

KENT BROWN PLANNING SERVICES

July 18, 2017

Nampa City Planning & Zoning Department
411 Third Street SO
Nampa ID 83651

RE: Canyon Creek Preliminary Plat

Gentlemen:

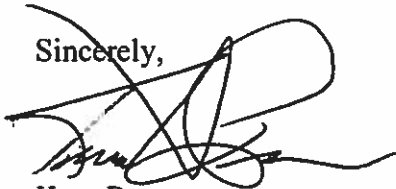
I am respectfully submitting a preliminary plat for Canyon Creek Subdivision, which is a single family residential neighborhood on 86.56 acres. This project is located on the west side of Can-ada Road approximately 1325 feet north of intersection of Can-ada Road and Cherry Lane.

The Preliminary plat Canyon Creek recently expired and we are seeking to have the preliminary plat reinstated. We are not proposing any changes to that previously approved preliminary plat The plan is still to have 255 single family lots with amenities of Tot lot and swimming pool and changing room.

Summary

We lost track of the time and allowed the preliminary plat to expire and we are seeking the city's approval to restore the preliminary plat. Please contact me if you have any questions regarding this application.

Sincerely,



Kent Brown
Planner

A. GENERAL INFORMATION

Subdivision Name CANYON CREEK SUBDIVISION
Total Acres 86.56
Intended Land Uses Circle residential, single-family multi-family, commercial, industrial)
Property Address(es) 17309 N CANADA ROAD AND 17447 N CANADA ROAD
Legal Description SEE ATTACHED LEGAL
Canyon County Parcel Account Number(s) R30703900000 AND R30803800000
Existing Zoning. (Circle one) RA RSM RD RML RMH RP BN CB BC BF IP IL IH AG
(County Zoning) _____

B. OWNER/ APPLICANT INFORMATION

Owner of Record

Name	IRON SHADOW REAL ESTATE LLC
Address	1548 W CAYUSE CREEK STE 100
City	MERIDIAN
State	IDAHO
Telephone	895-0500
Email	JEREMY@BILTMORECO.COM
Fax	

Applicant

Name	SAME AS ABOVE
Address	
City	
State	
Telephone	
Email	
Fax	

Engineer/Surveyor/Planner

Name	KENT BROWN
Address	3161 E SPRINGWOOD DR
City	MERIDIAN
State	IDAHO
Telephone	208-871-6842
Email	KENTLKB@GMAIL.COM
Fax	

SPP-00010-2017

C. SUBDIVISION INFORMATION

Lot Types	Number of Lots	Acres
Residential	255	49.177
Dwelling units per acre (gross /net)	2.88 / 4.6	
Commercial	0	
Industrial	0	
Common (Landscape, Utility, Other)	30	16.15
Open Space		16.15
Total	285	86.56

DEADLINES FOR SUBMITTALS

The completed application and plat documents must be submitted to the Planning Department not later than _____. The Planning Commission meets on _____; applications are due approximately ___ weeks prior to that date.

All supplemental information to be added to the application file must be received by the Planning Department no later than 15 days prior to the public hearing date.

*****Please do not submit a subdivision application until all items are completed. Incomplete applications will not be accepted or reviewed.*****

I understand:

1. This application is subject to acceptance by the City of Nampa upon determination that the application is complete.
2. The hearing date is tentative and subject to change with notice.
3. This application is subject to a public hearing before the Nampa Planning and Zoning Commission.
4. The application fee is non-refundable.

All information, statements, attachments, and exhibits included with this application submittal are true to the best of my knowledge.

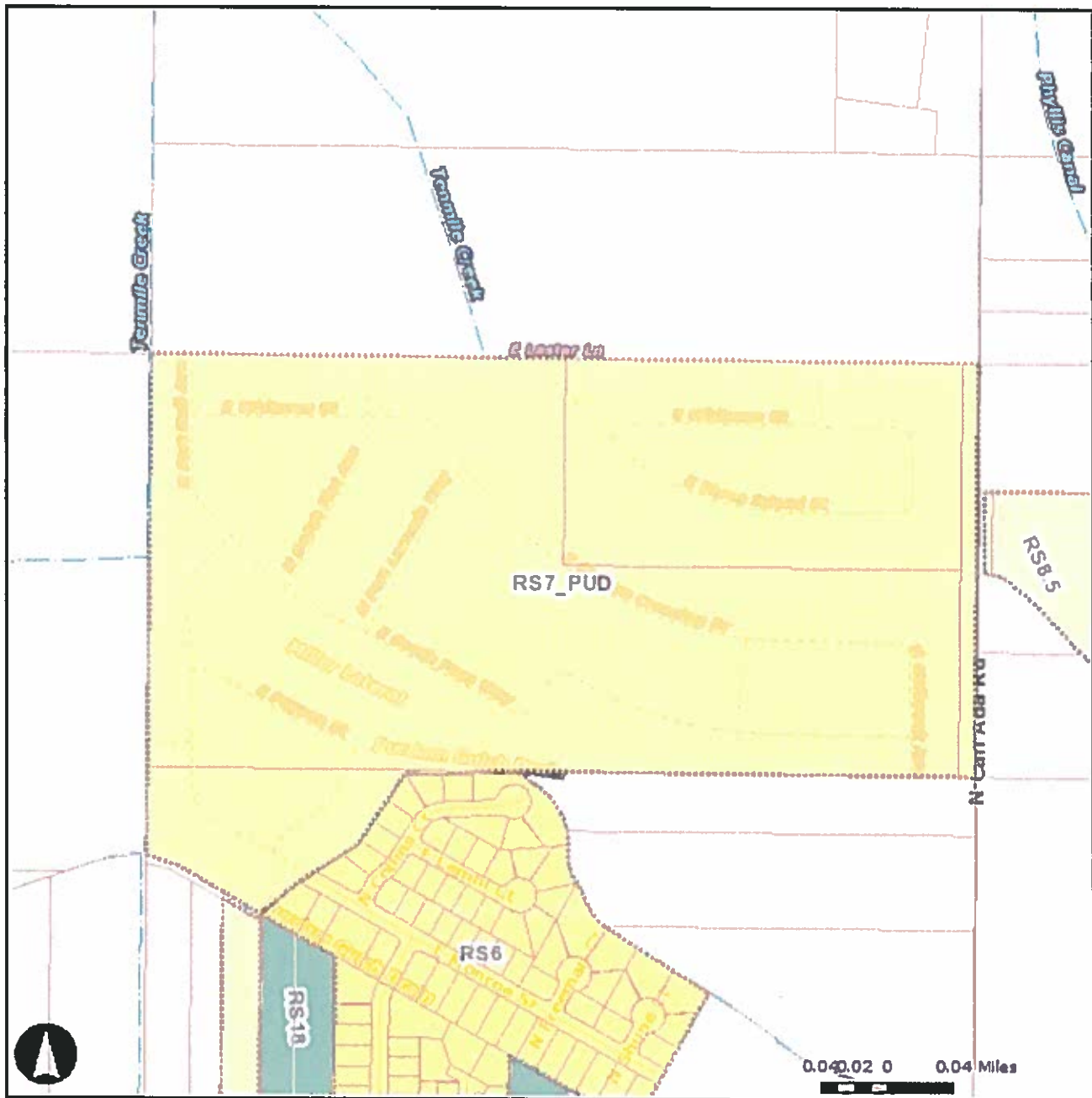
Signature  Date 7-18-17

For City Office Use Only

FEE \$: _____ CASH: _____ CHECK: _____ RECEIPT NO.: _____

DATE RECEIVED: _____ RECEIVED BY: _____ HEARING DATE: _____

Map



County Parcels



Zoning

- AG
- BC
- BC_PUD
- BF
- BN
- BN_PUD
- DB
- DH

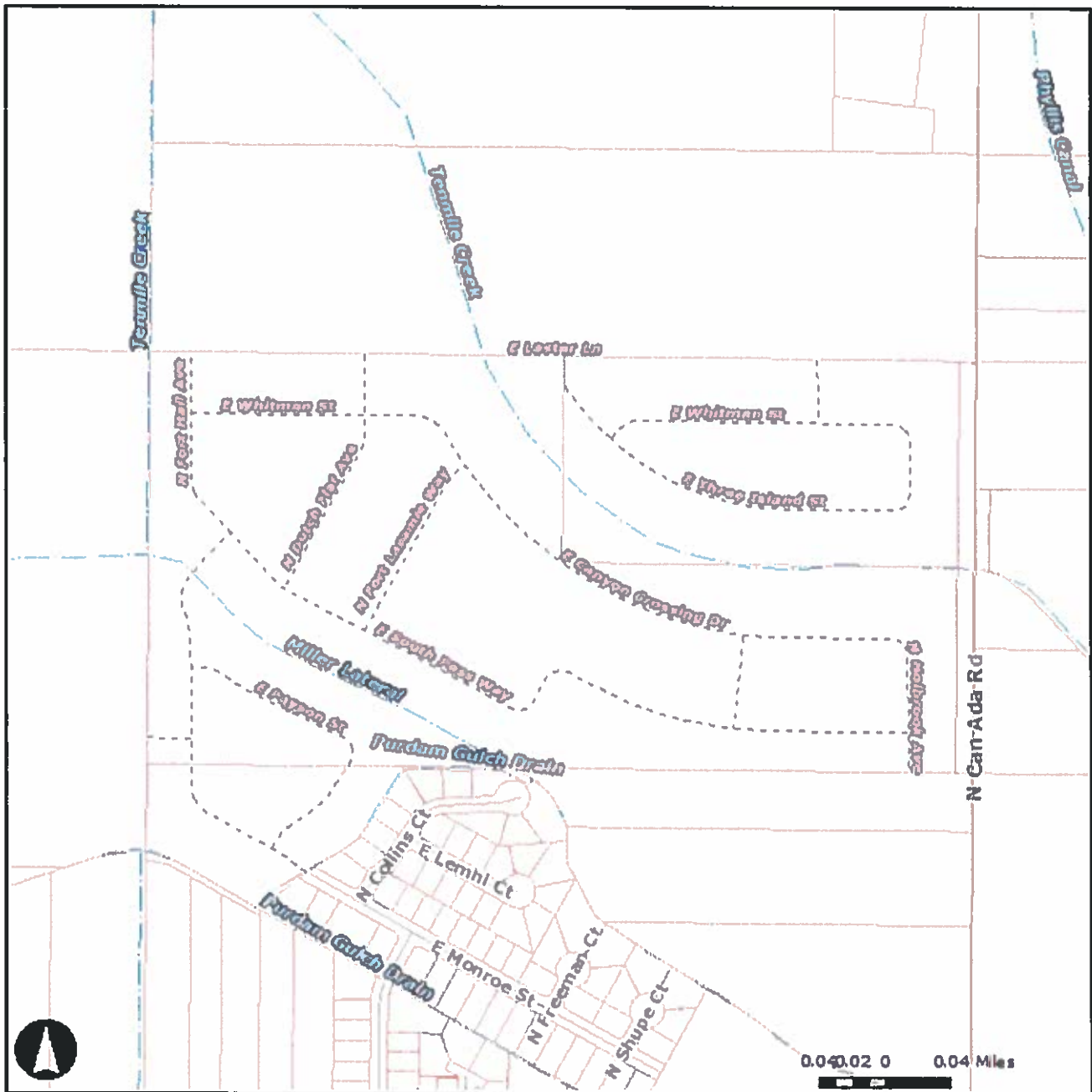
Zoning (continued)

- IP_RS
- RA
- RD
- RD_PUD
- RMH
- RML
- RML_PUD
- RP
- RP_PUD
- RS6

Zoning (continued)

- RS22
- RS22_PUD
- U
- UnZoned
- Draft Centerline
- Centerline <8k
- Road
- Trail
- Railroad

Map



County Parcels

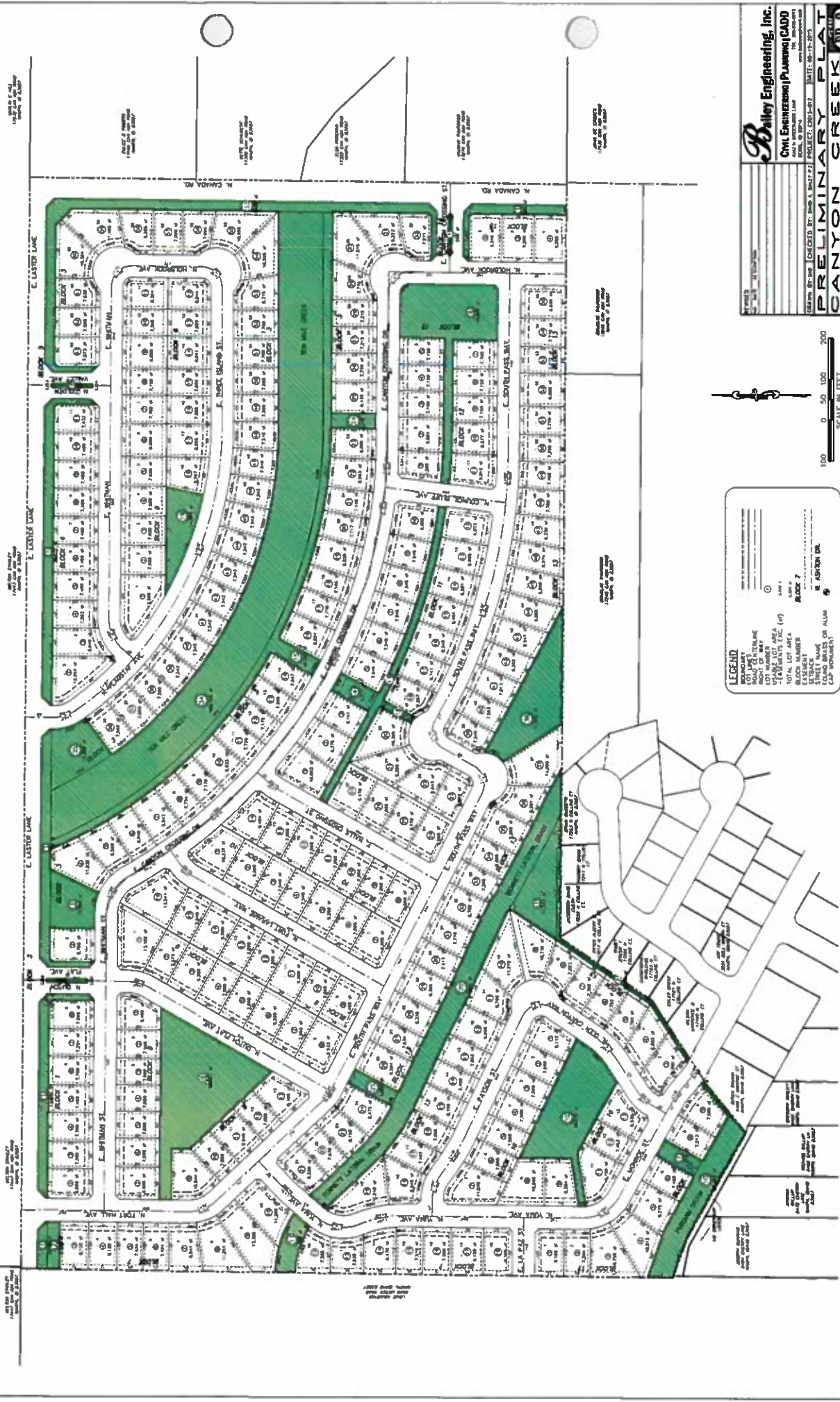
- County Parcels
- Zoning**
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Zoning (continued)

- IP_RS
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- RML
- RML_PUD
- RP
- RP_PUD
- RS6

Zoning (continued)

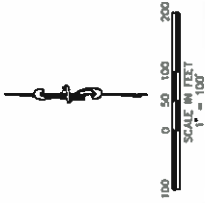
- RS22
- RS22_PUD
- U
- UnZoned
- Draft Centerline**
- Centerline_<8k
- Road
- Trail
- Railroad



Ballley Engineering, Inc.
 Civil Engineering (Professional) CADD
 1000 S. 10th Street, Suite 100
 Phoenix, AZ 85006
 Phone: (602) 998-1111
 Fax: (602) 998-1112
 Email: info@ballleyeng.com
 Website: www.ballleyeng.com

PROJECT: CDD-10-01
 DATE: 08-17-2017

PRELIMINARY PLAT
CANYON CREEK
SHADOW MOUNTAIN HOMES (P-2)



LEGEND

BOUNDARY	---
ROAD CENTERLINE	—+—
LOT CENTERLINE	—+—+—
LOT NUMBER	①
UTAH LOT AREA (sq ft)	1,000
TOTAL LOT AREA	100,000
BLOCK NUMBER	BLOCK 7
STREET NAME	E. ASHTON DR.
STREET WIDTH	40' ALIAS
STREET CENTERLINE	—+—
CAP. WORKSHEET	---

Land Information
 2017 State of Arizona
 Title: Shadow Mountain Homes (P-2)

Curve #	Radius	Length	Chord	Bearing	Bench
C1	71.00	45.34	45.34	120.0000°	3079.47'
C2	71.00	113.00	113.00	120.0000°	3079.47'
C3	71.00	180.00	180.00	120.0000°	3079.47'
C4	71.00	246.98	246.98	120.0000°	3079.47'
C5	71.00	314.00	314.00	120.0000°	3079.47'
C6	71.00	381.00	381.00	120.0000°	3079.47'
C7	71.00	448.00	448.00	120.0000°	3079.47'
C8	71.00	515.00	515.00	120.0000°	3079.47'
C9	71.00	582.00	582.00	120.0000°	3079.47'
C10	71.00	649.00	649.00	120.0000°	3079.47'
C11	71.00	716.00	716.00	120.0000°	3079.47'
C12	71.00	783.00	783.00	120.0000°	3079.47'
C13	71.00	850.00	850.00	120.0000°	3079.47'
C14	71.00	917.00	917.00	120.0000°	3079.47'
C15	71.00	984.00	984.00	120.0000°	3079.47'
C16	71.00	1051.00	1051.00	120.0000°	3079.47'
C17	71.00	1118.00	1118.00	120.0000°	3079.47'
C18	71.00	1185.00	1185.00	120.0000°	3079.47'
C19	71.00	1252.00	1252.00	120.0000°	3079.47'
C20	71.00	1319.00	1319.00	120.0000°	3079.47'
C21	71.00	1386.00	1386.00	120.0000°	3079.47'
C22	71.00	1453.00	1453.00	120.0000°	3079.47'
C23	71.00	1520.00	1520.00	120.0000°	3079.47'
C24	71.00	1587.00	1587.00	120.0000°	3079.47'
C25	71.00	1654.00	1654.00	120.0000°	3079.47'
C26	71.00	1721.00	1721.00	120.0000°	3079.47'
C27	71.00	1788.00	1788.00	120.0000°	3079.47'
C28	71.00	1855.00	1855.00	120.0000°	3079.47'
C29	71.00	1922.00	1922.00	120.0000°	3079.47'
C30	71.00	1989.00	1989.00	120.0000°	3079.47'
C31	71.00	2056.00	2056.00	120.0000°	3079.47'
C32	71.00	2123.00	2123.00	120.0000°	3079.47'
C33	71.00	2190.00	2190.00	120.0000°	3079.47'
C34	71.00	2257.00	2257.00	120.0000°	3079.47'
C35	71.00	2324.00	2324.00	120.0000°	3079.47'
C36	71.00	2391.00	2391.00	120.0000°	3079.47'
C37	71.00	2458.00	2458.00	120.0000°	3079.47'
C38	71.00	2525.00	2525.00	120.0000°	3079.47'
C39	71.00	2592.00	2592.00	120.0000°	3079.47'
C40	71.00	2659.00	2659.00	120.0000°	3079.47'
C41	71.00	2726.00	2726.00	120.0000°	3079.47'
C42	71.00	2793.00	2793.00	120.0000°	3079.47'
C43	71.00	2860.00	2860.00	120.0000°	3079.47'
C44	71.00	2927.00	2927.00	120.0000°	3079.47'
C45	71.00	2994.00	2994.00	120.0000°	3079.47'
C46	71.00	3061.00	3061.00	120.0000°	3079.47'
C47	71.00	3128.00	3128.00	120.0000°	3079.47'
C48	71.00	3195.00	3195.00	120.0000°	3079.47'
C49	71.00	3262.00	3262.00	120.0000°	3079.47'
C50	71.00	3329.00	3329.00	120.0000°	3079.47'
C51	71.00	3396.00	3396.00	120.0000°	3079.47'
C52	71.00	3463.00	3463.00	120.0000°	3079.47'
C53	71.00	3530.00	3530.00	120.0000°	3079.47'
C54	71.00	3597.00	3597.00	120.0000°	3079.47'
C55	71.00	3664.00	3664.00	120.0000°	3079.47'
C56	71.00	3731.00	3731.00	120.0000°	3079.47'
C57	71.00	3798.00	3798.00	120.0000°	3079.47'
C58	71.00	3865.00	3865.00	120.0000°	3079.47'
C59	71.00	3932.00	3932.00	120.0000°	3079.47'
C60	71.00	4000.00	4000.00	120.0000°	3079.47'
C61	71.00	4067.00	4067.00	120.0000°	3079.47'
C62	71.00	4134.00	4134.00	120.0000°	3079.47'
C63	71.00	4201.00	4201.00	120.0000°	3079.47'
C64	71.00	4268.00	4268.00	120.0000°	3079.47'
C65	71.00	4335.00	4335.00	120.0000°	3079.47'
C66	71.00	4402.00	4402.00	120.0000°	3079.47'
C67	71.00	4469.00	4469.00	120.0000°	3079.47'
C68	71.00	4536.00	4536.00	120.0000°	3079.47'
C69	71.00	4603.00	4603.00	120.0000°	3079.47'
C70	71.00	4670.00	4670.00	120.0000°	3079.47'
C71	71.00	4737.00	4737.00	120.0000°	3079.47'
C72	71.00	4804.00	4804.00	120.0000°	3079.47'
C73	71.00	4871.00	4871.00	120.0000°	3079.47'
C74	71.00	4938.00	4938.00	120.0000°	3079.47'
C75	71.00	5005.00	5005.00	120.0000°	3079.47'
C76	71.00	5072.00	5072.00	120.0000°	3079.47'
C77	71.00	5139.00	5139.00	120.0000°	3079.47'
C78	71.00	5206.00	5206.00	120.0000°	3079.47'
C79	71.00	5273.00	5273.00	120.0000°	3079.47'
C80	71.00	5340.00	5340.00	120.0000°	3079.47'
C81	71.00	5407.00	5407.00	120.0000°	3079.47'
C82	71.00	5474.00	5474.00	120.0000°	3079.47'
C83	71.00	5541.00	5541.00	120.0000°	3079.47'
C84	71.00	5608.00	5608.00	120.0000°	3079.47'
C85	71.00	5675.00	5675.00	120.0000°	3079.47'
C86	71.00	5742.00	5742.00	120.0000°	3079.47'
C87	71.00	5809.00	5809.00	120.0000°	3079.47'
C88	71.00	5876.00	5876.00	120.0000°	3079.47'
C89	71.00	5943.00	5943.00	120.0000°	3079.47'
C90	71.00	6010.00	6010.00	120.0000°	3079.47'
C91	71.00	6077.00	6077.00	120.0000°	3079.47'
C92	71.00	6144.00	6144.00	120.0000°	3079.47'
C93	71.00	6211.00	6211.00	120.0000°	3079.47'
C94	71.00	6278.00	6278.00	120.0000°	3079.47'
C95	71.00	6345.00	6345.00	120.0000°	3079.47'
C96	71.00	6412.00	6412.00	120.0000°	3079.47'
C97	71.00	6479.00	6479.00	120.0000°	3079.47'
C98	71.00	6546.00	6546.00	120.0000°	3079.47'
C99	71.00	6613.00	6613.00	120.0000°	3079.47'
C100	71.00	6680.00	6680.00	120.0000°	3079.47'

Curve #	Radius	Length	Chord	Bearing	Bench
C101	71.00	6747.00	6747.00	120.0000°	3079.47'
C102	71.00	6814.00	6814.00	120.0000°	3079.47'
C103	71.00	6881.00	6881.00	120.0000°	3079.47'
C104	71.00	6948.00	6948.00	120.0000°	3079.47'
C105	71.00	7015.00	7015.00	120.0000°	3079.47'
C106	71.00	7082.00	7082.00	120.0000°	3079.47'
C107	71.00	7149.00	7149.00	120.0000°	3079.47'
C108	71.00	7216.00	7216.00	120.0000°	3079.47'
C109	71.00	7283.00	7283.00	120.0000°	3079.47'
C110	71.00	7350.00	7350.00	120.0000°	3079.47'
C111	71.00	7417.00	7417.00	120.0000°	3079.47'
C112	71.00	7484.00	7484.00	120.0000°	3079.47'
C113	71.00	7551.00	7551.00	120.0000°	3079.47'
C114	71.00	7618.00	7618.00	120.0000°	3079.47'
C115	71.00	7685.00	7685.00	120.0000°	3079.47'
C116	71.00	7752.00	7752.00	120.0000°	3079.47'
C117	71.00	7819.00	7819.00	120.0000°	3079.47'
C118	71.00	7886.00	7886.00	120.0000°	3079.47'
C119	71.00	7953.00	7953.00	120.0000°	3079.47'
C120	71.00	8020.00	8020.00	120.0000°	3079.47'
C121	71.00	8087.00	8087.00	120.0000°	3079.47'
C122	71.00	8154.00	8154.00	120.0000°	3079.47'
C123	71.00	8221.00	8221.00	120.0000°	3079.47'
C124	71.00	8288.00	8288.00	120.0000°	3079.47'
C125	71.00	8355.00	8355.00	120.0000°	3079.47'
C126	71.00	8422.00	8422.00	120.0000°	3079.47'
C127	71.00	8489.00	8489.00	120.0000°	3079.47'
C128	71.00	8556.00	8556.00	120.0000°	3079.47'
C129	71.00	8623.00	8623.00	120.0000°	3079.47'
C130	71.00	8690.00	8690.00	120.0000°	3079.47'
C131	71.00	8757.00	8757.00	120.0000°	3079.47'
C132	71.00	8824.00	8824.00	120.0000°	3079.47'
C133	71.00	8891.00	8891.00	120.0000°	3079.47'
C134	71.00	8958.00	8958.00	120.0000°	3079.47'
C135	71.00	9025.00	9025.00	120.0000°	3079.47'
C136	71.00	9092.00	9092.00	120.0000°	3079.47'
C137	71.00	9159.00	9159.00	120.0000°	3079.47'
C138	71.00	9226.00	9226.00	120.0000°	3079.47'
C139	71.00	9293.00	9293.00	120.0000°	3079.47'
C140	71.00	9360.00	9360.00	120.0000°	3079.47'
C141	71.00	9427.00	9427.00	120.0000°	3079.47'
C142	71.00	9494.00	9494.00	120.0000°	3079.47'
C143	71.00	9561.00	9561.00	120.0000°	3079.47'
C144	71.00	9628.00	9628.00	120.0000°	3079.47'
C145	71.00	9695.00	9695.00	120.0000°	3079.47'
C146	71.00	9762.00	9762.00	120.0000°	3079.47'
C147	71.00	9829.00	9829.00	120.0000°	3079.47'
C148	71.00	9896.00	9896.00	120.0000°	3079.47'
C149	71.00	9963.00	9963.00	120.0000°	3079.47'
C150	71.00	10030.00	10030.00	120.0000°	3079.47'
C151	71.00	10097.00	10097.00	120.0000°	3079.47'
C152	71.00	10164.00	10164.00	120.0000°	3079.47'
C153	71.00	10231.00	10231.00	120.0000°	3079.47'
C154	71.00	10298.00	10298.00	120.0000°	3079.47'
C155	71.00	10365.00	10365.00	120.0000°	3079.47'
C156	71.00	10432.00	10432.00	120.0000°	3079.47'
C157	71.00	10499.00	10499.00	120.0000°	3079.47'
C158	71.00	10566.00	10566.00	120.0000°	3079.47'
C159	71.00	10633.00	10633.00	120.0000°	3079.47'
C160	71.00	10700.00	10700.00	120.0000°	3079.47'
C161	71.00	10767.00	10767.00	120.0000°	3079.47'
C162	71.00	10834.00	10834.00	120.0000°	3079.47'
C163	71.00	10901.00	10901.00	120.0000°	3079.47'
C164	71.00	10968.00	10968.00	120.0000°	3079.47'
C165	71.00	11035.00	11035.00	120.0000°	3079.47'
C166	71.00	11102.00	11102.00	120.0000°	3079.47'
C167	71.00	11169.00	11169.00	120.0000°	3079.47'
C168	71.00	11236.00	11236.00	120.0000°	3079.47'
C169	71.00				

August 25, 2015

**DESCRIPTION FOR
CANYON CROSSING SUBDIVISION**

A parcel of land located in the SE1/4 of Section 1, T.3N., R.2W., B.M., Canyon County, Idaho more particularly described as follows:

BEGINNING at the E1/4 corner of said Section 1;

thence along the East boundary line of said Section 1 South 00°39'49" West, 1321.94 feet to the S1/16 corner of said Section 1;

thence along the South boundary line of the N1/2 of the SE1/4 of said Section 1 North 89°30'31" West, 1836.39 feet;

thence leaving said South boundary line South 33°54'40" West, 273.52 feet;

thence South 57°00'27" West, 238.53 feet;

thence South 50°39'23" West, 154.45 feet;

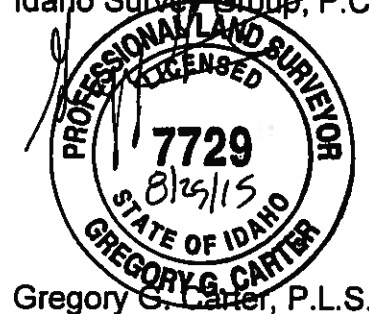
thence North 60°44'40" West, 297.35 feet;

thence North 70°23'40" West, 99.79 feet to a point on the North-South centerline of said Section 1;

thence along said North-South centerline North 00°35'34" East, 1606.91 feet to the C1/4 corner of said Section 1;

thence along the East-West centerline of said Section 1 South 89°28'04" East, 2660.65 feet to the **POINT OF BEGINNING** containing 86.59 acres, more or less.

Prepared by:
Idaho Survey Group, P.C.



Gregory G. Carter, P.L.S.



Parcel Report



Owner Information

Parcel	R3073800000
Property Address	17447 N CAN ADA RD
Property City	NAMPA, ID 83687
Primary Owner	IRON SHADOW REAL ESTATE LLC
Second Owner	-
Owner Address	1548 W CAYUSE CREEK DR STE 100
Owner City	MERIDIAN ID 83646

Parcel Information

Parcel	R3073800000	Primary Owner	IRON SHADOW REAL ESTATE LLC	Property Address	17447 N CAN ADA RD
Property City	NAMPA, ID 83687	Total Value	\$260,260	Acres	19.33
Second Owner	-	Owner Address	1548 W CAYUSE CREEK DR STE 100	Owner City	MERIDIAN ID 83646
Zoning	-	Subdivision	-	Section	01
Property Year	-	Code Area	0020007	Property Code	-
Home Exemption	0	Legal 1	01-3N-2W SE TX 15378 IN NESE LS RD	Legal 2	3N2W-01-SE
Legal 3	-	Legal 4	2015037434	Legal 5	N00000017200
Date Updated	2017-07-05				

General Characteristics

Parcel	R3073800000	Total Value	\$260,260	Land Value	106660
Improvements Value	153600	Subdivision ID	-	Fire District	-
Highway District	691 NAMPA HWY DIST #1 IN NAMPA	Cemetery District	730 FAIRVIEW CEMETERY	Flood District	-
Library District	-	Recreation District	-	Gopher District	-
Mosquito District	668 MOSQUITO ABATEMENT	Pest District	-	Ambulance District	653 AMBULANCE DISTRICT
School District	770 VALLIVUE SCHOOL DIST #139	Urban Renewal District	-	College District	775 COLLEGE OF WESTERN IDAHO
Water Sewer District	-	Date Updated	2017-07-09		



Parcel Report



Owner Information

Parcel	R3073900000
Property Address	17309 N CAN ADA RD
Property City	NAMPA, ID 83687
Primary Owner	IRON SHADOW REAL ESTATE LLC
Second Owner	-
Owner Address	1548 W CAYUSE CREEK DR STE 100
Owner City	MERIDIAN ID 83646

Parcel Information

Parcel	R3073900000	Primary Owner	IRON SHADOW REAL ESTATE LLC	Property Address	17309 N CAN ADA RD
Property City	NAMPA, ID 83687	Total Value	\$108,890	Acres	59.71
Second Owner	-	Owner Address	1548 W CAYUSE CREEK DR STE 100	Owner City	MERIDIAN ID 83646
Zoning	-	Subdivision	-	Section	01
Property Year	-	Code Area	0020007	Property Code	-
Home Exemption	47500	Legal 1	01-3N-2W SE S1/2 NE SE, NW SE L5 RD	Legal 2	3N2W-01-SE
Legal 3	-	Legal 4	2015037434	Legal 5	N00000017650
Date Updated	2017-07-05				

General Characteristics

Parcel	R3073900000	Total Value	\$108,890	Land Value	108890
Improvements Value	0	Subdivision ID	-	Fire District	-
Highway District	691 NAMPA HWY DIST #1 IN NAMPA	Cemetery District	730 FAIRVIEW CEMETERY	Flood District	-
Library District	-	Recreation District	-	Copher District	-
Mosquito District	668 MOSQUITO ABATEMENT	Pest District	-	Ambulance District	653 AMBULANCE DISTRICT
School District	770 VALLIVUE SCHOOL DIST #139	Urban Renewal District	-	College District	775 COLLEGE OF WESTERN IDAHO
Water Sewer District	-	Date Updated	2017-07-09		

Land Characteristics

Group Code	Description	Value
02	02 Irr pasture	\$1,890
01	01 Irr Ag	\$107,000



PRELIMINARY ENGINEERING REPORT FOR:
CANYON CROSSING SUBDIVISION

SEWER & WATER
IRRIGATION
STORM DRAIN

BEI PROJECT NO: C2015-012

DATE: 8-18-2015

DEVELOPER:
Iron Mountain Real Estate, Inc
3681 N Locust Grove, Suite 100
Meridian, ID 83646


Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD

Preliminary Sewer & Water Flow Calculations

For

Canyon Crossing Subdivision

Proposed Canyon Crossing Subdivision has 255 buildable lots. All buildable lots of the subdivision are designed for single-family residential construction.

Ten State Standards Section 11.243.A states that the sizing of new wastewater facilities receiving flow from new wastewater collection systems shall be based on an average daily flow of 100 gallons per capita.

According to 'Households and Families: 2010', published by the US Census Bureau, the average household size in the United States is 3.14 persons. To obtain a sewer flow rate, this number was multiplied by the average daily flow and the number of lots in the development.

$$100 \frac{\text{gal}}{\text{person}} \times 3.14 \frac{\text{persons}}{\text{home}} \times 255 \text{ lots} = 80,070 \text{ gal/day}$$

Thus, the Canyon Crossing development is expected to produce 80,070 gal/day or 55.6 gallons per minute (gpm) of sewage flow.

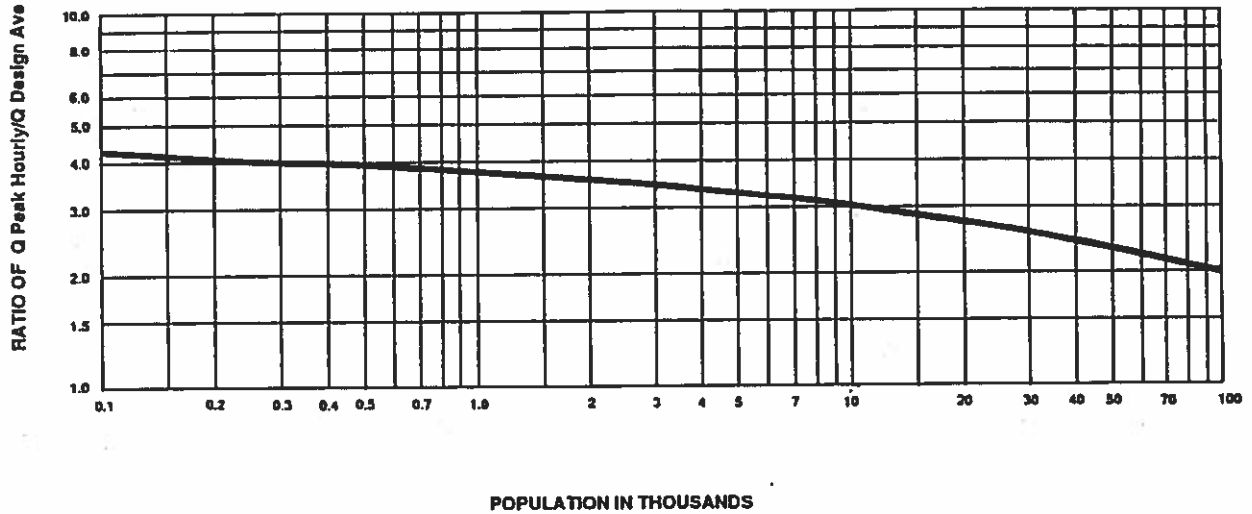
Ten State Standards Section 11.243.B states that the average daily flow must be used in conjunction with a peaking factor from 'Table 1' (see attached). Using the 3.14 average household size for each of the 255 lots, the expected population of the subdivision at build-out is approximately 800. A peak factor of 3.86 was derived from 'Table 1'.

$$80,070 \frac{\text{gal}}{\text{day}} \times 3.86 = 309,070 \text{ gal/day}$$

Thus, Canyon Crossing Subdivision is expected to produce 309,070 gal/day or 214.6 gpm of sewage flow at peak hours of the day.

Water flow calculations should be assumed to have the same flow rate demand as developed by the sewer flow calculations listed above. A peak daily flow of 55.6 gpm and a peak hourly flow of 214.6 gpm are anticipated.

**FIGURE 1.
RATIO OF PEAK HOURLY FLOW TO DESIGN AVERAGE FLOW**



10-9

Q peak hourly: Maximum Rate of Wastewater Flow (Peak Hourly Flow)

Q design ave: Design Average Daily Wastewater Flow

Source: $Q \text{ Peak Hourly}/Q \text{ Design Ave} = \frac{18 + \sqrt{P}}{4 + \sqrt{P}}$ --- (P = population in thousands)

Fair, G.M. and Geyer, J.C. "Water Supply and Waste-water Disposal"
1st Ed., John Wiley & Sons, Inc., New York (1954), p. 136

Bailey Engineering, Inc.
CIVIL ENGINEERING|PLANNING|CADD

Preliminary Irrigation Report

For

Canyon Crossing Subdivision

Proposed Canyon Crossing Subdivision is currently being used as farmland. The Purdham Drain, Bennett Lateral Drain and Ten Mile Creek all flow through the site.

The Purdham Drain runs northwest through the southwestern corner of the site and will not be impacted by the development. The Purdham Drain will be located completely within a common lot and no crossings will be necessary. The Purdham Drain will be kept open with development.

The Bennett Lateral Drain runs parallel to the Purdham Drain, also flowing to the northwest. The Bennett Lateral Drain will remain as an open ditch with development, with the exception of one (1) roadway crossing.

Ten Mile Creek enters proposed Canyon Crossing Subdivision on its eastern boundary, flowing under Can Ada Rd. The creek enters the site flowing west and curves northwest, exiting the site at the north boundary. The creek will be left open with development, with the exception of one (1) roadway crossing.

There are multiple smaller irrigation ditches located throughout the proposed development site. These ditches currently provide irrigation water to the property and will be abandoned or removed as development encroaches the farmland.



Preliminary Drainage Calculation Report

For

Canyon Crossing Subdivision

Proposed Canyon Crossing Subdivision consists of primarily flat and level terrain, currently being used as farmland. Site earthwork will consist primarily of excavating surface soils and material to subgrade for the proposed roadways and drainage ponds. Cut and fill operations will take place on a limited basis to provide for adequate drainage for building lots. Lots will be graded to provide a central pad for the homes, and provide positive drainage away from each structure.

Drainage runoff from the front half of each lot will be caught in a depression between the curb and sidewalk. Each depression will be 6 feet wide, with 3:1 side slopes, meaning a maximum depth of 12" in the depression. This depression has a cross sectional area of 3.0 ft²/ft. The rational method was used to calculate a peak runoff volume that would occur in a 1-hour storm. A peak volume of 2.14ft²/ft was determined in calculation (see attached). However, this calculation does not account for the depression area to be spanned by driveway. An average 20' driveway was used with an average 70' lot to determine an average storage volume of 150 ft³/lot. Extrapolating the unit calculation across the average 70' lot width, a 100-year, 1-hour storm would result in a runoff volume of 149.8 ft³/lot. As all lot drainage can thus be stored in the depressions, the lot runoff does not need to be accounted for in road drainage calculations. This statement is true along a straight roadway corridor, but is subject to change along corners where the swale length will be reduced on the inside of the curve. This additional volume is not expected to be significant and has not been accounted for in preliminary drainage design – The swale overflow volume will be calculated for each individual drainage area during the final design process for each phase.

Proposed roadways have been delineated into drainage basins based on existing and proposed site grading (See attached Drainage Map). Stormwater from roadways will flow off of the crown of the road into gutters on either side of the road. A weighted runoff coefficient of 0.90 for asphalt/concrete was used for each drainage basin, as they consist solely of asphalt and curb & gutter. The gutters will route the water to catch basins located at the low point of the drainage basin. Stormwater will flow from the catch basins to a single 1000- gallon sand and grease trap. The sand and grease trap will provide pretreatment for the stormwater before it flows into an infiltration basin. Each infiltration

basin will be sized to contain the 100-year storm and provide infiltration to the earth through a sand lens. Three (3) feet of separation are required between the sand lens and groundwater. Each infiltration basin has a preliminary design depth of 2.0 feet unless otherwise noted. The attached calculations show the required design volume and capacity of each drainage pond. The attached preliminary calculations show the pond volume in a 100-year, 1-hour storm with no infiltration. The ponds will be adjusted throughout the final design process to account for infiltration and to insure that each pond has adequate capacity through varying storm durations. The shape and size of each pond will likely change to provide more visually appealing landscapes. The attached calculations do show that each common lot provided for storm drainage has enough space for appropriately sized storm drainage facilities. Stormwater runoff both Laster and Can Ada Rd will flow to catch points and be routed to borrow ditches continuous along the widenings. Each borrow ditch will have a continuous sand lens for infiltration.

Methodology & Assumptions

1. Calculations for Sizing Storm Water Facilities
 - a. Rational Method used for peak flows: $Q_{\text{peak}} = CIA$
 - i. Q_{peak} = Peak flow for 100-year design storm at storm duration equal to time of concentration (10 minutes in preliminary design)
 1. C = Weighted runoff coefficient based on land use
 - a. C for single family residential use = .45
 - b. C for asphalt/concrete = .90
 2. I = Rainfall intensity of design storm in inches/hour – Intensity-Duration-Frequency table (Idaho Zone A IDF Curve)
 3. A = Area of drainage basin
 - ii. Runoff Volume Calculation
 1. $V=CIAT$
 - a. C = Weighted runoff coefficient
 - b. I = Rainfall Intensity
 - c. A = Drainage Area
 - d. T = Duration of storm of 1 hour
 - iii. Sand and Grease Trap Calculations
 1. Size 50-year peak flow w/ larger flow rates bypassed if necessary or desirable
 2. Vault size: 1000 or 1500 Gallon
 3. Baffle Spacing: 20 or 24 inches
 4. Throat Width: 48 inches or 60 inches
 5. Velocity must be less than 0.5 ft/sec

Attachments:

PRELIMINARY DRAINAGE CALCULATIONS – Appendix 1

DRAINAGE AREA MAP – Appendix 2

-END OF REPORT-

Canyon Crossing Preliminary Drainage Calculations

Idaho Zone A IDF Curve

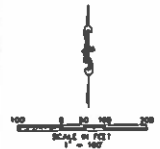
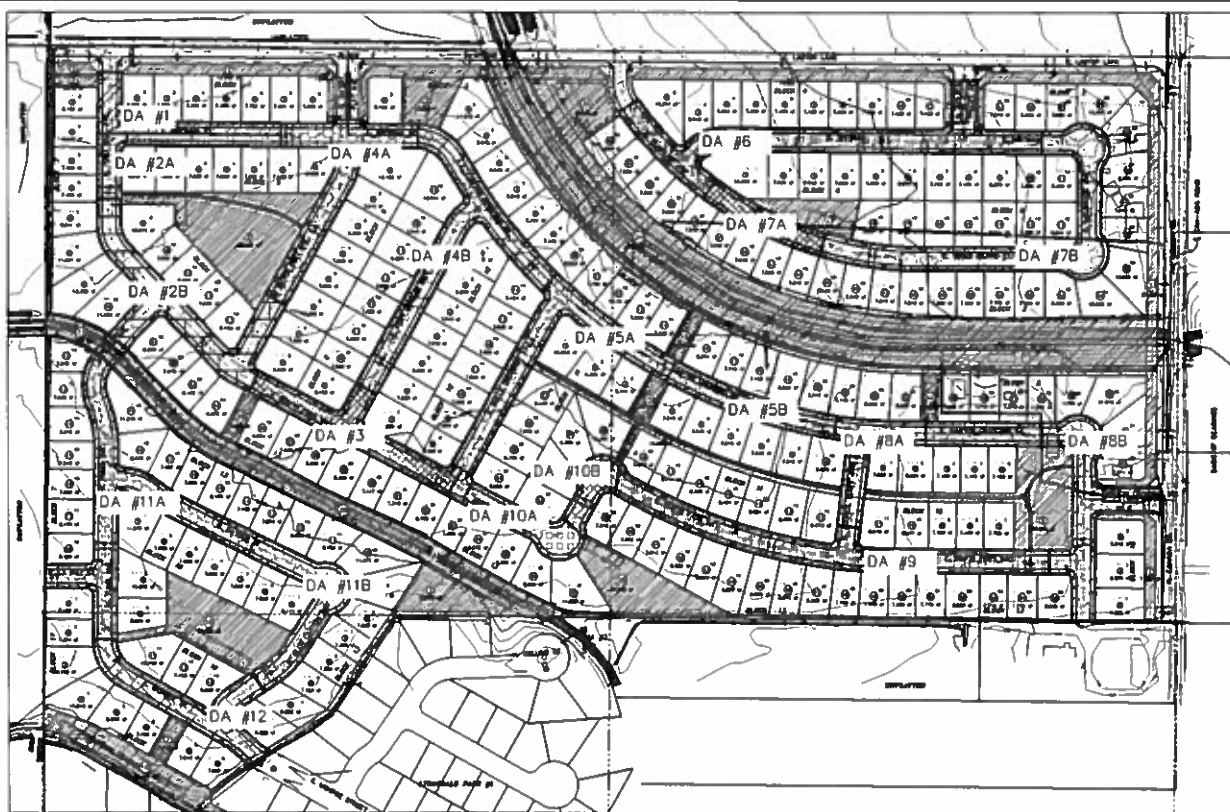
Tc=10 min I: 2.55 50-Year
 Tc=60 min I: 1.00 100-Year

<u>Drainage Area</u>	<u>Area (sf)</u>	<u>Area (acres)</u>	<u>Weighted Runoff Coefficient</u>	<u>50-Year Peak Flow (SG Trap Sizing) (cfs)</u>	<u>100-Year Required Storage Volume (1-Hour Storm) (cu ft)</u>	<u>Drains To:</u>	<u>Required Pond Storage Volume (w/ 15% for sedimentation) (cu ft)</u>	<u>Pond Capacity (Assume 2' depth) (cu ft)</u>
1	18519	0.43	0.90	0.98	1377	Pond 1	1584	4409
2A	19111	0.44	0.90	1.01	1421	Pond 2	5837	5971
2B	49129	1.13	0.90	2.59	3654			
3	34588	0.79	0.90	1.82	2573	Pond 3	2959	4162
4A	41187	0.95	0.90	2.17	3063	Pond 4	8140	11928
4B	53976	1.24	0.90	2.84	4015			
5A	44805	1.03	0.90	2.36	3333	Pond 5	5782	*6987
5B	22796	0.52	0.90	1.20	1696			
6	70255	1.61	0.90	3.70	5226	Pond 6	6009	22350
7A	16606	0.38	0.90	0.87	1235	Pond 7	6677	7265
7B	61457	1.41	0.90	3.24	4571			
8A	23080	0.53	0.90	1.22	1717	Pond 8	7148	*7688
8B	60481	1.39	0.90	3.19	4499			
9	62049	1.42	0.90	3.27	4615	Pond 9	5307	5486
10A	21279	0.49	0.90	1.12	1583	Pond 10	2904	4495
10B	12668	0.29	0.90	0.67	942			
11A	65314	1.50	0.90	3.44	4858	Pond 11	8206	9397
11B	30621	0.70	0.90	1.61	2278			
12	33404	0.77	0.90	1.76	2485	Pond 12	2857	6438

*3 ft water depth

Standard Yard Depression

-Unit Calculation-				
Front 1/2 of Lot	57.5' Long			
	1' Wide			
Weighted Runoff Coefficient	0.45		20' wide standard driveways	
Unit Runoff Volume =	2.14 sq ft		Standard 70' Lot Runoff Volume=	149.8 cu ft
Swale Area=	3.00 sq ft		Standard 70' Lot Depression Capacity subtract 20' driveway width:	150.0 cu ft



DATE	
BY	
CHECKED	
APPROVED	
Barley Engineering, Inc.	
Civil, Electrical, Plumbing, CADD	
1000 S. W. 10th St., Suite 100, Ft. Lauderdale, FL 33304	
TEL: (954) 341-2222 FAX: (954) 341-2223	
PRELIMINARY PLAN	
CANYON CROSSING	
SHADOW MOUNTAIN HOMES	

RECEIPT (TRC-1421523-18-07-2017)



BILLING CONTACT

IRON SHADOW REAL ESTATE
W 1548 Cayuse Cr, Ste 100
Meridian, ID

REFERENCE NUMBER	FEE NAME	TRANSACTION TYPE	PAYMENT METHOD	AMOUNT PAID
SPP-00010-2017	Preliminary Plat - Application Fee	Fee Payment	Check #1010	\$244.00
	Preliminary Plat - Fire Department	Fee Payment	Check #1010	\$160.00
	Preliminary Plat - Fire Department Per Lot Fee	Fee Payment	Check #1010	\$285.00
	Preliminary Plat - Lot Fee	Fee Payment	Check #1010	\$1,704.30
			SUB TOTAL	\$2,393.30
			TOTAL	\$2,393.30

CITY OF NAMPA SUBDIVISION SUBMITTALS

PRELIMINARY PLAT:

1. 20 COPIES - PRELIMINARY PLAT
2. CD - ELECTRONIC COPY (AUTOCAD FORMAT) OF PRELIMINARY PLAT
3. 3 COPIES - LANDSCAPING PLAN (INCORPORATING FENCE DETAIL: 1) LOCATION; 2) MATERIAL & TYPE OF FENCE; 3) HEIGHT OF FENCE.)
4. 3 COPIES - FULL GEOTECHNICAL/SOILS REPORTS - TO BE SUBMITTED WITH PRELIMINARY PLAT: WITH FOUNDATION RECOMMENDATION
5. 1 COPIES - STORM WATER REPORTS
6. 2 COPIES - TRAFFIC IMPACT STUDY *N/A*
7. 2 COPIES - 11" X 17" COPY OF PRELIMINARY PLAT
8. 1 COPY - 8 1/2" X 11" COPY OF PRELIMINARY PLAT
9. COPY OF WARRANTY DEED, PROOF OF OPTION, OR EARNEST MONEY AGREEMENT
- 10. LEGAL DESCRIPTION OF PLAT AREA.
- 11. FEES:
 - a. PLANNING DEPARTMENT: Preliminary Plat submittal fees - \$244.00 plus \$5.98 per lot
 - b. PLANNING DEPARTMENT: Application fee for Planned Unit Development - If applicable - \$790.00
 - c. SEWER MODEL PRELIMINARY PLAT FEE - \$250.00 - As of 1/15/05
 - d. WATER MODEL PRELIMINARY PLAT FEE - \$250.00 - As of 1/15/05
 - e. FIRE DEPARTMENT: Preliminary Plat submittal fees - \$160.00 plus \$1.00 per lot (payable at Planning Department).
 - f. FIRE DEPARTMENT: Application fee for Planned Unit Development - if applicable - \$250.00 plus \$1.00 per lot.
 - g. SUBDIVISION PLAT EXTENSION: Preliminary plat - if applicable - \$53

ROUTING: TO PLANNING AND ZONING COMMISSION FOR APPROVAL AT PUBLIC HEARING. ALL INFORMATION SHALL BE SUBMITTED AT LEAST 30 DAYS PRIOR TO PUBLIC HEARING. WILL BE SCHEDULED ON P&Z AGENDA DEPENDENT ON DEADLINE DATE FOR PUBLIC HEARING AND WHETHER AGENDA SPACE STILL AVAILABLE.

REVISED PRELIMINARY PLAT SUBMITTAL

1. FOLLOWING APPROVAL OF PRELIMINARY PLAT BY THE PLANNING COMMISSION (OR CITY COUNCIL IF ACTING AS AN APPEAL BOARD) SEVEN (7) COPIES OF THE REVISED PRELIMINARY PLAT SHALL BE SUBMITTED CONTAINING ALL REQUIRED MODIFICATIONS, REVISIONS AND CORRECTIONS. THE FINAL PLAT MAY THEN BE SUBMITTED AFTER APPROVAL OF THE REVISED PRELIMINARY PLAT.

ANNEXATION OF THE PROPERTY SHALL BE FINALIZED BEFORE SUBMITTAL OF A FINAL PLAT.

NAMPA PLANNING AND ZONING DEPT.
RECEIPT

20357

DATE JULY 18, 2017

RECEIVED FROM IRON SHADOW REAL ESTATE

ADDRESS 1548 W) CAYUSE CREEK DR.

DOLLARS \$ 2393.30

JOB ADDRESS CAN. ADA RD

SUBDIVISION CANYON CREEK

WATER
METER _____
CAPACITY _____
SERVICE LINE _____
DISTRIBUTION _____
MAINLINE _____

SEWER
CAPACITY _____
TRUNKLINE _____
MAINLINE _____
TV SEWER _____
SEWER MODEL N/A
WATER N/A

PLATS & ZONING
PRELIMINARY
FINAL _____
SHORT _____
CONDOS _____

APPLICATION
P.P
NEED

CASH

CHECK # 1010

SIGNATURE Sgt. Marshall

IRON SHADOW REAL ESTATE LLC

1010

ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH MICROPRINTED BORDER

IRON SHADOW REAL ESTATE LLC

1548 W. CAYUSE CREEK DRIVE
MERIDIAN, ID 83646
(208) 895-0500

WASHINGTON FEDERAL

19-7098/3250

1010

PAY

TWO THOUSAND THREE HUNDRED NINETY THREE } 312
15

TO THE
ORDER
OF

CITY OF NAMPA

DATE
7.17.17

[Signature]

AMOUNT
2393.30

THIS DOCUMENT CONTAINS HEAT SENSITIVE INK WHICH WILL DISAPPEAR WITH HEAT.

Secure Features Included FD Includes on next

SECURE SAFEGUARD SECURE