

**WATER AND SEWER  
IMPACT REPORT**  
for  
**REGIONAL GATEWAY COMMERCE PARK**

Prepared for:

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# CASA GRANDE, ARIZONA

## REGIONAL GATEWAY COMMERCE PARK

### WATER AND SEWER IMPACT REPORT

#### 1. DEVELOPMENT DATA

- a) Development: Regional Gateway Commerce Park by Chasse R.E. & Financial Group  
Report prepared by C.E.G., Inc. (623.536.1993)
- b) Location: Regional Gateway Commerce Park is located at the northwest corner of I-10 and I-8 interchange. Township 7 South, Range 6 East, Sections 2, 10, 11, 12, 13 & 14 of the Gila and Salt River Meridian; (See vicinity map and development plan).
- c) Zoning: Varies (Being rezoned to P.A.D.)
- d) Land Use: Regional Gateway Commerce Park proposes multiple land uses. Including: Light Industrial, Commercial, Garden Office, Business Park, and Corporate Office.
- e) Population: Regional Gateway Commerce Park has an unknown total population.  
Total Area: 450 acres± (developable area)

The following table lists the approach to estimating the allowable building areas for the different uses within the commerce park:

Use Description	Use Area (ac)	Lot Coverage (%)	Allowable Building Area (sf)
Commercial	7.13	40	124,000
Business Park	38.75	40	675,000
Light Industrial	166.17	40	2,895,000
Office	30.91	40	539,000
Mix (Office/L.Ind)	16.20	40	282,000
Corporate Park	95.64	30 (5 stories)	6,200,000



## 2. DEVELOPMENT WATER IMPACTS

- a) The average daily demand (ADD) is therefore:

Use Description	Allowable Building Area (sf)	Daily Consumption (gpd/sf)	ADD (gpd)
Commercial	124,000	0.1	12,400
Business Park	675,000	0.1	67,500
Light Industrial	2,895,000	0.1	289,500
Office	539,000	0.1	53,900
Mix (Office/L.Ind)	282,000	0.1	28,200
Corporate Park	6,200,000	0.1	620,000
Total			1,071,500

- b) The peak hour demand (PHD) is 3.2 x ADD, which is:

Use Description	PHD (gpd)
Commercial	39,680
Business Park	216,000
Light Industrial	926,400
Office	172,480
Mix (Office/L.Ind)	90,240
Corporate Park	1,984,000
Total	3,428,800

- c) The maximum fire flow based on Table B105.1 of the 2006 International Fire Code is 8000 gpm for a 4 hour duration.
- d) The proposed water system will be a 12" waterline looping through the Commerce Park within the proposed road rights of way serving each of the lots. The water system will connect to the existing 12" water line at the intersection of Mitchell Road and Highway 84 and near the exit ramp of Interstate 10 at Highway 84. The water system will provide stubs for future connection, routed under Interstate 8.



### 3. DEVELOPMENT WASTEWATER IMPACTS

- a) The average unit flows (ADF) are as follows:

Use Description	Allowable Building Area (sf)	Average Daily Flows (gpd/sf)	ADF (gpd)
Commercial	124,000	0.08	9,920
Business Park	675,000	0.08	54,000
Light Industrial	2,895,000	0.08	231,600
Office	539,000	0.08	43,120
Mix (Office/L.Ind)	282,000	0.08	22,560
Corporate Park	6,200,000	0.08	496,000
Total			857,200

- b) The Wet Weather Peaking Factor is:

$$\text{PF}_{\text{ww}} = 5.0$$

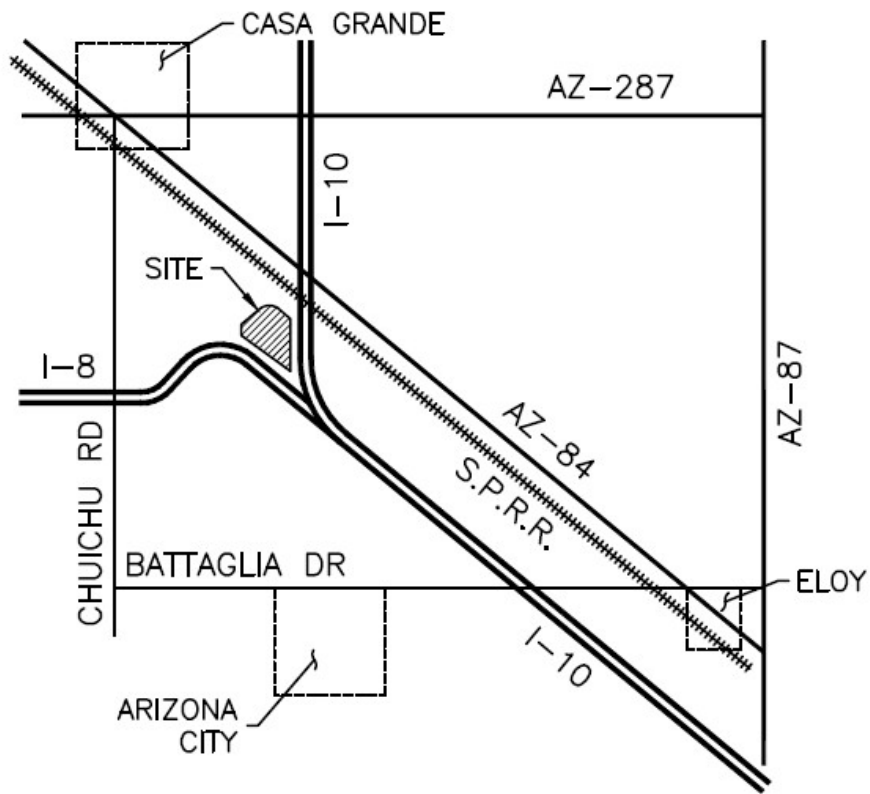
$$\text{Maximum Daily Flow (MDF)} = \text{ADF} \times \text{PF}_{\text{ww}}$$

Use Description	MDF (gpd)
Commercial	49,600
Business Park	270,000
Light Industrial	1,158,000
Office	215,600
Mix (Office/L.Ind)	112,800
Corporate Park	2,480,000
Total	4,286,000

- c) The proposed wastewater system will be a 15" mainline sewer pipe aligned through the Commerce Park within the proposed road rights of way serving each of the lots with 8" branches to provide service. The wastewater system will connect to the existing 15" sewer line located near the intersection of Henness Road and Selma Highway, north of the Commerce Park. The wastewater system will provide stubs for future connection, routed under Interstate 8



**ATTACHMENTS**



VICINITY MAP

SCALE: NTS



LEGAL DESCRIPTION FOR I-10 AND I-8  
NORTH OF INTERSTATE 8 AND WEST OF INTERSTATE 10

THE FOLLOWING DESCRIBED PROPERTY, PORTIONS OF SECTIONS 2, 10, 11, 12, 13 AND 14, ALL BEING A PART OF TOWNSHIP 7 SOUTH, RANGE 6 EAST, GILA AND SALT RIVER BASE AND MERIDIAN AS NOTED HEREIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION 2, FROM WHICH THE SOUTH QUARTER CORNER OF SECTION 2 BEARS NORTH 89 DEGREES 54 MINUTES 56 SECONDS EAST, A DISTANCE OF 2647.85 FEET, AND IS THE BASIS OF BEARINGS FOR THIS LEGAL DESCRIPTION;

THENCE NORTH 00 DEGREES 30 MINUTES 37 SECONDS WEST, ALONG THE WESTERLY LINE OF SAID SOUTHWEST QUARTER, A DISTANCE OF 296.64 FEET TO THE CENTERLINE OF THE FLORENCE CANAL; THENCE EASTERLY ALONG SAID CENTERLINE THROUGH THE FOLLOWING COURSES, NORTH 82 DEGREES 45 MINUTES 04 SECONDS EAST A DISTANCE OF 50.36 FEET TO A POINT OF CURVATURE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 4000.00 FEET;

THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 3 DEGREES 29 MINUTES 53 SECONDS, AN ARC DISTANCE OF 244.20 FEET TO A POINT OF TANGENCY;

THENCE NORTH 86 DEGREES 14 MINUTES 57 SECONDS EAST A DISTANCE OF 169.87 FEET TO A POINT OF CURVATURE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 650.00 FEET;

THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 54 DEGREES 37 MINUTES 20 SECONDS, AN ARC DISTANCE OF 619.67 FEET TO A POINT OF TANGENCY;

THENCE NORTH 31 DEGREES 37 MINUTES 37 SECONDS EAST A DISTANCE OF 337.19 FEET TO A POINT OF CURVATURE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 500.00 FEET;

THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 19 DEGREES 49 MINUTES 02 SECONDS, AN ARC DISTANCE OF 172.94 FEET TO A POINT OF TANGENCY;

THENCE NORTH 51 DEGREES 26 MINUTES 39 SECONDS EAST A DISTANCE OF 480.02 FEET TO A POINT OF CURVATURE CONCAVE SOUTHERLY, HAVING A RADIUS OF 550.00 FEET;

THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 74 DEGREES 29 MINUTES 32 SECONDS, AN ARC DISTANCE OF 715.07 FEET;

THENCE SOUTH 54 DEGREES 03 MINUTES 49 SECONDS EAST A DISTANCE OF 417.59 FEET TO A POINT ON THE EASTERLY LINE OF THE SOUTHWEST QUARTER OF SECTION 2;

THENCE SOUTH 00 DEGREES 21 MINUTES 35 SECONDS EAST, ALONG SAID EASTERLY LINE AND LEAVING AFORESAID CENTERLINE OF THE FLORENCE CANAL, A DISTANCE OF 1126.62 FEET TO THE SOUTH QUARTER CORNER OF SECTION 2, ALSO BEING THE NORTH QUARTER CORNER OF SECTION 11;

THENCE NORTH 89 DEGREES 54 MINUTES 56 SECONDS EAST, ALONG THE NORTHERLY LINE OF SAID SECTION 11, A DISTANCE OF 1713.04 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT-OF-WAY OF THE SOTHERN PACIFIC RAILROAD;

THENCE SOUTH 53 DEGREES 51 MINUTES 22 SECONDS EAST, ALONG SAID SOUTHWESTERLY LINE, A DISTANCE OF 1152.78 FEET TO A POINT ON THE EASTERLY LINE OF AFORESAID SECTION 11, ALSO BEING THE WESTERLY LINE OF SECTION 12;

THENCE SOUTH 00 DEGREES 19 MINUTES 38 SECONDS WEST, ALONG SAID WESTERLY LINE, A DISTANCE OF 645.63 FEET TO A POINT ON THE NORTHERLY LINE OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 12;

THENCE NORTH 89 DEGREES 29 MINUTES 03 SECONDS EAST, ALONG SAID NORTHERLY LINE, A DISTANCE OF 692.01 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY OF INTERSTATE 10;

THENCE ALONG SAID RIGHT-OF-WAY THROUGH THE FOLLOWING COURSES, SOUTH 04 DEGREES 17 MINUTES 13 SECONDS EAST A DISTANCE OF 2726.21 FEET TO A POINT OF CURVATURE, CONCAVE EASTERLY, HAVING A RADIUS OF 5879.58 FEET;

THENCE SOUTHERLY ALONG SAID LINE THROUGH A CENTRAL ANGLE OF 8 DEGREES 49 MINUTES 52 SECONDS, AN ARC DISTANCE OF 906.24 FEET TO A POINT ON A NON-TANGENT LINE;  
THENCE SOUTH 05 DEGREES 25 MINUTES 53 SECONDS EAST A DISTANCE OF 164.66 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 553.11 FEET, THE CENTER OF WHICH BEARS SOUTH 84 DEGREES 41 MINUTES 57 SECONDS WEST;  
THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 21 DEGREES 10 MINUTES 25 SECONDS, AN ARC DISTANCE OF 204.40 FEET TO A POINT ON THE SOUTHERLY LINE OF SECTION 12, BEING THE NORTHERLY LINE OF SECTION 13;  
THENCE CONTINUING ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 94 DEGREES 15 MINUTES 43 SECONDS, AN ARC DISTANCE OF 909.96 FEET, TO THE BEGINNING OF A NON-TANGENT LINE, THE PREVIOUSLY DESCRIBED CURVE BEING A TRANSITION DEPARTING FROM THE WESTERLY RIGHT-OF-WAY OF INTERSTATE 10 TO THE NORTHERLY RIGHT-OF-WAY LINE OF INTERSTATE 8;  
THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY THROUGH THE FOLLOWING COURSES, NORTH 61 DEGREES 39 MINUTES 05 SECONDS WEST A DISTANCE OF 380.35 FEET TO A POINT ON THE WESTERLY LINE OF SECTION 13, ALSO BEING THE EASTERLY LINE OF SECTION 14;  
THENCE CONTINUING NORTH 61 DEGREES 39 MINUTES 05 SECONDS WEST A DISTANCE OF 379.65 FEET TO A POINT ON THE NORTHERLY LINE OF SECTION 14, BEING THE SOUTHERLY LINE OF SECTION 11;  
THENCE NORTH 53 DEGREES 51 MINUTES 02 SECONDS WEST A DISTANCE OF 3634.89 FEET TO A POINT;  
THENCE, LEAVING AFORESAID NORTHERLY RIGHT-OF-WAY, NORTH 00 DEGREES 14 MINUTES 28 SECONDS EAST A DISTANCE OF 1835.73 FEET TO A POINT ON THE NORTHERLY LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 11;  
THENCE SOUTH 89 DEGREES 59 MINUTES 42 SECONDS WEST, ALONG SAID LINE, A DISTANCE OF 1994.01 FEET TO THE WESTERLY LINE OF SECTION 11, BEING THE NORTHEAST CORNER OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 10;  
THENCE SOUTH 89 DEGREES 48 MINUTES 27 SECONDS WEST, ALONG THE NORTHERLY LINE OF SAID SOUTH HALF, A DISTANCE OF 83.38 FEET TO A POINT;  
THENCE NORTH 26 DEGREES 55 MINUTES 41 SECONDS EAST A DISTANCE OF 93.86 FEET TO A POINT OF NON-TANGENT CURVATURE, CONCAVE NORTHWESTERLY, THE CENTER OF WHICH BEARS NORTH 61 DEGREES 42 MINUTES 48 SECONDS WEST, HAVING A RADIUS OF 1525.59 FEET;  
THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 3 DEGREES 22 MINUTES 35 SECONDS, AN ARC DISTANCE OF 89.90 FEET TO A POINT ON THE EASTERLY LINE OF THE NORTHEAST QUARTER OF SECTION 10;  
THENCE NORTH 00 DEGREES 13 MINUTES 15 SECONDS WEST, ALONG SAID EASTERLY LINE, A DISTANCE OF 1156.28 FEET TO THE POINT OF BEGINNING.