

City of Sparks TMSA/FSA Conceptual Facility Master Plan

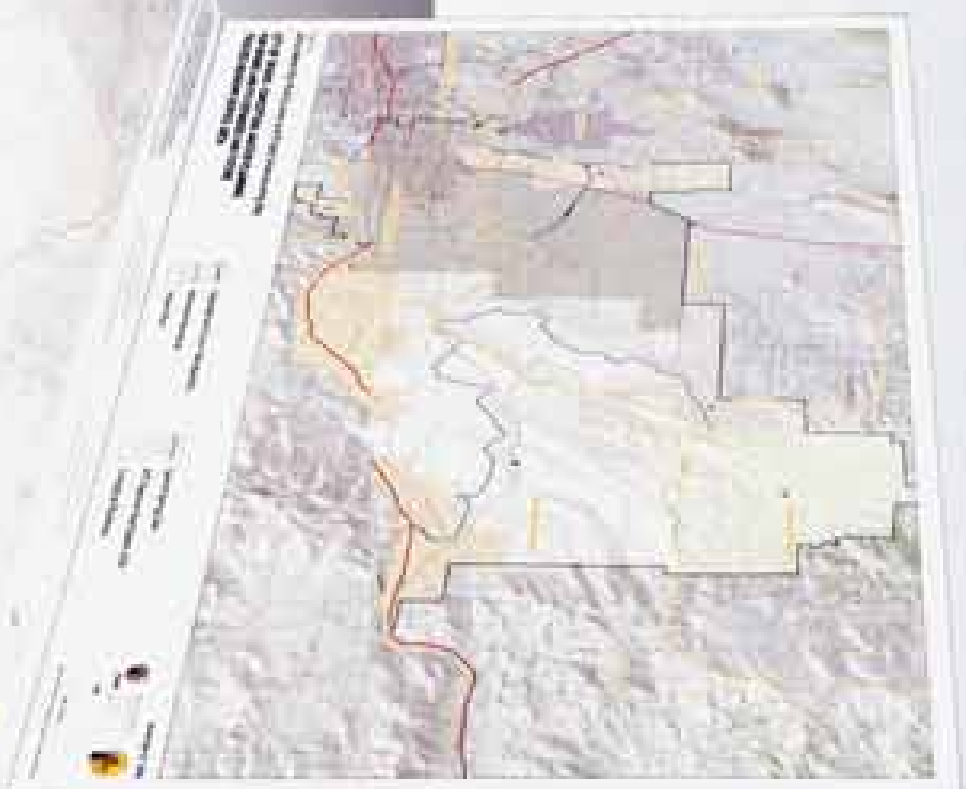
Volume 2 of 2

January 2008

Prepared for:

City of Sparks
910 Roberts Lane
Sparks, Nevada 89431

Regional Water Planning Commission
c/o Washoe County Department of Water Resources
4930 Energy Way
Reno, Nevada 89502



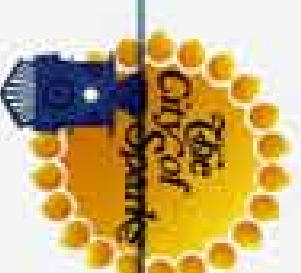
Project:



Stantec
6980 Sierra Center Parkway
Reno, Nevada
Tel: (775) 786-1000
Fax: (775) 786-1001

City of Sparks TMSA/FSA Conceptual Facility Master Plan

Volume 2 of 2



January, 2008



Prepared for:
City of Sparks
910 Roberto Lane
Sparks, Nevada 89431

Regional Water Planning Commission
c/o Washoe County Department of Water Resources
4930 Energy Way
Reno, Nevada 89502

Prepared by:
Stantec Consulting
6980 Sierra Center Parkway Suite 100
Reno, Nevada 89511
Tel: (775) 850-0777
Fax: (775) 850-0787

Project #180101085



Stantec

Stantec Consulting
6980 Sierra Center Parkway Suite 100
Reno, Nevada 89511
Tel: (775) 850-0777
Fax: (775) 850-0787

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income.

The second part of the document provides a detailed breakdown of the company's financial performance over the last quarter. It includes a comparison of actual results against budgeted figures, highlighting areas of both strength and weakness. The analysis shows that while sales have exceeded expectations, operating expenses have also increased significantly.

The third part of the document outlines the company's strategic goals for the upcoming year. It focuses on increasing market share, improving operational efficiency, and reducing costs. Key initiatives include launching new products, expanding into new markets, and implementing cost-saving measures across all departments.

The fourth part of the document discusses the company's financial outlook and the steps being taken to ensure long-term sustainability. It mentions the importance of maintaining a strong balance sheet and managing debt effectively. The company is committed to transparency and will provide regular updates on its financial health.

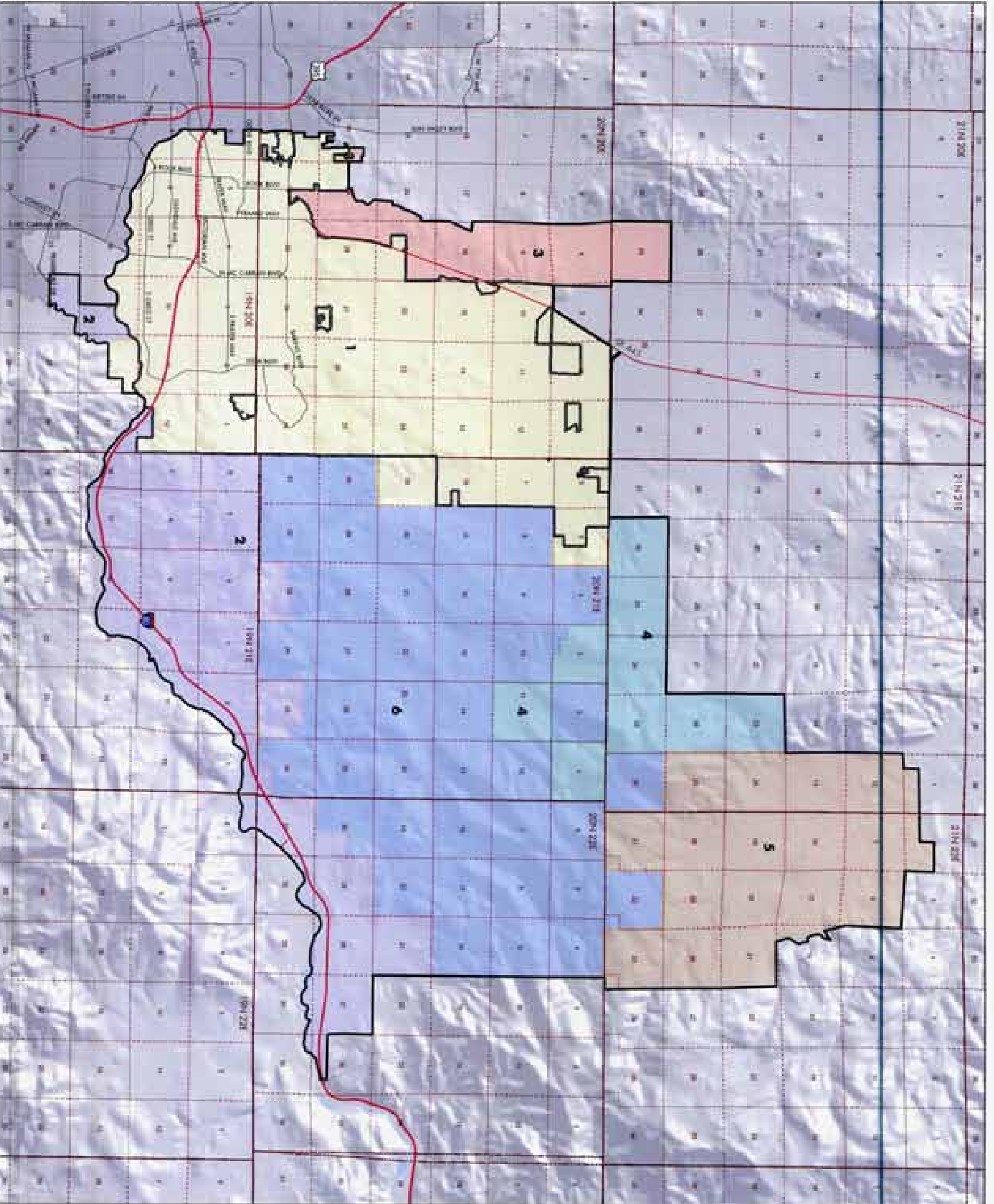
Finally, the document concludes with a statement of appreciation for the hard work and dedication of all employees. It expresses confidence in the company's future and encourages everyone to continue working together towards the common goal of success.

Section 1
Introduction

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 1.1

**Facility Plan Study Area and
Priority Service Area Boundaries**



Legend

- Study Area Boundary (1/27 sq miles)
- Section Lines & Number
- Street Centerlines
- Freeway
- Highway
- Motor Arterial
- 1
- 2
- 3
- 4
- 5
- 6
- Priority Service Area & Number



Sparks, California
 City of Sparks
 1000 Sparks Blvd., Sparks, NV 89410
 775.734.2222
 www.cityofsparks.com

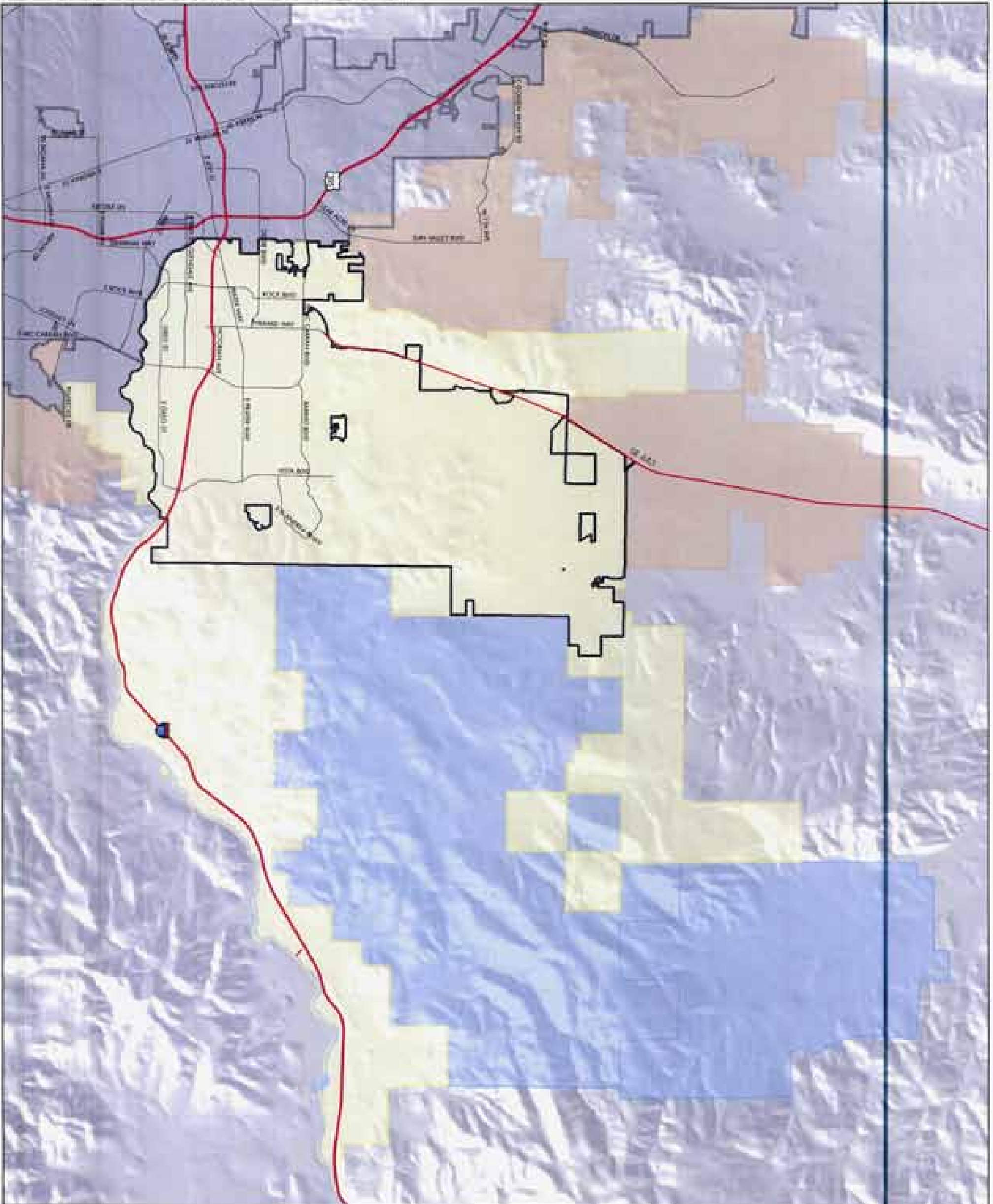
Sanitic
 1000 Sparks Blvd., Sparks, NV 89410
 775.734.2222
 www.sanitic.com

City of Sparks
 1000 Sparks Blvd., Sparks, NV 89410
 775.734.2222
 www.cityofsparks.com

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 1.2

**Regional TMSA boundaries
and Sparks FSA Area**



- Legend**
- Sparks Incorporated Boundary (24 sq miles)
 - Reno Incorporated Boundary (102 sq miles)
 - Sparks TMSA (70 sq miles)
 - Reno TMSA (162 sq miles)
 - Washoe County TMSA (93 sq miles)
 - Sparks FSA (38 sq miles)
 - Truckee River
 - Street Centerline
 - Freeway
 - Highway
 - Major Arterial

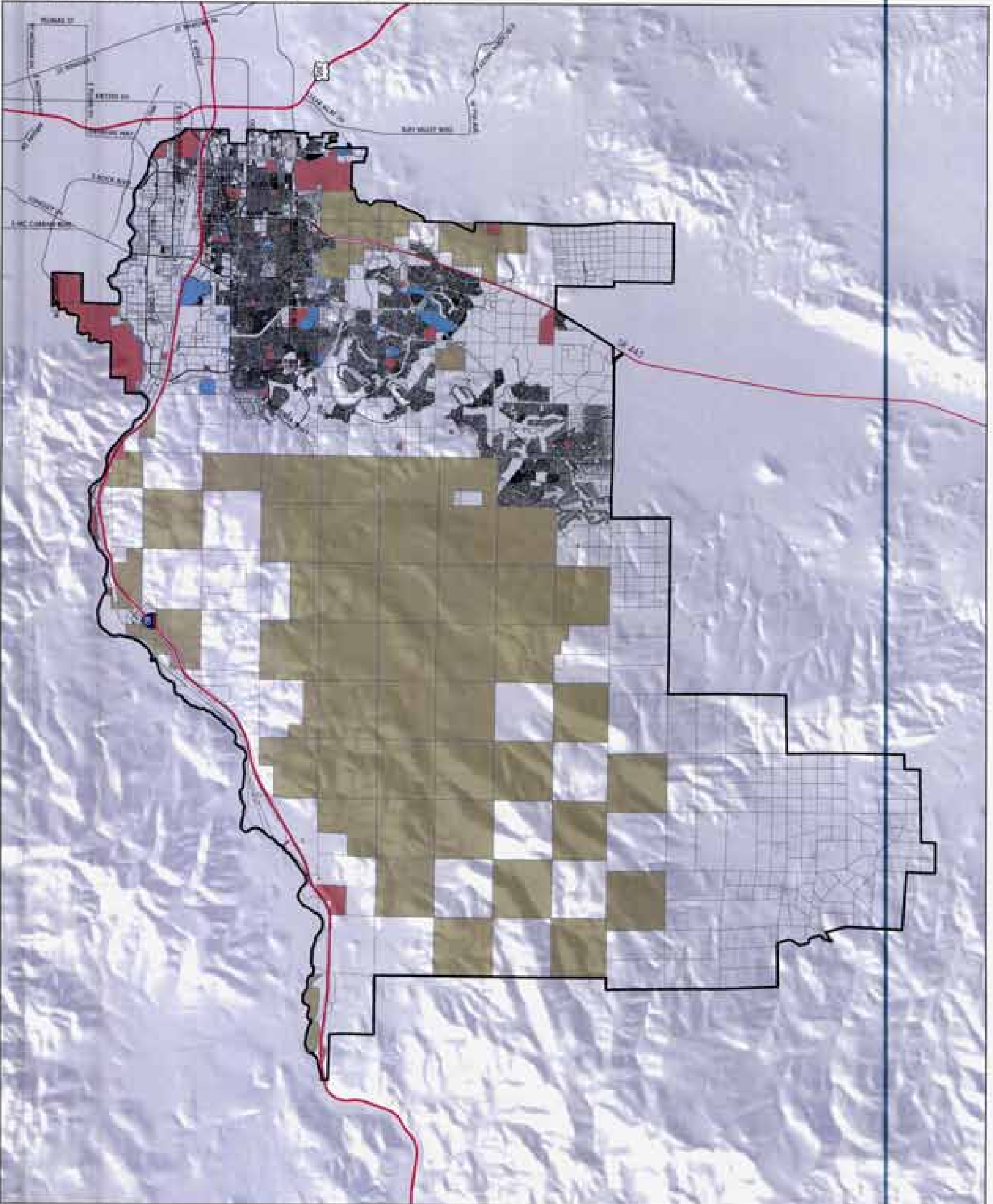


Santec Consulting
Sustainable Design Services
1000 N. Carson Street, Suite 100
Reno, NV 89509
Tel: (775) 825-1111
www.santec.com

City of Sparks, NV
1000 N. Carson Street, Suite 100
Reno, NV 89509
Tel: (775) 825-1111
www.cityofsparks.com



City of Sparks, NV
1000 N. Carson Street, Suite 100
Reno, NV 89509
Tel: (775) 825-1111
www.cityofsparks.com



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 1.3

**Private and Publicly Owned Land
by Major Category**

- Legend**
- Study Area Boundary
 - Private Parcel
 - Publicly Owned Parcel
 - United States of America
 - City of Sparks
 - Other State, Federal and Local Entities
 - Street Centerline
 - Freeway
 - Highway
 - Major Arterial



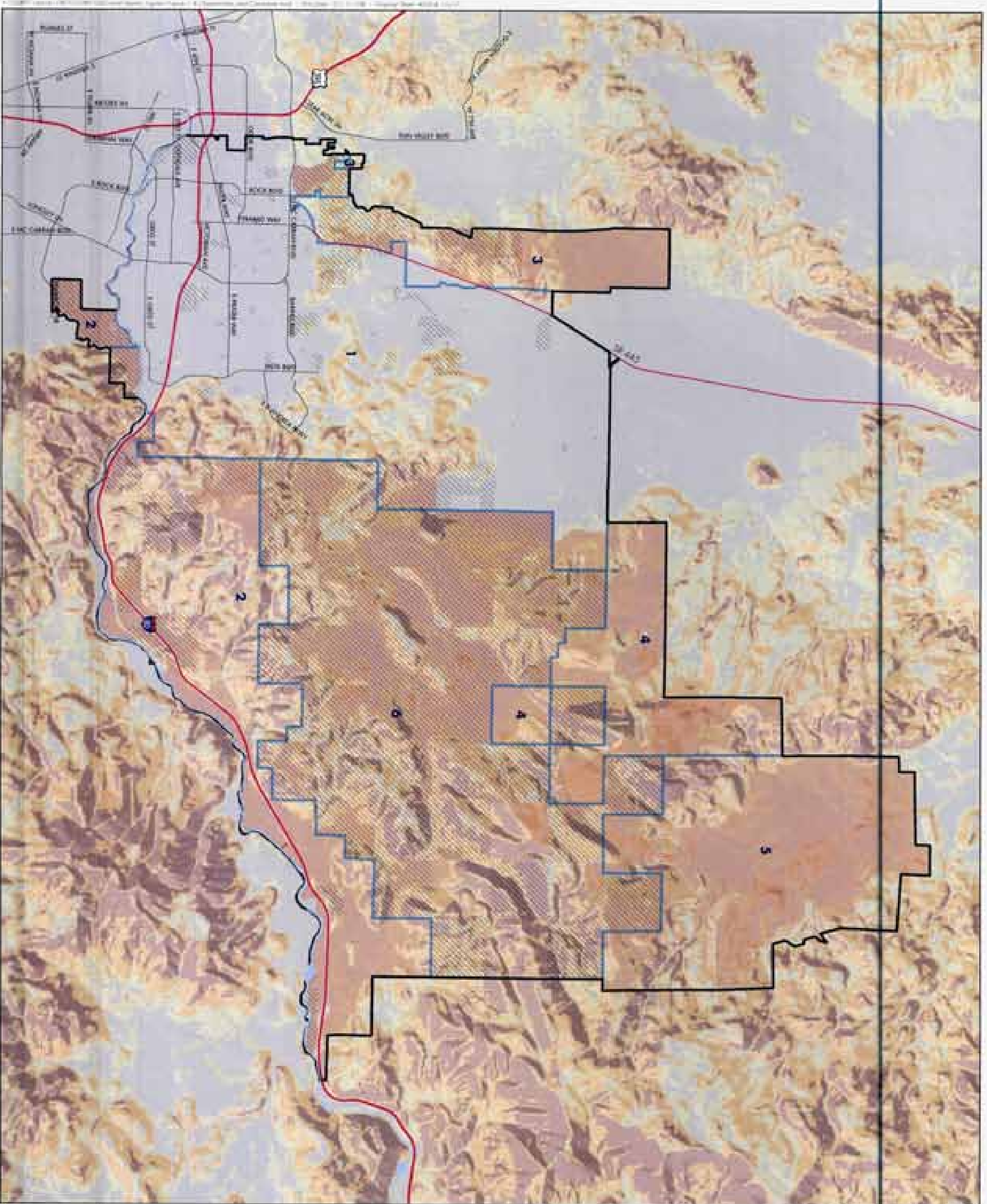

Stanley Consulting
 1000 S. Virginia Street, Suite 200
 Sparks, NV 89411
 Tel: (775) 835-1111
 Fax: (775) 835-1111
www.stanleyconsulting.com


City of Sparks
 1000 S. Virginia Street, Suite 200
 Sparks, NV 89411
 Tel: (775) 835-1111
 Fax: (775) 835-1111
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 1.4

Development Opportunities and Constraints



- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Adverse Slope**
 - 0 - 7%
 - 7.1 - 15%
 - 15.1 - 30%
 - Over 30%
 - Developable Areas (<30% Slope)
 - Publicly Owned Forest
 - Truckee River
 - Snow Catchment
 - Freeway
 - Highway
 - Major Avenue

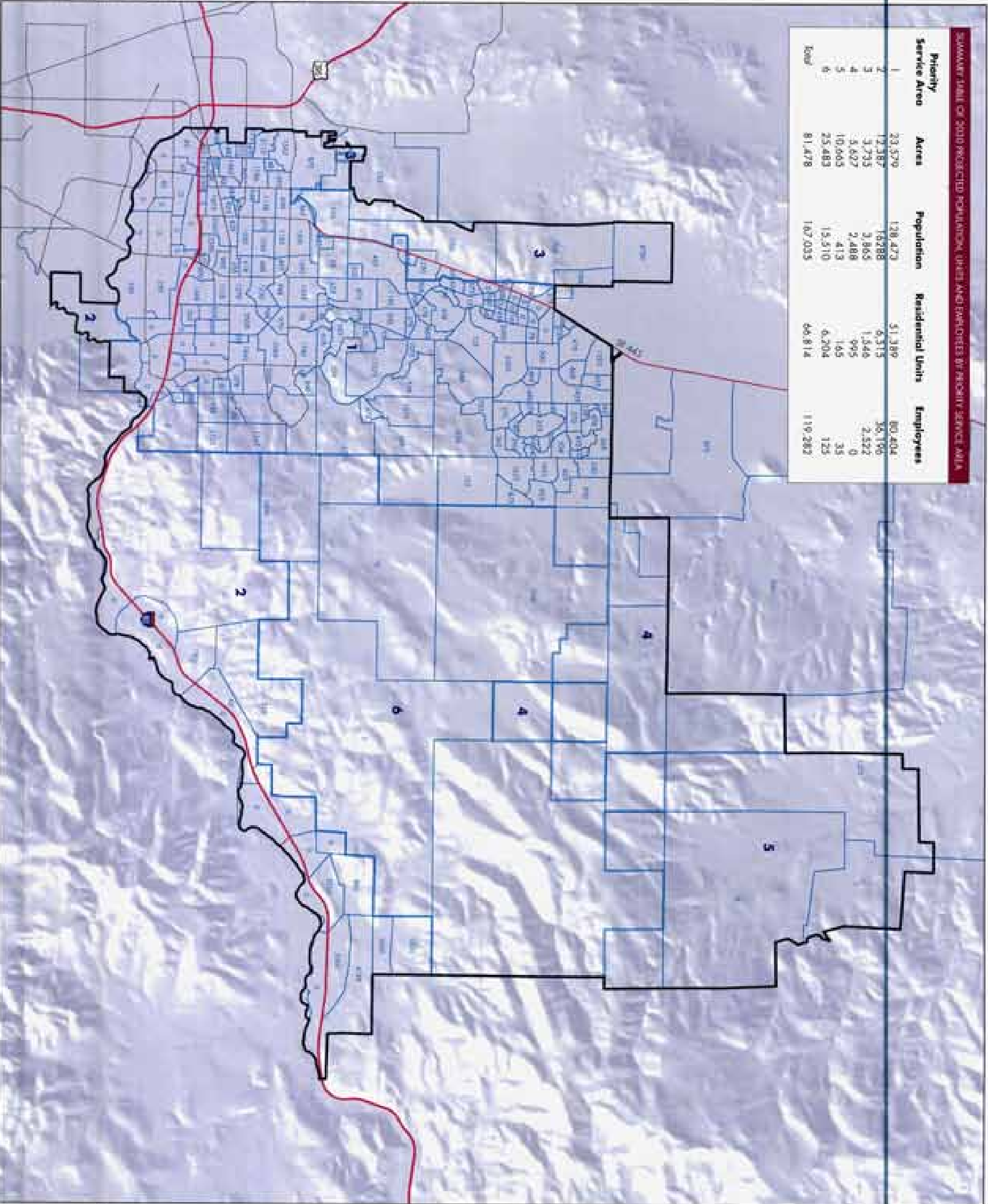



Spartan Consulting
 1000 N. Carson Street, Suite 200
 Sparks, NV 89410
 Phone: (775) 833-8888
 Website: www.spartanconsulting.com


CITY OF SPARKS
 1000 N. Carson Street, Suite 200
 Sparks, NV 89410
 Phone: (775) 833-8888
 Website: www.cityofsparks.com

SUMMARY TABLE OF 2030 PROJECTED POPULATION, UNITS AND EMPLOYERS BY PRIORITY SERVICE AREA

Priority Service Area	Area	Population	Residential Units	Employees
1	23,329	128,473	51,389	80,404
2	12,387	18,288	6,315	24,196
3	3,735	3,865	1,546	2,522
4	3,627	2,488	995	0
5	10,665	413	165	35
6	25,483	15,310	6,204	125
Total	81,478	167,035	66,814	119,267



CITY OF SPARKS TMSA/FSA CONCEPTUAL FACILITY MASTER PLAN

Figure 1.5

2030 Projected Population by Traffic Analysis Zone ("TAZ")

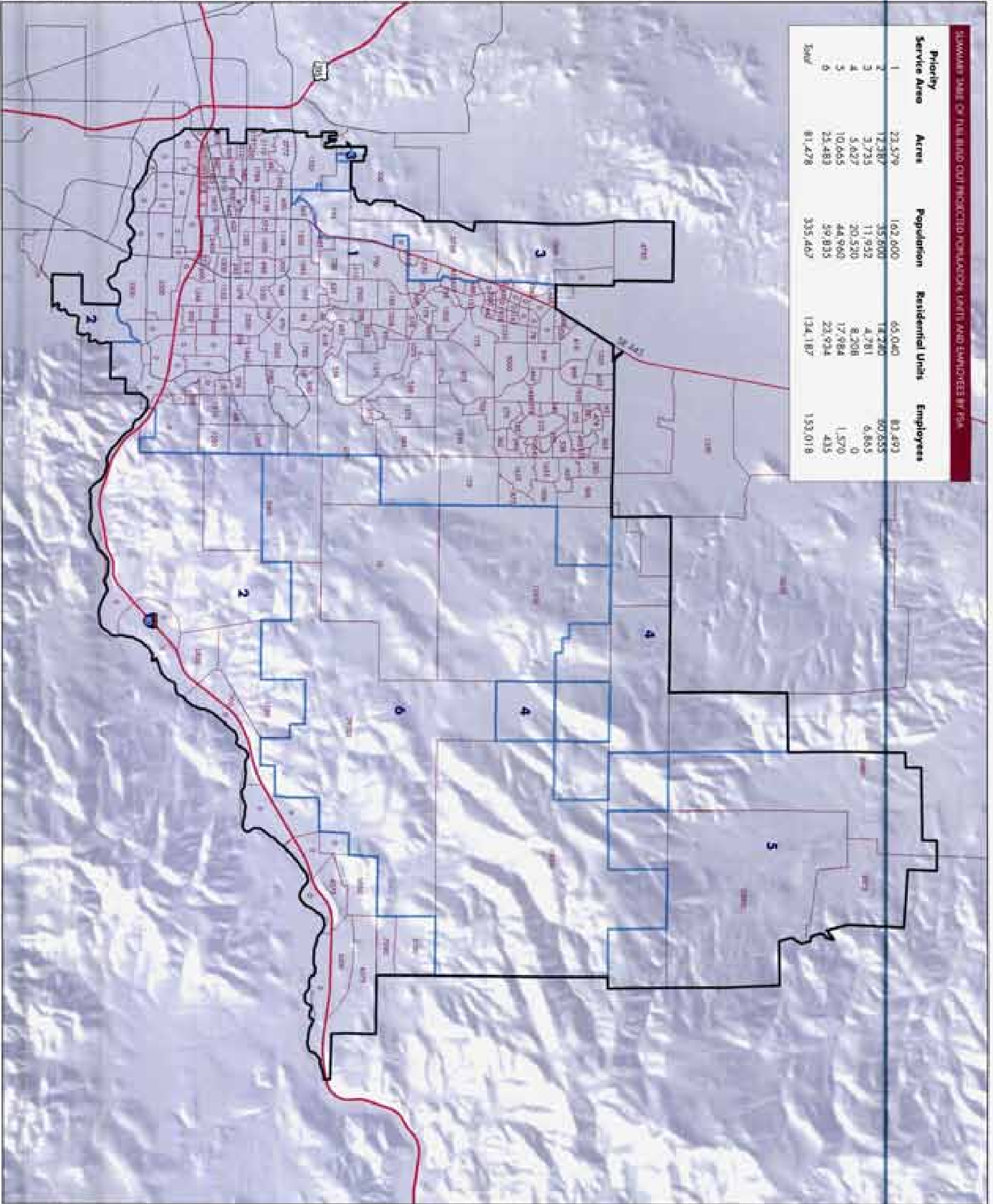
- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - TAZ Boundary with Population Projection
 - Street Corridor
 - Freeway
 - Highway
 - Major Arterial

Note: TAZs with 'V' population reflect a planned employment center and no residential use.



SUMMARY TABLE OF FULL-BUILD-OUT PROJECTED POPULATION, UNITS AND EMPLOYEES BY PZA

Priority Service Area	Area	Population	Residential Units	Employees
1	22,579	162,600	65,040	81,493
2	12,387	35,800	18,280	80,855
3	3,735	11,932	4,781	6,865
4	5,627	20,520	8,208	0
5	10,665	44,940	17,984	1,570
6	25,483	59,835	23,924	435
Total	81,478	335,467	134,187	153,018



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 1/6

**Full-Build-Out Projected Population
by Traffic Analysis Zone ("TAZ")**

- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - TAZ Boundary with Population Projection
 - Street Centerline
 - Freeway
 - Highway
 - Major Arterial

Note: TAZs with '0' population reflect a planned employment center and no residential uses.



SparkS Consulting
Sanitex
City of Sparks
2024



City of Sparks
2024

Section 7
Transportation

1. The first part of the document discusses the current state of transportation infrastructure and the challenges it faces. It highlights the need for investment in public transit, road maintenance, and air quality improvements. The text emphasizes that a comprehensive approach is required to address the diverse needs of different communities and modes of transport.

2. The second part of the document outlines the proposed transportation plan. This includes the development of a new transit system, the expansion of existing bus routes, and the construction of additional roadways. The plan also addresses the integration of different modes of transport, such as combining bus and bike-sharing services to provide a seamless travel experience.

3. The third part of the document discusses the funding sources for the transportation plan. It identifies various options, including state and federal grants, local government bonds, and public-private partnerships. The text stresses the importance of securing a stable and sustainable funding stream to ensure the long-term success of the transportation system.

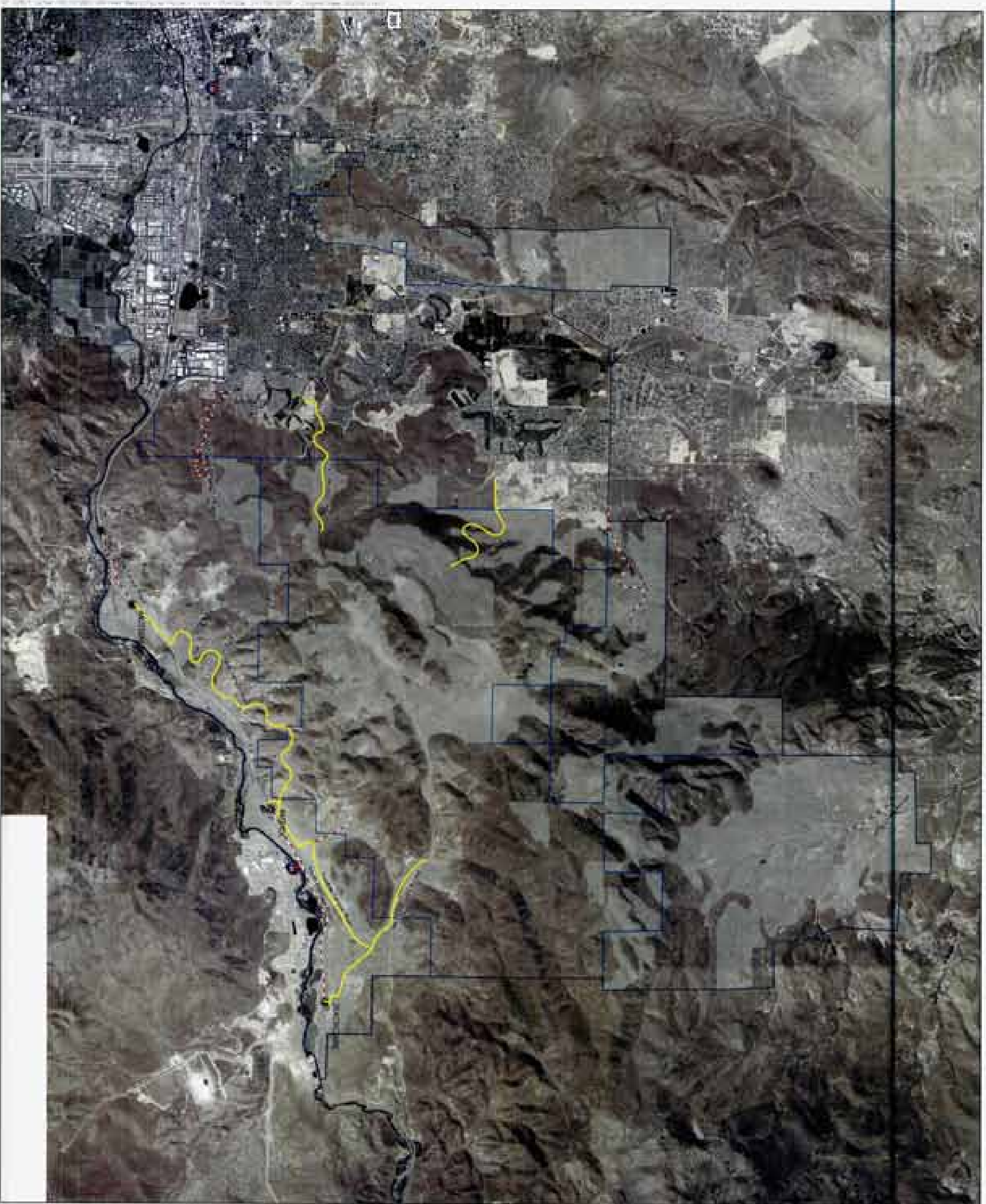
4. The final part of the document provides a timeline for the implementation of the transportation plan. It details the key milestones and the expected completion dates for various projects. The text also includes a section on monitoring and evaluation, which will allow the transportation authority to track progress and make adjustments as needed.

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 2.1

**Existing and Proposed
Roadway Network and
Traffic Assignments - 2030**

- Legend**
-  Study Area Boundary
 -  Priority Service Area Boundary & Number
 -  Developable Areas (<30% Slope)
 -  Existing & Proposed Interchanges
 -  Arterial Road
 -  Collector/Local Road



Sparks Consulting, Inc.
1000 W. 1st Street
Sparks, NV 89411
Tel: 775.734.8888
www.sparksconsulting.com

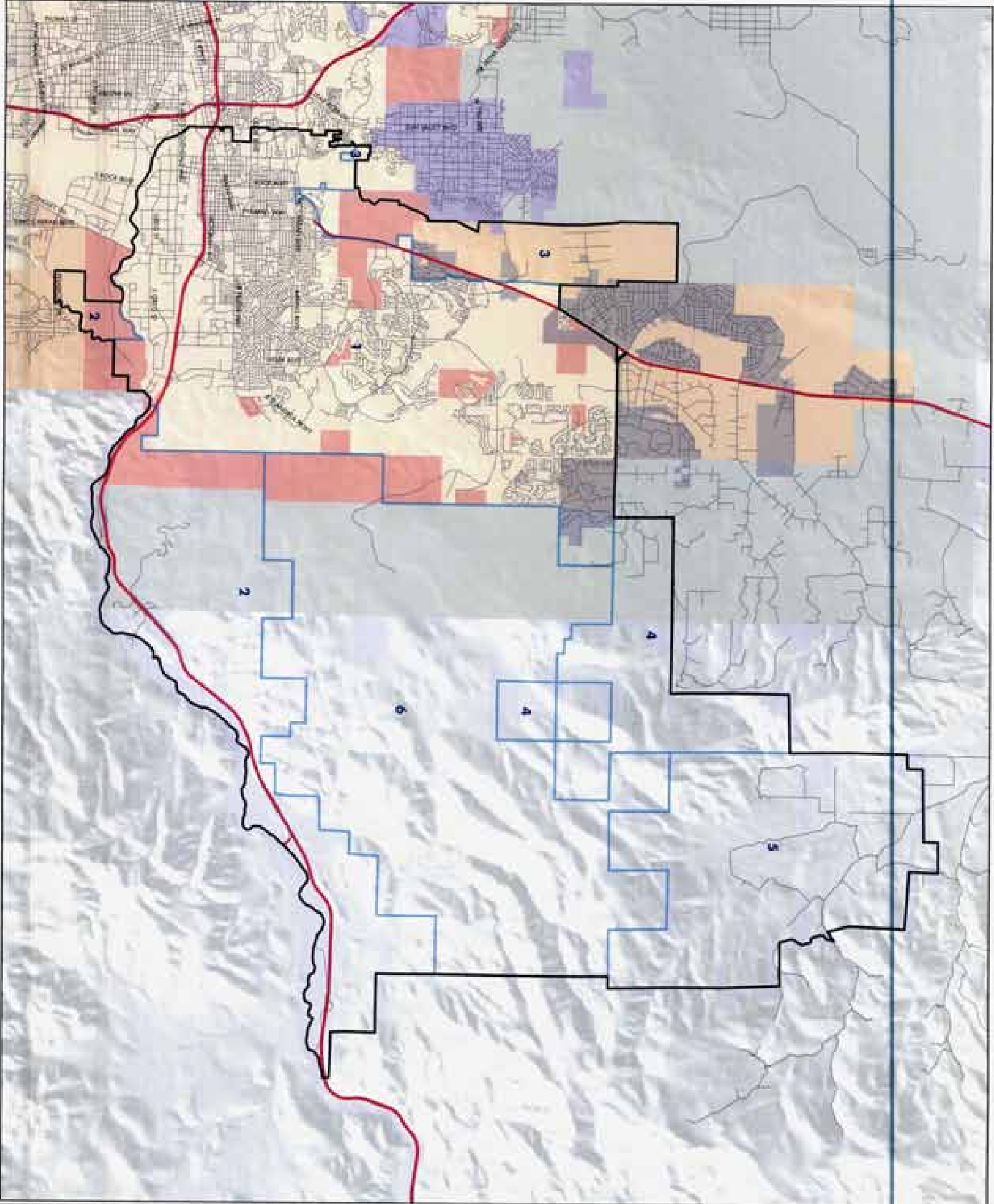


Section 3
Winter

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.1

**Existing Water Service Providers
and Service Territories**



- Legend:**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - WCDNWR Service Area
 - Washoe County/ Washoe Area
 - Washoe County/ Silver Lake Area
 - Other Washoe Area
 - TMSA Inad Area
 - TMSA Service of Interest
 - Highways
 - Arterial



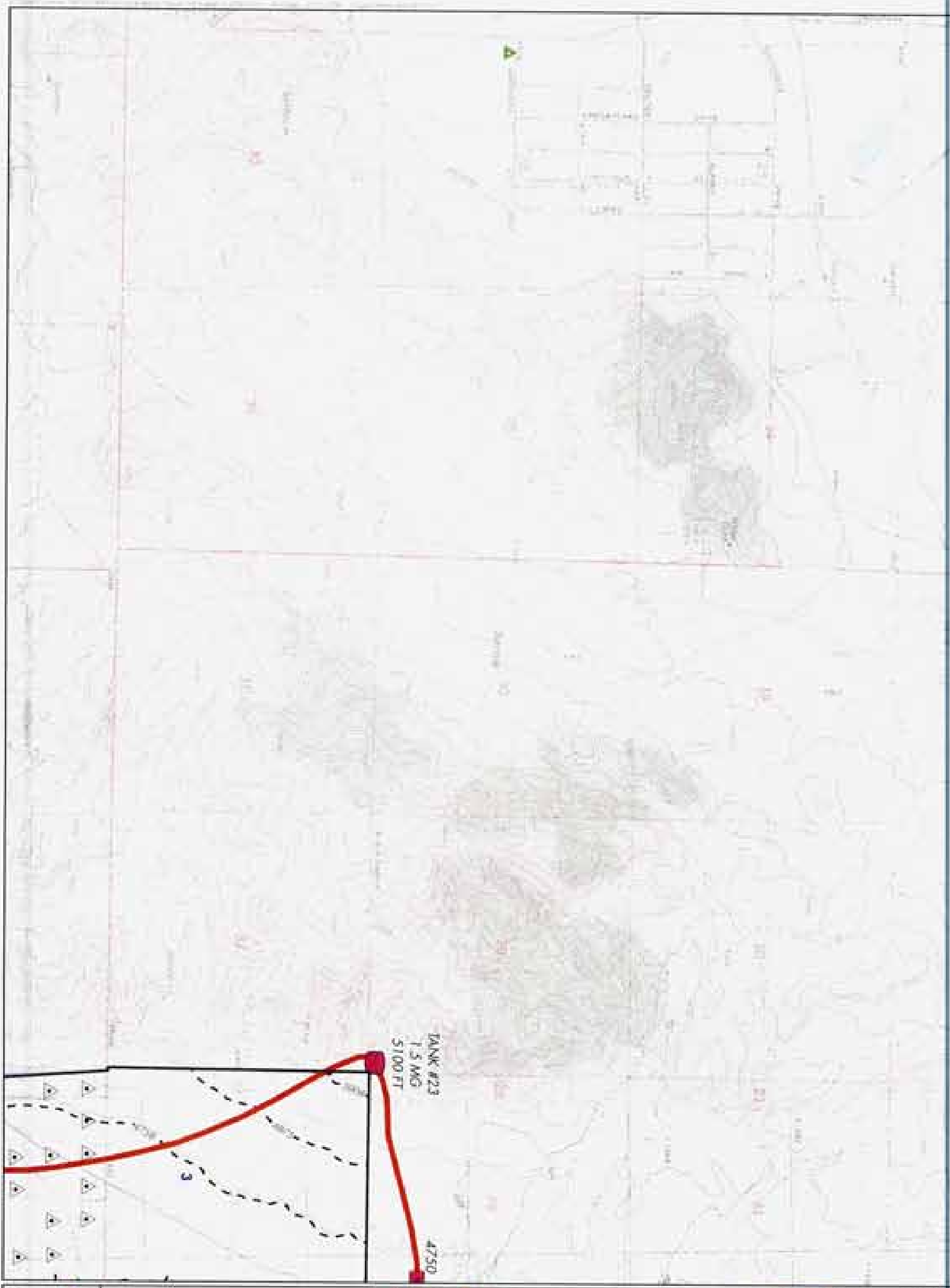

Spartan Consulting
 1400 S. Virginia Street
 Reno, NV 89502
 Phone: (775) 885-5177
 Fax: (775) 885-5178
 www.spartan.com


CITY OF SPARKS
 1000 S. Virginia Street
 Sparks, NV 89410
 Phone: (775) 343-2100
 www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.2

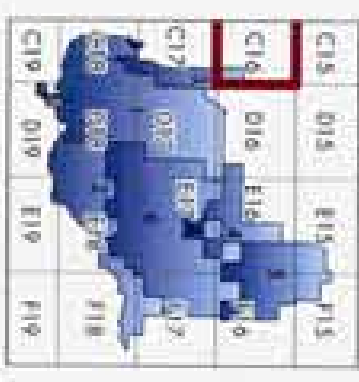
**Existing and Proposed Water
Facilities - 2030 (C16)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (c-30% Slope) - 2010
- Developable Areas (c-30% Slope) - Builder
- Truckee River
- Existing Pressure Main
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 8" Mains or greater
- WCDMA 8" Mains or greater
- WCDMA Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 10"
- 12"
- 16"
- Pressure Zone Boundaries & Elevation
- Actual Road
- Collector/Road Road

KEY MAP (not to scale)



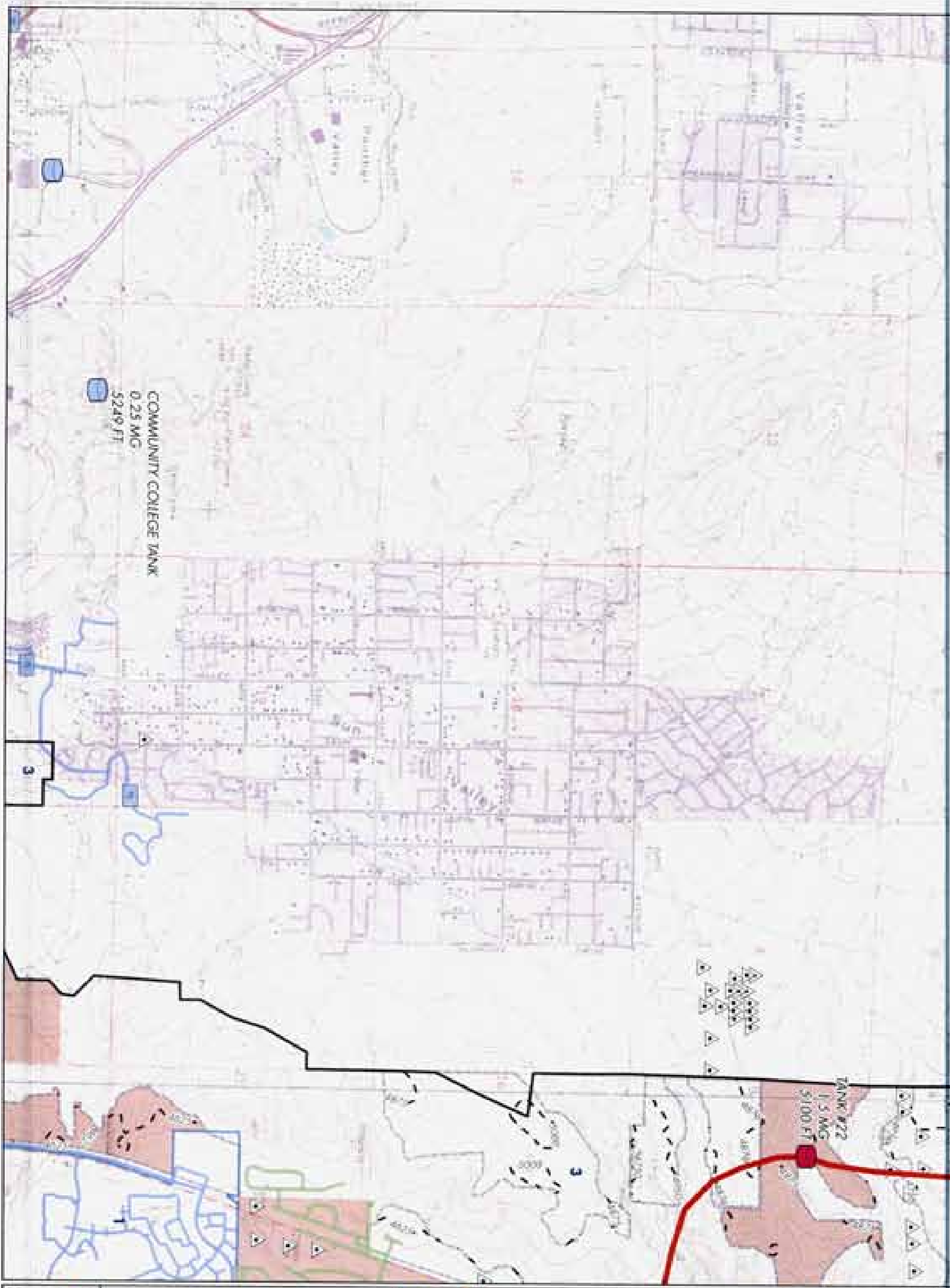
Stark Consulting
1000 N. 2nd St.
Sparks, NV 89410
Tel: (775) 359-1111
www.starkconsulting.com

City of Sparks
1000 N. 2nd St.
Sparks, NV 89410
Tel: (775) 359-1111
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.3

**Existing and Proposed Water
Facilities - 2030 (C17)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Development Area (C-20% Signal - 2030)
- Developable Areas (C-20% Signal - Building)
- System Pipe
- Existing Private Well
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 6" Mains or greater
- WCDMA 6" Mains or greater
- WCDMA Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 10"
- 12"
- Pressure Zone Boundaries & Elevation
- Arroyal Canal
- Collection/Arroyal Canal

KEY MAP (used in model)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19

Scale

0 1,000 2,000 4,000 Feet

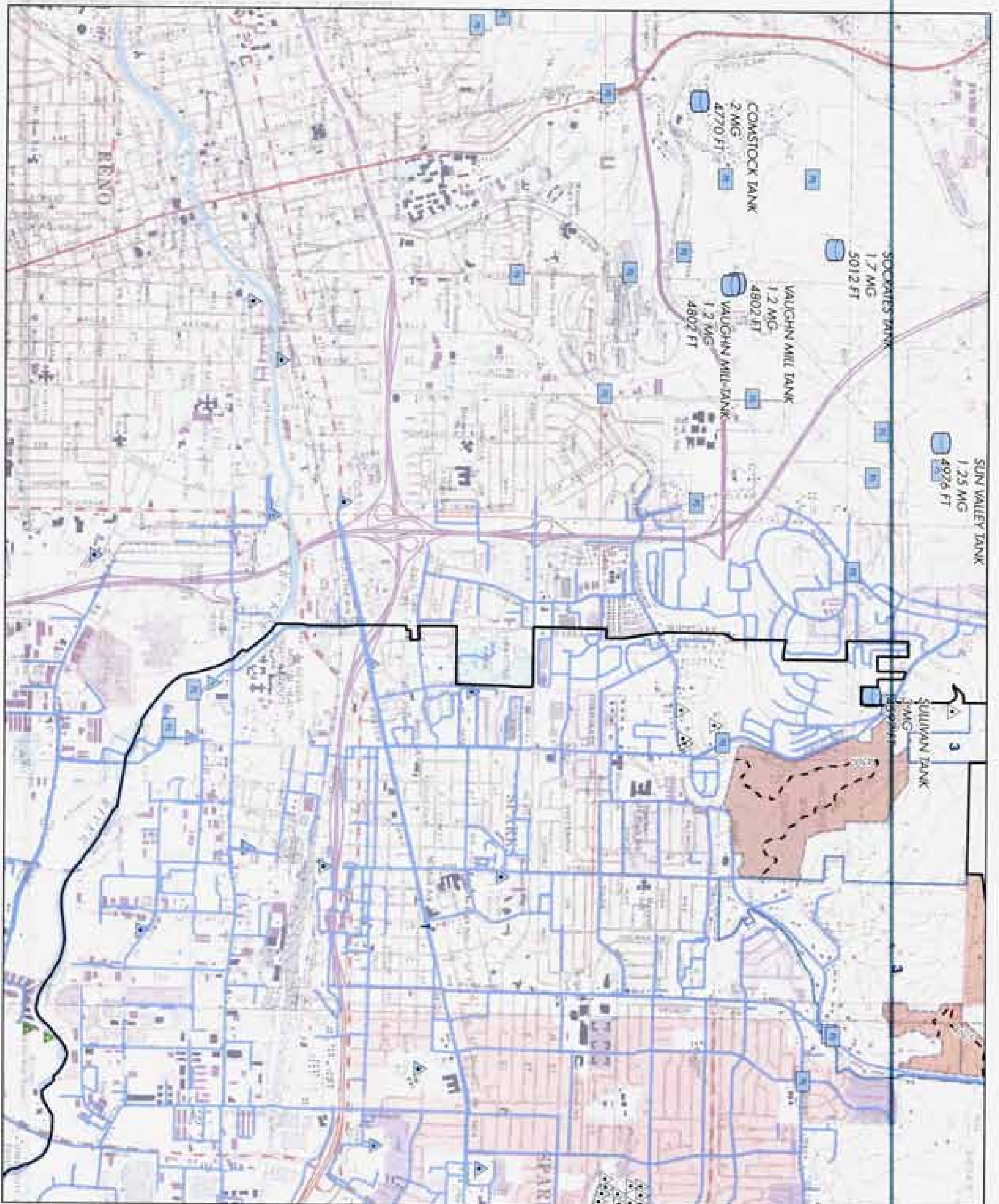
0 1,000 2,000 4,000 Meters

Dynamic Consulting
1000 S. Virginia Ave. Suite 200
Sparks, NV 89410
775.734.8888
www.dynamicconsulting.com

City of Sparks
1000 S. Virginia Ave. Suite 200
Sparks, NV 89410
775.734.8888
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

**Figure 3.4
Existing and Proposed Water
Facilities - 2030 (C18)**



- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Developer Aired (C-308, Seppel) - 2030
 - Developer Aired (C-308, Seppel) - 2030
 - Future Zone
 - Existing Private Well
 - TMSA Tank Location
 - TMSA Pump Station
 - TMSA Well
 - TMSA 8' Above or Greater
 - WCDMA 8' Above or Greater
 - WCDMA Well Location
 - Proposed Tank Location
 - Proposed Pump Station
 - Proposed Water Main
 - 16"
 - 12"
 - Future Zone Boundary & Elevation
 - Annual Flood
 - Collector/Local Road

KEY MAP - foot to scale

C19	B15	E15	B15
C18	D1A	E16	A16
C17	D02	E07	E17
C16	D03	E08	F18
C19	D19	E19	F19



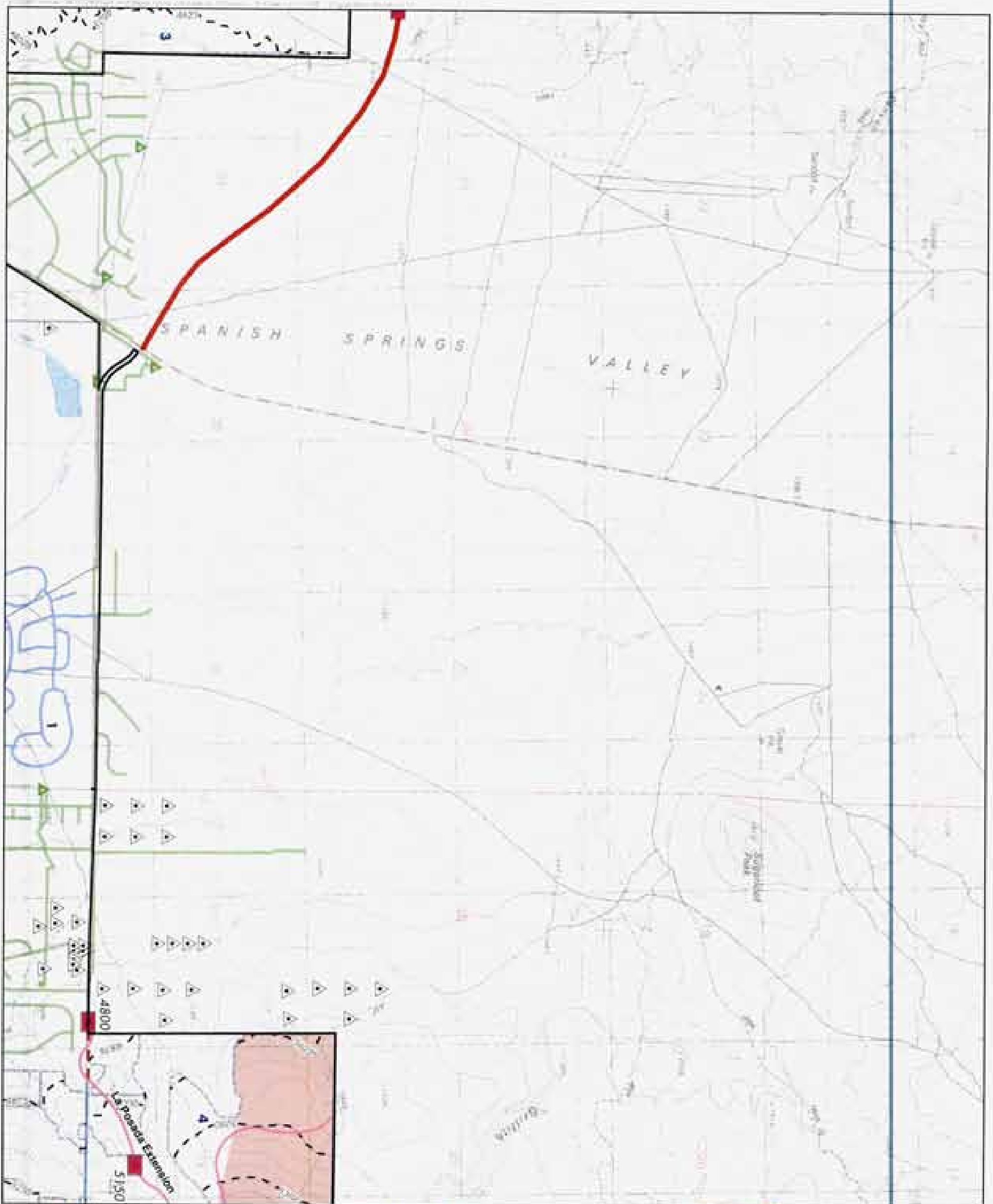
Sparks

City of Sparks
1000 West Carson Street
Sparks, NV 89410
Phone: 775.333.8888
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.5

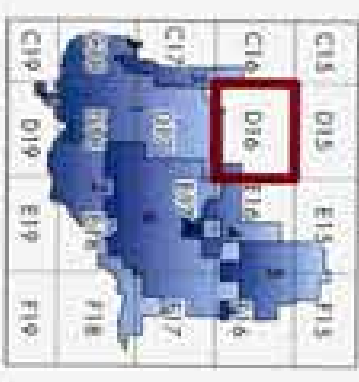
**Existing and Proposed Water
Facilities - 2030 (D16)**



Legend

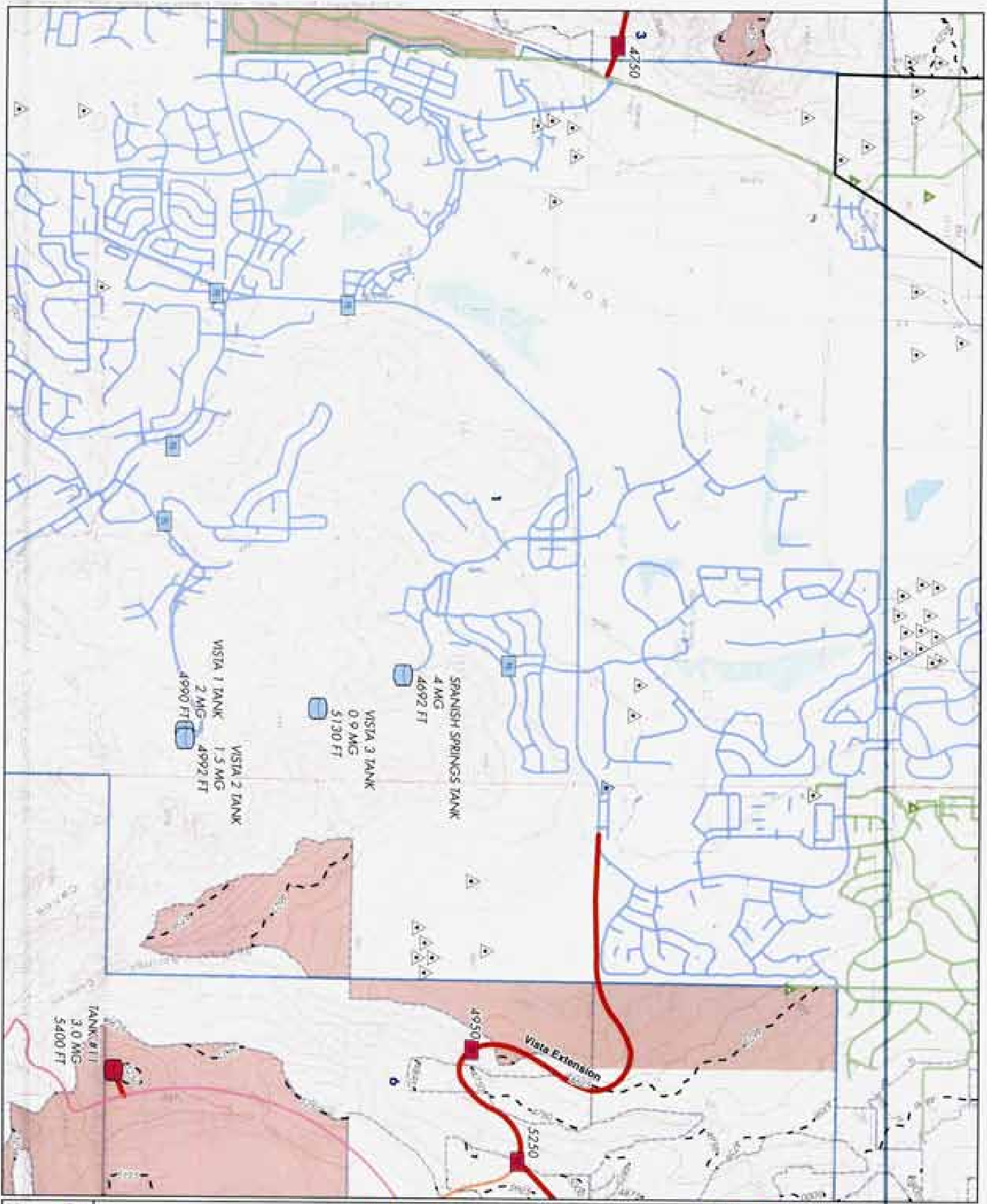
- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (4-20% Slope) - 2030
- Developable Areas (4-20% Slope) - Shadow
- Inactive Pipe
- Existing Pump Wells
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 8" Main or greater
- WCDMA 8" Main or greater
- WCDMA Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Main 16"
- 12"
- Pressure Zone Boundaries & Extension
- Arroyo Road
- Collection/Arroyo Road

KEY MAP (not to scale)



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

**Figure 3.6
Existing and Proposed Water
Facilities - 2030 (D17)**



- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Developable Area (C20% Slope) - 2030
 - Developable Area (<30% Slope) - Outflow
 - Inflow Pipe
 - Existing Private Well
 - TMSA Tank Locations
 - TMSA Pump Stations
 - TMSA Well
 - TMSA 8" Main or greater
 - WCDWR 8" Main or greater
 - WCDWR Well Locations
 - Proposed Tank Locations
 - Proposed Pump Stations
 - Proposed Water Main
 - 16"
 - 12"
 - Pressure Zone Boundaries & Elevation
 - Arroyo Flood
 - Collector/Local Road

KEY MAP - Just to scale

C15	O15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



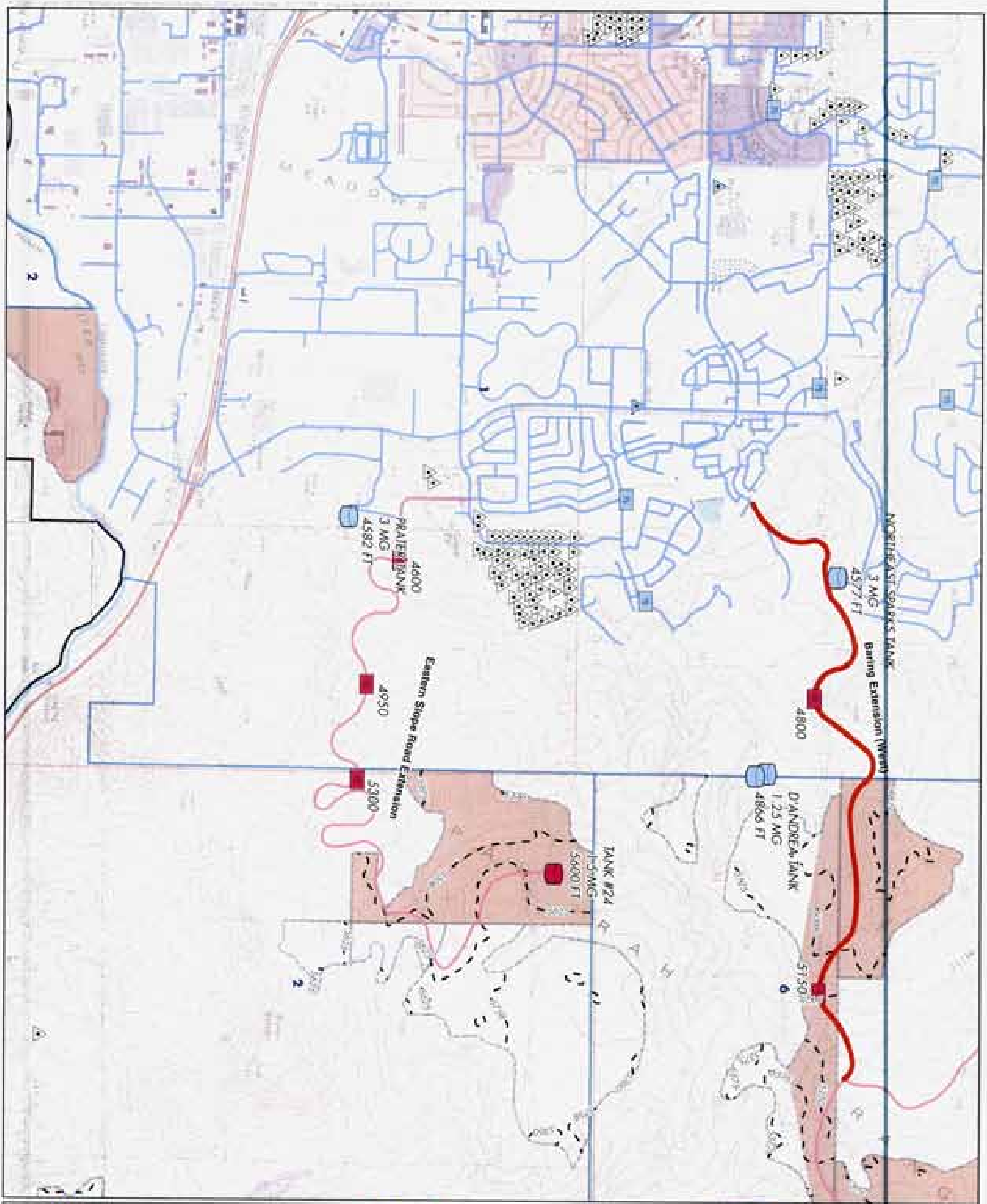
Sparkes Consulting
1000 West Reno Avenue
Reno, NV 89502
Tel: (775) 784-8888
www.sparkes.com

Sparkes Engineering
1000 West Reno Avenue
Reno, NV 89502
Tel: (775) 784-8888
www.sparkes.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

**Existing and Proposed Water
Facilities - 2030 (D18)**

Figure 3.7



Legend

- Study Area Boundary
- Primary Service Area Boundary & Number
- Developable Areas (c-30% Slope) - 2030
- Developable Areas (c-30% Slope) - Boulder
- Traction Pipe
- Existing Pressure Wells
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA Wells
- DMSA & MDM or greens
- WCDMA & MDM or greens
- WCDMA Well locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 16"
- 12"
- Pressure Zone Boundaries & Elevation
- Aerial Lines
- Collector/Feeder Lines

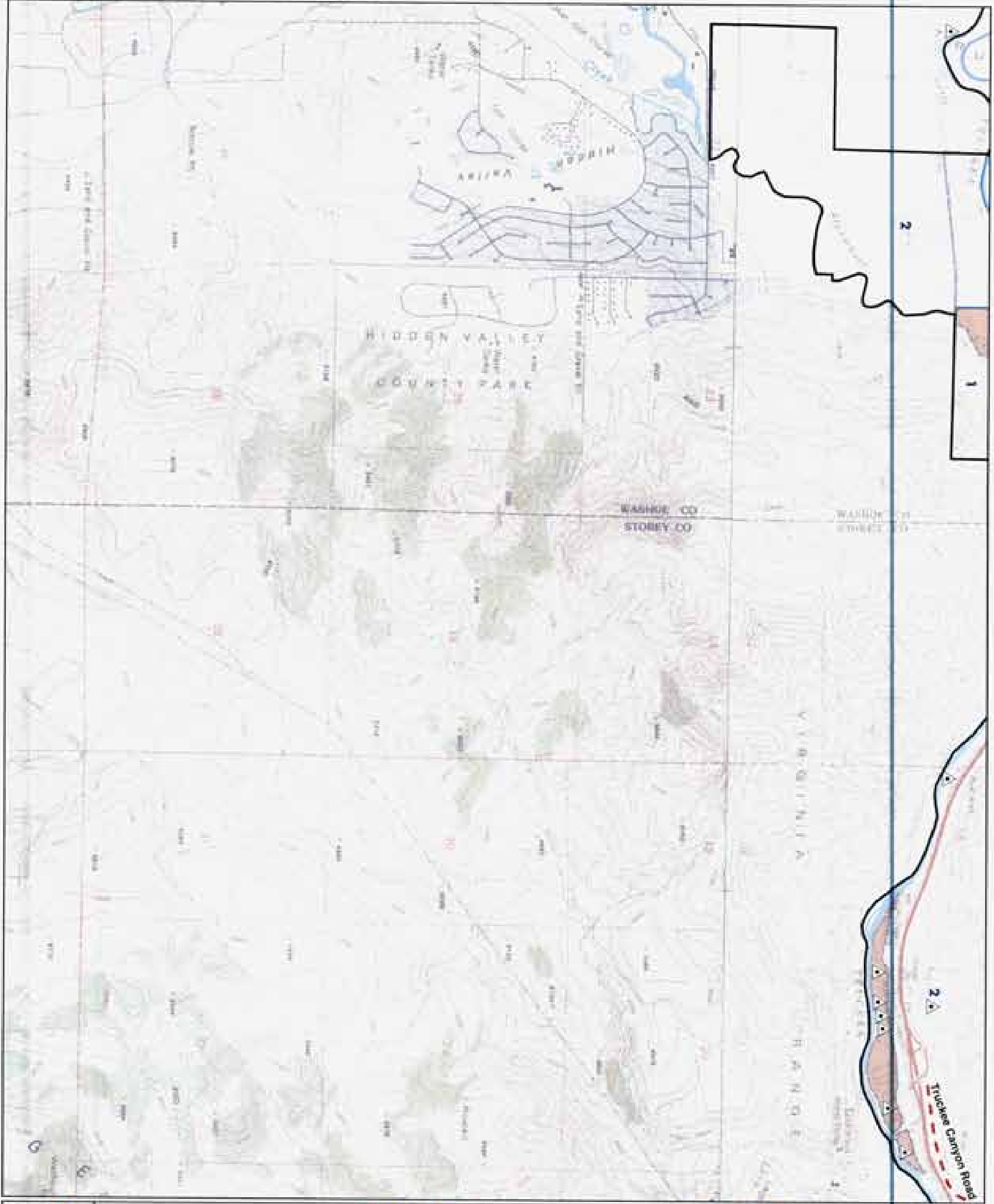
KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



Sparks Consulting
1000 Sparks Blvd., Suite 200
Sparks, NV 89410
775.734.8888
www.sparksconsulting.com

Sparks
City of Sparks
1000 Sparks Blvd., Suite 200
Sparks, NV 89410
775.734.8888
www.sparksnevada.com



**Figure 3.8
Existing and Proposed Water
Facilities - 2030 (D19)**

- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Developable Areas (±20% Slope) - 2030
 - Developable Areas (±30% Slope) - Bidder
 - Inaction Area
 - Existing Pump Station
 - TMSA Tank Locations
 - TMSA Pump Stations
 - TMSA Wells
 - TMSA 8" Above or greater
 - WCDMA 8" Main or greater
 - WCDMA Well locations
 - Proposed Tank Locations
 - Proposed Pump Stations
 - Proposed Water Mains
 - 16"
 - 12"
 - Future Zone Boundaries & Elevations
 - Aerial Road
 - Collector/Arterial Road

KEY MAP (North side)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19

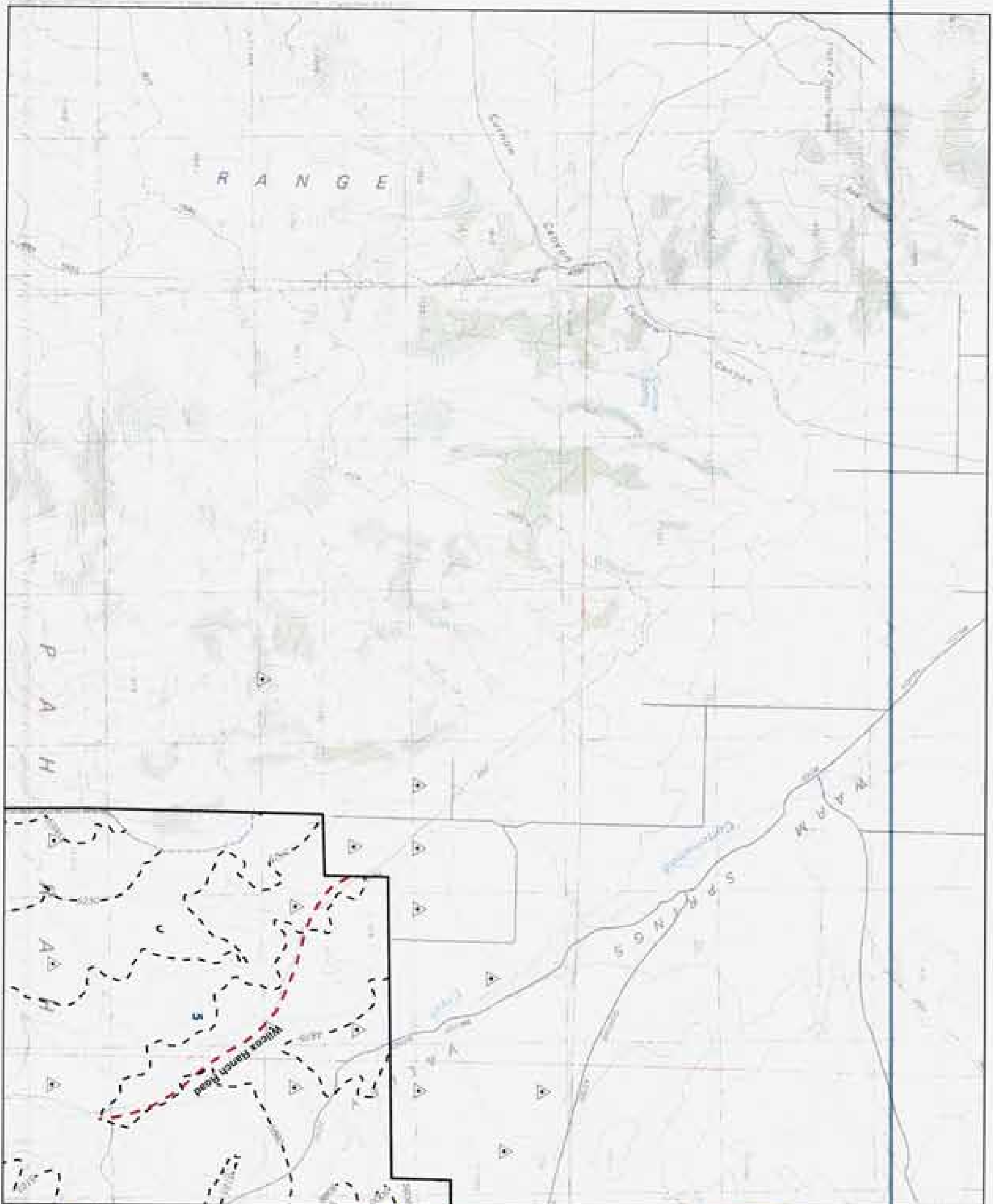


Stantec Consulting
 1000 West Bonanza Avenue
 Reno, NV 89501
 Tel: 775.784.8800
 Fax: 775.784.8801
 www.stantec.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.9

**Existing and Proposed Water
Facilities - 2030 (E15)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (c-20% Slope) - 2030
- Developable Areas (c-20% Slope) - Burdour
- Sparks River
- Existing Pump Station
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 8" Mains or greater
- WCDMA 8" Mains or greater
- WCDMA Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 10"
- 12"
- Pressure Zone Boundaries & Elevation
- Arroyo Road
- Collector/Arroyo Road

KEY MAP (water table)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.10

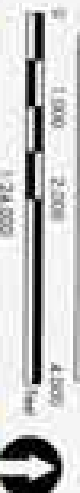
**Existing and Proposed Water
Facilities - 2030 (E16)**



- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Developable Areas (200% Slope) - 2030
 - Developable Areas (20% Slope) - Surface
 - Saturated River
 - Existing Pump Wells
 - TMSA Tank Locations
 - TMSA Pump Stations
 - TMSA Wells
 - TMSA 8" Mains or greater
 - WCDMA 8" Mains or greater
 - WCDMA Well Locations
 - Proposed Tank Locations
 - Proposed Pump Stations
 - Proposed Water Mains
 - 16"
 - 12"
 - Pressure Zone Boundaries & Elevation
 - Arroyo Road
 - Collector/Arroyo Road

KEY MAP (same scale)

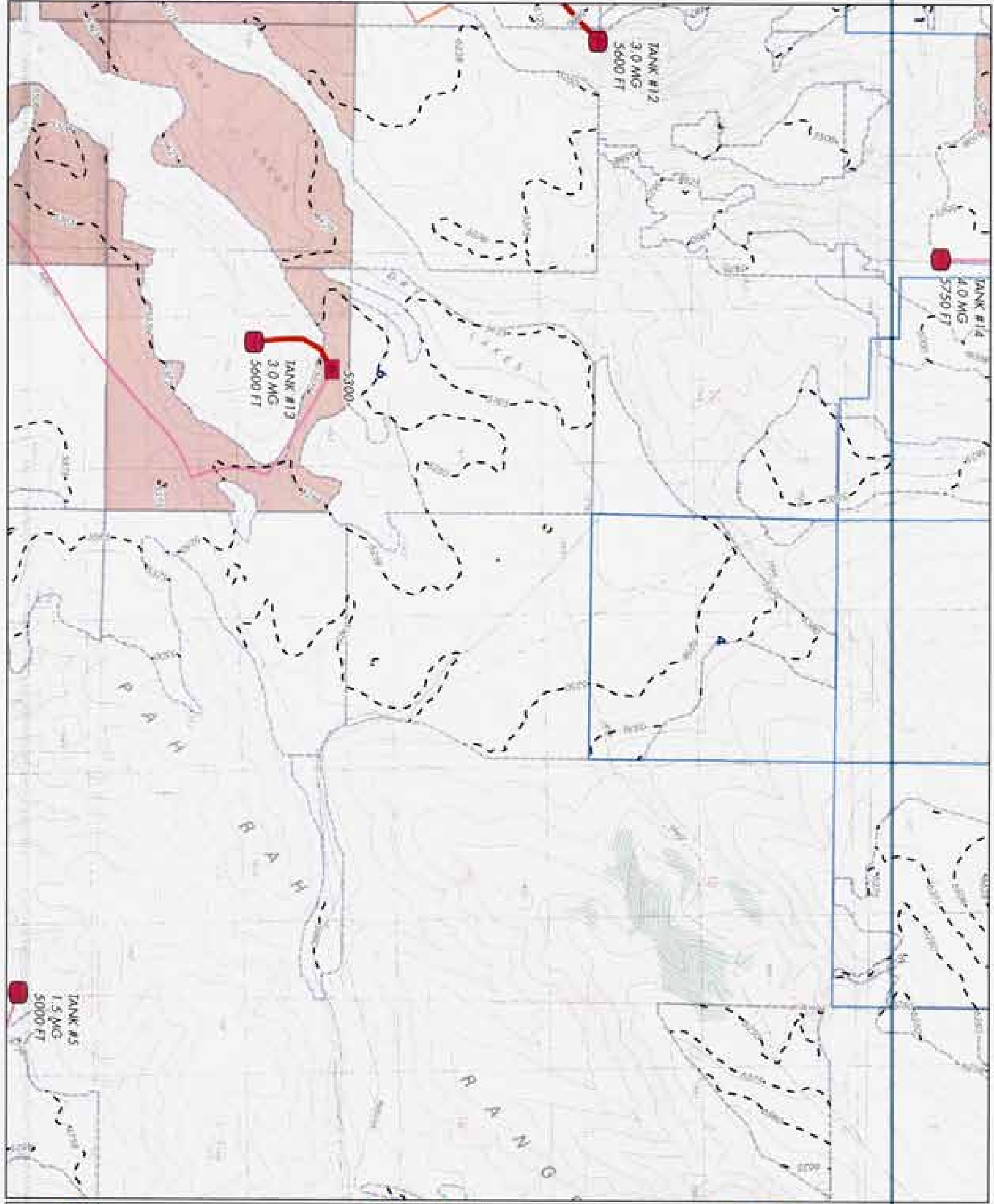
C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.11

**Existing and Proposed Water
Facilities - 2030 (E17)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (4-20% Slope) - 2030
- Developable Areas (4-20% Slope) - 2030
- Developable Areas (4-20% Slope) - 2030
- Subcell Area
- Existing Private Well
- TMSWA Tank Locations
- TMSWA Pump Stations
- TMSWA Wells
- TMSWA 8" Water or gas
- WCDNR 8" Water or gas
- WCDNR Well locations
- Proposed Tank locations
- Proposed Pump Stations
- Proposed Water Mains
- 12"
- 16"
- Pressure Zone Boundaries & Elevations
- Arroyo/road
- Collector/loop Road

KEY MAP (same scale)

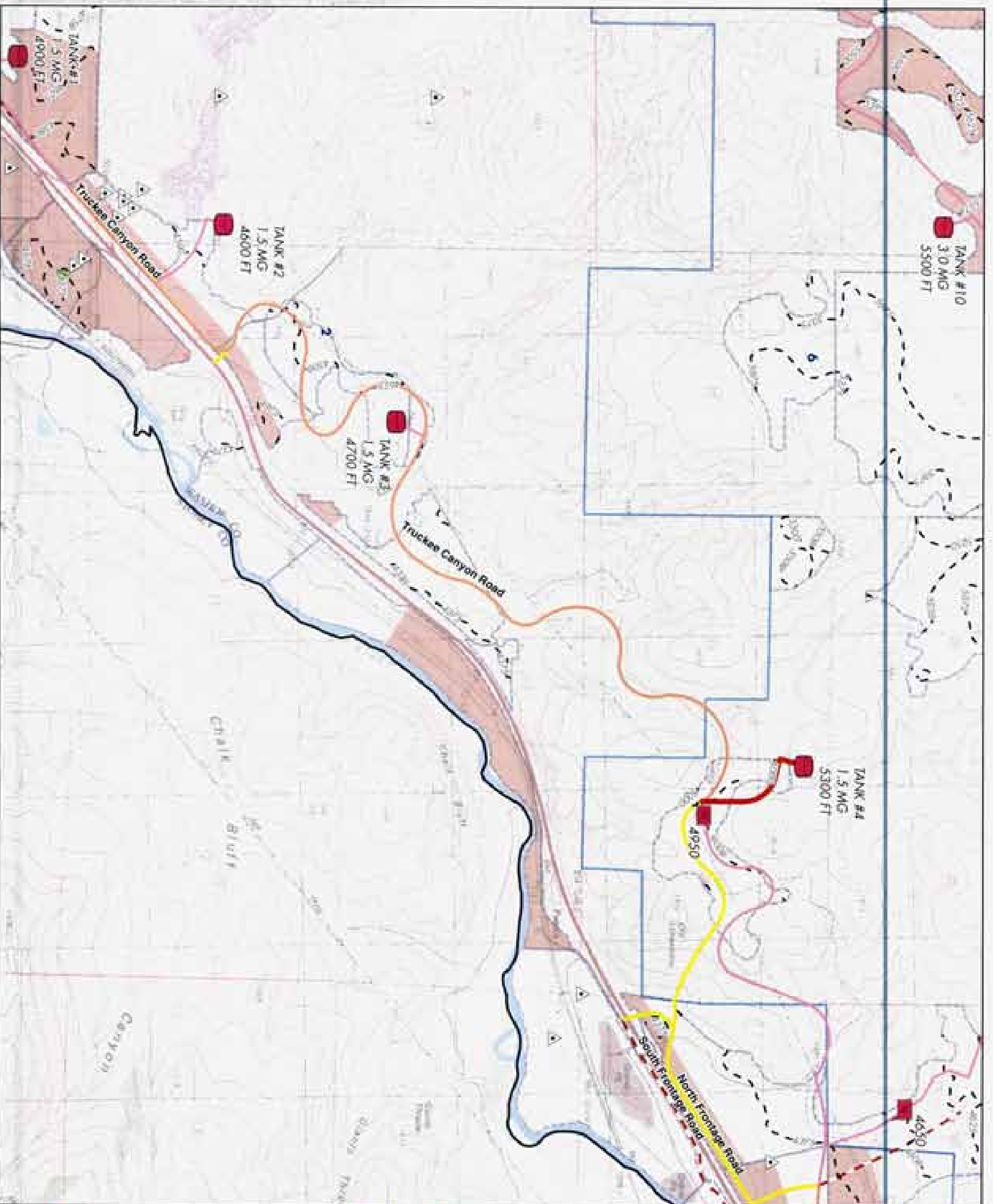
C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.12

**Existing and Proposed Water
Facilities - 2030 (E18)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (4-20% Slope) - 2030
- Developable Areas (4-20% Slope) - 2010
- Truckee River
- Existing Pump Wells
- TMSA#1 Tank Locations
- TMSA#2 Tank Locations
- TMSA#3 Tank Locations
- TMSA#4 Tank Locations
- TMSA#5 Tank Locations
- TMSA#6 Tank Locations
- TMSA#7 Tank Locations
- TMSA#8 Tank Locations
- TMSA#9 Tank Locations
- TMSA#10 Tank Locations
- TMSA#11 Tank Locations
- TMSA#12 Tank Locations
- TMSA#13 Tank Locations
- TMSA#14 Tank Locations
- TMSA#15 Tank Locations
- TMSA#16 Tank Locations
- TMSA#17 Tank Locations
- TMSA#18 Tank Locations
- TMSA#19 Tank Locations
- TMSA#20 Tank Locations
- TMSA#21 Tank Locations
- TMSA#22 Tank Locations
- TMSA#23 Tank Locations
- TMSA#24 Tank Locations
- TMSA#25 Tank Locations
- TMSA#26 Tank Locations
- TMSA#27 Tank Locations
- TMSA#28 Tank Locations
- TMSA#29 Tank Locations
- TMSA#30 Tank Locations
- TMSA#31 Tank Locations
- TMSA#32 Tank Locations
- TMSA#33 Tank Locations
- TMSA#34 Tank Locations
- TMSA#35 Tank Locations
- TMSA#36 Tank Locations
- TMSA#37 Tank Locations
- TMSA#38 Tank Locations
- TMSA#39 Tank Locations
- TMSA#40 Tank Locations
- TMSA#41 Tank Locations
- TMSA#42 Tank Locations
- TMSA#43 Tank Locations
- TMSA#44 Tank Locations
- TMSA#45 Tank Locations
- TMSA#46 Tank Locations
- TMSA#47 Tank Locations
- TMSA#48 Tank Locations
- TMSA#49 Tank Locations
- TMSA#50 Tank Locations
- TMSA#51 Tank Locations
- TMSA#52 Tank Locations
- TMSA#53 Tank Locations
- TMSA#54 Tank Locations
- TMSA#55 Tank Locations
- TMSA#56 Tank Locations
- TMSA#57 Tank Locations
- TMSA#58 Tank Locations
- TMSA#59 Tank Locations
- TMSA#60 Tank Locations
- TMSA#61 Tank Locations
- TMSA#62 Tank Locations
- TMSA#63 Tank Locations
- TMSA#64 Tank Locations
- TMSA#65 Tank Locations
- TMSA#66 Tank Locations
- TMSA#67 Tank Locations
- TMSA#68 Tank Locations
- TMSA#69 Tank Locations
- TMSA#70 Tank Locations
- TMSA#71 Tank Locations
- TMSA#72 Tank Locations
- TMSA#73 Tank Locations
- TMSA#74 Tank Locations
- TMSA#75 Tank Locations
- TMSA#76 Tank Locations
- TMSA#77 Tank Locations
- TMSA#78 Tank Locations
- TMSA#79 Tank Locations
- TMSA#80 Tank Locations
- TMSA#81 Tank Locations
- TMSA#82 Tank Locations
- TMSA#83 Tank Locations
- TMSA#84 Tank Locations
- TMSA#85 Tank Locations
- TMSA#86 Tank Locations
- TMSA#87 Tank Locations
- TMSA#88 Tank Locations
- TMSA#89 Tank Locations
- TMSA#90 Tank Locations
- TMSA#91 Tank Locations
- TMSA#92 Tank Locations
- TMSA#93 Tank Locations
- TMSA#94 Tank Locations
- TMSA#95 Tank Locations
- TMSA#96 Tank Locations
- TMSA#97 Tank Locations
- TMSA#98 Tank Locations
- TMSA#99 Tank Locations
- TMSA#100 Tank Locations
- WCDMW Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 12"
- 16"
- Pressure Zone Boundaries & Elevations
- Aerial Road
- Collector/Local Road

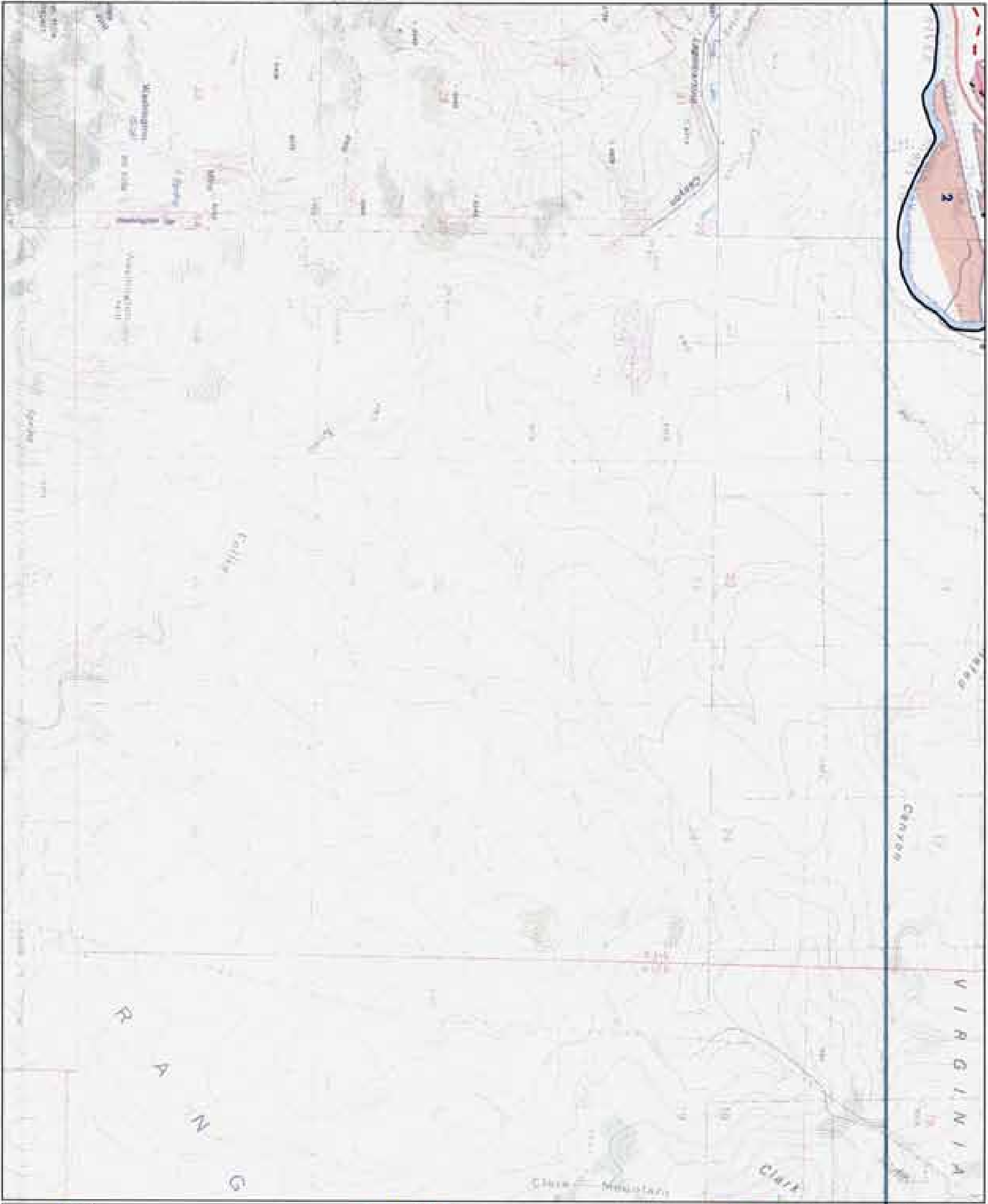
NEW MAP! (use to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



Stantec
 1000 North Virginia Street, Suite 200
 Sparks, NV 89411
 Phone: (775) 350-1000
 Fax: (775) 350-1001
 Email: info@stantec.com

City of Sparks
 1000 North Virginia Street, Suite 200
 Sparks, NV 89411
 Phone: (775) 350-1000
 Fax: (775) 350-1001
 Email: info@cityofsparks.com



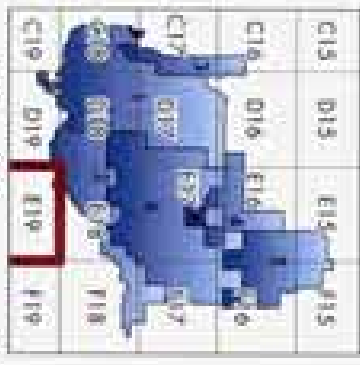
**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN
Figure 3.13**

**Existing and Proposed Water
Facilities - 2030 (E19)**

Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (L-3015 Signel) - 2030
- Developable Areas (L-3015 Signel) - Subdiv
- Trenches Base
- Existing Private Wells
- TMSA Well Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 8" Main or greater
- WCDM 8" Main or greater
- WCDM Well Locations
- Proposed Well Locations
- Proposed Pump Stations
- Proposed Water Mains
 - 12"
 - 16"
- Priority Zone Boundaries & Elevation
- Arterial Road
- Collector/Local Road

KEY MAP (not to scale)

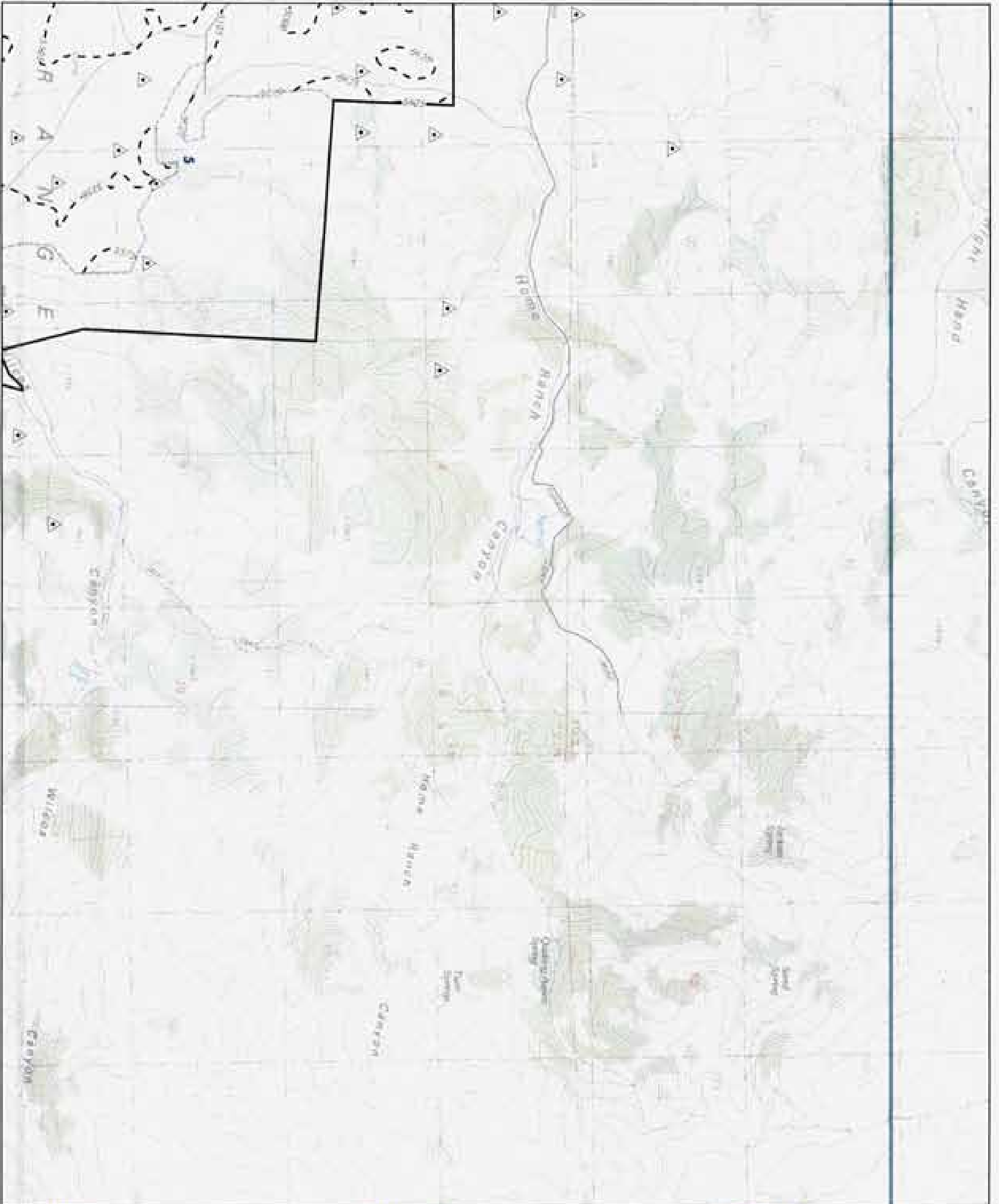


Stantec Consulting
 2000 North Rockwell
 Reno, NV 89502
 Phone: 775.786.8800
 Fax: 775.786.8801
 www.stantec.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.14

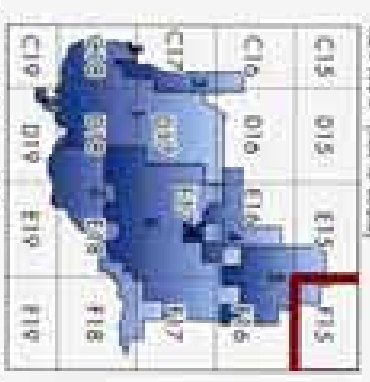
**Existing and Proposed Water
Facilities - 2030 (F15)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Number
- Developable Areas (A-20% Slope) - 2030
- Developable Areas (A-20% Slope) - Subdiv
- Existing River
- Existing Private Wells
- TMSA Tank Locations
- TMSA Pump Stations
- TMSA WMA
- TMSA 8" Main or greater
- WCDM 8" Main or greater
- WCDM Well locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Above
- 16'
- 17'
- 18'
- Pressure Zone Boundaries & Elevation
- Arterial Road
- Collector/Local Road

KEY MAP (not to scale)



1:24,000



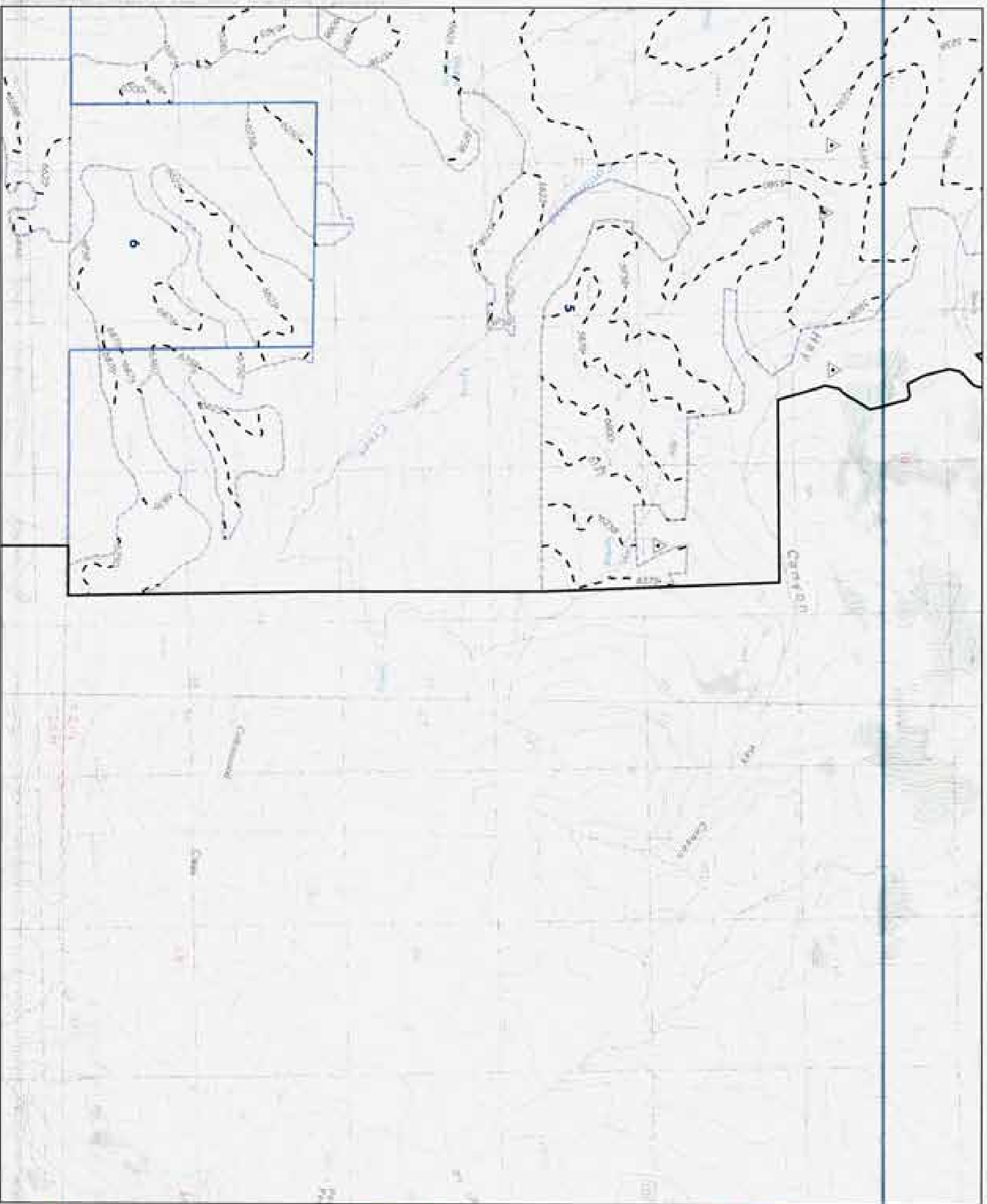
Sparks, NV
City of Sparks
2024



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.15

**Existing and Proposed Water
Facilities - 2030 (F16)**



Legend

- Study Area Boundary
- Priority Service Area Boundary & Narrative
- Developable Areas (<30% Slope) - 2030
- Developable Areas (>30% Slope) - Buffer
- Truckee River
- Existing Priority Well
- TMSA Well Locations
- TMSA Pump Stations
- TMSA Wells
- TMSA 8" Mains or greater
- WCDMS 8" Mains or greater
- WCDMS Well Locations
- Proposed Tank Locations
- Proposed Pump Stations
- Proposed Water Mains
- 16"
- 12"
- Pressure Zone Boundaries & Elevations
- Arterial Road
- Collector/Local Road

KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



Summit Consulting
3000 West Center Street
Suite 200
Sparks, NV 89411
Tel: (775) 358-8222
www.summitconsulting.com

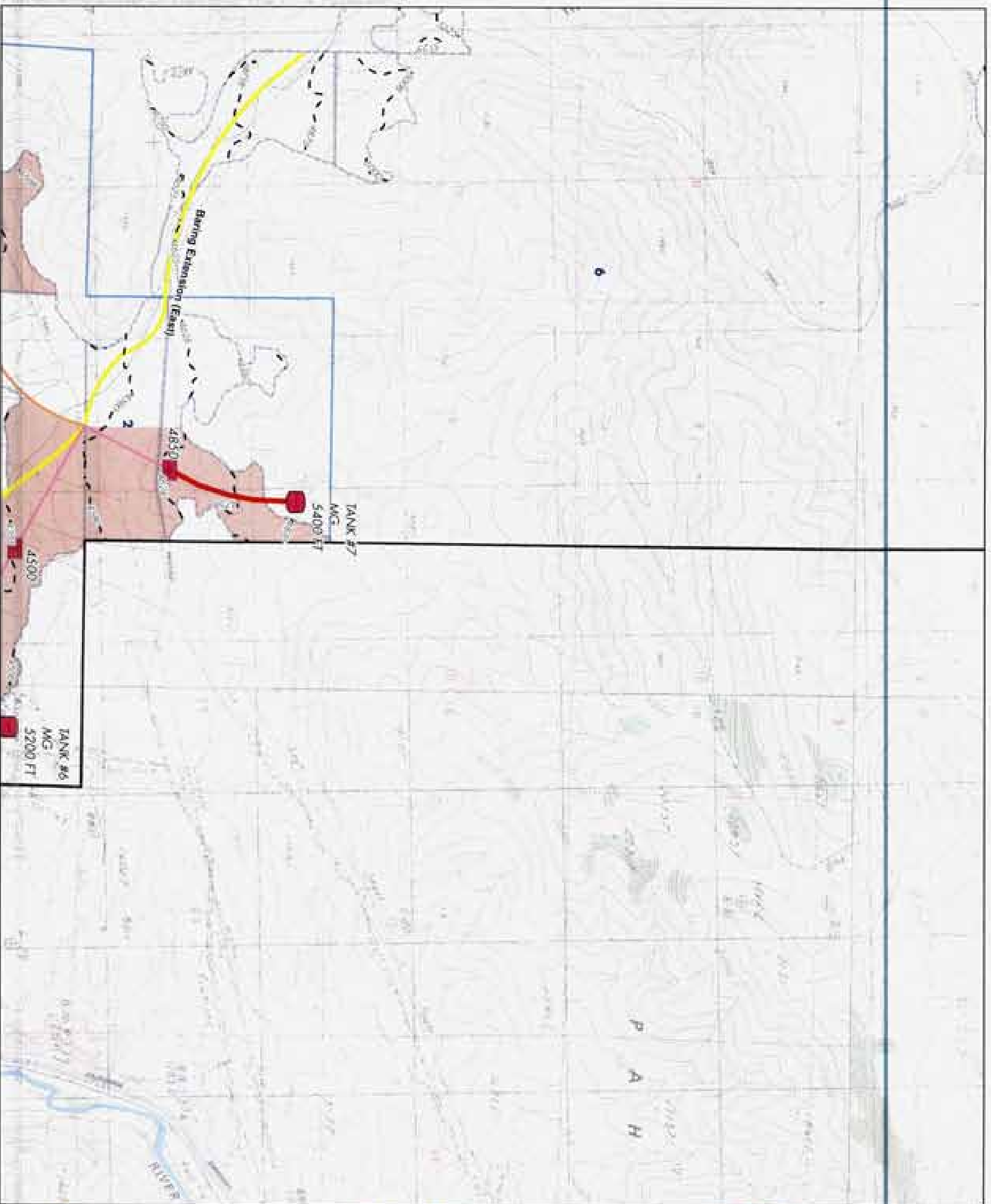
Prepared for: City of Sparks, NV



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.16

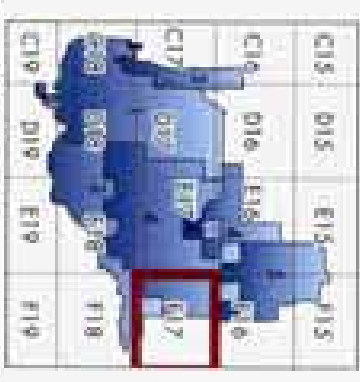
**Existing and Proposed Water
Facilities - 2030 (F17)**



Legend

- Solid Area Boundary
- Priority Service Area Boundary & Number
- Developable Area (C30S, S30S) - 2030
- Developable Area (C30S, S30S) - Budget - Budget
- Incluse Area
- Existing Firewater Main
- TMSA# Tank Location
- TMSA# Pump Station
- TMSA# Valve
- TMSA# B' Areas or groves
- WCDWA# B' Areas or groves
- WCDWA# Well location
- Proposed Tank Location
- Proposed Pump Station
- Proposed Water Main
- 16'
- 17'
- Pressure Zone Boundaries & Elevation
- Avalanche Road
- Ecology/Forest Road

KEY MAP (not to scale)



1:24,000



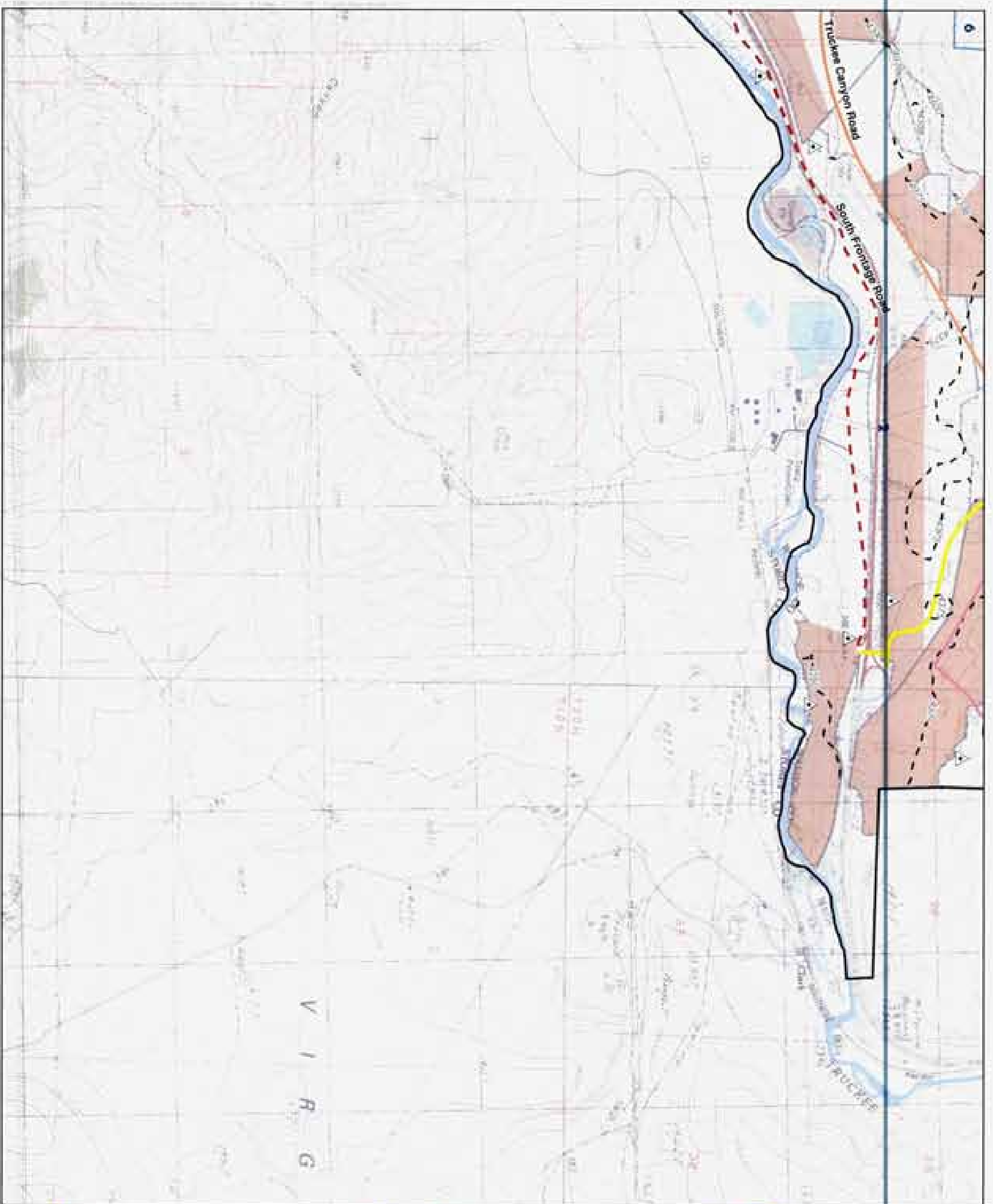
Sparks Consulting
2020 Sparks Blvd
Sparks, NV 89422
Sparks Engineering
2020 Sparks Blvd
Sparks, NV 89422



**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 3.17

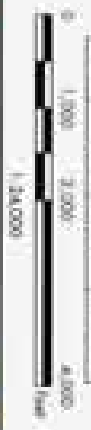
**Existing and Proposed Water
Facilities - 2030 (F18)**



- Legend**
- Study Area Boundary
 - Priority Service Area Boundary & Number
 - Developable Area (10% Slope) 2010
 - Developable Area (30% Slope) Buildout
 - Truckee River
 - Existing Private Water
 - TMSA Tank Locations
 - TMSA Pump Stations
 - TMSA Wells
 - TMSA B' Main or gutter
 - WCDWA B' Main or gutter
 - WCDWA Well locations
 - Proposed Tank locations
 - Proposed Pump Stations
 - Proposed Water Mains
 - 17"
 - 16"
 - Reserve Zone Boundaries & Location
 - Arroyo Road
 - Easement/Leased Road

KEY MAP (note scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



Stantec Consulting
 1000 West Bonanza Avenue
 Reno, NV 89501
 Phone: (775) 784-1000
 Fax: (775) 784-1001
 www.stantec.com

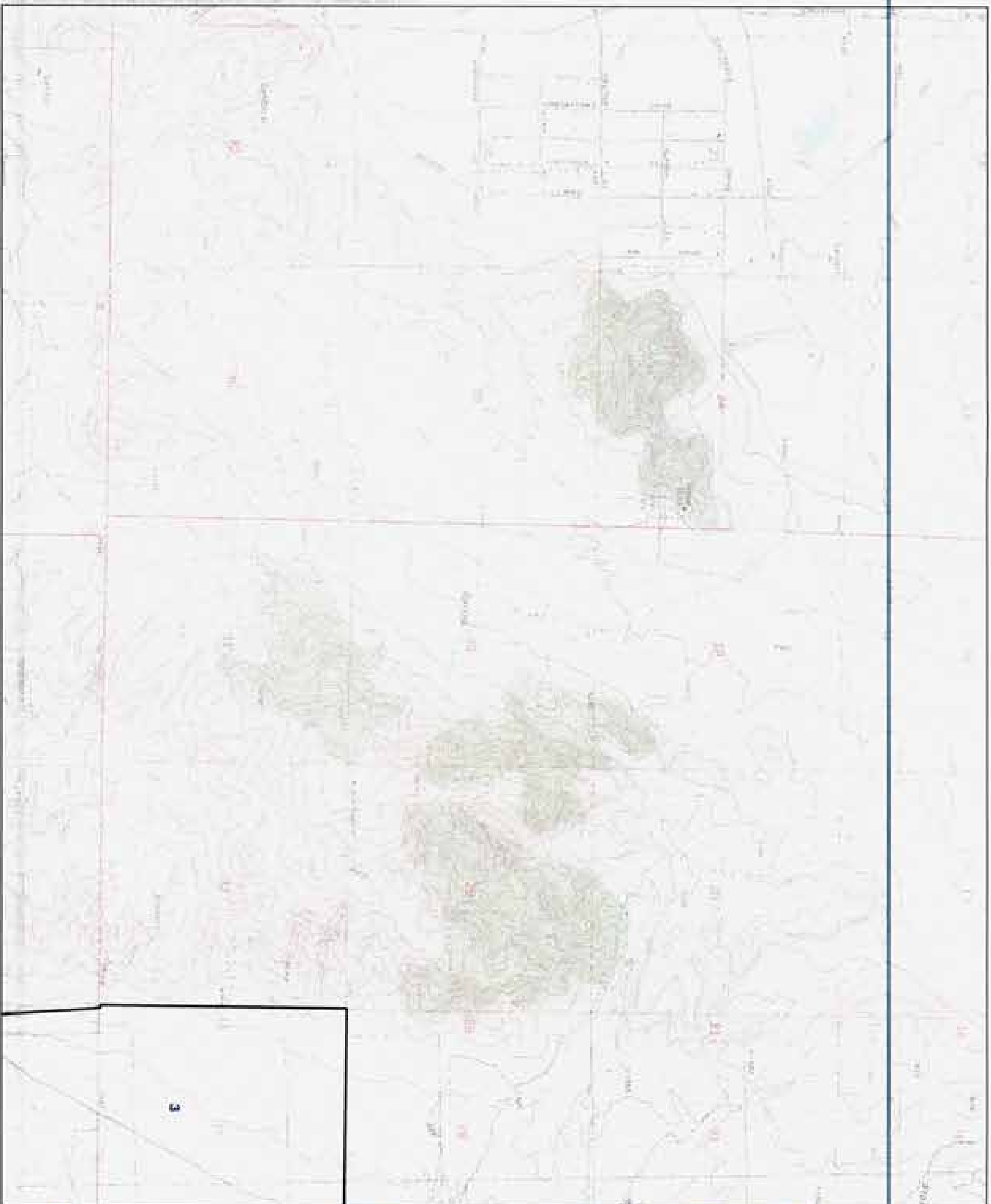
Section 4
Wiederholung / Rechenmal Wieder

1

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.1

**Existing and Proposed
Wastewater Facilities - 2030 (C16)**



Legend

- Solid Line Boundary
- Solid, Sewer Arterial Boundary & Runway
- Boundary from 2010 Study / 2010
- Boundary from 2020 Study / Study
- Subline Pipe
- Existing Sewer Line
- Arterial Sewer
- Collector Sewer Line
- 100000 Gallon Storage
- City of Sparks Storage Tank
- Proposed Wastewater Artery
- 8"
- 10"
- 12"
- 15"
- 18"
- 21"
- 24"
- 27"
- 30"
- Proposed Final Artery
- Proposed Final Artery
- Proposed Wastewater Facility
- Proposed Lift Station
- Proposed Exchange Area
- Proposed Effluent Water Storage
- Proposed Water Reclamation Facility

PER MAP AREA CODE

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



1:24,000



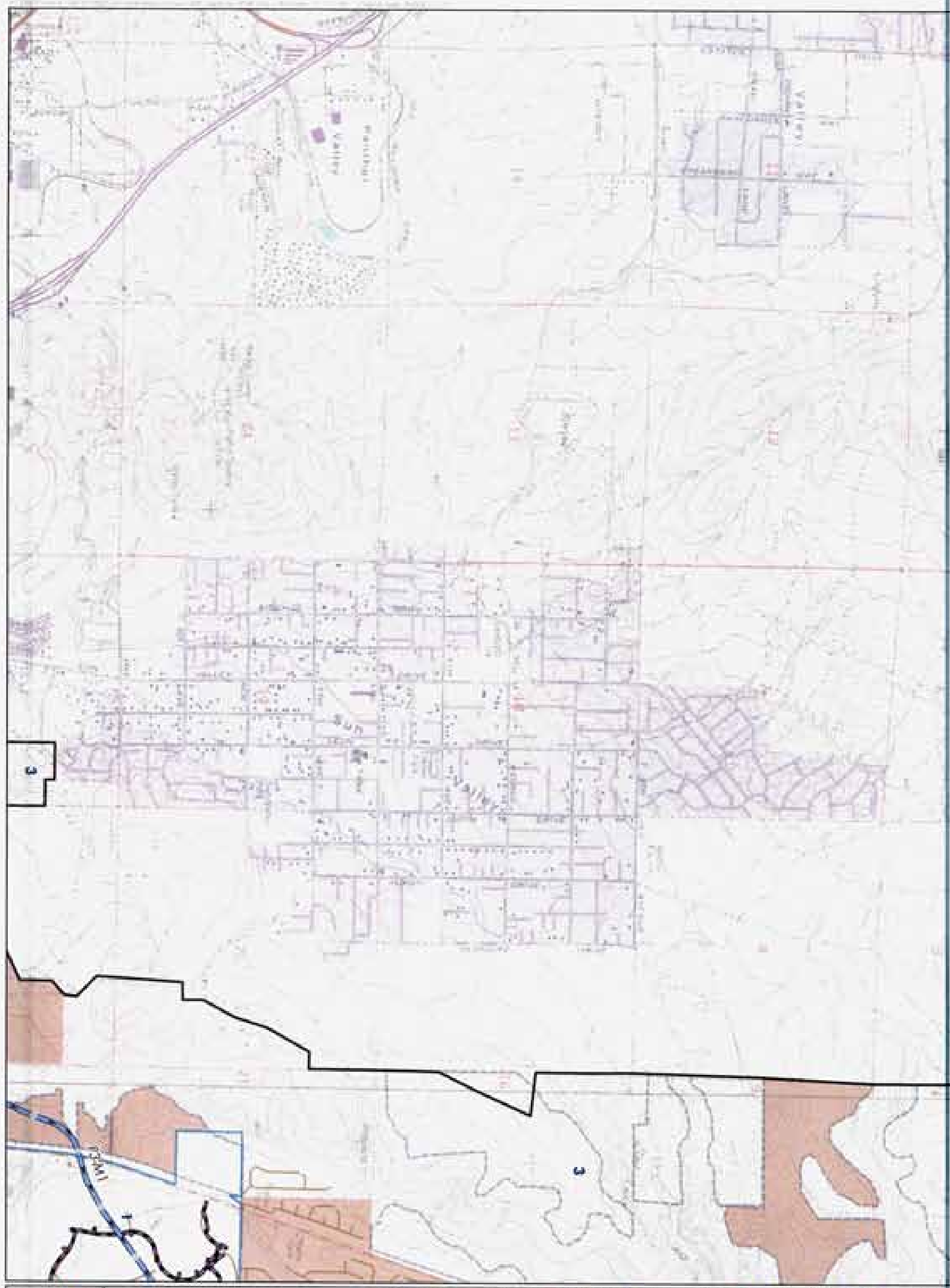
Stantec Consulting
1000 North Carson Street
Suite 200
Sparks, NV 89411
Tel: (775) 888-8277
www.stantec.com



CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 4.2

Existing and Proposed
Wastewater Facilities - 2030 (C17)



Legend

- Study Area Boundary
- Study Area Sub-Boundary (6-Minute Grid/Block Area (2025 Scale) 2020)
- Study Area Sub-Boundary (2025 Scale) 2020
- Study Area Sub-Boundary (2025 Scale) 2020
- Study Area
- Existing Sewer Line
- Proposed Sewer Line
- Collector/Force Main
- WASTEWATER PLANT STORAGE
- City of Sparks (Shared Use)
- Proposed Wastewater Plant
- 8"
- 10"
- 12"
- 18"
- 21"
- 24"
- 30"
- Regional Force Main
- Regional Shared Wren
- Regional (Intermittent) Flowline
- Regional Lift Station
- Regional Exchange Area
- Regional Effluent (Water Storage)
- Regional Water Reclamation Facility

PERMANENT FUTURE SIZES

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



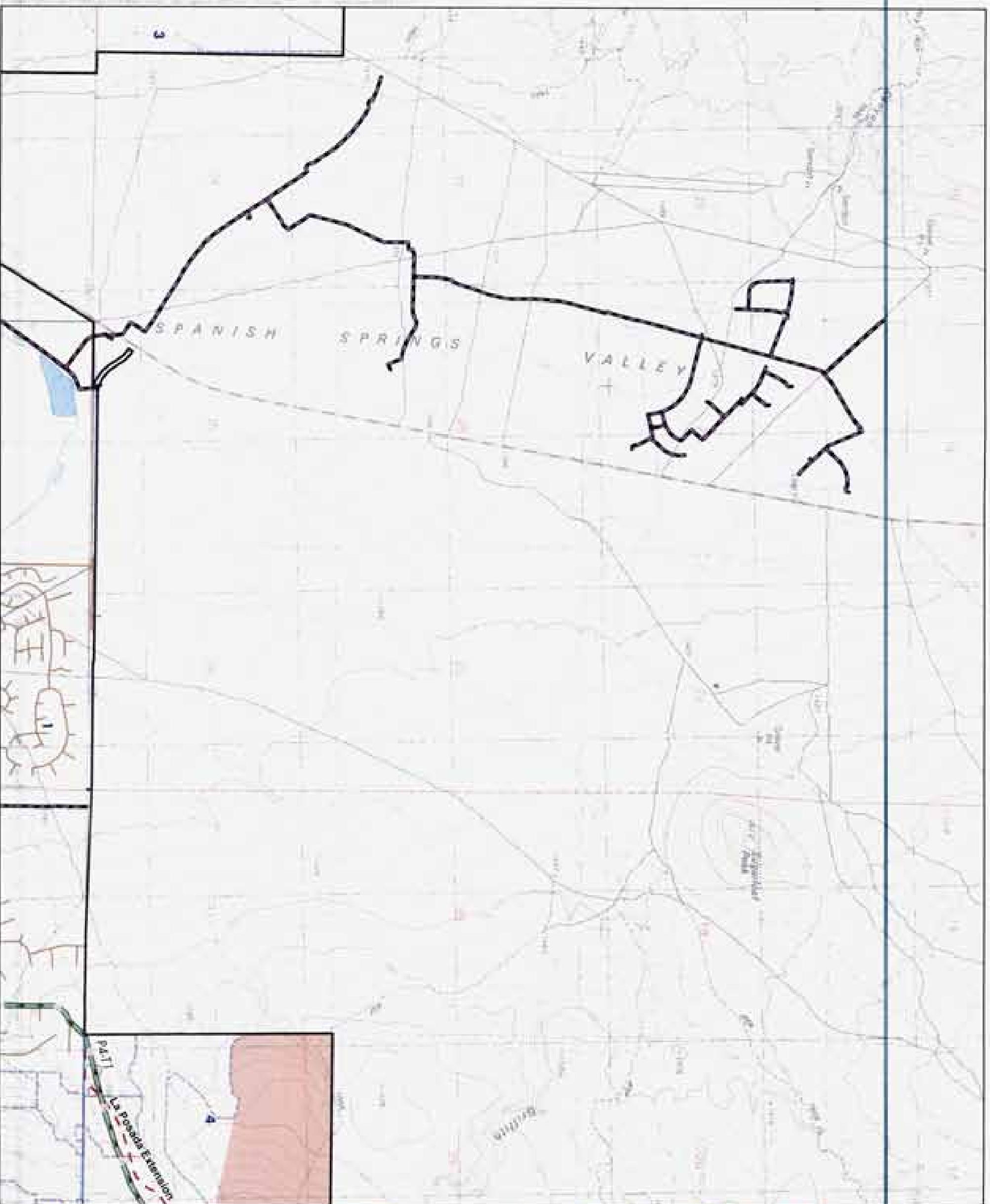
Scientific Consulting
 2200 North Carson Street
 Sparks, NV 89411
 Tel: (775) 359-9999
 Fax: (775) 359-9999
 www.scientificconsulting.com

City of Sparks
 1000 Nevada Street
 Sparks, NV 89411

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.4

**Existing and Proposed
Wastewater Facilities - 2030 (D16)**

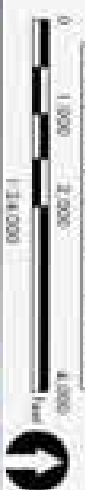


Legend

- Solid Area Boundary
- Property Boundary from Boundary & Marker
- Boundary from 2009 Study / 2020
- Precinct Area (PA) Study Status: Study
- Precinct Area (PA) Study Status: Not Studied
- Existing Sewer Line
- Abandoned Sewer Line
- Collection/Force Main
- Wastewater Treatment Plant
- City of Sparks Effluent Line
- Regional Wastewater Facility
- Regional Lift Station
- Regional Exchange Area
- Regional Effluent Storage
- Regional Water Reclamation Facility

PER MAP AREA TO DATE

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



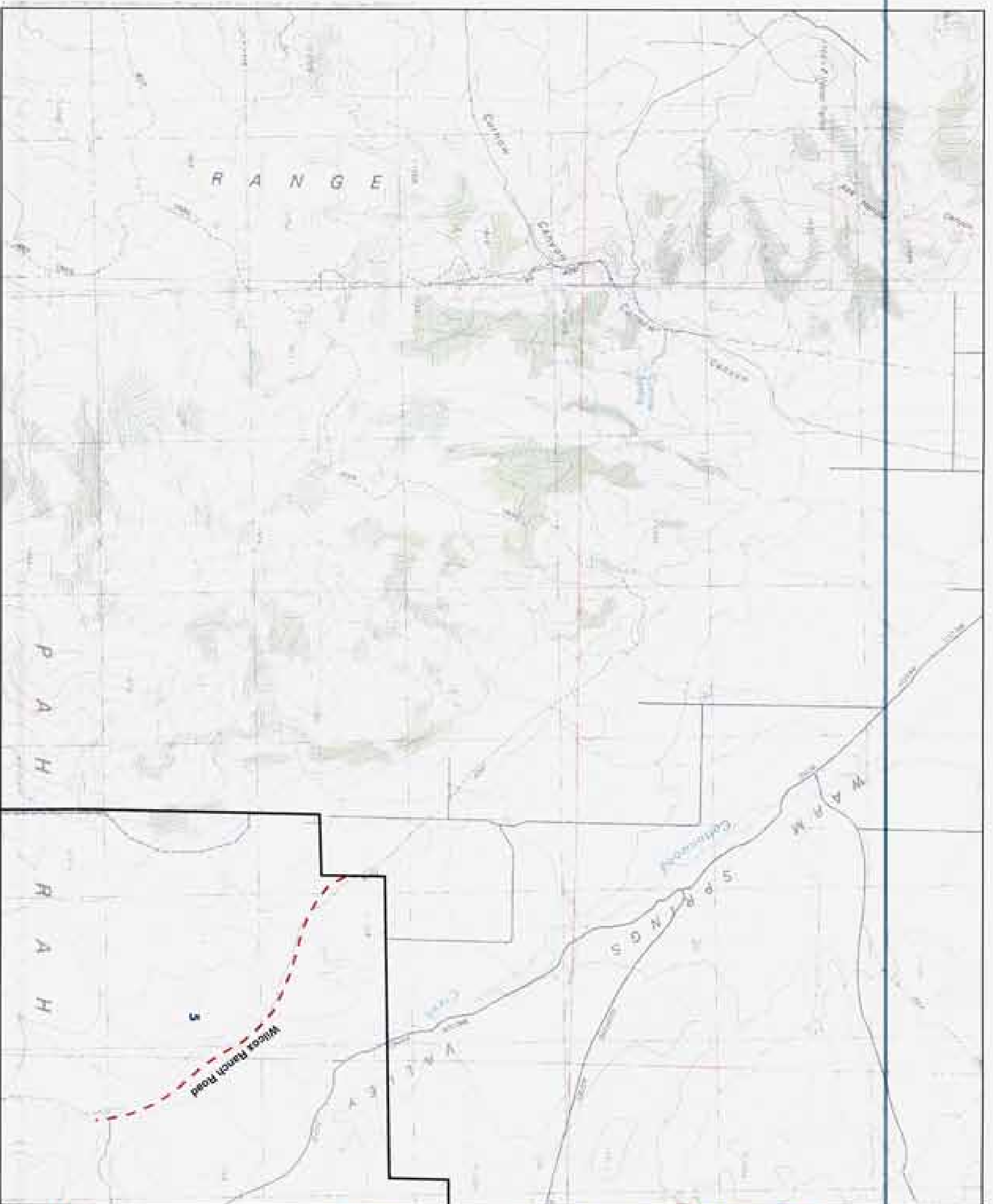
Sparkes Consulting
3800 S. Virginia Ave., Suite 100
Sparks, NV 89411
Tel: (775) 833-8881
Fax: (775) 833-8882
www.sparkes.com

CITY OF SPARKS
Nevada's Premier Destination

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.8

**Existing and Proposed
Wastewater Facilities - 2030 (E15)**



Legend

- City Area Boundary
- Park, Special Area Boundary, & Facility
- Development Area (2025 Study) - 2010
- Development Area (2025 Study) - 2030
- Utility Line
- Existing Sewer Line
- Sewer Line
- Collection/Force Main
- WQTRB Effluent Storage
- City of Sparks (Future) Sewer Treatment Plant
- Regional Transmission Main
- R-1
- R-2
- R-3
- R-4
- R-5
- R-6
- R-7
- R-8
- R-9
- Regional Flow Above
- Regional Below Slope
- Regional (Watercourse) Facility
- Regional (Watercourse) Facility
- Regional (LA) Station
- Regional Outstage Area
- Regional (Special) Utility Storage
- Regional (Water) Interconnection Node

RTM Water Facility Legend

C15	D15	E15	F15
C14	D14	E14	F14
C13	D13	E13	F13
C12	D12	E12	F12
C11	D11	E11	F11
C10	D10	E10	F10
C09	D09	E09	F09
C08	D08	E08	F08
C07	D07	E07	F07
C06	D06	E06	F06
C05	D05	E05	F05
C04	D04	E04	F04
C03	D03	E03	F03
C02	D02	E02	F02
C01	D01	E01	F01

Scale: 1:24,000

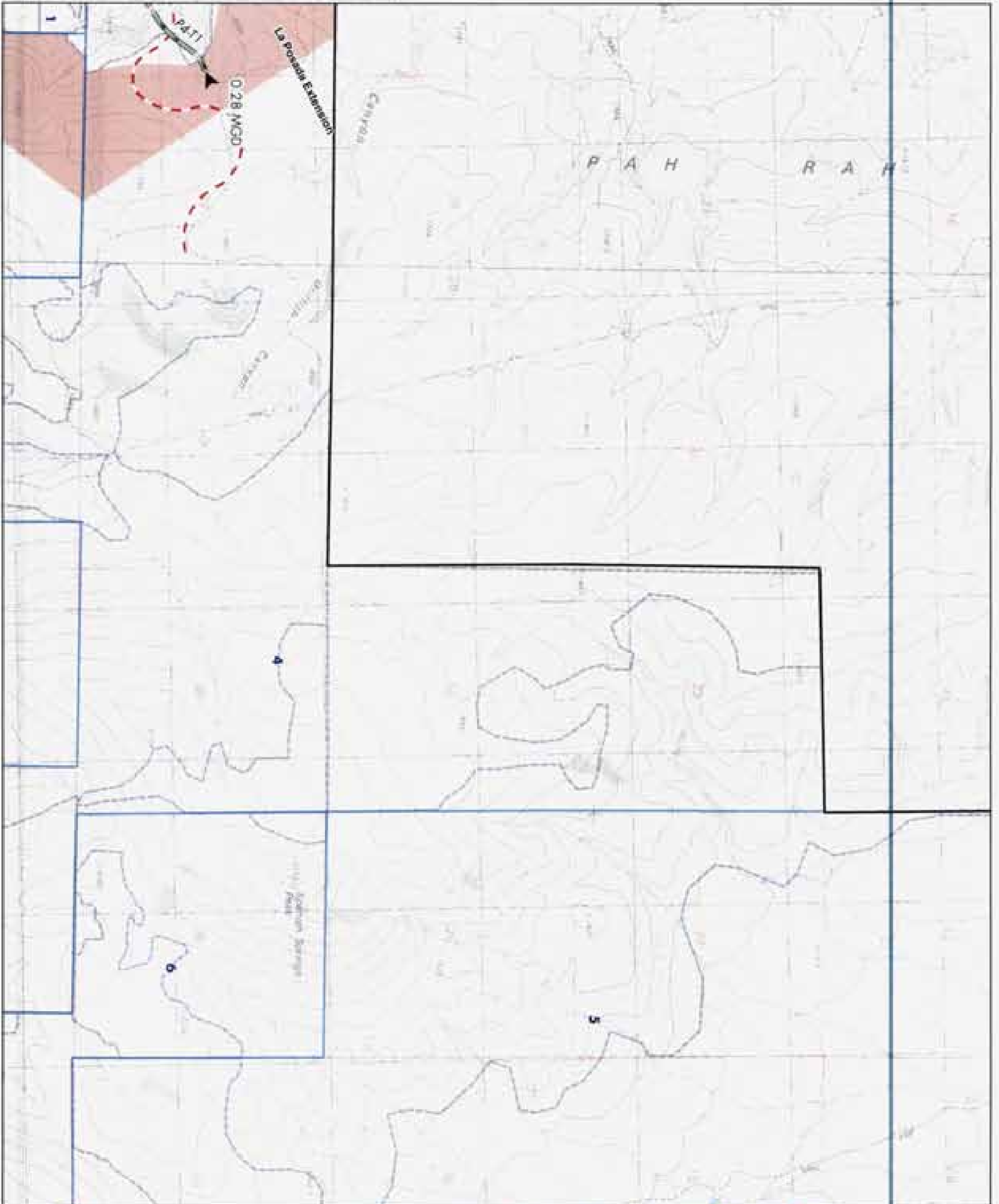
City of Sparks
Water & Sewer Department
1000 N. 2nd Street
Sparks, NV 89410
775.322.2222
www.cityofsparks.com

Graphic Designer
City of Sparks
1000 N. 2nd Street
Sparks, NV 89410
775.322.2222
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.9

**Existing and Proposed
Wastewater Facilities - 2030 (E16)**



Legend

- Study Area Boundary
- Property Services Area Boundary & Number
- Development Area in 2030 (Special - 2030)
- Development Area in 2030 (Special - Business)
- Truckee River
- Existing Sewer Line
- Abandoned
- Collection Road - Road
- WCCOAF Effluent Storage
- City of Sparks Effluent Line
- Regional Wastewater Main
- Regional Road Flow
- Regional Effluent Main
- Regional Wastewater Pumping
- Regional In-Sewer
- Regional Out-of-Sewer
- Regional Wastewater Plant
- Regional Effluent Water Storage
- Regional Storm Wastewater Facility

SEZ MAP Area Code

C15	015	E15	E15
C16	016	E16	E16
C17	017	E17	E17
C18	018	E18	E18
C19	019	E19	E19



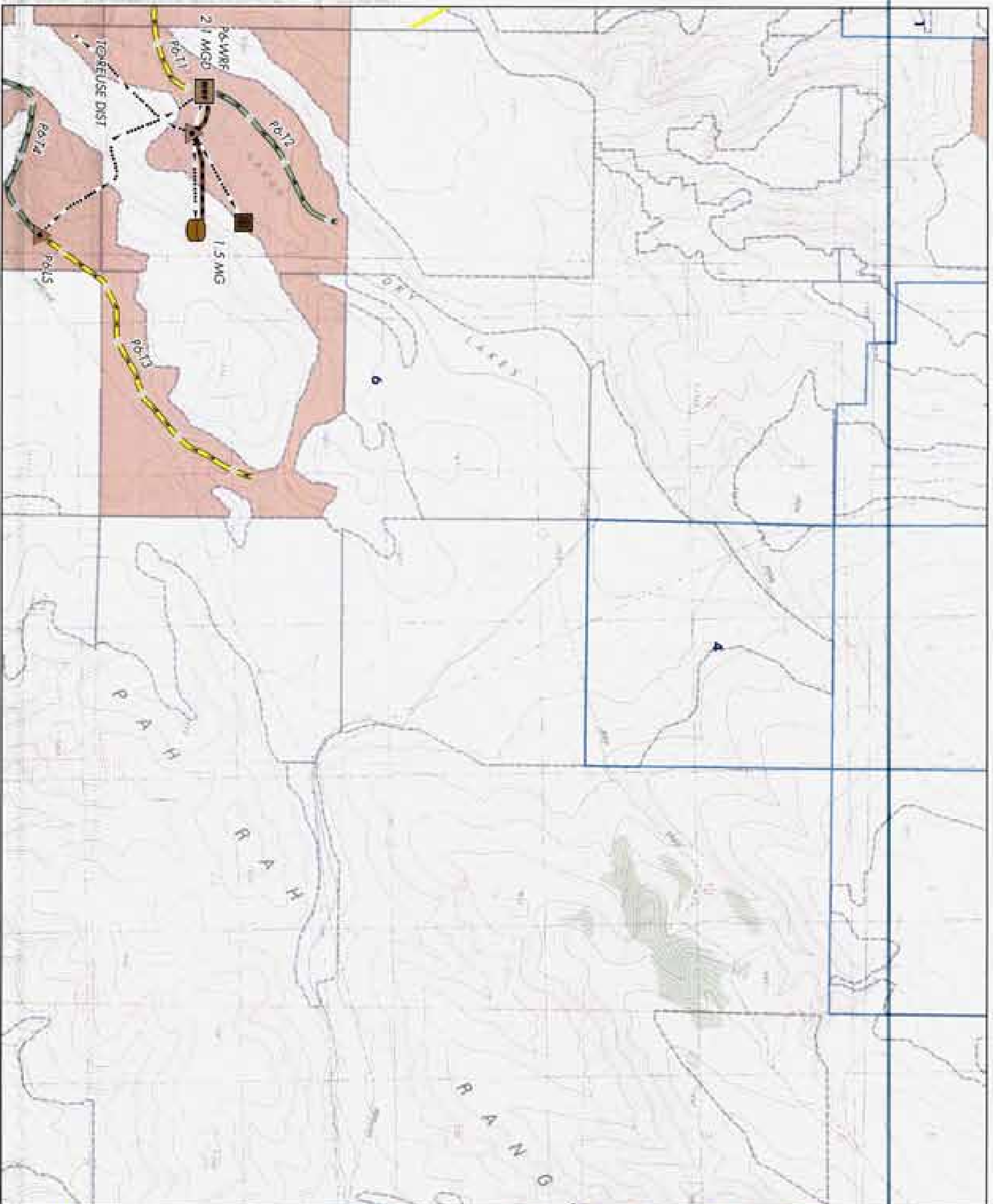
Sparkes Consulting
Sustainable Infrastructure
Water, Air, Energy, and Waste
1000 W. 2nd St.
Sparks, NV 89411
Tel: (775) 888-8888
www.sparkes.com

Sparks Engineering
1000 W. 2nd St.
Sparks, NV 89411
Tel: (775) 888-8888
www.sparkes.com

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 4.10

Existing and Proposed
Wastewater Facilities - 2030 (E17)

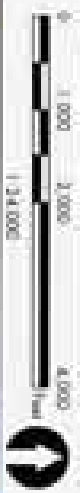


Legend

- Black Area Symbol
- Blue Area Symbol
- Light Blue Area Symbol
- Dark Blue Area Symbol
- Green Area Symbol
- Yellow Area Symbol
- Orange Area Symbol
- Red Area Symbol
- Purple Area Symbol
- Pink Area Symbol
- Brown Area Symbol
- Grey Area Symbol
- White Area Symbol
- Blue Line Symbol
- Black Line Symbol
- Red Line Symbol
- Green Line Symbol
- Yellow Line Symbol
- Orange Line Symbol
- Red Line Symbol
- Purple Line Symbol
- Pink Line Symbol
- Brown Line Symbol
- Grey Line Symbol
- White Line Symbol
- Black Triangle Symbol
- Brown Triangle Symbol
- Black Square Symbol
- Brown Square Symbol
- Black Square Symbol

KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



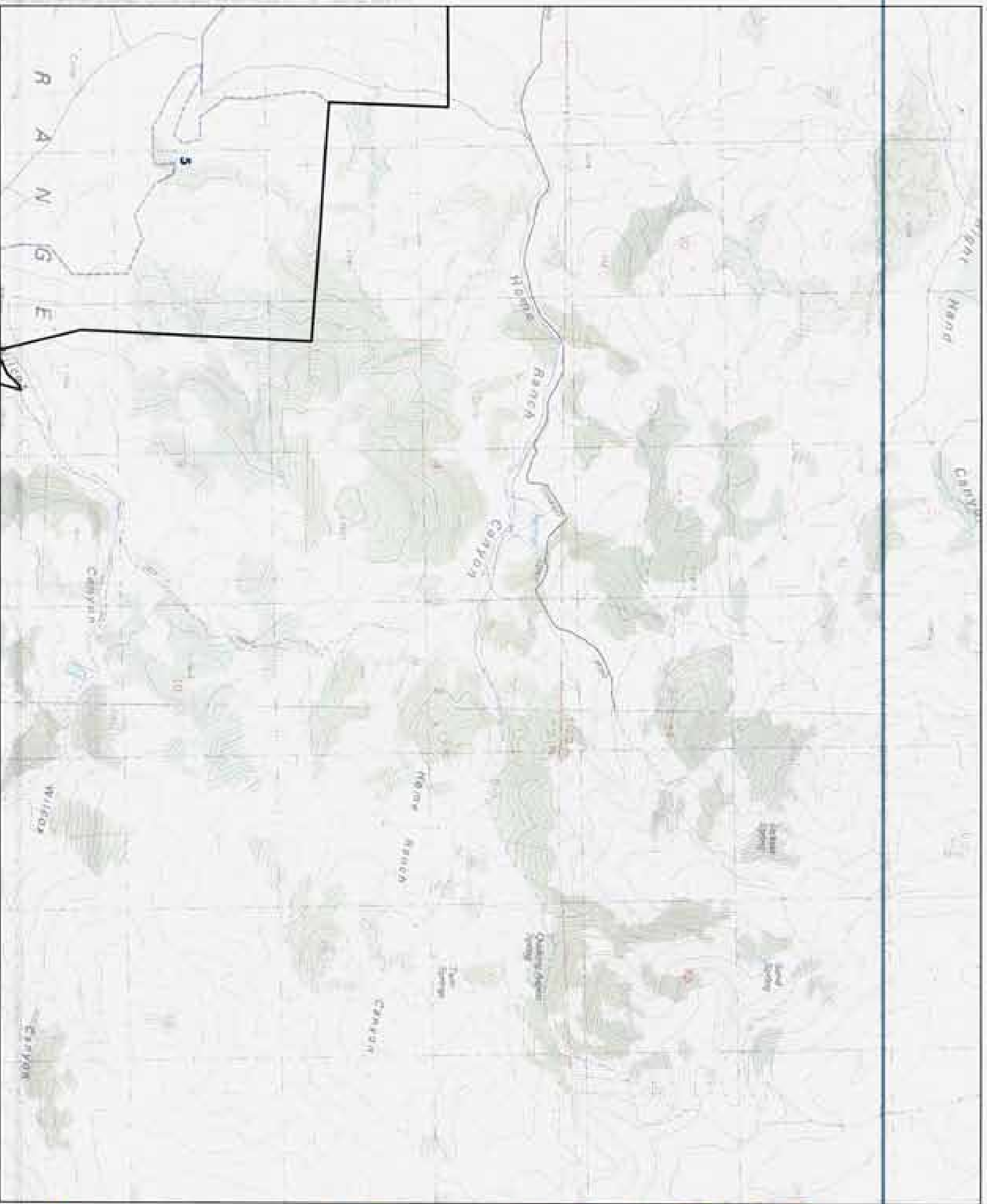
Sparkes Consulting
10000 S. 2000th Street
Suite 100
Sparks, NV 89435
Tel: (775) 898-0000
www.sparkes.com

Sparkes Engineering
10000 S. 2000th Street
Suite 100
Sparks, NV 89435
Tel: (775) 898-0000
www.sparkes.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.13

**Existing and Proposed
Wastewater Facilities - 2030 (F15)**



Legend

- Study Area Boundary
- Study Area Sub-Boundary #1 (Urban)
- Development Area (2030 Signal / 2030)
- Development Area (2030 Signal / 2030)
- Subarea
- Existing Sewer Line
- Sewer Line
- Collection/Inlet Line
- WCODA (Water Storage)
- City of Sparks Storage Tank
- Regional Treatment Plant
- Regional Flow Artery
- Regional Effluent Artery
- Regional Wastewater Facility
- Regional Lift Station
- Regional Interceptor Artery
- Regional Effluent Water Storage
- Regional (Over) Expansion Facility

SEWER SERVICE MODEL

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



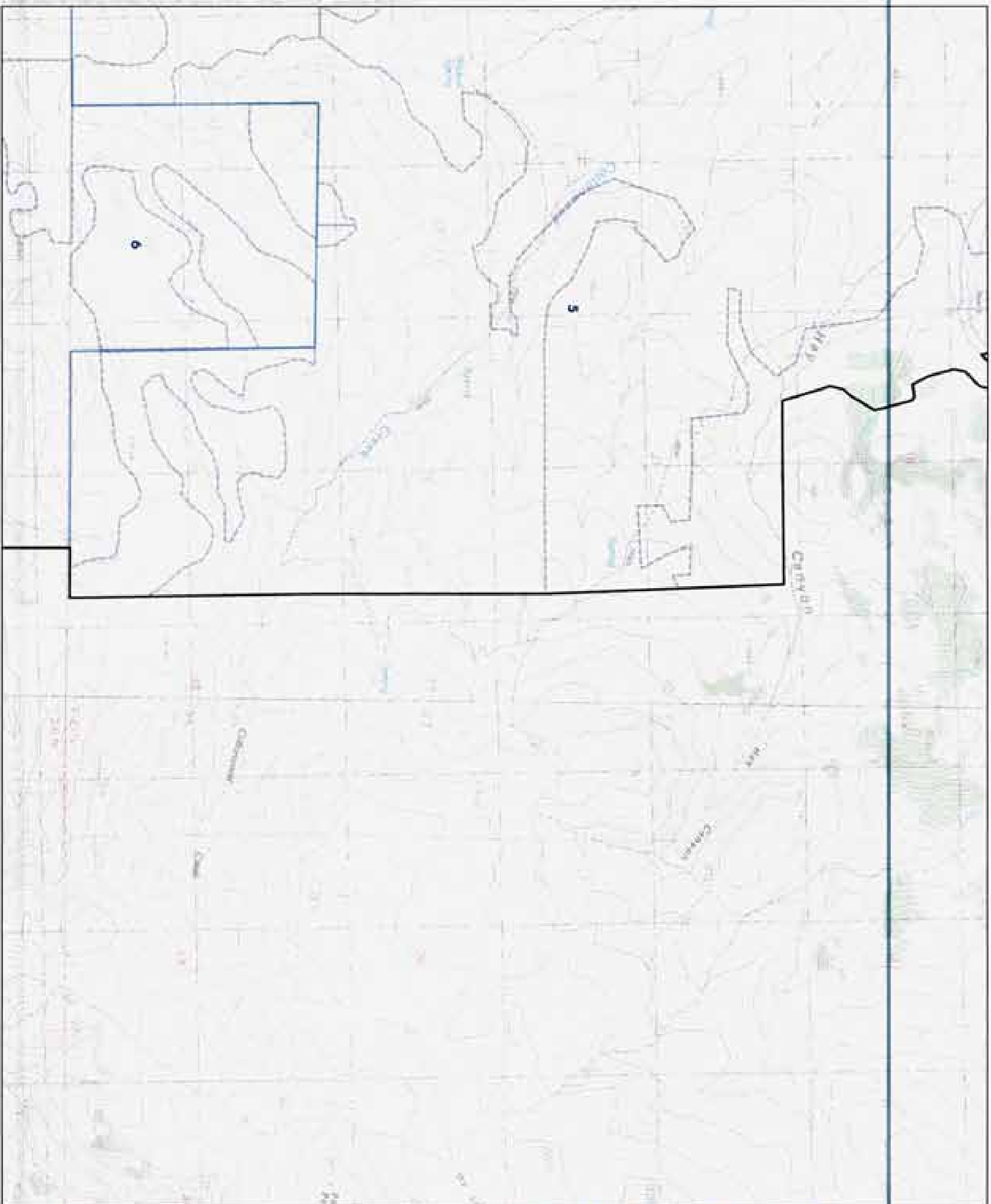
Sparkz Consulting
1000 N. 20th Street
Sparks, NV 89411
775.750.8888
www.sparkz.com

CITY OF SPARKS
1000 N. 20th Street
Sparks, NV 89411
775.750.8888
www.cityofsparks.com

**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.14

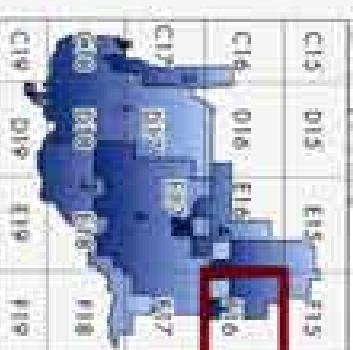
**Existing and Proposed
Wastewater Facilities - 2030 (F16)**



Legend

- Bulk Area Boundary
- Future Sewer Area Boundary, 5+ Years
- Candidate Area to 2025 (Signal: 2030)
- Candidate Area to 2025 (Signal: 2030)
- Future Sewer
- Existing Sewer Line
- Sewer Line
- Collection Point Line
- WQVFB Effluent Storage
- City of Sparks Effluent Line
- Proposed Wastewater Main
- 8"
- 12"
- 15"
- 18"
- 24"
- 30"
- 36"
- Proposed from Other
- Proposed Effluent Main
- Proposed Effluent Mainline
- Proposed lift station
- Proposed Backflow Valve
- Proposed Effluent Valve Storage
- Proposed Virgin Backflow Valve

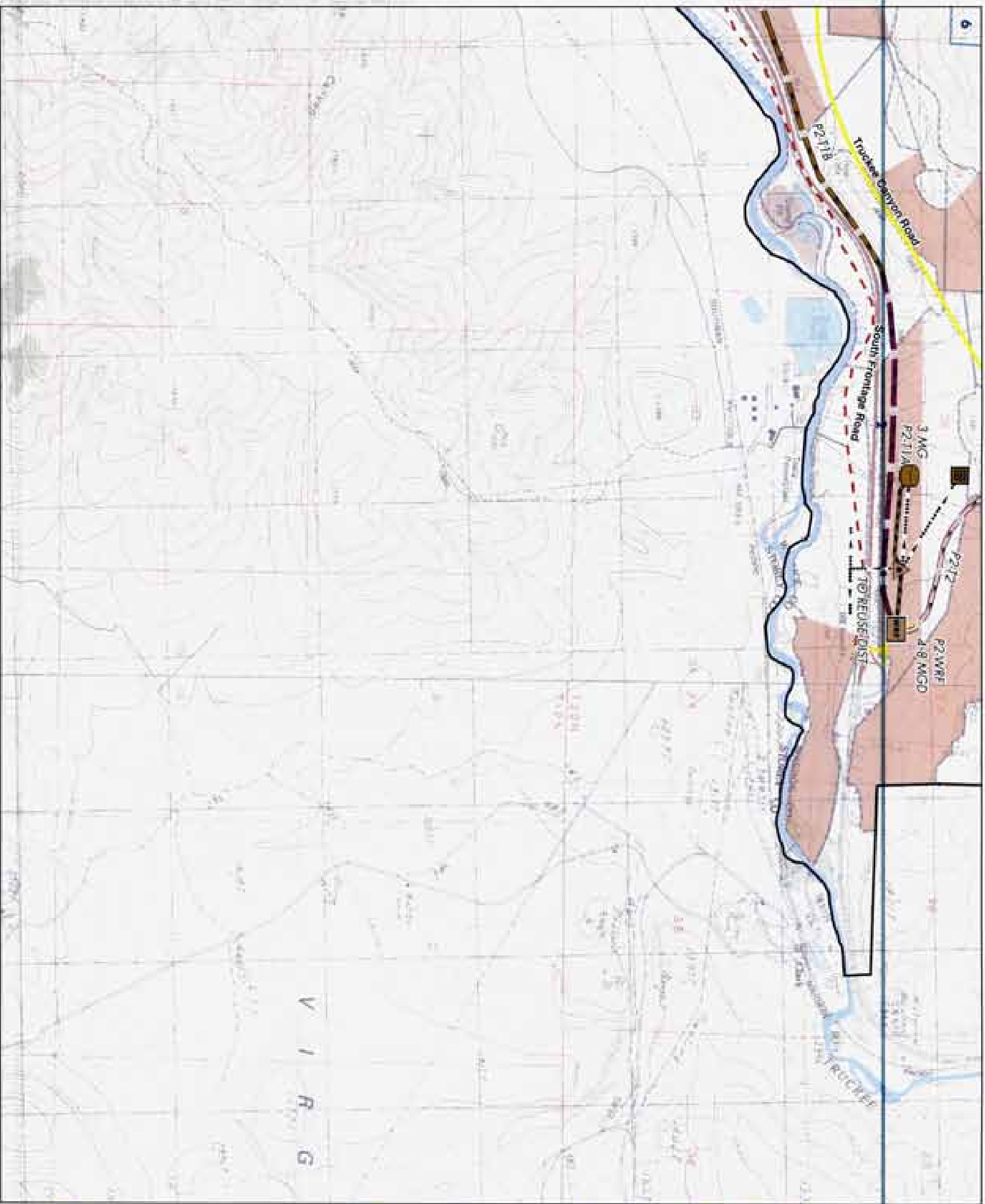
KEY MAP (Scale: 1:10,000)



Sparker Consulting
3000 West 10th Street
Sparks, NV 89411

Sparker TEL: (775) 833-8888
WWW: WWW.SPARKER.COM





**CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN**

Figure 4.16

**Existing and Proposed
Wastewater Facilities - 2030 (F18)**

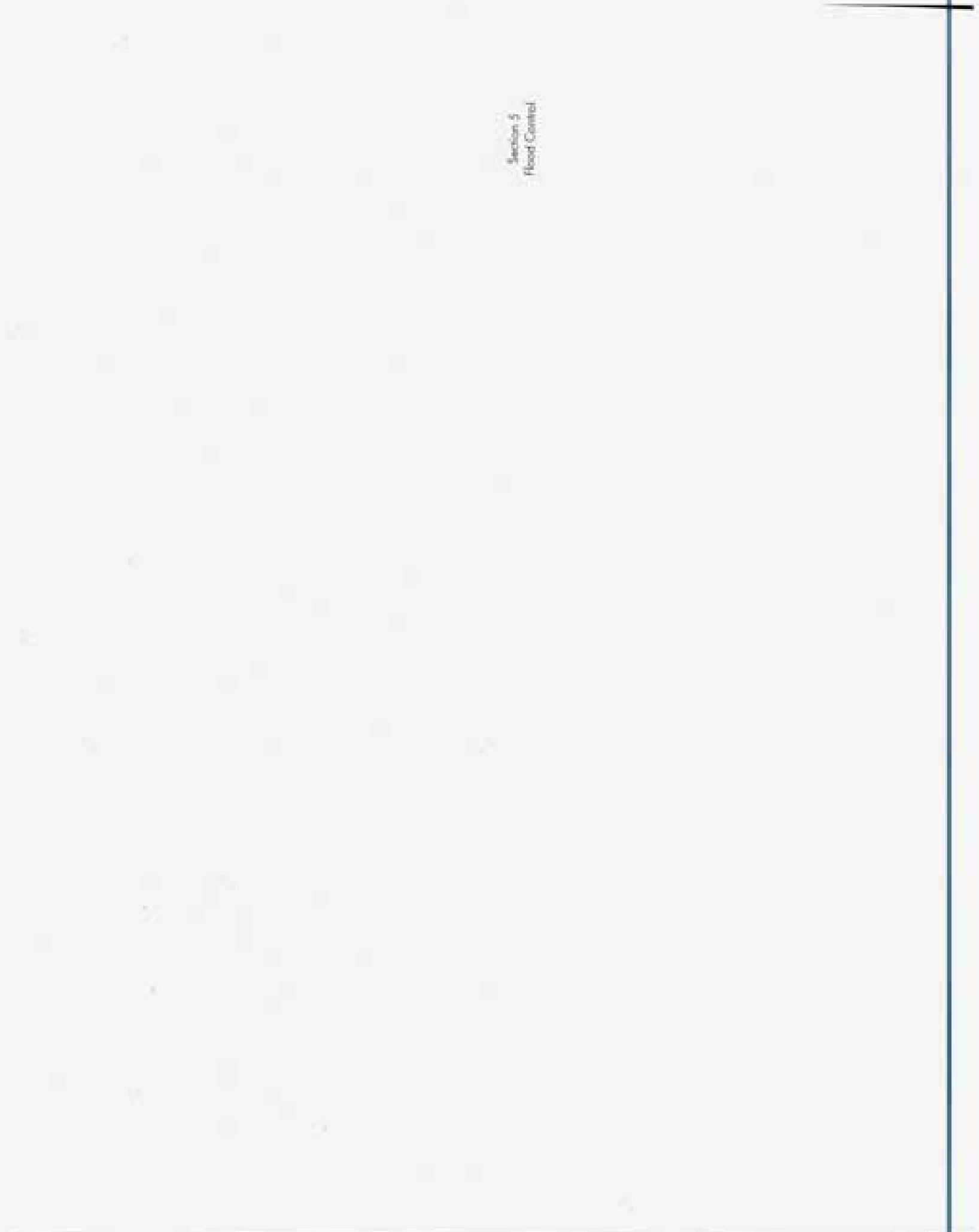
- Legend**
- Body Area Boundary
 - Priority Service Area Boundary & Service
 - Sanitary Sewer Main (2025 Study) - 2025
 - Sanitary Sewer Main (2025 Study) - 2030
 - Water Line
 - Existing Sewer Main
 - Proposed Sewer Main
 - Collection Point
 - Collection Point (Final)
 - WQRF (Final Design)
 - City of Sparks (Final Design)
 - Proposed Wastewater Main
 - Proposed Flow (ft³/sec)
 - Proposed 18" Storm
 - Proposed 24" Storm
 - Proposed 36" Storm
 - Proposed Flow (ft³/sec)
 - Proposed Effluent Main
 - Proposed Wastewater Facility
 - Proposed 18" Storm
 - Proposed 24" Storm
 - Proposed 36" Storm
 - Proposed Effluent Main
 - Proposed Wastewater Facility

RETMAP: Area Code

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



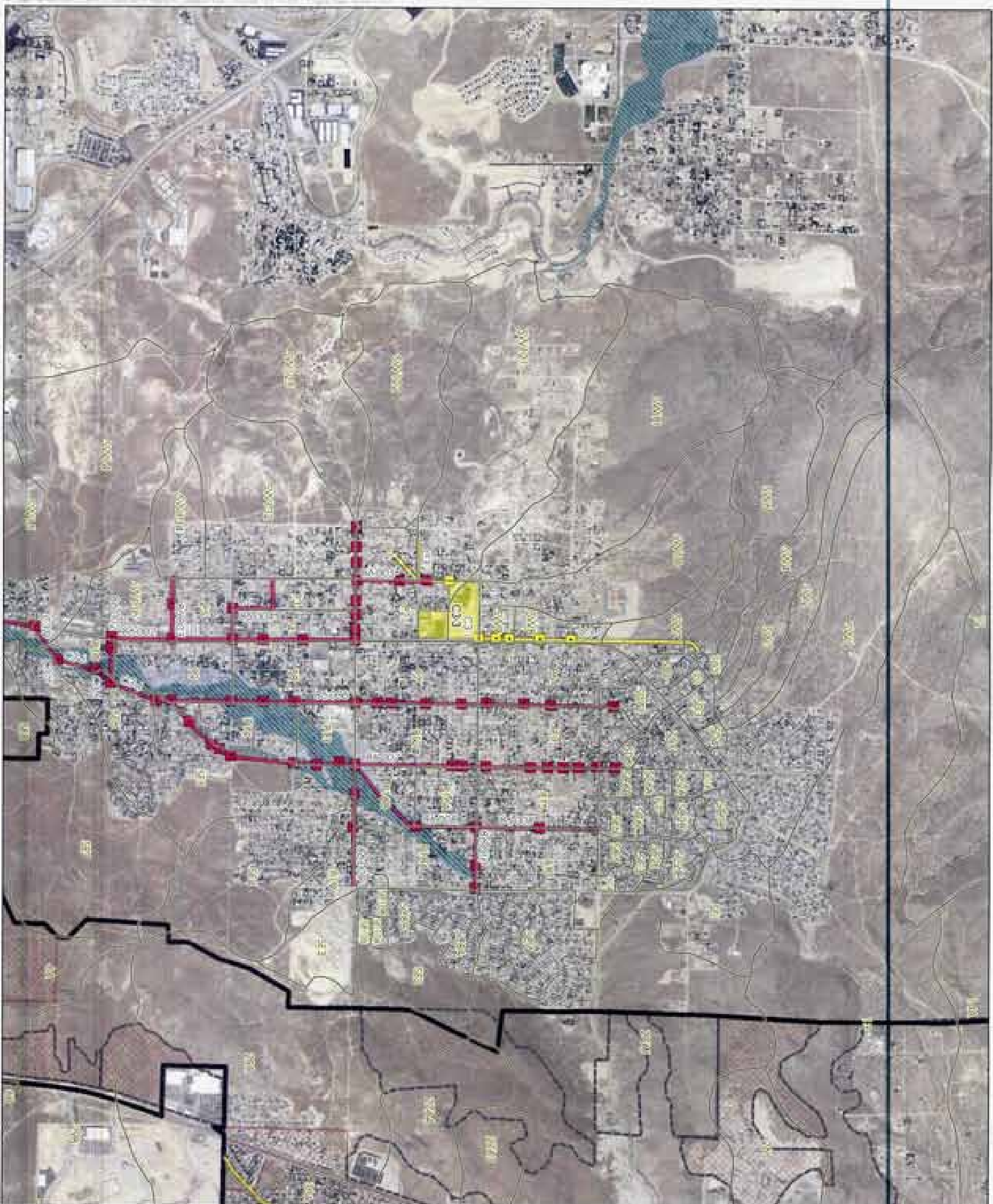
Sparkie Consulting
Water & Wastewater
Engineering & Construction
1000 N. Carson Street
Sparks, NV 89411
Tel: (775) 888-0077
Fax: (775) 888-0077
www.sparkie.com



CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 5.2

Existing and Proposed
Flood Control Facilities - 2030 (C17)



- Legend**
- City limits Area Boundary
 - Improvements 2018-2021-2025
 - Discharge Area 2018-2021-2025
 - Levee line
 - Culvert/flow line
 - Levee
 - Overland Structures
 - FEMA Flood Zone (Zone 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, 32, 33, 34, 35, 36, 37, 38, 39, 40)
 - Zone 1
 - Zone 2
 - Zone 3
 - Zone 4
 - Zone 5
 - Zone 6
 - Zone 7
 - Zone 8
 - Zone 9
 - Zone 10
 - Zone 11
 - Zone 12
 - Zone 13
 - Zone 14
 - Zone 15
 - Zone 16
 - Zone 17
 - Zone 18
 - Zone 19
 - Zone 20
 - Zone 21
 - Zone 22
 - Zone 23
 - Zone 24
 - Zone 25
 - Zone 26
 - Zone 27
 - Zone 28
 - Zone 29
 - Zone 30
 - Zone 31
 - Zone 32
 - Zone 33
 - Zone 34
 - Zone 35
 - Zone 36
 - Zone 37
 - Zone 38
 - Zone 39
 - Zone 40
 - Conceptual Stormwater Retention
 - Conceptual Stormwater Control Structure
 - Canals & Ditches
 - Levee
 - Regional
 - Local Overbanks
 - Channels & Embankments
 - Levee
 - Regional
 - Urban Drainage
 - Levee
 - Regional

KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18



Spartan Consulting

1000 N. Carson Street, Suite 100

Sparks, NV 89410

775.734.1111

www.spartanconsulting.com

City of Sparks

1000 N. Carson Street, Suite 100

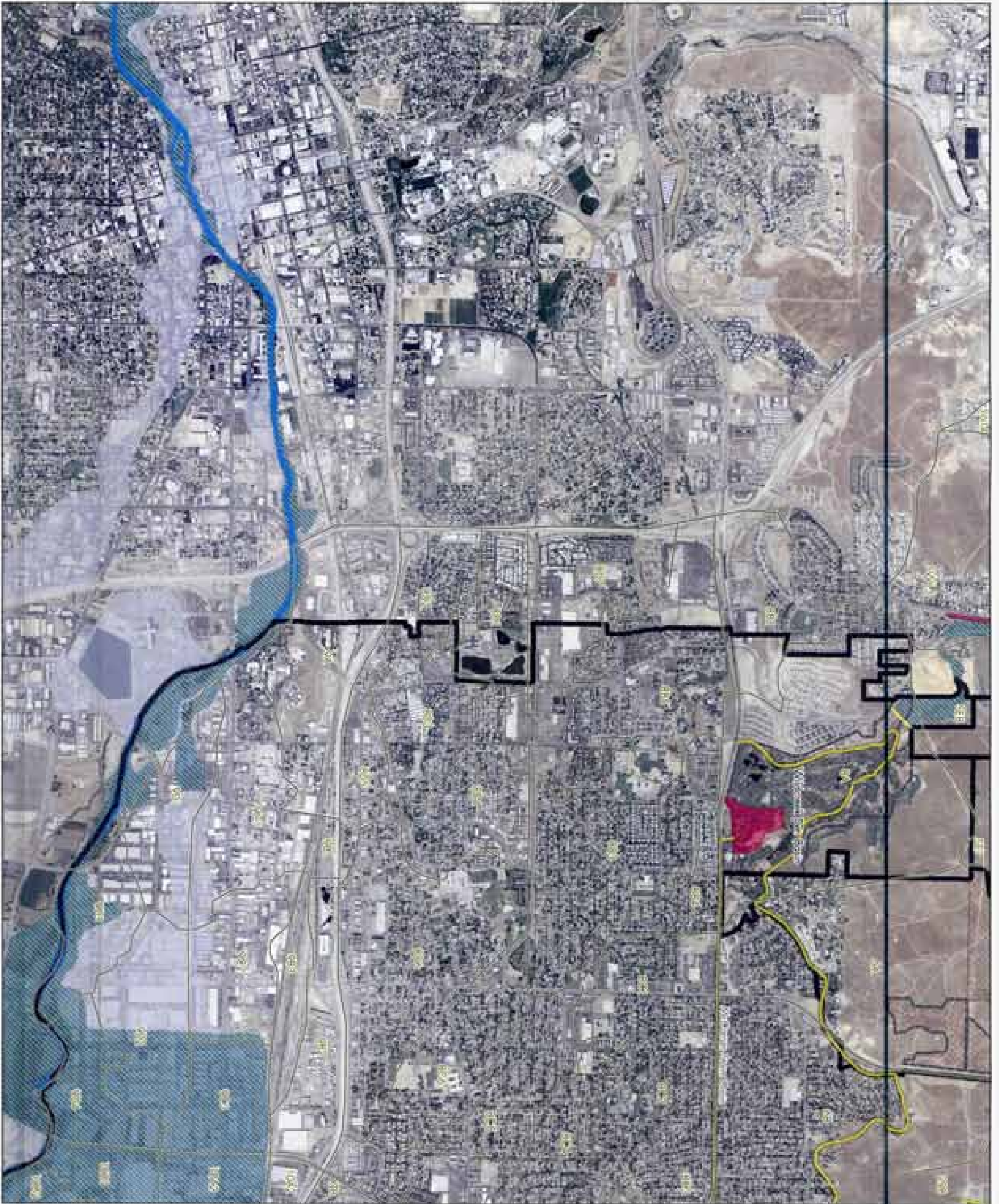
Sparks, NV 89410

775.734.1111

www.cityofsparks.com

Figure 5.3

**Existing and Proposed
Flood Control Facilities - 2030 (C18)**



Legend

- Storm Flow Bypass
- Flood Flow Down Hill Flow @ 1000ft
- Flood Flow @ 1000ft
- Conceptual Detention Basins
- Conceptual Stormwater Control Systems
- Canals & Bridges
- Levees
- Wetlands
- Water Control Structures
- Chemical & Petroleum
- Levees
- Wetlands
- Water Control Structures
- Other Areas
- Levees
- Wetlands

KEY MAP - Area to Model

C13	D13	E13	H13
C16	D16	E16	H16
C17	D17	E17	H17
C10	D10	E10	H10

Scale: 0, 1000, 2000, 4000 Feet
1:24,000

Slurlock **Slurlock Consulting**
2020 Sparks Blvd, Suite 100
Sparks, NV 89411
Tel: (775) 888-2222
Fax: (775) 888-2222
www.slurlock.com



CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

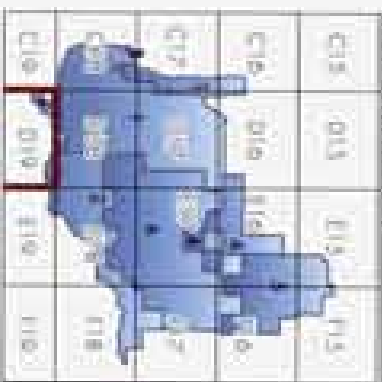
Figure 5.7

Existing and Proposed
Flood Control Facilities - 2030 (D19)

Legend

- Priority Service Area Boundaries
- Flood Protection Area - 200 Year (100%)
- Flood Protection Area - 100 Year (50%)
- Flood Hazard Area - 100 Year (50%)
- Flood Hazard Area - 500 Year (25%)
- Flood Hazard Area - 1000 Year (10%)
- Flood Zone A
- Flood Zone B1
- Flood Zone B2
- Flood Zone B3
- Flood Zone B4
- Flood Zone B5
- Flood Zone B6
- Flood Zone B7
- Flood Zone B8
- Flood Zone B9
- Flood Zone B10
- Conceptual Management Resolutions
- Conceptual Assessment Data Sources
- Station & Bridge
- Paved
- Natural
- Under Construction
- Chemical & Petroleum
- Leaking
- Hazard
- Under Construction
- Damaged Area
- Leaking
- Flooded

KEY MAP (not to scale)



Sparks Engineering
1000 W. 1st Street
Sparks, NV 89402
Phone: (775) 333-8844
Fax: (775) 333-8844

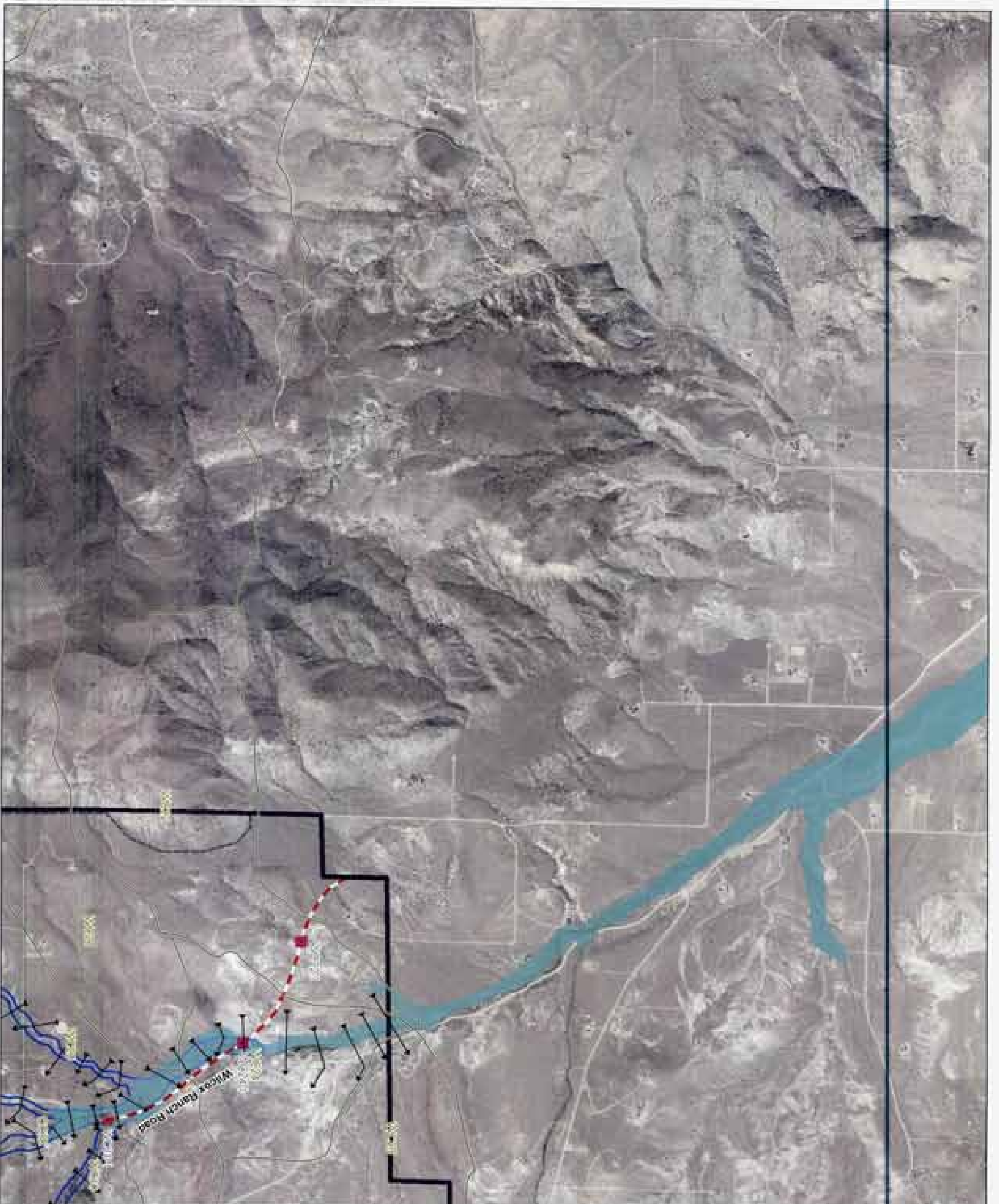


City of Sparks, Nevada
1000 W. 1st Street
Sparks, NV 89402
Phone: (775) 333-8844
Fax: (775) 333-8844

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 5.8

Existing and Proposed
Flood Control Facilities - 2030 (E15)



Legend

- City Service Area boundary
- Proposed Dam, 5,128' Span, 2000'
- Damaged Dam, 5,128' Span, 2000'
- Levee
- Channel River Spur
- Canal
- Potential boundary
- Flood Flood Dam
- Zone A (3000')
- Zone A
- Zone A1
- Zone A1
- Zone A2
- Conceptual Impoundment Reservoir
- Conceptual Municipal Core Facilities
- Station
- Station
- Urban Drainage
- Chemical & Industrial
- Station
- Natural
- Urban Drainage
- Damaged Area
- Levee
- Natural

KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18



CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 5.10
**Existing and Proposed
Flood Control Facilities - 2030 (E17)**



Legend

- Priority Service Area Boundary
- Interceptor Area 1-200' Spill - 2030
- Interceptor Area 1,2,3, 5,6, 7, 8, 9, 10
- Flood Wall
- Olden/Red Hill
- Levee
- Potential Inundation
- 500k Flood Zone
- 100k Flood Zone (100yr)
- Zone A
- Zone A1
- Zone A2
- Zone A3
- Conceptual Retention Structure
- Conceptual Interceptor Cross Section
- Channel & Bridge
- Levee
- Flood Wall
- Interceptor
- Water Conveyance
- Channel & Interceptor
- Bridge
- Flood Wall
- Interceptor
- Water Conveyance
- Stormwater Basin
- Levee
- Flood Wall

KEY MAP: (not to scale)

C13	D13	E13	F13
C14	D14	E14	F14
C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19
C20	D20	E20	F20

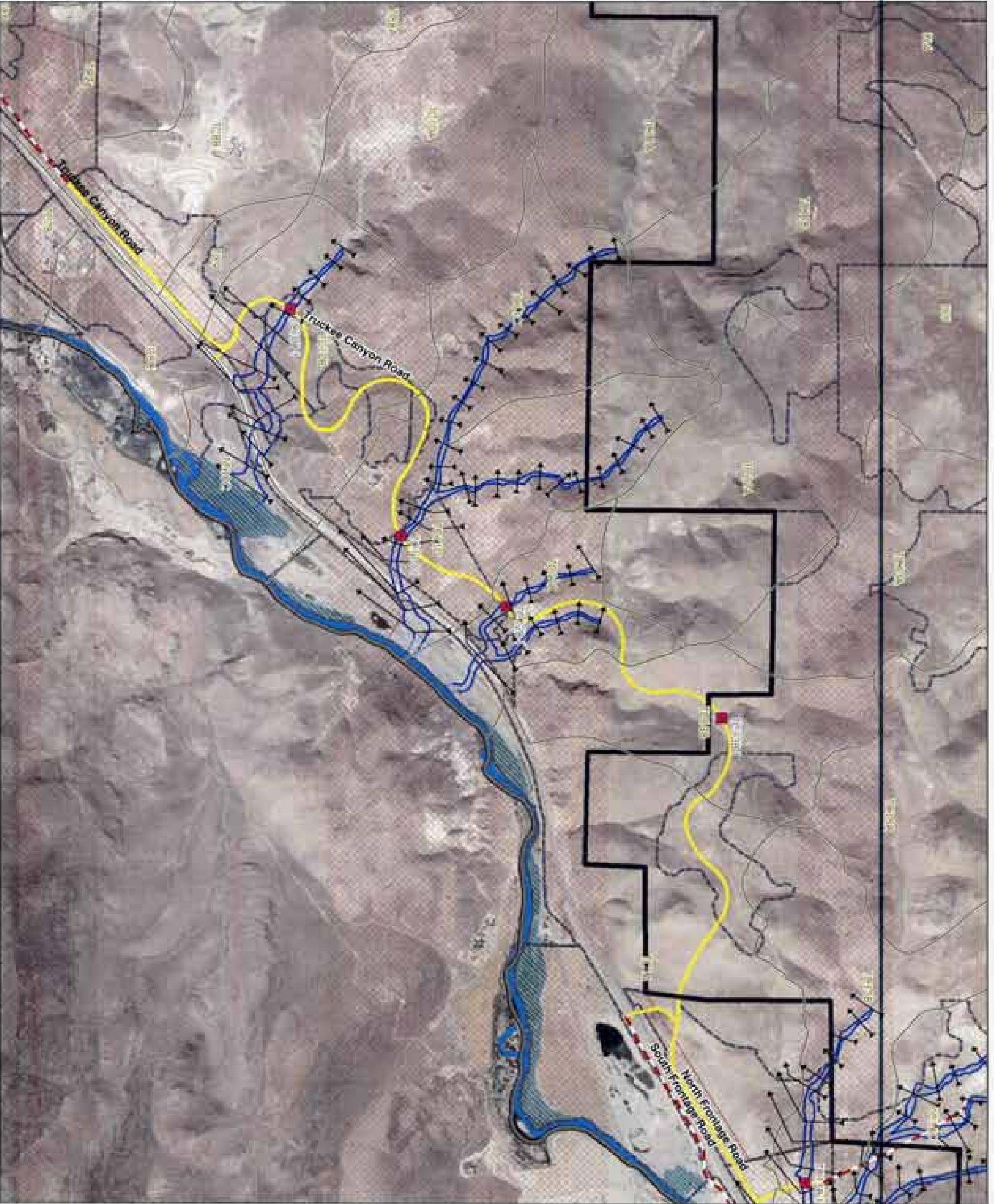
Scale: 0, 1,000, 2,000, 4,000 Feet
1:24,000

Stantec
 3000 Central Expressway
 Reno, NV 89502
 Tel: (775) 858-8777
 Fax: (775) 858-8777
 www.stantec.com

City of Sparks
 1000 Central Expressway
 Sparks, NV 89411
 Tel: (775) 335-1111
 Fax: (775) 335-1111
 www.cityofsparks.com

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure - 5.11
**Existing and Proposed
Flood Control Facilities - 2030 (E18)**



- Legend**
- Study District Area Boundary
 - Truckee Area S30E Street / 2000
 - Damaged Area S30E Street / 2000
 - Flood Road
 - Culvert/Flow Road
 - Levee
 - Flooded Area
 - FEMA Flood Zone
 - FEMA Zone 4 30004
 - Zone A
 - Zone A1
 - Zone A2
 - Zone AD
 - Conceptual Dam/Structure
 - Conceptual Dam/Structure Core Section
 - Check & Bridge
 - Levee
 - Levee
 - Urban Channel
 - Channel At Endowment
 - Levee
 - Riprap
 - Urban Channel
 - Damaged Area
 - Levee
 - Riprap

KEY MAP (Not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19



City of Sparks
City Engineer
1000 W. 1st St.
Sparks, NV 89411
775.333.8000

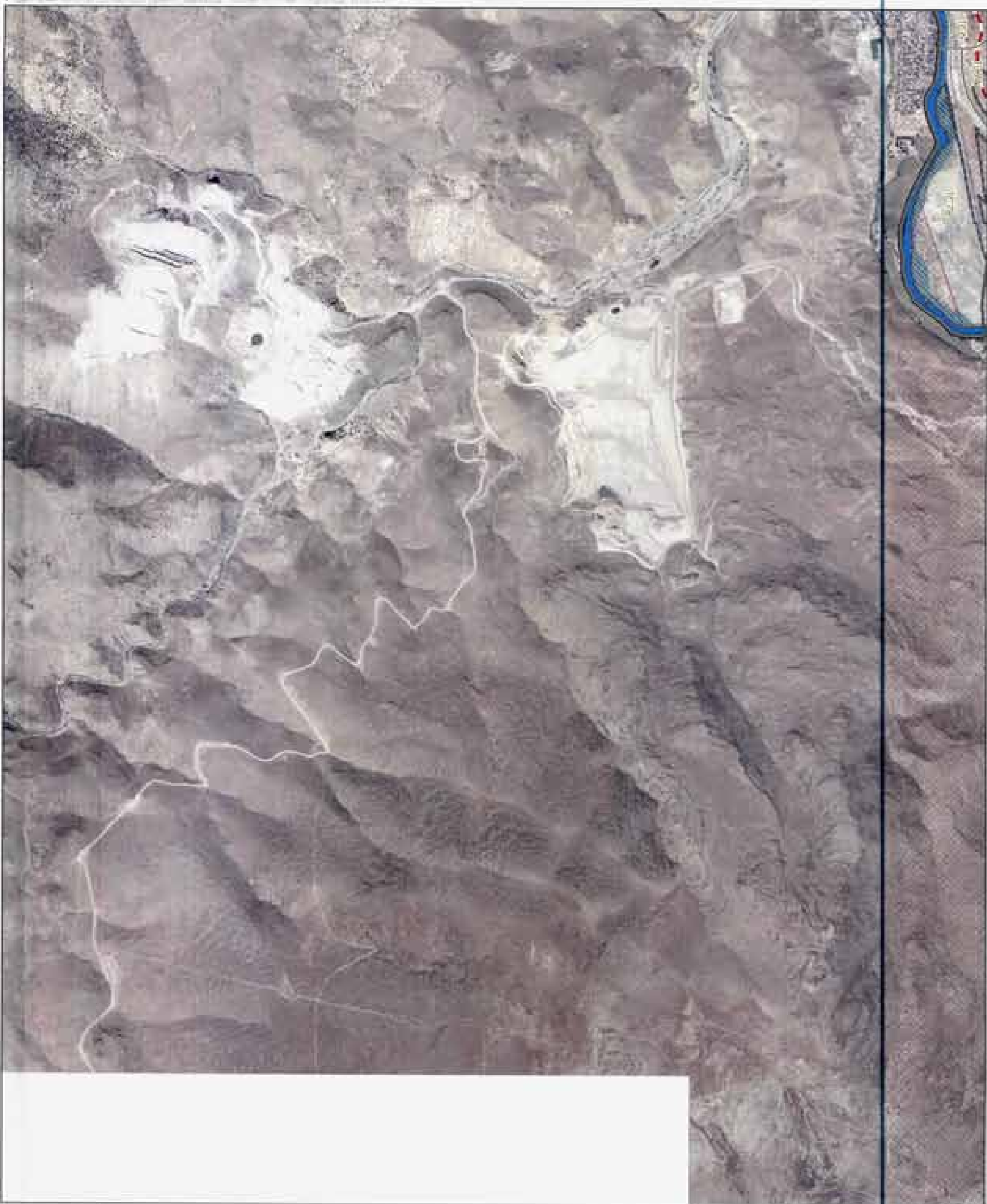
Santox
Water Treatment
1000 W. 1st St.
Sparks, NV 89411
775.333.8000

City of Sparks
Water Treatment
1000 W. 1st St.
Sparks, NV 89411
775.333.8000

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Figure 5.12

Existing and Proposed
Flood Control Facilities - 2030 (E19)



Legend

- Primary Service Area Boundary
- Secondary Service Area Boundary
- Designated Flood Zone 2030
- Designated Flood Zone 2030 (E19)
- Designated Flood Zone 2030 (E20)
- Designated Flood Zone 2030 (E21)
- Designated Flood Zone 2030 (E22)
- Designated Flood Zone 2030 (E23)
- Designated Flood Zone 2030 (E24)
- Designated Flood Zone 2030 (E25)
- Designated Flood Zone 2030 (E26)
- Designated Flood Zone 2030 (E27)
- Designated Flood Zone 2030 (E28)
- Designated Flood Zone 2030 (E29)
- Designated Flood Zone 2030 (E30)
- Designated Flood Zone 2030 (E31)
- Designated Flood Zone 2030 (E32)
- Designated Flood Zone 2030 (E33)
- Designated Flood Zone 2030 (E34)
- Designated Flood Zone 2030 (E35)
- Designated Flood Zone 2030 (E36)
- Designated Flood Zone 2030 (E37)
- Designated Flood Zone 2030 (E38)
- Designated Flood Zone 2030 (E39)
- Designated Flood Zone 2030 (E40)
- Designated Flood Zone 2030 (E41)
- Designated Flood Zone 2030 (E42)
- Designated Flood Zone 2030 (E43)
- Designated Flood Zone 2030 (E44)
- Designated Flood Zone 2030 (E45)
- Designated Flood Zone 2030 (E46)
- Designated Flood Zone 2030 (E47)
- Designated Flood Zone 2030 (E48)
- Designated Flood Zone 2030 (E49)
- Designated Flood Zone 2030 (E50)
- Designated Flood Zone 2030 (E51)
- Designated Flood Zone 2030 (E52)
- Designated Flood Zone 2030 (E53)
- Designated Flood Zone 2030 (E54)
- Designated Flood Zone 2030 (E55)
- Designated Flood Zone 2030 (E56)
- Designated Flood Zone 2030 (E57)
- Designated Flood Zone 2030 (E58)
- Designated Flood Zone 2030 (E59)
- Designated Flood Zone 2030 (E60)
- Designated Flood Zone 2030 (E61)
- Designated Flood Zone 2030 (E62)
- Designated Flood Zone 2030 (E63)
- Designated Flood Zone 2030 (E64)
- Designated Flood Zone 2030 (E65)
- Designated Flood Zone 2030 (E66)
- Designated Flood Zone 2030 (E67)
- Designated Flood Zone 2030 (E68)
- Designated Flood Zone 2030 (E69)
- Designated Flood Zone 2030 (E70)
- Designated Flood Zone 2030 (E71)
- Designated Flood Zone 2030 (E72)
- Designated Flood Zone 2030 (E73)
- Designated Flood Zone 2030 (E74)
- Designated Flood Zone 2030 (E75)
- Designated Flood Zone 2030 (E76)
- Designated Flood Zone 2030 (E77)
- Designated Flood Zone 2030 (E78)
- Designated Flood Zone 2030 (E79)
- Designated Flood Zone 2030 (E80)
- Designated Flood Zone 2030 (E81)
- Designated Flood Zone 2030 (E82)
- Designated Flood Zone 2030 (E83)
- Designated Flood Zone 2030 (E84)
- Designated Flood Zone 2030 (E85)
- Designated Flood Zone 2030 (E86)
- Designated Flood Zone 2030 (E87)
- Designated Flood Zone 2030 (E88)
- Designated Flood Zone 2030 (E89)
- Designated Flood Zone 2030 (E90)
- Designated Flood Zone 2030 (E91)
- Designated Flood Zone 2030 (E92)
- Designated Flood Zone 2030 (E93)
- Designated Flood Zone 2030 (E94)
- Designated Flood Zone 2030 (E95)
- Designated Flood Zone 2030 (E96)
- Designated Flood Zone 2030 (E97)
- Designated Flood Zone 2030 (E98)
- Designated Flood Zone 2030 (E99)
- Designated Flood Zone 2030 (E100)

KEY MAP (not to scale)

E19	E18	E17	E16	E15
E14	E13	E12	E11	E10
E09	E08	E07	E06	E05
E04	E03	E02	E01	E00

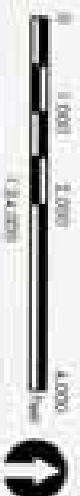
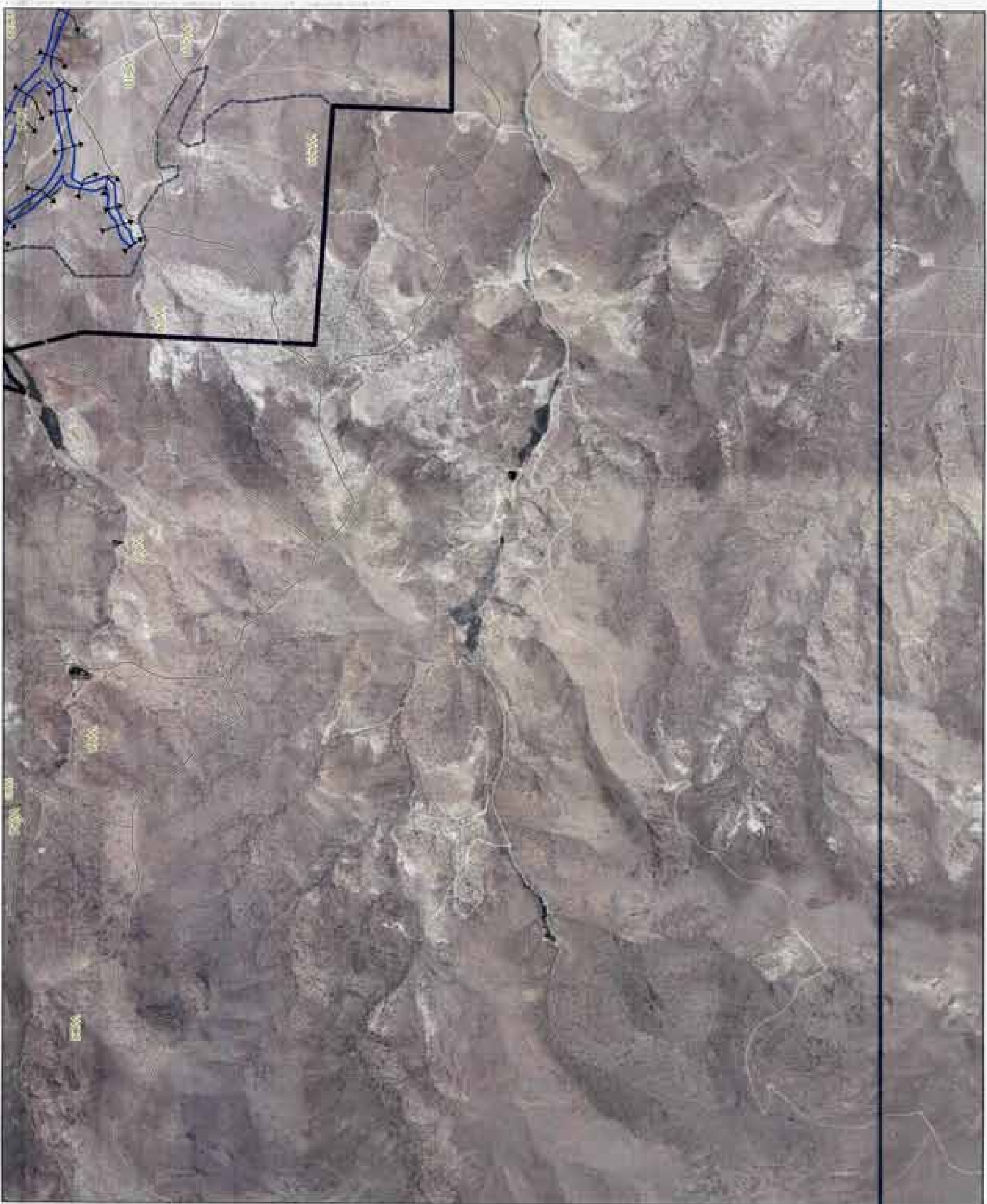


Figure 5.13

**Existing and Proposed
Flood Control Facilities - 2030 (F15)**

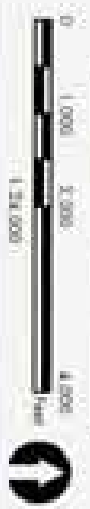


Legend

- Boundary - Sparks Area Boundary
- Designated Area - 2030 (Legal) - 2030
- Designated Area - 2030 (Legal) - 2030
- Legal Easement
- California State Road
- Road
- Unimproved Right-of-Way
- Road Right-of-Way
- 100 Year Flood Zone - 1:1000 A
- Zone A
- Zone B
- Zone C
- Zone D
- Zone E
- Zone F
- 200 Year Flood Zone
- 200 Year AD
- Designated Alternative Right-of-Way
- Conveyed Alternative Cross Section
- Utility & Structure
- Existing
- Proposed
- Utility Crosswalk
- Chemical & Petroleum
- Existing
- Proposed
- Utility Crosswalk
- Existing
- Proposed

KEY MAP (link to scroll)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18



Shawco Consulting
4600 South Nevada Street
Sparks, NV 89411
Tel: (775) 833-1111
Fax: (775) 833-1111
www.shawco.com

City of Sparks
1000 South Nevada Street
Sparks, NV 89411
Tel: (775) 833-1111
Fax: (775) 833-1111
www.cityofsparks.com

CITY OF SPARKS TMSA/FSA
CONCEPTUAL FACILITY MASTER PLAN

Existing and Proposed
Flood Control Facilities - 2030 (F18)

Figure 5.16



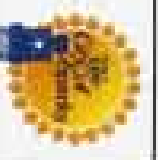
- Legend**
- Priority Service Area Boundary
 - District 1000 Area (2000-2030)
 - District 1000 Area (2030-2050)
 - Flood Zone
 - Zone A
 - Zone A1
 - Zone A2
 - Zone A3
 - Zone A4
 - Zone A5
 - Zone A6
 - Zone A7
 - Zone A8
 - Zone A9
 - Zone A10
 - Zone A11
 - Zone A12
 - Zone A13
 - Zone A14
 - Zone A15
 - Zone A16
 - Zone A17
 - Zone A18
 - Zone A19
 - Zone A20
 - Zone A21
 - Zone A22
 - Zone A23
 - Zone A24
 - Zone A25
 - Zone A26
 - Zone A27
 - Zone A28
 - Zone A29
 - Zone A30
 - Zone A31
 - Zone A32
 - Zone A33
 - Zone A34
 - Zone A35
 - Zone A36
 - Zone A37
 - Zone A38
 - Zone A39
 - Zone A40

KEY MAP (not to scale)

C15	D15	E15	F15
C16	D16	E16	F16
C17	D17	E17	F17
C18	D18	E18	F18
C19	D19	E19	F19
C20	D20	E20	F20



Stantec Consulting
2000 North Carson Avenue
Suite 200
Sparks, NV 89411
Tel: (775) 850-0111
Fax: (775) 850-0111
www.stantec.com



City of Sparks, NV
1000 North Carson Avenue
Sparks, NV 89411