

FINAL PLAT
ELK MOUNTAIN PUD
PHASE 10 & 11
480 SOUTH ~1520 EAST
CITY COUNCIL MEETING
May 16, 2019

Utilities & Roads:

Roads, culinary, sewer, storm water, and power are all stubbed into phase 10 from phase 9 construction. Phase 10 is stubbed into 480 south from the west. We asked Karchners to extend the sewer line from the last sewer manhole on 480 south to the other side of Hammer Road for future use. We do not need a manhole at the end, just a cleanout for now. This will give us options for future growth.

Other:

Phase 10 consists of 2 six-plex's. These were approved as retirement age units with the preliminary plat. They will be built as slab on grade with a targeted buyer of older residents. Phase 11 consists of 19 single family building lots.

ELK MOUNTAIN PHASE 11

PART OF THE NORTHEAST QUARTER OF SECTION 10
TOWNSHIP 10 NORTH RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN
480 SOUTH, 1620 EAST
HYRUM, UTAH

INDEX SHEET

SHEET INDEX

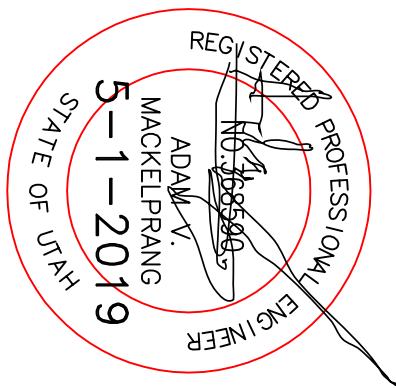
SHEET NO.	SHEET DESCRIPTION
1	INDEX SHEET
2	455 SOUTH/1520 EAST ROAD PLAN
3	480 SOUTH/1600 EAST ROAD PLAN
4	DRAINAGE PLAN

OWNER/DEVELOPER
KARTCHNER HOMES

CIVIL ENGINEER

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

CITY ENGINEER
CRAIG NEELEY
AQUA ENGINEERING INC.
533 WEST 2600 SOUTH
BOUNTIFUL, UTAH 84010
(801) 299-1327



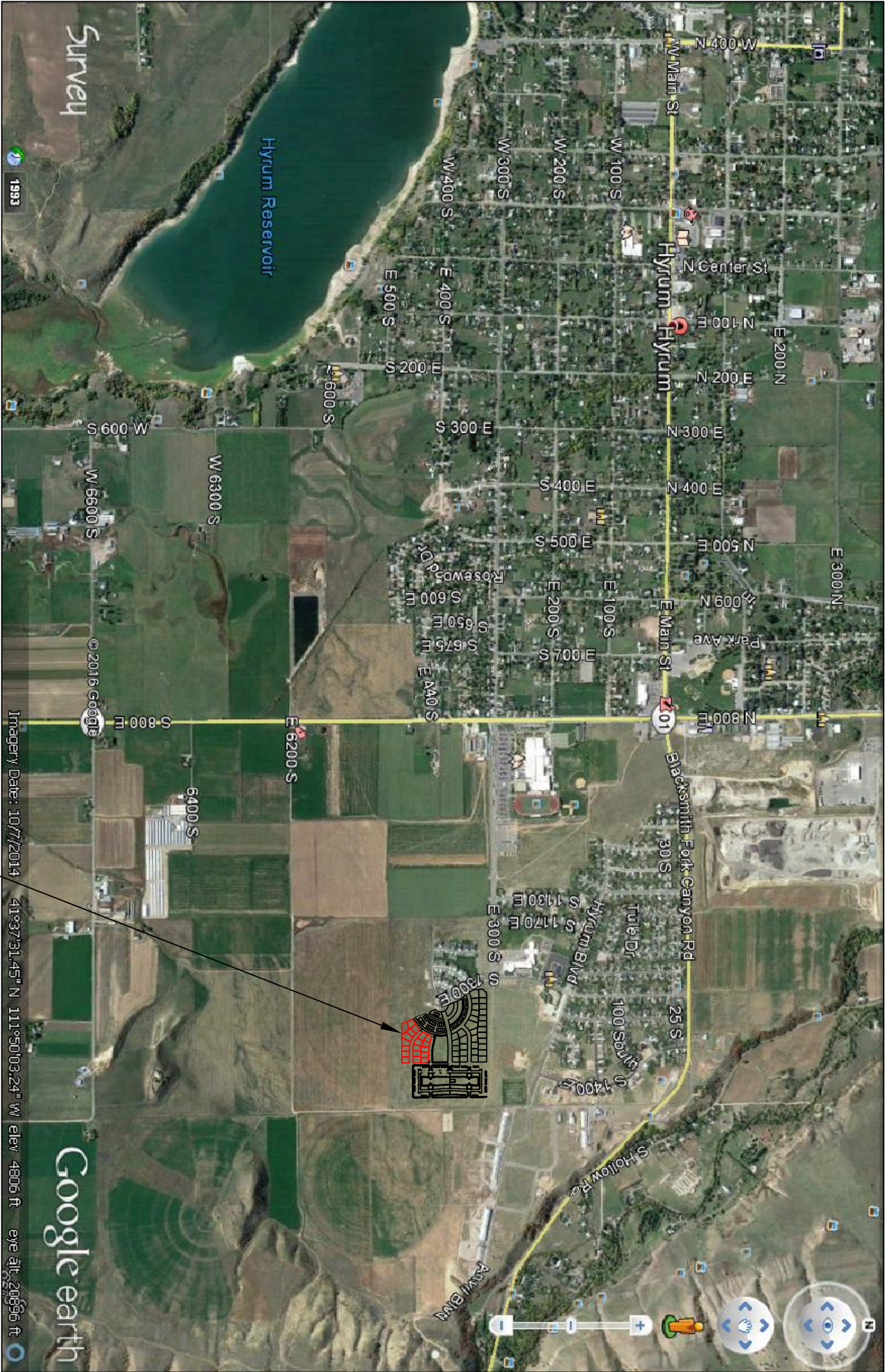
CITY ENGINEER APPROVAL

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND FIND IT TO BE IN
GENERAL COMPLIANCE TO THE CITY STANDARDS

CITY ENGINEER

DATE

- GENERAL NOTES (APPLICABLE TO ALL CIVIL SHEETS):
1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, CITY OF HYRUM 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 FIELD MEASUREMENTS AND DIMENSIONS SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER. ANY WORK DONE WITHOUT VERIFICATION IS DONE SO AT THE CONTRACTORS RISK AND EXPENSE IF ERRORS OCCUR.
 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, ELBOWS, BENDS, ELBOWS, FINE THROATNS AND GATE 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, 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 THE 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 FINAL ACCEPTANCE OF THIS PROJECT.
 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.
 22. ALL GATE VALVES SHALL BE LOCATED NEAR TO TEES OR CROSSES AND THEIR ASSOCIATED REDUCERS AS SHOWN ON THE PROJECT PLANS.
 23. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, HARDWARE, LABOR, ETC. TO ASSURE ALL MATERIALS AND METHODS ARE IN ACCORDANCE WITH THE CITY OF HYRUM REQUIRED GRABES, ALIGNMENTS AND COVER REQUIREMENTS.
 24. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF HYRUM FOR ALL UTILITY INSPECTIONS PRIOR TO BACKFILLING.
 25. ALL WATER SYSTEM COMPONENTS SHALL BE INSTALLED, PRESSURE TESTED, AND CHLORINATED PRIOR TO COMPLETING ANY ROADWAY CONSTRUCTION.
 26. ONE MYLAR AND ONE PAPER SET OF AS BUILTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF PUBLIC IMPROVEMENTS.



VICINITY MAP

PROJECT

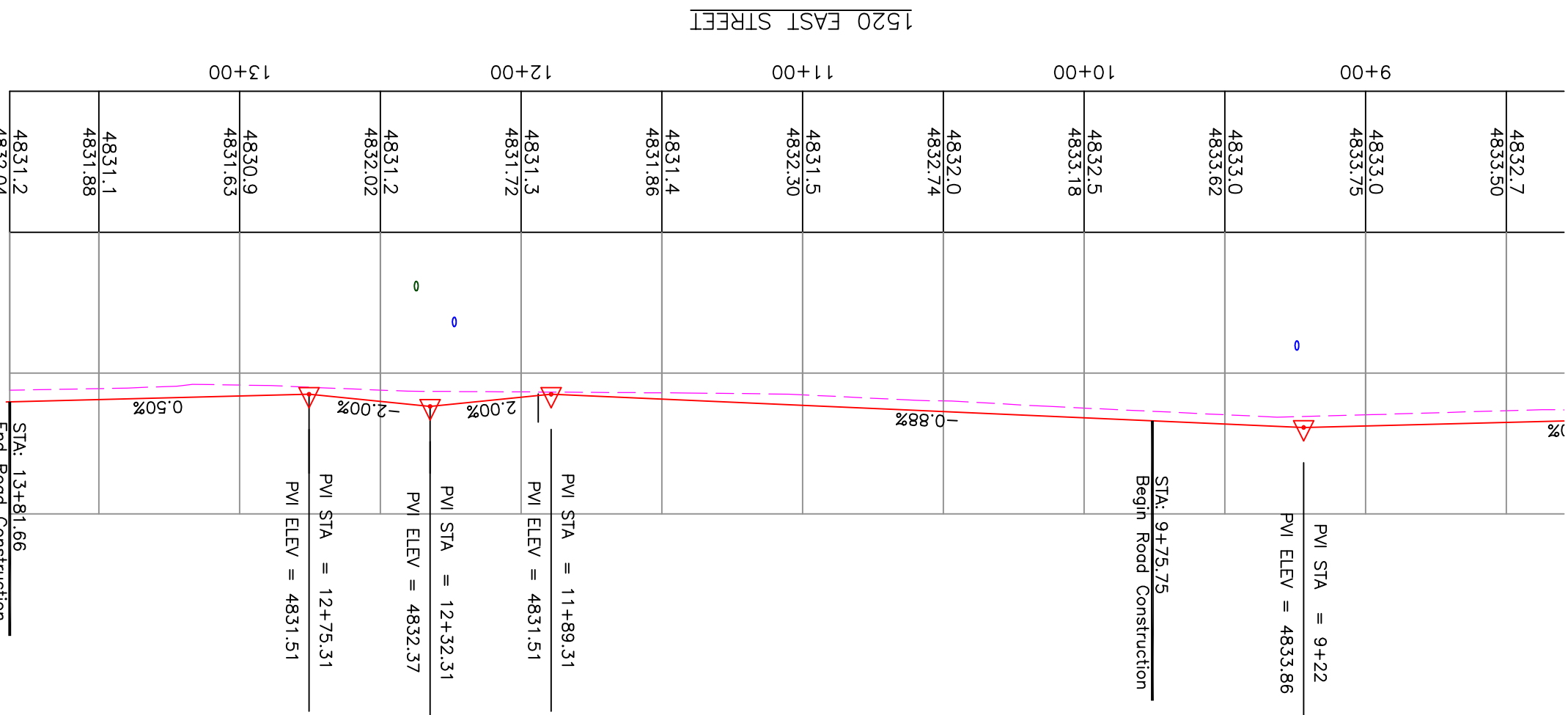
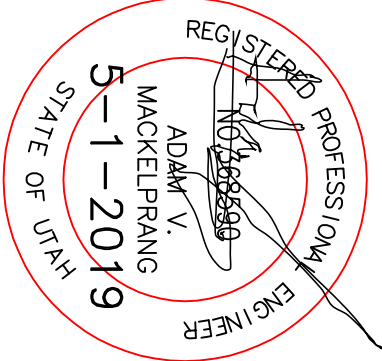
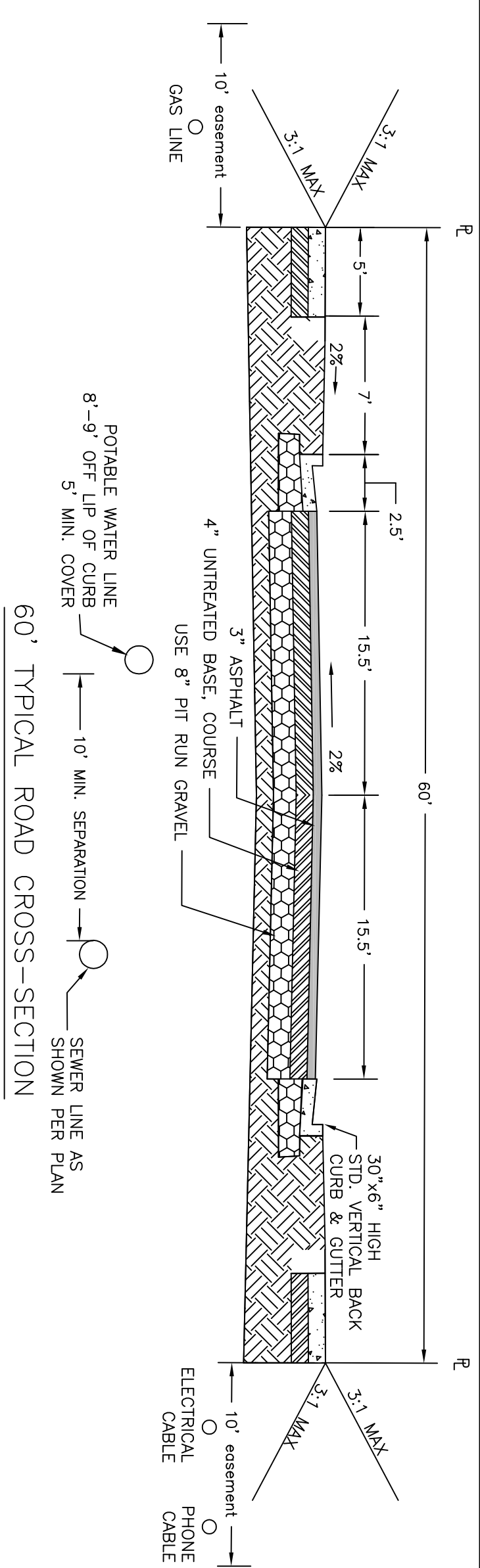
REVISION			
DATE	BY		

PART OF THE NORTHEAST QUARTER OF SECTION 10
TOWNSHIP 10 NORTH RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN
460 SOUTH, 1520 EAST
HUTCH, UTAH

1. ALL CONSTRUCTION TO MEET HYRUM CITY STANDARDS AND SPECIFICATIONS.
2. ALL WATER LINE SERVICES TO BE 1" COPPER WITH 18"x48" ABS OR 30" PVC METER BARRELS. LIDS TO HAVE 2" DIA. HOLES. ALL METERS TO BE LOCATED WITHIN THE PARK STRIP.
3. ALL HYRUM WATER LINES TO HAVE A MINIMUM COVER OF 5 FEET INSTALLED FREE HYDRAUNT PER HYRUM STANDARD DRAWING 6-R-46.
4. WATER MAIN TO BE 8" OR 14" CLASS 350 DI. OR PVC C-900 D1818 THURST BLOCK PER HYRUM STANDARD DRAWING 6-C-200.
5. SEWER SERVICES SHALL BE 4" SDR 35 PVC PER HYRUM STANDARD DRAWINGS 5-36 THROUGH 38.
6. SEWER SERVICES ARE TO EXTEND 10 FEET INSIDE LOT LINES WITH 7" TIE IN TO EXISTING SEWER MAINS.
7. TIE ELEVATIONS ARE APPROXIMATE AND ALL MANHOLES ARE TO BE ADJUSTED TO FINISH GRADE.
8. MANHOLES ARE TO BE PER HYRUM STANDARD DRAWINGS 5-30, 5-31, 5-34, 5-35.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND REQUIRED FOR THE COMPLETION OF THE WORK AND ALL CATCH BASINS SHALL BE PER HYRUM STANDARD DRAWING 4-115& 4-117.
11. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING EXCAVATION.
12. SHUT-OFF VALVES FOR CULINARY WATER LINES ARE REQUIRED AND ARE TO BE INSTALLED AT LOT LINES.
13. ALL HYRUM WATER LINES TO BE LOCATED NEXT TO THE MAIN LINE.
14. CONCRETE COLLARS SHALL BE REQUIRED AROUND ALL WATER VALVES. ROUND FOR POTABLE WATER AND SQUARE FOR IRRIGATION.
15. CONTRACTOR TO FIELD VERIFY EXISTING SEWER INVERTS PRIOR TO BEGINNING CONSTRUCTION.
16. SETTING STANDARD DRAWING 4-110 FOR CURB AND GUTTER DETAIL.
17. SEE HYRUM STANDARD DRAWING 4-112 FOR HANDICAP WAMP DETAIL.

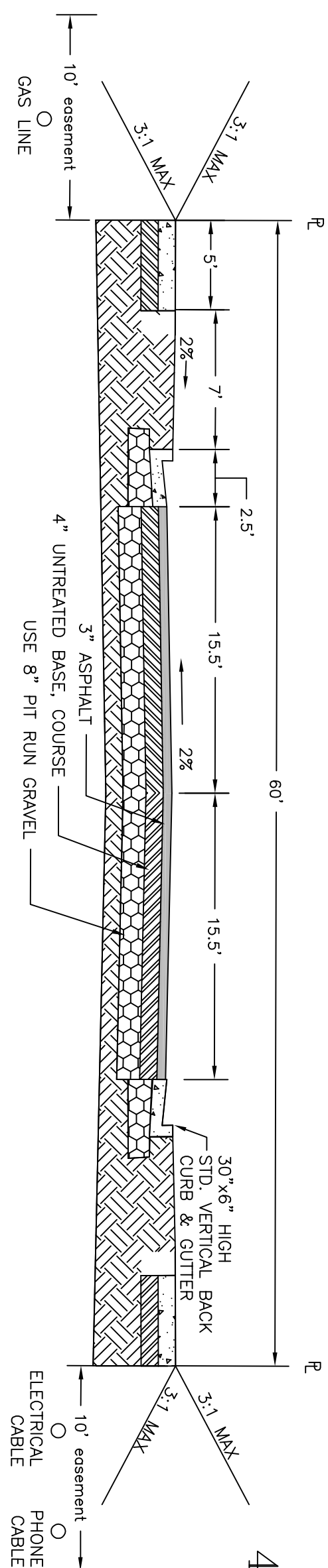
Figure 1: Typical cross-section of a multi-lane highway. The diagram illustrates the various components and layers of a highway cross-section, including existing and proposed infrastructure. The components are labeled as follows:

- Boundary Line
- Existing Water
- Proposed Water
- Existing Water
- Existing Sewer
- Proposed Sewer
- Existing Sewer
- Existing Storm
- Proposed Storm
- Existing Storm
- Existing Gas
- Proposed Gas
- Existing Gas
- Existing 5' Control
- Existing 1' Control
- Proposed Asphalt

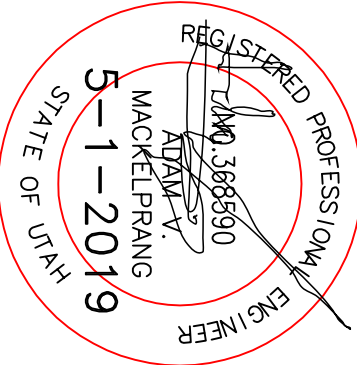


PART OF THE NORTHEAST QUARTER OF SECTION 10 TOWNSHIP 10 NORTH RANGE 1 EAST SALT LAKE BASE AND MERIDIAN 480 SOUTH, 1520 EAST HIRUM, UTAH			
SCALE:	AS NOTED	DRAWN BY:	AM
APPROVED BY:	BL	DWG DATA:	prelim.DWG
		CHECKED BY:	AM
		DATE:	2-2019

ELK MOUNTAIN PHASE 11
PART OF THE NORTHEAST QUARTER OF SECTION 10
TOWNSHIP 10 NORTH RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN
480 SOUTH, 1520 EAST
HYRUM, UTAH
480 SOUTH/1600 EAST ROAD PLAN



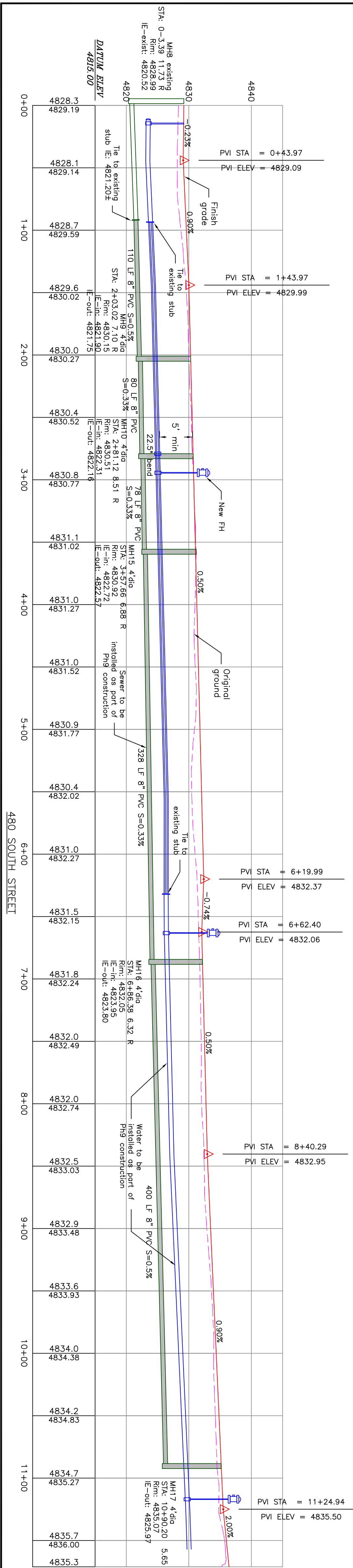
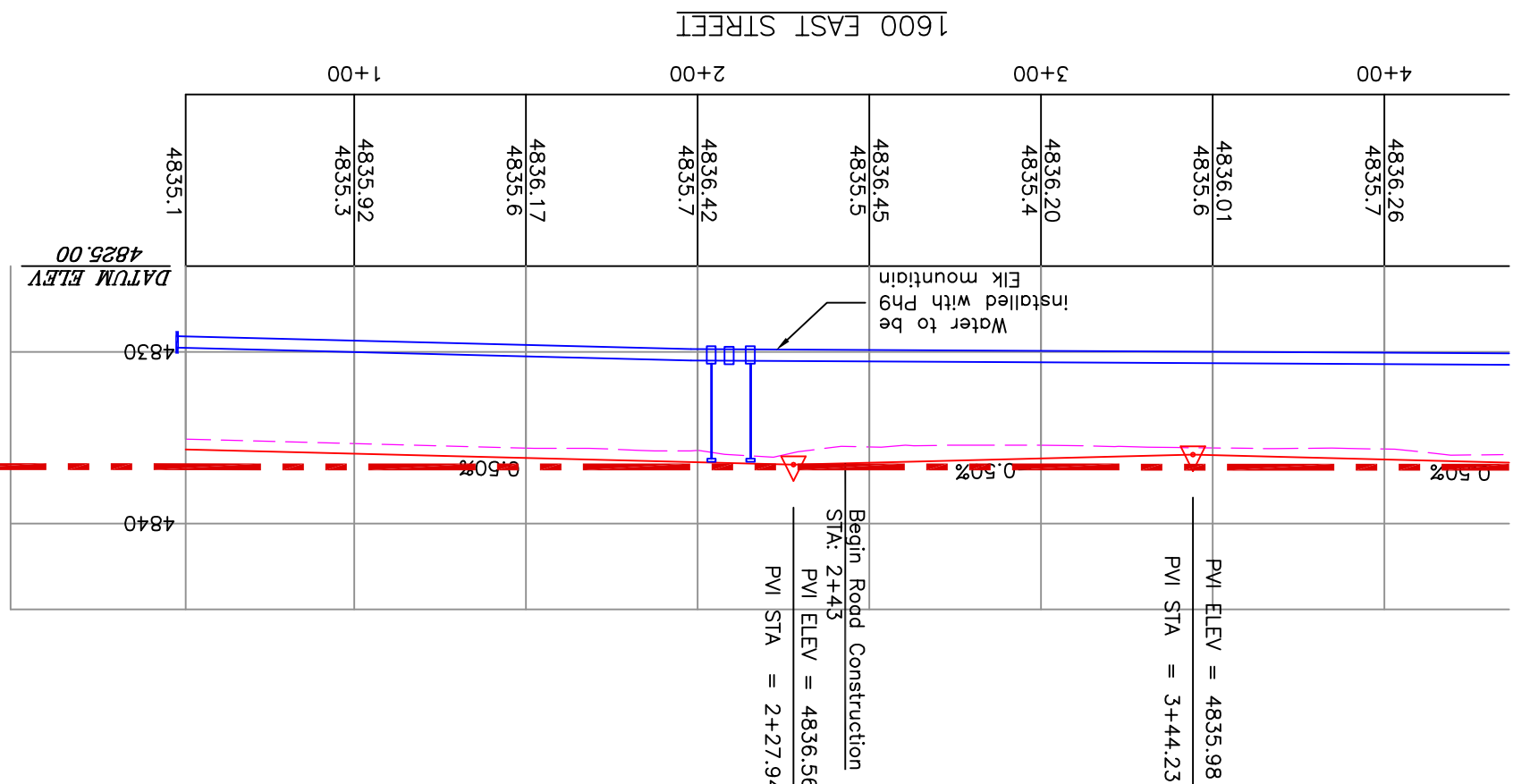
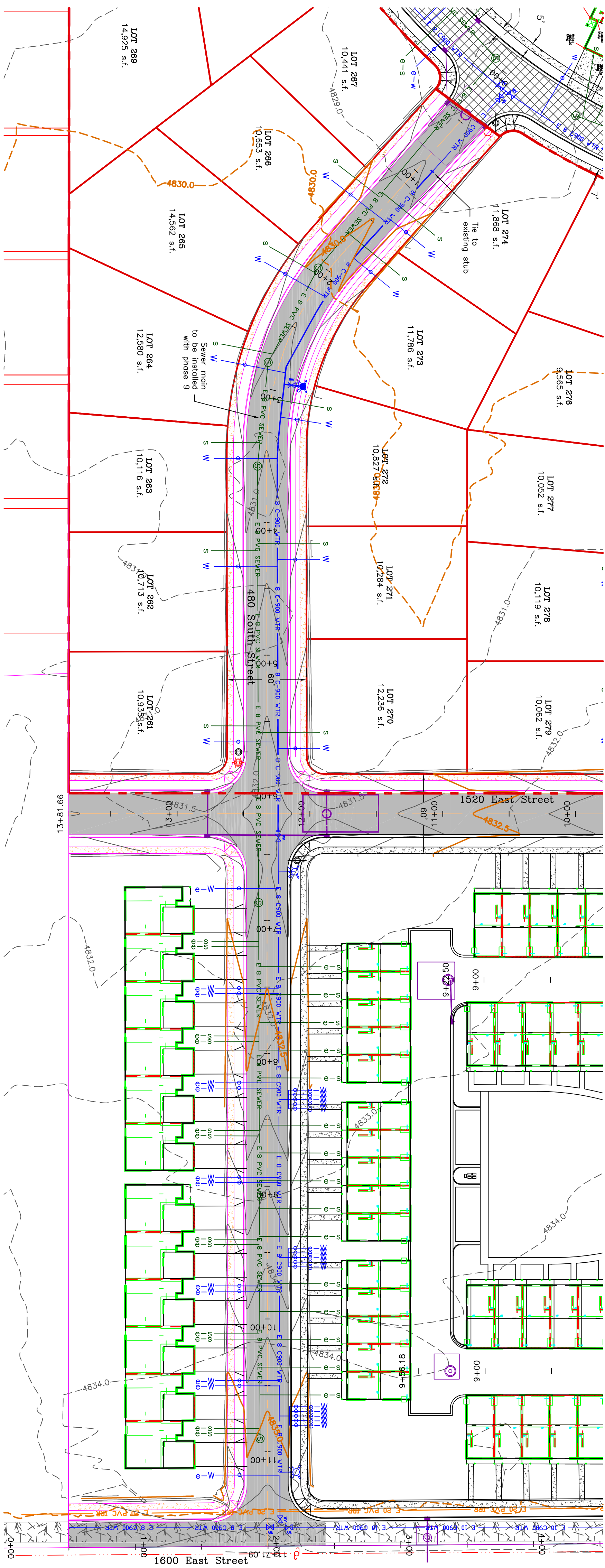
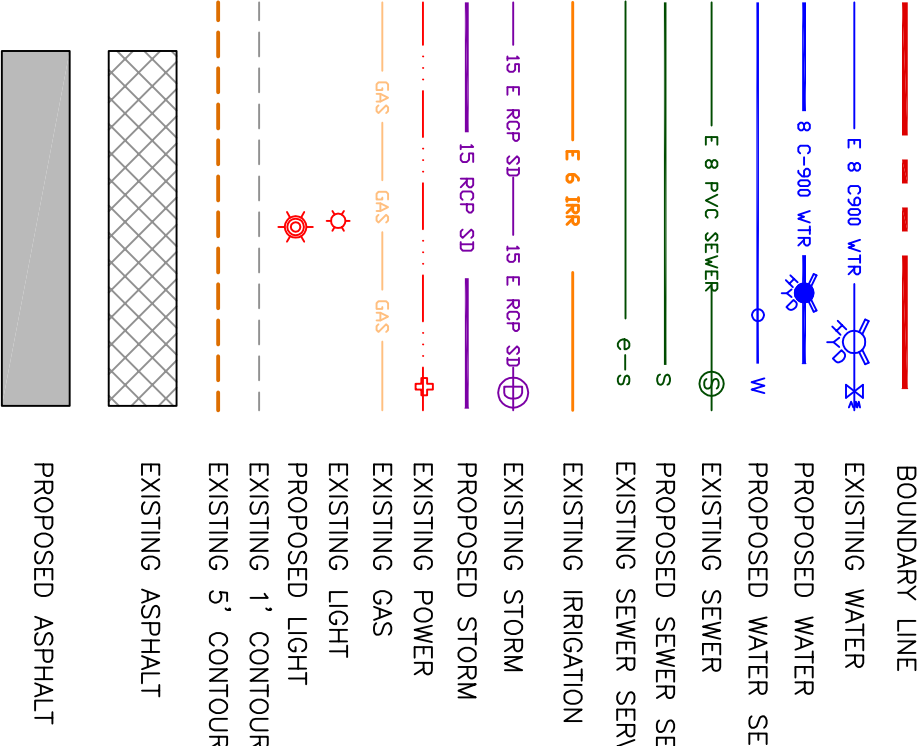
SCALE 1"=60' HORIZONTAL
SCALE 1"=10' VERTICAL



CONSTRUCTION NOTES

1. ALL CONSTRUCTION TO MEET HYRUM CITY STANDARDS AND SPECIFICATIONS
2. ALL WATER LINE SERVICES TO BE 1" COPPER WITH 18"x48" ABS OR PVC METER BARRLS. LIDS TO HAVE 2" DIA. HOLES. ALL METERS TO BE LOCATED WITHIN THE PARK STRIP. SEE HYRUM STANDARD DRAWING 6-44.
3. ALL WATER MAINS TO BE 12" OR LARGER. MINIMUM COVER OF 5 FEET. INSTALL FINE HYDRANT PER HYRUM STANDARD DRAWING 6-46.
4. WATER MAIN TO BE 8" OR 14" CLASS 350 D.I. OR PVC C-900 DR18 THRUST BLOCK PER HYRUM STANDARD DRAWING 6-42.
5. SEWER SERVICES SHALL BE 4" SPR 35 PVC PER HYRUM STANDARD DRAWINGS 5-36 THROUGH 5-38.
6. SEWER SERVICES TO EXTEND 10 FEET INSIDE LOT LINES WITH A 2'X4 MARKING THE END.
7. TOP ELEVATIONS ARE APPROXIMATE AND ALL MANHOLES ARE TO BE ADJUSTED TO FINISH GRADE.
8. MANHOLES ARE TO BE PER HYRUM STANDARD DRAWINGS 5-30, 5-31, 5-34, 5-35.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND FEES REQUIRED FOR THE COMPLETION OF THE WORK AND AS REQUIRED BY THE CITY.
10. ALL CATCH BASINS SHALL BE PER HYRUM STANDARD DRAWING 4-115& 4-117.
11. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING EXCAVATION.
12. SHUT-OFF VALVES FOR CULINARY WATER LINES ARE REQUIRED AND TO BE INSTALLED AT LOT LINES.
13. THE VALVE FOR THE HYDRANTS SHALL BE LOCATED NEXT TO THE MAIN LINE.
14. CONCRETE COLLARS SHALL BE REQUIRED AROUND ALL WATER VALVES. ROUND FOR PORTABLE WATER AND SQUARE FOR IRRIGATION.
15. CONTRACTOR TO FIELD VERIFY EXISTING SEWER INVERTS PRIOR TO BEGINNING CONSTRUCTION.
16. SEE HYRUM STANDARD DRAWING 4-110 FOR CURB AND GUTTER DETAIL.
17. SEE HYRUM STANDARD DRAWING 4-112 FOR HANDICAP RAMP DETAIL.

LEGEND



REVISION

DATE	BY

ALLIANCE CONSULTING ENGINEERS

150 EAST 200 NORTH SUITE P
LOGAN, UTAH 84321

ELK MOUNTAIN PHASE 11
480 SOUTH/1600 EAST ROAD PLAN
SHEET 3 OF 4

PART OF THE NORTHEAST QUARTER OF SECTION 10
TOWNSHIP 10 NORTH RANGE 1 EAST
SALT LAKE BASE AND MERIDIAN
480 SOUTH, 1520 EAST
HYRUM, UTAH

SCALE: AS NOTED

DRAWN BY: AM

CHECKED BY: AM

DATE: 2-2019

APPROVED BY: BL

DWG DATA: prelim.DWG

1. ALLOCATION/CONSTRUCTION TO MEET HANNU CITY STANDARDS AND SPECIFICATIONS
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PREPARED DRAWINGS AND THE COMPLETION OF ALL THE WORK AND AS REQUIRED BY THE CITY.
3. ALL CATCH BASINS SHALL HAVE A BICYCLE-SAFE GRADE.
4. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING EXCAVATION.
5. CONTRACTOR SHALL PROVIDE AND INSTALL A BARRING "SHOULDER" FOR FOOTWALKS AND EACH CATCH BASIN CONNECTS TO A SLUMP. INSTALL PER MANUFACTURER REQUIREMENTS. MODIFICATION OF STANDARD CATCH BASIN MAY BE REQUIRED.

BOUNDARY LINE	EXIST. CONTOUR (5 FT INTERVAL)
NEW STORM LINE/ MANHOLE	EXIST. CONTOUR (1 FT INTERVAL)
FLOW ARROW	NEW CONTOUR (2.5 FT INTERVAL)

CONTRIBUTING DRAINAGE AREA A: 95.271 S.F.(2.19 acres)

C-UNDERGROUS: 0.9
C-UNDERGROUS: 11,548 S.F. Homes
C-UNDERGROUS: 53,621 S.F. Total

BETANNING UNDEVELOPED AREA: 41,650 S.F.
C-UNDEVELOPED: 0.15
C/A= 6.248

C-POSTI=54,506/95,271 = 0.57

LENGTH OF DRAINAGE PATH: 576 FEET
TIME OF CONCENTRATION: 576/180 +10= 13.2 MIN
100=3.9 IN/HR

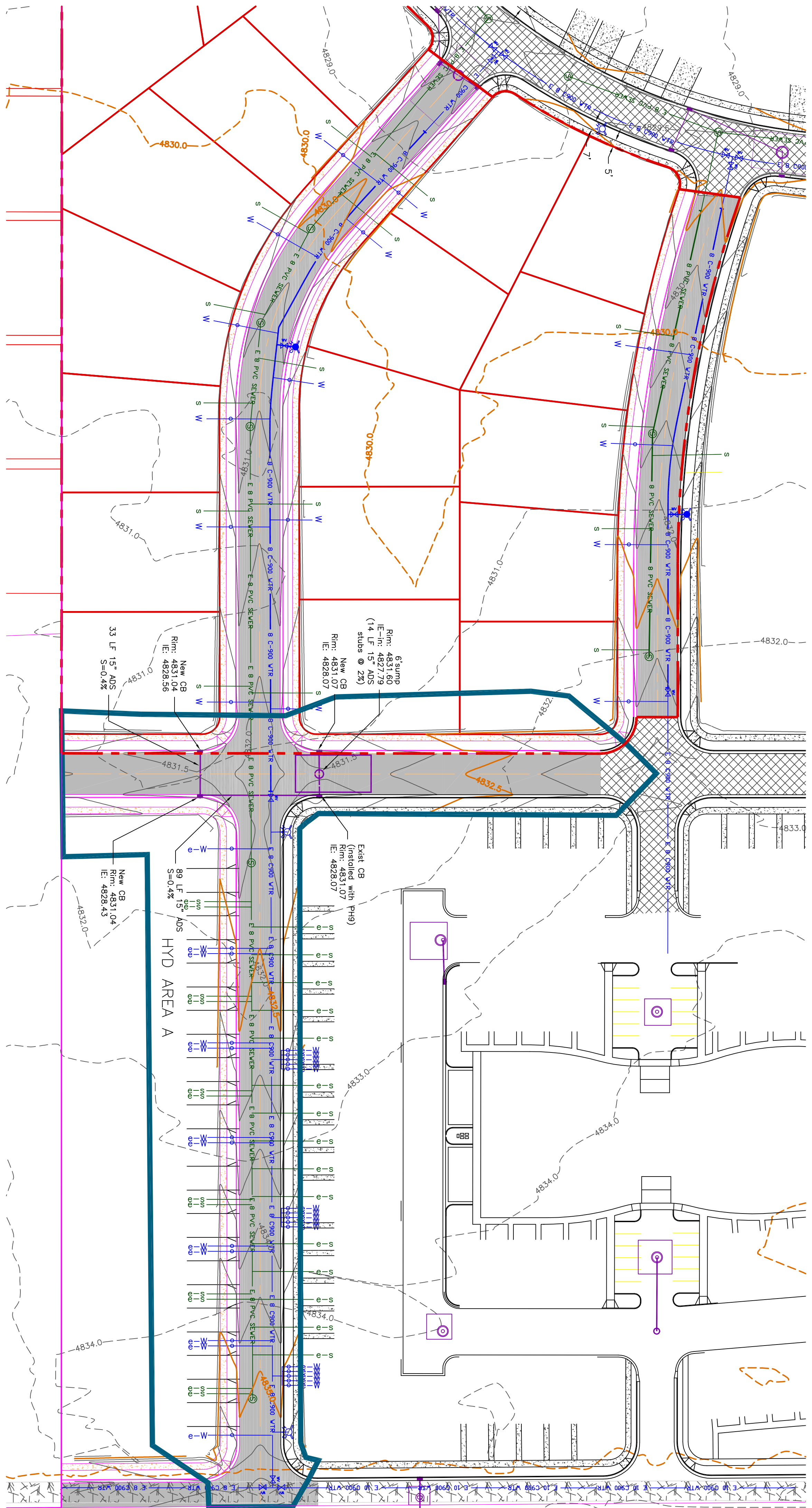
0.100 - (3.9IN)/HR=57.2 IN ACRES= 4.90 CFS
CAPACITY OF 15 IN PIPE @ 0.5% = 4.90 CFS

VOLUME REQUIRED FOR SLUMP
100 YR 24 HR STORM: 3.15 INCHES (NOAA ATLAS 14)
C-POSTI: 0.46
C-POSTI: (3.15 IN)*(0.57)(2.19 ACRES) = 14,254 CF

SEE 57'x48'x90" SLUMP

[illegible]

THE ORIGINAL CALCULATIONS IGNORED BOTH THE VOID RATIO AND INFILTRATION—THE ABOVE CALCULATION SHOWS HOW THESE TWO FACTORS CANCEL EACH OTHER OUT IN TERMS OF THE VOLUME REQUIRED.



A technical cross-section diagram of a gravel sump. The diagram shows a rectangular structure with a sloped bottom. At the top, there is a circular opening labeled 'SMH1' with a diameter of '6" DIA'. Below this opening is a 'PERFORATED MANHOLE'. The bottom of the structure is filled with 'WASHED GRAVEL'. The gravel is labeled 'SIZE AS NOTED IN CALCULATION'. The entire structure is labeled 'CATCH BASIN W/ SNOOT'.

SMH1
6" DIA
PERFORATED
MANHOLE

WASHED GRAVEL
SIZE AS NOTED IN
CALCULATION

CATCH BASIN
W/ SNOOT

GRAVEL SUMP DETAIL

1-1/2" MINUS WASHED
GRAVEL TO BE COMPLETELY
ENCASED IN FILTER FABRIC
(APPROVED BY CITY
ENGINEER)

REVISION					
DATE					
BY					



**ALLIANCE CONSULTING
ENGINEERS**

1150 EAST 200 NORTH SUITE P
LOCAL, UTAH 84321

ELK MOUNTAIN PHASE 11
DRAINAGE PLAN
SHEET 4 OF 4

1150 EAST 200 NORTH SUITE P
LOCAL, UTAH 84321

SCALE:	AS NOTED	DRAWN BY:	AM	CHECKED BY:	AM	DATE:	2-2019
		APPROVED BY:	BL	DWG DATA: prelim,DWG			