088 – GLENDALE CONDOMINIUMS 312 GLENDALE DRIVE, ANN ARBOR, MICHIGAN **DETENTION STUDY**

### <u>Introduction</u>

The Owners of the subject property desire to make improvements to the existing site. Site plans were submitted to the City of Ann Arbor for their review and comment. The City engaged the Washtenaw County Water Resources Commission (WCWRC) to assist in the review of the storm water management system. In the latest set of review comments (August 1, 2013), the WCWRC included a new comment indicating that there are downstream flooding issues in the Murray/Mulholland/Washington area. This area of flooding is approximately 4,000 feet (0.76 miles) from the site which is located at 312 Glendale Drive and is 2.64 acres in size.

In their comments the WWCWRC suggest that a study be done for the drainage area tributary to the Murray/Washington drain.



While we are confident that a 2.64 acre site would have little to no impact on a site located 4,000 feet away and the site area being a very small portion of a much larger tributary area, the cost of such a study is cost prohibitive. As an alternative, the WCWRC offered as an option, that the site provide a retention basin as part of the storm water management system. The retention basin size to contain the volumetric difference of storm water generated between pre-development and post-development.

Since receiving those comments the site has gone through several iterations of redesign to accommodate an additional basin and meet the requests of the City and the WCWRC.

As the plans show, the design of the retention portion of the system significantly reduces the <u>rate of flow</u>.

| Site Discharge Rate - Undeveloped      | Q <sub>Existing</sub> = 5.523 cfs |
|--|-----------------------------------|
| Design Detention Discharge Rate – With | $Q_{Design} = 0.343 \text{ cfs}$  |
| Improvements                           |                                   |

Regardless of the reduced <u>rate of flow</u> meeting the requirements of the WCWRC design parameters, a detention basin has been incorporated into the storm water management system. The detention basin has been sized to contain the **volume** of storm water generated equal to the difference between pre and post development conditions.

While the <u>rate of flow</u> of storm water from the site has been greatly reduced due to the inclusion of a retention basin, the **volume** of storm water will increase due to the addition of hard surfaces (pavement, buildings, etc.). The volume of water generated by the proposed improvements to this development is negligible when compared to the overall tributary area to the drain. Regardless, the revised storm water management plan includes both detention to meet the flow requirements and retention to meet the volume requirements as requested by the WCWRC and the City of Ann Arbor.

As indicated the current design includes both a detention basin and a retention basin as part of the storm water management system. The retention pond is designed so that the runoff volume difference between pre-development and post-development will be retained. The water stored in the retention basin portion of the system will dissipate through a combination of:

Percolation

- Evaporation
- Transpiration

Calculating the pre and post development runoff volume requires the generation of a unit hydrograph. Opting for a conservative approach and a small drainage area, the Rational Method was used.

A runoff coefficient (C<sub>Value</sub>) was calculated for both the existing pre-development and proposed post development scenarios.

| Determine Existing Site Runoff Coefficient: |                     |                |       |
|---|---------------------|----------------|-------|
| Existing L and Use:                         | Runoff Coefficient: | Drainage Area: |       |
| Pavement                                    | 0.95                | 0.112          | Acres |
| Building                                    | 0.95                | 0.059          | Acres |
| Gravel                                      | 0.50                | 0.000          | Acres |
| Landscape / Open Space:                     | 0.30                | 2.471          | Acres |
| Total Acreage:                              |                     | 2.642          | Acres |

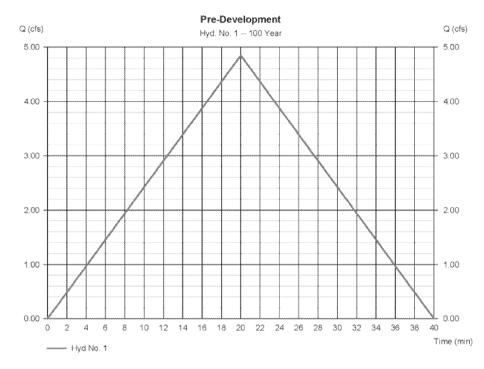
| Determine Proposed Site Run | off Coefficient:    |                |            |
|-----------------------------|---------------------|----------------|------------|
| Proposed Land Use:          | Runoff Coefficient: | Drainage Area: |            |
| Pavement                    | 0.95                | 0.350          | Acres      |
| Building                    | 0.95                | 0.520          | Acres      |
| Landscape / Open Space:     | 0.30                | 1.772          | Acres      |
| Total Acreage:              |                     | 2              | .642 Acres |

A time of concentration TC of 20 minutes was used in the calculation.

The design storm modeled was a 100-year – set for Washtenaw County parameters.

The model was run using Hydroflow Hydrographs AutoCAD® Civil 3D® v. 6.066.

| Hydrograph   | n Report  |   |  |
|--|---|---|--|
| Hydraflow Hydrographs Ext  | Thursday, Nov 7, 2013   |   |  |
| Hyd. No. 1   |   |   |  |
| Pre-Development  |   |   |  |
| Hydrograph type<br>Storm frequency<br>Time interval<br>Drainage area<br>Intensity<br>IDF Curve | = Rational<br>= 100 yrs<br>= 1 min<br>= 2.642 ac<br>= 6.111 in/hr<br>= Intensity Washtenaw 100 year.IDF | Peak discharge<br>Time to peak<br>Hyd. volume<br>Runoff coeff.<br>Tc by User<br>Asc/Rec limb fact | = 4.844 cfs<br>= 20 min<br>= 5,812 cuft<br>= 0.3<br>= 20.00 min<br>= 1/1 |



CIVIL ENGINEERS

LAND SURVEYORS LAND PLANNERS

NOWAK & FRAUS ENGINEERS 46777 WOODWARD AVE. PONTIAC, MI 48342-5032

H088 - Glendale Storm Management

H088 – Glendale Storm Management



H088 – Glendale Storm Management



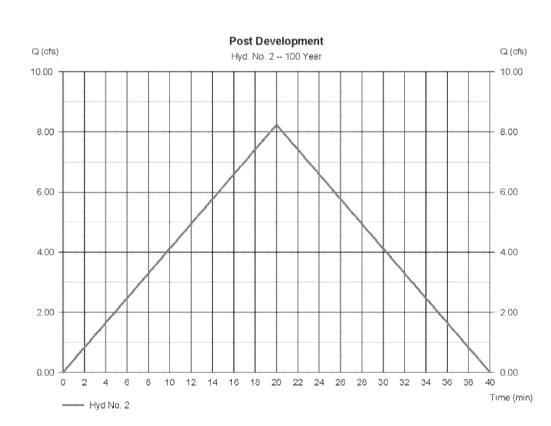
H088 - Glendale Storm Management

# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066 Hyd. No. 2 Post Development Hydrograph type = Rational Peak discharge = 8.234 cfs = 20 min Storm frequency = 100 yrs Time to peak = 9,881 cuft = 2.642 ac Runoff coeff. Drainage area = 6.111 in/hr = 20.00 min

Asc/Rec limb fact = 1/1

= Intensity Washtenaw 100 year.IDF



The results show:

| Pre-Development Existing Flow Volume | 5,812 cf |
|--------------------------------------|----------|
| Post Development Flow Volume         | 9,881 cf |

Based on the analysis, the difference between pre-development and post development is 4,069 cf. The volume provided for retention is 4,162 cf.

### STORM WATER SYSTEM NARRATIVE

The storm water management system for this site consists of three components: collection, detention/retention and discharge. The specifics of each component are as follows:

Storm water falling on the site and specifically onto the hard surfaces of the site is directed to collection points which are storm catch basins. The catch basins are sized and located to collect storm water from specific drainage areas in accordance with the requirements of the City of Ann Arbor, the Washtenaw County Water Resources Commission (WCWRC) and good engineering practice. The layout of the catch basins can be seen on Sheets C3.00 and C4.00. The drainage areas are shown on Sheet C4.00.

Once collected the storm water is conveyed underground through a piping network to a surface pond/basin. The piping network diameter and slopes have been calculated to convey the volume and rate of storm water being collected. The layout of the piping network can be seen on Sheets C3.00 and C4.00.

Prior to discharge into the surface pond/basin the water passes through a mechanical forebay. The forebay's function is to allow silts/sediments and debris to settle and be removed from the storm water stream prior to entering the pond/basin.

The above ground basin for this site has two functions. A portion of the basin will provide retention. The City and the WCWRC required that the difference in volume of water generated between pre-development and post-development be retained on site. The methodology of calculating that volume is further detailed on Sheet C8.00.

The retention volume of the surface pond is the volume below the invert of the outlet for the pond. The entire volume calculated to be retained cannot all be provided in the pond based on layout, grading and design of the site. Additional retention volume is provided in the stone below/underneath the underground detention system.

The second function of the surface basin/pond will be to pass water to the underground detention system. The underground detention system has been designed to handle the volume of water in accordance with the requirements of the WCWRC. The volume provided in this system accommodates: first flush, bank full and 100-year storm events.

The function of the underground detention system is to reduce the rate of flow from the developed site to an agricultural rate in accordance with the requirements as set forth by the City of Ann Arbor and the WCWRC. The underground detention system design and calculations are shown on Sheets C5.00 and C6.00.

A rock bed will be placed underneath the underground detention system. The voids in the rock will store the rest of the required retention volume. Water stored in the voids will be below the invert of the pipes and therefore will be retained. Water in retention will leave the site through the following methods: percolation, evaporation, transpiration. Water in the detention portion of the system will be discharged into the City storm system at a much reduced rate.

PROJECT + NUMBER

## ISSUE + DATE

12-202-01

4 APRIL 2012 O. REV. 19 SEPT. 2012 PRE-SUB 1/9/13 CIVIL 2/14/13 SITE PLAN 5/13/13 SITE PLAN 6/21/13 SITE PLAN 7-22-13 SITE PLAN 1-13-14 SITE PLAN 2-12-14 SITE PLAN 5-7-14 SITE PLAN 6-3-14 RESUB

> SHEET + TITLE **Detention Narrative PRELIMINARY**

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SHEET + NUMBER

C8.00

ENGINEERS

H088 – Glendale Storm Management



H088 – Giendale Storm Management