

VICINITY MAP
ZONE ATLAS PAGE K-14-Z

LEGAL DESCRIPTION

Lot 7 & Por. of Lot 8, Block 14
Huning's Highland Addition

DRAINAGE CALCULATIONS

EXISTING CONDITIONS:

ASSUME 90% D, 5% C, 5% B
0.3 AC * 4.5cfs/ac = 1.35cfs

PROPOSED CONDITIONS:

BASIN "A" (100% D)
0.163 AC * 4.7cfs/ac = 0.77cfs

BASIN "B" (50% D, 25% C, 25% B)
0.141 AC * 3.71cfs/ac = 0.52cfs

TOTAL PROPOSED = 1.29cfs

DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION

The purpose of this submittal is to present a final grading and drainage plan for the "Arno Lofts" project. This submittal is made in order to support building permit approval.

II. SITE LOCATION AND EXISTING CONDITIONS

The project site is located on the southeast corner of Central and Arno. Prior to demolitions work, the majority of the site contained the Zia Motor Lodge and associated facilities including parking. The site currently drains to the west and to the north into Arno and Central. The total peak discharge from the site in the 100 year storm is approximately 1.35cfs. The site is located within zone atlas map # K-14, and hydrologic zone 2.

III. PROPOSED HYDROLOGIC CONDITIONS

The proposed project is to consist of 18 Loft Apartments and a small courtyard area. The site has been divided into two basins for proposed conditions. Basin A consists solely of the main portion of the building (everything from the south edge of the building to the north property line). Basin A is 100% impervious area and generates a peak discharge of 0.77cfs in the 100 year storm. This flow will be discharged to Central Ave via roof drain lines to be daylighted through the face of the curb.

Proposed Basin B consists of the balconies, stair towers, sidewalks and courtyard area behind the building (everything from the south edge of the building to the south property line). Basin B will discharge 0.52cfs to Arno via surface flow during the 100 year storm event. Basin B is 50% impervious, and 25% each of land treatments B & C.

The total discharge to adjacent public streets under proposed conditions is slightly less than existing peak flows.

IV. OFFSITE CONSIDERATIONS

There are no upstream offsite flows which will impact this site. In addition, the site will not have any detrimental impact on downstream drainage infrastructure since proposed conditions discharge is slightly less than existing.

V. CONCLUSION

The improvements proposed with this final grading and drainage plan are capable of safely passing the 100 year storm and meet city requirements. With this submittal, we are seeking city hydrology approval for building permit.

GRADING NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND 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.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION", AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
- 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. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BARRIERS AT THE PROPERTY LINES AND NETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNDESIRABLE 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 HAIL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

KEYED NOTES

- PROVIDE TURNED BLOCKS IN BASE OF WALL
- TRENCH DRAIN, TO 80.34, SYSTEM SHALL BE CAPABLE OF HANDLING 0.50cfs FROM THE EAST END TO THE POINT WHERE THE FIRE DEPARTMENT IS LOCATED. THE CONTRACTOR SHALL VERIFY THE TRENCH DRAIN IS CAPABLE OF HANDLING 0.50cfs FROM THE EAST END TO THE POINT WHERE THE FIRE DEPARTMENT IS LOCATED. THE CONTRACTOR SHALL VERIFY THE TRENCH DRAIN IS CAPABLE OF HANDLING 0.50cfs FROM THE EAST END TO THE POINT WHERE THE FIRE DEPARTMENT IS LOCATED.
- DAYLIGHT 4" STORM DRAIN LINE - NOT CONSTRUCTED
- CONTRACTOR SHALL COORDINATE AND PAY FOR CITY INSTALLATION OF NEW 1 1/2" DOMESTIC WATER SERVICE
- EXTEND 1 1/2" WATER SERVICE TO WITHIN 5' OF BUILDING, SEE PLUMBING PLANS FOR CONTINUATION
- CONTRACTOR SHALL COORDINATE AND PAY FOR CITY INSTALLATION OF NEW 4" FIRE SERVICE
- EXTEND 4" FIRE SERVICE TO WITHIN 5' OF BUILDING, SEE PLUMBING PLANS FOR CONTINUATION

BASIS OF ELEVATION for this plan is ACS Control Station 6-K14(R) which is located in the sidewalk in the northeast quadrant of the intersection of Central Avenue and Broadway Boulevard. The mean sea level elevation of said control station = 4968.765.

UTILITY NOTES

- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL WORK RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND/OR STRUCTURING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED OF HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE UPMO UNIFORM PLUMBING CODE, LATEST EDITION.
- UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
- ROUGH GRADING OF SITE (+0.05') SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
- CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
- ALL VALVES SHALL BE ANCHORED PER COA STANDARD DWG. 2333.
- FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER METER, FIRE LINE, UTILITY EXPANSION CHARGES, AND SEWER HOODUP FEES FOR INSTALLATIONS. OWNER SHALL BE RESPONSIBLE FOR PRORATA AND OTHER SPECIAL ASSESSMENTS.
- CONTRACTOR SHALL VERIFY INVENTS AND LOCATIONS OF EXISTING UTILITIES AND OTHER POSSIBLE OBSTRUCTIONS PRIOR TO BEGINNING WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO BEGINNING WORK.

DRAINAGE CERTIFICATION

I, BRUCE STIDWORTHY, NMPE 14523, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 01/28/03. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ALAN BENHAM, NMPS 18700, OF THE FIRM BOHANNAN HUSTON. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 04/08/04 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

DATE 04/15/04
AS BUILT SPOT ELEVATION

Bohannan & Huston
Engineering & Spatial Data & Advanced Technologies
Courtney 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335

REVISIONS

RECEIVED
APR 15 2004
HYDROLOGY SECTION

DRAWN BY RAB
REVIEWED BY BUS
DATE 05/06/03
PROJECT NO.
DRAWING NAME

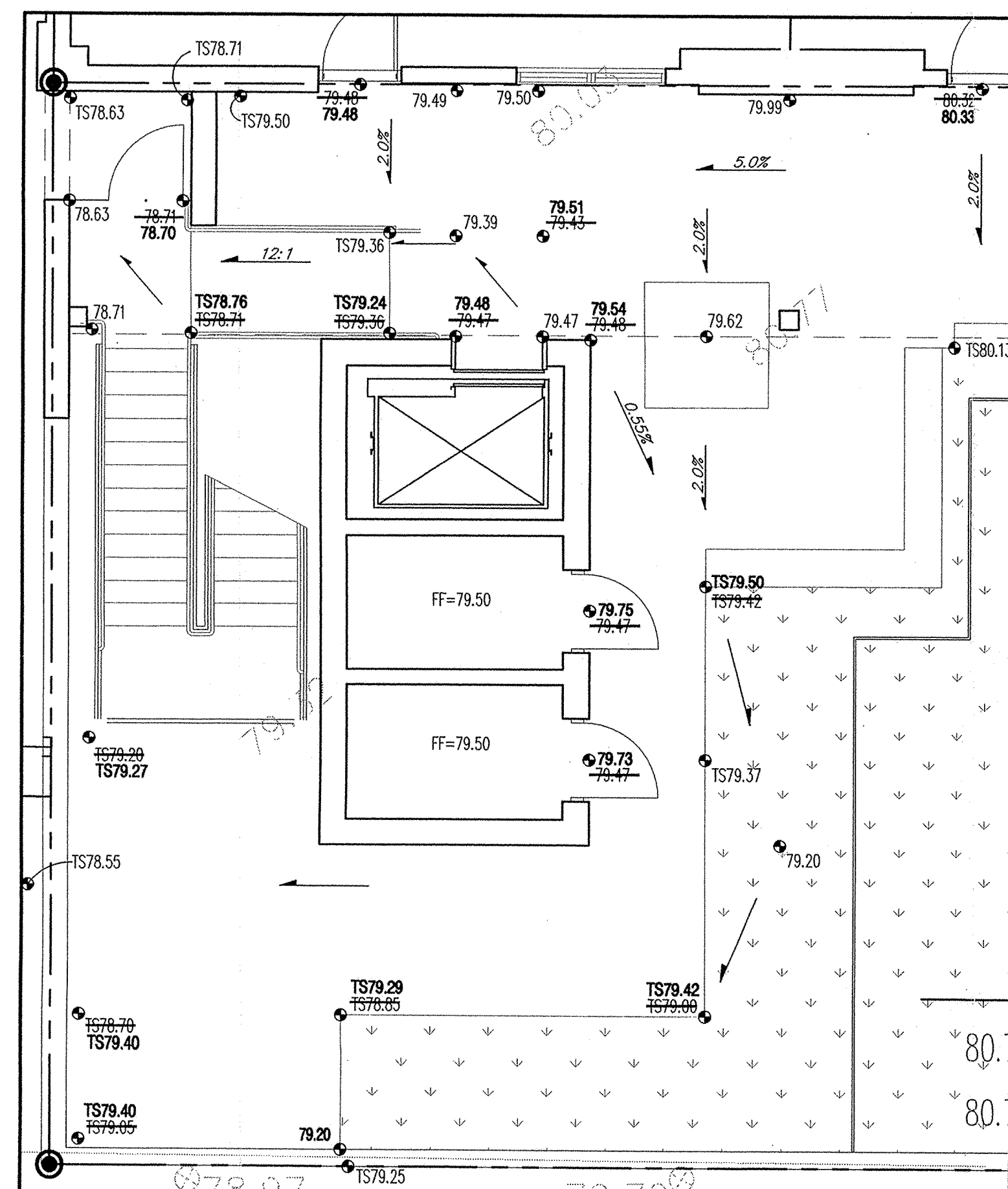
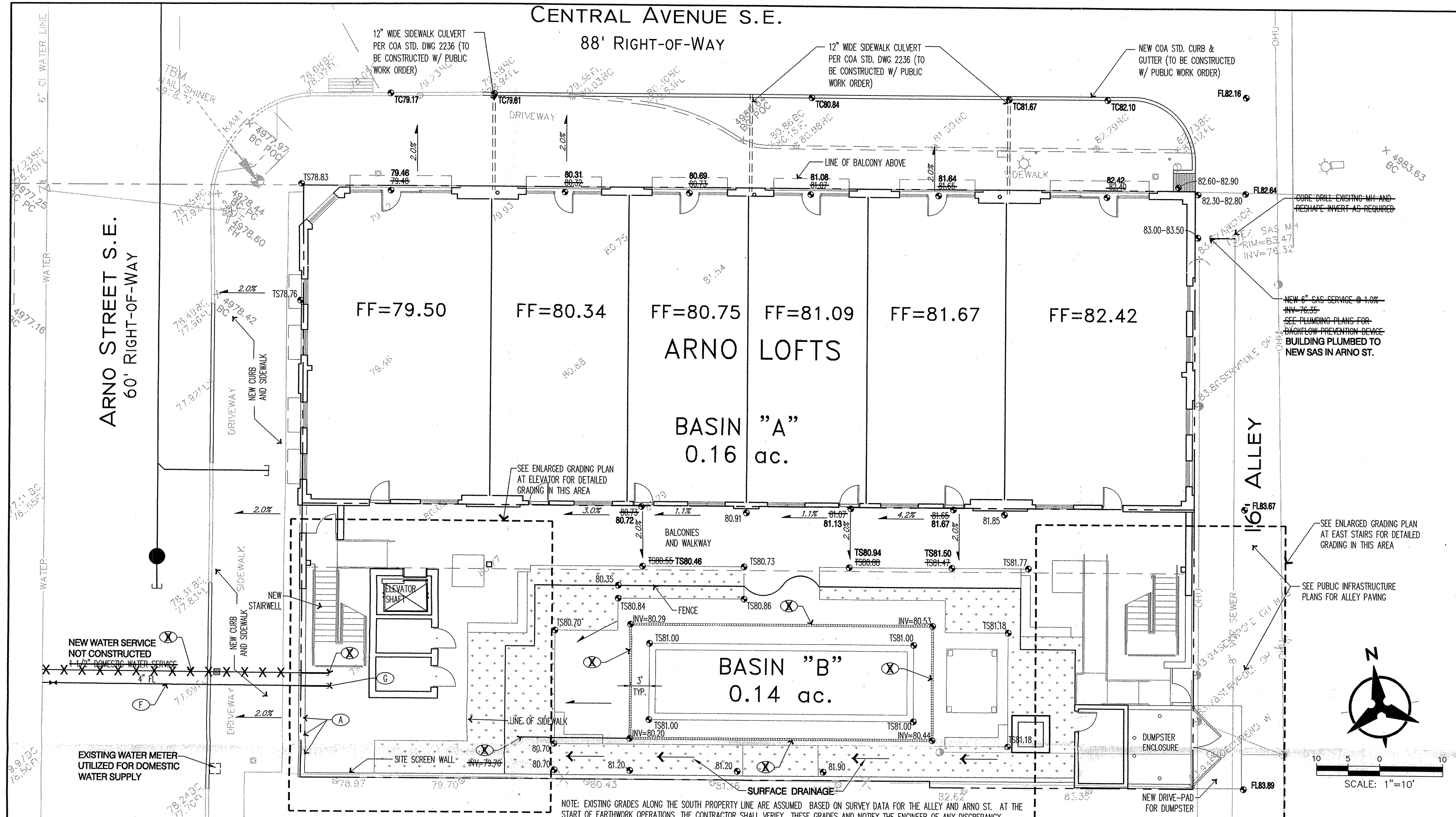
ARNO LOFTS
GRADING,
DRAINAGE, &
UTILITY PLAN

SHEET NO.

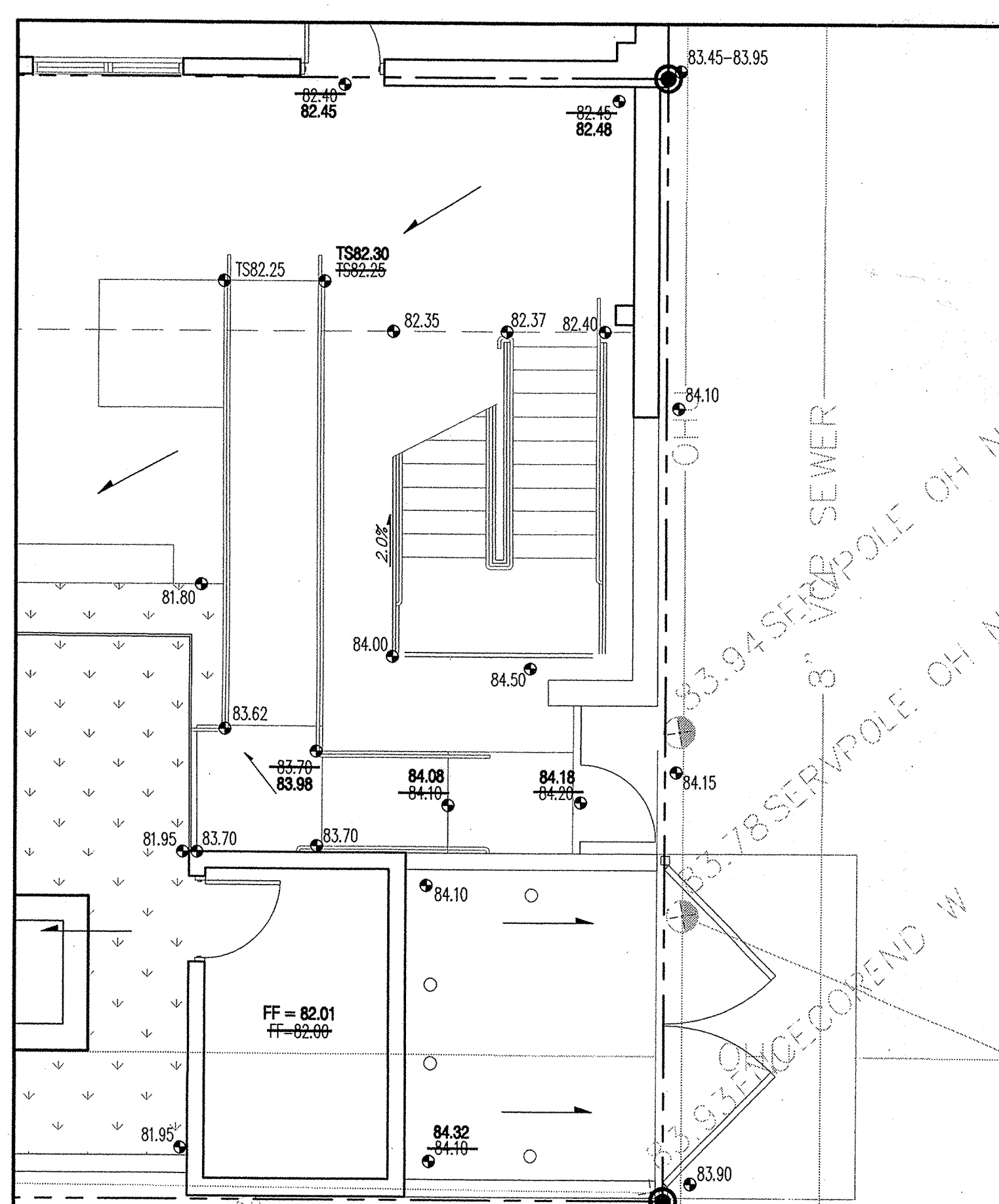
C100
OF

CENTRAL AVENUE S.E.

88' RIGHT-OF-WAY



ENLARGED GRADING PLAN AT ELEVATOR
SCALE: 1"=5'



ENLARGED GRADING PLAN AT EAST STAIRS
SCALE: 1"=5'

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT, 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. 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.
- FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT THE UTILITY 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 (E.G., BARRICADE, 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), U.S. 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 BARRICADES AT THE END AND BEGINNING OF EACH DAY.
- THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING SWPPP PREPARATION, IMPLEMENTATION AND MAINTENANCE F REQUIRED FOR COMPLIANCE WITH NPDES REQUIREMENTS.