FRUIT HEIGHTS CITY COUNCIL MEETING AGENDA

Notice is hereby given that the Fruit Heights City Council will hold a regular meeting at 7:00pm on June 17, 2025, at Fruit Heights City Hall, 910 South Mountain Road Fruit Heights City Utah.
Fruit Heights City is now streaming City Council Meetings on its YouTube Channel. Please follow us at https://www.youtube.com/@fruitheightscity9716/streams

1. CALL TO ORDER: Mayor John Pohlman

1.1 Pledge of Allegiance (Gary)

1.2 Prayer or Thought (John)

1.3 Roll call (Hailee)

1.4 Training How to deal with long term power outages. Given by Mary Monson CCC/Emergency Preparedness Committee

2. DECLARATION OF CONFLICT(S) OF INTEREST

3. PUBLIC COMMENT PERIOD

The public may address the City Council regarding issues that are or are not on the agenda. Please limit comments to 3 minutes. Please state your name and address of residence for the record. **No actions may be taken on items not specifically listed on the agenda.**

4. PRESENTATIONS

5. DISCUSSION ITEMS

Discussion items to be considered.

5.1 Public Hearing Resolution # 2025-06 Amendment to FY 2024-2025 Budget

5.2 Public Hearing Resolution #2025-07 Adopting FY 2025-2026 Operating Budget and Certified Tax Rate # 0.001717

5.3 Public Hearing Ordinance # 2025-02 Title 3A Planning Commission

5.4 Development Agreement for Pine Ridge Estates

6. ACTION ITEMS

6.1 Approve/Deny Resolution # 2025-06 Amendment to FY 2024-2025 Budget

6.2 Approve/Deny Resolution #2025-07 Adopting FY 2025-2026 Operating Budget Certified Tax Rate # 0.001717

6.3 Approve/Deny Ordinance # 2025-02 Title 3A Planning Commission

6.4 Approve/Deny Agreement for Pine Ridge Estates

6.5 Approve June 3, 2025, City Council Minutes

7. TABLED ITEMS

8. CALENDAR ITEMS

8.1 June 19, 2025, Juneteenth the City will be observing it on June 20, 2025, City Hall will be closed.

8.2 June 24, 2025, Planning Commission

8.3 July 1, 2025, City Council Meeting

9. PAST DISCUSSION ITEMS

10. COUNCIL REPORT

11. MAYOR REPORT

12. STAFF REPORT

13. CLOSED SESSION

The City Council may vote to discuss matters in a closed session for reasons allowed by law, including, but not limited to, the provisions of Utah Code § 52-4-205 of the Open and Public Meetings Act, and for attorney-client matters that are privileged pursuant to Utah Code § 78B-1-137.

14. ADJOURNMENT

CERTIFICATE OF POSTING

I HEREBY CERTIFY that this notice and agenda was posted at Fruit Heights City Hall, on the City's website, www.fruitheightscity.com, as well as posted on the Utah State Public Notice website in accordance with the requirements of the Utah Open and Public Meetings Act, including, but not limited to, provisions of Utah Code § 52-4-202.

Hailee Ballingham

Hailee Ballingham - Deputy Recorder

In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should contact the Fruit Heights City Manager, Darren Frandsen at (801)546-0861 at least 24 hours prior to the meeting.

Helpful Links.

Fruit Heights City Website: https://www.fruitheightscity.com/

Fruit Heights City YouTube Channel: https://www.youtube.com/channel/UCaIqHYd0U5RCpaDo8rquABw

Fruit Heights City Facebook Page: https://www.facebook.com/FruitHeightsCityGovernment

3A-03A-030. Planning Commission.

(a) Purpose: A planning commission is hereby created pursuant to the terms hereof. It is the intent of the city council that the commission represent the concerns of diverse citizen groups, as well as the broad interests of the community as a whole; that membership of the planning commission represents a fair cross section of the community and provide balanced representation in terms of geographic, professional, neighborhood and community interest; and that a wide range of expertise relating to development of a healthy and well planned community be sought when establishing or altering the composition of the membership of the planning commission. It is also the intent of this title that the activities of the planning commission and of its subcommittees, if any, be conducted to maximize the convenience and accessibility to the citizens of the city.

(b) For the purpose of the Planning Commission, Fruit Heights City is divided into 4 districts - with one planning commissioner representing each district, plus one at-large position. See Planning Commission District Map.

(c) Appointment: The planning commission shall be constituted and appointed as follows: shall consist of five (5) members, who shall be appointed by the mayor with the advice and consent of the city council.

(d) Term And Term Limitation: Members of the planning commission shall serve a term of three (3) years and shall not serve more than two (2) consecutive terms. A member may extend up to 6 months if no candidate is available to fill vacancy. Filling a vacated term does not count towards 2 consecutive terms.

(1) Each term shall begin on July 1 of the year of appointment and shall end on June 30 of the year when the appointment term expires.

(2) The terms of planning commission members shall be staggered. A planning commission member may be appointed for a term of less than three (3) years to provide for staggered terms or to complete a vacated, unexpired term.

(d) Residency Requirement: All members of the planning commission must be bona fide residents and qualified electors of the city.

(e) Compensation: Each member of the planning commission shall receive compensation per meeting and as reimbursement for expenses incurred in the performance of their official duties. Adopted in city budget. Compensation set by city manager.

(f) Removal And Vacancies: Members of the planning commission may be removed for cause by the mayor with the advice and consent of the city council, upon written charges and after a public hearing (if a public hearing is requested by the member being removed). Cause shall include, but not be limited to, violations of the Utah Municipal Officers' and Employees' Ethics Act, Utah Code Annotated Section 10-3-1301 et seq., or its successor. Any vacancy occurring on the planning commission by reason of death, moving out of the City, resignation or removal shall be promptly filled by the mayor with advice and consent of the city council for the unexpired term of such member. Any vacancy occurring on the planning commission by reason of expiration of term shall be promptly filled by the mayor with the advice and consent of the city council.

(g) Officers: The mayor shall appoint a chairperson and such other officers it deems advisable from among its members. The chairperson and such other officers shall serve

for a term of one year and shall not hold the position of chair for more than two (2) consecutive one year terms.

(h) Quorum: No action of the planning commission shall be official or of any effect except when a quorum of the members is present. Three (3) members of the planning commission shall constitute a quorum. A passing vote/recommendation requires a minimum of three votes regardless of how many commission members are present.

(i) Procedure: The planning commission shall adopt policies and procedures for the conduct of its meetings, the processing of applications, and for any other purposes considered necessary for the functioning of the planning commission.

(j) Powers And Duties:

(1) Prepare and recommend a general plan and amendments to the general plan to the city council;

(2) Recommend land use ordinances and zoning maps, official maps, and amendments to land use ordinances and maps to the city council;

(3) Act as a land use authority as provided in this title;

(4) Act as an appeal authority as provided in this title;

(5) Advise the city council on matters as the city council directs;

(6) Exercise any other powers necessary to enable it to perform functions delegated to it by the city council, or conferred upon it by state statutes.

(k) Meetings:

(1) The planning commission could meet at least once each month. Any member who cannot attend any meeting of the planning commission shall so notify the chair of the planning commission and/or the city manager. Any planning commission member shall be removed if unable to attend a minimum of 60% of meetings per year.

(2) All meetings, including any necessary public hearings, shall be held after the regular working hours of the city.

(3) All meetings and public hearings of the planning commission shall be public meetings, and shall comply with the provisions of Utah Code Annotated section 52-4-1 et seq., as amended.

(4) Such meetings shall be held in a public place designated by the planning commission and shall be of sufficient size to ensure public access.

(5) The planning commission shall keep minutes and a recording of the commission's proceedings as provided in Utah Code Annotated section 52-4-203, as amended.

(6) The official record of all commission meetings shall be the written and approved minutes.

(7) Copies of the minutes and any recordings may be provided, if requested, at the expense of the requesting party. If minutes are available but not yet approved by the commission, they shall be clearly identified as "unofficial".

FRUIT HEIGHTS CITY
FY25 BUDGET AMENDMENTS
June 17, 2025

GENERAL FUND

The budget amendments below are proposed in the General Fund for the following reasons: 1) Building permit fees are lower than expected, 2) Cable &franchise fees will be adjusted down due to year-end lease entries and will be less than budgeted, 3) Use of Fund balance was adjusted to balance the budget, 4) Police services are expected to be higher than budgeted, and 5) Fire protection services are expected to be higher than budgeted.

Revenues:

		Increase	Decrease	Ending Account Budget
Building Permit Fees	10-32-210		(25,000)	40,000
Cable Rent & Franchise Fees	10-32-300		(25,000)	40,000
Use of Fund Balance	10-39-650	464,525		605,000
		$ 464,525	$ (50,000)	$ 685,000

Expenses:

		Increase	Decrease	Ending Account Budget
Contract Services	10-54-310	13,225	-	350,000
Contract Services	10-57-620	15,000		335,000
		$ 28,225	$ -	$ 685,000

WATER FUND

The budget amendments below are proposed in the Water Fund for the following reasons: 1) Use of fund balance was adjusted to balance the budget, 4) Depreciation expense is expected to be higher than budgeted.

Revenues:

		Increase	Decrease	Ending Account Budget
Use of Fund Balance	51-38-910	129,000	-	300,000
		$ 129,000	$ -	$ 300,000

Expenses:

		Increase	Decrease	Ending Account Budget
Depreciation	51-89-650	40,000	-	300,000
		$ 40,000	$ -	$ 300,000

FRUIT HEIGHTS CITY
FY25 BUDGET AMENDMENTS
June 17, 2025

SOLID WASTE FUND

The budget amendments below are proposed in the Solid Waste Fund for the following reasons: 1) Use of fund balance was adjusted to balance the budget, 4) Miscellaneous supplies was adjusted for the purchase of recycling containers.

Revenues:

		Increase	Decrease	Ending Account Budget
Use of Fund Balance	59-39-110	105,000	-	115,000
		$ 105,000	$ -	$ 115,000

Expenses:

		Increase	Decrease	Ending Account Budget
Miscellaneous Supplies	59-40-610	112,000	-	115,000
		$ 112,000	$ -	$ 115,000

VEHICLE FUND

The budget amendments below are proposed in the Vehicle Fund for the following reasons: 1) Sale of vehicles/equipment was reduced to budget the gain on sale rather than proceeds of the sale, 2) Use of fund balance was adjusted to balance the budget, and 3) Depreciation expense is expected to be higher than budgeted.

Revenues:

		Increase	Decrease	Ending Account Budget
Sale of vehicles/equipment	61-38-400		(91,900)	125,000
Use of fund balance	61-39-140	33,650		40,000
		$ 33,650	$ (91,900)	$ 165,000

Expenses:

		Increase	Decrease	Ending Account Budget
Depreciation	61-89-650	10,000	-	165,000
		$ 10,000	$ -	$ 165,000

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
TAXES					
10-31-100	GENERAL PROPERTY TAXES	1,191,793	1,400,000	1,434,787	1,400,000
10-31-110	FEE'S IN LIEU	60,070	60,000	75,214	65,000
10-31-200	DELINQUENT PRIOR YEARS TAXES	8,933	10,000	8,616	8,000
10-31-300	GENERAL SALES & USE TAXES	1,117,894	1,100,000	1,105,974	1,100,000
TOTAL TAXES		**2,378,690**	**2,570,000**	**2,624,591**	**2,573,000**
LICENSES AND PERMITS					
10-32-100	BUSINESS LICENSES & PERMITS	4,470	3,600	7,188	5,000
10-32-105	APPLICATION FEE	750	2,000	2,700	2,000
10-32-210	BUILDING PERMIT FEES	52,477	65,000	40,135	50,000
10-32-215	EXCAVATION FEE	3,019	3,000	2,028	2,000
10-32-300	CABLE RENT & FRANCHISE FEES	47,872	65,000	40,000	40,000
TOTAL LICENSES AND PERMITS		**108,588**	**138,600**	**92,051**	**99,000**
INTERGOVERNMENTAL REVENUE					
10-33-585	LOCAL OPTION TAX	105,209	103,000	103,609	103,000
TOTAL INTERGOVERNMENTAL REVENUE		**105,209**	**103,000**	**103,609**	**103,000**
CHARGES FOR SERVICES					
10-34-110	CONVENIENCE FEE (Credit Card Fee)	342	500	1,447	750
10-34-130	SUBDIVISION/ENGINEERING FEES	76,670	35,000	20,571	30,000
10-34-240	INSPECTION FEES	36,890	30,000	57,464	40,000
10-34-740	PARK & RESERVATIONS FEES	5,153	2,000	6,273	3,500
10-34-910	ADMIN COST SHARE - WATER FUND	297,700	272,000	272,000	283,000
10-34-920	ADMIN COST SHARE - SEWER FUND	37,900	37,500	37,500	40,100
10-34-925	ADMIN CST SHARE - STRM DRN FND	173,200	158,000	158,000	167,000
10-34-930	ADMIN COSTS - SOLID WASTE	27,100	28,500	28,500	74,400
10-34-940	BLDG COST SHARE - WATER FUND	85,400	50,000	50,000	50,000
10-34-950	BLDG COST SHARE - SEWER FUND	10,900	12,500	12,500	12,400
10-34-960	BLDG COST SHARE-STRM DRN FUND	46,600	35,000	35,000	35,100
10-34-970	BLDG COST SHARE-SOLID WSTE FND	12,500	12,500	12,500	14,100
TOTAL CHARGES FOR SERVICES		**810,354**	**673,500**	**691,755**	**750,350**
MISCELLANEOUS					
10-36-100	INTEREST EARNINGS	79,915	135,000	87,510	100,000
10-36-400	SALE OF FIXED ASSETS	1,000	-	-	-
10-36-650	DONATIONS	7,880	-	13,945	-
10-36-700	LEASE & OTHER FINANCE PROCEEDS	104,082	-	100,000	100,000
10-36-900	FEES FROM RENT OF BUILDING	1,050	2,000	1,908	2,000
10-36-990	SUNDRY REVENUES	57,964	35,000	22,822	25,000
TOTAL MISCELLANEOUS		**251,892**	**172,000**	**226,185**	**227,000**
CONTRIBUTIONS AND TRANSFERS					
10-39-650	PRIOR YEARS SURPLUS GEN. FUND	-	140,475	-	329,800
TOTAL CONTRIBUTIONS AND TRANSFERS		**-**	**140,475**	**-**	**329,800**
TOTAL FUND REVENUE		**3,654,733**	**3,797,575**	**3,738,191**	**4,082,150**

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
EXPENDITURES					
LEGISLATIVE					
10-41-110	SALARIES - MAYOR AND COUNCIL	34,500	38,000	34,500	38,500
10-41-130	EMPLOYEE BENEFITS	2,639	3,000	2,639	3,000
10-41-210	BOOKS/SUBS/MEMBERSHIPS	-		-	-
10-41-220	PUBLIC NOTICES	141	200	106	200
10-41-230	TRAVEL, EDUCATION	795	3,000	307	3,000
10-41-240	TRAVEL, EDUCATION	53	-	-	-
TOTAL LEGISLATIVE		**38,129**	**44,200**	**37,552**	**44,700**
ADMINISTRATION					
10-43-110	SALARIES AND WAGES	193,762	155,000	146,066	163,000
10-43-130	EMPLOYEE BENEFITS	105,778	110,000	87,817	105,000
10-43-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	225	300	30	350
10-43-230	TRAVEL, EDUCATION	2,447	7,000	5,596	7,500
10-43-310	PROFESSIONAL & TECH SERVICES	4,023	13,500	3,210	15,000
TOTAL ADMINISTRATION		**306,236**	**285,800**	**242,719**	**290,850**
TREASURER					
10-44-110	SALARIES AND WAGES	55,407	57,500	55,878	60,000
10-44-130	EMPLOYEE BENEFITS	25,532	36,000	24,830	36,000
10-44-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	150	100	-	100
10-44-230	TRAVEL, EDUCATION	-	1,000	-	1,500
10-44-340	MILEAGE	-	-	-	-
TOTAL TREASURER		**81,089**	**94,600**	**80,708**	**97,600**
RECORDER/PUBLIC OUTREACH					
10-45-110	SALARIES AND WAGES	63,103	64,000	57,121	66,000
10-45-130	EMPLOYEE BENEFITS	5,093	10,000	4,520	10,000
10-45-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	175	8,000	2,746	8,500
10-45-230	TRAVEL, EDUCATION	-	1,500	-	1,500
TOTAL RECORDER/PUBLIC OUTREACH		**68,371**	**83,500**	**64,387**	**86,000**
AUDITING					
10-46-310	PROFESSIONAL & TECH SERVICES	11,100	20,000	11,425	20,000
TOTAL AUDITING		**11,100**	**20,000**	**11,425**	**20,000**
ATTORNEY					
10-47-310	PROFESSIONAL & TECH SERVICES	41,402	38,000	31,247	38,000
TOTAL ATTORNEY		**41,402**	**38,000**	**31,247**	**38,000**

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
CITY HALL OPERATIONS					
10-48-210	VETERAN'S MEMORIAL	4,643	-	23,153	600
10-48-266	MAINT AGREEMENT-COPIER	2,571	2,500	2,779	2,800
10-48-270	UTILITIES	7,272	6,000	5,947	7,000
10-48-551	CLEANING - LABOR AND SUPPLIES	5,481	7,200	4,787	7,200
10-48-555	BLDG MAINTENANCE/REPAIRS	3,125	48,000	5,596	45,000
10-48-610	MISCELLANEOUS EXPENSES	1,913	1,500	1,848	1,500
10-48-720	CAPITAL OUTLAY	27,854	20,000	22,454	25,000
TOTAL CITY HALL OPERATIONS		**52,859**	**85,200**	**66,564**	**89,100**
EMERGENCY PREPAREDNESS					
10-49-230	TRAVEL & EDUCATION	119	500	-	500
10-49-250	EQUIP - SUPPLIES & MAINTENANCE	1,204	1,200	253	500
TOTAL EMERGENCY PREPAREDNESS		**1,322**	**1,700**	**253**	**1,000**
NON-DEPARTMENTAL					
10-50-110	SALARIES AND WAGES	950	36,500	30,868	37,500
10-50-130	BENEFITS	-	16,250	13,544	16,500
10-50-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	6,899	1,500	6,728	1,700
10-50-220	PUBLIC NOTICES	1,558	2,200	2,314	2,400
10-50-240	OFFICE SUPPLIES AND EXPENSE	3,386	5,000	1,907	5,000
10-50-250	EQUIP - SUPPLIES & MAINTENANCE	1,749	4,000	-	4,500
10-50-280	TELEPHONE	5,520	5,500	4,977	5,500
10-50-281	CELLULAR TELEPHONE	866	1,200	874	1,200
10-50-282	TWO WAY RADIOS	-		-	
10-50-310	PROF & TECH SERVICES	147,245	130,000	101,321	130,000
10-50-315	BANK PROCESSING FEES	-	30,000	23,871	30,000
10-50-330	FRUIT HEIGHTS COMMUNITY ACTIVITIES	11,577	18,000	10,067	18,000
10-50-335	KAYS/FRUIT HEIGHTS CIVIC	1,236	1,000	-	1,000
10-50-510	INSURANCE	53,536	65,000	47,895	60,000
10-50-515	INSURANCE / LIFE / AD&D	1,419	3,000	1,560	3,200
10-50-530	ANIMAL CONTROL	-	-	-	-
10-50-610	MISCELLANEOUS EXPENSE	7,131	10,000	4,897	8,000
10-50-730	CAPITAL OUTLAY - FURNISHINGS	1,335	5,000	-	5,000
TOTAL NON-DEPARTMENTAL		**244,405**	**334,150**	**250,823**	**329,500**
ELECTIONS					
10-52-610	ELECTION SUPPLIES	-	250	-	300
10-52-620	ELECTION SERVICES	4,144	5,000	5,000	10,000
TOTAL ELECTIONS		**4,144**	**5,250**	**5,000**	**10,300**

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
PLANNING AND ZONING					
10-53-110	SALARIES AND WAGES	15,136	20,000	14,154	23,000
10-53-130	EMPLOYEE BENEFITS	7,763	10,500	6,010	12,300
10-53-140	PLANNING COMMISSION	1,430	3,200	1,134	4,100
10-53-220	PUBLIC NOTICES	885	700	53	700
10-53-310	PROFESSIONAL & TECH SERVICES	75,533	65,000	38,892	65,000
10-53-620	CONTRACT SERVICES	13,043	16,000	16,796	16,000
TOTAL PLANNING AND ZONING		**113,790**	**115,400**	**77,039**	**121,100**
POLICE DEPARTMENT					
10-54-310	CONTRACT SERVICES	272,956	336,775	346,586	360,000
10-54-450	NARCOTICS TASK FORCE	5,369	7,500	6,443	7,500
TOTAL POLICE DEPARTMENT		**278,325**	**344,275**	**353,029**	**367,500**
FIRE PROTECTION					
10-57-250	EQUIP - SUPPLIES & MAINTENANCE	150	500	-	500
10-57-620	CONTRACT SERVICES	307,500	320,000	330,750	350,000
TOTAL FIRE PROTECTION		**307,650**	**320,500**	**330,750**	**350,500**
BUILDING INSPECTION					
10-58-110	SALARIES & WAGES	15,136	19,500	12,501	22,000
10-58-130	EMPLOYEE BENEFITS	7,763	11,200	7,783	14,000
10-58-140	CONTRACT SERVICES - BLDG INSPS	30,116	30,000	25,311	40,000
10-58-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	1,064	1,500	953	1,500
10-58-240	OFFICE SUPPLIES AND EXPENSE	48	100	-	100
10-58-310	PROFESSIONAL & TECH SERVICES	5,795	-	-	-
TOTAL BUILDING INSPECTION		**59,922**	**62,300**	**46,548**	**77,600**
PUBLIC WORKS ADMIN					
10-59-110	SALARIES AND WAGES	191,141	235,000	241,798	279,000
10-59-130	EMPLOYEE BENEFITS	82,619	150,000	104,312	165,000
10-59-230	TRAVEL & EDUCATION	2,149	7,100	3,779	7,100
10-59-240	OFFICE SUPPLIES & EXPENSE	211	1,000	-	1,000
TOTAL PUBLIC WORKS ADMIN		**276,119**	**393,100**	**349,889**	**452,100**

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
STREETS					
10-60-110	SALARIES AND WAGES	60,123	58,000	48,052	69,000
10-60-130	EMPLOYEE BENEFITS	26,802	31,500	17,035	30,000
10-60-230	TRAVEL, EDUCATION	195	-	-	
10-60-240	OFFICE SUPPLIES AND EXPENSE	30	100	-	100
10-60-250	EQUIP - SUPPLIES & MAINTENANCE	1,298	5,000	3,431	5,000
10-60-270	UTILITIES	34,263	34,000	22,494	30,000
10-60-310	PROFESSIONAL & TECH SERVICES	41,184	60,000	34,236	60,000
10-60-340	EQUIPMENT RENTAL & MILEAGE	-	1,000	-	1,000
10-60-410	ROAD PATCHING - SUPPLIES	39,258	50,000	54,951	60,000
10-60-420	ROAD MAINTENANCE	52,010	100,000	58,238	75,000
10-60-450	PUBLIC SAFETY - SNOW PLOWING	18,910	45,000	15,009	45,000
10-60-480	PUBLIC SAFETY-LIGHTS & SIGNS	112,447	65,000	66,890	70,000
10-60-680	VEHICLE MAINTENANCE (COST SHARE)	20,000	70,000	70,666	70,000
TOTAL STREETS		**406,520**	**519,600**	**391,002**	**515,100**
CITY PARKS					
10-70-110	EMPLOYEES	60,205	58,000	55,713	68,000
10-70-125	TEMPORARY EMPLOYEE	-	-	-	-
10-70-130	EMPLOYEE BENEFITS	26,822	35,000	18,813	30,000
10-70-230	TRAVEL, EDUCATION	-	-	-	-
10-70-250	EQUIP - SUPPLIES & MAINTENANCE	18,942	40,000	45,860	55,000
10-70-260	PARK FACILITIES - REPAIR/MAINT	7,402	10,000	1,083	10,000
10-70-270	UTILITIES	1,032	2,000	1,426	2,000
10-70-310	PROFESSIONAL & TECH SERVICES	11,319	3,500	4,337	3,500
10-70-340	EQUIPMENT RENTAL	2,886	2,500	94	1,000
10-70-540	HA CREEK/Benchland IRRIGATION WATER	9,530	12,000	1,654	12,000
10-70-680	VEHICLE MAINTENANCE (COST SHARE)	47,370	70,000	70,000	70,000
10-70-740	CAPITAL OUTLAY - EQUIPMENT	53,492	22,000	25,495	10,000
TOTAL CITY PARKS		**238,999**	**255,000**	**224,475**	**261,500**
YOUTH COUNCIL					
10-72-615	UNIFORMS	(1,081)	500	-	500
10-72-620	YOUTH COUNCIL MISC. EXPENSES	5,650	7,000	7,623	7,000
TOTAL YOUTH COUNCIL		**4,568**	**7,500**	**7,623**	**7,500**
DISASTER RESPONSE					
10-73-610	MISC SUPPLIES & EQUIPMENT	280	-	-	-
TOTAL DISASTER RESPONSE		**280**	**-**	**-**	**-**
CONTRIBUTIONS AND TRANSFERS					
10-90-200	CONTRIBUTION TO VEHICLE/EQUIP	142,500	300,000	300,000	250,000
10-90-220	CONTRIBUTION TO CLASS C ROAD	513,074	187,500	187,500	150,000
10-90-999	CONTRIBUTION TO CAP PROJ FUND	685,000	300,000	300,000	268,800
10-90-120	UNALLOCATED TO FUND BALANCE	-	-	150,977	253,400
TOTAL CONTRIBUTIONS AND TRANSFERS		**1,340,574**	**787,500**	**938,477**	**922,200**
TOTAL FUND EXPENDITURES		**3,875,805**	**3,797,575**	**3,509,510**	**4,082,150**
NET REVENUE OVER EXPENDITURES		**(221,072)**	**-**	**228,680**	**-**

FRUIT HEIGHTS CITY CORPORATION
GENERAL FUND

	FY2026 OPERATIONAL BUDGET			
	FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
2025 FUND BALANCE				
Projected Revenues	3,738,190			
PY Unrestricted fund balance	843,037			
Add FY25 change in fund balance	150,977			
Projected Unrestricted Fund Balance	994,014			
% of Budgeted Revenues (5%-35%)	27%			
$ Amount below (above) the 30% target	127,443			
2026 FUND BALANCE				
Projected Revenues	4,082,150			
PY Unrestricted fund balance	994,014			
Add FY25 change in fund balance	(76,400)			
Projected Unrestricted Fund Balance	917,614			
% of Budgeted Revenues (5%-35%)	22%			
$ Amount below (above) the 30% target	307,031			

FRUIT HEIGHTS CITY CORPORATION
CAPITAL PROJECTS FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
SOURCE 33 &36					
13-33-400	GRANTS - STATE	-	126,000	-	-
13-36-100	INTEREST EARNINGS	223,866	150,000	186,544	200,000
TOTAL SOURCE 33 & 36		**223,866**	**276,000**	**186,544**	**200,000**
SOURCE 37					
13-37-280	PARKS AND TRAILS IMPACT FEES	6,690	10,000	4,014	5,600
13-37-300	TRANSPORTATION UTILITY FUND	179,606	180,000	183,635	180,000
TOTAL SOURCE 37		**186,296**	**190,000**	**187,649**	**185,600**
SOURCE 38					
13-38-100	CONTR.. FROM GENERAL FUND	685,000	300,000	300,000	268,800
13-38-800	CONTRIBUTIONS	-		-	-
13-38-999	USE OF FUND BALANCE	-	10,000	371,685	465,600
TOTAL SOURCE 38		**685,000**	**310,000**	**671,685**	**734,400**
TOTAL FUND REVENUE		**1,095,162**	**776,000**	**1,045,878**	**1,120,000**
EXPENDITURES					
13-90-880	UNALLOCATED USE OF FUND BAL	-	326,000	881,720	
TOTAL DEPARTMENT 90		**-**	**326,000**	**881,720**	**-**
CAPITAL PROJECTS					
13-99-003	SIDEWALK REPLACEMENT	13,775	50,000	3,106	15,000
NEW	TRANSPORTATION FEE PROJECTS	-		-	280,000
13-99-004	PARKING LOT	-	50,000	-	-
13-99-012	PARK IMPROVEMENTS	-	-	-	250,000
13-99-024	EAST BENCH TRAIL	814,889	100,000	153,271	25,000
13-99-026	CITY BUILDING	-	250,000	-	550,000
TOTAL CAPITAL PROJECTS		**828,664**	**450,000**	**156,377**	**1,120,000**
TOTAL FUND EXPENDITURES		**828,664**	**776,000**	**1,038,097**	**1,120,000**
NET REVENUE OVER EXPENDITURES		**266,498**	**-**	**7,780**	**-**

FRUIT HEIGHTS CITY CORPORATION
CAPITAL PROJECTS FUND

FY2026 OPERATIONAL BUDGET			
FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET

	CAPITAL PROJECTS FUND BALANCE		
	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024	767,451	2,780,385	3,547,836
2025 Est. Net Income		510,035	
2025 Est. Restrictions	183,635	(183,635)	
6/30/2025	951,086	3,106,785	4,057,871
2026 Est. Net Income		(185,600)	
2026 Est. Restrictions	(100,000)	100,000	
6/30/2026	851,086	3,021,185	3,872,271

FRUIT HEIGHTS CITY CORPORATION
CLASS C FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
INTERGOVERNMENTAL REVENUE					
21-33-560	CLASS C" ROAD FUND ALLOTMENTS"	278,881	280,000	298,474	280,000
TOTAL INTERGOVERNMENTAL REVENUE		**278,881**	**280,000**	**298,474**	**280,000**
OTHER REVENUE					
21-38-100	INTEREST EARNINGS	26,190	15,000	23,547	15,000
21-38-110	ANTIC. USE BEGINNING FUND BAL	-	-	-	
TOTAL OTHER REVENUE		**26,190**	**15,000**	**23,547**	**15,000**
CONTRIBUTIONS AND TRANSFERS					
21-39-100	CONTRIBUTION FROM GENERAL FUND	513,074	187,500	187,500	150,000
TOTAL CONTRIBUTIONS AND TRANSFERS		**513,074**	**187,500**	**187,500**	**150,000**
TOTAL FUND REVENUE		**818,146**	**482,500**	**509,521**	**445,000**
EXPENDITURES					
21-40-560	ROAD MAINTENANCE	-	-	-	-
21-40-580	ROADWAY IMPROV-OVERLAYS	1,103,406	-	-	280,000
21-90-880	CONTRIBUTION TO FUND BALANCE	-	482,500	500,439	165,000
TOTAL GEN FUND SUMMARY EXPENDITURES		**1,103,406**	**482,500**	**500,439**	**445,000**
TOTAL FUND EXPENDITURES		**1,103,406**	**482,500**	**500,439**	**445,000**
NET REVENUE OVER EXPENDITURES		**(285,260)**	**-**	**9,082**	**-**

FRUIT HEIGHTS CITY CORPORATION
CLASS C FUND

FY2026 OPERATIONAL BUDGET			
FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET

	CLASS C FUND BALANCE		
	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024	325,126		325,126
2025 Est. Net Income		-	
2025 Est. Restrictions	500,439		500,439
6/30/2025	825,565	-	825,565
2026 Est. Net Income	165,000		
2026 Est. Restrictions	-		
6/30/2026	990,565	-	990,565

FRUIT HEIGHTS CITY CORPORATION
IRRIGATION WATER PROJ FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
SOURCE 30					
49-30-210	ANNUAL MAINTENANCE FEES	12,768	13,000	13,000	13,000
TOTAL SOURCE 30		**12,768**	**13,000**	**13,000**	**13,000**
OTHER REVENUE					
49-38-200	SPECIAL ASSESSMENTS	332	-	1,444	-
49-38-910	USE OF FUND BALANCE	-	-	-	-
TOTAL OTHER REVENUE		**332**	**-**	**1,444**	**-**
TOTAL FUND REVENUE		**13,101**	**13,000**	**14,444**	**13,000**
EXPENDITURES					
GEN FUND SUMMARY EXPENDITURES					
49-40-250	EQUIP - SUPPLIES & MAINTENANCE	422	8,000	2,759	8,000
49-40-270	Utilities	-	1,000	-	1,000
49-40-310	PROF & TECH SERVICES	-	-	-	-
49-40-540	Benchland Water	-	2,000	1,521	2,000
TOTAL GEN FUND SUMMARY EXPENDITURES		**422**	**11,000**	**4,280**	**11,000**
DEPARTMENT 90					
49-90-880	UNALLOCATED TO FUND BALLANCE	-	1,500	9,731	1,500
49-90-999	TRANSFER TO FUND 51	-	500	-	500
TOTAL DEPARTMENT 90		**-**	**2,000**	**9,731**	**2,000**
TOTAL FUND EXPENDITURES		**422**	**13,000**	**14,011**	**13,000**
NET REVENUE OVER EXPENDITURES		**12,679**	**-**	**434**	**-**

FRUIT HEIGHTS CITY CORPORATION
WATER FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
ENTERPRISE REVENUE					
51-37-100	WATER SALES	1,036,771	1,000,000	1,166,540	1,150,000
51-37-280	CULINARY WATER IMPACT FEE	31,667	25,000	31,998	52,000
51-37-290	WATER CONNECTION FEES	570	500	360	1,000
TOTAL ENTERPRISE REVENUE		**1,069,008**	**1,025,500**	**1,198,898**	**1,203,000**
OTHER REVENUE					
51-38-100	INTEREST EARNINGS	111,933	40,000	87,674	70,000
51-38-115	PAPER BILLING REVENUE	11,839	10,000	11,887	10,000
51-38-500	SALE OF SUPPLIES (METERS, ETC)	4,115	5,000	2,664	5,000
51-38-600	GRANT REVENUE	1,197,223	-	-	-
51-38-610	GRANT REVENUE - ARPA	398,428	-	-	-
51-38-900	MISCELLANEOUS REVENUE	-	-	-	-
51-38-910	USE OF BEGINNING FUND BALANCE	-	171,000	-	566,450
TOTAL OTHER REVENUE		**1,723,539**	**226,000**	**102,225**	**651,450**
TOTAL FUND REVENUE		**2,792,546**	**1,251,500**	**1,301,123**	**1,854,450**
EXPENDITURES					
SOURCE OF SUPPLY					
51-81-100	SOURCE OF SUPPLY EXPENSE	288,304	322,000	320,512	353,000
TOTAL SOURCE OF SUPPLY		**288,304**	**322,000**	**320,512**	**353,000**
POWER: PUMPING TO STORAGE					
51-82-270	UTILITIES	19,859	22,000	20,107	23,000
TOTAL POWER: PUMPING TO STORAGE		**19,859**	**22,000**	**20,107**	**23,000**
PURIFICATION					
51-83-250	PURIFICATION EXPENSE	3,465	4,000	4,448	4,000
51-83-310	PROFESSIONAL & TECH SERVICES	1,008	1,500	1,210	1,500
TOTAL PURIFICATION		**4,473**	**5,500**	**5,213**	**5,500**

FRUIT HEIGHTS CITY CORPORATION
WATER FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
TRANSMISSION & DISTRIBUTION					
51-84-110	SALARIES AND WAGES	-	-	-	-
51-84-115	SALARY AND WAGES ASSISTANT	-	-	-	-
51-84-130	EMPLOYEE BENEFITS	-	-	-	-
51-84-135	EMPLOYEE BENEFITS, ASSISTANT	-	-	-	-
51-84-140	STANDBY PAY	-	-	-	-
51-84-160	PENSION EXPENSE	(5,300)	-	-	-
51-84-210	BOOKS/SUBSCRIPTIONS/MEMBERSHIP	3,216	3,000	5,240	4,200
51-84-230	TRAVEL, EDUCATION	230	-	-	-
51-84-250	EQUIP - SUPPLIES & MAINTENANCE	30,147	35,000	37,350	50,000
51-84-260	BLDG & GRNDS-SUPPLIES & MAINT	2,000	3,000	2,822	3,000
51-84-280	TELEPHONE	2,340	2,500	2,109	-
51-84-310	PROFESSIONAL & TECH SERVICES	112,946	130,000	100,904	75,000
51-84-340	EQUIPMENT RENTAL	-	3,000	-	1,500
51-84-400	WATER STUDY	-	3,000	-	1,500
51-84-410	ROAD TO SPRINGS - MAINTENANCE	-	2,500	-	2,500
51-84-450	SPECIAL PUBLIC SAFETY SUPPLIES	-	500	-	500
51-84-730	CAPITAL OUTLAY - IMPROVEMENTS	930	10,000	10,396	15,000
51-84-735	CAPITAL OUTLAY - IMPACT FEES	-	-	-	107,000
TOTAL TRANSMISSION & DISTRIBUTION		**146,508**	**192,500**	**158,822**	**260,200**
ADMINISTRATION & GENERAL					
51-85-610	MISCELLANEOUS EXPENSES	2,253	2,500	2,186	2,500
TOTAL ADMINISTRATION & GENERAL		**2,253**	**2,500**	**2,186**	**2,500**
OTHER					
51-89-650	DEPRECIATION	269,762	260,000	296,739	328,000
51-89-800	UNALLOCATED	-	141,315	88,300	
51-89-910	ADMIN COSTS - TO GENERAL FUND	297,700	272,000	272,000	283,000
51-89-915	COST SHARE OF CITY BUILDING	85,400	50,000	50,000	50,000
51-89-920	COST SHARE TO VEH & EQUIP	71,250	75,000	75,000	71,250
TOTAL OTHER		**724,112**	**798,315**	**782,039**	**732,250**
CAPITAL PROJECTS					
NEW	650 N WATERLINE EXTENSION	-	-	-	443,000
51-99-010	HYDRANT REPLACEMENT	-	50,000	5,622	35,000
51-99-025	AGING INFRASTRUCTURE	(95,815)	-	-	-
TOTAL CAPITAL PROJECTS		**(95,815)**	**50,000**	**5,622**	**478,000**
TOTAL FUND EXPENDITURES		**1,089,695**	**1,392,815**	**1,294,500**	**1,854,450**
NET REVENUE OVER EXPENDITURES		**1,702,852**	**(141,315)**	**6,623**	**-**

FRUIT HEIGHTS CITY CORPORATION
WATER FUND

FY2026 OPERATIONAL BUDGET			
FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET

	WATER FUND BALANCE			
	IFA	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024	10,354,072	513,232	2,010,492	12,877,796
2025 Est. Net Income			88,300	88,300
2025 Est. Restrictions	5,622	31,998	(37,620)	-
6/30/2025	10,359,694	545,230	1,972,872	12,877,796
2026 Est. Net Income			(566,450)	(566,450)
2026 Est. Restrictions		(55,000)	55,000	-
6/30/2026	10,304,694	600,230	1,461,422	12,366,346

FRUIT HEIGHTS CITY CORPORATION
SEWER FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
ENTERPRISE REVENUE					
52-37-100	SEWER SERVICE CHARGES	645,665	880,000	915,656	960,000
TOTAL ENTERPRISE REVENUE		**645,665**	**880,000**	**915,656**	**960,000**
OTHER REVENUE					
52-38-100	INTEREST EARNINGS	21,321	15,000	18,746	15,000
TOTAL OTHER REVENUE		**21,321**	**15,000**	**18,746**	**15,000**
TOTAL FUND REVENUE		**666,985**	**895,000**	**934,402**	**975,000**
EXPENDITURES					
SEWAGE TREATMENT					
52-80-310	SEWAGE TREATMENT EXPENSES	599,477	840,000	836,772	920,000
TOTAL SEWAGE TREATMENT		**599,477**	**840,000**	**836,772**	**920,000**
ADMINISTRATION & GENERAL					
52-85-610	MISCELLANEOUS EXPENSES	2,158	5,000	4,475	2,500
TOTAL ADMINISTRATION & GENERAL		**2,158**	**5,000**	**4,475**	**2,500**
OTHER					
52-89-910	ADMIN COSTS - TO GEN FUND	37,900	37,500	37,500	40,100
52-89-915	COST SHARE OF CITY BUILDING	10,900	12,500	12,500	12,400
52-89-930	UNALLOCATED FUNDS	-	-	43,189	-
TOTAL OTHER		**48,800**	**50,000**	**93,189**	**52,500**
TOTAL FUND EXPENDITURES		**650,435**	**895,000**	**934,436**	**975,000**
NET REVENUE OVER EXPENDITURES		**16,551**	**-**	**(34)**	**-**

	SEWER FUND BALANCE		
	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024		443,687	443,687
2025 Est. Net Income		43,154	43,154
2025 Est. Restrictions			-
6/30/2025	-	443,687	443,687
2026 Est. Net Income		-	-
2026 Est. Restrictions			-
6/30/2026	-	443,687	443,687

FRUIT HEIGHTS CITY CORPORATION
STORM WATER UTILITY FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
ENTERPRISE REVENUE					
55-37-100	STORM DRAIN FEES	383,478	385,000	385,897	385,500
55-37-280	STORM DRAIN IMPACT FEE	10,102	10,000	6,061	10,000
TOTAL ENTERPRISE REVENUE		**393,580**	**395,000**	**391,958**	**395,500**
OTHER REVENUE					
55-38-100	INTEREST EARNINGS	69,292	50,000	59,895	50,000
TOTAL OTHER REVENUE		**69,292**	**50,000**	**59,895**	**50,000**
CONTRIBUTIONS AND TRANSFERS					
55-39-110	USE OF BEGINNING FUND BALANCE	-	380,000	306,733	48,350
TOTAL CONTRIBUTIONS AND TRANSFERS		**-**	**380,000**	**306,733**	**48,350**
TOTAL FUND REVENUE		**462,872**	**825,000**	**758,586**	**493,850**
EXPENDITURES					
GEN FUND SUMMARY EXPENDITURES					
55-40-110	SALARY & WAGES	-	-	-	-
55-40-130	EMPLOYEE BENEFITS	-	-	-	-
55-40-140	PENSION EXPENSE	(3,141)	-	-	-
55-40-230	TRAVEL, EDUCATION	150	-	-	
55-40-250	MAINTENANCE	3,150	5,000	-	3,500
55-40-310	PROF & TECH SERVICES	83,803	70,000	42,074	70,000
55-40-320	MISCELLANEOUS EQUIPMENT	562	500	42	500
55-40-400	COUNTY & STATE STORM WTR FEES	2,420	3,000	2,604	4,000
55-40-550	ENGINEERING	-	10,000	4,769	4,000
55-40-555	MAINTENANCE/REPAIRS	260	1,000	-	5,000
55-40-610	MISCELLANEOUS SUPPLIES	515	750	458	500
55-40-650	DEPRECIATION	69,612	72,000	72,000	75,000
55-40-910	ADMIN COST TO GENERAL FUND	173,200	158,000	158,000	167,000
55-40-915	COST SHARE CITY BLDG FUND 10	46,600	35,000	35,000	35,100
55-40-920	COST SHARE TO VEHIC & EQUIP	71,250	71,250	71,250	71,250
TOTAL GEN FUND SUMMARY EXPENDITURES		**448,381**	**426,500**	**386,197**	**435,850**
CAPITAL PROJECTS					
55-99-008	CURB AND GUTTER REPLACEMENT	-	18,500	2,940	20,000
55-99-012	ORCHARD DRIVE STORM DRAIN	-	380,000	274,310	38,000
55-99-011	650 N QUAIL RIDGE	-	-	-	-
TOTAL CAPITAL PROJECTS		**-**	**398,500**	**277,250**	**58,000**
TOTAL FUND EXPENDITURES		**448,381**	**825,000**	**663,447**	**493,850**
NET REVENUE OVER EXPENDITURES		**14,491**	**-**	**95,139**	**-**

FRUIT HEIGHTS CITY CORPORATION
STORM WATER UTILITY FUND

FY2026 OPERATIONAL BUDGET			
FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET

	STORM FUND BALANCE			
	IFA	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024	2,567,954	-	1,179,120	3,747,074
2025 Est. Net Income	277,250		(306,733)	(29,483)
2025 Est. Restrictions				-
6/30/2025	2,845,204	-	1,179,120	4,024,324
2026 Est. Net Income			(48,350)	(48,350)
2026 Est. Restrictions	58,000		(58,000)	-
6/30/2026	2,903,204	-	1,072,770	3,975,974

FRUIT HEIGHTS CITY CORPORATION
SOLID WASTE FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
ENTERPRISE REVENUE					
59-37-100	SOLID WASTE COLLECTION CHARGES	445,070	490,000	494,605	609,000
TOTAL ENTERPRISE REVENUE		**445,070**	**490,000**	**494,605**	**609,000**
OTHER REVENUE					
59-38-100	INTEREST EARNINGS	21,321	15,000	18,746	15,000
TOTAL OTHER REVENUE		**21,321**	**15,000**	**18,746**	**15,000**
SOURCE 39					
59-39-110	USE OF BEGINNING FUND BALANCE	-	10,000	(22,201)	(5,500)
TOTAL SOURCE 39		**-**	**10,000**	**(22,201)**	**(5,500)**
TOTAL FUND REVENUE		**466,390**	**515,000**	**491,150**	**618,500**
EXPENDITURES					
GEN FUND SUMMARY EXPENDITURES					
59-40-105	WASTE DISPOSAL COSTS	225,293	233,000	228,000	250,000
59-40-310	WASTE COLLECTION COSTS	212,973	235,000	216,000	270,000
59-40-320	SEMI-ANNUAL CLEAN UP EXPENSES	810	3,000	-	5,000
59-40-610	MISCELLANEOUS SUPPLIES	2,158	3,000	119,955	5,000
59-40-910	ADMIN COSTS - TO GENERAL FUND	27,100	28,500	28,500	74,400
TOTAL GEN FUND SUMMARY EXPENDITURES		**468,334**	**502,500**	**592,455**	**604,400**
DEPARTMENT 89					
59-89-915	COST SHARE OF CITY BUILDING	12,500	12,500	12,500	14,100
TOTAL DEPARTMENT 89		**12,500**	**12,500**	**12,500**	**14,100**
TOTAL FUND EXPENDITURES		**480,834**	**515,000**	**604,955**	**618,500**
NET REVENUE OVER EXPENDITURES		**(14,444)**	**-**	**(113,805)**	**-**

	SOLID WASTE FUND BALANCE			
	RESTRICTED	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024		-	363,161	363,161
2025 Est. Net Income			22,201	22,201
2025 Est. Restrictions				-
6/30/2025	-	-	363,161	363,161
2026 Est. Net Income			5,500	5,500
2026 Est. Restrictions	-			-
6/30/2026	-	-	368,661	368,661

FRUIT HEIGHTS CITY CORPORATION
VEHICLE & EQUIPMENT FUND

		FY2026 OPERATIONAL BUDGET			
		FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET
REVENUES					
OTHER REVENUE					
61-38-100	INTEREST EARNINGS	41,391	30,000	36,463	30,000
61-38-200	GAIN ON SALE OF ASSETS	-	-	-	-
61-38-400	SALE OF VEHICLES/EQUIPMENT	61,686	216,900	126,659	25,000
TOTAL OTHER REVENUE		**103,078**	**246,900**	**163,122**	**55,000**
CONTRIBUTIONS AND TRANSFERS					
61-39-100	COST SHARE FROM GENERAL FUND	67,370	140,000	140,000	140,000
61-39-110	COST SHARE FRM STRM WTR FUND	71,250	71,250	71,250	71,250
61-39-120	COST SHARE FROM WATER FUND	71,250	75,000	75,000	71,250
61-39-140	ANTICIPATED FUND BALANCE USE	-	6,350	(493,238)	72,560
61-39-220	TRANSFER FROM GENERAL FUND	142,500	300,000	300,000	250,000
TOTAL CONTRIBUTIONS AND TRANSFERS		**352,370**	**592,600**	**93,012**	**605,060**
TOTAL FUND REVENUE		**455,448**	**839,500**	**256,134**	**660,060**
EXPENDITURES					
MAINTENANCE BUILDING					
61-61-250	SHOP - SUPPLIES, PROPANE, ETC	9,378	12,000	7,173	10,000
61-61-255	UTILITIES - GAS & ELECTRICITY	8,490	10,000	9,250	10,000
61-61-260	BLDG & GRNDS - REPAIRS & MAINT	3,237	20,000	7,476	20,000
61-61-280	TELEPHONE	2,819	3,000	2,953	-
TOTAL MAINTENANCE BUILDING		**23,924**	**45,000**	**26,852**	**40,000**
OPERATIONS EXPENSE					
61-62-240	FUEL	30,631	40,000	26,170	40,000
TOTAL OPERATIONS EXPENSE		**30,631**	**40,000**	**26,170**	**40,000**
MAINTENANCE & REPAIRS					
61-86-250	VEH & EQUIP, SUPPLIES & MAINT	35,960	30,000	50,559	30,000
61-86-260	TOOLS	1,996	3,500	3,921	5,000
61-86-275	TRADE IN MINI	-	-	-	-
61-86-280	TIRES	2,120	5,000	1,156	7,500
61-86-340	EQUIPMENT RENTAL	288	1,000	-	500
61-86-740	CAPITAL OUTLAY - VEHIC & EQUIP	-	560,000	182,000	360,000
TOTAL MAINTENANCE & REPAIRS		**40,364**	**599,500**	**237,636**	**403,000**
OTHER					
61-89-650	DEPRECIATION	143,706	155,000	159,514	177,060
61-89-700	CAPITALIZED ASSETS	-	-	-	
TOTAL OTHER		**143,706**	**155,000**	**159,514**	**177,060**
TOTAL FUND EXPENDITURES		**238,625**	**839,500**	**450,172**	**660,060**
NET REVENUE OVER EXPENDITURES		**216,823**	**-**	**(194,038)**	**(0)**

FRUIT HEIGHTS CITY CORPORATION
VEHICLE & EQUIPMENT FUND

	FY2026 OPERATIONAL BUDGET			
	FY24 ACTUAL	FY25 BUDGET	FY25 ESTIMATES	FY26 BUDGET

	VEHICLE FUND BALANCE			
	IFA	RESTRICTED	UNRESTRICTED	TOTAL
6/30/2024	879,852	-	835,186	1,715,038
2025 Est. Net Income			307,738	307,738
2025 Est. Restrictions	194,000		(194,000)	-
6/30/2025	1,073,852	-	641,186	1,715,038
2026 Est. Net Income			(72,560)	(72,560)
2026 Est. Restrictions	-			-
6/30/2026	1,073,852	-	568,626	1,642,478

DEVELOPMENT AGREEMENT
FOR [PINE RIDGE ESTATES]

THE DEVELOPMENT AGREEMENT (the "Agreement") is made and entered into as of the ____ day of _____, 2025, by and between **FRUIT HEIGHTS CITY**, a Utah municipal corporation, hereinafter referred to as the "City," **HENRY WALKER LAND, LLC,** a Utah limited liability company, its successors and assigns, hereinafter collectively referred to as the "Developer", and [**Pine Ridge Owners Association**[1]], hereinafter referred to as "HOA". The term "HOA" shall include any separate owners association created for Phase 2 (as defined below).

RECITALS:

A. Developer owns or has under contract approximately 26 acres of property located within the City, which property is more particularly described in **Exhibit A** attached hereto and incorporated herein by reference (the "Property").

B. The property has been zoned R-1-12. Developer is also seeking subdivision and final plat approval for 27 total building lots across two phases in the Project (the "Project").

C. The first phase ("Phase 1") is comprised of 15 lots and the second phase ("Phase 2") of the Project is comprised of 12 lots. Graphic depictions of Phase 1 and Phase 2 are attached hereto as **Exhibit B**.

D. Phase 1 and Phase 2 may be developed separately and by separate developers. As such, the Developer and City will clearly identify which obligations set forth herein are applicable to (i) Phase 1, or (ii) Phase 2. If this Agreement is silent as to which phase an obligation applies, such obligation shall be deemed applicable to both Phase 1 and Phase 2 independently.

E. It is the intent of the parties hereto that a default occurring pursuant to a Phase 1 obligation shall not be deemed to be a default for Phase 2 and vice versa.

F. The approved final plat for Phase 1 ("Phase 1 Final Plat") is attached hereto as **Exhibit C**. Once final, the approved final plat for Phase 2 (the "Phase 2 Final Plat") will be inserted at **Exhibit C**. References herein to "Final Plat" shall, with respect to Phase 1, mean the Phase 1 Final Plat, and with respect to Phase 2, mean the Phase 2 Final Plat once approved.

G. Persons and entities hereafter developing the Property or any portions of the Project thereon shall accomplish such development in accordance with (i) the requirements of the R-1-12 zone; (ii) the City's construction ordinance codified in Section 9-1-1 through 9-1-5; (iii) the Final Plat; (iv) the City's traffic ordinance, if different from the City's construction ordinance, codified in Section 6-1-1 through 6-1-8; (v) the civil plans prepared for the Project (the "Civil Plans"); and (vi) this Agreement (collectively, the "City Standards"). In the event of any conflict between the terms and provisions of this Agreement and the foregoing (i) through (v), the terms and provisions of this Agreement shall control. Thereafter, priority shall be (a) the Civil Plans; (b) the City's construction ordinance codified in Section 9-1-1 through 9-1-5; and (c) the requirements of the R-1-12 zone.

[1] Association subject to availability and change.

H. The City has the authority to enter into this Agreement pursuant to Utah Code Ann. ("Utah Code") Section 10-9a-102(2) and relevant provisions of the zoning ordinance, and the City desires to enter into this Agreement with the Developer and HOA for the purpose of establishing specific rights and obligations of said parties with respect to the Project in accordance with the terms and conditions of this Agreement.

I. This Agreement is consistent with the zoning ordinance and satisfies the requirements for the City, Developer, and HOA to enter into an agreed upon development agreement.

J. The parties intend to be bound by the terms of this Agreement as set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City, Developer, and HOA hereby agree as follows:

1. **Incorporation of Recitals and Exhibits.** The above Recitals and Exhibits that follow are hereby incorporated into and made part of this Agreement.

2. **Development of the Project.** The Project shall be developed in phases as set forth above by Developer, as follows:

a. Generally. The Project and all portions thereof shall be developed in accordance with the City Standards.

b. Roads and Traffic. Roads for the Project shall be developed in accordance with the City's Master Transportation Plan. Specifically, all roads to be constructed by Developer will be engineered and constructed in substantial accordance with City Standards and shall maintain a grade of 12% or less. Unless otherwise noted on the Final Plat, all such roads will be public streets.

c. Geotechnical Study and Review. As of the date hereof, there are four (4) geotechnical reports that have been prepared for, and need to be assessed as part of, the geotechnical conditions for the Project: (1) Geotechnical and Geologic Hazard Study, Barker Property, dated January 9, 2023, IGES project #00145-038 (the "IGES Report"); (2) Review of Geotechnical and Geologic Hazard Study, completed by Tim Thompson, P.E., with Geostrata, dated June 9, 2023 (the "Hazard Study"); (3) Response to Review Comments, dated September 6, 2023, submitted by IGES, and (4) Review of Keystone Retaining Wall Design Package, dated April 23, 2025, completed by Tim Thompson, Geostrata (the "Responses" and collectively with the IGES Report, Hazard Study, the "Geotechnical Studies"). For purposes of clarity, as of the date hereof, Tim Thompson is the City's hired 3rd party reviewer for the Geotechnical Studies. Each of the Geotechnical Studies are attached hereto as **Exhibit D**. Developer hereby agrees to substantially comply

with the City's Sensitive Lands Evaluation & Development Standards ordinance, a copy of which is attached hereto as **Exhibit E** in the initial development of the Project**.** Developer has agreed to pay for the actual and reasonable third party review of the Geotechnical Studies. Developer shall comply with all recommendations contained within the Geotechnical Studies in the initial development of the Project. Developer will include a section in its Declaration of Covenants, Conditions, and Restrictions, which may be separate for each phase (as applicable, "CC&Rs") stating that each owner within the Project will comply in perpetuity with the recommendations of the Geotechnical Studies.

d. Retaining Walls. A keystone retaining wall will be constructed along Driggs Drive ("Retaining Wall 1") as depicted and further described in the Keystone Retaining Wall Design Package dated 6-14-2024, and stamped by engineer Bradley M. Johnson. A second retaining wall will be constructed at the rear of lots 101 – 106 on the west side ("Retaining Wall 2" and together with Retaining Wall 1, the "Retaining Walls") as depicted and further described in the Keystone Retaining Wall Design Package dated 5/15/2024, and stamped by engineer Bradley M. Johnson.. As of the date hereof, it is anticipated that Retaining Wall 2 will be constructed on Parcel C, as shown on the Final Plat which is or will be owned by the City. The Retaining Walls and any fencing depicted in the Keystone Retaining Wall Design Packages referenced above, and attached hereto as **Exhibit F**, will be constructed by Developer and maintained by the HOA. The HOA agrees to pay for one (1) annual inspection by a geotechnical engineer selected by the HOA to assess the condition of the Retaining Walls. As of the date hereof, the City acknowledges that except for Retaining Wall 1 and Retaining Wall 2, no other retaining walls are required to be constructed within the Project or for the benefit of the Project. Developer will include a section in its CC&Rs stating that each owner with a lot specific retaining wall will cause such retaining wall to be designed and inspected by a geotechnical engineer to ensure proper design and installation and that the applicable owner or its builder will be required to supply the aforementioned geotechnical inspections to the City prior to obtaining a final certificate of occupancy. .

e. Geotechnical Compliance Reports and Inspections. Upon submittal for any building permit, each applicant will provide a grading and drainage plan to be reviewed by IGES for compliance with all recommendations contained in the Geotechnical Studies. After review, IGES will submit a compliance report to the City stating any specific lot recommendations, and indicating that the grading and drainage plans comply with the recommendations contained in the Geotechnical Studies. Within ten (10) days thereafter, the City shall cause a final review of the individual lot report by IGES to be timely reviewed by Geostrata. Each permit applicant agrees to pay for any costs associated with reviews of geotechnical conditions. Additionally, an onsite inspection by a geotechnical engineer will be required to observe the site excavation before footings can be installed. A geotechnical inspection will also be completed once all of the site grading has been completed prior to certificate of occupancy, is installed after receipt of final certificate of occupancy then an additional geotechnical inspection will be required

upon completion of such landscaping. Developer will include a section in its CC&Rs causing the HOA to monitor landscaping, that materially changes the final grade of a residence, installed post final certificate of occupancy to ensure compliance with this section. The HOA shall identify and hire a geotechnical or other qualified engineer (the "HOA Engineer") to inspect and monitor the Project on a quarterly calendar basis to confirm the compliance with the Geotechnical Studies (collectively, the "Quarterly Inspections"). Additionally, the CC&Rs shall include language obligating the HOA or a committee thereof to either hire a third-party to, or self-perform, compliance with the Water Covenants (as defined below) (in either instance, the "Water Committee"). The HOA shall include the costs of the Quarterly Inspections in the annual budget and such costs shall be considered common expenses. The cost of any review for compliance with Water Covenants shall be solely borne by the applicable lot owner. Additionally, the Developer shall include a section in its CC&Rs clearly stating that any violation of the Geotechnical Studies and/or the Water Covenants will result in a fine. The initial HOA Engineer will be IGES but the HOA reserves the right to replace IGES at any time it determines reasonably appropriate and/or necessary. As of the date hereof, no third party has been identified to monitor compliance with the Water Covenants. With respect to each phase, individually, Quarterly Inspections shall be required until 75% of the residences in each applicable phase have been constructed and received certificates of occupancy. Thereafter, the Geotechnical Inspections will automatically change from a Quarterly Inspection to an annual inspection, with the cost of each annual inspection to be included as a common expense of the HOA.

e. Storm Drainage. Developer shall construct all storm drainage facilities within the Project in accordance with the City Standards. No storm detention basin is required within the Project. All storm water will be directed to an existing storm detention basin owned by the Utah Department of Transportation on the west side of Mountain Road in accordance with the Civil Plans

f. Water System. Developer shall construct and install a culinary water system necessary to serve the Project in accordance with the City Standards. The City will verify adequate fire flow and pressure settings prior to the issuance of any building permits within the Project; provided, however, approval of the Civil Plans shall be prima facie evidence that the foregoing requirements have been satisfied. As part of infrastructure for Phase 2, Developer agrees to install a 12" water line across the upper road (extension of Rock Loft Drive) that will tie into an existing water line on Rock Loft Drive and carry it through and stub into Davis County property on the north side of the Project in accordance with the Civil Plans.

g. Culinary Water for Outdoor Use: The City agrees to allow the use of culinary water for outdoor use and irrigation. The City has adopted a Water Efficient Landscape Ordinance, attached hereto as **Exhibit G** (the "Water Covenants"). This Project will comply with the Water Covenants. The City will be able to price the culinary water supplied to the Development in accordance with established City ordinances governing the assessment of culinary water charges.

As of the date hereof, the current culinary water assessment is equal to $9,412.93. Additionally, the Project will have turf restrictions that will limit the amount of turf on any lot to the following: no more than 20% of the buildable area on the lot shall be turf on lots up to 1/2 acres in size, on lots in size that are greater than 1/2 acre then the turf restriction will be the lesser of no more than 20% of the buildable area of the lot or a maximum of 5,500 square feet of turf. The buildable area shall be calculated by excluding any restricted or sensitive lands area marked on the Final Plat and excluding any area of the lot with slopes in excess of 30%. No turf or non-drip irrigation shall be allowed in the restricted or sensitive area (as shown on the Final Plat or Civil Plans) on a lot. This turf restriction will not apply to artificial turf that does not require water. Trees and bushes will be encouraged but not required unless set forth in the Water Covenant, as an integral part of the comprehensive landscape plan unless the inclusion of the same violates the Water Covenants or is not economically feasible. Each landscape plan needs to demonstrate that extensive efforts have been made to limit high water demand landscaping such as the installation of grass turf. The City expressly agrees that compliance with the Water Covenants shall be deemed the Developer's and/or applicable owner's extensive efforts to comply therewith. A combination of hardscapes, mulch, bark, trees, bushes, and other low water use features, in a composition determined by the Developer and/or applicable owner, will be required on all landscaping plans, as established in the Water Covenants.

h. Utilities and Infrastructure. Developer shall install or cause to be installed natural gas, underground electrical service, sanitary sewer, and culinary water supply systems and storm drainage facilities as required by the City for the Project in accordance with the City Standards.

(i) The Developer will obtain a will serve, or similar confirmation, letter from Central Davis Sewer District. The letter will indicate that the Civil Plans have met the districts requirements. It is understood that the overall density of the Project will not exceed 3 units per acre.

(ii) The Developer, or subsequent owner of Phase 2, shall submit a will serve, or similar confirmation, letter from Weber Basin Water Conservancy District indicating that it has reviewed the Civil Plans and that Phase 2 is in full compliance with the Bureau of Reclamation's easement on the aqueduct, and any Phase 2 improvements that will cross the aqueduct or be located within the easement.

(iii) The Developer shall submit a will serve, or similar confirmation, letter from Rocky Mountain Power indicating that it has reviewed and approved the Civil Plans and agrees to the location of improvements.

(iv) The Developer shall submit the Civil Plans to the City's Contracted Fire Department (as of the date hereof, Farmington Fire) and obtain written approval from the Fire Marshal of Farmington Fire for any fire related

issues such as fire hydrant location, water pressure, street grades, and street layout.

(v) Except as otherwise noted herein, all public improvements for the Project which are intended to be owned by the City when completed shall be constructed and installed at the Developer's sole expense in accordance with City Standards. All offsite improvements required by the Civil Plans will be constructed and installed in a timely manner, by Developer, in order to coincide with the various phases of the Project.

(vi) Developer agrees that the CC&R's for the Project shall not conflict with any City Standards. Setback recommendations from the Geotechnical Report shall be considered when determining setback requirements related to sensitive land overlay zone issues.

(vii) Developer shall submit proposed CC&R's to the City for review and comment in conjunction with approval of the Final Plat. The City review shall be based on compliance with City Standards. The HOA will own and maintain parcel A and parcel B, which are located in Phase 1, as shown on the Final Plat.

i. Parks and Trails. As part of the Phase 2 improvements, Developer or the subsequent owner of Phase 2 agrees to construct a trail connecting the two cul-de-sacs with a natural surface trail at least 10' wide and roughly depicted on page T-1 of the Civil Plans (the "Trail"). The Trail will be located within a 20-foot easement and will be shown on the Final Plat. Developer or the subsequent owner of Phase 2 agrees to dedicate the Trail easement to the City, and the City shall own and maintain, at its sole cost, the Trail in perpetuity. One purpose, among other purposes, of the Trail will be to provide public access between the two cul-de-sacs, as shown on the Civil Plans, and provide an emergency downhill escape route in case of wildland fire or other emergencies. The Trail shall be constructed in a manner to accommodate a passenger vehicle if needed in emergency. The Trail shall be constructed in substantial accordance with the City Standards. The Trail will be part of Phase 2 and shall be completed in conjunction with the Phase 2 improvements. Failure by Developer or subsequent owner of Phase 2 to complete the Trail shall in no way cause the owner of Phase 1, if different, to be in default under the terms and provisions hereof or assume any obligation to complete the Trail to receive certificates of occupancy or any other approvals to realize its desired use of Phase 1.

j. Dedication and Donation. Prior to, or concurrent with, the recording of the Final Plat for the Project in the office of the Davis County Recorder, the Developer agrees to dedicate, transfer and voluntarily donate to the City all required easements for the purpose of constructing, installing, operating, maintaining, repairing and replacing public improvements and utilities located within the Project, as shown on the Civil Plans. Developer will take such actions as are necessary to obtain release of any monetary encumbrances on any portion of the

Project to be dedicated to the City at the time the final plat is recorded, at Developer's cost.

k. Required Changes. If any revisions or corrections of plats or Civil Plans shall be required by any other governmental entity having jurisdiction or lending institutions involved in financing, the Developer and the City shall cooperate where appropriate to obtain or develop reasonable, mutually acceptable alternative plans or plats. Developer shall have the sole duty and responsibility to obtain approval from any other governmental entities having jurisdiction with respect to the Project as needed.

l. Construction Standards and Requirements. All construction shall be conducted and completed in accordance with the City Standards. All required public improvements for the Project, as shown on the Civil Plans, shall be constructed in accordance with City Standards and shall be dedicated to the City. Prior to commencing any construction or development of any building, structures or other work or improvements within the Project, the Developer shall secure any and all permits which may be required by the City or any other governmental entity having jurisdiction over the work. Developer shall construct, or cause to be constructed, all improvements for the Project in conformity with all applicable federal, state and/or local laws, rules and regulations.

m. Security. At the appropriate time, Developer shall provide the City with security in a form satisfactory to the City to guarantee the installation and completion of all public improvements to be constructed by Developer within the applicable phases of the Project in accordance with City Standards. Security provided by the Developer shall also encompass revegetation consistent with a revegetation plan prepared by Developer, for the applicable phases, and approved by the City for all cuts and fills or any and all graded and disturbed areas related to the Project.

n. Inspection by the City. The City shall perform periodic inspections, no less frequently than once per calendar month, of the improvements being installed and constructed by the Developer or its contractors. No work involving excavation shall be covered until the same has been inspected by the City's representatives and/or the representatives of other governmental entities having jurisdiction over the particular improvements involved. Developer shall warrant the materials and workmanship of all public improvements installed by Developer or its contractors within the applicable phases of the Project and to be dedicated to the City for a period of twelve (12) months from and after the date of final inspection and approval by the City of the improvements in that phase. All buildings shall be inspected in accordance with the provisions of the International Building Code.

o. Maintenance during Construction. During construction, the Developer, the City, and their respective contractors shall use commercially reasonable efforts to keep the Project, and all affected public streets free, and clear from any unreasonable accumulation of debris, waste materials, mud, and any nuisances

created by the Project, and shall use commercially reasonable efforts to contain Project construction debris and provide dust and mud control, as required by City Standards, so as to prevent the scattering via wind and/or water runoff. Notwithstanding the foregoing, the City acknowledges that it is impossible to prevent all construction debris, dust, and mud from entering upon adjacent properties and/or public streets. As applicable, the City shall notify Developer in writing of the same, and Developer shall cause its contractor to substantially remove such debris, dust, and/or mud within a commercially reasonable timeframe following such written notice. Additionally, the City agrees and acknowledges that so long as Developer and/or its contractors, subcontractors, employees, agents, and any similar parties performing work within the applicable phases of the Project are complying with City Standards then its construction activities and debris accumulated therewith shall not be deemed nuisances.

3. **Payment of Fees.** The Developer shall pay to the City all required fees in a timely manner. Fees shall be paid in the amounts which are applicable at the appropriate time, pursuant to and consistent with standard City procedures, requirements, adopted by City.

4. **City Obligations.** Subject to Developer complying with City Standards, the City agrees to maintain the public improvements dedicated to the City upon expiration of the warranty period established in Section 2.n. above, and to provide standard municipal services to the Project including, but not limited to, police and fire protection subject to the payment of all fees and charges charged or levied therefore by the City. The City acknowledges and agrees that Developer's recording of the Final Plat shall be deemed satisfactory evidence of payment of all required fees and charges.

5. **Vested Rights and Reserved Legislative Powers**.

a. Vested Rights. To the maximum extent permitted under the laws of the City, the State of Utah and the United States, the Parties hereto intend that this Agreement grants to Developer the right to develop the respective phases within the Project, as outlined in and subject to the requirements set forth in this Agreement, without modification or interference by the City (collectively, the "Vested Rights"). The parties intend that the rights granted to Developer under this Agreement are contractual and also those rights that exist under statute, common law and at equity. The parties specifically intend that this Agreement grants to Developer "vested rights" as that term is construed in Utah's common law and pursuant to Utah Code Ann. §10-9a-509.5.

b. Applicable Development Regulations. Neither the City nor any department or agency of the City shall impose upon the Project (whether by initiative, or other means) any ordinance, resolution, rule, regulation, standard, directive, condition or other measure (each, a "New Law") that reduces or impacts the development rights provided by this Agreement or by the Vested Rights. Without limiting the generality of the foregoing, any New Law shall be deemed to conflict with this Agreement and/or the Vested Rights if it would accomplish any of the following results in a manner inconsistent with or more restrictive than Applicable Law, either by specific

reference to the Project or as part of a general enactment that applies to or affects the Project: (i) change any land uses or permitted uses of the Project, or any phase thereof; (ii) limit or control the rate, timing, phasing or sequencing of the approval, development or construction of all or any part of the Project, or any phase thereof, in any manner so long as all applicable requirements of this Agreement, the zoning ordinance are satisfied; or (iii) apply to the Project, or any phase thereof, any New Law otherwise allowed by this Agreement that is not uniformly applied on a City-wide basis to all substantially similar types of development projects and project sites with similar land use designations. Notwithstanding the foregoing, if Developer considers any New Law to be beneficial to the Project, or any phase thereof, this section does not require Developer to comply with the superseded ordinance, but rather in such cases, Developer may with City approval, which approval may not be unreasonably withheld, conditioned, or delayed, elect to request that the New Law apply to the Project.

c. Reserved Legislative Powers. The Developer acknowledges that the City is restricted in its authority to limit its police power by contract and that the limitations, reservations and exceptions set forth herein are intended to reserve to the City all of its police power that cannot be so limited. Notwithstanding the retained power of the City to enact such legislation of the police powers, such legislation shall not modify the Developer's vested right as set forth herein unless facts and circumstances are present which meet the exceptions to the vested rights doctrine as set forth in Section 10-9a-509.5 of the Municipal Land Use, Development, and Management Act, as adopted on the Effective Date, *Western Land Equities, Inc. v. County of Logan*, 617 P.2d 388 (Utah 1980), its progeny, or any other exception to the doctrine of vested rights recognized under state or federal law

6. **Indemnification and Insurance.** Developer and/or its contractors hereby agree to indemnify and hold the City and its officers, employees, representatives, agents and assigns harmless from any and all liability, loss, damage, costs or expenses, including attorney's fees and court costs, arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or to property of any person which shall occur within any publicly owned or dedicated areas of the Project or occur in connection with any off-site work done for or in connection with the Project or any phase thereof which shall be caused by any negligence or willful misconduct of the Developer or of any of Developer's agents, contractors, servants, or employees at any time; provided, however, the foregoing indemnification obligation shall not apply to claims, costs, demands, or similar liabilities arising as a result of the City's negligence or willful misconduct. Developer and/or its contractors shall furnish, or cause to be furnished, to the City a satisfactory certificate of insurance from a reputable insurance company evidencing general liability coverage for the Property and the Project in a single limit of not less than One Million Dollars ($1,000,000) and naming the City as an additional insured.

7. **Right of Access.** In accordance with City Standards, representatives of the City shall have the reasonable right of access to the Project and any portions thereof during the period of construction to inspect or observe the Project and any work thereon. Additionally, a plat note will be inserted on the plat that gives the city or its third-party geotechnical advisor the right to

enter upon any lot, but not residence, for purposes of inspecting the lot to make sure it is in compliance with all of the recommendations of the Geotechnical Studies. This right will continue in perpetuity. This access right shall not create a responsibly for the City or its representatives to ensure compliance with the report since this responsibility is solely placed on the lot and/or owner.

8. **Assignment.** The Developer shall not assign this Agreement or any rights or interests herein without giving prior written notice to the City; provided, however, Developer shall have the right and the City hereby expressly consents to an assignment of this Agreement to any purchaser of Phase 1 or Phase 2 (each, a "Phase Developer"), for development of their respective phases by providing written notice of such assignment and confirmation that the applicable Phase Developer agrees to be bound by the terms and provisions of this Agreement. Upon any assignment to a Phase Developer, (i) Developer shall be released from any future obligations as to those obligations which are assigned but shall remain responsible for the performance of any obligations that were not assigned, (ii) the Phase Developer shall be deemed to constitute the "Developer" under this Agreement with respect to its phase, and (iii) the term "Project" shall, with respect to such Phase Developer, be limited to its particular phase. Additionally, notwithstanding the foregoing or anything to the contrary herein, Developer shall have the right, without the consent of the City, to collaterally assign this Agreement to Developer's lender for the Project or any phase of the Project.

9. **Notices.** Any notices, requests and demands required or desired to be given hereunder shall be in writing and shall be served personally upon the party for whom intended, or if mailed, by certified mail, return receipt requested, postage prepaid, to such party at its address shown below:

To Developer:	Henry Walker Land, LLC Attn: Chad Bessinger 1216 W Legacy Crossing Blvd, Ste 300 Centerville, UT 84014
With a copy to:	J. Fisher Companies, LLC Attn: Legal Department 1216 W Legacy Crossing Blvd, Ste 300 Centerville, UT 84014
To the City:	Fruit Heights City Attn: City Manager 910 S. Mountain Road Fruit Heights, Utah 84037

10. **Default.** In the event any party fails to perform its obligations hereunder or to comply with the terms hereof, within thirty (30) days after giving written notice of default, the non-defaulting party may, at its election, have the following remedies:

a. All rights and remedies available at law and in equity, including injunctive relief, specific performance and/or damages.

b. The right to withhold all further approvals, licenses, permits, or other rights associated with the Project, or any development described in this Agreement until such default has been cured.

c. The right to draw upon any security posted or provided in connection with the Project.

d. The right to terminate this Agreement.

e. The rights and remedies set forth herein shall be cumulative.

f. Notwithstanding the 30-day cure period provided above, in the event more than thirty (30) days is reasonably required to cure a default and the defaulting party, within the thirty day cure period, commences actions reasonably designed to cure the default, then the cure period shall be extended for such additional period as the defaulting party is prosecuting those actions diligently to completion.

11. **Attorney's Fees.** In the event of any lawsuit between the parties hereto arising out of or related to this Agreement, or any of the documents provided for herein, the prevailing party or parties shall be entitled, in addition to the remedies and damages, if any, awarded in such proceeding, to recover their costs and a reasonable attorneys fee.

12. **Authority**. Each of the parties represents and warrants as of the date hereof that it/he/she/they have all requisite power and authority to execute and deliver this Agreement, being fully authorized to do so and that this Agreement constitutes a valid and binding agreement.

13. **Entire Agreement.** This Agreement together with the Exhibits attached hereto and the documents referenced herein, and all regulatory approvals given by the City for the Property and/or the Project, contain the entire agreement of the parties and supersede any prior promises, representations, warranties, or understandings between the parties with respect to the subject matter hereof which are not contained in this Agreement and the regulatory approvals for the Project, including any related conditions.

14. **Headings.** The headings contained in this Agreement are intended for convenience only and are in no way to be used to construe or limit the text herein.

15. **Non-Liability of City Officials, Employees and Others.** No officer, representative, agent, or employee of the City shall be personally liable to the Developer, or any successor-in-interest or assignee of the Developer in the event of any default or breach by the City or for any amount which may become due Developer, or its successors or assigns, for any obligation arising under the terms of this Agreement unless it is established that the officer, representative, agent or employee acted or failed to act due to fraud or malice.

16. **Binding Effect.** This Agreement shall inure to the benefit of, and be binding upon, the parties hereto and their respective heirs, representatives, officers, agents, employees, members, successors, and assigns.

17. **No Third-Party Rights.** The obligations of Developer set forth herein shall not create any rights in and/or obligations to any persons or parties other than the City. The parties hereto alone shall be entitled to enforce or waive any provisions of this Agreement.

18. **Recordation.** This Agreement shall be recorded by the City against Phase 1 and Phase 2 in the office of the Davis County Recorder, State of Utah, following the recording of the Final Plat for each such phase.

19. **Relationship.** Nothing in this Agreement shall be construed to create any partnership, joint venture, or fiduciary relationship between the parties hereto.

20. **Termination.** Notwithstanding anything in this Agreement to the contrary, and with respect to Phase 1 and Phase 2 each on an individual basis, it is agreed by the parties hereto that in the event a phase is not completed within five (5) years from the date of this Agreement or in the event the Developer does not comply with the City's Laws and the provisions of this Agreement, the City shall have the right, but not the obligation at the sole discretion of the City, which discretion shall not be unreasonably applied, to terminate this Agreement. For the avoidance of doubt, "completed", "completion", or any derivate thereof shall mean that the real property in an applicable phase has been installed such that upon proper application and payment of all applicable fees, the respective owner of such phase may apply for and obtain a building permit for one or more residences therein. Such termination may be affected by the City by giving written notice of intent to terminate to the Developer set forth herein. Whereupon, the Developer shall have sixty (60) days during which the Developer shall be given an opportunity to correct any alleged deficiencies and to take appropriate steps to complete the Project or begin to complete the Project prior to expiration of said 60-day period. In the event Developer fails to timely correct any alleged deficiency and complete the Project or begin to complete the Project, the City shall be released from any further obligations under this Agreement and the same shall be terminated.

21. **Severability**. If any portion of this Agreement is held to be unenforceable or invalid for any reason by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

22. **Amendment.** This Agreement may be amended only in writing signed by the parties hereto. The City Planning Director and/or his designee may review and execute on behalf of the City any and all Minor Amendments (defined below) to this Agreement. All amendments to this Agreement other than Minor Amendments shall be considered by the City Council if and as applicable in accordance with the requirements and procedures set forth in the zoning ordinance. The City Planning Director and/or his designee may consult with the City attorney in determining whether a proposed change is a Minor Amendment. No amendment or modification to this Agreement shall require the consent or approval of any person or entity having any interest in any specific lot, unit or other portion of the Project. For purposes of this provision, "***Minor Amendment***" means any amendment to this Development Agreement, excluding an increase or decrease in density or a change of use.

23. **Further Documentation**. This Agreement is entered into by the parties with the recognition and anticipation that subsequent agreements, plans, profiles, engineering and other

documentation implementing and carrying out the provisions of this Agreement may be necessary. As such, the parties agree to negotiate and act in good faith with respect to all such future items.

24. **Agreement to Run with the Land**. This Agreement shall be recorded in the Office of the Davis County Recorder against each phase following recording of the Final Plat for each phase and is intended to and shall be deemed to run with the land and individual parcels and shall be binding on and shall benefit all successors in the ownership of any portion of the Property.

25. **Sale or Conveyance**. Excluding a residence constructed on a phase within the Project, if Developer sells or conveys parcels of land, the lands so sold and conveyed shall bear the same rights, privileges, intended uses, configurations, and density as applicable to such parcel and be subject to the same limitations and rights of the City as when owned by Developer, and as set forth in this Agreement without any required approval, review, or consent by the City except as otherwise provided herein.

26. **Performance**. Each party, person and/or entity governed by this Agreement shall perform its respective obligations under this Agreement in a manner that will not unreasonably or materially delay, disrupt or inconvenience any other party, person and/or entity governed by this Agreement, the development of any portion of the Property or the issuance of Final Plat, certificates of occupancy or other approvals associated therewith.

27. **Consents and Approvals**. Except as expressly stated in this Agreement, the consent, approval, permit, license or other authorization of any party under this Agreement shall be given in a prompt and timely manner and shall not be unreasonably withheld, conditioned or delayed. Any consent, approval, permit, license or other authorization required hereunder from the City shall be given or withheld by the City in compliance with this Agreement and the City Ordinances.

28. **Estoppel Certificate**. If no uncured default exists in the provisions of this Agreement and upon ten (10) days prior written request by Developer, or a sub developer, the City will execute an estoppel certificate to any third party, certifying that Developer (or a sub developer), as the case may be, at that time is not in default of the terms of this Agreement.

29. **Force Majeure**. Any prevention, delay or stoppage of the performance of any obligation under this Agreement which is due to strikes, labor disputes, inability to obtain labor, materials, equipment or reasonable substitutes therefore; acts of nature; governmental restrictions, regulations or controls; judicial orders; enemy or hostile government actions; wars, civil commotions; fires or other casualties or other causes beyond the reasonable control of the party obligated to perform hereunder shall excuse performance of the obligation by that party for a period equal to the duration of that prevention, delay or stoppage.

[*Remainder of page left intentionally blank. Additional pages follow*.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective duly authorized representatives as of the day and year first hereinabove written.

CITY

FRUIT HEIGHTS CITY

By:_____
Name:_____
Its: Mayor

Attest:

By:_____
Name:_____
Its: City Recorder

DEVELOPER

HENRY WALKER LAND, LLC,
a Utah limited liability company

By: J. Fisher Companies, LLC
Its: Manager

By:_____
Name:_____
Its:_____

HOA

[--]

By:_____
Name:_____
Its:_____

CITY ACKNOWLEDGEMENT

STATE OF UTAH)
§
COUNTY OF DAVIS)

On the ____ day of _____, 2025, personally appeared before me _____, who being duly sworn, did say that he/she is the Mayor of Fruit Heights City, a municipal corporation of the State of Utah, and that the foregoing instrument was signed on behalf of the City by authority of its governing body and said _____ acknowledged to me that the City executed the same.

Witness my hand and official seal.

_____
(*notary signature*) (*seal*)

DEVELOPER ACKNOWLEDGEMENT

STATE OF UTAH)
§
COUNTY OF_____)

On the ____ day of _____, 2025, personally appeared before me _____, who being duly sworn, did say that he/she is the _____ of _____, and that the foregoing instrument was signed on behalf of the _____ by authority of its governing body and said _____ acknowledged to me that _____ executed the same.

Witness my hand and official seal.

_____
(*notary signature*) (*seal*)

HOA ACKNOWLEDGEMENT

STATE OF UTAH)
§
COUNTY OF_____)

On the ____ day of _____, 2025, personally appeared before me _____, who being duly sworn, did say that he/she is the _____ of _____, and that the foregoing instrument was signed on behalf of the _____ by authority of its governing body and said _____ acknowledged to me that _____ executed the same.

Witness my hand and official seal.

_____
(*notary signature*) (*seal*)

EXHIBIT A
Property Description

A PARCEL OF LAND SITUATE IN THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, STATE OF UTAH, COUNTY OF DAVIS, CITY OF FRUIT HEIGHTS AND DESCRIBED IN FURTHER DETAIL AS FOLLOWS:

BEGINNING ON THE EASTERLY RIGHT OF WAY LINE OF MOUNTAIN ROAD, SAID POINT OF BEGINNING BEING N00°01’00”E 303.56 FEET ALONG THE SECTION LINE AND N90°00’00”E 875.16 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION 36 AND RUNNING THENCE ALONG SAID EASTERLY RIGHT OF WAY LINE ALONG A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 745.50 FEET, A DISTANCE OF 20.64 FEET, A CHORD DIRECTION OF N34°16’17”W, AND A CHORD DISTANCE OF 20.64 FEET; THENCE LEAVING SAID RIGHT OF WAY LINE N69°58’21”E 246.19 FEET TO THE SOUTHEAST CORNER OF LOT 2, PINERIDGE SUBDIVISION, RECORDED AS ENTRY NO. 1804384 IN THE DAVIS COUNTY RECORDER; THENCE ALONG THE BOUNDARY OF SAID PINERIDGE SUBDIVISION THE FOLLOWING FOUR COURSES: 1) N26°10’00”W 370.00 FEET, 2) S69°58’21”W 130.00 FEET, 3) S26°10’00”E 220.00 FEET, 4) S69°58’21”W 120.00 FEET; THENCE N26°10’00”W 358.81 FEET; THENCE N03°40’50”W 545.47 FEET; THENCE S89°55’50”E 1515.27 FEET; THENCE S04°40’50”E 191.40 FEET; THENCE S24°15’50”E 345.02 FEET; THENCE S69°58’21”W 987.12 FEET; THENCE N43°01’28”W 135.69 FEET; THENCE N42°43’32”W 8.22 FEET; THENCE N40°48’11”E 20.73 FEET; THENCE N49°36’09”W 38.94 FEET; THENCE S51°18’08”W 74.69 FEET; THENCE S11°01’56”E 58.85 FEET; THENCE S50°29’34”E 109.54 FEET; THENCE S69°58’21”W 419.22 FEET TO THE POINT OF BEGINNING.

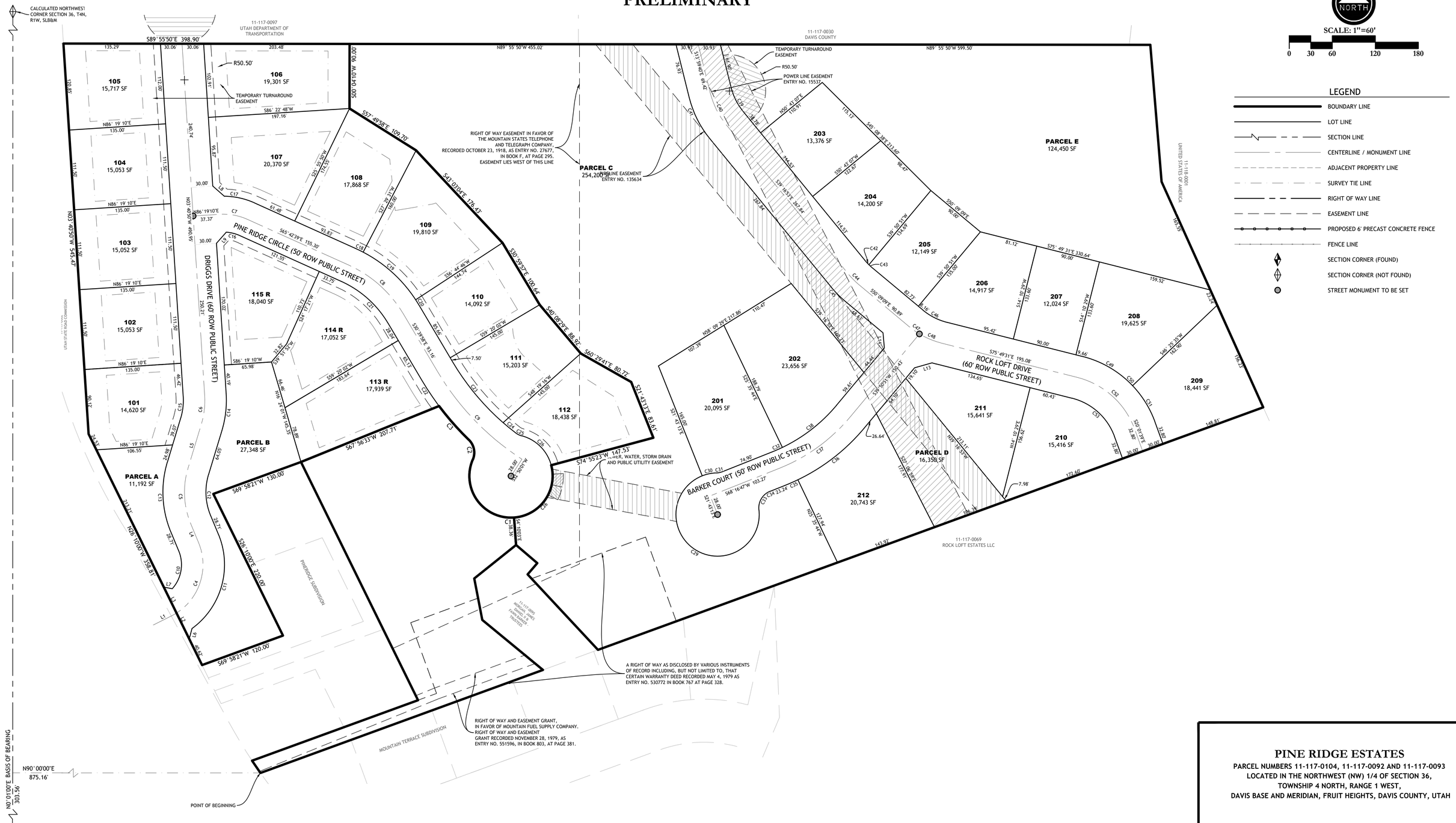
CONTAINS 25.96 ACRES IN AREA

EXHIBIT B
Graphic Depiction of Phase 1 and Phase 2
Preliminary Plat

PINE RIDGE ESTATES

PARCEL NUMBERS 11-117-0104, 11-117-0092 AND 11-117-0093 LOCATED IN THE NORTHWEST (NW) 1/4 OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, DAVIS BASE AND MERIDIAN, FRUIT HEIGHTS, DAVIS COUNTY, UTAH

PRELIMINARY



LEGEND

- BOUNDARY LINE
- LOT LINE
- SECTION LINE
- CENTERLINE / MONUMENT LINE
- ADJACENT PROPERTY LINE
- SURVEY TIE LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- PROPOSED 6' PRECAST CONCRETE FENCE
- FENCE LINE
- SECTION CORNER (FOUND)
- SECTION CORNER (NOT FOUND)
- STREET MONUMENT TO BE SET

OWNER / DEVELOPER

THE BOYER COMPANY
Spencer Moffat - Partner
101 South 200 East, Suite 200
Salt Lake City, Utah 84111

	DATE	REVISIONS	BY

EDM Partners LLC
2815 East 3300 South, DAVIS City, UT 84109
(801) 305-4670 www.edmpartners.com

PINE RIDGE ESTATES
PARCEL NUMBERS 11-117-0104, 11-117-0092 AND 11-117-0093
LOCATED IN THE NORTHWEST (NW) 1/4 OF SECTION 36,
TOWNSHIP 4 NORTH, RANGE 1 WEST,
DAVIS BASE AND MERIDIAN, FRUIT HEIGHTS, DAVIS COUNTY, UTAH

SHEET 2 OF 2

DAVIS COUNTY RECORDER

RECORDED #_____

STATE OF UTAH, COUNTY OF DAVIS, RECORDED AND FILED AT THE REQUEST OF:_____

DATE:_____ TIME:_____ BOOK:_____ PAGE:_____

FEE DAVIS COUNTY RECORDER

C:\Users\jmu823\EDM Partners Dropbox\Projects\Pine Ridge Estates\Drawings\Preliminary\2 Plat Fruit Heights Preliminary.dwg

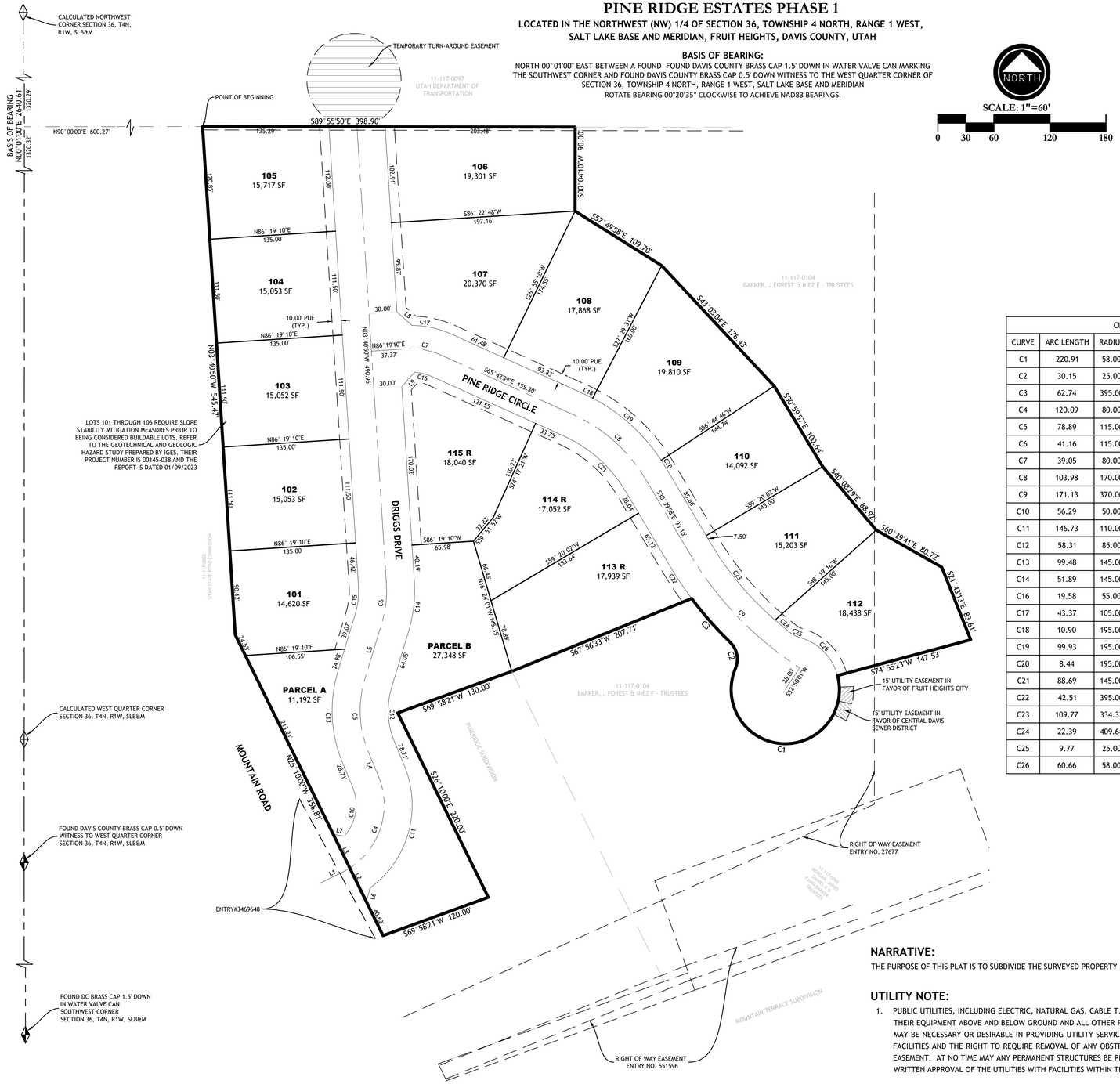
EXHIBIT C
Final Plat for Phase 1 and Phase 2

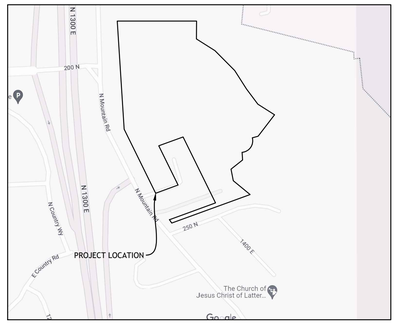
PINE RIDGE ESTATES PHASE 1

LOCATED IN THE NORTHWEST (NW) 1/4 OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, FRUIT HEIGHTS, DAVIS COUNTY, UTAH

BASIS OF BEARING:

NORTH 00°01'00" EAST BETWEEN A FOUND FOUND DAVIS COUNTY BRASS CAP 1.5' DOWN IN WATER VALVE CAN MARKING THE SOUTHWEST CORNER AND FOUND DAVIS COUNTY BRASS CAP 0.5' DOWN WITNESS TO THE WEST QUARTER CORNER OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN
ROTATE BEARING 00°20'35" CLOCKWISE TO ACHIEVE NAD83 BEARINGS.





VICINITY MAP - NOT TO SCALE

CURVE TABLE				
CURVE	ARC LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
C1	220.91	58.00	N85°57'39"W	109.60
C2	30.15	25.00	N11°23'20"W	28.35
C3	62.74	395.00	N41°22'57"W	62.68
C4	120.09	80.00	N20°31'24"E	109.13
C5	78.89	115.00	N2°49'43"W	77.36
C6	41.16	115.00	N6°34'20"E	40.94
C7	39.05	80.00	S79°41'44"E	38.67
C8	103.98	170.00	S48°11'18"E	102.37
C9	171.13	370.00	S43°54'58"E	169.61
C10	56.29	50.00	N9°46'13"E	53.37
C11	146.73	110.00	S15°43'56"W	136.09
C12	58.31	85.00	S2°49'43"E	57.18
C13	99.48	145.00	N2°49'43"W	97.54
C14	51.89	145.00	S6°34'20"W	51.62
C16	19.58	55.00	N75°54'29"W	19.47
C17	43.37	105.00	S77°32'40"E	43.06
C18	10.90	195.00	S64°06'34"E	10.90
C19	99.93	195.00	S47°49'36"E	98.84
C20	8.44	195.00	S31°54'20"E	8.44
C21	88.69	145.00	N48°11'18"W	87.31
C22	42.51	395.00	N33°44'57"W	42.49
C23	109.77	334.33	S39°46'44"E	109.28
C24	22.39	409.64	S50°45'03"E	22.39
C25	9.77	25.00	S63°48'20"E	9.71
C26	60.66	58.00	S45°02'21"E	57.93

LINE TABLE		
LINE	LENGTH	BEARING
L1	28.00	N63°31'45"E
L2	40.14	S26°10'00"E
L3	40.31	S26°10'00"E
L4	28.71	N22°28'56"W
L5	64.05	N16°49'30"E
L6	15.01	S15°11'33"W
L7	12.03	S79°12'09"E
L8	21.60	S48°35'26"E
L9	20.61	S41°31'04"W

LEGEND
- BOUNDARY LINE
- LOT LINE
- SECTION LINE
- CENTERLINE / MONUMENT LINE
- ADJACENT PROPERTY LINE
- SURVEY TIE LINE
- RIGHT OF WAY LINE
- PUBLIC UTILITY EASEMENT LINE
- SECTION CORNER (FOUND)
- SECTION CORNER (NOT FOUND)
- ROAD MONUMENT FOUND
- PROPERTY MARKER (SET OR FOUND AS NOTED)
- ROAD MONUMENT TO BE SET
- TEMPORARY TURN-AROUND EASEMENT

NARRATIVE:

THE PURPOSE OF THIS PLAT IS TO SUBDIVIDE THE SURVEYED PROPERTY INTO LOTS, STREETS AND INFRASTRUCTURE IMPROVEMENTS.

UTILITY NOTE:

1. PUBLIC UTILITIES, INCLUDING ELECTRIC, NATURAL GAS, CABLE T.V., WATER METER(S), AND TELEPHONE SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE UTILITY EASEMENTS AND LOT AREA IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN PROVIDING UTILITY SERVICES WITHIN AND WITHOUT THE LOTS IDENTIFIED HEREIN. INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO REQUIRE REMOVAL OF ANY OBSTRUCTIONS INCLUDING THE STRUCTURES, TREES AND VEGETATION THAT MAY BE PLACED WITHIN THE EASEMENT. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE EASEMENT OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITHOUT THE PRIOR WRITTEN APPROVAL OF THE UTILITIES WITH FACILITIES WITHIN THE EASEMENT.

NOTES:

1. THIS DRAWING IS CONSIDERED PRELIMINARY AND SUBJECT TO CHANGE UNTIL RECORDATION AT THE DAVIS COUNTY RECORDER'S OFFICE.
2. ALL REAR AND BOUNDARY CORNERS WILL BE SET WITH A 2' X $\frac{5}{8}$" REBAR AND CAP MARKED "EDM". FRONT LOT CORNERS WILL BE MARKED AT THE EXTENSION OF THE LOT LINE WITH A COPPER RIVET IN THE TOP BACK OF A CURB.
3. LOTS 114, 115 AND116 HAVE BEEN DESIGNATED WITH AN "R", FOR RESTRICTED. THE HOMES BUILT ON THESE LOTS MUST FRONT PINE RIDGE CIRCLE.
4. ALL COMMON PARCELS WITHIN THE SUBDIVISION ARE A PUBLIC UTILITY EASEMENT.

SURVEYOR'S CERTIFICATE

I, TYLER E. JENKINS DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR AND THAT I HOLD PROFESSIONAL SURVEY LICENSE NO. 4938730 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY THAT BY THE AUTHORITY OF THE OWNERS, I HAVE COMPLETED A SURVEY OF THE TRACT OF LAND AS SHOWN ON THIS PLAT AND DESCRIBED BELOW IN ACCORDANCE WITH SECTION 17-23-17, I VERIFY ALL MEASUREMENTS AND I HAVE PLACED MONUMENTS AS REPRESENTED ON THIS PLAT. I HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND STREETS, HEREAFTER TO BE KNOWN AS:

PINE RIDGE ESTATES PHASE 1

AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND.

2/13/2025
FOR REVIEW ONLY
DO NOT RECORD

PROFESSIONAL LAND SURVEYOR
4938730
TYLER E. JENKINS
STATE OF UTAH

BOUNDARY DESCRIPTION

A PARCEL OF LAND SITUATE IN THE NORTHWEST QUARTER OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, STATE OF UTAH, COUNTY OF DAVIS, CITY OF FRUIT HEIGHTS AND DESCRIBED IN FURTHER DETAIL AS FOLLOWS:

BEGINNING ON THE EASTERLY RIGHT OF WAY LINE OF MOUNTAIN ROAD, SAID POINT OF BEGINNING BEING N00°01'00"E 1320.32 FEET ALONG THE SECTION LINE AND N90°00'00"E 600.27 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION 36 AND RUNNING THENCE S89°55'50"E 398.90 FEET; THENCE S00°04'10"W 90.00 FEET; THENCE S57°49'58"E 109.70 FEET; THENCE S43°03'04"E 176.43 FEET; THENCE S30°59'57"E 100.64 FEET; THENCE S40°08'29"E 88.92 FEET; THENCE S60°29'41"E 80.72 FEET; THENCE S21°43'13"E 83.61 FEET; THENCE S74°55'23"W 147.53 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 58.00 FEET, A DISTANCE OF 220.91 FEET, A CHORD DIRECTION OF N85°57'39"W, AND A CHORD DISTANCE OF 109.60 FEET; THENCE ALONG A REVERSE CURVE TO THE LEFT, HAVING A RADIUS OF 25.00 FEET, A DISTANCE OF 30.15 FEET, A CHORD DIRECTION OF N11°23'20"W, AND A CHORD DISTANCE OF 28.35 FEET; THENCE ALONG A REVERSE CURVE TO THE RIGHT, HAVING A RADIUS OF 395.00 FEET, A DISTANCE OF 62.74 FEET, A CHORD DIRECTION OF N41°22'57"W, AND A CHORD DISTANCE OF 62.68 FEET; THENCE S67°56'33"W 207.71 FEET; THENCE S69°58'21"W 130.00 FEET; THENCE S26°10'00"E 220.00 FEET; THENCE S69°58'21"W 120.00 FEET; THENCE N26°10'00"W 358.81 FEET; THENCE N03°40'50"W 545.47 FEET TO THE POINT OF BEGINNING.

CONTAINS 8.58 ACRES IN AREA, 15 LOTS AND 2 PARCELS

ROTATE BEARING 00°20'35" CLOCKWISE TO ACHIEVE NAD83 BEARINGS.

OWNER'S DEDICATION

I/WE, THE UNDERSIGNED OWNER(S) OF THE HEREIN DESCRIBED TRACT OF LAND, DO HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS AND STREETS AS SHOWN HEREON TO BE HEREAFTER KNOWN AS:

PINE RIDGE ESTATES PHASE 1

AND DO HEREBY DEDICATE FOR PERPETUAL USE OF THE PUBLIC ALL RIGHTS-OF-WAY AS SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC USE AND DO HEREBY GRANT UNTO EACH PRIVATE UTILITY COMPANY AND PUBLIC UTILITY AGENCY PROVIDING UTILITY SERVICES TO THIS PROJECT, ALSO A PERPETUAL NON-EXCLUSIVE EASEMENT IN ALL AREAS DESIGNATED AS PUBLIC UTILITY EASEMENT AS SHOWN HEREON TO INSTALL, USE, KEEP, MAINTAIN, REPAIR AND REPLACE AS REQUIRED, UNDERGROUND UTILITY LINES, PIPES AND CONDUITS OF ALL TYPES AND APPURTENANCES THERETO SERVING THIS PROJECT.

HENRY WALKER DEVELOPMENT LLC

_____
NAME: _____
TITLE: _____

ACKNOWLEDGEMENT

ON THE _____ DAY OF _____, 20__, _____ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR SAID COUNTY OF _____ IN THE STATE OF UTAH, WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT HE IS THE _____ AND THAT HE SIGNED THE OWNER'S DEDICATION FREELY AND VOLUNTARILY FOR AND IN BEHALF OF SAID LIMITED LIABILITY COMPANY FOR THE PURPOSES THEREIN MENTIONED.

_____ _____ _____ _____
NOTARY PUBLIC COMMISSION NUMBER SIGNATURE

A NOTARY PUBLIC COMMISSIONED IN THE STATE OF UTAH. COMMISSION EXPIRES_____

PINE RIDGE ESTATES PHASE 1

LOCATED IN THE NORTHWEST (NW) 1/4 OF SECTION 36, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, FRUIT HEIGHTS, DAVIS COUNTY, UTAH

SHEET 1 OF 1

DAVIS COUNTY RECORDER
RECORDED #_____
STATE OF UTAH, COUNTY OF DAVIS,
RECORDED AND FILED AT THE REQUEST OF:_____
DATE:_____ TIME:_____
BOOK:_____ PAGE:_____
_____
FEE_____
DAVIS COUNTY RECORDER

FRUIT HEIGHTS CITY PLANNING COMMISSION
APPROVED BY THE FRUIT HEIGHTS CITY PLANNING COMMISSION ON THIS____ DAY OF_____, 20__.

_____
FRUIT HEIGHTS CITY CHAIRMAN

FRUIT HEIGHTS CITY ENGINEER
APPROVED BY THE FRUIT HEIGHTS CITY ENGINEER ON THIS____ DAY OF_____, 20__.

_____
FRUIT HEIGHTS CITY ENGINEER

FRUIT HEIGHTS CITY ACCEPTANCE
"THE APPROVAL OF THIS PLAT BY FRUIT HEIGHTS CITY DOES NOT RELIEVE THE LICENSED LAND SURVEYOR WHO EXECUTED THIS PLAT FROM THE RESPONSIBILITIES AND/OR LIABILITIES ASSOCIATED THEREWITH." THIS IS TO CERTIFY THAT THIS PLAT AND DEDICATION OF THIS PLAT WERE DULY APPROVED AND ACCEPTED BY FRUIT HEIGHTS CITY OF DAVIS COUNTY, UTAH, THIS _____ DAY OF _____, 20__

MAYOR: _____ ATTEST: _____

FRUIT HEIGHTS CITY ATTORNEY
I HEREBY CERTIFY THAT THE REQUIREMENTS OF ALL APPLICABLE STATUTES AND ORDINANCES PREREQUISITE TO APPROVAL BY THE ATTORNEY OF THE FOREGOING PLAT AND DEDICATIONS HAVE BEEN COMPLIED WITH.
DATED THIS _____ DAY OF _____, 20__

_____
FRUIT HEIGHTS CITY ATTORNEY

OWNER / DEVELOPER
HENRY WALKER DEVELOPMENT LLC

EDM Partners LLC
2815 East 3300 South, Salt Lake City, UT 84109
(801) 305-4670 www.edmpartners.com

DATE	REVISIONS	BY

EXHIBIT D

Geotechnical Studies

The following geotechnical studies are attached hereto by reference, while the complete reports are kept on file with the City.

(1) Geotechnical and Geologic Hazard Study, Barker Property, dated January 9, 2023, IGES project #00145-038 (the "IGES Report").

(2) Review of Geotechnical and Geologic Hazard Study, completed by Tim Thompson, P.E., with Geostrata, dated June 9, 2023 (the "Hazard Study").

(3) Response to Review Comments, dated September 6, 2023, submitted by IGES.

(4) Review of Keystone Retaining Wall Design Package, dated April 23, 2025, completed by Tim Thompson, Geostrata (Wall design review).

EXHIBIT E

Sensitive Lands Evaluation & Development Standards Ordinance

Chapter 10.10A
SENSITIVE LANDS EVALUATION & DEVELOPMENT STANDARDS (SLEDS)

Sections:

Appendices:

10.10A.010 Purpose.

The city deems it appropriate that sensitive land areas in the city be protected through their inclusion in a sensitive lands district to ensure that development is regulated in a manner that will minimize the potential impact from natural and man-made hazards and will reasonably preserve natural scenic beauty and ecological integrity. To the greatest extent practicable, the objectives to be achieved by the designation of a sensitive lands district include, without limitation, the following:

A. The protection of the public from natural hazards, such as land slide, rock fall, debris flow, earthquake ground rupture, liquefaction, shallow ground water, snow melt/storm water runoff and erosion.

B. The minimization of the threat of and consequential damage from fire in wildland interface areas.

C. The preservation of significant geological features, hydrologic features, wildlife habitat and migration corridors, and open space, including retention of natural topographic features such as drainage channels, streams, ridge lines, rock outcroppings, vistas, trees and other natural geologic and plant formations.

D. The preservation of appropriate public access to mountain areas and natural drainage channels for recreation.

E. The consideration, preservation and enhancement of environmental quality.

F. The master planning of an adequate transportation system for the total hillside area, including consideration of the city's master plan for streets, trails, bikes and pedestrians and consideration of densities and topography, with minimal cuts, fills, or other visible scars.

G. The use of terrain-adaptive architecture to ensure compatibility with the natural terrain, to preserve natural open spaces and vistas, and to minimize impact from geologically hazardous areas.

H. The placement of building sites in such a manner as to permit ample room for landscaping compatible with the natural vegetation and surface drainage.

10.10A.020 Scope and application.

A. *Application*. The provisions of this chapter shall apply to all lands in the city located in any area designated as a sensitive lands district on the city's official maps contained in Appendix A of this ordinance as amended from time to time. All approved subdivision plats that lie wholly or partially in a sensitive lands district shall be recorded with such designation shown on the official plat.

B. *Supplemental and Conflicting Provisions*. Unless otherwise specifically provided, the regulations contained in this chapter are in addition to the standards applicable to the underlying zones, or overlay zones, provided elsewhere in this title or any other applicable title, code, ordinance or law. In the event of conflict between the standards, guidelines and criteria of this chapter and the requirements of the underlying zoning district, the city's subdivision ordinance or any other requirements of this code, the more restrictive provision shall apply.

C. *Geologic hazard studies*. Project developers and their consultants shall present the results of geologic hazard studies in compliance with this chapter and its appendices. The standards set forth in the appendices to this chapter are the city's minimum requirements, but may be made more stringent, in specific, fact-sensitive circumstances, by the DRC based on recommendations of the city engineer or city geologist if evidence becomes available that suggests more stringent requirements are appropriate. In addition, the appendices shall not supersede other more stringent

requirements that may be required by other regulatory agencies or governmental entities that have jurisdiction.

D. *Appendix A.* Appendix A presents study area maps reflecting geological, hydrologic, infrastructure and other natural and man-made hazard concerns, as well as supplemental maps pertaining to development in the city's sensitive lands districts. The maps incorporate data obtained from numerous publications, previous geologic hazard studies and other expert sources such as FEMA, UGS, USGS, AGRC, etc. Updated versions of the maps will be added as they become available.

E. *Appendix B.* Appendix B presents the minimum standards for surface fault rupture hazard studies conducted in the city and describes the accepted minimum requirements for planning, conducting and reporting the results of surface fault rupture hazard studies. Site-specific surface fault rupture hazard studies performed by qualified engineering geologists shall be required prior to developing projects located in the Surface Fault Rupture Hazard Study Area as delineated on Map 1 in Appendix A of this chapter. The information contained in Appendix B was compiled from numerous published and unpublished sources and presents the current standard of care for surface fault rupture hazard studies in the city. If due to additional evidence a surface fault rupture hazard becomes known or suspected in an area subject to a development application, which area is not depicted on the Surface Fault Rupture Hazard Study Area Map, the DRC shall require the developer to submit applicable studies as recommended by the city engineer and the city geologist and the process outlined in this chapter shall be followed.

F. *Appendix C.* Appendix C presents the minimum standards for slope stability and landslide hazard studies conducted in the city and describes the accepted minimum requirements for planning, conducting and reporting the results of slope stability and landslide hazard studies. Site-specific slope stability and landslide hazard studies performed by qualified engineering geologists and geotechnical engineers shall be required prior to developing projects located in the Slope Stability and Landslide Hazard Study Area as delineated on Map 2 in Appendix A of this chapter. The information contained in Appendix C was compiled from numerous published and unpublished sources and presents the current standard of care for slope stability and landslide hazard studies in the city. If due to additional evidence a slope stability and/or landslide hazard becomes known or suspected in an area subject to a development application, which area is not depicted on the Slope Stability and Landslide Hazard Study Area Map, the DRC shall require the developer to submit applicable studies as recommended by the city engineer and the city geologist and the process outlined in this chapter shall be followed. At a minimum, a special study of slope stability will be required in the following instance:

(1) Site-specific slope stability analysis for all development in zones with moderate to very high hazard of landslides (Map 2).

G. *Appendix D.* Appendix D presents the minimum standards for liquefaction hazard studies conducted in the city and describes the accepted minimum requirements for planning, conducting and reporting the results of liquefaction hazard studies. Site-specific liquefaction hazard studies performed by qualified engineering geologists and geotechnical engineers shall be required prior to developing projects located in the Liquefaction Hazard Study Area as delineated on Map 3 in Appendix A of this chapter. The information contained in Appendix D was compiled from numerous published and unpublished sources and presents the current standard of care for liquefaction hazard studies in the city. If due to additional evidence a liquefaction hazard becomes known or suspected in an area subject to a development application, which area is not depicted on the Liquefaction Hazard Study Area Map, the DRC shall require the developer to

submit applicable studies as recommended by the city engineer and the city geologist and the process outlined in this chapter shall be followed. At a minimum, a special study of liquefaction hazard will be required in the following instances:

(1) Require site-specific liquefaction hazard analysis in zones of moderate to high liquefaction potential (Map 3) for the following IBC occupancy groups: Assembly Group A, Business Group B, Factory Group F-1, Educational Group E, High-Hazard Group H, Institutional Group I, and Residential Groups R-1, R-2, and R-4.

H. *Appendix E*. Appendix E presents the minimum standards for debris flow/alluvial fan flooding hazard studies conducted in the city and describes the accepted minimum requirements for planning, conducting and reporting the results of debris flow/alluvial fan flooding hazard studies. Site-specific debris flow/alluvial fan flooding hazard studies performed by qualified engineering geologists and geotechnical engineers shall be required prior to developing projects located in the Debris Flow/alluvial fan flooding Hazard Study Area as delineated on Map 4 in Appendix A of this chapter. The information contained in Appendix E was compiled from numerous published and unpublished sources and presents the current standard of care for debris flow/alluvial fan flooding hazard studies in the city. If due to additional evidence a debris flow/alluvial fan flooding hazard becomes known or suspected in an area subject to a development application, which area is not depicted on the Debris Flow/Alluvial Fan Flooding Hazard Study Area Map, the DRC shall require the developer to submit applicable studies as recommended by the city engineer and the city geologist and the process outlined in this chapter shall be followed. At a minimum, a special study of debris flow/alluvial fan flooding hazard will be required in the following instances:

(1) Site-specific debris flow/alluvial fan flooding hazard analysis for all development in zones with moderate to high debris flow/alluvial fan flooding hazard (Map 4).

I. *Appendix F*. Appendix F presents the minimum standards for rockfall hazard studies conducted in the city and describes the accepted minimum requirements for planning, conducting and reporting the results of rockfall hazard studies. Site-specific rockfall hazard studies performed by qualified engineering geologists and geotechnical engineers shall be required prior to developing projects located in the Rockfall Hazard Study Area as delineated on Map 5 in Appendix A of this chapter. The information contained in Appendix F was compiled from numerous published and unpublished sources and presents the current standard of care for rockfall hazard studies in the city. If due to additional evidence a rockfall hazard becomes known or suspected in an area subject to a development application, which area is not depicted on the Rockfall Hazard Study Area Map, the DRC shall require the developer to submit applicable studies as recommended by the city engineer and the city geologist and the process outlined in this chapter shall be followed. At a minimum, a special study of rockfall hazard will be required in the following instance:

(1) Site-specific rockfall hazard analysis for all development in zones with moderate to high rockfall hazard (Map 5).

J. *Appendix G*. Appendix G presents the source protection zones that require special regulations for the storage, handling, use or production of hazardous or toxic substances in order to protect, preserve and maintain existing and future public drinking water sources. The source protection zones are generally located upgradient of wells or near proposed points of diversion for the development of groundwater. Groundwater recharge zones are located in permeable and/or sensitive areas that have a critical impact on the groundwater quality and quantity of supply. The protection of source protection zones and groundwater recharge areas is essential to

the health, safety and welfare of city residents and visitors. At a minimum, observations of excavations will be required in the following instance:

(1) Observations of excavations by qualified engineers and/or geologists for all development within active fault special study zones (Map 1), areas with moderate to very high slope stability hazard (Map 2), areas with moderate to high liquefaction potential (Map 3), and areas with groundwater at depths of less than ten feet (Map 11).

(2) Observations of excavations by qualified engineers and/or geologists for all development, even outside of the zones specified above, for the following IBC occupancy groups: Assembly Group A, Educational Group E, High-Hazard Group H, Institutional Group I, and Residential Groups R-1, R-2, and R-4.

K. *Appendix H*. Appendix H presents the foundation excavation observations that are required for all new structures or additions that are built in the city. The DRC shall require the owner to submit a foundation excavation observation report, prepared in accordance with the process outlined in this chapter, prior to the construction of any structural footing or foundation for all buildings in the city.

L. *Appendix I*. Appendix I presents the riparian corridor and watershed protections adopted to minimize erosion and stabilize stream banks, improve water quality, preserve fish and wildlife habitat, regulate stream temperatures, reduce potential for flood damage, preserve natural aesthetic value of streams and protect the prime groundwater recharge areas of the city. These requirements are intended to provide protection for above-ground streams, stream corridors and recharge areas. Where streams flow through areas that are already developed, the riparian corridor and watershed protection requirements are intended to achieve a reasonable balance between natural streams and developed land uses.

10.10A.030 Definitions.

As used in this chapter:

A. "Acceptable and reasonable risk" means no loss of or significant injury to occupants, no release of hazardous or toxic substances, and structural damage but no collapse of structures.

B. "Accessory building" means any structure not designed for human occupancy, which may include detached garages with no habitable space, tool or storage sheds, gazebos, and swimming pools.

C. "Active fault" means a fault displaying evidence of displacement along one or more of its traces during Holocene time, which is approximately 10,000 years ago to the present.

D. "AGRC" means the Utah State Automated Geographic Reference Center.

E. "Avalanche" means a large mass of snow, ice, soil or rock, or a mixture of these materials, falling, sliding, or flowing rapidly down a hillside or mountainside under the force of gravity.

F. "Buildable area" means that, based on an accepted engineering geology report, the portion of a site not impacted by geologic hazards, or the portion of a site where it is concluded the identified geologic hazards can be mitigated to a level where risk to human life, property and city infrastructure is minimized and where structures may be safely sited.

G. "City" means the city of Fruit Heights and its public works director, city engineer, community development director, planning manager, building official, or other Fruit Heights officer or employee, as applicable.

H. "City council" means the Fruit Heights city council.

I. "Cluster development" means development in which a number of dwelling units are

placed in closer proximity than usual, or are attached, with the purpose of retaining or enlarging an open space area.

J. "Critical facilities" means essential, hazardous, special occupancy facilities, and Occupancy Categories III and IV as defined in the currently adopted International Building Code, and lifelines such as major utility, transportation, and communication facilities and their connections to critical facilities.

K. "Curriculum vitae" or "CV" means a written account of the professional life comprising one's education, accomplishments, work experience, publications, etc.

L. "Debris flow" means a slurry of rock, soil, organic material, and water transported in an extremely fast and destructive flow down channels and onto and across alluvial fans; including a continuum of sedimentation events and processes such as debris flows, debris floods, mudflows, clear-water floods, and alluvial-fan flooding.

M. "Development" means all critical facilities, subdivisions, single- and multi-family dwellings, commercial and industrial buildings; also additions to or intensification of existing buildings, storage facilities, pipelines and utility conveyances, and other land uses.

N. "Development review committee" or "DRC" means a committee of city staff members that reviews proposed development projects for compliance with this code, consisting of the director and others designated from time to time by him or her as approved by the city council, such as the city engineer, one or more of city planning staff members, the city's fire inspector, a representative of the city's public works provider, the city attorney, city geologist and/or others.

O. "Director" means the city's community development director.

P. "Engineering geologist" means a Utah-licensed geologist, who, through education, training, and experience, is competent in applying geologic data, geologic techniques, and geologic principles, which includes conducting field investigations, so that geologic conditions and geologic factors affecting engineered works, ground-water resources, and land-use planning are recognized, adequately interpreted, and clearly presented for use in engineering practice, land use planning, and for the protection of the public, and who utilizes specialized geologic training and experience to provide quantitative geologic information and recommendations and also works with and for land-use planners, environmental specialists, architects, public policy makers, and property owners to provide geologic information on which decisions can be made.

Q. "Engineering geology" means geologic work that is relevant to engineering and environmental concerns, and the public health, safety, and welfare. Engineering geology is the application of geological data, principles and interpretation so that geological factors affecting planning, design, construction, and maintenance of engineered works, land use planning and ground-water resources are adequately recognized and properly interpreted for use in engineering, land-use planning, and related practice.

R. "Essential facility" means buildings and other structures intended to remain operational in the event of an adverse catastrophic event, including all structures defined in Table 1.

S. "Fault" means a fracture in the earth's crust forming a boundary between rock or soil masses that have moved relative to each other.

T. "Fault setback" means an area on either side of a fault within which structures for human occupancy or critical facilities or their structural supports are not permitted.

U. "Fault scarp" means a steep slope or cliff formed by movement along a fault.

V. "Fault trace" means the intersection of a fault plane with the ground surface, often present as a fault scarp, or detected as a lineament on aerial photographs.

W. "Fault zone" means a corridor of variable width along one or more fault traces, within

which deformation of soil and rock units has occurred due to movement of the fault trace.

X. "FEMA" means the Federal Emergency Management Agency.

Y. "Geologic hazard" means a surface fault rupture, liquefaction, slope instability, landslide, debris-flow, rock-fall, or other geologic process or condition that may present a risk to life or property.

Z. "Geologic hazard study area" means a potentially hazardous area as shown on the geologic hazard study area maps within which hazard investigations are required prior to development.

AA. "Geotechnical engineer" means a professional, Utah-licensed engineer who, through education, training and experience, is competent in the field of geotechnical engineering.

BB. "Geotechnical engineering" means the investigation and engineering evaluation of earth materials including soil, rock, and man-made materials and their interaction with earth retention systems, foundations, and other civil engineering works. The practice involves the fields of soil mechanics, rock mechanics, and earth sciences and requires knowledge of engineering laws, formulas, construction techniques, and performance evaluation of engineering.

CC. "Governing body" means the city council or its designee.

DD. "Landslide" means the down-slope movement of a mass of soil or bedrock, including a continuum of processes between landslides, earth-flows, debris flows and debris avalanches, and rock falls.

EE. "Liquefaction" means a process by which certain water-saturated soils lose bearing strength because of earthquake-related ground shaking and subsequent increase of groundwater pore pressure.

FF. "Natural drainage channel" means naturally occurring features such as open swales, open channels, or open creek beds that help collect and convey stormwater over natural terrain to a determinate downstream point of discharge.

GG. "Non-buildable area" means a site that has any portion thereof within a geologic special study area where a geologic hazards investigation has not been conducted, a site where known or readily apparent geologic hazards exist in an area subject to a development application, which area is not depicted on the geologic hazards study area where a geologic hazards investigation has not been conducted, or that portion of a site which a geologic hazards report has concluded may be impacted by geologic hazards that cannot be reasonably mitigated to an acceptable level, and where the siting of habitable structures, structures requiring a building permit, or critical facilities, is not permitted.

HH. "Rockfall" means a rock or mass of rock, newly detached from a cliff or other steep slope which moves down-slope by falling, rolling, toppling, or bouncing; includes rockslides, rock-fall and rock avalanches.

II. "Sensitive lands" or "sensitive area" means any land within a sensitive lands district or which qualifies for inclusion in the sensitive lands as provided in this chapter.

JJ. "Sensitive lands district" or "sensitive lands overlay" means any designated overlay area published on an official map by the city which describes a sensitive area or special study zones. An official sensitive lands overlay map, as shown in Appendix A, shall be approved by the city council and shall be on record with the city at the front counter, in the planning department and/or with the city recorder. Sensitive lands overlay maps may also be available on the web at the city's official website.

KK. "Setback" means an area within which foundation elements that support habitable structures or critical facilities are not permitted.

LL. “Slope stability” means the resistance of a natural or artificial slope or other inclined surface to failure by sliding, usually assessed under both static and dynamic (earthquake-induced) conditions.

MM. “Snow avalanche” means a mass of predominantly snow and ice, but also including a mixture of soil or rock and organic debris, falling, sliding, and/or flowing rapidly down a hillside or mountainside under the force of gravity.

NN. “Special study zone” refers to an area within the vicinity of a potential or known fault zone(s) that warrant study to determine the feasibility of development in compliance with the regulations as outlined in Appendix B.

OO. “Structure designed for human occupancy” means any residential dwelling or any other structure used or intended for supporting or sheltering any use or occupancy.

PP. “SWPPP” means a storm water pollution prevention plan, conducted in accordance with appropriate standards, as determined by the city.

QQ. “Terrain adaptive architecture” means a system of architectural design where buildings step down steeply sloping sites and hillsides to create the least amount of visual impact from lower lying vantage points.

RR. “Talus” means rock fragments lying at the base of a cliff or a very steep rocky slope.

SS. “Trail” means a system of public recreational pathways located within the city for use by the public.

TT. “UGS” means the Utah Geological Survey.

UU. “Unpublished sources” means maps, documents, consultant’s reports or other data produced by credible scientific or professionally licensed individuals or entities that have not been published in publically or generally available formats.

VV. “USGS” means the United States Geological Survey.

WW. “Wet stamp” or “seal” means the official hallmark of an engineer, surveyor or other licensed professional that is reproduced, via ink or embossing, on plans, plats, studies or the like prepared by such professional or under his direction, to prove its authenticity and/or to confirm its accuracy.

10.10A.040 Development standards and controls.

Compliance with the development standards and controls of this chapter shall be required in connection with all structures and construction on sensitive lands; provided, however, that the development standards and controls contained in this chapter shall not circumvent or diminish the zoning controls of underlying zoning designations. Instead, the development standards and controls in this chapter are intended to, and shall, enhance the city’s regulatory control regarding building and development surrounding and within sensitive lands.

A. *Slopes*. The applicant will submit a predevelopment map with contour lines not to exceed 2’ intervals and indicating all slopes that are 30% or greater. Slope areas in excess of 30% may not be developed, and no more than 30% of a development’s slope areas in excess of 30% may be included in the area calculation to determine residential density. The planning commission may modify this requirement to include no more than 50% of the slope in excess of 30% toward density calculations upon finding that:

1. No significant or moderate harm will result;
2. The proposed modification will result in a more functional and improved plan;
3. The developer agrees to comply with any conditions or requirements imposed by the planning commission to mitigate any adverse effects which may result from the proposed

modification; and

4. If reasonably requested by the city in compliance with applicable legal standards for, *inter alia*, development exactions, the developer agrees to dedicate as open space any portion of the project that is not developable under this title.

B. *Single Family Lots*. For developments containing single family lots, the minimum lot size and yard requirements of the underlying zone shall apply, with the following exceptions:

1. Every lot shall have at least 5,000 square feet of buildable area, consisting of the area of the lot where the slope is 30% or less, which is completely contiguous and which has a minimum dimension of 50 feet either length or width.

2. Lots shall be designed to allow dwelling units to be located within 250 feet from a public street. All main and accessory buildings shall be built entirely within the buildable area.

C. *Density Limitations*.

1. The density limitations of the underlying zoning district shall control residential density.

2. The planning commission shall not adjust other zoning controls related to bulk and massing, including increased maximum structure height.

D. *Maximum Impervious Surface*. The total maximum allowable coverage by impervious material within a project or portion of a project within a sensitive lands district shall not exceed 30% of the total project area. Areas of roofs and private driveways will be estimated and included in the total impervious surface area.

E. *Grading, drainage, and erosion control*. The area of the watershed shall be used to determine the amount of storm water runoff generated before and after construction.

1. A grading and drainage report shall be prepared in which the developer shall describe the methods intended to be employed to control the erosion increase while in construction.

2. The developer is responsible for interim stabilization of all disturbed areas during periods of construction to prevent erosion offsite effects, and for final stabilization once construction is completed.

3. The SCS, Curve Number Method, or Rational Method, or other storm water computation method as approved by the city engineer, shall be used in computing runoff.

4. Lots shall be arranged so as to ensure adequate setbacks from drainage channels. The 100-year storm event shall be that basis for determining the minimum floor elevation. No structure shall be allowed in the 100 year floodplain as determined by the City Engineer.

5. Existing natural drainage channels shall remain as historically located except that roads and utilities may be installed across such channels as approved by the city engineer. Where these channel modifications are planned, the developer shall obtain applicable state Division of Water Rights and U.S. Army Corps of Engineers permits. The developer shall provide evidence of such permits to the city.

6. Facilities for the collection of storm water runoff shall be constructed on the development sites and according to the following requirements:

(a) Such facilities shall be the first improvements or facilities constructed on the development site.

(b) Such facilities shall be designed so as to detain safely and adequately the maximum expected storm water runoff for a 100-year storm event while allowing an offsite discharge not to exceed one tenth (0.1) cubic foot per second per acre.

(c) Such facilities shall be so designed so as to divert surface water away from cut faces or sloping surfaces of a fill.

(d) The existing drainage system, including natural drainage channels, shall be utilized to the

greatest extent practicable, as directed by the city engineer.

(e) Where drainage channels are required, wide shallow swales lined with appropriate vegetation, rock, or other approved material shall be used instead of cutting narrow, deep drainage ditches. Flow retarding devices, such as detention ponds, check dams, and recharge berms, shall be used where practical to minimize increases in runoff volume and peak flow rate due to development.

7. Construction on a development site shall be of a nature that will minimize the disturbance of vegetative cover.

8. Erosion control measures on a development site shall minimize increased suspended solids loading in runoff from such areas. A drainage system design to control storm water erosion during and after construction shall be contained in a detailed grading and drainage report submitted by the developer.

9. No grading or stripping shall be permitted except as part of a development plan approved in advance by the DRC pursuant to this chapter.

F. *Cut and Fill Slopes*. Cut and fill slopes shall comply with the following unless otherwise recommended in an approved soils and geology report:

1. Cut and fill slopes shall not exceed 12 feet.

2. Cut and fill slopes shall not exceed a slope ratio of 2:1 except as follows:

(a) No slopes shall be cut steeper than the bedding plane, fracture, fault or joint in any formation where the cut slope will lie on the dip of the strike line of the fracture, bedding plane, fault or joint.

(b) No slopes shall be cut in an existing landslide, mud flow or other form of naturally unstable slope.

(c) If the material of a slope is of such composition and character as to be unstable under the anticipated maximum moisture conditions, the slope angle shall be reduced to a stable value or increased through retention using a method approved by the city engineer and certified as to its stability by a professional soils engineer.

3. Fill slopes shall not be constructed on natural slopes steeper than 2:1.

4. Roadway cut and fill slopes located outside the dedicated public right-of-way shall be within recorded easements providing for slope protection and preservation. The easements shall be in a form acceptable to the city.

G. *Earthwork.*

1. All surface areas to receive fill shall be stripped of any surface vegetation, topsoil, and organics and cleared of any trash and debris that may be present at the time of construction.

2. After the site has been cleared and stripped, the exposed subgrade soils in those areas to receive fill shall be scarified to a depth of eight inches.

3. All fill material shall be earth materials that are free from organic material, (less than 30% by volume) and other deleterious materials as well as free of metal, concrete, asphalt and other construction debris. Imported fill material should be a non-expansive (less than 2% swell) granular materials and should not contain rocks or lumps over 6-inches in greatest dimension and not more than 15% of the material larger than 2½ inches.

4. Surface areas disturbed by trench excavations shall be contained within the limits of the development or within approved rights-of-way, except as may be necessary in order to comply with Occupational Safety and Health Administration requirements and as approved by the city engineer. Trench boxes shall be used whenever required to ensure compliance with this requirement.

5. The following compaction criteria shall be met for filling operations based on ASTM test designation 698-78:

Compaction Effort	*Description*
95%	Subgrade
97%	Structural fill
95%	Trench backfill
97%	Trench backfill (top 12-inches beneath pavement or concrete)
90%	Basement wall backfill

Fill material shall be spread and compacted in uniform horizontal lifts not exceeding eight inches in uncompacted thickness. Before compaction begins, the fill shall be brought to within 2% +/- of the optimum moisture content. Each lift should be thoroughly mixed before compaction to ensure a uniform distribution of moisture.

6. All structures shall bear on well compacted fill material or firm, undisturbed natural soil. No organic material, mud, muck, frozen material or ponded water shall be allowed in the footing foundation.

7. A written summary report of the completed compaction, showing location and depth of tests, materials used, moisture-density curves, moisture contents and relative density (if appropriate), prepared by a civil engineer, geotechnical engineer, or soils engineer shall be submitted to the city engineer for review.

8. The city engineer may require additional tests or information if the results of his review indicate that the conditions or materials are such that additional information is necessary.

H. *Setbacks*. The setbacks and other restrictions specified by this subsection are a minimum, and may be increased by the city if necessary for safety and stability, to prevent damage of adjacent properties from deposition or erosion, or to provide access for slope maintenance and drainage. Setbacks dealing with distances from property lines, structures or faults must satisfy the requirements of the following paragraphs. Retaining walls may be used to reduce the required setbacks when approved by the city.

1. Setbacks from property lines shall comply with most restrictive requirements that are applicable under this title and the city's building code.

2. Setbacks between graded slopes (cut or fill) and structures shall comply with this title, the city's building code and all other applicable ordinances.

3. No habitable structure, essential facility or critical facility shall be located over a fault. Determinations of the appropriate setback distance from the fault shall be made using data obtained in the geological report by the person or firm who prepared the geological report, but in no case shall this distance be less than fifteen feet.

I. *Vegetation and Re-vegetation*.

1. All areas on development sites cleared of natural vegetation in the course of construction of offsite improvements shall be replanted with drought tolerant vegetation which has good erosion control characteristics.

2. The use of persons or firms having expertise in the practice of re-vegetation (i.e., licensed landscape architects, erosion control specialists or nurserymen) shall approve the planning and installation of vegetative cover.

3. Vegetation shall be removed only when absolutely necessary, e.g., for the construction of buildings, roads and filled areas.

4. No vegetation shall be removed on a continuous hillside, crest (upslope or downslope) or a slope 30% or greater unless otherwise determined by the planning commission upon recommendation of the DRC.

5. Approval from the city engineer for uses such as trails and open space improvements. Any re-vegetation method of a trail, open space or hillside shall be subject to the approval of the city engineer.

6. Topsoil removed during construction shall be conserved whenever practicable for later use on areas requiring vegetation or landscaping (i.e., cut and fill slopes).

7. All disturbed soil surfaces shall be stabilized or covered prior to November 1st. If the planned impervious surfaces (i.e., road, driveways, etc.) cannot be established prior to November 1st, a temporary treatment adequate to prevent erosion shall be installed on those surfaces.

8. The property owner and/or developer shall be fully responsible for any destruction of native or applied vegetation identified as necessary for retention and shall be responsible for such destroyed vegetation. They shall carry the responsibility both for employees and subcontractors from the first day of construction until the final acceptance of improvements. The property owner and developer shall replace all destroyed vegetation with varieties of vegetation approved by the DRC. The property owner shall assume co-responsibility with the developer upon purchase of the property.

J. *Geology*.

1. No habitable structure or critical or essential infrastructure shall be built on or within 15 feet of any identified fault. Actual setbacks shall be determined through the process outlined in Appendix B.

2. No structures or off-site improvements shall be allowed on any active landslide area.

3. Problems associated with development on or near perched ground water and/or shallow ground water must be mitigated in a manner as approved by the planning commission.

K. *Fire Protection*.

1. Footing and foundation permits shall not be issued until work on an approved water system has commenced. A full building permit shall be issued only when the water system is completed and operational to provide fire protection.

2. Each development site proposal and building permit application shall be reviewed by the fire department to assure compliance with the city's fire code. Non-compliant developments shall not be approved.

3. Spark arresters shall be installed in every fireplace, whether constructed indoor or outdoor. The diameter of screen openings in such arresters shall not exceed ¼ inch.

4. Development adjacent to public lands shall provide access for fire protection vehicles and equipment.

5. A development in a sensitive lands district shall not permit the use of wood shake shingles or wood exterior siding, regardless of whether or not such materials have been treated with fire retardant.

L. *Streets and Ways*. Streets, roadways, and private access ways shall follow as nearly as possible the natural terrain. The following additional standards shall apply:

1. At least two ingress and egress routes shall be provided for each subdivision or PUD project.

2. Points of access shall be provided to all developed and undeveloped areas for emergency and fire-fighting equipment. Driveways located upon each lot extending from a public or private street shall have sufficient width and design to admit and accommodate fire-fighting equipment

and must comply with all applicable city standards.

3. Cul-de-sacs shall not exceed 600 feet in length and shall have a fire-department-approved turnaround with a back of curb line radius of at least 55 feet. Stub-streets that are longer than the width or length of any adjacent single lot or 200 feet, whichever is less, shall have a temporary turnaround at the end thereof.

4. Centerline curvatures shall not be less than a 100 foot radius on any curved street pattern.

5. Variations of the street design standards developed to solve special hillside visual and functional problems may be presented to the planning commission for consideration and approval. Examples of such variations may be the use of split roadways to avoid deep cuts, one-way streets, modifications of surface drainage treatments, sidewalk design.

6. Development sites which are located near canyon trails will provide public access to those trails. Public parking areas may be required by the planning commission at trail heads.

7. Developments adjacent to public lands shall provide for access by fire protection equipment.

8. The maximum amount of impervious surface for streets and roadways shall be 20% of the entire development site.

9. All streets or rights-of-way for vehicular traffic shall be subject to the following limitations:

(a) The maximum grade of such streets or rights-of-way shall be 12% except as hereafter provided.

(b) The provisions of this subsection shall not apply to streets or rights-of-way already constructed or which have heretofore been granted preliminary approval by the planning commission.

(c) Roads shall be designed to meet the city's road base, asphalt and compaction standards.

M. *Trails upon hillsides*.

1. The subdivider or other developer shall dedicate and improve to city standards trails necessary to provide public access to public lands and other trails shown on city or county master plans or required by the planning commission. Trails shall be located so that the route is feasible for both construction and long-term maintenance; side slopes shall not exceed 70% and rock cliffs and other insurmountable physical obstructions shall be avoided. The specific location of the trail right-of-way shall be verified on the ground before approving the subdivision.

2. A trail may be constructed to access upper/lower portions of residential property subject to the following conditions:

(a) No un-engineered cut or fill of the hillside shall be in excess of four feet. All cuts or fills shall be properly retained.

(b) The trail shall follow a meandering course, and not use a direct line pathway to the desired location. Where possible, the trail should follow the natural contours of the hillside.

(c) The grade of trails shall not exceed 12%. Trails, and retainage of adjacent slopes, shall be designed as directed by the city engineer.

(d) New trails shall be planned to harmonize with nature, including minimizing the destruction of existing stands of vegetation.

(e) New trails shall include the installation of bridges across natural drainages with permanent or temporary flow that cannot be crossed without entering the drainage.

(f) The trail shall be appropriately landscaped with native materials.

(g) Prior to construction and/or hillside cuts, the trail plan shall be submitted to the director and city engineer for review and approval.

N. *Architectural Design*. Architectural controls are primarily regulated by underlying zoning districts; however, the architectural requirements of this chapter include the following as determined by the Planning Commission:

1. The design of buildings and structures proposed for construction shall be visually compatible with the natural beauty of the foothills and canyon areas and other surrounding sensitive lands.
2. The materials used for buildings, structures and fences shall blend harmoniously with the natural setting.
3. The planning commission may review the design and comment on the specified exterior materials and colors for all structures.
4. Exposed foundation walls shall not exceed four feet above finished grade at any point.
5. The design and construction of structures within the urban interface area shall be consistent with the 2006 Utah Wildland-Urban Interface Code, as amended.

O. *On-Site Development*. The property owner and developer shall be fully responsible for making all improvements in accordance with the development site approval, e.g., drainage, erosion and vegetation requirements.

P. *Bond*. In addition to the requirements of this code requiring the posting of a completion bond for a development, the developer or owner shall be required to guarantee (via a cash bond, cash escrow or bank letter of credit, all in such form as city may require) the completion of re-vegetation projects, the stabilization of grading sites, cuts and fills, construction of storm water runoff facilities, and the construction of recreation space as required in this code. Such bond shall be in an amount equal to 125% of the city's estimate of the cost of construction of such work, and shall continue for 18 months after the completion date of all such project, improvements or facilities.

Q. *FEMA*. All habitable living space for new construction shall be at least one (1) foot above the 100 year flood plain elevation. Any additions to existing structures that includes any additional square feet shall meet this requirement.

10.10A.050 Responsibility for geologic hazard and other studies.

A. All applicants wishing to develop and/or build on sensitive lands shall provide, at their own expense, all applicable geologic, geotechnical or other studies outlined in this chapter and as directed by the DRC pursuant to section 10.10A.020.

B. Geologic hazard studies often require both engineering geology and geotechnical engineering expertise. Engineering geologic studies shall be performed under the direct supervision of a licensed engineering geologist qualified as provided in section 10.10A.060, and geotechnical engineering studies shall be performed under the direct supervision of a licensed geotechnical engineer qualified as provided in section 10.10A.060. All plans submitted to the city shall be stamped by a licensed geotechnical engineer and/or engineering geologist, as the case and standard of care may warrant, appropriately licensed and in good standing with the state of Utah.

C. As the case may warrant, the DRC, or the planning commission upon recommendation of the DRC, may from time to time require that additional studies related to the sensitive lands being developed be completed to address issues that may include, without limitation, hydrology, wildlife habitat, ecology, etc. All additional studies shall be completed by a city-approved expert in the particular field of study.

10.10A.060 Minimum acceptable qualifications of professionals.

A. *Minimum acceptable qualifications of the engineering geologist*. Engineering geology and the evaluation of geologic hazards is a specialized discipline within the practice of geology requiring technical expertise and knowledge of techniques not commonly used in other geologic disciplines. Therefore, geologic hazard investigations involving engineering geologic studies shall only be accepted by the city when conducted, signed and stamped by a qualified engineering geologist. The minimum qualifications of the engineering geologist who performs geologic hazard investigations of sensitive lands in the city are:

1. An active, current Utah State Professional Geologist's license.
2. In good standing with the Division of Professional and Occupational Licensing of the Utah Department of Commerce.
3. Demonstrated competence in the specified field as evidenced by a current CV provided to the city for review and approval.

B. *Minimum acceptable qualifications of a geotechnical engineer*. Evaluation and mitigation of geologic hazards often require contributions from a qualified geotechnical engineer, particularly in the design of mitigation measures. Geotechnical engineering is a specialized discipline within the practice of civil engineering requiring technical expertise in geotechnical engineering. Therefore, geologic hazard investigations requiring contributions from a qualified geotechnical engineer will only be accepted by the city when also conducted, signed and stamped by a qualified professional engineer. Minimum qualifications of a geotechnical engineer who participates in geologic hazard investigations of sensitive lands in the city are:

1. An active, current Utah State Professional Engineer's license.
2. In good standing with the Division of Professional and Occupational Licensing of the Utah Department of Commerce.
3. Demonstrated competence in the specified field as evidenced by a current CV provided to the city for review and approval.

C. *Minimum acceptable qualifications of other professionals*. From time to time the DRC, or the planning commission upon recommendation of the DRC, may require additional studies to evaluate issues that may include, but are not limited to hydrology, wildlife habitat, ecology, vegetation, etc. The DRC shall determine the adequacy of the qualifications of professionals performing additional studies based upon the following minimum standards:

1. An active, current Utah State professional license in the specified field and in good standing with the Division of Professional and Occupational Licensing of the Utah Department of Commerce; or,
2. Demonstrated competence in the specified field as evidenced by a current CV provided to the city for review and approval, showing extensive study in the specified field, experience performing the specified studies and professional competence; and
3. Professional certification obtained through a reputable national organization such as LEED, AIA, AICP, ASLA or other applicable equivalent.

10.10A.070 Procedure.

Proposals for building or development on sensitive lands shall follow the procedure set forth in this section, which shall consist of four distinct parts: (1) scoping study; (2) conceptual proposal/ disturbance permit request; (3) preliminary proposal; and (4) final approval. Applications for review by the city shall be filed and processed in the following order:

A. *Scoping meeting*. The developer or consultant shall schedule a scoping meeting with the

DRC to evaluate the investigative approach of the engineering geologist/geotechnical engineer. At this meeting, the consultant shall present a work plan that includes locations of anticipated geologic hazards and locations of proposed exploratory excavations, such as trenches, borings, and CPT soundings, which meet the minimum standards of practice. The investigation approach should allow for flexibility due to unexpected site conditions. Field findings may require modifications to the work plan. Upon successful completion of the scoping meeting, an application for a disturbance permit may be submitted to the city.

B. *Conceptual proposal/disturbance permit applications*.

1. Proposals for surveying, testing or other design-related activities requiring physical entry into areas located within a sensitive lands district shall be submitted to the DRC for review and modification, approval or denial. Prior to review by the DRC, the areas of proposed disturbance shall be staked at the applicant's expense. Following staking, the city engineer or city geologist shall have at least two business days to observe the staking.

2. Thereafter, the DRC, upon receiving a favorable recommendation from the city engineer and geologist, may authorize issuance of a grading permit to allow access to, and permit testing of, the approved areas.

3. The permit shall be limited to the staked area of proposed disturbance and may include conditions deemed appropriate by the DRC to protect sensitive areas. As dictated by the DRC, such conditions may include requirements for the following:

(a) Photo documentation to identify pre-existing types and general locations of vegetation which may need to be protected or replaced.

(b) The submission of a SWPPP for the implementation of adequate erosion control measures to protect affected areas. Supplemental erosion control measures may also be required between initial disturbances and either construction of permanent improvements or restoration and re-vegetation of the disturbed area.

(c) Limitations on cuts and fills to ensure that they are made only where necessary to obtain access for required testing.

(d) Requirements for restoration and re-vegetation of disturbed areas where permanent improvements are not constructed within one year following the disturbance.

(e) A land disturbance bond (cash bond, cash escrow or bank letter of credit, all in such form as city may require) to cover the expense of re-vegetating disturbed areas and returning graded areas to their natural state.

(f) Any other reasonable requirement to mitigate the effect of potential interruption caused by the disturbance of the area for conceptual or preliminary activities.

4. The conceptual plan shall include the following information; provided, however, that the DRC may reasonably modify the following requirements:

(a) A conceptual development map, drawn at a minimum scale of 1"=100', which shows:

(i) One or two foot contours;

(ii) Natural slopes of 30% or greater color shaded;

(iii)Proposed development layout of lots, roads, schools, churches, parks, open space, fire stations, commercial, cut or fill slopes or areas of disturbance, and any other proposed land use;

(iv)Labeling of any roads with grades in excess of eight percent; and

(v) Native vegetation, by type and location.

(b) A report which indicates:

(i) Total development area;

(ii) Total area with over 30% slope

(iii) Number of lots or units proposed;

(iv) Proposed density calculation;

(v) Evidence of compliance with city storm water requirements;

(vi) Percentage of each use, such as residential, commercial, recreational, transportation, etc.; and

(vii) Statement of compliance with the design requirements of this chapter.

(c) A re-vegetation plan addressing restoration plans for areas disturbed by preliminary activities.

C. *Preliminary assessment and mitigation*. Following conceptual approval, preliminary approval of a hazard assessment plan shall be sought from the planning commission or the city's planning department, as applicable. The information and reports required in this subsection are outlined in the appendices to this chapter; shall be submitted as part of an application for preliminary approval; and may be in addition to information required for preliminary approval for a subdivision, PUD or permit for a conditional or permitted use.

D. *Final approval of assessment and mitigation measures*. Final approval of hazard assessment and mitigation measures shall be issued by the planning department if the applicant demonstrates satisfactory compliance with all of the requirements of this chapter and compliance with all city requirements for final plat approval, PUD approval and/or conditional use approval, as applicable. In addition, all bonding requirements of this code shall be satisfied prior to the issuance of the final approval by the planning department.

10.10A.080 Geologic hazards study area maps.

A. *Geologic hazards study area maps*. Appendix A of this chapter contains the geologic hazards study area maps and other supplemental maps (the "*Appendix A maps*") applicable to identified sensitive lands in the city. The Appendix A maps are prepared using the best available scientific information, but are necessarily generalized and designed only to indicate areas where hazards may exist and where geologic hazards studies are required. Because such maps are prepared at a non-site-specific scale, hazards may exist that are not shown on the maps. The fact that a site is not shown in a geologic hazards study area for a particular hazard does not exempt the applicant from considering the hazard if evidence is found that it may exist. It is the responsibility of the applicant to consider and identify all geologic hazards on the subject site. If it is subsequently determined that the site has geologic hazards or other features that are not shown on the Appendix A maps, the review process will be pursuant to this chapter.

B. *Geologic hazards study area boundaries*. Boundaries shown on the Appendix A maps will not be systematically adjusted as each individual site-specific study indicates whether or not an actual hazard exists. Geologic hazards study area maps and other supplemental maps are meant only to define areas within the city where scientific evidence indicates a hazard may exist. However, the Exhibit A maps may be updated and amended by the city if found to be inaccurate or erroneous, or as new methods or data are developed to better define areas of potential hazards.

C. *Modification of geologic hazards study area and supplemental maps*. Where geologic hazards study area maps are thought by an applicant to be inaccurate or erroneous and require revision, the applicant shall submit to the city technical evidence by a qualified professional supporting the claim and showing the proposed revision. The DRC will review the information and render a decision. The applicant may appeal that decision to the City Council.

10.10A.090 Geologic hazard studies and reports required.

A. Any applicant requesting development approval on sensitive lands shall submit to the city five paper copies and one electronic copy of a site-specific geologic hazard study report for such land meeting the requirements of Appendices B-G of this chapter.

B. Applicants who are required to complete site-specific geological hazards tests shall be directed by the city regarding the scope of the required studies and tests through the conceptual proposal/disturbance permit process outlined in this chapter.

C. A foundation excavation report or observation report must be submitted to the city's building department for all new construction on sensitive lands. This report shall show that the developer or applicant has complied with all requirements and recommendations (included those in previous geotechnical reports that have been conducted for the subject property); shall show any geologic hazards found after excavation but prior to footing and foundation construction; and shall be certified by a licensed geotechnical engineer or engineering geologist as required by this chapter.

10.10A.100 Geologic hazard reports.

A. Upon a determination by the DRC of the scope of geologic or other hazard studies required by an applicant, the applicant, at its expense, shall provide the city with a site-specific report consistent with the requirements of this chapter that identifies all known or suspected geologic hazards on the site, whether originating on-site or off-site, and whether previously identified or previously unrecognized, that may affect the subject property. All reports shall include the original signature and wet stamp of the qualified professional geotechnical engineer or engineering geologist. Geologic hazards reports co-prepared by professional geologists and engineers must include the original signature and wet stamp of both professionals.

B. The scope of the development and the potential for hazards to exist on a sensitive lands property, as determined by the DRC in consultation with the city engineer and city geologist, shall govern which of the following studies must be completed in connection with a development application (the specific requirements for the performance of such studies are found in the appendices to this chapter):

1. Surface fault rupture hazard report (Appendix B). Surface fault rupture hazard reports shall contain all requirements described in Appendix B of this chapter, *Minimum Standards for Surface Fault Rupture Hazard Studies*. Surface fault rupture studies shall be conducted by a qualified engineering geologist.

2. Slope stability and landslide hazard reports (Appendix C). Slope stability and landslide hazard reports shall contain all requirements described in Appendix C of this chapter, *Minimum Standards for Slope Stability Hazard Studies*. Slope stability and landslide studies shall be conducted by a qualified engineering geologist or a qualified professional engineer.

3. Liquefaction hazard reports (Appendix D). Liquefaction hazard reports shall contain all requirements described in Appendix D of this chapter, *Minimum Standards for Liquefaction Hazard Studies*. Liquefaction analyses shall be conducted by a qualified geotechnical engineer.

4. Debris flow hazard reports (Appendix E). Debris flow hazard reports shall contain all requirements described in Appendix E of this chapter, *Minimum Standards for Debris Flow Hazard Studies*. Debris flow hazard investigations shall be conducted by a qualified engineering geologist. Mitigation measures will generally require contributions from geotechnical engineers, hydrologists, or civil engineers.

5. Rockfall hazard reports (Appendix F). Rockfall hazard reports shall contain all

requirements described in Appendix F of this chapter, *Minimum Standards for Rock-Fall Hazard Studies*. Rockfall studies shall be conducted by a qualified engineering geologist. Mitigation measures will generally require contributions from geotechnical and/or civil engineers.

6. Foundation excavation observation reports (Appendix H). Foundation excavation observation reports shall contain all requirements described in Appendix H of this chapter, *Minimum Standards for Foundation Excavation Observation Reports.* Foundation observation reports shall be conducted by a qualified geotechnical engineer or engineering geologist.

C. In addition to the requirements of the aforementioned reports, all geologic hazards reports shall include the following:

1. A 1:24,000-scale geologic map, with references, showing the general surface geology (landslides, alluvial fans, etc), bedrock geology where exposed, bedding attitudes, faults, and other geologic structural features;

2. A detailed site map of the subject area, at a scale equal to or more detailed than one inch equals 200 feet, showing the locations of subsurface investigations and site-specific geologic mapping performed as part of the geologic investigation, including boundaries and features related to any geologic hazards, topography, and drainage. The site map must show the location and boundaries of the property, geologic hazards, delineation of any recommended setback distances from hazards, and recommended locations for structures. Buildable and non-buildable areas shall be clearly identified;

3. Trench logs, when applicable, prepared in the field and presented in the geologic hazard report at a scale equal to or more detailed than one inch equals five feet;

4. Boring logs, when applicable, prepared with standard geologic nomenclature;

5. Listing of aerial photographs used and other supporting information, as applicable;

6. Conclusions, clearly supported by adequate data included in the report, that summarize the characteristics of the geologic hazards, and that address the potential effects of the geologic conditions and geologic hazards on the proposed development and its occupants, particularly in terms of risk and potential damage;

7. Specific recommendations for additional or more detailed studies, as may be required to understand or quantify a geologic hazard;

8. An evaluation of whether or not mitigation measures are required, including an evaluation of multiple mitigation options;

9. Specific recommendations for avoidance or mitigation of the effects of the hazards, consistent with the purposes set forth in this chapter, including design or performance criteria for engineered mitigation measures and all supporting calculations, analyses, modeling or other methods, and assumptions. Final design plans and specifications for engineered mitigation must be signed and stamped by a qualified geotechnical, civil and/or structural engineer, as appropriate;

10. All data upon which recommendations and conclusions are based shall be clearly stated in the report;

11. A statement shall be provided regarding the suitability of the proposed development from a geologic hazard perspective; and

12. Identification of all utilities that serve the proposed development, including design and specifications of flexible expansion joints for utility lines that cross any fault line(s).

D. When a submitted report does not contain adequate data to support its findings, additional or more detailed studies shall be required to explain or quantify a particular geologic hazard or to describe how mitigation measures recommended in the report are appropriate and adequate.

10.10A.110 Review of geologic hazard reports.

A. The city shall review any proposed land use which requires preparation of a geologic hazards report under this chapter to determine the possible risks to the safety of persons, property and city infrastructure from geologic hazards.

B. Prior to consideration of any request for rezoning of property, preliminary plat approval, or site plan approval, the required geologic hazard reports shall be submitted to the city for review.

C. The city will act diligently in reviewing each submitted geologic hazard report.

D. All direct costs associated with the review of geologic hazard reports shall be paid by the applicant through the application fee.

E. The city shall retain a copy of each geologic hazard report in the department's project file.

F. The city shall determine whether the report complies with all of the standards set forth in this chapter, including the following:

1. That suitable geologic hazard reports have been prepared by qualified professionals.

2. That the proposed land use does not present an unreasonable risk to the health, safety, and welfare of persons or property, including buildings, storm drains, public streets, culinary water facilities, utilities or critical facilities, whether off-site or on-site, or to the aesthetics and natural functions of the landscape, such as slopes, streams, other waterways, drainage, or wildlife habitat, whether off-site or on-site, because of the presence of geologic hazards or because of modifications to the site due to the proposed land use.

3. That the proposed land use demonstrates that, consistent with the state of the practice, the identified geologic hazards can be mitigated to a level where the risk to human life and damage to property are reduced to an acceptable and reasonable level in a manner which will not violate applicable federal, state, or local statutes, ordinances or regulations. Mitigation measures should consider, in their design, the intended aesthetic functions of other governing ordinances. The applicant must include with the geologic hazards reports a mitigation plan that defines how the identified hazards or limitations will be addressed without impacting or adversely affecting off-site areas. Implementation of mitigation measures must be reasonable and practical, especially if such measures require on-going maintenance by property owners.

G. The city may set other requirements that it deems necessary to mitigate any geologic hazards and to ensure that the purposes of this chapter are met. These other requirements may include, without limitation, the following:

1. Additional or more detailed studies to understand or quantify the hazard or determine whether mitigation measures recommended in the report are adequate;

2. Specific mitigation requirements, establishing buildable and non-buildable areas, limitations on slope grading and controls on grading, or re-vegetation;

3. Grading plans prepared by a licensed professional engineer which include the following, as required by the DRC:

(a) Maps of existing and proposed contours;
(b) Present and proposed slopes for each graded area;
(c) Existing and proposed drainage patterns;
(d) Location and depth of all proposed cuts and fills;
(e) Description of methods to be employed to achieve stabilization and compaction;
(f) Location and capacities of proposed drainage, structures, and erosion control measures

based on maximum runoff for a 100-year storm;

(g) Location of existing buildings or structures on or within 100 feet of the site, or which may be affected by proposed grading and construction; and

(h) Plan for monitoring and documentation of testing, field inspections during grading, and reporting to the city.

4. Installation of monitoring equipment and seasonal monitoring of surface and subsurface geologic conditions, including ground-water levels; and

5. Other requirements such as time schedules for completion of the mitigation and phasing of development.

H. All information shall be submitted as an original signed, wet-stamped document for the city's use, such as, making additional copies as deemed necessary, distribution to the public, review by other professionals or use by other parties that have an interest in the property. All information shall also be submitted in a digital format as directed by the city for use in the city's infrastructure database, GIS, CADD archives or other digital platform for city business, or for recordation at the Salt Lake County Recorder's office.

I. As a condition of approval of any development of sensitive lands which requires a geologic hazards report, the city may also set additional requirements as it deems necessary to protect the health, safety, and welfare of its residents, protect the city's infrastructure and financial health, and minimize potential adverse effects of geologic hazards to public health, safety, and property.

J. The city may require a qualified professional to be on site, at the developer's cost, during certain phases of development and construction, particularly during grading phases and the construction of retaining walls. For any real property being developed based on a geologic or geotechnical report which has been accepted by the city, no final inspection shall be completed, certificate of occupancy issued or performance bond released until the geotechnical engineer or engineering geologist who signed and approved such report certifies in writing that the completed improvements and structures conform to the descriptions and requirements contained in such report.

K. An applicant may appeal any decision made under the provisions of this chapter only after the city has issued a written review of a report. Any such appeal shall set forth the specific grounds or issues upon which the appeal is based. The appeal shall be submitted in writing to the director within 30 days of the city's issuance of the written review or other decision. The city's board of adjustment shall serve as the appeal authority for any technical dispute.

10.10A.120 Disclosure when a geologic hazard report is required.

A. Whenever a geologic hazard report is required under this chapter, the owner of the affected site shall record a signed, notarized disclosure notice, running with the land, in a form satisfactory to the city prior to the city's approval of any development or subdivision of such land. The recorded disclosure shall include the following:

1. Notice that the land is located within a geologic hazards study area as shown on the geologic hazards study area map or as otherwise defined in this chapter; and

2. Notice that a geologic hazards report was prepared and is available for public inspection in the city's files.

B. Where geologic hazards and related setbacks are delineated in a subdivision, the owner shall also place additional notification on the plat stating the above information, prior to final approval and recording of the plat.

10.10A.130 Warning and disclaimer.

The city's geologic hazards study area maps represent only those potentially hazardous areas known to the city and should not be construed to include all possible potential hazard areas. This chapter and the geologic hazards study area maps referenced herein may be amended by the city as new information becomes available pursuant to procedures set forth in this chapter. The provisions of this chapter do not in any way assure or imply that areas outside the geologic hazards study area maps boundaries are free from the possible adverse effects or risk of geologic hazards. This chapter shall not create any liability on the part of the city or any of its officers, employees, reviewers, consultants, agents or contractors for any damages from geologic hazards that result from reliance on this chapter or any administrative requirement or decision lawfully made hereunder.

10.10A.140 Change of use.

No change in use which results in the conversion of a building or structure from one that is not used for human occupancy to one that is used for human occupancy shall be permitted unless the building or structure complies with the provisions of this chapter.

10.10A.150 Conflicting regulations.

In cases of conflict between this chapter and the provisions of existing zoning classifications, building code, subdivision ordinance, or any other ordinance of the city or applicable law, the most restrictive provision shall apply.

Table 1--Essential Facilities

A. In the event of failure, the following buildings and structures represent a substantial hazard to human life:

1. Buildings where more than 300 people congregate in one area;
2. Elementary schools, secondary schools, or day care facilities with an occupancy greater than 250;
3. Colleges or adult education facilities with an occupancy greater than 500;
4. Health care facilities with an occupancy greater than 50 or more resident patients but not having surgery or emergency treatment facilities;
5. Jails and detention facilities;
6. Any structure with an occupancy greater than 1,000;
7. Power generating stations, water treatment or storage for potable water, waste water treatment facilities and other public utility facilities; and
8. Buildings containing toxic or explosive substances that would be dangerous to the public if released.

B. Essential facilities include, without limitation, the following buildings and structures:

1. Hospitals and other care facilities having surgery or emergency treatment facilities;
2. Fire, rescue and police stations and emergency vehicle garages and fueling facilities;
3. Designated emergency shelters;
4. Designated emergency preparedness, communications, and operation centers and other facilities required for emergency response;
5. Power-generating stations and other public utility facilities required as emergency backup facilities for facilities and structures included in this table;
6. Structures containing highly toxic materials as defined by the most recently adopted version of the IBC;
7. Aviation control towers, air traffic centers and emergency aircraft hangars;
8. Buildings and other structures having critical national defense functions; and
9. Water treatment and storage facilities required to maintain water pressure for fire suppression.

EXHIBIT F

Keystone Wall Design Package

KEYSTONE RETAINING WALL DESIGN PACKAGE
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

DESIGN PACKAGE CONTENTS		
	SHEET NO.	DESCRIPTION
SHOP DRAWINGS	1	COVER SHEET
	2	PLAN VIEW
	3	ELEVATION VIEW (1 OF 3)
	4	ELEVATION VIEW (2 OF 3)
	5	ELEVATION VIEW (3 OF 3)
	6	TYPICAL SECTION VIEW
	7	CONSTRUCTION SPECIFICATIONS & NOTES
	8	KEYSTONE DETAILS
	9	DESIGN CRITERIA
DESIGN CALCULATION PACKAGE	SECTION 2	BUTTRESS RETAINING WALL EVALUATION REPORT
	SECTION 3	STABILITY CALCULATIONS
	SECTION 4	GLOBAL STABILITY RESULTS

NOTE: THIS PLAN SET HAS BEEN PREPARED WITH COLOR LINE-TYPES TO MAKE SOME DETAILS AND SPECIFICATIONS MORE CLEAR. ANY COPIES OF THESE PLANS SHOULD BE MADE IN COLOR.

PROJECT AERIAL VIEW

REFERENCE IMAGE FROM GOOGLE EARTH PRO, IMAGE DATE APRIL 22, 2023

PREPARED FOR:

THE BOYER COMPANY
101 SOUTH 200 EAST, SUITE 200
SALT LAKE CITY, UTAH 84111
ATTN: SPENCER MOFFAT

PREPARED BY: BRADLEY M. JOHNSON, P.E.

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

REV	REVISION DESCRIPTION	DATE	BY	CHK

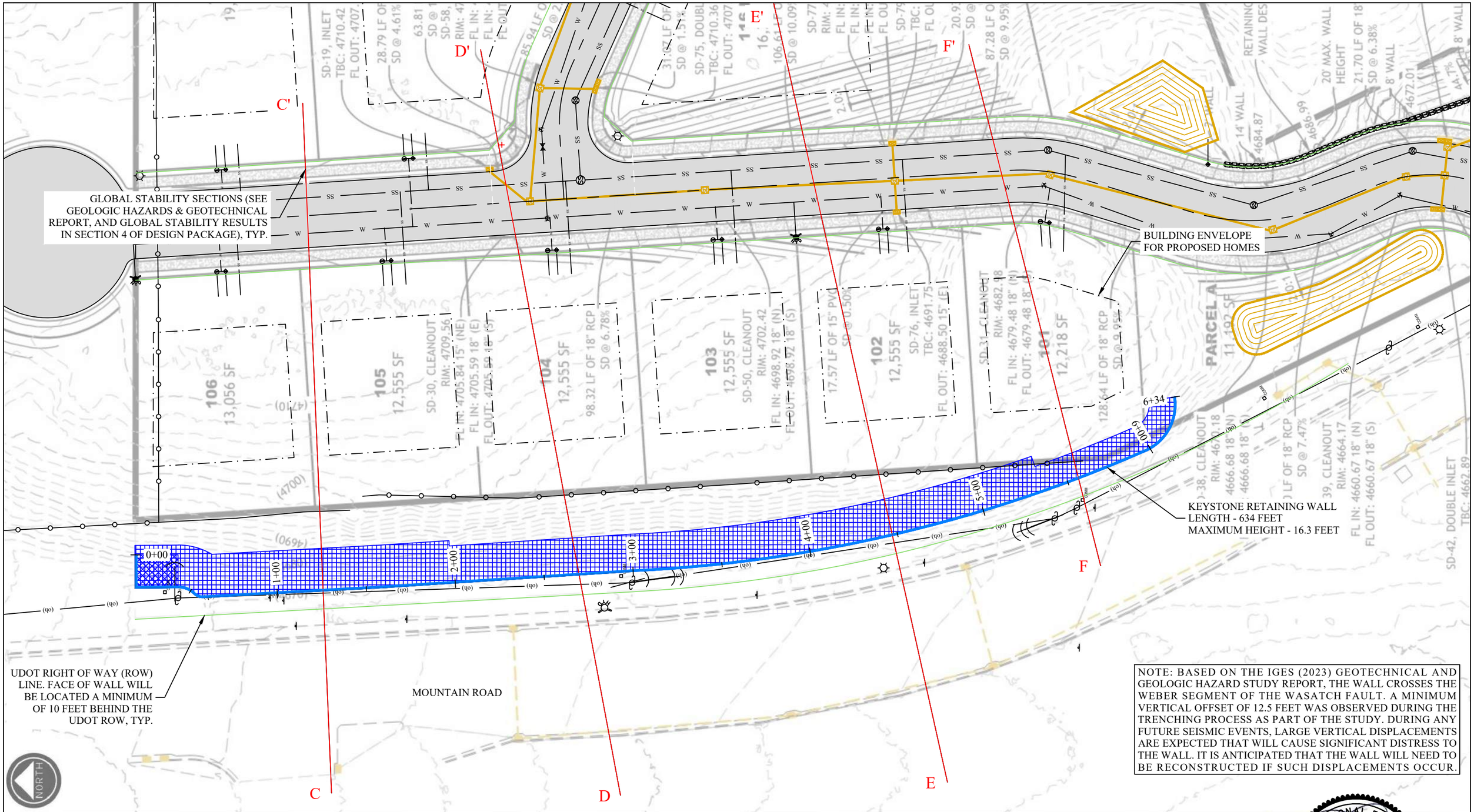
REVISIONS

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

COVER SHEET

DESIGNED BY:	BMJ	5-15-2024	PLOT SCALE 1=1
DRAWN BY:	BMJ	5-15-2024	
CHECKED BY:	KAH	5-15-2024	DWG SCALE 1"=250'
APPROVED BY:	BMJ	5-15-2024	
IGES PROJECT NO: 00145-047		SHEET NO: 1	REV N/A



NOTE: BASED ON THE IGES (2023) GEOTECHNICAL AND GEOLOGIC HAZARD STUDY REPORT, THE WALL CROSSES THE WEBER SEGMENT OF THE WASATCH FAULT. A MINIMUM VERTICAL OFFSET OF 12.5 FEET WAS OBSERVED DURING THE TRENCHING PROCESS AS PART OF THE STUDY. DURING ANY FUTURE SEISMIC EVENTS, LARGE VERTICAL DISPLACEMENTS ARE EXPECTED THAT WILL CAUSE SIGNIFICANT DISTRESS TO THE WALL. IT IS ANTICIPATED THAT THE WALL WILL NEED TO BE RECONSTRUCTED IF SUCH DISPLACEMENTS OCCUR.

PLAN VIEW

REFERENCE IMAGE FROM EDM PARTNERS, PINE RIDGE ESTATES PHASE 1, GRADING & DRAINAGE PLAN, SHEET 0-5 (SHEET DATED 1/22/2024). ALSO AUTOCAD FILES PROVIDED BY THE CLIENT.

REV	REVISION DESCRIPTION	DATE	BY	CHK
	REVISIONS			

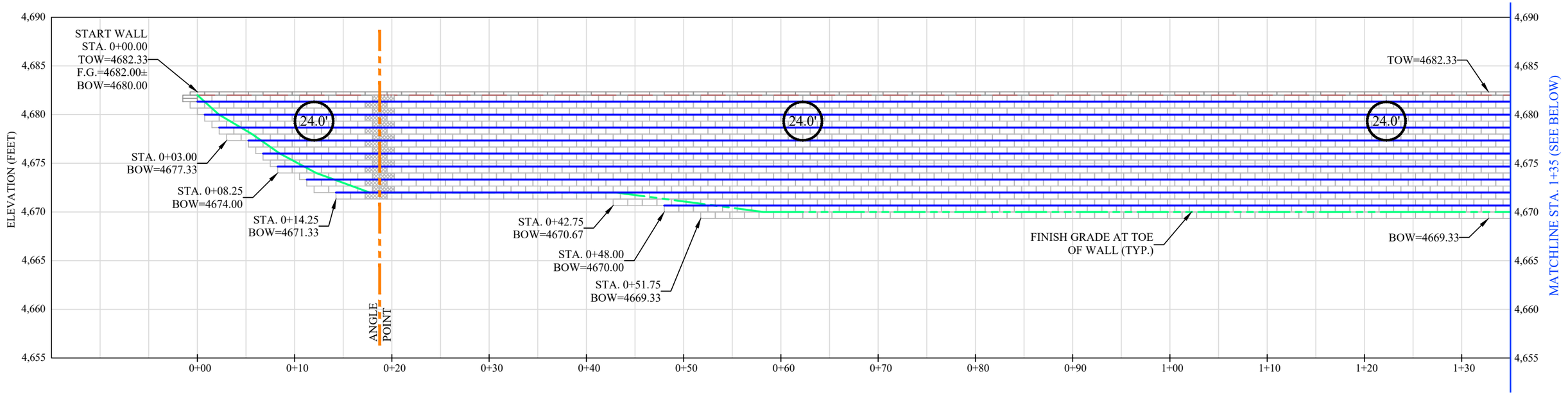
IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

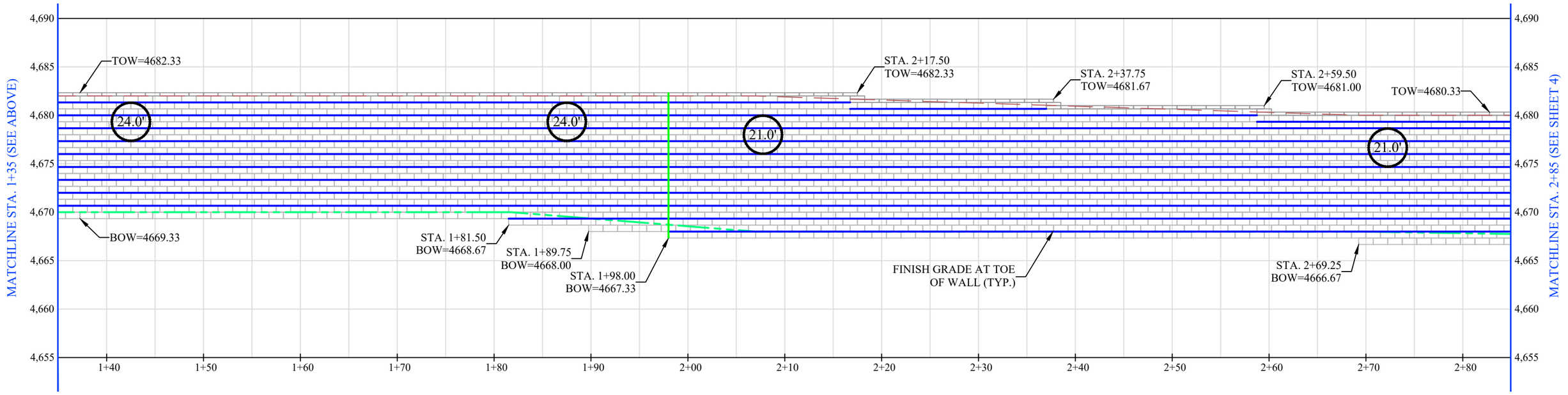
KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

PLAN VIEW

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE 1=1
DRAWN BY: BMJ	5-15-2024	
CHECKED BY: KAH	5-15-2024	DWG SCALE 1"=50'
APPROVED BY: BMJ	5-15-2024	
IGES PROJECT NO: 00145-047	SHEET NO: 2	REV N/A

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH





0 2 4 6 10 20
SCALE: 1" = 10'

LEGEND

TOW = TOP OF RETAINING WALL CAP BLOCK
BOW = BOTTOM OF RETAINING WALL BLOCK (TOP OF LEVELING PAD)
FG = FINISHED GRADE AT BOTTOM OF WALL

X.X' — SECTION GRID LENGTH, MEASURED FROM FRONT OF BLOCK (TYP.)

MIRAFI 5XT GEOGRID REINFORCEMENT

WALL ANGLE POINT

GRID CHANGE - CHANGE IN LENGTH OR GEOGRID PATTERN

ELEVATION VIEW

REFERENCE ELEVATIONS BASED ON DRAWINGS BY EDM PARTNERS, PINE RIDGE ESTATES PHASE 1, GRADING & DRAINAGE PLAN, SHEET 0-5 (SHEET DATED 1/22/2024) AND AUTOCAD FILES PROVIDED BY THE CLIENT. FIELD ADJUSTMENTS/CHANGES SHOULD BE EXPECTED ONCE CONSTRUCTION COMMENCES. IGES SHOULD BE CONSULTED WHERE FIELD CHANGES ARE REQUIRED.

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

REV	REVISION DESCRIPTION	DATE	BY	CHK

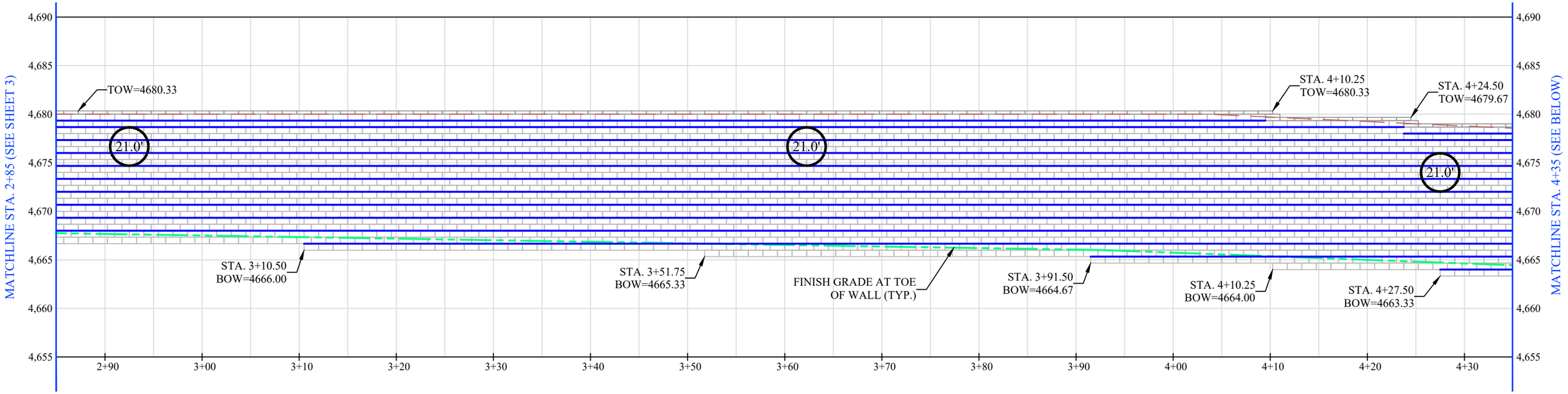
REVISIONS

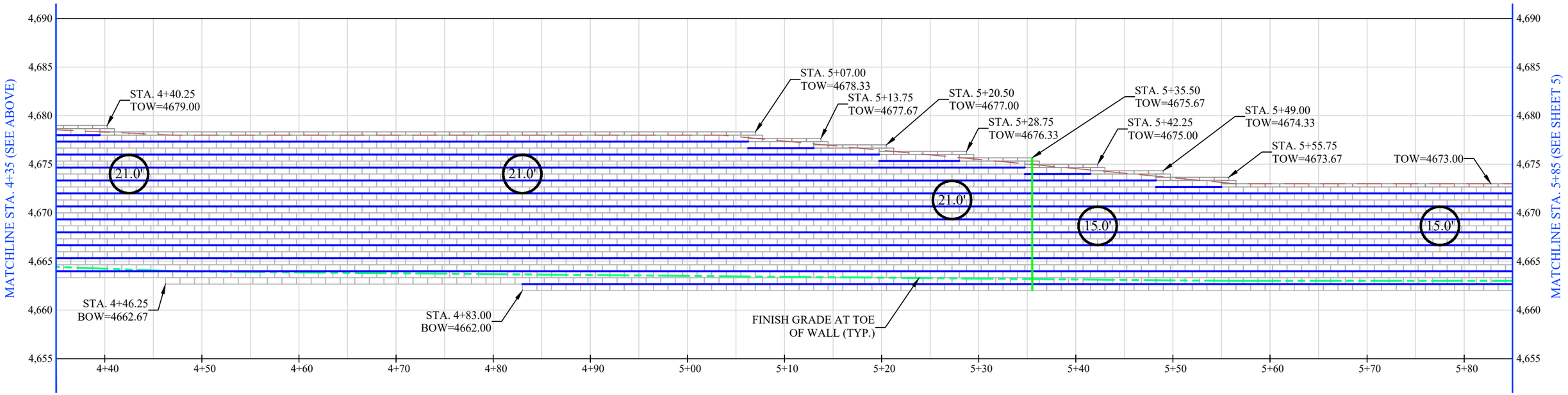
IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

ELEVATION VIEW (1 OF 3)

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	1=1
DRAWN BY: BMJ	5-15-2024		
CHECKED BY: KAH	5-15-2024	DWG SCALE	1"=10'
APPROVED BY: BMJ	5-15-2024		
IGES PROJECT NO: 00145-047	SHEET NO: 3	REV	N/A





0 2 4 6 10 20

SCALE: 1" = 10'

LEGEND

TOW = TOP OF RETAINING WALL CAP BLOCK
BOW = BOTTOM OF RETAINING WALL BLOCK (TOP OF LEVELING PAD)
FG = FINISHED GRADE AT BOTTOM OF WALL

X.XX' — SECTION GRID LENGTH, MEASURED FROM FRONT OF BLOCK (TYP.)

MIRAFI 5XT GEOGRID REINFORCEMENT

GRID CHANGE - CHANGE IN LENGTH OR GEOGRID PATTERN

ELEVATION VIEW

REFERENCE ELEVATIONS BASED ON DRAWINGS BY EDM PARTNERS, PINE RIDGE ESTATES PHASE 1, GRADING & DRAINAGE PLAN, SHEET 0-5 (SHEET DATED 1/22/2024) AND AUTOCAD FILES PROVIDED BY THE CLIENT. FIELD ADJUSTMENTS/CHANGES SHOULD BE EXPECTED ONCE CONSTRUCTION COMMENCES. IGES SHOULD BE CONSULTED WHERE FIELD CHANGES ARE REQUIRED.

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

REV	REVISION DESCRIPTION	DATE	BY	CHK

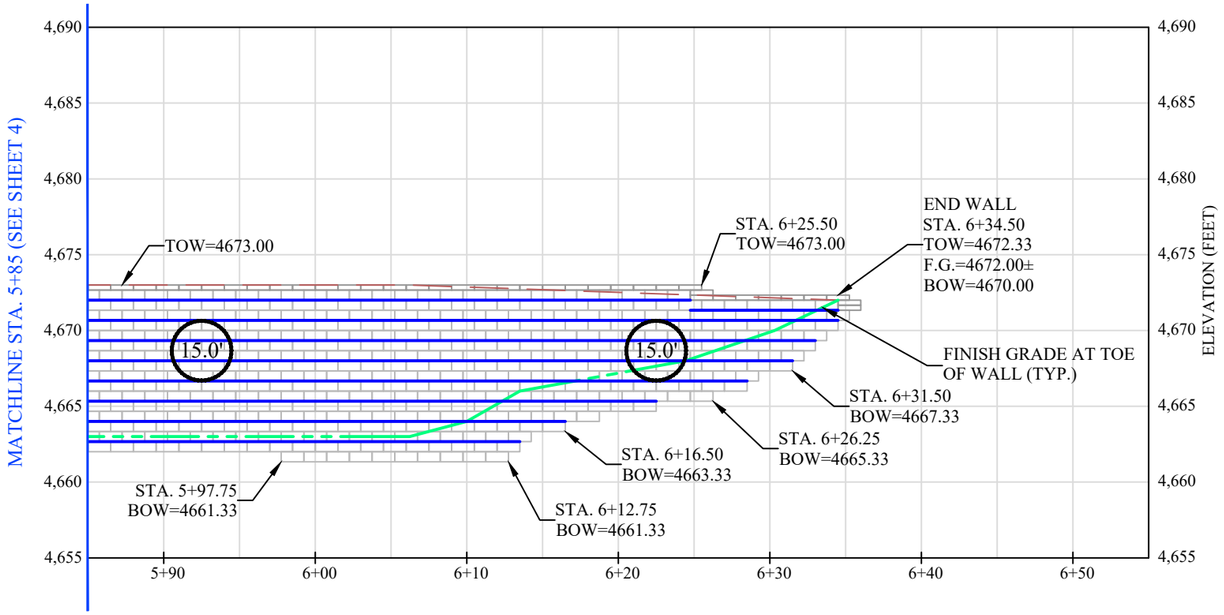
REVISIONS

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

ELEVATION VIEW (2 OF 3)

DESIGNED BY:	BMJ	5-15-2024	PLOT SCALE 1=1
DRAWN BY:	BMJ	5-15-2024	
CHECKED BY:	KAH	5-15-2024	DWG SCALE 1"=10'
APPROVED BY:	BMJ	5-15-2024	
IGES PROJECT NO: 00145-047	SHEET NO: 4		REV N/A



MATERIAL QUANTITY ESTIMATES	
MATERIAL	QUANTITIES
TOTAL WALL AREA (ft²)	8,483
KEYSTONE COMPAC III MODULAR BLOCKS	8,233
KEYSTONE CORNER BLOCKS	16
4-INCH KEYSTONE CAP BLOCKS	451
MIRAFI 5XT GEOGRID REINFORCEMENT (yd²)	15,000
GRANULAR FILL FOR REINFORCED ZONE (yd³)	7,500
UNIT FILL AND DRAINAGE GRAVEL (yd³)	775
CRUSHED STONE LEVELING PAD (yd³)	35
4-INCH PERFORATED DRAINAGE PIPE (ft)	3,200
6-OZ NON-WOVEN GEOTEXTILE FABRIC (yd²)	950

0 2 4 6 10 20
SCALE: 1" = 10'

LEGEND

TOW = TOP OF RETAINING WALL CAP BLOCK
BOW = BOTTOM OF RETAINING WALL BLOCK (TOP OF LEVELING PAD)
FG = FINISHED GRADE AT BOTTOM OF WALL

X.X' — SECTION GRID LENGTH, MEASURED FROM FRONT OF BLOCK (TYP.)

MIRAFI 5XT GEOGRID REINFORCEMENT

GRID CHANGE - CHANGE IN LENGTH OR GEOGRID PATTERN

ELEVATION VIEW

REFERENCE ELEVATIONS BASED ON DRAWINGS BY EDM PARTNERS, PINE RIDGE ESTATES PHASE 1, GRADING & DRAINAGE PLAN, SHEET 0-5 (SHEET DATED 1/22/2024) AND AUTOCAD FILES PROVIDED BY THE CLIENT. FIELD ADJUSTMENTS/CHANGES SHOULD BE EXPECTED ONCE CONSTRUCTION COMMENCES. IGES SHOULD BE CONSULTED WHERE FIELD CHANGES ARE REQUIRED.

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

REV	REVISION DESCRIPTION	DATE	BY	CHK
	REVISIONS			

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

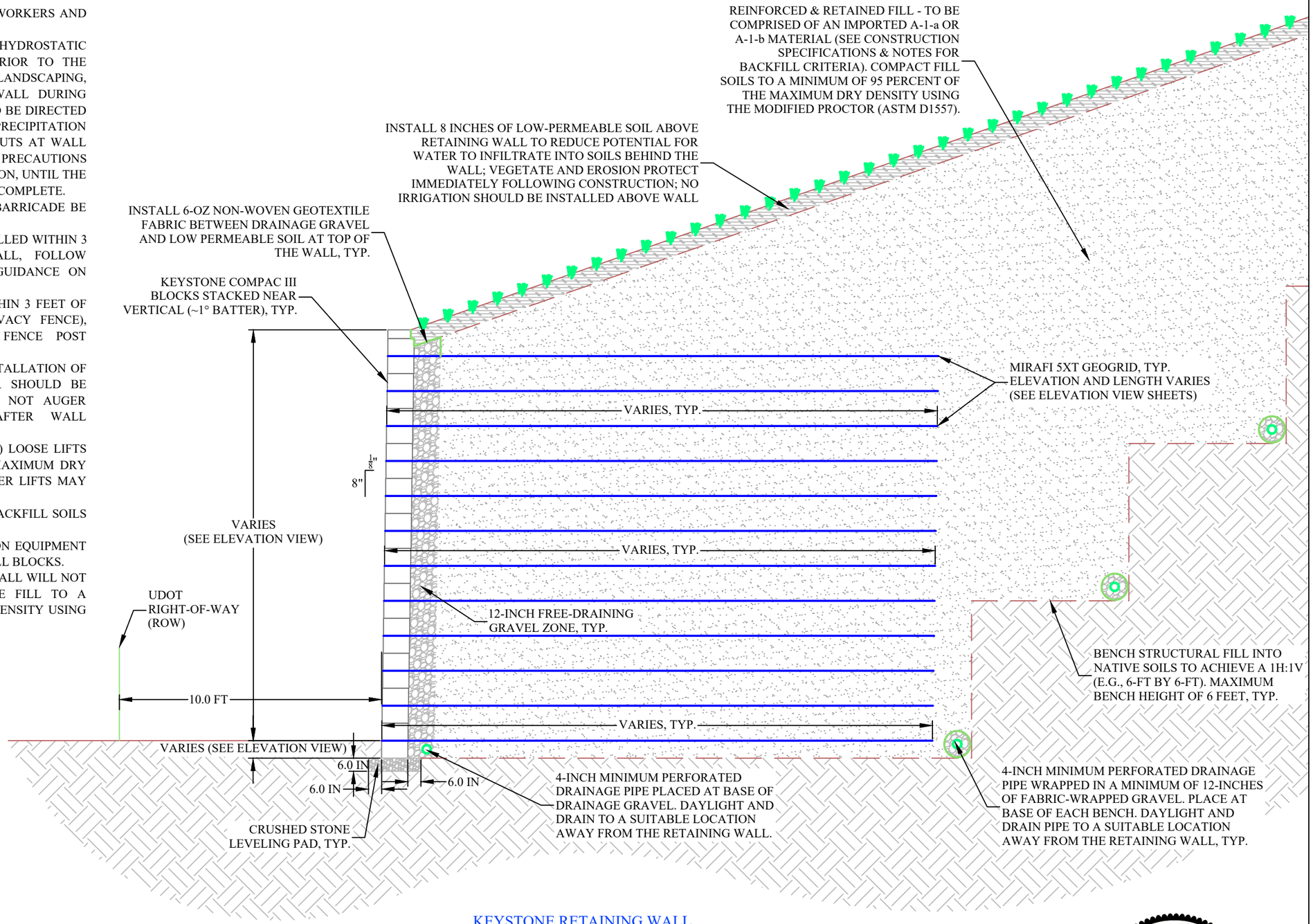
KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

ELEVATION VIEW (3 OF 3)

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	1=1
DRAWN BY: BMJ	5-15-2024		
CHECKED BY: KAH	5-15-2024	DWG SCALE	1"=10'
APPROVED BY: BMJ	5-15-2024		
IGES PROJECT NO: 00145-047	SHEET NO: 5	REV	N/A

SECTION VIEW NOTES:

1. SOIL CUT SHOULD BE BENCHED AS NEEDED TO PROTECT WORKERS AND TO COMPLY WITH OSHA REQUIREMENTS.
2. RETAINING WALLS ARE VULNERABLE TO EROSION AND HYDROSTATIC PRESSURES IMMEDIATELY AFTER INSTALLATION BUT PRIOR TO THE PLACEMENT OF LANDSCAPING/FINISHING ELEMENTS (E.G., LANDSCAPING, ETC.). TO MINIMIZE THE RISK OF DAMAGE TO THE WALL DURING ADDITIONAL SITE WORK, ALL SURFACE DRAINAGE SHOULD BE DIRECTED AWAY FROM THE WALL. EXCESS WATER DURING HEAVY PRECIPITATION EVENTS, IF NOT DRAINED PROPERLY, CAN CAUSE WASHOUTS AT WALL ENDS AND 'BLOWOUTS' OF INTERIOR SECTIONS. THESE PRECAUTIONS SHOULD BE TAKEN DURING AND AFTER WALL CONSTRUCTION, UNTIL THE FINAL SITE DRAINAGE, LANDSCAPING AND/OR PAVING ARE COMPLETE.
3. WE RECOMMEND THAT AN APPROPRIATE SAFETY FENCE/BARRICADE BE CONSIDERED BY THE OWNER ABOVE THE RETAINING WALL.
   - 3.1. IF A CHAIN LINK FENCE OR RAILING WILL BE INSTALLED WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL, FOLLOW MANUFACTURER CONSTRUCTION MANUAL FOR GUIDANCE ON FENCE POST PLACEMENT.
   - 3.2. IF A SOLID PANEL FENCE WILL BE INSTALLED WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL (E.G., PRIVACY FENCE), CONTACT IGES FOR RECOMMENDATIONS ON FENCE POST PLACEMENT.
   - 3.3. THE FENCE POSTS SHOULD BE PLACED DURING INSTALLATION OF THE RETAINING WALL. SONOTUBES OR SIMILAR SHOULD BE INSTALLED TO RECEIVE THE FENCE POSTS. DO NOT AUGER THROUGH THE GEOGRID REINFORCEMENT AFTER WALL INSTALLATION TO INSTALL FENCE POSTS.
4. PLACE WALL BACKFILL MATERIAL IN 12-INCH (MAXIMUM) LOOSE LIFTS AND COMPACT TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY USING ASTM D1557 (MODIFIED PROCTOR). THINNER LIFTS MAY BE NECESSARY TO ACHIEVE REQUIRED COMPACTION.
   - 4.1. PERFORM DENSITY TESTING OF THE REINFORCED BACKFILL SOILS AT 50-FOOT INTERVALS ON EVERY LIFT.
   - 4.2. USE ONLY SMALL, WALK-BEHIND TYPE COMPACTION EQUIPMENT WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL BLOCKS.
   - 4.3. IF ANY LOCATIONS EXIST WHERE THE RETAINING WALL WILL NOT BE PLACED UPON NATIVE SOILS, COMPACT THE FILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY USING ASTM D1557.



KEYSTONE RETAINING WALL
TYPICAL SECTION VIEW

APPROXIMATE GRAPHICAL SCALE: 1 INCH = 4 FEET (11x17 ONLY)

0 2 4 8
SCALE: 1" = 4'

REV	REVISION DESCRIPTION	DATE	BY	CHK

REVISIONS

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

TYPICAL SECTION VIEW

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	1=1
DRAWN BY: BMJ	5-15-2024		
CHECKED BY: KAH	5-15-2024	DWG SCALE	1"=4'
APPROVED BY: BMJ	5-15-2024		
IGES PROJECT NO: 00145-047	SHEET NO: 6	REV	N/A

PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

CONSTRUCTION SPECIFICATIONS & NOTES:

1. INTRODUCTION

1.1. FOLLOW THE GUIDANCE CONTAINED IN THE KEYSTONE CONSTRUCTION MANUAL UNLESS SPECIFICALLY SUPERSEDED BY MORE STRINGENT SPECIFICATION OR MATERIAL PROPERTIES PROVIDED HEREIN OR ON THE DRAWINGS.

1.1.1. IN THE EVENT THERE IS ANY CONFLICT OR AMBIGUITY BETWEEN THE FOLLOWING SPECIFICATIONS AND THE REFERENCED GUIDANCE, BRING ANY SUCH ISSUE IMMEDIATELY TO THE ATTENTION OF IGES, INC. FOR WRITTEN CLARIFICATION.

1.2. DESIGN AND CONSTRUCTION INFORMATION IS BASED ON GEOTECHNICAL INFORMATION OBTAINED FROM PROJECT PLANS, PROJECT GEOTECHNICAL & GEOLOGIC HAZARDS REPORT, DISCUSSIONS WITH THE CLIENT AND THE ENGINEERING ANALYSIS PERFORMED AS PART OF THE SCOPE OF WORK FOR THIS PROJECT BY IGES, INC.

1.3. LOCATE ALL EXISTING UTILITIES PRIOR TO RETAINING WALL CONSTRUCTION.

1.4. COMPLY WITH ALL ASPECTS OF OSHA 1926 SUBPART P APP B, SLOPING AND BENCHING FOR ALL EXCAVATED SLOPES.

1.5. IMPLEMENT THE FOLLOWING MEASURES TO REDUCE THE POTENTIAL FOR HYDROSTATIC PRESSURES TO BUILDUP BEHIND THE RETAINING WALL:

1.5.1. VEGETATION OR EROSION CONTROL MEASURES SHALL BE ESTABLISHED ABOVE AND BELOW THE RETAINING WALL IMMEDIATELY FOLLOWING CONSTRUCTION.

1.5.2. A 12-INCH WIDE GRAVEL ZONE INSTALLED BEHIND THE RETAINING WALL BLOCKS WITH A 4-INCH MINIMUM PERFORATED DRAINAGE PIPE AT THE BASE OF THE GRAVEL ZONE. ALSO DRAINAGE INSTALLED ON EACH BENCH BEHIND REINFORCED ZONE.

1.6. CONDITIONS SUCH AS LEAKY OR BROKEN IRRIGATION LINES AND/OR UNCONTROLLED RUNOFF FROM IMPROPER SITE GRADING (E.G., ALLOWING WATER TO POND ABOVE RETAINING WALL) CAN LEAD TO UNDERMINING OR HYDROSTATIC PRESSURES BUILDING UP BEHIND THE WALL, WHICH CAN LEAD TO SLOPE OR WALL MOVEMENT.

1.6.1. HYDROSTATIC CONDITIONS WERE NOT CONSIDERED IN THE ANALYSIS OF THE RETAINING WALL AND MUST BE AVOIDED.

1.6.2. RETAINING WALLS ARE VULNERABLE TO EROSION AND HYDROSTATIC PRESSURES IMMEDIATELY AFTER INSTALLATION OF THE RETAINING WALL BLOCKS, AND PRIOR TO THE PLACEMENT OF THE 8-INCHES OF LOW PERMEABLE SOIL/HARDSCAPE AND VEGETATING. AS THESE ARE CRITICAL COMPONENTS TO THE OVERALL STABILITY OF THE RETAINING WALLS, THE WALLS ARE NOT CONSIDERED COMPLETE UNTIL THEY ARE IN PLACE. WE RECOMMEND THESE ELEMENTS BE INSTALLED IMMEDIATELY FOLLOWING THE INSTALLATION OF THE BLOCKS.

1.6.3. THE OWNER SHALL BE AWARE OF THE RISKS IF THESE OR OTHER CONDITIONS OCCUR THAT COULD SATURATE OR ERODE THE SOIL BEHIND THE WALL OR IF THE FINISHING/LANDSCAPING ELEMENTS ARE NOT INSTALLED IMMEDIATELY FOLLOWING THE INSTALLATION OF THE RETAINING WALL BLOCKS.

2. KEYSTONE COMPAC III MSE RETAINING WALL MATERIALS

2.1. GEOGRID SOIL REINFORCEMENTS

2.1.1. MIRAFI MIRAGRID 5XT GEOGRID AS SHOWN ON THE ELEVATION AND TYPICAL SECTION DRAWINGS.

2.2. REINFORCED BACKFILL SOILS

2.2.1. APPROVED, IMPORTED, GRANULAR BACKFILL MEETING THE AASHTO SOIL CLASSIFICATION FOR A-1-a OR A-1-b, AND COMPLYING WITH THE FOLLOWING CRITERIA:

2.2.1.1. GRANULAR MATERIALS CONTAINING LESS THAN 25% FINES

2.2.1.2. MAXIMUM NOMINAL PARTICLE SIZE OF 4 INCHES

2.2.1.3. PI OF 6 OR LESS

2.2.1.4. pH GREATER THAN 3 BUT LESS THAN 9

2.2.1.5. REASONABLY FREE FROM FROZEN, ORGANIC, OR OTHER DELETERIOUS MATERIALS

2.2.1.6. MINIMUM EFFECTIVE FRICTION ANGLE OF 36 DEGREES

2.3. THE LEVELING PAD

2.3.1. 6-INCHES (MIN.) OF CRUSHED STONE.

2.4. USE NEW KEYSTONE COMPAC III BLOCK MATERIALS THAT MEET THE MINIMUM REQUIREMENTS OF KEYSTONE RETAINING WALL SYSTEMS, INC.

2.5. FACING FILL AND DRAINAGE GRAVEL FILL

2.5.1. A CLEAN 1-INCH MINUS CRUSHED STONE OR CRUSHED GRAVEL THAT COMPLIES WITH THE FOLLOWING CRITERIA:

2.5.1.1.

SIEVE SIZE	% PASSING
1"	100
¾"	75-100
⅜"	0-15
NO. 4	0-10
NO. 200	0-5

2.6. THE DRAINAGE PIPE

2.6.1. 4-INCH PERFORATED PIPE. NO SOCK IS REQUIRED.

3. KEYSTONE COMPAC III MSE RETAINING WALL INSTALLATION

3.1. FIELD-VERIFY PROPOSED FINISHED GRADE AT BOTTOM OF WALL TO PROVIDE THE MINIMUM WALL EMBEDMENT AS SHOWN ON THE ELEVATION AND SECTION VIEW DRAWINGS.

3.2. GRADE AND COMPACT THE FOUNDATION SUBGRADE SOILS FOR THE FULL LENGTH OF THE LEVELING PAD AND THE REINFORCED SECTION PRIOR TO PLACEMENT OF THE LEVELING PAD AND ANY BACKFILL.

3.2.1. REMOVE AND REPLACE ANY FOUNDATION SOILS FOUND TO BE UNSUITABLE OR UNSTABLE WITH APPROVED GRANULAR FILL COMPLYING WITH THE CRITERIA OUTLINED IN THE SECTIONS ABOVE.

3.3. SET THE LEVELING PAD LEVEL SIDE TO SIDE AND FRONT TO BACK.

3.3.1. INSTALL THE LEVELING PAD A MINIMUM OF 6 INCHES THICK AND EXTEND LATERALLY A MINIMUM OF 6 INCHES BEYOND THE ENDS OF THE BLOCKS BOTH FRONT AND BACK AS SHOWN ON THE DRAWINGS.

3.4. SET THE FIRST ROW OF BLOCK UNITS AND CHECK FOR LEVEL AND ALIGNMENT.

3.4.1. INSTALL ALL BLOCK ELEMENTS IN ACCORDANCE WITH KEYSTONE GUIDELINES.

3.5. PLACE FACING FILL AND DRAINAGE GRAVEL TO FILL THE VOIDS BETWEEN ADJACENT BLOCKS AND EXTEND A MINIMUM DISTANCE OF 12 INCHES BEHIND THE BACK OF THE KEYSTONE BLOCKS.

3.5.1. SET THE DRAINAGE PIPE AT THE BASE OF THE FACING FILL AND DRAINAGE GRAVEL ZONE [OR IN A LOCATION THAT WILL ALLOW FOR DRAINAGE] AND SLOPE TO DAYLIGHT AND DISCHARGE AT THE ENDS OF THE RETAINING WALL AND AT EACH LOW POINT.

3.6. INSTALL KEYSTONE FIBERGLASS PINS BETWEEN BLOCK COURSES AND SET TO ALLOW NO OFFSET BETWEEN SUCCESSIVE COURSES OF BLOCKS (NEAR-VERTICAL STACKING).

3.7. INSTALL GEOGRID AT THE ELEVATIONS INDICATED ON ELEVATION VIEW AND SECTION VIEW DRAWINGS.

3.7.1. CONNECT THE GEOGRID TO THE BLOCK UNITS AND FIBERGLASS PINS AS INDICATED ON THE KEYSTONE DETAILS SHEET.

3.7.2. INSTALL THE GEOGRID REINFORCEMENT TO THE MINIMUM LENGTH SPECIFIED ON THE ELEVATION AND SECTION VIEW DRAWINGS.

3.7.3. ROLL THE GEOGRID OUT FROM THE FACE OF THE WALL (MACHINE DIRECTION).

3.7.4. OVERLAP THE GEOGRID AS NECESSARY THROUGH RADII TO PROVIDE FULL COVERAGE FOR THE ENTIRE REQUIRED LENGTH. NO OVERLAP IS REQUIRED FOR ADJACENT PARALLEL PANELS. WHERE GEOGRID IS OVERLAPPED, INSTALL A MINIMUM OF 3 INCHES OF BACKFILL BETWEEN GEOGRID LAYERS.

3.7.5. PULL THE GEOGRID REINFORCEMENT TAUT TO REMOVE SLACK PRIOR TO FILL PLACEMENT ON THE GEOGRID.

3.8. DO NOT TURN EQUIPMENT WHEELS WHILE DRIVING OVER THE GEOGRID.

3.8.1. MINIMIZE RUBBER-TIRED EQUIPMENT TRAFFICKING ON THE GEOGRID AND OTHERWISE LIMITED TO NOT MORE THAN 5 MILES PER HOUR.

3.8.2. ANY GEOGRID THAT APPEARS TO HAVE BEEN DAMAGED BY EQUIPMENT TRAFFIC WILL BE REQUIRED TO BE REPLACED.

3.9. PLACE WALL BACKFILL MATERIAL IN 12-INCH MAXIMUM LOOSE LIFTS AND COMPACT TO A MINIMUM OF 95 PERCENT ASTM D1557 (MODIFIED PROCTOR). THINNER LIFTS MAY BE NECESSARY TO ACHIEVE REQUIRED COMPACTION.

3.9.1. PERFORM DENSITY TESTING OF THE REINFORCED BACKFILL SOILS AT 50-FOOT INTERVALS ON EVERY LIFT.

3.9.2. USE ONLY SMALL, WALK-BEHIND TYPE COMPACTION EQUIPMENT WITHIN 3 FEET OF THE BACK OF THE RETAINING WALL BLOCK.

3.9.3. IF ANY LOCATIONS EXIST WHERE THE RETAINING WALL WILL NOT BE PLACED UPON NATIVE SOILS, COMPACT THE FILL TO A MINIMUM OF 95 PERCENT OF ASTM D1557.

4. CONSTRUCTION OBSERVATION

4.1. TO FULFILL ANY APPLICABLE CITY, COUNTY AND/OR STATE AGENCY REQUIREMENTS, AND TO PROTECT THE CONTRACTOR AND DESIGN ENGINEER, IGES, INC. MUST PERFORM PERIODIC CONSTRUCTION OBSERVATIONS.

4.1.1. IF IGES, INC. DOES NOT OBSERVE THE RETAINING WALL DURING CONSTRUCTION, A FINAL LETTER REGARDING COMPLIANCE OF THE WALL CONSTRUCTION WITH THE DESIGN CRITERIA AND RECOMMENDATIONS CANNOT BE PROVIDED. IF IGES, INC. DOES NOT PERFORM THE PERIODIC CONSTRUCTION OBSERVATIONS OUTLINED BELOW, THE WALL CONTRACTOR/OWNER ASSUMES ALL RESPONSIBILITY FOR THE RETAINING WALL.

4.2. MSE WALL OBSERVATIONS SCHEDULE:

4.2.1. OBSERVE THE EXCAVATION AND SUITABILITY OF THE LEVELING PAD FOUNDATION SOILS.

4.2.2. OBSERVE THE INSTALLATION OF THE RETAINING WALL BLOCK INSTALLATION AT VARIOUS STAGES IN THE CONSTRUCTION.

4.2.2.1. ASSESS MINIMUM EMBEDMENT REQUIREMENTS.

4.2.2.2. ASSESS DEPTH OF GRAVEL DRAINAGE ZONE.

4.2.2.3. ASSESS TYPE, LOCATION AND DIAMETER OF DRAINAGE PIPE.

4.2.2.4. ASSESS BLOCK PLACEMENT AND POSITIONING FOR COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE SECTIONS ABOVE.

4.2.2.5. OBSERVE THE INSTALLATION OF THE GEOGRID REINFORCEMENT, ASSESSING GEOGRID CONNECTION, TYPE, LENGTH, CONDITION AND DIRECTION.

4.2.2.6. OBSERVE THE INSTALLATION OF THE REINFORCED AND RETAINED BACKFILL.

4.2.2.6.1. VERIFY THAT THE SELECT BACKFILL MATERIALS MEET THE REQUIREMENTS SET FORTH IN THE SECTIONS ABOVE. PERFORM AT LEAST ONE LABORATORY STRENGTH TEST ON THE REINFORCED AND RETAINED BACKFILL (E.G., DIRECT SHEAR).

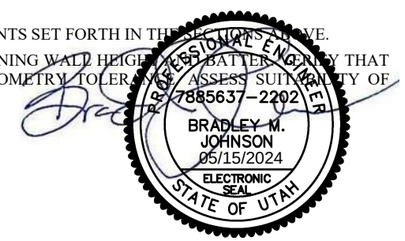
4.2.2.6.2. OBSERVE FILL PLACEMENT, COMPACTION AND LOOSE LIFT THICKNESS

4.2.2.6.1. OBSERVE OPERATION OF COMPACTION EQUIPMENT.

4.2.2.6.1.1. NOTE OUT-OF-TOLERANCE BEHAVIOR REGARDING MINIMUM ALLOWABLE OPERATING DISTANCE BEHIND BACK OF RETAINING WALL BLOCKS.

4.2.2.7. ASSESS COMPACTED BACKFILL MATERIAL FOR COMPLIANCE WITH REQUIREMENTS SET FORTH IN THE SECTIONS ABOVE.

4.2.3. OBSERVE THE COMPLETED RETAINING WALL SYSTEM. ASSESS THE FINISHED RETAINING WALL HEIGHT AND BATTER, VERIFY THAT BACKSLOPE AND TOESLOPE GRADING CONDITIONS DO NOT EXCEED DESIGN GEOMETRY TOLERANCES, ASSESS SUITABILITY OF EROSION CONTROL MEASURES INSTALLED ABOVE THE RETAINING WALL.



REV	REVISION DESCRIPTION	DATE	BY	CHK

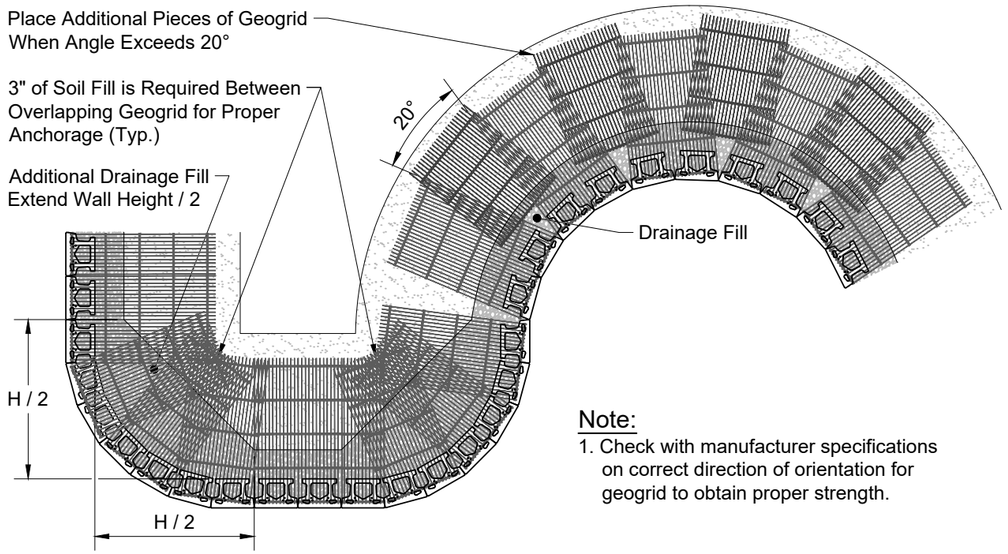
REVISIONS

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

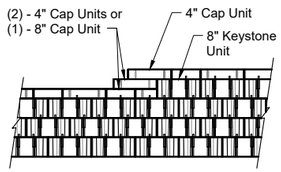
CONSTRUCTION SPECIFICATIONS & NOTES

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	
DRAWN BY: BMJ	5-15-2024	1=1	
CHECKED BY: KAH	5-15-2024	DWG SCALE	
APPROVED BY: BMJ	5-15-2024	NTS	
IGES PROJECT NO: 00145-047	SHEET NO: 7	REV N/A	



Note:
1. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.

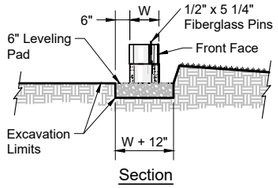
Geogrid Installation on Curves



Note:
1. Secure all cap units with Keystone Kapseal or equal.

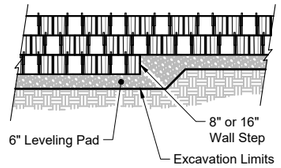
Top of Wall Steps

Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.

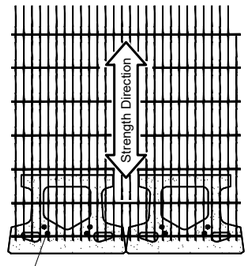


Section

Leveling Pad Detail

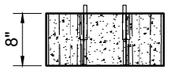


Elevation

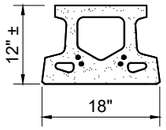


Geogrid is to be Placed on Level Backfill and Extended Over the Fiberglass Pins. Place Next Unit. Pull Grid Taught and Backfill. Stake as required.

Grid & Pin Connection



Compac III Elevation

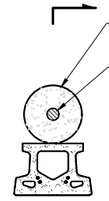


Compac III Plan

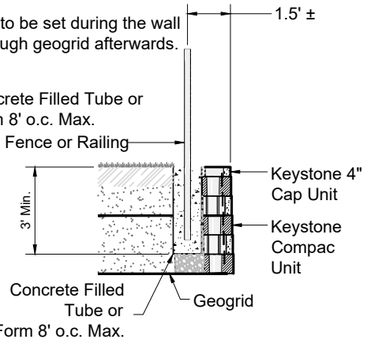
Compac III Unit

* Dimensions May Vary by Region

Note:
Concrete filled tube or form to be set during the wall construction, not drilled through geogrid afterwards. when directly behind units.



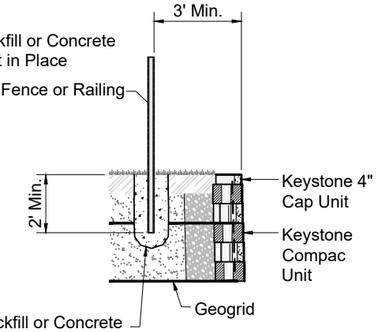
Fence Plan Detail



Fence Section & Plan Detail

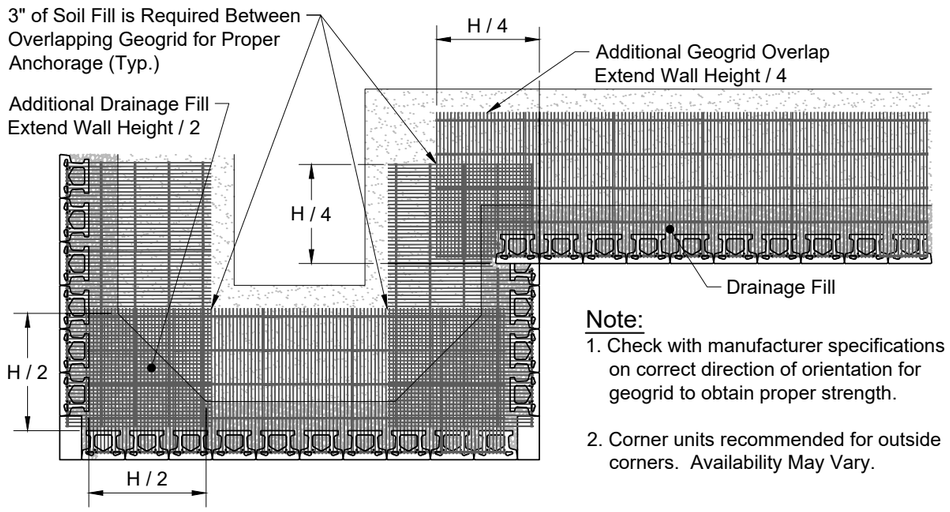
Compac Unit - Near Vertical Setback

Fence Plan Detail



Fence Section Detail

Compac Unit - Near Vertical Setback



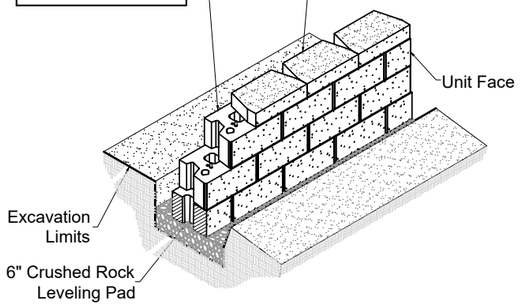
Note:
1. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.
2. Corner units recommended for outside corners. Availability May Vary.

Geogrid Installation at Corners

Base Leveling Pad Notes:
1. The leveling pad is to be constructed of crushed stone
2.The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

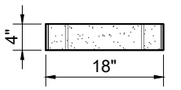
Compac Unit	
18"	Width:
12"	Depth:*
8"	Height:
90 lbs	Weight:*

Cap Unit	
Width:	18"
*Depth:	10 1/2"
Height:	4"
*Weight:	50 lbs

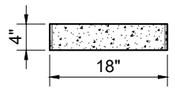


Compac Unit/Base Pad Isometric Section View

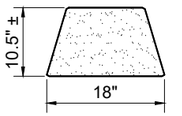
Dimensions & Weight May Vary by Region



Cap Unit Elevation



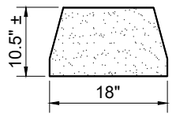
Cap Unit Elevation



Cap Unit Plan

Universal Cap Unit Option

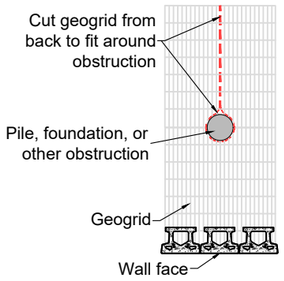
* Dimensions & Availability Will Vary by Region



Cap Unit Plan

Straight Split Cap Unit Option

* Dimensions & Availability Will Vary by Region



Geogrid Placement at Obstructions

Not To Scale

DETAILS PROVIDED BY KEYSTONE RETAINING WALL SYSTEMS, INC.

REV	REVISION DESCRIPTION	DATE	BY	CHK

REVISIONS

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

KEYSTONE DETAILS

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	
DRAWN BY: BMJ	5-15-2024	1=1	
CHECKED BY: KAH	5-15-2024	DWG SCALE	
APPROVED BY: BMJ	5-15-2024	NTS	
IGES PROJECT NO: 00145-047	SHEET NO: 8	REV N/A	

RETAINING WALL GEOMETRY AND LOADING CONDITIONS			
LENGTH (FT)	MAXIMUM HEIGHT (FT)	BACKSLOPE CONDITIONS	SURCHARGE LOADING
635	16.3	VARIES(2.5H:1V MAXIMUM)	2,500 PSF (HOME LOADING)

SOIL CONDITIONS USED IN DESIGN			
EARTH MATERIALS	FRICTION ANGLE	COHESION	UNIT WEIGHT
FILL*	36°	15 PSF	135 PCF
Qafy	32°	50 PSF	120 PCF
Qlsbp	34°	75 PSF	110 PCF

SOURCES & NOTES:
1. IGES, INC., 2023, GEOTECHNICAL AND GEOLOGIC HAZARD STUDY, BARKER PROPERTY, NEAR 400 NORTH MOUNTAIN ROAD, FRUIT HEIGHTS, UTAH, IGES PROJECT NO. 00145-038, REPORT DATED JANUARY 9, 2023.
2. COHESION USED ONLY IN GLOBAL STABILITY ANALYSES, NOT IN EXTERNAL STABILITY CALCULATIONS.
3. *STRENGTH OF FILL TO BE VERIFIED DURING PLACEMENT. SEE NOTE 4.2.2.6.1 ON SHEET 7 FOR TESTING REQUIREMENTS.

GENERAL NOTES:
1. THE ENGINEERING PRESENTED IN THIS DESIGN PACKAGE IS BASED ON SPECIFIC PRODUCTS (E.G., KEYSTONE COMPAC III BLOCKS, MIRAFI 5XT GEOGRID REINFORCEMENT, SOIL STRENGTHS GIVEN ABOVE, ETC.). ANY SUBSTITUTION OF THE SPECIFIED PRODUCTS WILL INVALIDATE THIS ENGINEERING. ANY CHANGES IN WALL LOCATION, ELEVATIONS OF LEVELING PAD, GRADES AT THE TOE OR TOP OF THE WALL, AND SOIL PARAMETERS AT THE SITE WILL ALSO INVALIDATE THE ENGINEERING. FIELD ADJUSTMENTS/CHANGES MAY BE NEEDED TO MEET ACTUAL CONDITIONS ONCE CONSTRUCTION COMMENCES. IGES SHOULD BE CONSULTED WHERE FIELD CHANGES ARE REQUIRED.
2. THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE INTELLECTUAL PROPERTY OF IGES, INC. THE DESIGN PACKAGE HAS BEEN FURNISHED FOR THIS SPECIFIC PROJECT ONLY. ANY PARTY ACCEPTING THIS DOCUMENT DOES SO IN CONFIDENCE AND AGREES THAT NO USE OR RE-USE OF THESE DOCUMENTS (EITHER IN WHOLE OR IN PART) SHALL BE PERMITTED UNLESS EXPRESSLY AUTHORIZED IN WRITING BY IGES, INC.
3. RETAINING WALLS ARE VULNERABLE TO EROSION AND HYDROSTATIC PRESSURES IMMEDIATELY AFTER INSTALLATION BUT PRIOR TO THE PLACEMENT OF LANDSCAPING/FINISHING ELEMENTS AT THE SITE (E.G., LANDSCAPING, ETC.). TO MINIMIZE THE RISK OF DAMAGE TO THE WALLS DURING ADDITIONAL SITE WORK, ALL SURFACE DRAINAGE SHOULD BE DIRECTED AWAY FROM THE WALLS. EXCESS WATER DURING HEAVY RAIN EVENTS, IF NOT DRAINED PROPERLY, CAN CAUSE WASHOUTS AT WALL ENDS AND 'BLOWOUTS' OF INTERIOR SECTIONS. THESE PRECAUTIONS SHOULD BE TAKEN DURING WALL CONSTRUCTION, AND AFTER, UNTIL THE FINAL SITE DRAINAGE, LANDSCAPING AND PAVING ARE COMPLETE.
4. MINIMUM EMBEDMENT OF THE WALL VARIES AS SHOWN ON THIS ELEVATION VIEW SHEETS. EMBEDMENT AT THE WALL TOE MUST BE MAINTAINED THROUGHOUT THE LIFE OF THE RETAINING WALL.
5. WE RECOMMEND THAT AN APPROPRIATE SAFETY FENCE/BARRICADE BE CONSIDERED BY THE OWNER ABOVE THE RETAINING WALLS. DESIGN OF THE FENCE/BARRICADE IS SPECIFICALLY EXCLUDED FROM THE ENGINEERING OF THIS WALL.

SEISMIC PARAMETERS USED IN DESIGN					
SEISMIC CRITERIA	MCE_G PGA	SITE CLASS	F_{PGA}	PGA_M	HORIZONTAL COEFFICIENT (k_h)
ASCE 7-16	0.585g	D	1.20	0.702g	0..292g (EXTERNAL) 0.702g (INTERNAL) 0.351g (GLOBAL)

SOURCES & NOTES:
1. IGES, INC., 2023, GEOTECHNICAL AND GEOLOGIC HAZARD STUDY, BARKER PROPERTY, NEAR 400 NORTH MOUNTAIN ROAD, FRUIT HEIGHTS, UTAH, IGES PROJECT NO. 00145-038, REPORT DATED JANUARY 9, 2023.
2. HORIZONTAL SEISMIC COEFFICIENT (k_h)
   2.1. EXTERNAL AND INTERNAL SEISMIC COEFFICIENT WERE DETERMINED USING METHODOLOGY IN THE NCMA 3RD EDITION (SEE SECTION 9.4). HORIZONTAL SEISMIC COEFFICIENT USED IN GLOBAL STABILITY WAS EQUAL TO HALF OF THE PGA_M.

RETAINING WALL ANALYSIS USED IN DESIGN	
ANALYSIS	DESIGN REFERENCES/SOFTWARE
EXTERNAL & INTERNAL STABILITY	CALLIDE TECHNOLOGIES, INC., 2023, VESPA2, VERSION 2.13.1.8046, NCMA 3RD EDITION DESIGN METHODOLOGY
GLOBAL STABILITY	SLIDE2 MODELER: ROCSCIENCE, INC., 1998-2024, VERSION 9.034, BUILD DATE APRIL 23, 2024

PROFESSIONAL ENGINEER
R. 7885637-2202
BRADLEY M. JOHNSON
05/15/2024
ELECTRONIC SEAL
STATE OF UTAH

REV	REVISION DESCRIPTION	DATE	BY	CHK
REVISIONS				

IGES EST. 1998
12429 SOUTH 300 EAST
DRAPER, UTAH 84020
(801) 748-4044

KEYSTONE RETAINING WALL
PINE RIDGE ESTATES PHASE 1
FRUIT HEIGHTS, UTAH

DESIGN CRITERIA

DESIGNED BY: BMJ	5-15-2024	PLOT SCALE	1=1
DRAWN BY: BMJ	5-15-2024	DWG SCALE	NTS
CHECKED BY: KAH	5-15-2024		
APPROVED BY: BMJ	5-15-2024		
IGES PROJECT NO: 00145-047	SHEET NO: 9	REV	N/A

SECTION 2


PROFESSIONAL ENGINEER
7885637-2202
BRADLEY M.
JOHNSON
05/15/2024
ELECTRONIC
SEAL
STATE OF UTAH

Intermountain GeoEnvironmental Services, Inc.
12429 South 300 East, Suite 100, Draper, Utah, 84020
Phone (801) 748-4044 | Fax (801) 748-4045
www.igesinc.com

Retaining Wall Buttress
Pine Ridge Estates Phase 1
Fruit Heights, Utah

IGES Project No. 00145-047

May 15, 2024

Prepared for:
The Boyer Company
101 South 200 East, Suite 200
Salt Lake City, Utah 84111
Attn: Spencer Moffat

PROJECT OVERVIEW

Pine Ridge Estates Phase 1 is located on the foothills east of Highway 89 and Mountain Road in Fruit Heights, Utah. IGES completed a Geotechnical and Geologic Hazard Study for the property (IGES, 2023). In this report, IGES performed slope stability analyses for the slope between the planned lots and Mountain Road (along the western margin of the property). As shown in Figure A-29 (also attached to the end of this report), minimum setbacks from the slope were determined to avoid building on areas having a factor of safety less than 1.5 or 1.0 for static and pseudo-static conditions, respectively.

The purpose of the proposed Keystone retaining wall is to reinforce and buttress the existing slope and lessen the existing slope angle so that the factors of safety will be sufficient to remove the minimum setbacks established in the Geotechnical and Geologic Hazard Study.

SUBSURFACE CONDITIONS

Based on the field investigation performed by IGES (2023), the following geologic units were identified in the area of the slope stability setbacks (reproduced here from the report in the following paragraphs).

Lake Bonneville Silt and Sand (Qlsbp)

This unit was observed in TP-2, TP-5, TP-7, TR-1A, TR-1C, TR-2A, TR-2B, TR-3A, TR-3B, and TR-4, extending to the maximum depth of exploration in all of these excavations. The unit thickness varied greatly, between 2 and more than 22 feet thick, typically thickening to the west and thinning to the east. In general, the unit consisted of several subunits that generally consisted of pale yellowish orange to dark yellowish orange to very pale orange to light gray, stiff to medium dense, dry, thinly bedded, Sandy SILT (ML) grading to Silty SAND (SM). Gravel and larger-sized clasts comprised between approximately 0% and 30% of the unit, with clasts consisting of subrounded to rounded gneiss and schist of the Farmington Canyon Complex up to 5 inches in diameter, though most commonly less than 1 inch in diameter. Thin unit commonly exhibited pinhole voids and white calcium carbonate lenses and stringers.

Young Alluvial Fan Deposits (Qafy)

This unit was only observed west of the fault in TR-4. The unit consisted of two subunits that were individually between 6.5 and 9 feet thick and collectively up to 15.5 feet thick. In general, the unit consisted of a dark yellowish brown to grayish brown to dusky brown, loose to medium dense, dry, weakly bedded to massive, Silty GRAVEL with sand (GM) grading to Clayey SAND (SC). Gravel and larger-sized clasts comprised between approximately 10% and 70% of the unit, with clasts consisting of subrounded to rounded

to subangular gneiss and schist of the Farmington Canyon Complex up to 7 inches in diameter, though most commonly less than 1 inch in diameter. The unit occasionally exhibited pinhole voids, where finer-grained.

STRENGTH OF EARTH MATERIALS

The same strength parameters used in the global stability analyses performed for the Geotechnical and Geologic Hazard Study were also used for this assessment. Table 1 below gives the strengths used for the respective soil units.

Table 1
Soil Strength Parameters

Earth Materials	Friction angle (degrees)	Cohesion (psf)	Unit Weight (pcf)
Qafy (Younger Alluvial-fan Deposit)*	32	50	120
Qlsbp** (Lake Bonneville Sand and Silt)	34	75	110
Imported Granular Fill (A-1-a or A-1-b)***	36	15	135

*Soil strengths are based on field observations and understanding of typical strengths for similar material types.

**Soil strengths for the Qlsbp are based on Direct Shear test results.

*** Imported strengths are estimated and will need to be confirmed during construction.

SEISMIC DESIGN PARAMETERS

The same seismic design parameters utilized in the Geotechnical and Geologic Hazard study were also used in the evaluation of the retaining wall. Table 2 below gives the Geo-Mean peak ground acceleration used for the wall analyses.

Table 2
Spectral Accelerations for MCE, Geo-Mean (2PE50) Values (Geotechnical)

Mapped B/C Boundary PGA (g)	**Site Coefficient F_{PGA} (Site Class C*)**	**PGA_M (g)**
0.585	1.2	0.702

GLOBAL STABILITY ANALYSES

The stability of the western slope was analyzed with four representative cross sections (Sections C-C', D-D', E-E', and F-F' on Sheet 2). Results of the stability analyses performed in the Geotechnical and Geologic Hazard study, along with the results that included the

addition of the Keystone MSE retaining wall are given in Table 3. A discussion of each section is also provided with the reinforcement that was required to achieve adequate factors of safety.

Table 3
Results of Slope Stability Analyses

Section	Original Report		With Keystone Wall	
	FS_{static}	$FS_{seismic}$	FS_{static}	$FS_{seismic}$
C-C'	1.46	0.80	1.83	1.01
D-D'	1.35	0.75	1.76	1.03
E-E'	1.35	0.76	1.72	1.00
F-F'	1.24	0.72	1.65	1.00

Section C-C' This section is primarily intended to evaluate the slope stability in the general area of Lot 6 and a portion of Lot 7. The slope stability analysis for Section C-C' indicates the minimum static and pseudo-static factors of safety are located along the western portion of the cross section and are FS_{static}=1.46 and $FS_{seismic}$=0.80. As a result, IGES provided the minimum setback given on Figure A-29a of the Geotechnical and Geologic Hazard study (attached to this report for reference).

As shown in Section 4 of the design package, a 12-foot exposed retaining wall with minimum 24 foot long reinforcement lengths spaced 16 inches apart (i.e., every other block course) to achieve stability. Geogrid reinforcement was required to be Mirafi 5XT. In the analyses, the fill soils were benched into the existing native soils at approximately 1H:1V (e.g., 6-foot-high cut followed by a 6-foot minimum bench). Using this geometry, the final slope for Section C-C' will be approximately 2.75H:1V.

Section D-D' This section evaluates the slope on Lot 5. The slope stability analysis for Section D-D' indicates the minimum static and pseudo-static factors of safety are located along the western portion of the cross section and are FS_{static}=1.3 and $FS_{seismic}$=0.7. As a result of the FS_{static} and $FS_{seismic}$ being less than 1.5 and 1.0, respectively, IGES provided the minimum setback given on Figure A-29a of the Geotechnical and Geologic Hazard study.

As shown in Section 4 of the design package, a 12-foot exposed retaining wall with minimum 21 foot long reinforcement lengths spaced 16 inches apart (i.e., every other block course) to achieve stability. Geogrid reinforcement was required to be Mirafi 5XT. Geogrid reinforcement was comprised of Mirafi 5XT. In the analyses, the fill soils were benched into the existing native soils at approximately 1H:1V (e.g., 6-foot-high cut followed by a 6-foot minimum bench). Using this geometry, the final slope for Section D-D' will be approximately 2.87H:1V.

Section E-E' This section evaluates the slope on Lot 4. The slope stability analysis for Section E-E' indicates the minimum static and pseudo-static factors of safety are located along the western portion of the cross section and are FS_{static}=1.35 and $FS_{seismic}$=0.76. As a result of the FS_{static} and $FS_{seismic}$ being less than 1.5 and 1.0, respectively, IGES provided the minimum setback given on Figure A-29a of the Geotechnical and Geologic Hazard study.

As shown in Section 4 of the design package, a 14-foot exposed retaining wall with minimum 21 foot long reinforcement lengths spaced 16 inches apart (i.e., every other block course) to achieve stability. Geogrid reinforcement was required to be Mirafi 5XT. In the analyses, the fill soils were benched into the existing native soils at approximately 1H:1V (e.g., 6-foot-high cut followed by a 6-foot minimum bench). Using this geometry, the final slope for Section E-E' will be approximately 2.84H:1V.

Section F-F' This section evaluates the slope on Lots 2 and 3 (moved slightly north from the section in the IGES report). The slope stability analysis for Section F-F' indicates the minimum static and pseudo-static factors of safety are located along the central to eastern portion of the cross section and are FS_{static}=1.24 and $FS_{seismic}$=0.72. As a result of the FS_{static} and $FS_{seismic}$ being less than 1.5 and 1.0, respectively, IGES provided the minimum setback given on Figure A-29a of the Geotechnical and Geologic Hazard study.

As shown in Section 4 of the design package, a 10-foot exposed retaining wall with minimum 24 foot long reinforcement lengths spaced 16 inches apart (i.e., every other block course) to achieve stability. Geogrid reinforcement was required to be Mirafi 5XT. In the analyses, the fill soils were benched into the existing native soils at approximately 1H:1V (e.g., 6-foot-high cut followed by a 6-foot minimum bench). Using this geometry, the final slope for Section F-F' will be approximately 2.5H:1V.

DRAINAGE

Drainage should be installed to allow water entering the reinforced soils to flow to a suitable location away from the retaining walls. The typical section drawing for the retaining wall shows a fabric-wrapped drain on each of the benches behind the reinforced zone. These drains should help to reduce the potential for the reinforced soils to become saturated. Since the exact bench height/spacing is unknown, the maximum vertical drain spacing should be 6 feet or less.

ADDITIONAL CONSIDERATIONS

Within the areas to be graded (below the leveling pad and for the entire reinforced zone), any existing surface vegetation, debris, asphalt, or undocumented fill (if any) should be

removed, and the upper 8 to 16 inches should be grubbed to remove the majority of the roots and organic matter. Any existing utilities should be re-routed or protected in-place. The exposed native soils should then be proof-rolled with heavy rubber-tired equipment such as a loader. Any soft/loose areas identified during proof-rolling should be removed and replaced with structural fill. An IGES representative should observe the site preparation and grading operations to assess whether these recommendations have been complied with.

As subsurface conditions are often highly variable and were only explored using test pits and trenches at various locations, it is important that IGES be involved during the construction of the retaining wall. This allows for IGES to observe potential problems and give recommendations during wall installation.

LIMITATIONS

The concept of risk is a significant consideration of geotechnical analyses. The analytical means and methods used in performing geotechnical analyses and development of resulting recommendations do not constitute an exact science. Analytical tools used by geotechnical engineers are based on limited data, empirical correlations, engineering judgment and experience. As such, the solutions and resulting recommendations presented in this report cannot be considered risk-free and constitute IGES's best professional opinions and recommendations based on the available data and design information available at the time they were developed. IGES has developed the preceding analyses, recommendations and designs, at a minimum, in accordance with generally accepted professional geotechnical engineering practices and care being exercised in the project area at the time our services were performed. No warrantees or guarantees are made.

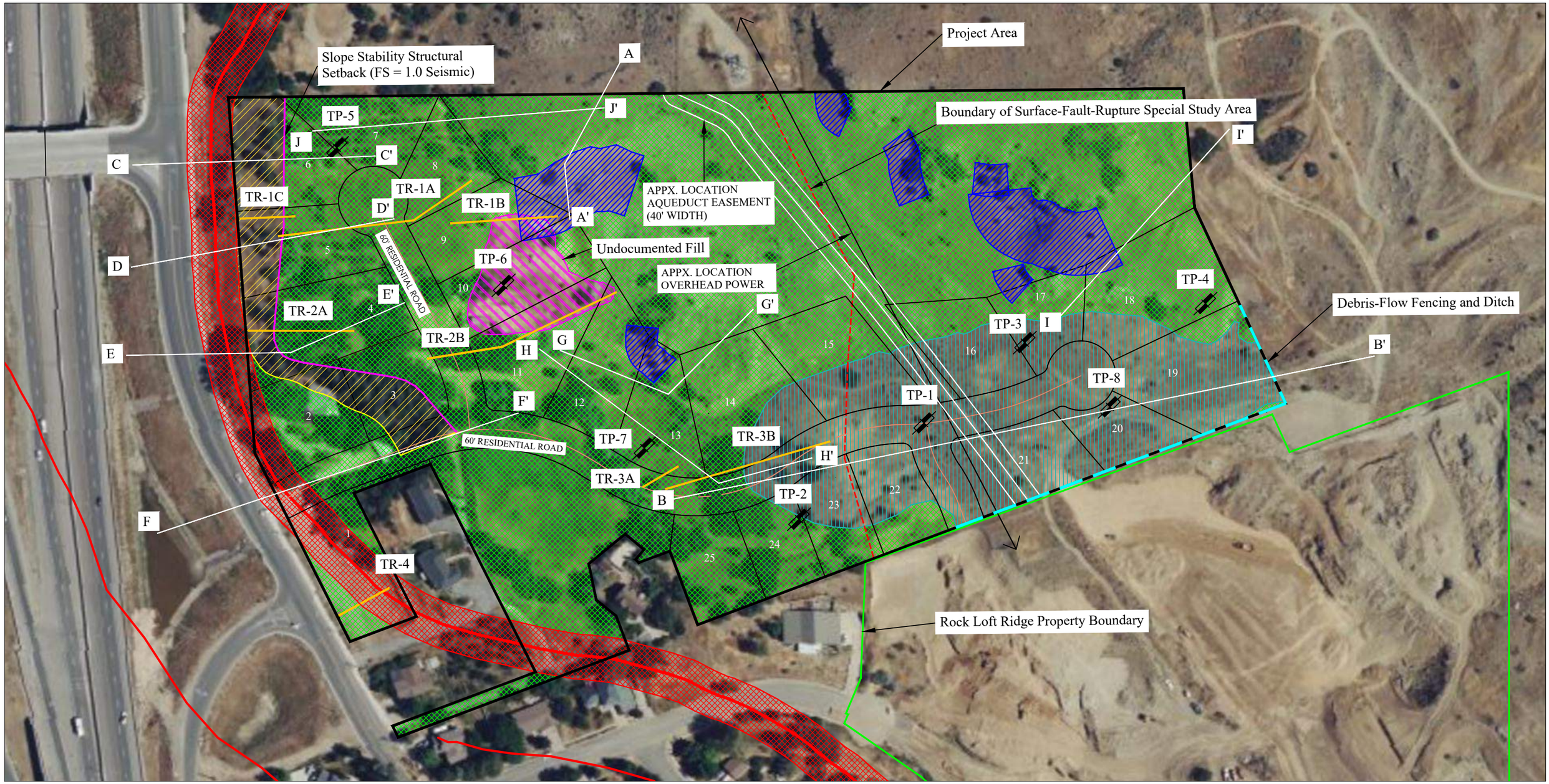
The information contained in this report is based on limited field testing and understanding of the project. The subsurface data used in the preparation of this report were obtained from the explorations made for this project. It is likely that variations in the soil and groundwater conditions exist between and beyond the points explored. The nature and extent of the variations may not be evident until construction occurs and additional explorations are completed. If any conditions are encountered at this site that are different from those described in this report, IGES must be immediately notified so that we may make any necessary revisions to recommendations contained in this report. In addition, if the scope of the proposed construction or grading changes from those described in this report, our firm must also be notified.

This report was prepared for our client's exclusive use on the project identified in the foregoing. Use of the data, recommendations or design information contained herein for

any other project or development of the site not as specifically described in this report is at the user's sole risk and without the approval of IGES, Inc. It is the client's responsibility to see that all parties to the project including the designer, contractor, subcontractors, etc. are made aware of this report in its entirety. The use of information contained in this report for bidding purposes should be done at the contractor's option and risk.

REFERENCES

IGES, Inc., 2023, Geotechnical and Geologic Hazard Study, Barker Property, Near 400 North Mountain Road, Fruit Heights, Utah, IGES Project No. 00145-038, Report dated January 9, 2023.



BASE MAP:
2022 Microsoft Corporation, 2022 Maxar,
2022 CNES Distribution Airbus DS

Legend

- Active Faults (Modified from McDonald, 2018)
- Buildable Area (No Mitigation Required)
- Surface-Fault-Rupture Setback Area (Non-Buildable)
- Rockfall Setback Area (Rockfall Mitigation Required)
- Slope Stability Structural Setback Area (Slope Stability Mitigation Required)
- Debris-Flow Fencing and Ditch
- Area of Undocumented Fill (Over-excavation Required)
- Debris-Flow Hazard Area (Debris-Flow Mitigation Required)
- Slope Stability Structural Setback Line (FS = 1.0 Seismic)
- TR-4 — Fault Trenches
- TP-8 — Test Pits
- J — J' Cross-Sections

*Specific hazard mitigation recommendations discussed on Figure A-29b and in the text of the report.

0 150 300
FEET
1" = 150'

N

IGES
Project No: 00145-038

Geotechnical and Geologic Hazard Investigation
Barker Property
Near 400 North Mountain Road
Fruit Heights, Utah
Recommended Mitigation Map

Figure A-29a

EXHIBIT G
Water Ordinance

WATER EFFICIENT LANDSCAPE ORDINANCE

ORDINANCE No. 2022-003

AN ORDINANCE ENACTING AND CODIFYING TITLE 8, CHAPTER 5A, OF THE FRUIT HEIGHTS MUNIICPAL CODE REGARDING WATER EFFICIENCY MEASURES RECOGNIZING THAT WATER IS NOT AN UNLIMITED RESOURCE AND THAT WATER CONSERVATION IS NECESSARY IN FRUIT HEIGHTS CITY.

WHEREAS, water is an increasingly scarce resource, of limited supply, and is subject to ever increasing demands;

WHEREAS, it is the policy of Fruit Heights to promote the conservation and efficient use of water and to prevent waste of this valuable resource;

WHEREAS, Fruit Heights recognizes that landscapes provide areas for active and passive recreation;

WHEREAS landscape design, installation, maintenance and management can and should be water efficient;

WHEREAS, Fruit Heights desires to promote the design, installation and maintenance of landscapes that are both attractive and water efficient;

WHEREAS Fruit Heights can accomplish these goals by adopting this ordinance; and,

WHEREAS, Fruit Heights has the authority to adopt this ordinance pursuant to Utah Code Annotated (2010) § 10-3-702, and hereby exercises its legislative powers in doing so.

Section 1. **Ordaining Clause**. Be it ordained by Fruit Heights City, that the Water Efficient Landscape Ordinance, Number 2022-000.

Section 2. **Water Efficient Landscape** Requirements. An ordinance amending the Zoning Code of the of Fruit Heights City so as to add a Water Efficient Landscape Ordinance of minimum landscape requirements. This ordinance shall be referred to as "Fruit Heights City Water Efficient Landscape Ordinance".

Section 3. **Purpose** The City Council has found that it is in the public interest to conserve the public's water resources and to promote water efficient landscaping. The purpose of this ordinance is to protect and enhance the community's environmental, economic, recreational, and aesthetic resources by promoting efficient use of water in the community's landscapes, reduce water waste and establish a structure for designing, installing, and maintaining water efficient landscapes throughout the City.

Section 4. **Definitions** The following definitions shall apply to this ordinance:

Applied Water: The portion of water supplied by the irrigation system to the landscape.

Bubbler: An irrigation head that delivers water to the root zone by "flooding" the planted area, usually measured in gallons per minute. Bubblers exhibit a trickle, umbrella, or short stream pattern.

Check Valve: A device used in sprinkler heads or pipe to prevent water from draining out of the pipe through gravity flow. Used to prevent pollution or contamination or the water supply due to the reverse flow of water from the secondary irrigation system.

Drip Emitter: Drip irrigation fittings that deliver water slowly at the root zone of the plant, usually measured in gallons per hour.
Effective Precipitation: The portion of total precipitation which becomes available for plant growth.

Established Landscape: The point at which plants in the landscape have developed significant root growth into the soil.

Establishment Period: the first year after installing the plant in the landscape.

Evapotranspiration (ET): The quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time, expressed in inches per day, month or year.

Grading Plan: The Grading Plan shows all finish grades, spot elevations as necessary and existing and new contours with the developed landscape area.

Ground Cover: Material planted in such a way as to form a continuous cover over the ground that can be maintained at a height not more than twelve (12) inches.

Hardscape: Driveways, Sidewalks, Patios, Solid Surface Decks and Paths.

Irrigation System Audit: An in-depth evaluation of the performance of an irrigation system that includes, but is not limited to, inspection, system tune-up recommendations, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and recommend adjustments to the irrigation schedule. The irrigation schedule should be in place prior to the Irrigation System Audit.

Irrigation Landscaped Area: All portions of a development site to be improved with plantings and irrigation. Natural open space areas shall not be included in the irrigated landscape area.

Irrigation Efficiency: the measurement of the amount of water beneficially applied, divided by the total amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system hardware characteristics and management practices.

Irrigation Plan: The irrigation plan shows the components of the irrigation system with water meter size, backflow prevention (when outdoor irrigation is supplied with culinary water), precipitation rates, flow rate and operating pressure for each irrigation circuit, and identification of all irrigation equipment.

Landscape Architect: A person who holds a professional license to practice landscape architecture in the state of Utah. Only a Landscape Architect can legally create commercial landscape plans.
Landscape Designer: A person who may or may not hold professional certificates for landscape design/architecture and cannot legally create commercial landscape plans. Landscape Designers generally focus on residential design and horticultural needs of home landscapes.

Landscape Education Package: A package that is intended to inform and educate water users in the city about water efficient landscapes. This package should include a listing of water conserving plants, certified landscape designers, landscape architects, certified irrigation designers, and certified irrigation contractors. Information regarding the City's water rates, billing format for water use and commitment to water conservation may also be included.

Landscape Plan Documentation Package: The preparation of a graphic and written criteria, specifications, and detailed plans to arrange and modify the effects of natural features such as plantings, ground and water forms, circulation, walks and other features to comply with the provisions of this ordinance. The Landscape Plan Documentation Package shall include a project data sheet, a Planting Plan, an Irrigation Plan, and a Grading Plan.

Landscape Zone: A portion of the landscaped area having plants with similar water needs, areas with similar microclimate (i.e., slope, exposure, wind, etc.) and soil conditions, and areas that will be similarly irrigated. A landscape zone can be served by one irrigation valve, or a set of valves with the same schedule.

Landscaping: Any combination of living plants, such as trees, shrubs, vines, ground covers, flowers, or grass; natural features such as rock, stone, or bark chips; and structural features, including but not limited to, fountains, reflecting pools, outdoor artwork, screen walls, fences or benches.

Localscapes®: A locally adaptable and environmentally sustainable urban landscape style that requires less irrigation than traditional Utah landscapes.

Maximum Applied Water Allowance (MAWA): the upper limit of annual applied water for the established landscaped area as specified in Section 8. It is based upon the area's reference evapotranspiration, a plant adjustment factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the MAWA.

Microclimate: The climate of a very small, restricted area that is different from the surrounding area. These areas include shade areas, sun areas, and areas protected by surrounding structures.

Mulch: Any material such as rock, bark, wood chips or other materials left loose and applied to the soil as a surface covering.

Overhead Spray: A water distribution device or irrigation head in the form of a pop-up, fixed pattern or rotary stream or spray that sprays irrigation water in an arc above the landscape.

Park Strip: A typically narrow landscaped area located between the back-of-curb and sidewalk.

Plant Adjustment Factor: A reference evapotranspiration factor, also referred to as a crop coefficient which is a value to indicate water needs of various plant types for optimum growth or yield. It is a factor to provide acceptable appearance and function of the plant.

Planting Plan: A plan to clearly and accurately identify and locate new and existing trees, shrubs, ground covers, turf areas, driveways, sidewalks, hardscape features, and fences.
Pop-up Spray Head: A sprinkler head or water distribution device that sprays water through a nozzle in a fixed pattern with no rotation.

Precipitation Rate: The amount of water applied to a given area, usually measured in inches per hour.

Pressure Compensating: A irrigation system component that compensates for fluctuating water pressure by only allowing a fixed volume of water through the component.

Rehabilitated Landscaping: Altering, repairing, or adding to a landscape to make possible a compatible use, increase curb appeal, decrease maintenance, etc.
Rotor Spray Head: A sprinkler head that distributes water through a nozzle by the rotation of a gear or mechanical rotor.

Runoff: Irrigation water that is not absorbed by the soil or landscape area to which it is applied, and which surface flows onto other areas.

Smart Automatic Irrigation Controller: An automatic timing device used to remotely control valves in the operation of an irrigation system using the internet to connect to a real time weather source or soil moisture sensor. Smart Automatic Irrigation Controllers schedule irrigation events using either evapotranspiration or soil moisture data to control when and how long sprinklers or drip systems operate and will vary based on time of year and weather/soil moisture conditions.

Special Landscape Area: (SLA) means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

Spray Sprinkler: An irrigation head that sprays water through a nozzle.
Stream Sprinkler: An irrigation head that projects water through a gear rotor in single or multiple streams.

Turf: A surface layer of earth containing grass species with full root structures that are maintained as mowed grass or lawn.

Waste of Water: shall include, but not necessarily limited to:
The use of water for any purpose, including outdoor irrigation, that consumes, or for which is applied substantial excess water beyond the reasonable amount required by the use, whether

such excess water is lost due to evaporation, percolation, discharges into the sewer system, or is allowed to run into the gutter or street. Washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas except to alleviate immediate health or safety hazards.

Water-Conserving Plant: A plant that can generally survive with available rainfall once established although supplemental irrigation may be needed or desirable during spring and summer months.

Section 5. Applicability of Water Efficient Landscape Ordinance The provisions of this ordinance shall apply to all new and rehabilitated landscaping for public agency projects, private commercial and industrial development projects, developer-installed landscaping in multi-family and single-family residential projects, and homeowner provided landscape improvements within the front, side, and rear yards of residential dwellings.

A. Single-family development:

1. A landscaping permit is required to be submitted for review with Fruit Heights City. The following shall be shown on the landscape plan.
2. Turf shall be restricted to no more than 30% of the buildable area of the lot up to ½ acres in size. Lots that are greater than ½ acre, turf restriction will be the lesser of no more than 20% of the buildable area of the lot or a maximum of 5,500 square feet of turf.
3. The buildable area shall be calculated by excluding any restricted or sensitive lands areas and excluding any area of the lot with slopes more than 30%.
4. No turf or non-drip irrigation shall be allowed in restricted or sensitive areas of any lot as determined by Fruit Heights City. This turf restriction will not apply to artificial turf that doesn't require water.
5. Trees and bushes will be encouraged as an integral part of the comprehensive landscape plan. A combination of hardscapes, mulch, bark, trees, bushes, and other low water use features will be required on all landscaping plans.
6. The City will review landscape plans to ensure that all landscaping plans meet the intent of the Water Efficient Landscape Ordinance prior to approval.
7. No turf or overhead spray allowed in park strip or areas with width's less than 8 feet.

B. Multi-Family, and PRUD type development:

1. These zones are restricted to not more than 20% turf on the total landscaped area with an allowance for city designated recreation areas. No turf or overhead spray will be allowed in the park strip or in areas with width's less than 8 feet.

Section 6. Landscapes in Commercial, Industrial, and Institutional Developments

2. Commercial, industrial, and institutional landscapes shall meet the Landscape and Irrigation Design Standards of this ordinance. The turf area shall not exceed 15% of the total landscaped area, outside of active recreation areas. No turf or overhead spray will be allowed in the park strip or in areas with width's less than 8 feet.

Section 7. Landscape Design Standards

A. Plant Selection

1. Plants shall be well-suited to the microclimate and soil conditions at the project site. Both native and locally-adapted plants are acceptable. Plants with similar water needs shall be grouped together as much as possible.

2. Areas with slopes greater than 30% shall be landscaped with deep-rooting, water- conserving plants for erosion control and soil stabilization.

3. Park strips and other landscaped areas less than eight (8) feet wide shall be landscaped with water-conserving plants that do not require overhead spray irrigation. (*Note: See Exhibit A for a list of recommended plants for various landscape situations and conditions (not a comprehensive list).*

4. Mulch. After completion of all planting, all irrigated non-turf areas shall be covered with a minimum four (4) inch layer of mulch to retain water, inhibit weed growth, and moderate soil temperature. Non-porous material shall not be placed under the mulch.

B. Soil Preparation.

1. Soil preparation will amend and/or enhance existing or imported soil to create planting soil suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the existing soil to a minimum depth of six (6) inches, and amending the existing soil with organic material, nutrients, etc. as per specific recommendations of the Landscape Architect based on the soil conditions or importing and placing amended topsoil per specific recommendation of the Landscape Architect.

C. **Tree Selection**. Tree species shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. Trees shall be selected as follows:

1. Broad canopy trees shall be selected where shade or screening of tall objects is desired;

2. Low-growing trees shall be selected for spaces under utility wires;

3. Select trees from which lower branches can be trimmed to maintain a healthy

growth habit where vision clearance and natural surveillance is a concern;

4. Narrow or columnar trees shall be selected where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street for natural surveillance;

5. Street trees shall be planted within existing and proposed park strips, and in sidewalk tree wells on streets without park strips. Tree placement shall provide canopy cover (shade) and avoid conflicts with existing trees, retaining walls, utilities, lighting, and other obstacles; and

6. Trees less than a two-inch caliper shall be double-staked until the trees mature to a two-inch caliper.

Section 8. Irrigation Design Standards

A. Sprinkler Systems

1. Smart Automatic Irrigation Controller. Landscaped areas shall be provided with a Water Sense labeled smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions. All controllers shall be equipped with automatic rain delay or rain shut-off capabilities and shall be setup to operate in "smart" mode.

2. Each valve shall irrigate a landscape with similar site, slope and soil conditions and plant materials with similar watering needs. Turf and non-turf areas shall be irrigated on separate valves. Drip emitters and sprinklers shall be placed on separate valves.

3. Drip emitters or a bubbler shall be provided for each tree. Bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be placed on a separate valve unless specifically exempted by the City due to the limited number of trees on the project site.

4. Drip irrigation or bubblers shall be used to irrigate plants in non-turf areas. Pop-up spray heads shall be at a minimum of four (4) inches in height to avoid blockage from lawn foliage.

5. Sprinklers shall have matched precipitation rates with each control valve circuit.

6. Sprinkler heads shall be attached to rigid lateral lines with flexible material (swing joints) to reduce potential for breakage.

7. Check valves shall be required where elevation differences cause low-head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure occurs within the irrigation system due to elevation differences.

8. Filters shall be required on all secondary water service connections. Filters shall have as a minimum a 30 mesh screen and shall be cleaned and maintained by the property owner on a regular basis.

9. Drip irrigation lines require additional filtration at or after the zone valve at a minimum of 200 mesh. End flush valves are required as necessary for drip irrigation lines.

10. Valves with spray or stream sprinklers shall be scheduled to operate in accordance with local water supplier restrictions to reduce water loss from wind, evaporation, or other environmental conditions not suitable for irrigation.

11. Program controller to operate valves for multiple repeat cycles (cycle and soak) where necessary to reduce runoff, particularly on slopes and soils with slow infiltration rates.

Section 9. Maximum Applied Water Allowance

Each new development or rehabilitated landscape that uses primary potable water for landscape irrigation must provide a water budget calculation to demonstrate a Maximum Applied Water Allowance (MAWA) for the new landscape or development. For parcels using secondary water, the MAWA is determined by the secondary water provider based on parcel size and is referred to as an allocation.

The Maximum Applied Water Allowance shall be calculated using the following equation:

MAWA = (ETo) (0.62)(1.15)[(0.8 x LA) + (0.3 x SLA)]
MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration (inches per year) as calculated from weather data at the closest available weather station.
0.62 = Conversion Factor (to gallons)
1.15= Delivery Inefficiency Factor (sprinkler system uniformity etc.)
0.8 = ET Adjustment Factor (ETAF), plant factor or crop coefficient (.8 standard for cool season turf)
LA = Landscape Area including SLA (square feet)
0.3 = Additional Water Allowance for SLA
SLA = Special Landscape Area (square feet)

ETo values can be obtained directly from the USU Climate Center where a data base of weather data from local stations is collected, analyzed, and stored. If you cannot find the ET data you need, please contact the city.

Additional details and examples of calculations are found in Appendix A

Section 10. Landscapes in New Single-family Residential Developments

A. Homebuilders and/or developers subdividing lots and/or constructing new single-family residential homes shall provide water-efficient landscaping to home buyers, when the landscape is installed by the homebuilder/developer. The water-efficient landscaping option shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and any central open space area consisting of plant material in mass requiring overhead spray irrigation shall not

exceed 30% of the total landscaped area.

B. Homebuilders and/or developers who construct model homes for a designated subdivision shall install water-efficient landscaping. The water-efficient landscaping shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and any central open space area consisting of plant material in mass requiring overhead spray irrigation shall not exceed 30% of the total landscaped area.

C. New Construction homes shall have landscaping and irrigation plans approved by the City Planning Department prior to issuance of building permits, for which no variance may be granted, and which meet the aforementioned requirements.

D. Model homes shall include an informational brochure on water-efficient landscaping.

E. When buyers or owners are installing their own landscaping on new home construction, a time frame for landscaping to be completed shall be 18 months from the time of occupancy to complete the total landscape.

Section 11. Prohibition on Restrictive Covenants Requiring Uniform Plant Material Irrigated with Spray Irrigation

A. Any Homeowners Association governing documents, such as bylaws, operating rules, covenants, conditions, and restrictions that govern the operation of a common interest development, are void and unenforceable if they:

1. Require the use of any uniform plant material requiring overhead spray irrigation in landscape areas less than 8 feet wide or require any uniform plant material requiring overhead spray irrigation in other areas that exceed 20% of the landscaped area; or

2. Prohibit, or include conditions that have the effect of prohibiting, the use of water-conserving plants as a group; or

3. Have the effect of prohibiting or restricting compliance with this ordinance or other water conservation measures.

Section 12. Documentation for Commercial, Industrial, and Institutional Projects

Landscape Plan Documentation Package. A copy of a Landscape Plan Documentation Package shall be submitted to and approved by the City prior to the issue of any permit. A copy of the approved Landscape Plan Documentation Package shall be provided to the property owner or site manager and to the local retail water purveyor. The Landscape Plan Documentation Package shall be prepared by a registered landscape architect and shall consist of the following items:

A. Project Data Sheet. The Project Data Sheet shall contain the following:

1. Project name and address;
2. Applicant or applicant agent's name, address, phone number, and email address;
3. Landscape architect's name, address, phone number, and email address; and
4. Landscape contractor's name, address, phone number and email address.

B. **Planting Plan.** A detailed planting plan shall be drawn at a scale that clearly identifies the following:

1. Location of all plant materials, a legend with botanical and common names, and size of plant materials;
2. Property lines and street names;
3. Existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements;
4. Existing trees and plant materials to be removed or retained;
5. Scale: graphic and written;
6. Date of Design;
7. Designation of a landscape zone, and
8. Details and specifications for tree staking, soil preparation, and other planting work.

C. **Irrigation Plan**. A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain the following information:

1. Layout of the irrigation system and a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers;
2. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;
3. Flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers, and
4. Installation details for irrigation components.

D. **Grading Plan**. A Grading Plan shall be drawn at the same scale as the Planting Plan and shall contain the following information:

1. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements, and

2. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements.

Section 13. Plan Review, Construction Inspection, and Post-Construction Monitoring for Commercial, Industrial, and Institutional Projects

A. As part of the Building Permit approval process, a copy of the Landscape Plan Documentation Package shall be submitted to the City for review and approval before construction begins.

B. All installers and designers shall meet state and local license, insurance, and bonding requirements, and be able to show proof of such.

C. During construction, site inspection of the landscaping may be performed by the City Building Inspection Department.

D. Following construction and prior to issuing the approval for occupancy, an inspection shall be scheduled with the Building Inspection Department to verify compliance with the approved landscape plans. The Certificate of Substantial Completion shall be completed by the property owner, contractor or landscape architect and submitted to the City.

E. The City reserves the right to perform site inspections at any time before, during or after the irrigation system and landscape installation, and to require corrective measures if requirements of this ordinance are not satisfied.

Section 14. Prohibited Watering Practices

Regardless of the age of a development (commercial, industrial, office, or residential), water shall be properly used. The wasting of water for any purpose is strictly prohibited.

Section 15. Enforcement, Penalty for Violations

The Fruit Heights City Public Works Director or designee(s) are authorized to enforce all provisions of this Ordinance.

Any consumer who violates any provisions of this Ordinance shall be issued a written notice of violation. This notice shall be affixed to the property where the violation occurred. The notice will describe the violation and order that it be corrected, cured or abated immediately or within times specified by the city. Failure to receive a notice shall not invalidate further actions by the City. If the order is not complied with, the City may terminate water service to the customer and/or issue a citation.

Section 16. Effective Date

This ordinance shall be effective as of the 17 of May 2022

Dated: May 17, 2022	FRUIT HEIGHTS
FRUIT HEIGHTS CITY CORPORATE Seal Davis County, Utah	Attest: Brandon Green Brandon Green, Recorder
	John Pohlman John Pohlman Mayor

Appendix A

The Maximum Applied Water Allowance shall be calculated using the equation:
MAWA = (ETo) (0.62) (1.15) [(0.8 x LA) + (0.3 x SLA)]

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project. The ETo values used in these calculations are examples only but are real ETo values from Weber Basin's weather station and should be substituted for actual ETo values for your specific city. For actual irrigation scheduling, automatic smart irrigation controllers are required and shall use current reference evapotranspiration data (most of which is part of each controller company's supporting weather network) or soil moisture sensor data.

(1) Example MAWA calculation: a hypothetical landscape project in Layton Utah with an irrigated landscape area of 20,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, or recreational areas). To calculate MAWA, the annual reference evapotranspiration value for Layton is 32.8 inches as documented from the Weber Basin weather station data.

MAWA = (ETo) (0.62) (1.15) [(0.8 x LA) + (0.3 x SLA)]

MAWA = Maximum Applied Water Allowance (gallons per year)
ETo = Reference Evapotranspiration (inches per year)
0.62 = Conversion Factor (to gallons)
1.15= Delivery Inefficiency Factor (sprinkler system uniformity etc.)
0.8 = ET Adjustment Factor (ETAF) typical for cool season turf
LA = Landscape Area including SLA (square feet)
0.3 = Additional Water Allowance for SLA
SLA = Special Landscape Area (square feet)

MAWA = (32.8 inches) (0.62) (1.15) [(0.8 x 20,000 square feet) + (0.3 x 0)] = **374,182 gallons per year** (or 1.15 AF/yr)

(2) In this next hypothetical example, the landscape project in Ogden Utah has the same ETo value of 32.8 inches and a total landscape area of 15,000 square feet. Within the 15,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.

MAWA = (ETo) (0.62) (1.15) [(0.8 x LA) + (0.3 x SLA)]

MAWA = (32.8 inches) (0.62) (1.15) [(0.8 x 15,000 square feet) + (0.3 x 2,000 square feet)] = 20.34 x [12,000 + 600] gallons per year = **280,696.8 gallons per year** (or .86 AF/year)

EXHIBIT A

Exhibit A is a list of approve Water-Wise plants. For additional information please visit the following websites:

https://www.weberbasin.com/Conservation/PlantInfo

https://extension.usu.edu/cwel/water-wise-plants