



# PLANNING COMMISSION MEETING AGENDA REGULAR MEETING

500 W. Big Beaver  
Troy, MI 48084  
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Donald Edmunds, Chair, Tom Krent, Vice Chair  
Ollie Apahidean, Karen Crusse, Carlton M. Faison, Michael W. Hutson  
Padma Kuppa, Philip Sanzica and John J. Tagle

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**August 9, 2016**

**7:00 P.M.**

**Council Board Room**

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1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – July 26, 2016
4. PUBLIC COMMENT – For Items Not on the Agenda

### **PRELIMINARY SITE PLAN REVIEW**

5. PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2015-0014) – Proposed Aloft Hotel, East side of Troy Center Drive, South of Big Beaver (PID 88-20-28-101-067), Section 28, Currently Zoned BB (Big Beaver) District

### **OTHER ITEMS**

6. CONDITIONAL REZONING APPLICATION (File Number CR JPCR2016-003) – Proposed McClure Road Apartments, North of Big Beaver, East of Crooks, East side of McClure (3142, 3114, 3086 McClure), Section 20, From R-1B (One Family Residential) District to BB (Big Beaver) District
7. ZONING ORDINANCE TEXT AMENDMENT (File Number ZOTA 249) – Enhanced Cluster Option
8. PUBLIC COMMENT – Items on Current Agenda
9. PLANNING COMMISSION COMMENT

ADJOURN

**NOTICE:** People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at [clerk@troymi.gov](mailto:clerk@troymi.gov) or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

Chair Edmunds called the Regular meeting of the Troy City Planning Commission to order at 7:00 p.m. on July 26, 2016 in the Council Board Room of the Troy City Hall.

1. ROLL CALL

Present:

Ollie Apahidean  
Karen Crusse  
Donald Edmunds  
Michael W. Hutson  
Tom Krent  
Padma Kuppa  
Phillip Sanzica  
John J. Tagle

Absent:

Carlton M. Faison

Also Present:

R. Brent Savidant, Planning Director  
Ben Carlisle, Carlisle Wortman Associates  
Allan Motzny, Assistant City Attorney  
Joe Blair, Planning Department NEXT Assistant  
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Mr. Savidant announced the applicant for Agenda item #10 requested a postponement.

**Resolution # PC-2016-07-048**

Moved by: Kuppa  
Support by: Tagle

**RESOLVED**, To approve the Agenda as revised.

Yes: All present (8)  
Absent: Faison

**MOTION CARRIED**

3. APPROVAL OF MINUTES

**Resolution # PC-2016-07-049**

Moved by: Sanzica  
Support by: Krent

**RESOLVED**, To approve the minutes of the July 12, 2016 Regular meeting as submitted.

Yes: All present (8)  
Absent: Faison

**MOTION CARRIED**

4. PUBLIC COMMENT – Items not on the Agenda

There was no one present who wished to speak.

5. ZONING BOARD OF APPEALS (ZBA) REPORT

Mr. Sanzica gave a report on the July 19, 2016 Zoning Board of Appeals meeting.

6. PLANNING AND ZONING REPORT

Mr. Savidant addressed:

- Proposed Draft Master Plan scheduled to be on the August 8, 2016 City Council agenda.
- Housekeeping list of potential amendments to the Zoning Ordinance.

**SPECIAL USE AND PRELIMINARY SITE PLAN REVIEWS**

7. PUBLIC HEARING - SPECIAL USE REQUEST AND PRELIMINARY SITE PLAN REVIEW (File Number JPLN2016-0020) – Proposed Rite Aid Pharmacy Drive-Through Addition, Southeast Corner of South Boulevard and Crooks (1981 W South Boulevard), Section 04, Currently Zoned NN “U” (Neighborhood Node “U”) District

Mr. Carlisle reported on the proposed Rite Aid Pharmacy Drive-Through. He recommended that Special Use Request and Preliminary Site Plan approval be granted with conditions as identified in his report dated July 18, 2016. Mr. Carlisle clarified that a photometric plan only would be required if there are changes in the existing lighting on site.

The applicant Brian Fabo was present. Mr. Fabo said the existing sidewalks on both street frontages are currently 8 feet in width. He advised there are no changes to the existing lighting on site and that an updated landscape plan and bicycle racks would be provided, as required.

There was discussion on:

- Drive-through bypass lane; traffic flow.
- Landscaping bypass lane adjacent to drive-through window.
- Reciprocal cross access easements.

PUBLIC HEARING OPENED

No one was present to speak.

PUBLIC HEARING CLOSED

**Resolution # PC-2016-07-050**

Moved by: Krent  
 Support by: Sanzica

**RESOLVED**, That Special Use Approval and Preliminary Site Plan Approval for the proposed Rite Aid drive-through addition, Southeast corner of South Boulevard and Crooks (1981 W. South Boulevard), Section 4, Currently Zoned NN “U” (Neighborhood Node) District, be granted, subject to the following conditions:

1. Provide two (2) bicycle parking spaces.
2. Insure both sidewalks on Crooks and South Boulevard are 8-feet in width.
3. Submit a complete landscape plan inclusive of outdoor plants in the bypass through-lane next to the drive-through lane for the drive-through window.

Yes: All present (8)  
 Absent: Faison

**MOTION CARRIED**

8. **PUBLIC HEARING - SPECIAL USE REQUEST AND PRELIMINARY SITE PLAN REVIEW (File Number SU JPLN2016-0017)** – Proposed 1-800 Self Storage Facility, East side of Coolidge, South of Maple (1330 Coolidge), Section 32, Currently Zoned MR (Maple Road) District

Mr. Carlisle reported on the proposed 1-800 Self Storage facility. He addressed the two phases of the project, its proximity to the Oakland/Troy Airport and related Federal Aviation Administration (FAA) regulations, sustainable design option for the Phase 2 and screening between adjacent uses.

Present were the applicant Joseph Guido and property owner/partner Eugene Sherizen.

There was discussion on:

- Sustainable design standards.
- FAA regulations and approval process.
- Screening as relates to landscaping, fencing, building visibility and security.

Members of the Planning Commission expressed overall support of the proposed use and site design. The members agreed to ask the applicant to come back before the Board after sustainable design standards are finalized and the FAA approval is complete.

**PUBLIC HEARING OPENED**

No one was present to speak.

**PUBLIC HEARING CLOSED**

**Resolution # PC-2016-07-051**

Moved by: Tagle  
 Support by: Hutson

**RESOLVED**, To postpone Special Use Approval and Preliminary Site Plan Approval for the proposed 1-800 Self Storage Facility, East side of Coolidge, South of Maple (1330 Coolidge), Section 32, Currently Zoned MR (Maple Road) District, until the applicant fulfills the requirements of the Sustainable Design Committee and has a definitive response from the FAA.

Yes: All present (8)  
 Absent: Faison

**MOTION CARRIED**

**PRELIMINARY SITE PLAN REVIEW**

- 9. **PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2016-0009)** – Proposed Maplelawn II Mixed Use, West side of Crooks, North of Maplelawn (PID 88-20-29-401-025), Section 29, Currently Zoned IB (Integrated Industrial and Business) District

Messrs. Savidant and Carlisle thanked the applicant for his quick responsiveness in addressing and following through with site plan details discussed at the July 12, 2016 Planning Commission meeting.

Mr. Carlisle recommended that Preliminary Site Plan approval be granted with a condition that the landscape plan is updated prior to Final Site Plan approval.

The applicant Joe Caradonna was present. Mr. Caradonna introduced Ozell Gothard, project landscape architect, who was present in the audience. Building material samples and updated elevations were circulated.

Chair Edmunds opened the floor for public comment. There was no one present; the floor was closed for public comment.

**Resolution # PC-2016-07-052**

Moved by: Hutson  
 Support by: Krent

**RESOLVED**, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed mixed use commercial building, located on the west side of Crooks, north of Maplelawn, Section 29, within the IB (Integrated Industrial and Business) District, be granted, subject to the following condition:

- 1. Update landscape plan to indicate tree preservation (including tree preservation techniques on plan) prior to Final Site Plan Approval.

Yes: All present (8)  
 Absent: Faison

**MOTION CARRIED**

- 10. PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2015-0014) – Proposed Aloft Hotel, East side of Troy Center Drive, South of Big Beaver (PID 88-20-28-101-067), Section 28, Currently Zoned BB (Big Beaver) District

*(Item postponed by applicant; refer to Approval of Agenda, Agenda item #2.)*

**OTHER ITEMS**

- 11. PUBLIC COMMENT – Items on Current Agenda

There was no one present who wished to speak.

- 12. PLANNING COMMISSION COMMENT

There were general Planning Commission comments.

The Regular meeting of the Planning Commission adjourned at 8:30 p.m.

Respectfully submitted,

\_\_\_\_\_  
 Donald Edmunds, Chair

\_\_\_\_\_  
 Kathy L. Czarnecki, Recording Secretary

DATE: August 3, 2016

TO: Planning Commission

FROM: R. Brent Savidant, Planning Director

SUBJECT: PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2015-0014) – Proposed Aloft Hotel, East side of Troy Center Drive, South of Big Beaver (PID 88-20-28-101-067), Section 28, Currently Zoned BB (Big Beaver) District

The petitioner Group 10 Management submitted the above referenced Preliminary Site Plan application for a proposed five-story, 126-room hotel.

The property is currently zoned BB (Big Beaver) District. The Planning Commission is responsible for granting Preliminary Site Plan approval for this item.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.

G:\SITE PLANS\SP JPLN 2015-0014 Aloft Hotel Sec 28\Aloft PC Memo 2016 08 09.docx

**PROPOSED RESOLUTION**

PRELIMINARY SITE PLAN REVIEW (File Number SP JPLN2015-0014) – Proposed Aloft Hotel, East side of Troy Center Drive, South of Big Beaver (PID 88-20-28-101-067), Section 28, Currently Zoned BB (Big Beaver) District

**Resolution # PC-2016-08-**

Moved by:

Seconded by:

**RESOLVED**, The Planning Commission hereby approves a shared parking arrangement with the abutting property;

**BE IT FINALLY RESOLVED**, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Aloft Hotel, located on the east side of Troy Center Drive, south of Big Beaver, Section 28, within the BB (Big Beaver) District, be granted, subject to applicant the following:

1. Provide the shared parking agreement and location of shared parking as part of the final site plan.
2. The applicant shall use clear glass for the area noted as “1<sup>st</sup> floor public space glazing” that is located at the canopy entrance.
3. Submit a lighting plan in compliance with Article 13 that includes fixture details and photometrics.

\_\_\_\_\_ ) or

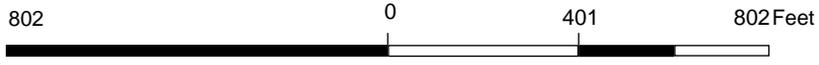
(denied, for the following reasons: \_\_\_\_\_) or

(postponed, for the following reasons: \_\_\_\_\_)

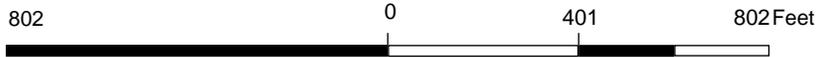
Yes:

No:

**MOTION CARRIED/FAILED**



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



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CARLISLE

WORTMAN  
associates, inc.

605 S. Main Street, Ste. 1  
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(734) 662-2200  
(734) 662-1935 Fax

Date: November 16, 2015  
Revised: February 23, 2016  
July 18, 2016

## Preliminary Site Plan Review For City of Troy, Michigan

<b>Applicant:</b>	Group 10 Management
<b>Project Name:</b>	Aloft Hotel
<b>Revised Plan Date:</b>	July 6, 2016
<b>Location:</b>	Southeast corner of Big Beaver Road and Troy Center Drive (southeast corner of site)
<b>Zoning:</b>	BB, Big Beaver Form-based district
<b>Action Requested:</b>	Preliminary Site Plan Approval
<b>Required Information:</b>	Deficiencies noted

### PROJECT AND SITE DESCRIPTION

We received a revised site plan and accompanying documents for a proposed hotel at the parcel located at the southeast corner of Big Beaver and Troy Plaza Drive. The applicant is proposing a 5-story, 66-foot tall hotel development encompassing 126 rooms and 65,590 square feet on a 1.75 acre portion of the larger 20 acre developed site. The site is currently developed as a parking lot adjacent to the existing regional retention basin.

The property is zoned Big Beaver Form-Based District. The proposed hotel development is allowed by-right and only requires Site Plan Review approval from the Planning Commission.

Aloft Hotel  
July 18, 2016

Location of Subject Property:  
Southeast corner of Big Beaver Road and Troy Center Drive

Proposed Uses of Subject Parcel:  
Hotel

Current Use of Subject Property:  
Vacant/Parking Lot

Current Zoning:  
The property is currently zoned Big Beaver Form Based Code, site type A.



Direction	Zoning	Use
North	BB, Big Beaver Form Based	Vacant / Parking
South	BB, Big Beaver Form Based	Commercial
East	BB, Big Beaver Form Based	Regional Retention Basin
West	BB, Big Beaver Form Based	Vacant Parking

**MASTER PLAN**

The site was identified in the Big Beaver Corridor Study as one of five Corridor “Gateway” locations. The plan calls for:

- Building from lot line to lot line along the right-of-way rather than continuing to be a collection of isolated towers.
- Multiple level buildings which includes vertically integrated mixed-use commercial, office and residential towers.
- The use of prominent ground floor retail, restaurants and cafes allows visual interest and activity for visitors and residents.
- Contain parking in structures that are shared by surrounding developments.
- Parking in rear and not visible from major thoroughfares.
- Buildings set close to the street.

Existing commercial structures currently encompass the parcel’s frontage along both Big Beaver and Troy Center Drive. The proposed hotel is planned to be constructed in the site’s southeast corner. Therefore, though desired by the Master Plan, a single large building or multiple storied buildings along Big Beaver at this site might not be achievable. However, there is an opportunity to develop a well-integrated site that includes creative yet consistent designed buildings. While we recognize that there are a multitude of different architectural styles and patterns along Big Beaver, creating site integration, cohesiveness, and a consistent design pattern both between and among this site is important. Because of its high visibility and prominence along Big Beaver, a key to site integration and cohesiveness, is a consistent building design pattern as well as the treatment and interaction between the buildings on the site.

**Items to be Addressed:** Address site plan issues to ensure development is consistent with Master Plan.

**BUILDING ORIENTATION AND OVERALL SITE LAYOUT**

The main building entrance is oriented to the west facing Troy Center Drive. A new access point along the south property line will provide direct vehicular access to the hotel. A pedestrian connection is also proposed adjacent the new access drive from Troy Center Drive to the proposed hotel. The applicant has provided additional internal pedestrian connections to the office and restaurant uses to the north furthering site integration and cohesiveness.

**Items to be Addressed:** None.

**AREA, WIDTH, HEIGHT, SETBACKS**

Required and Provided Dimensions:

The site is being developed as a hotel meeting Building Form D requirements. Building Form D is a permitted building form for Site Type A. Table 5.03.B.4. establishes the dimensional requirements for the building form D:

	<b>Required / Allowed</b>	<b>Provided</b>	<b>Compliance</b>
Front (Big Beaver)	10 foot build-to-line	Not Applicable	Existing structures are located along the Big Beaver corridor.
Front (Troy Center Drive)	10 foot build-to-line	Not Applicable	Existing structures are closer to Troy Center Drive.
Front (west)	-	44.3 feet	Complies
Rear (east)	40 foot minimum	70.9 feet	Complies
Side (north/south)	0 foot	34.1 feet (north) 76 feet (south)	Complies
Open Space	15 percent	32%	Complies
Building Lot Coverage	30 percent	20%	Complies
Building Height	Minimum 35 feet Maximum 66 feet	58 feet 4 inches, 59 feet to top of parapet	Complies
Parking	Big Beaver: Not located in front yard and screening	Not located in front yard.	Complies
	Troy Center Drive: Not located in front yard and screened	Parking is located in front yard and is screened.	Complies

The hotel is proposed to be located at the furthest point from both Big Beaver and Troy Center Drive on the subject site, and does not meet the build-to-line requirements along either corridor. However, due the existing buildings located on the site, the developed configuration of the site, and the potential for additional outlot development along Big Beaver and Troy Center Drive, the proposed hotel location will allow for additional future commercial (retail and restaurant) outlot development at the property frontage.

In the form-based districts, all parking shall be located in a side or rear yard. Since the proposed outlot is not adjacent to either Big Beaver or Troy Center Drive, no parking has been provided within the front yards.

Though the building height is noted to be 66 feet on the site data table (Sheet C-2.1), the top of the parapet is 59 feet, and 68 feet to the top of the mechanical screen wall. The mechanical screen wall does not count towards building height.

**Items to be Addressed:** None

**PARKING**

For the various uses Section 13.06.G of the Zoning Ordinance requires:

	Required	Provided
Hotel: 1 space for each guest room, 1 space per employee on the largest shift	126 rooms + 21 employees = 147 spaces	A parking calculation of both 144 and 141 spaces is shown on sheet C-2.1.  Applicant notes additional shared parking is provided in PNC bank.
Barrier Free	6	6
Bicycle Parking	2	7
Loading	0	0
<b>Total</b>	<b>147 automobile + 2 bicycle</b>	<b>156 spaces + 7 bicycle</b>

The applicant notes a shared parking agreement with the PNC Bank. Sixty-eight of the noted 141/144 spaces are located on the hotel site. The remaining 73/76 spaces are located as shared parking with the PNC site. Anecdotally, parking appears to be sufficient. However, the applicant should provide the shared parking agreement as part of the final site plan to ensure parking will be preserved for this use should the PNC site redevelop in the future. A bike rack has been added to the plans along the west elevation at the main building entrance.

**Items to be Addressed:** Provide the shared parking agreement as part of the final site plan.

**SITE ACCESS, and CIRCULATION**

Access to the site is provided via new boulevard drive at along the southern property line from Troy Center Drive. The applicant has provided for a greenbelt along both sides (north and south) of the proposed drive allowing for a tree-lined entry to the site from Troy Center Drive. The traffic engineering department will need to confirm that access and circulation is sufficient.

**Items to be Addressed:** None

**PEDESTRIAN CIRCULATION**

The applicant is providing a 5-foot wide pedestrian path from Troy Center Drive to the site. Internal pedestrian connectivity through the hotel side is provided. Additional internal connections from the proposed hotel to the PNC building has also been provided.

**Items to be Addressed:** None.

**LANDSCAPING**

The applicant has provided a landscape plan. The plan provides all necessary calculations regarding greenbelt, street trees, and parking lot landscaping requirements.

	<u>Required:</u>	<u>Provided:</u>	<u>Compliance:</u>
<u>Street Trees:</u> The Ordinance requires that the greenbelt shall be landscaped with a minimum of one (1) deciduous tree for every thirty (30) lineal feet, or fraction thereof, of frontage abutting a public road right-of-way.	City requested street trees along the proposed south entry drive – 625 ft./30=21 trees	19 street trees 6 ornamental trees	Compliant
<u>Site landscaping:</u> A minimum of twenty percent (20%) of the site area shall be comprised of landscape material.	15%	The applicant indicates 44% of softscape area	Compliant
<u>Parking Lot Landscaping:</u> 1 tree for every 8 parking spaces. Trees may be located adjacent to parking lot with planning commission approval.	18 trees	18 trees	Compliant

The applicant is also proposing additional landscaping and clean-up of the eastern property line and adjacent regional retention basin at the request of the City.

**Trash Enclosure:**

The trash enclosure is located northeast of the building outside of the 2 acre site. Detail of the enclosure and proposed exterior materials has been included on Sheet C-5.1 of the plan set. The east and west peripheries of the proposed trash enclosure are screened with shrubs and evergreen trees.

Condensing units along the north elevation are screened with shrubbery as well.

**Items to be Addressed:** None.

**LIGHTING**

The applicant did not submit a lighting plan with the revised application set.

**Items to be Addressed:** Submit a lighting plan in compliance with Article 13 that includes fixture details and photometrics .

## FLOOR PLAN AND ELEVATIONS

Floor plans and building elevations have been provided. The applicant is proposing a modern design with a mix of materials including a natural wood paneling system that wraps a portion of the first floor, spandrel and room glass glazing, and painted aluminum façade of various colors.



*Existing Aloft Hotel that matches materials, style, and color proposed.  
–Location: Denver*

Additional detail is provided in the design standards noted below.

**Items to be Addressed:** none

## DESIGN STANDARDS

The Big Beaver design standards provide the Planning Commission with direction when reviewing the proposed design features of this development.

### Façade Variation.

The maximum linear length of an uninterrupted building façade facing public streets and/or parks shall be thirty (30) feet. **The applicant has provided variation through exterior building materials, colors, textures and relief.**

### Pedestrian Access / Entrance.

- a. **Primary Entrance:** The primary building entrance shall be clearly identifiable and useable and located in the front façade parallel to the street. **The primary entrance is accessible from the proposed south access drive parallel to Troy Center Drive.**

- b. Pedestrian Connection. The pedestrian connection shall be fully paved and maintained surface not less than five (5) feet in width. **Pedestrian access is accommodated from Troy Center Drive, and provides internal connections throughout the hotel site and to the northern neighboring uses on the site.**
- c. Additional Entrances. In addition to the primary façade facing front façade and/or the right-of-way, if a parking area is located in the rear or side yard, must also have a direct pedestrian access to the parking area that is of a level of materials quality and design emphasis at least equal to that of the primary entrance. **Complies**

#### Ground Story Activation.

*The first floor of any front façade facing a right-of-way shall be no less than fifty (50) percent windows and doors, and the minimum transparency for facades facing a side street, side yard, or parking area shall be no less than 30 percent of the façade. Transparency alternatives are permitted up to 80% of the 50% total along the front of buildings, and up to 100% of the sides of buildings. The minimum transparency requirement shall apply to all sides of a building that abut an open space, including a side yard, or public right-of-way. Transparency requirements shall not apply to sides which abut an alley.*

***The applicant notes 49% of windows and doors on the first floor; however, the glass is spandrel or "room" glass, which does allow for transparency. The applicant should use clear glass for the area noted as "1<sup>st</sup> floor public space glazing" that is located at the canopy entrance. Use of clear glass in this location will create a more welcoming feel into the hotel.***

#### Transitional Features

- a. *Transitional features are architectural elements, site features, or alterations to building massing that are used to provide a transition between higher intensity uses and low- or moderate-density residential areas. These features assist in mitigating potential conflicts between those uses. Transitional features are intended to be used in combination with landscape buffers or large setbacks.*

***Due to proximity of other commercial uses, the commercial development is not a more intense use which would require transitional features.***

#### Site Access and Parking

- a. *Required Parking. Off-street parking shall be provided in accordance with the standards set forth in Article 13, Site Design Standards. **The applicant is six (6) spaces short but has noted a shared parking agreement.***
- b. *Location.*
  - i. *When parking is located in a side yard (behind the front building line) but fronts on the required building line, no more than fifty (50) percent of the total site's linear feet along the required building line or one hundred (100) feet, whichever is less, shall be occupied by parking. **Not Applicable***

- II. *For a corner lot, shall be no more than fifty (50) percent of the site's cumulative linear feet along the required building lines or one hundred (100) feet, whichever is less, shall be occupied by parking. The building shall be located in the corner of the lot adjacent to the intersection. **Not Applicable***
- III. *For a double frontage lot or a lot that has frontage on three (3) streets, the cumulative total of all frontages occupied by parking shall be no more than sixty-five (65) percent of the total site's linear feet along a required building line or one hundred and twenty-five (125) feet, whichever is less. **Not Applicable***
- IV. *Where off-street parking is visible from a street, it should be screened in accordance with the standards set forth in Section 13.02.C. **Not Applicable.***

## SUMMARY OF FINDINGS

*We support the conceptual development of this site, and find that the plan and development details are more consistent with the vision along Big Beaver and the requirements of Big Beaver form-based district.*

*Provided that the Planning Commission grant the parking deviation and agree to allow for shared parking, we recommend preliminary site plan approval with the following conditions to be addressed as part of the final site plan submittal:*

- 1) *Provide the shared parking agreement and location of shared parking as part of the final site plan.*
- 2) *The applicant should use clear glass for the area noted as "1<sup>st</sup> floor public space glazing" that is located at the canopy entrance. Use of clear glass in this location will create a more welcoming feel into the hotel.*
- 3) *Submit a lighting plan in compliance with Article 13 that includes fixture details and photometrics.*



CARLISLE/WORTMAN ASSOC., INC.

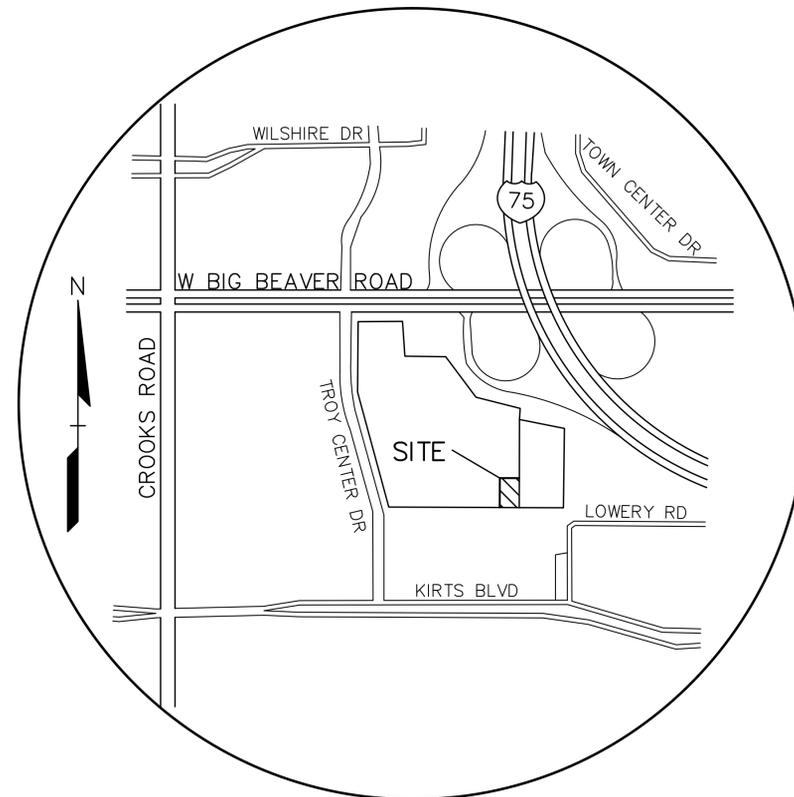
Benjamin R. Carlisle, AICP, LEED AP

Principal

PRELIMINARY SITE PLANS FOR

# ALOFT AT PNC OFFICE CENTER

PART OF THE SE 1/4 OF SECTION 12, T. 2N., R. 11E.,  
CITY OF TROY, OAKLAND COUNTY, MICHIGAN



LOCATION MAP  
NO SCALE

**LEGAL DESCRIPTION:**  
**PROPOSED PARCEL (PART OF PARCEL 20-28-101-067)**  
 Land situated in the City of Troy, Oakland County, Michigan described as follows:  
 Part of the Northwest 1/4 of Section 28, Township 2 North, Range 11 East, City of Troy, Oakland County, Michigan, described as: Commencing at the Northwest Corner of Section 28; thence along the north line of said Section 28, North 87 degrees 28 minutes 23 seconds East, 332.19 feet along the east Right-of-Way line of Troy Center Drive (120 feet wide); thence North 87 degrees 28 minutes 55 seconds East, 618.66 feet to the southwesterly Right-of-Way line of I-75 expressway; thence along said Right-of-Way, South 02 degrees 31 minutes 05 seconds East, 68.00 feet and S41°10'40"E, 256.12 feet and S77°21'56"E, 296.62 feet; thence S02°53'48"E, 319.74 feet to the Point of Beginning; thence continuing S02°53'48"E, 335.00 feet to the north line of "F.J. Kirts Farm" subdivision; thence along a portion of said subdivision, S87°26'19"W, 227.50 feet; thence N02°53'48"W, 335.00 feet; thence N87°26'19"E, 227.50 feet to the Point of Beginning. Containing 1.750 acres of land, more or less.

**LEGAL DESCRIPTION:**  
 PARCEL 20-28-101-067 (Overall Parcel)  
 Land situated in the City of Troy, Oakland County, Michigan described as follows:  
 Part of the Northwest 1/4 of Section 28, Township 2 North, Range 11 East, City of Troy, Oakland County, Michigan, described as: Commencing at the Northwest Corner of Section 28; thence along the north line of said Section 28, North 87 degrees 28 minutes 23 seconds East, 332.19 feet; thence South 02 degrees 31 minutes 05 seconds East, 68.00 feet and South 41 degrees 10 minutes 40 seconds East, 256.12 feet and South 77 degrees 21 minutes 56 seconds East, 296.62 feet; thence South 02 degrees 53 minutes 48 seconds East, 654.74 feet to the north line of "F.J. Kirts Farm" subdivision; thence along a portion of said subdivision, South 87 degrees 28 minutes 19 seconds West, 863.35 feet to a non-tangent curve on the easterly Right-of-Way of Troy Center Drive (120 Feet Wide); thence along said Right-of-Way on a curve to the left having an arc distance of 185.55 feet, radius of 1260.00 feet, central angle of 08 degrees 26 minutes 14 seconds, and a chord bearing of North 15 degrees 13 minutes 10 seconds West, 185.38 feet and North 19 degrees 26 minutes 18 seconds West, 397.91 feet and along a curve to the right an arc distance of 336.66 feet, radius of 1140.00 feet, a central angle of 16 degrees 55 minutes 14 seconds, and a chord bearing of North 10 degrees 58 minutes 41 seconds West, 335.44 feet and North 02 degrees 31 minutes 05 seconds West, 107.59 feet to the Point-of-Beginning. Containing 20.022 acres of land, more or less.

**INDEX OF DRAWINGS:**

- C-1.1 COVER SHEET
- C-2.1 TOPOGRAPHIC SURVEY
- C-3.1 PRELIMINARY SITE PLAN
- C-4.1 PRELIMINARY GRADING PLAN
- C-5.1 PRELIMINARY UTILITY PLAN
- C-5.1 NOTES AND DETAILS
  
- L-1.1 PRELIMINARY LANDSCAPE PLAN
- L-1.2 PRELIMINARY LANDSCAPE DETAILS
  
- 001 PROPOSED FLOOR PLAN-LEVEL 1
- 002 PROPOSED FLOOR PLAN-LEVEL 1
- 003 PROPOSED FLOOR PLAN-LEVEL 1
- 004 PROPOSED FLOOR PLAN-LEVEL 1
- 005 PROPOSED FLOOR PLAN-LEVEL 1
- 006 PROPOSED ROOF PLAN
- 007 PROPOSED EXTERIOR COLOR ELEVATIONS
- 008 PROPOSED EXTERIOR COLOR ELEVATIONS

**APPLICANT:**

GROUP 10 MANAGEMENT  
 30500 NORTHWESTERN HIGHWAY, SUITE 525  
 FARMINGTON HILLS, MI 48334  
 CONTACT: KENNY KOZA  
 PHONE: (248) 855-2100

**ARCHITECT:**

NORR, LLC  
 150 W. JEFFERSON AVENUE, SUITE 1300  
 DETROIT, MI 48226  
 CONTACT: LARRY KOWALSKI  
 PHONE: (313) 324-3134  
 FAX: (586) 945-0878

**CIVIL ENGINEER:**

PEA, INC.  
 2430 ROCHESTER COURT, SUITE: 100  
 TROY, MICHIGAN 48083  
 CONTACT: JAMES P. BUTLER, P.E.  
 PHONE: (248) 689-9090  
 FAX: (248) 689-1044

**LANDSCAPE ARCHITECT:**

PEA, INC.  
 7927 NEMCO WAY, SUITE 115  
 BRIGHTON, MI 48116  
 PHONE: (517) 546-8583  
 FAX: (517) 546-8973  
 CONTACT: JEFFREY T. SMITH, LLA, LEED AP

**NOT FOR CONSTRUCTION**

XREF: S:\PROJECTS\2015\2015196\DWG\15196-TOPOBASE.DWG  
 XREF: S:\PROJECTS\2015\2015196\DWG\15196-SITE PLAN\BASE-15196.DWG  
 XREF: S:\PROJECTS\2015\2015196\DWG\15196-SITE PLAN\TK-K-15196.DWG

NO.	BY	DATE	REVISIONS
1	MEB	06/13/16	REVISED PER STARTWOOD COMMENTS
2	MEB	06/13/16	REVISED PER CITY REVIEW BUILDING SHIFT PER OWNER
3	MEB	07/06/16	ADDED GENERATOR, AD AND FUEL TANK



**CAUTION**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY A: INDICATIVE. NO GUARANTEE IS GIVEN BY THE ENGINEER AS TO THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.  
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 CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL AGREEMENTS, CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE SOLE AND COMPLETE LIABILITY FOR THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT MAY BE AFFECTED BY THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES AND AUTHORITIES.

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**GROUP 10 MANAGEMENT**  
 30500 NORTHWESTERN HIGHWAY, SUITE 525  
 FARMINGTON HILLS, MI 48334

**COVER SHEET**  
**ALOFT AT PNC OFFICE CENTER**  
 PART OF THE SE 1/4 OF SECTION 12, T. 2N., R. 11E.,  
 CITY OF TROY, OAKLAND COUNTY, MICHIGAN

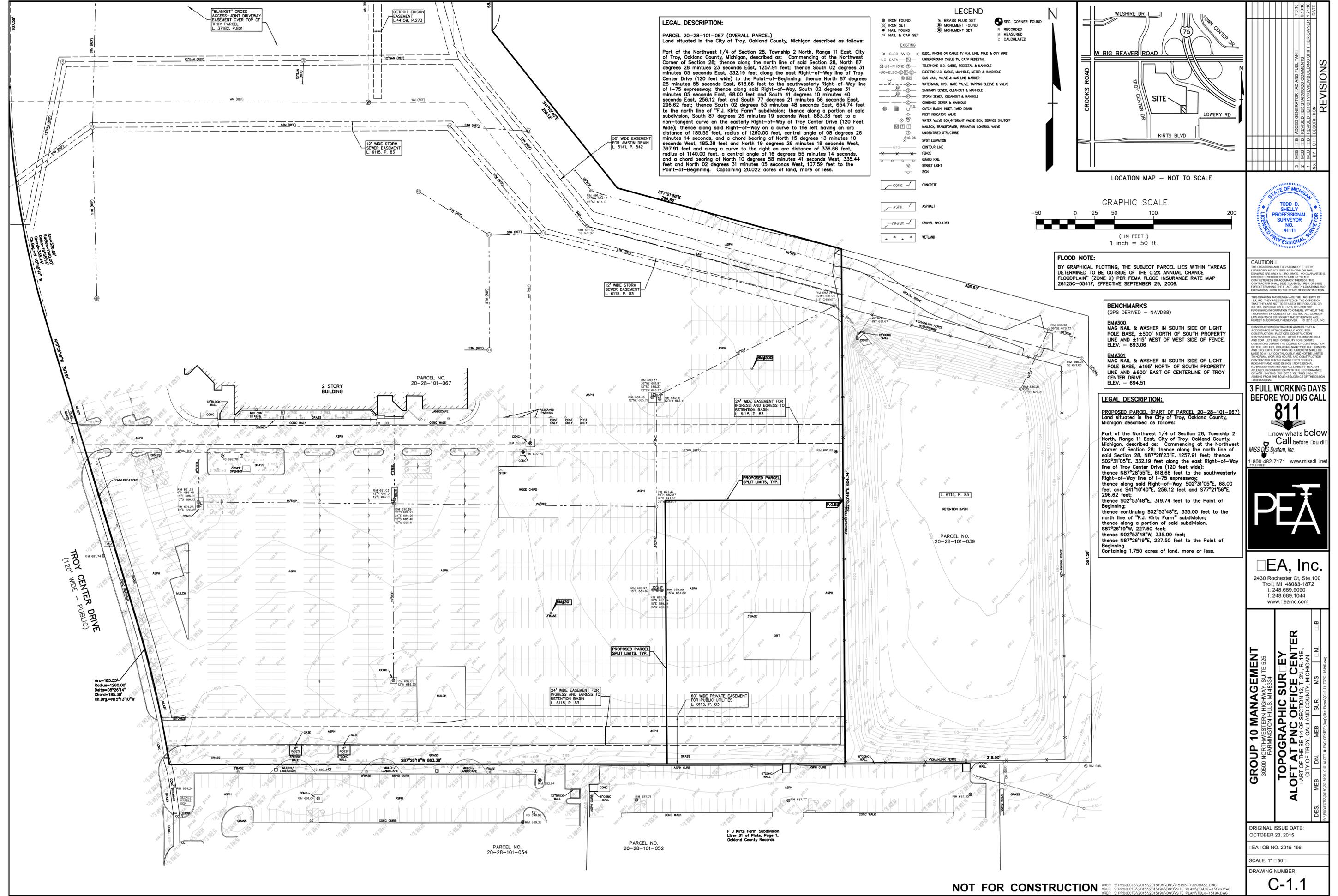
DES: MEB DN: MEB SUR: MS DIM: MB

ORIGINAL ISSUE DATE:  
 OCTOBER 23, 2015

EA / OB NO. 2015-196

SCALE: N/A

DRAWING NUMBER:  
**COVER**



**LEGAL DESCRIPTION:**  
 PARCEL 20-28-101-067 (OVERALL PARCEL)  
 Land situated in the City of Troy, Oakland County, Michigan described as follows:  
 Part of the Northwest 1/4 of Section 28, Township 2 North, Range 11 East, City of Troy, Oakland County, Michigan, described as: Commencing at the Northwest Corner of Section 28; thence along the north line of said Section 28, North 87 degrees 28 minutes 23 seconds East, 1257.91 feet; thence South 02 degrees 31 minutes 05 seconds East, 332.19 feet along the east Right-of-Way line of Troy Center Drive (120 feet wide) to the Point-of-Beginning; thence North 87 degrees 28 minutes 55 seconds East, 618.66 feet to the southwesterly Right-of-Way line of I-75 expressway; thence along said Right-of-Way, South 02 degrees 31 minutes 05 seconds East, 68.00 feet and South 41 degrees 10 minutes 40 seconds East, 256.12 feet and South 77 degrees 21 minutes 56 seconds East, 296.62 feet; thence South 02 degrees 53 minutes 48 seconds East, 654.74 feet to the north line of "F.J. Kirts Farm" subdivision; thence along a portion of said subdivision, South 87 degrees 28 minutes 19 seconds West, 853.38 feet to a non-tangent curve on the easterly Right-of-Way of Troy Center Drive (120 Feet Wide); thence along said Right-of-Way on a curve to the left having an arc distance of 185.55 feet, radius of 1260.00 feet, central angle of 08 degrees 26 minutes 14 seconds, and a chord bearing of North 15 degrees 13 minutes 10 seconds West, 185.38 feet and North 19 degrees 26 minutes 18 seconds West, 397.91 feet and along a curve to the right on an arc distance of 336.66 feet, radius of 1140.00 feet, a central angle of 16 degrees 55 minutes 14 seconds, and a chord bearing of North 10 degrees 56 minutes 41 seconds West, 335.44 feet and North 02 degrees 31 minutes 05 seconds West, 107.59 feet to the Point-of-Beginning. Containing 20.022 acres of land, more or less.

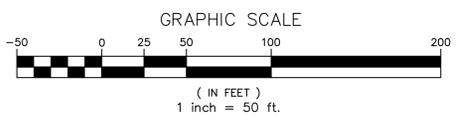
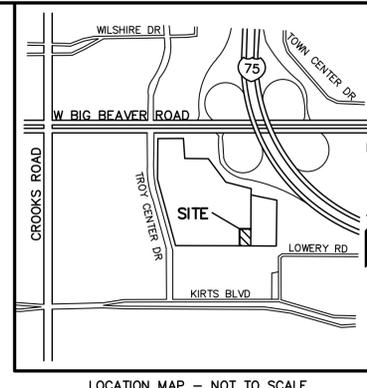
**LEGEND**

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

**EXISTING**

- ELEC. PHONE OR CABLE TV OR LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CABLE PEDESTAL
- TELEPHONE U.S. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.S. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATER MAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- CATCH BASIN, INLET, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MALBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- GUARD RAIL
- STREET LIGHT
- SIGN

**CONC.** CONCRETE  
**ASPH.** ASPHALT  
**GRAVEL** GRAVEL SHOULDER  
**WETLAND** WETLAND



**FLOOD NOTE:**  
 BY GRAPHICAL PLOTTING, THE SUBJECT PARCEL LIES WITHIN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN" (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP 26125-0541F, EFFECTIVE SEPTEMBER 29, 2006.

**BENCHMARKS**  
 (GPS DERIVED - NAVD88)

**BM#300**  
 MAG NAIL & WASHER IN SOUTH SIDE OF LIGHT POLE BASE, ±500' NORTH OF SOUTH PROPERTY LINE AND ±115' WEST OF WEST SIDE OF FENCE. ELEV. - 693.06

**BM#301**  
 MAG NAIL & WASHER IN SOUTH SIDE OF LIGHT POLE BASE, ±600' EAST OF CENTERLINE OF TROY CENTER DRIVE. ELEV. - 694.51

**LEGAL DESCRIPTION:**  
 PROPOSED PARCEL (PART OF PARCEL 20-28-101-067)  
 Land situated in the City of Troy, Oakland County, Michigan described as follows:  
 Part of the Northwest 1/4 of Section 28, Township 2 North, Range 11 East, City of Troy, Oakland County, Michigan, described as: Commencing at the Northwest Corner of Section 28; thence along the north line of said Section 28; N87°28'23"E, 1257.91 feet; thence S02°31'05"E, 332.19 feet along the east Right-of-Way line of Troy Center Drive (120 feet wide); thence N87°28'55"E, 618.66 feet to the southwesterly Right-of-Way line of I-75 expressway; thence along said Right-of-Way, S02°31'05"E, 68.00 feet and S41°10'40"E, 256.12 feet and S77°21'56"E, 296.62 feet; thence S02°53'48"E, 319.74 feet to the Point of Beginning; thence continuing S02°53'48"E, 335.00 feet to the north line of "F.J. Kirts Farm" subdivision; thence along a portion of said subdivision, S87°28'19"W, 227.50 feet; thence N02°53'48"W, 335.00 feet; thence N87°26'19"E, 227.50 feet to the Point of Beginning. Containing 1.750 acres of land, more or less.

**REVISIONS**

NO.	BY	DATE	DESCRIPTION
1	MEB	01/13/16	REVISED PER STARWOOD COMMENTS
2	MEB	01/13/16	REVISED PER STARWOOD COMMENTS
3	MEB	01/13/16	REVISED PER STARWOOD COMMENTS



**CAUTION:**  
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CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL CONDITIONS OF CONSTRUCTION CONTRACT, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE, DEPTH, LOCATION, AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE, DEPTH, LOCATION, AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE, DEPTH, LOCATION, AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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**GROUP 10 MANAGEMENT**  
 30500 NORTHWESTERN HIGHWAY, SUITE 525  
 FARMINGTON HILLS, MI 48334

**TOPOGRAPHIC SURVEY**

**ALLOTT AT PNC OFFICE CENTER**  
 PART OF THE SE 1/4 OF SECTION 12, T. 2N, R. 11E,  
 CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES. MEB DN. MEB SUR. MS. LM. LB.

ORIGINAL ISSUE DATE:  
 OCTOBER 23, 2015

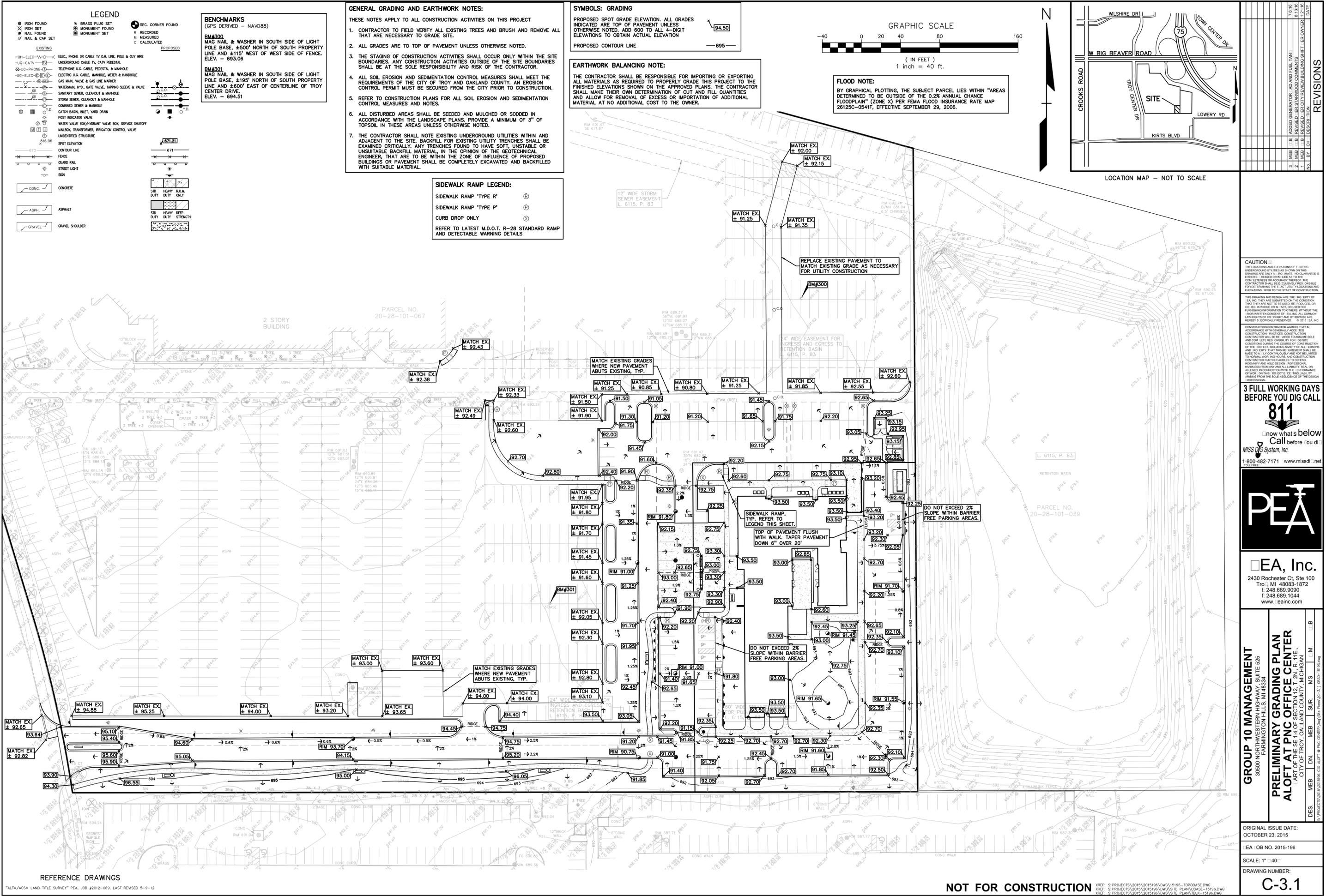
EA / OB NO. 2015-196

SCALE: 1" = 50'

DRAWING NUMBER:  
**C-1.1**

**NOT FOR CONSTRUCTION**





**LEGEND**

**EXISTING**

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- RECORDED
- MEASURED
- CALCULATED

**PROPOSED**

- ELEC. PHONE OR CABLE TV O.H. LINE, POLE & 42/7 WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATER MAIN, W.D. GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- CATCH BASIN, INLET, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/PAYMENT VALVE BOX, SERVICE SHUTOFF
- MALIBU, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIK
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- SID HEAVY DUTY
- SID HEAVY DEEP DUTY STRENGTH

**BENCHMARKS**  
(GPS DERIVED - NAVD88)

**BM#300**  
MAG NAIL & WASHER IN SOUTH SIDE OF LIGHT POLE BASE, ±500' NORTH OF SOUTH PROPERTY LINE AND ±115' WEST OF WEST SIDE OF FENCE. ELEV. - 693.06

**BM#301**  
MAG NAIL & WASHER IN SOUTH SIDE OF LIGHT POLE BASE, ±195' NORTH OF SOUTH PROPERTY LINE AND ±600' EAST OF CENTERLINE OF TROY CENTER DRIVE. ELEV. - 694.51

- GENERAL GRADING AND EARTHWORK NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT
- CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
  - ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
  - THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
  - ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE CITY OF TROY AND OAKLAND COUNTY. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY PRIOR TO CONSTRUCTION.
  - REFER TO CONSTRUCTION PLANS FOR ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
  - ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
  - THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE GEOTECHNICAL ENGINEER, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.

**SYMBOLS: GRADING**

PROPOSED SPOT GRADE ELEVATION, ALL GRADES INDICATED ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED. ADD 600 TO ALL 4-DIGIT ELEVATIONS TO OBTAIN ACTUAL ELEVATION

PROPOSED CONTOUR LINE

**EARTHWORK BALANCING NOTE:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

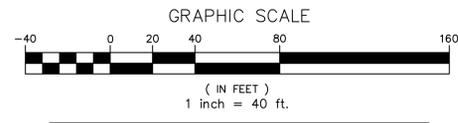
**SIDEWALK RAMP LEGEND:**

SIDEWALK RAMP 'TYPE R'

SIDEWALK RAMP 'TYPE P'

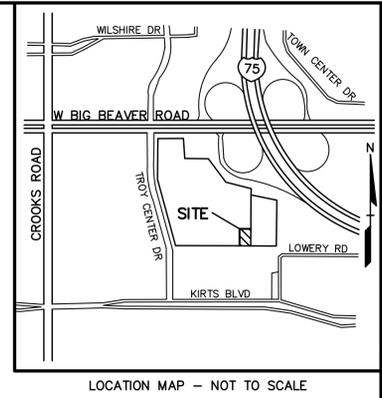
CURB DROP ONLY

REFER TO LATEST M.D.O.T. R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS



**FLOOD NOTE:**

BY GRAPHICAL PLOTTING, THE SUBJECT PARCEL LIES WITHIN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN" (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP 26125C-0541F, EFFECTIVE SEPTEMBER 29, 2006.



NO.	DATE	REVISIONS
1	06/13/16	REVISED PER STARTUP COMMENTS
2	06/13/16	REVISED PER STARTUP COMMENTS
3	06/13/16	REVISED PER STARTUP COMMENTS
4	06/13/16	REVISED PER STARTUP COMMENTS
5	06/13/16	REVISED PER STARTUP COMMENTS
6	06/13/16	REVISED PER STARTUP COMMENTS
7	06/13/16	REVISED PER STARTUP COMMENTS
8	06/13/16	REVISED PER STARTUP COMMENTS
9	06/13/16	REVISED PER STARTUP COMMENTS
10	06/13/16	REVISED PER STARTUP COMMENTS

**CAUTION**

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FARMINGTON HILLS, MI 48334

**PRELIMINARY GRADING PLAN**  
**ALLOFT AT PNC OFFICE CENTER**  
PART OF THE SE 1/4 OF SECTION 12, 2N, 17E, 11E,  
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES. MEB DN. MEB SUR. MS L.M. I.B.

ORIGINAL ISSUE DATE:  
OCTOBER 23, 2015

EA / OB NO. 2015-196

SCALE: 1" = 40'

DRAWING NUMBER:  
**C-3.1**

### LEGEND

● IRON FOUND	⊗ BRASS PLUG SET	⊙ SEC. CORNER FOUND
⊗ IRON SET	⊗ MONUMENT FOUND	⊙ RECORDED
⊗ NAIL FOUND	⊗ MONUMENT SET	⊙ MEASURED
⊗ NAIL & CAP SET		⊙ CALCULATED

— OH-ELEC—	ELEC. PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
— UG-CATV—	UNDERGROUND CABLE TV, CATV PEDESTAL
— UG-PHONE—	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
— UG-ELEC—	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
— GAS—	GAS MAIN, VALVE & GAS LINE MARKER
— W.M.—	WATER MAIN, INTD. GATE VALVE, TAPPING SLAVE & VALVE
— S.S.—	SANITARY SEWER, CLEANOUT & MANHOLE
— S.S.—	STORM SEWER, CLEANOUT & MANHOLE
— S.S.—	COMBINED SEWER & MANHOLE
— C.B.—	CATCH BASIN, INLET, YARD DRAIN
— P.I.—	POST INDICATOR VALVE
— W.V.—	WATER VALVE BOX/APPURTAIN VALVE BOX, SERVICE SHUTOFF
— T.—	TRANSFORMER, RIGORATION CONTROL VALVE
— U.—	UNIDENTIFIED STRUCTURE

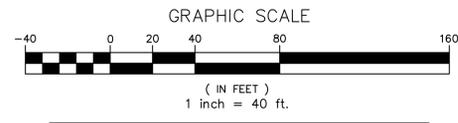
  

— 670 —	SPOT ELEVATION
— 671 —	CONTOUR LINE
— X —	FENCE
— X —	GUARD RAIL
— X —	STREET LIGHT
— X —	SIGN

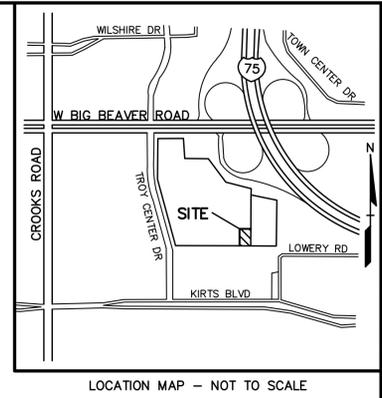
  

— CONC —	CONCRETE
— ASPH —	ASPHALT
— GRAVEL —	GRAVEL SHOULDER

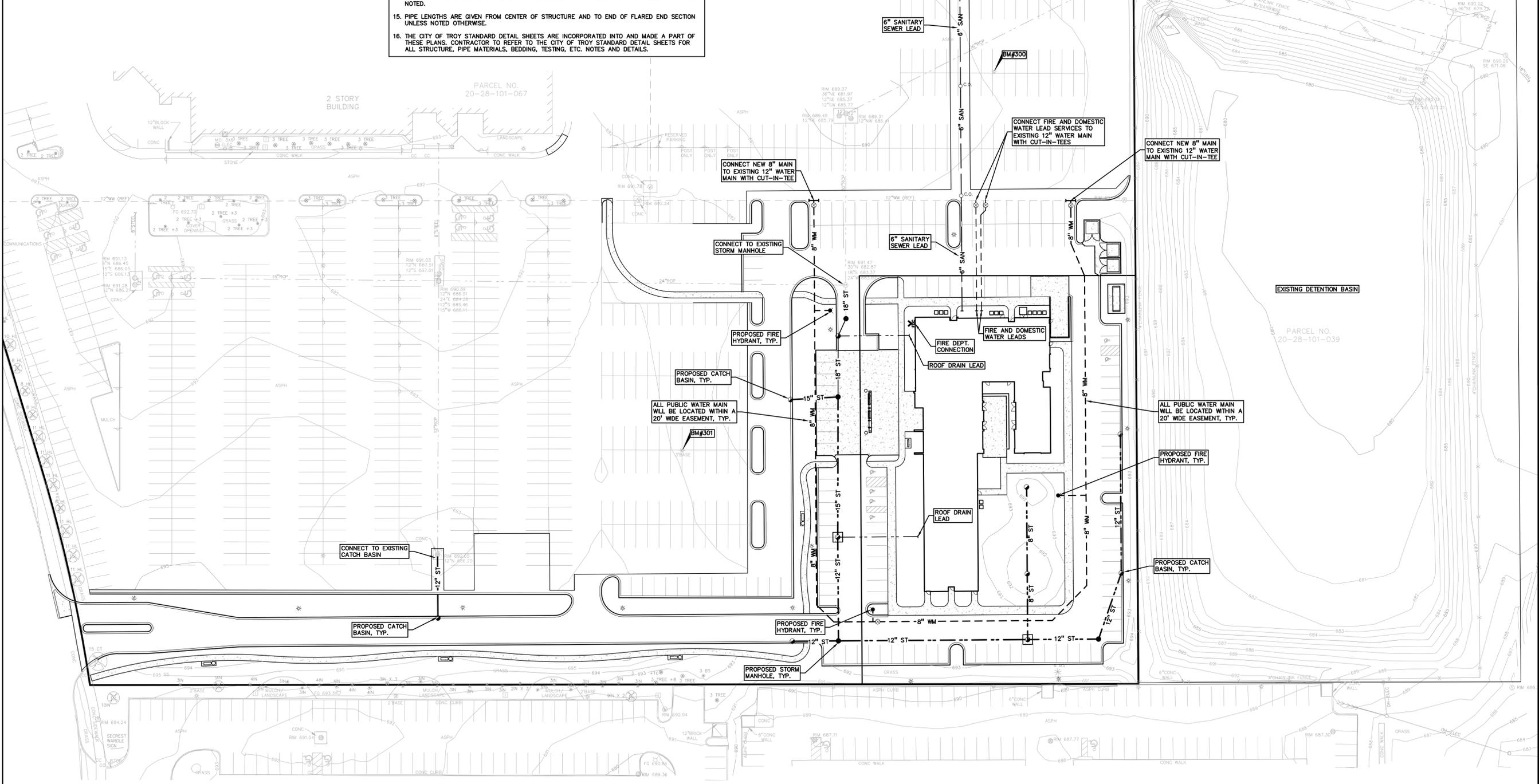
- ### GENERAL UTILITY NOTES:
- ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF TROY.
  - NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
  - ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
  - WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
  - ALL WATER MAIN SHALL BE PROVIDED WITH 6' OF COVER UNLESS OTHERWISE NOTED.
  - ALL FIRE HYDRANTS SHALL BE E.J.W #58R MODEL #250 PER CITY STANDARDS.
  - ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
  - ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY OF TROY.
  - THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION OF THE DETROIT WATER AND SEWER DEPARTMENT AT (313) 833-4682 AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.
  - ALL SANITARY SEWER 10" OR LARGER SHALL BE P.V.C. TRUSS PIPE (ASTM D2680) AND FITTINGS, WITH ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
  - ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
  - SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY END AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.
  - ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443).
  - ALL STORM SEWER LEADS SHALL BE PVC SCHEDULE 40 WITH GLUED JOINTS UNLESS OTHERWISE NOTED.
  - PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
  - THE CITY OF TROY STANDARD DETAIL SHEETS ARE INCORPORATED INTO AND MADE A PART OF THESE PLANS. CONTRACTOR TO REFER TO THE CITY OF TROY STANDARD DETAIL SHEETS FOR ALL STRUCTURE, PIPE MATERIALS, BEDDING, TESTING, ETC. NOTES AND DETAILS.



**FLOOD NOTE:**  
 BY GRAPHICAL PLOTTING, THE SUBJECT PARCEL LIES WITHIN "AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN" (ZONE X) PER FEMA FLOOD INSURANCE RATE MAP 26125C-0541F, EFFECTIVE SEPTEMBER 29, 2006.



NO.	DATE	REVISIONS
1	06/13/16	REVISED PER STARTWOOD COMMENTS
2	06/13/16	REVISED PER STARTWOOD COMMENTS
3	06/13/16	REVISED PER STARTWOOD COMMENTS
4	06/13/16	REVISED PER STARTWOOD COMMENTS
5	06/13/16	REVISED PER STARTWOOD COMMENTS



**CAUTION**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY A: INDICATE NO GUARANTEE IS GIVEN FOR THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION, DEPTH AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL PRACTICE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONFORMING TO ALL CITY, STATE AND FEDERAL REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONFORMING TO ALL CITY, STATE AND FEDERAL REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONFORMING TO ALL CITY, STATE AND FEDERAL REGULATIONS AND ORDINANCES.

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**GROUP 10 MANAGEMENT**  
 30500 NORTHWESTERN HIGHWAY, SUITE 525  
 FARMINGTON HILLS, MI 48334

**PRELIMINARY UTILITY PLAN**  
**ALLOT AT PNC OFFICE CENTER**  
 PART OF THE SE 1/4 OF SECTION 12, T. 2N, R. 11E.,  
 CITY OF TROY, OKLAHOMA COUNTY, MICHIGAN

DES. MEB DN. MEB SUR. MS IM. LB

ORIGINAL ISSUE DATE:  
 OCTOBER 23, 2015

EA / OB NO. 2015-196

SCALE: 1" = 40'

DRAWING NUMBER:  
**C-4.1**

REFERENCE DRAWINGS  
 \*ALTA/ACSM LAND TITLE SURVEY\* PEI, JOB #2012-069, LAST REVISED 5-9-12

**GENERAL NOTES:**

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
2. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
4. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG (811) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES AND SHALL NOTIFY OTHER REPRESENTATIVES OF OTHER UTILITIES IN THE VICINITY OF THE WORK.
5. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
6. MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE.
7. CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR OTHER UNWANTED DEBRIS AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS, BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY CONTAIN TRAFFIC IN ACCORDANCE WITH "MMUTCD".
9. ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH MI-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO THE DANGER OF MOVING GROUND.
10. ALL REFERENCES TO M.D.O.T. SPECIFICATIONS ARE TO BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

**PAVING NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY AND M.D.O.T.
2. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
3. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FULL SECTIONS OR BELOW SUBGRADE IN CUT SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
4. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE SPECIFIED.
5. BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.
6. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

**GENERAL UTILITY NOTES:**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY AND M.D.O.T.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES, WHICH MIGHT AFFECT THIS JOB.
3. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
4. WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER AT PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
5. EXACT GRADES AND DEPTHS OF UTILITIES ARE TO BE CHECKED CLOSELY WITH THE FIELD ENGINEER PRIOR TO INSTALLATION.
6. REFER TO CITY OF TROY STANDARD DETAIL SHEETS FOR ADDITIONAL INFORMATION.

**STORM SEWER NOTES:**

1. ALL STORM SEWER 12" AND LARGER SHALL BE RCP CLASS IV UNLESS OTHERWISE NOTED. REFER TO CITY STANDARD DETAILS SHEETS FOR STANDARD BEDDING DETAILS.
2. JOINTS FOR ALL STORM SEWER 12" AND LARGER SHALL BE MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443)
3. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED OF PVC SCHEDULE 40 PIPE AT 1.00% MINIMUM SLOPE WITH GLOUED JOINTS, UNLESS OTHERWISE NOTED. REFER TO CITY STANDARD DETAIL SHEETS FOR BEDDING DETAILS.
4. REFER TO CITY OF TROY STORM SEWER DETAIL SHEETS FOR ADDITIONAL INFORMATION.

**WATER MAIN NOTES:**

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6" BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5") DEGREE BENDS, PROPERLY ANCHORED.
2. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
3. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
4. ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
5. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL TESTING IS SATISFACTORILY COMPLETED.
6. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY SEWER OR STRUCTURE.
7. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 54 WITH POLYETHYLENE WRAP.
8. REFER TO CITY OF TROY WATER MAIN DETAIL SHEETS FOR ADDITIONAL INFORMATION.

**SANITARY SEWER NOTES:**

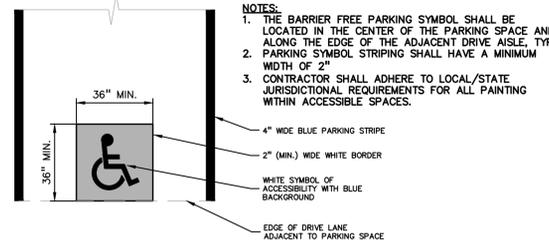
1. DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
2. ALL SANITARY LEADS SHALL BE CONSTRUCTED OF PVC SDR 23.5 AT 1.00% MINIMUM SLOPE.
3. ALL SANITARY SEWER SHALL BE CONSTRUCTED OF PVC TRUSS PIPE WITH A MINIMUM DIAMETER OF 8" PER CITY REQUIREMENTS.
4. JOINTS FOR P.V.C. SOLID WALL PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.
5. REFER TO CITY STANDARD DETAILS FOR PIPE BEDDING DETAILS.
6. REFER TO CITY OF TROY SANITARY SEWER DETAIL SHEETS FOR ADDITIONAL INFORMATION.



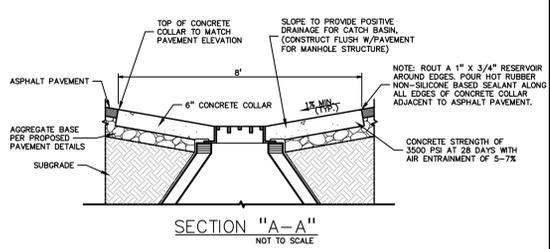
12" x 18" GREEN ON WHITE REFLECTORIZED CARPOOL PARKING ONLY SIGN DETAIL NOT TO SCALE



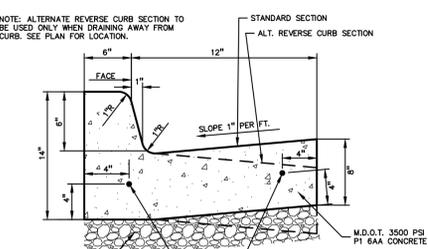
12" x 18" GREEN ON WHITE REFLECTORIZED HYBRID AND LOW EMISSION VEHICLES ONLY SIGN DETAIL NOT TO SCALE



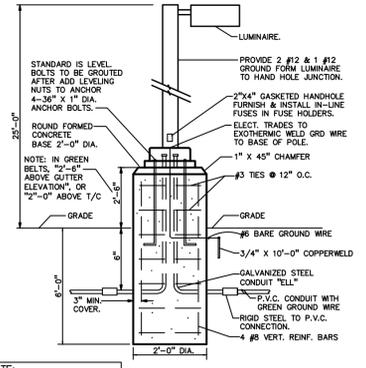
BARRIER FREE PARKING SYMBOL DETAIL (INTERNATIONAL SYMBOL OF ACCESSIBILITY) NOT TO SCALE



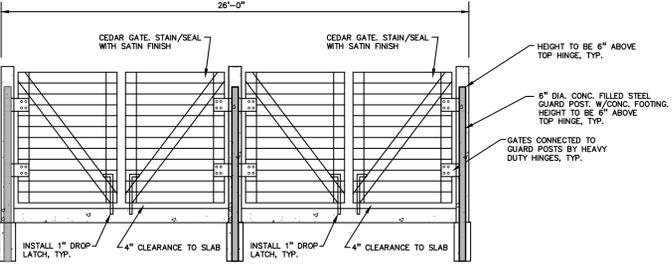
CONCRETE COLLAR AT CATCH BASIN DETAIL NOT TO SCALE



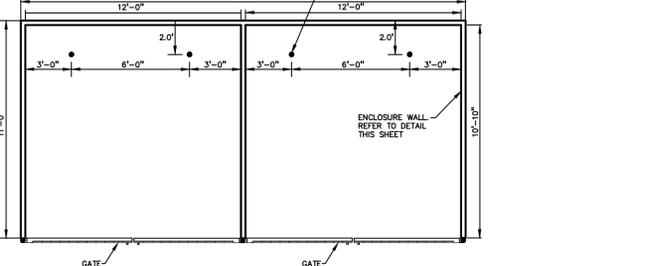
18"x6" STANDARD CONCRETE CURB AND GUTTER NOT TO SCALE



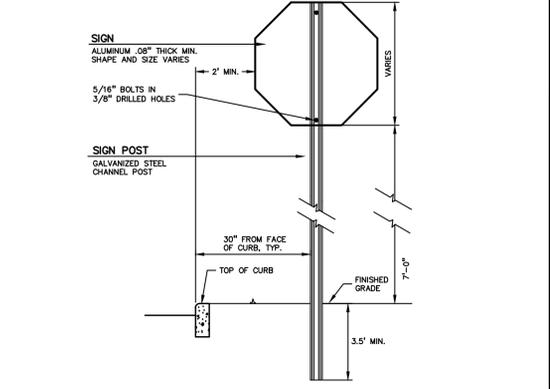
PARKING LOT LIGHT POLE DETAIL NOT TO SCALE



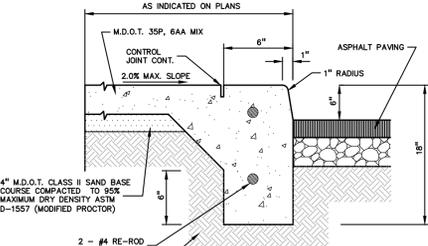
FRONT ELEVATION (STORAGE ENCLOSURE)



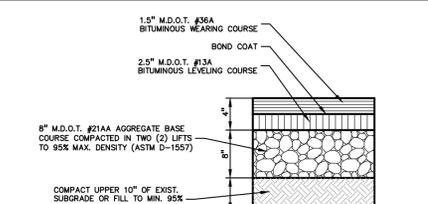
STORAGE ENCLOSURE DETAIL



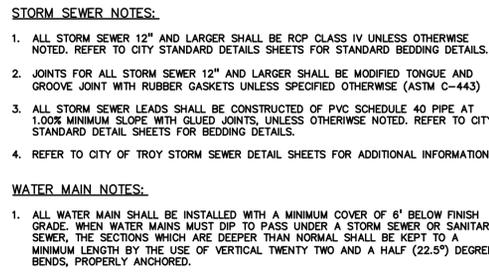
SIGN AND POST INSTALLATION IN LANDSCAPED AREAS NOT TO SCALE



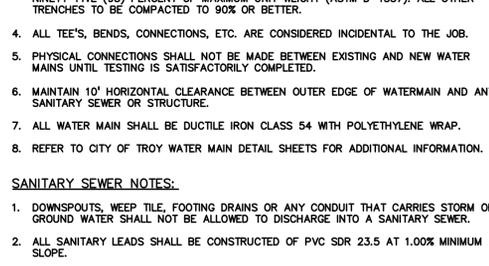
INTEGRAL CURB AND SIDEWALK NOT TO SCALE



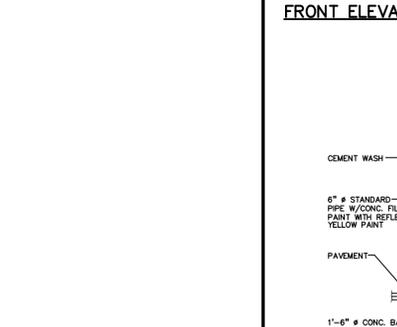
STANDARD DUTY ASPHALT DETAIL (NOT FOR USE IN THE RIGHT-OF-WAY) NOT TO SCALE



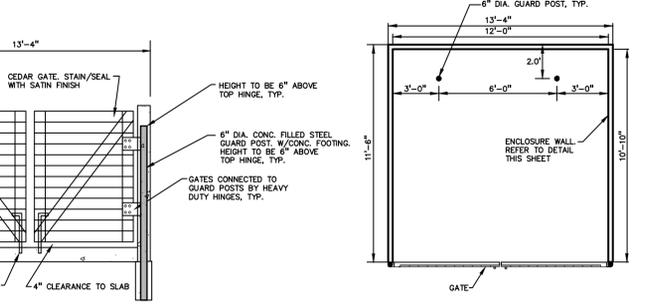
FRONT ELEVATION (TRASH ENCLOSURE)



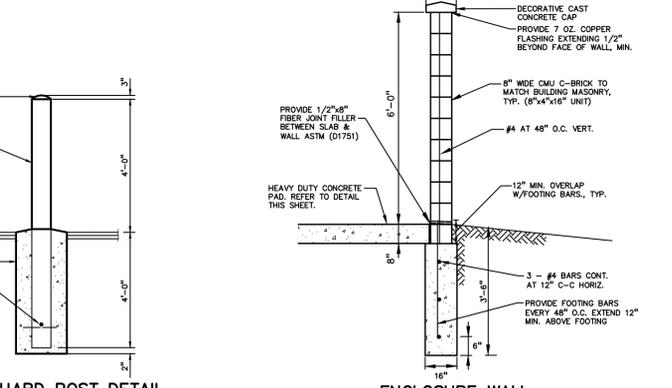
6" DIA. GUARD POST DETAIL



TRASH/STORAGE ENCLOSURE DETAILS NOT TO SCALE



RETAIL DUMPSTER ENCLOSURE DETAIL



ENCLOSURE WALL CROSS SECTION



STOP SIGN DETAIL NOT TO SCALE



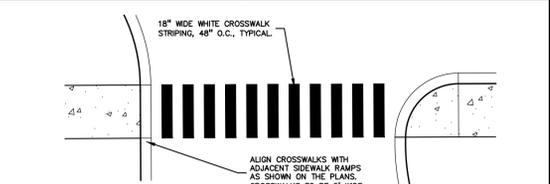
NO PARKING SIGN DETAIL NOT TO SCALE



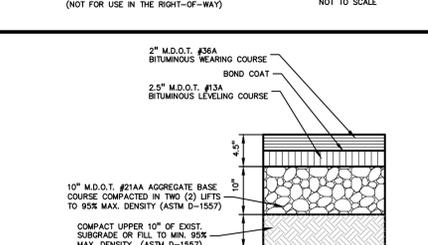
BARRIER FREE PARKING SIGN DETAIL NOT TO SCALE



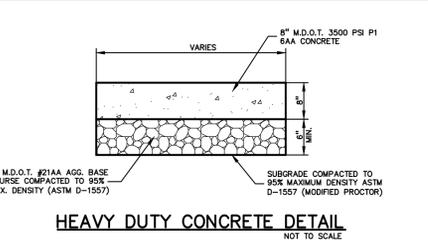
VAN ACCESSIBLE PARKING SIGN DETAIL NOT TO SCALE



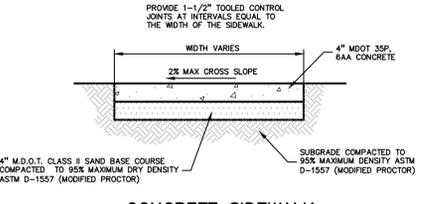
STRIPED CROSSWALK DETAIL NOT TO SCALE



HEAVY DUTY ASPHALT DETAIL (NOT FOR USE IN THE RIGHT-OF-WAY) NOT TO SCALE



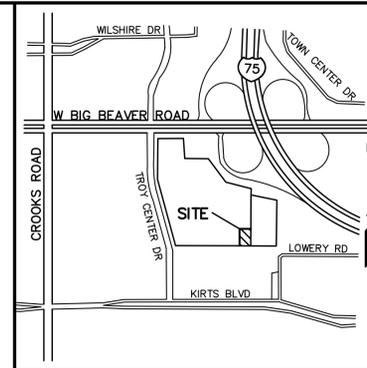
HEAVY DUTY CONCRETE DETAIL NOT TO SCALE



CONCRETE SIDEWALK NOT TO SCALE

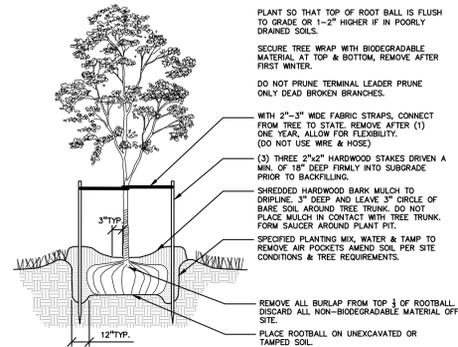
<p><b>REVISIONS</b></p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>7.6.10</td> <td>ADD</td> </tr> <tr> <td>2</td> <td>6.13.10</td> <td>REVISED PER STARWOOD COMMENTS</td> </tr> <tr> <td>3</td> <td>1.21.10</td> <td>REVISED PER CITY REVIEW BOARD COMMENTS</td> </tr> <tr> <td>4</td> <td>1.21.10</td> <td>REVISED PER CITY REVIEW BOARD COMMENTS</td> </tr> <tr> <td>5</td> <td>1.21.10</td> <td>REVISED PER CITY REVIEW BOARD COMMENTS</td> </tr> </table>		NO.	DATE	DESCRIPTION	1	7.6.10	ADD	2	6.13.10	REVISED PER STARWOOD COMMENTS	3	1.21.10	REVISED PER CITY REVIEW BOARD COMMENTS	4	1.21.10	REVISED PER CITY REVIEW BOARD COMMENTS	5	1.21.10	REVISED PER CITY REVIEW BOARD COMMENTS	<p><b>CAUTION</b></p> <p>THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AS INDICATED. NO GUARANTEE IS GIVEN FOR THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INFORMATION FROM THE CITY OF TROY AND M.D.O.T. PRIOR TO CONSTRUCTION.</p> <p>CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL PRACTICE, CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INFORMATION FROM THE CITY OF TROY AND M.D.O.T. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INFORMATION FROM THE CITY OF TROY AND M.D.O.T. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INFORMATION FROM THE CITY OF TROY AND M.D.O.T. PRIOR TO CONSTRUCTION.</p>
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<p><b>GROUP 10 MANAGEMENT</b></p> <p>30500 NORTHWESTERN HIGHWAY, SUITE 525 FARMINGTON HILLS, MI 48334</p>		<p><b>NOTES &amp; DETAILS</b></p> <p><b>ALOFT AT PNC OFFICE CENTER</b></p> <p>PART OF THE SE 1/4 OF SECTION 12, 2N, 1R, 11E, CITY OF TROY, ON LAND COUNTY, MICHIGAN</p> <p>DES: MEB DN MEB SUR MS LJM CMB MEB DN MEB SUR MS LJM</p>																		
<p>ORIGINAL ISSUE DATE: OCTOBER 23, 2015</p> <p>EA / OB NO. 2015-196</p> <p>SCALE: N/A</p> <p>DRAWING NUMBER: <b>C-5.1</b></p>		<p><b>NOT FOR CONSTRUCTION</b></p> <p>XREF: S:\PROJECTS\2015\2015196\DWG\15196-TOPOBASE.DWG XREF: S:\PROJECTS\2015\2015196\DWG\15196-TOWNSHIP.PLAN\BASE-15196.DWG XREF: S:\PROJECTS\2015\2015196\DWG\15196-SITE.PLAN\TK-K-15196.DWG</p>																		





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1	10/23/15	ISSUED FOR PERMITS
2	10/23/15	REVISED PER STARTWOOD COMMENTS
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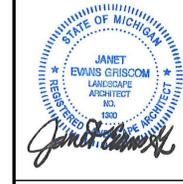
REVISIONS



**DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE

**GENERAL PLANTING NOTES:**

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



**CAUTION**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY A: NOT A GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION, DEPTH AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERAL AGREES THAT IN CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITY AND QUALITY OF ALL MATERIALS AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES.

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t: 248.689.9090  
f: 248.689.1044  
www.eainc.com

**GROUP 10 MANAGEMENT**  
30500 NORTHWESTERN HIGHWAY, SUITE 525  
FRAMINGHAM HILLS, MA 01904  
**PRELIMINARY LANDSCAPE DETAILS**  
**ALOFT AT PNC OFFICE CENTER**  
PART OF THE SE 1/4 OF SECTION 12, T. 2N., R. 11E.,  
CITY OF TROY, ON LAND COUNTY, MICHIGAN  
DES. DATE SUR. MS. I.M. I.B.  
S:\PROJECTS\2015\2015196\DWG\SITE\_PLANS\TK-K-15196.dwg

ORIGINAL ISSUE DATE:  
OCTOBER 23, 2015

EA / OB NO. 2015-196

SCALE: N = A

DRAWING NUMBER:

**L-1.2**



**BIKE RACK DETAIL**  
NOT TO SCALE

TYPE: BRCS-105 (5 LOOPS, 7 BIKES)  
(CYCLE SENTRY COLLECTION)  
SURFACE MOUNT  
BY: VICTOR STANLEY  
P: 800-368-2573

QUANTITY: 1  
COLOR: POWDER COAT GALV. BLACK

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

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

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

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

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

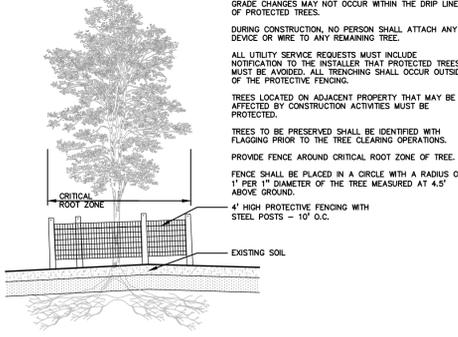
TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.

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

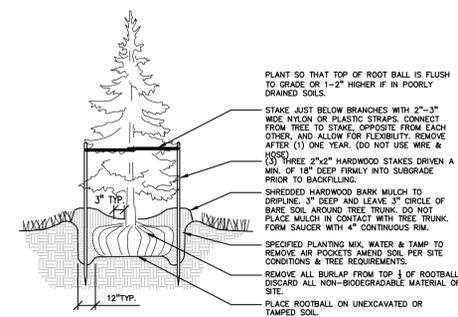
PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE.

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

4" HIGH PROTECTIVE FENCING WITH STEEL POSTS - 10' O.C.



**TREE PROTECTION DETAIL**  
NOT TO SCALE



**EVERGREEN TREE PLANTING DETAIL**  
NOT TO SCALE

PLANT SO THAT TOP OF ROOT BALL IS FLUSH TO GRADE OR 1-2" HIGHER IF IN POORLY DRAINED SOILS.

STAKE JUST BELOW BRANCHES WITH 2"-3" WIDE NYLON OR PLASTIC STRAPS; CONNECT FROM TREE TO STAKE, REMOVE AFTER (1) ONE YEAR, ALLOW FOR FLEXIBILITY. (DO NOT USE WIRE & HOSE)

(3) THREE 2"x2" HARDWOOD STAKES DRIVEN A MIN. OF 18" DEEP FIRMLY INTO SUBGRADE PRIOR TO BACKFILLING.

SHREDDED HARDWOOD BARK MULCH TO DRIFLINE, 3" DEEP AND LEAVE 3" CIRCLE OF BARE SOIL AROUND TREE TRUNK. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. FORM SAUCER AROUND PLANT FT.

SPECIFIED PLANTING MIX, WATER & TAMP TO REMOVE AIR POCKETS AMEND SOIL PER SITE CONDITIONS & TREE REQUIREMENTS.

REMOVE ALL BURLAP FROM TOP 1/2 OF ROOTBALL. DISCARD ALL NON-BIODEGRADABLE MATERIAL OFF SITE.

PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL.

PLANT SO THAT TOP OF ROOT BALL IS FLUSH TO GRADE OR 1-2" HIGHER IF IN POORLY DRAINED SOILS.

DO NOT COVER TOP OF ROOTBALL WITH SOIL.

FORM SAUCER WITH 4" CONTINUOUS RIM.

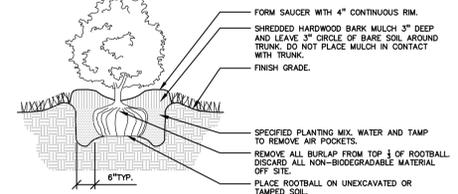
SHREDDED HARDWOOD BARK MULCH 3" DEEP AND LEAVE 3" CIRCLE OF BARE SOIL AROUND TRUNK. DO NOT PLACE MULCH IN CONTACT WITH TRUNK.

FINISH GRADE.

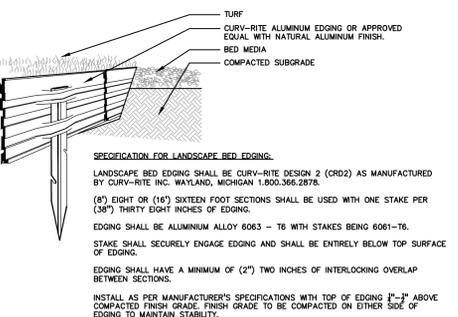
SPECIFIED PLANTING MIX, WATER AND TAMP TO REMOVE AIR POCKETS.

REMOVE ALL BURLAP FROM TOP 1/2 OF ROOTBALL. DISCARD ALL NON-BIODEGRADABLE MATERIAL OFF SITE.

PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL.



**SHRUB PLANTING DETAIL**  
NOT TO SCALE



**ALUMINUM EDGE DETAIL**  
NOT TO SCALE

**SPECIFICATION FOR LANDSCAPE BED EDGING:**

LANDSCAPE BED EDGING SHALL BE CURV-RITE DESIGN 2 (CRD2) AS MANUFACTURED BY CURV-RITE INC. WAYLAND, MICHIGAN 1.800.366.2878.

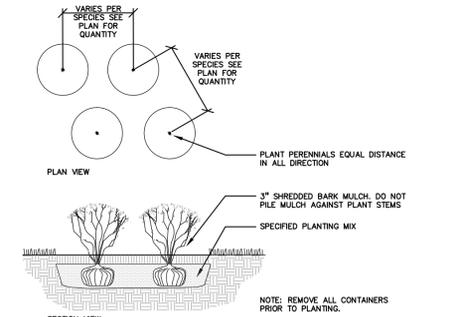
(6") HIGH OR (16") SIXTEEN FOOT SECTIONS SHALL BE USED WITH ONE STAKE PER (24") THIRTY EIGHT INCHES OF EDGING.

EDGING SHALL BE ALUMINUM ALLOY 6063 - T6 WITH STAKES BEING 6061-T6.

STAKE SHALL SECURELY ENGAGE EDGING AND SHALL BE ENTIRELY BELOW TOP SURFACE OF EDGING.

EDGING SHALL HAVE A MINIMUM OF (2") TWO INCHES OF INTERLOCKING OVERLAP BETWEEN SECTIONS.

INSTALL AS PER MANUFACTURER'S SPECIFICATIONS WITH TOP OF EDGING 2"-3" ABOVE COMPACTED FINISH GRADE. FINISH GRADE TO BE COMPACTED ON EITHER SIDE OF EDGING TO MAINTAIN STABILITY.



**PERENNIAL PLANTING DETAIL**  
NOT TO SCALE

PLANT PERENNIALS EQUAL DISTANCE IN ALL DIRECTION.

3" SHREDDED BARK MULCH. DO NOT PILE MULCH AGAINST PLANT STEMS.

SPECIFIED PLANTING MIX.

NOTE: REMOVE ALL CONTAINERS PRIOR TO PLANTING.

**NOT FOR CONSTRUCTION**

XREF: S:\PROJECTS\2015\2015196\DWG\15196-TOPOBASE.DWG  
XREF: S:\PROJECTS\2015\2015196\DWG\SITE\_PLANS\TK-K-15196.DWG  
XREF: S:\PROJECTS\2015\2015196\DWG\SITE\_PLANS\TK-K-15196.DWG

starwood  
Hotels and  
Resorts

aloft<sup>SM</sup>

HOTELS  
Tro<sup>o</sup> Michi<sup>o</sup>an

title sheet 000

ro<sup>o</sup>sed floor <sup>o</sup>an - level 1 001

ro<sup>o</sup>sed floor <sup>o</sup>an - level 2 002

ro<sup>o</sup>sed floor <sup>o</sup>an - level 3 003

ro<sup>o</sup>sed floor <sup>o</sup>an - level 4 004

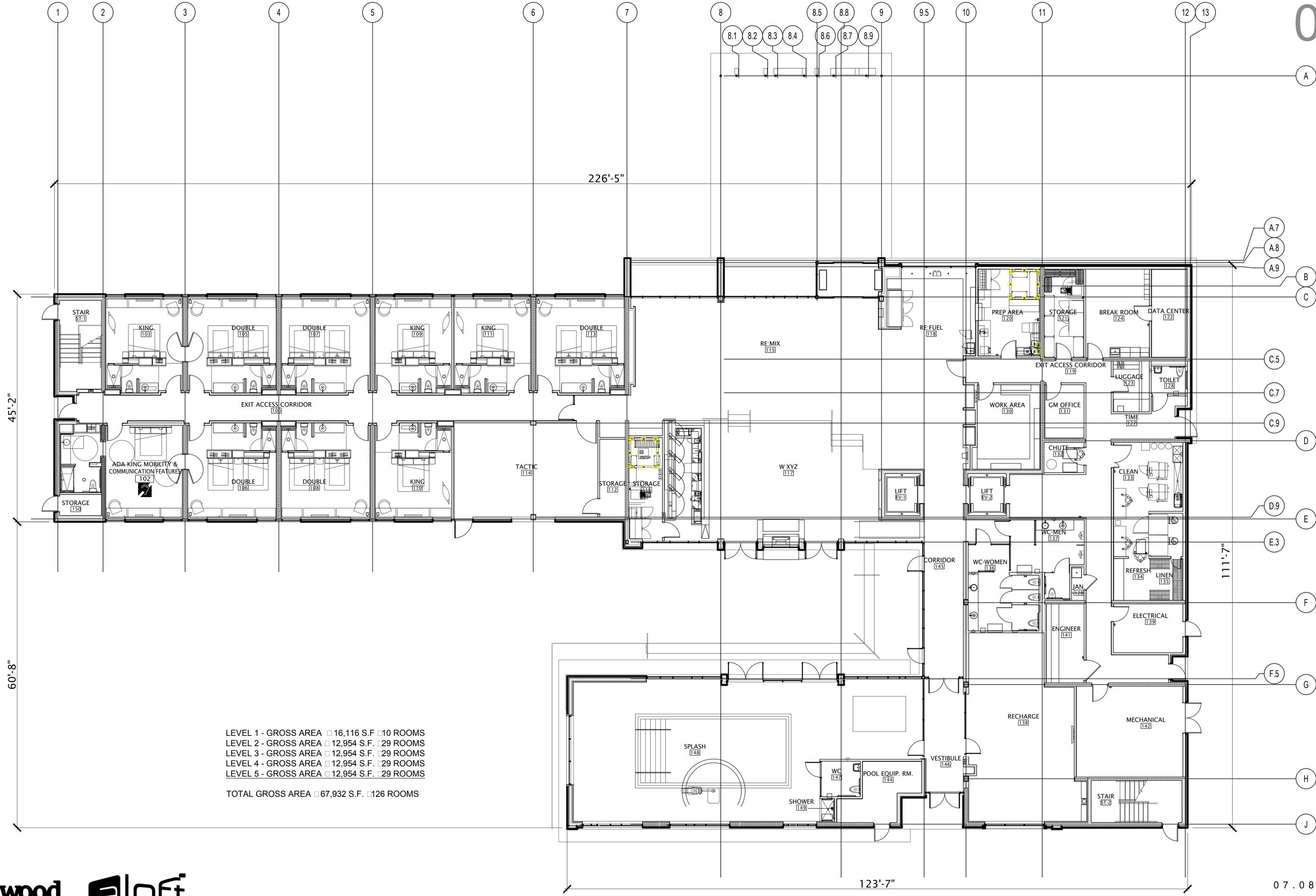
ro<sup>o</sup>sed floor <sup>o</sup>an - level 5 005

ro<sup>o</sup>sed roof <sup>o</sup>an 006

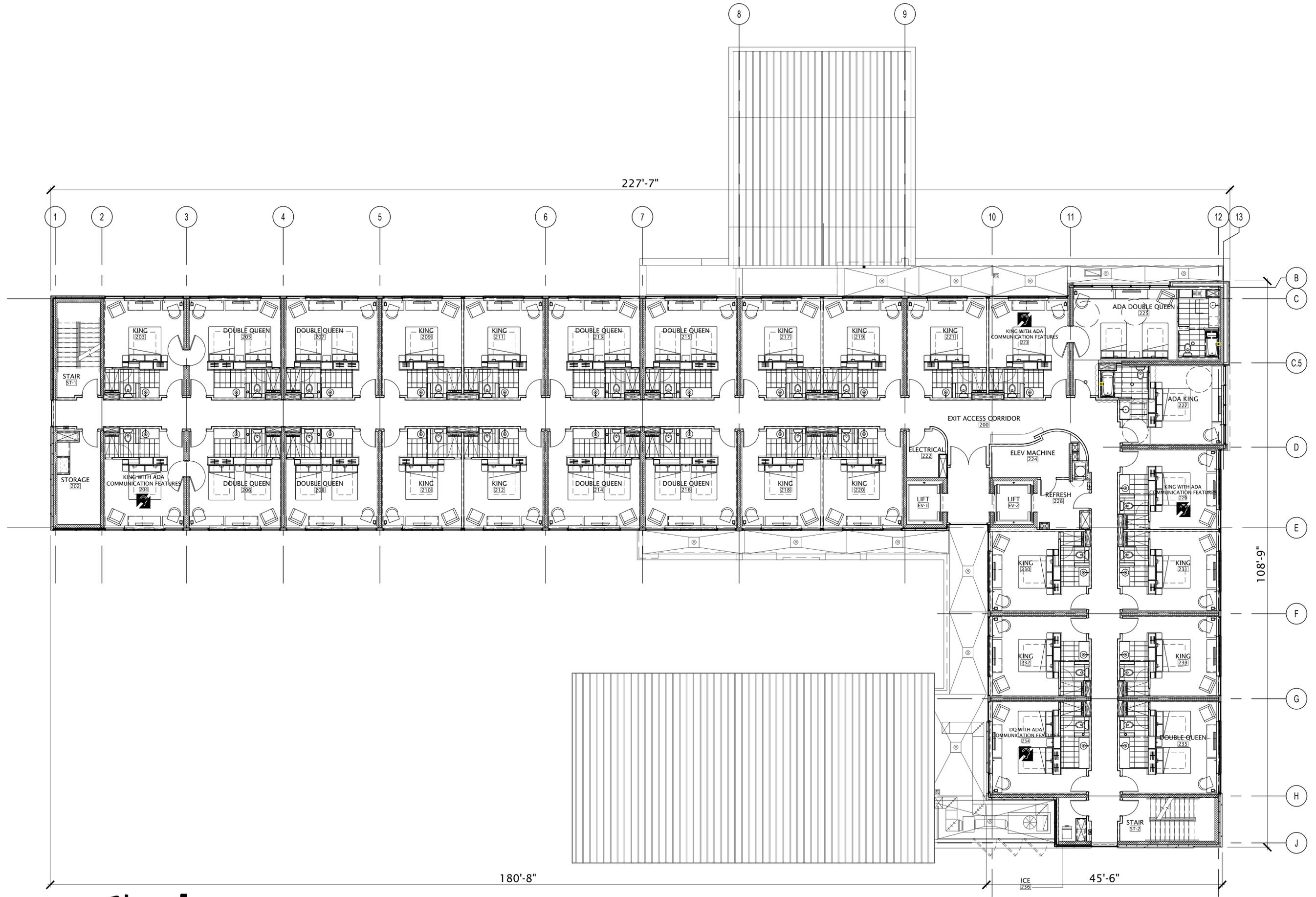
ro<sup>o</sup>sed e<sup>o</sup>terior color elevations 007

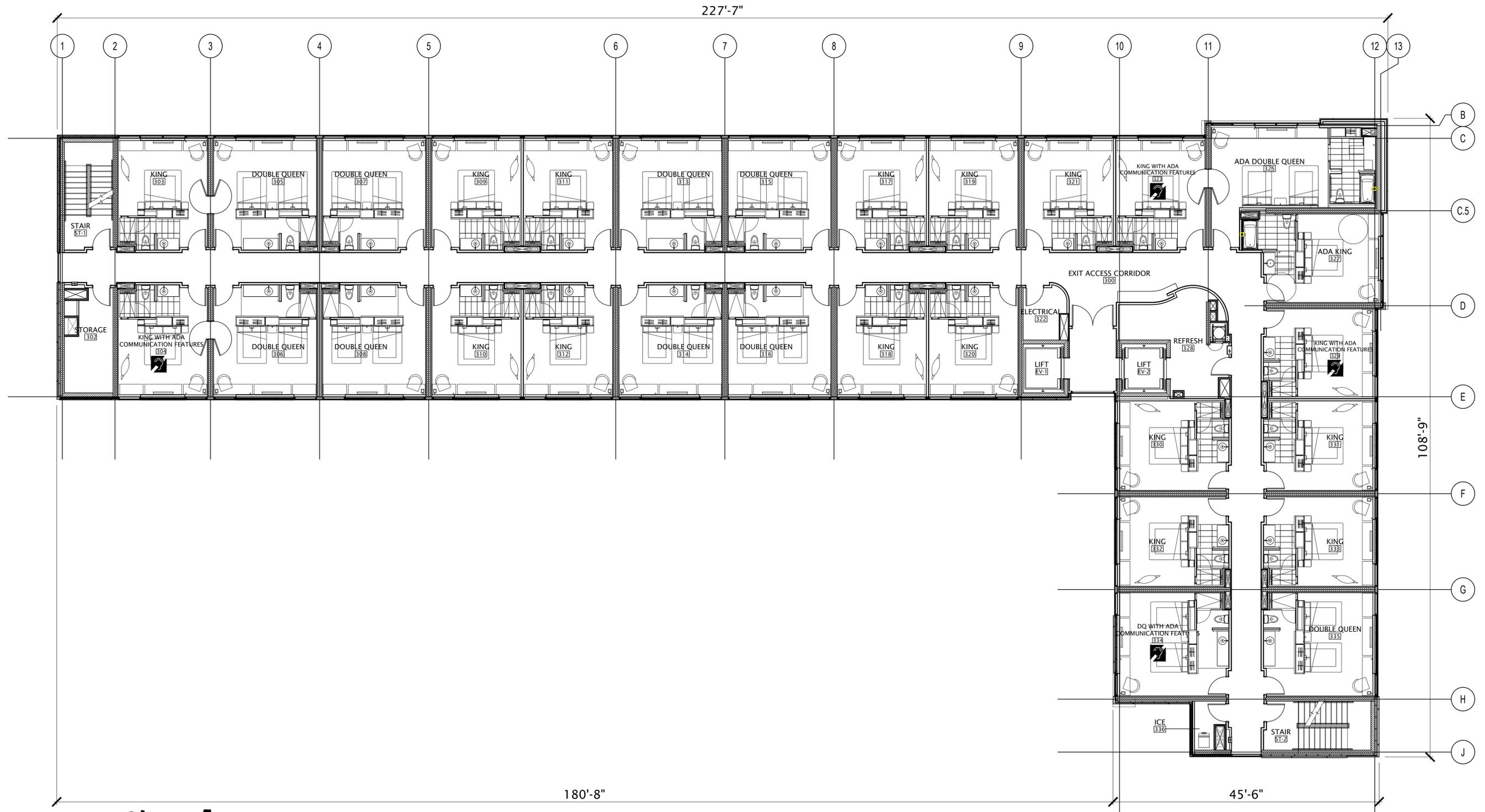
ro<sup>o</sup>sed e<sup>o</sup>terior color elevations 008

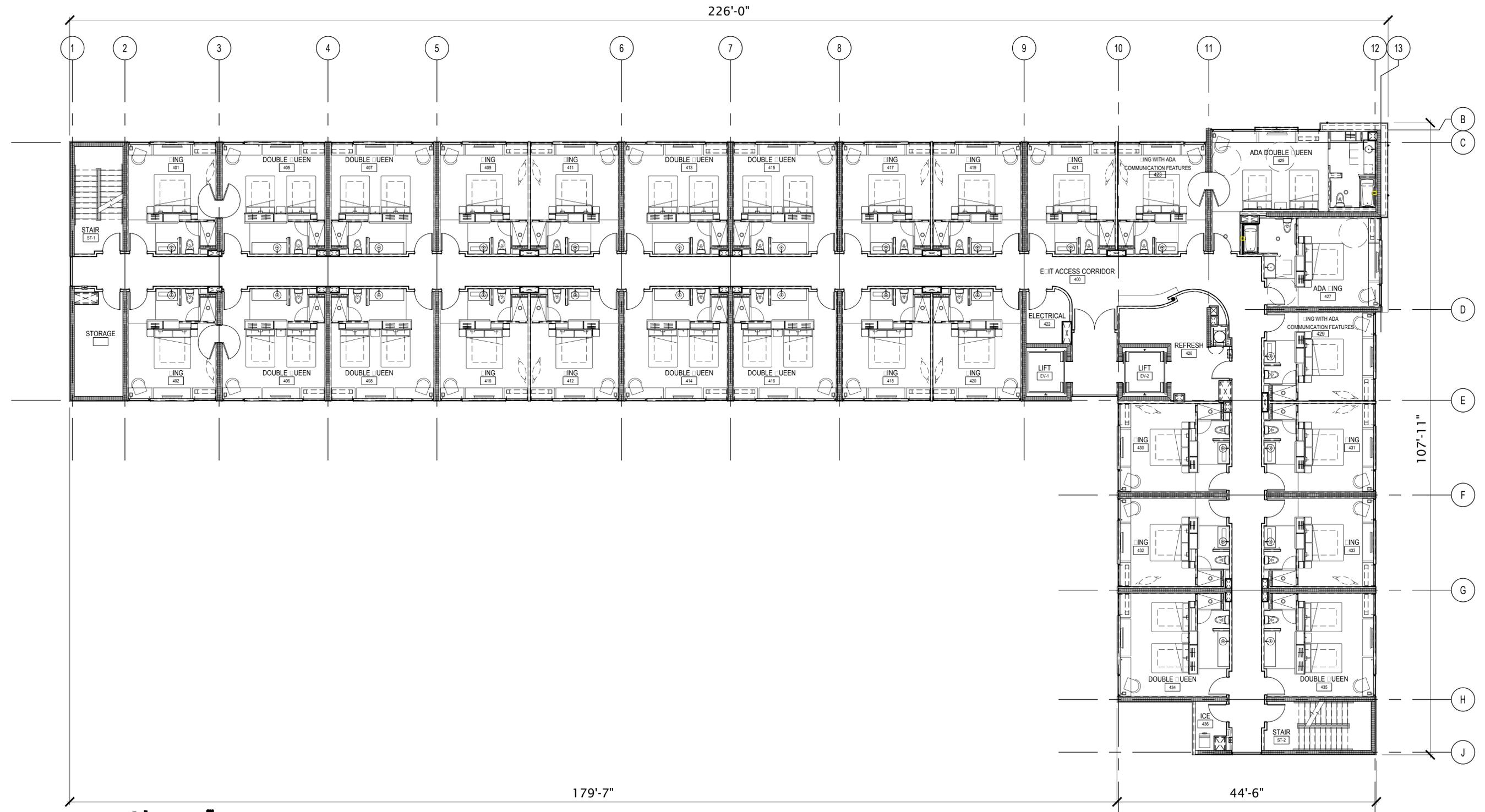




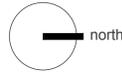
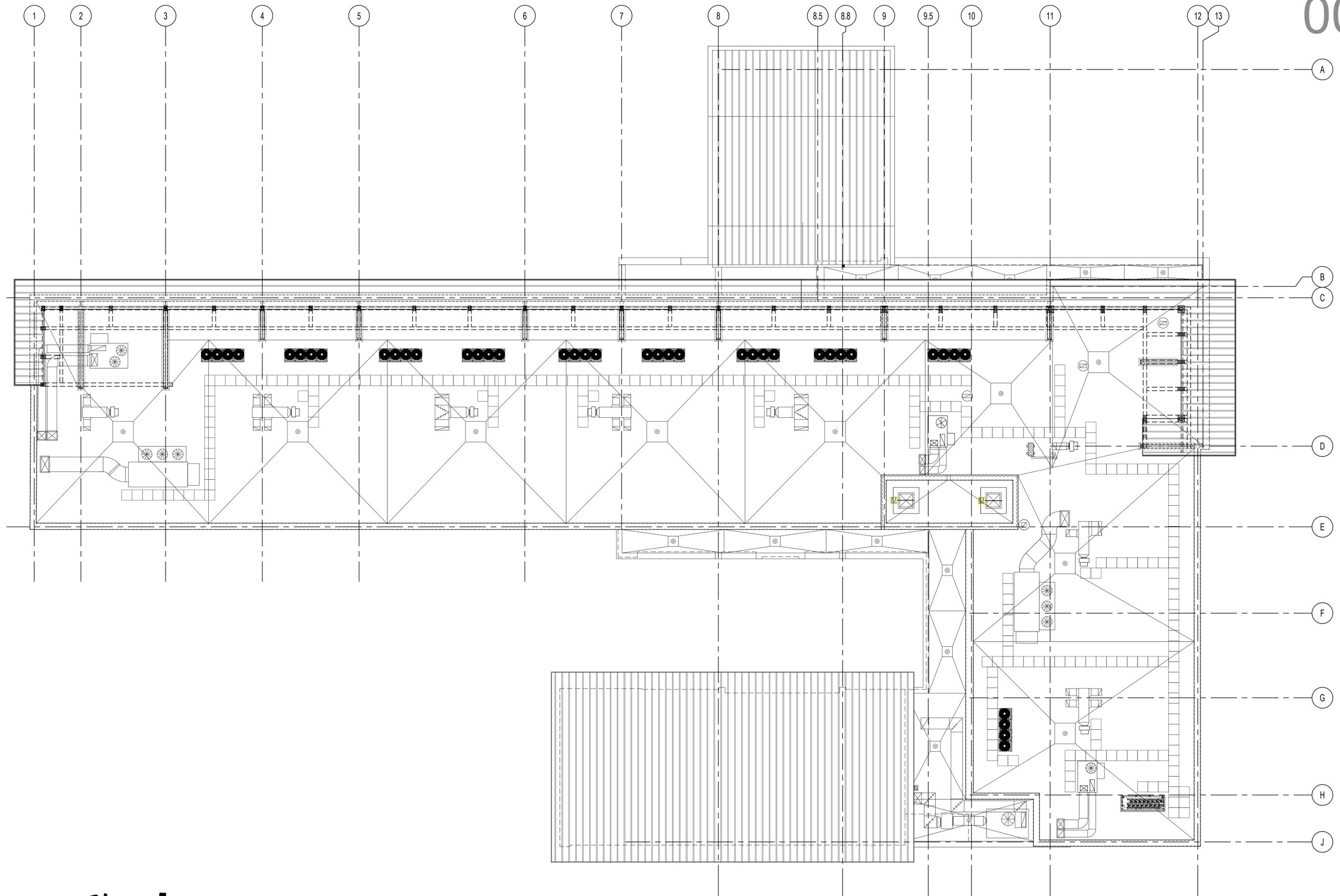
LEVEL 1 - GROSS AREA □ 16,116 S.F. □ 10 ROOMS  
 LEVEL 2 - GROSS AREA □ 12,954 S.F. □ 29 ROOMS  
 LEVEL 3 - GROSS AREA □ 12,954 S.F. □ 29 ROOMS  
 LEVEL 4 - GROSS AREA □ 12,954 S.F. □ 29 ROOMS  
 LEVEL 5 - GROSS AREA □ 12,954 S.F. □ 29 ROOMS  
 TOTAL GROSS AREA □ 67,932 S.F. □ 126 ROOMS





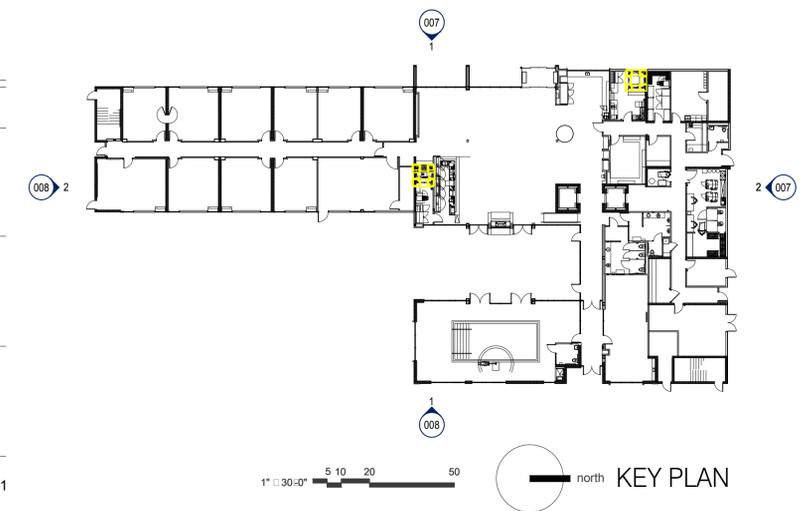








2-PROPOSED NORTH ELEVATION



KEY PLAN

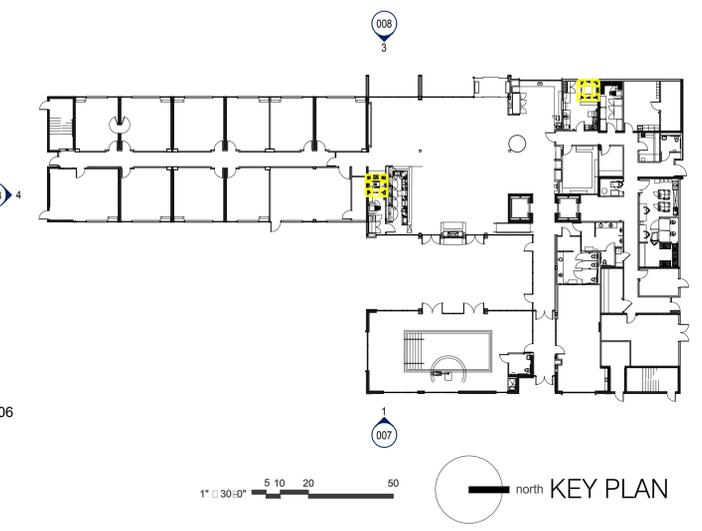
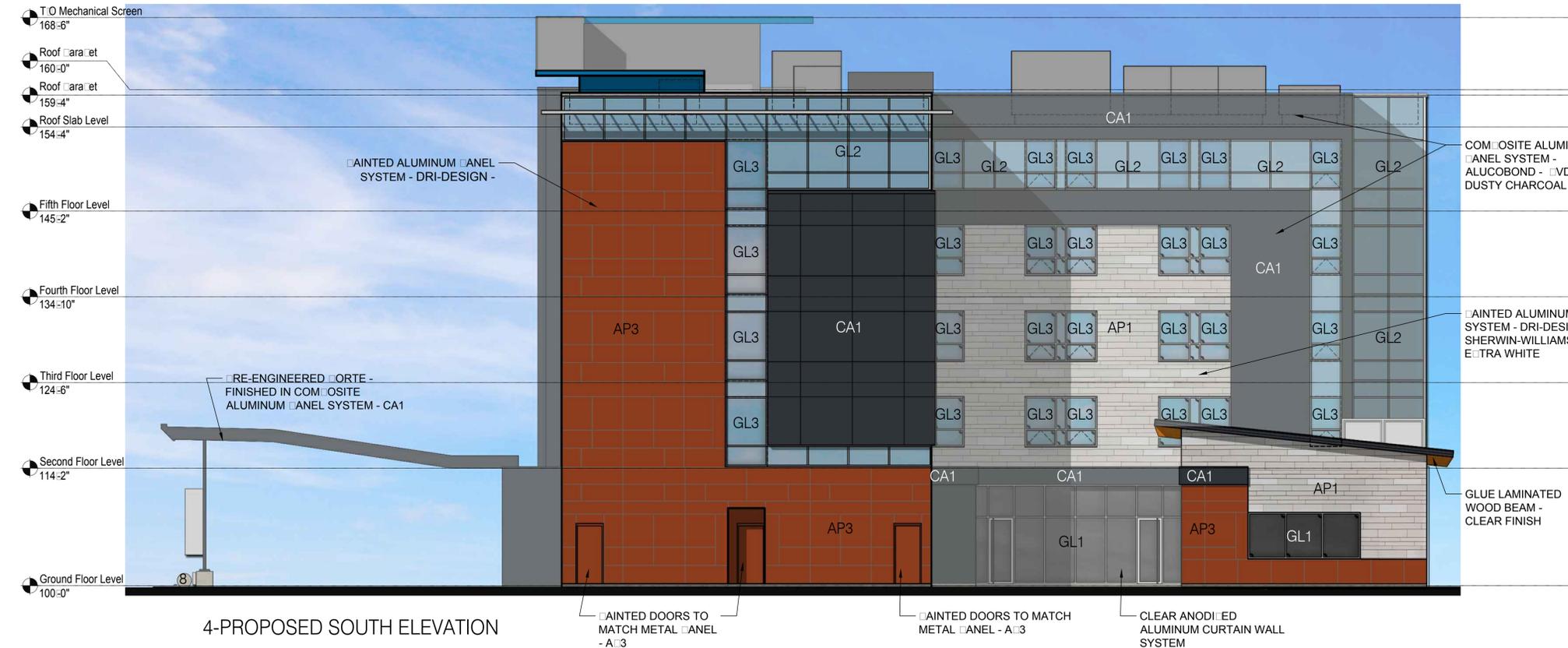
GLAZING CALCULATIONS

	LOCATION	AREA	WINDOW/DOOR	PERCENTAGE
WEST ELEVATION	1st	3,186.6 SF	1400.0 SF	43.9 %
	2 - 4	2,335.4 SF/FLR	900.8 SF	38.6 %
	5	3190.9 SF	2433.5 SF	76.2 %
NORTH ELEVATION	1st	1,395.3 SF	168.7 SF	12.1 %
	2 - 4	1,123.8 SF/FLR	362.4 SF	32.2 %
	5	1,534.1 SF	960.0 SF	62.6 %

- CA1 Composite Aluminum Panel System - Alucobond - VDF3 Dusty Charcoal
- AP1 Painted Aluminum Panel System - Dr-Design - Varies
- AP2 Painted Aluminum Panel System - Sherwin-Williams - SW659 Blue Ch
- AP3 Painted Aluminum Panel System - Dr-Design - Sherwin-Williams - SW635 Fired Br
- WP1 Natural Wood Composite Panel System - Sherwin-Williams - Wood-rodE - Dar - Wood
- WD1 Glue Laminated Wood Beam - Clear Finish
- CNC Cast in Place Concrete
- SF Design at Underside of Entrance and Ornamental Roof Structure
- AWF Window Frames - Clear Anodized Aluminum
- GL1 1st Floor Public Space Glazing
- GL2 Standel Glazing
- GL3 Room Glazing



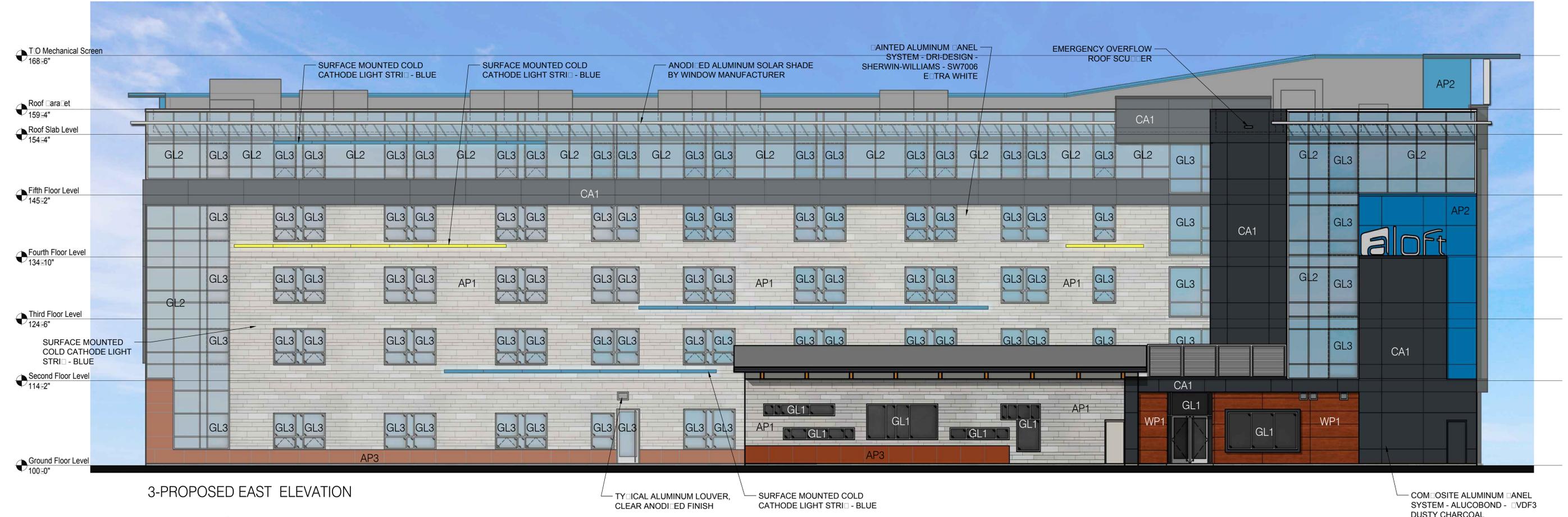
1-PROPOSED WEST ELEVATION



GLAZING CALCULATIONS

	LOCATION	AREA	WINDOW/DOOR	PERCENTAGE
EAST ELEVATION	1st	3,303.7 SF	793.9 SF	24.0 %
	2 - 4	2,316.3 SF/FLR	777.7 SF	33.6 %
	5	3,175.6 SF	2,499.7 SF	78.7 %
SOUTH ELEVATION	1st	1,482.5 SF	861.2 SF	58.1 %
	2 - 4	1,085.0 SF/FLR	318.8 SF	29.4 %
	5	1,488.0 SF	449.9 SF	30.2 %

- CA1 Composite Aluminum Panel System - Alucobond - VDF3 Dusty Charcoal
- AP1 Painted Aluminum Panel System - Dri-Design - Varies
- AP2 Painted Aluminum Panel System - Dri-Design - Sherwin-Williams - SW6959 Blue Chalk
- AP3 Painted Aluminum Panel System - Dri-Design - Sherwin-Williams - SW6335 Fired Brick
- WP1 Natural Wood Composite Panel System - Dri-Design - Sherwin-Williams - SW6335 Fired Brick
- WD1 Glue Laminated Wood Beam - Clear Finish
- CNC Cast in Place Concrete
- SF Designated Underside of Entrance and Ornamental Roof Structure
- AWF Window Frames - Clear Anodized Aluminum
- GL1 1st Floor Public Space Glazing
- GL2 Standard Glazing
- GL3 Room Glazing



DATE: August 3, 2016

TO: Planning Commission

FROM: R. Brent Savidant, Planning Director

SUBJECT: CONDITIONAL REZONING APPLICATION (File Number CR JPCR2016-003) – Proposed McClure Road Apartments, North of Big Beaver, East of Crooks, East side of McClure (3142, 3114, 3086 McClure), Section 20, From R-1B (One Family Residential) District to BB (Big Beaver) District

The applicant Tollbrook, LLC seeks a conditional rezoning of the subject parcel from R-1B (One Family Residential) District to BB (Big Beaver) District. As part of the application, the applicant submitted a Preliminary Site Plan for a 5-story, 140-room apartment building on McClure Road.

The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

The applicant seeks input from the Planning Commission on this application. The applicant presented the project to the Planning Commission on July 12, 2016. The Planning Commission provided feedback. The applicant revised the project based on the feedback, including reorienting the building and reducing the height of the building.

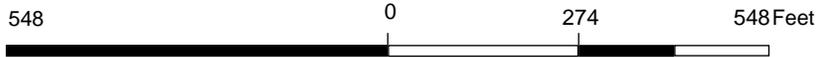
The next step in the process is scheduling a Planning Commission public hearing. No specific action by the Planning Commission is required at this time.

Please be prepared to discuss this item at the August 9, 2016 Planning Commission Regular meeting.

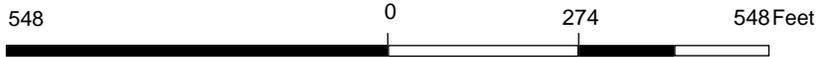
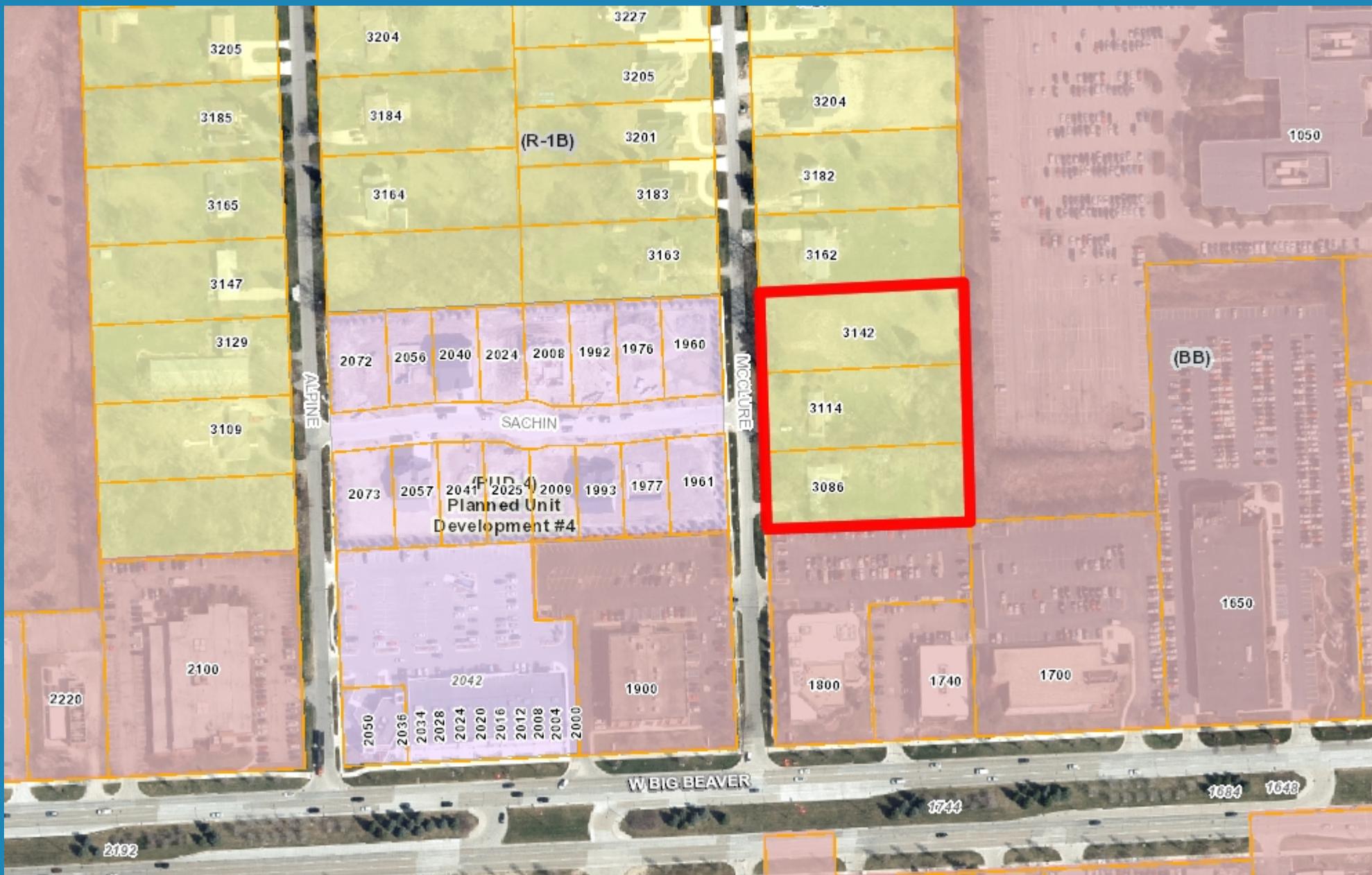
Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.

G:\Conditional Rezoning\JPCR 2016-003 McClure Road Apartments Sec 20\PC Memo 08 09 2016.docx



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



CARLISLE

WORTMAN  
associates, inc.

605 S. Main Street, Ste. 1  
Ann Arbor, MI 48104

(734) 662-2200  
(734) 662-1935 Fax

## MEMORANDUM

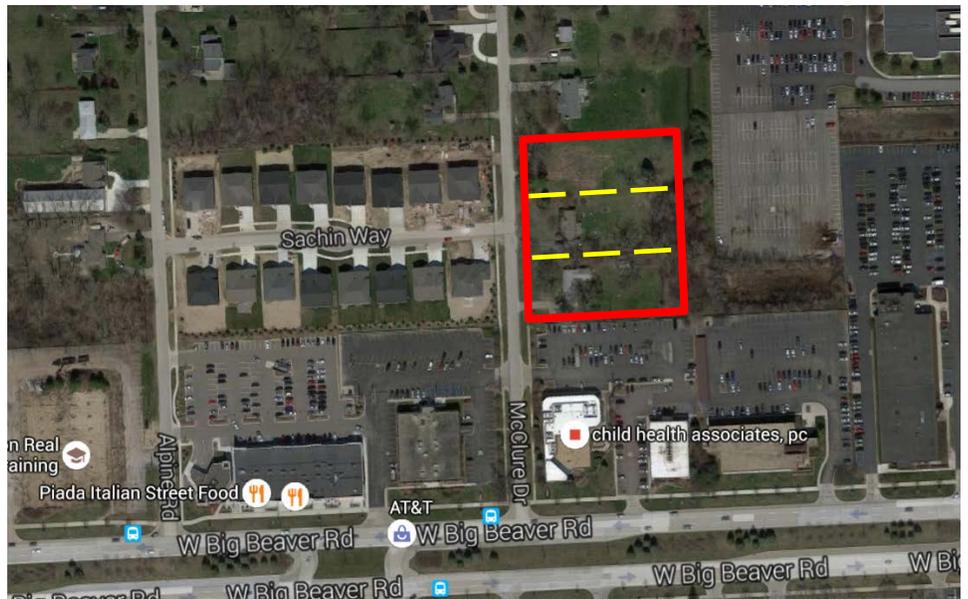
**TO:** City of Troy Planning Commission  
R. Brent Savidant, AICP

**FROM:** Benjamin R. Carlisle, AICP

**DATE:** August 2, 2016

**RE:** McClure Road Apartments

The applicant is requesting a conditional rezoning of the subject site encompassing three (3) parcels located on the east side of McClure Road, just north of Big Beaver. The three parcels are currently zoned R1-B, One Family Residential. The total development site acreage is 2.57 acres. The two southernmost lots are improved with a single-family home. The northernmost lot is vacant.



The application was last reviewed by the Planning Commission on July 12, 2016. Please see our July 7<sup>th</sup> memo for details.

Since that meeting, the applicant has made the following changes to their plans:

- Reduced the number of stories from six (6) to three (3) along northern edge of the building and transitioning to five (5) stories further south.
- Increased the building setback along the northern property line, which is adjacent to single-family residential, from 60 feet to 131 feet. The 131-foot setback is to the three-story portion of the building. The northern property line setback to the 5-story portion of the building is approximately 165 feet.
- Reduced the number of apartment units from 152 to 140
- Reduced the number of parking spaces from 205 to 199

- Altered the building layout from an L-shaped building to U-shaped building.
- Moved a majority of the at-grade parking from the interior of site based on L-shaped building to northern portion of site based on new U-shaped building
- Reduced the impervious surface percentage from 73% to 68%
- Reduced the building coverage percentage from 37% to 31%
- Provided architectural and design changes including incorporation of additional materials, greater building relief and fenestration, and greater variations in the roofline.

**Development Details**

The applicant proposes to conditionally rezone the property from R1-B, One Family Residential to BB, Big Beaver Form-Base District.

<b>Comparison Chart-Development Details</b>		
	<b>Development as proposed in Proposed on July 2016</b>	<b>Development as proposed on August 2016</b>
Current Zoning	R1-B	R1-B
Proposed Conditional Rezoning	BB, Big Beaver Form-Based District	BB, Big Beaver Form-Based District
Site Development Area	2.57 acres	2.57 acres
Use	Apartments	Apartments
Impervious Coverage	73%	68%
Building Coverage	37%	31%
Units	152	140
Height	6 stories, 66 feet	Three (3) along northern edge of the building and transitioning to five (5) stories further south. The height in feet is not indicated
Setbacks	Front (McClure)	30 feet
	Rear	30 feet
	Side (north)	60 feet
	Side (south)	30 feet
Required Parking by Ordinance	298 spaces	280 spaces
Provided Parking	205 spaces including	199 spaces

**Surrounding Zoning and Uses:**

A table summarizing zoning and uses of the adjacent properties is as follows:

Direction	Zoning	Use
North	R-1B, One-Family Residential	One Family Residential
South	BB, Big Beaver	Office
East	BB, Big Beaver (consent judgement)	Parking / Office
West	PUD	One Family Residential

There was discussion at the last Planning Commission meeting regarding the process of establishing the Big Beaver Zoning District in relation to the boundaries in the Master Plan. Please find the attached memo from Dick Carlisle providing more detail.

**Rezoning Standards:**

As set forth in Section 16.03, there are five (5) standards to consider for a rezoning:

1. *The proposed rezoning is consistent with the Master Plan.*
2. *The proposed rezoning will not cause nor increase any non-conformity.*
3. *Public services and facilities affected by a proposed development will be capable of accommodating service and facility loads caused by use of the development.*
4. *The rezoning will not impact public health, safety, or welfare.*
5. *The rezoning will ensure compatibility with adjacent uses of land.*

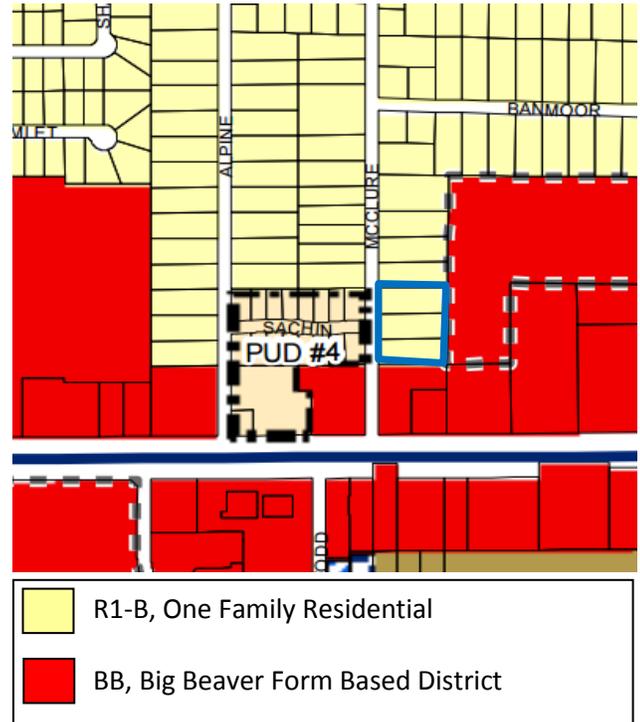
The applicant should address the aforementioned standards, specifically consistency with Master Plan, attempts to address to impact upon public health, safety, and welfare of adjacent properties and ensure compatibility with adjacent use of land. The applicant will be required to submit a traffic study.

The conditions offered by the applicant include the site plan as submitted. The applicant is seeking Planning Commission input prior to submitting a complete conditional rezoning and site plan application.

I look forward to discussing this memo.

Sincerely,

  
 CARLISLE/WORTMAN ASSOC., INC.  
 Benjamin R. Carlisle, AICP, LEED AP  
 Principal





CARLISLE

WORTMAN  
associates, inc.

605 S. Main Street, Ste. 1  
Ann Arbor, MI 48104

(734) 662-2200  
(734) 662-1935 Fax

**TO:** Brent Savidant, Planning Director  
City of Troy

**FROM:** Richard K. Carlisle

**DATE:** July 26, 2016

**RE:** Big Beaver Corridor Area

At a recent Planning Commission meeting, we were asked for the basis behind establishing what is considered the Big Beaver Corridor.

Both the Master Plan and Zoning Ordinance make reference to the Big Beaver Corridor Study, prepared in 2006. The Study was commissioned by both the City and the DDA with the intent of transforming Big Beaver into a “World Class” boulevard.

The District Plan incorporated a much larger area than just properties with frontage directly on Big Beaver. The thinking behind this was that a larger land area was needed to transform the Corridor into a mixed use, higher density, walkable environment. It was also recognized that many of the properties that front on Big Beaver do not have sufficient depth to be developed in a manner envisioned by the Plan.

A key consideration in the District Plan was the Building Height Plan. In short, the Building Height Plan called for a transition in building height from properties adjacent to Big Beaver Road to properties interior from the roadway. In other words, higher buildings were envisioned directly on Big Beaver transitioning to lower buildings adjacent to neighborhoods.

While the range of building heights was from 10-12 stories down to 2-3 stories, I believe the actual application of the Building Height Plan was intended to be taken in context. The Plan refers to such modulation in height, considering adjacent land uses.

The regulatory mechanism for implementing the Corridor Plan is the Zoning Ordinance, specifically the Big Beaver Form Based Code District. The current District boundaries are depicted on Map 5.04.1: Big Beaver District Regulating Plan. As is the case with many Zoning Districts, the boundaries are not necessarily coincident with those shown by the Big Beaver Corridor Plan. Modification of any District boundaries requires a rezoning based, in large part, on the consistency of the request with the Master Plan and any supporting Plans.

Richard K. Carlisle, *President* Douglas J. Lewan, *Executive Vice President*

R. Donald Wortman, *Principal* John L. Enos, *Principal* David Scurto, *Principal* Benjamin R. Carlisle, *Principal* Sally M. Elmiger, *Principal*  
Brian Oppmann, *Associate* Laura K. Kreps, *Associate*

The Big Beaver Form Based Code is more specific about the relationship of height and use to adjacent properties. There are clear standards to be applied to address the specific issue regarding transition to adjacent properties that includes the following language found in Section 5.04.E.4:

4. *Transitional Features.*

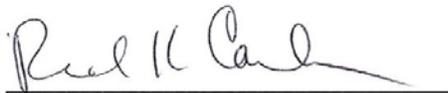
- a. *Transitional features are architectural elements, site features, or alterations to building massing that are used to provide a transition between higher intensity uses and low- or moderate-density residential areas. These features assist in mitigating potential conflicts between those uses. Transitional features are intended to be used in combination with landscape buffers or large setbacks.*
- b. *Intensity. A continuum of use intensity, where moderate intensity uses are sited between high-intensity uses and low-intensity uses, shall be developed for multi-building developments. An example would be an office use between commercial and residential uses.*
- c. *Height and Mass. Building height and mass in the form of building step-backs, recess lines or other techniques shall be graduated so that structures with higher intensity uses are comparable in scale with adjacent structures of lower-intensity uses.*

In conclusion, the Big Beaver Corridor Plan anticipates a potential Zoning District which is more expansive than the current Big Beaver Form Based Code. However, in the application of the Code to any specific parcel or project, the language in the Ordinance is clear in the need to consider adjacent properties in regards to use, intensity and height.

I hope this answers the concerns the Commission may have. It may be useful to provide the Commission with excerpts from the Plan which illustrate the concepts I discuss in this opinion. I have included portions of the Plan. Please let me know if there are additional questions.

Yours Truly,

---



CARLISLE/WORTMAN ASSOC., INC.  
Richard K. Carlisle, AICP  
President

# Ilium Luxury Apartments

3114 McClure Rd.

Troy, MI, 48084

United States of America

**DESIGNHAUS** EST  
ARCHITECTURE 1998

301 WALNUT BOULEVARD  
ROCHESTER, MI 48307

T: 248.601.4422 F: 248.453.5854

WWW.DESIGNHAUS.COM  
INFO@DESIGNHAUS.COM



### STATEMENT OF SELECTED DESIGN PROFESSIONAL

THESE CONSTRUCTION DOCUMENTS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES ISSUED AND APPROVED CODE MODIFICATIONS AND/OR MUNICIPAL CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL.

REGISTERED DESIGN PROFESSIONAL IN CHARGE:  
PETER STUHLREYER, A.I.A.  
MICHIGAN IDENTIFICATION # 44668  
DESIGNHAUS ARCHITECTURE

### PROJECT TEAM

**OWNER**  
TBD  
ADDRESS  
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C:  
CONTACT:

**ARCHITECT**  
DESIGNHAUS ARCHITECTURE  
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PROJECT MANAGER: JOE LATOZAS  
PROJECT ARCHITECT:  
PETER STUHLREYER, A.I.A.

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**MEP ENGINEER**  
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**STRUCTURAL ENGINEER**  
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T:  
F:  
C:  
CONTACT:

**CONTRACTOR**  
ADDRESS  
T:  
F:  
C:  
CONTACT:

### INDEX OF DRAWINGS

- SHEET ISSUED
- REVISED
- SHEET REISSUED

#### SHEET NO:

#### DRAWING NAME

#### GENERAL

G001 Title Sheet and Index  
G002 Reference & Code Information

#### CIVIL

TOPO Boundary, Topographic, and Tree Inventory and Preservation Plan

#### LANDSCAPE

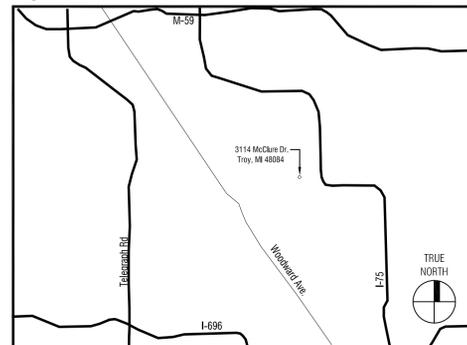
S100 Site Plan  
S101 Site Details  
S200 Preliminary Grading Plan  
L100 Landscape Plan  
S300 Preliminary Lighting Plan

#### ARCHITECTURAL

A100 Parking Level  
A101 Entry Level  
A102 Entry Level  
A102 First Floor  
A105 Second - Sixth Floors  
A200 Elevations  
A201 Elevations

Preliminary Design Review 6.14.2016  
Preliminary Discussion #2 7.21.2016

### VICINITY MAP



### LOCATION MAP



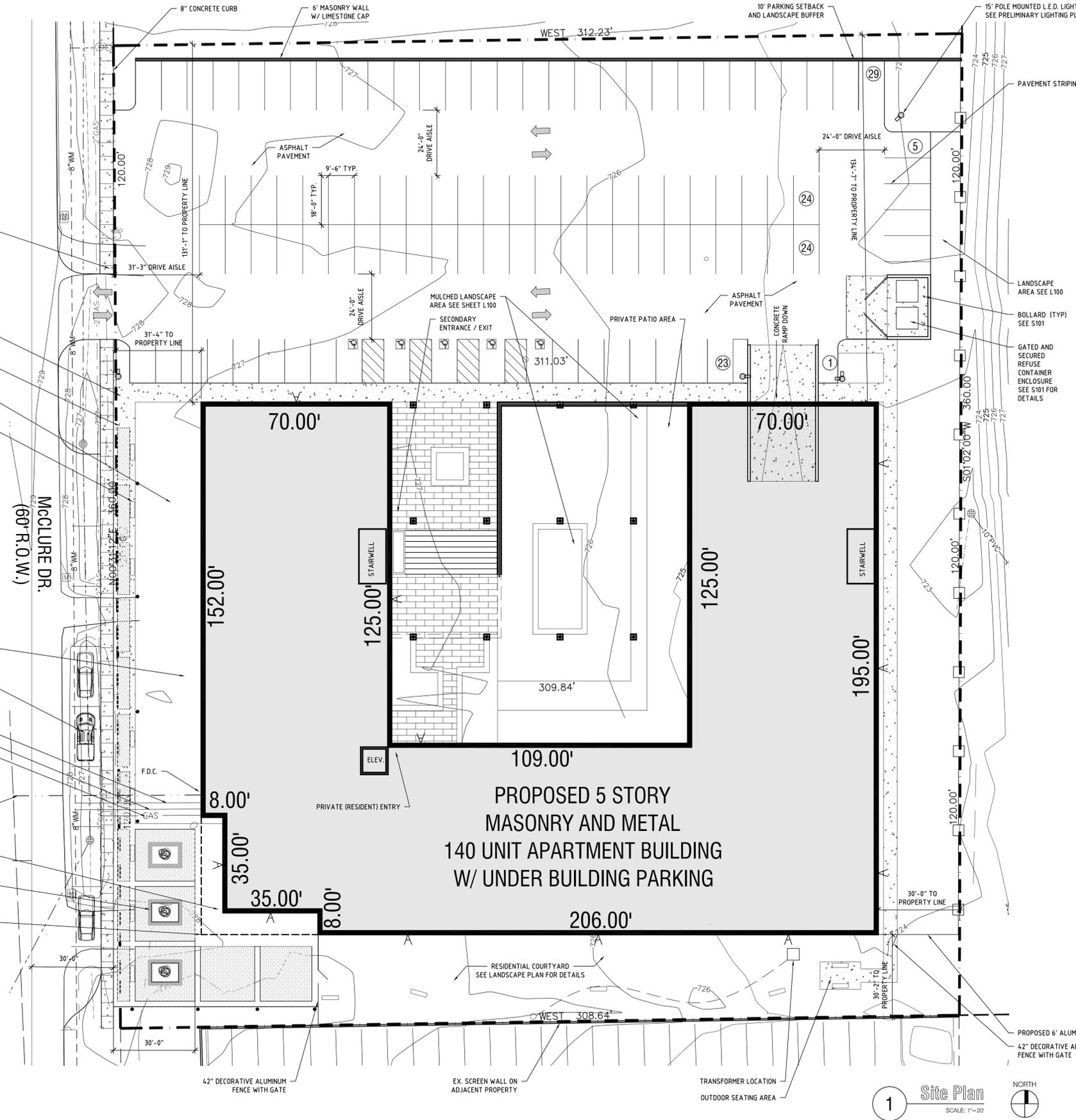
No.	Revision/Issue	Date
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	Preliminary Discussion #2	7.21.2016
	Preliminary Design Review	6.14.2016

**Ilium Luxury Apartments**  
3114 McClure Rd.  
Troy, MI, 48084  
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**Title Sheet and Index**

**G001** 016004





**SITE DATA**

Regulation	Information
Parcel I.D. (s)	20-20-476-007 / 008 / 009
Address	3142 / 3114 / 3086 McClure Dr.
Zoning	BB - Big Beaver District
Parcel Area	+/- 111,715 Sq. Ft. (2.57 Acres)
Legal Description	See Attachment w/ Application

**ZONING SCHEDULE OF REGULATIONS**

Regulation	Required	Provided
Setbacks	Front: 30' Sides: 30' Rear: 30'	Front: 31.33' Sides: N-131.08' / S- 30' Rear: 30'
Building Height	Maximum: 50' (when NOT adjacent to residential) 40' (when adjacent to residential)	n/a
Impervious Coverage	Maximum: 75%	68.13%
Building Coverage	Maximum: 40%	30.71%
Parking		103 Surface Spaces 96 Under Building Spaces 199 Spaces total (Including 9 handicap accessible spaces)

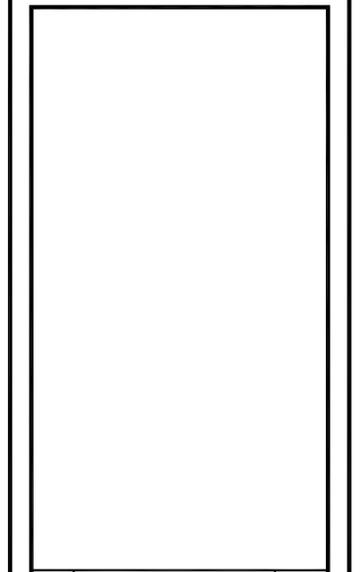
**BUILDING DATA**

5 Story Apartment Building
Exterior patio space units available
Community Courtyard/Greenspace
Balcony Units Available
Underground Parking - see S101 detail

**NOTES**

- F.D.C. per city standards.
- Asphalt pavement throughout. 6" concrete curb & gutter. 4" concrete sidewalks
- Fencing to be 6' in height. See S101 for details
- Brick veneer on dumpster to match building. See S101 detail
- See Lighting Plan for fixture locations. All lighting to have shielded light source

**1 Site Plan**  
 SCALE: 1"=20'



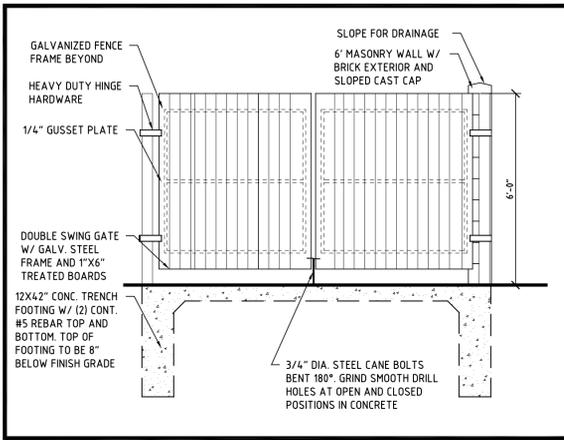
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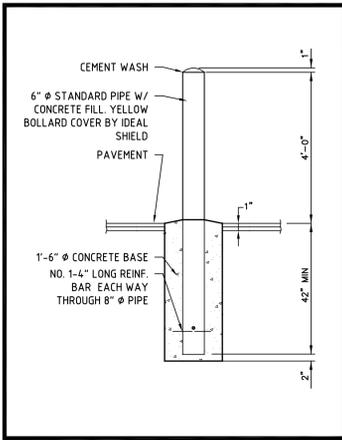
**Site Plan**

**S100** 016004

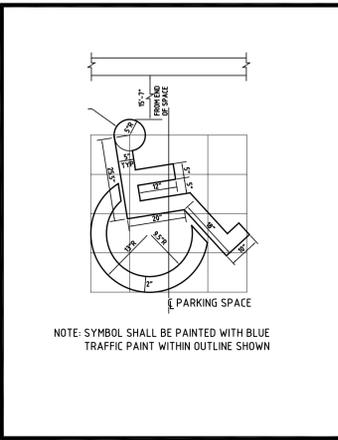
DUMPSTER ENCLOSURE DETAIL



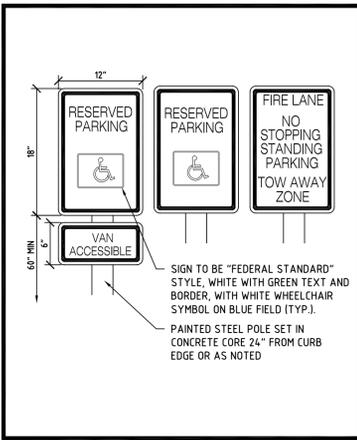
BOLLARD DETAIL



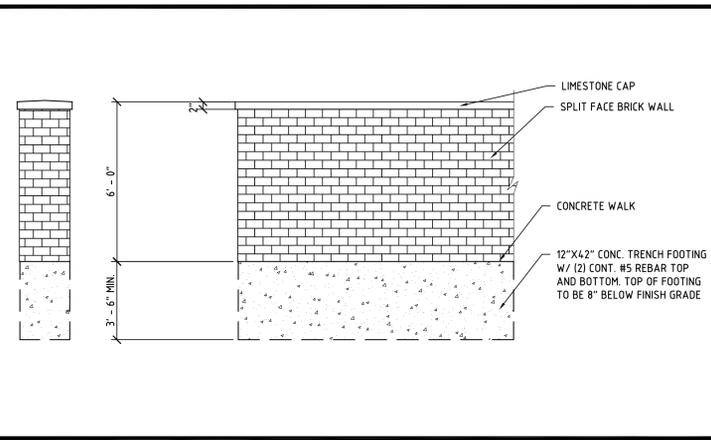
PARKING SPACE PAINT DETAIL



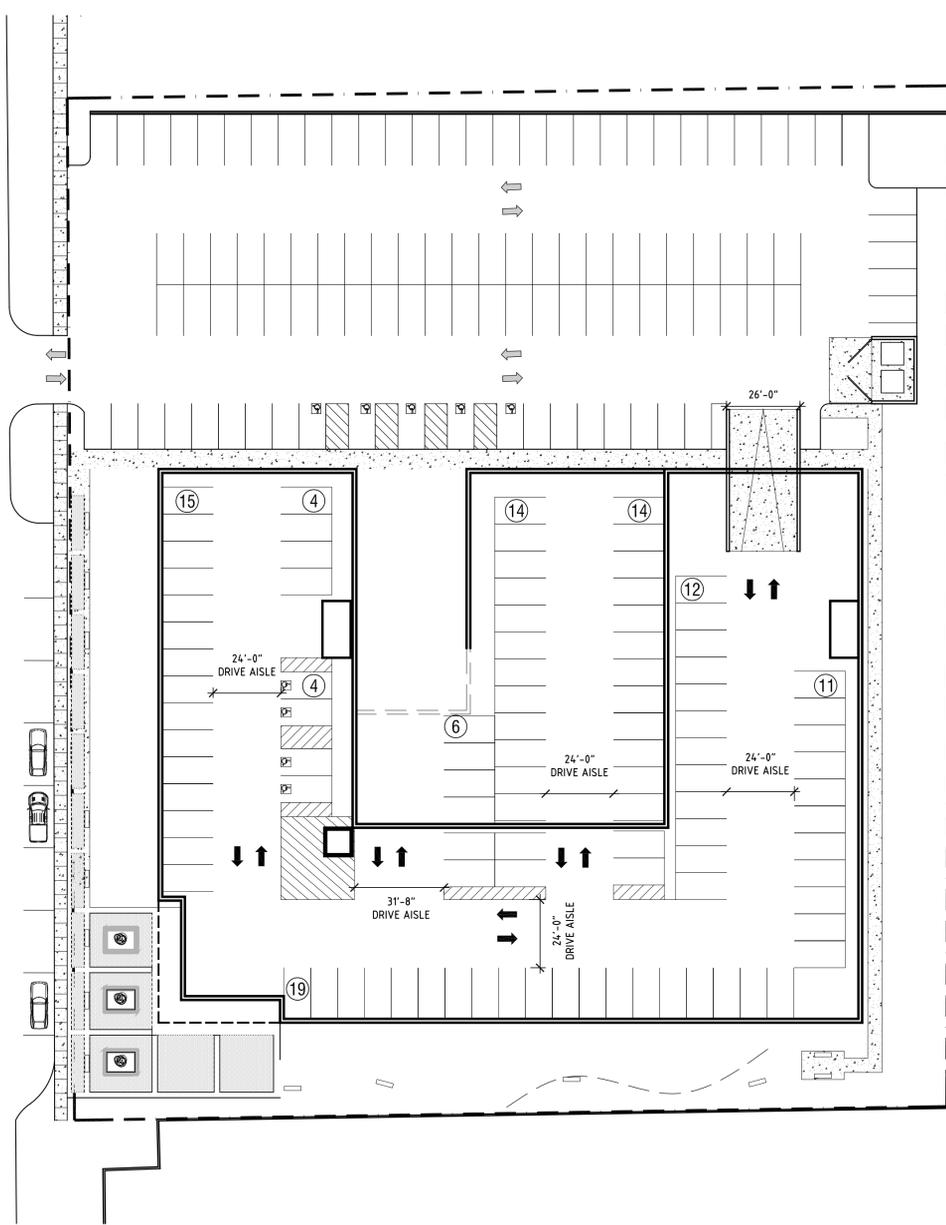
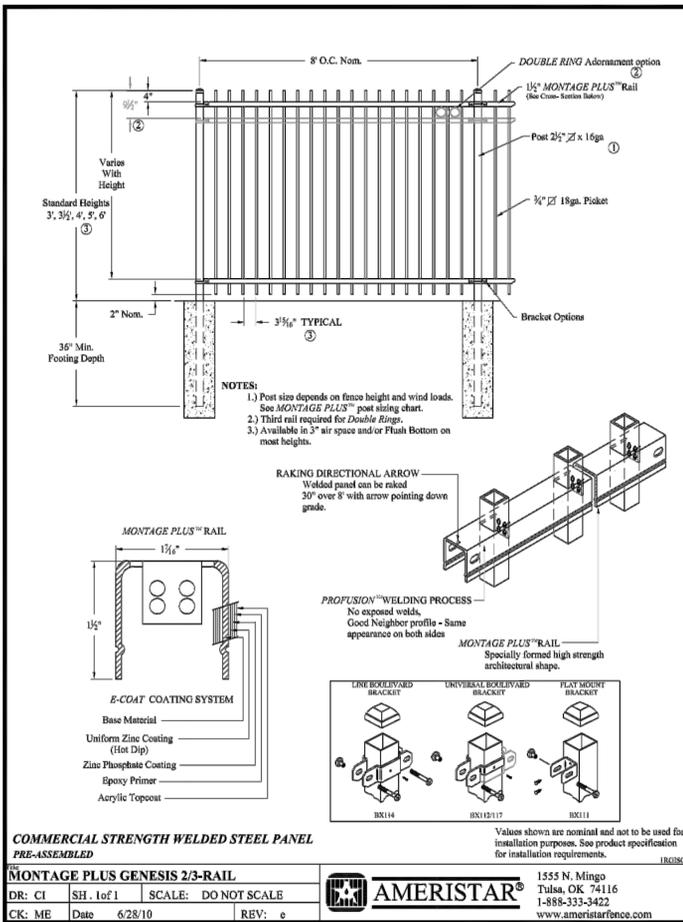
HANDICAP SIGN DETAIL



MASONRY WALL DETAIL



FENCE DETAIL

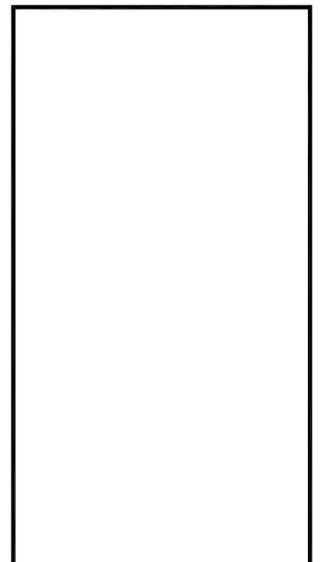
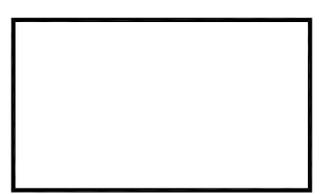


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Site Details

**S101**

016044



S101 Site Details.dwg

7/26/2016

Francesca



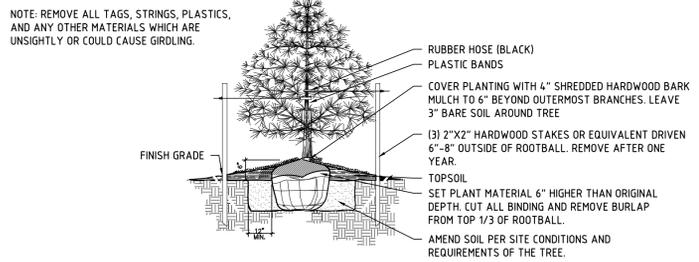


**GENERAL NOTES FOR LANDSCAPE DEVELOPMENT**

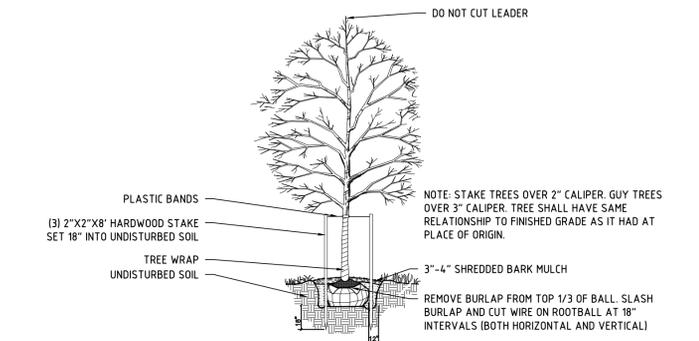
- LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1 GRADE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
- CONCERNING GROUND COVER, ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH. SEE SPECIFICATIONS. ALL OTHER DISTURBED AREAS SHALL BE SODDED.
- LANDSCAPING SHALL BE MAINTAINED IN A GOOD CONDITION TO PRESENT A HEALTHY, NEAT, AND ORDERLY APPEARANCE FREE FROM REFUSE AND DEBRIS. ALL UNHEALTHY AND DEAD MATERIAL SHALL BE REPLACED WITHIN ONE (1) YEAR OF THE NEXT APPROPRIATE PLANTING PERIOD.
- OWNER TO ESTABLISH MAINTENANCE PROGRAM TO ENSURE GROUNDS AND LANDSCAPING TO REMAIN HEALTHY AND WELL-GROOMED.
- RECOMMENDED PLANTING DATES ARE MARCH 1ST TO MAY 15TH FOR ALL MATERIALS, AND OCTOBER 15TH TO DECEMBER 15TH FOR DECIDUOUS MATERIALS. PLANTINGS OUTSIDE THESE DATES SHALL HAVE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.
- UNDERGROUND IRRIGATION SYSTEM TO BE DESIGNED AND INSTALLED BY CONTRACTOR.
- TURF GRASS TO BE COMMON TO OAKLAND COUNTY, MI.

**PLANTING DETAILS**

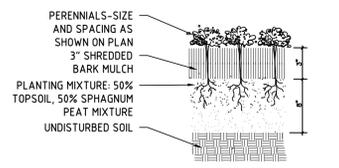
**EVERGREEN TREES**



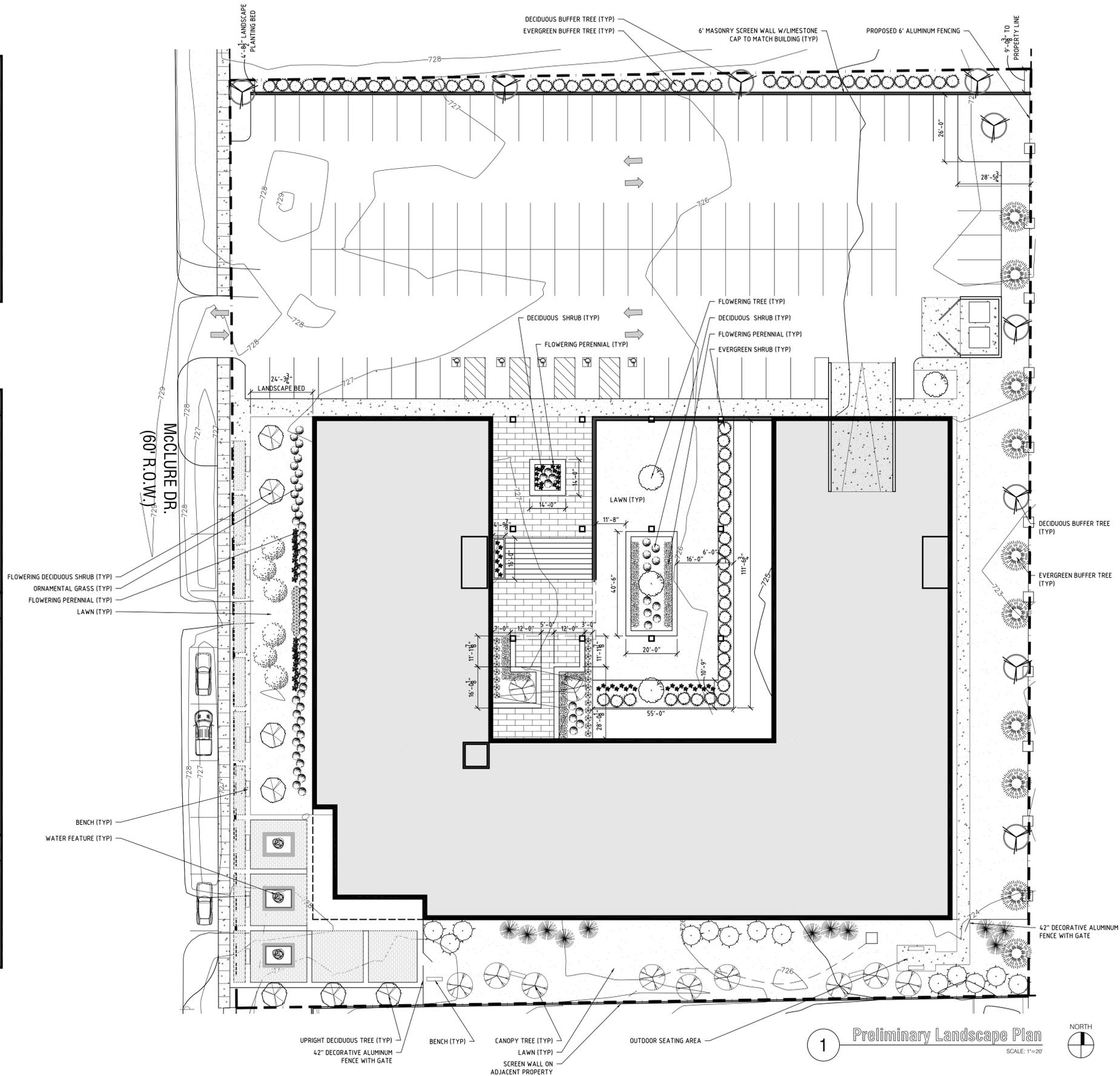
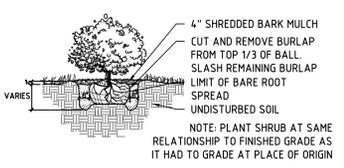
**DECIDUOUS TREES**



**PERENNIALS**



**SHRUBS**



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**Landscape Plan**

**L100** 016004

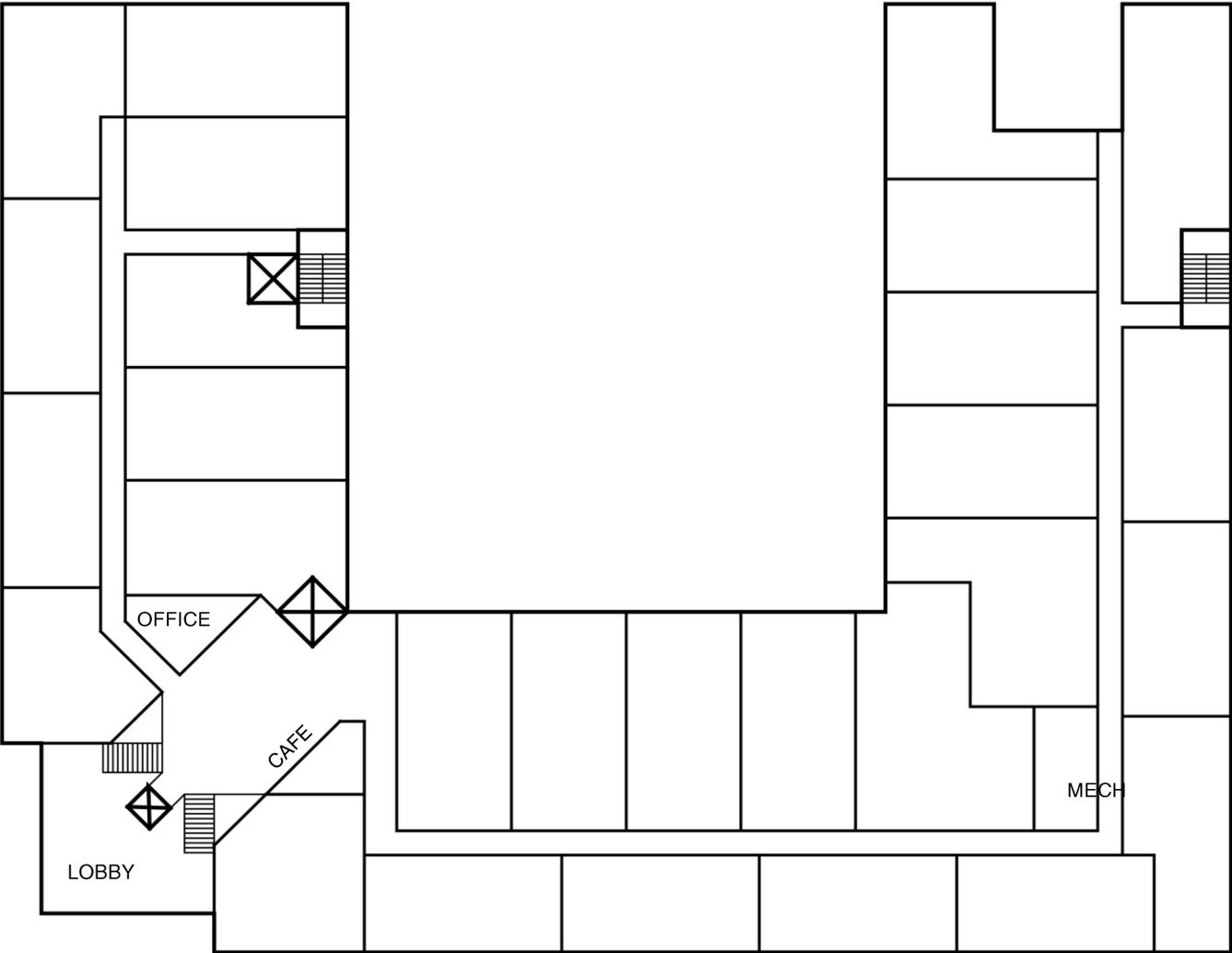
**1 Preliminary Landscape Plan**  
 SCALE: 1"=20'



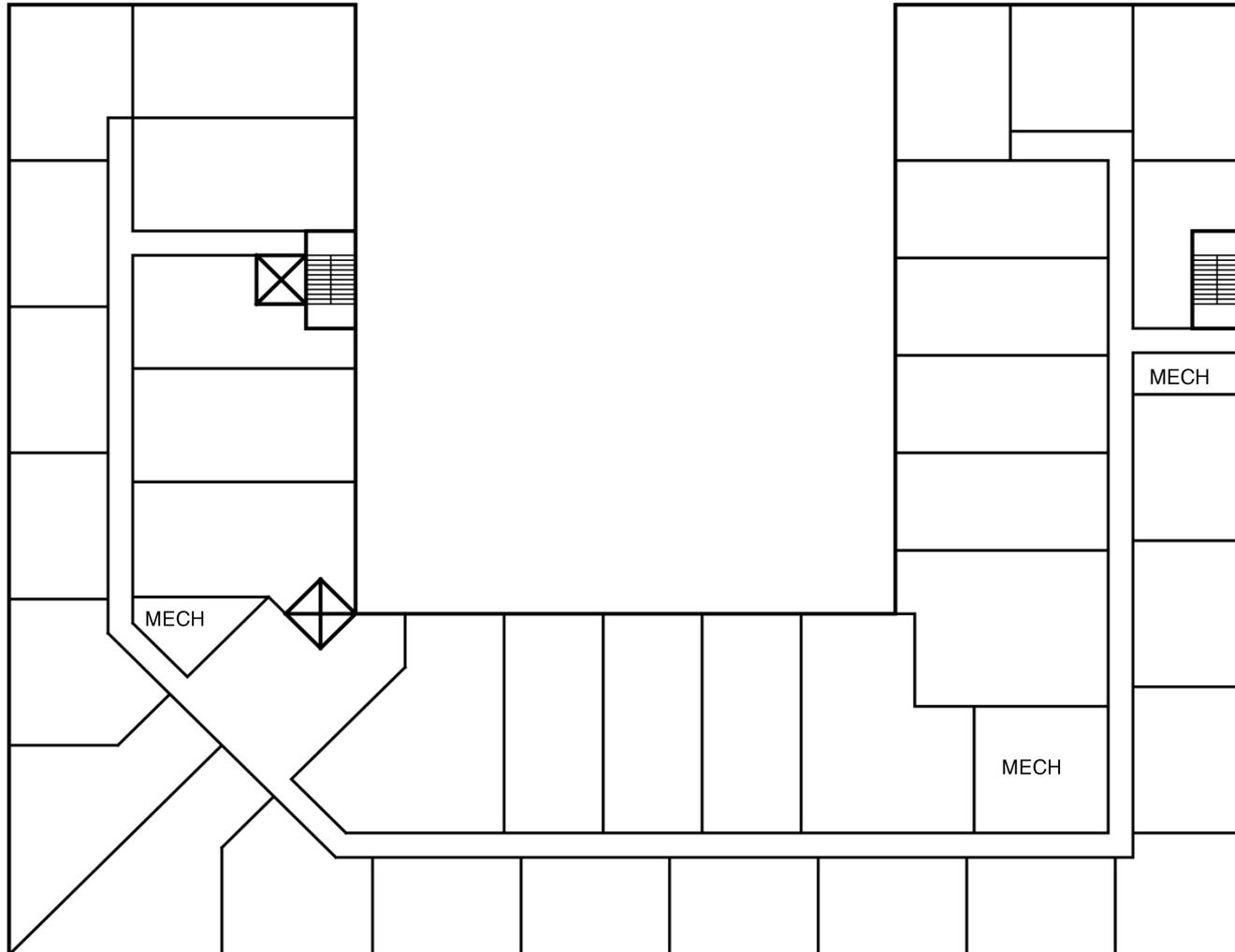
# Preliminary Design Package for Ilium Luxury Apartments in Troy, MI



Ilium Luxury Apartments  
1st Floor Plan  
28 1&2 BEDROOM UNITS

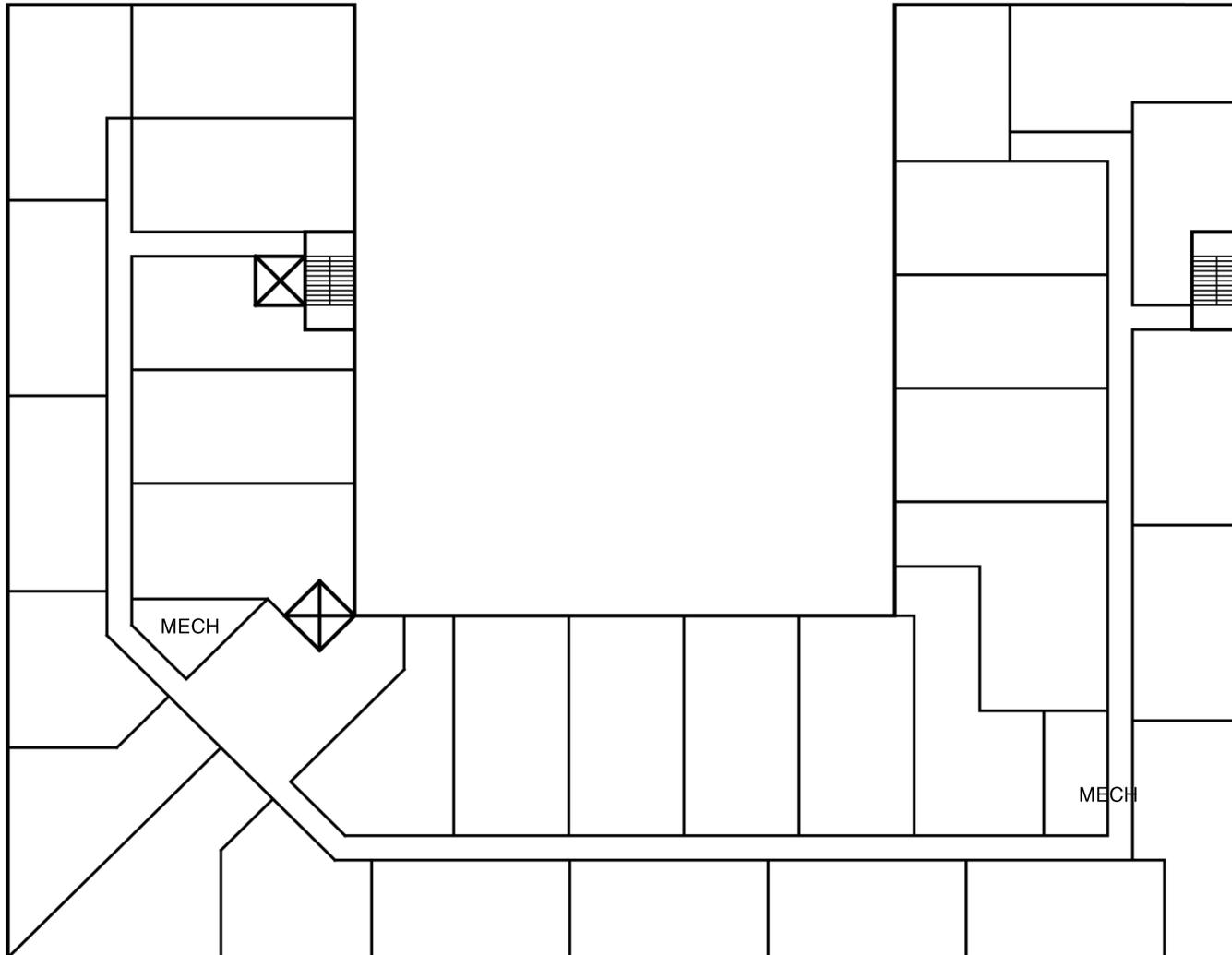


Ilium Luxury Apartments  
2<sup>nd</sup> Floor Plan  
30 1&2 BEDROOM UNITS

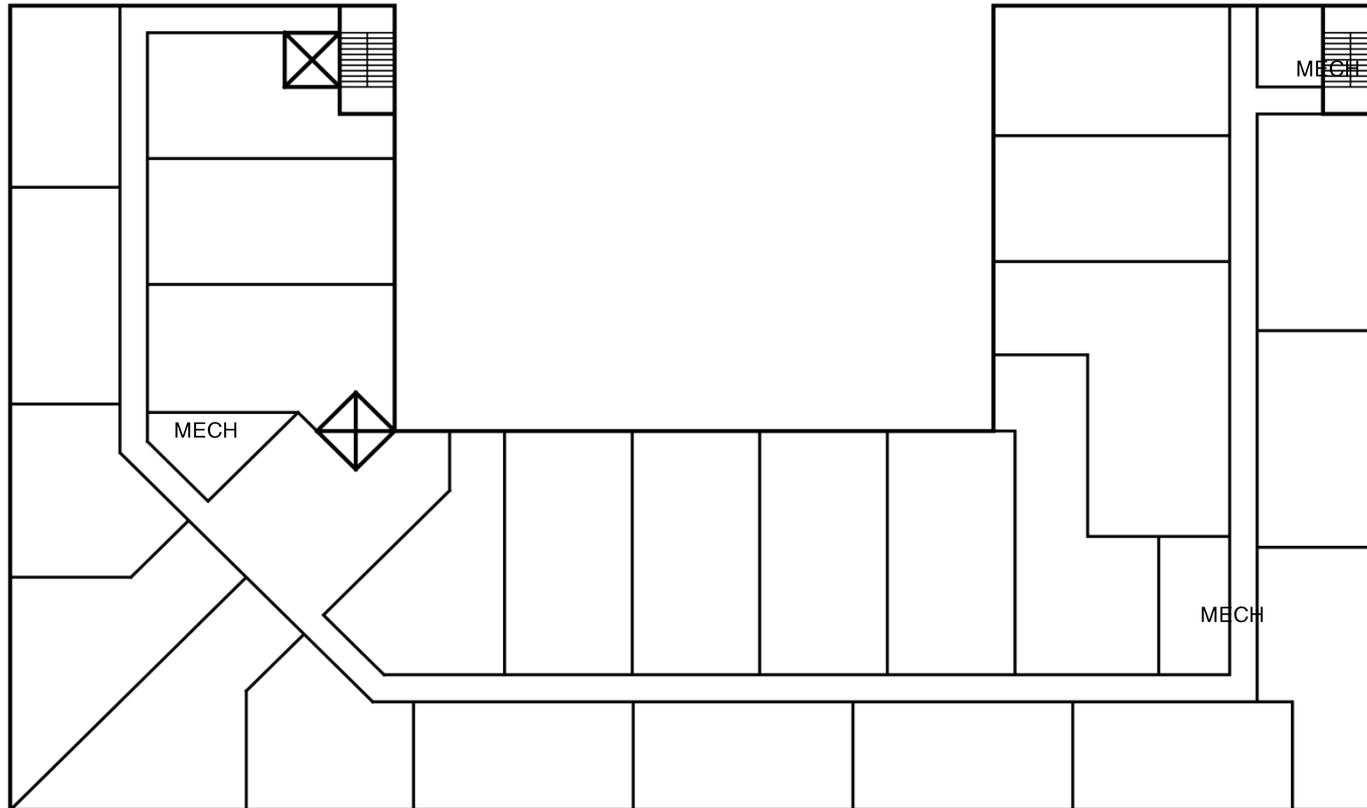


Ilium Luxury Apartments  
3<sup>rd</sup> Floor Plan

32 1&2 BEDROOM UNITS



Ilium Luxury Apartments  
4<sup>th</sup> & 5<sup>th</sup> Floor Plan  
25 1&2 BEDROOM UNITS



# Ilium Luxury Apartments Illustration



301 Walnut Blvd | Rochester, Michigan | 48307 | p 248 601 4422 | [www.designhaus.com](http://www.designhaus.com)

July 26<sup>th</sup>, 2016



# Ilium Luxury Apartments Illustration



Ilium Luxury Apartments  
West Elevation



Ilium Luxury Apartments  
South Elevation



Ilium Luxury Apartments  
East Elevation



Ilium Luxury Apartments  
North Elevation



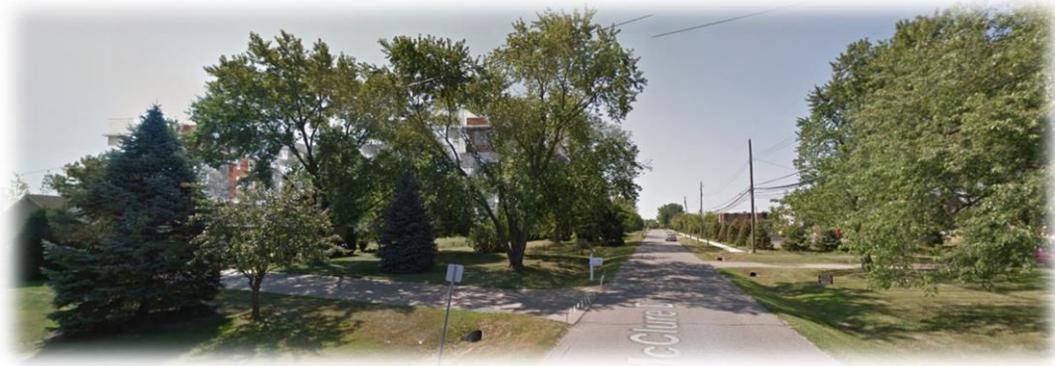
Ilium Luxury Apartments  
Southbound on McClure Rd.



880' From Building  
Zero Visibility



480' From Building  
Zero Visibility



320' From Building  
Top Floor Visible

# Ilium Luxury Apartments Elevations



Ilium Luxury Apartments  
Eastbound on Sachin Way



Ilium Luxury Apartments  
Birds Eye





DATE: August 3, 2016  
TO: Planning Commission  
FROM: R. Brent Savidant, Planning Director  
SUBJECT: ZONING ORDINANCE TEXT AMENDMENT (File Number ZOTA 249) – Enhanced Cluster Option

Attached is a complete draft of the Enhanced Cluster Option. It was prepared based on discussion at numerous Planning Commission meetings.

If the Planning Commission is satisfied with the draft, the next step in the amendment process is to schedule a Planning Commission public hearing.

Please be prepared to discuss this item at the August 9, 2016 Planning Commission meeting.

Attachments:

1. Draft Zoning Ordinance Text Amendment.

G:\ZOTAs\ZOTA 249 Enhanced Cluster Option\PC Memo 08 09 2016.doc

CITY OF TROY  
AN ORDINANCE TO AMEND  
CHAPTER 39 OF THE CODE  
OF THE CITY OF TROY  
CITY COUNCIL PUBLIC HEARING DRAFT

The City of Troy ordains:

Section 1. Short Title

This Ordinance shall be known and may be cited as an amendment to Chapter 39, Zoning Ordinance, of the Code of the City of Troy.

Section 2. Amendment

Chapter 39 of the Code of the City of Troy is amended as follows:

**Remove existing language for Section 10.04 and replace with following Section 10.04 Cluster Development to read as follows:**

- A. Intent. The Cluster Option is offered as an alternative to traditional residential development. The Cluster Option is intended to:
1. Encourage the use of property in accordance with its natural character.
  2. Assure the permanent preservation of open space and other natural features.
  3. Provide recreational facilities and/or open space within a reasonable distance of all residents of the Cluster development.
  4. Allow innovation and greater flexibility in the design of residential developments.
  5. Facilitate the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner.
  6. Ensure compatibility of design and use between neighboring property.
  7. Encourage a less sprawling form of development, thus preserving open space as undeveloped land.
  8. Allow for design innovation to provide flexibility for land development where the normal development approach would otherwise be unnecessarily restrictive or contrary to other City goals
- B. Uses.
1. To be eligible for Cluster consideration, property must be zoned R-1A, R-1B, R-1C, R-1D, or R-1E.

2. The permitted uses shall be limited to single-family detached residential development, residential accessory structures, non-commercial recreation uses and open space.
3. Two--family dwellings are permitted as a Special Use in the R1A, R1B, R1C, R1D, and R1E Zoning Districts with the following regulations:
  - a. The site shall have frontage on and primary access to a major or minor arterial.
  - b. Perimeter Setback: Perimeter setback for principal structures from all of the borders of the development shall be equal to the rear-yard setback requirement for the underlying zoning district of the property directly adjacent to each border. The required open space areas may be located partially or completely within the required perimeter setback..
  - c. Comply with the Special Use standards as set forth in Section 9.03.

C. Base Number of Units

1. The number of dwelling units permitted shall not exceed the number of dwelling units customarily developable in the zoning district in which the proposed development is located, developed with a conventional layout and all applicable ordinances and laws observed. In order to calculate density with a conventional subdivision or site condominium layout, the applicant shall submit a concept site plan of the property with a conventional layout. The plan shall indicate the topography of the site at two (2) foot contour intervals and the limits of all floodplains, water bodies, wetlands, easements, and other areas which would be set aside and preserved due to impracticality, economic unfeasibility, contractual prohibition, or based upon applicable law or ordinance. In addition, the concept plan with the conventional layout shall include the general street pattern and lot configurations. In general, the plan shall be drawn with sufficient detail to permit the Planning Commission to determine the density that would be achieved by conventional development
2. If all requirements 10.04.D are met, the underlying density established by 10.04.C.1 may be increased by twenty percent (20%).

D. Open Space Requirements.

1. The following land areas are not included as dedicated open space for the purposes of the Cluster development option:
  - a. The area of any street right-of-way.
  - b. The submerged area of any lakes, rivers, ponds or streams.
  - c. The required front and side setbacks surrounding a residential structure.
  - d. Required building separations.

- e. Storm water detention or retention facilities, with the exception of bio-retention areas that provide an active or passive recreation function, which can be considered open space.
  - f. Non-functional open space due to limited width or depth as determined by the City Council.
2. All land within a development that is not devoted to a residential unit, limited common elements, accessory structures, vehicle access, vehicle parking, a roadway, or an approved improvement, shall be set aside as common land for recreation, conservation, or preserved in an undeveloped state.
  3. A Cluster development shall maintain a minimum of twenty percent (20%) of the gross area of the site as dedicated open space held in common ownership.
  4. Benefit. The proposed open space shall provide at least one (1) of the following open space benefits:
    - a. Significant Natural Features. Preservation of significant natural features contained on the site, as long as it is in the best interest of the City to preserve the natural features that might be negatively impacted by conventional residential development. The determination of whether the site has significant natural features shall be made by the City Council, after review of a Natural Features Analysis, prepared by the applicant, that inventories these features; or
    - b. Recreation Facilities. If the site lacks significant natural features, it can qualify with the provision of usable recreation facilities to which all residents of the development shall have reasonable access. Such recreation facilities include areas such as a neighborhood park, passive recreational facilities, soccer fields, ball fields, bike paths, or similar facilities that provide a feature of community-wide significance and enhance residential development. Recreational facilities that are less pervious than natural landscape shall not comprise more than fifty (50) percent of the open space. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, that inventories these features; or
    - c. Preservation of Common Open Space or Creation of Natural Features. If the site lacks significant natural features, a proposed development may also qualify if the development will preserve common open space or create significant natural features such as wetlands. The determination of whether the site has significant natural features shall be made by the City Council after review of a

Site Analysis Plan, prepared by the applicant, which inventories these features.

5. The common open space may be centrally located along the road frontage of the development, located to preserve significant natural features, or located to connect open spaces throughout the development.
6. Connections between the dedicated open space of the development and adjacent open space, public land or existing or planned safety paths is preferred and may be required by the City Council.
7. The dedicated open space shall be set aside by the developer through an irrevocable conveyance, such as deed restriction, restrictive covenant, conservation easement, plat dedication, or other legal document that is subject to review and approval by the City Council, after review and recommendation by the City Attorney. The irrevocable conveyance document shall be approved before there can be final approval of the development (final site plan approval), and the developer shall record such documents with the Oakland County Register of Deeds. The City of Troy (or the common owners) shall be specifically identified as the beneficiary of its provisions.
  - a. The dedicated open space shall be perpetually maintained by parties that have an ownership interest in the open space.
  - b. Standards for scheduled maintenance of the open space.
  - c. If the owners of the dedicated open space have failed to maintain it so that it becomes a public nuisance, then the City shall undertake all future maintenance, and shall annually assess the costs for such maintenance upon the property owners in the association, based on the benefit allocation for each property as determined by the City assessor.
  - d. The irrevocable conveyance shall assure that the open space will be protected from all forms of development, except as shown on the approved Final Site Plan. Such conveyance shall indicate the proposed allowable use(s) of the dedicated open space. The open space restrictions shall prohibit uses or activities that negatively affect the dedicated open space, including the following:
    - 1) Dumping or storing of any material or refuse.
    - 2) Activity that may cause risk of soil erosion or threaten any living plant material.
    - 3) Cutting or removal of live plant material except for removal of dying or diseased vegetation.
    - 4) Use of motorized off-road vehicles.
    - 5) Cutting, filling or removal of vegetation from wetland areas.
    - 6) Use of pesticides, herbicides or fertilizers within any wetlands area.

- e. The irrevocable conveyance shall provide the following:
  - 7) The dedicated open space shall be perpetually maintained by parties that have an ownership interest in the open space.
  - 8) Standards for scheduled maintenance of the open space.
  - 9) If the owners of the dedicated open space have failed to maintain it so that it becomes a public nuisance, then the City shall undertake all future maintenance, and shall annually assess the costs for such maintenance upon the property owners in the association, based on the benefit allocation for each property.
  - 10) The dedicated open space shall forever remain open space, subject only to uses approved by the City on the approved Final Site Plan.
  - 11) Any structures or buildings accessory to a recreation or conservation use may be erected within the dedicated open space. These accessory structures or buildings shall not exceed one (1) percent of the required open space area.
- 8. Maintenance of Open Space. The applicant shall provide documentation to guarantee to the satisfaction of the City Council that all open space portions of the development will be maintained as approved and that all commitments for such maintenance are binding on successors and future owners of the subject property. All such documents shall be subject to approval by the City Attorney. This provision shall not prohibit a transfer of ownership or control, provided notice of such transfer is provided to the City, and that the continued maintenance guarantees remain satisfactory to the City, and the land uses continue as approved in the Cluster development.
- 9. Cohesive Neighborhood. The proposed development shall be designed to create a cohesive community neighborhood through common open space areas for passive or active recreation and resident interaction. All open space areas shall be reasonably accessible to all residents of the development.
- 10. Unified Control. The proposed development site shall be under single ownership or control, such that there is a single person or entity having proprietary responsibility for the full completion of the project. The applicant shall provide sufficient documentation of ownership or control in the form of agreements, contracts, covenants, and/or deed restrictions that indicate that the development will be completed in its entirety as proposed. All documents shall be subject to the review and approval by the City Attorney.
- 11. Density Impact. The proposed type and density of use shall not place an unreasonable impact on the subject and/or surrounding land and/or

property owners and occupants and/or the natural environment. An unreasonable impact shall be considered an unacceptable significant adverse effect on the quality of the surrounding community and the natural environment in comparison to the impacts associated with conventional development.

E. Bulk Regulations and Regulatory Flexibility: The City shall permit specific departures from the dimensional requirements of the Zoning Ordinance for yards and units as a part of the approval process. The applicant may cluster the dwellings, as long as the following requirements are satisfied:

1. Overall density shall not exceed the number of residential cluster units determined in Section 10.04.C unless a density bonus as set forth in Section 10.04.H has been granted by the City Council.

2. Setback provisions shall be as follows:

a. Perimeter Setback: The perimeter setback for principal structures from all of the borders of the development shall be equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border. The required open space areas may be located partially or completely within the perimeter setback.

b. Setback requirements for principal structures on the interior of the development shall be as follows. If property lines do not exist between houses, the setbacks shall be measured to an imaginary line of equal distance between the houses. A duplex shall be treated as a single-detached residence for the purpose of determining required setbacks. The minimum setbacks shall be as follows.

1) Front: Twenty (20) feet. There shall be at least twenty-five (25) feet between the garage door and the closest edge of the sidewalk to allow for an automobile to be parked in the driveway without obstructing the sidewalk.

2) Rear: Twenty-five (25) feet.

3) Side: Seven and one-half (7.5) feet. For detached units with "rear-to-side" relationships, the required setback shall be fifteen (15) feet for each unit, for a total of thirty (30) feet.

3. Required street frontage. The extent of street frontage shall be determined by the Planning Commission, in its discretion, with greater deviations from minimum frontage requirements applicable in the district to be permitted in proportion to the extent and importance of natural resources, topographical conditions, floodplains and wetlands to be preserved on the property, and

taking into consideration the size and shape of the development site, public safety factors, aesthetics and impact upon the surrounding developments.

4. All applicable zoning district regulations to height, parking, loading, general provisions, and other requirements shall be met.
  5. Regulatory Flexibility. The City Council, based upon a recommendation from the Planning Commission, may waive the front, side, rear, and perimeter setback provisions as set forth in 10.4.E.2 provided that the applicant has demonstrated innovative and creative site and building designs and solutions, which would otherwise be unfeasible or unlikely to be achieved absent this provision.
- F. Landscaping. Required landscaping shall be in accordance with section 13.02.F Subdivision and Site Condominium Landscaping.
- G. Access. Principal access to the development shall be provided by twenty-eight (28) foot wide public streets constructed to City standards that are located within sixty (60) foot wide rights-of-way or by twenty-eight (28) foot wide streets constructed to City public street standards that are located, within forty (40) foot private easements for public access. Sidewalks shall be constructed across the frontage of all dwelling unit parcels in accordance with City standards. Public utilities shall be placed within street rights-of-way, or within easements approved as to size and location by the City Engineer.
- H. Density Bonus. To encourage the use of the cluster development as set forth in the objectives in Section 10.04.A, a variable density bonus may be allowed at the discretion of City Council, based on a recommendation from Planning Commission. Density bonuses may be based upon a demonstration by the applicant of the following elements:
1. Open Space. For every ten percent (10%) additional open space above the minimum required amount that is not encumbered by rights-of-way or utility easements, a ten percent (10%) bonus density may be applied, or fraction thereof above the base yield number of units as established in 10.04.C.1.
  2. Housing Diversity and Options. A bonus above the base yield number of units established in 10.04.C.1 may be provided for a development that provides a diverse variety of housing types or provides a type of housing that is desired, but not currently offered in the city. The following requirements shall be met for the all bonus unit in excess of the base yield number of units:

- a. Maximum home square footage shall not exceed 1,500 sq/ft; and
  - b. Master first floor bedroom and bathroom shall be provided; and
- 3. Sustainable Design. A 10% unit bonus above the base yield number of units established in 10.04.C.1 may be provided for a development that utilizes sustainable design best practices including, but not limited to green infrastructure, stormwater best management practices, and green buildings. A sustainable design bonus shall be discretionary from the City Council, based on recommendation from the Planning Commission.
- 4. Such density bonuses are in addition to the bonus established in 10.04.C.2
- I. Standards for Review
  - 1. Review. In reviewing any application for a Cluster Development, the Planning Commission shall identify and evaluate all factors relevant to the application, and shall report its findings in full, along with its recommendations for disposition of the application, to the City Council.
  - 2. Findings. The applicant shall demonstrate that through the use of the Cluster option, the development will accomplish a sufficient number of the following objectives, as are reasonably applicable to the site, providing:
    - a. Long-term protection and preservation of natural resources, natural features, and open space of a significant quantity and/or quality in need of protection or preservation, and which would otherwise be unfeasible or unlikely to be achieved absent these regulations.
    - b. Innovative and creative site design through flexibility in the siting of dwellings and other development features that would otherwise be unfeasible or unlikely to be achieved absent these regulations.
    - c. Appropriate buffer and/or land use transitions between the Cluster development and surrounding properties.
    - d. A compatible mixture of open space, landscaped areas, and/or pedestrian amenities.
    - e. Sustainable design features and techniques, such as green building, stormwater management best practices, and low impact design, which will promote and encourage energy conservation and sustainable development.
    - f. A means for owning common open space and for protecting it from development in perpetuity.
    - g. Any density bonus is commensurate with the benefit offered to achieve such bonus.
    - h. The cluster development shall be adequately served by essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools. Such services

shall be provided and accommodated without an unreasonable public burden.

- i. The architectural form, scale, and massing shall ensure buildings are in proportion and complementary to those of adjacent properties and the selected building materials are of high, durable quality.

J. Application Requirements. In addition to the information required by the City of Troy for all other site plans, any development proposing to utilize the Cluster Plan shall contain the following:

1. A complete description of the land proposed to be dedicated for the common use of lot owners in the association or to the City, including the following:
  - a. A legal description of dedicated open space.
  - b. A topographical and boundary survey of dedicated open space.
  - c. A Natural Features Analysis that inventories all significant natural features on the property and on abutting properties, if applicable.
2. Information regarding current and proposed ownership and use of the dedicated open space, including the following:
  - a. The proposed ownership and control of the open space.
  - b. The proposed methods of regulating the use of the common facilities and areas so as to eliminate possible nuisances to other property owners and/or nuisances that require enforcement by the City of Troy.
  - c. The proposed and/or potential uses of dedicated open space and the proposed improvements to be constructed by the developer.
3. A detailed narrative and graphic plan that indicates a specific method(s) for protecting significant natural features including Protected Trees, wetlands, water courses, and open space during construction. The plan shall be consistent with the City's Woodland Protection requirements as set forth in Section 13.07, and shall be agreeable to the developer, who shall so indicate with his/her signature on the detailed narrative and graphic plan.
4. Other relevant information necessary to show that the proposed development qualifies for approval as a Cluster development.

### Section 3. Savings

All proceedings pending, and all rights and liabilities existing, acquired or incurred, at the time this Ordinance takes effect, are hereby saved. Such proceedings may be consummated under and according to the ordinance in force at the time such proceedings were commenced. This ordinance shall not be construed to alter, affect, or abate any pending prosecution, or prevent prosecution hereafter instituted under any ordinance

specifically or impliedly repealed or amended by this ordinance adopting this penal regulation, for offenses committed prior to the effective date of this ordinance; and new prosecutions may be instituted and all prosecutions pending at the effective date of this ordinance may be continued, for offenses committed prior to the effective date of this ordinance, under and in accordance with the provisions of any ordinance in force at the time of the commission of such offense.

Section 4. Severability Clause

Should any word, phrase, sentence, paragraph or section of this Ordinance be held invalid or unconstitutional, the remaining provision of this ordinance shall remain in full force and effect.

Section 5. Effective Date

This amendment to the Zoning Ordinance shall take effect ten (10) days after publication, which shall be published within 15 days of adoption, as required the Michigan Zoning Enabling Act (Act 110 of 2006).

This Ordinance is enacted by the Council of the City of Troy, Oakland County, Michigan, at a regular meeting of the City Council held at City Hall, 500 W. Big Beaver, Troy, MI, on the \_\_\_\_\_ day of \_\_\_\_\_, 2016.

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Dane Slater, Mayor

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Aileen Dickson, City Clerk