GENERAL NOTES:  
1. IF THIS SHEET IS NOT 24"X36" USE GRAPHIC SCALE ACCORDINGLY.

KEYED NOTES:
1. LANL'S MSS WILL INSTALL AND ADJUST PRESSURE OF GAS REGULATORS
2. SUBCONTRACTOR SHALL TERMINATE PIPING WITH A THREADED CAP OR PLUG AND ALLOW SUFFICIENT HORIZONTAL SPACE, 3 TO 12 FEET BETWEEN TERMINATION POINTS FOR INSTALLATION OF REGULATOR STATION
3. LOCATE REGULATORS NOT CLOSER THAN 10 FEET HORIZONTALLY FROM INTAKE AIR DEVICES (BLowers, FANS, ETC...)
4. BOND ABOVE GROUND PIPING TO ELECTRICAL GROUNDING SYSTEM BLEED TO GAS PIPING AT POINT OF ENTRY TO LOW PRESSURE REGULATOR AND UPSTREAM OF GAS APPLIANCE SHUT-OFF VALVE COMPLY WITH NEC 514-8.1.2 TO 514-8.2.3.2.4. 
5. BOND GAS PIPE LOCATED WITHIN 6 FEET OF A SERVICE ENTRANCE TO THE OUTSIDE AND TO THE CONDUCTOR PER MWIR THE BOND TO GAS PIPING AT THE DESIGNER'S DIRECTION AND TO THE OUTSIDE STREAM OF LOW PRESSURE REGULATOR.

NOTES FOR DESIGNER:  
(DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)
1. WHEN EDITING DETAIL TO SUIT PROJECT, AND JOB SPECIFIC REQUIREMENTS DELETE ONLY THOSE THAT DO NOT APPLY, AND MAKE VARIATIONS FROM APPLICABLE REQUIREMENTS CONTACT THE ESM CIVIL.
2. REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL REQUIREMENTS:
   a. ENGINEERING STANDARDS MANUAL, CIVIL CHAPTER 3.
   b. MASTER SPECIFICATION 33 5100, NATURAL GAS DISTRIBUTION (SITE). 
   c. GENERAL REVISION AND DWG. NO. WAS ST6500.
   d. INCORPORATED NOTES TO DESIGNER FROM SHEET 5 OF 5.
3. CHECKED OF REV.
4. DRAWING DEVELOPED FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE.)

DESIGN DRAWINGS AND SUBMITTALS OF SITE NATURAL GAS PIPING SYSTEM SHALL BE REVIEWED AND APPROVED BY A LANL UTILITIES AND INSTITUTIONAL FACILITIES REPRESENTATIVE.

FISHER REGULATOR CS200IR  
(CAPACITIES BASED ON 20 PSIG INLET PRESSURE)  
OUTLET PRESSURE          MAX. CAPACITY (SCFH) ORIFICE SPRING  
REGULATOR AT 0.6 S.G.    SIZE     NUMBER  
7.0 WC             475          3/16     GE32630X12 (UNPAINTED)  
14.0 WC            800          1/8      GE32634X12 (BLACK)  
20.0 WC            1025         3/16     GE32910X12 (BLACK)  

FISHER REGULATOR 627R  
(CAPACITIES BASED ON 60 PSIG INLET PRESSURE)  
OUTLET PRESSURE          CAPACITY (SCFH) ORIFICE  
REGULATOR AT 0.6 S.G.    NUMBER SIZE     
20.0 WC             840          1/8      10B3770012

480          1/8
1025         3/16

1/8           3/16

REGULATOR AND UPSTREAM OF GAS REGULATORS.
SPRING NO: 10B3076-X012 (YELLOW)
IMPEMENTATION (如果没有适用的水) USE ULTRA-VACUUM MAGNETIC FOR FIRE WALL.
1" REGULATOR, FISHER-627R. 
DUCTILE IRON BODY OUTLET PRESSURE: 20 PSIG ORIFICE SIZE: [ ]
1/8" NPT PLUG/BOLT HOLEAD TO PIPE - 4 PLACES
1" REGULATOR, FISHER-CS200IR. 
OUTLET PRESSURE [7.0 WC][14.0 WC][20.0 WC]
1" INSULATING UNION [REQUIRED ONLY WHEN UNDERGROUND PIPING IS STEEL]
SHUT-OFF VALUE 
60 TO 100 PSIG, SEE NOTES FOR DESIGNER:
1/4" NPT METAL PLUG W/THREADOLET