Willard City Corporation
NOV 19 2015
Received

GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

FINAL PLAT

SCALE: 1"= 120' (11x17 PLAN SET)
SCALE: 1"= 60' (22x34 PLAN SET)

GENERAL NOTES

- BOUNDARY LINE
- LOT LINE
- CL
- SETBACK
- EASEMENT
- ADDRESS BLOCK
- FOUND REBAR (AS NOTED)
- CL MONUMENT
- FOUND CL MONUMENT
- IRRIGATION EASEMENT (SEE LEGAL DESCRIPTION SHEET 2)

ALLIANCE CONSULTING ENGINEERS
750 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

OWNER:
Granite Ridge Development, Co
3718 north wolfcreek drive
Eden, Utah 84310

No.	REVISIONS/ SUBMISSIONS	DATE

REVIEWED : DRAWN :
CAD FILE : PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
FINAL PLAT

DATE : OCT,2015
DRAWING No. 1 OF 2

GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

FINAL PLAT

LEGAL DESCRIPTON

South Boundary

Part of the Southeast Quarter of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian described as follows:

Commencing at the Southeast Corner of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian monumented with a brass cap; thence N 00°45'40" W 760.63 feet along the east line of the the Southeast Quarter of said Section 26; thence West 1581.40 feet to a point on the south right of way line of Saddleback Road and the POINT OF BEGINNING and running

thence S 16°17'23" W 112.91 feet;
thence N 89°57'36" W 7.57 feet;
thence S 00°12'18" W 516.11 feet;
thence N 88°03'13" W 24.40 feet;
thence S 00°19'46" E 137.99 feet to the south line of the Southeast Quarter of said Section 26;
thence S 89°57'45" W 306.52 feet along said south line;
thence N 02°13'47" E 624.41 feet to a HAI rebar;
thence N 85°16'44" W 8.59 feet to a HAI rebar;
thence N 01°58'56" E 447.05 feet to a HAI rebar;
thence N 88°20'12" W 435.80 feet to the east right of way line of US Highway 89;
thence along said east right of way line 60.30 feet along a curve to the left with a radius of 3879.80 feet (center bears S86°23'54"W), a central angle of 00°53'26" and a chord that bears N04°02'49"W 60.30 feet
thence S 88°20'12" E 208.43 feet;
thence N 19°38'04" W 144.46 feet to the south right of way line of 655 South Street (Saddleback Road);
thence along said south right of way line the next three courses:
1) thence 256.93 feet along a curve to the right with a radius of 270.00 feet (center bears S02°13'56"E), a central angle of 54°31'16" and a chord that bears S84°58'17"E 247.34 feet
2) thence S 37°42'39" E 369.66 feet;
3) thence 208.85 feet along a curve to the left with a radius of 330.00 feet, a central angle of 35°15'39" and a chord that bears S55°50'29"E 205.38 feet to the point of beginning, containing 7.72 acres.

North Boundary

Part of the Southeast Quarter of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian described as follows:

Commencing at the Southeast Corner of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian monumented with a brass cap; thence N 00°45'40" W 1,310.58 feet along the east line of the the Southeast Quarter of said Section 26; thence West 2063.46 feet to a point on the north right of way line of Saddleback Road and the POINT OF BEGINNING and running

thence along said north right of way line the next two courses:
1) thence 161.98 feet along a curve to the left with a radius of 330.00 feet (center bears S 21°22'46" W), a central angle of 28°07'25" and a chord that bears N 82°40'57" W 160.36 feet
2) thence S 83°15'21" W 149.77 feet to the east right of way line of US Highway 89;
thence along the east right of way line of US Highway 89 278.02 feet along a curve to the left with a radius of 3879.80 feet (center bears S82°58'45"W), a central angle of 04°06'21" and a chord that bears N09°04'25"W 277.96 feet;
thence N 77°44'23" E 251.76 feet

thence along the boundary of Willard Peak Ranches No. 1 Appaloosa Rance the next two courses:
1) thence S 27°13'36" E 195.58 feet;
2) thence S 05°45'13" E 157.82 feet to the point of beginning, containing 2.00 acres.

IRRIGATION EASEMENT

An irrigation easement located in the Southeast Quarter of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian described as follows:

Commencing at the Southeast Corner of Section 26, Township 8 North, Range 2 West, Salt Lake Baseline and Meridian monumented with a brass cap; thence N 00°45'40" W 372.72 feet along the east line of the the Southeast Quarter of said Section 26; thence West 1626.79 feet to the POINT OF BEGINNING and running

thence S 00°12'18" W 105.30 feet along the east boundary of Granite Ridge Subdivision, Phase 1; thence N 89°54'16" W 120.08 feet; thence S 34°54'18" W 148.75 feet; thence S 41°25'06" W 82.11 feet to a point on the west line of Lot 17, Granite Ridge Subdivision, Phase 1; thence S 39°47'35" W 111.04 feet along said west line to the Southwest Corner of Granit Ridge Subdivision, Phase 1; thence N 02°13'47" E 44.91 feet along the west boundary of Granite Ridge Subdivision, Phase 1; thence N 69°21'43" E 32.51 feet; thence N 41°25'09" E 129.00 feet; thence N 34°54'18" E 159.50 feet; thence S 89°54'16" E 76.74 feet; thence N 45°05'44" E 49.76 feet; thence N 00°12'18" E 55.11 feet; thence S 89°54'16" E 10.00 feet to the point of beginning.

GENERAL NOTES

1. 27 RESIDENTIAL LOTS
2. TYPICAL EASEMENTS AS FOLLOWS UNLESS OTHERWISE NOTED:
   FRONT: 10'
   REAR: 10'
   SIDE: 5'
3. 5/8" REBAR TO BE SET AT ALL REAR PROPERY CORNERS. CURB PINS TO BE SET AT LOT LINE PROJECTIONS.

SURVEYOR'S CERTIFICATE

I, Brian G. Lyon, a Registered Land Surveyor, hold Certificate No. 275617, as prescribed by the laws of the State of Utah, and do hereby certify that by authority of the owners, I have made a survey of the tract of land shown on this plat, which is accurately described therewith, and have subdivided said tract of land into lots to be hereafter known as GRANITE RIDGE SUBDIVISION, PHASE 1, and that the same has been surveyed and staked on the ground as shown on this plat.

Signed on this _____day of _____ 20____.

PROFESSIONAL LAND SURVEYOR
275617
BRIAN G. LYON
11/16/15
STATE OF UTAH

OWNERS DEDICATION

Know all by these presents that we the undersigned owners of the above-described tract of land, having caused the same to be subdivided into lots and streets to hereafter be known as GRANITE RIDGE SUBDIVISION PHASE 1, do hereby dedicate for perpetual use of the public all parcels of land shown on this plat as intended for public use, and do warrant, defend and save the municipality harmless against any easements or other encumbrances on the dedicated streets which will interfere with the municipality's use, operation and maintenance of the streets and do further dedicate the easements as shown, with the same warranty as given for other dedicated property.

In witness whereof, we have hereunto set our hands this _____ day of _____, 2015.

LIMITED LIABILITY ACKNOWLEDGEMENT

STATE OF UTAH }
COUNTY OF BOX ELDER }

On the _____ day of _____ A.D., 20____,personally appeared before me, _____ who being by me duly sworn did say, for him/herself, that he/she is the Manager/Member of Granite Ridge Development Company, a Utah Limited Liability Company and that the within and foregoing instrument was signed on behalf of said Corporation by authority of its Articles of Organization and each duly acknowledged to me that said Limited Liability Company executed the same.
My commission expires:_____

Notary Public _____

Residing at:

SURVEYOR'S NOTES/NARRATIVE

1. THE PURPOSE OF THIS SURVEY WAS TO DEVELOP A RESIDENTIAL SUBDIVISION ON THE SUBJECT PROPERTY. THE SURVEY WAS REQUESTED BY ERIC HOUSEHOLDER.
2. THE BASIS OF BEARING IS N 00°45'40" W BETWEEN THE SOUTHEAST CORNER OF SECTION 26 MONUMENTED BRASS CAP AND THE EAST QUARTER CORNER OF SECTION 26 MONUMENTED WITH A BRASS CAP. THE CENTERLINE MONUMENTS AND BASIS OF SAID WILLARD PEAK RANCHES NO. 1 APPALOOSA RANCH WAS ALSO USED AS BASIS OF BEARING.
3. CENTERLINE MONUMENTS AND PROPERTY CORNERS SET FOR THE WILLARD PEAK RANCHES NO. 1 APPALOOSA RANCH WERE USED TO ESTABLISHED SADDLEBACK ROAD RIGHT OF WAY AND THE EAST LINE OF THE NORTH PARCEL. EXISTING REBAR WERE USED TO ESTABLISH WEST BOUNDARY OF THE SOUTH PARCEL. THE SOUTH LINE OF THE SOUTH PARCEL WAS ESTABLISHED ALONG THE SOUTHEAST QUARTER OF SECTION 26 USING A BRASS CAP AT THE SOUTHEAST CORNER AND A WITNESS MONUMENT 5' NORTH OF THE SOUTH QUARTER CORNER. STATE ROAD US 89 WAS ESTABLISHED USING FOUND RIGHT OF WAY MONUMENTS AT STATIONS 378+17.2, 388+69.68 AND 420+16.03.

CITY COUNCIL APPROVAL AND ACCEPTANCE

Presented to the Willard City Mayor this _____ day of _____ A.D., 20____, at which time this subdivision was approved and accepted.

Mayor *Date*

COUNTY SURVEYOR'S CERTIFICATE

I certify that I have examined this plat and find it to be correct and in accordance with information on file in this office and further it meets the minimum standards for plats required by county ordinance, and state law.

Date *County Surveyor*

APPROVAL AS TO FORM

Approved as to form this _____ day of _____ A.D., 20____.

City Attorney

ENGINEER'S CERTIFICATE

I certify that I have examined this plat and find it to be correct and in accordance with information on file in this office and the city ordinance.

Date *City Engineer*

UTILITY COMPANY APPROVALS

The utility easements shown on this plat are approved

Rocky Mtn Power

Questar Gas

Comcast Cable

CenturyLink Communications

PLANNING COMMISSION CHAIRMAN APPROVAL AND ACCEPTANCE

Presented to the Willard City Planning Commission chairman this _____ day of _____ A.D., 20____, at which time this subdivision was recommended to the City Council for approval.

Planning Commission Chairman *Date*

COUNTY RECORDER'S NO.

State of Utah, County of Box Elder, recorded and filed at the request of _____
Date _____ Time _____ Fee _____
Entry

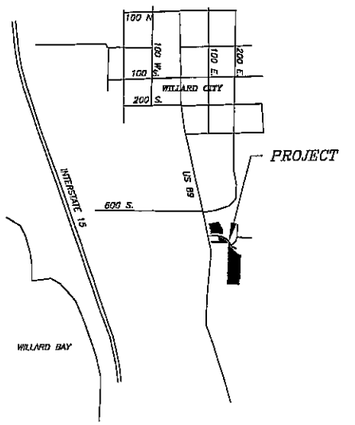
Index
Filed in: File of plats *County Recorder*

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	161.98	330.00	28°07'25"	N82°40'57"W	160.36
C2	278.02	3879.80	4°06'21"	N09°04'25"W	277.96
C3	256.93	270.00	54°31'16"	N84°58'17"W	247.34
C4	208.85	330.00	36°15'39"	S55°50'29"E	205.38
C5	60.30	3879.80	0°53'26"	N04°02'49"W	60.30
C6	54.84	330.00	9°31'20"	S88°01'01"W	54.78
C7	16.00	3879.80	0°14'11"	N07°08'20"W	16.00
C8	64.95	58.50	63°36'59"	S20°01'57"E	61.67
C9	14.31	15.00	54°40'26"	N24°30'14"W	13.78
C10	15.70	10.00	89°56'40"	N47°48'19"E	14.14
C11	114.58	3879.80	1°41'32"	N08°09'11"W	114.58
C12	92.09	3879.80	1°21'36"	N09°37'45"W	92.09
C13	51.45	58.50	50°23'28"	S36°58'16"W	49.81
C14	55.34	3879.80	0°49'02"	N10°43'04"W	55.34
C15	53.17	58.50	52°04'46"	S88°12'23"W	51.36
C16	58.47	58.50	57°16'05"	N37°07'12"W	56.07
C17	107.14	330.00	18°36'04"	N77°55'17"W	106.67
C18	37.07	15.00	141°36'08"	S16°25'17"E	28.33
C19	84.19	58.50	82°51'56"	N22°56'49"E	81.02
C20	19.26	150.00	7°21'19"	S00°50'41"E	19.24
C21	7.10	330.00	1°13'56"	S38°19'37"E	7.10
C22	12.21	12.50	55°57'24"	N10°57'53"W	11.73
C23	5.88	12.50	26°56'43"	N30°28'38"E	5.82
C24	77.53	155.00	28°39'27"	S29°38'16"W	76.72
C25	40.71	155.00	15°02'56"	S07°47'05"W	40.59
C26	41.06	330.00	7°07'45"	S42°30'28"E	41.03
C27	41.05	330.00	7°07'37"	S49°38'09"E	41.02
C28	119.64	330.00	20°46'21"	S63°35'08"E	118.99
C29	56.32	95.00	33°59'13"	S26°58'53"W	55.50
C30	18.07	12.50	82°50'03"	S85°23'01"W	16.54
C31	16.14	95.00	9°44'09"	S05°07'42"W	16.12
C32	19.70	12.50	90°18'59"	S44°53'44"E	17.73
C33	25.53	30.00	48°45'01"	N24°38'09"E	24.78
C34	30.53	61.00	28°40'34"	S34°40'22"W	30.21
C35	55.66	61.00	52°17'02"	S05°48'26"E	53.75
C36	65.09	61.00	61°08'07"	S62°31'00"E	62.04
C37	46.23	61.00	43°25'18"	N65°12'17"E	45.13
C38	24.32	30.00	46°27'09"	S66°43'13"W	23.66

LINE TABLE

LINE	LENGTH	BEARING
L1	81.97	N83°16'21"E
L2	124.21	S87°13'21"E
L3	195.58	S27°19'36"E
L4	149.77	S83°15'21"W
L5	28.41	S87°13'21"E
L6	2.87	S02°49'59"W
L7	36.72	S87°13'21"E
L8	44.49	S87°13'21"E
L11	516.11	S00°12'18"W



VICINITY MAP:

SEAL

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

OWNER:
Granite Ridge Development, Co
3718 north wolfcreek drive
Eden, Utah 84310

No.	REVISIONS/ SUBMISSIONS	DATE

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GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN WILLARD, UTAH
FINAL PLAT

DATE : NOV,2015
DRAWING No. 2 OF 2

GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

INDEX SHEET

VICINITY MAP:

SHEET INDEX

SHEET NO.	SHEET DESCRIPTION
1	INDEX SHEET
2	EXIST/ DEMO PLAN
3	SADDLEBACK ROAD
4	CUL-DE-SAC PLAN
5	210 EAST /820 SOUTH
6	GRADING/DRAINAGE PLAN
7	STORM DETAILS
8	IRRIGATION RE-ROUTE
9	SWPPP
10	SWPPP SPECIFICATIONS

OWNER/DEVELOPER
ERIC HOUSEHOLDER

CIVIL ENGINEER
ALLIANCE CONSULTING ENGINEERS, INC.
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
435-755-5121

GENERAL NOTES (APPLICABLE TO ALL CIVIL SHEETS):

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, APWA STANDARDS AND SPECIFICATIONS, WILLARD CITY PUBLIC WORKS CONSTRUCTION STANDARDS, STATE OF UTAH AND ANY OTHER APPLICABLE STANDARDS ISSUED BY THE CONTROLLING AGENCY.

2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE CONSTRUCTION. ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER.

3. CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION.

4. CONTRACTOR SHALL MAINTAIN ALL ADJACENT PROPERTY (PUBLIC & PRIVATE) FROM ALL CONSTRUCTION DEBRIS.

5. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITION FROM ALL NEW CONSTRUCTION TO EXISTING CONDITIONS.

6. CONTRACTOR SHALL PROVIDE ALL NECESSARY AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY LOCAL, STATE, AND FEDERAL CODES AND ORDINANCES.

7. CONTRACTOR SHALL REPLACE SURVEY MONUMENTS DAMAGED DURING CONSTRUCTION. SURVEY MONUMENTS TO BE REPLACED BY A REGISTERED, LICENSED LAND SURVEYOR.

8. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, INCLUDING FIBER OPTIC. ANY DAMAGES TO EXISTING UTILITIES WILL BE REPAIRED AT CONTRACTORS EXPENSE.

9. DIMENSIONS SHOWN ARE TO THE CENTER OF THE PIPELINE UNLESS OTHERWISE NOTED.

10. DISTANCES SHOWN ALONG PIPELINES ARE HORIZONTAL DISTANCES AND NOT ACTUAL PIPE LENGTHS. MORE PIPE MAY BE REQUIRED TO COMPLETE CONSTRUCTION THAN IS DIMENSIONED IN THE PLANS.

11. THRUST BLOCKS SHALL BE PLACED ON WATERLINES AT ALL DIRECTION CHANGES, FITTINGS, BENDS, ELBOWS, FIRE HYDRANTS AND GATES VALVES AS SHOWN IN THE PROJECT PLANS.

12. CONTRACTOR IS REQUIRED TO HAVE A SET OF PLANS ON THE SITE AT ALL TIMES. ANY WORK COMPLETED WITHOUT A SET PRESENT IS DONE SO AT THE CONTRACTORS RISK AND EXPENSE IF ERRORS OCCUR.

13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATER NECESSARY FOR DUST ABATEMENT, COMPACTION, ETC.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SOURCES FOR GRANULAR MATERIALS, WATER, WASTE SITES, AND ANY OTHER MATERIALS SOURCES AS REQUIRED FOR PROJECT COMPLETION.

15. ANY WORK DONE WITHIN A PUBLIC RIGHT-OF-WAY SHALL BE COORDINATED WITH THE APPROPRIATE TRANSPORTATION AGENCY AND SHALL MEET THE REQUIREMENTS OF THAT AGENCY AND THE REQUIREMENTS OF ANY RIGHT-OF-WAY OR SPECIAL USE PERMITS.

16. THE CONTRACTOR SHALL COORDINATE ALL LIVE TAPS AND ANY OTHER WORK OR MANIPULATION OF THE EXISTING WATER SYSTEM WITH THE CITY.

17. ON SLOPING AREAS THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MITIGATE ANY POSSIBLE EROSION PROBLEMS IN THE TRENCHES DUE TO STORM WATER THAT MIGHT OCCUR DURING OR AFTER CONSTRUCTION AS DIRECTED OR APPROVED BY ENGINEER.

18. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS DETAILED IN THE PROJECT PLANS UNTIL ALL PERMANENT AND POST CONSTRUCTION BMP'S AREA INSTALLED AND ACCEPTED.

19. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONS NECESSARY TO INSURE THAT NO STORM WATER/SEDIMENT AND/OR CONSTRUCTION DEBRIS ARE RELEASED FROM THE SITE. ANY RELEASES SHALL BE CLEANED AND MITIGATED AT THE CONTRACTOR'S EXPENSE.

20. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACCESS AND RELATED TRAFFIC CONTROL WITH THE COUNTY, CITY, AND STATE ROADWAY DEPARTMENTS. THE ENGINEER SHALL REVIEW ALL TRAFFIC CONTROL PLANS.

21. ALL GATE VALVES SHALL BE LOCATED NEAR THE EXTENSION OF LOT PROPERTY LINES OUTSIDE THE INTERSECTION.

22. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, HARDWARE, LABOR, ETC. TO CONSTRUCT VERTICAL AND HORIZONTAL BENDS IN PIPE AS NEEDED TO MEET THE REQUIRED GRADES, ALIGNMENTS AND COVER REQUIREMENTS.

23. THE CONTRACTOR SHALL COORDINATE WITH WILLARD CITY FOR ALL UTILITY INSPECTIONS PRIOR TO BACKFILLING.

24. ALL WATER SYSTEM COMPONENTS SHALL BE INSTALLED, PRESSURE TESTED, AND CHLORINATED PRIOR TO COMPLETING ANY ROADWAY CONSTRUCTION.

25. ALL WATER LINE SERVICES ARE TO BE STUBBED INTO EACH LOT 15' BEYOND THE PROPERTY LINE AT WHICH POINT THE BARREL, SETTER AND OTHER APPURTENANCES ARE TO BE INSTALLED PER CITY STANDARDS.

26. WATER MAIN TO BE C-900 DR14. INSTALL PER WILLARD CITY STANDARDS AND SPECIFICATIONS.

REGISTERED PROFESSIONAL ENGINEER
HOUSEHOLDER
ADAM D. MACKELPRANG
11-17-2015
STATE OF UTAH
SEAL

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

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TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
INDEX SHEET

DATE : AUG,2015
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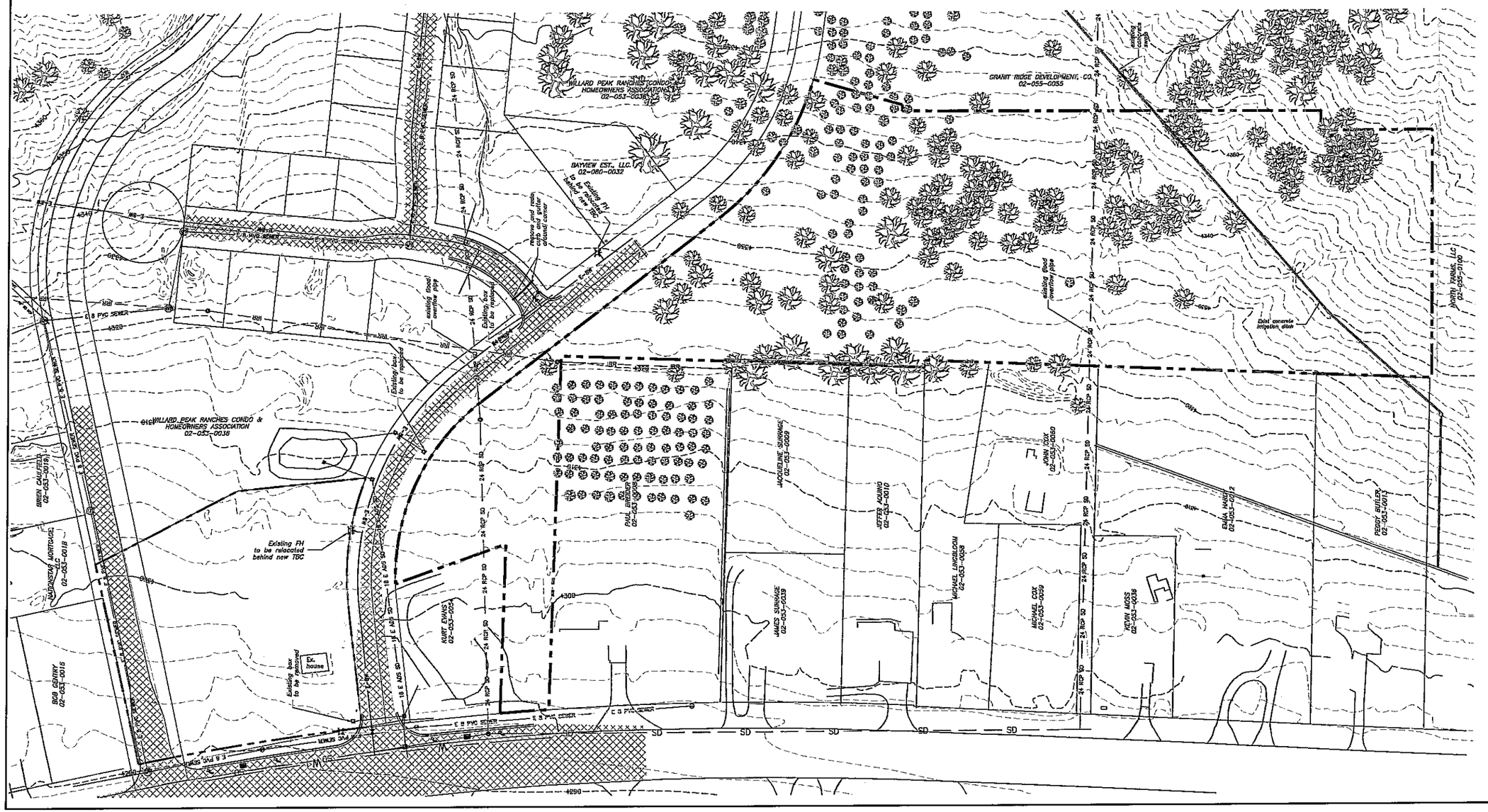
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

EXIST/ DEMO PLAN

0 60 120
SCALE: 1"=120' (11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

Legend:

- BOUNDARY LINE
- LOT LINE
- EXISTING FENCE
- E 8 PVC SEWER — EXISTING SANITARY SEWER
- E-BW — EXISTING WATERLINE
- 24 RCP SD — EXISTING STORM
- EXISTING ASHPALT
- MAJOR CONTOUR EXISTING (10')
- MINOR CONTOUR EXISTING (2')



SEAL: REGISTERED PROFESSIONAL ENGINEER
NO. 368590
ATHAN W. SIDDOWAY
MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

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EXIST / DEMO PLAN

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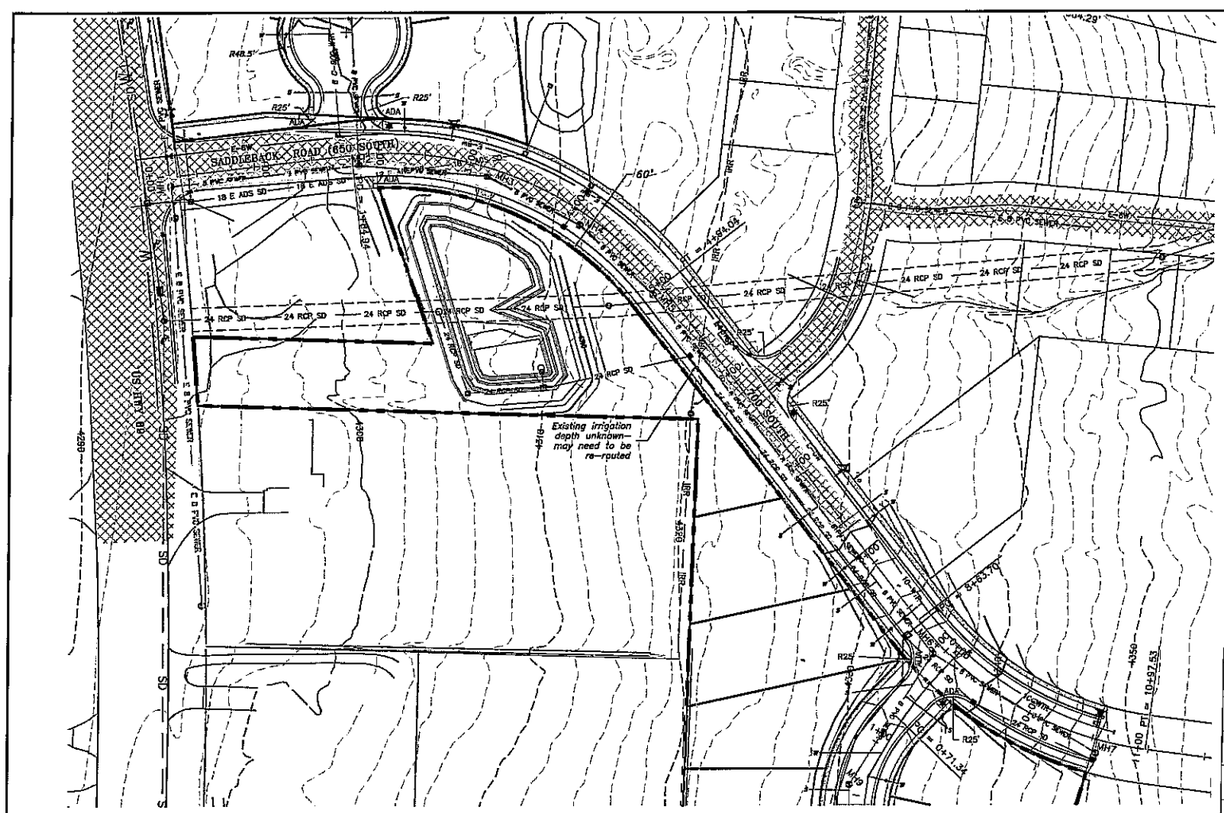
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

SADDLEBACK ROAD

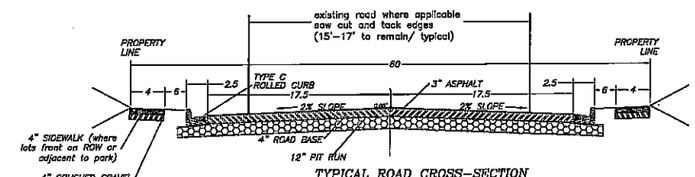


0 60 120
SCALE: 1"=120' (11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

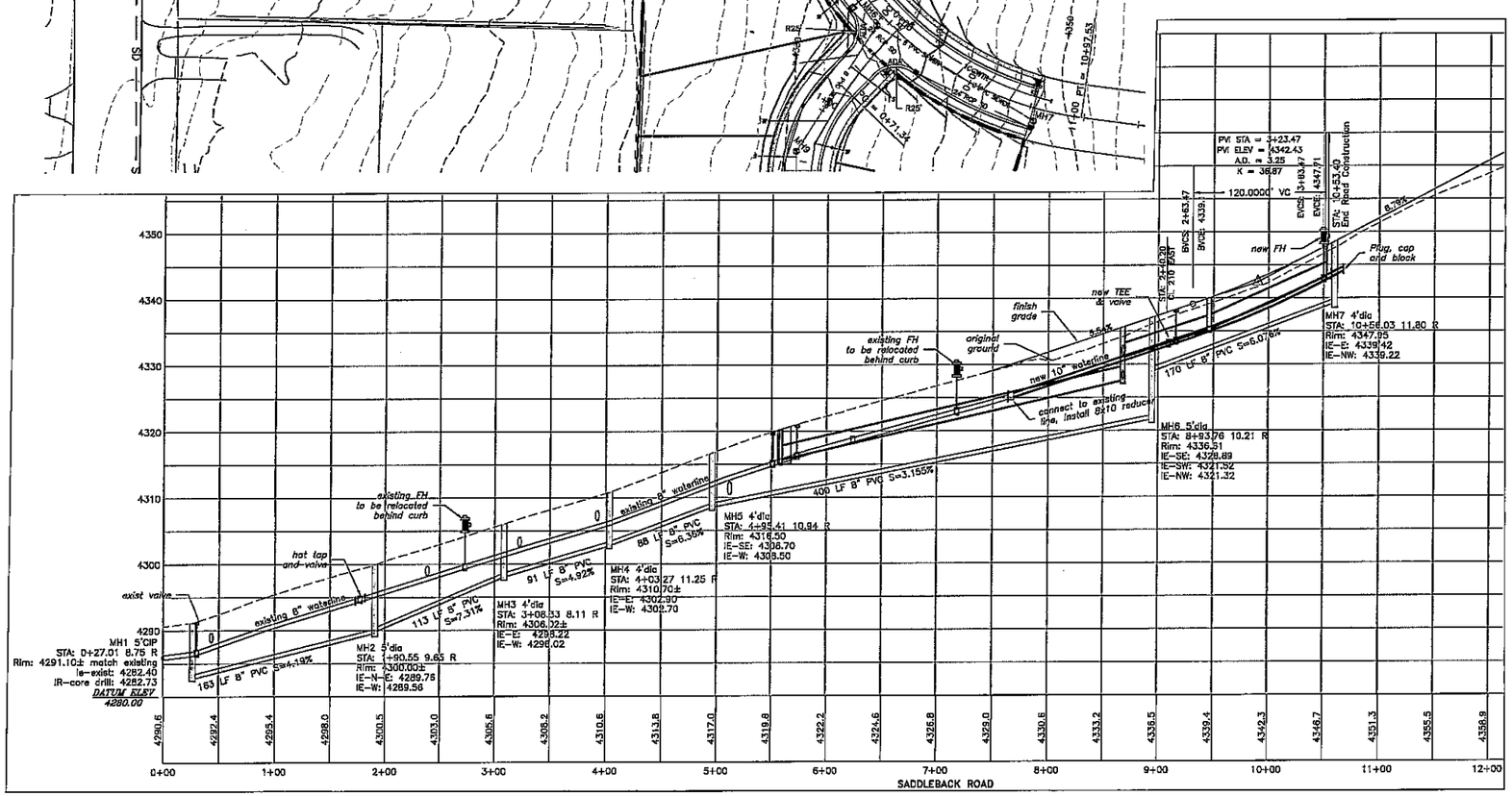
Legend:

- BOUNDARY LINE
- LOT LINE
- EXISTING FENCE
- EXISTING SANITARY SEWER
- EXISTING WATERLINE
- EXISTING STORM
- PROPOSED PVC C-900 WATER/ VALVE/FIRE HYDRANT
- PROPOSED CATCH BASIN AND LINES
- PROPOSED SEWER
- EXISTING ASHPALT
- MAJOR CONTOUR PROPOSED (10')
- MINOR CONTOUR PROPOSED (2')
- PROPOSED LIGHT PER CITY SPEC

Notes
1. Trees/ landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-½" caliber honey locust).
2. Detention pond area should be reseeded with natural grasses and other vegetation after construction as directed by the Planning Commission.



TYPICAL ROAD CROSS-SECTION
SADDLEBACK ROAD
Road to be seal coated after one year



REGISTERED PROFESSIONAL ENGINEER
NO. 368590
ADAM MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

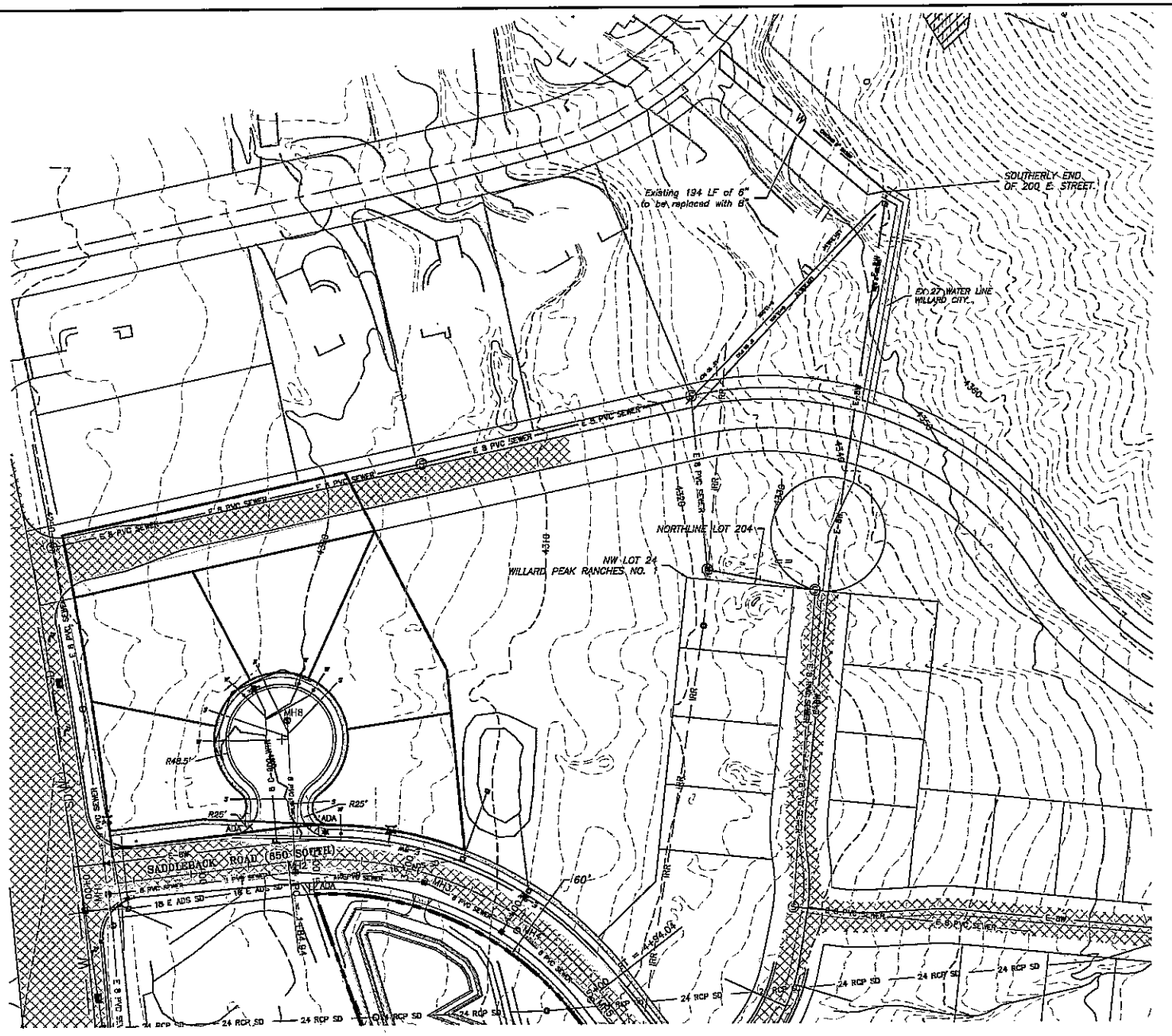
No.	REVISIONS/ SUBMISSIONS	DATE

REVIEWED :
CAD FILE :
DRAWN :
PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

SADDLEBACK ROAD

DATE : AUG,2015
DRAWING NO. 3



GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

CUL-DE-SAC PLAN

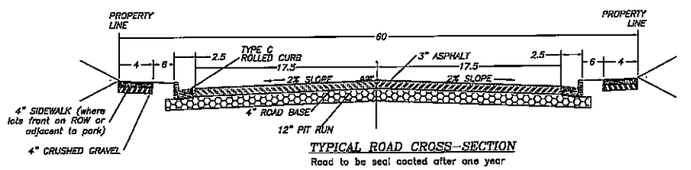
0 50 120

SCALE: 1"=120'(11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

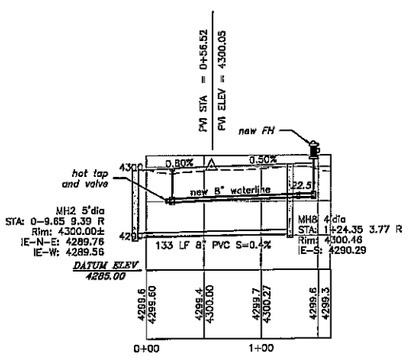
Legend:

- BOUNDARY LINE
- LOT LINE
- EXISTING FENCE
- 6 8 PVC SEWER — EXISTING SANITARY SEWER
- 6-8W — EXISTING WATERLINE
- 24 RCP SD — EXISTING STORM
- 10-WTR — PROPOSED WATER/VALVE/FIRE HYDRANT
- 24 RCP SD — PROPOSED CATCH BASIN AND LINES
- 8 PVC SEWER — PROPOSED SEWER
- EXISTING ASHPALT
- MAJOR CONTOUR PROPOSED (10')
- MINOR CONTOUR PROPOSED (2')
- PROPOSED LIGHT PER CITY SPEC

Notes
1. Trees/ landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-½" caliber honey locust).
2. Detention pond area should be reseeded with natural grasses and other vegetation after construction as directed by the Planning Commission.



TYPICAL ROAD CROSS-SECTION
Road to be seal coated after one year



REGISTERED PROFESSIONAL ENGINEER
ADAM V. MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

No.	REVISIONS/ SUBMISSIONS	DATE

DRAWN :
REVIEWED :
PROJECT NO. :
CAD FILE :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

CUL-DE-SAC PLAN

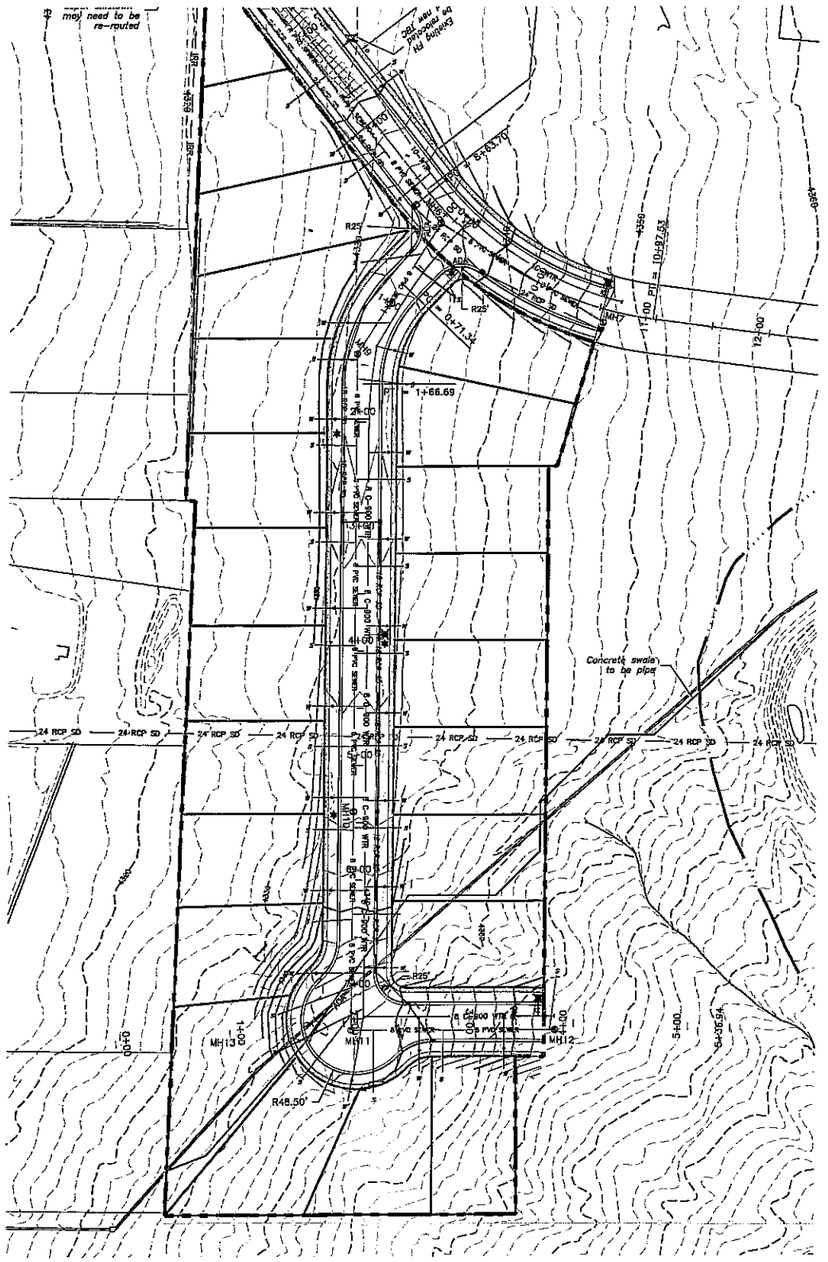
DATE : AUG,2015
DRAWING NO. 4

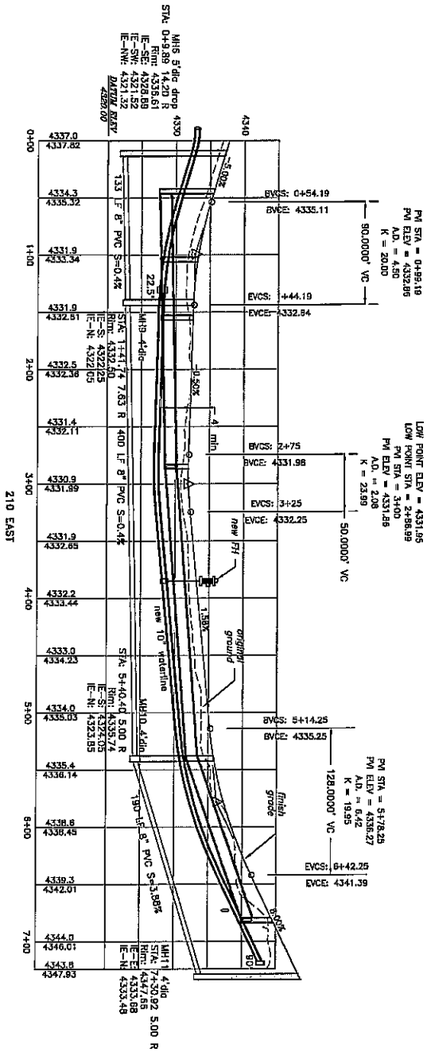
GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

210 EAST/820 SOUTH

SCALE: 1"=120' (11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

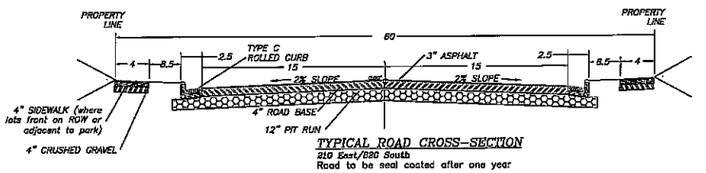




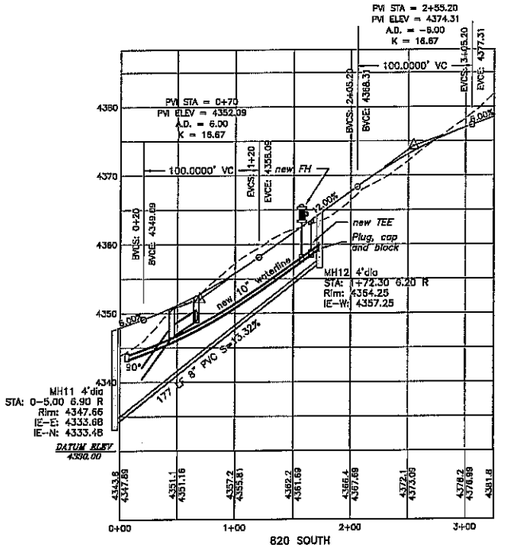
Legend:

- BOUNDARY LINE
- LOT LINE
- EXISTING FENCE
- E 6 PVC SEWER — EXISTING SANITARY SEWER
- EXISTING WATERLINE
- 24 RCP SD — EXISTING STORM
- 10-WTR — PROPOSED PVC C-900 WATER/ VALVE/FIRE HYDRANT
- 24 RCP SD — PROPOSED CATCH BASIN AND LINES
- 6 PVC SEWER — PROPOSED SEWER
- EXISTING ASHPALT
- MAJOR CONTOUR PROPOSED (10')
- MINOR CONTOUR PROPOSED (2')
- * PROPOSED LIGHT PER CITY SPEC

Notes
1. Trees/ landscaping will be installed per the development agreement. In particular final landscaping shall include two trees per lot, (4) per corner lot (1-4" caliber honey locust).
2. Detention pond area should be reseeded with natural grasses and other vegetation after construction as directed by the Planning Commission.



TYPICAL ROAD CROSS-SECTION
210 East/820 South
Road to be seal coated after one year



REGISTERED PROFESSIONAL ENGINEER
ADAM V. MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

No.	REVISIONS/ SUBMISSIONS	DATE

REVIEWED : DRAWN :
CAD FILE : PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

210 EAST/820 SOUTH

DATE : AUG,2015
DRAWING No. 5

GRANITE RIDGE SUBDIVISION
PHASE 1

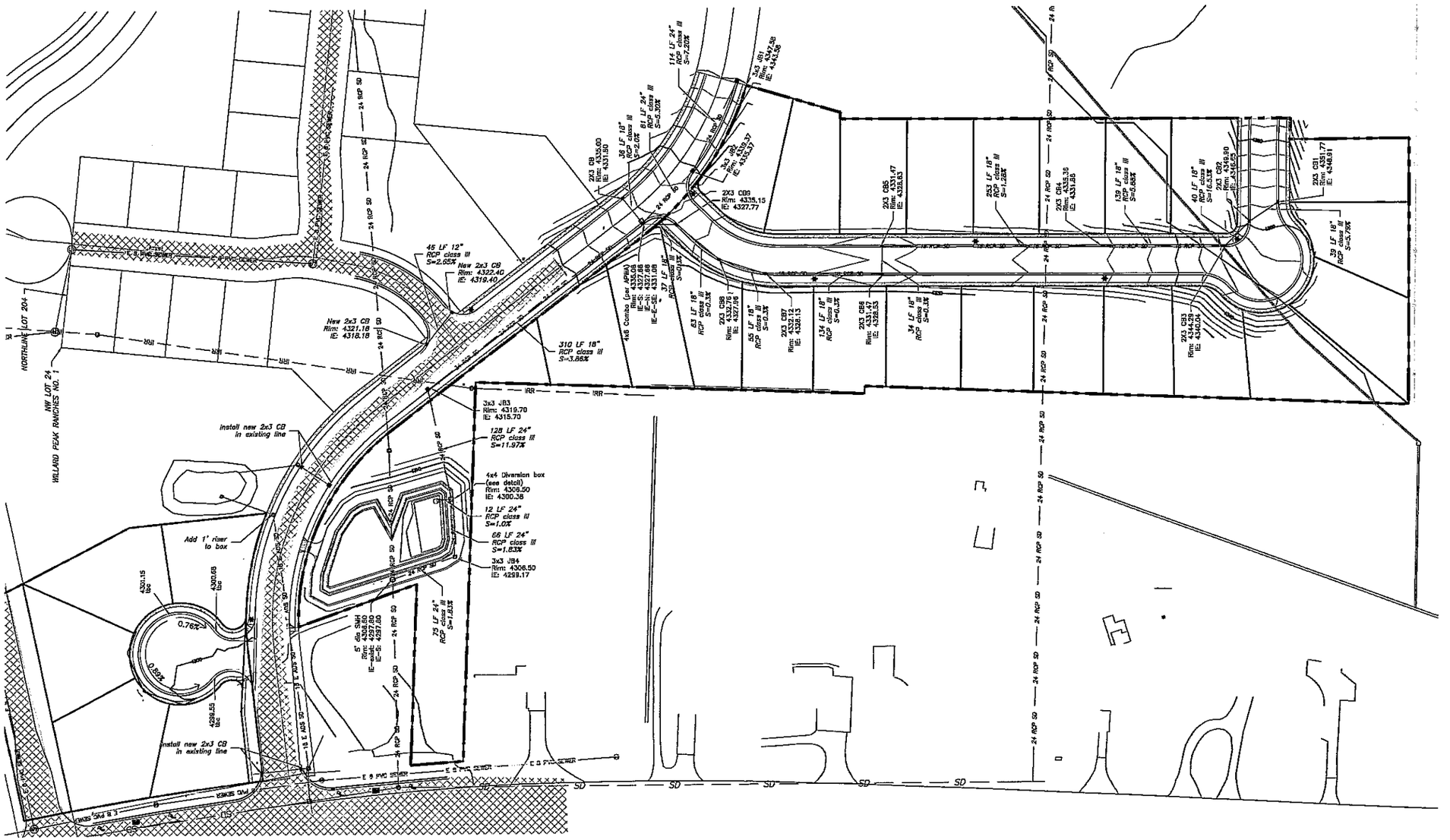
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

GRADING/DRAINAGE PLAN

0 60 120
SCALE: 1"=120'(11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

Legend:

- BOUNDARY LINE
- LOT LINE
- EXISTING FENCE
- E 8 PVC SEWER — EXISTING SANITARY SEWER
- E-SW — EXISTING WATERLINE
- 24 RCP SD — EXISTING STORM
- 10-WTR — PROPOSED WATER/FIRE HYDRANT
- 24 RCP SD — PROPOSED CATCH BASIN AND LINES
- 8 PVC SEWER — PROPOSED SEWER
- EXISTING ASHPALT
- MAJOR CONTOUR PROPOSED (10')
- MINOR CONTOUR PROPOSED (2')
- * PROPOSED LIGHT PER CITY SPEC



REGISTERED PROFESSIONAL ENGINEER
AUGUST 11, 2015
ALAN V. MACKELPRANG
11-17-2015
STATE OF UTAH
SEAL

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

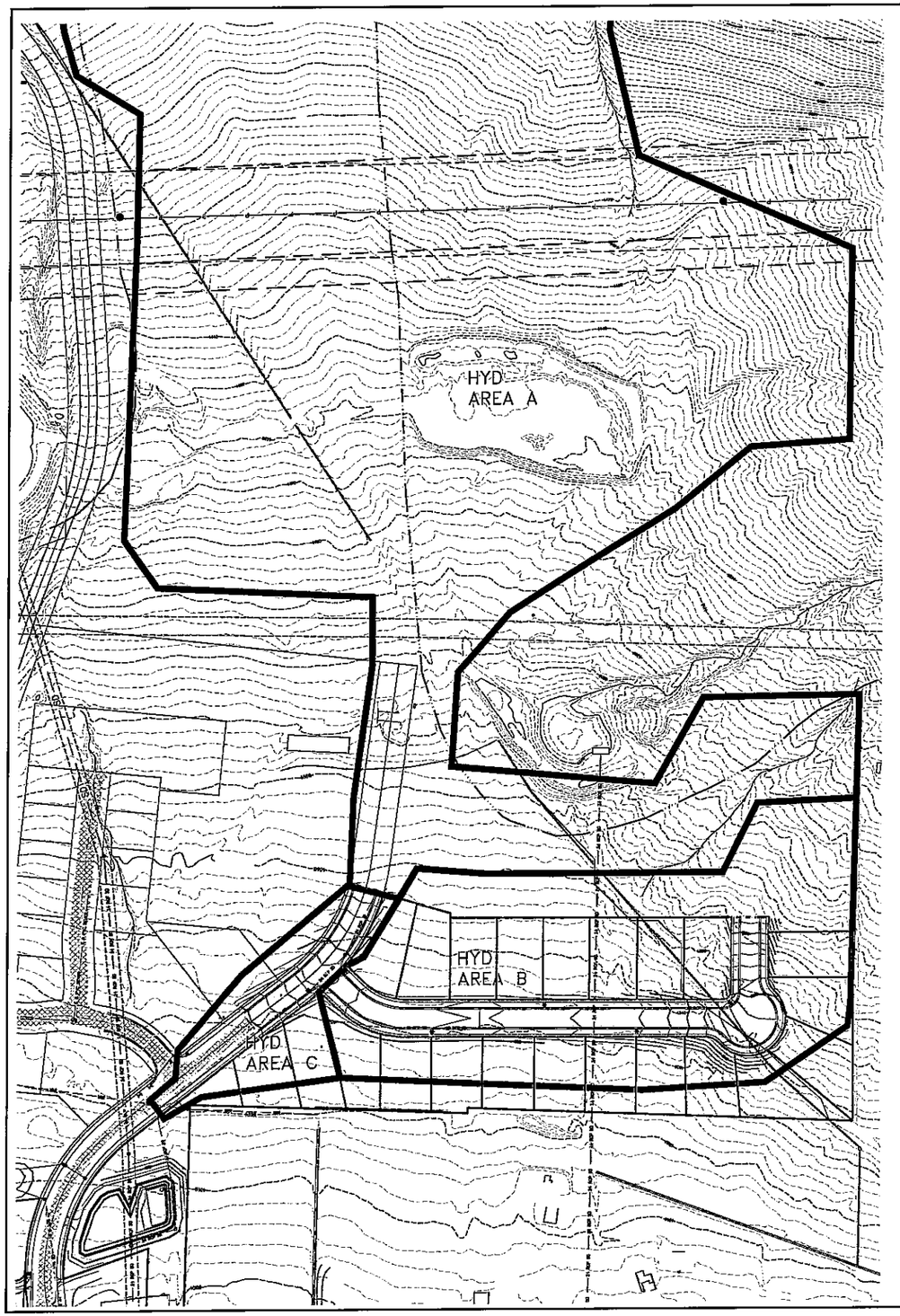
No.	REVISIONS/ SUBMISSIONS	DATE

REVIEWED : DRAWN :
CAD FILE : PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

GRADING/DRAINAGE PLAN

DATE : AUG.2015
DRAWING NO. 6



GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

STORM DETAILS

0 60 120
SCALE: 1"=120' (11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)

Determination of Weighted "C" Value:	Subarea A	Subarea B	Subarea C	Area	"C"			
	(sf)	(sf)	(sf)	(sf)	Value	A*C		
Road Area (roads, sidewalks, driveways, etc.)	372522	52584	21126	450232	0.9	410715.60		
Roof Area:	148500	48400	11000	207900	0.85	176715.00		
Landscaped Area:	732652	188730	27342	948724	0.15	142308.60		
Total Area	1253784	290014	59477	1603875	=		36.82 Ac	
	1253784	290014	59477					
				0.45				
Peakflow Determination:								
to								
"C" Value:	0.45	0.41	0.65	0.45		15 min Intensity - 100 yr storm		
						per TC for entire development		
Rainfall Intensity:	2.08	2.08	2.08	2.08	in/hr			
Area:	1253784	290014	59477	1603875	sf			
Peakflow:	27.54	5.69	1.36	34.78	cfs =			

Peak Flow Determination				Pipe Hydraulics												
Watershed Designation	Q (cfs)	Total Q (cfs)	Pipe-up I.D.	Upstream Invert (ft)	Downstream Invert (ft)	Pipe Length (ft)	Gradient (ft/ft)	Pipe Size (in)	Pipe Area (ft^2)	Pipe Cap. (ft)	Manning's n	Pipe Cap. (cfs)	Vel. (fps)	Fall	Check
AREA A	18.8														
		27.54	JB1-JB2	4343.58	4335.37	114.00	0.0720	24	3.14	6.28	0.013	60.71	19.32		OK
		27.54	JB2-COMBO	4335.37	4331.06	91.00	0.0530	24	3.14	6.28	0.013	52.08	16.57		OK
1/2 AREA B	2.84														
		2.84	CB1-CB2	4348.91	4346.85	29.00	0.0679	18	1.77	4.71	0.013	25.29	14.31		OK
		2.84	CB2-CB3	4346.85	4340.04	40.00	0.1662	18	1.77	4.71	0.013	42.10	24.16		OK
		2.84	CB3-CB4	4340.04	4331.86	136.00	0.0588	18	1.77	4.71	0.013	25.48	14.42		OK
		2.84	CB4-CB5	4331.86	4228.63	253.00	0.0128	18	1.77	4.71	0.013	11.97	6.72		OK
1/2 AREA B	2.84														
		5.68	CB5-CB6	4228.63	4228.53	34.00	0.0029	18	1.77	4.71	0.013	5.70	3.22		OK
		5.68	CB6-CB7	4228.53	4228.13	134.00	0.0030	18	1.77	4.71	0.013	5.74	3.25		OK
		5.68	CB7-CB8	4228.13	4327.96	56.00	0.0031	18	1.77	4.71	0.013	5.84	3.30		OK
		5.68	CB8-CB9	4327.96	4327.77	63.00	0.0030	18	1.77	4.71	0.013	5.77	3.26		OK
		5.68	CB9-COMBO	4327.77	4327.66	37.00	0.0030	18	1.77	4.71	0.013	5.73	3.24		OK
		33.22	COMBO-JB3	4327.66	4315.70	310.00	0.0386	24	3.14	6.28	0.013	44.43	14.14		OK
AREA C	1.55														
		34.77	JB3-POND	4315.70	4300.00	47.00	0.3340	24	3.14	6.28	0.013	120.75	41.62		OK

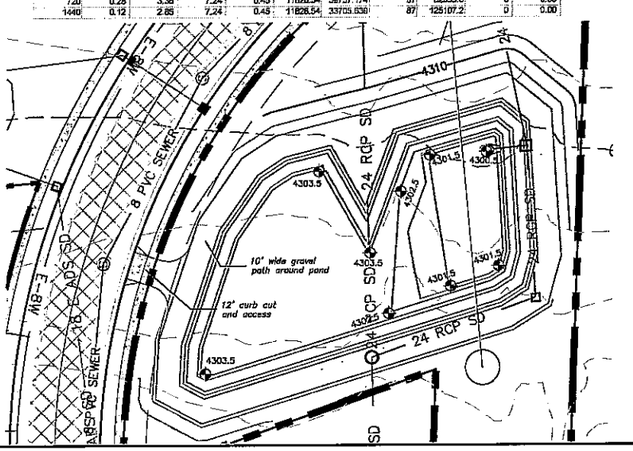
Drainage Area to Pond:	7.24	acres
Weighted "C" value for Pond Drainage Area:	0.45	
Allowable Discharge Rate:	0.2	cfs/acre

10-Year Return Period

Interval (min)	Precip.* Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CxIx3630 (ft^3/in)	Accum. Inflow (ft3/min)	Allowable Discharge (ft^3/min)	Accum. Discharge (ft^3)	Required Storage (ft^3)	(ac-ft)
15	2.37	0.59	7.24	0.45	11827	7001	87	1303	5698	0.13
30	1.69	0.80	7.24	0.45	11827	9414	87	2608	6806	0.16
60	0.99	0.99	7.24	0.45	11827	11681	87	5213	6468	0.15
360	0.28	1.67	7.24	0.45	11827	19727	87	31277	0	0.00
720	0.18	2.16	7.24	0.45	11827	25545	87	62554	0	0.00
1440	0.13	3.02	7.24	0.45	11827	35763	87	125107	0	0.00

100-Year Return Period

Interval (min)	Precip.* Intensity (in/hr)	Precip. Depth (in)	Area (ac)	C Value	CxIx3630 (ft^3/in)	Accum. Inflow (ft3/min)	Allowable Discharge (ft^3/min)	Accum. Discharge (ft^3)	Required Storage (ft^3)	(ac-ft)
15	4.55	1.14	7.24	0.45	11828.54	13452.689	87	1303.2	12149	0.28
30	3.08	1.53	7.24	0.45	11828.54	18204.806	87	2606.4	15598	0.36
60	1.90	1.90	7.24	0.45	11828.54	22470.439	87	5212.8	17258	0.40
120	1.10	2.20	7.24	0.45	11828.54	26018.366	87	10425.6	15593	0.36
360	0.44	2.64	7.24	0.45	11828.54	31222.068	87	31278.8	0	0.00
720	0.26	3.38	7.24	0.45	11828.54	39737.174	87	62553.6	0	0.00
1440	0.15	4.35	7.24	0.45	11828.54	51426.036	87	125107.2	0	0.00

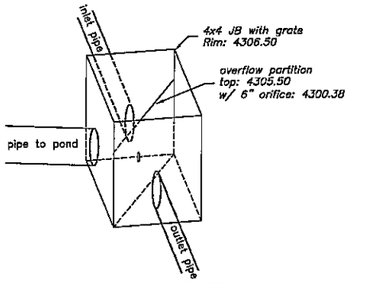


Legend:

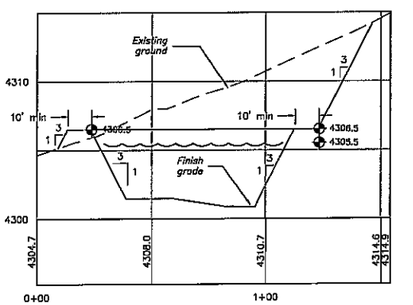
- SBDNDARY LINE
- LOT LINE
- EXISTING FENCE
- 8 PVC SEWER — EXISTING SANITARY SEWER
- 6-INI — EXISTING WATERLINE
- 24 RCP SD — EXISTING STORM
- 8 C-900 WTR — PROPOSED WATER/FIRE HYDRANT
- PROPOSED CATCH BASIN AND LINES
- 8 PVC SEWER — PROPOSED SEWER
- EXISTING ASHPALT
- MAJOR CONTOUR PROPOSED (10')
- MINOR CONTOUR PROPOSED (2')
- PROPOSED LIGHT PER CITY SPEC

NOTES:
Write the storm piping system has been designed for flows from the entire project the calculation for the pond only includes the area for phase 1.
The pond has been planned for the maximum size possible in the area available with the ability to accept store some storm water from future phases. In addition, the orifice has been sized for phase 1 only. In the future, if additional phases are to use this pond the orifice will need to be resized.

Size of the Orifice Openings for Discharge Pipe for Basin A		
Total Discharge	1.45 cfs	
Number of Orifices	1	
Evaluated Discharge	1.45 cfs	
Crest of Pond	4305.5 ft	
Invert of Developing Line	4297.5 ft	
Diameter of Developing Pipe	24 in	
Head at center of Orifice (H=(Q/Cd*Area)^2/2g)	2.5 ft	
in	3.25 ft	
in	2.95 in	
Diameter of opening	5.91	6 inches



DIVERSION BOX DETAIL



POND CROSS-SECTION
Max volume: 28,386 cf

REGISTERED PROFESSIONAL ENGINEER
No. 168590
MICHAEL D. MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

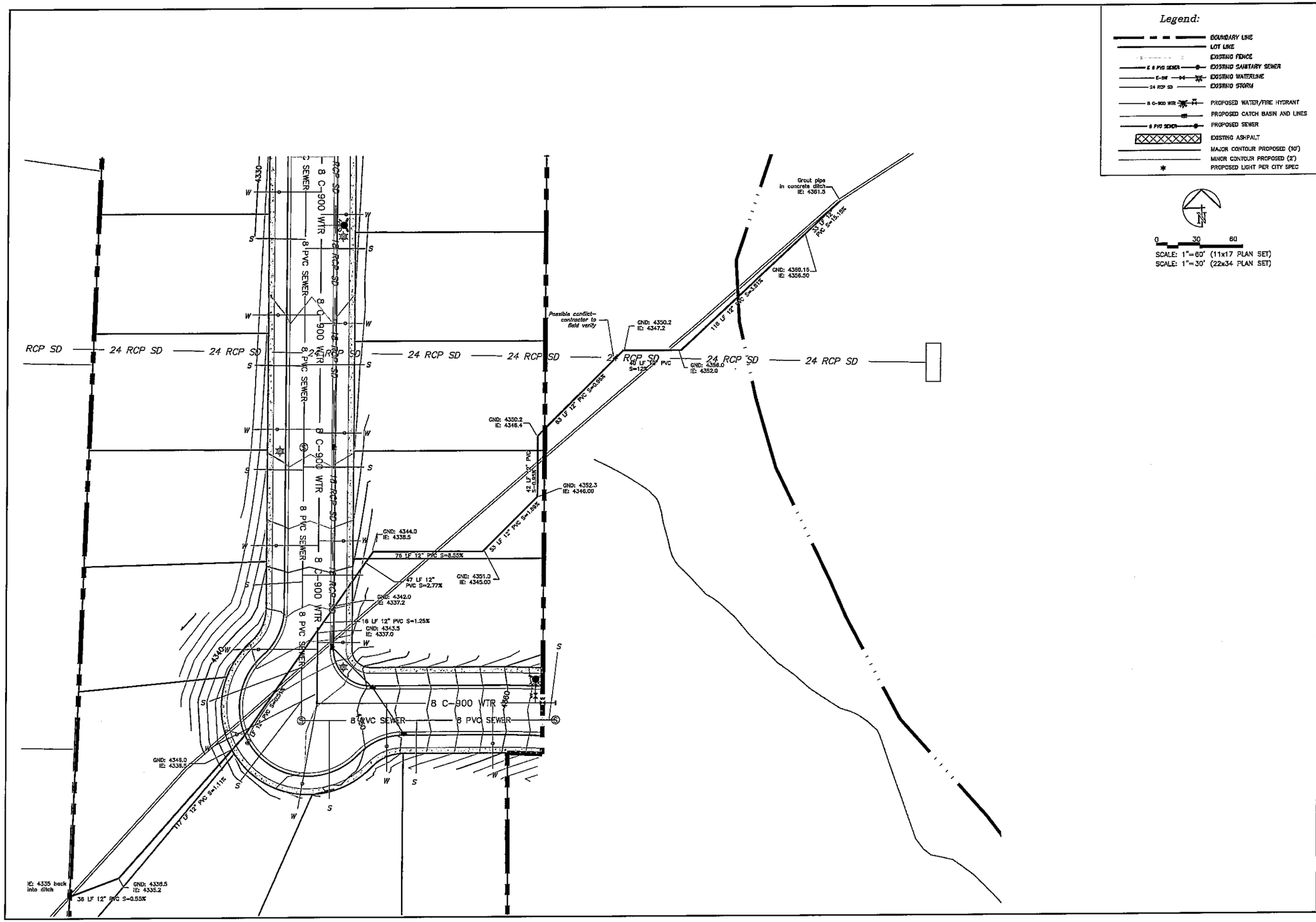
No.	REVISIONS / SUBMISSIONS	DATE

DESIGNED : DRAWN : CAD FILE : PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

STORM DETAILS

DATE : AUG.2015
DRAWING No. 7



REGISTERED PROFESSIONAL ENGINEER
ADAM V. MACKELPRANG
11-17-2015
STATE OF UTAH

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

No.	REVISIONS/ SUBMISSIONS	DATE

REVISED : DRAWN : CAD FILE : PROJECT NO. :

GRANITE RIDGE SUBDIVISION PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 8 NORTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN WILLARD, UTAH

IRRIGATION RE-ROUTE

DATE : AUG,2015

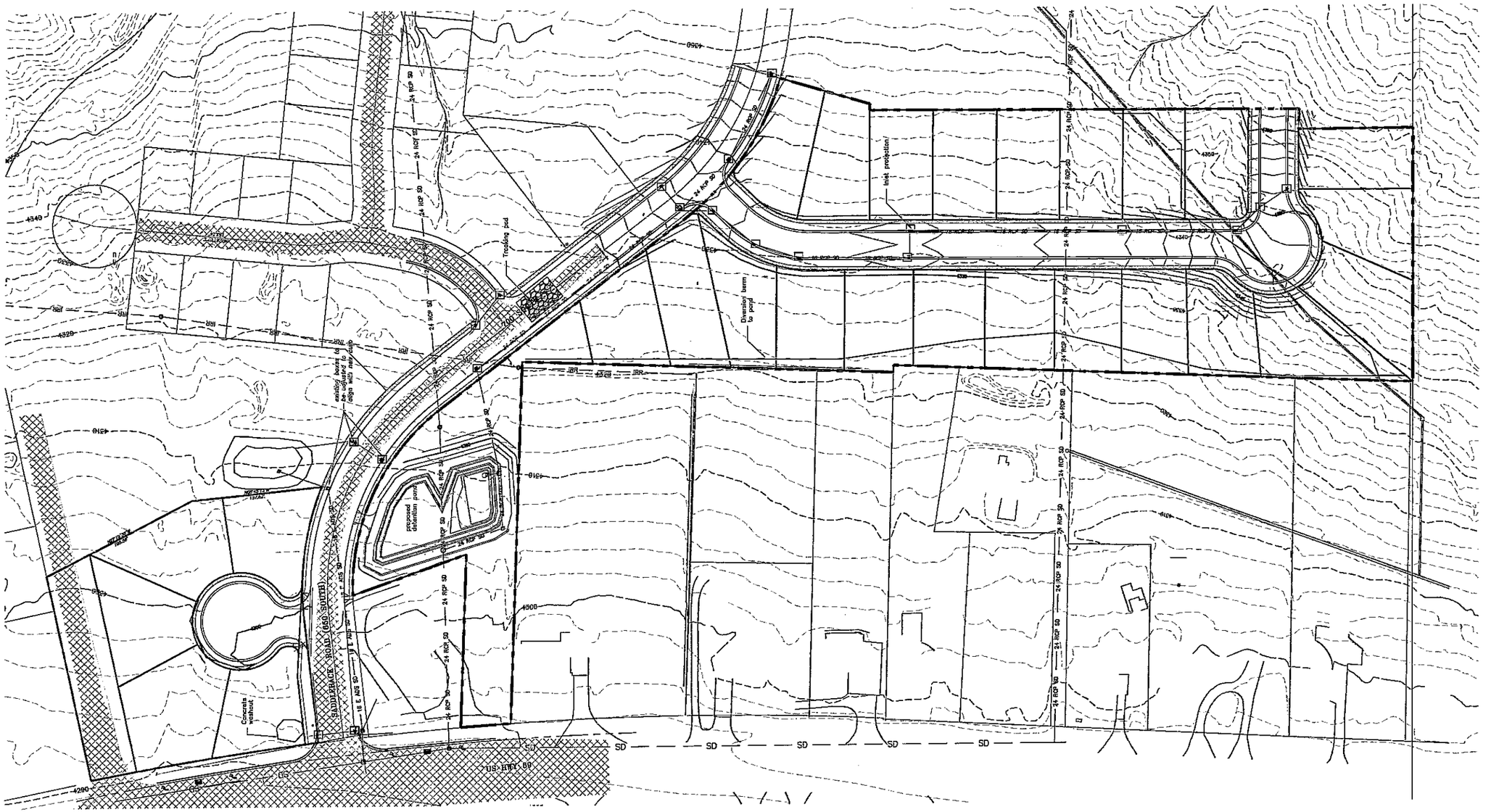
DRAWING 8

GRANITE RIDGE SUBDIVISION
PHASE 1

PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH

SWPPP

0 60 120
SCALE: 1"=120' (11x17 PLAN SET)
SCALE: 1"=60' (22x34 PLAN SET)



SEAL

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

No.	REVISIONS / SUBMISSIONS	DATE

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GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26,
TOWNSHIP 8 NORTH, RANGE 2 WEST,
SALT LAKE BASELINE AND MERIDIAN
WILLARD, UTAH
SWPPP

DATE : OCT.2015
DRAWING No. 9

SPECIAL CONDITIONS, MANAGEMENT PRACTICES & RESPONSIBILITIES

1. This Storm Water Pollution Prevention Plan (SWPPP) was developed at the request of: Eric Householder.
For the construction of: Granite Ridge Subdivision Phase 1 in Willard City, Utah.

2. This plan identifies potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site.

3. Except as permitted in # 4 below, all discharges covered by the plan shall be composed entirely of storm water:

4. The following non-storm water discharges occurring at this site may be permissible, providing the implementation of appropriate pollution prevention measures has been taken.

a. Discharges from fire fighting and fire hydrant discharges.
b. Water used to wash vehicles or control dust.
c. Potable water sources including waterline flushing.
d. Irrigation drainage.
e. Routing external building wash down which does not use detergents; pavement washwaters where spills or leaks of hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used.
f. Air conditioning condensation.
g. Springs, uncontaminated ground water, foundation or footing drains where flows are not contaminated with process materials such as solvents.

5. The discharge of hazardous substances or oil in the storm water discharge(s) from this facility shall be prevented or minimized in accordance with the SWPPP for the facility. This plan does not relieve the permittee of the reporting requirements of 40 CFR part 117, 40 CFR part 110, and 40 CFR part 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 CFR part 117, 40 CFR part 110, or 40 CFR part 302, occurs during a 24-hour period.

a. Notify the National Response Center (NRC) 800-424-8802.
b. Notify the Division of Water Quality (DWQ) 801-538-6146 (or the DWQ answering service at 801-536-4123)
c. Notify Willard City

6. Within 14 calendar day of knowledge of the release, the permittee shall file a written description, the date of release, the circumstances leading to the release, the measures taken/or planned to cleanup the release, and steps to be taken to minimize the chance of future occurrences.

7. Within 14 calendar day of knowledge of the release, this plan must be reviewed to identify measures to prevent the reoccurrence of such releases, and to respond to such releases, and the plan must be modified where appropriate.

STORM WATER POLLUTION PREVENTION PLAN

1. This plan shall be retained on-site at the facility. If the site is inactive or does not have an on-site locations adequate to store the SWPPP, the location of the plan, along with a contact phone number shall be posted on site. Reasonable local access to the plan, during normal working hours, must be provided.

2. Site Description:

a. Construction Activity: Construction of a residential subdivision.
b. Sequence of major activities: Site clearing, rough grading, utilities installation, finish grading, paving.
c. Total Area of Site: 9.71 acres
d. Existing Soil: Sx (31.9%), WcC (68.1%)
e. Site Location: Highway 89, 650 South in Willard Utah.
f. Discharges other than from construction: None.
g. Receiving Water: None.

3. Erosion and Sediment Controls.

a. The construction-phase erosion and sediment controls should be installed to retain sediment of site to the maximum extent possible.
b. All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations.

c. If sediment escapes the construction site, off-site accumulations of sediment must be removed immediately to minimize off-site impacts (e.g. fugitive sediment in street could be washed into storm sewers by the next rain and/or pose safety hazard to users of public streets).

d. Sediment traps shall be placed around all storm water inlets as shown on the plan. Allow only clean storm water to enter the inlets (e.g. fugitive sediment in street could be washed into storm sewers by the next rain and/or pose safety hazard to users of public streets).

e. Sediment must be removed from sediment traps, silt fences, or sedimentation ponds when design capacity has been reduced by 50%.

f. Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events (e.g. forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g. screening outfalls, picked up daily, etc.).

g. Offsite material storage areas (also including overburden and stockpiles of dirt, etc.) used solely by the permitted project are considered a part of the project.

4. Other Controls:

a. Waste Disposal — No solid materials, including building materials, shall be discharged to water of the State, except as authorized by a CWA Section 404 permit.

b. Off-site Tracking — Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

c. Septic, Waste and Sanitary Sewer Disposal — Comply with State and/or local waste disposal, sanitary sewer or septic system regulations. Provide portable toilets that are serviced weekly and pumped clean by a waste disposal company. No toxic or hazardous waste shall be disposed of in portable toilets or on-site sanitary sewer.

d. On Site Storage — Perform regular inventoris of construction materials stored onsite (including waste materials). Practice storage procedures to minimize exposure of the materials to storm water. Provide covered disposal containers in convenient locations on the site. Provide for weekly (more often if required) waste disposal.

5. Other Laws and Requirements:

a. Comply with local storm water control requirements

b. Comply with Federal or State laws pertaining to threatened or endangered species or historic properties.

c. Dischargers seeking variance to permit requirements shall submit an individual permit application along with a description of why requirements in approved State or local plans or permits should not be applicable as a condition of a UPDES permit.

6. Maintenance:

a. The controls and measures indicated on the plan shall be maintained in good and effective operating condition.

b. Maintenance needs identified in inspection or by other means shall be accomplished before the next anticipated storm event, or as necessary to maintain the continued effectiveness of storm water controls.

c. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as possible.

7. Inspection:

a. Inspect disturbed areas of the construction site that have not been finally stabilized, areas disturbed for the storage of materials that are exposed to precipitation, structural control measures and locations where vehicles enter or exit the site:

1. At least once every 14 calendar days.
2. Before anticipated storm events.
3. Within 24 hours of the end of a storm that is 0.5 inches or greater.

b. Where the site has been finally or temporarily stabilized, or runoff is unlikely due to winter conditions (e.g. site covered with snow, ice, or frozen ground, inspection shall be conducted at least once every month.

c. Points, Areas, BMP's, and Activities to be inspected.

(1) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

(2) Erosion and sediment control measures shall be observed to ensure they are operating correctly.

(3) Accessible discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

(4) Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

8. Inspection Induced Plan Revisions:

Based on the results of the inspection, this plan shall be revised as appropriate within 7 calendar days following the inspection.

9. Inspection Report:

a. Prepare an inspection report for each inspection. It shall contain:

(1) The scope of the inspection
(2) Name(s) and qualifications of personnel making the inspection.
(3) The date of the inspection.
(4) Major observations relating to the implementation of the SWPPP
(a) locations of discharges of sediment or other pollutants from the site.
(b) control devices that failed to operate or proved inadequate or a particular location.
(c) actions taken.

b. Reports shall be retained as part of the SWPPP for at least three years from the date that the site is finally stabilized.

c. Reports shall identify any incidents of non-compliance.

d. When a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the SWPPP and the permit.

e. The report shall be signed in accordance with the permit certification (that is the same as the certification signed by the engineer on this sheet).

10. Accessibility

The permittee shall retain a copy of the SWPPP at the construction site (or other location accessible the public) from the date of project initiation to the date of final stabilization. The permittees with day to day operational control over the SWPPP implementation shall have a copy of the plan available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site.

11. Final Stabilization:

1. Means that all soil disturbing activities at the site have been completed.

2. After construction has been completed, paved areas of the site shall be swept clean. Storm water inlets and pipe shall be leaned. All waste including storm water control measures shall be removed from the site.

3. Perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, or geotextiles) have been employed.

4. Landscaping shall not be overwatered so that soil erosion occurs.

5. When all construction activity on the site has been completed, the owner shall file a Notice of Termination with the State DEQ Division of Water Quality.

DEFINITIONS:

A Best Management Practices (BMP's) means schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the waters of the State. BMP's also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

B. Commencement of Construction means the initial disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

C. Control Measure means any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

D. CWA means Clean Water Act or the Federal Water Pollution Control Act.

E. Point Source means any discernible, confined and discrete conveyance including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

F. Runoff Coefficient means the fraction of total rainfall that twill appear at a conveyance as runoff.

G. Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

H. Water of the State means all lakes, ponds, marshes, water courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this State or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be "water of the state" under this definition.

I. Waste Pile means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Adam Mackelprang, P.E. Date: _____

SEAL

ALLIANCE CONSULTING ENGINEERS
150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321
(435)755-5121

No.	REVISIONS/ SUBMISSIONS	DATE

REVIEWED : | DRAWN : |
CAD FILE : | PROJECT NO. :

GRANITE RIDGE SUBDIVISION
PHASE 1
PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 9 NORTH, RANGE 2 WEST, SALT LAKE BASELINE AND MERIDIAN, WILLARD, UTAH

SWPPP SPECIFICATIONS

DATE : OCT,2015
DRAWING No. 10