

## AGENDA CITY PLANNING COMMISSION

City Hall - Council Chambers 6131 Taylorsville Road July 11, 2023 6:00 P.M.

- 1. Call Meeting To Order
- 2. Roll Call
- 3. Opening Remarks By The Chair and Commissioners
- 4. Citizens Comments
- 5. Swearing of Witnesses
- 6. Pending Business
  - A. TEXT AMENDMENT The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval of a text amendment pertaining to Chapter 1181.20 Building Materials for Dwellings (TA 23-14A),
- 7. New Business
  - A. MINOR CHANGE The applicant, KELLEY KOONS, is requesting approval of a Minor Change to the Detailed Development Plan to construct a four-season enclosed patio. Property is located at 5420 Brandt Pike (MC 23-16).

- B. REPLAT The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval to vacate Thorngate Road north of Waynegate Road (RP 23-18).
- C. DETAILED DEVELOPMENT PLAN The applicant, METROPOLITAN HOLDINGS LTD, is requesting approval of a Detailed Development Plan for a proposed new 312 unit apartment project. Property is located at Executive Boulevard across the street from the Rose Music Center (DDP 23-19).
- D. BASIC DEVELOPMENT PLAN The applicant, BP-OTP, LLC, is requesting approval of a Rezoning from O1 to PC, and a Basic Development Plan for a Wawa gas station convenience mart with fueling pumps. Property is located at 4949 Chambersburg Road (BDP 23-17).
- 8. Additional Business
- 9. Approval of Minutes
  - A. Planning Commission June 13, 2023
- 10. Reports and Calendar Review
- 11. Upcoming Meetings
  - A. August 15, 2023 September 12, 2023
- 12. Adjournment

#### AI-9327 Planning Commission Meeting Date: 07/11/2023 Text Amendment

Information

Agenda Title TEXT AMENDMENT - The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval of a text amendment pertaining to Chapter 1181.20 Building Materials for Dwellings (TA 23-14A),

Purpose and Background

Staff Report Decision Record Information Attachments

# Memorandum

Staff Report for Meeting of July 11, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, City Planner

Date: July 5, 2023

Subject: TA 23-14A - Building Materials for Dwellings Text Amendment (Amended)

Department of Planning and Zoning	City of Huber Heights
APPLICANT/OWNER:	City of Huber Heights
DEVELOPMENT NAME:	
ADDRESS/LOCATION:	6131 Taylorsville Rd.
ZONING/ACREAGE:	N/A
EXISTING LAND USE:	N/A
ZONING ADJACENT LAND:	N/A
REQUEST:	This proposed text amendment clarifies what exterior materials are considered masonry, and updates the facade coverage requirements based on recent practices.
ORIGINAL APPROVAL:	N/A
APPLICABLE HHCC:	Chapter 1189.20 Building materials for dwellings
CORRESPONDENCE:	In Favor – None Received In Opposition – None Received

#### STAFF ANALYSIS AND RECOMMENDATION:

#### **Overview**

Over the years, building materials have improved and builders utilize a range of materials to provide a mixture of building facades along a street, convey different design aesthetics, and control construction costs as prices of materials can vary depending on local and regional demand. This text amendment seeks to codify community expectations and provide reasonable flexibility for contemporary designs and modern material utilization.

Based on feedback from the Planning Commission this version has been revised for clarity and ease of administration.

#### Staff Analysis

Currently, there is a significant schism with exterior building material requirements between building in a straight zoned area (A, R-1, R-2, etc.) versus building on a lot in a Planned Residential areas. If a buyer seeks to construct a new single-story home or build a single-story addition in any district other than a PUD, they must fully wrap their single-story home in brick or masonry material. New two-story homes must have the first floor wrapped in brick or masonry material. The floors above can be any other material.

Recent Planning Commission decisions have established a minimum masonry limit at approximately 25% of the front façade for single-family homes. Multi-family structures have ranged from 10% to 20% in recent years.

Staff is proposing the following standards:

Non-PUD Zoning:

- One-Story dwellings: 25% of the front façade
- Multi-Story dwellings: 25% of the first-floor front façade.

PUD Zoning:

- 1 & 2-family buildings: 25% of the front facades
- Multi-family and mixed-use buildings: 10% of the aggregate building wall surface.

These standards encourage the Planning Commission to consider the types, location and layouts of the buildings. Every development is different, and the Planning Commission should include those details. Specifically, the Planning Commission is encouraged to:

When establishing the requirements, the Planning Commission shall consider the types, location, and layout of the buildings to:

(1) Encourage a mix of building facades and material usage and discourage monotonous building repetition.

(2) Encourage higher percentages of full depth brick, cultured brick, stone, cultured stone, or other approved masonry product along the frontage of major public streets and thoroughfares.

#### Additional Comments:

Staff feels that these revised materials requirements for dwellings reflect the recent decisions of the Planning Commission and City Council, and are a bridge from the previous masonry requirements to a constituent that desires a diverse architectural palate within the community.

Fire: No comments.

City Engineer: No comments.

#### **Recommendation**

Staff recommends approval of the text amendments as drafted.

#### **Planning Commission Action**

Planning Commission may take the following actions with a motion to:

- 1) Recommend approval of the text amendments as drafted;
- 2) Recommend approval of the text amendments with changes;
- 3) Recommend denial of the text amendments;



# **Planning Commission Decision Record**

WHEREAS, on May 2, 2023, the applicant, The City of Huber Heights, requested approval of a Text Amendment to the Zoning Ordinance of The City of Huber Heights pertaining to Chapter 1181.20 Building Materials for Dwellings (TA 23-14A), and;

WHEREAS, on July 11, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

moved to approve the request by the applicant, The city of Huber Heights, for approval of a Text Amendment to the Zoning Ordinance of the City of Huber Heights (TA 23-14A) in accordance with the recommendation of Staff's Memorandum dated July 5, 2023, with the following conditions:

1. Approve as submitted.

Seconded by Roll call showed: YEAS: NAYS: Motion to recommend approval carried .

Terry Walton, Chair Planning Commission Date

#### 1181.20 Building materials for dwellings. (Amended July 5, 2023)

- (a) One-Story Dwellings. 25% of the front façade of one-story dwellings shall be constructed of full depth brick, cultured brick, stone, or cultured stone. Other exterior wall areas may be constructed of full depth brick, cultured brick, stone, cultured stone, EFIS, poured concrete, split-faced concrete block, stucco, or masonry or vinyl siding. All vinyl siding shall have a thickness of not less than 0.44mm or be insulated.
- (b) Dwellings Over One Story. The first-floor front façade shall be constructed of 25% of full depth brick, cultured brick, stone, or cultured stone. Other exterior wall areas may be constructed of full depth brick, cultured brick, stone, cultured stone, EFIS, poured concrete, split-faced concrete block, stucco, or masonry or vinyl siding. All vinyl siding shall have a thickness of not less than 0.44mm or be insulated.
- (c) Dwellings in Planned Unit Developments. Exterior building wall material requirements for all residential and mixed-use residential buildings shall be established through the Basic Development Plan or Detail Development Plan approval. At least 10% of the aggregate multi-family or mixed-use building wall surface, within the development, should be full depth brick, cultured brick, stone, or cultured stone. Single-family and two-family development front façades shall be constructed of not less than 25% full depth brick, cultured brick, stone, or cultured stone. When establishing the requirements, the Planning Commission shall consider the types, location, and layout of the buildings to:
  - (1) Encourage a mix of building facades and material usage and discourage monotonous building repetition.
  - (2) Encourage higher percentages of full depth brick, cultured brick, stone, cultured stone, or other approved masonry product along the frontage of major public streets and thoroughfares.
- (d) *Exceptions.* The requirement for certain exterior walls of dwellings to be constructed of brick or other approved masonry type of material shall not apply to:
  - (1) Exterior wall areas of the dwelling where federal, state and/or local building codes prohibit the use of brick or other masonry materials such as gas fireplace inserts, cantilevers, gables, overhangs, soffits, downspouts and gutters, kitchen and other bays and other type of protrusion for which it is not reasonably practical to use the material stated above.
  - (2) Room additions, remodeling, or reconstruction, to or of, dwellings that do not comply with subsections (a) and (b) above when such dwellings were constructed prior to enactment of this Ordinance. Material that is used for additions or remodeling must be similar to the existing structure and maintain the integral look of the dwelling.
- (d) Definitions. For purposes of this section, the following terms shall have the following definitions:
  - (1) "Dwelling" means any building or portion thereof occupied or intended to be occupied exclusively for residential purposes, but not including a tent, cabin, trailer or trailer coach or other temporary or transient structure or facility.
  - (2) "First floor" means the highest point at the finish grade of the proposed ground surface.
  - (3) "Front Façade" means the side of the building facing the lot front as defined by Section 1123.69 (Lot, Front).

#### AI-9309 Planning Commission Meeting Date: 07/11/2023 Minor Change

Information

Agenda Title

MINOR CHANGE - The applicant, KELLEY KOONS, is requesting approval of a Minor Change to the Detailed Development Plan to construct a four-season enclosed patio. Property is located at 5420 Brandt Pike (MC 23-16).

Purpose and Background

Attachments

Staff Report Decision Record Drawing Fire Assessment

# Memorandum

Staff Report for Meeting of July 11, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, City Planner

Date: July 5, 2023

Subject: Minor Change to Detailed Development Plan MC 23-16 (AMVETS Post 464 – 5420 Brandt Pike)

Department of Planning and Zoning	City of Huber Heights
APPLICANT/OWNER:	Kelly Koons – Applicant
DEVELOPMENT NAME:	AMVETS Post 464
ADDRESS/LOCATION:	5420 Brandt Pike
ZONING/ACREAGE:	Planned Public and Private Buildings and Grounds District (PP) / 6.7 Acres
EXISTING LAND USE:	Fraternal Organization - AMVETS Post 464
ZONING ADJACENT LAND:	North: PC & PP East: R-5 West: R-4 & PC South: PC & B-2
REQUEST:	The applicant requests a minor change to the Detailed Development Plan to construct a 300 SF four-season enclosure on the north side of the existing building.
ORIGINAL APPROVAL:	N/A
APPLICABLE HHCC:	Chapter 1171, 1174
CORRESPONDENCE:	In Favor – None Received In Opposition – None Received

#### <u>Overview</u>

The applicant requests a minor change to the Detailed Development Plan to construct a 300 SF four-season enclosure on the north side of the existing building. The 30' by 10' structure will have overhead doors on each end of the building, and windows along the northern wall. The addition will be nearly 500' from Brandt Pike and barely visible due to its relatively small size.

#### Applicable Zoning Regulations

The applicable zoning regulations are Chapter 1171 – General Provisions and Chapter 1174 -Planned Public and Private Buildings and Grounds District (PP).

#### **Staff Analysis**

#### **Detailed Development Plan Analysis:**

The applicant requests a minor change to the Detailed Development Plan to construct a 300 SF four-season enclosure on the north side of the existing building. The exterior of the addition is mostly windows on the north side, and one window and overhead door on each end.

# Conformance With Planned Public and Private Buildings and Grounds District Requirements:

Uses: Fraternal organizations are a permitted use.

Development Standards:

- The addition meets all setback and yard requirements.
- No additional parking is necessary.

No other changes are being proposed by the applicant. The existing structure is just over 18,000 SF. This addition represents an enlargement of under 2% of the existing floor area. No other improvements are required by the zoning code.

#### **Additional Comments:**

Fire: No comments received.

City Engineer: No comments received.

#### **Recommendation**

Staff recommends approval of the minor change to the detailed development plan with no conditions.

Planning Commission Action
Planning Commission may take the following actions with a motion to:

Approve the minor change to the PUD;
Denial the minor change to the PUD;

- 3) Table the application to gather additional information.



# **Planning Commission Decision Record**

WHEREAS, on June 15, 2023, the applicant, Kelley Koons, requested approval of a Minor Change to the Detailed Development Plan to construct a four-season enclosed patio. Property is located at 5420 Brandt Pike, further identified as Parcel Number P70 01808 0009 of the Montgomery County Auditor's May (Case MC 23-16), and;

WHEREAS, on July 11, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

moved to approve the request by the applicant, Kelley Koons, for approval of a Minor Change to the Detailed Development Plan to construct a four-season enclosed patio. Property is located at 5420 Brandt Pike, (Case MC 23-16) in accordance with the recommendation of Staff's Memorandum dated July 5, 2023, with the following conditions:

1. Approve as submitted.

Seconded by Roll call showed: YEAS: NAYS: Motion to recommend approval carried

Terry Walton, Chair Planning Commission Date





EXISTING H V A C	
11	
UNIT	





Huber Heights Fire Division

#### Inspections require two business days advance notice! (OAC)1301:7-7-09(A)(5)

Occupancy Name: Amvets – Enclos		sed Pation		
Occupancy Addr	ess:	5420 Brandt Pike		
Type of Permit:		HHP&D Site Plan		
<b>Additional Permi</b>	ts:	Choose an item.		
<b>Additional Permi</b>	ts:	Choose an item.		
MCBR BLD:	Not Ye	et Assigned	HH P&D:	
MCBR MEC:			HHFD Plan:	23-194
MCBR ELE:			HHFD Box:	
REVIEWER:	Suson	α	DATE:	7/6/2023

## Fire Department Comments:

The Huber Heights City Code Part 15 Refers to Fire Code Requirements and has adopted by reference OFC and IFC Appendices

These comments are based only on the proposed site work, fire department access and basic fire protection concept at this time. A full plan review of the building systems, fire protection, egress and life safety will need to be conducted once the architectural plans have been submitted for permit. The proposed development will need to meet the requirements of the Ohio Fire Code 2017, Ohio Building Code 2017 and the Huber Heights Codified Ordinance. Based on the drawings provided the following requirements need to be met.

#### **Requirements: (Site Plan)**

- Driveways are existing and there do not appear to be any changes.
- A permit shall be obtained for construction from Montgomery County Building Regulations.

Please reference contact information below for questions or concerns with this document.

Plans reviewed by the Huber Heights Fire Division are reviewed with the intent they comply in <u>ALL</u> respects to this code, as prescribed in <u>SECTION (D)</u> <u>104.1 of the 2017 Ohio Fire Code</u>. Any omissions or errors on the plans or in this review do not relieve the applicant of complying with <u>ALL</u> applicable requirements of this code. These plans have been reviewed for compliance with the Ohio Fire Code adopted by this jurisdiction. There may be other regulations applicable under local, state, or federal statues and codes, which this department has no authority to enforce and therefore have not been evaluated as part of this plan review.

## AI-9310 Planning Commission Meeting Date: 07/11/2023

Replat

Information

Agenda Title

REPLAT - The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval to vacate Thorngate Road north of Waynegate Road (RP 23-18).

Purpose and Background

Attachments

Staff Report Decision Record Drawing Fire Assessment

# Memorandum

Staff Report for Meeting of July 11, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, City Planner

Date: July 5, 2023

Subject: Vacation of Public Right of Way RP 23-18 (Thorngate Dr. north of Waynegate Rd.)

Department of Planning and Zoning	City of Huber Heights
APPLICANT/OWNER:	City of Huber Heights – Applicant
DEVELOPMENT NAME:	N/A
ADDRESS/LOCATION:	Thorngate Drive, north of Waynegate Road.
ZONING/ACREAGE:	Planned Residential (PR) / 0.14 Acres
EXISTING LAND USE:	Right of Way stub
ZONING ADJACENT LAND:	North: PR East: PR West: PR South: PR
REQUEST:	The City of Huber Heights requests approval to vacate Thorngate Drive, north of Waynegate Rd. The remnants of the public right of way will be transferred to the adjacent property owners.
ORIGINAL APPROVAL:	N/A
APPLICABLE HHCC:	Chapter 1107, Ohio Revised Code 711.39
CORRESPONDENCE:	In Favor – None Received In Opposition – None Received.

#### **Overview**

The city is requesting approval to vacate Thorngate Drive, north of Waynegate Road. This is a stub street intended to connect to the subdivision to the north. The connection was never approved or completed, nor will it ever be constructed. As a result, this stub serves no municipal purpose, and has created drainage problems for the adjacent property owners.

Once the right of way is officially vacated and the road bed removed, the two parcels will be transferred to the adjacent property owners.

#### Applicable Subdivision Regulations

The applicable subdivision regulations for the plat are found in Chapter 1107 - Final Plat. The vacation of public right of way is governed by ORC 711.39 - Vacating Plat by Legislative Authority.

Vacating the public right of way requires approval by the platting commission (Planning Commission) and the Huber Heights City Council.

## Staff Analysis

The vacation is being initiated by the City at the request of the adjacent property owners who have consistent flooding issues due to this stub. The stub serves no municipal function since the connection to the northern subdivision was never completed. The City is removing the road bed for the adjacent property owners.

#### **Additional Comments:**

Fire: The Fire Department has approved vacation and replat.

City Engineer: The engineer has approved vacation and replat.

#### **Recommendation**

Staff recommends approval of the Thornburg Drive Vacation as submitted.

#### Planning Commission Action

Planning Commission may take the following actions with a motion to:

- 1) Recommend approval of the vacation and replat, with or without conditions.
- 2) Recommend denial vacation and replat.
- 3) Table the application to gather additional information.



# **Planning Commission Decision Record**

WHEREAS, on June 22, 2023, the applicant, The City of Huber Heights, requested approval to vacate Thorngate Road north of Waynegate Road (Case RP 23-18), and;

WHEREAS, on July 11, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

moved to approve the request by the applicant, The City of Huber Heights, for approval to vacate Thorngate Road north of Waynegate Road (Case RP 23-18) in accordance with the recommendation of Staff's Memorandum dated July 5, 2023, with the following conditions:

1. Approve as submitted.

Seconded by Roll call showed: YEAS: NAYS: Motion to recommend approval carried

Terry Walton, Chair Planning Commission Date





Huber Heights Fire Division

#### Inspections require two business days advance notice! (OAC)1301:7-7-09(A)(5)

Occupancy Name: Replat				
Occupancy Add	ress:	Thorngate Road		
Type of Permit:		HHP&D Site Plan		
Additional Perm	its:	Choose an item.		
Additional Perm	its:	Choose an item.		
-				
MCBR BLD:	N/A		HH P&D:	
MCBR MEC:			HHFD Plan:	23-197
MCBR ELE:			HHFD Box:	
<b>REVIEWER:</b>	Suson	g	DATE:	7/5/2023

## Fire Department Comments:

The Huber Heights City Code Part 15 Refers to Fire Code Requirements and has adopted by reference OFC and IFC Appendices

Plan submittal is approved as shown on drawing, dead end road vacation. Parcel to be split between adjoining homeowners.

Please reference contact information below for questions or concerns with this document.

Plans reviewed by the Huber Heights Fire Division are reviewed with the intent they comply in <u>ALL</u> respects to this code, as prescribed in <u>SECTION (D) 104.1 of the 2017 Ohio Fire Code</u>. Any omissions or errors on the plans or in this review do not relieve the applicant of complying with <u>ALL</u> applicable requirements of this code. These plans have been reviewed for compliance with the Ohio Fire Code adopted by this jurisdiction. There may be other regulations applicable under local, state, or federal statues and codes, which this department has no authority to enforce and therefore have not been evaluated as part of this plan review.

#### AI-9312 Planning Commission Meeting Date: 07/11/2023 Detailed Development Plan

#### Information

Agenda Title

DETAILED DEVELOPMENT PLAN - The applicant, METROPOLITAN HOLDINGS LTD, is requesting approval of a Detailed Development Plan for a proposed new 312 unit apartment project. Property is located at Executive Boulevard across the street from the Rose Music Center (DDP 23-19).

Purpose and Background

Attachments

Staff Report Decision Record Drawings Drawings Drawings Drawings Renderings Design Standards Signs Lighting

# Memorandum

Staff Report for Meeting of July 11, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, City Planner

Date: July 6, 2023

Subject: DDP 23-19 Metropolitan Holdings 312 unit multi-family development

Department of Planning and Zoning	City of Huber Heights
APPLICANT/OWNER:	Metropolitan Holdings, LTD. – Applicant Nancy Newbauer, Trustee - Owner
DEVELOPMENT NAME:	Metropolitan Holdings - Newbauer Site
ADDRESS/LOCATION:	6801 Executive Blvd.
ZONING/ACREAGE:	Planned Mixed Use (PM) / 25.3 Acres
EXISTING LAND USE:	Vacant / Agricultural
ZONING ADJACENT LAND:	North: R-7 East: PM West: I-1 South: PEP (Rose Music Center)
REQUEST:	The applicant requests Detailed Development Plan approval for a 312 unit apartment development called Reverb.
ORIGINAL APPROVAL:	N/A
APPLICABLE HHCC:	Chapter 1171, 1179, 1181
CORRESPONDENCE:	In Favor – None Received In Opposition – None Received

#### STAFF ANALYSIS AND RECOMMENDATION:

#### <u>Overview</u>

The applicant requests Detailed Development Plan approval to facilitate the construction of 312 residential units (1- and 2-bedroom apartments) on approximately 21.3 acres.

The Planning Commission recommended approval of a rezoning and basic development plan on February 14, 2023. The Huber Heights City Council approved the rezoning and basic development plan on April 11, 2023.

#### Applicable Zoning Regulations

The applicable zoning regulations are Chapter 1130 – Amendments, Chapter 1171 – General Provisions, Chapter 1179 – Planned Mixed Use, Chapter 1181 – General Provisions.

#### 1171.09 - Detailed development plan.

The detailed development plan shall conform substantially to the basic development plan. If desired by the developer, it may be submitted in stages with each stage reflecting a portion of the approved basic plan which is proposed to be recorded and developed; provided however, that such portion conforms to all requirements of this chapter and other applicable ordinances. The requirement procedure for approval of a detailed development plan shall be:

- (a) The detailed plan and supporting data shall be filed with the City. The Planning Commission shall determine that such plan is in conformity with these regulations and in agreement with the approved basic plan.
- (b) After review of the detailed plan and supporting data, the Commission shall approve or disapprove the plan submitted by the developer. Disapproval of the detailed plan shall be based on its failure to comply with the basic development plan and current applicable codes, standards and regulations.

The staff analysis addresses the elements of the Detailed Development Plan and standards for approval.

#### Staff Analysis

The approved rezoning and Basic Development Plan ordinance has the following relevant conditions:

- 1. The Basic Development and Zoning Regulations shall be those submitted with the application dated January 30, 2023.
- 2. The northern property buffering requirements shall be determined during the Detailed Development Plan review.

#### Conformance with the approved conditions of the BDP:

# 1. The Basic Development and Zoning Regulations shall be those submitted with the application dated January 30, 2023.

The development regulations that were submitted with the Basic Development Plan will be recorded as part of the detailed development plan approval. The Project Zoning and Design Standards are attached for reference.

The submitted detailed development plan substantially conforms to these requirements.

#### Setbacks

Minimum Requirements	As indicated on the DDP	Conforming (Y/N)
Front yard: 20 feet	25 feet	Y
Rear yard: 25 feet	25 feet	Y
East Side yard: 25 feet	25 feet	Y
West Side yard: 25 feet	20 feet	N*

\*The applicant has indicated that this is an error and will be sumitting corrected plans.

#### Signage

The DDP indicates two (2) internal illuminated wall signs on the clubhouse building. The two wall signs total 75 square feet.

Two non-illuminated entrance columns (monument signs) are proposed. The columns are 6 feet high and just under 4 feet wide. The signage graphic affixed to each column is approximately 3.5 square feet.

Staff feels the signs are appropriately located and well designed to showcase the music branding of apartment complex.

#### Architecture and Site Standards

The detailed development plan appears to satisfy the building material requirements outlined in the Project Zoning and Design Standards. The residential buildings are mixture of stone, cement panels, and lap and batten siding. The buildings facing Executive Boulevard including the clubhouse have extensive stone and masonry elements.

Additionally, the applicant is proposing a significant amenity package for residents including pool, outdoor kitchen and gathering areas.

Landscaping

The landscaping plan is substantially compliant to the standards outlined in the Project Zoning and Design Standards. This includes street tree, perimeter and interior landscaping, and open space requirements. Sheets L1 and L2 illustrate the proposed landscaping plan.

#### Lighting

The lighting plan indicates pedestrian scale decorative poles and fixtures will be used the parking areas and travel lanes. The decorative fixtures are mounted on 12-foot poles. The lighting standards limit light trespass to no more the 0.5 foot-candle. However, the photometric plan indicates areas of illumination on the north property line which exceeds this standard. As a condition of approval, the applicant shall shield the perimeter fixtures adjacent to the north property line.

#### **Street and Transportation Standards**

The detailed development plan complies with the street and transportation standards outlined in the Project Zoning and Design Standards.

The only significant change is the multi-use path along Executive Boulevard. The basic development plan indicated a 10-foot path. After discussions between the applicant and staff, the path has been reduced to eight (8) feet. This was done to better accommodate decorative street lighting that is being planned for Executive Boulevard. The width of the path matches the width of the path in front of the Rose.

# 2. The northern property buffering requirements shall be determined during the Detailed Development Plan review.

How the project is buffered from the northern neighborhood was a significant discussion topic and particular concern to the adjacent neighbors. Staff encouraged the development team to survey the treeline to determine which mature trees are healthy and should remain, and to cluster landscaping between the garages to further reduce visual and noise impacts. Additionally, specific grading requirements and their impacts to the treeline was unknown at the point of basic development plan approval.

Surprisingly, only eight trees within the 25-foot setback must be removed. They are clustered in the areas where two retaining walls must be constructed to achieve the grading required for the parking areas and garages. No trees along the property line are indicated to be removed. Sheet C201 and C202 illustrate the planned removals. Sheet C501 and C502 illustrate the grading limits and location of the retaining walls.

To mitigate the loss of the trees and increase buffering, the applicant is proposing substantial landscaping along the northern property line. Sheet L2 and L2.1 There is a dense mixture of evergreen and deciduous trees planned. The evergreens will be 6 feet at planting, and the various deciduous trees will have a 3-inch diameter. These are substantially larger than typically planted.

Staff feels the northern property line is adequately buffered between the existing trees remaining and the substantial amount of new plantings.

#### Staff Analysis

The DDP application substainally conforms with the Basic Development Plan ordinance approved by the City Council. Additionally, the DDP generally conforms to all relevant zoning regulations, including landscaping, lighting, parking, architectural standards and signs.

#### **Additional Comments:**

Fire: See Attached.

City Engineer: No comments received.

#### **Recommendation**

It is staff's opinion that the requirements of Section 1171.09 have been met and staff recommends approval of the Detailed Development Plan application submitted on June 22, 2023, with the following conditions:

- The applicant shall conform to the Basic Development Plan ordinance approved on April 11, 2023;
- Lighting fixtures along the northern perimeter shall have shields installed on the north side of the luminaire to reduce light trespass to the north.

#### **Planning Commission Action**

Planning Commission may take the following actions with a motion to:

- 1) Approve the Detailed Development Plan, with or without conditions;
- 2) Deny the Detailed Development Plan; or
- 3) Table the application in order to gather additional information.



# **Planning Commission Decision Record**

WHEREAS, on June 22, 2023, the applicant, Metropolitan Holdings, LTD, requested approval of a Detailed Development Plan for a 312 unit apartment project. Property is located on Executive Boulevard across the street from the Rose Music Center, further identified as Parcel Numbers P70 01820 0003 P70 01820 0004 of the Montgomery County Auditor's May (Case DDP 23-19), and;

WHEREAS, on July 11, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

moved to approve the request by the applicant, Metropolitan Holdings, LTD, for approval of a Detailed Development Plan for a 312 unit apartment project. Property is located on Executive Boulevard across the street from the Rose Music Center, (Case DDP 23-19) in accordance with the recommendation of Staff's Memorandum dated July 6, 2023, with the following conditions:

- 1. The applicant shall conform to the Basic Development Plan ordinance approved on April 11, 2023.
- 2. Lighting fixtures along the northern perimeter shall have shields installed on the north side of the luminaire to reduce light trespass to the north.

Seconded by Roll call showed: YEAS: NAYS: Motion to recommend approval carried

Terry Walton, Chair Planning Commission Date

# REVERB DEVELOPMENT PROJECT CITY OF HUBER HEIGHTS MONTGOMERY COUNTY, OHIO



# CONTACTS:

## OWNER/DEVELOPER:

METROPOLITAN HOLDINGS 1429 KING AVENUE COLUMBUS, OHIO 43212 CONTACT: JAMIE OBERSCHLAKE PHONE: (614) 325-1575 EMAIL: JOBERSCHLAKE@METROPOLITANHOLDINGS.COM

## CIVIL ENGINEER/SURVEYOR:

THE KLEINGERS GROUP 6219 CENTRE PARK DRIVE WEST CHESTER, OHIO 45069 CONTACT: TROY MESSER PHONE: (513) 779-7851 EMAIL: TROY.MESSER@KLEINGERS.COM

## ARCHITECT:

ARCHALL 49 E. 3RD AVENUE COLUMBUS, OHIO 43201 CONTACT: BRAD CHURCH PHONE: (614) 469-7500 EMAIL: BCHURCH@ARCHALL.COM

## LANDSCAPE ARCHITECT:

POD DESIGN 100 NORTHWOODS BLVD, SUITE A COLUMBUS, OHIO 43235 CONTACT: RYAN YOUNG PHONE: (614) 360-3065 EMAIL: RYOUNG@PODDESIGN.NET

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## GENERAL NOTES

5

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF HUBER HEIGHTS SPECIFICATIONS AND STANDARD DRAWINGS. IF NO CITY STANDARD IS AVAILABLE, THEN STANDARD DRAWINGS AND SPECIFICATIONS FROM THE MONTGOMERY COUNTY, OHIO ENGINEERING DEPARTMENT OR THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION & MATERIALS SPECIFICATIONS" (LATEST EDITION) SHALL BE FOLLOWED.
- ALL UTILITY TRENCH EXCAVATION WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY AND EASEMENTS SHALL BE BACKFILLED WITH GRANULAR FILL MATERIAL IN ACCORDANCE WITH CITY SPECIFICATIONS AND COMPACTED BEFORE SUB-GRADE APPROVAL
- ALL UNDERGROUND UTILITY SERVICE LATERALS ARE TO BE INSTALLED FROM MAIN TO RIGHT-OF-WAY LINE BEFORE STREETS ARE SURFACED.
- ALL CATCH BASINS (CURB AND GUTTER INLET) ODOT TYPE 3A UNLESS OTHERWISE SPECIFIED. THE CASTING HOOD SHALL HAVE "DUMP NO WASTE" LETTERING AND FISH IMAGE.
- ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE ASTM C-76, CLASS IV, UNLESS OTHERWISE NOTED.
- ALL MANHOLES TO BE TYPE "A", UNLESS OTHERWISE NOTED. CHANNEL BOTTOMS OF ALL MANHOLES.
- CURB RAMPS TO BE LOCATED AS INDICATED ON PLANS AND CONSTRUCTED IN ACCORDANCE WITH CITY SPECIFICATIONS.
- CONCRETE CURBING TO BE A TYPE SPECIFIED IN THE CITY OF HUBER HEIGHTS STANDARD DRAWINGS. EXTRUDED OR PRECAST CURB IS NOT PERMITTED.
- ALL FIELD TILE ENCOUNTERED SHALL BE REPLACED OR CONNECTED TO THE STORM SEWER SYSTEM.
- SITE GRADING WITHIN SUBDIVISIONS SHALL BE SUCH THAT ALL LOTS WILL READILY DRAIN. LOTS SHALL HAVE A 1.5% MINIMUM SLOPE IN GRASS AREAS. OVERLAND FLOW ON LOTS SHALL BE LIMITED TO A MAXIMUM DISTANCE OF THREE HUNDRED (300) FEET UNLESS APPROVED BY THE CITY ENGINEER.
- ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ACCORDING TO THE BEST AVAILABLE INFORMATION. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764; THE DAYTON POWER & LIGHT CO. AT 937-866-3303, AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF OUPS.
- THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO 13 CONTROL SOIL EROSION AND SEDIMENTATION THROUGH THE LIFE OF THE CONTRACT. THESE MAY INVOLVE THE USE OF HAY AND STRAW BALES, DIKES, SEDIMENT PITS, MULCHES, FILTER FABRICS AND OTHER DEVICES AND METHODS. PARTICULAR CARE SHALL BE TAKEN TO AVOID EROSION AND SEDIMENTATION ON EXISTING PAVED AND GRAVELED AREAS. FOR RESIDENTIAL AND SMALL CONSTRUCTION SITES - PRIOR TO ANY SITE DISTURBANCE, THE CONTRACTOR SHALL HAVE IN PLACE EROSION CONTROL MEASURES PER EPA 830-F-15-001 GUIDELINES FOR STORMWATER PREVENTION.
- ROOF AREA DRAIN LINES SHALL NOT BE EXTENDED 14. THROUGH CURBS BUT SHALL BE DIRECTLY CONNECTED TO THE STORM SEWER SYSTEM.
- ALL METAL CASTINGS SHALL BE PAINTED WITH TWO COATS 15. OF BLACK ASPHALTUM PAINT.
- ALL EXISTING MONUMENTS SHALL BE PROTECTED AND OR REFERENCED BY THE CONTRACTOR. MONUMENTS SHOWN ON THE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON MONTGOMERY COUNTY STANDARD CONSTRUCTION DRAWING MC-1. MONUMENT BOXES SHALL BE LOCATED AT ROADWAY PI, PC, PT POINTS AS WELL AS CROSS STREETS CENTERLINE.
- CONSTRUCTION STAKING MUST BE FURNISHED FOR THE CITY INSPECTOR TO VERIFY CONFORMANCE TO THE DESIGN PLAN. CONSTRUCTION STAKING IS REQUIRED AT SUFFICIENT DENSITY TO ENSURE THE CITY INSPECTOR CAN VERIFY THE WORK PERFORMED BY THE CONTRACTOR. CONTACT THE CITY INSPECTOR TO ENSURE ADEQUATE CONSTRUCTION STAKING IS FURNISHED.
- ALL SURVEY MUST BE PERFORMED BY THE STATE OF OHIO LICENSED SURVEYOR.

# SANITARY NOTES

- THE CONTRACTOR SHALL BE QUALIFIED TO CONSTRUCT SANITARY SEWERS. ALL SUCH WORK SHALL BE CONSTRUCTED ACCORDING TO CITY OF HUBER HEIGHTS SPECIFICATIONS.
- SANITARY SEWER PIPE AND FITTINGS SHALL BE PVC S3034 SDR 26.

- SANITARY SEWER PIPE JOINTS SHALL CONFORM TO ASTM D 16. ALL FIRE HYDRANTS IN SINGLE FAMILY RESIDENTIAL 3212 FOR PVC. DISTRICTS SHALL BE MUELLER CENTURION 250 MODEL A-ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN 423 WITH 5-1 1/4" MAIN VALVE OPENING WITH ONE 5" WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM STORTZ OUTLET WITH CAP AND 2 2-1/2" OUTLETS WITH CITY OF DAYTON THREADS. ARE PROHIBITED.
- NO CONSTRUCTION SHALL COMMENCE UNTIL ALL PERMITS HAVE BEEN ISSUED. ALL UTILITY TRENCHES WITHIN THE EXISTING OR PROPOSED
- STREET RIGHT-OF-WAY SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL CONFORMING TO ODOT 310 IN ACCORDANCE WITH THE CITY SPECIFICATIONS.
- 7. NO ADDITIONS, DELETIONS OR REVISIONS TO THE SANITARY SEWER ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY OF HUBER HEIGHTS.
- WATER LINES CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDES OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER AS POSSIBLE. IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THAT SPAN.
- ALL SERVICE LATERALS SHALL BE PVC SCHEDULE 40 AND ARE TO BE INSTALLED FROM MAIN TO RIGHT OF WAY OR EASEMENT BEFORE STREETS ARE SURFACED.
- 10. ALL MANHOLES SHALL BE PRECAST IN ACCORDANCE WITH CITY STANDARDS. MANHOLE STEPS SHALL BE PLASTIC. ALL MANHOLE FRAMES AND LIDS SHALL BE DUCTILE IRON TRAFFIC BEARING WITH VENT HOLES TO BE AT THE OPTION OF THE CITY ENGINEER.

# WATER NOTES

- THE CONTRACTOR SHALL BE QUALIFIED TO CONSTRUCT WATER MAINS. ALL WATER LINES AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO CITY OF HUBER HEIGHTS SPECIFICATIONS.
- WATER MAINS, BENDS AND FITTINGS SHALL BE DUCTILE CAST IRON PIPE AND CONFORM TO ANSI A-21.51 (AWWA C-151), CLASS 53. BENDS AND TEES SHALL BE RESTRAINED USING MECHANICAL JOINT RESTRAINTS SUCH AS MEGALUG OR APPROVED EOUAL.
- ALL WATER MAINS SHALL HAVE 4' -6" MINIMUM COVER.
- NO SERVICE CONNECTIONS SHALL BE MADE TO THE WATER MAIN UNTIL THE MAIN LINE HAS BEEN INSPECTED, TESTED, AND FLUSHED FOR 12 HOURS MINIMUM. NO TAPPING WILL BE PERMITTED IN INCLEMENT WEATHER.
- NO CONSTRUCTION SHALL COMMENCE UNTIL ALL PERMITS HAVE BEEN ISSUED.
- ALL UTILITY TRENCHES WITHIN THE EXISTING OR PROPOSED PAVEMENT OR EASEMENTS SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL CONFORMING TO ODOT 310 IN ACCORDANCE WITH THE CITY SPECIFICATIONS.
- NO ADDITIONS, DELETIONS, OR REVISIONS TO THE WATER FACILITIES ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY OF HUBER HEIGHTS.
- ONLY CITY OF HUBER HEIGHTS OR UNITED WATER PERSONNEL SHALL OPERATE MAIN LINE WATER VALVES.
- ALL FIRE HYDRANTS SHALL BE LOCATED 2' FROM AND WITHIN 5' OF THE CURB OR EDGE OF PAVEMENT AND 4" OPENING TO FACE THE STREET. THE FIRE HYDRANT IS TO BE INSTALLED AS PER THE DETAIL LOCATED WITHIN THE CITY OF HUBER HEIGHTS STANDARD DRAWINGS.
- 10. WATER LINES CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDES OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER AS POSSIBLE. IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THAT SPAN.
- ALL SERVICE LATERALS ARE TO BE INSTALLED FROM MAIN TO RIGHT OF WAY OR EASEMENT BEFORE STREETS ARE SURFACED.
- 12. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING WATER MAINS BEFORE CONSTRUCTION OF NEW WATER MAIN AT PROPOSED CONNECTIONS.
- 13. ALL GATE VALVES ARE TO BE LOCATED AT TEES OR CROSSES WITH A 2' MAXIMUM ANCHOR PIPE BETWEEN TEE OR CROSS AND VALVE. ALL PLUGS ARE TO BE CONNECTED TO VALVES EXCEPT WHERE SHOWN ON PLANS. PLUGS SHALL BE TAPPED WITH A 3/4" SHUT OFF VALVE FOR RELEASE OF AIR AND FOR FLUSHING.
- 14. ALL VALVES AND FIRE HYDRANTS SHALL HAVE RIGHT HAND (CLOCKWISE) OPENING DIRECTION.
- 15. GATE VALVES SHALL HAVE RESILIENT SEATS RATHER THAN BRASS SEATS. OPERATING RODS SHALL HAVE O-RING WATER SEALS RATHER THAN PACKING GLANDS.

- 17. ALL FIRE HYDRANTS IN MULTI FAMILY RESIDENTIAL AND **COMMERCIAL DISTRICTS** SHALL BE MUELLER CENTURION 200 MODEL A-425 WITH 5-1 1/4" MAIN VALVE OPENING TWO WAY WITH ONE 4" STORTZ OUTLET WITH CAP AND ONE 5" STORTZ OUTLET WITH CAP. OPERATING NUT TO BE A 1" SOUARE.
- THE FIRE HYDRANT BREAKAWAY FLANGE SHALL BE 18. LOCATED 4" ABOVE THE TOP OF CURB.
- 19. FIRE HYDRANTS SHALL BE PRIMED WITH RED OXIDE PRIMER AND PAINTED WITH TWO (2) COATS OF RED ENAMEL FROM THE BREAK-AWAY FLANGE TO THE TOP OF THE HYDRANT. LOWER SECTIONS OF THE HYDRANT, INCLUDING THE BARREL SHALL BE PAINTED WITH AN ASPHALTUM PAINT.
- 20. WATER SERVICE LINES SHALL BE 1" TYPE K COPPER PER CITY STANDARDS. METER YOKES AND METER VAULTS SHALL BE PER MONTGOMERY COUNTY STANDARDS.
- BOLLARDS, WHERE REQUIRED, SHALL BE CONCRETE FILLED 21. 8" DIAMETER POSTS WITH FOUNDATIONS SET 42" BELOW GRADE IN A CONCRETE FILLED EXCAVATION
- ALL HYDRANTS SHALL HAVE CITY OF DAYTON THREADS 22. RATHER THAN NATIONAL STANDARD THREADS EXCEPT FOR THE STREAMER CONNECTION WHICH SHALL BE A STORTZ FITTING.

Revised: 02/22/2023



- 2" ODOT ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
- (4) 8" ODOT ITEM 304 AGGREGATE BASE
- SUBGRADE COMPACTION, REFERENCE ODOT ITEM 5 204, EARTHWORK SPECIFICATION 312000 AND
- SOILS REPORT



- 1 1/2" ODOT ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
- ODOT ITEM 407 TACK COAT, APPLY IF TIME
- BETWEEN ASPHALT LIFTS EXCEEDS 30 DAYS 4" ODOT ITEM 441 ASPHALT CONCRETE
- INTERMEDIATE COURSE, TYPE 2, PG64-22
- (4) 8" ODOT ITEM 304 AGGREGATE BASE
- WOVEN GEOTEXTILE FABRIC, ODOT ITEM 712.09 TYPE D
- SUBGRADE COMPACTION, REFERENCE ODOT ITEM (6) 204, EARTHWORK SPECIFICATION 312000 AND SOILS REPORT









	EXTERIOR CONCRETE SLAB WALK
7	WITH FLUSH CURB DETAIL
:101/	NITO



CURB RAMP DETAIL - DOUBLE SIDED PARALLEL N.T.S.

WARNINGS ON EACH CURB RAMP WITH APPROVED MATERIALS, AS SHOWN IN SEPARATE DETAIL. INSTALL THESE PROPRIETY PRODUCTS AS PER MANUFACTURER'S WRITTEN

BASE OF EACH CONSTRUCTED CURB RAMP ALLOWS FOR PROPER DRAINAGE, WITHOUT EXCEEDING ALLOWABLE CROSS SLOPE OR RAMP SLOPES. VERTICAL CHANGE IN LEVEL EXCEEDING 2) GUTTER AND RAMP, ARE NOT ALLOWED.

SURFACES BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES TO BE ROUGHER THAN THE

CURB RAMP AS EXTENSIONS OF WALK JOINTS AND CONSISTENT WITH ITEM 608.03 REQUIREMENTS FOR A NEW CONCRETE WALK. PROVIDE A 1/2" ITEM 705.03 EXPANSION JOINT FILLER AROUND THE EDGE OF RAMPS BUILT IN EXISTING CONCRETE WALKS. LINES SHOWN ON THIS DRAWING INDICATE THE RAMP EDGES AND

\*WHERE POSSIBLE, POUR RAMP AREA INTEGRAL WITH THE CURB, OTHERWISE USE 6" THICK WALK.

- FLATTER CROSS SLOPE AND RUNNING SLOPE. 6. **DETECTABLE WARNINGS: INSTALL DETECTABLE WARNINGS**
- ON EACH CURB RAMP WITH APPROVED MATERIALS, AS SHOWN IN SEPARATE DETAIL. INSTALL THESE PROPRIETY PRODUCTS AS PER MANUFACTURER'S WRITTEN
- CONSTRUCTED CURB RAMP ALLOWS FOR PROPER DRAINAGE, WITHOUT EXCEEDING ALLOWABLE CROSS SLOPE OR RAMP SLOPES. VERTICAL CHANGE IN LEVEL EXCEEDING  $\frac{1}{8}$ " BETWEEN THE 1) PAVEMENT AND GUTTER, AND 2) GUTTER AND RAMP, ARE NOT ALLOWED.
- COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES TO BE ROUGHER THAN THE ADJACENT WALK.
- JOINTS: PROVIDE EXPANSION JOINTS IN THE CURB RAMP AS EXTENSIONS OF WALK JOINTS AND CONSISTENT WITH ITEM 608.03 REQUIREMENTS FOR A NEW CONCRETE WALK. PROVIDE A ½" ITEM 705.03 EXPANSION JOINT FILLER AROUND THE EDGE OF RAMPS BUILT IN EXISTING CONCRETE WALKS. LINES SHOWN ON THIS DRAWING INDICATE THE RAMP EDGES AND SLOPE CHANGES, AND DO NOT NECESSARILY INDICATE JOINT LINES.

# NOTES: GENERAL

1. DETECTABLE WARNINGS ARE A DISTINCTIVE SURFACE PATTERN OF TRUNCATED DOMES WHICH ARE DETECTABLE BY CANE OR UNDERFOOT TO ALERT PEOPLE WITH VISION IMPAIRMENTS OF THEIR APPROACH TO STREETS AND HAZARDOUS DROP-OFFS.

# PLACEMENT

- 2. DETECTABLE WARNINGS ARE TO BE INSTALLED AT ANY LOCATION WHERE PEDESTRIANS MIGHT CROSS PATHS WITH VEHICULAR TRAFFIC LANES, SUCH AS THE BASE OF CURB RAMPS OR AT BLENDED CURBS. A 24" STRIP OF DOMES IS TO BE INSTALLED FOR THE FULL WIDTH OF THE RAMP OR WALK.
- 3. THE DEPTH OF CONCRETE UNDERNEATH DETECTABLE WARNING PRODUCTS SHALL BE A MINIMUM OF 4".
- ALIGNMENT
- 4. TRUNCATED DOMES SHOULD BE ALIGNED WITH THE PRIMARY DIRECTION OF THE RAMP AS SHOWN ON THE DETECTABLE WARNING ALIGNMENT DETAIL. NORMALLY THE DETECTABLE WARNINGS SHOULD BE FLUSH WITH THE BACK OF THE CURB, BUT FOR SKEWED CONDITIONS SEE DETECTABLE WARNING ALIGNMENT DETAIL. FOR NON-STNADARD LAYOUTS, DETECTABLE WARNING MATERIALS MAY HAVE TO BE MITERED AND PLACED SEGMENTALLY.

# PRODUCTS & COLORS

1.6" MIN

2.4" MAX.

SQUARE PATTERN,

PARALLEL ALIGNMENT

5. COLOR OF THE DETECTABLE WARNINGS SHOULD CONTRAST WITH SURROUNDING CONCRETE WALK AND RAMP. BLACK IS NOT AN ACCEPTABLE COLOR. APPROVED PRODUCTS AND GUIDANCE ON COLOR MAY BE FOUND ON THE ODOT OFFICE OF ROADWAY ENGINEERING SERVICE'S DETECTABLE WARNINGS APPROVED LIST. INSTALL PRODUCTS AS PER MANUFACTURER'S PRINTED INSTRUCTIONS.







2.4"

MAX.

RADIAL ALIGNMENT



TRUNCATED DOMES DETAILS

DIRECTION

OF RAMP







DETECTABLE WARNING ALIGNMENT

DOME ALIGNMENT ON RADIUSED CURB













- 6" MIN ROCK

- SECTIONS SYMMETRICAL ABOUT €.
- 2. DIMENSIONS ON CHART ARE EXPRESSED IN INCHES.
- 3. PROVIDE EMBEDMENT IN ACCORDANCE WITH THE RECOMMENDATIONS OF ASTM D2321, 7.5.
- 4. BACKING OR ENCASEMENT TO BE ODOT CLASS "QC1" CONCRETE.
- 5. PAYMENT FOR CONCRETE BACKING AND ENCASEMENT SHALL BE BASED ON MINIMUM TRENCH WIDTH (Wn).
- 6. THE PIPE SHALL BE SUPPORTED BY 12" CONCRETE BLOCKING WHEN CONCRETE ENCASEMENT IS REQUIRED.
- 7. BLOCKING SHALL HAVE THE LENGTH SHOWN IN THE CHART OR OF SUFFICIENT LENGTH SO THAT THE PIPE LOAD ON THE SUBGRADE SHALL NOT EXCEED 3,000 LBS/SF. SEE CHART FOR MINIMUM BLOCK LENGTHS.
- 8. BEDDING MATERIAL TO BE NO. 57 STONE OR COMPACTED GRANULAR MATERIAL PER ODOT ITEM 703.11 TYPE 1.

BEDDING FOR FLEXIBLE SEWER N.T.S.

- COMPACTED NATIVE OR -GRANULAR MATERIAL AT CONTRACTOR'S OPTION. COMPACT TO 98% STANDARD

THE <b>KLEIN</b>	
	www.kleingers.com
LANDSCAPE ARCHITECTURE	6219 Centre Park Dr. West Chester, OH 4506 513.779.7851
SEAL:	
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CITY OF HU MONTGOMER	JEUI BER HEIGHTS ( COUNTY, OHIO
PROJECT NO:	220358,000
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# PROPOSED LEGEND





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<b>C R E A T I V E</b>	PRO st
	-
PEOPLE	¥
IN S P I R E D	c

ROPOSED LEGEND					
STM	STORM SEWER PIPE				
	CATCH BASIN				
	CURB INLET				
	HEADWALL				
	MANHOLE				
SAN	- SANITARY SEWER PIPE				
	SANITARY SEWER MANHOLE				
• CO	SANITARY SEWER CLEANOUT				
WAT	- WATERLINE PIPE				
<b>)</b>	FIRE HYDRANT				
⊗ <sup>W∨</sup>	WATER VALVE				
8 PIV	POST INDICATOR VALVE				
o <sup>FDC</sup>	FIRE DEPARTMENT CONNECTION				







GRADING LEGEND				
1215	- EXISTING MAJOR CONTOUR			
— — 1216 — —	- EXISTING MINOR CONTOUR			
<b>——</b> 1215 <b>—</b> —	- PROPOSED MAJOR CONTOUR			
	- PROPOSED MINOR CONTOUR			
× <sup>1215.00</sup>	PROPOSED SPOT ELEVATION			
~~~	PROPOSED SWALE			
	100-YEAR FLOOD ROUTE			

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1215	EXISTING MAJOR CONTOUR
<u> </u>	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	- PROPOSED MINOR CONTOUR
× <sup>1215.00</sup>	PROPOSED SPOT ELEVATION
~~~	PROPOSED SWALE
	100-YEAR FLOOD ROUTE

DATE: June 16, 2023

# SHEET INDEX

# SITE DRAWINGS

- LO.1 Overall Site Reference Plan
- L0.2 Open Space Plan
- L1.0 West Amenity Layout Plan
- L1.1 Clubhouse Amenity Layout Plan

# LANDSCAPE DRAWINGS

- L2.0 West Planting Plan
- L2.1 East Planting Plan
- L2.2 West Amenity Planting Plan Enlargement
- L2.3 Clubhouse Planting Plan Enlargement
- L2.4 Entry Drive Planting Plan Enlargement
- L3.0 Typical Building Foundation Planting Enlargements
- L3.1 Typical Building Foundation Planting Enlargements
- L3.2 Typical Building Foundation Planting Enlargements
- L3.3 Typical Building Foundation Planting Enlargements

<u>SITE DETAILS</u> SD1.0 - Site Details SD3.0 - Planting Details

# **REVERB** Huber Heights, OH

# Detailed Development Plan Submittal

PREPARED FOR



Metropolitan Holdings 1429 King Ave Columbus, OH 43212

PREPARED BY



**Columbus** 100 Northwoods Blvd Suite A Columbus, Ohio 43235 p 614.255.3399

**Cincinnati** 20 Village Square, Floor 3 Cincinnati, Ohio 45246 p 614.360.3066

**POD**design.net

# PROJECT NO. 21082

# VICINITY MAP



NORTH



# GENERAL NOTES

- 1. NOTIFY OWNER IMMEDIATELY WHEN DISCREPANCIES EXIST BETWEEN SITE CONDITIONS AND DRAWINGS.
- 2. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY OF THE VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN LIGHTS, SIGNS, BARRICADES, AND OTHER DEVICES TO WARN OF AND PHYSICALLY SEPARATE THE PEDESTRIAN FROM HAZARDS INCIDENTAL TO THE CONSTRUCTION AND DEMOLITION PROCESS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIANS THROUGH, AROUND, OR DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN

MOVEMENT SHALL ADHERE TO CHAPTER 6D OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION

- 4. REFER TO CIVIL ENGINEER'S PLANS FOR ALL SITE PARKING, CURBING, SIDEWALKS AND GRADING.
- 5. REFER TO M.E.P. PLANS FOR ALL ELECTRICAL CONNECTIONS AND FOR SITE LIGHTING LAYOUT AND RELATED DETAILS.

# LAYOUT NOTES

1. CONTRACTOR TO VERIFY WITH THE OWNER'S REPRESENTATIVE AND UTILITY COMPANIES THE LOCATIONS OF THE EXISTING UTILITIES PRIOR TO START. CALL OHIO UTILITIES PROTECTION SERVICES AT (800)362-2764. CONTRACTOR TO REPAIR ALL DAMAGES TO EXISTING UTILITIES, CURBS, PAVEMENTS, ETC. RESULTING FROM LANDSCAPE INSTALLATIONS WHICH OCCUR DURING THE CONSTRUCTION OF THE PROJECT.

- 2. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH WORK. NOTIFY ON SITE CONSTRUCTION MANAGER OF ANY DISCREPANCY BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS. NO WORK SHALL BE DONE IN AREAS WHERE SUCH DISCREPANCIES EXIST.
- 3. DO NOT SCALE DRAWINGS. UTILIZE DIMENSIONS INDICATED ON THE PLANS. THE CONTRACTOR SHALL COORDINATE ALL WORK AND BE RESPONSIBLE FOR ALL METHODS, MEANS, SEQUENCE, AND PROCEDURES OF THE WORK.
- 4. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL LINE WORK, LAYOUT AND DIMENSIONS ARE PARALLEL AND

PERPENDICULAR TO ONE ANOTHER.

- 5. DO NOT DISTURB AREAS OUTSIDE OF PROJECT LIMITS.
- 6. MAXIMUM SLOPES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE INDICATED ON THE PLANS. MAINTAIN POSITIVE DRAINAGE IN ALL AREAS. MAINTAIN 5% MAXIMUM RUNNING SLOPE AND 2% MAXIMUM CROSS SLOPE FOR ALL PAVEMENT.
- 7. PROTECT EXISTING FACILITIES DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING FACILITIES RESULTING FROM CONSTRUCTION ACTIVITIES.
- 8. ALL LAYOUT IS TO BE STAKED BY A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF OHIO. FOR ELECTRONIC FILES, CONTACT OWNER.NOTIFY OWNER TO

REVIEW LAYOUT STAKING AND APPROVE FIELD MODIFICATIONS AS NEEDED PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES.



### Columbus 100 Northwoods Blvd, Ste A Columbus, Ohio 43235 p 614.255.3399

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**POD**design.net

# Project Name Reverb **Multi-Family** Development

Executive Blvd.

Huber Heights, OH 45429



**Prepared For** Metropolitan Holdings 1429 King Avenue Columbus, Ohio 43212

# Project Info

Project # Date By Scale

21082 06/16/2023 NM, RY As Shown

Revisions

**PRELIMINARY** NOT FOR CONSTRUCTION

Sheet Title **OVERALL SITE** REFERENCE PLAN

Sheet #





M



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Revisions



Sheet Title **OPEN SPACE** PLAN

# LEGEND



OPEN SPACE

# CITY OF HUBER HEIGHTS CODE REQUIREMENTS

REQUIRED:	PROVIDED:
OPEN SPACE	521,697 SF.
25% OPEN SPACE REQUIRED	56% OPEN SPACE PROVIDED
MINIMUM 1.5 SHADE TREE REQUIRED FOR EACH 2,500SF OF OPEN SPACE	252 TREES PROPOSED + EXISTING DENSE VEGETATION AT NORTH PROPERTY LINE AND 75'
521,697 SF OF OPEN SPACE = $313$ TREES REQ.	JINLAW DUTTER AREA.





Sheet # L0.2





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Key Plan (N.T.S.)

# $\underline{\mathsf{CODED}\;\mathsf{NOTES}}\;\bigcirc\;$

- 1. OUTDOOR KITCHEN AND GRILL
- 2. STONE BOULDER SEATING, REFER TO DETAIL 3, SD1.0



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Revisions



# Sheet Title WEST AMENITY LAYOUT PLAN









REFERENCE IMAGES SHOWN FOR DESIGN INTENT ONLY

# CODED NOTES

- 1. FIRE BOWL WITH LOUNGE SEATING
- 2. PATIO SEATWALL WITH RAISED PLANTERS
- 3. OUTDOOR KITCHEN AND GRILLS
- 4. 10'X10' CANTILEVERED POOL UMBRELLAS, TYP. OF 2
- 5. BUILT IN RAISED POOL PLANTERS
- 6. POOL FEATURE STRUCTURE
- 7. POOL CABANAS
- 8. POOL ACCENT WALL
- 9. POOL FENCE
- 10. GLASS POOL FENCE AND GATE
- 11. OUTDOOR LOUNGE SPACE

# FINISH LEGEND



BROOM-FINISH CONCRETE PAVING REFER TO CIVIL PLANS

BUFFWASH CONCRETE, REFER TO DETAIL 1, SD1.0





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# Project Name Reverb **Multi-Family** Development

Executive Blvd.

Huber Heights, OH 45429



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# Project Info

Project # Date By Scale

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Sheet Title Clubhouse Amenity Layout Plan





Key Plan (N.T.S.)

# LEGEND



### EXISTING TREE TO REMAIN TYP. PROTECT IN PLACE

LIGHT POLE, TYP. REFER TO MEP PLANS

NOTES

1. REFER TO SHEETS L3.0-3.3 FOR TYPICAL BUILDING FOUNDATION PLANTINGS

PLAN	IT LIST				
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS
DECIDU	JOUS TREES		4		1
	AC FR	Acer freemanii 'Jeffsred' Autumn Blaze Red Maple	3" Cal.	B&B	
	be ni	Betula nigra 'Cully' River Birch	12' ht.	B&B	(4)Multi-stem 2" cal./stem
	GL TR	Gleditsia triacanthos f. inermis 'Skycole' Skyline Honeylocust	3" Cal.	B&B	
	PL AC	Platanus x acerifolia 'Morton Circle' Exclamation London Planetree	3" Cal.	B&B	
	TA DI	Taxodium distichum Bald Cypress	3" Cal.	B&B	
	QU BI	Quercus Bicolor Swamp White Oak	3" Cal.	B&B	
	QU IM	Quercus imbricaria Shingle Oak	3" Cal.	B&B	
	UL PA	Ulmus parvifolia Lacebark Elm	3" Cal.	B&B	
	ZE SE	Zelkova serrata 'Green Vase' Green Vase Zelkova	3" Cal.	B&B	
evergi	REEN TREES	•		·	·
	AB CC	Abies concolor White Fir	6' ht.	B&B	As Shown
	PI AB	Picea Abies Norway Spruce	6' ht.	B&B	As Shown
	PI ST	Pinus strobus Eastern White Pine	6' ht.	B&B	As Shown
	TH PL	Thuja standishii x plicata 'Green Giant' Green Giant Arborvitae	6' ht.	B&B	As Shown
	MENTAL TRE	ES			
	MA VI	Magnolia virginiana Sweetbay Magnolia	8' ht.	B&B	(3)Multi-stem 2" cal./stem

### CITY OF HUBER HEIGHTS CODE REQUIREMENTS REQUIRED: PROVIDED: STREET TREES: STREET TREE REQ. FOR EVERY 35 LF OF FRONTAGE 48 TREES PROVIDED 1,669 LF OF FRONTAGE = 48 TREES REQ. PROVIDED: PERIMETER LANDSCAPING 25' PERIMETER BUFFER PROVIDED 25' BUFFER ALONG NORTH + WEST PROPERTY EXISTING DENSE VEGETATION TO REMAIN LINE REQ. BUFFER SHALL BE PLANTED WITH (SHOWN ON LANDSCAPE PLAN) + 38 PLANT MATERIAL WHICH SHALL PROVIDE 80% DECIDUOUS TREES, 133 EVERGREEN TREES + OPAQUENESS UP TO 6' IN HEIGHT. GARAGE FACADES TO PROVIDE MINIMUM 80% OPAQUENESS. PARKING LOT LANDSCAPING PROVIDED: TREE REQ. FOR EVERY 10 PARKING SPACES 55 TREES PROVIDED 554 PARKING SPACES = 55 TREES REQ. OPEN SPACE 521,697 SF. 56% OPEN SPACE PROVIDED 25% OPEN SPACE REQUIRED MINIMUM 1.5 SHADE TREE REQUIRED FOR 252 TREES PROPOSED + EXISTING DENSE EACH 2,500SF OF OPEN SPACE VEGETATION AT NORTH PROPERTY LINE AND 75' STREAM BUFFER AREA. 521,697 SF OF OPEN SPACE = 313 TREES REQ. NTERIOR PARKING LOT (SECTION 1182.04) A MINIMUM 4% OF LANDSCAPE AREA REQUIRED 10,757 SF OF LANDSCAPE AREA PROVIDED 223,165 SF OF PARKING LOT AREA = 9,126.6SF OF LANDSCAPE AREA REQ.



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# Sheet Title WEST PLANTING PLAN

Sheet #





MINIA EACH

B

Key Plan (N.T.S.)

521,4 INTER a min Requ

223, SF OF

# LEGEND



EXISTING TREE TO REMAIN TYP. PROTECT IN PLACE

LIGHT POLE, TYP. REFER TO MEP PLANS

NOTES

### 1. REFER TO SHEETS L3.0-3.3 FOR TYPICAL BUILDING FOUNDATION PLANTINGS

١N	NT LIST							
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS			
IDU	duous trees							
	AC FR	Acer freemanii 'Jeffsred' Autumn Blaze Red Maple	3" Cal.	B&B				
	BE NI	Betula nigra 'Cully' River Birch	12' ht.	B&B	(4)Multi-stem 2" cal./stem			
	GL TR	Gleditsia triacanthos f. inermis 'Skycole' Skyline Honeylocust	3" Cal.	B&B				
	PL AC	Platanus x acerifolia 'Morton Circle' Exclamation London Planetree	3" Cal.	B&B				
	TA DI	Taxodium distichum Bald Cypress	3" Cal.	B&B				
	QU BI	Quercus Bicolor Swamp White Oak	3" Cal.	B&B				
	QU IM	Quercus imbricaria Shingle Oak	3" Cal.	B&B				
	UL PA	Ulmus parvifolia Lacebark Elm	3" Cal.	B&B				
	ZE SE	Zelkova serrata 'Green Vase' Green Vase Zelkova	3" Cal.	B&B				
GR	een trees							
	АВ СС	Abies concolor White Fir	6' ht.	B&B	As Shown			
	PI AB	Picea Abies Norway Spruce	6' ht.	B&B	As Shown			
	PI ST	Pinus strobus Eastern White Pine	6' ht.	B&B	As Shown			
	TH PL	Thuja standishii x plicata 'Green Giant' Green Giant Arborvitae	6' ht.	B&B	As Shown			
IAM	AMENTAL TREES							
	MA VI Magnolia virginiana Sweetbay Magnolia 8' ht. B&B (3)Multi-stem 2" cal./stem							

'Y OF HUBER HEIGHTS COD	)e requirements
JIRED:	PROVIDED:
ET TREES: REET TREE REQ. FOR EVERY 35 LF OF NTAGE	48 TREES PROVIDED
P LF OF FRONTAGE = 48 TREES REQ.	
METER LANDSCAPING	PROVIDED:
	25' PERIMETER BUFFER PROVIDED
UFFER ALONG NORTH + WEST PROPERTY REQ. BUFFER SHALL BE PLANTED WITH T MATERIAL WHICH SHALL PROVIDE 80% QUENESS UP TO 6' IN HEIGHT.	EXISTING DENSE VEGETATION TO REMAIN (SHOWN ON LANDSCAPE PLAN) + 38 DECIDUOUS TREES, 133 EVERGREEN TREES + GARAGE FACADES TO PROVIDE MINIMUM 80% OPAQUENESS.
ING LOT LANDSCAPING	PROVIDED:
E REQ. FOR EVERY 10 PARKING SPACES PARKING SPACES = 55 TREES REQ.	55 TREES PROVIDED
N SPACE	521,697 SF.
OPEN SPACE REQUIRED	56% OPEN SPACE PROVIDED
MUM 1.5 SHADE TREE REQUIRED FOR 1 2,500SF OF OPEN SPACE	252 TREES PROPOSED + EXISTING DENSE VEGETATION AT NORTH PROPERTY LINE AND 75'
697  SF OF OPEN SPACE = 313  TREES REQ.	STREAM BUFFER AREA.
RIOR PARKING LOT (SECTION 1182.04)	
NIMUM 4% OF LANDSCAPE AREA JIRED	10,757 SF OF LANDSCAPE AREA PROVIDED
165 SF OF PARKING LOT AREA = 9,126.6 F LANDSCAPE AREA REQ.	



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Sheet Title EAST PLANTING PLAN

Sheet #





PLAN	t list				
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARK
DECIDU	OUS TREES				
	AC AR	Acer Freemanii 'Armstrong' Armstrong Maple	3" Cal.	B&B	
	be ni	Betula nigra 'Cully' River Birch	12' ht.	B&B	(4)Multi- 2" cal./s
	UL PA	Lacebark Elm			
SHRUBS					
	FO GA	Fothergilla gardenii Dwarf Fothergilla	18" ht.	#5 cont.	as sho
Perenn	IALS/ VINES/	ORNAMENTAL GRASSES/ GROUNDCOVERS			
	EU FO	Euonymus fortunei 'Coloratus' Purple Wintercreeper		Flat	12" o.c.



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# Sheet Title WEST AMENITY PLANTING PLAN ENLARGEMENT

L2.2

Sheet #

Key Plan (N.T.S.)



# LEGEND



LIGHT POLE, TYP. REFER TO MEP PLANS

AN					
_/ \  \					
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS
CIDU	JOUS TREES				
		Acer freemanii 'Armstrong'	3" Cal	D & D	
		Armstrong Maple	5 Cui.	DQD	
	AC FR	Acer freemanii 'Jeffersred' Autumn Blaze Red Maple	3" Cal.	B&B	
	be NI	Betula nigra 'Cully' River Birch	12' ht.	B&B	(4)Multi-stem 2" cal./stem
	TA DI	Taxodium distichum Bald Cypress	3" Cal.	B&B	
	QU BI	Quercus Bicolor Swamp White Oak	3" Cal.	B&B	
	QU IM	Quercus imbricaria Shingle Oak	3" Cal.	B&B	
	UL PA	Ulmus parvifolia Lacebark Elm	3" Cal.	B&B	
	ZE SE	Zelkova serrata Zelkova	3" Cal.	B&B	
RNAN	IENTAL TREE	S			
	MA VI	Magnolia virginiana Sweetbay Magnolia	12' ht.	B&B	(3)Multi-stem 2" cal./stem
RUBS	$\dot{\mathbf{b}}$			•	
	BU GR	Buxus x 'Green Gem" Green Gem Boxwood	18" ht.	#5 cont.	AS SHOWN
	HY PA	Hydrangea paniculata 'Little Lamb' Little Lamb Hydrangea	18" ht.	#5 cont.	AS SHOWN
	HY CA	Hypericum calycinum Aaron's Beard St. John's-wort	18" ht.	#3 cont.	AS SHOWN
	HY QU	Hydrangea quercifolia Oakleaf Hydrangea	24" ht.	#5 cont.	AS SHOWN
	RH AR	Rhus aromatica 'Gro-Iow" Gro-Iow Fragrant Sumac	18" ht.	#3 cont.	AS SHOWN
	TA ME	Taxus x media 'Densiformis' Dense Yew	24" ht.	#5 cont.	AS SHOWN
	VI JU	Viburnum x juddii Judd Viburnum	24" ht.	#7 cont.	AS SHOWN
Renn	NALS/ VINES/	ORNAMENTAL GRASSES/ GROUNDCOVER	S		
	CA AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.
	LI MU	Liriope muscari 'Big Blue' Big Blue Lily Turf	Clump	#1 cont.	18" o.c.
	ne ju	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.
	PA TR	Parthenocissus tricuspidata Boston Ivy	Clump	#1 cont.	as shown
	PE OR	Pennisetum orientale 'Karley Rose' Karley Rose Fountain Grass	Clump	#1 cont.	24" o.c.
	RU FU	Rudbeckia fulgida 'Goldstrum" Goldstrum Black-eyed Susan	Clump	#1 cont.	18" o.c.
	SC SC	Schizachyrium scoparium 'The Blues' The Blues Little Bluestem	Clump	#1 cont.	18" o.c.



Key Plan (N.T.S.)



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Project # Date By Scale 21082 06/16/2023 NM, RY As Shown

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# Sheet Title CLUBHOUSE PLANTING PLAN ENLARGEMENT













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# LEGEND

Φ

LIGHT POLE, TYP. REFER TO MEP PLANS

# $\underline{\mathsf{CODED}\;\mathsf{NOTES}}\bigcirc$

1. ENTRY COLUMN, SEE DETAIL 2, SD1.0 AND SIGNAGE PACKAGE

PLAN	NT LIST				
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS
ORNA	MENTAL TRE	ES			
	AM CA	Amelanchier canadensis 'Autumn Brilliance' Autumn Brilliance Serviceberry	21" ht,	B&B	Multi-stem
SHRUB	S		·	•	•
	HY CA	Hypericum calycinum Aaron's Beard St. John's-wort	18" ht.	#3 cont.	as shown
	HY PA	Hydrangea paniculata 'Little Lamb' Little Lamb Hydrangea	18" ht.	#5 cont.	as shown
	TA EV	Taxus x media 'Everlow' Dense Yew	12" ht,	#5 cont.	as shown
	UL IV	Viburnum x juddii Judd Viburnum	24" ht.	#7 cont.	as shown
PERENI	NIALS/ VINES	5/ ORNAMENTAL GRASSES/ GROUNDCOVER	RS		
	CA AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.
	NE JU	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.
	RU FU	Rudbeckia fulgida 'Goldstrum" Goldstrum Black-eyed Susan	Clump	#1 cont.	18" o.c.
	SC SC	Schizachyrium scoparium 'The Blues' The Blues Little Bluestem	Clump	#1 cont.	18" o.c.



METROPOLITAN HOLDI

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# Sheet Title ENTRY DRIVE PLANTING PLAN ENLARGEMENT









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# LEGEND



LIGHT POLE, TYP. REFER TO MEP PLANS

AIR CONDENSER UNIT, TYP.

LIST					
YMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS	
US TREES					
C FR	Acer freemanii 'Armstrong' Armstrong Maple	3" Cal.	B&B		
NTAL TREE	S				
М СА	Amelanchier canadensis 'Autumn Brilliance' Autumn Brilliance Serviceberry	21" ht,	B&B	Multi-stem	
U GR	Buxus x 'Green Gem" Green Gem Boxwood	18" ht.	#5 cont.	as shown	
ЭGA	Fothergilla gardenii Dwarf Fothergilla	18" ht.	#5 cont.	as shown	
Y PA	Hydrangea paniculata 'Little Lamb' Little Lamb Hydrangea	18" ht.	#5 cont.	as shown	
Y QU	Hydrangea querficolia 'Snow Queen' Snow Queen' Oakleaf Hydrangea	18" ht.	#5 cont.	as shown	
A ME	Taxus x media 'Densiformis' Dense Yew	24" ht.	#5 cont.	as shown	
I CA	Viburnum carlesii Korean Spice Viburnum	24" ht.	#7 cont.	as shown	
LS/ VINES/ ORNAMENTAL GRASSES/ GROUNDCOVERS					
A AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.	
e st	Hemerocallis Stella D'Oro Stella de Oro Daylily	Clump	#1 cont.	12" o.c.	
MU	Liriope muscari 'Big Blue' Big Blue Lily Turf	Clump	#1 cont.	18" o.c.	
E JU	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.	

# Project Info

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Sheet Title TYPICAL BUILDING FOUNDATION PLANTING ENLARGEMENTS

Sheet # **L3.0** 





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# LEGEND



LIGHT POLE, TYP. REFER TO MEP PLANS



LIST					
Symbol	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS	
OUS TREES					
AC FR	Acer freemanii 'Armstrong' Armstrong Maple	3" Cal.	B&B		
NTAL TREES					
АМ СА	Amelanchier canadensis 'Autumn Brilliance' Autumn Brilliance Serviceberry	21" ht,	B&B	Multi-stem	
bu gr	Buxus x 'Green Gem" Green Gem Boxwood	18" ht.	#5 cont.	as shown	
O GA	Fothergilla gardenii Dwarf Fothergilla	18" ht.	#5 cont.	as shown	
HY PA	Hydrangea paniculata 'Little Lamb' Little Lamb Hydrangea	18" ht.	#5 cont.	as shown	
TA EV	Taxus x media 'Everlow' Dense Yew	12" ht,	#5 cont.	as shown	
TA ME	Taxus x media 'Densiformis' Dense Yew	24" ht.	#5 cont.	as shown	
VI CA	Viburnum carlesii Korean Spice Viburnum	24" ht.	#7 cont.	as shown	
ALS/ VINES/ ORNAMENTAL GRASSES/ GROUNDCOVERS					
CA AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.	
HE ST	Hemerocallis Stella D'Oro Stella de Oro Daylily	Clump	#1 cont.	12" o.c.	
l MU	Liriope muscari 'Big Blue' Big Blue Lily Turf	Clump	#1 cont.	18" o.c.	
NE JU	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.	
PE OR	Pennisetum orientale 'Karley Rose' Karley Rose Fountain Grass	Clump	#1 cont.	24" o.c.	

# Project Info

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# Sheet Title **TYPICAL** BUILDING FOUNDATION PLANTING **ENLARGEMENTS**

L3.1

Sheet #



PLANT LIST					
	Symbol	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS
DECIDU	OUS TREES				
	AC AR	Acer freemanii 'Armstrong' Armstrong Maple	3" Cal.	B&B	
ORNAM	ENTAL TREES				
	АМ СА	Amelanchier canadensis Serviceberry	21" ht,	B&B	Multi-stem
SHRUBS					
	BU GR	Buxus x 'Green Gem" Green Gem Boxwood	18" ht.	#5 cont.	AS SHOWN
	FO GA	Fothergilla gardenii Dwarf Fothergilla	18" ht.	#5 cont.	as shown
	TA ME	Taxus x media 'Densiformis' Dense Yew	24" ht.	#5 cont.	as shown
	VI CA	Viburnum carlesii Korean Spice Viburnum	24" ht.	#7 cont.	as shown
PERENNIALS/ VINES/ ORNAMENTAL GRASSES/ GROUNDCOVERS					
	CA AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.
	li mu	Liriope muscari 'Big Blue' Big Blue Lily Turf	Clump	#1 cont.	18" o.c.
	NE JU	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.

# LEGEND

- LIGHT POLE, TYP. REFER TO MEP PLANS
- AIR CONDENSER UNIT, TYP.



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Sheet Title

# **TYPICAL** BUILDING FOUNDATION PLANTING **ENLARGEMENTS**

Sh	eet #	
	.3.	.2

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ANT LIST					
	SYMBOL	BOTANICAL & COMMON NAMES	SIZE	COND.	REMARKS
CIDU	OUS TREES				
	AC AR	Acer freemanii 'Armstrong' Armstrong Maple	3" Cal.	B&B	
VAM	ENTAL TREES				
	AM CA	Amelanchier canadensis Serviceberry	21" ht,	B&B	Multi-stem
UBS					
	bu gr	Buxus x 'Green Gem" Green Gem Boxwood	18" ht.	#5 cont.	AS SHOWN
	FO GA	Fothergilla gardenii Dwarf Fothergilla	18" ht.	#5 cont.	AS SHOWN
	HY PA	Hydrangea paniculata 'Little Lamb' Little Lamb Hydrangea	18" ht.	#5 cont.	AS SHOWN
	TA ME	Taxus x media 'Densiformis' Dense Yew	24" ht.	#5 cont.	AS SHOWN
	VI CA	Viburnum carlesii Korean Spice Viburnum	24" ht.	#7 cont.	AS SHOWN
Ennials/ vines/ ornamental grasses/ groundcovers					
	CA AC	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	Clump	#1 cont.	24" o.c.
	LI MU	Liriope muscari 'Big Blue' Big Blue Lily Turf	Clump	#1 cont.	18" o.c.
	ne ju	Nepeta x. f. 'Junior Walker' Junior Walker's Low	Clump	#1 cont.	24" o.c.



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Sheet Title

# **TYPICAL** BUILDING FOUNDATION PLANTING **ENLARGEMENTS**



Sheet #

### GENERAL NOTES:

- 1. CONTRACTOR SHALL PROVIDE A 5' X 5' X 4. <u>\*FINAL</u>: CLEANING, CAULKING, AND 4" THICK MOCKUP FOR OWNER AND LANDSCAPE ARCHITECT APPROVAL. MOCKUP MAY NOT BE A PART OF
- COMPLETED WORK 2. REFER TO FINISH PLANS FOR SCORING PATTERNS AND EXPANSION JOINT locations.
- FINISH NOTES:
- 1. BUFFWASH FINISH: FINE AGGREGATES EXPOSED IN PAVEMENT SURFACE BY MEANS OF AN APPLIED CHEMICAL RETARDER. RETARDER SHALL BE A WATER SOLUBLE, LIQUID SET RETARDER CAPABLE OF TEMPORARILY DELAYING FINAL HARDENING OF CONCRETE TO A DEPTH OF  $\frac{1}{8}$ " TO  $\frac{1}{4}$ " FOR A MONOLITHIC LIGHT EXPOSED-AGGREGATE FINISH
- 2. <u>CURING</u>: AFTER INITIAL LIGHT EXPOSED-AGGREGATE EXPOSURE, CONTINUOUSLY SPRINKLE OR FOG PAVING WITH WATER FOR MINIMUM 7 DAYS OR INSTALL A MOISTURE RETAINING, NON-STAINING, NON-WOVEN CURING COVER AND MAINTAIN SUFFICIENT MOISTURE UNDER COVER TO PROVIDE FOR 100% HUMIDITY CONDITIONS AT ARCHITECTURAL CONCRETE SURFACE FOR A MINIMUM OF 7 DAYS.
- 3. <u>SEALING</u>: SEAL SURFACE OF LIGHT EXPOSED- AGGREGATE USING APPROVED PENETRATING SEALER, FOLLOW SEALER MANUFACTURER'S

DIRECTIONS WHEN APPLYING THEIR PRODUCT. SEALING OPERATIONS SHALL NOT COMMENCE UNTIL THE LIGHT EXPOSED-AGGREGATE SURFACES HAVE BEEN COMPLETELY AND PROPERLY CURED OR REACHED <u>28 DAYS</u> OF BEING IN PLACE WHICHEVER IS LATER.



-SURFACE MOUNT STANCHION PER

MANUFACTURER ON CONCRETE



NOTES:

- 1. DETAIL SHOWN FOR CONCEPTUAL PRICING ONLY. FINAL DESIGN TBD
- 2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO OWNER AND LANDSCAPE ARCHITECT 8. BASIS OF DESIGN FOR GLASS FOR APPROVAL.
- 3. GATE IS TO BE SELF-CLOSING, SELF-LATCHING AND LOCKABLE PER LOCAL POOL CODE REQUIREMENTS
- 4. GATE HEIGHT 54" FROM FINISHED GRADE
- 5. PANIC EXIT HARDWARE, SPRING HINGES, ELECTROMAGNETIC LOCK, CARD READER, PER MANUFACTURER RECOMMENDATIONS AND TO MEET LOCAL POOL CODES
- 6. GATE AVAILABLE FROM: AQUAVIEW (877) 229.7034 WWW.AQUAVIEWFENCING.COM OR APPROVED EQUAL

- BUTTON TO BE PROVIDED BY FENCE CONTRACTOR. REFER TO PLAN FOR R.T.E. BUTTON LOCATION
- FENCE AVAILABLE FROM: AQUAVIEW (877) 229.7034
- 9. 3/8" CLEAR TEMPERED GLASS, ALUMINUM POSTS, WELDED GRADE 50 STEEL, 1/4" THICK X 30" LONG STANCHION WELDED
- 10. GLASS FENCING MATERIALS, HARDWARE & INSTALLATION PER MANUFACTURERS







1. STONE VENEER TO MATCH ARCHITECTURE

LETTERING: WHITE

5. SEE SIGNAGE PACKAGE FOR FINAL DETAILS

4. TYPICAL OF 2 COLUMNS, SEE PLAN FOR FINAL

2. STONE ACCENT BANDING AND CAP TO MATCH

ACCENT BRANDING PANEL: MATERIAL: 1.5" THICK PAINTED HDU PANEL W/

.75" THICK PAINTED ACRYLIC LETTERING

BACKGROUND PICK: PMS 525 C PURPLE

EFERENCE IMAGE TO SHOW DESIGN INTENT ON

ARCHITECTURE

COLORS:

COLUMN LOCATIONS

NOTES:

# 

IMAGE SHOWN FOR DESIGN INTENT ONLY

FABRIC AGAINST EXISTING ON SITE









- NOTES: 1. STONE OUTCROPPING BASIS OF DESIGN: CANYON TAN CHUNKS SIZE: +/-4' L X 18" W X 25" H WHOLESALE STONE SUPPLIES (614)554-4267 WWW.WHOLESALESTONESUPPLIES.COM
- 2. CONTRACTOR SHALL SUBMIT PRODUCT SAMPLES TO OWNER'S REP. & LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO ORDERING STONE.
- 3. CONTRACTOR TO OBTAIN APPROVAL OF STONE PLACEMENT IN THE FIELD FROM OWNER'S REP. AND LANDSCAPE ARCHITECT PRIOR TO PROJECT
- COMPLETION. 4. REFER TO CIVIL PLANS FOR ALL GRADING INFORMATION AND TOB/ BOTTOM OF WALL elevations.



REFERENCE IMAGE



FENCE NOTES: 1. CONTRACTOR SHALL PROVIDE SHOP

DRAWINGS TO OWNER AND LANDSCAPE ARCHITECT FOR APPROVAL. 2.  $\frac{3}{4}$  SQ. PICKETS. AIRSPACE BETWEEN PICKETS

FERENCE IMAG

- SHALL BE LESS THAN 4" 3. COLOR: BLACK 4. FENCE AVAILABLE FROM:
- **VISTA RAILINGS** VISTA REGULAR PICKET 2 RAIL www.vistarailings.com 844.964.3937

-OR-AMERISTAR FENCE PRODUCTS MONTAGE MAJESTIC 2 RAIL (888) 333-3422 WWW.AMERISTARFENCE.COM



# Columbus

100 Northwoods Blvd, Ste A Columbus, Ohio 43235 p 614.255.3399

# Cincinnati

20 Village Square, Floor 3 Cincinnati, Ohio 45246 p 614.360.3066

**POD**design.net

# Project Name Reverb **Multi-Family** Development

Executive Blvd.

Huber Heights, OH 45429



**Prepared For** Metropolitan Holdings 1429 King Avenue Columbus, Ohio 43212

### Project Info

Project # Date By Scale

21082 06/16/2023 NM, RY As Shown

Revisions



Sheet Title SITE DETAILS



Sheet #



# PLANT INSTALLATION NOTES

- 1. CONTRACTOR SHALL VERIFY WITH THE OWNER AND UTILITY COMPANIES THE LOCATIONS OF THE EXISTING UTILITIES PRIOR TO STARTING WORK. CALL THE OHIO UTILITIES PROTECTION SERVICE AT (800) 362-2764. CONTRACTOR TO REPAIR ALL DAMAGES TO EXISTING UTILITIES, CURBS, PAVEMENTS, ETC. RESULTING FROM LANDSCAPE INSTALLATIONS WHICH OCCUR DURING THE CONSTRUCTION OF THE PROJECT.
- 2. PLANT MATERIAL SHALL BE FURNISHED IN THE QUANTITIES AND/OR SPACING AS SHOWN OR NOTED. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
- 3. CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF ALL SITE ELEMENTS AND IMMEDIATELY INFORM THE OWNER AND DESIGN CONSULTANT OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS. NO WORK SHALL BE DONE IN ANY AREA WHERE THERE IS A DISCREPANCY WITHOUT OWNER'S APPROVAL.
- 4. CONTACT THE OWNER TO REQUEST ELECTRONIC FILES FOR LAYOUT AND STAKING.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL

FINISH GRADING IN THE PROJECT REQUIRED TO PROVIDE A PROPER SOD AND PLANTING BED.

- 6. CONTRACTOR SHALL PROVIDE THE FOLLOWING SOIL AMENDMENTS: SOIL AMENDMENT:
  - 'COM-TIL' ORGANIC COMPOST (OR EQUAL) 7000 STATE ROUTE 104 SOUTH LOCKBOURNE, OHIO 43137 (614) 645-3152
  - PERENNIAL BED AREAS:
  - SPREAD 3" OF 'COM-TIL' OVER NEW LANDSCAPE AREAS AND INCORPORATE INTO THE TOP 8" OF THE SOIL BY MECHANICAL TILLER.
  - TREES AND SHRUBS: MIX 30% 'COM-TIL' TO 70% EXISTING SOIL FROM PLANT PIT EXCAVATION. IF EXCAVATED SOIL IS NOT SUITABLE, SUPPLEMENT WITH IMPORTED TOPSOIL.

### TURF: TBD

7. ALL PLANT MATERIAL TO MEET OR EXCEED AMERICAN STANDARD FOR NURSERY STOCK, 2014 EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.

- 8. ALL PLANT MATERIALS SUBJECT TO INSPECTION PRIOR, DURING AND AFTER INSTALLATION. ANY PLANT NOT MEETING THE REQUIREMENTS WILL BE CAUSE FOR REJECTION BY THE OWNER. ALL REJECTED PLANTS SHALL BE IMMEDIATELY REMOVED AND DISPOSED OF BY THE CONTRACTOR AND THE REPLACEMENT MATERIAL SHALL BE PROVIDED.
- 9. ALL SUBSTITUTIONS AND PLANT CHANGES MUST BE APPROVED BY THE OWNER AND DESIGN CONSULTANT PRIOR TO ANY ACTION TAKEN. TREES SHALL BE PROTECTED AND HANDLED CAREFULLY AT ALL TIMES DURING TRANSPORT & HANDLING TO PREVENT DRYING OF TREE OR ROOT BALL BY WINDS AND TO PREVENT ANY DAMAGE OR BREAKAGE OF THE ROOT BALL. BARK SHALL BE PROTECTED FROM BRUISING OR ABRASION.
- 10. WATER TREES IMMEDIATELY AFTER PLANTING AND CONTINUE TO WATER UNTIL FINAL ACCEPTANCE BY THE OWNER.
- 11. PLANT LOCATIONS AND BEDS SHALL BE LOCATED BY CONTRACTOR AND APPROVED BY OWNER AND DEISGN CONSULTANT BY PRIOR TO PLANT INSTALLATION.
- 12. BED LINE TO BE 18" FROM BASE OF PLANT MATERIAL UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

- 13. ALL SHRUB AND BED AREAS TO BE MULCHED WITH TWO INCHES (2") DEPTH MINIMUM SHREDDED HARDWOOD MULCH. SUBMIT SAMPLE TO OWNER FOR APPROVAL.
- 14. ALL AREAS OUTSIDE OF PLANTING BEDS SHALL BE SODDED AS SHOWN AND NOTED
- 15. FINISHED TURF (SOD) TO BE FLUSH WITH TOP OF ADJACENT CURB OR WALK. COORDINATE WITH OWNER IN FIELD AS REQUIRED.
- 16. THE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS AND GROUND COVERS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE. REPLACE MATERIAL WITHIN SEVEN (7) DAYS OF NOTIFICATION OF THE OWNER.
- 17. PERFORM CLEANING DURING INSTALLATION OF LANDSCAPE WORK AND UPON COMPLETION. REMOVE FROM SITE ALL EXCESS LANDSCAPE RELATED MATERIAL, SOIL DEBRIS AND EQUIPMENT. REPAIR DAMAGE RESULTING FROM LANDSCAPING OPERATIONS. SWEEP AND HOSE DOWN PAVED SURFACES AFFECTED BY LANDSCAPING OPERATIONS. COORDINATE WITH OWNER AND OTHER CONTRACTORS FOR FINAL CLEANUP PRIOR TO CLEANING.

- ACCEPTANCE.

  - AS REQUIRED.

  - FALL AND SPRING.

18. MAINTENANCE: THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE COMPLETED LANDSCAPE AND IRRIGATION SYSTEMS UNTIL THE DATE OF FINAL

A. MOWING - MINIMUM ONCE PER WEEK.

B. TRIMMING - SHRUBS, TREES, AND GROUND COVERS MINIMUM TWO TIMES PER YEAR OR

C. FERTILIZING - APPLY FERTILIZER AT A RATE EQUAL TO 1 LB. OF ACTUAL NITROGEN/1000 S.F. IN THE SPRING AND FALL TO ALL TURF AND PLANTINGS.

D. BED EDGING - EDGE ALL BEDS BY HAND, SPADE AT LEAST TWO TIMES PER YEAR AND TOP-MULCH WITH DRESS WOOD MULCH IN



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Revisions

PRELIMINARY NOT FOR CONSTRUCTION

**Sheet Title** 

# PLANTING DETAILS





**3** STANDARD GARAGE - SIDE SCALE 1/4" = 1'-0"

**1** O1 LEVEL - FLOOR PLAN (STANDARD) SCALE 1/8" = 1'-0"

MFR:	DMI
STYLE:	K STYLE PROFILE GUTTER
	SQUARE DOWNSPOUT
SIZE:	6" GUTTER
	4" DOWNSPOUT
COLOR:	TO MATCH TRIM
NOTE:	ALL DOWNSPOUTS TO INCORPOR
	SPLASH BLOCKS IF NOT TIED INT
	UNDERGROUND SYSTEM
NOTE:	PROVIDE ALUMINUM GUTTER
	GUARDS AT VALLEY LOCATIONS
ROOF SHINGLES	



FLOOR PLAN REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

• REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE

INFORMATION AND DETAILS

- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

### **FLOOR/CEILING ASSEMBLY TAG** FLOOR ASSEMBLIES (A3.51)

- INDICATES FLOOR/CEILING ASSEMBLY ONLY.

FLOOR PLAN

FLOOR PLAN

 FOR ADDITIONAL FLOOR/CEILING ASSEMBLY INFORMATION, REFER TO FLOOR/CEILING TYPES, U.L. ASSEMBLIES, BUILDING SECTIONS, WALL SECTIONS, AND DETAILS

### PLAN LEGEND

- NOT ALL PLAN SYMBOLS MAY BE USED ON EACH SHEET
- WALL ASSEMBLY SHEAR WALL REFER TO STRUCTURE INDICATES TYPE A UNIT IS BEING ILLUSTRATED
- DOOR NUMBER "#" -REFER TO DOOR # \ SCHEDULE (A6.00)

### CODED NOTES $\langle X'' \rangle$

- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- $\langle 1 \rangle$  Landscaping. See site landscaping plans
- $\langle 2 \rangle$  downspouts, storm. Refer to roof plan for exact LOCATIONS
- $\langle$  3  $\rangle$  SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY.
- 4 OVERHEAD GARAGE DOOR OPENER SEE ELECTRICAL
- < 5 <sup>`</sup> ALL DRYWALL IN THE GARAGE SPACES TO RECEIVE A LEVEL 2 FINISH; DRYWALL NOT TO BE PAINTED.
- $\langle$  6  $\rangle$  Location of attic access panel, see detail
- MAX. SLOPE OF CONCRETE SLAB IN THIS AREA TO NOT EXCEED 1:48 (1/4"/ FOOT) PER ICC A117.1-2009  $\langle 7 \rangle$
- (9) Prefinished Aluminum Gutter Refer to Material Spec.
- (10) WATERTABLE SLOPE AWAY FROM BUILDING
- $\langle 11 \rangle$  1X4 VINYL TRIM
- $\langle 12 \rangle$  1X4 CORNER VINYL TRIM
- $\langle 13 \rangle$  1X6 VINYL TRIM
- $\langle 14 \rangle$  MAINTENANCE MOP SINK
- (15) CONTINUOUS VENTED SOFFIT
- (16) CONTINUOUS RIDGE VENT SEE DETAIL AIR VENT INC., SHINGLE VENT II, COLOR TBD.
- (17) ICE & WATER SHIELD. SELF-ADHERING UNDERLAYMENT MIN. 48" FROM INSIDE FACE OF EXTERIOR WALL AND AS INDICATED ON ROOF PLAN.
- $\langle 18 \rangle$  WALLS BELOW SEE FLOOR PLAN
- $\langle 19 \rangle$  ASPHALT SHINGLE ROOF PRODUCT TBD.
- 20 GRAVITY HAT VENT
- (21) WALL INSERT MAILBOX SEE MANUFACTURER
- 22 PARCEL LOCKERS PROVIDED BY OWNER

### ELEVATION LEGEND

- INDICATES MECHANICAL EXHAUST
- □ INDICATES MECHANICAL INTAKE
- w01 INDICATES WINDOW TRIM REFER TO SHEET A6.10
- W01 INDICATES WINDOW REFER TO SHEET A6.10
- INDICATES EMERGENCY LIGHT REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION

BUILDING ELEVATIONS

INDICATES BUILDING MOUNTED SITE LIGHTING - REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION









SIZE: COLOR: NOTE:

REFER TO CODED NOTE -TBD-

- (21) WALL INSERT MAILBOX SEE MANUFACTURER
- (22) PARCEL LOCKERS PROVIDED BY OWNER







1 O1 LEVEL - FLOOR PLAN (VAN ADA) SCALE 1/8" = 1'-0"

MFR: Styl F:	dmi K styl e profil e gutter
0.175.	SQUARE DOWNSPOUT
SIZE:	4" DOWNSPOUT
COLOR:	TO MATCH TRIM
NOTE:	ALL DOWNSPOUTS TO INCORPO
1075	SPLASH BLOCKS IF NOT TIED IN UNDERGROUND SYSTEM
NOTE:	PROVIDE ALUMINUM GUTTER
	GUARDS AT VALLEY LOCATIONS

### **GENERAL NOTES**

FLOOR PLAN REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

• REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE

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FLOOR PLAN

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### DOOR NUMBER "#" -REFER TO DOOR # SCHEDULE (A6.00)

### CODED NOTES $\langle "X" \rangle$

- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- $\langle 1 \rangle$  Landscaping. See site landscaping plans
- $\langle 2 \rangle$  downspouts, storm. Refer to roof plan for exact LOCATIONS
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- 4 OVERHEAD GARAGE DOOR OPENER SEE ELECTRICAL
- $\langle$  5  $\rangle$  All Drywall in the garage spaces to receive a level 2 FINISH; DRYWALL NOT TO BE PAINTED.
- $\langle 6 \rangle$  Location of attic access panel, see detail
- 7MAX. SLOPE OF CONCRETE SLAB IN THIS AREA TO NOT EXCEED1:48 (1/4"/ FOOT) PER ICC A117.1-2009
- $\langle 9 \rangle$  prefinished aluminum gutter Refer to material spec.
- $\langle 10 \rangle$  watertable Slope Away from Building
- $\langle 11 \rangle$  1X4 VINYL TRIM
- $\langle 12 \rangle$  1X4 CORNER VINYL TRIM
- $\langle 13 \rangle$  1X6 VINYL TRIM
- (14) MAINTENANCE MOP SINK
- (15) CONTINUOUS VENTED SOFFIT
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### ELEVATION LEGEND

- INDICATES MECHANICAL EXHAUST
- □ INDICATES MECHANICAL INTAKE
- (w01) INDICATES WINDOW TRIM REFER TO SHEET A6.10
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BUILDING ELEVATIONS

INDICATES BUILDING MOUNTED SITE LIGHTING - REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION





PLAN LEGEND



















AND ADDL INFORMATION

BUILDING ELEVATIONS

BUILDING ELEVATIONS

- PROVIDE EXPANSION JOINTS IN FINISH MATERIALS. SHOP DWGS INDICATING EXPANSION JOINTS/ CONTROL JOINT LOCATIONS TO BE PROVIDED TO ARCHITECT FOR APPROVAL • BUILDING MOUNTED EQUIPMENT IS SHOWN FOR REFERENCE ONLY, REFER TO MEP/ DETAIL DWGS FOR SPECIFICATIONS. TYPICAL EQUIPMENT/ FIXTURES TO BE THE COLOR OF THE ADJACENT EXTERIOR FINISH U.N.O. REFER TO MECHANICAL DWGS FOR FINAL LOCATIONS
- REFER TO DOOR (A6.00) AND WINDOW (A6.10) SCHEDULES FOR SPECIFICATIONS
- EXTERIOR SIGNAGE IS BY OWNER AND TO BE COORDINATED W/ OWNER'S SIGN VENDOR. THE EXTERIOR SINAGE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL REQUIRED SIGNAGE PERMITS
- LOCATE AND PROVIDE FRT BLOCKING FOR ALL BUILDING SIGNAGE
- PRODUCTS LISTED FORM THE BASIS OF DESIGN. PRODUCTS WITH
   COMPARABLE DESIGNS, MATERIALS, PERFORMACE CHARACTERISTICS, TEXTURES, COLORS, ETC. MAY BE SUBMITTED TO THE ARCHITECT FOR REVIEW U.N.O.

### MATERIAL LEGEND

• REFER TO SHEET A3.50 FOR EXTERIOR FINISH ASSEMBLY SPECS

ST-1 APPLIED STONE VENEER MFR:

STYLE: COLOR:

NOTE:

STYLE:

TEXTURE: COLOR:

NOTE:

MFR:

STYLE:

SIZE:

COLOR:

NOTE:

NOTE:

MORTAR:

DUTCH QUALITY STONE OR APPROVED EQUAL WEATHER LEDGE QUAIL GREY -TBD-

AS-1 APPLIED EXTERIOR STUCCO

MFR:

-TBD-OR APPROVED EQUAL -TBD-SMOOTH **REFER TO ELEVATIONS** 

### **GUTTER/ DOWNSPOUT**

DMI K STYLE PROFILE GUTTER SQUARE DOWNSPOUT 6" GUTTER 4" DOWNSPOUT TO MATCH TRIM ALL DOWNSPOUTS TO INCORPORATE SPLASH BLOCKS IF NOT TIED INTO UNDERGROUND SYSTEM PROVIDE ALUMINUM GUTTER GUARDS AT VALLEY LOCATIONS









4 8A4.10



INFORMATION AND DETAILS REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF SHEATHING/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE • REFER TO SHEET A3.50 FOR WALL//FLOOR/CEILING ASSEMBLIES REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED • WINDOW AND DOOR OPENING DIMENSIONS W/ "R.O." REPRESENT ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE. WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE. INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS WALL ASSEMBLIES (A3.50) INDICATES WALL TYPE ONLY. SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE S REFER TO LIFE SAFETY PLAN FOR WALL TYPE DETAILS FOR FULL -PARTITION LEGEND FOR ADDITIONAL WALL ASSEMBLY INFORMATION, REFER TO  $\mathbb{O}$ INTERIOR WALL TYPES, U.L. ASSEMBLIES, BUILDING SECTIONS, WALL SECTIONS, AND DETAILS artme FLOOR ASSEMBLIES (A3.50) BA4.10 | XXX | 🗕 - INDICATES FLOOR/CEILING ASSEMBLY ONLY. ap ō • FOR ADDITIONAL WALL ASSEMBLY INFORMATION, REFER TO EXECUTIVE BLVD HUBER HEIGHTS, ( INTERIOR WALL TYPES, U.L. ASSEMBLIES, BUILDING SECTIONS, WALL SECTIONS, AND DETAILS erb JSE FLOOR PLAN NOT ALL PLAN SYMBOLS MAY BE USED ON EACH SHEET reve NEW WALL EXISTING WALL ASSEMBLY ASSEMBLY  $\overline{O}$ DEMOLISHED WALL SHEAR WALL REFER TO ASSEMBLY /ELEMENT STRUCTURE RAWING SET ©2023 archall architects llc INDICATES TYPE A UNIT IS BEING ILLUSTRATED ■ <u>2023 | 06 | 16</u> preliminary check set NEW DOOR NUMBER \ "#" - REFER TO EXISTING DOOR NUMBER "#" - REFER # TO DOOR SCHEDULE bid permit DOOR SCHEDULE (A6.00) \_\_\_\_\_ construction ASSEMBLY "A" - SEE GLAZING ELEVATIONS EXISTING GLAZING ASSEMBLY EVISIONS \_\_\_\_\_ # 614.469.7500 480.424.4585 INDICATES COLUMN LINE  $\Leftrightarrow$ \_\_\_\_\_ -----NOT FOR TION CONSTRUCTION archall architects PROJECT NUMBER 022037 SHEET TITLE OVERALL PLAN - CLUBHOUSE SHEET NUMBER

FLOOR PLAN

CLIENT

BA3.01

REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL

• REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE

INFORMATION ON THE INDEX SHEET



















### **GENERAL NOTES**

 PROVIDE EXPANSION JOINTS IN FINISH MATERIALS. SHOP DWGS INDICATING EXPANSION JOINTS/ CONTROL JOINT LOCATIONS TO BE PROVIDED TO ARCHITECT FOR APPROVAL

BUILDING ELEVATIONS

BUILDING ELEVATIONS

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### MATERIAL LEGEND

- REFER TO SHEET A3.50 FOR EXTERIOR FINISH ASSEMBLY SPECS
- ST-1
   APPLIED STONE VENEER

   MFR:
   DUTCH QUALITY STONE

   STYLE:
   OR APPROVED EQUAL

   STYLE:
   WEATHER LEDGE

   COLOR:
   QUAIL GREY

   MORTAR:
   -TBD 

   NOTE:
   APPLIED EXTERIOR STUCCO

MFR:

STYLE:

TEXTURE: COLOR:

NOTE:

MFR:

STYLE:

SIZE:

COLOR:

NOTE:

NOTE:

-TBD-OR APPROVED EQUAL -TBD-SMOOTH REFER TO ELEVATIONS

### GUTTER/ DOWNSPOUT

DMI K STYLE PROFILE GUTTER SQUARE DOWNSPOUT 6" GUTTER 4" DOWNSPOUT TO MATCH TRIM ALL DOWNSPOUTS TO INCORPORATE SPLASH BLOCKS IF NOT TIED INTO UNDERGROUND SYSTEM PROVIDE ALUMINUM GUTTER GUARDS AT VALLEY LOCATIONS







01 LEVEL - PLAN **PLAN**SCALE 1/4" = 1'-0"

FLOOR PLAN

CLIENT

.ITAN

- REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET
- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS

INFORMATION

- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF SHEATHING/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE











ELEVA	TION LEGEND BUILDING ELEVATIONS	GENERAL NOTES BUILDING ELEVATIONS	
⊠ wv01) wv01) €	INDICATES MECHANICAL EXHAUST INDICATES MECHANICAL INTAKE INDICATES WINDOW TRIM - REFER TO SHEET A6.10 INDICATES WINDOW - REFER TO SHEET A6.10 INDICATES EMERGENCY LIGHT - REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION INDICATES BUILDING MOUNTED SITE LIGHTING - REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION	<ul> <li>PROVIDE EXPANSION JOINTS IN FINISH MATERIALS. SHOP DWGS INDICATING EXPANSION JOINTS/ CONTROL JOINT LOCATIONS TO BE PROVIDED TO ARCHITECT FOR APPROVAL</li> <li>BUILDING MOUNTED EQUIPMENT IS SHOWN FOR REFERENCE ONLY, REFER TO MEP/ DETAIL DWGS FOR SPECIFICATIONS. TYPICAL EQUIPMENT/ FIXTURES TO BE THE COLOR OF THE ADJACENT EXTERIOR FINISH U.N.O. REFER TO MECHANICAL DWGS FOR FINAL LOCATIONS AND ADDL INFORMATION</li> <li>REFER TO DOOR (A6.00) AND WINDOW (A6.10) SCHEDULES FOR SPECIFICATIONS</li> <li>EXTERIOR SIGNAGE IS BY OWNER AND TO BE COORDINATED W/ OWNER'S SIGN VENDOR. THE EXTERIOR SINAGE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL REQUIRED SIGNAGE PERMITS</li> <li>LOCATE AND PROVIDE FRT BLOCKING FOR ALL BUILDING SIGNAGE</li> </ul>	CLIENT METROPOLITAN HOLDINGS
CODEI         1         2         3         4         5         6         7         8         9         10	DUNTES         BUILDING ELEVATIONS.           ELECTICN METERS - REFER TO ELECTRICAL DWGS. COORDINATE           DURTES         DEVENTIONE DUVINITO PUNUT - REFER TO MATERINATION           CAST STOME WATERTABLE - SLOPE AWAY FROM BUILDING         PAINTED WOOD POST - COLON TO MATCH TRIM. REFER TO SITURUTURAL DWOOD FOST - COLON TO MATCH TRIM. REFER TO SITURUTURAL DWOOD FOR TRIM.           CAST STOME HARDED RING:         CAST STOME HARDED RING:           CAST STOME RING:         CAST STOME RING:           CAST STOME RING:         CAST STOME RING:           CAST STOME RING: <td>Image: Construct of Constr</td> <td>Marcine and State       Design D</td>	Image: Construct of Constr	Marcine and State       Design D











1 DA4.10

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• NOT ALL CODED NOTES MAY BE USED ON EACH SHEET  $\langle 1 \rangle$  REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION

- $\overline{\langle 2 \rangle}$  BREEZEWAY GUARD REFER TO ENLARGED STAIR PLANS
- $\overline{\langle 3 \rangle}$  Landscaping. See site landscaping plans
- 4 GROUND MOUNTED CONDENSING UNIT REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE

8 GUARD RAIL - REFER TO SHEET A5.60

9 BALCONY DECK - REFER TO SHEET A5.60

BUILDING - REFER TO STRUCTURE

LOCATIONS

CHANNELS

(15) BREEZEWAY DECKING

PLAN.

6 PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.

 $\langle 7 \rangle$  Fire extinguishers - Refer to detail on sheet A3.01

(10) BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM

(11) DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT

(12) ATTIC ACCESS - LOCKABLE 24" X 36" ACCESS PANEL. PROVIDE A

 $\langle 13 \rangle$  SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS.

(14) CHASE CEILING DETAIL - PROVIDE GYP. BD. ON 1/2" RESILIENT

SHOWING METERS FOR REFERENCE ONLY

ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE

MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE.

PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF

REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL

INFORMATION

FLOOR PLAN GENERAL NOTES

REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE

INFORMATION ON THE INDEX SHEET

- INFORMATION AND DETAILSREFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE

FLOOR PLAN

CLIENT

- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS
   AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB
   CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51



- EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD WA FIRE PARTITION (1HR) // DOUBLE STUD (UL U341)
- RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD
- W6 INTERIOR PARTITION \*\* TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM

### \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



DA3.01









2 DA4.10

> 1 DA4.10

### CODED NOTES ("X")

+ NOT ALL CODED NOTES MAY BE USED ON EACH SHEET  $$\langle 1 \rangle$$  Refer to civil drawings for sidewalk connection

- $\overline{\langle 2 \rangle}$  BREEZEWAY GUARD REFER TO ENLARGED STAIR PLANS
- $\overline{\langle 3 \rangle}$  LANDSCAPING. SEE SITE LANDSCAPING PLANS
- GROUND MOUNTED CONDENSING UNIT REFER TO MECHANICAL DRAWINGS
- $\overline{5}$  FIRE RISER ROOM SEE SITE
- 6 PRESSURE TREATED WOOD POST REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\langle 7 \rangle$  FIRE EXTINGUISHERS REFER TO DETAIL ON SHEET A3.01
- (8)
   GUARD RAIL REFER TO SHEET A5.60
- 9 BALCONY DECK REFER TO SHEET A5.60
- (10) BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM BUILDING - REFER TO STRUCTURE
- (11) DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- ATTIC ACCESS LOCKABLE 24" X 36" ACCESS PANEL. PROVIDE A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- (13) SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- (15) BREEZEWAY DECKING

### ROOF CODED NOTES ("X") ROOF PLAN

- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
   FULLY ADHERED, SINGLE-PLY MEMBRANE ROOFING COLOR; WHITE
- PRE-FINISHED METAL COPING
- 3
   TAPERED INSULATION ROOF CRICKET MIN. SLOPE 1/2" = 1'-0"

   TOWARDS DRAIN
- 4 PRIMARY ROOF DRAINAGE THROUGH WALL SCUPPER TO COLLECTION BOX AND DOWNSPOUT
- 5 ROOF ACCESS HATCH

### FLOOR PLAN GENERAL NOTES

REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL
 INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS
   AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB
   CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51

• FOR ADDITIONAL FLOOR/CEILING ASSEMBLY INFORMATION, REFER TO FLOOR/CEILING TYPES, U.L. ASSEMBLIES, BUILDING SECTIONS, WALL SECTIONS, AND DETAILS

### PLAN LEGEND



WALL ASSEMBLY
SHEAR WALL
REFER TO

STRUCTURE INDICATES TYPE A UNIT IS BEING ILLUSTRATED

DOOR NUMBER "#" -REFER TO DOOR # SCHEDULE (A6.00)

# WALL TYPES

 a
 INDICATES FACADE FINISH (WALL SECTIONS ONLY)

 -w1
 INDICATES WALL TYPE ONLY.

- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
  REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY
- SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL a. STONE
- b. FIBER CEMENT SIDING
- W1 EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD W5 <u>FIRE PARTITION (1HR) (UL U305)</u> RATED GYPSUM BOARD
- 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD
  - Type 'X' gypsum 2x stud see unit plans 5/8" type 'X' gypsum

### \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



DA3.02




ELEVATION LEGEND       BUILDING ELEVA         □       INDICATES MECHANICAL EXHAUST         □       INDICATES MECHANICAL INTAKE         ₩01       INDICATES WINDOW TRIM - REFER TO SHEET A6.10         ₩01       INDICATES WINDOW - REFER TO SHEET A6.10         ₩01       INDICATES EMERGENCY LIGHT - REFER TO ELECTRICAL DW FOR ADDL INFORMATION	IONS       GENERAL NOTES       BUILDING ELEVATIONS         •       PROVIDE EXPANSION JOINTS IN FINISH MATERIALS. SHOP DWGS INDICATING EXPANSION JOINTS/ CONTROL JOINT LOCATIONS TO BE PROVIDED TO ARCHITECT FOR APPROVAL       •         •       BUILDING MOUNTED EQUIPMENT IS SHOWN FOR REFERENCE ONLY, REFER TO MEP/ DETAIL DWGS FOR SPECIFICATIONS. TYPICAL EQUIPMENT/ FIXTURES TO BE THE COLOR OF THE ADJACENT EXTERIOR FINISH U.N.O. REFER TO MECHANICAL DWGS FOR FINAL LOCATIONS AND ADDL INFORMATION         S       •       REFER TO DOOR (A6.00) AND WINDOW (A6.10) SCHEDULES FOR SPECIFICATIONS	CLIENT METROPOLITAN HOLDINGS
INDICATES EMERGENCY LIGHT - REFER TO ELECTRICAL DWE           INDICATES BUILDING MOUNTED SITE LIGHTING - REFER TO ELECTRICAL DWES FOR ADD. INFORMATION           CODED NOTES         BUILDING LIGHT - REFER TO ELECTRICAL DWES           (1)         ELECTRICAL DWES FOR ADD. INFORMATION           (2)         RIDGE VENT           (3)         GABLE VENT           (4)         PREFINISHED ALLIMINUM GUTTER - REFER TO MATERIAL SY           (5)         PREFINISHED ALLIMINUM GUTTER - REFER TO MATERIAL SY           (6)         WATTERTABLE - SLOPE AWAY FROM BUILDING           (7)         CANE DETECTION RAIL           (8)         PAINTED WOOD POST - COLOR TO MATCH TRIM - REFER TO SINECTIAS E00           (9)         BALCONY FASCIA BOARD (X12 FIBER CEMENT C.T.S)           (11)         MAYINYL CORNER TRIM           (12)         MAYINYL CORNER TRIM           (13)         MATCHTAGE FUNCTION FINIS HO CALS C. COLOR TO MATCH TRIMAL MARCH EXTERIOR FINIS HOUTOS SA LIGN           (14)         MAYNL FASCUA TRIM SH CENTER IN TOUSS SA AUGUNA HERITAL HARCONGS FOR LOCATIONS IN ROOF SOFITS           (14)         MAYNL FASCUA TRIM SH CENTER IN TOUSS SA AUGUNA HERITAL HERER TO HARCONG FINIS HOUTO AUGUNA HERITAL HERER TO HARCONGS FOR LOCATIONS IN ROOF SOFITS	<ul> <li>S. REFER TO DOOR (AL 00) AND WINDOW (AL 10) SCHEDULES FOR SPECIFICATIONS</li> <li>S. KETCHORATIONS SIGNATES BY OWNER AND TO BE COORDINATED WIND OWNERS SIGNATES BY OWNER AND TO BE COORDINATED WIND OWNERS SIGNATES BY OWNER AND TO BE COORDINATED WIND OWNERS SIGNATED THE LOCKING FOR ALL BULLDING SIGNATES FROME THE SPECIFIC AND FOR ALL BULLDING SIGNATES CONTACT IN THE SPECIFIC AND THE ALCONNO FOR ALL BULLDING SIGNATES CONTACT IN THE SPECIFIC AND THE ALCONNO FOR ALL BULLDING SIGNATES FROME UND.</li> <li>MATERIAL LEGEND BUTCH SUBMITED TO THE ARCHITEST FOR REFER UND.</li> <li>REFER TO SHEET AS FOR EXTERIOR FINISH ASSEMBLY SPECS STAT.</li> <li>APPLIED STORE VENEER MIRE DURING BUTCH OWNER AND BATTEN STATE DURING AND A BATTEN SIDNER MIRE DURING BUTCH OWNER BUTCH STATE DURING AND A BATTEN SIDNER MIRE DURING BUTCH OWNER BUTCH STATE DURING BUTCH OWNER BUTCH STATE DURING BUTCH OWNER BUTCH STATE DURING BUTCH OWNER BUTCH MIRE DURING BUTCH STATE DURING BUTCH SIDNER MIRE DURING BUTCH STATE DURING BUTCH SIDNER MIRE DURING BUTCH STATE DURING BUTCH MIRE DURING BUTCH STATE DURING BUTCH MIRE DURING BUTCH M</li></ul>	State of the second





**BLDG B - SIDE 1** SCALE 3/32" = 1'-0"



**BLDG B - SIDE 3** SCALE 3/32" = 1'-0"



ELEVATION LEGEND       BUILDING ELEVATIONS         INDICATES MECHANICAL EXHAUST       INDICATES MECHANICAL INTAKE         INDICATES MECHANICAL INTAKE       INDICATES WINDOW TRIM - REFER TO SHEET A6.10         INDICATES WINDOW - REFER TO SHEET A6.10       INDICATES WINDOW - REFER TO SHEET A6.10         INDICATES EMERGENCY LIGHT - REFER TO ELECTRICAL DWGS FOR ADDL INFORMATION       INDICATES EMERGENCY LIGHT - REFER TO ELECTRICAL DWGS	<ul> <li>GENERAL NOTES         <ul> <li>BUILDING ELEVATIONS</li> </ul> </li> <li>PROVIDE EXPANSION JOINTS IN FINISH MATERIALS. SHOP DWGS INDICATING EXPANSION JOINTS/ CONTROL JOINT LOCATIONS TO BE PROVIDED TO ARCHITECT FOR APPROVAL</li> <li>BUILDING MOUNTED EQUIPMENT IS SHOWN FOR REFERENCE ONLY, REFER TO MEP/ DETAIL DWGS FOR SPECIFICATIONS. TYPICAL EQUIPMENT/ FIXTURES TO BE THE COLOR OF THE ADJACENT EXTERIOR FINISH U.N.O. REFER TO MECHANICAL DWGS FOR FINAL LOCATIONS AND ADDL INFORMATION</li> <li>REFER TO DOOR (A6.00) AND WINDOW (A6.10) SCHEDULES FOR SPECIFICATIONS</li> </ul>	CLIENT METROPOLITAN HOLDINGS
<ul> <li>(M) RUICALES WINDOW - REFER TO SELECTINGAL DWGS FOR ADDL INFORMATION</li> <li>INDICATES BUILDING MOUNTED SITE LIGHTING - REFER TO LECOTED NOTES</li> <li>BUILDING ELEVATIONS</li> <li>CODED NOTES</li> <li>BUILDING ELEVATIONS</li> <li>(I) ELECTING METERS - REFER TO ELECTINGAL DWGS</li> <li>RIDGE VENT</li> <li>G GALE VENT</li> <li>G GALE VENT</li> <li>PREFINISHED ALLIMINUM BUTTER - REFER TO MATERIAL SPEC</li> <li>PREFINISHED ALLIMINUM BUTTER - REFER TO MATERIAL SPEC AND CONJECTIONAL TO ADD INFORMATION</li> <li>(I) MATERIALE - SLIDER AWAY FROM BUILDING</li> <li>(I) AND CONJECTIONAL DWGS</li> <li>(II) AND CONJECTIONAL DWGS TO COLOR TO MATCH TRIM - REFER TO STUDIAL DWGS</li> <li>(III) BUNCH FASGUATERIN</li> <li>(III) MUNCL CORRER TRIM</li> <li>(III) MUNCL FASGUATERIN</li> <li>(III) MUNCL FASGUATERIN</li> <li>(IIII) MUNCL FASGUATERIN</li> <li>(IIIII) MUNCL FASGUATERIN</li> <li>(IIIIII) MUNCL FASGUATERIN</li> <li>(IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</li></ul>	HIGH DLK D. REPERT DLK DORMANTON         • REFER TO DORG (AS 00) AND WINDOW (AS 10) SCHEDULES FOR SPECIFICATIONS         • DETENDE SIGNAGE IS BY OWNER AND TO BE COORDNATED W. OWNERS SIGNAGE IS BY OWNER AND TO BE COORDNATED W. OWNERS SIGNAGES BY OWNER AND TO BE COORDNATED W. OWNERS SIGNAGES BY OWNER AND TO BE COORDNATED W. OWNERS SIGNAGES BY OWNER AND TO BE COORDNATED SHALL BE FULL RESONABLE FOR ALL BUILDING SIGNAGE         • PRODUCTS LISTED FORM THE BLSCHING FOR ALL BUILDING SIGNAGE         • PRODUCTS LISTED FORM THE BLSCHING FOR ALL BUILDING SIGNAGE         • REFER TO SHEET AS OF OR EXTENSION FOR THE ARCHITEST FOR NEWED U.A.D.         IMATERIAL LEGEND       BUILDING ELEVATIONS         • REFER TO SHEET AS OF OR EXTENSION FINISH ASSEMBLY SPECS         ITT       APPLIED STORE VENERAL WATHER         IMATER       DUTCH OUNT STORE OR APPROVED EQUAL STULE:         VIS1       MARE:       DUTCH OUNT STORE OR APPROVED EQUAL STULE:         VIS1       MARE:       CO R APPROVED EQUAL STULE:         VIS1       MARE:       CO RAPPROVED EQUAL STULE:         VIS1       MARE:	Seal       Total and the seal of the s



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NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- (1) REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION
- (2) CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 3 NOT USED
- $\langle 4 \rangle$ GROUND MOUNTED CONDENSING UNIT - REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE
- **6** PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, WRAP POST WITH COMPOSITE TRIM. PAINT.
- (6A) PRESSURE TREATED WOOD POST REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\langle 7 \rangle$  NOT USED
- < 8 ) GUARD RAIL - REFER TO SHEET A5.60
- < 9 <sup>°</sup> BALCONY DECK - REFER TO SHEET A5.60
- $\langle 10 \rangle$  BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM BUILDING - REFER TO STRUCTURE
- $\langle 11 \rangle$  downspouts, storm. Refer to roof plan for exact LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- $\langle 13 \rangle$  SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- $\langle 14 \rangle$  Chase Ceiling Detail Provide Gyp. BD. on 1/2" Resilient CHANNELS
- $\langle 15 \rangle$  BREEZEWAY DECKING

**GENERAL NOTES** 

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

CLIENT

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51



## WALL TYPES a - INDICATES FACADE FINISH (WALL SECTIONS ONLY)

INDICATES WALL TYPE ONLY. (w1) <del>--</del>----X" - SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE

FLOOR PLAN // SECTIONS

- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL
- a. STONE b. FIBER CEMENT SIDING
- W1 EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD 2X6 STUD CAVITY
- 5/8" RATED GYPSUM BOARD W6 INTERIOR PARTITION \*\*
  - TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM
  - \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.





EA3.01a



**2 BLDG B - LEVEL 02** SCALE 3/32" = 1'-0"



**1** BLDG B - LEVEL 01 SCALE 3/32" = 1'-0"

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NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- (1) REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION
- CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS
   NOT USED
- 4 GROUND MOUNTED CONDENSING UNIT REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE

 $\begin{array}{c} 6 \end{array} \begin{array}{c} \mbox{PRESSURE TREATED WOOD POST - REFER TO STRUCTURE,} \\ \mbox{WRAP POST WITH COMPOSITE TRIM. PAINT.} \end{array}$ 

- 6A PRESSURE TREATED WOOD POST REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\langle 7 \rangle$  NOT USED

**8** GUARD RAIL - REFER TO SHEET A5.60

- (9) BALCONY DECK REFER TO SHEET A5.60
- 10BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM<br/>BUILDING REFER TO STRUCTURE
- DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- ATTIC ACCESS LOCKABLE 24" X 36" ACCESS PANEL. PROVIDE A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- 15 BREEZEWAY DECKING

**General Notes** 

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

CLIENT

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS
   AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB
   CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51



- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY
   SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY
  INFORMATION
- EXTERIOR FACADE MATERIAL
- a. STONE b. FIBER CEMENT SIDING
- W1) EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD W5 <u>FIRE PARTITION (1HR) (UL U305)</u> RATED GYPSUM BOARD 2X6 STUD CAVITY
- 5/8" RATED GYPSUM BOARD
  - Type 'X' gypsum 2X stud see unit plans 5/8" type 'X' gypsum

\*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



EA3.01b





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NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- $\langle 1 \rangle$  Refer to civil drawings for sidewalk connection
- (2) CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 3 NOT USED
- < 4 <sup>°</sup> GROUND MOUNTED CONDENSING UNIT - REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE

PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, **6** WRAP POST WITH COMPOSITE TRIM. PAINT.

- (6A) PRESSURE TREATED WOOD POST REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\langle 7 \rangle$  NOT USED
- 48 GUARD RAIL REFER TO SHEET A5.60
- < 9 <sup>°</sup> BALCONY DECK - REFER TO SHEET A5.60
- $\langle 10 \rangle$  Broom Finished Concrete Patio to Slope Away from BUILDING - REFER TO STRUCTURE
- $\langle 11 \rangle$  downspouts, storm. Refer to roof plan for exact LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- ابق الم BREEZEWAY DECKING



**GENERAL NOTES** 

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51

ILLUSTRATED

I ⊂ # ) \ SCHEDULE (A6.00)

WALL TYPES

(w1) <del>--</del>----

INFORMATION

a. STONE

EXTERIOR FACADE MATERIAL

b. FIBER CEMENT SIDING

W1) EXTERIOR WALL (NON-RATED)

SHEATHING

W3 FIRE BARRIER (1 HR) (UL U364)

SHEATHING GYPSUM BOARD

AIR GAP

W6 INTERIOR PARTITION \*\*

W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD

2X6 STUD CAVITY

TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM

W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341)

2X4 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD

5/8" RATED GYPSUM BOARD

RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY

5/8" GYPSUM BOARD

DOOR NUMBER "#" -REFER TO DOOR







The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.

\*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS

INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT.

CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07



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# archall architects

PROJECT NUMBER 022037

HEET TITLE

OVERALL PLANS - BLDG C SHEET NUMBER

EA3.01c



FLOOR PLAN NOT ALL CODED NOTES MAY BE USED ON EACH SHEET (1) REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 3 NOT USED **4** GROUND MOUNTED CONDENSING UNIT - REFER TO MECHANICAL DRAWINGS  $\langle 5 \rangle$  Fire Riser Room - See Site **6** PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, WRAP POST WITH COMPOSITE TRIM. PAINT. (6A) PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.  $\langle 7 \rangle$  Not used  $\langle 8 \rangle$  GUARD RAIL - REFER TO SHEET A5.60

BALCONY DECK - REFER TO SHEET A5.60 < 9

- (10) BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM BUILDING - REFER TO STRUCTURE
- DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- $\langle 13 \rangle$  see electrical site utility plan for meter locations. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS

(15) BREEZEWAY DECKING





- GENERAL NOTES
- REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51

INDICATES FLOOR/CEILING XXX + ASSEMBLY ONLY. • FOR ADDITIONAL FLOOR/CEILING ASSEMBLY INFORMATION, REFER TO FLOOR/CEILING TYPES, U.L. ASSEMBLIES, BUILDING SECTIONS, WALL SECTIONS, AND DETAILS PLAN LEGEND FLOOR PLAN



# WALL TYPES

FLOOR PLAN // SECTIONS a — INDICATES FACADE FINISH (WALL SECTIONS ONLY) INDICATES WALL TYPE ONLY. (w1) -

- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY • REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY
- INFORMATION
- EXTERIOR FACADE MATERIAL a. STONE b. FIBER CEMENT SIDING
- W1) EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD 2X6 STUD CAVITY
- 5/8" RATED GYPSUM BOARD W6 INTERIOR PARTITION \*\*
  - TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM
  - \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



EA3.01d





**2** BLDG A - ROOF SCALE 3/32" = 1'-0"



# ROOF CODED NOTES

# NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- (1) CONTINUOUS VENTED SOFFIT
- $\langle 2 \rangle$  continuous Ridge vent see detail air vent inc., shingle VENT II, COLOR TBD.
- $\langle 3 \rangle$  Gable vent below, see elev. For specification.
- $\langle 4 \rangle$  6" Aluminum Gutter Unless Noted Otherwise (U.N.O.)
- 3 1/2" x 4" DOWNSPOUT SEE ELEVATIONS. REFER TO CIVIL FOR < 5 EITHER DISCHARGE TO SPLASH BLOCK OR CONNECTION TO AREA DRAINS.
- 6 ICE & WATER SHIELD. SELF-ADHERING UNDERLAYMENT MIN. 48" FROM INSIDE FACE OF EXTERIOR WALL AND AS INDICATED ON ROOF PLAN.
- $\langle 7 \rangle$  Walls Below See Floor Plan
- ASPHALT SHINGLE PRODUCT TBD.
- (9) METAL VALLEY FLASHING
- $\langle 10 \rangle$  gravity hat vent
- CODED NOTES  $\langle "X" \rangle$
- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 〈 2 )
- (3) NOT USED
- $\langle 4 \rangle$ GROUND MOUNTED CONDENSING UNIT - REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE
- PRESSURE TREATED WOOD POST REFER TO STRUCTURE, 6 WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\left< 6 A \right> ~$  pressure treated wood post Refer to structure, paint WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- < 7 > NOT USED
- $\langle 8 \rangle$  GUARD RAIL REFER TO SHEET A5.60
- < 9 BALCONY DECK - REFER TO SHEET A5.60
- < 10 BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM BUILDING - REFER TO STRUCTURE
- (11) DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- $\langle 12 \rangle$  ATTIC ACCESS LOCKABLE 24" X 36" ACCESS PANEL. PROVIDE A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- $\langle 13 \rangle$  SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- 15 BREEZEWAY DECKING

# **General Notes**

ROOF PLAN

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
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- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51



# NOT ALL PLAN SYMBOLS MAY BE USED ON EACH SHEET WALL ASSEMBLY



DOOR NUMBER "#" -REFER TO DOOR # SCHEDULE (A6.00)

# WALL TYPES

- FLOOR PLAN // SECTIONS a - INDICATES FACADE FINISH (WALL SECTIONS ONLY) INDICATES WALL TYPE ONLY. (w1) <del>--</del>----
- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL a. STONE
- b. FIBER CEMENT SIDING
- W1 EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- (W4) <u>FIRE PARTITION (1HR) // DOUBLE STUD (UL U341)</u> RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD
- W6 INTERIOR PARTITION \*\* TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS
  - 5/8" TYPE 'X' GYPSUM

#### \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



SHEET NUMBER EA3.02a









**1** BLDG B - LEVEL 03 SCALE 3/32" = 1'-0"

1 EA4.100

# ROOF CODED NOTES

 $\langle 1 \rangle$  continuous vented soffit

# NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- $\langle 2 \rangle$  continuous Ridge vent see detail air vent inc., shingle
- VENT II, COLOR TBD.
- $\langle 3 \rangle$  Gable vent below, see elev. For specification.
- $\langle 4 \rangle$  6" Aluminum Gutter Unless Noted Otherwise (U.N.O.) 5 3 1/2" x 4" downspout - see elevations. Refer to civil for EITHER DISCHARGE TO SPLASH BLOCK OR CONNECTION TO AREA DRAINS
- 6 ICE & WATER SHIELD. SELF-ADHERING UNDERLAYMENT MIN. 48" FROM INSIDE FACE OF EXTERIOR WALL AND AS INDICATED ON ROOF PLAN.
- $\langle 7 \rangle$  Walls Below See Floor Plan
- ASPHALT SHINGLE PRODUCT TBD.
- $\langle 9 \rangle$ METAL VALLEY FLASHING
- $\langle 10 \rangle$  gravity hat vent
- CODED NOTES  $\langle "X" \rangle$
- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 〈 2 )
- (3) NOT USED
- $\langle 4 \rangle$ GROUND MOUNTED CONDENSING UNIT - REFER TO MECHANICAL DRAWINGS
- 5 FIRE RISER ROOM SEE SITE
- PRESSURE TREATED WOOD POST REFER TO STRUCTURE, 6 WRAP POST WITH COMPOSITE TRIM. PAINT.
- (6A) PRESSURE TREATED WOOD POST REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- $\langle 7 \rangle$ > NOT USED
- $\langle 8 \rangle$  GUARD RAIL REFER TO SHEET A5.60
- < 9 BALCONY DECK - REFER TO SHEET A5.60
- <10 BROOM FINISHED CONCRETE PATIO TO SLOPE AWAY FROM BUILDING - REFER TO STRUCTURE
- $\langle 11 \rangle$  downspouts, storm. Refer to roof plan for exact LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- $\langle 13 \rangle$  SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- 15 BREEZEWAY DECKING

# **General Notes**

ROOF PLAN

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51







DOOR NUMBER "#" -REFER TO DOOR SCHEDULE (A6.00)

# WALL TYPES

- FLOOR PLAN // SECTIONS a - INDICATES FACADE FINISH (WALL SECTIONS ONLY) INDICATES WALL TYPE ONLY. (w1) <del>--</del>----
- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL
- a. STONE b. FIBER CEMENT SIDING
- W1 EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 <u>FIRE BARRIER (1 HR) (UL U364)</u> EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- (W4) FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- (W5) <u>FIRE PARTITION (1HR) (UL U305)</u> RATED GYPSUM BOARD 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD
- W6 INTERIOR PARTITION \*\* TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM

\*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.





EA3.02b





**1** BLDG C - LEVEL 03 SCALE 3/32" = 1'-0"

# ROOF CODED NOTES

- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- $\langle 1 \rangle$  continuous vented soffit

ROOF PLAN

- $\langle 2 \rangle$ CONTINUOUS RIDGE VENT - SEE DETAIL - AIR VENT INC., SHINGLE VENT II, COLOR TBD.
- $\langle 3 \rangle$  Gable vent below, see elev. For specification.
- $\langle 4 \rangle$  6" Aluminum Gutter Unless Noted Otherwise (U.N.O.)
- (5) 3 1/2" x 4" DOWNSPOUT SEE ELEVATIONS. REFER TO CIVIL FOR EITHER DISCHARGE TO SPLASH BLOCK OR CONNECTION TO AREA DRAINS.
- 6 CE & WATER SHIELD. SELF-ADHERING UNDERLAYMENT MIN. 48 FROM INSIDE FACE OF EXTERIOR WALL AND AS INDICATED ON ROOF PLAN.
- WALLS BELOW SEE FLOOR PLAN
- ASPHALT SHINGLE PRODUCT TBD.
- $\langle 9 \rangle$  METAL VALLEY FLASHING
- $\langle 10 \rangle$  Gravity hat vent

# 

NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION
- 〈 2 ` CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 3 NOT USED
- $\langle 4 \rangle$

> NOT USED

< 8 <sup>°</sup>

9

- GROUND MOUNTED CONDENSING UNIT REFER TO MECHANICAL DRAWINGS 5 FIRE RISER ROOM - SEE SITE
- PRESSURE TREATED WOOD POST REFER TO STRUCTURE, < 6 `

GUARD RAIL - REFER TO SHEET A5.60

BUILDING - REFER TO STRUCTURE

BALCONY DECK - REFER TO SHEET A5.60

WRAP POST WITH COMPOSITE TRIM. PAINT. (6A) PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR

RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.

 $\langle 10 \rangle$  broom finished concrete patio to slope away from

- (11) DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- > SEE ELECTRICAL SITE UTILITY PLAN FOR METER LOCATIONS. <13 ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT CHANNELS
- (15) BREEZEWAY DECKING
- EA4.10¢

**GENERAL NOTES** 

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
- INTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE/CENTER OF GRID LINE WHERE APPLICABLE
- REFER TO SHEET A3.50 // A3.51 FOR WALL//FLOOR/CEILING ASSEMBLIES
- REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND DETAILS
- INTERIOR DOOR OPENINGS NOT LOCATED BY DIMENSION ARE TO BE LOCATED 4 1/2" OFF OF ADJACENT PERPENDICULAR WALL UNLESS OTHERWISE NOTED
- WINDOW AND DOOR OPENING DIMENSIONS ARE TO THE CENTER OF THE OPENING. REFER TO CUT SHEETS FOR ROUGH OPENINGS. MANUFACTURER TO ACCOUNT FOR SHIM SPACE.
- INTERIOR WALLS REQUIRING CONTROL JOINTS, LOCATE CONTROL JOINTS ALIGNED WITH EDGE OF THE NEAREST DOOR FRAME, U.N.O. IN THE ASSOCIATED ELEVATIONS
- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
- PLUMBING FIXTURES, SINKS, ELECTRIC WATER COOLERS, WATER CLOSETS, URINALS, ETC. ARE TO BE CENTERED w/CABINETS, PARTITIONS, AND FRAMED OPENINGS, U.N.O. ON ENLARGED PLANS / ELEVATIONS
- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51



# NOT ALL PLAN SYMBOLS MAY BE USED ON EACH SHEET

WALL ASSEMBLY





ILLUSTRATED DOOR NUMBER "#" -REFER TO DOOR I ⊂ # ) \ SCHEDULE (A6.00)

# WALL TYPES

FLOOR PLAN // SECTIONS a — INDICATES FACADE FINISH (WALL SECTIONS ONLY) INDICATES WALL TYPE ONLY. (w1) <del>----</del>

- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL
- a. STONE b. FIBER CEMENT SIDING

#### (W1) EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD

- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD (W5) <u>FIRE PARTITION (1HR) (UL U305)</u> RATED GYPSUM BOARD
- 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD
- W6 INTERIOR PARTITION \*\* TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM

#### \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.





HEET TITLE

SHEET NUMBER

OVERALL PLANS - BLDG C







# ROOF CODED NOTES

- NOT ALL CODED NOTES MAY BE USED ON EACH SHEET
- (1) CONTINUOUS VENTED SOFFIT 2 CONTINUOUS RIDGE VENT - SEE DETAIL - AIR VENT INC., SHINGLE
- VENT II, COLOR TBD.
- $\langle 3 \rangle$  Gable vent below, see elev. For specification.
- $\langle 4 \rangle$  6" Aluminum Gutter Unless Noted Otherwise (U.N.O.) 5 3 1/2" x 4" downspout - see elevations. Refer to civil for EITHER DISCHARGE TO SPLASH BLOCK OR CONNECTION TO AREA DRAINS.
- 6 ICE & WATER SHIELD. SELF-ADHERING UNDERLAYMENT MIN. 48 FROM INSIDE FACE OF EXTERIOR WALL AND AS INDICATED ON ROOF PLAN.
- WALLS BELOW SEE FLOOR PLAN
- ASPHALT SHINGLE PRODUCT TBD.
- $\langle 9 \rangle$  METAL VALLEY FLASHING
- $\langle 10 \rangle$  GRAVITY HAT VENT



# 

NOT ALL CODED NOTES MAY BE USED ON EACH SHEET

- REFER TO CIVIL DRAWINGS FOR SIDEWALK CONNECTION
- 〈 2 ` CANE DETECTION RAILING, REFER TO ENLARGED STAIR PLANS 3 NOT USED

ROOF PLAN

- 4 GROUND MOUNTED CONDENSING UNIT REFER TO MECHANICAL DRAWINGS  $\overline{5}$  FIRE RISER ROOM - SEE SITE
- PRESSURE TREATED WOOD POST REFER TO STRUCTURE, < 6 `
- WRAP POST WITH COMPOSITE TRIM. PAINT. (6A) PRESSURE TREATED WOOD POST - REFER TO STRUCTURE, PAINT WOOD POST WITH INTUMESCENT PAINT TO ACHIEVE A 1 HR
- RATING. WRAP POST WITH COMPOSITE TRIM. PAINT.
- > NOT USED
- (8) GUARD RAIL - REFER TO SHEET A5.60
- **〈** 9 ) BALCONY DECK - REFER TO SHEET A5.60
- $\langle 10 \rangle$  broom finished concrete patio to slope away from **BUILDING - REFER TO STRUCTURE**
- (11) DOWNSPOUTS, STORM. REFER TO ROOF PLAN FOR EXACT LOCATIONS
- $\langle 12 \rangle$  Attic access Lockable 24" X 36" access Panel. Provide A MINIMUM OF 30" HEAD SPACE ABOVE ACCESS PANEL. SELF CLOSING AND LATCHING ACCESS DOORS IN ATTIC SPACE. PROVIDE PLYWOOD WALKWAYS AS REQ'D SEE LIFE SAFETY ROOF PLAN.
- $\langle 13 \rangle$  see electrical site utility plan for meter locations. ARCHITECTURAL PLANS AND EXTERIOR ELEVATIONS ARE SHOWING METERS FOR REFERENCE ONLY
- (14) CHASE CEILING DETAIL PROVIDE GYP. BD. ON 1/2" RESILIENT

**GENERAL NOTES** 

FLOOR PLAN

 REFER TO EXPANDED SYMBOL LEGEND FOR ADDITIONAL INFORMATION ON THE INDEX SHEET

FLOOR PLAN

CLIENT

- REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR SITE INFORMATION AND DETAILS
- REFER TO UNIT PLAN SHEETS FOR RESIDENTIAL UNIT INFORMATION
- EXTERIOR PLAN DIMENSIONS ARE MEASURED TO FACE OF STUD/FACE OF BLOCK/FACE OF CONCRETE//FACE OF FOUNDATION WHERE APPLICABLE
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- PROVIDE ALL REQUIRED BLOCKING, FURRING, AND BACK FOR ANY WALL-MOUNTED FIXTURES, SHELVING AND ACCESSORIES
- CONTRACTORS SHALL COORDINATE THE SIZE AND LOCATION OF ALL NEW M.E.P. ITEMS OR OPENINGS w/THE APPROPRIATE CONTRACTOR
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- REFER TO STRUCTURAL DRAWINGS FOR TYPICAL FLOOR SLAB CONSTRUCTION INFORMATION AND DETAILS

FLOOR/CEILING ASSEMBLY TAG FLOOR ASSEMBLIES (A3.51







INDICATES TYPE A UNIT IS BEING ILLUSTRATED DOOR NUMBER "#" -

REFER TO DOOR I ⊂ # ) \ SCHEDULE (A6.00)

# WALL TYPES

- FLOOR PLAN // SECTIONS a — INDICATES FACADE FINISH (WALL SECTIONS ONLY) -(w1) -----INDICATES WALL TYPE ONLY.
- X" SIZE OF COMPONENT IF DIFF. FROM STANDARD WALL TYPE
- REFER TO SHEET A3.50 FOR WALL TYPE ASSEMBLY SPECIFICATIONS. THE BELOW DESCRIPTION IS FOR CONTEXT ONLY
- REFER TO LIFE SAFETY PLAN FOR ADDITIONAL RATED ASSEMBLY INFORMATION
- EXTERIOR FACADE MATERIAL
- a. STONE b. FIBER CEMENT SIDING
- (W1) EXTERIOR WALL (NON-RATED) EXTERIOR FINISH (REFER TO ELEVATIONS) STRUCTURAL INSULATED SHEATHING 2X6 INSULATED STUD CAVITY 5/8" GYPSUM BOARD
- W2 EXTERIOR WALL (1 HR) (UL U356) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W3 FIRE BARRIER (1 HR) (UL U364) EXTERIOR FINISH (REFER TO ELEVATIONS) SHEATHING GYPSUM BOARD 2X6 INSULATED STUD CAVITY 5/8" RATED GYPSUM BOARD
- W4 FIRE PARTITION (1HR) // DOUBLE STUD (UL U341) RATED GYPSUM BOARD 2X4 INSULATED STUD CAVITY AIR GAP 2X4 INSULATED STUD CAVITY
- 5/8" RATED GYPSUM BOARD W5 FIRE PARTITION (1HR) (UL U305) RATED GYPSUM BOARD
- 2X6 STUD CAVITY 5/8" RATED GYPSUM BOARD W6 INTERIOR PARTITION \*\*
- TYPE 'X' GYPSUM 2X STUD SEE UNIT PLANS 5/8" TYPE 'X' GYPSUM

#### \*\*IN ACCORDANCE WITH 714.4.1.2 MEMBRANE PENETRATIONS INTERIOR UNIT WALLS PERMITTED TO INTERRUPT THE CONT. CEILING MEMBRANE IN ACCORDANCE WITH EXCEPTION 07

The ceiling membrane of 1- and 2-hour fire-resistance-rated horizontal assemblies is permitted to be interrupted with the double wood top plate of a fire-resistance-rated wall assembly, provided that all penetrating items through the double top plates are protected in accordance with Section 714.4.1.1.1 or 714.4.1.1.2. The fireresistance rating of the wall shall not be less than the rating of the horizontal assembly.



SHEET NUMBER

EA3.02d



# BICINE HOLDINGS

**REVERB APARTMENTS DETAILED DEVELOPMENT** PLAN SUBMITTAL



**Breezeway Building A - Rear Rendered Elevation** NOT TO SCALE



**Breezeway Building A - Front Rendered Elevation** NOT TO SCALE



DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023



**Breezeway Building A - Side Rendered Elevation** NOT TO SCALE



**Breezeway Building A - Side Rendered Elevation** NOT TO SCALE



**Reverb Apartments** DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023





**Breezeway Building B - Rear Rendered Elevation** NOT TO SCALE



**Breezeway Building B - Front Rendered Elevation** NOT TO SCALE



DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023 HOLDINGS





**Breezeway Building B - Side Rendered Elevation** NOT TO SCALE



**Breezeway Building B - Side Rendered Elevation** NOT TO SCALE



DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023





**Breezeway Building C - Rear Rendered Elevation** NOT TO SCALE



**Breezeway Building C - Front Rendered Elevation** NOT TO SCALE

 Reverb Apartments
 METROPOLITAN

 DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023
 HOLDINGS



**Breezeway Building C - Side Rendered Elevation** NOT TO SCALE



**Breezeway Building C - Side Rendered Elevation** NOT TO SCALE



DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023 HOLDINGS



**Breezeway Building D - Rear Rendered Elevation** NOT TO SCALE



**Breezeway Building D - Front Rendered Elevation** NOT TO SCALE





**Breezeway Building D - Side Rendered Elevation** NOT TO SCALE



**Breezeway Building D - Side Rendered Elevation** NOT TO SCALE



DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023 HOLDINGS



**Breezeway Building E - Rear Rendered Elevation** NOT TO SCALE



**Breezeway Building E - Front Rendered Elevation** NOT TO SCALE







**Breezeway Building E - Side Rendered Elevation** NOT TO SCALE



**Breezeway Building E - Side Rendered Elevation** NOT TO SCALE



**Reverb Apartments** DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023



**Clubhouse - Poolside Rendered Elevation** NOT TO SCALE



**Clubhouse - Front Rendered Elevation** NOT TO SCALE

archall architects

DETAILED DEVELOPMENT PLAN SUBMITTAL | JUNE 16, 2023 HOLDINGS





**Clubhouse - Side Rendered Elevation** NOT TO SCALE



**Clubhouse - Side Rendered Elevation Facing Executive Blvd** NOT TO SCALE

archall architects ©2023 ARCHALL ARCHITECTS







# **Pool Building - Rear Rendered Elevation** NOT TO SCALE



# **Pool Building - Front Rendered Elevation** NOT TO SCALE



# **Pool Building - Side Rendered Elevation** NOT TO SCALE



**Pool Building - Side Rendered Elevation** NOT TO SCALE







# **Standard Garages - Front Rendered Elevation** NOT TO SCALE



Mail Room and Garages - Front Rendered Elevation NOT TO SCALE

# archall architects ©2023 ARCHALL ARCHITECTS





**Garages - Typical Rear Rendered Elevation** NOT TO SCALE



Garages - Typical Side Rendered Elevation NOT TO SCALE





# Applied Stone Veneer (ST-1)

MFR STYLE COLOR DUTCH QUALITY STONE WEATHER LEDGE QUAIL GRAY



Vinyl Siding 1 (VS-1)

MFR	PLY GEM MASTIC
PRODUCT	VERTICAL BOARD & BATTEN
COLOR	VICTORIAN GRAY
SIZE	4" EXPOSURE



**Roof Shingles** MER COLOR

CERTIANTEED PATRIOT WEATHERED WOOD



Exposed Wood TREATMENT WEATHER SEALED COLOR CLEAR

# **Material Board**

# Vinyl Siding 2 (VS-2)

MFR PRODUCT COLOR SIZE

KP VINYL SIDING VERTICAL BOARD & BATTEN / MAXIM WHITE 8" EXPOSURE



SIZE



# Fiber Cement Panel (FC-1)

MFR STYLE COLOR

JAMES HARDIE HARDIE PANEL SMOOTH FIELD PAINT - REFER TO ELEVATIONS



MFR



# Vinyl Siding 3 (VS-3)



PLY GEM MASTIC HORIZONTAL LAP / MILL CREEK VICTORIAN GREY DOUBLE 4"

# **Applied Exterior Stucco (AS-1)**

STYLE COLOR LOCAL SUPPLIER SMOOTH FIELD PAINT - REFER TO ELEVATIONS





# **Project Zoning and Design Standards**

+/- 25.3 Newbauer property located along Executive Blvd within the Rose Music Center at The Heights Entertainment District also known as Montgomery County, Ohio Parcel #'s P70-01820-0003 and P70-01820-0004 January 23, 2023



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# **INTRODUCTION**

## **Executive Drive/ Newbauer Development**

The vision for the Executive Drive/ Newbauer Development (the "Project") is a Planned Mixed- Use District (PM) to promote multi-use development where a resident can live, work, and play within a planned neighborhood.

The PM district allows for integration of commercial, office, residential and open space into a cohesive development. It allows projects of unique design and layout, and innovative land planning, and can provide for a harmonious community, bringing new businesses, new residents and visitors to the area. The uses of the PM District will compliment and expand the Rose Music Center at The Heights Entertainment District (the "Entertainment District").

The Project consists of  $\pm 25.3$  acres that front Executive Boulevard directly north of the Rose Music Center with the goal to include multi-family residential and commercial uses. Multi-family housing uses will create a critical mass of people necessary to support both the Project's commercial development, and those proposed on the adjacent  $\pm 60$  acres east and west of the subject property. The commercial uses on the Property, and those future developments flanking either side of the subject site, will be both appropriate for the Entertainment District, offer additional complimentary services and amenities to area residents, and will be highly sustainable based on the proximity of recently added and newly expanded housing options within the Entertainment District. The Project shall be designed so that the buildings, structures and open spaces will be preserved and maintained. Special care will be taken to protect any preexisting natural features, particularly the stream that runs the entire length of the property. Attention shall be given to make sure that the design of the project will not create any nuisances within the development impacting neighboring properties. The architecture shall be encouraged to be unique but similar in certain characteristics.

#### **Goals of the Project**

All development within the Project shall conform to these Zoning and Design Standards in order to achieve the following goals:

- 1. Enable development that establishes a cohesive identity.
- 2. Incorporate similar materials, colors, and landscape features, which were used at existing developments, including the Rose Music Center at The Heights.
- 3. Introduce urban-style forms and design elements.
- 4. Place strong emphasis on connectivity, recognizing the importance of linking the various sites within the Entertainment District to reinforce a consistent character.
- 5. Recognizing the importance of pedestrians to the economic vitality of mixed-use neighborhood and entertainment-type areas, and diminishing the emphasis of vehicles, encourage strong pedestrian accommodations and connectivity.

# **ZONING**

The approval of the Basic Development Plan and rezoning from Planned Commercial (PC) to Planned Mixed Use (PM) will allow for a better-balanced community for residents, visitors, and employees.

The following uses are permitted in the Planned Mixed-Use District (PM) as outlined in Chapter 1179.02 of the City of Huber Heights Zoning Code ("Zoning Code") shall be as follows:

- Entertainment Venues
- Hotels
- Colleges, schools and libraries
- Professional offices, including medical and dental clinics, and offices
- Restaurants and taverns
- Banks or other financial institutions. Pay-day lenders and/or title lenders shall be prohibited.
- Public facilities
- Recreational Uses
- Multi-Family Residential Dwellings
- Parking structures
- Retail commercial establishments, excluding convenience stores, gas stations or other commercial uses exhibiting similar characteristics of the aforementioned excluded uses as determined by the Planning Department. Outdoor sales and storage shall be prohibited.

# **SETBACKS**

The following setbacks shall be established for the project:

- Front yard (Executive Boulevard) 20 feet
- Side yard 25 feet
- Rear yard (Adjacent to existing single family) 25 feet

# **SIGNAGE**

Any and all signs proposed in the Project shall be in compliance with Chapter 1189 of the City of Huber Heights Zoning Code. The Developer, or any future occupant, shall develop and submit a more comprehensive signage plan in the Detailed Development Plan to be approved by the Planning Commission.

# ARCHITECTURE & SITE STANDARDS

The following section outlines the appropriate building materials and architectural features for the proposed development.

# **COMMERCIAL, OFFICE, & MIXED-USE BUILDINGS**

## **Building Materials for Commercial, Office & Mixed-use Buildings**

- All exterior walls of commercial, office and mixed-use buildings shall be 100% masonry materials. All buildings shall be architecturally designed so that there will be no rear of any building directly fronting Executive Boulevard as determined by the City and the Master Developer. All buildings shall have a minimum of two distinct building materials from the approved list with secondary materials covering a minimum of 10% of the total building facades. Window walls shall be considered windows by the City Code.
- All building façades shall be covered in fiber cement panel, stucco and exterior plaster, EIFS and synthetic stucco cladding systems, brick, stone, cast stone and/ or split face block.
- Mixing of exterior materials is permitted so long as it is configured in aesthetically appealing design style.
- The use of alternative materials such as metal panel, and other modern materials, as approved by Planning Commission, may be appropriate when they are used in a complimentary or similar fashion as traditional materials would be used or historically employed.
- The minimum building separation between buildings shall be 6 feet.

## **Roof Style**

Buildings constructed may include the following roof styles:

- Flat roofs with appropriate parapet height to screen any rooftop mechanical systems if such systems are designed to be permanently installed on the roof.
- Gabled roofs with dormers with dimensional asphalt shingles and/ or standing seam metal.
- Pitched or contemporary shed roofs

All roofs, regardless of style, shall have sufficient parapet heights, cornices, fascia, soffits, eaves and/or overhangs of a character and scale complimentary to the overall scale of the building and architectural forms. Dormers, chimneys, and other aesthetically appropriate elements of architectural or visual interest are encouraged.

# MULTI-FAMILY HOUSING

- Multi-family Housing is considered a structure designed to resemble a large house, series of townhomes, and garden style homes, and containing multiple units arranged above and/ or beside each other.
- The maximum number of dwellings permitted in the Project shall not exceed 320 multi-family housing units for Subareas A & B. Subarea C is intended to be developed as commercial or mixed use.

## **Building Materials for Multi-Family Housing**

• A minimum of 50% in aggregate of Executive Boulevard-facing facades of buildings located south of the stream that bisects the property West-to-East, and within 100' of the northern boundary of the Right of Way of Executive Boulevard (collectively, the "EB Facades"), shall be covered in masonry materials, which include brick, cast stone, fiber cement panel or other masonry products approved by the City. Notwithstanding the foregoing, each EB Façade shall be covered in no less than 8% masonry materials.

- A minimum of 15% in aggregate of the remaining facades of all buildings shall be covered in masonry materials.
- All buildings shall be positioned and architecturally designed so that there will be no rear of any building directly fronting or facing Executive Boulevard, as determined by the City and the developer. All buildings shall have a minimum of two distinct building materials from the approved list with secondary materials covering a minimum of 10% of the total building facades. Window walls shall be considered windows by the City Code.
- The use of alternative materials such as double 4 vinyl, board and batten vinyl, vinyl shake, fiber cement plank, and other modern materials shall be appropriate when they are used in the same way as traditional materials would have been used.

## **Roof Style**

Buildings constructed may include the following roof styles: Subarea A – As illustrated in Exhibit A

• Flat roofs with appropriate parapet screening

All roofs, regardless of style, shall have sufficient parapet heights and/or cornices of a character and scale complimentary to the overall scale of the building and architectural forms. Additional aesthetically appropriate elements of architectural or visual interest are encouraged. Small architectural accent or decorative canopies, eyebrows, awnings, or other features located at entryways or porches may utilize standing-seam metal roofs or other architectural appropriate materials as deemed appropriate by the City or Master Developer.

Subarea B – As illustrated in Exhibit A

- Flat roofs with appropriate parapet screening
- Gabled roofs with or without dormers with dimensional asphalt shingles
- Hip & valley and/ or gable & valley roofs with dimensional asphalt shingles
- Mansard roofs with a combination of flat roofs and dimensional asphalt shingles
- Gable & valley roofs with dimensional asphalt shingles
- Gambrel roofs with dimensional asphalt shingles (accessory buildings only)

# **ARCHITECTURAL FEATURES**

- In general, buildings shall include highly visible features, architectural detail and pedestrianoriented articulation.
- Carriage houses with garages on the first floor and apartments above shall be allowed.
- Detached garages and service or utility buildings shall be allowed as accessory structures.
- Gutters and downspouts shall have a color to match or complement the finish trim of the buildings.
- When a window type and grid pattern design has been chosen for a building, the same design must be used on all elevations. Use of other window designs as "accent" windows is permitted.
- Building facades shall be broken up by using varied material, windows, and/ or façade depths
- Entrances and stairways to upper story units must be internal to the building footprint. Open breezeways internal to the building footprint are acceptable.

- Buildings need to respond to any adjacent open space and natural features present.
- The principal building facades shall maintain a consistent setback throughout the development. This setback shall be a minimum of 10' from the right of way of Executive Boulevard.
- The minimum building separation shall be 6 feet.
- Balconies, stoops, and porches are encouraged, and may project beyond the primary face of the principal building facades.

## Massing/Scale

- Buildings shall be appropriate in terms of scale and massing.
- Building heights shall be a minimum of one story and up to four stories in height. The number of stories is measured at the lowest floor elevation of the primary public or common entrance of the building.
- The maximum building height shall not exceed 50 feet. The building height shall be measured from the lowest floor elevation the primary public or common entrance to the elevation of the bottom of the interior ceiling of the top floor of the building.

# **LANDSCAPING**

To protect and promote a harmonious development that ensures a functional and logical arrangement of mixed uses, the effective and efficient use of landscaping and buffering is required. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The project shall include the following landscaping and buffering:

- Street trees shall be installed along Executive Boulevard every 35 lineal feet. Street trees shall be planted and spaced equally between the back of the curb and edge of sidewalk within the right of way. The type of tree and size shall be proposed by the Developer at the Detailed Development Plan application stage and approved by the Planning Commission. Any existing trees that are within this area that can be saved at the discretion of the developer and the City shall be counted towards the requirement.
- For perimeter landscaping along the north and west property line, a 25-foot buffer strip shall be provided to include landscaping materials which will maintain an opaqueness of at least 80% from a height up to 6 feet tall. For the planting materials that are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of existing trees, natural features or amenities as part of this buffer is encouraged and if preserved, they will be used towards the calculation. Parking areas, accessways or any impervious surfaces are prohibited within this buffer strip. The placement of garage buildings and their associated facades shall be permitted to achieve the screening necessary for vehicular use and parking areas.
- Trees of at least 1 <sup>3</sup>/<sub>4</sub>" caliper shall be planted within the development at an amount of one tree for every 10 parking spaces. Trees shall be reasonably spaced around the site.
- The site shall provide a total of 25% green space to be made up of landscaped and/ or natural vegetation. The existing stream and associated setbacks shall be counted in this calculation
### SITE FURNISHINGS

In order to create a consistent aesthetic appearance throughout the site, any furnishings that are used shall be consistent throughout the project. This will ensure a level of quality with the details of the development that will set it apart from other developments in the area.

### **LIGHTING**

- Site lighting fixtures shall be downcast finished in a dark hue.
- Street lighting shall be designed and consistently placed to sufficiently match those fixtures already employed within the Entertainment District and located along Brandt Pike. Street lighting within the public ROW shall be both decorative in nature yet utilitarian and appropriate in function. Street lighting fixtures shall be spaced no more than 200 feet on center, on each side of the ROW, staggered and alternated from center or mid-point of that of the respective diagonally located fixture.
- Lighting shall be placed throughout the development as necessary to create a safe environment for residents.
- Site lighting fixtures shall not exceed a height of 25 feet
- Pedestrian-scale fixtures may be located within open spaces or other areas requiring additional lighting. These fixtures shall have decorative posts and lamps and not exceed a height of 14 feet.
- Exterior building lighting shall also be decorative, in character with the architectural style of the buildings
- Lighting Standards: The following special conditions shall apply:
  - $\circ$   $\,$  The height of any on-site light fixture shall not exceed 25 feet in height.
  - All fixtures shall have a cut-off angle of 90 degrees or less; and shall have light shields if facing the residential neighborhood to the north.
  - No direct light source shall be visible at the property line (adjacent to residential) at ground level; and
  - o Maximum illumination at the property line shall not exceed one half foot-candle

#### STREET AND TRANSPORTATION STANDARDS

The Project is designed to encourage walkability and other alternative modes of transportation. There shall be limited ingress and egress points onto the public streets, which will reduce traffic conflicts. The facilities in the development will be properly arranged so as to provide for proper internal pedestrian and traffic circulation.

#### **Parking requirements**

It is important that parking within the Project is approached in a strategic manner. There must be enough created to support The Project, however the design of the parking shall not dominate the master plan or take away from the streetscape. In order to achieve this balance, the placement and design of parking areas Page 8 of 10

becomes very important. This design will vary depending upon the building type and the site design for each development site. The following section explores these parking requirements and considerations in more detail.

In order to ensure that there is enough parking to support future land use within The Project, the future land uses shall include a minimum of one parking space per bedroom. Parking within the Project must measure nine (9) feet by eighteen (18) feet, except on-street parallel parking spaces which shall measure eight (8) feet by twenty (20) feet. Parking drive aisles shall measure a minimum of twenty-four (24) feet in width. Additional information on parking requirements can be found in Chapter 1185 of the City of Huber Heights Zoning Codes.

### **CONCLUSION**

The approval of a Planned Mixed-Use District (PM) will allow for a more cohesive development. The treatment of the building designs, parking, landscaping, site improvements and pedestrian spaces as outlined in these Project Zoning and Design Standards is essential to creating the pedestrian-oriented environment for the Project's walkable lifestyle community. These standards are intended to ensure the proper development of the Project, improve the quality of life for existing residents, and to attract new residents to the community.

## EXHIBIT A





SCALE 3/8" = 1' - 52.96 SQ FT TOTAL

#### SIGN A - Canopy Mounted Face-Lit Channel Logo and Letters

#### (1) SET REQUIRED

METAL CANOPY BY OTHERS

'PICK' GRAPHIC IN (2) PARTS AND LETTERS AS SHOWN ARE FORMED ALUMINUM - BACKS WITH 4" DEEP RETURNS PRIMED AND PAINTED - 1/8" TRANSLUCENT ACRYLIC FACES AND 1" TRIMCAP RETAINER - ILLUMINATED WITH INTERNAL HIGH OUTPUT WHITE LED WIRED TO REMOTE POWER SUPPLY CONVERTERS (UL LISTED #E153594) HOUSED IN METAL BOXES WITH DISCONNECT SWITCH PLACED IN ACCESSIBLE AREA BEHIND WALL CONNECTED TO 120V AC ELECTRICAL SERVICE RUN TO LOCATION AND THROUGH CANOPY BY OTHERS

'REVERB' LETTERS ARE MOUNTED USING 3" X 3" X .250" ALUMINUM ANGLE BRACKETS ON BACKS
TO 3" X .250" ALUMINUM STRAP MOUNTING RAIL WHICH SECURES TO TOP OF CANOPY USING
NON-CORROSIVE BOLTS OR OTHER BASED ON CANOPY CONSTRUCTION
'PICK' SECTIONS MOUNTED TO TOP AND BOTTOM OF CANOPY AS SHOWN USING 3" X 3" X .250"

ALUMINUM BRACKETS ON BACK WHICH SECURE TO CANOPY USING NON-CORROSIVE BOLTS OR OTHER BASED ON CANOPY CONSTRUCTION

ADDITIONAL SUPPORT FOR TOP SECTION OF PICK' VIA VERTICAL 2" X 2" X .250" ALUMINUM ANGLE(S) WELDED TO BRACKETS - TOP SECTION SECURED TO SUPPORT USING NON-CORROSIVE BOLTS

#### COLORS

'PICK' - PMS 525 C PURPLE, FACE - WHITE TRANSLUCENT ACRYLIC FACED WITH 3M 3630-128

PLUM PURPLE TRANSLUCENT VINYL - PURPLE TRIMCAP (LETTERS PAINTED WHITE INSIDE 'REVERB' - WHITE - WHITE TRANSLUCENT FACES - WHITE TRIMCAP BRACKETS, RAILS, HARDWARE - PAINT TO MATCH CANOPY (VERIFY COLOR/FINISH)

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SCALE 1/16" = 1' - WEST ELEVATION - PROPOSED SIGN B

SCALE 3/4" = 1' - SECTION THROUGH SIGN A

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SCALE 1/2" = 1' - 21.87 SQ FT

**END VIEW** 

#### SIGN B - SF Wall Graphic with Face-Lit Channel Letter

#### (1) REQUIRED

NON-ILLUMINATED 'PICK' IS DDN STYLE FABRICATED ALUMINUM - BACKER AND FACE WITH 4" DEEP RETURN PRIMED AND PAINTED

LETTER 'R' IS FORMED ALUMINUM - BACK WITH 4" DEEP RETURN PRIMED AND PAINTED WITH 1/8" TRANSLUCENT ACRYLIC FACE AND 1" TRIMCAP RETAINER - FACE IS ILLUMINATED WITH INTERNAL HIGH OUTPUT WHITE LED WIRED TO REMOTE POWER SUPPLY CONVERTERS (UL LISTED #E153594) HOUSED IN METAL BOXES WITH DISCONNECT SWITCH PLACED IN ACCESSIBLE AREA BEHIND WALL CONNECTED TO 120V AC ELECTRICAL SERVICE RUN TO LOCATION BY OTHERS

LETTER MOUNTED TO 'PICK' FACE USING NON-CORROSIVE BOLTS

'PICK' BACKER IS MOUNTED TO WALL USING 1/4" DIAMETER X 2.5"+/- LONG NON-CORROSIVE EXPANSION ANCHORS OR OTHER BASED ON WALL CONSTRUCTION - FACE IS SECURED TO BACKER USING COUNTER-SUNK SCREWS

#### COLORS

'PICK', HARDWARE - PMS 525 C PURPLE 'R' - WHITE FACE - WHITE TRANSLUCENT - WHITE TRIMCAP

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SCALE 1/2" = 1'

#### SIGN C - SF Non-Illuminated Entrance Column Dimensional Graphic

#### (2) REQUIRED

'PICK' BACKGROUND IS CUT TO SHAPE 1.5" THICK HDU (HIGH DENSITY URETHANE) PRIMED AND PAINTED - LETTER 'R' IS CUT TO SHAPE 3/4" THICK PAINTED ACRYLIC MOUNTED TO FACE OF 'PICK' SHAPE USING THREADED STUDS TAPPED INTO LETTER BACK INTO MATCHING HOLES IN SHAPE AND SECURED WITH APPROPRIATE ADHESIVE

ASSEMBLED GRAPHIC IS MOUNTED FACE OF STONE COVERED COLUMN BY OTHERS USING NON-CORROSIVE THREADED STUDS WITH 1/2" LONG NYLON SPACER SLEEVES SET INTO SILICONE ADHESIVE FILLED BORES IN STONE

COLORS 'PICK' - PMS 525 C PURPLE 'R' - WHITE



SCALE 1" = 1' - 3.5 SQ FT

END VIEW

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NOT TO SCALE - PROPOSED SIGNS

NOT TO SCALE - PROPOSED SIGNS

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PHOTOMETR	C STATISTICS	6					
DESCRIPTION	CALCTYPE	UNITS	AVG	МАХ	MIN	MAX/MIN	AVG/MIN
SITE	ILLUMINANCE	fc	1.3 fc	9.5 fc	0.0 fc	N/A	N/A

LUMINAIRE SCHEDULE						
CATALOG NUMBER	DESCRIPTION	LAMP	LUMENS	LLF	WATTS	MOUNTING HEIGHT
PL3 PTUE3–P80–30K–MVOLT–AL3–BK–BL	POLE MOUNTED LUMINAIRE, LED POSTOP PRISMATIC OPTIC, DECORATIVE COVER	LED	11,387	0.95	100W	12'-0" AFG
PL5 PTUE3–P80–30K–MVOLT–AL5–BK–BL	POLE MOUNTED LUMINAIRE, LED POSTOP PRISMATIC OPTIC, DECORATIVE COVER	LED	11,395	0.95	100W	12'-0" AFG
W2 93137BL	WALL MOUNTED LUMINAIRE, LED GLASS SCONCE	LED	876	0.95	10W	9'-0" AFG
₩5 ₽563001–143–30K	WALL MOUNTED LUMINAIRE, LED UP/DOWN CYLINDER	LED	1,766	0.95	24W	7'-0" AFG

က ent apartm ပ်ပိ EXECUTIVE BLVD HUBER HEIGHTS DEVEL reverb ШС ©2023 archall architects llc AWING SET I | DD | preliminary heck set archall architects ROJECT NUMBER 022037 IEET TITLE SITE LIGHTING PHOTOMETRICS PLAN SHEET NUMBER AE0.01

SITE LIGHTING PI	HOTMETRICS 7-3	-23.DWG						
<b>PR</b> Engineer	ATEF	<b>R</b> iates, Inc.						
Dublin, Ohio	Road 43016	(614 pratereng	4)  766  4896 ineering.com					
DESIGNED BY DRAWN BY CHECKED BY JOB NUM.								



#### AI-9311 Planning Commission Meeting Date: 07/11/2023 Basic Development Plan

#### Information

Agenda Title

BASIC DEVELOPMENT PLAN - The applicant, BP-OTP, LLC, is requesting approval of a Rezoning from O1 to PC, and a Basic Development Plan for a Wawa gas station convenience mart with fueling pumps. Property is located at 4949 Chambersburg Road (BDP 23-17).

Purpose and Background

Attachments

Staff Report Decision Record Drawings New ROW lines Site Plan Elevations Floor Plan Traffic Impact Study Fire Assessment

## Memorandum

Staff Report for Meeting of July 11, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, City Planner

Date: July 5, 2023

Subject: BDP 23-17 (Wawa Convenience Store) 4949 Chambersburg Road

Department of Planning and Zoning	City of Huber Heights
APPLICANT/OWNER:	BP-OTP, LLC – Applicant Adam Malonjao - Owner
DEVELOPMENT NAME:	Wawa Convenience Store
ADDRESS/LOCATION:	4949 Chambersburg Road
ZONING/ACREAGE:	Planned Commercial (PC) / 2.96 Acres General Office (O-1) / 4.79 Acres
EXISTING LAND USE:	Single-family home and vacant ground
ZONING ADJACENT LAND:	North: O-1 East: O-1 & R-4 West: R-1 South: PC
REQUEST:	The applicant requests the rezoning of approximately 2.44 acres from O-1 to PC and approval of a Basic Development Plan of 5.41 acres to facilitate the construction of a 5,915 SF Wawa convenience store with fueling pumps.
	The remaining northern 2.34 acres will remain undeveloped and retain O-1 zoning.
ORIGINAL APPROVAL:	N/A
APPLICABLE HHCC:	Chapter 1171, 1176

#### CORRESPONDENCE:

In Favor – None Received In Opposition – None Received

#### <u>Overview</u>

The applicant seeks to construct a new 5,915 SF Wawa convenience store with eight fueling pumps at the corner of Old Troy Pike and Chambersburg Road. Wawa is entering the Dayton area market, and this will be its first Huber Heights store.

The proposed store will sit on 5.41 acres, of which approximately three (3) acres are zoned Planned Commercial and approximately 2.4 acres are zoned O-1. Convenience stores and fueling stations are permitted in the Planned Commercial District but not the O-1. Thus, a replat and rezoning are included in the Basic Development Plan application.

Nearby commercial and retail uses at this intersection include Walgreens on the southwest corner; KeyBank on the northeast corner; and Speedway at the southeast corner.

#### **Site Characteristics**

Approximately half the site is currently developed as a single-family house in a densely wooded and landscaped lot. The other half is wooded, undeveloped land. There is a steep grade change with the plateau of the site approximately 30 feet above the Chambersburg / OTP intersection. The grade change between the road and the site becomes less dramatic as one travels east on Chambersburg and north on Old Troy Pike.

While the proposed store is located in the general clearing of the lot, grading will be required to develop the building pad, parking area, fueling bays and access drives. However, it does appear that grading will end approximately 80 feet from the east property line and have no impact on the home north of the site.

The site has access to all necessary utilities. Additionally, the applicant will dedicate the required right-of-way for the planned Chambersburg widening and multi-use path.

#### Applicable Zoning Regulations

The applicable zoning regulations are Chapter 1171 – General Provisions, Chapter 1176 – Planned Commercial, Chapter 1181 – General Provisions, Chapter 1182 – Landscaping, and Chapter 1185 – Parking and Loading.

#### Chapter 1171.05 - Contents of basic development plan, states:

(a) The basic development plan shall consist of at least the following information together with such other data and materials as may be required by the City:

(1) Site plan showing the actual shape and dimensions of the lot to be built upon or to be changed in its use together with the location of the existing and proposed structures with approximate square footages, number of stories including heights of structures;

(2) Typical elevation views of the front and side of each type of building;

(3) Planning location and dimensions of all proposed drives, service access road, sidewalks and curb openings;

(4) Parking lot areas (show dimensions of a typical parking space), unloading areas, fire lanes and handicapped parking;

(5) Landscaping plan, walls and fences;

(6) Storm water detention and surface drainage;

(7) Exterior lighting plan;

(8) Vehicular circulation pattern;

(9) Location and square footage of signs;

(10) Topographic survey; and

(11) Listing of proposed uses taken from the list of permitted and special uses of the PUD zoning district to which rezoning is being sought.

(b) The Planning Commission shall schedule both the proposed rezoning and the issue of approval of the basic development plan for a combined public hearing, following which it shall make its recommendation indicating approval, approval with modification or disapproval.

#### Chapter 1171.06 - General standards for approval, states:

The Planning Commission shall review the application, prepared development plan and the facts presented at the hearing. The applicant shall have the burden of proof. No approval shall be given unless the Commission shall find by a preponderance of the evidence that such PUD on the proposed locations:

(a) Is consistent with official thoroughfare plan, comprehensive development plan and other applicable plans and policies;

(b) Could be substantially completed within the period of time specified in the schedule of development submitted by the developer;

(c) Is accessible from public roads that are adequate to carry the traffic that shall be imposed upon them by the proposed development. Further, the streets and driveways on the site of the proposed development shall be adequate to serve the residents or occupants of the proposed development;

(d) Shall not impose an undue burden on public services such as utilities, fire and police protection, and schools;

(e) Contains such proposed covenants, easements and other provisions relating to the proposed development standards as may reasonably be required for the public health, safety and welfare;

(f) Shall be landscaped or otherwise improved and the location and arrangement of structures, parking areas, walks, lighting and appurtenant facilities shall be compatible with the existing intended uses, and any part of a PUD not used for structures, parking and loading areas, or accessways;

(g) Shall preserve natural features such as water courses, trees and rock outcrops, to the degree possible, so that they can enhance the overall design of the PUD;

(h) Is designed to take advantage of the existing land contours in order to provide satisfactory road gradients and suitable building lots and to facilitate the provision of proposed services;

(i) Shall place underground all electric and telephone facilities, street light wiring and other wiring conduits and similar facilities in any development which is primarily designed for or occupied by dwellings, unless waived by the Commission because of technical reasons;

(j) Shall not create excessive additional requirements at public cost of public facilities and services and shall not be detrimental to the economic welfare of the community;

(k) Shall not involve uses, activities, processes, materials, equipment and conditions of operation that shall be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors; and

(I) Rezoning of the land to the PUD District and approval of the development plan shall not adversely affect the public peace, health, morals, safety or welfare.

#### Staff Analysis

The staff analysis addresses the rezoning request and elements of the Basic Development Plan and standards for approval.

#### **Rezoning Analysis:**

The applicant requests the rezoning of approximately 2.44 acres from O-1 General Office to Planned Commercial (PC).

#### Conformance with Comprehensive Plan

The City's comprehensive plan indicates the site is within the Estates pattern area adjacent to the Southtown pattern area. The Estates development pattern area recognizes that is area is where large-scale development is unlikely to occur and where large-lot residential development is appropriate. This is particularly true on the west side of the pattern area where environmental constraints, such as flooding, limit the development potential.

However, that is not to say the area is determined to be exclusively residential. One of the key elements within the Estates development pattern area is to "allow for incremental, contextually relevant non-residential uses and amenities." This site is on

the east edge of the pattern district, not subject to flooding and at the intersection of two major roadways. Additionally, all necessary utilities are available.

Given the location of this site and its context within the Estate pattern district, staff feels the rezoning from O-1 to PC is consistent with the comprehensive plan.

#### Basic Development Plan Analysis:

The applicant proposes constructing a 5,915 SF convenience store and four-island fueling center. The applicant has submitted all necessary plans and studies for the Basic Development Plan review.

Conformance With Planned Commercial District Requirements:

Uses: Retail uses and filling stations are principally permitted in the district.

Development Standards:

- The site plan meets all parking and building setback and yard requirements.
- Nineteen street trees are required. The preliminary landscaping plan shows 19 street trees. However, due to grading issues and Chambersburg Road's planned widening, most of them are not near the sidewalk. During the Detailed Development plan review, staff will work with the applicant to place the required trees appropriately.
- The lighting plan submitted with the application meets all requirements. The proposed fixture height is 20 feet, and the fixture types meet the code. The photometric analysis indicates no light trespasses across the property lines.
- The building design substantially meets the exterior material recommendation. Not including glazing, the building's entire exterior is 68% masonry. The front façade is 78% masonry and glazing. Approximately 28% of the exterior is a wood composite accent siding.
- All utilities are below ground.

Parking and Loading:

• The applicant proposes 53 parking spaces, more than the code requires. Parking stall dimensions are 10' x 20', as required.

Landscaping:

• The plans appear to meet the landscaping requirements but will be verified when the detailed development plan is submitted.

Signs:

• A sign package was not submitted with the application and will be reviewed when the detailed development plan is submitted. The elevations indicate three wall signs, and the site plan indicates two monument signs.

#### Conformance with General Standards of Approval:

Below is the staff analysis of conformance with the general standards of approval.

(a) Is consistent with official thoroughfare plan, comprehensive development plan and other applicable plans and policies;

It is the staff's opinion that the proposal is consistent with the comprehensive plan and thoroughfare plan. The site is located at the intersection of arterial and collector streets.

(b) Could be substantially completed within the period of time specified in the schedule of development submitted by the developer;

While no development schedule has been submitted, the applicant has stated to staff that they will initiate construction shortly after all plans are approved by the City and County. There are no concerns on the part of staff that the applicant would have difficulty financing and constructing the project in a reasonable time.

(c) Is accessible from public roads that are adequate to carry the traffic that shall be imposed upon them by the proposed development. Further, the streets and driveways on the site of the proposed development shall be adequate to serve the residents or occupants of the proposed development;

It is important to note that the traffic counts were taken when school was in session, and they represent an accurate assessment of the existing peak traffic volume. The traffic study estimates there will be 541 AM and 467 PM weekday peak hour trips.

This store's net new peak hour trips are estimated at 129 AM and 1179 PM. It's important to note that the study estimates that 76% of those trips are pass-by, meaning those vehicles are on the road regardless of whether the Wawa development is constructed.

The traffic study indicates that no drop-down lanes are necessary. The applicant is required to dedicate additional ROW along Chambersburg Road to facilitate the construction of a future roadway widening.

(d) Shall not impose an undue burden on public services such as utilities, fire and police protection, and schools;

Staff does not anticipate any undue burden on public services. The area has adequate utility and street capacity. We are unaware of any policing concerns, and the development will comply will all building and fire code requirements.

(e) Contains such proposed covenants, easements and other provisions relating to the proposed development standards as may reasonably be required for the public health, safety and welfare;

Any conditions imposed by the Planning Commission or City Council will be memorialized in the PUD legislation and remain in effect unless modified by the Planning Commission or City Council.

(f) Shall be landscaped or otherwise improved and the location and arrangement of structures, parking areas, walks, lighting and appurtenant facilities shall be compatible with the existing intended uses, and any part of a PUD not used for structures, parking and loading areas, or accessways;

The staff believes the site plan is generally well arranged, and internal circulation is efficient and compatible with the intended use. Pedestrian connections between the streets and the store are provided. The landscaping requirements will be reviewed with the Detailed Development application.

(g) Shall preserve natural features such as water courses, trees and rock outcrops, to the degree possible, so that they can enhance the overall design of the PUD;

The site will retain a significant amount of wooded area to the west and north. Additionally, the existing decorative retaining wall will remain.

(h) Is designed to take advantage of the existing land contours in order to provide satisfactory road gradients and suitable building lots and to facilitate the provision of proposed services;

As discussed, the site has significant topographic features. The grading plan illustrates significant grading on the site's west, south and northeast edges. The grading should not impact the properties west or north of the site since there is an adequate buffer between the property lines and the extent of the grading activities. The applicant is grading to a 3:1 slope and providing vegetative ground cover, which will limit erosion.

(i) Shall place underground all electric and telephone facilities, street light wiring and other wiring conduits and similar facilities in any development which is primarily designed for or occupied by dwellings, unless waived by the Commission because of technical reasons;

All utilities will be placed underground.

(*j*) Shall not create excessive additional requirements at public cost of public facilities and services and shall not be detrimental to the economic welfare of the community;

Staff does not anticipate any additional public services required to support this development.

(k) Shall not involve uses, activities, processes, materials, equipment and conditions of operation that shall be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors; and

All proposed uses are consistent with the Planned Commercial district zoning being requested as part of this application. The traffic study does not indicate that this development will generate excessive traffic.

(*I*) Rezoning of the land to the PUD District and approval of the development plan shall not adversely affect the public peace, health, morals, safety or welfare.

The staff believes the rezoning is consistent with the comprehensive plan and will not adversely affect surrounding properties.

#### Additional Comments:

Fire: See attached.

**City Engineer:** The engineer has reviewed the site plan and requested additional right of way along Old Troy Pike and Chambersburg Road. The applicant has indicated that they will revise their plans accordingly.

#### **Recommendation**

Staff supports the partial rezoning from General Office (O-1) to Planned Commercial. It is the staff's opinion that the requirements of Section 1171.06 can be met, and recommends approval of the rezoning and Basic Development Plan with the following conditions:

- The applicant shall assess the health of the existing trees along the site's perimeter that will be incorporated into the landscaping plan. Healthy trees shall be identified and incorporated into the landscaping plan as appropriate, subject to approval as part of the Detailed Development Plan. The applicant shall also develop a plan to protect key trees during construction, subject to staff approval.
- The applicant shall work with staff to determine the final street tree placement during the Detailed Development Plan phase.
- Signs shall conform with Chapter 1189, unless otherwise approved in the Detailed Development Plan by the Planning Commission.
- Permitted uses shall be those listed as permitted uses in Section 1176.01, except the following are prohibited:
  - Vehicle sales, rental or service
  - Sweepstakes Cafes
  - Short-term lenders (pay-day lenders, loans against auto titles, etc.)
  - Dry cleaners
  - o Outdoor sales and storage, unless approved by the Planning Commission

• The applicant shall submit a revised Basic Development Plan indicating the corrected ROW dedication along Old Troy Pike and Chambersburg Road, as the City engineer requires.

#### **Planning Commission Action**

Planning Commission may take the following actions with a motion to:

- 1) Recommend approval of the rezoning and basic development plan application, with or without conditions.
- 2) Recommend denial of the rezoning and basic development plan.
- 3) Table the application to gather additional information.



## **Planning Commission Decision Record**

WHEREAS, on June 16, 2023, the applicant, BP-OTP, LLC, requested approval of a Rezoning from O1 to PC, and a Basic Development Plan. Property is located at 4949 Chambersburg Road, further identified as Parcel Number P70 04004 0017 of the Montgomery County Auditor's May (Case BDP 23-17), and;

WHEREAS, on July 11, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

moved to approve the request by the applicant, BP-OTP, LLC, for approval of a Rezoning from O1 to PC, and a Basic Development Plan. Property is located at 4949 Chambersburg Road, (Case BDP 23-17), in accordance with the recommendation of Staff's Memorandum dated July 5, 2023, with the following conditions:

- The applicant shall assess the health of the existing trees along the site's perimeter that will be incorporated into the landscaping plan. Healthy trees shall be identified and incorporated into the landscaping plan as appropriate, subject to approval as part of the Detailed Development Plan. The applicant shall also develop a plan to protect key trees during construction, subject to staff approval.
- 2. The applicant shall work with staff to determine the final street tree placement during the Detailed Development Plan phase.
- 3. Signs shall conform with Chapter 1189, unless otherwise approved in the Detailed Development Plan by the Planning Commission.
- 4. Permitted uses shall be those listed as permitted uses in Section 1176.01, except the following are prohibited:
  - a. Vehicle sales, rental or service
  - b. Sweepstakes Cafes

BDP 23-17 – Decision Record

- c. Short-term lenders (pay-day lenders, loans against auto titles, etc.)
- d. Dry cleaners
- e. Outdoor sales and storage, unless approved by the Planning Commission
- 5. The applicant shall submit a revised Basic Development Plan indicating the corrected ROW dedication along Old Troy Pike and Chambersburg Road, as the City engineer requires.

Seconded by Roll call showed: YEAS: NAYS: Motion to recommend approval carried

Terry Walton, Chair Planning Commission Date



**LOCATION MAP** SCALE: |" = 1000'±



# **AERIAL MAP** SCALE: |" = 150'±

## LEGAL DESCRIPTION

DESCRIPTION OF 5.4105 ACRES AT OLD TROY PIKE AND CHAMBERSBURG ROAD, HUBER HEIGHTS, OHIO:

SITUATED IN THE STATE OF OHIO, COUNTY OF MONTGOMERY, CITY OF HUBER HEIGHTS, LOCATED IN SECTION 28, TOWN 2, RANGE 8 BTM, BEING ALL OF THE 2.968 ACRES CONVEYED TO ADAM MALONJAO IN INSTRUMENT NO. 2019-00018975 AND 2.4426 ACRES OF THE 4.7964 ACRES (4.7976 ACRES BY SURVEY) CONVEYED TO ADAM MALONJAO IN INSTRUMENT NO. 2022-00056216, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF OLD TROY PIKE (STATE ROUTE 202) AND THE CENTERLINE OF CHAMBERSBURG ROAD (60' WIDE), BEING THE POINT OF BEGINNING:

THENCE WESTERLY ALONG THE CENTERLINE OF CHAMBERSBURG ROAD, NORTH 85°30'17" WEST, 513.31 FEET TO THE SOUTHEASTERLY CORNER OF THE 2.992 ACRE PARCEL CONVEYED TO JOSEPH NAHUM IN IR#2018-00050848 AND THE SOUTHWESTERLY CORNER OF SAID 2.968 ACRE PARCEL; THENCE NORTHERLY, ALONG THE COMMON LINE NAHUM & MALONJAO, NORTH

3°43'44" EAST, 463.55 FEET; THENCE EASTERLY, ALONG A NEW DIVISION LINE THROUGH THE 4.7964 ACRE MALONJAO PARCEL, SOUTH 84°33'23" EAST, 513.21 FEET TO THE CENTERLINE OF OLD

TROY PIKE: THENCE SOUTHERLY ALONG THE CENTERLINE OF OLD TROY PIKE, SOUTH 3°41'37" WEST, 455.06 FEET, BEING AT THE POINT OF BEGINNING, CONTAINING 5.4105 ACRES OF LAND MORE OR LESS. BASIS OF BEARINGS: THE BEARINGS SHOWN HERON ARE BASED ON THE CENTERLINE

OF OLD TROY PIKE (SOUTH 3°41'37" WEST) AS DETERMINED BY GPS OBSERVATIONS UTILIZING THE ODOT VRS/RTK NETWORK, OHIO STATE PLANE COORDINATE SYSTEM, NAD 83(2011).



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

# SITE DEVELOPMENT PLANS FOR Wawa

# **CONVENIENCE STORE WITH FUEL SALES WAWA STORE #: 7200**

PARCEL ID: P70 04004 0017 & P70 04004 0026 SECTION 28, TOWN 2, RANGE 8 BTM 4949 CHAMBERSBURG ROAD CITY OF HUBER HEIGHTS, MONTGOMERY COUNTY, OHIO

SCALE: |" = 150'±

# PLANS PREPARED BY:



Rutherford, NJ  $\cdot$  New York, NY  $\cdot$  Boston, MA Princeton, NJ  $\cdot$  Tampa, FL  $\cdot$  Detroit, MI www.stonefieldeng.com

Headquarters: 92 Park Avenue, Rutherford, NJ 07070 Phone 201.340.4468 · Fax 201.340.4472

## PLAN REFERENCE MATERIALS:

I. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO: ALTA / NSPS LAND TITLE SURVEY PREPARED BY RVP

- SURVEYING, DATED 03/24/2023 GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI,
- DATED 02/13/2023 PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
- PREPARED BY INTERTEK PSI DATED JANUARY 31, 2023. LOCATION MAP OBTAINED FROM UNITED STATES GEOLOGICAL SURVEY, DAYTON NORTH QUADRANGLE,
- **OHIO MONTGOMERTY COUNTY, 7.5-MINUTE SERIES,** DATED 2019. ZONING MAP OBTAINED FROM CITY OF HUBER HEIGHTS •
- GIS AERIAL MAP PROVIDED BY GOOGLE EARTH PRO, DATE
- **RETRIEVED 03/28/2023** 2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

	DEVELOPMENT PLANS	STONEFIEL D	NOT AP			
		engineering & design	PROVE			
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			Ω ON	06-09-2023	КН	RESUBMISSION FOR BASIC DEVELOPMENT PLAN REVIEW
			ح STR	05-10-2023	КН	FOR BASIC DEVELOPMENT PLAN REVIEW
PIN: P70	04004 0017 & P70 04004 0026	207 Shallow Suite 200 Dataat MI 18335	- UC1	04-13-2023	RB	FOR CLIENT REVIEW
CITY OF MONTG	HUBER HEIGHTS OMERY COUNTY, OHIO	90/ 3115107 3016 200, Ded 014, 111 70220 Phone 248.247.1115	ns ION	E DATE	BΥ	DESCRIPTION

## **APPLICANT**

**BP-OTP, LLC** 20411 WEST 12 MILE ROAD, SUITE 200 **CITY OF SOUTHFIELD, MICHIGAN 48076** (248) 797-0003 PATRICK@BLUEPENINSULA.NET

WAWA SITE DATA TABLE PARCEL ID: P70 04004 0017 & P70 04004 0026

ADDRESS

LAND USE

ZONE A

ZONE B

ZONE C

**JURISDICTION** 

EXISTING ZONING

TOTAL SITE AREA

WAWA SITE AREA

MINIMUM REQUIRED PARKING

PARKING PROVIDED (TOTAL)

FRONT YARD SETBACK

(CHAMBERSBURG ROAD)

FRONT YARD SETBACK

REAR PARKING SETBACK

FRONT PARKING SETBACK

CANOPY CONFIGURATION

(CHAMBERSBURG ROAD)

FRONT YARD SETBACK

(STATE ROAD 202)

NUMBER OF MPD'S

BUILDING TYPE

CANOPY TYPE

TYPE OF MPD'S

REAR YARD BUILDING SETBACK

(STATE ROAD 202)

BUILDING AREA

4949 CHAMBERSBURG

CITY OF HUBER HEIGHT

PLANNED COMMERCIAL GENERAL OFFICE

**OFFICE & COMMERCIAL** 

I SPACE PER 125 GFA

53 SPACES (INCLUDING 3

22 SPACES (INCLUDING 3

10 SPACES (INCLUDING 2 AIR PUMP SPACES)

= 47 SPACES I SPACE PER EACH **EMPLOYEE** = 4 SPACES **TOTAL 51 SPACES** 

ADA SPACES)

ADA SPACES)

21 SPACES

75 FT

75 FT

25 F

15 FT

25 FT

25 FT

U59 FB-R

STACKED

SLOPED

(8) 3+1+1

8

ROAD

338,262 SF

247,809 SF 5,915 SF (0.14 AC



ADAM MALONJAO 1480 N 2200 W SALT LAKE CITY, UTAH 84116

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SHEET INDEX	
DRAWING TITLE	SHEET #
COVER SHEET	C-1
SITE PLAN	C-2
GRADING PLAN	C-3
STORMWATER MANAGEMENT PLAN	C-4 & C-5
UTILITY PLAN	C-6
LIGHTING PLAN	C-7
LANDSCAPING PLAN	C-8
LANDSCAPING DETAILS	C-9
FUEL DELIVERY TRUCK CIRCULATION (WB-50)	C-10
STORE DELIVERY TRUCK CIRCULATION (WB-67)	C-11
FIRE TRUCK CIRCULATION (OLD TROY PIKE)	C-12
FIRE TRUCK CIRCULATION (CHAMBERSBURG)	C-13
	C-14 THRU C-18
ADDITIONAL SHE	ETS

DRAWING TITLE	SHEET #
ALTA / NSPS LAND TITLE SURVEY	100 & 101



222/DET-220205 BLUE PENINSULA - 4949 CHAMBERSBURG ROAD, HUBER HEIGHTS, OHICADDIPLOT/SDP-02-51

LAND USE /	AND ZONI	NG
PARCEL ID: P70 0400	4 0017 & P70 04	004 0026
PLANNED COMMERCIAL (	PC) & GENERAI	OFFICE (O-I)
OPOSED USE		
FILLING STATION	PERMITTED USE	E
CONVENIENCE STORE	PERMITTED AC	CESSORY USE
DNING REQUIREMENT	REQUIRED	PROPOSED
INIMUM LOT AREA	N/A	203,403 SF (4.67 AC)
INIMUM LOT WIDTH	N/A	513.0 FT
AXIMUM IMPERVIOUS COVERAGE	N/A	-
AXIMUM BUILDING HEIGHT	N/A	-
INIMUM FRONT YARD SETBACK	75 FT	186.8 FT
INIMUM RIGHT-OF-WAY SETBACK	75 FT	186.8 FT
INIMUM SIDE YARD SETBACK	N/A	161.0 FT
INIMUM REAR YARD SETBACK	N/A	157.3 FT
INIMUM RIGHT-OF-WAY PARKING TBACK	25 FT	108.9 FT
INIMUM NON-BUSINESS PARKING TBACK	15 FT	108.9 FT

OFF-STREET PARKING REQUIREMENTS					
CODE SECTION	REQUIRED	PROPOSED			
§ 1185.12.C.6.B	FILLING STATIONS:	53 SPACES			
	I SPACE PER 125 SF,				
	PLUS I SPACE / EMPLOYEE				
	(5,915 SF)(1/125 SF) = 47 SPACES				
	(4 EMPLOY.)(1 / EMPLOY.) = 4 SPACES				
	TOTAL: 47 + 4 = 51 SPACES				
§ 1185.03.A	PARKING DIMENSIONS:	10 FT × 20 FT			
	10 FT x 18 FT, 25 FT AISLES	30 FT AISLES			
§ 1185.13.B.1	LOADING:	I SPACE			
	I SPACE, 10 FT x 25 FT	18 FT x 152 F			
§ 1185.06.A	INTERIOR PARKING LANDSCAPING				
	5% OF TOTAL AREA				
	(25,141 SF)(0.05) = 1,257 SF	2,246 SF			

SIGNAGE REQUIREMENTS					
CODE SECTION	REQUIRED	PROPOSED			
§ 1189.07.B	QUANTITY:				
	I GROUND SIGN PER FRONTAGE	2 SIGNS			
	(1 SIGN)(2 FRONTAGES) = 2 SIGNS				
§ 1189.05.B.1	RIGHT-OF-WAY SETBACK:	I5 FT			
	15 FT				
§ 1189.07.B	SIGNAGE AREA:				
	75 SF	< 75 SF			

## SYMBOL

DESCRIPTION

PROPOSED CURB & GUTTER

PROPOSED SIGNS / BOLLARDS

PROPOSED FLUSH CURB

PROPOSED FENCE

PROPOSED BUILDING

PROPOSED CONCRETE

PROPOSED RETAINING WALL

PROPOSED BUILDING DOORS

PROPOSED AREA LIGHT

PROPERTY LINE

SETBACK LINE





GENERAL NOTES

- 1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
   ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY
- 3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
- THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
   THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND
- METHODS OF CONSTRUCTION.
  THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
   CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP
- CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
   THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN
- ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
  10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE
- PROCUREMENT OF STREET OPENING PERMITS.
  11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
  12. SUBJECT AND AN EMPLOYEE OF STONEFIELD ENCIDEERING & DESIGN LLC
- 12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.







T2022/DET-220205 BLUE PENINSULA - 4949 CHAMBERSBURG ROAD, HUBER HEIGHTS, OHICADDIPLOTISDP-03-GRAD.I



#### GRADING NOTES

- I. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
- 2. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
- 3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
- THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
   MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
- CURB GUTTER: 0.50%
   CONCRETE SURFACES: 1.00%
- ASPHALT SURFACES: 1.00%
  5. A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.
- 6. FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

#### ADA NOTES

- I. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
- THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
   THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- 4. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- 5. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
- ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
   A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE
- ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
  8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF <sup>1</sup>/<sub>4</sub> INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN <sup>1</sup>/<sub>4</sub> INCHES AND <sup>1</sup>/<sub>2</sub> INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP <sup>1</sup>/<sub>4</sub> INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN I UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
- 9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ½ INCH.









DRAWINGS. IF NO CITY STANDARD IS AVAILABLE, THEN STANDARD DRAWINGS AND SPECIFICATIONS FROM THE MONTGOMERY COUNTY, OHIO ENGINEERING DEPARTMENT OR THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION & MATERIALS 2. ALL UTILITY TRENCH EXCAVATION WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY AND EASEMENTS SHALL BE BACKFILLED WITH GRANULAR FILL MATERIAL IN ACCORDANCE WITH CITY SPECIFICATIONS AND COMPACTED BEFORE SUB-GRADE APPROVAL.

FROM MAIN TO RIGHT-OF-WAY LINE BEFORE STREETS ARE SURFACED. 4. ALL CATCH BASINS (CURB AND GUTTER INLET) ODOT TYPE 3A UNLESS OTHERWISE SPECIFIED. THE CASTING HOOD SHALL HAVE "DUMP NO

8. CURB RAMPS TO BE LOCATED AS INDICATED ON PLANS AND

10. ALL FIELD TILE ENCOUNTERED SHALL BE REPLACED OR CONNECTED

ALL LOTS WILL READILY DRAIN. LOTS SHALL HAVE A 1.5% LOTS SHALL BE LIMITED TO A MAXIMUM DISTANCE OF THREE HUNDRED ENGINEER.

12. ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ACCORDING TO THE BEST AVAILABLE INFORMATION. FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT I-800-362-2764; THE DAYTON POWER & LIGHT CO. AT 937-866-3303, AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF OUPS. 13. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH THE LIFE OF THE CONTRACT. THESE MAY INVOLVE THE USE OF HAY AND STRAW BALES, DIKES, SEDIMENT PITS, MULCHES, FILTER FABRICS AND

14. ROOF AREA DRAIN LINES SHALL NOT BE EXTENDED THROUGH CURBS BUT SHALL BE DIRECTLY CONNECTED TO THE STORM SEWER SYSTEM.

REFERENCED BY THE CONTRACTOR. MONUMENTS SHOWN ON THE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON MONTGOMERY COUNTY STANDARD CONSTRUCTION DRAWING MC-I. MONUMENT BOXES SHALL BE LOCATED AT ROADWAY PI, PC, PT POINTS AS WELL AS CROSS STREETS CENTERLINE. INSPECTOR TO VERIFY CONFORMANCE TO THE DESIGN PLAN. CONSTRUCTION STAKING IS REQUIRED AT SUFFICIENT DENSITY TO ENSURE THE CITY INSPECTOR CAN VERIFY THE WORK PERFORMED BY THE CONTRACTOR. CONTACT THE CITY INSPECTOR TO ENSURE

DRAINAGE AND UTILITY NOTES

- CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT
- THE LOWEST INVERT AND WORK UP-GRADIENT. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

**EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES** 

- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL
- EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.







Prepared by Stonefield HydroCAD® 10.20-2f s/n 1	Engineering	/SIS g & Design HydroCAD So	ftware Solutions LLC	<i>U-YR Rall</i> Printed	3/31/2023		
	Summary	for Pond	1P: DETENTION POND 2				
[92] Warning: Device #3 i	s above defir	ned storage					
Inflow Area =       198,         Inflow =       13.66 c         Outflow =       1.57 c         Primary =       1.57 c	219 sf, 38.3 cfs @ 12.06 cfs @ 12.66 cfs @ 12.66	3% Imperviou hrs, Volume hrs, Volume hrs, Volume	us, Inflow Depth = 2.29" for 1 = 37,764 cf = 37,764 cf, Atten= 89% = 37,764 cf	0-YR even 5, Lag= 35	t 9.6 min		
Routing by Stor-Ind meth Peak Elev= 881.71' @ 12	od, Time Spa 2.66 hrs Sur	an= 5.00-55.0 f.Area= 5,99	00 hrs, dt= 0.05 hrs I sf   Storage= 17,261 cf				
Plug-Flow detention time: Center-of-Mass det, time:	= 136.1 min c = 135.5 min (	calculated for	37,764 cf (100% of inflow) 4)				
Volume Invert	Avail.Storage	e Storage D	escription				
#1 877.00' Elevation Surf.A	19,028 c rea li	f Custom S	Stage Data (Prismatic)Listed bel Cum Store	ow (Recalc	;)		
(feet) (sq 877.00 1,3	<u>-ft) (cu</u> 995	bic-feet) 0	(cubic-feet) 0				
878.00 2,4 879.00 3,2 880.00 4.2	36 294 224	1,916 2,865 3 759	1,916 4,781 8 540				N
881.00         5,2           882.00         6,3	226 800	4,725 5,763	13,265 19,028				
Device Routing #1 Primary	Invert Ou	utlet Devices	ce/Grate $C=0.600$ Limited to	veir flow at	low heads		
#2 Primary #3 Primary	879.00' <b>4.0</b> Lir 882.00' <b>6.0</b>	)" Vert. ORI nited to weir )' long WEIR	FICE / GRATE C= 0.600 flow at low heads 2 End Contraction(s)		iow neads		
Primary OutFlow Max=1	I.57 cfs @ 12 ce Controls 0 (Orifice Cont	2.66 hrs HW 0.90 cfs @ 10	=881.71' (Free Discharge) .27 fps) @ 7 68 fps)				
-3=WEIR (Controls 0.0	Contraction Cont 00 cfs)	Hudrogen-t	פין יטי י ש				
					Inflow Primary		
14- 14- 13-			Inflow Area=198,219	sf			
			Peak Elev=881. Storage=17 261	71' cf			
10- 9- 9-							
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3 3 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
<b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>	19 20 21 22 23 24 25 2	5 27 28 29 30 31 32 33 3 Time (hours)					
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As Required Under Quality Project Pro	Post-Construer Post-Construer Post-Construer Post-Construer Post-Construer Project ID: pliance Spreadshe e user must select npliance Spreadshe e required Water O ign, including offsil de user must select npliance Spreadshe e required Water O ign, including offsil de user must select se user must select pliance Spreadshe e required Water O ign, including offsil de user must select se user must select pliance Spreadshe e required Water O ign, including offsil de user must select se user must select on content se content in the second on the second on the second ign of the second ign o	ction WaterSCFS < ICFS < I	At 35 38 37 38 39 40 41 42 49 44 45 46 47 48 48 50 51 52 53 EXISTING SITE RUN 59 CFS Quality Volume on General Permit No. OHC0000 Version ew development and redevelopment projects. ious surface and, if redevelopment, 3) total exis ment from the dropdown menu to apply the pro- gned practice or combination of practices meet culated here. This spreadsheet does not account ent storage volume. Convenience Store w/ Gas Pumps arg Road Longitude: -84.139853 ering & Design * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation + 0.9(i) ED POST-CONSTRUCTION CONDITION al Impervious Surface Area = 1.744 Impervious Fraction, i = 0.383 ering Runoff Coefficient, Rv2 = 0.393 = 262 %	<b>DFF (I</b> <b>1.1 2020-5-7</b> ireen boxes ing ber the for factors <b>0</b> <b>1.1 acres</b>	-YR)		
As Required Under Project Details Project Project Details Project Proj	19 20 21 22 23 24 25 2 ATE (IO I.57 Post-Construer er Ohio NPDE er Quality Volume r ea disturbed, 2) pla e user must select npliance Spreadshe e required Water O ign, including offsit dect Name: Wa Project ID: DE t Location: 494 t Latitude: 39. Applicant: K.I mitted By: Sto Date: 3/3 Volume Calcu d Area, A = elopment: Re e Equation: WC NDITIONS 0.299 acr 0.066 0.109	P = 2 + 2 + 2 + 2 + 3 + 3 + 3 + 3 + 3 + 3 +	At 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 EXISTING SITE RUN S9 CFS Quality Volume on General Permit No. OHC0000 Version ew development and redevelopment projects. ious surface and, if redevelopment projects. ious surface and, if redevelopment or apply the pro- gned practice or combination of practices meet culated here. This spreadsheet does not accoun- ent storage volume. Convenience Store w/ Gas Pumps rg Road Longitude: -84.139853 ering & Design A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equati + 0.9(i) ED POST-CONSTRUCTION CONDITION al Impervious Surface Area = 1.744 Impervious Fraction, i = 0.383 cric Runoff Coefficient, Rv2 = 0.399 = 262 %	brn 3]	-YR)		
As Required Under Project Details Project Project Details Project Project Details Project Project Details Project Project Details Project	Post-Construer Post-Construer Post-Construer Project ID: t Location: a construction: a construction: a construction: b construction: a construction: a construction: b construction: a construction: b construction: c construction:	<b>P Y R Y Z Z Z Z Z Z Z Z Z Z</b>	A 35 38 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53   EXISTING SITE RUN   S.59 CFS   Quality Volume on General Permit No. OHC0000/ version ew development and redevelopment projects. ious surface and, if redevelopment, 3) total exis nent from the dropdown menu to apply the progred practice or combination of practices meet culated here. This spreadsheet does not accountent storage volume. Convenience Store w/ Gas Pumps irg Road k* [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 1.1000] irg Road k* [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 1.1000] irg Road i a 262 % a 4,573 cu. ft. irg a by CPS	<b>DFF (I</b> <b>1.1 2020-5-7</b> Freen boxes ing ber the for factors <b>acres</b>	-YR)		
As Required Under Project Details Project Project Details Project Project Details Project Proje	Post-Construer Post-Construer Post-Construer Post-Construer Project ID: I and a special project ID: I coation: Project ID: I coation: I coat	a 27 28 29 30 31 32 33         b 27 28 29 30 31 32 33         c Time (hours)         c CFS < I	A 35 38 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 EXISTING SITE RUN S9 CFS Quality Volume on General Permit No. OHC0000/ Version ew development and redevelopment projects. ious surface and, if redevelopment, 3) total exis ment from the dropdown menu to apply the pro- gned practice or combination of practices meet culated here. This spreadsheet does not account ent storage volume. Convenience Store w/ Gas Pumps irg Road Longitude: -84.139853 ering & Design * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation + 0.9(i) ED POST-CONSTRUCTION CONDITION al Impervious Surface Area = 1.744 Impervious Fraction, i = 0.383 cric Runoff Coefficient, Rv2 = 0.393 = 262 % = 4,573 cu. ft. rea to treat with a practice is 1.473 EBAY PROVIDED	DFF (I	-YR)		

PROPOSED STORMWATER BASIN - 10-YEAR EVENT	
2023-03-30 TR55 County Analysis       Type II 24-hr       10-YR Rainfall=4.00"         Prepared by Stonefield Engineering & Design       Printed 3/31/2023         HydroCAD® 10.20-2f s/n 10626 © 2022 HydroCAD Software Solutions LLC       Printed 3/31/2023	
Summary for Pond 1P: DETENTION POND 2	
92] Warning: Device #3 is above defined storage	
nflow Area = 198,219 sf, 38.33% Impervious, Inflow Depth = 2.29" for 10-YR event nflow = 13.66 cfs @ 12.06 hrs, Volume= 37,764 cf Dutflow = 1.57 cfs @ 12.66 hrs, Volume= 37,764 cf, Atten= 89%, Lag= 35.6 min Primary = 1.57 cfs @ 12.66 hrs, Volume= 37,764 cf	
Routing by Stor-Ind method, Time Span= 5.00-55.00 hrs, dt= 0.05 hrs Peak Elev= 881.71' @ 12.66 hrs Surf.Area= 5,991 sf Storage= 17,261 cf	
Plug-Flow detention time= 136.1 min calculated for 37,764 cf (100% of inflow) Center-of-Mass det_time= 135.5 min ( 962.9 - 827.4 )	
Volume Invert Avail.Storage Storage Description	
#1 877.00' 19,028 cf Custom Stage Data (Prismatic)Listed below (Recalc) Elevation Surf.Area Inc.Store Cum.Store	
(feet) (sq-ft) (cubic-feet) (cubic-feet) 877.00 1,395 0 0	
878.00       2,436       1,916       1,916         879.00       3,294       2,865       4,781         880.00       4,224       3,759       8,540	NOT
881.00         5,226         4,725         13,265           882.00         6,300         5,763         19,028	
Device Routing Invert Outlet Devices #1 Primary 877.00' <b>4.0" Vert Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads	
#1       Finally       677.00       4.0       Vert. Onlice/State       0.000       Ennited to weil now at low heads         #2       Primary       879.00'       4.0"       Vert. ORIFICE / GRATE       C= 0.600         Limited to weil flow at low heads       Limited to weil flow at low heads       End Contraction(s)         #3       Primary       882.00'       6.0' long WEIR       2 End Contraction(s)	
<b>Primary OutFlow</b> Max=1.57 cfs @ 12.66 hrs HW=881.71' (Free Discharge) —1=Orifice/Grate (Orifice Controls 0.90 cfs @ 10.27 fps) —2=ORIFICE / GRATE (Orifice Controls 0.67 cfs @ 7.68 fps) —3=WEIR (Controls 0.00 cfs)	
Hydrograph 13.66 cfs 13.66 cfs 14 13 14 13 14 13 14 13 14 13 14 14 15 14 15 14 15 16 17 17 18 19 19 19 19 19 19 19 10 10 10 10 10 10 10 10 10 10	
<sup>12</sup> <sup>14</sup> <sup>10</sup> <sup>9</sup>	
8 7 6 7 6 7 6 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7	
4 3 4 4 4 4 4 4 4 4 4 4 4 4 4	
0 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 Time (hours)	
GN RELEASE RATE (10-YR) < EXISTING SITE RUNOFF (1-YR)	
1.57 CF5 < 1.59 CF5	
Post-Construction Water Quality Volume	l s
Version 1.1 2020-5-7 his spreadsheet calculates the Water Quality Volume required for both new development and redevelopment projects. Green boxes	N N N
ndicate user input for 1) the total area disturbed, 2) planned total impervious surface and, if redevelopment, 3) total existing npervious surface, each in acres. The user must select new or redevelopment from the dropdown menu to apply the proper quation. Use the separate BMP Compliance Spreadsheets to verify a designed practice or combination of practices meets the	
pplicable requirements including the required Water Quality Volume calculated here. This spreadsheet does not account for factors hat may affect the final practice design, including offsite run-on or sediment storage volume.	
Project Details	Δd
Project Name: Wawa - Proposed Convenience Store W/ Gas Pumps Project ID: DET-220205 Project Location: 4949 Chambersburg Road	EVELO
Project Latitude:       39.848673       Longitude:       -84.139853         NPDES Permit Applicant:       K. Heffernan       Submitted By:       Stonefield Engineering & Design         Date:       3/30/2023       January (January (Janu	SITE D
Required Water Quality Volume Calculation	
Total Disturbed Area, A = 4.550 acres	
Type of Development:     Redevelopment       Wester Quality Volume Equations:     N/Quality A # (/D A # Q A); (D A D A / A) / (D A D A / A)	
water quality volume equation: $vvQv = 0.90$ in. " A " [( $kv1$ "0.2)+( $kv2$ - $kv1$ )] / 12 [Equation 3] where, $Rv = 0.05 + 0.9$ (i)	
PRE-CONSTRUCTION CONDITIONS PROPOSED POST-CONSTRUCTION CONDITIONS Ex. Impervious Surface = 0.299 acres Total Impervious Surface Area = 1.744 acres	
Ex. Impervious Fraction, i = 0.066 Impervious Fraction, i = 0.383 Rv1 = 0.109 Volumetric Runoff Coefficient, Rv2 = 0.395	
$\Delta Rv = 262 \%$	
Water Quality Volume, WQv = 0.105 ac-ft = 4,573 cu. ft.	SCALE:
Message Center: The minimum impervious area to treat with a practice is 1.473 acres	
5,000 CF FOREBAY PROVIDED	м
	DRAWI
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<section-header></section-header>	droCAD® 10.20-21	f s/n 10626 © 2022 HydroCA	D Software Solutions LLC		
<form></form>		Summary for Po	nd 1P: DETENTION POND 2		
<form></form>	low Area =	198.219 sf. 38.33% Impe	.ge rvious. Inflow Depth = 2.29" for 10-YR	event	
<text></text>	low = 1 Itflow = mary =	I3.66 cfs @ 12.06 hrs, Vo 1.57 cfs @ 12.66 hrs, Vo 1.57 cfs @ 12.66 hrs, Vo	lume= 37,764 cf lume= 37,764 cf, Atten= 89%, Lag lume= 37,764 cf	g= 35.6 min	
<text></text>	uting by Stor-Ind ak Elev= 881.71	l method, Time Span= 5.00- ' @ 12.66 hrs Surf.Area= १	·55.00 hrs, dt= 0.05 hrs 5,991 sf Storage= 17,261 cf		
<form></form>	Jg-Flow detention	n time= 136.1 min calculate t_time= 135.5 min ( 962.9	d for 37,764 cf (100% of inflow)		
<form></form>		rt Avail.Storage Stora	ge Description		
<form></form>	#1 877.00	)' 19,028 cf <b>Cust</b>	om Stage Data (Prismatic)Listed below (R	ecalc)	
<form></form>	evation S (feet)	Surf.Area Inc.Store (sq-ft) (cubic-feet)	(cubic-feet)		
BBBC 0       4.22       3.73       1.940         BBC 0       4.22       3.73       1.940         BBC 0       4.22       3.73       1.940         BBC 0       4.22       4.740       1.940         BBC 0       4.22       4.740       0.940         BBC 0       4.240       4.740       0.940         BBC 0       0.200       4.200       0.940       0.940         BBC 0       0.200       0.200       0.200       0.200       0.200         Compound Line Alian	878.00 879.00	2,436 1,916 3,294 2,865	1,916 4,781		
82:00       6,00       7,03       1 0.02         81:00       000       0,00       1,000         81:00       000       0,000       0,000       0,000         81:00       0000       0000       0000       0000       0000         81:00       00000       00000       00000       00000 </td <td>880.00 881.00</td> <td>4,224 3,759 5,226 4,725</td> <td>8,540 13,265</td> <td></td> <td></td>	880.00 881.00	4,224 3,759 5,226 4,725	8,540 13,265		
The Print of	882.00	6,300 5,763	19,028		
<figure></figure>	#1 Primary #2 Primary #3 Primary	877.00' 4.0" Vert. ( 879.00' 4.0" Vert. ( Limited to v 882.00' 6.0' long V	Drifice/Grate C= 0.600 Limited to weir flo DRIFICE / GRATE C= 0.600 weir flow at low heads VEIR 2 End Contraction(s)	ow at low heads	
	mary OutFlow I -1=Orifice/Grate -2=ORIFICE / GF -3=WEIR ( Contr	Max=1.57 cfs @ 12.66 hrs (Orifice Controls 0.90 cfs ( <b>RATE</b> (Orifice Controls 0.67 rols 0.00 cfs)	HW=881.71' (Free Discharge) ② 10.27 fps) cfs @ 7.68 fps)		
<form></form>		Hydrogra	Inflow Area=198,219 sf	□ Inflow □ Primary	
<section-header></section-header>			Peak Elev=881.71' Storage=17,261 cf		
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Dest-Construction Water Quality Volume         Asequired Under Ohio NPDES Construction General Permit No. OHCO0005         Dest-Construction General Permit No. OHCO0005         Permit Application State Action Construction Rest South Perpendication Permit No. OHCO0005         Dest-Construction General Permit No. OHCO0005         Perpicel Listing         Perpicel Dest-Dest-Dest-Dest-Dest-Dest-Dest-Dest-		SE RATE (10-YR) I.57 CFS	< <b>EXISTING SITE RUNOF</b> < <b>I.59 CFS</b>	= (I-YR)	
Post-Construction Water Quality Volume As Required Under Ohio NPDES Construction General Permit No. OHCODOS grandadent stickafts the Water Quality Volume required for the devolution of the two stores drown links, exist in the start in the start in the start of the devolution multiclash by the stores affect and the start. The start in the start of the start of the devolution multiclash by the stores affect and start in the start. The start of the start of the devolution multiclash by the stores affect and start in the start of the start of the start of the devolution multiclash by the start affect the find practice design. Including of this num-on or address targar volume.         Project Details       Project Internet Defaultion of the devolution of the devolution of the devolution of the devolution of the devolution affect to exist in the devolution of the devolution of the devolution of the devolution project Location:         Project Details       Def 220205 Project Location:       Def 220205 Def 220203         NPRDS Pornik Applicant Submitted By:       Stander3 and start in the devolution Start of the devolution of the devolution Def 220203         Required Water Quality Volume Calculation       Total Disturbed Aras, A = 4.050 parces Value of Development:       Restore Value 0.090 in, * A * [[RV: ^0.2]+(RV2-RV1]] / 12 [[Guation 3] Water Quality Volume Start of the Def 2023 Restore Total Impervious Starta & Rest = 2.0248 Restore Def 2023       Restore Starta = 0.038 Rv1 = 0.109       Volumetric Runoff Coefficient, Rv2 = 0.385 ARv = 20.2 %         Water Quality Volume, WQv = 0.105 ac.ft = 4.573 cu.ft.       Message Center       The minimum impervious care to the date with a practice is 1.473 accres					
Regularized construction       Substructure         Regularized constructure       Substructure         Substructure       Substructure         Regularized constructure       Substructure         Substructure       Substructure	As Required	Post-Construction W	ater Quality Volume		
cate use funge of a first back and a dambed. 2) planed to tail impervious arrifice, out in a rest. The user main solution were the applicable program data and in reaction of practices meets the first indicating the registering watch the program data and in practice or combination of practices meets the first indicating the registering watch and the regis	spreadsheet calculates	the Water Quality Volume required for	version 1.1 2020 both new development and redevelopment projects. Green bo	D-5-7 Dxes	
Multier quality Volume Calculation: Marker Quality Volume Calcula	cate user input for 1) the ervious surface, each in a ation. Use the congrate	e total area disturbed, 2) planned total in acres. The user must select new or rede	mpervious surface and, if redevelopment, 3) total existing evelopment from the dropdown menu to apply the proper		
Project Details         Project Name:         Project Name:         Project Io:         DET-220205         Project Location:         B489 Chambersburg Road         Project Latitude:         B489 Chambersburg Road         Project Latitude:         B489 Chambersburg Road         NPDES Permit Applicant:         Kleffenan         Submitted By:         Stomefield Engineering & Design         Date:         B/30/2023             Required Water Quality Volume Calculation     Total Disturbed Area, A = 4.550 acres           Type of Development:          Redevelopment:         Neter Quality Volume Equation:         Water Quality Volume Equation:         Water Quality Volume Colocitation         PRE-CONSTRUCTION CONDITIONS         PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface = 0.299 acres         Total Impervious Surface Area = 1.7449 acres         Sx. Impervious Fraction, i = 0.066         Impervious Fraction, i = 0.383         Rv1 = 0.109       Volumetric Rundf Coefficient, Rv2 = 0.395         ARv = 262 %            Message Center:       The minimum impervious carea t	icable requirements incl may affect the final pra	luding the required Water Quality Volur ictice design, including offsite run-on or	ne calculated here. This spreadsheet does not account for fact sediment storage volume.	ors	
Projett Name:       Wawa - Proposed Convenience Store w/ Gas Pumps         Projett D:       DET-220205         Projett Location:       4949 Chambersburg Road         Projett Location:       4949 Chambersburg Road         Projett Latitude:       39.848673       Longitude:  -84.139853         NPDES Permit Applicant:       K-Heffernam       Submitted By:         Submitted By:       Stonefield Engineering & Design         Date:       3/30/2023    Required Water Quality Volume Calculation          Total Disturbed Area, A =       4.550 acres         Type of Development:       wedewelopment         wedewelopment:       wedewelopment         weter Quality Volume Equation:       Water Quality Volume Equation:         Water Quality Volume Equation:       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres       Total Impervious Surface Area =       1.744 acres         Ex. Impervious Fraction, i =       0.385       Akv =       262 %       Mater Quality Volume, WQv =       0.105 ac-ft       =       4,573 cu. ft.         Message Center:       The minimum impervious area to treat with a practice is       1.473 acres         Store Construction Construction impervions area to treat with a practice is       1.473 acres	Project Details				
Project Latitude:       38,48673       Longitude:       -84,139853         NPDES Permit Applicant:       K. Heffernan       Submitted By:       Stomefield Engineering & Design         Base       3/30/2023         Required Water Quality Volume Calculation         Total Disturbed Area, A =       4.550 acres         Type of Development:       Redevelopment         Water Quality Volume Equation:       WQv = 0.90 in. * A * [[Kv1*0.2]+[Rv2-Rv1]] / 12 [Equation 3]         where, Rv = 0.05 + 0.3(i)       PROFOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres       Total Impervious Surface Area =       1.744 acres         x. Impervious Fraction, 1 =       0.666       Impervious Fraction, 1 =       0.833         Rv1 =       0.109       Volumetric Runoff Coefficient, Rv2 =       0.395         ARv =       262 %       Aver       262 %         Water Quality Volume, WQv =       0.105 ac-ft       =       4,573 cu. ft.         Message Center:       The minimum impervious area to treat with a practice is       1.473 acres         S,000 CF FOREBAY PROVIDED       1.473 acres       1.473 acres		Project Name: Wawa - Prop Project ID: DET-220205 Project Location: 4949 Chamb	osed Convenience Store w/ Gas Pumps		
Interpretent       Interpretent         Submitted By:       Stonefield Engineering & Design         Date:       3/30/2023         Required Water Quality Volume Calculation         Total Disturbed Area, A =       4.550 acres         Type of Development:       Redevelopment         Redevelopment:       V         Water Quality Volume Equation:       WQ = 0.90 in. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3]         where, Rv = 0.05 + 0.9(i)       PRE-CONSTRUCTION CONDITIONS         PRE-CONSTRUCTION CONDITIONS       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres       Total Impervious Surface Area =         Ex. Impervious Fraction, i =       0.066       Impervious Fraction, i =       0.383         Rv1 =       0.109       Volumetric Runoff Coefficient, Rv2 =       0.395 $\Delta Rv =       262 %       Mesesage Center:       The minimum impervious area to treat with a practice is       1.473 acres         5,000 CCF FOREBAY PROVIDED       1.473 acres       1.473 acres       1.473 acres   $	NDDEC	Project Latitude: 39.848673	Longitude: -84.139853		
Required Water Quality Volume Calculation         Total Disturbed Area, A =       4.550 acres         Type of Development:       redevelopment         Water Quality Volume Equation:       WQv = 0.90 in. * A * [(Rv1*0.2)+(Rv2.Rv1)] / 12 [Equation 3] where, Rv = 0.05 + 0.9(i)         PRE-CONSTRUCTION CONDITIONS       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres         Total Impervious Surface Area =       1.744 acres         ix. Impervious Fraction, i =       0.66         May =       0.109         Volumetric Runoff Coefficient, Rv2 =       0.395         ARv =       262 %         Water Quality Volume, WQv =       0.105 ac-ft       =         4,573 cu. ft.       1.473 acres         S,000 CF FOREBAY PROVIDED       1.473 acres		Submitted By: Stonefield Er Date: 3/30/2023	ngineering & Design		
Total Disturbed Area, A =       4.550 acres         Type of Development:       Redevelopment         Water Quality Volume Equation:       WQy = 0.90 in. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] where, Rv = 0.05 + 0.9(i)         PRE-CONSTRUCTION CONDITIONS       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres       Total Impervious Surface Area =       1.744 acres         ix. Impervious Fraction, i =       0.066       Impervious Fraction, i =       0.383         Rv1 =       0.109       Volumetric Runoff Coefficient, Rv2 =       0.395         ΔRv =       262 %		Quality Volume Calculation			
Type of Development:       Redevelopment         Water Quality Volume Equation:       WQy = 0.90 in. * A * [[Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] where, Rv = 0.05 + 0.9(i)	Required Water Q				
PRE-CONSTRUCTION CONDITIONS       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299 acres         Total Impervious Surface Area =       1.744 acres         ix. Impervious Fraction, i =       0.066         Impervious Fraction, i =       0.066         Impervious Fraction, i =       0.109         Volumetric Runoff Coefficient, Rv2 =       0.395         ΔRv =       262 %    Water Quality Volume, WQv =          0.105 ac-ft       =       4,573 cu. ft.    Message Center:          The minimum impervious area to treat with a practice is       1.473 acres	Required Water Q Total Di	isturbed Area, A = 4.550 acr			
PRE-CONSTRUCTION CONDITIONS       PROPOSED POST-CONSTRUCTION CONDITIONS         Ex. Impervious Surface =       0.299       acres         Total Impervious Surface Area =       1.744       acres         impervious Fraction, i =       0.066       Impervious Fraction, i =       0.383         Rv1 =       0.109       Volumetric Runoff Coefficient, Rv2 =       0.395         ΔRv =       262 %         Water Quality Volume, WQv =       0.105 ac-ft       =       4,573 cu. ft.         Message Center:       The minimum impervious area to treat with a practice is       1.473 acres         S,000 CF FOREBAY PROVIDED       1.473 acres	Required Water C Total Di Type Water Oucling	isturbed Area, A = 4.550 acr of Development: Redevelopmen	t $\mathbf{\nabla}$		
Ex. Impervious Surface = 0.299 acres Total Impervious Surface Area = 1.744 acres ix. Impervious Fraction, i = 0.066 Impervious Fraction, i = 0.383 Rv1 = 0.109 Volumetric Runoff Coefficient, Rv2 = 0.395 ΔRv = 262 % Water Quality Volume, WQv = 0.105 ac-ft = 4,573 cu. ft. Message Center: The minimum impervious area to treat with a practice is 1.473 acres 5,000 CF FOREBAY PROVIDED	Required Water O Total Di Type Water Quality V	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 in where, Rv =	t ▼ n. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] : 0.05 + 0.9(i)		
Water Quality Volume, WQv = 0.105 ac-ft = 4,573 cu. ft.   Message Center:   The minimum impervious area to treat with a practice is 1.473 acres 5,000 CF FOREBAY PROVIDED	Required Water O Total Di Type Water Quality V PRE-CONSTRUCTI	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 in where, Rv =	t t. n. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] : 0.05 + 0.9(i) DPOSED POST-CONSTRUCTION CONDITIONS		
Message Center: The minimum impervious area to treat with a practice is 1.473 acres 5,000 CF FOREBAY PROVIDED	Required Water O Total Di Type Water Quality V <u>PRE-CONSTRUCTI</u> Ex. Impervious Su x. Impervious Fract	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 i where, Rv = <u>ION CONDITIONS</u> PRO urface = 0.299 acres tion, i = 0.066 Rv1 = 0.109 Vol	t The set of the se		
5,000 CF FOREBAY PROVIDED	Required Water C Total Di Type Water Quality V <u>PRE-CONSTRUCTI</u> Ex. Impervious Su :x. Impervious Fract Water Qualit	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 i where, Rv = <u>ION CONDITIONS</u> PRG urface = 0.299 acres tion, i = 0.066 Rv1 = 0.109 Vol	t n. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] = 0.05 + 0.9(i) DPOSED POST-CONSTRUCTION CONDITIONS Total Impervious Surface Area = 1.744 acres Impervious Fraction, i = 0.383 umetric Runoff Coefficient, Rv2 = 0.395 $\Delta Rv = 262 \%$ ft = 4,573 cu. ft.		
	Required Water C Total Di Type Water Quality V <u>PRE-CONSTRUCTI</u> Ex. Impervious Su Ex. Impervious Fract Water Qualit Message Center:	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 i where, Rv = <u>ION CONDITIONS</u> PRO urface = 0.299 acres tion, i = 0.066 Rv1 = 0.109 Vol	t n. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] = 0.05 + 0.9(i) DPOSED POST-CONSTRUCTION CONDITIONS Total Impervious Surface Area = 1.744 acres Impervious Fraction, i = 0.383 umetric Runoff Coefficient, Rv2 = 0.395 $\Delta Rv = 262 \%$ ft = 4,573 cu. ft. ous area to treat with a practice is 1.473 acres		
	Required Water O Total Di Type Water Quality V <u>PRE-CONSTRUCTI</u> Ex. Impervious Su :x. Impervious Fract Water Qualit Message Center:	isturbed Area, A = 4.550 acr e of Development: Redevelopmen Volume Equation: WQv = 0.90 i where, Rv = <u>ION CONDITIONS</u> PRG urface = 0.299 acres tion, i = 0.066 Rv1 = 0.109 Vol :y Volume, WQv = 0.105 ac-1 <u>The minimum impervi</u> <b>5,000 CF FC</b>	t n. * A * [(Rv1*0.2)+(Rv2-Rv1)] / 12 [Equation 3] = 0.05 + 0.9(i) DPOSED POST-CONSTRUCTION CONDITIONS Total Impervious Surface Area = 1.744 acres Impervious Fraction, i = 0.383 umetric Runoff Coefficient, Rv2 = 0.395 $\Delta Rv = 262 \%$ ft = 4,573 cu. ft. ous area to treat with a practice is 1.473 acres DREBAY PROVIDED		



**PROPOSED SITE: I-YEAR EVENT** 

## **CRITICAL STORM EVENT** 17,440 CF / 10,047 CF = 1.735 = 73.5% INCREASE

DETERMINING STO Percent Increase in F	TABLE 1 DETERMINING STORM FREQUENCY FOR WHICH CONTROL IS NEEDED Percent Increase in Runoff Volume From a 1 Year Frequency 24 Hour Storm						
equal or greater than (percent)	less than (percent)	Storm Frequency (years)					
(e)	10	1					
10	20	2					
20	50	5					
50	100	10					
100	250	25					
250	500	50					
500	-	100					

						06-09-2023 KH RESUBMISSION FOR BASIC DEVELOPMENT PLAN REVIEW	05-10-2023 KH FOR BASIC DEVELOPMENT PLAN REVIEW	04-13-2023 NB FOR CLIENT REVIEW	DATE BY DESCRIPTION
						m	2	_	ISSUE
NO	T AP	PRO	VE	) FC	)R C	ON	STR	UC'	TION
	STONEFIEL	andinaaring & design		M correct NN And Work NN - Borrect	Detroit, FIL - NEW LOCK, N DOSCOTI, FILA Dringston NI - Taman El - Duthouford NI	FILICEUDI, NJ - LAILIPA, FE - NULLELIOLU, NJ		7000 IM sizes 2000 official control 2000	00/ Shelpy Sulte 200, Detroit, MI 40220 Phone 248.247.1115
SITE DEVELOPMENT PLANS PROPOSED CONVENIENCE STORE WITH GAS PUMPS PIN: P70 04004 0017 & P70 04004 0026 PIN: PF0 PINE PINE PINE PINE PINE PINE PINE PINE									
	CHARLES FONDALIVO, P.E. OHIO LICENSE No. PE.80383 LICENSED PROFESSIONAL ENGINEER								
SCAL	STONEFIELD engineering & design								
SCALE: I" = 60' PROJECT ID: DET-220205 TITLE: STORMWATER MANAGEMENT PLAN									



SYMBOL

FNGINFFR

# DESCRIPTION



**CITY OF HUBER HEIGHTS STANDARD SANITARY NOTES:** 

- I. THE CONTRACTOR SHALL BE QUALIFIED TO CONSTRUCT SANITARY SEWERS. ALL SUCH WORK SHALL BE CONSTRUCTED ACCORDING TO CITY OF HUBER HEIGHTS SPECIFICATIONS. SANITARY SEWER PIPE AND FITTINGS SHALL BE PVC S3034 SDR 26.
- 3. SANITARY SEWER PIPE JOINTS SHALL CONFORM TO ASTM D 3212 FOR 4. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER
- CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED. 5. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL PERMITS HAVE
- BEEN ISSUED. 6. ALL UTILITY TRENCHES WITHIN THE EXISTING OR PROPOSED STREET RIGHT-OF-WAY SHALL BE BACKFILLED WITH COMPACTED GRANULAR MATERIAL CONFORMING TO ODOT 310 IN ACCORDANCE
- WITH THE CITY SPECIFICATIONS. 7. NO ADDITIONS, DELETIONS OR REVISIONS TO THE SANITARY SEWER ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY OF HUBER HEIGHTS.
- WATER LINES CROSSING ANY AND ALL SEWERS SHALL HAVE MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDES OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUIDISTANT AND AS FAR FROM THE SEWER AS POSSIBLE. IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THAT
- 9. ALL SERVICE LATERALS SHALL BE PVC SCHEDULE 40 AND ARE TO BE INSTALLED FROM MAIN TO RIGHT OF WAY OR EASEMENT BEFORE STREETS ARE SURFACED. 10. ALL MANHOLES SHALL BE PRECAST IN ACCORDANCE WITH CITY
- STANDARDS. MANHOLE STEPS SHALL BE PLASTIC. ALL MANHOLE FRAMES AND LIDS SHALL BE DUCTILE IRON TRAFFIC BEARING WITH VENT HOLES TO BE AT THE OPTION OF THE CITY ENGINEER.

DRAINAGE AND UTILITY NOTES

- I. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD
- ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING. 2. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION. 4. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED
- BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC. 5. ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY
- SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASEMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC. 6. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO
- CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING 7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS,
- ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY. 8. CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY
- SEWER AT THE LOWEST INVERT AND WORK UP-GRADIENT. 9. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE
- DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK. 10. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND
- INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.



R X R **N N** NOT APPROVED FOR CONSTRUCTION Ша 0 gir Ī S U Δ Σ Ζ D Z C Ζ O >S Ο 0 0 ۵ Ř ш S CHARLES ON OLIVO, P.E. OHIO LICENSE No. PE.80383 LICENSED PROFESSIONAL ENGINEER STONEFIELD .... engineering & design I" = 30' PROJECT ID: DET-220205 SCALE: TITLE: UTILITY PLAN DRAWING: **C-6** 

(						WAWA LIGHTING REQUIREMENT
	SYMBOL LABEL QUANTI		DISTRIBUTION LLF MANU	ACTURER IES FILE		N REQUIRED
	A 12	CREE EDGE SERIES LED AREA LIGHT W/ BACK	TYPE III 0.90 CREE L	GHTING ARE-EDG-3MB-XX-06-E-UL -XX -525-XXXX-57k	\$ 7(1)(A) § 7(1)(B)	ZONE I: PARKING AREA AND INTERNAL DRIVE
		CREE EDGE SERIES LED SECURITY WALL			_	MINIMUM: 0.25 FOOT-CANDLES AVERAGE: 2.00 - 4.00 FOOT-CANDLES
	B 8	PACK - 60 LED - 700mA - 57K	TYPE IV 0.90 CREE L	GHTING SEC-EDG-4M-XX-06-E-UL-700-57K	§ 7(1)(C)	ZONE 2: BUILDING SIDEWALKS MINIMUM: 1.00 FOOT-CANDLES
	C 16	304 SERIES LED RECESSED CANOPY LUMINAIF - 60 LED - 700mA - 57K	RE TYPE III 0.90 CREE L	GHTING CAN-304-PS-XX-06-UL-700-57K	§ 7(1)(D)	AVERAGE: 3.00-5.00 FOOT-CANDLES ZONE 3: BUILDING FACADE
v 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	<sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0		1	§ 7(1)(F)	AVERAGE: 5.00 FOOT-CANDLES
						MINIMUM: 15.00 FOOT-CANDLES AT BASE OF DOOR
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.1	0.1 0.1 0.1 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		AVERAGE: 35.00 - 40.00 FOOT-CANDLES (TYPICAL SUBURBAN LOCATION)
<sup>†</sup> 0.0 <sup>†</sup>	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.1 <sup>†</sup> 0.2	<sup>+</sup> 0.2 <sup>+</sup> 0.2 <sup>+</sup> 0.1 <sup>+</sup> 0.1	ō.i ō.i ō.i ō.i ō.i ō.i <sup>†</sup> 0.i <sup>†</sup> 0.i	<sup>↑</sup> 0.0 <sup>↑</sup> 0.0 <sup>↑</sup> 0.0 <b>§ 7(1)(G)</b>	
<sup>†</sup> 0.0 <sup>†</sup>	<b>-</b> <sup>+</sup> 0.0 <b>-</b> <sup>+</sup> 0.0 <u></u> <sup>+</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.2 <sup>†</sup> 0.4	0.4 0.4 0.5 0.6 0.6	<u>−0.5 −0.4 −0.4</u> −0.3 −0.2 −0.2 1 −0.1	0.1 ō.0 ō.b	AVERAGE: 5.00 FOOT-CANDLES
	·					AVERAGE: 5.00 FOOT-CANDLES
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.6 0.8	0.8 1.0 1.5 2.7 2.8			STANDARD POLE: 20 FT HEIGHT
<sup>†</sup> 0.0 <sup>†</sup>	<sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> .1 <sup>†</sup> .7	1.2 1.2.2.1.2.2.7	<u>+ 25 17 55 58 5.8</u> 1.9 0.8 0.3	[ <b>0</b> :1 <sup>†</sup> 0.1 <sup>†</sup> 0.0	
$\dot{0}.0$	<sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> <b>1</b> <i>µ</i> <sup>†</sup> 2.7	1.6 0.6 0.4 <b>A (20')</b> 0.5		to,1 <sup>†</sup> 0.0 0.0	
		A (20') e		A (20)		
0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.1 <td><sup>†</sup>0.0 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1</td> <td><sup>†</sup>0.0 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>.1 <sup>‡</sup>2.8</td> <td>1.4 0.3 0.1 0.1 0.1 0.1</td> <td>TO.I     TO.I     TO.I     TO.I     TO.I</td> <td>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0</td> <td></td>	<sup>†</sup> 0.0 <sup>†</sup> 0.1 <sup>†</sup> 0.1 <sup>†</sup> 0.1	<sup>†</sup> 0.0 <sup>†</sup> 0.1 <sup>†</sup> 0.1 <sup>†</sup> 0.1 <sup>†</sup> .1 <sup>‡</sup> 2.8	1.4 0.3 0.1 0.1 0.1 0.1	TO.I     TO.I     TO.I     TO.I     TO.I	0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
$\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.0$ $\dot{0}.1$ $\dot{0}.2$ $\dot{0}.7$		1.1 <sup>†</sup> 0.8 <b>A (20')</b> <sup>†</sup> 0.4 <sup>†</sup> 20 <sup>†</sup> 2.6	1.8, <sup>†</sup> 0.5 <sup>†</sup> 0.2 <sup>†</sup> 0.1 <sup>†</sup> 0.1		0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
	2.7 <sup>3</sup> .0 <sup>3</sup> .1	<sup>2</sup> .2 <sup>3</sup> .1 <sup>2</sup> .4 <sup>2</sup> .4 <sup>2</sup> .4 <sup>1</sup> .8		<u>1.5</u> 0.7 0.3 0.1 0.0 0.0 0.0 0.0	<sup>+</sup> <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0	
0.0         0.0         0.0         0.0         0.0         0.0         0.1         0.1         0.3         0.7	1.3 <sup>2</sup> .4 <sup>2</sup> .8 <sup>2</sup> .2	<sup>1</sup> / <sub>2.1</sub> <sup>1</sup> / <sub>2.7</sub> <sup>1</sup> / <sub>3.3</sub> <sup>1</sup> / <sub>2.4</sub> <sup>1</sup> / <sub>1.7</sub> <sup>1</sup> / <sub>1.2</sub>	1.2 <sup>2</sup> .1 <sup>3</sup> .1 <sup>2</sup> .8	1.7 $0.8$ $0.3$ $0.1$ $0.0$ $0.0$ $0.0$ $0.0$	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
to.0         to.0         to.0         to.0         to.0         to.0         to.0         to.1         to.1         to.2         to.3	<sup>†</sup> 0.8 <sup>†</sup> 1.2 <sup>†</sup> 1.5 <sup>†</sup> 1.7	1.6 1.5 1.3 1.1 <sup>5</sup> 0.9 <sup>5</sup> 0.8	<sup>†</sup> .1 <sup>†</sup> .2 <sup>†</sup> .3 <sup>†</sup> .4 <sup>†</sup> .4	1.1 <sup>†</sup> 0.8 <sup>†</sup> 0.3 <sup>†</sup> 0.1 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
<sup>+</sup> 0.0 <sup>+</sup> 0.1 <sup>+</sup> 0.1 <sup>+</sup> 0.2	0.8 20 9 2.6	3.2 <sup>1</sup> .9 <sup>1</sup> .5 <sup>0</sup> .7 <sup>1</sup> .8	<sup>+</sup> 4.3 <sup>+</sup> 4.6 <sup>+</sup> 5.7 <sup>+</sup> 3.8 <sup>+</sup> 2.1	1.1 1.0 <sup>†</sup> 0.3 <sup>†</sup> 0.1 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.1     0.4	1.2 <u>2.6 3.0° ° 2.1</u> °	54, 2.9 10 2.4 1.0 59 C (22.75 (2 TYPIC)		<b>25')</b>	$\begin{bmatrix} \bar{0}.0 \\ \mathbf{M} \end{bmatrix} \begin{bmatrix} \bar{0}.0 \\ \mathbf{M} \end{bmatrix}$	
<sup>†</sup> 0.0 <sup>†</sup> 0.1 <sup>†</sup> 0.7	4.7 4.7 <b>B (15')</b>			$\begin{array}{c c} \textbf{CAL} \\ \hline \textbf{7} & \hline \textbf{0}.1 \\ \hline \textbf{A} & (20') \end{array}  \hline \textbf{0}.0  \hline \textbf{0}.0  \hline \textbf{0}.0  \hline \textbf{0}.0  \hline \textbf{0}.0 \\ \hline \textbf{A} & (20') \end{array}$		
to.0 to.0 to.0 to.0 to.0 to.0 to.0 to.1 to.1 to.2 to.3	7-3 <b>B</b> (15')	<b>B</b> (15') <b>2</b> 2.9 1.7 1.1 5.0	13.8 17.8 23.8 20.4 1 9.9	3.1 <u>5.</u> 5.0 5.0 5.0 5.0 5.0 5.0		
				25)		
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.4 1.2	5.8			<b>CAL)</b> 1.6 01 0.0 0.0 0.0 0.0 0.0		
to.0         to.0 <thto.0< th="">         to.0         to.0         <tht< td=""><td>2.0</td><td>23 2.7 1.5 6.5</td><td>14.8 19.0 25.0 20.4</td><td><b>0.9</b> 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td><td><sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0</td><td></td></tht<></thto.0<>	2.0	23 2.7 1.5 6.5	14.8 19.0 25.0 20.4	<b>0.9</b> 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
to.0	3.1 <u>0</u> 0		[∰		<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	BUILDING
	B (15')	B (15)				
0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.3 1.0 1.8	<sup>2.5</sup> <b>B</b> (15')	B (15')	15.7 19.6 25.3 19.5 5.0		0.0 00 0.0 0.0 (*) 00	
to.0         to.1         to.3         to.3         to.1         to.3         to.3 <thto.3< th="">         to.3         to.3         <tht< td=""><td>4.8 2.7 3.6 4.3</td><td>2.9 3.1 2.0 C (22.75') (2 TYPICAL)</td><td>6.30 205 27.7 C (17.25')</td><td></td><td><sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0</td><td></td></tht<></thto.3<>	4.8 2.7 3.6 4.3	2.9 3.1 2.0 C (22.75') (2 TYPICAL)	6.30 205 27.7 C (17.25')		<sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0 <sup>†</sup> 0.0	
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CODE SECTION	REQUIRED	PROPOSED
	YARD LANDSCAPING	
§ 1176.03.(b)(1)	ALL YARDS WITHIN THE DEVELOPMENT PLAN SHALL BE LANDSCAPED AND NOT USED FOR PARKING MINIMUM 15 FT ALONG THE PROPERTY LINES	COMPLIES
	STREET TREES	
§   8 . 7.	I TREE FOR EVERY 40 LF OF FRONTAGE	
	CHAMBERSBURG ROAD: 429 FT	
	(316 FT) * (1 TREE / 40 FT FRONTAGE) = 8 TREES	I EXISTING TREE TO REMAIN 7 TREES PROPOSED
	OLD TROY PIKE: 573 FT	
	(419 FT) * (1 TREE / 40 FT FRONTAGE) = 11 TREES	II TREES PROPOSED
§   8 . 8.(3)	UTILITY SCREENING A CONTINUOUS PLANTING, HEDGE, OR FENCE ENCLOSING ANY SERVICE STRUCTURE <sup>(1)</sup>	SCREENING PROVIDED
	THE HEIGHT OF THE SCREENING MATERIAL SHALL BE (I) FT HIGHER THAN THE SERVICE	COMPLIES
		COMPLIES
§ 1182.03.(b)(3)B.	MINIMUM 25% OPEN SPACE IS REQUIRED TO BE MAINTAINED NEAREST TO ANY PUBLIC RIGHT-OF-WAY VISIBLE BY THE GENERAL PUBLIC	
	(203,403 SF) * (0.25) = 50,851 SF	52,329 SF PROVIDED
	25% OF THE OPEN SPACE PROVIDED SHALL BE LOCATED IN THE FRONT YARDS AND SIDE YARDS	
	(50,851 SF) * (0.25) = 12,713 SF	13,082 SF PROVIDED
§ 1182.04.(a)(1)	R.O.W. PARKING LOT LANDSCAPING WHEN A PARKING LOT IS LOCATED ADJACENT TO A PUBLIC RIGHT-OF-WAY A LANDSCAPED STRIP SHALL BE PROVIDED ONT HE PROPERTY BETWEEN THE PARKING LOT	LANDSCAPED STRIP PROVIDED
§ 1182.04.(a)(2)A.	AND THE RIGHT OF WAY LANDSCAPED STRIP WIDTH: 10 FT	10.00 FT PROVIDED
	I SHADE TREE FOR EVERY 35 LF OF FRONTAGE	
	(493 FT) * (I TREE / 35 FT FRONTAGE) = 14 TREES	14 TREES PROPOSED
	10 SHRUBS FOR EVERY 35 LF OF FRONTAGE	
	(493 FT) * (10 SHRUBS / 35 FT FRONTAGE) = 141 SHRUBS	141 SHRUBS PROPOSED
	PERIMETER PARKING LOT LANDSCAPING	
§ 1182.04.(b)(1)	10 FT WIDE LANDSCAPED STRIP REQUIRED BETWEEN THE PARKING LOT AND ANY ADJACENT PROPERTY LINE	10.00 FT STRIP PROVIDED
	I SHADE TREE FOR EVERY 35 LF OF PARKING LOT PERIMETER	
	(177 FT) * (1 TREE / 35 FT FRONTAGE) = 5 TREES	5 TREES PROPOSED
	3 SHRUBS FOR EVERY 35 LF OF PARKING LOT PERIMETER	
	$(177 \text{ FI})^{\circ}$ (3 SHRUBS / 35 FI FRONTAGE) = 16 SHRUBS	16 SHRUBS PROPOSED
£ 1192 04 (a)		
§ 1182.04.(C)	(35, 230, SE) * (0.04) = 1.409, SE	
§ 1182 04 (c)(1)	AT LEAST 2 SHADE TREES SHALL BE LOCATED WITHIN 60 FT OF EVERY PARKING SPACE	
§ 1182.04.(c)(2)A.	TERMINAL ISLANDS ARE REQUIRED AT THE ENDS OF PARKING BAYS	COMPLIES
5	MINIMUM WIDTH: 9 FT	10.52 FT PROVIDED
	75% OF THE TERMINAL ISLANDS SHALL BE PLANTED WITH PERENNIALS AND SHRUBS	COMPLIES
	MAXIMUM 2 FT HIGH THE REMAINING 25% OF THE TERMINAL ISLANDS SHALL BE COVERED WITH GRASS OR	COMPLIES
§ 1182 04 (c)(5)A	MINIMUM 60 SE OF PLANTING SPACE SHALL BE PROVIDED FOR FACH TREE	COMPLIES
3	NO TREE PLANTING AREA SHALL BE LESS THAN 6 FT WIDE	COMPLIES
	BUFFER AND SCREENING REQUIREMENTS	
§ 1182.05.(a)(3)D.	DENSE EVERGREEN PLANTINGS MAY BE USED FOR SCREENING	PROVIDED
§ 1182.05.(a)(4)A.	SIDE AND REAR YARDS FOR NONRESIDENTIAL USES ABUTTING RESIDENTIAL DISTRICTS	PROVIDED
§ 1182.05.(a)(4)E.5.	SHALL PROVIDE SCREENING MINIMUM 6 FT HIGH BUFFER TYPE 4 REQUIRED ALONG WEST AND NORTH PROPERTY LINE. BUILDINGS OR USES SHALL BE SET BACK MINIMUM 50 FT FROM ALL RESIDENTIAL DISTRICT LOT LINES AND	COMPLIES <sup>(2)</sup>
	LOADING AREA SCREENING	
§ 1182.05.(B)(1)	ALL LOADING AREAS SHALL BE SCREENED FROM RESIDENTIAL ZONES	PLANTINGS PROPOSED SUPPLEMENTING EXISTING WOODED AREA TO REMAIN

A NON-RESIDENTIAL BUILDING OR SITE. PROPOSED BUILDING AND PARKING LOT IS SET BACK MINIMUM 157.58 FT AWAY FROM THE NEAREST PROPERTY LINE WITH ADDITIONAL SCREENING PROVIDED. (2)

			PLANT SCHED	JLE	
DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
$\mathbf{x}$	× ACE 8 ACER SACCHARUM		ACER SACCHARUM	SUGAR MAPLE	2.5" - 3" (
+	GLE	5	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE® HONEY LOCUST	2.5" - 3" (
$\bigcirc$	TIL	5	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5" - 3" (
EVERGREEN TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
$\odot$	JUN	12	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6` - 7` H
ORNAMENTAL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
+	AME	4	AMELANCHIER ALNIFOLIA	SERVICEBERRY	I.5" - 2" C
Ð	SYR	9	SYRINGA RETICULATA	JAPANESE TREE LILAC	1.5" - 2" (
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
(+)	FOR	15	FORSYTHIA X 'ARNOLD'S DWARF'	ARNOLD'S DWARF FORSYTHIA	24" - 30
Ō	HYD	15	HYDRANGEA MACROPHYLLA `ENDLESS SUMMER`	BAILMER HYDRANGEA	24" - 30
<b>(</b> + <b>)</b>	VIB	15	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	24" - 30
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
$\odot$	AZA	45	AZALEA X `DELAWARE VALLEY WHITE`	VALLEY WHITE AZALEA	24" - 30
$\otimes$	GLA	57	ILEX GLABRA `COMPACTA`	COMPACT INKBERRY	24" - 30
$\odot$	TAX	47	TAXUS X MEDIA 'DENSIFORMIS'	DENSE ANGLO-JAPANESE YEW	24" - 30
PERENNIALS AND GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPACIN
۵٫۵٫۵٫۵٫۹٫۵٬۹۵٬۹۵٬۹۵٬۹۵٬۹۵٬۹۵٬۹۶۵٬ ۵٫۹٬۵۶٬۹۵٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬ ۵٫۰٫۰۵٬۵۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬۹۶٬	CAR	540	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE	l8" o.c
	PAN	16	PANICUM VIRGATUM `SHENANDOAH`	SHENANDOAH SWITCH GRASS	36" o.c
() () () () () () () () () () () () () (	RUD	54	RUDBECKIA FULGIDA 'LITTLE GOLDSTAR'	LITTLE GOLDSTAR CONEFLOWER	18" o.c

THE PLAN SHALL DICTATE.



SEEDS/FT<sup>2</sup> 2.369 6.129 3.285 6.240 1.664

SEEDS/FT<sup>2</sup> 0.479 0.503 0.678 1.304

4.176

0.045 0.298 4 346

PLS LBS/ACRE PLS LBS TOTAL

PLS LBS/ACRE PLS LBS TOTAL

0.025 0.030 0.0020 0.0050 0.0080 0.15 0.015 0.0010 0.0030

MIX RATIO

0.650 1.250 1.850 0.900

0.030 0.120 0.050 0.030 0.082 0.025

0.030 0.002 0.005 0.008 0.150 0.015 0.001



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	N	L <b>D</b> 220205		CITY OF HUBER HEIGHTS MONTGOMERY COUNTY, OHIO	00/ Sheliby Sulte 200, Detroit, Mi 40220 Phone 248.247.1115	<u>s</u> FION	sue D <i>i</i>	TE B'		DESCRIPTION



I. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF 2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER

• MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY • MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY

#### GENERAL LANDSCAPING NOTES

- I. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE I. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY. . WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO
- THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL. 3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL,
- IF SO REQUESTED 4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY. 5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE
- LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER. OR GOVERNING MUNICIPAL OFFICIAL.
- 6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

#### PROTECTION OF EXISTING VEGETATION NOTES

- BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AT THE DRIP-LINE OR LIMIT OF DISTURBANCE AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. FENCE INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL." NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT. 3. IN RARE INSTANCES WHERE EXCAVATING, FILL, OR GRADING IS REQUIRED WITHIN THE DRIP-LINE OF TREES TO REMAIN, THE
- WORK SHALL BE PERFORMED AS FOLLOWS: • TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN THE TREE ROOTS SHALL NOT BE CUT BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO
- THE ROOTS. NO ROOTS, LIMBS, OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE. RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18") AND FINISH APPROXIMATELY TWO INCHES (2") ABOVE THE FINISH GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REOUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, TREE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL."
- LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED. SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION. NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL."

SOIL PREPARATION AND MULCH NOTES:

- I. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS
- 2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS
- MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
- TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1"). 4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT
- 5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE. . CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD
- OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
- INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBED AREA OF THE SITE. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS REOUIRED TOPSOIL), IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN. 9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE
- OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE
- INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER II. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL
- SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR, GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF 12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
- 13. Soil shall be loosened with a backhoe or other large coarse-tiling equipment unless the soil is frozen or EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE. 14. APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN
- PRODUCT AND PLANT MATERIAL 15. ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:

MYCRO® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA. TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING. AND SELECTED ORGANIC MICROBIAL NUTRIENTS

- DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
- MYCOR® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL. WHICH REOUIRE ERICOID MYCORRHIZAE. • SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS
- IN A PH RANGE OF 3 TO 9. • FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL
- APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION. OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.
- HEALTHY START MACRO TABS 12-8-8
- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS. • TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (B&B) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT I TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL, EVENLY DISTRIBUTED 3. REFERENCE LANDSCAPE PLAN FOR AREAS TO BE SEEDED OR LAID WITH SOD. AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES.

IRRIGATION DURING ESTABLISHMENT					
SIZE AT PLANTING	IRRIGATION FOR VITALITY	IRRIGATION FOR SURVIVAL			
< 2" CALIPER	DAILY FOR TWO WEEKS, EVERY OTHER DAY FOR TWO MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR TWO TO THREE MONTHS			
2"-4 CALIPER	DAILY FOR ONE MONTH, EVERY OTHER DAY FOR THREE MONTHS, WEEKLY UNTIL ESTABLISHED	TWO TO THREE TIMES WEEKLY FOR THREE TO FOUR MONTHS			
4 >" CALIPER	DAILY FOR SIX WEEKS, EVERY OTHER DAY FOR FIVE MONTHS, WEEKLY UNTIL ESTABLISHED	TWICE WEEKLY FOR FOUR TO F MONTHS			

I. AT EACH IRRIGATION, APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER TO THE ROOT BALL SURFACE. APPLY IT IN A MANNER SO ALL WATER SOAKS THE ENTIRE ROOT BALL. DO NOT WATER IF ROOT BALL IS WET/SATURATED ON THE IRRIGATION DAY.

2. WHEN IRRIGATING FOR VITALITY, DELETE DAILY IRRIGATION WHEN PLANTING IN WINTER OR WHEN PLANTING IN COOL CLIMATES. ESTABLISHMENT TAKES THREE TO FOUR MONTHS PER INCH TRUNK CALIPER. NEVER APPLY IRRIGATION IF THE SOIL IS SATURATED.

3. WHEN IRRIGATION FOR SURVIVAL, TREES TAKE MUCH LONGER TO ESTABLISH THAN REGULARLY IRRIGATED TREES. IRRIGATION MAY BE REQUIRED IN THE NORMAL HOT, DRY PORTIONS OF THE FOLLOWING YEAR.

SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE. 4" TO 6" DEEPER THAN ROOT BALL SET ROOT BALL ON UNDISTURBED SOIL PAD IN BOTTOM OF HOLE. TAMP SOIL SOLIDLY AROUND

INSTALL (2) 3" dia. 8' LONG CEDAR

POST IN TO UNDISTURBED SOIL.

THEN BACKFILL. STAKES SHALL

KEEP TREE VERTICAL AND PLUMB.

SECURE STAKES TO TREE USING

SET TOP OF TRUE ROOT BALL I

TO 2" ABOVE FINISHED GRADE

OR SEVERAL INCHES HIGHER IN

SAUCER AROUND TREE AT EDGE

MAXIMUM 3" OF SHREDDED BARK

MULCH. DO NOT PLACE MULCH

WITHIN 6" OF TREE TRUNK.

POORLY DRAINING SOILS.

FORM FARTH WATERING

2 ARBORTIES.

OF ROOT BALL.

CONIFEROUS TREE PLANTING DETAIL NOT TO SCALE

BASE OF ROOT BALL

### NOTES

I. FOR THE CONTAINER-GROWN SHRUBS. USE FINGERS OR SMALL HAND TOOL TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER. THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND

REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS • MODIEY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM MODIFY EXTREMELY SANDY SOILS

ORGANIC MATTER AND/OR DRY. SHREDDED

USE FINGERS OR SMALL

HAND TOOL TO PULL

ROOTS OUT OF BALL.

SOIL TO BE PREPARED PER

TABLE PRIOR TO PLANTING

LAWN OR

PAVING

SUBGRADE

- INSTALLATION GUIDELINES: I. LOOP TIE AROUND TREE AND NAIL TO CEDAR STAKE
  - FOLD ENDS OF ARBORTIE BACK, SECURE TO STAKES

OF TREES LARGER THAN 6"

- GEMPLERS I-800-332-6744 or GEMPLERS.COM CSP OUTDOORS 1-800-592-6940 or
- **ARBORTIE DETAIL** 
  - NOT TO SCALE

REMOVE ALL STAKING AND TIES AT END OF FIRST GROWING SEASON. KNOT

CSPOUTDOORS.COM

5

WITH I" GALVANIZED ROOFING NAIL OR USE A

SOURCES INCLUDE:

# CONSULT LANDSCAPE ARCHITECT FOR STAKING





#### PLANT QUALITY AND HANDLING NOTES

REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. 2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER

COMMON NAMES 3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND. HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE 4. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR

FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REIECTED 5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY

TAGGED WITH THE PROPER NAME AND SIZE. 6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.

7. ALL PLANTS DESIGNATED BALL AND BURLAP (B&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.

8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INIURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR IMPROPER HANDLING OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE. 9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING

DETAILS. 10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN possible. The root ball shall be kept moist at all time and covered with moistened mulch or aged WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS HALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.

II. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL. 12. PLANTS WITH INIURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS, ONLY DISEASED OR INIURED PLANTS SHALL BE REMOVED. 13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO

RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT 14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY

15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:

PLANTS (MARCH 15 - DECEMBER 15) LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER I - DECEMBER I)

ACE

CAF

CEI

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16. THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPLANT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15) OSTRYA VIRGINIANA ABIES CONCOLOR CORNUS VARIETIES

R BUERGERIANUM	CRATAEGUS VARIETIES	PINUS NIGRA
R FREEMANII	CUPRESSOCYPARIS LEYLANDII	PLATANUS VARIETIES
R RUBRUM	FAGUS VARIETIES	POPULUS VARIETIES
R SACCHARINUM	HALESIA VARIETIES	PRUNUS VARIETIES
ULA VARIETIES	ILEX X FOSTERII	PYRUS VARIETIES
PINUS VARIETIES	ILEX NELLIE STEVENS	QUERCUS VARIETIES (NOT Q. PALUSTRIS)
RUS DEODARA	ILEX OPACA	SALIX WEEPING VARIETIES
TIS VARIETIES	JUNIPERUS VIRGINIANA	SORBUS VARIETIES
CIDIPHYLLUM VARIETIES	KOELREUTERIA PANICULATA	TAXODIUM VARIETIES
CIS CANADENSIS	LIQUIDAMBAR VARIETIES	TAXUX B REPANDENS
RNUS VARIETIES	LIRIODENDRON VARIETIES	TILIA TOMENTOSA VARIETIES
TAEGUS VARIETIES	MALUS IN LEAF	ULMUS PARVIFOLIA VARIETIES
	NYSSA SYLVATICA	ZELKOVA VARIETIES

17. IF A PROPOSED PLANT IS UNATTAINABLE OR ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL PRIOR TO ORDERING AND INSTALLATION.

18. DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY AND PROMPTLY REMOVED AT THE END OF EACH WORK DAY. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.

19. THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY. 20. A 90-DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.

21. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR other means. Repairing and reshaping water rings or saucers, maintaining stakes and guys if originali REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING, PRUNING, SPRAYING, FERTILIZING, MOWING THE LAWN, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.

2. MOW ALL GRASS AREAS AT REGULAR INTERVALS TO KEEP THE GRASS HEIGHT FROM EXCEEDING THREE INCHES (3"). MOWING SHALL BE PERFORMED ONLY WHEN GRASS IS DRY. MOWER BLADE SHALL BE SET TO REMOVE NO MORE THAN ONE THIRD (1/3) OF THE GRASS LENGTH. WHEN THE AMOUNT OF GRASS IS HEAVY, IT SHALL BE REMOVED TO PREVENT DESTRUCTION OF THE UNDERLYING TURF. MOW GRASS AREAS IN SUCH A MANNER AS TO PREVENT CLIPPINGS FROM BLOWING ON PAVED AREAS, AND SIDEWALKS. CLEANUP AFTER MOWING SHALL INCLUDE SWEEPING OR BLOWING OF PAVED AREAS AND SIDEWALKS TO CLEAR THEM FROM MOWING DEBRIS.

23. GRASSED AREAS DAMAGED DURING THE PROCESS OF THE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL RESTORE THE DISTURBED AREAS TO A CONDITION SATISFACTORY TO THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE. THIS MAY INCLUDE FILLING TO GRADE, FERTILIZING, SEEDING, AND MULCHING

24. SHOULD THE OWNER REQUIRE MAINTENANCE BEYOND THE STANDARD 90-DAY MAINTENANCE PERIOD, A SEPARATE CONTRACT SHALL BE ESTABLISHED. 25. LANDSCAPE CONTRACTOR SHALL WATER NEW PLANTINGS FROM TIME OF INSTALL AND THROUGHOUT REQUIRED 90-DAY

MAINTENANCE PERIOD UNTIL PLANTS ARE ESTABLISHED. IF ON-SITE WATER IS NOT AVAILABLE AT THE PROJECT LOCATION, THE LANDSCAPE CONTRACTOR SHALL FURNISH IT BY MEANS OR A WATERING TRUCK OR OTHER ACCEPTABLE MANNER. 26. THE QUANTITY OF WATER APPLIED AT ONE TIME SHALL BE SUFFICIENT TO PENETRATE THE SOIL TO A MINIMUM OF EIGHT INCHES (8") IN SHRUB BEDS AND SIX INCHES (6") IN TURF AREAS AT A RATE WHICH WILL PREVENT SATURATION OF THE SOIL. 27. IF AN AUTOMATIC IRRIGATION SYSTEM HAS BEEN INSTALLED, IT CAN BE USED FOR WATERING PLANT MATERIAL. HOWEVER, FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY OF PLANT HEALTH AND

#### PLANT MATERIAL GUARANTEE NOTES

ESTABLISHMENT.

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (I YR.) FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE

.. THE LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE DYING, DEAD, OR DEFECTIVE PLANT MATERIAL AT HIS EXPENSE. THE LANDSCAPE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS COMPANY'S OPERATIONS. 3. ALL REPLACEMENT PLANTS SHALL BE OF THE SAME SPECIES AND SIZE AS SPECIFIED ON THE APPROVED OR FINAL PLANT LIST. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.

4. THE CONTRACTOR SHALL INSTRUCT THE OWNER AS TO THE PROPER CARE AND MAINTENANCE OF ALL PLANTINGS.

#### LAWN (SEED OR SOD) NOTES:

. SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS. 2. SEED OR SOD SHALL BE PURCHASED FROM A RECOGNIZED DISTRIBUTOR AND SHALL BE COMPOSED OF THE MIX OR BLEND

WITHIN THE PROVIDED "SEED SPECIFICATION" OR "SOD SPECIFICATION."

4. SEEDING SHALL NOT BE PERFORMED IN WINDY WEATHER. IF THE SEASON OF THE PROJECT COMPLETION PROHIBITS PERMANENT STABILIZATION, TEMPORARY STABILIZATION SHALL BE PROVIDED IN ACCORDANCE WITH THE "TEMPORARY SEEDING SPECIFICATION.'

5. PROTECT NEW LAWN AREAS AGAINST TRESPASSING WHILE THE SEED IS GERMINATING. FURNISH AND INSTALL FENCES, SIGNS, BARRIERS OR ANY OTHER NECESSARY TEMPORARY PROTECTIVE DEVICES. DAMAGE RESULTING FROM TRESPASS. EROSION. WASHOUT, SETTLEMENT OR OTHER CAUSES SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR AT HIS EXPENSE. REMOVE ALL FENCES, SIGNS, BARRIERS OR OTHER TEMPORARY PROTECTIVE DEVICES ONCE LAWN HAS BEEN ESTABLISHED.

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	<b>BADDALELLE STOONEFIELLD Begineering &amp; design</b> Detroit, MI • New York, NY • Boston, MA Princeton, NJ • Tampa, FL • Rutherford, NJ Www.stonefieldeng.com 607 Shelby Suite 200, Detroit, MI 48226 Phone 248.247.1115								
SITE DEVELOPMENT PLANS PROPOSED CONVENIENCE STORE WITH GAS PUMPS PIN: F70 04004 001 & F70 04004 0026 PIN: F70 04004 04									
CHARLES DONOLIVO, P.E. OHIO LICENSE No. PE.80383 LICENSED PROFESSIONAL ENGINEER									
SCALE: AS SHOWN PROJECT ID: DET-220205									
SCALE TITLE:	: <i>1</i>	45 SH		<u> </u>	κοj	ECT			220205













oy Suite 200, Detroit, № Phone 248.247.1115

<u>o</u>

PIN: P70 04004 0017 & P70 0400 4949 CHAMBERSBURG ROAD CITY OF HUBER HEIGHTS MONTGOMERY COUNTY, OH





Huber Heights Ladder 22 Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock-to-lock time Max Wheel Angle

40.000ft 8.000ft 7.745ft 0.656ft 8.000ft 5.00s 45.00°

30'	0'	30'	60'		
GRAPHIC SCALE IN FEET I" = 30'					







Huber Heights Ladder 22 Overall Length Overall Width Overall Body Height Min Body Ground Clearance Track Width Lock-to-lock time Max Wheel Angle

40.000ft 8.000ft 7.745ft 0.656ft 8.000ft 5.00s 45.00°

30'	0'	30'	60'		
GRAPHIC SCALE IN FEET $I'' = 30'$					









.DET/2022/DET-220205 BLUE PENINSULA - 4949 CHAMBERSBURG ROAD, HUBER HEIGHTS, OHICADD/PLOT/SDP-14-15-16-17-18-DETL.DW

 J) COMMENCE ROLLING AS SOON AS THE PAVING MATERIAL CAN BE COMPACTED WITHOUT DISPLACEMENT. ROLLING MUST BE DONE WHILE THE PAVING MATERIAL IS WITHIN 15° TO 25° F OF THE TEMPERATURE OF THE MATERIAL WHEN DELIVERED. COMPACT ALL PAVING MATERIAL TO A MINIMUM OF 95 PERCENT OF MAXIMUM MARSHALL DENSITY, AS DETERMINED AT THE HOT MIX PLANT. FINAL COMPACTION SHALL BE ACCOMPLISHED USING EITHER A MINIMUM 10 TON STEEL WHEELED STATIC ROLLER OR A STEEL, SMOOTH DRUM VIBRATORY ROLLER WITH A MINIMUM 10 TON VIBRATORY RATING. FINAL ROLLING SHALL REMOVE ALL INDENTATIONS OR IRREGULARITIES IN THE PAVEMENT SURFACE.
 K) ALL PAVING WORK SHALL BE PERFORMED WITH UTMOST CARE AND IN

- ACCORDANCE WITH ALL INDUSTRY ACCEPTED STANDARDS OF GOOD PRACTICE. THE CONTRACTOR SHALL AVOID ANY DAMAGE OR STAINING TO CURBS, SIDEWALKS, APRONS, SHRUBBERY OR OTHER WORK. ALL PAVING EDGES MUST BE SEALED USING RUBBERIZED ASPHALT HOT POURED SEALING MATERIAL, APPLIED BY SQUEEGEE TO A MINIMUM 6-INCH WIDTH. L) WHERE ASPHALT PAVEMENT IS BEING PLACED AFTER NOVEMBER 1, THE
- WHERE ASTRACT PAYENERY IS BEING FLACED AT THE NOVEMBER 1, THE BINDER COURSE SHALL BE USED AS A SURFACE UNTIL THE FOLLOWING SPRING. AT THAT TIME, ANY IRREGULARITIES, POTHOLES OR OTHER SIGNS OF DISTRESS IN THE BINDER COURSE SHALL BE REPAIRED OR REPLACED. THE FINISHED WEARING SURFACE SHALL THEN BE APPLIED AT THE DIRECTION OF A WAWA REPRESENTATIVE.
   M) GRADUATION REQUIREMENTS:
- ASPHALT PAVING MIXTURES FOR DRIVEWAYS AND PARKING AREAS SHALL COMPLY WITH THE FOLLOWING PARTICLE SIZE DISTRIBUTION REQUIREMENTS AS APPLICABLE. GRADATION REQUIREMENTS FOR SUPERPAVE MIXES SHALL SUPERSEDE THIS TABLE:

Percent by Weight Passing

Sieve Size	Base Course	Binder Course	Wearing Surface
2"	100	-	-
1 1⁄2"	95 – 100	100	
1"	-	90 – 100	-
3/4"	60 – 100	75 – 95	-
1/2"	-	50 - 80	100
3/8"	40 – 70	45 – 75	80 - 100
#4	=	30 – 60	45 – 80
#8	15 – 40	15 – 45	30 - 60
#16	-	10 – 30	20 – 45
#30	8 – 24	8 – 24	10 – 35
#50	5 – 20	5 – 20	5 – 30
#100	4 – 10	<mark>4 – 1</mark> 0	4 – 14
#200	2 – 8	2 – 8	3 – 10












12022/DET-220205 BLUE PENINSULA - 4949 CHAMBERSBURG ROAD, HUBER HEIGHTS, OHICADDIPLOTISDP-14-15-16-17-18-DETL.DV







022\DET-220205 BLUE PENINSULA - 4949 CHAMBERSBURG ROAD, HUBER HEIGHTS, OH\CADD\PLOT\SDP-02-SI

LAND USE AND ZONING							
PARCEL ID: P70 0400	4 0017 & P70 04	004 0026					
PLANNED COMMERCIAL (	PC) & GENERAL	OFFICE (O-I)					
ROPOSED USE							
FILLING STATION	PERMITTED USE	E					
CONVENIENCE STORE	NVENIENCE STORE PERMITTED ACCESSORY USE						
ONING REQUIREMENT	REQUIRED	PROPOSED					
INIMUM LOT AREA	N/A	203,403 SF (4.67 AC)					
INIMUM LOT WIDTH	N/A	513.0 FT					
AXIMUM IMPERVIOUS COVERAGE	N/A	-					
AXIMUM BUILDING HEIGHT	N/A	-					
INIMUM FRONT YARD SETBACK	75 FT	186.8 FT					
INIMUM RIGHT-OF-WAY SETBACK	75 FT	186.8 FT					
INIMUM SIDE YARD SETBACK	N/A	161.0 FT					
INIMUM REAR YARD SETBACK	N/A	157.3 FT					
INIMUM RIGHT-OF-WAY PARKING ETBACK	25 FT	108.9 FT					
INIMUM NON-BUSINESS PARKING ETBACK	15 FT	108.9 FT					

OFF-STREET PARKING REQUIREMENTS					
CODE SECTION	REQUIRED	PROPOSED			
§ 1185.12.C.6.B	FILLING STATIONS:	53 SPACES			
	I SPACE PER 125 SF,				
	PLUS I SPACE / EMPLOYEE				
	(5,915 SF)(1/125 SF) = 47 SPACES				
	(4 EMPLOY.)(1 / EMPLOY.) = 4 SPACES				
	TOTAL: 47 + 4 = 51 SPACES				
§ 1185.03.A	PARKING DIMENSIONS:	10 FT × 20 FT,			
	10 FT x 18 FT, 25 FT AISLES	30 FT AISLES			
§ 1185.13.B.1	LOADING:	I SPACE			
	I SPACE, 10 FT x 25 FT	18 FT x 152 FT			
§ 1185.06.A	INTERIOR PARKING LANDSCAPING				
	5% OF TOTAL AREA				
	(25,141 SF)(0.05) = 1,257 SF	2,246 SF			

SIGNAGE REQUIREMENTS						
CODE SECTION	REQUIRED	PROPOSED				
§ 1189.07.B	QUANTITY:					
	I GROUND SIGN PER FRONTAGE	2 SIGNS				
	(1 SIGN)(2 FRONTAGES) = 2 SIGNS					
§ 1189.05.B.1	RIGHT-OF-WAY SETBACK:	I5 FT				
	I5 FT					
§ 1189.07.B	SIGNAGE AREA:					
Δ.	75 SF	< 75 SF				

## SYMBOL

DESCRIPTION

PROPOSED CURB & GUTTER

PROPOSED FLUSH CURB

PROPOSED FENCE

PROPOSED BUILDING

PROPOSED CONCRETE

PROPOSED RETAINING WALL

PROPOSED BUILDING DOORS

PROPOSED AREA LIGHT

PROPOSED SIGNS / BOLLARDS

PROPERTY LINE

SETBACK LINE



### <//>



GENERAL NOTES

- I. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
   ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY
- 3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
- 4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
- THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
   THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- 7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
   THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN
- ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE
- PROCUREMENT OF STREET OPENING PERMITS. 11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
- 12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC.
   BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



						23 KH RESUBMISSION FOR BASIC DEVELOPMENT PLAN REVIEW	23 KH FOR BASIC DEVELOPMENT PLAN REVIEW	23 NB FOR CLIENT REVIEW	BY DESCRIPTION
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SITE DEVELOPMENT PLANS	PPODCED CONVENIENCE							PIN: P70 04004 0017 & P70 04004 0026	CITY OF HUBER HEIGHTS MONTGOMERY COUNTY, OHIO
CHARLES D. OLIVO, P.E. OHIO LICENSE No. PE.80383 LICENSED PROFESSIONAL ENGINEER STONEFIELD engineering & design									
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WAWA

HFA

HARRISON FRENCH

& ASSOCIATES, LTD

1705 S. Walton Blvd., Suite 3 Bentonville, Arkansas 72712 www.hfa-ae.com

t 479.273.7780

Date: 06/14/23

Drawing Name: ARCHITECTURAL SITE PLAN

Proto: 42-23-61013





# T.O. ROOF TOWER 23' - 9' . . . . . . . . . . . . . . . . Wawa 16' - 0' B.O. OVERHANG 11' - 0" Welcome







**WAWA U59FB-R** 

CHAMBERSBURG ROAD & TROY PIKE CITY OF HUBER HEIGHTS, MONTGOMETY COUNTY, OH





## OTHERWISE. 2. FOR SLAB CONTROL JOINT LOCATIONS SEE SHEET "S1.01". 3. FOR EQUIPMENT LAYOUT SEE SHEET EQ1.0 4. FOR UNDERSLAB CONDUIT LOCATIONS SEE SHEETS "P1.0" & "E3.0". 5. REFER TO SHEET A9.0 - FINISH FLOOR PLAN FOR INTERIOR ELEVATION MARKERS AND SHEET A9.1, A10.0 & A10.1

- 6. REFER TO SHEET A5.0 FOR STOREFRONT ELEVATIONS AND DIMENSIONS.
- 7. PROVIDE DIAGONAL BRACING TO ALL METAL STUD SOFFITS THAT ARE SUSPENDED FROM STRUCTURE ABOVE.
- 8. AT ALL METAL STUD PARTITIONS SYSTEMS THAT EXTEND TO STRUCTURE, PROVIDE DEFLECTION TRACK WITH 19/A0.6.



- 2. FOR EQUIPMENT LAYOUT SEE SHEET EQ1.0
- 3. FOR UNDERSLAB CONDUIT LOCATIONS SEE MEP
- 4. REFER TO SHEET A1.0 FOR BLOCKING SCHEDULE, DOOR SCHEDULE, ROOM FINISH SCHEDULE, AND GENERAL NO
- 5. REFER TO SHEET A9.0 FINISH FLOOR PLAN FOR INTERIOR ELEVATION MARKERS AND SHEET A9.1, A10.0 & A10.1 ELEVATIONS.
- 6. REFER TO SHEET A5.0 FOR STOREFRONT ELEVATIONS.
- 7. PROVIDE DIAGONAL BRACING TO ALL METAL STUD SOFFITS THAT ARE SUSPENDED FROM STRUCTURE ABOVE.
- 8. AT ALL METAL STUD PARTITIONS SYSTEMS THAT EXTEND TO STRUCTURE, PROVIDE DEFLECTION TRACK WITH 2" SEE DETAIL 19/A0.6

GENERAL NOTES	
<ol> <li>EXTERIOR WALL DIMENSIONS ARE FROM FACE OF EXTERIOR STUD. INTERIOR WALL DIMENSIONS ARE FROM FACE OF STUD, UNLESS NOTED OTHERWISE.</li> </ol>	
2. FOR SLAB CONTROL JOINT LOCATIONS SEE SHEET "S1.01".	
3. FOR EQUIPMENT LAYOUT SEE SHEET EQ1.0	
<ul> <li>FOR UNDERSLAB CONDUIT LOCATIONS SEE SHEETS "P1.0" &amp; "E3.0".</li> <li>DEFEED TO SHEET AD A FINISH ELCOD DI AN FOD INTEDIOD EL DI ATTONIA AD ATTONI</li></ul>	HARRISON FRENCH
<ol> <li>REFER TO SHEET AS.0 FOR STOREFRONT ELEVATIONS AND DIMENSIONS.</li> </ol>	& ASSOCIATES, PLLC
7. PROVIDE DIAGONAL BRACING TO ALL METAL STUD SOFFITS THAT ARE SUSPENDED FROM STRUCTURE ABOVE.	t 479.273.7780
8. AT ALL METAL STUD PARTITIONS SYSTEMS THAT EXTEND TO STRUCTURE, PROVIDE DEFLECTION TRACK WITH 2" MIN. DEFLECTION SEE DETAIL 19/A0.6.	1705 S. Walton Blvd., Suite 3 Bentonville Arkapsas 72712
9. SOIL TREATMENT FOR TERMITE CONTROL SHALL BE PER SPECIFICATION SECTION 02282 SOIL TREATMENT.	www.hfa-ae.com
10. ALL WALLS BEHIND WALK- REFRIGERATORS AND FREEZERS SHALL BE 1/2" CEMENT BOARD CEMENT BOARD TO HEIGHT OF 8" ABOVE TOP OF W.I.B. FASTEN BOARDS TO STUDS @8" O.C. EA. WAY WI CEMENT BOARD FASTENERS. EMBED ALKALI-RESISTANT TAPE IN THINSET OVER JOINTS.	
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FOR UNDERSLAB CONDUIT LOCATIONS SEE MEP	8 0 424 0
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. REFER TO SHEET A5.0 FOR STOREFRONT ELEVATIONS.	
AT ALL METAL STUD PARTITIONS SYSTEMS THAT EXTEND TO STRUCTURE, PROVIDE DEFLECTION TRACK WITH 2" MIN. DEFLECTION	
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	DIMENSION
	FLOOR PLAN
	SHEET:

# Traffic Impact Study

Proposed Wawa Convenience Store with Fuel Sales Old Troy Pike & Chambersburg Road City of Huber Heights Montgomery County, Ohio

Prepared for: Blue Peninsula

Date: April 7, 2023

SE&D Job Number: DET-220205

cl. D. Chi

Charles D. Olivo, PE Principal Ohio PE License No. 803983

John R. Corak Project Manager





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#### **TECHNICAL APPENDIX**

#### LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

Table A1: Comparative Level of Service (Delay) Table

#### **TURNING MOVEMENT COUNT DATA**

Intersection of Old Troy Pike & Chambersburg Road

#### **FIGURES**

- Figure I Site Location Map
- Figure 2 2023 Existing Traffic Volumes
- Figure 3 "New" Site-Generated Traffic Volumes
- Figure 4 "Pass-By" Site-Generated Traffic Volumes
- Figure 5 Total Site-Generated Traffic Volumes
- Figure 6 2025 Opening Year No-Build Traffic Volumes
- Figure 7 2025 Opening Year Build Traffic Volumes
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- Figure 9 2045 Design Year Build Traffic Volumes

#### **HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS**

- 2023 Existing Traffic Conditions
- 2025 No-Build Traffic Conditions
- 2025 Build Traffic Conditions

#### TRAFFIC SIGNAL TIMING DIRECTIVE

Intersection of Old Troy Pike & Chambersburg Road

#### INTRODUCTION

This Traffic Impact Study was prepared to investigate the potential impacts of the proposed convenience store with fuel sales on the adjacent roadway network. The subject property is located at the northwesterly quadrant of the intersection of Old Troy Pike and Chambersburg Road in the City of Huber Heights, Montgomery County, Ohio. The site location is shown on appended **Figure I**.

The subject property is designated as Parcel ID P70-04004-0017 and P70-04004-0026. The site has approximately 248 feet of frontage along Old Troy Pike and approximately 513 feet of frontage along Chambersburg Road. The existing site is occupied by a single-family residential home. Access is presently provided via one (1) full-movement driveway along Chambersburg Road. Under the proposed development program, the existing structures would be razed and a 5,915 square-foot convenience store with eight (8) fuel pumps (16 fueling positions) would be constructed. Access is proposed via one (1) full-movement driveway along Chambersburg Road.

#### METHODOLOGY

Stonefield Engineering & Design, LLC has prepared this Traffic Impact Study in accordance with the recommended guidelines and practices outlined by the Ohio Department of Transportation (ODOT) within Chapter 9 "Traffic Impact Study (TIS)" of the State Highway Access Management Manual (SHAMM). A detailed field investigation was performed to assess the existing conditions of the adjacent roadway network. A data collection effort was completed to identify the existing traffic volumes at the study intersections to serve as a base for the traffic analyses. Capacity analysis, a procedure used to estimate the traffic-carrying ability of roadway facilities over a range of defined operating conditions, was performed using the <u>Highway Capacity Manual</u>, 6<sup>th</sup> Edition (HCM) and the Highway Capacity Software (HCS7) for all study conditions to assess the roadway operations.

For an unsignalized intersection, Level of Service (LOS) A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 80 seconds per vehicle. The Technical Appendix contains the Highway Capacity Analysis Detail Sheets for the study intersections analyzed in this assessment. The traffic signal timing utilized within the signalized analysis is based on timing directives provided by the City of Huber Heights.

#### 2023 EXISTING CONDITION

#### 2023 EXISTING ROADWAY CONDITIONS

The proposed convenience store with fuel sales is located at the northwesterly quadrant of the intersection of Old Troy Pike and Chambersburg Road in the City of Huber Heights, Montgomery County, Ohio. The subject property is designated as Parcel ID P70-04004-0017 and P70-04004-0026. The site has approximately 248 feet of frontage along Old Troy Pike and approximately 513 feet of frontage along Chambersburg Road. Land uses in the area are a mix of commercial, educational, residential, and retail uses.

Old Troy Pike (Ohio State Route 202) is classified as a Principal Arterial roadway with a general northsouth orientation and is under the jurisdiction of ODOT. Along the site frontage, the roadway provides two (2) lanes of travel in each direction, separated by a center left-turn lane, with additional lanes provided at key intersections to facilitate turning movements. The roadway has a posted speed limit of 35 mph. Curb and sidewalk are provided along both sides of the roadway, shoulders are not provided, and on-street parking is not permitted. Old Troy Pike provides north-south mobility throughout the City of Huber Heights and surrounding municipalities and provides access to Dwight D. Eisenhower Highway (Interstate-70) to the north of the site for a mix of commercial, educational, residential, and retail uses along its length.

Chambersburg Road is classified as a Minor Arterial roadway with a general east-west orientation and is under the jurisdiction of the City of Huber Heights. Along the site frontage, the roadway provides one (1) lane of travel in each direction with additional lanes provided a key intersections to facilitate turning movements. The roadway has a posted speed limit of 35 mph. Along the site frontage, curb and sidewalk are not provided along both sides of the roadway, shoulders are not provided, and on-street parking is not permitted. Chambersburg Road provides east-west mobility throughout the City of Huber Heights and provides access to Brandt Pike (Ohio State Route 201) to the east of the site for a mix of commercial, educational, residential, and retail uses along its length.

Old Troy Pike and Chambersburg Road intersect to form a four (4)-leg intersection controlled by a four (4)-phase traffic signal operating on a 140-second background cycle length. The eastbound approach of Chambersburg Road provides one (1) exclusive left-turn lane and one (1) shared through/right-turn lane and the westbound approach of Chambersburg Road provides one (1) exclusive left-turn lane, one (1) exclusive through lane, and one (1) exclusive right-turn lane. The northbound and southbound approaches of Old Troy Pike each provide one (1) exclusive left-turn lane, one (1) exclusive through lane, and one (1) shared through/right-turn lane. Crosswalks, pedestrian signals, and pedestrian ramps are provided across all legs of the intersection.

#### 2023 EXISTING TRAFFIC VOLUMES

Turning movement counts were collected during the typical weekday morning, weekday midday, and weekday evening time periods to evaluate existing traffic conditions and identify the specific hours when traffic activity on the adjacent roadways is at a maximum and could be potentially impacted by the development of the site. Turning movement counts were collected at the intersection of Old Troy Pike and Chambersburg Road. Specifically, turning movement counts were conducted on Tuesday, February 28, 2023, from 7:00 a.m. to 9:00 a.m. and from 2:00 p.m. to 7:00 p.m.

The study time periods were chosen as they are representative of the peak periods of both the adjacent roadway network and the proposed development and the arrival and dismissal times of Wayne High School and Weisenborn Junior High School. It is noted that the traffic counts were conducted while classes were in session for the Huber Heights school district. The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and the Institute of Transportation Engineers (ITE) guidelines. Based on the review of the count data the weekday morning peak hour occurred from 7:15 a.m. to 8:15 a.m.; the school dismissal peak hour occurred from 2:45 p.m. to 3:45 p.m., and the weekday evening peak hour occurred from 5:00 p.m. to 6:00 p.m. The Technical Appendix contains a summary of the turning movement count data. The 2023 Existing weekday morning, school dismissal, and weekday evening peak hour volumes are summarized on appended **Figure 2**.

#### 2023 EXISTING LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the 2023 Existing Condition during the weekday morning, school dismissal, and the weekday evening peak hours at the study intersections. Under the existing condition, the signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate at overall Level of Service C during the weekday morning, school dismissal, and weekday evening peak hours.

#### **TRIP GENERATION**

#### TRIP GENERATION CALCULATIONS

Trip generation projections for the proposed convenience store with fuel sales were prepared utilizing ITE's <u>Trip Generation Manual</u>, II<sup>th</sup> Edition. Trip generation rates associated with Land Use 945 "Convenience Store/Gas Station" were cited for the proposed 5,915-square-foot convenience store with fuel sales. It is noted that the ITE does not provide trip generation data during the school dismissal peak hour. As such, the weekday evening peak hour trip generation rates were utilized for the school dismissal peak hour.

3

**Table I** provides the weekday morning, school dismissal, and weekday evening trip generation volumes associated with the proposed development.

	Weekday Morning Peak Hour			School Dismissal Peak Hour			Weekday Evening Peak Hour		
Land Use	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
5,915 SF Convenience Store/Gas Station ITE Land Use 945	270	271	541	234	233	467	234	233	467

As stated within Chapter 10 of ITE's <u>Trip Generation Handbook</u>, 3<sup>rd</sup> Edition, there are instances when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. Convenience stores and gas stations are specifically located on or adjacent to busy streets to attract motorists already on the roadway. Therefore, the proposed convenience store with fuel sales development would be expected to attract a portion of its trips from the traffic passing the site on the way from an origin to an ultimate destination. These trips do not add new traffic to the adjacent roadway system and are referred to as pass-by trips.

Based upon the published ITE data for Land Use 945 "Convenience Store/Gas Station," 76% of the sitegenerated traffic during the weekday morning peak hour and 75% of the site-generated traffic during the weekday evening peak hour is comprised of pass-by traffic. It is noted that the ITE does not publish pass-by rates during the school dismissal peak hour. As such, the weekday evening peak hour pass-by rates were utilized for the school dismissal peak hour. **Table 2** shows the additional site generated traffic for the proposed development in terms of newly generated traffic and pass-by traffic.

	Wee P	kday Mo 'eak Hou	rning Ir	School Dismissal Peak Hour			Weekday Evening Peak Hour			
Тгір Туре	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
"New" Trips	64	65	129	59	58	117	59	58	117	
"Pass-By" Trips	206	206	412	175	175	350	175	175	350	
Total	270	271	541	234	233	467	234	233	467	

TABLE 2 – PROPOSED TRIP GENERATION – NEW & PASS-BY TRIPS

At the site driveways, the calculated number of pass-by trips is shown as a negative number at the through movement as the vehicles are temporarily diverted from the through travel stream into and out of the site access point.

#### TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by the proposed development were distributed according to the existing travel pattern along the adjacent roadways, the location of nearby gas stations and convenience stores, and the access management plan of the site. The "New" Site-Generated Traffic Volumes are illustrated on **Figure 3** and the "Pass-By" Site-Generated Traffic Volumes expected to access the site are depicted on **Figure 4**. The Total Site-Generated Traffic Volumes are summarized on appended **Figure 5**.

#### **OPENING YEAR TRAFFIC CONDITIONS**

#### 2025 OPENING YEAR NO-BUILD TRAFFIC VOLUMES

The 2023 Existing Condition traffic volume data was grown to a future horizon year of 2025, which is a conservative estimate for when the proposed convenience store with fuel sales is expected to be fully constructed. To calculate the annual background growth rate, census data published by the United States Census Bureau from 2010 and 2020 was analyzed. Based on the census data analyzed, the United States Census Bureau forecasts a 1.30% annual population increase between 2010 and 2020. As such, the existing traffic volumes at the study intersections were increased by 1.30% annually for two (2) years.

The background growth rate was applied to the 2023 Existing Traffic Volumes to calculate the 2025 Opening Year No-Build Traffic Volumes for the weekday morning, school dismissal, and weekday evening peak hours. These volumes are summarized on appended **Figure 6**.

#### 2025 OPENING YEAR NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Opening Year No-Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours at the study intersections. The signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate generally consistent with the findings of the Existing Condition during the weekday morning, school dismissal, and the weekday evening peak hours.

#### 2025 OPENING YEAR BUILD TRAFFIC VOLUMES

The site-generated trips were added to the 2025 Opening Year No-Build Traffic Volumes to calculate the 2025 Opening Year Build Traffic Volumes and are shown on appended **Figure 7**.

#### 2025 OPENING YEAR BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2025 Opening Year Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours at the study intersections and proposed site driveways. Appended **Table AI** compares the Existing, No-Build, and Build Conditions Level of Service and delay values.

The signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate generally consistent with the findings of the Opening Year No-Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours peak hours. The turning movements at the site driveway along Old Troy Pike are calculated to operate at Level of Service C or better during the weekday morning, school dismissal, and the weekday evening peak hours. The turning movements at the site driveway along Chambersburg Road are calculated to operate at Level of Service B or better during the weekday morning, school dismissal, and the weekday evening peak hours.

#### **DESIGN YEAR TRAFFIC CONDITIONS**

#### 2045 DESIGN YEAR NO-BUILD TRAFFIC VOLUMES

The 2023 Existing Condition traffic volume data was grown to a future horizon year of 2045, which is the design year of the proposed convenience store with fuel sales. To calculate the annual background growth rate, census data published by the United States Census Bureau from 2010 and 2020 was analyzed. Based on the census data analyzed, the United States Census Bureau forecasts a 1.30% annual population increase between 2010 and 2020. As such, the existing traffic volumes at the study intersections were increased by 1.30% annually for 22 years.

The background growth rate was applied to the 2023 Existing Traffic Volumes to calculate the 2045 Design Year No-Build Traffic Volumes for the weekday morning, school dismissal, and weekday evening peak hours. These volumes are summarized on appended **Figure 8**.

Based on consultations with the City of Huber Heights and Choice One Engineering, it is proposed to construct a two-way left-turn lane along the Chambersburg Road site frontage. It is noted that the Chambersburg Road improvements are in preliminary planning phase and will not be constructed within the next two (2) years. As such, the Chambersburg Road improvements were only included within the Design Year analysis and not the Opening Year analysis.

#### 2045 DESIGN YEAR NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2045 Design Year No-Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours at the study intersections. The signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate generally consistent with the findings of the Existing Condition during the weekday morning, school dismissal, and weekday evening peak hours.

#### 2045 DESIGN YEAR BUILD TRAFFIC VOLUMES

The site-generated trips were added to the 2045 Design Year No-Build Traffic Volumes to calculate the 2045 Design Year Build Traffic Volumes and are shown on appended **Figure 9**.

#### 2045 DESIGN YEAR BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2045 Design Year Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours at the study intersections and proposed site driveways.

The signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate generally consistent with the findings of the Design Year No-Build Condition during the weekday morning, school dismissal, and the weekday evening peak hours. The turning movements at the site driveway along Old Troy Pike are calculated to operate at Level of Service E or better during the weekday morning and weekday evening peak hours and at Level of Service D or better during the school dismissal peak hour. The turning movements at the site driveway along Chambersburg Road are calculated to operate at Level of Service B or better during the weekday morning, school dismissal, and the weekday evening peak hours.

#### **BUILD CONDITION DEGRADATION**

A capacity analysis was conducted to evaluate the degradation at the signalized and unsignalized intersections utilizing the <u>ODOT Analysis and Traffic Simulation Manual</u> (OATS), Section 5.9 – Operational Goals of Mainline and Intersections. Based on the criteria set forth within the OATS, signalized intersections are to operate at overall Level of Service D or better. Based on the capacity analysis conducted, the signalized intersection of Old Troy Pike and Chambersburg Road is calculated to operate at overall Level of Service D or better during each of the peak hours studied in both the 2025 Opening Year Build Condition and the 2045 Design Year Build Condition.

Additionally, the OATS requires each individual approach at signalized and unsignalized intersections to operate at Level of Service E or better. The turning movements at the signalized intersection of Old Troy Pike and Chambersburg Road are calculated to operate at Level of Service E or better during each of the peak hours studied in both the 2025 Opening Year Build Condition and the 2045 Design Year Build Condition. The turning movements at the site driveways along Old Troy Pike and Chambersburg Road are

calculated to operate at Level of Service E or better during each of the peak hours studied in both the 2025 Opening Year Build Condition and the 2045 Design Year Build Condition.

Finally, the OATS requires a V/C ratio under 1.0 with a preferred V/C ratio under 0.93. Based on the analysis conducted that turning movements at the signalized intersection of Old Troy Pike and Chambersburg Road and as well as the site driveways along Old Troy Pike and Chambersburg Road are calculated to have V/C ratios under 0.93 during each of the peak hours studied in both the 2025 Opening Year Build Condition and the 2045 Design Year Build Condition. As such, the proposed development would meet the operational goals of mainlines and intersections as described within the OATS.

#### SITE CIRCULATION & ACCESS

A review was conducted of the proposed convenience store with fuel sales using the Site Plan prepared by our office, dated April 4, 2023. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Under the proposed development plan, a 5,915-square-foot convenience store would be constructed in the center of the site. The fueling area with eight (8) fueling pumps (16 fueling positions) would be located to the east of the proposed convenience store. Access is proposed via one (1) full-movement driveway along Old Troy Pike and one (1) full-movement driveway along Chambersburg Road. Right-angle parking spaces would be located along the northerly, southerly, and easterly sides of the building and on the northern and southern portions of the site. Two-way vehicular circulation throughout the site would be facilitated via a minimum 30-foot-wide drive aisles. A trash enclosure would be located on the northwesterly portion of the property.

#### CONCLUSIONS

This report was prepared to examine the potential traffic impact of the proposed convenience store with fuel sales. The analysis findings, which have been based on industry-standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. The site-generated trips of the proposed development would consist largely of "pass-by" trips, as opposed to new vehicles on the roadway, due to the land use, location, and the access management plan. The intersection delays throughout the roadway network would operate at generally consistent Level of Service as the No-Build Conditions in both the opening year and the design year. The Levels of Service, delay, and V/C ratios would be compliant with the requirements set forth within the OATS. The site driveways and on-site layout have been designed to provide effective access to and from the subject property.

Z:\Michigan\DET\2022\DET-220205 Blue Peninsula - 4949 Chambersburg Road, Huber Heights, OH\Calculations & Reports\Traffic\Reports\2023-04 Traffic Impact Study\2023-04 Traffic Impact Study.

#### **TECHNICAL APPENDIX**

#### LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA & COMPARISON TABLES

#### LEVEL OF SERVICE /AVERAGE CONTROL DELAY CRITERIA

The ability of a roadway to effectively accommodate traffic demand is determined through an assessment of the volume-to-capacity ratio, delay and Level of Service of the lane group and/or intersection. The volume-to-capacity ratio is the ratio of traffic flow rate to capacity for a given transportation facility. As defined within the <u>Highway Capacity Manual</u>, 6<sup>th</sup> Edition (HCM), intersection delay is the total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility. Level of service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

For an unsignalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle and LOS F denotes operations with delay in excess of 80 seconds per vehicle.

Level Of Service (LOS)	Signalized Delay Range (average control delay in sec/veh)	Unsignalized Delay Range (average control delay in sec/veh)
A	<=10	<=10
В	>10 and <=20	>10 and <=15
С	>20 and <=35	>15 and <=25
D	>35 and <=55	>25 and <=35
E	>55 and <=80	>35 and <=50
F	>80	>50

Source: Highway Capacity Manual, 6<sup>th</sup> Edition

## STONEFIELD

#### Table A1: Comparative Level of Service (Delay) Table

City of Huber Heights, Montgomery County, Ohio

X (n) = Level of Service (seconds of delay)

		I						
		Weekday Morning Peak Hour						
		2023 Existing	2025 No-Build	2025 Build	2045 No-Build	2045 Build		
Intersection	Lane Group	Condition	Condition	Condition	Condition	Condition		
	EB Left	D (54.8)	D (54.5)	D (52.3)	D (51.6)	D (49.6)		
	EB Through/Right	E (66.3)	E (66.2)	E (65.0)	E (64.5)	E (63.3)		
	WB Left	D (52.6)	D (52.1)	D (50.5)	D (51.9)	D (50.5)		
	WB Through	E (57.6)	E (57.2)	E (55.3)	D (53.8)	D (51.9)		
	WB Right	E (58.8)	E (58.4)	E (56.0)	E (55.2)	D (52.8)		
Old Troy Pike (N/S) & Chambersburg Road	NB Left	A (6.6)	A (8.9)	A (9.9)	B (12.6)	B (14.0)		
Old Troy Pike (N/S) & Chambersburg Road (E/W)	NB Through	B (12.7)	B (13.1)	B (14.4)	B (17.6)	B (19.4)		
	NB Through/Right	B (12.8)	B (13.1)	B (14.5)	B (17.7)	B (19.5)		
	SB Left	A (8.4)	A (8.7)	A (9.6)	B (12.3)	B (13.6)		
	SB Through	B (12.9)	B (13.4)	B (14.8)	B (18.8)	C (20.6)		
	SB Through/Right	B (13.0)	B (13.4)	B (14.9)	B (18.9)	C (20.7)		
	Overall	C (23.3)	C (23.5)	C (24.5)	C (26.7)	C (27.9)		
Old They Bike (N/S) & Site Driveway (E)	EB Left/Right			C (24.2)		E (42.7)		
Old Troy Fike (IN/S) & Site Driveway (E)	NB Left			B (10.6)		B (12.4)		
Chambanahung Baad (E/M/) & Site Driveryay (S)	EB Left/Through			A (7.8)		A (8.0)		
Chambersburg Road (E/VV) & Site Driveway (S)	SB Left/Right			B (11.9)		B (12.0)		

		School Dismissal Peak Hour						
Intersection	Lane Group	2023 Existing Condition	2025 No-Build Condition	2025 Build Condition	2045 No-Build Condition	2045 Build Condition		
	EB Left	D (47.8)	D (47.4)	D (47.4)	D (42.5)	D (42.6)		
Old Troy Pike (N/S) & Chambersburg Road (E/W)	EB Through/Right	E (58.7)	E (58.4)	E (60.1)	E (56.9)	E (61.3)		
	WB Left	D (48.2)	D (47.8)	D (48.2)	D (43.8)	D (45.2)		
	WB Through	D (54.3)	D (53.9)	D (54.2)	D (49.9)	D (50.1)		
	WB Right	E (62.1)	E (62.2)	E (62.0)	E (71.2)	E (71.0)		
	NB Left	B (10.2)	B (10.5)	B (10.5)	B (15.0)	B (15.2)		
	NB Through	B (16.1)	B (16.6)	B (16.8)	C (25.3)	C (25.6)		
	NB Through/Right	B (16.1)	B (16.6)	B (16.8)	C (25.4)	C (25.8)		
	SB Left	B (11.0)	B (11.4)	B (11.6)	B (18.3)	B (18.7)		
	SB Through	B (14.5)	B (14.9)	B (15.2)	C (21.0)	C (21.2)		
	SB Through/Right	B (14.5)	B (15.0)	B (15.2)	C (21.0)	C (21.3)		
	Overall	C (27.5)	C (27.7)	C (28.2)	C (33.0)	C (33.7)		
	EB Left/Right			C (19.4)		D (27.8)		
Old Troy Pike (IN/S) & Site Driveway (E)	NB Left			A (9.9)		B (11.1)		
Chambourg Bood (EAA() & Site Driveway (S)	EB Left/Through			A (7.8)		A (8.0)		
Chambersburg Road (E/W) & Site Driveway (3)	SB Left/Right			B (12.4)		B (12.3)		

			Week	day Evening Peal	( Hour	
		2023 Existing	2025 No-Build	2025 Build	2045 No-Build	2045 Build
Intersection	Lane Group	Condition	Condition	Condition	Condition	Condition
	EB Left	D (46.9)	D (46.4)	D (46.4)	D (41.6)	D (41.6)
	EB Through/Right	E (56.4)	E (56.0)	E (57.1)	D (52.6)	D (54.7)
	WB Left	D (46.9)	D (46.4)	D (46.7)	D (41.8)	D (42.6)
	WB Through	D (54.9)	D (54.5)	D (54.8)	D (50.6)	D (50.9)
	WB Right	E (63.1)	E (64.2)	E (64.0)	E (73.4)	E (73.2)
Old Troy Pike (N/S) & Chambersburg Road	NB Left	B (11.1)	B (11.5)	B (11.6)	B (17.0)	B (17.1)
(E/W)	NB Through	B (17.6)	B (18.4)	B (18.6)	C (29.3)	C (29.7)
	NB Through/Right	B (17.6)	B (18.4)	B (18.6)	C (29.5)	C (29.9)
	SB Left	B (12.3)	B (12.9)	B (13.1)	C (23.1)	C (23.9)
	SB Through	B (15.7)	B (16.3)	B (16.6)	C (23.5)	C (23.8)
	SB Through/Right	B (15.8)	B (16.4)	B (16.6)	C (23.5)	C (23.8)
	Overall	C (27.5)	C (28.0)	C (28.4)	C (34.5)	C (35.0)
Old Trey Bike (N/S) & Site Driveway (E)	EB Left/Right			C (22.8)		E (36.9)
Old Troy Fike (IV/S) & Sile Driveway (E)	NB Left			B (10.5)		B (12.2)
Chambourne Bood (EVAV) & Site Driveway (S)	EB Left/Through			A (7.9)		A (8.1)
Chambersburg Road (E/W) & Site Driveway (S)	SB Left/Right			B (12.6)		B (12.6)

#### TURNING MOVEMENT COUNT DATA

## **Stonefield Engineering & Design, LLC**

607 Shelby Street, Suite 200, Detroit, MI 48226 248.247.1115 t. 201.340.4472 f.

Intersection of Old Troy Pike and Chambersburg Rd Huber Heights, OH Tuesday, February 28, 2023

File Name : DET-220205.01 Site Code : 220205 Start Date : 2/28/2023 Page No : I

	Groups Printed- Auto - HV - B/SB																							
		Cham	bersb	urg Ro	b		Cham	bersb	urg R	d	Old Troy Pike						Old Troy Pike							
		Ea	astbou	nd		Westbound						Northbound						Southbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total			
07:00 AM	8	16	15	0	39	14	10	5	0	29	4	57	9	0	70	25	109	9	0	143	281			
07:15 AM	8	13	13	0	34	31	11	12	0	54	17	99	25	0	141	21	183	11	0	215	444			
07:30 AM	10	20	13	0	43	35	29	29	0	93	7	137	34	0	178	53	166	12	0	231	545			
07:45 AM		15	5	0	31	10	18	19	0	47	5	117	13	0	135	18	134	21	0	173	386			
Total	37	64	46	0	147	90	68	65	0	223	33	410	81	0	524	117	592	53	0	762	1656			
08:00 AM	19	12	5	0	36	23	21	21	0	65	8	72	22	0	102	16	94	13	0	123	326			
08:15 AM	8	26	5	0	39	20	13	26	0	59	5	97	21	0	123	20	109	9	0	138	359			
08:30 AM	14	21	7	0	42	17	25	33	0	75	4	103	12	0	119	18	113	П	0	142	378			
08:45 AM	23	17	8	0	48	19	14	21	0	54	6	106	19	0	131	17	116	14	0	147	380			
Total	64	76	25	0	165	79	73	101	0	253	23	378	74	0	475	71	432	47	0	550	1443			
*** BREAK **	*																							
02:00 PM	13	25	9	0	47	31	24	34	0	89	8	86	19	0	113	34	127	23	0	184	433			
02:15 PM	12	19	6	0	37	24	18	46	0	88	5	138	28	0	171	35	150	9	0	194	490			
02:30 PM	15	29	5	0	49	22	25	32	0	79	9	147	29	0	185	34	124	12	0	170	483			
02:45 PM	18	36	8	0	62	33	31	36	0	100	13	130	34	0	177	44	130	20	0	194	533			
Total	58	109	28	0	195	110	98	148	0	356	35	501	110	0	646	147	531	64	0	742	1939			
					- 1																			
03:00 PM	20	21	6	0	47	17	20	45	0	82	4	161	28	0	203	27	138	17	0	182	514			
03:15 PM	25	42	9	0	/6	19	39	59	0	117	8	159	33	0	200	43	134	13	0	190	583			
03:30 PM	17	54	9	0	80	21	26	60	0	107		153	25	0	189	37	139		0	187	563			
03:45 PM	3/	33	8	0	/8	34	34	54	0	122	10	170	39	0	219	50	145	26	0	221	640			
l otal	99	150	32	0	281	91	119	218	0	428	43	643	125	0	811	157	556	6/	0	/80	2300			
04:00 PM	23	43	6	0	72	35	28	49	0	112	3	170	36	0	209	43	154	24	0	221	614			
04:15 PM	37	27	6	0	70	34	33	45	0	112	6	188	30	0	224	40	169	15	0	224	630			
04:30 PM	26	36	8	0	70	33	45	48	0	126	9	163	31	0	203	30	171	26	0	227	626			
04:45 PM	20	42	7	0	69	24	28	32	0	84	8	183	26	0	217	43	177	30	0	250	620			
Total	106	148	27	0	281	126	134	174	0	434	26	704	123	0	853	156	671	95	0	922	2490			
05.00 DM	20	40	,	0	77	24	22	гo	0		0	170	22	0	210	20	175	24	0	227	(20			
	20	42	0 2	0	70	20	20	27	0	110	0	1/0	3Z 24	0	210	20	105	24	0	227	637			
05.13 FM	10	דד גר	7	0	()	22	40	ر <del>ب</del> دع	0	103	12	100	24	0	232	12	155	20	0	230	630			
	17	34	/	0	60	27	40 25	23	0	120		190	30	0	237	43	101	20	0	210	(2)			
	101	1/0	22	0	272	102	146	212	0	118	42	720	20	0	206	45	101	04	0	242	020			
TOLAT	101	147	23	0	275	103	140	212	0	101	42	/37	112	0	073	101	034	00	0	721	2340			
06:00 PM	16	26	8	0	50	26	30	35	0	91	8	147	32	0	187	36	158	26	0	220	548			
06:15 PM	27	38	4	0	69	23	29	48	0	100	7	121	19	0	147	43	129	6	0	178	494			
06:30 PM	18	23	4	0	45	16	22	35	0	73	4	140	18	0	162	32	171	19	0	222	502			
06:45 PM	13	22	4	0	39	20	27	33	0	80	4	104	26	0	134	29	127	13	0	169	422			
Total	74	109	20	0	203	85	108	151	0	344	23	512	95	0	630	140	585	64	0	789	1966			
Crond Tatal	E 20	005	201	0	IFAE	601	744	10/0	~	2400	225	2007	720	^	4022	0/0	4021	171	0	E.4.4	רגנגו			
	240	805	201	0	1545	084	746	1069	0	2499	225	388/	720	0	4832	767	4021	4/6	0	5466	14342			
Appren %	34.9	52.I	15	0	10.0	27.4	27.7	42.8 7 5	0	174	4./	ö∪.4	14.7 F	0	ד רכ	1/./	/ 3.6	٥./ م	0	201				
I OTAI %	3.8 500	5.6 707	1.4	0	10.8	4.8	5.Z	7.5	0	17.4	1.6	2700	200	0	55./	0.0	2020	5.5	0	38.1	14005			
% Auto	920	90	17/ QQ	0	925	95 4	737 99 I	98 3	0	∠ <del>1111</del> 97 Ω	020	97 5	95 L	0	1007 70	727 98 5	9770	יסדי 92 ו	0	979	97 7			
/o Aut0	/ /0	//	/0	0	/0.5	/5.0	//.1	/0.5	0	0.11	/ / J.O	//.J	/0.0	0	//	/0.0	//./	20.1	0	//./	//./			

## **Stonefield Engineering & Design, LLC**

607 Shelby Street, Suite 200, Detroit, MI 48226 248.247.1115 t. 201.340.4472 f.

Intersection of Old Troy Pike and Chambersburg Rd Huber Heights, OH Tuesday, February 28, 2023 File Name : DET-220205.01 Site Code : 220205 Start Date : 2/28/2023 Page No : 2

	Groups Printed- Auto - HV - B/SB																				
		bersb	d		nbersb	d		Old	Troy												
		Ea	astbou	nd		Westbound						No	orthbo	und							
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
HV	11	8	4	0	23	30	7	18	0	55	14	99	32	0	145	12	93	9	0	114	337
% HV	2	I	2	0	1.5	4.4	0.9	1.7	0	2.2	6.2	2.5	4.4	0	3	1.2	2.3	1.9	0	2.1	2.3
B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		I	Chambersburg Rd						Old	l Troy	Pike										
		Ea	astbou	nd		Westbound						No	orthbo	und							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak I of I																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	8	13	13	0	34	31	11	12	0	54	17	99	25	0	141	21	183	11	0	215	444
07:30 AM	10	20	13	0	43	35	29	29	0	93	7	137	34	0	178	53	166	12	0	231	545
07:45 AM	11	15	5	0	31	10	18	19	0	47	5	117	13	0	135	18	134	21	0	173	386
08:00 AM	19	12	5	0	36	23	21	21	0	65	8	72	22	0	102	16	94	13	0	123	326
Total Volume	48	60	36	0	144	99	79	81	0	259	37	425	94	0	556	108	577	57	0	742	1701
% App. Total	33.3	41.7	25	0		38.2	30.5	31.3	0		6.7	76.4	16.9	0		14.6	77.8	7.7	0		
PHF	.632	.750	.692	.000	.837	.707	.681	.698	.000	.696	.544	.776	.691	.000	.781	.509	.788	.679	.000	.803	.780
Auto	48	59	34	0	4	92	76	75	0	243	35	414	85	0	534	106	556	56	0	718	1636
% Auto	100	98.3	94.4	0	97.9	92.9	96.2	92.6	0	93.8	94.6	97.4	90.4	0	96.0	98. I	96.4	98.2	0	96.8	96.2
HV	0	I.	2	0	3	7	3	6	0	16	2	11	9	0	22	2	21	I	0	24	65
% HV	0	1.7	5.6	0	2.1	7.1	3.8	7.4	0	6.2	5.4	2.6	9.6	0	4.0	1.9	3.6	1.8	0	3.2	3.8
B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour for	Entino	Intorno	etion D		- 02.4E I	I Car I M															
		interse		egins a	L UZ:45 I	- I'I 	21	27	0	100	12	120	24	0	177	4.4	120	20	0	104	522
02:45 PM	20	סנ ור	0	0	62	33	20	30	0	100	13	130	24	0	202	- <del>11</del> 27	130	20	0	174	535
	20	21	6	0	4/	1/	20	45	0	82	14	161	28	0	203	27	138	17	0	182	514
03:15 PM	25	42	9	0	76	19	39	59	0	117	8	159	33	0	200	43	134	13	0	190	583
03:30 PM	1/	54	9	0	80	21	26	60	0	107		153	25	0	189	3/	139		0	187	563
I otal Volume	08	153	32	0	265	90	116	200	0	406	46	603	120	0	769	151	541	61	0	/53	2193
% App. Total	30.2	57.7	12.1	0		22.2	28.6	49.3	0		6	/8.4	15.6	0	0.17	20.1	/1.8	8.1	0		
PHF	.800	./08	.889	.000	.828	.682	./44	.833	.000	.868	.821	.936	.882	.000	.947	.858	.9/3	./63	.000	.970	.940
Auto	78	151	32	0	261	8/	115	198	0	400	42	5/8	115	0	/35	14/	527	59	0	/33	2129
% Auto	97.5	98.7	100	0	98.5	96.7	99.1	99.0	0	98.5	91.3	95.9	95.8	0	95.6	97.4	97.4	96.7	0	97.3	97.1
HV	2	2	0	0	4	3	1	2	0	6	4	25	5	0	34	4	14	2	0	20	64
% HV	2.5	1.3	0	0	1.5	3.3	0.9	1.0	0	1.5	8.7	4.1	4.2	0	4.4	2.6	2.6	3.3	0	2.7	2.9
B/SB	0	U	U	U	0		0	0	U	0	0	0	0	0	0	0	0	0	U	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## **Stonefield Engineering & Design, LLC**

607 Shelby Street, Suite 200, Detroit, MI 48226 248.247.1115 t. 201.340.4472 f.

Intersection of Old Troy Pike and Chambersburg Rd Huber Heights, OH Tuesday, February 28, 2023 File Name : DET-220205.01 Site Code : 220205 Start Date : 2/28/2023 Page No : 3

		Cham	bersb	urg R	d	Chambersburg Rd						Old	Troy	Pike							
		E	astbou	nd		Westbound						No									
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak I of I																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	28	42	6	0	76	26	33	59	0	118	8	178	32	0	218	38	165	24	0	227	639
05:15 PM	31	44	2	0	77	22	38	45	0	105	12	196	24	0	232	55	155	26	0	236	650
05:30 PM	19	34	7	0	60	27	40	53	0	120	11	190	36	0	237	43	153	20	0	216	633
05:45 PM	23	29	8	0	60	28	35	55	0	118	11	175	20	0	206	45	181	16	0	242	626
Total Volume	101	149	23	0	273	103	146	212	0	461	42	739	112	0	893	181	654	86	0	921	2548
% App. Total	37	54.6	8.4	0		22.3	31.7	46	0		4.7	82.8	12.5	0		19.7	71	9.3	0		
PHF	.815	.847	.719	.000	.886	.920	.913	.898	.000	.960	.875	.943	.778	.000	.942	.823	.903	.827	.000	.951	.980
Auto	100	148	22	0	270	102	146	210	0	458	41	730	110	0	881	180	648	86	0	914	2523
% Auto	99.0	99.3	95.7	0	98.9	99.0	100	99.1	0	99.3	97.6	98.8	98.2	0	98.7	99.4	99.I	100	0	99.2	99.0
HV	I	1	I	0	3	I	0	2	0	3	I	9	2	0	12	I.	6	0	0	7	25
% HV	1.0	0.7	4.3	0	1.1	1.0	0	0.9	0	0.7	2.4	1.2	1.8	0	1.3	0.6	0.9	0	0	0.8	1.0
B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**FIGURES** 


















# CAPACITY ANALYSIS DETAIL SHEETS

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O an and hafe muchies								leste an e	- <b>(</b>	e	4!	L R		N.L.
	0540							Interse		torma	tion		₄∔Ļ	
Agency	SE&D			·				Duratio	n, n	0.2	50			R.
Analyst	NK		Analys	sis Date	Apr 6	, 2023		Area I	/pe	Oth	er	×		K
Jurisdiction	Huber Heights, Ohi	C	Time F	Period	Week Peak	day Moi Hour	rning	PHF		0.7	8	1 4 MM	w‡e s	
Urban Street	Old Troy Pike		Analys	sis Year	2023 Cond	Existing tion		Analys	s Perioo	1>	7:15	Π,	<u> </u>	
Intersection	Chambersburg Roa	d	File Na	ame	2023	Existing	.xus						.,	
Project Description	Proposed Wawa w/	Fuel Sa	ales									1		
· ·														
Demand Information				EB			W	'B		N	В		SB	
Approach Movement			L	Т	R	L			L		R	L	Т	R
Demand ( v ), veh/h			48	60	36	99	7	9 8'	37	42	25 94	108	577	57
			<b></b>	<u> </u>			_							1
Signal Information		2		6	215	- 1245a	L		¥	E.	L L	sta		
Cycle, s 140.0	Reference Phase	2		5		51	7	2	ľ₿	E	1		3	
Offset, s 0	Reference Point	End	Green	6.7	1.2	87.5	6.4	4.9	) 12	.3				5
Uncoordinated No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	) 4.			▶ _		Y
Force Mode Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	)  1.(	)	5	6	7	8
The Dec Ke			EDI	_	EDT			MDT			NDT	0.00		ODT
Timer Results			EBL		EBI	WB	<u> </u>	WBI	N	SL	NBI	SB	-	SBI
Assigned Phase			/		4	3	$\rightarrow$	8	<u></u>	_	2	1		6
Case Number			1.1		4.0	1.1	$\rightarrow$	3.0	1.	1	4.0	1.1		4.0
Phase Duration, s		11.8	;	17.4	16.6	3	22.2	12	.1	92.6	13.4	1	93.9	
Change Period, (Y+R	nge Period, ( Y+ <i>R c</i> ), s Allow Headway ( <i>MAH</i> ), s				5.1	5.4	$\rightarrow$	5.1	5.	4	5.1	5.4	_	5.1
Max Allow Headway ( I	ax Allow Headway ( <i>MAH</i> ), s				3.2	3.1	$\rightarrow$	3.2	3.	1	0.0	3.1	_	0.0
Queue Clearance Time	( <b>g</b> s ), s		6.3		11.7	11.2	2	11.0	3.	3		5.7		
Green Extension Time	(g e), s		0.0		0.6	0.1	$\rightarrow$	0.6	0.	1	0.0	0.2		0.0
Phase Call Probability			0.91		1.00	0.99	)	1.00	0.8	84		1.00	)	
Max Out Probability			0.15	5	0.00	0.06	5	0.00	0.0	00		0.00	)	
Movement Group Res	ults			EB			WE	3		NE	3		SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Movement			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate ( v	), veh/h		62	123		127	101	104	47	342	2 323	138	413	400
Adjusted Saturation Flo	ow Rate ( <i>s</i> ), veh/h/l	n	1810	1752		1711	184	1 1522	2 1739	185	6 1739	1781	1841	1782
Queue Service Time ( g	g s ), S		4.3	9.7		9.2	7.2	9.0	1.3	11.9	9 12.0	3.7	14.8	14.8
Cycle Queue Clearance	e Time ( <i>g c</i> ), s		4.3	9.7		9.2	7.2	9.0	1.3	11.9	9 12.0	3.7	14.8	14.8
Green Ratio ( g/C )			0.13	0.09		0.18	0.1	2 0.12	0.67	0.6	3 0.63	0.68	0.63	0.63
Capacity ( c ), veh/h			209	154		211	225	5 186	472	116	0 1087	569	1167	1130
Volume-to-Capacity Ra	tio(X)		0.295	0.802		0.600	0.45	0 0.55	3 0.10 <sup>-</sup>	0.29	5 0.297	0.243	0.354	0.354
Back of Queue (Q), f	/In ( 95 th percentile	)												
Back of Queue (Q), ve	eh/In ( 95 th percenti	le)	3.5	7.9		7.2	6.0	6.3	0.8	8.7	8.3	2.5	10.3	10.0
Queue Storage Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00
Uniform Delay ( <i>d</i> 1), s	/veh		54.5	62.7		51.6	57.	1 57.9	8.6	12.	1 12.1	8.3	12.1	12.1
Incremental Delay ( d 2	remental Delay ( <i>d</i> <sub>2</sub> ), s/veh					1.0	0.5	1.0	0.0	0.6	0.7	0.1	0.8	0.9
Initial Queue Delay ( d		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay ( d ), s/ve	eh		54.8	66.3		52.6	57.	58.8	8.6	12.	7 12.8	8.4	12.9	13.0
Level of Service (LOS)			D	E		D	E	E	Α	В	В	Α	В	В
Approach Delay, s/veh	/LOS		62.5	5	Е	56.1	1	Е	12	.5	В	12.3	3	В
Intersection Delay, s/ve				23	3.3						С			
Multimodal Results		EB			WE	3		NE	3		SB			
Pedestrian LOS Score	edestrian LOS Score / LOS			2	В	2.32	2	В	2.0	8	В	1.89	)	В
Bicycle LOS Score / LO	edestrian LOS Score / LOS cycle LOS Score / LOS				А	1.04	1	Α	1.(	8	А	1.27	7	А

		пос	Sigi	lalize		500		esu	115 0	Sun	inary					
<b>a</b>																. T
General Inform	nation								Inte	ersect	ion Infe	ormatio	on			* ' <u>*</u>
Agency		SE&D							Dura	ation,	h	0.250				×.
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area	а Тур	e	Other	-	×		
Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Scho Peak	ol Dismi: Hour	ssal	PHF	=		0.94		4 4 4	₩ <del>]</del> E 8	+ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2023 Cond	Existing tion		Ana	lysis	Period	1> 2:4	45		<u>ነ</u> ተኑ	
Intersection		Chambersburg Roa	d	File Na	ame	2023	Existing	.xus						1 "		~ [
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales										1		
, , ,																
Demand Inform	nation				EB			V	∕B			NB			SB	
Approach Move	ement			L	Т	R	L		Т	R	L	Т	R	L	Т	R
Demand ( v ), v	/eh/h			80	153	32	90	1	16	200	46	603	120	151	541	61
				-						-						
Signal Informa	ation				6	215	- NA	2	, _			Ę (		-+-		_
Cycle, s	140.0	Reference Phase	2		5		51	7 T	1	'	ΤŔ.	e 1		$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	6.8	1.2	82.4	7.	4	0.8	20.5	;				<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.	2	0.0	4.1	_ '	く IA		╱	7
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.	2	0.0	1.0		5	6	7	8
																_
Timer Results				EBL	-	EBT	WB		WE	3T	NBL	-	NBT	SBI	-	SBT
Assigned Phase	е			7		4	3	$\rightarrow$	8		5		2	1		6
Case Number				1.1		4.0	1.1		3.0	0	1.1		4.0	1.1		4.0
Phase Duration	n, s		s			25.6	13.6	3	26.	.3	12.2	2	87.5	13.4		88.6
Change Period	, ( <b>Y+</b> R a	c ), S	5.4		5.1	5.4		5.1	1	5.4		5.1	5.4		5.1	
Max Allow Head	Period,(Y+ <i>R</i> <sub>c</sub> ), s w Headway( <i>MAH</i> ), s					3.2	3.1		3.2	2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	( <i>g</i> s ), s		7.7		16.4	8.4		20.	.2	3.5			7.0		
Green Extensio	on Time	(ge), s		0.0		1.0	0.0		1.0	0	0.1		0.0	0.3		0.0
Phase Call Pro	bability			0.96	6	1.00	0.98	3	1.0	00	0.85	5		1.00	)	
Max Out Proba	bility			1.00	)	0.00	1.00	)	0.0	00	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			W	B			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8		18	5	2	12	1	6	16
Adjusted Flow I	Rate ( v	), veh/h		85	197		96	12	32	213	49	396	374	161	325	315
Adjusted Satura	ation Flo	w Rate ( s ), veh/h/l	n	1767	1828		1767	188	35 1	598	1682	1841	1734	1767	1856	1789
Queue Service	Time ( g	g s ), S		5.7	14.4		6.4	8.3	3 1	8.2	1.5	15.8	15.8	5.0	12.0	12.1
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		5.7	14.4		6.4	8.3	3 1	8.2	1.5	15.8	15.8	5.0	12.0	12.1
Green Ratio ( g	ı/C)			0.20	0.15		0.20	0.1	50	).15	0.64	0.59	0.59	0.65	0.60	0.60
Capacity ( c ), v	/eh/h			243	267		206	28	6 2	242	503	1083	1020	482	1107	1068
Volume-to-Cap	acity Ra	tio(X)		0.350	0.737		0.465	0.43	31 0.	.878	0.097	0.365	0.366	0.333	0.294	0.295
Back of Queue	(Q), ft	/In ( 95 th percentile	)													
Back of Queue	(Q), ve	eh/In ( 95 th percenti	le)	4.5	11.0		5.1	7.2	2 1	2.1	1.0	11.1	10.6	3.4	8.9	8.7
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	(d1), s/	/veh	,	47.5	57.2		47.6	53.	95	58.1	10.1	15.1	15.1	10.9	13.8	13.8
Incremental De	Jniform Delay ( d 1 ), s/veh ncremental Delay ( d 2 ), s/veh				1.5		0.6	0.4	1 4	4.0	0.0	1.0	1.0	0.1	0.7	0.7
nitial Queue Delay ( $d z$ ), s/veh				0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delav (	Control Delay ( <i>d</i> ), s/veh				58.7		48.2	54.	3 6	62.1	10.2	16.1	16.1	11.0	14.5	14.5
Level of Service	e (LOS)			D	E		D	D	Ť	E	В	В	В	В	В	В
Approach Delay	y, s/veh	/LOS		55.4		E	56.8	3	E		15.8	5	В	13.8	3	В
Intersection De	ntersection Delay, s/veh / LOS					2	7.5							С		
Multimodal Re	Iultimodal Results				EB			W	В			NB			SB	
Pedestrian LOS	Itimodal Results Jestrian LOS Score / LOS			2.31		В	2.3	1	В	3	2.09	)	В	1.90	)	В
Bicycle LOS Sc	cycle LOS Score / LOS				5	Α	1.20	)	A	<b>\</b>	1.16	;	А	1.15	5	А

		пса	Sigi	anze		el Sec		esu	its Sull	innary	,				
<b>a</b>															
General Inform	nation								Intersec	tion Inf	ormatio	on	_		× 14
Agency		SE&D							Duration	, h	0.250				R
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area Typ	е	Other	-	×		~_ <mark>≮_</mark> ⊱_
Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Week Peak	day Eve Hour	ening	PHF		0.98		4 4 4	W ∲E 8	+ ↓ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2023 Cond	Existing tion		Analysis	Period	1> 2:	45		ጎተቅ	
Intersection		Chambersburg Roa	d	File Na	ame	2023	Existing	.xus					1 "		
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
, , ,															
Demand Inform	nation				EB			W	'B		NB			SB	
Approach Move	ement			L	Т	R	L		R	L	Т	R	L	Т	R
Demand ( v ), v	/eh/h			101	149	23	103	14	6 212	42	739	112	181	654	86
				1											
Signal Informa	ation					215	- NA				E l		-+-		_
Cycle, s	140.0	Reference Phase	2		5		51	<u>م</u> ۲	4	ΉŔ.	6		$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	6.5	1.7	80.7	8.6	3 0.1	21.4	L T				- -
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1	_ '	く IA		<u>~</u>	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0	_	5	6	7	8
					_			_			_				
Timer Results				EBI	-	EBT	WB		WBT	NBI		NBT	SBI	-	SBT
Assigned Phase	е			7		4	3	$\rightarrow$	8	5		2	1		6
Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration	n, s		14.0	)	26.5	14.1	1	26.6	11.9	)	85.8	13.6	3	87.5	
Change Period	eriod, (Y+R c), s					5.1	5.4		5.1	5.4		5.1	5.4		5.1
Max Allow Head	ange Period,(Y+ <i>R c</i> ), s x Allow Headway( <i>MAH</i> ), s					3.2	3.1		3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	( <i>g</i> s ), s		8.7		14.5	8.8		20.6	3.3			7.9		
Green Extensio	on Time	(ge), s		0.0		1.0	0.0		1.0	0.0		0.0	0.3		0.0
Phase Call Pro	bability			0.98	}	1.00	0.98	3	1.00	0.81			1.00	)	
Max Out Proba	bility			1.00	)	0.00	1.00	)	0.00	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate ( v	), veh/h		103	176		105	149	216	43	444	424	185	385	370
Adjusted Satura	ation Flo	w Rate ( <i>s</i> ), veh/h/l	n	1795	1841		1795	190	0 1598	1781	1885	1798	1795	1885	1808
Queue Service	Time ( g	g s ), S		6.7	12.5		6.8	10.1	1 18.6	1.3	18.3	18.3	5.9	14.8	14.8
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		6.7	12.5		6.8	10.1	1 18.6	1.3	18.3	18.3	5.9	14.8	14.8
Green Ratio ( g	ı/C)			0.21	0.15		0.22	0.1	5 0.15	0.62	0.58	0.58	0.63	0.59	0.59
Capacity ( c ), v	/eh/h			246	281		241	292	2 246	466	1087	1037	443	1110	1064
Volume-to-Cap	acity Ra	tio(X)		0.419	0.624		0.437	0.51	0 0.880	0.092	0.409	0.409	0.417	0.347	0.348
Back of Queue	(Q), ft	/In ( 95 th percentile	)												
Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	5.4	9.8		5.6	8.5	12.4	0.9	12.8	12.3	4.1	10.7	10.4
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	(d1), s	/veh		46.4	55.5		46.4	54.4	4 58.0	11.1	16.4	16.4	12.1	14.9	14.9
Incremental De	iform Delay ( d 1 ), s/veh remental Delay ( d 2 ), s/veh				0.8		0.5	0.5	5.1	0.0	1.1	1.2	0.2	0.9	0.9
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delay (		46.9	56.4		46.9	54.9	9 63.1	11.1	17.6	17.6	12.3	15.7	15.8		
Level of Service	e (LOS)			D	E		D	D	E	В	В	В	В	В	В
Approach Delay	Approach Delay, s/veh / LOS				)	D	56.9	9	E	17.3	3	В	15.1		В
Intersection De	lay, s/ve	h / LOS				2	7.5						С		
Multimodal Re	Iultimodal Results				EB			WE	3		NB			SB	
Pedestrian LOS	strian LOS Score / LOS			2.31		В	2.3	1	В	2.09	)	В	1.90	)	В
Bicycle LOS Sc	cycle LOS Score / LOS				5	Α	1.26	3	А	1.24	L I	А	1.26	3	А

		noc		5001		esu	its Su	minary	1							
Imprime colspan="4">Imprime colspan="4"           Analysis         NK         Analysis         Data         Analysis         NK         NK </td <td>O</td> <td> 4!</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Interne e</td> <td>. 4: I <b>6</b></td> <td> 4!</td> <td></td> <td></td> <td></td> <td>• T.</td>	O	4!								Interne e	. 4: I <b>6</b>	4!				• T.
Analysit         Dial	General Inform	hation	0540							Interse		ormati	on	- 1	444	
Analysit         NR         Analysit         NR         Analysite         Arral type         Other         S           Jurisdiction         Huber Heights, Ohio         Time Period         WeaketWormig         PH         0.7 15         0.7 15           Lintersaction         Chambersburg Road         File Name         20.3 50-504d         Analysis Vear         20.5 0-504d         Analysis Vear         20.5 0-	Agency		SE&D							Duratio	n, n	0.250	)			K.
Juniscition         Huber Heights, Ohio         Time Period         Workkay Morning         PHF         0.78           Uthan Street         Old Troy Pike         Analysis Yeri         2025 No-Built         Analysis Period         1> 7.15           Intersection         Chambersburg Road         File Name         2023 Existing.xus         Vertex	Analyst		NK		Analys	sis Date	Apr 6	, 2023		Area Ty	pe	Othe	-	<b>→</b> ×		×
Urban Street       Old Troy Pike       Analysis Var       2025 N-Build Condition       Analysis Period       1> 7:15       I	Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Week Peak	day Moi Hour	rning	PHF		0.78		1 4 m	₩ <del> </del> E 8	+ + + + +
IntersectionFile Name2023 Existing .usUSimulationg .usProject DoscriptionProposed Wawa W/ Fuel SalesNo<	Urban Street		Old Troy Pike		Analys	sis Year	2025 Cond	No-Build tion	b	Analysi	s Period	1> 7:	15		<u>4</u> † 7	
Project Desorption         Proposed Wave w/ Fuel Sales         EB         VUE         N	Intersection		Chambersburg Roa	d	File Na	ame	2023	Existing	.xus					1 1	.,	
Demand Information         L         T         R	Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales		R							1		
Demand InformationUEBVIBUTRLRLRLRLRLRLRLRLRLRLRLRLRLRLRLRLRLRLRLRRLRRLRRRLRRLRRLRRR <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																
Approach Movement       L       T       R <thl< th=""> <tht< th=""> <thl< th="">      &lt;</thl<></tht<></thl<>	Demand Inform	nation				EB			W	′B		NB			SB	
Demand ( v), veh/h         49         62         37         102         81         83         84         96         111         592         58           Signal Information Cycle, s         140.0         Reference Phase         2           Green Addition         0         Reference Print         End Velow         32         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         4.1         52         0.0         1.0         62         0.0         1.0         62         0.0         1.0         64         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54         51         54	Approach Move	ement			L	Т	R	L		r R	L	Т	R	L	Т	R
Signal Information         Cycle, s         140.0         Reference Phase         2           Offset, s         0         Reference Phase         2           Offset, s         0         Reference Phase         2           Offset, s         0         Reference Phase         2           Fried         Simult Gap EW         On         1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         4.1         32         0.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.0         0.1         1.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0<	Demand ( <i>v</i> ), v	eh/h			49	62	37	102	8	1 83	38	436	96	111	592	58
Signal information         Signal informatinformatinformotion         Signal information	<u> </u>						1 111		_		_	_				1
Cycle, s         14/L0         Network         2         Network	Signal Informa			2		6	215	- 1245a	La		H.2	¥.		sta		
Oliset, solution         O         Netlemene Point         End         Creen         6.8         1.2         77.0         6.4         5.1         1.2         0.0         1.1         3.2         0.0         1.1         3.2         0.0         1.1         3.2         0.0         1.1         3.2         0.0         1.0         7.1         4.1         3.2         0.0         1.0         7.1         4.0         1.1         1	Cycle, s	140.0	Reference Phase	2	-	5		51	7	e	"R	e	1		3	◀ 4
Uncoordinated         No         Simult. Gap EW         On         Red         2.2         0.0         4.1         3.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.1         4.0         9.0         9.0         9.0         9.0         1.1         4.0         9.0         9.0         1.1         4.0         9.0         1.1         4.0         9.0         1.0         9.0         1.0         9.0         1.0         9.0         1.0         9.0         1.0         9.0         1.0         0.0         3.1         3.2         3.1         3.2         3.1         3.2         3.1         3.2         3.1         3.2         3.1         3.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Offset, s	0	Reference Point	End	Green	6.8	1.2	87.0	6.4	4 5.1	12.6	3				5
Force Mode       Fixed       Simult. Gap N/S       On       Red       2.2       0.0       1.0       2.2       0.0       1.0 <th< td=""><td>Uncoordinated</td><td>No</td><td>Simult. Gap E/W</td><td>On</td><td>Yellow</td><td>3.2</td><td>0.0</td><td>4.1</td><td>3.2</td><td>2 0.0</td><td>4.1</td><td>_</td><td>רא <u>ו</u>≺</td><td></td><td></td><td>Y</td></th<>	Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1	_	רא <u>ו</u> ≺			Y
Timer Results         EBL         EBT         WBL         WBL         NBL         NBT         SBL         SBT           Assigned Phase         7         4         3         8         5         2         1         6           Case Number         1.1         4.0         1.1         3.0         11.1         4.0         1.1         4.0         93.2           Chase Duration, s         11.8         17.7         16.9         22.8         12.2         92.1         13.4         93.2           Change Period, (Y+Rc), s         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         1.00         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         <	Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0	_	5	6	7	8
Immer Kesuits         Lebit         Viel         Welt         Nelt         Nelt         Selt	<b>T</b> . <b>D</b> . K				EDI	_	EDT			MOT			NDT	0.01		ODT
Assigned Phase       I       4       3       8       5       2       1       6         Case Number       1.1       4.0       1.1       3.0       1.1       4.0       1.1       4.0         Phase Duration, s       11.8       17.7       16.9       22.8       12.2       92.1       13.4       93.2         Change Period, (YR.) s       5.4       5.1       5.4	Timer Results				EBI		EBI	WB		WBI	NB	-	NBI	SBI	-	SBI
Case Number1.14.01.13.01.14.01.14.01.14.0Phase Duration, s11.817.716.922.812.292.113.493.2Change Period, (Y+R c), s5.45.15.45.15.45.15.45.15.45.1Max Allow Headway (MAH), s3.13.23.13.23.11.00.310.0Queue Clearance Time (g c), s6.411.911.511.23.3 $$ 5.9 $$ Green Extension Time (g c), s6.411.911.00.991.000.85 $$ 1.00 $$ Max Out Probability0.911.000.991.000.85 $$ 1.00 $$ $$ Movement Group Results $$ 7RRLTRLTR1.61.6Adjusted Flow Rate (v), veh/h6312713114415213114212314515.5Cycle Queue Clearance Time (g c), s4.49.99.57.39.21.312.412.53.915.515.5Cycle Queue Clearance Time (g c), s4.49.99.57.39.21.312.412.53.915.515.5Cycle Queue Clearance Time (g c), s4.49.99.57.39.21.312.412.53.915.515.5Cycle Queue Clearance Time (g c), s4.49.9 <td>Assigned Phase</td> <td>e</td> <td></td> <td></td> <td></td> <td></td> <td>4</td> <td>3</td> <td><math>\rightarrow</math></td> <td>8</td> <td>5</td> <td></td> <td>2</td> <td>1</td> <td>_</td> <td>6</td>	Assigned Phase	e					4	3	$\rightarrow$	8	5		2	1	_	6
Phase Duration, s11.817.716.922.812.292.113.493.2Change Period, (Y*R_), s5.45.15.45.15.45.15.45.15.45.1Max Allow Headway (MAH), s3.13.23.13.23.13.23.13.23.10.03.10.0Queue Clearance Time (g*), s6.411.911.511.23.3 $\cdot$ 1.00.90.0	Case Number				1.1		4.0	1.1	-	3.0	1.1		4.0	1.1		4.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Phase Duration	I, S		11.8	;	17.7	16.9	)	22.8	12.2	2	92.1	13.4	1 9	93.2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Change Period	nge Period, ( Y+ <i>R c</i> ), s Allow Headway ( <i>MAH</i> ), s					5.1	5.4		5.1	5.4		5.1	5.4		5.1
Queue Clearance Time ( $g \circ$ ), s       6.4       11.9       11.5       11.2       3.3 $$ 5.9 $$ Green Extension Time ( $g \circ$ ), s       0.0       0.6       0.1       0.6       0.1       0.6       0.1       0.0       0.3       0.0         Max Out Probability       0.01       1.00       0.99       1.00       0.85 $$ 1.00 $$ Max Out Probability       0.17       0.00       0.99       0.00       0.00       0.00       0.00 $$ 0.00 $$ 0.00 $$ 0.00 $$ 0.00 $$ 0.00 $$ 0.00 $$ 0.00 $$ 0.00 $       0.00       $	Max Allow Head	ange Fellou, (1+1, c), s ax Allow Headway ( <i>MAH</i> ), s					3.2	3.1	$\rightarrow$	3.2	3.1		0.0	3.1		0.0
Green Extension Time (g ∘), s       0.0       0.0       0.6       0.1       0.0	Queue Clearan	ce Time	( <b>g</b> s ), s		6.4		11.9	11.5	5	11.2	3.3			5.9		
Phase Call Probability       0.91       1.00       0.99       1.00       0.85       Image of the transform of the transform of the transform of transform	Green Extensio	n Time	(ge),s		0.0		0.6	0.1	$\rightarrow$	0.6	0.1		0.0	0.3		0.0
Max Out Probability       0.17       0.00       0.09       0.00 <th< td=""><td>Phase Call Pro</td><td>bability</td><td></td><td></td><td>0.91</td><td></td><td>1.00</td><td>0.99</td><td>9</td><td>1.00</td><td>0.85</td><td>5</td><td></td><td>1.00</td><td>)</td><td></td></th<>	Phase Call Pro	bability			0.91		1.00	0.99	9	1.00	0.85	5		1.00	)	
Movement Group ResultsLTRLTRLTRLTRLTRLTRLTRLTRLTRLTRAproach MovementCTRLTRLTRAproach MovementCTRLTRALTRALTRALTRALTRAA <t< td=""><td>Max Out Proba</td><td>bility</td><td></td><td></td><td>0.17</td><td></td><td>0.00</td><td>0.09</td><td>9</td><td>0.00</td><td>0.00</td><td>)</td><td></td><td>0.00</td><td>)</td><td></td></t<>	Max Out Proba	bility			0.17		0.00	0.09	9	0.00	0.00	)		0.00	)	
Approach MovementILITRILT<RILT<RILT<RILTRILT<RILTRILTRILT<RIL	Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Assigned Movement         7         4         14         3         8         18         5         2         12         1         6         16           Adjusted Flow Rate (v), veh/h         63         127         63         127         131         104         106         49         351         331         142         423         410           Adjusted Saturation Flow Rate (s), veh/h/ln         1810         1752         6         7.1         1844         120         12.0         12.0         17.0         18.5         17.0         18.5         17.0         18.5         17.0         12.4         12.0         3.0         15.5         15.5           Cycle Queue Clearance Time (g c), s         4.4         9.9         0.0         5.7         7.3         9.2         13.0         1.4         3.0         1.5         15.5         15.5           Green Ratic (g/C)         0.14         0.9         0.0         1.5         10.8         0.42         18.0         1.6         1.5         10.8         0.55         115.0         15.5         12.5         15.5         15.5         15.5         15.5         15.5         15.5         15.5         15.5         15.5         15.5	Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Adjusted Flow Rate (v), veh/h         63         127         131         104         106         49         351         331         142         423         410           Adjusted Saturation Flow Rate (s), veh/h/ln         1810         1752         I711         1841         1522         1739         1856         1739         1781         1841         1783           Queue Service Time (g s), s         4.4         9.9         I         9.5         7.3         9.2         1.3         12.4         12.5         3.9         15.5         15.5           Green Ratio (g/C)         0.14         09         I         0.13         0.13         0.13         0.62         0.62         0.68         0.63	Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Saturation Flow Rate (s), veh/h/In       1810       1752       M       1711       1841       1522       1739       1856       1739       1781       1841       1783         Queue Service Time (g c), s       4.4       9.9       9.5       7.3       9.2       1.3       12.4       12.5       3.9       15.5       15.5         Cycle Queue Clearance Time (g c), s       4.4       9.9       0.18       0.13       0.2       1.3       12.4       12.5       3.9       15.5       15.5         Green Ratio (g/C)       0.14       0.9       0.18       0.13       0.13       0.67       0.52       0.68       0.63       0.53       0.63         Capacity (c), veh/h       212       157       C       14       2.22       192       460       153       1080       557       152       152         Sack of Queue (Q), th/ln (95 th percentile)       0.26       0.610       0.447       6.52       6.4       0.9       9.0       0.00	Adjusted Flow I	Rate( <i>v</i>	), veh/h		63	127		131	104	l 106	49	351	331	142	423	410
Queue Service Time (g s), s         4.4         9.9         9.5         7.3         9.2         1.3         12.4         12.5         3.9         15.5         15.5           Cycle Queue Clearance Time (g c), s         0.14         0.09         0.8         0.13         0.13         0.67         0.62         0.62         0.68         0.63         0.63           Green Ratio (g/C)         0.14         0.09         0.8         0.13         0.47         0.67         0.62         0.62         0.68         0.63         0.53           Capacity (c), veh/h         212         157         C         214         232         192         460         1153         1800         557         1159         1122           Volume-to-Capacity Ratio (X)         0.296         0.80         6         0.47         7.4         6.2         6.4         0.90         0.00 </td <td>Adjusted Satura</td> <td>ation Flo</td> <td>ow Rate ( <i>s</i> ), veh/h/l</td> <td>n</td> <td>1810</td> <td>1752</td> <td></td> <td>1711</td> <td>184</td> <td>1 1522</td> <td>1739</td> <td>1856</td> <td>1739</td> <td>1781</td> <td>1841</td> <td>1783</td>	Adjusted Satura	ation Flo	ow Rate ( <i>s</i> ), veh/h/l	n	1810	1752		1711	184	1 1522	1739	1856	1739	1781	1841	1783
Cycle Queue Clearance Time (g c), s         4.4         9.9         9.5         7.3         9.2         1.3         12.4         12.5         3.9         15.5         15.5           Green Ratio (g/C)         0.14         0.09         0.18         0.13         0.13         0.67         0.62         0.62         0.68         0.63         0.63           Capacity (c), veh/h         212         157         C         214         232         192         460         1153         1080         557         1159         1122           Volume-to-Capacity Ratio (X)         0.296         0.806         C         0.610         0.447         0.55         0.106         0.305         0.306         0.256         0.365         0.365           Back of Queue (Q), th/ln (95 th percentile)         3.6         8.1         C         7.4         6.2         6.4         0.9         9.0         8.6         2.6         10.7         10.4           Queue Storage Ratio (RQ) (95 th percentile)         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	Queue Service	Time ( g	g s ), S		4.4	9.9		9.5	7.3	9.2	1.3	12.4	12.5	3.9	15.5	15.5
Green Ratio (g/C)       0.14       0.09       0.18       0.13       0.13       0.67       0.62       0.68       0.63       0.63         Capacity (c), veh/h       212       157       214       232       192       460       1153       1080       557       1159       1122         Volume-to-Capacity Ratio (X)       0.296       0.296       0.806       0.610       0.447       0.554       0.106       0.305       0.306       0.256       0.365       0.365         Back of Queue (Q), th/ln (95 th percentile)       7       7.4       6.2       6.4       0.9       9.0       8.6       2.6       10.7       10.4         Queue Storage Ratio (RQ) (95 th percentile)       0.00	Cycle Queue C	learance	e Time ( <i>g c</i> ), s		4.4	9.9		9.5	7.3	9.2	1.3	12.4	12.5	3.9	15.5	15.5
Capacity (c), veh/h2121572142321924601153108055711591122Volume-to-Capacity Ratio (X)0.2960.8060.8060.6100.4470.5540.1060.3050.3050.3050.365 <td< td=""><td>Green Ratio ( g</td><td>/C)</td><td></td><td></td><td>0.14</td><td>0.09</td><td></td><td>0.18</td><td>0.1</td><td>3 0.13</td><td>0.67</td><td>0.62</td><td>0.62</td><td>0.68</td><td>0.63</td><td>0.63</td></td<>	Green Ratio ( g	/C)			0.14	0.09		0.18	0.1	3 0.13	0.67	0.62	0.62	0.68	0.63	0.63
Volume-to-Capacity Ratio (X)0.2960.2960.80600.4470.5540.1060.3050.3060.2560.365 <td>Capacity ( <i>c</i> ), v</td> <td>/eh/h</td> <td></td> <td></td> <td>212</td> <td>157</td> <td></td> <td>214</td> <td>232</td> <td>2 192</td> <td>460</td> <td>1153</td> <td>1080</td> <td>557</td> <td>1159</td> <td>1122</td>	Capacity ( <i>c</i> ), v	/eh/h			212	157		214	232	2 192	460	1153	1080	557	1159	1122
Back of Queue (Q), ft/ln (95 th percentile)3.6 $\mathbb{R}$	Volume-to-Cap	acity Ra	tio ( <i>X</i> )		0.296	0.806		0.610	0.44	7 0.554	0.106	0.305	0.306	0.256	0.365	0.365
Back of Queue (Q), veh/ln (95 th percentile)3.68.17.4 $6.2$ $6.4$ $0.9$ $9.0$ $8.6$ $2.6$ $10.7$ $10.4$ Queue Storage Ratio (RQ) (95 th percentile) $0.00$ <td>Back of Queue</td> <td>(Q), ft</td> <td>/In ( 95 th percentile</td> <td>)</td> <td></td>	Back of Queue	(Q), ft	/In ( 95 th percentile	)												
Queue Storage Ratio (RQ) (95 th percentile)0.000	Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	3.6	8.1		7.4	6.2	6.4	0.9	9.0	8.6	2.6	10.7	10.4
Uniform Delay (d 1), s/veh54.3 $62.5$ $51.0$ $56.6$ $57.5$ $8.9$ $12.4$ $12.4$ $8.6$ $12.5$ $12.5$ Incremental Delay (d 2), s/veh0.3 $3.7$ Incremental Delay (d 3), s/veh0.0 $0.7$ 0.0 $0.7$ 0.1 $0.9$ 0.9Initial Queue Delay (d 3), s/veh0.0 $0.7$ 0.00.0 $0.7$ 0.00.0 $0.0$ <td>Queue Storage</td> <td>Ratio (</td> <td>RQ) (95 th percent</td> <td>ile)</td> <td>0.00</td> <td>0.00</td> <td></td> <td>0.00</td> <td>0.0</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incremental Delay (d 2), s/veh0.33.7Image: d 0 0 0.50.90.00.70.70.10.90.9Initial Queue Delay (d 3), s/veh0.0 <td>Uniform Delay (</td> <td>( d 1 ), s/</td> <td>/veh</td> <td></td> <td>54.3</td> <td>62.5</td> <td></td> <td>51.0</td> <td>56.0</td> <td>6 57.5</td> <td>8.9</td> <td>12.4</td> <td>12.4</td> <td>8.6</td> <td>12.5</td> <td>12.5</td>	Uniform Delay (	( d 1 ), s/	/veh		54.3	62.5		51.0	56.0	6 57.5	8.9	12.4	12.4	8.6	12.5	12.5
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Incremental De	cremental Delay ( <i>d</i> <sub>2</sub> ), s/veh				3.7		1.0	0.5	0.9	0.0	0.7	0.7	0.1	0.9	0.9
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Level of Service (LOS)DEDEEABABBApproach Delay, s/veh / LOS $62.3$ E $55.6$ E $12.8$ B $12.7$ $B$ Intersection Delay, s/veh / LOS $2.32$ E $55.6$ E $12.8$ B $12.7$ $B$ Multimodal Results $E$ <	Control Delay (	Control Delay ( d ), s/veh				66.2		52.1	57.2	2 58.4	8.9	13.1	13.1	8.7	13.4	13.4
Approach Delay, s/veh / LOS       62.3       E       55.6       E       12.8       B       12.7       B         Intersection Delay, s/veh / LOS       23.5       23.5       E       12.8       B       12.7       B         Multimodal Results       EB       WB       NB       SE       SE         Pedestrian LOS Score / LOS       2.32       B       2.32       B       2.08       B       1.89       B	Level of Service	e (LOS)			D	E		D	E	E	Α	В	В	Α	В	В
Intersection Delay, s/veh / LOS         23.5         C           Multimodal Results         EB         WB         NB         SB           Pedestrian LOS Score / LOS         2.32         B         2.32         B         2.08         B         1.89         B	Approach Delay	Approach Delay, s/veh / LOS				3	Е	55.6	3	E	12.8	3	В	12.7	7	В
Multimodal Results         EB         WB         NB         SB           Pedestrian LOS Score / LOS         2.32         B         2.32         B         2.08         B         1.89         B	ntersection Delay, s/veh / LOS						23	3.5						С		
Pedestrian LOS Score / LOS         2.32         B         2.32         B         2.08         B         1.89         B	Multimodal Re	lultimodal Results				EB			WE	3		NB			SB	
	Pedestrian LOS	edestrian LOS Score / LOS			2.32	2	В	2.32	2	В	2.08	3	В	1.89	)	В
Bicycle LOS Score / LOS 0.80 A 1.05 A 1.09 A 1.29 A	Bicycle LOS Sc	estrian LOS Score / LOS cle LOS Score / LOS				)	А	1.05	5	А	1.09	)	А	1.29	)	А

Intersection Information         Intersection Information         Duration, h         0.250           Analysis         NK         Analysis         Data         Analysis         Pref         Duration, h         0.250           Analysis         NK         Analysis         Data         Res         Diration         Diration <thdiration< th="">         Diration         Diration<!--</th--><th colspan="10"></th></thdiration<>																
Carteria montation         marksection         marksection <thmarksection< td="" th<=""><td></td><td> ti a m</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Interes</td><td>ati a m lunf</td><td></td><td></td><td></td><td></td><td>. L</td></thmarksection<>		ti a m								Interes	ati a m lunf					. L
Agency         DecAU         Duration, n         0.230         Duration, n         0.230           Analysis         NK         Analysis Data         Apr 6. 2023         Araa Type         0.044         Image: Type         0.94           Utidation, n         Huber Heights, Ohio         Time Period         School Dismissal         PHF         0.94         Image: Type         0.94           Utidation, n         Contaminer         Contaminer         2025 No Eutid Xus         No         1.245         Image: Type         0.94           Utidation, no         Project Description         Project Description         Project Description         1.245         School Dismatel         1.245         School Dismatel         Image: Type	General Inform	nation	0540							Interse		ormatio	on		444	- <u>-</u>
Aralysit         NR         Aralysit         NR         Aralysit         NR         Aralysit         NR         Aralysit         Pres         Other         0.94           Jurisdiction         Huber Heights. Ohio         Time Period         Stock Hold         Aralysits Pari Q         1         2.45           Intersection         Chambersburg Road         File Name         2005 No Eulid         Aralysits Pari Q         1         2.45           Approach Movement         L         T         R         L<	Agency		SE&D							Duratio	n, n	0.250				×
Juria Global       Huber Heights, Ohio       Time Period       School Diamissal       PHF       0.04         Utban Street       Old Troy Pike       Analysis Verz       2025 No-Build       Analysis Period       1> 2.45         Project Description       Proposed Wava w/ Fuel Sales       2025 No-Build       Nalysis Period       1> 2.45       No         Demand Information       Proposed Wava w/ Fuel Sales       VIII       R       L       T       R       R       S       S       S       S       S       S       S       S       S	Analyst		NK		Analys	sis Date	Apr 6	, 2023		Area Ty	ре	Other		×		<b>∼</b> _
Urban Streat       Old Troy Pike       Analysis Var       2025 No-Build       Analysis Period       >> 2.45       Immeration       Immeration       Immeration       Project Description       Project Descriptio	Jurisdiction		Huber Heights, Ohi	0	Time F	Period	Schoo Peak	ol Dismi: Hour	ssal	PHF		0.94		1 4 M 4	W + E 8	+ + ↓ ↓
	Urban Street		Old Troy Pike		Analys	sis Year	2025 Cond	No-Build tion	b	Analysi	s Period	1> 2:4	45		<u>1</u> 1 + +	
Project Description         Proposed Wawa w Fuel Sales         VB         NB         NB         SB           Approach Movement         L         T         R         L         L         T         R         R         R         L         T         R         L         T         R         L         T         R         L         T         R<	Intersection		Chambersburg Roa	ıd	File Na	ame	2025	No Build	d.xus	0				1 .		
Demand Information         LB         T         R         L         D	Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
Demand Information         L         T         R											1					
Approach Movement       L       T       R       R       L       T       R       L       T       R       L       T       R       L       T       R       L       T       R       L       T	Demand Inform	nation				EB			N	/B		NB			SB	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Approach Move	ement			L	Т	R	L		r r	L	Т	R	L	Т	R
Signal Information         Cycle. s       140.0       Reference Phase       2         Offset, s       0       Reference Point       End       Solution	Demand ( v ), v	/eh/h			82	157	33	92	11	19 20	5 47	619	123	155	555	63
Signal momentation         Signal		4!			1		1 111									
Cycle.         140.0         Retiremo Prints         2         n <td>Signal Informa</td> <td>ation</td> <td>Defense Dhara</td> <td>0</td> <td>-</td> <td>6</td> <td>245</td> <td><u>8243</u>8</td> <td></td> <td></td> <td>H.2</td> <td>∐ L</td> <td></td> <td>sta -</td> <td></td> <td>~</td>	Signal Informa	ation	Defense Dhara	0	-	6	245	<u>8243</u> 8			H.2	∐ L		sta -		~
Olise, s         U         Reference Four         End         Green         §.9         1.1         81.7         7.6         0.8         2.00         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         1.0         2.2         0.0         1.0         0.0         1.0         0.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1	Cycle, s	140.0	Reference Phase			5		- <u>5</u> 1	7	٤	" R	2	1	2	3	<b>★</b> 4
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Uliset, s	U	Reference Point	End	Green	6.9	1.1	81.7	7.	6 0.8	20.	)			_	<u> </u>
Profer Wode	Uncoordinated	INO Fixed	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.	2 0.0	4.1	_ [	∖」⁴			<b>Y</b>
Timer Results         EBL         EBT         WBL         WBL         NBL         NBT         SBL         SBT           Assigned Phase         7         4         3         8         5         2         1         6           Case Number         1.1         4.0         1.1         3.0         1.1         4.0         1.1         4.0           Phase Duration, s         13.0         26.0         13.7         26.8         12.3         86.8         15.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         5.4         5.1         0.0         3.1         0.0         3.1         0.0         3.1         0.0         3.1         0.0         3.1         0.0 <td< td=""><td>Force Mode</td><td>Fixed</td><td>Simult. Gap N/S</td><td>On</td><td>Rea</td><td>Z.Z</td><td>0.0</td><td>1.0</td><td>Z.,</td><td>2  0.0</td><td>1.0</td><td></td><td>5</td><td>6</td><td>7</td><td>8</td></td<>	Force Mode	Fixed	Simult. Gap N/S	On	Rea	Z.Z	0.0	1.0	Z.,	2  0.0	1.0		5	6	7	8
Initial Assigned Phase         ICL         ICL <thicl< th="">         ICL         <thicl< th=""></thicl<></thicl<>	Timor Poculto				EBI		ERT	\//R	1		NR		NRT	SBI		CRT
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Assigned Phas	0				-		3		8	5	-	2	1		6
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Caso Number	e			11		4	1 1	-	3.0	1 1		2	11	_	4.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Phase Number				1.1		4.0 26.0	12	7	26.8	12	2	4.0 96.9	1.1	1	4.0 88.0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Change Period	(V+P)		3			5 1	5.4		5 1	5.4	,	5 1	5.4	, ·	5 1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Max Allow Hea	$\frac{1}{2}$	२				3.7	3.4	-	3.1	3.4		0.0	3.4		0.0
Calculate Order Andre (y s), s       1.00       1.00       0.00       1.00       0.01       0.0       1.00       0.0       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00       1.00       0.00		way (MAH), s			7.8		16.8	3.1 8.5	-	20.7	3.1		0.0	7.2	_	0.0
Original Lateriation Time (y e), so       0.00       1.00       0.00       1.00       0.08       1.00       0.86       0.00       0.0	Green Extensio	n Time	$(g_s), s$		7.0		10.0	0.0		1.0	0.1		0.0	0.3		0.0
Privage Call Probability       1.00       0.00       1.00       0.00	Bhase Call Bro	hability	(ge), s		0.0	,	1.0	0.0	2	1.0	0.1		0.0	1.00		0.0
Max out + foldowing       1.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00         Movement Group Results       L       T       R       L       C       L <td>Max Out Proba</td> <td>bility</td> <td></td> <td></td> <td>1.00</td> <td></td> <td>0.00</td> <td>1.00</td> <td>י ר</td> <td>0.00</td> <td>0.0</td> <td></td> <td></td> <td>0.00</td> <td>, — — — — — — — — — — — — — — — — — — —</td> <td></td>	Max Out Proba	bility			1.00		0.00	1.00	י ר	0.00	0.0			0.00	, — — — — — — — — — — — — — — — — — — —	
Movement Group ResultsIIIRITRITRITRITRITRITRITRITRITRITRITRITRITRITRITRITRITRIITRAITRIITRIIRIIRIIRIIRIIRIIRIIRIIRIIRIIRIIRIIRIIRII <th< td=""><td></td><td>onity</td><td></td><td></td><td>1.00</td><td>,</td><td>0.00</td><td>1.00</td><td>,</td><td>0.00</td><td>0.0</td><td>,</td><td></td><td>0.00</td><td></td><td></td></th<>		onity			1.00	,	0.00	1.00	,	0.00	0.0	,		0.00		
Approach MovementIL	Movement Gro	oup Res	ults			EB			W	3		NB			SB	
Assigned Movement       7       4       14       3       8       18       5       2       12       1       6       16         Adjusted Flow Rate (v), veh/h       87       222       98       127       218       50       406       383       165       324       323         Adjusted Saturation Flow Rate (s), veh/h/ln       1767       1828       1767       1825       186       168       184       166       58       168       184       166       58       168       166       16.5 <t< td=""><td>Approach Move</td><td>ement</td><td></td><td></td><td>L</td><td>Т</td><td>R</td><td>L</td><td>Т</td><td>R</td><td>L</td><td>Т</td><td>R</td><td>L</td><td>Т</td><td>R</td></t<>	Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Adjusted Flow Rate (v), veh/h         87 $2 \cup 2$ 98 $1 \ge 7$ 218         50 $4 \cup 6$ 383         165 $3 \lor 3$ Adjusted Saturation Flow Rate (s), veh/h/ln         1767 $1 \ge 2$ 1767 $1 \ge 5$ 158         168         182         181         173         1767 $1 \ge 5$ 1789           Queue Service Time (g $c$ ), s         5.8 $1 \cdot 2$ 6.5 $8 \cdot 5$ 18.7         16.8         16.5         5.2         12.5         12.5         12.5         12.5         12.5         12.5         12.5           Green Ratio (g/C)         0.20         0.15         0.8         6.5 $8 \cdot 5$ 18.7         16.8         0.58         0.64 $5 \cdot 5$ 0.58         0.58         0.58         0.58         0.58         0.58         0.58         0.58         0.58         0.58         0.58         0.59	Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Saturation Flow Rate (s), veh/h/ln       1767       1828       I       1767       1885       1588       1682       1841       1734       1767       1856       1787         Queue Service Time (g $\circ$ ), s       5.8       14.8       6.5       8.5       18.7       1.6       16.5       16.5       5.2       12.5       12.6         Cycle Queue Clearance Time (g $c$ ), s       5.8       14.8       6.5       8.5       18.7       1.6       16.5       16.5       5.2       12.5       12.6         Green Ratio (g/C)       0.20       0.15       0.21       0.16       0.63       0.58       0.58       0.64       0.59       0.59         Capacity (c), veh/h       244       273       0       0.21       0.16       0.63       0.58       0.58       0.64       0.59       0.59         Capacity (c), veh/h       0.51       0.33       0.79       0       0.73       0.70       0.10       0.10       0.59       0.59       0.58       0.68       0.69       0.59       0.59       0.58       0.58       0.68       0.79       0.10       0.59       0.59       0.59       0.59       0.59       0.50       0.50       0.50       0.50	Adjusted Flow	Rate( <i>v</i>	), veh/h		87	202		98	127	7 218	50	406	383	165	334	323
Queue Service Time (g s), s5.814.86.58.518.71.61.6.51.6.55.212.512.6Cycle Queue Clearance Time (g c), s5.814.86.58.518.71.616.516.55.212.512.6Green Ratio (g/C)0.200.150.210.150.210.160.630.580.580.640.590.59Capacity (c), veh/h2472732732082922484911075101346910980.59Volume-to-Capacity Ratio (X)0.3530.7900.4710.4330.8000.1020.3780.3790.3510.3440.305Back of Queu (Q), th/ln (95 th percentile)4.611.21.65.27.312.41.011.511.03.69.29.0Queue Storage Ratio (RQ) (95 th percentile)4.611.21.60.00	Adjusted Satura	ation Flo	ow Rate ( <i>s</i> ), veh/h/l	n	1767	1828		1767	188	5 1598	1682	1841	1734	1767	1856	1789
Cycle Queue Clearance Time (g c), s5.814.86.58.518.71.616.516.55.212.512.6Green Ratio (g/C)0.200.150.200.150.210.160.160.630.580.640.590.59Capacity (c), veh/h247273208292248491107510134691090.305 <td< td=""><td>Queue Service</td><td>Time ( g</td><td>g s ), S</td><td></td><td>5.8</td><td>14.8</td><td></td><td>6.5</td><td>8.5</td><td>5 18.7</td><td>1.6</td><td>16.5</td><td>16.5</td><td>5.2</td><td>12.5</td><td>12.6</td></td<>	Queue Service	Time ( g	g s ), S		5.8	14.8		6.5	8.5	5 18.7	1.6	16.5	16.5	5.2	12.5	12.6
Green Ratio (g/C)0.200.1500.160.160.630.580.640.590.59Capacity (c), veh/h2472732082922484911075101346910921059Volume-to-Capacity Ratio (X)0.3530.7390.3510.7390.4710.4330.8800.1020.3780.3790.3510.3410.305	Cycle Queue C	learance	e Time ( <i>g c</i> ), s		5.8	14.8		6.5	8.5	5 18.7	1.6	16.5	16.5	5.2	12.5	12.6
Capacity (c), veh/h2472732082922484911075101346910981059Volume-to-Capacity Ratio (X)0.3530.7390.3530.7390.4710.4330.8800.1020.3780.3790.3510.3040.305Back of Queu (Q), tr/ln (95 th percentile)4.611.2Image: Comparison of the comparison of t	Green Ratio (g	/C)			0.20	0.15		0.21	0.1	6 0.16	0.63	0.58	0.58	0.64	0.59	0.59
Volume-to-Capacity Ratio (X)0.3530.7390.4710.4330.8800.1020.3780.3790.3510.3040.3040.3040.3040.305Back of Queu (Q), tr/ln (95 th percentile)4.611.25.27.312.41.011.511.03.69.29.0Queue Storage Ratio (RQ) (95 th percentile)0.000.006.000.00<	Capacity ( c ), v	/eh/h			247	273		208	292	2 248	491	1075	1013	469	1098	1059
Back of Queue (Q), ft/ln (95 th percentile)Image: Constant of the co	Volume-to-Cap	acity Ra	tio ( <i>X</i> )		0.353	0.739		0.471	0.43	3 0.880	0.102	0.378	0.379	0.351	0.304	0.305
Back of Queue (Q), veh/ln (95 th percentile)4.611.25.27.312.41.011.511.03.69.29.0Queue Storage Ratio (RQ) (95 th percentile)0.00 <t< td=""><td>Back of Queue</td><td>(Q), ft</td><td>/In ( 95 th percentile</td><td>e)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Back of Queue	(Q), ft	/In ( 95 th percentile	e)												
Queue Storage Ratio ( RQ ) ( 95 th percentile)0.00 <t< td=""><td>Back of Queue</td><td>( Q ), ve</td><td>eh/In ( 95 th percenti</td><td>ile)</td><td>4.6</td><td>11.2</td><td></td><td>5.2</td><td>7.3</td><td>3 12.4</td><td>1.0</td><td>11.5</td><td>11.0</td><td>3.6</td><td>9.2</td><td>9.0</td></t<>	Back of Queue	( Q ), ve	eh/In ( 95 th percenti	ile)	4.6	11.2		5.2	7.3	3 12.4	1.0	11.5	11.0	3.6	9.2	9.0
Uniform Delay (d 1), s/veh       47.1       56.9       47.2       53.6       57.9       10.4       15.6       11.2       14.2	Queue Storage	Ratio (	RQ) (95 th percent	tile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incremental Delay (d 2), s/veh       0.3       1.5       0.6       0.4       4.3       0.0       1.0       1.1       0.2       0.7       0.7         Initial Queue Delay (d 3), s/veh       0.0       0	Uniform Delay	( d 1 ), s/	/veh		47.1	56.9		47.2	53.	6 57.9	10.4	15.6	15.6	11.2	14.2	14.2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Incremental De	lay ( <i>d</i> 2	), s/veh	0.3	1.5		0.6	0.4	4.3	0.0	1.0	1.1	0.2	0.7	0.7	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Initial Queue D	itial Queue Delay ( d ₃), s/veh				0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Level of Service (LOS)DEDDEBBBBBBBBAApproach Delay, s/veh / LOS $55.1$ E $56.6$ E $16.2$ B $14.2$ BIntersection Delay, s/veh / LOS $27.7$ <td< td=""><td>Control Delay (</td><td>d ), s/ve</td><td>eh</td><td></td><td>47.4</td><td>58.4</td><td></td><td>47.8</td><td>53.</td><td>9 62.2</td><td>10.5</td><td>16.6</td><td>16.6</td><td>11.4</td><td>14.9</td><td>15.0</td></td<>	Control Delay (	d ), s/ve	eh		47.4	58.4		47.8	53.	9 62.2	10.5	16.6	16.6	11.4	14.9	15.0
Approach Delay, s/veh / LOS $55.1$ E $56.6$ E $16.2$ B $14.2$ BIntersection Delay, s/veh / LOS $27.7$ $27.7$ $-27.7$	Level of Service	e (LOS)			D	E		D	D	E	В	В	В	В	В	В
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Approach Dela	y, s/veh	/LOS		55.1		E	56.6	5	E	16.:	2	В	14.2	2	В
Multimodal Results         EB         WB         NB         SB           Pedestrian LOS Score / LOS         2.31         B         2.31         B         2.09         B         1.90         B           Bicycle LOS Score / LOS         0.97         A         1.22         A         1.18         A         1.17         A	Intersection De	lay, s/ve	h / LOS				2	7.7						С		
Pedestrian LOS Score / LOS         2.31         B         2.31         B         2.31         B         2.09         B         1.90         B           Bicycle LOS Score / LOS         0.97         A         1.22         A         1.18         A         1.17         A	Multimodal Re	Iultimodal Results				FB			\//F	3		NB			SB	
Bicycle LOS Score / LOS         0.97         A         1.22         A         1.18         A         1.17         A	Pedestrian I OS	strian LOS Score / LOS			2.31		В	2.3	1	B	2.0	3	В	1.90	)	В
	Bicycle LOS So	core / LC	)S	0.97	,	А	1.22	2	A	1.1	3	А	1.17	7	А	

		пса	Sigi	anze		el Sec		esu	its Suii	innary	,				
<b>a</b>															
General Inform	nation								Intersec	tion Inf	ormatio	on	_		× 14
Agency		SE&D							Duration	, h	0.250				R_
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area Typ	е	Other	-	×		~_ <mark>≮_</mark> ⊱_
Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Week Peak	day Eve Hour	ening	PHF		0.98		<u> </u>	w∓e 8	+ ↓ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2025 Cond	No-Build tion	d	Analysis	Period	1> 2:	45		<u>ጎተ</u> ቅ	
Intersection		Chambersburg Roa	d	File Na	ame	2025	No Build	d.xus					1 "		
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
, , ,															
Demand Inform	nation				EB			W	′B		NB			SB	
Approach Move	ement			L	Т	R	L		r R	L	Т	R	L	Т	R
Demand ( v ), v	/eh/h			104	153	24	106	15	50 218	43	758	115	186	671	88
Signal Informa	ation					215	- NA				E l		-+-		_
Cycle, s	140.0	Reference Phase	2		5		51	<u>م</u> ۲	6	ΉŔ.	6		$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	6.5	1.9	79.7	8.7	7 0.1	21.9	)				<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1		く 14		╱	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0		5	6	7	8
								_			_				
Timer Results				EBI	-	EBT	WB		WBT	NBI		NBT	SBI	-	SBT
Assigned Phase	е			7		4	3	$\rightarrow$	8	5		2	1		6
Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration	n, s		14.1		27.0	14.3	3	27.2	11.9	)	84.8	13.9	)	86.7	
Change Period	eriod, $(Y+R_c)$ , s Headway $(MAH)$ s					5.1	5.4		5.1	5.4		5.1	5.4		5.1
Max Allow Head	nge Period, ( Y+ <i>R c</i> ), s Allow Headway ( <i>MAH</i> ), s					3.2	3.1		3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	( <i>g</i> s ), s		8.9		14.8	9.0		21.1	3.4			8.1		
Green Extensio	on Time	(ge), s		0.0		1.1	0.0		1.0	0.0		0.0	0.3		0.0
Phase Call Pro	bability			0.98	}	1.00	0.99	9	1.00	0.82	2		1.00	)	
Max Out Proba	bility			1.00	)	0.00	1.00	)	0.00	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate ( v	), veh/h		106	181		108	153	3 222	44	456	435	190	395	379
Adjusted Satura	ation Flo	w Rate ( s ), veh/h/l	n	1795	1840		1795	190	0 1598	1781	1885	1798	1795	1885	1808
Queue Service	Time ( g	y s ), S		6.9	12.8		7.0	10.3	3 19.1	1.4	19.2	19.2	6.1	15.5	15.5
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		6.9	12.8		7.0	10.3	3 19.1	1.4	19.2	19.2	6.1	15.5	15.5
Green Ratio ( g	ı/C)			0.22	0.16		0.22	0.10	6 0.16	0.62	0.57	0.57	0.63	0.58	0.58
Capacity ( c ), v	/eh/h			250	289		244	300	) 252	453	1073	1024	432	1099	1054
Volume-to-Cap	acity Ra	tio(X)		0.424	0.626		0.443	0.51	1 0.883	0.097	0.425	0.425	0.440	0.359	0.360
Back of Queue	(Q), ft	/In ( 95 th percentile	)												
Back of Queue	(Q), ve	eh/In ( 95 th percenti	le)	5.6	10.0		5.7	8.6	12.8	1.0	13.4	12.9	4.3	11.1	10.8
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	(d1), s	/veh	,	45.9	55.2		45.9	54.0	0 57.7	11.5	17.1	17.1	12.6	15.4	15.4
Incremental De	form Delay ( d 1 ), s/veh remental Delav ( d 2 ), s/veh				0.8		0.5	0.5	6.5	0.0	1.2	1.3	0.3	0.9	1.0
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delav (	Control Delay ( <i>d</i> ), s/veh						46.4	54.	5 64.2	11.5	18.4	18.4	12.9	16.3	16.4
Level of Service	e (LOS)			D	E		D	D	E	В	В	В	В	В	В
Approach Delay	y, s/veh	/LOS		52.4		D	57.1	1	E	18.1		В	15.7	,	В
Intersection De	Intersection Delay, s/veh / LOS					2	8.0						С		
Multimodal Re	Iultimodal Results				EB			WE	3		NB			SB	
Pedestrian LOS	estrian LOS Score / LOS			2.31		В	2.3	1	В	2.09	)	В	1.90	)	В
Bicycle LOS Sc	cycle LOS Score / LOS				6	А	1.29	9	А	1.26	3	А	1.28	3	Α

	пос	anze		el Seci		esu	its Sui	innary	,			_		
														. T
General Information								Intersec	tion Inf	ormatio	on			* ' <u>*</u>
Agency	SE&D							Duration	, h	0.250				×.
Analyst	NK		Analys	sis Date	e Apr 6	, 2023		Area Typ	e	Other	-	×		
Jurisdiction	Huber Heights, Ohio	0	Time F	Period	Week Peak	day Moi Hour	ning	PHF		0.78		4 4 4	₩ <del>1</del> ε 8	+ ↓ ↓
Urban Street	Old Troy Pike		Analys	sis Yea	r 2025 Cond	Build tion		Analysis	Period	1> 7:	15		<u>1</u> ††	
Intersection	Chambersburg Roa	d	File Na	ame	2023	Existing	.xus					1 .		
Project Description	Proposed Wawa w/	Fuel Sa	ales									1		
7 1	-													
Demand Information				EB			W	′B		NB			SB	
Approach Movement			L	Т	R	L		r R	L	Т	R	L	Т	R
Demand ( <i>v</i> ), veh/h			49	70	52	102	8	9 83	44	459	96	111	606	58
			<u> </u>	<u> </u>				1						1
Signal Information		<u>^</u>		6	215	- 1245a	L		¥	¥.		sta		
Cycle, s 140.0	Reference Phase	2		5		51	7	E	"R	E .	1		3	<b>↔</b> 4
Offset, s 0	Reference Point	End	Green	7.1	0.9	84.7	6.4	4.9	15.1					5
Uncoordinated No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1	_	\  4			
Force Mode Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0		5	6	7	8
Timer Deculto					CDT				NDI		NDT	CDI		ODT
Timer Results			EBI	-	EBI	VVB		0	NBI		NBI	SBI		SBI
Assigned Phase			1		4	3	$\rightarrow$	8	C		2	1		6
			1.1		4.0	1.1	-	3.0	1.1	-	4.0	1.1		4.0
Phase Duration, s	\ -	11.8	5	20.2	16.7		25.1	12.5	)	89.8	13.4		90.6	
	Period, ( Y+R c ), s w Headway ( MAH ), s				5.1	5.4	$\rightarrow$	5.1	5.4	_	5.1	5.4	$\rightarrow$	5.1
Max Allow Headway ( A	x Allow Headway ( <i>MAH</i> ), s				3.2	3.1	$\rightarrow$	3.2	3.1	_	0.0	3.1	$\rightarrow$	0.0
Queue Clearance Time	(gs), s		6.3	_	14.4	11.3	\$	11.0	3.6		0.0	6.1	$\rightarrow$	
Green Extension Time	(ge), s		0.0		0.7	0.1	$\rightarrow$	0.7	0.1		0.0	0.3		0.0
Phase Call Probability			0.91	-	1.00	0.99	)	1.00	0.89	)		1.00	<u>'</u>	
Max Out Probability			0.15		0.00	0.07		0.00	0.00	)		0.00	,	
Movement Group Res	ults			EB			WE	3		NB			SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Movement			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v	), veh/h		63	156		131	114	106	56	366	345	142	432	419
Adjusted Saturation Flo	w Rate ( <i>s</i> ), veh/h/l	n	1810	1737		1711	184	1 1522	1739	1856	1744	1781	1841	1784
Queue Service Time ( g	y s ), S		4.3	12.4		9.3	7.9	9.0	1.6	13.6	13.7	4.1	16.7	16.7
Cycle Queue Clearance	e Time ( <i>g</i> c ), s		4.3	12.4	<u> </u>	9.3	7.9	9.0	1.6	13.6	13.7	4.1	16.7	16.7
Green Ratio (g/C)			0.15	0.11		0.20	0.14	4 0.14	0.66	0.60	0.60	0.66	0.61	0.61
Capacity ( c ), veh/h			227	187		212	263	3 217	441	1122	1054	527	1124	1090
Volume-to-Capacity Ra		<u> </u>	0.276	0.836		0.616	0.43	4 0.490	0.128	0.326	0.328	0.270	0.384	0.385
Back of Queue (Q), ft	/In ( 95 th percentile	)												
Back of Queue (Q), ve	eh/In ( 95 th percenti	le)	3.5	9.5		7.3	6.7	6.3	1.1	9.8	9.4	2.8	11.5	11.2
Queue Storage Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay ( <i>d</i> 1 ), s/	m Delay ( $d_1$ ), s/veh					49.4	54.	8 55.3	9.8	13.6	13.6	9.5	13.9	13.9
Incremental Delay ( d 2	remental Delay ( d ₂ ), s/veh					1.1	0.4	0.6	0.0	0.8	0.8	0.1	1.0	1.0
Initial Queue Delay ( d :		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay ( d ), s/ve	_evel of Service (LOS)					50.5	55.	56.0	9.9	14.4	14.5	9.6	14.8	14.9
Level of Service (LOS)	11.00		D	E	<u> </u>	D		E	A	В	В	A	В	В
Approach Delay, s/veh			61.4	-	E	53.7		D	14.1		В	14.1		В
Intersection Delay, s/ve				24	4.5									
Multimodal Results		EB			WE	3		NB			SB			
Pedestrian LOS Score	ultimodal Results edestrian LOS Score / LOS				В	2.32	2	В	2.08	3	В	1.89	,	В
Bicycle LOS Score / LC	destrian LOS Score / LOS ycle LOS Score / LOS				А	1.07	7	А	1.12	2	А	1.31		А

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													-		
General Inform	nation								Intersed	ction Inf	ormatio	on	*	****	× L <u>x</u>
Agency		SE&D							Duratior	n, h	0.250			* * ¥	×_
Analyst		NK		Analys	sis Dat	e Apr 6	, 2023		Area Ty	ре	Other		<u></u>		 * }
Jurisdiction		Huber Heights, Ohio	C	Time F	Period	Scho Peak	ol Dismi: Hour	ssal	PHF		0.94		4 <del>1</del> 4	w‡e s	↓ ↓ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2025 Cond	Build tion		Analysis	Period	1> 2:4	45	٦ <sub>_</sub>	<u>114</u>	
Intersection		Chambersburg Roa	d	File Na	ame	2025	Build.xu	S					1 "	ef   1   efs   J   1	* [ [ ]
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
Demand Inform	nation				EB			N	/B		NB			SB	
Approach Move	ement			L	Т	R	L	Τ-	Г R	L	Т	R	L	Т	R
Demand ( v ), v	eh/h			82	165	46	92	12	27 205	52	641	123	155	568	63
				0										<u> </u>	
Signal Informa	tion				5	215	11.				£ I	_			_
Cycle, s	140.0	Reference Phase	2		2		51	<u>.</u> [^^	6	ř₩.	è		$\mathbf{Y}$	<b>K</b>	<b>-</b> € .
Offset, s	0	Reference Point	End	Green	7 1	0.9	81 7	7	6 0.8	21 (		1	∎ 2	3	<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.	2 0.0	4.1		< 🛛		~	$\rightarrow$
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.	2 0.0	1.0		5	6	7	8
<b>Timer Results</b>				EBI	-	EBT	WB	L	WBT	NB	_	NBT	SBI	-	SBT
Assigned Phase	e			7		4	3		8	5		2	1		6
Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration	i, S			13.0	)	26.1	13.7	7	26.9	12.	5	86.8	13.4		87.7
Change Period,	, ( Y+R )	c ), S	5.4		5.1	5.4		5.1	5.4		5.1	5.4		5.1	
Max Allow Head	Period, ( Y+R c ), s v Headway ( <i>MAH</i> ), s			3.1		3.2	3.1		3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	(gs), s		7.8		18.8	8.5		20.7	3.7			7.2		
Green Extensio	n Time	(ge),s		0.0		1.1	0.0		1.1	0.1		0.0	0.3		0.0
Phase Call Prol	bability			0.97	,	1.00	0.98	3	1.00	0.88	3		1.00	)	
Max Out Proba	bility			1.00	)	0.00	1.00	)	0.00	0.00	)		0.00	)	
	,														
Movement Gro	oup Res	ults			EB			W	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate( <i>v</i>	), veh/h		87	224		98	13	5 218	55	418	395	165	341	330
Adjusted Satura	ation Flo	w Rate ( <i>s</i> ), veh/h/l	n	1767	1814		1767	188	5 1598	1682	1841	1737	1767	1856	1790
Queue Service	Time ( g	g s ), S		5.8	16.8		6.5	9.1	18.7	1.7	17.1	17.2	5.2	12.9	13.0
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		5.8	16.8		6.5	9.1	18.7	1.7	17.1	17.2	5.2	12.9	13.0
Green Ratio ( g	/C)			0.20	0.15		0.21	0.1	6 0.16	0.63	0.58	0.58	0.64	0.59	0.59
Capacity ( c ), v	/eh/h			241	272		191	293	3 248	486	1074	1014	459	1095	1056
Volume-to-Capa	acity Ra	itio(X)		0.361	0.825	5	0.513	0.46	61 0.878	0.114	0.389	0.390	0.359	0.312	0.313
Back of Queue	(Q), ft	t/In ( 95 th percentile	)								-				
Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	4.6	12.5		5.2	7.8	3 12.4	1.2	11.9	11.4	3.6	9.5	9.2
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	(d1), s	/veh		47.1	57.7		47.4	53.	8 57.8	10.5	15.7	15.7	11.4	14.4	14.4
Incremental De	ental Delay ( <i>d</i> ₂ ), s/ven			0.3	2.4		0.8	0.4	4.2	0.0	1.1	1.1	0.2	0.7	0.8
nitial Queue Delay ( <i>d</i> 3 ), s/veh				0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (	Control Delay ( <i>d</i> ), s/veh				60.1		48.2	54.	2 62.0	10.5	16.8	16.8	11.6	15.2	15.2
Level of Service	e (LOS)			D	Е		D	D	E	В	В	В	В	В	В
Approach Delay	, s/veh	/LOS		56.6	; ]	E	56.7	7	E	16.4	1	В	14.5	;	В
Intersection Del	lav. s/ve	h / LOS				2	8.2						С		
	,, _,	-								1 					
Multimodal Re	Multimodal Results				EB			W	3		NB			SB	
Pedestrian LOS	estrian LOS Score / LOS		2.31		В	2.31	1	В	2.09	)	В	1.90	)	В	
Bicycle LOS Sc	ore / LC	)S	.OS			А	1.23	3	А	1.20	)	А	1.18	3	А

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Interaction Information         Interaction Information         Interaction Information           Qagency         SEAD         Duration, h         Q.235           Juriadiction         Huber Heights, Ohio         TTRE Period         Qagency         SET         Duration, h         Q.235           Unan Street         Old Troy Pike         Analysis Ver 2025 Build         Analysis Ver 2025 Build         Analysis Ver 2025 Build         Analysis Ver 2025 Build         Colspan="1">Colspan="1"         Colspan="1"         Colspan="1"         Colspan="1"         Colspan="1"         Colspan="1"         Colspan="1"          Colspan="1"         Colspan="1" <th colsp<="" th=""><th></th><th></th><th>пса</th><th>s Sigr</th><th>anze</th><th>a inte</th><th>ersect</th><th></th><th>esu</th><th>its Su</th><th>nmary</th><th>/</th><th></th><th></th><th></th><th></th></th>	<th></th> <th></th> <th>пса</th> <th>s Sigr</th> <th>anze</th> <th>a inte</th> <th>ersect</th> <th></th> <th>esu</th> <th>its Su</th> <th>nmary</th> <th>/</th> <th></th> <th></th> <th></th> <th></th>			пса	s Sigr	anze	a inte	ersect		esu	its Su	nmary	/				
Intersection Information         Intersection Information         Intersection Information         Intersection Information         Intersection         Intersection <th< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>-</td><td></td><td></td></th<>	-									1				-			
Agency         SEAD         Duration, in         0.250           Analyst         NK         Analysis Date (Apr 6, 2023)         Area Type         0.08           Juriadiction         Huber Heights, Ohio         Time Paried         Apr 6, 2023         Area Type         0.98           Urban Streat         Old Troy Pike         Analysis Vest         2025 Build         Analysis Period         1>2.45         Area Vest           Project Description         Proposed Wawa w/ Fuel Sales         2025 Build Aus         T         R         L         T	General Inforn	nation								Interse	ction Inf	ormat	ion		4 4 4 1 1 4 1 1	× 1 <u>4</u>	
Analysis         NK         Analysis         Prior         Order Type         Other	Agency		SE&D							Duratio	ո, h	0.25	0	_		×.	
Jurisdiction         Huber Heights, Ohio         Time Partol         Wookday Exoning         PHF         0.88         Image and the particular set of the part particular set of the part part particular set of	Analyst		NK		Analys	sis Dat	e Apr 6	, 2023		Area Ty	ре	Othe	er	×		₹	
Urban Street       Old Toy Pike       Analysis Var       2025 Build.cus       Analysis Period       12 - 24 5       Improvement       12 - 24 5         Project Description       Proposed Wawa w/ Fuel Sales       2025 Build.cus       Summarian       No	Jurisdiction		Huber Heights, Ohi	0	Time F	Period	Week Peak	day Eve Hour	ening	PHF		0.98			W ∔ E S	+ ↓ ↓ ↓	
Intersection       Chambersburg Road       File Name       2025 Build xus       Image Name	Urban Street		Old Troy Pike		Analys	sis Yea	r 2025 Cond	Build tion		Analysi	s Period	1> 2	:45		<u>114</u>		
Project Description         Proposed Wave w/ Fuel Sales         VB         NB         T         R         L         T         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R	Intersection		Chambersburg Roa	ıd	File Na	ame	2025	Build.xu	s					1 1			
Demand Information         EB         VB         NB         SB           Approach Movement         L         T         R         L         T	Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales												
Demand Information         L         T         R <thl< th="">         T         R</thl<>	, , ,																
Approach Movement.       L       T       R       L       T       R       L       T       R       L       T       R       D       T       R       D       T       R       D       T       R       D       T       R       D       T       R       D       T       R       D       D	Demand Inform	nation				EB			Ν	/B		NE	}		SB		
Demand ( $\psi$ ), veh/h         104         161         37         106         158         218         48         780         115         186         684         88           Signal Information Cycle, s         140.0         Reference Phase         2           Offset, s         0         Reference Point         End         7         797         8.7         0.1         220 $\psi$	Approach Move	ement			L	T	R	L	-	Г R	L	Т	R	L	Т	R	
Signal Information         Cycle.s         140.0         Reference Print         End         J.V.	Demand ( v ), v	/eh/h			104	161	37	106	1	58 21	3 48	78	) 115	186	684	88	
Signal Information Cycle, s       00,0       Reference Phase       0       Green 68,8       1.7       70,0       8.7       0,1       2.20       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       3.2       0.0       4.1       4.0       1.1	· · · · · · ·								_			_					
Cycle, s       140.0       Reference Phase       2         Green       0.8       Reference Phate       End         Green       0.8       1.7       79.7       8.7       0.1       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       2.2       0.0       1.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       4.0       1.1       0.0       3.1       3.2       3.1       3.2       3.1       3.2<	Signal Informa	ation				6	216	- Nor					L	-+-		_	
Offset         0         Reference Pont         End         Creen         6.8         1.7         7.9         7.9         7.0	Cycle, s	140.0	Reference Phase	2		5		51	۳Ľ	e	۴ 🛱	e			¥ _	€ ₄	
Uncoordinated         No         Simult. Gap EW         On         Red         2.2         0.0         4.1         3.2         0.0         4.1         3.2         0.0         4.1           Force Mode         Fixed         Simult. Gap N/S         On         Red         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.2         0.0         1.0         2.1         1.0         6.2         5.1         5.4         5.1	Offset, s	0	Reference Point	End	Green	6.8	1.7	79.7	8.	7 0.1	22.0	)				<u> </u>	
Force Mode         Fixed         Simult. Gap N/S         On         Red         2.2         0.0         1.0         0.0         1.1         4.0         1.0         0.0         1.1         4.0         1.0         0.0         1.1         4.0         1.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0	Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.	2 0.0	4.1		<u>ና</u> 4			Y	
Timer Results         EBL         EBT         WBL         WBL         NBL         NBT         SBL         SBT           Assigned Phase         7         4         3         8         5         2         1         6           Case Number         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         1.1         4.0         5.1         5.4         5.1         <	Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.	2  0.0	1.0	_	5	6	7	8	
Time Results         EBL         EBL         WBI         WBL         NBL         NBL         NBL         SBL         CBL         <									. 1						_		
Assigned Phase       /       4       3       8       5       2       1       6         Case Number       1.1       4.0       1.1       3.0       1.1       4.0       1.1       4.0         Phase Duration, s       14.1       27.1       14.3       27.2       12.2       84.8       13.9       86.4         Change Period, (*FR c), s       5.4       5.1       5.4	Timer Results				EBI	-	EBI	WB		WBT	NB		NBI	SBI	-	SBI	
Case Number       1.1       4.0       1.1       3.0       1.1       4.0       3.1       3.2       3.1       3.2       3.1       3.2       3.1       3.2       3.1       0.0       3.1       0.0       1.0       0.0       3.1       0.0       0.0       0.0       3.1       0.0	Assigned Phas	e			7		4	3	_	8	5	_	2	1		6	
Phase Duration, s       14.1       27.1       14.3       27.2       12.2       18.4       13.9       86.4         Change Period, (Y+R_r), s       5.4       5.1       5.4       5.1       5.4       5.1       5.4       5.1       5.4       5.1       5.4       5.1         Max Allow Headway (MAH), s       3.1       3.2       3.1       3.2       3.1       3.2       3.1       3.5 $\mathbb{S}.4$ $\mathbb{S}.1$ Green Extension Time (g *), s       0.0       1.10       0.0       1.10       0.0       1.10       0.0       0.03       0.0         Max Out Probability       0.98       1.00       0.09       1.00       0.00 <th< td=""><td>Case Number</td><td></td><td></td><td></td><td>1.1</td><td></td><td>4.0</td><td>1.1</td><td></td><td>3.0</td><td>1.1</td><td></td><td>4.0</td><td>1.1</td><td></td><td>4.0</td></th<>	Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Phase Duration	1, S		14.1		27.1	14.3	3	27.2	12.	2	84.8	13.9	) ;	86.4		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Change Period	Period, (Y+R c), s w Headway (MAH), s					5.1	5.4	_	5.1	5.4	_	5.1	5.4		5.1	
Queue Clearance Time ( $g \circ$ ), s         8.9         16.7         9.0         21.1         3.5 $\blacksquare$ 8.1           Green Extension Time ( $g \circ$ ), s         0.0         1.1         0.0         21.1         0.1         0.0         0.3         0.0           Max Out Probability         0.98         1.00         0.99         1.00         0.80         0.00         0.00         0.00         0.00         0.00         0.00           Max Out Probability         1.00         0.98         1.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           Max Out Probability         1.00         0.00         1.00         0.00         0.00         0.00         0.00         0.00         0.00           Movement         L         T         R         L         T         R         L         T         R         L         T         R           Adjusted Flow Rate ( $v$ ), velv/n         106         202         108         161         228         190         16.1         159         185         1800           Queue Service Time ( $g \circ$ ), s         6.9         14.7         7.0         10.9         19.1         1.5         19.9	Max Allow Hea	Allow Headway ( <i>MAH</i> ), s					3.2	3.1	$\rightarrow$	3.2	3.1		0.0	3.1		0.0	
Green Extension Time ( $g \circ$ ), s         0.0         1.1         0.0         1.1         0.0         1.0         0.03         0.0           Phase Call Probability         0.98         1.00         0.99         1.00         0.85 $\cdot$ 1.00 $\cdot$	Queue Clearan	ce Time	e ( g s ), s		8.9		16.7	9.0	_	21.1	3.5			8.1			
Phase Call Probability       0.98       1.00       0.99       1.00       0.00      <	Green Extensio	on Time	(g <sub>e</sub> ), s		0.0		1.1	0.0	_	1.1	0.1		0.0	0.3		0.0	
Max Out Probability       1.00       0.00       1.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00         Movement Group Results       L       T       R       L       L       T       R       L <thl< th=""></thl<>	Phase Call Pro	bability			0.98	}	1.00	0.99	)	1.00	0.8	5		1.00	)		
Movement Group Results       L       T       R       Adjusted flow Rate (v), veh/h       106       202       108       161       222       49       467       446       190       402       366         Queue Service Time (g c), s       6.9       14.7       7.0       10.9       19.1       1.5       19.9       6.1       15.9       15.9       15.9       16.9       15.9       16.9       15.9       15.9       15.9       16.9       16.9       15.9       16.9       15.9       15.9       15.9       16.9       16.9       15.9       15.9       16.9       15.9	Max Out Proba	bility			1.00	)	0.00	1.00		0.00	0.0	)		0.00	)		
Approach MovementIL	Movement Gro	oup Res	sults			EB			W	3		NB			SB		
Assigned Movement7414381852121616Adjusted Flow Rate (v), veh/h106 $2 \square 2$ 108161222494674461004 $\square 2$ 386Adjusted Saturation Flow Rate (s), veh/h/ln1795 $1 \square 2$ 70 $1 \square 2$ 170 $1 \square 2$ 1701	Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
Adjusted Flow Rate (v), veh/h106 $2 \cup 2$ 10816122249467446190 $4 \cup 2$ 380Adjusted Saturation Flow Rate (s), veh/h/in1795 $1 \times 2$ 119010.019019018817818.51800179518.51800Queue Service Time (g c), s6.9 $1 \cdot 7$ 7.0 $7.0$ $1 \cdot 7$ 19.115.5 $1 \cdot 7$ 19.919.06.1 $1 \cdot 7$ 15.915.9Green Ratio (g/C)0.22 $0.16$ 0.22 $0.16$ $0.22$ $0.16$ 0.160.62 $0.57$ 0.63 $0.54$ 0.570.570.63 $0.54$ 0.57Gapacity (c), veh/h245 $2 \times 7$ $0 \cdot 7$ <td< td=""><td>Assigned Move</td><td>ment</td><td></td><td></td><td>7</td><td>4</td><td>14</td><td>3</td><td>8</td><td>18</td><td>5</td><td>2</td><td>12</td><td>1</td><td>6</td><td>16</td></td<>	Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Saturation Flow Rate (s), ven/n/n         1795         1824         1795         1900         1588         1781         1885         1800         1785         1800         1885         1800         1885         1800         1885         1800         1885         1800         1885         1800         1885         1800         1885         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1895         1800         1995         1895         1800         1995         1895         1800         1995         1895         1995	Adjusted Flow	Rate( <i>v</i>	), veh/h		106	202		108	16	1 222	49	467	446	190	402	386	
Queue Service Time (g s), s6.914.77.01.91.11.51.9.91.9.96.11.5.91.5.	Adjusted Satura	ation Flo	ow Rate ( <i>s</i> ), veh/h/l	n	1795	1824		1795	190	0 1598	1781	1885	1800	1795	1885	1809	
Cycle Queue Clearance Time (g c), s6.914.77.010.919.11.519.919.96.115.915.9Green Ratio (g/C)0.220.160.220.160.220.160.220.160.620.570.570.630.580.58Capacity (c), veh/h2452872872273025344917.3102442310.90.4350.4350.4350.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.570.630.4490.570.630.570.800.100.430.570.630.570.800.100.430.4490.570.670.830.570.830.490.570.630.4490.570.670.830.580.4490.570.670.830.580.440.411.51.530.441.51.50.670.600.00 <t< td=""><td>Queue Service</td><td>Time ( g</td><td>g s ), S</td><td></td><td>6.9</td><td>14.7</td><td></td><td>7.0</td><td>10.</td><td>9 19.1</td><td>1.5</td><td>19.9</td><td>19.9</td><td>6.1</td><td>15.9</td><td>15.9</td></t<>	Queue Service	Time ( g	g s ), S		6.9	14.7		7.0	10.	9 19.1	1.5	19.9	19.9	6.1	15.9	15.9	
Green Ratio (g/C)       0.22       0.16       0.22       0.16       0.16       0.62       0.57       0.63       0.58       0.58         Capacity (c), veh/h       245       287       227       300       253       449       1073       1024       423       1095       1051         Volume-to-Capacity Ratio (X)       0.433       0.705       0.476       0.537       0.880       0.109       0.436       0.449       0.367       0.367       0.367       0.368       0.499       0.433       0.436       0.433       0.705       0.476       0.537       0.880       0.109       0.436       0.449       0.367       0.367         Back of Queue (Q), th/ln (95 th percentile)       5.6       11.1       1       5.7       9.0       12.8       1.1       13.8       13.3       4.4       11.4       11.0         Queue Storage Ratio (RQ) (95 th percentile)       0.00 <t< td=""><td>Cycle Queue C</td><td>learance</td><td>e Time ( <i>g c</i> ), s</td><td></td><td>6.9</td><td>14.7</td><td></td><td>7.0</td><td>10.</td><td>9 19.1</td><td>1.5</td><td>19.9</td><td>19.9</td><td>6.1</td><td>15.9</td><td>15.9</td></t<>	Cycle Queue C	learance	e Time ( <i>g c</i> ), s		6.9	14.7		7.0	10.	9 19.1	1.5	19.9	19.9	6.1	15.9	15.9	
Capacity (c), veh/h2452872273002534491073102442310951051Volume-to-Capacity Ratio (X)0.4330.7050.476 $0.537$ 0.8800.109 $0.436$ 0.449 $0.367$ 0.367Back of Queu (Q), tr/ln (95 th percentile)5.611.1r5.7 $9.0$ 12.81.1 $13.8$ 13.34.4 $11.4$ 11.0Queue Storage Ratio (RQ) (95 th percentile)0.00 $0.00$	Green Ratio (g	1/C)			0.22	0.16	<u> </u>	0.22	0.1	6 0.16	0.62	0.57	0.57	0.63	0.58	0.58	
Volume-to-Capacity Ratio (X)       0.433       0.705       0.476       0.537       0.880       0.109       0.436      <	Capacity ( c ), v	/eh/h			245	287		227	300	) 253	449	1073	1024	423	1095	1051	
Back of Queue (Q), ft/ln (95 th percentile)Image: Second ProblemImage: Second Problem<	Volume-to-Cap	acity Ra	itio (X)		0.433	0.705		0.476	0.53	37 0.880	0.109	0.436	6 0.436	0.449	0.367	0.367	
Back of Queue (Q), veh/ln (95 th percentile)5.611.15.79.012.81.113.813.34.411.411.0Queue Storage Ratio (RQ) (95 th percentile)0.00	Back of Queue	(Q), ft	t/In (95 th percentile	)						-	<u> </u>						
Queue Storage Ratio ( $RQ$ ) ( 95 th percentile)0.00	Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	5.6	11.1		5.7	9.0	) 12.8	1.1	13.8	13.3	4.4	11.4	11.0	
Uniform Delay (d_1), s/veh       45.9       55.9       46.1       54.2       57.6       11.5       17.3       12.8       15.6       15.6         Incremental Delay (d_2), s/veh       0.5       1.2       0.6       0.6       6.4       0.0       1.3       1.3       0.3       0.9       1.0         Initial Queue Delay (d_3), s/veh       0.0 <td>Queue Storage</td> <td>Ratio (</td> <td>RQ) (95 th percent</td> <td>tile)</td> <td>0.00</td> <td>0.00</td> <td></td> <td>0.00</td> <td>0.0</td> <td>0 0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	Queue Storage	Ratio (	RQ) (95 th percent	tile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Incremental Delay (d 2), s/veh $0.5$ $1.2$ $0.6$ $0.6$ $6.4$ $0.0$ $1.3$ $1.3$ $0.3$ $0.9$ $1.0$ Initial Queue Delay (d 3), s/veh $0.0$	Uniform Delay	m Delay ( <i>d</i> 1 ), s/veh				55.9		46.1	54.	2 57.6	11.5	17.3	17.3	12.8	15.6	15.6	
Initial Queue Delay (d_3), s/ven $0.0$	Incremental De	remental Delay ( d ₂ ), s/veh				1.2		0.6	0.6	6.4	0.0	1.3	1.3	0.3	0.9	1.0	
Control Delay (a), s/ven46.457.146.754.864.011.618.613.116.616.6Level of Service (LOS)DEDDEBBBBBBBApproach Delay, s/veh / LOS $53.4$ D $57.2$ E18.3B15.9BBIntersection Delay, s/veh / LOS $53.4$ D $57.2$ E18.3B15.9BIntersection Delay, s/veh / LOS $53.4$ D $57.2$ E18.3B15.9BIntersection Delay, s/veh / LOS $53.4$ D $57.2$ E18.3B15.9BIntersection Delay, s/veh / LOS $53.4$ D $57.2$ E $18.3$ B15.9BIntersection Delay, s/veh / LOS $23.4$ $E$ $57.2$ E $18.3$ B $15.9$ BPedestrian LOS Score / LOS $2.31$ B $2.31$ B $2.09$ B $1.90$ BBicycle LOS Score / LOS $1.00$ A $1.30$ A $1.28$ A $1.29$ A	Initial Queue D	nitial Queue Delay ( <i>d</i> ₃ ), s/veh Control Delay ( <i>d</i> ), s/veh						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Level of Service (LOS)DEDDEBBBABABABABABABBBBBBBBBBBBBBBBBBBBBBBBBBBBIII <t< td=""><td>Control Delay (</td><td>a), s/ve</td><td>en</td><td></td><td>46.4</td><td>57.1</td><td></td><td>46.7</td><td>54.</td><td>o 64.0</td><td>11.6</td><td>18.6</td><td>18.6</td><td>13.1</td><td>16.6</td><td>16.6</td></t<>	Control Delay (	a), s/ve	en		46.4	57.1		46.7	54.	o 64.0	11.6	18.6	18.6	13.1	16.6	16.6	
Approach Delay, s/veh / LOS53.4D57.2E18.3B15.9BIntersection Delay, s/veh / LOS $28.4$ $28.4$ $C$ $C$ Multimodal ResultsEB $B$ BBPedestrian LOS Score / LOS2.31B2.31B2.09B1.90BBicycle LOS Score / LOS1.00A1.30A1.28A1.29A	Level of Service	e (LOS)	11.00		D	Ë		D		E	В	B	В	В	В	В	
Intersection Delay, s/ven / LOS     28.4     C       Multimodal Results     EB     WB     NB     S       Pedestrian LOS Score / LOS     2.31     B     2.31     B     2.09     B     1.90     B       Bicycle LOS Score / LOS     1.00     A     1.30     A     1.28     A     1.29     A	Approach Dela	y, s/veh	/ LOS		53.4	-	D	57.2		E	18.3	5	В	15.9	)	В	
Multimodal Results         EB         WB         NB         SB           Pedestrian LOS Score / LOS         2.31         B         2.31         B         2.09         B         1.90         B           Bicycle LOS Score / LOS         1.00         A         1.30         A         1.28         A         1.29         A	Intersection De	ntersection Delay, s/veh / LOS					2	5.4						C			
Pedestrian LOS Score / LOS         2.31         B         2.31         B         2.31         B         2.09         B         1.90         B           Bicycle LOS Score / LOS         1.00         A         1.30         A         1.28         A         1.29         A	Multimodal Re	lultimodal Results				EB			W	3		NB			SB		
Bicycle LOS Score / LOS         1.00         A         1.30         A         1.28         A         1.29         A	Pedestrian LOS	ultimodal Results edestrian LOS Score / LOS					В	2.3		В	2.0	3	В	1.90	)	В	
	Bicycle LOS So	In LOS Score / LOS				)	А	1.30	)	А	1.2	3	А	1.29	)	А	

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General Inforn	nation	0540							Intersec		ormati	on	_	444	- <u>x</u>
Agency		SE&D							Duration	, n	0.250	)			K.
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area Typ	e	Othe	r	×		×
Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Week Peak	day Moi Hour	rning	PHF		0.78		\$P	W + E 8	
Urban Street		Old Troy Pike		Analys	sis Year	2045 Cond	No-Build tion	b	Analysis	Period	1> 7:	15		<u>1</u> 1 + +	
Intersection		Chambersburg Roa	d	File Na	ame	2045	No-Build	d.xus					1 1		
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
										14					
Demand Inform	nation				EB			W	'B		NB			SB	
Approach Move	ement			L	Т	R	L		R	<u> </u>	Т	R	L	Т	R
Demand( <i>v</i> ), v	eh/h			64	80	48	132	10	05 108	49	565	125	143	767	76
								_		_	_				
Signal Informa			2		6	245	- 1245a	La		¥			<b>s†</b> 3		
Cycle, s	140.0	Reference Phase	2	-	5		51	7		۴Ŕ.	e	1		3	◀ 4
Offset, s	0	Reference Point	End	Green	7.3	0.8	81.2	7.3	3 1.3	15.7	7				5
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 3.2	4.1	_	$ \leq   4 \rangle $			
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2   2.2	1.0		5	6	7	8
<b>T</b> . <b>D</b> . <b>K</b>				EDI	_	EDT			MOT			NDT	0.01		ODT
Timer Results				EBI		EBI	WB		WBI	NBI	-	NBT	SBI		SBI
Assigned Phase	e			1		4	3	$\rightarrow$	8	5		2	1	$\rightarrow$	6
Case Number				1.1		4.0	1.1	-	3.0	1.1		4.0	1.1		4.0
Phase Duration	on, s od, ( <i>Y+R c</i> ), s					20.8	19.4	1	27.4	12.7	/	86.3	13.5		87.2
Change Period	ange Period, (Y+R c), s					5.1	5.4	$\rightarrow$	5.1	5.4		5.1	5.4		5.1
Max Allow Hea	ax Allow Headway ( <i>MAH</i> ), s					3.2	3.1		3.2	3.1		0.0	3.1	$\rightarrow$	0.0
Queue Clearan	ce Time	( <b>g</b> s ), s		7.6		14.8	13.9	9	13.8	3.9			7.8		
Green Extensio	n Time	(g e), s		0.0		0.8	0.1	$\rightarrow$	0.8	0.1		0.0	0.3	$\rightarrow$	0.0
Phase Call Pro	bability			0.96	;	1.00	1.00	)	1.00	0.91	1		1.00	)	
Max Out Proba	bility			1.00	)	0.00	1.00	)	0.00	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate( <i>v</i>	), veh/h		82	164		169	135	5 138	63	457	428	183	549	532
Adjusted Satura	ation Flo	ow Rate ( <i>s</i> ), veh/h/l	n	1810	1752		1711	184	1 1522	1739	1856	1738	1781	1841	1782
Queue Service	Time ( g	g s ), S		5.6	12.8		11.9	9.3	11.8	1.9	19.2	19.2	5.8	24.6	24.6
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		5.6	12.8		11.9	9.3	11.8	1.9	19.2	19.2	5.8	24.6	24.6
Green Ratio (g	/C)			0.16	0.11		0.23	0.10	6 0.16	0.63	0.58	0.58	0.64	0.59	0.59
Capacity ( c ), v	/eh/h			246	196		246	294	243	344	1077	1009	433	1079	1045
Volume-to-Cap	acity Ra	tio ( <i>X</i> )		0.333	0.837		0.689	0.45	8 0.570	0.183	0.424	0.424	0.423	0.509	0.509
Back of Queue	(Q), ft	/In ( 95 th percentile	)												
Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	4.6	9.9		9.2	7.7	8.1	1.3	13.1	12.5	4.1	16.0	15.6
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	( d 1 ), s/	/veh		51.3	60.9		47.5	53.3	3 54.4	12.5	16.4	16.4	12.1	17.1	17.1
Incremental De	cremental Delay ( d 2), s/veh				3.6		4.4	0.4	0.8	0.1	1.2	1.3	0.2	1.7	1.8
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delay (	Control Delay ( d ), s/veh						51.9	53.8	3 55.2	12.6	17.6	17.7	12.3	18.8	18.9
Level of Service	e (LOS)			D	E		D	D	E	В	В	В	В	В	В
Approach Dela	Approach Delay, s/veh / LOS				2	Е	53.5	5	D	17.3	3	В	17.9	)	В
Intersection De	ntersection Delay, s/veh / LOS					2	6.7						С		
Multimodal Results					EP			\^/	2		ND			<b>CD</b>	
Podostrian L OC	Aultimodal Results					P	0.04	1	, D	2.00		P	1.00		P
Riovelo LOS So	-OS Score / LOS			2.32	-		2.3			2.08	7		1.90		D
	JUE / LC			0.85	,	A	1.24	-	A	1.27		A	1.00	,	D

		пос	lalize		ersec		esu	its Sui	iiiiai y	,					
<b>a</b>															. T
General Inform	nation								Intersed	tion Inf	ormatio	on	_		* ' <u>*</u>
Agency		SE&D							Duratior	i, h	0.250				×.
Analyst		NK		Analys	sis Dat	e Apr 6	, 2023		Area Ty	be	Othe	-	×		
Jurisdiction		Huber Heights, Ohi	C	Time F	Period	Scho Peak	ol Dismi: Hour	ssal	PHF		0.94		4 44 44	₩ <u></u> 8	+ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2045 Cond	No-Build tion	d	Analysis	Period	1> 2:	45		ጎተቅ	
Intersection		Chambersburg Roa	d	File Na	ame	2025	Build.xu	IS	<u>n</u>		1		1 "		~ [
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
, , ,															
Demand Inform	nation				EB			Ν	/B		NB			SB	
Approach Move	ement			L	Т	R	L	Τ-	r r	L	Т	R	L	Т	R
Demand ( v ), v	/eh/h			106	203	43	120	1:	54 266	61	801	159	201	719	81
				17-							_				1
Signal Informa	ation				6	215	- Netter				E .		-+-		_
Cycle, s	140.0	Reference Phase	2		5		51	~ [~ ]		۳R	e l		$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	7.4	2.9	72.3	9.	0 1.0	26.5	5				<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.	2 0.0	4.1	_ '	く IA		<u>~</u>	7
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0	_	5	6	7	8
				1			_			_	_		1		
Timer Results				EBL	-	EBT	WB	L	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	е			7		4	3	_	8	5		2	1		6
Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration	n, s		14.4	-	31.6	15.4	1	32.5	12.8	3	77.4	15.7	<b>'</b>	80.3	
Change Period	, ( <b>Y+</b> R a	5.4		5.1	5.4	·	5.1	5.4		5.1	5.4		5.1		
Max Allow Head	ge Period,(Y+ <i>R c</i> ), s Ilow Headway( <i>MAH</i> ), s					3.2	3.1		3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	( <i>g</i> s ), s		9.1		21.0	10.1	1	26.2	4.4			9.9		
Green Extensio	on Time	(ge), s		0.0		1.3	0.0		1.2	0.1		0.0	0.4		0.0
Phase Call Pro	bability			0.99	)	1.00	0.99	9	1.00	0.92	2		1.00	)	
Max Out Proba	bility			1.00	)	0.01	1.00	)	0.04	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate ( v	), veh/h		113	262		128	164	4 283	65	526	495	214	433	418
Adjusted Satura	ation Flo	w Rate ( s ), veh/h/l	n	1767	1828		1767	188	5 1598	1682	1841	1734	1767	1856	1789
Queue Service	Time ( g	g s ), S		7.1	19.0		8.1	10.	7 24.2	2.4	27.1	27.1	7.9	19.7	19.8
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		7.1	19.0		8.1	10.	7 24.2	2.4	27.1	27.1	7.9	19.7	19.8
Green Ratio ( g	ı/C)			0.25	0.19	1	0.26	0.2	0 0.20	0.57	0.52	0.52	0.59	0.54	0.54
Capacity ( c ), v	/eh/h			293	345		237	369	313	373	950	895	358	996	961
Volume-to-Cap	acity Ra	tio(X)		0.385	0.758		0.539	0.44	4 0.904	0.174	0.553	0.553	0.598	0.435	0.435
Back of Queue	(Q), ft	/In ( 95 th percentile	)												
Back of Queue	(Q), ve	eh/In ( 95 th percenti	le)	5.7	13.9		6.5	8.8	3 16.6	1.7	17.9	17.1	5.7	13.7	13.3
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	(d1), s/	/veh	,	42.2	53.7		42.7	49.	6 55.0	15.0	22.9	22.9	17.7	19.6	19.6
Incremental De	orm Delay ( d 1 ), s/veh emental Delay ( d 2 ), s/veh				3.2		1.1	0.3	3 16.2	0.1	2.3	2.5	0.6	1.4	1.4
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delav (		42.5	56.9		43.8	49.	9 71.2	15.0	25.3	25.4	18.3	21.0	21.0		
Level of Service	e (LOS)			D	E		D	D	E	В	С	С	В	С	С
Approach Delay	Approach Delay, s/veh / LOS				;	D	59.0		E	24.7	7	C	20,4		С
Intersection De	ntersection Delay, s/veh / LOS					3	3.0						С		
	leiseuon belay, aven r Lee														
Multimodal Re	lultimodal Results				EB			W	3		NB			SB	
Pedestrian LOS	lestrian LOS Score / LOS			2.31		В	2.31	1	В	2.10	)	В	1.91		В
Bicycle LOS Sc	cycle LOS Score / LOS					А	1.44	1	Α	1.38	3	А	1.37	7	А

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• · · · ·					1	• •						1
General Information						Intersec	tion Info	ormati	on	_		24 L <u>a</u>
Agency SE&D	_					Duration	, h	0.250	)			r.
Analyst NK	Analys	sis Date	e Apr 6	, 2023		Area Typ	e	Othe	-	×		×
Jurisdiction Huber Heights, Ohio	Time I	Period	Week Peak	day Eve Hour	ening	PHF		0.98		***	w ‡ e s	+ ↓ ↓ + ↓ ↓
Urban Street Old Troy Pike	Analys	sis Year	2045 Cond	No-Build tion	t	Analysis	Period	1> 2:	45		ጎተቅ	
Intersection Chambersburg Road	File N	ame	245 N	lo Build.	xus			-ù		1 .		
Project Description Proposed Wawa w/ Fuel	Sales									1		
Demand Information		EB			W	В		NB			SB	
Approach Movement	L	Т	R	L	_ T	R	L	Т	R	L	Т	R
Demand ( v ), veh/h	134	198	31	137	19	4 282	56	982	149	240	869	114
							_	_				
Signal Information	-	5	245	¥¥	La			E L		-		
Cycle, s 140.0 Reference Phase 2	-	5		51	<u>ا</u> م		۴₿.	E	1		3	♣ ₄
Offset, s 0 Reference Point End	Green	7.1	4.4	69.3	10	.4 0.2	27.6	;				5
Uncoordinated No Simult. Gap E/W On	Yellow	/ 3.2	0.0	4.1	3.2	2 0.0	4.1	′	く  4			Y
Force Mode Fixed Simult. Gap N/S On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0	_	5	6	7	8
						MOT		_	NET	0.54		0.D.T
Timer Results	EB	-	EBI	WB		WBI		-	NBI	SBI	-	SBI
Assigned Phase	1		4	3	$\rightarrow$	8	5	_	2	1		6
Case Number	1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration, s	15.8	3	32.7	16.0	)	32.9	12.5	5	74.4	17.0	)	78.8
Change Period, $(Y+R_c)$ , s	5.4		5.1	5.4	$\rightarrow$	5.1	5.4	_	5.1	5.4	_	5.1
Max Allow Headway ( MAH ), s	3.1	_	3.2	3.1	_	3.2	3.1	_	0.0	3.1		0.0
Queue Clearance Time ( $g_s$ ), s	10.4	4	18.3	10.6	3	26.7	4.1			11.2	2	
Green Extension Time ( $g_e$ ), s	0.0		1.4	0.0	_	1.1	0.1		0.0	0.4		0.0
Phase Call Probability	1.00	)	1.00	1.00	)	1.00	0.89	)		1.00	)	
Max Out Probability	1.00	)	0.00	1.00	)	0.09	0.00	)		0.00	)	
Movement Group Results		EB			WE	}		NB			SB	
Approach Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	137	234		140	198	288	57	590	564	245	512	491
Adjusted Saturation Flow Rate ( s ), veh/h/ln	1795	1840		1795	190	0 1598	1781	1885	1798	1795	1885	1808
Queue Service Time ( $g s$ ), s	8.4	16.3		8.6	13.1	24.7	2.1	32.2	32.3	9.2	24.7	24.7
Cycle Queue Clearance Time ( $g_c$ ), s	8.4	16.3		8.6	13.1	24.7	2.1	32.2	32.3	9.2	24.7	24.7
Green Ratio(g/C)	0.27	0.20		0.27	0.20	0.20	0.55	0.49	0.49	0.59	0.53	0.53
Capacity( <i>c</i> ), veh/h	293	363		280	377	317	331	933	890	329	993	952
Volume-to-Capacity Ratio ( <i>X</i> )	0.467	0.644		0.500	0.52	5 0.908	0.173	0.633	0.634	0.743	0.516	0.516
Back of Queue (Q), ft/ln (95 th percentile)												
Back of Queue ( Q ), veh/ln ( 95 th percentile)	6.8	12.1		6.9	10.3	3 17.0	1.6	21.4	20.7	6.8	16.8	16.2
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay ( d 1 ), s/veh	41.1	51.7		41.3	50.2	2 54.9	16.9	26.0	26.0	21.9	21.5	21.5
Incremental Delay ( d ₂ ), s/veh	0.4	0.9		0.5	0.4	18.6	0.1	3.3	3.4	1.3	1.9	2.0
Initial Queue Delay ( <i>d</i> ₃ ), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay ( <i>d</i> ), s/veh	41.6	52.6		41.8	50.6	5 73.4	17.0	29.3	29.5	23.1	23.5	23.5
Level of Service (LOS)	D	D		D	D	E	В	С	C	С	С	С
Approach Delay, s/veh / LOS	48.	5	D	59.1	1	E	28.8	3	С	23.4		С
Intersection Delay, s/veh / LOS			34	4.5						С		
Multimodal Results		EB			WE	3		NB			SB	
Pedestrian LOS Score / LOS	2.3	1	В	2.31	1	В	2.10	)	В	1.91		В
Bicycle LOS Score / LOS	1.1(	2	А	1.52	2	В	1.49	)	А	1.52	2	В

		HUS	s Sign		a inte	ersect		esu	its Su	nmary	/				
General Informat	tion								Interse	ction Inf	ormat	on	×		>= l <u>s</u>
Agency		SE&D		0					Duratio	n, h	0.25	0		* * *	×_
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area Ty	ре	Othe	r	<u></u>		×_ 5-
Jurisdiction		Huber Heights, Ohio	C	Time F	Period	Week Peak	day Moi Hour	rning	PHF		0.78		4 4 4	₩Ĵ₽	+ ↓ + ↓ +
Urban Street	ľ	Old Troy Pike		Analys	sis Yea	r 2045 Cond	Build tion		Analysi	s Period	1> 7	:15		<u> </u>	
Intersection		Chambersburg Roa	d	File Na	ame	2045	Build.xu	s					1 "	*{ [ *** T	er D
Project Description	n	Proposed Wawa w/	Fuel Sa	ales									1		
r reject becomption			1 401 00												
Demand Informat	tion				EB			W	′B		NE	;		SB	
Approach Moveme	ent			L	Т	R	L	1	r R	L	Т	R	L	Т	R
Demand ( v ), veh	ı/h			64	88	63	132	11	3 10	3 55	588	3 125	143	781	76
Signal Informatio	on					깄	11.			5	5				
Cycle, s 14	40.0	Reference Phase	2	1	2			<b>,</b>  -^	6	F.S.	è.		$\mathbf{\nabla}$	<u> </u>	-4
Offset, s	0	Reference Point	End	Creation			70.7			10	4	1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow	1.5	0.9	<u>/8./</u> <u>4</u> 1	1.	∠ I. 2 3.2	18.	1	<u> </u>		x	$\rightarrow$
Force Mode Fi	ixed	Simult, Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 2.2	1.0		5	6	7	8
	"rea		•		1	1	1	1		1					
Timer Results				FBI		FBT	WB		WBT	NB		NBT	SBI		SBT
Assigned Phase				7	-	4	3	-	8	5		2	1		6
Case Number				11		4.0	11	$\rightarrow$	3.0	1 1		4.0	11		4.0
Dhase Number				12.6	2	4.0	10 1	-	20.0	12 (		4.0	1.1	, ,	4.0 01 0
Change Duration, S	ase Duration, s ange Period,(Y+ <i>R c</i> ), s					5 1	19. 5.4	-+-	29.0	12.	9	5.0	5.0	, ,	5 1
	ange Period, (Y+R c), s					0.1	0.4		0.1	0.4		0.0	0.4	_	0.0
	ay ( IV	и́АП), S		3.1		3.2	3.1	_	3.2	3.1		0.0	3.1		0.0
Queue Clearance		(gs), s		7.4	_	17.3	13.7	·	13.5	4.3	-		8.1		
Green Extension I	lime (	. g e ), s		0.0		0.9	0.1	$\rightarrow$	0.9	0.1		0.0	0.3		0.0
Phase Call Probab	bility			0.96	j	1.00	1.00	)	1.00	0.94	4		1.00	)	
Max Out Probabili	ity			0.96	6	0.00	1.00		0.00	0.0	)		0.00	)	
Movement Group	p Resi	ults			EB			WE	3		NB			SB	
Approach Moveme	ent			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Moveme	ent			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rat	te ( v )	), veh/h		82	194		169	145	5 138	71	471	443	183	558	541
Adjusted Saturatio	on Flo	w Rate ( <i>s</i> ), veh/h/l	n	1810	1740		1711	184	1 1522	1739	1856	1742	1781	1841	1783
Queue Service Tin	me ( <i>g</i>	rs), S		5.4	15.3		11.7	9.9	11.5	2.3	20.9	20.9	6.1	26.2	26.3
Cycle Queue Clea	arance	e Time ( <i>g c</i> ), s		5.4	15.3		11.7	9.9	11.5	2.3	20.9	20.9	6.1	26.2	26.3
Green Ratio ( g/C	:)			0.18	0.13		0.24	0.1	8 0.18	0.62	0.56	0.56	0.62	0.57	0.57
Capacity ( c ), veh	n/h			260	226		243	325	5 268	328	1044	980	411	1047	1014
Volume-to-Capacit	ity Rat	tio(X)		0.316	0.858		0.698	0.44	6 0.516	0.215	0.452	0.452	0.446	0.533	0.533
Back of Queue ( C	Q), ft/	In ( 95 th percentile	)												
Back of Queue ( C	Q), ve	h/ln ( 95 th percenti	le)	4.5	11.2		9.0	8.1	7.9	1.6	14.2	13.5	4.3	17.1	16.7
Queue Storage Ra	atio ( I	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay ( d	' 1 ), s/	veh		49.3	59.7		45.9	51.	5 52.2	13.9	18.0	18.0	13.4	18.7	18.7
Incremental Delay		0.3	3.7		4.6	0.4	0.6	0.1	1.4	1.5	0.3	1.9	2.0		
Initial Queue Dela		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delay ( d )		49.6	63.3		50.5	51.9	9 52.8	14.0	19.4	19.5	13.6	20.6	20.7		
Level of Service (L	Level of Service (LOS)						D	D	D	В	В	В	В	С	С
Approach Delav. s		59.2	2	E	51.7	7	D	19.0	5	В	19.6	;	В		
Intersection Delay				2	7.9						С				
				_							-				
Multimodal Resu	llts				EB			WE	3		NB			SB	
Pedestrian LOS S	Score /	LOS		2.32	2	В	2.31		В	2.0	Э	В	1.90	)	В
Bicycle LOS Score	e / LO	S		0.94		А	1.23	3	А	1.3	2	А	1.55	5	В

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		HUS	s Sigr	alize	a inte	erseci	ion R	esu	its Sun	imary					
General Inform	nation								Intersec	tion Inf	ormatio	on	*	4 24 4 1	× 1 <u>x</u>
Agency		SE&D							Duration	, h	0.250			7 * ¥	×.
Analyst		NK		Analys	sis Date	e Apr 6	, 2023		Area Typ	е	Other		4		 ₹5
Jurisdiction		Huber Heights, Ohio	C	Time F	Period	Schoo Peak	ol Dismi: Hour	ssal	PHF		0.94		4 4 4	WĴE	+ ↓ + ↓ +
Urban Street		Old Troy Pike		Analys	sis Yea	r 2045 Cond	Build tion		Analysis	Period	1> 2:4	15		<u>114</u>	
Intersection		Chambersburg Roa	d	File Na	ame	2045	Build.xu	IS					1 "	<u>4</u> [47]	<u>* r</u>
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
, , ,															
Demand Inform	nation				EB			W	/B		NB			SB	
Approach Move	ement			L	Т	R	L	Τ-	r r	L	Т	R	L	Т	R
Demand ( v ), v	eh/h			106	211	56	120	16	62 266	66	823	159	201	732	81
								1							
Signal Informa	tion				6	2115	والمحالية	1		E a	₽ L		-+-		_
Cycle, s	140.0	Reference Phase	2		5		51	~ [~ ]	4	ΉŔ.	e l	<b>1</b>	$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	7.5	2.8	72.2	9.0	0 1.0	26.5	5				K
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1		く IA			
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0		5	6	7	8
			_	EDI					MOT			NDT	0.01		0.D.T.
Timer Results				EBI	-	EBI	WB		WBI		-	NBI	SBI	·	SBI
Assigned Phase	e			1		4	3	$\rightarrow$	8	5		2	1		6
Case Number				1.1		4.0	1.1	_	3.0	1.1		4.0	1.1		4.0
Phase Duration	ase Duration, s					31.6	15.4	1	32.6	12.9	)	77.3	15.7		80.1
Change Period	ange Period, ( $Y+Rc$ ), s					5.1	5.4	·	5.1	5.4		5.1	5.4		5.1
Max Allow Head	dway ( A	ИАН ), s		3.1		3.2	3.1	_	3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	e ( <i>g</i> s ), s		9.1		23.0	10.1	1	26.2	4.6			9.9		
Green Extensio	n Time	(ge),s		0.0		1.3	0.0		1.3	0.1		0.0	0.4		0.0
Phase Call Pro	bability			0.99	)	1.00	0.99	9	1.00	0.93	3		1.00	)	
Max Out Proba	bility			1.00	)	0.02	1.00	)	0.05	0.00	)		0.00	)	
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate( <i>v</i>	), veh/h		113	284		128	172	2 283	70	537	507	214	440	425
Adjusted Satura	ation Flo	w Rate ( <i>s</i> ), veh/h/l	n	1767	1817		1767	188	5 1598	1682	1841	1736	1767	1856	1790
Queue Service	Time ( g	g s ), S		7.1	21.0		8.1	11.3	3 24.2	2.6	28.0	28.0	7.9	20.2	20.2
Cycle Queue C	learance	e Time ( <i>g c</i> ), s		7.1	21.0		8.1	11.:	3 24.2	2.6	28.0	28.0	7.9	20.2	20.2
Green Ratio (g	/C)			0.25	0.19	<u> </u>	0.26	0.2	0 0.20	0.57	0.52	0.52	0.59	0.54	0.54
Capacity ( c ), v	/eh/h			287	344		220	370	) 314	369	950	896	350	994	959
Volume-to-Cap	acity Ra	itio (X)		0.393	0.826		0.580	0.46	6 0.902	0.190	0.566	0.566	0.610	0.443	0.443
Back of Queue	(Q), ft	I/In (95 th percentile	)												
Back of Queue	( Q ), ve	eh/In ( 95 th percenti	le)	5.7	15.4		6.6	9.2	2 16.5	1.8	18.4	17.6	5.7	13.9	13.6
Queue Storage	Ratio (	RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (	( d 1 ), s/	/veh		42.2	54.5		43.0	49.	8 55.0	15.1	23.2	23.2	18.1	19.8	19.8
Incremental De		0.3	6.7		2.1	0.3	3 16.0	0.1	2.4	2.6	0.6	1.4	1.5		
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delay (		42.6	61.3		45.2	50.	1 71.0	15.2	25.6	25.8	18.7	21.2	21.3		
Level of Service		D	E		D	D	E	В	C	C	В	C	C		
Approach Delay		55.9	)	Е	59.1	1	E	25.0	)	С	20.7		С		
Intersection De	ntersection Delay, s/veh / LOS					3	3.7						С		
Multimodal Re	sults				FB			\//F	3		NB			SB	
Pedestrian I OS	Score	/105		231		B	231	1	R	2 10		В	1 01		В
Bicycle I OS Sc	core / I C	)S		1 1/		Δ	1.0	5	Δ	1 41		A	1 39	3	A
210,00 200 00		-					1.40	-					1.00		

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		HUS	s Sigr	alize		erseci	ION R	esu	its Sun	nmary	·				
General Inform	nation								Intersec	tion Inf	ormatio	on	K		× L <u>x</u>
Agency		SE&D							Duration	, h	0.250			7 * ¥	×.
Analyst		NK		Analys	sis Dat	e Apr 6	, 2023		Area Typ	e	Other		<u></u> 4 →		×
Jurisdiction		Huber Heights, Ohio	C	Time F	Period	Week Peak	day Eve Hour	ening	PHF		0.98		4 44 44 4 1	WÂE	↓ ↓ ↓ ↓ ↓
Urban Street		Old Troy Pike		Analys	sis Yea	r 2045 Cond	Build tion		Analysis	Period	1> 2:4	45		<u> </u>	
Intersection		Chambersburg Roa	d	File Na	ame	2045	Build.xu	s			_		1 "		*
Project Descrip	tion	Proposed Wawa w/	Fuel Sa	ales									1		
· · · <b>)</b> · · · · · · · ·															
Demand Inform	nation				EB			W	′B		NB			SB	
Approach Move	ement			L	Т	R	L		r R	L	Т	R	L	Т	R
Demand ( v ), v	eh/h			134	206	44	137	20	)2 282	61	1004	149	240	882	114
Signal Informa	ition				6	216	ونالع				₽ L				_
Cycle, s	140.0	Reference Phase	2		5		51	۳Ľ.		ΉË.	e.		$\mathbf{Y}_{2}$	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	7.3	4.3	69.2	10	.4 0.2	27.6	;		-		<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.2	0.0	4.1	3.2	2 0.0	4.1	_	く 4			
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.2	0.0	1.0	2.2	2 0.0	1.0		5	6	7	8
													0		
Timer Results				EBI	-	EBT	WB	L	WBT	NBL	-	NBT	SBI	-	SBT
Assigned Phase	e			7		4	3		8	5		2	1		6
Case Number				1.1		4.0	1.1		3.0	1.1		4.0	1.1		4.0
Phase Duration	ase Duration, s					32.7	16.0	)	32.9	12.7	,	74.3	17.0	)	78.6
Change Period,	ange Period, ( $Y+R_c$ ), s					5.1	5.4		5.1	5.4		5.1	5.4		5.1
Max Allow Head	dway( <i>N</i>	<i>MAH</i> ), s		3.1		3.2	3.1		3.2	3.1		0.0	3.1		0.0
Queue Clearan	ce Time	e ( g s ), s		10.4	L I	20.2	10.6	3	26.6	4.3			11.2	2	
Green Extensio	n Time	(ge), s		0.0		1.4	0.0		1.2	0.1		0.0	0.4		0.0
Phase Call Prol	bability			1.00	)	1.00	1.00	)	1.00	0.91			1.00	)	
Max Out Proba	bility			1.00	)	0.01	1.00	)	0.10	0.00	)		0.00	)	
Movement Gra	un Boo				ED			۱۸/۵	2		ND			CD.	
Approach Move	mont	ouits					<u> </u>		, 			D	<u> </u>	<u>эр</u>	Р
Approach Move	ment					<b>R</b>			K 40	L C	1	к 10			<u>к</u>
Adjusted Flow		)		1	4	14	3	0	10	C	2	12	1	0	10
Adjusted Flow F		), ven/n		137	2007		140	200	288	02	100	5/5	245	519	498
Adjusted Satura		w Rale ( s ), ven/n/i	n	1795	1827		1795	190	0 1598	1/81	1885	1800	1795	1885	1809
Queue Service	nine (g	js), S		0.4	10.2		0.0	13.	7 24.0	2.3	აა.∠ ეე ე	33.3	9.2	25.2	25.2
Green Ratio ( a	$\frac{1}{C}$	e Time ( <i>g</i> c), s		8.4 0.27	0.20		8.6 0.27	0.2	7 24.6	2.3	33.2 0.49	0 49	9.2	25.2	25.2 0.53
Capacity $(c)$ , y	/eh/h			287	361	-	263	378	3 318	328	932	890	324	990	950
Volume-to-Cap	acity Ra	tio (X)	_	0.476	0.707	-	0.532	0.54	6 0.906	0.190	0.645	0.647	0.757	0.524	0.524
Back of Queue	(Q), ft	/In ( 95 th percentile	)	0.110	0.101	-	0.002	0.0	0.000	0.100	0.010	0.0 11	0.101	0.021	0.021
Back of Queue	(Q) ve	eh/In ( 95 th percenti	/ le)	6.8	13.4	-	7.0	10	7 17 0	17	22.0	21.2	69	17 1	16.5
	Ratio (	RO (95 th percent	ilo)	0.00	0.00		0.00	0.0		0.00	0.00	0.00	0.0	0.00	0.00
Uniform Delay (	$(d_1)$ s	/veh		41.2	52.4		41.5	50	1 54 8	17.0	26.3	26.3	22.6	21.8	21.8
Incremental De	lay ( d 2	), s/veh		0.5	2.2		1.1	0.5	18.4	0.1	3.4	3.6	1.4	2.0	2.1
Initial Queue De		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Control Delay (		41.6	54.7		42.6	50	9 73.2	17.1	29.7	29.9	23.9	23.8	23.8		
l evel of Service		D	D		<u></u>	D	F	В	C	C.	C	C	C		
Approach Delay		50 1		D	59 2		F	29.2		C	23.8	3	C C		
Intersection Del		00.		2	5.0	_	_	20.2		-	C 20.0		-		
	ntersection Delay, s/veh / LOS												J		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/ LOS		2.31		В	2.31	1	В	2.10		В	1.91		В
Bicycle LOS Sc	ore / LC	DS		1.13	3	Α	1.53	3	В	1.51		В	1.53	3	В

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	HCS Iwo-Way Sto	p-Control Report												
General Information		Site Information												
Analyst	NK	Intersection	Old Troy Pike & Site Driveway											
Agency/Co.	SE&D	Jurisdiction	Fairborn, Ohio											
Date Performed	4/6/2023	East/West Street	Site Driveway											
Analysis Year	2025	North/South Street	Old Troy Pike											
Time Analyzed     Weekday Morning Peak Hour     Peak Hour Factor     0.78       Intersection Orientation     North-South     Analysis Time Period (hrs)     0.25														
Intersection Orientation     North-South     Analysis Time Period (hrs)     0.25       Project Description     Convenience Store w/ Fuel Sales														
Intersection Orientation     North-South     Analysis Time Period (hrs)     0.25       Project Description     Convenience Store w/ Fuel Sales     Convenience Store w/ Fuel Sales														
Project Description Convenience Store w/ Fuel Sales Lanes														
Vehicle Volumes and A	diustments													

									1							
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	Т				Т	TR
Volume (veh/h)		41		150					0	44	547				625	155
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)		(	0													
Right Turn Channelized																
Median Type   Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.80		6.90						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)			245							56						
Capacity, c (veh/h)			426							700						
v/c Ratio			0.57							0.08						
95% Queue Length, Q <sub>95</sub> (veh)			3.5							0.3						
Control Delay (s/veh)			24.2							10.6						
Level of Service (LOS)			С							В						
Approach Delay (s/veh)		24	4.2							0	.8					
Approach LOS		(	С							/	Ą					

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		ŀ	HCS -	Two-	Way	Stop	-Cor	ntrol	Repo	ort						
General Information							Site	Inforr	natio	n						
Analyst	NK						Inters	ection			Old T	roy Pike	& Site D	riveway		
Agency/Co.	SE&C	)					Jurisc	liction			Fairbo	orn, Ohio	C			
Date Performed	4/6/2	023					East/	West Stre	eet		Site D	Priveway				
Analysis Year	2025						North	n/South	Street		Old T	roy Pike				
Time Analyzed	Schoo	ol Dismis	ssal Peak	Hr			Peak	Hour Fac	ctor		0.94					
Intersection Orientation	North	n-South					Analy	sis Time	Period (	hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sa	les											
Lanes																
Vehicle Volumes and Adju	ustme	nts			אפןס Majo	了 个 个 个 Y r Street: Nor	Ì Ì Ì Ì I I IIIIIIIIIIIIIIIIIIIIIIIIIII	F C								
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	Т				Т	TR
Volume (veh/h)		52		115					0	57	871				671	120
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)			0													
Right Turn Channelized																
Median Type   Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.80		6.90						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

## Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		178				61				
Capacity, c (veh/h)		426				803				
v/c Ratio		0.42				0.08				
95% Queue Length, Q <sub>95</sub> (veh)		2.0				0.2				
Control Delay (s/veh)		19.4				9.9				
Level of Service (LOS)		С				А				
Approach Delay (s/veh)	19.4					0	.6			
Approach LOS	(	2			 		4		 	

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		ŀ	ICS <sup>-</sup>	Гwo-	Way	Stop	-Cor	ntrol	Repo	ort						
General Information							Site	Inforr	natio	n						
Analyst	NK						Inters	ection			Old T	roy Pike	& Site D	riveway		
Agency/Co.	SE&D	)					Juriso	liction			Fairbo	orn, Ohio	)			
Date Performed	4/6/2	023					East/	West Stre	eet		Site D	riveway				
Analysis Year	2025						North	n/South	Street		Old T	roy Pike				
Time Analyzed	Week	day Ever	ning Pea	k Hour			Peak	Hour Fac	ctor		0.98					
Intersection Orientation	North	n-South					Analy	sis Time	Period (	hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	es											
anes																
				141 <u>4</u> 41	A T Majo	1 1 ↓ Street: Nor	t ↑ ↑ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	14 1 X 4 F 5								
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6

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Median Type   Storage	
Critical and Follow-up He	adways

LR

Left Only

Number of Lanes

Percent Heavy Vehicles (%)

Proportion Time Blocked

Percent Grade (%) Right Turn Channelized

Configuration Volume (veh/h)

	caawa	y S									
Base Critical Headway (sec)	Τ	7.5		6.9			4.1				
Critical Headway (sec)		6.80		6.90			4.10				
Base Follow-Up Headway (sec)		3.5		3.3			2.2				
Follow-Up Headway (sec)		3.50		3.30			2.20				
Delay, Queue Length, and	d Leve	l of Se	ervice	i i							
Flow Rate, v (veh/h)	Τ		170				58				
Capacity, c (veh/h)			370				711				
v/c Ratio			0.46				0.08				
95% Queue Length, Q <sub>95</sub> (veh)			2.3				0.3				
Control Delay (s/veh)			22.8				10.5				
Level of Service (LOS)			C				В				
Approach Delay (s/veh)		22	2.8				0	.5			
Approach LOS			С					4			

	HCS Two-Way Sto	op-Control Report												
General Information		Site Information												
Analyst	NK	Intersection	Old Troy Pike & Site Driveway											
Agency/Co.	SE&D	Jurisdiction	Fairborn, Ohio											
Date Performed	4/6/2023	East/West Street	Site Driveway											
Analysis Year	2045	North/South Street	Old Troy Pike											
Time Analyzed     Weekday Morning Peak Hour     Peak Hour Factor     0.78       Intersection Orientation     North-South     Analysis Time Period (hrs)     0.25														
Intersection Orientation     North-South     Analysis Time Period (hrs)     0.25       Project Description     Convenience Store w/ Fuel Sales     Convenience Store w/ Fuel Sales     Convenience Store w/ Fuel Sales														
Intersection Orientation         North-South         Analysis Time Period (hrs)         0.25           Project Description         Convenience Store w/ Fuel Sales         Convenience Store w/ Fuel Sales         Convenience Store w/ Fuel Sales														
Project Description     Convenience Store w/ Fuel Sales       Lanes														
		↑↑ North-South												
Vehicle Volumes and A	diustments													

Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	Т				Т	TR
Volume (veh/h)		41		150					0	44	716				850	155
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)		(	0													
Right Turn Channelized																
Median Type   Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.80		6.90						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)			245							56						
Capacity, c (veh/h)			327							545						
v/c Ratio			0.75							0.10						
95% Queue Length, Q <sub>95</sub> (veh)			5.7							0.3						
Control Delay (s/veh)			42.7							12.4						
Level of Service (LOS)			E							В						
Approach Delay (s/veh)		42	2.7							0	.7					
Approach LOS			E							/	4					

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		H	HCS <sup>-</sup>	Two-	Way	Stop	o-Cor	ntrol	Repo	ort						
General Information		_	_	_	_	_	Site	Infor	matio	n		_	_	_	_	
Analyst	NK						Inters	ection			Old T	roy Pike	& Site D	Driveway		
Agency/Co.	SE&C	)					Juriso	liction			Fairbo	orn, Ohio	2	,		
Date Performed	4/6/2	023					East/	West Str	eet		Site D	Driveway				
Analysis Year	2045						Nort	n/South	Street		Old T	roy Pike				
Time Analyzed	Schoo	ol Dismis	sal Peak	: Hr			Peak	Hour Fa	ctor		0.94	-				
Intersection Orientation	North	n-South					Analy	vsis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	es											
Lanes																
		_		_				]	_	_	_			_	_	
					_											
					Majo	r Street: No	rth-South									
Vehicle Volumes and Adj	mes and Adjustments															
Approach		Eastbound Westbound Northbound Southbound														
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	Т				Т	TR
Volume (veh/h)		52		115					0	57	1138				899	120
Percent Heavy Vehicles (%)		0		0					0	0						
Proportion Time Blocked																
Percent Grade (%)			0													
Right Turn Channelized																
Median Type   Storage				Left	Only								1			
Critical and Follow-up Ho	eadwa	ys														
Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.80		6.90						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						
Delay, Queue Length, and	d Leve	l of S	ervice	ļ												
Flow Rate, v (veh/h)			178							61						
Capacity, c (veh/h)			331							651						
v/c Ratio			0.54							0.09						
95% Queue Length, Q <sub>95</sub> (veh)			3.0							0.3						
Control Delay (s/veh)			27.8							11.1						
Level of Service (LOS)			D							В						
Approach Delay (s/veh)		2	7.8	-		-	-			0	.5				-	-
Approach LOS		27.8 D									Ą					

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	HCS Two-'	Way Stop-Control	Report						
General Information		Site Inform	nation						
Analyst	NK	Intersection	Old Troy Pike	& Site Driveway					
Agency/Co.	SE&D	Jurisdiction	Fairborn, Ohi	0					
Date Performed	4/6/2023	East/West Stre	eet Site Driveway	1					
Analysis Year	2045	North/South S	Street Old Troy Pike						
Time Analyzed	Weekday Evening Peak Hour	Peak Hour Fac	tor 0.98						
Intersection Orientation	North-South	Analysis Time	Period (hrs) 0.25						
Project Description	Convenience Store w/ Fuel Sal	es							
Lanes									
	14 t t t t t t t t t t t t t t t t t t t	1 4 1 A A A L U 4 1 A A A A A A A A A A A A A A A							
Vehicle Volumes and A	Adjustments								
Approach Eastbound Westbound Northbound Southbound									

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Movement	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9
Number of Lanes		0	1	0		0	0	0
Configuration			LR					
Volume (veh/h)		52		115				
Percent Heavy Vehicles (%)		0		0				
Proportion Time Blocked								
Percent Grade (%)		(	0					
Right Turn Channelized								

## Critical and Follow-up Headways

Median Type | Storage

Critical and Follow-up He	auwa	ys										
Base Critical Headway (sec)		7.5		6.9				4.1				
Critical Headway (sec)		6.80		6.90				4.10				
Base Follow-Up Headway (sec)		3.5		3.3				2.2				
Follow-Up Headway (sec)		3.50		3.30				2.20				
Delay, Queue Length, and	Leve	l of Se	ervice									
Flow Rate, v (veh/h)			170					58				
Capacity, c (veh/h)			276					556				
v/c Ratio			0.62					0.10				
95% Queue Length, Q <sub>95</sub> (veh)			3.8					0.3				
Control Delay (s/veh)			36.9					12.2				
Level of Service (LOS)			E					В				
Approach Delay (s/veh)		36	5.9					0	.5			
Approach LOS			E					ļ	4			

Left Only

		ŀ	ICS <sup>-</sup>	Two-	Way	Stop	o-Cor	ntrol	Repo	ort						
General Information			_	_	_	_	Site	Infor	matio	n	_	_				
Analyst	NK						Inters	section			Chan	nbersbur	g Road a	& Site Dr	iveway	
Agency/Co.	SE&D	)					Juriso	diction			Fairb	orn, Ohi	0			
Date Performed	4/6/2	2023					East/	West Str	eet		Chan	nbersbur	rg Road			
Analysis Year	2025						North	n/South	Street		Site D	Driveway	,			
Time Analyzed	Week	day Moi	ning Pe	ak Hour			Peak	Hour Fa	ctor		0.78					
Intersection Orientation	East-	West					Analy	/sis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	les											
Lanes																
Vehicle Volumes and Adj	justme	stments														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration	<u> </u>	LT						TR							LR	<u> </u>
Volume (veh/h)		33	123				153	38		<u> </u>				48		32
Percent Heavy Vehicles (%)		0		<u> </u>				<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	0		0
Proportion Time Blocked	+								<u> </u>							
Percent Grade (%)									<u> </u>						)	
Median Time   Storage				Lind	, ided											
		-		Unu	viueu											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)	4.1 7.1									6.2						
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2								<u> </u>			<u> </u>	3.5	<u> </u>	3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of Se	ervice	ļ												
Flow Rate, v (veh/h)		42													103	
Capacity, c (veh/h)		1333													628	
v/c Ratio		0.03													0.16	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.6	
Control Delay (s/veh)		7.8	0.3												11.9	
Level of Service (LOS)		A	A												В	

1.9

А

Approach Delay (s/veh)

Approach LOS

11.9

		ŀ	HCS -	Two-	Way	Stop	o-Cor	ntrol	Repo	ort						
General Information							Site	Infor	matio	n						
Analyst	NK						Inters	section			Char	nbersbur	g Road	& Site D	riveway	
Agency/Co.	SE&D	)					Jurisc	liction			Fairb	orn, Ohi	0			
Date Performed	4/6/2	2023					East/	West Str	eet		Char	nbersbur	rg Road			
Analysis Year	2025						North	n/South	Street		Site	Driveway	1			
Time Analyzed	Scho	ol Dismis	sal Peak	: Hr			Peak	Hour Fa	ctor		0.94					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	es											
Lanes																
				1 4 1 7 4 P	ר היל Maj	or Street: Ea	↑ ۴ ↑ ast-West	1 7 4 4 7 1								
Vehicle Volumes and Ad	Easthound															
Approach		Eastb	ound			Westbound				North	nbound			South	bound	
Movement	U	L	Т	R	U	U L T R U					Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	<u> </u>
Volume (veh/h)		27	251				212	30						42		24
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type   Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of Se	ervice	•												
Flow Rate, v (veh/h)	T	29													70	
Capacity, c (veh/h)		1319													559	
v/c Ratio		0.02													0.13	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.4	
Control Delay (s/veh)		7.8	0.2												12.4	
Level of Service (LOS)		A	А												В	
Approach Delay (s/veh)		0.9												1;	2.4	
Approach LOS	1	0.9 A													B	

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		ŀ	HCS <sup>-</sup>	Two-	Way	Stop	-Cor	ntrol	Repo	ort						
General Information					_		Site	Infor	matio	n		_				
Analyst	NK						Inters	ection			Chan	nbersbur	g Road a	& Site Di	iveway	
Agency/Co.	SE&D	)					Jurisc	liction			Fairb	orn, Ohi	<u>с</u> С			
Date Performed	4/6/2	2023					East/	West Str	eet		Cham	nbersbur	g Road			
Analysis Year	2025						North	n/South	Street		Site D	Driveway	,			
Time Analyzed	Weel	day Eve	ning Pea	k Hour			Peak	Hour Fa	ctor		0.98					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	les		1									
Lanes																
				2414444	۲ ۲ Maj	or Street: Ea	t ≁ r ist-West	4 4 X 4 X 4 V								
Vehicle Volumes and Ad	justme	stments														
Approach		Eastb	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		25	262				262	32		<u> </u>				40	<u> </u>	26
Percent Heavy Vehicles (%)	<u> </u>	0												0	<u> </u>	0
Proportion Time Blocked																
Percent Grade (%)									<u> </u>						)	
Right Turn Channelized									<u> </u>							
Median Type   Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of S	ervice	ļ												
Flow Rate, v (veh/h)		26													67	
Capacity, c (veh/h)		1273													540	
v/c Ratio		0.02													0.12	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.4	
Control Delay (s/veh)		7.9	0.2												12.6	
Level of Service (LOS)		A	A												В	

0.9

А

Approach Delay (s/veh)

Approach LOS

12.6

				Γ	\	Ctor	Car	. <b>t</b> 11 <b>e</b> le	Dem	o. 14t						
			102	IWO-	vvay	Stop	o-Cor	itroi	керс	ort						
General Information							Site	Infor	matio	n						
Analyst	NK						Inters	section			Chan	nbersbur	g Road	& Site Dı	iveway	
Agency/Co.	SE&D	)					Jurisc	diction			Fairb	orn, Ohi	D			
Date Performed	4/6/2	2023					East/	West Str	eet		Chan	nbersbur	g Road			
Analysis Year	2045						North	n/South	Street		Site D	Driveway	,			
Time Analyzed	Week	day Mo	ning Pe	ak Hour			Peak	Hour Fa	ctor		0.78					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	Fuel Sal	es											
Lanes																
				J 4 1 4 4 7 1	۲. Maj	or Street: Ea	t transformation	74 1 74 1 7 A								
Vehicle Volumes and Adj	ustme	stments														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		33	167				206	38						48		32
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized									<u> </u>							
Median Type   Storage				Left	Only								1			
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)	4.1 7.1									7.1		6.2				
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)										3.5		3.3				
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		42													103	
Capacity, c (veh/h)		1259													618	
v/c Ratio		0.03													0.17	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.6	
Control Delay (s/veh)		8.0													12.0	
Level of Service (LOS)		A													В	

1.3

А

Approach Delay (s/veh)

Approach LOS

12.0

		ŀ	ICS -	Two-'	Way	Stop	o-Cor	ntrol	Repo	ort						
General Information	_	_	_	_	_		Site	Infor	natio	n	_	_	_	_	_	_
Analyst	NK						Inters	ection			Chan	nbersbur	g Road	& Site D	riveway	
Agency/Co.	SE&C	)					Juriso	diction			Fairb	orn, Ohi	<u>р</u>		J	
Date Performed	4/6/2	2023					East/	West Str	eet		Chan	nbersbur	g Road			
Analysis Year	2045						North	n/South	Street		Site I	Driveway	,			
Time Analyzed	Scho	ol Dismis	sal Peak	: Hr			Peak	Hour Fa	ctor		0.94					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	' Fuel Sal	es		,			. ,						
Lanes																
				74174P1		or Street: Ea	↑ ㆍ ㆍ ㆍ ast-West	4 4 24 2 6								
Vehicle Volumes and Adj	olumes and Adjustments Eastbound															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	T	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		27	331				279	30						42		24
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type   Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, and	d Leve	l of S	ervice	ł												
Flow Rate, v (veh/h)	Τ	29													70	
Capacity, c (veh/h)		1242													561	
v/c Ratio		0.02													0.13	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.4	
Control Delay (s/veh)		8.0									1				12.3	
Level of Service (LOS)		A													В	
Approach Delay (s/veh)		0.6												1	2.3	
Approach LOS	0.6 A													В		

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						_	_									
		H	ICS <sup>-</sup>	Гwo-	Way	Stop	-Cor	ntrol	Repo	ort						
General Information							Site	Infor	matio	n						
Analyst	NK						Inters	section			Chan	nbersbur	g Road	& Site Di	iveway	
Agency/Co.	SE&C	)					Jurisc	liction			Fairb	orn, Ohi	C			
Date Performed	4/6/2	023					East/	West Str	eet		Chan	nbersbur	g Road			
Analysis Year	2045						North	n/South	Street		Site [	Driveway	,			
Time Analyzed	Week	day Eve	ning Pea	k Hour			Peak	Hour Fa	ctor		0.98					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	0.25					
Project Description	Conv	enience	Store w/	Fuel Sal	es											
Lanes																
				147747 17	۲ ۲ <sub>Maj</sub>	or Street: Ea	t t T ist-West	4 1 7 4 4 7 1								
Vehicle Volumes and Adj	djustments															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		25	344				345	32		<u> </u>				40		26
Percent Heavy Vehicles (%)		0								<u> </u>				0		0
Proportion Time Blocked																
Percent Grade (%)									<u> </u>						0	
Right Turn Channelized									<u> </u>							
Median Type   Storage				Left	Only								1			
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30
Delay, Queue Length, an	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		26													67	
Capacity, c (veh/h)		1185													542	
v/c Ratio		0.02													0.12	
95% Queue Length, Q <sub>95</sub> (veh)		0.1													0.4	
Control Delay (s/veh)		8.1													12.6	
Level of Service (LOS)		A													В	

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0.5

А

Approach Delay (s/veh)

Approach LOS

12.6

## TRAFFIC SIGNAL TIMING DIRECTIVE

WNH GHEOKED LEC COTOTIVE	SJIATAD NAJA JANDIS JIJAAAT	DESTIC SIGNAL DESIGN
SUMMARY           TEM         AT         OTIAL         MILESCRPTION           200         1:5         SI         WLAL REBOEL           200         1:5         SI         WLAL REBOEL           200         1:5         SI         WLAL REBOEL           201         2:5         EACH CONRETINALX         SI           201         2:5         EACH CONRETINALX         SI           202         2:80         4:000         1:5         EACH CONRETINALX           203         2:800         2         EACH CONRETINALX         SI           2:5         2:401         2         EACH CONRETINALX         SI           2:5         2:400         2         EACH CONRETINALX         SI           2:5         2:800         2         EACH CONSTITICIBLITION COLE         Si           2:5         2:800         2         EACH CONTICIPTICALE         Si           2:5         2:800         2	Edit         Pactori         Pactorial         Pacto	Mail         Science         To         Excience         Excince         Excince         Excince<
TRAFFIC SIGNAL CONTROLLER TIMING CHART           TRAFFIC SIGNAL CONTROLLER TIMING CHART           INTERSETION OLI TROY PIKE ROLOMBERSIGNOD           MANTANING AGENCY: CITY OF HUBER HEIGHTS           MANTANING AGENCY: CITY OF HUBER HEIGHTS           MANTANING AGENCY: CITY OF HUBER HEIGHTS           START UP           DUAL ENTRY: YES         206. 446           OVERILAP         OVERILAP           OVERILAP         AMANTANING AGENCY: CITY OF HUBER HEIGHTS           START UP         DUAL ENTRY: YES         PRASE           START UP         DUAL ENTRY: YES         PRASE         206. 440           COURD ON PLANED         OVERILAP         A         B           MITERVALE         CONTROLLER MOVEMENT NO.           COURD ON PLANED         CONTROLLER MOVEMENT NO.           OVERILAP         CONTROLLER MOVEMENT NO.           MITERVAL         CONTROLLER MOVEMENT NO.           COURD ON PLANED         CONTROLLER MOVEMENT NO.           A         A	MORENITIAL         VISCAGACTIANTIONI         VISCAGACTIANTIANTIANTIANTIANTIANTIANTIANTIANTIAN	14a         5AT         2         1030-100         4         10           1-47         2         1002200         4         120           1-47         2         2002390         0         FRE           2         2002390         0         FRE           2         2002390         0         FRE           2         0004800         1         10           35M         2         2002390         0         FRE           47-50         4         2         2002390         0         FRE           47-50         4         0004600         0         FRE         100           47-50         5         14001900         7         140         120           47-50         5         0004600         0         FRE         120           47-50         5         14001900         7         140         120           47-50         5         0         7         120         120           47-50         5         14001900         7         120         120           47-50         5         0         7         120         120           47-50         5

A48



Huber Heights Fire Division

## Inspections require two business days advance notice! (OAC)1301:7-7-09(A)(5)

Occupancy Nam	e:	WaWa									
Occupancy Addr	ess:	4949 Chambers	sburg Road								
Type of Permit:		HHP&D Site Plan									
Additional Permi	ts:	Choose an item.									
Additional Permi	itional Permits: Choose an item.										
MCBR BLD:	Not Ye	et Assigned	HH P&D:								
MCBR MEC:			HHFD Plan:	23-195							
MCBR ELE:			HHFD Box:								
REVIEWER:	Suson	g	DATE:	7/6/2023							

# Fire Department Comments:

The Huber Heights City Code Part 15 Refers to Fire Code Requirements and has adopted by reference OFC and IFC Appendices

These comments are based only on the proposed sitework, fire department access and basic fire protection concept at this time. A full plan review of the building systems, fire protection, egress and life safety will need to be conducted once the architectural plans have been submitted for permit. The proposed development will need to meet the requirements of the Ohio Fire Code 2017, Ohio Building Code 2017, and the Huber Heights Codified Ordinance.

## **Requirements:**

- The canopy over fuel pumps shall have a clearance of 13 feet 6 inches or higher for fire apparatus clearance. Ohio Fire Code 503.2.1.
- The turn radius off both Old Troy Pike and Chambersburg Road appear to meet the requirements for fire department access as required in Ohio Fire Code.
- Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. Ohio Fire Code 507.5.4.
- A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved. (No trees, bushes, plantings, etc.) Ohio Fire Code 507.5.5.

Please reference contact information below for questions or concerns with this document.

Plans reviewed by the Huber Heights Fire Division are reviewed with the intent they comply in <u>ALL</u> respects to this code, as prescribed in <u>SECTION (D)</u> <u>104.1 of the 2017 Ohio Fire Code</u>. Any omissions or errors on the plans or in this review do not relieve the applicant of complying with <u>ALL</u> applicable requirements of this code. These plans have been reviewed for compliance with the Ohio Fire Code adopted by this jurisdiction. There may be other regulations applicable under local, state, or federal statues and codes, which this department has no authority to enforce and therefore have not been evaluated as part of this plan review.

# AI-9308 Planning Commission Meeting Date: 07/11/2023

Minutes

## Information

Agenda Title Planning Commission June 13, 2023

Purpose and Background

Attachments

Minutes

## Planning Commission June 13, 2023, Meeting City of Huber Heights

- **I.** Chair Terry Walton called the meeting to order at approximately 6:00 p.m.
- II. Present at the meeting: Mr. Cassity, Mr. Jeffries, Ms. Thomas, Ms. Vargo, and Mr. Walton.

Members absent: None.

Staff Present: Aaron K. Sorrell, Interim City Planner, and Geri Hoskins, Planning & Zoning Administrative Secretary.

### III. Opening Remarks by the Chairman and Commissioners

None.

### IV. Citizens Comments

None.

V. Swearing of Witnesses Mr. Walton explained the proceedings of tonight's meeting and administered the sworn oath to all persons wishing to speak or give testimony regarding items on the agenda. All persons present responded in the affirmative.

#### VI. Pending Business

None.

#### VII. New Business

1. TEXT AMENDMENT - The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval of text amendments pertaining to Chapter 1181.20 Building Materials and other minor revisions to the Planning & Zoning Ordinance as previously approved by the Ordinance Review Commission (TA 23-14).

Mr. Sorrell stated over the years, building materials have improved and builders utilize a range of materials to provide a mixture of building facades along a street, convey different design aesthetics, and control construction costs as prices of materials can vary depending on local and regional demand. This text amendment seeks to codify community expectations and provide reasonable flexibility for contemporary designs and modern material utilization.

#### **Staff Analysis**

Currently, there is a significant schism with exterior building material requirements between building in a straight zoned area (A, R-1, R-2, etc.) versus building on a lot in a Planned Residential area. If a buyer seeks to construct a new single-story home or build a single-story addition in any district other than a

Planning Commission Meeting

June 13, 2023

PUD, they must fully wrap their single-story home in brick or masonry material. New two-story homes must have the first floor wrapped in brick or masonry material. The floors above can be any other material.

Recent Planning Commission decisions have established a minimum masonry limit at approximately 25% of the front façade for single-family homes. Multi-family structures have ranged from 15% to 20% in recent years.

Staff is proposing the following standards:

Non-PUD Zoning:

- One-Story dwellings: 100% of the front façade
- Multi-Story dwellings: 100% of the first-floor front façade.

PUD Zoning:

- 1 & 2-family buildings: 50% of the front facades aggregated over the development.
- Multi-family and mixed-use buildings: 20% of the aggregate building wall surface.

These standards encourage the Planning Commission to consider the types, location, and layouts of the buildings. Every development is different, and the Planning Commission should include those details. Specifically, the Planning Commission is encouraged to:

When establishing the requirements, the Planning Commission shall consider the types, location, and layout of the buildings to:

- (1) Encourage a mix of building facades and material usage and discourage monotonous building repetition.
- (2) Encourage higher percentages of full depth brick, cultured brick, stone, cultured stone, or other approved masonry product along the frontage of major public streets and thoroughfares.

## Additional Comments:

Staff feels that these revised material requirements for dwellings reflect the recent decisions of the Planning Commission and City Council, and are a bridge from the previous masonry requirements to a constituent that desires a diverse architectural palate within the community.

Fire: No comments.

City Engineer: No comments.

Discussion on the aggregated amount, clarify more than the intent. Mr. Sorrell will rework.

## **Action**

Ms. Thomas moved to continue the request by the applicant THE CITY OF HUBER HEIGHTS, for approval of a Text Amendment pertaining to Chapter
Planning Commission Meeting

June 13, 2023

1181.20 Building Materials for Dwellings (TZ 23-14A) in accordance with the recommendation of Staff's Memorandum dated June 6, 2023, and the Planning Commission Decision Record attached thereto.

Seconded by Mr. Cassity. Roll call showed: YEAS: Mr. Jeffries, Ms. Vargo, Mr. Cassity, Ms. Thomas, and Mr. Walton. NAYS: None. Motion to continue carried 5 -0.

2. TEXT AMENDMENT - The applicant, THE CITY OF HUBER HEIGHTS, is requesting approval of text amendments pertaining to Chapter 1181.20 Building Materials and other minor revisions to the Planning & Zoning Ordinance as previously approved by the Ordinance Review Commission (TA 23-14).

Mr. Sorrell stated that the proposed changes reflect the recommendations of the Ordinance Review Commission, along with a few staff-initiated changes.

# Staff Analysis

As mentioned above, most of the text change recommendations originate from the Ordinance Review Commission. These changes largely address scribner errors and updates to the Ohio Revised Code. Staff has added a few clarifying terms for ease of administration.

Fire: No comments.

City Engineer: No comments.

# <u>Action</u>

Mr. Jeffries moved to approve the request by the applicant THE CITY OF HUBER HEIGHTS, for approval of a Text Amendment pertaining to other minor revisions to the Planning & Zoning Ordinance as preciously approved by the Ordinance Review Commission (TZ 23-14B) in accordance with the recommendation of Staff's Memorandum dated June 6, 2023, and the Planning Commission Decision Record attached thereto.

Seconded by Ms. Thomas. Roll call showed: YEAS: Mr. Jeffries, Ms. Vargo, Mr. Cassity, Ms. Thomas, and Mr. Walton. NAYS: None. Motion to approve carried 5 -0.

# VIII. Additional Business

None.

# IX. Approval of the Minutes

Without objection, the minutes of the May 9, 2023, Planning Commission meeting are approved.

Planning Commission Meeting June 13, 2023

#### X. Reports and Calendar Review

Mr. Sorrell stated we should receive WaWa's application by the end of the week and the apartments behind Key Bank.

# XI. Upcoming Meetings

July 11, 2023 August 1, 2023

# XII. Adjournment

There being no further business to come before the Commission, the meeting was adjourned at approximately 6:40 p.m.

Terry Walton, Chair

Date

Geri Hoskins, Administrative Secretary

Date