7796 CULEBRA ROAD
APARTMENTS

Feasibility Report

February 2020
February 28, 2020

Ms. Jennifer Bartlett  
Cesar Chavez Foundation  
1440 E. Washington Street  
Phoenix, AZ 85024

Re: 7796 Culebra Road Apartments  
Feasibility Report

Dear Ms. Bartlett:

We have completed the feasibility study on the above referenced property as requested in accordance with the Uniform Multifamily Rules to be used to complete your application. Additionally, we hope this information proves useful in your evaluation of the property; please do not hesitate to call if questions arise during your review. We look forward to working with you as the project develops.

Sincerely,

Pape-Dawson Engineers, Inc.

[Signature]  
Thomas M. Carter, P.E.  
Sr. Vice President

Attachments

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1. PURPOSE  
The intent of this report is to provide a due diligence assessment of the current site conditions and development requirements of the proposed 7796 Culebra Apartments project. This report was compiled based on information obtained from the City of San Antonio Unified Development Code (UDC), and information obtained from City, State, and Federal Agencies.

2. GENERAL  
7796 Culebra Apartments is a proposed ±7.68-acre, multi-family development located at 7796 Culebra Road, west of Northwest Loop 410 between Reed Road and Ingram Road (Exhibit 1). 7796 Culebra Apartments falls within the City of San Antonio (COSA), within Bexar County, Texas. The site is currently undeveloped and bound by multi-family developments to the southeast and a portion of the north, commercial development to the remainder of the north, Culebra Right of Way (ROW) to the west, Pipers Creek Street ROW to the east, and Ingram Road ROW to the south. The site is currently platted as Lot 2, Block 4, of New City Block 18284 recorded in Volume 9503, Page 75 of Deed and Plat records of Bexar County, Texas. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel number 48029C0360G identifies the site as outside the limits of the 1% annual chance (100-year) floodplain (Exhibit 5). The site is composed of one tract of land, City of San Antonio Parcel Key 379253 and is zoned MF-33. The Bexar County Property ID is 696159 (7.6874-Acres), valued at $1,081,550.00. The current millage rate for the property is $26.08832 per $1,000 assessed value.

Since the site is not located in the Edwards Aquifer Recharge Zone, a Water Pollution Abatement Plan (WPAP) will not be required. The site is not located within presumptive endangered species habitat areas according to US Fish and Wildlife guidelines, and the site is not located within Karst Zones 1 or 2. An Endangered Species Survey will not be required prior to construction; however, a Habitat Compliance Form (HCF) will still be
required. The HCF will state that the site is not located in an area requiring additional information or research.

Utilities are available adjacent to the site without any anticipated extensions. San Antonio Water System (SAWS) sewer and water lines are available along Ingram Road and Culebra Road. Water is also available along Piper Creek Street. There are dry utilities near the site including electric, gas, telephone, and cable TV available for the proposed development.

3. ACCESS
   3.1 Ingress and Egress Requirements

   The site has frontage along Ingram Road for approximately 176 linear feet, along Pipers Creek Street for approximately 512 linear feet, and along Culebra Road for approximately 375 linear feet. The current Major Thoroughfare Plan (MTP) shows Ingram Road as a Secondary Arterial Type A with an 86-foot Right of Way (ROW) and Culebra Road as a Primary Arterial Type A with a 120-foot ROW. The current plat complies with these ROW widths.

   Locations of new driveways will need to comply with the San Antonio UDC guidelines along Ingram Road and Pipers Creek Street. In general, drives are not allowed within 125 feet of an intersection. Based on frontage, the site could be eligible for access along any of the three frontages. Sidewalk exists along Ingram Road and Culebra Road; However, sidewalk will be required along Pipers Creek Street. During the permit process, the City will require the sidewalks meet the Americans with Disabilities Act (ADA) cross slope requirements. Additionally, bicycle lanes are present along Culebra Road and Ingram Road. Pipers Creek Street does not have existing bicycle facilities. Therefore, no additional bicycle lanes or multi-use paths will be required.
3.2 Off-Street Parking Requirements

The required number of COSA Standard 9-foot by 18-feet parking spaces for 120 units is 120 minimum or 228 maximum spaces. This equates to 1.5 spaces per unit minimum and 1.9 per unit maximum parking spaces. Up to 30% of these spaces may be compact parking spaces with minimum dimensions of 8-foot by 16-feet. Each compact space will need to be individually identified by lettering on the pavement. Of the 120 minimum parking spaces, 5 accessible parking spaces must be provided with at least 1 of the spaces being van accessible. Grading within these spaces must be 2% or less, and an accessible route must be provided from these spaces.

In addition to parking requirements, bicycle spaces must be provided at a minimum of 10% of the minimum vehicle spaces with a maximum requirement of 24 spaces. For a 120-unit apartment this equates to 12 bicycle spaces.

3.3 Fire Access and Design Criteria

The site falls within the COSA Fire Department District area and is currently served by the San Antonio Fire Department Station #35. There are two existing fire hydrants along Culebra Road adjacent to the site along the 20-inch ductile iron and 8-inch asbestos cement water lines. There is an additional existing fire hydrant along the west side of Pipers Creek Street along the 8-inch asbestos cement water line.

The site will have to comply with the respective sections of the 2018 International Fire Code, and City local amendments as adopted by Ordinance Number 2018-06-21-0494. These requirements include, fire lane, sprinkler, fire department connection, hose lay and other requirements that will be inspected by the San Antonio Fire Marshall. It is anticipated that private on-site hydrants will be required to provide adequate fire protection to all buildings. Any buildings over 30-feet in
height will also require aerial apparatus access, which requires the building face to be between 15-feet and 39-feet from fire lanes with 25-foot drive lanes throughout.

4. ZONING AND LAND USE

The site is currently within the City of San Antonio and is zoned Multi-Family-33 (“MF-33”), within the Airport Hazard Overlay District (AHOD), Lackland Military Notification Zone (Lackland MNA) and Lackland Military Lighting Zone (Lackland MLOD-2, MLR-2) Overlay Districts (Exhibit 7). “MF-33” Zoning provides for multi-family and group residential use with a maximum density of up to 33 units per acre depending on size. City of San Antonio Ordinance Number 2017-05-18-0368, dated May 18, 2017, established the proposed site as multi-family use at 33 units per acre within this site. The building setback and height requirements for “MF-33” zoning are:

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Front Setback (min)</th>
<th>Side Setback (min)</th>
<th>Rear Setback (min)</th>
<th>Height (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MF-33</td>
<td>20</td>
<td>5</td>
<td>10</td>
<td>45</td>
</tr>
</tbody>
</table>

The maximum front setback is 20 feet, the minimum side setback is 5 feet, and the minimum rear setback is 10 feet. Side and rear setbacks only apply when abutting residential or residential zoning districts; therefore, the requirement is not applicable since the property is adjacent to multi-family development. For a lot with more than 100 linear feet of frontage, the maximum front setback of 20 feet may be increased to 90 feet. This is dependent on no parking or drives other than egress/ingress drives are to be within 20 feet of the property line.

The maximum height for multi-family buildings is 45 feet. Setbacks for height exist to increase the building height beyond the 45 feet. Structures may exceed height limits two feet per every one linear foot setback from side and rear setback lines.
The AHOD was established to prevent obstruction for the take-off, landing and maneuvering of aircrafts. Height regulations within the AHOD include a limit of 200 feet or a 100 to 1 slope from the nearest airport runway.

MLOD-2, MLR-2 was established to regulated outdoor lighting that could impact military operations within 5 miles of the perimeter of Lackland Air Force Base. MLR-2 restrictions include a maximum of 500 lumens in the Uplight High and Uplight Low zones with a maximum total output of 1,000 lumens. Furthermore, only 5 lumens are allowed per square foot within the MLR-2 zone. Lighting plans are required to be prepared by a certified engineer, architect, landscape engineer or designer. A list of acceptable lights and additional requirements may be found within the Military Lighting Overlay District Section 35-339.04 within the UDC.

5. OVERALL DEVELOPMENT PLAN & PLATTING
The 7.68-acre site is located at 7796 Culebra Road, east of the intersection of Ingram Road and Pipers Creek Street, COSA Parcel Key 379253. The site is currently platted as Lot 2, Block 4, of the New City Block 18284, recorded in Volume 9503, Page 75 of the Deed and Plat Records of Bexar County, Texas. Replatting the site is required if the intent is to subdivide the property.

6. VESTED RIGHTS
“Vested Rights” (grandfathered rights) allows a property to develop according to previous versions of codes or regulations and be exempt from requirements created after the rights are established. In order to apply vested rights to a parcel of land, proof of intention to develop the property for the proposed use must be demonstrated. The site is not currently vested. The proposed site will need to comply with current codes and ordinances.
7. LANDSCAPE & TREE PRESERVATION

The current Tree Preservation Ordinance and Landscape Ordinance are applicable to this development, and demonstration of compliance with these ordinances are required to obtain a plat (if replatting) or building permit. Properties in San Antonio are required, by ordinance, to preserve trees to the fullest extent possible in accordance with the tree preservation requirements in the UDC.

The 2010 Tree Ordinance (current) protects significant and heritage trees on the property. Significant trees are defined as any species of tree that is at least 6 inches in diameter (except for six small tree species), and heritage trees include all species 24 inches or larger. 60% of significant trees may be removed from the site, while all heritage trees must be preserved. Trees within easements and ROWs are exempt from preservation rules. The proposed site will have to meet the requirements of final canopy coverage in accordance with the ordinance as well. The 2010 ordinance requires 25% of canopy for projects in this area. For a 4.44-acre site, this would be 1.11-acres, or 48,352 SF of canopy. For reference, a new 1.5-inch oak tree counts as 787.5 SF of canopy, while new pecan trees count as 1,080 SF. For requirements of the ordinance, this would be 62 oak trees or 45 pecan trees to comply.

City requirements for site landscaping, including parking lot shading, buffer zones, and streetscape treatment, are outlined in the Landscape Ordinance. Though landscaping is not addressed during platting, plans demonstrating compliance with these requirements must be submitted and approved by the City prior to the issuance of a building permit. This ordinance should not have an impact on overall infrastructure development. A minimum Streetscape or Landscape Ordinance is combined with the Tree Preservation Ordinance. Recently, the City has adopted elements of the Landscape Ordinance that dictate the placement of street trees and parking lot shading. All of these elements will need to be addressed in the project landscape plan. A landscape architect should be retained to prepare any required submittals.
8. PARKLAND DEDICATION
The City of San Antonio requires all multi-family projects to dedicate one acre of parkland per 114 dwelling units. COSA Parks and Recreation review parkland requirements during the platting process. Since this site is already platted and replatting is not anticipated, for a proposed 120-unit multi-family site, it is anticipated that approximately 1.05 acres of parkland dedication is to be required. However, this requirement is typically satisfied by acquiring parkland dedication credits for the proposed site amenities such as the clubhouse, open play areas, walking trails, recreation centers and pools. Additional parkland requirements may be seen in Sec 35-503 of the UDC.

9. STORMWATER POLLUTION PREVENTION
The Texas Commission on Environmental Quality (TCEQ) implements and enforces Environmental Protection Agency (EPA) regulations regarding stormwater pollution prevention. The Texas Pollution Discharge Elimination System (TPDES) program has been developed to protect surface water from contamination. Under the program, all construction activities occupying more than one acre require the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must identify potential sources of contamination (for small projects, the source is primarily sediment runoff during rain events) and a plan for installation and maintenance of measures to prevent pollution (for sediment control silt fencing is the typical protection) throughout construction. A Notice of Intent (NOI) and $100.00 fee must be submitted by both the owner and contractor prior to construction to notify the agency of project initiation. TCEQ or SAWS may inspect the project at any time to ensure adherence to the procedures outlines in the plan. Once the site is stabilized (i.e. grass is established) and pollution is no longer a threat, a Notice of Termination (NOT) is filed to document the end of the project.
10. ENDANGERED SPECIES
Endangered species, or potential habitats for endangered species, are found in portions of Bexar County, Texas. The site is not located within a region known to contain endangered species as defined under the Endangered Species Act. Currently, four bird species are listed as endangered species within Bexar County, they include the golden-cheeked warbler, black-capped vireo, interior least tern and the whooping crane.

According to the Critical Habitat Maps provided by the U.S. Fish and Wildlife, the site is not located in Karst Zones 1, 2; or Warbler Habitat. Based on the location of the site, neither a Karst survey, nor an Endangered Species Survey is required; however, a habitat assessment will be required.

11. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel number 48029C0360G identifies the site as outside the limits of the 1% annual chance (100-year) floodplain (Exhibit 5).

12. TOPOGRAPHY
A United States Geological Service (USGS) topographic map and an existing topographic map reflecting the Bexar County contours can be found in Exhibits 3 and 4.

Standard engineering practice requires that a site-specific geotechnical study be conducted for every proposed development. The site-specific geotechnical report should identify the site soil conditions and should make design recommendations for future building foundations and pavement sections. According to United States Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) soil maps, the site is comprised of Eckrant cobbly clay (Exhibit 6). It is Pape-Dawson’s recommendation that a Geotechnical Engineer be engaged to conduct a site-specific geotechnical study for the property prior to development.
Sidewalk grading will need to meet the Americans with Disabilities Act (ADA) cross slope requirements. Additionally, the proposed site currently shows approximately 20 feet of fall from east to west (Exhibit 3). Retaining walls may need to be utilized in order to maintain drainage once a site plan is finalized. Lastly, finished floor elevations and grading will need to be such that utilities have adequate cover.

13. DRAINAGE

The site will have to comply with the City of San Antonio drainage requirements, which includes preparation of a Stormwater Management Plan (SWMP). The site falls within the Leon Creek Watershed and is not within any known mandatory detention areas. According to FEMA Flood Insurance Rate Map (FIRM) Number 48029C0360G the site is outside of the 100-year floodplain (Exhibit 5). The site drains from east to west toward the existing Crown Meadows Subdivision and Pipers Creek Street. Pipers Creek Street then drains north towards an existing concrete swale. This swale outfalls into an existing drainage channel which eventually outfalls into Slick Ranch Creek and subsequently Leon Creek.

The City of San Antonio Drainage Ordinance requires developers to mitigate the effects of any increased runoff from a site. This can be done in one of three ways:

1. Onsite detention of the increased amount of stormwater runoff.
2. Make modifications offsite to allow for the increased runoff without impacting downstream landowners.
3. Participate in a regional stormwater management program by paying a fee to the City in lieu of other (FILO) means of complying with the ordinance. The FILO for multi-family developments is $0.20 per square foot of increased impervious cover and will be used by the City to construct regional stormwater detention basins, or other drainage-related projects. Currently the site is undeveloped. A detailed site plan is needed to evaluate the increase of impervious cover to verify fees owed.
The proposed site is not a part of any mandatory detention areas, and current site plans do not account for detention ponds. Because of the anticipated increase in impervious cover and the existing drainage structures downstream, the SWMP must prove that there is no drainage impact to other properties, drainage or habitable structures, to a point 2,000-foot downstream. Once it is proven that there will be no impact to downstream structures, the project may elect to pay fees in lieu of detention (FILO). Based on 85% impervious cover on the 4.44-acres, the anticipated FILO is $32,879.09 The proposed site will not require any filtration since it is not located over the Edwards Aquifer Recharge or Contributing Zones.

14. UTILITIES

Public utilities are available to serve the subject property. A more detailed discussion of the presence and availability of each type of utility follow.

14.1 Water and Sanitary Sewer

SAWS is the water and sanitary sewer provider for the site (Exhibit 8). The site falls within SAWS Pressure Zone 5, in the low water development zone. The site is within the middle wastewater collection zone and within the Leon Creek watershed. If the site requires an excess of 100 EDUs, a Utility Service Agreement (USA) will be required. The USA outlines the required improvements, impact fees and connection points for sanitary sewer and water service. Based on 120 units, the site will require 60 EDUS and a USA won’t be required. Anything over 200 units will require a USA with SAWS.

An existing 8-inch asbestos cement (AC) water main runs along west side of Pipers Creek Street and along the south side of Ingram Road. An existing 8-inch AC water main runs along the west side of Culebra Road, but terminates near the property line of the site. This 8-inch main will need to be extended along the frontage of the
property and looped into the existing 20-inch ductile iron (DI) water main along Culebra Road. SAWS requires a 12-inch main or larger be tapped for fire services.

There are three existing fire hydrants in the vicinity of the site. Additional fire hydrants may be required on-site as determined by truck and hose lay and fire lane layouts. Additional fire requirements are discussed within the Fire Department Requirements section. It should also be noted that this portion of Culebra is COSA ROW per the Turnback Ordinance #2014-01-30-0046, so an easement is not required.

An existing 8-inch sanitary sewer main runs within the median of Ingram Road. There is also an existing 8-inch sanitary sewer main which runs along the south side of Culebra Road. A grading plan is needed in order to ensure proper coverage over utilities.

The projected impact fees required for the site are based on the SAWS Utility Service Regulations, which became effective June 1, 2019. The fees are based on the number of Equivalent Dwelling Units (EDUs) associated with the project use and reflect the relative demand on the system. SAWS requires water impact fees to be paid at the time the meter is set. Multi-family developments are calculated at a rate of 0.5 EDU/unit, and irrigation meter rates are calculated by meter size. A water flow rate of 290 gallons per day is equivalent to 1 EDU. A sewer flow rate of 200 gallons per day is equivalent to 1 EDU. The projected fees are summarized below:

- Domestic Water Impact Fee (based on 120 units) = $284,940 ($4,749/EDU)
- Irrigation Water Impact Fee (based on 1” meter) = $9,498 ($4,749/EDU)
- Sewer Impact Fee (based on 120 units) = $159,840 ($2,664/EDU)
- Total Impact Fee = $454,278

Note: The plat was recorded in 1983 and could have vested impact fees. A meeting with SAWS is required to verify.
14.2 Electric Service
CPS Energy is the electric purveyor for the site. There is an existing overhead electric line running along the east side of Pipers Creek Street and the south side of Culebra Road. Once electric loads are determined for the site, a meeting with CPS Energy representatives would be recommended to determine how to serve the site. A detailed site plan and anticipated loads will be needed before a discussion can take place.

14.3 Telephone/Communications
Time Warner Cable (TWC), AT&T and Guadalupe Valley Telephone Cooperative (GVTC) are providers of the telephone and communications for the site.

14.4 Cable Television
The project area is within the service of Time Warner Cable (TWC); other service providers may be available as well. Cable service typically follows the alignment of the electrical service and show not present a significant logistical impact on the project.

15. TRAFFIC IMPACT ANALYSIS (TIA)
The City of San Antonio requires every project to submit an analysis regarding the effect of the proposed project on surrounding traffic generally measured in PHTs in order to plat or permit a property. A full Traffic Impact Analysis (TIA) has been conducted for this site. The TIA will be approved once it is associated with a building permit. The TIA requires restriping of the southbound approach to separate the left and right lanes and add a crosswalk at the Pipers Creek and Ingram intersection.
16. SUMMARY

The proposed ±7.68-acre, multi-family development located at 7796 Culebra Road, west of Northwest Loop 410 between Reed Road and Ingram Road has access to available utilities such as water, sewer, gas, electricity, telephone, and cable. The property is zoned “MF-33” within the Airport Hazard Overlay District. A multi-family development is allowed to a maximum height of 45-feet due to its proximity to a San Antonio Airport runway. A TIA study has been prepared for the development. Preparation of a Storm Water Management Plan is required.

A preliminary site plan has been developed in conjunction with JHP Architects and is based the current projection of 120-units (Attachment 3).

The project will require building permits from the City of San Antonio. Building permit fees, in addition to review fees are based upon the valuation and scope of the project. Additionally, if the site elects to not provide detention and can prove no negative impact, the stormwater management participation program fee in lieu of detention (FILO) fees are paid at time of building permit approval and are based on the increase of impervious cover. The building permit process is described in detail on the City of San Antonio website. The review process typically requires approximately 60-90 days.

San Antonio does not require site plan approval but will be reviewed for compliance as part of the building permit. The zoning site plan established the site as multi-family. An updated zoning site plan is not anticipated.

San Antonio does not require a sitework permit. Phased permitting is allowed to begin working prior to full building plan approval. If this is preferred a site permit can be submitted.
The development shall comply with the directives of the City of San Antonio UDC and City Regulations. The site is platted and is not intended to be replatted. If replatting is required approximately 120 to 150 days should be allowed for the platting process. Platting can occur concurrently with design and permitting.
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Soils Map
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Water and Sewer - SAWS Map
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Plat
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Preliminary Site Plan