



**STORM DRAIN
MASTER PLAN**

APRIL 2022



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1.0 EXECUTIVE SUMMARY

Farmington City has retained CRS Engineers to prepare an impact fee facilities plan (IFFP) based on the improvements proposed in the 2014 Storm Drain Master Plan Update (SDMP). The SDMP identifies the improvements that will need to be made to the storm drain system as the City approaches built out conditions. The SDMP also projects the costs to complete the recommended improvements.

The purpose of an IFFP is to identify the portion of the improvement costs that are placed upon City by future development. The IFFP provides a technical basis for assessing updated impact fees throughout the City. This document will address the future infrastructure needed to serve the City based on current land use planning. The existing and future capital projects documented in the IFFP will help maintain the existing level of service for all existing and future residents within the service area.

LEVEL OF SERVICE

Level of Service (LOS) defines the minimum standard to which the storm drain system will be built. The IFFP identifies the existing LOS and establishes the proposed LOS for future infrastructure. The existing LOS for Farmington City is that all storm water pipes are designed to convey the 25 year storm event, and all detention basins are designed to detain the 100 year storm. The proposed LOS is to maintain the existing standards for both conveyance and detention.

PROJECTED FUTURE GROWTH

Farmington City is anticipating a high level of growth and development over the next 20 years. The City is expected to reach its full built out potential by 2037 as a result of this development. The demand for storm drain infrastructure will increase by approximately 51 percent.

REQUIRED SYSTEM IMPROVEMENTS

To meet the demands of future development, the city has planned 67 projects to be completed over the next 10 years. 14 projects will focus on detention of storm water. The proposed detention basins will hold a combined volume of 65.7 acre-feet and will cost approximately \$5.6 million. The remaining 47 projects will be storm water conveyance infrastructure, totaling over 37,000 linear feet. Conveyance projects are estimated to cost \$16.2 million. Of the proposed \$21.8 million dollars in storm drain improvements, it is proposed that just over \$7.1 million be paid for using impact fees.



2.0 INTRODUCTION

One of the sources of revenue for financing new public facilities or expansions to existing facilities is a one-time charge for connection to the system. This charge is often referred to as an impact fee, connection fee, or capital contribution fee. These fees are designed to recover all or a portion of the capital investment made by the City to provide sufficient capacity in a public facility system to serve new users. Revenue generated through the assessment of impact fees may be used to directly offset the cost of system expansion or to repay debt issued to finance the system expansion.

Capital improvements needed to provide new capacity in a public utility system must generally be constructed in large increments. Therefore, system expansions are often constructed years in advance of when the added capacity will be fully used. Thus, current system users are often charged rates that are used to pay for a portion of the system capacity to serve future users. Impact fees, designed to recover the investment in this extra capacity, are often assessed to avoid charging existing users for these extra capacity costs.

Farmington City has retained CRS Engineers to prepare an IFFP for the areas evaluated in the 2014 SDMP. The IFFP identifies demands placed upon City facilities by future development and evaluates how these demands will be met by the City. The IFFP also outlines the improvements which may be funded through impact fees.

Requirements for the preparation of an IFFP are outlined in Title 11, Chapter 36 of the Utah code (the Impact Fees Act). Under these requirements, an IFFP shall accomplish the following for each facility:

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth
4. Identify demands of new development
5. Identify the means by which demands from new development will be met
6. Consider the following additional issues
 - a. Revenue sources to finance required system improvements
 - b. Necessity of improvements to maintain the proposed level of service
 - c. Need for facilities relative to planned locations of schools

The following sections of this report have been organized to address each of these requirements.



3.0 EXISTING LEVEL OF SERVICE

Level of service is defined in the Impact Fees Act as “the defined performance standard or unit of demand for each capital component of a public facility within a service area”. This section discusses the level of service being currently provided to existing users.

PERFORMANCE STANDARD

The performance standard defines the level of service the City has established to satisfy City and/or State requirements. There is no minimum State standard for storm drain as there are with some other utilities. Farmington City desires to protect their residents and assets from flooding. The City’s goal is to balance the cost of storm drainage improvements with the amount of surface runoff that is expected to occur on a regular basis. The evaluation criteria for this study was provided by Farmington City as documented in the SDMP.

Design Storm Parameters

The design storm predicts how much precipitation will fall and the rate at which it will fall for a projected storm event. Storm events are classified by the percent chance of occurrence within a given year. The 25-year storm event has a 4% annual chance of occurring, and the 100-year storm has a 1% annual chance of occurring. Rainfall data for system evaluation is based on the National Oceanic and Atmospheric Administration (NOAA) Atlas 14. This data is commonly used by professionals in the industry and has been shown to produce accurate results in studies conducted in neighboring communities. The Farmer-Fletcher, 6-hour rainfall distribution was used in the system analysis and combined with the NOAA rainfall data, this is the basis for the determination of the improvements in this IFFP.

Storm Drain Conveyance

Storm drain pipes are designed to pass the runoff from a 25-year storm event. If a storm exceeds the 25-year event, the pipes will pressurize and eventually flood into the streets. It is important to note that roadways are intended to become major storm water conveyance facilities during storms that are larger than the 25-year event, and should be designed to convey flows up to the 100-year event. In addition to storm drain pipes, the City also uses some open channels for storm water conveyance.

Detention Basins

Detention facilities are used frequently to reduce peak flow rates from developed properties. These can be constructed and maintained by a developer or group of developers. Detention basins can also be regional or system facilities, which are often constructed and maintained by the City. Detention basins are sized to detain the 100-year storm event while releasing at a rate that is slightly higher than the 25-year storm event.



Special Release Rates

In some areas, release from detention facilities is restricted to less than the standard discharge rate because downstream infrastructure cannot handle the full 25-year event. This type of restriction is typically caused by situations that cannot be controlled by the City including flat natural topography, water right agreements, other ownership control, and extreme improvement costs.

In areas where good stormwater management dictates that the runoff from a small local area be released quickly prior to the arrival of a larger peak runoff, a rate higher than the 25-year storm event is allowed. This occurs in areas near the western edge of the City or just upstream of a large regional detention basin.

Specific release rates, expressed in terms of cfs/acre, are identified on the SDMP where these special conditions occur. Impact fee reductions may be considered by the City where more stringent restrictions apply, but elevated impact fees will not be assessed where less restrictive discharge is allowed.



4.0 PROPOSED LEVEL OF SERVICE

The proposed level of service is the performance standard used to evaluate system needs in the future. The Impact Fee Act indicates that the proposed level of service may:

1. Diminish or equal the existing level of service; or
2. Exceed the existing level of service if, independent of the use of impact fees, the City implements and maintains the means to increase the level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

DETERMINATION OF PROPOSED LEVEL OF SERVICE

It is critical for the protection of public and private property that the Level of Service does not diminish. Therefore, all storm drain conveyance shall be designed to the 25-year storm event, and all detention basins shall be designed for the 100-year storm event.



5.0 CAPACITY TO ACCOMMODATE FUTURE GROWTH

EXISTING STORM DRAIN INFRASTRUCTURE

Farmington City's existing storm drain infrastructure was analyzed using Geographic Information Systems (GIS) and hydraulic models. The GIS data provides the location, diameter, and length of the pipes. The hydraulic model is used to estimate the flow rate under specific precipitation conditions. This data was used to estimate the monetary value and existing capacity of the storm drain system. Table 5-1 provides the estimated value of the City's storm drain pipes.

FARMINGTON CITY STORM DRAIN PIPES (TABLE 5-1)			
Pipe Material	Pipe Diameter	Length	Estimated Value
Unknown	Unknown	40,732	\$ 4,276,889
Unknown	8"	857	\$ 33,435
Unknown	10"	3,029	\$ 136,306
Unknown	12"	5,356	\$ 273,173
Unknown	15"	41,804	\$ 2,508,263
Unknown	18"	42,874	\$ 2,958,304
Unknown	21"	6,403	\$ 499,455
Unknown	24"	18,667	\$ 1,623,990
Unknown	27"	1,447	\$ 138,918
Unknown	30"	12,109	\$ 1,271,421
Unknown	36"	10,287	\$ 1,265,248
Unknown	42"	3,609	\$ 508,883
Unknown	48"	1,027	\$ 163,248
Unknown	54"	373	\$ 66,086
Unknown	60"	927	\$ 180,813
Ductile Iron Pipe	8"	115	\$ 4,476
ADS Pipe	18"	432	\$ 29,824
High Density Polyethylene	12"	731	\$ 19,739
High Density Polyethylene	15"	4,322	\$ 129,665
High Density Polyethylene	18"	3,873	\$ 127,820
High Density Polyethylene	24"	710	\$ 27,689
High Density Polyethylene	42"	472	\$ 26,920
Corrugated Metal Pipe	10"	92	\$ 3,214
Corrugated Metal Pipe	12"	233	\$ 9,107
Corrugated Metal Pipe	15"	242	\$ 10,909
Corrugated Metal Pipe	18"	399	\$ 20,356
Corrugated Metal Pipe	24"	3,360	\$ 211,677
Corrugated Metal Pipe	36"	639	\$ 55,599
Corrugated Metal Pipe	42"	294	\$ 29,133
Corrugated Metal Pipe	48"	99	\$ 10,988
Reinforced Concrete Pipe	12"	2,309	\$ 138,553
Reinforced Concrete Pipe	15"	26,323	\$ 1,974,237
Reinforced Concrete Pipe	18"	15,946	\$ 1,435,198
Reinforced Concrete Pipe	21"	1,393	\$ 146,304



Reinforced Concrete Pipe	24"	14,927	\$ 1,791,257
Reinforced Concrete Pipe	27"	2,688	\$ 362,896
Reinforced Concrete Pipe	30"	3,120	\$ 468,075
Reinforced Concrete Pipe	36"	6,470	\$ 1,164,665
Reinforced Concrete Pipe	42"	846	\$ 177,713
Reinforced Concrete Pipe	54"	876	\$ 236,554
Reinforced Concrete Pipe	60"	408	\$ 122,480
Total	-	280,826	\$ 24,639,500

EXISTING DEMAND AND DETERMINATION OF EXCESS CAPACITY

Storm drain demand is dependent on the area of impervious surface on a parcel of land. Impervious surfaces are manmade features like buildings, parking lots, and driveways that prevent water from being absorbed into the soil. This creates more surface runoff that flows into the City's storm drain system. The City has enough capacity to meet existing demands, with few exceptions. Where the capacity does not meet demand, existing deficiencies have been identified. There is no excess capacity in the storm drain system.



6.0 DEMANDS OF NEW DEVELOPMENT

STORM WATER DEMAND EQUIVALENCE

New development increases the demand on the storm drain network by increasing the amount of impervious surface area and the amount of runoff. Farmington City has estimated the projected development over the next 20 years. The City has planned for both residential and private non-residential growth. To calculate the drainage demand, the City uses an Equivalent Service Unit (ESU). The ESU is calculated based on the type of property being developed. These calculations are outlined in Table 6-1.

Residential

Single family residential units are the basis for ESU calculation. One dwelling unit is equal to one ESU. The impervious area is the average for existing single family residences in the City. For all other property types the service unit generation rate is the ratio of impervious surface area for that property type to that of single family residential. Multi-family residences typically have less impervious area than single family because there are multiple dwelling units in the same building. The site area for multi-family is a weighted average assuming 8 – 10 dwelling units per acre.

Private Non-Residential

Private non-residential developments are separated into five categories: retail, industrial, institutional, office, and other. For each of these categories, the ESU is calculated per thousand square feet of gross floor area (GFA). It is assumed that the building occupies approximately 15% of the site, this is the floor area ratio (FAR). The impervious area is obtained by multiplying the acres of site area and the percent impervious. All the percent impervious values are based on standard runoff coefficients.

STORM WATER DEMAND EQUIVALENCE (TABLE 6-1)						
Type of Property	Unit of Measure	Site Area		Percent Impervious	Impervious Area (acres)	Service Unit Generation Rate
		FAR	Acres			
Single Residential	Dwelling Unit	NA	NA	NA	0.094	1.00
Multi-Residential	Dwelling Unit	NA	0.119	60%	0.071	0.76
Retail	1,000 Sq. Ft. GFA	15%	0.153	85%	0.130	1.39
Industrial	1,000 Sq. Ft. GFA	15%	0.153	75%	0.115	1.23
Institutional	1,000 Sq. Ft. GFA	15%	0.153	30%	0.046	0.49
Office	1,000 Sq. Ft. GFA	15%	0.153	65%	0.099	1.06
Other	1,000 Sq. Ft. GFA	15%	0.153	60%	0.092	0.98

Using this method, the ESU can be calculated based on the type of property and the applicable service unit generation rate. Thus, if a developer were to construct a 70,000-square foot retail property, that property would be 97.3 ESU ($70,000/1000 = 70 * 1.39 = 97.3$).



DEMANDS OF NEW DEVELOPMENT

ESU are the basis for calculation of the impact fee, and for calculation of impact fee revenue credits. They can also be used to estimate the future demands on the storm drain system. The projected development for Farmington City is shown in table 6-2. The service unit generation rate from table 6-1 has already been applied, so the development is given in ESU.

PROJECTED 2040 DEVELOPMENT (TABLE 6-2)				
Type of Property	Current ESU (2016)	Future ESU (2037)	ESU Increase	Percent Increase
Single Residential	5,602	8,246	2,644	47%
Multi-Residential	723	1,042	319	44%
Retail	2,566	3,684	1,118	44%
Industrial	129	251	122	94%
Institutional	1,116	1,134	18	2%
Office	719	2,015	1,296	180%
Other	369	544	175	48%
Total	11,224	16,916	5,692	51%

As shown in the table above, the overall demand for storm drain infrastructure is projected to increase by 51% by 2037. The SDMP considers development by Traffic Analysis Zone (TAZ) to anticipate where the development will take place. This allows the City to plan improvements to accommodate future storm water demand.



7.0 MEANS BY WHICH DEMANDS FROM NEW DEVELOPMENT WILL BE MET

To satisfy the requirements of state law, demand placed upon system facilities by future development was projected using the process outlined below.

1. **Existing Capacity**—The capacities of the existing facilities were evaluated using a hydraulic storm water model as part of the master plan.
2. **Existing Deficiencies**—Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities.
3. **Future Demand**—The demand that future development will place on the system was estimated based on development projections as discussed in Section 6.0.
4. **Future Deficiencies**—Future deficiencies in the storm drain infrastructure were identified based on the defined level of service.
5. **Recommended Improvements**—Needed storm drain improvements were identified to resolve the project deficiencies.

STORM DRAIN MASTER PLAN

The SDMP follows the steps above to identify the necessary infrastructure to serve future developments. Using this process, the city has planned 128 storm drain improvements over the next 20 years. The full list of these projects is available in Appendix C.

PROJECT COST ATTRIBUTABLE TO 10-YEAR GROWTH

Of the 128 projects that have been planned, 61 projects are projected to be completed in the next 10 years. Projects are organized by geographical location (see the SDMP, Appendix B), and by project type – conveyance or detention. There are 47 conveyance projects and 14 detention projects planned in the next 10 years. Summaries of these projects are provided in the tables below, while detailed cost estimates are shown in Appendix A.

10 YEAR STORM WATER DETENTION PROJECT SUMMARY (TABLE 7-1)					
Map Grid Number	Volume (AC-FT)	Estimated Cost	Map Grid Number	Volume (AC-FT)	Estimated Cost
1	0.3	\$ 51,911	29	2.7	\$ 323,123
4	0.2	\$ 40,875	29	12.2	\$ 550,049
7	0.3	\$ 51,911	30	4.2	\$ 465,058
12	1.4	\$ 171,765	35	6.6	\$ 739,587
18	6.5	\$ 728,552	36	4.4	\$ 155,810
23	13.3	\$ 1,431,483	40	0.6	\$ 84,649
23	2.1	\$ 241,600	41	8.5	\$ 283,138
			43	2.4	\$ 281,014
Total Volume			65.7		
Total Estimated Cost			\$ 5,600,525		



FARMINGTON 10 YEAR STORM WATER CONVEYANCE PROJECT SUMMARY (TABLE 7-2)				
Pipe Material	Pipe Diameter	Length	Number of Projects	Estimated Cost
Open Channel	-	390	1	\$ 8,307.00
Reinforced Concrete Pipe	15"	6,625	10	\$ 765,266.40
Reinforced Concrete Pipe	18"	4,270	7	\$ 467,464.00
Reinforced Concrete Pipe	24"	13,015	23	\$ 1,685,064.30
Reinforced Concrete Pipe	30"	340	1	\$ 48,848.00
Reinforced Concrete Pipe	36"	7,420	16	\$ 7,298,757.40
Reinforced Concrete Pipe	48"	350	1	\$ 89,815.00
Reinforced Concrete Pipe	60"	1,800	3	\$ 650,218.00
Total	-	37,220	67	\$ 16,225,140

BASIS OF CONSTRUCTION COST ESTIMATES

Costs for the proposed infrastructure were prepared by CRS Engineers, and are based on the costs for similar projects in the area over the last 5 years. These costs are combined with contractor estimates to provide a per unit cost for each item planned for the project. The total cost of the project is broken down into System Costs, Existing Deficiencies, Project Costs, and State or Federal Funds. Some projects will be entirely funded by one of the above categories, while others will have a percentage paid from multiple sources.

System Costs

System Costs are the costs for the portion of the project that will affect the overall storm drain network. These projects will be constructed by the City to meet the demands of new development. Impact fees will be collected to pay for system costs. At the City's discretion, they may negotiate reduced impact fees with a developer to allow for on-site detention or similar on-site improvements.

Existing Deficiencies

Existing deficiencies are costs for projects that are necessary because the existing infrastructure is insufficient to meet the current demand. These improvements will be constructed or paid for by the City. Impact Fees will not be used to pay for existing deficiencies.

Project Costs

Project Costs are the responsibility of the developer. Each development is required to meet the level of service requirements outlined in sections 3 and 4. Developers may also be responsible to build the necessary infrastructure to convey water off the property and tie into existing infrastructure. The SDMP has planned for several projects where the City is anticipating a high level of development, but the proposed locations shown on the map are for reference only. Developments will plan their storm drain projects as outlined, and projects will be approved individually by the City.



State or Federal Funds

State and Federal funds are available to pay for certain projects. The City will apply for use of these funds to construct the applicable projects. Some projects have already been identified for construction with these funds, however use of these funds is not necessarily approved by the funding agencies yet. The City will continue to work with funding agencies to secure funding for as many projects as possible.



8.0 FUNDING PLANS AND REVENUE SOURCES

MANNER OF FINANCING (11-36A-302.2)

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If the City is awarded a grant that requires that a portion of the funds be matched by the City and if the project for which the grant is awarded is eligible for the use of impact fees, the City may use impact fees to fund its portion of the project. At the City's discretion, a reduced impact fee may be collected in this case to account for the use of grant monies.

Bonds

None of the costs contained in this IFFP include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFFP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

Interfund Loans

Because infrastructure must generally be built ahead of growth, situations often arise in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Consideration of potential interfund loans will be included in the impact fee analysis and should also be considered in subsequent accounting of impact fee expenditures.

Impact Fees

It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions

Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future Storm Drain infrastructure. If a developer constructs a facility or dedicates land within the development, the value of the dedication is credited against that developer's impact fee liability.



If the value of the dedication/exaction is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the value of the improvements dedicated is worth more than the development's impact fee liability, the City must reimburse the difference to the developer from impact fee revenues collected from other developments.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

No developer dedications are expected for Storm Drain infrastructure.

NECESSITY OF IMPROVEMENTS TO MAINTAIN LEVEL OF SERVICE (11-36A-302.3)

According to State statute, impact fees cannot be used to correct deficiencies in the system and must be necessary to maintain the proposed level of service established for all users. Only those projects or portions of projects that are required to maintain the proposed level of service for future growth have been included in this IFFP. This will result in an equitable fee as future users will not be expected to fund any portion of the projects that will benefit existing residents.

SCHOOL RELATED INFRASTRUCTURE (11-36A-302.4)

As part of the noticing and data collection process for this plan, information was gathered regarding future school district and charter school development. Where the City is aware of the planned location of a school, required public facilities to serve the school have been included in the impact fee analysis.

NOTICING AND ADOPTION REQUIREMENTS (11-36A-502)

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFFP. If an entity prepares an independent IFFP rather than include a capital facilities element in the general plan, the actual IFFP must be adopted by enactment. Before the IFFP can be adopted, a reasonable notice of the public hearing must be published in a local newspaper at least 10 days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the City during the 10-day noticing period for public review and inspection. Utah Code requires that the city must post a copy of the ordinance in at least three places. These places may include the City offices and the public libraries within the City's jurisdiction. Following the 10-day noticing period, a public hearing will be held, after which the city may adopt, amend and adopt, or reject the proposed IFFP.



9.0 IMPACT FEE CERTIFICATION

This report has been prepared in accordance with Utah Code Title 11 Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to Utah municipal capital facilities plans and impact fee analyses. The accuracy of this report relies upon the planning, engineering, and other source data, which was provided by the City and their designees.

In accordance with Utah Code Annotated, 11-36a-306(1), CRS Engineers makes the following certification:

I certify that this impact fee facility plan:

1. Includes only the cost of public facilities that are:
 - a. Allowed under the Impact Fees Act; and
 - b. Actually incurred; or
 - c. Projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
 - a. Costs of operation and maintenance of public facilities;
 - b. Cost of qualifying public facilities that will raise the level of service for the facilities, through impact fee, above the level of service that is supported by existing residents;
 - c. An expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act.

This certification is made with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP or in the impact fee analysis are followed in their entirety by the City.
2. If all or a portion of the IFFP or impact fee analysis is modified or amended this certification is no longer valid.
3. All information provided in this preparation of this IFFP is assumed to be correct, complete and accurate. This includes information provided by the City and outside sources.

Dated: April 14, 2022



APPENDIX A

FARMINGTON CITY STORM DRAIN MASTER PLAN

10 YEAR PROJECT COSTS

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
Grid 1											
01-1	Detention Pond: 0.3 AC-FT										
1	Land Acquisition	0.10	ACRE	\$150,000.00	\$ 15,000.00						
2	Excavation - Grading	485	CY	\$ 7.75	\$ 3,758.75						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	45	CY	\$ 55.00	\$ 2,475.00						
5	Erosion control	10%	%	-	\$ 3,323.38						
	Subtotal				\$ 36,557.13	\$ -	\$ -	\$ -	\$ 51,911.12	\$ -	2016 Complete
6	Engineering - Design & Construction	12%	%	-	\$ 4,386.86						
7	Mobilization	10%	%	-	\$ 3,655.71						
8	Contingency	20%	%	-	\$ 7,311.43						
	Item Subtotal				\$ 51,911.12	0%	0%	0%	100%	0%	
Grid 4											
04-2	Detention Pond: 0.2 AC-FT										
1	Land Acquisition	0.07	ACRE	\$150,000.00	\$ 10,000.00						
2	Excavation - Grading	325	CY	\$ 7.75	\$ 2,518.75						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	30	CY	\$ 55.00	\$ 1,650.00						
5	Erosion control	10%	%	-	\$ 2,616.88						
	Subtotal				\$ 28,785.63	\$ -	\$ -	\$ -	\$ 40,875.59	\$ -	2017 Complete
6	Engineering - Design & Construction	12%	%	-	\$ 3,454.28						
7	Mobilization	10%	%	-	\$ 2,878.56						
8	Contingency	20%	%	-	\$ 5,757.13						
	Item Subtotal				\$ 40,875.59	0%	0%	0%	100%	0%	
Grid 5											
05-1	Storm Drain Pipe										
1	15" RCP	620	LF	\$ 55.00	\$ 34,100.00						
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
	Subtotal				\$ 50,600.00	\$ -	\$ -	\$ -	\$ 71,852.00	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 6,072.00						
4	Mobilization	10%	%	-	\$ 5,060.00						
5	Contingency	20%	%	-	\$ 10,120.00						
	Item Subtotal				\$ 71,852.00	0%	0%	0%	100%	0%	
05-2	Storm Drain Pipe										
1	18" RCP	1440	LF	\$ 60.00	\$ 86,400.00						
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00						
	Subtotal				\$ 113,900.00	\$ 16,040.13	\$ -	\$ -	\$ 145,697.87	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 13,668.00						
4	Mobilization	10%	%	-	\$ 11,390.00						
5	Contingency	20%	%	-	\$ 22,780.00						
	Item Subtotal				\$ 161,738.00	10%	0%	0%	90%	0%	

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
05-3 Detention Pond											
						0%	0%	0%	100%	0%	Complete
Grid 7											
07-1 Detention Pond: 0.3 AC-FT											
1	Land Acquisition	0.10	ACRE	\$150,000.00	\$ 15,000.00						
2	Excavation - Grading	485	CY	\$ 7.75	\$ 3,758.75						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	45	CY	\$ 55.00	\$ 2,475.00						
5	Erosion control	10%	%	-	\$ 3,323.38						
				Subtotal	\$ 36,557.13	\$ -	\$ -	\$ -	\$ 51,911.12	\$ -	2016 Complete
6	Engineering - Design & Construction	12%	%	-	\$ 4,386.86						
7	Mobilization	10%	%	-	\$ 3,655.71						
8	Contingency	20%	%	-	\$ 7,311.43						
				Item Subtotal	\$ 51,911.12	0%	0%	0%	100%	0%	
07-2 Storm Drain Pipe											
1	15" RCP	400	LF	\$ 55.00	\$ 22,000.00						
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
				Subtotal	\$ 33,000.00	\$ -	\$ -	\$ -	\$ 46,860.00	\$ -	2017 Complete
3	Engineering - Design & Construction	12%	%	-	\$ 3,960.00						
4	Mobilization	10%	%	-	\$ 3,300.00						
5	Contingency	20%	%	-	\$ 6,600.00						
				Item Subtotal	\$ 46,860.00	0%	0%	0%	100%	0%	
07-3 Storm Drain Pipe											
1	15" RCP	440	LF	\$ 55.00	\$ 24,200.00						
2	Asphalt restoration	1760	SF	\$ 7.00	\$ 12,320.00						
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
				Subtotal	\$ 47,520.00	\$ -	\$ -	\$ -	\$ 67,478.40	\$ -	2017 Complete
4	Engineering - Design & Construction	12%	%	-	\$ 5,702.40						
5	Mobilization	10%	%	-	\$ 4,752.00						
6	Contingency	20%	%	-	\$ 9,504.00						
				Item Subtotal	\$ 67,478.40	0%	0%	0%	100%	0%	
Grid 11											
11-1 Control Structure											
1	Diversion Box	1	EA	\$ 22,000.00	\$ 22,000.00						
				Subtotal	\$ 22,000.00	\$ 31,240.00	\$ -	\$ -	\$ -	\$ -	2019 - 2021
2	Engineering - Design & Construction	12%	%	-	\$ 2,640.00						
3	Mobilization	10%	%	-	\$ 2,200.00						
4	Contingency	20%	%	-	\$ 4,400.00						
				Item Subtotal	\$ 31,240.00	100%	0%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
Grid 12											
12-1	Detention Pond: 1.4 AC-FT										
10	Land Acquisition	0.47	ACRE	\$150,000.00	\$ 70,000.00						
9	Excavation - Grading	2260	CY	\$ 7.75	\$ 17,515.00						
8	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
7	Granular base (3")	190	CY	\$ 55.00	\$ 10,450.00						
5	Erosion control	10%	%	-	\$ 10,996.50						
	Subtotal				\$ 120,961.50	\$ -	\$ -	\$ -	\$ 171,765.33	\$ -	2024
5	Engineering - Design & Construction	12%	%	-	\$ 14,515.38						
4	Mobilization	10%	%	-	\$ 12,096.15						
3	Contingency	20%	%	-	\$ 24,192.30						
	Item Subtotal				\$ 171,765.33	0%	0%	0%	100%	0%	
12-2	Storm Drain Pipe										
9	15" RCP	285	LF	\$ 55.00	\$ 15,675.00						
8	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
	Subtotal				\$ 21,175.00	\$ -	\$ -	\$ -	\$ 30,068.50	\$ -	2024
7	Engineering - Design & Construction	12%	%	-	\$ 2,541.00						
6	Mobilization	10%	%	-	\$ 2,117.50						
5	Contingency	20%	%	-	\$ 4,235.00						
	Item Subtotal				\$ 30,068.50	0%	0%	0%	100%	0%	
12-3	Storm Drain Pipe										
9	24" RCP	1090	LF	\$ 75.00	\$ 81,750.00						
8	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	Subtotal				\$ 103,750.00	\$ -	\$ -	\$ 24,148.01	\$ 123,176.99	\$ -	2024
7	Engineering - Design & Construction	12%	%	-	\$ 12,450.00						
6	Mobilization	10%	%	-	\$ 10,375.00						
5	Contingency	20%	%	-	\$ 20,750.00						
	Item Subtotal				\$ 147,325.00	0%	0%	16%	84%	0%	
12-4	Storm Drain Pipe										
9	15" RCP	870	LF	\$ 55.00	\$ 47,850.00						
8	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
	Subtotal				\$ 64,350.00	\$ -	\$ -	\$ -	\$ 91,377.00	\$ -	2024
7	Engineering - Design & Construction	12%	%	-	\$ 7,722.00						
6	Mobilization	10%	%	-	\$ 6,435.00						
5	Contingency	20%	%	-	\$ 12,870.00						
	Item Subtotal				\$ 91,377.00	0%	0%	0%	100%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
12-5	Storm Drain Pipe										
10	24" RCP	570	LF	\$ 75.00	\$ 42,750.00	\$ -	\$ -	\$ 18,915.33	\$ 57,409.67	\$ -	2024
9	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
	Subtotal				\$ 53,750.00						
8	Engineering - Design & Construction	12%	%	-	\$ 6,450.00						
7	Mobilization	10%	%	-	\$ 5,375.00						
6	Contingency	20%	%	-	\$ 10,750.00						
	Item Subtotal				\$ 76,325.00	0%	0%	25%	75%	0%	
12-6	Storm Drain Pipe										
1	24" RCP	60	LF	\$ 75.00	\$ 4,500.00	\$ -	\$ -	\$ 1,598.65	\$ 18,224.55	\$ -	2024
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
3	Remove culvert	60	LF	\$ 10.00	\$ 600.00						
4	Asphalt restoration	480	SF	\$ 7.00	\$ 3,360.00						
	Subtotal				\$ 13,960.00						
5	Engineering - Design & Construction	12%	%	-	\$ 1,675.20						
6	Mobilization	10%	%	-	\$ 1,396.00						
7	Contingency	20%	%	-	\$ 2,792.00						
	Item Subtotal				\$ 19,823.20	0%	0%	8%	92%	0%	
12-7	Storm Drain Pipe										
9	15" RCP	30	LF	\$ 55.00	\$ 1,650.00	\$ 4,728.60	\$ -	\$ -	\$ -	\$ -	2024
8	Asphalt restoration	240	SF	\$ 7.00	\$ 1,680.00						
	Subtotal				\$ 3,330.00						
7	Engineering - Design & Construction	12%	%	-	\$ 399.60						
6	Mobilization	10%	%	-	\$ 333.00						
5	Contingency	20%	%	-	\$ 666.00						
	Item Subtotal				\$ 4,728.60	100%	0%	0%	0%	0%	
12-8	Storm Drain Pipe										
9	18" RCP	120	LF	\$ 60.00	\$ 7,200.00	\$ -	\$ -	\$ -	\$ 10,224.00	\$ -	2024
	Subtotal				\$ 7,200.00						
8	Engineering - Design & Construction	12%	%	-	\$ 864.00						
7	Mobilization	10%	%	-	\$ 720.00						
6	Contingency	20%	%	-	\$ 1,440.00						
	Item Subtotal				\$ 10,224.00	0%	0%	0%	100%	0%	
12-9	Storm Drain Pipe										
8	18" RCP	130	LF	\$ 60.00	\$ 7,800.00	\$ -	\$ -	\$ -	\$ 11,076.00	\$ -	2024
	Subtotal				\$ 7,800.00						
7	Engineering - Design & Construction	12%	%	-	\$ 936.00						
6	Mobilization	10%	%	-	\$ 780.00						
5	Contingency	20%	%	-	\$ 1,560.00						
	Item Subtotal				\$ 11,076.00	0%	0%	0%	100%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
Grid 15											
15-1	Storm Drain Pipe										
1	60" RCP	260	LF	\$ 300.00	\$ 78,000.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
				<i>Subtotal</i>	\$ 94,000.00	\$ -	\$ -	\$ -	\$ -	\$ 133,480.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 11,280.00						
4	Mobilization	10%	%	-	\$ 9,400.00						
5	Contingency	20%	%	-	\$ 18,800.00						
				Item Subtotal	\$ 133,480.00	0%	0%	0%	0%	100%	
15-2	Storm Drain Pipe										
1	36" RCP	280	LF	\$ 100.00	\$ 28,000.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
				<i>Subtotal</i>	\$ 44,000.00	\$ -	\$ -	\$ -	\$ -	\$ 62,480.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 5,280.00						
4	Mobilization	10%	%	-	\$ 4,400.00						
5	Contingency	20%	%	-	\$ 8,800.00						
				Item Subtotal	\$ 62,480.00	0%	0%	0%	0%	100%	
15-3	Storm Drain Pipe										
1	42" RCP	350	LF	\$ 135.00	\$ 47,250.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
				<i>Subtotal</i>	\$ 63,250.00	\$ -	\$ -	\$ -	\$ -	\$ 89,815.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 7,590.00						
4	Mobilization	10%	%	-	\$ 6,325.00						
5	Contingency	20%	%	-	\$ 12,650.00						
				Item Subtotal	\$ 89,815.00	0%	0%	0%	0%	100%	
15-4	Storm Drain Pipe										
1	24" RCP	365	LF	\$ 75.00	\$ 27,375.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
				<i>Subtotal</i>	\$ 43,375.00	\$ -	\$ -	\$ -	\$ -	\$ 61,592.50	2022
3	Engineering - Design & Construction	12%	%	-	\$ 5,205.00						
4	Mobilization	10%	%	-	\$ 4,337.50						
5	Contingency	20%	%	-	\$ 8,675.00						
				Item Subtotal	\$ 61,592.50	0%	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
Grid 16											
16-1	Storm Drain Pipe										
1	24" RCP	305	LF	\$ 75.00	\$ 22,875.00						
2	Inlet/Combo/Junction Boxes	1.00	EA	\$ 5,500.00	\$ 5,500.00						
				<i>Subtotal</i>	\$ 28,375.00	\$ 32,234.00	\$ 8,058.50	\$ -	\$ -	\$ -	2019
3	Engineering - Design & Construction	12%	%	-	\$ 3,405.00						
4	Mobilization	10%	%	-	\$ 2,837.50						
5	Contingency	20%	%	-	\$ 5,675.00						
				Item Subtotal	\$ 40,292.50	80%	20%	0%	0%	0%	
16-2	Storm Drain Pipe										
1	24" RCP	885	LF	\$ 75.00	\$ 66,375.00						
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
				<i>Subtotal</i>	\$ 82,875.00	\$ 70,609.50	\$ 47,073.00	\$ -	\$ -	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 9,945.00						
4	Mobilization	10%	%	-	\$ 8,287.50						
5	Contingency	20%	%	-	\$ 16,575.00						
				Item Subtotal	\$ 117,682.50	60%	40%	0%	0%	0%	
Grid 17											
17-1	Storm Drain Pipe										
1	24" RCP	680	LF	\$ 75.00	\$ 51,000.00						
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
				<i>Subtotal</i>	\$ 62,000.00	\$ 52,824.00	\$ 35,216.00	\$ -	\$ -	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 7,440.00						
4	Mobilization	10%	%	-	\$ 6,200.00						
5	Contingency	20%	%	-	\$ 12,400.00	60%	40%	0%	0%	0%	
				Item Subtotal	\$ 88,040.00						
17-2	Storm Drain Pipe										
1	24" RCP	490	LF	\$ 75.00	\$ 36,750.00						
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
				<i>Subtotal</i>	\$ 47,750.00	\$ 40,683.00	\$ 27,122.00	\$ -	\$ -	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 5,730.00						
4	Mobilization	10%	%	-	\$ 4,775.00						
5	Contingency	20%	%	-	\$ 9,550.00	60%	40%	0%	0%	0%	
				Item Subtotal	\$ 67,805.00						

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
17-3	Storm Drain Pipe										
1	24" RCP	540	LF	\$ 75.00	\$ 40,500.00	\$ 43,878.00	\$ 29,252.00	\$ -	\$ -	\$ -	2020
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
	Subtotal				\$ 51,500.00						
3	Engineering - Design & Construction	12%	%	-	\$ 6,180.00	60%	40%	0%	0%	0%	
4	Mobilization	10%	%	-	\$ 5,150.00						
5	Contingency	20%	%	-	\$ 10,300.00						
	Item Subtotal				\$ 73,130.00						
17-4	Storm Drain Pipe										
1	24" RCP	1050	LF	\$ 75.00	\$ 78,750.00	\$ 81,153.00	\$ 54,102.00	\$ -	\$ -	\$ -	2020
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
	Subtotal				\$ 95,250.00						
3	Engineering - Design & Construction	12%	%	-	\$ 11,430.00	60%	40%	0%	0%	0%	
4	Mobilization	10%	%	-	\$ 9,525.00						
5	Contingency	20%	%	-	\$ 19,050.00						
	Item Subtotal				\$ 135,255.00						
17-5	Storm Drain Pipe										
1	15" RCP	140	LF	\$ 55.00	\$ 7,700.00	\$ -	\$ -	\$ 18,744.00	\$ -	\$ -	2018 Complete
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
	Subtotal				\$ 13,200.00						
3	Engineering - Design & Construction	12%	%	-	\$ 1,584.00	0%	0%	100%	0%	0%	
4	Mobilization	10%	%	-	\$ 1,320.00						
5	Contingency	20%	%	-	\$ 2,640.00						
	Item Subtotal				\$ 18,744.00						
Grid 18											
18-1	Detention Pond: 6.5 AC-FT										
1	Land Acquisition	2.17	ACRE	\$150,000.00	\$ 325,000.00	\$ 364,275.97	\$ -	\$ -	\$ 364,275.97	\$ -	2020
2	Excavation - Grading	10490	CY	\$ 7.75	\$ 81,297.50						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	875	CY	\$ 55.00	\$ 48,125.00						
5	Erosion control	10%	%	-	\$ 46,642.25						
	Subtotal				\$ 513,064.75	50%	0%	0%	50%	0%	
6	Engineering - Design & Construction	12%	%	-	\$ 61,567.77						
7	Mobilization	10%	%	-	\$ 51,306.48						
8	Contingency	20%	%	-	\$ 102,612.95						
	Item Subtotal				\$ 728,551.95						

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
18-2 Storm Drain Pipe											
1	24" RCP	130	LF	\$ 75.00	\$ 9,750.00	\$ -	\$ -	\$ 13,845.00	\$ -	\$ -	2019
	<i>Subtotal</i>				\$ 9,750.00						
2	Engineering - Design & Construction	12%	%	-	\$ 1,170.00						
3	Mobilization	10%	%	-	\$ 975.00						
4	Contingency	20%	%	-	\$ 1,950.00						
	Item Subtotal				\$ 13,845.00	0%	0%	100%	0%	0%	
18-3 Storm Drain Pipe											
1	18" RCP	1110	LF	\$ 60.00	\$ 66,600.00	\$ -	\$ -	\$ -	\$ 125,812.00	\$ -	2019
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	<i>Subtotal</i>				\$ 88,600.00						
3	Engineering - Design & Construction	12%	%	-	\$ 10,632.00						
4	Mobilization	10%	%	-	\$ 8,860.00						
5	Contingency	20%	%	-	\$ 17,720.00						
	Item Subtotal				\$ 125,812.00	0%	0%	0%	100%	0%	
Grid 19											
19-1 Storm Drain Pipe											
1	24" RCP	40	LF	\$ 75.00	\$ 3,000.00	\$ -	\$ -	\$ 15,818.80	\$ -	\$ -	2019
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
3	Remove culvert	40	LF	\$ 10.00	\$ 400.00						
4	Asphalt restoration	320	SF	\$ 7.00	\$ 2,240.00						
	<i>Subtotal</i>				\$ 11,140.00						
5	Engineering - Design & Construction	12%	%	-	\$ 1,336.80	0%	0%	100%	0%	0%	
6	Mobilization	10%	%	-	\$ 1,114.00						
7	Contingency	20%	%	-	\$ 2,228.00						
	Item Subtotal				\$ 15,818.80						
Grid 21											
21-1 Storm Drain Pipe											
1	48" RCP	300	LF	\$ 165.00	\$ 49,500.00	\$ -	\$ -	\$ -	\$ -	\$ 93,010.00	2022
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	<i>Subtotal</i>				\$ 65,500.00						
3	Engineering - Design & Construction	12%	%	-	\$ 7,860.00						
4	Mobilization	10%	%	-	\$ 6,550.00						
5	Contingency	20%	%	-	\$ 13,100.00	0%	0%	0%	0%	100%	
	Item Subtotal				\$ 93,010.00						

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
21-2 Storm Drain Pipe											
1	36" RCP	280	LF	\$ 100.00	\$ 28,000.00	\$ -	\$ -	\$ -	\$ -	\$ 62,480.00	2022
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
Subtotal					\$ 44,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 5,280.00						
4	Mobilization	10%	%	-	\$ 4,400.00						
5	Contingency	20%	%	-	\$ 8,800.00						
Item Subtotal					\$ 62,480.00	0%	0%	0%	0%	100%	
21-3 Storm Drain Pipe											
1	36" RCP	450	LF	\$ 100.00	\$ 45,000.00	\$ -	\$ -	\$ -	\$ -	\$ 86,620.00	2022
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
Subtotal					\$ 61,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 7,320.00						
4	Mobilization	10%	%	-	\$ 6,100.00						
5	Contingency	20%	%	-	\$ 12,200.00						
Item Subtotal					\$ 86,620.00	0%	0%	0%	0%	100%	
Grid 22											
22-1 Storm Drain Pipe											
1	3' x 6' RCB	100	LF	\$ 620.00	\$ 62,000.00	\$ 57,510.00	\$ 38,340.00	\$ -	\$ -	\$ -	2020
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
Subtotal					\$ 67,500.00						
3	Engineering - Design & Construction	12%	%	-	\$ 8,100.00						
4	Mobilization	10%	%	-	\$ 6,750.00						
5	Contingency	20%	%	-	\$ 13,500.00						
Item Subtotal					\$ 95,850.00	60%	40%	0%	0%	0%	
Grid 23											
23-1 Detention Pond: 13.3 AC-FT											
1	Land Acquisition	4.43	ACRE	\$150,000.00	\$ 665,000.00	\$ 858,889.68	\$ 572,593.12	\$ -	\$ -	\$ -	2020
2	Excavation - Grading	21460	CY	\$ 7.75	\$ 166,315.00						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	1790	CY	\$ 55.00	\$ 98,450.00						
Subtotal					\$ 941,765.00						
5	Erosion control	10%	%	-	\$ 94,176.50						
6	Engineering - Design & Construction	12%	%	-	\$ 113,011.80						
7	Mobilization	10%	%	-	\$ 94,176.50						
8	Contingency	20%	%	-	\$ 188,353.00						
Item Subtotal					\$ 1,431,482.80	60%	40%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)																	
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year						
23-2	Detention Pond: 2.1 AC-FT																
1	Land Acquisition	0.70	ACRE	\$150,000.00	\$ 105,000.00	\$ 241,600.20	\$ -	\$ -	\$ -	\$ -	2017 Complete						
2	Excavation - Grading	3390	CY	\$ 7.75	\$ 26,272.50												
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00												
4	Granular base (3")	285	CY	\$ 55.00	\$ 15,675.00												
	Subtotal				\$ 158,947.50												
5	Erosion control	10%	%	-	\$ 15,894.75	100%	0%	0%	0%	0%							
6	Engineering - Design & Construction	12%	%	-	\$ 19,073.70												
7	Mobilization	10%	%	-	\$ 15,894.75												
8	Contingency	20%	%	-	\$ 31,789.50												
	Item Subtotal				\$ 241,600.20												
23-3	Storm Drain Pipe																
1	48" RCP	130	LF	\$ 165.00	\$ 21,450.00	\$ 31,907.40	\$ 21,271.60	\$ -	\$ -	\$ -	2020						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00												
	Subtotal				\$ 37,450.00												
3	Engineering - Design & Construction	12%	%	-	\$ 4,494.00												
4	Mobilization	10%	%	-	\$ 3,745.00												
5	Contingency	20%	%	-	\$ 7,490.00	60%	40%	0%	0%	0%							
	Item Subtotal				\$ 53,179.00												
Grid 27																	
27-1	Storm Drain Pipe																
1	30" RCP	340	LF	\$ 90.00	\$ 30,600.00	\$ -	\$ -	\$ -	\$ -	\$ 66,172.00	2022						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00												
					\$ 46,600.00												
3	Engineering - Design & Construction	12%	%	-	\$ 5,592.00												
4	Mobilization	10%	%	-	\$ 4,660.00												
5	Contingency	20%	%	-	\$ 9,320.00	0%	0%	0%	0%	100%							
	Item Subtotal				\$ 66,172.00												
27-2	Storm Drain Pipe																
1	60" RCP	650	LF	\$ 300.00	\$ 195,000.00	\$ -	\$ -	\$ -	\$ -	\$ 299,620.00	2022						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00												
	Subtotal				\$ 211,000.00												
3	Engineering - Design & Construction	12%	%	-	\$ 25,320.00												
4	Mobilization	10%	%	-	\$ 21,100.00												
5	Contingency	20%	%	-	\$ 42,200.00	0%	0%	0%	0%	100%							
	Item Subtotal				\$ 299,620.00												

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
27-3 Storm Drain Pipe											
1	36" RCP	390	LF	\$ 100.00	\$ 39,000.00	\$ -	\$ -	\$ -	\$ -	\$ 78,100.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
Subtotal					\$ 55,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 6,600.00						
4	Mobilization	10%	%	-	\$ 5,500.00						
5	Contingency	20%	%	-	\$ 11,000.00						
Item Subtotal					\$ 78,100.00	0%	0%	0%	0%	100%	
Grid 29											
29-1 Detention Pond: 2.7 AC-FT											
1	Land Acquisition	0.90	ACRE	\$150,000.00	\$ 135,000.00	\$ -	\$ -	\$ -	\$ 323,123.13	\$ -	\$ 2,022.00
2	Excavation - Grading	4360	CY	\$ 7.75	\$ 33,790.00						
3	Inlet / Outlet Structures	3	EA	\$ 6,000.00	\$ 18,000.00						
4	Granular base (3")	365	CY	\$ 55.00	\$ 20,075.00						
5	Erosion control	10%	%	-	\$ 20,686.50						
Subtotal					\$ 227,551.50						
6	Engineering - Design & Construction	12%	%	-	\$ 27,306.18	0%	0%	0%	100%	0%	
7	Mobilization	10%	%	-	\$ 22,755.15						
8	Contingency	20%	%	-	\$ 45,510.30						
Item Subtotal					\$ 323,123.13						
29-2 Detention Pond: 12.2 AC-FT											
1	Excavation - Grading	19685	CY	\$ 7.75	\$ 152,558.75	\$ 440,039.36	\$ 110,009.84	\$ -	\$ -	\$ -	2020
2	Inlet / Outlet Structures	3	EA	\$ 6,000.00	\$ 18,000.00						
3	Granular base (3")	1645	CY	\$ 55.00	\$ 90,475.00						
4	36" RCP (2) Previously Installed	1	LS	\$ 81,658.00	\$ 81,658.00						
5	Erosion control	10%	%	-	\$ 34,269.18						
Subtotal					\$ 376,960.93						
6	Engineering - Design & Construction	12%	%	-	\$ 60,000.00	80%	20%	0%	0%	0%	
7	Mobilization	10%	%	-	\$ 37,696.09						
8	Contingency	20%	%	-	\$ 75,392.19						
Item Subtotal					\$ 550,049.20						
Grid 30											
30-1 Storm Drain Pipe											
1	15" RCP	860	LF	\$ 55.00	\$ 47,300.00	\$ -	\$ -	\$ -	\$ 158,983.20	\$ -	2019
2	Asphalt restoration	6880	SF	\$ 7.00	\$ 48,160.00						
3	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
Subtotal					\$ 111,960.00						
4	Engineering - Design & Construction	12%	%	-	\$ 13,435.20						
5	Mobilization	10%	%	-	\$ 11,196.00	0%	0%	0%	100%	0%	
6	Contingency	20%	%	-	\$ 22,392.00						
Item Subtotal					\$ 158,983.20						

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
30-3	Detention Pond: 4.17 AC-FT										
1	Land Acquisition	1.39	ACRE	\$150,000.00	\$ 208,500.00						
2	Excavation - Grading	6730	CY	\$ 7.75	\$ 52,157.50						
3	Inlet / Outlet Structures	1	EA	\$ 6,000.00	\$ 6,000.00						
4	Granular base (3")	565	CY	\$ 55.00	\$ 31,075.00						
5	Erosion control	10%	%	-	\$ 29,773.25						
	Subtotal				\$ 327,505.75	\$ -	\$ -	\$ -	\$ 465,058.17	\$ -	2020
6	Engineering - Design & Construction	12%	%	-	\$ 39,300.69						
7	Mobilization	10%	%	-	\$ 32,750.58						
8	Contingency	20%	%	-	\$ 65,501.15						
	Item Subtotal				\$ 465,058.17	0%	0%	0%	100%	0%	
30-5	Storm Drain Pipe										
1	24" RCP	520	LF	\$ 75.00	\$ 39,000.00						
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
	Subtotal				\$ 50,000.00	\$ -	\$ -	\$ -	\$ 71,000.00	\$ -	2020
3	Engineering - Design & Construction	12%	%	-	\$ 6,000.00						
4	Mobilization	10%	%	-	\$ 5,000.00						
5	Contingency	20%	%	-	\$ 10,000.00						
	Item Subtotal				\$ 71,000.00	0%	0%	0%	100%	0%	
30-6	Storm Drain Pipe										
1	24" RCP	1270	LF	\$ 75.00	\$ 95,250.00						
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00						
	Subtotal				\$ 122,750.00	\$ 87,152.50	\$ 87,152.50	\$ -	\$ -	\$ -	Complete
3	Engineering - Design & Construction	12%	%	-	\$ 14,730.00						
4	Mobilization	10%	%	-	\$ 12,275.00						
5	Contingency	20%	%	-	\$ 24,550.00						
	Item Subtotal				\$ 174,305.00	50%	50%	0%	0%	0%	
30-7	Storm Drain Pipe										
1	36" RCP	1030	LF	\$ 100.00	\$ 103,000.00						
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00						
	Subtotal				\$ 130,500.00	\$ 92,655.00	\$ 92,655.00	\$ -	\$ -	\$ -	Complete
3	Engineering - Design & Construction	12%	%	-	\$ 15,660.00						
4	Mobilization	10%	%	-	\$ 13,050.00						
5	Contingency	20%	%	-	\$ 26,100.00						
	Item Subtotal				\$ 185,310.00	50%	50%	0%	0%	0%	
Grid 31											

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
31-2 Storm Drain Pipe											
1	24" RCP	970	LF	\$ 75.00	\$ 72,750.00	\$ 134,545.00	\$ -	\$ -	\$ -	\$ -	2020
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
Subtotal				\$ 94,750.00							
3	Engineering - Design & Construction	12%	%	-	\$ 11,370.00						
4	Mobilization	10%	%	-	\$ 9,475.00						
5	Contingency	20%	%	-	\$ 18,950.00	100%	0%	0%	0%	0%	
Item Subtotal				\$ 134,545.00							
Grid 34											
34-2 Storm Drain Pipe											
1	24" RCP	410	LF	\$ 75.00	\$ 30,750.00	\$ -	\$ -	\$ -	\$ -	\$ 66,385.00	2022
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
Subtotal				\$ 46,750.00							
3	Engineering - Design & Construction	12%	%	-	\$ 5,610.00						
4	Mobilization	10%	%	-	\$ 4,675.00						
5	Contingency	20%	%	-	\$ 9,350.00	0%	0%	0%	0%	100%	
Item Subtotal				\$ 66,385.00							
34-3 Storm Drain Pipe											
1	24" RCP	740	LF	\$ 75.00	\$ 55,500.00	\$ 61,344.00	\$ 40,896.00	\$ -	\$ -	\$ -	2022
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
Subtotal				\$ 72,000.00							
3	Engineering - Design & Construction	12%	%	-	\$ 8,640.00						
4	Mobilization	10%	%	-	\$ 7,200.00						
5	Contingency	20%	%	-	\$ 14,400.00	60%	40%	0%	0%	0%	
Item Subtotal				\$ 102,240.00							
34-4 Storm Drain Pipe											
1	48" RCP	1370	LF	\$ 165.00	\$ 226,050.00	\$ 252,014.50	\$ -	\$ -	\$ 252,014.50	\$ -	2019
2	Asphalt restoration	13700	SF	\$ 7.00	\$ 95,900.00						
3	Inlet/Combo/Junction Boxes	6	EA	\$ 5,500.00	\$ 33,000.00						
Subtotal				\$ 354,950.00							
4	Engineering - Design & Construction	12%	%	-	\$ 42,594.00						
5	Mobilization	10%	%	-	\$ 35,495.00	50%	0%	0%	50%	0%	
6	Contingency	20%	%	-	\$ 70,990.00						
Item Subtotal				\$ 504,029.00							

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
34-5	Storm Drain Pipe										
1	60" RCP	730	LF	\$ 300.00	\$ 219,000.00	\$ -	\$ -	\$ -	\$ -	\$ 356,420.00	2022
2	Headwall Structure	4	EA	\$ 8,000.00	\$ 32,000.00						
	Subtotal				\$ 251,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 30,120.00						
4	Mobilization	10%	%	-	\$ 25,100.00						
5	Contingency	20%	%	-	\$ 50,200.00						
	Item Subtotal				\$ 356,420.00	0%	0%	0%	0%	100%	
Grid 35											
35-1	Detention Pond: 6.6 AC-FT										
1	Land Acquisition	2.20	ACRE	\$150,000.00	\$ 330,000.00	\$ 73,958.75	\$ -	\$ -	\$ 665,628.73	\$ -	2019
2	Excavation - Grading	10650	CY	\$ 7.75	\$ 82,537.50						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	890	CY	\$ 55.00	\$ 48,950.00						
5	Erosion control	10%	%	-	\$ 47,348.75						
	Subtotal				\$ 520,836.25	10%	0%	0%	90%	0%	
6	Engineering - Design & Construction	12%	%	-	\$ 62,500.35						
7	Mobilization	10%	%	-	\$ 52,083.63						
8	Contingency	20%	%	-	\$ 104,167.25						
	Item Subtotal				\$ 739,587.48						
35-2	Storm Drain Pipe										
1	36" RCP	420	LF	\$ 100.00	\$ 42,000.00	\$ 41,180.00	\$ -	\$ -	\$ 41,180.00	\$ -	2019
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	Subtotal				\$ 58,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 6,960.00						
4	Mobilization	10%	%	-	\$ 5,800.00						
5	Contingency	20%	%	-	\$ 11,600.00						
	Item Subtotal				\$ 82,360.00	50%	0%	0%	50%	0%	
35-3	Storm Drain Pipe										
1	6' x 13' RCB	400	LF	\$ 1,210.00	\$ 484,000.00	\$ -	\$ -	\$ -	\$ -	\$ 710,000.00	2022
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	Subtotal				\$ 500,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 60,000.00						
4	Mobilization	10%	%	-	\$ 50,000.00						
5	Contingency	20%	%	-	\$ 100,000.00						
	Item Subtotal				\$ 710,000.00	0%	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
35-4	Ditch										
1	Ditch excavation	390	LF	\$ 15.00	\$ 5,850.00	\$ -	\$ -	\$ 8,307.00	\$ -	\$ -	2016 Complete
	<i>Subtotal</i>				\$ 5,850.00						
2	Engineering - Design & Construction	12%	%	-	\$ 702.00						
3	Mobilization	10%	%	-	\$ 585.00						
4	Contingency	20%	%	-	\$ 1,170.00						
	Item Subtotal				\$ 8,307.00	0%	0%	100%	0%	0%	
Grid 36											
36-3	Detention Pond: 4.4 AC-FT										
1	Land Acquisition	0.00	ACRE	\$150,000.00	\$ -	\$ 124,647.60	\$ 31,161.90	\$ -	\$ -	\$ -	2022
2	Excavation - Grading	7100	CY	\$ 7.75	\$ 55,025.00						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	595	CY	\$ 55.00	\$ 32,725.00						
5	Erosion control	10%	%	-	\$ 9,975.00						
	<i>Subtotal</i>				\$ 109,725.00	80%	20%	0%	0%	0%	
6	Engineering - Design & Construction	12%	%	-	\$ 13,167.00						
7	Mobilization	10%	%	-	\$ 10,972.50						
8	Contingency	20%	%	-	\$ 21,945.00						
	Item Subtotal				\$ 155,809.50						
36-4	Storm Drain Pipe										
1	18" RCP	970	LF	\$ 60.00	\$ 58,200.00	\$ 91,107.20	\$ 22,776.80	\$ -	\$ -	\$ -	2022
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	<i>Subtotal</i>				\$ 80,200.00						
3	Engineering - Design & Construction	12%	%	-	\$ 9,624.00						
4	Mobilization	10%	%	-	\$ 8,020.00						
5	Contingency	20%	%	-	\$ 16,040.00	80%	20%	0%	0%	0%	
	Item Subtotal				\$ 113,884.00						
36-6	Storm Drain Pipe										
1	24" RCP	70	LF	\$ 75.00	\$ 5,250.00	\$ -	\$ -	\$ -	\$ 13,021.40	\$ -	Complete
2	Asphalt restoration	560	SF	\$ 7.00	\$ 3,920.00						
	<i>Subtotal</i>				\$ 9,170.00						
3	Engineering - Design & Construction	12%	%	-	\$ 1,100.40						
4	Mobilization	10%	%	-	\$ 917.00						
5	Contingency	20%	%	-	\$ 1,834.00	0%	0%	0%	100%	0%	
	Item Subtotal				\$ 13,021.40						

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
36-7	Storm Drain Pipe										
1	24" RCP	920	LF	\$ 75.00	\$ 69,000.00						
2	Asphalt restoration	7360	SF	\$ 7.00	\$ 51,520.00						
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	Subtotal				\$ 142,520.00	\$ 80,951.36	\$ 40,475.68	\$ -	\$ 80,951.36	\$ -	Complete
4	Engineering - Design & Construction	12%	%	-	\$ 17,102.40						
5	Mobilization	10%	%	-	\$ 14,252.00						
6	Contingency	20%	%	-	\$ 28,504.00						
	Item Subtotal				\$ 202,378.40	40%	20%	0%	40%	0%	
Grid 37											
37-2	Storm Drain Pipe										
1	15" RCP	1040	LF	\$ 55.00	\$ 57,200.00						
2	Asphalt restoration	8320	SF	\$ 7.00	\$ 58,240.00						
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	Subtotal				\$ 137,440.00	\$ -	\$ -	\$ 195,164.80	\$ -	\$ -	2019
4	Engineering - Design & Construction	12%	%	-	\$ 16,492.80						
5	Mobilization	10%	%	-	\$ 13,744.00						
6	Contingency	20%	%	-	\$ 27,488.00						
	Item Subtotal				\$ 195,164.80	0%	0%	100%	0%	0%	
Grid 39											
39-1	Storm Drain Pipe										
1	24" RCP	710	LF	\$ 75.00	\$ 53,250.00						
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
	Subtotal				\$ 69,750.00	\$ 49,522.50	\$ -	\$ -	\$ 49,522.50	\$ -	2019
3	Engineering - Design & Construction	12%	%	-	\$ 8,370.00						
4	Mobilization	10%	%	-	\$ 6,975.00						
5	Contingency	20%	%	-	\$ 13,950.00						
	Item Subtotal				\$ 99,045.00	50%	0%	0%	50%	0%	
39-3	Storm Drain Pipe										
1	36" RCP	430	LF	\$ 100.00	\$ 43,000.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	Subtotal				\$ 59,000.00	\$ -	\$ -	\$ -	\$ -	\$ 83,780.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 7,080.00						
4	Mobilization	10%	%	-	\$ 5,900.00						
5	Contingency	20%	%	-	\$ 11,800.00						
	Item Subtotal				\$ 83,780.00	0%	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
Grid 40											
40-5	Storm Drain Pipe										
1	36" RCP	370	LF	\$ 100.00	\$ 37,000.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	<i>Subtotal</i>				\$ 53,000.00	\$ -	\$ -	\$ -	\$ -	\$ 75,260.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 6,360.00						
4	Mobilization	10%	%	-	\$ 5,300.00						
5	Contingency	20%	%	-	\$ 10,600.00						
	Item Subtotal				\$ 75,260.00	0%	0%	0%	0%	100%	
40-6	Storm Drain Pipe										
1	24" RCP	380	LF	\$ 75.00	\$ 28,500.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	<i>Subtotal</i>				\$ 44,500.00	\$ -	\$ -	\$ -	\$ -	\$ 63,190.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 5,340.00						
4	Mobilization	10%	%	-	\$ 4,450.00						
5	Contingency	20%	%	-	\$ 8,900.00						
	Item Subtotal				\$ 63,190.00	0%	0%	0%	0%	100%	
40-7	Storm Drain Pipe										
1	24" RCP	440	LF	\$ 75.00	\$ 33,000.00						
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00						
	<i>Subtotal</i>				\$ 49,000.00	\$ -	\$ -	\$ -	\$ -	\$ 69,580.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 5,880.00						
4	Mobilization	10%	%	-	\$ 4,900.00						
5	Contingency	20%	%	-	\$ 9,800.00						
	Item Subtotal				\$ 69,580.00	0%	0%	0%	0%	100%	
40-8	Storm Drain Pipe										
1	15" RCP	1940	LF	\$ 55.00	\$ 106,700.00						
2	Inlet/Combo/Junction Boxes	7	EA	\$ 5,500.00	\$ 38,500.00						
	<i>Subtotal</i>				\$ 145,200.00	\$ 164,947.20	\$ 41,236.80	\$ -	\$ -	\$ -	2022
3	Engineering - Design & Construction	12%	%	-	\$ 17,424.00						
4	Mobilization	10%	%	-	\$ 14,520.00						
5	Contingency	20%	%	-	\$ 29,040.00						
	Item Subtotal				\$ 206,184.00	80%	20%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
40-9 Detention Pond: 0.6 AC-FT											
1	Land Acquisition	0.20	ACRE	\$150,000.00	\$ 30,000.00						
2	Excavation - Grading	970	CY	\$ 7.75	\$ 7,517.50						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	85	CY	\$ 55.00	\$ 4,675.00						
5	Erosion control	10%	%	-	\$ 5,419.25						
	Subtotal				\$ 59,611.75	\$ 67,718.95	\$ 16,929.74	\$ -	\$ -	\$ -	2023
6	Engineering - Design & Construction	12%	%	-	\$ 7,153.41						
7	Mobilization	10%	%	-	\$ 5,961.18						
8	Contingency	20%	%	-	\$ 11,922.35						
	Item Subtotal				\$ 84,648.69	80%	20%	0%	0%	0%	
40-10 Storm Drain Pipe											
1	18" RCP	340	LF	\$ 60.00	\$ 20,400.00						
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
	Subtotal				\$ 31,400.00	\$ -	\$ -	\$ -	\$ 44,588.00	\$ -	2023
3	Engineering - Design & Construction	12%	%	-	\$ 3,768.00						
4	Mobilization	10%	%	-	\$ 3,140.00						
5	Contingency	20%	%	-	\$ 6,280.00						
	Item Subtotal				\$ 44,588.00	0%	0%	0%	100%	0%	
Grid 41											
41-1 Detention Pond: 8.5 AC-FT											
1	Excavation - Grading	13715	CY	\$ 7.75	\$ 106,291.25						
2	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
3	Granular base (3")	1145	CY	\$ 55.00	\$ 62,975.00						
4	Erosion control	10%	%	-	\$ 18,126.63						
	Subtotal				\$ 199,392.88	\$ 283,137.88	\$ -	\$ -	\$ -	\$ -	2022
5	Engineering - Design & Construction	12%	%	-	\$ 23,927.15						
6	Mobilization	10%	%	-	\$ 19,939.29						
7	Contingency	20%	%	-	\$ 39,878.58						
	Item Subtotal				\$ 283,137.88	100%	0%	0%	0%	0%	
41-2 Storm Drain Pipe											
1	60" RCP	640	LF	\$ 300.00	\$ 192,000.00						
2	Jack & Bore	640	LF	\$ 2,000.00	\$ 1,280,000.00						
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
	Subtotal				\$ 1,494,000.00	\$ -	\$ -	\$ -	\$ -	\$ 2,121,480.00	2022
4	Engineering - Design & Construction	12%	%	-	\$ 179,280.00						
5	Mobilization	10%	%	-	\$ 149,400.00						
6	Contingency	20%	%	-	\$ 298,800.00						
	Item Subtotal				\$ 2,121,480.00	0%	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
41-3	Storm Drain Pipe										
1	60" RCP	730	LF	\$ 300.00	\$ 219,000.00						
2	Jack & Bore	730	LF	\$ 2,000.00	\$ 1,460,000.00						
3	Headwall Structure	1	EA	\$ 8,000.00	\$ 8,000.00						
				Subtotal	\$ 1,687,000.00	\$ -	\$ -	\$ -	\$ -	\$ 2,395,540.00	2022
4	Engineering - Design & Construction	12%	%	-	\$ 202,440.00						
5	Mobilization	10%	%	-	\$ 168,700.00						
6	Contingency	20%	%	-	\$ 337,400.00						
				Item Subtotal	\$ 2,395,540.00	0%	0%	0%	0%	100%	
41-5	Storm Drain Pipe										
1	36" RCP	360	LF	\$ 100.00	\$ 36,000.00						
2	Jack & Bore	360	LF	\$ 2,000.00	\$ 720,000.00						
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
				Subtotal	\$ 767,000.00	\$ 544,570.00	\$ -	\$ 544,570.00	\$ -	\$ -	2022
4	Engineering - Design & Construction	12%	%	-	\$ 92,040.00						
5	Mobilization	10%	%	-	\$ 76,700.00						
6	Contingency	20%	%	-	\$ 153,400.00						
				Item Subtotal	\$ 1,089,140.00	50%	0%	50%	0%	0%	
41-8	Storm Drain Pipe										
1	5' x 8' RCB	2020	LF	\$ 850.00	\$ 1,717,000.00						
2	Inlet/Combo/Junction Boxes	7	EA	\$ 5,000.00	\$ 34,000.00						
				Subtotal	\$ 1,751,000.00	\$ -	\$ -	\$ -	\$ -	\$ 2,486,420.00	2022
3	Engineering - Design & Construction	12%	%	-	\$ 210,120.00						
4	Mobilization	10%	%	-	\$ 175,100.00						
5	Contingency	20%	%	-	\$ 350,200.00						
				Item Subtotal	\$ 2,486,420.00	0%	0%	0%	0%	100%	
41-9	Storm Drain Pipe										
1	36" RCP	380	LF	\$ 100.00	\$ 38,000.00						
2	Jack & Bore	380	LF	\$ 2,000.00	\$ 760,000.00						
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 10,450.00						
				Subtotal	\$ 808,450.00	\$ -	\$ -	\$ -	\$ -	\$ 1,147,999.00	2022
4	Engineering - Design & Construction	12%	%	-	\$ 97,014.00						
5	Mobilization	10%	%	-	\$ 80,845.00						
6	Contingency	20%	%	-	\$ 161,690.00						
				Item Subtotal	\$ 1,147,999.00	0%	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
41-10	Storm Drain Pipe										
1	24" RCP	380	LF	\$ 75.00	\$ 28,500.00	\$ -	\$ -	\$ -	\$ -	\$ 56,090.00	2022
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
Subtotal				\$ 39,500.00							
3	Engineering - Design & Construction	12%	%	-	\$ 4,740.00						
4	Mobilization	10%	%	-	\$ 3,950.00						
5	Contingency	20%	%	-	\$ 7,900.00	0%	0%	0%	0%	100%	
Item Subtotal				\$ 56,090.00							
41-11	Storm Drain Pipe										
1	4' x 6' RCB	970	LF	\$ 685.00	\$ 664,450.00	\$ -	\$ -	\$ -	\$ -	\$ 974,759.00	2022
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
Subtotal				\$ 686,450.00							
3	Engineering - Design & Construction	12%	%	-	\$ 82,374.00						
4	Mobilization	10%	%	-	\$ 68,645.00						
5	Contingency	20%	%	-	\$ 137,290.00	0%	0%	0%	0%	100%	
Item Subtotal				\$ 974,759.00							
Grid 43											
43-1	Storm Drain Pipe										
1	36" RCP	490	LF	\$ 100.00	\$ 49,000.00	\$ -	\$ -	\$ -	\$ -	\$ 1,476,800.00	2022
2	Jack & Bore	490	LF	\$ 2,000.00	\$ 980,000.00						
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
Subtotal				\$ 1,040,000.00							
4	Engineering - Design & Construction	12%	%	-	\$ 124,800.00						
5	Mobilization	10%	%	-	\$ 104,000.00	0%	0%	0%	0%	100%	
6	Contingency	20%	%	-	\$ 208,000.00						
Item Subtotal				\$ 1,476,800.00							
43-2	Storm Drain Pipe										
1	36" RCP	410	LF	\$ 100.00	\$ 41,000.00	\$ 619,120.00	\$ -	\$ 619,120.00	\$ -	\$ -	2022
2	Jack & Bore	410	LF	\$ 2,000.00	\$ 820,000.00						
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
Subtotal				\$ 872,000.00							
4	Engineering - Design & Construction	12%	%	-	\$ 104,640.00						
5	Mobilization	10%	%	-	\$ 87,200.00	50%	0%	50%	0%	0%	
6	Contingency	20%	%	-	\$ 174,400.00						
Item Subtotal				\$ 1,238,240.00							

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
43-3	Storm Drain Pipe										
1	36" RCP	970	LF	\$ 100.00	\$ 97,000.00	\$ 1,461,890.00	\$ -	\$ 1,461,890.00	\$ -	\$ -	2022
2	Jack & Bore	970	LF	\$ 2,000.00	\$ 1,940,000.00						
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00						
Subtotal					\$ 2,059,000.00						
4	Engineering - Design & Construction	12%	%	-	\$ 247,080.00						
5	Mobilization	10%	%	-	\$ 205,900.00						
6	Contingency	20%	%	-	\$ 411,800.00						
Item Subtotal					\$ 2,923,780.00	50%	0%	50%	0%	0%	
43-4	Detention Pond: 2.4 AC-FT										
1	Land Acquisition	0.80	ACRE	\$150,000.00	\$ 120,000.00	\$ 281,013.56	\$ -	\$ -	\$ -	\$ -	2021
2	Excavation - Grading	3875	CY	\$ 7.75	\$ 30,031.25						
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00						
4	Granular base (3")	325	CY	\$ 55.00	\$ 17,875.00						
5	Erosion control	10%	%	-	\$ 17,990.63						
Subtotal					\$ 197,896.88						
6	Engineering - Design & Construction	12%	%	-	\$ 23,747.63	100%	0%	0%	0%	0%	
7	Mobilization	10%	%	-	\$ 19,789.69						
8	Contingency	20%	%	-	\$ 39,579.38						
Item Subtotal					\$ 281,013.56						
43-5	Storm Drain Pipe										
1	36" RCP	670	LF	\$ 100.00	\$ 67,000.00	\$ 118,570.00	\$ -	\$ -	\$ -	\$ -	2021
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00						
Subtotal					\$ 83,500.00						
3	Engineering - Design & Construction	12%	%	-	\$ 10,020.00						
4	Mobilization	10%	%	-	\$ 8,350.00						
5	Contingency	20%	%	-	\$ 16,700.00						
Item Subtotal					\$ 118,570.00	100%	0%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP											
Estimate of Probable Costs (based on bid data from 2021)											
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System (10-Year)	System (Beyond 10-Year)	Existing Deficiency	Project	State or Federal Funds	Construction Year
43-6	Storm Drain Pipe										
1	36" RCP	490	LF	\$ 100.00	\$ 49,000.00	\$ 85,200.00	\$ -	\$ -	\$ -	\$ -	2021
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00						
Subtotal					\$ 60,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 7,200.00						
4	Mobilization	10%	%	-	\$ 6,000.00						
5	Contingency	20%	%	-	\$ 12,000.00						
Item Subtotal					\$ 85,200.00	100%	0%	0%	0%	0%	
43-7	Storm Drain Pipe										
1	18" RCP	160	LF	\$ 60.00	\$ 9,600.00	\$ 2,144.20	\$ -	\$ -	\$ 19,297.80	\$ -	Complete
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00						
Subtotal					\$ 15,100.00						
3	Engineering - Design & Construction	12%	%	-	\$ 1,812.00						
4	Mobilization	10%	%	-	\$ 1,510.00						
5	Contingency	20%	%	-	\$ 3,020.00						
Item Subtotal					\$ 21,442.00	10%	0%	0%	90%	0%	
DETENTION POND COSTS = \$ 5,600,525.70						\$ 2,735,281.96	\$ 730,694.60	\$ -	\$ 2,134,549.15	\$ -	
STORM DRAIN PIPE/DITCHES COSTS = \$ 22,504,358.80						\$ 4,349,721.09	\$ 585,627.88	\$ 2,922,121.58	\$ 1,529,815.75	\$ 13,117,072.50	
TOTAL COSTS = \$ 28,104,884.50						\$ 7,085,003.05	\$ 1,316,322.48	\$ 2,922,121.58	\$ 3,664,364.90	\$ 13,117,072.50	



APPENDIX B

FARMINGTON CITY STORM DRAIN MASTER PLAN

STORM DRAIN MAPS

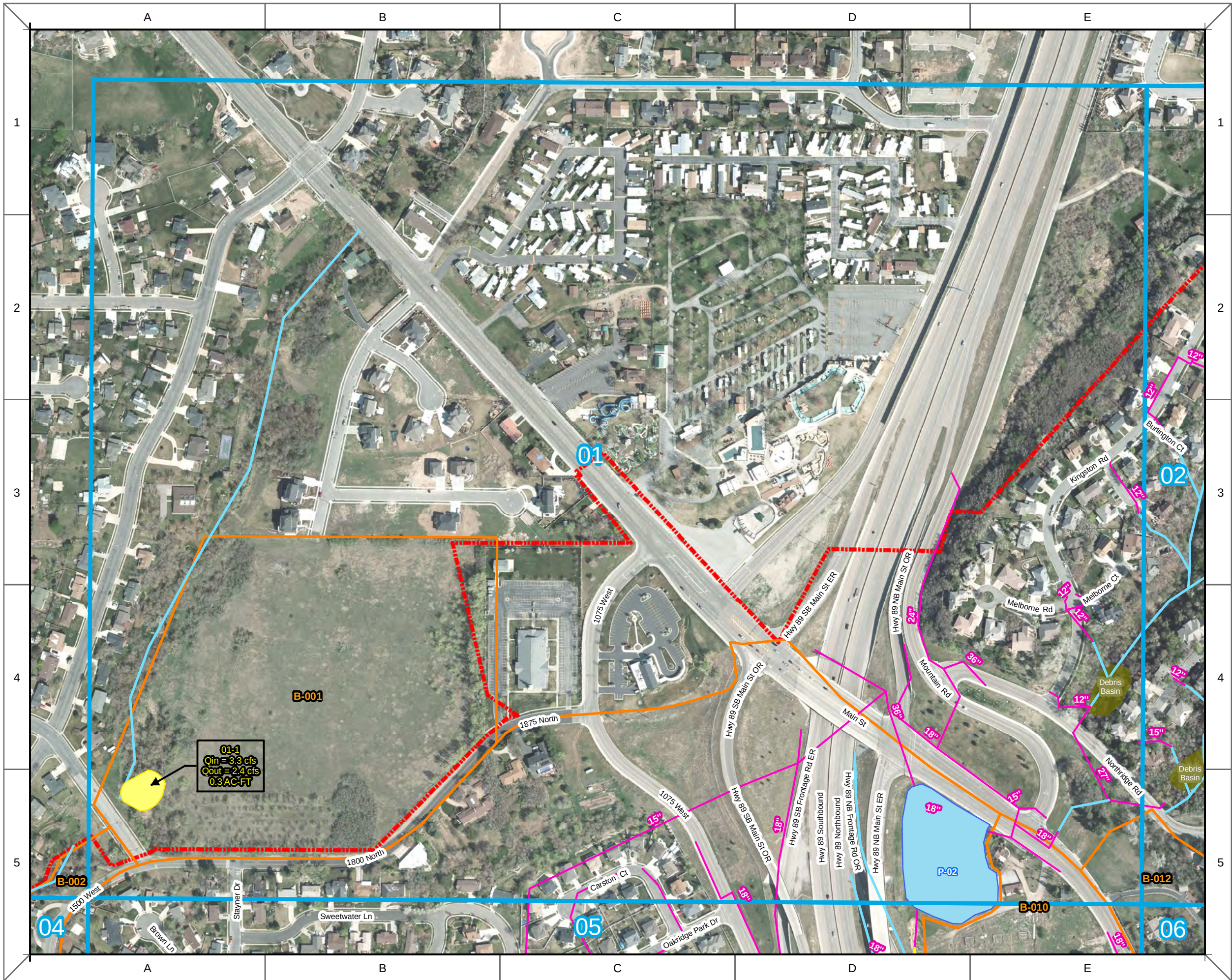
FARMINGTON CITY STORM DRAIN MASTER PLAN



Legend

- Municipal Boundary
- Existing Streams
- Existing Storm Water Lines
- Existing Water
- Drainage Basin Boundary
- Future Storm Drainage Project
- Study Areas



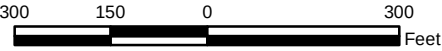
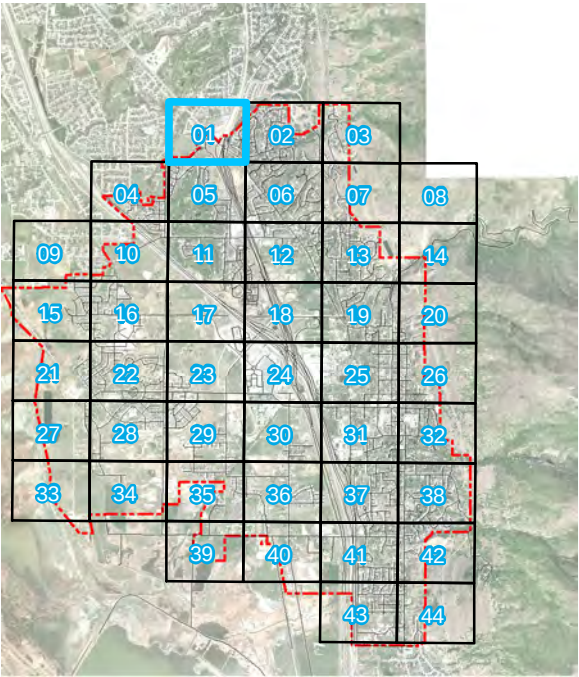


GRID # 1



HISTORIC BEGINNINGS • 1847

FARMINGTON CITY
STORM DRAIN MASTER PLAN



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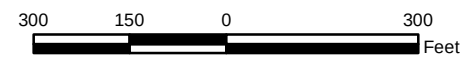
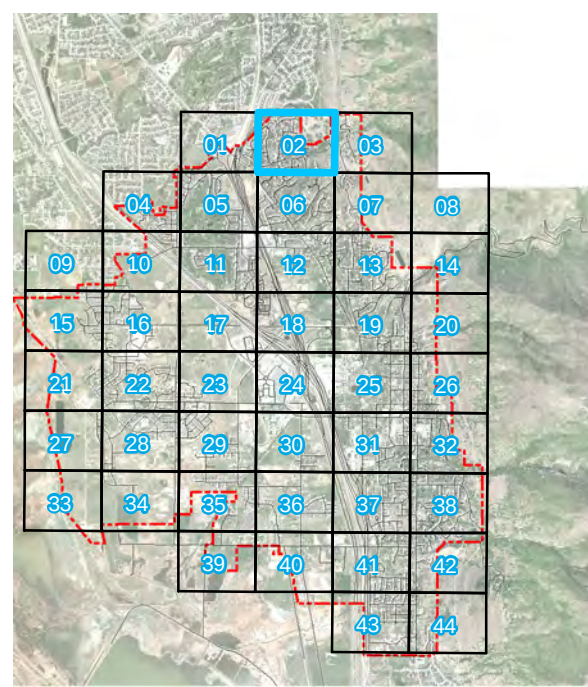
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FARMINGTON CITY STORM DRAIN MASTER PLAN



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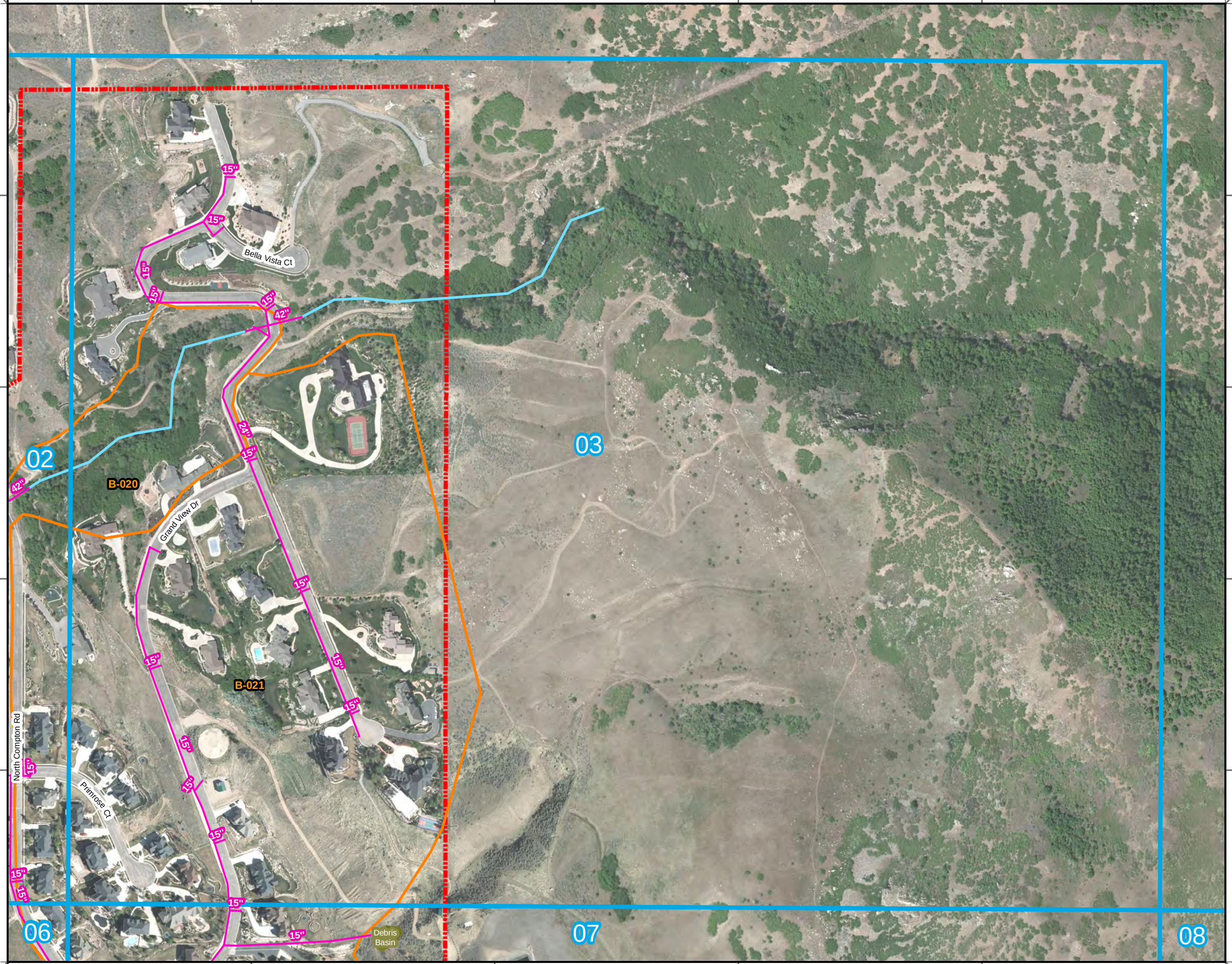
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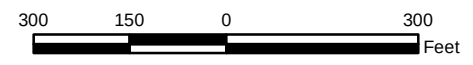
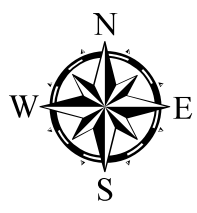
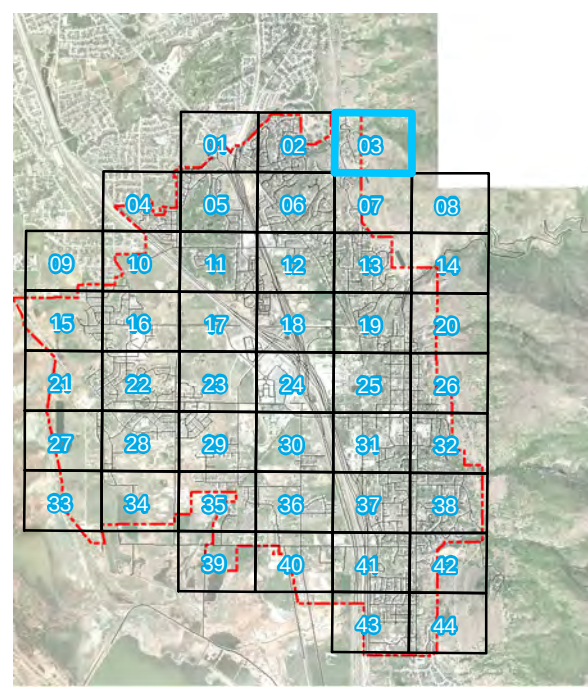


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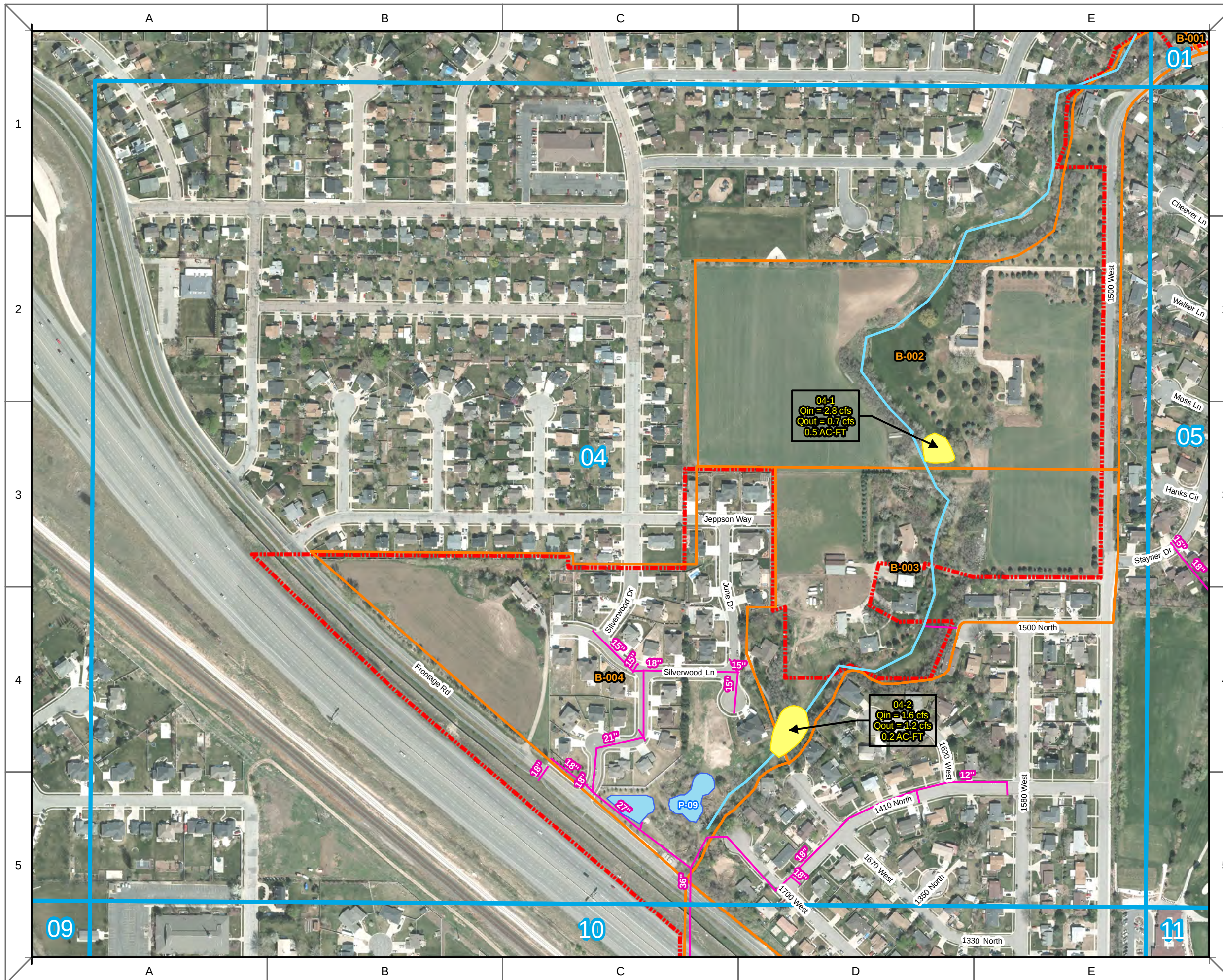
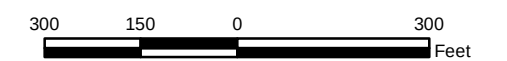
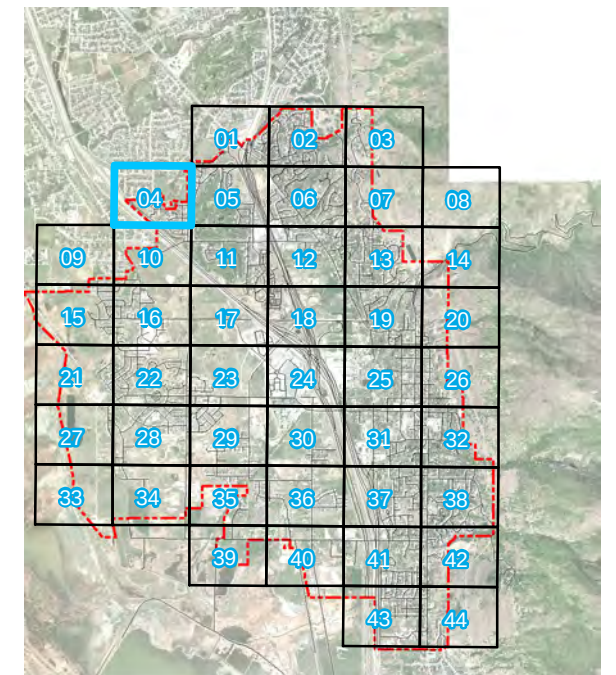
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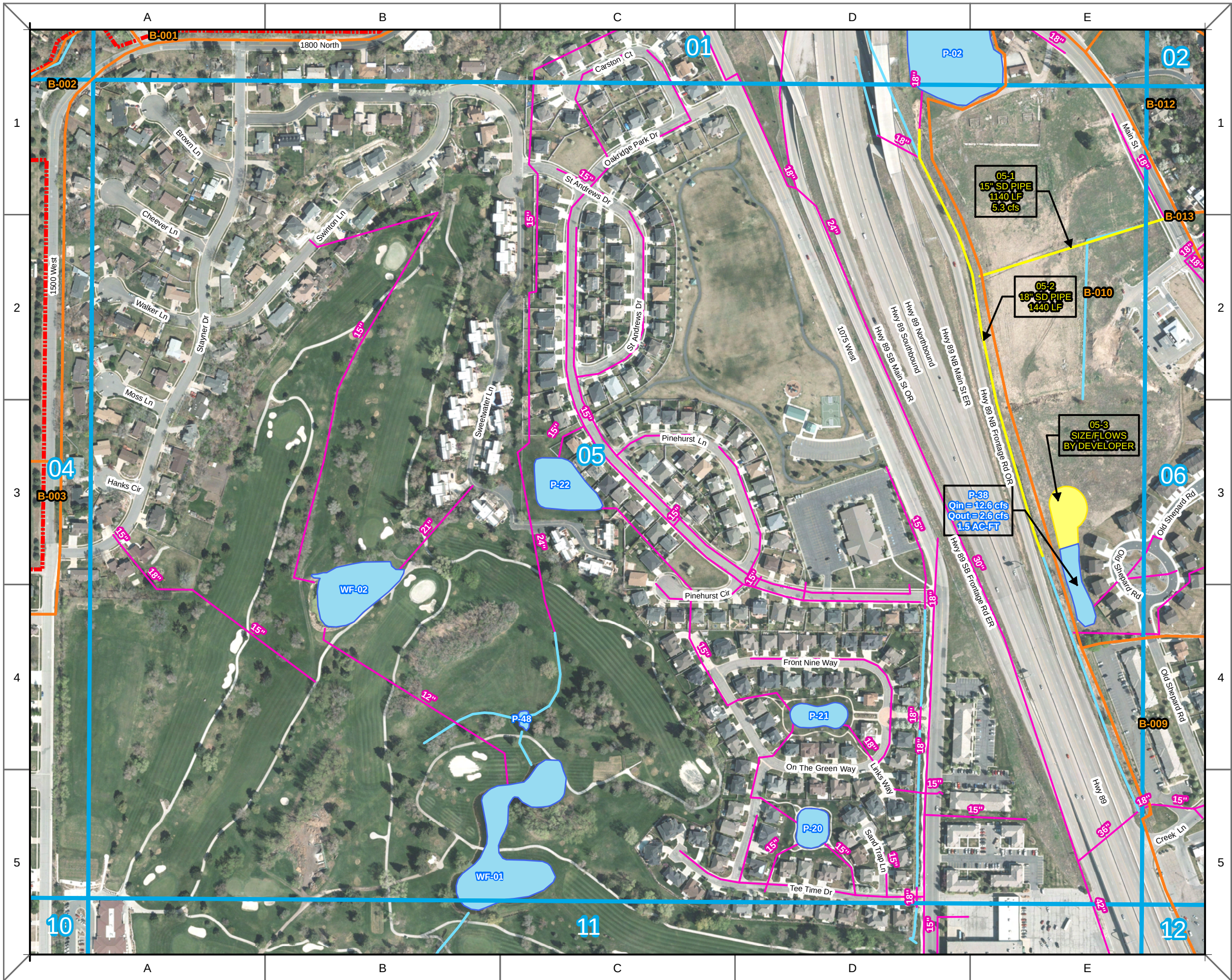
FARMINGTON CITY STORM DRAIN MASTER PLAN





FARMINGTON CITY STORM DRAIN MASTER PLAN



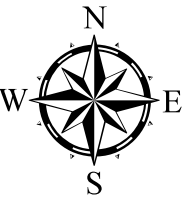
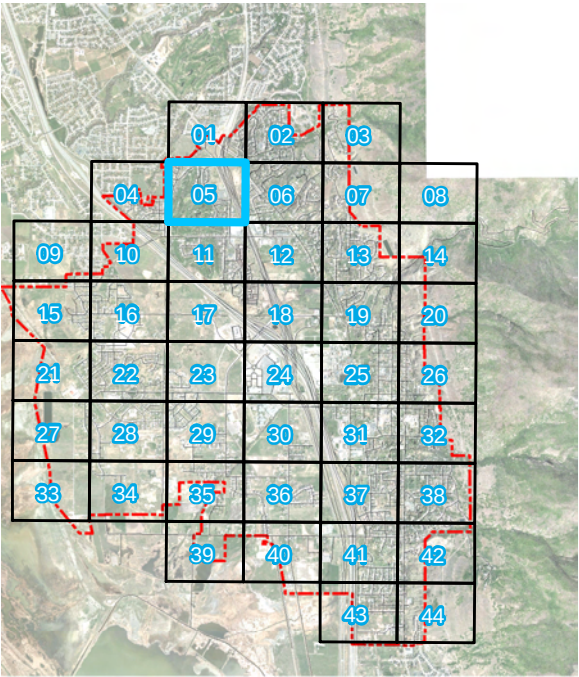


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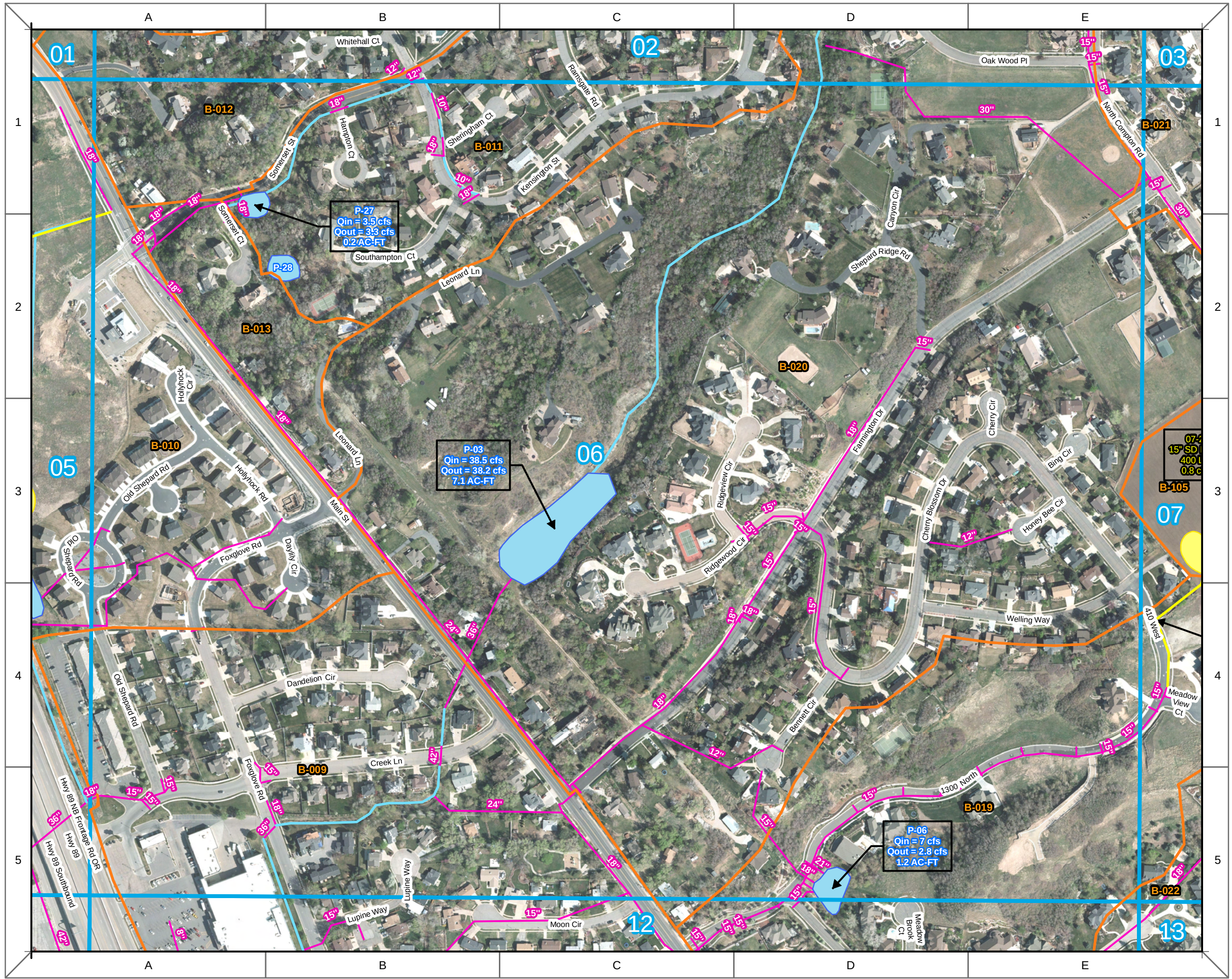
FARMINGTON CITY
STORM DRAIN MASTER PLAN



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Feet

Date: 7/10/2015



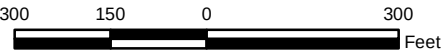
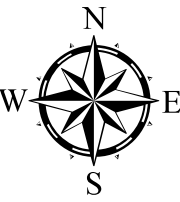
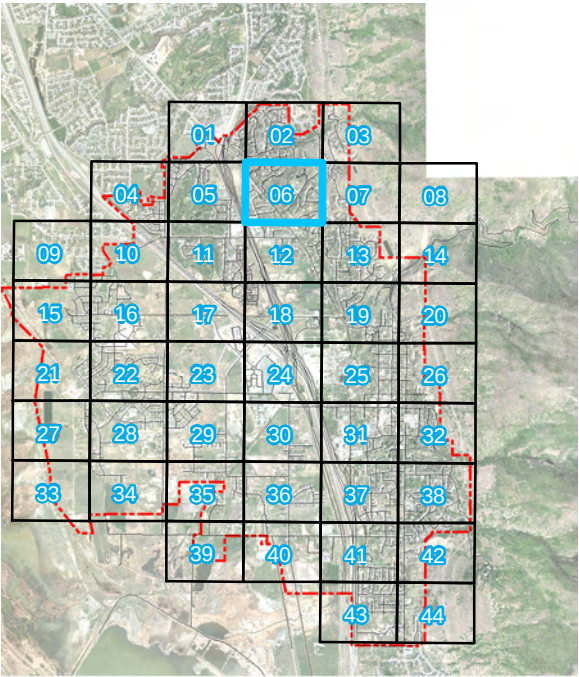


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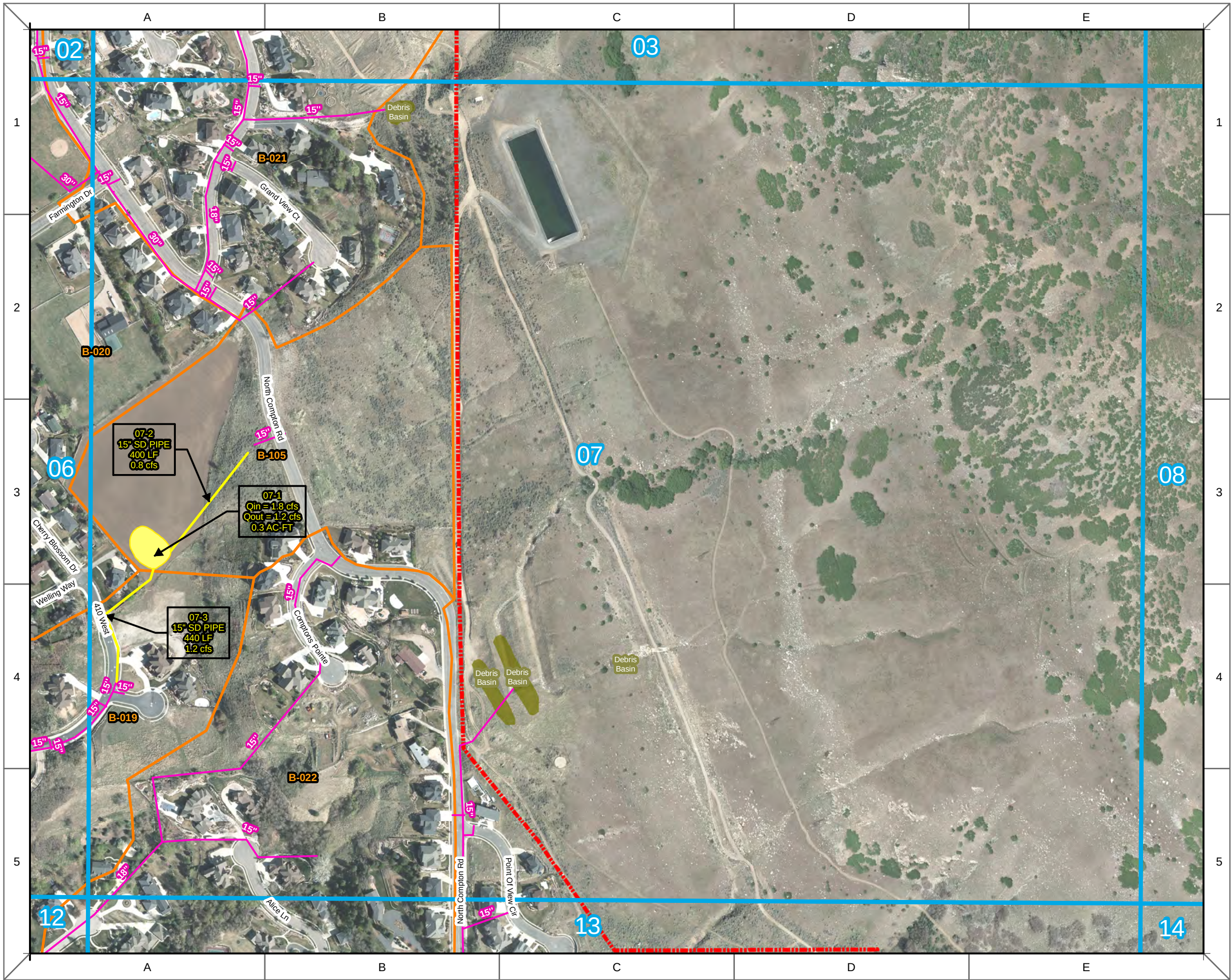
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STORM DRAIN MASTER PLAN



Date: 9/5/2014



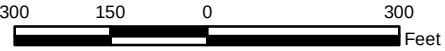
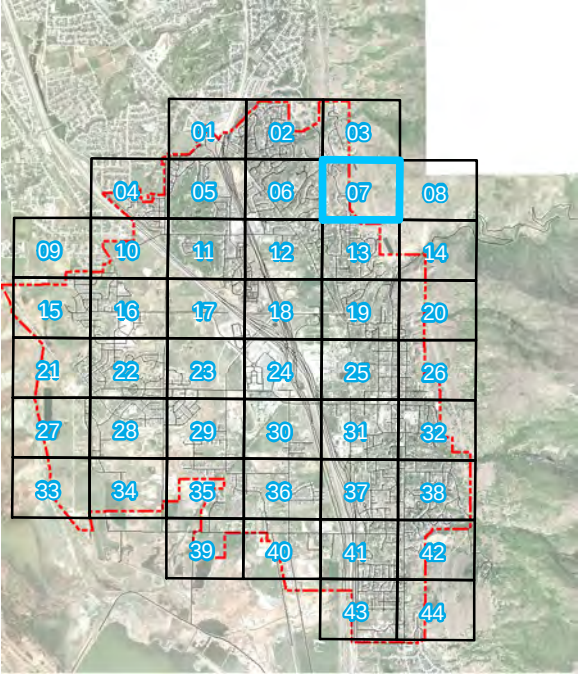


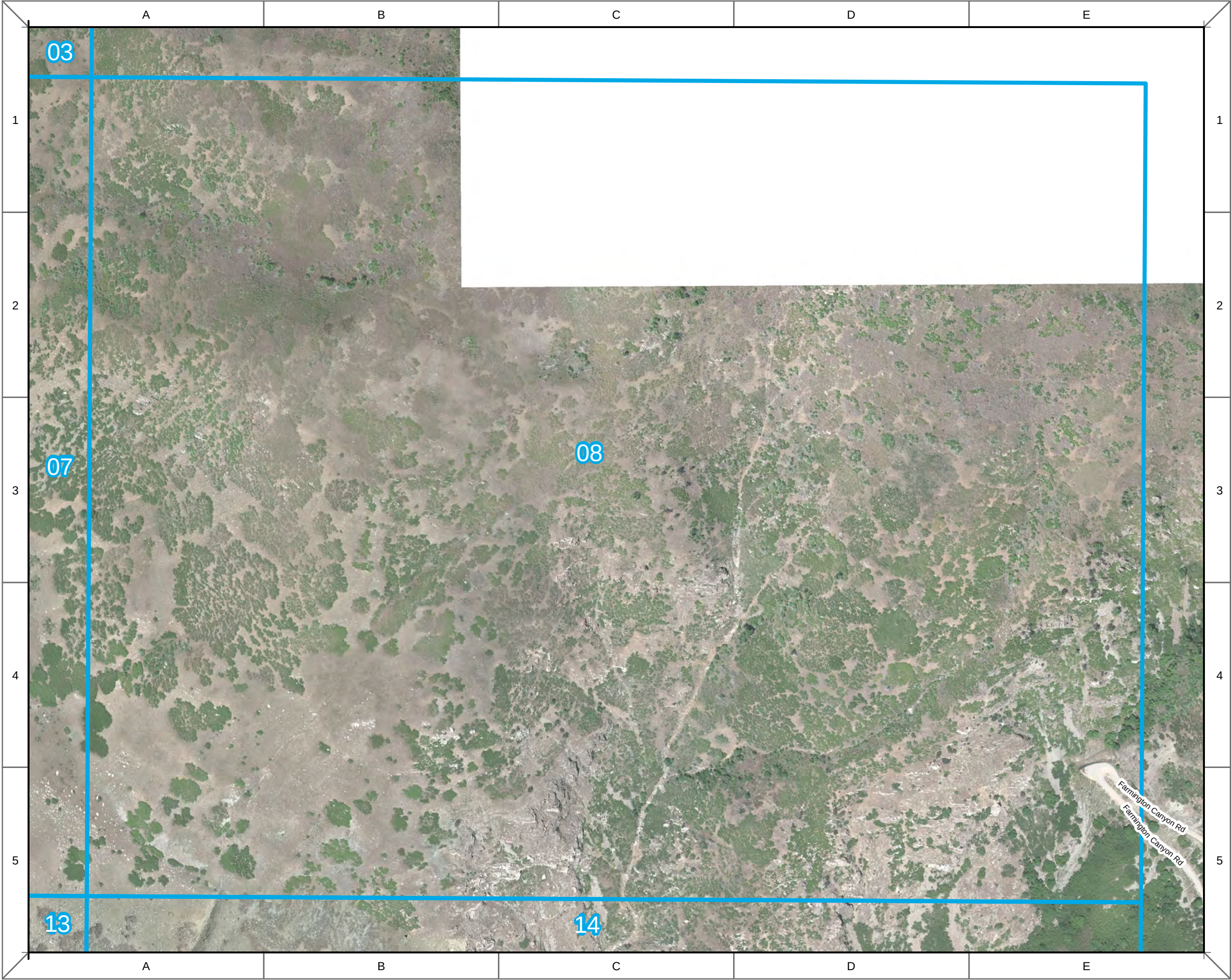
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FARMINGTON CITY
STORM DRAIN MASTER PLAN



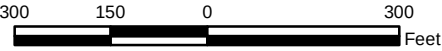
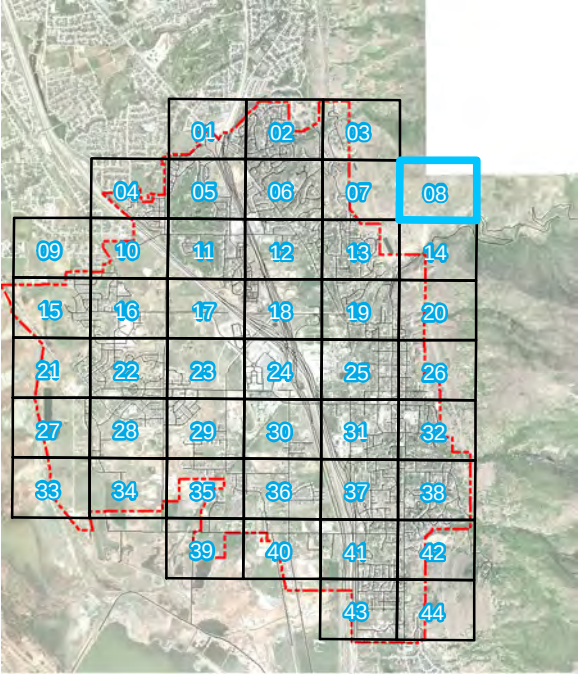


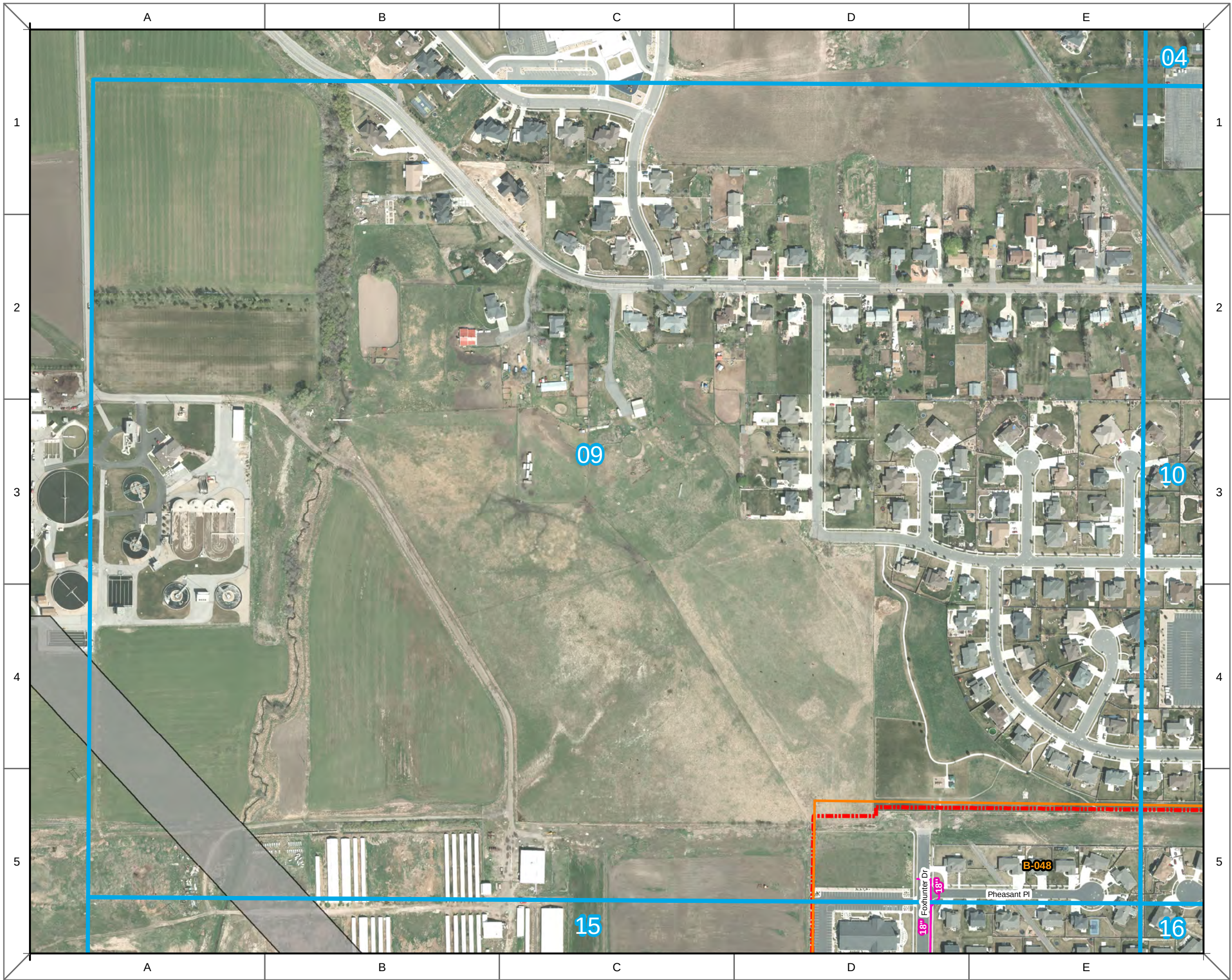
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STORM DRAIN MASTER PLAN**



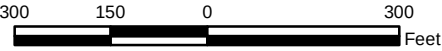
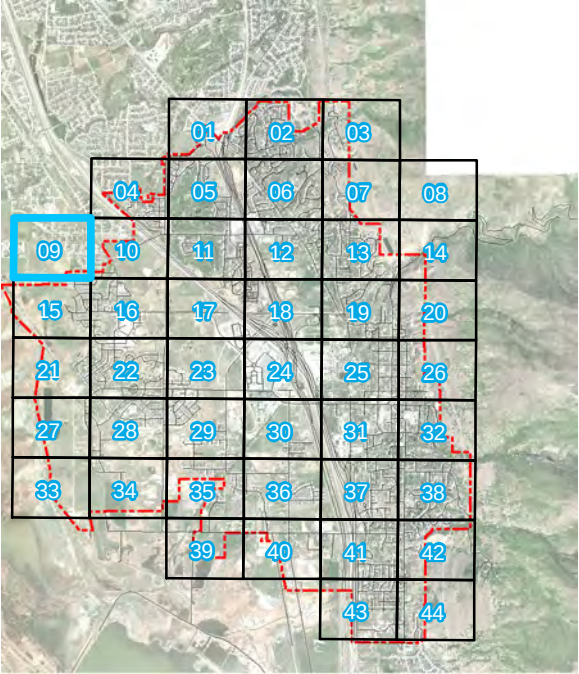


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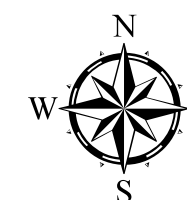
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STORM DRAIN MASTER PLAN

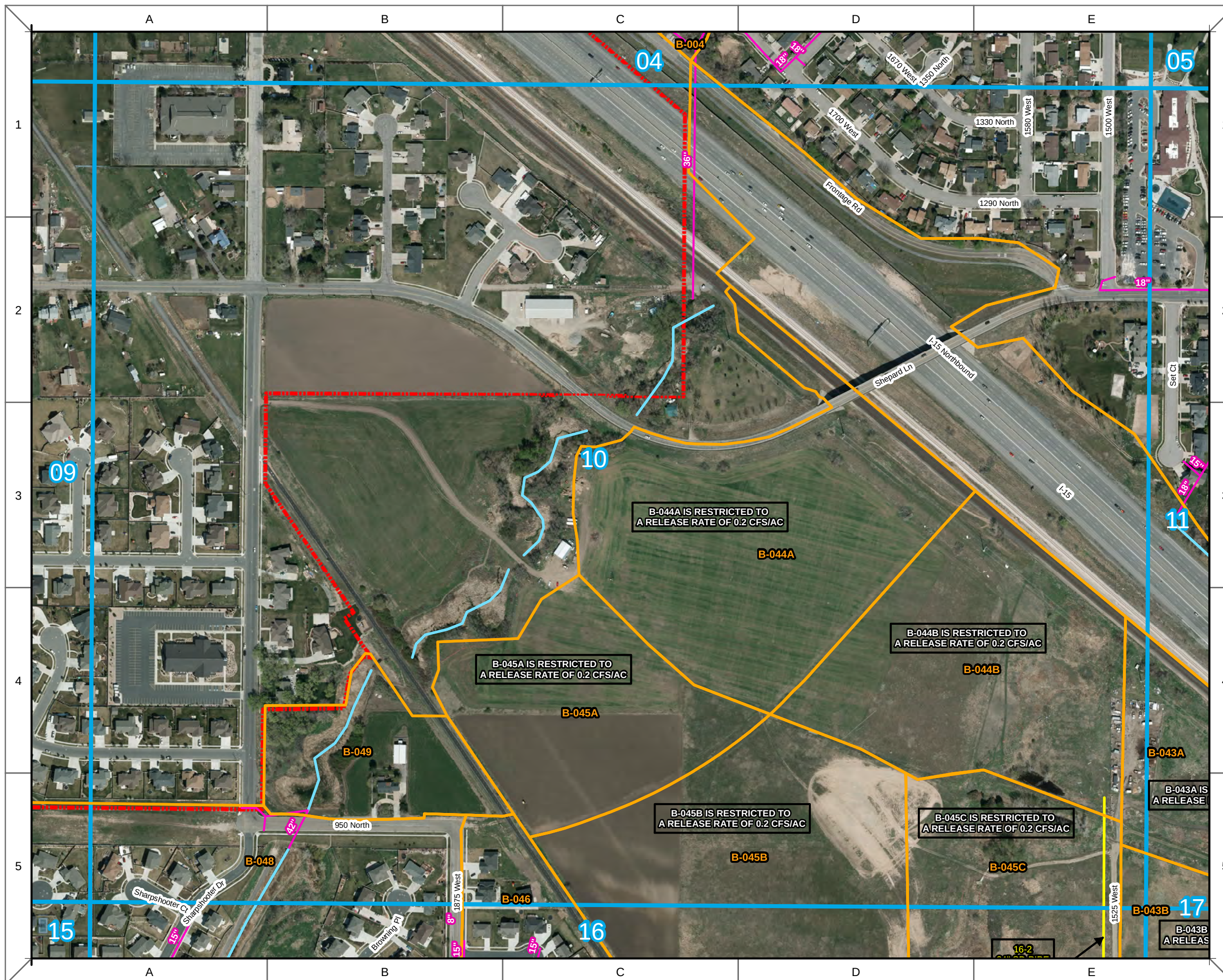




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	04	05	06	07	08
09	10	11	12	13	14
15	16	17	18	19	20
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33	34	35	36	37	38
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				43	44



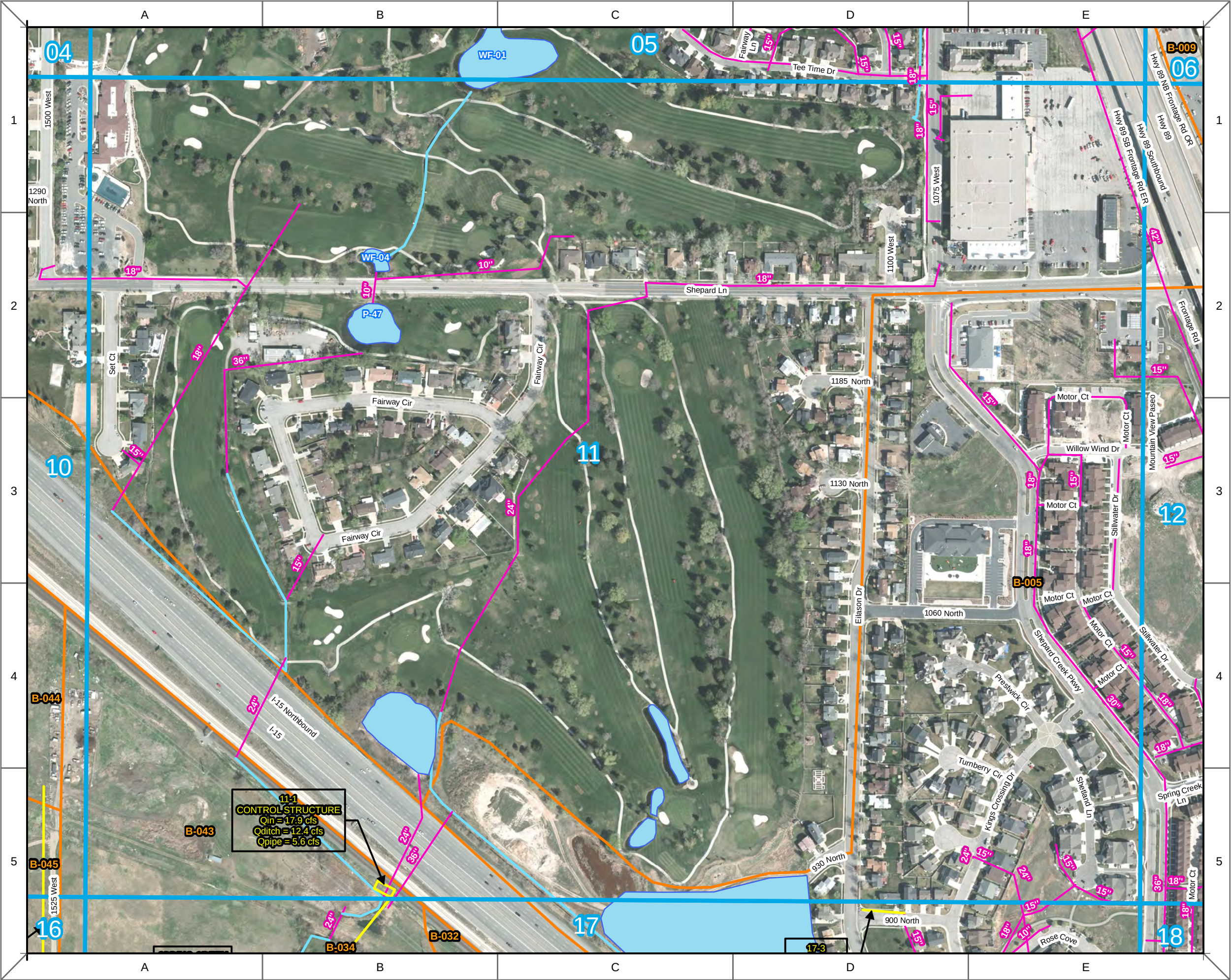
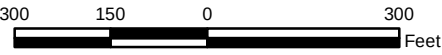
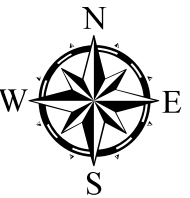
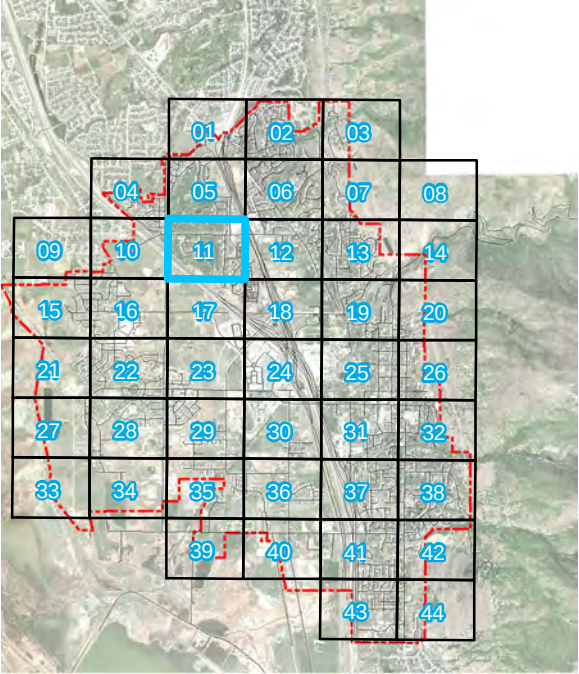
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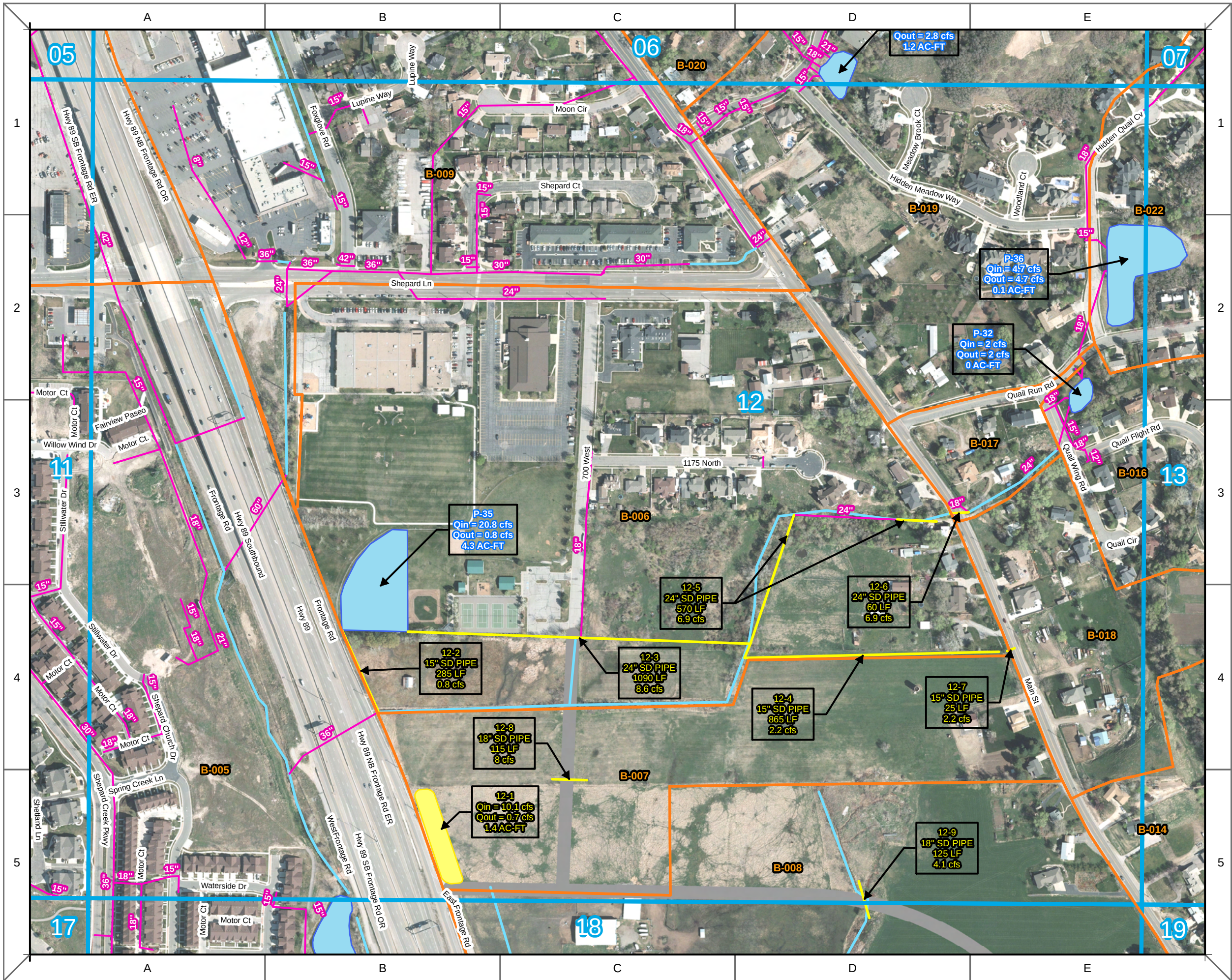




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STORM DRAIN MASTER PLAN



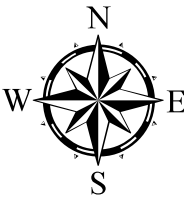
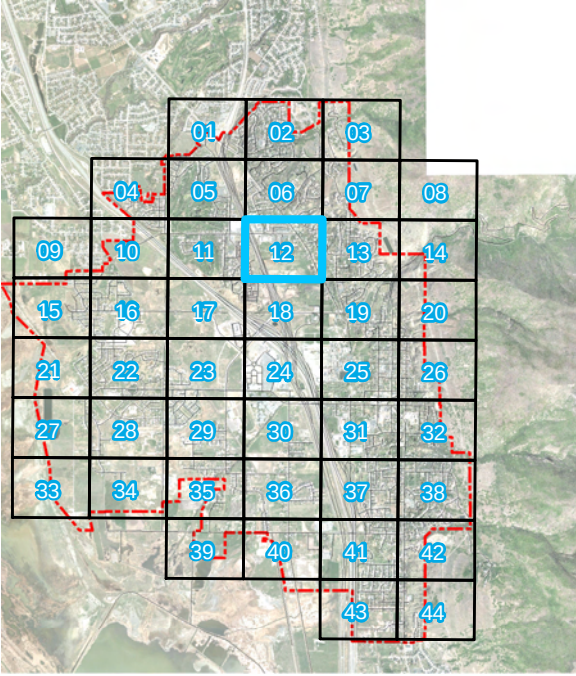


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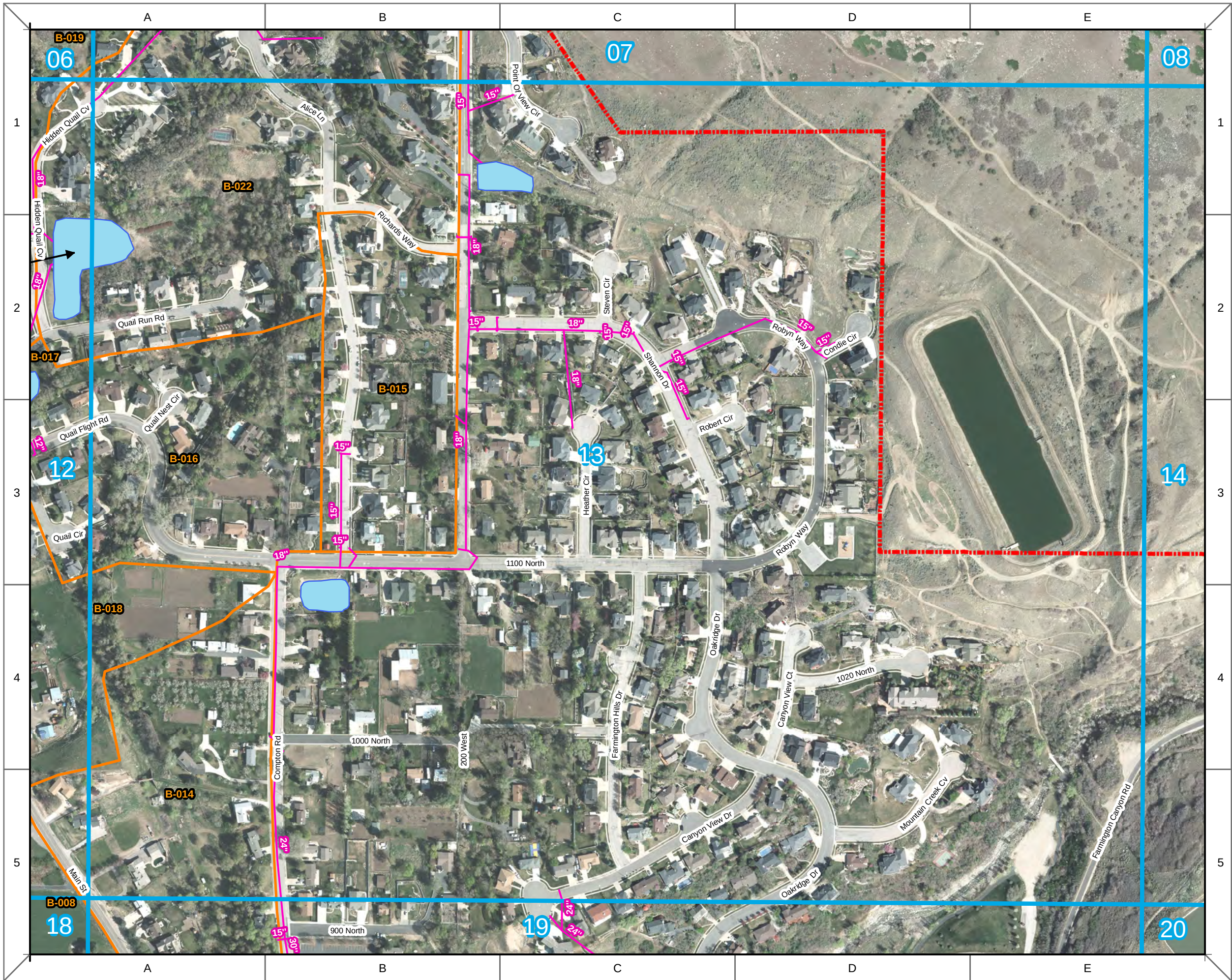
FARMINGTON CITY
STORM DRAIN MASTER PLAN



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Feet

Date: 7/10/2015



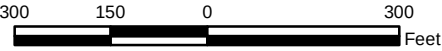
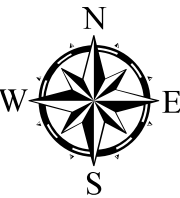
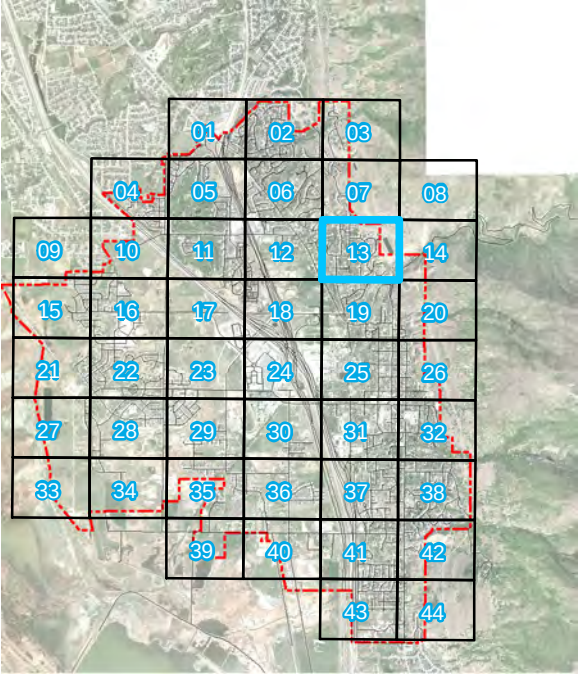


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FARMINGTON CITY
STORM DRAIN MASTER PLAN



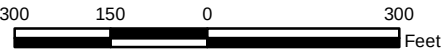
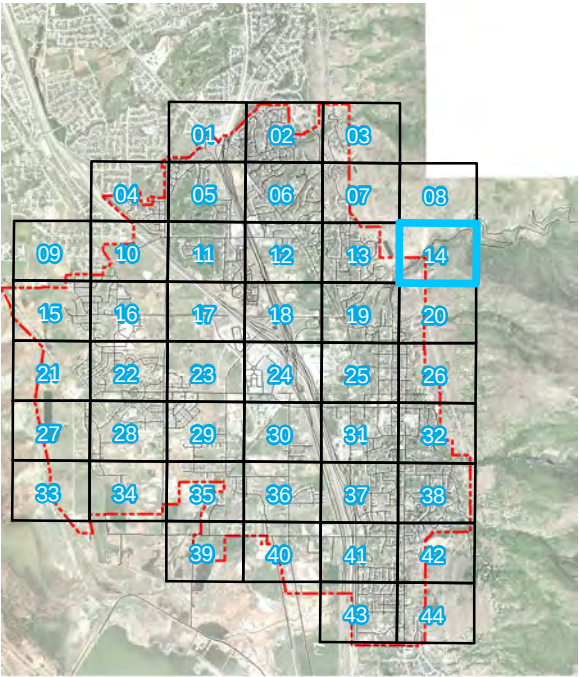


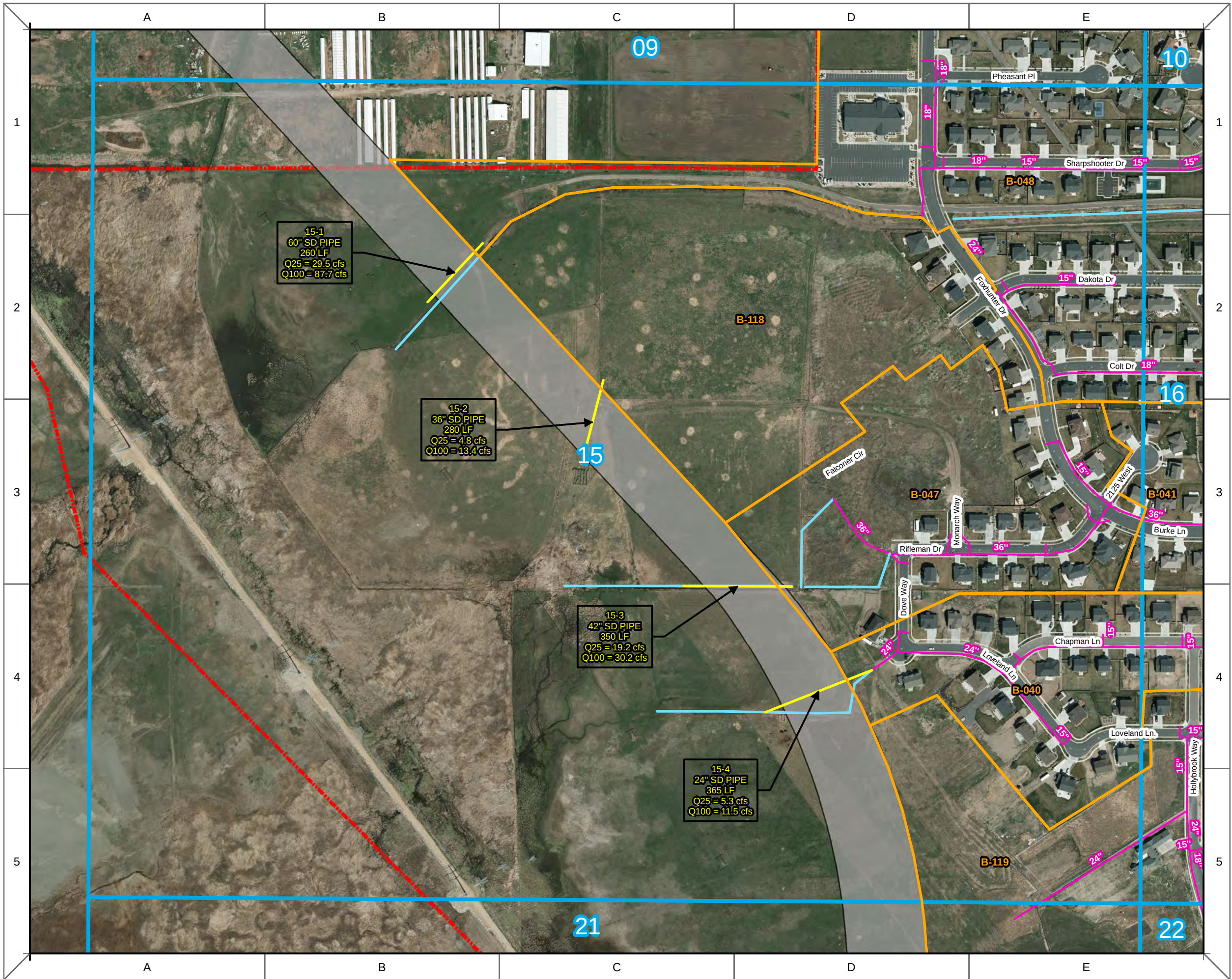
GRID # 14



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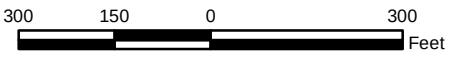
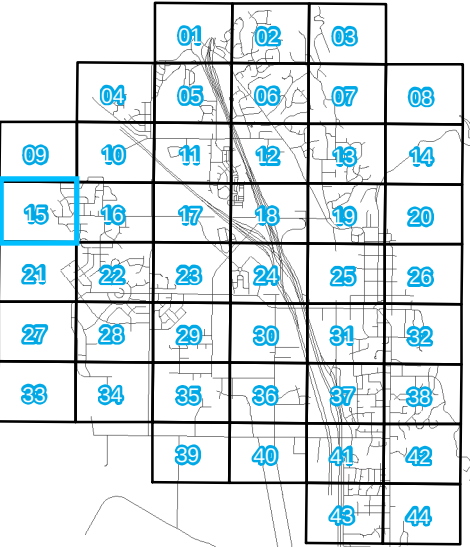


GRID # 15



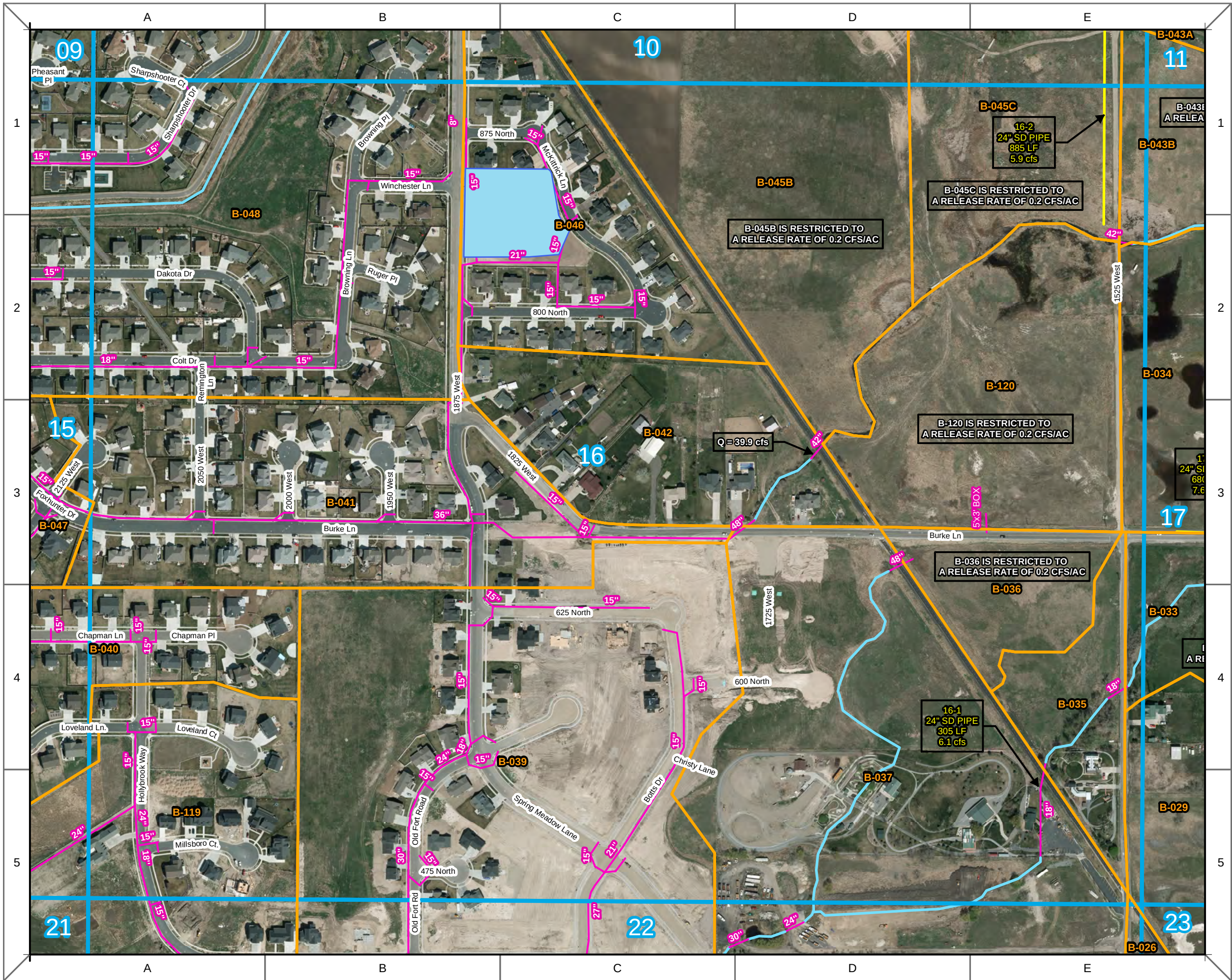
HISTORIC BEGINNINGS • 1847

**FARMINGTON CITY
STORM DRAIN MASTER PLAN**



Date: 6/1/2018

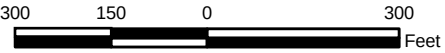
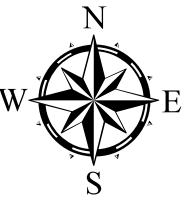
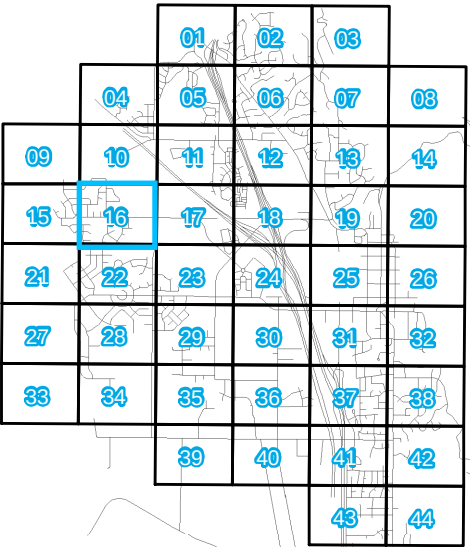




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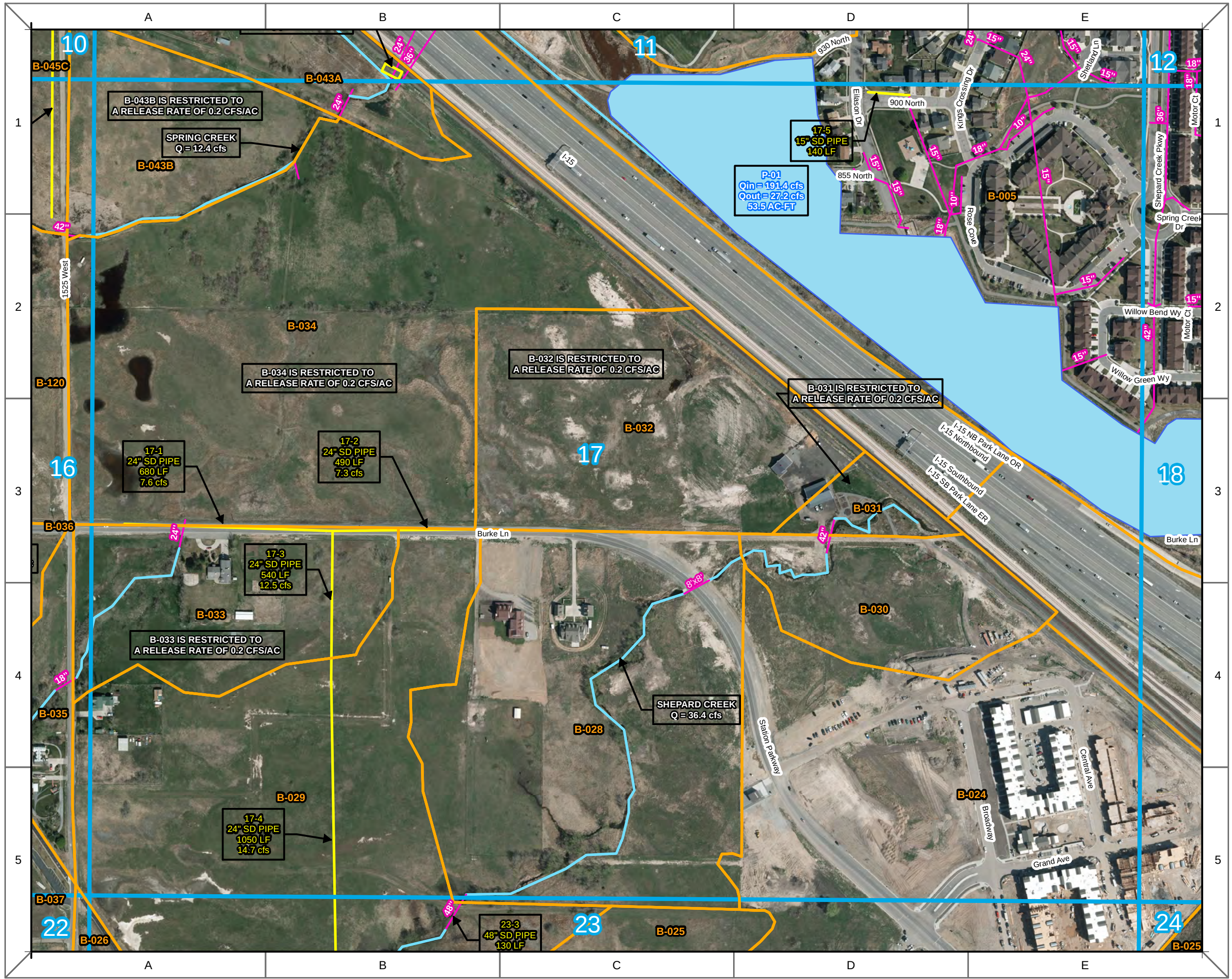


FARMINGTON CITY
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Date: 6/1/2018



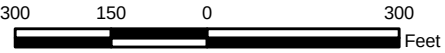
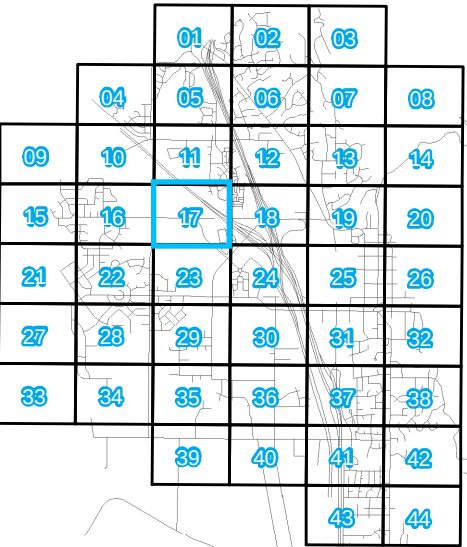


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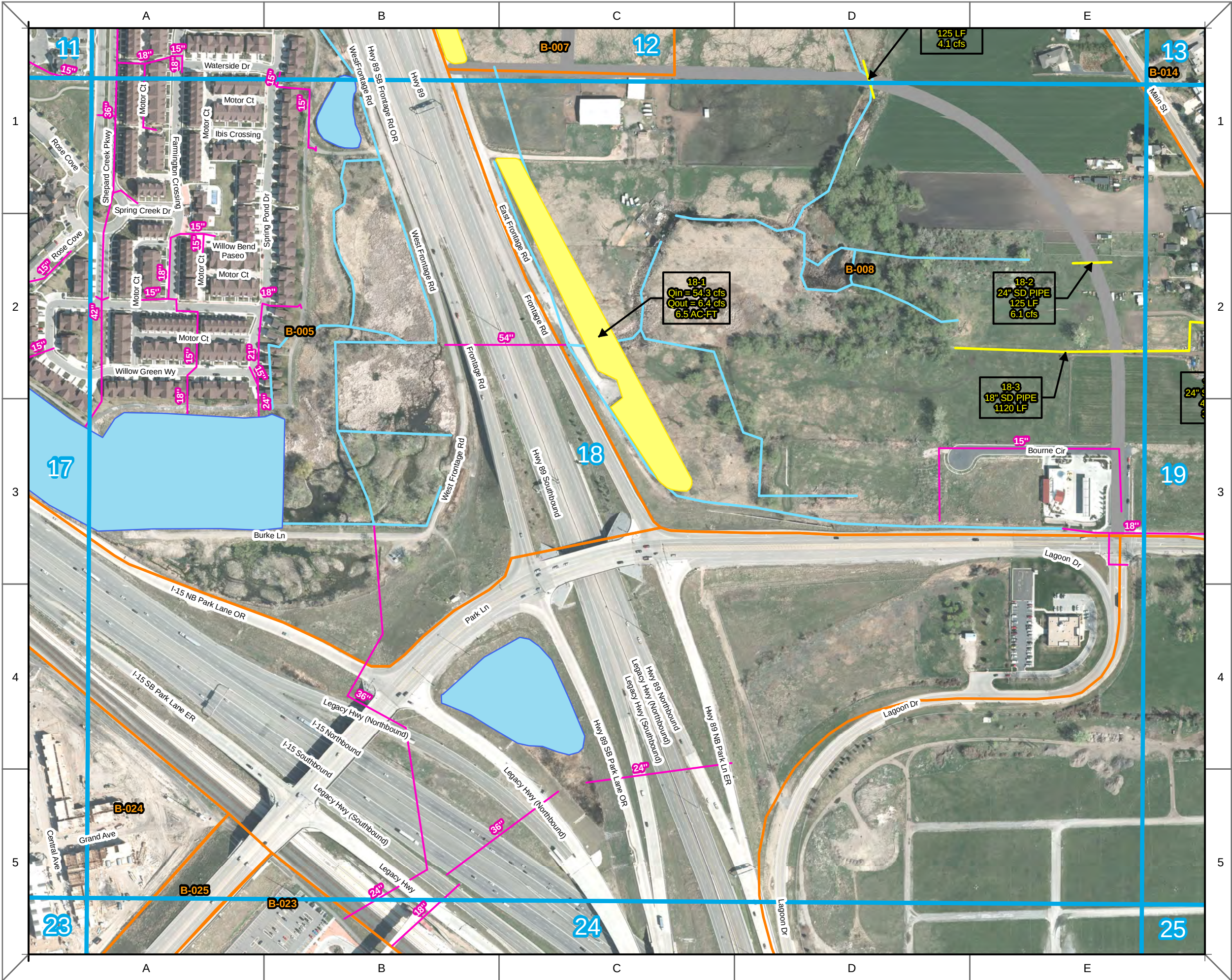
HISTORIC BEGINNINGS • 1847

FARMINGTON CITY STORM DRAIN MASTER PLAN



Date: 6/1/2018



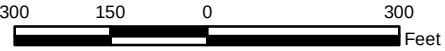
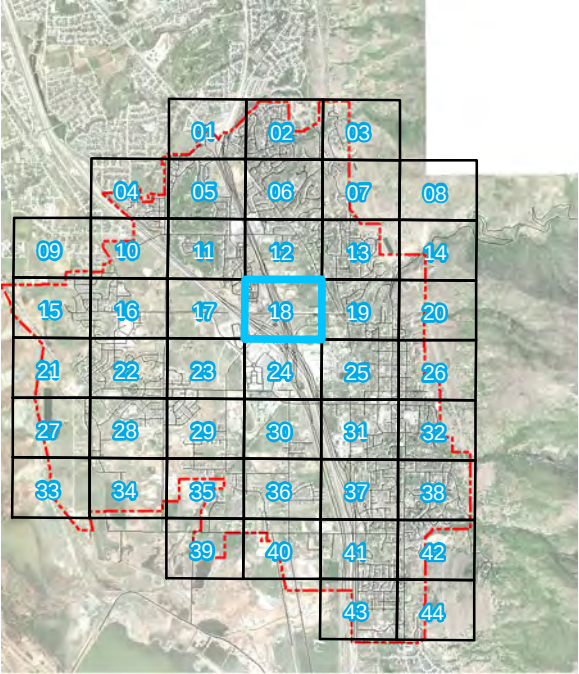


GRID # 18



HISTORIC BEGINNINGS • 1847

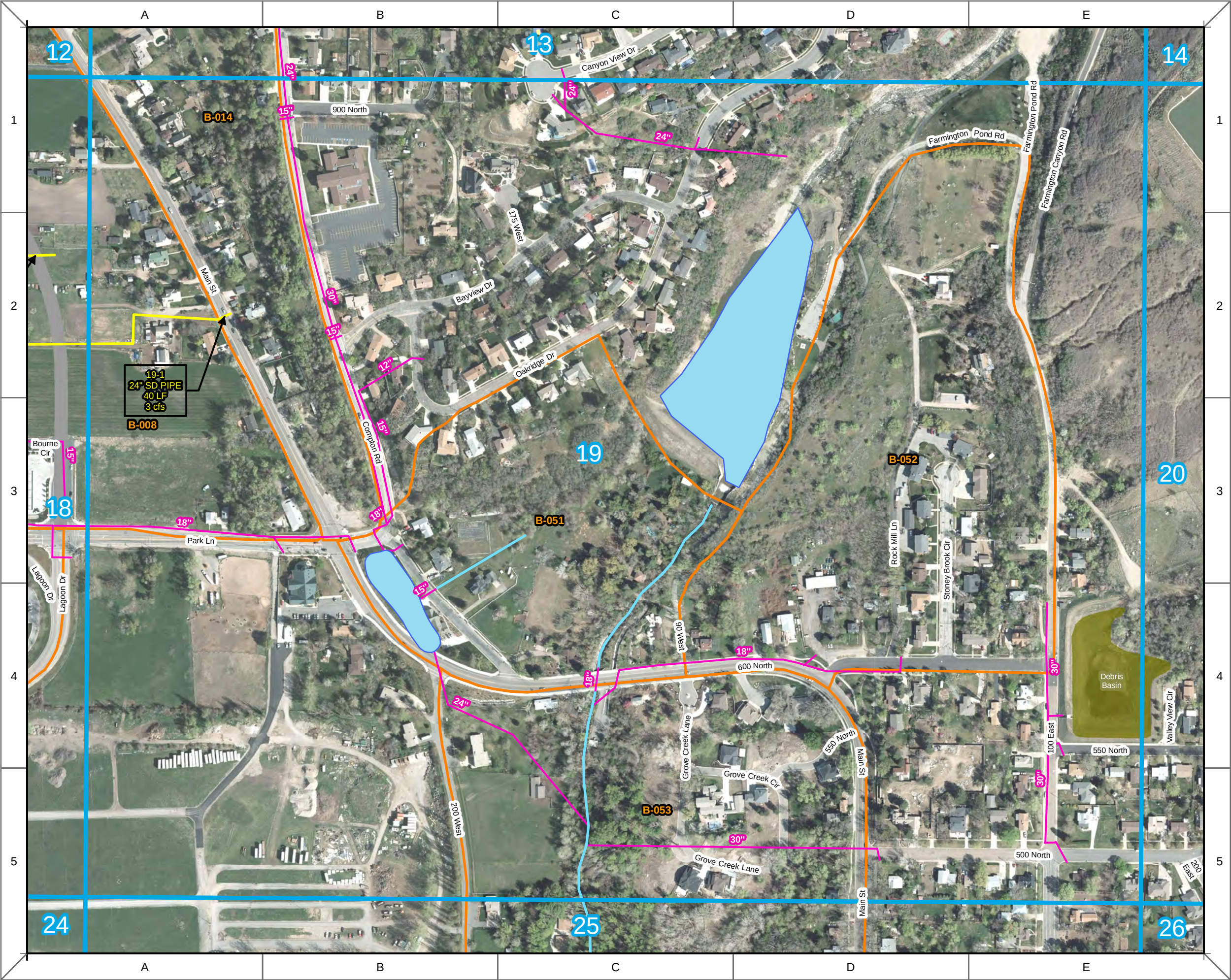
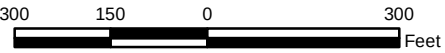
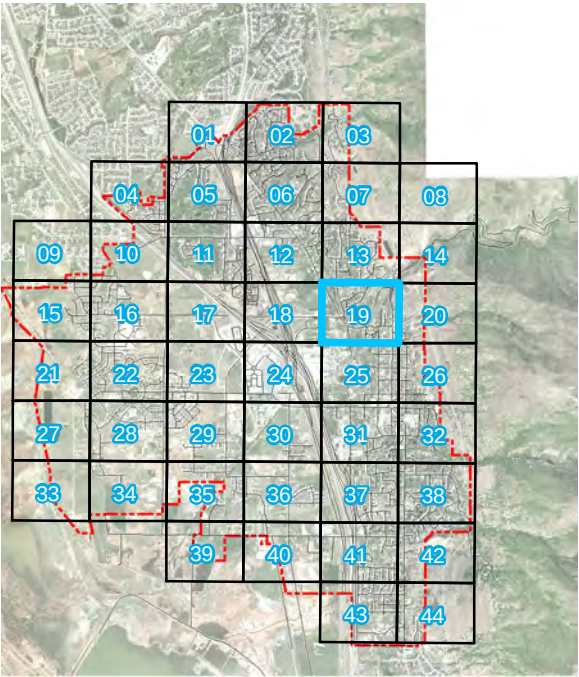
FARMINGTON CITY
STORM DRAIN MASTER PLAN





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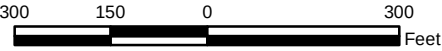
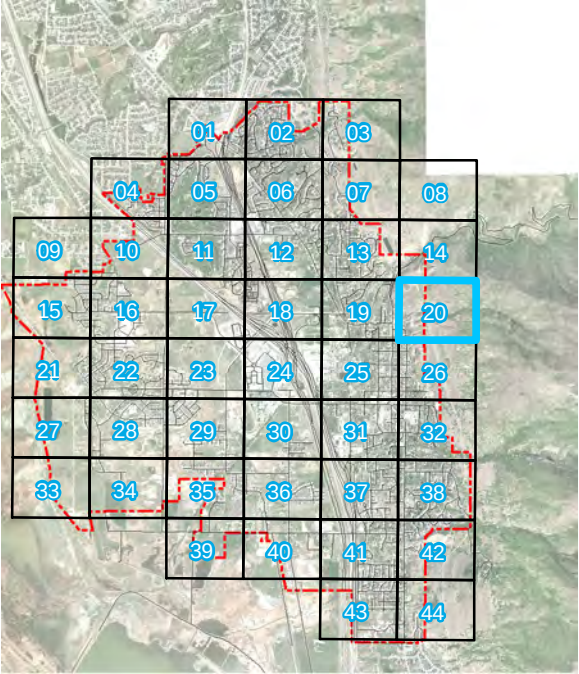


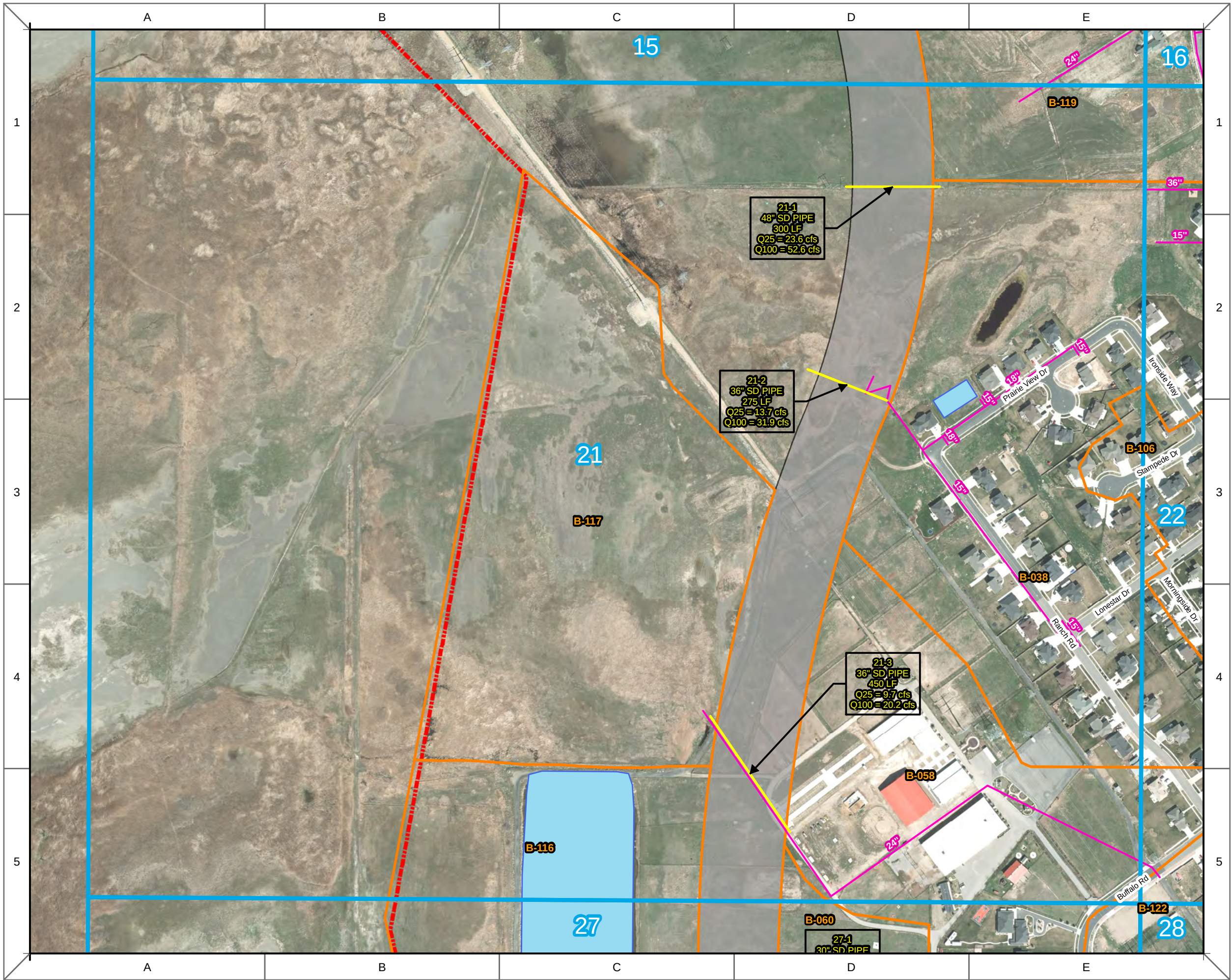
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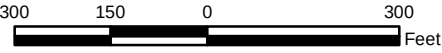
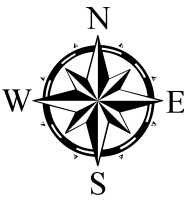
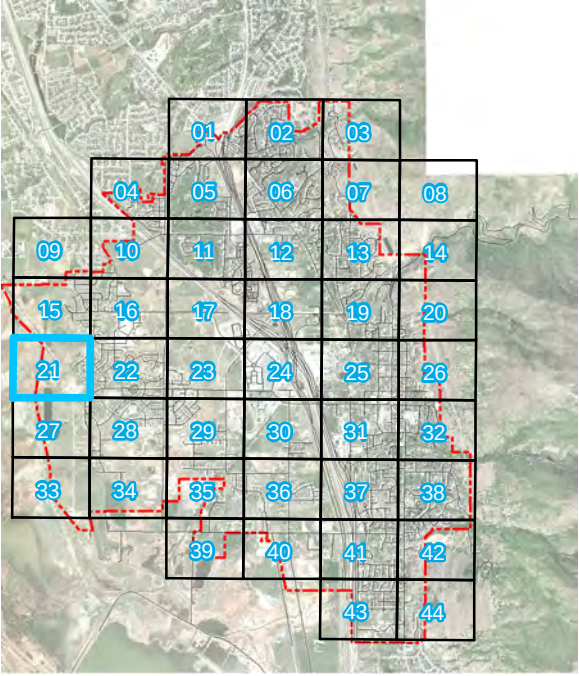


GRID # 21



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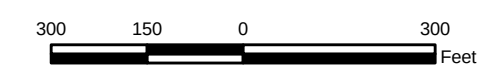
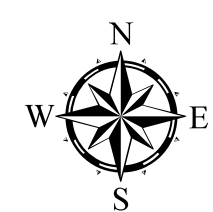


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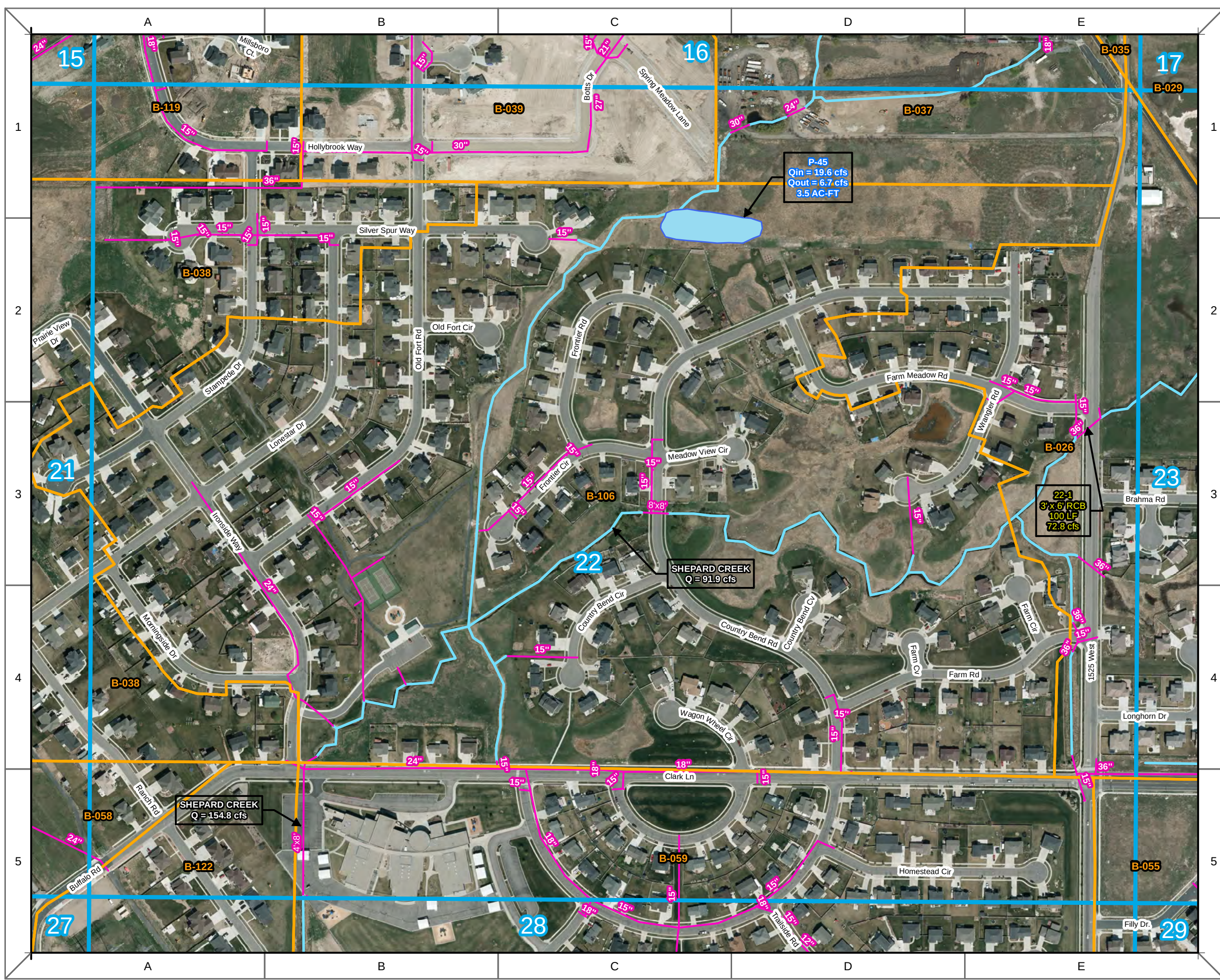


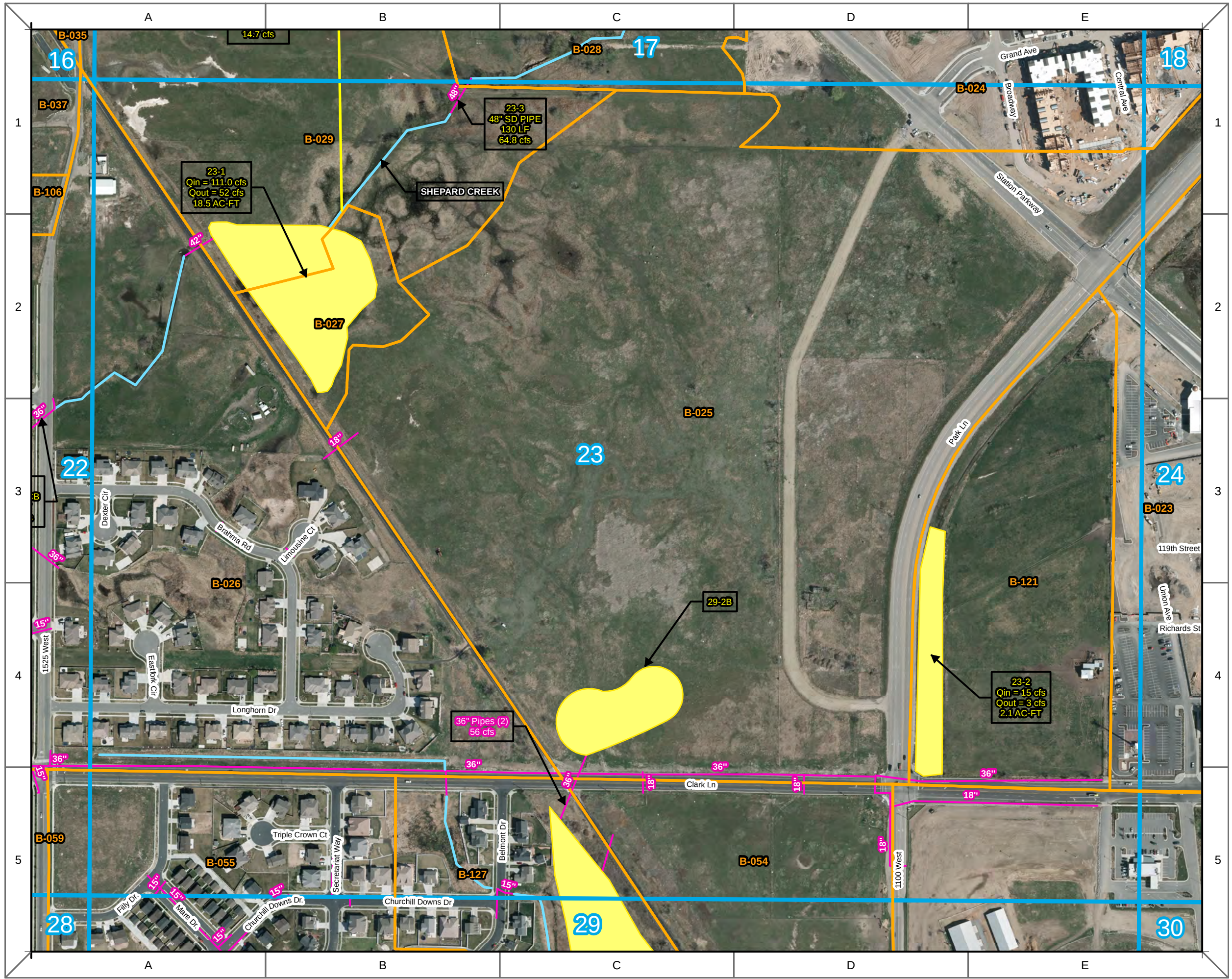
FARMINGTON CITY STORM DRAIN MASTER PLAN

		01	02	03	
	04	05	06	07	08
09	10	11	12	13	14
15	16	17	18	19	20
21	22	23	24	25	26
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Date: 6/1/2018



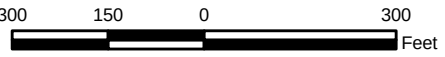
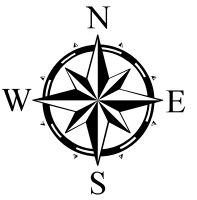
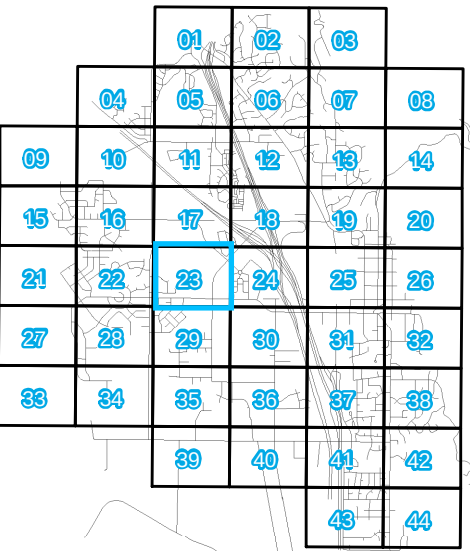


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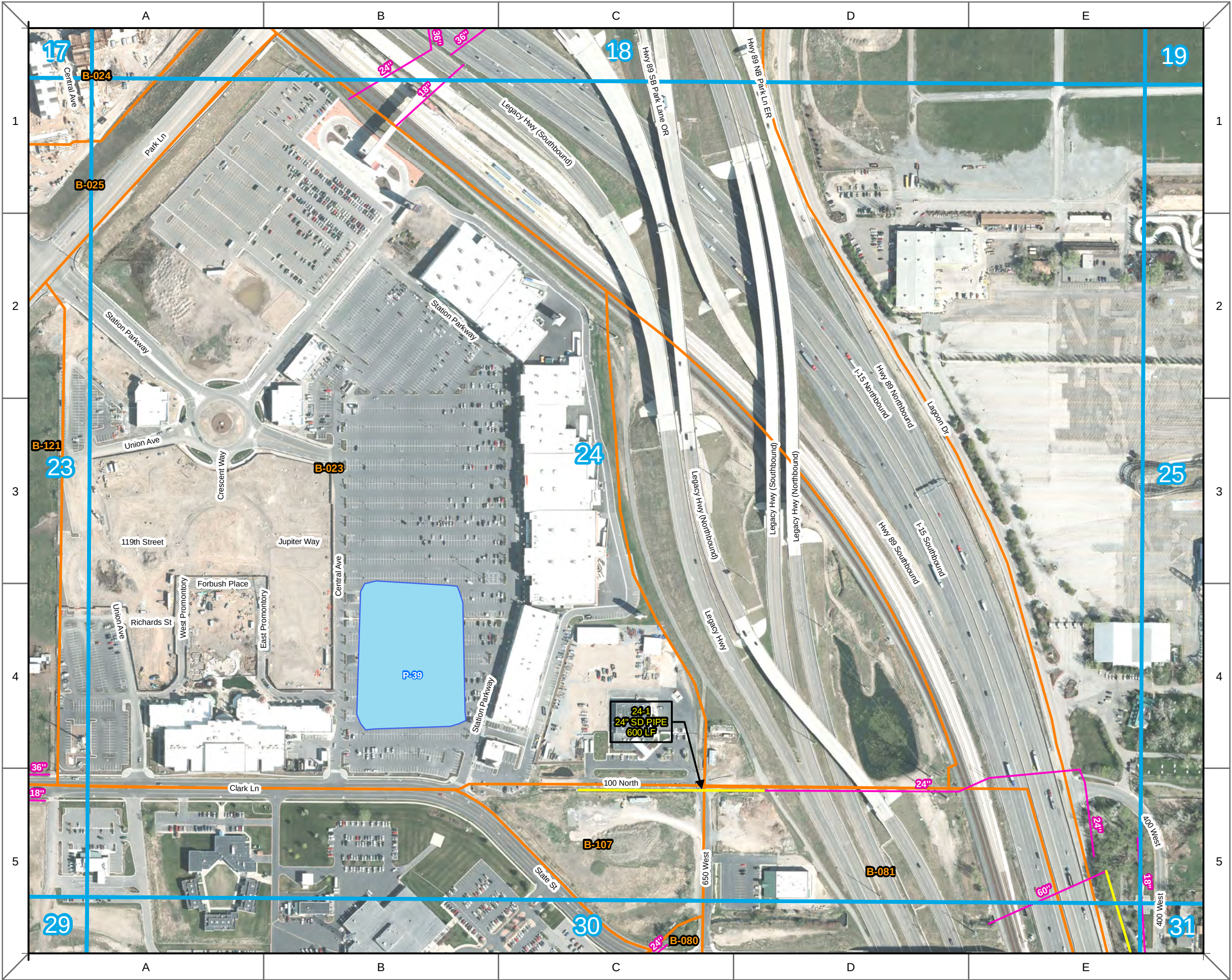
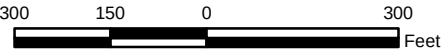
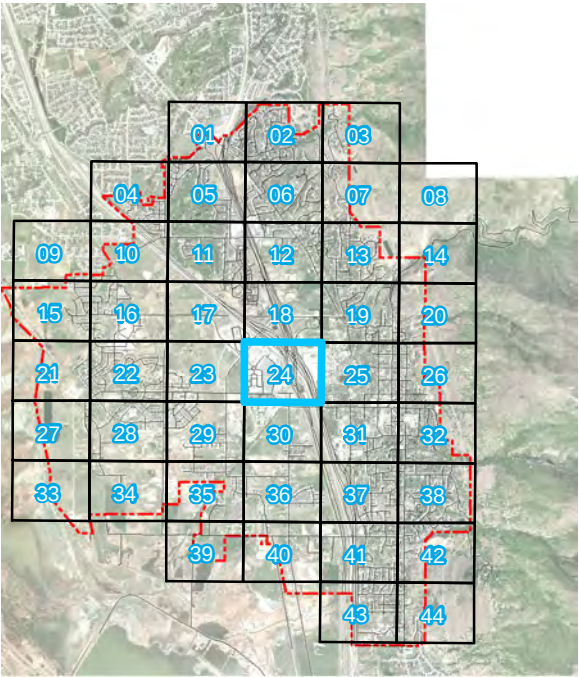
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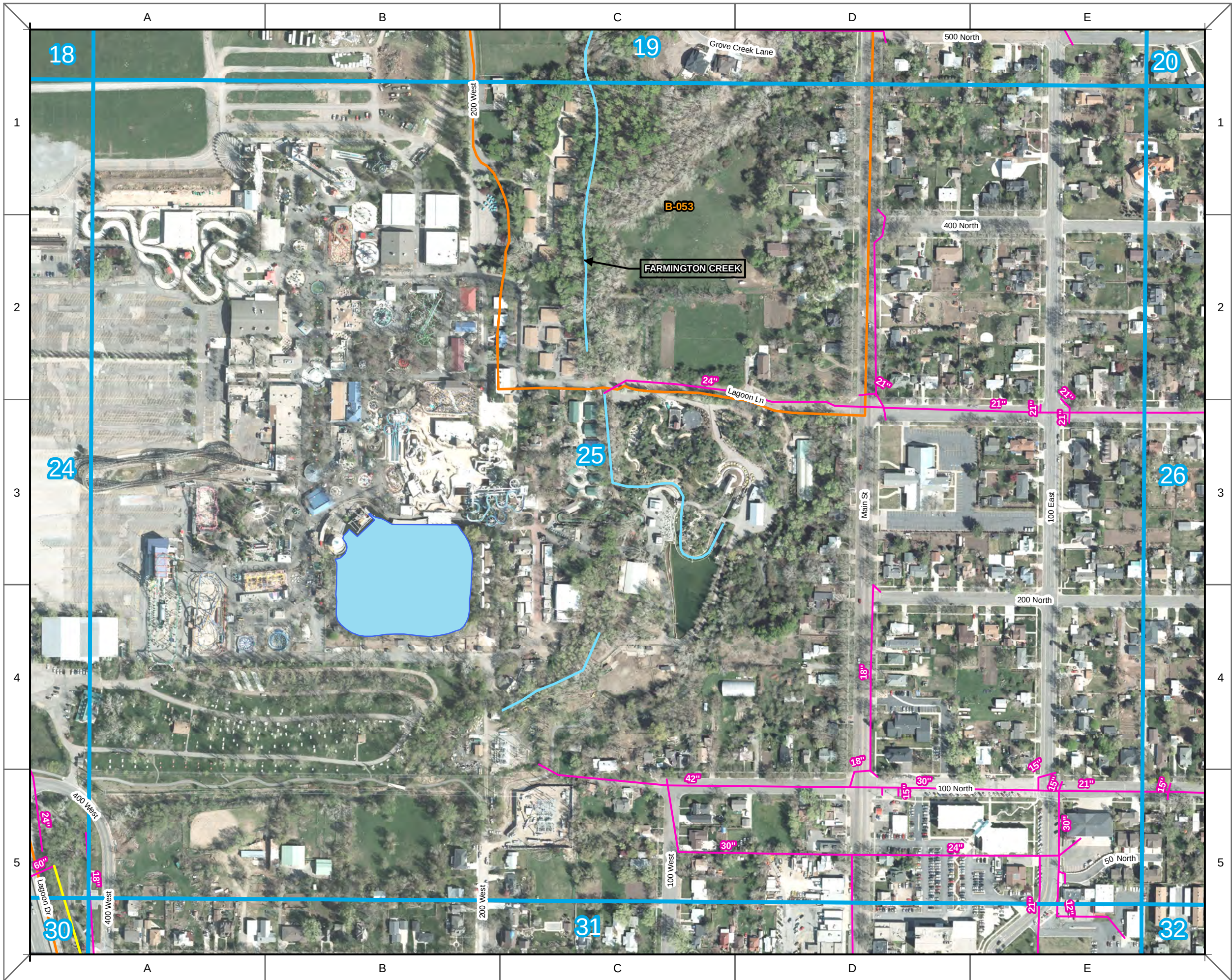




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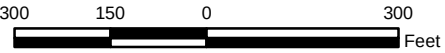
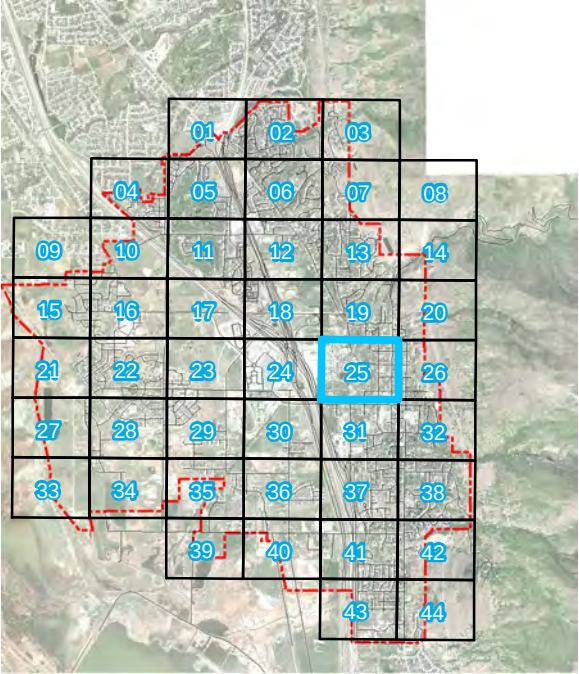


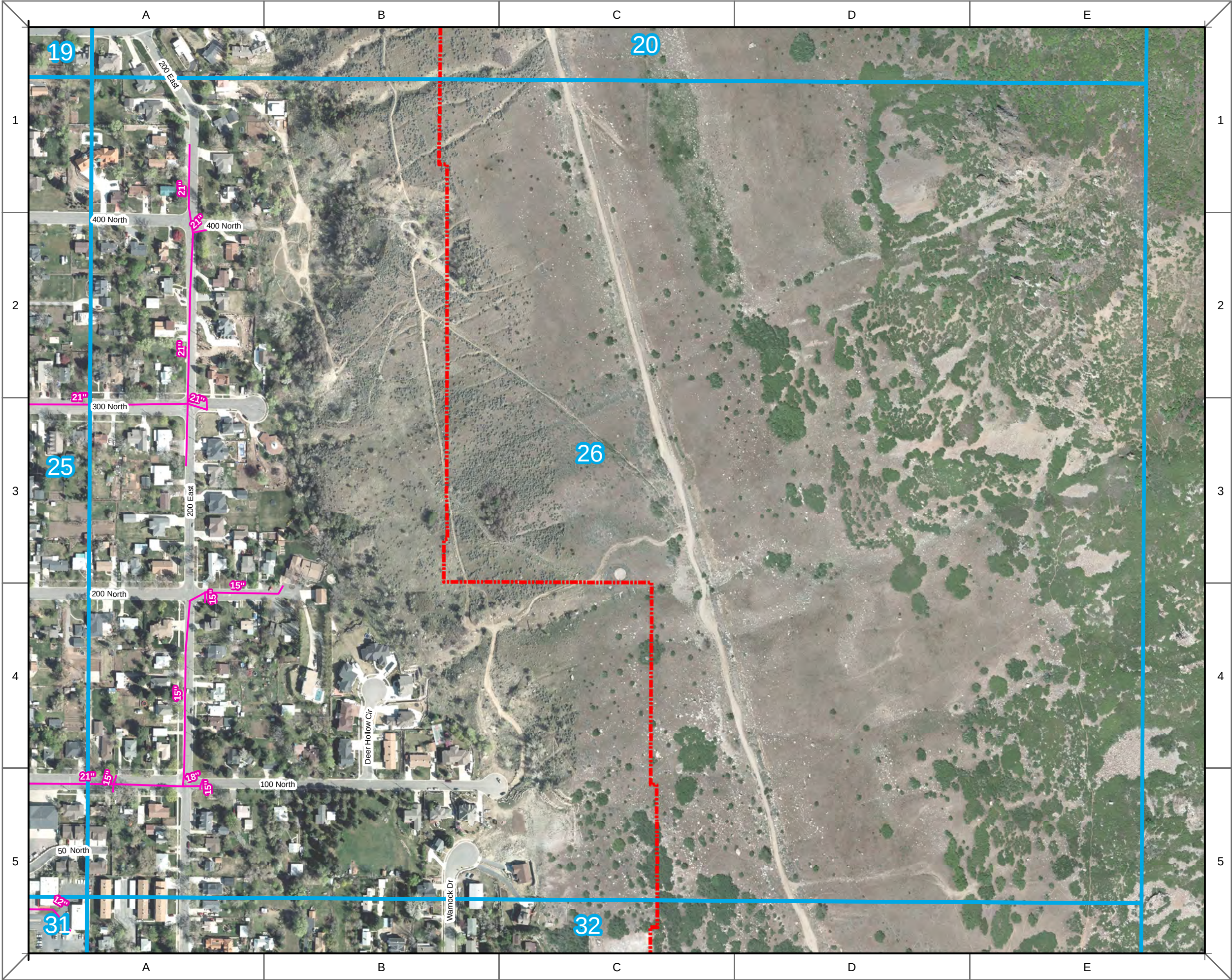
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FARMINGTON CITY
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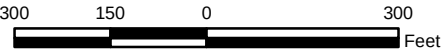
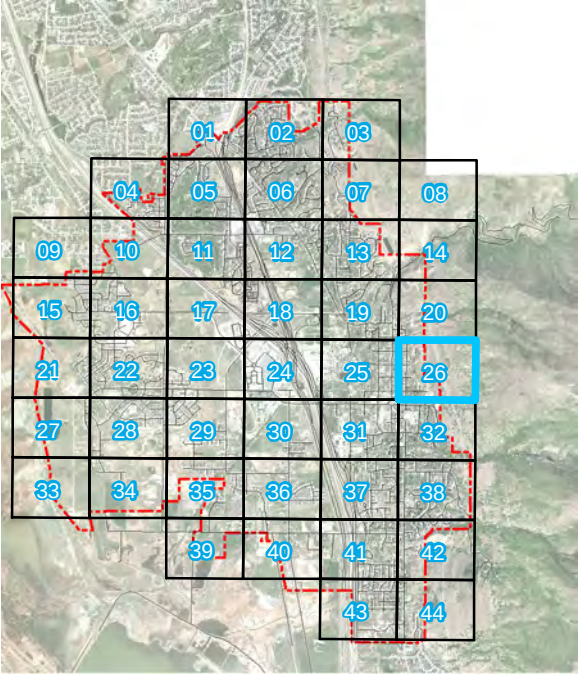


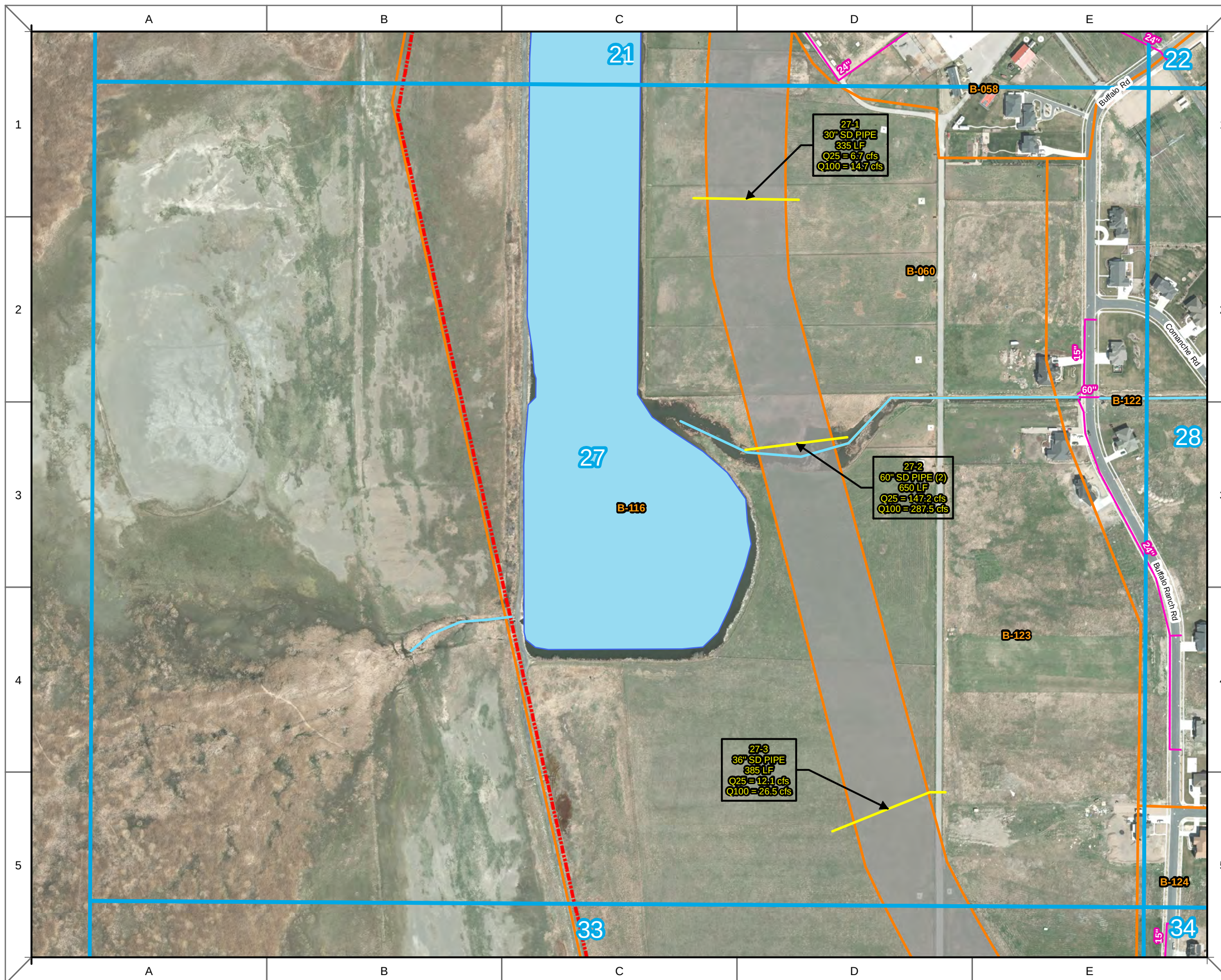
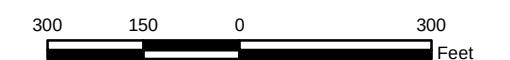
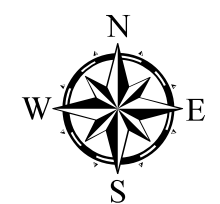
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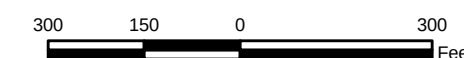
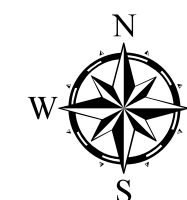
FARMINGTON CITY
STORM DRAIN MASTER PLAN



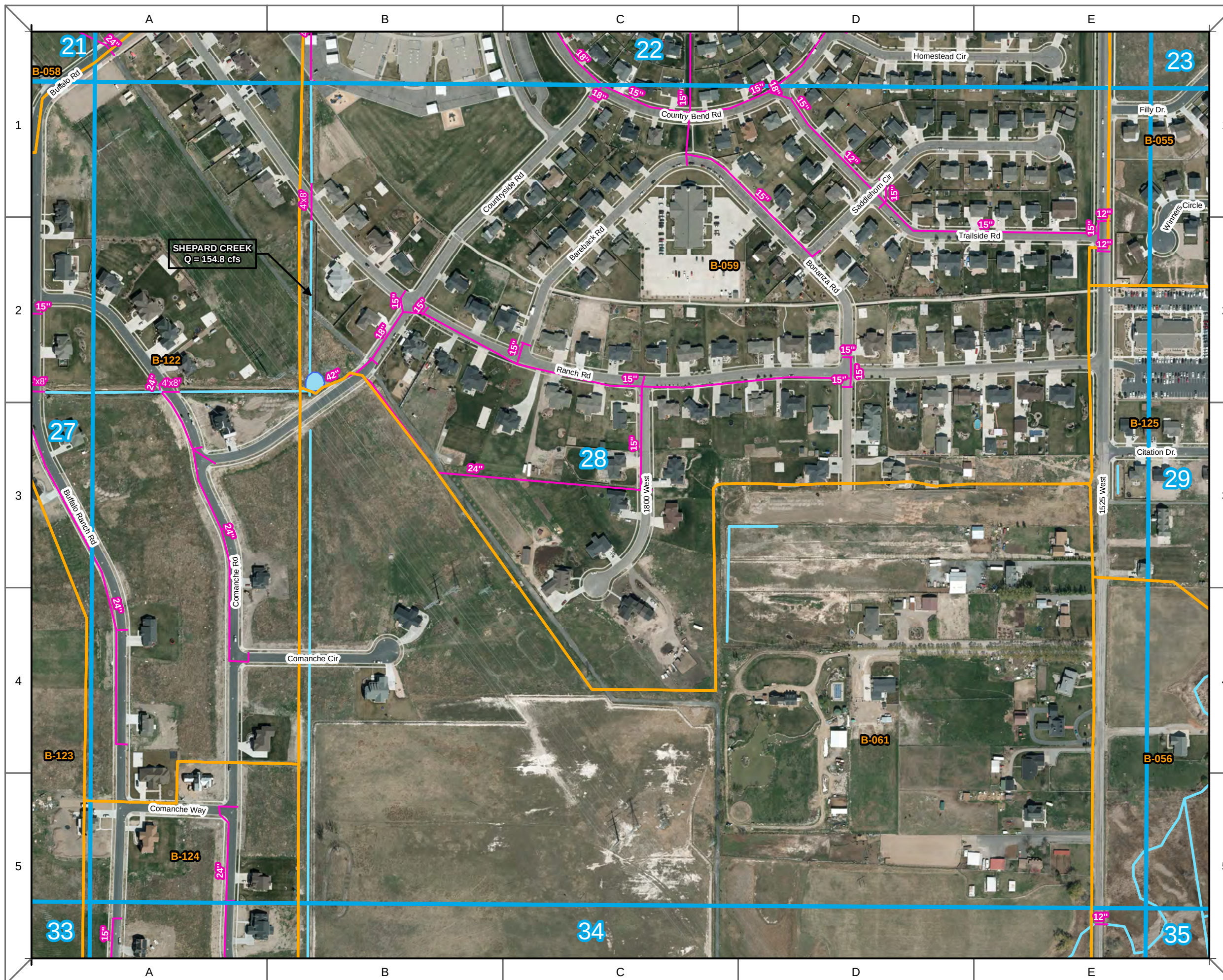


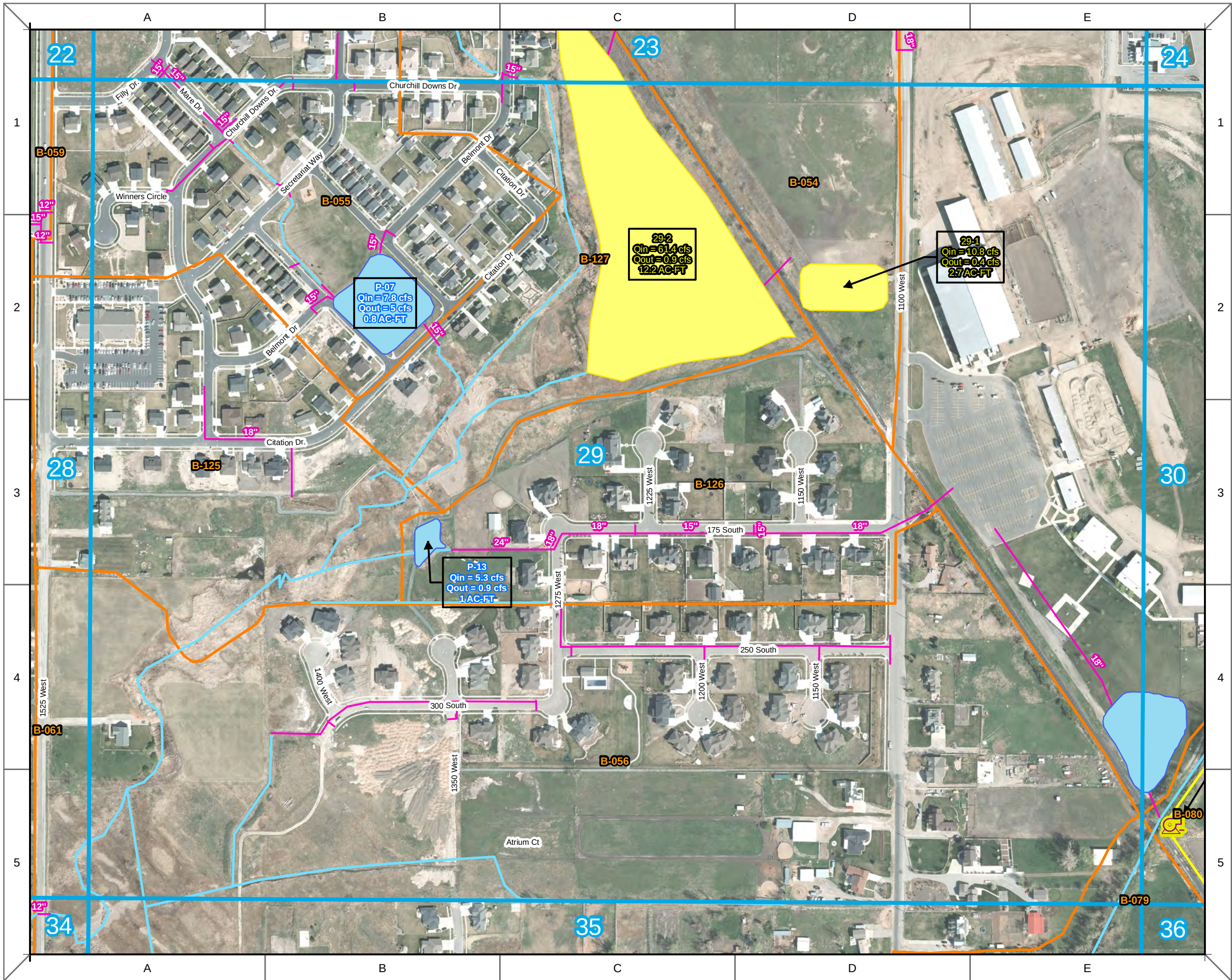


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15	16	17	18	19	20
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Date: 6/1/2018



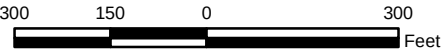
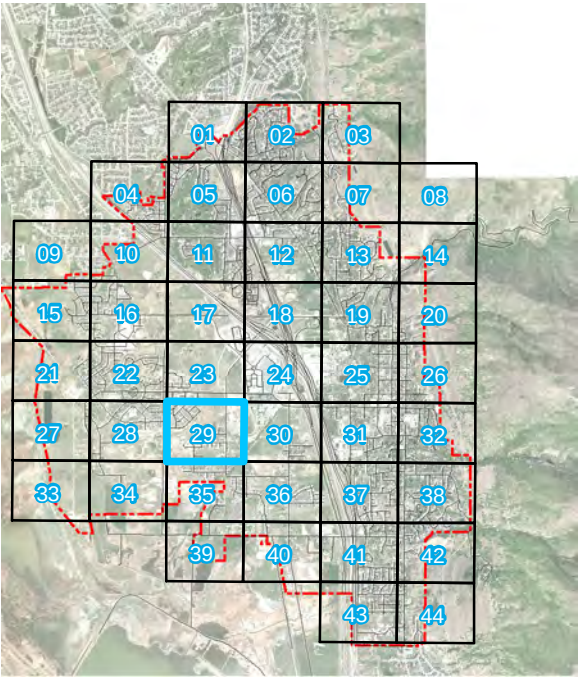


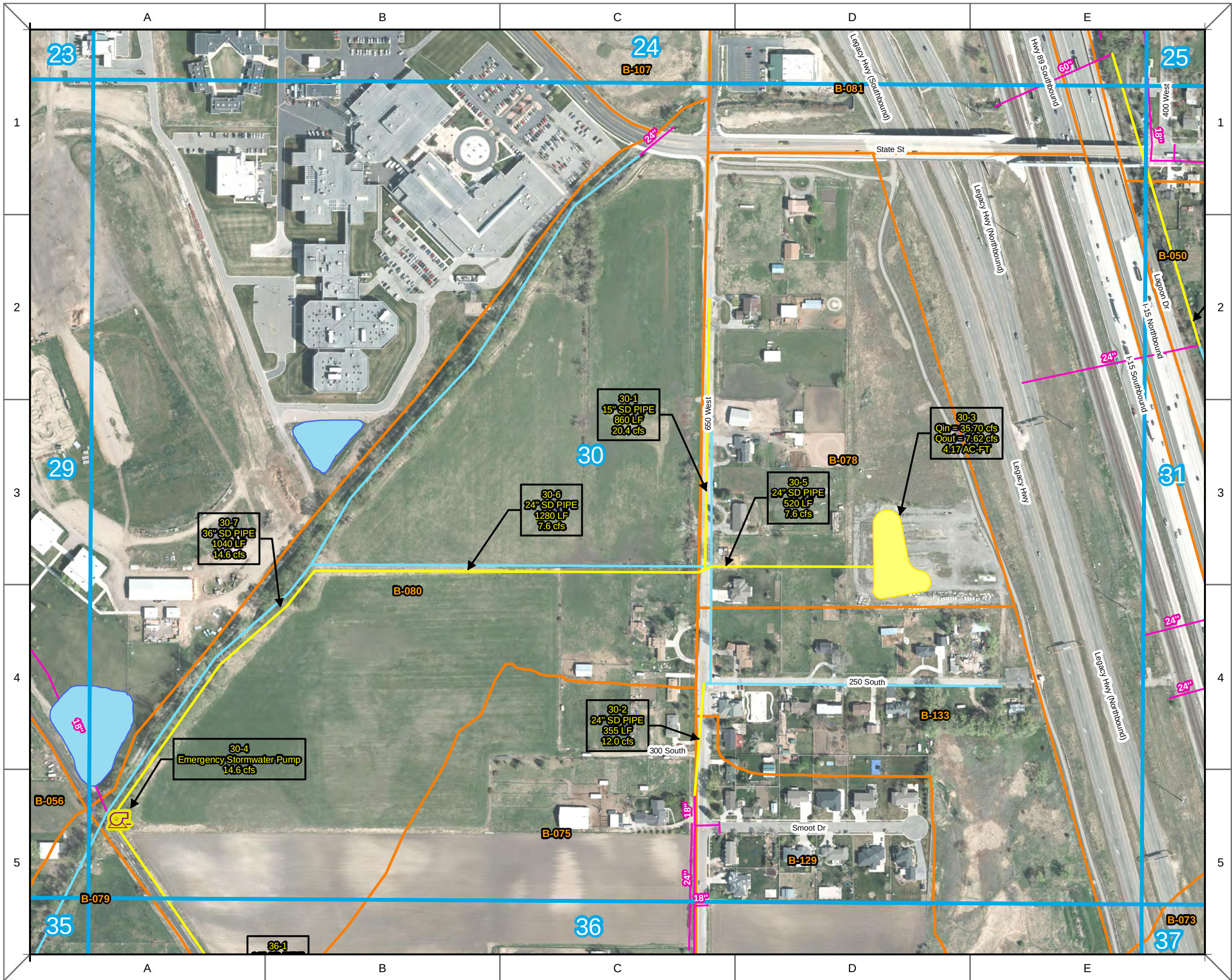
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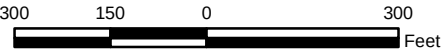
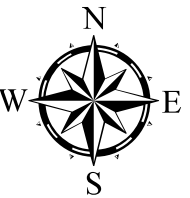
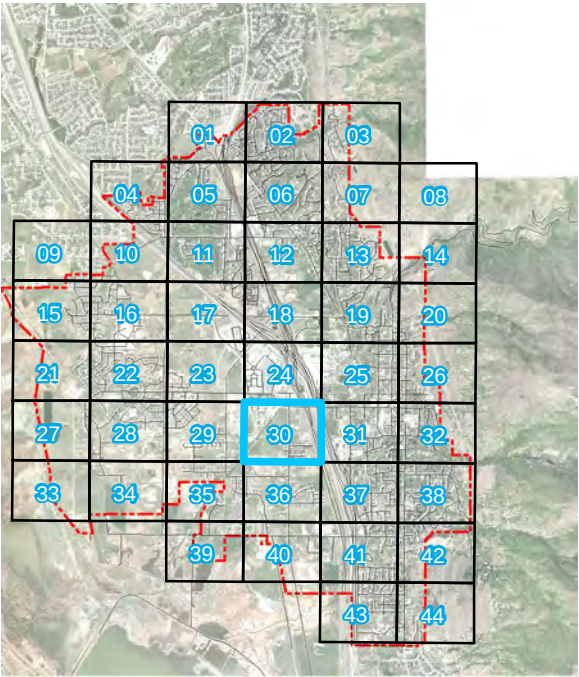


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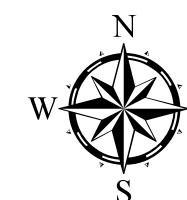
HISTORIC BEGINNINGS • 1847

FARMINGTON CITY
STORM DRAIN MASTER PLAN

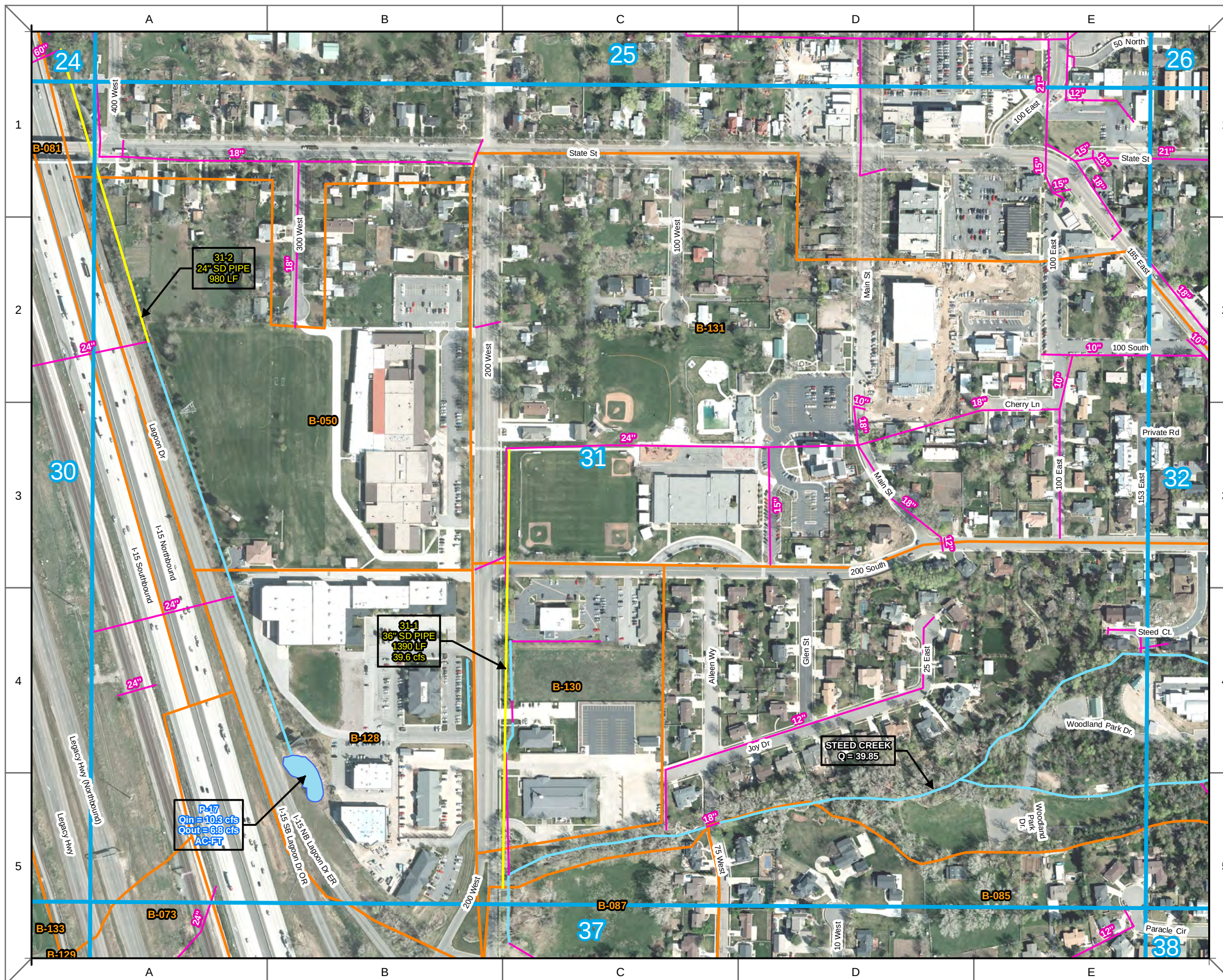


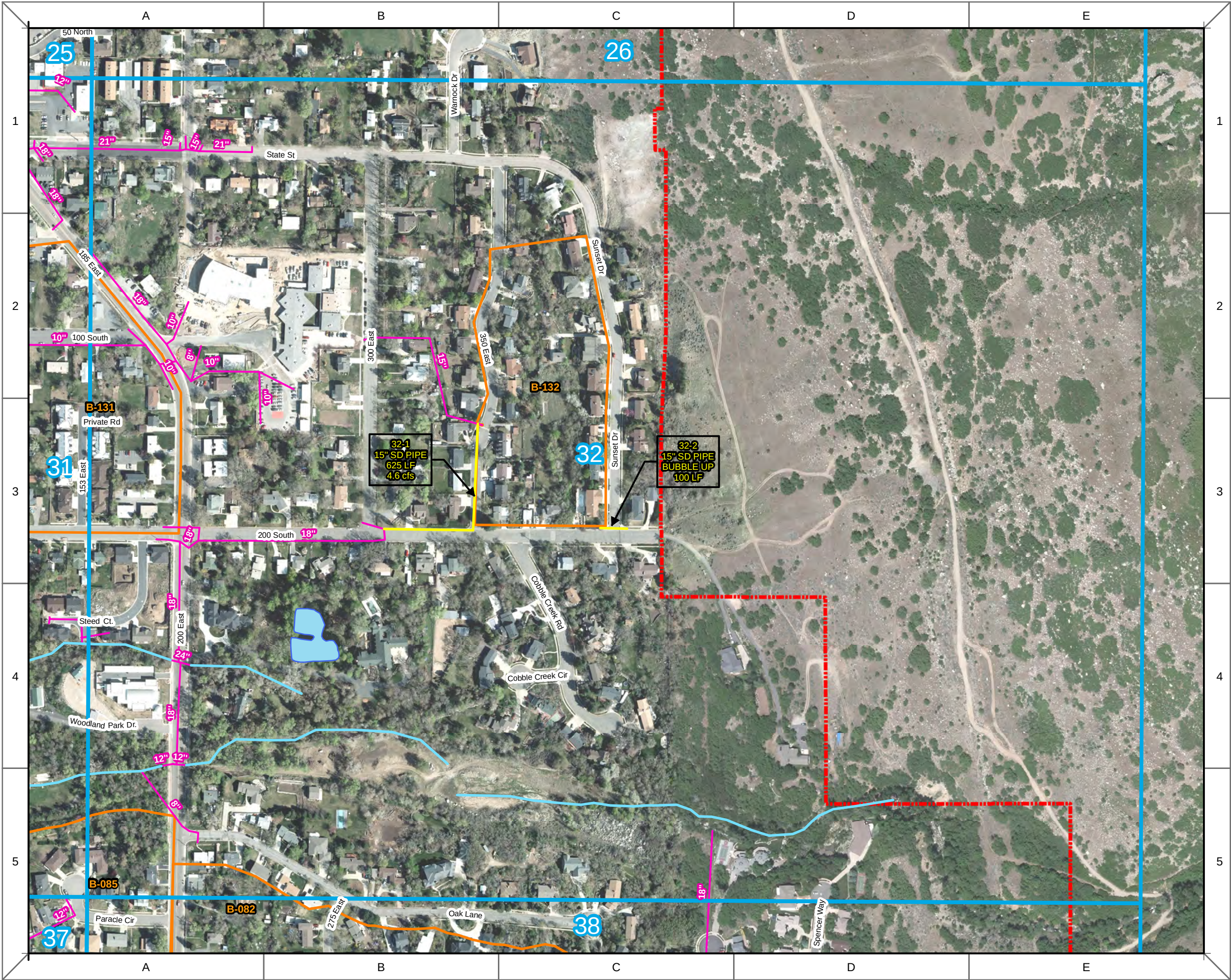


An aerial photograph of a city grid, likely New York City, with a 10x10 grid of numbered cells overlaid. The cells are numbered 01 through 44. Cell 31 is highlighted with a thick blue border. Red dashed lines indicate a path or boundary through the grid, starting from the top left and ending at the bottom right.



300 150 0 300 Fee



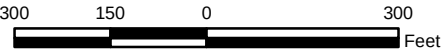
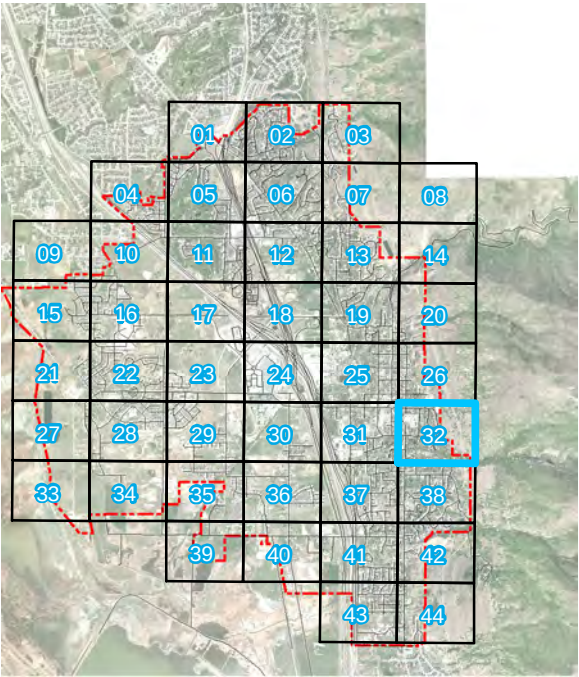


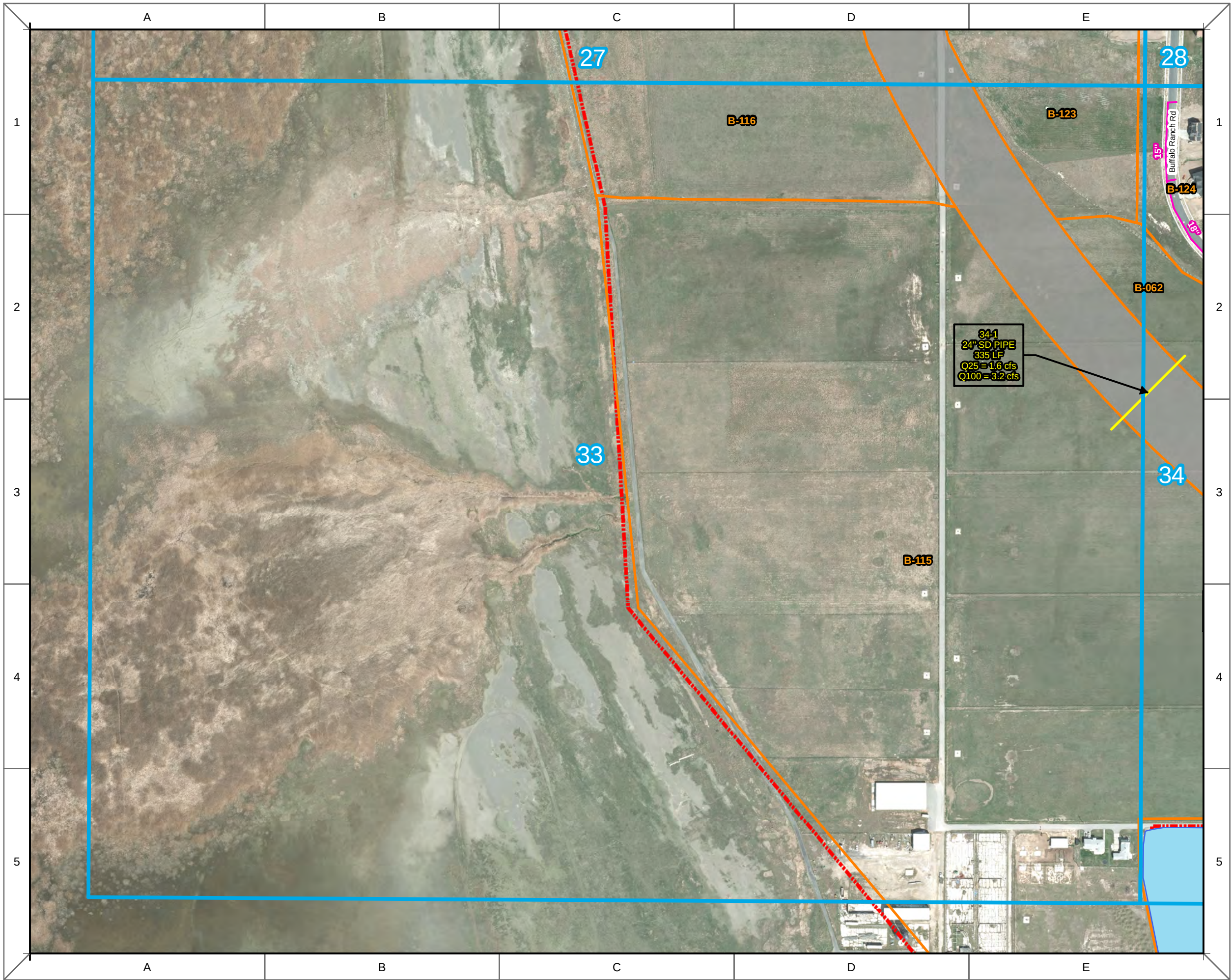
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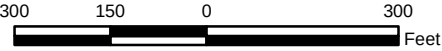
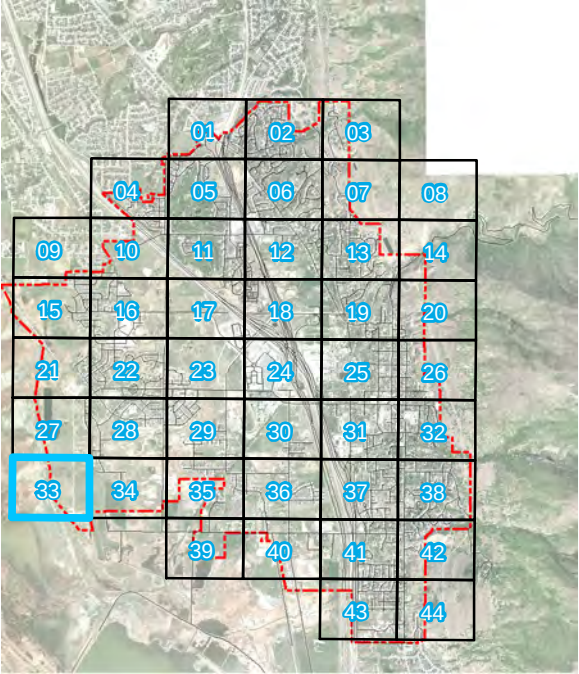


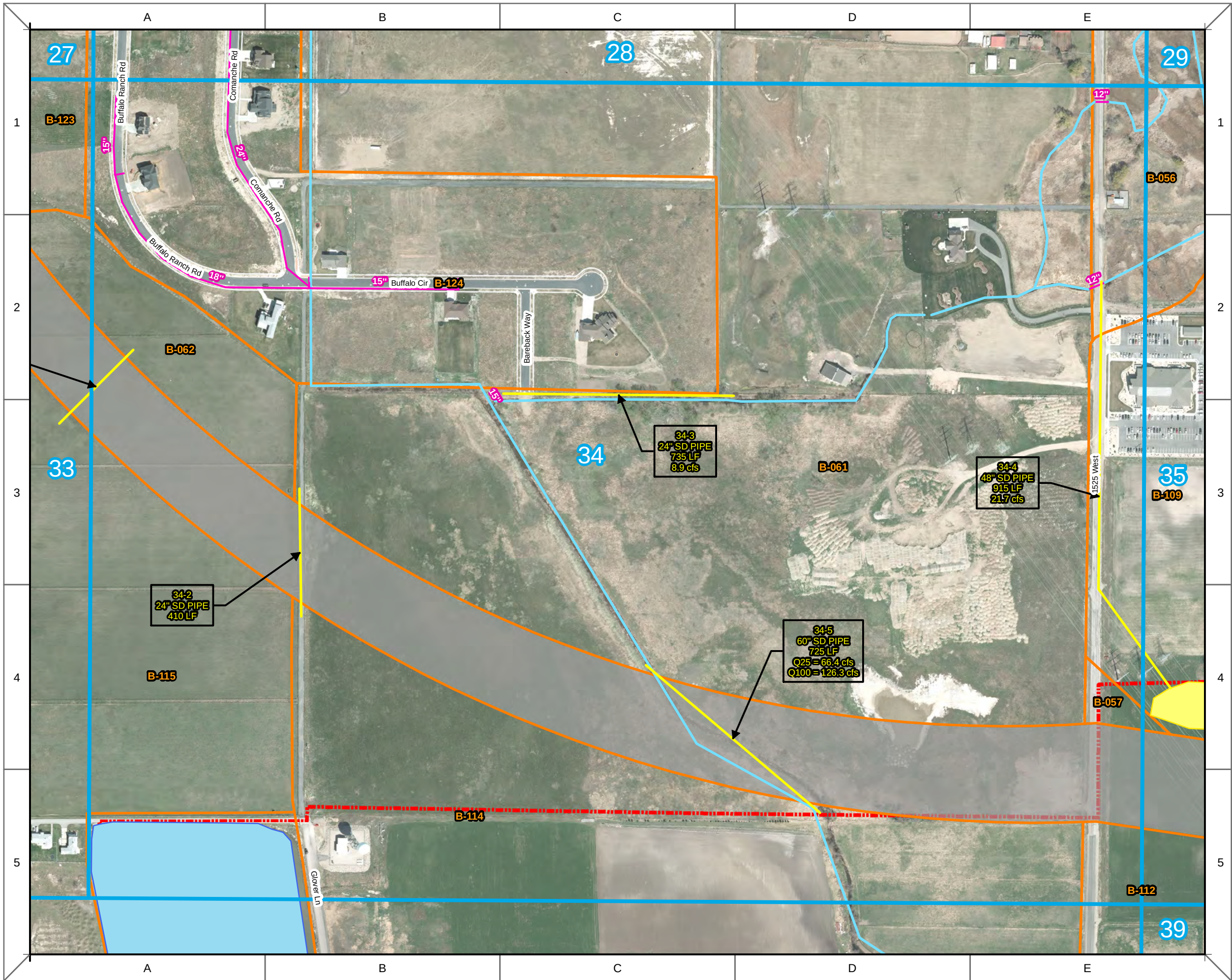
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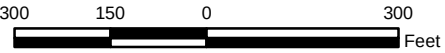
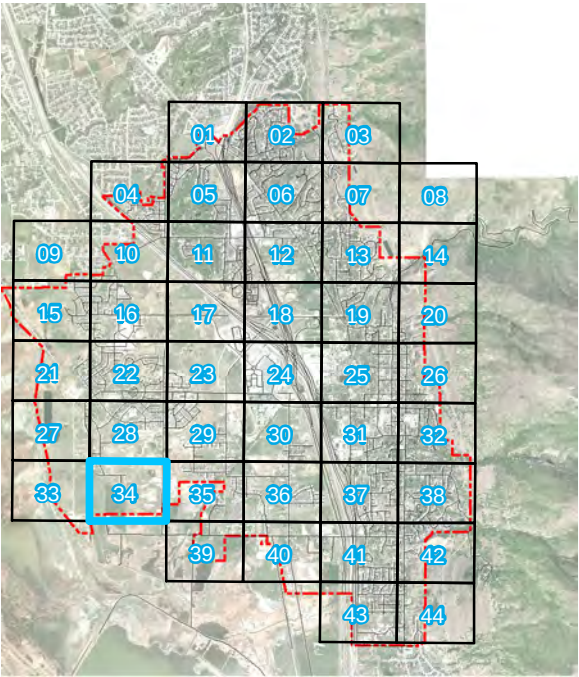


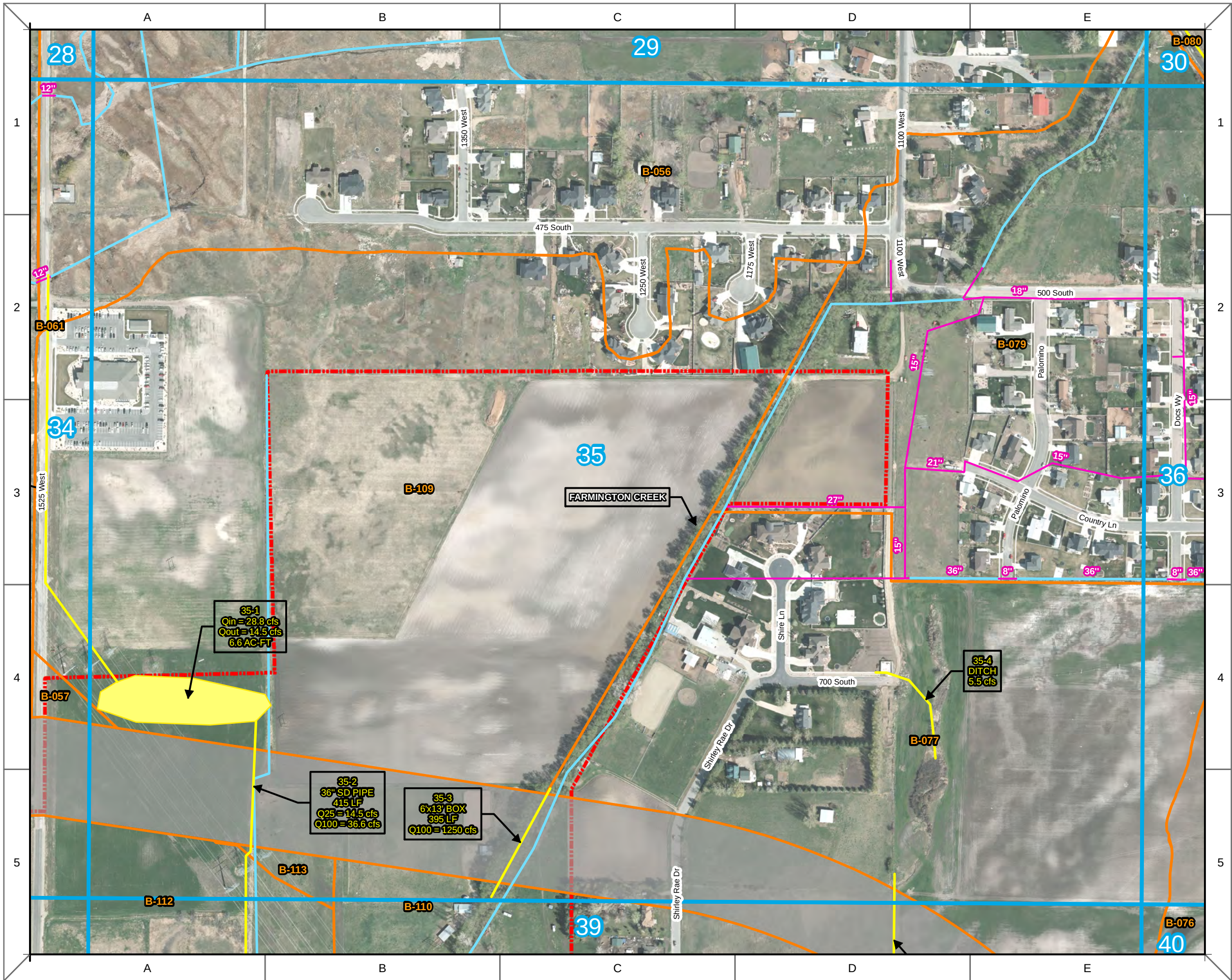
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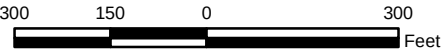
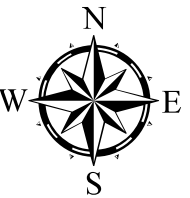
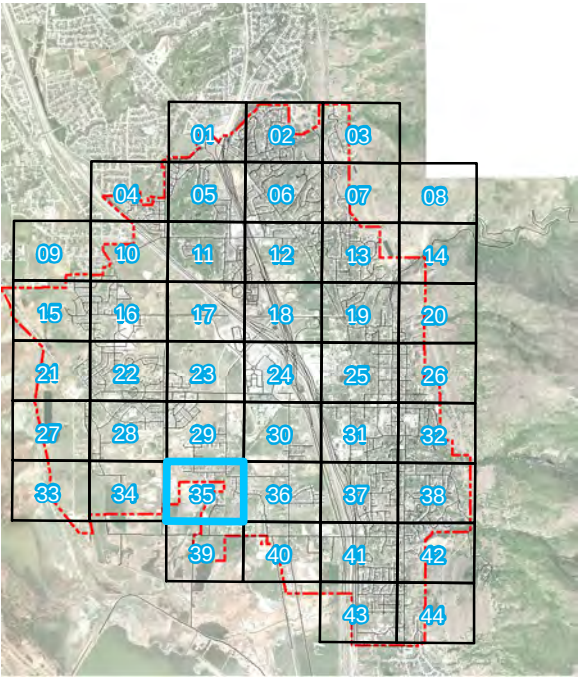


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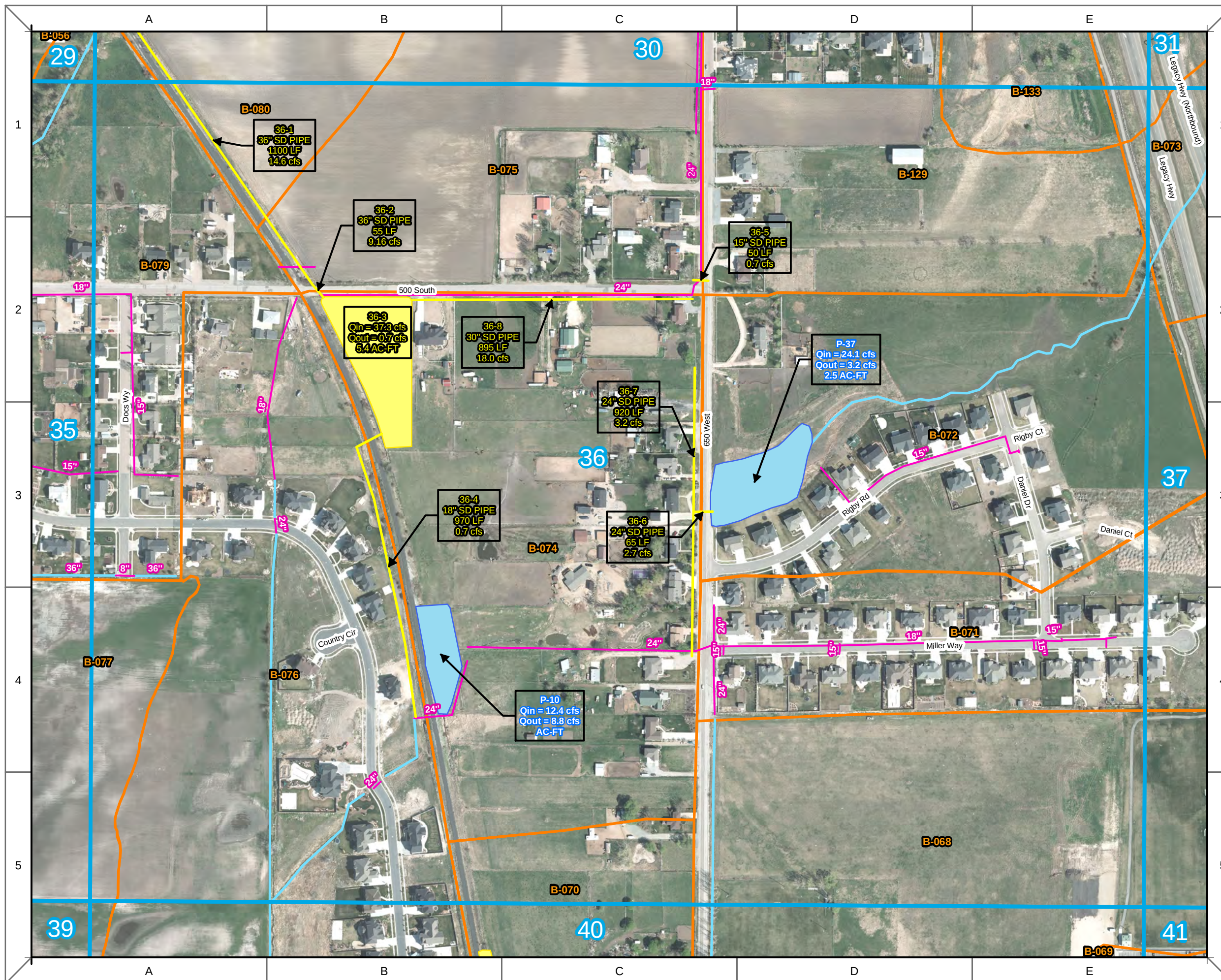
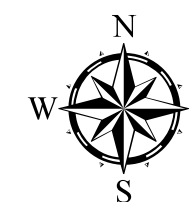
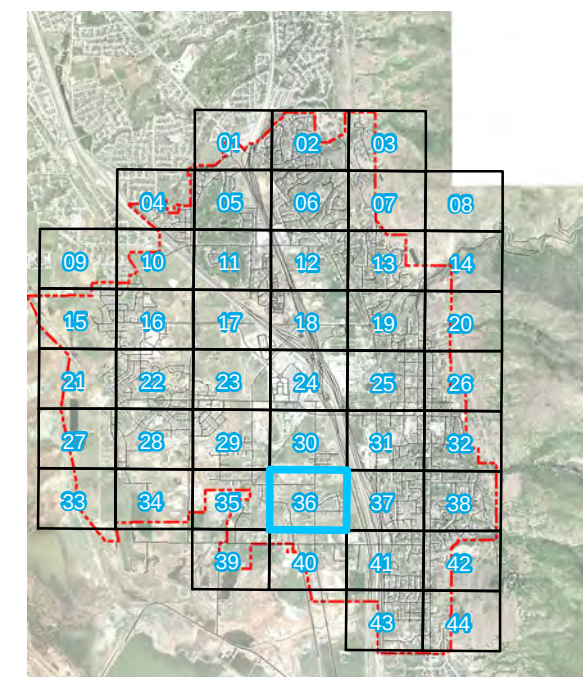
HISTORIC BEGINNINGS • 1847

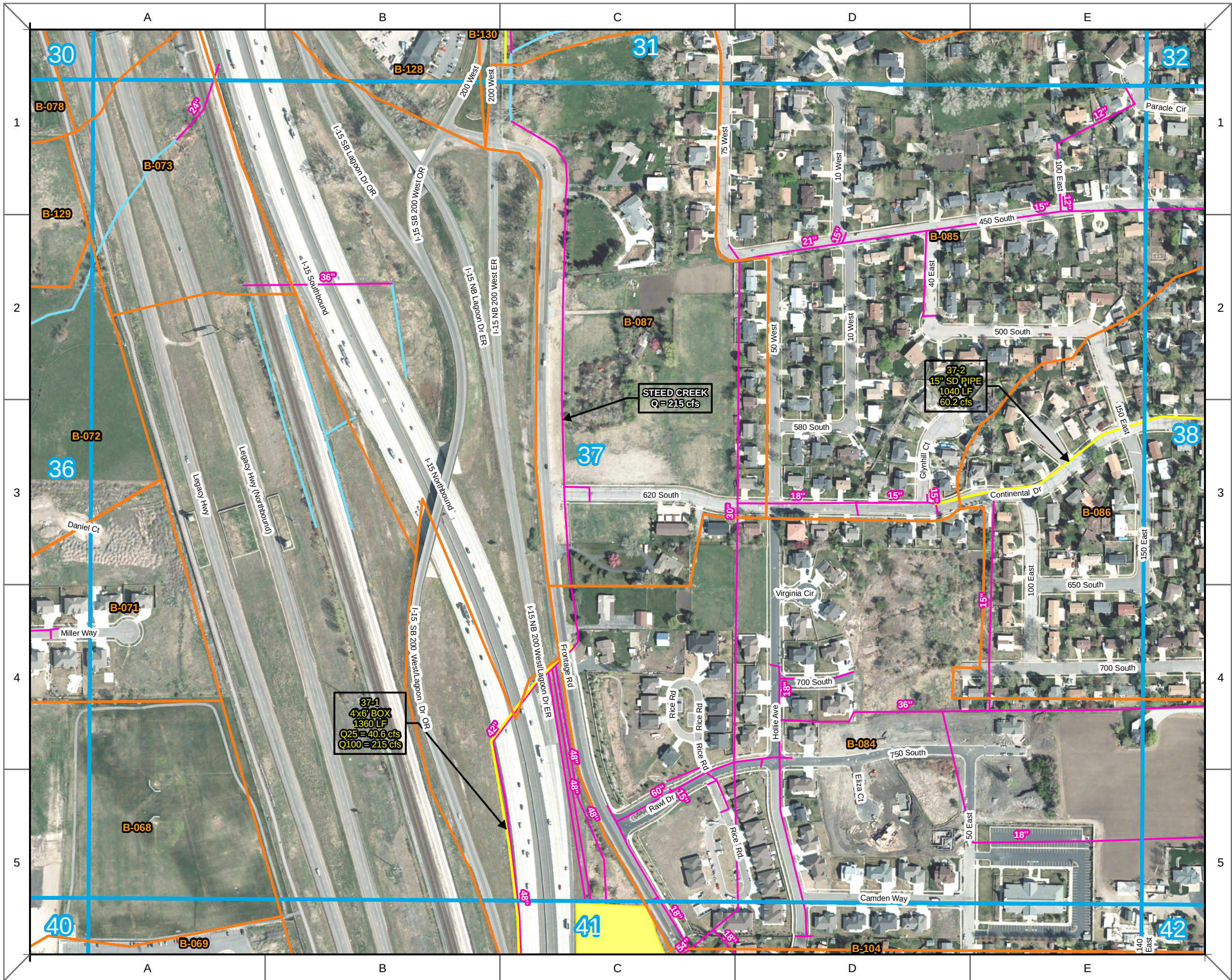
FARMINGTON CITY
STORM DRAIN MASTER PLAN





FARMINGTON CITY STORM DRAIN MASTER PLAN



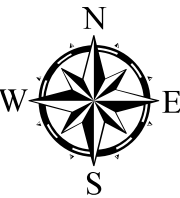
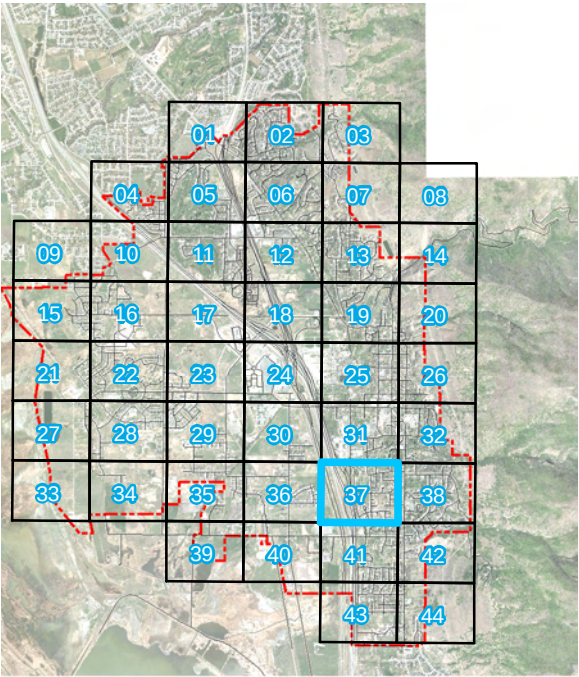


GRID # 37



HISTORIC BEGINNINGS • 1847

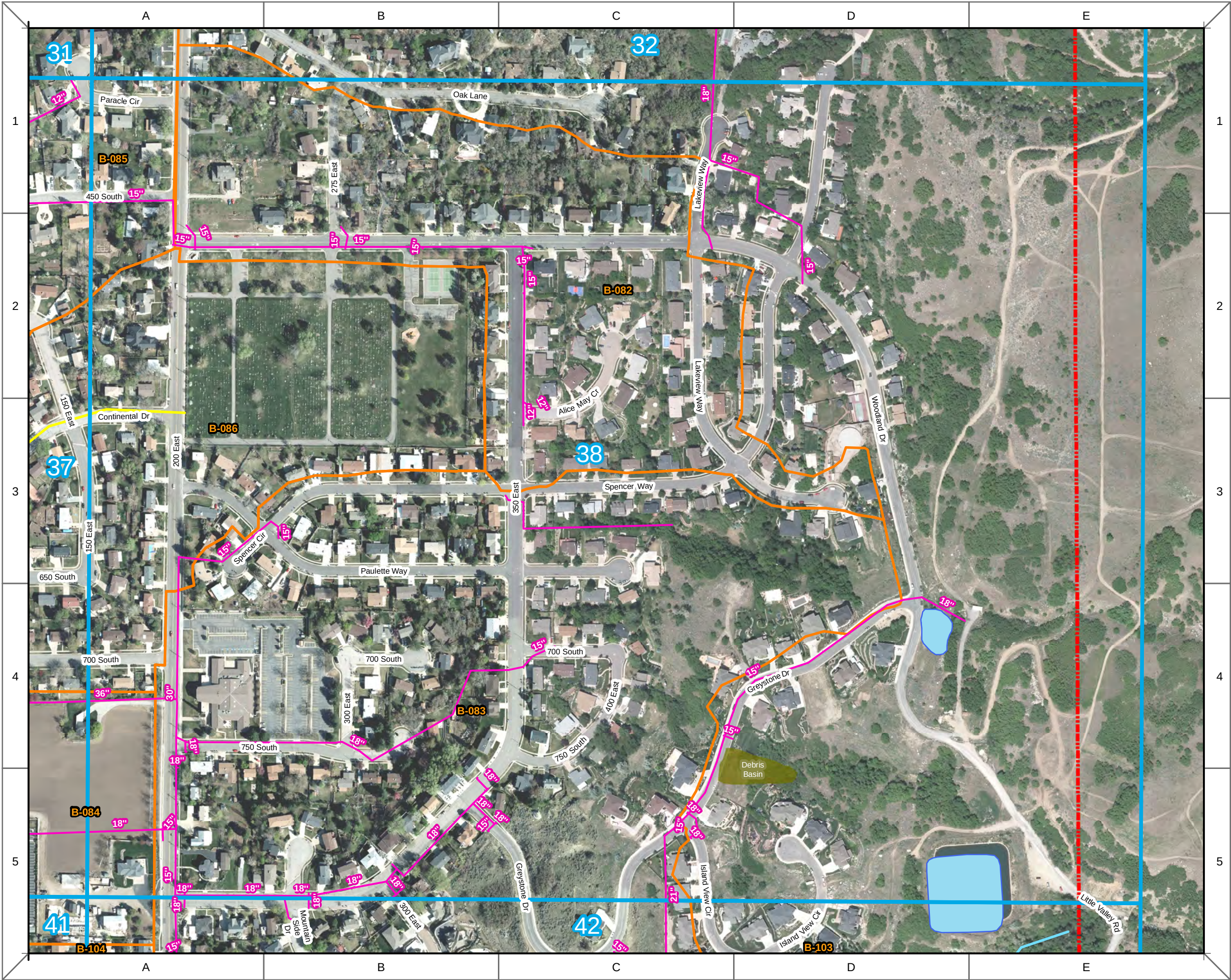
FARMINGTON CITY
STORM DRAIN MASTER PLAN



300 150 0 300
Feet

Date: 9/5/2014



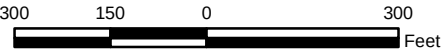
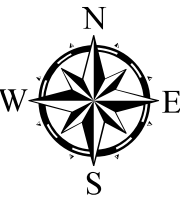
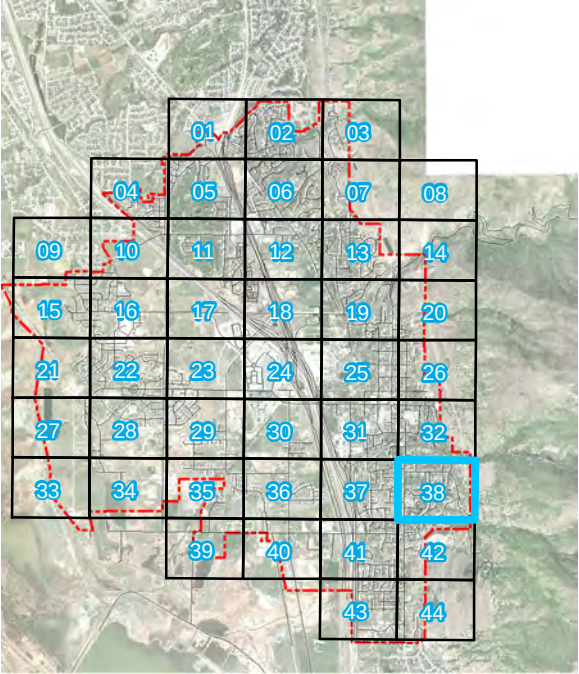


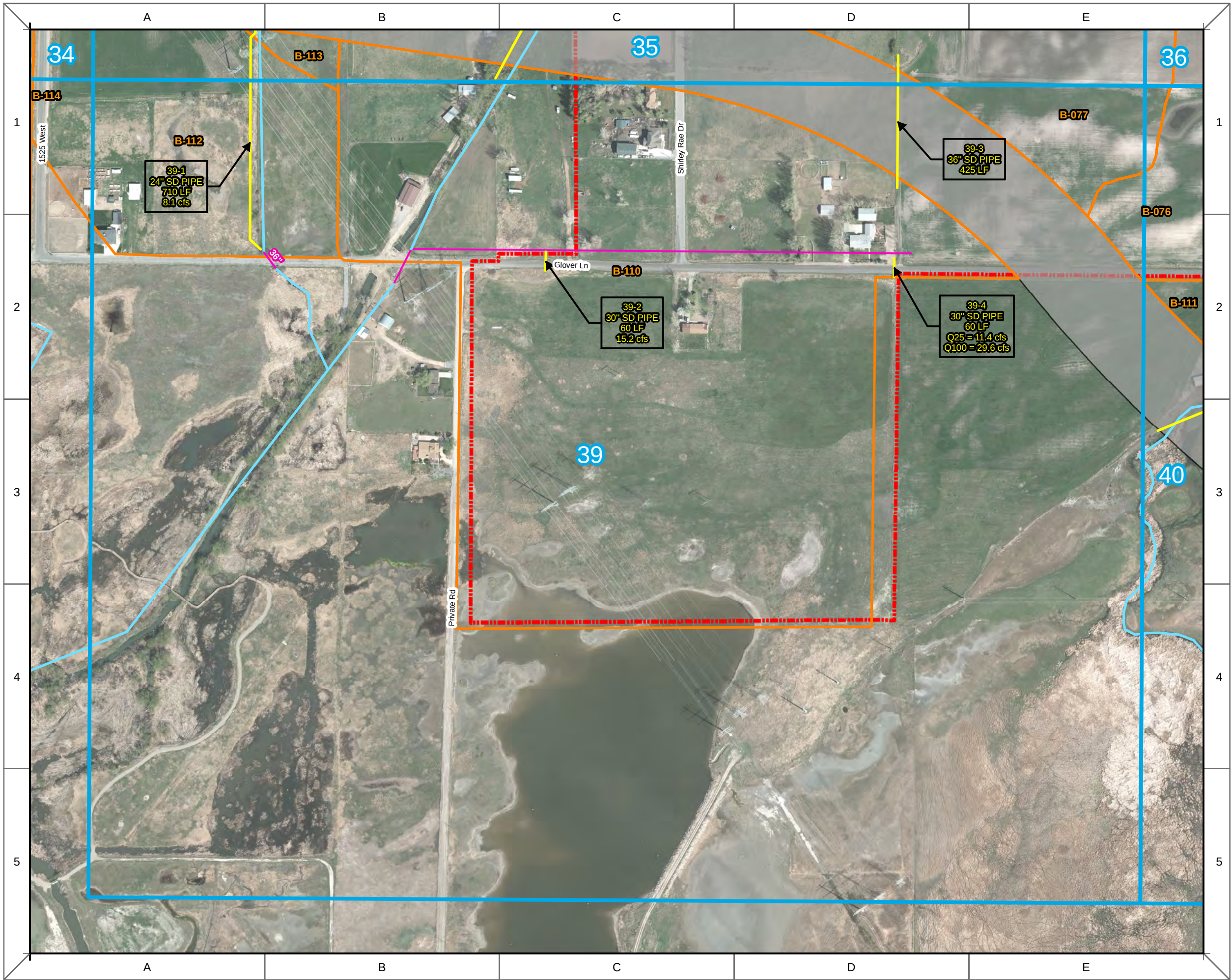
GRID # 38



HISTORIC BEGINNINGS • 1847

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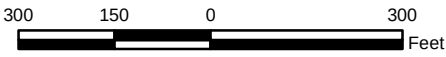
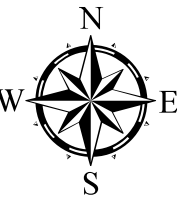
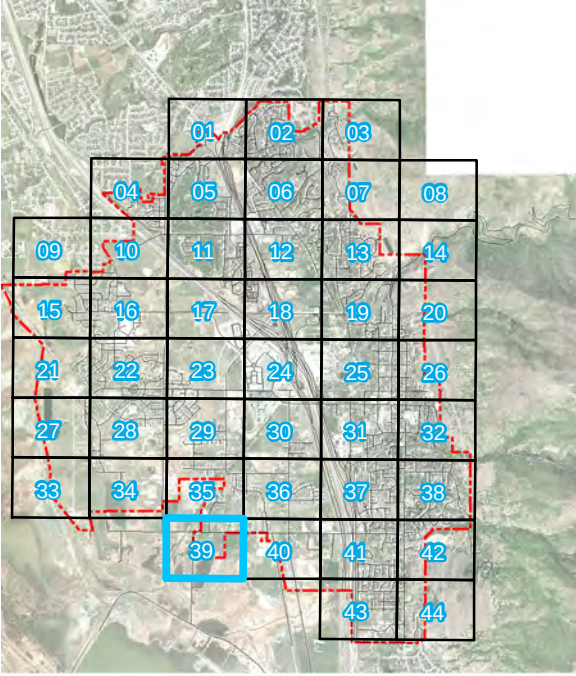


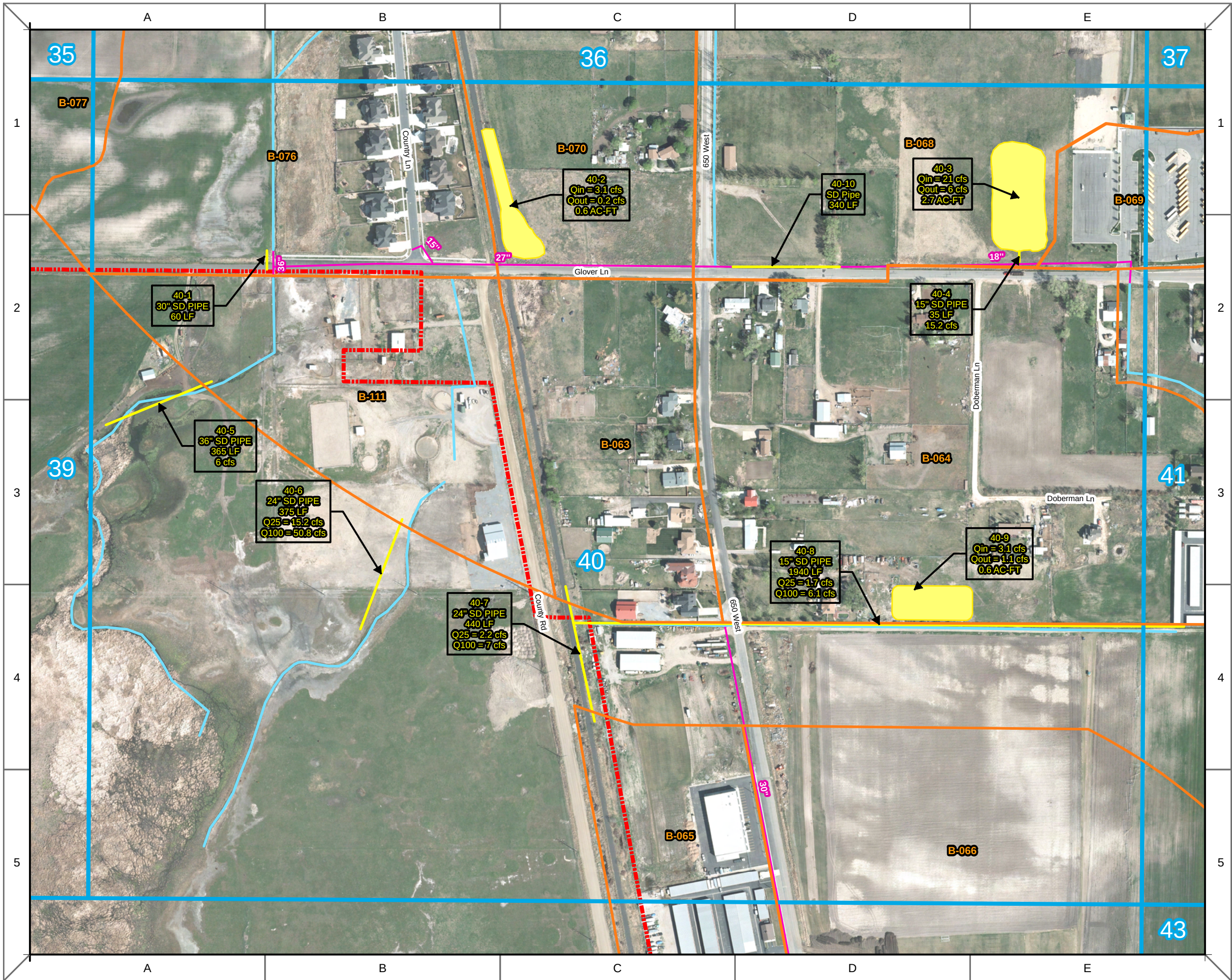
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HISTORIC BEGINNINGS • 1847

FARMINGTON CITY
STORM DRAIN MASTER PLAN



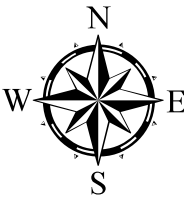
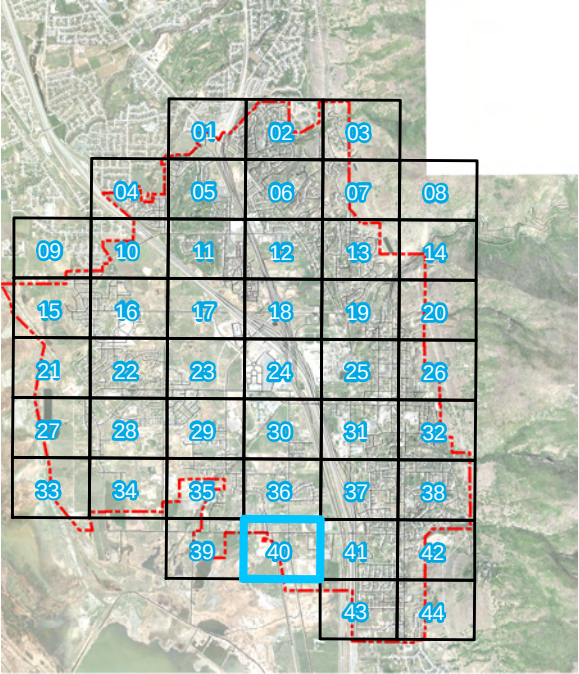


GRID # 40



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FARMINGTON CITY STORM DRAIN MASTER PLAN



300 150 0 300 Feet

Date: 8/19/2015



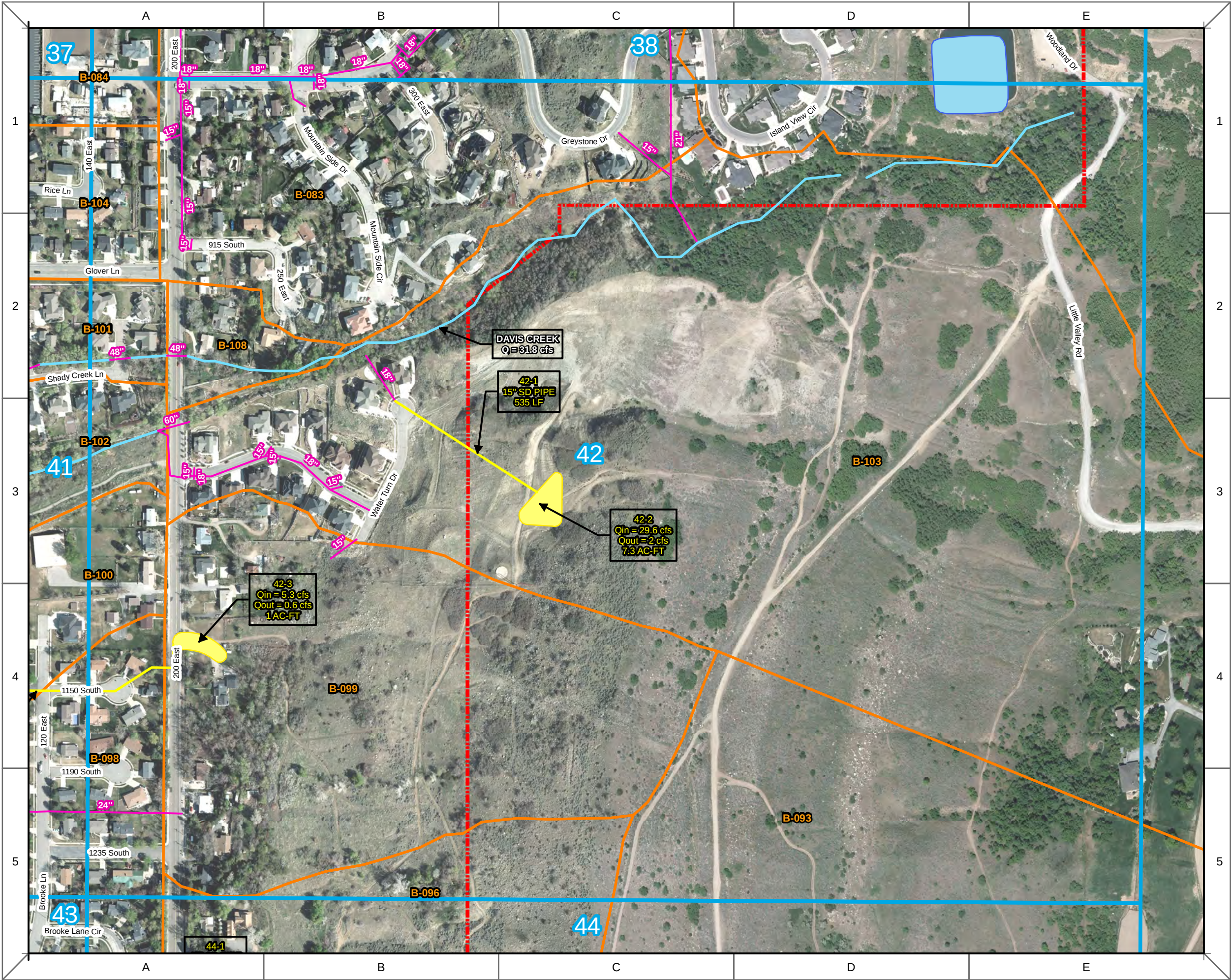


An aerial photograph of a city grid with a 10x10 grid of numbered cells. The cells are numbered 01 to 44, with some cells missing (e.g., 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44). The cell 41 is highlighted with a blue border. Red dashed lines indicate a path or boundary across the grid.



A horizontal scale bar with a black border. It is divided into three segments by two vertical lines. The left segment is labeled '300', the middle segment is labeled '150', and the right segment is labeled '300'. The word 'Feet' is written at the far right end of the bar.



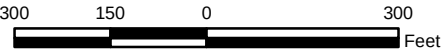
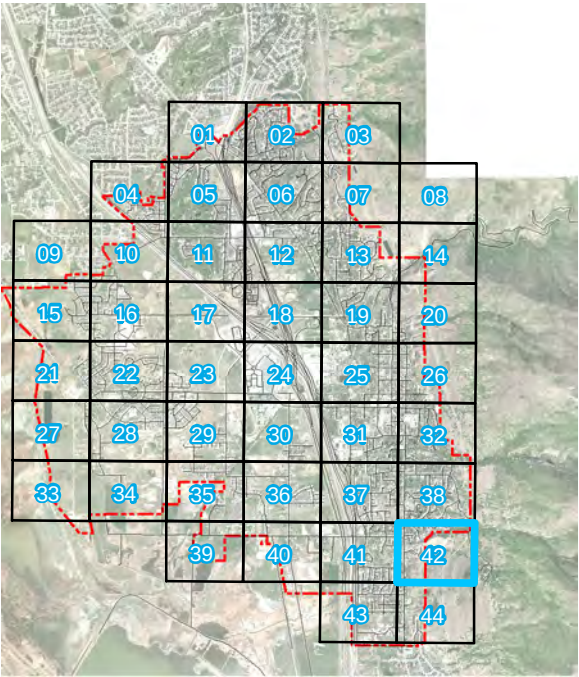


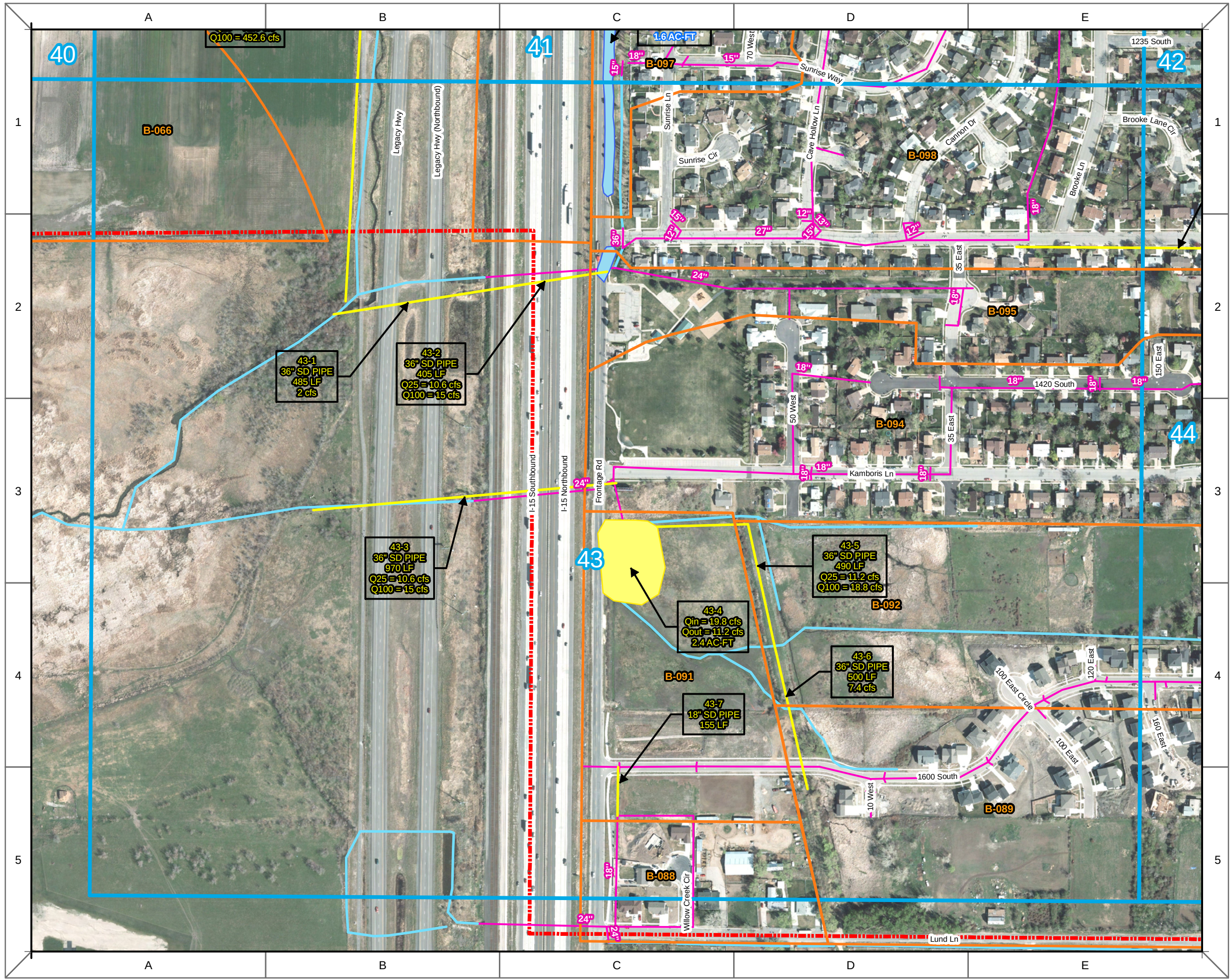
GRID # 42



HISTORIC BEGINNINGS • 1847

FARMINGTON CITY
STORM DRAIN MASTER PLAN



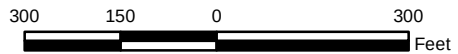
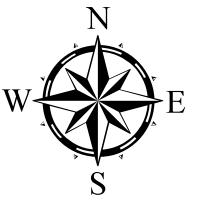
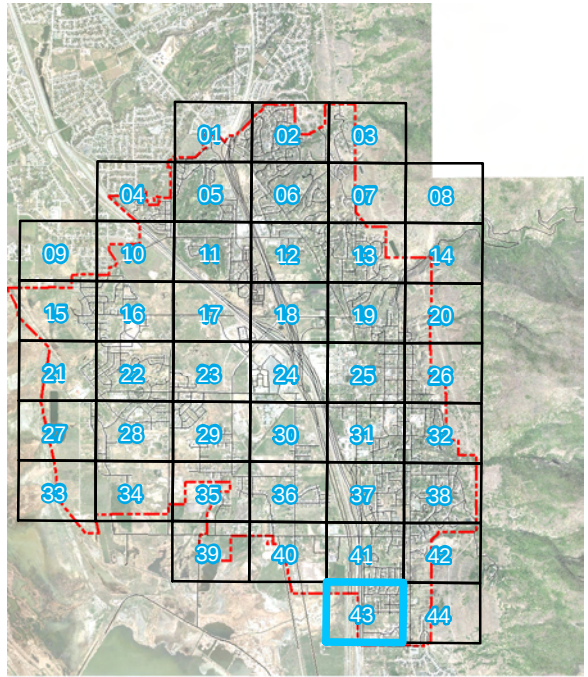


GRID # 43



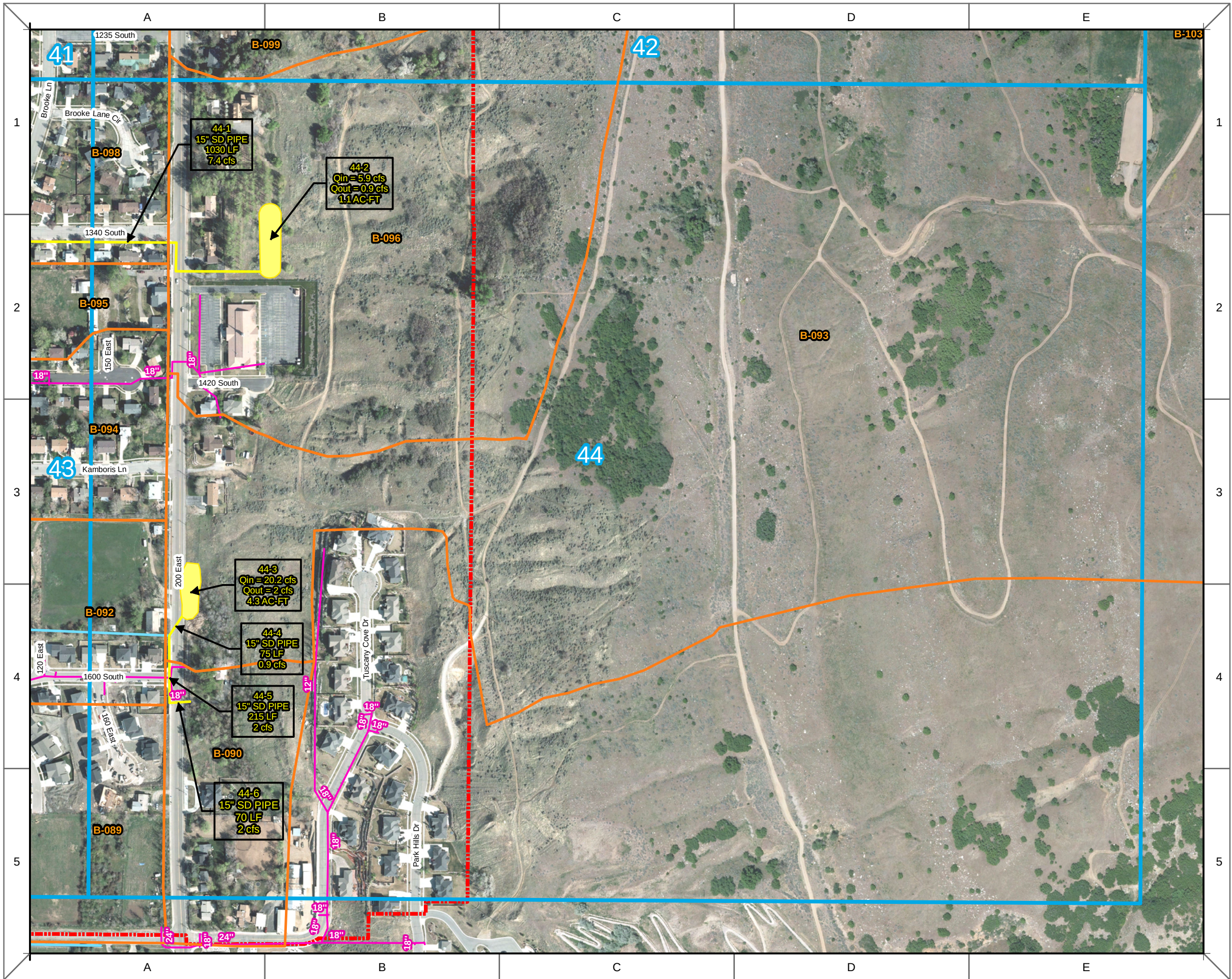
HISTORIC BEGINNINGS • 1847

FARMINGTON CITY
STORM DRAIN MASTER PLAN



Date: 9/5/2014



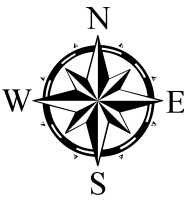
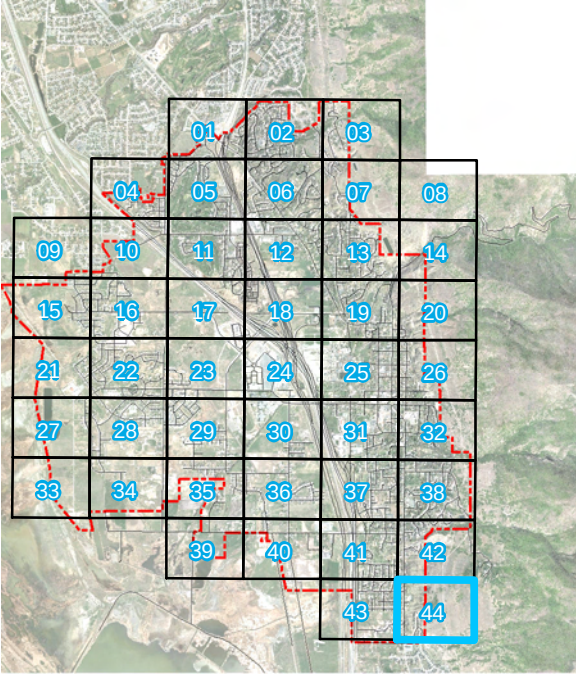


GRID # 44



HISTORIC BEGINNINGS • 1847

FARMINGTON CITY STORM DRAIN MASTER PLAN



300 150 0 300 Feet

Date: 9/5/2014





APPENDIX C

FARMINGTON CITY STORM DRAIN MASTER PLAN

20 YEAR PROJECT COSTS

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
Grid 1										
01-1	Detention Pond: 0.3 AC-FT									
1	Land Acquisition	0.10	ACRE	\$150,000.00	\$ 15,000.00	\$ -	\$ -	\$ 51,911.12	\$ -	Complete
2	Excavation - Grading	485	CY	\$ 7.75	\$ 3,758.75					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	45	CY	\$ 55.00	\$ 2,475.00					
5	Erosion control	10%	%	-	\$ 3,323.38					
Subtotal					\$ 36,557.13					
6	Engineering - Design & Construction	12%	%	-	\$ 4,386.86					
7	Mobilization	10%	%	-	\$ 3,655.71					
8	Contingency	20%	%	-	\$ 7,311.43	0%	0%	100%	0%	
Item Subtotal					\$ 51,911.12					
Grid 4										
04-1	Detention Pond: 0.5 AC-FT									
1	Land Acquisition	0.17	ACRE	\$150,000.00	\$ 25,000.00	\$ -	\$ -	\$ 73,613.16	\$ -	6-13
2	Excavation - Grading	810	CY	\$ 7.75	\$ 6,277.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	70	CY	\$ 55.00	\$ 3,850.00					
5	Erosion control	10%	%	-	\$ 4,712.75					
Subtotal					\$ 51,840.25					
6	Engineering - Design & Construction	12%	%	-	\$ 6,220.83					
7	Mobilization	10%	%	-	\$ 5,184.03					
8	Contingency	20%	%	-	\$ 10,368.05	0%	0%	100%	0%	
Item Subtotal					\$ 73,613.16					
04-2	Detention Pond: 0.2 AC-FT									
1	Land Acquisition	0.07	ACRE	\$150,000.00	\$ 10,000.00	\$ -	\$ -	\$ 40,875.59	\$ -	Complete
2	Excavation - Grading	325	CY	\$ 7.75	\$ 2,518.75					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	30	CY	\$ 55.00	\$ 1,650.00					
5	Erosion control	10%	%	-	\$ 2,616.88					
Subtotal					\$ 28,785.63					
6	Engineering - Design & Construction	12%	%	-	\$ 3,454.28					
7	Mobilization	10%	%	-	\$ 2,878.56					
8	Contingency	20%	%	-	\$ 5,757.13	0%	0%	100%	0%	
Item Subtotal					\$ 40,875.59					
Grid 5										
05-1	Storm Drain Pipe									
1	15" RCP	620	LF	\$ 55.00	\$ 34,100.00	\$ -	\$ -	\$ 71,852.00	\$ -	0-6
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
Subtotal					\$ 50,600.00					
3	Engineering - Design & Construction	12%	%	-	\$ 6,072.00					
4	Mobilization	10%	%	-	\$ 5,060.00					
5	Contingency	20%	%	-	\$ 10,120.00	0%	0%	100%	0%	
Item Subtotal					\$ 71,852.00					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
05-2	Storm Drain Pipe									
1	18" RCP	1440	LF	\$ 60.00	\$ 86,400.00	\$ 16,040.13	\$ -	\$ 145,697.87	\$ -	0-6
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00					
	Subtotal				\$ 113,900.00					
3	Engineering - Design & Construction	12%	%	-	\$ 13,668.00					
4	Mobilization	10%	%	-	\$ 11,390.00					
5	Contingency	20%	%	-	\$ 22,780.00					
Item Subtotal					\$ 161,738.00	10%	0%	90%	0%	
05-3	Detention Pond									
						0%	0%	100%	0%	Complete
Grid 7										
07-1	Detention Pond: 0.3 AC-FT									
1	Land Acquisition	0.10	ACRE	\$150,000.00	\$ 15,000.00	\$ -	\$ -	\$ 51,911.12	\$ -	Complete
2	Excavation - Grading	485	CY	\$ 7.75	\$ 3,758.75					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	45	CY	\$ 55.00	\$ 2,475.00					
5	Erosion control	10%	%	-	\$ 3,323.38					
	Subtotal				\$ 36,557.13					
6	Engineering - Design & Construction	12%	%	-	\$ 4,386.86					
7	Mobilization	10%	%	-	\$ 3,655.71					
8	Contingency	20%	%	-	\$ 7,311.43					
Item Subtotal					\$ 51,911.12	0%	0%	100%	0%	
07-2	Storm Drain Pipe									
1	15" RCP	400	LF	\$ 55.00	\$ 22,000.00	\$ -	\$ -	\$ 46,860.00	\$ -	Complete
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
	Subtotal				\$ 33,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 3,960.00					
4	Mobilization	10%	%	-	\$ 3,300.00					
5	Contingency	20%	%	-	\$ 6,600.00					
Item Subtotal					\$ 46,860.00	0%	0%	100%	0%	
07-3	Storm Drain Pipe									
1	15" RCP	440	LF	\$ 55.00	\$ 24,200.00	\$ -	\$ -	\$ 67,478.40	\$ -	Complete
2	Asphalt restoration	1760	SF	\$ 7.00	\$ 12,320.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
	Subtotal				\$ 47,520.00					
4	Engineering - Design & Construction	12%	%	-	\$ 5,702.40					
5	Mobilization	10%	%	-	\$ 4,752.00					
6	Contingency	20%	%	-	\$ 9,504.00					
Item Subtotal					\$ 67,478.40	0%	0%	100%	0%	
Grid 11										
11-1	Control Structure									
1	Diversion Box	1	EA	\$ 22,000.00	\$ 22,000.00	\$ 31,240.00	\$ -	\$ -	\$ -	0-6
	Subtotal				\$ 22,000.00					
2	Engineering - Design & Construction	12%	%	-	\$ 2,640.00					
3	Mobilization	10%	%	-	\$ 2,200.00					
4	Contingency	20%	%	-	\$ 4,400.00					
Item Subtotal					\$ 31,240.00	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
Grid 12										
12-1 Detention Pond: 1.4 AC-FT										
1	Land Acquisition	0.47	ACRE	\$150,000.00	\$ 70,000.00					
2	Excavation - Grading	2260	CY	\$ 7.75	\$ 17,515.00					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	190	CY	\$ 55.00	\$ 10,450.00					
5	Erosion control	10%	%	-	\$ 10,996.50					
	Subtotal				\$ 120,961.50	\$ -	\$ -	\$ 171,765.33	\$ -	6-13
6	Engineering - Design & Construction	12%	%	-	\$ 14,515.38					
7	Mobilization	10%	%	-	\$ 12,096.15					
8	Contingency	20%	%	-	\$ 24,192.30					
	Item Subtotal				\$ 171,765.33	0%	0%	100%	0%	
12-2 Storm Drain Pipe										
1	15" RCP	285	LF	\$ 55.00	\$ 15,675.00					
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
	Subtotal				\$ 21,175.00	\$ -	\$ -	\$ 30,068.50	\$ -	6-13
3	Engineering - Design & Construction	12%	%	-	\$ 2,541.00					
4	Mobilization	10%	%	-	\$ 2,117.50					
5	Contingency	20%	%	-	\$ 4,235.00					
	Item Subtotal				\$ 30,068.50	0%	0%	100%	0%	
12-3 Storm Drain Pipe										
1	24" RCP	1090	LF	\$ 75.00	\$ 81,750.00					
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
	Subtotal				\$ 103,750.00	\$ -	\$ 24,148.01	\$ 123,176.99	\$ -	6-13
3	Engineering - Design & Construction	12%	%	-	\$ 12,450.00					
4	Mobilization	10%	%	-	\$ 10,375.00					
5	Contingency	20%	%	-	\$ 20,750.00					
	Item Subtotal				\$ 147,325.00	0%	16%	84%	0%	
12-4 Storm Drain Pipe										
1	15" RCP	870	LF	\$ 55.00	\$ 47,850.00					
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
	Subtotal				\$ 64,350.00	\$ -	\$ -	\$ 91,377.00	\$ -	6-13
3	Engineering - Design & Construction	12%	%	-	\$ 7,722.00					
4	Mobilization	10%	%	-	\$ 6,435.00					
5	Contingency	20%	%	-	\$ 12,870.00					
	Item Subtotal				\$ 91,377.00	0%	0%	100%	0%	
12-5 Storm Drain Pipe										
1	24" RCP	570	LF	\$ 75.00	\$ 42,750.00					
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
	Subtotal				\$ 53,750.00	\$ -	\$ 18,915.33	\$ 57,409.67	\$ -	6-13
3	Engineering - Design & Construction	12%	%	-	\$ 6,450.00					
4	Mobilization	10%	%	-	\$ 5,375.00					
5	Contingency	20%	%	-	\$ 10,750.00					
	Item Subtotal				\$ 76,325.00	0%	25%	75%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
12-6 Storm Drain Pipe										
1	24" RCP	60	LF	\$ 75.00	\$ 4,500.00	\$ -	\$ 1,598.65	\$ 18,224.55	\$ -	0-6
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
3	Remove culvert	60	LF	\$ 10.00	\$ 600.00					
4	Asphalt restoration	480	SF	\$ 7.00	\$ 3,360.00					
<i>Subtotal</i>					\$ 13,960.00					
5	Engineering - Design & Construction	12%	%	-	\$ 1,675.20					
6	Mobilization	10%	%	-	\$ 1,396.00					
7	Contingency	20%	%	-	\$ 2,792.00					
Item Subtotal					\$ 19,823.20	0%	8%	92%	0%	
12-7 Storm Drain Pipe										
1	15" RCP	30	LF	\$ 55.00	\$ 1,650.00	\$ 4,728.60	\$ -	\$ -	\$ -	6-13
2	Asphalt restoration	240	SF	\$ 7.00	\$ 1,680.00					
<i>Subtotal</i>					\$ 3,330.00					
3	Engineering - Design & Construction	12%	%	-	\$ 399.60					
4	Mobilization	10%	%	-	\$ 333.00					
5	Contingency	20%	%	-	\$ 666.00					
Item Subtotal					\$ 4,728.60	100%	0%	0%	0%	
12-8 Storm Drain Pipe										
1	18" RCP	120	LF	\$ 60.00	\$ 7,200.00	\$ -	\$ -	\$ 10,224.00	\$ -	6-13
<i>Subtotal</i>					\$ 7,200.00					
2	Engineering - Design & Construction	12%	%	-	\$ 864.00					
3	Mobilization	10%	%	-	\$ 720.00					
4	Contingency	20%	%	-	\$ 1,440.00					
Item Subtotal					\$ 10,224.00	0%	0%	100%	0%	
12-9 Storm Drain Pipe										
1	18" RCP	130	LF	\$ 60.00	\$ 7,800.00	\$ -	\$ -	\$ 11,076.00	\$ -	6-13
<i>Subtotal</i>					\$ 7,800.00					
2	Engineering - Design & Construction	12%	%	-	\$ 936.00					
3	Mobilization	10%	%	-	\$ 780.00					
4	Contingency	20%	%	-	\$ 1,560.00					
Item Subtotal					\$ 11,076.00	0%	0%	100%	0%	
Grid 15										
15-1 Storm Drain Pipe										
1	60" RCP	260	LF	\$ 300.00	\$ 78,000.00	\$ -	\$ -	\$ -	\$ 133,480.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
<i>Subtotal</i>					\$ 94,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 11,280.00					
4	Mobilization	10%	%	-	\$ 9,400.00					
5	Contingency	20%	%	-	\$ 18,800.00					
Item Subtotal					\$ 133,480.00	0%	0%	0%	100%	
15-2 Storm Drain Pipe										
1	36" RCP	280	LF	\$ 100.00	\$ 28,000.00	\$ -	\$ -	\$ -	\$ 62,480.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
<i>Subtotal</i>					\$ 44,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,280.00					
4	Mobilization	10%	%	-	\$ 4,400.00					
5	Contingency	20%	%	-	\$ 8,800.00					
Item Subtotal					\$ 62,480.00	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
15-3 Storm Drain Pipe										
1	42" RCP	350	LF	\$ 135.00	\$ 47,250.00	\$ -	\$ -	\$ -	\$ 89,815.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
Subtotal				\$ 63,250.00						
3	Engineering - Design & Construction	12%	%	-	\$ 7,590.00					
4	Mobilization	10%	%	-	\$ 6,325.00					
5	Contingency	20%	%	-	\$ 12,650.00	0%	0%	0%	100%	
Item Subtotal				\$ 89,815.00						
15-4 Storm Drain Pipe										
1	24" RCP	365	LF	\$ 75.00	\$ 27,375.00	\$ -	\$ -	\$ -	\$ 61,592.50	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
Subtotal				\$ 43,375.00						
3	Engineering - Design & Construction	12%	%	-	\$ 5,205.00					
4	Mobilization	10%	%	-	\$ 4,337.50					
5	Contingency	20%	%	-	\$ 8,675.00	0%	0%	0%	100%	
Item Subtotal				\$ 61,592.50						
Grid 16										
16-1 Storm Drain Pipe										
1	24" RCP	305	LF	\$ 75.00	\$ 22,875.00	\$ 40,292.50	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
Subtotal				\$ 28,375.00						
3	Engineering - Design & Construction	12%	%	-	\$ 3,405.00					
4	Mobilization	10%	%	-	\$ 2,837.50					
5	Contingency	20%	%	-	\$ 5,675.00	100%	0%	0%	0%	
Item Subtotal				\$ 40,292.50						
16-2 Storm Drain Pipe										
1	24" RCP	885	LF	\$ 75.00	\$ 66,375.00	\$ 117,682.50	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
Subtotal				\$ 82,875.00						
3	Engineering - Design & Construction	12%	%	-	\$ 9,945.00					
4	Mobilization	10%	%	-	\$ 8,287.50					
5	Contingency	20%	%	-	\$ 16,575.00	100%	0%	0%	0%	
Item Subtotal				\$ 117,682.50						
Grid 17										
17-1 Storm Drain Pipe										
1	24" RCP	680	LF	\$ 75.00	\$ 51,000.00	\$ 88,040.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
Subtotal				\$ 62,000.00						
3	Engineering - Design & Construction	12%	%	-	\$ 7,440.00					
4	Mobilization	10%	%	-	\$ 6,200.00					
5	Contingency	20%	%	-	\$ 12,400.00	100%	0%	0%	0%	
Item Subtotal				\$ 88,040.00						
17-2 Storm Drain Pipe										
1	24" RCP	490	LF	\$ 75.00	\$ 36,750.00	\$ 67,805.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
Subtotal				\$ 47,750.00						
3	Engineering - Design & Construction	12%	%	-	\$ 5,730.00					
4	Mobilization	10%	%	-	\$ 4,775.00					
5	Contingency	20%	%	-	\$ 9,550.00	100%	0%	0%	0%	
Item Subtotal				\$ 67,805.00						

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)														
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority				
17-3 Storm Drain Pipe														
1	24" RCP	540	LF	\$ 75.00	\$ 40,500.00	\$ 73,130.00	\$ -	\$ -	\$ -	0-6				
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00									
Subtotal				\$ 51,500.00										
3	Engineering - Design & Construction	12%	%	-	\$ 6,180.00									
4	Mobilization	10%	%	-	\$ 5,150.00									
5	Contingency	20%	%	-	\$ 10,300.00									
Item Subtotal					\$ 73,130.00	100%	0%	0%	0%					
17-4 Storm Drain Pipe														
1	24" RCP	1050	LF	\$ 75.00	\$ 78,750.00	\$ 135,255.00	\$ -	\$ -	\$ -	0-6				
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00									
Subtotal				\$ 95,250.00										
3	Engineering - Design & Construction	12%	%	-	\$ 11,430.00									
4	Mobilization	10%	%	-	\$ 9,525.00									
5	Contingency	20%	%	-	\$ 19,050.00									
Item Subtotal					\$ 135,255.00	100%	0%	0%	0%					
17-5 Storm Drain Pipe														
1	15" RCP	140	LF	\$ 55.00	\$ 7,700.00	\$ -	\$ 18,744.00	\$ -	\$ -	0-6 Complete				
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00									
Subtotal				\$ 13,200.00										
3	Engineering - Design & Construction	12%	%	-	\$ 1,584.00									
4	Mobilization	10%	%	-	\$ 1,320.00									
5	Contingency	20%	%	-	\$ 2,640.00									
Item Subtotal					\$ 18,744.00	0%	100%	0%	0%					
Grid 18														
18-1 Detention Pond: 6.5 AC-FT														
1	Land Acquisition	2.17	ACRE	\$150,000.00	\$ 325,000.00	\$ 364,275.97	\$ -	\$ 364,275.97	\$ -	0-6				
2	Excavation - Grading	10490	CY	\$ 7.75	\$ 81,297.50									
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00									
4	Granular base (3")	875	CY	\$ 55.00	\$ 48,125.00									
5	Erosion control	10%	%	-	\$ 46,642.25									
Subtotal				\$ 513,064.75										
6	Engineering - Design & Construction	12%	%	-	\$ 61,567.77									
7	Mobilization	10%	%	-	\$ 51,306.48									
8	Contingency	20%	%	-	\$ 102,612.95									
Item Subtotal					\$ 728,551.95	50%	0%	50%	0%					
18-2 Storm Drain Pipe														
1	24" RCP	130	LF	\$ 75.00	\$ 9,750.00	\$ -	\$ 13,845.00	\$ -	\$ -	0-6				
Subtotal				\$ 9,750.00										
2	Engineering - Design & Construction	12%	%	-	\$ 1,170.00									
3	Mobilization	10%	%	-	\$ 975.00									
4	Contingency	20%	%	-	\$ 1,950.00									
Item Subtotal					\$ 13,845.00	0%	100%	0%	0%					
18-3 Storm Drain Pipe														
1	18" RCP	1110	LF	\$ 60.00	\$ 66,600.00	\$ -	\$ -	\$ 125,812.00	\$ -	0-6				
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00									
Subtotal				\$ 88,600.00										
3	Engineering - Design & Construction	12%	%	-	\$ 10,632.00									
4	Mobilization	10%	%	-	\$ 8,860.00									
5	Contingency	20%	%	-	\$ 17,720.00									
Item Subtotal					\$ 125,812.00	0%	0%	100%	0%					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
Grid 19										
19-1	Storm Drain Pipe									
1	24" RCP	40	LF	\$ 75.00	\$ 3,000.00					
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
3	Remove culvert	40	LF	\$ 10.00	\$ 400.00					
4	Asphalt restoration	320	SF	\$ 7.00	\$ 2,240.00					
	<i>Subtotal</i>				\$ 11,140.00					
5	Engineering - Design & Construction	12%	%	-	\$ 1,336.80					
6	Mobilization	10%	%	-	\$ 1,114.00					
7	Contingency	20%	%	-	\$ 2,228.00					
	Item Subtotal				\$ 15,818.80	0%	100%	0%	0%	0-6
Grid 21										
21-1	Storm Drain Pipe									
1	48" RCP	300	LF	\$ 165.00	\$ 49,500.00					
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
	<i>Subtotal</i>				\$ 65,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 7,860.00					
4	Mobilization	10%	%	-	\$ 6,550.00					
5	Contingency	20%	%	-	\$ 13,100.00					
	Item Subtotal				\$ 93,010.00	0%	0%	0%	100%	0-6
21-2	Storm Drain Pipe									
1	36" RCP	280	LF	\$ 100.00	\$ 28,000.00					
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
	<i>Subtotal</i>				\$ 44,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,280.00					
4	Mobilization	10%	%	-	\$ 4,400.00					
5	Contingency	20%	%	-	\$ 8,800.00					
	Item Subtotal				\$ 62,480.00	0%	0%	0%	100%	0-6
21-3	Storm Drain Pipe									
1	36" RCP	450	LF	\$ 100.00	\$ 45,000.00					
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
	<i>Subtotal</i>				\$ 61,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 7,320.00					
4	Mobilization	10%	%	-	\$ 6,100.00					
5	Contingency	20%	%	-	\$ 12,200.00					
	Item Subtotal				\$ 86,620.00	0%	0%	0%	100%	0-6
Grid 22										
22-1	Storm Drain Pipe									
1	3' x 6' RCB	100	LF	\$ 620.00	\$ 62,000.00					
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
	<i>Subtotal</i>				\$ 67,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 8,100.00					
4	Mobilization	10%	%	-	\$ 6,750.00					
5	Contingency	20%	%	-	\$ 13,500.00					
	Item Subtotal				\$ 95,850.00	100%	0%	0%	0%	0-6

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
Grid 23										
23-1	Detention Pond: 13.3 AC-FT									
1	Land Acquisition	4.43	ACRE	\$150,000.00	\$ 665,000.00	\$ 1,431,482.80	\$ -	\$ -	\$ -	0-6
2	Excavation - Grading	21460	CY	\$ 7.75	\$ 166,315.00					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	1790	CY	\$ 55.00	\$ 98,450.00					
Subtotal					\$ 941,765.00					
5	Erosion control	10%	%	-	\$ 94,176.50					
6	Engineering - Design & Construction	12%	%	-	\$ 113,011.80					
7	Mobilization	10%	%	-	\$ 94,176.50					
8	Contingency	20%	%	-	\$ 188,353.00	100%	0%	0%	0%	
Item Subtotal					\$ 1,431,482.80					
23-2	Detention Pond: 2.1 AC-FT									
1	Land Acquisition	0.70	ACRE	\$150,000.00	\$ 105,000.00	\$ 241,600.20	\$ -	\$ -	\$ -	0-6
2	Excavation - Grading	3390	CY	\$ 7.75	\$ 26,272.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	285	CY	\$ 55.00	\$ 15,675.00					
Subtotal					\$ 158,947.50					
5	Erosion control	10%	%	-	\$ 15,894.75					
6	Engineering - Design & Construction	12%	%	-	\$ 19,073.70					
7	Mobilization	10%	%	-	\$ 15,894.75					
8	Contingency	20%	%	-	\$ 31,789.50	100%	0%	0%	0%	
Item Subtotal					\$ 241,600.20					
23-3	Storm Drain Pipe									
1	48" RCP	130	LF	\$ 165.00	\$ 21,450.00	\$ 53,179.00	\$ -	\$ -	\$ -	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
Subtotal					\$ 37,450.00					
3	Engineering - Design & Construction	12%	%	-	\$ 4,494.00					
4	Mobilization	10%	%	-	\$ 3,745.00					
5	Contingency	20%	%	-	\$ 7,490.00	100%	0%	0%	0%	
Item Subtotal					\$ 53,179.00					
Grid 27										
27-1	Storm Drain Pipe									
1	30" RCP	340	LF	\$ 90.00	\$ 30,600.00	\$ -	\$ -	\$ -	\$ 66,172.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
Subtotal					\$ 46,600.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,592.00					
4	Mobilization	10%	%	-	\$ 4,660.00					
5	Contingency	20%	%	-	\$ 9,320.00	0%	0%	0%	100%	
Item Subtotal					\$ 66,172.00					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
27-2 Storm Drain Pipe										
1	60" RCP	650	LF	\$ 300.00	\$ 195,000.00	\$ -	\$ -	\$ -	\$ 299,620.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
<i>Subtotal</i>					\$ 211,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 25,320.00					
4	Mobilization	10%	%	-	\$ 21,100.00					
5	Contingency	20%	%	-	\$ 42,200.00					
Item Subtotal					\$ 299,620.00	0%	0%	0%	100%	
27-3 Storm Drain Pipe										
1	36" RCP	390	LF	\$ 100.00	\$ 39,000.00	\$ -	\$ -	\$ -	\$ 78,100.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
<i>Subtotal</i>					\$ 55,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 6,600.00					
4	Mobilization	10%	%	-	\$ 5,500.00					
5	Contingency	20%	%	-	\$ 11,000.00					
Item Subtotal					\$ 78,100.00	0%	0%	0%	100%	
Grid 29										
29-1 Detention Pond: 2.7 AC-FT										
1	Land Acquisition	0.90	ACRE	\$150,000.00	\$ 135,000.00	\$ -	\$ -	\$ 323,123.13	\$ -	0-6
2	Excavation - Grading	4360	CY	\$ 7.75	\$ 33,790.00					
3	Inlet / Outlet Structures	3	EA	\$ 6,000.00	\$ 18,000.00					
4	Granular base (3")	365	CY	\$ 55.00	\$ 20,075.00					
5	Erosion control	10%	%	-	\$ 20,686.50					
<i>Subtotal</i>					\$ 227,551.50					
6	Engineering - Design & Construction	12%	%	-	\$ 27,306.18					
7	Mobilization	10%	%	-	\$ 22,755.15					
8	Contingency	20%	%	-	\$ 45,510.30					
Item Subtotal					\$ 323,123.13	0%	0%	100%	0%	
29-2 Detention Pond: 12.2 AC-FT										
1	Excavation - Grading	19685	CY	\$ 7.75	\$ 152,558.75	\$ 550,049.20	\$ -	\$ -	\$ -	0-6
2	Inlet / Outlet Structures	3	EA	\$ 6,000.00	\$ 18,000.00					
3	Granular base (3")	1645	CY	\$ 55.00	\$ 90,475.00					
4	36" RCP (2) Previously Installed	1	LS	\$ 81,658.00	\$ 81,658.00					
5	Erosion control	10%	%	-	\$ 34,269.18					
<i>Subtotal</i>					\$ 376,960.93					
6	Engineering - Design & Construction	12%	%	-	\$ 60,000.00					
7	Mobilization	10%	%	-	\$ 37,696.09					
8	Contingency	20%	%	-	\$ 75,392.19					
Item Subtotal					\$ 550,049.20	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
Grid 30										
30-1 Storm Drain Pipe										
1	15" RCP	860	LF	\$ 55.00	\$ 47,300.00	\$ -	\$ -	\$ 158,983.20	\$ -	0-6
2	Asphalt restoration	6880	SF	\$ 7.00	\$ 48,160.00					
3	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
Subtotal					\$ 111,960.00					
4	Engineering - Design & Construction	12%	%	-	\$ 13,435.20					
5	Mobilization	10%	%	-	\$ 11,196.00					
6	Contingency	20%	%	-	\$ 22,392.00					
Item Subtotal					\$ 158,983.20	0%	0%	100%	0%	
30-3 Detention Pond: 4.17 AC-FT										
1	Land Acquisition	1.39	ACRE	\$150,000.00	\$ 208,500.00	\$ -	\$ -	\$ 465,058.17	\$ -	0-6
2	Excavation - Grading	6730	CY	\$ 7.75	\$ 52,157.50					
3	Inlet / Outlet Structures	1	EA	\$ 6,000.00	\$ 6,000.00					
4	Granular base (3")	565	CY	\$ 55.00	\$ 31,075.00					
5	Erosion control	10%	%	-	\$ 29,773.25					
Subtotal					\$ 327,505.75					
6	Engineering - Design & Construction	12%	%	-	\$ 39,300.69					
7	Mobilization	10%	%	-	\$ 32,750.58	0%	0%	100%	0%	
8	Contingency	20%	%	-	\$ 65,501.15					
Item Subtotal					\$ 465,058.17					
30-4 Emergency Pump										
1	Emergency Pump	1	EA	\$135,000.00	\$ 135,000.00	\$ 191,700.00	\$ -	\$ -	\$ -	7-13
Subtotal					\$ 135,000.00					
2	Engineering - Design & Construction	12%	%	-	\$ 16,200.00					
3	Mobilization	10%	%	-	\$ 13,500.00					
4	Contingency	20%	%	-	\$ 27,000.00	100%	0%	0%	0%	
Item Subtotal					\$ 191,700.00					
30-5 Storm Drain Pipe										
1	24" RCP	520	LF	\$ 75.00	\$ 39,000.00	\$ -	\$ -	\$ 71,000.00	\$ -	0-6
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
Subtotal					\$ 50,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 6,000.00					
4	Mobilization	10%	%	-	\$ 5,000.00					
5	Contingency	20%	%	-	\$ 10,000.00					
Item Subtotal					\$ 71,000.00	0%	0%	100%	0%	
30-6 Storm Drain Pipe										
1	24" RCP	1270	LF	\$ 75.00	\$ 95,250.00	\$ 174,305.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00					
Subtotal					\$ 122,750.00					
3	Engineering - Design & Construction	12%	%	-	\$ 14,730.00					
4	Mobilization	10%	%	-	\$ 12,275.00					
5	Contingency	20%	%	-	\$ 24,550.00					
Item Subtotal					\$ 174,305.00	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
30-7 Storm Drain Pipe										
1	36" RCP	1030	LF	\$ 100.00	\$ 103,000.00	\$ 185,310.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00					
				Subtotal	\$ 130,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 15,660.00					
4	Mobilization	10%	%	-	\$ 13,050.00					
5	Contingency	20%	%	-	\$ 26,100.00					
				Item Subtotal	\$ 185,310.00	100%	0%	0%	0%	
Grid 31										
31-1 Storm Drain Pipe										
1	36" RCP	1390	LF	\$ 100.00	\$ 139,000.00	\$ -	\$ 364,641.80	\$ -	\$ -	7-13
2	Remove culvert	695	LF	\$ 10.00	\$ 6,950.00					
3	Asphalt restoration	11120	SF	\$ 7.00	\$ 77,840.00					
4	Inlet/Combo/Junction Boxes	6	EA	\$ 5,500.00	\$ 33,000.00					
				Subtotal	\$ 256,790.00					
5	Engineering - Design & Construction	12%	%	-	\$ 30,814.80					
6	Mobilization	10%	%	-	\$ 25,679.00	0%	100%	0%	0%	
7	Contingency	20%	%	-	\$ 51,358.00					
				Item Subtotal	\$ 364,641.80					
31-2 Storm Drain Pipe										
1	24" RCP	970	LF	\$ 75.00	\$ 72,750.00	\$ 134,545.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
				Subtotal	\$ 94,750.00					
3	Engineering - Design & Construction	12%	%	-	\$ 11,370.00					
4	Mobilization	10%	%	-	\$ 9,475.00					
5	Contingency	20%	%	-	\$ 18,950.00	100%	0%	0%	0%	
				Item Subtotal	\$ 134,545.00					
Grid 34										
34-1 Storm Drain Pipe										
1	24" RCP	340	LF	\$ 75.00	\$ 25,500.00	\$ -	\$ -	\$ -	\$ 58,930.00	7-13
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				Subtotal	\$ 41,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 4,980.00					
4	Mobilization	10%	%	-	\$ 4,150.00					
5	Contingency	20%	%	-	\$ 8,300.00	0%	0%	0%	100%	
				Item Subtotal	\$ 58,930.00					
34-2 Storm Drain Pipe										
1	24" RCP	410	LF	\$ 75.00	\$ 30,750.00	\$ -	\$ -	\$ -	\$ 66,385.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				Subtotal	\$ 46,750.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,610.00					
4	Mobilization	10%	%	-	\$ 4,675.00					
5	Contingency	20%	%	-	\$ 9,350.00	0%	0%	0%	100%	
				Item Subtotal	\$ 66,385.00					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
34-3 Storm Drain Pipe										
1	24" RCP	740	LF	\$ 75.00	\$ 55,500.00	\$ 102,240.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
				Subtotal	\$ 72,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 8,640.00					
4	Mobilization	10%	%	-	\$ 7,200.00					
5	Contingency	20%	%	-	\$ 14,400.00	100%	0%	0%	0%	
				Item Subtotal	\$ 102,240.00					
34-4 Storm Drain Pipe										
1	48" RCP	1370	LF	\$ 165.00	\$ 226,050.00	\$ 252,014.50	\$ -	\$ 252,014.50	\$ -	0-6
2	Asphalt restoration	13700	SF	\$ 7.00	\$ 95,900.00					
3	Inlet/Combo/Junction Boxes	6	EA	\$ 5,500.00	\$ 33,000.00					
				Subtotal	\$ 354,950.00					
4	Engineering - Design & Construction	12%	%	-	\$ 42,594.00					
5	Mobilization	10%	%	-	\$ 35,495.00	50%	0%	50%	0%	
6	Contingency	20%	%	-	\$ 70,990.00					
				Item Subtotal	\$ 504,029.00					
34-5 Storm Drain Pipe										
1	60" RCP	730	LF	\$ 300.00	\$ 219,000.00	\$ -	\$ -	\$ -	\$ 356,420.00	0-6
2	Headwall Structure	4	EA	\$ 8,000.00	\$ 32,000.00					
				Subtotal	\$ 251,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 30,120.00					
4	Mobilization	10%	%	-	\$ 25,100.00					
5	Contingency	20%	%	-	\$ 50,200.00	0%	0%	0%	100%	
				Item Subtotal	\$ 356,420.00					
Grid 35										
35-1 Detention Pond: 6.6 AC-FT										
1	Land Acquisition	2.20	ACRE	\$150,000.00	\$ 330,000.00	\$ 73,958.75	\$ -	\$ 665,628.73	\$ -	0-6
2	Excavation - Grading	10650	CY	\$ 7.75	\$ 82,537.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	890	CY	\$ 55.00	\$ 48,950.00					
5	Erosion control	10%	%	-	\$ 47,348.75					
				Subtotal	\$ 520,836.25	10%	0%	90%	0%	
6	Engineering - Design & Construction	12%	%	-	\$ 62,500.35					
7	Mobilization	10%	%	-	\$ 52,083.63					
8	Contingency	20%	%	-	\$ 104,167.25					
				Item Subtotal	\$ 739,587.48					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
35-2 Storm Drain Pipe										
1	36" RCP	420	LF	\$ 100.00	\$ 42,000.00	\$ 41,180.00	\$ -	\$ 41,180.00	\$ -	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	<i>\$ 58,000.00</i>					
3	Engineering - Design & Construction	12%	%	-	\$ 6,960.00					
4	Mobilization	10%	%	-	\$ 5,800.00					
5	Contingency	20%	%	-	\$ 11,600.00					
				Item Subtotal	\$ 82,360.00	50%	0%	50%	0%	
35-3 Storm Drain Pipe										
1	6' x 13' RCB	400	LF	\$ 1,210.00	\$ 484,000.00	\$ -	\$ -	\$ -	\$ 710,000.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	<i>\$ 500,000.00</i>					
3	Engineering - Design & Construction	12%	%	-	\$ 60,000.00					
4	Mobilization	10%	%	-	\$ 50,000.00					
5	Contingency	20%	%	-	\$ 100,000.00					
				Item Subtotal	\$ 710,000.00	0%	0%	0%	100%	
35-4 Ditch										
1	Ditch excavation	390	LF	\$ 15.00	\$ 5,850.00	\$ -	\$ 8,307.00	\$ -	\$ -	Complete
				<i>Subtotal</i>	<i>\$ 5,850.00</i>					
2	Engineering - Design & Construction	12%	%	-	\$ 702.00					
3	Mobilization	10%	%	-	\$ 585.00					
4	Contingency	20%	%	-	\$ 1,170.00					
				Item Subtotal	\$ 8,307.00	0%	100%	0%	0%	
Grid 36										
36-1 Storm Drain Pipe										
1	36" RCP	1100	LF	\$ 100.00	\$ 110,000.00	\$ 195,250.00	\$ -	\$ -	\$ -	13-20
2	Inlet/Combo/Junction Boxes	5	EA	\$ 5,500.00	\$ 27,500.00					
				<i>Subtotal</i>	<i>\$ 137,500.00</i>					
3	Engineering - Design & Construction	12%	%	-	\$ 16,500.00					
4	Mobilization	10%	%	-	\$ 13,750.00					
5	Contingency	20%	%	-	\$ 27,500.00					
				Item Subtotal	\$ 195,250.00	100%	0%	0%	0%	
36-2 Storm Drain Pipe										
1	36" RCP	60	LF	\$ 100.00	\$ 6,000.00	\$ 21,101.20	\$ -	\$ -	\$ -	13-20
2	Asphalt restoration	480	SF	\$ 7.00	\$ 3,360.00					
3	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
				<i>Subtotal</i>	<i>\$ 14,860.00</i>					
4	Engineering - Design & Construction	12%	%	-	\$ 1,783.20					
5	Mobilization	10%	%	-	\$ 1,486.00					
6	Contingency	20%	%	-	\$ 2,972.00					
				Item Subtotal	\$ 21,101.20	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
36-3	Detention Pond: 4.4 AC-FT									
1	Land Acquisition	0.00	ACRE	\$150,000.00	\$ -	\$ 155,809.50	\$ -	\$ -	\$ -	0-6
2	Excavation - Grading	7100	CY	\$ 7.75	\$ 55,025.00					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	595	CY	\$ 55.00	\$ 32,725.00					
5	Erosion control	10%	%	-	\$ 9,975.00					
Subtotal					\$ 109,725.00					
6	Engineering - Design & Construction	12%	%	-	\$ 13,167.00					
7	Mobilization	10%	%	-	\$ 10,972.50					
8	Contingency	20%	%	-	\$ 21,945.00					
Item Subtotal					\$ 155,809.50	100%	0%	0%	0%	
36-4	Storm Drain Pipe									
1	18" RCP	970	LF	\$ 60.00	\$ 58,200.00	\$ 113,884.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
Subtotal					\$ 80,200.00					
3	Engineering - Design & Construction	12%	%	-	\$ 9,624.00					
4	Mobilization	10%	%	-	\$ 8,020.00					
5	Contingency	20%	%	-	\$ 16,040.00					
Item Subtotal					\$ 113,884.00	100%	0%	0%	0%	
36-6	Storm Drain Pipe									
1	24" RCP	70	LF	\$ 75.00	\$ 5,250.00	\$ -	\$ -	\$ 13,021.40	\$ -	Complete
2	Asphalt restoration	560	SF	\$ 7.00	\$ 3,920.00					
Subtotal					\$ 9,170.00					
3	Engineering - Design & Construction	12%	%	-	\$ 1,100.40					
4	Mobilization	10%	%	-	\$ 917.00					
5	Contingency	20%	%	-	\$ 1,834.00					
Item Subtotal					\$ 13,021.40	0%	0%	100%	0%	
36-7	Storm Drain Pipe									
1	24" RCP	920	LF	\$ 75.00	\$ 69,000.00	\$ 121,427.04	\$ -	\$ 80,951.36	\$ -	0-6
2	Asphalt restoration	7360	SF	\$ 7.00	\$ 51,520.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
Subtotal					\$ 142,520.00					
4	Engineering - Design & Construction	12%	%	-	\$ 17,102.40					
5	Mobilization	10%	%	-	\$ 14,252.00					
6	Contingency	20%	%	-	\$ 28,504.00					
Item Subtotal					\$ 202,378.40	60%	0%	40%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
36-8 Storm Drain Pipe										
1	30" RCP	900	LF	\$ 90.00	\$ 81,000.00	\$ 217,828.00	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	7200	SF	\$ 7.00	\$ 50,400.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
<i>Subtotal</i>					\$ 153,400.00					
4	Engineering - Design & Construction	12%	%	-	\$ 18,408.00	100%	0%	0%	0%	
5	Mobilization	10%	%	-	\$ 15,340.00					
6	Contingency	20%	%	-	\$ 30,680.00					
Item Subtotal					\$ 217,828.00					
Grid 37										
37-1 Storm Drain Pipe										
1	4' x 6' RCB	1360	LF	\$ 685.00	\$ 931,600.00	\$ -	\$ -	\$ -	\$ 2,458,872.00	7-12
2	Jack & Bore	400	LF	\$ 2,000.00	\$ 800,000.00					
<i>Subtotal</i>					\$ 1,731,600.00					
3	Engineering - Design & Construction	12%	%	-	\$ 207,792.00					
4	Mobilization	10%	%	-	\$ 173,160.00	0%	0%	0%	100%	
5	Contingency	20%	%	-	\$ 346,320.00					
Item Subtotal					\$ 2,458,872.00					
37-2 Storm Drain Pipe										
1	15" RCP	1040	LF	\$ 55.00	\$ 57,200.00	\$ -	\$ 195,164.80	\$ -	\$ -	0-6
2	Asphalt restoration	8320	SF	\$ 7.00	\$ 58,240.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
<i>Subtotal</i>					\$ 137,440.00					
4	Engineering - Design & Construction	12%	%	-	\$ 16,492.80	0%	100%	0%	0%	
5	Mobilization	10%	%	-	\$ 13,744.00					
6	Contingency	20%	%	-	\$ 27,488.00					
Item Subtotal					\$ 195,164.80					
Grid 39										
39-1 Storm Drain Pipe										
1	24" RCP	710	LF	\$ 75.00	\$ 53,250.00	\$ 49,522.50	\$ -	\$ 49,522.50	\$ -	0-6
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
<i>Subtotal</i>					\$ 69,750.00					
3	Engineering - Design & Construction	12%	%	-	\$ 8,370.00					
4	Mobilization	10%	%	-	\$ 6,975.00	50%	0%	50%	0%	
5	Contingency	20%	%	-	\$ 13,950.00					
Item Subtotal					\$ 99,045.00					
39-2 Storm Drain Pipe										
1	30" RCP	60	LF	\$ 90.00	\$ 5,400.00	\$ -	\$ 2,892.84	\$ 9,546.36	\$ -	13-20
2	Asphalt restoration	480	SF	\$ 7.00	\$ 3,360.00					
<i>Subtotal</i>					\$ 8,760.00					
3	Engineering - Design & Construction	12%	%	-	\$ 1,051.20					
4	Mobilization	10%	%	-	\$ 876.00	0%	23%	77%	0%	
5	Contingency	20%	%	-	\$ 1,752.00					
Item Subtotal					\$ 12,439.20					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
39-3 Storm Drain Pipe										
1	36" RCP	430	LF	\$ 100.00	\$ 43,000.00	\$ -	\$ -	\$ -	\$ 83,780.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	\$ 59,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 7,080.00					
4	Mobilization	10%	%	-	\$ 5,900.00					
5	Contingency	20%	%	-	\$ 11,800.00					
				Item Subtotal	\$ 83,780.00	0%	0%	0%	100%	
Grid 40										
40-2 Detention Pond: 0.6 AC-FT										
1	Land Acquisition	0.20	ACRE	\$150,000.00	\$ 30,000.00	\$ -	\$ -	\$ 84,648.69	\$ -	7-12
2	Excavation - Grading	970	CY	\$ 7.75	\$ 7,517.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	85	CY	\$ 55.00	\$ 4,675.00					
5	Erosion control	10%	%	-	\$ 5,419.25					
				<i>Subtotal</i>	\$ 59,611.75	\$ -	\$ -	\$ 84,648.69	\$ -	7-12
6	Engineering - Design & Construction	12%	%	-	\$ 7,153.41					
7	Mobilization	10%	%	-	\$ 5,961.18					
8	Contingency	20%	%	-	\$ 11,922.35					
				Item Subtotal	\$ 84,648.69	0%	0%	100%	0%	
40-5 Storm Drain Pipe										
1	36" RCP	370	LF	\$ 100.00	\$ 37,000.00	\$ -	\$ -	\$ -	\$ 75,260.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	\$ 53,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 6,360.00					
4	Mobilization	10%	%	-	\$ 5,300.00					
5	Contingency	20%	%	-	\$ 10,600.00					
				Item Subtotal	\$ 75,260.00	0%	0%	0%	100%	
40-6 Storm Drain Pipe										
1	24" RCP	380	LF	\$ 75.00	\$ 28,500.00	\$ -	\$ -	\$ -	\$ 63,190.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	\$ 44,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,340.00					
4	Mobilization	10%	%	-	\$ 4,450.00					
5	Contingency	20%	%	-	\$ 8,900.00					
				Item Subtotal	\$ 63,190.00	0%	0%	0%	100%	
40-7 Storm Drain Pipe										
1	24" RCP	440	LF	\$ 75.00	\$ 33,000.00	\$ -	\$ -	\$ -	\$ 69,580.00	0-6
2	Headwall Structure	2	EA	\$ 8,000.00	\$ 16,000.00					
				<i>Subtotal</i>	\$ 49,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 5,880.00					
4	Mobilization	10%	%	-	\$ 4,900.00					
5	Contingency	20%	%	-	\$ 9,800.00					
				Item Subtotal	\$ 69,580.00	0%	0%	0%	100%	
40-8 Storm Drain Pipe										
1	15" RCP	1940	LF	\$ 55.00	\$ 106,700.00	\$ 206,184.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	7	EA	\$ 5,500.00	\$ 38,500.00					
				<i>Subtotal</i>	\$ 145,200.00					
3	Engineering - Design & Construction	12%	%	-	\$ 17,424.00					
4	Mobilization	10%	%	-	\$ 14,520.00					
5	Contingency	20%	%	-	\$ 29,040.00					
				Item Subtotal	\$ 206,184.00	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
40-9 Detention Pond: 0.6 AC-FT										
1	Land Acquisition	0.20	ACRE	\$150,000.00	\$ 30,000.00	\$ 84,648.69	\$ -	\$ -	\$ -	0-6
2	Excavation - Grading	970	CY	\$ 7.75	\$ 7,517.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	85	CY	\$ 55.00	\$ 4,675.00					
5	Erosion control	10%	%	-	\$ 5,419.25					
				Subtotal	\$ 59,611.75					
6	Engineering - Design & Construction	12%	%	-	\$ 7,153.41					
7	Mobilization	10%	%	-	\$ 5,961.18					
8	Contingency	20%	%	-	\$ 11,922.35					
				Item Subtotal	\$ 84,648.69	100%	0%	0%	0%	
40-10 Storm Drain Pipe										
1	18" RCP	340	LF	\$ 60.00	\$ 20,400.00	\$ -	\$ -	\$ 44,588.00	\$ -	
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
				Subtotal	\$ 31,400.00					
3	Engineering - Design & Construction	12%	%	-	\$ 3,768.00					
4	Mobilization	10%	%	-	\$ 3,140.00					
5	Contingency	20%	%	-	\$ 6,280.00					
				Item Subtotal	\$ 44,588.00	0%	0%	100%	0%	
Grid 41										
41-1 Detention Pond: 8.5 AC-FT										
1	Excavation - Grading	13715	CY	\$ 7.75	\$ 106,291.25	\$ 283,137.88	\$ -	\$ -	\$ -	0-6
2	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
3	Granular base (3")	1145	CY	\$ 55.00	\$ 62,975.00					
4	Erosion control	10%	%	-	\$ 18,126.63					
				Subtotal	\$ 199,392.88					
5	Engineering - Design & Construction	12%	%	-	\$ 23,927.15					
6	Mobilization	10%	%	-	\$ 19,939.29					
7	Contingency	20%	%	-	\$ 39,878.58					
				Item Subtotal	\$ 283,137.88	100%	0%	0%	0%	
41-2 Storm Drain Pipe										
1	60" RCP	640	LF	\$ 300.00	\$ 192,000.00	\$ -	\$ -	\$ -	\$ 2,121,480.00	0-6
2	Jack & Bore	640	LF	\$ 2,000.00	\$ 1,280,000.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
				Subtotal	\$ 1,494,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 179,280.00					
5	Mobilization	10%	%	-	\$ 149,400.00					
6	Contingency	20%	%	-	\$ 298,800.00					
				Item Subtotal	\$ 2,121,480.00	0%	0%	0%	100%	
41-3 Storm Drain Pipe										
1	60" RCP	730	LF	\$ 300.00	\$ 219,000.00	\$ -	\$ -	\$ -	\$ 2,395,540.00	0-6
2	Jack & Bore	730	LF	\$ 2,000.00	\$ 1,460,000.00					
3	Headwall Structure	1	EA	\$ 8,000.00	\$ 8,000.00					
				Subtotal	\$ 1,687,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 202,440.00					
5	Mobilization	10%	%	-	\$ 168,700.00					
6	Contingency	20%	%	-	\$ 337,400.00					
				Item Subtotal	\$ 2,395,540.00	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
41-4	Detention Pond: 6.6 AC-FT									
1	Land Acquisition	2.20	ACRE	\$150,000.00	\$ 330,000.00	\$ 739,587.48	\$ -	\$ -	\$ -	7-12
2	Excavation - Grading	10650	CY	\$ 7.75	\$ 82,537.50					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	890	CY	\$ 55.00	\$ 48,950.00					
5	Erosion control	10%	%	-	\$ 47,348.75					
	Subtotal				\$ 520,836.25					
6	Engineering - Design & Construction	12%	%	-	\$ 62,500.35					
7	Mobilization	10%	%	-	\$ 52,083.63					
8	Contingency	20%	%	-	\$ 104,167.25					
	Item Subtotal				\$ 739,587.48	100%	0%	0%	0%	
41-5	Storm Drain Pipe									
1	36" RCP	360	LF	\$ 100.00	\$ 36,000.00	\$ 544,570.00	\$ 544,570.00	\$ -	\$ -	0-6
2	Jack & Bore	360	LF	\$ 2,000.00	\$ 720,000.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
	Subtotal				\$ 767,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 92,040.00					
5	Mobilization	10%	%	-	\$ 76,700.00					
6	Contingency	20%	%	-	\$ 153,400.00					
	Item Subtotal				\$ 1,089,140.00	50%	50%	0%	0%	
41-6	Storm Drain Pipe									
1	15" RCP	1050	LF	\$ 55.00	\$ 57,750.00	\$ 196,741.00	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	8400	SF	\$ 7.00	\$ 58,800.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
	Subtotal				\$ 138,550.00					
4	Engineering - Design & Construction	12%	%	-	\$ 16,626.00					
5	Mobilization	10%	%	-	\$ 13,855.00					
6	Contingency	20%	%	-	\$ 27,710.00					
	Item Subtotal				\$ 196,741.00	100%	0%	0%	0%	
41-7	Storm Drain Pipe									
1	15" RCP	1060	LF	\$ 55.00	\$ 58,300.00	\$ 198,317.20	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	8480	SF	\$ 7.00	\$ 59,360.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
	Subtotal				\$ 139,660.00					
4	Engineering - Design & Construction	12%	%	-	\$ 16,759.20					
5	Mobilization	10%	%	-	\$ 13,966.00					
6	Contingency	20%	%	-	\$ 27,932.00					
	Item Subtotal				\$ 198,317.20	100%	0%	0%	0%	
41-8	Storm Drain Pipe									
1	5' x 8' RCB	2020	LF	\$ 850.00	\$ 1,717,000.00	\$ -	\$ -	\$ -	\$ 2,486,420.00	0-6
2	Inlet/Combo/Junction Boxes	7	EA	\$ 5,000.00	\$ 34,000.00					
	Subtotal				\$ 1,751,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 210,120.00					
4	Mobilization	10%	%	-	\$ 175,100.00					
5	Contingency	20%	%	-	\$ 350,200.00					
	Item Subtotal				\$ 2,486,420.00	0%	0%	0%	100%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
41-9 Storm Drain Pipe										
1	36" RCP	380	LF	\$ 100.00	\$ 38,000.00	\$ -	\$ -	\$ -	\$ 1,147,999.00	0-6
2	Jack & Bore	380	LF	\$ 2,000.00	\$ 760,000.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 10,450.00					
Subtotal					\$ 808,450.00					
4	Engineering - Design & Construction	12%	%	-	\$ 97,014.00					
5	Mobilization	10%	%	-	\$ 80,845.00					
6	Contingency	20%	%	-	\$ 161,690.00					
Item Subtotal					\$ 1,147,999.00	0%	0%	0%	100%	
41-10 Storm Drain Pipe										
1	24" RCP	380	LF	\$ 75.00	\$ 28,500.00	\$ -	\$ -	\$ -	\$ 56,090.00	0-6
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
Subtotal					\$ 39,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 4,740.00					
4	Mobilization	10%	%	-	\$ 3,950.00					
5	Contingency	20%	%	-	\$ 7,900.00					
Item Subtotal					\$ 56,090.00	0%	0%	0%	100%	
41-11 Storm Drain Pipe										
1	4' x 6' RCB	970	LF	\$ 685.00	\$ 664,450.00	\$ -	\$ -	\$ -	\$ 974,759.00	0-6
2	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
Subtotal					\$ 686,450.00					
3	Engineering - Design & Construction	12%	%	-	\$ 82,374.00					
4	Mobilization	10%	%	-	\$ 68,645.00					
5	Contingency	20%	%	-	\$ 137,290.00					
Item Subtotal					\$ 974,759.00	0%	0%	0%	100%	
Grid 42										
42-1 Storm Drain Pipe										
1	15" RCP	540	LF	\$ 55.00	\$ 29,700.00	\$ 65,746.00	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	800	SF	\$ 7.00	\$ 5,600.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
Subtotal					\$ 46,300.00					
4	Engineering - Design & Construction	12%	%	-	\$ 5,556.00					
5	Mobilization	10%	%	-	\$ 4,630.00					
6	Contingency	20%	%	-	\$ 9,260.00					
Item Subtotal					\$ 65,746.00	100%	0%	0%	0%	
42-2 Detention Pond: 7.3 AC-FT										
1	Land Acquisition	2.43	ACRE	\$150,000.00	\$ 365,000.00	\$ 816,098.14	\$ -	\$ -	\$ -	7-12
2	Excavation - Grading	11780	CY	\$ 7.75	\$ 91,295.00					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	985	CY	\$ 55.00	\$ 54,175.00					
5	Erosion control	10%	%	-	\$ 52,247.00					
Subtotal					\$ 574,717.00					
6	Engineering - Design & Construction	12%	%	-	\$ 68,966.04					
7	Mobilization	10%	%	-	\$ 57,471.70					
8	Contingency	20%	%	-	\$ 114,943.40					
Item Subtotal					\$ 816,098.14	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
42-3 Detention Pond: 1 AC-FT										
1	Land Acquisition	0.33	ACRE	\$150,000.00	\$ 50,000.00	\$ 127,992.23	\$ -	\$ -	\$ -	7-12
2	Excavation - Grading	1615	CY	\$ 7.75	\$ 12,516.25					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	135	CY	\$ 55.00	\$ 7,425.00					
5	Erosion control	10%	%	-	\$ 8,194.13					
				Subtotal	\$ 90,135.38					
6	Engineering - Design & Construction	12%	%	-	\$ 10,816.25					
7	Mobilization	10%	%	-	\$ 9,013.54					
8	Contingency	20%	%	-	\$ 18,027.08					
				Item Subtotal	\$ 127,992.23	100%	0%	0%	0%	
Grid 43										
43-1 Storm Drain Pipe										
1	36" RCP	490	LF	\$ 100.00	\$ 49,000.00	\$ -	\$ -	\$ -	\$ 1,476,800.00	0-6
2	Jack & Bore	490	LF	\$ 2,000.00	\$ 980,000.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
				Subtotal	\$ 1,040,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 124,800.00					
5	Mobilization	10%	%	-	\$ 104,000.00					
6	Contingency	20%	%	-	\$ 208,000.00					
				Item Subtotal	\$ 1,476,800.00	0%	0%	0%	100%	
43-2 Storm Drain Pipe										
1	36" RCP	410	LF	\$ 100.00	\$ 41,000.00	\$ 619,120.00	\$ 619,120.00	\$ -	\$ -	0-6
2	Jack & Bore	410	LF	\$ 2,000.00	\$ 820,000.00					
3	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
				Subtotal	\$ 872,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 104,640.00					
5	Mobilization	10%	%	-	\$ 87,200.00					
6	Contingency	20%	%	-	\$ 174,400.00					
				Item Subtotal	\$ 1,238,240.00	50%	50%	0%	0%	
43-3 Storm Drain Pipe										
1	36" RCP	970	LF	\$ 100.00	\$ 97,000.00	\$ 1,461,890.00	\$ 1,461,890.00	\$ -	\$ -	0-6
2	Jack & Bore	970	LF	\$ 2,000.00	\$ 1,940,000.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
				Subtotal	\$ 2,059,000.00					
4	Engineering - Design & Construction	12%	%	-	\$ 247,080.00					
5	Mobilization	10%	%	-	\$ 205,900.00					
6	Contingency	20%	%	-	\$ 411,800.00					
				Item Subtotal	\$ 2,923,780.00	50%	50%	0%	0%	
43-4 Detention Pond: 2.4 AC-FT										
1	Land Acquisition	0.80	ACRE	\$150,000.00	\$ 120,000.00	\$ 281,013.56	\$ -	\$ -	\$ -	0-6
2	Excavation - Grading	3875	CY	\$ 7.75	\$ 30,031.25					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	325	CY	\$ 55.00	\$ 17,875.00					
5	Erosion control	10%	%	-	\$ 17,990.63					
				Subtotal	\$ 197,896.88					
6	Engineering - Design & Construction	12%	%	-	\$ 23,747.63					
7	Mobilization	10%	%	-	\$ 19,789.69					
8	Contingency	20%	%	-	\$ 39,579.38					
				Item Subtotal	\$ 281,013.56	100%	0%	0%	0%	

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
43-5	Storm Drain Pipe									
1	36" RCP	670	LF	\$ 100.00	\$ 67,000.00	\$ 118,570.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	3	EA	\$ 5,500.00	\$ 16,500.00					
				Subtotal	\$ 83,500.00					
3	Engineering - Design & Construction	12%	%	-	\$ 10,020.00					
4	Mobilization	10%	%	-	\$ 8,350.00					
5	Contingency	20%	%	-	\$ 16,700.00					
	Item Subtotal				\$ 118,570.00	100%	0%	0%	0%	
43-6	Storm Drain Pipe									
1	36" RCP	490	LF	\$ 100.00	\$ 49,000.00	\$ 85,200.00	\$ -	\$ -	\$ -	0-6
2	Inlet/Combo/Junction Boxes	2	EA	\$ 5,500.00	\$ 11,000.00					
				Subtotal	\$ 60,000.00					
3	Engineering - Design & Construction	12%	%	-	\$ 7,200.00					
4	Mobilization	10%	%	-	\$ 6,000.00					
5	Contingency	20%	%	-	\$ 12,000.00					
	Item Subtotal				\$ 85,200.00	100%	0%	0%	0%	
43-7	Storm Drain Pipe									
1	18" RCP	160	LF	\$ 60.00	\$ 9,600.00	\$ 2,144.20	\$ -	\$ 19,297.80	\$ -	Complete
2	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 5,500.00					
				Subtotal	\$ 15,100.00					
3	Engineering - Design & Construction	12%	%	-	\$ 1,812.00					
4	Mobilization	10%	%	-	\$ 1,510.00					
5	Contingency	20%	%	-	\$ 3,020.00					
	Item Subtotal				\$ 21,442.00	10%	0%	90%	0%	
Grid 44										
44-1	Storm Drain Pipe									
1	15" RCP	1030	LF	\$ 55.00	\$ 56,650.00	\$ 195,008.60	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	8240	SF	\$ 7.00	\$ 57,680.00					
3	Inlet/Combo/Junction Boxes	4	EA	\$ 5,500.00	\$ 22,000.00					
4	Connect to existing structure	1	EA	\$ 1,000.00	\$ 1,000.00					
				Subtotal	\$ 137,330.00					
5	Engineering - Design & Construction	12%	%	-	\$ 16,479.60	100%	0%	0%	0%	
6	Mobilization	10%	%	-	\$ 13,733.00					
7	Contingency	20%	%	-	\$ 27,466.00					
	Item Subtotal				\$ 195,008.60					
44-2	Detention Pond: 1.1 AC-FT									
1	Land Acquisition	0.37	ACRE	\$150,000.00	\$ 55,000.00	\$ 139,027.76	\$ -	\$ -	\$ -	7-12
2	Excavation - Grading	1775	CY	\$ 7.75	\$ 13,756.25					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	150	CY	\$ 55.00	\$ 8,250.00					
5	Erosion control	10%	%	-	\$ 8,900.63					
				Subtotal	\$ 97,906.88	100%	0%	0%	0%	
6	Engineering - Design & Construction	12%	%	-	\$ 11,748.83					
7	Mobilization	10%	%	-	\$ 9,790.69					
8	Contingency	20%	%	-	\$ 19,581.38					
	Item Subtotal				\$ 139,027.76					

Farmington City Storm Drain Masterplan IFFP Estimate of Probable Costs (based on bid data from 2021)										
Item No.	Improvement Description	Quantity	Unit	Unit Cost	Total Cost	System	Existing Deficiency	Project	State or Federal Funds	Priority
44-3	Detention Pond: 4.3 AC-FT									
1	Land Acquisition	1.43	ACRE	\$150,000.00	\$ 215,000.00	\$ 488,413.97	\$ -	\$ -	\$ -	7-12
2	Excavation - Grading	6940	CY	\$ 7.75	\$ 53,785.00					
3	Inlet / Outlet Structures	2	EA	\$ 6,000.00	\$ 12,000.00					
4	Granular base (3")	580	CY	\$ 55.00	\$ 31,900.00					
5	Erosion control	10%	%	-	\$ 31,268.50					
	Subtotal				\$ 343,953.50					
6	Engineering - Design & Construction	12%	%	-	\$ 41,274.42					
7	Mobilization	10%	%	-	\$ 34,395.35					
8	Contingency	20%	%	-	\$ 68,790.70					
	Item Subtotal				\$ 488,413.97	100%	0%	0%	0%	
44-4	Storm Drain Pipe									
1	15" RCP	80	LF	\$ 55.00	\$ 4,400.00	\$ 12,609.60	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	640	SF	\$ 7.00	\$ 4,480.00					
	Subtotal				\$ 8,880.00					
3	Engineering - Design & Construction	12%	%	-	\$ 1,065.60					
4	Mobilization	10%	%	-	\$ 888.00					
5	Contingency	20%	%	-	\$ 1,776.00					
	Item Subtotal				\$ 12,609.60	100%	0%	0%	0%	
44-5	Storm Drain Pipe									
1	15" RCP	220	LF	\$ 55.00	\$ 12,100.00	\$ 40,924.40	\$ -	\$ -	\$ -	7-12
2	Asphalt restoration	1760	SF	\$ 7.00	\$ 12,320.00					
3	Inlet/Combo/Junction Boxes	1	EA	\$ 5,500.00	\$ 4,400.00					
	Subtotal				\$ 28,820.00					
4	Engineering - Design & Construction	12%	%	-	\$ 3,458.40					
5	Mobilization	10%	%	-	\$ 2,882.00					
6	Contingency	20%	%	-	\$ 5,764.00					
	Item Subtotal				\$ 40,924.40	100%	0%	0%	0%	
44-6	Storm Drain Pipe									
1	15" RCP	70	LF	\$ 55.00	\$ 3,850.00	\$ -	\$ 11,033.40	\$ -	\$ -	7-12
2	Asphalt restoration	560	SF	\$ 7.00	\$ 3,920.00					
	Subtotal				\$ 7,770.00					
3	Engineering - Design & Construction	12%	%	-	\$ 932.40					
4	Mobilization	10%	%	-	\$ 777.00					
5	Contingency	20%	%	-	\$ 1,554.00					
	Item Subtotal				\$ 11,033.40	0%	100%	0%	0%	
Total Conveyance					\$ 26,745,501.20	\$ 6,270,574.97	\$ 3,300,689.62	\$ 1,539,362.11	\$ 15,634,874.50	
Total Detention					\$ 8,069,907.12	\$ 5,777,096.13	\$ -	\$ 2,292,810.99	\$ -	
TOTAL COSTS =					\$ 34,815,408.32					
						\$ 12,047,671.10	\$ 3,300,689.62	\$ 3,832,173.10	\$ 15,634,874.50	