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August 25, 2022

Hays Trinity Groundwater Conservation District
Attn: Charlie Flatten, General Manager *via E-mail & U.S. Mail*
P.O. Box 1648
Dripping Springs, Texas 78620

Re: Clancy Utility Holdings, LLC – Supplemental Filing in Support of Application for a Municipal Groundwater Production Permit from HTGCD

Dear Charlie:

A. Introduction:

The purpose of this letter is to provide you with information to supplement and support the Application previously filed on behalf of Clancy Utility Holdings, LLC ("Clancy") for a municipal groundwater production permit to serve 1,400 acres now known as Mirasol Springs (formerly known as the Norsworthy Ranch) in western Hays County. Clancy's original Application was filed on July 21, 2021 (the "Supplement"). This Supplement reflects changes in Clancy's projected water demand needs with details about the demands to be supplied, when necessary, by the groundwater component of its water resource inventory. Most significantly, this supplement reflects Clancy's reduction in the system-wide volume of groundwater from approximately 90 acre-feet per year to 85 acre-feet per year. Applicant believes that this is the minimum volume of groundwater it must have access to as an alternative water supply source to both (i) protect the public health and safety of retail water customers within its service area (the Mirasol Springs Development), and (ii) maintain compliance with State and Federal laws and regulations related to the operation of a public retail water utility. The ability to produce this volume of groundwater pursuant to the permits being sought from the two local groundwater conservation districts with jurisdiction over Applicant's service area, however, does not mean that Applicant will in fact use that volume of groundwater in any annual timeframe.

The changes to Clancy's Application described below are prompted by developments since the filing of its original application in July 2021. First, representatives of Clancy and the Developer have been engaged in numerous discussions with stakeholders in the area and the local utilities, and the two groundwater districts from whom Clancy is requesting groundwater production permits for municipal use, *i.e.*, Hays Trinity Groundwater Conservation District ("HTGCD") and Southwestern Travis County Groundwater Conservation District ("SWTCGCD"). Additionally, in response to those discussions, the Developer has made significant modifications to the Development's land use plan, which include both the relocation of planned development from sites

considered to be environmentally sensitive and the resulting ripple effects those relocations had on the siting of Clancy's wastewater facilities and other planned improvements. One of the biggest modifications to the Development's land use plan was the 17% reduction in the number of residential units to be built at Mirasol Springs. The Development now contemplates the construction of 71 residences at full Buildout, rather than the original 83 residences described in Clancy's July 2021 Application to HTGCD. The Developer also agreed to fund the connection of all residential units to Clancy's centralized wastewater collection, treatment and disposal system at Mirasol. This decision not only eliminated the potential threat of leaks from 17 separate septic systems proximate to Roy Creek, but it also increased the potential volume of treated effluent available to utilize for beneficial reuse within the Development.

One of the facts unique to Mirasol Springs approach to development of its property and, specifically its enhanced water conservation initiatives that cannot be emphasized enough, is the Developer's and Utility's approach to irrigation. As confirmed in this supplement, Mirasol Springs is eliminating the use of potable water for irrigation purposes within the Applicant's service area.

Clancy will *not* supply any irrigation water from its retail potable water supplies. Instead, all irrigation water will be supplied either through storage from rainwater harvested by the irrigating landowner, or the treated effluent to be made available from Applicant's centralized wastewater collection and treatment system. Clancy, as the Applicant, has worked with the Developer for an enhanced wastewater treatment system capable of generating effluent of a quality meeting TCEQ's standards for Type I beneficial reuse pursuant to Chapter 210 of the TCEQ's Rules (30 TAC).

This aggressive approach to water conservation by the Developer and Clancy, however, also means that before ever implementing any formal water conservation or drought management protocols, both Clancy and its future water customers within the Mirasol Springs Development have given up the first line of water conservation buffer supply, *i.e.*, irrigation water. The loss, or reduction in the irrigation water resources is typically used by retail water utilities and their retail customers to absorb the initial curtailments resulting from implementation of water conservation protocols imposed by the mandates of the local groundwater districts, LCRA and/or the TCEQ during drought periods.

In addition to requesting approximately 20% less groundwater than it has contracted with the LCRA for surface water, the "thin margins" of any excess supply in Clancy's request for groundwater production as an alternative water resource supply to substitute for its baseload surface water supply is further highlighted by the fact that Clancy has *not* included in its water supply calculations any "system losses." As you are aware, retail water utilities traditionally experience on average a 10-15% system loss or other forms of "unaccounted for water" resulting from system leaks, meter readings, or other failures in its treatment and distribution system. Clancy has been aggressive again in its conservation initiatives by *not* requesting that additional volume of water in its Application.

The changes to the pending system-wide groundwater production permit requests being proposed by Clancy in this Supplement are explained in greater detail below.

1. Rationale for Supplementation

The purpose of this "Supplement" to Clancy Utility Holdings, LLC (the "Applicant") HTGCD Application is:

(i) to reflect the changes/updates to the development plan for Mirasol Springs, and

(ii) to restate the Applicant's water supply demands in a format consistent with HTGCD's Rule 11.4.1.A relating to residential water demand projections at full development Build-out, and

(iii) to account separately for the non-residential demands at Build-out as contemplated by HTGCD Rule 11.4.1.B.

As discussed in the previously provided water demand studies prepared by Murfee Engineering, Inc. ("MEC"), the average projected water demand for the Mirasol Springs Development based upon the original land plan was an estimated average of 117,750 gallons per day, inclusive of irrigation under normal operating conditions outside of any periods of drought. MEC's original projected demand equated annually to an estimated 132 acre-feet per year, which is equal to less than one acre-foot of water per year per 10 acres of land within the 1,400-acre Mirasol Development.

As previously represented, Mirasol Springs will be provided both centralized water and wastewater utility services on a retail basis by the Applicant, Clancy Utility Holdings LLC ("Clancy"). As noted above, Clancy's centralized wastewater system has now been expanded to include all residences planned for construction within the Development. Clancy has been created as a Texas public retail utility to provide the utility services exclusively to the Mirasol Springs Development.

Based upon discussions with Stakeholders, the Mirasol Springs Development Team has worked closely with the Clancy Team to embrace the "One Water Concept" to utilize its available water resources, particularly groundwater, efficiently and strategically in a manner consistent with a sustainable Hill Country. Clancy and the Developer have worked to prioritize and marshal the water sources available to Clancy to maximize the beneficial use of each and every available drop.

The changed circumstances of Clancy's water supply demand reflect the following developments since the filing of Clancy's original groundwater production application with HTGCD, as well as its subsequent separate filing of a groundwater production application with SWTCGCD:

(i) Modifications in the Mirasol site development plan, which included:

a. A reduction in the number of single-family residences to be built; and

b. A reduction in the number of rooms to be constructed in the proposed Inn; and

c. Size/Scale of the 2 proposed restaurants; and

d. Relocation of facilities within the Development to address drainage, erosion and potential water quality impacts from the planned development; and

(ii) Developer's agreement to include deed/land use restrictions:

a. to prohibit utilization of potable water supplies for irrigation of ornamental landscaping and lawns; and

b. to require the installation on all structures (including residential) of rainwater harvesting equipment to capture and store rainwater, and requiring use of rainwater for irrigation purposes; and

c. to prohibit the drilling of private wells for use by single family homes; and

d. encouraging the planting of native species of drought resistant plants and grasses; and

(iii) Developer's agreement to require design and construction of HVAC systems whenever feasible to direct HVAC drainage to a facility or location outside of the facility where the system condensate drainage can be applied to beneficial use whenever practicable; and

(iv) Developer's agreement to expand and enhance Clancy's central wastewater collection and treatment system to add all of the single-family residences within the Mirasol Development. According to calculations by MEC, this decision by the Mirasol Springs Developer in coordination with the Applicant will enhance the volume of treated effluent available for non-potable water demands by increasing the projected daily volume of effluent available for beneficial reuse for non-potable purposes to approximately 39,000 gallons per day on average, or approximately 43.7 acre-feet/year at full Build-out.[1]

2. <u>Surface Water Primary Source</u>

In December 2020, Clancy contracted with the Lower Colorado River Authority ("LCRA") for 108 acre-feet of raw surface water already permitted to LCRA and enhanced by the storage capacity of the Highland Lakes. This annual "Firm Water Contract" contract is intended to provide a baseload average daily supply of potable water to the Mirasol Development of approximately

[1] (39,000 gpd X 365 days)/325,851 gal/ac-ft = 43.6856109 acre-feet per year. Treated effluent volumes available on a daily basis likely will be reduced during drought periods when Clancy's water conservation and drought response protocols in its adopted plans are implemented due to the reduced use of water for potable purposes.

96,500 gallons per day.[2] This average daily volume will be subject to curtailments triggered by either, or both, the terms of the LCRA Contract, including the water conservation and drought contingency plans incorporated therein, and/or curtailments mandated by special conditions included in the diversion permit that will be issued by the Texas Commission on Environmental Quality ("TCEQ") required to implement Clancy's diversion and use of the surface water available pursuant to the LCRA Contract. Water, which is authorized for diversion, but which is not needed will not be diverted.

Clancy has an administratively complete surface water rights application pending at the TCEQ to authorize Clancy's use of a diversion point on the Pedernales River upstream of the Highland Lakes. To enhance the reliability of the surface water available pursuant to the LCRA Contract, the application includes a request to construct and operate an off-channel reservoir within the Mirasol Springs Development as part of Clancy's utility system. The off-channel reservoir will have practical environmental and recreational benefits in addition to water storage. The reservoir will add an environmental habitat space, recreational and aesthetic values, and provide a water source for both domestic livestock and wildlife that will occupy the plentiful open space area within the Development, which will be guaranteed by the conservation easement to be imposed over the majority of the 1,400 acres.

3. Rationale for Groundwater Permits

Surface water resources in Texas, including those permitted to the LCRA appurtenant to the Highland Lakes in the Hill Country are susceptible to Texas's drought cycles. Accordingly, to ensure the availability of water for the Mirasol Springs Development, Clancy has sought alternative sources to serve as redundant supply sources to ensure that Clancy meets the statutory/regulatory demands on retail water utilities under Texas Law.

While Clancy and the Developer have coordinated to provide for the development of a wastewater system that will maximize the volume of treated effluent available for beneficial reuse for non-potable needs, Clancy also investigated the availability of groundwater supplies as a means to diversify is water supply inventory, and provide a redundant water source when needed in periods of drought when the surface water resource might not be available.

Again, water not needed to meet the utility's demands to protect the public health and safety, and maintain Clancy's compliance with the statutory and regulatory requirements applicable to retail public utilities in Texas, will not be diverted, pumped or used. It will, however, be available when needed. This "be available" criterion is important because of the time interval between the filing of applications for the various requisite permits needed for either groundwater or surface water permits and their approval.

As the Mirasol Springs Development overlaps two separate local groundwater conservation districts, *i.e.*, Hays Trinity Groundwater Conservation District ("HTGCD") and the Southwestern Travis County Groundwater Conservation District ("SWTCGCD"), Clancy has

[2] This number assumes no losses within the collection, treatment and/or distribution system due to system losses whether caused by leaks or evaporative losses from storage.

made separate applications to both districts for non-exempt groundwater production permits. Clancy's cumulative total groundwater production authorization from the Middle Trinity Aquifer applied for as of this Supplement, is being reduced to 85 acre-feet per year.[3]

The various groundwater reports, studies and certifications Clancy commissioned related to the Mirasol Springs Development daily and annual water demand projections are included in Clancy's previous filings with the HTGCD. They have also been provided to SWTCGCD.

4. Clancy's Original HTGCD Permit Application filed July 2021

On July 21, 2021, Clancy filed its original application with the Hays Trinity Groundwater Conservation District ("HTGCD") seeking permit authorization to produce up to 56.7 acre-feet of groundwater per year from four wells completed in the Middle Trinity Aquifer within the Mirasol Springs Development. On October 14, 2021, Clancy filed its first supplement to support its Application. Clancy continues to seek authorization to produce up to 56.7 acre-feet per year from HTGCD.

5. Clancy's Original SWTCGCD Permit Application filed December 2021

On December 14, 2021, Clancy filed a separate application with the Southwestern Travis County Groundwater Conservation District ("SWTCGCD") seeking authorization to produce up to 33.63 acre-feet of groundwater per year from the Middle Trinity Aquifer. Clancy's SWTCGCD Application, like its HTGCD Application, remains "pending." Based upon the developments described herein, Clancy will be supplementing its SWTCGCD Application and reducing its total requested production volume to 28.3 acre-feet per year.

6. Clancy's Efforts to Moderate Groundwater Usage

Collectively, as originally filed, Clancy's HTGCD Application and SWTCGCD Application sought authorization to produce up to 90.33 acre-feet of groundwater per year from five wells completed in the Middle Trinity Aquifer. This volume of groundwater is less than the 108 acre-feet of surface water that Clancy has secured a long-term water supply contract from the Lower Colorado River Authority ("LCRA"). The delta in total water supply volume between Clancy's projected typical daily demand under normal operating conditions reflected in the volume of surface water Clancy has contracted from the LCRA, and the volume of groundwater Clancy sought to permit cumulatively from HTGCD and SWTCGCD is reflective of the fact that Clancy planned to rely upon its LCRA surface water source to supply the normal operating demands for potable water (residential and nonresidential) within its 1,400-acre service area of Mirasol Springs Development during non-drought periods.

When the ability to divert the surface water contracted from the LCRA is curtailed by either the LCRA or Texas Commission on Environmental Quality ("TCEQ"), however, Clancy needs to supplement its potable water supply with the groundwater authorized by permits applied for from

[3] As originally filed, Clancy's separate applications to HTGCD and SWTCGCD sought to permit approximately 90 acre-feet of groundwater production annually.

HTGCD and SWTCGCD. This rationale of utilizing groundwater only when surface water is not available continues to be a cornerstone of Clancy's operating strategy. As evidenced by this Supplement Clancy's cumulative request for groundwater in its combined original applications for groundwater to HTGCD and SWTCGCD has been reduced.

7. Clancy's Statutory "Utility" Obligations

As a public water supply provider operating as a retail water utility, Clancy must be capable of providing a continuous and adequate flow of potable water under Texas law. *See generally* Texas Water Code § 13.250; 16 TAC 24.205. Because the LCRA's Highland Lakes, and the surface water flows in the Lower Colorado River Basin are well documented to be susceptible to drought, Clancy must secure additional *alternative* water supply sources to replace its LCRA contracted water when needed. Again, the requested alternative groundwater supplies will be used in times when adequate surface water contracted from LCRA is not available for diversion, treatment and beneficial use within Clancy's retail water service area.

8. Groundwater Applications Reflect Conservation Mindset

Because Clancy's plan to use groundwater will be during times when the surface water contracted from LCRA is unavailable due to low flow and drought conditions, Clancy is requesting less groundwater than its full predicted demand. In part, Clancy's request for less groundwater is reflective of Clancy's plan to implement its water conservation and drought contingency plans included in Clancy's original Application. Clancy's water conservation and drought response alternatives also include (i) Clancy's year-round restrictions on the use of potable water supplies for irrigation, (ii) Developer mandated rainwater harvesting, and (iii) Clancy's enhanced plans for beneficial reuse of treated wastewater effluent to meet non-potable demands, pursuant to Chapter 210 (30 TAC).

B. Original Development Plans & Water Demand:

In Clancy's original July 2021 Application filed with HTGCD, the volume of groundwater production requested to be permitted for municipal use from HTGCD was up to 56.7 acre-feet per annum to be produced from four (4) public water supply wells to be sited within the HTGCD's jurisdiction and completed in the Middle Trinity Aquifer within the Mirasol Springs development. That volume of maximum demand being requested from HTGCD has not changed, however, the presentation of Clancy's basis for the demand is being clarified.

The Mirasol Springs development plan, as described in Clancy's original HTGCD Application, generically described 83 residential demand centers for residential beneficial use (55 Single Family Residences and 28 Casitas). The Application did not specifically identify the residential potable demand as contemplated by HTGCD Rule 11.4.1.A to include the number of bedrooms per house. Similarly, the nonresidential Commercial potable demand was stated generically.

The overall facilities originally planned for construction within the Mirasol Development at "Build-out" were generally described in both Clancy's original HTGCD and SWTCGCD Applications as follows:

1) 83 Residential Units:

   a. 55 Residences (including 4-to-5-bedroom homes),

   b. 28 Casitas-style patio Residences (including 2-to-4-bedroom homes);

2) 77-Room Inn with two restaurants and a swimming pool;

3) University of Texas Field Station studying Hill Country Sustainable Development;

4) Pole Barn and Kennels; and

5) A 4–6-acre Organic Farm to serve the on-site restaurants.

Clancy's original HTGCD Application did *not* project either (i) the residential potable water demand on a per household basis in the format contemplated by HTGCD Rule 11.4.1.A, or (ii) the non-residential potable water demand separately as contemplated by HTGCD rule 11.4.1.B. Instead, Clancy's original HTCGCD Application generically presented all of facilities (residential and nonresidential) that formed the basis of the "total annual ground water demand estimate" of 56.7 acre-feet/year, as contemplated by HTGCD Rule 11.4.1.C.

C. Modified Development Plans & Clancy's Reduced Groundwater Request:

1. Clancy's Updated HTGCD Request

Since the filing of its original Application with HTGCD, the Developer of Mirasol Springs, Mirasol Springs LLC, has modified its development plans to address concerns raised by various local environmental interests, and the HTGCD's staff's request for clarification of the groundwater needs of the Development. These changes in the land plan and resultant potable water supply demand at Build-out have been coordinated with Clancy. Attached hereto as Appendix "B" are updated Site Plan Maps that replace the Maps contained in Clancy's original HTGCD Application under TAB 5, Appendix "C" at pages 0030 through 0031, inclusive. *See* Appendix "B."

In addition to the Developer's plan to adopt deed restrictions (i) prohibiting the use of potable water for irrigation, (ii) mandating the installation and operation of rainwater harvesting, and (iii) the enhanced plans for beneficial use of treated effluent, the overall land plan modifications include the relocation of proposed residential lot sites, a reduction in the total number of Single Family Residences projected to be built, and an expansion of the Applicant's centralized wastewater collection, treatment, and disposal facilities.

Based upon Developer's changes to the Mirasol Springs Site Plan, and refinements to the strategic implementation of the Developer's and Clancy's Joint Plan to implement "One Water"

components into the beneficial use of water within the Mirasol Springs Development, coupled with the use of the formula mandated by HTGCD Rule 11.4.1, Clancy is reducing its total requested groundwater authorization from the two groundwater districts from 90.33 acre-feet/year down to 85 acre-feet/year. On an average daily basis, this represents a reduction from approximately 80,641 gallons per day down to an average 75,883 gallons per day.

The requested groundwater will still be produced from five wells described in Clancy's separate permit applications to be completed in the Middle Trinity Aquifer within the 1,400-acre Mirasol Development. Four of the wells will be sited in, and permitted by, the HTGCD. The fifth well will be sited within, and permitted by the SWTCGCD.

Clancy seeks to have HTGCD "aggregate" the production from the four wells subject to HTGCD's jurisdiction, and to authorize the cumulative production from the same wells permitted by HTGCD of 50,618.4 gallons per day on average, or up to 56.7 acre-feet/year. The remaining 28.3 acre-ft/year will be permitted through SWTCGCD.

2. Clancy's Updated SWTCGCD Request

In its supplemental filing with the SWTCGCD Clancy will be reducing its requested authorized production from the one well to be sited within SWTCGCD's jurisdiction to approximately 25,000 gallons per day on average, or approximately 28.3 acre-feet per year. This represents about a sixteen percent (16%) annual reduction from the Permit Application originally filed with SWTCGCD.

D. Updated Potable Water Demand & HTGCD Rule 11.4.1:

Cumulatively, Clancy, with the Developer's support is reducing its total requested groundwater authorization for production from the Middle Trinity Aquifer for the entire Mirasol Development by 5.33 acre-feet per year, or approximately 4,758 gallons per day on average.

1. Clancy's Residential Demand

Applicant has reduced the total number of residences within the Mirasol Springs development by 12 units - from 83 to 71. Based upon the changes to the development plan for Mirasol Springs, and to present the projected residential water demand at Build-out consistent with the formula prescribed in HTGCD's Rule 11.4.1.A.-C, Applicant supplements its original Application with the following "**Table 1**," which provides details on the contemplated residential potable demand at Build-out:

Table 1
Projected Residential Demand at Build-out

No. Residences	No. Bedrooms	No. Persons	Daily Water Demand Formula @ 80 gpd[4]
21	5	6	21 X 6 X 80 = 10,080 gpd[5]
42	4	5	42 X 5 X 80 = 16,800 gpd
8	3	4	8 X 4 X 80 = 2,560 gpd
			Total Gallons Per Day – 29,440 gallons/day at Build-out

Based upon the information presented in Table 1, the projected residential indoor potable water demand within the Mirasol Springs development (no irrigation usage), based upon 80 gallons per day per capita usage at Build-out, rather than the 110 gallons per capita per day prescribed by HTGCD Rule 11.4.1, is 29,440 gallons per day or approximately 32.98 acre-feet per annum.

(29,440 gal/day X 365 days) / 325,851 gal/ac-ft = 32.9770355 ac-ft/year

2. Clancy's Commercial Demand

In addition to the changes to its projected residential potable water demand, Clancy's projected potable water supply demand within its Mirasol Springs service area for the Commercial (nonresidential) facilities planned at Build-out is set forth in "**Table 2**" below.

As HTGCD does *not* have a "formula" for projecting the potable water demand for "nonresidential" facilities similar to HTGCD Rule 11.4.1.A, which Clancy relied upon to develop the residential demand commercial projections in Table 1, Applicant commissioned Murfee Engineering Company, Inc. ("MEC"), a licensed Texas Engineering Firm.[6] MEC is recognized for its expertise in water and wastewater utility development, design, engineering, and construction to assist in the calculation of projected water supply demands (potable and non-potable) within the Mirasol Springs development at Build-out.

[4] HTGCD Rule 11.4.1.A prescribes the use of 110 gallons per person per day ("gppd") using the following formula for each residence: **(number of bedrooms plus 1) X 110 gallons = gpd demand per residence.** The 110 gallons per day per person includes the use of potable water both indoors and outdoors. Based upon the Developer's stated intent to restrict the use of potable water to indoor use only, and to limit irrigation supplies to rainwater harvesting, the 110 gallons per day projected demand component has been reduced to 80 gallons per person per day.
[5] Gallons per Day ("gpd").
[6] MEC assisted Clancy in the development of its residential potable water demand numbers too.

Table 2
Projected Non-residential Demand at Build-out

Nonresidential Commercial Facilities	**#LUE**	**Daily Water Demand @ 320 gpd/LUE**[7]
73-Room Inn w-swimming pool	44	44 X 320 = 14,080
Restaurant No. 1	34	34 X 320 = 10,880
Restaurant No. 2	39	39 X 320 = 12,480
UT Field Station	13	13 X 320 = 4,160
Event Barn & Kennels	5	5 X 320 = 1,600
Organic Farm	32	32 X 320 = 10,240
	167	Total Gallons Per Day – 53,440 gallons/day at Build-out

a) Rationale Behind Clancy's Commercial Demand

MEC analyzed the various water supply needs of the nonresidential facilities within Clancy's Mirasol Springs service area, and calculated the projected volume at Build-out utilizing the then current land plan and the LUE calculation criteria adopted and published by the West Travis County Public Utility Agency ("WTCPUA") in its Tariff/Regulations to calculate the water supply demand for Mirasol Springs' Commercial (nonresidential) facilities.[8] The WTCPUA Tariff provided criteria for developing a demand calculation which was used in the absence of more detailed guidance in Rule 11.4.1.B. of the HTGCD's Rules.

MEC's analysis used an LUE formula that assumed four individuals per LUE cumulatively consuming on average of 450 gallons per day. Clancy requested MEC modify its prior calculations based upon Clancy's work with the Developer to limit the use of potable water for non-potable uses, particularly outdoor irrigation, in connecting with other changes to the Land Plan. *See* Appendix "C" attached hereto (MEC Supplemental Water Demand Memorandum dated August 19, 2022). To this end, MEC maintained the 4 person per LUE for purposes of calculating Commercial demand, however, it reduced the cumulative average consumption per LUE per day.

[7] In the absence of express guidance for commercial water demand in Rule 11.4.1, Clancy has defined an LUE for purposes of its non-residential water demand calculation as follows: As used in this table, each LUE identified is equivalent to the daily volume of water for 4 persons, each using 80 gallons per capita per day. Accordingly, an LUE is the equivalent of 320 gallons per day. This volume does *not* include water for irrigation purposes at the identified facility.

[8] *See* WTCPUA Rate Tariff §3.03(e) @ pp 17-18 ("LUE Conversion by Use Table"). The WTCPUA Rate Tariff is available online at:
https://www.wtcpua.org/documents/948/2021.10.01_WTCPUA_Amended_Rate_Tariff__redline_.pdf

Rather than 450 gallons per day, using the same 80 gallons per person per day consumption incorporated in its Table 1 analysis above, MEC defined an LUE for Commercial demand purposes as the equivalent of 320 gallons per day (approximately 20% of the prior MEC LUE volume) in its calculation of Commercial demand at Build-out. Clancy's updated Commercial demand based upon the revised MEC calculations are summarized in Table 2 above.

Based upon the information presented in Table 2 above, the projected Commercial (nonresidential) potable water demand within the Mirasol Springs Development under normal operating conditions, *i.e.*, outside of periods of drought is projected at approximately 53,440 gallons per day, or an estimated 60 acre-feet per annum at Build-out.[9]

(53,440 gal/day X 365 days) / 325,851 gal/ac-ft = 59.8604883 ac-ft/year

b) Clancy's Combined Residential/Commercial Groundwater Request

Combining the calculated potable water supply demand for residential use shown in Table 1 (29,400 gpd) and the Commercial nonresidential beneficial uses projected at Build-out of the Mirasol Springs development shown in Table 2 (53,440 gpd), the daily demand at Build-out is projected at approximately 82,840 gallons per day, or approximately 92.792 acre-feet per annum.

(82,840 gal/day X 365 days) / 325,851 gal/ac-ft = 92.7927181 ac-ft/year

Again, this projected estimate reflects normal operating conditions outside of periods of drought.

E. Clancy Requesting Less Than Its Demand:

The combined projected potable water supply demand at Build-out of approximately 93 acre-feet/year for the Mirasol Springs Development within Clancy's 1,400 acre service area exceeds the total volume of groundwater Clancy seeks to have permitted cumulatively by HTGCD and SWTCGCD, *i.e.*, up to 85 acre-feet/year requested.[10] As noted, Clancy will continue to work with the Developer, stakeholder groups and the District to increase its use of non-potable water sources in an effort to reduce its reliance upon potable supplies.

Because Mirasol's development is in its "start-up," and the Developer has committed to the water conservation initiatives outlined herein, as well as the use of alternative non-potable water supply sources, Clancy has reduced the total annual volume of groundwater it is requesting from the two groundwater districts to 85 acre-feet per year. Again, this reflects an average daily demand of approximately 75,000 gallons per day of groundwater from beneath Mirasol's 1,400-

[9] Clancy is working with the Developer and MEC to evaluate the potential ability to utilize treated effluent, or other non-potable water supplies to substitute for some of the demands for potable water identified in Table 2 once Clancy has satisfied TCEQ's requirements under Chapter 210 (30 TAC).

[10] Clancy originally applied to SWTCGCD for a separate production permit from a well to be completed in the Middle Trinity Aquifer sited within SWTCGCD's jurisdiction potion of the Mirasol Springs development for 33.63 acre-feet per annum. In combination with the 56.7 acre-feet per annum requested in its HTGCD Application, Clancy seeks permits to produce a combined annual volume of groundwater equal to 90.33 acre-feet per annum.

acre footprint. Clancy's cumulative groundwater production authorization request is less than 1 acre-foot per year per every 16 acres within the Development at Build-out.

Clancy is able to seek authorization to produce less groundwater than the projected annual demand due to a combination of factors. In addition to Clancy's efforts to work with local stakeholders and to incorporate "One Water" considerations into its water use practices, and the enhanced water conservation and drought contingency planning for the Mirasol Springs development, those factors include the following:

(i) The reduction in the number of projected Residences at total Build-out; and

(ii) The Developer's decision to have Clancy connect all residences to some form of centralized wastewater collection system with the ability to be authorized to generate treated effluent capable of beneficial reuse for non-potable purposes with TCEQ approval pursuant to 30 TAC Chapter 210; and

(iii) No use of potable water for irrigation within the Mirasol Springs Development.

F. <u>Clancy's 2022 Groundwater Permit Request Modifications</u>:

1. <u>HTGCD – 56.7 Acre-Feet</u>

Of the total projected annual demand for Mirasol Springs calculated above (92.9 acre-feet/year), Applicant seeks only to permit the production of 85 acre-feet/year of groundwater production from the Middle Trinity Aquifer underlying its 1,400-acre service area. Of that total 85 acre-feet maximum production authorization requested, Clancy seeks to permit up to 56.7 acre-feet from HTGCD to be produced from four wells.

2. <u>SWTCGCD – 22.8 Acre-Feet</u>

The 28.3 acre-feet balance of the projected combined permitted annual groundwater demand will be produced, if needed, from a fifth well within the Mirasol Springs Development located within the boundaries of the Southwest Travis County Groundwater Conservation District ("SWTCGCD"). Using the same information presented in this Supplement to its HTGCD Application, including using HTGCD's formula for calculating projected potable water demand for residential uses found in Rule 11.4.1 because SWTCGCD has no comparable rule, Applicant will supplement its separate SWTCGCD Application. Clancy's SWTCGCD Supplement will reflect a reduction to Clancy's requested annual production volume from up to 33.63 acre-feet to up to 28.3 acre-feet per year of groundwater produced from the Middle Trinity Aquifer.

G. <u>Clancy's Modified Application Forms</u>:

To avoid confusion resulting from the restated residential and Commercial nonresidential water demand calculations outlined in this Supplement, Applicant has appended hereto the following modified Bates-stamped pages from the Groundwater Availability Report in its originally filed HTGCD Application under TAB 7, Appendix "E" at pages 0104 through 0112,

inclusive. *See* Appendix "A." These Bates-stamped pages update, and supersede, those same pages contained in Clancy's original HTGCD Application.

While Clancy has attempted to update its Application fully, in the event of a conflict between the information presented in this Supplement, and Clancy's earlier filings, Clancy requests that HTGCD rely upon the information and the request contained in this Supplement.

H. <u>Conclusion</u>:

In order for Clancy Utility Holdings LLC ("Clancy") to provide potable water services to the Mirasol Springs Development as a retail public utility, not just a public water supply system, Clancy seeks authorization from HTGCD to produce up to 56.7 acre-feet of groundwater from its four wells within HTGCD's jurisdiction for use when drought conditions prevent Clancy's reliance upon the surface water resources contracted from LCRA are not able to be diverted from the Pedernales River. This authorization will allow Clancy, when needed due to the inability to secure adequate surface water from the Pedernales River pursuant to Clancy's LCRA Contract to pump up to a potential daily demand of 50,618 gallons per day. HTGCD's groundwater production authorization will provide Clancy with one of the "redundancy tools" Clancy needs to meet the extensive set of statutory and regulatory requirements to protect the public health and safety in compliance with Chapter 13, Texas Water Code, and Chapter 24 of the Rules of the Texas Public Utility Commission (16 TAC), and Chapter 290 of the regulations promulgated by the Texas Commission on Environmental Quality (30 TAC). Among the mandatory requirements applicable to retail public utilities providing potable water service is the duty to provide a continuous and adequate supply of potable water to the customers within its Service Area. Texas Water Code §13.250; 16 TAC §24.205 (TCEQ's water system quantity/quality requirements shall be minimum standards for determining sufficiency and safety of production, treatment, storage, transmission, and distribution facilities).

As summarized herein, in concert with the Developer, Clancy has taken multiple steps to maximize water conservation and minimize the demand for potable water, as well as diversify the water supply sources within its inventory. Mirasol's diversified supply sources include (i) surface water contracted from LCRA's existing permitted Highland Lakes water supply, (ii) groundwater underlying its 1,400-acre Service Area, (iii) enhanced reuse of treated effluent generated within Clancy's Service Area, and utilization of rainwater harvesting facilities on all available structures within its Service Area. Through these cumulative efforts Clancy has maximized its ability to minimize its potential need for groundwater production in any given year.

Please let me know if you, or Mr. Boghici, have any questions regarding the information provided herein, including the enclosed attachments. Please be sure that this letter provided supplemental information in support of Clancy's Application, including the attachments are logged into the District's records as being a part of Clancy's Application in the District's records.

Thank you for your assistance with this matter. Best wishes.

Sincerely,

McCARTHY & McCARTHY, LLP

Edmond R. McCarthy, Jr.,
Attorney for Clancy Utility Holdings, LLC

ERM/tn
Encl.

cc: Radu Boghici, P.G., HTGCD

Clancy Utility Holdings, LLC
Attn: Jim Truitt, Executive Vice President

Murfee Engineering, Inc.
Attn: George Murfee, P.E.

Tarver Geologic Services, LLC
Attn: Rusty Tarver, P.G.

Southwest Travis County Groundwater Conservation District
Attn: Lane Cockrell, General Manager

Appendix "A"

Clancy's Updated pages 0104 through 0122, inclusive,[11] from the Groundwater Availability Certification in its HTGCD Application Form (Tarver, P.G., Revised 8-23-22)

[11] The changes are identified in **RED TYPE**.

TRANSMITTAL OF DATA FORM

Name of Proposed Subdivision: **MIRASOL SPRINGS**

Property Owner's Name(s): Mirasol Springs, LLC	
Address:	4143 Maple Avenue, Suite 400 Dallas, Texas 75219
Phone:	214-301-4255
Fax:	
Plat Applicants Name:	Mirasol Springs, LLC
Address:	4143 Maple Avenue, Suite 400 Dallas, Texas 75219
Phone:	214-301-4255
Fax:	

I, Shaun Miller (President) , the Plat Applicant, attest that the following information has been provided in accordance with Title 30, TAC, Chapter 230.

Has the Certification of Groundwater Availability for Platting Form (Figure: 30 TAC §230.3(c)) been provided to the:	(Please Circle One)	
1. Municipal or County authority?	**Yes**	No
2. Executive administrator of the Texas Water Development Board?	**Yes**	No
3. Applicable Groundwater Conservation District or Districts?	**Yes**	No
Name of Groundwater Conservation District or Districts:		
Southwest Travis County Groundwater Conservation District **Hays Trinity Groundwater Conservation District**		

Note: Mail the required information to the executive administrator of the Texas Water Development Board at the following address:

Executive Administrator
Texas Water Development Board
Groundwater Resources Division
P.O. Box 13231
Austin, Texas 78711-3231

Contact and other information for the Groundwater Conservation Districts within the state may be accessed on the following Internet pages:
http://www.tceq.state.tx.us/permitting/wate_supply/groundwater/districts.html
http://www.twdb.state.tx.us/GwRD/pages/gwrdindex.html
http://www.texasgroundwater.org/index.htm

CERTIFICATION OF GROUNDWATER AVAILABLITY FOR PLATTING FORM

Use of this form: If required by a municipal authority pursuant to Texas Local Government Code, §212.0101, or a county authority pursuant to §232.0032, Texas Local Government Code, the plat applicant and the Texas licensed professional engineer or Texas licensed professional geoscientist shall use this form based upon the requirements of Title 30, TAC, Chapter 230 to certify that adequate groundwater is available under the land to be subdivided (if the source of water for the subdivision is groundwater under the subdivision) for any subdivision subject to platting under Texas Local Government Code, §212.004 and §232.001. The form and Chapter 230 do not replace state requirements applicable to public drinking water supply systems or the authority of counties or groundwater conservation districts under either Texas Water Code, §35.019 or Chapter 36.

Administrative Information (30 TAC §230.4)

1. Name of Proposed Subdivision: **Mirasol Springs**

2. Any Previous Name Which Identifies the Tract of Land: **Norsworthy Ranch**

3. Property Owner's Name(s): **Mirasol Springs, LLC**

Address: **4143 Maple Avenue, Suite 400, Dallas, Texas 75219**

Phone: **214-301-4255**

Fax:

4. Plant Applicant's Name: **Mirasol Springs, LLC**

Address: **4143 Maple Avenue, Suite 400, Dallas, Texas 75219**

Phone: **214-301-4255**

Fax:

5. Licensed Professional Engineer or Geoscientist: **Geoscientist No. 1974 (TX)**

Name: **Robert Tarver**

Address: **Tarver Geologic Services, LLC**
2123 Divide Pass
Blanco, TX 78606

Phone: **512-914-9571**

Fax: none

Certificate Number: **Texas P.G. No. 1974**

6. Location and Property Description of Proposed Subdivision: **24601 Hamilton Pool Rd, Travis County**
Tract comprised of 1400 +/- Acres containing:
Tract I (260.40 ac) Hays Tax Parcel 13654 & 13658
Tract II (433.42 ac) Hays Tax Parcel 13653, 19399 & 19430
Tract III (425.192 ac) Hays Tax Parcel No. 13659 & Travis Tax Parcel 355301
Tract IV (2.452 ac) Travis Tax Parcel No. 355301
Tract V 278.480 ac – Lots 2, 3 & 4, Block C, Hurlbut Ranch East subdivision.
All as recorded in Document No. 2018051535 of Official Public Records of Travis County, Texas

7. Tax Assessor Parcel Number(s):
Travis County: 355301 (168.845 ac +/-)
Hays County: 13653,13654, 13658, 13659, 19399, 19430, 32702, 32703, and 32702 (1,231.964 ac +/-)

Book:

Map:

Parcel:

Proposed Subdivision Information (30 TAC §230.5)

8. Purpose of Proposed Subdivision (single family/multi-family residential, non-residential, commercial): **Single Family Residential, Commercial & Non-Residential**

9. Size of Proposed Subdivision (acres): **1,232 +/- acres (within Hays County)**

168 +/- acres (within Travis County)
1,400 +/- Total (per deed)

10: Number of Proposed Lots: Travis County: **1 condo lot (10 Residences and Commercial Units, e.g., 73 Room Hotel w-pool, 2 restaurants, UT Field Research Station; Stables & Kennels, and Organic Farm)**
Hays County**:** **61 single-family residences (homes and cottages)**

11. Average Size of Proposed Lots: **Travis County: 168 acres**
Hays County: 0.4 acres – 10.0 acres

12. Anticipated Method of Water Distribution

Expansion of Existing Public Water Supply System?	Yes	**No**
New (Proposed) Public Water Supply System?	**Yes**	No
Individual Water Wells to Serve Individual Lots?	Yes	**No**
Combination of Methods?	Yes	**No**

Description (if needed): **Centralized Public Water Supply System with Conjunctive Use of Surface Water, Reclaimed Water & Rainfall Harvesting**

13. Additional Information (if required by municipal or county authority):
See Water Demand Projections (Murfee Engineering, Inc.)
Note: If public water supply is anticipated, written application for service to existing water providers within a ½-mile radius should be attached to this form (30 TAC§230.5(f) of this title).

Projected Water Demand Estimate (30 TAC§230.6)

14. Residential Water Demand Estimate at Full Build Out (includes both single family and multi-family residential).
Number of Proposed Housing Units (single and multi-family): **Travis County: 73 room Inn & 10 Residences**
Hays County: 61 single-family
Average Number of Persons per Housing Unit: 4.0 **persons avg**
Gallons of Water Required per Person per Day: **80.0 gpd/person avg**
Water Demand per Housing Unit per Year (acre-feet/year): **0.465 acre-feet/year avg**
Total Expected Residential Water Demand per Year (acre-feet/year):
Hays County 28.33 acre-feet/year (25,291 gpd)
Travis County 4.65 acre-feet/year (4,151 gpd)
Total 32.98 acre-feet/year (29,442 gpd)

15. Non-residential Water Demand Estimate at Full Build Out. **53,440 gpd or 59.86 acre-feet/year**
Type(s) of Non-residential Water Uses: **Commercial use to service 73 Room Inn w-pool, 2 Restaurants, UT Field Research Station, Event Barn & Kennels, and Organic Farm**

Water Demand per Type per Year (acre-feet/year):

Travis County			**Hays County**		
Residential:	**4.65 ac-ft/yr**	(4,151 gpd)	**Residential:**	**28.33 ac-ft/yr**	(**25,291** gpd)
Commercial:	**59.86 ac-ft/yr**	(53,440 gpd)	**Commercial:**	**0 ac-ft/yr**	(0 gpd)
Irrigation:	**0 ac-ft/yr**	(0 gpd)	**Irrigation:**	**0 ac-ft/yr**	(0 gpd)

16. Total Water Demand Estimate at Full Build Out (acre-feet/year):
Travis County: 64.51 ac-ft/yr (57,592 gpd)
Hays County: 28.33 ac-ft/yr (25,291 gpd)
Total Property: 92.84 ac-ft/yr (82,881 gpd)

17. Sources of Information Used for Demand Estimates: **30 TAC §290; HTGCD Rule 11.4.1; West Travis County PUA Tariff; Review of Water Demand Studies prepared by Murfee Engineering, Inc. (MEC)**

General Groundwater Resource Information (30 TAC§230.7)

18. Identify and describe, using Texas Water Development Board names, the aquifer(s) which underlines the proposed subdivision:

Middle Trinity Aquifer

Note: Users may refer to the most recent State Water Plan to obtain general information pertaining to the state's aquifers. The State Water Plan is available on the Texas Water Development Board's Internet website at: www.twdba.state.tx.us

Obtaining Site-Specific Groundwater Data (30 TAC§230.8)		
19. Have all known existing, abandoned, and inoperative wells within the proposed subdivision been located, identified, and shown on a plat as required under§230.8(b) of this title?	**Yes**	No
20. Were the geologic and groundwater resource factors identified under §230.7(b) of this title consider in the planning and designing the aquifer test required under §230.8(c) of this title?	**Yes**	No
21. Have test and observation wells been located, drilled, and logged, completed, developed, and shown on the plat as required by §230.8(c)(1) – (4) of this title?	**Yes**	No
22. Have all reasonable precautions been taken to ensure that Contaminants do not reach the subsurface environment and that undesirable groundwater has been confined to the zone(s) of origin (§230.8(c)(5) off this title)?	**Yes**	No
23. Has an aquifer test been conducted which meets the the requirements of §230.8(c)(1) and (6) of this title?	**Yes**	No
24. Were existing wells or previous aquifer test data used? **Wells**	**Yes**	No
25. If yes, did they meet the requirements of §230.8(c)(7) of this title?	**Yes**	No
26. Were additional observation wells or aquifer testing utilized? (a Lower Trinity Well & Bentree RV Resort PWS Well)	**Yes**	No
Note: If expansion of an existing public water supply system or a new public water supply system is the anticipated method of water distribution for the proposed subdivision, site-specific groundwater data shall be developed under the requirements of 30 TAC, Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems) and applicable information and correspondence developed in meeting those requirements shall be attached to this form pursuant to §230.8(a) of this title.	**Yes**	No
Determination of Groundwater Quality (30 TAC §230.9)		
27. Have water quality samples been collected as required by §230.9 of this title?	**Yes**	No
28. Has a water quality analysis been performed which meets the requirements of §230.9 of this title?	**Yes**	No
Determination of Groundwater Availability (30 TAC §230.10)		

29. Have the aquifer parameters required by (30 TAC §230.10) of this title been determined?	**Yes**	No

30. If so, provide the aquifer parameters as determined.

Rate of yield and drawdown: **Max 27 gpm w/ 26.1 ft max drawdown. Min 6.5 gpm w/ 6.2 ft drawdown.**

Specific capacity: **Q/s @ 1-hr max = 9.8 gpm/ft; Q/s @ 1-hr min = 1.5 gpm/ft**

Efficiency of the pumped well: **Ranges from minimum of 42% to maximum of 98%**

Transmissivity: **T max 14,060 gpd/ft; T min 1,597 gpd/ft**

Coefficient of storage: **S max 0.012; S min 0.0004**

Hydraulic conductivity: **K max 208.0 gpd/ft^2; K min 26.9 gpd/ft^2**

Were any recharge or barrier boundaries detected?: **No**

If yes, please describe:

Thickness of aquifer(s): **b max 73.6 ft; b min 49.7 ft**

31. Have time-drawdown determinations been calculated as required under §230.10(d)(1) of this title?	**Yes**	No
32. Have distance-drawdown determinations been calculated as required under §230.10(d)(2) of this title?	**Yes**	No
33. Have any interference determinations been made as required under §230.10(d)(3) of this title?	**Yes**	No
34. Has the anticipated method of water delivery, the annual groundwater demand estimates at full build out, and geologic and groundwater information been taken into account in making these determinations?	**Yes**	No
35. Has the water quality analysis required under §230.9 of this title been compared to primary and secondary public drinking water standards as required under §230.10(e) of this title?	**Yes**	No
Does the concentration of any analyzed constituent exceed the standards?	Yes	**No**
If yes, Please list the constituent(s) and concentration measures(s) which exceed standards: **All Middle Trinity wells meet or exceed water quality standards above.**	Yes	**No**

Groundwater Availability and Usability Statements (30 TAC §230.11(a) and (b))

36. Drawdown of the aquifer at the pumped well(s) is estimated to be **16.9 to 3.7 feet over a 10-year period and 18.0 to 3.9 feet over a 30-year period**.

37. Drawdown of the aquifer at the property boundary is estimated to be **5.5 to 1.6** feet over a 10-year period and **6.1 to 1.9** feet over a 30-year period.

38. The distance from the pumped well(s) to the outer edges of the cone(s)-of-depression is estimated to be **≥5,000** feet over a 10-year period and > **5,000** feet over a 30-year period.

39. The recommended minimum spacing limit between wells is **1,000** feet with a recommended well yield of **20** gallons per minute per well.

40. Available groundwater **is**/is not (circle one) of sufficient quality to meet the intended use of the platted subdivision.

41. The groundwater availability determination does not consider the following conditions (identify any assumptions or uncertainties that are inherent in the groundwater availability determination):

- No groundwater production off this tract by others is considered.

- It is assumed that there is no groundwater recharge.
- Climate change is not considered in this study.
- Estimates and calculations are presented on a continuous pumping basis for the time periods indicated.

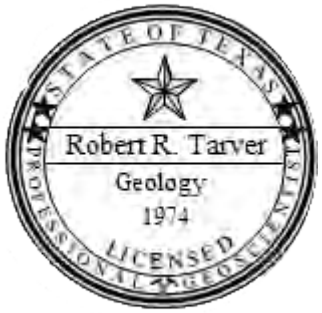
The following additional assumptions are also included with regards to determining aquifer parameters, well parameters and drawdown estimates contained within this study (Driscoll, 1986);

- The water-bearing formation is uniform in character and the hydraulic conductivity is the same in all directions.
- The formation is uniform in thickness and infinite in areal extent.
- The formation receives no recharge from any source.
- The pumped well penetrates and receives water from the full thickness of the water-bearing formation.
- The water removed from storage is discharged instantaneously when the head is lowered.
- The pumping well is 100 percent efficient.
- All water removed from the well comes from aquifer storage.
- Laminar flow exists throughout the well and aquifer.
- The water table or potentiometric surface has no slope.

Certification of Groundwater Availability (30 TAC §230.11(c))

42. I, **Robert Tarver**, Texas Licensed Professional Engineer or *Texas Licensed Professional Geoscientist* (circle which applies), certificate number **1974**, based n best professional judgment, current groundwater conditions, and the information developed and presented in this form, certify that adequate groundwater is available from the underlying aquifer(s) to supply the anticipated use of the proposed subdivision.

Date: 26-March-2021 / Revised 7-July-2021/**Revised 23-August-22**



(affix seal)

v

ADMINISTRATIVE INFORMATION [30 TAC §230.4]

(Information also is contained in the Certification of Groundwater Availability for Platting Form)

(1) Name of Proposed Subdivision; **Mirasol Springs**

(2) Previous or other name(s) which identifies the tract of land; **Norsworthy Ranch**

(3) Name, address, phone number, and facsimile number of the property owner or owner(s);

Name: Mirasol Springs, LLC
Address: 4143 Maple Avenue, Suite 400
Dallas, Texas 75219
Phone: 214-301-4255 *Fax*:

(4) Name, address, phone number, facsimile number, and registration number of person submitting the plat application;

Name: Shaun Miller, President
Address: 4143 Maple Avenue, Suite 400
Dallas, Texas 75219
Phone: 214-301-4255 *Fax*:

(5) Name, address, phone number, facsimile number, and registration number of licensed professional engineer or licensed professional geoscientist preparing the certification as required in this chapter;

Name: **Robert Tarver** **Professional Geoscientist No.: 1974 (State of Texas)**
Address: **2123 Divide Pass, Blanco, Texas 78606**
Phone: **512-914-7591** *Fax*: none *Email*: **rtarver512@gmail.com**

(6) Location and property description of the proposed subdivision;

24601 Hamilton Pool Rd, Travis County
Tract comprised of 1400.809 Acres containing:
Tract I (260.40 ac) Hays Tax Parcel 13654 & 13658
Tract II (433.42 ac) Hays Tax Parcel 13653, 19399 & 19430
Tract III (425.192 ac) Hays Tax Parcel No. 13659 & Travis Tax Parcel 355301
Tract IV (2.452 ac) Travis Tax Parcel No. 355301
Tract V 278.480 ac – Lots 2, 3 & 4, Block C, Hurlbut Ranch East subdivision.
All as recorded in Document No. 2018051535 of Official Public Records of Travis County, Texas

(7) The tax assor parcel number(s) by book, map, and parcel;

Parcel Number:
Travis County: 355301 (168 ac +/-)
Hays County: 13653,13654, 13658, 13659, 19399, 19430, 32702, 32703, and 32702 (1,232 ac +/-)
Book:
Map

PROPOSED SUBDIVISION INFORMATION [30 TAC §230.5]
(Information also is contained in the Certification of Groundwater Availability for Plattting Form)

(1) Purpose of the proposed subdivision, for example, single family residential, multi-family residential, non-residential, commercial, or industrial;

Travis County: Mixed Use: Commercial, Single-Family Residential, Agricultural, Wildlife Conservation, Educational
Hays County: Single-Family Residential, Wildlife Conservation, Educational

(2) The size of the proposed subdivision in acres;
Travis County: 168 +/- acres
Hays County: 1,232+/- acres

(3) Number of proposed lots within the proposed subdivision;
Travis County: 1 condo lot (w-73 Room Inn w-pool, 2 restaurants, UT Field Research Station, Stables & Kennels, Organic Farm, and 10 single-family residences
Hays County: 61 single-family residences

(4) Averages size (in acres) of the proposed lots in the proposed subdivision;
Travis County: 168 ac (1 condo lot)
Hays County: 0.4 ac – 10 ac single-family lots

(5) Anticipated method of water distribution to the proposed lots in the proposed subdivision (if groundwater under the subdivision is to be the source of water supply);

(A) an expansion of an existing public water supply system to serve the proposed subdivision (if groundwater under the subdivision is to be the source of water supply);

(B) a new public water supply system for the proposed subdivision;

(C) Individual water wells to serve individual lots; or

(D) a combination of methods;

Murfee Engineering, Inc. water demand projection documents state that the use of groundwater will be redundant to surface water and other sources. Groundwater usage is planned only for domestic use for potable residential and commercial use, and no irrigation, in this redundant capacity. Mirasol Springs is utilizing a conjunctive use approach to water supply at the proposed development as shown below (see Murfee Engineering Water Demand Projections for more detail).

Total Project (1,400 +/- acres)

*Surface Water**: 108 ac-ft/yr (96,410 gpd)

Reclaimed Water: 30.3 ac-ft/yr (27,000pd)
Rainfall Harvesting: 4.9 ac-ft/yr (4,378 gpd)
Groundwater: **92.84 ac-ft/yr (82,881 gpd)**
* *Applicant has a senior water rights contract in place with the Lower Colorado River Authority.*

(6) If the anticipated method of water distribution for the proposed subdivision is from an expansion of an existing public water supply system or from a proposed public water supply system, evidence required under §290.39(c)(1) of this title (relating to Rules and Regulations for Public Water Systems) which shall be provided demonstrating that written application for service was made to the existing water providers within a ½-mile radius of the subdivision.

Pending

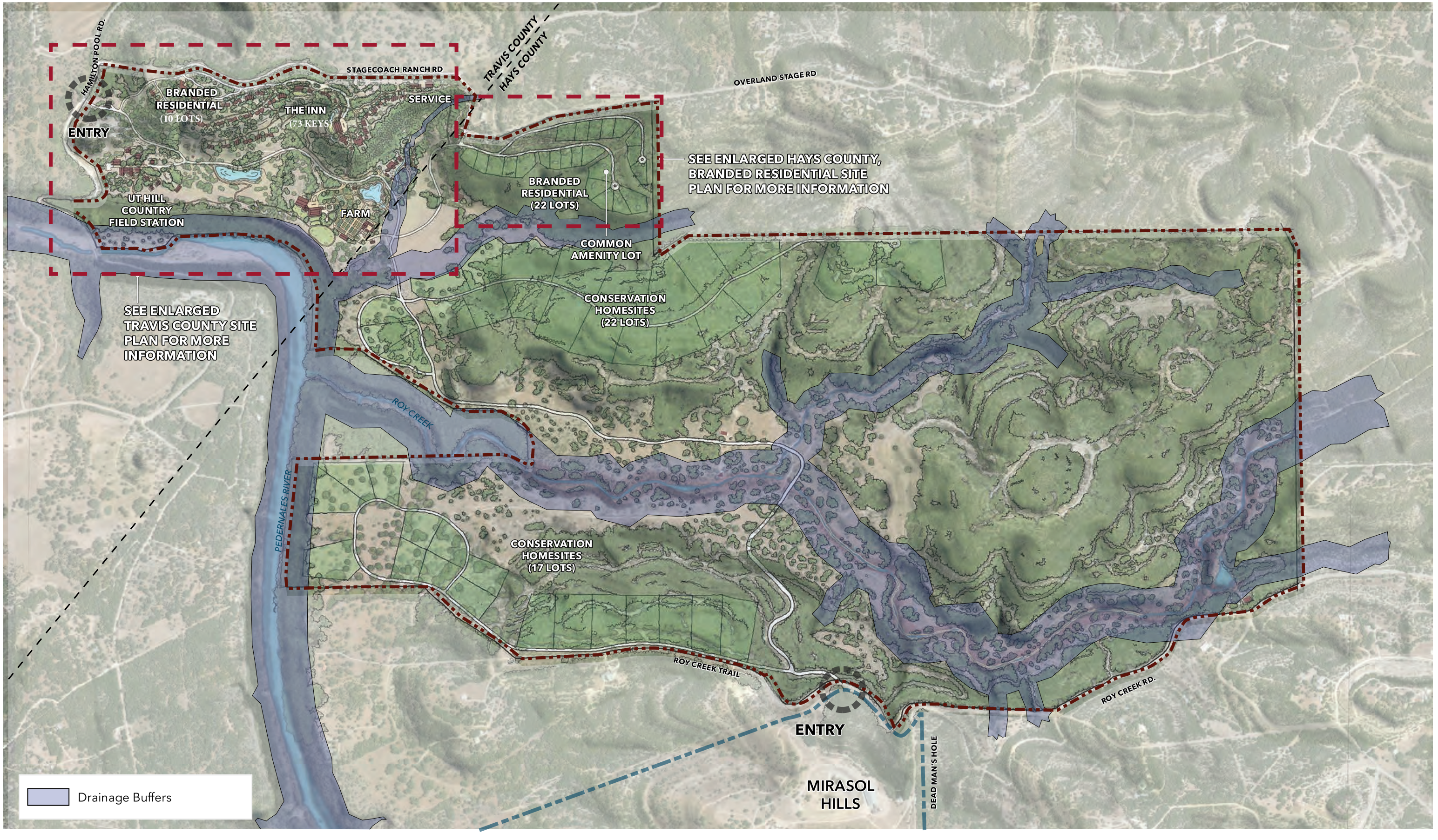
(7) Any additional information required by municipal or county authority as part of the plat application.

PROJECTED WATER DEMAND ESTIMATE [30 TAC §230.7]

Travis County and Hays County Projected Water Demand Estimates prepared by Murfee Engineering, Inc., Austin, Texas are attached. **The West Travis County PUA Tariff is available on-line at: https://www.wtcpua.org/documents/948/2021.10.01_WTCPUA_Amended_Rate_Tariff__redline_.pdf**

Appendix "B"

Current Maps depicting Updated Development Plan for Mirasol Springs pages 0030 through 0031, inclusive, from its HTGCD Application



SITE PLAN - OVERALL

0 1,000 2,000'

1" = 1,000' *at 11" x 17"*

Mirasol Springs Inn & Farm | Schematic Design Preliminary Pricing | June 10, 2022

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SITE PLAN - TRAVIS COUNTY

0 300 600'

1" = 300' *at 11"x 17"*

Mirasol Springs Inn & Farm | Schematic Design Preliminary Pricing | June 10, 2022

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PAUL DUESING PARTNERS dwg. HART HOWERTON

Appendix "C"

MEC's Supplemental Water Demand Memorandum (August 19, 2022)

MURFEE ENGINEERING COMPANY, INC.
Texas Registered Firm No. F-353
1101 Capital of TX Hwy., South
Building D, Suite 110
Austin, TX 78746
512-327-9204

MEMORANDUM

Date: August 19, 2022

To: Jim Truitt – Mirasol Capital

From: George Murfee

Re: Mirasol Supplemental Water Demand Summary

MEC Project No.: 19011.20

Based upon the recent modifications to the land plan, including (i) the reduction in the number of residential units to be built, and (ii) the prohibition against irrigation using potable water resources, the purpose of this memorandum is to provide a summary of the water demands for the Mirasol Development within the context of the procurement of water rights. This memo does not discuss the mechanics of water service strategy, construction, cost, or schedule.

WATER DEMANDS

MEC developed water demand projections to serve as the basis for the groundwater availability studied prepared by Tarver Geologic Services, LLC. Owing to the county line bisecting the property and associated groundwater conservation district boundaries, two groundwater availability studies were prepared. This supplemental water demand summary addresses the residential and non-residential water demand for the entire development irrespective of the county and groundwater conservation district. Those two demands enumerate fully the assumptions and the methodology applied to the estimate water demands.

Two tables are presented showing:

(1) the residential demand based on HTGCD methodology and (2) a modified methodology using LUE (Land Use Equivalency) for non-residential demands.

Table 1
Projected Residential Demand at Build-out

No. Residences	No. Bedrooms	No. Persons	Daily Water Demand Formula @ 80 gpd[1]
21	5	6	21 X 6 X 80 = 10,080 gpd[2]
42	4	5	42 X 5 X 80 = 16,800 gpd
8	3	4	8 X 4 X 80 = 2,560 gpd
			Total Gallons Per Day – 29,440 gallons/day at Build-out

[1] HTGCD Rule 11.4.1.A prescribes the use of 110 gallons per person per day ("gppd") using the following formula for each residence: **(number of bedrooms plus 1) X 110 gallons = gpd demand per residence.** The 110 gallons per day per person includes the use of potable water both indoors and outdoors. Based upon the Developer's stated intent to restrict the use of potable water to indoor use only, and to limit irrigation supplies to rainwater harvesting, the 110 gallons per day projected demand component has been reduced to 80 gallons per person per day.
[2] Gallons per Day ("gpd").

Table 2
Projected Non-residential Demand at Build-out

Nonresidential Commercial Facilities	#LUE	Daily Water Demand @ 320 gpd/LUE[2]
73-Room Inn w-swimming pool	44	44 X 320 = 14,080
Restaurant No. 1	34	34 X 320 = 10,880
Restaurant No. 2	39	39 X 320 = 12,480
UT Field Station	13	13 X 320 = 4,160
Event Barn & Kennels	5	5 X 320 = 1,600
Organic Farm	32	32 X 320 = 10,240
	167	Total Gallons Per Day – 53,440 gallons/day at Build-out

[1] MEC assisted Clancy in the development of its residential potable water demand numbers too.
[2] In the absence of express guidance for commercial water demand in Rule 11.4.1, Clancy has defined an LUE for purposes of its non-residential water demand calculation as follows: As used in this table, each LUE identified is equivalent to the daily volume of water for 4 persons, each using 80 gallons per capita per day. Accordingly, an LUE is the equivalent of 320 gallons per day. This volume does *not* include water for irrigation purposes at the identified facility.