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## ISSUE/REVISION RECORD

DATE	DESCRIPTION
04-11-14	INITIAL BIDSET
08-12-14	DEVELOPMENT PLAN
12-17-14	DP RESUBMITTAL #1
02-20-15	DP RESUBMITTAL #2

## PROFESSIONAL IN CHARGE

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## PROJECT MANAGER

MARLEY PHILLIPS

## QUALITY CONTROL

KIEW KAM, PE

## DRAWN BY

NICOLE NOVACK

## PROJECT NAME

CIRCLE K

COLORADO SPRINGS  
COLORADO

E. FOUNTAIN BLVD. &  
ACADEMY PARK LOOP



## PROJECT NUMBER

20130780

## SHEET TITLE

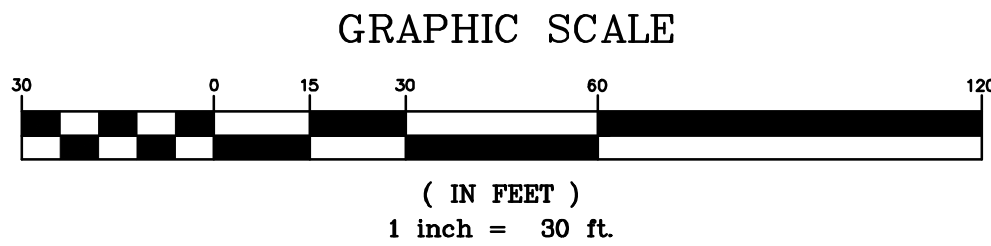
PRELIMINARY  
UTILITY PLAN

## SHEET NUMBER

7 of 18



Know what's below.  
Call before you dig.



## GENERAL UTILITY NOTES:

- CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND ENSURE NO CONFLICTS EXIST WITH PROPOSED IMPROVEMENTS. NOTIFY ENGINEER IMMEDIATELY IF UTILITIES ARE LOCATED DIFFERENTLY THAN SHOWN. THE CONTRACTOR SHALL COORDINATE WITH EACH RESPECTIVE UTILITY COMPANY IN ORDER TO RELOCATE IF NEEDED IN CONFORMANCE WITH THEIR GUIDELINES.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO THE REMOVAL OF INDICATED UTILITIES ON SITE (SEE DEMOLITION PLAN). CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS REQUIRED FOR DEMOLITION AND HAUL OFF FROM THE APPROPRIATE AUTHORITIES.
- AUTHORIZATION MUST BE OBTAINED FROM COLORADO SPRINGS UTILITIES TO CONSTRUCT, ALTER OR MODIFY A WATER OR SEWER LINE. CONSTRUCTION OF WATER AND SEWER INFRASTRUCTURE WILL BE AUTHORIZED BY THE WATER SYSTEM UPON:
  - APPROVAL OF SUBMITTED PLANS.
  - NOTIFICATION OF THE WATER SYSTEM AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
- BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH COLORADO SPRINGS UTILITIES FOR THE CONSTRUCTION OF THE GAS LINE.
- BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH COLORADO SPRINGS UTILITIES FOR THE CONSTRUCTION OF ELECTRICAL CONDUIT TO PROVIDE SERVICE TO THE TRANSFORMER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING, PRIOR TO CONSTRUCTION, ALL EXISTING LOCATIONS AND INVERT ELEVATIONS OF SANITARY SEWERS, STORM DRAINAGE, AND WATER MAINS. IF ANY INVERT ELEVATION VARIES MORE THAN 0.1 FT. FROM RECORD ELEVATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. WORK SHALL NOT PROCEED UNTIL THE CONTRACTOR IS NOTIFIED BY THE ENGINEER.
- CONNECT TO EXISTING UTILITIES AND INSTALL UTILITIES IN COMPLIANCE WITH REQUIREMENTS OF APPROPRIATE JURISDICTIONAL AGENCIES.
- COORDINATE WITH BUILDING PLANS TO ASSURE ACCURACY OF UTILITY CONNECTIONS AND COMPLIANCE WITH LOCAL CODES.
- ALL SEWERS TO BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING CLEANING OF ANY SILT OR DEBRIS ACCUMULATED IN STRUCTURES.
- ALL SURPLUS EXCAVATED MATERIAL FROM THE TRENCH SHALL BE DISPOSED OFF THE SITE BY CONTRACTOR.
- COORDINATE EXACT TRENCHING, ROUTING, AND POINT OF TERMINATION WITH ALL UTILITY COMPANIES.
- ALL WATER LINES SHALL HAVE AT LEAST FIVE (5.0) FEET GROUND COVER FROM THE TOP OF THE PIPE TO THE FINISHED GROUND SURFACE.
- ALL WATER LINES 2" OR SMALLER SHALL BE TYPE K-COPPER.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING UTILITY LOCATES. CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-822-1987.

## PROPOSED LEGEND:

---	PROPERTY LINE
---	PROPOSED CURB & GUTTER
---	GAS LINES
---	TELEPHONE LINES
---	SANITARY SEWER LINES
---	WATER LINES
---	UNDERGROUND ELECTRIC LINES
---	DOUBLE CLEAN OUT
---	CLEAN OUT

## LIGHT POLES

NOTE: ALL PROPOSED FLOWLINES HAVE A  
BASE ELEVATION OF 6800.00 FEET

## GENERAL NOTES FOR SANITARY SEWER SERVICE LINES

THE CONTRACTOR SHALL NOTIFY THE COLORADO SPRINGS UTILITIES, DISPATCH (668-3524) 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO OUTLINE METHODS OF CONSTRUCTION, MATERIALS TO BE USED, CONSTRUCTION STAKING.

- WASTEWATER SERVICES TO BE LOCATED IN THE CENTER OF THE LOT, OR THE CENTER OF THE DRIVEWAY FOR A FLAG LOT. (PER WASTEWATER DETAIL DRAWING C 5-1) NOTE: ALTERNATE SERVICE LOCATION, IS ONLY WITH THE APPROVAL OF COLORADO SPRINGS UTILITIES SHOWN ON WASTEWATER DETAIL DRAWING C 5-1.
- SANITARY SEWER SERVICES TO BE INSTALLED A MINIMUM OF 7 FEET INTO THE PROPERTY UNLESS OTHERWISE SHOWN.
- PROPERTY END OF ALL SEWER SERVICES TO BE MARKED WITH A 2X 4X12 FOOT WOOD POST EXTENDING VERTICALLY FROM FLOW-LINE.
- FINAL LOCATION OF ALL SEWER, WATER AND GAS SERVICES TO BE APPROVED IN THE FIELD BY THE COLORADO SPRINGS UTILITY INSPECTOR.
- UTILITY LOCATIONS, WHETHER OR NOT SHOWN ON THIS PLAN, IN NO WAY RELIEVES THE CONTRACTOR FROM THE RESPONSIBILITY OF CALLING FOR AND OBTAINING UTILITY LOCATIONS FROM THE APPROPRIATE AUTHORITIES PRIOR TO BEGINNING EXCAVATION.
- SANITARY SEWER SERVICE CONNECTIONS TO BE CONNECTED AT A MINIMUM OF 5 FEET FROM ANY MANHOLE ON THE MAIN LINE AND TWO (2) FEET BETWEEN TAPS CENTER TO CENTER.
- ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE HOST PIPE (I.E. 6" SERVICE LINE REQUIRES A 6" CLEAN-OUT, TO BE INSTALLED PER COLORADO SPRINGS UTILITIES STANDARD DETAIL C 5-4).

COLORADO SPRINGS UTILITIES  
COMMERCIAL UTILITY SERVICE PLAN APPROVAL

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
PROJECT NUMBER: \_\_\_\_\_ WORK ORDER NUMBER: \_\_\_\_\_  
CSU SHEET \_\_\_\_\_ OF \_\_\_\_\_

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

## UTILITY KEY NOTES

- U2 SANITARY SEWER POINT OF ENTRY (PER MEP PLANS)
- U3 SANITARY SEWER POINT OF CONNECTION PER CSU STANDARDS
- U5 SANITARY SEWER CLEAN-OUT
- U6 SANITARY SEWER DOUBLE CLEAN-OUT
- U7 SANITARY SEWER WYE CONNECTION
- U9 CONNECT TO EXISTING SANITARY SEWER MANHOLE PER CSU STANDARDS
- U10 TRAFFIC RATED D, 500 GAL. GREASE INTERCEPTOR (PER ARCH./MEP PLANS). REF. CITY DRAWING C2-4.
- U14 IRRIGATION WATER LINE (TYPE AND SIZE PER IRRIGATION PLAN)
- U15 DOMESTIC WATER METER (SEE NOTE FOR SIZE)
- U16 IRRIGATION WATER SUBMETER AFTER DOMESTIC METER (SIZE PER IRRIGATION PLAN)
- U18 EXISTING FIRE HYDRANT
- U26 WATER LINE POINT OF ENTRY (PER MEP PLANS)
- U27 WATER LINE POINT OF CONNECTION PER CSU STANDARDS
- U37 MAINTAIN MIN. 24" VERTICAL SEPARATION
- U43 PROPOSED ELECTRIC TRANSFORMER
- U44 UNDERGROUND ELECTRIC SERVICE
- U46 ELECTRIC SERVICE POINT OF ENTRY (PER MEP PLANS)
- U47 ELECTRIC SERVICE POINT OF CONNECTION PER CSU STANDARDS
- U48 UNDERGROUND TELEPHONE SERVICE
- U50 TELEPHONE SERVICE POINT OF ENTRY (PER MEP PLANS)
- U51 TELEPHONE SERVICE POINT OF CONNECTION
- U52 GAS SERVICE (PER LOCAL COMPANY STANDARDS)
- U55 GAS LINE POINT OF ENTRY (PER MEP PLANS)
- U56 GAS LINE POINT OF CONNECTION
- U60 CONTRACTOR TO VERIFY EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- U80 TRAFFIC RATED D, 500 GAL. SAND / OIL INTERCEPTOR (PER ARCH./MEP PLANS). REF. CITY WASTEWATER CONSTRUCTION DRAWING C2-5, 6, 7.
- U81 TRANSFORMER CONCRETE PAD BY OWNER/DEVELOPER (PER CSU SPECIFICATIONS)
- U82 3-1,500 GAL. WATER RECLAIM VAULTS (PER ARCH./MEP PLANS)
- U83 2'X3' PRECAST CATCH BASIN
- U84 3/4" WATER LINE TO YARD HYDRANT
- U86 BACKFLOW PREVENTION ASSEMBLY PER CSU STANDARDS
- U87 FROST FREE WATER/YARD HYDRANT
- U88 HONES STEPHENS CORP. PLUMBEST BACKWATER VALVE B04-600 OR EQUAL W/ APPROVAL OF COLORADO SPRINGS UTILITIES. REF. CITY WASTEWATER CONSTRUCTION DRAWING C2-5.
- U89 STEEL CASING UNDER RETAINING WALL PER CSU DWGS. C 1-1

WATER SERVICE INSTALLATIONS  
GENERAL NOTES

- ALL WORK ON FABRICATION AND INSTALLATION OF METER BOXES SHALL CONFORM TO THE FOLLOWING CODES, LATEST EDITION:
  - PIKES PEAK REGIONAL BUILDING CODE
  - CURRENT ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE
  - BUILDING CODE FOR REINFORCED CONCRETE (ACI)
  - AMERICAN WELDING SOCIETY SPECIFICATIONS
  - UNIFORM MECHANICAL CODE
- ALL MATERIAL COMPONENTS CONSIDERED DEFECTIVE BY COLORADO SPRINGS UTILITIES SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE SITE AT NO EXPENSE TO COLORADO SPRINGS UTILITIES.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS OF ALL OPENINGS, METERS, INSERTS, ETC., WITH COLORADO SPRINGS UTILITIES AND THE MANUFACTURER.
- CONCRETE WORK SHALL CONFORM TO THE CONCRETE SPECIFICATIONS DESCRIBED WITHIN THIS DOCUMENT AND ALSO CONFORM TO THE WATER LINE EXTENSION AND SERVICE STANDARDS.
- ROUTING OF CONCRETE WALLS AROUND PIPES AND FOOTINGS AS SHOWN ON DRAWINGS SHALL BE DONE WITH NON-SHRINK GROUT.
- IN THE EVENT THAT GROUND WATER OR OTHER UNSTABLE AND UNUSUAL CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES IMMEDIATELY FOR INSPECTION AND RECOMMENDATIONS FOR DRAINS, GRAVEL FILL, ADDITIONAL REINFORCING, ETC. APPROVED RUBBER WATER STOPS SHALL BE USED IN ALL CONCRETE JOINTS FOR CONDITIONS WHERE SUBSURFACE WATER IS ENCOUNTERED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN METER SIZE AND DIMENSIONS FROM APPLICATIONS AND PERMITS. ALL SIZES AND DIMENSIONS SHALL CONFORM TO COLORADO SPRINGS UTILITIES STANDARDS AND SPECIFICATIONS. REGULATORS MAY BE LOCATED IN A METER PIT OR IN THE BUILDING. REGARDLESS OF LOCATION, THE REGULATOR MUST BE ON THE INLET SIDE OF THE METER.
- ONLY ONE (1) WATER METER SHALL BE INSTALLED IN A PIT, REGARDLESS OF SIZE. (IF A SECOND METER IS TO BE INSTALLED, THIS IS WITH APPROVAL OF COLORADO SPRINGS UTILITIES FIELD SERVICES)
- THE STOP/OR VALVE SHALL BE DEFINED AS THE CONTROL AT PROPERTY LINE OR THE FIRST VALVE AFTER CONNECTION OF THE CORPORATION STOP OR TAP VALVE TO A WATER DISTRIBUTION MAIN, NOT TO INCLUDE ANY STOPS OR VALVES ON PRIVATE MAINS OR SERVICES WHICH WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ALL IRRIGATION, FIRE AND COMMERCIAL POTABLE WATER SERVICE CONNECTIONS SHALL INCLUDE BACK-FLOW PREVENTION ASSEMBLY, WHICH MEET THE STANDARDS SPECIFIED BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE). NO WATER SERVICE LINE WILL BE APPROVED BY COLORADO SPRINGS UTILITIES FOR METER INSTALLATION UNTIL THE REQUIRED BACK-FLOW PREVENTION MEASURES HAVE BEEN MET. A REDUCED PRESSURE BACKFLOW DEVICE SHALL BE REQUIRED WHERE A HIGH HAZARD CONDITION EXISTS SUCH AS, BUT NOT LIMITED TO, CHEMICALS RUST INHIBITORS OR BODILY FLUIDS THAT COULD POTENTIALLY BE BACK SIPHONED INTO THE DOMESTIC WATER SUPPLY.
- ON 1-1/2" THROUGH 12" METER INSTALLATIONS A W/ OR 3/8" TEE MAY BE INSTALLED TO ALLOW FOR A GAUGE BEFORE THE PRESSURE REDUCING VALVE FOR PURPOSES OF MONITORING INCOMING (MAIN LINE) PRESSURE WITH APPROVAL OF COLORADO SPRINGS UTILITIES.
- YARD HYDRANT SERVICE LINE ASSEMBLY SHALL BE CONSTRUCTED WITH TYPE "K" COPPER PIPE FROM CURB STOP TO THE FIRST ELBOW OF THE YARD HYDRANT ASSEMBLY.
- THE BACKFLOW PREVENTION ASSEMBLY FOR THE YARD HYDRANT SHALL BE PER DETAIL DRAWING B1-17.
- YARD HYDRANT FOR SEASONAL USE ONLY: REFERENCE DRAWING A 10-3B FOR TEMPORARY REMOVAL OF BACKFLOW DEVICE.
- METER PIT AND YARD HYDRANT MUST BE FROST FREE UNITS TO PROTECT FROM FREEZING DURING WINTER MONTHS.
- YARD HYDRANT MUST DRAIN WHEN NOT IN USE. 3/4"-2" ROCK SHALL BE USED AROUND WEEP HOLE OR DRAIN TO ALLOW DRAINAGE.
- SYSTEM SHOULD BE DRAINED AND BLOWN OUT BY OCTOBER 20TH OF EACH YEAR TO AVOID DAMAGE FROM FREEZING, UNLESS ALTERNATIVE PRECAUTIONS ARE UNDERTAKEN BY THE OWNER.

