

STAFF REPORT

ITEM: Floodplain Permit Application for installation of a natural gas main extension within the floodplain of an unnamed tributary of the Little River near N. Flood Avenue and W. Franklin Road.

APPLICANT: Oklahoma Natural Gas – Drew Nixon

ENGINEER: Johnson and Associates, Inc. – Brian Rowe, CFM/ Diana Phan, P.E.

BACKGROUND

The applicant requests approval of a floodplain permit to allow installation of a new 2-inch polyethylene gas main extension between N. Flood Avenue and N. Interstate Drive along the proposed N.W. 28th Street alignment, south of W. Franklin Road and north of Franklin Business Park.

The project consists of a subsurface gas main extension utilizing trenchless bore installation methods at three separate floodplain crossings associated with an unnamed tributary of the Little River. The proposed work includes temporary bore pits and underground installation only. No permanent above-ground structures, fill placement, grading, or channel modifications are proposed within the floodplain. Disturbed areas will be restored to pre-project conditions following construction.

STAFF ANALYSIS

The project includes three trenchless bore crossings beneath the mapped floodplain associated with an unnamed tributary of the Little River. The crossings are identified at the following approximate coordinates:

- Crossing #1: 35.273035, -97.484607
- Crossing #2: 35.275505, -97.484403
- Crossing #3: 35.275505, -97.484403

Because the project is located within FEMA Zone A floodplain areas without published detailed flood elevations, the applicant provided Base Flood Elevation determinations prepared by the U.S. Army Corps of Engineers Floodplain Management Services program. The provided determinations identify BFEs of approximately 1147.4 feet NAVD88 and 1149.9 feet NAVD88 for the respective crossings.

Proposed Development Characteristics

- Installation of new 2-inch PE gas main extension

- Three trenchless bore crossings beneath the floodplain
- No permanent structures within the floodplain
- No fill placement or grading within the floodplain
- No watercourse alteration proposed
- Temporary construction disturbance only, with restoration to pre-project conditions

APPLICABLE ORDINANCE SECTIONS (36-533)

(e)(2)(a) – Floodplain modification and fill restrictions

(e)(2)(e) – Compensatory storage requirements

(e)(4)(c) – Special requirements oil and gas

(f)(3)(8) – No-rise condition requirements

DETAILED ORDINANCE ANALYSIS

(e)(2)(a) – Floodplain Fill Restrictions

Only sub-surface trenching will occur within the floodplain.

(e)(2)(e) – Compensatory Storage

No compensatory storage will be required since there will be no fill brought into the floodplain.

(e)(4)(c) – Special Requirements for Oil and Gas

The applicants submitted plans indicated trenching outside of the floodplain and greater than 50 feet from the edge of the channel. In addition, the bore depth will exceed 10 feet depth below the channel bed. Certification that pipe thickness met or exceeded minimum requirements provided in plans.

(f)(3)(8) – No-Rise Requirement

Engineer provided a No-Rise Certification.

RECOMMENDATION

Staff recommends approval of floodplain permit application #742.

ACTION TAKEN:
