

CITY OF ALBUQUERQUE



March 28, 2017

Richard J. Berry, Mayor

Tandy M. Freel, P.E.
Bohannon Huston Inc.
Courtyard 1, 7500 Jefferson St NE,
Albuquerque, NM, 87109

RE: PNM Girard Substation Improvement
Grading and Drainage Plan
Engineer's Stamp Date 3-14-2017(File: H16D011)

Dear Mr. Freel:

Based upon the information provided in your submittal received 3-15-2017, the above referenced Grading and Drainage Plan is approved for Grading Permit Approval and SO19 Approval.

Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3999.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Planning Dept.
Development Review Services

MA/SB

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: PNM Girard Substation Improvements **Building Permit #:** _____ **City Drainage #:** H16D01
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract B-1 of The Plat of Tracts A-1-A and B-1 of Cole's Industrial Subdivision No. 3 in the City of Albuquerque, New Mexico
City Address: 2733 Girard Blvd NE

Engineering Firm: Bohannon Huston Inc **Contact:** Tandy Freel
Address: Courtyard I, 7500 Jefferson St NE, Albuquerque, NM 87109
Phone#: 505-823-1000 **Fax#:** 505-798-7988 **E-mail:** tfreel@bhinc.com

Owner: PNM **Contact:** Chris Maestas
Address: 2401 Aztec Rd NE, Albuquerque, NM 87107
Phone#: 505-241-0853 **Fax#:** _____ **E-mail:** Chris.Maestas@pnm.com

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

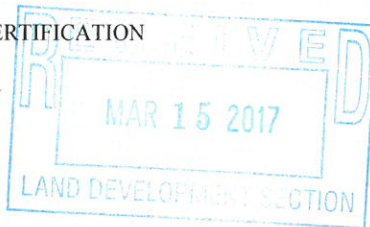
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
☒ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

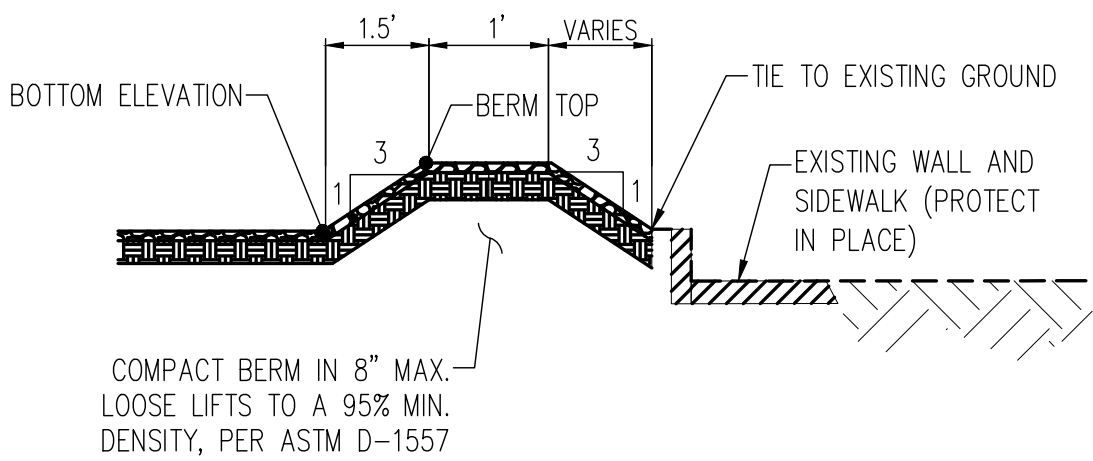
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____



IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: March 16, 2017 By: Carl Vermillion

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

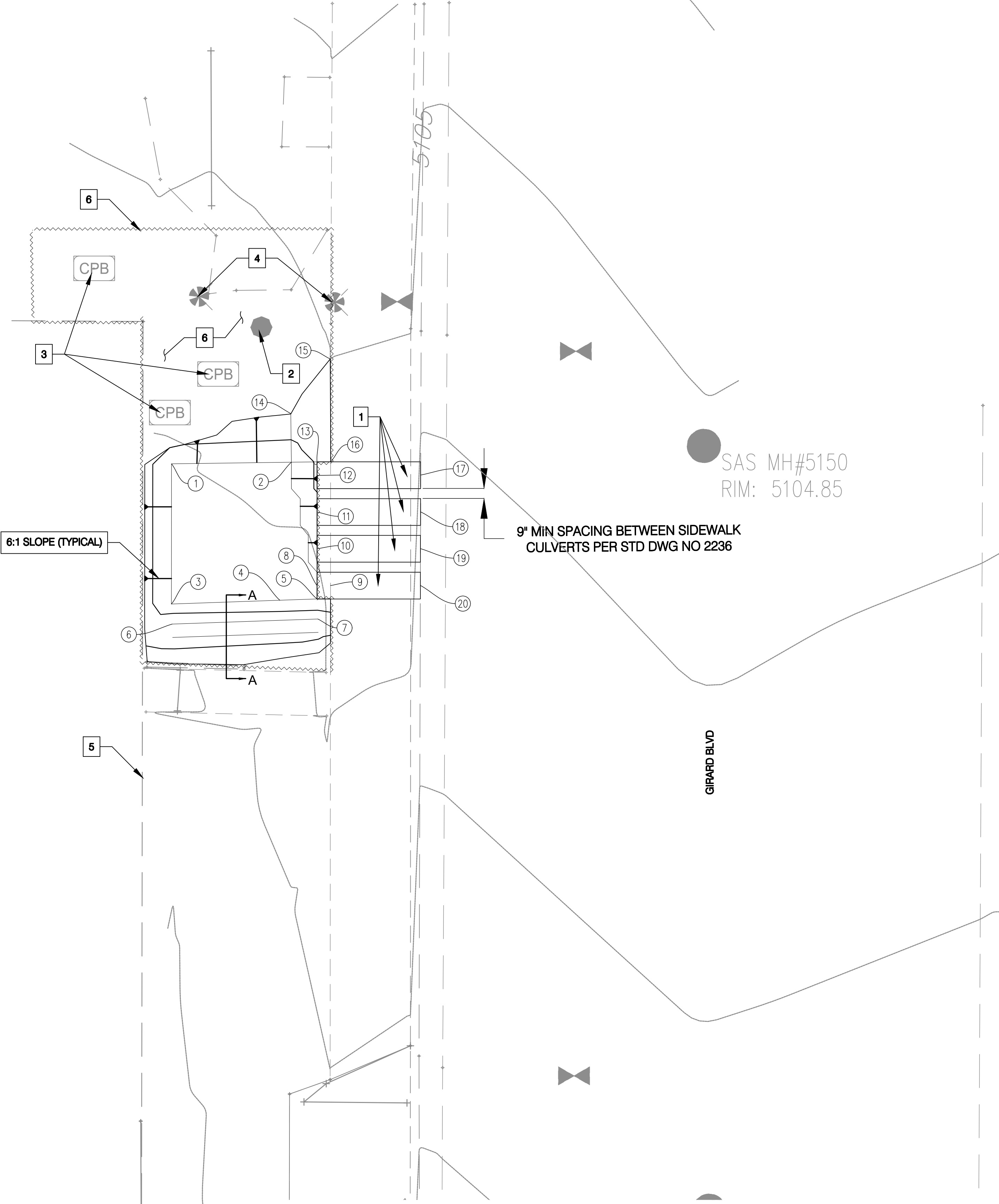


PROPOSED BERM SECTION
NOT TO SCALE

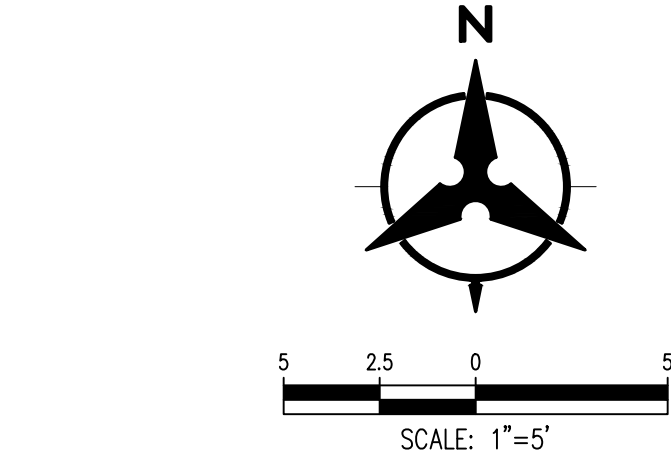
EXISTING PNM
GIRARD SUBSTATION

Point Table			
○	NORTHING	EASTING	ELEVATION
1	1496559.97	1531576.76	5103.77
2	1496560.09	1531585.72	5103.72
3	1496549.49	1531576.75	5103.77
4	1496549.77	1531584.86	5103.72
5	1496549.87	1531587.64	5103.72
6	1496547.99	1531576.80	5104.26
7	1496548.37	1531587.69	5104.22
8	1496550.87	1531587.64	5103.72
9	1496550.87	1531588.64	5104.36
10	1496553.62	1531587.64	5103.83
11	1496556.37	1531587.64	5103.93
12	1496559.11	1531587.64	5104.04
13	1496560.12	1531587.64	5104.04
14	1496563.73	1531585.69	5104.33
15	1496567.81	1531588.62	5105.00
16	1496560.12	1531588.65	5104.71
17	1496559.13	1531585.38	5103.88
18	1496556.38	1531585.38	5103.77
19	1496553.63	1531585.37	5103.67
20	1496550.88	1531585.36	5103.56

NOTE: ELEVATIONS LISTED IN TABLE ARE TOP OF 4" BASE COURSE/COBBLE FINISHED GRADE



PNM GIRARD SUBSTATION SITE - HYDRAULIC CALCULATIONS							
Ultimate Development Conditions Basin Data Table							
This table is based on the DPM Section 22.2, Zone: 2							
SUB-BASIN	Area	Area	Land Treatment Percentages				Q(100)
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)
Existing Basin (Upstream of Proposed Culverts)	99450	2.28	0.0%	0.0%	5.0%	95.0%	4.62
							10.55

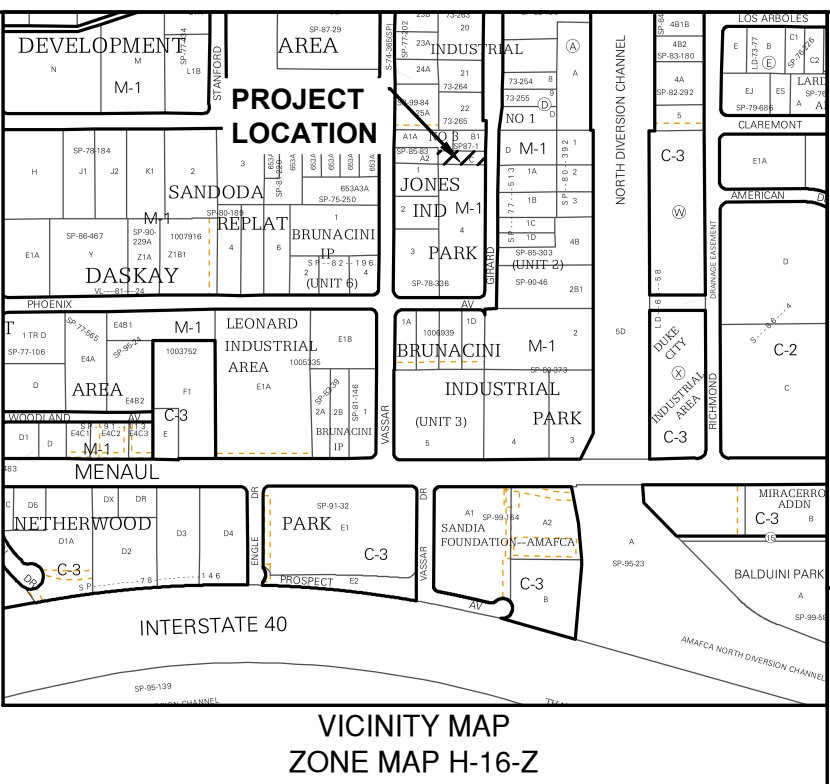


GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
- THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
- ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
- THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.



KEYED NOTES

- INSTALL 4-24" CULVERTS PER COA STD DWG NO 2236 (CULVERT PLATE SHALL EXTEND 12" BEHIND BACK OF SIDEWALK AND BOLTS SHALL BE TACK WELDED AT PLATE)
- EXISTING PNM POWER POLE PROTECT IN PLACE.
- EXISTING PULL BOXES PROTECT IN PLACE
- EXISTING FIRE HYDRANTS PROTECT IN PLACE
- EXISTING BLOCK WALL PROTECT IN PLACE
- INSTALL 4" OF BASE COURSE/COBBLE ($D_{50} = 2"$) WITH FILTER FABRIC TO AREAS SURROUNDING ALL EXISTING FEATURES WITH A 2" REVEAL ON PULL BOXES. GRAVEL SHALL EXTEND NORTH TO THE EDGE OF ASPHALT (BOUNDARY OF AREA SHOWN IN PLAN)

NOTICE TO CONTRACTORS (SO 19)

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

CITY OF ALBUQUERQUE PLANNING AND DESIGN DIVISION			
PROJECT TITLE: PNM GIRARD SUBSTATION IMPROVEMENTS			
TITLE:			
Design Review Committee	City Engineer Approval	Mo. / Day / Yr.	
Last Design Update		Mo. / Day / Yr.	
CITY PROJECT NO.		ZONE MAP NO. H-16-Z	DWG. SHEET OF