



~~August 28, 2024~~
June 03, 2025

Revised with updated Lot Count on 06/03/2025 per City of Bryan

Zach Kennard, PE
City of Bryan
Traffic Operations Engineer
979-209-5900

Original, Approved Master Plan: +/-220 Lots
Updated Master Plan: +/- 216 Lots

Re.: Trip Generation Determination
Gourd Creek Subdivision
MBESI No. 1000-0468

Dear Zach:

The purpose of this letter is to estimate the average number of trips generated for the Gourd Creek Subdivision at full build-out for both the entire day and peak hour.

The following assumptions and calculations have been made:
(Source: *Institute of Transportation Engineers, Trip Generation, 8th Edition*).

ITE Land Code: Single-Family Detached Housing (210)

Lot Count: (Phase 1: 46) + (Phase 2: 80) + (Phase 3: +/- 21) + (Phase 4: +/- ~~73~~⁶⁹) = ~~220~~²¹⁶

* Average Trips Generated for Weekday per Dwelling Unit: 9.57

>> ~~220~~²¹⁶ x 9.57 = ~~2,105~~^{2,067} trips generated per weekday at full build-out.

* Average Trips Generated for Weekday A.M. Peak Hour per Dwelling Unit: 0.77

>> ~~220~~²¹⁶ x 0.77 = ~~169~~¹⁶⁶ trips generated per weekday A.M. peak hour at full build-out

* Average Trips Generated for Weekday P.M. Peak Hour per Dwelling Unit: 1.02

>> ~~220~~²¹⁶ x 1.02 = ~~224~~²²⁰ trips generated per weekday P.M. peak hour at full build-out.

The Developer improved the portion of Chick Lane (now called Barred Rock Road) along the entire frontage of the Gourd Creek Subdivision per City request. This roadway has been improved to 50' minimum Right-Of-Way with 27' asphalt pavement, Curb and Gutter, and 5' sidewalks on both sides of the street.

Please call or email if you have any questions or comments.

Sincerely,

Josh Fry, P.E.
Engineer
(979) 693-3838
joshf@mcclurebrowne.com



ATTACHMENT #1
EXCERPT FROM
INSTITUTE OF TRANSPORTATION ENGINEERS
TRIP GENERATION (an ITE INFORMATIONAL REPORT)
8th Edition

Single-Family Detached Housing (210)

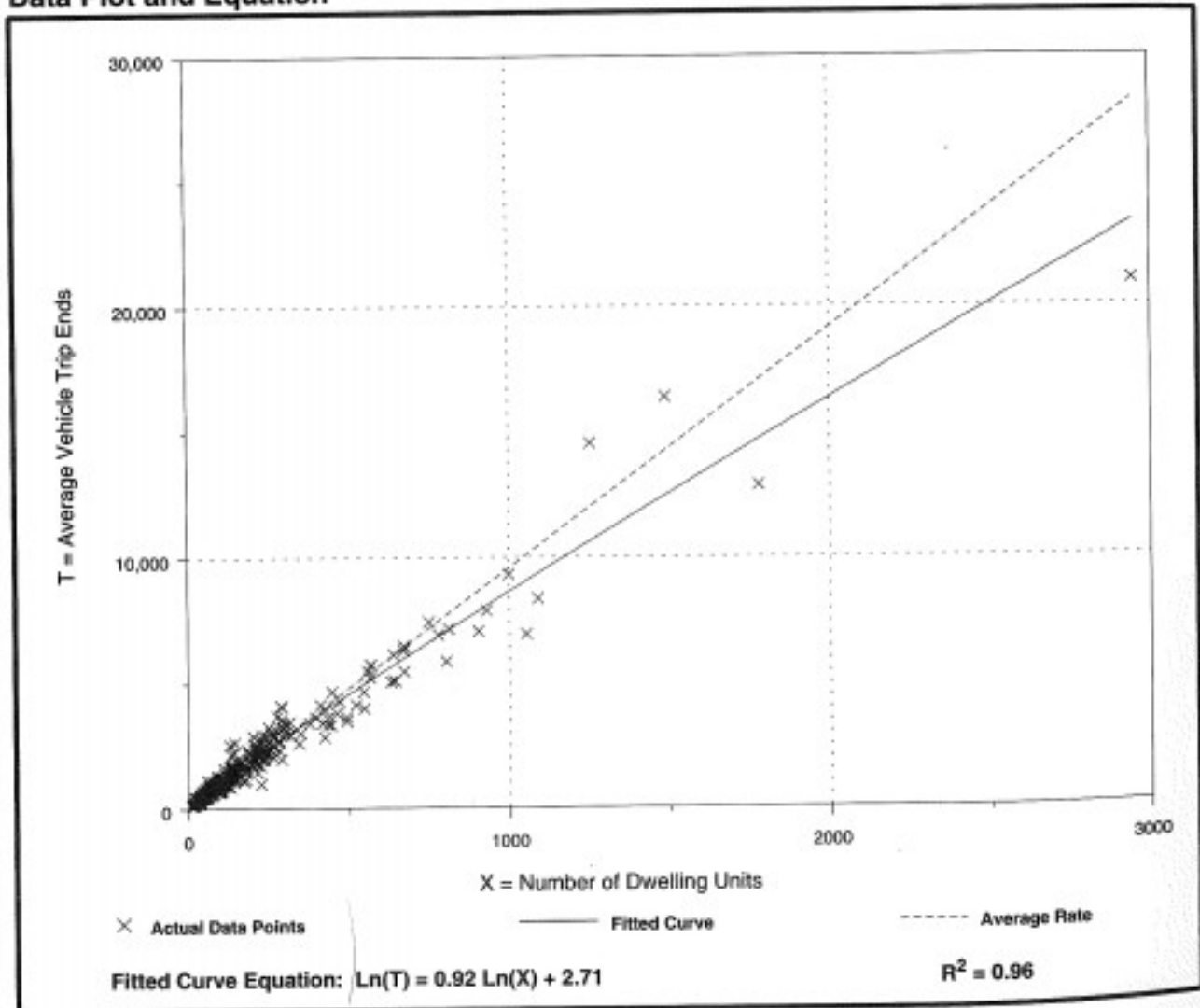
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Number of Studies: 351
Avg. Number of Dwelling Units: 197
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.57	4.31 - 21.85	3.69

Data Plot and Equation



Single-Family Detached Housing (210)

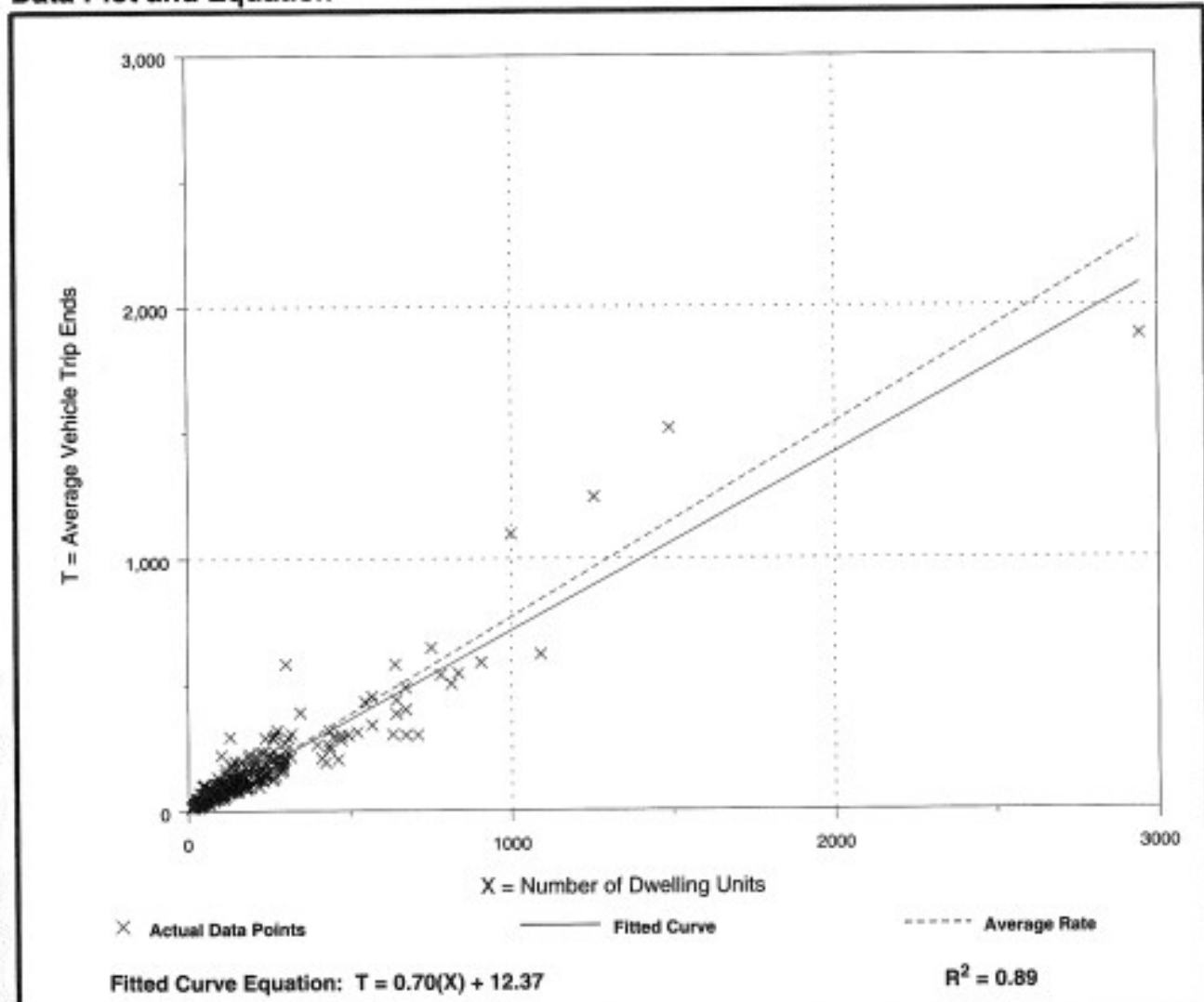
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 341
 Avg. Number of Dwelling Units: 181
 Directional Distribution: 26% entering, 74% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.77	0.33 - 2.27	0.91

Data Plot and Equation



Single-Family Detached Housing (210)

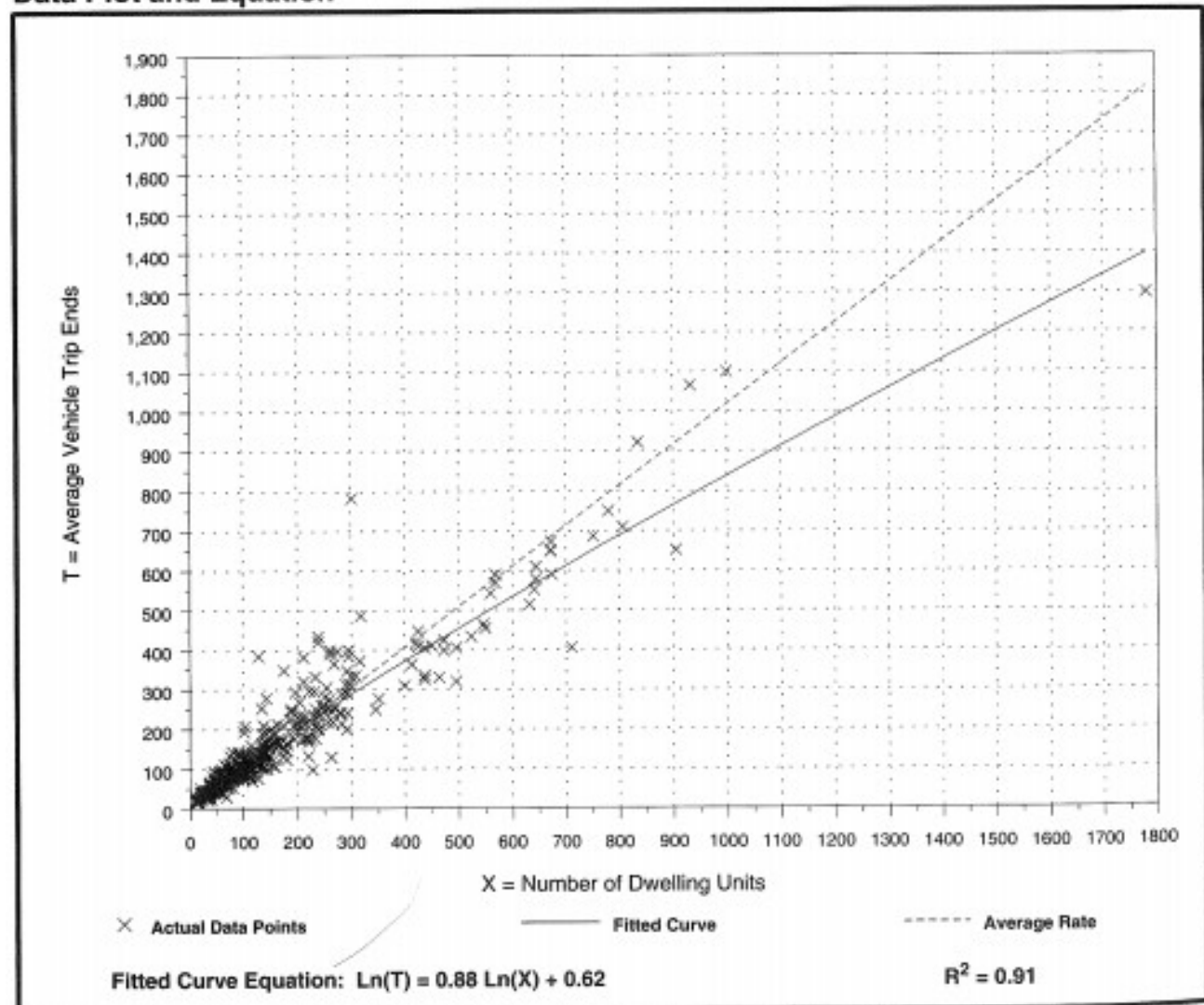
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 360
 Avg. Number of Dwelling Units: 174
 Directional Distribution: 64% entering, 36% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.02	0.42 - 2.98	1.05

Data Plot and Equation

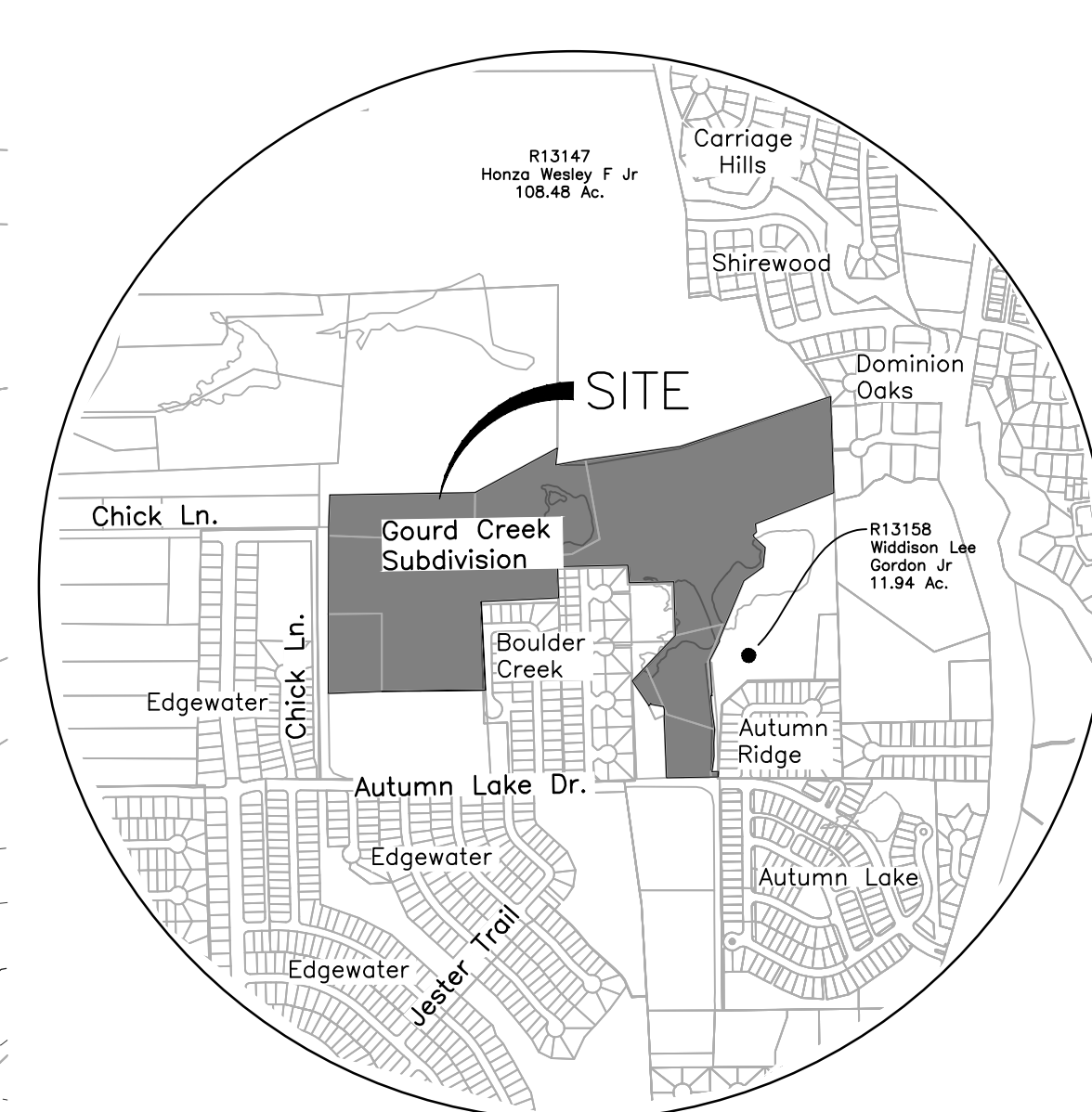
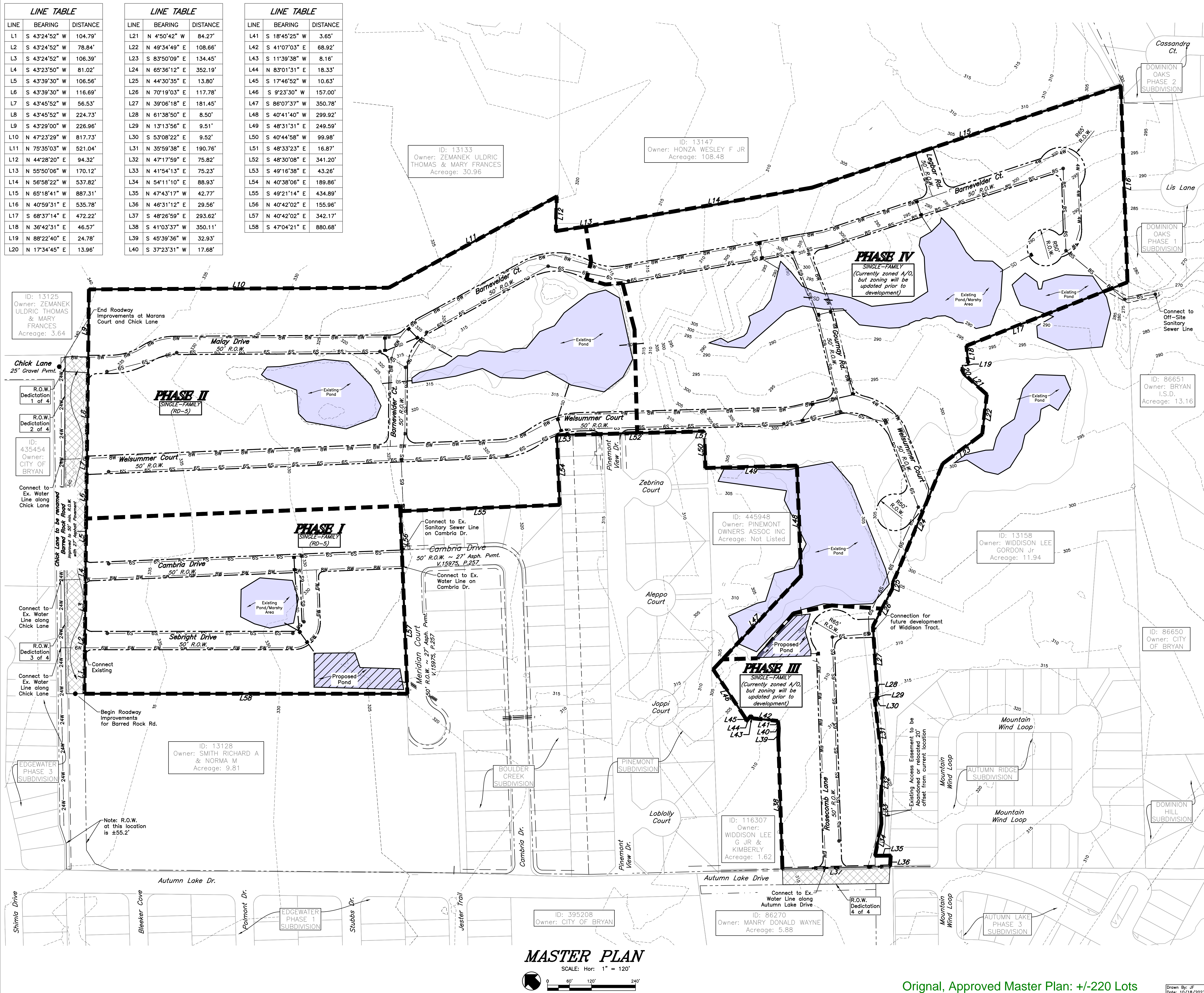


ATTACHMENT #2
GOURD CREEK SUBDIVISION MASTER PLAN

LINE	BEARING	DISTANCE
L1	S 43°24'52" W	104.79'
L2	S 43°24'52" W	78.84'
L3	S 43°24'52" W	106.39'
L4	S 43°23'50" W	81.02'
L5	S 43°39'30" W	106.56'
L6	S 43°39'30" W	116.69'
L7	S 43°45'52" W	56.53'
L8	S 43°45'52" W	224.73'
L9	S 43°29'00" W	226.96'
L10	N 47°23'29" W	817.73'
L11	N 75°35'03" W	521.04'
L12	N 44°28'20" E	94.32'
L13	N 55°50'06" W	170.12'
L14	N 56°58'22" W	537.82'
L15	N 65°18'41" W	887.31'
L16	N 40°59'31" E	535.78'
L17	S 68°37'14" E	472.22'
L18	N 36°42'31" E	46.57'
L19	N 88°22'40" E	24.78'
L20	N 17°34'45" E	13.96'

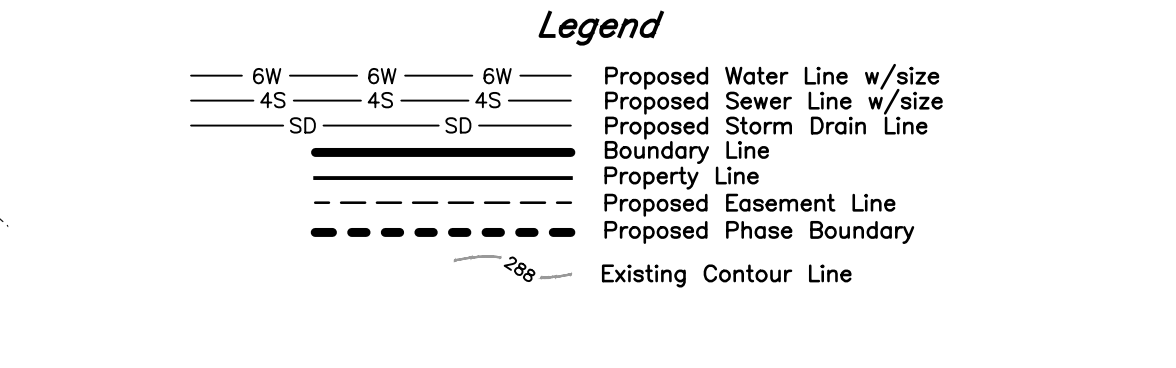
LINE	BEARING	DISTANCE
L21	N 4°50'42" W	84.27'
L22	N 49°34'49" E	108.66'
L23	S 83°50'09" E	134.45'
L24	N 65°36'12" E	352.19'
L25	N 44°30'35" E	13.80'
L26	N 70°19'03" E	117.78'
L27	N 39°06'18" E	181.45'
L28	N 61°38'50" E	8.50'
L29	N 13°13'56" E	9.51'
L30	S 53°08'22" E	9.52'
L31	N 35°59'38" E	190.76'
L32	N 47°17'59" E	75.82'
L33	N 41°54'13" E	75.23'
L34	N 54°11'10" E	88.93'
L35	N 47°43'17" W	42.77'
L36	N 46°31'12" E	29.56'
L37	S 48°26'59" E	293.62'
L38	S 41°03'37" W	350.11'
L39	S 45°39'36" W	32.93'
L40	S 37°23'31" W	17.68'

LINE	BEARING	DISTANCE
L41	S 18°45'25" W	3.65'
L42	S 41°07'03" E	68.92'
L43	S 11°39'38" W	8.16'
L44	N 83°01'31" E	18.33'
L45	S 17°46'52" W	10.63'
L46	S 9°23'30" W	157.00'
L47	S 86°07'37" W	350.78'
L48	S 40°41'40" W	299.92'
L49	S 48°31'31" E	249.59'
L50	S 40°44'58" W	99.98'
L51	S 48°33'23" E	16.87'
L52	S 48°30'08" E	341.20'
L53	S 49°16'38" E	43.26'
L54	N 40°38'06" E	189.86'
L55	S 49°21'14" E	434.89'
L56	N 40°42'02" E	155.96'
L57	N 40°42'02" E	342.17'
L58	S 47°04'21" E	880.68'



VICINITY MAP
SCALE: Hor: 1" = 1000'

- GENERAL NOTES:**
- ZONING:** For Phases (1-2) RD-5, Residential District-5000 as passed and approved by the Bryan City Council.
ANNEX23-01: February 7, 2023 - Ordinance 2615
ANNEX23-04: May 2, 2023 - Ordinance 2625
ZONING: For Phases (3-4) Currently zoned A/O, but these areas are to be rezoned at a future date prior to development. Proposed Land Use: Single Family Residential.
 - According to the Flood Insurance Rate Maps for Brazos County, Texas and Incorporated Areas, Map Number 4804100195E effective 05/16/2012, no portion of this property is located in a 100-year flood hazard area.
 - Existing ground contours are based on an aerial data of the site.
 - Water, Sewer, and Electricity will be served by City of Bryan.
 - Where electric facilities are installed, BTU has the right to install, operate, relocate, construct, reconstruct, add to, maintain, inspect, patrol, enlarge, repair, remove and replace said facilities upon, over, under, and across the property included in the PUE, and the right of ingress and egress on property adjacent to the PUE to access electric facilities.
 - Streets will be asphalt with concrete aprons.
 - Utility locations and sizes are approximate and may vary with development of construction plans with each phase.
 - A Homeowner's Association (HOA) shall be established with direct responsibility to, and controlled by, the property owners involved to provide for operation, repair and maintenance of all common areas, private drainage easements, and private stormwater detention facilities which are a part of this subdivision. The City of Bryan shall not be responsible for any operation, repair and maintenance of these areas.
 - Common Areas and Landscape Easements (including detention area shall be owned & maintained by Homeowners Association and may not be enclosed or screened from the ROW by fencing.
 - Building Setback Lines shall be:
RD-5
Front yard- 25'
Side yard- 5'
Side Street- 15'
Rear yard- 5'
 - Sidewalks shall be provided on both sides of all curb and gutter streets.



Scheduled for P&Z
Oct 23 2023
Ihove
CITY OF BRYAN
Development Services

MASTER PLAN
GOURD CREEK SUBDIVISION
±60.68 ACRES
OUT OF
ZENO PHILLIPS SURVEY, A-45
BRAZOS COUNTY, TEXAS
4 Phases
October 2023
SCALE: 1" = 120'

Owner:
Shian Cao
Remodeling BCS
3100 Texas Ave. South
College Station, TX 77845
(979)200-3335

Surveyor:
Texas Firm Registration No. 10103300
McClure & Browne Engineering/Surveying, Inc.
1008 Woodcreek Dr., Suite 103
College Station, Texas 77845
(979) 693-3838

Drawn By: JF
Date: 10/18/2023

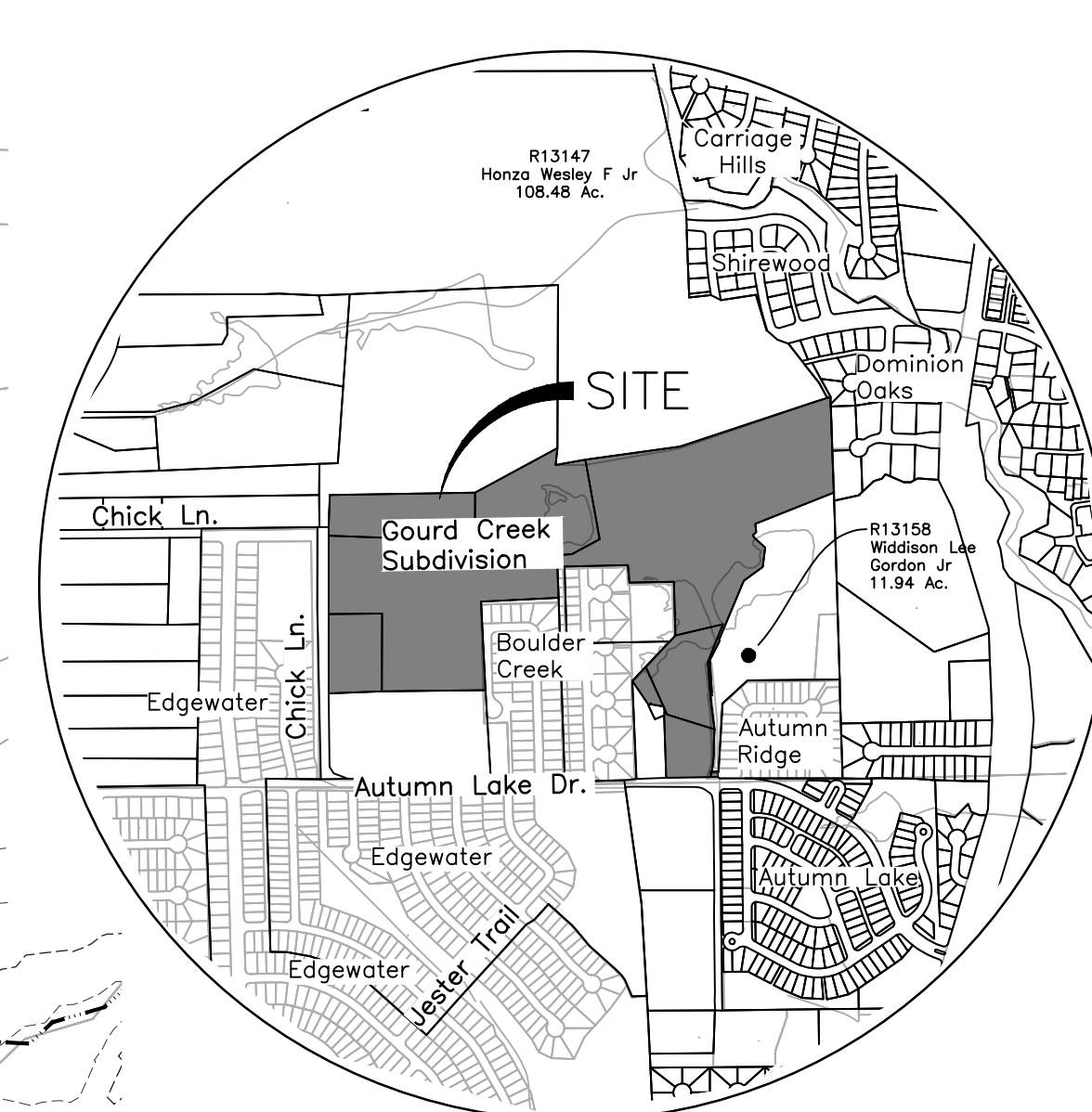
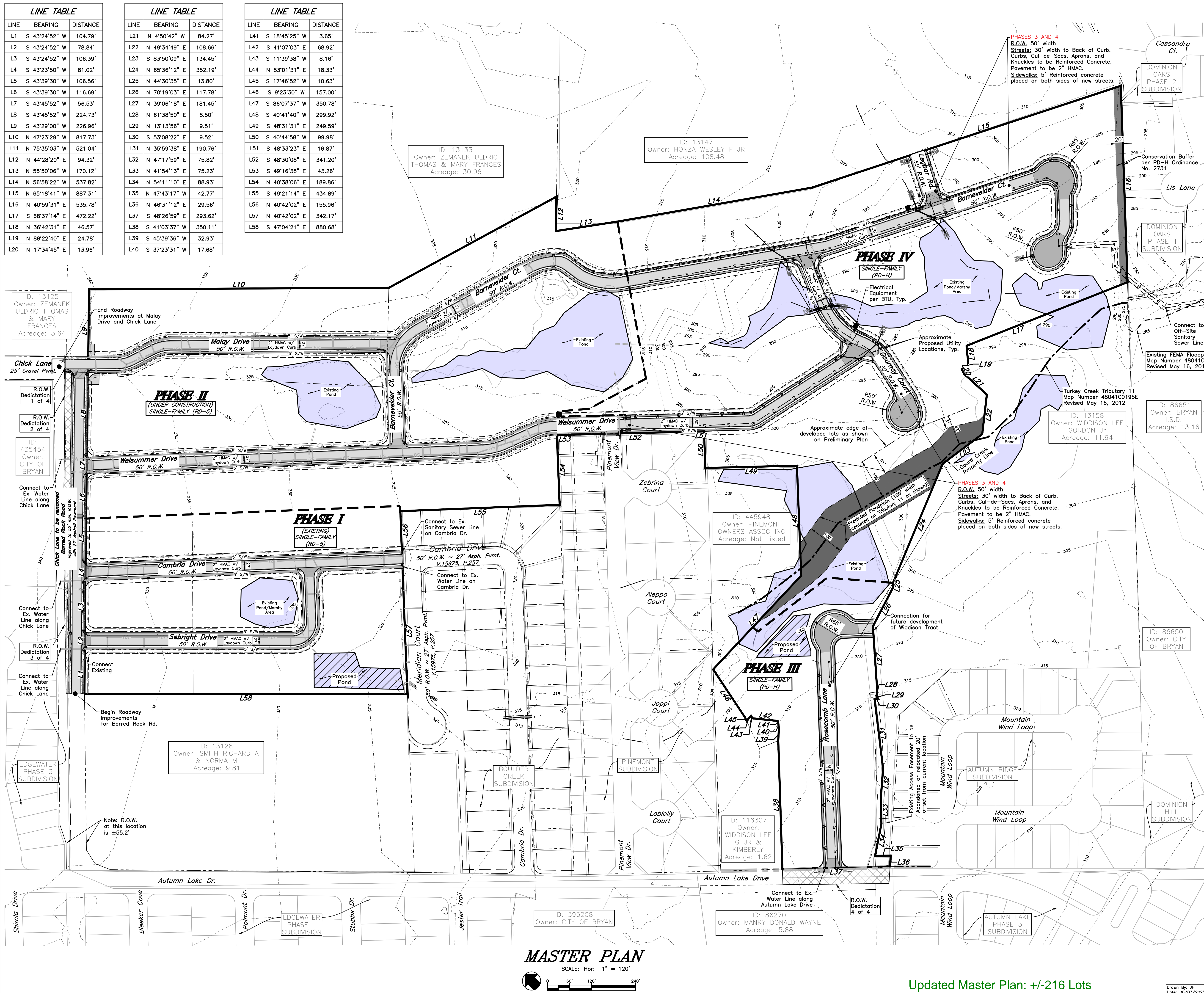
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Original, Approved Master Plan: +/-220 Lots

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- VICINITY MAP**
SCALE: Hor: 1" = 1000'
- GENERAL NOTES:**
- ZONING: For Phases (1-2) RD-5, Residential District-5000 as passed and approved by the Bryan City Council. ANNE23-01: February 7, 2023 - Ordinance 2615. ANNE23-04: May 2, 2023 - Ordinance 2625.
 - ZONING: For Phases (3-4) Planned Development - Housing District (PDH), as approved by City Council on January 14, 2025 (case no. RZ24-106), per Ordinance No. 2731.
 - According to the Flood Insurance Rate Maps for Brazos County, Texas and Incorporated Areas, Map Number 4804100195E effective 05/16/2012, no portion of this property is located in a 100-year flood hazard area.
 - Existing ground contours are based on an aerial data of the site.
 - Water, Sewer, and Electricity will be served by City of Bryan.
 - Where electric facilities are installed, BTU has the right to install, operate, relocate, construct, reconstruct, add to, maintain, inspect, patrol, enlarge, repair, remove and replace said facilities upon, over, under, and across the property included in the PUE, and the right of ingress and egress on property adjacent to the PUE to access electric facilities.
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 - Building Setback Lines shall be:
 - RD-5 and PD-H
 - Front yard- 25'
 - Side yard- 5'
 - Side Street- 15'
 - Rear yard- 5'
 - Sidewalks shall be provided on both sides of all curb and gutter streets.

Legend

6W	6W	6W	Proposed Water Line w/size
4S	4S	4S	Proposed Sewer Line w/size
SD	SD	SD	Proposed Storm Drain Line
---	---	---	Boundary Line
---	---	---	Property Line
---	---	---	Proposed Easement Line
---	---	---	Proposed Phase Boundary
---	---	---	Existing Contour Line

MASTER PLAN
GOURDE CREEK SUBDIVISION
±60.68 ACRES
OUT OF
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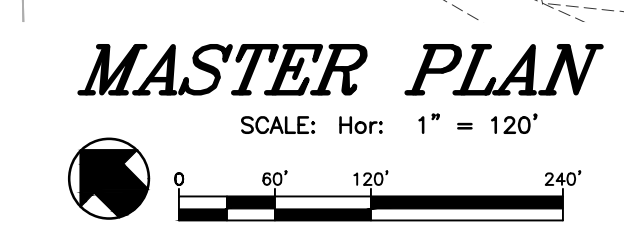
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1008 Woodcreek Dr., Suite 103
College Station, Texas 77845
(979) 693-3838

Drawn By: JF
Date: 06/03/2025

1000468-mp.dwg



Updated Master Plan: +/-216 Lots