



The City of  
**MIDWEST CITY**  
COMMUNITY DEVELOPMENT DEPARTMENT

Billy Harless, Community Development Director

ENGINEERING DIVISION  
Brandon Bundy, City Engineer  
CURRENT PLANNING DIVISION  
Kellie Gilles, Planning Manager  
COMPREHENSIVE PLANNING  
Petya Stefanoff, Comprehensive Planner  
BUILDING INSPECTION DIVISION  
Christine Brakefield, Building Official  
GIS DIVISION  
Greg Hakman, GIS Coordinator

ANY PERSON REQUIRING SPECIAL ASSISTANCE OR OTHER REASONABLE ACCOMODATION TO ATTEND AND/OR FULLY PARTICIPATE IN ANY MEETING MUST CONTACT BRANDON BUNDY VIA EMAIL AT [BBUNDY@MIDWESTCITYOK.ORG](mailto:BBUNDY@MIDWESTCITYOK.ORG) OR PHONE AT 739-1220 AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF THE MEETING. DURING A PUBLIC MEETING, CALL 739-1388 FOR ASSISTANCE.

**AGENDA FOR THE REGULAR MEETING OF THE**

**MIDWEST CITY  
PLANNING COMMISSION**

**July 7, 2020 – 7:00 p.m.**

**City Council Chambers**

**City Hall**

**100 North Midwest Boulevard**

**A. CALL TO ORDER**

**B. ANNOUNCEMENT**

1. Recognition of Stan Greil's service on the Midwest City Planning Commission.

**C. MINUTES**

1. Discussion and consideration of the minutes of the June 2, 2020 Planning Commission meeting.

**D. DISCUSSION**

1. (PC-2045) Public hearing with discussion and consideration of ordinance to redistrict from R-6, Single Family Residential to R-HD, High Density Residential, for the property described as a part of the SW/4 of Section 12, T-11-N, R-2-W, located at 2500 South Douglas Blvd.
2. (PC-2046) Public hearing with discussion and consideration of an ordinance redistricting from Planned Unit Development (PUD) to Amended Planned Unit Development (PUD), for the property described as a part of the Lots 7-10 of the Thomas Acres Addition addressed as 9070 NE 13<sup>th</sup> Street.
3. (PC-2047) Discussion and consideration of approval of the proposed preliminary plat of Freedom Villas, described as a part of the SE/4 of Section 35, T12N, R2W, located at 8712 E. Main Street.
4. (PC-2048) Discussion and consideration of an ordinance amending Appendix A, Zoning Regulations, of the Midwest City Code; by amending Section 4.5.2, Light Industrial: Restricted; Section 4.9.2, Use Chart and providing for repealer and severability and setting an effective date.

**E. COMMISSION DISCUSSION**

**F. PUBLIC DISCUSSION**

**G. FURTHER INFORMATION**

**H. ADJOURN**

Notice of regular Midwest City Planning Commission meetings in 2020 was filed for the calendar year with the Midwest City Clerk prior to December 15, 2019 and copies of the agenda for this meeting were posted at City Hall at least 24 hours in advance of the meeting.

## **MINUTES OF MIDWEST CITY PLANNING COMMISSION MEETING**

**June 2, 2020 - 7:00 p.m.**

This regular meeting of the Midwest City Planning Commission was held in the Council Chambers, 100 North Midwest Boulevard, Midwest City, Oklahoma County, Oklahoma, on June 2, 2020 at 7:00 p.m., with the following members present:

Commissioners present: Dean Hinton  
Jess Huskey  
Jim Smith  
Jim Campbell

Commissioners absent: Stan Greil  
Russell Smith  
Dee Collins

Staff present: Billy Harless, Community Development Director  
Kellie Gilles, Current Planning Manager  
Brandon Bundy, City Engineer  
Sarah Steward, Associate Current Planner

The meeting was called to order by Commissioner Hinton at 7:02 p.m.

**A. CALL TO ORDER –**  
**B. MINUTES**

1. Motion was made by Huskey, seconded by J. Smith, to approve the minutes of the May 5, 2020 Planning Commission meeting as presented. Voting aye: Hinton, Huskey, J. Smith and Campbell. Nay: none. Motion carried.

**C. NEW MATTERS:**

1. **(PC-2043) Public hearing with discussion and consideration of an ordinance to redistrict from C-3, Community Commercial to SPUD, Simplified Planned Unit Development, governed by the C-4, General Commercial district, subject to staff comments, for the property addressed as 2224 S. Air Depot Boulevard.**

Staff presented a brief overview of this item. Applicant David Box, 522 Colcord Dr., OKC, was present on behalf of owner Hunter Grace, LLC. There was general discussion about the item. A motion was made by Campbell, seconded by Huskey, to recommend approval of this item subject to staff comments. Voting aye: Hinton, Huskey, J. Smith and Campbell. Voting nay: none. Motion carried.

**2. (PC-2044) Public hearing with discussion and consideration of approval of a resolution for a Special Use Permit to allow the use of Eating Establishment: Sit-Down, Alcoholic Beverages Permitted in the C-3, Community Commercial district, for the property described as a part of the SW/4 of Section 4 T11N, R2W, located at 6007 SE 15<sup>th</sup> Street.**

Staff presented a brief overview of this item. The applicant, Dave Zimmer of 3510 24<sup>th</sup> Ave. NW, Norman, OK, was present. There was general discussion about the item. A motion was made by Huskey, seconded by J. Smith, to recommend approval of this item subject to staff comments. Voting aye: Hinton, Huskey, J. Smith, Campbell. Voting nay: none. Motion carried.

**D. COMMISSION DISCUSSION:** General Discussion.

**E. PUBLIC DISCUSSION:** None.

**F. FURTHER INFORMATION:** None.

There being no further matters before the Commission, motion to adjourn was made by Huskey, seconded by Campbell. Voting aye: Hinton, Huskey, J. Smith, Campbell. Voting nay: none. Motion carried.

The meeting adjourned at 7:16 p.m.

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(KG)





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**MIDWEST CITY**  
COMMUNITY DEVELOPMENT DEPARTMENT

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Greg Hakman, GIS Coordinator

**To:** Chairman and Planning Commission

**From:** Billy Harless, Community Development Director

**Date:** July 7, 2020

**Subject:** (PC-2045) Public hearing with discussion and consideration of an ordinance to redistrict from R-6, Single Family Residential to R-HD, High Density Residential, for the property described as a part of the SW/4 of Section 12, T-11-N, R-2-W, located at 2500 South Douglas Blvd.

**Executive Summary:** In 1987, the west 200 feet of this property which fronts onto S. Douglas Blvd. was rezoned from single family residential to C-3, Community Commercial. A request to extend the C-3 zoning 150' to the east was approved in 2018. The rest of the parcel was unchanged and remains zoned as R-6, Single Family Detached Residential. The owners of the property are requesting to rezone the portion of the property that is currently zoned R-6, Single Family Detached Residential to R-HD, High Density Residential for multi-family residential development. The Future Land Use Map within the Comprehensive Plan identifies this area as HDR, High Density Residential. A preliminary plat for this entire parcel was approved in February 2020. If this rezoning request is approved, the applicant will need to apply to amend the preliminary plat to meet the requirements for multi-family residential development rather than single family residential. If this request is approved, the development will be required to meet all zoning, engineering, building and fire codes adopted by the City of Midwest City. Action is at the discretion of the Planning Commission and City Council.

**Dates of Hearing:** Planning Commission – July 7, 2020  
City Council – July 28, 2020

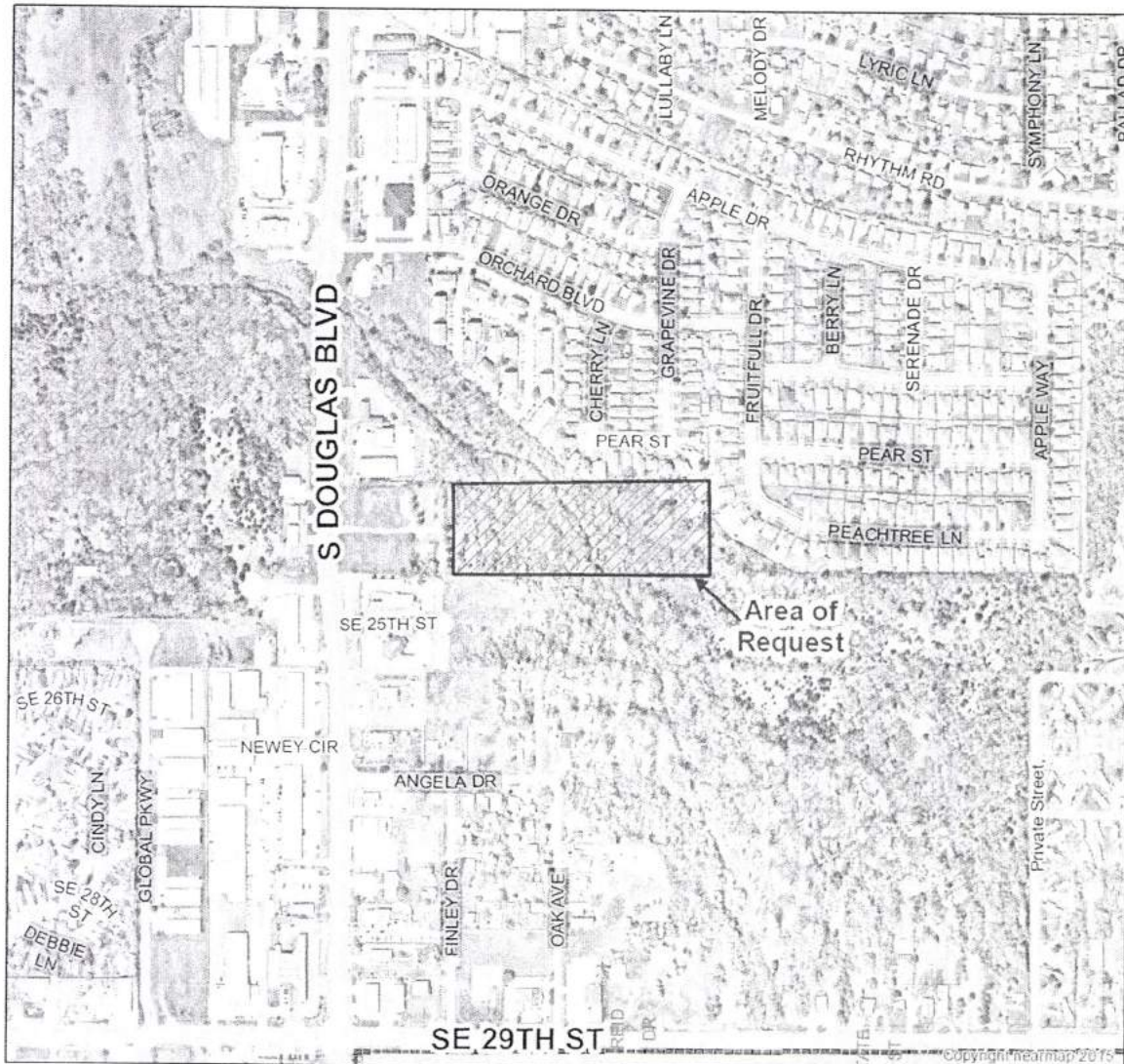
**Council Ward:** Ward 2, Councilmember Pat Byrne

**Owner:** James Webster Trust

**Applicant:** Chris Webster

**Proposed Use:** Multi-family Residential





**Development Proposed by Comprehensive Plan:**

- Area of Request – High Density Residential (HDR)
- North – Low Density Residential (LDR) and High Density Residential (HDR)
- South – Office/Retail (OR) and Parks & Open Space (POS)
- East – Low Density Residential (LDR)
- West – High Density Residential (HDR)

**Zoning Districts:**

- Area of Request – R-6, Single Family Residential
- North – Planned Unit Development (PUD)
- South and East – R-6, Single Family Detached Residential
- West – C-3, Community Commercial

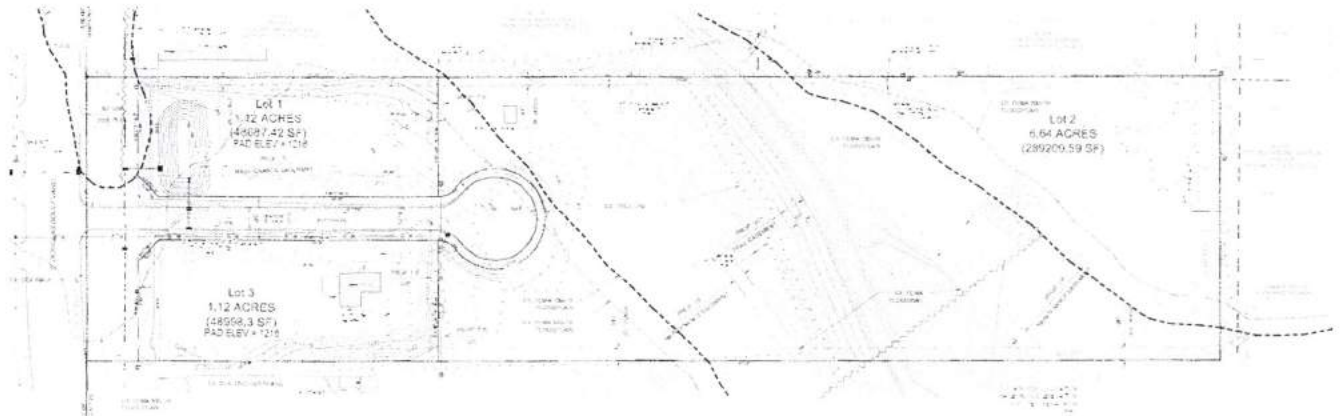
**Land Use:**

- Area of Request – vacant
- North – Concord Apartments and single family residences
- South – Vacant
- East – single family residences
- West – one single family residential structure

**Size:**

The area of request has a frontage of approximately 335' along the proposed street of StatusOne Dr. and a depth of approximately 910' containing an area of approximately 6.89 acres, more or less.

Below is the current approved preliminary plat showing the proposed street of StatusOne Dr. If this request is approved, the preliminary plat will need to be re-heard by the Planning Commission and the Council but the design of the street providing access to the area of request will remain similar. The bulb of the cul-de-sac provides approximately 335' of frontage along StatusOne Drive.



**Municipal Code Citation:**

**2.10 R-HD, High Density Residential District**

**2.10.1. General Description**

This residential district is intended to provide for a density of more than twenty (20) units per gross acre. The principal use of land is for a wide variety of dwelling types.

Related recreational, religious, and educational uses normally located to serve residential areas also are permitted to provide the basic elements of convenient, balanced, and attractive living areas.

**Comprehensive Plan Citation:**

**High Density Residential Land Use**

Traditional apartment-type units in attached living complexes characterize high density residential land use. There are currently several high density residential areas within Midwest City. It should be noted that medium density uses should also be permitted in any area designated for high density use.

**History:**

1. This part of this parcel has been R-6, Single Family Detached Residential since the adoption of the 1985 zoning code.
2. The west 200 feet of the parcel were rezoned to C-3, Community Commercial in 1987 (PC-990).
3. The C-3, Community Commercial zoning was extended 150' to the east in May of 2018 (PC-1947).
4. A preliminary plat for the area of request was approved in February 2020 (PC-2039).



**Staff Comments:**

**Engineer's report:**

Note: This application is for rezoning of a portion of the previously approved preliminary plat of StatusOne located at 2500 S Douglas Boulevard.

The rezoning will be for a single large lot which is existing R-6.

The same engineering requirements as dictated in the preliminary plat application will be carried forward into this rezoning.

**Previous Waivers**

At the preliminary plat, waivers were granted to the applicant based on the fact that this parcel would be R-6.

Sec. 38-44.6. 100-year floodplains.

(b) 100-year floodplain restrictions.

(3) All 100-year floodplains are subject to the following requirements for all types of development.

(a) The 100-year floodplain shall be dedicated on the final plat to the city as a single lot or may be owned and maintained by an HOA, pursuant to section 38-50. Homeowners' association (HOA) requirements, of this Subdivision Ordinance.

(b) At no time shall any portion of the 100-year floodplain exist or be within any single-family or two-family residential lot.

AND

Sec. 38-44.6. 100-year floodplains.

(f) Adjacent street types.

(3) Cul-de-sac streets.

(b) Cul-de-sac shall comply with the following criteria (See Figure 58: Cul-de-Sac Adjacent to a 100-Year Floodplain).

1. A minimum fifty (50) percent of an adjacent cul-de-sac bulb shall be open to the 100-year floodplain and no residential lot shall encroach within the area between this line and the major creek.

2. An entry monument(s) or feature(s) as well as landscaping shall be provided at the end of the cul-de-sac and a pathway of a minimum twelve (12) feet in width shall be provided to the major creek as approved by the director of community development.



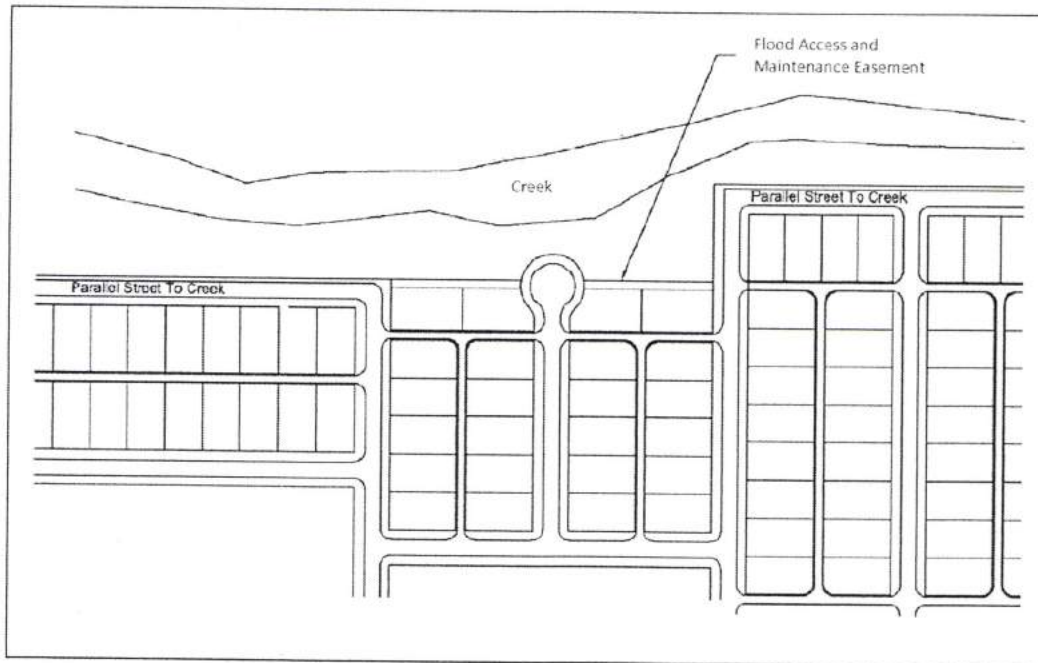


Figure 58

The waiver was granted with the stipulation that the developer dedicate a drainage, utility, and access easement in lieu of the requirement of a separate lot. This will be even more important with the proposed high density development. **The City needs to have access to the floodway and utilities on the east side of the property. Any further development of this property will require that the municipal code is followed and that the property will be broken into lots with dedication of the floodway to the City.**

#### Water Improvements

There is a twelve (12) inch public water main running along the west side of Douglas Boulevard.

The applicant has proposed teeing into this water main, boring across Douglas Boulevard and extending an eight (8) inch public water main to all of the proposed lots as required in Municipal Code 43-32. The lines will be within the proposed right of way for StatusOne Dr.

Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for all new buildings.

#### Sanitary Sewerage Collection and Disposal

Connection to the public sanitary sewer system for domestic service is a building permit requirement per Municipal Code Chapter 43-109.

#### Streets and Sidewalks

The proposed development is divided by a regulated creek which hinders access across the entire property.

Douglas Boulevard is listed as a primary arterial in the 2008 Comprehensive Plan. A right-of-way of 120 feet is required, 60 feet on each side of centerline with an addition ten (10) foot utility easement adjacent to the proposed development. It will be required to be dedicated on the final plat if not already existing.

The applicant proposes to construct a public local street, StatusOne Drive, with sidewalks to service the area of request. Access to all the lots is proposed of Douglas Boulevard via an approximate 420 foot long cul-de-sac called StatusOne Drive.

The comprehensive plan dictates the connection of internal streets within the square mile sections that are designated as future collector roads. The thoroughfare plan does not designate this area to contain a future collector road. The subdivision plan also requires the connection of roads in a proposed subdivision if the proposal contains fifty or more proposed lots. This application falls below that threshold at three lots. The applicant proposes to construct a public local street that is a cul de sac with one point of ingress / egress.

#### Drainage and Flood Control, Wetlands, and Sediment Control

The proposed development is rolling with a creek bisecting the property and a ridge on the approximate western quarter. Drainage to the proposed development generally is as follows:

- A developed storm sewer exists running along the east side of Douglas Boulevard draining south to north. This line serves to drain the right-of-way and does not have a known capacity.
- Soldier Creek bisects the property, running from south to north. Soldier Creek is a regulated creek with the existence of regulated FEMA floodway and floodplain.
- On the southeast corner of the proposed development lies an outfall from a detention pond serving the Orchard 2<sup>nd</sup> Addition. This outfall then runs across the proposed development via a natural channel to Soldier Creek. This drainage is contained within the regulated floodplain.
- Sheet flow comprises of the rest of the drainage both into and out of the proposed development.

All the drainage eventually flows into Soldier Creek. Currently, the proposed development tract has one (1) house but is otherwise undeveloped with no improvements or structures.

Detention will be required upon building permit.

The area of request is dissected by a regulated floodway and flood zone AE (the 100-year floodplain) as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 18<sup>th</sup>, 2009.

No identified wetlands are located on or abutting the proposed development as shown on the National Wetlands Inventory, [www.fws.gov/wetlands/data/Mapper.html](http://www.fws.gov/wetlands/data/Mapper.html) prepared by the United States Department of the Interior Fish and Wildlife Service, access October 15<sup>th</sup>, 2019.

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.



**A substantial amount of fill is being proposed with this development. No fill will be allowed in the regulatory floodway. A floodplain permit will be required and a FEMA approved LOMR-F (Letter of Map Revision – Fill).**

Easements and Right-of-Way

The required easements and existing right of way for the area of request are illustrated on the preliminary plat and will be dedicated to the city when the final plat is filed.

All easements and right of way dedications are to comply with Municipal Code Sections 38-43, 38-44, and 38-45.

A 15' Utility easement will be required to be dedicated along the southern property line per 38-48.15. (c)(2).

**Fire Marshal's report:**

The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15.

Other requirements will be reviewed once design/construction plans have been submitted.

**Plan Review Comments:**

This is a request to rezone a portion (approximately 6.89 acres) of the property to R-HD, High Density Residential to allow for multi-family development. Currently, the area of request is zoned R-6, Single Family Detached Residential. Although the applicant's immediate plans are to build a multi-family development on the west side of Soldier Creek, if this request is approved, another multi-family development could be built on the east side of the creek in the future.

If this request is approved, the development will be required to meet all regulations of the Zoning Ordinance including parking, exterior materials, landscaping, height, etc.

As mentioned previously, a preliminary plat was approved for the area of request in February 2020. That plat was reviewed with the eastern portion being zoned R-6, Single Family Detached Residential, allowing just one (1) single family residential structure. If this zoning is approved, the applicant is aware that the preliminary plat will need to be revised and re-heard by the Planning Commission and City Council to address requirements for platting for multi-family residential development.

The Future Land Use Map within the Comprehensive Plan does identify this area as High Density Residential. This request is compatible with the Future Land Use Map.

On June 30, 2020, the applicant hosted a meeting for the surrounding property owners at the Charles Johnson Building. Approximately 15 neighbors attended as well as the Mayor, Councilman Pat Byrne, Planning Commissioner Russell Smith and City staff. Neighbors expressed concerns about setbacks, the height of the apartment structures, drainage and property values. Per the Zoning Ordinance, the required side setback for multi-family units is 7', however, the Subdivision Regulations require a minimum 15' perimeter easement in which no structure can be built. The applicant did state that he planned on designing the road along the north property line so that would create an even larger buffer between the multi-family structures and the abutting single family residential homes. During the platting process, tree preservation will also be required.



July 7, 2020

This will require that the applicant leave the mature trees in all areas of the site except those areas designated for infrastructure such as roads, utilities and drainage. The maximum height for multi-family units per the Zoning Ordinance is 45'. The applicant is not requesting a variance to this or any other portion of the code. During the platting/subdividing process, the applicant will be required to meet all codes regarding drainage and inspections will be conducted by engineering staff to ensure compliance.

Action is at the discretion of the Planning Commission and City Council.

**Action Required:**

Approve or reject the ordinance to redistrict to R-HD, High Density Residential for the property as noted herein, subject to staff's comments as found in the July 7, 2020 agenda packet and made a part of PC-2045 file.

  
Billy Harless,  
Community Development Director

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The City of  
MIDWEST CITY

COMMUNITY DEVELOPMENT DEPARTMENT - ENGINEERING DIVISION

William Harless, Community Development Director

Brandon Bundy, P.E., C.F.M., City Engineer

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To: Kellie Gilles, Plans Review Manager

From: Brandon Bundy, City Engineer

Date: June 22<sup>nd</sup>, 2020

Subject: Engineering staff comments for pc-2045 rezoning application

**ENGINEERING STAFF CODE CITATIONS AND COMMENTS - PC-2045:**

Note: This application is for rezoning of a portion of the previously approved preliminary plat of StatusOne located at 2500 S Douglas Boulevard.

The rezoning will be for a single large lot which is existing R-6.

The same engineering requirements as dictated in the preliminary plat application will be carried forward into this rezoning.

**Previous Waivers**

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100 N. Midwest Boulevard, Midwest City, Oklahoma 73110

Engineering Division (405) 739-1220 X FAX (405)739-1399

to a 100-Year Floodplain).

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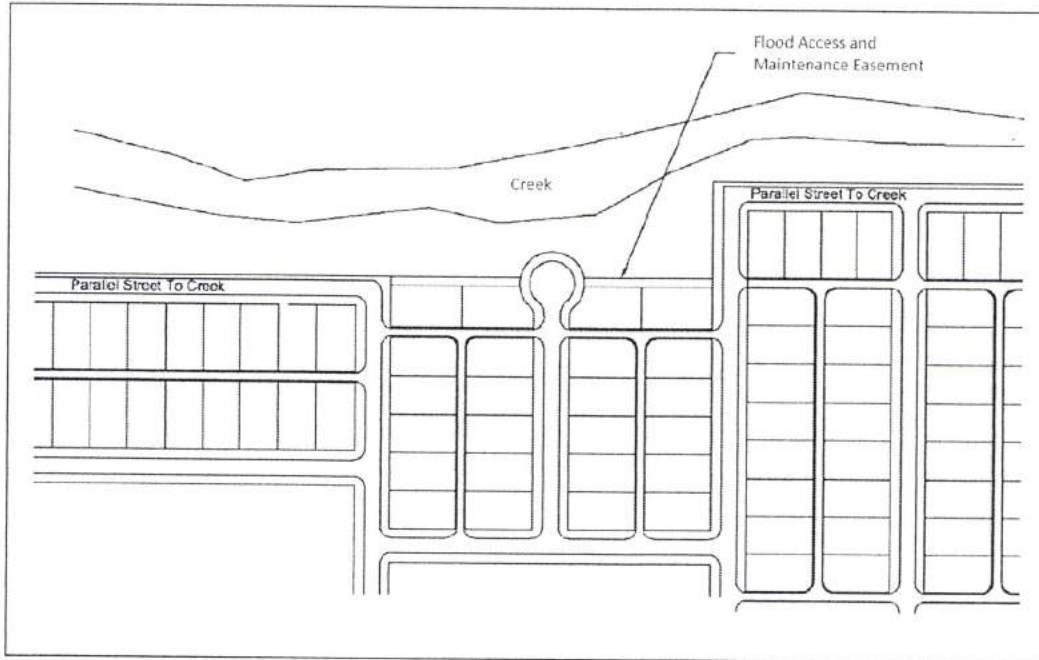


Figure 58

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## **Streets and Sidewalks**

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All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

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## Midwest City Fire Marshal's Office

8201 E Reno Avenue, Midwest City, OK 73110  
[dhelmberger@midwestcityok.org](mailto:dhelmberger@midwestcityok.org) Office: 405-739-1355  
[www.midwestcityok.org](http://www.midwestcityok.org)



Re: PC - 2045

Date: 17 June 2020

PC-2045 is a request to rezone a portion of this lot from R-6, Single Family Residential to R-HD, High Density Residential for multifamily residential buildings.

- The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15.
- Other requirements will be reviewed once design / construction plans have been submitted.

Respectfully,

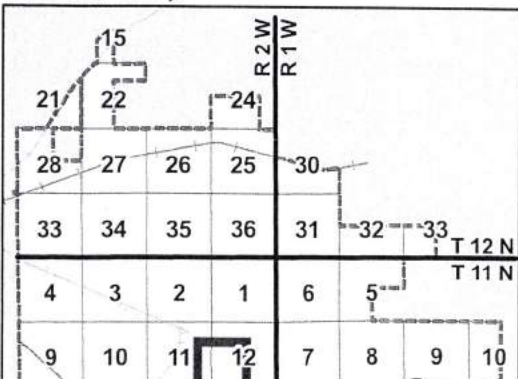
A handwritten signature in black ink, appearing to read "D. Helmberger".

Duane Helmberger  
Fire Marshal  
Midwest City Fire Department





Locator Map

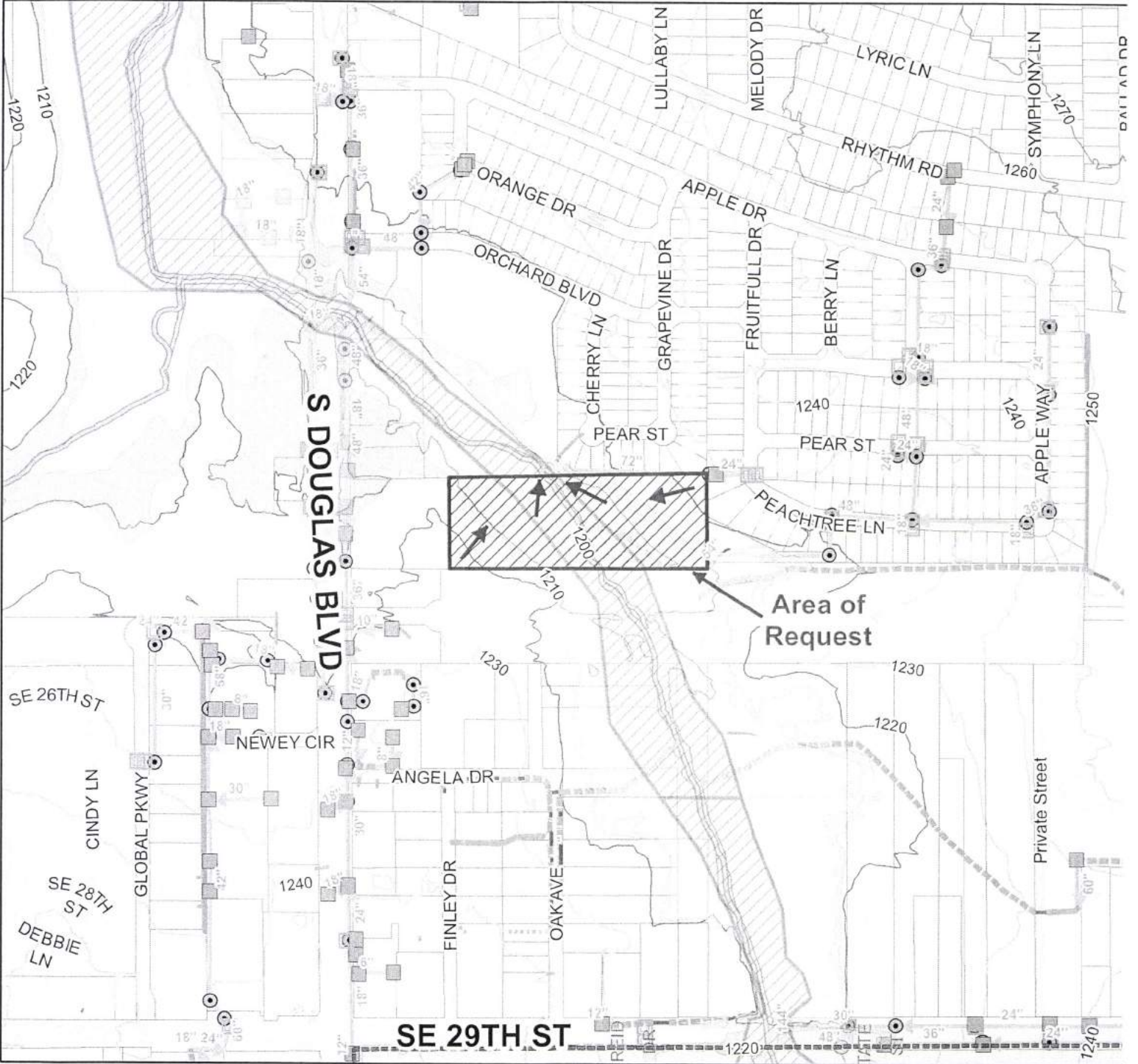


**3/2020 NEARMAP AERIAL VIEW FOR  
PC-2045  
(SW/4, Sec. 12, T11N, R2W)**

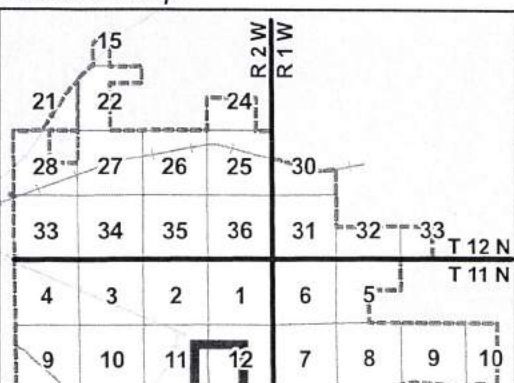


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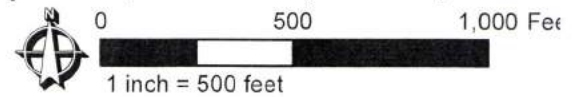
Locator Map



- Drainage Legend**
- Curb Inlets
  - Inlets
  - Junction Box
  - Culverts
  - Flumes
  - Developed Channels
  - Trickle Channels
  - Undeveloped Channels
  - Storm Lines
  - Creeks
- ELEVATION**
- 1166-1204 ft
  - 1204-1228 ft
  - 1228-1250 ft
  - 1250-1278 ft

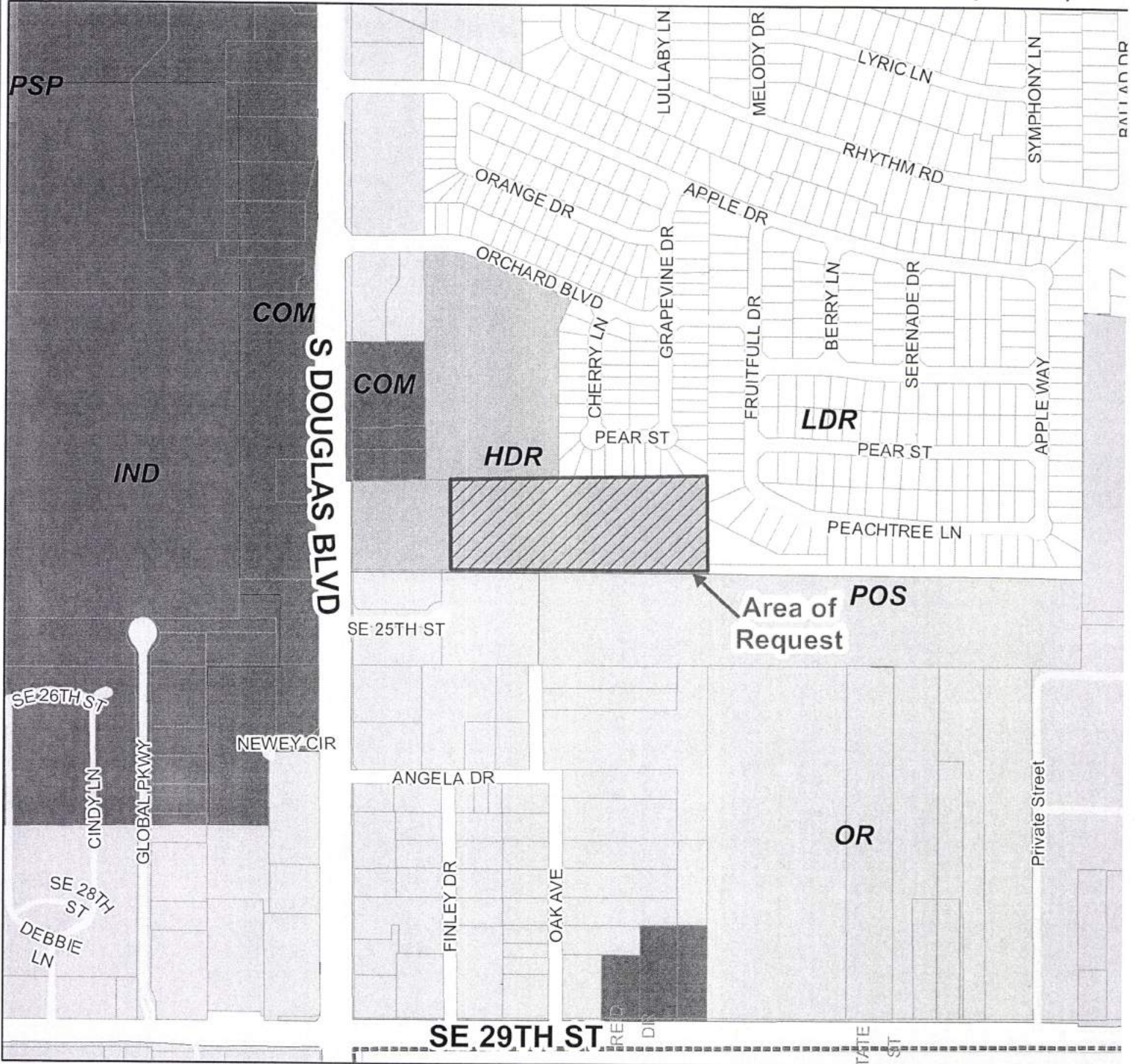
- 2009 FEMA Floodplains**
- 500-yr floodplain
  - 100-yr floodplain
- 2009 FEMA Floodway**
- FLOODWAY

**DRAINAGE  
LOCATION MAP FOR  
PC-2045  
(SW/4, Sec. 12, T11N, R2W)**

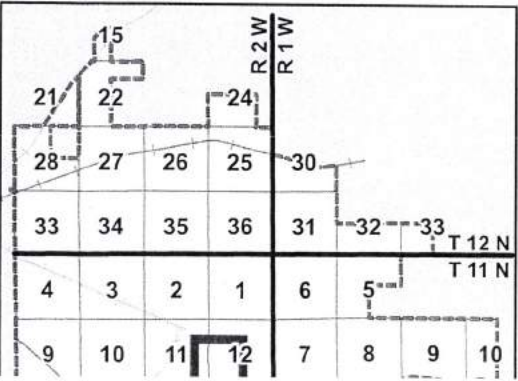


THIS MAP IS A GENERAL INFORMATION PUBLIC RESOURCE. THE CITY OF MIDWEST CITY MAKES NO WARRANTY, REPRESENTATION OR GUARANTEE AS TO THE CONTENT, ACCURACY, TIMELINESS OR COMPLETENESS OF ANY OF THE INFORMATION PROVIDED ON THIS MAP. ANY PARTY'S USE OR RELIANCE ON THIS MAP OR ANY INFORMATION ON IT IS AT THAT PARTY'S OWN RISK AND WITHOUT LIABILITY TO THE CITY OF MIDWEST CITY, ITS OFFICIALS OR ITS EMPLOYEES FOR ANY DISCREPANCIES, ERRORS OR





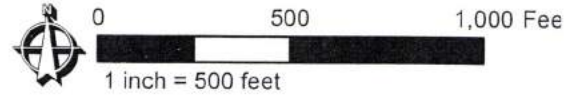
Locator Map



Future Land Use Legend

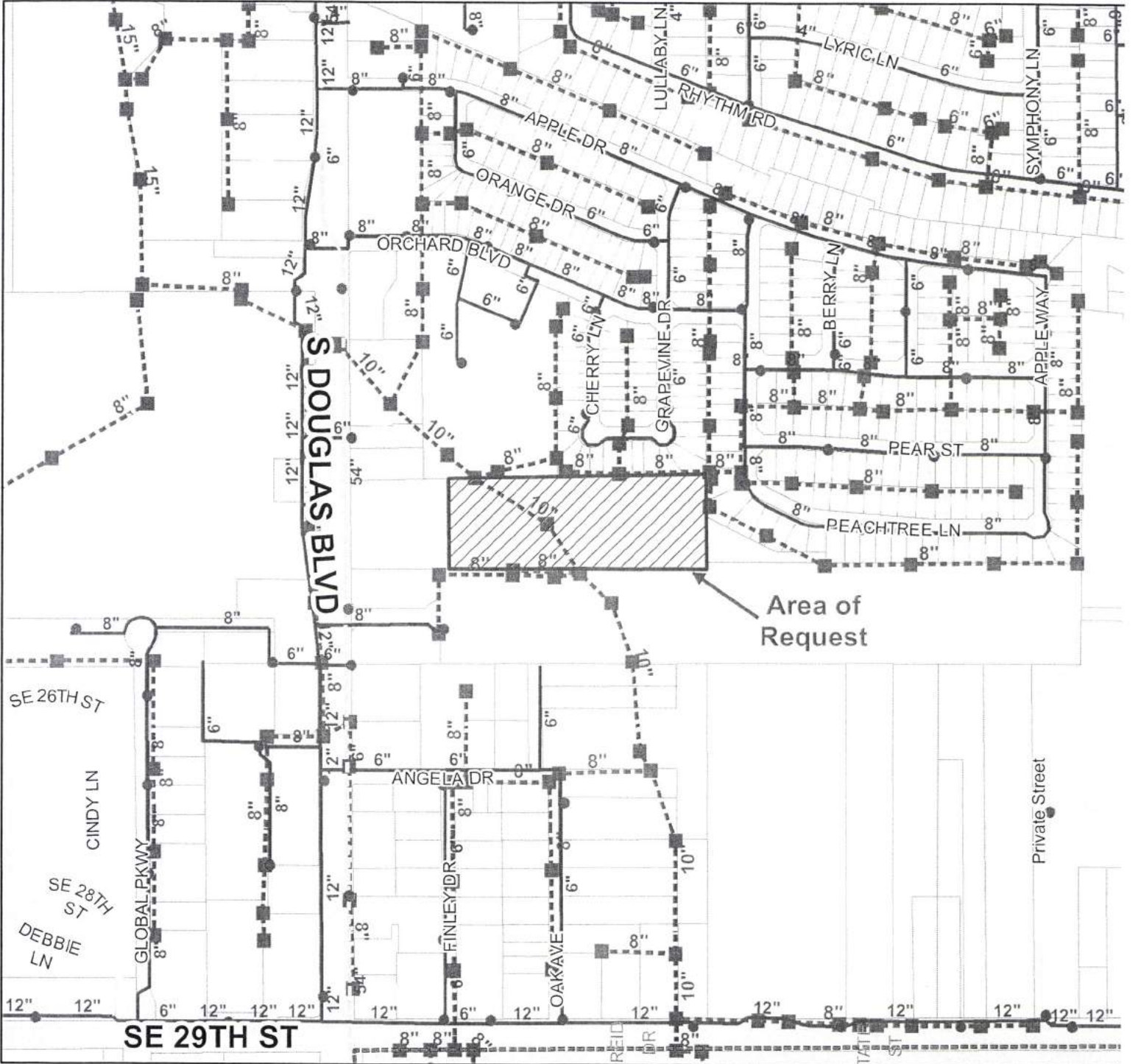
- Single-Family Detached Residential
- Medium Density Residential
- High Density Residential
- Manufactured Home
- Public/Semi-Public
- Parks/Open Space
- Office/Retail
- Commercial
- Industrial

**FUTURE LAND USE  
MAP FOR  
PC-2045  
(SW/4, Sec. 12, T11N, R2W)**

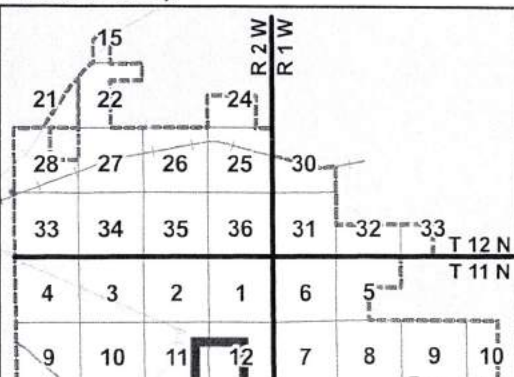


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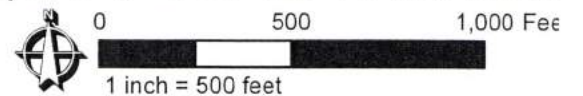
Locator Map



**Water/Sewer Legend**

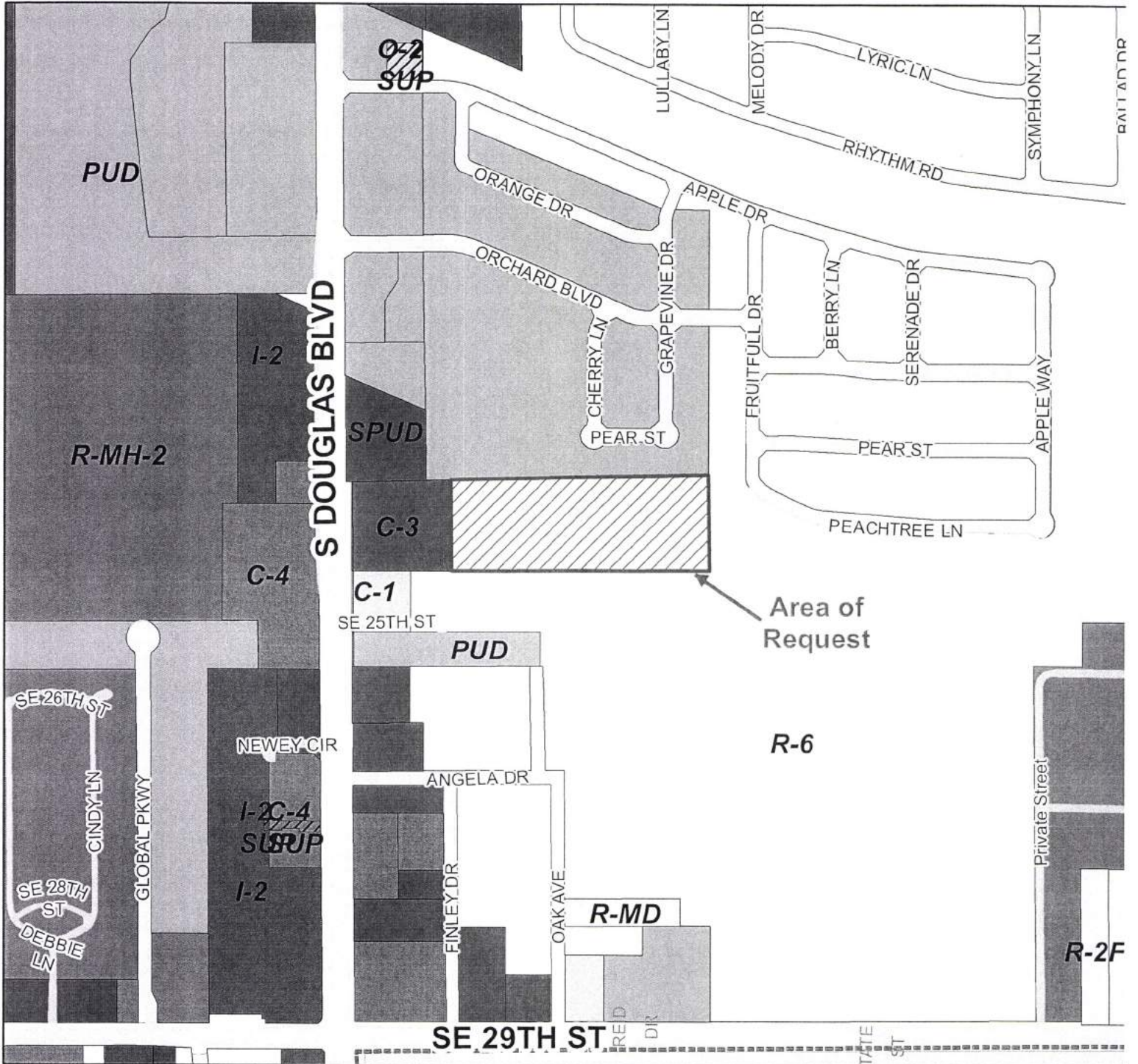
- Fire Hydrants
- Water Lines
  - Distribution
  - Well
  - OKC Cross Country
  - Sooner Utilities
  - Thunderbird
  - Unknown
- Sewer Manholes

**WATER/SEWER LINE  
LOCATION MAP FOR  
PC-2045  
(SW/4, Sec. 12, T11N, R2W)**

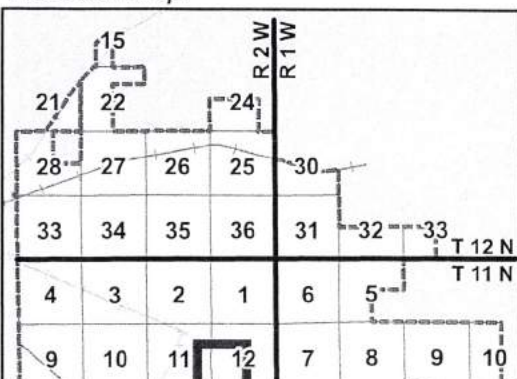


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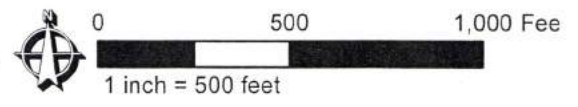
Locator Map



Current Zoning Legend

A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS

**ZONING MAP FOR  
PC-2045  
(SW/4, Sec. 12, T11N, R2W)**



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1 **PC-2045**

2 **ORDINANCE NO. \_\_\_\_\_**

3 **AN ORDINANCE RECLASSIFYING THE ZONING DISTRICT OF THE PROPERTY**  
4 **DESCRIBED IN THIS ORDINANCE TO R-HD, HIGH DENSITY RESIDENTIAL, AND**  
5 **DIRECTING AMENDMENT OF THE OFFICIAL ZONING DISTRICT MAP TO**  
6 **REFLECT THE RECLASSIFICATION OF THE PROPERTY'S ZONING DISTRICT;**  
7 **AND PROVIDING FOR REPEALER AND SEVERABILITY**

8 BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MIDWEST CITY, OKLAHOMA:

9 **ORDINANCE**

10 **SECTION 1.** That the zoning district of the following described property is hereby reclassified  
11 to R-HD, High Density Residential, subject to the conditions contained in the PC-2045 file, and  
that the official Zoning District Map shall be amended to reflect the reclassification of the  
property's zoning district as specified in this ordinance:

12 A tract of land lying in the Southwest Quarter of Section Twelve (12), Township Eleven  
13 (11) North, Range Two (2) west of the Indian Meridian, Midwest City, Oklahoma  
County, Oklahoma, being more particularly described as follows:

14 COMMENCING at the Northwest corner of said Southwest Quarter;  
15 THENCE South 00°32'01" East, along the West line of said Southwest Quarter, a  
16 distance of 660.00 feet; THENCE North 89°27'59" East a distance of 410.00 feet to the  
point of beginning.  
17 THENCE North 89°27'59" East a distance of 910.00 feet;  
18 THENCE South 00°32'001" East a distance of 330.00 feet;  
THENCE South 89°27'598" West a distance of 910.00 feet;  
19 THENCE North 00°32'01" West a distance of 330.00 feet to the point of beginning.

20 **SECTION 2. REPEALER.** All ordinances or parts of ordinances in conflict herewith are  
hereby repealed.

21 **SECTION 3. SEVERABILITY.** If any section, sentence, clause or portion of this ordinance is  
22 for any reason held to be invalid, such decision shall not affect the validity of the remaining  
portions of the ordinance.

23 PASSED AND APPROVED by the Mayor and Council of the City of Midwest City, Oklahoma,  
24 on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.



THE CITY OF MIDWEST CITY,  
OKLAHOMA

\_\_\_\_\_  
MATTHEW D. DUKES II, Mayor

ATTEST:

\_\_\_\_\_  
SARA HANCOCK, City Clerk

APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
HEATHER POOLE, City Attorney

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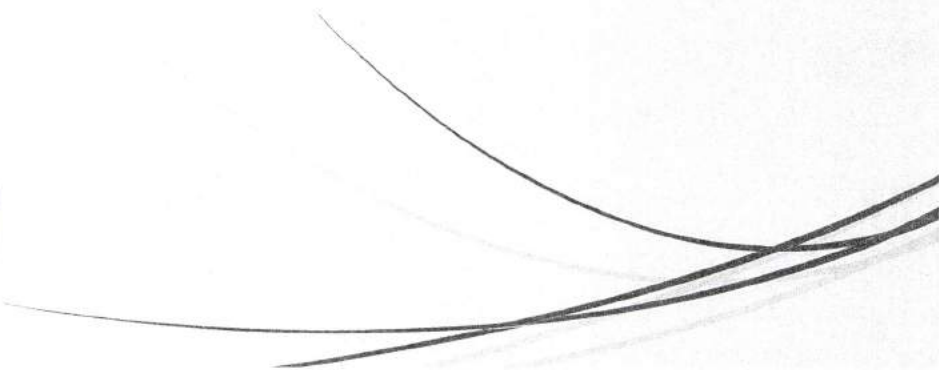


# CREEKSIDE PARK, THE RESIDENCES

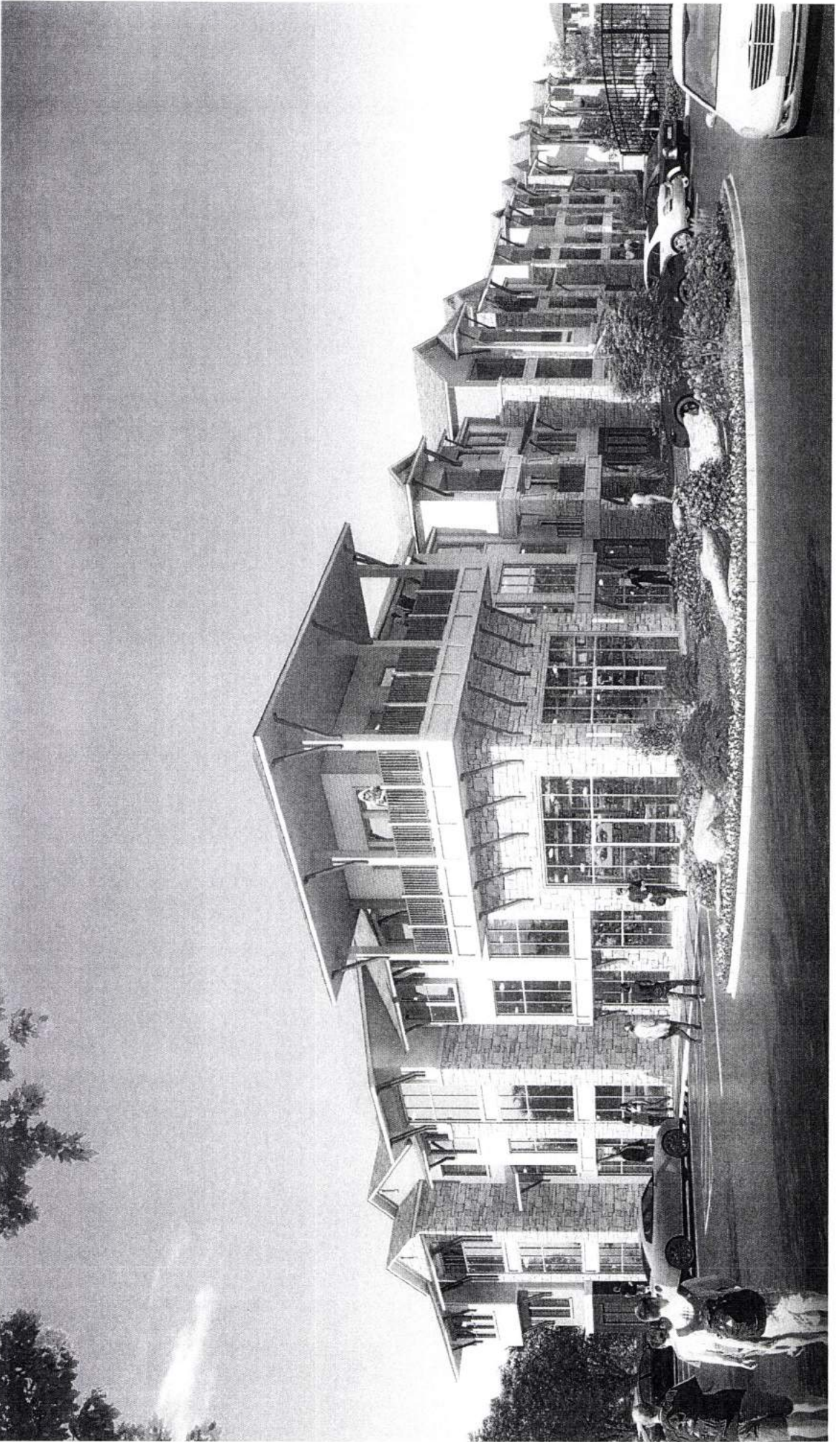
DISCOVER WHAT MAKES US THE BEST



# CREEKSIDE PARK, THE RESIDENCES

- Come experience the ultimate standard in apartment living at The Residences Apartments, in Midwest City, Oklahoma. Our contemporary community is located near Interstate 40, less than one mile from Tinker AFB and just 10 miles east of downtown Oklahoma City making any commute a breeze. Everything you need is at your fingertips, top-notch schools, nice dining, shopping venues, and local entertainment attractions are all nearby. If quality and convenience are at the top of your list, you have come to the right place!
- 











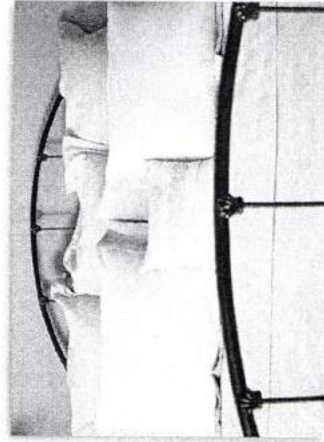
# CREEKSIDE PARK, THE RESIDENCES

- Choose from numerous designer floor plans featuring one, two, and three bedrooms for rent. Standard amenities include 9-foot ceilings, beautiful hardwood flooring, large walk-in closets, and an in-home washer and dryer. You will love preparing meals in your gourmet kitchen with dishwasher, microwave, and refrigerator. At The Residences Apartments we have everything to fit your lifestyle.
- 



# APARTMENT FEATURES

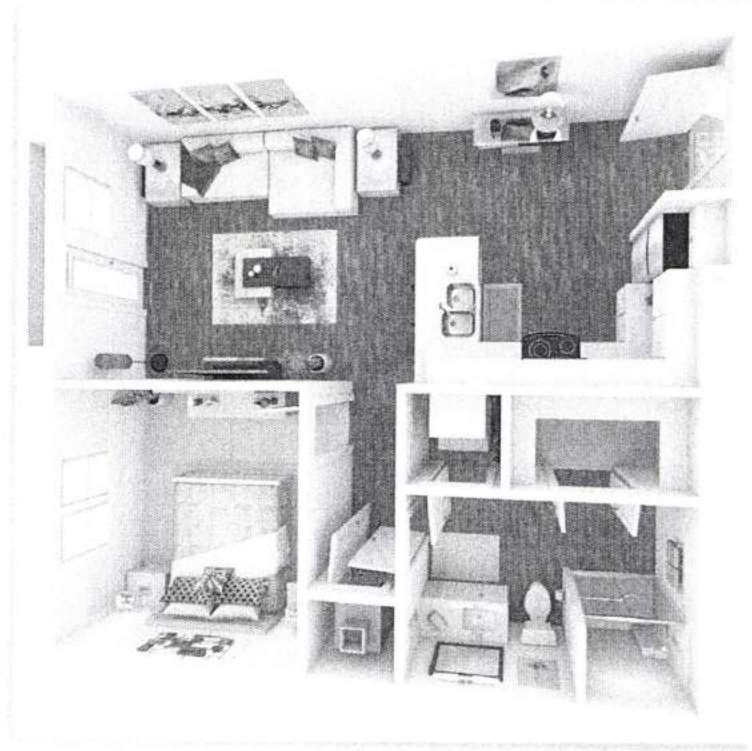
- ▶ 9Ft Ceilings
- ▶ Quartz Countertops
- ▶ Washer and Dryer in Home
- ▶ Hardwood Floors
- ▶ Large Kitchen Islands
- ▶ Build in Shelving
- ▶ Balcony or Patio
- ▶ Air Conditioning
- ▶ Carpeted Floors
- ▶ Ceiling Fans
- ▶ Dishwasher
- ▶ Extra Storage
- ▶ Microwave
- ▶ Refrigerator





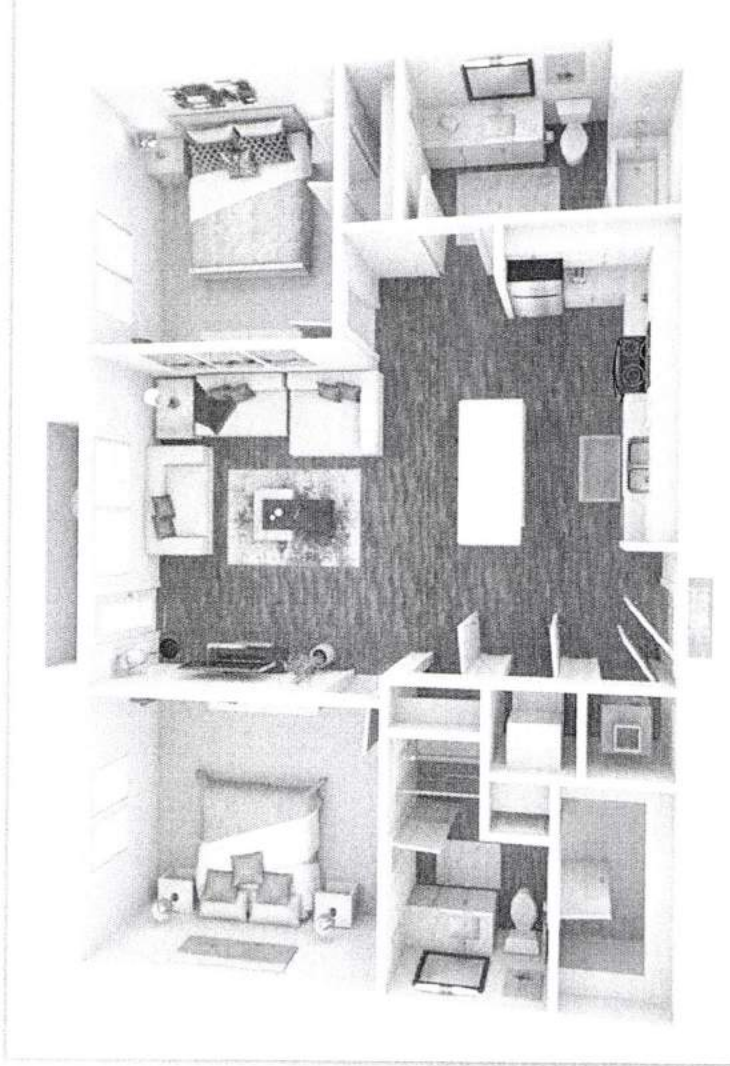
# Floor Plan Examples

► 1 BED | 1.0 BATH 626 SQ. FT.



# Floor Plan Examples

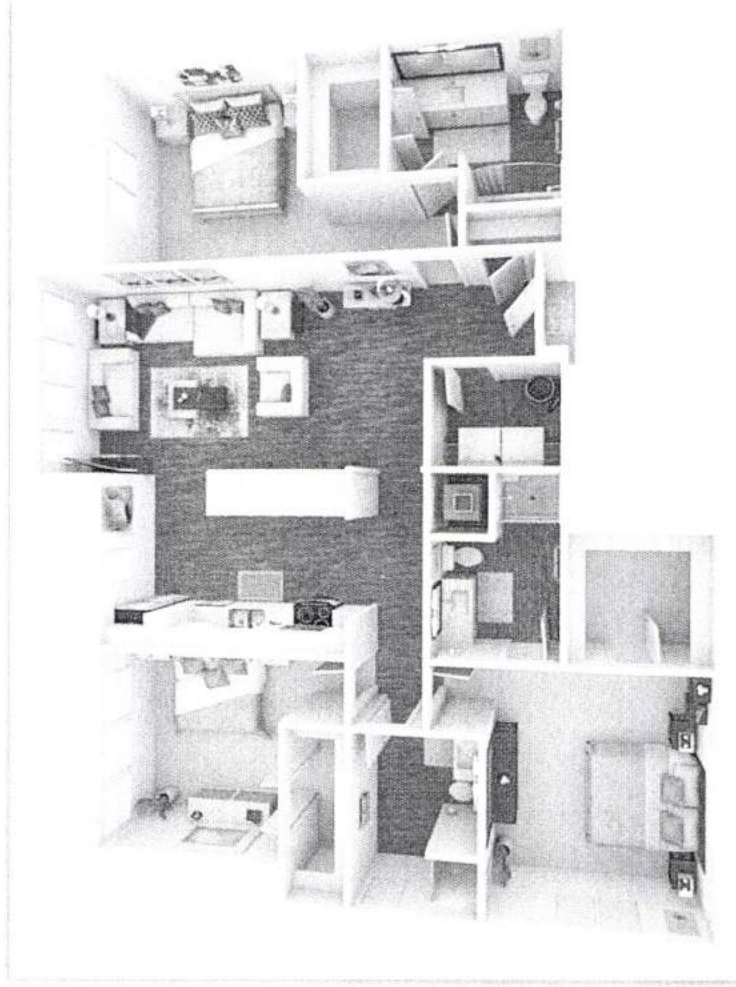
■ 2 BEDS | 2.0 BATHS 950 SQ. FT.





# Floor Plan Examples

▶ 3 BEDS | 3.0 BATHS | 1545 SQ. FT.





# COMMUNITY AMENITIES



- ▶ Parklike Setting
- ▶ Mature Trees
- ▶ 24-Hour Fitness Center
- ▶ Elevator
- ▶ High Speed Internet Access
- ▶ Resort Style Pool
- ▶ Assigned Parking
- ▶ Clubhouse
- ▶ Business Center
- ▶ Copy and Fax Services
- ▶ Cable Available
- ▶ Easy Access to Freeways and Shopping



## PET FRIENDLY

- ▶ Looking for a pet-friendly community? Look no further than The Residences Apartments! As a pet-friendly community, we proudly allow cats and dogs here at The Residences Apartments. Now your pet can relax by your side and enjoy the comforts of your home.

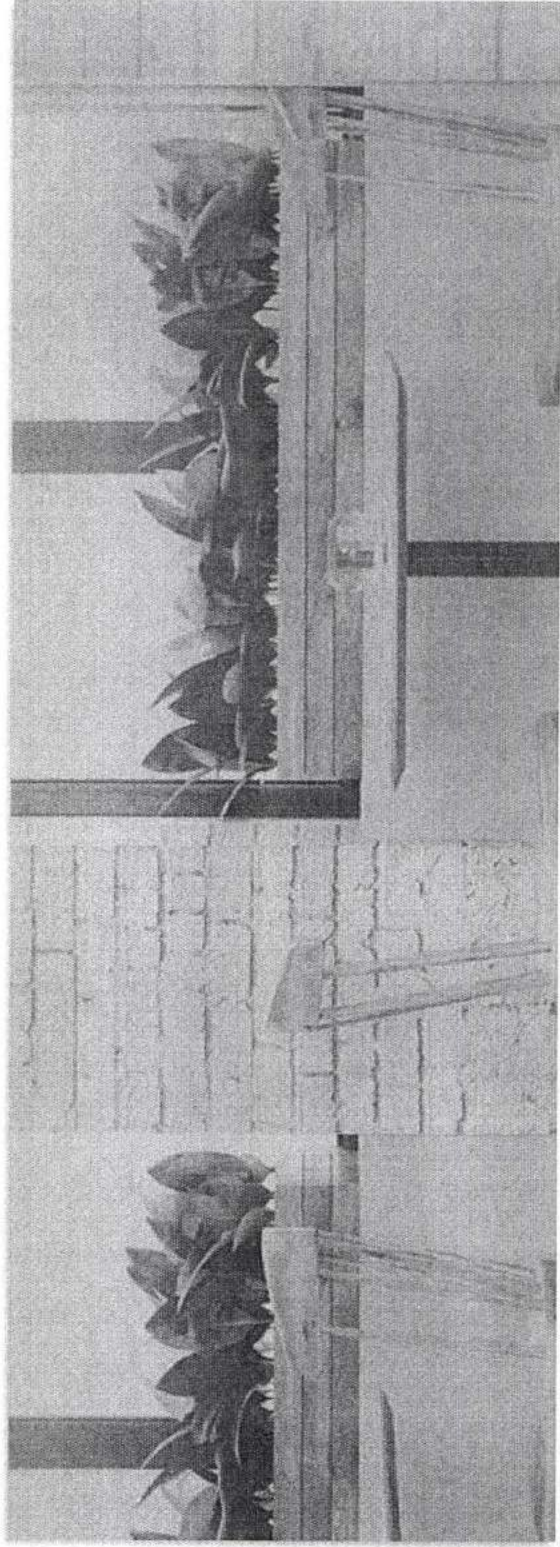






## LIVE. LOVE. LOCATION.

- ▶ The Residences Apartments is conveniently located in Midwest City, OK with easy access to everything you could want or need! Shopping, restaurants, schools, entertainment venues; you name it, it's all within minutes of your new home.





# NEIGHBORHOOD

## RESTAURANTS

- ▶ S&B Burger Joint 0.50 mi
- ▶ Henry Hudson's Pub 0.55 mil
- ▶ The Rib Crib 0.60 mi
- ▶ Cheddar's 2.80 mi
- ▶ Logan's Roadhouse 3.90 mi
- ▶ Chili's Grille & Bar 4.00 mi
- ▶ Buffalo Wild Wings 4.70 mi

## SHOPPING

- ▶ Crest Foods 2.00 mi
- ▶ Town Center 2.00 mi
- ▶ Kohl's 2.20 mi
- ▶ Target 2.40 mi
- ▶ Lowe's 2.80 mi
- ▶ Sam's Club 3.50 mi
- ▶ Walmart Supercenter 5.0 mi





# NEIGHBORHOOD

## SCHOOLS

- Soldier Creek Elementary 9/10 rated 0.70 mi
- Carl Albert Junior High 8/10 rated 1.25 mi
- Carl Albert High School 9/10 rated 1.60 mi
- Rose State College 4.00 mi

## ACTIVITIES

- Soldier Creek Hiking Trail 0.75 mi
- Regional Golf Course 1.40 mi



# NEIGHBORHOOD

## ENTERTAINMENT

- ▶ Andy's Altitude 1291 3.2 mi
- ▶ Warren Theatre 3.6 mi
- ▶ Rose State Performing Arts 4.0 mi

## PARKS & LAKES

- ▶ Regional Park 1.65 mi
  - ▶ Happy Trails Dog Park 2.3 mi
  - ▶ Draper Lake 8.8 mi
- 





# NEIGHBORHOOD

## HOSPITALS

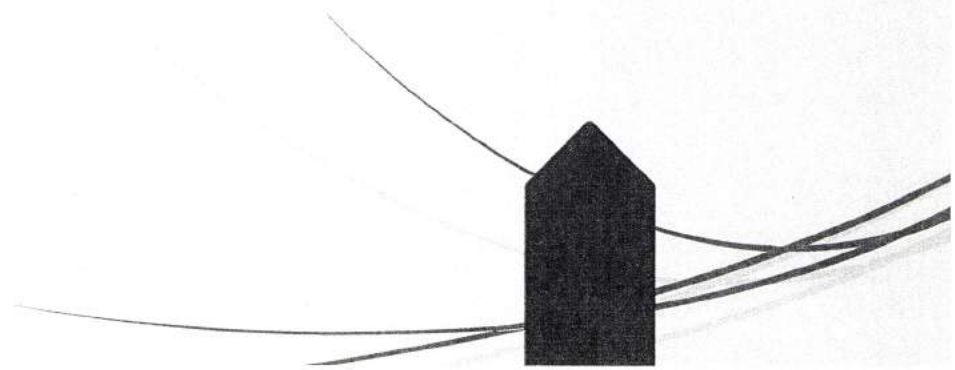
- ▶ St. Anthony Healthplex 1.4 mi
- ▶ Alliance Health Midwest 3.2 mi

## BANKS & SERVICES

- ▶ The First State Bank .10 mi
- ▶ IBC Bank .30 mi
- ▶ FNB Community Bank .90 mi
- ▶ Sooner State Bank 1.10 mi
- ▶ Post Office 2.00 mi
- ▶ Fedex Office Print & Ship 3.00 mi

# CREEKSIDE PARK, THE RESIDENCES

DISCOVER WHAT MAKES US THE BEST







The City of  
**MIDWEST CITY**  
COMMUNITY DEVELOPMENT DEPARTMENT

Billy Harless, Community Development Director

ENGINEERING DIVISION  
Brandon Bundy, City Engineer  
CURRENT PLANNING DIVISION  
Kellie Gilles, Manager  
COMPREHENSIVE PLANNING  
Petya Stefanoff, Comprehensive Planner  
BUILDING INSPECTION DIVISION  
Christine Brakefield, Building Official  
GIS DIVISION  
Greg Hakman, GIS Coordinator

**To:** Chairman and Planning Commission  
**From:** Billy Harless, Community Development Director  
**Date:** July 7, 2020

**Subject:** (PC – 2046) Public hearing with discussion and consideration of an ordinance redistricting from Planned Unit Development (PUD) to Amended Planned Unit Development (PUD), for the property described as a part of the Lots 7-10 of the Thomas Acres Addition addressed as 9070 NE 13<sup>th</sup> Street.

**Executive Summary:** A PUD governed by the R-MD, Medium Density Residential district, for the area of request was approved in October 2019. There was much discussion regarding the design of the development at both the Planning Commission and City Council meetings. The Planning Commission recommended denial but the PUD was approved by the City Council. Since that time, the applicant has requested to make modifications to the approved PUD. These modifications include:

- Reconfiguring the design of the homes so that each dwelling unit has an attached garage. This was a concern during the original review as garages for both dwelling units of each duplex were placed at one end of the structure meaning the occupant of the unit on the other end would have to walk outside from their garage to their dwelling unit.
- The original PUD consisted of eleven (11) residential duplex structures with twenty-two (22) dwelling units. This request increases the density by adding one (1) more duplex structure with two (2) dwelling units.
- The 26' wide road has been shortened
- The storage units have increased in size
- Detention pond has been modified

All future maintenance of the private drive, detention pond, water and sewer house lines and all other portions of the development will be the responsibility of the property owner. A single private drive is proposed to provide access to each lot. Private water and sewer lines will be extended from the main public lines to serve each dwelling unit. Within this proposal, the applicant plans to retain ownership of the entire development and rent out individual dwelling units. Action is at the discretion of the Planning Commission and City Council.

**Dates of Hearing:** Planning Commission – July 7, 2020  
City Council – July 28, 2020

**Council Ward:** Ward 5, Councilmember Christine C. Price Allen

**Owner/Applicant:** Adam Stephens

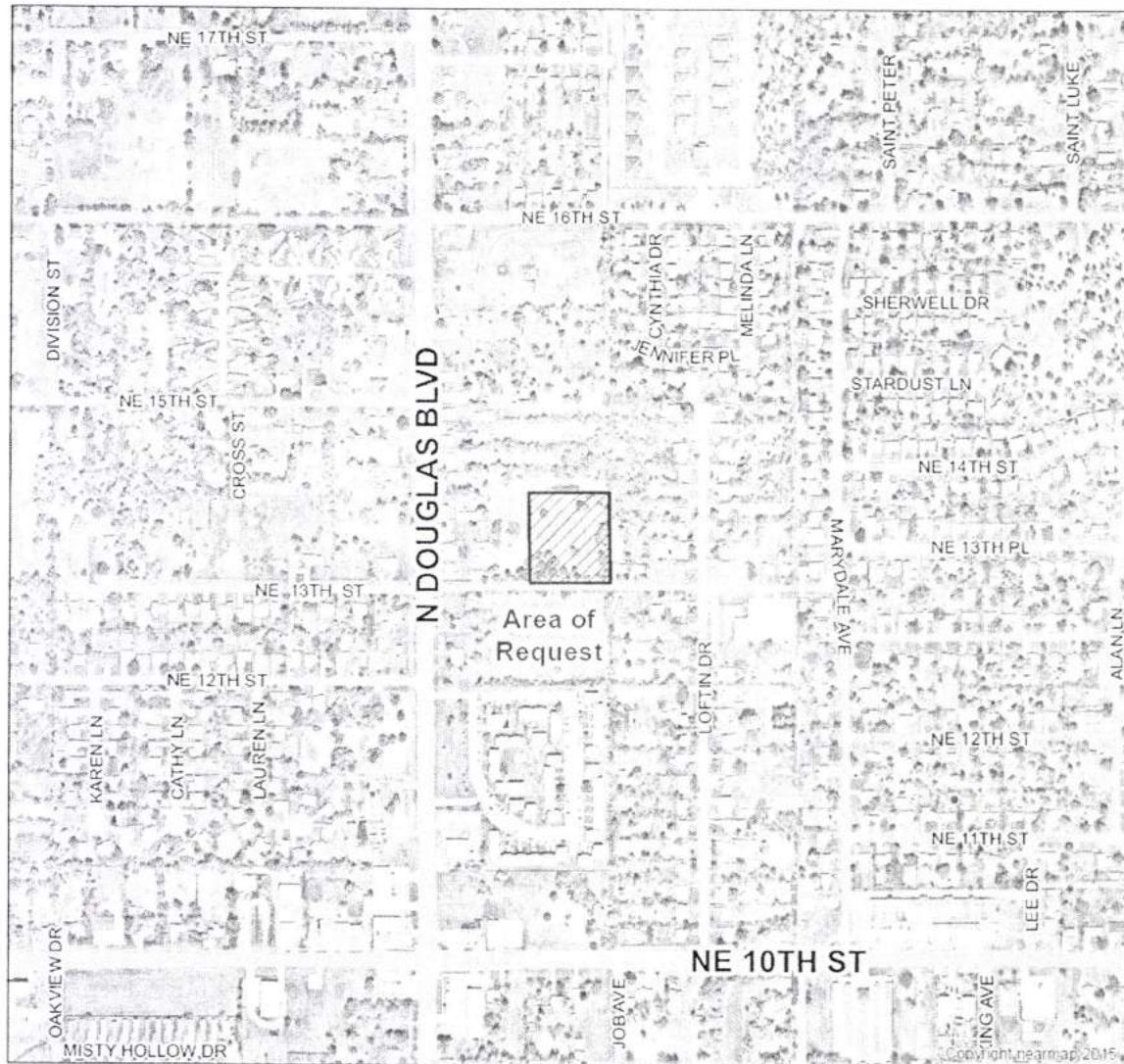
**Proposed Use:** 12 duplex structures (24 dwelling units) on one lot

**Size:** The area of request has a frontage along NE 13<sup>th</sup> St. of approximately 286 ft. and contains an area of approximately 2.04 acres.

**Development Proposed by Comprehensive Plan:**

Area of Request – MDR, Medium Density Residential

North, South, East and West – LDR, Low Density Residential



**Zoning Districts:**

Area of Request – Planned Unit Development (PUD) governed by R-MD, Medium Density Residential

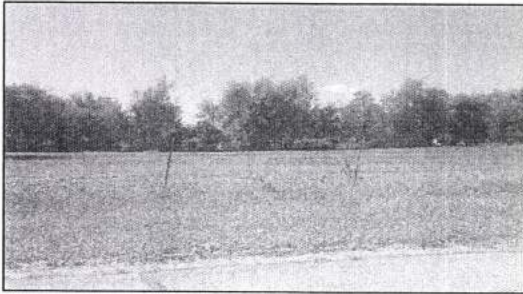
North, South, East and West – R-6, Single Family Detached Residential



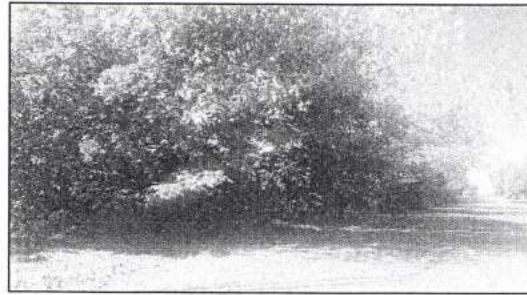
**Land Use:**

Area of Request – vacant

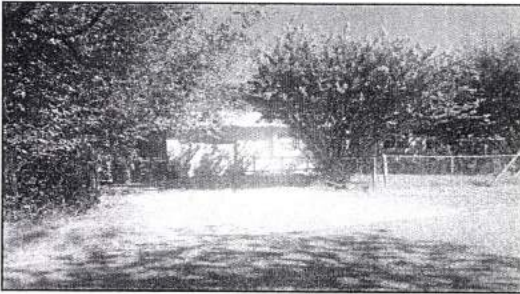
North – Vacant



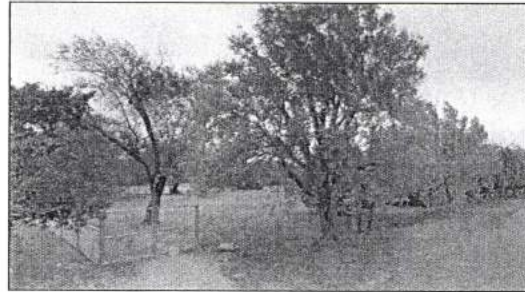
South - Vacant



East – single family residence



West - vacant



**Comprehensive Plan Citation:**

Medium Density Residential (MDR) Land Use

This use is representative of two-family, attached dwelling units, such as duplex units and townhomes. Medium density land uses often provide areas for “empty nesters” who may not want the maintenance of a large-lot single-family home and for young families who may find a townhome or duplex more affordable than a single-family home. It is anticipated that new areas for medium density land use will be developed in the future.

**Municipal Code Citation:**

2.25 PUD, Planned Unit Development

2.25.1 General Provisions

The planned unit development, herein referred to as PUD, is a special zoning district category that provides an alternate approach to conventional land use controls to produce unique, creative, progressive, or quality land developments.

The PUD may be used for particular tracts or parcels of land that are under common ownership and are to be developed as one unit according to a master development plan. The PUD is subject to special review procedures within the PUD application and review and once approved by the City Council it becomes a special zoning classification for the property it represents.

### 2.25.2 Intent and Purpose

The intent and purpose of the PUD provisions are as follows:

- (A) Innovative land development  
Encourage innovative land development while maintaining appropriate limitations on the character and intensity of use, assuring compatibility with adjoining and proximate properties, and following the guidelines of the comprehensive plan.
- (B) Flexibility within developments  
Permit flexibility within the development to maximize the unique physical features of the particular site.
- (C) Efficient use of land  
Encourage efficient use of land, facilitate economic arrangements of buildings and circulation systems, and encourage diversified living environments and land uses.
- (D) Function, design and diversity  
Achieve a continuity of function and design within the development and encourage diversified living environments and land uses.
- (E) Modifications to development requirements  
Provide a vehicle for negotiating modifications in standard development requirements in order to both encourage innovative development and protect the health, safety and welfare of the community.

### **History:**

1. This property has been zoned residential since the adoption of the 1985 Zoning Map.
2. The area was platted as a part of the Thomas Acres addition in 1957.
3. A PUD governed by the R-MD, Medium Density Residential District was approved for the area of request October 22, 2019 (PC-2023).

### **Staff Comments:**

#### **Engineer's Report:**

Note: This application is for amending the PUD previously approved in October 2019 (PC-2023) for a development located at 9070 NE 13<sup>th</sup> Street. No engineering improvements are required with this application.

#### Water Supply and Distribution

A six (6) inch public water main is located on the south side of NE 13<sup>th</sup> Street. Public water mains extend along the full frontage of this property and existing facility is connected to the city water main, therefore water line improvements are not required as outlined in Municipal Code 43-32.

A fire hydrant is shown in the proposed master site plan. Applicant can either extend public main with required easements or may use a private system subject that they meter at the public / private connection.

#### Sanitary Sewerage Collection and Disposal

An eight (8) inch public sewer main is located along the entire north side and a portion of the east side of the proposed development. The public sewer main is accessible to this development. Sewer line improvements are not required as outlined in Municipal Code



#### Streets and Sidewalks

Access to the area of request is available off NE 13<sup>th</sup> Street which is classified as a local road in the 2008 Comprehensive Plan. NE 13<sup>th</sup> Street is a two lane, 22-foot-wide, uncurbed, asphalt roadway. Half street and sidewalk improvements along NE 13<sup>th</sup> Street will be required with a building permit submittal as outline in Municipal Code 37-67 and 38-45.

#### Drainage and Flood Control, Wetlands, and Sediment Control

The area of request has a gentle fall to the northeast and is primarily field with a few trees. Topography is such that water sheet flows off the site to the north and east. There is no existing detention.

The area of request is entirely within flood zone AE as shown on Flood Insurance Rate map (FIRM) number 40109C0330H, dated December 18<sup>th</sup>, 2009. None of the proposed development is affected by flood zone AE.

Detention will be required for this development and shall be prepared by a registered professional engineer and be submitted to staff for plan review and approval. The detention system proposed is entirely private with private storm pipes and private inlets. The outfall of this development appears to be in the northeast corner. This outfall proposed will flow onto neighbor's private property and as such, require substantial energy dissipation and redistribution of concentrated flow to sheet flow.

#### Easements and Right-of-Way

As outlined in Municipal Code 38-45, a local road shall have a total right-of-way of fifty (50) feet, twenty-five (25) feet each side of center line. The area of request currently shows to have fifty (50) feet therefore no additional right of way will be required with this application.

#### **Fire Marshal's Report:**

The Fire Marshal has reviewed this request. The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15. Other requirements will be reviewed once design/construction plans have been submitted. The 10' wide access to the storage is required to be widened to a minimum of 12' while also being able to support an anticipated load of 75,000 lbs. Fire flow requirements and hydrant location will be reviewed at a later date.

#### **Plan Review Comments:**

This PUD is being requested in order to develop this 2.04-acre site into a small, duplex community. The development will consist of 24 dwelling units/12 duplex structures, a storage building with individual units for use by the residents and a small maintenance garage.

As mentioned in the Executive Summary, a similar PUD was approved for the area of request in October 2019. There were concerns at both the Planning Commission and City Council hearings regarding the design of the structures, specifically the placement of the garages on one end of each structure. With the garages on one end of the structure, the occupant of the dwelling unit on the other end would have to walk outside to get from their driveway/garage to their dwelling unit. Although the PUD was approved, the applicant wanted to change the design to alleviate concerns raised by Planning Commissioners and Councilmembers.

The Zoning Ordinance does allow for the Community Development Director to approve minor changes to a PUD. As the design of the homes was a large concern at the Planning Commission and City Council meetings, it was determined that a change in design would need to be re-heard by the Planning Commission and City Council. There are other minor amendments between this application and the approved PUD listed in the executive summary.

The dwelling units will be three-bedroom units housed in 12 duplex structures. Each dwelling unit will have an attached single car garage.

A variance is requested to allow a 5' setback on the east and west sides of the property. Code requires a minimum 7' side setback. A 5' setback was approved with the original PUD.

The private drive providing access to each of the residential structures will be required to be built to Midwest City standards but will remain private. The Master Development Plan approved with the previous PUD was approved with rollover curbs. The site plan submitted with this application does not show rollover curbs.

The PUD is to be governed by the R-MD, Medium Density Residential zoning district. Section 5.2.4 (H) of the Zoning Ordinance requires that sight-proof screening be provided between medium density and single family residential districts. This will require that the applicant provide sight-proof screening along the north, east and west sides of the property. The maximum height for stockade fences is 8'. Metal poles are required. Metal panel fencing is prohibited. The sight-proof screening must be installed prior to use of the property.

Regarding landscaping, the PUD states that the landscaping will meet MWC codes. A minimum of two (2) trees are required for each dwelling unit. The trees should be a minimum of 2 ½" caliper at the time of planting.

The property is already platted as lots 7-10 of the Thomas Acres Addition. The applicant plans to keep the development under single ownership and does not plan to replat the property into individual lots for each duplex structure. Section 2.0 of the proposed PUD inaccurately states the legal description as Section 24. Other sections of the PUD and other references correctly identify the property legal description as Section 25.

As required by the Zoning Ordinance, notice was sent to all property owners within 300 feet of the proposed development and published in the Journal Record. As of this writing, staff has received no inquiries or protest.

If this application is denied, the PUD that was approved in October 2019 would remain in effect and the applicant could apply for building permits in accordance with that previously approved design. In accordance with the Zoning Ordinance, if no progress is made three (3) years from the date of PUD approval, the PUD becomes void and the zoning reverts back to what it was prior to the PUD approval. In this case, the land would revert back to R-6, Single Family Detached Residential.



July 7, 2020

Action is at the discretion of the Planning Commission and City Council.

**Action Required:** Approve or reject the ordinance to redistrict to Amended Planned Unit Development for the property as noted herein, subject to the staff comments and recommendations as found in the July 7, 2020 agenda packet and made a part of PC-2046 file.



---

Billy Harless, AICP  
Community Development Director

KG

The City of  
**MIDWEST CITY**

COMMUNITY DEVELOPMENT DEPARTMENT - ENGINEERING DIVISION

William Harless, Community Development Director

Brandon Bundy, P.E., C.F.M., City Engineer

---

To: Kellie Gilles, Plans Review Manager

From: Brandon Bundy, City Engineer

Date: June 22<sup>nd</sup>, 2020

Subject: Engineering staff comments for pc-2046 application to amend the PUD.

**ENGINEERING STAFF CODE CITATIONS AND COMMENTS - PC-2046:**

Note: This application is for amending the PUD previously approved in October 2019 (PC-2023) for a development located at 9070 NE 13<sup>th</sup> Street. No engineering improvements are required with this application.

**Water Supply and Distribution**

A six (6) inch public water main is located on the south side of NE 13<sup>th</sup> Street. Public water mains extend along the full frontage of this property and existing facility is connected to the city water main, therefore water line improvements are not required as outlined in Municipal Code 43-32.

A fire hydrant is shown in the proposed master site plan. Applicant can either extend public main with required easements or may use a private system subject that they meter at the public / private connection.

**Sanitary Sewerage Collection and Disposal**

An eight (8) inch public sewer main is located along the entire north side and a portion of the east side of the proposed development. The public sewer main is accessible to this development. Sewer line improvements are not required as outlined in Municipal Code 43-109.

**Streets and Sidewalks**

Access to the area of request is available off NE 13<sup>th</sup> Street which is classified as a local road in the 2008 Comprehensive Plan. NE 13<sup>th</sup> Street is a two lane, 22-foot-wide, uncurbed, asphalt roadway. Half street and sidewalk improvements along NE 13<sup>th</sup> Street will be required with a building permit submittal as outline in Municipal Code 37-67 and 38-45.



### **Drainage and Flood Control, Wetlands, and Sediment Control**

The area of request has a gentle fall to the northeast and is primarily field with a few trees. Topography is such that water sheet flows off the site to the north and east. There is no existing detention.

The area of request is entirely within flood zone AE as shown on Flood Insurance Rate map (FIRM) number 40109C0330H, dated December 18<sup>th</sup>, 2009. None of the proposed development is affected by flood zone AE.

Detention will be required for this development and shall be prepared by a registered professional engineer and be submitted to staff for plan review and approval. The detention system proposed is entirely private with private storm pipes and private inlets. The outfall of this development appears to be in the northeast corner. This outfall proposed will flow onto neighbor's private property and as such, require substantial energy dissipation and redistribution of concentrated flow to sheet flow.

### **Easements and Right-of-Way**

As outlined in Municipal Code 38-45, a local road shall have a total right-of-way of fifty (50) feet, twenty five (25) feet each side of center line. The area of request currently shows to have fifty (50) feet therefore no additional right of way will be required with this application.



## Midwest City Fire Marshal's Office

8201 E Reno Avenue, Midwest City, OK 73110  
[dhelmberger@midwestcityok.org](mailto:dhelmberger@midwestcityok.org) Office: 405-739-1355  
[www.midwestcityok.org](http://www.midwestcityok.org)



Re: PC - 2046

Date: 17 June 2020

PC-2046 is a request to amend a PUD. The Preston Grove PUD was approved in October 2019.

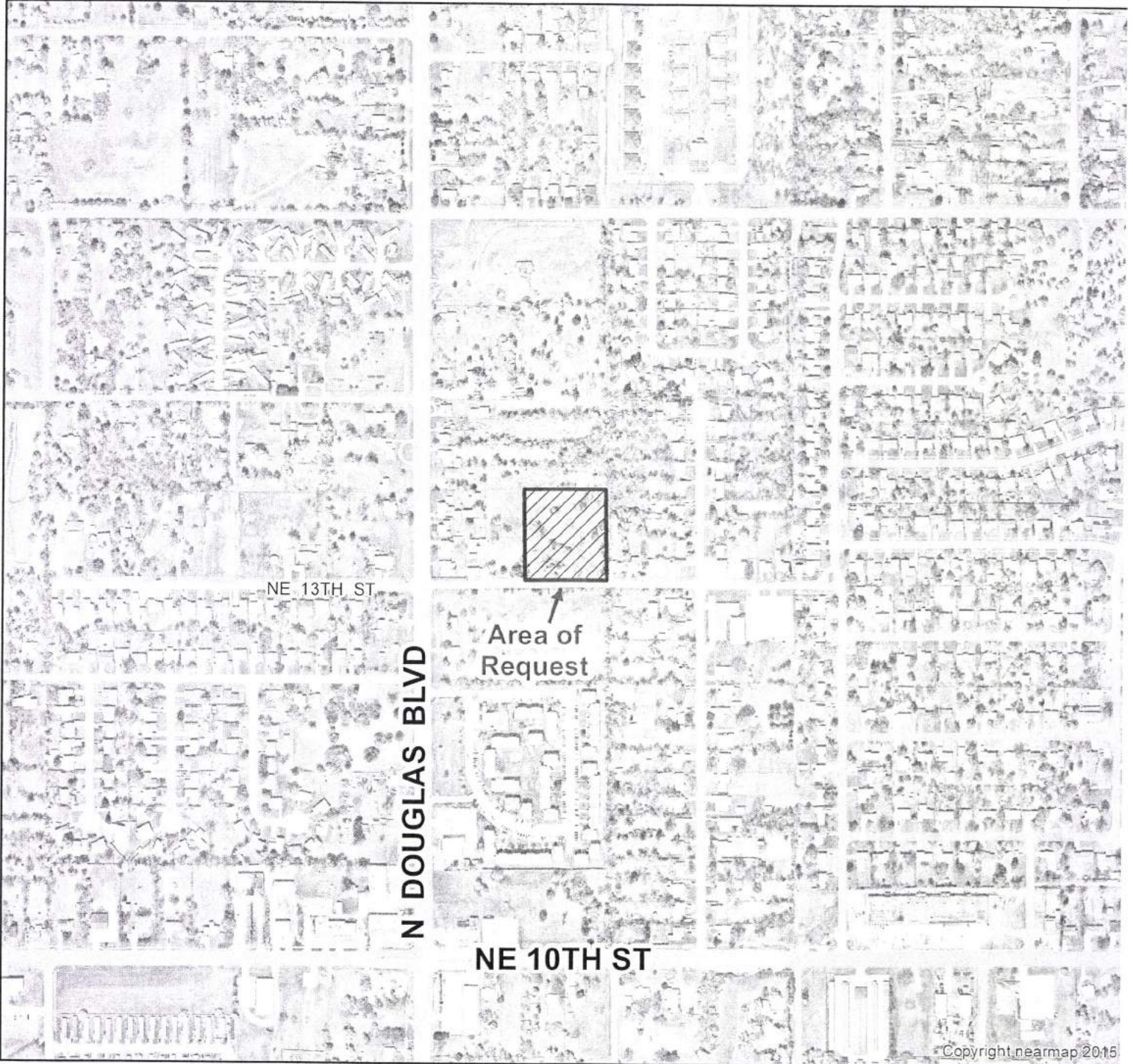
- The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15.
- Other requirements will be reviewed once design / construction plans have been submitted.
- The 10' wide access to the storage is required to be widened to a minimum of 12 feet while also being able to support an anticipated load of 75,000 lbs.
- Fire flow requirements and hydrant location will be reviewed at a later date.

Respectfully,

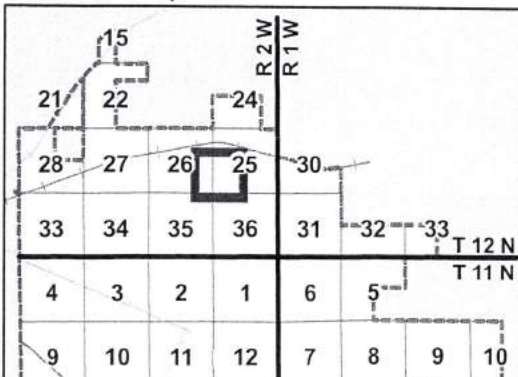
A handwritten signature in black ink, appearing to read "D. Helmberger".

Duane Helmberger  
Fire Marshal  
Midwest City Fire Department

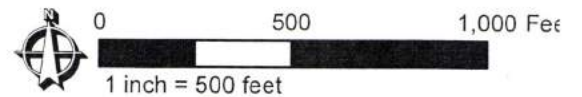




Locator Map

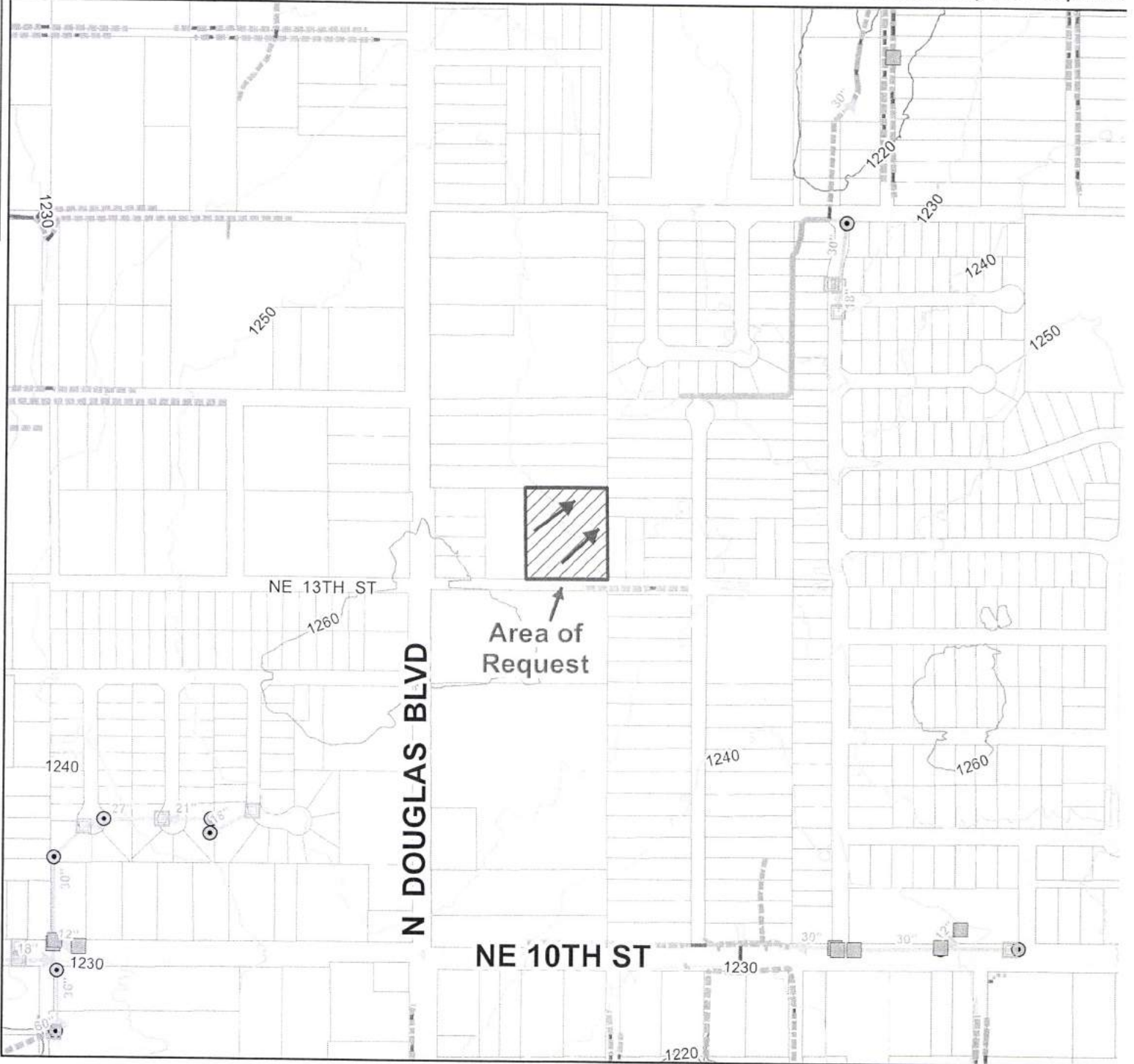


**3/2020 NEARMAP AERIAL VIEW FOR  
PC-2046  
(SW/4, Sec. 25, T12N, R2W)**

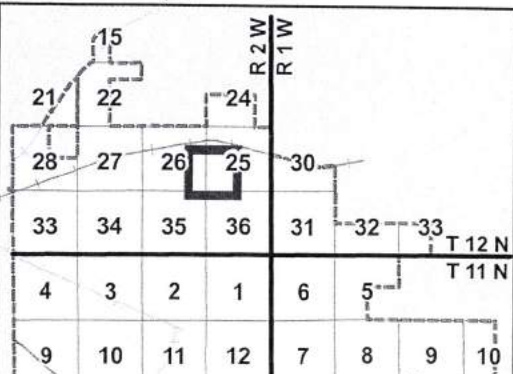


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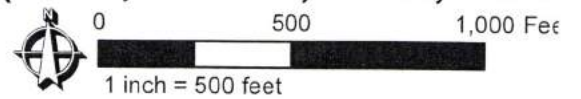
Locator Map



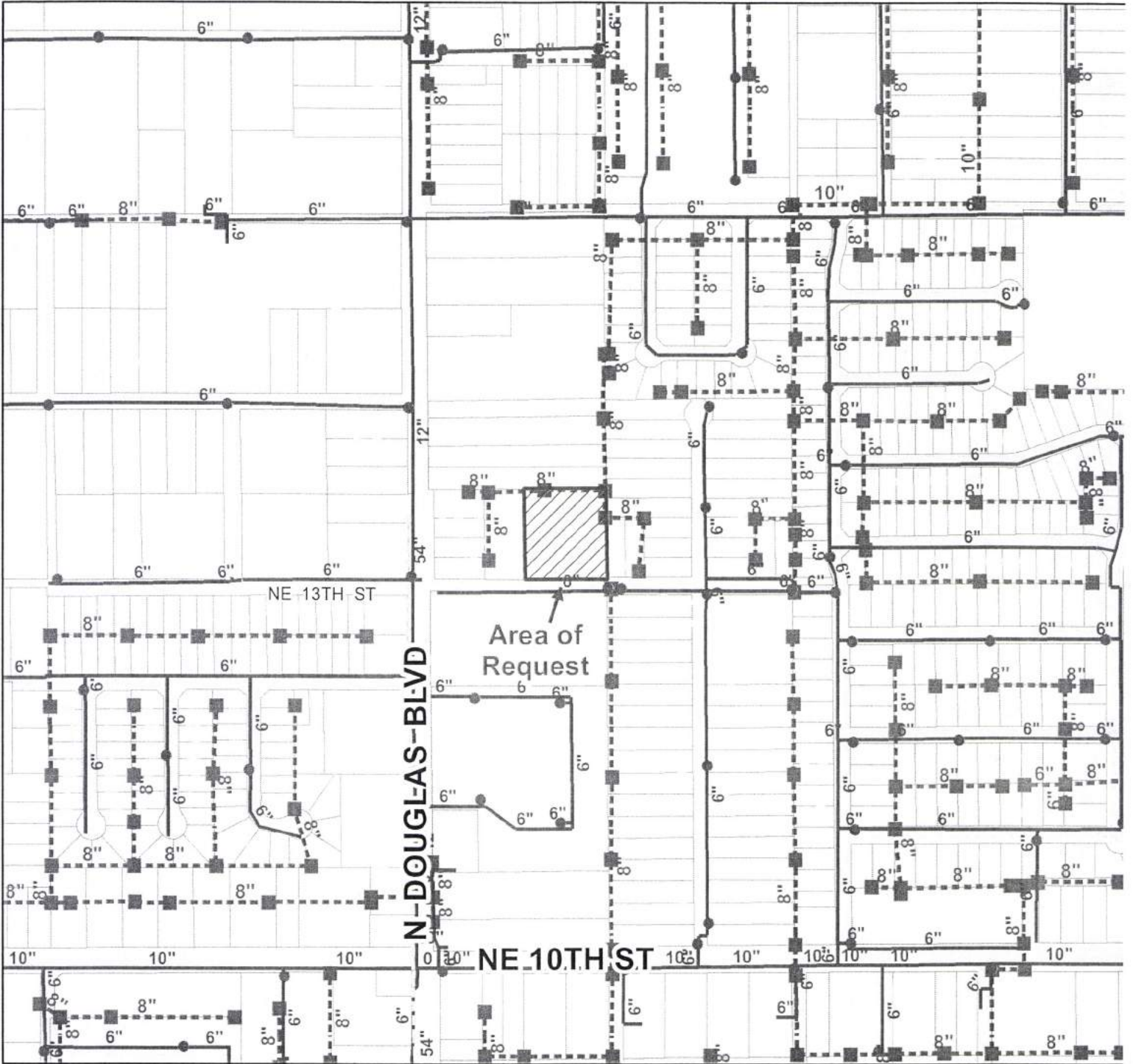
- Drainage Legend**
- Curb Inlets
  - Inlets
  - Junction Box
  - Culverts
  - Flumes
  - Developed Channels
  - Trickle Channels
  - Undeveloped Channels
  - Storm Lines
  - Creeks
- ELEVATION**
- 1166-1204 ft
  - 1204-1228 ft
  - 1228-1250 ft
  - 1250-1278 ft

- 2009 FEMA Floodplains**
- 500-yr floodplain
  - 100-yr floodplain
  - 2009 FEMA Floodway

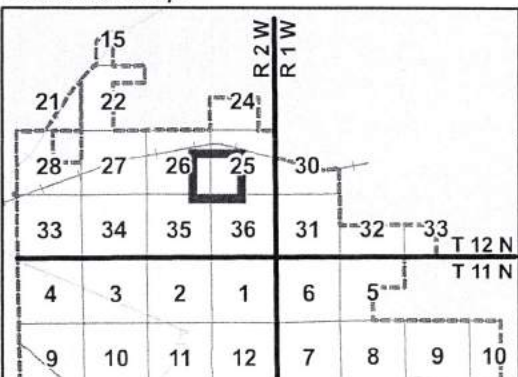
**DRAINAGE  
LOCATION MAP FOR  
PC-2046  
(SW/4, Sec. 25, T12N, R2W)**



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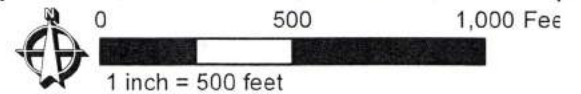
Locator Map



**Water/Sewer Legend**

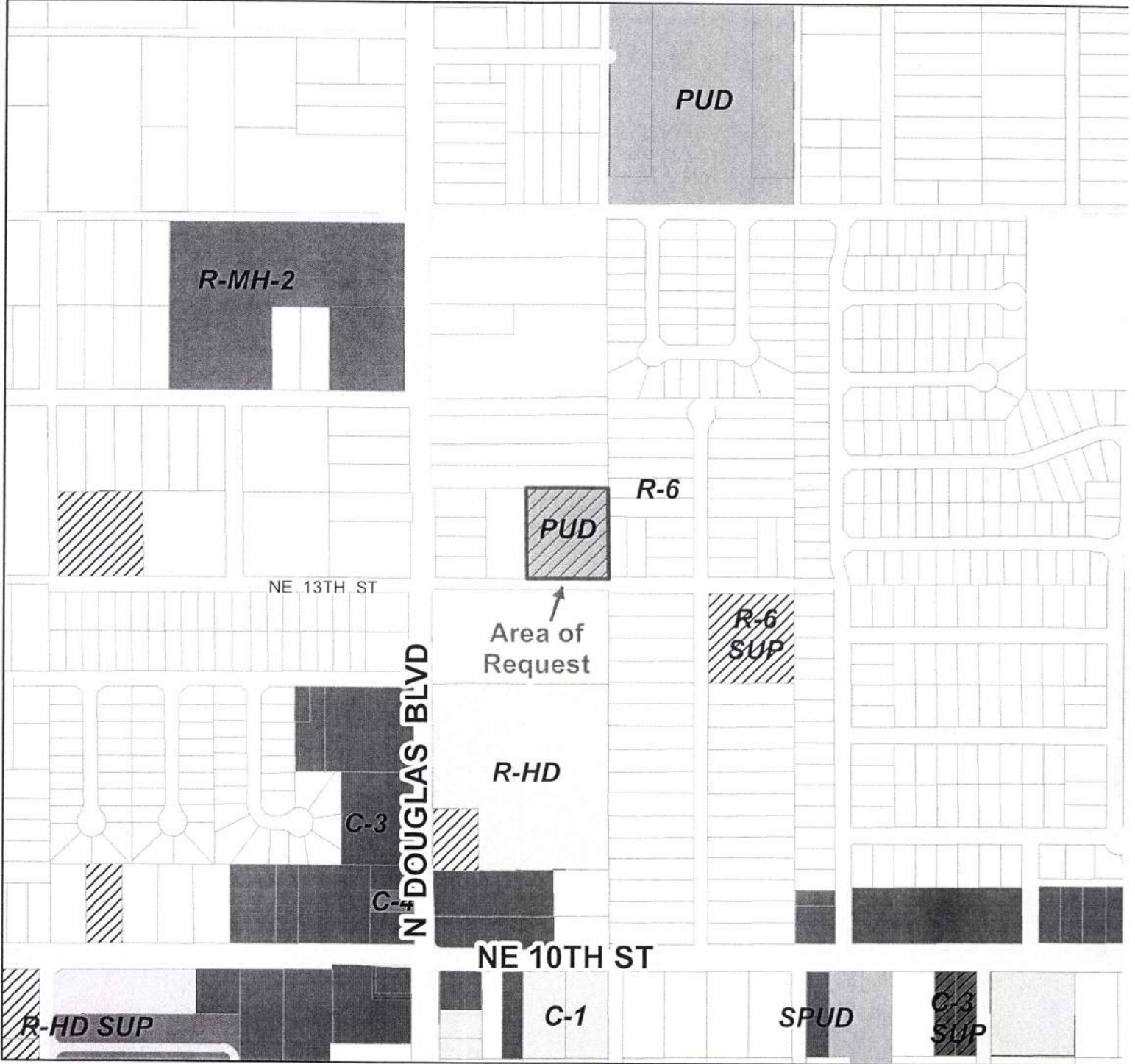
- Fire Hydrants
- Water Lines
  - Distribution
  - Well
  - OKC Cross Country
  - Sooner Utilities
  - Thunderbird
  - Unknown
- Sewer Manholes

**WATER/SEWER LINE  
LOCATION MAP FOR  
PC-2046  
(SW/4, Sec. 25, T12N, R2W)**

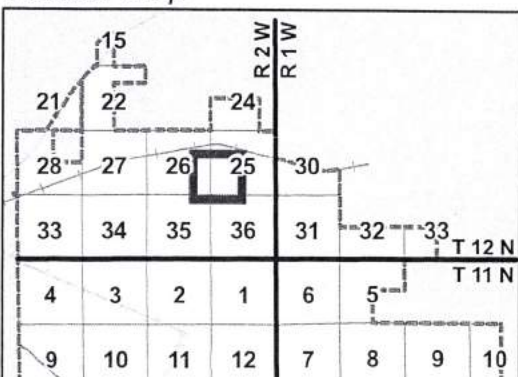


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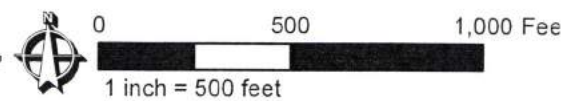
Locator Map



Current Zoning Legend

A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS

**ZONING MAP FOR  
PC-2046  
(SW/4, Sec. 25, T12N, R2W)**



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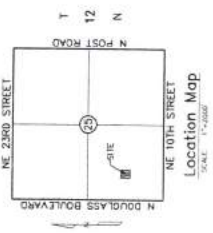
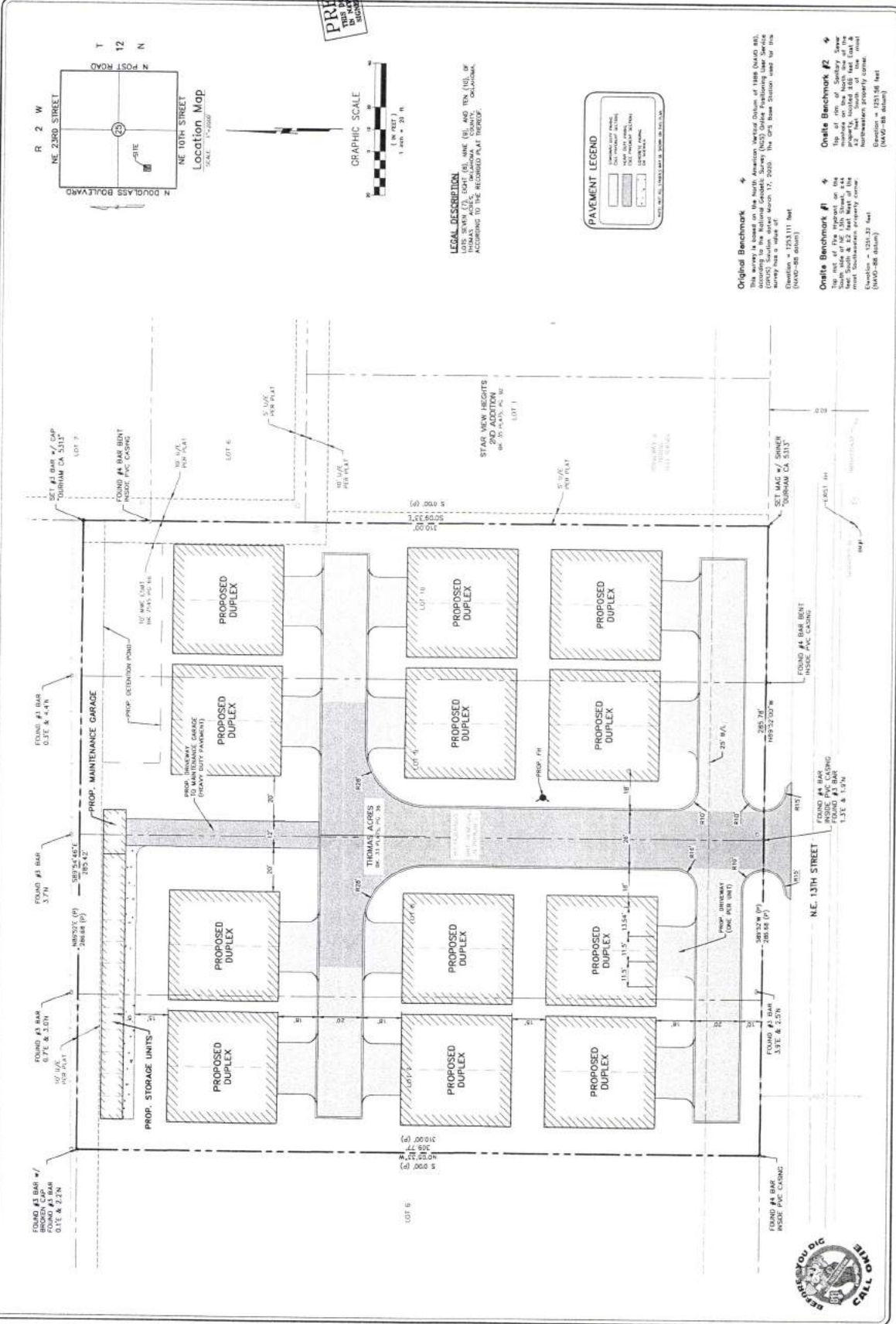
**RUBBS CONSULTING LLC**  
 CIVIL ENGINEERING & LAND PLANNING  
 1000 S. 10TH STREET  
 SUITE 200  
 MIDWEST CITY, OK 73110  
 TEL: 405-234-4444  
 FAX: 405-234-4444  
 WWW.RUBBSCONSULTING.COM



**13TH STREET VILLAGE**  
 SITE PLAN  
 9070 NE 13TH STREET  
 MIDWEST CITY, OK 73110

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMITS	04/17/20
2	REVISED PER COMMENTS	04/17/20
3	REVISED PER COMMENTS	04/17/20
4	REVISED PER COMMENTS	04/17/20
5	REVISED PER COMMENTS	04/17/20
6	REVISED PER COMMENTS	04/17/20
7	REVISED PER COMMENTS	04/17/20
8	REVISED PER COMMENTS	04/17/20
9	REVISED PER COMMENTS	04/17/20
10	REVISED PER COMMENTS	04/17/20
11	REVISED PER COMMENTS	04/17/20
12	REVISED PER COMMENTS	04/17/20
13	REVISED PER COMMENTS	04/17/20
14	REVISED PER COMMENTS	04/17/20
15	REVISED PER COMMENTS	04/17/20
16	REVISED PER COMMENTS	04/17/20
17	REVISED PER COMMENTS	04/17/20
18	REVISED PER COMMENTS	04/17/20
19	REVISED PER COMMENTS	04/17/20
20	REVISED PER COMMENTS	04/17/20

SHEET NUMBER  
**C1.0**  
 19-056



**LEGAL DESCRIPTION**  
 THE S.W. 1/4, S. 20E, R. 18E, AND TEN (10) OF THE 1/4 ACRES, LOT 12, S. 20E, R. 18E, SEC. 10, T. 19N, R. 18E, AS SHOWN ON THE RECORDED PLAT THEREOF.



**Original Benchmark**  
 The survey is based on the North American Vertical Datum of 1988 (NAVD 88), according to the National Geodetic Survey (NGS) Online Horizontal Line Service (OHLN) Station ID: 16000171. The OHLN Station datum used for this survey has a value of:  
 Elevation = 1203.111 feet  
 (NAVD-88 datum)

**Onsite Benchmark #1**  
 Top of curb of existing concrete sidewalk at the intersection of NE 13th Street and NE Douglas Boulevard, located 1.00 feet East of the northwestern property corner.  
 Elevation = 1203.32 feet  
 (NAVD-88 datum)

**Onsite Benchmark #2**  
 Top of curb of existing concrete sidewalk at the intersection of NE 10th Street and NE Douglas Boulevard, located 1.00 feet East of the northwestern property corner.  
 Elevation = 1203.56 feet  
 (NAVD-88 datum)

13TH STREET VILLAGE





The City of Midwest City  
Planned Unit Development

PUD

Design Statement for  
Preston Grove Community  
5-28-2020

Prepared By:

Adam Stephens

12400 S Hiwassee

Oklahoma City, OK 73165

(580)291-1516

[adamstephens@yahoo.com](mailto:adamstephens@yahoo.com)

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SECTION 1.0 Introduction

The Planned Unit Development of Preston Grove Community consists of 2.04 acres and is located on the north side of NE 13<sup>th</sup> and Douglas Boulevard and Post road, in Midwest City. The property is further described as, Thomas Acres a part of SW 1/4, section 25, Twp 12N R-2-W Oklahoma County, Oklahoma.

SECTION 2.0 Legal Descriptions

The legal description of the property contained within this Planned Unite Development is as follows:

Part of Thomas Acres NW 1/4, SW1/4, Section 25, Twp 12N R-2-W Oklahoma County, Oklahoma,

Being more particularly described as follow:

Commencing at the Northwest  $\frac{1}{4}$ , Southwest  $\frac{1}{4}$ , Section 24, Township 12 North, Range 2 West of the Indian Meridian.

SECTION 3.0 Owner/Developer

The owner and developer of this property described in Section 2.0 is Preston Grove Communities LLC.

SECTION 4.0 Site and Surrounding Area

The subject property is presently undeveloped. The subject property is zoned PUD governed by R-MD Medium Density residential. The site is bound on the west by a residential tract of land zoned R-6 Single Family Residential; on the north by a residential tract of land currently zoned R-6 Single Family Residential; on the east by a residential tract of land currently zoned R-6 Single Family Residential; and the south access across NE 13<sup>th</sup> R-6 Single Family Residential. Surrounding properties are zoned and used for:

West: R-6 Single Family Residential

North: R-6 Single Family Residential

East: R-6 Single Family Residential

South: R-6 Single Family Residential

SECTION 5.0 Physical Characteristics

SECTION 6.0            Concept

The concept for this PUD is R-MD Residential Medium Density. This PUD proposes a development of 2.04 acres.

SECTION 6.1            Development and Subdivision Variations

Requesting variance to side setbacks on east and west boundaries from 7' to 5'.

SECTION 7.0            Service Availability

SECTION 7.1            Streets

The proposed subdivision will accessible only from NE 13<sup>th</sup>

SECTION 7.2            Sanitary Sewer

An 8-inch sewer line is located along the north property line of existing lots 7,8,9,10 and along the west side of lots 5 and 6.

SECTION 7.3            Water

A 6-inch water line is located along the south side right of way of NE 13<sup>th</sup>, south of south property line of existing lots 7,8,9,10. The developer will connect to an existing water line south of the property.

SECTION 7.4            Fire Protection

The nearest fire station to this property is located at 8712 NE 10<sup>th</sup> Street, approximately 0.7 miles to the southwest.

SECTION 7.5            Gas Service, Electrical Service, and Telephone Service

Proper coordination with the various utility companies will be made in conjunction with this development.

SECTION 7.6            Drainage



The property within this PUD is not within a FEMA 100-year flood plain.

Development will comply with the Midwest City Municipal Code.

#### SECTION 8.0 Use and Development Regulations

The use and development of the R-MD shall govern this PUD, except as herein modified, including accessory uses subject to their appropriate conditions and review procedures for public hearings where applicable, unless otherwise noted herein. The original intended primary use is Duplex Units.

#### SECTION 9.0 Special Regulations

##### SECTION 9.1 Landscaping Regulations

The subject parcel shall meet all requirements of the City of Midwest City Landscaping Ordinance in place at the time of the development.

##### SECTION 9.3 Access Regulations

There will be a driveway access to Duplex units from SE 13<sup>th</sup> street in this PUD.

##### SECTION 9.4 Common Areas

Maintenance of all common areas in the development and maintenance of all amenities located within the common areas shall be the responsibility of the property owner. Structures, storage facilities, storage of materials, grading, fill or other obstructions, including fencing, whether temporary or permanent, will be allowed as long as pervious stated does not cause as, but not limited to, walks, benches, and docks, shall be permitted if installed in a manner to meet the requirements specified above.

##### SECTION 9.5 Platting

Parcel will remain as is and is not being re-platted.

# 13th Street Village

## PRELIMINARY DETENTION REPORT

R 2 W



### LOCATION MAP

9070 NE 13<sup>th</sup> Street  
Midwest City, OK

May 28, 2020

*[Handwritten Signature]*  
REGISTERED PROFESSIONAL ENGINEER  
MARK C. GRUBBS  
21697  
OKLAHOMA  
5/28/2020

**R**  
**RUBBS CONSULTING, LLC**  
CIVIL ENGINEERING & LAND PLANNING  
1800 S Sara Road  
Yukon, OK 73099  
Phone: (405) 265-0641  
Fax: (405) 265-0649

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<i>PROPOSED DRAINAGE SUMMARY</i> .....	1
<i>DETENTION SUMMARY</i> .....	1
<i>CONCLUSIONS &amp; RECOMMENDATIONS</i> .....	2

### APPENDIX

Historic Drainage Area Map  
Developed Drainage Area Map

#### *DETENTION CALCULATIONS*

- Hydrologic Runoff Worksheets
- Historic Drainage Area
  - Developed Drainage Area to Pond
  - Developed Bypass Drainage Area
- Site Detention Calculations – HydroCAD Model
- 100-YR frequency Storm Event



## ***REPORT SUMMARY***

### PROJECT DESCRIPTION

This project will consist of the development of an approximate 2.04 acre site as a quad-plex, residential development. The project site is located at 9070 NE 13<sup>th</sup> Street, which is in the vicinity of NE 13<sup>th</sup> Street and Douglas Blvd, with the aliquot description being a part of the Southwest Quarter (SW/4) of Section Twenty-five (25), Township Twelve (12) North, Range Two (2) West of the Indian Meridian, Oklahoma County, Oklahoma.

This Detention Report addresses the design and control of the storm water runoff for the proposed development to meet the City of Midwest City drainage ordinance.

### HISTORIC DRAINAGE SUMMARY

The existing site is currently undeveloped and consists of a vegetative grass cover. Storm water runoff from the site historically flows across the site from the southwest corner of the site to the northeast corner.

### PROPOSED DRAINAGE SUMMARY

The detention pond for this project will be located near the northeast corner of the site. The detention pond has been designed to accommodate the stormwater runoff of the proposed development. The majority of runoff from the developed area will be routed through the detention pond. A small portion of the site will bypass the pond and will discharge onto the adjacent property to the east. A minimum of 70% impervious area was used to determine run-off coefficient per City of Midwest City requirements. The drainage areas and the detention pond location are shown on the Proposed Drainage Area Map in the Appendix to this report.

### DETENTION SUMMARY

Detention is required and will be provided by an on-site detention pond located near the northeast corner of the development by constructing a berm and an outlet structure. The outlet structure will limit the discharge from the site to historic conditions for the 100-year storm event.

HydroCAD, Storm Water Modeling software, in conjunction with the Rational Method, has been used to show that the proposed pond will provide the required storm water detention for the 100-year frequency rainfall event. Based on the Preliminary Detention Calculations, the calculated discharge from the detention pond will not exceed historic discharge rate. Supporting calculations are included in the Appendix to this report.

**CONCLUSIONS & RECOMMENDATIONS**

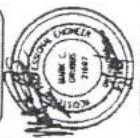
The included detention calculations show that the proposed detention structure will provide a system that meets the requirements of the City of Midwest City drainage ordinance.

It is hereby requested that the City of Midwest City accept and approve this Preliminary Detention Report and authorize this project to proceed to the design and construction phases.



## ***APPENDIX***

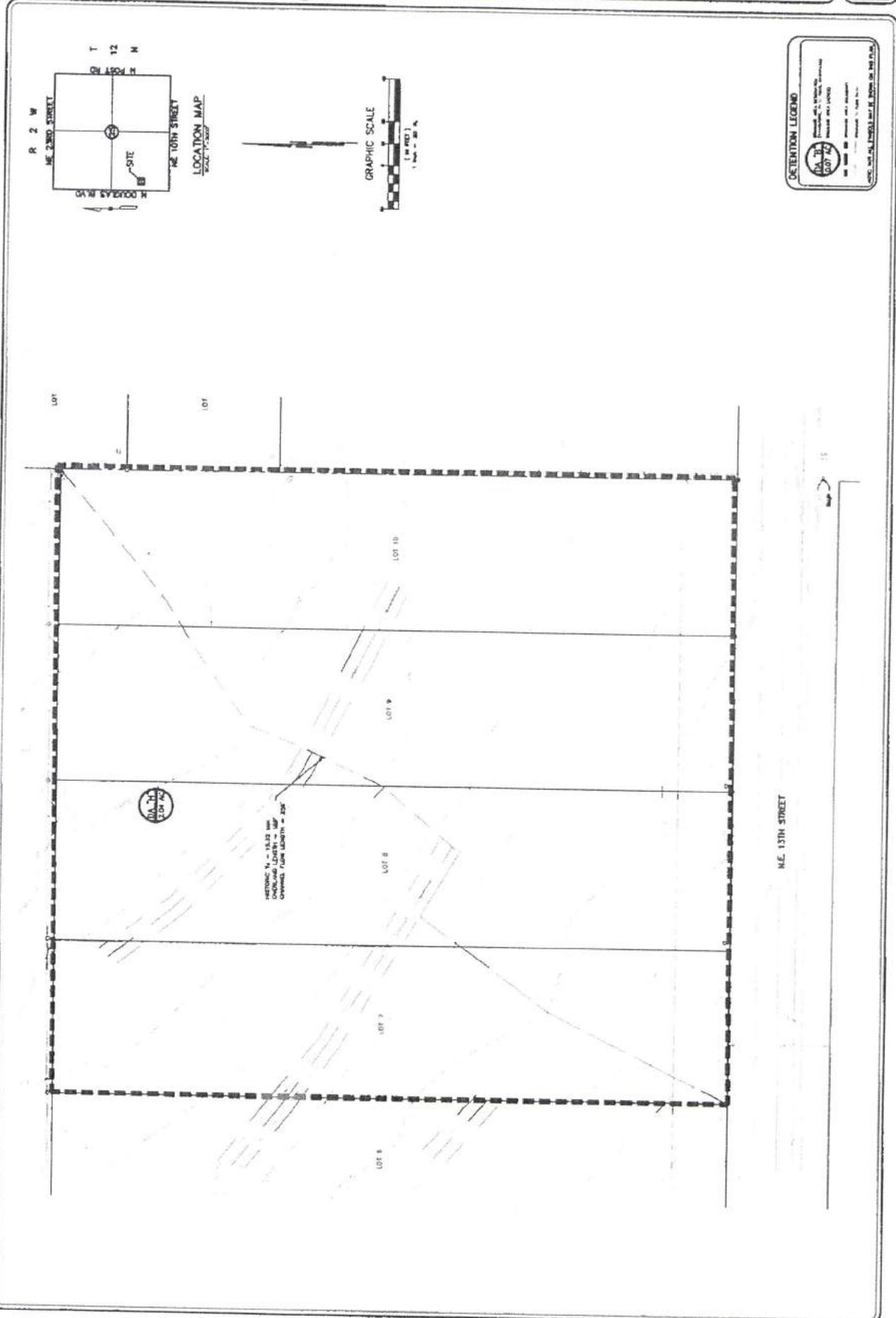
**RUBBS CONSULTING, LLC**  
 CIVIL ENGINEERING & LAND PLANNING  
 1001 N. 10TH STREET  
 SUITE 200  
 WEST CHESTER, OH 43081  
 PHONE: 614.393.8888  
 FAX: 614.393.8889  
 WWW: RUBBS-CONSULTING.COM



**13TH STREET VILLAGE**  
 HISTORIC DRAINAGE  
 AREA MAP  
 9020 NE 13TH STREET  
 WEST CHESTER, OH 43081

NO.	DESCRIPTION	DATE

**DAH**  
 DAVID H. ANDERSON  
 18-006







## ***DETENTION CALCULATIONS***

## 13th Street Village Hydrologic Runoff Worksheet -- Historic Conditions

### Summary

Date Modified: 5/28/2020

**Drainage Area Designation:** HISTORIC  
**Drainage Basin Total Area:** 2.04 Acres  
**Weighted Runoff Coefficient (C):** 0.50  
**Time of Concentration:** 15.32 Min.

I (in/hr)	Q (cfs)
12= 3.93	Q2= 4.01
15= 4.70	Q5= 4.79
110= 5.35	Q10= 5.46
125= 6.20	Q25= 6.32
150= 7.05	Q50= 7.19
1100= 7.83	Q100= 7.99

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

Undeveloped Land Uses:	Drainage Area (Acres)	Runoff Coefficient (C)	DA * C
Undeveloped	2.04	0.50	1.02
<b>Developed Land Uses:</b>			
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.00	0.70	0.00
Duplex	0.00	0.75	0.00
Quad-Plex	0.00	0.80	0.00
Apartments	0.00	0.85	0.00
Commercial - Offices	0.00	0.90	0.00
Shopping Center	0.00	0.95	0.00
Industrial	0.00	0.95	0.00
Parks and School Yards	0.00	0.50	0.00
<b>Total Area</b>	<b>2.04</b>		<b>1.02</b>
		Weighted C: 0.50	

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	Upstm Elev.	Dwnstm Elev.	Reach Length (ft)	Slope (%)	Overland Condition	K	Tc (Min.)
Reach 1:	1258.00	1254.50	189.00	1.85	Poor Grass	0.900	13.90
Reach 2:				0.00	Pavement	0.370	0.00

##### Channel Flow Tc:

	Channel Length (ft)	Velocity (fps)	Tc (Min.)
Reach 1:	256.00	3.00	1.42
Reach 2:			0.00

##### Pipe Flow Tc:

	Pipe Length (ft)	Velocity (fps)	Tc (Min.)
Reach 1:			0.00
Reach 2:			0.00

**Total Tc:** 15.32  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc)^E (A, B & E obtained from table to right)  
 Runoff (Q) = C I (DA)

I (in/hr)	Q (cfs)
12= 3.93	Q2= 4.01
15= 4.70	Q5= 4.79
110= 5.35	Q10= 5.46
125= 6.20	Q25= 6.32
150= 7.05	Q50= 7.19
1100= 7.83	Q100= 7.99

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## 13th Street Village Hydrologic Runoff Worksheet -- Proposed Conditions

### Summary

Date Modified: 5/28/2020

**Drainage Area Designation:** Proposed  
**Drainage Basin Total Area:** 1.52 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 14.50 Min.

	<u>I (in/hr)</u>	<u>Q (cfs)</u>
I2=	4.03	Q2= 4.29
I5=	4.80	Q5= 5.11
I10=	5.47	Q10= 5.82
I25=	6.34	Q25= 6.74
I50=	7.20	Q50= 7.66
I100=	8.00	Q100= 8.52

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Undeveloped	0.00	0.50	0.00
<u>Developed Land Uses:</u>			
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.00	0.70	0.00
Industrial	0.00	0.95	0.00
Commercial	0.00	0.90	0.00
Shopping Center	0.00	0.95	0.00
Percent Impervious	1.52	0.70	1.06
Total Area:	1.52		1.06
		Weighted C:	0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min)</u>
Reach 1:	1258.00	1257.00	34.00	2.94	Avg. Grass	1.000	7.46
Reach 2:	1257.00	1249.00	364.00	2.20	Pavement	0.370	7.04

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:		7.00	0.00
Reach 2:			0.00

Total Tc: 14.50  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) \* E (A, B & E obtained from table to right)  
 Runoff (Q) = C \* I \* (DA)

	<u>I (in/hr)</u>	<u>Q (cfs)</u>
I2=	4.03	Q2= 4.29
I5=	4.80	Q5= 5.11
I10=	5.47	Q10= 5.82
I25=	6.34	Q25= 6.74
I50=	7.20	Q50= 7.66
I100=	8.00	Q100= 8.52

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8



## 13th Street Village Hydrologic Runoff Worksheet -- Bypass

### Summary

Date Modified 5/28/2020

**Drainage Area Designation:** Bypass  
**Drainage Basin Total Area:** 0.52 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 5.00 Min.

<u>I (in/hr)</u>		<u>Q (cfs)</u>	
I2=	5.83	Q2=	2.12
I5=	6.55	Q5=	2.39
I10=	7.46	Q10=	2.72
I25=	8.65	Q25=	3.15
I50=	9.83	Q50=	3.58
I100=	10.92	Q100=	3.98

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Undeveloped	0.00	0.50	0.00
<u>Developed Land Uses:</u>			
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.00	0.70	0.00
Industrial	0.00	0.95	0.00
Commercial	0.00	0.90	0.00
Shopping Center	0.00	0.95	0.00
Percent Impervious	0.52	0.70	0.36
Total Area	0.52		0.36
		Weighted C:	0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1256.00	1253.50	80.00	3.13	Pavement	0.370	3.74
Reach 2:	0.00	0.00	0.00	3.85	Pavement	0.370	0.00

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:		5.00	0.00
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

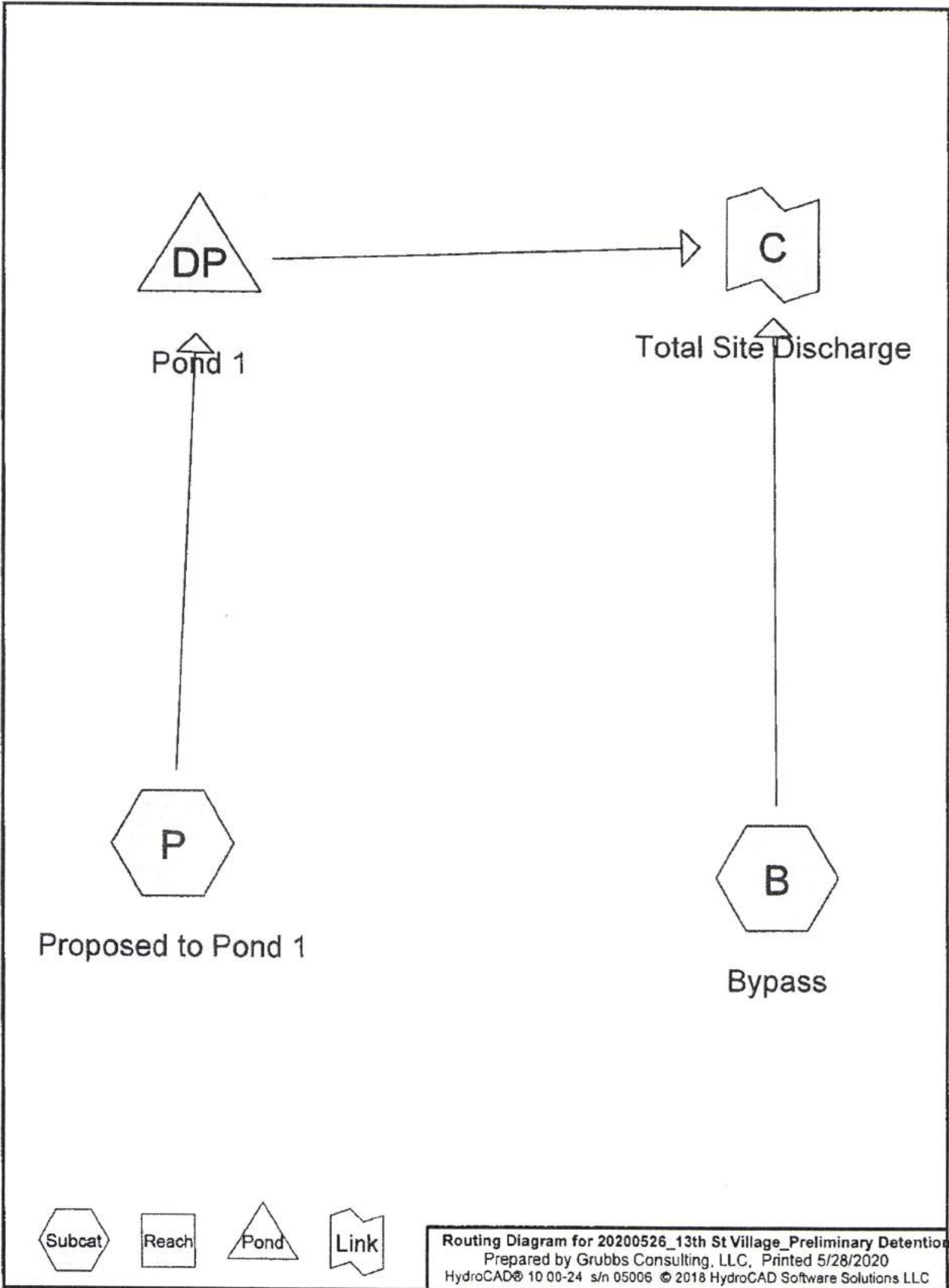
Total Tc: 5.00  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A/(B + Tc)^E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

<u>I (in/hr)</u>		<u>Q (cfs)</u>	
I2=	5.83	Q2=	2.12
I5=	6.55	Q5=	2.39
I10=	7.46	Q10=	2.72
I25=	8.65	Q25=	3.15
I50=	9.83	Q50=	3.58
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Frequency (Year)	Parameters for MWC IDF Equations		
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5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8



Routing Diagram for 20200526\_13th St Village\_Preliminary Detention  
 Prepared by Grubbs Consulting, LLC, Printed 5/28/2020  
 HydroCAD® 10 00-24 s/n 05006 © 2018 HydroCAD Software Solutions LLC

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points  
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B: Bypass** Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=1.67"  
Tc=5.00 min C=0.70 Runoff=2.51 cfs 0.072 af

**Subcatchment P: Proposed to Pond 1** Runoff Area=1.520 ac 0.00% Impervious Runoff Depth=1.67"  
Tc=14.50 min C=0.70 Runoff=7.32 cfs 0.212 af

**Pond DP: Pond 1** Peak Elev=1,248.97' Storage=2,850 cf Inflow=7.32 cfs 0.212 af  
Outflow=5.29 cfs 0.212 af

**Link C: Total Site Discharge** Inflow=7.57 cfs 0.284 af  
Primary=7.57 cfs 0.284 af

**Total Runoff Area = 2.040 ac Runoff Volume = 0.284 af Average Runoff Depth = 1.67"**  
**100.00% Pervious = 2.040 ac 0.00% Impervious = 0.000 ac**



**Summary for Subcatchment B: Bypass**

Runoff = 2.51 cfs @ 0.09 hrs, Volume= 0.072 af, Depth= 1.67"

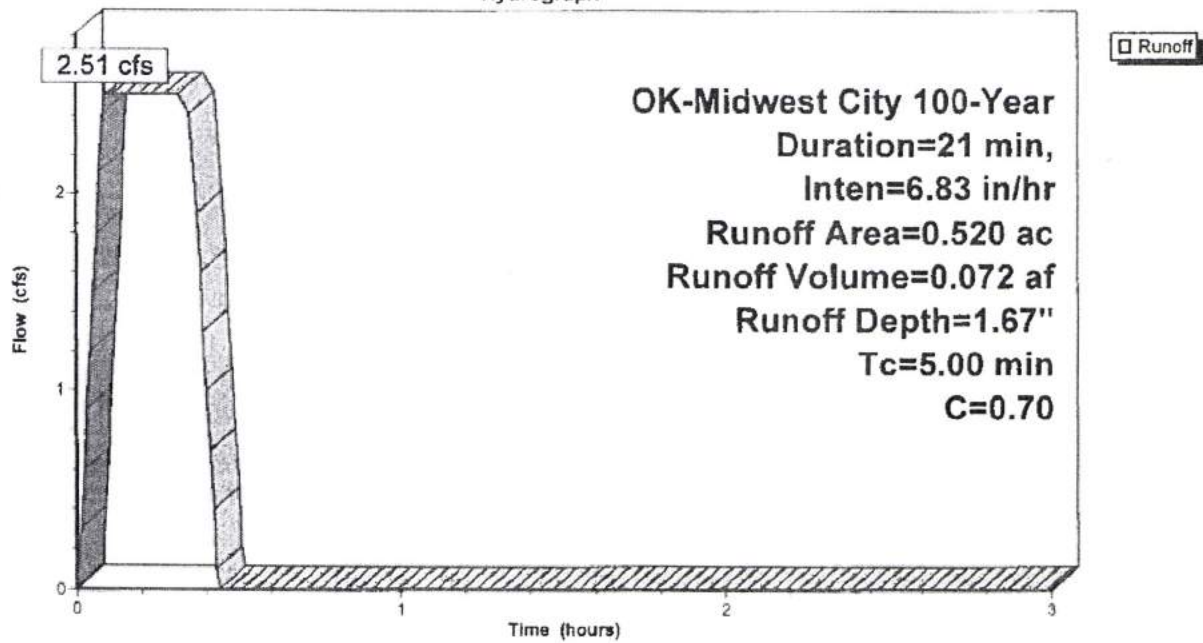
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Midwest City 100-Year Duration=21 min, Inten=6.83 in/hr

Area (ac)	C	Description
0.520	0.70	
0.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.00					Direct Entry,

**Subcatchment B: Bypass**

Hydrograph



**Summary for Subcatchment P: Proposed to Pond 1**

Runoff = 7.32 cfs @ 0.25 hrs, Volume= 0.212 af, Depth= 1.67"

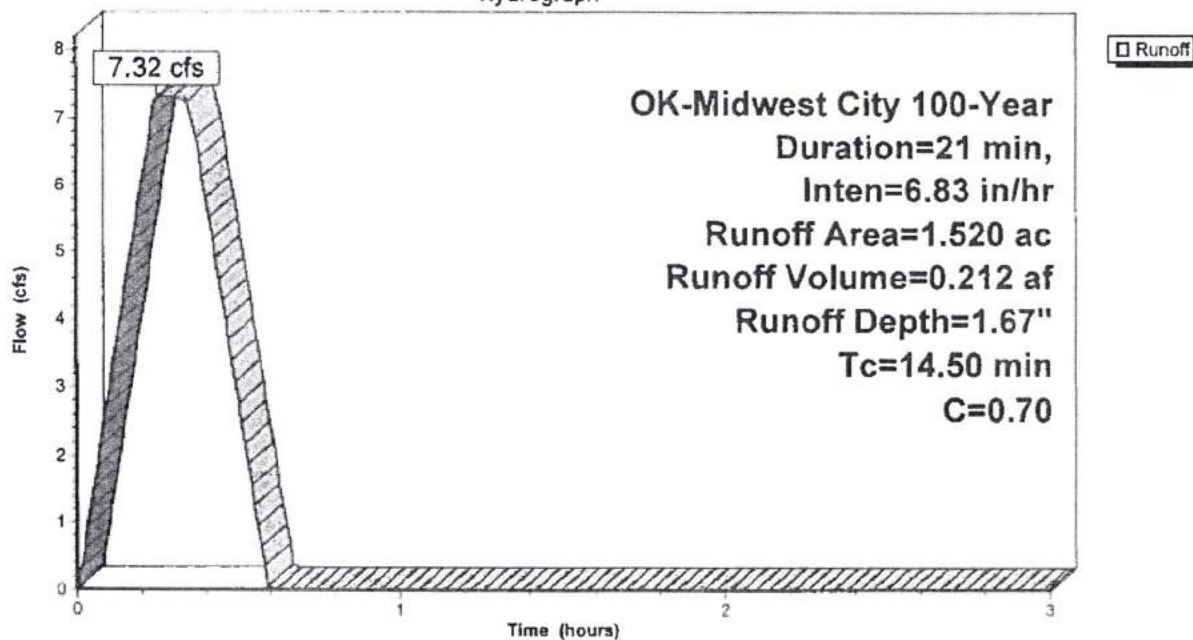
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Midwest City 100-Year Duration=21 min, Inten=6.83 in/hr

Area (ac)	C	Description
1.520	0.70	
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.50					Direct Entry,

**Subcatchment P: Proposed to Pond 1**

Hydrograph



**Summary for Pond DP: Pond 1**

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth = 1.67" for 100-Year event  
 Inflow = 7.32 cfs @ 0.25 hrs, Volume= 0.212 af  
 Outflow = 5.29 cfs @ 0.42 hrs, Volume= 0.212 af, Atten= 28%, Lag= 10.0 min  
 Primary = 5.29 cfs @ 0.42 hrs, Volume= 0.212 af

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,248.97' @ 0.42 hrs Surf.Area= 2,964 sf Storage= 2,850 cf

Plug-Flow detention time= 7.2 min calculated for 0.212 af (100% of inflow)  
 Center-of-Mass det. time= 7.0 min ( 24.8 - 17.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,247.25'	4,480 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,247.25	294	0	0
1,247.75	776	268	268
1,248.00	1,367	268	535
1,248.25	2,062	429	964
1,248.50	2,579	580	1,544
1,248.75	2,781	670	2,214
1,249.00	2,988	721	2,935
1,249.50	3,189	1,544	4,480

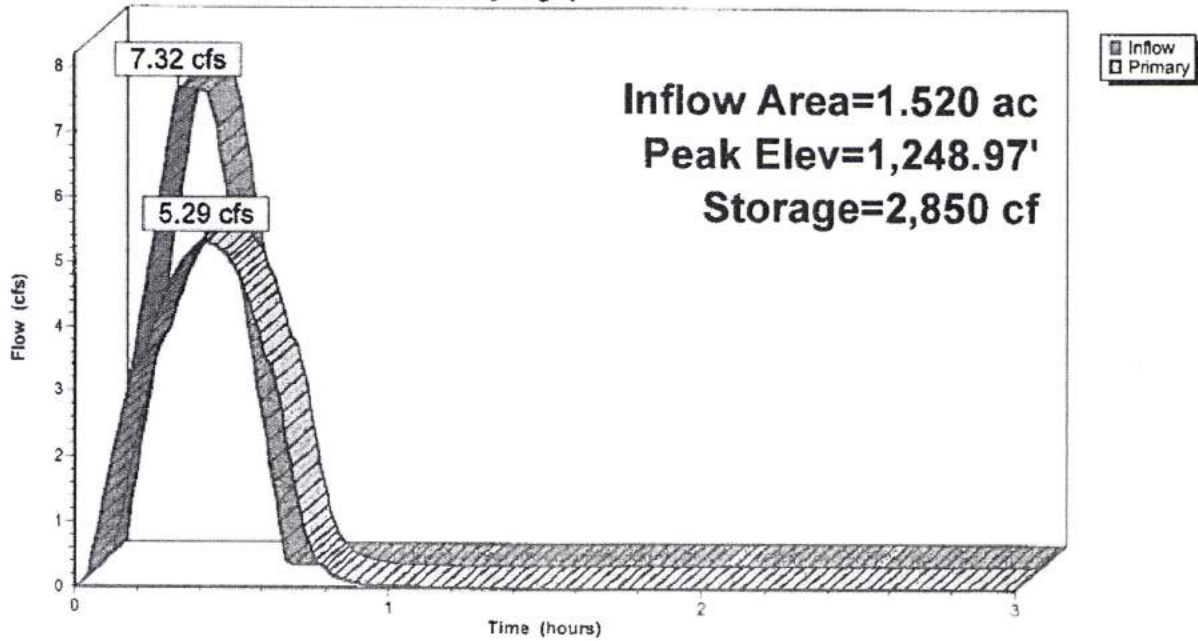
Device	Routing	Invert	Outlet Devices
#1	Primary	1,247.25'	<b>10.0" Round Culvert</b> L= 36.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 1,247.25' / 1,247.07' S= 0.0050 ' / Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Primary	1,247.25'	<b>10.0" Round Culvert</b> L= 36.0' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 1,247.25' / 1,247.07' S= 0.0050 ' / Cc= 0.900 n= 0.012, Flow Area= 0.55 sf

Primary OutFlow Max=5.29 cfs @ 0.42 hrs HW=1,248.97' (Free Discharge)  
 1=Culvert (Barrel Controls 2.64 cfs @ 4.85 fps)  
 2=Culvert (Barrel Controls 2.64 cfs @ 4.85 fps)



**Pond DP: Pond 1**

Hydrograph

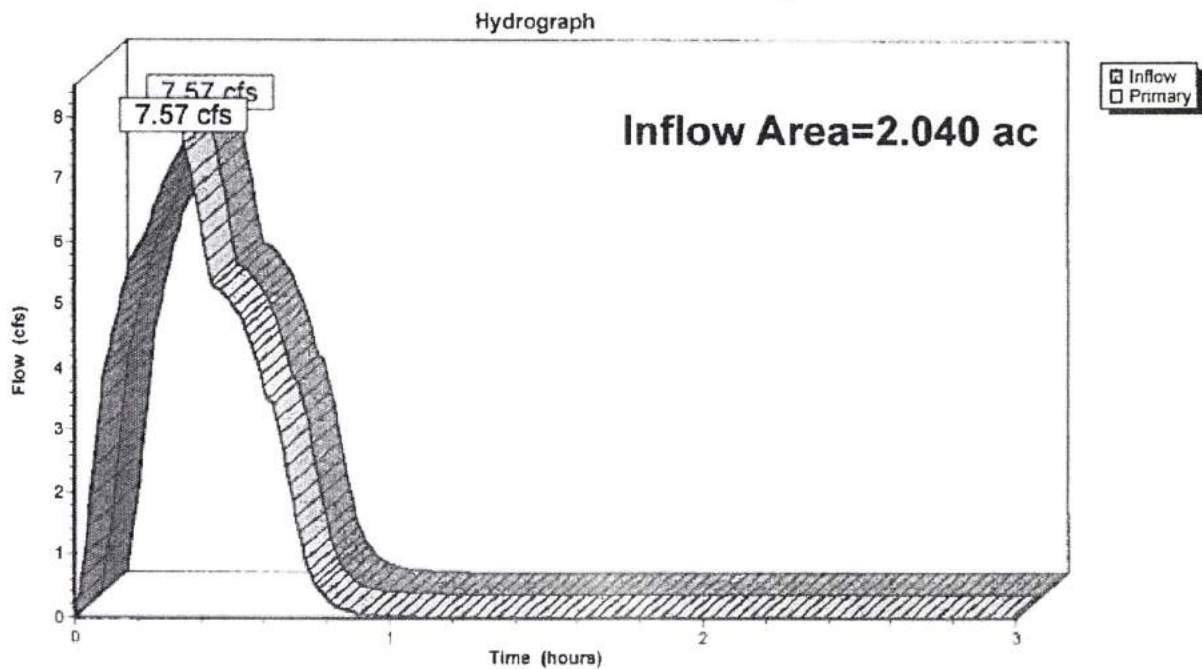


### Summary for Link C: Total Site Discharge

Inflow Area = 2.040 ac, 0.00% Impervious, Inflow Depth = 1.67" for 100-Year event  
Inflow = 7.57 cfs @ 0.35 hrs, Volume= 0.284 af  
Primary = 7.57 cfs @ 0.35 hrs, Volume= 0.284 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

### Link C: Total Site Discharge



1 **PC-2046**

2 **ORDINANCE NO. \_\_\_\_\_**

3 **AN ORDINANCE RECLASSIFYING THE ZONING DISTRICT OF THE PROPERTY**  
4 **DESCRIBED IN THIS ORDINANCE TO AMENDED PUD, PLANNED UNIT**  
5 **DEVELOPMENT AND DIRECTING AMENDMENT OF THE OFFICIAL ZONING**  
6 **DISTRICT MAP TO REFLECT THE RECLASSIFICATION OF THE PROPERTY'S**  
7 **ZONING DISTRICT; AND PROVIDING FOR REPEALER AND SEVERABILITY**

8 BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MIDWEST CITY, OKLAHOMA:

9 **ORDINANCE**

10 SECTION 1. That the zoning district of the following described property is hereby reclassified  
11 to Amended PUD, Planned Unit Development, subject to the conditions contained in the PC-  
12 2046 file, and that the official Zoning District Map shall be amended to reflect the  
13 reclassification of the property's zoning district as specified in this ordinance:

14 Lots 7-10 of the Thomas Acres Addition, part of the SW/4 of Section 25, T12N,  
15 R2W, City of Midwest City, OK

16 SECTION 2. REPEALER. All ordinances or parts of ordinances in conflict herewith are  
17 hereby repealed.

18 SECTION 3. SEVERABILITY. If any section, sentence, clause or portion of this ordinance is  
19 for any reason held to be invalid, such decision shall not affect the validity of the remaining  
20 portions of the ordinance.

21 PASSED AND APPROVED by the Mayor and Council of the City of Midwest City, Oklahoma,  
22 on the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

23 THE CITY OF MIDWEST CITY,  
24 OKLAHOMA

25 \_\_\_\_\_  
26 MATTHEW D. DUKES II, Mayor

27 ATTEST:

28 \_\_\_\_\_  
29 SARA HANCOCK, City Clerk

30 APPROVED as to form and legality this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

31 \_\_\_\_\_  
32 Heather Poole, City Attorney





**Size:**

The area of request has a frontage along East Main Street of approximately 330 ft. and contains an area of approximately 4.79 acres.

**Zoning Districts:**

Area of Request – R-HD, High Density Residential

North – R-6, Single Family Detached Residential with a Special Use Permit for a fraternal lodge

South – PUD

East – C-3, Community Commercial and R-HD, High Density Residential

West – R-6, Single Family Detached Residential

**Land Use:**

Area of Request – one (1) vacant residential structure

North – lodge

South – North Oaks quad-plexes

East – warehouse

West – single family residence

**Municipal Code Citation:**

2.10.1. R-HD, High Density Residential District – General Description

This residential district is intended to provide for a density of more than twenty (20) units per gross acre. The principal use of land is for a wide variety of dwelling types.

Related recreational, religious, and educational uses normally located to service residential areas also are permitted to provide the basic elements of convenient, balanced, and attractive living areas.

38-18.1. Purpose

The purpose of a Preliminary Plat shall be to determine the general layout of the subdivision, the adequacy of public facilities needed to serve the intended development, and the overall compliance of the land division with applicable requirements of the Subdivision Ordinance.

**History:**

1. (PC-699) This property was rezoned from R-1 to R-4, Medium Density with a Special Use Permit for a Group Home in 1984.
2. (PC-1604) An application for a Special Use Permit for a Community Based Care Facility was stricken on January 10, 2006.
3. The official 2010 Zoning Map identified this area as R-HD, High Density Residential with a Special Use Permit for a group home.

**Engineer's Comments:**

Note: This application is for a preliminary plat of Freedom Villas located at 8712 E Main Street.

Section 38-18 in the Subdivision Regulations requires all existing and proposed utility lines and public improvements be reflected on the preliminary plat or accompanying plan. The proposed public utility line installations required with this application are shown on the plat, must be constructed and will be dedicated to the city prior to the final plat application.



### Water Improvements

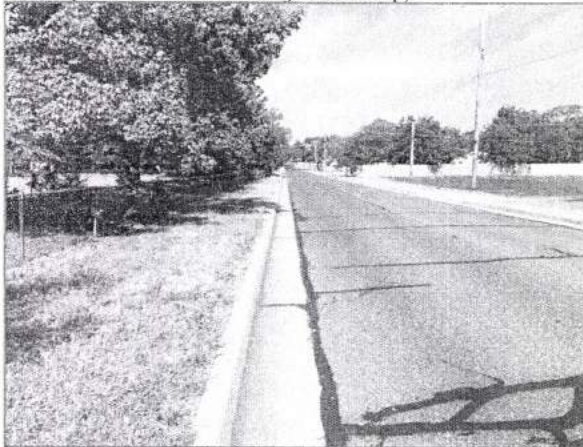
There is a six (6) inch public water main running along the south side of E Main Street and a six (6) inch public water main runs along the east side of the proposed development. The applicant has proposed connecting to the existing waterline running along the east property and at the existing waterline on E Main Street; looping the system. The proposed extension will be an eight (8) inch public waterline. New eight (8) inch public water main would then extend to all additional proposed lots as required in Municipal Code 43-32. The lines will be within the proposed right of way of the proposed streets. Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for all new buildings.

### Sanitary Sewer Collection and Disposal

The proposed development has access to an existing eight (8) inch public sewer line at the north side of E Main St on the west edge of the proposed development. The applicant has proposed constructing a public sewer main providing service to all of the proposed lots by extension of the eight (8) inch line running along proposed streets and utilizing existing sanitary sewers. Connection to the public sanitary sewer system for domestic service is a building permit requirement per Municipal Code Chapter 43-109 for all lots.

### Streets and Sidewalks

E Main Street is listed as a local road in the 2008 Comprehensive Plan. A right-of-way of 50 feet is required, 25 feet on each side of centerline with an additional ten (10) foot utility easement adjacent to the proposed development. It will be required to be dedicated on the final plat if not already existing.



Looking west on E Main Street. Curb and Gutter existing but no sidewalk.



Looking east on E Main Street. Open paved ditch/ Inlet at Northeast corner.

The applicant proposes to construct two public streets in a hammerhead configuration; Spirit Drive and Patriot Drive. All the lots in the proposed development will front onto the new streets with limits of no access to those lots bordering E Main Street. Additionally, the applicant proposed to make half street improvements along E Main Street the length of the proposed development.

All improvements will include sidewalks. This sidewalk will be required to be built prior to the final plat application as per Section 38-47.2. Any work to the existing drives or sidewalk will require current Midwest City standard.

Improvement plans for the street and sidewalks must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.



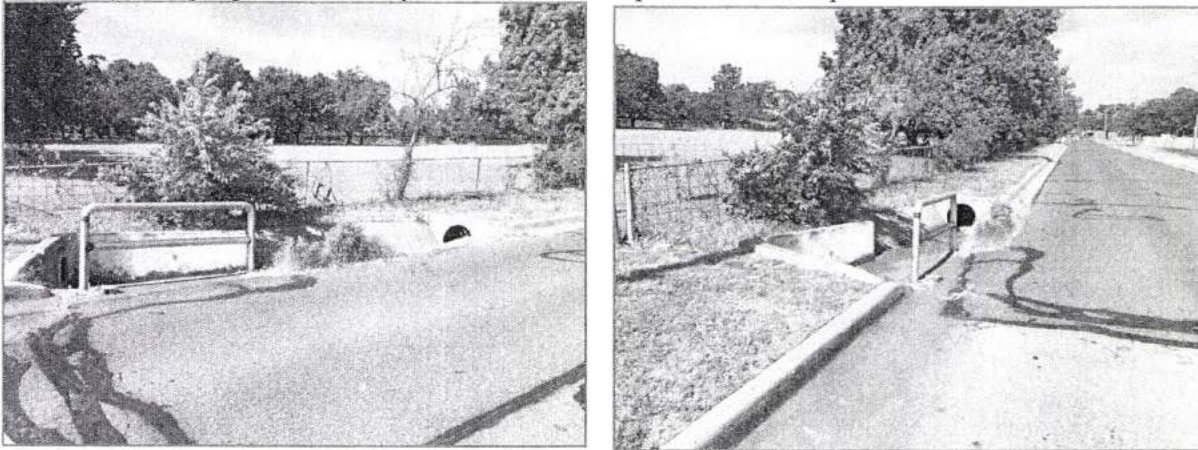
The comprehensive plan dictates the connection of internal streets within the square mile sections that are designated as future collector roads. The thoroughfare plan does not designate this area to contain a future collector road. The applicant proposes to construct two public local streets that are dead ends with one point of ingress / egress; Spirit Drive is 500 feet long.

#### Drainage and Flood Control, Wetlands, and Sediment Control

The proposed development is gently sloped to the northwest. Existing property drains via sheet flow to the west and to the north where is picked up by the curbing along E Main Street. Drainage to the proposed development generally is as follows:

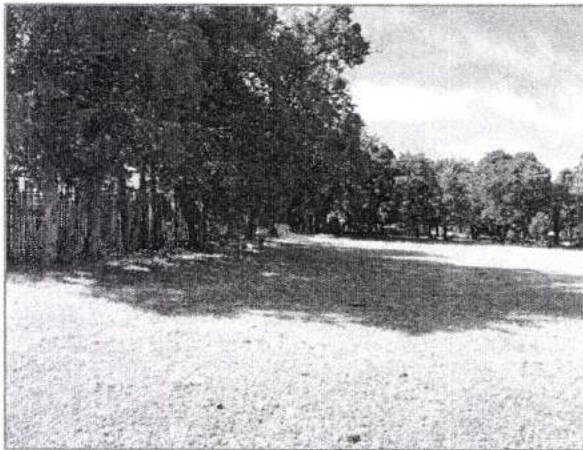
- A developed storm sewer system runs along the south side of E Main Street.
  - On the northeast corner of the property, there is an open paved ditch junction which accepts water as an inlet off E Main Street and a pipe running off the eastern property.
  - The outflow of this paved junction then runs west ~640' via piping to an existing drainage box and then ultimately north to Soldier Creek Tributary 4.
- Drainage which does not fall into the above system sheet flows across the proposed development and then the neighboring property to the west; ultimately making its way to curbing along E Main Street. The curbing then takes the water to the same existing drainage box as the above pipe system.

All the drainage eventually flows into Soldier Creek via Soldier Creek Tributary 4. Currently, the proposed development is undeveloped with no improvements.

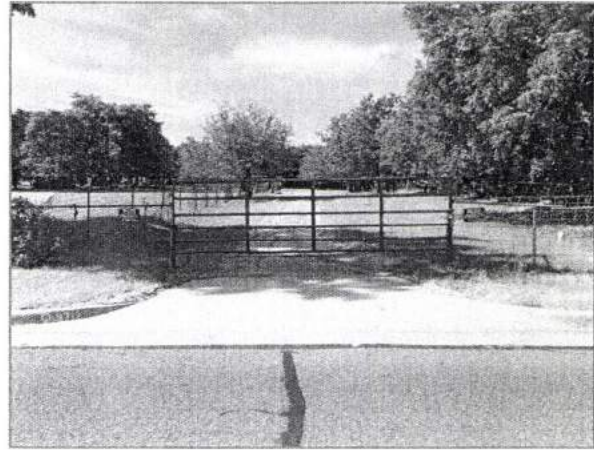


Open ditch / inlet to be improved with development. Entirely enclosed with new inlet

July 7, 2020



Looking south along east boundary. Note fall towards north and West



Western edge of proposed development. Some bypass proposed to fall onto this property.

The applicant has proposed that a common detention pond handle most of the drainage and a few areas where drainage would bypass the common system. The applicant has proposed the following improvements:

- A common detention pond which would accept 3.6 acres (65% of the 5.52 total drainage acreage). The detention pond will outflow via a piped weir and into the existing piped system on E Main Street
- Bypass areas
  - The developer will also enclose the paved ditch with a junction box and inlet combination. This will be required as part of the development. 0.2 acres would flow directly onto E Main Street in the northeast corner.
  - 0.34 acres a proposed to flow from 2 lots into an inlet proposed on the backside of the common detention pond. This inlet will take the water to the existing piped system on E Main Street.
  - 0.92 acres are proposed to sheet flow directly to the neighboring property to the west. These will be backyards of four lots. Sheet flow would be required and not allow any concentration of flow.
  - 0.46 acres are proposed to flow to the neighboring west property. Staff will require that the developer work with the property owner of the neighboring west property to understand the impacts. If needed, mitigation will be required in the form of further energy dissipation and / or distribution of the drainage flow.

The area of request has no identified flood zones or floodway as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 18<sup>th</sup>, 2009.

The National Wetlands Inventory, [www.fws.gov/wetlands/data/Mapper.html](http://www.fws.gov/wetlands/data/Mapper.html) prepared by the United States Department of the Interior Fish and Wildlife Service, access October 15<sup>th</sup>, 2019 has not identified any riparian or wetland areas:

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site.



The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

#### Easements and Right-of-Way

The required easements and existing right of way for the area of request are illustrated on the preliminary plat and will be dedicated to the city when the final plat is filed.

All easements and right of way dedications are to comply with Municipal Code Sections 38-43, 38-44, and 38-45.

#### **Fire Marshal's Comments:**

The Fire Department has reviewed this preliminary plat. The property is required to meet and maintain the requirements of Midwest City Ordinances, Section 15. Other requirements will be reviewed once design/construction plans have been submitted. Fire flow requirements and hydrant locations will be reviewed at a later date during the design and construction phase.

#### **Planning Comments:**

The purpose of this preliminary plat is to create nineteen (19) two-family residential lots. The area of request is zoned R-HD, High Density Residential which does allow for the use of duplexes. If this proposed subdivision is approved, all development will be required to meet the regulations for the R-HD district as stated in the Zoning Ordinance. These regulations include:

- The exterior of each home must be constructed of a minimum of 85% masonry materials, 100% facing the street
- 25' front setback, 20' rear setback, 7' side setbacks
- 50% maximum building coverage
- Minimum 5:12 roof pitch
- Two trees planted in front of the front building line for each lot

One new curb-cut along East Main Street will provide access to the area of request. As this subdivision is creating less than 50 lots, a secondary point of access is not required.

The Park Land Review Committee met on June 16, 2020 to review the proposed subdivision. As the subdivision is anticipated to generate far less than 2,500 new residents, the code does allow the applicant to pay a fee in lieu of a park land dedication. The applicant requested the fee in lieu option and the committee voted to approve the request. The fee will be determined by staff and the applicant as required by code and paid prior to application for the final plat.

It should be noted that the Special Use Permit (SUP) for a group home for this property is no longer valid as the group home has not been in operation over the past twelve (12) months. The Zoning Ordinance states that if a use allowed by SUP has been discontinued or abandoned for a period of twelve (12) months, the SUP shall expire by default.

The existing structure on the property must be demolished prior to application of a final plat. A demolition permit should be applied for through Community Development.

This preliminary plat does meet the requirements of the subdivision regulations. Action is at the discretion of the Planning Commission and City Council.



July 7, 2020

**Action Required:** Approve or reject the preliminary plat of Freedom Villas located on the property as noted herein, subject to the staff comments and found in the July 7, 2020 agenda packet and made a part of PC- 2047 file.



---

Billy Harless, AICP  
Community Development Director

KG

The City of  
**MIDWEST CITY**

COMMUNITY DEVELOPMENT DEPARTMENT - ENGINEERING DIVISION

William Harless, Community Development Director

Brandon Bundy, P.E., C.F.M., City Engineer

---

To: Kellie Gilles, Plans Review Manager

From: Brandon Bundy, City Engineer

Date: June 22<sup>nd</sup>, 2020

Subject: Engineering staff comments for pc-2047 preliminary plat application

**ENGINEERING STAFF CODE CITATIONS AND COMMENTS - PC-2047:**

Note: This application is for a preliminary plat of Freedom Villas located at 8712 E Main Street.

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**Water Improvements**

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Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for all new buildings.

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The applicant has proposed constructing a public sewer main providing service to all of the proposed lots by extension of the eight (8) inch line running along proposed streets and utilizing existing sanitary sewers.

Connection to the public sanitary sewer system for domestic service is a building permit requirement per Municipal Code Chapter 43-109 for all lots.

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All improvements will include sidewalks. This sidewalk will be required to be built prior to the final plat application as per Section 38-47.2. Any work to the existing drives or sidewalk will require current Midwest City standard.

Improvement plans for the street and sidewalks must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

The comprehensive plan dictates the connection of internal streets within the square mile sections that are designated as future collector roads. The thoroughfare plan does not designate this area to contain a future collector road. The applicant proposes to construct two public local streets that are dead ends with one point of ingress / egress; Spirit Drive is 500 feet long.



## Drainage and Flood Control, Wetlands, and Sediment Control

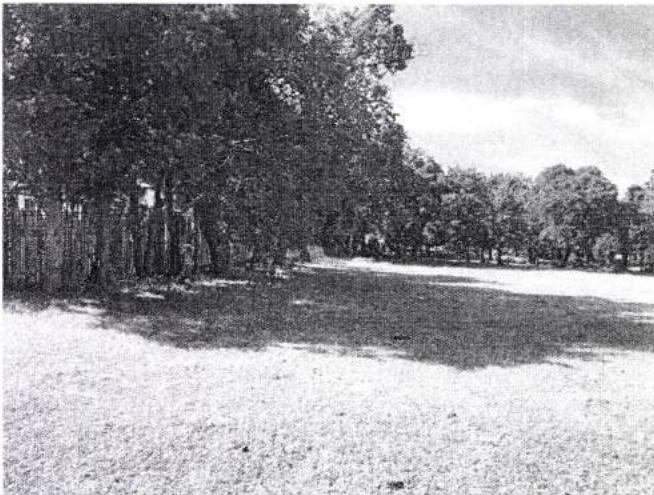
The proposed development is gently sloped to the northwest. Existing property drains via sheet flow to the west and to the north where is picked up by the curbing along E Main Street. Drainage to the proposed development generally is as follows:

- A developed storm sewer system runs along the south side of E Main Street.
  - On the northeast corner of the property, there is an open paved ditch junction which accepts water as an inlet off E Main Street and a pipe running off the eastern property.
  - The outflow of this paved junction then runs west ~640' via piping to an existing drainage box and then ultimately north to Soldier Creek Tributary 4.
- Drainage which does not fall into the above system sheet flows across the proposed development and then the neighboring property to the west; ultimately making its way to curbing along E Main Street. The curbing then takes the water to the same existing drainage box as the above pipe system.

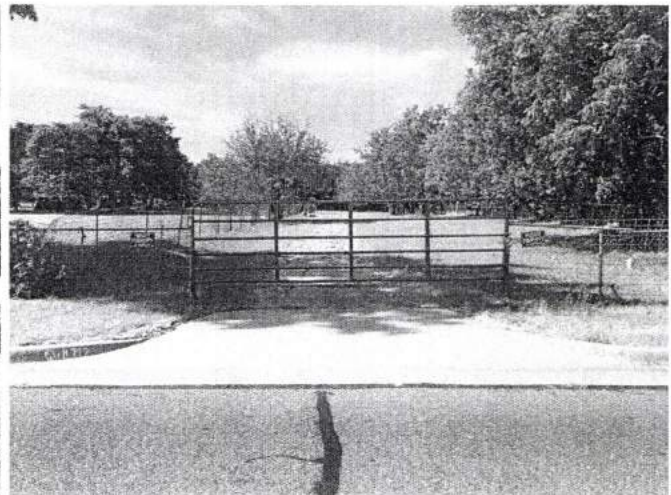
All the drainage eventually flows into Soldier Creek via Soldier Creek Tributary 4. Currently, the proposed development is undeveloped with no improvements.



Open ditch / inlet to be improved with development. Entirely enclosed with new inlet



Looking south along east boundary. Note fall towards north and west



Western edge of proposed development. Some bypass proposed to fall onto this property



The applicant has proposed that a common detention pond handle most of the drainage and a few areas where drainage would bypass the common system. The applicant has proposed the following improvements:

- A common detention pond which would accept 3.6 acres (65% of the 5.52 total drainage acreage). The detention pond will outflow via a piped weir and into the existing piped system on E Main Street
- Bypass areas
  - The developer will also enclose the paved ditch with a junction box and inlet combination. This will be required as part of the development. 0.2 acres would flow directly onto E Main Street in the northeast corner.
  - 0.34 acres are proposed to flow from 2 lots into an inlet proposed on the backside of the common detention pond. This inlet will take the water to the existing piped system on E Main Street.
  - 0.92 acres are proposed to sheet flow directly to the neighboring property to the west. These will be backyards of four lots. Sheet flow would be required and not allow any concentration of flow.
  - 0.46 acres are proposed to flow to the neighboring west property. Staff will require that the developer work with the property owner of the neighboring west property to understand the impacts. If needed, mitigation will be required in the form of further energy dissipation and / or distribution of the drainage flow.

The area of request has no identified flood zones or floodway as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 18<sup>th</sup>, 2009.

The National Wetlands Inventory, [www.fws.gov/wetlands/data/Mapper.html](http://www.fws.gov/wetlands/data/Mapper.html) prepared by the United States Department of the Interior Fish and Wildlife Service, access October 15<sup>th</sup>, 2019 has not identified any riparian or wetland areas:

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

### **Easements and Right-of-Way**

The required easements and existing right of way for the area of request are illustrated on the preliminary plat and will be dedicated to the city when the final plat is filed.

All easements and right of way dedications are to comply with Municipal Code Sections 38-43, 38-44, and 38-45.



## Midwest City Fire Marshal's Office

8201 E Reno Avenue, Midwest City, OK 73110  
[dhelmberger@midwestcityok.org](mailto:dhelmberger@midwestcityok.org) Office: 405-739-1355  
[www.midwestcityok.org](http://www.midwestcityok.org)



Re: PC - 2047

Date: 17 June 2020

PC-2047 is a request for a preliminary plat for a duplex development. The property is already zoned R-HD so duplexes are an allowed use.

- The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15.
- Other requirements will be reviewed once design / construction plans have been submitted.
- Fire flow requirements and hydrant locations will be reviewed at a later date during the design and construction phase.

Respectfully,

A handwritten signature in black ink, appearing to read "D. Helmberger".

Duane Helmberger  
Fire Marshal  
Midwest City Fire Department





The City of  
**MIDWEST CITY**  
 COMMUNITY DEVELOPMENT DEPARTMENT  
 CURRENT PLANNING DIVISION

Grubbs Consulting  
 Applicant: Tinker Villas LLC  
 Phone Number: 641-5878  
 Address: 39004 N. MacArthur #100  
           site address: 8712 E. Main JKC

**Preliminary Plat Requirements/Checklist – Planning**

- Lot to be subdivided is less than 5 acres
- Lot to be subdivided has an area of more than 10,000 square feet

38-48.2	<b>Zoning Compliance</b>	
38-48.2	All lots shall conform to zoning district compliance.	X R-HD
38-48.4	<b>Lot Shape</b>	
38-48.4 (A) (B)	Lots shall generally be rectangular in shape. Flag lots are prohibited. Irregular lots shall meet all width, frontage and setback requirements as required by the zoning ordinance.	X
38-48.5	<b>Lot Lines</b>	
38-48.5 (A) (1)	Side lot lines shall be at ninety degree angles or radial to street Right-of-Way lines to the greatest extent possible.	X
38-48.5 (B) (1)	All lot lines shall align along County, school district and other jurisdictional boundary lines.	X
38-48.6	<b>Lot Orientation Restrictions</b>	
38-48.6 (A)	No single-family, two-family or townhome lot shall front onto or have a driveway onto any Arterial Street.	X
38-48.6 (B)	Lots are prohibited from backing to local streets.	X
38-48.7	<b>Limits-of-No-Access – shown on preliminary plat</b>	
38-48.7 (A)(1)	Low Density lots shall not derive access from an Arterial Street.	X
38-48.7 (A)(2)	Lots facing Collector Streets should be minimized to the fullest extent.	X
38-48.8	<b>Lot Frontages</b>	
38-48.8 (A)(1)	Each lot shall have adequate access to a street by having frontage on a street that is not less than 35' at the street Right-of-Way line. This also applies to lots fronting onto an eyebrow or bulb portion of a cul-de-sac.	X
38-48.8(B)(1)(a)	For single-family, two-family and townhomes, double frontage lots are prohibited from backing or having the side facing onto an Arterial Street without appropriate screening.	X
38-48.8(B)(1)(b)	Where lots back or side onto an Arterial Street, no driveway access is allowed onto the Arterial Street.	X NA
38-48.8(B)(2)	For multifamily and nonresidential lots, if lots have frontage on more than one street, a front building line must be established for each street.	NA
38-48.8(B)(3)	Residential lots should face the front of a similar lot, park or open space.	X
38-48.10	<b>Lot and Block Numbering</b>	
38-48.10(A)	All lots within each phase of a development are to be numbered consecutively	X



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	within each block. Each block shall have alpha or numeric designations.	
38-48.11	<b>Building Lines</b>	
	Building lines along all streets shall be shown on the Preliminary Plats and shall conform with the minimum setbacks for front, side and rear yards as required by the zoning district.	X
38-48.12	<b>Block Requirements</b>	
38-48.12(B)(1)	Blocks for residential uses shall not be longer than 1,800 feet measured along the center line of the block.	X
38-48.12(B)(2)	When a block exceeds 600 feet in length, the Planning Commission may require a dedicated easement not less than 15 feet wide and a paved crosswalk not less than 4 feet wide to provide pedestrian access across the block.	NA
38-48.12(C)(1)	Blocks used for residential purposes should be of sufficient width to allow for two tiers of lots of appropriate depth.	NA
38-48.12(C)(2)	Exceptions to the prescribed block width shall be permitted for blocks adjacent to major streets, railroads or waterways.	NA
38-48.12(C)(3)	Blocks intended for business and industrial use should be of a width suitable for the intended use, with due allowance for off-street parking and loading facilities.	NA
38-48.14	<b>Subdivision Name Requirement</b>	
38-48.14(A)(1)	New subdivisions shall be named so as to prevent conflict or "sound-alike" confusion with names of other subdivisions.	X
38-48.14(A)(2)	Subdivisions with similar names shall be located in proximity to each other.	X
38-49.3	<b>Subdivision Amenities – Where amenities are proposed in conjunction with a development, such amenities shall be reviewed and approved in accordance with the following:</b>	No amenities proposed
38-49.3(A)	Preliminary plans and illustrations, along with a written statement of such concepts, shall be submitted for review and approval with the Preliminary Plat.	NA
38-49.3(B)	Plans for amenities shall then be incorporated into the screening plan and/or landscape plan for submittal as part of the construction plans.	
38-49.3(C)	Lighting plans for all outdoor amenities	
38-49.3(D)	Plans for structural elements shall be sealed by a licensed Professional Engineer and shall be considered for approval by the City.	
38-49.4	<b>Design of Amenities</b>	
38-49.4(A)(1)(a)	Entry features shall be constructed entirely on privately owned property and shall not suspend over a public Right-of-Way.	
38-49.4(A)(1)(b)	Minor elements of an entry feature may be placed within an entry street median upon Plat approval, provided that such street median is platted as a non-buildable lot and dedicated to a HOA for private ownership and maintenance.	
38-49.4(A)(1)(c)	An entry feature having a water pond, fountain or other water feature shall only be allowed if approved by the Planning Commission and City Council during the plat review process.	
38-	No entry feature, other than screening walls or extensions of screening walls,	





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49.4(A)(1)(d)	may be constructed on any portion of a single-family, two-family or townhome											
38-49.4(A)(1)(e)	All such features shall be constructed on lots that are platted as "non-buildable" lots and dedicated to a HOA for private ownership and maintenance.	NA										
38-49.4(A)(2)	Entry features shall not encroach into the visibility triangle or otherwise impair pedestrian or vehicular visibility.											
38-49.4(A)(3)	The maximum height for entry features and structures shall be the maximum height of the governing zoning district as measured from the nearest street or sidewalk grade.											
38-49.4(B)	If private recreation facilities are provided, they shall be centrally located within the overall development to the greatest extent possible.											
38-49.4(C)	All outdoor amenities shall provide appropriate lighting.											
38-49.4(D)	A detention or retention pond shall be considered an amenity if it meets the following design considerations:											
38-49.4(D)(1)	Located between the building and street or completely bounded by streets											
38-49.4(D)(2)	Viewable from public space											
38-49.4(D)(4)	Accessible by patrons											
38-49.4(D)(5)	Seating area, public art or fountain											
38-49.4(D)(6)	One tree or planter at least 16 square feet for every 200 square feet of open space, and be located within or adjacent to the open space.											
38-50.2	<b>Homeowners' Association (HOA) Applicability</b>											
38-50.2(A)	Any one or more of the following elements created as part of a development shall require formation of a HOA prior to recordation of a final plat in order to maintain the amenity or facility:	Will be required										
38-50.2(A)(1)	Amenity	NO										
38-50.2(A)(2)	100-year Floodplain	NO										
38-50.2(A)(3)	Private streets	NO										
38-50.2(A)(4)	Thoroughfare screening	NO										
38-50.2(A)(5)	Detention or retention ponds	YES										
38-50.2(A)(6)	Private park	NO										
38-51.2	<b>Applicability of Parks and Open Space Dedication</b>											
This shall apply to all residential subdivision plats having a dwelling unit density of greater than one unit per net acre												
38-51.5(A)	The acreage to be contributed concurrent with the final approval by the City Council of any residential subdivision plat shall be determined by the following formula:	Park Land Review Committee voted to allow a fee in lieu of parkland										
	<table border="1"> <tr> <td>Two acres</td> <td>X (multiplied by)</td> <td>Each 1,000 persons projected to occupy the fully developed subdivision</td> <td>=</td> <td>Amount of land to be contributed</td> </tr> <tr> <td colspan="5" style="text-align: center;">Which is</td> </tr> </table>		Two acres	X (multiplied by)	Each 1,000 persons projected to occupy the fully developed subdivision	=	Amount of land to be contributed	Which is				
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Which is												





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	.002 acres	X (multiplied by)	Number of person per dwelling unit	X (multiplied by)	# of dwelling units projected for subdivision	=	Amount of land to be contributed	
38-51.6	<b>Suitability of land</b>							
38-51.6(A)(1)	The dedicated land should form a single parcel or tract of land at least 3 acres in size unless the Parkland Review Committee determines that a smaller tract would be in the public interest.							NA- fee in lieu
38-52.3	<b>Design requirements for parks and open space</b>							
38-52.3(A)	Parks and open spaces shall be bounded by a street or by other public uses.							
38-52.3(B)(1)	Single-family and two-family residential lots shall be oriented such that they front or side onto parks and open spaces but do not back to them.							
38-52.3(B)(2)	Residential lots shall only be allowed to back onto a park or open space when:							
38-52.3(B)(2)(a)	A trail is provided within the related park or open space.							
38-52.3(B)(2)(b)	The sites physical character does not reasonably accommodate an alternative design or the layout of the subdivision complements the use of the use of park or open space (e.g., lots backing to a golf course.)							
38-52.3(C)(1)	A proposed development adjacent to a park of open space shall not be designed to restrict public visibility or reasonable access from other area developments.							
38-52.3(C)(2)	Street connections to existing or future adjoining subdivisions shall be required to provide reasonable access to parks and open space areas.							
38-52.3(D)(1)	Where a non-residential use must directly abut a park or open space area, the use shall be oriented such that it sides, and does not back onto the park or open space area if at all possible							
38-52.3(D)(2)	Nonresidential uses shall be separated from the park or open space by a minimum 6 foot tall decorative metal fence with an irrigated living screen.							
38-52.3(E)	Alleys should not be designed to encourage their use as a means of vehicular, bike or pedestrian travel to the park.							
38-52.3(F)(1)	Public access into parks and open spaces shall not be less than 50' in width at the public Right-of-Way line, at the street curb, and at any other public access point.							
38-52.3(F)(2)	Such access shall not be part of a residential lot or other private property.							
38-52.8	<b>Hike-and-Bike Trail Requirements</b>							
38-52.8(B)	Hike-and-Bike trails, especially those providing access too and along 100-year Floodplains and other open spaces, shall be in accordance with the following design criteria:							NA No trails proposed in area
38-52.8(B)(1)	A minimum 30' wide level ground surface shall be provided for a 10' wide public hike-and-bike trail. The 30' wide level ground surface (compliant with ADA) may be provided within and/or outside of the 100-year floodplain.							
38-52.8(B)(2)	The Right-of-Way of a public street may count towards the 30' wide, ADA compliant level ground surface upon approval from the Director of Community Services.							



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38-52.8(B)(4)	The hike-and-bike trail shall be designed to minimize visibility blind spots from public streets for public safety purposes.	NA
38-52.8(C)(1)	The Director of Community Services shall have the authority to determine the placement of a public hike-and-bike trail at the time of the preliminary plat review and approval.	
38-52.8(C)(2)	The location of such trails shall be safe and economical.	
38-52.8(C)(3)	No development shall interrupt future trail routes or otherwise hinder efficient public access to or from an existing or future planned trail.	
38-52.8(D)(1)	The location of trails within developments adjacent to or within a 100-year Floodplain recognized on the Trails Master Plan shall be coordinated with the Director of Community Services and shall be staked in the field by the developer and approved by the Director of Community Services prior to the submittal of a preliminary plat.	
38-52.8(D)(2)	The location of the trail shall be specified on the preliminary plat as the approved location for the hike-and-bike trail, and an easement for such shall be shown on the preliminary plat and final plat for any portions of the trail that traverse private property.	
38-52.8(E)	When development is adjacent to an undeveloped property, a pedestrian access stub-out in conjunction with a street connection to the edge of the development shall be required to allow for future access between developments as indicated on the Trails Master Plan.	
38-53.4	<b>Tree Canopy Management Plan</b>	NA < 5 acres
38-53.4	A Tree Canopy Management Plan shall be required as part of the preliminary plat. <b>This only applies to sites five acres or larger.</b>	Not required
38-53.5(B)(1)	The applicant shall prepare a Tree Canopy Management Plan and shall submit the plan as part of the preliminary plat application.	
38-53.5(B)(2)	Within the Tree Canopy Management Plan, the applicant shall provide the following information:	
38-53.5(B)(2)(a)	Pre-development tree canopy coverage (as determined by the City)	
38-53.5(B)(2)(b)	Post-development tree canopy coverage (as determined by the applicant)	
38-53.5(B)(2)(c)	Visual identification of tree canopy to be removed.	
38-53.5(C)(1)	Tree Canopy Management Plan shall be reviewed by the Director of Community Development for compliance with all standards.	
38-53.5(C)(2)	After reviewing the Tree Canopy Management Plan, the Director of Community Development shall make a recommendation to the Planning Commission and City Council. The Director must act within 30 days of the official filing date of the preliminary plat application.	
38-53.6	<b>Tree Preservation Requirements</b>	
38-53.6(A)	Option A (Standard Option) – Only trees in the following areas may be removed:	





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38-53.6(A)(1)	The Tree Canopy or any tree located within any street Right-of-Way may be removed.	NA
38-53.6(A)(2)	The Tree Canopy or any tree located within any area dedicated for water, wastewater, drainage and other similar infrastructure needs may be removed.	
38-53.6(A)(3)	The Tree Canopy or any tree located within any area required by the subdivision ordinance for a site feature, such as a screening wall, may be removed.	
38-53.6(B)	Option B (Alternative Compliance)	
38-53.6(B)(1)	The applicant may elect to develop a site using the Residential Cluster Development option.	
38-53.6(B)(2)	In the design of the Tree Canopy Management Plan, if a Residential Cluster Development Option is used, only the Tree Canopy or trees within the designated open space areas shall be preserved.	
38-53.7	<b>Tree Mitigation Plan – Required if trees are removed prior to approval of a Tree Canopy Management Plan</b>	
38-53.7(B)(2)	Tree Mitigation Requirements:	
38-53.7(B)(2)(a)	The applicant shall calculate the area of Tree Canopy that should have been preserved under Option A or Option B.	
38-53.7(B)(2)(b)	The resulting calculation shall be the amount of Tree Canopy that shall be restored.	
38-53.7(B)(2)(c)	Replacement trees shall be required to cover an area equal to the calculated restoration area.	
38-53.7(B)(2)(d)	The applicant shall calculate the number of replacement trees needed to cover the calculated restoration area.	
38-53.7(B)(2)(e)	In calculating the area for replacement trees, the mature size of replacement trees shall be used.	
38-53.7(B)(2)(f)	In calculating the area for replacement trees, only large trees shall be used.	
38-53.7(B)(2)(g)	Tree Canopy coverage at maturity is to be obtained through the planting of 2.5 inch caliper trees at spacing that will meet the calculated restoration area.	
38-53.7(B)(2)(h)	Replacement trees shall be a minimum 2.5 inch caliper trees.	
38-53.7(B)(2)(i)	Replacement trees shall be planted at spacing that will meet the calculated restoration area.	
38-53.7(B)(2)(j)	The Tree Canopy Management Plan shall show graphically the location of each replacement tree.	
38-53.7(B)(2)(k)	The number of replacement trees shall be shown in a tabular format and indicated the tree species and area of coverage assumptions for each tree species at maturity.	
38-53.7(B)(2)(l)	Replacement trees shall be planted prior to the approval of a final plat.	
38-53.7(B)(3)	Alternative Tree Mitigation Requirements	





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Administrative		
	One digital copy of the preliminary plat	X
	Three 24x36 copies of the preliminary plat to scale	NA - allowed digital submission
	Name of subdivision centered at the top of the preliminary plat.	X
	Name of city, county, state, section, township and range centered and printed at the top of the preliminary plat.	X
	Name and address of the owner of record, the subdivider, the owners engineer and the registered surveyor preparing the plat.	X
	Legal description of the property to be subdivided, including the acreage and number of proposed lots in the subdivision.	OWNER will change and be shown on final plat
	Key map showing the location of the property to be subdivided referenced to existing or proposed arterial streets or highways.	X

**Preliminary Plat Requirements/Checklist - Zoning**

5.14.1	Lot Variety Required (required for areas 5 acres or larger)	NA - Two-family develop
5.14.1(A)	Applicability – This section only applies to single-family residential developments of 5 acres or larger.	
5.14.1(B)(1)	15% of lots within a development shall be larger than the minimum lot size. Lots shall be increased at least 20% of the minimum lot size.	
5.14.1(B)(2)	15% of lots within a development may be smaller than the minimum lot size. Lot sizes shall not be reduced greater than 20% of the minimum lot size.	
5.14.1(C)	Single-family lots shall not be smaller than 6,000 square feet.	
5.14.1(D)	Lots of various sizes shall be evenly distributed throughout a development.	

Additional Notes:



The City of  
**MIDWEST CITY**  
 COMMUNITY DEVELOPMENT DEPARTMENT  
 ENGINEERING DIVISION

Applicant: Grubbs Consulting LLC  
 Phone Number: \_\_\_\_\_  
 Address: 8712 E Main St

**Preliminary Plat Requirements/Checklist - Engineering**

The preliminary plat shall be accompanied by a statement signed by the registered engineer preparing the plat that he has, to the best of his ability, designed the subdivision in accordance with the latest subdivision regulations and in accordance with the ordinances and regulations governing the subdivision of land.

<b>38-18</b>	<b>Preliminary Plat:</b>	BB
Administrative	North arrow, scale, date, and site location map	BB
Administrative	The total number of lots	BB
Administrative	The total area of development	BB
Administrative	The location of proposed lots, areas in Acres and Square Feet, and dimensions.	BB
Administrative 38-42.3(b)(3)	The location of property lines, existing easements, buildings, fences, cemeteries or burial grounds, and other existing features within the area to be subdivided and similar facts regarding existing conditions on immediately adjacent property.	BB
Administrative 38-42.3(b)(3)	The location of any natural features such as water courses, water bodies, flood hazard areas, tree masses, steep slopes, or rock outcroppings within the area to be subdivided and similar facts regarding existing conditions on immediately adjacent property.	None existing in proposed area
Administrative 38-42.3(b)(3)	The location, width, and name of all existing or platted streets or other public ways (i.e. railroad and state-owned) within or immediately adjacent to the tract.	BB
Administrative	The location of all existing or abandoned oil or gas wells, oil or gas pipelines and other appurtenances associated with the extraction, production and distribution of petroleum products and all related easements on the site or on immediately adjacent property.	None existing in proposed area
13-18.2(c)	The applicant shall furnish with the application to the city a current title commitment issued by a title insurance company authorized to do business in Oklahoma, a title opinion letter from an attorney licensed to practice in Oklahoma, or some other acceptable proof of ownership, identifying all persons having an ownership interest in the property subject to the preliminary plat.	
Administrative	The legal metes and bounds of the property being developed.	BB
13-69.7(1)	The area of the preliminary drainage plan in acres shown at points where storm water enters and leaves the proposed subdivision, and where drainage channels intersect roadways and at junction points.	BB
13-69.7(3)	The location, size, and type of existing and proposed storm water control facilities including storm sewers, inlets, culverts, swales, channels and retention or detention ponds and areas. The approximate area in acres served by said facilities shall be shown.	BB
13-69.7(4)	Special structures such as dams, spillways, dikes or levees.	BB



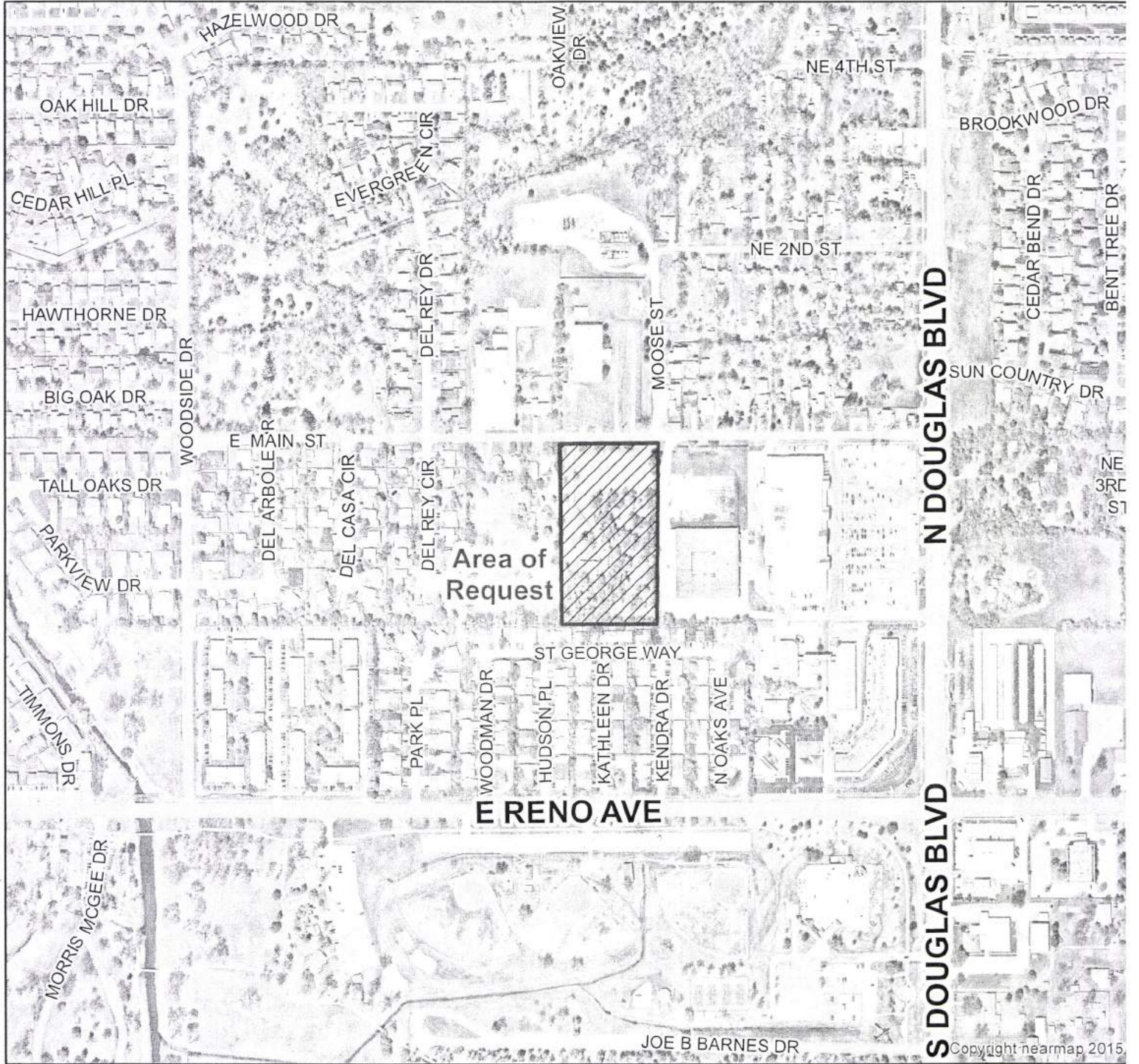
Administrative	Location of Floodplain if adjacent or within development	BB
Administrative	Location of Wetlands if adjacent or within development. If so, the developer is required to notify the Army Corp of Engineers.	BB
Administrative 38-43.3(a)(1)	Show the location and size of water mains.	BB
Administrative 38-43.3(a)(1)	Show the location and size of wastewater mains.	BB
Administrative 38-43.3(a)(2)	Show the location and specifications for fire hydrant systems.	BB
Administrative	Finish floor elevations for all pad sites	BB
Administrative 13-69.7(2)	Drainage arrows on all lots showing the final grading and where the water will drain	BB
Administrative 38-54.3(c)(1) 38-54.3(d)(1) 38-54.4	Required retaining walls and retaining wall easements	BB
Administrative	Existing contours with intervals not to exceed two (2) feet referenced to a United State Geological Survey or Geodetic Survey bench mark or monument.	BB
Administrative	Show the proposed street layout and right of ways.	BB
38-45.4(c)	All existing arterial streets and such collector and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress.	BB
38-45.4(d)	All access points to existing roadways and be of the required number.	BB
38-45.4(e)	The development shall have two (2) connections to adjacent properties.	
38-45.4(n)	The names of all new proposed streets.	BB
38-45.4(o)	The development shall not have any proposed cul-de-sacs longer than five hundred (500) feet in length	BB
38-47	The location and size of all proposed pedestrian crosswalks, bike trails, horse trails, or other supplementary movement systems.	BB
<b>38-18.2(a)(1) 38-44.3(a)(2)</b>	<b>Preliminary stormwater management plan (SWMP)</b>	BB
38-44.3(e)(1)	A digital copy of the preliminary SWMP shall be submitted along with the preliminary plat.	BB
38-44.3(e)(2)	The preliminary SWMP shall be labeled as "Preliminary"	BB
38-44.3(e)(3)	The preliminary SWMP shall be signed, sealed, and dated by the professional engineer (P.E.) or shall contain a statement showing the professional engineer's name and license number and affirming the preliminary SWMP was prepared under the direction of the engineer and that the plan is preliminary	BB
38-44.3(b)(3)	If no preliminary drainage plan is required [only upon city engineer's approval, see 38-44.44 (b)(3)]: show existing drainage patterns, runoff coefficients, and the proposed changes to these items (before and after development)	
38-44.3(c)	The preliminary SWMP must comply with the Engineering Standards Manual and construction details and the Midwest City Code of Ordinances (e.g. chapters 13 and 43), including control/sediment plans	BB
<b>38-18.2(a)(2) 38-44.4(a)(2)</b>	<b>Preliminary drainage plan</b>	



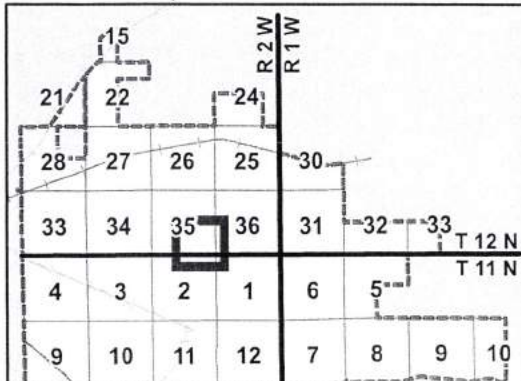
13-69.7(1)	The area of the preliminary drainage plan in acres shown at points where storm water enters and leaves the proposed subdivision, and where drainage channels intersect roadways and at junction points.	BB
13-69.7(3)	The location, size, and type of existing and proposed storm water control facilities including storm sewers, inlets, culverts, swales, channels and retention or detention ponds and areas. The approximate area in acres served by said facilities shall be shown.	BB
13-69.7(4)	Special structures such as dams, spillways, dikes or levees.	
38-44.4(c)(1)	The preliminary drainage plan shall show the watershed affecting the development and how the runoff from the fully-developed watershed will be conveyed to, through, and from the development.	BB
38-44.4(c)(2)	The preliminary drainage plan must comply with the Engineering Standards Manual and construction details and the Midwest City Code of Ordinances (e.g. chapters 13 and 43)	BB
38-44.4(d)(1)	Three (3) paper copies of the preliminary drainage plan	
38-44.4(d)(2)	The preliminary drainage plan shall be labeled as "Preliminary"	BB
38-44.4(d)(3)	The preliminary drainage plan shall be stamped by and dated by the engineer, professional	BB
<b>38-44.5</b>	<b>If the development proposed is adjacent to or within the 100-year floodplain the following are required:</b>	--
38-44.6(a)	No Development within a floodway.	--
38-44.6(b)(1)	All 100-year floodplains shall be maintained in an open natural condition	--
38-44.6(b)(2)(a)	The 100-year floodplain shall be dedicated on the final plat to the city as a single lot or may be owned and maintained by an HOA	--
38-44.6(b)(3)(b)	No portion of a single-family or two-family residential lot shall exist within the 100-year floodplain	--
38-44.5(b)(3)(c)	A fifteen-foot wide maintenance easement adjacent to the floodway	--
38-44.5(b)(3)(e)	All streets adjacent to a 100-year floodplain shall have a minimum ROW width of fifty (50) feet.	--
38-44.5(b)(3)(f)(2)	All streets adjacent to a 100-year floodplain shall have a minimum sixty (60) percent of the linear frontage	--
38-44.5(b)(3)(f)(3)(a)	Not more than one (1) cul-de-sac in a row adjacent to 100-year floodplain	--
38-44.5(b)(3)(f)(2)(b)(1)	A minimum fifty (50) percent of an adjacent cul-de-sac bulb shall be open to the 100-year floodplain and no residential lot shall encroach within the area between this line and the major creek.	--
38-44.5(b)(3)(f)(2)(b)(2)	An entry monument(s) or feature(s) as well as landscaping shall be provided at the end of the cul-de-sac and a pathway of a minimum twelve (12) feet in width shall be provided to the major creek	--
<b>38-18.2(a)(3)</b> <b>38-43.3</b>	<b>Preliminary utility plan</b>	
Administrative	The preliminary utility plan shall show the location and width of all adjacent utility easements	BB
38-38.43.2(2)	Width of all proposed utility easements	BB
38-43.3(a)(1)	The preliminary utility plan shall show the location and size of water mains.	BB
38-43.3(a)(1)	The preliminary utility plan shall show the location and size of wastewater mains.	BB

38-43.3(a)(2)	The preliminary utility plan shall include plans and specifications for fire hydrant systems.	
38-43.4(b)	All water and wastewater utilities including connections within the ROW or easements shall be vested to the city.	BB
38-43.4(d)	No utility or service lines shall cross another lot.	BB
38-43.4(e)	Any utility adjacent to non-city government roads shall be constructed outside that ROW and in a separate easement unless agreed upon by non-city owner and Midwest City	BB
<b>38-18.2(a)(5)</b>	<b>Preliminary site development plan</b>	
Administrative	Finish floor elevations for all pad sites	BB
Administrative 13-69.7(2)	Drainage arrows on all lots showing the final grading and where the water will drain (not to drain over more than adjacent lot)	BB
Administrative 38-54.3(c)(1) 38-54.3(d)(1) 38-54.4	Required retaining walls and retaining wall easements	BB
Administrative	Existing contours with intervals not to exceed two (2) feet referenced to a United State Geological Survey or Geodetic Survey bench mark or monument.	BB
<b>38-18.2(a)(6)</b>	<b>Street layout plan</b>	
Administrative	The classification of every street within or adjacent to the development.	BB
38-45.4(b)	The streets within the development shall conform to the city's comprehensive plan.	BB
38-45.4(c)	The proposed street system shall extend all existing arterial streets and such collector and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress.	BB
38-45.4(d)	The street layout plan shall show all access points to existing roadways and be of the required number.	BB
38-45.4(e)	The street layout plan shall have two (2) connections to adjacent properties.	BB
38-45.4(n)	The street layout plan will have the names of all new proposed streets.	BB
38-45.4(o)	The street layout plan shall not have any proposed cul-de-sacs longer than five hundred (500) feet in length	BB
38-47	The location, size, and easements of all proposed pedestrian crosswalks, bike trails, horse trails, or other supplementary movement systems.	BB
<b>38-18.2 (a) (7)</b>	<b>Street signage and striping plan</b>	
Administrative	Proposed signage of development	BB
Administrative	Proposed striping if required	--
<b>38-18.2 (a) (9)</b>	<b>Other plans</b>	
<b>Administrative</b>	<b>If fee in lieu of improvements: include quantities and cost estimates</b>	
Engineering Comments and Recommendations:		
Associated Departments (Fire, Stormwater, and Utilities) Comments and Recommendations:		

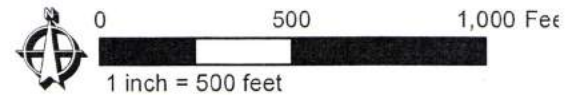




Locator Map

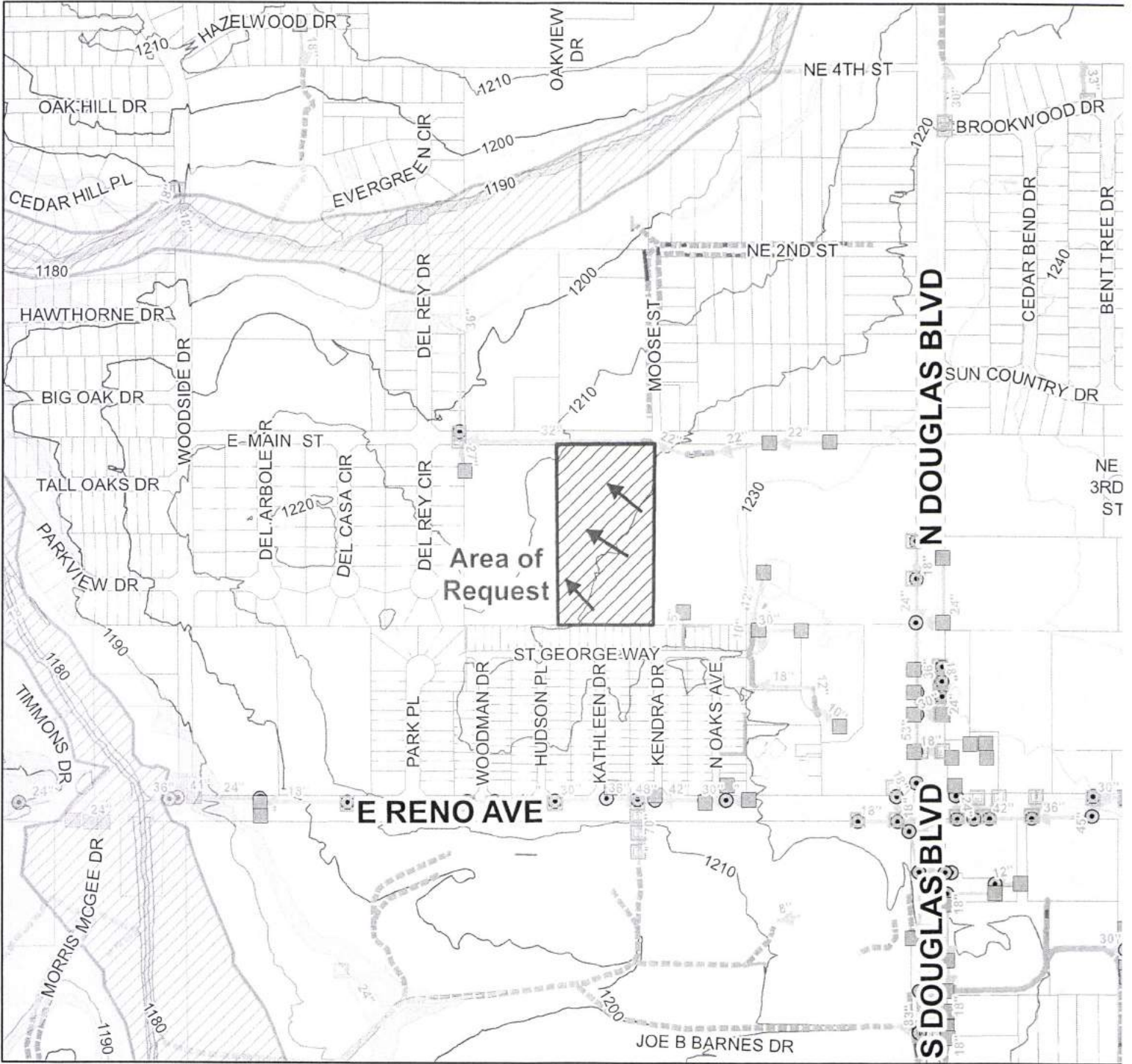


**3/2020 NEARMAP AERIAL VIEW FOR  
PC-2047  
(SE/4, Sec. 35, T12N, R2W)**

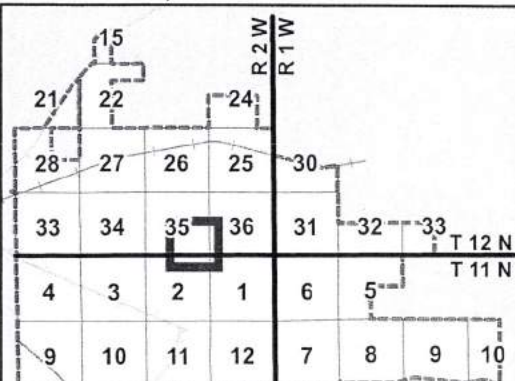


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Locator Map



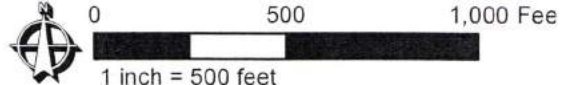
- Drainage Legend**
- Curb Inlets
  - Inlets
  - Junction Box
  - Culverts
  - Flumes
  - Developed Channels
  - Trickle Channels
  - Undeveloped Channels
  - Storm Lines
  - Creeks
- ELEVATION**
- 1166-1204 ft
  - 1204-1228 ft
  - 1228-1250 ft
  - 1250-1278 ft

2009 FEMA Floodplains

- 500-yr floodplain
- 100-yr floodplain
- 2009 FEMA Floodway
- FLOODWAY

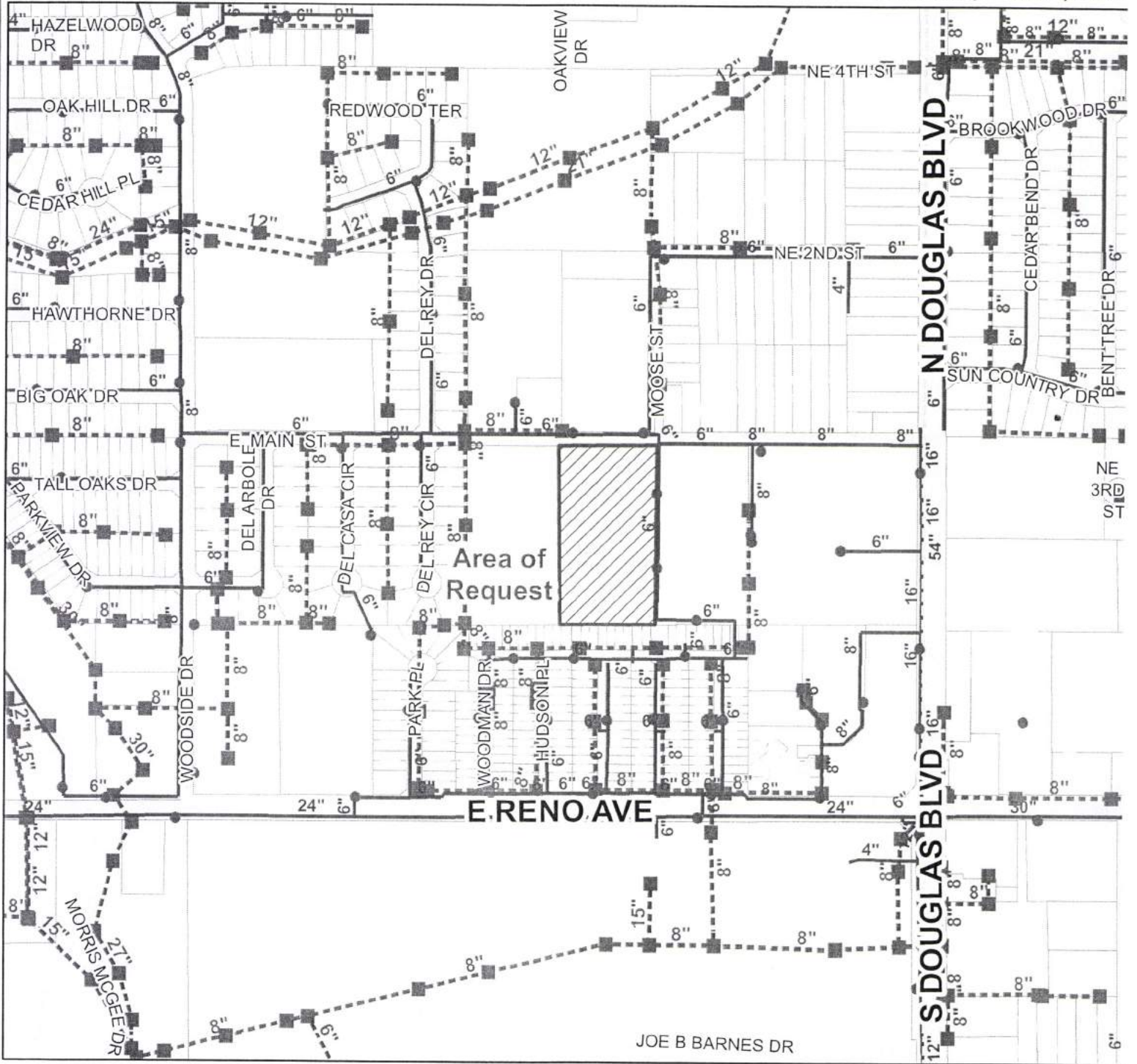
**DRAINAGE LOCATION MAP FOR PC-2047**

(SE/4, Sec. 35, T12N, R2W)

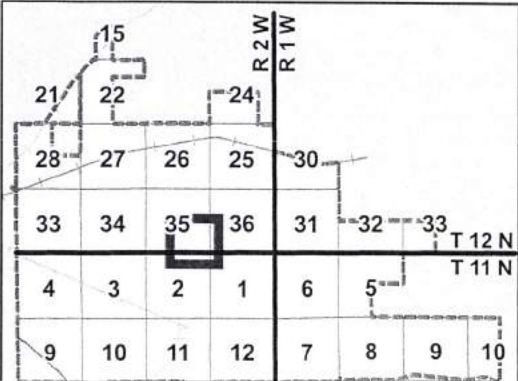


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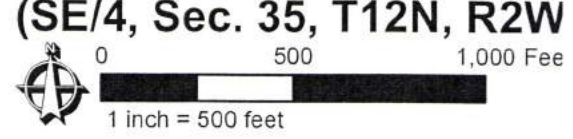
Locator Map



**Water/Sewer Legend**

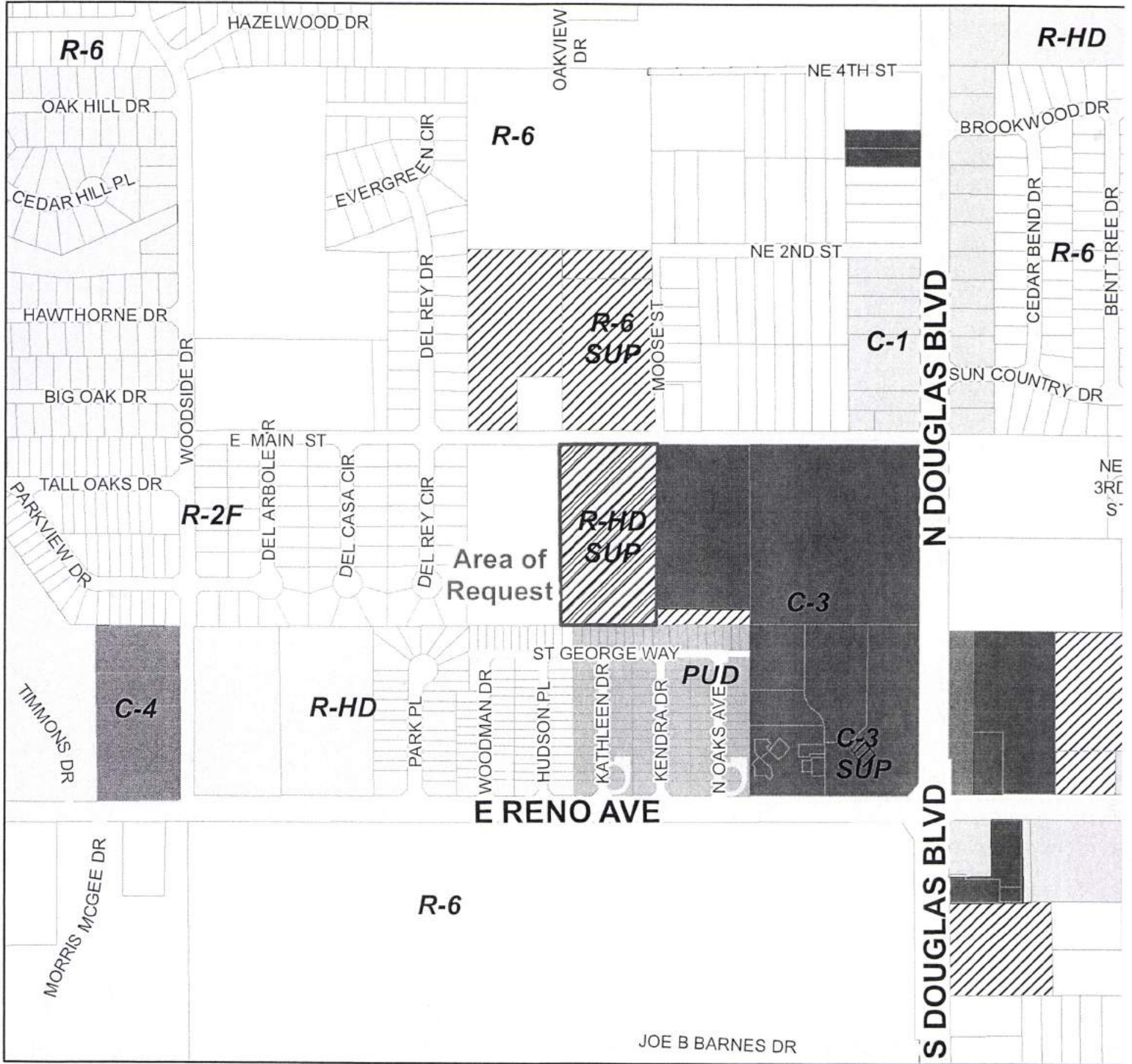
- Fire Hydrants
- Water Lines
  - Distribution
  - Well
  - OKC Cross Country
  - Sooner Utilities
  - Thunderbird
  - Unknown
- Sewer Manholes

**WATER/SEWER LINE LOCATION MAP FOR PC-2047 (SE/4, Sec. 35, T12N, R2W)**

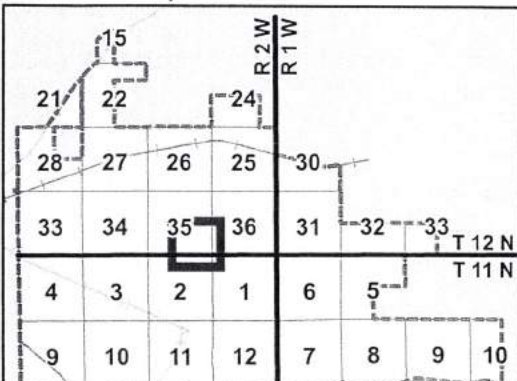


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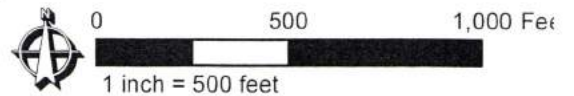
Locator Map



Current Zoning Legend

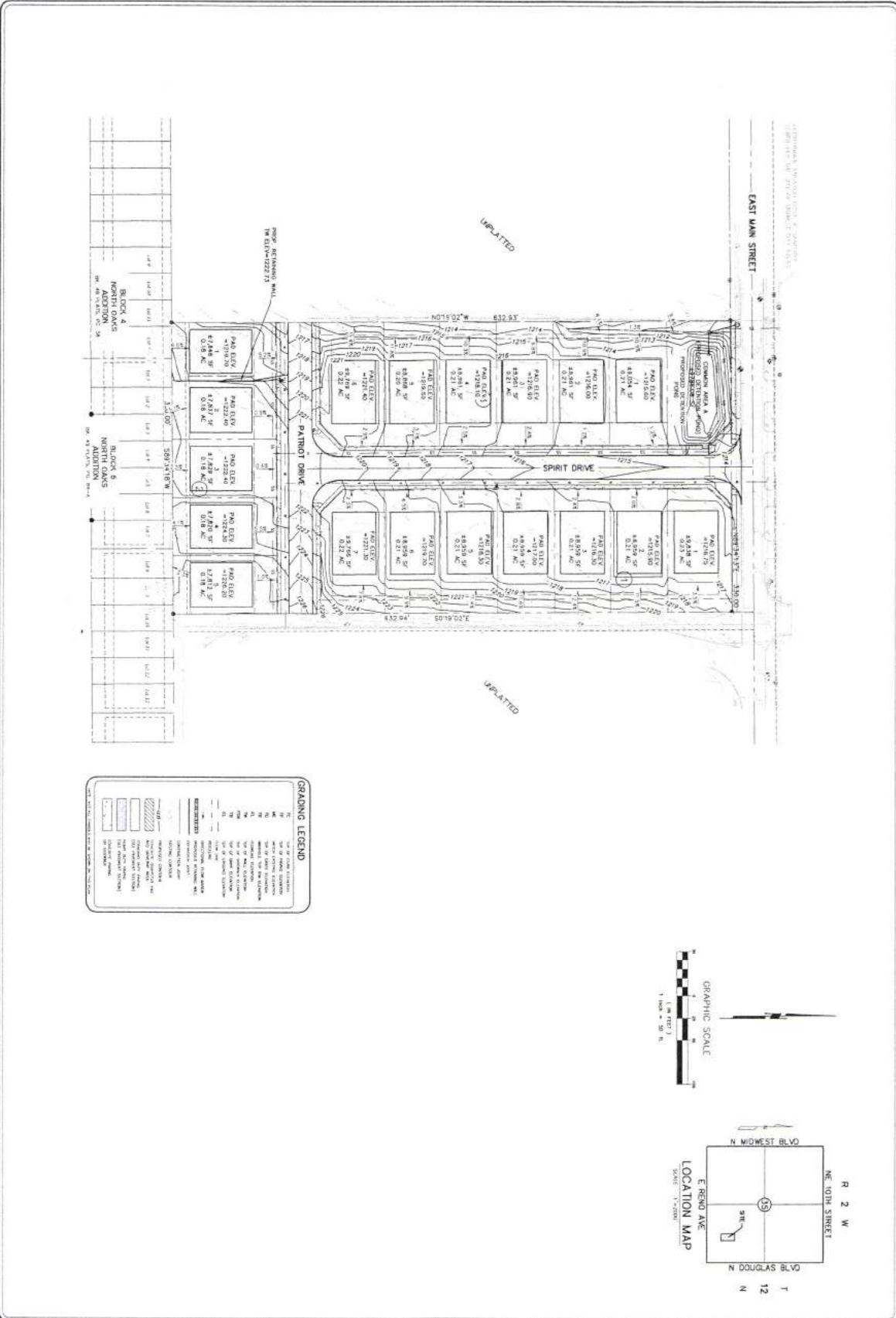
A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS

**ZONING MAP FOR  
PC-2047  
(SE/4, Sec. 35, T12N, R2W)**



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FREEDOM VILLAS

SHEET NUMBER  
**EXH**

NO.	DESCRIPTION	DATE

Proj No: 20-033  
 Date: 5/19/2020  
 Scale: (Sheet) 1/4" = 1'-0"  
 Drawn By: JVA  
 Checked By: JVA  
 Approved By: JVA

**FREEDOM VILLAS**  
 8712 EAST MAIN STREET  
 MIDWEST CITY, OKLAHOMA CO., OKLAHOMA  
**PRELIMINARY SITE  
 DEVELOPMENT PLAN**

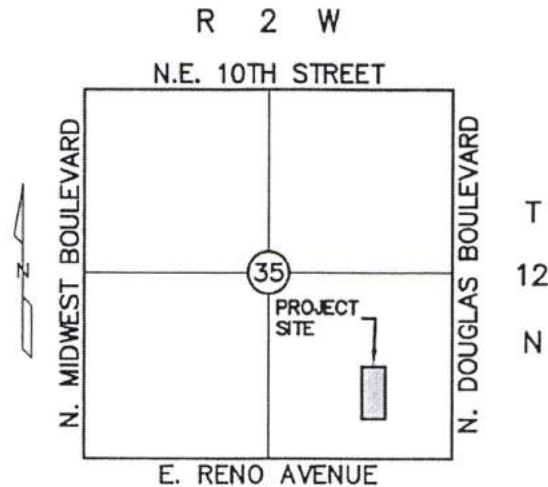


**RUBBS CONSULTING LLC**  
 CIVIL ENGINEERING & LAND PLANNING  
 1011 S. Shaw Road  
 Tulsa, OK 74106  
 Phone: 485-255-8841  
 Fax: 485-255-8848  
RUBBS CONSULTING LLC IS A SEPARATE ENTITY FROM RUBBS CONSULTING, INC.



# FREEDOM VILLAS

## PRELIMINARY STORMWATER MANAGEMENT & DRAINAGE PLAN



LOCATION MAP

SCALE: 1"=2000'

8712 East Main Street  
Midwest City, OK

June 19<sup>th</sup>, 2020



**GRUBBS CONSULTING, LLC**  
CIVIL ENGINEERING & LAND PLANNING  
1800 S. Sara Road  
Yukon, OK 73099  
Phone: (405) 265-0641  
Fax: (405) 265-0649



## TABLE OF CONTENTS

### REPORT SUMMARY

<i>PROJECT DESCRIPTION</i> .....	1
<i>DRAINAGE SUMMARY</i> .....	1
<i>DETENTION SUMMARY</i> .....	1
<i>CONCLUSIONS &amp; RECOMMENDATIONS</i> .....	2

### APPENDIX

#### *DETENTION CALCULATIONS*

##### Drainage Area Maps

- Historic Drainage Area Map
- Proposed Drainage Area Map

##### Hydrologic Runoff Worksheets

- Historic Drainage Area (H1)
- Historic Drainage Area (H2)
- Proposed Drainage Area (P1)
- Bypass Drainage Area (B1)
- Bypass Drainage Area (B2)
- Bypass Drainage Area (B3)
- Bypass Drainage Area (B2+B3)

##### Proposed Detention Calculations

- HydroCAD Reports

#### *DRAINAGE CALCULATIONS*

##### Hydrologic Runoff Worksheets

- Drainage Area to Street Inlet
- Drainage Area to Curb Opening
- Drainage Area to Field Inlet

## ***REPORT SUMMARY***

### *PROJECT DESCRIPTION*

This project will develop a 5.01-acre tract of land into single-family/duplex structured housing. The subject tract currently has a single-family residence that will be demolished prior to construction beginning. The site is located on the south side of East Main Street and 0.21 miles west of North Douglas Boulevard and is a part of the Southeast Quarter of Section 35, T12N, R2W of the Indian Meridian, Oklahoma County, Oklahoma.

The North Oaks Addition is adjacent to the south, single-family is adjacent to the west and commercial development is adjacent to the east of the subject property.

This Preliminary Stormwater Management and Drainage Plan addresses the preliminary design and control of the storm water runoff for the proposed development.

### *DRAINAGE SUMMARY*

The site currently contains a single residence and consists of vegetative cover with moderate tree coverage. Stormwater runoff currently flows from southeast to northwest and discharges offsite at two locations. Each of the discharge locations were evaluated to determine the historic discharge amounts at these locations. The calculated discharge amount was then used as the maximum allowed discharge at those locations for the proposed development. The site is proposed to be developed in a manner as not to change the direction or rate of the historic storm water runoff.

The developments stormwater management and drainage will be designed in accordance with the City of Midwest City Drainage Ordinance.

### *DETENTION AND STORM SEWER SUMMARY*

Approximately 3.60 acres of the developed site will be routed through a detention pond to regulate the site runoff to be at or below that of the calculated historic discharge rate. The detention pond was sized accordingly to meet these criteria using HydroCAD software. The proposed detention pond calculations can be found in the appendix. The detention pond outlet will be tied into the existing 36" corrugated metal pipe underground storm sewer running along the south right-of-way of east main street.

Standard street inlets will be utilized to route stormwater runoff from the street to the proposed detention pond. These inlets were sized to capture the 100-year storm event.

The existing storm sewer located at the northeast corner of the site currently has approximately 27 ft of open channel between the outlet of a 24" corrugate metal pipe and the inlet of a 36" corrugated metal pipe. This open channel will be removed, and a closed conduit will be installed along with a junction box in order to make all the storm sewer in this area underground.



The small area located at the southwest portion of the site draining into Patriot Drive will be allowed to pass through a 3' wide curb opening to prevent water from standing at the west end of Patriot Drive.

The below summary table compares the historic and proposed discharge amounts.

<b>Detention Summary Table</b>			
Drainage Area	Release Rate (CFS)	Drainage Area	Release Rate (CFS)
H2	10.79	H1+H2	17.53
B2+B3	8.59	P1+B1+B2+B3	17.43
Difference	-2.20	Difference	-0.10

**CONCLUSIONS & RECOMMENDATIONS**

The detention calculations show that the proposed development will provide for a functional drainage system that meets the City of Midwest City drainage regulations per the subdivision regulations.

It is hereby requested that the City of Midwest City accept this Preliminary Stormwater Management and Drainage Plan and approve the Preliminary Plat.

***DETENTION CALCULATIONS***

***DRAINAGE AREA MAPS***





**RUBBS CONSULTING, LLC**  
 CIVIL ENGINEERING & LAND PLANNING  
 1505 WEST 10TH STREET, SUITE 100  
 OKLAHOMA CITY, OKLAHOMA 73106  
 TEL: 405.521.1100 FAX: 405.521.1101  
 WWW.RUBBSCONSULTING.COM



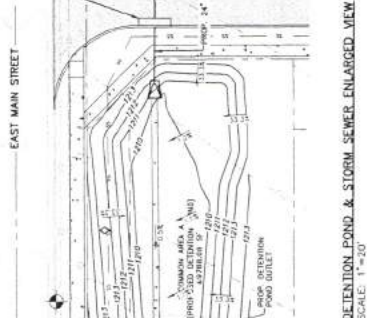
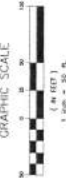
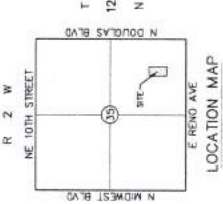
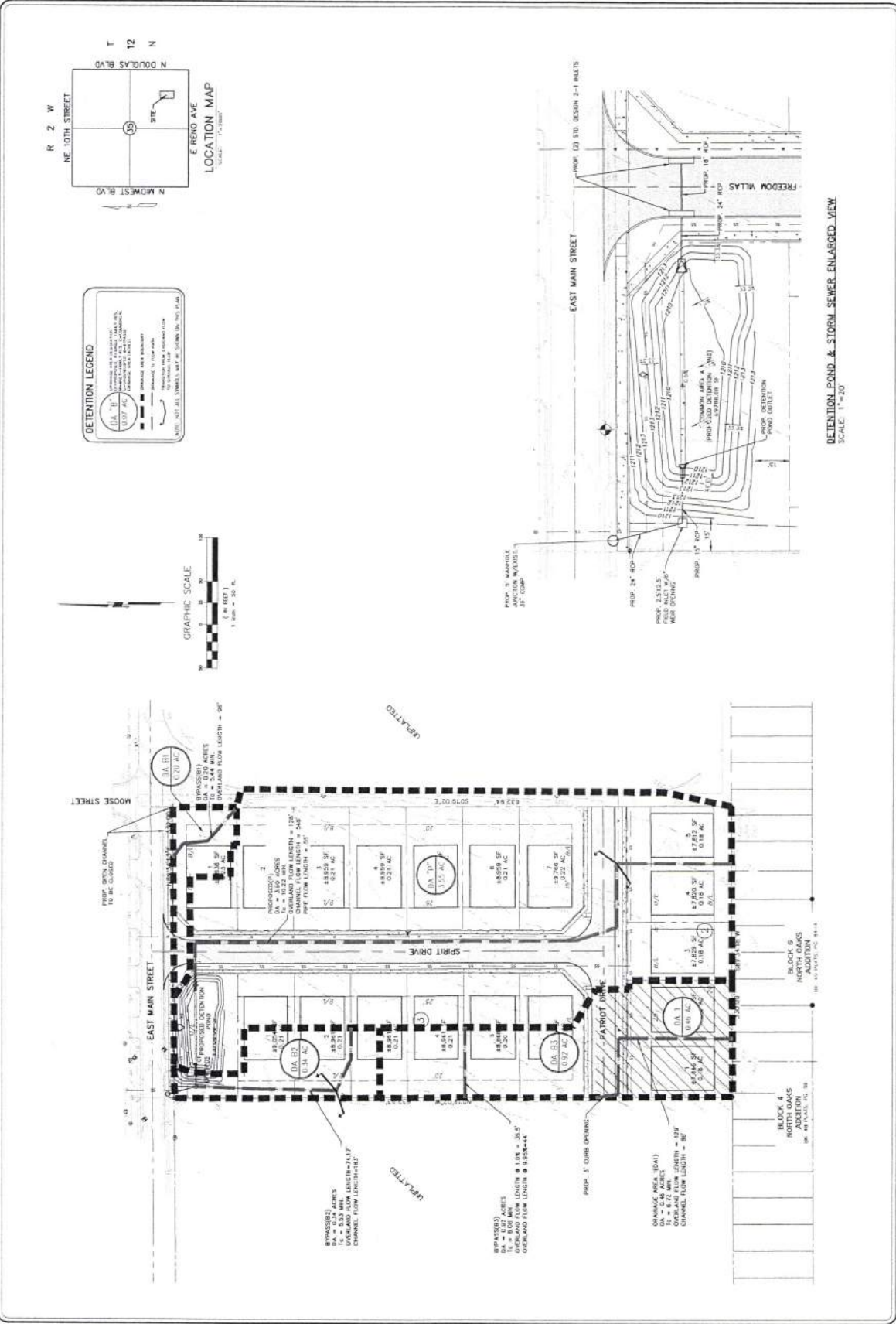
**FREEDOM VILLAS**  
 PROPOSED DRAINAGE AREA MAP  
 MIDWEST CITY, OKLAHOMA CO., OKLAHOMA  
 8112 EAST MAIN STREET

NO.	DESCRIPTION	DATE

Proj. No. 20-033  
 Date (Print) 11/20/20  
 Date (Plot) 11/20/20  
 Drawn By: M. J. GIBSON  
 Checked By: M. J. GIBSON  
 Approved By: M. J. GIBSON

SHEET NUMBER  
**DAP**

20-033



DETONATION POND & STORM SEWER ENLARGED VIEW  
 SCALE: 1" = 20'

FREEDOM VILLAS

***HISTORIC RUNOFF WORKSHEETS***



## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/18/2020

Drainage Area Designation: **H1**  
 Drainage Basin Total Area: **1.92 Acres**  
 Weighted Runoff Coefficient (C): **0.50**  
 Time of Concentration: **16.93 Min.**

<u>I (in/hr)</u>	<u>Q (cfs)</u>
I2= 3.75	Q2= 3.60
I5= 4.51	Q5= 4.33
I10= 5.13	Q10= 4.93
I25= 5.95	Q25= 5.71
I50= 6.76	Q50= 6.49
I100= 7.51	Q100= 7.21

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	1.92	0.50	0.96
Forest/Woodlands	0.00	0.47	0.00
<u>Developed Land Uses:</u>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.00	0.70	0.00
Apartments	0.00	0.85	0.00
Total Area:	1.92		0.96
			Weighted C: 0.50

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1224.00	1209.00	370.09	4.05	Avg. Grass	1.000	16.93
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

Total Tc: 16.93  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) =  $A/(B+Tc)^E$  (A, B & E obtained from table to right)  
 Runoff (Q) =  $C I (DA)$

<u>I (in/hr)</u>	<u>Q (cfs)</u>
I2= 3.75	Q2= 3.60
I5= 4.51	Q5= 4.33
I10= 5.13	Q10= 4.93
I25= 5.95	Q25= 5.71
I50= 6.76	Q50= 6.49
I100= 7.51	Q100= 7.21

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY

### Hydrologic Runoff Worksheet

#### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** H2  
**Drainage Basin Total Area:** 3.09 Acres  
**Weighted Runoff Coefficient (C):** 0.50  
**Time of Concentration:** 19.97 Min.

<i>I</i> (in/hr)	<i>Q</i> (cfs)
I2= 3.45	Q2= 5.33
I5= 4.19	Q5= 6.48
I10= 4.77	Q10= 7.37
I25= 5.53	Q25= 8.54
I50= 6.29	Q50= 9.71
I100= 6.99	Q100= 10.79

#### Supporting Calculations

##### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	3.09	0.50	1.55
Forest/Woodlands	0.00	0.47	0.00
<b>Developed Land Uses:</b>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.00	0.70	0.00
Apartments	0.00	0.85	0.00
Total Area:	3.09		1.55
			Weighted C: 0.50

##### Time of Concentration (Tc) Supporting Calculations

**Overland Flow Tc:**

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1226.80	1212.90	481.49	2.89	Avg. Grass	1.000	19.97
Reach 2:							

**Channel Flow Tc:**

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:		5.00	0.00
Reach 2:			0.00

**Pipe Flow Tc:**

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00
<b>Total Tc:</b>			19.97

(For Tc < 5 min., Use Tc = 5 min.)

##### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) \* E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

<i>I</i> (in/hr)	<i>Q</i> (cfs)
I2= 3.45	Q2= 5.33
I5= 4.19	Q5= 6.48
I10= 4.77	Q10= 7.37
I25= 5.53	Q25= 8.54
I50= 6.29	Q50= 9.71
I100= 6.99	Q100= 10.79

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

***PROPOSED RUNOFF WORKSHEETS***



## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** P  
**Drainage Basin Total Area:** 3.60 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 10.22 Min.

I (in/hr)	Q (cfs)
I2= 4.66	Q2= 11.75
I5= 5.44	Q5= 13.72
I10= 6.20	Q10= 15.62
I25= 7.18	Q25= 18.10
I50= 8.17	Q50= 20.58
I100= 9.07	Q100= 22.86

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<b>Developed Land Uses:</b>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	3.60	0.70	2.52
Apartments	0.00	0.85	0.00
Total Area:	3.60		2.52
			Weighted C: 0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1225.48	1224.45	128.00	0.80	Residential	0.511	8.07
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	548.00	4.50	2.03
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	55.00	7.50	0.12
Reach 2:			0.00

**Total Tc:** 10.22  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) \* E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

I (in/hr)	Q (cfs)
I2= 4.66	Q2= 11.75
I5= 5.44	Q5= 13.72
I10= 6.20	Q10= 15.62
I25= 7.18	Q25= 18.10
I50= 8.17	Q50= 20.58
I100= 9.07	Q100= 22.86

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY

### Hydrologic Runoff Worksheet

#### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** B1  
**Drainage Basin Total Area:** 0.20 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 5.44 Min.

I (in/hr)	Q (cfs)
I2= 5.70	Q2= 0.80
I5= 6.44	Q5= 0.90
I10= 7.34	Q10= 1.03
I25= 8.50	Q25= 1.19
I50= 9.66	Q50= 1.35
I100= 10.74	Q100= 1.50

#### Supporting Calculations

##### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<b>Developed Land Uses:</b>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.20	0.70	0.14
Apartments	0.00	0.85	0.00
Total Area:	0.20		0.14
Weighted C:			0.70

##### Time of Concentration (Tc) Supporting Calculations

###### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1219.41	1216.14	96.00	3.41	Residential	0.511	5.44
Reach 2:							

###### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

###### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

**Total Tc:** 5.44  
 (For Tc < 5 min., Use Tc = 5 min.)

##### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) ^ E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

I (in/hr)	Q (cfs)
I2= 5.70	Q2= 0.80
I5= 6.44	Q5= 0.90
I10= 7.34	Q10= 1.03
I25= 8.50	Q25= 1.19
I50= 9.66	Q50= 1.35
I100= 10.74	Q100= 1.50

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** B2  
**Drainage Basin Total Area:** 0.34 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 5.53 Min.

<i>I (in/hr)</i>		<i>Q (cfs)</i>	
I2=	5.68	Q2=	1.35
I5=	6.42	Q5=	1.53
I10=	7.31	Q10=	1.74
I25=	8.47	Q25=	2.02
I50=	9.63	Q50=	2.29
I100=	10.70	Q100=	2.55

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00

#### Developed Land Uses:

Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.34	0.70	0.24
Apartments	0.00	0.85	0.00
<b>Total Area:</b>	<b>0.34</b>		<b>0.24</b>

Weighted C: 0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1215.50	1212.10	74.17	4.58	Residential	0.511	4.66
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	183.00	3.50	0.87
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

Total Tc: 5.53

(For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc)^E (A, B & E obtained from table to right)

Runoff (Q) = CI(DA)

<i>I (in/hr)</i>		<i>Q (cfs)</i>	
I2=	5.68	Q2=	1.35
I5=	6.42	Q5=	1.53
I10=	7.31	Q10=	1.74
I25=	8.47	Q25=	2.02
I50=	9.63	Q50=	2.29
I100=	10.70	Q100=	2.55

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8



## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** B3 Bypass to H2 Discharge Point  
**Drainage Basin Total Area:** 0.92 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 8.08 Min.

	<u>I (in/hr)</u>		<u>Q (cfs)</u>
I2=	5.07	Q2=	3.27
I5=	5.84	Q5=	3.76
I10=	6.66	Q10=	4.29
I25=	7.71	Q25=	4.97
I50=	8.77	Q50=	5.65
I100=	9.74	Q100=	6.27

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<u>Developed Land Uses:</u>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.92	0.70	0.64
Apartments	0.00	0.85	0.00
<b>Total Area:</b>	<b>0.92</b>		<b>0.64</b>
<b>Weighted C:</b>			<b>0.70</b>

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1218.00	1217.64	35.50	1.01	Residential	0.511	4.80
Reach 2:	1217.64	1213.26	44.00	9.95	Residential	0.511	3.29

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00
<b>Total Tc:</b>			<b>8.08</b>

(For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) =  $A/(B+Tc)^E$  (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

	<u>I (in/hr)</u>		<u>Q (cfs)</u>
I2=	5.07	Q2=	3.27
I5=	5.84	Q5=	3.76
I10=	6.66	Q10=	4.29
I25=	7.71	Q25=	4.97
I50=	8.77	Q50=	5.65
I100=	9.74	Q100=	6.27

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/18/2020

**Drainage Area Designation:** B2+B3 Combined Bypass to West  
**Drainage Basin Total Area:** 1.26 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 8.08 Min.

I (in/hr)	Q (cfs)
I2= 5.07	Q2= 4.47
I5= 5.84	Q5= 5.15
I10= 6.66	Q10= 5.87
I25= 7.71	Q25= 6.80
I50= 8.77	Q50= 7.73
I100= 9.74	Q100= 8.59

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

Undeveloped Land Uses:	Drainage Area (Acres)	Runoff Coefficient (C)	DA * C
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<b>Developed Land Uses:</b>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	1.26	0.70	0.88
Apartments	0.00	0.85	0.00
Total Area:	1.26		0.88
Weighted C:			0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	Upstm Elev.	Dwnstm Elev.	Reach Length (ft)	Slope (%)	Overland Condition	K	Tc (Min.)
Reach 1:	1215.50	1215.14	35.50	1.01	Residential	0.511	4.80
Reach 2:	1217.64	1213.26	44.00	9.95	Residential	0.511	3.29

##### Channel Flow Tc:

	Channel Length (ft)	Velocity (fps)	Tc (Min.)
Reach 1:			0.00
Reach 2:			0.00

##### Pipe Flow Tc:

	Pipe Length (ft)	Velocity (fps)	Tc (Min.)
Reach 1:			0.00
Reach 2:			0.00

**Total Tc:** 8.08  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

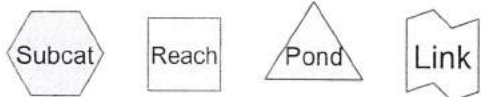
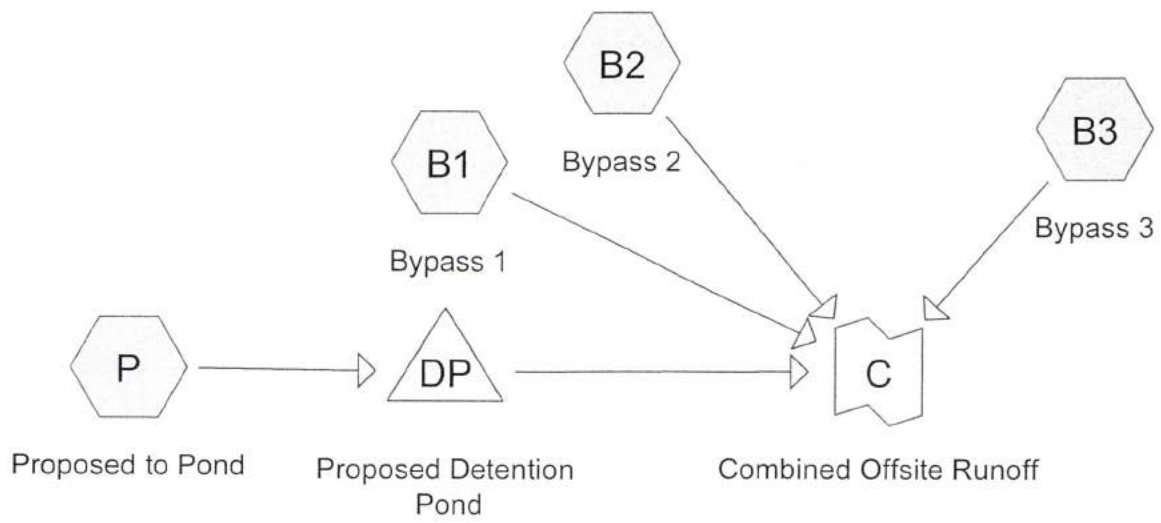
Intensity (I) = A / (B + Tc)^E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

I (in/hr)	Q (cfs)
I2= 5.07	Q2= 4.47
I5= 5.84	Q5= 5.15
I10= 6.66	Q10= 5.87
I25= 7.71	Q25= 6.80
I50= 8.77	Q50= 7.73
I100= 9.74	Q100= 8.59

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

***HYDROCAD REPORTS***





**Routing Diagram for Freedom Villas-Prelim Detention**  
 Prepared by Grubbs Consulting, LLC, Printed 6/18/2020  
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**Freedom Villas-Prelim Detention**

Prepared by Grubbs Consulting, LLC  
HydroCAD® 10.10-3a s/n 05006 © 2020 HydroCAD Software Solutions LLC

**Area Listing (all nodes)**

Area (acres)	C	Description (subcatchment-numbers)
5.010	0.70	(B1, B2, B3, P)
<b>5.010</b>	<b>0.70</b>	<b>TOTAL AREA</b>

**Freedom Villas-Prelim Detention**

Prepared by Grubbs Consulting, LLC

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Proposed 100-Yr Storm Event

OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

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Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment B1: Bypass 1**

Runoff Area=0.200 ac 0.00% Impervious Runoff Depth=1.38"  
Tc=5.4 min C=0.70 Runoff=1.11 cfs 0.023 af

**Subcatchment B2: Bypass 2**

Runoff Area=0.340 ac 0.00% Impervious Runoff Depth=1.38"  
Tc=5.5 min C=0.70 Runoff=1.90 cfs 0.039 af

**Subcatchment B3: Bypass 3**

Runoff Area=0.920 ac 0.00% Impervious Runoff Depth=1.38"  
Tc=8.1 min C=0.70 Runoff=5.13 cfs 0.106 af

**Subcatchment P: Proposed to Pond**

Runoff Area=3.550 ac 0.00% Impervious Runoff Depth=1.38"  
Tc=10.2 min C=0.70 Runoff=19.79 cfs 0.409 af

**Pond DP: Proposed Detention Pond**

Peak Elev=1,212.82' Storage=9,386 cf Inflow=19.79 cfs 0.409 af  
15.0" Round Culvert n=0.012 L=40.0' S=0.0027 '/' Outflow=10.17 cfs 0.409 af

**Link C: Combined Offsite Runoff**

Inflow=17.43 cfs 0.577 af  
Primary=17.43 cfs 0.577 af

**Total Runoff Area = 5.010 ac Runoff Volume = 0.577 af Average Runoff Depth = 1.38"**  
**100.00% Pervious = 5.010 ac 0.00% Impervious = 0.000 ac**



**Summary for Subcatchment B1: Bypass 1**

Runoff = 1.11 cfs @ 0.09 hrs, Volume= 0.023 af, Depth= 1.38"

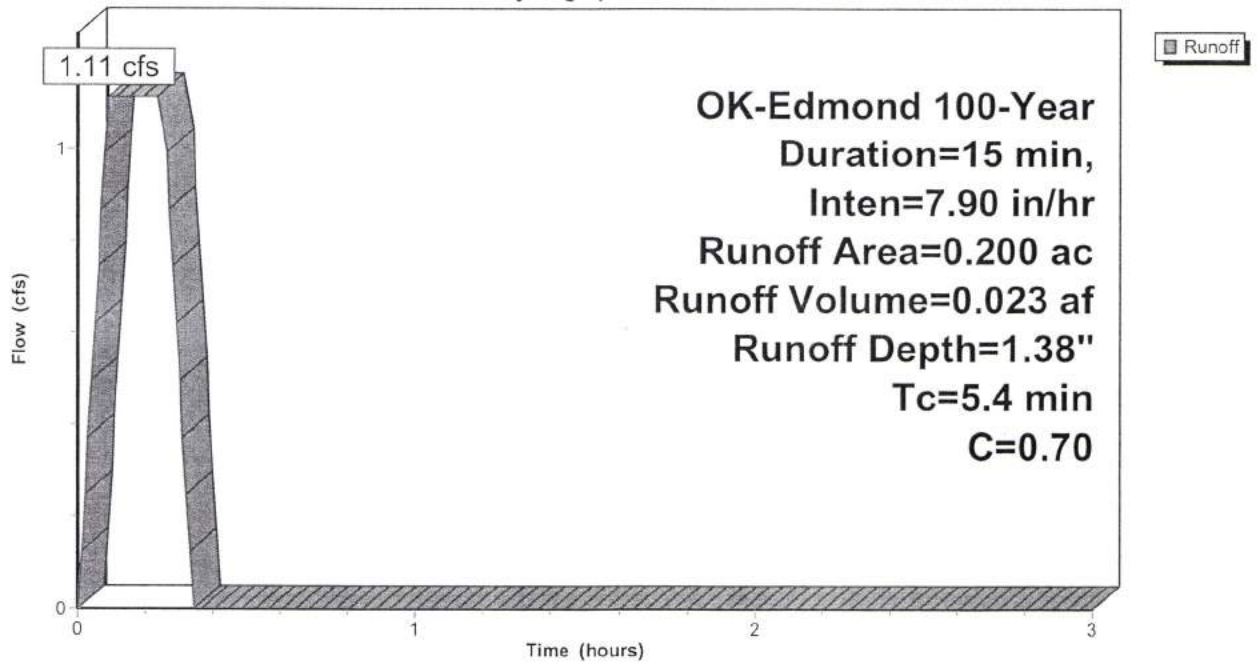
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

Area (ac)	C	Description
0.200	0.70	
0.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4					Direct Entry,

**Subcatchment B1: Bypass 1**

Hydrograph



**Summary for Subcatchment B2: Bypass 2**

Runoff = 1.90 cfs @ 0.10 hrs, Volume= 0.039 af, Depth= 1.38"

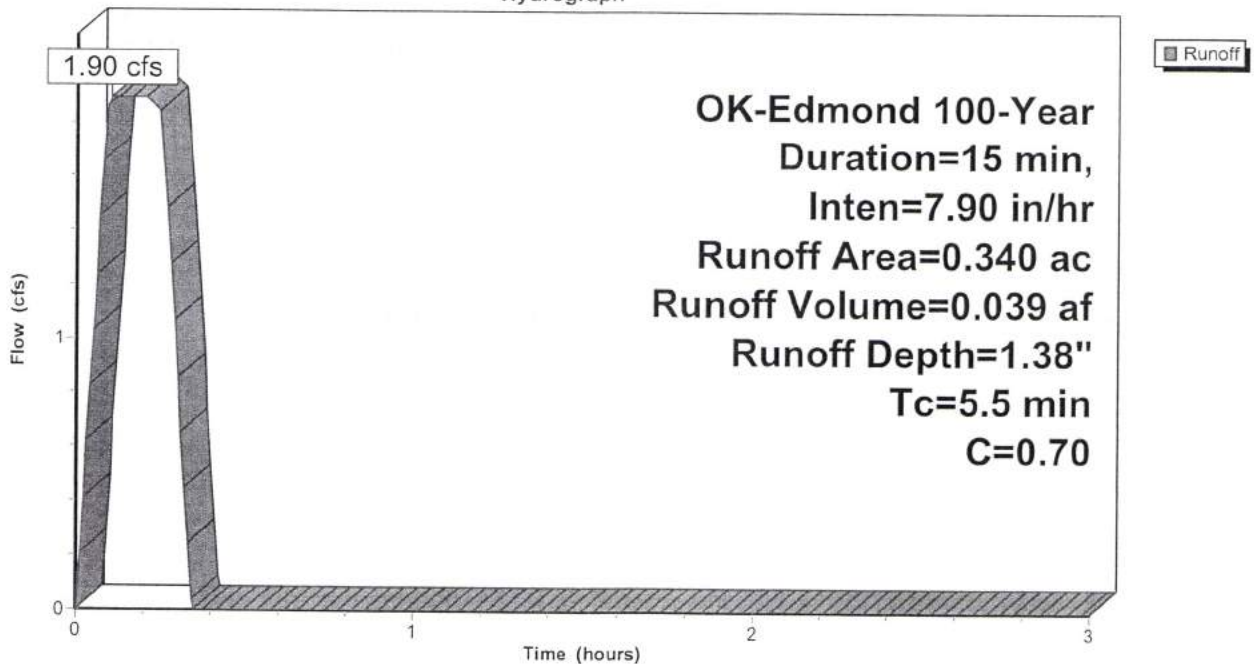
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

Area (ac)	C	Description
0.340	0.70	
0.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5					Direct Entry,

**Subcatchment B2: Bypass 2**

Hydrograph



**Freedom Villas-Prelim Detention**

OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

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**Summary for Subcatchment B3: Bypass 3**

Runoff = 5.13 cfs @ 0.14 hrs, Volume= 0.106 af, Depth= 1.38"

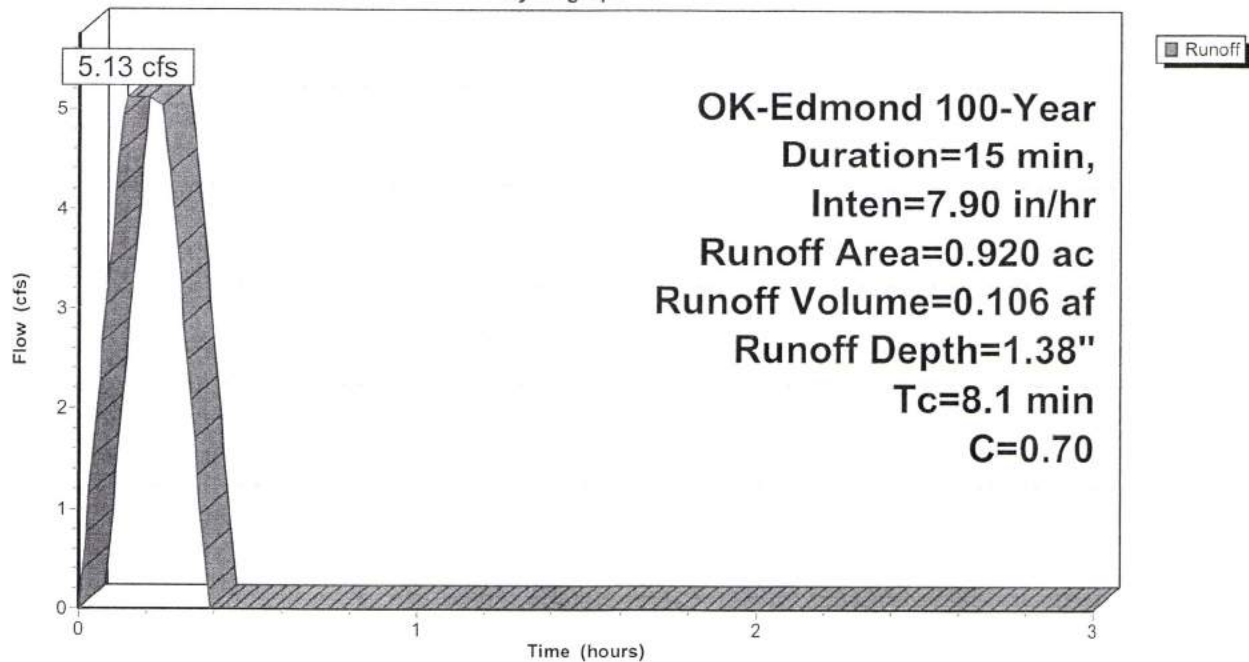
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

Area (ac)	C	Description
0.920	0.70	
0.920		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1					Direct Entry,

**Subcatchment B3: Bypass 3**

Hydrograph





**Freedom Villas-Prelim Detention**

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Proposed 100-Yr Storm Event

OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

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**Summary for Subcatchment P: Proposed to Pond**

Runoff = 19.79 cfs @ 0.17 hrs, Volume= 0.409 af, Depth= 1.38"

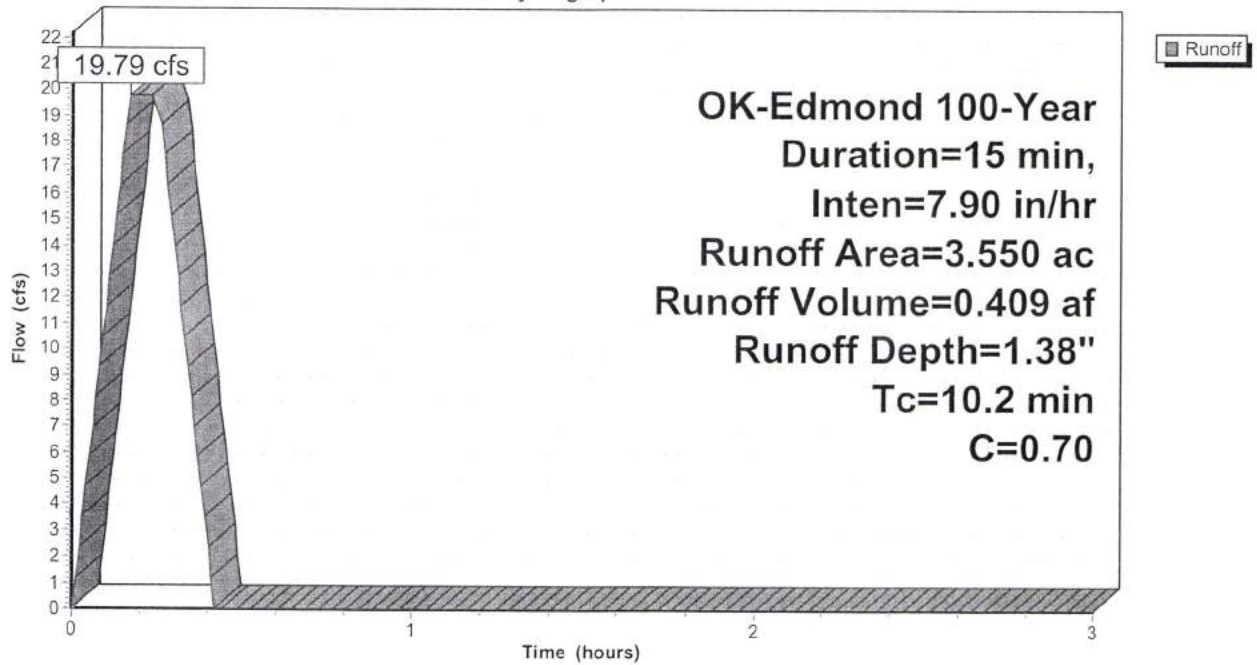
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

Area (ac)	C	Description
3.550	0.70	
3.550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2					Direct Entry,

**Subcatchment P: Proposed to Pond**

Hydrograph



**Freedom Villas-Prelim Detention** OK-Edmond 100-Year Duration=15 min, Inten=7.90 in/hr

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**Summary for Pond DP: Proposed Detention Pond**

Inflow Area = 3.550 ac, 0.00% Impervious, Inflow Depth = 1.38" for 100-Year event  
 Inflow = 19.79 cfs @ 0.17 hrs, Volume= 0.409 af  
 Outflow = 10.17 cfs @ 0.33 hrs, Volume= 0.409 af, Atten= 49%, Lag= 9.8 min  
 Primary = 10.17 cfs @ 0.33 hrs, Volume= 0.409 af

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,212.82' @ 0.33 hrs Surf.Area= 4,389 sf Storage= 9,386 cf

Plug-Flow detention time= 12.6 min calculated for 0.407 af (100% of inflow)  
 Center-of-Mass det. time= 12.7 min ( 25.3 - 12.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,209.55'	11,359 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

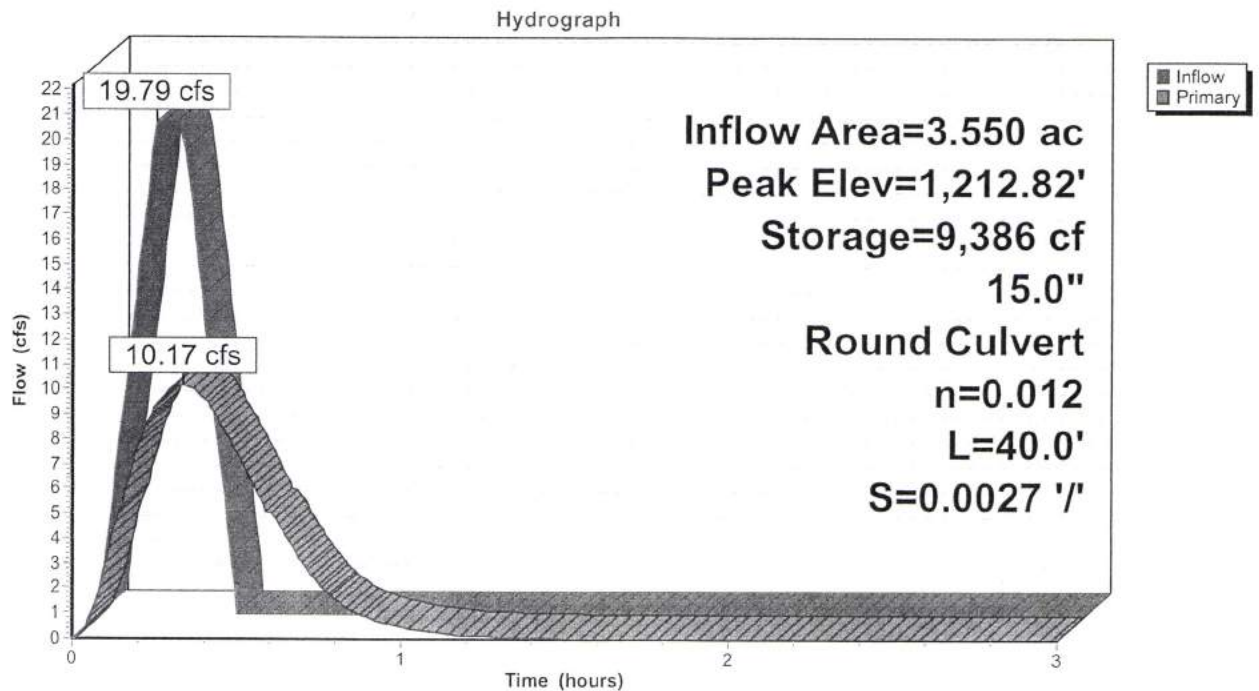
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,209.55	0	0	0
1,210.00	1,785	402	402
1,211.00	2,932	2,359	2,760
1,212.00	3,700	3,316	6,076
1,213.00	4,542	4,121	10,197
1,213.25	4,753	1,162	11,359

Device	Routing	Invert	Outlet Devices
#1	Primary	1,209.55'	<b>15.0" Round Culvert</b> L= 40.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 1,209.55' / 1,209.44' S= 0.0027 '/ Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

**Primary OutFlow** Max=10.17 cfs @ 0.33 hrs HW=1,212.82' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 10.17 cfs @ 8.29 fps)

### Pond DP: Proposed Detention Pond





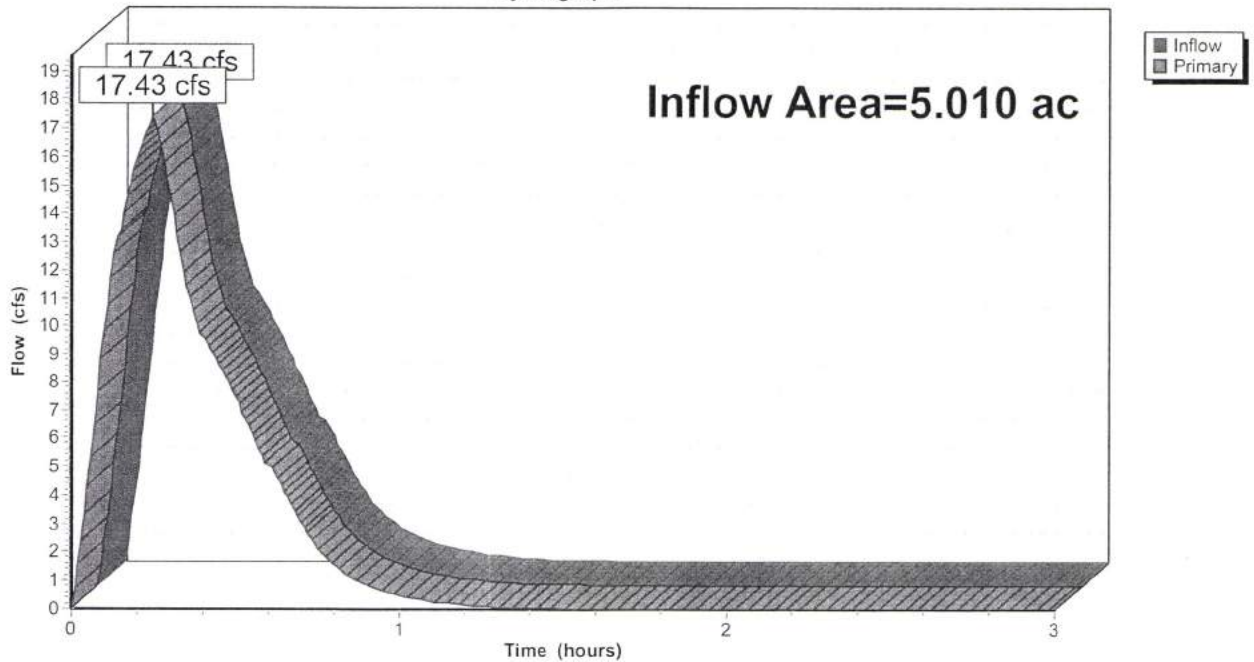
**Summary for Link C: Combined Offsite Runoff**

Inflow Area = 5.010 ac, 0.00% Impervious, Inflow Depth = 1.38" for 100-Year event  
 Inflow = 17.43 cfs @ 0.25 hrs, Volume= 0.577 af  
 Primary = 17.43 cfs @ 0.25 hrs, Volume= 0.577 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

**Link C: Combined Offsite Runoff**

Hydrograph



**Summary for Pond DP: Proposed Detention Pond**

Inflow Area = 3.550 ac, 0.00% Impervious, Inflow Depth = 1.87" for 100-Year event  
 Inflow = 15.41 cfs @ 0.17 hrs, Volume= 0.552 af  
 Outflow = 10.70 cfs @ 0.49 hrs, Volume= 0.552 af, Atten= 31%, Lag= 18.9 min  
 Primary = 10.70 cfs @ 0.49 hrs, Volume= 0.552 af

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,213.04' @ 0.49 hrs Surf.Area= 4,580 sf Storage= 10,401 cf

Plug-Flow detention time= 13.5 min calculated for 0.552 af (100% of inflow)  
 Center-of-Mass det. time= 13.4 min ( 31.5 - 18.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,209.55'	11,359 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,209.55	0	0	0
1,210.00	1,785	402	402
1,211.00	2,932	2,359	2,760
1,212.00	3,700	3,316	6,076
1,213.00	4,542	4,121	10,197
1,213.25	4,753	1,162	11,359

Device	Routing	Invert	Outlet Devices
#1	Primary	1,209.55'	<b>15.0" Round Culvert</b> L= 40.0' RCP, groove end w/headwall, Ke= 0.200 Inlet / Outlet Invert= 1,209.55' / 1,209.44' S= 0.0027 '/ Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

**Primary OutFlow** Max=10.70 cfs @ 0.49 hrs HW=1,213.04' (Free Discharge)

↳ **1=Culvert** (Barrel Controls 10.70 cfs @ 8.72 fps)

**Freedom Villas-Prelim Detention**

OK-Edmond 100-Year Duration=26 min, Inten=6.15 in/hr

Prepared by Grubbs Consulting, LLC

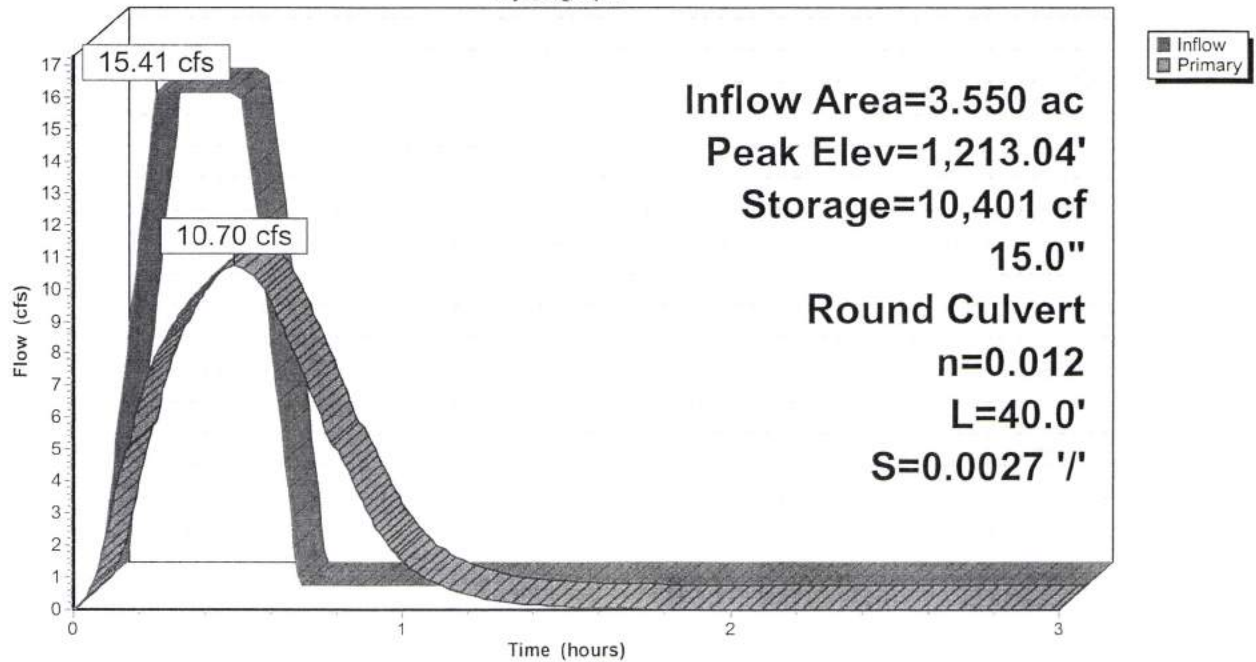
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**Pond DP: Proposed Detention Pond**

Hydrograph





# ***DRAINAGE CALCULATIONS***

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 5/28/2020

**Drainage Area Designation:** P  
**Drainage Basin Total Area:** 3.60 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 10.22 Min.

I (in/hr)	Q (cfs)
I2= 4.66	Q2= 11.75
I5= 5.44	Q5= 13.72
I10= 6.20	Q10= 15.62
I25= 7.18	Q25= 18.10
I50= 8.17	Q50= 20.58
I100= 9.07	Q100= 22.86

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<b>Developed Land Uses:</b>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	3.60	0.70	2.52
Apartments	0.00	0.85	0.00
Total Area:	3.60		2.52
Weighted C:			0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1225.48	1224.45	128.00	0.80	Residential	0.511	8.07
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	548.00	4.50	2.03
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	55.00	7.50	0.12
Reach 2:			0.00

Total Tc: 10.22  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) =  $A / (B + Tc)^E$  (A, B & E obtained from table to right)  
 Runoff (Q) = C I (DA)

I (in/hr)	Q (cfs)
I2= 4.66	Q2= 11.75
I5= 5.44	Q5= 13.72
I10= 6.20	Q10= 15.62
I25= 7.18	Q25= 18.10
I50= 8.17	Q50= 20.58
I100= 9.07	Q100= 22.86

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## Storm Sewer Structure Capacity Worksheet

### Inlet Capacity Summary

(2) STD. DESIGN 2-1 INLETS = 26.4 CFS > 22.86 CFS (DA P Q100)

### Pipe Capacity Summary

CAPACITY 18" RCP @ 1.10% = 11.97 CFS > 11.43 CFS (1/2 OF DA P Q100)

CAPACITY 24" RCP @ 1.0% = 24.57 CFS > 22.86 CFS (DA P Q100)

### Inlet Capacity Supporting Information

<u>STD Inlet No.</u>	<u>Grate Capacity (CFS)</u>	<u>Hood Capacity (CFS)</u>	<u>Total Capacity (CFS)</u>
2-0	3.2	5.0	8.2
<b>2-1</b>	<b>3.2</b>	<b>10.0</b>	<b>13.2</b>
2-2	3.2	15.0	18.2
2-3	3.2	20.0	23.2
2-4	3.2	25.0	28.2
2-5	3.2	30.0	33.2

### Pipe Capacity Supporting Calculations

Pipe Capacity calculated by Manning's Equation =  $(1.49 \cdot AR^{2/3} S^{1/2}) / n$

Required head calculated using Diameter plus 1.5 times Velocity Head =  $D + (1.5 \cdot (V^2) / 2g)$

Pipe Capacity

Pipe Diameter (D): 18 Inches  
 Box Span: 0 Feet  
 Box Rise: 0 Feet  
 Material: RCP  
 Slope: 1.10%  
 Manning's n: 0.012  
 Area (A): 1.77 Square Feet  
 Wetted Perimeter (P): 4.71 Feet  
 Hydraulic Radius (A/P): 0.38 Feet  
 Velocity (V): 6.77 Ft/s  
 Capacity (Q): 11.97 CFS

Pipe Capacity

Pipe Diameter (D): 24 Inches  
 Box Span: 0 Feet  
 Box Rise: 0 Feet  
 Material: RCP  
 Slope: 1.00%  
 Manning's n: 0.012  
 Area (A): 3.14 Square Feet  
 Wetted Perimeter (P): 6.28 Feet  
 Hydraulic Radius (A/P): 0.50 Feet  
 Velocity (V): 7.82 Ft/s  
 Capacity (Q): 24.57 CFS



## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 5/28/2020

**Drainage Area Designation:** DA 1  
**Drainage Basin Total Area:** 0.46 Acres  
**Weighted Runoff Coefficient (C):** 0.70  
**Time of Concentration:** 6.72 Min.

	<u>I (in/hr)</u>		<u>Q (cfs)</u>
I2=	5.38	Q2=	1.73
I5=	6.14	Q5=	1.98
I10=	6.99	Q10=	2.25
I25=	8.10	Q25=	2.61
I50=	9.20	Q50=	2.96
I100=	10.23	Q100=	3.29

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<u>Developed Land Uses:</u>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	<b>0.46</b>	0.70	0.32
Apartments	0.00	0.85	0.00
Total Area:	0.46		0.32
Weighted C:			0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstm Elev.</u>	<u>Dwnstm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1222.36	1219.27	129.00	2.40	Residential	0.511	6.51
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	88.00	7.00	0.21
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

**Total Tc:** 6.72  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) ^ E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

	<u>I (in/hr)</u>		<u>Q (cfs)</u>
I2=	5.38	Q2=	1.73
I5=	6.14	Q5=	1.98
I10=	6.99	Q10=	2.25
I25=	8.10	Q25=	2.61
I50=	9.20	Q50=	2.96
I100=	10.23	Q100=	3.29

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8

## Flume 1 Weir Capacity Worksheet

### Weir Capacity Summary

CAPACITY OF 3' WIDE CURB OPENING = 3.53 CFS > 3.29 CFS (DA 1 Q100)

### Weir Capacity Supporting Calculations

Weir Capacity calculated by  $Q = 3.33bH^{3/2}$

#### Weir Capacity

b:	3.0
H:	0.5
Capacity (Q):	3.53 CFS
Q100:	3.29 CFS
Depth:	5.59 Inches

## FREEDOM VILLAS-PRELIMINARY DRAINAGE STUDY Hydrologic Runoff Worksheet

### Summary

Date Modified: 6/19/2020

Drainage Area Designation: **B2**  
 Drainage Basin Total Area: 0.34 Acres  
 Weighted Runoff Coefficient (C): 0.70  
 Time of Concentration: 5.53 Min.

<u>I (in/hr)</u>		<u>Q (cfs)</u>	
I2=	5.68	Q2=	1.35
I5=	6.42	Q5=	1.53
I10=	7.31	Q10=	1.74
I25=	8.47	Q25=	2.02
I50=	9.63	Q50=	2.29
I100=	10.70	Q100=	2.55

### Supporting Calculations

#### Weighted Runoff Coefficient Supporting Calculations

<u>Undeveloped Land Uses:</u>	<u>Drainage Area (Acres)</u>	<u>Runoff Coefficient (C)</u>	<u>DA * C</u>
Cultivated	0.00	0.50	0.00
Pasture/Range	0.00	0.50	0.00
Forest/Woodlands	0.00	0.47	0.00
<u>Developed Land Uses:</u>			
Commercial	0.00	0.90	0.00
Shopping Center/Industrial	0.00	0.95	0.00
Rural Single Family Residential	0.00	0.60	0.00
Single Family Residential	0.34	0.70	0.24
Apartments	0.00	0.85	0.00
Total Area:			0.34
Weighted C:			0.70

#### Time of Concentration (Tc) Supporting Calculations

##### Overland Flow Tc:

	<u>Upstrm Elev.</u>	<u>Dwnstrm Elev.</u>	<u>Reach Length (ft)</u>	<u>Slope (%)</u>	<u>Overland Condition</u>	<u>K</u>	<u>Tc (Min.)</u>
Reach 1:	1215.50	1212.10	74.17	4.58	Residential	0.511	4.66
Reach 2:							

##### Channel Flow Tc:

	<u>Channel Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:	183.00	3.50	0.87
Reach 2:			0.00

##### Pipe Flow Tc:

	<u>Pipe Length (ft)</u>	<u>Velocity (fps)</u>	
Reach 1:			0.00
Reach 2:			0.00

Total Tc: 5.53  
 (For Tc < 5 min., Use Tc = 5 min.)

#### Runoff (Q) Supporting Calculations

Intensity (I) = A / (B + Tc) \* E (A, B & E obtained from table to right)  
 Runoff (Q) = CI(DA)

<u>I (in/hr)</u>		<u>Q (cfs)</u>	
I2=	5.68	Q2=	1.35
I5=	6.42	Q5=	1.53
I10=	7.31	Q10=	1.74
I25=	8.47	Q25=	2.02
I50=	9.63	Q50=	2.29
I100=	10.70	Q100=	2.55

Frequency (Year)	Parameters for MWC IDF Equations		
	A	B	E
2-Year	56.43	11.5	0.81
5-Year	72	15	0.8
10-Year	82	15	0.8
25-Year	95	15	0.8
50-Year	108	15	0.8
100-Year	120	15	0.8



## Storm Sewer Structure Capacity Worksheet

### Inlet Capacity Summary

REFER TO FIELD INLET WIER CAPACITY WORKSHEET

### Pipe Capacity Summary

CAPACITY 24" RCP @ 0.50% = 17.38 CFS > 13.25 CFS (DA B2 Q100 + DETENTION POND PEAK Q100 RELEASE)

### Pipe Capacity Supporting Calculations

Pipe Capacity calculated by Manning's Equation =  $(1.49 \cdot AR^{2/3} S^{1/2}) / n$

Required head calculated using Diameter plus 1.5 times Velocity Head =  $D + (1.5 \cdot (V^2) / 2g)$

<u>Pipe Capacity</u>	
Pipe Diameter (D):	24 Inches
Box Span:	0 Feet
Box Rise:	0 Feet
Material:	RCP
Slope:	0.50%
Manning's n:	0.012
Area (A):	3.14 Square Feet
Wetted Perimeter (P):	6.28 Feet
Hydraulic Radius (A/P):	0.50 Feet
Velocity (V):	5.53 Ft/s
Capacity (Q):	<b>17.38 CFS</b>

<u>Required Head</u>	
Required Head:	2.71 Feet

<u>Pipe Capacity</u>	
Pipe Diameter (D):	30 Inches
Box Span:	0 Feet
Box Rise:	0 Feet
Material:	RCP
Slope:	0.50%
Manning's n:	0.012
Area (A):	4.91 Square Feet
Wetted Perimeter (P):	7.85 Feet
Hydraulic Radius (A/P):	0.63 Feet
Velocity (V):	6.42 Ft/s
Capacity (Q):	<b>31.51 CFS</b>

<u>Required Head</u>	
Required Head:	3.46 Feet

## Field Inlet Weir Opening Capacity Worksheet

### Weir Capacity Summary

CAPACITY OF 2.5' WIDE & 6" TALL FILED INLET = 2.94 CFS > 2.55 CFS (DA B2)

### Weir Capacity Supporting Calculations

Weir Capacity calculated by  $Q = 3.33bH^{3/2}$

#### Weir Capacity

b:	2.5 Ft
H:	0.5 Ft
Capacity (Q):	2.94 CFS
Q100:	2.55 CFS
Depth:	5.19 Inches



The City of  
**MIDWEST CITY**  
COMMUNITY DEVELOPMENT DEPARTMENT

Billy Harless, Community Development Director

ENGINEERING DIVISION  
Brandon Bundy, City Engineer  
CURRENT PLANNING DIVISION  
Kellie Gilles, Current Planning Manager  
COMPREHENSIVE PLANNING  
Petya Stefanoff, Comprehensive Planner  
BUILDING INSPECTION DIVISION  
Christine Brakefield, Building Official  
GIS DIVISION  
Greg Hakman, GIS Coordinator

**To:** Chairman and Planning Commission  
**From:** Billy Harless, Community Development Director  
**Date:** July 7, 2020

**Subject:** Discussion and consideration of an ordinance amending Appendix A, Zoning Regulations, of the Midwest City Code; by amending Section 4.5.2, Light Industrial: Restricted; Section 4.9.2, Use Chart and providing for repealer and severability and setting an effective date.

In July of 2019, staff received an application to rezone a parcel from C-3, Community Commercial to SPUD, to allow the use of marijuana processing. Currently, the Zoning Ordinance only allows marijuana processing in the I-1, I-2 and I-3 Industrial Districts. In reviewing this application, staff learned about some of the equipment that is used for marijuana processing is not as intensive as typical industrial equipment and machinery. The City Council took no action on that item to allow staff to research marijuana processing and determine if an amendment to our ordinances may be necessary.

Over the last year, staff has researched marijuana processing and consulted with other municipalities regarding their experiences and ordinances. Staff attended the regular APTAC (Areawide Planning and Technical Advisory Committee) meeting at ACOG (Association of Central Oklahoma Governments) on November 14, 2019. During this meeting, staff from various central Oklahoma communities discussed questions and concerns regarding medical marijuana. Midwest City staff asked those in attendance how they were approaching the various forms of processing within their zoning ordinance. Staff from communities including Del City, Edmond and El Reno stated that they too have realized that different forms of processing may be appropriate uses in zoning districts other than just industrial but had so far not made changes to their ordinances regarding processing.

The ordinance prepared for this meeting adds light processing in the Light Industrial: Restricted use unit classification and requires a special use permit for all Light Industrial: Restricted uses in the C-3, zoning district. Light Industrial: Restricted are allowed by right in the C-4, I-1, I-2 and I-3 zoning districts. Special use permit applications go before the Planning Commission for a recommendation and City Council for approval.

This process will allow staff to require that the applicant submit details of the processing equipment to be used. If the special use permit is approved, the building and fire inspectors as well as planning manager will make annual inspections of the facility as required by OMMA for the Certificate of Compliance. During these inspections, the building inspector and fire inspector will be able to view the equipment being used to ensure that it is consistent with the approved special use permit.



Section 7.6.5 of the Zoning Ordinance states that if the Community Development Director finds that the occupancy does not comply with the special use permit, it can be referred to the City Council for review. This section also requires that modification of an existing special use permit would require a new application and hearings before the Planning Commission and City Council.

This proposed ordinance amendment was recommended for approval by the Ordinance Review Committee on May 28, 2020. Notice of this amendment was published in the Journal Record. Action is at the discretion of the Planning Commission and City Council.

A handwritten signature in black ink, appearing to read "Billy Harless", written over a horizontal line.

Billy Harless, AICP  
Community Development Director

KG

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE AMENDING APPENDIX A, ZONING REGULATIONS, OF THE MIDWEST CITY CODE; BY AMENDING SECTION 4.5.2, LIGHT INDUSTRIAL: RESTRICTED; SECTION 4.9.2, USE CHART AND PROVIDING FOR REPEALER AND SEVERABILITY.**

**SECTION 1.** That Appendix A, Zoning Regulations, of the Midwest City Code, is hereby amended by amending Section 4.5.2, Light Industrial: Restricted, as follows:

Establishments engaged in the manufacture, assembly, research, or processing with all operations and processes entirely within an enclosed structure. There is no outdoor storage of raw materials and products.

Establishments have no outdoor industrial wastewater treatment system and produce no airborne emissions, objectionable noise, glare, odor, vibrations, smoke or dust associated with the industrial operation.

Typical uses include, but are not limited to, bakery employing more than five (5) fulltime employees; book binder; cabinet shop; clothing manufacturing; electronic equipment assembly and manufacturing; furniture upholstery; ice plant; laundry and dry cleaning plant employing more than five (5) full time people; printing plant; engraving plant; instrument and meter manufacture; mattress renovation; optical goods manufacture; photographic equipment manufacture; collection and compression of aluminum cans and glass for recycling. Also to include any plant extraction or processing that is deemed less hazardous than stated or accounted for in the International Building and Fire Codes. Examples of which include but are not limited to cold water washing and heat press processing.

Any Light Industrial: Restricted use requiring a Special Use Permit must apply for such permit in accordance with Section 7.6 of the Zoning Ordinance and any specific condition imposed on such use by the City Council must be adhered to during the operation of such use. If any specific conditions of an approved Special Use Permit are not adhered to, the Special Use Permit shall expire or the applicant must apply to amend the Special Use Permit in accordance with Section 7.6.5 of the Zoning Ordinance.

**SECTION 2.** That Appendix A, Zoning Regulations, of the Midwest City Code, is hereby amended by amending Section 4.9.2, Use Chart, as follows:

For line 4.5.2 a "S" will be shown for the following zoning district to indicate that a Special Use Permit is required: C-3

**SECTION 3. REPEALER.** All ordinances or parts of ordinances in conflict herewith are hereby repealed.

**SECTION 4. SEVERABILITY.** If any section, sentence, clause or portion of this ordinance is for any reason held to be invalid or unconstitutional, such portion shall be deemed a separate,

distinct and independent provision and such holding shall not affect the validity of the remaining portions of this ordinance.

PASSED AND APPROVED by the Mayor and Council of the City of Midwest City, Oklahoma, on the \_\_\_\_ day of \_\_\_\_\_, 2020.

THE CITY OF MIDWEST CITY, OKLAHOMA

\_\_\_\_\_  
MATTHEW D. DUKES II, Mayor

ATTEST:

\_\_\_\_\_  
SARA HANCOCK, City Clerk

APPROVED as to form and legality this \_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
HEATHER POOLE, City Attorney