

Application for Subdivision & Planned Unit Development Revised July 2015 **FEB 18 2016**

Application Date \_\_\_\_\_  
Fee: 487500

Name of Subdivision/Planned Unit Development:  
Palomar Estates Phase 2 Subdivision

Location (Legal Description)  
See attached Legal Description

Owner Kendrick Rogers Ph ( ) 435-703-4007  
Address 2259 S. Fairway Hills Dr. Fax: \_\_\_\_\_  
City St. George State Utah Zip 84770  
E-Mail kendrick@infowest.com

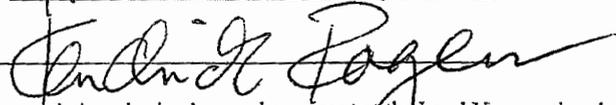
Applicant Same as owner Ph ( ) \_\_\_\_\_  
Address \_\_\_\_\_ Fax \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ E-Mail \_\_\_\_\_

Registered Engineer or Surveyor Iron Rock Engineering, Inc dba. TC Engineering  
Address 460 East 300 South Fax 435-644-2969  
City Kanab State Utah Zip 84741  
Email tom@tc-eng.com

Existing Zone <u>R-1</u>	Zone Change Require	<u>Y</u>	<u>N</u>
Number of Lots <u>4</u>	Total Acreage	_____	_____
Minimum Lot Size <u>5.16 Acres</u>	Open Space Acres	_____	_____
Overall Density _____	% Open Space	_____	_____

Additional Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

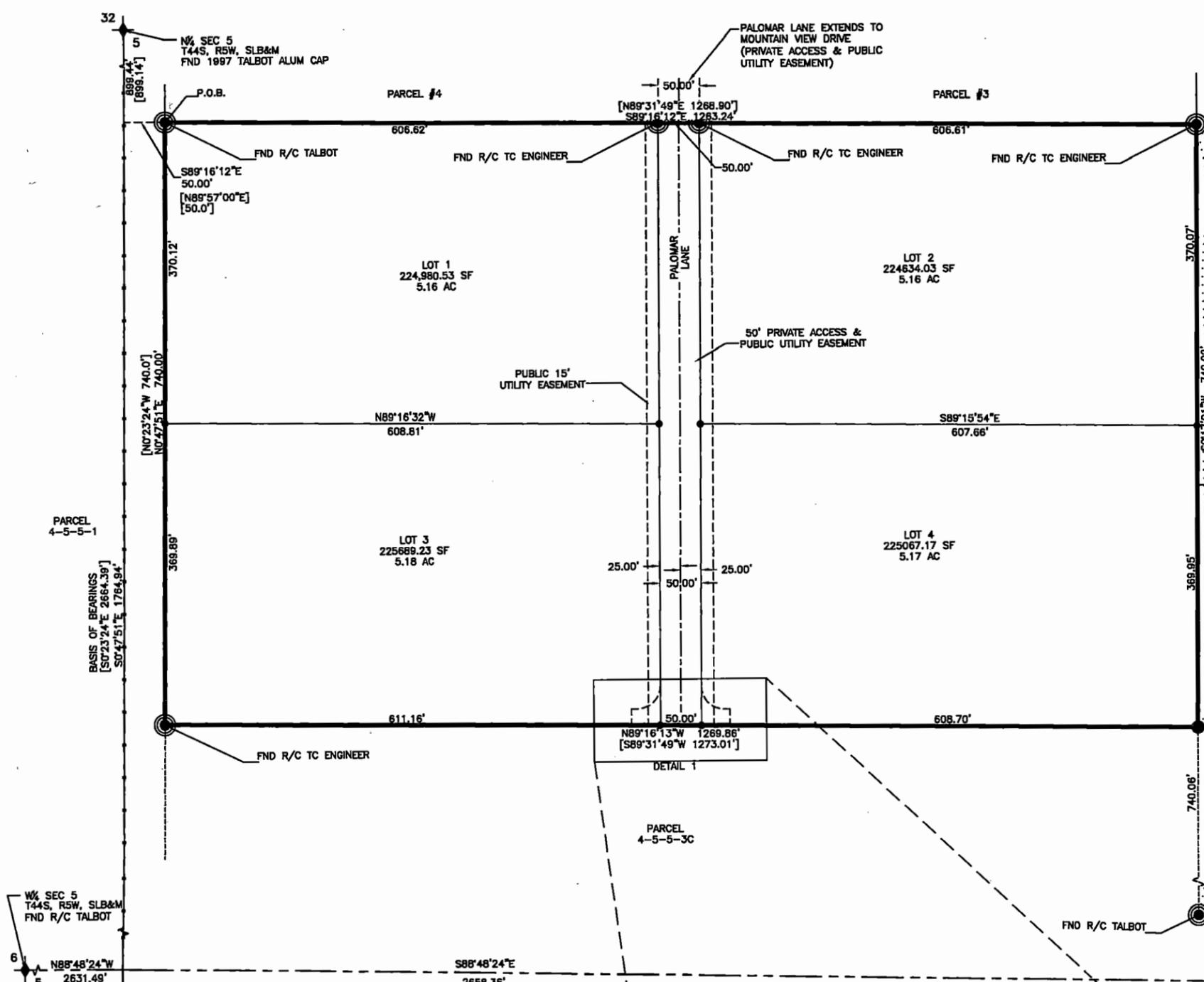
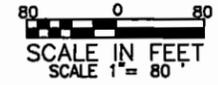
I HEREBY CERTIFY THE ABOVE INFORMATION TO BE TRUE AND ACCURATE

Printed Name: KENDRICK ROGERS  
Signature: 

\*It is highly recommended that the applicant or their authorized agent be present at the Land Use meeting that the Subdivision & Planned Unit is an Agenda Item. Electronic appearance is acceptable if prior arrangements are made.

# PALOMAR RANCH ESTATES PHASE 2 SUBDIVISION

LOCATED IN NE 1/4 SECTION 5,  
TOWNSHIP 44 SOUTH, RANGE 5 WEST  
SALT LAKE BASE AND MERIDIAN



### Palomar Ranch Estates, Phase 2 Subdivision Legal Description:

#### Record Description:

Beginning at a Point which lies North 89° 57' 00" East 50.0 feet, along the section line and South 00° 23' 24" East 899.14 feet, from the North 1/4 Corner of Section 5, Township 44 South, Range 5 West, Salt Lake Base and Meridian, and running: thence North 89° 31' 49" East 1268.90 feet; thence South 00° 42' 29" East 740.01 feet; thence South 89° 31' 49" West 1273.01 feet; thence North 00° 23' 24" West 740.0 feet, to the Point of Beginning. Containing 21.69 acres (more or less).

#### As-Surveyed Description:

Commencing at the North 1/4 Corner of Section 5, Township 44 South, Range 5 West, Salt Lake Base and Meridian, thence, along the north-south 1/4 line, South 00° 47' 51" East 899.50 feet, thence South 89° 16' 12" East, to the POINT OF BEGINNING, and running: thence South 89° 16' 12" East 1263.23 feet, to the east 1/16 line; thence, along said line, South 00° 17' 01" West 740.02 feet; thence North 89° 16' 13" West 1269.86 feet, to a point 50.00 feet from the north-south 1/4 line; thence, parallel to said line, North 00° 47' 51" East 740.00 feet, to the POINT OF BEGINNING; containing 21.52 acres (more or less).

#### SURVEYOR'S CERTIFICATE

I, Thomas W Avant, do hereby certify that I am a Licensed Land Surveyor, and that I hold Certificate of Registration No. (License No.) 5561917, as prescribed by the laws of the State of Utah. I further certify that by the authority of the owners, I have made a plot of the tract of land shown on this survey and described above to be hereafter known as "Palomar Ranch Estates, Phase 2" and that said tract of land has been subdivided into four lots, and Public Utility and Private Access Easements as shown on this plot.

Thomas W Avant R.P.L.S. No. 5561917 DATE

The Owner(s) of the Property described in the Boundary Description, does consent to the preparation and recording of this plat and Subject to any conditions and restrictions stated hereon, have caused the same to be Subdivided into 4 Lots, Public Utility Easements, Temporary Turn Around Easement and Private Roads and does hereby offer and convey to all public utility agencies and their successors and assigns a permanent easement and right-of-way for the construction and maintenance of subterranean electrical, telephons, water lines and appurtenances, together with the right of access thereto. The Temporary Turn Around Easement to be vacate upon Palomar Lane being extended to the South.

IN WITNESS we have hereunto set our hands this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Kendrick Rogers, member  
Southern Star Homes, LLC  
2259 S. Fairway Hills, Dr.  
St. George, Utah 84770

**Reason for Survey:**  
To divide parcel 4-5-5-3B into 4 parcels of 5 acres or more.

**Referenced Documents:**  
- Warranty Deed - Book 0455 Page 082

#### ACKNOWLEDGMENT

STATE OF \_\_\_\_\_ ) s.s.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, personally appeared before me Kendrick Rogers, member of Southern Star Homes, LLC who is personally know to me (or satisfactorily proved to me), and who being by me duly sworn did say that he executed this Plat.

#### NOTARY PUBLIC

#### CERTIFICATE OF RECORDING

I, \_\_\_\_\_ Recorder of Kane County, do hereby certify that above Plat was filed for recording in my office this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

KANE COUNTY RECORDER ENTRY NO. \_\_\_\_\_

RECORDED AND FILED AT THE REQUEST OF: \_\_\_\_\_

- LEGEND**
- SET 5/8" x 36" REBAR WITH PLASTIC CAP MARKED TC ENG. PLS 5561917
  - FOUND MONUMENT AS NOTED
  - ✦ FOUND SECTION CORNER AS NOTED

PROPERTY LINE  
PUBLIC UTILITY & PRIVATE ACCESS EASEMENT  
ADJACENT PROPERTY  
TEMPORARY EASEMENT  
SECTION LINE  
X LINE  
1/2 LINE  
SURVEY BOUNDARY  
RECORD BEARING AND DISTANCE

#### COUNTY SURVEYOR CERTIFICATE

I, \_\_\_\_\_ Kane County Surveyor, do hereby certify that this office has examined the above plat and have determined that it is correct and in accordance with information on file in this office and recommend it for approval this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

KANE COUNTY SURVEYOR

#### Kane County Land Use Authority

On this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, the Land Use Authority of Kane County, Utah, having reviewed the above plat and having found that it complies with the requirements of the Kane County's Land Use Ordinance and by authorization of said authority hereby recommend approval of said plat for acceptance by Kane County, Utah.

CHAIRMAN Land Use Authority

#### by the Kane County Commission

We the Kane County Commission have reviewed the hereon plat and by authorization of said Kane County Commission recorded in the minutes of its meeting of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, hereby accept the said Plat with all commitments and all obligations pertaining thereto and is hereby ordered filed for record in the Office of the Kane County Recorder.

Attest: \_\_\_\_\_ Chairman - Kane County Commission

#### COUNTY ATTORNEY CERTIFICATE

I, \_\_\_\_\_ Attorney for Kane County, do hereby certify that I have examined the above plat and said plat meets the requirements of Kane County and is hereby recommended for approval this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

KANE COUNTY ATTORNEY

DATE:	REVISION:

PALOMAR RANCH ESTATES  
PHASE 2 SUBDIVISION  
KANE COUNTY, UT  
SCALE: 1" = 80'  
REDUCE SCALE BY 1/2 FOR 11x17 DRAWINGS

TC ENGINEERING  
DESIGNING and BUILDING A  
BETTER FUTURE  
460 EAST 300 SOUTH  
P.O. BOX 55, KANAB, UTAH 84741  
(435)644-2031 (office) / (435)644-2969 (fax)

FILE: \_\_\_\_\_  
VC AREA-3  
DRAWN BY: \_\_\_\_\_  
CH  
OF 1

# CONSTRUCTION PLANS

## KANE COUNTY, UTAH

SCALE IN FEET  
SCALE 1" = 75'

### PROJECT INFORMATION:

PROJECT LOCATION: \_\_\_\_\_ NORTH EAST 1/4 SECTION 5, TOWNSHIP 44 SOUTH, RANGE 5 WEST OF THE SALT LAKE BASE AND MERIDIAN, KANE COUNTY, UTAH

OWNER & DEVELOPER: \_\_\_\_\_ SOUTHERN STAR HOMES, LLC. KENDRIC ROGERS - MEMBER 2259 S. FAIRWAY HILLS DR. ST. GEORGE, UT 84770 (435) 703-4007

SUBDIVISION SPECIFICATION:

AREA: \_\_\_\_\_ 21.52 ACRES

ZONE: \_\_\_\_\_ R-5

SETBACKS:

FRONT: \_\_\_\_\_ 30 FT.

SIDES: \_\_\_\_\_ 10 FT.

REAR: \_\_\_\_\_ 20 FT.

DESIGN SPECIFICATIONS: \_\_\_\_\_ KANE COUNTY - SUBDIVISION ORDINANCE

#### DESIGN CRITERIA:

STREETS TYPE: \_\_\_\_\_ PRIVATE ACCESS

MIN. RIGHT-OF-WAY: \_\_\_\_\_ 50 FT.

STREET CROSS-SECTION: \_\_\_\_\_ TYPICAL STREET DETAIL 6, SHEET C400

ROAD DESIGN SPEED: \_\_\_\_\_ 25 M.P.H.

ROAD POSTED SPEED: \_\_\_\_\_ 25 M.P.H.

MAIN ROAD STOPPING SIGHT DISTANCE: \_\_\_\_\_ 155 FT.

MAX SUPERELEVATION: \_\_\_\_\_ 0%

MIN VERTICAL CURVE RATES: \_\_\_\_\_ Kcrest = 12  
Ksag = 28

MAX. GRADES: \_\_\_\_\_ 2.09%

ESTIMATED SUBBASE CUT (UNADJUSTED) \_\_\_\_\_ 292.08 CU. YDS.

ESTIMATED SUBBASE FILL (ADJUSTED 120%) \_\_\_\_\_ 224.98 CU. YDS.

ESTIMATED SUBBASE NET \_\_\_\_\_ 67.10 CU YDS. (CUT)

ESTIMATED PIT RUN \_\_\_\_\_ 424.06 CU YDS.

ESTIMATED BASE \_\_\_\_\_ 141.35 CU YDS.

ALL CONSTRUCTION SHALL COMPLY WITH THE PUBLIC WORKS DESIGN AND CONSTRUCTION STANDARDS FOR KANE COUNTY.

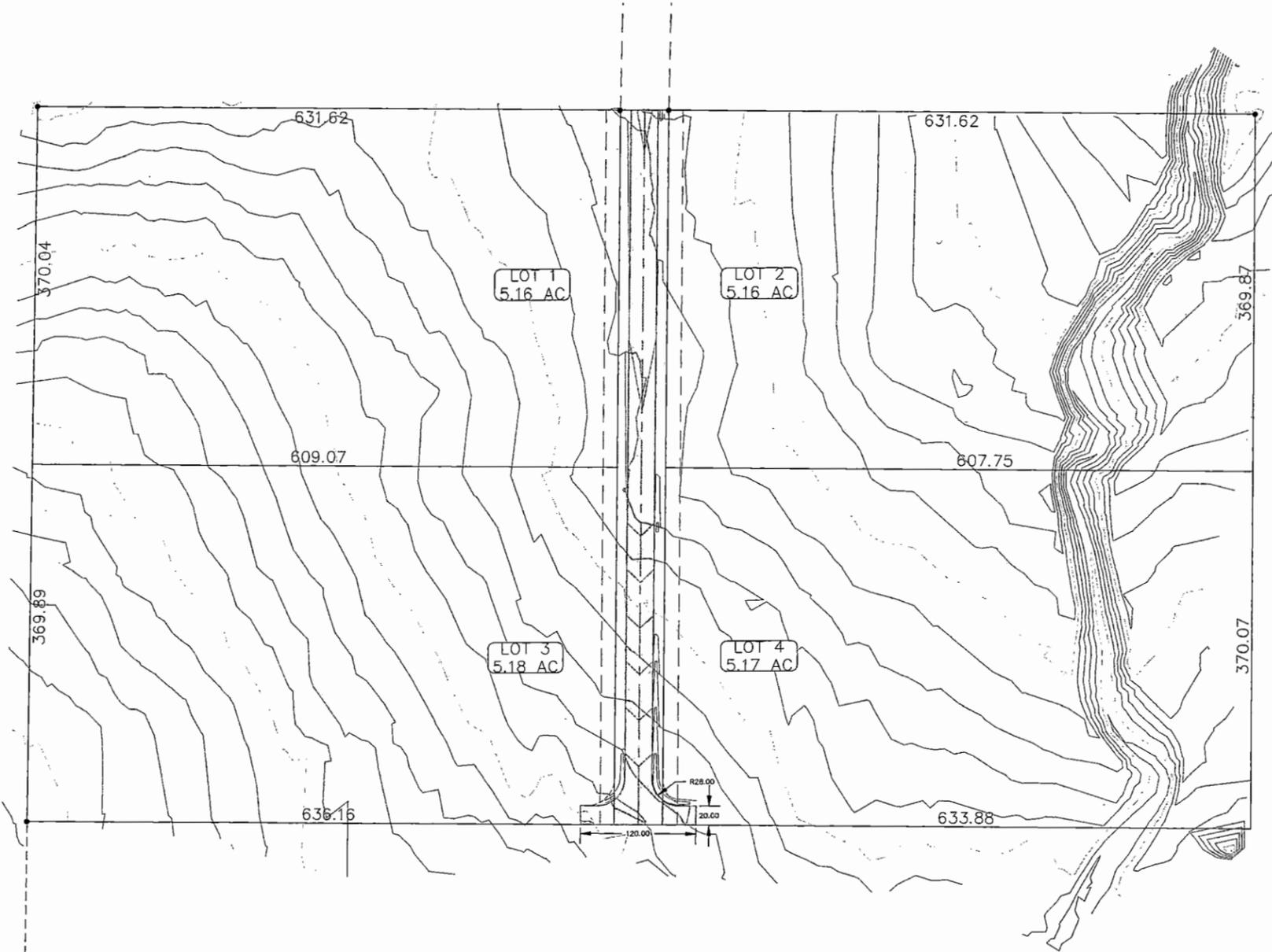
### DRAWING INDEX

TITLE SHEET: \_\_\_\_\_ SHEET C100

PROJECT SPECIFICATIONS: \_\_\_\_\_ SHEET C200

CONSTRUCTION PLANS: \_\_\_\_\_ SHEET C300-C301

CONSTRUCTION DETAILS: \_\_\_\_\_ SHEET C400



### LEGEND

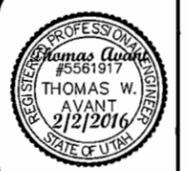
- FOUND SECTION CORNER AS DESCRIBED
- REBAR AND CAP
- EXISTING ROAD CENTERLINE
- PROPOSED ROAD CENTERLINE
- UTILITY EASEMENT
- PROPERTY LINES
- PROJECT BOUNDARY LINES
- EXISTING MINOR CONTOUR LINE
- EXISTING MAJOR CONTOUR LINE
- PROPOSED MINOR CONTOUR LINE
- PROPOSED MAJOR CONTOUR LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED UNDERGROUND POWER LINE
- PROPOSED UNDERGROUND TELEPHONE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- AIR/VAC ASSEMBLY
- EXISTING WATER METER
- PROPOSED WATER METER
- EXISTING TRANSFORMER
- PROPOSED TRANSFORMER

Know what's below. Call 811 before you dig.

**BLUE STAKES OF UTAH**  
UTILITY NOTIFICATION CENTER, INC.  
www.bluestakes.org  
1-800-662-4111

DATE:	REVISION:
1/18/2016	INITIAL SUBMITTAL
2/22/2016	USER REVISIONS

PALOMAR RANCH ESTATES - PHASE 2  
TITLE SHEET  
KANE COUNTY, UT  
SCALE= 1" = 75'  
REDUCE SCALE BY 1/2 FOR 11X17 DRAWINGS



**TC ENGINEERING**  
DESIGNING and BUILDING A  
BETTER FUTURE  
460 EAST 300 SOUTH  
P.O. BOX 55, KANAB, UTAH 84741  
(435)644-2031 (office) / (435)644-2969 (fax)

FILE: \_\_\_\_\_  
DRAWN BY: J.D.B.  
SHEET: C100

**GENERAL NOTES:**

SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN SECTION 3 OF THE KANE COUNTY STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 96% OF MODIFIED PROCTOR MAXIMUM DENSITY PER AASHTO T180, METHOD D FOR A-1 SOILS AND AASHTO T99, METHOD D FOR OTHER SOILS FOR TRAVELED AREAS INCLUDING ROADS, SHOULDERS, PARKING LOTS, AND DRIVEWAYS AND 90% OF OF MODIFIED PROCTOR MAXIMUM DENSITY PER AASHTO T180, METHOD D FOR A-1 SOILS AND AASHTO T99, METHOD D FOR OTHER SOILS FOR NON-TRAVELED AREAS. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% PLUS OR MINUS OF OPTIMUM. PLACE BACKFILL AND EMBANKMENT MATERIALS IN LAYERS NOT EXCEEDING 12 INCHES NON-COMPACTIVE DEPTH. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS & SPECS.

BACKFILL MATERIAL FOR UTILITY TRENCHES SHALL BE MATERIAL FREE OF RUBBISH, DEBRIS, ORGANIC MATERIAL, FROZEN MATERIAL, ROCKS EXCEEDING 12 INCHES, OR OTHER OBJECTIONABLE MATERIAL. BACKFILL FOR ELECTRICAL TRENCHES SHALL NOT INCLUDE ANY ROCKS EXCEEDING 3 INCHES IN SIZE, BROKEN PORTLAND CEMENT CONCRETE OR ASPHALT. PIPE BEDDING SHALL BE NATIVE OR IMPORTED SOIL, SAND, GRAVEL, CRUSHED ROCK OR OTHER MATERIAL NOT EXCEEDING 3/4 INCH MAXIMUM PARTICLE SIZE. FLOWABLE FILL CAN BE USED AS BEDDING. DO NOT PLACE ROCKS LARGER THAN 2.5 INCHES IN BACKFILL PLACED WITHIN 12 INCHES OF PAVEMENT SUBGRADE. BACKFILL TRENCHES AS SOON AS POSSIBLE. NO MORE THAN 500 LINEAR FEET OF OPEN TRENCH IS PERMITTED.

ALL ROADWAY AREAS SHALL BE SCARIFIED, MOISTURE CONDITIONED, AND COMPACTED MIN 12" OF SUBBASE AND HAVE STERILIZATION OF THE SOIL TO EPA STANDARDS AND USU EXTENSION RECOMMENDED PRODUCTS PRIOR TO PLACEMENT OF UBC ROAD BASE OR ASPHALT.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.

THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT.

**WATER NOTES:**

1. ALL CONSTRUCTION SHALL CONFORM TO THE "KANE COUNTY STANDARD SPECIFICATIONS AND DRAWING DETAILS FOR DESIGN AND CONSTRUCTION", AND "THE INTERNATIONAL PLUMBING CODE".
2. CONTRACTOR SHALL POTHOLE ALL PIPELINES TO VERIFY DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION.
3. 12 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL ALSO BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.
4. THRUST RESTRAINT ON THE NEW PIPELINE SHALL BE BELL AND SPIGOT JOINT RESTRAINT HARNESS OR CLAMP RATED AT PRESSURE CLASS OF PIPE OR GREATER. USE MEGA-LUG OR APPROVED EQUAL ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.
5. ASPHALT REPLACED OVER THE PIPE TRENCHING IS TO MATCH EXISTING PAVEMENT DEPTHS WITH A 6" OVER CUT FROM THE EDGE OF THE TRENCH LINE ON EACH SIDE OF THE TRENCH. SEE DETAIL 1, SHEET C400.
7. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY THE ENGINEER.
9. ALL WATER LINES TO BE 8" C-900 PIPE WITH BELL AND SPIGOT JOINTS WITH ELASTOMERIC GASKETS AND BEAR NSF LABEL. ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON. ALL WATER LINES SHALL BE INSTALLED AND TESTED AS PER KANE COUNTY STANDARD SPECIFICATIONS.
10. ALL SERVICE LINES TO LOTS SHALL BE HDPE PIPE, 200 PSI, IRON PIPE SIZE WITH STAINLESS STEEL INSERT STIFFENERS AND MAINTAIN 4 FEET MINIMUM COVER TO TOP OF PIPE. TAP SADDLE, CORPORATION STOP, AND SERVICE METER PER KANE COUNTY STANDARD SPECIFICATIONS. SERVICE LINES SHALL BE A MIN 3/4" SERVICE LINE TO EACH LOT. INSTALL METER ON PROPERTY LINE.
11. ALL FIRE HYDRANTS SHALL BE KENNEDY 6' DRY BARREL TYPE WITH PRIMER AND TWO COATS OF RED ENAMEL WITH A MIN 6 FOOT BURY. HYDRANTS SHALL HAVE A 6" C-900 PIPE AND SHUT-OFF VALVE BETWEEN WATER SUPPLY AND HYDRANT AND INSTALLED AS PER KANE COUNTY STANDARD SPECIFICATIONS.
12. ALL WATER MAIN LINES TO BE INSTALLED A MINIMUM OF 10' HORIZONTALLY FROM ANY SEWER MAIN LINE AND 18" VERTICALLY ABOVE TOP OF SEWER MAIN LINE OR STORM DRAIN LINE AT ANY CROSSING. WHEN THE WATER MAIN CANNOT BE AS HIGH AS 18 INCHES ABOVE THE SEWER, THE SEWER SHALL BE CONSTRUCTED OF MATERIAL WITH PRESSURE CONDUIT STANDARDS FOR A DISTANCE OF 20 FEET ON EITHER SIDE OF THE CROSSING. ALL POTABLE AND FIRE WATER LINE TO MAINTAIN A MINIMUM DEPTH OF 60" BELOW FINISHED GRADE TO TOP OF PIPE.
13. ALL TEES, BENDS PLUGS AND HYDRANTS SHALL BE PROVIDED WITH REACTION BLOCKING, TIE RODS OR JOINTS DESIGNED TO PREVENT MOVEMENT.
14. ALL VALVES SHALL BE AWWA C509 IRON BODY GATE VALVES WITH BRONZE TRIM, NON-RISING STEM WITH A 2" SQUARE OPERATING NUT, SINGLE WEDGE, RESILIENT SEAT, MECHANICAL JOINT ENDS. RATED FOR 200 POUNDS PER SQUARE INCH WORKING PRESSURE. VALVE BOX AND COVER SHALL BE CAST IRON EXTENSION SLEEVE TYPE WITH "WATER" CAST ON COVER WITH A CLASS AA(AE) REINFORCED CONCRETE.
15. ALL MATERIALS TO BE NSF 61 CERTIFIED FOR USE WITH POTABLE WATER.

**WATER PIPE TESTING:**

1. TEST WATER MAINS AT LESSER OF 200 PSI OR PRESSURE RATING OF PIPE. TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE KANE COUNTY ENGINEER, OR KANE COUNTY WATER CONSERVANCY DISTRICT, AS APPLICABLE.
  - A. FILL PIPE WITH WATER AND PLACE UNDER SLIGHT PRESSURE FOR AT LEAST 48 HOURS.
  - B. BRING PIPE PRESSURE TO TEST PRESSURE AND MAINTAIN FOR 4 HOURS MIN.
  - C. PROVIDE ACCURATE MEANS FOR MEASURING QUANTITY OF WATER NEEDED TO MAINTAIN TEST PRESSURE ON PIPE FOR TEST PERIOD.
  - D. IF VOLUME OF WATER ADDED TO PIPE IS 10 GALLONS PER INCH OF PIPE DIAMETER PER MILE OF PIPE PER 24 HOURS OR LESS, PIPE PASSES TEST.
  - E. IF PIPE DOES NOT PASS TEST, FIND SOURCE OF LEAKAGE, REPAIR OR REPLACE, AND RETEST. REPEAT UNTIL PIPE PASSES TEST.
2. BACTERIOLOGICAL TEST: AFTER FLUSHING CHLORINATED WATER FROM WATER LINES, TAKE SAMPLE FOR BACTERIOLOGICAL TEST. IF NECESSARY, RE-CHLORINATE UNTIL SATISFACTORY BACTERIOLOGICAL TEST IS OBTAINED. DO NOT PUT PIPING INTO SERVICE UNTIL TEST RESULTS ARE SATISFACTORY. THE FOLLOWING TEST PROTOCOL IS LISTED IN ANSI/AWWA STANDARD C651.
  - A. COLLECT TWO SAMPLES FROM EACH SAMPLE LOCATION TAKEN AT LEAST 24 HRS. APART.
  - B. COLLECT A SAMPLE FROM AT LEAST EVERY 1,200 FT OF NEW MAIN.
  - C. COLLECT A SAMPLE FROM THE END OF THE LINE AND AT LEAST ONE FROM EACH BRANCH.
  - D. TEST SAMPLES FOR TOTAL COLIFORM BACTERIA IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. ADDITIONAL TESTS MAY BE REQUIRED INCLUDING: CHLORINE RESIDUAL, TURBIDITY, pH, AND HETEROTROPHOC PLAT COUNT (HPC).
  - E. SPECIAL CONDITION. COLLECT ADDITIONAL SAMPLES AT INTERVALS OF APPROXIMATELY 200 FT IF TRENCH WATER HAS ENTERED THE NEW MAIN DURING CONSTRUCTION OR IF EXCESSIVE QUANTITIES OF DIRT OR DEBRIS HAVE ENTERED THE NEW MAIN. TAKE SAMPLES OF WATER THAT HAS STOOD IN THE NEW MAIN FOR AT LEAST 16 HOURS AFTER FINAL FLUSHING.
  - F. COLLECT SAMPLES IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER DO NOT USE HOSE OR FIRE HYDRANTS FOR THE COLLECTION OF SAMPLES. ENSURE THAT THERE IS NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. USE CLEAN AND DISINFECTED SAMPLING PIPE THAT HAS BEEN FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER TUBE GOOSENECK ASSEMBLY. THIS ASSEMBLY CAN BE REMOVED AFTER SAMPLING AND USED AGAIN.
  - G. IF THE HPC TEST RESULTS ARE GREATER THAN 500 COLONY-FORMING UNITS(CFU) PER mL, FLUSH AND COLLECT A REPEAT SAMPLE UNTIL NO COLIFORMS ARE PRESENT AND HPC IS BELOW 500 CFU/mL.
  - H. COLIFORM BACTERIA MUST BE ABSENT FROM THE SAMPLES AND THE BACTERIOLOGICAL QUALITY OF THE WATER EQUAL TO OR BETTER THAN THAT OF THE DISTRIBUTION SYSTEM.
  - I. IF UNSATISFACTORY TEST RESULTS ARE OBTAINED, FLUSH THE MAIN AGAIN AND RESAMPLE. IF CHECK SAMPLES ALSO FAIL TO PRODUCE ACCEPTABLE RESULTS, RECHLORINATE THE MAIN BY THE CONTINUOUS-FEED OR SLUG METHOD UNTIL TWO CONSECUTIVE SETS OF ACCEPTABLE TESTS ARE TAKEN AT LEAST 24 HR APART. IN SOME CASES, IT MAY BE NECESSARY TO PIG OR PRESSURE WASH THE PIPE PRIOR TO RECHLORINATING THE MAIN. IT IS ADVISABLE TO CHECK THE QUALITY OF THE WATER ENTERING THE NEW MAIN BECAUSE HIGH VELOCITIES USED FOR FLUSHING MAY HAVE DISTURBED SEDIMENT IN THE SUPPLY PIPING AND RESULTED IN POOR QUALITY FEED WATER.

**WATER PIPE DISINFECTION**

1. AFTER COMPLETING PRESSURE TESTING, FLUSH PIPE TO REMOVE DIRT OR OTHER FOREIGN OBJECTS.
2. ADD LIQUID CHLORINE OR LIQUID CALCIUM HYPOCHLORITE TO PIPE TO OBTAIN 50 PPM CONCENTRATION OF CHLORINE. MAINTAIN 25 PPM CHLORINE RESIDUAL AT THE END OF 24 HOURS. DISINFECTION PROCEDURES SHALL COMPLY WITH UTAH STATE RULES FOR PUBLIC DRINKING WATER SYSTEMS, PART 11 AND AWWA C651.
3. FLUSH CHLORINATED WATER FROM PIPE. DISPOSE OF DISCHARGED CHLORINATED WATER IN ACCEPTABLE MANNER AND IN CONFORMANCE WITH RULES OF UTAH WATER QUALITY BOARD (SEE R317 OF ADMINISTRATIVE CODE), AND/OR AWWA STANDARDS.

DATE:	REVISION:
3/15/2016	1
3/17/2016	2
3/22/2016	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15

PALOMAR RANCH ESTATES - PHASE 2  
**PROJECT SPECIFICATIONS**  
 KANE COUNTY, UT  
 SCALE= NTS  
 REDUCE SCALE BY 1/2 FOR 11x17 DRAWINGS



**T.C. ENGINEERING**  
 DESIGNING and BUILDING A  
 BETTER FUTURE  
 460 EAST 900 SOUTH  
 P.O. BOX 55, KANAB, UTAH 84741  
 (435)644-2031 (office) / (435)644-9969 (fax)

FILE: ROGERS, KENDRICK  
 SHEET: C200  
 DRAWN BY: J.D.B.

60 0 60  
 SCALE IN FEET  
 SCALE 1" = 60'



**KEYED NOTES:**

- ① EXISTING 8" WATER MAIN
- ② EXISTING FIRE HYDRANT
- ③ TIE INTO EXISTING 8" WATER MAIN WITH PROPOSED 8" C900 WATER MAIN AT THIS APPROXIMATE LOCATION. ACTUAL DEPTH UNKNOWN. SEE DETAIL 1 SHEET C400 FOR TRENCHING REQUIREMENTS. INCLUDE JOINT RESTRAINTS PER KANE COUNTY STANDARDS.
- ④ EXISTING WATER METER
- ⑤ EXISTING ELECTRICAL TRANSFORMER
- ⑥ EXISTING UNDERGROUND ELECTRICAL CONDUIT
- ⑦ EXISTING FIBER OPTIC CONDUIT
- ⑧ INSTALL 3 PHASE POWER CONDUIT PER GARKANE ENERGY SPECIFICATIONS SEE DETAILS 1 & 8 SHEET C400.
- ⑨ 6" OF PIT RUN AND 2" OF GRANULAR BASE PER ROAD SECTION. SEE DETAIL 6, SHEET C400.
- ⑩ INSTALL NEW FIBER OPTIC CONDUIT PER SOUTH CENTRAL COMMUNICATIONS SPECIFICATIONS SEE DETAIL 1 SHEET C400 FOR TRENCHING REQUIREMENTS.
- ⑪ INSTALL NEW WATER METER PER DETAIL 2 SHEET C400.
- ⑫ INSTALL 1" POLY WATER SERVICE TO WATER METER PER DETAIL 5, SHEET C400.
- ⑬ INSTALL ELECTRICAL TRANSFORMER BOX PER DETAIL 7 SHEET C400.
- ⑭ INSTALL 8X6X8 TEE, 6" WATER VALVE AND FIRE HYDRANT PER DETAIL 3, SHEET C4.0.
- ⑮ INSTALL 8" WATER VALVE SEE DETAIL 4, SHEET C400.
- ⑯ CAP PROPOSED 8" WATER LINE

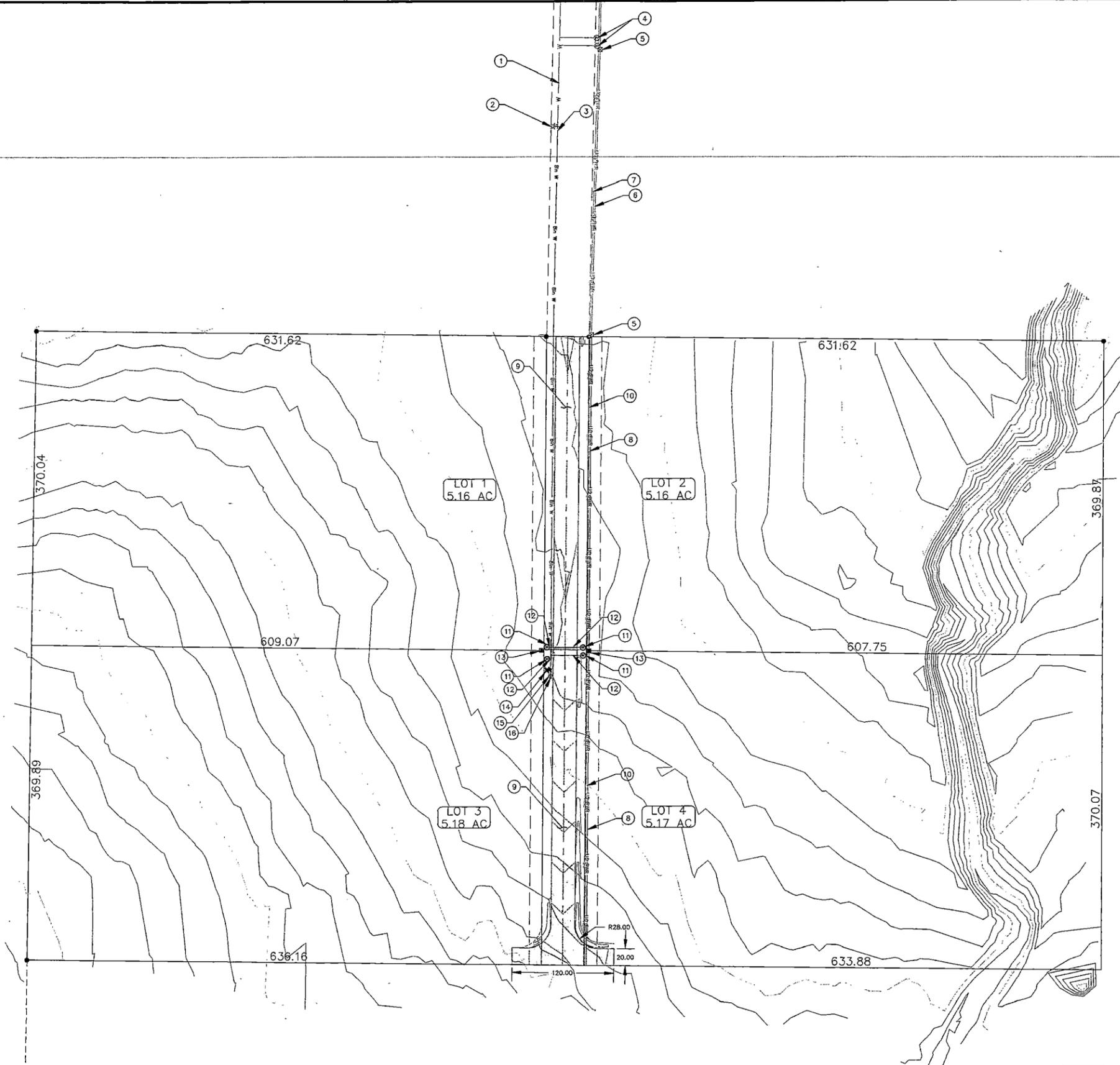
DATE:	REVISION:
1/17/2016	INITIAL SUBMITTAL
	REVISIONS

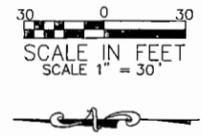
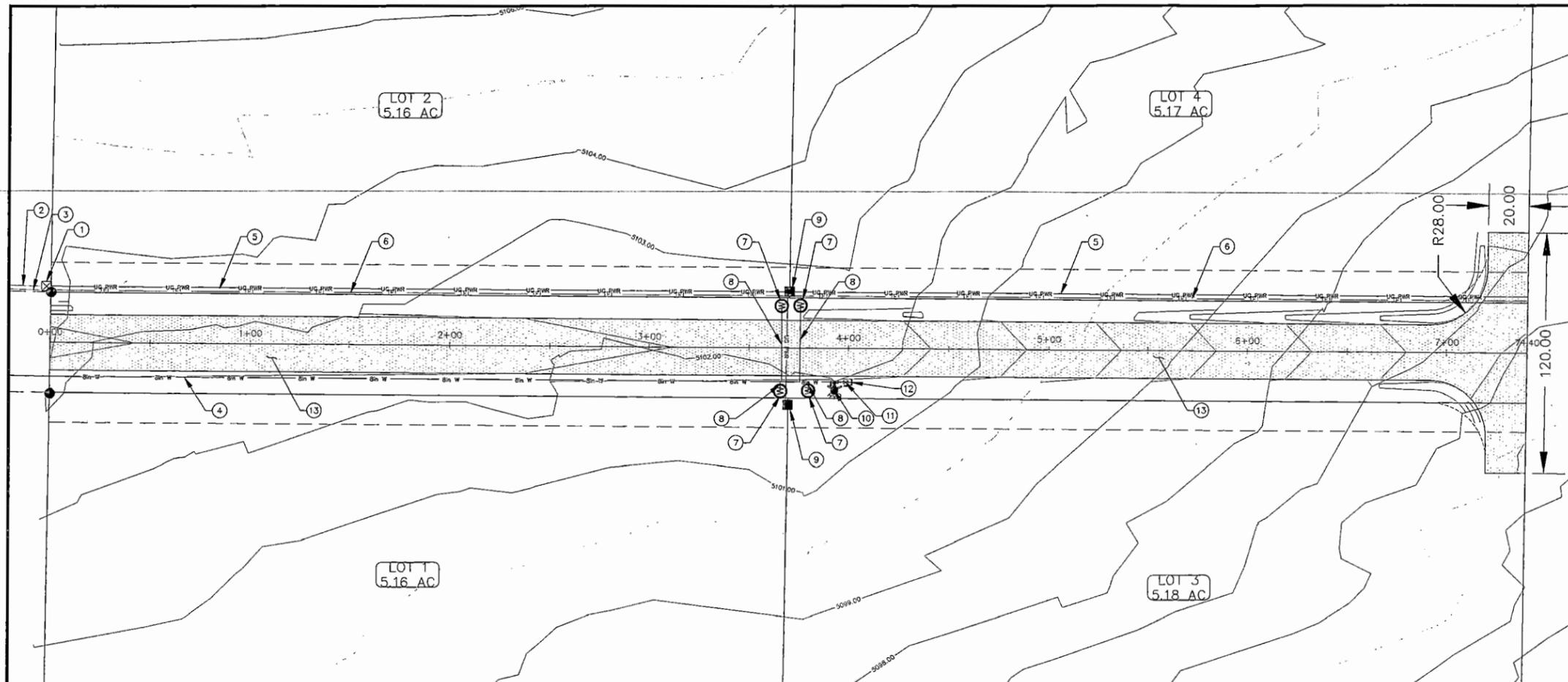
PALOMAR RANCH ESTATES - PHASE 2  
**SITE PLAN**  
 KANE COUNTY, UT  
 SCALE = 1" = 60'  
 REDUCE SCALE BY 1/2 FOR 11x17 DRAWINGS



**TC ENGINEERING**  
 DESIGNING and BUILDING A  
 BETTER FUTURE  
 460 EAST 300 SOUTH  
 P.O. BOX 55, KANAB, UTAH 84741  
 (435)644-2031 (office) / (435)644-2969 (fax)

FILE: ROGERS, KENDRICK  
 SHEET: C300  
 DRAWN BY: J.D.B.



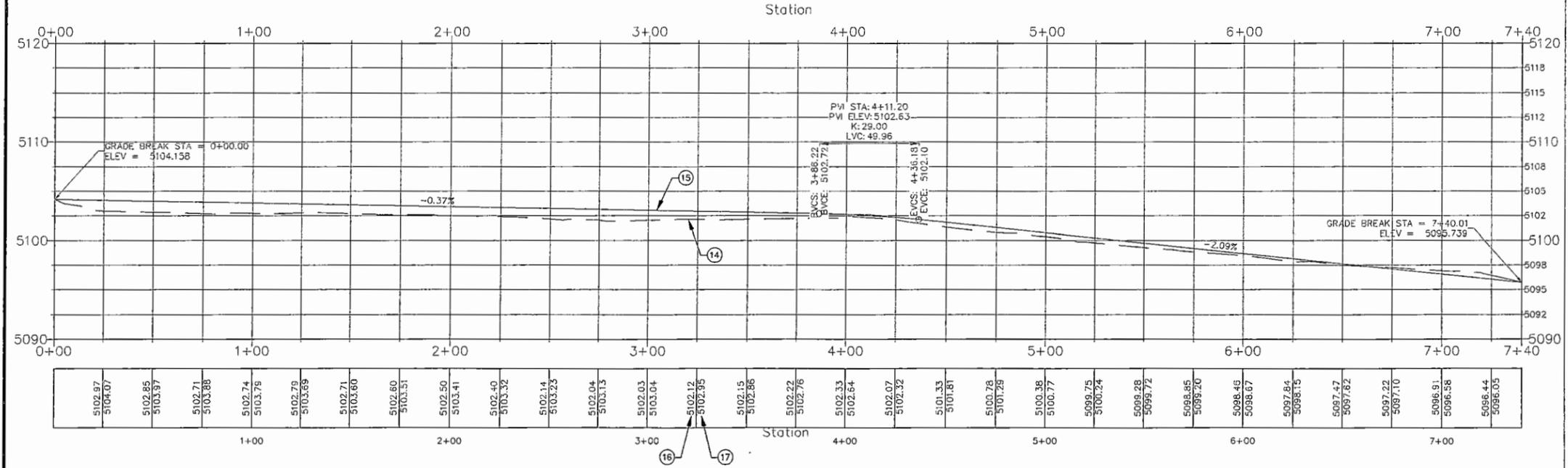


**PALOMAR LANE  
PLAN & PROFILE  
STA: 0+00 - 7+40**

**KEYED NOTES:**

- ① EXISTING ELECTRICAL TRANSFORMER
- ② EXISTING UNDERGROUND ELECTRICAL CONDUIT
- ③ EXISTING FIBER OPTIC COMMUNICATIONS CONDUIT
- ④ INSTALL 8" C900 WATER MAIN SEE DETAIL 1 SHEET C400 FOR TRENCHING REQUIREMENTS. INCLUDE JOINT RESTRAINTS PER KANE COUNTY STANDARDS.
- ⑤ INSTALL 3 PHASE POWER CONDUIT PER GARKANE ENERGY SPECIFICATIONS SEE DETAILS 1 & 8 SHEET C400.
- ⑥ INSTALL NEW FIBER OPTIC CONDUIT PER SOUTH CENTRAL COMMUNICATIONS SPECIFICATIONS SEE DETAIL 1 SHEET C400 FOR TRENCHING REQUIREMENTS.
- ⑦ INSTALL NEW WATER METER PER DETAIL 2 SHEET C400.
- ⑧ INSTALL 1" POLY WATER SERVICE TO WATER METER PER DETAIL 5, SHEET C400.
- ⑨ INSTALL ELECTRICAL TRANSFORMER BOX PER DETAIL 7 SHEET C400.
- ⑩ INSTALL 8X6X8 TEE, 6" WATER VALVE AND FIRE HYDRANT PER DETAIL 3, SHEET C4.0.
- ⑪ INSTALL 8" WATER VALVE SEE DETAIL 4, SHEET C400.
- ⑫ CAP PROPOSED 8" WATER LINE
- ⑬ 6" OF PIT RUN AND 2" OF GRANULAR BASE PER ROAD SECTION. SEE DETAIL 6, SHEET C400.
- ⑭ EXISTING GROUND PROFILE
- ⑮ PROPOSED ROADWAY PROFILE
- ⑯ EXISTING GRADE ELEVATION
- ⑰ PROPOSED ROADWAY FINISH GRADE ELEVATION

**PALOMAR LANE PROFILE**



DATE:	REVISION:
2/27/2016	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17

PALOMAR RANCH ESTATES - PHASE 2  
**PLAN & PROFILE**  
 KANE COUNTY, UT  
 SCALE = 1" = 30"  
 REDUCE SCALE BY 1/2 FOR 11x17 DRAWINGS

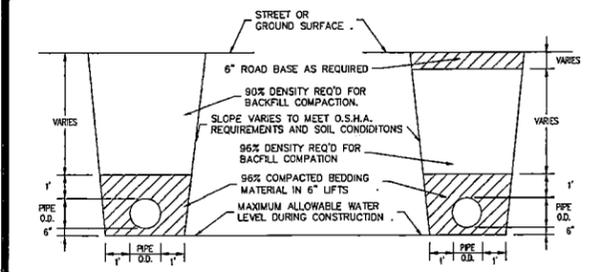


**TC ENGINEERING**  
 DESIGNING and BUILDING A  
 BETTER FUTURE  
 460 EAST 900 SOUTH  
 P.O. BOX 55, KANAB, UTAH 84741  
 (435)644-2031 (office) / (435)644-3969 (fax)



FILE: ROGERS, KENDRICK  
 SHEET: C301  
 DRAWN BY: J.D.B.

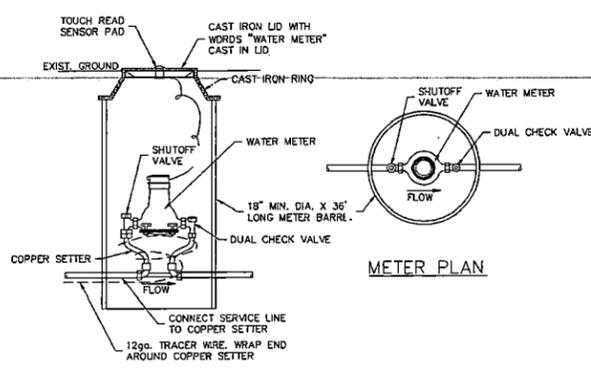
UTILITY	BURY DEPTH (MIN)	CONDUIT	TRACER WIRE / WARNING TAPE	REMARKS
WATER	4'	NO	TRACER WIRE WARNING TAPE	CONSULT LOCAL WATER CONSERV. DIST. AS NECESSARY
GAS	2.5' W/ SAND BEDDING	NO	18 GA. TRACER WIRE	
PHONE/FIBER	DROP OR SERVICE 2.25' MAIN PHONE OR LOCAL FIBER 3' INTER OFFICE FIBER 4'	ALL THREE	LOCATE WIRE	CONSULT LOCAL PHONE CO. FOR SPECIAL CONDITIONS
POWER	PRIMARY 4' SECONDARY 3'	BOTH P & S	WARNING TAPE 1" ABOVE CONDUCTOR	NO OTHER UTILITY WITHIN 2' CLEAR ZONE, BELOW WATER.
SEWER	VARIES	NO	WARNING TAPE 2" ABOVE ALL PIPES	1.5' CLEAR BELOW WATER LINES



CLASS "D" BACKFILL  
NON-TRAVELED AREAS

CLASS "B" BACKFILL  
TRAVELED AREAS

① UTILITY TRENCH DETAIL



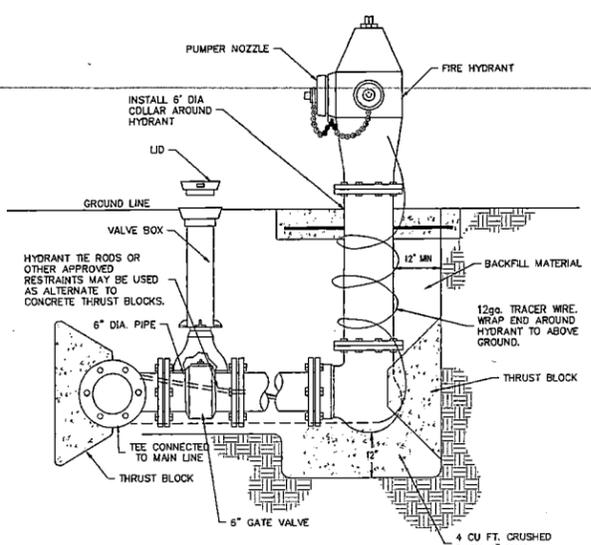
**METER SECTION**

**METER PLAN**

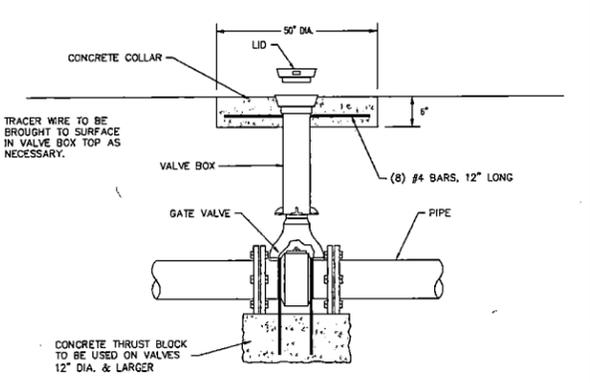
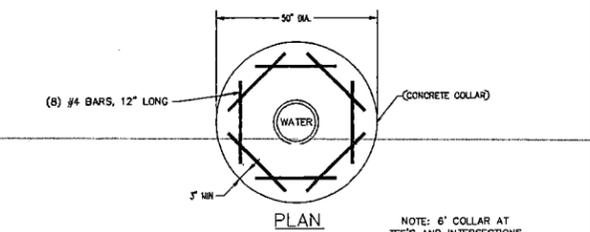
NOTES:  
1. IN HIGH ELEVATIONS WITH DEEPER FROST LINES, METER SETS AND BARRELS SHALL BE 6 FT. MINIMUM DEPTH. MUELLER BARRELS (#203c51572bb) THERMAL-COIL METER BOX, OR APPROVED EQUAL. PRE-ASSEMBLED IS OPTIONAL TO PROVIDE FROST PROTECTION. VERIFY REQUIREMENTS OF LOCAL WATER UTILITY PROVIDER AS NECESSARY.  
2. A 6" BLUE MARKER BY BARREL, 32" X 1" EXTENSION, CLOTH AROUND VALVE, 3/4" ROCK UNDER BARREL PLACED ON PROPERTY LINE, AND 12 GAUGE TRACER WIRE REQ'D BY KCWCO.

② METER BOX DETAIL

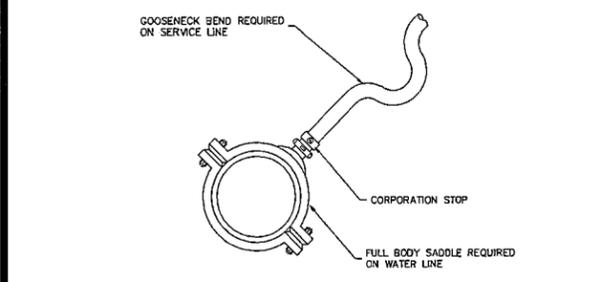
**KCWCO ADDITIONAL REQUIREMENTS:**  
1. 12 GAUGE TRACER WIRE REQ'D  
2. GATE VALVE TO BE BOLTED TO MAIN LINE TEE.  
3. KENNEDY HYDRANTS OR EQUAL.



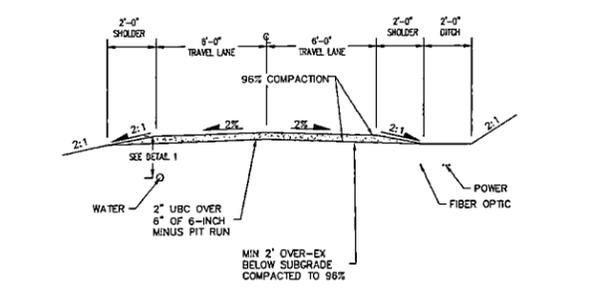
③ FIRE HYDRANT DETAIL



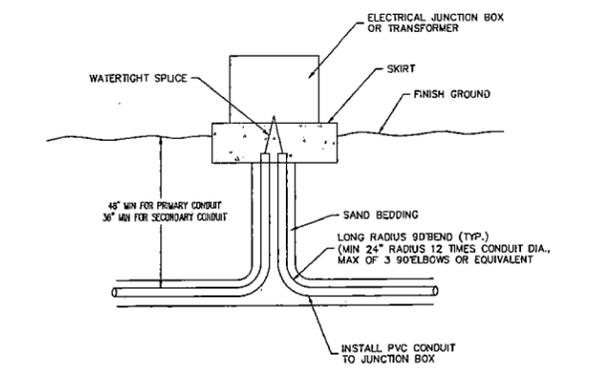
④ GATE VALVE DETAIL



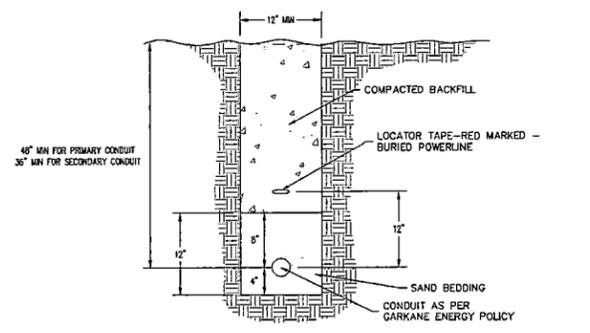
⑤ WATER SERVICE CONNECTION DETAIL



⑥ TYPICAL ROAD SECTION



⑦ ELECTRICAL JUNCTION BOX DETAIL

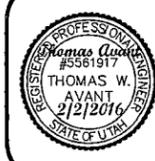


NOTES:  
1. CABLES RUNNING ALONG UNPAVED ROADS SHALL NOT BE PLACED WITHIN THE ROADWAY  
2. TRENCHES SHALL BE STRAIGHT FROM POINT TO POINT AS SHOWN ON STAKING SHEETS.  
3. ALL BACKFILL SHALL BE CAREFULLY PLACED SO AS TO PREVENT UNDUE STRESS ON CABLE.  
4. ALL BACKFILL SHALL BE COMPACTED SO AS TO PREVENT SETTLING. CARE MUST BE TAKEN TO PREVENT DAMAGE TO CABLE OR CONDUIT.  
5. NO CABLE WILL BE PLACED IN TRENCHES UNTIL TRENCH IS COMPLETELY PREPARED TO PROPER DEPTH, ALIGNMENT, BEDDING, ETC. METER BASE MUST BE INSTALLED AND INSPECTED BEFORE SECONDARY OR SERVICE CABLES CAN BE INSTALLED.  
6. MAXIMUM BENDING RADIUS IS 12 TIMES CABLE/CONDUIT DIAMETER A MAXIMUM OF THREE 90S (OR THE EQUIVALENT) IS PERMITTED IN A CONDUIT RUN.  
7. IF DEPTH OF POWER LINE AND OTHER UTILITIES CONFLICT, POWERLINE SHALL BE DEEPER THAN CONFLICTING UTILITY.

⑧ ELECTRICAL CABLE / CONDUIT TRENCH DETAIL

DATE:	1/18/2016
REVISION:	INITIALS, SUBMITTAL, DATE, REVISIONS
	2/2/2016

PALOMAR RANCH ESTATES - PHASE 2  
DETAILS  
KANE COUNTY, UT  
SCALE = 1" = 30'  
REDUCE SCALE BY 1/2 FOR 11x17 DRAWINGS



TC ENGINEERING  
DESIGNING AND BUILDING A BETTER FUTURE  
460 EAST 300 SOUTH  
P.O. BOX 55, KANAB, UTAH 84741  
(435)644-2031 (office) / (435)644-2969 (fax)

FILE: ROGERS, KENDRICK  
DRAWN BY: J.D.B.  
SHEET: C-400