



CITY OF NORMAN, OK
FLOODPLAIN PERMIT COMMITTEE MEETING
Development Center, Conference Room, 225 N. Webster Avenue, Norman,
OK 73069
Monday, August 21, 2023 at 3:30 PM

AGENDA

AMENDED

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, retaliation, 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 contact the ADA Technician at 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 July 17, 2023 meeting.

ACTION ITEMS

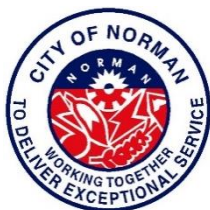
2. **Floodplain Application Permit No. 678** - This permit is for the construction of an access road off of 36th Ave. NW and the addition of a sanitary sewer line through the floodplain of a tributary of the Little River for the Franklin Woods Subdivision.
3. **Floodplain Application Permit No. 679** - This permit is for the installation of a curb and sidewalk as well as grading of the property to improve drainage at 218 S. Lahoma.
4. **Flood Hazard Ordinance Amendment** - Cumulative Substantial Damage and Substantial Improvement Language

DISCUSSION ITEMS

5. Discussion regarding procedural and substantive aspects of the Flood Hazard Ordinance.

MISCELLANEOUS COMMENTS

ADJOURNMENT



CITY OF NORMAN, OK
FLOODPLAIN PERMIT COMMITTEE MEETING
 Development Center, Conference Room B, 225 N. Webster Avenue,
 Norman, OK 73069
 Monday, July 17, 2023 at 3:30 PM

MINUTES

ROLL CALL

The meeting was called to order by Mr. Shawn O’Leary at 3:30 p.m. Roll was called and 6 members were present, one was absent. Mr. Scott Sturtz was absent. Others in attendance included, Jason Murphy, Stormwater Program Manager; Todd McLellan, Development Engineer; Amy Shepard, Staff; Kim Freeman, Staff; Kim Austin, NextEra Energy Transmission Southwest, LLC (NEET Southwest); Megan C., BMed; Mark Banner, Hall Estill; Gunner Joyce, Rieger Law Group; Libby Smith, Rieger Law Group; Nick Fuhr, NextEra Energy Transmission Southwest, LLC (NEET Southwest); Chris Lira, Resident; Leo Calvert, Resident; Paul Snow, Resident; Don Wilkerson, Resident; Lynn Wilkerson, Resident; Shyla Slay, Resident; Charla Bird, Resident; Inger Giuffrida, Resident; Bob Crumrine, Resident; G. Ben, Resident.

MINUTES

1. Approval of minutes from the June 20, 2023 meeting

Mr. O’Leary called for a motion to approve the minutes from the meeting of June 20, 2023. Ms. Stansel asked for a correction to page 1 specifying the location as 60th Ave NW. The motion was made by Ken Danner and seconded by Bill Scanlon. The minutes were approved 6-0.

ACTION ITEMS

2. Floodplain Permit No. 675

Mr. O’Leary said this Application is for the proposed installation of an electric transmission line across Norman through the Canadian River, Ten-Mile Flat Creek, and Little River Floodplains. Mr. O’Leary asked Mr. Murphy to present the staff report. Mr. Murphy said the Applicant is NextEra Energy Transmission Southwest and the Engineer is Burns and McDonnell Engineering Company. Mr. Murphy said the application is for proposed construction of an overhead electric transmission line. The proposed alignment will begin at the west boundary of the City limit (approx. 0.45 miles south of W. Robinson St.) and extend to the north boundary of the City limit (approx. 0.15 miles east of 48th Ave. NE). A total of 35 overhead electric transmission line pole structures are proposed to be constructed in the Special Flood Hazard Areas (SFHA) of Norman. Structure foundations for the transmission poles are engineered based on the size of the structure and soil conditions encountered. In addition to the pole structure installation, tree clearing within the 150-foot right-of-way along with temporary access road construction consisting of drives and crushed rock access roads or installation of crane mats will be performed. Sediment controls will be installed as needed.

Mr. Murphy said typical poles will be spun concrete or steel monopoles approximately four feet in diameter at ground level. Two of the poles will be in the regulatory floodway of the Canadian River and the other 33 poles will be in the floodplains of Ten-Mile Flat Creek and the Little

River and its Tributaries. Hydraulic analyses using HEC-RAS modeling was submitted by the Applicant for each of the locations. For the 2 poles in the Canadian River floodway report from February 28, 2023, it was determined that no rise in the BFE would occur. The hydraulic analysis report for the remaining 33 poles was submitted in the HEC-RAS model floodplain analysis report dated April 21, 2023. Of these, 17 are in the Ten-Mile Flat Creek floodplain and will cause no rise in the BFE. The remaining 16 are in the Little River floodplain or its tributaries. 2 of the poles in the Little River floodplain will cause a rise of 0.01 feet in the BFE according the applicant's report, the rest will cause no rise.

Mr. Murphy said the Applicant included in their application a chart indicating a minimum volume of material to be removed from each pole location in the various floodplains in order to meet the compensatory storage requirement of the Flood Hazard Ordinance. Spoils from excavation and compensatory storage creation will be removed from the floodplain and spread in upland areas outside of the floodplain. Some of the installation locations in this application are themselves outside of the regulatory floodplain, but the access and tree clearing to reach the site require crossing the floodplain.

Mr. Murphy said the Applicant has indicated that tree clearing will take place prior to construction to create temporary access roads. Where conditions allow, overland travel will be utilized with no grading or road construction. If temporary construction of access roads or improvements to existing roads are needed within floodplains, crane mats will be temporarily placed on the access roads. Air-bridges will be constructed where underground pipelines are crossed by access roads. The Applicant has also indicated that sediment controls will be installed during construction. Any temporary crane mats that are utilized will be removed following construction. Access roads will be removed and reclaimed, if necessary, to original contours. The Applicant has also indicated that revegetation will occur where appropriate.

Mr. Murphy reviewed plans and aerial maps of the project locations provided to members in their packets.

Mr. Murphy confirmed all ordinance requirements have been met and said staff recommends Floodplain Permit Application No. 675 be approved.

Mr. O'Leary asked for comments or additions from the Applicant. Hearing none, Mr. O'Leary asked for any comments from the public. Mr. Crumrine, resident, has 2 properties close to the line and asked for clarification on the location of the line on the Little River. Mr. Crumrine also asked for a copy of the packet presented by Mr. Murphy. Mr. Murphy offered his business card with his contact information.

Ms. Giuffrida, resident, expressed concern about homeowners being unaware of how they are affected and adequate notification. Ms. Giuffrida asked for a pause on the application for the public to be duly informed. Ms. Giuffrida also expressed concern regarding the runoff and environmental impact to Lake Thunderbird. Additionally, Ms. Giuffrida expressed concern for the impact to migratory birds.

Mr. Lira, resident, is currently in litigation with NextEra and asked for the committee to consider postponing the application to prevent NextEra from entering his property prior to the merits of his case being heard.

Mr. Wilkerson, resident, expressed concern with changing the elevation and how that will affect the drainage. Mr. Wilkerson also expressed concern if the Little River floods and if the poles were to fall, having live wires in the water. Additionally, Mr. Wilkerson expressed concern

about the integrity of NextEra due to a subpoena for eminent domain and requesting underground mineral rights.

Mr. Snow, resident, expressed concern with erosion of the river due to tree clearing. Mr. Snow also expressed concern with lack of notification. Additionally, Mr. Snow expressed concern with the negative impact on the agriculture, animals and his children.

Ms. Wilkerson, resident, asked why the utility easement isn't being utilized. Ms. Wilkerson, expressed concern with receiving a one-time payment for the easement purchase.

Ms. Giuffrida, expressed concern again about the timeline of the notification to the property owners. Ms. Giuffrida asked if the Applicant has consulted any Eagle Aviaries or tribal nations regarding eagle impacts. Ms. Austin, with NextEra Energy Transmission Southwest, LLC (NEET Southwest), responded that a number of studies have been done on the project and they have a tribal relations team who engages with the tribes and she is unable to respond to tribal relations questions but offered to follow up with team members. Ms. Austin spoke about the environmental studies completed to satisfy the need for federal, state and local permits. Ms. Giuffrida encouraged Ms. Austin to consult with the Eagle Aviaries. Mr. Crumrine, indicated he had 2 eagles and babies in eyesight of his acreage. Mr. Snow also indicated they have eagles, falcons, hawks, owls and cranes that live in the trees that would be impacted.

Mr. Wilkerson said he hopes the City will start looking out for the citizens as he stands to lose almost everything between this and the turnpike. Mr. Snow asked why the applicant isn't using an existing easement and if the power lines already in the area could be utilized.

Mr. O'Leary brought the discussion back to the committee. Mr. O'Leary reminded the committee of their role pertaining to the floodplain ordinance. Mr. Wilkerson expressed concern with building a road, even temporary, would impact his property. Ms. Hoggatt asked about the use of the easements acquired from property owners and Mr. O'Leary directed the question to the Applicant and the impact to the land within the floodplain. Ms. Austin responded that all of the impacts associated with this project are temporary impacts except for the poles. Ms. Austin also responded the poles have gone through a number of floodplain studies and engineers have looked at the area and completed the analysis to satisfy floodplain regulations for stabilizing and revegetating the land.

Ms. Stansel inquired if the homeowners would have another meeting prior to approval. Mr. O'Leary responded there have been multiple meetings with City Council regarding easements and access. Mr. O'Leary asked the NextEra representatives who regulates this project from an energy standpoint. Mr. Banner, Hall Estill, responded there have been several meetings and items under consideration with City Council. Mr. Banner said this project is a result of analysis for energy needs in the area from the Southwest Power Pool and could result in lower energy costs for residents. Mr. Banner said the project was advertised by the Southwest Power Pool and NextEra bid on that project. Ms. Stansel expressed her concern for the residents affected by this project and their route to express their concerns. Mr. O'Leary said he believes the Oklahoma Corporation Commission would be the regulatory agency at the state level.

Mr. O'Leary said the majority of the overhead power lines would be located on private property, which is why NextEra is requesting easements from property owners. Mr. O'Leary said as far as he is aware the city or state do not have any regulatory authority over land acquisition or easement agreements on private property. The process is a negotiation between the company and the landowner. Ms. Stansel expressed concern for the residents in attendance who said they are already in lawsuits with the applicant.

Mr. Scanlon said the application answers the technical requirements and inquired about other considerations in the floodplain ordinance. Mr. Scanlon said the committee is allowed to weigh other considerations and he hears lots of unanswered questions that fall into the scope of the other considerations. Mr. Scanlon said he is not prepared to support the application and would like answers to the questions that came up during the meeting. Ms. Stansel inquired who would be responsible if there is flooding in these areas and Mr. O’Leary confirmed it’s the landowner’s responsibility. Ms. Austin said within a NextEra easement, they are responsible for the operation and maintenance of the easement. Ms. Austin said it is NextEra’s intent to disturb the minimum area possible.

Ms. Stansel asked if any City bridges are impacted by the project. Mr. O’Leary responded that a thorough evaluation has already been done for any road or bridge impacted by the project as part of the Road Use Agreement already authorized by the City Council to protect the integrity of our road system.

Mr. Scanlon asked for a start date and period of performance for the project. Mr. Fuhr, NextEra Energy Transmission Southwest, LLC (NEET Southwest), responded the construction date is set for November 15, 2023 through July of 2024. Mr. Danner inquired if the dates are subject to easement negotiations and Mr. Fuhr confirmed. Ms. Scanlon asked the dates are for Norman construction only and Mr. Fuhr responded the dates are for the entirety of the project.

Mr. Danner inquired about the width of the easement. Mr. Fuhr responded the easement is 150 ft. Mr. Danner also inquired about the area parallel with and north of Franklin Rd and near 48th Ave. if any of the easement acquired is in the statutory right of way or future City right of way. Mr. Fuhr responded they would need to review in detail and get back to Mr. Danner. Mr. Danner said he is inquiring related to a proposed future development in the area.

Ms. Hoggatt inquired about how a change in elevation would impact the lake and the effect on possible flooding. Mr. Murphy referred to the packet and the data submitted. Mr. Murphy said after careful review the application meets the requirements and the hydraulic analysis appear to be sound. Mr. O’Leary confirmed with Mr. Murphy that our review of the application is more on the permanent structures. Mr. Murphy said the permit includes locations for the disruption of the floodplain for temporary access for installation of the poles. Mr. Murphy said the Canadian River has a wide floodplain and the impact on the BFE is very minimal.

Ms. Hudson asked about the concerns related to the access road for the project. Mr. Wilkerson confirmed a road is being proposed gate to gate and the area would need to be raised because the ground is too soft to drive on between 36th and 48th. Ms. Austin responded in cases where the ground is soft, temporary mats would be used and they pay attention to the weather and know their responsibilities while they are out there during construction. Mr. Wilkerson expressed concern about drainage in the area during and after construction due to the fragility of the area. Ms. Hoggatt asked for the applicant’s definition of a temporary road. Ms. Austin responded once the poles are in the ground, they will restore everything to the same condition including removing temporary access. Ms. Hudson inquired if temporary access is needed in the future, would a new permit be required. Mr. Murphy responded that a permit is good for 2 years and anything outside of that would require a new Floodplain permit.

Ms. Hoggatt asked if Stormwater permits had been issued for the project. Mr. Murphy confirmed the packet includes Earth Change Permits from the City of Norman and Department of Environmental Quality. Mr. Murphy said the Stormwater Pollution Prevention Plan was reviewed and accepted. Mr. O’Leary confirmed Stormwater Quality division administered the

permit. Ms. Hoggatt inquired if there are issues could Stormwater Quality be contacted and Mr. Murphy confirmed.

Ms. Stansel asked if Mr. Danner's questions had been satisfied. Mr. Danner said his questions are related to a proposed development in the area not regarding the floodplain permit. Ms. Stansel inquired if this permit would be sent to the Planning Commission and Mr. O'Leary responded it would not because there are no other City actions pending.

Mr. Danner inquired if there are any proposed underground utility burials and Mr. Fuhr confirmed it is only above ground poles. Mr. Scanlon inquired about utility lines and pipelines and how that will be mitigated. Mr. Fuhr responded they have conducted multiple utility surveys throughout the project to identify pipelines and overhead and underground utilities and currently finalizing crossing agreements with different entities and working with the owners to make sure they are mitigating per their requirements.

Mr. O'Leary called for a motion or further questions. Mr. Danner motioned to approve Floodplain Application No. 675 on the condition the Applicant acquires all easements according to the route contained in the application. Ms. Hudson seconded the motion. Ms. Hoggatt inquired about the length of the permit, Mr. O'Leary confirmed it's for 2 years. Mr. Murphy confirmed the Applicant must provide proof of all easements acquired prior to the permit being issued. Ms. Stansel inquired about the notification of the Floodplain Permit Committee Meeting to the property owners. Mr. Murphy responded the Floodplain notices were mailed more than a month prior to the meeting. Ms. Stansel asked how many requests for the packet and information about this application were received. Mr. Murphy responded he did not receive any requests for the meeting packet prior to the meeting.

Ms. Stansel said she still had concerns about the application due to the comments from homeowners. The committee discussed the section of the Floodplain Ordinance where other considerations can be cited for health and safety concerns. Mr. O'Leary encouraged the committee to make sure when applying other considerations that they are specifically related to the floodplain. Mr. O'Leary clarified this vote requires supermajority 5 out of 7. Mr. Danner inquired if the permit is not approved, and the Applicant wants to pursue an appeal, where it would go. Ms. Hudson confirmed any appeals from the Floodplain Committee decision by any person can be taken to the Board of Adjustment. Ms. Stansel said at least two members of the Board of Adjustment must be trained on floodplain regulations to hear the appeal and asked if that was available. Ms. Hudson said she believed there are two members trained but would verify. The committee voted to approve the application 4-2; however the motion failed because a super majority of the votes were not received. Mr. O'Leary advised the Applicant of the appeal process if they choose to appeal. Ms. Hudson said the process for Board of Adjustment will include notification of all property owners within 300 feet of the proposed location.

ADJOURNMENT

Mr. O'Leary called for a motion to adjourn. Mr. Danner motioned to adjourn and was seconded by Ms. Hoggatt. The motion was approved 6-0. The meeting adjourned at 4:31 p.m.

Passed and approved this _____ day of _____, 2023

City of Norman Floodplain Administrator, Shawn O'Leary

STAFF REPORT

08/21/2023

PERMIT NO. 678

ITEM: This Floodplain Permit Application is for the construction of Franklin Woods Blvd. and the construction of an 8” sanitary sewer extension and manhole in Zone A floodplain of a tributary of the Little River near the intersection of 36th Ave. NW and Franklin Road. This work is being done for the proposed Franklin Woods Addition.

BACKGROUND:

APPLICANT: Raven Investments, LLC
BUILDER: TBD
ENGINEER: SMC Consulting Engineers

The applicant is requesting a floodplain permit for the construction of a road to be built across the Zone A floodplain of a tributary to the Little River and to install an 8” sanitary sewer extension and manhole. The proposed site is located at the northeast corner of the intersection of 36th Avenue N.W. and Franklin Road in Norman, Oklahoma. The site is bound by the existing developments of Crystal Spring Addition and Community Christian School to the north, 36th Avenue NW to the west, and Franklin Road to the South. The site is also bound by undeveloped pastureland to the southeast and Frontage Road for Interstate No. 35 (I-35) to the east. The proposal is for mixed-use development of approximately 60.48 acres that will include commercial/offices, light industrial, multifamily residential, and single-family residential. The proposed development will be served with public streets, waterlines, sanitary sewer, stormwater collection and conveyance systems as well as multiple detention ponds for stormwater management.

The two main components of the application are a road across the floodplain constructed with a 10’ x 4’ RCB to convey the waters of the creek as well as the manhole and sanitary sewer extension that will extend into the Zone A flood zone. The proposed construction of the road on the northwest corner of the development includes an excavation volume of 2,993.96 CY and a fill volume of 2,943.64 CY, resulting in a net decrease in fill of approximately 50 CY in addition to the volume of the 100 linear feet of 10’ x 4’ RCB, bringing the total increase of storage capacity in the floodplain to just under 200 CY. Installation of the sanitary sewer line in the southeast corner of the development will involve trenching through the floodplain to install the 8” line and returning the disturbed areas to the original grade. According to the plans, the new proposed manhole will be located outside the floodplain.

The applicant submitted a flood study report that calculated base flood profiles for the Little River tributary under existing and proposed conditions using HEC-RAS modeling. The stormwater runoff from the upstream, offsite drainage areas and onsite drainage areas will be conveyed through the tributary and through the proposed culvert under the boulevard and discharging south to the Tributary G of the Little River. According to the report, the proposed 100-year flood profiles will be contained within the proposed common area and WQPZ drainage easement for Franklin Woods Addition. As a result of the proposed improvements, the HEC-RAS model shows that the BFE will be decreased slightly and should not cause adverse impacts up or downstream of the project.

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 Tributary G of the Little River floodplain (Zone A). At the proposed site, the BFE is approximately 1157.0 ft.

Applicable Ordinance Sections:	Subject Area:
36-533	(e)2(a)..... Fill restrictions
	(e)2(e)..... Compensatory storage
	(e)2(j)..... Utilities constructed to minimize flood damage
	(e)2(l)..... In/exfiltration of flood waters in utility systems
	(f)3(a)(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.

According to the plans submitted by the applicant, excavation quantities exceed fill quantities by approximately 50 CY in addition to the storage of the 100 linear feet of the RCB, satisfying the ordinance requirements.

(e)2(j) and (e)2(l) Utilities constructed to minimize flood damage and to prevent in/exfiltration of flood waters in utility systems. All public utilities and facilities shall be constructed to minimize flood damage. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters.

The sewer line pipe joints have gaskets making the system watertight, and the entire system is leak tested prior to going into service. The new proposed manhole is being constructed out of the floodplain and is shown with an elevation greater than the BFE satisfying these requirements.

(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 demonstrated through HEC-RAS modeling that there will be a decrease in the 100-year water surface elevation as a result of the improvements in the floodplain of the tributary satisfying this requirement.

RECOMMENDATION: Staff recommends Floodplain Permit Application #678 be approved.

ACTION TAKEN: _____



City of Norman Floodplain Permit Application

Floodplain Permit No. 678

Building Permit No. _____

Date 7/27/2022 8/21/2023

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: Raven Investments, LLC ADDRESS: P.O. Box 7187, Moore, OK 73153

TELEPHONE: 405-637-8742 SIGNATURE: [Signature]

BUILDER: _____ ADDRESS: _____

TELEPHONE: _____ SIGNATURE: _____

ENGINEER: SMC Consulting Engineers ADDRESS: 815 W. Main, OKC, OK 73106

TELEPHONE: (405) 232-7715 SIGNATURE: [Signature]

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.

38th Ave. NW and Franklin Road

SW 1/4, Section 2, T9N, R3W

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELOPMENT

ACTIVITY

STRUCTURE TYPE

- New Structure
- Addition
- Alteration
- Relocation
- Demolition
- Replacement
- Residential (1-4 Family)
- Residential (More than 4 Family)
- Non-Residential (Flood proofing? Yes)
- Combined Use (Residential & Commercial)
- Manufactured (Mobile) Home
- In Manufactured Home Park? Yes

ESTIMATED COST OF PROJECT \$_____ 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.

Construction of Franklin Woods Addition, a residential subdivision

Construction of Franklin Woods Blvd to include a 10'x4' RCB in Flood Zone A in the NW corner of the site.

Construction of an 8" sanitary sewer extension and manhole that extends into Flood Zone A in the SE corner of the site.

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.: 40027C0190K, 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 1157.0 Ft. NGVD (MSL) Unavailable

See Section 4 for additional instructions.

SIGNED: Jason Murphy **DATE:** 8/17/2023

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.)

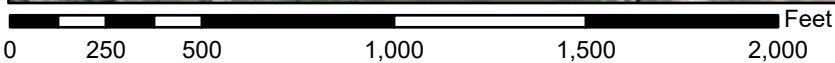
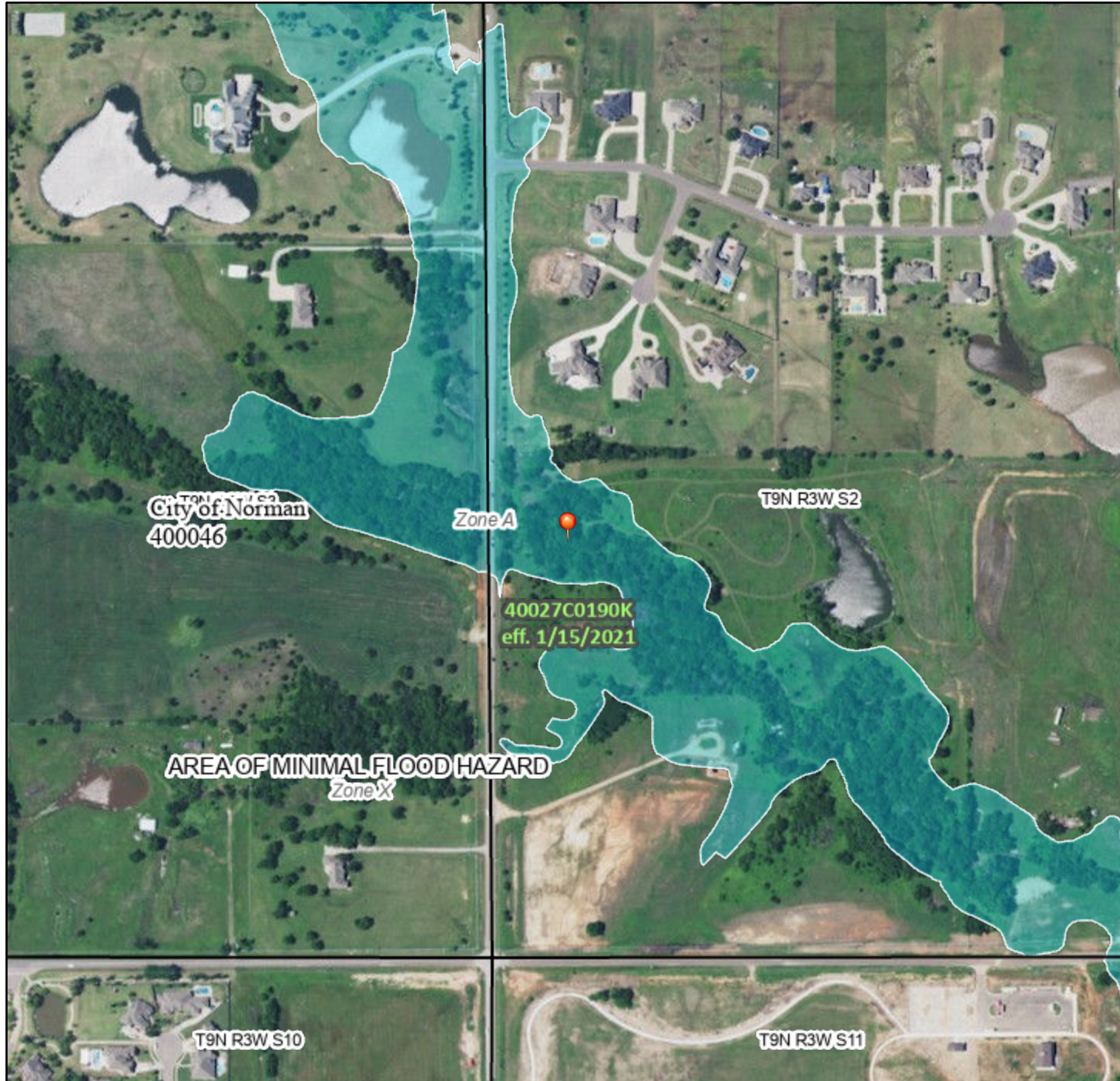
1. FEMA Elevation Certificate
and/or
2. FEMA Floodproofing Certificate

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.

National Flood Hazard Layer FIRMette



97°29'56"W 35°17'1"N



1:6,000

97°29'18"W 35°16'32"N

Basemap Imagery Source: USGS National Map 2023

Legend

Item 2.

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR F... 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 |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| OTHER FEATURES | | Levee, Dike, or Floodwall |
| | | 20.2 Cross Sections with 1% Annual Chance |
| MAP PANELS | | 17.5 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 |
| | | 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 8/9/2023 at 9:55 AM 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.

**FLOOD STUDY
FOR UNNAMED TRIBUTARY AND CULVERT
TO LITTLE RIVER TRIBUTARY G & PART OF
COMMON AREA 'A' OF FRANKLIN WOODS ADDITION**



**BY:
SMC CONSULTING ENGINEERS, P.C.
815 W. MAIN
OKLAHOMA CITY, OK 73106
(405) 232-7715
FAX: 232-7859**

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- APPENDIX B: FLOOD HYDROGRAPHS FOR FLOOD STUDY**
- APPENDIX C: EXISTING HEC-RAS MODEL**
- APPENDIX D: PROPOSED HEC-RAS MODEL**
- APPENDIX E: FEMA EFFECTIVE FIRMETTE**

EXHIBIT 1: PROPOSED DRAINAGE MAP FOR FLOOD STUDY

**FLOOD STUDY
FOR UNNAMED TRIBUTARY AND CULVERT
TO LITTLE RIVER TRIBUTARY G & PART OF
COMMON AREA 'A' OF FRANKLIN WOODS ADDITION**

INTRODUCTION

The proposed site is located at the northeast corner of the intersection of 36th Avenue N.W. and Franklin Road in Norman, Oklahoma. The site is bound by the existing developments of Crystal Spring Addition and Community Christian School to the north, 36th Avenue N.W. to the west, and Franklin Road to the South. The site is also bound by undeveloped pastureland to the southeast and Frontage Road for Interstate No. 35 (I-35) to the east.

It is proposed to develop approximately 60.48 acres for a variety of mixed uses. These uses will consist of commercial/offices, light industrial, multifamily residential, and single-family residential. The development will be served with public streets, waterlines, sanitary sewer lines, stormwater collection and conveyance systems, and multiple detention ponds for stormwater management.

This flood study report is prepared to analyze the existing unnamed tributary to Little River Tributary G which flows southeasterly through the site of Franklin Woods Addition. The unnamed tributary is analyzed under existing and proposed conditions where the proposed conditions will consider the proposed boulevard and culvert improvements connecting to the single-family residential tract to 36th Avenue N.W. Since detention is or will be provided, all upstream drainage areas including the onsite areas that are not part of public right of way are considered undeveloped in both analyses.

Per the FEMA Effective FIRM Panel Number 40027C0190K, dated January 15, 2021, Portions of the unnamed tributary to Little River Tributary G and Little River Tributary G flowing through the site are part of the FEMA Effective Floodplain, Zone A.

The existing soil types for the area are predominantly Type D soil with some Type B soils. For additional information on the existing soil types, refer Appendix A: Soils Data.

The proposed boulevard connection and culvert improvements will not cause a rise greater than five hundredths of a foot (0.05') to any adjacent property in the base flood elevation. Furthermore, the clearing and grading work associated with the proposed development of Franklin Woods Addition will be performed in strict accordance with the City of Norman Floodplain Activity Permit.

PROCEDURES

The hydrologic modeling for the drainage basins is performed using the SCS TR-20 method. Hydrologic runoff curve numbers and equations for calculating the time of concentration were taken from the ODOT Roadway Drainage Manual, Chapter 7, Hydrology. The following sheet and shallow flow equations were used to calculate the time of concentrations unless otherwise noted differently.

Sheet Flow:

$$T_{t(\text{sheet})} = \frac{0.42}{P_2^{0.5}} \left(\frac{nL}{\sqrt{S}} \right)^{0.8}$$

Where,

$T_{t(\text{sheet})}$ = Sheet Flow Travel Time, minutes

n = Roughness Coefficient, unitless

L = Flow Length, ft

P_2 = 2-year, 24-hour rainfall, in

S = Slope of the Surface, ft/ft

Shallow Flow:

$$T_{t(\text{type})} = \frac{L}{60V}$$

Where,

$T_{t(\text{type})}$ = Shallow Flow Travel Time, minutes

L = Flow Length, ft

V for Paved Surface = 20.3282 ($S^{0.5}$), where S = Slope along Segment, ft/ft

V for Unpaved Surface = 16.1345 ($S^{0.5}$), where S = Slope along Segment, ft/ft

The unnamed tributary is analyzed in this report to verify existing and proposed conveyance capacities and determine if there is any rise in the base flood elevation as a result of the proposed improvements associated with Franklin Woods Addition. The cross section profiles are analyzed as an excavated, straight, and uniform channel after weathering using a Manning's Coefficient of $n=0.033$ and a Manning's Coefficient of $n=0.050$ is used for the overbank conditions.

The downstream tailwater and boundary condition for this flood study of the unnamed tributary is set at 1157.00 and derived by assuming Little River Tributary G is flowing full at the unnamed tributary's link to said Tributary G, since a FEMA Effective BFE has not been established for this area.

In this study:

1. The overall drainage area is delineated to establish the hydrology model of the drainage basin for the unnamed tributary to Little River Tributary G.
2. The base flood profiles are calculated for the unnamed tributary under existing and proposed conditions using HEC-RAS, version 6.1.0, developed by the US Army Corps of Engineers to verify no rise greater than five hundredths of a foot (0.05') will occur to the base flood elevation.

PROPOSED CONDITIONS

It is proposed to develop approximately 60.48 acres for a variety of mixed uses. The uses will consist of commercial/offices, light industrial, multifamily residential, and single-family residential. The development will be served with public streets, waterlines, sanitary sewer lines, stormwater collection and conveyance systems, and multiple detention ponds for stormwater management.

Approximately 32.788 acres of the overall drainage area are identified for the unnamed tributary to Little River Tributary G’s drainage calculations. The upstream drainage area runoff curve numbers are weighted based on the existing soil types. Refer to the below Table No. 1 for weighted runoff curve number summary.

Table No. 1: Weighted Runoff Curve Number Summary Table

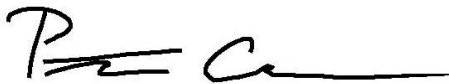
Soil Map Unit Symbol	HSG	Total Sub-Area	Pervious Curve Number	Weighted Curve Number
		(acres)	CN	CN
3	B	2.817	61	
9	D	2.476	80	
50	D	15.899	80	
51	D	11.596	80	
Total Area:		32.788		78

The storm water runoffs from the upstream, offsite drainage areas and from the onsite drainage areas will be conveyed through said unnamed tributary as well as through the proposed culvert under the boulevard connection to 36th Avenue N.W., ultimately discharging in the southerly direction towards Little River Tributary G.

The hydrology for the upstream drainage areas of unnamed tributary to Little River Tributary G are detailed on said Exhibit 1: Proposed Drainage Map for Flood Study. Refer to Appendix B for the flood hydrographs for the upstream drainage areas, Appendix C for the Existing HEC-RAS Model, and Appendix D for the Proposed HEC-RAS Model.

CONCLUSION

1. The proposed 100-year flood profiles for the unnamed tributary to Little River Tributary G are contained within the proposed common area and WQPZ Drainage Easement for Franklin Woods Addition. Refer Appendix D for proposed flood profiles and water surface elevations.
2. The Proposed HEC-RAS Model further shows that the calculated 100-year water surface elevations within said unnamed tributary is decreased as a result of the proposed improvements; therefore, meeting the requirement for causing no rise greater than five hundredths of a foot (0.05') to any adjacent property in the base flood elevation as a result of the proposed development.
3. The proposed development will not cause adverse impacts upstream or downstream of the project.



Preston Caldwell, P.E.
SMC Consulting Engineers, P.C.



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

*Civil Engineering
Land Development
Storm Water Management*

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

August 1, 2023

Mr. Shawn O'Leary, P.E.
Floodplain Administrator
City of Norman

RE: No Rise Certification for
Franklin Woods Addition
Norman, Oklahoma
SMC #6532.00

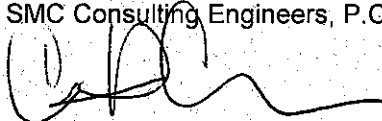
Dear Mr. O'Leary,

The proposed development of Franklin Woods Addition provides for the construction of a sanitary sewer line and a boulevard connecting to 36th Avenue N.W. The boulevard will be fitted with a 10'x4' RCB culvert for stormwater management.

The construction of the sanitary sewer line will require construction activities within the effective floodplain. There is no fill anticipated in the floodplain with the construction of the sanitary sewer line. Therefore, no rise in the base flood elevation (BFE) will occur on any adjacent properties.

The boulevard and box culvert will also require construction activities within the effective floodplain. There will be no rise in the BFE as a result of the boulevard improvements per the Flood Study for the Unnamed Tributary to Little River Tributary G, prepared by SMC Consulting Engineers, P.C., dated August 1, 2023.

Sincerely,
SMC Consulting Engineers, P.C.



Christopher D. Anderson, P.E.
Project Engineer

Existing Surface: N:\DWGS\6532.00 - Richard McKown - Harding Property\Floodplain Permi
Final Surface: N:\DWGS\6532.00 - Richard McKown - Harding Property\Floodplain Permi

Cut volume: 80,836.8 C.F., 2,993.96 C.Y.
Fill volume: 79,478.3 C.F., 2,943.64 C.Y.
Bank Fill Volume: 99,347.85 C.F., 3,679.55 C.Y.

Area in Cut : 31,441.9 S.F., 0.72 Acres
Area in Fill: 38,692.2 S.F., 0.89 Acres
Area exactly in daylight: 11,560.5 S.F., 0.27 Acres
Total inclusion area: 81,694.6 S.F., 1.88 Acres

Average Cut Depth: 2.57 feet
Average Fill Depth: 2.57 feet
Cut to Fill ratio: 1.02
Export Volume: 50.3 C.Y.
Elevation Change To Reach Balance: 0.017
Volume Change Per .1 ft: 302.6 C.Y.

Cut Swell Factor : 1.000
Fill Shrink Factor: 0.800
Cut (C.Y.) / Area (acres): 1596.39
Fill (C.Y.) / Area (acres): 1569.56

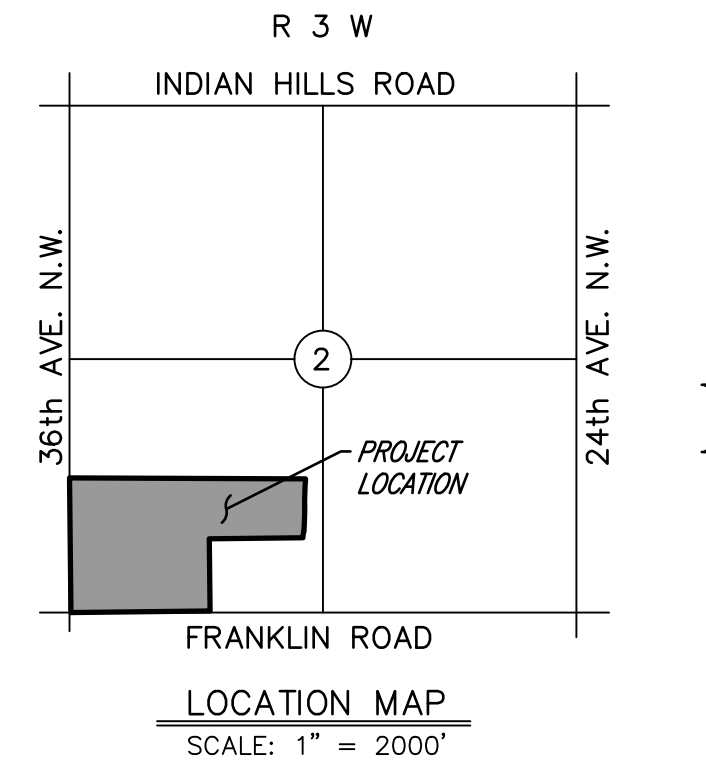
Max Cut: 7.189 at 2119648.334,708891.782
Max Fill: 6.000 at 2119606.032,708768.890

STORM DRAINAGE DETENTION FACILITY EASEMENT

DRAINAGE DETENTION FACILITY EASEMENTS ARE HEREBY ESTABLISHED AS SHOWN TO PROVIDE FOR DETENTION OF STORM SURFACE WATER AND CONSTRUCTED AS APPROVED BY THE CITY ENGINEER...

PRELIMINARY PLAT FRANKLIN WOODS ADDITION A PLANNED UNIT DEVELOPMENT A PART OF THE S.W. 1/4, SECTION 2, T9N, R3W, I.M. NORMAN, CLEVELAND COUNTY, OKLAHOMA

SCALE: 1" = 100' RESIDENTIAL LOTS - 47 OPEN SPACE AREA = 29.39 AC.±



LEGAL DESCRIPTION

Being a tract of land lying in the Southwest Quarter (S.W. 1/4) of Section Two (2), Township Nine North (T9N), Range Three West (R3W) of the Indian Meridian, Norman, Cleveland County, Oklahoma, and being more particularly described as follows:

BEGINNING at the Southwest corner of said S.W. 1/4; THENCE North 00°35'43" West a distance of 1403.12 feet; THENCE South 89°45'17" East a distance of 2457.81 feet to a point on the Westerly right-of-way of the Frontage Road of Interstate Highway No. 35...

SMC CONSULTING ENGINEERS, P.C. ALL RIGHTS RESERVED THESE DOCUMENTS MAY NOT BE USED FOR ANY PURPOSES WITHOUT PRIOR WRITTEN PERMISSION FROM SMC CONSULTING ENGINEERS, P.C.

OWNER: RAVEN INVESTMENTS, L.L.C. P.O. BOX 7187 MOORE, OKLAHOMA 73153

ENGINEER: SMC Consulting Engineers, P.C. 815 W. Main Street Oklahoma City, Oklahoma 73160

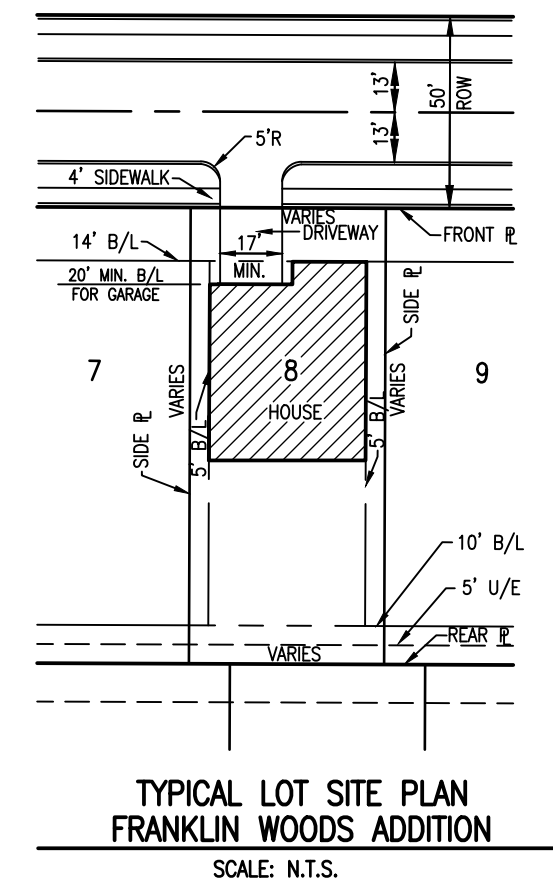
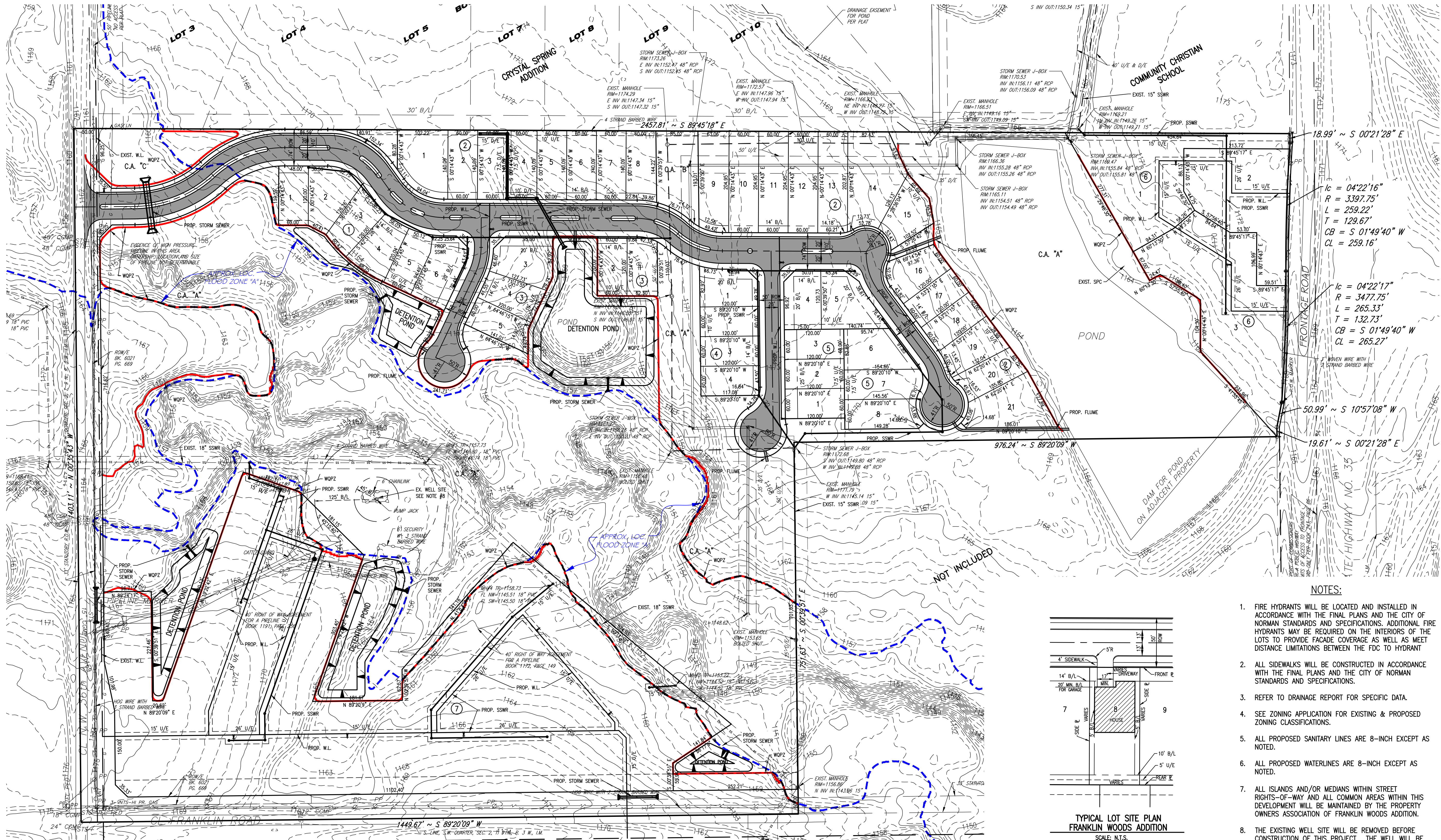


FRANKLIN WOODS ADDITION 36th AVE. N.W. & FRANKLIN RD. NORMAN, OKLAHOMA

Table with columns for No., Revision, Date, and By. Includes SMC Consulting Engineers, P.C. contact information and Oklahoma State Board of Professional Engineers details.

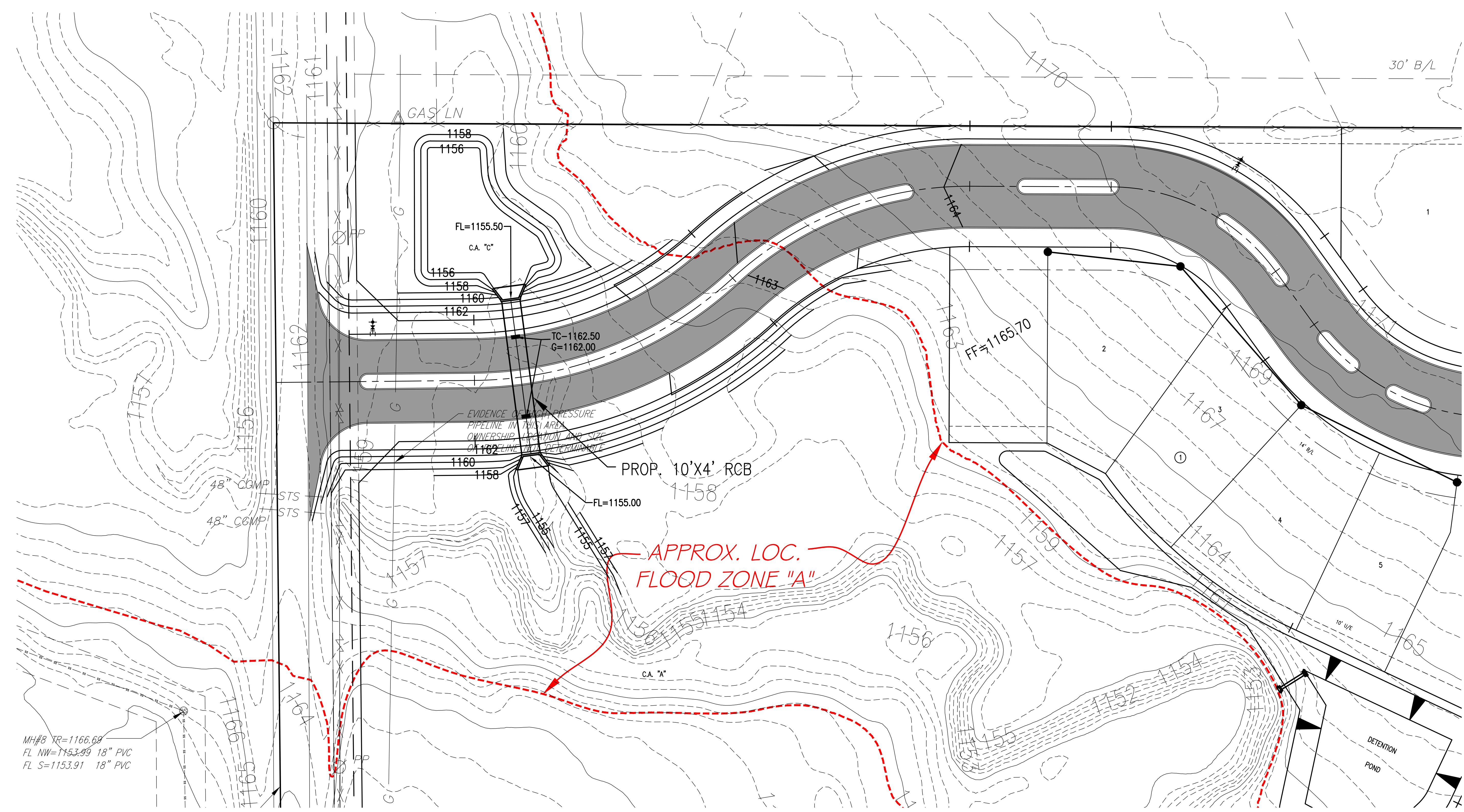
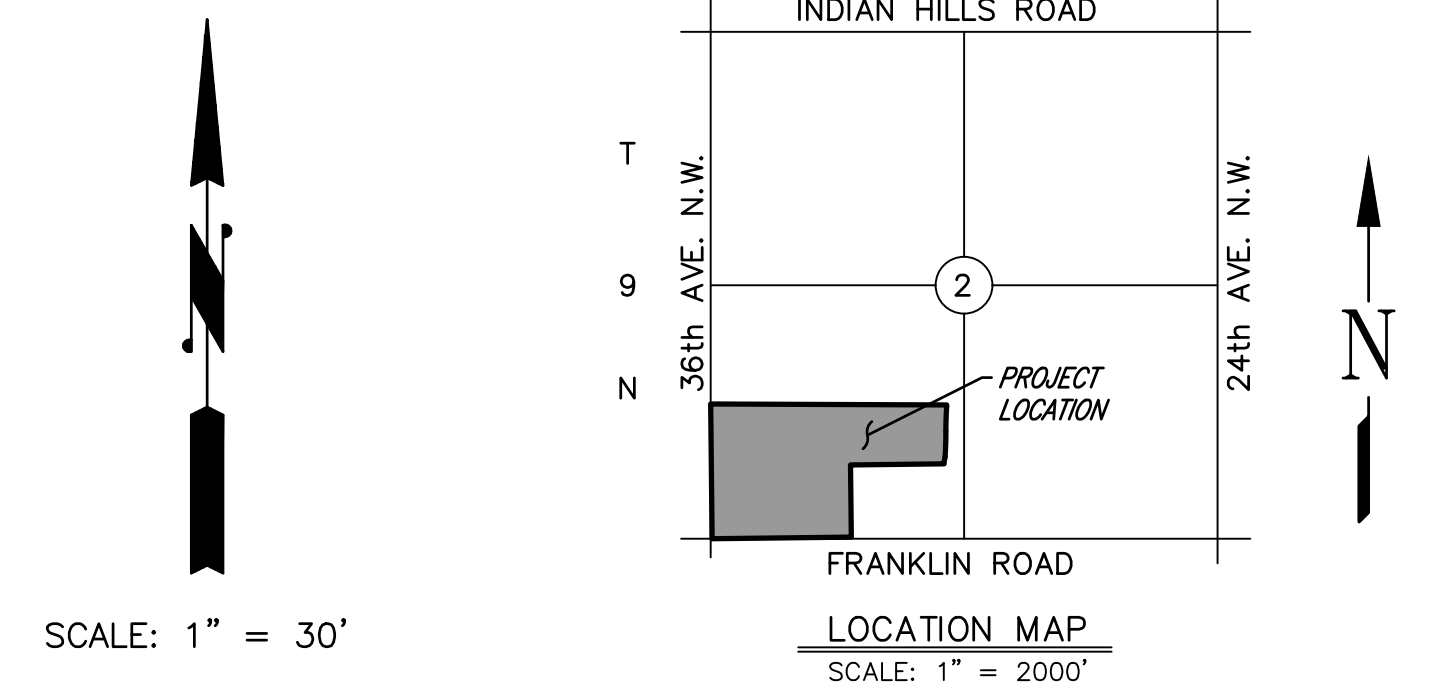
PROJECT NO.: 6532.00 DATE: 5/01/23 SCALE: 1" = 100' DRAWN BY: DC ENGINEER: Christopher D. Anderson P.E. NUMBER: 18288

PRELIMINARY PLAT SHEET NO. 1



- NOTES: 1. FIRE HYDRANTS WILL BE LOCATED AND INSTALLED IN ACCORDANCE WITH THE FINAL PLANS AND THE CITY OF NORMAN STANDARDS AND SPECIFICATIONS. 2. ALL SIDEWALKS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE FINAL PLANS AND THE CITY OF NORMAN STANDARDS AND SPECIFICATIONS.

EXHIBIT FOR GRADING, ROADWAY AND DRAINAGE
 CONSTRUCTION IN FLOOD PLAIN
FRANKLIN WOODS ADDITION
 A PLANNED UNIT DEVELOPMENT
 A PART OF THE S.W. 1/4, SECTION 2, T9N, R3W, I.M.
 NORMAN, CLEVELAND COUNTY, OKLAHOMA



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FRANKLIN WOODS ADDITION
36th AVE. N.W. & FRANKLIN RD.
NORMAN, OKLAHOMA

SMC
 Consulting Engineers, P.C.
 402-232-7715
 402-232-7639
 www.smcok.com

OKLAHOMA CERTIFICATE OF AUTHORIZATION NO. CA 464 EXP. 09/20/2025

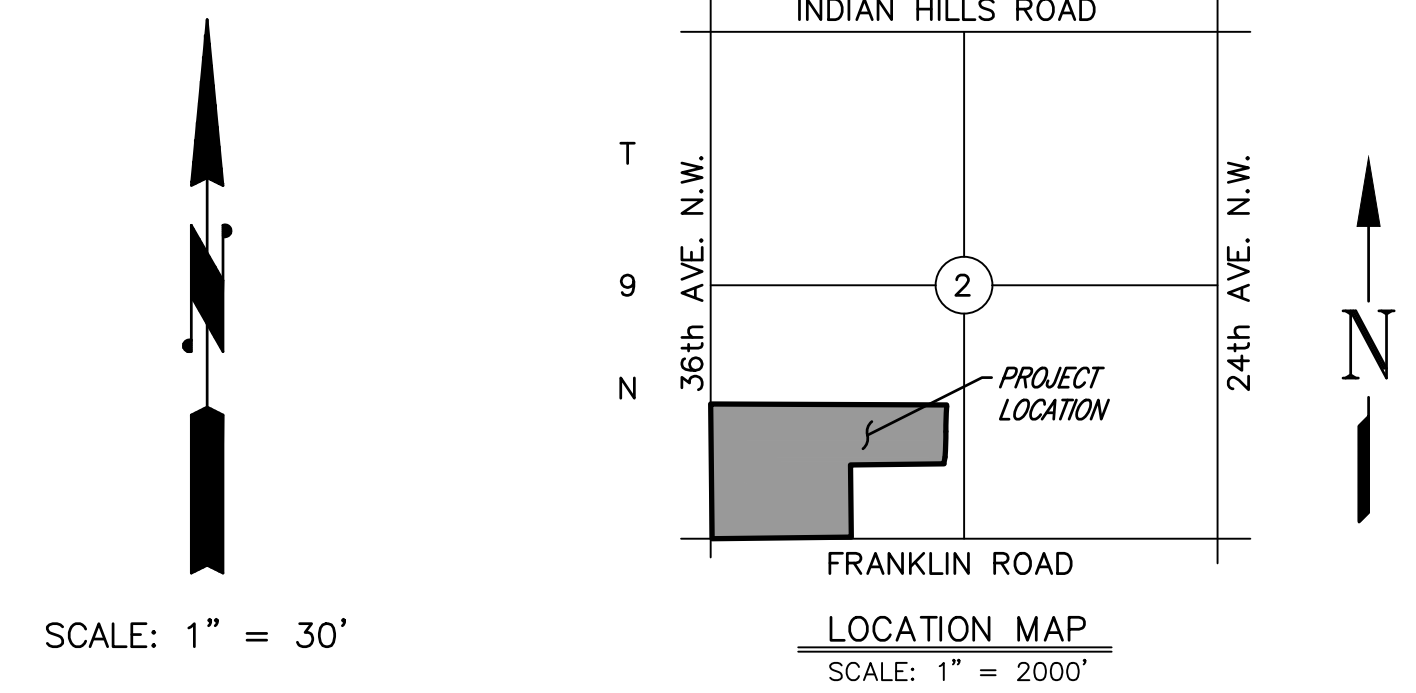
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 SCALE: 1" = 30'
 DRAWN BY: DG
 ENGINEER:
 P.E. NUMBER:

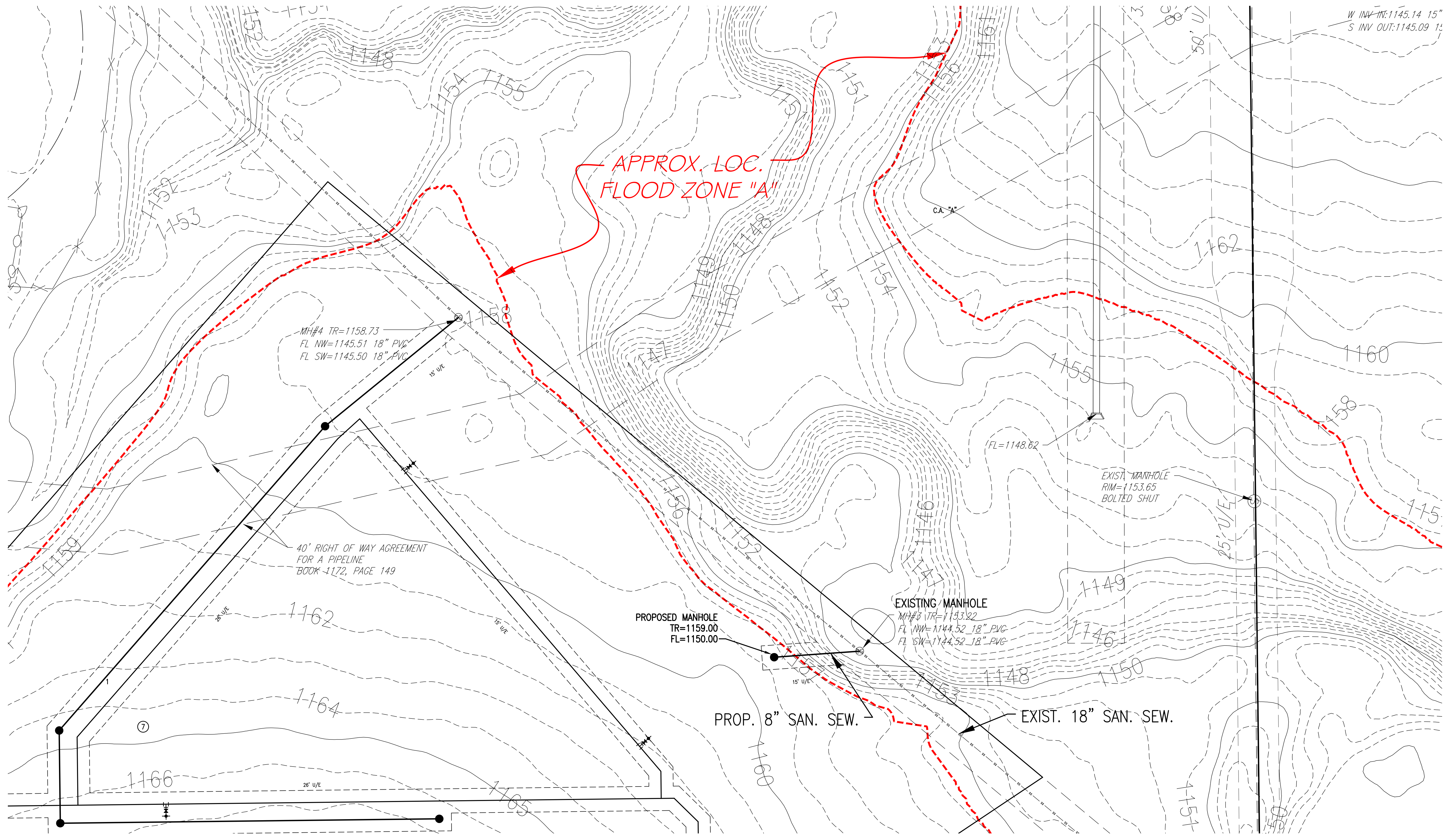
EXHIBIT FOR GRADING,
 ROADWAY, AND DRAINAGE
 CONSTRUCTION IN FLOOD PLAIN

SHEET NO.
1

EXHIBIT FOR SANITARY SEWER CONSTRUCTION
 IN FLOOD PLAIN
FRANKLIN WOODS ADDITION
 A PLANNED UNIT DEVELOPMENT
 A PART OF THE S.W. 1/4, SECTION 2, T9N, R3W, I.M.
 NORMAN, CLEVELAND COUNTY, OKLAHOMA



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FRANKLIN WOODS ADDITION

36th AVE. N.W. & FRANKLIN RD.
 NORMAN, OKLAHOMA

SMC
 Consulting Engineers, P.C.
 6101
 P.O. Box 232
 Norman, Oklahoma 73060
 Phone: 405-232-7715 Fax: 405-232-7639
 Website: www.smcok.com

OKLAHOMA CERTIFICATE OF AUTHORIZATION NO. CA 464 EXP. 09/20/2023

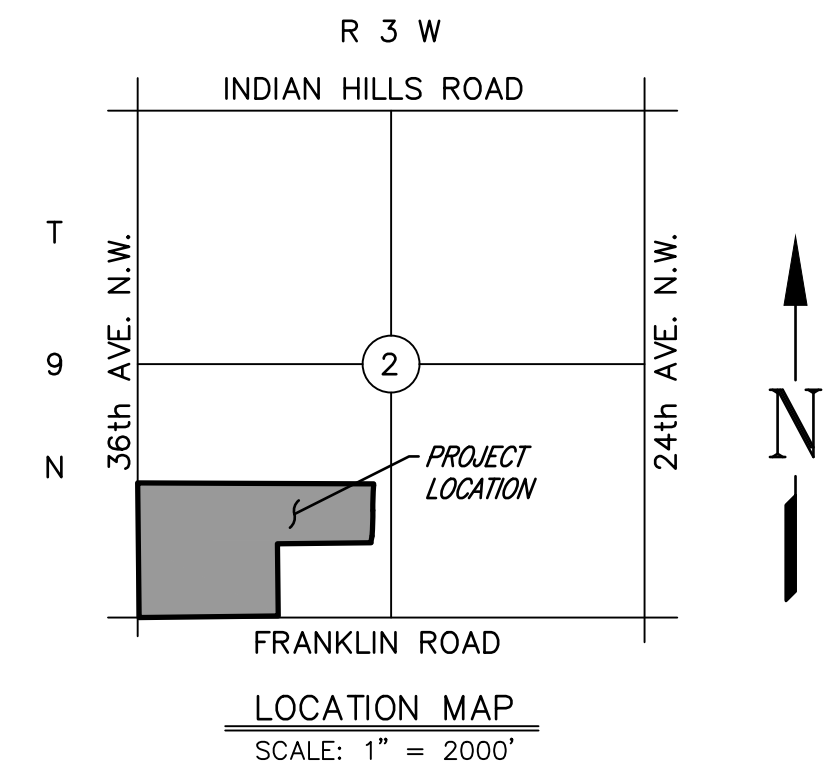
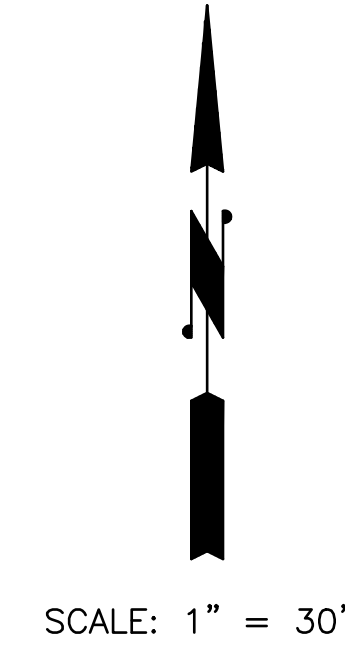
No.	Revision	Date

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 ENGINEER:
 P.E. NUMBER:

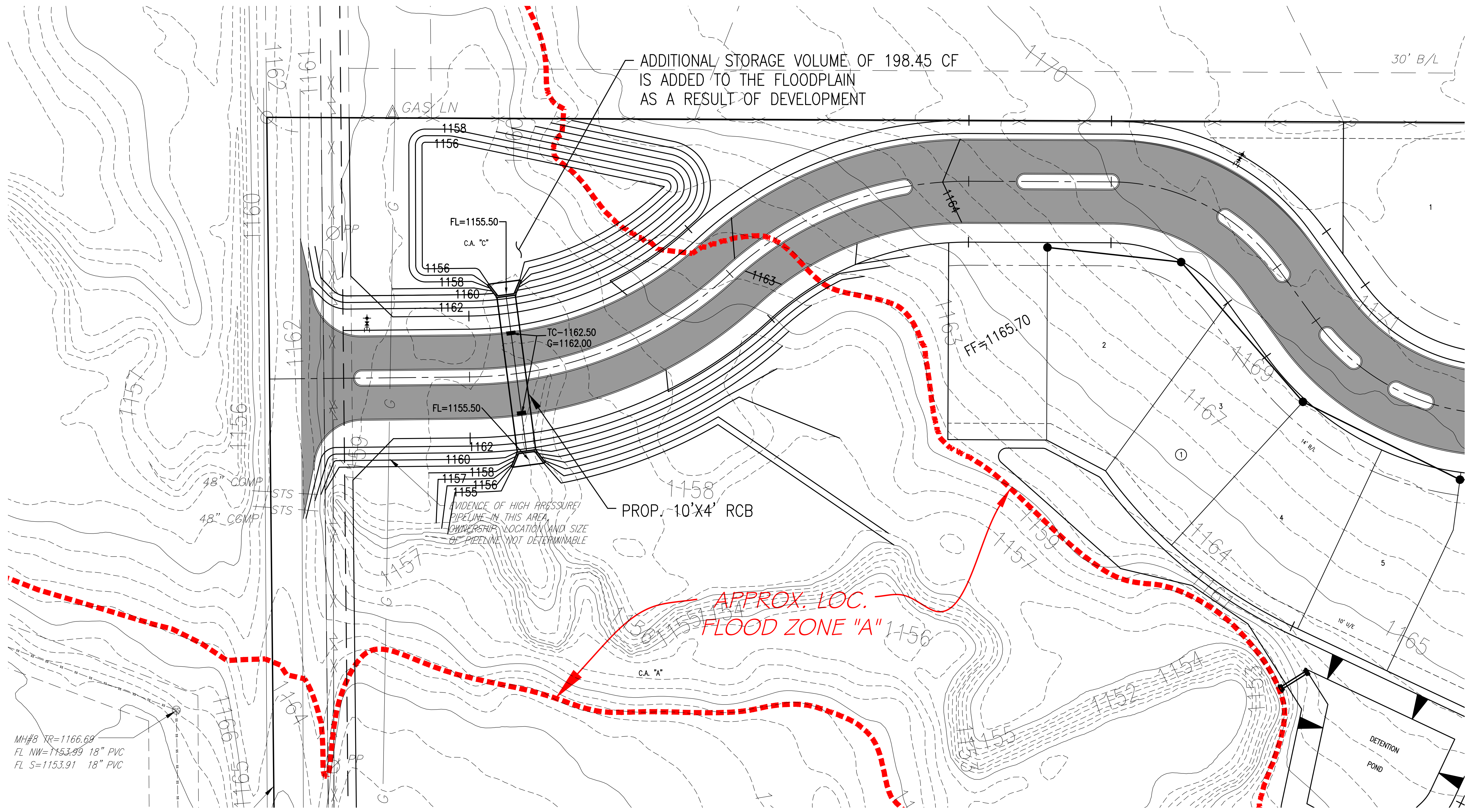
EXHIBIT FOR SANITARY SEWER CONSTRUCTION IN FLOOD PLAIN

W:\06532\00 - RICHARD NORMAN - FLOOD PROPERTY\PRELIMINARY PLAN\SS2 FLOOD PLAN PERMIT EXHIBIT.DWG
 Printed by: Steve Gartin @ 1/11/2023 10:17 AM

EXHIBIT FOR GRADING, ROADWAY AND DRAINAGE
CONSTRUCTION IN FLOOD PLAIN
FRANKLIN WOODS ADDITION
A PLANNED UNIT DEVELOPMENT
A PART OF THE S.W. 1/4, SECTION 2, T9N, R3W, I.M.
NORMAN, CLEVELAND COUNTY, OKLAHOMA



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FRANKLIN WOODS ADDITION
36th AVE. N.W. & FRANKLIN RD.
NORMAN, OKLAHOMA

SMC
SMC Consulting Engineers, P.C.
1000 N. Lincoln Blvd., Suite 100
Norman, Oklahoma 73069
Phone: 405-232-7715 Fax: 405-232-7659
Website: www.smcok.com

OKLAHOMA CERTIFICATE OF AUTHORIZATION NO. CA 464 EXP. 09/20/2025

No.	Revision	Date
1	ADDED TERTIARY QUANTITY	07/31/23

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DATE: 7/31/23
SCALE: 1" = 30'
DRAWN BY: DG
ENGINEER:
P.E. NUMBER:

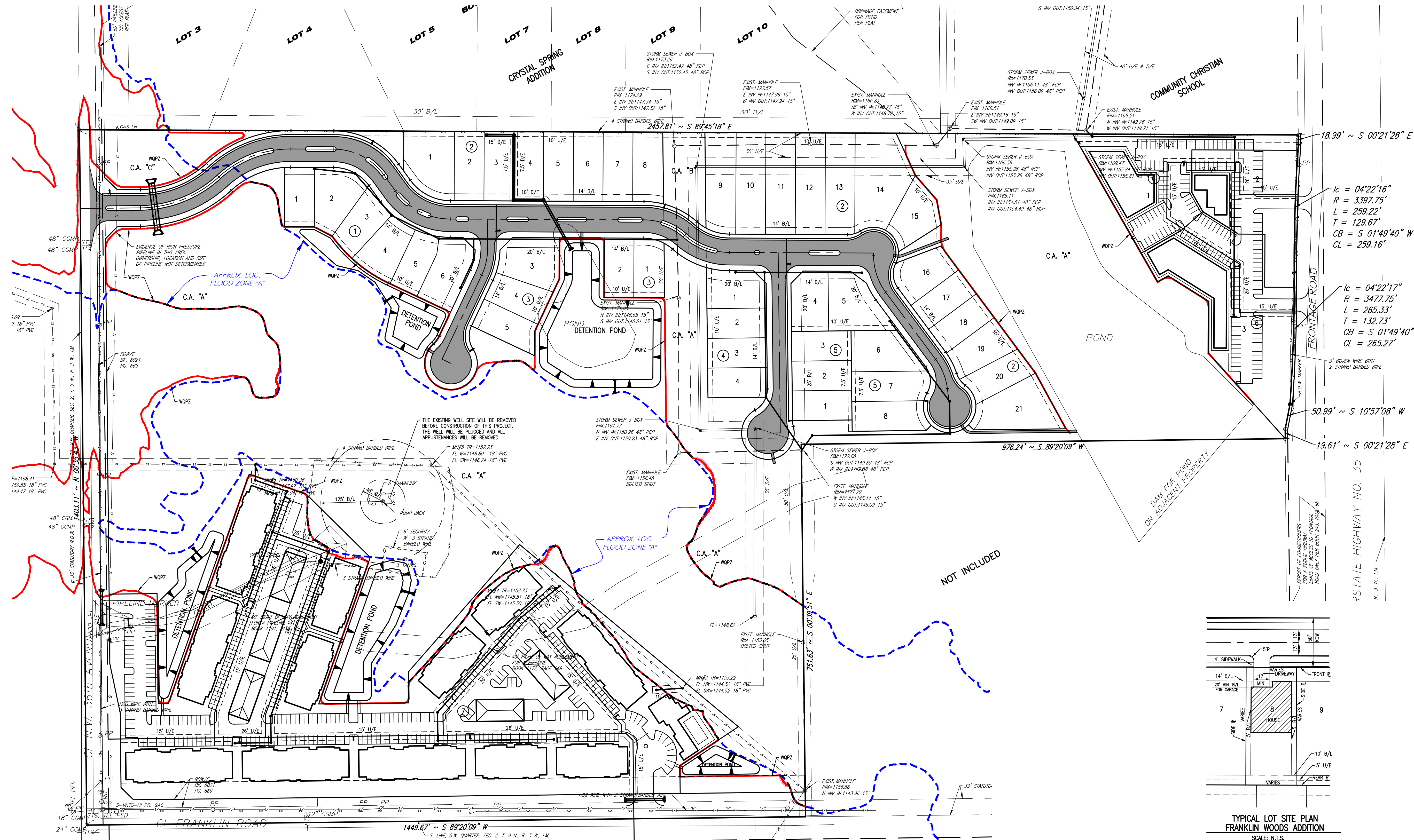
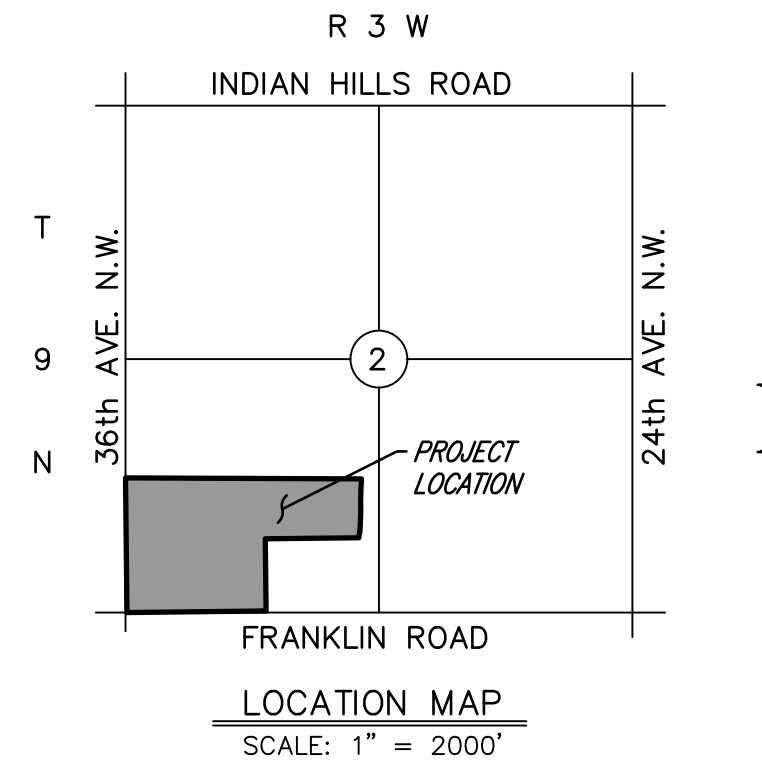
EXHIBIT FOR GRADING,
ROADWAY, AND DRAINAGE
CONSTRUCTION IN FLOOD PLAN

SHEET NO.
1

PRELIMINARY SITE PLAN FRANKLIN WOODS ADDITION

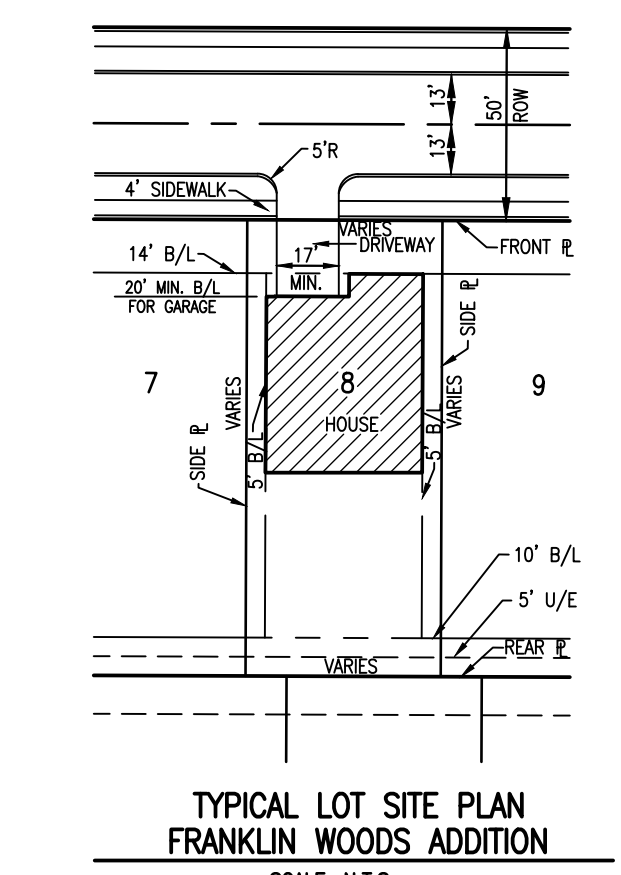
A PLANNED UNIT DEVELOPMENT
A PART OF THE S.W. 1/4, SECTION 2, T9N, R3W, I.M.
NORMAN, CLEVELAND COUNTY, OKLAHOMA

SCALE: 1" = 100'



Curve Data 1:
Ic = 04°22'16"
R = 3397.75'
L = 259.22'
T = 129.67'
CB = S 01°49'40" W
CL = 259.16'

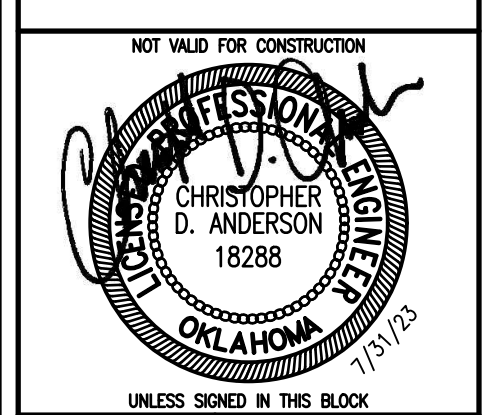
Curve Data 2:
Ic = 04°22'17"
R = 3477.75'
L = 265.33'
T = 132.73'
CB = S 01°49'40" W
CL = 265.27'



Item 2.
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OWNER:
RAVEN INVESTMENTS, L.L.C.
P.O. BOX 7187
MOORE, OKLAHOMA 73153

ENGINEER:
SMC Consulting Engineers, P.C.
815 W. Main Street
Oklahoma City, Oklahoma 73160



FRANKLIN WOODS ADDITION
36th AVE. N.W. & FRANKLIN RD.
NORMAN, OKLAHOMA

PROJECT NO.:	6532.00
DATE:	5/01/23
SCALE:	1" = 100'
DRAWN BY:	DC
ENGINEER:	Christopher D. Anderson
P.E. NUMBER:	18288
NO.	
REVISION	
DATE	
BY	
DATE	
BY	
DATE	
BY	

PRELIMINARY SITE PLAN
SHEET NO. 1

PLANS 6532.00 - RICHARD MOORE - IRVING PROPERTY PRELIMINARY PLANS PRELIMINARY SITE PLAN
Prepared by: Corey Giffin © 5/1/2023 8:40 AM

STAFF REPORT

08/21/2023

PERMIT NO. 679

ITEM: This Floodplain Permit Application is for grading, sidewalk repair and curb repair for a lot in the Imhoff Creek floodplain.

BACKGROUND:

APPLICANT: City of Norman Public Works Department
BUILDER: Public Works Stormwater Maintenance Division
ENGINEER: Brandon Brooks, P.E., CFM

218 S. Lahoma Ave., until recently, had an original single story, masonry house that was constructed in 1930 on Lot 7 Block 2 of the Eagleton Addition. The entire property including the house is in the floodplain/floodway of Imhoff Creek in an area of repetitive flooding. The previous owner of the lot, Mr. Cox, was utilizing this structure as a rental property. In June of 2022, the property was flooded and 6-8 inches of water inundated the structure. Mr. Cox reached out to the City shortly after this event to determine what his options were with regards to obtaining a floodplain permit for repairs. It was determined that significant enough damage had occurred to the structure to trigger the City’s Flood Hazard Ordinance rules concerning substantial damage/improvements and that the entire structure would need to be elevated to two feet above the BFE as well as other improvements made to meet all the requirements of the ordinance. After some consideration, Mr. Cox reached out to City staff to inquire about potentially selling the property to the City to dedicate the lot for permanent floodplain storage rather than make the repairs and improvements to the property. He cited concerns related to not only the cost benefit of the repairs, but the safety of any potential future tenants since he recognized the significant flood risk in this area. Negotiations began with the City and Mr. Cox at the end of 2022 into early 2023 for the sale of the property. Once an agreement was reached, City Council approved contract (K-2223-150) for purchase of the lot in April of 2023. Closing on the property occurred on August 14, 2023 and the City has taken possession of 218 S. Lahoma.

Included in the terms of the sale of the lot to the City, Mr. Cox received all necessary permits and had the house demolished and all materials removed from the site, including the existing damaged sidewalk and the concrete driveway. The demolition process left a depression in the lot where the house had been located as well as gaps in the sidewalk and curb. This floodplain permit application would grant City Stormwater Maintenance staff authority to replace missing sidewalk along the front of the lot with an ADA compliant sidewalk as well as install a concrete curb to connect existing gap in the curb line along the west side of S. Lahoma Avenue along the front of this property. In addition, grading will occur to bring fill from a cut area on the west side of the property near Imhoff Creek to the eastern side of the lot to fill in the recess where the structure was removed. Grading will be performed to also create a negative gradient from east to west across the lot to facilitate the flow of flood waters towards Imhoff Creek and away from neighboring properties and the roadway. Following repair and grading work, the sod will be installed on any bare areas. City staff will continue to maintain the site after completion of the work as well, including mowing and clean up after storm events. No new fill will be brought into the site to complete the grading or removing the recess.

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 Imhoff Creek floodplain (Zone AE). At the proposed site, the BFE is 1153.0 ft.

Applicable Ordinance Sections:	Subject Area:
36-533	(e)2(a).....Fill restrictions
	(e)2(e).....Compensatory storage
	(f)3(a)(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.

No fill will be brought into the floodplain satisfying ordinance requirements.

(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 indicated that since no fill will be brought into the floodplain as a result of this work and installation of the sidewalk and curb is to replace what was removed during demolition, there will be no rise in the BFE satisfying the ordinance requirements.

RECOMMENDATION: Staff recommends Floodplain Permit Application #679 be approved.

ACTION TAKEN: _____



City of Norman

Floodplain Permit Application

Floodplain Permit No. 679

Building Permit No. _____

Date August 21, 2023

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: City of Norman Public Works Department ADDRESS: 225 N. Webster Ave. Norman, OK 73069

TELEPHONE: 405-366-5455 SIGNATURE: _____

BUILDER: City of Norman Stormwater Maintenance ADDRESS: _____

TELEPHONE: _____ SIGNATURE: _____

ENGINEER: City of Norman Engineering Department ADDRESS: 225 N. Webster Ave. Norman, OK 73069

TELEPHONE: 405-366-5459 SIGNATURE: _____

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.

218 S. Lahoma Ave. Norman, OK

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELOPMENT

- | <u>ACTIVITY</u> | <u>STRUCTURE TYPE</u> |
|---|---|
| <input type="checkbox"/> New Structure | <input checked="" type="checkbox"/> Residential (1-4 Family) |
| <input type="checkbox"/> Addition | <input type="checkbox"/> Residential (More than 4 Family) |
| <input checked="" 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 checked="" type="checkbox"/> Replacement | <input type="checkbox"/> In Manufactured Home Park? <input type="checkbox"/> Yes |

ESTIMATED COST OF PROJECT \$ 5000 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.

The structure on 218 S. Lahoma was recently demolished and the City of Norman is purchasing the empty lot and permanently dedicating the lot to storage in the Imhoff Creek Floodplain.

Curb and sidewalks need to be replaced for safety and ADA compliance. The lot needs to be graded to prevent water pooling in the excavation site of the home as well as promote drainage generally from east to west towards Imhoff Creek.

Sod will be installed after repair and grading work is complete.

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.: 02803, 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 1153.0 Ft. NGVD (MSL) Unavailable

See Section 4 for additional instructions.

SIGNED:  DATE: August 21, 2023

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.)

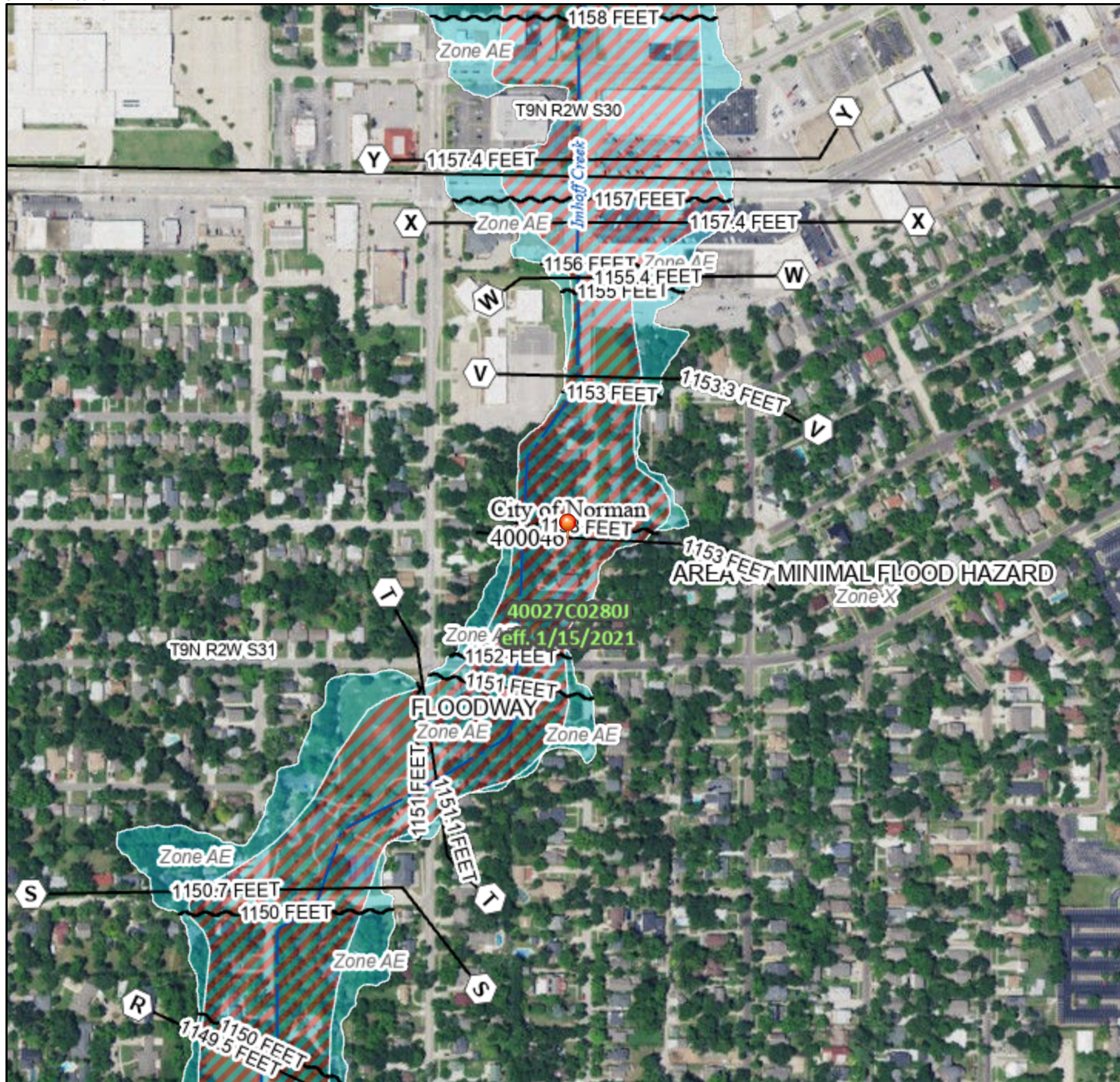
1. FEMA Elevation Certificate
and/or
2. FEMA Floodproofing Certificate

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.

National Flood Hazard Layer FIRMette



97°27'25"W 35°13'11"N



Legend

Item 3.

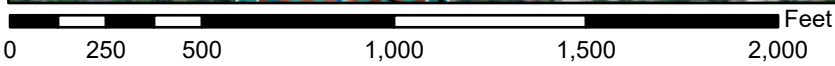
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM UT

- | | |
|------------------------------------|---|
| SPECIAL FLOOD HAZARD AREAS | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs Area of Undetermined Flood Hazard Zone D |
| GENERAL STRUCTURES | <ul style="list-style-type: none"> Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall |
| OTHER FEATURES | <ul style="list-style-type: none"> 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation 17.5 Coastal Transect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature |
| MAP PANELS | <ul style="list-style-type: none"> 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 8/9/2023 at 9:24 AM 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.

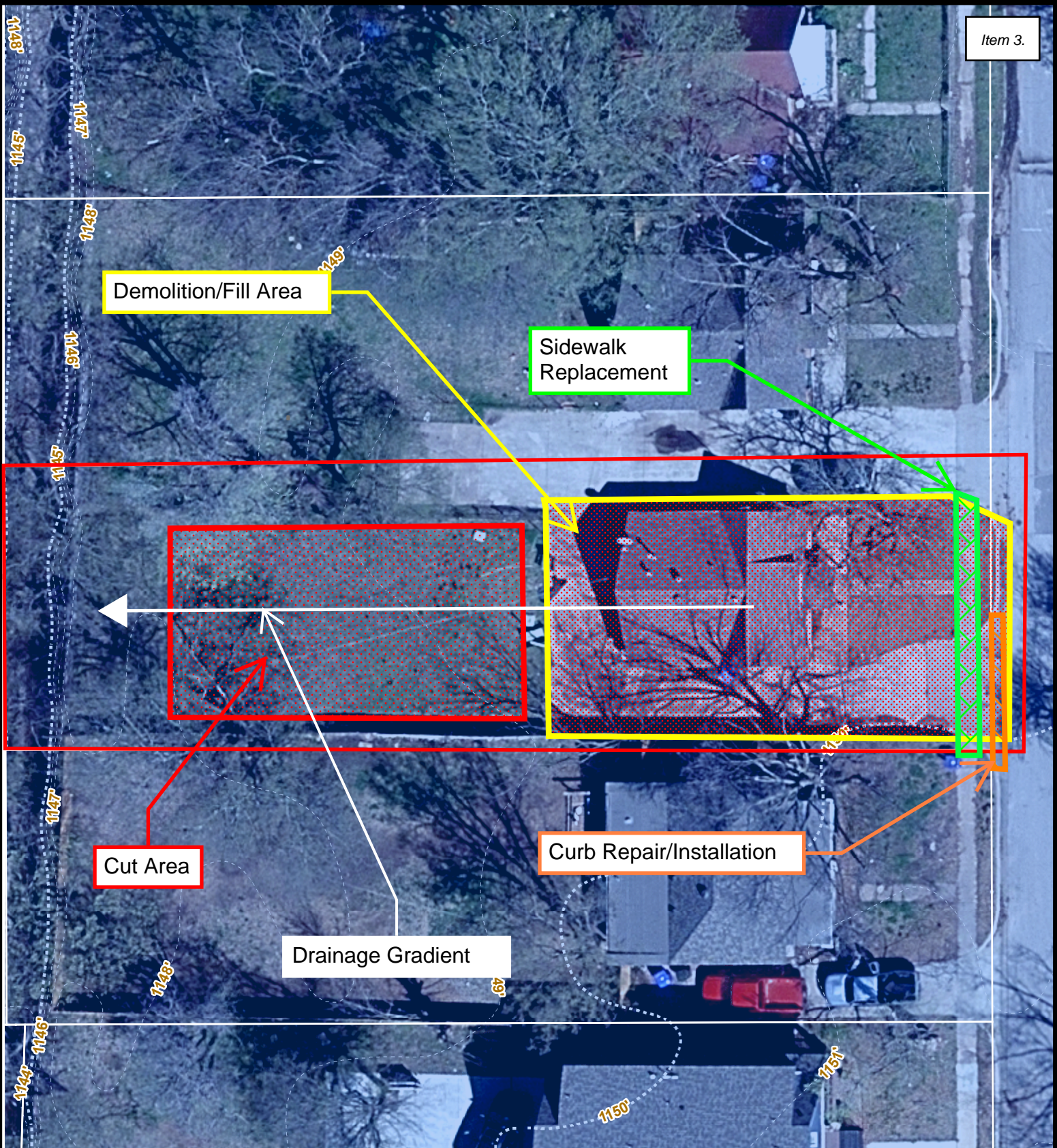
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifier, FIRM panel number, and FIRM effective date. Map in unmapped and unmodernized areas cannot be used for regulatory purposes.



1:6,000

97°26'48"W 35°12'42"N

Basemap Imagery Source: USGS National Map 2023



218 S. Lahoma Ave.

Legend

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

Contours 2021

Layer

- Index Contour
- Intermediate Contour

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

1 inch = 24 feet



August 8, 2023

Mr. Shawn O'Leary, P.E., CFM
Floodplain Administrator
City of Norman

Re: No Rise Certification
218 South Lahoma Ave
Norman, OK

Dear Mr. O'Leary:

This project involves rehabilitation of the property at 218 South Lahoma Avenue, which is adjacent to Imhoff Creek, following the demolition of the repetitive loss home. This property exists in the floodway of Imhoff Creek. The demolition of the property left a depression in the property. This project will use material on site to fill in the depression by regrading from the West side of the property towards the East side. With the removal of the structure, the pervious area of the site has been increased. The curb and sidewalk that was removed during demolition will be reconstructed.

The channel flow line and banks of Imhoff Creek will not be altered at this site. No material (soil or otherwise) will be placed in the channel or brought in to the property. There will not be any increase in the Base Flood Elevation at this location.

Please contact me at 405-366-5459 if you have any questions or need further information.

Sincerely,

Brandon Brooks, P.E., CFM
Capital Projects Engineer



RETURN TO: CITY OF NORMAN
Attn: Beth Muckala
201 West Gray Street
Norman, OK 73069

We hereby certify this to be a true and correct copy of the original instrument

First American Title

By: [Signature]

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT **Cox-Coyle Investments, LLC**, an Oklahoma Limited Liability Company **alk/a Cox Coyle Investments, LLC**, an Oklahoma Limited Liability Company ("Grantor"), in consideration of the sum of **TEN DOLLARS (\$10.00)** and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby grant, bargain, sell and convey unto the **City of Norman, Oklahoma, a Municipal Corporation ("City")**, the fee simple title in and to the following described real property and premises, and including all right, title and interest in and to the airspace, light and view above the surface of the lands herein described, reserving and excepting the mineral interests, therein, to-wit:

All of Lot Seven (7), in Block Two (2), of EAGLETON ADDITION, to the City of Norman, Cleveland County, Oklahoma, according to the recorded plat thereof ("Property").

All bearings contained in this description are based on the Oklahoma State Plane Coordinate System and are not astronomical bearings.

Together with all improvements thereon and the appurtenances thereunto belonging, and warrant the title to the same. The reservation and exception of mineral rights herein does not include rock, gravel, sand and other road building materials.

To have and to hold said described premises unto said City, its heirs and assigns forever, free clear and discharged of and from all former grants, charges, taxes, judgments, mortgages and other liens and encumbrances of whatsoever nature, **EXCEPT THAT the Property is currently and must remain vacant of all structures. The City shall not, nor may any future owner, construct any new buildings on the Property. This restriction shall run as a covenant with the land and may not be removed by any act of the City or private party, but may instead only be removed by entry of an order by a court of competent jurisdiction for just cause.**

Signed and delivered this 14 day of August, 2023.

COX-COYLE INVESTMENTS, LLC

By: [Signature]
Name: Christopher M. Cox
Title: Manager

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF OKLAHOMA, COUNTY OF CLEVELAND, SS:

Before me, the undersigned, a Notary Public in and for said County and State, on this 14 day of August, 2023, personally appeared **Christopher M. Cox of Cox-Coyle Investments, LLC**, as its **Manager**, and to me known to be the identical person(s) who executed the foregoing warranty deed and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

My Commission Expires: JULY 22, 2025 Notary Public: [Signature] Becki Nafi



Approved as to form and legality this 14th day of August, 2023.
[Signature] City Attorney



Approved and accepted by the City of Norman, this 14 day of August, 2023.

[Signature]
Larry Heikkila, Mayor

ATTEST: [Signature]

City Clerk
SEAL:

EXEMPT FROM DOCUMENTARY STAMP TAX O.S. TITLE 68, ARTICLE 32, SECTION 3202, PARAGRAPH 11.

STAFF REPORT

08/21/2023

ITEM: Revisions to Floodplain Ordinance to include language for cumulative substantial improvement provisions.

BACKGROUND:

The City's Floodplain Ordinance which is included in Section 36-533 of the City of Norman Code of Ordinances, was first adopted by the City of Norman on July 8, 1975. The ordinance has been revised fifteen (15) times. Revisions occurred in 1978, 1981, 1986, 1987, 1989, 1997, 2003, 2004, 2007, 2008, 2012, 2017, 2020, 2021 and 2022. The floodplain ordinance was originally adopted as a requirement of the City of Norman's participation in the National Flood Insurance Program (NFIP), which was established by the U.S. Congress in 1968 and is administered by the Department of Homeland Security's Federal Emergency Management Agency (FEMA).

DISCUSSION:

Residents and business owners in Norman are eligible for a reduction in flood insurance premiums because of the city's active participation in FEMA's National Flood Insurance Program (NFIP) Community Rating System (CRS). In addition to lower premiums, the CRS program helps to reduce the threat of injury or death and property damage due to flooding in Norman.

The CRS is a voluntary program for NFIP participating communities. The intended goals of the CRS program are to reduce flood losses, facilitate accurate insurance ratings and promote the awareness of flood insurance. The CRS program rewards communities for implementing activities that protect their residents from flooding. These programs include public outreach, floodplain open space preservation and higher regulatory standards.

Communities are rewarded by having the individual flood insurance policyholder's premiums reduced. Flood insurance premium reductions run in 5 percent increments, from 5 percent to 45 percent. Class ratings range from 10 to 1. The higher the flood protection activity, the lower the Class rating. Norman became a Class 6 community in 2022. Norman's flood insurance policyholders who reside in Special Flood Hazard Areas receive a 20 percent reduction on flood insurance premiums. The reduction in flood insurance premiums represents an annual savings in premium costs for Norman policyholders and will take effect at the time a new policy is written or an effective policy is renewed.

The CRS Coordinator's Manual is the guidebook for the CRS program. The Coordinator's Manual spells out the credits and credit criteria for community activities and programs that go above and beyond the minimum requirements for participation in FEMA's National Flood Insurance Program. The Coordinator's Manual explains how the CRS operates, how credits are calculated, and what documentation is required, and also acts as guidance for communities in enhancing their flood loss reduction and resource protection activities. According the CRS manual, including provisions in a flood hazard ordinance for cumulative SI/SD is worth up to 90 points, or about 20% of the points needed to improve a class rating from 6 to 5.

Currently, the City's Flood Hazard Ordinance includes language related to substantial improvement and substantial damage (SI/SD) that states that any cost to repair or improve a structure in the floodplain that exceeds 50% of the value of the structure is considered substantial improvement and therefore requires that the structure be brought into full compliance with all current Flood Hazard Ordinance requirements. Proposed cumulative substantial improvement

language would require that the cost of repairs or improvements would be calculated over a ten-year period for determining if the threshold for substantial improvement has been met. In addition to changes in the definition of substantial improvement, two new definitions will be added to the ordinance to clarify “market value” and define “cumulative cost” and how they are calculated.

The following example demonstrates the effects of the ordinance revision:

An existing, non-conforming house in the floodplain has a market value of \$100,000 and the owner applies for a floodplain permit to renovate portions of the structure for a total cost of \$25,000, resulting in a 25% cost of improvements to the structure. Two years later, that same house now has a market value of \$125,000 and is damaged during a flooding event resulting in repair costs of \$35,000 resulting in a 28% cost of improvement to structure. The combined cost of improvements is 53% of the market value of the structure over a two-year period. Under existing requirements, the structure would not be required to come into compliance with the flood hazard ordinance by flood proofing, raising or otherwise mitigating flood risk. With cumulative SI/SD requirements, a permit could not be granted unless the structure was renovated in such a manner as to make it compliant with the flood hazard ordinance and therefore help mitigate the flooding risk.

The schedule for the ordinance amendment is outlined below:

Norman Revised Floodplain Ordinance Schedule	
Item	Completion Date
Proposed Ordinance Changes Approved by OWRB	August 9, 2023
Proposed Ordinance Changes to Floodplain Permit Committee	August 21, 2023
Proposed Ordinance Changes to Planning Commission	October 12, 2023
Proposed Ordinance Changes to City Council 1st Reading	November 14, 2023
Proposed Ordinance Changes to City Council 2nd Reading	November 28, 2023
Revised Floodplain Ordinance Becomes Effective	December 28, 2023

The following is a summary of the proposed revisions to the ordinance. Changes and additions to existing language are underlined:

36-533 (c) *Definitions.* The following words, terms, and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Cumulative Cost is the sum of the cost of repairs, construction, rehabilitation, addition, or other improvement of a structure divided by the assessed market value of a structure at the time that a cost is incurred and is calculated over the immediate past 10-year period.

Market Value means, for purposes of determining substantial improvement, the value of a structure and any attached improvements. The assessed value of a structure, as determined by the Cleveland County Assessor, shall be presumed to

be the market value unless evidence of an alternative valuation is presented to and accepted by the Floodplain Permit Committee. The Floodplain Permit Committee is ultimately responsible for determining the market value of a structure, although an appeal can be made to the Board of Adjustment.

Substantial improvement means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before “start of construction” of the improvement. This includes structures that have incurred “substantial damage”, regardless of the actual work performed. The cost used in the substantial improvement determination shall be the cumulative costs of all previous improvements for a specific building or structure during the immediate past 10-year period. The term "substantial improvement" does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions; or
2. Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

RECOMMENDATION: Staff recommends that the Floodplain Permit Committee approve the revised ordinance.

ACTION TAKEN: _____

AN ORDINANCE OF THE CITY OF NORMAN, OKLAHOMA AMENDING SECTION 533 (“FH, FLOOD HAZARD DISTRICT”) OF THE ZONING ORDINANCE, TO REVISE AND ADD DEFINITIONS TO SUBPART (C) (“DEFINITIONS”), TO ALLOW FOR “CUMULATIVE COST” TO BE ACCOUNTED FOR IN DETERMINING “SUBSTANTIAL IMPROVEMENTS” AND TO DEFINE “MARKET VALUE”; AND PROVIDING FOR THE SEVERABILITY THEREOF.

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF NORMAN, OKLAHOMA:

§ 1. That, Section 533(c) of Chapter 36 of the Code of the City of Norman, shall be amended as follows:

Definitions. The following words, terms, and phrases, when used in this section, shall have the following meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

* * *

Compensatory storage means stormwater storage that is built to replace storage volume that is lost due to development encroaching into the floodplain.

Cumulative Cost is the sum of the cost of repairs, construction, rehabilitation, addition, or other improvement of a structure divided by the assessed market value of a structure at the time that a cost is incurred and is calculated over the immediate past 10-year period.

Development means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling, or storage of equipment or materials.

* * *

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market Value means, for purposes of determining substantial improvement, the value of a structure and any attached improvements. The assessed value of a structure, as determined by the Cleveland County Assessor, shall be presumed to be the market value unless evidence of an alternative valuation is presented to and accepted by the Floodplain Permit Committee. The Floodplain Permit Committee is ultimately responsible for determining the market value of a structure, although an appeal can be made to the Board of Adjustment.

Maximum extent feasible means no prudent, practical, and feasible alternative exists and all possible planning to minimize potential harm has been undertaken. Economic considerations may be taken into account but shall not be the overriding factor in determining maximum extent feasible.

* * *

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before “start of construction” of the improvement. This includes structures that have incurred “substantial” damage”, regardless of the actual work performed. The cost used in the substantial improvement determination shall be the cumulative costs of all previous improvements for a specific building or structure during the immediate past 10-year period. The term “substantial improvement” does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions; or
2. Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

Variance means grant of relief by the City from the terms of a floodplain management regulation.

* * *

§ 2. **SEVERABILITY**. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held 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.

ADOPTED this _____ day
of _____, 2023.

NOT ADOPTED this _____ day
of _____, 2023.

(Mayor)

(Mayor)

ATTEST:

(City Clerk)