

Alyssa Linenkugel, Place 1
Tomas Mendoza, Place 2
John Mounce, Place 3



James Castle, Place 4
Daniel Dennis, Place 5
Shelby St. Claire, Mayor Pro Tem, Place 6

James Clark, Mayor
CITY OF JUSTIN
CITY COUNCIL AGENDA
AUGUST 8, 2024
415 N. COLLEGE AVE.
5:30 PM

A) CALL TO ORDER

Convene into Session:
Invocation and Pledge of Allegiance
American Flag

Texas Flag: *“Honor the Texas Flag; I pledge allegiance to thee, Texas, one state, under God, one and indivisible”*

B) EXECUTIVE SESSION

Any item on this posted agenda could be discussed in Executive Session as long as it is within one of the permitted categories under sections 551.071 through 551.076 and Section 551.087 of the Texas Government Code.

1.
 - Under Section 551.071, to conduct a private consultation with the City Attorney regarding:
 1. Danheim Complaint Against the City of Justin; PUCT Docket No. 53836
 2. Petition of Town of Northlake and City of Justin; PUCT Docket No. 54243
 3. Range Creek Developers Agreement
 4. Trafford Terrace Developers Agreement
 5. Oncor Transmission Line
 6. Treeline Development

C) UPCOMING MEETINGS AND EVENTS

1. The following is a list of upcoming meetings and events:
 - August 13, 2024 Park Board Meeting at 6 p.m.
 - August 14, 2024 First Day of School
 - August 15, 2024 EDC/CDC Meeting at 6 p.m.
 - August 15, 2024 Timberbrook Town Hall at 6 p.m.
 - August 20, 2024 Planning and Zoning Commission Meeting at 6 p.m.

- August 22, 2024 City Council Meeting at 5:30 p.m.

D) PUBLIC COMMENT

In order to expedite the flow of business and to provide all citizens the opportunity to speak, the mayor may impose a three-minute limitation on any person addressing the Council. The Texas Open Meetings Act prohibits the City Council from discussing issues, which the public have not been given a seventy-two (72) hour notice. Issues raised may be referred to City staff for research and/or placed on a future agenda.

E) CONSENT AGENDA

Any Council Member may request an item on the Consent Agenda to be taken up for individual consideration.

1. Consider approving City Council minutes dated July 18, 2024 and July 25, 2024; and take appropriate action.
2. Consider approving Resolution 696-24 approving East Side Water Loop Improvements, and take appropriate action.
3. Consider approving Resolution 697-24 for the execution of an agreement with Civic Plus Next Request; and take appropriate action.
4. Consider adopting Ordinance 784-24 approving a budget amendment for the Economic Development Corporation; and take appropriate action.
5. Consider approving Resolution 698-24 authorizing the execution and amendment of the Talley Blvd ICA with Denton County; and take appropriate action.
6. Consider approving Resolution 699-24 for the City to accept and take over the proposed Timberbrook Neighborhood Park; and take appropriate action.

F) ITEMS PULLED FROM CONSENT AGENDA

G) PUBLIC HEARING

1. Conduct a Public Hearing and consider adopting Ordinance 785-24 approving an Amendment to the existing Planned Development Agreement (SF-1 PD-597-15) for Meadowlands Phase 1, legally described as Lots 1-7, Block A. Generally located southwest from the intersection of FM 407 and Meadowview Drive; and take appropriate action.

H) WORKSHOP

1. Discussion on Water and Wastewater Master Plan update.

I) ACTION ITEMS

1. Consider approving Resolution 695-24 for execution of a financial agreement with the Texas Water Development Board for the next phase of funding in connection with the issuance of

\$2,500,000 in principal amount of combination tax and revenue certificates of obligation; and take appropriate action.

2. Consider approving Resolution 700-24 authorizing publication and posting of notice of intention to issue certificates of obligation, including the adoption of a resolution pertaining thereto; and take appropriate action.
3. Consider and act upon Resolution 701-24 of the City of Justin, Texas, to declare an emergency and authorize the City Manager to negotiate and execute an agreement on behalf of the City in an amount not to exceed \$200,000 to design and construct water system improvements, and further appropriate necessary funding.

J) MAYOR'S RECAP

K) FUTURE AGENDA ITEMS

L) ADJOURN

I, the undersigned authority, do hereby certify that the above notice of the meeting of the City Council of the City of Justin, Texas, is a true and correct copy of the said notice that I posted on the official bulletin board at Justin Municipal Complex, 415 North College Street, Justin, Texas, a place of convenience and readily accessible to the general public at all times, and said notice posted this 2nd of August by 6 p.m., at least 72 hours preceding the scheduled meeting time.

Amy Piukana

Amy Piukana, TRMC, City Secretary

Vacant, Place 1
Tomas Mendoza, Place 2
John Mounce, Place 3



James Castle, Place 4
Daniel Dennis, Place 5
Shelby St. Claire, Mayor Pro Tem, Place 6

James Clark, Mayor

MINUTES

**State of Texas
County of Denton
City of Justin**

Justin City Council Regular Session Meeting - July 18, 2024

A) CALL TO ORDER

Convene into Session

Present

Mayor James Clark, Mayor Pro Tem Shelby St. Claire, Council Member John Mounce, Council Member Tomas Mendoza, Council Member James Castle, Council Member Daniel Dennis

City Staff: City Manager, Jarrod Greenwood, Assistant City Manager, Abbey Reece

Mayor Clark called the meeting to order at 4:30 p.m.

B) EXECUTIVE SESSION

Any item on this posted agenda could be discussed in Executive Session as long as it is within one of the permitted categories under sections 551.071 through 551.076 and Section 551.087 of the Texas Government Code.

1.

- Under Section 551.074, to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee: *City Council Vacancy*

Mayor Clark recessed into closed executive session at 4:31 p.m. and reconvened at 4:49 p.m.

C) PUBLIC COMMENT

In order to expedite the flow of business and to provide all citizens the opportunity to speak, the mayor may impose a three-minute limitation on any person addressing the Council. The Texas Open Meetings Act prohibits the City Council from discussing issues, which the public have not been given a seventy-two (72) hour notice. Issues raised may be referred to City staff for research and/or placed on a future agenda.

No public comments on non-agenda items were provided.

D) ACTION ITEM - PUBLIC HEARING

1. Conduct a Public Hearing and consider approving Resolution 692-24 appointing a City Council Place 1 member to fill a vacancy for an unexpired term ending in May 2025, and take appropriate action.

Mayor Clark opened the public hearing.

The following citizen spoke:

Applicant Thomas Kiselak, 1015 Timber Ridge Drive, Justin, Texas spoke thanking City Council for the opportunity to interview for the City Council vacancy.

Mayor Clark closed the public hearing. Mayor Clark thanked the following applicants who applied for the City Council vacancy: Scott Kasper, David Beck, Alyssa Linenkugel, James Wells, Joseph Russo, Thomas Kiselak, Kasey Cantrell, Ronald Rackley, Corrina Gidden, Brenna Romine, Cecilia Coker, and Mark Montanari.

A motion was made by Council Member Dennis to appoint Scott Kasper as Place 1 City Council member. Motion seconded by Council Member Castle.

The motion prevailed by the following vote:

In Favor - Mayor Pro Tem St. Claire, Council Member Dennis, Council Member Castle

Opposed - Mayor Clark, Council Member Mounce, Council Member Mendoza

The item failed due to a 3-3 tie vote.

A new motion was made by Mayor Pro Tem St. Claire to appoint Alyssa Linenkugel as Place 1 City Council member. Motion seconded by Council Member Mendoza.

The motion prevailed by the following vote:

In Favor - Mayor Pro Tem St. Claire, Mayor Clark, Council Member Mounce, Council Member Mendoza

Opposed - Council Member Dennis, Council Member Castle

The item passed by a 4-2 vote.

E) ADJOURN

There being no further business to discuss, Mayor Clark adjourned the meeting at 4:54 p.m.

Signed by: _____
Mayor Clark

Amy Piukana

Amy Piukana, TRMC, City Secretary

Seal:

Vacant, Place 1
Tomas Mendoza, Place 2
John Mounce, Place 3



James Castle, Place 4
Daniel Dennis, Place 5
Shelby St. Claire, Mayor Pro Tem, Place 6

James Clark, Mayor

MINUTES

**State of Texas
County of Denton
City of Justin**

Justin City Council Regular Session Meeting - July 25, 2024

A) CALL TO ORDER

Convene into Session:
Invocation and Pledge of Allegiance
American Flag

Texas Flag: ***"Honor the Texas Flag; I pledge allegiance to thee, Texas, one state, under God, one and indivisible"***

Present

Mayor James Clark, Mayor Pro Tem Shelby St. Claire, Council Member John Mounce, Council Member Tomas Mendoza, Council Member James Castle, Council Member Daniel Dennis

City Staff: City Manager, Jarrod Greenwood, Assistant City Manager, Abbey Reece, City Secretary, Amy Piukana, Public Works Director, Josh Little, Finance Director Josh Armstrong and City Attorney, Matthew Boyle.

Mayor Clark called the meeting to order at 5:30 p.m.

Pastor Joe Slater with Justin Church of Christ led the invocation. Mayor Clark led the Pledge of Allegiance and Pledge to the Texas Flag.

B) EXECUTIVE SESSION

Any item on this posted agenda could be discussed in Executive Session as long as it is within one of the permitted categories under sections 551.071 through 551.076 and Section 551.087 of the Texas Government Code.

1.
 - Under Section 551.071, to conduct a private consultation with the City Attorney regarding:
 1. Danheim Complaint Against the City of Justin; PUCT Docket No. 53836
 2. Petition of Town of Northlake and City of Justin; PUCT Docket No. 54243

3. Range Creek Developers Agreement
4. Trafford Terrace Developers Agreement
5. Oncor Transmission Line
6. Treeline Development
7. Oliver Creek Ranch Preliminary Plat

City Attorney Matthew Boyle read the caption of closed session items

Mayor Clark recessed into a closed executive session at 5:34 p.m. and reconvened into open session at 6:25 p.m.

C) UPCOMING MEETINGS AND EVENTS

Mayor Clark announced upcoming meetings and events.

1. The following is a list of upcoming meetings and events:
 - August 1, 2024 Reatta Ranch Town Hall at 6 p.m.
 - August 6, 2024 Open House for the Unified Development Code at 6:00pm (Country Abbey)
 - August 8, 2024 City Council Meeting at 5:30 p.m.
 - August 13, 2024 Park Board Meeting at 6 p.m.
 - August 14, 2024 First Day of School
 - August 15, 2024 EDC/CDC Meeting at 6 p.m.
 - August 15, 2024 Timberbrook Town Hall at 6 p.m.
 - August 20, 2024 Planning and Zoning Commission Meeting at 6 p.m.
 - August 22, 2024 City Council Meeting at 5:30 p.m.

D) CEREMONIAL ITEM(S)

1. Provide Oath of Office to Newly Appointed City Council Member, Place 1

City Secretary Amy Piukana provided the Oath of Office to Alyssa Linenkugel, who was appointed as City Council member Place 1.

E) RECOGNITION(S)

1. Presentation of the TAMI Award to Communications Manager Krystal Gonzalez

Mayor Clark recognized Communications Manager Krystal Gonzalez for receiving Tami Awards for the Communications Department.

F) PRESENTATION(S)

1. Receive a Quarterly Investment Report.

Director of Finance Josh Armstrong provided a Quarterly Investment Report.

G) PUBLIC COMMENT

The following public comment(s) were provided:

Dylan James, 364 Cedar Crest Drive, Justin, Texas submitted a public comment form to record his position expressing his concerns regarding Robert's Rules of Order and appointment process for City Council appointment.

H) CONSENT AGENDA

Any Council Member may request an item on the Consent Agenda to be taken up for individual consideration.

Mayor Clark asked City Council members if any items need to be pulled off the consent agenda. Council Member Linenkugel pulled Agenda Item 1, Council Member Mendoza pulled Agenda Item 6, Mayor Pro Tem St. Claire pulled Agenda Item 4.

Council Member Mounce made a motion to approve Consent Agenda Items 2,3,5, as presented. Motion seconded by Council Member Mendoza. Motion approved unanimously.

1. Consider approving City Council minutes dated June 20, 2024 Joint Planning and Zoning Commission minutes and June 27, 2024 Regular City Council meeting minutes; and take appropriate action.

Council Member Linenkugel made a motion to approve the June 20, 2024 meeting minutes, with the amendment to change the name to Josh Armstrong (typo) on the June 27, 2024 meeting minutes. Motion seconded by Council Member Mounce. Motion approved unanimously.

2. Consider adopting Ordinance No. 783-24, an ordinance of the City Council of the City of Justin, Texas approving the 2024 Annual Service Plan Update to the Service and Assessment Plan, including the Assessment Roll, for the Timberbrook Public Improvement District No. 1 in accordance with Chapter 372, Local Government Code, as amended; and take appropriate action.
3. Consider approving Resolution 684-24 authorizing execution of Denton County Communications Agreement, and take appropriate action.
4. Consider approving Resolution 691-24 appointing Emily Krzyzek to Place 4 and appointing Rod Stokes to Place 8 for the Planning and Zoning Commission; and take appropriate action.

Mayor Pro Tem St. Claire requested this item be pulled to allow applicants to introduce themselves to the City Council. However; these members were not present to introduce themselves.

Motion made by Council Member Linenkugel made a motion to approve Resolution 691-24 to appoint Emily Krzyzek to Place 4 and appoint Rod Stokes to Place 8 for the Planning and Zoning Commission. Motion seconded by Mayor Pro Tem St. Claire. Motion approved unanimously.

5. Consider approving Resolution 693-24 authorizing an amendment to an agreement between the City of Justin and Aqua Texas, Inc.; and take appropriate action
6. Consider approving Resolution 694-24 accepting a Preliminary Plat for Oliver Creek Ranch, consisting of 1,031 lots, generally located south from the intersection of FM 1384 and Jim Baker

Road; and take appropriate action.

Council Member Mendoza noted he pulled this item to allow education for the public in regards to services and finances.

Mayor Clark noted this area is located outside of Justin city limits and the city is unable to control lot sizes. City Manager Jarrod Greenwood noted this is a Municipal Utility District and the Developer manages and finances all infrastructure (water, sewer, streets), noting the water rate is 1.5 times the city rate.

Motion made by Council Member Mendoza to approve Resolution 694-24, as presented. Motion seconded by Council Member Mounce. Motion approved unanimously.

I) ITEMS PULLED FROM CONSENT AGENDA

Council Member Linenkugel pulled Agenda Item 1, Council Member Mendoza pulled Agenda Item 6, Mayor Pro Tem St. Claire pulled Agenda Item 4.

J) PUBLIC HEARING(S)

1. Conduct a Public Hearing and consider approving a Replat for Justin Town Square legally described as Lot 1R1-1R4, Block 4; and take appropriate action.

City Manager Jarrod Greenwood was present to answer any questions.

Mayor Clark opened the public hearing. Mr. Daniel Franklin representing the Developer was present to answer questions. There were no questions. Mayor Clark closed the public hearing.

A motion was made by Council Member Mounce to approve a replat for Justin Town Square described as Lot 1R1-1R4, Block 4, as presented. Motion seconded by Mayor Pro Tem St. Claire. Motion approved unanimously.

K) ACTION ITEM(S)

1. Consider approving Resolution 687-24 authorizing a contract amendment with Westwood; and take appropriate action. *(This item was tabled from the June 27, 2024 City Council Meeting)*

City Manager Jarrod Greenwood was present to answer any questions. Ivan Gonzales with Place Strategies was present to answer questions. Council Member Castle asked if the cost increase was a result from the two extra meetings and what changed from the original bid. Mr. Gonzales and City Manager Greenwood explained additional work was required, and the timeline was extended, resulting in increased costs.

After discussion, a motion was made by Council Member Mounce to approve Resolution 687-24, as presented. Motion seconded by Council Member Linenkugel. Motion approved by vote of 6-1, Council Member Castle opposed.

2. Consider approving Resolution 689-24 for the placement, consideration and adoption of the 2024 Tax Year Property Tax Rate on the City Council meeting agenda for August 8, 2024, for the City of Justin, Texas for the Fiscal Year beginning October 1, 2024 and ending September 30, 2025;

requiring publication of the notice of the 2024 tax year proposed property tax rate in a newspaper of general circulation in the City; posting the notice on the City's website; and providing an effective date; and take appropriate action.

Director of Finance Josh Armstrong briefed City Council regarding this item. Mr. Armstrong noted Resolution 689-24 sets the public hearing for September 12, 2024 and sets the maximum tax rate in an amount not to exceed the current tax rate (.628363).

The City Council discussed the resolution, the September 12, 2024 public hearing date, the maximum rate, and the option to delay the resolution approval until the de minimis rate is known.

After discussion, a motion was made by Council Member Mounce to approve Resolution 689-24, setting the public hearing for September 12, 2024 and adopting a maximum tax rate not to exceed .628363. Motion seconded by Council Member Linenkugel.

The following record vote was taken:

In favor: Linenkugel, Mendoza, Mounce, Castle, Clark

Opposed: Dennis, St. Claire

Motion passed 5-2.

L) BUDGET WORKSHOP

Director of Finance Josh Armstrong, City Manager Jarrod Greenwood and Assistance City Manager Abbey Reece briefed City Council reviewing the budget timeline, the city's vision, mission and values, strategic initiatives, citizen feedback, financial policies, future growth, historical tax revenue, property tax, budget highlights, general and utility funds, 5-Year Capital Improvement Projects budget calendar and next steps.

M) FUTURE AGENDA ITEMS

1. Consider a request by Mayor Pro Tem St. Claire to add a future agenda item.

Mayor Clark asked if Council Members had any future agenda item requests.

Council Member Castle requested a future agenda item to discuss Jo Merle Morris Community Center (Gym) renovation. The City Council unanimously agreed to add this to a future agenda.

Mayor Pro Tem St. Claire requested an increase in fine fees for breaking the no solicitor ordinance within the city. The City Council unanimously agreed to add this to a future agenda.

Council Member Linenkugel requested an agenda item to create a Youth Advisory Council. The City Council unanimously agreed to add this to a future agenda.

N) ADJOURN

Mayor Clark adjourned the meeting at 8:43 p.m.

Signed by: _____
Mayor James Clark

Amy Piukana

Amy Piukana, TRMC, City Secretary

Seal:



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 2. (CONSENT AGENDA)

Title: Consider approving Resolution 696-24 approving East Side Water Loop Improvements, and take appropriate action.

Department: Public Works

Contact: Josh Little, Public Works Director

Recommendation:

Staff recommends approval of Resolution 696-24 East Side Water Loop Improvements Agreement with Kitching & Co. Dirtworx for the amount of \$747,427.533.

Background:

The east side of Justin is currently only supplied water from one 8" water line. This is because our point of distribution originates from the Elevated Storage Tank in Old Town. Our wholesale water provider, Upper Trinity Regional Water District, supplies the City of Justin water directly to this tower, which is then distributed throughout the city. The water supply from 8" water line has to come back to the east side to provide water to all residents & businesses. The main purpose of this proposed 12" water line is to provide a second feed to the east side of Justin to improve water pressure, reliability, and quality.

City Attorney Review: N/A

Attachments:

1. Resolution 696-24 East Side Water Loop Improvements
2. 2024-07-30 Recommendation for Award East Side Water Loop
3. Bid Tabulation
4. Project Location Map - East Side Water Loop

**CITY OF JUSTIN
RESOLUTION 696-24**

A RESOLUTION OF THE CITY COUNCIL OF CITY OF JUSTIN, APPROVING AN AGREEMENT FOR THE EAST SIDE WATER LOOP IMPROVEMENTS, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT ON BEHALF OF THE CITY OF THE CITY OF JUSTIN, TEXAS.

WHEREAS, the City Council of the City of Justin, Texas recognizes the importance of a safe and reliable water supply; and

WHEREAS, the East Side Water Loop Improvements aligns with the “Excellence in Operations” Pillar by providing Strategic Results that is “Improved Infrastructure”; and

WHEREAS, the City Council finds that the passage of this resolution is in the best interest of the citizens of Justin.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1: That, all matters stated in the Recitals hereinabove are found to be true and correct and are incorporated herein by reference as if copied in their entirety.

SECTION 2: That the City of Justin City Council hereby approves the Agreement with Kitching & Co. Dirtworx, attached hereto as Exhibit “A”.

SECTION 3: If any portion of this Resolution shall, for any reason, be declared invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions hereof and the Council hereby determines that it would have adopted this Resolution without the invalid provision.

SECTION 4: That this resolution shall become effective from and after its date of passage.

DULY PASSED and approved by the City Council of the City of Justin, Texas, by a vote on this the 8TH day of August 2024.

APPROVED:

James Clark, Mayor

ATTEST:

Amy Piukana, City Secretary

APPROVED AS TO FORM:

Matthew Boyle, City Attorney

July 31, 2024
WW No.: 3340-23.029

Mr. Jarrod Greenwood
City Manager
CITY OF JUSTIN
415 N. College Avenue
Justin, Texas 76247

Re: **Justin East Side Water Loop**
RECOMMENDATION OF AWARD
Justin, Denton County, Texas

Dear Mr. Greenwood:

BID RESULTS

Attached is the Bid Tabulation for the bids received July 30, 2024 for the referenced project for your use.

The lowest Bid received for the project was from Kitching & Co, Dirtworx. Based on the estimated quantities in the Bid Proposal and the unit prices bid by Kitching & Co the total amount of the bid for contract award is \$747,427.53.

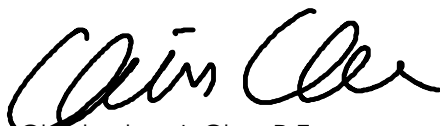
CONTRACTOR QUALIFICATIONS

Kitching & Co. provided a list of experience and references for this project. Westwood called some of the various references and verified experience and the references' opinion of the work performed by the contractor. The experience provided by the contractor showed work in similar projects but for subdivision work done by a private developer instead of a municipality. Personal references regarding Dan Rolan were provided for municipal work during his time at a previous contractor. These personal references were positive of Mr. Rolan.

RECOMMENDATION

Based on the information we have received to date, we see no reason besides the experienced noted above not to award a contract for the referenced project to Kitching & Co. for the amount bid of \$747,427.53.

Should you have any questions about the information contained herein, please do not hesitate to call.



Christopher J. Cha, P.E.

Attachments:
Bid Tabulation
Xc: File

CITY OF JUSTIN

BID TABULATION

PROJECT NAME: JUSTIN EAST SIDE WATER LOOP
WW No. 44169

BIDS OPENED: July 30, 2024
CONTRACT TIME: 110 Calendar Days

ITEM	DESCRIPTION	BID QTY	UNIT	Kitching & Co Dirtworx 901 Industrial Dr Anna, TX		JBM Excavation LLC 464 W Hinton Tioga TX		FM Utilities LLC 4911 Redbird Trl Midlothian, TX		Tellus Consulting LLC 4000 Nbig Springs St Ste 230 Midland, TX		Atkins Bros. Equip 3516 Old Ft. Worth Rd. Midlothian, TX	
				UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1	Contingency Allowance for Water Items	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
2	Mobilization	1	LS	\$ 34,100.00	\$ 34,100.00	\$ 30,000.00	\$ 30,000.00	\$ 44,639.30	\$ 44,639.30	\$ 51,284.82	\$ 51,284.82	\$ 25,000.00	\$ 25,000.00
3	Traffic Control	1	LS	\$ 6,050.00	\$ 6,050.00	\$ 15,000.00	\$ 15,000.00	\$ 9,835.00	\$ 9,835.00	\$ 11,106.24	\$ 11,106.24	\$ 1,000.00	\$ 1,000.00
4	Temporary Erosion, Sedimentation And Water Pollution Prevention (SWPPP)	1	LS	\$ 4,416.50	\$ 4,416.50	\$ 10,000.00	\$ 10,000.00	\$ 22,810.00	\$ 22,810.00	\$ 28,905.30	\$ 28,905.30	\$ 1,000.00	\$ 1,000.00
5	Site Clearing	42	STA	\$ 230.48	\$ 9,680.16	\$ 400.00	\$ 16,800.00	\$ 445.00	\$ 18,690.00	\$ 278.48	\$ 11,696.16	\$ 100.00	\$ 4,200.00
6	Project Sign	2	LS	\$ 1,452.00	\$ 2,904.00	\$ 500.00	\$ 1,000.00	\$ 935.00	\$ 1,870.00	\$ 950.97	\$ 1,901.94	\$ 500.00	\$ 1,000.00
7	12" PVC C-900, DR-18 Water Main Pipe By Open Cut	3,749	LF	\$ 85.94	\$ 322,189.06	\$ 80.00	\$ 299,920.00	\$ 83.00	\$ 311,167.00	\$ 107.47	\$ 402,905.03	\$ 112.00	\$ 419,888.00
8	6" PVC C-900, DR-18 Water Main Pipe By Open Cut	220	LF	\$ 35.05	\$ 7,711.00	\$ 50.00	\$ 11,000.00	\$ 71.00	\$ 15,620.00	\$ 77.98	\$ 17,155.60	\$ 50.00	\$ 11,000.00
9	Ductile Iron Fittings	1.6	TON	\$ 28,017.96	\$ 44,828.74	\$ 24,000.00	\$ 38,400.00	\$ 33,670.00	\$ 53,872.00	\$ 21,342.49	\$ 34,147.98	\$ 22,000.00	\$ 35,200.00
10	Install Fire Hydrant Assembly	6	EA	\$ 6,087.19	\$ 36,523.14	\$ 6,000.00	\$ 36,000.00	\$ 9,390.00	\$ 56,340.00	\$ 5,672.12	\$ 34,032.72	\$ 5,000.00	\$ 30,000.00
11	12" Gate Valve And Valve Box	8	EA	\$ 4,223.22	\$ 33,785.76	\$ 8,000.00	\$ 64,000.00	\$ 5,300.00	\$ 42,400.00	\$ 5,193.21	\$ 41,545.68	\$ 4,000.00	\$ 32,000.00
12	6" Gate Valve And Valve Box	9	EA	\$ 1,597.07	\$ 14,373.63	\$ 4,000.00	\$ 36,000.00	\$ 2,560.00	\$ 23,040.00	\$ 2,102.90	\$ 18,926.10	\$ 1,400.00	\$ 12,600.00
13	Blow-Off Valve	1	EA	\$ 4,450.97	\$ 4,450.97	\$ 7,000.00	\$ 7,000.00	\$ 12,450.00	\$ 12,450.00	\$ 9,345.95	\$ 9,345.95	\$ 4,500.00	\$ 4,500.00
14	1" & 2" Water Service (Long)	3	EA	\$ 3,148.75	\$ 9,446.25	\$ 2,000.00	\$ 6,000.00	\$ 5,370.00	\$ 16,110.00	\$ 4,053.98	\$ 12,161.94	\$ 4,000.00	\$ 12,000.00
15	Meter Box	3	EA	\$ 393.25	\$ 1,179.75	\$ 500.00	\$ 1,500.00	\$ 705.00	\$ 2,115.00	\$ 530.39	\$ 1,591.17	\$ 330.00	\$ 990.00
16	Connect To Existing Water Main	4	EA	\$ 1,831.60	\$ 7,326.40	\$ 1,000.00	\$ 4,000.00	\$ 18,535.00	\$ 74,140.00	\$ 3,450.23	\$ 13,800.92	\$ 4,000.00	\$ 16,000.00
17	Cut Plug And Abandon Existing Water Main	4	EA	\$ 763.37	\$ 3,053.48	\$ 1,000.00	\$ 4,000.00	\$ 4,025.00	\$ 16,100.00	\$ 1,505.64	\$ 6,022.56	\$ 2,000.00	\$ 8,000.00
18	Trench Excavation Safety and Support	3,749	LF	\$ 1.33	\$ 4,986.17	\$ 2.00	\$ 7,498.00	\$ 5.00	\$ 18,745.00	\$ 4.51	\$ 16,907.99	\$ 1.00	\$ 3,749.00
19	5' Wide Residential Asphalt Repair	1,083	LF	\$ 45.37	\$ 49,135.71	\$ 60.00	\$ 64,980.00	\$ 31.00	\$ 33,573.00	\$ 98.21	\$ 106,361.43	\$ 110.00	\$ 119,130.00
20	6' Wide Residential Concrete Repair	70	LF	\$ 88.77	\$ 6,213.90	\$ 200.00	\$ 14,000.00	\$ 106.00	\$ 7,420.00	\$ 255.21	\$ 17,864.70	\$ 120.00	\$ 8,400.00
21	12" PVC C-900, DR-14 Water Main Pipe in Steel Casing	390	LF	\$ 111.01	\$ 43,293.90	\$ 120.00	\$ 46,800.00	\$ 159.00	\$ 62,010.00	\$ 276.26	\$ 107,741.40	\$ 641.00	\$ 249,990.00
22	Hydromulch	1,051	SY	\$ 2.95	\$ 3,100.45	\$ 3.00	\$ 3,153.00	\$ 3.20	\$ 3,363.20	\$ 3.19	\$ 3,352.69	\$ 1.00	\$ 1,051.00
23	6" Topsoil	1,051	SY	\$ 2.82	\$ 2,963.82	\$ 5.00	\$ 5,255.00	\$ 11.80	\$ 12,401.80	\$ 5.40	\$ 5,675.40	\$ 27.00	\$ 28,377.00
24	6" Flexbase	1,635	SY	\$ 9.32	\$ 15,238.20	\$ 20.00	\$ 32,700.00	\$ 16.40	\$ 26,814.00	\$ 19.16	\$ 31,326.60	\$ 10.00	\$ 16,350.00
25	Excavation For Location Of Existing Utilities	2	EA	\$ 1,249.62	\$ 2,499.24	\$ 2,500.00	\$ 5,000.00	\$ 6,500.00	\$ 13,000.00	\$ 4,421.28	\$ 8,842.56	\$ 500.00	\$ 1,000.00
26	Remove Concrete Pavement	50	SY	\$ 23.73	\$ 1,186.50	\$ 100.00	\$ 5,000.00	\$ 56.00	\$ 2,800.00	\$ 99.40	\$ 4,970.00	\$ 10.00	\$ 500.00
27	Remove and Salvage Fire Hydrant	3	EA	\$ 961.24	\$ 2,883.72	\$ 1,000.00	\$ 3,000.00	\$ 1,050.00	\$ 3,150.00	\$ 1,100.00	\$ 3,300.00	\$ 500.00	\$ 1,500.00
28	2" Combination Air Valve	2	EA	\$ 11,953.54	\$ 23,907.08	\$ 8,000.00	\$ 16,000.00	\$ 16,475.00	\$ 32,950.00	\$ 12,604.13	\$ 25,208.26	\$ 15,000.00	\$ 30,000.00
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL BID				\$ 747,427.53		\$ 834,006.00		\$ 987,425.30		\$ 1,078,081.14		\$ 1,124,425.00
				(3,947.30)	\$ 751,374.83								
	5% BID SECURITY			5% BOND		5% BOND		5% BOND		5% BOND		5% BOND	
	ADDENDA ACKNOWLEDGED			yes		yes		yes		yes		yes	

Calculation error on submitted Unit Price Form

CITY OF JUSTIN				Westwood					
PROJECT NAME: JUSTIN EAST SIDE WATER LOOP WW No. 44169									
BIDS OPENED: July 30, 2024 CONTRACT TIME: 110 Calendar Days				Western Municipal Const 402 Gulf Ave Justin, TX		Excel 4 Construction LLC PO Box 4739 Fort Worth, TX		Canary Construction 802 N Kealy Ave St 101 Lewisville, TX	
ITEM	DESCRIPTION	BID QTY	UNIT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1	Contingency Allowance for Water Items	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
2	Mobilization	1	LS	\$ 98,764.06	\$ 98,764.06	\$ 27,000.00	\$ 27,000.00	\$ 80,000.00	\$ 80,000.00
3	Traffic Control	1	LS	\$ 11,653.03	\$ 11,653.03	\$ 17,000.00	\$ 17,000.00	\$ 32,000.00	\$ 32,000.00
4	Temporary Erosion, Sedimentation And Water Pollution Prevention (SWPPP)	1	LS	\$ 19,751.88	\$ 19,751.88	\$ 90,000.00	\$ 90,000.00	\$ 22,000.00	\$ 22,000.00
5	Site Clearing	42	STA	\$ 589.59	\$ 24,762.78	\$ 985.00	\$ 41,370.00	\$ 1,200.00	\$ 50,400.00
6	Project Sign	2	LS	\$ 407.86	\$ 815.72	\$ 750.00	\$ 1,500.00	\$ 1,500.00	\$ 3,000.00
7	12" PVC C-900, DR-18 Water Main Pipe By Open Cut	3,749	LF	\$ 121.44	\$ 455,278.56	\$ 153.00	\$ 573,597.00	\$ 165.00	\$ 618,585.00
8	6" PVC C-900, DR-18 Water Main Pipe By Open Cut	220	LF	\$ 56.92	\$ 12,522.40	\$ 107.00	\$ 23,540.00	\$ 145.00	\$ 31,900.00
9	Ductile Iron Fittings	1.6	TON	\$ 25,994.31	\$ 41,590.90	\$ 11,000.00	\$ 17,600.00	\$ 25,000.00	\$ 40,000.00
10	Install Fire Hydrant Assembly	6	EA	\$ 9,518.66	\$ 57,111.96	\$ 5,500.00	\$ 33,000.00	\$ 12,000.00	\$ 72,000.00
11	12" Gate Valve And Valve Box	8	EA	\$ 4,685.70	\$ 37,485.60	\$ 5,200.00	\$ 41,600.00	\$ 4,500.00	\$ 36,000.00
12	6" Gate Valve And Valve Box	9	EA	\$ 2,455.97	\$ 22,103.73	\$ 7,100.00	\$ 63,900.00	\$ 2,500.00	\$ 22,500.00
13	Blow-Off Valve	1	EA	\$ 8,554.51	\$ 8,554.51	\$ 5,500.00	\$ 5,500.00	\$ 9,500.00	\$ 9,500.00
14	1" & 2" Water Service (Long)	3	EA	\$ 6,687.83	\$ 20,063.49	\$ 3,800.00	\$ 11,400.00	\$ 3,500.00	\$ 10,500.00
15	Meter Box	3	EA	\$ 2,116.10	\$ 6,348.30	\$ 500.00	\$ 1,500.00	\$ 900.00	\$ 2,700.00
16	Connect To Existing Water Main	4	EA	\$ 5,650.29	\$ 22,601.16	\$ 6,500.00	\$ 26,000.00	\$ 6,000.00	\$ 24,000.00
17	Cut Plug And Abandon Existing Water Main	4	EA	\$ 2,041.95	\$ 8,167.80	\$ 1,200.00	\$ 4,800.00	\$ 12,000.00	\$ 48,000.00
18	Trench Excavation Safety and Support	3,749	LF	\$ 5.83	\$ 21,856.67	\$ 1.00	\$ 3,749.00	\$ 4.00	\$ 14,996.00
19	5' Wide Residential Asphalt Repair	1,083	LF	\$ 83.27	\$ 90,181.41	\$ 85.00	\$ 92,055.00	\$ 125.00	\$ 135,375.00
20	6' Wide Residential Concrete Repair	70	LF	\$ 148.05	\$ 10,363.50	\$ 135.00	\$ 9,450.00	\$ 220.00	\$ 15,400.00
21	12" PVC C-900, DR-14 Water Main Pipe in Steel Casing	390	LF	\$ 130.16	\$ 50,762.40	\$ 303.00	\$ 118,170.00	\$ 450.00	\$ 175,500.00
22	Hydromulch	1,051	SY	\$ 1.46	\$ 1,534.46	\$ 4.00	\$ 4,204.00	\$ 5.00	\$ 5,255.00
23	6" Topsoil	1,051	SY	\$ 9.82	\$ 10,320.82	\$ 17.00	\$ 17,867.00	\$ 5.00	\$ 5,255.00
24	6" Flexbase	1,635	SY	\$ 24.15	\$ 39,485.25	\$ 26.00	\$ 42,510.00	\$ 95.00	\$ 155,325.00
25	Excavation For Location Of Existing Utilities	2	EA	\$ 1,570.32	\$ 3,140.64	\$ 5,500.00	\$ 11,000.00	\$ 2,000.00	\$ 4,000.00
26	Remove Concrete Pavement	50	SY	\$ 34.96	\$ 1,748.00	\$ 65.00	\$ 3,250.00	\$ 125.00	\$ 6,250.00
27	Remove and Salvage Fire Hydrant	3	EA	\$ 1,926.42	\$ 5,779.26	\$ 500.00	\$ 1,500.00	\$ 900.00	\$ 2,700.00
28	2" Combination Air Valve	2	EA	\$ 15,291.20	\$ 30,582.40	\$ 11,500.00	\$ 23,000.00	\$ 25,000.00	\$ 50,000.00
				\$ -		\$ -		\$ -	
	TOTAL BID			\$ 1,163,330.69		\$ 1,356,062.00		\$ 1,723,141.00	
	5% BID SECURITY			5% BOND		5% BOND		5% BOND	
	ADDENDA ACKNOWLEDGED			yes		yes		yes	
	Calculation error on submitted Unit Price Form								

CITY OF JUSTIN

BID TABULATION

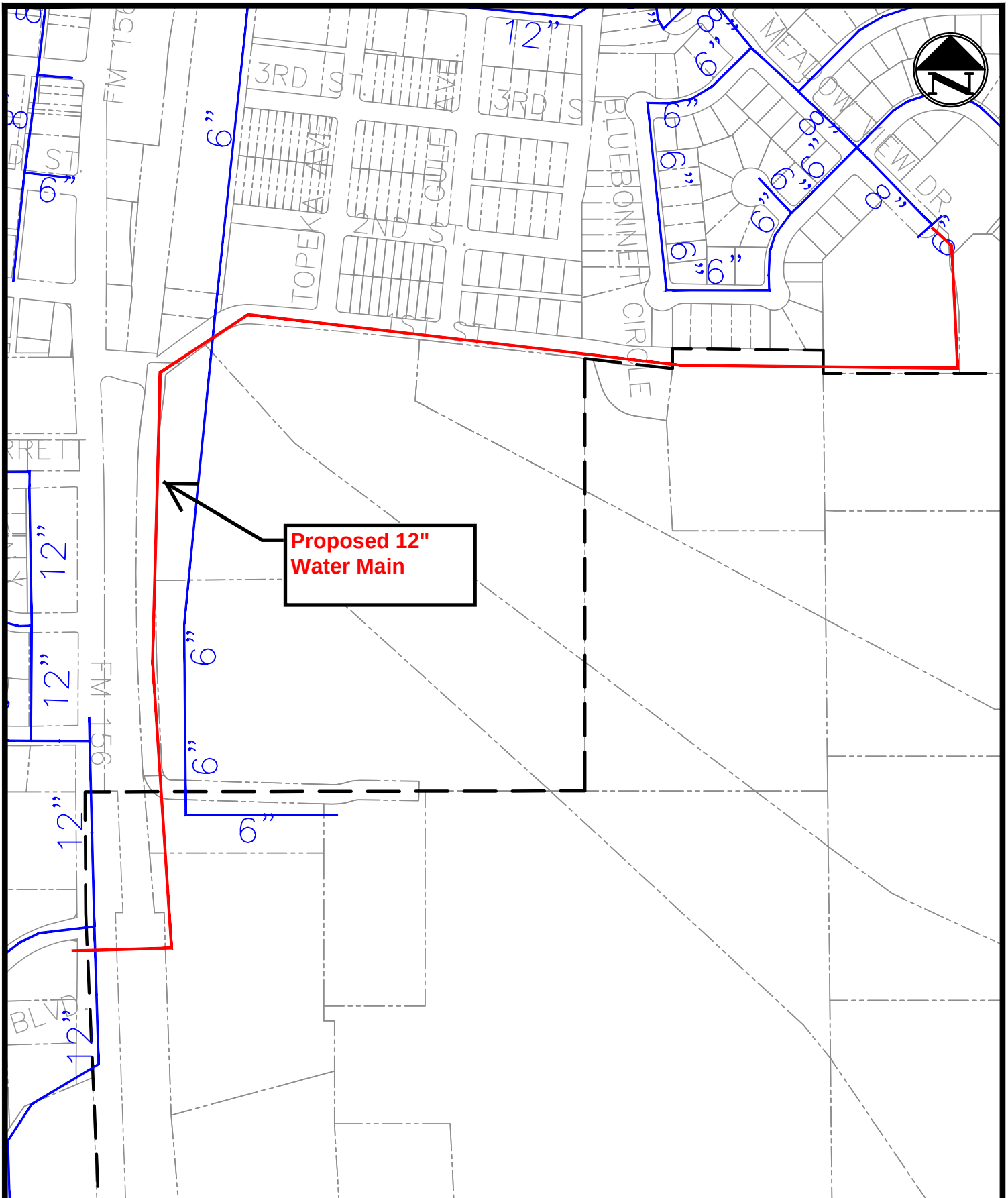
PROJECT NAME: JUSTIN EAST SIDE WATER LOOP
WW No. 44169

BIDS OPENED: July 30, 2024
CONTRACT TIME: 110 Calendar Days

				Kitching & Co Dirtworx 901 Industrial Dr Anna, TX		JBM Excavation LLC 464 W Hinton Tioga TX		FM Utilities LLC 4911 Redbird Trl Midlothian, TX		Tellus Consulting LLC 4000 Nbig Springs St Ste 230 Midland, TX		Atkins Bros. Equip 3516 Old Ft. Worth Rd. Midlothian, TX	
ITEM	DESCRIPTION	BID QTY	UNIT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1	Contingency Allowance for Water Items	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
2	Mobilization	1	LS	\$ 34,100.00	\$ 34,100.00	\$ 30,000.00	\$ 30,000.00	\$ 44,639.30	\$ 44,639.30	\$ 51,284.82	\$ 51,284.82	\$ 25,000.00	\$ 25,000.00
3	Traffic Control	1	LS	\$ 6,050.00	\$ 6,050.00	\$ 15,000.00	\$ 15,000.00	\$ 9,835.00	\$ 9,835.00	\$ 11,106.24	\$ 11,106.24	\$ 1,000.00	\$ 1,000.00
4	Temporary Erosion, Sedimentation And Water Pollution Prevention (SWPPP)	1	LS	\$ 4,416.50	\$ 4,416.50	\$ 10,000.00	\$ 10,000.00	\$ 22,810.00	\$ 22,810.00	\$ 28,905.30	\$ 28,905.30	\$ 1,000.00	\$ 1,000.00
5	Site Clearing	42	STA	\$ 230.48	\$ 9,680.16	\$ 400.00	\$ 16,800.00	\$ 445.00	\$ 18,690.00	\$ 278.48	\$ 11,696.16	\$ 100.00	\$ 4,200.00
6	Project Sign	2	LS	\$ 1,452.00	\$ 2,904.00	\$ 500.00	\$ 1,000.00	\$ 935.00	\$ 1,870.00	\$ 950.97	\$ 1,901.94	\$ 500.00	\$ 1,000.00
7	12" PVC C-900, DR-18 Water Main Pipe By Open Cut	3,749	LF	\$ 85.94	\$ 322,189.06	\$ 80.00	\$ 299,920.00	\$ 83.00	\$ 311,167.00	\$ 107.47	\$ 402,905.03	\$ 112.00	\$ 419,888.00
8	6" PVC C-900, DR-18 Water Main Pipe By Open Cut	220	LF	\$ 35.05	\$ 7,711.00	\$ 50.00	\$ 11,000.00	\$ 71.00	\$ 15,620.00	\$ 77.98	\$ 17,155.60	\$ 50.00	\$ 11,000.00
9	Ductile Iron Fittings	1.6	TON	\$ 28,017.96	\$ 44,828.74	\$ 24,000.00	\$ 38,400.00	\$ 33,670.00	\$ 53,872.00	\$ 21,342.49	\$ 34,147.98	\$ 22,000.00	\$ 35,200.00
10	Install Fire Hydrant Assembly	6	EA	\$ 6,087.19	\$ 36,523.14	\$ 6,000.00	\$ 36,000.00	\$ 9,390.00	\$ 56,340.00	\$ 5,672.12	\$ 34,032.72	\$ 5,000.00	\$ 30,000.00
11	12" Gate Valve And Valve Box	8	EA	\$ 4,223.22	\$ 33,785.76	\$ 8,000.00	\$ 64,000.00	\$ 5,300.00	\$ 42,400.00	\$ 5,193.21	\$ 41,545.68	\$ 4,000.00	\$ 32,000.00
12	6" Gate Valve And Valve Box	9	EA	\$ 1,597.07	\$ 14,373.63	\$ 4,000.00	\$ 36,000.00	\$ 2,560.00	\$ 23,040.00	\$ 2,102.90	\$ 18,926.10	\$ 1,400.00	\$ 12,600.00
13	Blow-Off Valve	1	EA	\$ 4,450.97	\$ 4,450.97	\$ 7,000.00	\$ 7,000.00	\$ 12,450.00	\$ 12,450.00	\$ 9,345.95	\$ 9,345.95	\$ 4,500.00	\$ 4,500.00
14	1" & 2" Water Service (Long)	3	EA	\$ 3,148.75	\$ 9,446.25	\$ 2,000.00	\$ 6,000.00	\$ 5,370.00	\$ 16,110.00	\$ 4,053.98	\$ 12,161.94	\$ 4,000.00	\$ 12,000.00
15	Meter Box	3	EA	\$ 393.25	\$ 1,179.75	\$ 500.00	\$ 1,500.00	\$ 705.00	\$ 2,115.00	\$ 530.39	\$ 1,591.17	\$ 330.00	\$ 990.00
16	Connect To Existing Water Main	4	EA	\$ 1,831.60	\$ 7,326.40	\$ 1,000.00	\$ 4,000.00	\$ 18,535.00	\$ 74,140.00	\$ 3,450.23	\$ 13,800.92	\$ 4,000.00	\$ 16,000.00
17	Cut Plug And Abandon Existing Water Main	4	EA	\$ 763.37	\$ 3,053.48	\$ 1,000.00	\$ 4,000.00	\$ 4,025.00	\$ 16,100.00	\$ 1,505.64	\$ 6,022.56	\$ 2,000.00	\$ 8,000.00
18	Trench Excavation Safety and Support	3,749	LF	\$ 1.33	\$ 4,986.17	\$ 2.00	\$ 7,498.00	\$ 5.00	\$ 18,745.00	\$ 4.51	\$ 16,907.99	\$ 1.00	\$ 3,749.00
19	5' Wide Residential Asphalt Repair	1,083	LF	\$ 45.37	\$ 49,135.71	\$ 60.00	\$ 64,980.00	\$ 31.00	\$ 33,573.00	\$ 98.21	\$ 106,361.43	\$ 110.00	\$ 119,130.00
20	6' Wide Residential Concrete Repair	70	LF	\$ 88.77	\$ 6,213.90	\$ 200.00	\$ 14,000.00	\$ 106.00	\$ 7,420.00	\$ 255.21	\$ 17,864.70	\$ 120.00	\$ 8,400.00
21	12" PVC C-900, DR-14 Water Main Pipe in Steel Casing	390	LF	\$ 111.01	\$ 43,293.90	\$ 120.00	\$ 46,800.00	\$ 159.00	\$ 62,010.00	\$ 276.26	\$ 107,741.40	\$ 641.00	\$ 249,990.00
22	Hydromulch	1,051	SY	\$ 2.95	\$ 3,100.45	\$ 3.00	\$ 3,153.00	\$ 3.20	\$ 3,363.20	\$ 3.19	\$ 3,352.69	\$ 1.00	\$ 1,051.00
23	6" Topsoil	1,051	SY	\$ 2.82	\$ 2,963.82	\$ 5.00	\$ 5,255.00	\$ 11.80	\$ 12,401.80	\$ 5.40	\$ 5,675.40	\$ 27.00	\$ 28,377.00
24	6" Flexbase	1,635	SY	\$ 9.32	\$ 15,238.20	\$ 20.00	\$ 32,700.00	\$ 16.40	\$ 26,814.00	\$ 19.16	\$ 31,326.60	\$ 10.00	\$ 16,350.00
25	Excavation For Location Of Existing Utilities	2	EA	\$ 1,249.62	\$ 2,499.24	\$ 2,500.00	\$ 5,000.00	\$ 6,500.00	\$ 13,000.00	\$ 4,421.28	\$ 8,842.56	\$ 500.00	\$ 1,000.00
26	Remove Concrete Pavement	50	SY	\$ 23.73	\$ 1,186.50	\$ 100.00	\$ 5,000.00	\$ 56.00	\$ 2,800.00	\$ 99.40	\$ 4,970.00	\$ 10.00	\$ 500.00
27	Remove and Salvage Fire Hydrant	3	EA	\$ 961.24	\$ 2,883.72	\$ 1,000.00	\$ 3,000.00	\$ 1,050.00	\$ 3,150.00	\$ 1,100.00	\$ 3,300.00	\$ 500.00	\$ 1,500.00
28	2" Combination Air Valve	2	EA	\$ 11,953.54	\$ 23,907.08	\$ 8,000.00	\$ 16,000.00	\$ 16,475.00	\$ 32,950.00	\$ 12,604.13	\$ 25,208.26	\$ 15,000.00	\$ 30,000.00
				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL BID				\$ 747,427.53		\$ 834,006.00		\$ 987,425.30		\$ 1,078,081.14		\$ 1,124,425.00
				(3,947.30)	\$ 751,374.83								
	5% BID SECURITY			5% BOND		5% BOND		5% BOND		5% BOND		5% BOND	
	ADDENDA ACKNOWLEDGED			yes		yes		yes		yes		yes	

Calculation error on submitted Unit Price Form

CITY OF JUSTIN						Westwood			
PROJECT NAME: JUSTIN EAST SIDE WATER LOOP WW No. 44169									
BIDS OPENED: July 30, 2024 CONTRACT TIME: 110 Calendar Days				Western Municipal Const 402 Gulf Ave Justin, TX		Excel 4 Construction LLC PO Box 4739 Fort Worth, TX		Canary Construction 802 N Kealy Ava St 101 Lewisville, TX	
ITEM	DESCRIPTION	BID QTY	UNIT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT	UNIT PRICE	TOTAL AMOUNT
1	Contingency Allowance for Water Items	1	LS	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
2	Mobilization	1	LS	\$ 98,764.06	\$ 98,764.06	\$ 27,000.00	\$ 27,000.00	\$ 80,000.00	\$ 80,000.00
3	Traffic Control	1	LS	\$ 11,653.03	\$ 11,653.03	\$ 17,000.00	\$ 17,000.00	\$ 32,000.00	\$ 32,000.00
4	Temporary Erosion, Sedimentation And Water Pollution Prevention (SWPPP)	1	LS	\$ 19,751.88	\$ 19,751.88	\$ 90,000.00	\$ 90,000.00	\$ 22,000.00	\$ 22,000.00
5	Site Clearing	42	STA	\$ 589.59	\$ 24,762.78	\$ 985.00	\$ 41,370.00	\$ 1,200.00	\$ 50,400.00
6	Project Sign	2	LS	\$ 407.86	\$ 815.72	\$ 750.00	\$ 1,500.00	\$ 1,500.00	\$ 3,000.00
7	12" PVC C-900, DR-18 Water Main Pipe By Open Cut	3,749	LF	\$ 121.44	\$ 455,278.56	\$ 153.00	\$ 573,597.00	\$ 165.00	\$ 618,585.00
8	6" PVC C-900, DR-18 Water Main Pipe By Open Cut	220	LF	\$ 56.92	\$ 12,522.40	\$ 107.00	\$ 23,540.00	\$ 145.00	\$ 31,900.00
9	Ductile Iron Fittings	1.6	TON	\$ 25,994.31	\$ 41,590.90	\$ 11,000.00	\$ 17,600.00	\$ 25,000.00	\$ 40,000.00
10	Install Fire Hydrant Assembly	6	EA	\$ 9,518.66	\$ 57,111.96	\$ 5,500.00	\$ 33,000.00	\$ 12,000.00	\$ 72,000.00
11	12" Gate Valve And Valve Box	8	EA	\$ 4,685.70	\$ 37,485.60	\$ 5,200.00	\$ 41,600.00	\$ 4,500.00	\$ 36,000.00
12	6" Gate Valve And Valve Box	9	EA	\$ 2,455.97	\$ 22,103.73	\$ 7,100.00	\$ 63,900.00	\$ 2,500.00	\$ 22,500.00
13	Blow-Off Valve	1	EA	\$ 8,554.51	\$ 8,554.51	\$ 5,500.00	\$ 5,500.00	\$ 9,500.00	\$ 9,500.00
14	1" & 2" Water Service (Long)	3	EA	\$ 6,687.83	\$ 20,063.49	\$ 3,800.00	\$ 11,400.00	\$ 3,500.00	\$ 10,500.00
15	Meter Box	3	EA	\$ 2,116.10	\$ 6,348.30	\$ 500.00	\$ 1,500.00	\$ 900.00	\$ 2,700.00
16	Connect To Existing Water Main	4	EA	\$ 5,650.29	\$ 22,601.16	\$ 6,500.00	\$ 26,000.00	\$ 6,000.00	\$ 24,000.00
17	Cut Plug And Abandon Existing Water Main	4	EA	\$ 2,041.95	\$ 8,167.80	\$ 1,200.00	\$ 4,800.00	\$ 12,000.00	\$ 48,000.00
18	Trench Excavation Safety and Support	3,749	LF	\$ 5.83	\$ 21,856.67	\$ 1.00	\$ 3,749.00	\$ 4.00	\$ 14,996.00
19	5' Wide Residential Asphalt Repair	1,083	LF	\$ 83.27	\$ 90,181.41	\$ 85.00	\$ 92,055.00	\$ 125.00	\$ 135,375.00
20	6' Wide Residential Concrete Repair	70	LF	\$ 148.05	\$ 10,363.50	\$ 135.00	\$ 9,450.00	\$ 220.00	\$ 15,400.00
21	12" PVC C-900, DR-14 Water Main Pipe in Steel Casing	390	LF	\$ 130.16	\$ 50,762.40	\$ 303.00	\$ 118,170.00	\$ 450.00	\$ 175,500.00
22	Hydromulch	1,051	SY	\$ 1.46	\$ 1,534.46	\$ 4.00	\$ 4,204.00	\$ 5.00	\$ 5,255.00
23	6" Topsoil	1,051	SY	\$ 9.82	\$ 10,320.82	\$ 17.00	\$ 17,867.00	\$ 5.00	\$ 5,255.00
24	6" Flexbase	1,635	SY	\$ 24.15	\$ 39,485.25	\$ 26.00	\$ 42,510.00	\$ 95.00	\$ 155,325.00
25	Excavation For Location Of Existing Utilities	2	EA	\$ 1,570.32	\$ 3,140.64	\$ 5,500.00	\$ 11,000.00	\$ 2,000.00	\$ 4,000.00
26	Remove Concrete Pavement	50	SY	\$ 34.96	\$ 1,748.00	\$ 65.00	\$ 3,250.00	\$ 125.00	\$ 6,250.00
27	Remove and Salvage Fire Hydrant	3	EA	\$ 1,926.42	\$ 5,779.26	\$ 500.00	\$ 1,500.00	\$ 900.00	\$ 2,700.00
28	2" Combination Air Valve	2	EA	\$ 15,291.20	\$ 30,582.40	\$ 11,500.00	\$ 23,000.00	\$ 25,000.00	\$ 50,000.00
				\$ -		\$ -		\$ -	
	TOTAL BID				\$ 1,163,330.69		\$ 1,356,062.00		\$ 1,723,141.00
	5% BID SECURITY			5% BOND		5% BOND		5% BOND	
	ADDENDA ACKNOWLEDGED			yes		yes		yes	
	Calculation error on submitted Unit Price Form								



JUSTIN
— 1887 —

PROJECT LOCATION MAP EAST SIDE LOOP WATER IMPROVEMENTS

LEGEND

- EXISTING WATER MAIN
 - PROPERTY LINE
- 0 200 400 600

HORIZONTAL SCALE IN FEET



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 3. (CONSENT AGENDA)

Title: Consider approving Resolution 697-24 for the execution of an agreement with Civic Plus Next Request; and take appropriate action.

Department: Administration

Contact: Jarrod Greenwood, City Manager

Recommendation:

City Administration recommends approval of Resolution 697-24, as presented.

Background:

The City currently processes public information requests by email submittal and does not currently have software that provides workflow, file conversion, redaction and records retention. Utilizing emails for requests has been a challenge for cities to manage and comply with the Texas Public Information Act as the email can become lost, buried in a long list of new emails, or diverted to SPAM. The proposed software will establish, promote and support transparency by providing a clear and consistent process for handling these requests and will allow a requester the ability to check on the status of their information request. Automation of processes improves our efficiency and reduces overall costs to fulfill these requests. The proposed software will help staff ensure advance to PIA laws by providing tools for tracking deadlines and managing requests fulfillment.

The goal is to provide citizens with the right to access city records efficiently, provide security and workflow to track records from start to finish, and maintain city records in compliance with state retention policy.

The requested funding for this software is \$2,886.50 for initial setup and integrates with the current website software, Civic Plus. The ongoing \$8,998.00 cost has been included in the proposed budget.

City Attorney Review: No

Attachments:

1. Resolution 697-24 Civic Plus Next Request

2. NextRequest SOW - Justin, TX

RESOLUTION NO. 697-24

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS,
APPROVING AN AGREEMENT BETWEEN THE CITY OF JUSTIN AND CIVIC PLUS
FOR NEXT REQUEST PUBLIC INFORMATION SOFTWARE.**

WHEREAS, Next Request software provides citizens with access to local government records in an efficient and transparent manner; and

WHEREAS, Next Request provides compliance with the Attorney Generals Office for compliance with the Public Information Act; and

WHEREAS, Next Request software provides for security, disposition and preservation of City records required by State Law; and

WHEREAS, Next Request is necessary to provide effective operations of the City and provides people of the state with access to their rights; and

WHEREAS, Next Request provides the City with uniform standards and procedures for processing public information requests; and

NOW, THEREFORE, for and in consideration of the mutual covenants and agreement herein contained, the sufficiency of which are hereby acknowledged, and upon and subject to the terms and conditions hereinafter set forth.

APPROVED THIS THE 8TH DAY OF AUGUST, 2024.

ATTEST:

Amy M. Piukana, City Secretary

APPROVED:

James Clark, Mayor

APPROVED AS TO FORM:

City Attorney

**CivicPlus**

302 South 4th St. Suite 500
Manhattan, KS 66502
US

Quote #:**Date:****Expires On:**

Statement of Work

Q-78283-1

6/17/2024 2:13 PM

10/31/2024

Client:

City of Justin, TX

Bill To:

JUSTIN, TEXAS

SALESPERSON	Phone	EMAIL	DELIVERY METHOD	PAYMENT METHOD
Shaun Jernigan		shaun.jernigan@civicplus.com		Net 30

Discount(s)

QTY	PRODUCT NAME	DESCRIPTION	DISCOUNT %	TOTAL
1.00	NextRequest Year 1 Annual Fee Discount	CivicPlus Customer Incentive - 50% Off Year 1	0	USD -4,499.00

One-time(s)

QTY	PRODUCT NAME	DESCRIPTION	DISCOUNT %	TOTAL
1.00	NextRequest Standard Implementation	NextRequest Standard Implementation	50	USD 750.00

Recurring Service(s)

QTY	PRODUCT NAME	DESCRIPTION	DISCOUNT %	TOTAL
1.00	NextRequest Standard	NextRequest Standard with up to 10 Admin-Publisher Users and 2TB of Storage	16.5925	USD 8,998.00

List Price - Initial Term Total	USD 12,288.00
Total Investment - Initial Term	USD 5,249.00
Annual Recurring Services (Subject to Uplift)	USD 8,998.00

Initial Term	8/12/2024 - 8/11/2025, Renewal Term 8/12 each calendar year
--------------	---

Initial Term Invoice Schedule	100% to be invoiced upon signing. \$2,362.50 credit to be applied to the Initial Term amount.
Renewal Procedure	Automatic 1 year renewal term, unless 60 days notice provided prior to renewal date
Annual Uplift	5% to be applied in year 3

This Statement of Work ("SOW") shall be subject to the terms and conditions of the CivicPlus Master Services Agreement and the applicable Solution and Services terms and conditions located at <https://www.civicplus.help/hc/en-us/p/legal-stuff> (collectively, the "Binding Terms"). By signing this SOW, Client expressly agrees to the terms and conditions of the Binding Terms throughout the term of this SOW.

Acceptance

The undersigned has read and agrees to the following Binding Terms, which are incorporated into this SOW, and have caused this SOW to be executed as of the date signed by the Customer which will be the Effective Date:

For CivicPlus Billing Information, please visit <https://www.civicplus.com/verify/>

Authorized Client Signature

CivicPlus

By (please sign):

By (please sign):

Printed Name:

Printed Name:

Title:

Title:

Date:

Date:

Organization Legal Name:

Billing Contact:

Title:

Billing Phone Number:

Billing Email:

Billing Address:

Mailing Address: (If different from above)

PO Number: (Info needed on Invoice (PO or Job#) if required)



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 4. (CONSENT AGENDA)

Title: Consider adopting Ordinance 784-24 approving a budget amendment for the Economic Development Corporation; and take appropriate action.

Department: Administration

Contact: Abbey Reece

Recommendation:

Approve the budget amendment as presented.

Background:

On July 15th, the EDC board awarded Justin Nail Lounge a sign grant in the amount \$3,000. A budget amendment has to be approved to allocate those funds under their incentives line item. The amendment and picture of the sign have been included in your packet.
Justin Nail Lounge expects to open closer to September and will operate with 15 employees.

City Attorney Review: N/A

Attachments:

1. FY 23-24 EDC Budget Amendment
2. justin nail lounge
3. Ordinance for EDC Amendment

ACCOUNT NUMBER	Description	FY 23-24 ORIGINAL BUDGET	FY 23-24 AMENDED BUDGET	FY 23-24 AMENDED BUDGET	\$ CHANGE
-------------------	-------------	--------------------------------	-------------------------------	-------------------------------	-----------

EDC

235-7520-xxxxxx	Transfer to Fund Balance	\$ 172,028	\$ 79,528	\$ 76,528	\$ (89,500)
235-7520-670010	INCENTIVE PROJECTS	\$ 100,000	\$ 175,000	\$ 178,000	\$ 3,000

Total -

**BUDGET AMENDMENT
FY 2022-2023
Amended Expenditures**

ACCOUNT NUMBER	Description	FY 23-24 ORIGINAL BUDGET	FY 23-24 AMENDED BUDGET	\$ CHANGE
----------------	-------------	--------------------------------	-------------------------------	-----------

CDC

236-7530-xxxxxx	Transfer to Fund Balance	\$ 140,110	\$ 65,110	\$ (75,000)
236-7530-670010	INCENTIVE PROJECTS	\$ 100,000	\$ 175,000	\$ 75,000

Total -



CITY OF JUSTIN, TEXAS

ORDINANCE NUMBER 784-24

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS AMENDING THE ADOPTED EDC BUDGET, AUTHORIZING CERTAIN BUDGET AMENDMENTS PERTAINING TO THE FY 2023-2024 EDC BUDGET; AND PROVIDING FOR AN EFFECTIVE DATE HEREOF.

WHEREAS, the City Council approved Ordinance number 760-23 Fiscal Year 2023-2024 Budget beginning October 1, 2023 and ending September 30, 2024; and,

WHEREAS, the EDC is adding \$3,000 for a sign reimbursement grant to Justin Nail Lounge for this fiscal year;

WHEREAS, the City Council of the City of Justin, Texas finds that attracting new retail provides an economic benefit to the community; and

WHEREAS, the City Council has the authority to approve amendments to the Adopted Budget; and,

WHEREAS, the City Council has determined that the proposed amendments to the Fiscal Year 2023-2024 Budget are in the best interest of the City.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1. That Ordinance No. 760-23, the Fiscal Year 2023-2024 Budget Ordinance, is hereby amended to incorporate the changes set out herein are hereby authorized and approved.

SECTION 2. All portions of the existing FY 2023-2024 Budget, except as specifically herein amended, shall remain in full force and effect, and not be otherwise affected by the adoption of this ordinance.

SECTION 3. In the event any clause, phrase, provision, sentence, or part of this ordinance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair or invalidate this ordinance as a whole or any part of provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Justin, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

SECTION 4. That this Ordinance shall become effective from and after its adoption and is so ordained.

**PASSED ON THE FIRST READING BY THE CITY COUNCIL ON THE 8 DAY OF
AUGUST 2024.**

**PASSED ON SECOND READING BY THE CITY COUNCIL ON THE ____ DAY OF
AUGUST 2024**

**James Clark,
Mayor**

ATTESTED:

**Amy Piukana,
City Secretary**

APPROVED AS TO FORM:

**Matthew Boyle,
City Attorney**



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 5. (CONSENT AGENDA)

Title: Consider approving Resolution 698-24 authorizing the execution and amendment of the Talley Blvd ICA with Denton County; and take appropriate action.

Department: Administration

Contact: Matthew Cyr, Director of Planning and Development

Recommendation:

Staff recommends approval.

Background:

City Attorney Review: Yes

Attachments:

1. ICA_City of Justin_Tally-Harmonson_Updated
2. Resolution 698.24

THE STATE OF TEXAS §
 §
COUNTY OF DENTON §

**INTERLOCAL COOPERATION AGREEMENT BETWEEN
DENTON COUNTY, TEXAS, AND THE CITY OF JUSTIN, TEXAS**

THIS AGREEMENT is made, entered into and executed by and between Denton County, Texas, a duly organized political subdivision of the State of Texas, hereinafter (“the County”); and the City of Justin, Texas, (“the City”), a duly organized political subdivision of the State of Texas. The County and the City are collectively referred to herein as “the Parties.”

WHEREAS, the County and the City mutually desire to enter into this Agreement for the purpose of providing the engineering, right-of-way acquisition, utility relocations, inspections, and construction of Tally Boulevard and Harmonson Road as a four-lane undivided roadway with drainage improvements and illumination between John Wiley Road/FM 1171 Connection and FM 156, located entirely in the municipal limits of the City and Denton County Commissioner Precinct #4, hereinafter “the Project”; and

WHEREAS, the estimated cost of completion for the Project is THREE MILLION AND NO/100 DOLLARS (\$3,000,000.00), with the County agreeing to contribute an initial amount which shall not exceed TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00), based on current available funding, but upon issuance of additional bond funds, this Agreement is intended to be amended at a future date to increase the County commitment toward satisfactory completion of the Project in an amount which shall not exceed THREE MILLION AND NO/100 DOLLARS (\$3,000,000.00), and

WHEREAS, the Interlocal Cooperation Act, Texas Government Code Chapter 791, hereinafter “the Act,” provides authorization for a local government to contract with one or more local governments to perform governmental functions and services under the terms of the Act, and the County and the City hereby mutually agree to be subject to the provisions of the Act; and

WHEREAS, the County and the City value the timely completion of the Project which involves roads which are an integral part of the County’s road system, and the Parties are undertaking the Project to facilitate safe travel on an improved roadway; and

NOW, THEREFORE, this Agreement is hereby made and entered into by the County and the City upon and for the mutual consideration stated herein:

WITNESSETH:

I.

Pursuant to Texas Government Code §791.011, the County and the City hereby enter into this Agreement in order to perform certain governmental functions and services in the area of streets, roads, and drainage. The purpose of this Agreement is to provide a governmental function or service that each party is authorized to perform individually.

II.

The County and the City hereby agree that the scope of the Project shall consist of engineering, right-of-way acquisition, utility relocations, inspections, and construction of Tally Boulevard and Harmonson Road as a four-lane undivided roadway with drainage improvements and illumination between John Wiley Road/FM 1171 Connection and FM 156, at an estimated cost of THREE MILLION AND NO/100 DOLLARS (\$3,000,000.00), with the County agreeing to contribute an initial amount which shall not exceed TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00), based on current available funding, but upon issuance of additional bond funds, this Agreement is intended to be amended at a future date to increase the County commitment toward satisfactory completion of the Project in an amount which shall not exceed THREE MILLION AND NO/100 DOLLARS (\$3,000,000.00). The Project is located entirely within the municipal limits of the City and Denton County Commissioner Precinct #4.

III.

The County hereby agrees to make an initial contribution toward satisfactory completion of the project in an amount which shall not exceed TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00), provided that any and all funding is approved by formal action of the Denton County Commissioners Court.

IV.

The City agrees to manage all engineering, right-of-way acquisition, utility relocations, inspections, construction, and maintenance of the Project. The City shall timely provide the County with all invoices and requested documentation in an amount which shall not exceed TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00).

V.

This exchange of in-kind services between the County and the City is deemed adequate consideration for the obligations exchanged by the Parties herein.

VI.

As the City proceeds with the completion of the Project, the City shall submit all invoices for reimbursement to the Denton County Auditor, Mr. Jeff May, 1 Courthouse Drive, Suite 2000, Denton, Texas 76208, c/o Mr. John Polster, Innovative Transportation Solutions, Inc., 2701 Valley View Lane, Farmers Branch, Texas 75234. The City shall submit invoices on a monthly basis, and the County shall reimburse the City on a pro rata basis for all approved expenses related to the Project within thirty calendar days of receipt of an invoice from the City, provided that all expenditures are made in a manner which is consistent with the terms of this Agreement. Upon satisfactory completion of the Project, the County and the City shall prepare and complete a full audit of the Project.

VII.

As required by Texas Transportation Code §251.012 and as evidenced by the signature of the City's representative below, the governing body of the City by the execution of and approval of this Agreement hereby approves of the expenditure of County money to finance the construction, improvement, maintenance, or repair of a street or alley in the County that is located in the City.

VIII.

This agreement may be terminated in whole, or in part, by the County or the City upon thirty days written notice to the other party. In the event of termination by the County, the County shall pay all approved invoices submitted up to and including the date of termination.

IX.

This Agreement represents the entire integrated agreement between the County and the City and supersedes all prior negotiations, representations, and agreements, either oral or written. This Agreement may be amended only by written instrument signed by both of the Parties. Notices shall be directed as follows:

For City: Honorable James Clark, Mayor
 City of Justin, Texas
 415 N College Avenue
 P.O. Box 129
 Justin, Texas 76247

Copy To: Brittany Andrews, City Secretary
 City of Justin, Texas
 415 N College Avenue
 P.O. Box 129
 Justin, Texas 76247

For County: Honorable Andy Eads, Denton County Judge
1 Courthouse Drive, Suite 3100
Denton, Texas 76208
andy.eads@dentoncounty.com
holly.sadlowski@dentoncounty.com

Copy To: Denton County District Attorney's Office - Civil Division
1450 East McKinney Street, Suite 3100
Denton, Texas 76209

X.

The covenants, terms, and conditions herein are to be construed under the laws of the State of Texas and are performable by the Parties in Denton County, Texas. The Parties mutually agree that venue for any obligation arising from this Agreement shall lie in Denton County, Texas.

XI.

The City agrees and understands that the City, its employees, servants, agents or representatives shall at no time represent themselves to be employees, servants, agents or representatives of the County.

XII.

The City agrees to accept full responsibility for the acts, negligence and omissions of all City employees, agents, subcontractors or contract laborers and for all other persons doing work under a contract or agreement with the City.

XIII.

This Agreement is not intended to extend the liability of the Parties beyond that provided for by law. Neither the County nor the City waive, nor shall be deemed to have hereby waived, any immunity or defense that would otherwise be available to it against claims made by third parties.

XIV.

In the event that any portion of this Agreement shall be found to be contrary to law, it is the intent of the Parties hereto that the remaining portions shall remain valid and in full force and effect to the fullest extent possible.

XV.

The undersigned officers and agents of the Parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the Parties hereto, and each party hereby certifies to the other that any necessary resolutions extending said authority have been duly passed and are now in full force and effect.

XVI.

This Agreement becomes effective when signed by the last party whose signing makes the respective agreement fully executed, and the term of this Agreement is for the life of the Project beginning on the date of execution of this Agreement and continuing until the Project is completed.

Executed this _____ day of _____, 2024.

DENTON COUNTY, TEXAS

1 Courthouse Drive, Suite 3100
Denton, Texas 76209

By: _____
Honorable Andy Eads
Denton County Judge
Acting by and on behalf of the authority
of the Denton County Commissioners Court

ATTEST:

By: _____
Denton County Clerk

CITY OF JUSTIN, TEXAS

415 N College Avenue, P.O. Box 129
Justin, Texas 76247

By: _____
Honorable James Clark
Mayor of the City of Justin, Texas
Acting by and on behalf of the authority
of the City of Justin, Texas

ATTEST:

By: _____
City Secretary

COUNTY AUDITOR'S CERTIFICATE

I hereby certify funds are available to accomplish and pay the obligation of Denton County, Texas, under this Agreement.

Denton County Auditor

APPROVAL OF INTERLOCAL COOPERATION AGREEMENT

Denton County, Texas, acting by and through the Denton County Commissioners Court, hereby gives its specific written approval to the following Project, prior to beginning of the Project in satisfaction of Texas Government Code §791.014. The scope of the Project shall consist of engineering, right-of-way acquisition, utility relocations, inspections, and construction of Tally Boulevard and Harmonson Road as a four-lane undivided roadway with drainage improvements and illumination between John Wiley Road/FM 1171 Connection and FM 156, with an estimated cost of completion of THREE MILLION AND NO/100 DOLLARS (\$3,000,000.00). The Project shall be located entirely within the municipal limits of the City of Justin and Denton County Commissioner Precinct #4.

The County hereby agrees to make an initial contribution toward satisfactory completion of the project in an amount which shall not exceed TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00), provided that any and all funding is approved by formal action of the Denton County Commissioners Court.

The local governments which requested the Project and with whom the Agreement is by and between are Denton County, Texas, and the City of Justin, Texas.

By vote on the date below, the Denton County Commissioners Court has approved the project identified above and authorized execution of this document by the presiding officer of the Denton County Commissioners Court.

Date: _____

By: _____
Presiding Officer of the Denton
County Commissioners Court

RESOLUTION NO. 698-24

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF JUSTIN,
TEXAS, AUTHORIZING THE INTERLOCAL COOPERATION
AGREEMENT WITH DENTON COUNTY FOR THE TALLY
BOULEVARD AND HARMONSON ROAD PROJECT**

WHEREAS, the City of Justin, Texas, and Denton County, Texas, desire to enter into an Interlocal Cooperation Agreement to facilitate the engineering, right-of-way acquisition, utility relocations, inspections, and construction of Tally Boulevard and Harmonson Road; and

WHEREAS, this project aims to convert these roads into a four-lane undivided roadway with improved drainage and illumination between John Wiley Road/FM 1171 Connection and FM 156, enhancing traffic flow and safety within the city; and

WHEREAS, the total estimated cost of the project is \$3,000,000, with Denton County initially contributing an amount not to exceed \$2,000,000, and the City of Justin managing the project; and

WHEREAS, upon the issuance of additional bond funds, the agreement may be amended to increase Denton County's contribution to cover the total project cost; and

WHEREAS, this agreement is authorized under the Texas Government Code Chapter 791, which allows local governments to contract with one another to perform governmental functions and services; and

WHEREAS, the City Council of the City of Justin finds that entering into this agreement serves the best interest of the city and its residents;

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY
OF JUSTIN, TEXAS, THAT:**

SECTION 1. That all provisions of the Resolutions of the City of Justin, Texas, in conflict with the provisions of this Resolution be, and the same are hereby, repealed, and all other provisions of the Resolutions of the City not in conflict with the provisions of this Resolution shall remain in full force and effect.

SECTION 2. This Resolution shall take effect immediately upon its passage and attached as "Exhibit" A

DULY PASSED by the City Council of the City of Justin, Texas, on the 8th day of August 2024.

APPROVED:

James Clark, Mayor

ATTEST:

Amy Piukana, City Secretary

APPROVED AS TO FORM:

City Attorney



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 6. (CONSENT AGENDA)

Title: Consider approving Resolution 699-24 for the City to accept and take over the proposed Timberbrook Neighborhood Park; and take appropriate action.

Department: Administration

Contact: Matthew Cyr, Director of Planning and Development, Josh Little, Public Works Director

Recommendation:

Discuss and provide recommendations in regards to the acceptance of the donation of Timberbrook Neighborhood Park.

Background:

Bloomfield Homes is exploring the possibility of donating 2.7 acres of parkland to the City of Justin. The developer would construct the park and donate to the City of Justin once the project is complete. In 2016 City Council approved a Developers Agreement with Bloomfield, which allowed the developer to construct Timberbrook. In the Developers Agreement, the Developer had designated a 2.7 acre parcel to be dedicated to the City as a municipal site such as a fire station. This site is located in the attachments and was always meant to be dedicated for a municipal use.

The amenities included are the following: 200-seat amphitheater with a concrete platform (without a roof), two pickleball courts, a basketball court, 25' x 50' covered pavilion, concrete ping pong tables, concrete cornhole setups, 9 parking spots, 2 food truck parallel parking spots and electrical infrastructure for stage use and other incidental purposes. Approximately sixty trees are planned to be planted on the site, which will go towards the Tree City USA program requirements at no expense to the City.

If the City Council approves, staff will be able to maintain the park in accordance with the standards set by the National Recreation and Parks Association. Additionally, a recent residential survey, which had 848 respondents (representing approximately 33% of total households), identified more amenities and parks as the second-highest priority for improvements.

Maintenance/Implementation:

Staff will employ a third party to assist with park mowing and maintenance as needed. The full cost would be \$18,716.00. The full number will not be utilized initially, but as the City grows in the near future, Staff expects to utilize the full cost for 3rd party like the City does in other areas around town.

Fiscal Information:

The total cost to completely maintain the park would be \$18,716.00 a year.

<u>Fiscal Information</u>		
Park	Annual Cost	Services
Timberbrook Dog Park	\$27,362.28	Mowing
City Hall, FM 156, and other ROW	\$22,005.42	Watering and landscaping
Proposed Park	\$18,716.00	Monthly irrigation checks, turf application, 4 rounds and 36 annual visits

Parks Board Recommendation:

Staff forwarded this item to the Parks Board for a recommendation and consideration. On June 11, 2024, the Parks Board unanimously recommended approval with the condition that Construction Plans be brought back for approval to City Council after a recommendation from the Parks Board.

Next Steps if Approved:

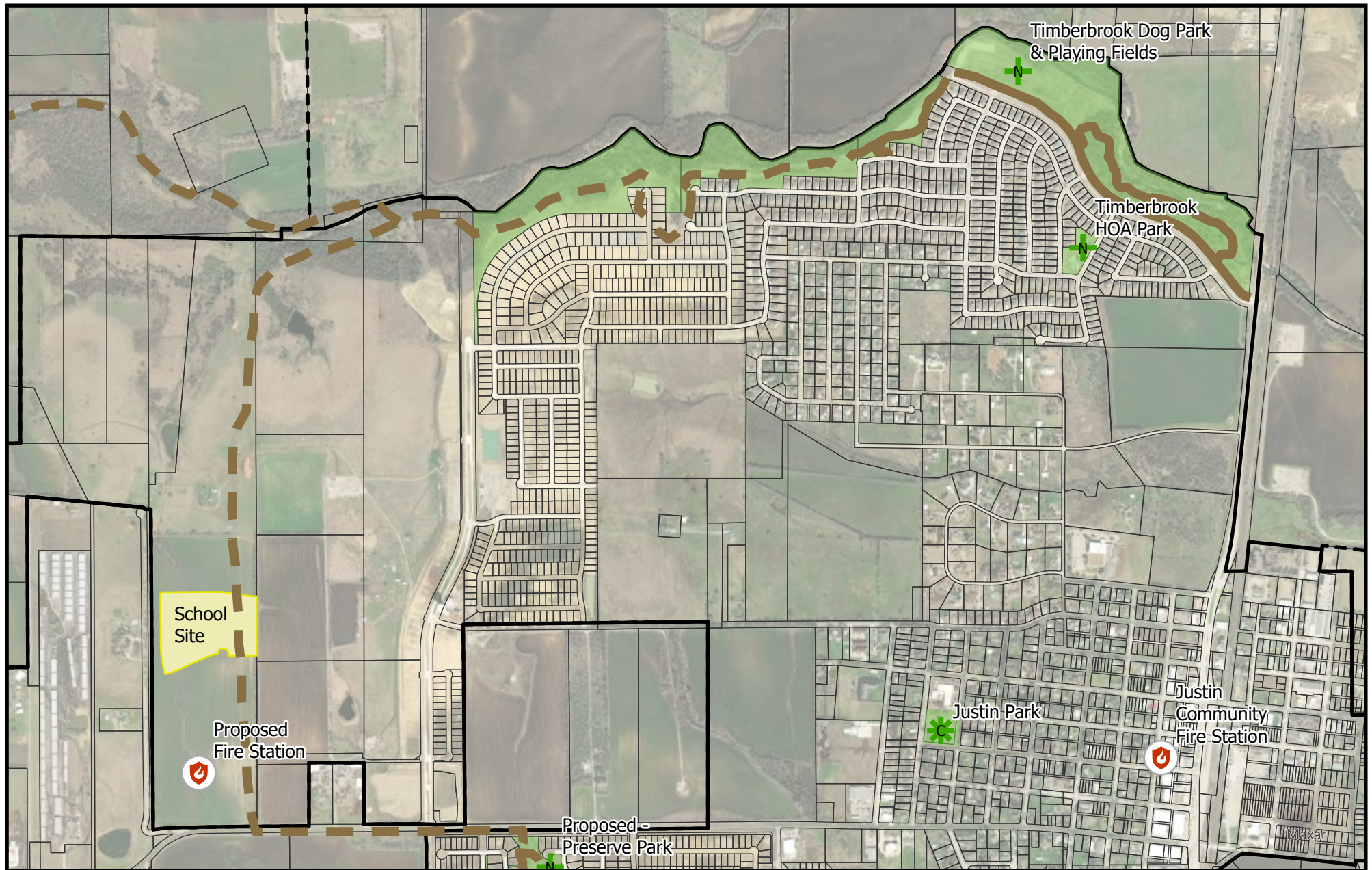
1. Dedication of land to the City of Justin
2. Work with Parks Board on Facility Naming Policy
3. Construction Plans to be brought back forward to Parks Board and City Council
4. Construction occurs

City Attorney Review: N/A

Attachments:

1. Justin Parks, Trails, and Services - Timberbrook
2. Justin Parks, Trails, and Services
3. TIMBERBROOK AMENITIES 053124
4. Timberbrook Neighborhood Park 5-9-24

5. Timberbrook Developers Agreement
6. Timberbrook Park Powerpoint 06112024 Parks Board
7. Resolution 699-24



0 375 750 1,500 2,250
Feet

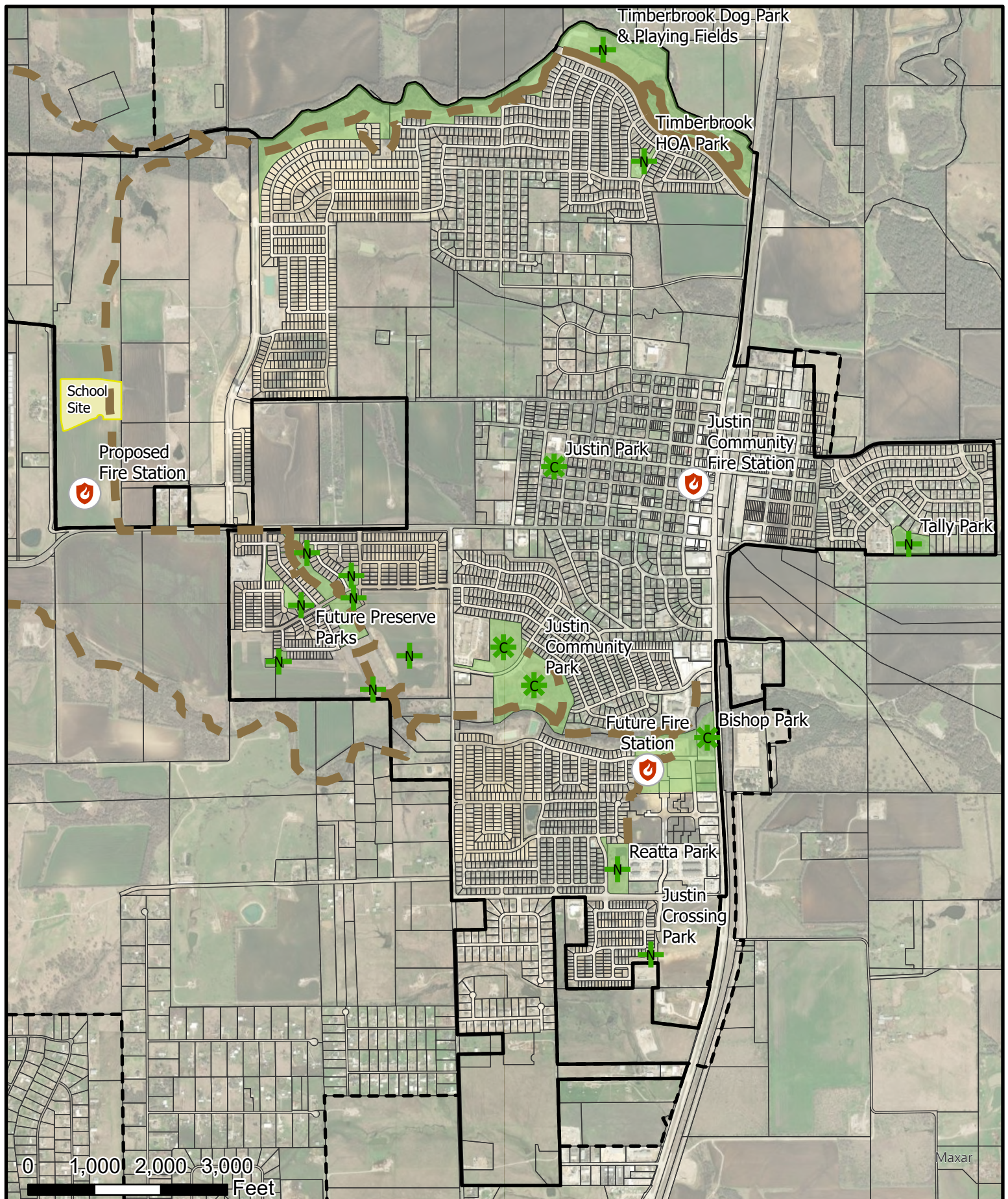


Prepared by:
Christopher T. Young
GIS Technician
Date: 6/05/2024

Parks, Trails, & Services Timberbrook Area City of Justin, TX

Legend

- | | | |
|--------------------|------------------------|-------------------|
| Justin City Limits | Proposed Trail | Fire Stations |
| Justin ETJ | Justin Elementary Site | Community Park |
| Parcels | Parks/Open Space | Neighborhood Park |
| Existing Trail | | |



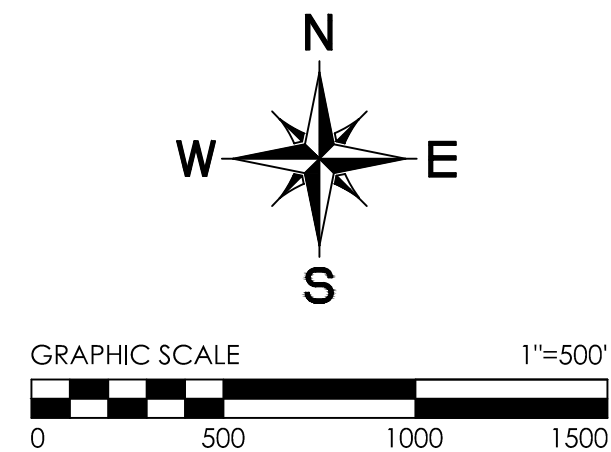
Legend

- | | | |
|--------------------|------------------------|-------------------|
| Justin City Limits | Justin Elementary Site | Community Park |
| Justin ETJ | Parks/Open Space | Neighborhood Park |
| Existing Trail | Fire Stations | |
| Proposed Trail | | |



Parks, Trails, & Services City of Justin, TX

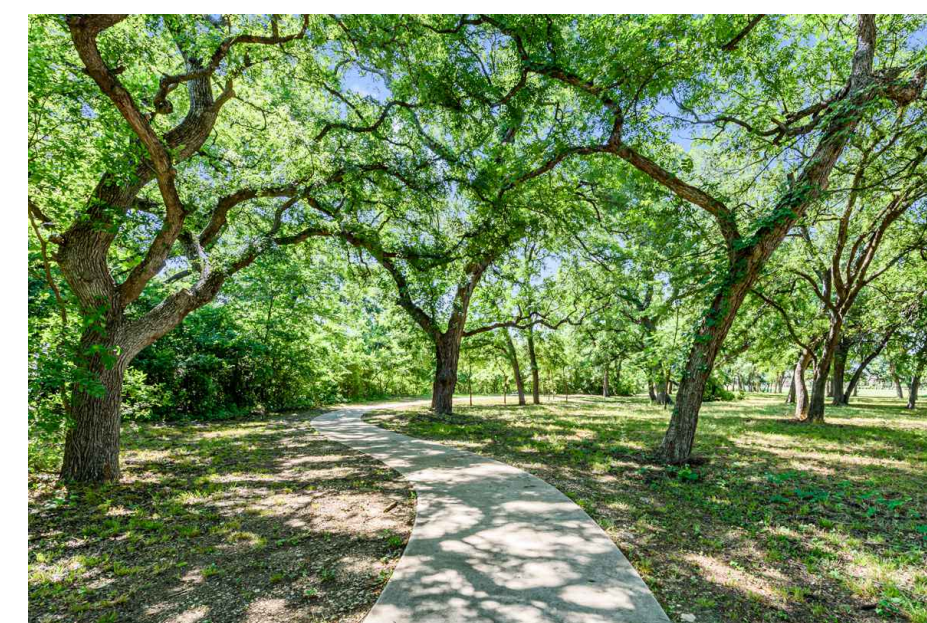
Prepared by:
Christopher T. Young
GIS Technician
Date: 6/05/2024



TRAIL SYSTEM



DOG PARK



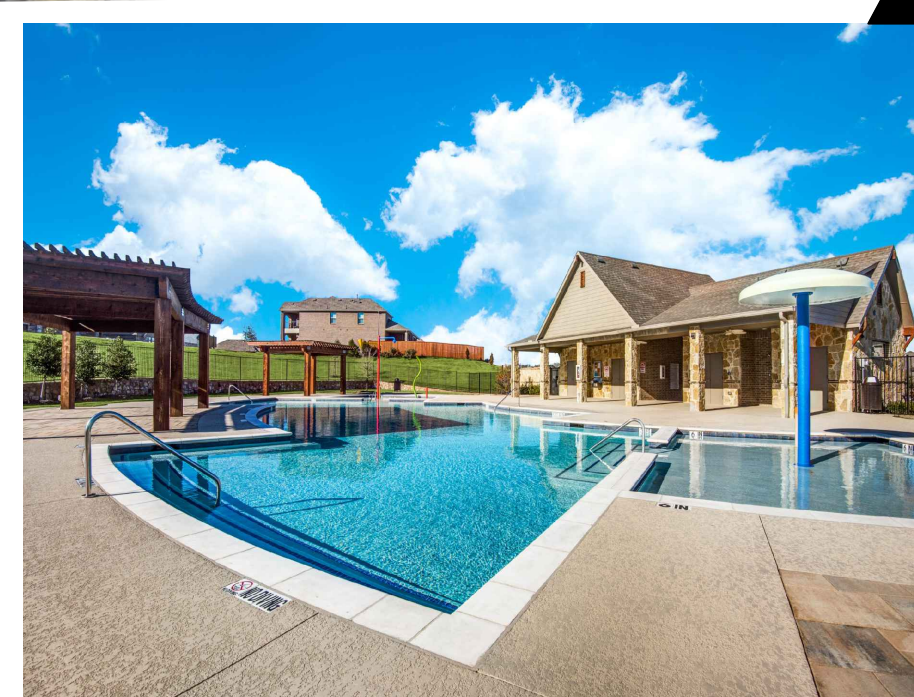
TRAIL SYSTEM



COMMUNITY BOOK SHARE



ENTRY MONUMENT



AMENITY CENTER



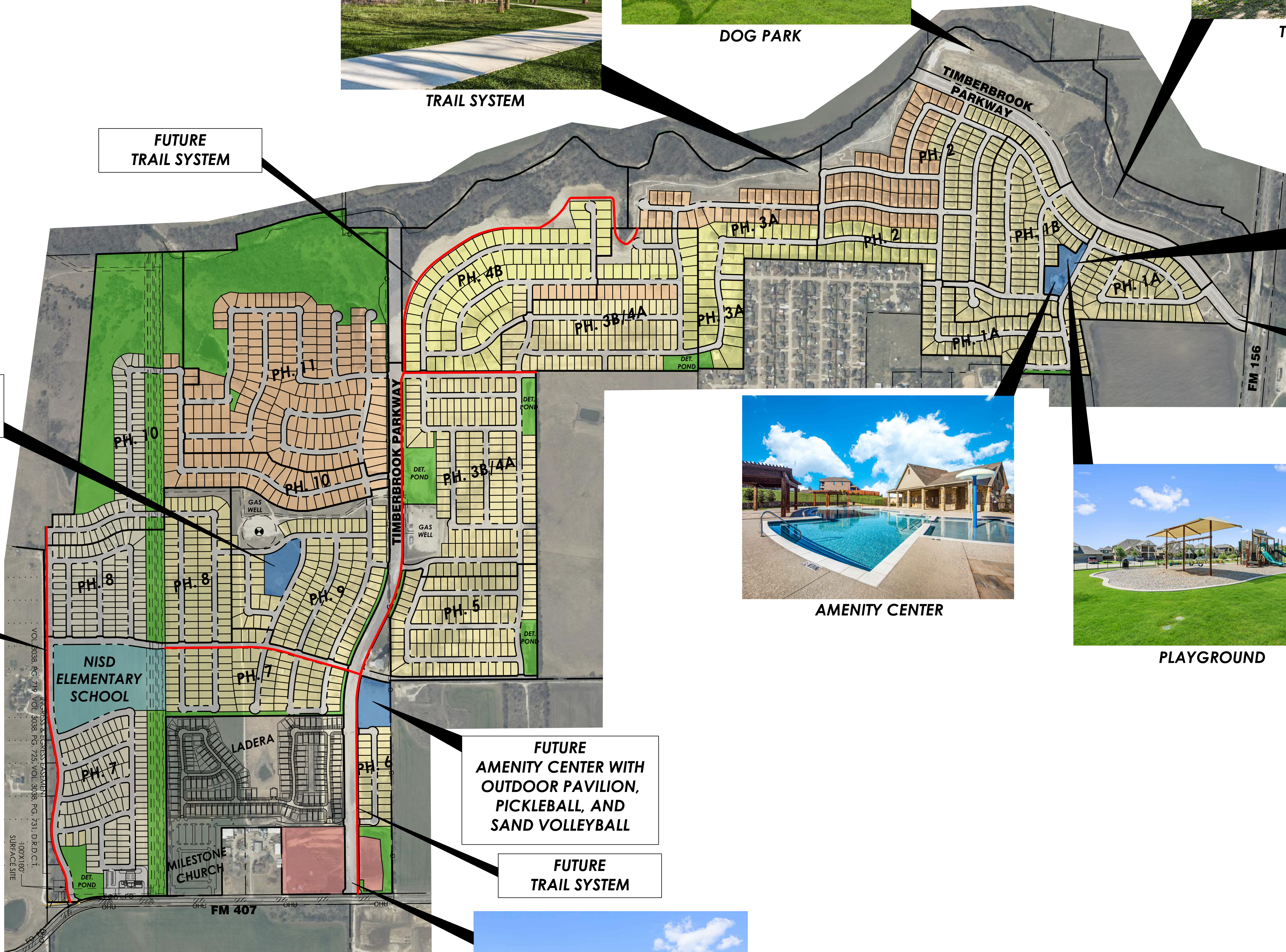
PLAYGROUND

FUTURE
AMENITY CENTER WITH
OUTDOOR PAVILION,
PICKLEBALL, AND
SAND VOLLEYBALL

FUTURE
TRAIL SYSTEM



ENTRY MONUMENT



FUTURE
TRAIL SYSTEM

FUTURE
AMENITY CENTER
AND POOL

FUTURE
TRAIL SYSTEM

PREPARED BY:
GMcivil
Engineering & Surveying
2559 SW Grapevine Pkwy, Grapevine, Texas 76051
817-329-4373
TxEng Firm # F-2944 | TxSurv Firm # 10021700

DEVELOPER:
**BLOOMFIELD
HOMES, LP**
1050 E. HWY 114, SUITE 210
SOUTHLAKE, TX 76092
(817) 416-1572

TIMBERBROOK AMENITIES
LOCATED IN
CITY OF JUSTIN, DENTON
COUNTY, TEXAS
September, 2023



SECOND TRACT
CALLED 45.00 ACRES
HADDOCK, RAYMOND A &
ELSIE LOU
DOC. NO. 2011-19529
D.R.D.C.

CALLOUTS LEGEND:

- | | |
|--|--|
| (A) 25' x 50' SHADE STRUCTURE | (H) CONCRETE AMPHITHEATER STAGE |
| (B) RESTROOM BUILDING (+/- 500 SQ. FT.) | (I) LAWN AMPHITHEATER |
| (C) CONCRETE DINING PLAZA | (J) OPEN PLAY AREA |
| (D) ARTIFICIAL TURF GRASS EVENT LAWN WITH (2) PING PONG TABLES AND (3) CORNHOLE STATIONS | (K) CONCRETE SIDEWALK |
| (E) "THE HILL" | (L) HEAD-IN PARKING (9 PARKING STALLS) |
| (F) BASKETBALL COURT | (M) FOOD TRUCK PARALLEL PARKING (2 PARKING STALLS) |
| (G) GAME BENCH | (N) DOUBLE PICKLEBALL COURT |



3" CALIPER SHADE TREE;
SPECIES TBD.

SHRUB AND
GROUND COVER BED.



SCALE: 1" = 20'-0"

TIMBERBROOK PHASE 6 / POCKET PARK CONCEPT PLAN

City of Justin, Denton County, Texas

SHEET 1 OF 1
Owner Submittal 5-9-2024

**JOHNSON VOLK
CONSULTING**

TBPELS Engineering Firm No. 11962 / Land Surveying Firm No. 10194033
704 Central Parkway East | Suite 1200 | Plano, TX 75074 | 972.201.3100

EXHIBIT G MISCELLANEOUS CONDITIONS

Gas Wells

Must be set back at least 150 feet from existing well heads, homes and parks, and screened in compliance with the City's ordinances.

Park Land, Hike & Bike Trails

Owner shall offer park land for dedication in the final plat to the City in accordance with the City's park dedication requirements in effect as of the Effective Date and the Owner's development plan, in the Owner's sole discretion. Concrete hike and bike trails shall be installed at a width of 6' in the flood plain and flood way. The concrete hike and bike trails shall be paid for with Assessments on the Property within the PIDs to the extent allowed by law.

Screening

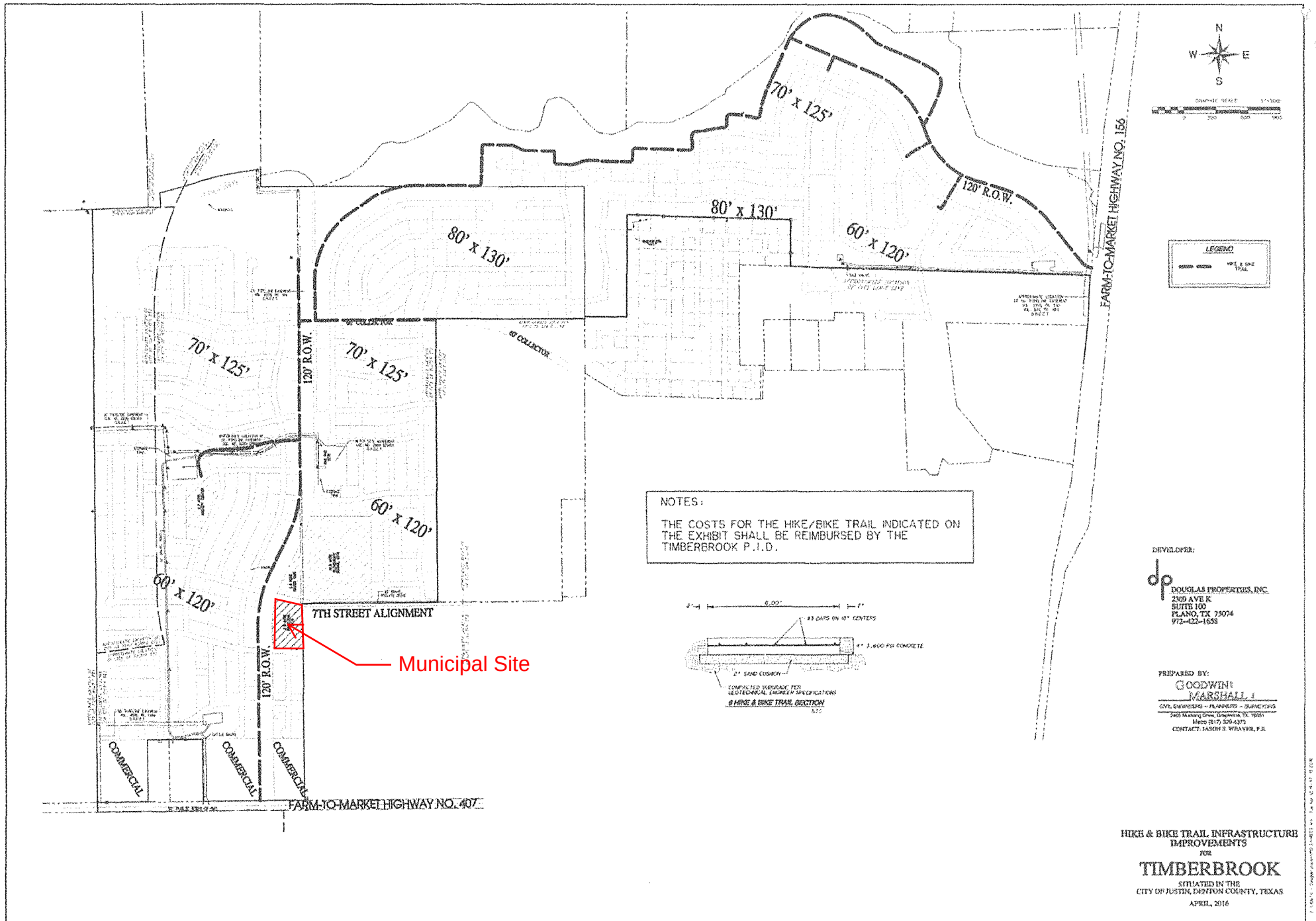
Owner shall, at Owner's sole discretion, install a 6-foot high masonry screening wall or wrought iron fence with living screen where lots back to a roadway, with a 4-foot sidewalk. Lots which back onto park land shall provide a decorative iron fence of uniform design.

Development Fees

Pay all development fees including but not limited to: Zoning Fees, Plat Review Fees, Plan Review Fees, residential construction fees and inspection fees.

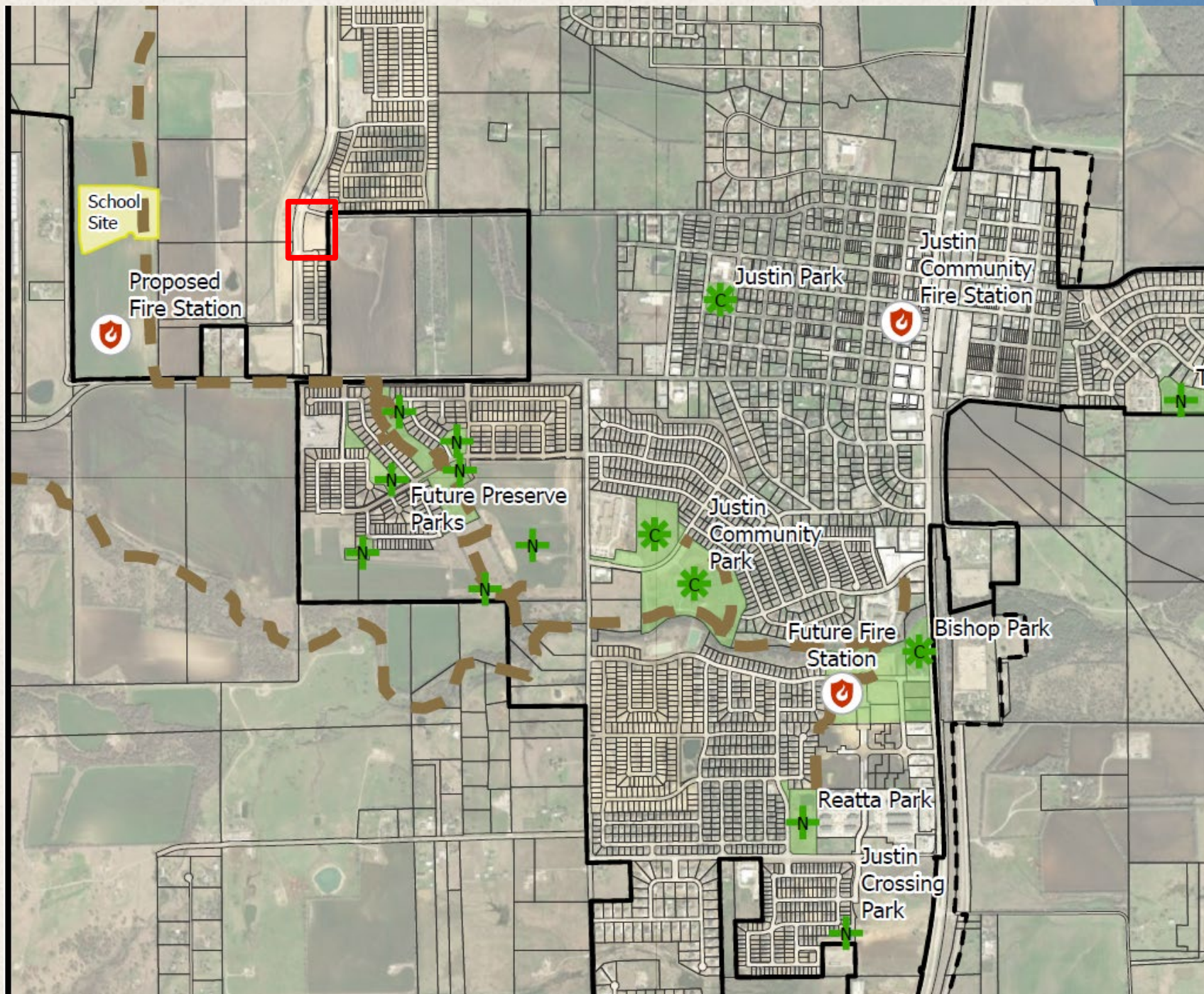
Municipal Site

Dedicate 2.8 Acres for a municipal site and 1.4 Acres for a water tower site. The land that is dedicated shall be agreed to by the City. The school site shall be negotiated with the Northwest Independent School District.



Proposed Timberbrook Park

- Discuss and provide recommendations in regard to the acceptance of the donation of Timberbrook Neighborhood Park.
- Bloomfield Homes is exploring the possibility of donating 2.7 acres of parkland and the improvements/facilities to the City of Justin. The developer would construct the park and donate to the City of Justin once the project is complete.
- In 2016, the City of Justin approved a Developers Agreement with Bloomfield that designated the property to be donated to the City for the eventual fire station. However, in this time, the developer dedicated additional land out west for the fire station.





- 200-seat amphitheater with a concrete platform (without a roof), two pickleball courts, a basketball court, 25' x 50' covered pavilion, concrete ping pong tables, concrete cornhole setups, 9 parking spots, 2 food truck parallel parking spots and electrical infrastructure for stage use and other incidental purposes.
- Approximately sixty trees are planned to be planted on the site.



TRAIL SYSTEM



DOG PARK



TRAIL SYSTEM



COMMUNITY BOOK SHARE



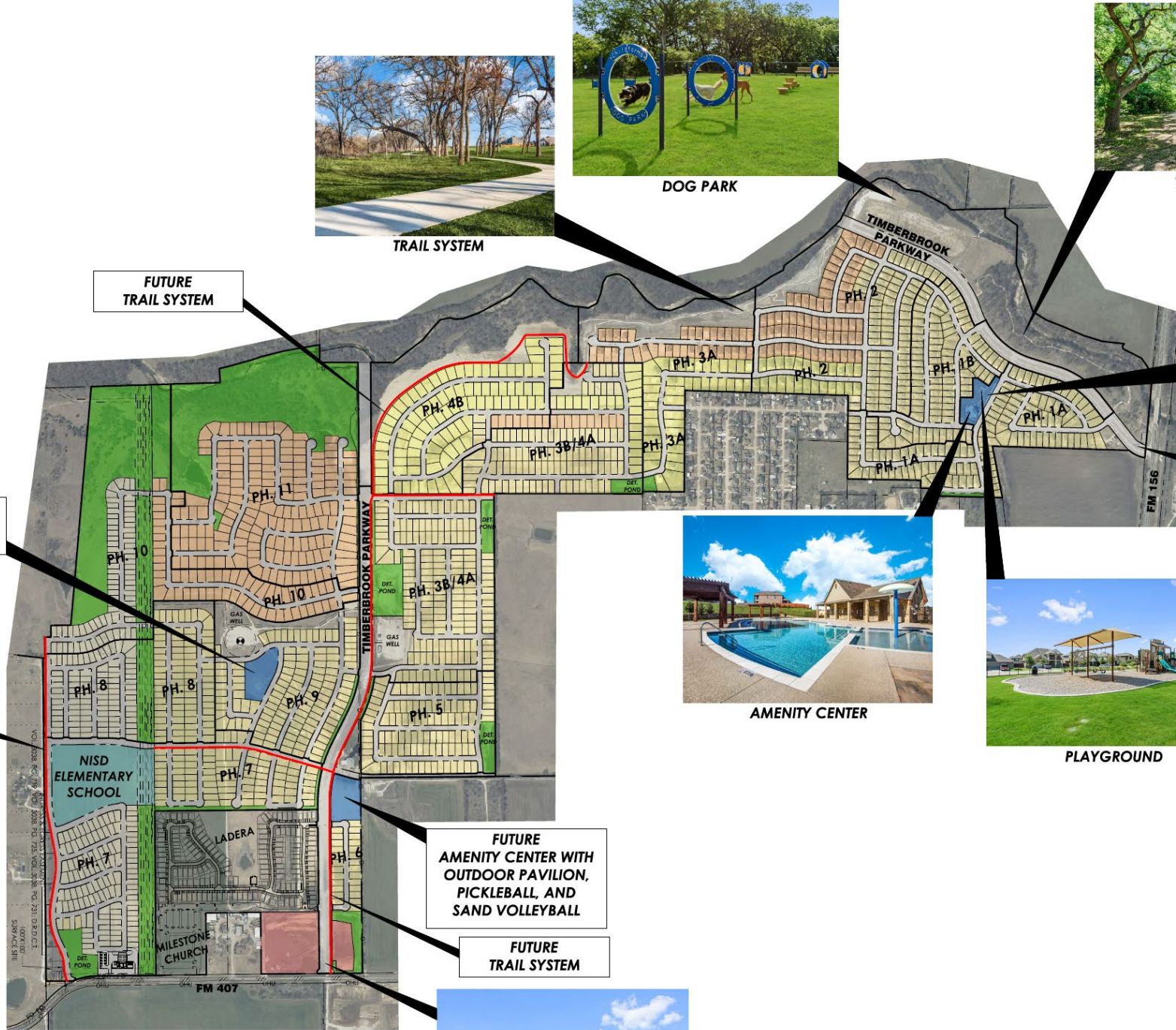
AMENITY CENTER



PLAYGROUND



ENTRY MONUMENT



FUTURE TRAIL SYSTEM

FUTURE AMENITY CENTER AND POOL

FUTURE TRAIL SYSTEM

FUTURE AMENITY CENTER WITH OUTDOOR PAVILION, PICKLEBALL, AND SAND VOLLEYBALL

FUTURE TRAIL SYSTEM



Maintenance Information

Parks contracted out for maintenance:

- ▶ City Hall, FM 156, and Right-of-Ways
- ▶ Timberbrook Dog Park and trail area

Other Parks Maintained By Staff:

- ▶ Community Park
- ▶ Bishop Park
- ▶ Justin Park
- ▶ Tally Park

- ▶ **Total Acreage:** 141 acres (includes future private and public parks in Timberbrook and The Preserve)
- ▶ **Total Number of Staff:** 5 FTE

Fiscal Information

Park	Annual Cost	Services
Timberbrook Dog Park	\$27,362.28	Mowing
City Hall, FM 156, and other ROW	\$22,005.42	Watering and landscaping
Proposed Park	\$18,716.00	Monthly irrigation checks, turf application, 4 rounds and 36 annual visits

BENCHMARKING

TWENTY YEAR BENCHMARKING COMPARISON (2022 - 2042)										
NATIONAL RECREATION AND PARK ASSOCIATION (NRPA)		CITY OF JUSTIN								
BENCHMARK BASIS		EXISTING STATUS	2022 BENCHMARK		2027 BENCHMARK		2032 BENCHMARK		2042 BENCHMARK	
		ACTUAL	LOW VALUE	HIGH VALUE	LOW VALUE	HIGH VALUE	LOW VALUE	HIGH VALUE	LOW VALUE	HIGH VALUE
RESIDENTS	Less than 20,000	6,127	6,127		9,327		12,428		19,764	
NUMBER OF PARKS (PUBLIC + PRIVATE)	761 - 1,924 Residents per Park	15 PARKS**	3 Parks	8 Parks	5 Parks	12 Parks	7 Parks	17 Parks	11 Parks	26 Parks
PARK-ACRES	5.2 - 21.7 Acres per 1,000 Residents	141 ACRES **	32 Acres	133 Acres	49 Acres	203 Acres	65 Acres	270 Acres	103 Acres	429 Acres
TRAILS (EXISTING AND PLANNED)	2 - 10 Miles	6.0 MILES **	0.6 Miles	3.1 Miles	1 Mile	4.7 Miles	1.3 Miles	6.2 Miles	2 Miles	9.9 Miles
FULL-TIME EQUIVALENT (FTE) STAFF	6.4 - 21.1 FTE per 10,000 Residents	10 FTE *	3.9 FTE	12.9 FTE	6.0 FTE	19.7 FTE	8.0 FTE	26.2 FTE	12.7 FTE	41.7 FTE
ANNUAL OPERATING EXPENDITURES	\$551,925 to \$2,443,647 per year	\$832,650*	\$169,082	\$748,611	\$257,390	\$1,139,595	\$342,966	\$1,518,482	\$545,412	\$2,414,812
* Does not include volunteer time or budget. ** Includes future build-out of Timberbrook and The Preserve (Timberbrook counted as one park)										



Actual Exceeds Amount



Actual Within 2x of Amount



Actual Less than 2x of Amount

Action Considered:

- ▶ Recommend approval, recommend approval with conditions, table with clarification and intent, or recommend denial.

Staff Recommendation:

- ▶ Staff recommends consideration based upon the request to dedicate the land and improvements at no initial cost to the City.

Parks Board Recommendation:

Staff Analysis:

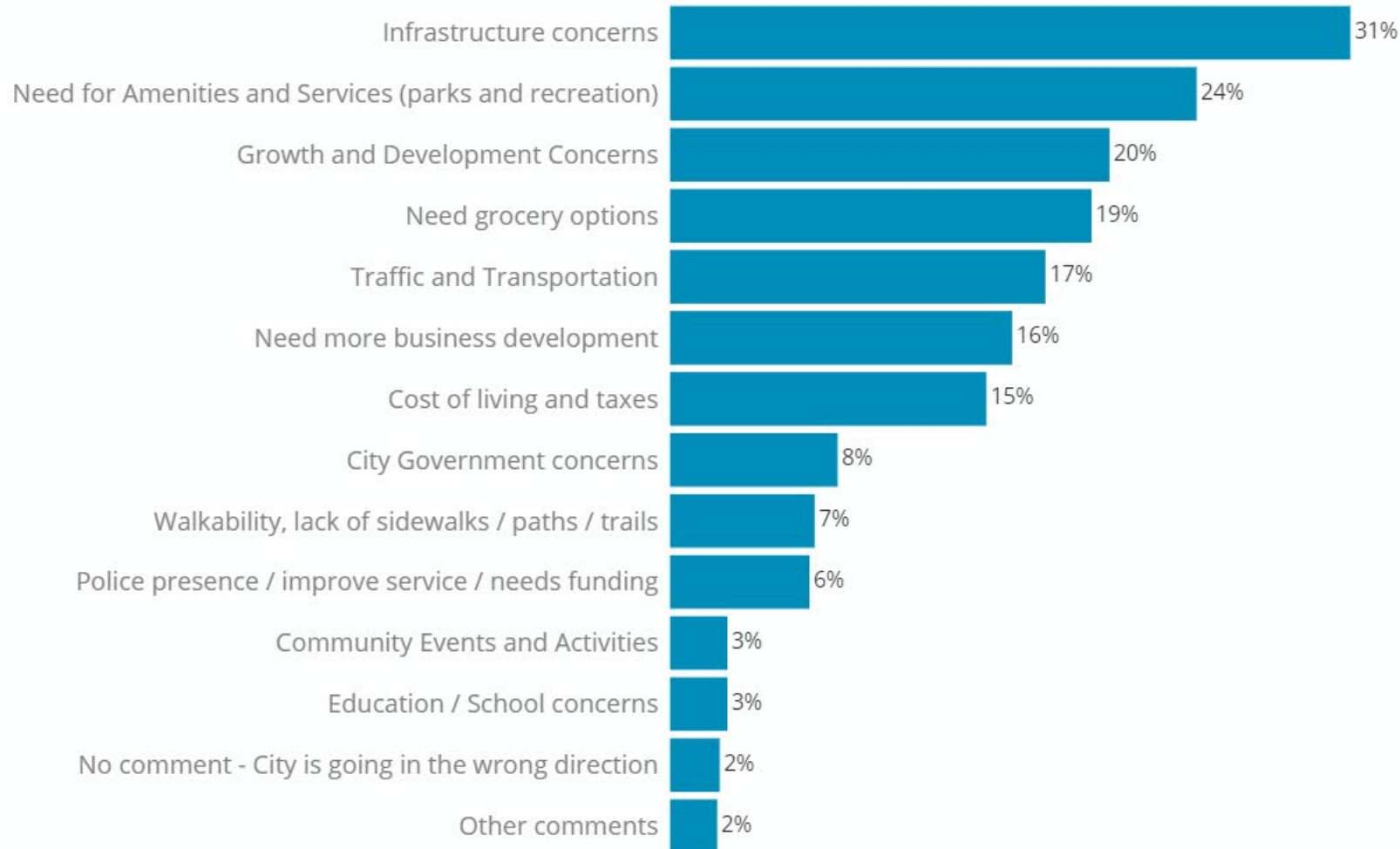
- ▶ If the Parks Board recommends approval and the City Council concurs, staff will be able to maintain the park in accordance with the standards set by the National Recreation and Parks Association. Additionally, a recent residential survey, which had 848 respondents (representing approximately 33% of total households), identified more amenities and parks as the second highest priority for improvements.
- ▶ If action is taken, this item will be forwarded to City Council on July 25, 2024.

Next Steps:

- ▶ Dedication of land to the City of Justin
- ▶ Work with Parks Board on Facility Naming Policy
- ▶ Construction Plans to be brought back forward to Parks Board and City Council.

Overall: Areas of improvement

Justin: CityPOV



Demo Filters

Gender

(All) ▼

Age

(All) ▼

Time in City

(All) ▼

Children at home

(All) ▼

Area

(All) ▼

Direction of Town

(All) ▼

Invite Type

(All) ▼

Sample: 848

RESOLUTION NO. 699-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS, REGARDING THE DONATION OF PARKLAND BY BLOOMFIELD HOMES.

WHEREAS, Bloomfield Homes is considering donating 2.7 acres of parkland to the City of Justin, with the developer constructing the park and transferring ownership to the city upon completion; and

WHEREAS, the City Council approved a Developer's Agreement with Bloomfield Homes in 2016, which allowed the development of Timberbrook and designated a 2.7-acre parcel for municipal use; and

WHEREAS, the proposed park will include amenities such as a 200-seat amphitheater, two pickleball courts, a basketball court, a 25' x 50' covered pavilion, concrete ping pong tables, concrete cornhole setups, parking spots, food truck parking, and electrical infrastructure, with approximately sixty trees to be planted at no cost to the City; and

WHEREAS, the donation aligns with the recent residential survey where residents identified more amenities and parks as a high priority; and

WHEREAS, the Parks Board recommended approval of this donation on June 11, 2024, with the condition that construction plans be presented for approval to the City Council after review by the Parks Board; and

WHEREAS, staff will employ third-party assistance for park maintenance as needed, while handling mowing and basic lawn care, with an estimated annual cost of \$8,000; and

WHEREAS, acceptance of this donation will enhance recreational opportunities in Justin and support the city's goals of providing quality public spaces for its residents;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS, THAT:

SECTION 1. That all provisions of the Resolutions of the City of Justin, Texas, in conflict with the provisions of this Resolution be, and the same are hereby, repealed, and all other provisions of the Resolutions of the City not in conflict with the provisions of this Resolution shall remain in full force and effect.

SECTION 2. This Resolution shall take effect immediately upon its passage and attached as "Exhibit" A

DULY PASSED by the City Council of the City of Justin, Texas, on the 8th day of August 2024.

APPROVED:

James Clark, Mayor

ATTEST:

Amy Piukana, City Secretary

APPROVED AS TO FORM:

City Attorney



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 1. (PUBLIC HEARING)

Title: Conduct a Public Hearing and consider adopting Ordinance 785-24 approving an Amendment to the existing Planned Development Agreement (SF-1 PD-597-15) for Meadowlands Phase 1, legally described as Lots 1-7, Block A. Generally located southwest from the intersection of FM 407 and Meadowview Drive; and take appropriate action.

Department: Development

Contact: Matthew Cyr, Director of Planning and Development

Recommendation:

Staff recommends approval.

Background:

The Applicant is seeking to amend the existing Developers Agreement (PD-597-15) for the Reserve at Meadowlands, Phase 1 development. Legally described as Lots 1-7, Block A, and generally located southwest from the intersection of FM 407 and Meadowview Drive.

The original agreement was signed on October 12, 2015, with certain conditions to be fulfilled as outlined in the attached ordinance.

In April 2023, the HOA approached the staff regarding unmet conditions for Reserve at Phase I. The HOA requested staff to assess the feasibility of incorporating these items before the commencement of Reserve at Meadowlands Phase II. Consequently, Staff engaged with the developer and organized a meeting for discussion. After a series of meetings, an agreement was reached between the HOA and developer to revise the Planned Development to align with the actual development on the ground and address additional concerns from both the HOA and the developer.

REVISIONS:

All revisions have been reviewed by the HOA and the developer for a general agreement.

1. Remove subsection H. This is not relevant to the Planned Development since this is already in the Code of Ordinances as a requirement and trees have already been planted.
 2. Subsection I. A six foot (6') masonry wall shall be constructed on the east edge of the Gas easement on the lots (This has already been done years ago); each homeowner will be required to maintain mowing and general upkeep to minimum of City standards the space west of the
-

masonry wall to the edges of the Lot. This defers maintenance to the residents on the other side of the fence since they do own the entire lot.

3. Subsection J. This revision allows the homeowner on Lot 7 more flexibility to choose different options for privacy use such as: mesh screening, wood slats, or live screening.
4. Subsection K. This revisions provides certain lighting along the walking trail along with a timeframe (sixty-days) to install the lighting.
5. Subsection L. Subsection to be removed based on the fact that all lighting for Reserve at meadowlands Ph. I has already been installed.
6. Subsection N. Within 60 days after the Approval and Execution of this PD, a five (5') foot wide sidewalk will be provided for connection to Atchison Road according to the attached diagram; If said sidewalk is not constructed and accepted within in sixty (60) days there may be penalties assessed in accordance with Sec. 52-5 of the Code of Ordinances.
7. Subsection O. Subsection to be removed as the drainage of the subdivision has already been constructed.

City Attorney Review: N/A

Attachments:

1. Planned Development PD-597-15
2. Map - Reserve Ph1
3. Redlined Amendment
4. Ordinance 785-24

**CITY OF JUSTIN, TEXAS
ORDINANCE NO. 597-15**

AN ORDINANCE OF THE CITY OF JUSTIN, TEXAS, GRANTING PLANNED DEVELOPMENT ZONING FOR THE "VILLAS OF MEADOWLANDS I" (TO BE KNOWN AS THE RESERVE AT MEADOWLANDS I) LOCATED ON 2.967 ACRES IN THE S. R. ROBERTS SURVEY, ABSTRACT NO. 1127, IN THE CITY OF JUSTIN, DENTON COUNTY, TEXAS; PROVIDING FOR THE APPROVAL OF A DEVELOPMENT PLAN; PROVIDING SPECIAL CONDITIONS; PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Planning and Zoning Commission and the City Council of the City of Justin, in compliance with the laws of the State of Texas with reference to the granting of zoning classification and changes, have given the requisite notices by publication and otherwise, and have held due hearings and afforded a full and fair hearing to all property owners generally and to all persons interested and situated in the affected area and in the vicinity thereof, and the City Council of Justin is of the opinion and finds that a zoning change should be granted and the Comprehensive Zoning Ordinance and Map should be amended;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1. That the Comprehensive Zoning Ordinance and Map of the City of Justin, Texas, are hereby amended to approve a change of zoning to Planned Development ("PD") for single-family uses for the "Villas of Meadowlands I" (henceforth to be known and identified as The Reserve at Meadowlands I) on a tract of 2.967 acres of land in the S. R. Roberts Survey, Abstract No. 1127, in the City of Justin, Denton County, Texas, and being more particularly described in Exhibit "A" attached hereto and made part hereof for all purposes, the same as if fully copied herein (the "property").

SECTION 2. That the property shall be improved in conformance with the approved Development Plan attached hereto as Exhibit "B" and made a part hereof for all purposes, the same as if fully copied herein.

SECTION 3. That in conformance with and in addition to all site improvements shown on the approved Development Plan, development of the property is subject to conformance with the following special conditions:

A. The development may include single-family residences, with a minimum dwelling

area of 1,800 square feet, and any accessory structures permitted in the SF-1 zoning district by the Use Tables contained in the Comprehensive Zoning Ordinance;

B. The lots in the development shall meet or exceed the following minimum area regulations:

(1) minimum lot width of fifty feet (50');

(2) minimum lot depth of one hundred twenty-five feet (125');

(3) minimum lot area of 5,500 square feet, but with an average area of all lots a minimum of 10,952 square feet;

(4) minimum front yard setback of fifteen feet (15');

(5) minimum side yard setback of five feet (5');

(6) minimum side yard setback on the street side of a corner lot of fifteen feet (15');

(7) minimum setback of garage door from abutting alley or street of twenty feet (20');

C. No building in the development shall exceed 35' in height;

D. Each building shall provide 100% masonry exterior surface construction on the front facade, provided that at least 80% of the other exterior surfaces shall be masonry;

E. The primary pitch of the roof of all structures shall be 8/12;

F. Enclosed two car garages shall be provided for each residence;

G. Builders shall not be permitted to repeat any layout of a residence for at least 3 homes on either side of a home;

H. Each lot shall be provided with two front yard trees and one backyard tree, each with a minimum caliper of three inches (3");

I. A six feet (6') masonry fence shall be provided along FM 407, Atchinson Avenue, and the west side of Lots 6 and 7, provided the existing fence along the south side of the open space adjacent to Lot 7 will be retained;

J. A six feet (6') wrought iron fence shall be required along the south side of Lot 7;

K. At a minimum, four (4) street lights at street corners and along walking paths shall be provided, in accordance with the Development Plan;

L. All street lights and lights along walking trails shall be "Dark Sky" compliant;

M. Owners of all residences in the development shall be required to be members of a homeowners' association created for the development, and the association shall be responsible to maintain the commonly owned open green space in the development;

N. A sidewalk with connectivity to the west shall be required;

O. Developer shall make improvements to the drainage channel and pipe along FM 407 as approved by the city engineer;

P. In conformance with the conceptual Development Plan approved hereby, a detailed Development Plan shall be submitted by the developer to the Planning and Zoning

Commission for its review and recommendations. The detailed Development Plan will then be reviewed and approved by the City Council, prior to the issuance of any building permit for the development; and

Q. The detailed Development Plan must include: final lot layout, Landscape Planting Plan, proposed Screening Fence/Wall(s), sidewalk locations, project amenity areas, site lighting, and any other specific detailed plan requirements of City Council made at the time of review of the detailed Development Plan.

SECTION 4. That the above described property shall be used only in the manner and for the purposes provided for by the Comprehensive Zoning Ordinance of the City of Justin, as amended hereby.

SECTION 5. All provisions of the ordinances of the City of Justin in conflict with the provisions of this ordinance are hereby repealed.

SECTION 6. Should any sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Comprehensive Zoning Ordinance as a whole.

SECTION 7. Any person, firm or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Comprehensive Zoning Ordinance of the City of Justin, as heretofore amended, and upon conviction shall be punished by a fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offence; and each and every day such violation shall continue shall be deemed to constitute a separate offence.

SECTION 8. This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

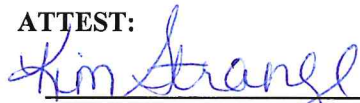
DULY PASSED by the City Council of the City of Justin, Texas, on the 12th day of October 2015.

APPROVED:



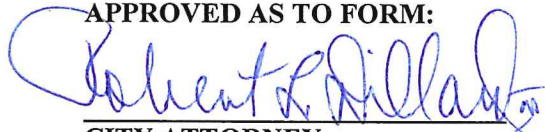
GREG SCOTT, MAYOR

ATTEST:



KIM STRANGE, CITY SECRETARY

APPROVED AS TO FORM:



CITY ATTORNEY

EXHIBIT A

LEGAL DESCRIPTION

BEING a 2.967 acre tract of land in the S.R. Roberts Survey, Abstract No. 1127 and being a portion of that 56.575 acre tract of land in Denton County, Texas owned by Denton County Development Company and being more particularly described as follows:

BEGINNING at a *Yi*" iron rod found at the southeast corner herein described tract and being by plat call the northeast corner of Lot 1R, Block A of the Meadowlands Phase 1-A as recorded in Cabinet 1, Page 269 of the Plat Records of Denton County, Texas and also being in the west right-of-way line of Meadow View Drive;

THENCE S 43°57'53" W leaving said right-of-way a distance of 125.53 feet to a *Yi*" iron rod found at the common corner between Lot 2R and Lot 3R of said Block A;

THENCE N 89°27'17" W a distance of 234.99 feet to a *Yi*" iron rod found at the northwest corner of Lot 4R of said Block A and being the southwest corner of herein described tract;

THENCE S 05°31'46" W a distance of 423.47 feet to a *Yi*" iron rod found;

THENCE N 02°01'45" W a distance of 532.16 feet to a *Yi*" iron rod found;

THENCE S 84°30'06" E a distance of 40.00 feet to a *Yi*" iron rod found;

THENCE N 05°31'42" E a distance of 326.21 feet to a *Yi*" iron rod set in the south right-of-way line of FM 407;

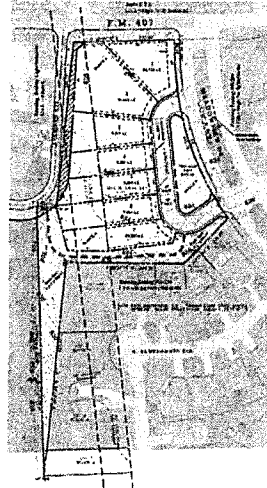
THENCE N 88°09'33" E along said south right-of-way line a distance of 200.00 feet to a *Yi*" iron rod set in the west line of said Meadow View Drive;

THENCE S 01°50'53" E along said west right-of-way line a distance of 37.58 feet to a 1/2" iron rod set and said point being the Point of Curvature of a curve to the left having a Radius of 550.00 feet, a Central Angle of 34°58'39", a Chord Bearing of S 19°19'47" E and a Chord Distance of 330.57 feet;

THENCE along said right-of-way in a southerly direction a distance of 335.76 feet to the Point of Beginning and containing in all 129238 square Beginning and containing in all 129238 square feet or 2.967 acres land.

EXHIBIT B

The Reserve at Meadowlands I



The Reserve at Meadowlands I - Site Data Summary Chart

Category	Value	Value
Acres	12.5%	1.73 ac.
Open Space	27.2%	3.45 ac.
Impervious	13.1%	1.63 ac.
Impervious (paved)	2.2%	0.28 ac.
Impervious (unpaved)	10.9%	1.35 ac.

Site Data

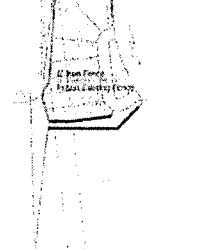
Category	Value
Open Space	3.45
Impervious	1.63

Lot Summary

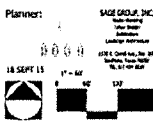
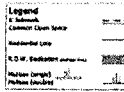
Category	Value
Residential Lots	2
Commercial Lots	1
Industrial Lots	1

Lot / Zoning

Category	Value
Residential	2
Commercial	1
Industrial	1



- The Reserve at Meadowlands I - Development Requirements**
1. Minimum Width: 30 Feet
 2. Minimum Depth: 120 Feet
 3. Minimum Area: 1,000 SF
 4. Minimum Area: 1,000 SF
 5. Any Building in the Development, Wall Located 30 Feet in Front
 6. Plot 1 and 2: 120 Feet
 7. Plot 3 and 4: 120 Feet
 8. Plot 5 and 6: 120 Feet
 9. Plot 7 and 8: 120 Feet
 10. Plot 9 and 10: 120 Feet
 11. Plot 11 and 12: 120 Feet
 12. Plot 13 and 14: 120 Feet
 13. Plot 15 and 16: 120 Feet
 14. Plot 17 and 18: 120 Feet
 15. Plot 19 and 20: 120 Feet
 16. Plot 21 and 22: 120 Feet
 17. Plot 23 and 24: 120 Feet
 18. Plot 25 and 26: 120 Feet
 19. Plot 27 and 28: 120 Feet
 20. Plot 29 and 30: 120 Feet
 21. Plot 31 and 32: 120 Feet
 22. Plot 33 and 34: 120 Feet
 23. Plot 35 and 36: 120 Feet
 24. Plot 37 and 38: 120 Feet
 25. Plot 39 and 40: 120 Feet
 26. Plot 41 and 42: 120 Feet
 27. Plot 43 and 44: 120 Feet
 28. Plot 45 and 46: 120 Feet
 29. Plot 47 and 48: 120 Feet
 30. Plot 49 and 50: 120 Feet
 31. Plot 51 and 52: 120 Feet
 32. Plot 53 and 54: 120 Feet
 33. Plot 55 and 56: 120 Feet
 34. Plot 57 and 58: 120 Feet
 35. Plot 59 and 60: 120 Feet
 36. Plot 61 and 62: 120 Feet
 37. Plot 63 and 64: 120 Feet
 38. Plot 65 and 66: 120 Feet
 39. Plot 67 and 68: 120 Feet
 40. Plot 69 and 70: 120 Feet
 41. Plot 71 and 72: 120 Feet
 42. Plot 73 and 74: 120 Feet
 43. Plot 75 and 76: 120 Feet
 44. Plot 77 and 78: 120 Feet
 45. Plot 79 and 80: 120 Feet
 46. Plot 81 and 82: 120 Feet
 47. Plot 83 and 84: 120 Feet
 48. Plot 85 and 86: 120 Feet
 49. Plot 87 and 88: 120 Feet
 50. Plot 89 and 90: 120 Feet
 51. Plot 91 and 92: 120 Feet
 52. Plot 93 and 94: 120 Feet
 53. Plot 95 and 96: 120 Feet
 54. Plot 97 and 98: 120 Feet
 55. Plot 99 and 100: 120 Feet



Development Plan

The Reserve at Meadowlands I

Justin, Denton County, Texas

Owner:
Denton Creek Development Corp.

Developer:
Wendybridge Development, LLC
2010111-0110
Contact: Billy Smith

ORDINANCE NO.

AN ORDINANCE OF THE CITY OF JUSTIN, TEXAS, GRANTING PLANNED DEVELOPMENT ZONING FOR THE "VILLAS OF MEADOWLANDS I" (TO BE KNOWN AS THE RESERVE AT MEADOWLANDS I) LOCATED ON 2.967 ACRES IN THE S. R. ROBERTS SURVEY, ABSTRACT NO. 1127, IN THE CITY OF JUSTIN, DENTON COUNTY, TEXAS; PROVIDING FOR THE APPROVAL OF A DEVELOPMENT PLAN; PROVIDING SPECIAL CONDITIONS; PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

DULY PASSED by the City Council of the City of Justin, Texas, on the 12th day of October 2015.

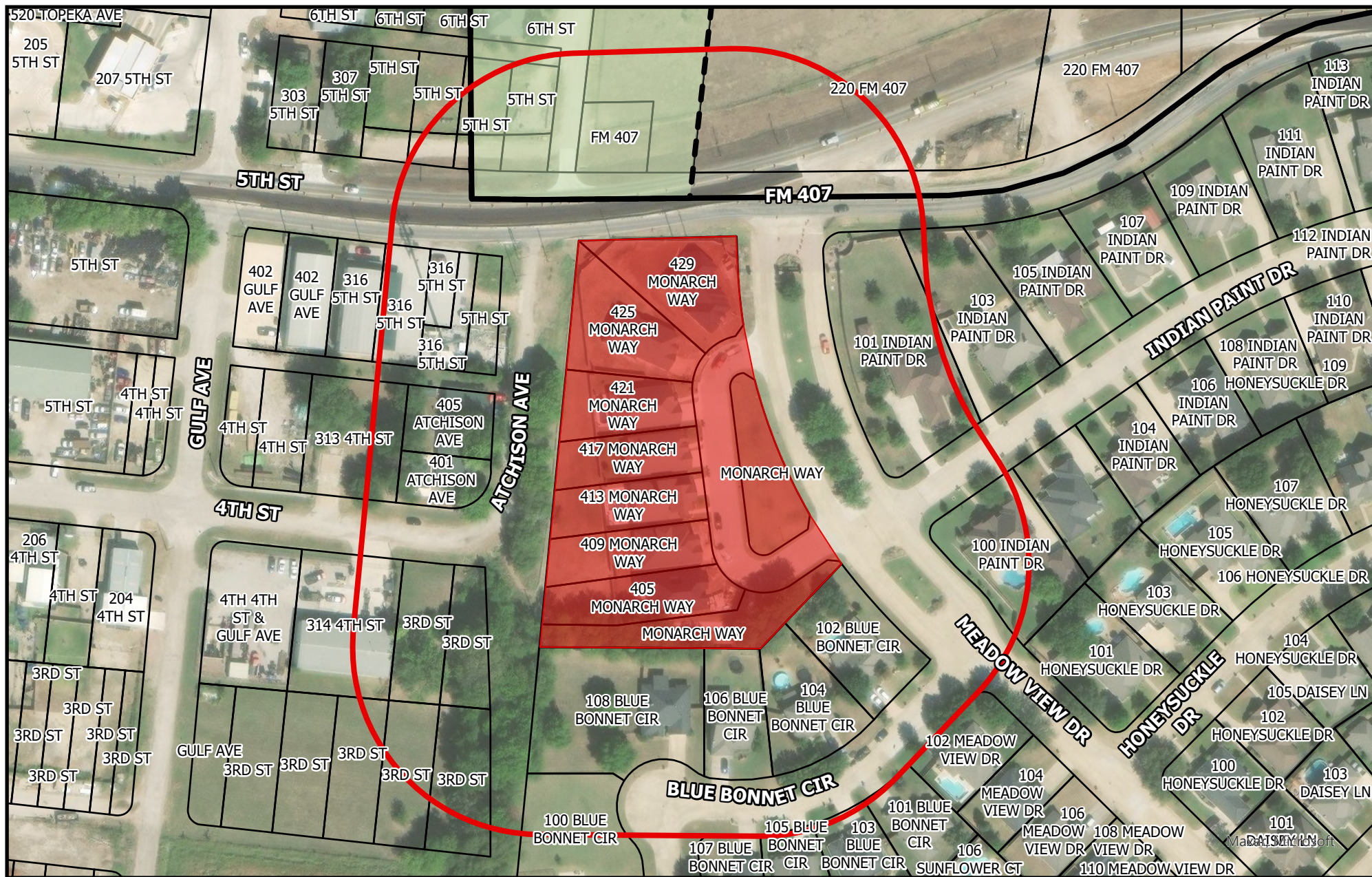
APPROVED:



GREG SCOTT, MAYOR

ATTEST:

KIM STRANGE, CITY SECRETARY



0 50 100 200
Feet

Created by:
Christopher T. Young
GIS Technician
Date: 12/07/2023



Reserve at Meadowlands Phase 1 PD Amendment City of Justin, TX

 Justin City Limits
 Justin ETJ

Legend

 Reserve at
Meadowlands Ph1
 200ft Notice Radius

CITY OF JUSTIN, TEXAS
ORDINANCE NO. 597-15
(Redlined Draft Amendment)

AN ORDINANCE OF THE CITY OF JUSTIN, TEXAS, GRANTING PLANNED DEVELOPMENT ZONING FOR THE "VILLAS OF MEADOWLANDS I" (TO BE KNOWN AS THE RESERVE AT MEADOWLANDS I) LOCATED ON 2.967 ACRES IN THE S. R. ROBERTS SURVEY, ABSTRACT NO. 1127, IN THE CITY OF JUSTIN, DENTON COUNTY, TEXAS; PROVIDING FOR THE APPROVAL OF A DEVELOPMENT PLAN; PROVIDING SPECIAL CONDITIONS; PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Planning and Zoning Commission and the City Council of the City of Justin, in compliance with the laws of the State of Texas with reference to the granting of zoning classification and changes, have given the requisite notices by publication and otherwise, and have held due hearings and afforded a full and fair hearing to all property owners generally and to all persons interested and situated in the affected area and in the vicinity thereof, and the City Council of Justin is of the opinion and finds that a zoning change should be granted and the Comprehensive Zoning Ordinance and Map should be amended;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1. That the Comprehensive Zoning Ordinance and Map of the City of Justin, Texas, are hereby amended to approve a change of zoning to Planned Development ("PD") for single-family uses for the "Villas of Meadowlands I" (henceforth to be known and identified as The Reserve at Meadowlands I) on a tract of 2.967 acres of land in the S. R. Roberts Survey, Abstract No. 1127, in the City of Justin, Denton County, Texas, and being more particularly described in Exhibit "A" attached hereto and made part hereof for all purposes, the same as if fully copied herein (the "property").

SECTION 2. That the property shall be improved in conformance with the approved Development Plan attached hereto as Exhibit "B" and made a part hereof for all purposes, the same as if fully copied herein.

SECTION 3. That in conformance with and in addition to all site improvements shown on the approved Development Plan, development of the property is subject to conformance with

the following special conditions:

- A. The development may include single-family residences, with a minimum dwelling area of 1,800 square feet, and any accessory structures permitted in the SF-I zoning district by the Use Tables contained in the Comprehensive Zoning Ordinance;
- B. The lots in the development shall meet or exceed the following minimum area regulations:
 - (1) minimum lot width of fifty feet (50');
 - (2) minimum lot depth of one hundred twenty-five feet (125');
 - (3) minimum lot area of 5,500 square feet, but with an average area of all lots a minimum of 10,952 square feet;
 - (4) minimum front yard setback of fifteen feet (15');
 - (5) minimum side yard setback of five feet (5');
 - (6) minimum side yard setback on the street side of a corner lot of fifteen feet (15');
 - (7) minimum setback of garage door from abutting alley or street of twenty feet (20');
- C. No building in the development shall exceed 35' in height;
- D. Each building shall provide 100% masonry exterior surface construction on the front facade, provided that at least 80% of the other exterior surfaces shall be masonry;
- E. The primary pitch of the roof of all structures shall be 8/12;
- F. Enclosed two car garages shall be provided for each residence;
- G. Builders shall not be permitted to repeat any layout of a residence for at least 3 homes on either side of a home;
- ~~H. Each lot shall be provided with two front yard trees and one backyard tree, each with a minimum caliper of three inches (3");~~ **Sub-section to be removed.**
- ~~I. A six foot (6') masonry fence shall be provided along FM 407, Atchinson Avenue, and the west side of Lots 6 and 7, provided the existing fence along the south side of the open space adjacent to Lot 7 will be retained;~~ **A six foot (6') masonry wall shall be constructed on the east edge of the Gas easement on the lots; each homeowner will be required to maintain mowing and general upkeep to Minimum of City standards the space west of the masonry wall to the edges of the Lot.**
- ~~J. A six foot (6') wrought iron fence shall be required along the south side of Lot 7;~~ **A six foot (6') iron fence shall be required along the south side of Lot 7 (along the north side of Open Space Lot 8); the owner of this home may choose to create more privacy by use of:**
 - 1) mesh screening,
 - 2) wood slats, or
 - 3) landscaping;

These efforts must be made on the homeowner side of the fence and be dark in color. This fence is to be maintained by the HOA Entity which oversees the The Reserve at Meadowlands 1 or the homeowner.

- ~~K. At a minimum, four (4) street lights at street corners and along walking paths shall be provided, in accordance with the Development Plan;~~ **Within 60 days after the Approval and Execution of this PD, lighting shall be provided approximately every 8 linear feet along the walking trail (described in item N below) thru Open Space Lot 8 to the street of Atchison Rd. Solar Powered Lights may be placed in the Right of Way as needed. No lighting shall be required along the iron fencing adjacent to Lot 7 or near the Monarch Way street connection. The maintenance of the path lighting shall be the responsibility of the HOA Entity which oversees the The Reserve at Meadowlands 1.**
- ~~L. All street lights and lights along walking trails shall be "Dark Sky" compliant;~~ **Sub-section to be removed.**

- M. Owners of all residences in the development shall be required to be members of a homeowners' association created for the development, and the association shall be responsible to maintain the commonly owned open green space in the development;
- N. ~~A sidewalk with connectivity to the west shall be required;~~ Within 60 days after the Approval and Execution of this PD, a five (5') foot wide sidewalk will be provided for connection to Atchison Road according to the attached diagram; If said sidewalk is not constructed and accepted within in sixty (60) days there may be penalties assessed in accordance with Sec. 52-5 of the Code of Ordinances.
- O. ~~Developer shall make improvements to the drainage channel and pipe along FM 407 as approved by the city engineer;~~ Sub-section to be removed.
- P. In conformance with the conceptual Development Plan approved hereby, a detailed Development Plan shall be submitted by the developer to the Planning and Zoning Commission for its review and recommendations. The detailed Development Plan will then be reviewed and approved by the City Council, prior to the issuance of any building permit for the development; and
- Q. The detailed Development Plan must include: Final lot layout, Landscape Planting Plan, proposed Screening Fence/Wall(s), sidewalk locations, project amenity areas, site lighting, and any other specific detailed plan requirements of City Council made at the time of review of the detailed Development Plan.

SECTION 4. That the above described property shall be used only in the manner and for the purposes provided for by the Comprehensive Zoning Ordinance of the City of Justin, as amended hereby.

SECTION 5. All provisions of the ordinances of the City of Justin in conflict with the provisions of this ordinance are hereby repealed.

SECTION 6. Should any sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Comprehensive Zoning Ordinance as a whole.

SECTION 7. Any person, firm or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Comprehensive Zoning Ordinance of the City of Justin, as heretofore amended, and upon conviction shall be punished by a fine not to

exceed the sum of two thousand dollars (\$2,000.00) for each offence; and each and every day such violation shall continue shall be deemed to constitute a separate offence.

SECTION 8. This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

DULY PASSED by the City Council of the City of Justin, Texas, on the XXth day of
XXXX 2024.

PASSED ON THE FIRST READING BY THE CITY COUNCIL ON THE ____ DAY OF
_____, 2024.

PASSED ON SECOND READING BY THE CITY COUNCIL ON THE ____ DAY OF
_____, 2024.

APPROVED:

**JAMES CLARK,
MAYOR**

ATTEST:

**AMY PIUKANA,
CITY SECRETARY**

APPROVED AS TO FORM:

CITY ATTORNEY

Lighting Exhibit and Fence Covering Exhibit

Lights to be placed every 6 to 9 linear feet along the sidewalk for covering +/- 180LF

1. Bollard Lighting Example Pictures 1



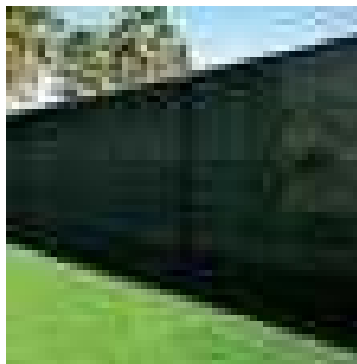
2. Bollard Lighting Example Pictures 2



3. Bollard Lighting Example Pictures 3



4. Item J – show examples of screen mesh and wood slat coverings:
a. Screen Mesh

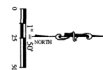


b. Wood Slats Example 1



c. Wood Slats Example 2





Sidewalk and Lighting Plan

Approximate Location of Existing Sidewalk

Approximate Location for Light Bollards

NOTES:

1. Property is Zoned "PD-597"

2. Any franchised public utility, including the City of Tucson, shall have the right to move and keep moved all or part of any building, fence, trees, shrubs, other growths or improvements which in any way encumber or interfere with the construction, maintenance or efficiency of its respective system on any of the easements shown on the Plat. Any franchised public utility including the City of Tucson, shall have the right at all times of access and egress to and from and upon said easements for the purposes of constructing, reconstructing, inspecting, patrol, maintaining, and adding to or removing all or part of its respective systems without the necessity at any time of procuring the permission of the City of Tucson.

3. FLOOD STATEMENT: I have reviewed the F.E.M.A. Flood Insurance Rate Map for the City of Justin, Community Number 480778 effective date 4-16-2011 and that map indicates as scaled, that the property is within "Non-Shaded Zone X" defined as "Areas determined to be outside the 0.2% annual chance flood (500-year)" as shown on Panel 485 G of said map.

4. **Usability (usages).** Usability triangles in the form of public open space assessments (P.O.S.) shall be provided at the intersection of all public streets and at the intersection of all public streets and highways and/or private streets as required by the City's Development Standards. The assessment shall prohibit any obstruction within the assessment from a height of twenty-four inches (24") to a height of eleven feet (11') above the top of the adjacent curb. A single pole sign with a maximum pole diameter of twelve inches (12"), may be allowed in the assessment area. The assessment shall be located within the P.O.S. when the typical observation line zone and is otherwise prohibited by the zoning ordinance. Utility poles and guy wires may be located in the P.O.S. Other ground mounted electrical and communication equipment and switch gear may be located within the P.O.S. when the location is coordinated with the City Engineer.

5. This subdivision consists of 7 Residential Lots
 Lot 1 Block A Residential

- | | |
|---------------|-----------------------------|
| Lot 1 Block A | Residential |
| Lot 2 Block A | Residential |
| Lot 3 Block A | Residential |
| Lot 4 Block A | Residential |
| Lot 5 Block A | Residential |
| Lot 6 Block A | Residential |
| Lot 7 Block A | Residential |
| Lot 8 Block A | Open Space |
| Lot 1 Block B | Drainage & Utility Easement |
| | Drainage & Utility Easement |

	CLAVE	RAJAS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	55.00	82.42	74.92	N35.4702° E	65.5130°	
C2	35.00	52.45	47.46	E35.4702° E	65.5130°	
C3	15.00	22.48	20.48	N35.4702° E	65.5130°	
C4	15.00	30.60	28.58	N65.4034° W	117.0617°	
C5	35.00	71.51	58.77	N65.4034° W	117.0617°	
C6	55.00	112.30	93.82	N65.4034° W	117.0617°	



FINAL PLAT RESERVE AT MEADOWLANDS

BEING 2.312 ACRES IN THE STEPHEN
R. ROBERTS, ABSTRACT NUMBER
1127, IN THE CITY OF JUSTIN,
DENTON COUNTY, TEXAS

OWNER'S ACKNOWLEDGEMENT AND DEDICATION

I, the undersigned, owner of the land shown on this plat within the area described by metes and bounds as follows:

All THIA CERTAIN TRACT of land situated in the STEPHEN R. ROBERTS SURVEY, Assessed Number 1127, in the City of Justin, Denton County, Texas, and being a part of a called "Tract 1," described in a deed to Rockwater Developments, LLC, recorded in Instrument Number 2016-147890 of the Real Property Records of Denton County, Texas, the subject tract described more particularly described as follows:

THENCE South 43 degrees 47 minutes 04 seconds West, with the North line of said Meadsworth Addition, Phase 1A, a distance of 1725.34 feet to a 3/8" iron rod found for corner.

THENCE, from the beginning 1/4 mile E of 7th Avenue East, with said common line, a distance of 108.60 feet to a 3/4" iron rod capped X-42; set for corner, in the West 90° E. way, the N.E. corner of said Plats.

THENCE South 01 degree 58 minutes 42 seconds East, with said common line, a distance of 37.55 feet to a $\frac{1}{4}$ " iron rod capped "XAZ" set at the beginning of a non-tangent curve to the left, having a radius of 550.00 feet and a chord bearing and distance of South 19 degrees 26 minutes 30 seconds East, 300.15 feet;

And designated herein as the RESERVE AT MIDLANDS, PHASE I, subdivision to the City of Austin, Texas, and whose name is designated herein, hereby dedicated to the use of the public forever all streets, alleys, ways, water courses, drains, easements, rights-of-way and other places shown thereon for the purposes and consideration herein expressed.

Owner ML
 Date 5-25-18

COUNTY OF DENTON

BEFORE ME, the undersigned authority, on this 25 day of May, 2018, ANNE M. WATSON, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and considerations therein stated.

Given under my hand and seal of office this _____ day of _____, 2018.

[Signature]

Notary Public

 ANNE M. WATSON
State of Texas
Commission Expires 05/15/2021

STATE OF TEXAS

CERTIFICATE OF SURVEYOR

I, the undersigned, a Registered Professional Land Surveyor in the State of Texas, hereby certify that this plot is true and correct and was prepared from an actual survey of the property made under my supervision on the ground.

Kathryn A. Zollinger, RPLS
Date: 5-25-08

This plot has been submitted to and considered by the Planning Commission, hereby approved by such Commission.

Dated this 12 day of Nov.

ATTEST: SECRETARY Buttany Anderson

THE CITY COUNCIL OF JUSTIN ON May 30, 2017 VOTED AFFIRMATIVELY TO ADOPT THIS PLAT AND APPROVE IT FOR FILING OF RECORD.

BY: MAYOR David A. Lerner
ATTEST: CITY SECRETARY Brittany Andrews

In the Official Records Of:
 Denton County
 On: 6/5/2018 2:17:22 PM
 In the PLAT Records
 RESERVE AT MEADOWLANDS
 Doc Number: 2018 - 248
 Number of Pages: 1
 Amount: \$0.00
 Order#: 20180605000621
 By: BF

ORDINANCE NUMBER 785-24

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS, APPROVING AN AMENDMENT TO ORDINANCE 597-15, AND PROVIDING AN INCORPORATION OF PREMISES; PROVIDING A CUMULATIVE/REPEALER CLAUSE, PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the applicant of the properties described as Block A, Lots 1-7, Reserve at Meadowlands Ph. 1, in the City of Justin, Denton County, Texas; and

WHEREAS, the City of Justin passed Ordinance 597-15 on October 12, 2015, granting Planned Development zoning and outlining special conditions for development on these lots; and

WHEREAS, the City of Justin, the Meadowlands Homeowners Association, Inc. (the “Homeowner’s Association”), and Woodbridge Developers Inc. (the “Developer”), have proposed amendments to Ordinance 597-15 to address concerns; and

WHEREAS, the Planning and Zoning Commission of the City of Justin (the “Commission”), in compliance with the laws of the State of Texas, gave the requisite notices by publication and otherwise, and held public hearings and afforded full and fair hearings to all property owners generally and to all persons interested in this regard; and

WHEREAS, having reviewed the request the Commission determined that the proposed amendments to Ordinance 597-15 outlined in this Ordinance were in compliance with all of the requisite regulations and the City’s Comprehensive Plan and recommended approval of this Ordinance; and

WHEREAS, the City Council of the City of Justin, in compliance with the laws of the State of Texas, having given the requisite notices by publication and otherwise, having held public hearings and afforded full and fair hearings to all property owners generally and to all persons interested in this regard, and having considered the recommendation of the Commission, has determined that the developer’s agreement be amended according to the exhibit below;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

Section 1. Incorporation of Premises. That all of the above recitals are found to be true and correct and are incorporated into the body of this ordinance as if fully set forth herein.

Section 2. Ordinance Amendment. That Section 3 of Ordinance 597-15 of the City Council of the City of Justin, Texas, regulating property legally described as BLOCK A, LOTS 1-7, RESERVE AT MEADOWLANDS PH. 1 and generally located southwest from the intersection of FM 407 and Meadowview Lane, Justin, Denton County, Texas, is duly amended as follows in “Exhibit A” and described below:

- Sub-sections H, L, and O are to be removed.

- Sub-section I will now read “A six foot (6') masonry wall shall be constructed on the east edge of the Gas easement on the lots; each homeowner will be required to maintain mowing and general upkeep to Minimum of City standards the space west of the masonry wall to the edges of the Lot.”
- Sub-section J will now read “A six foot (6') iron fence shall be required along the south side of Lot 7 (along the north side of Open Space Lot 8); the owner of this home may choose to create more privacy by use of: 1) mesh screening, 2) wood slats, or 3) landscaping; These efforts must be made on the homeowner side of the fence and be dark in color. This fence is to be maintained by the HOA Entity which oversees the The Reserve at Meadowlands 1 or the homeowner.”
- Sub-section K will now read as follows: “Within 60 days after the Approval and Execution of this PD, lighting shall be provided approximately every 8 linear feet along the walking trail (described in item N below) thru Open Space Lot 8 to the street of Atchison Rd. Solar Powered Lights may be placed in the Right of Way as needed. No lighting shall be required along the iron fencing adjacent to Lot 7 or near the Monarch Way street connection. The maintenance of the path lighting shall be the responsibility of the HOA Entity which oversees the The Reserve at Meadowlands 1.”
- Sub-section N will now read as follows: “Within 60 days after the Approval and Execution of this PD, a five (5') foot wide sidewalk will be provided for connection to Atchison Road according to the attached diagram; If said sidewalk is not constructed and accepted within in sixty (60) days there may be penalties assessed in accordance with Sec. 52-5 of the Code of Ordinances.”

Section 3. Cumulative/Repealer Clause. This ordinance shall be cumulative of all provisions of state or federal law and all ordinances of the City of Justin, Texas, except where the provisions of this ordinance are in direct conflict with the provisions of such other ordinances, in which event the conflicting provisions of such ordinances are hereby repealed to the extent of such conflict.

Section 4. Severability Clause. If any word, section, article, phrase, paragraph, sentence, clause or portion of this ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, such holding shall not affect for any reason, the validity of the remaining portions of this ordinance, or the Comprehensive Zoning Ordinance, Chapter 52 of the City of Justin Code of Ordinances, and the remaining portions shall remain in full force and effect.

Section 5. Effective Date. This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

Approved the 8th day of August, 2024.

James Clark, Mayor

ATTEST:

Amy Piukana, City Secretary

Approved as to form:

City Attorney

EXHIBIT A

CITY OF JUSTIN, TEXAS
ORDINANCE NO. 597-15
(Redlined Draft Amendment)

AN ORDINANCE OF THE CITY OF JUSTIN, TEXAS, GRANTING PLANNED DEVELOPMENT ZONING FOR THE "VILLAS OF MEADOWLANDS I" (TO BE KNOWN AS THE RESERVE AT MEADOWLANDS I) LOCATED ON 2.967 ACRES IN THE S. R. ROBERTS SURVEY, ABSTRACT NO. 1127, IN THE CITY OF JUSTIN, DENTON COUNTY, TEXAS; PROVIDING FOR THE APPROVAL OF A DEVELOPMENT PLAN; PROVIDING SPECIAL CONDITIONS; PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Planning and Zoning Commission and the City Council of the City of Justin, in compliance with the laws of the State of Texas with reference to the granting of zoning classification and changes, have given the requisite notices by publication and otherwise, and have held due hearings and afforded a full and fair hearing to all property owners generally and to all persons interested and situated in the affected area and in the vicinity thereof, and the City Council of Justin is of the opinion and finds that a zoning change should be granted and the Comprehensive Zoning Ordinance and Map should be amended;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1. That the Comprehensive Zoning Ordinance and Map of the City of Justin, Texas, are hereby amended to approve a change of zoning to Planned Development ("PD") for single-family uses for the "Villas of Meadowlands I" (henceforth to be known and identified as The Reserve at Meadowlands I) on a tract of 2.967 acres of land in the S. R. Roberts Survey, Abstract No. 1127, in the City of Justin, Denton County, Texas, and being more particularly described in Exhibit "A" attached hereto and made part hereof for all purposes, the same as if fully copied herein (the "property").

SECTION 2. That the property shall be improved in conformance with the approved Development Plan attached hereto as Exhibit "B" and made a part hereof for all purposes, the same as if fully copied herein.

SECTION 3. That in conformance with and in addition to all site improvements shown on the approved Development Plan, development of the property is subject to conformance with

the following special conditions:

- A. The development may include single-family residences, with a minimum dwelling area of 1,800 square feet, and any accessory structures permitted in the SF-I zoning district by the Use Tables contained in the Comprehensive Zoning Ordinance;
- B. The lots in the development shall meet or exceed the following minimum area regulations:
 - (1) minimum lot width of fifty feet (50');
 - (2) minimum lot depth of one hundred twenty-five feet (125');
 - (3) minimum lot area of 5,500 square feet, but with an average area of all lots a minimum of 10,952 square feet;
 - (4) minimum front yard setback of fifteen feet (15');
 - (5) minimum side yard setback of five feet (5');
 - (6) minimum side yard setback on the street side of a corner lot of fifteen feet (15');
 - (7) minimum setback of garage door from abutting alley or street of twenty feet (20');
- C. No building in the development shall exceed 35' in height;
- D. Each building shall provide 100% masonry exterior surface construction on the front facade, provided that at least 80% of the other exterior surfaces shall be masonry;
- E. The primary pitch of the roof of all structures shall be 8/12;
- F. Enclosed two car garages shall be provided for each residence;
- G. Builders shall not be permitted to repeat any layout of a residence for at least 3 homes on either side of a home;
- ~~H. Each lot shall be provided with two front yard trees and one backyard tree, each with a minimum caliper of three inches (3");~~ **Sub-section to be removed.**
- ~~I. A six feet (6') masonry fence shall be provided along FM 407, Atchinson Avenue, and the west side of Lots 6 and 7, provided the existing fence along the south side of the open space adjacent to Lot 7 will be retained;~~ **A six foot (6') masonry wall shall be constructed on the east edge of the Gas easement on the lots; each homeowner will be required to maintain mowing and general upkeep to Minimum of City standards the space west of the masonry wall to the edges of the Lot.**
- ~~J. A six feet (6') wrought iron fence shall be required along the south side of Lot 7;~~ **A six foot (6') iron fence shall be required along the south side of Lot 7 (along the north side of Open Space Lot 8); the owner of this home may choose to create more privacy by use of:**
 - 1) mesh screening,
 - 2) wood slats, or
 - 3) landscaping;

These efforts must be made on the homeowner side of the fence and be dark in color. This fence is to be maintained by the HOA Entity which oversees the The Reserve at Meadowlands 1 or the homeowner.

- ~~K. At a minimum, four (4) street lights at street corners and along walking paths shall be provided, in accordance with the Development Plan;~~ **Within 60 days after the Approval and Execution of this PD, lighting shall be provided approximately every 8 linear feet along the walking trail (described in item N below) thru Open Space Lot 8 to the street of Atchison Rd. Solar Powered Lights may be placed in the Right of Way as needed. No lighting shall be required along the iron fencing adjacent to Lot 7 or near the Monarch Way street connection. The maintenance of the path lighting shall be the responsibility of the HOA Entity which oversees the The Reserve at Meadowlands 1.**
- ~~L. All street lights and lights along walking trails shall be "Dark Sky" compliant;~~ **Sub-section to be removed.**

- M. Owners of all residences in the development shall be required to be members of a homeowners' association created for the development, and the association shall be responsible to maintain the commonly owned open green space in the development;
- N. ~~A sidewalk with connectivity to the west shall be required;~~ Within 60 days after the Approval and Execution of this PD, a five (5') foot wide sidewalk will be provided for connection to Atchison Road according to the attached diagram; If said sidewalk is not constructed and accepted within in sixty (60) days there may be penalties assessed in accordance with Sec. 52-5 of the Code of Ordinances.
- O. ~~Developer shall make improvements to the drainage channel and pipe along FM 407 as approved by the city engineer;~~ Sub-section to be removed.
- P. In conformance with the conceptual Development Plan approved hereby, a detailed Development Plan shall be submitted by the developer to the Planning and Zoning Commission for its review and recommendations. The detailed Development Plan will then be reviewed and approved by the City Council, prior to the issuance of any building permit for the development; and
- Q. The detailed Development Plan must include: Final lot layout, Landscape Planting Plan, proposed Screening Fence/Wall(s), sidewalk locations, project amenity areas, site lighting, and any other specific detailed plan requirements of City Council made at the time of review of the detailed Development Plan.

SECTION 4. That the above described property shall be used only in the manner and for the purposes provided for by the Comprehensive Zoning Ordinance of the City of Justin, as amended hereby.

SECTION 5. All provisions of the ordinances of the City of Justin in conflict with the provisions of this ordinance are hereby repealed.

SECTION 6. Should any sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Comprehensive Zoning Ordinance as a whole.

SECTION 7. Any person, firm or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Comprehensive Zoning Ordinance of the City of Justin, as heretofore amended, and upon conviction shall be punished by a fine not to

exceed the sum of two thousand dollars (\$2,000.00) for each offence; and each and every day such violation shall continue shall be deemed to constitute a separate offence.

SECTION 8. This ordinance shall take effect immediately from and after its passage and the publication of the caption, as the law in such cases provides.

DULY PASSED by the City Council of the City of Justin, Texas, on the XXth day of
XXXX 2024.

PASSED ON THE FIRST READING BY THE CITY COUNCIL ON THE ____ DAY OF
_____, 2024.

PASSED ON SECOND READING BY THE CITY COUNCIL ON THE ____ DAY OF
_____, 2024.

APPROVED:

JAMES CLARK,
MAYOR

ATTEST:

AMY PIUKANA,
CITY SECRETARY

APPROVED AS TO FORM:

CITY ATTORNEY

Lighting Exhibit and Fence Covering Exhibit

Lights to be placed every 6 to 9 linear feet along the sidewalk for covering +/- 180LF

1. Bollard Lighting Example Pictures 1



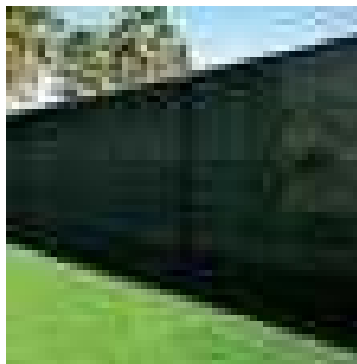
2. Bollard Lighting Example Pictures 2



3. Bollard Lighting Example Pictures 3



4. Item J – show examples of screen mesh and wood slat coverings:
- a. Screen Mesh



b. Wood Slats Example 1



c. Wood Slats Example 2



Reserve at Meadowlands Phase 1

Sidewalk and Lighting Plan



LEGEND

- 1/2" = 1' SCALE
- 1/4" = 1' SCALE
- 1/8" = 1' SCALE
- 1/16" = 1' SCALE
- 1/32" = 1' SCALE
- 1/64" = 1' SCALE
- 1/128" = 1' SCALE
- 1/256" = 1' SCALE
- 1/512" = 1' SCALE
- 1/1024" = 1' SCALE
- 1/2048" = 1' SCALE
- 1/4096" = 1' SCALE
- 1/8192" = 1' SCALE
- 1/16384" = 1' SCALE
- 1/32768" = 1' SCALE
- 1/65536" = 1' SCALE
- 1/131072" = 1' SCALE
- 1/262144" = 1' SCALE
- 1/524288" = 1' SCALE
- 1/1048576" = 1' SCALE
- 1/2097152" = 1' SCALE
- 1/4194304" = 1' SCALE
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City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 1. (WORKSHOP)

Title: Discussion on Water and Wastewater Master Plan update.

Department: Administration

Contact: Matthew Cyr, Director of Planning and Development

Recommendation:

Discuss accordingly. No action is required.

Background:

Discuss an update regarding the Master Water and Wasterwater Plan updates.

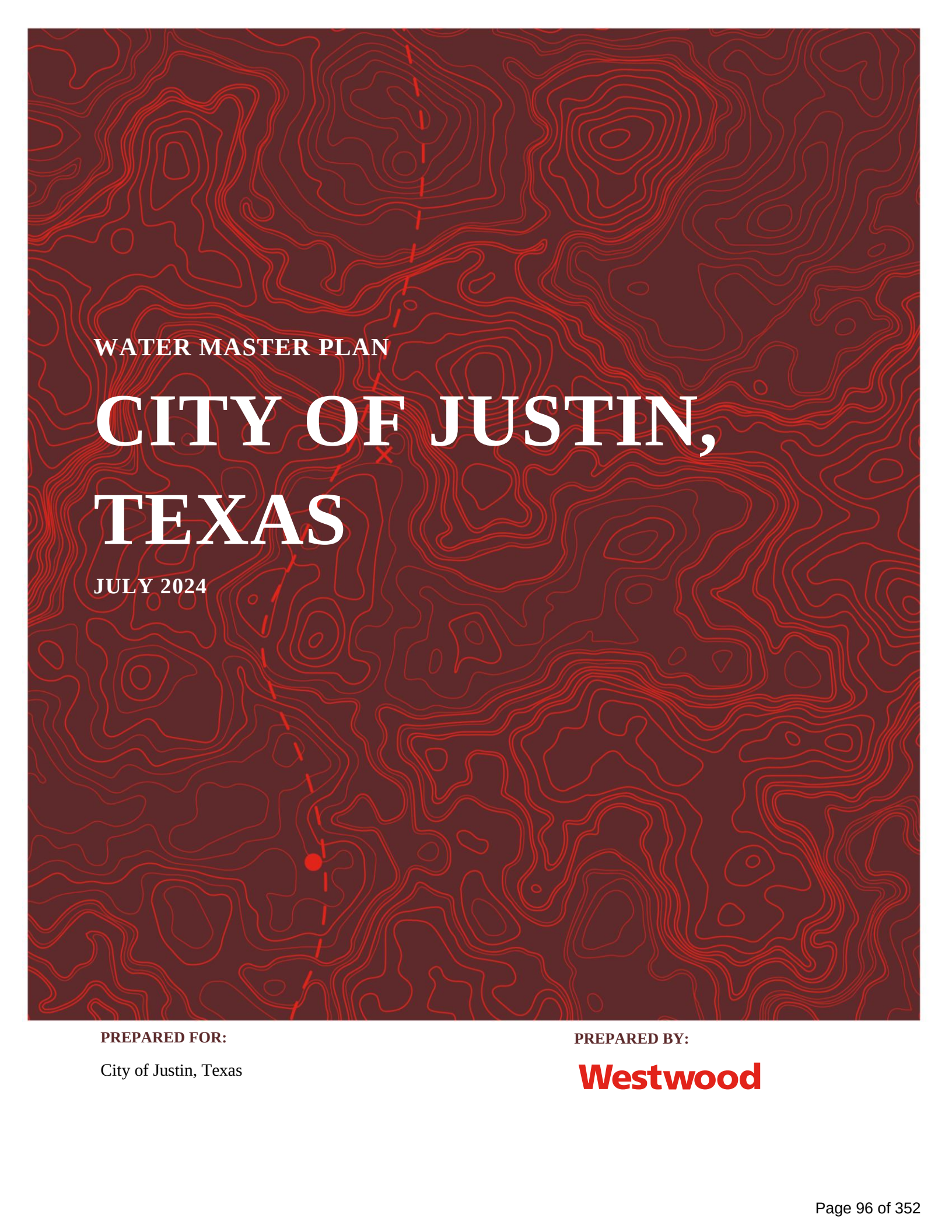
On May 2, 2023, the City of Justin entered into an agreement with Westwood Professional Services, Inc. for planning services related to the UDC, Master Planning, FM 156 Planning, Old Town Planning, Ad Valorem analysis, and to update the Master Water and Sewer Plan.

The Master Water and Sewer Plan have been nearing completion in the last several months.

City Attorney Review: No

Attachments:

1. Draft Waster Master Plan
2. Draft Wastewater Master Plan



WATER MASTER PLAN

CITY OF JUSTIN, TEXAS

JULY 2024

PREPARED FOR:

City of Justin, Texas

PREPARED BY:

Westwood

City of Justin, Texas

Water Masterplan

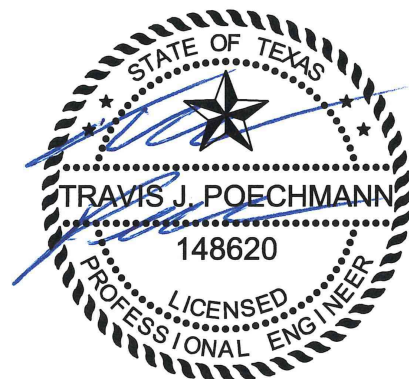
City of Justin, Texas

Prepared For:

City of Justin, Texas, Texas

Prepared By:

Westwood Professional Services
5725 W. Badura Avenue, Suite 100
Las Vegas, NV 89118
Phone: (702) 284-5300



Digitally signed by Travis Poechmann
Date: 2024.07.10 15:06:26-07'00'

Project Number: R0044439.00
Date: July 2024

Travis Poechmann, P.E.
TX Professional Engineer No. 148620

Assisted by: Jehovana Rios, E.I.

Table of Contents

1	Introduction	1
1.1	Purpose	1
1.2	Contributing Land and Corresponding Land Use Analysis.....	1
1.3	Water Master Planning Assumptions	1
1.4	Design Criteria	2
2	Water Master Plan	3
2.1	Water Pressure Zone Boundaries	3
2.2	Existing Water Demand Flow Rates	3
2.3	Future Water Demand Flow Rates	4
2.4	Storage Capacity.....	4
2.5	Pump Capacity	5
3	Water System Model	7
3.1	Model Development	7
3.2	Model Output	8
4	Recommended Infrastructure	9
4.1	Existing System Improvements	9
4.2	Future System Improvements.....	9
5	Conclusions & Recommendations.....	10
6	References.....	11

List of Tables

Table 2-1	Unit Demands.....	3
Table 2-2	Water Pressure Zone – Static Pressure Bands	3
Table 2-3	Existing Water System Demands	4
Table 2-4	Future Water System Demands	4
Table 2-5	Existing Storage Capacity	4
Table 2-6	Storage System Compliance.....	5
Table 2-7	Required Storage Volumes.....	5
Table 2-8	Peak Hour Flows Per Pressure Zone	5
Table 3-1	Diurnal Curve table	7

List of Appendices

Appendix A Figures

Figure 1 – Land Use Plan

Figure 2 – Water Pressure Zone Map

Figure 3 – Existing Node Map

Figure 4 – Existing Fire Check Node Map

Figure 5 – Existing Water System Schematic

Figure 6 – Future Node Map

Figure 7 – Future Fire Check Node Map

Figure 8 – Future Water System Schematic

1 Introduction

1.1 Purpose

This report provides an update to the January 2021 Water Master Plan prepared by Pacheco Koch for The City of Justin, Texas (COJ). The City of Justin is a fast-growing city near the Dallas Fort Worth Metroplex area in Texas. COJ acquired Extraterritorial Jurisdiction (ETJ) over an external territory which is rapidly being developed and will require water infrastructure improvements to accommodate its growth. This water master plan was prepared for an existing condition including proposed developments to be fully constructed by 2028, and a future condition including a full buildout for the City of Justin and the Extraterritorial Jurisdiction.

The information presented in this report is at a planning level only and should not be considered the final design of the proposed water system. Details of the proposed infrastructure facilities will require refinement as the detailed parcel layouts and roadway plans are developed.

1.2 Contributing Land and Corresponding Land Use Analysis

Assumptions for land use of land contributing to water system demands are listed below and shown on Figure 1 – Land Use Plan in Appendix A.

Existing:

- For all developed land existing land use was assumed, and for submitted/approved plans planned land uses were assumed.
- Existing Homes within ETJ are assumed to be on separate well systems and will not be connected to the water infrastructure in the future.

Future:

- The assumed land uses for future development were either single family residential (SFR) or commercial.
- Parcels directly adjacent to the FM 401 were assumed future commercial and all other land was assumed SFR.

The model was updated using submitted development plans, current NearMap aerials, and the City of Justin existing infrastructure GIS.

1.3 Water Master Planning Assumptions

This section summarizes the design criteria and general assumptions made to develop a hydraulic model and design requirements of proposed water infrastructure:

- A design criterion was established by evaluating adjacent city design standards, existing usage data from the City of Justin, and the Texas Administrative Code.
- This update considers the existing and approved water systems.
- Node elevations used are based on existing grades, proposed street grades and lot elevations.
- Fire flow criteria for proposed developments were assumed to be 1,500 gpm for residential and commercial land use.
- Hazen Williams coefficient of 110 was assumed for all pipelines.

- This analysis assumes that a new Upper Trinity Regional Water District delivery point will supply the 905 water pressure zone directly at the Timberbrook ground storage.

1.4 Design Criteria

This report will propose water infrastructure as a function of the following hydraulic design parameters.

Pressure Requirements:

Per the Texas Administrative Code, the system must be designed to support a minimum pressure of 35 psi at all points within the distribution network, and during fire events the system must maintain a minimum pressure of 20 psi.

Storage Requirements:

Per the Texas Administrative Code, system over 250 connections require a total storage capacity of 200 gallons per connection and systems over 2,500 connections require an elevated storage capacity of 100 gallons per connection.

Pumping Requirements:

Per the Texas Administrative Code, it is required to have two or more pumps with a capacity of 0.6 gpm per connection or a total capacity of at least 1,000 gpm and the ability to meet peak hour demands.

Fire Flow:

Minimum fire flow availability of 1,500 gpm at each hydrant located in single-family residential areas, non-residential or multi-family residential areas.

2 Water Master Plan

To model future infrastructure for the City of Justin, monthly meter billing data for 2021-2022 was obtained from the city. The data was extrapolated to determine average water usage at each connection.

Demands in the existing model were not adjusted and assumed to be accurate based on previous meter data. Units from the existing model were estimated using the previously submitted water master plan for the City of Justin. Base demands placed at junctions were divided by the average usage per connection (0.14 gpm) estimated for the billing data for 2019-2020.

Additionally, the water master plan update prepared in 2021 utilized an average usage per connection of 0.17 gpm for the Timberbrook development. A portion of Timberbrook was analyzed with a flow of 0.17gpm per connection.

For all unit demands a maximum day and peak hour peaking factor of 1.9 and 2.5 were used, respectively. See Table 2-1 for a summary of all unit demands calculated.

TABLE 2-1 UNIT DEMANDS

Unit Demand	gpm/connection
Commercial 2024	0.41
Commercial Max Day 2024	0.78
Residential 2024	0.31
Residential Max Day 2024	0.59
Bill Average	0.14
Bill Average Max Day	0.27
Timberbrook PK 2021	0.17
Timberbrook PK Max Day 2021	0.32

2.1 Water Pressure Zone Boundaries

The City of Justin contains two (2) water pressure zones: 832 WPZ and 905 WPZ. The water pressure zones are based on static pressure bands summarized in Table 2-2. See Figure 2 – Water Pressure Zone Map for the City of Justin’s water service pressure planes.

TABLE 2-2 WATER PRESSURE ZONE – STATIC PRESSURE BANDS

Zone	Highest Elevation (ft)	Lowest Pressure @ minimum storage level (psi)	Lowest Elevation (ft)	Highest Pressure @ maximum storage level (psi)
832	690	48.48	590	104.76
905	790	36.79	690	93.07

2.2 Existing Water Demand Flow Rates

The units modeled for the existing water system and their corresponding demands are summarized per water pressure zone in Table 2-3.

TABLE 2-3 EXISTING WATER SYSTEM DEMANDS

Zone	Units	Avg Day	Max Day	Peak Hour ¹
832	3,305.24	565.95	1,078.12	1,414.87
905	2,375.88	714.75	1,360.12	1,786.87
Total	5,681.12	1,280.70	2,438.24	3,201.74

¹ Peak hour peaking factor was assumed to be 2.5 times the average day demand.

2.3 Future Water Demand Flow Rates

The units modeled for the future water system and their corresponding demands are summarized per water pressure zone in Table 2-4.

TABLE 2-4 FUTURE WATER SYSTEM DEMANDS

Zone	Units	Avg Day	Max Day	Peak Hour
832	7,881.19	2,082.76	3,773.35	5,206.91
905	20,450.06	6,456.54	12,456.24	16,141.35
Total	28,331.25	8,539.30	16,229.59	21,348.25

¹ Peak hour peaking factor was assumed to be 2.5 times the average day demand.

2.4 Storage Capacity

Existing Storage

The current storage of the COJ consists of three (3) elevated tanks with a total of 1.6 million gallons of storage capacity and two (2) ground storage tanks with a total of 1.5 million gallons of storage capacity. See Table 2-5 for locations, volumes, elevations, and corresponding water pressure zones.

TABLE 2-5 EXISTING STORAGE CAPACITY

Elevated Storage Location	Volume (gal)	WPZ	Max level (ft)	Min level (ft)	Ground Elevation
Snyder St	300,000	832	832	802	657.7
Reatta Dr	300,000	832	832	802	665.4
W 7th Street	1,000,000	905	905	874	730
SUBTOTAL	1,600,000				
Ground Storage Location	Volume (gal)	WPZ	Max level (ft)	Min level (ft)	Ground Elevation
4th St	500,000	832	670	640	640
W 7th Street	1,000,000	905	760	730	730
SUBTOTAL	1,500,000				
TOTAL	3,100,000				

The City of Justin currently meets the storage requirements set forth by the Texas Administrative Code (TAC). See Table 2-6 for a summary of system compliance.

TABLE 2-6 STORAGE SYSTEM COMPLIANCE

Existing	Compliance Assessment	WPZ	Number of Connections	TAC Capacity Requirement / connection		Required Amount		Actual Amount		System Compliant
Storage	Total Storage	832	3,305	200	gal/conn	661,048	gal	1,100,000	gal	TRUE
		905	2,376			475,177	gal	2,000,000	gal	TRUE
	Elevated Storage	832	3,305	100	gal/conn	330,524	gal	600,000	gal	TRUE
		905	2,376			237,588	gal	1,000,000	gal	TRUE

Future Storage

For the buildout scenario the City of Justin will require storage upgrades to meet storage requirements. See table 2-7 for proposed supplemental storage at the city buildout.

TABLE 2-7 REQUIRED STORAGE VOLUMES

Proposed	Volume (gal)	WPZ
EST	188,119	832
EST	1,045,006	905
GST	288,119	832
GST	1,045,006	905

2.5 Pump Capacity

The TAC requires a water system to have a pump capacity equivalent to the peak hour demands of the system; or to have a storage capacity of 200 gallons per connection and two service pumps with a minimum capacity of 0.6 gpm per connection at each pressure plane. See Table 2-8 for minimum calculated pump capacities for the existing system and an estimate of units that can be constructed before major pump station upgrades are required.

TABLE 2-8 EXISTING PUMP CAPACITIES PER PRESSURE ZONE

WPZ	Peak Hour	0.6 * units	Required Pump Capacity (gpm)	Existing Pump Station Capacity (gpm)	Remaining Capacity (gpm)	Unit Capacity (units)
832	1,414.87	1,983.14	1,414.87	2,500	1,085.13	1,808
905	1,786.87	1,425.53	1,425.53	3,000	1,574.47	2,624

The existing system meets pumping requirements for both pressure zones but will require a supplemental pumping capacity of approximately 2,228.71 gpm for the 832 WPZ and 9,270.04 gpm for the 905 WPZ at the buildout condition. See Table 2-9 for future pump capacity calculations and the pump capacity required to support future demands.

TABLE 2-9 FUTURE PUMP CAPACITIES PER PRESSURE ZONE

WPZ	Peak Hour	0.6 * units	Required Pump Capacity (gpm)	Existing Pump Station Capacity (gpm)	Required Supplemental Pump Capacity (gpm)
832	5,206.91	4,728.71	4,728.715	2,500	2,228.71
905	16,141.35	12,270.04	12,270.036	3,000	9,270.04

3 Water System Model

3.1 Model Development

Hydraulic analyses were run for the following scenarios:

1. 24-hour extended period simulation (EPS) of existing system with maximum day demands
2. Maximum day demands plus emergency fire flow of the existing system.
3. 24-hour extended period simulation (EPS) of the future system with maximum day demands
4. Maximum day demands plus emergency fire flow of the future system.

The 24-hour EPS model was modeled using the diurnal demand pattern in Table 3-1 with an average maximum day peaking factor of 1.9 and a peak hour factor of 2.5 and a secondary peak of 2.4.

TABLE 3-1 DIURNAL CURVE TABLE

Hour	Peaking Factor
0	1.55
1	1.72
2	1.95
3	2.10
4	2.33
5	2.43
6	2.50
7	2.33
8	1.90
9	1.74
10	1.73
11	1.75
12	1.75
13	1.74
14	1.71
15	1.60
16	1.60
17	1.69
18	1.78
19	2.20
20	2.40
21	1.80
22	1.66
23	1.55
Average	1.90

Demands were input into the model as a function of land use, see Figure 1 - Land Use Map. Demands were assigned to a single node or distributed evenly among nodes within the land use.

All planned developments, except for Treeline Phases 2, 3, 4, and 5, with planned unit counts and corresponding land use were included in the existing EPS model.

For the future EPS model, 7 commercial units and 5 residential units were assumed per acre. A total of 3,693.63 acres of which 198.28 were commercial were included in the future analysis. Total system units for the existing and future models are summarized in Table 2-3 and Table 2-4, respectively.

3.2 Model Output

The junction pressures for maximum day and maximum day plus fire flow are presented in Figures 3 and 4 for the existing model and Figures 6 and 7 for the future model. The data can be compared with the operational requirements presented in Section 1.4 “Design Criteria” of this report.

4 Recommended Infrastructure

4.1 Existing System Improvements

The existing model update identified improvements that are recommended for the current water system.

To separate the water pressure zones, gate valves need to be closed at the intersection of Timber Ridge Drive and Hackberry Lane and at the intersection of Wrenwood Drive and Hackberry Lane. A third gate valve along Hillside Drive just west of Summit Drive is also required to be closed. However, the existing system is not meeting the 20-psi requirement at all fire hydrant locations during the maximum day plus 1,500 gpm fire flow scenario in this area. It is recommended that in lieu of the third gate valve a PRV station is introduced on Hillside Drive to be closed during all flow conditions and only to provide flow to the lower pressure zone during low pressure times caused by fire events. To accomplish this outcome the PRV should be set to 35-40 psi with a recommended setting of 40 psi. See Figure 5 for a water system schematic of the existing system.

4.2 Future System Improvements

In the future, the amount of flow that will be required of the reservoir on 3rd Street and Snyder Ave will trigger pipeline size increases. The 6-inch pipeline along the corridor between 3rd Street and 4th Street from College Avenue to Sealey Avenue, and the 8-inch outlet from the reservoir and additional 8-inch segment ending at Snyder Avenue will all need to be increased to 16-inch. This pipeline upgrade will allow the elevated storage tank on Reatta Drive to be properly filled and diminish low levels at peak hours.

To supply all future developments in the 905 pressure plane the following improvements will be required: additional pumping capacity to the Timberbrook Pump Station, a 1.0 MG ground storage, a 1.0 MG elevated storage, a 24-inch backbone to convey water to the 905 WPZ, and a secondary 16-inch feed from the Timberbrook pump station to the elevated storage at the proposed location on FM 407 and B Judge Lane. There was no location selected for additional ground storage required. Refer to sections 2.4 “Storage Capacity” and 2.5 “Pump Capacity” for storage and pumping requirements at buildout conditions.

Currently the Timberbrook EST and adjacent pump station are sharing an outlet transmission. Increasing the pumping capacity at Timberbrook would cause the EST to be in a constant full state and never drain appropriately. Once pump station upgrades are done to the Timberbrook pump station a dedicated inlet and outlet will be needed to control the levels of the EST. A possible solution which was modeled in the future EPS system would be to add controls to the inlet pipe to only open when elevations in the EST reach 880-ft and close when the EST is full.

To supply all future developments in the 832 pressure plane, the following improvements will be required: additional pumping capacity at the 4th Street pump station, a 0.2 MG elevated storage, and a 0.3 MG ground storage. Refer to sections 2.4 “Storage Capacity” and 2.5 “Pump Capacity” for storage and pumping requirements at buildout conditions. See Figure 8 for a water system schematic of the future system.

5 Conclusions & Recommendations

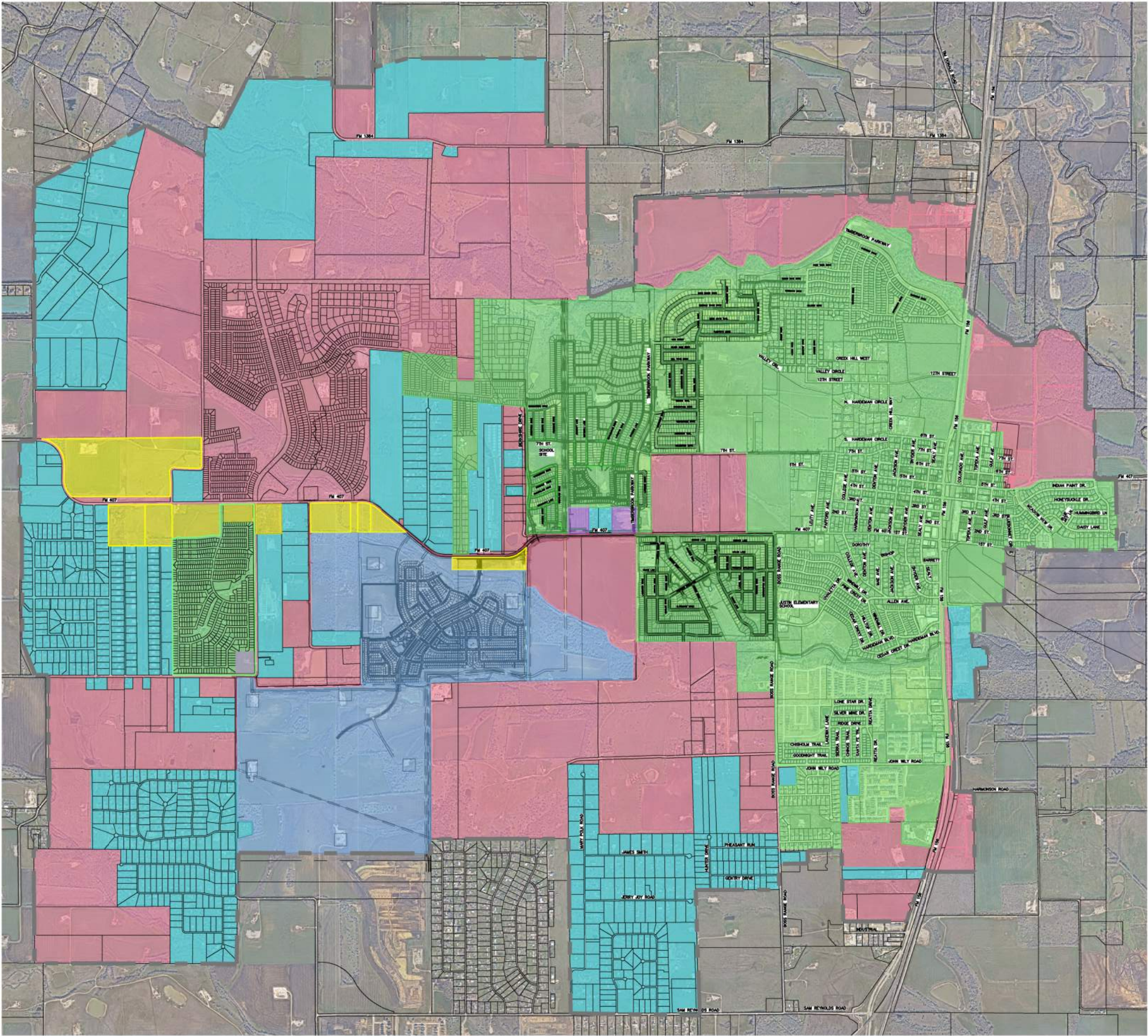
The water infrastructure for the City of Justin, Texas has been planned to meet the requirements of the TAC. The design and construction of the proposed water infrastructure shall generally conform to the recommendations of this master plan. If any further changes to the land use plan in Figure 1 occur, including but not limited to changes in parcel acreage and densities, the water master plan shall be re-evaluated to verify whether revisions to the infrastructure master plan will need to be made.

6 References

Pacheco Koch Consulting Engineers, INC. (2021). *City of Justin Water Master Plan*. Dallas, Texas.

The State of Texas. (n.d.). Title 30 - Environmental Quality. Texas Administrative Code.

Appendix A
Figures



LEGEND

- PROJECT BOUNDARY
- CITY OF JUSTIN LIMITS
- COMMERCIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - RESIDENTIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - COMMERCIAL
- TREELINE DEVELOPMENT
- EXTRATERRITORIAL JURISDICTION (ETJ) - NOT A PART



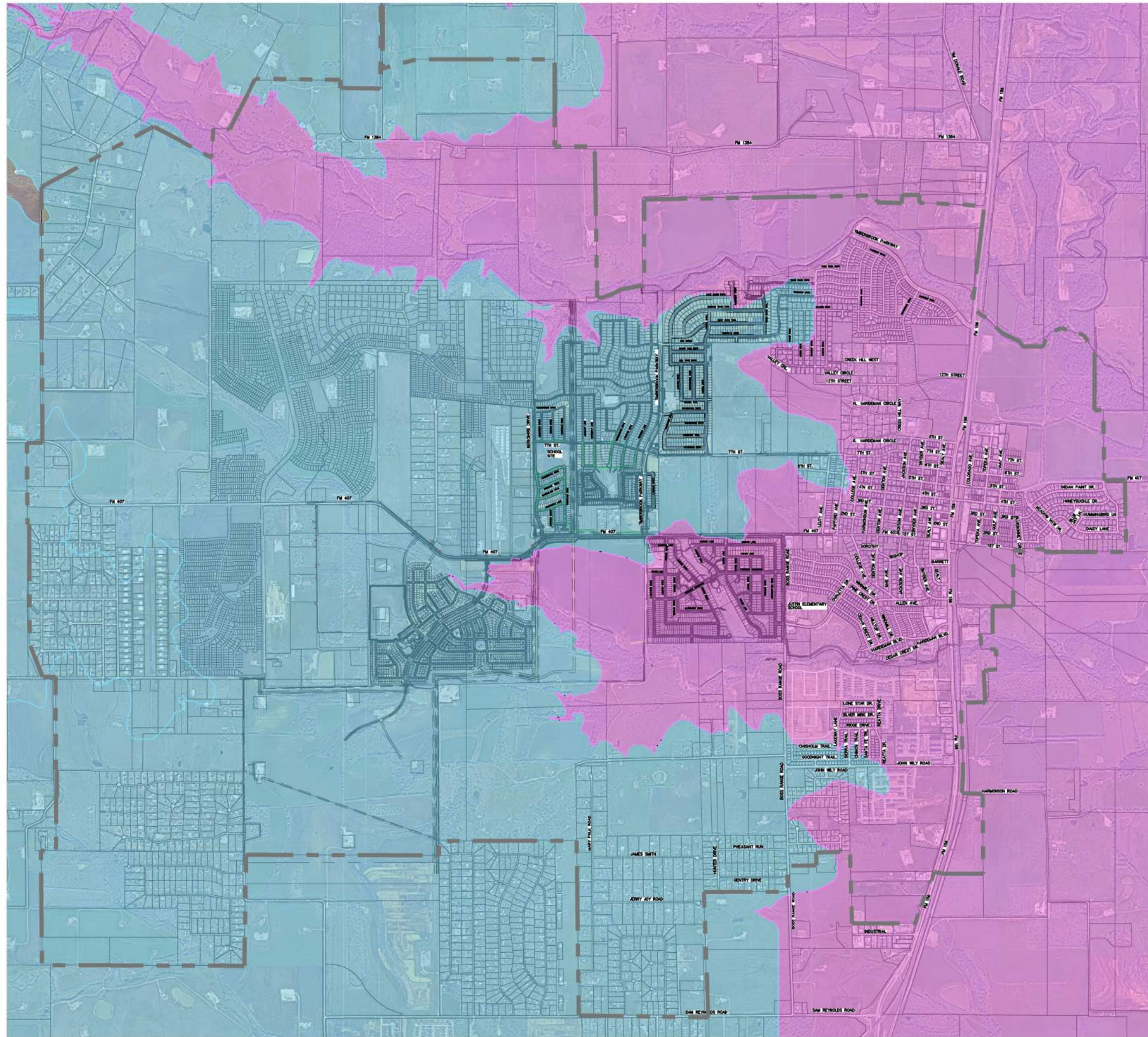
CITY OF JUSTIN, TEXAS
CITY OF JUSTIN WATER MASTER PLAN UPDATE
LAND USE PLAN

DATE: June 24
DRAFTER: JR
DESIGNER: JR
CHECKED: TJP
PROJECT NO. -

FIGURE 1
SHEET 1 OF 1

Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

NO.	DESCRIPTION	DATE	BY	APP.



LEGEND

-  PROJECT BOUNDARY
 905 WATER PRESSURE ZONE
 832 WATER PRESSURE ZONE



CITY OF JUSTIN, TEXAS

**CITY OF JUSTIN WATER MASTER PLAN UPDATE
WATER PRESSURE ZONE MAP**

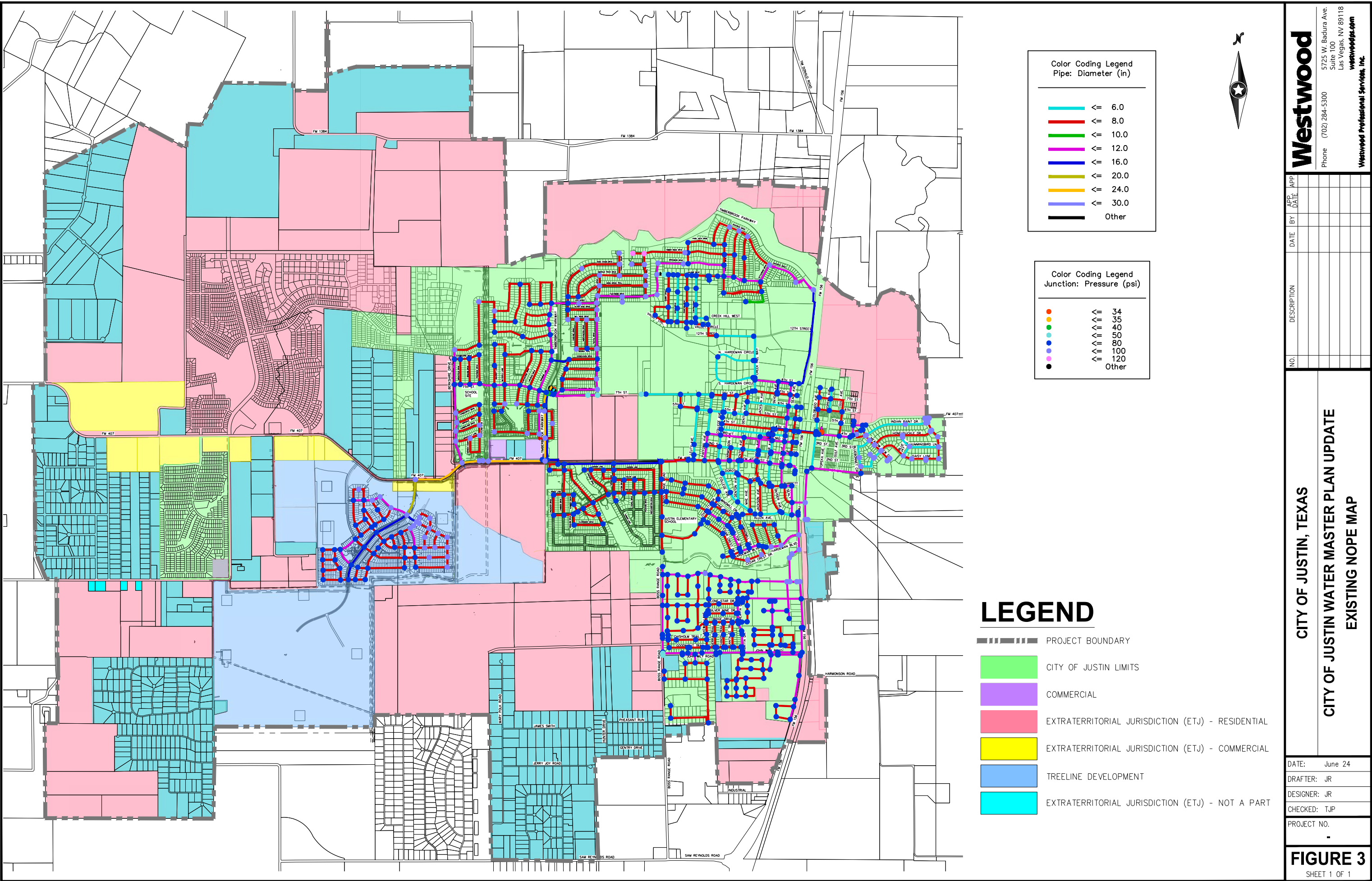
DATE:	June 24
DRAFTER:	JR
DESIGNER:	JR
CHECKED:	TJP
PROJECT NO.	

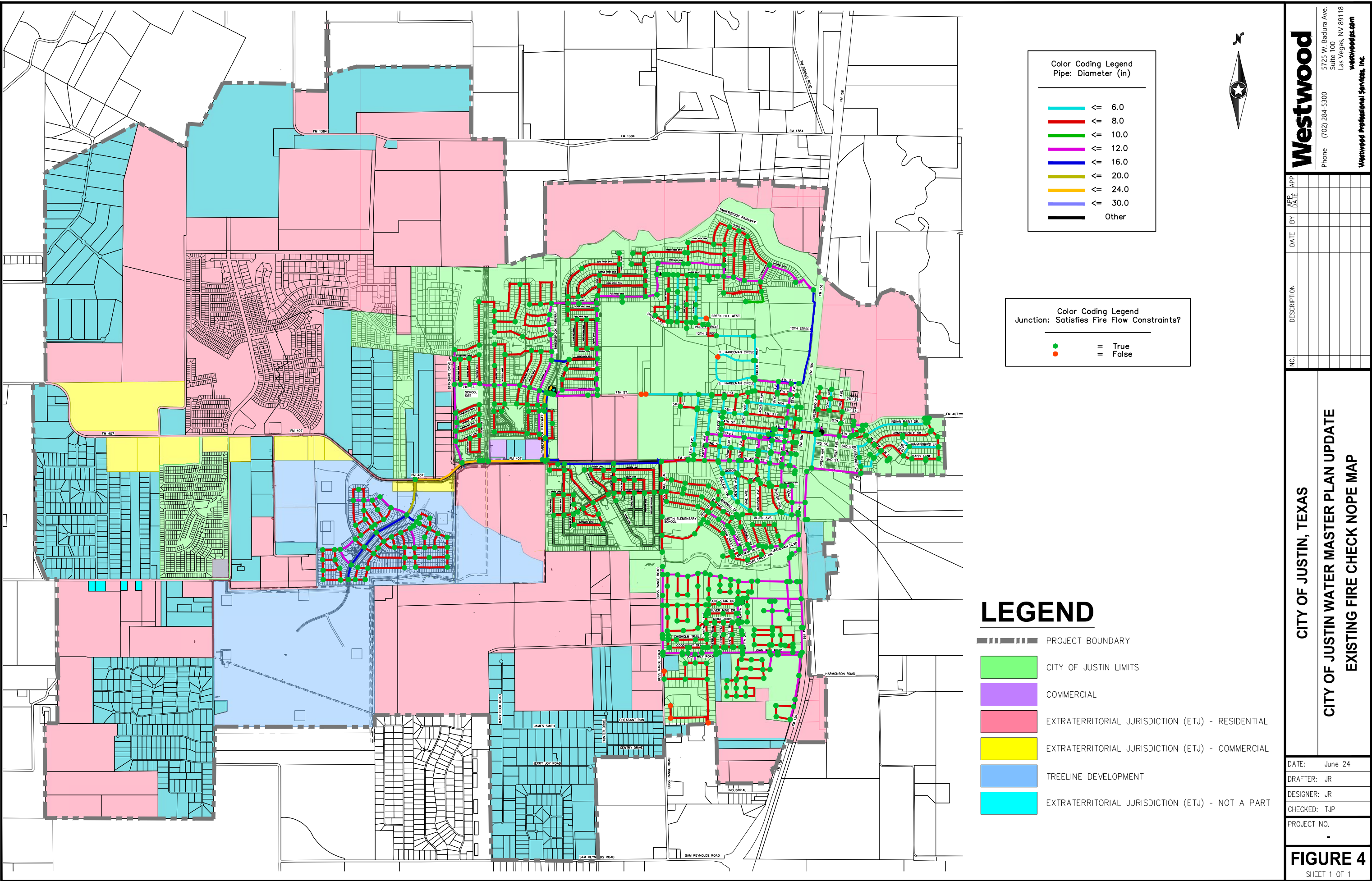
FIGURE 2
SHEET 1 OF 1

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Westwood

Phone (702) 284-5300 5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.





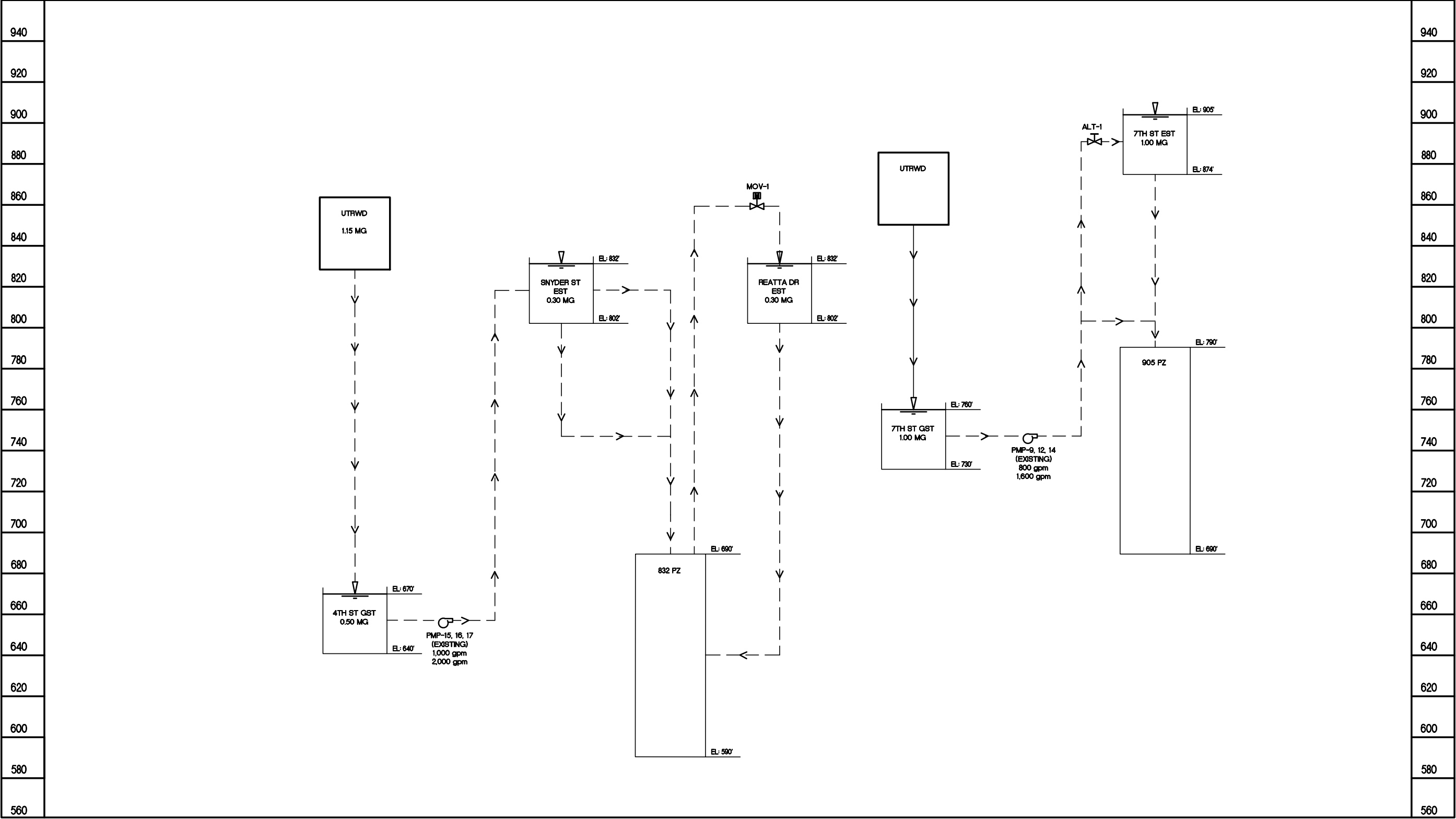
CITY OF JUSTIN, TEXAS
CITY OF JUSTIN WATER MASTER PLAN UPDATE
EXISTING FIRE CHECK NOPE MAP

NO.	DESCRIPTION	DATE	BY	APP.	DATE

Westwood
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
westwoodps.com
Westwood Professional Services, Inc.

DATE:	June 24
DRAFTER:	JR
DESIGNER:	JR
CHECKED:	TJP
PROJECT NO.	-

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CITY OF JUSTIN, TEXAS

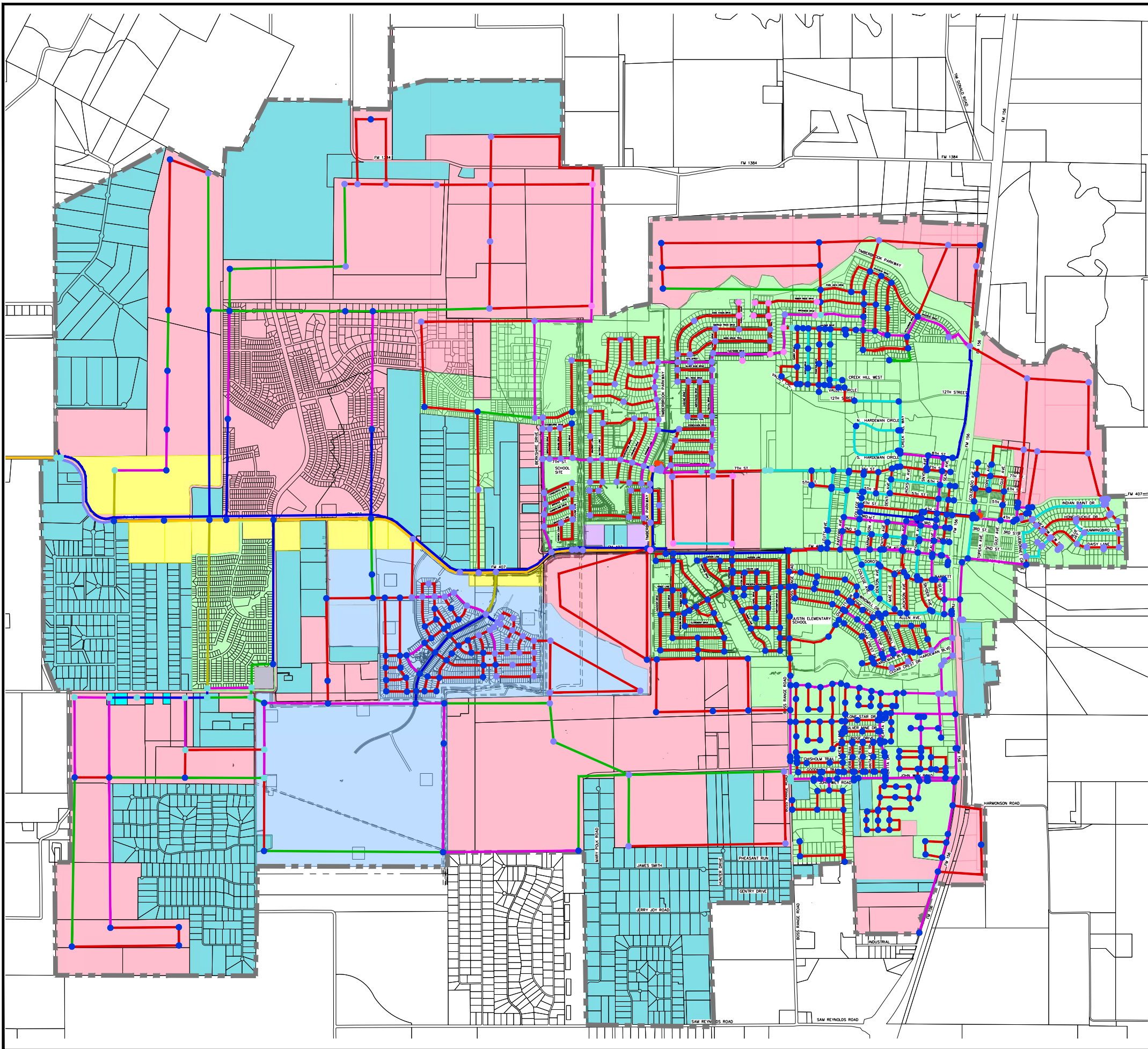
CITY OF JUSTIN WATER MASTER PLAN UPDATE
EXISTING WATER SYSTEM SCHEMATIC

DATE: June 2024
DRAFTER: JR
DESIGNER: JR
CHECKED: TJP
PROJECT NO.

FIGURE 5
SHEET 1 OF 1

Westwood
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Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
Fax (702) 284-5399
www.westwood.com
Westwood Professional Services, Inc.

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LEGEND

- PROJECT BOUNDARY
- CITY OF JUSTIN LIMITS
- COMMERCIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - RESIDENTIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - COMMERCIAL
- TREELINE DEVELOPMENT
- EXTRATERRITORIAL JURISDICTION (ETJ) - NOT A PART

Color Coding Legend	
Pipe: Diameter (in)	
—	≤ 6.0
—	≤ 8.0
—	≤ 10.0
—	≤ 12.0
—	≤ 16.0
—	≤ 20.0
—	≤ 24.0
—	≤ 30.0
—	Other

Color Coding Legend	
Junction: Pressure (psi)	
●	≤ 34
●	≤ 35
●	≤ 40
●	≤ 50
●	≤ 80
●	≤ 100
●	≤ 120
●	Other



CITY OF JUSTIN, TEXAS

CITY OF JUSTIN WATER MASTER PLAN UPDATE

FUTURE NOPE MAP

DATE: June 24

DRAFTER: JR

DESIGNER: JR

CHECKED: TJP

PROJECT NO. -

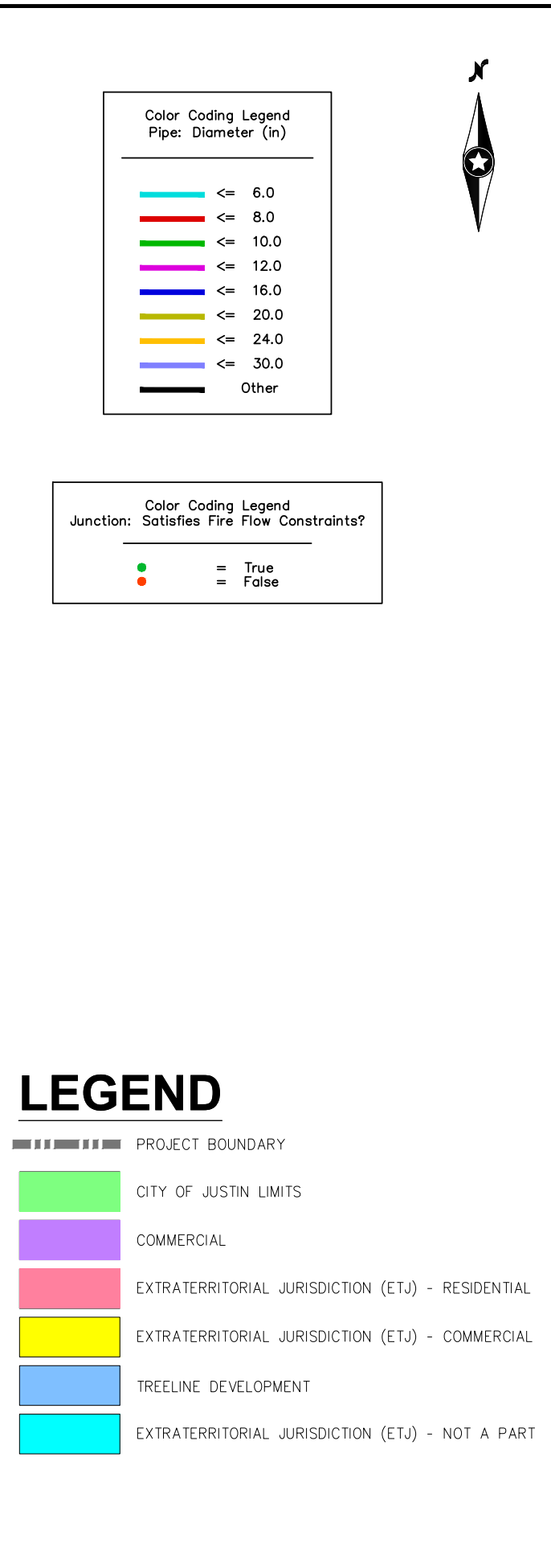
FIGURE 6

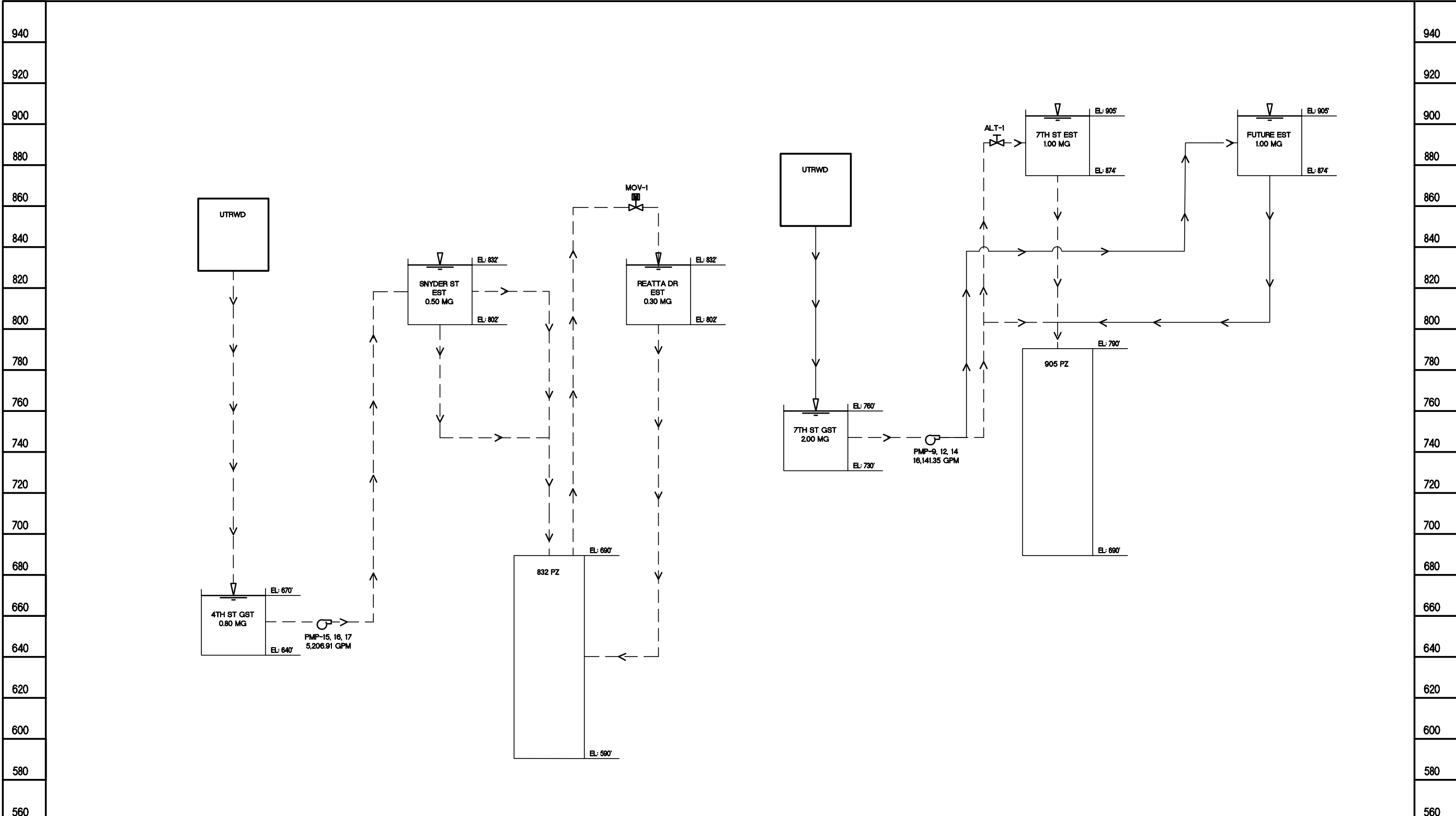
SHEET 1 OF 1

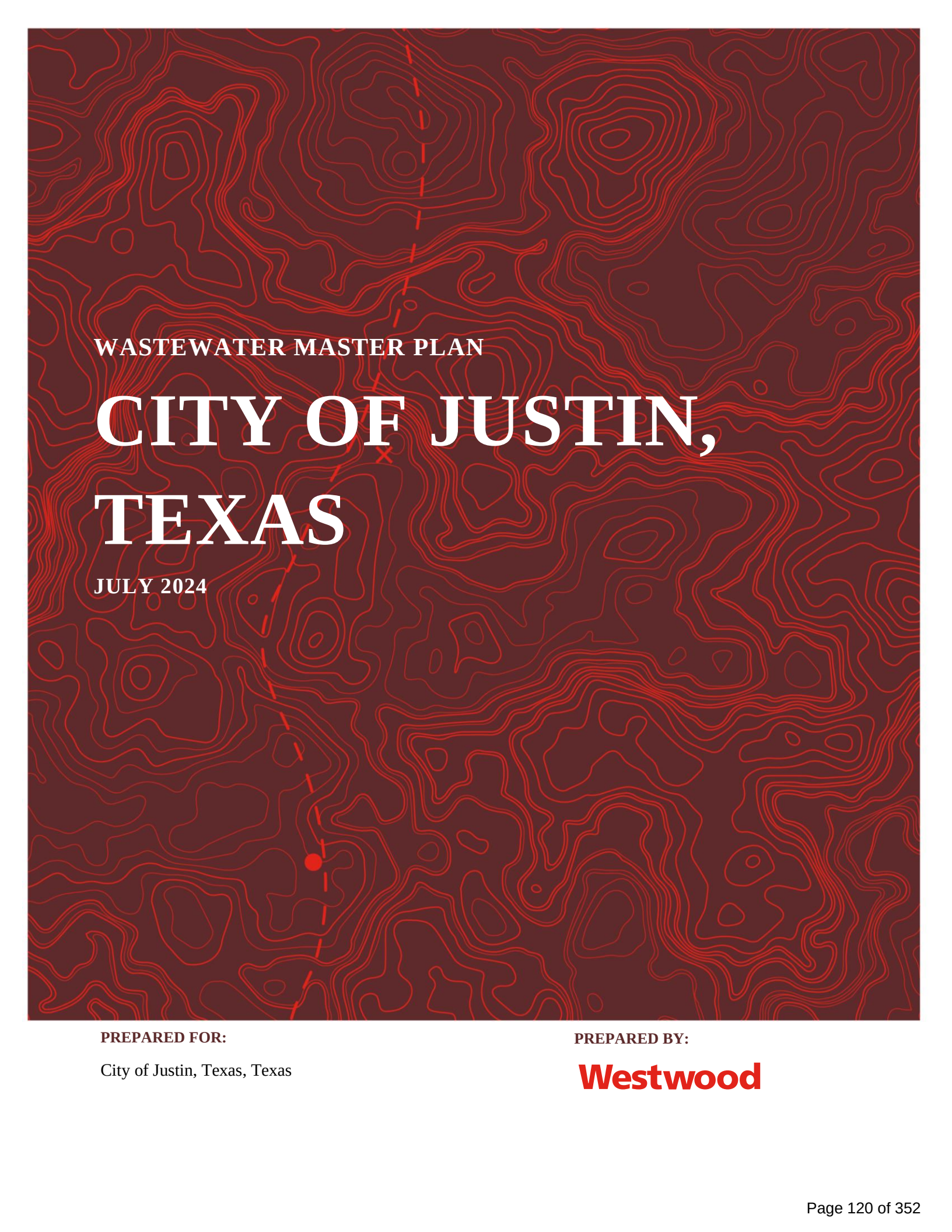
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NO.	DESCRIPTION	DATE	BY	APP.	DATE







WASTEWATER MASTER PLAN

CITY OF JUSTIN, TEXAS

JULY 2024

PREPARED FOR:

City of Justin, Texas, Texas

PREPARED BY:

Westwood

City of Justin, Texas

Wastewater Masterplan

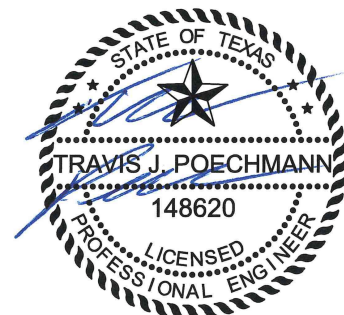
City of Justin, Texas

Prepared For:

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Prepared By:

Westwood Professional Services
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Digitally signed by Travis Poechmann
Date: 2024.07.10 15:06:00-07'00'

Project Number: R0044439.00
Date: July 2024

Travis Poechmann, P.E.
TX Professional Engineer No. 148620

Assisted by: Abel Garcia Morales, E.I.

Table of Contents

1 Introduction 3

1.1 Project Overview 3

1.2 Land Use to Wastewater System Analysis 3

1.3 Operational Requirements 4

2 Wastewater Contributions..... 5

2.1 Wastewater Contribution Rates 5

2.2 Existing Wastewater System Basin Contributions 5

2.3 Future Wastewater System Basin Contributions 5

3 Wastewater Collection System Model 7

3.1 Model Physical Attributes Development..... 7

3.2 Model Evaluation 7

3.3 Model Output 7

4 Existing Buildout Recommended Improvements 8

5 Future Buildout Recommended Improvements..... 10

6 Conclusions & Recommendations..... 12

7 References..... 12

List of Tables

Table 1.1: Assumed Gravity Sewer Design Criteria..... 4

Table 2.1: City of Justin Wastewater Contribution Rates..... 5

Table 2.2: Existing Wastewater System Basin Contributions 5

Table 2.2: Future Justin Treatment Plant Wastewater System Basin Contributions 6

Table 2.2: Future Denton Creek Outfall Wastewater System Basin Contributions..... 6

Table 4.1: Existing Buildout Wastewater Model Improvements..... 8

Table 4.2: Pipe Flow Capacity Calculations..... 9

Table 5.1: Future Buildout Wastewater Model Improvements..... 10

Table 5.2: Pipe Flow Capacity Calculations 11

List of Appendices

Appendix A Figures

Figure 1 – City of Justin Land Use Plan

Figure 2 – Basin Map

Figure 3 – Peak Dry Weather Flow – Existing Node Map

Figure 4 – Peak Dry Weather Flow – Existing d/D Map

Figure 5 – Peak Dry Weather Flow – Existing Improvements Node Map

Figure 6 – Peak Dry Weather Flow – Existing Improvements d/D Map

Figure 7 – Peak Dry Weather Flow – Future Buildout Node Map

Figure 8 – Peak Dry Weather Flow – Future Buildout d/D Map

Figure 9 – Peak Dry Weather Flow – Future Buildout Improvements Node Map

Figure 10 – Peak Dry Weather Flow – Future Buildout Improvements d/D Map

Appendix B SewerGems Model Output Tables

1 Introduction

1.1 Project Overview

This report provides a wastewater master plan for the existing and future infrastructure facilities for the City of Justin, Texas including Extraterritorial Jurisdiction (ETJ) acquired in the last few years.

An existing wastewater model originally from 2013 was used as the base model. The model was updated to show current construction/planned development. The assumed existing infrastructure was determined to be infrastructure near the end of the design stage and close to construction/plans approval. The future infrastructure was considered as full buildout of City of Justin including ETJ. See Figure 1 – Location Map, for the project location in Appendix A.

The information presented in this report is at a planning level only and should not be considered the final design of the proposed wastewater system. Details of the proposed infrastructure facilities will require refinement as the detailed parcel layouts and roadway plans are developed.

1.2 Land Use to Wastewater System Analysis

Land Use to Wastewater System analysis assumptions are listed below. See Figure 2 – Land Use Plan in Appendix A.

Existing,

- Existing infrastructure used existing land uses while areas with submitted/approved plans used the planned land uses.
- Existing Homes within ETJ are assumed to be on septic and it is assumed that they will not be connected to the sewer infrastructure in the future.
- Existing lift stations discharge flow rates are assumed to match the basin peak flow for modeling purposes.

Future Areas,

- The assumed land uses for future development were either single family residential (SFR) or commercial. Future single family was assumed to have a density of 5 Single Family Residential units per acre. Future commercial parcels used a sewer contribution rate of 1,500 gpd/acre.
- Parcels directly adjacent to the FM 401 were assumed future commercial and all other land was assumed SFR.
- Future lift stations discharge flow rates are assumed to match the basin peak flow for modeling purposes.

The model was updated using submitted development plans, current NearMap aerials, and City of Justin GIS accordingly.

1.3 Operational Requirements

The average flow rate and the peak flow rate are used conjunctively to adequately design and size the wastewater collection system. A design criterion was established by evaluating adjacent city design standards, existing usage data from the City of Justin, and Texas administrative code. Assumed design requirements for gravity sewers collection system is presented in Tables 1.2.

TABLE 1.1: ASSUMED GRAVITY SEWER DESIGN CRITERIA

Design Parameter	Requirement
Minimum Gravity Pipe Diameter (inches)	6
Minimum Design Pipe Slope (ft/ft)	0.003 (Future) 0.0010 (Existing)
Minimum Velocity (fps)	2.0 @ 50% full
Maximum Depth to Diameter (d/D) Ratio	Full Pipe Flow ⁽¹⁾
Mannings Friction Coefficient	N = 0.013
Peaking Factor	4

Notes:
1) A d/D ratio of 0.96 or 96% was used to be conservative and allow time to execute design and construction of improvements.

2 Wastewater Contributions

2.1 Wastewater Contribution Rates

Wastewater contribution flow rate evaluation used treatment plan data records. Table 2.1 summarizes the applicable wastewater contribution rates used.

TABLE 2.1: CITY OF JUSTIN WASTEWATER CONTRIBUTION RATES

Land Use	Contribution Rates (gpd/Unit)	Contribution Rates (gpd/Acre)
Single-Family Residential (SFR)	220	1,100 ⁽¹⁾
Multi-Family Residential (MFR)	180	---
Commercial/Non-Residential	---	1,500

Notes:

- 1) Future model assumes a density of 5 units per acre, thus 1,100 gpd/acre.

2.2 Existing Wastewater System Basin Contributions

The existing wastewater system contains multiple smaller basins connected to the existing City of Justin wastewater treatment plant via lift stations. Table 2.2 summarizes the average day flow and peak flow at each basin.

TABLE 2.2: EXISTING WASTEWATER SYSTEM BASIN CONTRIBUTIONS

Basin	Average Day Weather Flow (MGD)	Peak Flow (MGD)
Meadowlands Lift Station	0.0462	0.1849
12 th Street LS (Private)	0.0306	0.1223
12 th Street LS (Downtown)	0.0395	0.1579
Timberbrooks LS	0.2776	1.1106
City of Justin Treatment Plant	2.1261	3.7844
Total Flow	2.5200	5.3601

2.3 Future Wastewater System Basin Contributions

City of Justin sewer is planned to connect to the Trinity River Authority of Texas Denton Creek Regional Wastewater System. The future wastewater system model contains multiple smaller basins connected to two outfalls: the existing City of Justin wastewater treatment plant area and Denton Creek. These modeled outfalls will eventually connect to the Denton Creek Regional Wastewater System southeast of City of Justin. Existing topography analysis identified future sewer basins within ETJ that are assumed to connect

to the modeled outfalls via lift stations. Table 2.3 and Table 2.4 summarizes the average day flow and peak flow at each basin.

TABLE 2.3: FUTURE JUSTIN TREATMENT PLANT WASTEWATER SYSTEM BASIN CONTRIBUTIONS

Basin	Average Day Weather Flow (MGD)	Peak Flow (MGD)
Meadowlands Lift Station	0.0462	0.1849
12 th Street LS (Private)	0.0306	0.1223
12 th Street LS (Downtown)	0.0395	0.1579
Timberbrooks LS	0.3906	1.2235
Southwest ETJ LS	0.3933	1.5732
City of Justin Treatment Plant	5.0754	14.3371
Total Flow	5.9756	17.5989

TABLE 2.4: FUTURE DENTON CREEK OUTFALL WASTEWATER SYSTEM BASIN CONTRIBUTIONS

Basin	Average Day Weather Flow (MGD)	Peak Flow (MGD)
North ETJ LS	1.3029	5.2116
Denton Creek SS	0.2328	0.9312
Total Flow	1.5357	6.1428

3 Wastewater Collection System Model

3.1 Model Physical Attributes Development

The proposed City of Justin, Texas sewer collector model elevations, as presented in Figures 4 and 5, are based on existing grading and an existing wastewater model. Future manhole rim elevation was placed at existing grade surface. The pipe inverts were set at a minimum of seven feet below the rim elevation, unless the minimum slope requirements (Section 1.4 of this report) were not met, then lower inverts were required. Parcels are assumed to flow towards the main streets regardless of existing grade flow patterns. Parcels with submitted plans used the available plan manhole elevations. Final manhole invert elevations will be finalized during the improvement plans design for future buildout parcels.

Models of the proposed sewer lines were constructed using Bentley's SewerGEMS. SewerGEMS integrates the slopes, pipe sizes, flows, Manning's coefficient, lengths, and peaking factors to produce accurate sewer calculation results. SewerGEMS datasheets for Pipes, Manholes, and Outfalls are included the Appendix B.

3.2 Model Evaluation

The pipe segments were analyzed using peak dry weather flow in the existing conditions and future buildout conditions. All pipe segments with a depth to diameter (d/D) ratio greater than 0.96 were identified in this flow condition. Then, in a new model scenario, pipe segments identified over the d/D threshold set increased one pipe size at a time until the d/D in the new pipe met 0.96 d/D or less. In conditions where an isolated pipe segment was upsized all downstream pipe sizes were also increased to match until connecting to an existing matching pipe size or larger. This iterative process continued until all pipes met the requirements in all scenarios. Models showing all scenarios evaluated and recommended improvements are found in Figures 3 thru 10 in Appendix A.

3.3 Model Output

The manhole and pipe reports for average day flow and peak wet weather flow conditions in existing and future buildout are presented in Appendix B. The data can be compared with the operational requirements presented in Section 1.4 "Operational Requirements" of this report. The scenarios evaluated are listed below.

4 Existing Buildout Recommended Improvements

The existing buildout model update identified improvements that are recommended with the current wastewater collection system.

The 12th Street LS and Timberbrooks LS flows ultimately get discharged into MH-170. Full details of design flow capacity of the Timberbrooks LS are unknown. The peak flow from the Timberbrooks LS basin was used as the design flow for the LS. Based on these assumptions it is recommended to upsize approximately 2,730 LF of existing 12-inch sewer from MH-170 to MH-196 to 14-inch sewer prior to full buildout of the Timberbrooks LS basin. See Table 4.1 for summary.

TABLE 4.1: EXISTING BUILDOUT WASTEWATER MODEL IMPROVEMENTS

Pipe	Upstream MH	Downstream MH	Slope (ft/ft)	Length	Ex. Diameter (Inches)	Proposed Minimum Diameter (Inches)
CO-170	162	163	0.004	334.4	12	14
CO-189	163	153	0.005	333.0	12	14
CO-187	153	164	0.003	162.2	12	14
CO-177	164	158	0.003	187.5	12	14
CO-175	158	165	0.002	200.7	12	14
CO-166	165	166	0.003	153.0	12	14
CO-164	166	167	0.002	167.0	12	14
CO-162	167	168	0.002	367.2	12	14
CO-150	168	173	0.004	459.3	12	14
CO-148	173	188	0.005	365.3	12	14

Please note that the model is preliminary. Physical properties from the previous model were used for existing areas, submitted plans were used for areas in design or construction, and existing grade was used to assume physical attributes for future areas. True lengths and slopes can be surveyed to model more accurately.

It is recommended that the indicated pipes be upsized once an existing pipe flow depth of 90% is reached at the flattest pipe segment slope. This would allow time for design and construction of the improvements before full pipe flow is met in the gravity sewer collection system. Regular inspections in the existing system (old town) are recommended to avoid obstructions of flow during peak flow conditions. Table 4.2 summarizes the pipe flow capacity calculations for various slopes at 90% full. Calculations prepared used Bentley Flowmaster Connect Edition Update 3.

TABLE 4.2: PIPE FLOW CAPACITY CALCULATIONS

Diameter (Inches)	Slope (ft/ft)	Flow (MGD)	D/d (%)
12	0.002	1.0975	90
12	0.003	1.344000	90
12	0.004	1.552000	90
12	0.005	1.735000	90

5 Future Buildout Recommended Improvements

The future buildout model update identified improvements that are recommended within the current wastewater collection system.

At future buildout, it is recommended to upsize sewer along FM 407 near old town, College Ave, Allen Ave, Pafford Ave, a segment in the preserve phase two, and the CP1 to CP2 sewer near the city of Justin treatment plant. See Table 5.1 for summary.

TABLE 5.1: FUTURE BUILDOUT WASTEWATER MODEL IMPROVEMENTS

Pipe	Upstream MH	Downstream MH	Slope (ft/ft)	Length	Ex. Diameter (Inches)	Proposed Minimum Diameter (Inches)
CO-509	472	176	0.006	1,604.9	8	10
CO-140	176	177	0.003	368.4	8	10
CO-139	177	178	0.006	336.3	8	10
CO-138	178	179	0.026	38.0	8	10
CO-321	85	177	0.008	890.7	8	10
CO-320	86	179	0.005	760.4	6	8
CO-137	179	180	0.010	388.6	8	10
CO-136	180	181	0.013	687.9	8	10
CO-135	181	182	0.007	287.4	8	12
CO-133	182	183	0.003	389.0	8	12
CO-132	183	184	0.005	189.0	8	12
CO-131	184	185	0.014	217.1	8	12
CO-129	185	186	0.008	598.4	8	12
CO-128	186	187	0.047	0.047	8	12
CO-127	187	188	0.006	137.1	8	12
CO-449	21	358	0.003	147.3	12	15
CO-450	359	202	0.003	347.3	12	15
CO-358	426	427	0.003	294.4	30	36
CO-359	427	428	0.003	300.8	30	36
CO-361	428	429	0.004	212.1	30	36
CO-362	429	430	0.002	203.9	30	36
CO-364	430	431	0.002	84.1	30	36
CO-365	431	432	0.001	317.5	30	36
CO-368	432	433	0.001	556.6	30	36
CO-369	433	Justin Treatment Plant Outfall	0.034	189.0	30	36

Please note that the model is preliminary. Physical properties from the previous model were used for existing areas, submitted plans were used for areas in design or construction, and existing grade was used to assume physical attributes for future areas. True lengths and slopes can be surveyed to model more accurately.

Table 4.2 summarizes the pipe flow capacity calculations for various slopes at 90% full. Calculations prepared used Bentley Flowmaster Connect Edition Update 3.

TABLE 5.2: PIPE FLOW CAPACITY CALCULATIONS

Diameter (Inches)	Slope (ft/ft)	Flow (MGD)	D/d (%)
6	0.005	0.2733	90
8	0.003	0.4560	90
8	0.004	0.5265	90
8	0.005	0.5887	90
12	0.002	1.0975	90
12	0.003	1.3440	90
12	0.004	1.5520	90
12	0.005	1.7350	90
30	0.001	8.9360	90
30	0.002	12.6370	90
30	0.003	15.4780	90

6 Conclusions & Recommendations

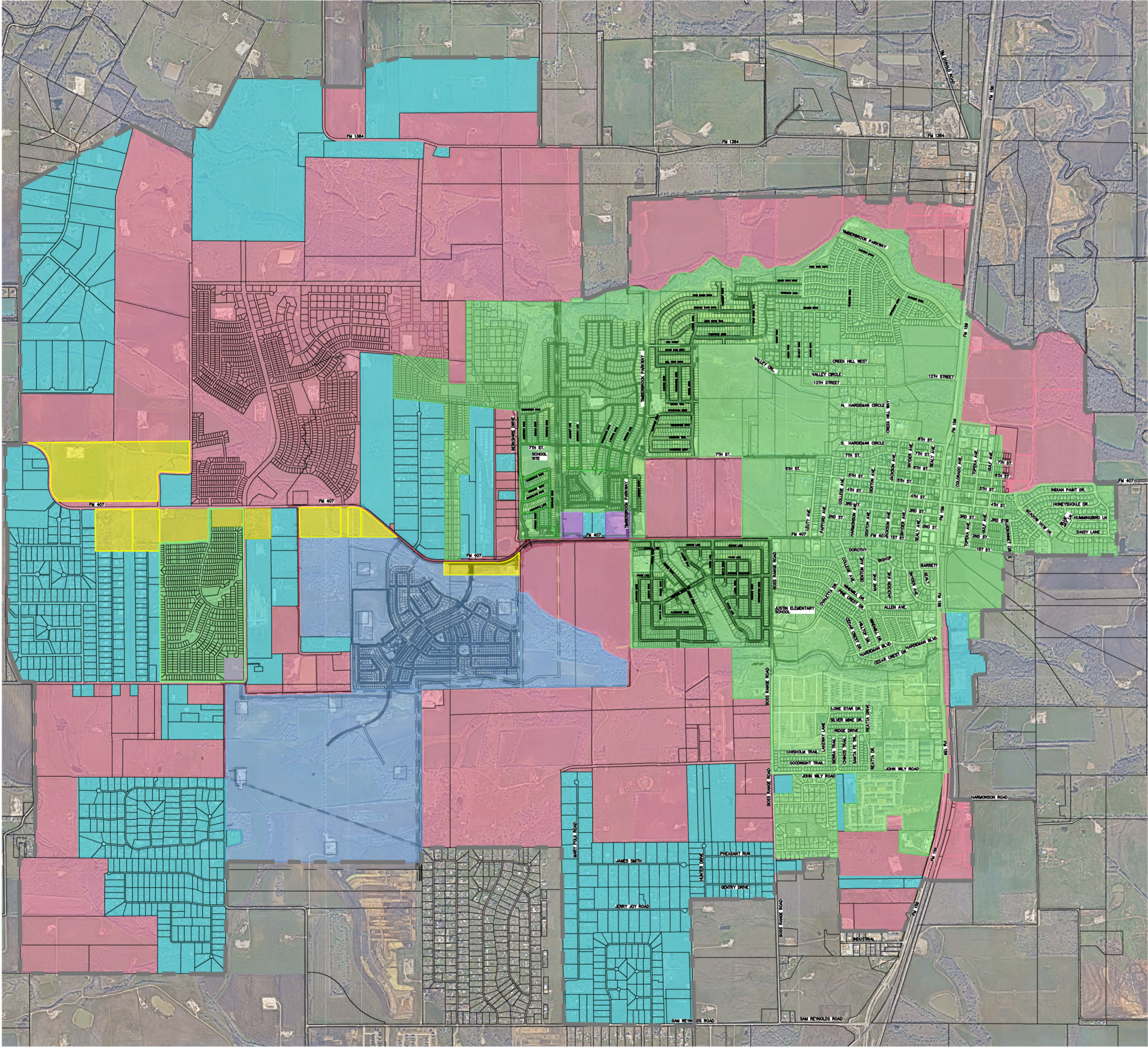
The wastewater infrastructure for the City of Justin, Texas development has been planned to meet the parameters presented in Section 1. The design and construction of the proposed wastewater infrastructure shall generally conform to the recommendations of this master plan. If flatter slopes are proposed during design the normal depth d/D shall be reevaluated to satisfy operational requirements from Section 1.3. If any further changes to the land use plan in Figure 1 occur, including but not limited to changes in parcel acreage, densities, and/or sewer routing, the wastewater master plan shall be re-evaluated to verify whether revisions to the infrastructure master plan will need to be made.

7 References

1. *The State of Texas. (n.d) Title 30 – Environmental Quality, Texas Administrative Code.*

Appendix A

Figures



LEGEND

- PROJECT BOUNDARY
- CITY OF JUSTIN LIMITS
- COMMERCIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - RESIDENTIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - COMMERCIAL
- TREELINE DEVELOPMENT
- EXTRATERRITORIAL JURISDICTION (ETJ) - NOT A PART



CITY OF JUSTIN, TEXAS
CITY OF JUSTIN WASTE WATER MASTER PLAN UPDATE
LAND USE PLAN

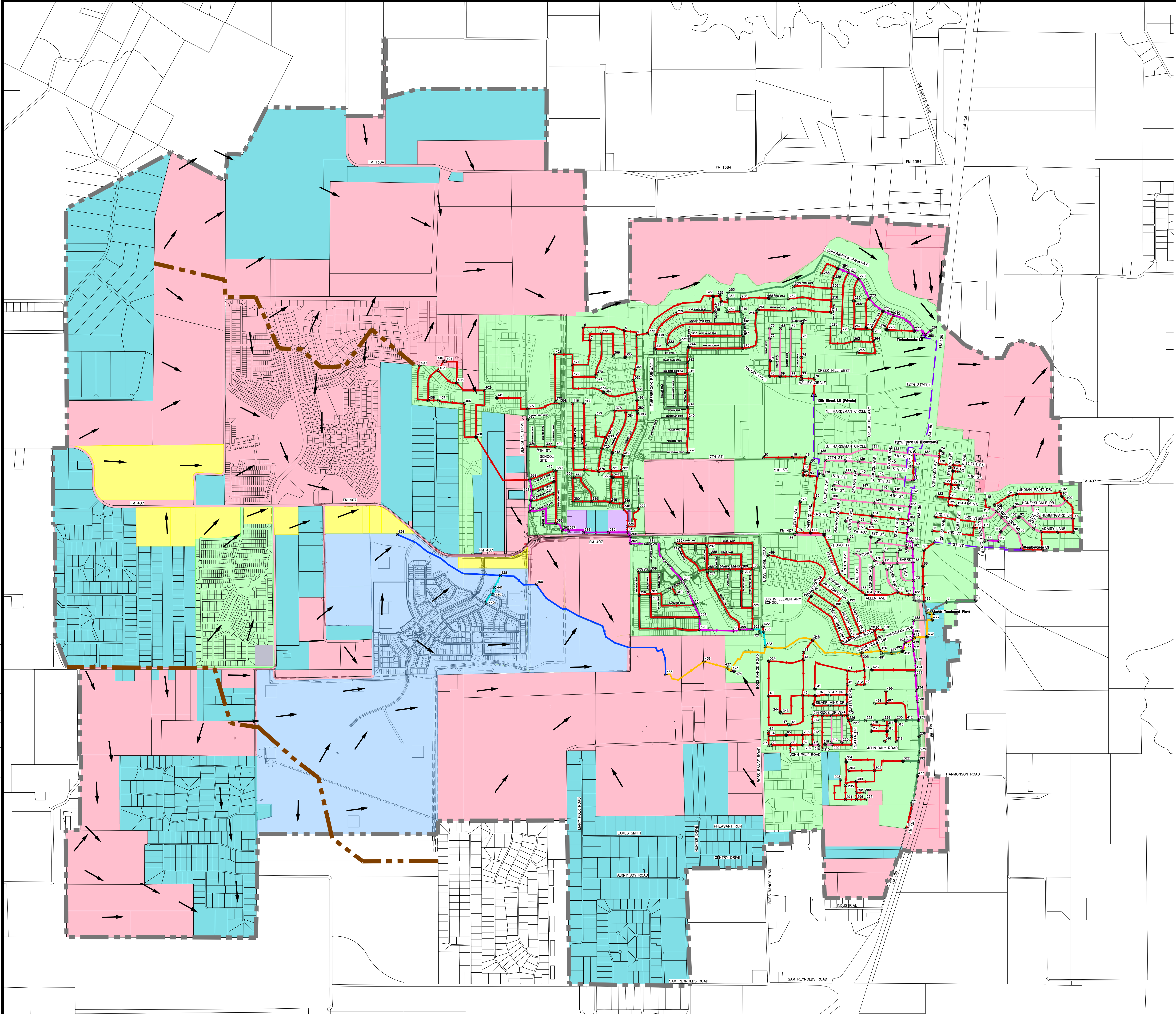
DATE:	July 24
DRAFTER:	AGM
DESIGNER:	AGM
CHECKED:	TJP
PROJECT NO.	-

FIGURE 1
SHEET 1 OF 1

Westwood
Phone (702) 284-5300
5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
westwoodps.com
Westwood Professional Services, Inc.

NO.	DESCRIPTION	DATE	BY	APP.	APP.

7/8/2024 2:06 PM - A:\0044439.00.CITY OF JUSTIN WATER AND WASTEWATER MAP\03-STUDIES\03-WWAP\03-WWAP UPDATE\024.WWAP.CITY OF JUSTIN WASTEWATER MODEL UPDATE.DWG



Color Coding Legend
Conduit: Diameter (in)

	<= 6.0
	<= 8.0
	<= 10.0
	<= 12.0
	<= 14.0
	<= 15.0
	<= 18.0
	<= 21.0
	<= 27.0
	<= 30.0
	<= 33.0
	<= 36.0
	Other

LEGEND

	PROJECT BOUNDARY
	CITY OF JUSTIN LIMITS
	COMMERCIAL
	EXTRATERRITORIAL JURISDICTION (ETJ) - RESIDENTIAL
	EXTRATERRITORIAL JURISDICTION (ETJ) - COMMERCIAL
	TREELINE DEVELOPMENT
	EXTRATERRITORIAL JURISDICTION (ETJ) - NOT A PART
	SEWER FORCEMAIN
	SEWER BASIN BOUNDARY

CITY OF JUSTIN, TEXAS

CITY OF JUSTIN

CITY OF JUSTIN WASTEWATER MASTERPLAN UPDATE

EXISTING PEAK FLOW - SEWER MAP

DATE: ----

DRAFTER: AGM

DESIGNER: AGM

CHECKED: TJP

PROJECT NO.
R0044439.00

Westwood

5725 W. Badura Ave.
Suite 100
Las Vegas, NV 89118
Phone (702) 284-5300
Fax (702) 284-5399
westwoodps.com
Westwood Professional Services, Inc.

DATE

BY

APP.

DATE

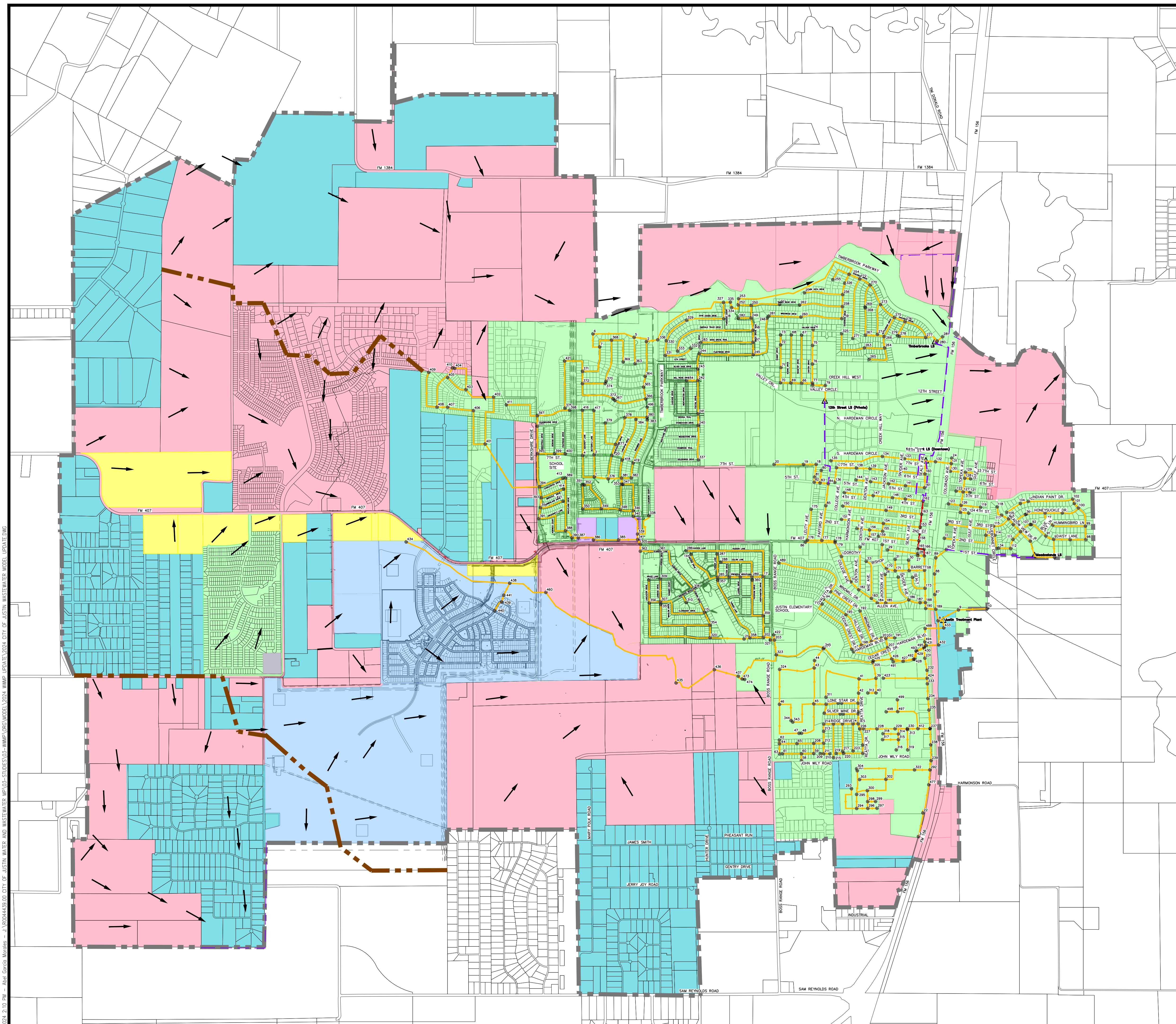
DESCRIPTION

NO.

FIGURE 2

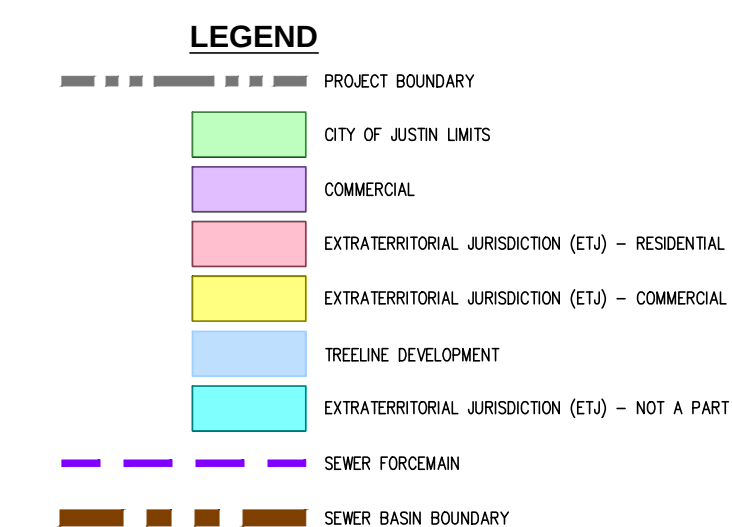
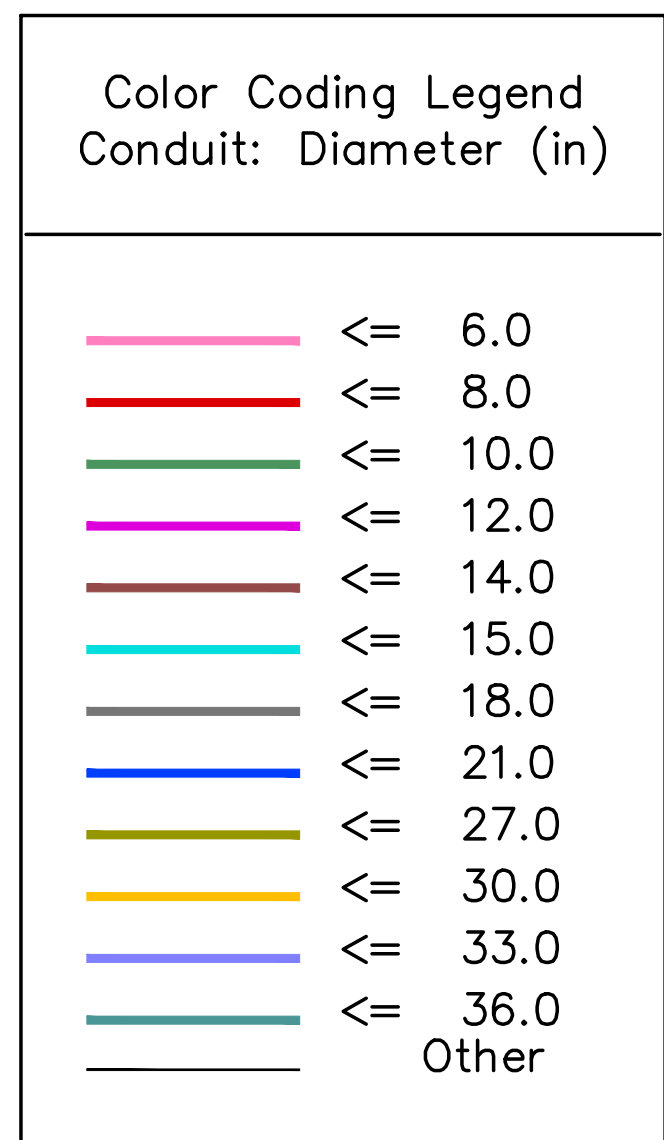
SHEET 1 OF 1

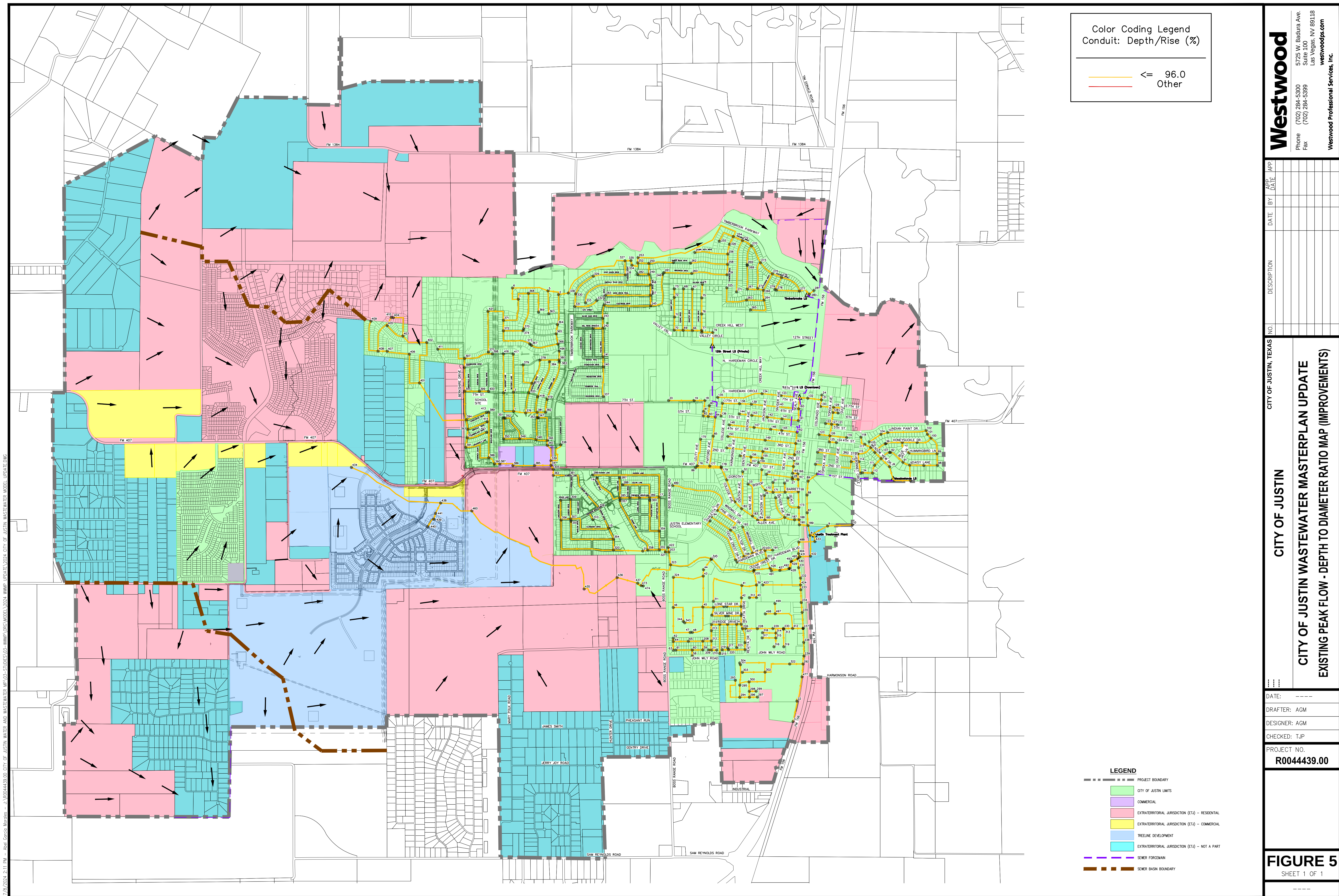
Page 136 of 352

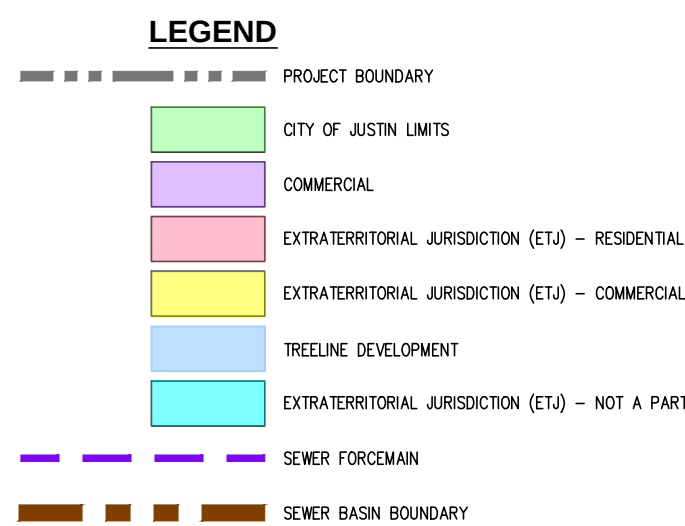


LEGEND

- PROJECT BOUNDARY
- CITY OF AUSTIN LIMITS
- COMMERCIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - RESIDENTIAL
- EXTRATERRITORIAL JURISDICTION (ETJ) - COMMERCIAL
- TREE LINE DEVELOPMENT
- EXTRATERRITORIAL JURISDICTION (ETJ) - NOT A PART
- SEWER FORCE MAIN
- SEWER BASIN BOUNDARY







Appendix B

SewerGems Model Output Tables

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.0251	0.0251
2	697.00	688.00	0.0000	0.0636	0.0636
3	713.23	700.75	0.0037	0.0084	0.0121
4	715.75	703.96	0.0037	0.0092	0.0130
5	699.00	689.00	0.0000	0.0444	0.0444
6	701.00	692.50	0.0000	0.0392	0.0392
7	701.00	694.00	0.0000	0.0392	0.0392
8	616.65	597.00	0.0000	1.6786	1.6786
9	624.36	600.00	0.0000	0.0060	0.0060
10	615.22	611.22	0.0060	0.0000	0.0060
11	639.83	635.83	0.0009	0.0000	0.0009
12	630.00	626.00	0.0000	0.0018	0.0018
13	640.61	636.61	0.0009	0.0000	0.0009
14	684.46	677.74	0.0037	0.0000	0.0037
15	665.40	656.95	0.0020	0.2594	0.2614
17	672.00	660.12	0.0068	0.0328	0.0396
18	695.45	688.75	0.0121	0.0009	0.0130
19	700.00	693.50	0.0000	0.0009	0.0009
20	702.00	696.00	0.0009	0.0000	0.0009
21	655.88	641.91	0.0000	0.2959	0.2959
22	671.67	651.05	0.0000	0.0150	0.0150
23	636.98	632.98	0.0004	0.0000	0.0004
24	637.85	633.00	0.0004	0.0000	0.0004
25	643.27	639.27	0.0022	0.0000	0.0022
26	663.00	656.00	0.0033	0.0000	0.0033
27	641.33	637.33	0.0000	0.0022	0.0022
28	642.00	638.00	0.0004	0.0018	0.0022
29	662.29	658.29	0.0018	0.0000	0.0018
30	645.00	641.00	0.0009	0.0000	0.0009
31	653.81	649.81	0.0009	0.0000	0.0009
32	681.00	669.74	0.0040	0.0000	0.0040
33	673.00	662.09	0.0031	0.0000	0.0031
34	630.99	626.99	0.0018	0.0000	0.0018
35	628.00	624.00	0.0022	0.0000	0.0022
36	628.00	624.00	0.0020	0.0000	0.0020
37	625.00	621.00	0.0004	0.0000	0.0004
38	625.00	621.00	0.0007	0.0000	0.0007
39	626.00	622.00	0.0004	0.0293	0.0297
40	645.95	641.95	0.0000	0.0090	0.0090
41	646.00	639.00	0.0022	0.0180	0.0202
42	654.00	647.00	0.0000	0.0042	0.0042
43	639.22	630.25	0.0000	0.0521	0.0521
44	635.02	629.32	0.0000	0.0521	0.0521
45	664.58	651.86	0.0051	0.0163	0.0213
46	671.94	659.46	0.0051	0.0136	0.0187
47	683.37	676.59	0.0081	0.0000	0.0081

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
48	683.31	677.33	0.0046	0.0000	0.0046
49	680.62	674.00	0.0009	0.0026	0.0035
50	685.00	681.00	0.0026	0.0000	0.0026
51	679.25	672.00	0.0007	0.0000	0.0007
52	670.26	666.26	0.0004	0.0037	0.0042
53	681.22	677.22	0.0031	0.0000	0.0031
54	682.00	678.00	0.0022	0.0000	0.0022
55	669.37	665.37	0.0007	0.0051	0.0057
56	672.31	668.31	0.0000	0.0029	0.0029
57	685.00	681.00	0.0029	0.0000	0.0029
58	693.97	689.97	0.0004	0.0000	0.0004
59	692.00	683.50	0.0007	0.0048	0.0055
60	693.50	686.00	0.0018	0.0031	0.0048
61	695.00	691.00	0.0026	0.0000	0.0026
62	692.00	688.00	0.0004	0.0000	0.0004
63	695.00	691.00	0.0013	0.0000	0.0013
64	693.29	686.50	0.0024	0.0018	0.0042
65	691.97	684.00	0.0026	0.0042	0.0068
66	675.00	671.00	0.0004	0.0169	0.0174
67	689.00	686.00	0.0044	0.0000	0.0044
68	695.50	691.50	0.0044	0.0000	0.0044
69	676.19	672.22	0.0007	0.0119	0.0125
70	678.00	674.00	0.0024	0.0051	0.0075
71	686.09	682.00	0.0026	0.0024	0.0051
72	700.00	696.00	0.0015	0.0009	0.0024
73	702.00	698.00	0.0009	0.0000	0.0009
74	681.64	672.00	0.0068	0.0000	0.0068
75	684.00	669.00	0.0018	0.0068	0.0086
76	680.71	665.00	0.0015	0.0086	0.0101
77	673.00	662.00	0.0000	0.0275	0.0275
78	673.00	661.50	0.0013	0.0275	0.0288
79	670.00	659.00	0.0018	0.0288	0.0306
80	692.64	688.00	0.0007	0.0000	0.0007
81	697.00	687.00	0.0000	0.0130	0.0130
82	696.89	686.50	0.0013	0.0130	0.0143
83	695.07	686.00	0.0000	0.0150	0.0150
84	692.67	682.00	0.1245	0.0150	0.1395
85	686.04	675.00	0.0035	0.1395	0.1430
86	676.00	669.00	0.0009	0.0000	0.0009
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0009	0.0015	0.0024
92	619.26	615.00	0.0015	0.0000	0.0015
93	621.16	617.16	0.0033	0.0007	0.0040

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
94	618.07	614.07	0.0018	0.0046	0.0064
95	596.25	592.25	0.0000	0.0286	0.0286
96	604.14	597.00	0.0000	0.0286	0.0286
97	604.00	600.00	0.0022	0.0240	0.0262
98	604.83	600.83	0.0018	0.0222	0.0240
99	615.32	604.00	0.0009	0.0213	0.0222
100	613.82	607.00	0.0018	0.0156	0.0174
101	613.00	608.00	0.0000	0.0092	0.0092
102	612.36	609.00	0.0000	0.0092	0.0092
103	617.60	615.00	0.0062	0.0031	0.0092
104	623.40	617.00	0.0009	0.0022	0.0031
105	630.59	622.00	0.0022	0.0000	0.0022
106	623.36	619.36	0.0020	0.0026	0.0046
107	618.58	614.58	0.0018	0.0000	0.0018
108	618.00	614.00	0.0004	0.0099	0.0104
109	608.00	604.00	0.0000	0.0176	0.0176
110	612.70	608.70	0.0000	0.0176	0.0176
111	615.01	611.01	0.0024	0.0031	0.0055
112	619.01	615.01	0.0013	0.0018	0.0031
113	632.33	628.33	0.0024	0.0000	0.0024
114	627.31	623.31	0.0011	0.0042	0.0053
115	625.81	621.81	0.0018	0.0053	0.0071
116	622.45	618.45	0.0004	0.0075	0.0080
117	630.32	626.32	0.0000	0.0004	0.0004
118	631.79	627.79	0.0004	0.0000	0.0004
119	636.30	634.00	0.0018	0.0000	0.0018
120	639.00	635.00	0.0013	0.0000	0.0013
121	638.41	635.41	0.0004	0.0000	0.0004
122	638.00	635.00	0.0004	0.0000	0.0004
123	639.37	635.37	0.0022	0.0000	0.0022
124	637.33	634.50	0.0018	0.0000	0.0018
125	639.71	634.00	0.0009	0.0018	0.0027
126	640.00	633.00	0.0000	0.0067	0.0067
127	638.00	632.00	0.0000	0.0076	0.0076
128	638.00	631.00	0.0000	0.0090	0.0090
129	639.00	630.50	0.0049	0.0094	0.0143
130	638.52	629.50	0.0000	0.0143	0.0143
131	638.93	628.00	0.0000	0.0148	0.0148
132	631.15	627.15	0.0000	0.0148	0.0148
133	648.00	644.00	0.0000	0.0090	0.0090
134	657.27	653.27	0.0075	0.0015	0.0090
135	683.62	679.62	0.0015	0.0000	0.0015
136	688.94	684.94	0.0022	0.0000	0.0022
137	684.00	680.00	0.0020	0.0022	0.0042
138	673.70	669.70	0.0013	0.0042	0.0055
139	665.44	661.44	0.0033	0.0055	0.0088

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
140	647.95	643.95	0.0004	0.0088	0.0092
141	649.63	645.63	0.0020	0.0044	0.0064
142	655.77	651.77	0.0009	0.0035	0.0044
143	666.41	662.41	0.0020	0.0015	0.0035
144	676.16	672.16	0.0015	0.0000	0.0015
145	650.00	646.00	0.0029	0.0066	0.0095
146	654.80	650.80	0.0015	0.0051	0.0066
147	663.89	659.89	0.0020	0.0031	0.0051
148	684.50	680.50	0.0031	0.0000	0.0031
149	659.42	655.42	0.0031	0.0053	0.0084
150	682.72	678.72	0.0053	0.0000	0.0053
151	679.20	675.20	0.0044	0.0000	0.0044
152	680.00	676.00	0.0024	0.0000	0.0024
153	642.65	631.50	0.0009	1.2999	1.3008
154	667.28	663.28	0.0040	0.0073	0.0113
155	671.41	667.41	0.0000	0.0029	0.0029
156	678.17	674.17	0.0000	0.0029	0.0029
157	678.92	674.92	0.0004	0.0000	0.0004
158	642.00	630.50	0.0009	1.3048	1.3057
159	674.11	670.11	0.0040	0.0000	0.0040
160	639.27	635.27	0.0000	0.0157	0.0157
161	641.92	636.92	0.0000	0.0064	0.0064
162	644.00	634.50	1.2698	0.0095	1.2794
163	643.00	633.00	0.0009	1.2878	1.2887
164	641.74	631.00	0.0000	1.3008	1.3008
165	643.00	630.00	0.0000	1.3057	1.3057
166	641.00	629.50	0.0000	1.3057	1.3057
167	640.87	629.20	0.0004	1.3079	1.3083
168	639.51	628.50	0.0000	1.3134	1.3134
169	669.64	665.64	0.0018	0.0000	0.0018
170	657.00	653.00	0.0004	0.0018	0.0022
171	650.05	646.05	0.0004	0.0031	0.0035
172	643.48	639.48	0.0007	0.0044	0.0051
173	638.23	626.80	0.0000	1.3156	1.3156
174	657.00	645.64	0.0029	0.0000	0.0029
175	689.00	679.19	0.0029	0.0000	0.0029
176	676.00	669.00	0.0002	0.0029	0.0031
177	675.00	668.00	0.0000	0.1461	0.1461
178	675.00	666.00	0.0000	0.1461	0.1461
179	675.00	665.00	0.0013	0.1470	0.1483
180	668.00	661.00	0.0031	0.1483	0.1514
181	657.00	651.00	0.0004	0.1514	0.1518
182	656.00	650.00	0.0011	0.1558	0.1569
183	656.00	649.00	0.0002	0.1600	0.1602
184	655.00	648.00	0.0007	0.1602	0.1608
185	655.00	645.00	0.0015	0.1641	0.1657

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
186	650.00	640.10	0.0013	0.1685	0.1699
187	636.81	625.80	0.0009	0.1699	0.1707
188	634.90	625.00	0.0000	1.4863	1.4863
189	630.12	620.00	0.0000	1.6726	1.6726
190	633.16	624.00	0.0013	1.4863	1.4877
191	642.00	630.32	0.0057	0.0000	0.0057
192	639.34	635.34	0.0055	0.0000	0.0055
193	661.00	650.50	0.0128	0.0000	0.0128
194	663.00	656.00	0.0145	0.0000	0.0145
195	652.00	645.00	0.0057	0.0273	0.0330
196	660.00	653.00	0.0092	0.0000	0.0092
197	643.00	631.95	0.0009	0.0092	0.0101
198	641.00	630.48	0.0002	0.0431	0.0433
199	640.00	629.51	0.0000	0.0488	0.0488
200	640.00	629.00	0.0090	0.0488	0.0579
201	640.00	628.50	0.0009	0.0636	0.0645
202	657.86	640.44	0.0000	0.3601	0.3601
203	651.68	639.30	0.0000	0.3606	0.3606
204	635.35	627.53	0.0000	0.0521	0.0521
205	627.03	613.90	0.0000	0.0297	0.0297
206	642.00	630.70	0.0044	0.0000	0.0044
207	637.00	626.60	0.0000	0.0689	0.0689
208	692.00	681.50	0.0011	0.0123	0.0134
209	691.63	687.63	0.0009	0.0000	0.0009
210	692.87	688.87	0.0009	0.0000	0.0009
211	692.00	686.00	0.0013	0.0018	0.0031
212	688.97	680.00	0.0009	0.0165	0.0174
213	682.39	678.39	0.0007	0.0174	0.0180
214	678.00	673.10	0.0009	0.0180	0.0189
215	694.00	690.00	0.0037	0.0000	0.0037
216	684.36	672.00	0.0009	0.0227	0.0235
217	691.85	687.85	0.0044	0.0000	0.0044
218	685.00	670.90	0.0009	0.0279	0.0288
219	693.50	689.42	0.0004	0.0000	0.0004
220	692.65	688.63	0.0018	0.0004	0.0022
221	687.02	683.02	0.0007	0.0022	0.0029
222	680.80	676.80	0.0011	0.0029	0.0040
223	688.76	684.76	0.0042	0.0000	0.0042
224	681.00	669.80	0.0004	0.0330	0.0334
225	678.34	669.14	0.0002	0.0370	0.0372
226	675.00	668.49	0.0002	0.0411	0.0414
227	675.00	668.10	0.0000	0.0414	0.0414
228	667.43	663.43	0.0000	0.0414	0.0414
229	660.66	656.66	0.0000	0.0414	0.0414
230	652.07	648.07	0.0000	0.0954	0.0954
231	617.00	613.00	0.0000	0.1768	0.1768

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
232	623.02	619.02	0.0000	0.1768	0.1768
233	634.54	630.54	0.0004	0.1489	0.1494
234	642.74	633.00	0.0004	0.1485	0.1489
235	645.01	634.00	0.0013	0.1471	0.1485
236	646.60	637.50	0.0000	0.1471	0.1471
237	646.27	637.60	0.0000	0.1471	0.1471
238	649.49	645.49	0.0013	0.0504	0.0518
239	654.00	647.00	0.0004	0.0500	0.0504
240	715.79	702.58	0.0051	0.0238	0.0288
241	713.78	701.32	0.0077	0.0288	0.0365
242	707.86	697.69	0.0000	0.0528	0.0528
243	708.74	696.43	0.0064	0.0528	0.0592
244	709.51	694.41	0.0092	0.0592	0.0684
245	697.57	685.41	0.0007	0.0737	0.0744
246	702.25	695.20	0.0053	0.0000	0.0053
247	699.14	684.09	0.0009	0.0836	0.0845
248	693.35	682.77	0.0009	0.0975	0.0983
249	683.16	672.11	0.0004	0.1005	0.1010
250	668.43	660.38	0.0015	0.1043	0.1058
251	690.59	684.04	0.0033	0.0000	0.0033
252	656.00	647.39	0.0000	0.1846	0.1846
253	652.94	646.89	0.0000	0.1846	0.1846
254	628.48	619.55	0.0009	0.2191	0.2200
255	634.67	627.08	0.0040	0.0000	0.0040
256	651.29	640.84	0.0018	0.0275	0.0293
257	679.35	670.87	0.0051	0.0000	0.0051
258	659.57	648.16	0.0011	0.0213	0.0224
259	661.88	652.60	0.0024	0.0097	0.0121
260	685.49	673.84	0.0055	0.0042	0.0097
261	702.55	696.00	0.0042	0.0000	0.0042
262	684.59	677.53	0.0092	0.0000	0.0092
263	666.17	658.54	0.0033	0.0068	0.0101
264	642.59	634.66	0.0009	0.0134	0.0143
265	671.57	665.52	0.0033	0.0000	0.0033
266	638.66	628.22	0.0018	0.0211	0.0229
267	653.78	643.95	0.0020	0.0048	0.0068
268	654.48	647.43	0.0048	0.0000	0.0048
269	653.36	646.31	0.0035	0.0000	0.0035
270	626.58	617.80	0.0026	0.2350	0.2376
271	661.10	652.34	0.0103	0.0000	0.0103
272	627.49	618.69	0.0011	0.2303	0.2314
273	632.66	615.97	0.0029	0.2411	0.2440
274	646.22	640.17	0.0035	0.0000	0.0035
275	626.83	614.51	0.0009	0.2669	0.2677
276	626.86	613.48	0.0040	0.2702	0.2741
277	623.97	610.89	0.0000	0.2776	0.2776

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
278	628.22	622.17	0.0035	0.0000	0.0035
279	629.72	623.67	0.0024	0.0000	0.0024
280	624.65	606.77	0.0000	0.2776	0.2776
281	621.00	607.50	0.0000	0.0000	0.0000
282	680.94	673.59	0.0022	0.0000	0.0022
283	713.91	705.91	0.0092	0.0000	0.0092
284	709.71	699.50	0.0163	0.0000	0.0163
285	676.69	665.28	0.0000	0.0059	0.0059
286	684.35	677.74	0.0169	0.0000	0.0169
287	686.89	679.40	0.0022	0.0000	0.0022
288	681.88	675.31	0.0055	0.0000	0.0055
289	674.27	661.54	0.0000	0.0158	0.0158
290	680.15	662.79	0.0022	0.0081	0.0103
291	678.42	664.04	0.0022	0.0059	0.0081
292	657.93	647.93	0.0000	0.0500	0.0500
293	688.12	680.00	0.0051	0.0000	0.0051
294	685.74	675.28	0.0011	0.0079	0.0090
295	686.10	677.87	0.0029	0.0000	0.0029
296	686.35	674.16	0.0009	0.0106	0.0114
297	686.50	679.94	0.0015	0.0000	0.0015
298	687.19	673.27	0.0011	0.0123	0.0134
299	687.72	680.79	0.0009	0.0000	0.0009
300	683.66	672.05	0.0051	0.0167	0.0218
301	689.48	683.51	0.0033	0.0000	0.0033
302	674.98	667.28	0.0000	0.0350	0.0350
303	688.39	683.19	0.0057	0.0000	0.0057
304	690.09	684.74	0.0075	0.0000	0.0075
305	692.12	678.88	0.0000	0.2215	0.2215
306	677.34	663.81	0.0035	0.2341	0.2376
307	673.34	665.85	0.0079	0.0139	0.0218
308	685.55	677.81	0.0048	0.0000	0.0048
309	683.15	668.86	0.0090	0.0000	0.0090
310	672.84	665.47	0.0022	0.0000	0.0022
311	673.46	666.46	0.0139	0.0000	0.0139
312	652.00	645.00	0.0090	0.0000	0.0090
313	655.00	649.00	0.0000	0.0540	0.0540
314	660.00	656.00	0.0000	0.0405	0.0405
315	665.00	658.50	0.0000	0.0270	0.0270
316	671.00	664.00	0.0135	0.0000	0.0135
317	677.00	670.00	0.0135	0.0000	0.0135
318	670.00	663.00	0.0135	0.0000	0.0135
319	673.00	667.00	0.0135	0.0000	0.0135
320	659.72	648.58	0.0018	0.2941	0.2959
321	652.90	639.66	0.0000	0.3601	0.3601
322	661.52	651.66	0.0000	0.0350	0.0350
323	642.14	619.50	0.0000	0.5157	0.5157

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
324	644.75	634.24	0.0121	0.0187	0.0308
325	669.84	662.79	0.0068	0.0000	0.0068
326	631.39	620.64	0.0013	0.0293	0.0306
327	667.06	660.05	0.0000	0.0788	0.0788
328	687.80	678.10	0.0020	0.0132	0.0152
329	703.09	695.12	0.0046	0.0086	0.0132
330	707.36	699.70	0.0040	0.0046	0.0086
331	712.25	705.20	0.0020	0.0026	0.0046
332	716.88	709.51	0.0026	0.0000	0.0026
333	715.72	708.81	0.0130	0.0000	0.0130
334	665.00	656.25	0.0000	0.0788	0.0788
335	663.00	657.00	0.0000	0.0788	0.0788
336	697.70	677.25	0.0000	0.0636	0.0636
337	714.42	706.45	0.0238	0.0000	0.0238
338	701.95	693.00	0.0055	0.0000	0.0055
339	698.12	683.00	0.0000	0.1036	0.1036
340	699.36	688.00	0.0000	0.0981	0.0981
341	692.05	679.33	0.0000	0.2215	0.2215
342	679.00	658.95	0.0150	0.0000	0.0150
343	676.08	670.00	0.0059	0.0000	0.0059
344	676.08	670.00	0.0055	0.0000	0.0055
345	635.35	614.98	0.0000	0.5678	0.5678
346	700.78	689.42	0.0000	0.0981	0.0981
347	710.14	698.78	0.0084	0.0000	0.0084
348	704.15	692.79	0.0024	0.0873	0.0898
349	709.01	697.65	0.0020	0.0163	0.0183
350	713.82	702.37	0.0000	0.0092	0.0092
351	719.97	708.52	0.0092	0.0000	0.0092
352	717.53	706.17	0.0070	0.0000	0.0070
353	710.67	694.00	0.0051	0.0640	0.0691
354	666.25	650.64	0.0015	0.2726	0.2741
355	675.60	665.60	0.0112	0.0000	0.0112
356	674.28	667.08	0.0200	0.0000	0.0200
357	676.69	669.69	0.0139	0.0000	0.0139
358	656.32	641.44	0.0018	0.3098	0.3115
359	660.14	651.40	0.0033	0.0453	0.0486
360	672.00	665.00	0.0057	0.0000	0.0057
361	685.85	675.46	0.0070	0.2248	0.2319
362	693.00	677.92	0.0033	0.2215	0.2248
363	722.00	715.00	0.0053	0.0000	0.0053
364	719.00	712.00	0.0042	0.0150	0.0191
365	721.00	714.00	0.0095	0.0055	0.0150
366	722.00	715.00	0.0007	0.0048	0.0055
367	733.00	726.00	0.0048	0.0000	0.0048
368	707.00	700.00	0.0022	0.0110	0.0132
369	725.00	718.00	0.0046	0.0000	0.0046

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
370	720.00	713.00	0.0064	0.0000	0.0064
371	713.00	700.00	0.0035	0.0224	0.0260
372	725.00	711.50	0.0009	0.0088	0.0097
373	733.00	723.00	0.0057	0.0000	0.0057
374	720.00	713.00	0.0031	0.0000	0.0031
375	735.00	728.00	0.0110	0.0000	0.0110
376	707.53	696.53	0.0000	0.0433	0.0433
377	713.51	706.51	0.0000	0.0134	0.0134
378	720.85	713.85	0.0051	0.0020	0.0070
379	721.15	714.15	0.0064	0.0000	0.0064
380	726.51	719.51	0.0020	0.0000	0.0020
381	710.66	694.75	0.0000	0.0640	0.0640
382	713.18	703.00	0.0000	0.0101	0.0101
383	726.54	719.54	0.0075	0.0000	0.0075
384	726.84	719.84	0.0073	0.0000	0.0073
385	700.22	685.81	0.0000	0.1179	0.1179
386	699.66	687.25	0.0000	0.1179	0.1179
387	698.53	688.61	0.0000	0.1179	0.1179
388	703.57	693.02	0.0000	0.1179	0.1179
389	716.39	710.00	0.0077	0.0000	0.0077
390	699.69	692.34	0.0000	0.1179	0.1179
391	704.97	695.51	0.0068	0.1034	0.1102
392	706.84	696.28	0.0000	0.1034	0.1034
393	708.51	696.97	0.0000	0.0986	0.0986
394	711.52	697.75	0.0000	0.0937	0.0937
395	718.37	700.29	0.0000	0.0365	0.0365
396	714.19	702.14	0.0029	0.0163	0.0191
397	715.00	702.95	0.0000	0.0163	0.0163
398	741.00	731.00	0.0059	0.0000	0.0059
399	716.82	707.85	0.0000	0.0174	0.0174
400	718.39	709.00	0.0174	0.0000	0.0174
401	730.00	723.00	0.0000	0.0546	0.0546
402	748.00	741.00	0.0117	0.0095	0.0211
403	751.00	744.00	0.0000	0.0095	0.0095
404	762.00	755.00	0.0048	0.0000	0.0048
405	760.00	753.00	0.0046	0.0000	0.0046
406	739.00	732.00	0.0070	0.0264	0.0334
407	744.00	736.00	0.0114	0.0150	0.0264
408	744.00	737.00	0.0000	0.0150	0.0150
409	764.00	757.00	0.0086	0.0000	0.0086
410	762.00	755.00	0.0064	0.0000	0.0064
411	748.00	740.00	0.0103	0.0000	0.0103
412	650.00	638.43	0.0000	0.0954	0.0954
413	715.92	711.00	0.0026	0.0000	0.0026
414	712.20	705.00	0.0048	0.0000	0.0048
415	709.79	702.50	0.0048	0.0000	0.0048

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
416	722.47	715.47	0.0092	0.0000	0.0092
417	719.02	712.02	0.0084	0.0000	0.0084
418	717.45	708.77	0.0033	0.0073	0.0106
419	720.47	707.83	0.0026	0.0075	0.0101
420	716.20	703.53	0.0048	0.0134	0.0183
421	710.00	703.00	0.0018	0.0110	0.0128
422	647.57	639.60	0.0004	0.0000	0.0004
423	650.00	643.00	0.0270	0.0000	0.0270
424	629.82	625.81	0.0004	0.1764	0.1768
425	625.31	609.57	0.0000	0.5975	0.5975
426	621.61	606.67	0.0000	0.6664	0.6664
427	619.19	605.83	0.0000	0.6664	0.6664
428	617.08	604.98	0.0000	0.6664	0.6664
429	617.43	604.14	0.0000	0.6664	0.6664
430	614.23	603.75	0.0000	0.8432	0.8432
431	613.00	603.57	0.0000	0.8432	0.8432
432	611.00	603.16	0.0000	0.8432	0.8432
433	611.23	602.41	0.0000	0.8432	0.8432
434	704.25	688.76	0.0000	0.0000	0.0000
435	657.20	635.85	0.0000	0.1551	0.1551
436	649.22	628.55	0.0000	0.1551	0.1551
437	642.58	627.00	0.0000	0.1551	0.1551
438	688.44	670.33	0.0000	0.1551	0.1551
439	696.60	682.54	0.0000	0.1551	0.1551
440	698.97	686.12	0.1551	0.0000	0.1551
441	691.08	675.45	0.0000	0.1551	0.1551
460	682.86	664.17	0.0000	0.1551	0.1551
473	642.54	626.31	0.0000	0.1551	0.1551
474	651.00	627.00	0.0000	0.0000	0.0000
477	662.59	648.99	0.0000	0.0150	0.0150
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.23	0.0288	17.1
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.31	0.0365	19.9
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	1.47	0.0528	21.8
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	1.60	0.0592	22.1
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	1.34	0.0504	15.4
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	1.83	0.0684	23.2
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	2.39	0.0518	19.0
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	0.91	0.0053	15.2
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	2.69	0.1471	18.0
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	1.56	0.0744	19.9
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	2.30	0.1471	21.0
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	1.64	0.0845	20.3
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	1.74	0.1485	21.1
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	3.55	0.0983	20.3
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	2.19	0.1489	19.7
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	3.67	0.1010	20.6
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.28	0.0033	15.4
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	3.91	0.1494	20.6
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	4.12	0.1768	17.7
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	3.38	0.1768	18.7
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	3.81	0.1058	26.8
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	3.83	0.1768	18.1
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	1.84	0.1846	30.3
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	2.56	0.1846	31.0
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	3.59	0.0954	22.1
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	1.44	0.0954	23.9
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	2.52	0.0414	16.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	0.98	0.0040	24.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	2.04	0.0414	11.8
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	3.25	0.0293	15.5

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	1.99	0.0414	11.9
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	1.44	0.0051	10.2
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.28	0.0414	13.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	2.08	0.0224	13.5
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	1.37	0.0372	18.1
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	1.45	0.0121	10.9
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	1.34	0.0334	17.3
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	1.50	0.0097	8.7
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.25	0.0042	15.0
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.32	0.0042	6.8
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	1.64	0.0092	10.3
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.15	0.0040	11.8
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	2.04	0.0101	9.2
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.18	0.0029	4.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	1.41	0.0033	7.4
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	0.79	0.0022	4.2
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	1.74	0.0143	11.4
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.36	0.0004	4.2
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	1.61	0.0068	9.8
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.21	0.0288	16.5
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	0.75	0.0048	6.8
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	1.32	0.0044	14.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	1.53	0.0035	24.1
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	1.58	0.0103	26.3
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.20	0.0235	15.3
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	1.85	0.2200	28.9
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.16	0.0037	9.7
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	1.87	0.2314	29.1
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	1.96	0.2376	29.3
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.10	0.0189	13.6

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.28	0.0035	24.8
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	2.07	0.0180	12.1
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	1.92	0.2440	29.9
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.14	0.0174	11.6
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	2.12	0.0229	28.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.11	0.0031	8.3
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.09	0.2677	30.0
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	0.75	0.0009	4.9
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	2.13	0.2741	28.6
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	0.74	0.0009	3.6
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.05	0.0035	22.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.09	0.0134	11.2
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.09	0.0024	24.6
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	3.20	0.2776	27.8
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.57	0.0022	15.1
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	1.38	0.0092	16.8
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	3.68	0.0689	18.0
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.18	0.0163	16.4
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	0.70	0.0044	14.4
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	2.41	0.5678	12.6
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.08	0.0158	14.2
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	3.26	0.0521	15.8
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.22	0.0169	14.0
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	2.13	0.3601	26.3
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	1.93	0.0645	21.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.01	0.0022	5.8
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	1.55	0.0579	21.9
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.05	0.0055	8.9
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.07	0.0488	23.9
CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	0.89	0.0103	10.8

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

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CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.29	0.0433	23.1
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	0.97	0.0101	14.9
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	0.75	0.0059	8.2
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.30	0.0092	8.7
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	0.85	0.0081	9.3
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	1.34	0.0500	16.3
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	0.76	0.0051	8.1
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	0.73	0.0029	7.1
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	0.84	0.0090	9.6
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.49	0.0015	3.7
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	2.04	0.0330	18.0
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	0.99	0.0114	10.5
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.41	0.0009	2.8
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	1.58	0.0145	12.7
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	0.98	0.0134	11.9
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.08	0.0128	12.7
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	0.97	0.0033	8.8
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.29	0.0218	14.3
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	1.36	0.0057	11.1
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	0.88	0.0055	16.1
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	1.31	0.0075	11.5
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	2.07	0.0350	14.3
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	0.93	0.0057	14.0
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	2.31	0.2215	24.6
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	2.70	0.2319	24.9
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	5.59	1.4877	39.4
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	2.96	0.2376	25.7
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.29	0.0218	26.1
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.08	0.0048	9.3
CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.12	1.4863	38.2

2024 City of Justin Wastewater Model Update.stsw
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CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	0.92	0.0090	10.8
CO-127	187	625.80	188	625.00	137.1	0.006	8.0	0.013	2.28	0.1707	61.3
CO-128	186	640.10	187	625.80	303.8	0.047	8.0	0.013	4.81	0.1699	36.1
CO-129	185	645.00	186	640.10	598.4	0.008	8.0	0.013	2.56	0.1657	35.3
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.50	0.0022	21.4
CO-131	184	648.00	185	645.00	217.1	0.014	8.0	0.013	3.06	0.1608	34.8
CO-132	183	649.00	184	648.00	189.0	0.005	8.0	0.013	2.16	0.1602	35.4
CO-133	182	650.00	183	649.00	389.0	0.003	8.0	0.013	1.65	0.1569	40.0
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	1.63	0.0139	10.9
CO-135	181	651.00	182	650.00	287.4	0.003	8.0	0.013	1.83	0.1518	41.6
CO-136	180	661.00	181	651.00	687.9	0.015	8.0	0.013	3.06	0.1514	36.5
CO-137	179	665.00	180	661.00	388.6	0.010	8.0	0.013	2.69	0.1483	33.3
CO-138	178	666.00	179	665.00	38.0	0.026	8.0	0.013	3.74	0.1461	33.0
CO-139	177	668.00	178	666.00	336.3	0.006	8.0	0.013	2.20	0.1461	33.2
CO-140	176	669.00	177	668.00	368.4	0.003	8.0	0.013	0.53	0.0031	19.9
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	3.32	0.0540	22.2
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	2.35	0.0405	18.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	1.96	0.0270	15.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	0.90	0.0029	5.3
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	1.67	0.0135	11.8
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	0.79	0.0029	27.0
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	1.88	0.0135	11.8
CO-148	173	626.80	188	625.00	365.3	0.005	12.0	0.013	3.55	1.3156	64.7
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	1.61	0.0135	13.4
CO-150	168	628.50	173	626.80	459.3	0.004	12.0	0.013	3.14	1.3134	72.7
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	2.01	0.0135	14.7
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	1.45	0.0051	54.3
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.12	0.0035	7.9
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	2.60	0.2741	27.5
CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	3.67	0.2614	26.6

2024 City of Justin Wastewater Model Update.stsw
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CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.15	0.0022	6.4
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	2.20	0.3601	24.6
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	0.93	0.0018	5.3
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	1.66	0.0350	14.1
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	4.43	0.3606	19.6
CO-162	167	629.20	168	628.50	367.2	0.002	12.0	0.013	2.58	1.3083	88.4
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	2.27	0.5157	12.6
CO-164	166	629.50	167	629.20	167.0	0.002	12.0	0.013	2.57	1.3057	100.0
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.26	0.0308	18.7
CO-166	165	630.00	166	629.50	153.0	0.003	12.0	0.013	2.57	1.3057	100.0
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	1.69	0.0057	9.3
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	2.09	0.0187	14.0
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	0.79	0.0068	8.3
CO-170	162	634.50	163	633.00	334.4	0.004	12.0	0.013	3.40	1.2794	88.5
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.25	0.0306	29.6
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	3.41	0.0788	32.4
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	0.80	0.0064	9.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	2.25	0.0152	17.1
CO-175	158	630.50	165	630.00	200.7	0.002	12.0	0.013	2.57	1.3057	100.0
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	1.61	0.0132	10.0
CO-177	164	631.00	158	630.50	187.5	0.003	12.0	0.013	2.56	1.3008	100.0
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	0.96	0.0086	9.0
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	1.44	0.0040	52.6
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.08	0.0046	7.0
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.35	0.0004	4.8
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	0.67	0.0026	5.2
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.09	0.0029	5.9
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	1.37	0.0130	17.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.09	0.0029	9.1
CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	1.77	0.0788	24.5

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CO-187	153	631.50	164	631.00	162.2	0.003	12.0	0.013	2.56	1.3008	100.0
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	2.70	0.0788	24.5
CO-189	163	633.00	153	631.50	333.0	0.005	12.0	0.013	2.54	1.2887	100.0
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	1.94	0.0636	22.6
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	1.88	0.0113	54.4
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	0.66	0.0024	6.6
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.08	0.0055	16.8
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	0.97	0.0044	7.2
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	2.38	0.0981	27.1
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	1.33	0.0053	9.9
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	3.40	0.1036	34.6
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	1.62	0.0084	55.5
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	1.92	0.2215	26.1
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	1.48	0.0150	11.3
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	2.39	0.0202	13.2
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.25	0.0031	7.6
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.25	0.0051	9.2
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.26	0.0066	10.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	1.70	0.0095	55.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	2.37	0.0981	25.3
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.13	0.0084	17.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	0.98	0.0015	5.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	2.30	0.0898	26.2
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.21	0.0035	7.6
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	1.44	0.0183	18.4
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.09	0.0044	8.8
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.16	0.0092	9.7
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	1.34	0.0064	9.9
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.16	0.0092	7.9
CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	1.37	0.0092	12.8

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CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.06	0.0070	9.2
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	1.58	0.0088	11.4
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	1.40	0.0055	10.1
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.22	0.0042	8.3
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.17	0.0691	28.2
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	0.86	0.0022	6.7
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.17	0.0112	24.6
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	0.88	0.0015	8.1
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	1.43	0.0090	10.6
CO-226	133	644.00	12th Street LS (Downtown)	622.00	549.6	0.040	6.0	0.013	1.98	0.0090	9.6
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	1.35	0.0200	27.0
CO-228	132	627.15	12th Street LS (Downtown)	622.00	244.8	0.021	6.0	0.013	1.82	0.0148	13.1
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	1.58	0.0139	30.6
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	0.81	0.0148	17.4
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.21	0.0143	12.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	0.84	0.0143	11.5
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	0.78	0.0090	11.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.06	0.0057	12.5
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	0.71	0.0076	9.6
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	2.29	0.2248	24.8
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	0.69	0.0067	9.1
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	1.59	0.0053	14.3
CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.66	0.0027	6.9
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	2.06	0.0191	16.5
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.43	0.0018	4.9

2024 City of Justin Wastewater Model Update.stsw
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CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.21	0.0150	11.0
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	0.69	0.0022	6.5
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	0.67	0.0055	9.1
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.57	0.0004	5.6
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.07	0.0048	6.8
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.60	0.0004	5.6
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	1.43	0.0132	15.1
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	0.92	0.0013	6.4
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.23	0.0046	7.7
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.41	0.0018	7.0
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.11	0.0064	8.2
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.36	0.0004	2.1
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.33	0.0260	17.4
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	0.79	0.0004	6.6
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	1.86	0.0097	11.2
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.02	0.0071	10.5
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.02	0.0057	7.3
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	0.88	0.0053	9.9
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.52	0.0031	7.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	0.92	0.0024	7.6
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	0.95	0.0128	12.6
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	1.58	0.0110	9.9
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.18	0.0251	16.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.04	0.0031	7.8
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	1.51	0.0183	15.0
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.31	0.0134	10.5
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	0.98	0.0055	12.5
CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.07	0.0070	8.4
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	1.65	0.0176	15.0
CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.04	0.0064	8.2

2024 City of Justin Wastewater Model Update.stsw
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CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	0.73	0.0020	5.4
CO-273	109	604.00	Meadowlands LS	575.00	387.8	0.075	6.0	0.013	3.01	0.0176	12.6
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	1.58	0.0080	11.5
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	1.48	0.0433	21.1
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	1.61	0.0104	14.2
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	1.81	0.0101	16.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	0.92	0.0018	10.5
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.29	0.0101	8.0
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.09	0.0075	7.9
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	1.77	0.0106	16.0
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.08	0.0073	7.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	2.63	0.1179	22.7
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	0.81	0.0022	4.3
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	1.41	0.1179	19.9
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	0.83	0.0031	6.8
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	1.57	0.1179	21.4
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	0.94	0.0092	8.5
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	1.49	0.1179	25.2
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.11	0.0092	8.2
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.19	0.0077	19.7
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.01	0.0092	10.1
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.16	0.0174	12.2
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	1.48	0.0222	15.1
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	0.95	0.1179	23.3
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	0.90	0.0240	15.6
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	1.39	0.1102	21.3
CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	1.42	0.0262	14.0
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	1.44	0.1034	20.6
CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	1.67	0.0286	13.6

2024 City of Justin Wastewater Model Update.stsw
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CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	1.43	0.0986	19.6
CO-303	95	592.25	Meadowlands LS	575.00	518.3	0.033	8.0	0.013	2.50	0.0286	12.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	1.42	0.0937	19.1
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.06	0.0046	8.8
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.12	0.0365	18.7
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.27	0.0064	12.7
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	0.89	0.0191	13.0
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	0.88	0.0163	10.6
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.10	0.0040	12.2
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	0.92	0.0015	5.3
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	1.55	0.0059	9.5
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.26	0.0024	12.5
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	1.72	0.0174	14.8
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.05	0.0174	11.9
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	64.3
CO-320	86	669.00	179	665.00	760.4	0.005	6.0	0.013	0.48	0.0009	24.2
CO-321	85	675.00	177	668.00	890.7	0.008	8.0	0.013	2.42	0.1430	33.0
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	2.16	0.0546	24.0
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	2.83	0.1395	32.3
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	1.63	0.0211	16.0
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	1.70	0.0150	21.2
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	0.84	0.0095	11.0
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	0.91	0.0143	11.3
CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.05	0.0048	7.8
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	0.92	0.0130	11.8
CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.10	0.0046	7.7

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CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.45	0.0007	6.4
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	1.58	0.0334	17.6
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	1.35	0.0264	14.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	1.51	0.0288	14.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	0.96	0.0150	13.2
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	1.62	0.0275	14.1
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	1.38	0.0086	9.9
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.02	0.0101	11.5
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.22	0.0064	9.4
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.07	0.0086	8.3
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	1.85	0.0103	10.5
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	0.96	0.0068	7.4
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.03	0.0026	16.3
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.06	0.0048	17.4
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	0.97	0.0048	17.8
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.55	0.0009	4.9
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.16	0.0092	8.9
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.12	0.0024	6.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.13	0.0084	9.0
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.25	0.0051	6.8
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.28	0.0004	23.3
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	0.95	0.0075	9.2
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	1.88	0.0270	23.1
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	2.78	0.0297	11.9
CO-358	426	606.67	427	605.83	294.4	0.003	30.0	0.013	2.28	0.6664	14.8
CO-359	427	605.83	428	604.98	300.8	0.003	30.0	0.013	2.28	0.6664	14.2
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.13	0.0044	11.1
CO-361	428	604.98	429	604.14	212.1	0.004	30.0	0.013	2.56	0.6664	15.0
CO-362	429	604.14	430	603.75	203.9	0.002	30.0	0.013	1.98	0.6664	17.1
CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.04	0.0044	11.3

2024 City of Justin Wastewater Model Update.stsw
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CO-364	430	603.75	431	603.57	84.1	0.002	30.0	0.013	2.21	0.8432	19.0
CO-365	431	603.57	432	603.16	317.5	0.001	30.0	0.013	1.85	0.8432	20.0
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	0.97	0.0125	10.9
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	2.12	0.0174	12.5
CO-368	432	603.16	433	602.41	556.6	0.001	30.0	0.013	1.88	0.8432	17.4
CO-369	433	602.41	Justin Treatment Plant	596.00	189.0	0.034	30.0	0.013	5.83	0.8432	12.0
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	0.88	0.0068	8.9
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	2.02	0.1551	9.8
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	2.03	0.1551	9.8
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	0.75	0.0042	6.8
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	1.91	0.1551	7.0
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	0.79	0.0013	4.5
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	1.40	0.1551	7.0
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.55	0.0004	3.9
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	1.81	0.1551	6.4
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	1.81	0.1551	9.4
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	0.82	0.0026	5.1
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.16	0.0238	15.3
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	0.88	0.0048	6.2
CO-382	280	606.77	Timberbrook LS	606.50	58.8	0.005	12.0	0.013	2.32	0.2776	27.8
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	0.91	0.0055	8.4
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	4.08	0.1551	12.3
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	2.87	0.1551	13.6
CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.59	0.0004	3.8
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	2.67	0.1551	13.9
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.22	0.0029	3.9
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	0.89	0.0029	5.4

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.24	0.0022	5.1
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.16	0.0031	5.0
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	0.74	0.0007	3.8
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	0.98	0.0026	4.6
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.08	0.0035	11.4
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.25	0.0081	9.5
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	1.32	0.0046	9.0
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.15	0.0055	8.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.26	0.0059	9.4
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	1.52	0.0521	20.2
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	2.02	0.0213	16.6
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	1.53	0.0521	20.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	1.88	0.0042	4.3
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.21	0.0042	8.7
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	1.32	0.0090	7.4
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	2.08	0.0090	11.2
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	2.10	0.0297	12.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	0.77	0.0007	5.3
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.44	0.0004	5.4
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.05	0.0020	8.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	0.77	0.0022	6.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.05	0.0018	2.7
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	0.95	0.0031	27.6
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.15	0.0040	32.9
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.65	0.0009	5.4
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.50	0.0009	6.3
CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.01	0.0018	5.3
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	0.84	0.0022	5.5
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	1.37	0.0022	52.8
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.02	0.0033	26.8

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.24	0.0022	52.8
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	0.71	0.0004	8.4
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.45	0.0004	7.4
CO-447	160	635.27	12th Street LS (Downtown)	622.00	328.5	0.040	8.0	0.013	2.22	0.0157	8.8
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	0.84	0.0150	9.8
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	0.84	0.0150	13.0
CO-449	21	641.91	358	641.44	147.6	0.003	12.0	0.013	2.07	0.2959	33.3
CO-450	358	641.44	202	640.44	347.3	0.003	12.0	0.013	2.03	0.3115	33.7
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	0.40	0.0009	2.9
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	0.66	0.0009	6.4
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	1.72	0.0396	17.8
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	2.46	0.0486	34.3
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	1.04	0.0130	10.9
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	2.84	0.2959	30.2
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	0.95	0.0037	6.4
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	2.59	0.0306	12.4
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.56	0.0009	3.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	0.75	0.0018	5.3
CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.53	0.0009	3.1
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.16	0.0060	4.6
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	0.73	0.0060	20.0
CO-471	8	597.00	Justin Treatment Plant	596.00	132.8	0.008	24.0	0.013	4.33	1.6786	26.3
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	2.89	0.5975	13.6
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	10.19	1.6726	30.4
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.17	0.0392	20.3

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.22	0.0392	21.3
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.15	0.0130	12.4
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.16	0.0444	22.0
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	3.29	0.0636	17.7
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	0.98	0.0121	12.7
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	1.59	0.0640	27.1

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Average Day Flow

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.0462
12th Street LS (Private)	666.05	645.00	0.0306
12th Street LS (Downtown)	637.00	622.00	0.0395
Timberbrooks LS	626.50	606.50	0.2776
Justin Treatment Plant	616.27	596.00	2.5218

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.1003	0.1003
2	697.00	688.00	0.0000	0.2543	0.2543
3	713.23	700.75	0.0150	0.0334	0.0484
4	715.75	703.96	0.0150	0.0370	0.0519
5	699.00	689.00	0.0000	0.1778	0.1778
6	701.00	692.50	0.0000	0.1566	0.1566
7	701.00	694.00	0.0000	0.1566	0.1566
8	616.65	597.00	0.0000	1.9873	1.9873
9	624.36	600.00	0.0000	0.0240	0.0240
10	615.22	611.22	0.0240	0.0000	0.0240
11	639.83	635.83	0.0036	0.0000	0.0036
12	630.00	626.00	0.0000	0.0072	0.0072
13	640.61	636.61	0.0036	0.0000	0.0036
14	684.46	677.74	0.0150	0.0000	0.0150
15	665.40	656.95	0.0079	1.0375	1.0454
17	672.00	660.12	0.0273	0.1311	0.1584
18	695.45	688.75	0.0484	0.0035	0.0519
19	700.00	693.50	0.0000	0.0035	0.0035
20	702.00	696.00	0.0035	0.0000	0.0035
21	655.88	641.91	0.0000	1.1836	1.1836
22	671.67	651.05	0.0000	0.0600	0.0600
23	636.98	632.98	0.0018	0.0000	0.0018
24	637.85	633.00	0.0018	0.0000	0.0018
25	643.27	639.27	0.0088	0.0000	0.0088
26	663.00	656.00	0.0132	0.0000	0.0132
27	641.33	637.33	0.0000	0.0089	0.0089
28	642.00	638.00	0.0018	0.0071	0.0089
29	662.29	658.29	0.0071	0.0000	0.0071
30	645.00	641.00	0.0036	0.0000	0.0036
31	653.81	649.81	0.0035	0.0000	0.0035
32	681.00	669.74	0.0158	0.0000	0.0158
33	673.00	662.09	0.0123	0.0000	0.0123
34	630.99	626.99	0.0070	0.0000	0.0070
35	628.00	624.00	0.0088	0.0000	0.0088
36	628.00	624.00	0.0079	0.0000	0.0079
37	625.00	621.00	0.0018	0.0000	0.0018
38	625.00	621.00	0.0026	0.0000	0.0026
39	626.00	622.00	0.0018	0.1170	0.1188
40	645.95	641.95	0.0000	0.0361	0.0361
41	646.00	639.00	0.0088	0.0722	0.0810
42	654.00	647.00	0.0000	0.0167	0.0167
43	639.22	630.25	0.0000	0.2086	0.2086
44	635.02	629.32	0.0000	0.2086	0.2086
45	664.58	651.86	0.0202	0.0651	0.0854
46	671.94	659.46	0.0202	0.0546	0.0748
47	683.37	676.59	0.0326	0.0000	0.0326

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
48	683.31	677.33	0.0185	0.0000	0.0185
49	680.62	674.00	0.0035	0.0106	0.0141
50	685.00	681.00	0.0106	0.0000	0.0106
51	679.25	672.00	0.0026	0.0000	0.0026
52	670.26	666.26	0.0018	0.0150	0.0167
53	681.22	677.22	0.0123	0.0000	0.0123
54	682.00	678.00	0.0088	0.0000	0.0088
55	669.37	665.37	0.0026	0.0202	0.0229
56	672.31	668.31	0.0000	0.0114	0.0114
57	685.00	681.00	0.0114	0.0000	0.0114
58	693.97	689.97	0.0018	0.0000	0.0018
59	692.00	683.50	0.0026	0.0194	0.0220
60	693.50	686.00	0.0070	0.0123	0.0194
61	695.00	691.00	0.0106	0.0000	0.0106
62	692.00	688.00	0.0018	0.0000	0.0018
63	695.00	691.00	0.0053	0.0000	0.0053
64	693.29	686.50	0.0097	0.0070	0.0167
65	691.97	684.00	0.0106	0.0167	0.0273
66	675.00	671.00	0.0018	0.0678	0.0695
67	689.00	686.00	0.0176	0.0000	0.0176
68	695.50	691.50	0.0176	0.0000	0.0176
69	676.19	672.22	0.0026	0.0475	0.0502
70	678.00	674.00	0.0097	0.0202	0.0299
71	686.09	682.00	0.0106	0.0097	0.0202
72	700.00	696.00	0.0062	0.0035	0.0097
73	702.00	698.00	0.0035	0.0000	0.0035
74	681.64	672.00	0.0273	0.0000	0.0273
75	684.00	669.00	0.0070	0.0273	0.0343
76	680.71	665.00	0.0062	0.0343	0.0405
77	673.00	662.00	0.0000	0.1100	0.1100
78	673.00	661.50	0.0053	0.1100	0.1153
79	670.00	659.00	0.0070	0.1153	0.1223
80	692.64	688.00	0.0026	0.0000	0.0026
81	697.00	687.00	0.0000	0.0519	0.0519
82	696.89	686.50	0.0053	0.0519	0.0572
83	695.07	686.00	0.0000	0.0598	0.0598
84	692.67	682.00	0.1312	0.0598	0.1910
85	686.04	675.00	0.0141	0.1910	0.2051
86	676.00	669.00	0.0036	0.0000	0.0036
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0035	0.0062	0.0097
92	619.26	615.00	0.0062	0.0000	0.0062
93	621.16	617.16	0.0132	0.0026	0.0158

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
94	618.07	614.07	0.0070	0.0185	0.0255
95	596.25	592.25	0.0000	0.1144	0.1144
96	604.14	597.00	0.0000	0.1144	0.1144
97	604.00	600.00	0.0088	0.0959	0.1047
98	604.83	600.83	0.0070	0.0889	0.0959
99	615.32	604.00	0.0035	0.0854	0.0889
100	613.82	607.00	0.0070	0.0625	0.0695
101	613.00	608.00	0.0000	0.0370	0.0370
102	612.36	609.00	0.0000	0.0370	0.0370
103	617.60	615.00	0.0246	0.0123	0.0370
104	623.40	617.00	0.0035	0.0088	0.0123
105	630.59	622.00	0.0088	0.0000	0.0088
106	623.36	619.36	0.0079	0.0106	0.0185
107	618.58	614.58	0.0070	0.0000	0.0070
108	618.00	614.00	0.0018	0.0397	0.0415
109	608.00	604.00	0.0000	0.0705	0.0705
110	612.70	608.70	0.0000	0.0705	0.0705
111	615.01	611.01	0.0097	0.0123	0.0220
112	619.01	615.01	0.0053	0.0070	0.0123
113	632.33	628.33	0.0097	0.0000	0.0097
114	627.31	623.31	0.0044	0.0169	0.0213
115	625.81	621.81	0.0070	0.0213	0.0283
116	622.45	618.45	0.0018	0.0301	0.0318
117	630.32	626.32	0.0000	0.0018	0.0018
118	631.79	627.79	0.0018	0.0000	0.0018
119	636.30	634.00	0.0072	0.0000	0.0072
120	639.00	635.00	0.0054	0.0000	0.0054
121	638.41	635.41	0.0018	0.0000	0.0018
122	638.00	635.00	0.0018	0.0000	0.0018
123	639.37	635.37	0.0090	0.0000	0.0090
124	637.33	634.50	0.0072	0.0000	0.0072
125	639.71	634.00	0.0036	0.0072	0.0108
126	640.00	633.00	0.0000	0.0269	0.0269
127	638.00	632.00	0.0000	0.0305	0.0305
128	638.00	631.00	0.0000	0.0359	0.0359
129	639.00	630.50	0.0197	0.0376	0.0574
130	638.52	629.50	0.0000	0.0574	0.0574
131	638.93	628.00	0.0000	0.0592	0.0592
132	631.15	627.15	0.0000	0.0592	0.0592
133	648.00	644.00	0.0000	0.0361	0.0361
134	657.27	653.27	0.0300	0.0062	0.0361
135	683.62	679.62	0.0062	0.0000	0.0062
136	688.94	684.94	0.0088	0.0000	0.0088
137	684.00	680.00	0.0079	0.0088	0.0167
138	673.70	669.70	0.0053	0.0167	0.0220
139	665.44	661.44	0.0132	0.0220	0.0352

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
140	647.95	643.95	0.0018	0.0352	0.0370
141	649.63	645.63	0.0080	0.0176	0.0256
142	655.77	651.77	0.0035	0.0141	0.0176
143	666.41	662.41	0.0079	0.0062	0.0141
144	676.16	672.16	0.0062	0.0000	0.0062
145	650.00	646.00	0.0116	0.0264	0.0380
146	654.80	650.80	0.0062	0.0203	0.0264
147	663.89	659.89	0.0080	0.0123	0.0203
148	684.50	680.50	0.0123	0.0000	0.0123
149	659.42	655.42	0.0125	0.0212	0.0336
150	682.72	678.72	0.0212	0.0000	0.0212
151	679.20	675.20	0.0176	0.0000	0.0176
152	680.00	676.00	0.0097	0.0000	0.0097
153	642.65	631.50	0.0036	1.3941	1.3977
154	667.28	663.28	0.0160	0.0291	0.0450
155	671.41	667.41	0.0000	0.0114	0.0114
156	678.17	674.17	0.0000	0.0114	0.0114
157	678.92	674.92	0.0018	0.0000	0.0018
158	642.00	630.50	0.0036	1.4136	1.4172
159	674.11	670.11	0.0159	0.0000	0.0159
160	639.27	635.27	0.0000	0.0626	0.0626
161	641.92	636.92	0.0000	0.0256	0.0256
162	644.00	634.50	1.2739	0.0380	1.3119
163	643.00	633.00	0.0036	1.3455	1.3491
164	641.74	631.00	0.0000	1.3977	1.3977
165	643.00	630.00	0.0000	1.4172	1.4172
166	641.00	629.50	0.0000	1.4172	1.4172
167	640.87	629.20	0.0018	1.4261	1.4279
168	639.51	628.50	0.0000	1.4481	1.4481
169	669.64	665.64	0.0070	0.0000	0.0070
170	657.00	653.00	0.0018	0.0070	0.0088
171	650.05	646.05	0.0018	0.0123	0.0141
172	643.48	639.48	0.0026	0.0176	0.0203
173	638.23	626.80	0.0000	1.4569	1.4569
174	657.00	645.64	0.0114	0.0000	0.0114
175	689.00	679.19	0.0114	0.0000	0.0114
176	676.00	669.00	0.0009	0.0114	0.0123
177	675.00	668.00	0.0000	0.2174	0.2174
178	675.00	666.00	0.0000	0.2174	0.2174
179	675.00	665.00	0.0053	0.2210	0.2263
180	668.00	661.00	0.0123	0.2263	0.2386
181	657.00	651.00	0.0018	0.2386	0.2404
182	656.00	650.00	0.0044	0.2562	0.2606
183	656.00	649.00	0.0009	0.2729	0.2738
184	655.00	648.00	0.0026	0.2738	0.2764
185	655.00	645.00	0.0062	0.2896	0.2958

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
186	650.00	640.10	0.0053	0.3072	0.3125
187	636.81	625.80	0.0036	0.3125	0.3161
188	634.90	625.00	0.0000	1.7730	1.7730
189	630.12	620.00	0.0000	1.9633	1.9633
190	633.16	624.00	0.0054	1.7730	1.7784
191	642.00	630.32	0.0229	0.0000	0.0229
192	639.34	635.34	0.0220	0.0000	0.0220
193	661.00	650.50	0.0510	0.0000	0.0510
194	663.00	656.00	0.0581	0.0000	0.0581
195	652.00	645.00	0.0229	0.1091	0.1320
196	660.00	653.00	0.0370	0.0000	0.0370
197	643.00	631.95	0.0035	0.0370	0.0405
198	641.00	630.48	0.0009	0.1725	0.1734
199	640.00	629.51	0.0000	0.1954	0.1954
200	640.00	629.00	0.0361	0.1954	0.2314
201	640.00	628.50	0.0035	0.2543	0.2578
202	657.86	640.44	0.0000	1.4406	1.4406
203	651.68	639.30	0.0000	1.4424	1.4424
204	635.35	627.53	0.0000	0.2086	0.2086
205	627.03	613.90	0.0000	0.1188	0.1188
206	642.00	630.70	0.0176	0.0000	0.0176
207	637.00	626.60	0.0000	0.2754	0.2754
208	692.00	681.50	0.0044	0.0493	0.0537
209	691.63	687.63	0.0035	0.0000	0.0035
210	692.87	688.87	0.0035	0.0000	0.0035
211	692.00	686.00	0.0053	0.0070	0.0123
212	688.97	680.00	0.0035	0.0660	0.0695
213	682.39	678.39	0.0026	0.0695	0.0722
214	678.00	673.10	0.0035	0.0722	0.0757
215	694.00	690.00	0.0150	0.0000	0.0150
216	684.36	672.00	0.0035	0.0906	0.0942
217	691.85	687.85	0.0176	0.0000	0.0176
218	685.00	670.90	0.0035	0.1118	0.1153
219	693.50	689.42	0.0018	0.0000	0.0018
220	692.65	688.63	0.0070	0.0018	0.0088
221	687.02	683.02	0.0026	0.0088	0.0114
222	680.80	676.80	0.0044	0.0114	0.0158
223	688.76	684.76	0.0167	0.0000	0.0167
224	681.00	669.80	0.0018	0.1320	0.1338
225	678.34	669.14	0.0009	0.1478	0.1487
226	675.00	668.49	0.0009	0.1646	0.1654
227	675.00	668.10	0.0000	0.1654	0.1654
228	667.43	663.43	0.0000	0.1654	0.1654
229	660.66	656.66	0.0000	0.1654	0.1654
230	652.07	648.07	0.0000	0.3814	0.3814
231	617.00	613.00	0.0000	0.7073	0.7073

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
232	623.02	619.02	0.0000	0.7073	0.7073
233	634.54	630.54	0.0018	0.5957	0.5975
234	642.74	633.00	0.0018	0.5939	0.5957
235	645.01	634.00	0.0054	0.5885	0.5939
236	646.60	637.50	0.0000	0.5885	0.5885
237	646.27	637.60	0.0000	0.5885	0.5885
238	649.49	645.49	0.0054	0.2017	0.2071
239	654.00	647.00	0.0018	0.1999	0.2017
240	715.79	702.58	0.0202	0.0950	0.1153
241	713.78	701.32	0.0308	0.1153	0.1461
242	707.86	697.69	0.0000	0.2112	0.2112
243	708.74	696.43	0.0255	0.2112	0.2367
244	709.51	694.41	0.0370	0.2367	0.2737
245	697.57	685.41	0.0026	0.2948	0.2974
246	702.25	695.20	0.0211	0.0000	0.0211
247	699.14	684.09	0.0035	0.3344	0.3379
248	693.35	682.77	0.0035	0.3898	0.3934
249	683.16	672.11	0.0018	0.4022	0.4039
250	668.43	660.38	0.0062	0.4171	0.4233
251	690.59	684.04	0.0132	0.0000	0.0132
252	656.00	647.39	0.0000	0.7383	0.7383
253	652.94	646.89	0.0000	0.7383	0.7383
254	628.48	619.55	0.0035	0.8765	0.8800
255	634.67	627.08	0.0158	0.0000	0.0158
256	651.29	640.84	0.0070	0.1100	0.1170
257	679.35	670.87	0.0202	0.0000	0.0202
258	659.57	648.16	0.0044	0.0854	0.0898
259	661.88	652.60	0.0097	0.0387	0.0484
260	685.49	673.84	0.0220	0.0167	0.0387
261	702.55	696.00	0.0167	0.0000	0.0167
262	684.59	677.53	0.0370	0.0000	0.0370
263	666.17	658.54	0.0132	0.0273	0.0405
264	642.59	634.66	0.0035	0.0537	0.0572
265	671.57	665.52	0.0132	0.0000	0.0132
266	638.66	628.22	0.0070	0.0845	0.0915
267	653.78	643.95	0.0079	0.0194	0.0273
268	654.48	647.43	0.0194	0.0000	0.0194
269	653.36	646.31	0.0141	0.0000	0.0141
270	626.58	617.80	0.0106	0.9398	0.9504
271	661.10	652.34	0.0414	0.0000	0.0414
272	627.49	618.69	0.0044	0.9214	0.9258
273	632.66	615.97	0.0114	0.9645	0.9759
274	646.22	640.17	0.0141	0.0000	0.0141
275	626.83	614.51	0.0035	1.0674	1.0710
276	626.86	613.48	0.0158	1.0806	1.0965
277	623.97	610.89	0.0000	1.1106	1.1106

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
278	628.22	622.17	0.0141	0.0000	0.0141
279	629.72	623.67	0.0097	0.0000	0.0097
280	624.65	606.77	0.0000	1.1106	1.1106
281	621.00	607.50	0.0000	0.0000	0.0000
282	680.94	673.59	0.0088	0.0000	0.0088
283	713.91	705.91	0.0370	0.0000	0.0370
284	709.71	699.50	0.0651	0.0000	0.0651
285	676.69	665.28	0.0000	0.0238	0.0238
286	684.35	677.74	0.0678	0.0000	0.0678
287	686.89	679.40	0.0088	0.0000	0.0088
288	681.88	675.31	0.0220	0.0000	0.0220
289	674.27	661.54	0.0000	0.0634	0.0634
290	680.15	662.79	0.0088	0.0326	0.0414
291	678.42	664.04	0.0088	0.0238	0.0326
292	657.93	647.93	0.0000	0.1999	0.1999
293	688.12	680.00	0.0202	0.0000	0.0202
294	685.74	675.28	0.0044	0.0317	0.0361
295	686.10	677.87	0.0114	0.0000	0.0114
296	686.35	674.16	0.0035	0.0422	0.0458
297	686.50	679.94	0.0062	0.0000	0.0062
298	687.19	673.27	0.0044	0.0493	0.0537
299	687.72	680.79	0.0035	0.0000	0.0035
300	683.66	672.05	0.0202	0.0669	0.0871
301	689.48	683.51	0.0132	0.0000	0.0132
302	674.98	667.28	0.0000	0.1399	0.1399
303	688.39	683.19	0.0229	0.0000	0.0229
304	690.09	684.74	0.0299	0.0000	0.0299
305	692.12	678.88	0.0000	0.8862	0.8862
306	677.34	663.81	0.0141	0.9363	0.9504
307	673.34	665.85	0.0317	0.0554	0.0871
308	685.55	677.81	0.0194	0.0000	0.0194
309	683.15	668.86	0.0361	0.0000	0.0361
310	672.84	665.47	0.0088	0.0000	0.0088
311	673.46	666.46	0.0554	0.0000	0.0554
312	652.00	645.00	0.0361	0.0000	0.0361
313	655.00	649.00	0.0000	0.2160	0.2160
314	660.00	656.00	0.0000	0.1620	0.1620
315	665.00	658.50	0.0000	0.1080	0.1080
316	671.00	664.00	0.0540	0.0000	0.0540
317	677.00	670.00	0.0540	0.0000	0.0540
318	670.00	663.00	0.0540	0.0000	0.0540
319	673.00	667.00	0.0540	0.0000	0.0540
320	659.72	648.58	0.0070	1.1766	1.1836
321	652.90	639.66	0.0000	1.4406	1.4406
322	661.52	651.66	0.0000	0.1399	0.1399
323	642.14	619.50	0.0000	2.0628	2.0628

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
324	644.75	634.24	0.0484	0.0748	0.1232
325	669.84	662.79	0.0273	0.0000	0.0273
326	631.39	620.64	0.0053	0.1170	0.1223
327	667.06	660.05	0.0000	0.3150	0.3150
328	687.80	678.10	0.0079	0.0528	0.0607
329	703.09	695.12	0.0185	0.0343	0.0528
330	707.36	699.70	0.0158	0.0185	0.0343
331	712.25	705.20	0.0079	0.0106	0.0185
332	716.88	709.51	0.0106	0.0000	0.0106
333	715.72	708.81	0.0519	0.0000	0.0519
334	665.00	656.25	0.0000	0.3150	0.3150
335	663.00	657.00	0.0000	0.3150	0.3150
336	697.70	677.25	0.0000	0.2543	0.2543
337	714.42	706.45	0.0950	0.0000	0.0950
338	701.95	693.00	0.0220	0.0000	0.0220
339	698.12	683.00	0.0000	0.4145	0.4145
340	699.36	688.00	0.0000	0.3925	0.3925
341	692.05	679.33	0.0000	0.8862	0.8862
342	679.00	658.95	0.0600	0.0000	0.0600
343	676.08	670.00	0.0238	0.0000	0.0238
344	676.08	670.00	0.0220	0.0000	0.0220
345	635.35	614.98	0.0000	2.2713	2.2713
346	700.78	689.42	0.0000	0.3925	0.3925
347	710.14	698.78	0.0334	0.0000	0.0334
348	704.15	692.79	0.0097	0.3494	0.3590
349	709.01	697.65	0.0079	0.0651	0.0730
350	713.82	702.37	0.0000	0.0370	0.0370
351	719.97	708.52	0.0370	0.0000	0.0370
352	717.53	706.17	0.0282	0.0000	0.0282
353	710.67	694.00	0.0202	0.2561	0.2763
354	666.25	650.64	0.0062	1.0903	1.0965
355	675.60	665.60	0.0449	0.0000	0.0449
356	674.28	667.08	0.0801	0.0000	0.0801
357	676.69	669.69	0.0554	0.0000	0.0554
358	656.32	641.44	0.0070	1.2390	1.2461
359	660.14	651.40	0.0132	0.1813	0.1945
360	672.00	665.00	0.0229	0.0000	0.0229
361	685.85	675.46	0.0282	0.8994	0.9275
362	693.00	677.92	0.0132	0.8862	0.8994
363	722.00	715.00	0.0211	0.0000	0.0211
364	719.00	712.00	0.0167	0.0598	0.0766
365	721.00	714.00	0.0378	0.0220	0.0598
366	722.00	715.00	0.0026	0.0194	0.0220
367	733.00	726.00	0.0194	0.0000	0.0194
368	707.00	700.00	0.0088	0.0440	0.0528
369	725.00	718.00	0.0185	0.0000	0.0185

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
370	720.00	713.00	0.0255	0.0000	0.0255
371	713.00	700.00	0.0141	0.0898	0.1038
372	725.00	711.50	0.0035	0.0352	0.0387
373	733.00	723.00	0.0229	0.0000	0.0229
374	720.00	713.00	0.0123	0.0000	0.0123
375	735.00	728.00	0.0440	0.0000	0.0440
376	707.53	696.53	0.0000	0.1734	0.1734
377	713.51	706.51	0.0000	0.0537	0.0537
378	720.85	713.85	0.0202	0.0079	0.0282
379	721.15	714.15	0.0255	0.0000	0.0255
380	726.51	719.51	0.0079	0.0000	0.0079
381	710.66	694.75	0.0000	0.2561	0.2561
382	713.18	703.00	0.0000	0.0405	0.0405
383	726.54	719.54	0.0299	0.0000	0.0299
384	726.84	719.84	0.0290	0.0000	0.0290
385	700.22	685.81	0.0000	0.4717	0.4717
386	699.66	687.25	0.0000	0.4717	0.4717
387	698.53	688.61	0.0000	0.4717	0.4717
388	703.57	693.02	0.0000	0.4717	0.4717
389	716.39	710.00	0.0308	0.0000	0.0308
390	699.69	692.34	0.0000	0.4717	0.4717
391	704.97	695.51	0.0273	0.4136	0.4409
392	706.84	696.28	0.0000	0.4136	0.4136
393	708.51	696.97	0.0000	0.3942	0.3942
394	711.52	697.75	0.0000	0.3749	0.3749
395	718.37	700.29	0.0000	0.1461	0.1461
396	714.19	702.14	0.0114	0.0651	0.0766
397	715.00	702.95	0.0000	0.0651	0.0651
398	741.00	731.00	0.0238	0.0000	0.0238
399	716.82	707.85	0.0000	0.0695	0.0695
400	718.39	709.00	0.0695	0.0000	0.0695
401	730.00	723.00	0.0000	0.2182	0.2182
402	748.00	741.00	0.0466	0.0378	0.0845
403	751.00	744.00	0.0000	0.0378	0.0378
404	762.00	755.00	0.0194	0.0000	0.0194
405	760.00	753.00	0.0185	0.0000	0.0185
406	739.00	732.00	0.0282	0.1056	0.1338
407	744.00	736.00	0.0458	0.0598	0.1056
408	744.00	737.00	0.0000	0.0598	0.0598
409	764.00	757.00	0.0343	0.0000	0.0343
410	762.00	755.00	0.0255	0.0000	0.0255
411	748.00	740.00	0.0414	0.0000	0.0414
412	650.00	638.43	0.0000	0.3814	0.3814
413	715.92	711.00	0.0106	0.0000	0.0106
414	712.20	705.00	0.0194	0.0000	0.0194
415	709.79	702.50	0.0194	0.0000	0.0194

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
416	722.47	715.47	0.0370	0.0000	0.0370
417	719.02	712.02	0.0334	0.0000	0.0334
418	717.45	708.77	0.0132	0.0290	0.0422
419	720.47	707.83	0.0106	0.0299	0.0405
420	716.20	703.53	0.0194	0.0537	0.0730
421	710.00	703.00	0.0070	0.0440	0.0510
422	647.57	639.60	0.0018	0.0000	0.0018
423	650.00	643.00	0.1080	0.0000	0.1080
424	629.82	625.81	0.0018	0.7055	0.7073
425	625.31	609.57	0.0000	2.3901	2.3901
426	621.61	606.67	0.0000	2.6656	2.6656
427	619.19	605.83	0.0000	2.6656	2.6656
428	617.08	604.98	0.0000	2.6656	2.6656
429	617.43	604.14	0.0000	2.6656	2.6656
430	614.23	603.75	0.0000	3.3728	3.3728
431	613.00	603.57	0.0000	3.3728	3.3728
432	611.00	603.16	0.0000	3.3728	3.3728
433	611.23	602.41	0.0000	3.3728	3.3728
434	704.25	688.76	0.0000	0.0000	0.0000
435	657.20	635.85	0.0000	0.6204	0.6204
436	649.22	628.55	0.0000	0.6204	0.6204
437	642.58	627.00	0.0000	0.6204	0.6204
438	688.44	670.33	0.0000	0.6204	0.6204
439	696.60	682.54	0.0000	0.6204	0.6204
440	698.97	686.12	0.6204	0.0000	0.6204
441	691.08	675.45	0.0000	0.6204	0.6204
460	682.86	664.17	0.0000	0.6204	0.6204
473	642.54	626.31	0.0000	0.6204	0.6204
474	651.00	627.00	0.0000	0.0000	0.0000
477	662.59	648.99	0.0000	0.0600	0.0600
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.84	0.1153	34.4
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.95	0.1461	40.6
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	2.17	0.2112	45.1
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	2.37	0.2367	45.8
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	2.01	0.2017	31.1
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	2.70	0.2737	47.6
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	3.61	0.2071	38.7
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	1.40	0.0211	30.7
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	4.02	0.5885	37.0
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	2.31	0.2974	40.5
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	3.42	0.5885	43.3
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	2.42	0.3379	41.4
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	2.56	0.5939	43.4
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	5.33	0.3934	41.4
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	3.25	0.5957	40.3
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	5.51	0.4039	42.2
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.95	0.0132	31.5
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	5.88	0.5975	42.2
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	6.17	0.7073	35.9
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	5.05	0.7073	38.0
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	5.73	0.4233	59.5
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	5.75	0.7073	36.6
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	2.56	0.7383	66.7
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	3.72	0.7383	65.9
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	5.40	0.3814	45.8
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	2.10	0.3814	49.6
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	3.83	0.1654	33.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	1.50	0.0158	52.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	3.08	0.1654	23.6
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	4.91	0.1170	31.2

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	3.01	0.1654	23.8
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	2.20	0.0202	20.6
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.92	0.1654	27.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	3.14	0.0898	27.4
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	2.04	0.1487	36.3
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	2.18	0.0484	22.1
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	2.00	0.1338	34.8
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	2.30	0.0387	17.6
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.91	0.0167	30.3
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.99	0.0167	13.7
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	2.50	0.0370	20.9
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.75	0.0158	23.6
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	3.12	0.0405	18.7
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.80	0.0114	9.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	2.12	0.0132	15.0
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	1.20	0.0088	8.4
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	2.66	0.0572	23.1
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.54	0.0018	8.3
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	2.44	0.0273	19.9
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.81	0.1153	33.1
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	1.15	0.0194	13.4
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	2.02	0.0176	29.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	2.30	0.0141	52.4
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	2.41	0.0414	57.1
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.79	0.0942	30.5
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	2.65	0.8800	63.4
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.76	0.0150	19.3
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	2.67	0.9258	63.9
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	2.81	0.9504	64.6
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.65	0.0757	27.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.95	0.0141	54.5
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	3.13	0.0722	24.3
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	2.74	0.9759	66.3
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.71	0.0695	23.2
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	3.19	0.0915	62.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.68	0.0123	16.5
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.98	1.0710	66.8
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	1.12	0.0035	9.8
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	3.04	1.0965	61.3
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	1.09	0.0035	7.1
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.60	0.0141	46.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.65	0.0537	21.9
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.62	0.0097	54.1
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	4.70	1.1106	59.1
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.87	0.0088	30.5
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	2.11	0.0370	34.2
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	5.53	0.2754	36.5
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.78	0.0651	33.3
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	1.08	0.0176	29.1
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	3.63	2.2713	25.2
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.62	0.0634	28.6
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	4.90	0.2086	32.0
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.85	0.0678	28.2
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	3.09	1.4406	56.1
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	2.85	0.2578	44.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.55	0.0088	11.3
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	2.28	0.2314	45.1
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.61	0.0220	17.7
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.56	0.1954	50.2
CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	1.35	0.0414	21.1

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.92	0.1734	48.3
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	1.47	0.0405	30.1
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	1.15	0.0238	15.9
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.98	0.0370	17.1
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	1.28	0.0326	18.2
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	2.00	0.1999	32.7
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	1.17	0.0202	15.7
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	1.12	0.0114	13.7
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	1.27	0.0361	18.9
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.75	0.0062	7.2
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	3.07	0.1320	36.7
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	1.49	0.0458	20.6
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.63	0.0035	5.5
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	2.39	0.0581	25.8
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	1.48	0.0537	23.5
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.63	0.0510	25.4
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	1.47	0.0132	17.4
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.94	0.0871	28.7
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	2.07	0.0229	22.4
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	1.35	0.0220	33.5
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	2.01	0.0299	23.3
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	3.11	0.1399	28.7
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	1.42	0.0229	28.4
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	3.37	0.8862	51.9
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	3.97	0.9275	51.1
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	5.87	1.7784	43.1
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	4.36	0.9504	52.7
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.93	0.0871	53.2
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.65	0.0194	18.6
CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.33	1.7730	41.9

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	1.40	0.0361	21.3
CO-127	187	625.80	188	625.00	137.1	0.006	8.0	0.013	2.68	0.3161	73.0
CO-128	186	640.10	187	625.80	303.8	0.047	8.0	0.013	5.72	0.3125	50.3
CO-129	185	645.00	186	640.10	598.4	0.008	8.0	0.013	3.00	0.2958	48.1
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.76	0.0088	43.5
CO-131	184	648.00	185	645.00	217.1	0.014	8.0	0.013	3.56	0.2764	46.6
CO-132	183	649.00	184	648.00	189.0	0.005	8.0	0.013	2.50	0.2738	47.3
CO-133	182	650.00	183	649.00	389.0	0.003	8.0	0.013	1.87	0.2606	54.1
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	2.46	0.0554	22.1
CO-135	181	651.00	182	650.00	287.4	0.003	8.0	0.013	2.06	0.2404	55.2
CO-136	180	661.00	181	651.00	687.9	0.015	8.0	0.013	3.48	0.2386	46.8
CO-137	179	665.00	180	661.00	388.6	0.010	8.0	0.013	3.03	0.2263	41.8
CO-138	178	666.00	179	665.00	38.0	0.026	8.0	0.013	4.20	0.2174	40.8
CO-139	177	668.00	178	666.00	336.3	0.006	8.0	0.013	2.45	0.2174	41.0
CO-140	176	669.00	177	668.00	368.4	0.003	8.0	0.013	0.81	0.0123	26.7
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	4.98	0.2160	45.4
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	3.54	0.1620	37.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	2.96	0.1080	31.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	1.36	0.0114	10.4
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	2.54	0.0540	23.9
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	1.22	0.0114	39.0
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	2.86	0.0540	23.9
CO-148	173	626.80	188	625.00	365.3	0.005	12.0	0.013	3.60	1.4569	69.2
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	2.43	0.0540	27.2
CO-150	168	628.50	173	626.80	459.3	0.004	12.0	0.013	3.14	1.4481	79.8
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	3.08	0.0540	30.0
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	2.21	0.0203	58.6
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.71	0.0141	15.8
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	3.78	1.0965	56.6
CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	5.44	1.0454	54.8

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Active Scenario: Existing Model - Peak Flow (PF=4)

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CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.75	0.0088	12.8
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	3.20	1.4406	51.5
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	1.42	0.0070	10.7
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	2.51	0.1399	28.3
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	6.63	1.4424	39.8
CO-162	167	629.20	168	628.50	367.2	0.002	12.0	0.013	2.81	1.4279	92.7
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	3.42	2.0628	24.8
CO-164	166	629.50	167	629.20	167.0	0.002	12.0	0.013	2.79	1.4172	100.0
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.89	0.1232	37.9
CO-166	165	630.00	166	629.50	153.0	0.003	12.0	0.013	2.79	1.4172	100.0
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	2.56	0.0229	18.8
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	3.16	0.0748	28.2
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	1.20	0.0273	16.4
CO-170	162	634.50	163	633.00	334.4	0.004	12.0	0.013	2.58	1.3119	100.0
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.87	0.1223	63.3
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	5.09	0.3150	72.2
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	1.22	0.0256	18.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	3.44	0.0607	34.9
CO-175	158	630.50	165	630.00	200.7	0.002	12.0	0.013	2.79	1.4172	100.0
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	2.42	0.0528	20.2
CO-177	164	631.00	158	630.50	187.5	0.003	12.0	0.013	2.75	1.3977	100.0
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	1.45	0.0343	17.8
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	2.18	0.0159	55.3
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.65	0.0185	13.8
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.53	0.0018	9.6
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	1.03	0.0106	10.3
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.66	0.0114	11.6
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	2.08	0.0519	35.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.67	0.0114	18.4
CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	2.58	0.3150	51.1

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-187	153	631.50	164	631.00	162.2	0.003	12.0	0.013	2.75	1.3977	100.0
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	4.02	0.3150	51.1
CO-189	163	633.00	153	631.50	333.0	0.005	12.0	0.013	2.66	1.3491	100.0
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	2.87	0.2543	46.4
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	2.89	0.0450	59.0
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	1.01	0.0097	12.9
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.65	0.0220	34.5
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	1.48	0.0176	14.6
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	3.48	0.3925	55.8
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	2.02	0.0212	20.0
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	5.06	0.4145	73.6
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	2.46	0.0336	61.2
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	2.76	0.8862	55.9
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	2.23	0.0600	22.4
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	3.61	0.0810	26.9
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.90	0.0123	15.3
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.91	0.0203	18.5
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.90	0.0264	21.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	2.57	0.0380	61.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	3.46	0.3925	52.6
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.72	0.0334	35.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	1.49	0.0062	11.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	3.39	0.3590	53.7
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.85	0.0141	15.2
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	2.17	0.0730	37.8
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.66	0.0176	17.7
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.77	0.0370	19.6
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	2.02	0.0256	19.7
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.77	0.0370	15.5
CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	2.07	0.0370	25.9

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.63	0.0282	18.6
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	2.40	0.0352	23.2
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	2.14	0.0220	20.5
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.87	0.0167	16.8
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.66	0.2763	60.8
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	1.32	0.0088	13.5
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.77	0.0449	50.7
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	1.38	0.0062	16.3
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	2.18	0.0361	21.0
CO-226	133	644.00	12th Street LS (Downtown)	622.00	549.6	0.040	6.0	0.013	2.98	0.0361	19.2
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	2.04	0.0801	55.3
CO-228	132	627.15	12th Street LS (Downtown)	622.00	244.8	0.021	6.0	0.013	2.74	0.0592	26.3
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	2.38	0.0554	60.0
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	1.20	0.0592	35.6
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.83	0.0574	25.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	1.26	0.0574	23.0
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	1.18	0.0359	22.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.61	0.0229	25.4
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	1.08	0.0305	18.8
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	3.34	0.8994	51.6
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	1.05	0.0269	17.7
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	2.42	0.0211	29.6
CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.99	0.0108	13.3
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	3.12	0.0766	33.7
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.66	0.0072	9.5

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.83	0.0598	22.2
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	1.05	0.0090	12.6
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	1.03	0.0220	17.9
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.84	0.0018	11.0
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.63	0.0194	13.4
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.89	0.0018	11.0
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	2.16	0.0528	30.8
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	1.40	0.0054	12.7
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.88	0.0185	15.5
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.62	0.0072	13.5
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.70	0.0255	16.5
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.55	0.0018	3.9
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.99	0.1038	35.2
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	1.19	0.0018	13.4
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	2.85	0.0387	22.4
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.54	0.0283	21.1
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.56	0.0229	14.7
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	1.33	0.0213	19.4
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.80	0.0123	14.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	1.41	0.0097	15.1
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	1.44	0.0510	24.8
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	2.42	0.0440	19.6
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.77	0.1003	33.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.59	0.0123	15.7
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	2.28	0.0730	30.5
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.98	0.0537	21.3
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	1.48	0.0220	25.3
CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.64	0.0282	16.9
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	2.48	0.0705	30.1
CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.59	0.0255	16.6

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	1.11	0.0079	10.8
CO-273	109	604.00	Meadowlands LS	575.00	387.8	0.075	6.0	0.013	4.51	0.0705	25.4
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	2.38	0.0318	23.3
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	2.21	0.1734	43.5
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	2.45	0.0415	28.8
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	2.76	0.0405	33.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	1.40	0.0070	21.4
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.97	0.0405	15.8
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.67	0.0299	15.8
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	2.71	0.0422	33.2
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.65	0.0290	15.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	3.96	0.4717	48.0
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	1.22	0.0088	8.6
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	2.07	0.4717	40.8
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	1.26	0.0123	13.3
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	2.32	0.4717	44.0
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	1.42	0.0370	16.8
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	2.20	0.4717	51.2
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.68	0.0370	16.3
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.83	0.0308	40.3
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.53	0.0370	19.8
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.75	0.0695	24.3
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	2.24	0.0889	30.4
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	1.36	0.4717	47.0
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	1.34	0.0959	31.5
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	2.05	0.4409	43.9
CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	2.14	0.1047	28.3
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	2.14	0.4136	42.3
CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	2.50	0.1144	27.3

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

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CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	2.13	0.3942	40.0
CO-303	95	592.25	Meadowlands LS	575.00	518.3	0.033	8.0	0.013	3.78	0.1144	24.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	2.11	0.3749	38.7
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.59	0.0185	17.9
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.69	0.1461	37.6
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.92	0.0255	25.2
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	1.34	0.0766	25.7
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	1.34	0.0651	20.7
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.68	0.0158	24.6
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	1.43	0.0062	10.7
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	2.36	0.0238	18.7
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.92	0.0097	25.2
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	2.60	0.0695	29.6
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.58	0.0695	23.7
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	68.3
CO-320	86	669.00	179	665.00	760.4	0.005	6.0	0.013	0.73	0.0036	31.5
CO-321	85	675.00	177	668.00	890.7	0.008	8.0	0.013	2.67	0.2051	40.3
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	3.22	0.2182	48.9
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	3.09	0.1910	38.5
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	2.46	0.0845	32.6
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	2.57	0.0598	29.3
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	1.27	0.0378	21.9
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	1.36	0.0572	22.5
CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.61	0.0194	15.3
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	1.39	0.0519	23.2
CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.66	0.0185	15.2

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CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.67	0.0026	12.8
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	2.36	0.1338	35.9
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	2.02	0.1056	29.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	2.26	0.1153	29.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	1.44	0.0598	26.1
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	2.44	0.1100	28.7
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	2.12	0.0343	19.8
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.54	0.0405	22.9
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.86	0.0255	18.7
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.63	0.0343	16.5
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	2.83	0.0414	20.8
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	1.46	0.0273	14.8
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.56	0.0106	32.9
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.61	0.0194	35.3
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	1.47	0.0194	36.3
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.83	0.0035	9.6
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.77	0.0370	17.8
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.68	0.0097	13.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.73	0.0334	17.9
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.89	0.0202	13.3
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.42	0.0018	67.0
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	1.45	0.0299	17.8
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	2.83	0.1080	47.1
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	4.23	0.1188	23.9
CO-358	426	606.67	427	605.83	294.4	0.003	30.0	0.013	3.43	2.6656	29.4
CO-359	427	605.83	428	604.98	300.8	0.003	30.0	0.013	3.41	2.6656	28.2
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.73	0.0176	22.0
CO-361	428	604.98	429	604.14	212.1	0.004	30.0	0.013	3.85	2.6656	30.0
CO-362	429	604.14	430	603.75	203.9	0.002	30.0	0.013	2.97	2.6656	35.4
CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.59	0.0176	23.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-364	430	603.75	431	603.57	84.1	0.002	30.0	0.013	3.30	3.3728	39.4
CO-365	431	603.57	432	603.16	317.5	0.001	30.0	0.013	2.74	3.3728	40.8
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	1.46	0.0502	21.7
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	3.24	0.0695	25.4
CO-368	432	603.16	433	602.41	556.6	0.001	30.0	0.013	2.79	3.3728	35.4
CO-369	433	602.41	Justin Treatment Plant	596.00	189.0	0.034	30.0	0.013	8.83	3.3728	24.0
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	1.34	0.0273	17.4
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	3.06	0.6204	19.4
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	3.07	0.6204	19.4
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	1.14	0.0167	13.1
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	2.90	0.6204	13.7
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	1.20	0.0053	8.9
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	2.12	0.6204	13.7
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.82	0.0018	7.6
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	2.75	0.6204	12.5
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	2.75	0.6204	18.6
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	1.24	0.0106	10.2
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.74	0.0950	30.6
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	1.35	0.0194	12.1
CO-382	280	606.77	Timberbrook LS	606.50	58.8	0.005	12.0	0.013	3.34	1.1106	59.1
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	1.39	0.0220	16.3
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	6.15	0.6204	24.6
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	4.34	0.6204	27.2
CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.94	0.0018	7.6
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	4.02	0.6204	27.9
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.83	0.0114	7.7
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	1.35	0.0114	10.8

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.88	0.0088	10.3
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.76	0.0123	10.1
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	1.14	0.0026	7.6
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	1.49	0.0106	9.3
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.68	0.0141	22.9
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.91	0.0326	19.3
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	2.01	0.0185	18.2
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.75	0.0220	17.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.92	0.0238	18.9
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	2.24	0.2086	41.3
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	3.08	0.0854	33.8
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	2.27	0.2086	42.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	2.81	0.0167	8.6
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.84	0.0167	17.5
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	2.02	0.0361	14.7
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	3.17	0.0361	22.8
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	3.18	0.1188	25.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	1.15	0.0026	10.7
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.68	0.0018	10.9
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.60	0.0079	17.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	1.18	0.0088	13.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.64	0.0070	5.5
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	1.45	0.0123	39.3
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.76	0.0158	47.1
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.99	0.0035	10.7
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.76	0.0036	12.6
CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.58	0.0071	10.7
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	1.28	0.0089	10.8
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	2.09	0.0089	55.7
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.57	0.0132	38.5

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.94	0.0088	55.6
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	1.11	0.0018	17.2
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.68	0.0018	14.6
CO-447	160	635.27	12th Street LS (Downtown)	622.00	328.5	0.040	8.0	0.013	3.39	0.0626	17.4
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	1.27	0.0600	19.2
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	1.27	0.0600	25.9
CO-449	21	641.91	358	641.44	147.6	0.003	12.0	0.013	2.90	1.1836	79.5
CO-450	358	641.44	202	640.44	347.3	0.003	12.0	0.013	2.77	1.2461	76.9
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	0.59	0.0035	5.6
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	1.00	0.0035	12.6
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	2.58	0.1584	36.2
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	3.68	0.1945	69.0
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	1.58	0.0519	21.3
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	4.14	1.1836	66.9
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	1.46	0.0150	12.5
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	3.92	0.1223	24.8
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.85	0.0036	6.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	1.14	0.0072	10.5
CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.81	0.0036	6.2
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.76	0.0240	9.0
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	1.10	0.0240	23.0
CO-471	8	597.00	Justin Treatment Plant	596.00	132.8	0.008	24.0	0.013	4.55	1.9873	28.7
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	4.36	2.3901	27.3
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	10.69	1.9633	33.0
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.73	0.1566	41.5

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.81	0.1566	43.9
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.74	0.0519	24.6
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.71	0.1778	45.4
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	4.96	0.2543	35.8
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	1.47	0.0484	25.1
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	2.33	0.2561	59.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Model - Peak Flow (PF=4)

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.1849
12th Street LS (Private)	666.05	645.00	0.1223
12th Street LS (Downtown)	637.00	622.00	0.1579
Timberbrooks LS	626.50	606.50	1.1106
Justin Treatment Plant	616.27	596.00	5.3601

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.1003	0.1003
2	697.00	688.00	0.0000	0.2543	0.2543
3	713.23	700.75	0.0150	0.0334	0.0484
4	715.75	703.96	0.0150	0.0370	0.0519
5	699.00	689.00	0.0000	0.1778	0.1778
6	701.00	692.50	0.0000	0.1566	0.1566
7	701.00	694.00	0.0000	0.1566	0.1566
8	616.65	597.00	0.0000	1.9873	1.9873
9	624.36	600.00	0.0000	0.0240	0.0240
10	615.22	611.22	0.0240	0.0000	0.0240
11	639.83	635.83	0.0036	0.0000	0.0036
12	630.00	626.00	0.0000	0.0072	0.0072
13	640.61	636.61	0.0036	0.0000	0.0036
14	684.46	677.74	0.0150	0.0000	0.0150
15	665.40	656.95	0.0079	1.0375	1.0454
17	672.00	660.12	0.0273	0.1311	0.1584
18	695.45	688.75	0.0484	0.0035	0.0519
19	700.00	693.50	0.0000	0.0035	0.0035
20	702.00	696.00	0.0035	0.0000	0.0035
21	655.88	641.91	0.0000	1.1836	1.1836
22	671.67	651.05	0.0000	0.0600	0.0600
23	636.98	632.98	0.0018	0.0000	0.0018
24	637.85	633.00	0.0018	0.0000	0.0018
25	643.27	639.27	0.0088	0.0000	0.0088
26	663.00	656.00	0.0132	0.0000	0.0132
27	641.33	637.33	0.0000	0.0089	0.0089
28	642.00	638.00	0.0018	0.0071	0.0089
29	662.29	658.29	0.0071	0.0000	0.0071
30	645.00	641.00	0.0036	0.0000	0.0036
31	653.81	649.81	0.0035	0.0000	0.0035
32	681.00	669.74	0.0158	0.0000	0.0158
33	673.00	662.09	0.0123	0.0000	0.0123
34	630.99	626.99	0.0070	0.0000	0.0070
35	628.00	624.00	0.0088	0.0000	0.0088
36	628.00	624.00	0.0079	0.0000	0.0079
37	625.00	621.00	0.0018	0.0000	0.0018
38	625.00	621.00	0.0026	0.0000	0.0026
39	626.00	622.00	0.0018	0.1170	0.1188
40	645.95	641.95	0.0000	0.0361	0.0361
41	646.00	639.00	0.0088	0.0722	0.0810
42	654.00	647.00	0.0000	0.0167	0.0167
43	639.22	630.25	0.0000	0.2086	0.2086
44	635.02	629.32	0.0000	0.2086	0.2086
45	664.58	651.86	0.0202	0.0651	0.0854
46	671.94	659.46	0.0202	0.0546	0.0748
47	683.37	676.59	0.0326	0.0000	0.0326

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
48	683.31	677.33	0.0185	0.0000	0.0185
49	680.62	674.00	0.0035	0.0106	0.0141
50	685.00	681.00	0.0106	0.0000	0.0106
51	679.25	672.00	0.0026	0.0000	0.0026
52	670.26	666.26	0.0018	0.0150	0.0167
53	681.22	677.22	0.0123	0.0000	0.0123
54	682.00	678.00	0.0088	0.0000	0.0088
55	669.37	665.37	0.0026	0.0202	0.0229
56	672.31	668.31	0.0000	0.0114	0.0114
57	685.00	681.00	0.0114	0.0000	0.0114
58	693.97	689.97	0.0018	0.0000	0.0018
59	692.00	683.50	0.0026	0.0194	0.0220
60	693.50	686.00	0.0070	0.0123	0.0194
61	695.00	691.00	0.0106	0.0000	0.0106
62	692.00	688.00	0.0018	0.0000	0.0018
63	695.00	691.00	0.0053	0.0000	0.0053
64	693.29	686.50	0.0097	0.0070	0.0167
65	691.97	684.00	0.0106	0.0167	0.0273
66	675.00	671.00	0.0018	0.0678	0.0695
67	689.00	686.00	0.0176	0.0000	0.0176
68	695.50	691.50	0.0176	0.0000	0.0176
69	676.19	672.22	0.0026	0.0475	0.0502
70	678.00	674.00	0.0097	0.0202	0.0299
71	686.09	682.00	0.0106	0.0097	0.0202
72	700.00	696.00	0.0062	0.0035	0.0097
73	702.00	698.00	0.0035	0.0000	0.0035
74	681.64	672.00	0.0273	0.0000	0.0273
75	684.00	669.00	0.0070	0.0273	0.0343
76	680.71	665.00	0.0062	0.0343	0.0405
77	673.00	662.00	0.0000	0.1100	0.1100
78	673.00	661.50	0.0053	0.1100	0.1153
79	670.00	659.00	0.0070	0.1153	0.1223
80	692.64	688.00	0.0026	0.0000	0.0026
81	697.00	687.00	0.0000	0.0519	0.0519
82	696.89	686.50	0.0053	0.0519	0.0572
83	695.07	686.00	0.0000	0.0598	0.0598
84	692.67	682.00	0.1312	0.0598	0.1910
85	686.04	675.00	0.0141	0.1910	0.2051
86	676.00	669.00	0.0036	0.0000	0.0036
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0035	0.0062	0.0097
92	619.26	615.00	0.0062	0.0000	0.0062
93	621.16	617.16	0.0132	0.0026	0.0158

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
94	618.07	614.07	0.0070	0.0185	0.0255
95	596.25	592.25	0.0000	0.1144	0.1144
96	604.14	597.00	0.0000	0.1144	0.1144
97	604.00	600.00	0.0088	0.0959	0.1047
98	604.83	600.83	0.0070	0.0889	0.0959
99	615.32	604.00	0.0035	0.0854	0.0889
100	613.82	607.00	0.0070	0.0625	0.0695
101	613.00	608.00	0.0000	0.0370	0.0370
102	612.36	609.00	0.0000	0.0370	0.0370
103	617.60	615.00	0.0246	0.0123	0.0370
104	623.40	617.00	0.0035	0.0088	0.0123
105	630.59	622.00	0.0088	0.0000	0.0088
106	623.36	619.36	0.0079	0.0106	0.0185
107	618.58	614.58	0.0070	0.0000	0.0070
108	618.00	614.00	0.0018	0.0397	0.0415
109	608.00	604.00	0.0000	0.0705	0.0705
110	612.70	608.70	0.0000	0.0705	0.0705
111	615.01	611.01	0.0097	0.0123	0.0220
112	619.01	615.01	0.0053	0.0070	0.0123
113	632.33	628.33	0.0097	0.0000	0.0097
114	627.31	623.31	0.0044	0.0169	0.0213
115	625.81	621.81	0.0070	0.0213	0.0283
116	622.45	618.45	0.0018	0.0301	0.0318
117	630.32	626.32	0.0000	0.0018	0.0018
118	631.79	627.79	0.0018	0.0000	0.0018
119	636.30	634.00	0.0072	0.0000	0.0072
120	639.00	635.00	0.0054	0.0000	0.0054
121	638.41	635.41	0.0018	0.0000	0.0018
122	638.00	635.00	0.0018	0.0000	0.0018
123	639.37	635.37	0.0090	0.0000	0.0090
124	637.33	634.50	0.0072	0.0000	0.0072
125	639.71	634.00	0.0036	0.0072	0.0108
126	640.00	633.00	0.0000	0.0269	0.0269
127	638.00	632.00	0.0000	0.0305	0.0305
128	638.00	631.00	0.0000	0.0359	0.0359
129	639.00	630.50	0.0197	0.0376	0.0574
130	638.52	629.50	0.0000	0.0574	0.0574
131	638.93	628.00	0.0000	0.0592	0.0592
132	631.15	627.15	0.0000	0.0592	0.0592
133	648.00	644.00	0.0000	0.0361	0.0361
134	657.27	653.27	0.0300	0.0062	0.0361
135	683.62	679.62	0.0062	0.0000	0.0062
136	688.94	684.94	0.0088	0.0000	0.0088
137	684.00	680.00	0.0079	0.0088	0.0167
138	673.70	669.70	0.0053	0.0167	0.0220
139	665.44	661.44	0.0132	0.0220	0.0352

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
140	647.95	643.95	0.0018	0.0352	0.0370
141	649.63	645.63	0.0080	0.0176	0.0256
142	655.77	651.77	0.0035	0.0141	0.0176
143	666.41	662.41	0.0079	0.0062	0.0141
144	676.16	672.16	0.0062	0.0000	0.0062
145	650.00	646.00	0.0116	0.0264	0.0380
146	654.80	650.80	0.0062	0.0203	0.0264
147	663.89	659.89	0.0080	0.0123	0.0203
148	684.50	680.50	0.0123	0.0000	0.0123
149	659.42	655.42	0.0125	0.0212	0.0336
150	682.72	678.72	0.0212	0.0000	0.0212
151	679.20	675.20	0.0176	0.0000	0.0176
152	680.00	676.00	0.0097	0.0000	0.0097
153	642.65	631.50	0.0036	1.3941	1.3977
154	667.28	663.28	0.0160	0.0291	0.0450
155	671.41	667.41	0.0000	0.0114	0.0114
156	678.17	674.17	0.0000	0.0114	0.0114
157	678.92	674.92	0.0018	0.0000	0.0018
158	642.00	630.50	0.0036	1.4136	1.4172
159	674.11	670.11	0.0159	0.0000	0.0159
160	639.27	635.27	0.0000	0.0626	0.0626
161	641.92	636.92	0.0000	0.0256	0.0256
162	644.00	634.50	1.2739	0.0380	1.3119
163	643.00	633.00	0.0036	1.3455	1.3491
164	641.74	631.00	0.0000	1.3977	1.3977
165	643.00	630.00	0.0000	1.4172	1.4172
166	641.00	629.50	0.0000	1.4172	1.4172
167	640.87	629.20	0.0018	1.4261	1.4279
168	639.51	628.50	0.0000	1.4481	1.4481
169	669.64	665.64	0.0070	0.0000	0.0070
170	657.00	653.00	0.0018	0.0070	0.0088
171	650.05	646.05	0.0018	0.0123	0.0141
172	643.48	639.48	0.0026	0.0176	0.0203
173	638.23	626.80	0.0000	1.4569	1.4569
174	657.00	645.64	0.0114	0.0000	0.0114
175	689.00	679.19	0.0114	0.0000	0.0114
176	676.00	669.00	0.0009	0.0114	0.0123
177	675.00	668.00	0.0000	0.2174	0.2174
178	675.00	666.00	0.0000	0.2174	0.2174
179	675.00	665.00	0.0053	0.2210	0.2263
180	668.00	661.00	0.0123	0.2263	0.2386
181	657.00	651.00	0.0018	0.2386	0.2404
182	656.00	650.00	0.0044	0.2562	0.2606
183	656.00	649.00	0.0009	0.2729	0.2738
184	655.00	648.00	0.0026	0.2738	0.2764
185	655.00	645.00	0.0062	0.2896	0.2958

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
186	650.00	640.10	0.0053	0.3072	0.3125
187	636.81	625.80	0.0036	0.3125	0.3161
188	634.90	625.00	0.0000	1.7730	1.7730
189	630.12	620.00	0.0000	1.9633	1.9633
190	633.16	624.00	0.0054	1.7730	1.7784
191	642.00	630.32	0.0229	0.0000	0.0229
192	639.34	635.34	0.0220	0.0000	0.0220
193	661.00	650.50	0.0510	0.0000	0.0510
194	663.00	656.00	0.0581	0.0000	0.0581
195	652.00	645.00	0.0229	0.1091	0.1320
196	660.00	653.00	0.0370	0.0000	0.0370
197	643.00	631.95	0.0035	0.0370	0.0405
198	641.00	630.48	0.0009	0.1725	0.1734
199	640.00	629.51	0.0000	0.1954	0.1954
200	640.00	629.00	0.0361	0.1954	0.2314
201	640.00	628.50	0.0035	0.2543	0.2578
202	657.86	640.44	0.0000	1.4406	1.4406
203	651.68	639.30	0.0000	1.4424	1.4424
204	635.35	627.53	0.0000	0.2086	0.2086
205	627.03	613.90	0.0000	0.1188	0.1188
206	642.00	630.70	0.0176	0.0000	0.0176
207	637.00	626.60	0.0000	0.2754	0.2754
208	692.00	681.50	0.0044	0.0493	0.0537
209	691.63	687.63	0.0035	0.0000	0.0035
210	692.87	688.87	0.0035	0.0000	0.0035
211	692.00	686.00	0.0053	0.0070	0.0123
212	688.97	680.00	0.0035	0.0660	0.0695
213	682.39	678.39	0.0026	0.0695	0.0722
214	678.00	673.10	0.0035	0.0722	0.0757
215	694.00	690.00	0.0150	0.0000	0.0150
216	684.36	672.00	0.0035	0.0906	0.0942
217	691.85	687.85	0.0176	0.0000	0.0176
218	685.00	670.90	0.0035	0.1118	0.1153
219	693.50	689.42	0.0018	0.0000	0.0018
220	692.65	688.63	0.0070	0.0018	0.0088
221	687.02	683.02	0.0026	0.0088	0.0114
222	680.80	676.80	0.0044	0.0114	0.0158
223	688.76	684.76	0.0167	0.0000	0.0167
224	681.00	669.80	0.0018	0.1320	0.1338
225	678.34	669.14	0.0009	0.1478	0.1487
226	675.00	668.49	0.0009	0.1646	0.1654
227	675.00	668.10	0.0000	0.1654	0.1654
228	667.43	663.43	0.0000	0.1654	0.1654
229	660.66	656.66	0.0000	0.1654	0.1654
230	652.07	648.07	0.0000	0.3814	0.3814
231	617.00	613.00	0.0000	0.7073	0.7073

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
232	623.02	619.02	0.0000	0.7073	0.7073
233	634.54	630.54	0.0018	0.5957	0.5975
234	642.74	633.00	0.0018	0.5939	0.5957
235	645.01	634.00	0.0054	0.5885	0.5939
236	646.60	637.50	0.0000	0.5885	0.5885
237	646.27	637.60	0.0000	0.5885	0.5885
238	649.49	645.49	0.0054	0.2017	0.2071
239	654.00	647.00	0.0018	0.1999	0.2017
240	715.79	702.58	0.0202	0.0950	0.1153
241	713.78	701.32	0.0308	0.1153	0.1461
242	707.86	697.69	0.0000	0.2112	0.2112
243	708.74	696.43	0.0255	0.2112	0.2367
244	709.51	694.41	0.0370	0.2367	0.2737
245	697.57	685.41	0.0026	0.2948	0.2974
246	702.25	695.20	0.0211	0.0000	0.0211
247	699.14	684.09	0.0035	0.3344	0.3379
248	693.35	682.77	0.0035	0.3898	0.3934
249	683.16	672.11	0.0018	0.4022	0.4039
250	668.43	660.38	0.0062	0.4171	0.4233
251	690.59	684.04	0.0132	0.0000	0.0132
252	656.00	647.39	0.0000	0.7383	0.7383
253	652.94	646.89	0.0000	0.7383	0.7383
254	628.48	619.55	0.0035	0.8765	0.8800
255	634.67	627.08	0.0158	0.0000	0.0158
256	651.29	640.84	0.0070	0.1100	0.1170
257	679.35	670.87	0.0202	0.0000	0.0202
258	659.57	648.16	0.0044	0.0854	0.0898
259	661.88	652.60	0.0097	0.0387	0.0484
260	685.49	673.84	0.0220	0.0167	0.0387
261	702.55	696.00	0.0167	0.0000	0.0167
262	684.59	677.53	0.0370	0.0000	0.0370
263	666.17	658.54	0.0132	0.0273	0.0405
264	642.59	634.66	0.0035	0.0537	0.0572
265	671.57	665.52	0.0132	0.0000	0.0132
266	638.66	628.22	0.0070	0.0845	0.0915
267	653.78	643.95	0.0079	0.0194	0.0273
268	654.48	647.43	0.0194	0.0000	0.0194
269	653.36	646.31	0.0141	0.0000	0.0141
270	626.58	617.80	0.0106	0.9398	0.9504
271	661.10	652.34	0.0414	0.0000	0.0414
272	627.49	618.69	0.0044	0.9214	0.9258
273	632.66	615.97	0.0114	0.9645	0.9759
274	646.22	640.17	0.0141	0.0000	0.0141
275	626.83	614.51	0.0035	1.0674	1.0710
276	626.86	613.48	0.0158	1.0806	1.0965
277	623.97	610.89	0.0000	1.1106	1.1106

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

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278	628.22	622.17	0.0141	0.0000	0.0141
279	629.72	623.67	0.0097	0.0000	0.0097
280	624.65	606.77	0.0000	1.1106	1.1106
281	621.00	607.50	0.0000	0.0000	0.0000
282	680.94	673.59	0.0088	0.0000	0.0088
283	713.91	705.91	0.0370	0.0000	0.0370
284	709.71	699.50	0.0651	0.0000	0.0651
285	676.69	665.28	0.0000	0.0238	0.0238
286	684.35	677.74	0.0678	0.0000	0.0678
287	686.89	679.40	0.0088	0.0000	0.0088
288	681.88	675.31	0.0220	0.0000	0.0220
289	674.27	661.54	0.0000	0.0634	0.0634
290	680.15	662.79	0.0088	0.0326	0.0414
291	678.42	664.04	0.0088	0.0238	0.0326
292	657.93	647.93	0.0000	0.1999	0.1999
293	688.12	680.00	0.0202	0.0000	0.0202
294	685.74	675.28	0.0044	0.0317	0.0361
295	686.10	677.87	0.0114	0.0000	0.0114
296	686.35	674.16	0.0035	0.0422	0.0458
297	686.50	679.94	0.0062	0.0000	0.0062
298	687.19	673.27	0.0044	0.0493	0.0537
299	687.72	680.79	0.0035	0.0000	0.0035
300	683.66	672.05	0.0202	0.0669	0.0871
301	689.48	683.51	0.0132	0.0000	0.0132
302	674.98	667.28	0.0000	0.1399	0.1399
303	688.39	683.19	0.0229	0.0000	0.0229
304	690.09	684.74	0.0299	0.0000	0.0299
305	692.12	678.88	0.0000	0.8862	0.8862
306	677.34	663.81	0.0141	0.9363	0.9504
307	673.34	665.85	0.0317	0.0554	0.0871
308	685.55	677.81	0.0194	0.0000	0.0194
309	683.15	668.86	0.0361	0.0000	0.0361
310	672.84	665.47	0.0088	0.0000	0.0088
311	673.46	666.46	0.0554	0.0000	0.0554
312	652.00	645.00	0.0361	0.0000	0.0361
313	655.00	649.00	0.0000	0.2160	0.2160
314	660.00	656.00	0.0000	0.1620	0.1620
315	665.00	658.50	0.0000	0.1080	0.1080
316	671.00	664.00	0.0540	0.0000	0.0540
317	677.00	670.00	0.0540	0.0000	0.0540
318	670.00	663.00	0.0540	0.0000	0.0540
319	673.00	667.00	0.0540	0.0000	0.0540
320	659.72	648.58	0.0070	1.1766	1.1836
321	652.90	639.66	0.0000	1.4406	1.4406
322	661.52	651.66	0.0000	0.1399	0.1399
323	642.14	619.50	0.0000	2.0628	2.0628

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
324	644.75	634.24	0.0484	0.0748	0.1232
325	669.84	662.79	0.0273	0.0000	0.0273
326	631.39	620.64	0.0053	0.1170	0.1223
327	667.06	660.05	0.0000	0.3150	0.3150
328	687.80	678.10	0.0079	0.0528	0.0607
329	703.09	695.12	0.0185	0.0343	0.0528
330	707.36	699.70	0.0158	0.0185	0.0343
331	712.25	705.20	0.0079	0.0106	0.0185
332	716.88	709.51	0.0106	0.0000	0.0106
333	715.72	708.81	0.0519	0.0000	0.0519
334	665.00	656.25	0.0000	0.3150	0.3150
335	663.00	657.00	0.0000	0.3150	0.3150
336	697.70	677.25	0.0000	0.2543	0.2543
337	714.42	706.45	0.0950	0.0000	0.0950
338	701.95	693.00	0.0220	0.0000	0.0220
339	698.12	683.00	0.0000	0.4145	0.4145
340	699.36	688.00	0.0000	0.3925	0.3925
341	692.05	679.33	0.0000	0.8862	0.8862
342	679.00	658.95	0.0600	0.0000	0.0600
343	676.08	670.00	0.0238	0.0000	0.0238
344	676.08	670.00	0.0220	0.0000	0.0220
345	635.35	614.98	0.0000	2.2713	2.2713
346	700.78	689.42	0.0000	0.3925	0.3925
347	710.14	698.78	0.0334	0.0000	0.0334
348	704.15	692.79	0.0097	0.3494	0.3590
349	709.01	697.65	0.0079	0.0651	0.0730
350	713.82	702.37	0.0000	0.0370	0.0370
351	719.97	708.52	0.0370	0.0000	0.0370
352	717.53	706.17	0.0282	0.0000	0.0282
353	710.67	694.00	0.0202	0.2561	0.2763
354	666.25	650.64	0.0062	1.0903	1.0965
355	675.60	665.60	0.0449	0.0000	0.0449
356	674.28	667.08	0.0801	0.0000	0.0801
357	676.69	669.69	0.0554	0.0000	0.0554
358	656.32	641.44	0.0070	1.2390	1.2461
359	660.14	651.40	0.0132	0.1813	0.1945
360	672.00	665.00	0.0229	0.0000	0.0229
361	685.85	675.46	0.0282	0.8994	0.9275
362	693.00	677.92	0.0132	0.8862	0.8994
363	722.00	715.00	0.0211	0.0000	0.0211
364	719.00	712.00	0.0167	0.0598	0.0766
365	721.00	714.00	0.0378	0.0220	0.0598
366	722.00	715.00	0.0026	0.0194	0.0220
367	733.00	726.00	0.0194	0.0000	0.0194
368	707.00	700.00	0.0088	0.0440	0.0528
369	725.00	718.00	0.0185	0.0000	0.0185

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
370	720.00	713.00	0.0255	0.0000	0.0255
371	713.00	700.00	0.0141	0.0898	0.1038
372	725.00	711.50	0.0035	0.0352	0.0387
373	733.00	723.00	0.0229	0.0000	0.0229
374	720.00	713.00	0.0123	0.0000	0.0123
375	735.00	728.00	0.0440	0.0000	0.0440
376	707.53	696.53	0.0000	0.1734	0.1734
377	713.51	706.51	0.0000	0.0537	0.0537
378	720.85	713.85	0.0202	0.0079	0.0282
379	721.15	714.15	0.0255	0.0000	0.0255
380	726.51	719.51	0.0079	0.0000	0.0079
381	710.66	694.75	0.0000	0.2561	0.2561
382	713.18	703.00	0.0000	0.0405	0.0405
383	726.54	719.54	0.0299	0.0000	0.0299
384	726.84	719.84	0.0290	0.0000	0.0290
385	700.22	685.81	0.0000	0.4717	0.4717
386	699.66	687.25	0.0000	0.4717	0.4717
387	698.53	688.61	0.0000	0.4717	0.4717
388	703.57	693.02	0.0000	0.4717	0.4717
389	716.39	710.00	0.0308	0.0000	0.0308
390	699.69	692.34	0.0000	0.4717	0.4717
391	704.97	695.51	0.0273	0.4136	0.4409
392	706.84	696.28	0.0000	0.4136	0.4136
393	708.51	696.97	0.0000	0.3942	0.3942
394	711.52	697.75	0.0000	0.3749	0.3749
395	718.37	700.29	0.0000	0.1461	0.1461
396	714.19	702.14	0.0114	0.0651	0.0766
397	715.00	702.95	0.0000	0.0651	0.0651
398	741.00	731.00	0.0238	0.0000	0.0238
399	716.82	707.85	0.0000	0.0695	0.0695
400	718.39	709.00	0.0695	0.0000	0.0695
401	730.00	723.00	0.0000	0.2182	0.2182
402	748.00	741.00	0.0466	0.0378	0.0845
403	751.00	744.00	0.0000	0.0378	0.0378
404	762.00	755.00	0.0194	0.0000	0.0194
405	760.00	753.00	0.0185	0.0000	0.0185
406	739.00	732.00	0.0282	0.1056	0.1338
407	744.00	736.00	0.0458	0.0598	0.1056
408	744.00	737.00	0.0000	0.0598	0.0598
409	764.00	757.00	0.0343	0.0000	0.0343
410	762.00	755.00	0.0255	0.0000	0.0255
411	748.00	740.00	0.0414	0.0000	0.0414
412	650.00	638.43	0.0000	0.3814	0.3814
413	715.92	711.00	0.0106	0.0000	0.0106
414	712.20	705.00	0.0194	0.0000	0.0194
415	709.79	702.50	0.0194	0.0000	0.0194

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
416	722.47	715.47	0.0370	0.0000	0.0370
417	719.02	712.02	0.0334	0.0000	0.0334
418	717.45	708.77	0.0132	0.0290	0.0422
419	720.47	707.83	0.0106	0.0299	0.0405
420	716.20	703.53	0.0194	0.0537	0.0730
421	710.00	703.00	0.0070	0.0440	0.0510
422	647.57	639.60	0.0018	0.0000	0.0018
423	650.00	643.00	0.1080	0.0000	0.1080
424	629.82	625.81	0.0018	0.7055	0.7073
425	625.31	609.57	0.0000	2.3901	2.3901
426	621.61	606.67	0.0000	2.6656	2.6656
427	619.19	605.83	0.0000	2.6656	2.6656
428	617.08	604.98	0.0000	2.6656	2.6656
429	617.43	604.14	0.0000	2.6656	2.6656
430	614.23	603.75	0.0000	3.3728	3.3728
431	613.00	603.57	0.0000	3.3728	3.3728
432	611.00	603.16	0.0000	3.3728	3.3728
433	611.23	602.41	0.0000	3.3728	3.3728
434	704.25	688.76	0.0000	0.0000	0.0000
435	657.20	635.85	0.0000	0.6204	0.6204
436	649.22	628.55	0.0000	0.6204	0.6204
437	642.58	627.00	0.0000	0.6204	0.6204
438	688.44	670.33	0.0000	0.6204	0.6204
439	696.60	682.54	0.0000	0.6204	0.6204
440	698.97	686.12	0.6204	0.0000	0.6204
441	691.08	675.45	0.0000	0.6204	0.6204
460	682.86	664.17	0.0000	0.6204	0.6204
473	642.54	626.31	0.0000	0.6204	0.6204
474	651.00	627.00	0.0000	0.0000	0.0000
477	662.59	648.99	0.0000	0.0600	0.0600
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.84	0.1153	34.4
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.95	0.1461	40.6
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	2.17	0.2112	45.1
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	2.37	0.2367	45.8
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	2.01	0.2017	31.1
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	2.70	0.2737	47.6
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	3.61	0.2071	38.7
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	1.40	0.0211	30.7
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	4.02	0.5885	37.0
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	2.31	0.2974	40.5
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	3.42	0.5885	43.3
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	2.42	0.3379	41.4
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	2.56	0.5939	43.4
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	5.33	0.3934	41.4
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	3.25	0.5957	40.3
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	5.51	0.4039	42.2
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.95	0.0132	31.5
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	5.88	0.5975	42.2
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	6.17	0.7073	35.9
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	5.05	0.7073	38.0
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	5.73	0.4233	59.5
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	5.75	0.7073	36.6
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	2.56	0.7383	66.7
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	3.72	0.7383	65.9
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	5.40	0.3814	45.8
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	2.10	0.3814	49.6
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	3.83	0.1654	33.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	1.50	0.0158	52.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	3.08	0.1654	23.6
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	4.91	0.1170	31.2

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	3.01	0.1654	23.8
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	2.20	0.0202	20.6
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.92	0.1654	27.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	3.14	0.0898	27.4
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	2.04	0.1487	36.3
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	2.18	0.0484	22.1
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	2.00	0.1338	34.8
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	2.30	0.0387	17.6
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.91	0.0167	30.3
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.99	0.0167	13.7
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	2.50	0.0370	20.9
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.75	0.0158	23.6
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	3.12	0.0405	18.7
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.80	0.0114	9.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	2.12	0.0132	15.0
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	1.20	0.0088	8.4
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	2.66	0.0572	23.1
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.54	0.0018	8.3
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	2.44	0.0273	19.9
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.81	0.1153	33.1
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	1.15	0.0194	13.4
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	2.02	0.0176	29.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	2.30	0.0141	52.4
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	2.41	0.0414	57.1
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.79	0.0942	30.5
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	2.65	0.8800	63.4
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.76	0.0150	19.3
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	2.67	0.9258	63.9
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	2.81	0.9504	64.6
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.65	0.0757	27.0

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.95	0.0141	54.5
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	3.13	0.0722	24.3
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	2.74	0.9759	66.3
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.71	0.0695	23.2
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	3.19	0.0915	62.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.68	0.0123	16.5
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.98	1.0710	66.8
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	1.12	0.0035	9.8
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	3.04	1.0965	61.3
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	1.09	0.0035	7.1
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.60	0.0141	46.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.65	0.0537	21.9
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.62	0.0097	54.1
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	4.70	1.1106	59.1
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.87	0.0088	30.5
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	2.11	0.0370	34.2
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	5.53	0.2754	36.5
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.78	0.0651	33.3
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	1.08	0.0176	29.1
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	3.63	2.2713	25.2
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.62	0.0634	28.6
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	4.90	0.2086	32.0
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.85	0.0678	28.2
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	3.09	1.4406	56.1
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	2.85	0.2578	44.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.55	0.0088	11.3
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	2.28	0.2314	45.1
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.61	0.0220	17.7
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.56	0.1954	50.2
CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	1.35	0.0414	21.1

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.92	0.1734	48.3
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	1.47	0.0405	30.1
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	1.15	0.0238	15.9
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.98	0.0370	17.1
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	1.28	0.0326	18.2
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	2.00	0.1999	32.7
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	1.17	0.0202	15.7
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	1.12	0.0114	13.7
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	1.27	0.0361	18.9
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.75	0.0062	7.2
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	3.07	0.1320	36.7
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	1.49	0.0458	20.6
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.63	0.0035	5.5
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	2.39	0.0581	25.8
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	1.48	0.0537	23.5
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.63	0.0510	25.4
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	1.47	0.0132	17.4
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.94	0.0871	28.7
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	2.07	0.0229	22.4
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	1.35	0.0220	33.5
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	2.01	0.0299	23.3
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	3.11	0.1399	28.7
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	1.42	0.0229	28.4
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	3.37	0.8862	51.9
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	3.97	0.9275	51.1
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	5.87	1.7784	43.1
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	4.36	0.9504	52.7
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.93	0.0871	53.2
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.65	0.0194	18.6
CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.33	1.7730	41.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	1.40	0.0361	21.3
CO-127	187	625.80	188	625.00	137.1	0.006	8.0	0.013	2.68	0.3161	73.0
CO-128	186	640.10	187	625.80	303.8	0.047	8.0	0.013	5.72	0.3125	50.3
CO-129	185	645.00	186	640.10	598.4	0.008	8.0	0.013	3.00	0.2958	48.1
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.76	0.0088	43.5
CO-131	184	648.00	185	645.00	217.1	0.014	8.0	0.013	3.56	0.2764	46.6
CO-132	183	649.00	184	648.00	189.0	0.005	8.0	0.013	2.50	0.2738	47.3
CO-133	182	650.00	183	649.00	389.0	0.003	8.0	0.013	1.87	0.2606	54.1
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	2.46	0.0554	22.1
CO-135	181	651.00	182	650.00	287.4	0.003	8.0	0.013	2.06	0.2404	55.2
CO-136	180	661.00	181	651.00	687.9	0.015	8.0	0.013	3.48	0.2386	46.8
CO-137	179	665.00	180	661.00	388.6	0.010	8.0	0.013	3.03	0.2263	41.8
CO-138	178	666.00	179	665.00	38.0	0.026	8.0	0.013	4.20	0.2174	40.8
CO-139	177	668.00	178	666.00	336.3	0.006	8.0	0.013	2.45	0.2174	41.0
CO-140	176	669.00	177	668.00	368.4	0.003	8.0	0.013	0.81	0.0123	26.7
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	4.98	0.2160	45.4
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	3.54	0.1620	37.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	2.96	0.1080	31.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	1.36	0.0114	10.4
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	2.54	0.0540	23.9
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	1.22	0.0114	39.0
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	2.86	0.0540	23.9
CO-148	173	626.80	188	625.00	365.3	0.005	14.0	0.013	3.68	1.4569	54.8
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	2.43	0.0540	27.2
CO-150	168	628.50	173	626.80	459.3	0.004	14.0	0.013	3.29	1.4481	58.2
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	3.08	0.0540	30.0
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	2.21	0.0203	58.6
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.71	0.0141	15.8
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	3.78	1.0965	56.6
CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	5.44	1.0454	54.8

2024 City of Justin Wastewater Model Update.stsw

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CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.75	0.0088	12.8
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	3.20	1.4406	51.5
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	1.42	0.0070	10.7
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	2.51	0.1399	28.3
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	6.63	1.4424	39.8
CO-162	167	629.20	168	628.50	367.2	0.002	14.0	0.013	2.50	1.4279	68.7
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	3.42	2.0628	24.8
CO-164	166	629.50	167	629.20	167.0	0.002	14.0	0.013	2.43	1.4172	77.2
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.89	0.1232	37.9
CO-166	165	630.00	166	629.50	153.0	0.003	14.0	0.013	3.12	1.4172	70.8
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	2.56	0.0229	18.8
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	3.16	0.0748	28.2
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	1.20	0.0273	16.4
CO-170	162	634.50	163	633.00	334.4	0.004	14.0	0.013	3.47	1.3119	54.2
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.87	0.1223	63.3
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	5.09	0.3150	72.2
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	1.22	0.0256	18.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	3.44	0.0607	34.9
CO-175	158	630.50	165	630.00	200.7	0.002	14.0	0.013	2.80	1.4172	66.1
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	2.42	0.0528	20.2
CO-177	164	631.00	158	630.50	187.5	0.003	14.0	0.013	2.87	1.3977	67.5
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	1.45	0.0343	17.8
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	2.18	0.0159	55.3
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.65	0.0185	13.8
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.53	0.0018	9.6
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	1.03	0.0106	10.3
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.66	0.0114	11.6
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	2.08	0.0519	35.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.67	0.0114	18.4
CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	2.58	0.3150	51.1

2024 City of Justin Wastewater Model Update.stsw

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CO-187	153	631.50	164	631.00	162.2	0.003	14.0	0.013	3.04	1.3977	64.8
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	4.02	0.3150	51.1
CO-189	163	633.00	153	631.50	333.0	0.005	14.0	0.013	3.50	1.3491	58.9
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	2.87	0.2543	46.4
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	2.89	0.0450	59.0
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	1.01	0.0097	12.9
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.65	0.0220	34.5
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	1.48	0.0176	14.6
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	3.48	0.3925	55.8
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	2.02	0.0212	20.0
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	5.06	0.4145	73.6
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	2.46	0.0336	61.2
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	2.76	0.8862	55.9
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	2.23	0.0600	22.4
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	3.61	0.0810	26.9
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.90	0.0123	15.3
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.91	0.0203	18.5
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.90	0.0264	21.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	2.57	0.0380	61.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	3.46	0.3925	52.6
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.72	0.0334	35.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	1.49	0.0062	11.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	3.39	0.3590	53.7
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.85	0.0141	15.2
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	2.17	0.0730	37.8
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.66	0.0176	17.7
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.77	0.0370	19.6
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	2.02	0.0256	19.7
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.77	0.0370	15.5
CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	2.07	0.0370	25.9

2024 City of Justin Wastewater Model Update.stsw

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CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.63	0.0282	18.6
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	2.40	0.0352	23.2
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	2.14	0.0220	20.5
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.87	0.0167	16.8
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.66	0.2763	60.8
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	1.32	0.0088	13.5
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.77	0.0449	50.7
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	1.38	0.0062	16.3
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	2.18	0.0361	21.0
CO-226	133	644.00	12th Street LS (Downtown)	622.00	549.6	0.040	6.0	0.013	2.98	0.0361	19.2
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	2.04	0.0801	55.3
CO-228	132	627.15	12th Street LS (Downtown)	622.00	244.8	0.021	6.0	0.013	2.74	0.0592	26.3
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	2.38	0.0554	60.0
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	1.20	0.0592	35.6
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.83	0.0574	25.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	1.26	0.0574	23.0
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	1.18	0.0359	22.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.61	0.0229	25.4
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	1.08	0.0305	18.8
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	3.34	0.8994	51.6
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	1.05	0.0269	17.7
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	2.42	0.0211	29.6
CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.99	0.0108	13.3
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	3.12	0.0766	33.7
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.66	0.0072	9.5

2024 City of Justin Wastewater Model Update.stsw

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CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.83	0.0598	22.2
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	1.05	0.0090	12.6
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	1.03	0.0220	17.9
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.84	0.0018	11.0
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.63	0.0194	13.4
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.89	0.0018	11.0
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	2.16	0.0528	30.8
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	1.40	0.0054	12.7
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.88	0.0185	15.5
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.62	0.0072	13.5
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.70	0.0255	16.5
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.55	0.0018	3.9
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.99	0.1038	35.2
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	1.19	0.0018	13.4
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	2.85	0.0387	22.4
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.54	0.0283	21.1
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.56	0.0229	14.7
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	1.33	0.0213	19.4
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.80	0.0123	14.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	1.41	0.0097	15.1
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	1.44	0.0510	24.8
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	2.42	0.0440	19.6
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.77	0.1003	33.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.59	0.0123	15.7
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	2.28	0.0730	30.5
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.98	0.0537	21.3
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	1.48	0.0220	25.3
CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.64	0.0282	16.9
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	2.48	0.0705	30.1
CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.59	0.0255	16.6

2024 City of Justin Wastewater Model Update.stsw

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CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	1.11	0.0079	10.8
CO-273	109	604.00	Meadowlands LS	575.00	387.8	0.075	6.0	0.013	4.51	0.0705	25.4
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	2.38	0.0318	23.3
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	2.21	0.1734	43.5
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	2.45	0.0415	28.8
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	2.76	0.0405	33.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	1.40	0.0070	21.4
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.97	0.0405	15.8
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.67	0.0299	15.8
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	2.71	0.0422	33.2
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.65	0.0290	15.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	3.96	0.4717	48.0
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	1.22	0.0088	8.6
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	2.07	0.4717	40.8
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	1.26	0.0123	13.3
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	2.32	0.4717	44.0
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	1.42	0.0370	16.8
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	2.20	0.4717	51.2
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.68	0.0370	16.3
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.83	0.0308	40.3
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.53	0.0370	19.8
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.75	0.0695	24.3
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	2.24	0.0889	30.4
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	1.36	0.4717	47.0
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	1.34	0.0959	31.5
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	2.05	0.4409	43.9
CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	2.14	0.1047	28.3
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	2.14	0.4136	42.3
CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	2.50	0.1144	27.3

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Existing Infrastructure Upgrades

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CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	2.13	0.3942	40.0
CO-303	95	592.25	Meadowlands LS	575.00	518.3	0.033	8.0	0.013	3.78	0.1144	24.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	2.11	0.3749	38.7
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.59	0.0185	17.9
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.69	0.1461	37.6
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.92	0.0255	25.2
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	1.34	0.0766	25.7
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	1.34	0.0651	20.7
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.68	0.0158	24.6
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	1.43	0.0062	10.7
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	2.36	0.0238	18.7
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.92	0.0097	25.2
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	2.60	0.0695	29.6
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.58	0.0695	23.7
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	68.3
CO-320	86	669.00	179	665.00	760.4	0.005	6.0	0.013	0.73	0.0036	31.5
CO-321	85	675.00	177	668.00	890.7	0.008	8.0	0.013	2.67	0.2051	40.3
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	3.22	0.2182	48.9
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	3.09	0.1910	38.5
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	2.46	0.0845	32.6
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	2.57	0.0598	29.3
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	1.27	0.0378	21.9
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	1.36	0.0572	22.5
CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.61	0.0194	15.3
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	1.39	0.0519	23.2
CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.66	0.0185	15.2

2024 City of Justin Wastewater Model Update.stsw

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CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.67	0.0026	12.8
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	2.36	0.1338	35.9
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	2.02	0.1056	29.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	2.26	0.1153	29.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	1.44	0.0598	26.1
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	2.44	0.1100	28.7
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	2.12	0.0343	19.8
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.54	0.0405	22.9
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.86	0.0255	18.7
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.63	0.0343	16.5
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	2.83	0.0414	20.8
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	1.46	0.0273	14.8
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.56	0.0106	32.9
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.61	0.0194	35.3
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	1.47	0.0194	36.3
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.83	0.0035	9.6
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.77	0.0370	17.8
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.68	0.0097	13.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.73	0.0334	17.9
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.89	0.0202	13.3
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.42	0.0018	67.0
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	1.45	0.0299	17.8
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	2.83	0.1080	47.1
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	4.23	0.1188	23.9
CO-358	426	606.67	427	605.83	294.4	0.003	30.0	0.013	3.43	2.6656	29.4
CO-359	427	605.83	428	604.98	300.8	0.003	30.0	0.013	3.41	2.6656	28.2
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.73	0.0176	22.0
CO-361	428	604.98	429	604.14	212.1	0.004	30.0	0.013	3.85	2.6656	30.0
CO-362	429	604.14	430	603.75	203.9	0.002	30.0	0.013	2.97	2.6656	35.4
CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.59	0.0176	23.0

2024 City of Justin Wastewater Model Update.stsw

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CO-364	430	603.75	431	603.57	84.1	0.002	30.0	0.013	3.30	3.3728	39.4
CO-365	431	603.57	432	603.16	317.5	0.001	30.0	0.013	2.74	3.3728	40.8
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	1.46	0.0502	21.7
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	3.24	0.0695	25.4
CO-368	432	603.16	433	602.41	556.6	0.001	30.0	0.013	2.79	3.3728	35.4
CO-369	433	602.41	Justin Treatment Plant	596.00	189.0	0.034	30.0	0.013	8.83	3.3728	24.0
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	1.34	0.0273	17.4
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	3.06	0.6204	19.4
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	3.07	0.6204	19.4
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	1.14	0.0167	13.1
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	2.90	0.6204	13.7
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	1.20	0.0053	8.9
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	2.12	0.6204	13.7
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.82	0.0018	7.6
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	2.75	0.6204	12.5
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	2.75	0.6204	18.6
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	1.24	0.0106	10.2
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.74	0.0950	30.6
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	1.35	0.0194	12.1
CO-382	280	606.77	Timberbrook LS	606.50	58.8	0.005	12.0	0.013	3.34	1.1106	59.1
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	1.39	0.0220	16.3
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	6.15	0.6204	24.6
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	4.34	0.6204	27.2
CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.94	0.0018	7.6
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	4.02	0.6204	27.9
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.83	0.0114	7.7
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	1.35	0.0114	10.8

2024 City of Justin Wastewater Model Update.stsw

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CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.88	0.0088	10.3
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.76	0.0123	10.1
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	1.14	0.0026	7.6
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	1.49	0.0106	9.3
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.68	0.0141	22.9
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.91	0.0326	19.3
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	2.01	0.0185	18.2
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.75	0.0220	17.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.92	0.0238	18.9
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	2.24	0.2086	41.3
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	3.08	0.0854	33.8
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	2.27	0.2086	42.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	2.81	0.0167	8.6
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.84	0.0167	17.5
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	2.02	0.0361	14.7
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	3.17	0.0361	22.8
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	3.18	0.1188	25.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	1.15	0.0026	10.7
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.68	0.0018	10.9
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.60	0.0079	17.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	1.18	0.0088	13.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.64	0.0070	5.5
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	1.45	0.0123	39.3
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.76	0.0158	47.1
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.99	0.0035	10.7
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.76	0.0036	12.6
CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.58	0.0071	10.7
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	1.28	0.0089	10.8
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	2.09	0.0089	55.7
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.57	0.0132	38.5

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CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.94	0.0088	55.6
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	1.11	0.0018	17.2
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.68	0.0018	14.6
CO-447	160	635.27	12th Street LS (Downtown)	622.00	328.5	0.040	8.0	0.013	3.39	0.0626	17.4
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	1.27	0.0600	19.2
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	1.27	0.0600	25.9
CO-449	21	641.91	358	641.44	147.6	0.003	12.0	0.013	2.90	1.1836	79.5
CO-450	358	641.44	202	640.44	347.3	0.003	12.0	0.013	2.77	1.2461	76.9
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	0.59	0.0035	5.6
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	1.00	0.0035	12.6
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	2.58	0.1584	36.2
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	3.68	0.1945	69.0
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	1.58	0.0519	21.3
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	4.14	1.1836	66.9
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	1.46	0.0150	12.5
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	3.92	0.1223	24.8
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.85	0.0036	6.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	1.14	0.0072	10.5
CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.81	0.0036	6.2
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.76	0.0240	9.0
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	1.10	0.0240	23.0
CO-471	8	597.00	Justin Treatment Plant	596.00	132.8	0.008	24.0	0.013	4.55	1.9873	28.7
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	4.36	2.3901	27.3
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	10.69	1.9633	33.0
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.73	0.1566	41.5

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CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.81	0.1566	43.9
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.74	0.0519	24.6
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.71	0.1778	45.4
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	4.96	0.2543	35.8
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	1.47	0.0484	25.1
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	2.33	0.2561	59.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Existing Infrastructure Upgrades

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.1849
12th Street LS (Private)	666.05	645.00	0.1223
12th Street LS (Downtown)	637.00	622.00	0.1579
Timberbrooks LS	626.50	606.50	1.1106
Justin Treatment Plant	616.27	596.00	5.3601

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.0251	0.0251
2	697.00	688.00	0.0000	0.0636	0.0636
3	713.23	700.75	0.0037	0.0084	0.0121
4	715.75	703.96	0.0037	0.0092	0.0130
5	699.00	689.00	0.0000	0.0444	0.0444
6	701.00	692.50	0.0000	0.0392	0.0392
7	701.00	694.00	0.0000	0.0392	0.0392
8	616.65	597.00	0.0000	2.0286	2.0286
9	624.36	600.00	0.0000	0.0060	0.0060
10	615.22	611.22	0.0060	0.0000	0.0060
11	639.83	635.83	0.0009	0.0000	0.0009
12	630.00	626.00	0.0000	0.0018	0.0018
13	640.61	636.61	0.0009	0.0000	0.0009
14	684.46	677.74	0.0037	0.0000	0.0037
15	665.40	656.95	0.0020	0.3324	0.3344
16	690.00	683.00	0.0411	0.0000	0.0411
17	672.00	660.12	0.0068	0.0328	0.0396
18	695.45	688.75	0.0121	0.0818	0.0939
19	700.00	693.50	0.0000	0.0818	0.0818
20	702.00	696.00	0.0818	0.0000	0.0818
21	655.88	641.91	0.0000	0.3689	0.3689
22	671.67	651.05	0.0000	0.1497	0.1497
23	636.98	632.98	0.0004	0.0000	0.0004
24	637.85	633.00	0.0004	0.0000	0.0004
25	643.27	639.27	0.0022	0.0000	0.0022
26	663.00	656.00	0.0033	0.0000	0.0033
27	641.33	637.33	0.0000	0.0022	0.0022
28	642.00	638.00	0.0004	0.0018	0.0022
29	662.29	658.29	0.0018	0.0000	0.0018
30	645.00	641.00	0.0009	0.0000	0.0009
31	653.81	649.81	0.0009	0.0000	0.0009
32	681.00	669.74	0.0040	0.0000	0.0040
33	673.00	662.09	0.0031	0.0000	0.0031
34	630.99	626.99	0.0018	0.0000	0.0018
35	628.00	624.00	0.0022	0.0000	0.0022
36	628.00	624.00	0.0020	0.0000	0.0020
37	625.00	621.00	0.0004	0.0000	0.0004
38	625.00	621.00	0.0007	0.0000	0.0007
39	626.00	622.00	0.0004	0.0293	0.0297
40	645.95	641.95	0.0000	0.0090	0.0090
41	646.00	639.00	0.0022	0.0180	0.0202
42	654.00	647.00	0.0000	0.0042	0.0042
43	639.22	630.25	0.0000	0.0521	0.0521
44	635.02	629.32	0.0000	0.0521	0.0521
45	664.58	651.86	0.0051	0.0163	0.0213
46	671.94	659.46	0.0051	0.0136	0.0187

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
47	683.37	676.59	0.0081	0.0000	0.0081
48	683.31	677.33	0.0046	0.0000	0.0046
49	680.62	674.00	0.0009	0.0026	0.0035
50	685.00	681.00	0.0026	0.0000	0.0026
51	679.25	672.00	0.0007	0.0000	0.0007
52	670.26	666.26	0.0004	0.0037	0.0042
53	681.22	677.22	0.0031	0.0000	0.0031
54	682.00	678.00	0.0022	0.0000	0.0022
55	669.37	665.37	0.0007	0.0051	0.0057
56	672.31	668.31	0.0000	0.0029	0.0029
57	685.00	681.00	0.0029	0.0000	0.0029
58	693.97	689.97	0.0004	0.0000	0.0004
59	692.00	683.50	0.0007	0.0048	0.0055
60	693.50	686.00	0.0018	0.0031	0.0048
61	695.00	691.00	0.0026	0.0000	0.0026
62	692.00	688.00	0.0004	0.0000	0.0004
63	695.00	691.00	0.0013	0.0000	0.0013
64	693.29	686.50	0.0024	0.0018	0.0042
65	691.97	684.00	0.0026	0.0042	0.0068
66	675.00	671.00	0.0004	0.0169	0.0174
67	689.00	686.00	0.0044	0.0000	0.0044
68	695.50	691.50	0.0044	0.0000	0.0044
69	676.19	672.22	0.0007	0.0119	0.0125
70	678.00	674.00	0.0024	0.0051	0.0075
71	686.09	682.00	0.0026	0.0024	0.0051
72	700.00	696.00	0.0015	0.0009	0.0024
73	702.00	698.00	0.0009	0.0000	0.0009
74	681.64	672.00	0.0068	0.0000	0.0068
75	684.00	669.00	0.0018	0.0068	0.0086
76	680.71	665.00	0.0015	0.0086	0.0101
77	673.00	662.00	0.0000	0.0275	0.0275
78	673.00	661.50	0.0013	0.0275	0.0288
79	670.00	659.00	0.0018	0.0288	0.0306
80	692.64	688.00	0.0007	0.0000	0.0007
81	697.00	687.00	0.0000	0.0939	0.0939
82	696.89	686.50	0.0013	0.0939	0.0952
83	695.07	686.00	0.0000	0.0959	0.0959
84	692.67	682.00	0.1245	0.0959	0.2204
85	686.04	675.00	0.0035	0.2204	0.2239
86	676.00	669.00	0.0009	0.0000	0.0009
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0009	0.0015	0.0024
92	619.26	615.00	0.0015	0.0000	0.0015

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
93	621.16	617.16	0.0033	0.0007	0.0040
94	618.07	614.07	0.0018	0.0046	0.0064
95	596.25	592.25	0.0000	0.0286	0.0286
96	604.14	597.00	0.0000	0.0286	0.0286
97	604.00	600.00	0.0022	0.0240	0.0262
98	604.83	600.83	0.0018	0.0222	0.0240
99	615.32	604.00	0.0009	0.0213	0.0222
100	613.82	607.00	0.0018	0.0156	0.0174
101	613.00	608.00	0.0000	0.0092	0.0092
102	612.36	609.00	0.0000	0.0092	0.0092
103	617.60	615.00	0.0062	0.0031	0.0092
104	623.40	617.00	0.0009	0.0022	0.0031
105	630.59	622.00	0.0022	0.0000	0.0022
106	623.36	619.36	0.0020	0.0026	0.0046
107	618.58	614.58	0.0018	0.0000	0.0018
108	618.00	614.00	0.0004	0.0099	0.0104
109	608.00	604.00	0.0000	0.0176	0.0176
110	612.70	608.70	0.0000	0.0176	0.0176
111	615.01	611.01	0.0024	0.0031	0.0055
112	619.01	615.01	0.0013	0.0018	0.0031
113	632.33	628.33	0.0024	0.0000	0.0024
114	627.31	623.31	0.0011	0.0042	0.0053
115	625.81	621.81	0.0018	0.0053	0.0071
116	622.45	618.45	0.0004	0.0075	0.0080
117	630.32	626.32	0.0000	0.0004	0.0004
118	631.79	627.79	0.0004	0.0000	0.0004
119	636.30	634.00	0.0018	0.0000	0.0018
120	639.00	635.00	0.0013	0.0000	0.0013
121	638.41	635.41	0.0004	0.0000	0.0004
122	638.00	635.00	0.0004	0.0000	0.0004
123	639.37	635.37	0.0022	0.0000	0.0022
124	637.33	634.50	0.0018	0.0000	0.0018
125	639.71	634.00	0.0009	0.0018	0.0027
126	640.00	633.00	0.0000	0.0067	0.0067
127	638.00	632.00	0.0000	0.0076	0.0076
128	638.00	631.00	0.0000	0.0090	0.0090
129	639.00	630.50	0.0049	0.0094	0.0143
130	638.52	629.50	0.0000	0.0143	0.0143
131	638.93	628.00	0.0000	0.0148	0.0148
132	631.15	627.15	0.0000	0.0148	0.0148
133	648.00	644.00	0.0000	0.0090	0.0090
134	657.27	653.27	0.0075	0.0015	0.0090
135	683.62	679.62	0.0015	0.0000	0.0015
136	688.94	684.94	0.0022	0.0000	0.0022
137	684.00	680.00	0.0020	0.0022	0.0042
138	673.70	669.70	0.0013	0.0042	0.0055

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
139	665.44	661.44	0.0033	0.0055	0.0088
140	647.95	643.95	0.0004	0.0088	0.0092
141	649.63	645.63	0.0020	0.0044	0.0064
142	655.77	651.77	0.0009	0.0035	0.0044
143	666.41	662.41	0.0020	0.0015	0.0035
144	676.16	672.16	0.0015	0.0000	0.0015
145	650.00	646.00	0.0029	0.0066	0.0095
146	654.80	650.80	0.0015	0.0051	0.0066
147	663.89	659.89	0.0020	0.0031	0.0051
148	684.50	680.50	0.0031	0.0000	0.0031
149	659.42	655.42	0.0031	0.0053	0.0084
150	682.72	678.72	0.0053	0.0000	0.0053
151	679.20	675.20	0.0044	0.0000	0.0044
152	680.00	676.00	0.0024	0.0000	0.0024
153	642.65	631.50	0.0009	1.4128	1.4137
154	667.28	663.28	0.0040	0.0073	0.0113
155	671.41	667.41	0.0000	0.0029	0.0029
156	678.17	674.17	0.0000	0.0029	0.0029
157	678.92	674.92	0.0004	0.0000	0.0004
158	642.00	630.50	0.0009	1.4177	1.4186
159	674.11	670.11	0.0040	0.0000	0.0040
160	639.27	635.27	0.0000	0.0157	0.0157
161	641.92	636.92	0.0000	0.0064	0.0064
162	644.00	634.50	1.3827	0.0095	1.3923
163	643.00	633.00	0.0009	1.4007	1.4016
164	641.74	631.00	0.0000	1.4137	1.4137
165	643.00	630.00	0.0000	1.4186	1.4186
166	641.00	629.50	0.0000	1.4186	1.4186
167	640.87	629.20	0.0004	1.4208	1.4212
168	639.51	628.50	0.0000	1.4263	1.4263
169	669.64	665.64	0.0018	0.0000	0.0018
170	657.00	653.00	0.0004	0.0018	0.0022
171	650.05	646.05	0.0004	0.0031	0.0035
172	643.48	639.48	0.0007	0.0044	0.0051
173	638.23	626.80	0.0000	1.4285	1.4285
174	657.00	645.64	0.0029	0.0000	0.0029
175	689.00	679.19	0.0029	0.0000	0.0029
176	676.00	669.00	0.0002	0.1590	0.1592
177	675.00	668.00	0.0000	0.3831	0.3831
178	675.00	666.00	0.0000	0.3831	0.3831
179	675.00	665.00	0.0013	0.3840	0.3854
180	668.00	661.00	0.0031	0.3854	0.3884
181	657.50	652.00	0.0004	0.3884	0.3889
182	656.00	650.00	0.0011	0.3928	0.3939
183	656.00	649.00	0.0002	0.3970	0.3972
184	655.00	648.00	0.0007	0.3972	0.3979

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
185	655.00	645.00	0.0015	0.4012	0.4027
186	650.00	640.10	0.0013	0.4056	0.4069
187	636.81	625.80	0.0009	0.4069	0.4078
188	634.90	625.00	0.0000	1.8363	1.8363
189	630.12	620.00	0.0000	2.0226	2.0226
190	633.16	624.00	0.0013	1.8363	1.8377
191	642.00	630.32	0.0057	0.0000	0.0057
192	639.34	635.34	0.0055	0.0000	0.0055
193	661.00	650.50	0.0128	0.0000	0.0128
194	663.00	656.00	0.0145	0.0000	0.0145
195	652.00	645.00	0.0057	0.0273	0.0330
196	660.00	653.00	0.0092	0.0000	0.0092
197	643.00	631.95	0.0009	0.0092	0.0101
198	641.00	630.48	0.0002	0.0431	0.0433
199	640.00	629.51	0.0000	0.0488	0.0488
200	640.00	629.00	0.0090	0.0488	0.0579
201	640.00	628.50	0.0009	0.0636	0.0645
202	657.86	640.44	0.0000	0.4331	0.4331
203	651.68	639.30	0.0000	0.4336	0.4336
204	635.35	627.53	0.0000	0.0521	0.0521
205	627.03	613.90	0.0000	0.0297	0.0297
206	642.00	630.70	0.0044	0.0000	0.0044
207	637.00	626.60	0.0000	0.0689	0.0689
208	692.00	681.50	0.0011	0.0123	0.0134
209	691.63	687.63	0.0009	0.0000	0.0009
210	692.87	688.87	0.0009	0.0000	0.0009
211	692.00	686.00	0.0013	0.0018	0.0031
212	688.97	680.00	0.0009	0.0165	0.0174
213	682.39	678.39	0.0007	0.0174	0.0180
214	678.00	673.10	0.0009	0.0180	0.0189
215	694.00	690.00	0.0037	0.0000	0.0037
216	684.36	672.00	0.0009	0.0227	0.0235
217	691.85	687.85	0.0044	0.0000	0.0044
218	685.00	670.90	0.0009	0.0279	0.0288
219	693.50	689.42	0.0004	0.0000	0.0004
220	692.65	688.63	0.0018	0.0004	0.0022
221	687.02	683.02	0.0007	0.0022	0.0029
222	680.80	676.80	0.0011	0.0029	0.0040
223	688.76	684.76	0.0042	0.0000	0.0042
224	681.00	669.80	0.0004	0.0330	0.0334
225	678.34	669.14	0.0002	0.0370	0.0372
226	675.00	668.49	0.0002	0.0411	0.0414
227	675.00	668.10	0.0000	0.0414	0.0414
228	667.43	663.43	0.0000	0.0414	0.0414
229	660.66	656.66	0.0000	0.0414	0.0414
230	652.07	648.07	0.0000	0.0954	0.0954

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
231	617.00	613.00	0.0000	0.3323	0.3323
232	623.02	619.02	0.0000	0.3323	0.3323
233	634.54	630.54	0.0004	0.3044	0.3048
234	642.74	633.00	0.0004	0.3040	0.3044
235	645.01	634.00	0.0013	0.3026	0.3040
236	646.60	637.50	0.0000	0.3026	0.3026
237	646.27	637.60	0.0000	0.3026	0.3026
238	649.49	645.49	0.0013	0.2059	0.2072
239	654.00	647.00	0.0004	0.2055	0.2059
240	715.79	702.58	0.0051	0.0238	0.0288
241	713.78	701.32	0.0077	0.0288	0.0365
242	707.86	697.69	0.0000	0.0528	0.0528
243	708.74	696.43	0.0064	0.0528	0.0592
244	709.51	694.41	0.0092	0.0592	0.0684
245	697.57	685.41	0.0007	0.0737	0.0744
246	702.25	695.20	0.0053	0.0000	0.0053
247	699.14	684.09	0.0009	0.0836	0.0845
248	693.35	682.77	0.0009	0.0975	0.0983
249	683.16	672.11	0.0004	0.1005	0.1010
250	668.43	660.38	0.0015	0.1043	0.1058
251	690.59	684.04	0.0033	0.0000	0.0033
252	656.00	647.39	0.0000	0.1846	0.1846
253	652.94	646.89	0.0000	0.1846	0.1846
254	628.48	619.55	0.0009	0.2191	0.2200
255	634.67	627.08	0.0040	0.0000	0.0040
256	651.29	640.84	0.0018	0.0275	0.0293
257	679.35	670.87	0.0051	0.0000	0.0051
258	659.57	648.16	0.0011	0.0213	0.0224
259	661.88	652.60	0.0024	0.0097	0.0121
260	685.49	673.84	0.0055	0.0042	0.0097
261	702.55	696.00	0.0042	0.0000	0.0042
262	684.59	677.53	0.0092	0.0000	0.0092
263	666.17	658.54	0.0033	0.0068	0.0101
264	642.59	634.66	0.0009	0.0134	0.0143
265	671.57	665.52	0.0033	0.0000	0.0033
266	638.66	628.22	0.0018	0.0211	0.0229
267	653.78	643.95	0.0020	0.0048	0.0068
268	654.48	647.43	0.0048	0.0000	0.0048
269	653.36	646.31	0.0035	0.0000	0.0035
270	626.58	617.80	0.0026	0.2350	0.2376
271	661.10	652.34	0.0103	0.0000	0.0103
272	627.49	618.69	0.0011	0.2303	0.2314
273	632.66	615.97	0.0029	0.2411	0.2440
274	646.22	640.17	0.0035	0.0000	0.0035
275	626.83	614.51	0.0009	0.2669	0.2677
276	626.86	613.48	0.0040	0.2702	0.2741

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
277	623.97	610.89	0.0000	0.2776	0.2776
278	628.22	622.17	0.0035	0.0000	0.0035
279	629.72	623.67	0.0024	0.0000	0.0024
280	624.65	606.77	0.0000	0.3906	0.3906
281	621.00	607.50	0.0000	0.0434	0.0434
282	680.94	673.59	0.0022	0.0000	0.0022
283	713.91	705.91	0.0092	0.0000	0.0092
284	709.71	699.50	0.0163	0.0000	0.0163
285	676.69	665.28	0.0000	0.0059	0.0059
286	684.35	677.74	0.0169	0.0000	0.0169
287	686.89	679.40	0.0022	0.0000	0.0022
288	681.88	675.31	0.0055	0.0000	0.0055
289	674.27	661.54	0.0000	0.0158	0.0158
290	680.15	662.79	0.0022	0.0081	0.0103
291	678.42	664.04	0.0022	0.0059	0.0081
292	657.93	647.93	0.0000	0.2055	0.2055
293	688.12	680.00	0.0051	0.0000	0.0051
294	685.74	675.28	0.0011	0.0079	0.0090
295	686.10	677.87	0.0029	0.0000	0.0029
296	686.35	674.16	0.0009	0.0106	0.0114
297	686.50	679.94	0.0015	0.0000	0.0015
298	687.19	673.27	0.0011	0.0123	0.0134
299	687.72	680.79	0.0009	0.0000	0.0009
300	683.66	672.05	0.0051	0.0167	0.0218
301	689.48	683.51	0.0033	0.0000	0.0033
302	674.98	667.28	0.0000	0.0350	0.0350
303	688.39	683.19	0.0057	0.0000	0.0057
304	690.09	684.74	0.0075	0.0000	0.0075
305	692.12	678.88	0.0000	0.2945	0.2945
306	677.34	663.81	0.0035	0.3071	0.3106
307	673.34	665.85	0.0079	0.0139	0.0218
308	685.55	677.81	0.0048	0.0000	0.0048
309	683.15	668.86	0.0090	0.0000	0.0090
310	672.84	665.47	0.0022	0.0000	0.0022
311	673.46	666.46	0.0139	0.0000	0.0139
312	652.00	645.00	0.0090	0.0000	0.0090
313	655.00	649.00	0.0000	0.0540	0.0540
314	660.00	656.00	0.0000	0.0405	0.0405
315	665.00	658.50	0.0000	0.0270	0.0270
316	671.00	664.00	0.0135	0.0000	0.0135
317	677.00	670.00	0.0135	0.0000	0.0135
318	670.00	663.00	0.0135	0.0000	0.0135
319	673.00	667.00	0.0135	0.0000	0.0135
320	659.72	648.58	0.0018	0.3671	0.3689
321	652.90	639.66	0.0000	0.4331	0.4331
322	661.52	651.66	0.0000	0.0350	0.0350

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
323	642.14	619.50	0.0000	3.4641	3.4641
324	644.75	634.24	0.0121	0.0187	0.0308
325	669.84	662.79	0.0068	0.0000	0.0068
326	631.39	620.64	0.0013	0.0293	0.0306
327	667.06	660.05	0.0000	0.0788	0.0788
328	687.80	678.10	0.0020	0.0132	0.0152
329	703.09	695.12	0.0046	0.0086	0.0132
330	707.36	699.70	0.0040	0.0046	0.0086
331	712.25	705.20	0.0020	0.0026	0.0046
332	716.88	709.51	0.0026	0.0000	0.0026
333	715.72	708.81	0.0130	0.0000	0.0130
334	665.00	656.25	0.0000	0.0788	0.0788
335	663.00	657.00	0.0000	0.0788	0.0788
336	697.70	677.25	0.0000	0.0636	0.0636
337	714.42	706.45	0.0238	0.0000	0.0238
338	701.95	693.00	0.0055	0.0000	0.0055
339	698.12	683.00	0.0000	0.1036	0.1036
340	699.36	688.00	0.0000	0.0981	0.0981
341	692.05	679.33	0.0000	0.2945	0.2945
342	679.00	658.95	0.0150	0.1347	0.1497
343	676.08	670.00	0.0059	0.0000	0.0059
344	676.08	670.00	0.0055	0.0000	0.0055
345	635.35	614.98	0.0000	3.5162	3.5162
346	700.78	689.42	0.0000	0.0981	0.0981
347	710.14	698.78	0.0084	0.0000	0.0084
348	704.15	692.79	0.0024	0.0873	0.0898
349	709.01	697.65	0.0020	0.0163	0.0183
350	713.82	702.37	0.0000	0.0092	0.0092
351	719.97	708.52	0.0092	0.0000	0.0092
352	717.53	706.17	0.0070	0.0000	0.0070
353	710.67	694.00	0.0051	0.0640	0.0691
354	666.25	650.64	0.0015	0.3456	0.3471
355	675.60	665.60	0.0112	0.0000	0.0112
356	674.28	667.08	0.0200	0.0000	0.0200
357	676.69	669.69	0.0139	0.0000	0.0139
358	656.32	641.44	0.0018	0.3828	0.3845
359	660.14	651.40	0.0033	0.0453	0.0486
360	672.00	665.00	0.0057	0.0000	0.0057
361	685.85	675.46	0.0070	0.2978	0.3049
362	693.00	677.92	0.0033	0.2945	0.2978
363	722.00	715.00	0.0053	0.0000	0.0053
364	719.00	712.00	0.0042	0.0150	0.0191
365	721.00	714.00	0.0095	0.0055	0.0150
366	722.00	715.00	0.0007	0.0048	0.0055
367	733.00	726.00	0.0048	0.0000	0.0048
368	707.00	700.00	0.0022	0.0110	0.0132

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
369	725.00	718.00	0.0046	0.0000	0.0046
370	720.00	713.00	0.0064	0.0000	0.0064
371	713.00	700.00	0.0035	0.0224	0.0260
372	725.00	711.50	0.0009	0.0088	0.0097
373	733.00	723.00	0.0057	0.0000	0.0057
374	720.00	713.00	0.0031	0.0000	0.0031
375	735.00	728.00	0.0110	0.0000	0.0110
376	707.53	696.53	0.0000	0.0433	0.0433
377	713.51	706.51	0.0000	0.0134	0.0134
378	720.85	713.85	0.0051	0.0020	0.0070
379	721.15	714.15	0.0064	0.0000	0.0064
380	726.51	719.51	0.0020	0.0000	0.0020
381	710.66	694.75	0.0000	0.0640	0.0640
382	713.18	703.00	0.0000	0.0101	0.0101
383	726.54	719.54	0.0075	0.0000	0.0075
384	726.84	719.84	0.0073	0.0000	0.0073
385	700.22	685.81	0.0194	0.1716	0.1909
386	699.66	687.25	0.0000	0.1716	0.1716
387	698.53	688.61	0.0136	0.1240	0.1375
388	703.57	693.02	0.0000	0.1240	0.1240
389	716.39	710.00	0.0077	0.0000	0.0077
390	699.69	692.34	0.0000	0.1240	0.1240
391	704.97	695.51	0.0068	0.1094	0.1163
392	706.84	696.28	0.0000	0.1094	0.1094
393	708.51	696.97	0.0000	0.1046	0.1046
394	711.52	697.75	0.0000	0.0998	0.0998
395	718.37	700.29	0.0000	0.0365	0.0365
396	714.19	702.14	0.0029	0.0163	0.0191
397	715.00	702.95	0.0000	0.0163	0.0163
398	741.00	731.00	0.0059	0.0000	0.0059
399	716.82	707.85	0.0000	0.0174	0.0174
400	718.39	709.00	0.0174	0.0000	0.0174
401	730.00	723.00	0.0000	0.0606	0.0606
402	748.00	741.00	0.0117	0.0155	0.0272
403	751.00	744.00	0.0061	0.0095	0.0155
404	762.00	755.00	0.0048	0.0000	0.0048
405	760.00	753.00	0.0046	0.0000	0.0046
406	739.00	732.00	0.0070	0.0264	0.0334
407	744.00	736.00	0.0114	0.0150	0.0264
408	744.00	737.00	0.0000	0.0150	0.0150
409	764.00	757.00	0.0086	0.0000	0.0086
410	762.00	755.00	0.0064	0.0000	0.0064
411	748.00	740.00	0.0103	0.0000	0.0103
412	650.00	638.43	0.0000	0.0954	0.0954
413	715.92	711.00	0.0026	0.0000	0.0026
414	712.20	705.00	0.0048	0.0000	0.0048

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
415	709.79	702.50	0.0048	0.0000	0.0048
416	722.47	715.47	0.0092	0.0000	0.0092
417	719.02	712.02	0.0084	0.0000	0.0084
418	717.45	708.77	0.0033	0.0073	0.0106
419	720.47	707.83	0.0026	0.0075	0.0101
420	716.20	703.53	0.0048	0.0134	0.0183
421	710.00	703.00	0.0018	0.0110	0.0128
422	647.57	639.60	0.0004	0.0000	0.0004
423	650.00	643.00	0.0270	0.0000	0.0270
424	629.82	625.81	0.0004	0.3318	0.3323
425	625.31	609.57	0.0000	3.5459	3.5459
426	621.61	606.67	0.0000	3.6148	3.6148
427	619.19	605.83	0.0000	3.6148	3.6148
428	617.08	604.98	0.0000	3.6148	3.6148
429	617.43	604.14	0.0000	3.6148	3.6148
430	614.23	603.75	0.0000	3.9470	3.9470
431	613.00	603.57	0.0000	3.9470	3.9470
432	611.00	603.16	0.0000	3.9470	3.9470
433	611.23	602.41	0.0000	3.9470	3.9470
434	704.25	688.76	0.0508	1.0839	1.1347
435	657.20	635.85	0.0458	2.9725	3.0183
436	649.22	628.55	0.0000	3.0223	3.0223
437	642.58	627.00	0.0000	3.0223	3.0223
438	688.44	670.33	0.0000	1.3089	1.3089
439	696.60	682.54	0.0000	0.1551	0.1551
440	698.97	686.12	0.1551	0.0000	0.1551
441	691.08	675.45	0.0000	0.1551	0.1551
442	775.00	768.00	1.1930	0.0000	1.1930
443	720.00	713.00	0.1173	0.7248	0.8421
444	805.00	798.00	0.1430	0.0000	0.1430
445	740.00	733.00	0.3178	0.4070	0.7248
446	794.00	787.00	0.0101	0.0000	0.0101
447	777.00	770.00	0.0412	0.0439	0.0850
448	725.00	718.00	0.0150	0.0941	0.1091
449	796.00	791.00	0.1602	0.0000	0.1602
450	757.00	750.00	0.2640	0.0000	0.2640
451	695.00	688.00	0.6601	0.0000	0.6601
452	665.00	648.00	0.1897	0.6601	0.8498
453	735.00	728.00	0.1116	0.2817	0.3933
454	735.00	728.00	0.0941	0.0000	0.0941
455	765.00	758.00	0.1214	0.1602	0.2817
456	680.00	673.00	0.0600	1.3809	1.4409
457	680.00	673.00	0.0040	0.0000	0.0040
458	695.00	688.00	0.1029	0.0000	0.1029
459	615.00	610.50	0.0434	0.0000	0.0434
460	682.86	664.17	0.2226	1.3089	1.5316

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
461	710.00	703.00	0.0453	0.9512	0.9965
462	680.00	673.00	0.0616	0.0000	0.0616
463	651.00	638.00	0.1324	0.9114	1.0438
464	725.00	718.00	0.0000	1.1930	1.1930
465	785.00	779.00	0.0337	0.0000	0.0337
466	782.00	772.00	0.0000	0.0439	0.0439
467	725.00	718.00	0.0874	0.0000	0.0874
468	706.73	694.90	0.0000	1.0839	1.0839
469	695.00	688.00	0.0340	0.0000	0.0340
470	670.00	665.00	0.0432	0.0000	0.0432
471	685.00	678.00	0.0192	0.0000	0.0192
472	685.00	678.00	0.1562	0.0000	0.1562
473	642.54	626.31	0.0000	3.0305	3.0305
474	651.00	627.00	0.0082	0.0000	0.0082
475	680.00	673.00	0.0504	0.0411	0.0915
476	655.00	649.50	0.0208	0.0000	0.0208
477	662.59	648.99	0.0000	0.1705	0.1705
478	624.00	617.00	0.2328	0.0000	0.2328
479	645.00	628.00	0.0000	1.0438	1.0438
480	645.00	623.00	0.2107	1.0438	1.2545
481	625.00	600.00	0.0250	1.2545	1.2796
482	620.00	593.00	0.0000	1.3029	1.3029
483	619.00	600.00	0.0233	0.0000	0.0233
484	600.00	590.00	0.0000	1.5357	1.5357
485	611.00	604.00	1.3029	0.0000	1.3029
486	626.00	619.00	0.0695	0.0000	0.0695
487	622.00	615.00	0.0000	0.0695	0.0695
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.23	0.0288	17.1
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.31	0.0365	19.9
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	1.47	0.0528	21.8
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	1.60	0.0592	22.1
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	2.02	0.2059	31.3
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	1.83	0.0684	23.2
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	3.61	0.2072	31.7
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	0.91	0.0053	15.2
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	3.33	0.3026	26.1
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	1.56	0.0744	19.9
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	2.83	0.3026	30.3
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	1.64	0.0845	20.3
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	2.14	0.3040	30.4
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	3.55	0.0983	20.3
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	2.70	0.3044	28.4
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	3.67	0.1010	20.6
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.28	0.0033	15.4
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	4.83	0.3048	29.1
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	4.96	0.3323	24.4
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	4.07	0.3323	25.8
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	3.81	0.1058	26.8
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	4.62	0.3323	24.8
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	1.84	0.1846	30.3
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	2.56	0.1846	31.0
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	3.59	0.0954	22.1
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	1.44	0.0954	29.2
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	2.52	0.0414	16.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	0.98	0.0040	24.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	2.04	0.0414	11.8
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	3.25	0.0293	15.5

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	1.99	0.0414	11.9
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	1.44	0.0051	10.2
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.28	0.0414	13.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	2.08	0.0224	13.5
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	1.37	0.0372	18.1
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	1.45	0.0121	10.9
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	1.34	0.0334	17.3
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	1.50	0.0097	8.7
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.25	0.0042	15.0
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.32	0.0042	6.8
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	1.64	0.0092	10.3
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.15	0.0040	11.8
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	2.04	0.0101	9.2
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.18	0.0029	4.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	1.41	0.0033	7.4
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	0.79	0.0022	4.2
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	1.74	0.0143	11.4
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.36	0.0004	4.2
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	1.61	0.0068	9.8
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.21	0.0288	16.5
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	0.75	0.0048	6.8
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	1.32	0.0044	14.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	1.53	0.0035	24.1
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	1.58	0.0103	26.3
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.20	0.0235	15.3
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	1.85	0.2200	28.9
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.16	0.0037	9.7
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	1.87	0.2314	29.1
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	1.96	0.2376	29.3
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.10	0.0189	13.6

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.28	0.0035	24.8
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	2.07	0.0180	12.1
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	1.92	0.2440	29.9
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.14	0.0174	11.6
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	2.12	0.0229	28.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.11	0.0031	8.3
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.09	0.2677	30.0
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	0.75	0.0009	4.9
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	2.13	0.2741	28.6
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	0.74	0.0009	3.6
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.05	0.0035	22.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.09	0.0134	11.2
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.09	0.0024	24.6
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	3.20	0.2776	29.3
CO-76	281	607.50	280	606.77	179.1	0.004	12.0	0.013	1.29	0.0434	21.6
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.57	0.0022	15.1
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	1.38	0.0092	16.8
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	3.68	0.0689	18.0
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.18	0.0163	16.4
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	0.70	0.0044	14.4
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	4.11	3.5162	31.2
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.08	0.0158	14.2
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	3.26	0.0521	15.8
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.22	0.0169	14.0
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	2.25	0.4331	28.9
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	1.93	0.0645	21.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.01	0.0022	5.8
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	1.55	0.0579	21.9
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.05	0.0055	8.9
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.07	0.0488	23.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

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CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	0.89	0.0103	10.8
CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.29	0.0433	23.1
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	0.97	0.0101	14.9
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	0.75	0.0059	8.2
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.30	0.0092	8.7
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	0.85	0.0081	9.3
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	2.02	0.2055	33.1
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	0.76	0.0051	8.1
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	0.73	0.0029	7.1
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	0.84	0.0090	9.6
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.49	0.0015	3.7
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	2.04	0.0330	18.0
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	0.99	0.0114	10.5
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.41	0.0009	2.8
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	1.58	0.0145	12.7
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	0.98	0.0134	11.9
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.08	0.0128	12.7
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	0.97	0.0033	8.8
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.29	0.0218	14.3
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	1.36	0.0057	11.1
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	0.88	0.0055	16.1
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	1.31	0.0075	11.5
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	2.07	0.0350	14.3
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	0.93	0.0057	14.0
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	2.50	0.2945	28.5
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	2.92	0.3049	28.6
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	5.93	1.8377	43.8
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	3.20	0.3106	29.3
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.29	0.0218	28.8
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.08	0.0048	9.3

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

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CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.37	1.8363	42.7
CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	0.92	0.0090	10.8
CO-127	187	625.80	188	625.00	137.1	0.006	8.0	0.013	2.85	0.4078	78.3
CO-128	186	640.10	187	625.80	303.8	0.047	8.0	0.013	6.18	0.4069	58.4
CO-129	185	645.00	186	640.10	598.4	0.008	8.0	0.013	3.23	0.4027	55.9
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.50	0.0022	24.1
CO-131	184	648.00	185	645.00	217.1	0.014	8.0	0.013	3.93	0.3979	55.5
CO-132	183	649.00	184	648.00	189.0	0.005	8.0	0.013	2.72	0.3972	58.5
CO-133	182	650.00	183	649.00	389.0	0.003	8.0	0.013	2.00	0.3939	71.6
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	1.63	0.0139	10.9
CO-135	181	652.00	182	650.00	287.4	0.007	8.0	0.013	3.01	0.3889	68.6
CO-136	180	661.00	181	652.00	687.9	0.013	8.0	0.013	3.82	0.3884	55.2
CO-137	179	665.00	180	661.00	388.6	0.010	8.0	0.013	3.49	0.3854	54.6
CO-138	178	666.00	179	665.00	38.0	0.026	8.0	0.013	4.92	0.3831	54.4
CO-139	177	668.00	178	666.00	336.3	0.006	8.0	0.013	2.83	0.3831	56.1
CO-140	176	669.00	177	668.00	368.4	0.003	8.0	0.013	1.69	0.1592	50.7
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	3.32	0.0540	22.2
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	2.35	0.0405	18.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	1.96	0.0270	15.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	0.90	0.0029	23.9
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	1.67	0.0135	11.8
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	0.79	0.0029	40.7
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	1.88	0.0135	11.8
CO-148	173	626.80	188	625.00	365.3	0.005	14.0	0.013	3.67	1.4285	54.9
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	1.61	0.0135	13.4
CO-150	168	628.50	173	626.80	459.3	0.004	14.0	0.013	3.28	1.4263	57.6
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	2.01	0.0135	14.7
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	1.45	0.0051	54.3
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.12	0.0035	7.9
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	2.78	0.3471	30.9

2024 City of Justin Wastewater Model Update.stsw

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CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	3.94	0.3344	30.1
CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.15	0.0022	6.4
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	2.32	0.4331	27.1
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	0.93	0.0018	5.3
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	1.66	0.0350	22.5
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	4.68	0.4336	21.5
CO-162	167	629.20	168	628.50	367.2	0.002	14.0	0.013	2.49	1.4212	68.2
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	3.96	3.4641	31.7
CO-164	166	629.50	167	629.20	167.0	0.002	14.0	0.013	2.43	1.4186	77.1
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.26	0.0308	18.7
CO-166	165	630.00	166	629.50	153.0	0.003	14.0	0.013	3.12	1.4186	70.7
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	1.69	0.0057	9.3
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	2.09	0.0187	14.0
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	0.79	0.0068	8.3
CO-170	162	634.50	163	633.00	334.4	0.004	14.0	0.013	3.52	1.3923	55.8
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.25	0.0306	29.6
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	3.41	0.0788	32.4
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	0.80	0.0064	9.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	2.25	0.0152	17.1
CO-175	158	630.50	165	630.00	200.7	0.002	14.0	0.013	2.80	1.4186	66.1
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	1.61	0.0132	10.0
CO-177	164	631.00	158	630.50	187.5	0.003	14.0	0.013	2.88	1.4137	67.8
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	0.96	0.0086	9.0
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	1.44	0.0040	52.6
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.08	0.0046	7.0
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.35	0.0004	4.8
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	0.67	0.0026	5.2
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.09	0.0029	5.9
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	1.37	0.0130	17.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.09	0.0029	9.1

2024 City of Justin Wastewater Model Update.stsw

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CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	1.77	0.0788	24.5
CO-187	153	631.50	164	631.00	162.2	0.003	14.0	0.013	3.05	1.4137	65.3
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	2.70	0.0788	24.5
CO-189	163	633.00	153	631.50	333.0	0.005	14.0	0.013	3.53	1.4016	59.8
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	1.94	0.0636	22.6
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	1.88	0.0113	54.4
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	0.66	0.0024	6.6
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.08	0.0055	16.8
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	0.97	0.0044	7.2
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	2.38	0.0981	27.1
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	1.33	0.0053	9.9
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	3.40	0.1036	38.0
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	1.62	0.0084	55.5
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	2.07	0.2945	30.3
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	2.92	0.1497	35.6
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	2.39	0.0202	13.2
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.25	0.0031	7.6
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.25	0.0051	9.2
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.26	0.0066	10.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	1.70	0.0095	55.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	2.37	0.0981	25.3
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.13	0.0084	17.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	0.98	0.0015	5.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	2.30	0.0898	26.2
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.21	0.0035	7.6
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	1.44	0.0183	18.4
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.09	0.0044	8.8
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.16	0.0092	9.7
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	1.34	0.0064	9.9
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.16	0.0092	7.9

2024 City of Justin Wastewater Model Update.stsw

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CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	1.37	0.0092	12.8
CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.06	0.0070	9.2
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	1.58	0.0088	11.4
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	1.40	0.0055	10.1
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.22	0.0042	8.3
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.17	0.0691	28.2
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	0.86	0.0022	6.7
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.17	0.0112	27.3
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	0.88	0.0015	8.1
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	1.43	0.0090	10.6
CO-226	133	644.00	12th Street LS (Downtown)	622.00	549.6	0.040	6.0	0.013	1.98	0.0090	9.6
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	1.35	0.0200	29.5
CO-228	132	627.15	12th Street LS (Downtown)	622.00	244.8	0.021	6.0	0.013	1.82	0.0148	13.1
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	1.58	0.0139	33.6
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	0.81	0.0148	17.4
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.21	0.0143	12.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	0.84	0.0143	11.5
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	0.78	0.0090	11.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.06	0.0057	12.5
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	0.71	0.0076	9.6
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	2.48	0.2978	28.6
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	0.69	0.0067	9.1
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	1.59	0.0053	14.3
CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.66	0.0027	6.9
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	2.06	0.0191	16.5

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

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Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.43	0.0018	4.9
CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.21	0.0150	11.0
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	0.69	0.0022	6.5
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	0.67	0.0055	9.1
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.57	0.0004	5.6
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.07	0.0048	6.8
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.60	0.0004	5.6
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	1.43	0.0132	15.1
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	0.92	0.0013	6.4
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.23	0.0046	7.7
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.41	0.0018	7.0
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.11	0.0064	8.2
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.36	0.0004	2.1
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.33	0.0260	17.4
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	0.79	0.0004	6.6
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	1.86	0.0097	11.2
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.02	0.0071	10.5
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.02	0.0057	7.3
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	0.88	0.0053	9.9
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.52	0.0031	7.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	0.92	0.0024	7.6
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	0.95	0.0128	12.6
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	1.58	0.0110	9.9
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.18	0.0251	16.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.04	0.0031	7.8
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	1.51	0.0183	15.0
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.31	0.0134	10.5
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	0.98	0.0055	12.5
CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.07	0.0070	8.4
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	1.65	0.0176	15.0

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

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CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.04	0.0064	8.2
CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	0.73	0.0020	5.4
CO-273	109	604.00	Meadowlands LS	575.00	387.8	0.075	6.0	0.013	3.01	0.0176	12.6
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	1.58	0.0080	11.5
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	1.48	0.0433	21.1
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	1.61	0.0104	14.2
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	1.81	0.0101	16.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	0.92	0.0018	10.5
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.29	0.0101	8.0
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.09	0.0075	7.9
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	1.77	0.0106	16.0
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.08	0.0073	7.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	3.04	0.1909	27.3
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	0.81	0.0022	4.3
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	1.57	0.1716	24.6
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	0.83	0.0031	6.8
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	1.64	0.1375	24.5
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	0.94	0.0092	8.5
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	1.51	0.1240	25.8
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.11	0.0092	8.2
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.19	0.0077	20.1
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.01	0.0092	10.1
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.16	0.0174	12.2
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	1.48	0.0222	15.1
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	0.96	0.1240	23.8
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	0.90	0.0240	15.6
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	1.41	0.1163	21.9
CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	1.42	0.0262	14.0
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	1.47	0.1094	21.2

2024 City of Justin Wastewater Model Update.stsw

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CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	1.67	0.0286	13.6
CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	1.46	0.1046	20.2
CO-303	95	592.25	Meadowlands LS	575.00	518.3	0.033	8.0	0.013	2.50	0.0286	12.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	1.44	0.0998	19.6
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.06	0.0046	8.8
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.12	0.0365	19.0
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.27	0.0064	12.7
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	0.89	0.0191	13.0
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	0.88	0.0163	10.6
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.10	0.0040	12.2
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	0.92	0.0015	5.3
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	1.55	0.0059	9.5
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.26	0.0024	12.5
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	1.72	0.0174	14.8
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.05	0.0174	11.9
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	68.5
CO-320	86	669.00	179	665.00	760.4	0.005	6.0	0.013	0.48	0.0009	38.4
CO-321	85	675.00	177	668.00	890.7	0.008	8.0	0.013	2.74	0.2239	49.5
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	2.23	0.0606	25.0
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	3.21	0.2204	40.8
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	1.76	0.0272	17.4
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	2.96	0.0959	33.5
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	0.98	0.0155	13.1
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	1.58	0.0952	28.9
CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.05	0.0048	9.0
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	1.65	0.0939	30.7

2024 City of Justin Wastewater Model Update.stsw

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CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.10	0.0046	9.0
CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.45	0.0007	14.4
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	1.58	0.0334	18.2
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	1.35	0.0264	14.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	1.51	0.0288	14.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	0.96	0.0150	13.2
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	1.62	0.0275	14.1
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	1.38	0.0086	9.9
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.02	0.0101	11.5
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.22	0.0064	9.4
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.07	0.0086	8.3
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	1.85	0.0103	10.5
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	0.96	0.0068	7.4
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.03	0.0026	16.7
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.06	0.0048	17.8
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	0.97	0.0048	18.2
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.55	0.0009	4.9
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.16	0.0092	8.9
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.12	0.0024	6.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.13	0.0084	9.0
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.25	0.0051	6.8
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.28	0.0004	25.9
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	0.95	0.0075	9.2
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	1.88	0.0270	29.2
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	2.78	0.0297	11.9
CO-358	426	606.67	427	605.83	294.4	0.003	30.0	0.013	3.73	3.6148	34.5
CO-359	427	605.83	428	604.98	300.8	0.003	30.0	0.013	3.72	3.6148	33.1
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.13	0.0044	11.1
CO-361	428	604.98	429	604.14	212.1	0.004	30.0	0.013	4.20	3.6148	35.1
CO-362	429	604.14	430	603.75	203.9	0.002	30.0	0.013	3.23	3.6148	40.1

2024 City of Justin Wastewater Model Update.stsw

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CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.04	0.0044	11.3
CO-364	430	603.75	431	603.57	84.1	0.002	30.0	0.013	3.44	3.9470	43.2
CO-365	431	603.57	432	603.16	317.5	0.001	30.0	0.013	2.86	3.9470	44.6
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	0.97	0.0125	10.9
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	2.12	0.0174	12.5
CO-368	432	603.16	433	602.41	556.6	0.001	30.0	0.013	2.91	3.9470	38.5
CO-369	433	602.41	Justin Treatment Plant	596.00	189.0	0.034	30.0	0.013	9.24	3.9470	26.0
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	0.88	0.0068	8.9
CO-371	434	688.76	438	670.33	2,927.0	0.006	21.0	0.013	3.68	1.1347	28.3
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	3.81	1.3089	30.6
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	3.98	1.5316	36.2
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	0.75	0.0042	6.8
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	4.63	3.0183	30.5
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	0.79	0.0013	4.5
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	3.36	3.0223	30.6
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.55	0.0004	3.9
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	4.39	3.0223	28.5
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	4.39	3.0305	30.3
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	0.82	0.0026	5.1
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.16	0.0238	15.3
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	0.88	0.0048	6.2
CO-382	280	606.77	Timberbrook LS	606.50	58.8	0.005	15.0	0.013	2.50	0.3906	24.7
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	0.91	0.0055	8.4
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	4.08	0.1551	12.3
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	2.87	0.1551	28.1
CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.59	0.0004	3.8
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	2.67	0.1551	13.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.22	0.0029	3.9
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	0.89	0.0029	5.4
CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.24	0.0022	5.1
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.16	0.0031	5.0
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	0.74	0.0007	3.8
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	0.98	0.0026	4.6
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.08	0.0035	11.4
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.25	0.0081	9.5
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	1.32	0.0046	9.0
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.15	0.0055	8.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.26	0.0059	9.4
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	1.52	0.0521	20.2
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	2.02	0.0213	16.6
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	1.53	0.0521	20.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	1.88	0.0042	4.3
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.21	0.0042	8.7
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	1.32	0.0090	7.4
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	2.08	0.0090	11.2
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	2.10	0.0297	12.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	0.77	0.0007	5.3
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.44	0.0004	5.4
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.05	0.0020	8.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	0.77	0.0022	6.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.05	0.0018	2.7
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	0.95	0.0031	44.4
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.15	0.0040	53.8
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.65	0.0009	5.4
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.50	0.0009	6.3
CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.01	0.0018	5.3
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	0.84	0.0022	5.5

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	1.37	0.0022	52.8
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.02	0.0033	40.6
CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.24	0.0022	52.8
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	0.71	0.0004	8.4
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.45	0.0004	7.4
CO-447	160	635.27	12th Street LS (Downtown)	622.00	328.5	0.040	8.0	0.013	2.22	0.0157	8.8
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	1.65	0.1497	31.4
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	1.72	0.1705	32.8
CO-449	21	641.91	358	641.44	147.6	0.003	12.0	0.013	2.20	0.3689	37.4
CO-450	358	641.44	202	640.44	347.3	0.003	12.0	0.013	2.15	0.3845	37.4
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	1.52	0.0818	26.6
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	2.58	0.0818	25.9
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	1.72	0.0396	17.8
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	2.46	0.0486	36.7
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	1.87	0.0939	28.7
CO-461(1)	16	683.00	475	673.00	1,603.5	0.006	8.0	0.013	1.55	0.0411	21.7
CO-461(2)	475	673.00	342	658.95	2,244.4	0.006	8.0	0.013	1.96	0.0915	29.6
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	3.03	0.3689	33.9
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	0.95	0.0037	6.4
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	2.59	0.0306	12.4
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.56	0.0009	3.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	0.75	0.0018	5.3
CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.53	0.0009	3.1
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.16	0.0060	4.6
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	0.73	0.0060	21.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-471	8	597.00	Justin Treatment Plant	596.00	132.8	0.008	24.0	0.013	4.58	2.0286	29.0
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	4.88	3.5459	32.7
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	10.78	2.0226	33.5
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.17	0.0392	20.3
CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.22	0.0392	21.3
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.15	0.0130	12.4
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.16	0.0444	22.0
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	3.29	0.0636	17.7
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	0.98	0.0121	12.7
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	1.59	0.0640	27.1
CO-483	464	718.00	456	673.00	3,406.4	0.013	15.0	0.013	5.02	1.1930	45.5
CO-484(1)	443	713.00	461	703.00	1,147.3	0.009	18.0	0.013	3.85	0.8421	29.8
CO-484(2) (1)	461	703.00	468	694.90	932.8	0.009	18.0	0.013	4.04	0.9965	32.7
CO-484(2) (2)	468	694.90	434	688.76	708.0	0.009	15.0	0.013	4.20	1.0839	38.6
CO-485	444	798.00	445	733.00	3,754.3	0.017	8.0	0.013	3.21	0.1430	47.5
CO-486	445	733.00	443	713.00	2,582.5	0.008	15.0	0.013	3.60	0.7248	33.8
CO-487(1)	446	787.00	466	772.00	1,496.7	0.010	8.0	0.013	1.21	0.0101	14.4
CO-487(2)	466	772.00	447	770.00	511.4	0.004	8.0	0.013	1.34	0.0439	22.5
CO-488	447	770.00	456	673.00	7,808.9	0.012	8.0	0.013	2.45	0.0850	57.1
CO-489	448	718.00	461	703.00	2,042.7	0.007	8.0	0.013	2.18	0.1091	49.1
CO-490	455	758.00	453	728.00	3,435.9	0.009	10.0	0.013	2.98	0.2817	43.3
CO-491	450	750.00	445	733.00	4,077.0	0.004	12.0	0.013	2.21	0.2640	35.1
CO-492	451	688.00	452	648.00	3,066.6	0.013	15.0	0.013	4.23	0.6601	33.6
CO-493(1)	452	648.00	463	638.00	2,294.5	0.004	18.0	0.013	3.02	0.8498	30.2
CO-493(2)	463	638.00	479	628.00	2,274.3	0.004	21.0	0.013	3.16	1.0438	26.6

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Average Day Flow

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-495	453	728.00	Southwest ETJ LS	723.00	1,858.5	0.003	10.0	0.013	2.12	0.3933	46.6
CO-496	454	728.00	448	718.00	2,028.8	0.005	8.0	0.013	1.82	0.0941	28.1
CO-497	449	791.00	455	758.00	3,220.1	0.010	8.0	0.013	2.75	0.1602	38.8
CO-498	456	673.00	435	635.85	2,699.9	0.014	15.0	0.013	5.37	1.4409	52.3
CO-499	457	673.00	436	628.55	1,440.5	0.031	8.0	0.013	1.34	0.0040	52.7
CO-500	458	688.00	456	673.00	1,524.1	0.010	8.0	0.013	2.38	0.1029	58.4
CO-501	459	610.50	281	607.50	710.1	0.004	12.0	0.013	1.30	0.0434	11.8
CO-502	462	673.00	463	638.00	2,294.2	0.015	8.0	0.013	2.40	0.0616	45.3
CO-503	442	768.00	464	718.00	5,429.8	0.009	15.0	0.013	4.41	1.1930	40.3
CO-504	466	772.00	465	779.00	1,610.0	0.004	8.0	0.013	1.29	0.0337	18.8
CO-505	467	718.00	468	694.90	1,438.6	0.016	8.0	0.013	2.70	0.0874	51.2
CO-506	469	688.00	386	687.25	1,306.5	0.001	12.0	0.013	0.60	0.0340	21.8
CO-507	471	678.00	438	670.33	239.6	0.032	12.0	0.013	2.06	0.0192	29.1
CO-508	470	665.00	342	658.95	1,684.8	0.004	8.0	0.013	1.30	0.0432	26.9
CO-509	472	678.00	176	669.00	1,604.9	0.006	8.0	0.013	2.19	0.1562	39.4
CO-510	474	627.00	473	626.31	61.0	0.011	12.0	0.013	1.10	0.0082	38.1
CO-511	476	649.50	477	648.99	569.4	0.001	8.0	0.013	0.64	0.0208	30.4
CO-512	478	617.00	484	590.00	4,651.4	0.006	10.0	0.013	2.44	0.2328	59.2
CO-513	479	628.00	480	623.00	1,166.6	0.004	21.0	0.013	3.14	1.0438	28.1
CO-514	480	623.00	481	600.00	5,501.6	0.004	21.0	0.013	3.27	1.2545	29.6
CO-515	481	600.00	482	593.00	1,674.0	0.004	21.0	0.013	3.29	1.2796	31.1
CO-516	482	593.00	North ETJ	592.00	133.2	0.008	15.0	0.013	4.19	1.3029	43.4
CO-517	483	600.00	482	593.00	913.7	0.008	8.0	0.013	1.41	0.0233	48.9
CO-519	485	604.00	484	590.00	2,998.4	0.005	12.0	0.013	3.46	1.3029	70.9
CO-520	484	590.00	Denton Creek SS	589.00	171.3	0.006	12.0	0.013	3.91	1.5357	69.2
CO-521	486	619.00	487	615.00	1,826.2	0.002	12.0	0.013	1.19	0.0695	15.3
CO-522	487	615.00	280	606.77	274.1	0.030	12.0	0.013	2.99	0.0695	22.4

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Average Day Flow

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.0462
12th Street LS (Private)	666.05	645.00	0.0306
12th Street LS (Downtown)	637.00	622.00	0.0395
Timberbrooks LS	626.50	606.50	0.3906
Justin Treatment Plant	616.27	596.00	5.9756
Soutwest ETJ LS	730.00	723.00	0.3933
Denton Creek SS	600.00	589.00	1.5357
North ETJ	620.00	592.00	1.3029

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.1003	0.1003
2	697.00	688.00	0.0000	0.2543	0.2543
3	713.23	700.75	0.0150	0.0334	0.0484
4	715.75	703.96	0.0150	0.0370	0.0519
5	699.00	689.00	0.0000	0.1778	0.1778
6	701.00	692.50	0.0000	0.1566	0.1566
7	701.00	694.00	0.0000	0.1566	0.1566
8	616.65	597.00	0.0000	3.0484	3.0484
9	624.36	600.00	0.0000	0.0240	0.0240
10	615.22	611.22	0.0240	0.0000	0.0240
11	639.83	635.83	0.0036	0.0000	0.0036
12	630.00	626.00	0.0000	0.0072	0.0072
13	640.61	636.61	0.0036	0.0000	0.0036
14	684.46	677.74	0.0150	0.0000	0.0150
15	665.40	656.95	0.0079	1.3296	1.3375
16	690.00	683.00	0.1644	0.0000	0.1644
17	672.00	660.12	0.0273	0.1311	0.1584
18	695.45	688.75	0.0484	0.3271	0.3755
19	700.00	693.50	0.0000	0.3271	0.3271
20	702.00	696.00	0.3271	0.0000	0.3271
21	655.88	641.91	0.0000	1.4756	1.4756
22	671.67	651.05	0.0000	0.5987	0.5987
23	636.98	632.98	0.0018	0.0000	0.0018
24	637.85	633.00	0.0018	0.0000	0.0018
25	643.27	639.27	0.0088	0.0000	0.0088
26	663.00	656.00	0.0132	0.0000	0.0132
27	641.33	637.33	0.0000	0.0089	0.0089
28	642.00	638.00	0.0018	0.0071	0.0089
29	662.29	658.29	0.0071	0.0000	0.0071
30	645.00	641.00	0.0036	0.0000	0.0036
31	653.81	649.81	0.0035	0.0000	0.0035
32	681.00	669.74	0.0158	0.0000	0.0158
33	673.00	662.09	0.0123	0.0000	0.0123
34	630.99	626.99	0.0070	0.0000	0.0070
35	628.00	624.00	0.0088	0.0000	0.0088
36	628.00	624.00	0.0079	0.0000	0.0079
37	625.00	621.00	0.0018	0.0000	0.0018
38	625.00	621.00	0.0026	0.0000	0.0026
39	626.00	622.00	0.0018	0.1170	0.1188
40	645.95	641.95	0.0000	0.0361	0.0361
41	646.00	639.00	0.0088	0.0722	0.0810
42	654.00	647.00	0.0000	0.0167	0.0167
43	639.22	630.25	0.0000	0.2086	0.2086
44	635.02	629.32	0.0000	0.2086	0.2086
45	664.58	651.86	0.0202	0.0651	0.0854
46	671.94	659.46	0.0202	0.0546	0.0748

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
47	683.37	676.59	0.0326	0.0000	0.0326
48	683.31	677.33	0.0185	0.0000	0.0185
49	680.62	674.00	0.0035	0.0106	0.0141
50	685.00	681.00	0.0106	0.0000	0.0106
51	679.25	672.00	0.0026	0.0000	0.0026
52	670.26	666.26	0.0018	0.0150	0.0167
53	681.22	677.22	0.0123	0.0000	0.0123
54	682.00	678.00	0.0088	0.0000	0.0088
55	669.37	665.37	0.0026	0.0202	0.0229
56	672.31	668.31	0.0000	0.0114	0.0114
57	685.00	681.00	0.0114	0.0000	0.0114
58	693.97	689.97	0.0018	0.0000	0.0018
59	692.00	683.50	0.0026	0.0194	0.0220
60	693.50	686.00	0.0070	0.0123	0.0194
61	695.00	691.00	0.0106	0.0000	0.0106
62	692.00	688.00	0.0018	0.0000	0.0018
63	695.00	691.00	0.0053	0.0000	0.0053
64	693.29	686.50	0.0097	0.0070	0.0167
65	691.97	684.00	0.0106	0.0167	0.0273
66	675.00	671.00	0.0018	0.0678	0.0695
67	689.00	686.00	0.0176	0.0000	0.0176
68	695.50	691.50	0.0176	0.0000	0.0176
69	676.19	672.22	0.0026	0.0475	0.0502
70	678.00	674.00	0.0097	0.0202	0.0299
71	686.09	682.00	0.0106	0.0097	0.0202
72	700.00	696.00	0.0062	0.0035	0.0097
73	702.00	698.00	0.0035	0.0000	0.0035
74	681.64	672.00	0.0273	0.0000	0.0273
75	684.00	669.00	0.0070	0.0273	0.0343
76	680.71	665.00	0.0062	0.0343	0.0405
77	673.00	662.00	0.0000	0.1100	0.1100
78	673.00	661.50	0.0053	0.1100	0.1153
79	670.00	659.00	0.0070	0.1153	0.1223
80	692.64	688.00	0.0026	0.0000	0.0026
81	697.00	687.00	0.0000	0.3755	0.3755
82	696.89	686.50	0.0053	0.3755	0.3808
83	695.07	686.00	0.0000	0.3834	0.3834
84	692.67	682.00	0.1312	0.3834	0.5146
85	686.04	675.00	0.0141	0.5146	0.5287
86	676.00	669.00	0.0036	0.0000	0.0036
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0035	0.0062	0.0097
92	619.26	615.00	0.0062	0.0000	0.0062

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
93	621.16	617.16	0.0132	0.0026	0.0158
94	618.07	614.07	0.0070	0.0185	0.0255
95	596.25	592.25	0.0000	0.1144	0.1144
96	604.14	597.00	0.0000	0.1144	0.1144
97	604.00	600.00	0.0088	0.0959	0.1047
98	604.83	600.83	0.0070	0.0889	0.0959
99	615.32	604.00	0.0035	0.0854	0.0889
100	613.82	607.00	0.0070	0.0625	0.0695
101	613.00	608.00	0.0000	0.0370	0.0370
102	612.36	609.00	0.0000	0.0370	0.0370
103	617.60	615.00	0.0246	0.0123	0.0370
104	623.40	617.00	0.0035	0.0088	0.0123
105	630.59	622.00	0.0088	0.0000	0.0088
106	623.36	619.36	0.0079	0.0106	0.0185
107	618.58	614.58	0.0070	0.0000	0.0070
108	618.00	614.00	0.0018	0.0397	0.0415
109	608.00	604.00	0.0000	0.0705	0.0705
110	612.70	608.70	0.0000	0.0705	0.0705
111	615.01	611.01	0.0097	0.0123	0.0220
112	619.01	615.01	0.0053	0.0070	0.0123
113	632.33	628.33	0.0097	0.0000	0.0097
114	627.31	623.31	0.0044	0.0169	0.0213
115	625.81	621.81	0.0070	0.0213	0.0283
116	622.45	618.45	0.0018	0.0301	0.0318
117	630.32	626.32	0.0000	0.0018	0.0018
118	631.79	627.79	0.0018	0.0000	0.0018
119	636.30	634.00	0.0072	0.0000	0.0072
120	639.00	635.00	0.0054	0.0000	0.0054
121	638.41	635.41	0.0018	0.0000	0.0018
122	638.00	635.00	0.0018	0.0000	0.0018
123	639.37	635.37	0.0090	0.0000	0.0090
124	637.33	634.50	0.0072	0.0000	0.0072
125	639.71	634.00	0.0036	0.0072	0.0108
126	640.00	633.00	0.0000	0.0269	0.0269
127	638.00	632.00	0.0000	0.0305	0.0305
128	638.00	631.00	0.0000	0.0359	0.0359
129	639.00	630.50	0.0197	0.0376	0.0574
130	638.52	629.50	0.0000	0.0574	0.0574
131	638.93	628.00	0.0000	0.0592	0.0592
132	631.15	627.15	0.0000	0.0592	0.0592
133	648.00	644.00	0.0000	0.0361	0.0361
134	657.27	653.27	0.0300	0.0062	0.0361
135	683.62	679.62	0.0062	0.0000	0.0062
136	688.94	684.94	0.0088	0.0000	0.0088
137	684.00	680.00	0.0079	0.0088	0.0167
138	673.70	669.70	0.0053	0.0167	0.0220

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
139	665.44	661.44	0.0132	0.0220	0.0352
140	647.95	643.95	0.0018	0.0352	0.0370
141	649.63	645.63	0.0080	0.0176	0.0256
142	655.77	651.77	0.0035	0.0141	0.0176
143	666.41	662.41	0.0079	0.0062	0.0141
144	676.16	672.16	0.0062	0.0000	0.0062
145	650.00	646.00	0.0116	0.0264	0.0380
146	654.80	650.80	0.0062	0.0203	0.0264
147	663.89	659.89	0.0080	0.0123	0.0203
148	684.50	680.50	0.0123	0.0000	0.0123
149	659.42	655.42	0.0125	0.0212	0.0336
150	682.72	678.72	0.0212	0.0000	0.0212
151	679.20	675.20	0.0176	0.0000	0.0176
152	680.00	676.00	0.0097	0.0000	0.0097
153	642.65	631.50	0.0036	1.5070	1.5106
154	667.28	663.28	0.0160	0.0291	0.0450
155	671.41	667.41	0.0000	0.0114	0.0114
156	678.17	674.17	0.0000	0.0114	0.0114
157	678.92	674.92	0.0018	0.0000	0.0018
158	642.00	630.50	0.0036	1.5265	1.5301
159	674.11	670.11	0.0159	0.0000	0.0159
160	639.27	635.27	0.0000	0.0626	0.0626
161	641.92	636.92	0.0000	0.0256	0.0256
162	644.00	634.50	1.3868	0.0380	1.4248
163	643.00	633.00	0.0036	1.4584	1.4620
164	641.74	631.00	0.0000	1.5106	1.5106
165	643.00	630.00	0.0000	1.5301	1.5301
166	641.00	629.50	0.0000	1.5301	1.5301
167	640.87	629.20	0.0018	1.5390	1.5408
168	639.51	628.50	0.0000	1.5610	1.5610
169	669.64	665.64	0.0070	0.0000	0.0070
170	657.00	653.00	0.0018	0.0070	0.0088
171	650.05	646.05	0.0018	0.0123	0.0141
172	643.48	639.48	0.0026	0.0176	0.0203
173	638.23	626.80	0.0000	1.5698	1.5698
174	657.00	645.64	0.0114	0.0000	0.0114
175	689.00	679.19	0.0114	0.0000	0.0114
176	676.00	669.00	0.0009	0.6361	0.6370
177	675.00	668.00	0.0000	1.1657	1.1657
178	675.00	666.00	0.0000	1.1657	1.1657
179	675.00	665.00	0.0053	1.1692	1.1745
180	668.00	661.00	0.0123	1.1745	1.1868
181	657.50	652.00	0.0018	1.1868	1.1886
182	656.00	650.00	0.0044	1.2044	1.2088
183	656.00	649.00	0.0009	1.2212	1.2220
184	655.00	648.00	0.0026	1.2220	1.2247

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
185	655.00	645.00	0.0062	1.2379	1.2440
186	650.00	640.10	0.0053	1.2555	1.2608
187	636.81	625.80	0.0036	1.2608	1.2643
188	634.90	625.00	0.0000	2.8341	2.8341
189	630.12	620.00	0.0000	3.0244	3.0244
190	633.16	624.00	0.0054	2.8341	2.8395
191	642.00	630.32	0.0229	0.0000	0.0229
192	639.34	635.34	0.0220	0.0000	0.0220
193	661.00	650.50	0.0510	0.0000	0.0510
194	663.00	656.00	0.0581	0.0000	0.0581
195	652.00	645.00	0.0229	0.1091	0.1320
196	660.00	653.00	0.0370	0.0000	0.0370
197	643.00	631.95	0.0035	0.0370	0.0405
198	641.00	630.48	0.0009	0.1725	0.1734
199	640.00	629.51	0.0000	0.1954	0.1954
200	640.00	629.00	0.0361	0.1954	0.2314
201	640.00	628.50	0.0035	0.2543	0.2578
202	657.86	640.44	0.0000	1.7326	1.7326
203	651.68	639.30	0.0000	1.7344	1.7344
204	635.35	627.53	0.0000	0.2086	0.2086
205	627.03	613.90	0.0000	0.1188	0.1188
206	642.00	630.70	0.0176	0.0000	0.0176
207	637.00	626.60	0.0000	0.2754	0.2754
208	692.00	681.50	0.0044	0.0493	0.0537
209	691.63	687.63	0.0035	0.0000	0.0035
210	692.87	688.87	0.0035	0.0000	0.0035
211	692.00	686.00	0.0053	0.0070	0.0123
212	688.97	680.00	0.0035	0.0660	0.0695
213	682.39	678.39	0.0026	0.0695	0.0722
214	678.00	673.10	0.0035	0.0722	0.0757
215	694.00	690.00	0.0150	0.0000	0.0150
216	684.36	672.00	0.0035	0.0906	0.0942
217	691.85	687.85	0.0176	0.0000	0.0176
218	685.00	670.90	0.0035	0.1118	0.1153
219	693.50	689.42	0.0018	0.0000	0.0018
220	692.65	688.63	0.0070	0.0018	0.0088
221	687.02	683.02	0.0026	0.0088	0.0114
222	680.80	676.80	0.0044	0.0114	0.0158
223	688.76	684.76	0.0167	0.0000	0.0167
224	681.00	669.80	0.0018	0.1320	0.1338
225	678.34	669.14	0.0009	0.1478	0.1487
226	675.00	668.49	0.0009	0.1646	0.1654
227	675.00	668.10	0.0000	0.1654	0.1654
228	667.43	663.43	0.0000	0.1654	0.1654
229	660.66	656.66	0.0000	0.1654	0.1654
230	652.07	648.07	0.0000	0.3814	0.3814

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
231	617.00	613.00	0.0000	1.3292	1.3292
232	623.02	619.02	0.0000	1.3292	1.3292
233	634.54	630.54	0.0018	1.2176	1.2194
234	642.74	633.00	0.0018	1.2158	1.2176
235	645.01	634.00	0.0054	1.2104	1.2158
236	646.60	637.50	0.0000	1.2104	1.2104
237	646.27	637.60	0.0000	1.2104	1.2104
238	649.49	645.49	0.0054	0.8236	0.8290
239	654.00	647.00	0.0018	0.8218	0.8236
240	715.79	702.58	0.0202	0.0950	0.1153
241	713.78	701.32	0.0308	0.1153	0.1461
242	707.86	697.69	0.0000	0.2112	0.2112
243	708.74	696.43	0.0255	0.2112	0.2367
244	709.51	694.41	0.0370	0.2367	0.2737
245	697.57	685.41	0.0026	0.2948	0.2974
246	702.25	695.20	0.0211	0.0000	0.0211
247	699.14	684.09	0.0035	0.3344	0.3379
248	693.35	682.77	0.0035	0.3898	0.3934
249	683.16	672.11	0.0018	0.4022	0.4039
250	668.43	660.38	0.0062	0.4171	0.4233
251	690.59	684.04	0.0132	0.0000	0.0132
252	656.00	647.39	0.0000	0.7383	0.7383
253	652.94	646.89	0.0000	0.7383	0.7383
254	628.48	619.55	0.0035	0.8765	0.8800
255	634.67	627.08	0.0158	0.0000	0.0158
256	651.29	640.84	0.0070	0.1100	0.1170
257	679.35	670.87	0.0202	0.0000	0.0202
258	659.57	648.16	0.0044	0.0854	0.0898
259	661.88	652.60	0.0097	0.0387	0.0484
260	685.49	673.84	0.0220	0.0167	0.0387
261	702.55	696.00	0.0167	0.0000	0.0167
262	684.59	677.53	0.0370	0.0000	0.0370
263	666.17	658.54	0.0132	0.0273	0.0405
264	642.59	634.66	0.0035	0.0537	0.0572
265	671.57	665.52	0.0132	0.0000	0.0132
266	638.66	628.22	0.0070	0.0845	0.0915
267	653.78	643.95	0.0079	0.0194	0.0273
268	654.48	647.43	0.0194	0.0000	0.0194
269	653.36	646.31	0.0141	0.0000	0.0141
270	626.58	617.80	0.0106	0.9398	0.9504
271	661.10	652.34	0.0414	0.0000	0.0414
272	627.49	618.69	0.0044	0.9214	0.9258
273	632.66	615.97	0.0114	0.9645	0.9759
274	646.22	640.17	0.0141	0.0000	0.0141
275	626.83	614.51	0.0035	1.0674	1.0710
276	626.86	613.48	0.0158	1.0806	1.0965

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
277	623.97	610.89	0.0000	1.1106	1.1106
278	628.22	622.17	0.0141	0.0000	0.0141
279	629.72	623.67	0.0097	0.0000	0.0097
280	624.65	606.77	0.0000	1.5622	1.5622
281	621.00	607.50	0.0000	0.1737	0.1737
282	680.94	673.59	0.0088	0.0000	0.0088
283	713.91	705.91	0.0370	0.0000	0.0370
284	709.71	699.50	0.0651	0.0000	0.0651
285	676.69	665.28	0.0000	0.0238	0.0238
286	684.35	677.74	0.0678	0.0000	0.0678
287	686.89	679.40	0.0088	0.0000	0.0088
288	681.88	675.31	0.0220	0.0000	0.0220
289	674.27	661.54	0.0000	0.0634	0.0634
290	680.15	662.79	0.0088	0.0326	0.0414
291	678.42	664.04	0.0088	0.0238	0.0326
292	657.93	647.93	0.0000	0.8218	0.8218
293	688.12	680.00	0.0202	0.0000	0.0202
294	685.74	675.28	0.0044	0.0317	0.0361
295	686.10	677.87	0.0114	0.0000	0.0114
296	686.35	674.16	0.0035	0.0422	0.0458
297	686.50	679.94	0.0062	0.0000	0.0062
298	687.19	673.27	0.0044	0.0493	0.0537
299	687.72	680.79	0.0035	0.0000	0.0035
300	683.66	672.05	0.0202	0.0669	0.0871
301	689.48	683.51	0.0132	0.0000	0.0132
302	674.98	667.28	0.0000	0.1399	0.1399
303	688.39	683.19	0.0229	0.0000	0.0229
304	690.09	684.74	0.0299	0.0000	0.0299
305	692.12	678.88	0.0000	1.1782	1.1782
306	677.34	663.81	0.0141	1.2284	1.2424
307	673.34	665.85	0.0317	0.0554	0.0871
308	685.55	677.81	0.0194	0.0000	0.0194
309	683.15	668.86	0.0361	0.0000	0.0361
310	672.84	665.47	0.0088	0.0000	0.0088
311	673.46	666.46	0.0554	0.0000	0.0554
312	652.00	645.00	0.0361	0.0000	0.0361
313	655.00	649.00	0.0000	0.2160	0.2160
314	660.00	656.00	0.0000	0.1620	0.1620
315	665.00	658.50	0.0000	0.1080	0.1080
316	671.00	664.00	0.0540	0.0000	0.0540
317	677.00	670.00	0.0540	0.0000	0.0540
318	670.00	663.00	0.0540	0.0000	0.0540
319	673.00	667.00	0.0540	0.0000	0.0540
320	659.72	648.58	0.0070	1.4686	1.4756
321	652.90	639.66	0.0000	1.7326	1.7326
322	661.52	651.66	0.0000	0.1399	0.1399

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
323	642.14	619.50	0.0000	12.6763	12.6763
324	644.75	634.24	0.0484	0.0748	0.1232
325	669.84	662.79	0.0273	0.0000	0.0273
326	631.39	620.64	0.0053	0.1170	0.1223
327	667.06	660.05	0.0000	0.3150	0.3150
328	687.80	678.10	0.0079	0.0528	0.0607
329	703.09	695.12	0.0185	0.0343	0.0528
330	707.36	699.70	0.0158	0.0185	0.0343
331	712.25	705.20	0.0079	0.0106	0.0185
332	716.88	709.51	0.0106	0.0000	0.0106
333	715.72	708.81	0.0519	0.0000	0.0519
334	665.00	656.25	0.0000	0.3150	0.3150
335	663.00	657.00	0.0000	0.3150	0.3150
336	697.70	677.25	0.0000	0.2543	0.2543
337	714.42	706.45	0.0950	0.0000	0.0950
338	701.95	693.00	0.0220	0.0000	0.0220
339	698.12	683.00	0.0000	0.4145	0.4145
340	699.36	688.00	0.0000	0.3925	0.3925
341	692.05	679.33	0.0000	1.1782	1.1782
342	679.00	658.95	0.0600	0.5387	0.5987
343	676.08	670.00	0.0238	0.0000	0.0238
344	676.08	670.00	0.0220	0.0000	0.0220
345	635.35	614.98	0.0000	12.8849	12.8849
346	700.78	689.42	0.0000	0.3925	0.3925
347	710.14	698.78	0.0334	0.0000	0.0334
348	704.15	692.79	0.0097	0.3494	0.3590
349	709.01	697.65	0.0079	0.0651	0.0730
350	713.82	702.37	0.0000	0.0370	0.0370
351	719.97	708.52	0.0370	0.0000	0.0370
352	717.53	706.17	0.0282	0.0000	0.0282
353	710.67	694.00	0.0202	0.2561	0.2763
354	666.25	650.64	0.0062	1.3824	1.3885
355	675.60	665.60	0.0449	0.0000	0.0449
356	674.28	667.08	0.0801	0.0000	0.0801
357	676.69	669.69	0.0554	0.0000	0.0554
358	656.32	641.44	0.0070	1.5311	1.5381
359	660.14	651.40	0.0132	0.1813	0.1945
360	672.00	665.00	0.0229	0.0000	0.0229
361	685.85	675.46	0.0282	1.1914	1.2196
362	693.00	677.92	0.0132	1.1782	1.1914
363	722.00	715.00	0.0211	0.0000	0.0211
364	719.00	712.00	0.0167	0.0598	0.0766
365	721.00	714.00	0.0378	0.0220	0.0598
366	722.00	715.00	0.0026	0.0194	0.0220
367	733.00	726.00	0.0194	0.0000	0.0194
368	707.00	700.00	0.0088	0.0440	0.0528

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
369	725.00	718.00	0.0185	0.0000	0.0185
370	720.00	713.00	0.0255	0.0000	0.0255
371	713.00	700.00	0.0141	0.0898	0.1038
372	725.00	711.50	0.0035	0.0352	0.0387
373	733.00	723.00	0.0229	0.0000	0.0229
374	720.00	713.00	0.0123	0.0000	0.0123
375	735.00	728.00	0.0440	0.0000	0.0440
376	707.53	696.53	0.0000	0.1734	0.1734
377	713.51	706.51	0.0000	0.0537	0.0537
378	720.85	713.85	0.0202	0.0079	0.0282
379	721.15	714.15	0.0255	0.0000	0.0255
380	726.51	719.51	0.0079	0.0000	0.0079
381	710.66	694.75	0.0000	0.2561	0.2561
382	713.18	703.00	0.0000	0.0405	0.0405
383	726.54	719.54	0.0299	0.0000	0.0299
384	726.84	719.84	0.0290	0.0000	0.0290
385	700.22	685.81	0.0774	0.6863	0.7637
386	699.66	687.25	0.0000	0.6863	0.6863
387	698.53	688.61	0.0543	0.4959	0.5502
388	703.57	693.02	0.0000	0.4959	0.4959
389	716.39	710.00	0.0308	0.0000	0.0308
390	699.69	692.34	0.0000	0.4959	0.4959
391	704.97	695.51	0.0273	0.4378	0.4651
392	706.84	696.28	0.0000	0.4378	0.4378
393	708.51	696.97	0.0000	0.4184	0.4184
394	711.52	697.75	0.0000	0.3991	0.3991
395	718.37	700.29	0.0000	0.1461	0.1461
396	714.19	702.14	0.0114	0.0651	0.0766
397	715.00	702.95	0.0000	0.0651	0.0651
398	741.00	731.00	0.0238	0.0000	0.0238
399	716.82	707.85	0.0000	0.0695	0.0695
400	718.39	709.00	0.0695	0.0000	0.0695
401	730.00	723.00	0.0000	0.2424	0.2424
402	748.00	741.00	0.0466	0.0620	0.1087
403	751.00	744.00	0.0242	0.0378	0.0620
404	762.00	755.00	0.0194	0.0000	0.0194
405	760.00	753.00	0.0185	0.0000	0.0185
406	739.00	732.00	0.0282	0.1056	0.1338
407	744.00	736.00	0.0458	0.0598	0.1056
408	744.00	737.00	0.0000	0.0598	0.0598
409	764.00	757.00	0.0343	0.0000	0.0343
410	762.00	755.00	0.0255	0.0000	0.0255
411	748.00	740.00	0.0414	0.0000	0.0414
412	650.00	638.43	0.0000	0.3814	0.3814
413	715.92	711.00	0.0106	0.0000	0.0106
414	712.20	705.00	0.0194	0.0000	0.0194

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
415	709.79	702.50	0.0194	0.0000	0.0194
416	722.47	715.47	0.0370	0.0000	0.0370
417	719.02	712.02	0.0334	0.0000	0.0334
418	717.45	708.77	0.0132	0.0290	0.0422
419	720.47	707.83	0.0106	0.0299	0.0405
420	716.20	703.53	0.0194	0.0537	0.0730
421	710.00	703.00	0.0070	0.0440	0.0510
422	647.57	639.60	0.0018	0.0000	0.0018
423	650.00	643.00	0.1080	0.0000	0.1080
424	629.82	625.81	0.0018	1.3274	1.3292
425	625.31	609.57	0.0000	13.0037	13.0037
426	621.61	606.67	0.0000	13.2791	13.2791
427	619.19	605.83	0.0000	13.2791	13.2791
428	617.08	604.98	0.0000	13.2791	13.2791
429	617.43	604.14	0.0000	13.2791	13.2791
430	614.23	603.75	0.0000	14.6083	14.6083
431	613.00	603.57	0.0000	14.6083	14.6083
432	611.00	603.16	0.0000	14.6083	14.6083
433	611.23	602.41	0.0000	14.6083	14.6083
434	704.25	688.76	0.2030	4.3357	4.5387
435	657.20	635.85	0.1831	10.7100	10.8931
436	649.22	628.55	0.0000	10.9092	10.9092
437	642.58	627.00	0.0000	10.9092	10.9092
438	688.44	670.33	0.0000	5.2358	5.2358
439	696.60	682.54	0.0000	0.6204	0.6204
440	698.97	686.12	0.6204	0.0000	0.6204
441	691.08	675.45	0.0000	0.6204	0.6204
442	775.00	768.00	3.5921	0.0000	3.5921
443	720.00	713.00	0.4692	2.8993	3.3686
444	805.00	798.00	0.5721	0.0000	0.5721
445	740.00	733.00	1.2714	1.6280	2.8993
446	794.00	787.00	0.0405	0.0000	0.0405
447	777.00	770.00	0.1646	0.1754	0.3401
448	725.00	718.00	0.0601	0.3762	0.4363
449	796.00	791.00	0.6410	0.0000	0.6410
450	757.00	750.00	1.0559	0.0000	1.0559
451	695.00	688.00	2.6405	0.0000	2.6405
452	665.00	648.00	0.7588	2.6405	3.3993
453	735.00	728.00	0.4464	1.1268	1.5732
454	735.00	728.00	0.3762	0.0000	0.3762
455	765.00	758.00	0.4858	0.6410	1.1268
456	680.00	673.00	0.2399	4.3438	4.5837
457	680.00	673.00	0.0161	0.0000	0.0161
458	695.00	688.00	0.4116	0.0000	0.4116
459	615.00	610.50	0.1737	0.0000	0.1737
460	682.86	664.17	0.8906	5.2358	6.1263

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
461	710.00	703.00	0.1813	3.8049	3.9861
462	680.00	673.00	0.2464	0.0000	0.2464
463	651.00	638.00	0.5295	3.6458	4.1752
464	725.00	718.00	0.0000	3.5921	3.5921
465	785.00	779.00	0.1349	0.0000	0.1349
466	782.00	772.00	0.0000	0.1754	0.1754
467	725.00	718.00	0.3496	0.0000	0.3496
468	706.73	694.90	0.0000	4.3357	4.3357
469	695.00	688.00	0.1361	0.0000	0.1361
470	670.00	665.00	0.1728	0.0000	0.1728
471	685.00	678.00	0.0766	0.0000	0.0766
472	685.00	678.00	0.6247	0.0000	0.6247
473	642.54	626.31	0.0000	10.9419	10.9419
474	651.00	627.00	0.0327	0.0000	0.0327
475	680.00	673.00	0.2015	0.1644	0.3659
476	655.00	649.50	0.0832	0.0000	0.0832
477	662.59	648.99	0.0000	0.6819	0.6819
478	624.00	617.00	0.9312	0.0000	0.9312
479	645.00	628.00	0.0000	4.1752	4.1752
480	645.00	623.00	0.8430	4.1752	5.0182
481	625.00	600.00	0.1001	5.0182	5.1182
482	620.00	593.00	0.0000	5.2116	5.2116
483	619.00	600.00	0.0934	0.0000	0.0934
484	600.00	590.00	0.0000	2.2341	2.2341
485	611.00	604.00	1.3029	0.0000	1.3029
486	626.00	619.00	0.2780	0.0000	0.2780
487	622.00	615.00	0.0000	0.2780	0.2780
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.84	0.1153	34.4
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.95	0.1461	40.6
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	2.17	0.2112	45.1
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	2.37	0.2367	45.8
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	2.80	0.8236	69.2
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	2.70	0.2737	47.6
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	5.33	0.8290	65.4
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	1.40	0.0211	30.7
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	4.88	1.2104	54.7
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	2.31	0.2974	40.5
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	4.12	1.2104	66.5
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	2.42	0.3379	41.4
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	2.99	1.2158	66.9
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	5.33	0.3934	41.4
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	3.90	1.2176	58.8
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	5.51	0.4039	42.2
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.95	0.0132	31.5
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	7.19	1.2194	59.9
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	7.36	1.3292	49.9
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	6.00	1.3292	53.1
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	5.73	0.4233	59.5
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	6.84	1.3292	80.6
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	2.56	0.7383	66.7
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	3.72	0.7383	65.9
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	5.40	0.3814	45.8
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	2.10	0.3814	60.6
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	3.83	0.1654	33.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	1.50	0.0158	52.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	3.08	0.1654	23.6
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	4.91	0.1170	31.2

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	3.01	0.1654	23.8
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	2.20	0.0202	20.6
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.92	0.1654	27.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	3.14	0.0898	27.4
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	2.04	0.1487	36.3
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	2.18	0.0484	22.1
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	2.00	0.1338	34.8
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	2.30	0.0387	17.6
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.91	0.0167	30.3
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.99	0.0167	13.7
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	2.50	0.0370	20.9
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.75	0.0158	23.6
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	3.12	0.0405	18.7
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.80	0.0114	9.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	2.12	0.0132	15.0
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	1.20	0.0088	8.4
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	2.66	0.0572	23.1
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.54	0.0018	8.3
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	2.44	0.0273	19.9
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.81	0.1153	33.1
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	1.15	0.0194	13.4
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	2.02	0.0176	29.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	2.30	0.0141	52.4
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	2.41	0.0414	57.1
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.79	0.0942	30.5
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	2.65	0.8800	63.4
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.76	0.0150	19.3
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	2.67	0.9258	63.9
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	2.81	0.9504	64.6
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.65	0.0757	27.0

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.95	0.0141	54.5
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	3.13	0.0722	24.3
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	2.74	0.9759	66.3
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.71	0.0695	23.2
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	3.19	0.0915	62.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.68	0.0123	16.5
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.98	1.0710	66.8
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	1.12	0.0035	9.8
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	3.04	1.0965	61.3
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	1.09	0.0035	7.1
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.60	0.0141	46.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.65	0.0537	21.9
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.62	0.0097	54.1
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	4.70	1.1106	61.0
CO-76	281	607.50	280	606.77	179.1	0.004	12.0	0.013	1.95	0.1737	44.8
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.87	0.0088	30.5
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	2.11	0.0370	34.2
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	5.53	0.2754	36.5
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.78	0.0651	33.3
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	1.08	0.0176	29.1
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	5.71	12.8849	63.9
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.62	0.0634	28.6
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	4.90	0.2086	32.0
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.85	0.0678	28.2
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	3.22	1.7326	63.2
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	2.85	0.2578	44.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.55	0.0088	11.3
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	2.28	0.2314	45.1
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.61	0.0220	17.7
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.56	0.1954	50.2

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	1.35	0.0414	21.1
CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.92	0.1734	48.3
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	1.47	0.0405	30.1
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	1.15	0.0238	15.9
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.98	0.0370	17.1
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	1.28	0.0326	18.2
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	2.80	0.8218	77.6
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	1.17	0.0202	15.7
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	1.12	0.0114	13.7
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	1.27	0.0361	18.9
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.75	0.0062	7.2
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	3.07	0.1320	36.7
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	1.49	0.0458	20.6
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.63	0.0035	5.5
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	2.39	0.0581	25.8
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	1.48	0.0537	23.5
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.63	0.0510	25.4
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	1.47	0.0132	17.4
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.94	0.0871	28.7
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	2.07	0.0229	22.4
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	1.35	0.0220	33.5
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	2.01	0.0299	23.3
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	3.11	0.1399	28.7
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	1.42	0.0229	28.4
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	3.60	1.1782	62.0
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	4.25	1.2196	58.8
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	6.69	2.8395	54.5
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	4.67	1.2424	60.3
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.93	0.0871	58.8
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.65	0.0194	18.6

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.89	2.8341	53.6
CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	1.40	0.0361	21.3
CO-127	187	625.80	188	625.00	137.1	0.006	8.0	0.013	5.60	1.2643	100.0
CO-128	186	640.10	187	625.80	303.8	0.047	8.0	0.013	8.23	1.2608	96.7
CO-129	185	645.00	186	640.10	598.4	0.008	8.0	0.013	5.51	1.2440	96.7
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.76	0.0088	49.3
CO-131	184	648.00	185	645.00	217.1	0.014	8.0	0.013	5.43	1.2247	100.0
CO-132	183	649.00	184	648.00	189.0	0.005	8.0	0.013	5.42	1.2220	100.0
CO-133	182	650.00	183	649.00	389.0	0.003	8.0	0.013	5.36	1.2088	100.0
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	2.46	0.0554	22.1
CO-135	181	652.00	182	650.00	287.4	0.007	8.0	0.013	5.27	1.1886	100.0
CO-136	180	661.00	181	652.00	687.9	0.013	8.0	0.013	5.26	1.1868	100.0
CO-137	179	665.00	180	661.00	388.6	0.010	8.0	0.013	5.21	1.1745	100.0
CO-138	178	666.00	179	665.00	38.0	0.026	8.0	0.013	5.17	1.1657	100.0
CO-139	177	668.00	178	666.00	336.3	0.006	8.0	0.013	5.17	1.1657	100.0
CO-140	176	669.00	177	668.00	368.4	0.003	8.0	0.013	2.82	0.6370	100.0
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	4.98	0.2160	45.4
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	3.54	0.1620	37.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	2.96	0.1080	31.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	1.36	0.0114	54.5
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	2.54	0.0540	23.9
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	1.22	0.0114	56.4
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	2.86	0.0540	23.9
CO-148	173	626.80	188	625.00	365.3	0.005	14.0	0.013	3.75	1.5698	63.6
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	2.43	0.0540	27.2
CO-150	168	628.50	173	626.80	459.3	0.004	14.0	0.013	3.35	1.5610	61.2
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	3.08	0.0540	30.0
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	2.21	0.0203	58.6
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.71	0.0141	15.8
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	3.98	1.3885	64.8

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	5.81	1.3375	63.2
CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.75	0.0088	12.8
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	3.34	1.7326	57.4
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	1.42	0.0070	10.7
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	2.51	0.1399	50.8
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	6.98	1.7344	43.9
CO-162	167	629.20	168	628.50	367.2	0.002	14.0	0.013	2.50	1.5408	72.8
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	5.49	12.6763	67.6
CO-164	166	629.50	167	629.20	167.0	0.002	14.0	0.013	2.42	1.5301	82.6
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.89	0.1232	37.9
CO-166	165	630.00	166	629.50	153.0	0.003	14.0	0.013	3.17	1.5301	75.9
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	2.56	0.0229	18.8
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	3.16	0.0748	28.2
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	1.20	0.0273	16.4
CO-170	162	634.50	163	633.00	334.4	0.004	14.0	0.013	3.54	1.4248	57.0
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.87	0.1223	63.3
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	5.09	0.3150	72.2
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	1.22	0.0256	18.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	3.44	0.0607	34.9
CO-175	158	630.50	165	630.00	200.7	0.002	14.0	0.013	2.83	1.5301	70.4
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	2.42	0.0528	20.2
CO-177	164	631.00	158	630.50	187.5	0.003	14.0	0.013	2.91	1.5106	71.5
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	1.45	0.0343	17.8
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	2.18	0.0159	55.3
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.65	0.0185	13.8
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.53	0.0018	9.6
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	1.03	0.0106	10.3
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.66	0.0114	11.6
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	2.08	0.0519	35.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.67	0.0114	18.4

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	2.58	0.3150	51.1
CO-187	153	631.50	164	631.00	162.2	0.003	14.0	0.013	3.09	1.5106	68.7
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	4.02	0.3150	51.1
CO-189	163	633.00	153	631.50	333.0	0.005	14.0	0.013	3.56	1.4620	62.1
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	2.87	0.2543	46.4
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	2.89	0.0450	59.0
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	1.01	0.0097	12.9
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.65	0.0220	34.5
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	1.48	0.0176	14.6
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	3.48	0.3925	55.8
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	2.02	0.0212	20.0
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	5.06	0.4145	78.3
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	2.46	0.0336	61.2
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	2.91	1.1782	67.7
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	4.21	0.5987	76.6
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	3.61	0.0810	26.9
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.90	0.0123	15.3
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.91	0.0203	18.5
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.90	0.0264	21.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	2.57	0.0380	61.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	3.46	0.3925	52.6
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.72	0.0334	35.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	1.49	0.0062	11.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	3.39	0.3590	53.7
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.85	0.0141	15.2
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	2.17	0.0730	37.8
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.66	0.0176	17.7
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.77	0.0370	19.6
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	2.02	0.0256	19.7
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.77	0.0370	15.5

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	2.07	0.0370	25.9
CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.63	0.0282	18.6
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	2.40	0.0352	23.2
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	2.14	0.0220	20.5
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.87	0.0167	16.8
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.66	0.2763	60.8
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	1.32	0.0088	13.5
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.77	0.0449	57.7
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	1.38	0.0062	16.3
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	2.18	0.0361	21.0
CO-226	133	644.00	12th Street LS (Downtown)	622.00	549.6	0.040	6.0	0.013	2.98	0.0361	19.2
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	2.04	0.0801	60.5
CO-228	132	627.15	12th Street LS (Downtown)	622.00	244.8	0.021	6.0	0.013	2.74	0.0592	26.3
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	2.38	0.0554	60.0
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	1.20	0.0592	35.6
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.83	0.0574	25.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	1.26	0.0574	23.0
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	1.18	0.0359	22.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.61	0.0229	25.4
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	1.08	0.0305	18.8
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	3.56	1.1914	60.6
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	1.05	0.0269	17.7
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	2.42	0.0211	29.6
CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.99	0.0108	13.3
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	3.12	0.0766	33.7

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.66	0.0072	9.5
CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.83	0.0598	22.2
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	1.05	0.0090	12.6
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	1.03	0.0220	17.9
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.84	0.0018	11.0
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.63	0.0194	13.4
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.89	0.0018	11.0
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	2.16	0.0528	30.8
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	1.40	0.0054	12.7
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.88	0.0185	15.5
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.62	0.0072	13.5
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.70	0.0255	16.5
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.55	0.0018	3.9
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.99	0.1038	35.2
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	1.19	0.0018	13.4
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	2.85	0.0387	22.4
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.54	0.0283	21.1
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.56	0.0229	14.7
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	1.33	0.0213	19.4
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.80	0.0123	14.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	1.41	0.0097	15.1
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	1.44	0.0510	24.8
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	2.42	0.0440	19.6
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.77	0.1003	33.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.59	0.0123	15.7
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	2.28	0.0730	30.5
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.98	0.0537	21.3
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	1.48	0.0220	25.3
CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.64	0.0282	16.9
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	2.48	0.0705	30.1

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.59	0.0255	16.6
CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	1.11	0.0079	10.8
CO-273	109	604.00	Meadowlands LS	575.00	387.8	0.075	6.0	0.013	4.51	0.0705	25.4
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	2.38	0.0318	23.3
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	2.21	0.1734	43.5
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	2.45	0.0415	28.8
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	2.76	0.0405	33.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	1.40	0.0070	21.4
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.97	0.0405	15.8
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.67	0.0299	15.8
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	2.71	0.0422	33.2
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.65	0.0290	15.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	4.53	0.7637	59.9
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	1.22	0.0088	8.6
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	2.27	0.6863	51.7
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	1.26	0.0123	13.3
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	2.42	0.5502	51.7
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	1.42	0.0370	16.8
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	2.23	0.4959	52.6
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.68	0.0370	16.3
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.83	0.0308	41.3
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.53	0.0370	19.8
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.75	0.0695	24.3
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	2.24	0.0889	30.4
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	1.37	0.4959	48.3
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	1.34	0.0959	31.5
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	2.08	0.4651	45.2
CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	2.14	0.1047	28.3
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	2.17	0.4378	43.6

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	2.50	0.1144	27.3
CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	2.16	0.4184	41.3
CO-303	95	592.25	Meadowlands LS	575.00	518.3	0.033	8.0	0.013	3.78	0.1144	24.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	2.14	0.3991	40.1
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.59	0.0185	17.9
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.69	0.1461	38.4
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.92	0.0255	25.2
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	1.34	0.0766	25.7
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	1.34	0.0651	20.7
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.68	0.0158	24.6
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	1.43	0.0062	10.7
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	2.36	0.0238	18.7
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.92	0.0097	25.2
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	2.60	0.0695	29.6
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.58	0.0695	23.7
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	68.5
CO-320	86	669.00	179	665.00	760.4	0.005	6.0	0.013	0.03	0.0036	100.0
CO-321	85	675.00	177	668.00	890.7	0.008	8.0	0.013	2.34	0.5287	100.0
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	3.32	0.2424	51.0
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	4.02	0.5146	81.7
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	2.65	0.1087	35.4
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	4.38	0.3834	58.8
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	1.47	0.0620	26.2
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	2.23	0.3808	62.6
CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.61	0.0194	18.0
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	2.34	0.3755	68.8

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.66	0.0185	17.9
CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.67	0.0026	29.5
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	2.36	0.1338	37.0
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	2.02	0.1056	29.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	2.26	0.1153	29.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	1.44	0.0598	26.1
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	2.44	0.1100	28.7
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	2.12	0.0343	19.8
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.54	0.0405	22.9
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.86	0.0255	18.7
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.63	0.0343	16.5
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	2.83	0.0414	20.8
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	1.46	0.0273	14.8
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.56	0.0106	34.0
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.61	0.0194	36.3
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	1.47	0.0194	37.3
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.83	0.0035	9.6
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.77	0.0370	17.8
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.68	0.0097	13.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.73	0.0334	17.9
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.89	0.0202	13.3
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.42	0.0018	76.1
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	1.45	0.0299	17.8
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	2.83	0.1080	60.0
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	4.23	0.1188	23.9
CO-358	426	606.67	427	605.83	294.4	0.003	30.0	0.013	4.19	13.2791	100.0
CO-359	427	605.83	428	604.98	300.8	0.003	30.0	0.013	4.19	13.2791	100.0
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.73	0.0176	22.0
CO-361	428	604.98	429	604.14	212.1	0.004	30.0	0.013	4.19	13.2791	100.0
CO-362	429	604.14	430	603.75	203.9	0.002	30.0	0.013	4.19	13.2791	100.0

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.59	0.0176	23.0
CO-364	430	603.75	431	603.57	84.1	0.002	30.0	0.013	4.60	14.6083	100.0
CO-365	431	603.57	432	603.16	317.5	0.001	30.0	0.013	4.60	14.6083	100.0
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	1.46	0.0502	21.7
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	3.24	0.0695	25.4
CO-368	432	603.16	433	602.41	556.6	0.001	30.0	0.013	4.60	14.6083	82.4
CO-369	433	602.41	Justin Treatment Plant	596.00	189.0	0.034	30.0	0.013	13.44	14.6083	51.1
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	1.34	0.0273	17.4
CO-371	434	688.76	438	670.33	2,927.0	0.006	21.0	0.013	5.37	4.5387	58.2
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	5.51	5.2358	62.9
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	5.69	6.1263	72.4
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	1.14	0.0167	13.1
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	6.57	10.8931	62.5
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	1.20	0.0053	8.9
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	4.63	10.9092	62.6
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.82	0.0018	7.6
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	6.21	10.9092	55.6
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	6.21	10.9419	62.0
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	1.24	0.0106	10.2
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.74	0.0950	30.6
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	1.35	0.0194	12.1
CO-382	280	606.77	Timberbrook LS	606.50	58.8	0.005	15.0	0.013	3.66	1.5622	51.4
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	1.39	0.0220	16.3
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	6.15	0.6204	24.6
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	4.34	0.6204	57.6
CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.94	0.0018	7.6
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	4.02	0.6204	27.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.83	0.0114	7.7
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	1.35	0.0114	10.8
CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.88	0.0088	10.3
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.76	0.0123	10.1
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	1.14	0.0026	7.6
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	1.49	0.0106	9.3
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.68	0.0141	22.9
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.91	0.0326	19.3
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	2.01	0.0185	18.2
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.75	0.0220	17.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.92	0.0238	18.9
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	2.24	0.2086	41.3
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	3.08	0.0854	33.8
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	2.27	0.2086	42.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	2.81	0.0167	8.6
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.84	0.0167	17.5
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	2.02	0.0361	14.7
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	3.17	0.0361	22.8
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	3.18	0.1188	25.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	1.15	0.0026	10.7
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.68	0.0018	10.9
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.60	0.0079	17.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	1.18	0.0088	13.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.64	0.0070	5.5
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	1.45	0.0123	56.7
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.76	0.0158	57.6
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.99	0.0035	10.7
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.76	0.0036	12.6
CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.58	0.0071	10.7
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	1.28	0.0089	10.8

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	2.09	0.0089	55.7
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.57	0.0132	56.9
CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.94	0.0088	55.6
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	1.11	0.0018	17.2
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.68	0.0018	14.6
CO-447	160	635.27	12th Street LS (Downtown)	622.00	328.5	0.040	8.0	0.013	3.39	0.0626	17.4
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	2.35	0.5987	71.5
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	2.40	0.6819	76.3
CO-449	21	641.91	358	641.44	147.6	0.003	12.0	0.013	2.91	1.4756	100.0
CO-450	358	641.44	202	640.44	347.3	0.003	12.0	0.013	3.03	1.5381	90.1
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	2.18	0.3271	56.6
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	3.82	0.3271	54.5
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	2.58	0.1584	36.2
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	3.68	0.1945	69.0
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	2.71	0.3755	62.9
CO-461(1)	16	683.00	475	673.00	1,603.5	0.006	8.0	0.013	2.31	0.1644	45.3
CO-461(2)	475	673.00	342	658.95	2,244.4	0.006	8.0	0.013	2.85	0.3659	61.9
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	4.34	1.4756	82.3
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	1.46	0.0150	12.5
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	3.92	0.1223	24.8
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.85	0.0036	6.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	1.14	0.0072	10.5
CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.81	0.0036	6.2
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.76	0.0240	9.0
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	1.10	0.0240	28.0

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-471	8	597.00	Justin Treatment Plant	596.00	132.8	0.008	24.0	0.013	5.14	3.0484	35.8
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	6.90	13.0037	80.5
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	12.11	3.0244	41.2
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.73	0.1566	41.5
CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.81	0.1566	43.9
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.74	0.0519	24.6
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.71	0.1778	45.4
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	4.96	0.2543	35.8
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	1.47	0.0484	25.1
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	2.33	0.2561	59.0
CO-483	464	718.00	456	673.00	3,406.4	0.013	15.0	0.013	6.64	3.5921	80.8
CO-484(1)	443	713.00	461	703.00	1,147.3	0.009	18.0	0.013	5.63	3.3686	61.3
CO-484(2) (1)	461	703.00	468	694.90	932.8	0.009	18.0	0.013	5.85	3.9861	82.0
CO-484(2) (2)	468	694.90	434	688.76	708.0	0.009	15.0	0.013	5.47	4.3357	91.7
CO-485	444	798.00	445	733.00	3,754.3	0.017	8.0	0.013	4.68	0.5721	83.4
CO-486	445	733.00	443	713.00	2,582.5	0.008	15.0	0.013	5.13	2.8993	69.5
CO-487(1)	446	787.00	466	772.00	1,496.7	0.010	8.0	0.013	1.82	0.0405	29.2
CO-487(2)	466	772.00	447	770.00	511.4	0.004	8.0	0.013	1.99	0.1754	46.2
CO-488	447	770.00	456	673.00	7,808.9	0.012	8.0	0.013	3.62	0.3401	75.5
CO-489	448	718.00	461	703.00	2,042.7	0.007	8.0	0.013	3.16	0.4363	79.4
CO-490	455	758.00	453	728.00	3,435.9	0.009	10.0	0.013	4.21	1.1268	85.6
CO-491	450	750.00	445	733.00	4,077.0	0.004	12.0	0.013	3.18	1.0559	74.1
CO-492	451	688.00	452	648.00	3,066.6	0.013	15.0	0.013	6.17	2.6405	71.8
CO-493(1)	452	648.00	463	638.00	2,294.5	0.004	18.0	0.013	4.32	3.3993	65.6
CO-493(2)	463	638.00	479	628.00	2,274.3	0.004	21.0	0.013	4.59	4.1752	56.9

2024 City of Justin Wastewater Model Update.stsw

Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-495	453	728.00	Southwest ETJ LS	723.00	1,858.5	0.003	10.0	0.013	4.46	1.5732	91.6
CO-496	454	728.00	448	718.00	2,028.8	0.005	8.0	0.013	2.62	0.3762	59.8
CO-497	449	791.00	455	758.00	3,220.1	0.010	8.0	0.013	3.90	0.6410	79.9
CO-498	456	673.00	435	635.85	2,699.9	0.014	15.0	0.013	7.02	4.5837	92.6
CO-499	457	673.00	436	628.55	1,440.5	0.031	8.0	0.013	2.04	0.0161	55.3
CO-500	458	688.00	456	673.00	1,524.1	0.010	8.0	0.013	3.49	0.4116	78.2
CO-501	459	610.50	281	607.50	710.1	0.004	12.0	0.013	1.97	0.1737	23.1
CO-502	462	673.00	463	638.00	2,294.2	0.015	8.0	0.013	3.57	0.2464	71.5
CO-503	442	768.00	464	718.00	5,429.8	0.009	15.0	0.013	5.71	3.5921	75.2
CO-504	466	772.00	465	779.00	1,610.0	0.004	8.0	0.013	1.92	0.1349	38.2
CO-505	467	718.00	468	694.90	1,438.6	0.016	8.0	0.013	4.01	0.3496	75.9
CO-506	469	688.00	386	687.25	1,306.5	0.001	12.0	0.013	0.90	0.1361	45.7
CO-507	471	678.00	438	670.33	239.6	0.032	12.0	0.013	3.15	0.0766	57.0
CO-508	470	665.00	342	658.95	1,684.8	0.004	8.0	0.013	1.92	0.1728	55.3
CO-509	472	678.00	176	669.00	1,604.9	0.006	8.0	0.013	2.77	0.6247	100.0
CO-510	474	627.00	473	626.31	61.0	0.011	12.0	0.013	1.69	0.0327	84.9
CO-511	476	649.50	477	648.99	569.4	0.001	8.0	0.013	0.95	0.0832	68.4
CO-512	478	617.00	484	590.00	4,651.4	0.006	10.0	0.013	3.44	0.9312	85.8
CO-513	479	628.00	480	623.00	1,166.6	0.004	21.0	0.013	4.55	4.1752	61.1
CO-514	480	623.00	481	600.00	5,501.6	0.004	21.0	0.013	4.68	5.0182	65.6
CO-515	481	600.00	482	593.00	1,674.0	0.004	21.0	0.013	4.70	5.1182	83.0
CO-516	482	593.00	North ETJ	592.00	133.2	0.008	15.0	0.013	6.57	5.2116	94.7
CO-517	483	600.00	482	593.00	913.7	0.008	8.0	0.013	2.12	0.0934	63.0
CO-519	485	604.00	484	590.00	2,998.4	0.005	12.0	0.013	3.46	1.3029	84.7
CO-520	484	590.00	Denton Creek SS	589.00	171.3	0.006	12.0	0.013	4.40	2.2341	89.7
CO-521	486	619.00	487	615.00	1,826.2	0.002	12.0	0.013	1.78	0.2780	30.9
CO-522	487	615.00	280	606.77	274.1	0.030	12.0	0.013	4.52	0.2780	46.7

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Future Model - Peak Flow (PF=4)

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.1849
12th Street LS (Private)	666.05	645.00	0.1223
12th Street LS (Downtown)	637.00	622.00	0.1579
Timberbrooks LS	626.50	606.50	1.5622
Justin Treatment Plant	616.27	596.00	17.6567
Soutwest ETJ LS	730.00	723.00	1.5732
Denton Creek SS	600.00	589.00	2.2341
North ETJ	620.00	592.00	5.2116

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
1	710.15	698.09	0.0000	0.1003	0.1003
2	697.00	688.00	0.0000	0.2543	0.2543
3	713.23	700.75	0.0150	0.0334	0.0484
4	715.75	703.96	0.0150	0.0370	0.0519
5	699.00	689.00	0.0000	0.1778	0.1778
6	701.00	692.50	0.0000	0.1566	0.1566
7	701.00	694.00	0.0000	0.1566	0.1566
8	616.65	597.00	0.0000	3.0484	3.0484
9	624.36	600.00	0.0000	0.0240	0.0240
10	615.22	611.22	0.0240	0.0000	0.0240
11	639.83	635.83	0.0036	0.0000	0.0036
12	630.00	626.00	0.0000	0.0072	0.0072
13	640.61	636.61	0.0036	0.0000	0.0036
14	684.46	677.74	0.0150	0.0000	0.0150
15	665.40	656.95	0.0079	1.3296	1.3375
16	690.00	683.00	0.1644	0.0000	0.1644
17	672.00	660.12	0.0273	0.1311	0.1584
18	695.45	688.75	0.0484	0.3271	0.3755
19	700.00	693.50	0.0000	0.3271	0.3271
20	702.00	696.00	0.3271	0.0000	0.3271
21	655.88	641.91	0.0000	1.4756	1.4756
22	671.67	651.05	0.0000	0.5987	0.5987
23	636.98	632.98	0.0018	0.0000	0.0018
24	637.85	633.00	0.0018	0.0000	0.0018
25	643.27	639.27	0.0088	0.0000	0.0088
26	663.00	656.00	0.0132	0.0000	0.0132
27	641.33	637.33	0.0000	0.0089	0.0089
28	642.00	638.00	0.0018	0.0071	0.0089
29	662.29	658.29	0.0071	0.0000	0.0071
30	645.00	641.00	0.0036	0.0000	0.0036
31	653.81	649.81	0.0035	0.0000	0.0035
32	681.00	669.74	0.0158	0.0000	0.0158
33	673.00	662.09	0.0123	0.0000	0.0123
34	630.99	626.99	0.0070	0.0000	0.0070
35	628.00	624.00	0.0088	0.0000	0.0088
36	628.00	624.00	0.0079	0.0000	0.0079
37	625.00	621.00	0.0018	0.0000	0.0018
38	625.00	621.00	0.0026	0.0000	0.0026
39	626.00	622.00	0.0018	0.1170	0.1188
40	645.95	641.95	0.0000	0.0361	0.0361
41	646.00	639.00	0.0088	0.0722	0.0810
42	654.00	647.00	0.0000	0.0167	0.0167
43	639.22	630.25	0.0000	0.2086	0.2086
44	635.02	629.32	0.0000	0.2086	0.2086
45	664.58	651.86	0.0202	0.0651	0.0854
46	671.94	659.46	0.0202	0.0546	0.0748

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
47	683.37	676.59	0.0326	0.0000	0.0326
48	683.31	677.33	0.0185	0.0000	0.0185
49	680.62	674.00	0.0035	0.0106	0.0141
50	685.00	681.00	0.0106	0.0000	0.0106
51	679.25	672.00	0.0026	0.0000	0.0026
52	670.26	666.26	0.0018	0.0150	0.0167
53	681.22	677.22	0.0123	0.0000	0.0123
54	682.00	678.00	0.0088	0.0000	0.0088
55	669.37	665.37	0.0026	0.0202	0.0229
56	672.31	668.31	0.0000	0.0114	0.0114
57	685.00	681.00	0.0114	0.0000	0.0114
58	693.97	689.97	0.0018	0.0000	0.0018
59	692.00	683.50	0.0026	0.0194	0.0220
60	693.50	686.00	0.0070	0.0123	0.0194
61	695.00	691.00	0.0106	0.0000	0.0106
62	692.00	688.00	0.0018	0.0000	0.0018
63	695.00	691.00	0.0053	0.0000	0.0053
64	693.29	686.50	0.0097	0.0070	0.0167
65	691.97	684.00	0.0106	0.0167	0.0273
66	675.00	671.00	0.0018	0.0678	0.0695
67	689.00	686.00	0.0176	0.0000	0.0176
68	695.50	691.50	0.0176	0.0000	0.0176
69	676.19	672.22	0.0026	0.0475	0.0502
70	678.00	674.00	0.0097	0.0202	0.0299
71	686.09	682.00	0.0106	0.0097	0.0202
72	700.00	696.00	0.0062	0.0035	0.0097
73	702.00	698.00	0.0035	0.0000	0.0035
74	681.64	672.00	0.0273	0.0000	0.0273
75	684.00	669.00	0.0070	0.0273	0.0343
76	680.71	665.00	0.0062	0.0343	0.0405
77	673.00	662.00	0.0000	0.1100	0.1100
78	673.00	661.50	0.0053	0.1100	0.1153
79	670.00	659.00	0.0070	0.1153	0.1223
80	692.64	688.00	0.0026	0.0000	0.0026
81	697.00	687.00	0.0000	0.3755	0.3755
82	696.89	686.50	0.0053	0.3755	0.3808
83	695.07	686.00	0.0000	0.3834	0.3834
84	692.67	682.00	0.1312	0.3834	0.5146
85	686.04	675.00	0.0141	0.5146	0.5287
86	676.00	669.00	0.0036	0.0000	0.0036
87	629.75	625.84	0.0000	0.1849	0.1849
88	634.05	630.05	0.0000	0.1849	0.1849
89	638.00	634.00	0.0000	0.1849	0.1849
90	639.00	635.00	0.1849	0.0000	0.1849
91	608.57	604.57	0.0035	0.0062	0.0097
92	619.26	615.00	0.0062	0.0000	0.0062

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
93	621.16	617.16	0.0132	0.0026	0.0158
94	618.07	614.07	0.0070	0.0185	0.0255
95	596.25	592.25	0.0000	0.1144	0.1144
96	604.14	597.00	0.0000	0.1144	0.1144
97	604.00	600.00	0.0088	0.0959	0.1047
98	604.83	600.83	0.0070	0.0889	0.0959
99	615.32	604.00	0.0035	0.0854	0.0889
100	613.82	607.00	0.0070	0.0625	0.0695
101	613.00	608.00	0.0000	0.0370	0.0370
102	612.36	609.00	0.0000	0.0370	0.0370
103	617.60	615.00	0.0246	0.0123	0.0370
104	623.40	617.00	0.0035	0.0088	0.0123
105	630.59	622.00	0.0088	0.0000	0.0088
106	623.36	619.36	0.0079	0.0106	0.0185
107	618.58	614.58	0.0070	0.0000	0.0070
108	618.00	614.00	0.0018	0.0397	0.0415
109	608.00	604.00	0.0000	0.0705	0.0705
110	612.70	608.70	0.0000	0.0705	0.0705
111	615.01	611.01	0.0097	0.0123	0.0220
112	619.01	615.01	0.0053	0.0070	0.0123
113	632.33	628.33	0.0097	0.0000	0.0097
114	627.31	623.31	0.0044	0.0169	0.0213
115	625.81	621.81	0.0070	0.0213	0.0283
116	622.45	618.45	0.0018	0.0301	0.0318
117	630.32	626.32	0.0000	0.0018	0.0018
118	631.79	627.79	0.0018	0.0000	0.0018
119	636.30	634.00	0.0072	0.0000	0.0072
120	639.00	635.00	0.0054	0.0000	0.0054
121	638.41	635.41	0.0018	0.0000	0.0018
122	638.00	635.00	0.0018	0.0000	0.0018
123	639.37	635.37	0.0090	0.0000	0.0090
124	637.33	634.50	0.0072	0.0000	0.0072
125	639.71	634.00	0.0036	0.0072	0.0108
126	640.00	633.00	0.0000	0.0269	0.0269
127	638.00	632.00	0.0000	0.0305	0.0305
128	638.00	631.00	0.0000	0.0359	0.0359
129	639.00	630.50	0.0197	0.0376	0.0574
130	638.52	629.50	0.0000	0.0574	0.0574
131	638.93	628.00	0.0000	0.0592	0.0592
132	631.15	627.15	0.0000	0.0592	0.0592
133	648.00	644.00	0.0000	0.0361	0.0361
134	657.27	653.27	0.0300	0.0062	0.0361
135	683.62	679.62	0.0062	0.0000	0.0062
136	688.94	684.94	0.0088	0.0000	0.0088
137	684.00	680.00	0.0079	0.0088	0.0167
138	673.70	669.70	0.0053	0.0167	0.0220

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
139	665.44	661.44	0.0132	0.0220	0.0352
140	647.95	643.95	0.0018	0.0352	0.0370
141	649.63	645.63	0.0080	0.0176	0.0256
142	655.77	651.77	0.0035	0.0141	0.0176
143	666.41	662.41	0.0079	0.0062	0.0141
144	676.16	672.16	0.0062	0.0000	0.0062
145	650.00	646.00	0.0116	0.0264	0.0380
146	654.80	650.80	0.0062	0.0203	0.0264
147	663.89	659.89	0.0080	0.0123	0.0203
148	684.50	680.50	0.0123	0.0000	0.0123
149	659.42	655.42	0.0125	0.0212	0.0336
150	682.72	678.72	0.0212	0.0000	0.0212
151	679.20	675.20	0.0176	0.0000	0.0176
152	680.00	676.00	0.0097	0.0000	0.0097
153	642.65	631.50	0.0036	1.5070	1.5106
154	667.28	663.28	0.0160	0.0291	0.0450
155	671.41	667.41	0.0000	0.0114	0.0114
156	678.17	674.17	0.0000	0.0114	0.0114
157	678.92	674.92	0.0018	0.0000	0.0018
158	642.00	630.50	0.0036	1.5265	1.5301
159	674.11	670.11	0.0159	0.0000	0.0159
160	639.27	635.27	0.0000	0.0626	0.0626
161	641.92	636.92	0.0000	0.0256	0.0256
162	644.00	634.50	1.3868	0.0380	1.4248
163	643.00	633.00	0.0036	1.4584	1.4620
164	641.74	631.00	0.0000	1.5106	1.5106
165	643.00	630.00	0.0000	1.5301	1.5301
166	641.00	629.50	0.0000	1.5301	1.5301
167	640.87	629.20	0.0018	1.5390	1.5408
168	639.51	628.50	0.0000	1.5610	1.5610
169	669.64	665.64	0.0070	0.0000	0.0070
170	657.00	653.00	0.0018	0.0070	0.0088
171	650.05	646.05	0.0018	0.0123	0.0141
172	643.48	639.48	0.0026	0.0176	0.0203
173	638.23	626.80	0.0000	1.5698	1.5698
174	657.00	645.64	0.0114	0.0000	0.0114
175	689.00	679.19	0.0114	0.0000	0.0114
176	676.00	669.00	0.0009	0.6361	0.6370
177	675.00	668.00	0.0000	1.1657	1.1657
178	675.00	666.00	0.0000	1.1657	1.1657
179	675.00	665.00	0.0053	1.1692	1.1745
180	668.00	661.00	0.0123	1.1745	1.1868
181	657.50	652.00	0.0018	1.1868	1.1886
182	656.00	650.00	0.0044	1.2044	1.2088
183	656.00	649.00	0.0009	1.2212	1.2220
184	655.00	648.00	0.0026	1.2220	1.2247

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
185	655.00	645.00	0.0062	1.2379	1.2440
186	650.00	640.10	0.0053	1.2555	1.2608
187	636.81	625.80	0.0036	1.2608	1.2643
188	634.90	625.00	0.0000	2.8341	2.8341
189	630.12	620.00	0.0000	3.0244	3.0244
190	633.16	624.00	0.0054	2.8341	2.8395
191	642.00	630.32	0.0229	0.0000	0.0229
192	639.34	635.34	0.0220	0.0000	0.0220
193	661.00	650.50	0.0510	0.0000	0.0510
194	663.00	656.00	0.0581	0.0000	0.0581
195	652.00	645.00	0.0229	0.1091	0.1320
196	660.00	653.00	0.0370	0.0000	0.0370
197	643.00	631.95	0.0035	0.0370	0.0405
198	641.00	630.48	0.0009	0.1725	0.1734
199	640.00	629.51	0.0000	0.1954	0.1954
200	640.00	629.00	0.0361	0.1954	0.2314
201	640.00	628.50	0.0035	0.2543	0.2578
202	657.86	640.44	0.0000	1.7326	1.7326
203	651.68	639.30	0.0000	1.7344	1.7344
204	635.35	627.53	0.0000	0.2086	0.2086
205	627.03	613.90	0.0000	0.1188	0.1188
206	642.00	630.70	0.0176	0.0000	0.0176
207	637.00	626.60	0.0000	0.2754	0.2754
208	692.00	681.50	0.0044	0.0493	0.0537
209	691.63	687.63	0.0035	0.0000	0.0035
210	692.87	688.87	0.0035	0.0000	0.0035
211	692.00	686.00	0.0053	0.0070	0.0123
212	688.97	680.00	0.0035	0.0660	0.0695
213	682.39	678.39	0.0026	0.0695	0.0722
214	678.00	673.10	0.0035	0.0722	0.0757
215	694.00	690.00	0.0150	0.0000	0.0150
216	684.36	672.00	0.0035	0.0906	0.0942
217	691.85	687.85	0.0176	0.0000	0.0176
218	685.00	670.90	0.0035	0.1118	0.1153
219	693.50	689.42	0.0018	0.0000	0.0018
220	692.65	688.63	0.0070	0.0018	0.0088
221	687.02	683.02	0.0026	0.0088	0.0114
222	680.80	676.80	0.0044	0.0114	0.0158
223	688.76	684.76	0.0167	0.0000	0.0167
224	681.00	669.80	0.0018	0.1320	0.1338
225	678.34	669.14	0.0009	0.1478	0.1487
226	675.00	668.49	0.0009	0.1646	0.1654
227	675.00	668.10	0.0000	0.1654	0.1654
228	667.43	663.43	0.0000	0.1654	0.1654
229	660.66	656.66	0.0000	0.1654	0.1654
230	652.07	648.07	0.0000	0.3814	0.3814

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
231	617.00	613.00	0.0000	1.3292	1.3292
232	623.02	619.02	0.0000	1.3292	1.3292
233	634.54	630.54	0.0018	1.2176	1.2194
234	642.74	633.00	0.0018	1.2158	1.2176
235	645.01	634.00	0.0054	1.2104	1.2158
236	646.60	637.50	0.0000	1.2104	1.2104
237	646.27	637.60	0.0000	1.2104	1.2104
238	649.49	645.49	0.0054	0.8236	0.8290
239	654.00	647.00	0.0018	0.8218	0.8236
240	715.79	702.58	0.0202	0.0950	0.1153
241	713.78	701.32	0.0308	0.1153	0.1461
242	707.86	697.69	0.0000	0.2112	0.2112
243	708.74	696.43	0.0255	0.2112	0.2367
244	709.51	694.41	0.0370	0.2367	0.2737
245	697.57	685.41	0.0026	0.2948	0.2974
246	702.25	695.20	0.0211	0.0000	0.0211
247	699.14	684.09	0.0035	0.3344	0.3379
248	693.35	682.77	0.0035	0.3898	0.3934
249	683.16	672.11	0.0018	0.4022	0.4039
250	668.43	660.38	0.0062	0.4171	0.4233
251	690.59	684.04	0.0132	0.0000	0.0132
252	656.00	647.39	0.0000	0.7383	0.7383
253	652.94	646.89	0.0000	0.7383	0.7383
254	628.48	619.55	0.0035	0.8765	0.8800
255	634.67	627.08	0.0158	0.0000	0.0158
256	651.29	640.84	0.0070	0.1100	0.1170
257	679.35	670.87	0.0202	0.0000	0.0202
258	659.57	648.16	0.0044	0.0854	0.0898
259	661.88	652.60	0.0097	0.0387	0.0484
260	685.49	673.84	0.0220	0.0167	0.0387
261	702.55	696.00	0.0167	0.0000	0.0167
262	684.59	677.53	0.0370	0.0000	0.0370
263	666.17	658.54	0.0132	0.0273	0.0405
264	642.59	634.66	0.0035	0.0537	0.0572
265	671.57	665.52	0.0132	0.0000	0.0132
266	638.66	628.22	0.0070	0.0845	0.0915
267	653.78	643.95	0.0079	0.0194	0.0273
268	654.48	647.43	0.0194	0.0000	0.0194
269	653.36	646.31	0.0141	0.0000	0.0141
270	626.58	617.80	0.0106	0.9398	0.9504
271	661.10	652.34	0.0414	0.0000	0.0414
272	627.49	618.69	0.0044	0.9214	0.9258
273	632.66	615.97	0.0114	0.9645	0.9759
274	646.22	640.17	0.0141	0.0000	0.0141
275	626.83	614.51	0.0035	1.0674	1.0710
276	626.86	613.48	0.0158	1.0806	1.0965

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
277	623.97	610.89	0.0000	1.1106	1.1106
278	628.22	622.17	0.0141	0.0000	0.0141
279	629.72	623.67	0.0097	0.0000	0.0097
280	624.65	606.77	0.0000	1.5622	1.5622
281	621.00	607.50	0.0000	0.1737	0.1737
282	680.94	673.59	0.0088	0.0000	0.0088
283	713.91	705.91	0.0370	0.0000	0.0370
284	709.71	699.50	0.0651	0.0000	0.0651
285	676.69	665.28	0.0000	0.0238	0.0238
286	684.35	677.74	0.0678	0.0000	0.0678
287	686.89	679.40	0.0088	0.0000	0.0088
288	681.88	675.31	0.0220	0.0000	0.0220
289	674.27	661.54	0.0000	0.0634	0.0634
290	680.15	662.79	0.0088	0.0326	0.0414
291	678.42	664.04	0.0088	0.0238	0.0326
292	657.93	647.93	0.0000	0.8218	0.8218
293	688.12	680.00	0.0202	0.0000	0.0202
294	685.74	675.28	0.0044	0.0317	0.0361
295	686.10	677.87	0.0114	0.0000	0.0114
296	686.35	674.16	0.0035	0.0422	0.0458
297	686.50	679.94	0.0062	0.0000	0.0062
298	687.19	673.27	0.0044	0.0493	0.0537
299	687.72	680.79	0.0035	0.0000	0.0035
300	683.66	672.05	0.0202	0.0669	0.0871
301	689.48	683.51	0.0132	0.0000	0.0132
302	674.98	667.28	0.0000	0.1399	0.1399
303	688.39	683.19	0.0229	0.0000	0.0229
304	690.09	684.74	0.0299	0.0000	0.0299
305	692.12	678.88	0.0000	1.1782	1.1782
306	677.34	663.81	0.0141	1.2284	1.2424
307	673.34	665.85	0.0317	0.0554	0.0871
308	685.55	677.81	0.0194	0.0000	0.0194
309	683.15	668.86	0.0361	0.0000	0.0361
310	672.84	665.47	0.0088	0.0000	0.0088
311	673.46	666.46	0.0554	0.0000	0.0554
312	652.00	645.00	0.0361	0.0000	0.0361
313	655.00	649.00	0.0000	0.2160	0.2160
314	660.00	656.00	0.0000	0.1620	0.1620
315	665.00	658.50	0.0000	0.1080	0.1080
316	671.00	664.00	0.0540	0.0000	0.0540
317	677.00	670.00	0.0540	0.0000	0.0540
318	670.00	663.00	0.0540	0.0000	0.0540
319	673.00	667.00	0.0540	0.0000	0.0540
320	659.72	648.58	0.0070	1.4686	1.4756
321	652.90	639.66	0.0000	1.7326	1.7326
322	661.52	651.66	0.0000	0.1399	0.1399

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
323	642.14	619.50	0.0000	12.6763	12.6763
324	644.75	634.24	0.0484	0.0748	0.1232
325	669.84	662.79	0.0273	0.0000	0.0273
326	631.39	620.64	0.0053	0.1170	0.1223
327	667.06	660.05	0.0000	0.3150	0.3150
328	687.80	678.10	0.0079	0.0528	0.0607
329	703.09	695.12	0.0185	0.0343	0.0528
330	707.36	699.70	0.0158	0.0185	0.0343
331	712.25	705.20	0.0079	0.0106	0.0185
332	716.88	709.51	0.0106	0.0000	0.0106
333	715.72	708.81	0.0519	0.0000	0.0519
334	665.00	656.25	0.0000	0.3150	0.3150
335	663.00	657.00	0.0000	0.3150	0.3150
336	697.70	677.25	0.0000	0.2543	0.2543
337	714.42	706.45	0.0950	0.0000	0.0950
338	701.95	693.00	0.0220	0.0000	0.0220
339	698.12	683.00	0.0000	0.4145	0.4145
340	699.36	688.00	0.0000	0.3925	0.3925
341	692.05	679.33	0.0000	1.1782	1.1782
342	679.00	658.95	0.0600	0.5387	0.5987
343	676.08	670.00	0.0238	0.0000	0.0238
344	676.08	670.00	0.0220	0.0000	0.0220
345	635.35	614.98	0.0000	12.8849	12.8849
346	700.78	689.42	0.0000	0.3925	0.3925
347	710.14	698.78	0.0334	0.0000	0.0334
348	704.15	692.79	0.0097	0.3494	0.3590
349	709.01	697.65	0.0079	0.0651	0.0730
350	713.82	702.37	0.0000	0.0370	0.0370
351	719.97	708.52	0.0370	0.0000	0.0370
352	717.53	706.17	0.0282	0.0000	0.0282
353	710.67	694.00	0.0202	0.2561	0.2763
354	666.25	650.64	0.0062	1.3824	1.3885
355	675.60	665.60	0.0449	0.0000	0.0449
356	674.28	667.08	0.0801	0.0000	0.0801
357	676.69	669.69	0.0554	0.0000	0.0554
358	656.32	641.44	0.0070	1.5311	1.5381
359	660.14	651.40	0.0132	0.1813	0.1945
360	672.00	665.00	0.0229	0.0000	0.0229
361	685.85	675.46	0.0282	1.1914	1.2196
362	693.00	677.92	0.0132	1.1782	1.1914
363	722.00	715.00	0.0211	0.0000	0.0211
364	719.00	712.00	0.0167	0.0598	0.0766
365	721.00	714.00	0.0378	0.0220	0.0598
366	722.00	715.00	0.0026	0.0194	0.0220
367	733.00	726.00	0.0194	0.0000	0.0194
368	707.00	700.00	0.0088	0.0440	0.0528

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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369	725.00	718.00	0.0185	0.0000	0.0185
370	720.00	713.00	0.0255	0.0000	0.0255
371	713.00	700.00	0.0141	0.0898	0.1038
372	725.00	711.50	0.0035	0.0352	0.0387
373	733.00	723.00	0.0229	0.0000	0.0229
374	720.00	713.00	0.0123	0.0000	0.0123
375	735.00	728.00	0.0440	0.0000	0.0440
376	707.53	696.53	0.0000	0.1734	0.1734
377	713.51	706.51	0.0000	0.0537	0.0537
378	720.85	713.85	0.0202	0.0079	0.0282
379	721.15	714.15	0.0255	0.0000	0.0255
380	726.51	719.51	0.0079	0.0000	0.0079
381	710.66	694.75	0.0000	0.2561	0.2561
382	713.18	703.00	0.0000	0.0405	0.0405
383	726.54	719.54	0.0299	0.0000	0.0299
384	726.84	719.84	0.0290	0.0000	0.0290
385	700.22	685.81	0.0774	0.6863	0.7637
386	699.66	687.25	0.0000	0.6863	0.6863
387	698.53	688.61	0.0543	0.4959	0.5502
388	703.57	693.02	0.0000	0.4959	0.4959
389	716.39	710.00	0.0308	0.0000	0.0308
390	699.69	692.34	0.0000	0.4959	0.4959
391	704.97	695.51	0.0273	0.4378	0.4651
392	706.84	696.28	0.0000	0.4378	0.4378
393	708.51	696.97	0.0000	0.4184	0.4184
394	711.52	697.75	0.0000	0.3991	0.3991
395	718.37	700.29	0.0000	0.1461	0.1461
396	714.19	702.14	0.0114	0.0651	0.0766
397	715.00	702.95	0.0000	0.0651	0.0651
398	741.00	731.00	0.0238	0.0000	0.0238
399	716.82	707.85	0.0000	0.0695	0.0695
400	718.39	709.00	0.0695	0.0000	0.0695
401	730.00	723.00	0.0000	0.2424	0.2424
402	748.00	741.00	0.0466	0.0620	0.1087
403	751.00	744.00	0.0242	0.0378	0.0620
404	762.00	755.00	0.0194	0.0000	0.0194
405	760.00	753.00	0.0185	0.0000	0.0185
406	739.00	732.00	0.0282	0.1056	0.1338
407	744.00	736.00	0.0458	0.0598	0.1056
408	744.00	737.00	0.0000	0.0598	0.0598
409	764.00	757.00	0.0343	0.0000	0.0343
410	762.00	755.00	0.0255	0.0000	0.0255
411	748.00	740.00	0.0414	0.0000	0.0414
412	650.00	638.43	0.0000	0.3814	0.3814
413	715.92	711.00	0.0106	0.0000	0.0106
414	712.20	705.00	0.0194	0.0000	0.0194

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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415	709.79	702.50	0.0194	0.0000	0.0194
416	722.47	715.47	0.0370	0.0000	0.0370
417	719.02	712.02	0.0334	0.0000	0.0334
418	717.45	708.77	0.0132	0.0290	0.0422
419	720.47	707.83	0.0106	0.0299	0.0405
420	716.20	703.53	0.0194	0.0537	0.0730
421	710.00	703.00	0.0070	0.0440	0.0510
422	647.57	639.60	0.0018	0.0000	0.0018
423	650.00	643.00	0.1080	0.0000	0.1080
424	629.82	625.81	0.0018	1.3274	1.3292
425	625.31	609.57	0.0000	13.0037	13.0037
426	621.61	606.67	0.0000	13.2791	13.2791
427	619.19	605.83	0.0000	13.2791	13.2791
428	617.08	604.98	0.0000	13.2791	13.2791
429	617.43	604.14	0.0000	13.2791	13.2791
430	614.23	603.75	0.0000	14.6083	14.6083
431	613.00	603.57	0.0000	14.6083	14.6083
432	611.00	603.16	0.0000	14.6083	14.6083
433	611.23	602.41	0.0000	14.6083	14.6083
434	704.25	688.76	0.2030	4.3357	4.5387
435	657.20	635.85	0.1831	10.7100	10.8931
436	649.22	628.55	0.0000	10.9092	10.9092
437	642.58	627.00	0.0000	10.9092	10.9092
438	688.44	670.33	0.0000	5.2358	5.2358
439	696.60	682.54	0.0000	0.6204	0.6204
440	698.97	686.12	0.6204	0.0000	0.6204
441	691.08	675.45	0.0000	0.6204	0.6204
442	775.00	768.00	3.5921	0.0000	3.5921
443	720.00	713.00	0.4692	2.8993	3.3686
444	805.00	798.00	0.5721	0.0000	0.5721
445	740.00	733.00	1.2714	1.6280	2.8993
446	794.00	787.00	0.0405	0.0000	0.0405
447	777.00	770.00	0.1646	0.1754	0.3401
448	725.00	718.00	0.0601	0.3762	0.4363
449	796.00	791.00	0.6410	0.0000	0.6410
450	757.00	750.00	1.0559	0.0000	1.0559
451	695.00	688.00	2.6405	0.0000	2.6405
452	665.00	648.00	0.7588	2.6405	3.3993
453	735.00	728.00	0.4464	1.1268	1.5732
454	735.00	728.00	0.3762	0.0000	0.3762
455	765.00	758.00	0.4858	0.6410	1.1268
456	680.00	673.00	0.2399	4.3438	4.5837
457	680.00	673.00	0.0161	0.0000	0.0161
458	695.00	688.00	0.4116	0.0000	0.4116
459	615.00	610.50	0.1737	0.0000	0.1737
460	682.86	664.17	0.8906	5.2358	6.1263

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Manhole Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Local In) (MGD)	Flow (Total In) (MGD)	Flow (Total Out) (MGD)
461	710.00	703.00	0.1813	3.8049	3.9861
462	680.00	673.00	0.2464	0.0000	0.2464
463	651.00	638.00	0.5295	3.6458	4.1752
464	725.00	718.00	0.0000	3.5921	3.5921
465	785.00	779.00	0.1349	0.0000	0.1349
466	782.00	772.00	0.0000	0.1754	0.1754
467	725.00	718.00	0.3496	0.0000	0.3496
468	706.73	694.90	0.0000	4.3357	4.3357
469	695.00	688.00	0.1361	0.0000	0.1361
470	670.00	665.00	0.1728	0.0000	0.1728
471	685.00	678.00	0.0766	0.0000	0.0766
472	685.00	678.00	0.6247	0.0000	0.6247
473	642.54	626.31	0.0000	10.9419	10.9419
474	651.00	627.00	0.0327	0.0000	0.0327
475	680.00	673.00	0.2015	0.1644	0.3659
476	655.00	649.50	0.0832	0.0000	0.0832
477	662.59	648.99	0.0000	0.6819	0.6819
478	624.00	617.00	0.9312	0.0000	0.9312
479	645.00	628.00	0.0000	4.1752	4.1752
480	645.00	623.00	0.8430	4.1752	5.0182
481	625.00	600.00	0.1001	5.0182	5.1182
482	620.00	593.00	0.0000	5.2116	5.2116
483	619.00	600.00	0.0934	0.0000	0.0934
484	600.00	590.00	0.0000	2.2341	2.2341
485	611.00	604.00	1.3029	0.0000	1.3029
486	626.00	619.00	0.2780	0.0000	0.2780
487	622.00	615.00	0.0000	0.2780	0.2780
488	621.06	600.07	0.0000	0.0000	0.0000
489	668.34	664.34	0.0000	0.0000	0.0000
491	620.67	607.00	0.0000	0.0000	0.0000
492	612.00	604.00	0.0000	0.0000	0.0000
493	617.21	603.50	0.0000	0.0000	0.0000
494	621.75	602.00	0.0000	0.0000	0.0000
495	615.51	603.00	0.0000	0.0000	0.0000
496	729.11	722.11	0.0000	0.0000	0.0000
497	655.41	644.22	0.0000	0.0000	0.0000
498	660.78	650.78	0.0000	0.0000	0.0000
499	656.22	645.50	0.0000	0.0000	0.0000

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-1	240	702.58	241	701.32	291.4	0.004	8.0	0.013	1.84	0.1153	34.4
CO-2	241	701.32	242	697.69	852.2	0.004	8.0	0.013	1.95	0.1461	40.6
CO-3	242	697.69	243	696.43	290.7	0.004	8.0	0.013	2.17	0.2112	45.1
CO-4	243	696.43	244	694.41	398.9	0.005	8.0	0.013	2.37	0.2367	45.8
CO-5	239	647.00	238	645.49	401.5	0.004	10.0	0.013	2.80	0.8236	69.2
CO-6	244	694.41	245	685.41	1,382.5	0.007	8.0	0.013	2.70	0.2737	47.6
CO-7	238	645.49	237	637.60	411.9	0.019	10.0	0.013	5.33	0.8290	65.4
CO-8	245	685.41	246	695.20	1,204.2	0.008	8.0	0.013	1.40	0.0211	30.7
CO-9	237	637.60	236	637.50	8.5	0.012	12.0	0.013	4.88	1.2104	54.7
CO-10	245	685.41	247	684.09	317.3	0.004	10.0	0.013	2.31	0.2974	40.5
CO-11	236	637.50	235	634.00	466.8	0.007	12.0	0.013	4.12	1.2104	66.5
CO-12	247	684.09	248	682.77	308.0	0.004	10.0	0.013	2.42	0.3379	41.4
CO-13	235	634.00	234	633.00	295.1	0.003	12.0	0.013	2.99	1.2158	66.9
CO-14	248	682.77	249	672.11	314.3	0.034	10.0	0.013	5.33	0.3934	41.4
CO-15	234	633.00	233	630.54	378.4	0.007	12.0	0.013	3.90	1.2176	58.8
CO-16	249	672.11	250	660.38	321.6	0.036	10.0	0.013	5.51	0.4039	42.2
CO-17	250	660.38	251	684.04	730.2	0.032	8.0	0.013	1.95	0.0132	31.5
CO-18	233	630.54	424	625.81	140.6	0.034	12.0	0.013	7.19	1.2194	59.9
CO-19	424	625.81	232	619.02	202.2	0.034	12.0	0.013	7.36	1.3292	49.9
CO-20	232	619.02	231	613.00	312.8	0.019	12.0	0.013	6.00	1.3292	53.1
CO-21	250	660.38	252	647.39	332.3	0.039	10.0	0.013	5.73	0.4233	59.5
CO-22	231	613.00	430	605.89	258.6	0.027	12.0	0.013	6.84	1.3292	51.0
CO-23	252	647.39	253	646.89	158.8	0.003	10.0	0.013	2.56	0.7383	66.7
CO-24	253	646.89	254	619.55	3,440.3	0.008	10.0	0.013	3.72	0.7383	65.9
CO-25	230	648.07	412	638.43	266.7	0.036	10.0	0.013	5.40	0.3814	45.8
CO-26	412	638.43	237	637.60	309.3	0.003	10.0	0.013	2.10	0.3814	60.6
CO-27	229	656.66	230	648.07	315.5	0.027	10.0	0.013	3.83	0.1654	33.4
CO-28	255	627.08	254	619.55	590.6	0.013	8.0	0.013	1.50	0.0158	52.0
CO-29	228	663.43	229	656.66	460.3	0.015	10.0	0.013	3.08	0.1654	23.6
CO-30	256	640.84	326	620.64	295.6	0.068	8.0	0.013	4.91	0.1170	31.2

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-31	227	668.10	228	663.43	339.0	0.014	10.0	0.013	3.01	0.1654	23.8
CO-32	257	670.87	256	640.84	980.6	0.031	8.0	0.013	2.20	0.0202	20.6
CO-33	226	668.49	227	668.10	100.5	0.004	10.0	0.013	1.92	0.1654	27.8
CO-34	258	648.16	256	640.84	303.2	0.024	8.0	0.013	3.14	0.0898	27.4
CO-35	225	669.14	226	668.49	136.6	0.005	8.0	0.013	2.04	0.1487	36.3
CO-36	259	652.60	258	648.16	309.8	0.014	8.0	0.013	2.18	0.0484	22.1
CO-37	224	669.80	225	669.14	134.9	0.005	8.0	0.013	2.00	0.1338	34.8
CO-38	260	673.84	259	652.60	1,053.0	0.020	8.0	0.013	2.30	0.0387	17.6
CO-39	223	684.76	224	669.80	689.2	0.022	6.0	0.013	1.91	0.0167	30.3
CO-40	260	673.84	261	696.00	818.6	0.027	8.0	0.013	1.99	0.0167	13.7
CO-41	262	677.53	258	648.16	1,100.3	0.027	8.0	0.013	2.50	0.0370	20.9
CO-42	222	676.80	226	668.49	423.1	0.020	8.0	0.013	1.75	0.0158	23.6
CO-43	263	658.54	264	634.66	516.9	0.046	8.0	0.013	3.12	0.0405	18.7
CO-44	221	683.02	222	676.80	213.6	0.029	8.0	0.013	1.80	0.0114	9.8
CO-45	265	665.52	264	634.66	750.4	0.041	8.0	0.013	2.12	0.0132	15.0
CO-46	220	688.63	221	683.02	487.0	0.012	8.0	0.013	1.20	0.0088	8.4
CO-47	266	628.22	264	634.66	293.0	0.022	8.0	0.013	2.66	0.0572	23.1
CO-48	219	689.42	220	688.63	193.8	0.004	6.0	0.013	0.54	0.0018	8.3
CO-49	267	643.95	266	628.22	481.0	0.033	8.0	0.013	2.44	0.0273	19.9
CO-50	218	670.90	224	669.80	266.6	0.004	8.0	0.013	1.81	0.1153	33.1
CO-51	268	647.43	267	643.95	694.3	0.005	8.0	0.013	1.15	0.0194	13.4
CO-52	217	687.85	218	670.90	698.4	0.024	6.0	0.013	2.02	0.0176	29.8
CO-53	269	646.31	270	617.80	581.9	0.049	8.0	0.013	2.30	0.0141	52.4
CO-54	272	618.69	271	652.34	1,548.7	0.022	8.0	0.013	2.41	0.0414	57.1
CO-55	216	672.00	218	670.90	232.2	0.005	8.0	0.013	1.79	0.0942	30.5
CO-56	254	619.55	272	618.69	296.6	0.003	12.0	0.013	2.65	0.8800	63.4
CO-57	215	690.00	216	672.00	860.3	0.021	8.0	0.013	1.76	0.0150	19.3
CO-58	272	618.69	270	617.80	309.2	0.003	12.0	0.013	2.67	0.9258	63.9
CO-59	270	617.80	273	615.97	565.7	0.003	12.0	0.013	2.81	0.9504	64.6
CO-60	214	673.10	216	672.00	245.5	0.004	8.0	0.013	1.65	0.0757	27.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Conduit Table

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CO-61	274	640.17	273	615.97	796.6	0.030	8.0	0.013	1.95	0.0141	54.5
CO-62	213	678.39	214	673.10	185.1	0.029	8.0	0.013	3.13	0.0722	24.3
CO-63	273	615.97	275	614.51	486.5	0.003	12.0	0.013	2.74	0.9759	66.3
CO-64	212	680.00	213	678.39	304.2	0.005	8.0	0.013	1.71	0.0695	23.2
CO-65	266	628.22	275	614.51	553.2	0.025	8.0	0.013	3.19	0.0915	62.9
CO-66	211	686.00	212	680.00	267.7	0.022	8.0	0.013	1.68	0.0123	16.5
CO-67	275	614.51	276	613.48	291.9	0.004	12.0	0.013	2.98	1.0710	66.8
CO-68	210	688.87	211	686.00	157.2	0.018	6.0	0.013	1.12	0.0035	9.8
CO-69	276	613.48	277	610.89	710.4	0.004	12.0	0.013	3.04	1.0965	61.3
CO-70	209	687.63	211	686.00	83.5	0.020	8.0	0.013	1.09	0.0035	7.1
CO-71	278	622.17	277	610.89	673.5	0.017	8.0	0.013	1.60	0.0141	46.8
CO-72	208	681.50	212	680.00	253.8	0.006	8.0	0.013	1.65	0.0537	21.9
CO-73	279	623.67	276	613.48	406.8	0.025	8.0	0.013	1.62	0.0097	54.1
CO-74	277	610.89	280	606.77	365.3	0.011	12.0	0.013	4.70	1.1106	61.0
CO-76	281	607.50	280	606.77	179.1	0.004	12.0	0.013	1.95	0.1737	44.8
CO-77	282	673.59	249	672.11	326.8	0.005	8.0	0.013	0.87	0.0088	30.5
CO-78	283	705.91	247	684.09	1,330.0	0.016	8.0	0.013	2.11	0.0370	34.2
CO-81	207	626.60	426	612.04	307.7	0.047	8.0	0.013	5.53	0.2754	36.5
CO-82	284	699.50	242	697.69	287.2	0.006	8.0	0.013	1.78	0.0651	33.3
CO-83	206	630.70	207	626.60	911.8	0.004	8.0	0.013	1.08	0.0176	29.1
CO-85	345	614.98	425	609.57	1,421.9	0.004	30.0	0.013	5.71	12.8849	63.9
CO-86	289	661.54	17	660.12	285.9	0.005	8.0	0.013	1.62	0.0634	28.6
CO-87	204	627.53	345	626.00	36.4	0.042	8.0	0.013	4.90	0.2086	32.0
CO-88	286	677.74	17	660.12	2,621.1	0.007	8.0	0.013	1.85	0.0678	28.2
CO-89	202	640.44	321	639.66	250.2	0.003	15.0	0.013	3.22	1.7326	63.2
CO-90	201	628.50	207	626.60	240.3	0.008	8.0	0.013	2.85	0.2578	44.9
CO-91	285	665.28	287	679.40	594.4	0.024	8.0	0.013	1.55	0.0088	11.3
CO-92	200	629.00	201	628.50	107.3	0.005	8.0	0.013	2.28	0.2314	45.1
CO-93	288	675.31	289	661.54	1,167.4	0.012	8.0	0.013	1.61	0.0220	17.7
CO-94	199	629.51	200	629.00	270.2	0.002	8.0	0.013	1.56	0.1954	50.2

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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CO-95	289	661.54	290	662.79	297.0	0.004	8.0	0.013	1.35	0.0414	21.1
CO-96	198	630.48	199	629.51	271.9	0.004	8.0	0.013	1.92	0.1734	48.3
CO-97	197	631.95	198	630.48	272.7	0.005	8.0	0.013	1.47	0.0405	30.1
CO-98	285	665.28	291	664.04	295.7	0.004	8.0	0.013	1.15	0.0238	15.9
CO-99	196	653.00	197	631.95	1,538.4	0.014	8.0	0.013	1.98	0.0370	17.1
CO-100	291	664.04	290	662.79	284.2	0.004	8.0	0.013	1.28	0.0326	18.2
CO-101	292	647.93	239	647.00	246.9	0.004	10.0	0.013	2.80	0.8218	77.6
CO-102	293	680.00	294	675.28	929.8	0.005	8.0	0.013	1.17	0.0202	15.7
CO-103	295	677.87	294	675.28	357.4	0.007	8.0	0.013	1.12	0.0114	13.7
CO-104	294	675.28	296	674.16	282.6	0.004	8.0	0.013	1.27	0.0361	18.9
CO-105	297	679.94	296	679.00	235.5	0.004	8.0	0.013	0.75	0.0062	7.2
CO-106	195	645.00	198	630.48	884.8	0.016	8.0	0.013	3.07	0.1320	36.7
CO-107	296	674.16	298	673.27	174.1	0.005	8.0	0.013	1.49	0.0458	20.6
CO-108	299	680.79	298	680.00	199.7	0.004	8.0	0.013	0.63	0.0035	5.5
CO-109	194	656.00	195	645.00	692.6	0.016	8.0	0.013	2.39	0.0581	25.8
CO-110	298	673.27	300	672.05	278.6	0.004	8.0	0.013	1.48	0.0537	23.5
CO-111	193	650.50	195	645.00	914.5	0.006	8.0	0.013	1.63	0.0510	25.4
CO-112	301	683.51	300	672.05	815.0	0.014	8.0	0.013	1.47	0.0132	17.4
CO-113	300	672.05	302	667.28	751.5	0.006	8.0	0.013	1.94	0.0871	28.7
CO-114	302	667.28	303	683.19	672.1	0.024	8.0	0.013	2.07	0.0229	22.4
CO-115	192	635.34	199	629.51	829.0	0.007	8.0	0.013	1.35	0.0220	33.5
CO-116	302	667.28	304	684.74	1,027.1	0.017	8.0	0.013	2.01	0.0299	23.3
CO-117	302	667.28	322	651.66	966.7	0.016	8.0	0.013	3.11	0.1399	28.7
CO-118	191	630.32	201	628.50	230.8	0.008	8.0	0.013	1.42	0.0229	28.4
CO-119	305	678.88	362	677.92	177.8	0.005	12.0	0.013	3.60	1.1782	62.0
CO-120	361	675.46	306	663.81	1,437.1	0.008	12.0	0.013	4.25	1.2196	58.8
CO-121	190	624.00	189	620.00	256.5	0.016	18.0	0.013	6.69	2.8395	54.5
CO-122	306	663.81	15	656.95	666.8	0.010	12.0	0.013	4.67	1.2424	60.3
CO-123	307	665.85	15	656.95	1,427.9	0.006	8.0	0.013	1.93	0.0871	58.8
CO-124	308	677.81	307	665.85	849.6	0.014	8.0	0.013	1.65	0.0194	18.6

2024 City of Justin Wastewater Model Update.stsw
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CO-125	188	625.00	190	624.00	149.2	0.007	18.0	0.013	4.89	2.8341	53.6
CO-126	309	668.86	307	665.85	582.4	0.005	8.0	0.013	1.40	0.0361	21.3
CO-127	187	625.80	188	625.00	137.1	0.006	12.0	0.013	3.77	1.2643	71.6
CO-128	186	640.10	187	625.80	303.8	0.047	12.0	0.013	8.20	1.2608	61.2
CO-129	185	645.00	186	640.10	598.4	0.008	12.0	0.013	4.29	1.2440	59.4
CO-130	310	665.47	306	663.81	543.5	0.003	8.0	0.013	0.76	0.0088	49.3
CO-131	184	648.00	185	645.00	217.1	0.014	12.0	0.013	5.20	1.2247	58.9
CO-132	183	649.00	184	648.00	189.0	0.005	12.0	0.013	3.60	1.2220	61.0
CO-133	182	650.00	183	649.00	389.0	0.003	12.0	0.013	2.61	1.2088	74.4
CO-134	311	666.46	41	639.00	1,530.1	0.018	8.0	0.013	2.46	0.0554	22.1
CO-135	181	652.00	182	650.00	287.4	0.007	12.0	0.013	3.98	1.1886	71.5
CO-136	180	661.00	181	652.00	687.9	0.013	10.0	0.013	5.02	1.1868	68.3
CO-137	179	665.00	180	661.00	388.6	0.010	10.0	0.013	4.55	1.1745	72.8
CO-138	178	666.00	179	665.00	38.0	0.026	10.0	0.013	6.54	1.1657	72.5
CO-139	177	668.00	178	666.00	336.3	0.006	10.0	0.013	3.48	1.1657	81.3
CO-140	176	669.00	177	668.00	368.4	0.003	10.0	0.013	2.36	0.6370	81.0
CO-141	230	648.07	313	649.00	21.7	0.043	8.0	0.013	4.98	0.2160	45.4
CO-142	314	656.00	313	649.00	339.8	0.021	8.0	0.013	3.54	0.1620	37.4
CO-143	315	658.50	314	656.00	143.4	0.017	8.0	0.013	2.96	0.1080	31.4
CO-144	175	679.19	176	669.00	814.3	0.013	8.0	0.013	1.36	0.0114	49.3
CO-145	316	664.00	315	658.50	272.6	0.020	8.0	0.013	2.54	0.0540	23.9
CO-146	174	645.64	186	640.10	667.4	0.008	6.0	0.013	1.22	0.0114	56.4
CO-147	317	670.00	315	658.50	404.5	0.028	8.0	0.013	2.86	0.0540	23.9
CO-148	173	626.80	188	625.00	365.3	0.005	14.0	0.013	3.75	1.5698	63.6
CO-149	318	663.00	314	656.00	396.1	0.018	8.0	0.013	2.43	0.0540	27.2
CO-150	168	628.50	173	626.80	459.3	0.004	14.0	0.013	3.35	1.5610	61.2
CO-151	313	649.00	319	667.00	517.4	0.035	8.0	0.013	3.08	0.0540	30.0
CO-152	172	639.48	168	628.50	391.1	0.028	6.0	0.013	2.21	0.0203	58.6
CO-154	171	646.05	172	639.48	354.8	0.019	6.0	0.013	1.71	0.0141	15.8
CO-155	354	650.64	320	648.58	322.7	0.006	12.0	0.013	3.98	1.3885	64.8

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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CO-156	15	656.95	354	650.64	360.7	0.017	12.0	0.013	5.81	1.3375	63.2
CO-157	170	653.00	171	646.05	238.8	0.029	6.0	0.013	1.75	0.0088	12.8
CO-158	321	639.66	203	639.30	105.3	0.003	15.0	0.013	3.34	1.7326	57.4
CO-159	169	665.64	170	653.00	652.8	0.019	6.0	0.013	1.42	0.0070	10.7
CO-160	292	647.93	322	651.66	394.9	0.009	10.0	0.013	2.51	0.1399	50.8
CO-161	203	639.30	323	630.00	377.8	0.025	15.0	0.013	6.98	1.7344	43.9
CO-162	167	629.20	168	628.50	367.2	0.002	14.0	0.013	2.50	1.5408	72.8
CO-163	323	619.50	345	614.98	1,296.4	0.003	30.0	0.013	5.49	12.6763	67.6
CO-164	166	629.50	167	629.20	167.0	0.002	14.0	0.013	2.42	1.5301	82.6
CO-165	43	630.25	324	634.24	897.8	0.004	8.0	0.013	1.89	0.1232	37.9
CO-166	165	630.00	166	629.50	153.0	0.003	14.0	0.013	3.17	1.5301	75.9
CO-167	55	665.37	45	651.86	315.9	0.043	8.0	0.013	2.56	0.0229	18.8
CO-168	46	659.46	324	634.24	889.1	0.028	8.0	0.013	3.16	0.0748	28.2
CO-169	325	662.79	263	658.54	1,005.0	0.004	8.0	0.013	1.20	0.0273	16.4
CO-170	162	634.50	163	633.00	334.4	0.004	14.0	0.013	3.54	1.4248	57.0
CO-171	326	620.64	254	619.55	251.9	0.004	8.0	0.013	1.87	0.1223	63.3
CO-172	252	647.39	334	656.25	262.4	0.034	8.0	0.013	5.09	0.3150	72.2
CO-173	161	636.92	160	635.27	354.0	0.005	8.0	0.013	1.22	0.0256	18.1
CO-174	327	660.05	328	678.10	417.1	0.043	8.0	0.013	3.44	0.0607	34.9
CO-175	158	630.50	165	630.00	200.7	0.002	14.0	0.013	2.83	1.5301	70.4
CO-176	328	678.10	329	695.12	949.3	0.018	8.0	0.013	2.42	0.0528	20.2
CO-177	164	631.00	158	630.50	187.5	0.003	14.0	0.013	2.91	1.5106	71.5
CO-178	329	695.12	330	699.70	756.9	0.006	8.0	0.013	1.45	0.0343	17.8
CO-179	159	670.11	158	630.50	1,038.3	0.038	8.0	0.013	2.18	0.0159	55.3
CO-180	330	699.70	331	705.20	374.2	0.015	8.0	0.013	1.65	0.0185	13.8
CO-181	157	674.92	156	674.17	193.2	0.004	6.0	0.013	0.53	0.0018	9.6
CO-182	331	705.20	332	709.51	705.8	0.006	8.0	0.013	1.03	0.0106	10.3
CO-183	156	674.17	155	667.41	335.7	0.020	6.0	0.013	1.66	0.0114	11.6
CO-184	333	708.81	248	682.77	2,225.1	0.012	8.0	0.013	2.08	0.0519	35.4
CO-185	155	667.41	154	663.28	201.3	0.021	6.0	0.013	1.67	0.0114	18.4

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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CO-186	335	657.00	334	656.25	142.1	0.005	8.0	0.013	2.58	0.3150	51.1
CO-187	153	631.50	164	631.00	162.2	0.003	14.0	0.013	3.09	1.5106	68.7
CO-188	335	657.00	327	660.05	174.6	0.017	8.0	0.013	4.02	0.3150	51.1
CO-189	163	633.00	153	631.50	333.0	0.005	14.0	0.013	3.56	1.4620	62.1
CO-190	336	677.25	327	660.05	2,121.0	0.008	8.0	0.013	2.87	0.2543	46.4
CO-191	154	663.28	153	631.50	943.1	0.034	8.0	0.013	2.89	0.0450	59.0
CO-192	152	676.00	156	674.17	322.2	0.006	6.0	0.013	1.01	0.0097	12.9
CO-193	338	693.00	339	683.00	782.3	0.013	8.0	0.013	1.65	0.0220	34.5
CO-194	151	675.20	154	663.28	1,070.0	0.011	8.0	0.013	1.48	0.0176	14.6
CO-195	339	683.00	340	688.00	493.5	0.010	8.0	0.013	3.48	0.3925	55.8
CO-196	150	678.72	149	655.42	1,104.9	0.021	6.0	0.013	2.02	0.0212	20.0
CO-197	339	683.00	341	679.33	137.1	0.027	8.0	0.013	5.06	0.4145	78.3
CO-198	149	655.42	163	633.00	909.9	0.025	6.0	0.013	2.46	0.0336	61.2
CO-199	341	679.33	305	678.88	140.1	0.003	12.0	0.013	2.91	1.1782	67.7
CO-200	22	651.05	342	658.95	617.7	0.013	8.0	0.013	4.21	0.5987	76.6
CO-201	41	639.00	39	622.00	438.3	0.039	8.0	0.013	3.61	0.0810	26.9
CO-202	148	680.50	147	659.89	736.3	0.028	6.0	0.013	1.90	0.0123	15.3
CO-203	147	659.89	146	650.80	495.2	0.018	6.0	0.013	1.91	0.0203	18.5
CO-204	146	650.80	145	646.00	329.3	0.015	6.0	0.013	1.90	0.0264	21.8
CO-205	145	646.00	162	634.50	453.5	0.025	6.0	0.013	2.57	0.0380	61.9
CO-206	346	689.42	340	688.00	142.3	0.010	8.0	0.013	3.46	0.3925	52.6
CO-207	347	698.78	346	689.42	937.7	0.010	8.0	0.013	1.72	0.0334	35.2
CO-208	144	672.16	143	662.41	374.8	0.026	6.0	0.013	1.49	0.0062	11.9
CO-209	348	692.79	346	689.42	337.1	0.010	8.0	0.013	3.39	0.3590	53.7
CO-210	143	662.41	142	651.77	460.6	0.023	6.0	0.013	1.85	0.0141	15.2
CO-211	349	697.65	348	692.79	485.6	0.010	8.0	0.013	2.17	0.0730	37.8
CO-212	142	651.77	141	645.63	435.8	0.014	6.0	0.013	1.66	0.0176	17.7
CO-213	350	702.37	349	697.65	472.0	0.010	8.0	0.013	1.77	0.0370	19.6
CO-214	141	645.63	161	636.92	486.9	0.018	6.0	0.013	2.02	0.0256	19.7
CO-215	351	708.52	350	702.37	615.0	0.010	8.0	0.013	1.77	0.0370	15.5

2024 City of Justin Wastewater Model Update.stsw
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CO-216	140	643.95	160	635.27	617.3	0.014	6.0	0.013	2.07	0.0370	25.9
CO-217	352	706.17	349	697.65	867.6	0.010	8.0	0.013	1.63	0.0282	18.6
CO-218	139	661.44	140	643.95	789.8	0.022	6.0	0.013	2.40	0.0352	23.2
CO-219	138	669.70	139	661.44	345.6	0.024	6.0	0.013	2.14	0.0220	20.5
CO-220	137	680.00	138	669.70	508.1	0.020	6.0	0.013	1.87	0.0167	16.8
CO-221	353	694.00	348	692.79	652.5	0.002	8.0	0.013	1.66	0.2763	60.8
CO-222	136	684.94	137	680.00	379.1	0.013	6.0	0.013	1.32	0.0088	13.5
CO-223	355	665.60	354	650.64	1,778.9	0.008	8.0	0.013	1.77	0.0449	57.7
CO-224	135	679.62	134	653.27	1,335.1	0.020	6.0	0.013	1.38	0.0062	16.3
CO-225	134	653.27	133	644.00	562.7	0.016	6.0	0.013	2.18	0.0361	21.0
CO-226	133	644.00	12th Street LS (Downto wn)	622.00	549.6	0.040	6.0	0.013	2.98	0.0361	19.2
CO-227	356	667.08	320	648.58	2,402.2	0.008	8.0	0.013	2.04	0.0801	60.5
CO-228	132	627.15	12th Street LS (Downto wn)	622.00	244.8	0.021	6.0	0.013	2.74	0.0592	26.3
CO-229	357	669.69	358	641.44	1,728.6	0.016	8.0	0.013	2.38	0.0554	60.0
CO-230	131	628.00	132	627.15	405.8	0.002	6.0	0.013	1.20	0.0592	35.6
CO-231	130	629.50	131	628.00	197.5	0.008	8.0	0.013	1.83	0.0574	25.6
CO-232	129	630.50	130	629.50	383.8	0.003	8.0	0.013	1.26	0.0574	23.0
CO-233	128	631.00	129	630.50	153.7	0.003	8.0	0.013	1.18	0.0359	22.4
CO-234	360	665.00	359	651.40	1,183.8	0.011	8.0	0.013	1.61	0.0229	25.4
CO-235	127	632.00	128	631.00	351.8	0.003	8.0	0.013	1.08	0.0305	18.8
CO-236	362	677.92	361	675.46	471.7	0.005	12.0	0.013	3.56	1.1914	60.6
CO-237	126	633.00	127	632.00	344.4	0.003	8.0	0.013	1.05	0.0269	17.7
CO-238	5	689.00	363	715.00	673.2	0.039	8.0	0.013	2.42	0.0211	29.6

2024 City of Justin Wastewater Model Update.stsw
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CO-239	125	634.00	126	633.00	179.5	0.006	8.0	0.013	0.99	0.0108	13.3
CO-240	364	712.00	2	688.00	890.5	0.027	8.0	0.013	3.12	0.0766	33.7
CO-241	124	634.50	125	634.00	212.1	0.002	8.0	0.013	0.66	0.0072	9.5
CO-242	365	714.00	364	712.00	276.5	0.007	8.0	0.013	1.83	0.0598	22.2
CO-243	123	635.37	126	633.00	321.6	0.007	8.0	0.013	1.05	0.0090	12.6
CO-244	366	715.00	365	714.00	306.0	0.003	8.0	0.013	1.03	0.0220	17.9
CO-245	122	635.00	127	632.00	178.5	0.017	8.0	0.013	0.84	0.0018	11.0
CO-246	367	726.00	366	715.00	807.7	0.014	8.0	0.013	1.63	0.0194	13.4
CO-247	121	635.41	127	632.00	173.3	0.020	8.0	0.013	0.89	0.0018	11.0
CO-248	368	700.00	7	694.00	460.6	0.013	8.0	0.013	2.16	0.0528	30.8
CO-249	120	635.00	128	631.00	150.1	0.027	8.0	0.013	1.40	0.0054	12.7
CO-250	369	718.00	368	700.00	841.0	0.021	8.0	0.013	1.88	0.0185	15.5
CO-251	119	634.00	126	633.00	500.8	0.002	8.0	0.013	0.62	0.0072	13.5
CO-252	370	713.00	368	700.00	1,071.5	0.012	8.0	0.013	1.70	0.0255	16.5
CO-253	118	627.79	117	626.32	289.7	0.005	8.0	0.013	0.55	0.0018	3.9
CO-254	371	700.00	7	694.00	1,023.4	0.006	8.0	0.013	1.99	0.1038	35.2
CO-255	117	626.32	116	618.45	198.6	0.040	6.0	0.013	1.19	0.0018	13.4
CO-256	372	711.50	371	700.00	310.2	0.037	8.0	0.013	2.85	0.0387	22.4
CO-257	115	621.81	116	618.45	445.2	0.008	6.0	0.013	1.54	0.0283	21.1
CO-258	373	723.00	372	711.50	1,099.7	0.010	8.0	0.013	1.56	0.0229	14.7
CO-259	114	623.31	115	621.81	233.6	0.006	6.0	0.013	1.33	0.0213	19.4
CO-260	374	713.00	372	711.50	582.4	0.003	8.0	0.013	0.80	0.0123	14.3
CO-261	113	628.33	114	623.31	342.6	0.015	6.0	0.013	1.41	0.0097	15.1
CO-262	421	703.00	371	700.00	712.0	0.004	8.0	0.013	1.44	0.0510	24.8
CO-263	375	728.00	421	703.00	1,201.3	0.021	8.0	0.013	2.42	0.0440	19.6
CO-264	1	698.09	376	696.53	355.3	0.004	8.0	0.013	1.77	0.1003	33.9
CO-265	112	615.01	111	611.01	237.9	0.017	6.0	0.013	1.59	0.0123	15.7
CO-266	420	703.53	376	696.53	605.5	0.012	8.0	0.013	2.28	0.0730	30.5
CO-267	377	706.51	420	703.53	298.4	0.010	8.0	0.013	1.98	0.0537	21.3
CO-268	111	611.01	110	608.70	275.6	0.008	6.0	0.013	1.48	0.0220	25.3

2024 City of Justin Wastewater Model Update.stsw
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CO-269	378	713.85	377	706.51	733.8	0.010	8.0	0.013	1.64	0.0282	16.9
CO-270	110	608.70	109	604.00	344.3	0.014	6.0	0.013	2.48	0.0705	30.1
CO-271	379	714.15	377	706.51	764.5	0.010	8.0	0.013	1.59	0.0255	16.6
CO-272	380	719.51	378	713.85	565.7	0.010	8.0	0.013	1.11	0.0079	10.8
CO-273	109	604.00	Meadowl ands LS	575.00	387.8	0.075	6.0	0.013	4.51	0.0705	25.4
CO-275	116	618.45	108	614.00	188.1	0.024	6.0	0.013	2.38	0.0318	23.3
CO-276	376	696.53	381	694.75	339.3	0.005	8.0	0.013	2.21	0.1734	43.5
CO-277	108	614.00	110	608.70	259.6	0.020	6.0	0.013	2.45	0.0415	28.8
CO-278	381	694.75	382	703.00	251.3	0.033	8.0	0.013	2.76	0.0405	33.0
CO-279	107	614.58	110	608.70	315.6	0.019	6.0	0.013	1.40	0.0070	21.4
CO-280	419	707.83	382	703.00	385.6	0.013	8.0	0.013	1.97	0.0405	15.8
CO-281	383	719.54	419	707.83	1,171.0	0.010	8.0	0.013	1.67	0.0299	15.8
CO-282	418	708.77	381	694.75	473.6	0.030	8.0	0.013	2.71	0.0422	33.2
CO-283	384	719.84	418	708.77	1,106.7	0.010	8.0	0.013	1.65	0.0290	15.9
CO-284	385	685.81	341	679.33	484.7	0.013	12.0	0.013	4.53	0.7637	59.9
CO-285	105	622.00	104	617.00	414.5	0.012	8.0	0.013	1.22	0.0088	8.6
CO-286	386	687.25	385	685.81	641.4	0.002	12.0	0.013	2.27	0.6863	51.7
CO-287	104	617.00	103	615.00	206.6	0.010	8.0	0.013	1.26	0.0123	13.3
CO-288	387	688.61	386	687.25	444.9	0.003	12.0	0.013	2.42	0.5502	51.7
CO-289	103	615.00	102	609.00	1,139.8	0.005	8.0	0.013	1.42	0.0370	16.8
CO-290	388	693.02	390	692.34	257.6	0.003	12.0	0.013	2.23	0.4959	52.6
CO-291	102	609.00	101	608.00	117.7	0.008	8.0	0.013	1.68	0.0370	16.3
CO-292	389	710.00	388	693.02	1,344.6	0.013	8.0	0.013	1.83	0.0308	41.3
CO-293	101	608.00	100	607.00	152.9	0.007	8.0	0.013	1.53	0.0370	19.8
CO-294	100	607.00	99	604.00	533.6	0.006	8.0	0.013	1.75	0.0695	24.3
CO-295	99	604.00	98	600.83	341.8	0.009	8.0	0.013	2.24	0.0889	30.4
CO-296	390	692.34	387	692.22	161.6	0.001	12.0	0.013	1.37	0.4959	48.3
CO-297	98	600.83	97	600.00	397.2	0.002	8.0	0.013	1.34	0.0959	31.5
CO-298	391	695.51	388	693.02	1,082.9	0.002	12.0	0.013	2.08	0.4651	45.2

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CO-299	97	600.00	96	597.00	421.0	0.007	8.0	0.013	2.14	0.1047	28.3
CO-300	392	696.28	391	695.51	286.3	0.003	12.0	0.013	2.17	0.4378	43.6
CO-301	96	597.00	95	592.25	458.7	0.010	8.0	0.013	2.50	0.1144	27.3
CO-302	393	696.97	392	696.28	250.7	0.003	12.0	0.013	2.16	0.4184	41.3
CO-303	95	592.25	Meadowl ands LS	575.00	518.3	0.033	8.0	0.013	3.78	0.1144	24.1
CO-304	394	697.75	393	696.97	281.7	0.003	12.0	0.013	2.14	0.3991	40.1
CO-305	106	619.36	94	614.07	439.9	0.012	6.0	0.013	1.59	0.0185	17.9
CO-306	395	700.29	394	697.75	850.9	0.003	10.0	0.013	1.69	0.1461	38.4
CO-307	94	614.07	100	607.00	458.6	0.015	6.0	0.013	1.92	0.0255	25.2
CO-308	396	702.14	395	700.29	698.9	0.003	10.0	0.013	1.34	0.0766	25.7
CO-309	397	702.95	396	702.14	269.9	0.003	10.0	0.013	1.34	0.0651	20.7
CO-310	93	617.16	99	604.00	836.4	0.016	6.0	0.013	1.68	0.0158	24.6
CO-311	92	615.00	91	604.57	476.8	0.022	6.0	0.013	1.43	0.0062	10.7
CO-312	398	731.00	397	702.95	849.2	0.033	8.0	0.013	2.36	0.0238	18.7
CO-313	91	604.57	96	597.00	216.8	0.035	6.0	0.013	1.92	0.0097	25.2
CO-314	90	635.00	89	634.00	343.2	0.003	8.0	0.013	1.81	0.1849	41.7
CO-315	399	707.85	395	700.29	435.5	0.017	8.0	0.013	2.60	0.0695	29.6
CO-316	89	634.00	88	630.05	411.2	0.010	8.0	0.013	2.80	0.1849	35.3
CO-317	88	630.05	87	625.84	523.1	0.008	8.0	0.013	2.62	0.1849	36.1
CO-318	400	709.00	399	707.85	271.3	0.004	8.0	0.013	1.58	0.0695	23.7
CO-319	87	625.84	189	620.00	375.6	0.016	8.0	0.013	3.32	0.1849	68.5
CO-320	86	669.00	179	665.00	760.4	0.005	8.0	0.013	0.70	0.0036	48.2
CO-321	85	675.00	177	668.00	890.7	0.008	10.0	0.013	3.41	0.5287	69.2
CO-322	401	723.00	394	697.75	1,998.2	0.013	8.0	0.013	3.32	0.2424	51.0
CO-323	84	682.00	85	675.00	564.1	0.012	8.0	0.013	4.02	0.5146	59.3
CO-324	402	741.00	401	723.00	1,418.8	0.013	8.0	0.013	2.65	0.1087	35.4
CO-325	83	686.00	84	682.00	209.2	0.019	8.0	0.013	4.38	0.3834	58.8
CO-326	403	744.00	402	741.00	790.9	0.004	8.0	0.013	1.47	0.0620	26.2
CO-327	82	686.50	83	686.00	151.9	0.003	8.0	0.013	2.23	0.3808	62.6

2024 City of Justin Wastewater Model Update.stsw
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CO-328	404	755.00	403	744.00	836.8	0.013	8.0	0.013	1.61	0.0194	18.0
CO-329	81	687.00	82	686.50	133.5	0.004	8.0	0.013	2.34	0.3755	68.8
CO-330	405	753.00	403	744.00	588.3	0.015	8.0	0.013	1.66	0.0185	17.9
CO-331	80	688.00	83	686.00	320.5	0.006	8.0	0.013	0.67	0.0026	29.5
CO-332	406	732.00	401	723.00	1,155.9	0.008	8.0	0.013	2.36	0.1338	37.0
CO-333	407	736.00	406	732.00	664.2	0.006	8.0	0.013	2.02	0.1056	29.8
CO-334	78	661.50	79	659.00	324.9	0.008	8.0	0.013	2.26	0.1153	29.5
CO-335	408	737.00	407	736.00	270.9	0.004	8.0	0.013	1.44	0.0598	26.1
CO-336	77	662.00	78	661.50	50.3	0.010	8.0	0.013	2.44	0.1100	28.7
CO-337	409	757.00	408	737.00	1,140.8	0.018	8.0	0.013	2.12	0.0343	19.8
CO-338	76	665.00	77	662.00	485.5	0.006	8.0	0.013	1.54	0.0405	22.9
CO-339	410	755.00	408	737.00	1,141.4	0.016	8.0	0.013	1.86	0.0255	18.7
CO-340	75	669.00	76	665.00	475.3	0.008	8.0	0.013	1.63	0.0343	16.5
CO-341	411	740.00	397	702.95	1,072.5	0.035	8.0	0.013	2.83	0.0414	20.8
CO-342	74	672.00	75	669.00	401.4	0.007	8.0	0.013	1.46	0.0273	14.8
CO-346	413	711.00	394	697.75	639.1	0.021	8.0	0.013	1.56	0.0106	34.0
CO-347	414	705.00	393	696.97	610.2	0.013	8.0	0.013	1.61	0.0194	36.3
CO-348	415	702.50	392	696.28	607.9	0.010	8.0	0.013	1.47	0.0194	37.3
CO-349	73	698.00	72	696.00	255.4	0.008	6.0	0.013	0.83	0.0035	9.6
CO-350	416	715.47	4	703.96	1,151.0	0.010	8.0	0.013	1.77	0.0370	17.8
CO-351	72	696.00	71	682.00	576.3	0.024	6.0	0.013	1.68	0.0097	13.9
CO-352	417	712.02	3	700.75	1,127.0	0.010	8.0	0.013	1.73	0.0334	17.9
CO-353	71	682.00	70	674.00	390.1	0.021	8.0	0.013	1.89	0.0202	13.3
CO-354	422	639.60	203	639.30	133.7	0.002	8.0	0.013	0.42	0.0018	76.1
CO-355	70	674.00	69	672.22	263.7	0.007	8.0	0.013	1.45	0.0299	17.8
CO-356	423	643.00	424	625.81	1,116.5	0.015	8.0	0.013	2.83	0.1080	60.0
CO-357	205	613.90	425	612.00	43.1	0.044	8.0	0.013	4.23	0.1188	23.9
CO-358	426	606.67	427	605.83	294.4	0.003	36.0	0.013	5.22	13.2791	54.6
CO-359	427	605.83	428	604.98	300.8	0.003	36.0	0.013	5.20	13.2791	52.0
CO-360	68	691.50	69	672.22	1,223.9	0.016	6.0	0.013	1.73	0.0176	22.0

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

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CO-361	428	604.98	429	604.14	212.1	0.004	36.0	0.013	5.91	13.2791	58.3
CO-362	429	604.14	430	603.75	203.9	0.002	36.0	0.013	4.47	13.2791	69.6
CO-363	67	686.00	66	671.00	1,226.7	0.012	6.0	0.013	1.59	0.0176	23.0
CO-364	430	603.75	431	603.57	84.1	0.002	36.0	0.013	4.77	14.6083	73.3
CO-365	431	603.57	432	603.16	317.5	0.001	36.0	0.013	3.86	14.6083	73.4
CO-366	69	672.22	66	671.00	273.5	0.004	8.0	0.013	1.46	0.0502	21.7
CO-367	66	671.00	77	662.00	275.9	0.033	8.0	0.013	3.24	0.0695	25.4
CO-368	432	603.16	433	602.41	556.6	0.001	36.0	0.013	3.93	14.6083	61.7
CO-369	433	602.41	Justin Treatme nt Plant	596.00	189.0	0.034	36.0	0.013	13.25	14.6083	40.0
CO-370	65	684.00	208	681.50	426.9	0.006	8.0	0.013	1.34	0.0273	17.4
CO-371	434	688.76	438	670.33	2,927.0	0.006	21.0	0.013	5.37	4.5387	58.2
CO-372(1)	438	670.33	460	664.17	1,000.5	0.006	21.0	0.013	5.51	5.2358	62.9
CO-372(2)	460	664.17	435	635.85	4,596.4	0.006	21.0	0.013	5.69	6.1263	72.4
CO-373	64	686.50	65	684.00	448.6	0.006	8.0	0.013	1.14	0.0167	13.1
CO-374	435	635.85	436	628.55	1,213.7	0.006	30.0	0.013	6.57	10.8931	62.5
CO-375	63	691.00	64	686.50	258.3	0.017	8.0	0.013	1.20	0.0053	8.9
CO-376	436	628.55	437	627.00	630.3	0.002	30.0	0.013	4.63	10.9092	62.6
CO-377	62	688.00	64	686.50	95.2	0.016	8.0	0.013	0.82	0.0018	7.6
CO-378(1)	437	627.00	473	626.31	134.1	0.005	30.0	0.013	6.21	10.9092	55.6
CO-378(2)	473	626.31	323	619.50	1,317.2	0.005	30.0	0.013	6.21	10.9419	62.0
CO-379	61	691.00	60	686.00	484.7	0.010	8.0	0.013	1.24	0.0106	10.2
CO-380	240	702.58	337	706.45	884.6	0.004	8.0	0.013	1.74	0.0950	30.6
CO-381	60	686.00	59	683.50	313.1	0.008	8.0	0.013	1.35	0.0194	12.1
CO-382	280	606.77	Timberb rooks LS	606.50	58.8	0.005	15.0	0.013	3.66	1.5622	51.4
CO-383	59	683.50	208	681.50	258.1	0.008	8.0	0.013	1.39	0.0220	16.3
CO-384	439	682.54	441	675.45	178.5	0.040	15.0	0.013	6.15	0.6204	24.6
CO-385	441	675.45	438	670.33	345.8	0.015	15.0	0.013	4.34	0.6204	57.6

2024 City of Justin Wastewater Model Update.stsw
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CO-386	58	689.97	60	686.00	174.0	0.023	8.0	0.013	0.94	0.0018	7.6
CO-387	440	686.12	439	682.54	300.9	0.012	15.0	0.013	4.02	0.6204	27.9
CO-388	57	681.00	56	668.31	413.5	0.031	8.0	0.013	1.83	0.0114	7.7
CO-390	56	668.31	55	665.37	237.4	0.012	8.0	0.013	1.35	0.0114	10.8
CO-392	54	678.00	55	665.37	306.6	0.041	8.0	0.013	1.88	0.0088	10.3
CO-394	53	677.22	52	666.26	424.4	0.026	8.0	0.013	1.76	0.0123	10.1
CO-396	51	672.00	52	666.26	215.7	0.027	8.0	0.013	1.14	0.0026	7.6
CO-398	50	681.00	49	674.00	385.5	0.018	8.0	0.013	1.49	0.0106	9.3
CO-401	49	674.00	225	669.14	252.1	0.019	8.0	0.013	1.68	0.0141	22.9
CO-408	47	676.59	46	659.46	1,248.2	0.014	8.0	0.013	1.91	0.0326	19.3
CO-410	48	677.33	45	651.86	997.6	0.026	8.0	0.013	2.01	0.0185	18.2
CO-413	46	659.46	344	670.00	702.0	0.015	8.0	0.013	1.75	0.0220	17.9
CO-414	343	670.00	45	651.86	985.0	0.018	8.0	0.013	1.92	0.0238	18.9
CO-416	44	629.32	204	627.53	373.1	0.005	8.0	0.013	2.24	0.2086	41.3
CO-418	45	651.86	43	630.25	914.1	0.024	8.0	0.013	3.08	0.0854	33.8
CO-420	43	630.25	44	629.32	188.0	0.005	8.0	0.013	2.27	0.2086	42.9
CO-422	52	666.26	42	647.00	256.6	0.075	8.0	0.013	2.81	0.0167	8.6
CO-424	42	647.00	41	639.00	365.7	0.022	8.0	0.013	1.84	0.0167	17.5
CO-426	312	645.00	40	641.95	208.3	0.015	8.0	0.013	2.02	0.0361	14.7
CO-428	40	641.95	39	622.00	373.0	0.053	8.0	0.013	3.17	0.0361	22.8
CO-430	39	622.00	205	613.90	413.0	0.020	8.0	0.013	3.18	0.1188	25.9
CO-431	38	621.00	93	617.16	148.3	0.026	6.0	0.013	1.15	0.0026	10.7
CO-432	37	621.00	106	619.36	208.5	0.008	6.0	0.013	0.68	0.0018	10.9
CO-433	36	624.00	108	614.00	405.8	0.025	6.0	0.013	1.60	0.0079	17.8
CO-434	35	624.00	106	619.36	483.3	0.010	6.0	0.013	1.18	0.0088	13.9
CO-435	34	626.99	112	615.01	303.4	0.039	12.0	0.013	1.64	0.0070	5.5
CO-436	33	662.09	183	649.00	1,015.0	0.013	6.0	0.013	1.45	0.0123	56.7
CO-437	32	669.74	182	650.00	1,097.2	0.018	6.0	0.013	1.76	0.0158	57.6
CO-438	31	649.81	171	646.05	291.6	0.013	6.0	0.013	0.99	0.0035	10.7
CO-439	30	641.00	172	639.48	265.3	0.006	6.0	0.013	0.76	0.0036	12.6

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CO-440	29	658.29	28	638.00	776.5	0.026	6.0	0.013	1.58	0.0071	10.7
CO-441	28	638.00	27	637.33	55.4	0.012	6.0	0.013	1.28	0.0089	10.8
CO-442	27	637.33	167	629.20	165.0	0.049	6.0	0.013	2.09	0.0089	55.7
CO-443	26	656.00	185	645.00	726.4	0.015	6.0	0.013	1.57	0.0132	56.9
CO-444	25	639.27	173	626.80	539.7	0.023	6.0	0.010	1.94	0.0088	55.6
CO-445	24	633.00	131	628.00	139.7	0.036	8.0	0.013	1.11	0.0018	17.2
CO-446	23	632.98	129	630.50	282.6	0.009	8.0	0.013	0.68	0.0018	14.6
CO-447	160	635.27	12th Street LS (Downto wn)	622.00	328.5	0.040	8.0	0.013	3.39	0.0626	17.4
CO-448(1)	22	651.05	477	648.99	743.5	0.003	10.0	0.013	2.35	0.5987	71.5
CO-448(2)	477	648.99	292	647.93	381.5	0.003	10.0	0.013	2.40	0.6819	76.3
CO-449	21	641.91	358	641.44	147.6	0.003	15.0	0.013	3.14	1.4756	59.1
CO-450	358	641.44	202	640.44	347.3	0.003	15.0	0.013	3.04	1.5381	62.5
CO-452	20	696.00	19	693.50	751.8	0.003	8.0	0.013	2.18	0.3271	56.6
CO-453	19	693.50	18	688.75	321.3	0.015	8.0	0.013	3.82	0.3271	54.5
CO-454	17	660.12	359	651.40	1,003.1	0.009	8.0	0.013	2.58	0.1584	36.2
CO-455	359	651.40	202	640.44	551.3	0.020	8.0	0.013	3.68	0.1945	69.0
CO-456	18	688.75	81	687.00	325.0	0.005	8.0	0.013	2.71	0.3755	62.9
CO-461(1)	16	683.00	475	673.00	1,603.5	0.006	8.0	0.013	2.31	0.1644	45.3
CO-461(2)	475	673.00	342	658.95	2,244.4	0.006	8.0	0.013	2.85	0.3659	61.9
CO-462	320	648.58	21	641.91	866.7	0.008	12.0	0.013	4.34	1.4756	68.2
CO-464	14	677.74	285	665.28	1,010.6	0.012	8.0	0.013	1.46	0.0150	12.5
CO-465	79	659.00	12th Street LS (Private)	645.00	403.8	0.035	8.0	0.013	3.92	0.1223	24.8
CO-466	13	636.61	12	626.00	1,177.1	0.009	8.0	0.013	0.85	0.0036	6.1
CO-467	12	626.00	114	623.31	227.5	0.012	8.0	0.013	1.14	0.0072	10.5

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CO-468	11	635.83	12	626.00	1,238.6	0.008	8.0	0.013	0.81	0.0036	6.2
CO-469	10	611.22	9	600.00	731.6	0.015	10.0	0.013	1.76	0.0240	9.0
CO-470	9	600.00	8	597.00	587.0	0.005	18.0	0.013	1.10	0.0240	28.0
CO-471	8	597.00	Justin Treatme nt Plant	596.00	132.8	0.008	24.0	0.013	5.14	3.0484	35.8
CO-474	425	609.57	426	606.67	473.4	0.006	30.0	0.013	6.90	13.0037	63.1
CO-475	189	620.00	8	597.00	298.0	0.077	18.0	0.013	12.11	3.0244	41.2
CO-476	7	694.00	6	692.50	512.8	0.003	8.0	0.013	1.73	0.1566	41.5
CO-477	6	692.50	5	689.00	1,067.3	0.003	8.0	0.013	1.81	0.1566	43.9
CO-478	4	703.96	1	698.09	835.9	0.007	8.0	0.013	1.74	0.0519	24.6
CO-479	5	689.00	2	688.00	386.2	0.003	8.0	0.013	1.71	0.1778	45.4
CO-480	2	688.00	336	677.25	291.3	0.037	8.0	0.013	4.96	0.2543	35.8
CO-481	3	700.75	1	698.09	564.1	0.005	8.0	0.013	1.47	0.0484	25.1
CO-482	381	694.75	353	694.00	162.1	0.005	8.0	0.013	2.33	0.2561	59.0
CO-483	464	718.00	456	673.00	3,406.4	0.013	15.0	0.013	6.64	3.5921	80.8
CO-484(1)	443	713.00	461	703.00	1,147.3	0.009	18.0	0.013	5.63	3.3686	61.3
CO-484(2) (1)	461	703.00	468	694.90	932.8	0.009	18.0	0.013	5.85	3.9861	82.0
CO-484(2) (2)	468	694.90	434	688.76	708.0	0.009	15.0	0.013	5.47	4.3357	91.7
CO-485	444	798.00	445	733.00	3,754.3	0.017	8.0	0.013	4.68	0.5721	83.4
CO-486	445	733.00	443	713.00	2,582.5	0.008	15.0	0.013	5.13	2.8993	69.5
CO-487(1)	446	787.00	466	772.00	1,496.7	0.010	8.0	0.013	1.82	0.0405	29.2
CO-487(2)	466	772.00	447	770.00	511.4	0.004	8.0	0.013	1.99	0.1754	46.2
CO-488	447	770.00	456	673.00	7,808.9	0.012	8.0	0.013	3.62	0.3401	75.5
CO-489	448	718.00	461	703.00	2,042.7	0.007	8.0	0.013	3.16	0.4363	79.4
CO-490	455	758.00	453	728.00	3,435.9	0.009	10.0	0.013	4.21	1.1268	85.6
CO-491	450	750.00	445	733.00	4,077.0	0.004	12.0	0.013	3.18	1.0559	74.1
CO-492	451	688.00	452	648.00	3,066.6	0.013	15.0	0.013	6.17	2.6405	71.8

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-493(1)	452	648.00	463	638.00	2,294.5	0.004	18.0	0.013	4.32	3.3993	65.6
CO-493(2)	463	638.00	479	628.00	2,274.3	0.004	21.0	0.013	4.59	4.1752	56.9
CO-495	453	728.00	Soutwest ETJ LS	723.00	1,858.5	0.003	10.0	0.013	4.46	1.5732	91.6
CO-496	454	728.00	448	718.00	2,028.8	0.005	8.0	0.013	2.62	0.3762	59.8
CO-497	449	791.00	455	758.00	3,220.1	0.010	8.0	0.013	3.90	0.6410	79.9
CO-498	456	673.00	435	635.85	2,699.9	0.014	15.0	0.013	7.02	4.5837	92.6
CO-499	457	673.00	436	628.55	1,440.5	0.031	8.0	0.013	2.04	0.0161	55.3
CO-500	458	688.00	456	673.00	1,524.1	0.010	8.0	0.013	3.49	0.4116	78.2
CO-501	459	610.50	281	607.50	710.1	0.004	12.0	0.013	1.97	0.1737	23.1
CO-502	462	673.00	463	638.00	2,294.2	0.015	8.0	0.013	3.57	0.2464	71.5
CO-503	442	768.00	464	718.00	5,429.8	0.009	15.0	0.013	5.71	3.5921	75.2
CO-504	466	772.00	465	779.00	1,610.0	0.004	8.0	0.013	1.92	0.1349	38.2
CO-505	467	718.00	468	694.90	1,438.6	0.016	8.0	0.013	4.01	0.3496	75.9
CO-506	469	688.00	386	687.25	1,306.5	0.001	12.0	0.013	0.90	0.1361	45.7
CO-507	471	678.00	438	670.33	239.6	0.032	12.0	0.013	3.15	0.0766	57.0
CO-508	470	665.00	342	658.95	1,684.8	0.004	8.0	0.013	1.92	0.1728	55.3
CO-509	472	678.00	176	669.00	1,604.9	0.006	10.0	0.013	3.13	0.6247	63.4
CO-510	474	627.00	473	626.31	61.0	0.011	12.0	0.013	1.69	0.0327	84.9
CO-511	476	649.50	477	648.99	569.4	0.001	8.0	0.013	0.95	0.0832	68.4
CO-512	478	617.00	484	590.00	4,651.4	0.006	10.0	0.013	3.44	0.9312	85.8
CO-513	479	628.00	480	623.00	1,166.6	0.004	21.0	0.013	4.55	4.1752	61.1
CO-514	480	623.00	481	600.00	5,501.6	0.004	21.0	0.013	4.68	5.0182	65.6
CO-515	481	600.00	482	593.00	1,674.0	0.004	21.0	0.013	4.70	5.1182	83.0
CO-516	482	593.00	North ETJ	592.00	133.2	0.008	15.0	0.013	6.57	5.2116	94.7
CO-517	483	600.00	482	593.00	913.7	0.008	8.0	0.013	2.12	0.0934	63.0
CO-519	485	604.00	484	590.00	2,998.4	0.005	12.0	0.013	3.46	1.3029	84.7
CO-520	484	590.00	Denton Creek SS	589.00	171.3	0.006	12.0	0.013	4.40	2.2341	89.7

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Length (Scaled) (ft)	Slope (Calculated) (ft/ft)	Diameter (in)	Manning's n	Velocity (ft/s)	Flow (MGD)	Depth/Rise (%)
CO-521	486	619.00	487	615.00	1,826.2	0.002	12.0	0.013	1.78	0.2780	30.9
CO-522	487	615.00	280	606.77	274.1	0.030	12.0	0.013	4.52	0.2780	46.7

2024 City of Justin Wastewater Model Update.stsw
Active Scenario: Infrastructure Upgrades in Future Conditions

FlexTable: Outfall Table

Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Flow (Total Out) (MGD)
Meadowlands LS	600.74	575.00	0.1849
12th Street LS (Private)	666.05	645.00	0.1223
12th Street LS (Downtown)	637.00	622.00	0.1579
Timberbrooks LS	626.50	606.50	1.5622
Justin Treatment Plant	616.27	596.00	17.6567
Soutwest ETJ LS	730.00	723.00	1.5732
Denton Creek SS	600.00	589.00	2.2341
North ETJ	620.00	592.00	5.2116



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 1. (ACTION ITEMS)

Title: Consider approving Resolution 695-24 for execution of a financial agreement with the Texas Water Development Board for the next phase of funding in connection with the issuance of \$2,500,000 in principal amount of combination tax and revenue certificates of obligation; and take appropriate action.

Department: Administration

Contact: Josh Armstrong, Finance Director

Recommendation:

Approve resolution and execution of the financing agreement with the Texas Water Development Board for the next phase of funding in connection with the issuance of \$2,500,000 in principal amount of combination tax and revenue certificates of obligation.

Background:

The agenda item is for approval of the financing agreement with the Texas Water Development Board to issue the certificates of obligation through the SWIFT program.

As a reminder, the State sells the COs at their AAA credit rating and then subsidizes the interest for the repayment by 50% due to our designated rural status.

City Attorney Review: Yes

Attachments:

1. Resolution 695-24 Finance Agreement
2. Justin 51045_Financing Agreement SWIFT 2024_DRAFT.07.23.2024
3. SWIFT Financing Agreement Attachment B Justin 2024
4. Justin Series 2024 TWDB SWIFT CO Timetable 080124

RESOLUTION NO. 695-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS, APPROVING A FINANCE AGREEMENT BETWEEN CITY OF JUSTIN AND TEXAS WATER DEVELOPMENT BOARD.

WHEREAS, the TWDB adopted Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072, 20-062, and 21-084 (Attachment A, referred to as the Resolution) on July 20, 2017 making a multi-year commitment to the City for financial assistance in the amount of \$9,700,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT) administered by the TWDB; and

WHEREAS, the City closed on the 2017 portion of the commitment in the amount of \$2,400,00; and

WHEREAS, at its July 22, 2019 meeting the TWDB, through Resolution No. 19-072, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 20-062, to extend the City's Annual Loan Closing Schedule for the 2019 commitment and 2021 commitment; and

WHEREAS, at its July 23, 2020 meeting the TWDB, through Resolution No. 20-062, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 19-072, to extend the City's Annual Loan Closing Schedule for the 2022 commitment; and

WHEREAS, at its July 22, 2021 meeting the TWDB, through Resolution No. 21-084, amended TWDB Resolution 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, to modify Annual Loan Closing Schedule to combine and redistribute the closing amounts for the City's multi-year commitments from 2021 to 2024; and

WHEREAS, through this Agreement, the City intends to sell to the TWDB the City's \$2,500,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, Proposed Series 2024 (City's Bonds) for the TWDB's financial assistance from the SWIRFT, as further described in Attachment B; and

WHEREAS, the SWIRFT is funded in part with proceeds of the expected issuance of

TWDB's revenue bonds (SWIRFT Bonds), issued under authority of Texas Water Code §§ 15.472 and 15.475, and Texas Constitution, Article III, Section 49-d-13; and

WHEREAS, the SWIRFT Bonds are additionally secured by money made available under the terms of a bond enhancement agreement executed under authority of Texas Water Code §§ 15.434 and 15.435, and Texas Constitution, Article III, Section 49-d-12; and

WHEREAS, the SWIRFT is funded, in part, with money received as repayment of financial assistance provided from the SWIRFT, under Texas Water Code § 15.472, which is used to pay the principal and interest on the SWIRFT Bonds, under Texas Water Code § 15.474, and Texas Constitution, Article III, Section 49-d-13(d) and (f); and

WHEREAS, the Resolution provides that funding the commitment is contingent on future sales of SWIRFT Bonds designated by the TWDB; and

WHEREAS, the TWDB intends to provide financial assistance from the SWIRFT to the City with proceeds of SWIRFT Bonds designated by the TWDB; and

WHEREAS, the TWDB and the City desire to enter into this Agreement to set forth the obligations of the Parties with respect to the TWDB providing financial assistance to the City consistent with the desire of the TWDB to issue SWIRFT Bonds to provide money for the SWIRFT.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreement herein contained, the sufficiency of which are hereby acknowledged, and upon and subject to the terms and conditions hereinafter set forth.

APPROVED THIS THE 8TH DAY OF AUGUST, 2024.

ATTEST:

Amy M. Piukana, City Secretary

APPROVED:

James Clark, Mayor

APPROVED AS TO FORM:

City Attorney



FINANCING AGREEMENT

This FINANCING AGREEMENT (Agreement) is entered into between the TEXAS WATER DEVELOPMENT BOARD (TWDB), an agency of the State of Texas, and the City of Justin (City). The TWDB and the City may be referred to as the “Party” or “Parties” in this Agreement.

RECITALS

WHEREAS, the TWDB adopted Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072, 20-062, and 21-084 (Attachment A, referred to as the Resolution) on July 20, 2017 making a multi-year commitment to the City for financial assistance in the amount of \$9,700,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT) administered by the TWDB; and

WHEREAS, the City closed on the 2017 portion of the commitment in the amount of \$2,400,00; and

WHEREAS, at its July 22, 2019 meeting the TWDB, through Resolution No. 19-072, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 20-062, to extend the City’s Annual Loan Closing Schedule for the 2019 commitment and 2021 commitment; and

WHEREAS, at its July 23, 2020 meeting the TWDB, through Resolution No. 20-062, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 19-072, to extend the City’s Annual Loan Closing Schedule for the 2022 commitment; and

WHEREAS, at its July 22, 2021 meeting the TWDB, through Resolution No. 21-084, amended TWDB Resolution 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, to modify Annual Loan Closing Schedule to combine and redistribute the closing amounts for the City’s multi-year commitments from 2021 to 2024; and

WHEREAS, through this Agreement, the City intends to sell to the TWDB the City’s \$2,500,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, Proposed Series 2024 (City’s Bonds) for the TWDB’s financial assistance from the SWIRFT, as further described in Attachment B; and

WHEREAS, the SWIRFT is funded in part with proceeds of the expected issuance of

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TWDB's revenue bonds (SWIRFT Bonds), issued under authority of Texas Water Code §§ 15.472 and 15.475, and Texas Constitution, Article III, Section 49-d-13; and

WHEREAS, the SWIRFT Bonds are additionally secured by money made available under the terms of a bond enhancement agreement executed under authority of Texas Water Code §§ 15.434 and 15.435, and Texas Constitution, Article III, Section 49-d-12; and

WHEREAS, the SWIRFT is funded, in part, with money received as repayment of financial assistance provided from the SWIRFT, under Texas Water Code § 15.472, which is used to pay the principal and interest on the SWIRFT Bonds, under Texas Water Code § 15.474, and Texas Constitution, Article III, Section 49-d-13(d) and (f); and

WHEREAS, the Resolution provides that funding the commitment is contingent on future sales of SWIRFT Bonds designated by the TWDB; and

WHEREAS, the TWDB intends to provide financial assistance from the SWIRFT to the City with proceeds of SWIRFT Bonds designated by the TWDB; and

WHEREAS, the TWDB and the City desire to enter into this Agreement to set forth the obligations of the Parties with respect to the TWDB providing financial assistance to the City consistent with the desire of the TWDB to issue SWIRFT Bonds to provide money for the SWIRFT.

NOW, THEREFORE, for and in consideration of the promises and the mutual covenants contained in this Agreement, the TWDB and the City agree as follows:

AGREEMENT

SECTION 1. MUTUAL COMMITMENTS. As further described in the Resolution, the TWDB committed to the City and the City hereby commits to borrow from the TWDB an amount not to exceed \$2,500,000 from the SWIRFT to be evidenced by the issuance and delivery of City Bonds to the TWDB consistent with the terms and conditions described in this Agreement, Attachment A, Attachment B, and Attachment C.

SECTION 2. TRANSACTION SCHEDULE AND PRICING. By execution of this Agreement, the City acknowledges and represents that it has a current need for financial assistance from the TWDB and shall take all necessary steps to issue and deliver the City Bonds to evidence the commitment described in Section 1. The City further acknowledges and understands that the TWDB is entering into this Agreement for the sole purpose of issuing SWIRFT Bonds to fund the TWDB commitment described in the Resolution and in this Agreement. The City acknowledges that the SWIRFT Bonds, the subject of this Agreement, are being issued for the purpose of funding the City's requested financial assistance.

With respect to the City Bonds and the SWIRFT Bonds, the Parties agree to structure such

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public securities in a manner that will allow for substantially similar terms, redemption provisions, and related matters to allow the TWDB to timely pay the debt service on the SWIRFT Bonds. The foregoing notwithstanding, the TWDB consents to early redemption, or prepayment of the City Bonds, as provided for in this Agreement and the Resolution. The City Bonds may be prepaid by the City on any date beginning on or after the first scheduled interest payment date that occurs no earlier than 10 years from the dated date of the City Bonds. To confirm the terms of the City Bonds and the SWIRFT Bonds, the City shall execute this Agreement.

In order to mutually assure the performance of the Parties under this Agreement, the Parties agree that the issuance and delivery of the SWIRFT Bonds and the issuance and delivery of the City Bonds to TWDB shall occur not more than fifty-six (56) days apart as reflected in Attachment C. Notwithstanding the foregoing, the Parties intend and expect that the TWDB issue and deliver its SWIRFT Bonds approximately fourteen (14) days after execution of the TWDB's Bond Purchase Agreement or such date as may be mutually agreed to in Attachment C.

SECTION 3. BINDING COMMITMENT. The TWDB agrees to take all necessary steps to issue the SWIRFT Bonds for the purposes described in this Agreement and in the Resolution upon receipt of this Agreement, which shall be signed and delivered by the City to the Executive Administrator of the TWDB at least nineteen (19) days before the initiation of the pricing of the SWIRFT Bonds, as set forth in Attachment C. The City acknowledges that the schedule provided in Attachment C is a best estimate by the TWDB and is subject to change by the TWDB. The TWDB expressly reserves the right to modify Attachment C at any time and shall provide the City with an updated Attachment C as soon as practicable upon any modification; provided that, if such modification of Attachment C occurs before the initiation of pricing of the SWIRFT Bonds and such modification results in an earlier scheduled pricing date, no such modification of Attachment C may result in the City having fewer than five (5) days between the receipt of the modified schedule and the TWDB posting the Preliminary Official Statement for the SWIRFT Bonds.

SECTION 4. TERMINATION & BREACH OF AGREEMENT.

- A. The Parties agree that the City may terminate this Agreement in writing with no penalty at any time up to fourteen (14) days before the initiation of the pricing of the SWIRFT Bonds, as set forth in Attachment C.
- B. The City understands and agrees that the City may terminate this Agreement in writing between thirteen (13) days and six (6) days prior to the initiation of the pricing of the SWIRFT Bonds (currently estimated to occur on September 25, 2024) as set forth in Attachment C, provided the City agrees to reimburse the TWDB from lawfully available funds of the City for its proportional share of transaction costs incurred by the TWDB, such as, but not limited to, any fees or costs related to any rating agency, financial advisor, legal counsel, or other similar party or related costs pertaining to the SWIRFT

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Bonds in an amount not to exceed \$1,833 (Transaction Cost Payment). The City shall be obligated to pay such costs to the TWDB no later than March 5, 2025.

- C. The City understands and agrees that the City may terminate this Agreement in writing within five (5) days prior to the initiation of the pricing of the SWIRFT Bonds as set forth in Attachment C and no later than 9:00 am Central Standard Time on the day before the TWDB Bond Pricing, provided the City agrees to pay to the TWDB from lawfully available funds 1.0 percent of the amount of the commitment authorized in Section 1 of this Agreement (Pre-pricing Termination Payment), and additionally shall reimburse the TWDB from lawfully available funds of the City its Transaction Cost Payment. The City shall be obligated to pay such costs to the TWDB no later than March 5, 2025. The City understands and agrees that termination under this section will result in a total penalty amount of \$26,833.
- D. The City understands and agrees that TWDB would suffer and incur severe and irreparable damages if the City Bonds are not issued and delivered. Failure to issue the City Bonds by the date specified in Attachment C, as contemplated in this Agreement, shall be a breach of this Agreement and the City shall pay, from lawfully available funds of the City, a "Post-pricing Termination Payment" to the TWDB. The Post-pricing Termination Payment shall be an amount equal to 5.0 percent of the amount of the commitment authorized in Section 1 of this Agreement. The City shall pay the Post-pricing Termination Payment to the TWDB no later than March 5, 2025. The City shall also reimburse the TWDB from lawfully available funds of the City, its Transaction Cost Payment, plus the City's proportional share of the underwriters' discount incurred by the TWDB, no later than March 5, 2025. The City understands and agrees that failure by the City to issue the City Bonds by the date specified in Attachment C, will result in a total penalty amount pursuant to this section not to exceed \$138,711.

SECTION 5. AMORTIZATION STRUCTURE. The City shall provide the TWDB a maturity schedule in the form set forth in Attachment B at the time of execution of this Agreement. A final amortization structure will be required at least fourteen (14) days before the initiation of pricing of the SWIRFT Bonds in accordance with the provisions of this Agreement. The par amount included in Attachment B may be revised, subject to approval by the Executive Administrator of the TWDB, at any time up to the fourteenth (14) day before the initiation of pricing of the SWIRFT Bonds with no penalty. The final amortization schedule adopted by the City as included in the City's Private Placement Memorandum and Bond Resolution must reflect the final amortization structure set forth in Attachment B. The City must provide the TWDB a final amortization schedule at least seven (7) days prior to adoption of City's Bond Resolution. To the extent the amortization schedule included in Attachment B does not match the amortization schedule included in the finally adopted bonds, the City will be subject to the penalty described above in Section 4D.

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SECTION 6. CONTINGENCIES.

- A. The Parties agree that the TWDB's obligation to purchase the City's Bonds with the SWIRFT is contingent upon the TWDB receiving all legally required approvals for the issuance of the SWIRFT Bonds from the Legislative Budget Board, the Bond Review Board, and the Texas Attorney General. The TWDB's obligation to purchase the City's Bonds with the SWIRFT is also contingent upon the purchase and delivery of the SWIRFT Bond proceeds by the underwriters pursuant to the Bond Purchase Agreement relating to the SWIRFT Bonds.

Accordingly, if any contingency described in the preceding paragraph above is unmet, the TWDB, upon delivery of written notice thereof to the City, may extend or terminate this Agreement together with all of its obligations and duties without incurring any cost, fee, or penalty for either the TWDB or the City.

- B. The Parties agree that the City's obligation to issue and deliver the City Bonds is contingent upon approval by the Texas Attorney General of the City Bonds. The City agrees to use its best efforts to obtain approval by the Texas Attorney General of the City Bonds to satisfy the closing requirements set forth in Section 2 of this Agreement. To this end, the City agrees as follows:

- (1) City shall timely file the transcript of proceedings for the City Bonds with the Texas Attorney General in accordance with the schedule contained in Attachment C;
- (2) City shall comply with the requirements and conditions contained in the Resolution;
- (3) City shall provide the TWDB with a copy of the preliminary approval letter from the Texas Attorney General promptly upon receipt;
- (4) City shall provide the TWDB with a copy of its responses to the preliminary approval letter concurrently with the submission of such responses to the Texas Attorney General; and
- (5) City shall allow TWDB to brief the Texas Attorney General on any issues noted in the preliminary approval letter and initiate or participate in conferences with the Texas Attorney General related to the approval of the City Bonds.

Accordingly, if, after the City employs its best efforts to obtain approval by the Texas Attorney General and such approval cannot be obtained by the date specified in Attachment C, the TWDB, as a matter of law, at its sole discretion, may terminate this Agreement and upon termination the City shall pay, from any of its lawfully available funds, the Post-pricing Termination Payment no later than March 5, 2025, as provided in Section 4D. The City shall also reimburse the TWDB from lawfully available funds of the City its Transaction Cost Payment plus the City's proportional share of the underwriters' discount

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no later than March 5, 2025. The City understands and agrees that if the City does not obtain approval from the Texas Attorney General and issue its City Bonds by the date specified in Attachment C, it will be subject to a total penalty amount pursuant to this section not to exceed \$138,711.

SECTION 7. REDEMPTION OF OUTSTANDING DEBT. Proceeds of the City Bonds shall not be used, in whole or in part, to redeem outstanding bonds, commercial paper, or other obligations issued by the City. The City agrees that it will not take or fail to take any action that will cause the SWIRFT Bonds to be considered to be advance refunding bonds under Section 149(d) of the Internal Revenue Code of 1986, as amended.

SECTION 8. NOTICES. All notices, agreements or other communications required hereunder shall be given, and shall be deemed given, when delivered in writing to the address, facsimile or email of the identified Party or Parties set forth below:

Texas Water Development Board Development Fund Manager P.O. Box 13231 Austin, Texas 78711-3231 Telephone: (512) 475-4584 Facsimile: (512) 475-2053 E-mail:Finace-Department- Management@twbd.texas.gov	City of Justin Attn: City Manager 415 North College Avenue Justin, Texas 76247-9429 Telephone: (940) 648-2541 Facsimile: (940) 648-0091 E-mail: CityManager@cityofjustin.com
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SECTION 9. SEVERABILITY. In the event any provision of this Agreement shall be held illegal, invalid, or unenforceable by any court of competent jurisdiction, such holding shall not invalidate, render unenforceable, or otherwise affect any of its other provisions.

SECTION 10. AMENDMENTS, SUPPLEMENTS, AND MODIFICATIONS. Other than the changes allowed under Section 3 and Section 5, this Agreement may be amended, supplemented, or modified only in a writing executed by duly authorized representatives of the Parties.

SECTION 11. APPLICABLE LAW. This Agreement and any amendments shall be governed by and construed in accordance with the laws of the State of Texas.

SECTION 12. STATE AUDIT. By executing this Agreement and delivering the City Bonds, the City accepts the authority of the Texas State Auditor's Office to conduct audits and investigations in connection with all state funds received pursuant to this Agreement. The City shall comply with any directive from the Texas State Auditor and shall cooperate in any such investigation or audit. The City agrees to provide the Texas State Auditor with access to any information the Texas State Auditor considers relevant to the investigation or audit.

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SECTION 13. FORCE MAJEURE. Either Party to this Agreement may be excused from performance under this Agreement for any period when performance is prevented as the result of an act of God, strike, war, civil disturbance, or epidemic, provided that the Party experiencing the event of Force Majeure has prudently and promptly acted to take any and all steps that are within the Party's control to ensure performance and to shorten the duration of the event of Force Majeure. The Party suffering an event of Force Majeure shall provide notice of the event to the other Party as soon as practicable but not later than five business days after the event. Subject to this provision, such nonperformance shall not be deemed a breach or a ground for termination.

SECTION 14. EFFECTIVE DATE. This Agreement shall be effective as of the date of the last signature below.

SECTION 15. BINDING AGREEMENT. The execution of this Agreement has been authorized by the governing boards of both Parties. The individuals executing this Agreement have the legal authority to bind each respective Party to the terms and conditions of this Agreement. The respective commitments of the TWDB and the City set forth above shall be binding upon the TWDB and the City upon both Parties' execution of this Agreement.

[Remainder of Page Intentionally Left Blank]

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EXECUTED in multiple counterparts, each of which shall be deemed to be an original.

CITY OF JUSTIN

By: _____

Name: James Clark

Title: Mayor

Date: _____

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TEXAS WATER DEVELOPMENT BOARD

By: _____

Name: Bryan McMath

Title: Interim Executive Administrator

Date: _____

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ATTACHMENT A

TWDB RESOLUTION NO. 17-075, AS AMENDED BY TWDB RESOLUTION NOS. 19-072, 20-062, AND 21-084

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**A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
APPROVING AN APPLICATION FOR FINANCIAL ASSISTANCE TO THE CITY OF JUSTIN
IN THE FORM OF A MULTI-YEAR COMMITMENT
FROM THE STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS
THROUGH THE PROPOSED PURCHASE OF \$12,000,000 CITY OF JUSTIN, TEXAS TAX
AND SURPLUS REVENUE CERTIFICATES OF OBLIGATION,
PROPOSED SERIES 2017 THROUGH PROPOSED SERIES 2021**

(17-075)

WHEREAS, the City of Justin (City) has filed an application for financial assistance in the amount of \$12,000,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT) to finance the design and construction of certain water supply project(s) identified as Project No. 51045 (Project); and

WHEREAS, the City seeks financial assistance from the Texas Water Development Board (TWDB) in the form of a multi-year commitment through the TWDB's proposed purchase of \$12,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, Proposed Series 2017 through proposed series 2021, (together with all authorizing documents (Obligations)), all as is more specifically set forth in the application and in recommendations of the Executive Administrator's staff; and

WHEREAS, the City has offered a pledge of ad valorem taxes and surplus net revenues of the City's combined waterworks and sewer system as sufficient security for the repayment of the Obligations; and

WHEREAS, the commitment is approved for funding under the TWDB's pre-design funding option, and initial and future releases of funds are subject to 31 TAC § 363.1307; and

WHEREAS, as a rural political subdivision, the City qualifies for additional interest rate subsidization of up to 50 percent at the following levels: 50 percent for a term of 20 years, 33.50 percent for a term of 21 to 25 years, and 26.15 percent for a term of 26 to 30 years. The interest rate subsidy applicable to each proposed series will be set through each financing agreement executed between the TWDB and the City, pursuant to this Resolution; and

WHEREAS, these interest rate subsidies given above are based on assumptions necessary to generate an optimum debt service structure for the anticipated TWDB SWIRFT bond issuance, and are subject to modification as necessary to preserve and maintain the integrity of the SWIRFT Program; and

WHEREAS, the TWDB has carefully considered all matters required by law and in particular, whether the Project as set forth in the application meets the criteria

provided by Texas Water Code § 15.434(b) relating to a project for a rural political subdivision as defined by Texas Water Code § 15.992; and

WHEREAS, the TWDB hereby finds:

1. that the application and assistance applied for meet the requirements of Texas Water Code, Chapter 15, Subchapters G and H and 31 TAC Chapter 363, Subchapters A and M;
2. that the Project is a recommended water management strategy project in the State Water Plan adopted pursuant to Texas Water Code § 16.051, in accordance with Texas Water Code § 15.474(a);
3. that the City is exempt from requirements to adopt a water conservation program because the City's appropriation of surface water for municipal, industrial, and other uses is less than 1,000 acre-feet a year as required by Texas Water Code § 11.1271;
4. that the City satisfactorily completed all requests by the Executive Administrator or a regional planning group for information relevant to the Project, including a water infrastructure financing survey under Texas Water Code § 16.053(q), in accordance with 31 TAC § 363.1309(b)(2);
5. that the current water audit has been completed by the City and filed with the TWDB in accordance with Texas Water Code § 16.0121 and 31 TAC § 358.6;
6. that the City is a rural political subdivision as defined by Texas Water Code § 15.992;
7. that the City has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises and any applicable state law relating to contracting with historically underutilized businesses, in accordance with Texas Water Code § 15.435(h) and 31 TAC § 363.1309(b)(3); and
8. that the Executive Administrator issued a Categorical Exclusion on June 15, 2017, such findings being subject to the standard emergency discovery conditions for threatened and endangered species and cultural resources in the Project contract documents. The TWDB concurs with the environmental finding issued by the Executive Administrator.

NOW THEREFORE, based on these findings, the TWDB resolves as follows:

A commitment is made by the TWDB to the City of Justin for financial assistance in the amount of \$12,000,000 from the State Water Implementation Revenue Fund for Texas, to be evidenced by the TWDB's proposed purchase of

City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation as follows:

- a) \$2,400,000 Proposed Series 2017, to expire on December 31, 2017;
- b) \$2,400,000 Proposed Series 2019, to expire on December 31, 2019; and
- c) \$7,200,000 Proposed Series 2021, to expire on December 31, 2021.

Such commitment is conditioned as follows:

Standard Conditions:

- 1. this commitment is contingent on a future sale of bonds by the TWDB or on the availability of funds on hand;
- 2. this commitment is contingent upon the issuance of a written approving opinion of the Attorney General of the State of Texas stating that the City has complied with all of the requirements of the laws under which said Obligations were issued; that said Obligations were issued in conformity with the Constitution and laws of the State of Texas; and that said Obligations are valid and binding obligations of the City;
- 3. this commitment is contingent upon the City's continued compliance with all applicable laws, rules, policies and guidance as these may be amended from time to time to adapt to a change in law, in circumstances, or any other legal requirement;
- 4. this commitment is contingent upon the City executing a separate financing agreement, approved as to form and substance by the Executive Administrator, and submitting that executed agreement to the TWDB consistent with the terms and conditions described in the financing agreement;
- 5. the City shall use a paying agent/registrar in accordance with 31 TAC § 363.42(c)(2), and shall require the paying agent/registrar to provide a copy of all receipts documenting debt service payments to the TWDB and to the TWDB's designated Trustee;

The Following Conditions Must Be Included in the Obligations:

- 6. the Obligations must provide that the Obligations can be called for early redemption only in inverse order of maturity, on any date beginning on or after the first interest payment date that is 10 years from the dated date of the Obligations, at a redemption price of par, together with accrued interest to the date fixed for redemption;

7. the Obligations must include a provision wherein the City, or an obligated person for whom financial or operating data is presented to the TWDB in the application for financial assistance either individually or in combination with other issuers of the City's Obligations or obligated persons, will, at a minimum, regardless of the amount of the Obligations, covenant to comply with requirements for continuing disclosure on an ongoing basis substantially in the manner required by Securities and Exchange Commission (SEC) in 17 CFR § 240.15c2-12 (Rule 15c2-12) and determined as if the TWDB were a Participating Underwriter within the meaning of such rule, such continuing disclosure undertaking being for the benefit of the TWDB and the beneficial owners of the City's Obligations, if the TWDB sells or otherwise transfers such Obligations, and the beneficial owners of the TWDB's bonds if the City is an obligated person with respect to such bonds under SEC Rule 15c2-12;
8. the Obligations must contain a provision requiring the City to levy a tax and/or maintain and collect sufficient rates and charges to produce system revenues in an amount necessary to meet the debt service requirements of all outstanding obligations and to maintain the funds established and required by the Obligations;
9. the Obligations must include a provision requiring the City to use any loan proceeds from the Obligations that are determined to be surplus proceeds remaining after completion of the Project for the following purposes as approved by the Executive Administrator: (1) deposit into the Interest and Sinking Fund or other debt service account for the payment of interest or principal on the Obligations owned by the TWDB; or (2) eligible costs for the Project as authorized by the Executive Administrator;
10. the Obligations must contain a provision that the TWDB may exercise all remedies available to it in law or equity, and any provision of the Obligations that restricts or limits the TWDB's full exercise of these remedies shall be of no force and effect;
11. loan proceeds are public funds and, as such, the Obligations must include a provision requiring that these proceeds shall be held at a designated state depository institution or other properly chartered and authorized institution in accordance with the Public Funds Investment Act, Government Code, Chapter 2256, and the Public Funds Collateral Act, Government Code, Chapter 2257;
12. loan proceeds shall not be used by the City when sampling, testing, removing or disposing of contaminated soils and/or media at the Project site. The Obligations shall include an environmental indemnification provision wherein the City agrees to indemnify, hold harmless and protect the TWDB from any and all claims, causes of action or damages to the person or property of third parties arising from the sampling, analysis, transport, storage, treatment,

recycling and disposition of any contaminated sewage sludge, contaminated sediments and/or contaminated media that may be generated by the City, its contractors, consultants, agents, officials and employees as a result of activities relating to the Project to the extent permitted by law;

13. the Obligations must include a provision stating that the City shall report to the TWDB the amounts of Project funds, if any, that were used to compensate historically underutilized businesses that worked on the Project, in accordance with 31 TAC § 363.1312;
14. the Obligations must contain a provision that the TWDB will purchase the Obligations, acting through the TWDB's designated Trustee, and the Obligations shall be registered in the name of Cede & Co. and closed in book-entry form in accordance with 31 TAC § 363.42(c)(1);

Tax-exempt Conditions:

15. the Obligations must include a provision prohibiting the City from using the proceeds of this loan in a manner that would cause the Obligations to become "private activity bonds" within the meaning of § 141 of the Internal Revenue Code as amended (Code) and the Treasury Regulations promulgated thereunder (Regulations);
16. the Obligations must provide that no portion of the proceeds of the loan will be used, directly or indirectly, in a manner that would cause the Obligations to be "arbitrage bonds" within the meaning of § 148(a) of the Code and Regulations, including to acquire or to replace funds that were used, directly or indirectly, to acquire Nonpurpose Investments (as defined in the Code and Regulations) that produce a yield materially higher than the yield on the TWDB's bonds that are issued to provide financing for the loan (Source Series Bonds), other than Nonpurpose Investments acquired with:
 - a. proceeds of the TWDB's Source Series Bonds invested for a reasonable temporary period of up to three (3) years after the issue date of the Source Series Bonds until such proceeds are needed for the facilities to be financed;
 - b. amounts invested in a bona fide debt service fund, within the meaning of § 1.148-1(b) of the Regulations; and
 - c. amounts deposited in any reasonably required reserve or replacement fund to the extent such amounts do not exceed the least of maximum annual debt service on the Obligations, 125 percent of average annual debt service on the Obligations, or 10 percent of the stated principal amount (or, in the case of a discount, the issue price) of the Obligations;

17. the Obligations must include a provision requiring the City take all necessary steps to comply with the requirement that certain amounts earned on the investment of gross proceeds of the Obligations be rebated to the federal government in order to satisfy the requirements of § 148 of the Code. The Obligations must provide that the City will:
 - a. account for all Gross Proceeds, as defined in the Code and Regulations, (including all receipts, expenditures, and investments thereof) on its books of account separately and apart from all other funds (and receipts, expenditures and investments thereof) and retain all records of such accounting for at least six years after the final Computation Date. The City may, however, to the extent permitted by law, commingle Gross Proceeds of its loan with other money of the City, provided that the City separately accounts for each receipt and expenditure of such Gross Proceeds and the obligations acquired therewith;
 - b. calculate the Rebate Amount, as defined in the Code and Regulations, with respect to its loan, not less frequently than each Computation Date, in accordance with rules set forth in § 148(f) of the Code, § 1.148-3 of the Regulations, and the rulings thereunder. The City shall maintain a copy of such calculations for at least six years after the final Computation Date;
 - c. as additional consideration for the making of the loan, and in order to induce the making of the loan by measures designed to ensure the excludability of the interest on the TWDB's Source Series Bonds from the gross income of the owners thereof for federal income tax purposes, pay to the United States the amount described in paragraph (b) above within 30 days after each Computation Date;
 - d. exercise reasonable diligence to assure that no errors are made in the calculations required by paragraph (b) and, if such error is made, to discover and promptly to correct such error within a reasonable amount of time thereafter, including payment to the United States of any interest and any penalty required by the Regulations;
18. the Obligations must include a provision prohibiting the City from taking any action that would cause the interest on the Obligations to be includable in gross income for federal income tax purposes;
19. the Obligations must provide that the City will not cause or permit the Obligations to be treated as "federally guaranteed" obligations within the meaning of § 149(b) of the Code;

20. the Obligations must provide that neither the City nor a related party thereto will acquire any of the TWDB's Source Series Bonds in an amount related to the amount of the Obligations to be acquired from the City by the TWDB;

Pledge Conditions:

21. the Obligations must contain a provision that provides as follows:
- a. if system revenues are actually on deposit in the Interest and Sinking Fund in advance of the time when ad valorem taxes are scheduled to be levied for any year, then the amount of taxes which otherwise would have been required to be levied and collected may be reduced to the extent and by the amount of revenues then on deposit in the Interest and Sinking Fund; or
 - b. if surplus revenues are based upon budgeted amounts:
 - i. the Obligations must include a requirement that the City transfer and deposit in the Interest and Sinking Fund each month an amount of not less than 1/12th of the annual debt service on the Obligations until the amount on deposit in the Interest and Sinking Fund equals the amount required for annual debt service on the Obligations; further, that the ordinance authorizing the issuance of the Obligations must include a requirement that the City shall not transfer any funds from the City's pledged system revenues to any fund other than the Interest and Sinking Fund until such time as an amount equal to the annual debt service on the Obligations for the then-current fiscal year has been deposited in the Interest and Sinking Fund;
 - ii. the Obligations must include a requirement that for each year the Obligations are outstanding, and prior to the time taxes are to be levied for such year, the City shall establish, adopt, and maintain an annual budget that provides for either the monthly deposit of sufficient surplus pledged revenues and/or tax revenues, the monthly deposit of any other legally available funds on hand at the time of the adoption of the annual budget, or a combination thereof, into the Interest and Sinking Fund for the repayment of the Obligations; and
 - iii. the Obligations must include a requirement that the City shall at all times maintain and collect sufficient rates and charges in conjunction with any other legally available funds so that after payment of the costs of operating and maintaining the system, it produces revenues in an amount not less than 1.10 times debt

service requirements of all outstanding Obligations of the City and other obligations of the City that are secured in whole or in part by the pledged revenues, for which the City is budgeting the repayment of such Obligations, or the City shall provide documentation that evidences the levy and collection of an ad valorem tax rate dedicated to the Interest and Sinking Fund, in conjunction with any other legally available funds, sufficient for the repayment of debt service requirements;

Conditions to Close or for Release of Funds:

22. prior to closing, the City shall submit documentation evidencing the adoption and implementation of sufficient system rates and charges or, if applicable, the levy of an interest and sinking tax rate sufficient for the repayment of all system debt service requirements;
23. prior to closing, if not previously provided with the application, the City shall submit executed contracts for engineering, and, if applicable, financial advisor and bond counsel, for the Project that are satisfactory to the Executive Administrator. Fees to be reimbursed under the contracts must be reasonable in relation to the services performed, reflected in the contract, and acceptable to the Executive Administrator;
24. prior to closing, when any portion of financial assistance is to be held in escrow or in trust, the City shall execute an escrow agreement or trust agreement, approved as to form and substance by the Executive Administrator, and shall submit that executed agreement to the TWDB;
25. prior to closing, the City's bond counsel must prepare a written opinion that states that the interest on the Obligations is excludable from gross income or is exempt from federal income taxation. Bond counsel may rely on covenants and representations of the City when rendering this opinion;
26. prior to closing, the City's bond counsel must prepare a written opinion that states that the Obligations are not "private activity bonds." Bond counsel may rely on covenants and representations of the City when rendering this opinion;
27. the transcript must include a No Arbitrage Certificate or similar Federal Tax Certificate setting forth the City's reasonable expectations regarding the use, expenditure and investment of the proceeds of the Obligations;
28. the transcript must include evidence that the information reporting requirements of § 149(e) of the Internal Revenue Code will be satisfied. This requirement may be satisfied by filing an IRS Form 8038 with the Internal Revenue Service. In addition, the applicable completed IRS Form 8038 or other evidence that the information reporting requirements of § 149(e) have

been satisfied must be provided to the Executive Administrator within fourteen (14) days of closing. The Executive Administrator may withhold the release of funds for failure to comply;

PROVIDED, however, the commitment is subject to the following special conditions:

Special Conditions:

29. prior to execution of the financing agreement for the Obligations, the City must submit its 2016 audited financials, in form and substance acceptable to the Executive Administrator; and
30. the City must comply with all conditions as specified in the final environmental finding of the Executive Administrator, including the standard emergency discovery conditions for threatened and endangered species and cultural resources.

APPROVED and ordered of record this, the 20th day of July, 2017.

TEXAS WATER DEVELOPMENT BOARD

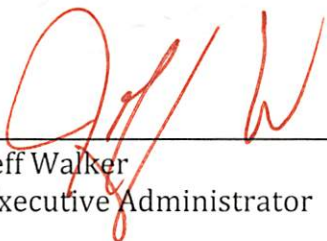




Bech K. Bruun, Chairman

DATE SIGNED: 7-20-17

ATTEST:



Jeff Walker
Executive Administrator

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD
AMENDING TEXAS WATER DEVELOPMENT BOARD
RESOLUTION NO. 17-075
TO PROVIDE FINANCIAL ASSISTANCE TO THE CITY OF JUSTIN
IN THE AMOUNT OF \$12,000,000

(19-072)

WHEREAS, at its July 20, 2019 meeting, the Texas Water Development Board (TWDB), by TWDB Resolution No. 17-075, made a multi-year commitment to the City of Justin (City) for financial assistance in the amount of \$12,000,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT), through the purchase of \$12,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, all as is more specifically set forth in the TWDB's Resolution No. 17-075 (Resolution) and accompanying documentation, to which documents express reference is made; and

WHEREAS, the City closed on the 2017 portion of the commitment in the amount of \$2,400,000; and

WHEREAS, by correspondence dated February 8, 2019, the City requests that the TWDB amend the Resolution to modify the City's Annual Loan Closing Schedule to reflect extending the 2019 commitment to 2020, and extending the 2021 commitment to 2022; and

WHEREAS, the TWDB hereby finds that the proposed amendment to TWDB Resolution No. 17-075 as requested by the City, are reasonable and within the public interest and will serve a public purpose; and

WHEREAS, in accordance with the Texas Water Code, the TWDB has carefully considered all matters required by law.

NOW, THEREFORE, based on these considerations and findings, the TWDB resolves as follows:

1. The commitment made through the Resolution to the City of Justin for financial assistance from the State Water Implementation Revenue Fund for Texas is amended, and shall be evidenced by the TWDB's proposed purchase of the City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation in accordance with the annual loan closing schedule proposed below:
 - a. \$2,400,000 Proposed Series 2020, to expire on December 31, 2020;
 - b. \$7,200,000 Proposed Series 2022, to expire on December 31, 2022.
3. All other terms and conditions of TWDB Resolution No. 17-075 shall remain in full force and effect.

APPROVED and ordered of record this the 22nd day of July, 2019.



TEXAS WATER DEVELOPMENT BOARD

A blue ink signature of Peter M. Lake is written over a horizontal line.

Peter M. Lake, Chairman

DATE SIGNED: 7/22/19

ATTEST:

A blue ink signature of Jeff Walker is written over a horizontal line.

Jeff Walker, Executive Administrator

**A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD AMENDING
TEXAS WATER DEVELOPMENT BOARD RESOLUTION NO. 17-075, AS AMENDED BY
TEXAS WATER DEVELOPMENT BOARD RESOLUTION NO. 19-072,
TO PROVIDE FINANCIAL ASSISTANCE TO THE CITY OF JUSTIN
IN THE AMOUNT OF \$12,000,000**

(20-062)

WHEREAS, at its July 20, 2017 meeting, the Texas Water Development Board (TWDB), by TWDB Resolution No. 17-075, made a multi-year commitment to the City of Justin (City) for financial assistance in the amount of \$12,000,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT), through the purchase of \$12,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, all as is more specifically set forth in the TWDB's Resolution Nos. 17-075 and 19-072 and accompanying documentation, to which documents express reference is made; and

WHEREAS, the City closed on the 2017 portion of the commitment in the amount of \$2,400,00; and

WHEREAS, at its July 22, 2019, meeting the TWDB, through Resolution No. 19-072, amended TWDB Resolution 17-075 to extend the City's Annual Loan Closing Schedule for the 2019 commitment and 2021 commitment;

WHEREAS, the City seeks an amendment to TWDB Resolution No. 17-075, as amended by TWDB Resolution No. 19-072, to modify the City's Annual Loan Closing Schedule to extend its multi-year commitments from 2022 to 2024. The City's request will divide the amended proposed 2022 commitment into three commitments and extend the commitment from 2022 to 2024. This will allow the City to better align the closings with the remaining construction phases; and

WHEREAS, the TWDB hereby finds that the proposed amendments to TWDB Resolution No. 17-075, as amended by TWDB Resolution No. 19-072, as requested by the City, are reasonable and within the public interest and will serve a public purpose; and

WHEREAS, in accordance with the Texas Water Code, the TWDB has carefully considered all matters required by law;

NOW, THEREFORE, based on these considerations and findings, the TWDB resolves as follows:

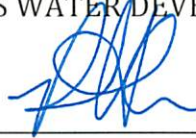
1. The commitment made through TWDB Resolution No. 17-075, as amended by TWDB Resolution No. 19-072, to the City of Justin for financial assistance from the State Water Implementation Revenue Fund for Texas is amended, and shall be

evidenced by the TWDB's proposed purchase of the \$9,600,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, in accordance with the annual loan closing schedule proposed below:

- a. \$2,400,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2020, to expire on December 31, 2020;
 - b. \$1,200,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2021, to expire on December 31, 2021;
 - c. \$2,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2022, to expire on December 31, 2022;
 - d. \$4,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2024, to expire on December 31, 2024; and
2. All other terms and conditions of TWDB Resolution No. 17-075, as amended by TWDB Resolution No. 19-072, shall remain in full force and effect.

APPROVED and ordered of record this the 23rd day of July, 2020.

TEXAS WATER DEVELOPMENT BOARD



Peter M. Lake, Chairman

DATE SIGNED: 7/23/20

ATTEST:



Jeff Walker, Executive Administrator

A RESOLUTION OF THE TEXAS WATER DEVELOPMENT BOARD AMENDING
TEXAS WATER DEVELOPMENT BOARD RESOLUTION NO. 17-075, AS AMENDED BY
TEXAS WATER DEVELOPMENT BOARD RESOLUTION NOS. 19-072 AND 20-062
TO PROVIDE FINANCIAL ASSISTANCE TO THE CITY OF JUSTIN
IN THE AMOUNT OF \$12,000,000

(21-084)

WHEREAS, at its July 20, 2017 meeting, the Texas Water Development Board (TWDB), by TWDB Resolution No. 17-075, made a multi-year commitment to the City of Justin (City) for financial assistance in the amount of \$12,000,000 from the State Water Implementation Revenue Fund for Texas (SWIRFT), through the purchase of \$12,000,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, all as is more specifically set forth in the TWDB's Resolution Nos. 17-075, 19-072, and 20-062 and accompanying documentation, to which documents express reference is made; and

WHEREAS, the City closed on the 2017 portion of the commitment in the amount of \$2,400,00; and

WHEREAS, at its July 22, 2019, meeting the TWDB, through Resolution No. 19-072, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 20-062, to extend the City's Annual Loan Closing Schedule for the 2019 commitment and 2021 commitment;

WHEREAS, at its July 23, 2020, meeting the TWDB, through Resolution No. 20-062, amended TWDB Resolution 17-075, as amended by TWDB Resolution No. 19-072, to extend the City's Annual Loan Closing Schedule for the 2022 commitment;

WHEREAS, the City seeks an amendment to TWDB Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, to modify Annual Loan Closing Schedule to combine and redistribute the closing amounts for its multi-year commitments from 2021 to 2024. This will allow the City to better align the closings with the remaining construction phases; and

WHEREAS, the TWDB hereby finds that the proposed amendments to TWDB Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, as requested by the City, are reasonable and within the public interest and will serve a public purpose; and

WHEREAS, in accordance with the Texas Water Code, the TWDB has carefully considered all matters required by law;

NOW, THEREFORE, based on these considerations and findings, the TWDB resolves as follows:

1. The commitment made through TWDB Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, to the City of Justin for financial assistance from the State Water Implementation Revenue Fund for Texas is amended, and shall be evidenced by the TWDB's proposed purchase of City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation, in accordance with the annual loan closing schedule:
 - a. \$2,400,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2021, to expire on December 31, 2021;
 - b. \$4,800,000 City of Justin, Texas Tax and Surplus Revenue Certificates of Obligation Proposed Series 2024, to expire on December 31, 2024; and
2. All other terms and conditions of TWDB Resolution No. 17-075, as amended by TWDB Resolution Nos. 19-072 and 20-062, shall remain in full force and effect.

APPROVED and ordered of record this, the 22nd day of July 2021.

TEXAS WATER DEVELOPMENT BOARD


Brooke T. Paup
Brooke T. Paup, Chairwoman

DATE SIGNED: July 22, 2021

ATTEST:



Jeff Walker, Executive Administrator

ATTACHMENT B

DESCRIPTION OF BORROWER BONDS

Title of Borrower Bonds:

Project Name:

Project Number:

Aggregate Principal Amount of Borrower Bonds:

Anticipated Closing Date:

Dated Date:

First Principal Payment Date:

First Interest Payment Date:

Maturity Schedule:

Maturity

Principal Amount

Disclaimer: This is a working document and is provided as a courtesy. All information contained herein is subject to change upon further review of the TWDB.

ATTACHMENT C
FINANCING SCHEDULE*

DATE	ACTION
07/23/2024	TWDB approval of commitments
09/2/2024	<i>Labor Day Holiday**</i>
09/6/2024	<i>Financing agreement – last day to execute (19 days prior to initiation of pricing)</i>
09/11/2024	Financing agreement (Sec. 4A) -last day political subdivisions can terminate without penalty (14 days prior to initiation of pricing)
09/11/2024	Financing agreement (Sec. 5) -last day political subdivisions can modify maturity schedule (14 days prior to initiation of pricing)
09/20/2024	Financing agreement (Sec. 4B) -last day political subdivisions can terminate with costs of issuance (5 days prior to initiation of pricing)
09/25/2024	Financing agreement (Sec. 4C) -before 9:00 a.m. political subdivisions can terminate with costs of issuance and 1% penalty (1 day prior to pricing).
09/25/2024	TWDB bond pricing initiation (pre-pricing begins)
09/26/2024	TWDB bond pricing
10/10/2024	TWDB bond closing (political subdivisions must close within 56 days)
10/11 to 12/5/2024	Closings on political subdivision obligations
10/14/2024	Columbus Day Holiday (TWDB open)**
10/17/2024	TWDB approves interest rates available to political subdivisions
Various	Political subdivisions adopt bond resolutions and/or master agreements
Various	Political subdivisions submit transcripts to Texas Attorney General in preparation of closing
11/11/2024	<i>Veteran's Day Holiday**</i>
11/28/2024	<i>Thanksgiving Holiday**</i>
11/29/2024	<i>Thanksgiving Holiday**</i>
12/5/2024	Last day to close on political subdivision obligations
12/6/2024	Financing agreement (Sec. 4D) -penalty applied to any political subdivision failing to issue debt Start of post-pricing termination payment period (includes costs of issuance, underwriters' discount and 5% penalty)
03/5/2025	Last due date for payment of penalties

**Preliminary, subject to change*

***State agency holidays are reflected to show when TWDB is closed; they are counted towards deadlines.*

ATTACHMENT B

DESCRIPTION OF BORROWER BONDS

Title of Borrower Bonds: Combination Tax and Surplus Revenue Certificates of Obligation

Project Name: Enhanced Water Loss Control and Conservation Program

Project Number: 51045

Aggregate Principal Amount of Borrower Bonds: \$2,500,000

Anticipated Closing Date: November 21, 2024

Dated Date: 10/15/2024

First Principal Payment Date: 8/15/2025

First Interest Payment Date: 2/15/2025

Maturity Schedule:

Maturity	Principal
08/15/2025	115,000.00
08/15/2026	105,000.00
08/15/2027	105,000.00
08/15/2028	110,000.00
08/15/2029	110,000.00
08/15/2030	115,000.00
08/15/2031	115,000.00
08/15/2032	120,000.00
08/15/2033	120,000.00
08/15/2034	120,000.00
08/15/2035	125,000.00
08/15/2036	125,000.00
08/15/2037	130,000.00
08/15/2038	130,000.00
08/15/2039	135,000.00
08/15/2040	140,000.00
08/15/2041	140,000.00
08/15/2042	145,000.00
08/15/2043	145,000.00
08/15/2044	150,000.00

Disclaimer: This is a working document and is provided as a courtesy. All information contained herein is subject to change upon further review of the TWDB.



Certificates of Obligation (TWDB SWIFT), Series 2024

Projected Schedule of Events

Aug-24						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Sep-24						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Oct-24						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
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27	28	29	30	31		

Nov-24						
S	M	T	W	T	F	S
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17	18	19	20	21	22	23
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By	Day	Event
8-Aug-24	Thursday	City Council approves SWIFT Financing Agreement City Council approves Notice of Intent Resolution for Certificates of Obligation
TBD	TBD	First publication of Notice of Intent to issue Certificates of Obligation (must be at least 46 days before the sale date - <u>NO LATER THAN 9/8/24</u>)
TBD	TBD	Second publication of Notice of Intent to issue Certificates of Obligation (same day of the week following first publication - <u>EXACTLY ONE WEEK LATER</u>)
6-Sep-24	Friday	Last Day for TWDB to receive executed Financing Agreement
11-Sep-24	Wednesday	Last Day for City to terminate Financing Agreement without penalty
17-Oct-24	Thursday	TWDB provides final lending rates for SWIFT Bonds
24-Oct-24	Thursday	Bond Sale; City Council approves Ordinance authorizing Certificates of Obligation
21-Nov-24	Thursday	Closing and delivery of Funds to the City



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 2. (ACTION ITEMS)

Title: Consider approving Resolution 700-24 authorizing publication and posting of notice of intention to issue certificates of obligation, including the adoption of a resolution pertaining thereto; and take appropriate action.

Department: Administration

Contact: Josh Armstrong, Finance Director

Recommendation:

Approve notice of intention to issue certificates of obligation, including the adoption of a resolution, authorizing publication, and all matters related thereto.

Background:

Staff are recommending approval of all related documents for the next planned phase of the SWIFT project.

The upcoming draw would be in the amount of \$2.5M, to replace the last of the remaining waterlines in the Old Town/Adams Addition area and finalize the waterline replacement project.

City Attorney Review: N/A

Attachments:

1. Resolution 700-24 Notice of Intent

RESOLUTION NO. 700-24

A RESOLUTION approving and authorizing publication and posting of notice of intention to issue certificates of obligation.

WHEREAS, the City Council of the City of Justin, Texas (the "City"), has determined that certificates of obligation should be issued under and pursuant to the provisions of Texas Local Government Code, Subchapter C of Chapter 271 (the "Act"), for the purpose of paying contractual obligations to be incurred for (i) the construction of public works, to wit: constructing, acquiring, purchasing, renovating, enlarging, equipping, and improving water system properties and facilities, including land and rights-of-way therefor, and (ii) professional services rendered in relation to such projects and the financing thereof; and

WHEREAS, prior to the issuance of such certificates, the City Council is required to publish notice of its intention to issue the same in accordance with the provisions of the Act; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1: The City Secretary is hereby authorized and directed to cause notice to be published of the City Council's intention to issue certificates of obligation in a principal amount not to exceed \$2,500,000 for the purpose of paying contractual obligations to be incurred for (i) the construction of public works, to wit: constructing, acquiring, purchasing, renovating, enlarging, equipping, and improving water system properties and facilities, including land and rights-of-way therefor, and (ii) professional services rendered in relation to such projects and the financing thereof, and such certificates shall be payable from ad valorem taxes and a pledge of the net revenues of the City's combined Waterworks and Sewer System. The notice hereby approved and authorized to be published shall read substantially in the form and content of **Exhibit A** hereto attached and incorporated herein by reference as a part of this resolution for all purposes.

SECTION 2: The City Secretary shall cause the aforesaid notice to be published (i) in a newspaper of general circulation in the City, once a week for two consecutive weeks, the date of the first publication to be at least forty-six (46) days prior to the date stated therein for the passage of the ordinance authorizing the issuance of the certificates of obligation, and (ii) continuously on the City's website for at least forty-five (45) days before the date stated therein for the passage of the ordinance authorizing the issuance of the certificates of obligation.

SECTION 3: It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Texas Government Code, Chapter 551, as amended.

SECTION 4: This Resolution shall be in force and effect from and after its passage on the date shown below.

[The remainder of this page intentionally left blank.]

PASSED AND ADOPTED, this August 8, 2024.

CITY OF JUSTIN, TEXAS

ATTEST:

Mayor

City Secretary

(City Seal)

EXHIBIT A

NOTICE OF INTENTION TO ISSUE CITY OF JUSTIN, TEXAS, CERTIFICATES OF OBLIGATION

TAKE NOTICE that the City Council of the City of Justin, Texas, shall convene at 5:00 o'clock P.M. on the 24th day of October 2024, at its regular meeting place in the City Hall, 415 N. College Avenue, Justin, Texas, and, during such meeting, the City Council will consider the passage of one or more ordinances authorizing the issuance of certificates of obligation, in one or more series, in a principal amount not to exceed \$2,500,000 for the purpose of paying contractual obligations to be incurred for (i) the construction of public works, to wit: constructing, acquiring, purchasing, renovating, enlarging, equipping, and improving water system properties and facilities, including land and rights-of-way therefor, and (ii) professional services rendered in relation to such projects and the financing thereof, and such certificates shall be payable from ad valorem taxes and a pledge of the net revenues of the City's combined Waterworks and Sewer System. In accordance with Texas Local Government Code Section 271.049, (i) the current principal amount of all of the City's outstanding public securities secured by and payable from ad valorem taxes is \$18,105,000; (ii) the current combined principal and interest required to pay all of the City's outstanding public securities secured by and payable from ad valorem taxes on time and in full is \$22,994,146; (iii) the estimated combined principal and interest required to pay the certificates of obligation to be authorized on time and in full is \$3,070,437; (iv) the maximum interest rate for the certificates may not exceed the maximum legal interest rate; and (v) the maximum maturity date of the certificates to be authorized is August 15, 2044. The certificates are to be issued, and this notice is given, under and pursuant to the provisions of Texas Local Government Code, Subchapter C of Chapter 271.

Amy M. Piukana
City Secretary
City of Justin, Texas



City Council Coversheet
August 8, 2024
415 N. COLLEGE AVE.

Agenda Item: 3. (ACTION ITEMS)

Title: Consider and act upon Resolution 701-24 of the City of Justin, Texas, to declare an emergency and authorize the City Manager to negotiate and execute an agreement on behalf of the City in an amount not to exceed \$200,000 to design and construct water system improvements, and further appropriate necessary funding.

Department: Administration

Contact:

Recommendation:

Staff recommends approval of the resolution.

Background:

The City of Justin has experienced significant water system delivery issues within the southern portion of the City during month of July threatening the public health and welfare of its citizens. Staff have identified a solution that can provide benefit and relief to this portion of the City. The proposed Resolution would allow staff to immediately begin the design and selection of a contractor to construct a waterline along Boss Range Road from Ovaletta ta Dr. to Wilkerson Ln. This work would include the installation of fire hydrants, valves, new service taps, and a creek crossing.

City Attorney Review:

Attachments:

1. Resolution 701-24

**CITY OF JUSTIN
RESOLUTION 701-24**

A RESOLUTION OF THE CITY COUNCIL OF CITY OF JUSTIN, DECALRING AN EMERGENCY AND AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECTUTE AND AGREEMENT ON BEHALF OF THE CITY OF THE CITY OF JUSTIN, TEXAS IN AN AMOUNT NOT TO EXCEED \$200,000, TO DESIGN AND CONSTRUCT WATER SYSTEM IMPROVEMENTS, AND FURTHER APPROPRIATES THE NECESSARY FUNDING.

WHEREAS, the provision of water service throughout the City of Justin is of vital importance to the health, safety, and welfare of the citizens of Justin; and

WHEREAS, Justin desires to secure and maintain an adequate potable water source for the health, safety, and welfare of the citizens of Justin; and

WHEREAS, the City of Justin has experienced significant water system delivery issues within the southern portion of the City during month of July threatening the public health and welfare of its citizens; and

WHEREAS, a water system improvement project has been identified that can provide benefit and relief to this portion of the City; and

WHEREAS, the City Council find that the proposed water system improvements provides for sound infrastructure improvements consistent with goals and objectives within the adopted strategic plan; and

WHEREAS, the City Council finds that the funding for the engineering design and construction of the water system improvements along Boss Range Road at Trail Creek is necessary; and

WHEREAS, that the Adopted Budget shall be amended to reflect the appropriation of funds from restricted Impact Fee Revenues; and

WHEREAS, the City Council finds that the passage of this resolution is in the best interest of the citizens of Justin.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF JUSTIN, TEXAS:

SECTION 1: That, all matters stated in the Recitals hereinabove are found to be true and correct and are incorporated herein by reference as if copied in their entirety.

SECTION 2: That the City of Justin City Council hereby authorizes the City Manager to negotiate and execute an agreement on behalf of the City in an Amount not to exceed \$200,000 to

design and construct water system improvements, and further appropriates necessary funding.

SECTION 3: If any portion of this Resolution shall, for any reason, be declared invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining provisions hereof and the Council hereby determines that it would have adopted this Resolution without the invalid provision.

SECTION 4: That this resolution shall become effective from and after its date of passage.

DULY PASSED and approved by the City Council of the City of Justin, Texas, by a vote on this the 8TH day of August 2024.

APPROVED:

James Clark, Mayor

ATTEST:

Amy Piukana, City Secretary

APPROVED AS TO FORM:

Matthew Boyle, City Attorney