

John Hall, Chairman
Pam Reed, Commissioner
Peggy Garner, Commissioner



TEXAS WATER COMMISSION

PROTECTING TEXANS' HEALTH AND SAFETY BY PREVENTING AND REDUCING POLLUTION

November 10, 1992

Mr. Jerry Smith, Sr.
Huebner Road Property Joint Venture
3003 N.W. Loop 410, Suite 203
San Antonio, Texas 78230

Re: Edwards Aquifer, Bexar County
PROJECT: Oakwood Subdivision - Units 1, 2, & 3, Located on West Side of Huebner Road Approximately 0.25 Miles North of Bitters Road, San Antonio, Texas.
TYPE: Request for Approval of Water Pollution Abatement Plan (WPAP); 31 Texas Administrative Code (TAC) §313.4; Edwards Aquifer Protection Program.

Dear Mr. Smith:

The Texas Water Commission (TWC) has completed their review of the WPAP application for the referenced project that was submitted to this office on the behalf of Huebner Road Property Joint Venture by Pape-Dawson Consulting Engineers, Inc. on October 15, 1992.

PROJECT DESCRIPTION

The proposed Oakwood Subdivision - Units 1, 2, & 3, are located on the west side of Huebner Road approximately 0.25 miles north of Bitters Road, San Antonio, Texas. Units 1, 2 & 3 consist of an approximately 48.6 acre tract which will be divided into 158 single-family residential lots, roadways, and curb and gutter. Unit 1 will consist of 48 lots. Unit 2 will consist of 57 lots. Unit 3 will consist of 53 lots. A recreation site located on the south corner of the project site will include a community center, swimming pool, tennis courts and a parking area designed to accommodate approximately 20 vehicles.

The site is located within the City of San Antonio, and will conform with applicable codes and requirements of the City of San Antonio. Potable water will be supplied by San Antonio Water System.

The normal population of the development is estimated to be about 474 persons. 59,250 gallons of domestic wastewater is to be generated by this project. It will be disposed of by conveyance to the existing Salado Creek Sewage Treatment Plant owned by the City of San Antonio.

REPLY TO: DISTRICT 8 / 140 HEIMER RD., SUITE 360 / SAN ANTONIO, TEXAS 78232-5042 / AREA CODE 512/490-3096

Mr. Jerry Smith, Sr.
Page 2
November 10, 1992

The proposed impervious cover for the development, approximately 18.5 acres (38.1%), includes single family dwelling roof tops, driveways, sidewalks, and streets.

Approximately 222 cubic feet per second of stormwater flow will be generated in a 25 year storm event from the 48.6 acre tract. Stormwater runoff will be typical of a residential site.

GEOLOGY ON SITE

According to the geologic assessment included with the submittal, the two on-site sinkholes (Sinkhole #1 & Sinkhole #2) are each described to have a moderate level of concern. The one on-site fault zone is described to have a low level of concern.

The District 8 site inspection of October 13, 1992, revealed Sinkhole #1 has soil cover within it. No openings within Sinkhole #1 were observed which would allow direct flow into the subsurface. The natural bottom of Sinkhole #2 was covered with fill material (Rock & soil and some building materials) which had been placed within it.

GEOLOGY DOWN-GRADIENT OF SITE

According to the geologic assessment included with the submittal, numerous features, including one sinkhole, a fault zone, fractured rock outcrops and a closed depression, are present downgradient of the proposed project site within two drainage pathways. Sinkhole #3 is considered to have a moderate level of concern. All fractured rock zones are described to be of low sensitivity. The closed depression is described to be of low to moderate concern.

POLLUTION ABATEMENT

1. During Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site during construction:

A. Where feasible, stormwater runoff will be directed around construction operations.

B. Two (2) temporary stormwater detention areas equipped with silt fences within rock berms will be placed to filter stormwater runoff. Detention Area #1 is to be located on the

Mr. Jerry Smith, Sr.
Page 3
November 10, 1992

south corner of the project site and within the south end of Sinkhole #2. The building materials and excess rocks and soils which have been placed in Sinkhole #2 will be removed and be disposed of properly. Any native clay lining the bottom of Sinkhole #1 and Sinkhole #2 will remain in place.

Detention Area #2 is to be located approximately 1,000 feet northeast of Detention Area #1 on the northwest side of Huebner Road.

C. During placement of road paving materials stormwater runoff from untimely rainfall will be routed through hay bales, silt fences and/or temporary detention ponds, collected and disposed of properly.

D. Access to each phase of construction will be through stabilized construction entrances.

E. Areas of temporary stockpile for soils will be upgradient of the temporary stormwater detention areas and within additional erosion control barriers shown on the site plan.

F. Detention Areas 1 and 2 will remain in place until 70% of the disturbed area within the watershed for the respective feature has either received impervious cover or has been revegetated or otherwise stabilized.

2. After Construction:

The following measures will be taken to prevent pollution of stormwater originating on-site or up-gradient from the project site and potentially flowing across and off the site after construction:

A. After construction is complete stormwater runoff from the project will be directed away from both on-site sinkholes. Prior to leaving the completed subdivision stormwater will be directed through vegetated drainage areas and channels noted on the site plan.

3. Recharge Features:

The following measures will be taken to prevent pollutants from entering recharge features while maintaining or enhancing the quantity of water entering the recharge features identified in the geologic assessment.

A. During Construction

Sinkhole #1: Sinkhole #1 will be filled with on-site excavation material during construction of Unit 1. Until it

Mr. Jerry Smith, Sr.

Page 4

November 10, 1992

is filled the south end of the sinkhole will be breached by excavating a temporary channel through the embankment. Any stormwater would flow downstream to be captured and treated in Detention Area #1. During construction of Unit 2 - Phase 1 the temporary drainage swale will be recontoured to direct stormwater runoff from the filled Sinkhole #1 area to an underground 24-inch diameter pipe. Stormwater from this pipe will be directed to Detention Area #1.

Sinkhole #2: Sinkhole #2 is reported to contain a layer of Del Rio Clay, 3 to 4 feet of rock and soil placed during construction of Huebner Road, and some municipal solid waste (building materials) placed without authorization. Prior to construction the unauthorized building materials will be removed and disposed of properly. During construction, the southern area of Sinkhole #2 shown on the site plan will become temporary Detention Area #1. The clay layer and any compacted overlying soil will remain in place.

B. After Construction:

Both Sinkhole #1 and Sinkhole #2 will be protected by the overlying soils and by providing positive drainage away from the sinkhole area.

APPROVAL

The plan for this project has been reviewed for compliance with 31 TAC §313.4 which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan is in general agreement with 31 TAC §313.4; therefore, approval of the plan is hereby granted subject to the specific conditions listed below.

Failure to comply with any of the aforementioned conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to §26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative penalties of up to \$10,000 for each act of violation and for each day of violation.

Special Conditions

1. All temporary erosion and sedimentation control measures shall be in place prior to commencement of construction for each unit and phase of this project.

Mr. Jerry Smith, Sr.

Page 5

November 10, 1992

2. Prior to commencing construction on each unit or phase of Oakwood Subdivision the applicant/agent shall notify the District 8 Office.

3. Prior to the construction of Detention Area #1 the thickness of the Del Rio Clay shall be determined. If the thickness is found to be insufficient additional impervious material shall be required. Also, no untreated stormwater should be allowed into the remainder of Sinkhole #2.

4. Prior to commencing construction of Unit 1 and Unit 2 - Phase 1, temporary Detention Area #1 shall be constructed.

5. After completion of construction for Unit 1 and Unit 2 - Phase 1, stormwater runoff from the parking area for the recreational center will be directed to the adjacent vegetated drainage easement.

6. Prior to commencing construction of Unit 2 - Phase 2 and Unit 3, the temporary Detention Area #2 shall be constructed.

7. Detention Areas #1 and #2 will remain in place until 70% of the disturbed area within the watershed for the respective feature has either received impervious cover or has been revegetated or otherwise stabilized. After Detention Areas 1 and 2 have been removed but during residential construction on the individual lots in this development, temporary E&S controls shall be installed. The E&S controls shall be inspected periodically during construction and following any significant rainfall occurrences. Necessary repairs to the E&S controls shall be made as soon as possible.

Standard Conditions

1. Please be reminded that 31 TAC §313.4(c) requires the owner/developer to: (1) record in the county deed records that this property is subject to the approved WPAP; (2) submit to the Executive Director, within 30 days of receiving this written notice of approval of the water pollution abatement plan, proof of application for recordation of notice in the county deed records; and (3) submit to the District 8 Office, prior to commencing construction, proof of application for recordation of notice in the county deed records. Enclosed is a suggested format you may be used to deed record your approved WPAP.

2. Prior to commencing construction, the applicant/agent shall submit to the District 8 Office copies of any changes made to the plans and specifications for this project which have been required by the TWC review and/or all other permitting authorities.

Mr. Jerry Smith, Sr.
Page 6
November 10, 1992

3. Please note, following this approval of the regulated activities described in the referenced WPAP submittal, any amendment to these activities required by some other regulating authority or desired by the applicant will require the submittal of a WPAP application to amend this approval. And, as indicated in 31 TAC §313.4 and §313.27, an application to amend any approved regulated activity shall include payment of appropriate fees and all information necessary for its review and Executive Director approval.

4. Additionally, all contractors conducting regulated activities associated with this proposed regulated project shall be provided with copies of this approval letter and the entire contents of the submitted WPAP so as to convey to the contractors the specific conditions of this approval. During the course of these regulated activities, the contractors shall be required to keep on-site copies of the WPAP and this approval letter.

5. The temporary Erosion and Sedimentation (E&S) controls for the entire project shall be installed prior to beginning any other construction work on this project.

During residential construction on the individual lots in this development, temporary E&S controls shall be installed. The E&S controls shall be inspected periodically during construction and following any significant rainfall occurrences. Necessary repairs to the E&S controls shall be made as soon as possible.

6. The appropriate E&S control(s) that shall be used during the construction of the project should be determined as follows: (1) **Silt fences** should be used when the drainage area is less than 2 acres and the slope is less than 10%. (2) **Rock berms with filtration** should be used when the drainage areas are greater than two acres or when the slopes are in excess of 10%. The bottom edge of the filter fabric must be buried at least 4 inches below grade.

7. The TWC may monitor stormwater discharges from the site to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection may be necessary if excessive solids are being discharged from the site.

8. Also, 31 TAC §313.4(d)(2) requires that if any significant recharge features, such as solution openings or sinkholes, are discovered during construction, all regulated activities near the significant recharge feature must be suspended immediately and may not be resumed until the Executive Director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. Upon discovery of the significant recharge features, the developer shall immediately notify this office.

Mr. Jerry Smith, Sr.

Page 7

November 10, 1992

9. Upon completion of the project, the applicant shall reseed or sod all areas disturbed during construction.

10. If any abandoned wells exist on the site or are found during construction of the proposed development, they shall be plugged in accordance with the local underground water conservation district's plugging procedures, if applicable, or 31 TAC Section 287.50(a) of this title (relating to Standards for Plugging Wells that Penetrate Undesirable Water Zones), or an equivalent method, as approved by the Executive Director. Pursuant to 31 TAC Section 287.48(e), the person that plugs such a well shall, within 30 days after plugging is complete, submit a Water Well Completion and Plugging Report to the Executive Director, through the District 8 Office and to the Edwards Underground Water District.

Any drill holes resulting from core sampling on-site or down-gradient of the site shall be plugged with concrete, from the bottom of the hole to the top of the hole, so as to not allow water or contaminants to enter the subsurface environment.

11. No waste-disposal wells, new confined animal feeding operations, land disposal of Class I wastes, or use of sewage holding tanks as parts of organized collection systems shall be allowed on the recharge zone of this regulated development.

12. During the course of the construction related to the referenced regulated project, the owner/developer shall comply with all applicable provisions of 31 TAC §313.4. Construction which is initiated and abandoned, or not completed, shall be returned to a permanent condition such that groundwater in the Edwards Aquifer is protected from potential contamination. Additionally, Huebner road Property Joint Venture, applicant, shall remain responsible for the provisions and special conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and specific conditions of this approval.

13. Pursuant to 31 TAC §313.4(d)(1) and prior to commencing regulated activities, the applicant must provide the District 8 Office with the date on which the regulated activity will commence.

14. Please note that 31 TAC §313.4(g) states that this approval expires two years from this date unless, prior to the expiration date, construction has commenced on the regulated project.

15. Approval of the design of the sewage collection system for this proposed subdivision shall be obtained from the Texas Water Commission prior to the commencement of construction of the sewage collection system, the design of which shall be in accordance with 31 TAC Section 313.5.

Mr. Jerry Smith, Sr.

Page 8

November 10, 1992

If you have any questions or require additional information, please contact a representative of the Edwards Aquifer Protection Program at the District 14 Office (512) 463-7803.

Sincerely,



Billy H. Boggs,
District Manager for

Jesús Garza
Executive Director

BHB-JKM/jkm

Enclosure

cc: Pape-Dawson Engineers
Rebecca Cedillo, V.P., San Antonio Water System
Ron Pena, P.E., Environmental Engineer, Bexar County Public
Works Department
Russell L. Masters, Edwards Underground Water District
Rob Conti, Edwards Aquifer Coordinator, Texas Water Commission
John Mauser, District 8, Texas Water Commission
TWC - Central Records (with attachment)