



CITY OF NORMAN, OK
FLOODPLAIN PERMIT COMMITTEE MEETING
Development Center, Room B, 225 N. Webster Ave., Norman, OK 73069
Monday, June 02, 2025 at 3:30 PM

AGENDA

It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, relation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please call 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.

ROLL CALL

MINUTES

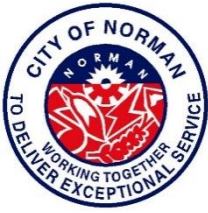
1. Approval of minutes from the April 7, 2025 meeting. Postponed from the May 19th, 2025 meeting.
2. Approval of minutes from the May 19, 2025 meeting.

ACTION ITEMS

3. **Floodplain Permit Application No. 716** - This floodplain permit application is for the proposed creation of a burn pit in the Bishop Creek floodplain near Eagle Cliff West development.
4. **Floodplain Permit Application No. 717** - This floodplain permit application is for the proposed replacement of a pedestrian bridge over Brookhaven Creek near 705 36th Ave. NW.

MISCELLANEOUS COMMENTS

ADJOURNMENT



CITY OF NORMAN, OK

FLOODPLAIN PERMIT COMMITTEE MEETING

Development Center, Conference Room B, 225 N. Webster Avenue,
Norman, OK 73069

Monday April 7, 2025 at 3:30 PM

MINUTES

The Floodplain Permit Committee of the City of Norman, Cleveland County, State of Oklahoma, met in Regular Session in Conference Room B at the Development Center, on the 7th day of April, 2025, at 3:30 p.m., and notice of the agenda of the meeting was posted at the Norman Municipal Building at 201 West Gray, Development Center at 225 N. Webster and on the City website at least 24 hours prior to the beginning of the meeting.

ROLL CALL

The meeting was called to order by Mr. Miles at 3:30 p.m. Roll was taken. Committee members in attendance included Bill Scanlon, Resident Member; Sherri Stansel, Resident Member; Tim Miles, City Engineer; Lora Hoggatt, Public Services Manager and Ken Danner, Subdivision Development Manager. Committee members absent included Scott Sturtz, Floodplain Administrator and Jane Hudson, Director of Planning. Also in attendance were Jason Murphy, Stormwater Program Manager; Roxsie Stephens, Staff; Kevin Korrale, Encore Operating Inc; and Chris Anderson, SMC Consulting.

MINUTES

1. Approval of minutes from the March 17th meeting

Mr. Sturtz asked for any comments on the minutes from the meeting of March 17th, 2025. There were no edits needed or requested. The motion for approval was made by Mr. Scanlon and seconded by Mr. Danner. The minutes were approved with a vote of 5-0.

ACTION ITEMS

2. Floodplain Permit No. 707

Mr. Miles stated that the permit application is for the proposed installation of an oil well in the lot on the northwest corner of the intersection of 60th avenue NW and West Franklin Road in the Ten-Mile Flat Creek Floodplain.

Mr. Murphy stated the applicant is Encore Operating, Inc. and the Engineer is SMC Consulting Engineers P.C.

Mr. Murphy provided a staff report, detailing the requirements for the proposed new private drive and oil well installation, with respect to the floodplain permit requirements.

Staff recommends permit application #707 be approved with the following conditions:

1. As-builts be provided of the new private drive, well area pads and compensatory storage to ensure adequate elevations and compensatory volume is achieved.
2. Calculations for any additional volume of fill be provided for bringing drive approach off of 60th Avenue NW up to code. If that volume exceeds the expected 824 cubic yards of excess compensatory storage being created, then the compensatory storage volume should increase to accommodate that additional quantity of fill.

Mr. Murphy and Mr. Miles asked the committee if they had any questions.

Mr. Miles asked for any comments from the public.

Mr. Danner motioned to approve the permit. Mr. Scanlon seconded the motion. **The permit application passed with a vote of 5-0.**

3. Floodplain Permit No. 711

Mr. Murphy stated the Application for Permit No. 711 is for the proposed construction of a cellular tower in the Canadian River floodplain south of Jefferson Road and east of I-35.

Mr. Murphy said the applicant is American Towers, LLC and the Engineer is Patrick Barry P.E., with the builder to be determined.

Mr. Murphy presented the staff report, providing details of requirements for the installation of a cellular communications tower, the compensatory storage, a security fence, and a primary compound.

Mr. Murphy stated staff recommends Floodplain Permit Application #680 be approved with the following condition:

1. As-builts be provided verifying the appropriate compensatory storage has been provided and elevations of constructed structures, including the compound and access road were built to the approximate specifications provided in the application. As-builts should also include the elevation of installed electrical equipment to verify freeboard requirements.

Mr. Miles asked the committee if they have any questions.

- Mr. Stanzel asked about the location of the compensatory storage and the potential of un-housed individuals creating encampments.
- Mr. Miles stated that the height of the tower in relation to the distance the proposed installation is from the right of way.
- Ms. Hoggatt confirmed that the code requirement of distance from right of way will require the proposed installation location to be changed.

The committee discussed the permit and determined a postponement is needed. Mr. Murphy stated that Staff will also now recommend for a postponement.

Mr. Miles asked for any comments from the public.

Mr. Scanlon motioned to postpone voting on permit. Mr. Danner seconded the motion. The postponement vote passed with a vote of 5-0.

MISCELLANEOUS COMMENTS

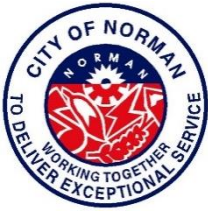
Mr. Murphy stated that Norman in the Know was being held as a public meeting that evening. He also stated that presently there were not any permits pending for the next meeting.

ADJOURNMENT

Mr. Danner motioned to adjourn. Mr. Scanlon seconded the motion. Mr. Sturtz adjourned the meeting at 4:01p.m.

Passed and approved this _____ day of _____, 2025

City of Norman Floodplain Administrator, Scott Sturtz



CITY OF NORMAN, OK

FLOODPLAIN PERMIT COMMITTEE MEETING

Development Center, Conference Room B, 225 N. Webster Avenue,
Norman, OK 73069

Monday May 19, 2025 at 3:30 PM

MINUTES

The Floodplain Permit Committee of the City of Norman, Cleveland County, State of Oklahoma, met in Regular Session in Conference Room B at the Development Center, on the 19th day of May, 2025, at 3:30 p.m., and notice of the agenda of the meeting was posted at the Norman Municipal Building at 201 West Gray, Development Center at 225 N. Webster and on the City website at least 24 hours prior to the beginning of the meeting.

ROLL CALL

The meeting was called to order by Mr. Sturtz at 3:30 p.m. Roll was taken. Committee members in attendance included Bill Scanlon, Resident Member; Sherri Stansel, Resident Member; Scott Sturtz, Floodplain Administrator; Jane Hudson, Director of Planning; Tim Miles, City Engineer; and Ken Danner, Subdivision Development Manager. Committee members absent included Lora Hoggatt, Public Services Manager. Also in attendance were Jason Murphy, Stormwater Program Manager; and Roxsie Stephens, Staff. Citizens in attendance included Lollie Lenker, Doug and Stacy Shelton, Nathan Madenwald, Taul Sanders, and Tahir Nasir.

MINUTES

1. Approval of minutes from the April 7th 2025 meeting

The approval of minutes was postponed until the next Floodplain meeting on June 2nd, 2025.

ACTION ITEMS

2. Floodplain Permit No. 714

Mr. Sturtz stated that the floodplain permit application is for the realignment of a sewer interceptor line near the Chardonnay development in the Woodcrest Creek Floodplain.

Mr. Murphy stated the applicant is City of Norman Utilities. The contractor is TBD and the engineer is Ken Giannone P.E.

Mr. Murphy provided a staff report, detailing the requirements for the realignment of the sewer interceptor line, with respect to the floodplain permit requirements.

Mr. Murphy stated staff recommends permit application #714 be approved.

Mr. Sturtz asked the committee if they had any questions.

Mr. Sturtz asked for any comments from the public. Doug & Stacy Shelton asked for clarification on the map being used for floodplain determination. It was discussed and confirmed that if the property owners have a LOMA, determining that their property is no longer part of the Floodplain, then their property will still show on the FEMA Floodplain map because it is not updated with each individual LOMA determination.

Mr. Scanlon motioned to approve the permit. Mr. Danner seconded the motion. **The permit application was granted with a vote of 6-0.**

3. Floodplain Permit No. 715

Mr. Murphy stated that the floodplain permit application is for an interior remodel of the Trails Golf Course club house in the Canadian River floodplain.

Mr. Murphy said the applicant is DP Gamble Homes and the engineer is Tahir Nasir, P.E., S.E. (NSE Engineering).

Mr. Murphy presented the staff report, providing details of requirements for the interior remodel, with respect to the Floodplain permit requirements.

Mr. Murphy stated staff recommends Floodplain Permit Application #715 be approved.

Mr. Sturtz asked the committee if they have any questions.

Mr. Sturtz asked for any comments from the public.

Mr. Danner motioned to approve. Mr. Scanlon seconded the motion. **The permit application was granted with a vote of 6-0.**

MISCELLANEOUS COMMENTS

Mr. Sturtz provided information to the committee related to a recent floodplain violation that is currently being addressed.

ADJOURNMENT

Mrs. Hudson motioned to adjourn. Mr. Danner seconded the motion. Mr. Sturtz adjourned the meeting at 3:52 p.m.

Passed and approved this _____ day of _____, 2025

City of Norman Floodplain Administrator, Scott Sturtz

STAFF REPORT

06/02/2025

PERMIT NO. 716

ITEM: This Floodplain Permit Application is for the proposed burn pit in the Bishop Creek floodplain near Eagle Cliff West subdivision.

BACKGROUND:

APPLICANT: Home Creations

Builder: ESO Excavation, LLC

ENGINEER: SMC Consulting Engineers, P.C.

On March 13, 2025, a floodplain notice of violation was sent to the applicant in regards to illegal fill in the Bishop Creek floodplain near Eagle Cliff West Subdivision. Trees that had been cleared for the development had been discarded into the adjacent floodplain. A complaint had been filed by two different groups of inspectors that had discovered the violation during routine inspections. Home Creations staff met with City staff to discuss a remedy. Staff recommended removal of the fill from the floodplain and disposal of the material offsite outside of the floodplain. The applicant indicated that removal of the material from the floodplain was not possible and proposed to burn the fill on site using an air curtain incinerator in a 10' wide by 30' long and 10' deep burn pit. Air curtain incineration involves the use of a forced air "curtain" that contains smoke and particulates and recirculates the material and re-burns it reducing smoke and emissions significantly. The applicant has indicated that multiple pits will likely be required to dispose of all the material. According the applicant's engineer, this process leaves little to no remaining material and will effectively remove the fill from the floodplain and satisfy the requirements of the notice of violation. This process is weather dependent and likely to take several months to complete. The applicant has contacted the Norman Fire Marshall and began the process of obtaining a burn permit for this work.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? Yes ☐ No ☒

According to the latest FIRM, the site of the proposed work is located in the Bishop Creek Floodplain (Zone AE). At the proposed site, the BFE is 1088.0'. Aerial images from multiple years indicate that the area is regularly inundated with water where a significant amount of the material is currently located. The applicant has indicated they plan to move the material further north, but partially inside the regulatory floodplain to create the burn pits. See attached plans and aerial maps. The applicant has indicated that some of the burn pits may be outside of the floodplain, but likely, most won't be. Staff recommendation would be that work be performed outside of the regulatory floodplain negating the need for the permit to address the existing violation, the applicant has indicated that removing the fill from the floodplain in a manner other than burn pits at this location is not possible.

Applicable Ordinance Sections:

Subject Area:

36-533 (e)2(a)..... Fill restrictions
 (e)2(e)..... Compensatory storage
 (f)(3)(8) No rise considerations

(e)2(a) and (e)2(e) Fill Restrictions in the Floodplain and Compensatory Storage – Fill is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered, and erosion problems can develop. Compensatory storage must be provided within the general location of any storage that is displaced by fill or other development activity and must serve the equivalent hydrologic function as the portion which is displaced with respect to the area and elevation of the floodplain.

The applicant has indicated that an air curtain incinerator will leave little to no material once the process is complete. This would correct the existing violation and satisfy the requirement once the work is complete.

(f)3(a)(8) No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property as a result of the proposed work is required. For proposed development within a designated regulatory floodway, certification that no increase in the BFE on any adjacent property as a result of the proposed work is required.

The project engineer has submitted a No Rise statement indicating that this project will not cause a rise in the BFE at this location, meeting the ordinance requirements.

Conclusion: Staff forwards this application for Floodplain Permit #716 to Floodplain Permit Committee for their consideration.

ACTION TAKEN: _____



City of Norman

Floodplain Permit Application

Floodplain Permit No. 716

Building Permit No. _____

Date 05/22/2025 6/2/2025

FLOODPLAIN PERMIT APPLICATION (\$100.00 Application Fee Required)

SECTION 1: GENERAL PROVISIONS (APPLICANT to read and sign):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
5. The permit will expire if no work is commenced within 2 years of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
7. Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) Any modifications of the stream banks or flow line within the area that would be regulatory floodway whether or not that channel has a regulatory floodplain, unless the work is being done by the City of Norman staff as part of a routine maintenance activity.
9. All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.)

APPLICANT: Home Creations ADDRESS: 2240 N. Broadway, Moore, OK 73160TELEPHONE: (405) 692-2222 SIGNATURE: mo sharifiBUILDER: ESO Excavation, LLC ADDRESS: P.O. Box 1001 Mustang, OK 73064TELEPHONE: (405) 554-3478 SIGNATURE: Eric OwensENGINEER: SMC Consulting
Engineers, P.C. ADDRESS: 815 W. Main, OKC, OK 73106TELEPHONE: (405) 232-7715 SIGNATURE: C.D. Q

PROJECT LOCATION

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful.

Eagle Cliff West, Section 1

Approximate Center of Site: 35°10'00.6"N / 97°26'03.2"W

DESCRIPTION OF WORK (Check all applicable boxes):**A. STRUCTURAL DEVELOPMENT**ACTIVITYSTRUCTURE TYPE

- | | |
|--|---|
| <input type="checkbox"/> New Structure | <input type="checkbox"/> Residential (1-4 Family) |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Residential (More than 4 Family) |
| <input type="checkbox"/> Alteration | <input type="checkbox"/> Non-Residential (Flood proofing? <input type="checkbox"/> Yes) |
| <input type="checkbox"/> Relocation | <input type="checkbox"/> Combined Use (Residential & Commercial) |
| <input checked="" type="checkbox"/> Demolition | <input type="checkbox"/> Manufactured (Mobile) Home |
| <input type="checkbox"/> Replacement | <input type="checkbox"/> In Manufactured Home Park? <input type="checkbox"/> Yes |

ESTIMATED COST OF PROJECT \$ TBD Work that involves substantial damage/substantial improvement requires detailed cost estimates and an appraisal of the structure that is being improved.

B. OTHER DEVELOPMENT ACTIVITIES:

- ☐ Fill ☐ Mining ☐ Drilling ☐ Grading
- ☒ Excavation (Beyond the minimum for Structural Development)
- ☐ Watercourse Alteration (Including Dredging and Channel Modifications)
- ☐ Drainage Improvements (Including Culvert Work) ☐ Road, Street or Bridge Construction
- ☐ Subdivision (New or Expansion) ☐ Individual Water or Sewer System

In addition to items A. and B. provide a complete and detailed description of proposed work (failure to provide this item will be cause for the application to be rejected by staff). Attach additional sheets if necessary.

Burning cleared trees within floodplain while using air curtain incinerator and associated burn pit.

Burn pit to be approximately 10' wide by 30' long by 10' deep.

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

- A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above to the location of the channel, floodway, and the regulatory flood-protection elevation.
- B. A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information.

☒ Not Applicable:

- C. Subdivision or other development plans (If the subdivision or other developments exceeds 50 lots or 5 acres, whichever is the lesser, the applicant **must** provide 100-year flood elevations if they are not otherwise available).

☒ Not Applicable:

- D. Plans (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, soil types and other pertinent information.

☒ Not Applicable:

- E. A profile showing the slope of the bottom of the channel or flow line of the stream.

☒ Not Applicable:

- F. Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures.

☒ Not Applicable:

- G. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

☒ Not Applicable:

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
- I. A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.
- J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

The proposed development is located on FIRM Panel No.: 40027C0295J, Dated: 02/20/2013

The Proposed Development:

☐ Is NOT located in a Special Flood Hazard Area

(Notify the applicant that the application review is complete and NO FLOODPLAIN PERMIT IS REQUIRED).

☒ Is located in a Special Flood Hazard Area.

☐ The proposed development is located in a floodway.

☒ 100-Year flood elevation at the site is 1089.00 Ft. NGVD (MSL) ☐ Unavailable

See Section 4 for additional instructions.

SIGNED: 

DATE: 5/29/25

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The applicant must also submit the documents checked below before the application can be processed.

- ☐ Flood proofing protection level (non-residential only) _____ Ft. NGVD (MSL). For flood proofed structures applicant must attach certification from registered engineer.
- ☐ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☒ Certification from a registered engineer that the proposed activity in a regulatory flood plain will result in an increase of no more than 0.05 feet in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☐ All other applicable federal, state, and local permits have been obtained.

Other: _____

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Chairman.)

The proposed activity: (A) ☐ **Is**; (B) ☐ **Is Not** in conformance with provisions of Norman's City Code Chapter 22, Section 429.1. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED: _____ DATE: _____

If **BOX A** is checked, the Floodplain committee chairman may issue a Floodplain Permit.

If **BOX B** is checked, the Floodplain committee chairman will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Floodplain committee or may request a hearing from the Board of Adjustment.

APPEALS: Appealed to Board of Adjustment: ☐ Yes ☐ No
 Hearing date: _____

Board of Adjustment Decision - Approved: ☐ Yes ☐ No

Conditions:

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Occupancy is issued.)

1. FEMA Elevation Certificate
and/or
2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.

Consulting Engineers, P.C.
815 West Main
Oklahoma City, OK 73106
405-232-7715
FAX 405-232-7859
www.smcokc.com

*Civil Engineering
Land Development
Storm Water Management*

Terence L. Haynes
Christopher D. Anderson
Muhammad A. Khan

May 22, 2025

Mr. Scott Sturtz, P.E., CFM
Floodplain Administrator
City of Norman

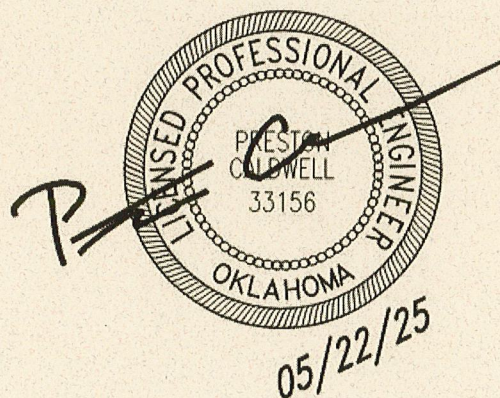
RE: No Rise Certification for
Eagle Cliff West, Section 1
Norman, Oklahoma
SMC #6552.01

Dear Mr. Sturtz,

As a part of the proposed construction of Eagle Cliff Section 1, there were trees cleared to allow the subdivision to be built. These trees have been pushed offsite within the adjacent FEMA Effective Floodplain to be burned. The contractor will be utilizing an air curtain incinerator with an appropriately sized burn pit (roughly 10' wide by 30' long by 10' deep). With this incineration process, there will be little to no remaining material upon completion of the burning. Nonetheless, there will be no rise in the base flood elevation (BFE) or adverse impact will occur on the property or any adjacent properties, upstream or downstream.

Sincerely,
SMC Consulting Engineers, P.C.

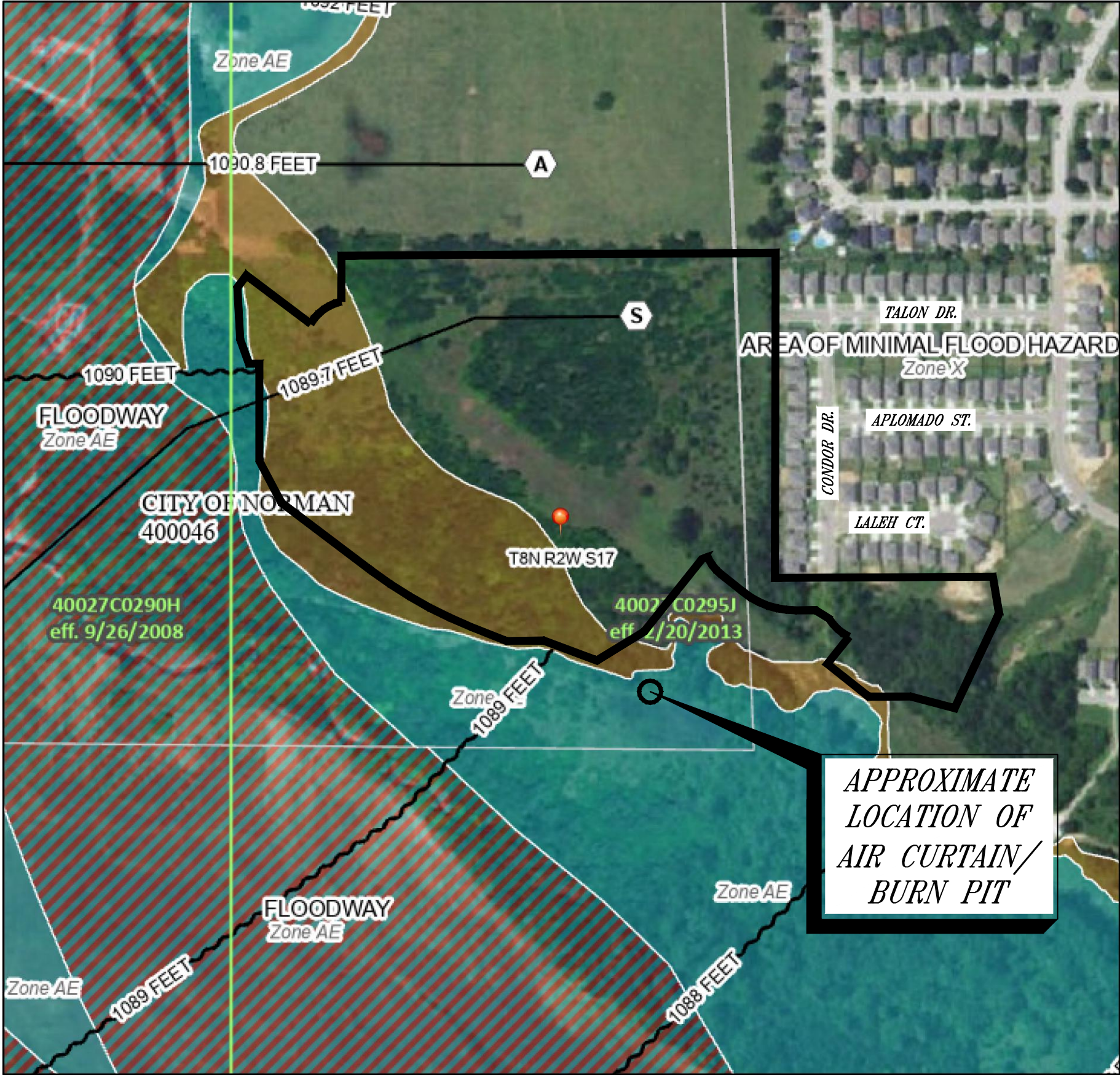
Preston Caldwell, P.E.



National Flood Hazard Layer FIRMMette



97°26'23"W 35°10'11"N



97°25'45"W 35°9'42"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

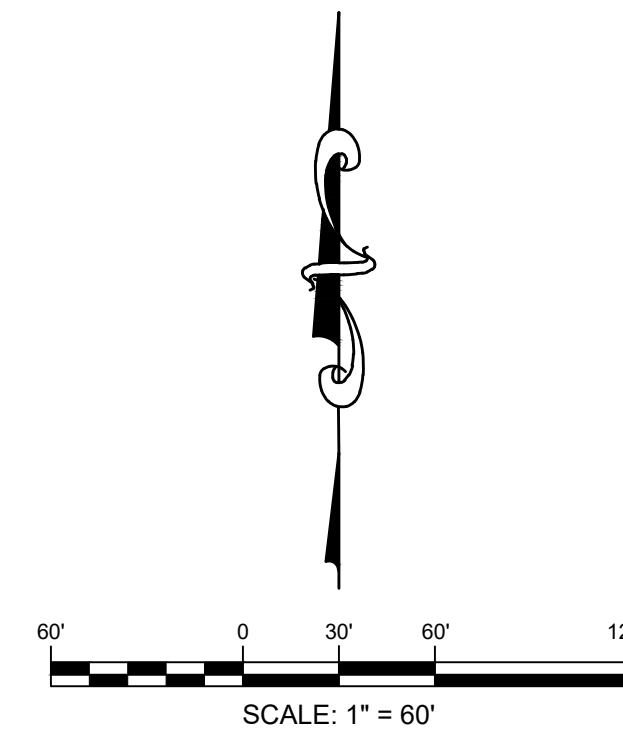
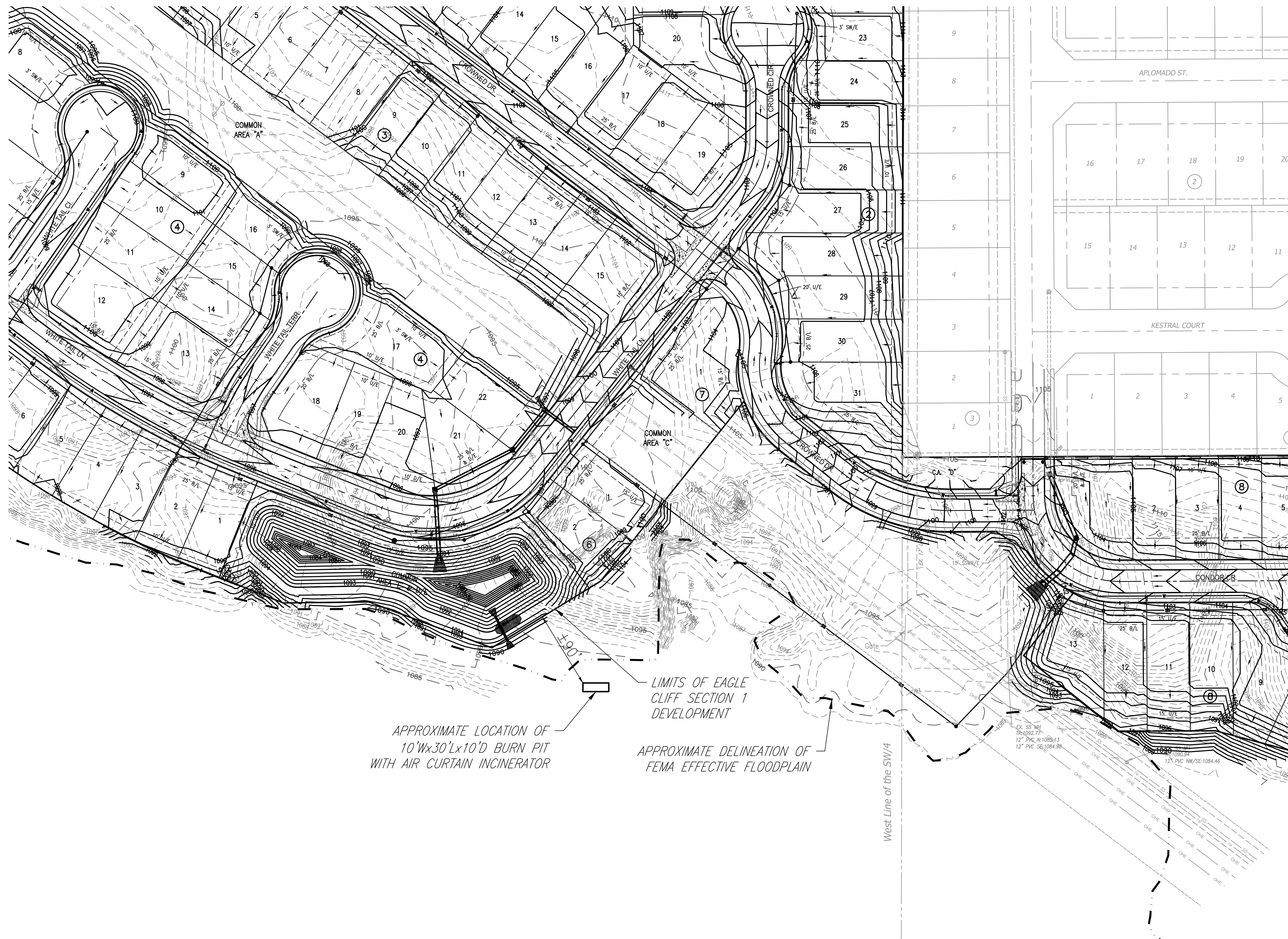
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/22/2025 at 1:58 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

SITE & GRADING PLAN FOR FLOODPLAIN ACTIVITY PERMIT**EAGLE CLIFF WEST SECTION 1**

A PART OF THE N.E. ¼ OF SECTION 16, T13N, R5W, I.M.
OKLAHOMA CITY, CANADIAN COUNTY, OKLAHOMA

**EAGLE CLIFF WEST SECTION 1****JENKINS AVE. & POST OAK DR.
NORMAN, OKLAHOMA**

SMC
Consulting Engineers, P.C.
6110 S. Lincoln Blvd., Suite 200
Norman, Oklahoma 73069
Phone: 405-232-7715 Fax: 405-232-7659
Website: www.smcok.com

OKLAHOMA CERTIFICATE OF AUTHORIZATION NO. CA 464 EXP. 06/30/2025

No. Revision

By Date

PROJECT NO.: 6552.01
DATE: 05/22/25
SCALE: 1" = 60'
DRAWN BY: SY
ENGINEER: CHRISTOPHER D. ANDERSON
P.E. NUMBER: 18288

**SITE & GRADING PLAN
FOR FLOODPLAIN
ACTIVITY PERMIT**

SHEET NO.
EXHIBIT 1



The City of NORMAN

225 N. Webster • P.O. Box 370
Norman, Oklahoma 73069 • 73070

Item 3.

March 13, 2025

Home Creations
c/o Hossein Farzaneh
2252 North Broadway Street
Moore, OK 73160

Certified Mail
Regular U.S. Mail
Email: DEQ@homecreations.com

Re: Illegal Modification and Fill in the Bishop Creek Floodplain at Eagle Cliff West Development

Dear Mr. Farzaneh:

City staff investigated illegal modifications of the floodplain and illegal fill material in the floodplain on property you own immediately south of the Eagle Cliff West Development. The location of the excavation and fill material are indicated on the attached map and are located within the City of Norman (1% chance) floodplain Zone AE.

City records indicate that floodplain permits have not been obtained to perform modifications or place fill within the floodplain, which is a violation of the floodplain ordinance. In summary, you are in violation of the City Code of Ordinances Chapter 36 Section 533 FH, Flood Hazard District, which has been adopted by City Council.

Section 533 FH (f)(14) - Enforcement of Violations

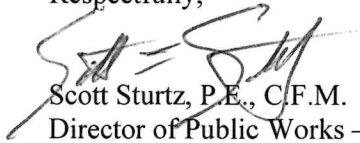
- a. Each day during which a violation exists shall constitute a separate offense.
- b. For each offense cited, a penalty of not less than \$50.00 nor more than \$750.00 shall be assessed to:
 1. The owners of record; and/or
 2. Any person employed in connection therewith and who may have assisted in the commission of such violation.
 - i. In addition to the penalties provided in NCC 1-114, the City may institute appropriate actions or proceedings at law or equity for the enforcement of the provisions of this article or to correct the violations thereof. The conviction and punishment of any person hereunder shall not relieve such person from the responsibility to correct prohibited buildings, structures, obstructions, or improvements, nor prevent the enforcement, correction, or removal thereof.
 - ii. The legally recorded owner of any property located in a special flood hazard area onto which fill material of any nature has been applied, with or without his knowledge and in violation of the provisions of this article, shall immediately, and at his expense, remove all such material upon written request to do so by the Director of Public Works. Upon failure of the property owner to complete this work in a timely manner, the City Council may order the work to be completed and expenses charged to the property owner or levied against the property.
 - iii. Any and all apprehended persons depositing fill material of any nature in violation of this article shall be prosecuted to the fullest extent of the law.

Please be aware that any development including modifications or placing of fill in the floodplain requires a floodplain permit from the City. More information is available on the City's website

(www.normanok.gov) by clicking the Flood Hazard Protection link on the Stormwater Division's home page. The floodplain permit application form can be downloaded from the website also.

Please apply for floodplain permits or remove fill and return the disturbed areas to their original condition by April 13, 2025. Failure to comply may result in the aforementioned penalties, as well as any other means of removal or compliance attainment allowed by law. Please contact Jason Murphy at (405) 366-5455 if you need further information about the floodplain permit.

Respectfully,



Scott Sturtz, P.E., C.F.M.





Director of Public Works – Floodplain Administrator

cc: Darrell Pyle, City Manager
Shannon Stevenson, Assistant City Manager
Tim Miles, City Engineer
Beth Muckala, Assistant City Attorney III
Jason Murphy, Stormwater Program Manager
Todd McLellan, Development Engineer



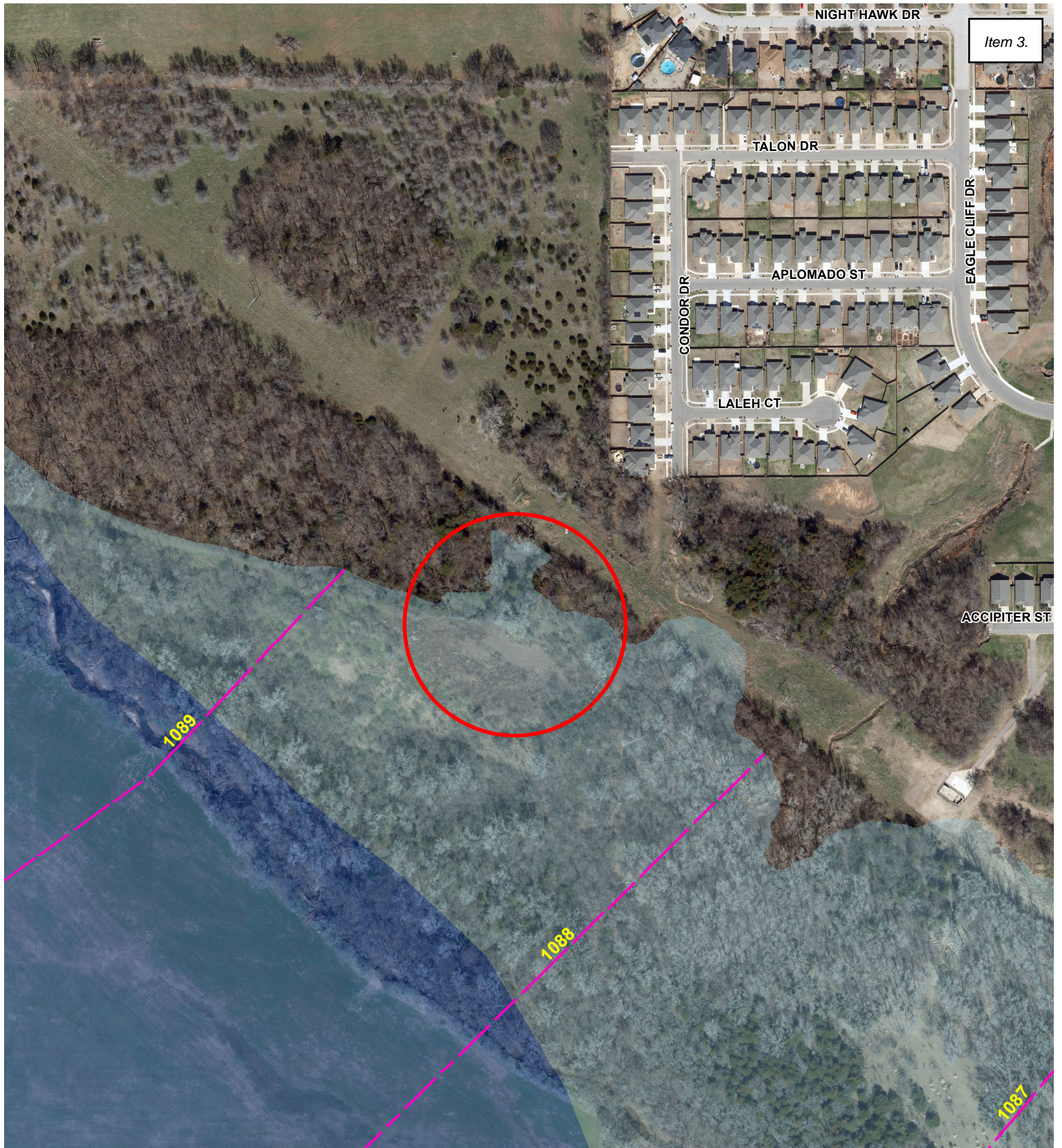
Eagle Cliff West

Legend

-  1% Chance Floodplain
-  Floodway
-  Lot Line
-  Parcel

Mar 10, 2025 at 11:29:01 AM
Norman OK 73072
United States








Item 3.



Eagle Cliff West 2023




Legend

-  BFE 2021
-  1% Chance Floodplain
-  Floodway



Eagle Cliff West Dec. 2024 Approximate Burn Pit Locations

Legend

-  BFE 2021
-  1% Chance Floodplain
-  Floodway

STAFF REPORT

06/02/2025

PERMIT NO. 717

ITEM: This Floodplain Permit Application is for the proposed replacement of a pedestrian bridge over Brookhaven Creek near 705 36th Avenue NW.

BACKGROUND:

APPLICANT: Chris Dragg

Builder: Chris Dragg

ENGINEER: Dansby Engineering, PLC

A bridge over Brookhaven Creek connecting the residents of the development at 705 36th Avenue NW, the Westchester Townhomes, to the park area and community pool was built in 1984. This was a concrete bridge spanning the creek. During the heavy rains at the end of April 2025, significant debris and erosion from the flood waters caused the aging bridge to become compromised and irreparably damaged. An emergency permit was granted by the City's floodplain administrator to allow for the removal of the bridge and stabilization to occur to prevent further damage and removing a blockage that could have caused flooding on adjacent properties and upstream of the bridge. The applicant is now requesting a floodplain permit to rebuild the bridge. The applicant's engineer states that the new bridge will tie into the existing sidewalk and bridge to match the original bridge grades and elevations to again allow access by the residents to the park and community pool facilities as well as repair the sidewalk and stabilize the banks and eroded areas to make the area safe for pedestrians and preserve the property.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? Yes ☐ No ☒

According to the latest FIRM, the site of the proposed work is located in the Brookhaven Creek Floodplain (Zone AE). At the proposed site, the BFE is 1149.0'. The applicant has indicated that any fill used in the repair will be obtained from adjacent area. Placement of stabilization materials, such as rip rap, will be installed at grade and will only be used to replace what has been lost by erosion and scour.

Applicable Ordinance Sections:

Subject Area:

36-533 (e)2(a)..... Fill restrictions
 (e)2(e)..... Compensatory storage
 (f)(3)(8) No rise considerations

(e)2(a) and (e)2(e) Fill Restrictions in the Floodplain and Compensatory Storage – Fill is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered, and erosion problems can develop. Compensatory storage must be provided within the general location of any storage that is displaced by fill or other development activity and must serve the equivalent hydrologic function as the portion which is displaced with respect to the area and elevation of the floodplain.

The applicant has indicated that fill used for grading will be obtained from onsite creating a net zero gain. Stabilization materials will be installed at grade and is only to replace what was lost to erosion and scour, meeting this ordinance requirement.

(f)3(a)(8) No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property as a result of the proposed work is required. For proposed development within a designated regulatory floodway, certification that no increase in the BFE on any adjacent property as a result of the proposed work is required.

The project engineer has submitted a No Rise statement indicating that this project will not cause a rise in the BFE at this location, meeting the ordinance requirements.

Recommendation: Staff recommends Floodplain Permit Application #717 be approved.

ACTION TAKEN: _____



City of Norman

Floodplain Permit Application

Floodplain Permit No. 717

Building Permit No. _____

Date 6/2/2025

FLOODPLAIN PERMIT APPLICATION (\$100.00 Application Fee Required)

SECTION 1: GENERAL PROVISIONS (APPLICANT to read and sign):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
5. The permit will expire if no work is commenced within 2 years of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
7. Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) Any modifications of the stream banks or flow line within the area that would be regulatory floodway whether or not that channel has a regulatory floodplain, unless the work is being done by the City of Norman staff as part of a routine maintenance activity.
9. All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.)

APPLICANT: Chris Dragg ADDRESS: 3817 Danfield Lane Norman Ok 73072TELEPHONE: 405-823-5354SIGNATURE: J. W. Dansby (Agent)BUILDER: Chris Dragg ADDRESS: 3817 Danfield LaneTELEPHONE: 405-823-5354SIGNATURE: J. W. Dansby (Agent)ENGINEER: Dansby Engineering, PLC ADDRESS: 2202 Westpark Dr. Suite B Norman, OK 73069TELEPHONE: (405)760-8830SIGNATURE: J. W. Dansby

PROJECT LOCATION

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful.

703 36th Ave NW – Spring Brook Addition 4 Lot 1 Blk 1 unit 21 Westchester Condominiums A Unit Ownership Estate & 1/30 INT C/E

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURE TYPE

- | | |
|---|---|
| <input type="checkbox"/> New Structure | <input type="checkbox"/> Residential (1-4 Family) |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Residential (More than 4 Family) |
| <input type="checkbox"/> Alteration | <input type="checkbox"/> Non-Residential (Flood proofing? <input type="checkbox"/> Yes) |
| <input type="checkbox"/> Relocation | <input type="checkbox"/> Combined Use (Residential & Commercial) |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Manufactured (Mobile) Home |
| <input checked="" type="checkbox"/> Replacement | <input type="checkbox"/> In Manufactured Home Park? <input type="checkbox"/> Yes |

ESTIMATED COST OF PROJECT \$ 6500.00 Work that involves substantial damage/substantial improvement requires detailed cost estimates and an appraisal of the structure that is being improved.

B. OTHER DEVELOPMENT ACTIVITIES:

- ☒ Fill ☐ Mining ☐ Drilling ☒ Grading
☐ Excavation (Beyond the minimum for Structural Development)
☐ Watercourse Alteration (Including Dredging and Channel Modifications)
☐ Drainage Improvements (Including Culvert Work) ☒ Road, Street or Bridge Construction
☐ Subdivision (New or Expansion) ☐ Individual Water or Sewer System

In addition to items A. and B. provide a complete and detailed description of proposed work (failure to provide this item will be cause for the application to be rejected by staff). Attach additional sheets if necessary.

This project proposes the construction of a permanent pedestrian bridge to replace a previously existing structure over Brookhaven Creek, which was removed due to flood-related damage and safety concerns.

The bridge connects the Westchester Townhomes' internal sidewalk system to the community pool facility. The replacement bridge will tie into the existing sidewalk paths and match the original

bridge's grades and elevations to ensure continuity, accessibility, and aesthetic consistency

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

- A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above to the location of the channel, floodway, and the regulatory flood-protection elevation.
- B. A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information.

☐ Not Applicable:

SEE ATTACHED FEMA MAP

- C. Subdivision or other development plans (If the subdivision or other developments exceeds 50 lots or 5 acres, whichever is the lesser, the applicant **must** provide 100-year flood elevations if they are not otherwise available).

☒ Not Applicable:

- D. Plans (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, soil types and other pertinent information.

☐ Not Applicable:

SEE ATTACHED CONSTRUCTION PLANS

- E. A profile showing the slope of the bottom of the channel or flow line of the stream.

☐ Not Applicable:

SEE ATTACHED FEMA STUDY DOCS

DATED JANURARY 15, 2021

- F. Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures.

☒ Not Applicable:

- G. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

☒ Not Applicable:

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.

-SEE ATTACHED NO RISE CERTIFICATE & LETTER

- I. A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.
- J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

The proposed development is located on FIRM Panel No.: 0280J, Dated: 1/15/2021

The Proposed Development:

☐ Is NOT located in a Special Flood Hazard Area

(Notify the applicant that the application review is complete and NO FLOODPLAIN PERMIT IS REQUIRED).

☐ Is located in a Special Flood Hazard Area.

☒ The proposed development is located in a floodway.

☒ 100-Year flood elevation at the site is 1149.0 Ft. NGVD (MSL) ☐ Unavailable

See Section 4 for additional instructions.

SIGNED: _____

DATE: 5/29/2025

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The applicant must also submit the documents checked below before the application can be processed.

- ☐ Flood proofing protection level (non-residential only) _____ Ft. NGVD (MSL). For flood proofed structures applicant must attach certification from registered engineer.
- ☐ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☐ Certification from a registered engineer that the proposed activity in a regulatory flood plain will result in an increase of no more than 0.05 feet in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted.
- ☐ All other applicable federal, state, and local permits have been obtained.

Other: _____

SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Chairman.)

The proposed activity: (A) ☐ **Is**; (B) ☐ **Is Not** in conformance with provisions of Norman's City Code Chapter 36, Section 533. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED: _____ DATE: _____

If **BOX A** is checked, the Floodplain committee chairman may issue a Floodplain Permit.

If **BOX B** is checked, the Floodplain committee chairman will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Floodplain committee or may request a hearing from the Board of Adjustment.

APPEALS: Appealed to Board of Adjustment: ☐ Yes ☐ No
 Hearing date: _____

Board of Adjustment Decision - Approved: ☐ Yes ☐ No

Conditions:

SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Occupancy is issued.)

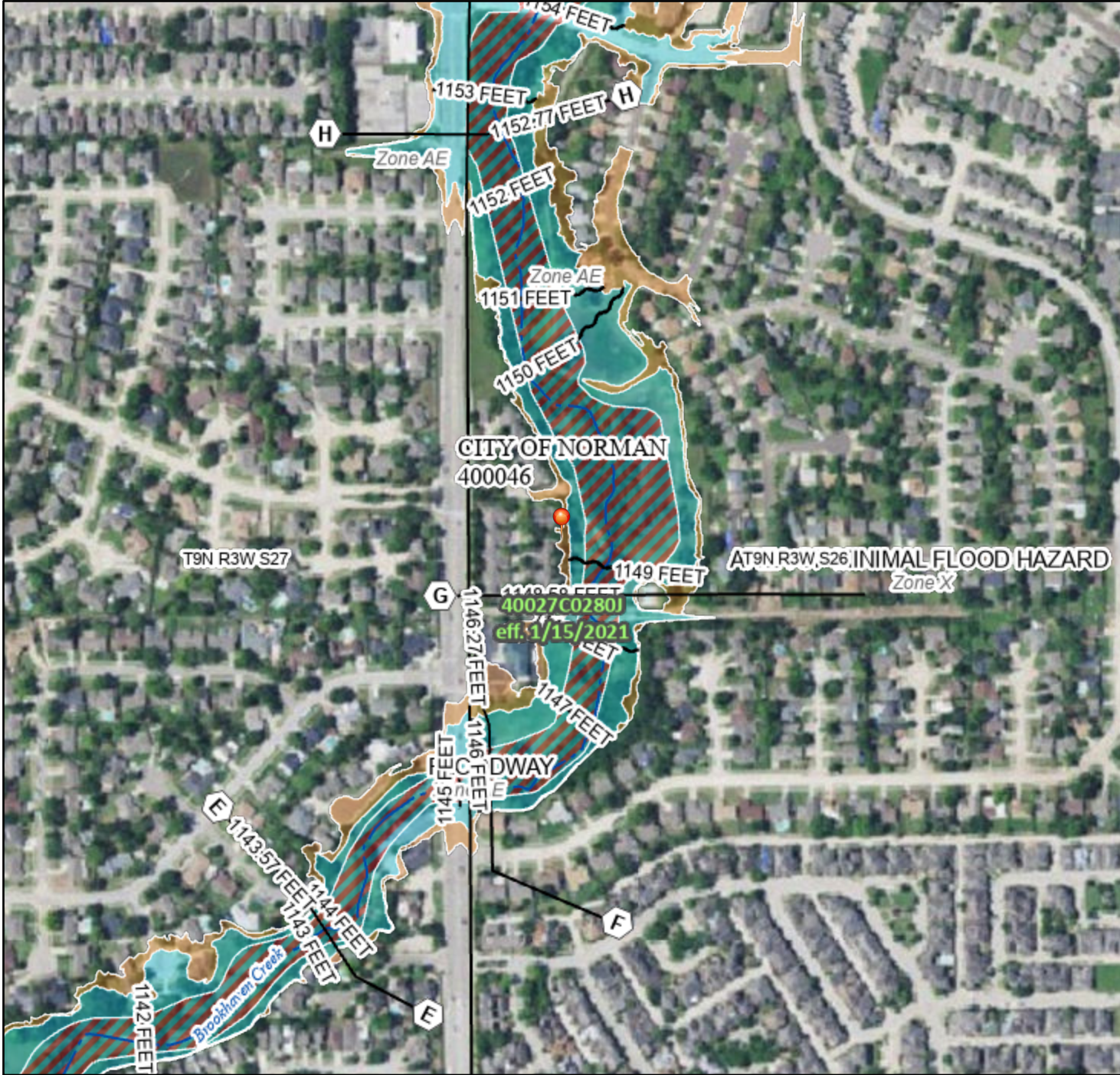
1. FEMA Elevation Certificate
and/or
2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.

National Flood Hazard Layer FIRMette



97°29'55"W 35°13'49"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

97°29'17"W 35°13'20"N

Basemap Imagery Source: USGS National Map 2023

Legend

Item 4.

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM UT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/29/2025 at 6:10 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifier, FIRM panel number, and FIRM effective date. Map in unmapped and unmodernized areas cannot be used for regulatory purposes.

Dansby Engineering PLC

Civil and Environmental Engineers

Mr. Jason Murphy
Stormwater Program Manager
City of Norman
225 N Webster
Norman, OK 73069

May 23, 2025

Re: 2459 No Rise Statement
Westchester Townhomes
703 36th Ave NW
Norman, Oklahoma 73072

Dear Mr. Murphy:

This proposed project is construction of a permanent pedestrian bridge to replace a previously existing structure over Brookhaven Creek, which was removed due to flood-related damage and safety concerns. The bridge connects the Westchester Townhomes' internal sidewalk system to the community pool facility. The replacement bridge will tie into the existing sidewalk paths and match the original bridge's grades and elevations to ensure continuity, accessibility, and aesthetic consistency.

This letter is to state that the construction of the replacement bridge will not affect the existing flood plain elevations at or near the site and the project does not alter the flooding potential. Additionally, since the project is in the floodway, a no rise statement is required.

Any fill that is required for the construction of the bridge will be obtained on site which is all in the flood plain. Consequently, compensatory storage is not required. All earthwork or site grading that will be included in this project is on the property and within the flood plain.

The base flood elevation at this location is approximately 1149.0. The finished floor on the replacement bridge will be at or above the elevation of the original bridge. No rise in the BFE is expected due to this project since the bridge will be at or above the elevation of the bridge that was replaced. Also, the cross section of the flood plain is over 280 feet wide at this location. This is to certify that there is NO RISE IN THE BFE due to this project.

1

2202 Westpark Drive Suite B, Norman, Oklahoma 73069
Telephone/Fax: (405) 321-4049 Email: jwdansby@email.com

The site plan is attached showing the location of the proposed bridge. The FEMA map, FIS cross sections and profiles are attached. If you have any questions, or require additional information, please call.

Sincerely,

J.W. Dansby, P.E.
Civil Engineer



This project proposes the construction of a permanent pedestrian bridge to replace a previously existing structure over Brookhaven Creek, which was removed due to flood-related damage and safety concerns. The bridge connects the Westchester Townhomes' internal sidewalk system to the community pool facility. The replacement bridge will tie into the existing sidewalk paths and match the original bridge's grades and elevations to ensure continuity, accessibility, and aesthetic consistency.

Scope of Work:**1. Bridge Alignment and Integration:**

- The new structure will be installed in the same location as the original bridge and will tie into the existing sidewalk approaches on both sides.
- The grades and elevations of the new structure will match those of the former bridge, ensuring seamless ADA-compliant pedestrian access without altering the existing slope or alignment.

2. Structural Components:

- Two W12x40 steel I-beams (12-inch tall) will serve as the primary load-bearing members.
- Each beam will span 50 feet, with a 20-foot clear span over the creek and 15 feet of overhang on either side, anchored into grade for structural stability.
- Beams will be spaced 8 feet apart, center-to-center.

3. Decking and Concrete Slab:

- Treated $\frac{3}{4}$ -inch plywood will be temporarily installed between the beams as a base for forming the concrete slab.
- A plastic sheeting layer will be installed over the plywood to prevent concrete seepage into the creek during pouring.
- An 11-inch thick reinforced concrete slab will be poured in place, integrally connecting the two beams to form a monolithic deck.

4. Rebar Reinforcement:

- #4 rebar will be installed in two layers (top and bottom), forming a 12-inch grid in both directions.
- The grid system will be tied and welded at all joints for maximum reinforcement integrity and load distribution.

5. Environmental and Site Considerations:

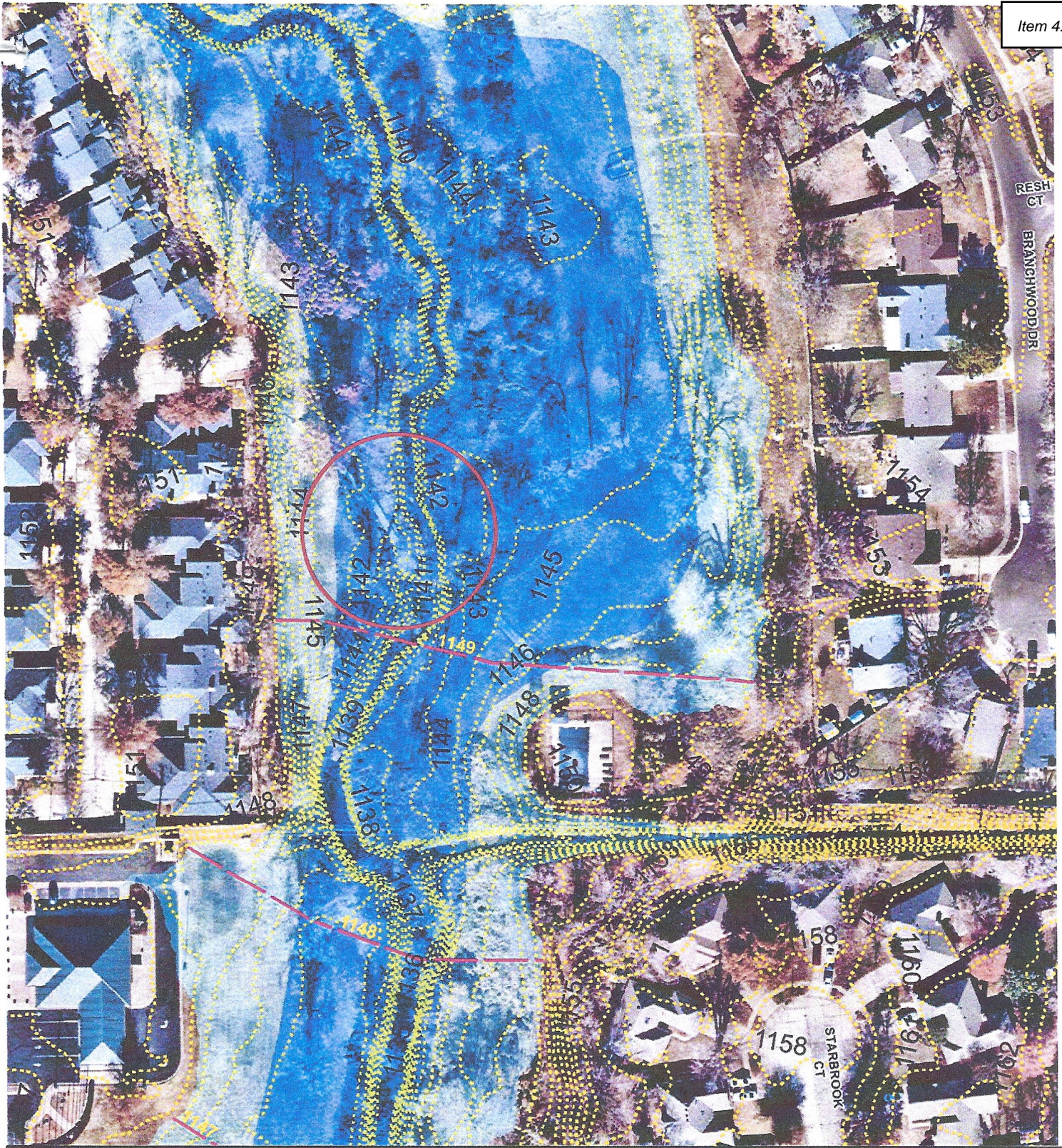
- No heavy equipment will enter the creek bed; all construction will occur from the top of the banks.
- Erosion control barriers and protective sheeting will be used to safeguard the creek from sediment or concrete runoff.
- All work will comply with floodplain and environmental protection standards as applicable.

6. Use and Load Rating:

- The bridge is designed for pedestrian traffic only, including foot traffic from residents and seasonal access to the pool area.
- No motorized vehicles, bicycles, or livestock will use the bridge.

7. Timeline:

- Construction will begin immediately following permit approval and be completed within 30 calendar days.
- All work will occur during daylight hours and pose no disruption to natural water flow.

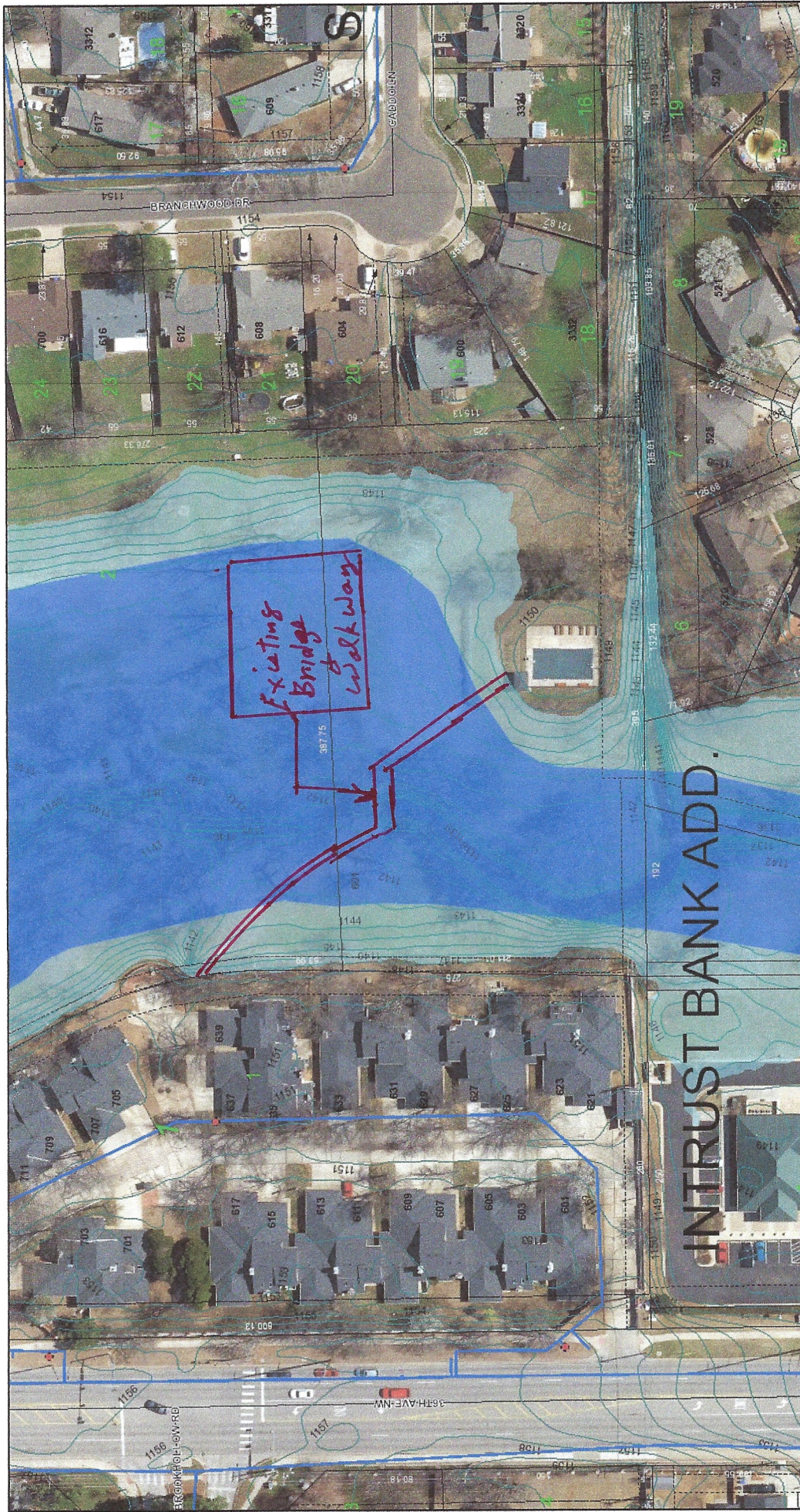


Brookhaven Creek

Legend

- BFE 2021
- 1% Chance Floodplain
- Floodway
- Contours2023

City of Norman WebMap



5/15/2025, 3:41:38 PM

Flood Hazard Zone

100

floodway

Contour Urban 1 foot (2007)

Easement

Conservation Easements

Lot Line

Parcel

WMains

Hydrant

Address Number

OU

Lake Thunderbird

Railroad

Streets

Centerline Labels (10,000+)

AerialPhoto2023

Red: Band_1

Green: Band_2

Blue: Band_3

1:824

0 55 110 220 ft

0 15 30 60 m

City of Norman, GIS Services Division

Item 4.

The City of Norman assumes no responsibility of errors or omissions in the information provided.

*Westchester Site Plan
Bridge Replacement*



