RECORD DRAWINGS

CONSTRUCTION PLANS FOR MESA DEL SOL INNOVATION PARK WATER UTILITY SITE PUBLIC INFRASTRUCTURE

ALBUQUERQUE, NEW MEXICO

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Steven K. Morrow, of the firm Brasher and Lorenz, Inc., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Will Plotner, Jr. NMPS 14271.

Steven K. Morrow, NMPE 13679

12-15-08
Date

12-15-08

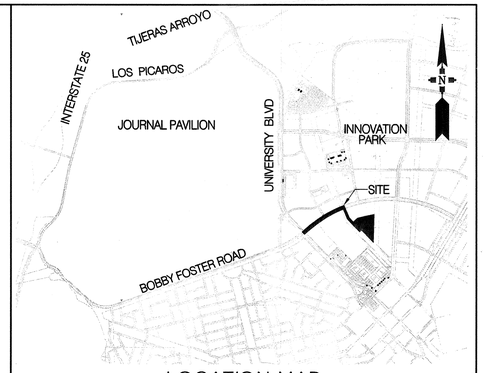
SURVEYOR'S CERTIFICATION

I, WILL PLOTNER JR, A DULY QUALIFIED, REGISTERED, PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE 'AS-BUILT' INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND 'AS-BUILT' SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION, THAT THE 'AS-BUILT' INFORMATION SHOWN ON THESE DRAWNINGS WAS ADDED BY ME OR UNDER MY SUPERVISION, AND THAT THIS 'AS-BUILT' INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. CARTESIAN SURVEYS IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING, OR INTENT OF THE RECORD DRAWINGS.

WILL PLOTNER JR, NMPS 14271

9/23/08

INDEX



LOCATION MAP
ZONE ATLAS INDEX MAP No. R-15 & R-16
NOT TO SCALE

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

4. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

5. REMOVAL OF THE EXISTING CURB & GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

6. ELECTRONIC MARKER DISKS (EMD) WILL BE PLACED ACCORDING TO SECTION 170 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7.

7. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.

4. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION, CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.

5. ALL WORK EFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.

6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING, OR AS INDICATED BY THIS PLAN SET.

7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.

8. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.

9. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

10. CONTRACTOR SHALL COORDINATE WITH THE ABCWUA (505-768-2500) SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY ABCWUA PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE ABCWUA SEVEN (7) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.

11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY THE COA.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- [X] ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- [ ] BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- [ ] TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER.
- [ ] SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- [ ] IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- [ ] ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- [X] THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS.

2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR CONSTRUCTION OBSERVER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

3. 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.

4. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE CONSTRUCTION OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

5. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE 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.

6. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.

7. 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.

8. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADING, SURFACE DISTURBANCE).

9. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AT HIS EXPENSE ANY AND ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.

10. ALL PERMANENT PAVEMENT MARKING AND TRAFFIC SIGNING SHALL BE FURNISHED BY THE CONTRACTOR PER PLAN.

11. THE CONTRACTOR SHALL FOLLOW THE COA STANDARD CONSTRUCTION, TRAFFIC CONTROL AND SIGNING PLAN PROVIDED IN THE COA STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.

12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), U.S. DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

13. 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 AS PER STANDARD SPECIFICATIONS.

14. ALL SAWCUT PAVEMENT SHALL HAVE A UNIFORM EDGE AND BE SPRAYED WITH TACK.

15. WHEN ABUTTING NEW CURB AND GUTTER TO EXISTING PAVEMENT, A 1' WIDE SECTION OF EXISTING PAVEMENT ADJACENT TO THE CURB AND GUTTER SHALL BE SAWCUT, REMOVED, AND REPLACED AS PER THE COA STANDARD SPECIFICATIONS.

16. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, PAVEMENT MARKINGS, CURB & GUTTER, DRIVE PADS, WHEELCHAIR RAMPS, AND SIDEWALK DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE PER COA STANDARDS, AT HIS OWN EXPENSE.

17. FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

18. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.

19. CONTRACTOR WILL PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY THE COA.

20. DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL PAVEMENT MARKING AND SIGNING WITH PRIVATE STREETS AND DEVELOPMENT.

NOTE:
RESEED ALL DISTURBED AREAS PER COA STANDARD SPECIFICATIONS SECTION 1012.

NOTE: DEVELOPER IS RESPONSIBLE FOR STREET NAME SIGNS, STOP SIGNS, MAINTENANCE AND ANY NECESSARY STRIPING REQUIRED ON PRIVATE STREETS.

APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
DATE: 01/28/09

Mesa del Sol

Bohannan Huston INC
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

DRB # NA

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEERS STAMP & SIGNATURE

MICHAEL BALASKOVITS NEW MEXICO 18187 LICENSED PROFESSIONAL ENGINEER

3-26-08

APPROVALS	ENGINEER	DATE
DRC Chairman		
Transportation		
Water/Wastewater		
Hydrology		
Parks		
Const. Coord.		
Environ. Health		

APPROVED FOR CONSTRUCTION

City Engineer Date

City Project No.	Drawing Number	Sheet	Of
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Mar 25, 2008 - 6:08pm

BHI JOB NO 070204

DATE: JANUARY 2008

SCANNED BY PLANNING

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09/26/2007 08:07 PM Page 1 of 2 Toulouse Bernalillo County

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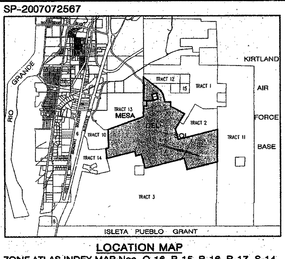

LOCATION MAP

ZONE ATLAS INDEX MAP Nos. C-16, R-15, R-16, R-17, S-14, S-15, S-16, S-17, T-16, T-17

NOT TO SCALE

DISCLOSURE STATEMENT

The purpose of this Plat is to subdivide all of Tract 4-B of the Plat of Mesa Del Sol Tracts 4-A, 4-B and 4-C, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on June 22, 2006 in Book 2006C, page 197 as Document No. 2006092810 together with all of Tract 4-A-1 of the Plat of Mesa Del Sol Tracts 4-A-1 THRU 4-A-4, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on April 17, 2007 in Book 2007C, page 98 as Document No. 2007056330 into thirty-one (31) tracts, to dedicate public street "right-of-way" to the City of Albuquerque, " " grant easements and to vacate easements.

LANDFILL DISCLOSURE STATEMENT

The subject property is located near or is a former landfill site. Due to the subject property being on or near a former landfill, certain precautionary measures may need to be taken, at a minimum the health and safety of the public. Recommendations made by a professional engineer with expertise in landfills and landfill gas issues (as required by the most current version of the "Interim Guidelines for Development within 1000 feet of Landfills") shall be consulted, prior to development of the site.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are for the common joint use of Utility Service Providers (dry utilities only), including but not limited to:

A. PNM Electric Services - the installation, maintenance and service of underground electrical lines, transformers, and other equipment, fixtures, structures, and related facilities reasonably necessary to provide electrical service.

B. PNM Gas services for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

C. QWEST for the installation, maintenance, and service of all buried communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

D. Comcast Cable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

E. Time Warner for the installation, maintenance, and service of all buried communication lines and other related equipment and facilities and cable and other related equipment and facilities reasonably necessary to provide communication services and cable TV service including but not limited to above ground pedestals and closures.

Included is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool, (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any wall be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electric Safety Code caused by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

Easements for electric transformers/switchgears, as installed shall extend ten feet (10) in front of transformer/switchgear doors and five feet (5) on each side.

DESCRIPTION

A certain tract of land being a portion of Sections 15, 21, 22, 23, 26, 27, 28, 29, 34 and 35, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico, being and comprising all of Tract 4-B of the Plat of Mesa Del Sol Tracts 4-A, 4-B and 4-C, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on June 22, 2006 in Book 2006C, page 197 as Document No. 2006092810 together with all of Tract 4-A-1 of the Plat of Mesa Del Sol Tracts 4-A-1 THRU 4-A-4, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on April 17, 2007 in Book 2007C, page 98 as Document No. 2007056330.

Tract contains 2270.5622 acres, more or less.

SUBDIVISION DATA

1. DRB No.
2. Zone Atlas Index Nos. C-16, R-15, R-16, R-17, S-14, S-15, S-16, S-17, T-16 and T-17.
3. Zoning: PC.
3. Gross Subdivision Acreage: 2270.5622 Acres.
4. Total number of tracts Created: Thirty-one (31) Tracts.
5. Total mileage of full width public street right-of-way created: 5.133 Miles.
6. Date of Survey: February, 2007.
7. Plat is located within Sections 15, 21, 22, 23, 26, 27, 28, 29, 34 and 35, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico.

NOTICE OF SUBDIVISION PLAT CONDITIONS

PURSUANT TO SECTION 7 OF THE CITY OF ALBUQUERQUE, NEW MEXICO SUBDIVISION ORDINANCE, A VARIANCE OR WAIVER FROM CERTAIN SUBDIVISION REQUIREMENTS HAS BEEN GRANTED BY THE CITY AND THE ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY IN CONNECTION WITH THIS PLAT.

FUTURE SUBDIVISION OF LANDS WITHIN THIS PLAT, ZONING SITE DEVELOPMENT PLAN APPROVALS, AND DEVELOPMENT PERMITS MAY BE CONDITIONED UPON DEDICATION OF RIGHTS-OF-WAY AND EASEMENTS, AND/OR UPON INFRASTRUCTURE IMPROVEMENTS BY THE OWNER FOR WATER, SANITARY SEWER, STREETS, DRAINAGE, GRADING AND PARKS IN ACCORDANCE WITH CURRENT RESOLUTIONS, ORDINANCES AND POLICIES IN EFFECT AT THE TIME FOR ANY SPECIFIC PROPOSAL.

THE CITY (AND AMAFCA WITH REFERENCE TO DRAINAGE) MAY REQUIRE AND/OR PERMIT EASEMENTS TO BE DEDICATED, OR REMOVED WHEN FUTURE PLATS AND/OR SITE DEVELOPMENT PLANS ARE APPROVED.

BY ITS APPROVAL OF THIS SUBDIVISION THE CITY MAKES NO REPRESENTATION OR WARRANTIES AS TO THE LOCATION OF UTILITIES, OR REMOVED WHEN FUTURE PLATS AND/OR SITE REQUIREMENTS INCLUDING (BUT NOT LIMITED TO) THE FOLLOWING ITEMS:

1. WATER AND SANITARY SEWER AVAILABILITY.
2. FUTURE STREET DEDICATIONS AND/OR IMPROVEMENTS.
3. PARK AND OPEN SPACE REQUIREMENTS.
4. DRAINAGE REQUIREMENTS AND/OR IMPROVEMENTS.
5. EXCAVATION, FILLING OR GRADING REQUIREMENTS.

ANY PERSON INTENDING DEVELOPMENT OF LANDS WITHIN SUBJECT SUBDIVISION IS CAUTIONED TO INVESTIGATE THE STATUS OF THESE ITEMS.

AT SUCH TIME AS ALL SUCH CONDITIONS HAVE BEEN SATISFACTORILY MET, THE CITY ENGINEER SHALL APPROVE A RECORDABLE DOCUMENT, REMOVING SUCH CONDITIONS FROM ALL OR FROM A PORTION OF THE AREA WITHIN THE SUBJECT SUBDIVISION.

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone) NAD 1927 and the basis of bearings is the Plat of Mesa Del Sol, Tracts 4-A-1 THRU 4-A-4 Albuquerque, New Mexico, filed on April 17, 2007 in Book 2007C, Page 98 as Document No. 2007056330.
2. Record Bearings and distances are the same as shown on this plat and the same as shown on the Plat of Mesa Del Sol, Tracts 4-A-1 THRU 4-A-4, Albuquerque, New Mexico, filed on April 17, 2007 in Book 2007C, Page 98 as Document No. 2007056330 and the Plat of Mesa Del Sol Tracts 4-A, 4-B and 4-C, Albuquerque, New Mexico filed on June 22, 2006 in Book 2006C, page 197 as Document No. 2006092810.
3. Distances are ground distances.
4. All easements of record are shown.
5. The location of pipeline, powerline, and communication line easements and/or right-of-ways shown hereon were plotted from the granting documents in conjunction with field ties of existing infrastructure.
6. All easements shown hereon were provided by Fidelity National Title Included in the Search and Report letter from Mesa Del Sol Plat filed: June 22, 2006 to April 4, 2007 dated April 9, 2007.
   Other documents not of public record in the Bernalillo County Clerk's were provided by the State Land Office as shown hereon.
7. Centerline monumentation to be installed at installed at centerline PC's, PT's, angle points and street intersections prior to acceptance of subdivision street improvements and will consist of a standard 3-1/4" aluminum alloy cap stamped "CITY OF ALBUQUERQUE", "CENTERLINE MONUMENTATION", "SURVEY MARKER", DO NOT DISTURB", "PLS 16468".
8. All interior tract corners to be monumented by a #5 rebar and yellow plastic survey cap stamped "GROMATZKY PS 16468".
9. All streets are public, to be dedicated to the City of Albuquerque with the filing of this plat.
10. Tracts CS-1 thru CS-4 are private open space, owned and maintained by Mesa Del Sol, LLC or its assignees and excepting Tract CS-4, are subject to a public pedestrian access and public drainage easement granted with the filing of this plat. These tracts are for the use and benefit of Tracts 1 thru 26 inclusive, in accordance with approved drainage plans on file with the City of Albuquerque.
11. Maintenance of public drainage easement and public pedestrian access easement is the responsibility of Mesa Del Sol, LLC.
12. Tract 26 benefits from existing Sign Easements filed: July 7, 2006 in Book A120, Page 647, records of Bernalillo County, New Mexico. (not plottable)

FREE CONSENT AND DEDICATION

The foregoing plat of that certain tract of land situate within Sections 15, 21, 22, 23, 26, 27, 28, 29, 34 and 35, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico, being and comprising all of Tract 4-B of the Plat of Mesa Del Sol Tracts 4-A, 4-B and 4-C, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on June 22, 2006 in Book 2006C, page 197 as Document No. 2006092810 together with all of Tract 4-A-1 of the Plat of Mesa Del Sol Tracts 4-A-1 THRU 4-A-4, Albuquerque, New Mexico as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on April 17, 2007 in Book 2007C, page 98 as Document No. 2007056330, now comprising Tracts 1 thru 26 inclusive, Tract A, and Tracts CS-1 thru CS-4 inclusive, Bulk Land Plat For Mesa Del Sol Innovation Park, Albuquerque, New Mexico is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof. Said owner(s) and/or proprietor(s) do hereby dedicate all streets and public rights-of-way as shown hereon to the City of Albuquerque in fee simple with warranty covenants and do hereby grant: All Access, Utility and Drainage Easements shown hereon including the right to construct, operate, inspect, and maintain facilities therein; and all Public Utility Easements shown hereon for the common and joint use of Gas, Electrical Power, and Communication Services for buried distribution lines, conduits, and pipes for underground utilities where shown or indicated, including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. The City has the right to enter upon the Grantees Property at any time and perform whatever inspection, installation, maintenance, repair, modification or removal ("Work") it deems appropriate without liability to the City. If the Work effects any improvements or Encroachments made by the Grantee, the City will not be financially or otherwise responsible for rebuilding or repairing of improvements or encroachments. If in the opinion of the City, the Work to be performed by the City could endanger the structural integrity or otherwise damage the improvements or encroachments, the Grantee shall, at its own expense, take whatever protective measures are required to safeguard the improvements or encroachments. Said owner(s) and/or proprietor(s) do hereby indemnify the City and do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed.

MESA DEL SOL, LLC, a New Mexico Limited Liability Company
By: FC Covington Manager, LLC, a New Mexico Limited Liability Company, Member
By: FC Mesa, Inc., a New Mexico Corporation, Member

BY: _____
Michael D. Daly
Chief Operating Officer

OFFICIAL SEAL
Patty E. Lydens
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 8-15-08

State of New Mexico)
SS
County of Bernalillo)

This instrument was acknowledged before me on 15 day of May, 2007, by Michael D. Daly, Chief Operating Officer of FC Mesa, Inc., a New Mexico Corporation, as Member of Mesa Del Sol, LLC, a New Mexico Limited Liability Company, as Member of Mesa Del Sol, LLC, a New Mexico Limited Liability Company.

My Commission Expires: 8-15-08 Patty E. Lydens
Notary Public

PACIFICA MESA STUDIOS, LLC

BY: _____
Harold Kelensky
Chairman and CEO

OFFICIAL SEAL
Commission # 1738646
Notary Public - California
Los Angeles County
My Comm. Expires Oct 8, 2011

State of California)
SS
County of Los Angeles)

This instrument was acknowledged before me on 25 day of May, 2007, by Harold Kelensky, Chairman and CEO of Pacifica Mesa Studios, LLC, a California Limited Liability Company.

My Commission Expires: April 29, 2011 Delora L. Shrockenaster
Notary Public

JURISDICTIONAL AFFIDAVIT

I, Robert Gromatzky, a registered Professional New Mexico Surveyor, hereby affirm that the property described does lie within the platting and subdivision jurisdiction of the City of Albuquerque.

Robert Gromatzky
New Mexico Professional Surveyor 16469

Date: April 27, 2007

SURVEYOR'S CERTIFICATION

I, Robert Gromatzky, a registered Professional New Mexico Surveyor, certify that I am responsible for this survey and that this plat was prepared by me or under my supervision, shows all easements of record, and conforms to the Minimum Requirements of the Board of Registration for Professional Engineers and Professional Surveyors in October, 2000 and meets the minimum requirements for monumentation and surveys contained in the Albuquerque Subdivision Ordinance, and is true and accurate to the best of my knowledge and belief.

Robert Gromatzky
New Mexico Professional Surveyor 16469

Date: April 27, 2007

ROBERT GROMATZKY NEW MEXICO 16469 LICENSED PROFESSIONAL SURVEYOR

SHEET 1 OF 7

BULK LAND PLAT FOR
MESA DEL SOL INNOVATION PARK

(A REPLAT OF TRACTS 4-A-1 & 4-B, MESA DEL SOL)

ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
APRIL, 2007

PROJECT NUMBER 1006539

APPLICATION NUMBER 07DRB-70048

PLAT APPROVAL

CITY TRANSPORTATION		6/21/07 DATE
QWEST		7-12-07 DATE
COMCAST CABLE		9-6-07 DATE
PNM ELECTRIC SERVICES		9-6-07 DATE
PNM GAS SERVICES		7/25/07 DATE
TIME WARNER		DATE
CITY PARKS/PL		6-7-07 DATE
CITY SURVEYOR		7-11-07 DATE
TRAFFIC ENGINEERING, TRANSPORTATION DIVISION		9/13/07 DATE
SOLID WASTE MANAGEMENT DEPARTMENT		7/1/07 DATE
PARKS & RECREATION DEPARTMENT		7/1/07 DATE
AMAFCA		7/11/07 DATE
CITY ENGINEER		9/13/07 DATE
DEVELOPMENT REVIEW BOARD, PLANNING DEPARTMENT		7-11-07 DATE
ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY		9/13/07 DATE
REAL PROPERTY DIVISION		9-6-07 DATE
ENVIRONMENTAL HEALTH DEPARTMENT		DATE

TAX CERTIFICATION

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID ON UPC #

101605126126010 1944

PROPERTY OWNER OF RECORD State of New Mexico

BERNALILLO COUNTY TREASURER'S OFFICE DATE

In approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a Title Search of the properties shown hereon. Consequently, PNM does not waive nor release any easement or easement rights to which it may be entitled.

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

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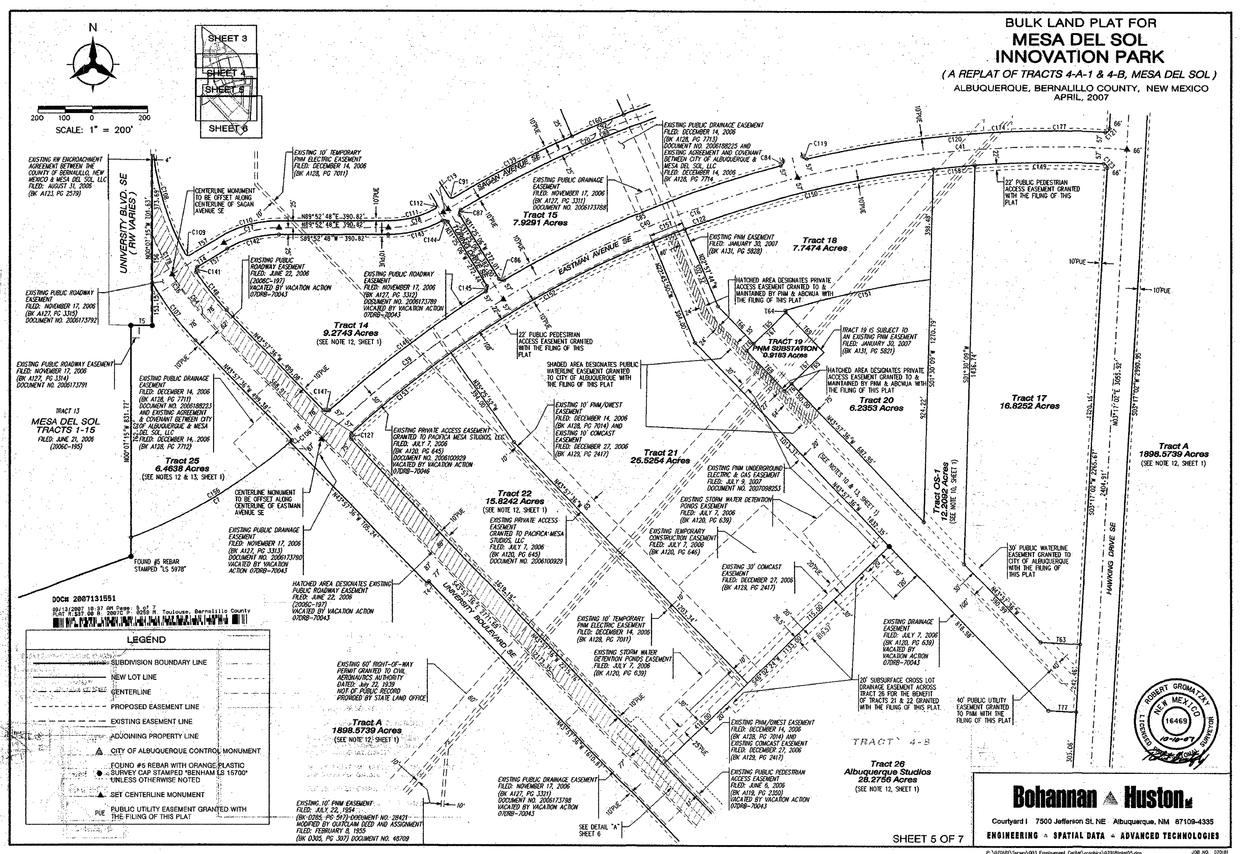
JOB NO 070204



DOC# 2007131551
09/26/2007 08:07 PM Page 2 of 2 Toulouse Bernalillo County

SHEET 5 OF 7

BULK LAND PLAT FOR
MESA DEL SOL INNOVATION PARK

(A REPLAT OF TRACTS 4-A-1 & 4-B, MESA DEL SOL)

ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
APRIL, 2007

Bohannan ▲ Huston
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JOB NO 070204

PLAT (FOR INFORMATION ONLY)

Design Review Committee

City Engineer Approval

Last Design Update

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	G-2	2	14

Date: February 2008

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

Bohannan ▲ Huston
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

Mesa del Sol

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: MJB DATE: 02.08
Drawn By: DATE: 02.08
Checked By: MJB DATE: 02.08

ENGINEER'S SEAL
NEW MEXICO LICENSED PROFESSIONAL ENGINEER 18187 MICHAEL J. BASS
3-26-08

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

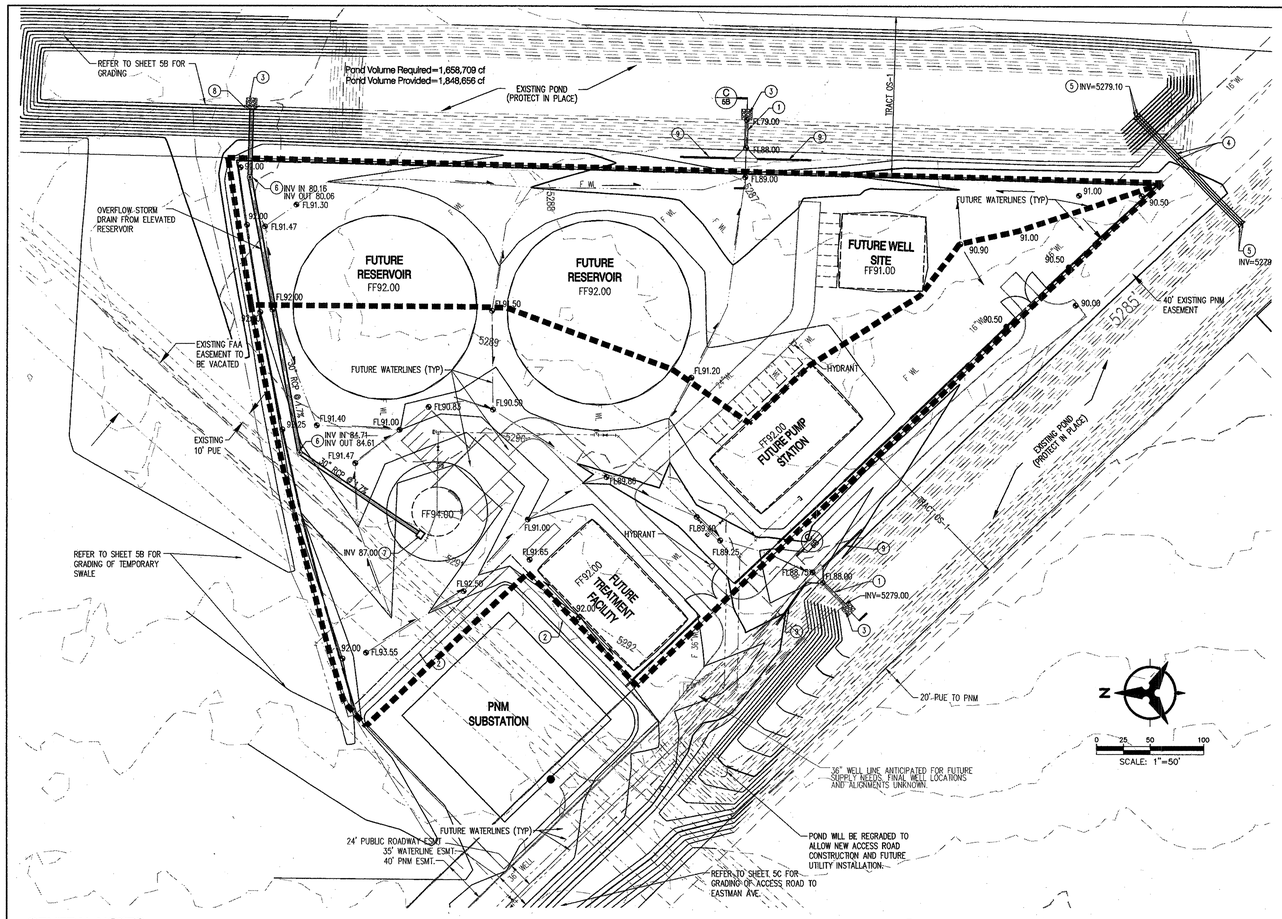
BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-0-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE. STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

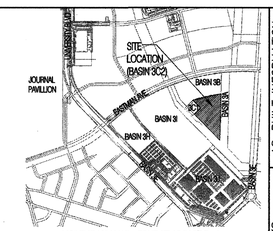
AS-BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY Cartesian Surveys Inc. DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY Cartesian Surveys Inc. DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

RECORD DRAWINGS

BHI JOB NO. 070204

SCANNED BY PLANNING





VICINITY/BASIN MAP - ZONE ATLAS PAGE R-16

Introduction

This drainage management plan is in support of the Water Utility Site at Mesa del Sol. With this submittal we are requesting COA hydrology approval for DRB Site Plan Administrative Amendment Approval and Building Permit Approval.

This drainage management plan follows the concepts and guidelines set forth in the "Drainage Area 3 Drainage Management Plan (COA File R16/DA3)," which outlines the drainage scheme and sizes the pond for this basin. In this drainage management plan, this site is referenced as Basin C32.

Existing Conditions

The elevated reservoir site ("The Site") is Tract 20 of the Bulk Land Plat for Mesa del Sol Innovation Park. This 6.24 acre lot is currently undeveloped and slopes 0.5% to 1.0% from the west to east. It is located in between the two Regional Retention Ponds ("Ponds") constructed with the Albuquerque Studios Site (COA Hydro File #R16/D002A).

In addition, there is a PNM substation that was constructed to the northwest of The Site. The majority of this site is self contained and will not adversely affect the elevated reservoir site (See COA Hydro File #R16/D002B).

Once The Site is completed, it will be bound on three sides. The Ponds to the east and southwest and a future developed parcel to the north.

Offsite Drainage

Current drainage from the undeveloped land to the west of the site drains into the existing pond constructed with the Albuquerque Studios site via storm drain and surface flow. A temporary swale west of the access road will direct flows to the existing pond. All drainage to the east of these adjacent tracts continues to outfall to the existing playa system to the east and will not affect the site. Drainage from the north will be diverted east into the existing ponds via a temporary swale. Upon development of the future parcels, drainage will be conveyed to the existing ponds in a manner suitable to each specific site plan, and each site will be subject to future submittal and approval.

Proposed Site Grading

The slope of the site under proposed conditions will be between 0.5% to 1.0%. A portion of the site will drain to the eastern pond (Basin 1) while the remainder of the site will drain to the southwestern pond (Basin 2). This site will not be paved but seeded resulting in land treatments to be 50% D, 25% C and 25% B (See Table 1 for basin calculations).

Basin 1 and Basin 2 will drain to their respected ponds via concrete rundowns. The rundowns will have a 20' wide opening and neck down to a 4' wide channel heading down the 3:1 side slopes of the pond. Per the weir equation provided from the DPM chapter 22.3, the allowable flow of the 20' wide opening at 6" of depth is approximately 19cfs. In addition the 4' wide 6" tall rundown headed down the 3:1 slope has an allowable discharge of 32.17cfs. This far exceeds the required Q for each basin.

The ponds have previously been constructed to account for developed flows from this site with the Albuquerque Studios submittal. Currently there are only a few basins contributing to the existing Ponds. Under current conditions for these basins (including the developed flows from The Site), the maximum water surface elevation (WWSEL) is approximately 5284.60.

(Note: the ponds were sized to accept the 100 year, 10 day storm generated by the fully developed drainage area in accordance with the methodology outlined in the DPM section 22.2. Developed land treatments for Mesa del Sol sites are assumed to be 90% treatment D and 10% treatment B. Currently the top of the ponds extend to 5289.00).

A portion of the existing western pond constructed with the Albuquerque Studios site will be filled in order to allow room for an access road and future utilities to serve both the Elevated Reservoir site and the Mesa del Sol development. The pond to the east will be extended to the north to account for this volume. (Total pond volume provided after pond adjustments = 42.4 acre-ft, Total volume required for current contributing basins to the existing ponds = 18.9 acre-ft).

Floodplain

In accordance with FEMA Community Map Panel #35001C0255E, the site is not located within a floodplain.

Conclusion

This drainage submittal has been prepared in accordance with City of Albuquerque requirements. This plan demonstrates the proposed grading and drainage design. The implementation of this design would result in the safe passage and retention of the 100 yr, 10 day storm event. We have previously received hydrology approval for DRB site plan approval and rough grading and foundation permit approval. With this submittal we are requesting COA Hydrology Department approval for DRB Administrative Amendment approval and building permit approval.

GENERAL NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATION AS NOTED IN THE SOILS REPORT BY GEO-TEST, INC. DATED 1/07 (JOB NO. 1-81202).
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES & REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. BOULDERS GREATER THAN 3 FEET IN DIAMETER EXCAVATED DURING GRADING ACTIVITIES SHALL BE STOCKPILED AND DISPOSED OF AT THE DISCRETION OF THE OWNER.
6. ALL WALLS SHOWN ARE TO BE PLACED ALONG PROPERTY LINE.

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TABLE 1
ELEVATED RESERVOIR - DEVELOPED HYDRAULIC CALCULATIONS
Basin Data Table

This table is based on the DPM Section 22.2, Zone:2

SUB-BASIN ID	Area (SQ.FT)	Area (AC.)	Land Treatment Percentages A	B	C	D	Q(100) (cfs/ac.)	Q(100) (cfs)	WTE (inches)	$V(100)_{bas}$ (CF)	$V(100)_{bsmy}$ (CF)
Basin 1	110391	2.53	0.0%	25.0%	25.0%	50.0%	4.29	10.87	1.96	17984	25344
Basin 2	162841	3.74	0.0%	25.0%	25.0%	50.0%	3.71	13.86	1.54	20077	31740
Total	*273231.68*	*6.27*								*38061.29*	*57083.40*

KEYED NOTES

1. INSTALL CONCRETE WEIR AND RUNDOWN PER DETAIL A & B, SHEET 5B. TRANSITION FROM WEIR SECTION TO RUNDOWN SECTION OVER 10'.
2. INSTALL TURN BLOCKS FOR DRAINAGE EVERY 20 FT.O.C.
3. INSTALL 10'X10' RIP RAP BLANKET, 12" THICK.
4. FUTURE 2-36" RCP STORM DRAIN PIPES (TO BE CONSTRUCTED AT A LATER DATE.
5. INSTALL 36" RCP END SECTION.
6. INSTALL TYPE E MANHOLE PER COA STANDARD DRAWING 2101.
7. TIE TO EXISTING STUB
8. INSTALL 30" RCP END SECTION.
9. PROVIDE 1' HIGH BERM, 2FT WIDE TOP, WITH 3:1 SIDE SLOPES. EXTEND 50' BEYOND CONCRETE RUNDOWN.

LEGEND

⊕91.82	PROPOSED SPOT ELEVATIONS
×92.45	EXISTING SPOT ELEVATIONS
5470	EXISTING CONTOUR W/ INDEX ELEVATION
	FLOW ARROW
W	PROPOSED TANK WATER LINE
	DRAINAGE BASIN BOUNDARIES
	PROPOSED WALL
	PROPOSED SLOPE

BHI JOB NO. 070204

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ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

MESA DEL SOL
ELEVATED WATER RESERVOIR
SITE GRADING, DRAINAGE, AND UTILITY PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
.	R-16-Z	5A	5

ENGINEER'S SEAL: JEFFREY L. MUNN, NEW MEXICO, 16858, REGISTERED PROFESSIONAL ENGINEER, 12-19-07

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY: CBP DATE: 01/2007
DRAWN BY: MTD DATE: 01/2007
CHECKED BY: DJG DATE: 01/2007

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

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NO.

Mesa del Sol

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

(FOR INFORMATION ONLY)

WATER UTILITY SITE
APPROVED GRADING & DRAINAGE PLANS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
X	X			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	G-3	3	14

ENGINEER'S SEAL: MICHAEL J. BALASKOVITS, NEW MEXICO, 18187, LICENSED PROFESSIONAL ENGINEER, 3-26-08

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: MJB DATE: 02.08
Drawn By: DATE: 02.08
Checked By: MJB DATE: 02.08

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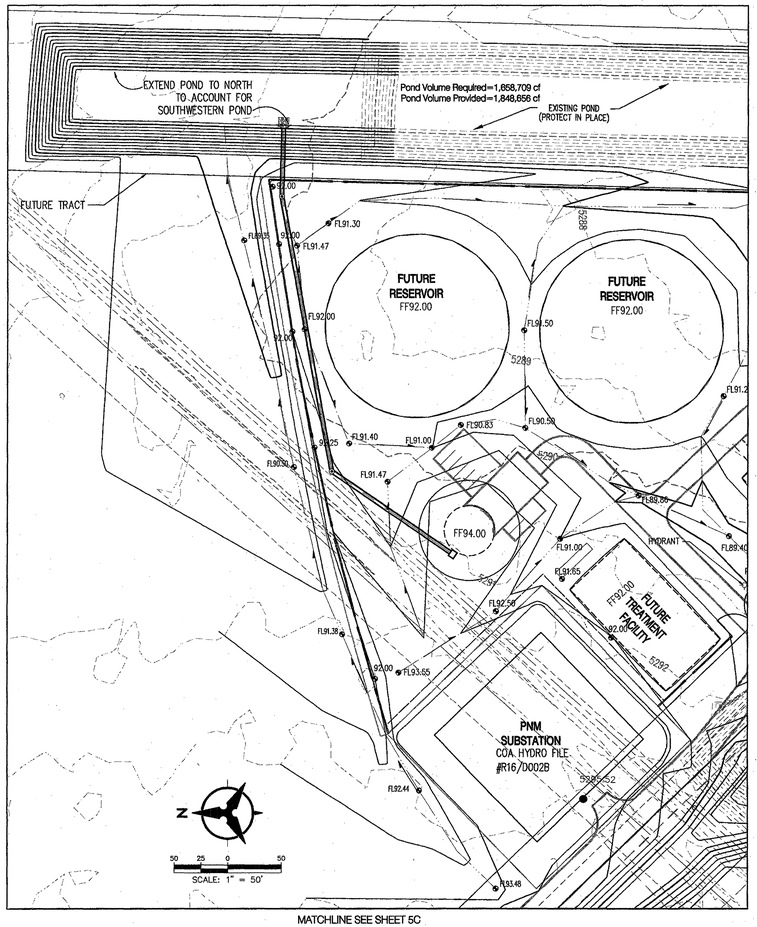
BHI JOB NO. 070204

Date: February 2008

RECORD DRAWINGS

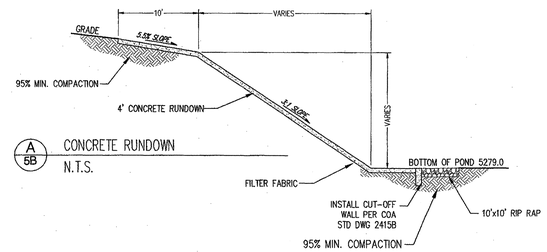
SCANNED BY PLANNING



MATCHLINE SEE SHEET 5C

LEGEND

- PROPERTY LINE
- 5289 EXISTING CONTOUR
- 90 PROPOSED INDEX CONTOUR
- 91 PROPOSED INTERMEDIATE CONTOUR
- 92.50 PROPOSED SPOT ELEVATION
- PROPOSED SWALE FLOWLINE



A 5B CONCRETE RUNDOWN
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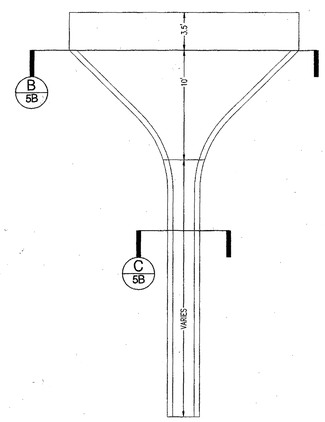
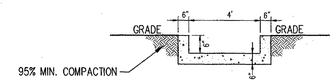


B 5B

C 5B

PLAN VIEW OF CONCRETE WIER AND RUNDOWN
N.T.S.



C 5B CONCRETE RUNDOWN TYPICAL SECTION
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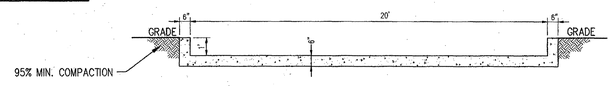

B 5B CONCRETE RUNDOWN WEIR SECTION
N.T.S.

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BHI JOB NO. 070204

AS-BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY Cartesian Surveys Inc.	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY Cartesian Surveys Inc.	DATE
DRAWINGS CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS

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SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

JEFFREY L. MILLER NEW MEXICO 16058 LICENSED PROFESSIONAL ENGINEER 12-19-07

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

Bohannan ▲ Huston INC.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

MESA DEL SOL EVEVATED RESERVOIR
CONCEPTUAL OFFSITE GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	R-16-Z	5B	5

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SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

MICHAEL BALASKOVITS NEW MEXICO 18187 LICENSED PROFESSIONAL ENGINEER 3-26-08

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: MJB DATE: 02.08
Drawn By: DATE: 02.08
Checked By: MJB DATE: 02.08

Mesa del Sol

Bohannan ▲ Huston INC.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

(FOR INFORMATION ONLY)

WATER UTILITY SITE
APPROVED GRADING & DRAINAGE PLANS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
X	X			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	G-4	4	14

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BHI JOB NO. 070204

Date: February 2008

RECORD DRAWINGS

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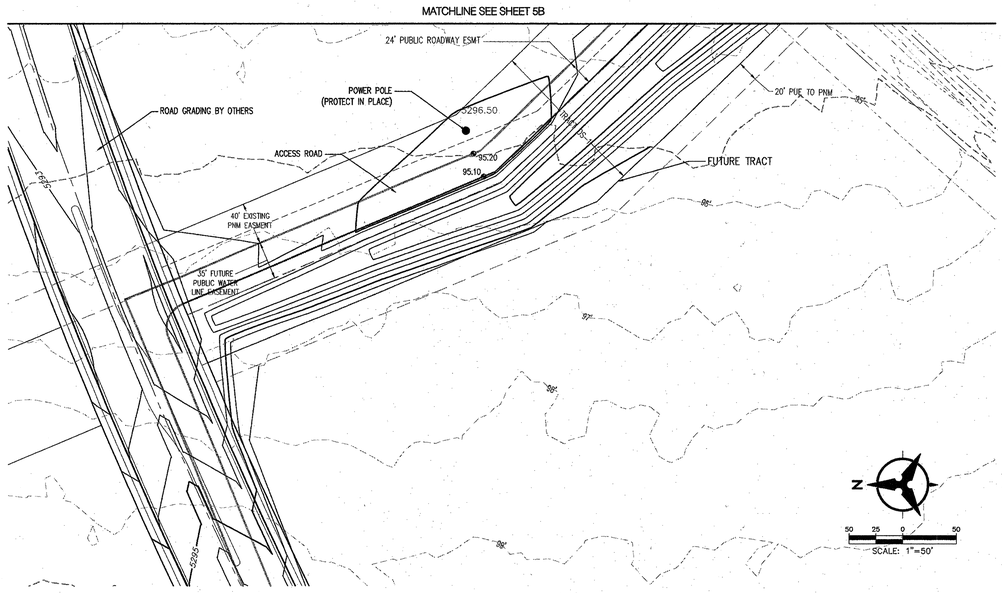

LEGEND

———	PROPERTY LINE
- - - 5289 - - -	EXISTING CONTOUR
——— 90 ———	PROPOSED INDEX CONTOUR
——— 91 ———	PROPOSED INTERMEDIATE CONTOUR
92.50	PROPOSED SPOT ELEVATION
——— ► ———	PROPOSED SWALE FLOWLINE

Bohannan ▲ Huston INC
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

MESA DEL SOL EVEVATED RESERVOIR
CONCEPTUAL OFFSITE GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
	R-16-Z	5C	5

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BHI JOB NO. 070204

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

ENGINEER'S SEAL: JEFFREY L. MULLEN, NEW MEXICO, 16658, LICENSED PROFESSIONAL ENGINEER, 12-13-07

SURVEY INFORMATION

NO.	BY	DATE	FIELD NOTES

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ENGINEER'S SEAL: MICHAEL BALASKOVITS, NEW MEXICO, 18187, LICENSED PROFESSIONAL ENGINEER, 3-26-08

Mesa del Sol

Bohannan ▲ Huston INC
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X	X			

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775461	R16	G-5	5	14

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Tue, 25 Mar 2008 - 6:15:08pm, Plotted by: MBALASKOVITS

BHI JOB NO. 070204

Date: February 2008

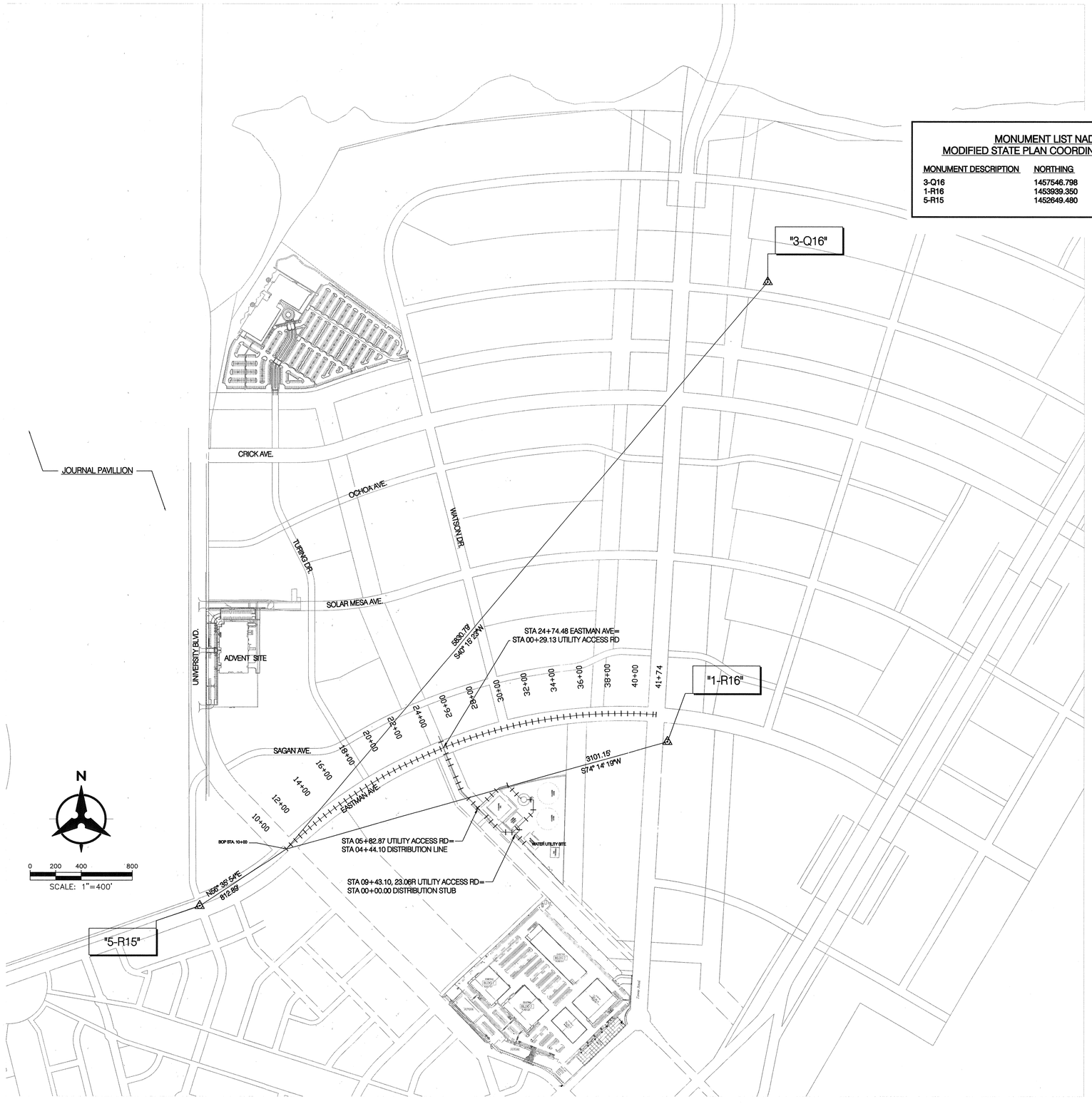
RECORD DRAWINGS

SCANNED BY PLANNING

NOTE:
CONTRACTOR SHALL VERIFY SURVEY CONTROL PLAN AGAINST THE RECORDED PLAT. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.

MONUMENT LIST NAD83/NAD88
MODIFIED STATE PLAN COORDINATES (NM-CENTRAL)

MONUMENT DESCRIPTION	NORTHING	EASTING	ELEVATION
3-Q16	1457546.798	1534025.978	5310.390
1-R16	1453939.350	1533242.614	5291.451
5-R15	1452649.480	1529579.435	5306.674



AS-BUILT INFORMATION

CONTRACTOR — DATE
WORK staked by Cartesian Surveys Inc. — DATE
INSPECTOR'S ACCEPTANCE BY: — DATE
FIELD VERIFICATION by Cartesian Surveys Inc. — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE. STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

MICHAEL BALASKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER

4-11-08

No.	Date	REMARKS	By
		REVISIONS	
		DESIGN	

Designed By: MJB — DATE: 02.08
Drawn By: — DATE: 02.08
Checked By: MJB — DATE: 02.08

Mesa del Sol

Bohannan ▲ Huston INC.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

SURVEY CONTROL PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
X	X			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	G-6	6	14

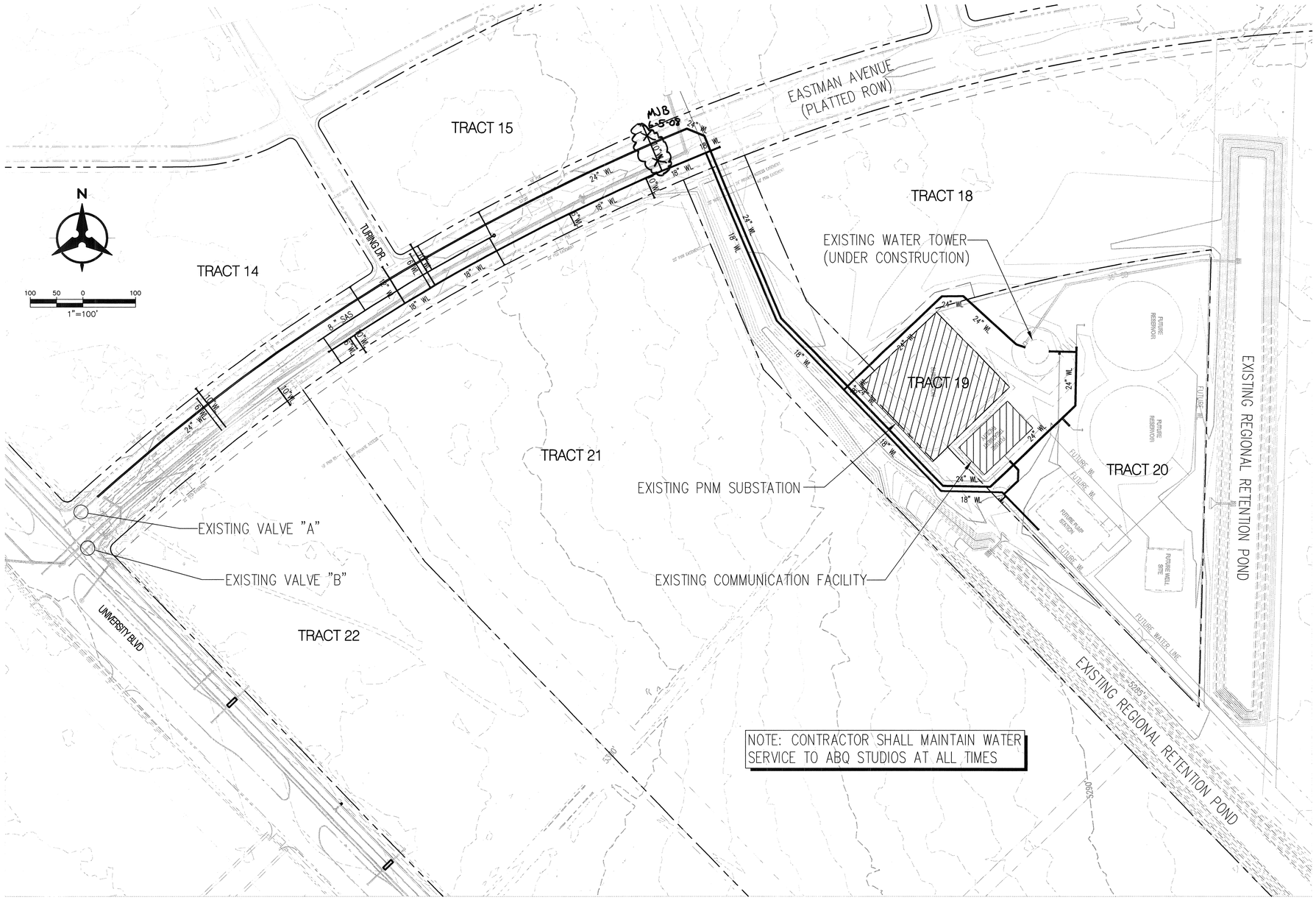
P:\070204\cdp\pnp\070204_HV-Control_SheetG6.dwg
Fri, 11 Apr 2008 - 2:27:11pm, Plotted by: MBALASKOVITS

BHI JOB NO. 070204

Date: February 2008

RECORD DRAWINGS

SCANNED BY PLANNING



NOTE: CONTRACTOR SHALL MAINTAIN WATER SERVICE TO ABQ STUDIOS AT ALL TIMES

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY CONSTRUCTION OBSERVER IMMEDIATELY OF ANY CONFLICTS.

2. CONTRACTOR SHALL PROVIDE INSPECTORS (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

3. ANY DAMAGE TO EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

4. ALL POTABLE WATER LINE BUTTERFLY VALVES SHALL BE BUILT PER COA STD DWG 2352. VALVE BOX AND COVER PER COA STD DWG 2328.

5. ALL POTABLE WATER LINE GATE VALVES SHALL BE BUILT PER COA STD DWG 2326. VALVE BOX AND COVER PER COA STD DWG 2328.

6. ALL COMBINATION AIR/VACUUM VALVES SHALL BE BUILT PER COA STD DWG 2350.

7. ALL FIRE HYDRANTS SHALL BE BUILT PER COA STD DWG 2340.

8. 10" SERVICE/FIRE LINES WILL BE USED FOR FUTURE DEVELOPMENT. DOMESTIC SERVICES WILL TIE DIRECTLY TO THIS 10" LINE.

9. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.065 SUBPART P.

11. ALL MANHOLES SHALL BE BUILT PER COA STD DWG 2101 OR 2102, EXCLUDING MANHOLE STEPS.

12. MANHOLE AND VALVE CAN RIMS ELEVATIONS ARE APPROXIMATE AND ARE SUBJECT TO REVISION (+/- 1') DURING ROADWAY DESIGN. INSTALL MANHOLES AND VALVE CANS WITH TEMPORARY COLLAR CONCRETE PAD AROUND RING AND COVER TO PROFILE ROADWAY ELEVATION. UNDER THE FUTURE ROADWAY PROJECT MANHOLE AND VALVE RINGS AND COVERS WILL BE ADJUSTED TO FINAL GRADE, PERMANENT CONCRETE PADS WILL BE INSTALLED THEN.

13. CURVILINEAR SEWER IS BASED UPON PIPE JOINT LENGTH OF 20FT OR SHORTER.

14. SERVICES SHALL BE 6" SANITARY SEWER LINE, AT S=0.60% INSTALL 6" PLUG AND ELECTRONIC MARKER DISK PER COA STD DETAIL 2145.

15. ALL WATERLINE SHALL BE RESTRAINED PER RESTRAINED JOINT TABLES. IF CONTRACTOR ENCOUNTERS VARYING SOIL TYPES THEY SHALL CONTACT THE ENGINEER IMMEDIATELY TO RECALCULATE RESTRAINED LENGTHS.

LEGEND

- PROPERTY LINE
- SD — EXISTING STORM DRAIN
- SAS — EXISTING SANITARY SEWER
- W — EXISTING WATER LINE
- EXISTING CAP
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN MANHOLE
- PROPOSED WATER EASEMENT
- WL — PROPOSED WATER LINE
- PROPOSED VALVE
- FL — PROPOSED FIRE LINE
- PROPOSED HYDRANT
- PROPOSED CAP
- PROPOSED WATER METER
- SAS — PROPOSED SAS LINE
- PROPOSED MANHOLE

WATER SHUT-OFF PLAN

1. CLOSE EXISTING VALVES A AND B

WATER SHUT-OFF REQUIREMENTS:

CONTRACTOR WILL BE RESPONSIBLE FOR THE TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUCTION WITH THE COMPLETION OF CONNECTIONS. AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT ABCWUA TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN. CONTRACTOR SHALL NOT OPERATE VALVES ON THE PROJECT.

CONTRACTOR WILL BE RESPONSIBLE FOR FLUSHING, DISINFECTING, AND TESTING THE LINES AS REQUIRED BY THE ABCWUA.

NOTE:

THE SURFACE AND SUBSURFACE SOILS WITHIN THE BOUNDARIES OF THIS PROJECT MAY BE USED ONLY FOR PURPOSES OF BEDDING OF UNDERGROUND UTILITIES, FOUNDATION, AND BACKFILL UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR, OR ANY OF ITS SUBCONTRACTORS, BE ALLOWED TO USE ANY SOIL FROM WITHIN THE PROJECT BOUNDARIES AS AN ADMIXTURE TO ANY CONSTRUCTION MATERIAL, SUCH AS, BUT NOT LIMITED TO, THE BATCHING OF ASPHALT, CONCRETE, MASONRY, OR GROUT. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS BE ALLOWED TO REMOVE ANY SOIL FROM THE PROPERTY WITHIN THE BOUNDARIES OF THIS PROJECT, IN ANY AMOUNT WHATEVER, FOR TRANSPORT BY ANY MEANS TO ANY LOCATION OUTSIDE THOSE PROPERTY BOUNDARIES.

AS-BUILT INFORMATION

		DATE
CONTRACTOR		
WORK STAKED by: Cartesian Surveys Inc.		DATE
INSPECTOR'S ACCEPTANCE BY		DATE
FIELD VERIFICATION by: Cartesian Surveys Inc.		DATE
DRAWINGS CORRECTED BY		DATE
MICRO-FILM INFORMATION		
RECORDED BY		DATE
NO.		

BENCH MARKS

ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE. STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

MICHAEL BALASKOVITS NEW MEXICO 18187 LICENSED PROFESSIONAL ENGINEER

4-11-08

No.	Date	REMARKS	By

REVISIONS

DESIGN

Designed By: MJB DATE: 02.08

Drawn By: DATE: 02.08

Checked By: MJB DATE: 02.08

Mesa del Sol

Bohannan Huston INC

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL
OVERALL UTILITY PLAN

Design Review Committee: APPROVED JUN 0 6 2008 DESIGN REVIEW COMMITTEE

City Engineer Approval: APPROVED JUN 1 6 2008 DESIGN REVIEW COMMITTEE

Last Design Update | Mo./Day/Yr. | Mo./Day/Yr.

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-1	7	14

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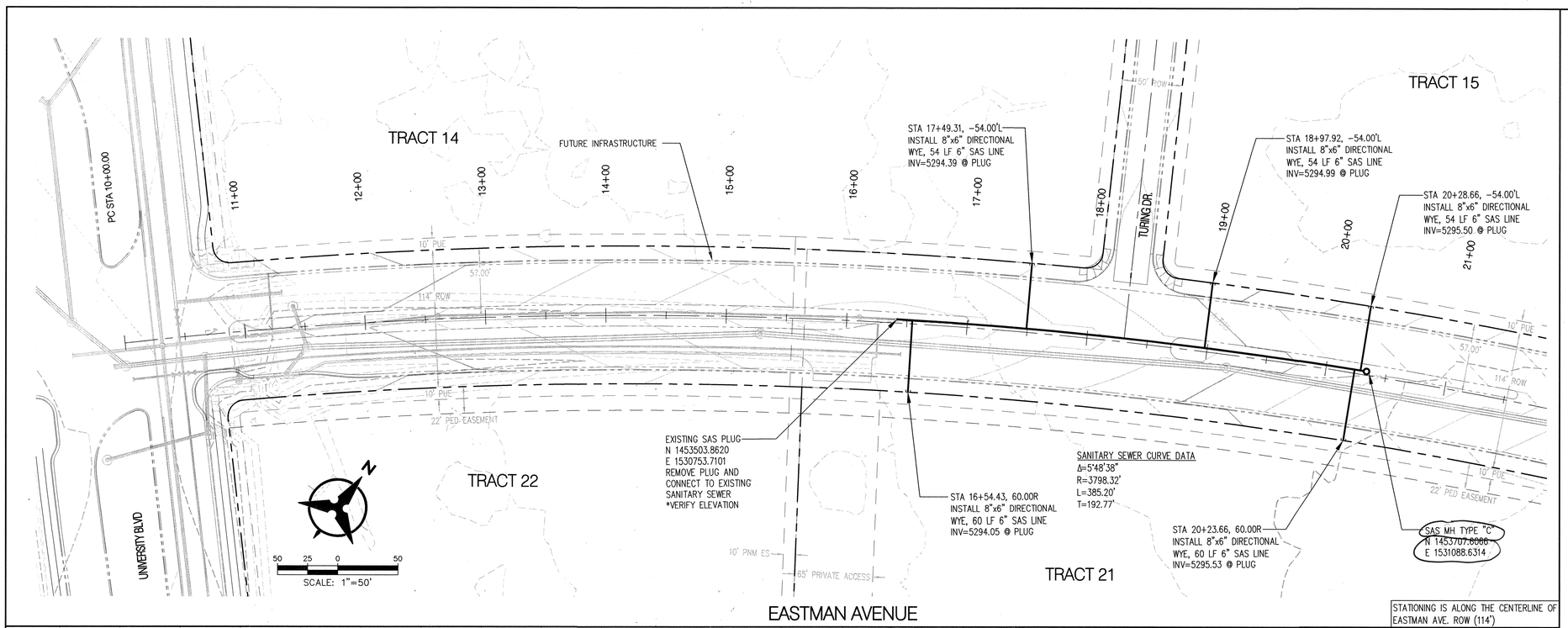
BHI JOB NO. 070204

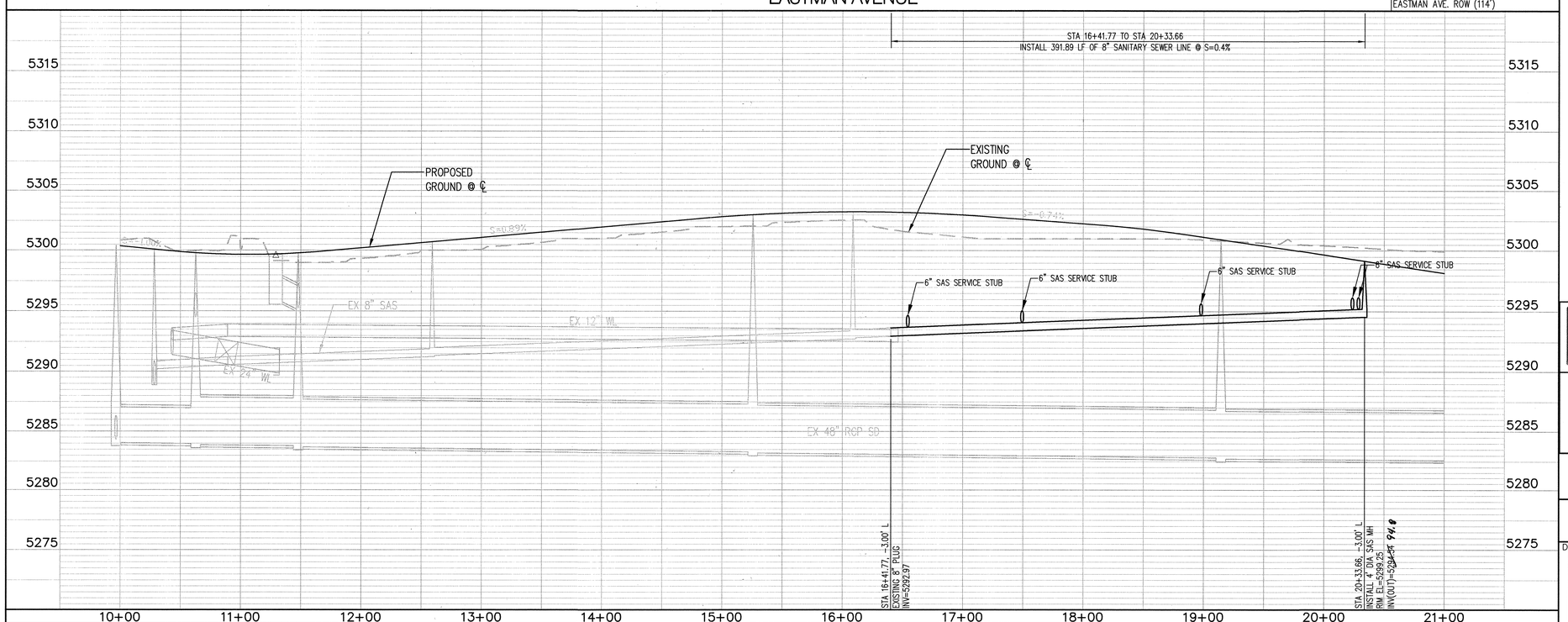
Date: February 2008

SCANNED BY PLANNING

RECORD DRAWINGS



STATIONING IS ALONG THE CENTERLINE OF EASTMAN AVE. ROW (114')



SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

BHI JOB NO. 070204

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Tue, 8-Apr-2008 - 9:16:am, Plotted by: MBALASKOVITS

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTLE IRON PIPE - PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

Certification

THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Will Phillips

Mesa del Sol

Bohannan Huston INC.

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
EASTMAN AVENUE
SANITARY SEWER PLAN & PROFILE STA 10+00.00 TO STA. 21+00.00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE	APPROVED JUN 18 2008 DESIGN REVIEW COMMITTEE			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-2	8	14

AS-BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY Cartesian Surveys Inc.	DATE
INSPECTOR ACCEPTANCE BY	DATE
FIELD VERIFICATION BY Cartesian Surveys Inc	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	DATE

BENCH MARKS

ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION CO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE. STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

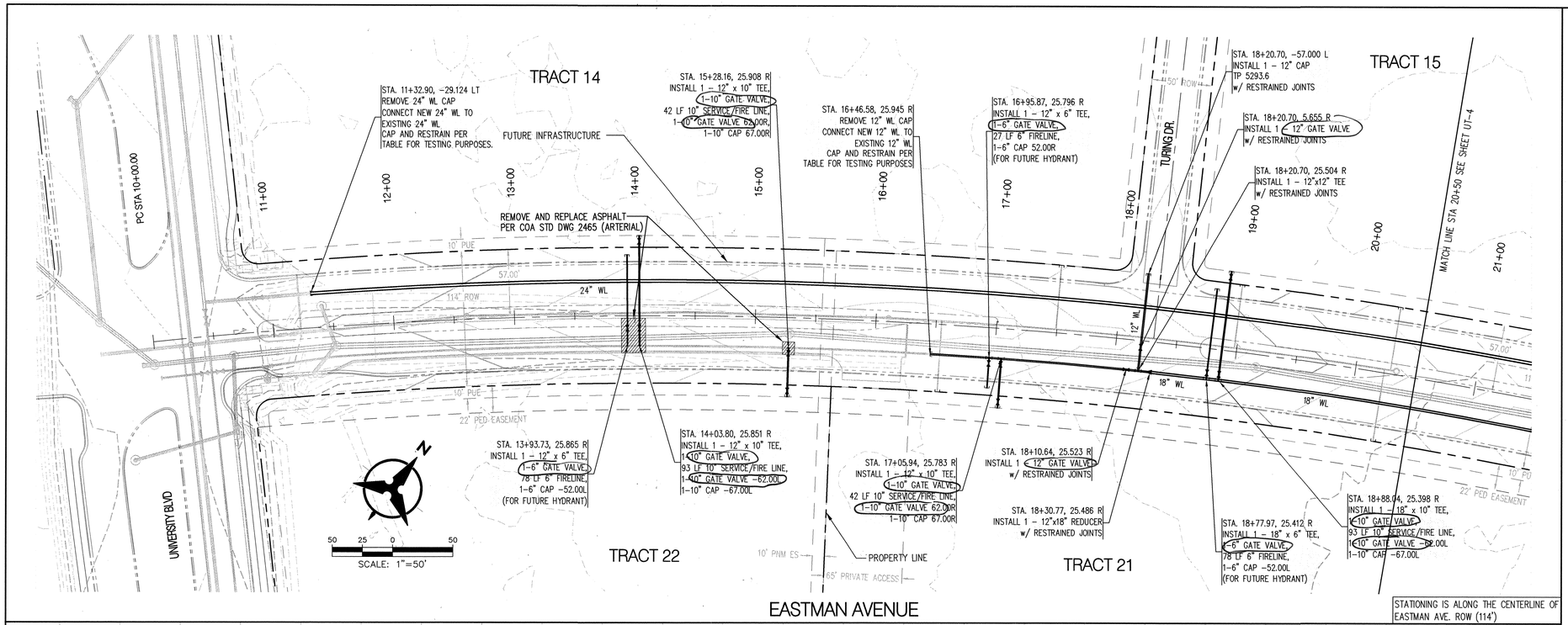
MICHAEL BALASKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER
4-11-08

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

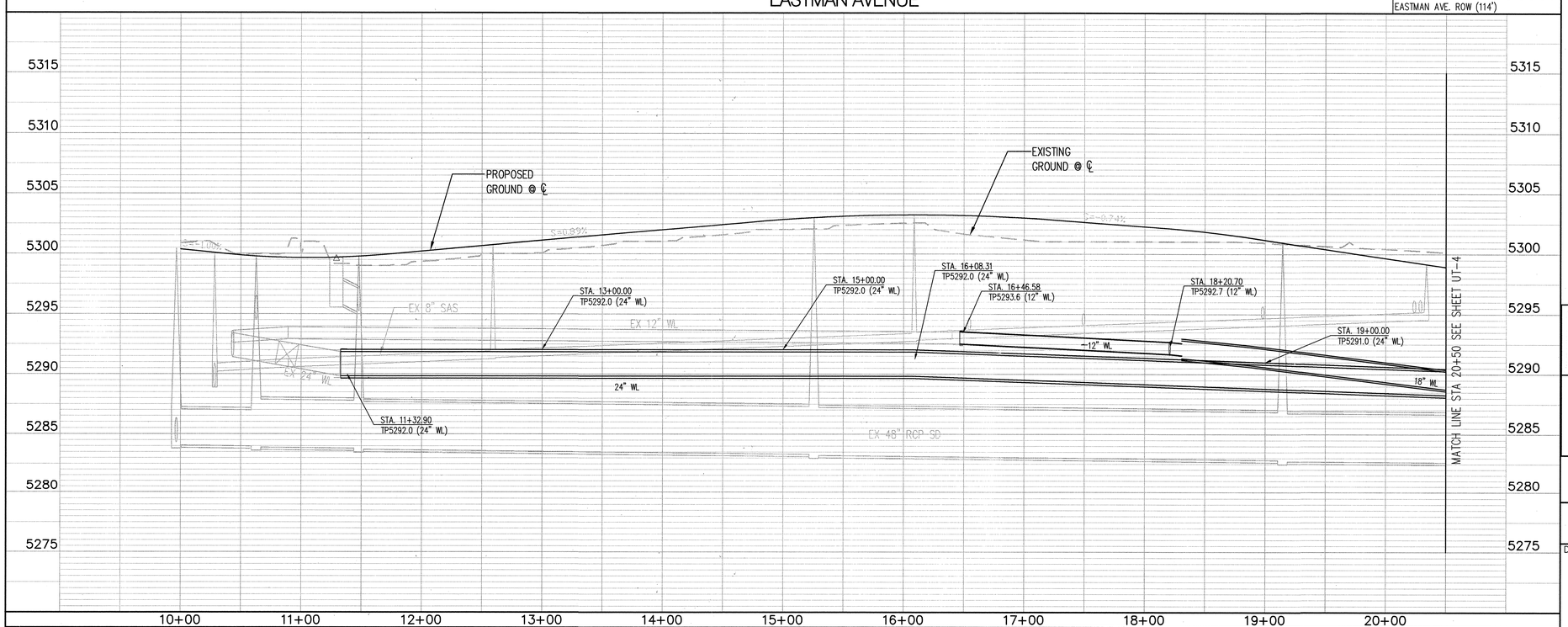
DESIGNED BY: BHW DATE 3.08
DRAWN BY: BHW DATE 3.08
CHECKED BY: MB DATE 3.08

RECORD DRAWINGS

SCANNED BY PLANNING



STATIONING IS ALONG THE CENTERLINE OF EASTMAN AVE. ROW (114')



Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RESTRAINED JOINT TABLE (>12")

MECHANICAL JOINTS (DUCTILE IRON)	LENGTH OF RESTRAINED JOINTS (18")	(24")
22.50° H BEND	7'	8'
45° H BEND	14'	17'
18" x 6" TEE	1' (BRANCH)	–
18" x 18" TEE	54' (BRANCH)	–
24" x 24" TEE	–	74' (BRANCH)
24" x 24" CROSS	–	74' (BRANCH)
18" x 12" REDUCER	39'	–
24" x 18" REDUCER	–	40'
BUTTERFLY VALVE	72'	92'
CAP	72'	92'

RESTRAINED JOINT TABLE (<=12")

MECHANICAL JOINTS (C900-PVC)	LENGTH OF RESTRAINED JOINTS
6" CAP/GATEVALVE	42'
10" CAP/GATEVALVE	66'
12" CAP/GATEVALVE	78'
12"x6"x12" TEE	10' (6" BRANCH)
12"x10"x12" TEE	33' (10" BRANCH)
12"x12"x12" TEE	50' (12" BRANCH)

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTILE IRON PIPE - PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

NOTE:
1. RESTRAINED JOINTS ANALYZED WITH TYPE SM SOIL, 1.5 SAFETY FACTOR, 4 FT MIN BURY, TRENCH TYPE 4, AND WITH 150 PSI MAX PRESSURE.

2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.

3. ALL SERVICE/FIRE LINES AND FUTURE HYDRANT LINES WITHIN EASTMAN AVENUE SHALL BE RESTRAINED THE ENTIRE DISTANCE FROM THE FITTING TO THE CAP.

3. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. ALL PIPE JOINTS WITHIN 20 LF OF A MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.

4. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE RESTRAINED JOINT TABLE (THIS SHEET).

5. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

6. THE CONTRACTOR SHALL TREAT CONNECTIONS TO EXISTING LINES OR WATER TOWER AS A CAP WHEN CALCULATING RESTRAINING LENGTH.

Mesa del Sol

Bohannan Huston INC
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
EASTMAN AVENUE
WATERLINE PLAN & PROFILE STA 10+00.00 TO STA. 20+50.00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE	APPROVED JUN 18 2008 DESIGN REVIEW COMMITTEE			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-3	9	14

AS-BUILT INFORMATION
CONTRACTOR / DATE
WORK STAKED BY Cartesian Surveys Inc. / DATE
WORK INSPECTED / DATE
ACCEPTANCE BY / DATE
FIELD VERIFICATION BY Cartesian Surveys Inc. / DATE
DRAWINGS CORRECTED BY / DATE
MICRO-FILM INFORMATION
RECORDED BY / DATE
NO. / DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE.
STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES
NO. / BY / DATE

ENGINEER'S SEAL
MICHAEL E. SMALSKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER
4-11-08

NO.	DATE	REMARKS / REVISIONS / DESIGN	BY
		DESIGNED BY: BHW	DATE 3.08
		DRAWN BY: BHW	DATE 3.08
		CHECKED BY: MB	DATE 3.08

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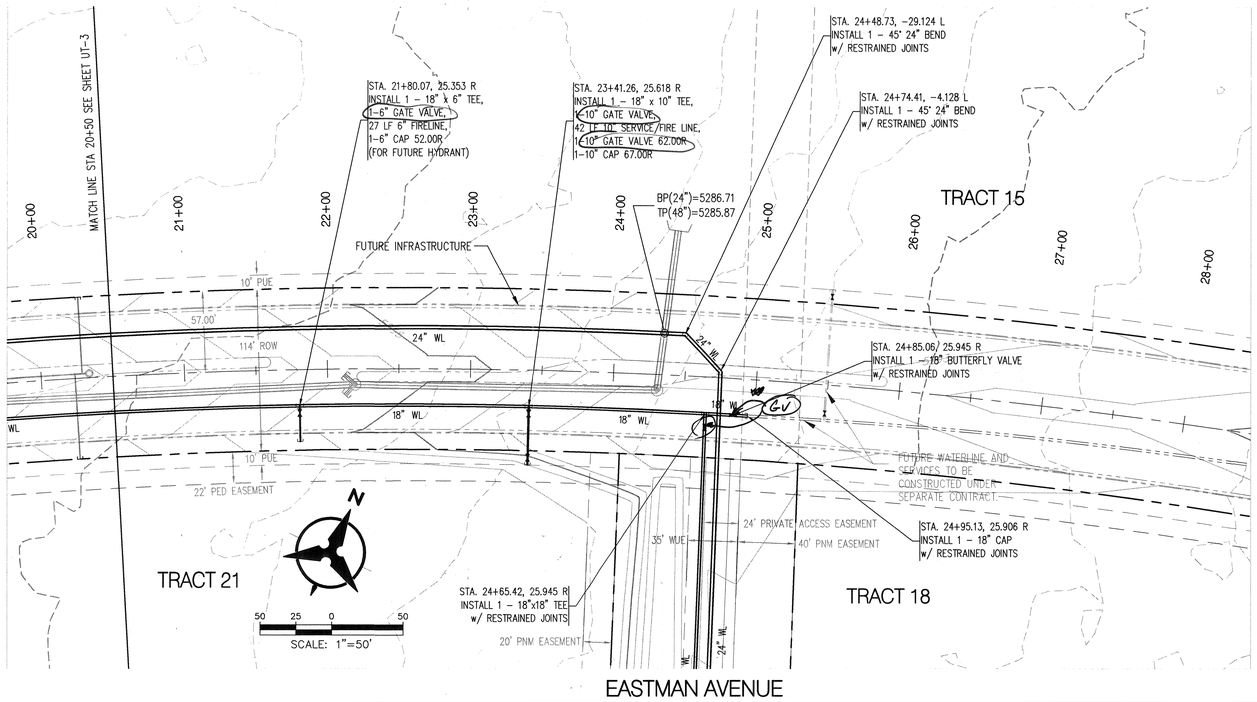
Tue, 8-Apr-2008 - 9:03:am, Plotted by: MBALASKOVITS

BHI JOB NO. 070204

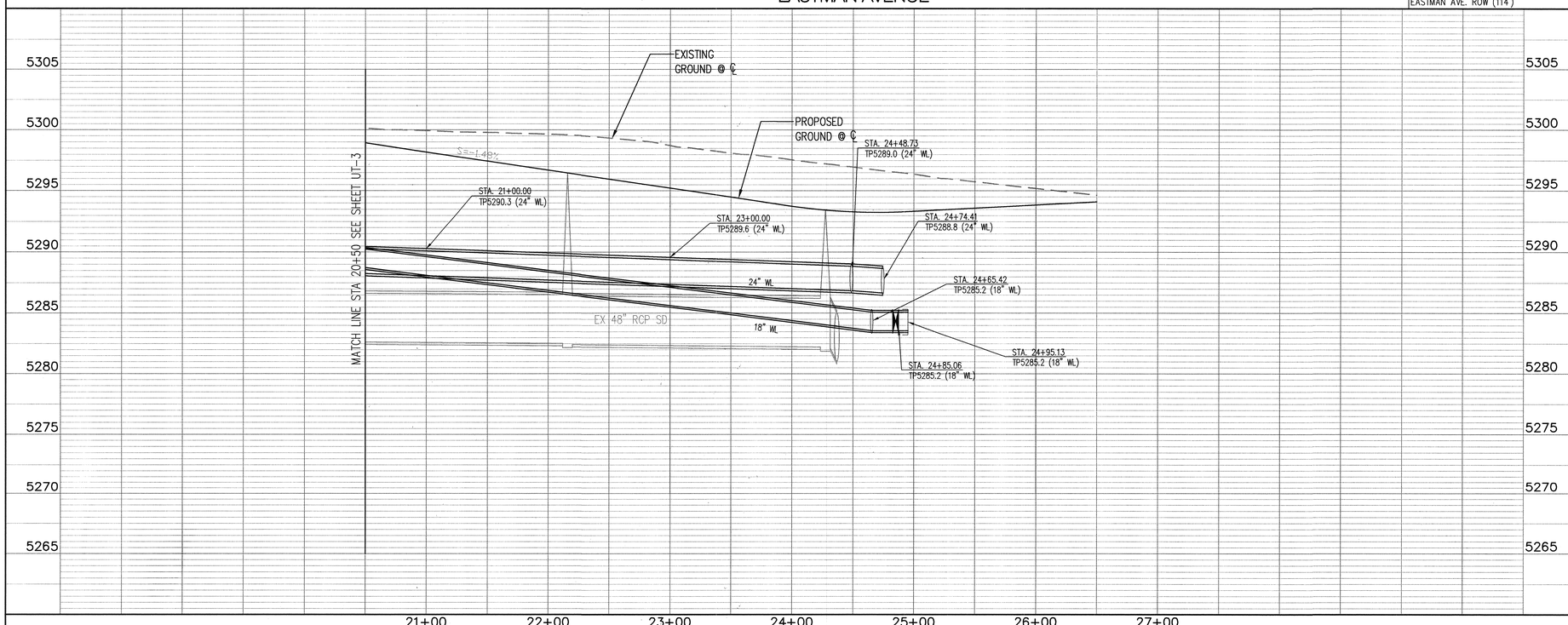
SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

SCANNED BY PLANNING

RECORD DRAWINGS



STATIONING IS ALONG THE CENTERLINE OF EASTMAN AVE. ROW (114')



NOTE:
CONTRACTOR SHALL TAKE EXTRA CARE WHEN CONSTRUCTING 24" WATERLINE OVER EXISTING 48" RCP STORM DRAIN (APPROX STA 24+34). CONTRACTOR SHALL ENSURE THE RESTRAINED JOINT DOES NOT OCCUR OVER THE TOP OF THE EXISTING 48" RCP STORM DRAIN.

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RESTRAINED JOINT TABLE (>12")

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45° H BEND	14'	17'
18" x 6" TEE	1' (BRANCH)	–
18" x 18" TEE	54' (BRANCH)	–
24" x 24" TEE	–	74' (BRANCH)
24" x 24" CROSS	–	74' (BRANCH)
18" x 12" REDUCER	39'	–
24" x 18" REDUCER	–	40'
BUTTERFLY VALVE	72'	92'
CAP	72'	92'

RESTRAINED JOINT TABLE (</=12")

MECHANICAL JOINTS (C900-PVC)	LENGTH OF RESTRAINED JOINTS
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12"x6"x12" TEE	10' (6" BRANCH)
12"x10"x12" TEE	33' (10" BRANCH)
12"x12"x12" TEE	50' (12" BRANCH)

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTILE IRON PIPE – PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

NOTE:
1. RESTRAINED JOINTS ANALYZED WITH TYPE SM SOIL, 1.5 SAFETY FACTOR, 4 FT MIN BURY, TRENCH TYPE 4, AND WITH 150 PSI MAX PRESSURE.

2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.

3. ALL SERVICE/FIRE LINES AND FUTURE HYDRANT LINES WITHIN EASTMAN AVENUE SHALL BE RESTRAINED THE ENTIRE DISTANCE FROM THE FITTING TO THE CAP.

3. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS, UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. ALL PIPE JOINTS WITHIN 20 LF OF A MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.

4. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE RESTRAINED JOINT TABLE (THIS SHEET).

5. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

6. THE CONTRACTOR SHALL TREAT CONNECTIONS TO EXISTING LINES OR WATER TOWER AS A CAP WHEN CALCULATING RESTRAINING LENGTH.

Mesa del Sol

Bohannan ▲ Huston INC.
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
EASTMAN AVENUE
WATERLINE PLAN & PROFILE STA 20+50.00 TO STA. 27+00.00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE	APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-4	10	14

SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

BHI JOB NO. 070204

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Thu, 5-Jun-2008 – 3:57:pm, Plotted by: MBALASKOVITS

AS-BUILT INFORMATION

		DATE
CONTRACTOR WORK STAKED BY	Cartesian Surveys Inc.	DATE
INSPECTOR'S INSPECTIONS BY		DATE
FIELD VERIFICATION BY	Cartesian Surveys Inc.	DATE
DRAWINGS CORRECTED BY		DATE

MICRO-FILM INFORMATION

RECORDED BY: DATE
NO. DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE. STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

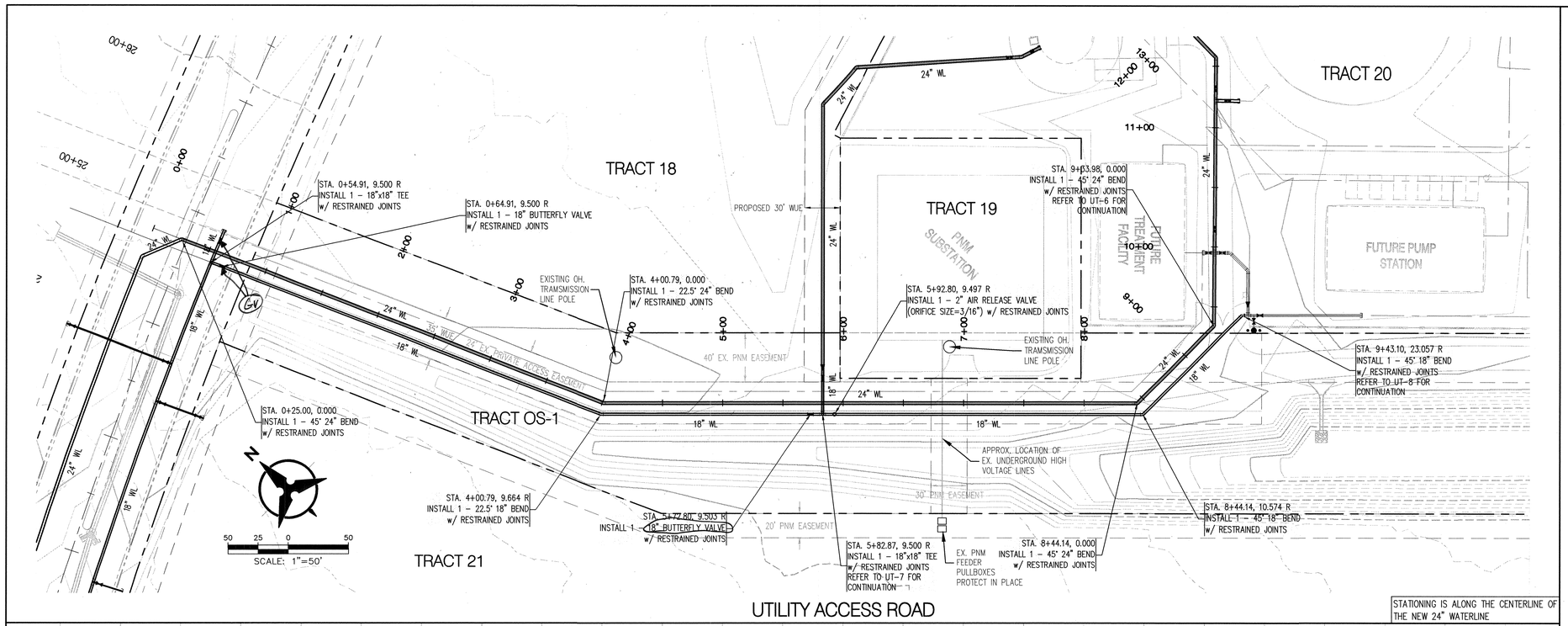
ENGINEER'S SEAL
MICHAEL B. VOLKOVITS
NEW MEXICO
18187
06-05-08
LICENSED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

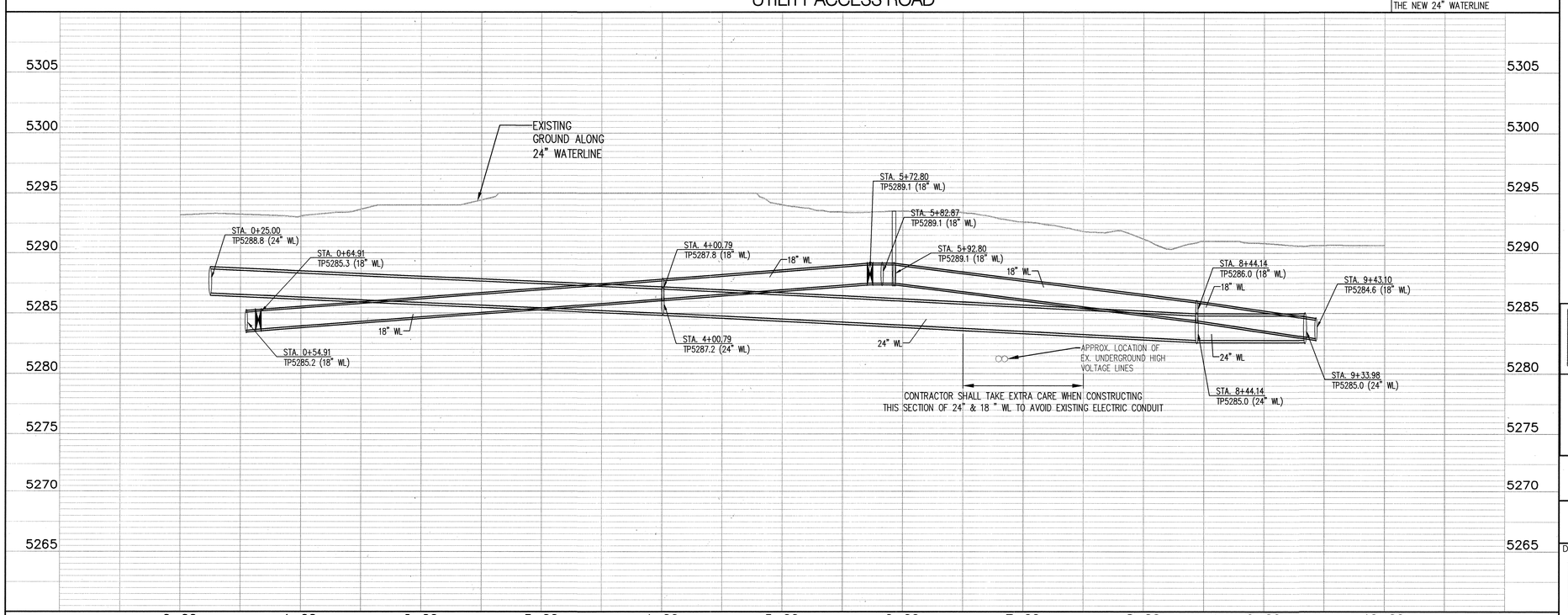
DESIGNED BY: BHW DATE 3.08
DRAWN BY: BHW DATE 3.08
CHECKED BY: MB DATE 3.08

RECORD DRAWINGS

SCANNED BY PLANNING



STATIONING IS ALONG THE CENTERLINE OF THE NEW 24" WATERLINE



NOTE:
PRIOR TO CONSTRUCTION OF 24" AND 18" WATERLINES BETWEEN STA. 6+00 AND 7+50, CONTRACTOR SHALL POTHOLE THE EXISTING UNDERGROUND HIGH VOLTAGE LINES. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

Certification
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Will Phel

RESTRAINED JOINT TABLE (>12")

MECHANICAL JOINTS (DUCTILE IRON)	LENGTH OF RESTRAINED JOINTS (18")	LENGTH OF RESTRAINED JOINTS (24")
22.50° H BEND	7'	8'
45° H BEND	14'	17'
18" x 6" TEE	1' (BRANCH)	–
18" x 18" TEE	54' (BRANCH)	–
24" x 24" TEE	–	74' (BRANCH)
24" x 24" CROSS	–	74' (BRANCH)
18" x 12" REDUCER	39'	–
24" x 18" REDUCER	–	40'
BUTTERFLY VALVE	72'	92'
CAP	72'	92'

RESTRAINED JOINT TABLE (<=12")

MECHANICAL JOINTS (C900-PVC)	LENGTH OF RESTRAINED JOINTS
6" CAP/GATEVALVE	42'
10" CAP/GATEVALVE	66'
12" CAP/GATEVALVE	78'
12"x6"x12" TEE	10' (6" BRANCH)
12"x10"x12" TEE	33' (10" BRANCH)
12"x12"x12" TEE	50' (12" BRANCH)

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTLE IRON PIPE - PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

NOTE:
1. RESTRAINED JOINTS ANALYZED WITH TYPE SM SOIL, 1.5 SAFETY FACTOR, 4 FT MIN BURY, TRENCH TYPE 4, AND WITH 150 PSI MAX PRESSURE.

2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.

3. ALL SERVICE/FIRE LINES AND FUTURE HYDRANT LINES WITHIN EASTMAN AVENUE SHALL BE RESTRAINED THE ENTIRE DISTANCE FROM THE FITTING TO THE CAP.

3. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. ALL PIPE JOINTS WITHIN 20 LF OF A MJ SHALL BE RESTRAINED AT THE CONTRACTORS EXPENSE.

4. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE RESTRAINED JOINT TABLE (THIS SHEET).

5. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

6. THE CONTRACTOR SHALL TREAT CONNECTIONS TO EXISTING LINES OR WATER TOWER AS A CAP WHEN CALCULATING RESTRAINING LENGTH.

Mesa del Sol

Bohannan Huston INC
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR WORK STAKED BY: Cartesian Surveys Inc. DATE
WORK INSPECTED FOR ACCEPTANCE BY DATE
FIELD VERIFICATION BY: Cartesian Surveys Inc. DATE
DRAWINGS CORRECTED BY DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO. DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE.
STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
MICHAEL BALASKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER
4-11-08

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY: BHW DATE 3.08
DRAWN BY: BHW DATE 3.08
CHECKED BY MB DATE 3.08

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
UTILITY ACCESS ROAD
WATERLINE PLAN & PROFILE STA 0.00 TO STA. 9+33.98

Design Review Committee: APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED JUN 18 2008 DESIGN REVIEW COMMITTEE
Last Design Update | Mo./Day/Yr. | Mo./Day/Yr.

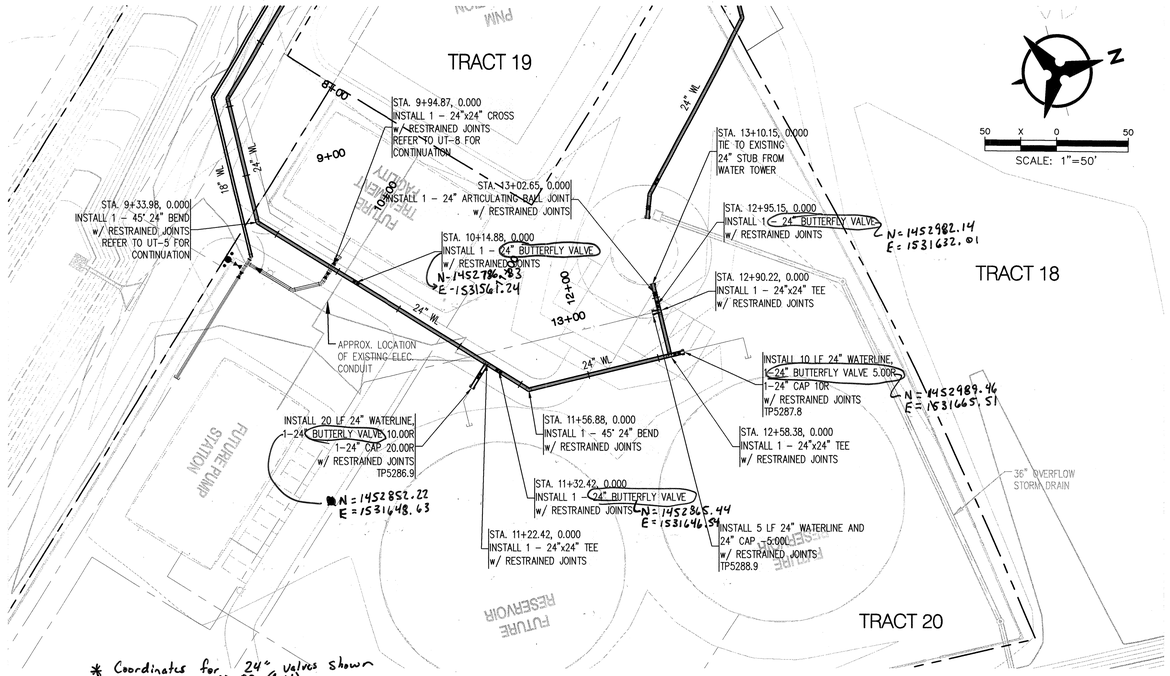
P:\070204\cdp\pnp\070204upnp04.dwg
Wed, 9-Apr-2008 - 9:37:am, Plotted by: BWARREN

BHI JOB NO. 070204
SCALE: 1"=50' (HORIZ.) 1"=5' (VERT.)

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-5	11	14

RECORD DRAWINGS

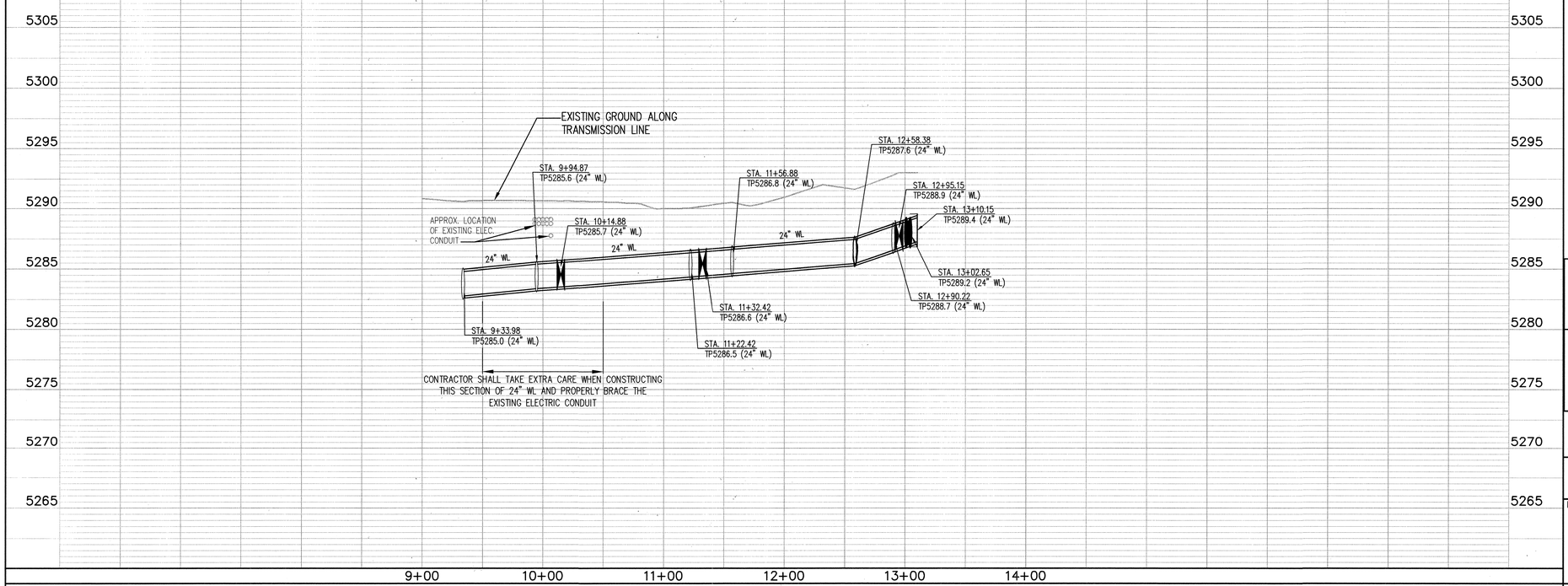
SCANNED BY PLANNING



* Coordinates for 24" Valves shown hereon are NAD 83 (Grid)

TRANSMISSION LINE

STATIONING IS ALONG THE CENTERLINE OF THE NEW 24" WATERLINE



NOTE:
CONTRACTOR SHALL FULLY RESTRAIN THE ENTIRE LENGTH DETAILED ON THIS SHEET (STA. 9+33.98 TO STA. 13+10.15)

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE 24" ARTICULATING BALL JOINT FOR ENGINEER'S APPROVAL.

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RESTRAINED JOINT TABLE (>12")

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22.50° H BEND	7'	8'
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18" x 6" TEE	1' (BRANCH)	–
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24" x 24" TEE	–	74' (BRANCH)
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24" x 18" REDUCER	–	40'
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CAP	72'	92'

RESTRAINED JOINT TABLE (<=12")

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12"x10"x12" TEE	33' (10" BRANCH)
12"x12"x12" TEE	50' (12" BRANCH)

MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTLE IRON PIPE – PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

NOTE:
1. RESTRAINED JOINTS ANALYZED WITH TYPE SM SOIL, 1.5 SAFETY FACTOR, 4 FT MIN BURY, TRENCH TYPE 4, AND WITH 150 PSI MAX PRESSURE.

2. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.

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6. THE CONTRACTOR SHALL TREAT CONNECTIONS TO EXISTING LINES OR WATER TOWER AS A CAP WHEN CALCULATING RESTRAINING LENGTH.

Mesa del Sol

Bohannan Huston INC
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR / DATE
WORK STAKED BY: Cartesian Surveys Inc. / DATE
WORK SUPERVISOR ACCEPTANCE BY / DATE
FIELD VERIFICATION BY: Cartesian Surveys Inc. / DATE
DRAWINGS CORRECTED BY / DATE
MICRO-FILM INFORMATION
RECORDED BY / DATE
NO. / DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP RIVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE.
STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES
NO. / BY / DATE

ENGINEER'S SEAL
MICHAEL BALASKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER
4-11-08

NO.	REMARKS	BY	DATE

REVISIONS
DESIGN
DESIGNED BY: BHW DATE 3.08
DRAWN BY: BHW DATE 3.08
CHECKED BY MB DATE 3.08

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
TRANSMISSION LINE
WATERLINE PLAN & PROFILE STA 9+33.98 TO STA. 13+10.15

Design Review Committee: APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED JUN 18 2008 DESIGN REVIEW COMMITTEE
Last Design Update | Mo./Day/Yr. | Mo./Day/Yr.

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-6	12	14

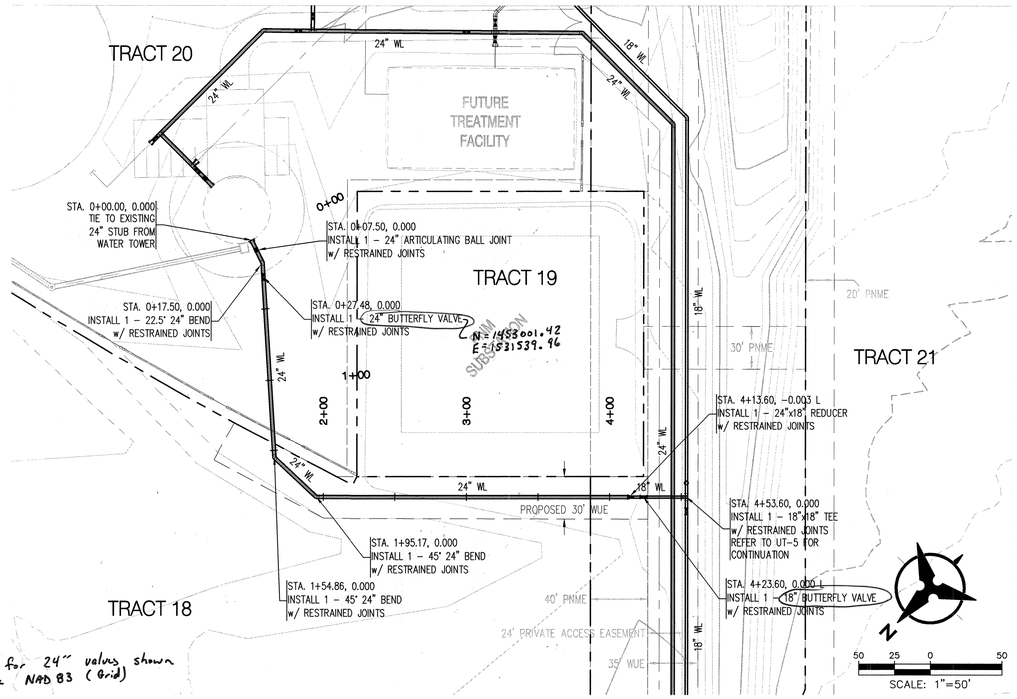
P:\070204\cdp\pnp\070204upnp05.dwg
Wed, 9-Apr-2008 – 9:42:am, Plotted by: BWARREN

BHI JOB NO. 070204

SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

RECORD DRAWINGS

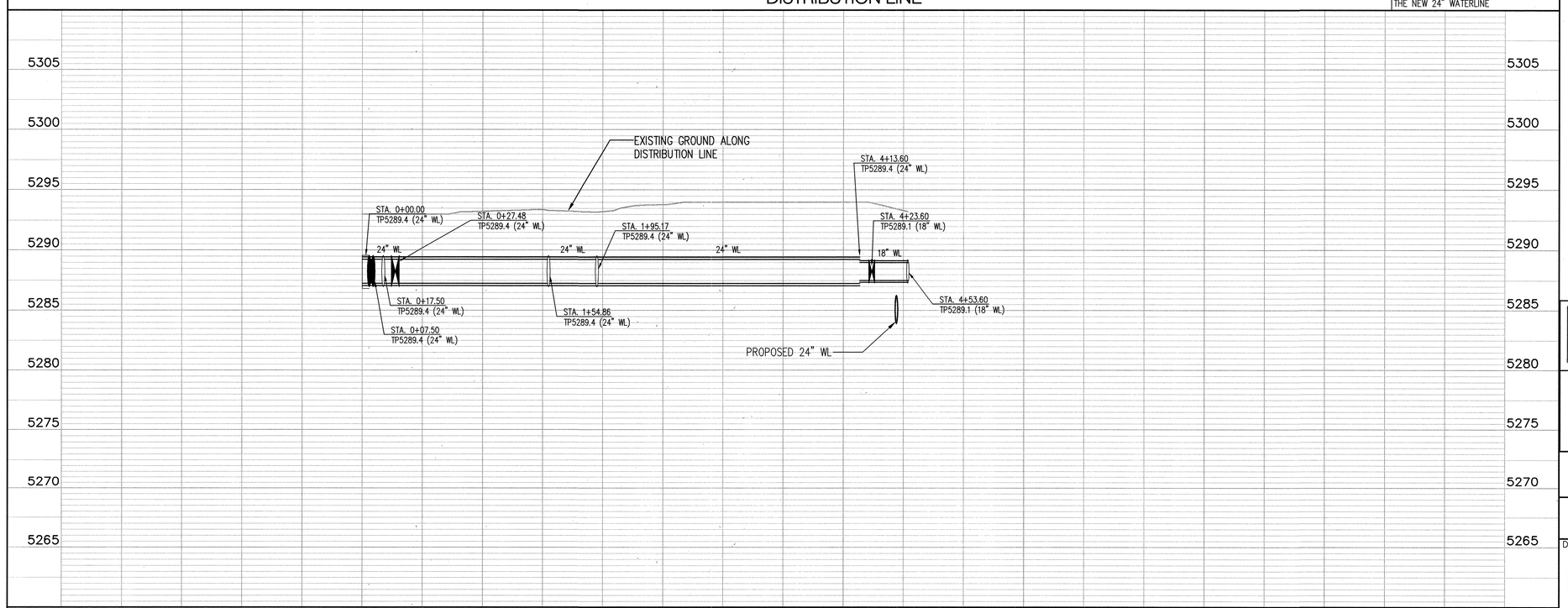
SCANNED BY PLANNING



* Coordinates for 24" valves shown hereon are NAD 83 (Grid)

DISTRIBUTION LINE

STATIONING IS ALONG THE CENTERLINE OF THE NEW 24" WATERLINE



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RESTRAINED JOINT TABLE (</=12")

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MATERIALS:

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WATER LINE: C900-PVC DR18 (12" AND SMALLER)
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Mesa del Sol

Bohannan Huston INC
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY Cartesian Surveys Inc. — DATE
WORK INSPECTED — DATE
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY Cartesian Surveys Inc. DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO. — DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE.
STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
LICENSED PROFESSIONAL ENGINEER MICHAEL BALASKOVITS NEW MEXICO 18187
4-11-08

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY: BHW DATE 3.08
DRAWN BY: BHW DATE 3.08
CHECKED BY MB DATE 3.08

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
DISTRIBUTION LINE
WATERLINE PLAN & PROFILE STA 0.00 TO STA. 4+58.36

Design Review Committee: APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED JUN 18 2008 DESIGN REVIEW COMMITTEE
Last Design Update | Mo./Day/Yr. | Mo./Day/Yr.

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-7	13	14

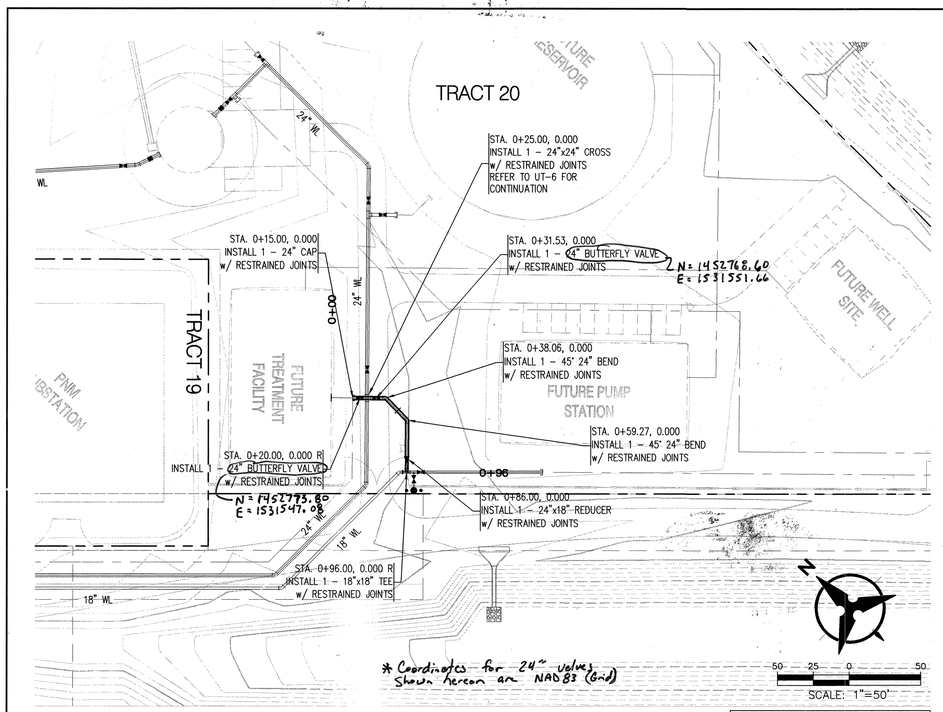
P:\070204\cdp\pnp\070204upnp06.dwg
Wed, 9-Apr-2008 – 9:46:am, Plotted by: BWARREN

BHI JOB NO. 070204

SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

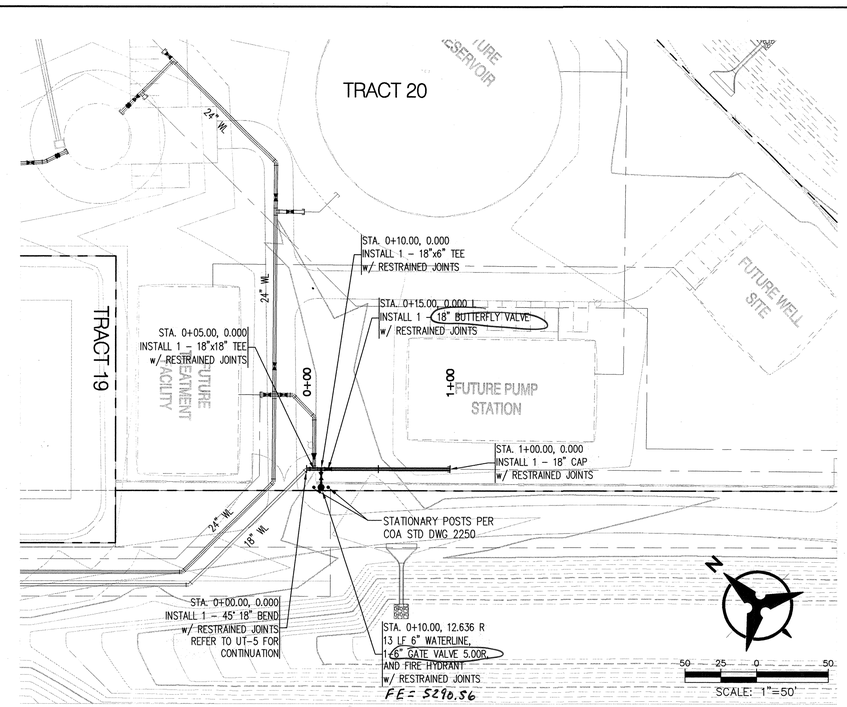
SCANNED PLANNING

RECORD DRAWINGS



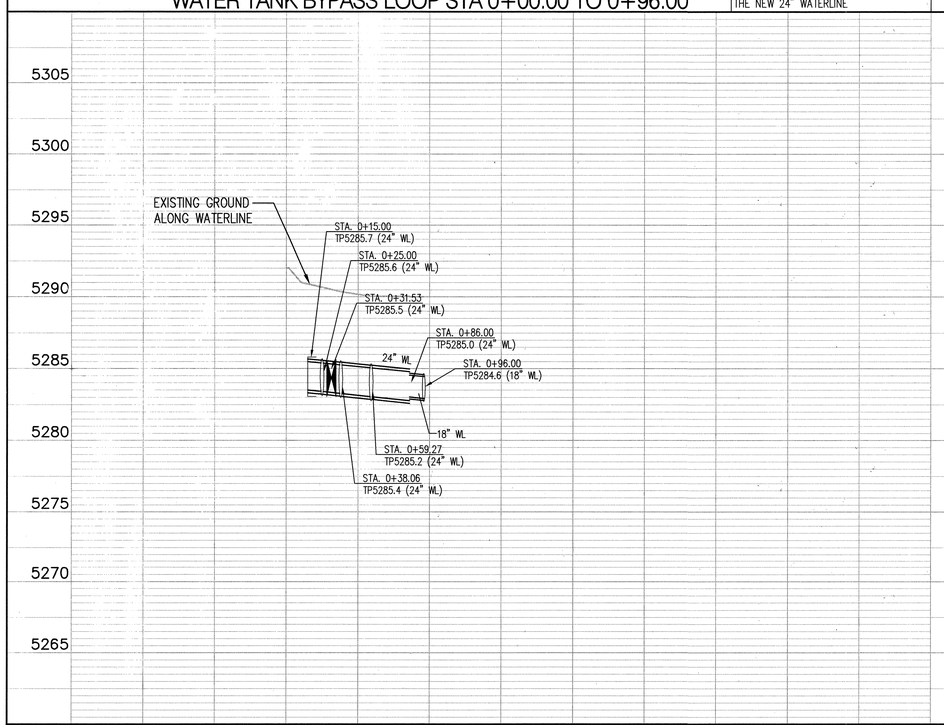
WATER TANK BYPASS LOOP STA 0+00.00 TO 0+96.00

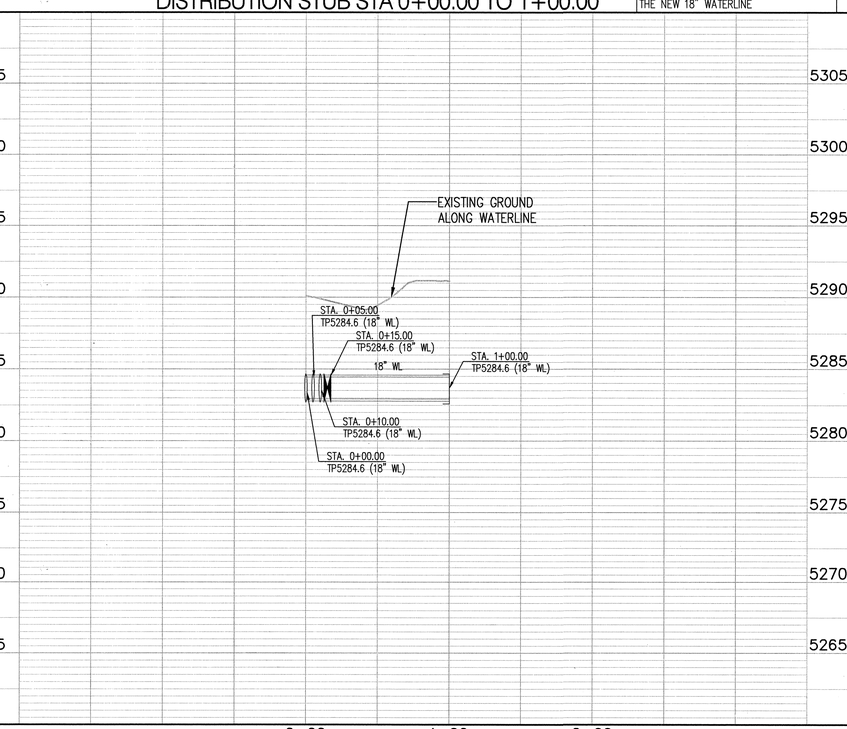
STATIONING IS ALONG THE CENTERLINE OF THE NEW 24" WATERLINE



DISTRIBUTION STUB STA 0+00.00 TO 1+00.00

STATIONING IS ALONG THE CENTERLINE OF THE NEW 18" WATERLINE





NOTE:
CONTRACTOR SHALL FULLY RESTRAIN ALL SECTIONS OF WATERLINE DETAILED ON THIS SHEET.

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MATERIALS:

SAS LINE: SDR-35 PVC
WATER LINE: C900-PVC DR18 (12" AND SMALLER)
DUCTILE IRON PIPE – PRESSURE CLASS 250 OR GREATER (LARGER THAN 12")

NOTE:
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Mesa del Sol

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Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING ▲ SPATIAL DATA ▲ ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

MESA DEL SOL INNOVATION PARK
TANK BYPASS LOOP & DISTRIBUTION STUB
WATERLINE PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED JUN 06 2008 DESIGN REVIEW COMMITTEE	APPROVED JUN 13 2008 DESIGN REVIEW COMMITTEE			

City Project No.	Zone Map No.	Drawing No.	Sheet	Of
775461	R16	UT-8	14	14

AS-BUILT INFORMATION
CONTRACTOR WORK STAKED BY: Cartesian Surveys Inc. DATE
INSPECTOR ACCEPTANCE BY DATE
FIELD VERIFICATION BY: Cartesian Surveys Inc. DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO. DATE

BENCH MARKS
ACS 3-1/4" ALUMINUM CAP REVETED TO A TUBE SET IN A CONCRETE BASE IN THE GROUND STAMPED "5-Q-14, 1987", FROM THE RIO BRAVO BLVD. AND BROADWAY INTERSECTION, GO SOUTH 0.9 MILES AND PROCEED 123' WEST OF THE CENTERLINE.
STATE PLANE COORDINATES (CENTRAL ZONE, NAD83/NAVD88) N=1460471.432, E=1521388.180 (GROUND) ELEV.=4981.17

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
MICHAEL BALAJKOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER
4-11-08

NO.	BY	DATE	REMARKS
			REVISIONS
			DESIGN

DESIGNED BY: BHW DATE 11.07
DRAWN BY: BHW DATE 12.07
CHECKED BY: MB DATE 12.07

P:\070204\cdp\pnp\070204upnp07.dwg
Wed, 9-Apr-2008 – 8:58:am, Plotted by: BWARREN

BHI JOB NO. 070204

SCALE: 1"=50' (HORIZ.)
1"=10' (VERT.)