CITY OF ALBUQUERQUE

Planning Department
David S. Campbell, Director



Timothy M. Keller, Mayor

April 9, 2018

Jake Bordenave Bordenave Designs PO Box 91194 Albuquerque, NM 87199

RE: Homewood Suites - 5400 San Antonio Dr. NE

Grading and Drainage Plan

Engineer's Stamp Date 3/28/2018 (C1.1 & C1.2) & 4/5/2018 (C1.3 & C1.45)

Hydrology File: E18D050

Dear Mr. Bordenave:

Based on the information provided in the submittal received on 4/6/2018 the above-referenced Grading and Drainage Plan is approved for Site Plan for Building Permit and Building Permit.

PO Box 1293

Albuquerque

NM 87103

- 1. Please include copies of the approved plan, sheets C1.1 through C1.4, in the Site Plan for Building Permit prior to City Engineer's signature
- 2. Include a copy of the approved Site Plan for Building Permit in the construction plan sets for Building Permit.
- 3. Prior to WO approval, remove the note on the plan & profile sheet that says "pipe is undersized..."
- 4. The final Elevation Certificate must be submitted to Rudy Rael with the as-built floor elevation prior to Certificate of Occupancy.
- 5. An Engineer's Certification is required prior to Release of Financial Guarantees and Certificate of Occupancy.

www.cabq.gov

If you have any questions, I can be contacted at 924-3986 or jhughes@cabq.gov.

Sincerely,

James D. Hughes P.E.

Principal Engineer, Planning Dept.

Development Review Services



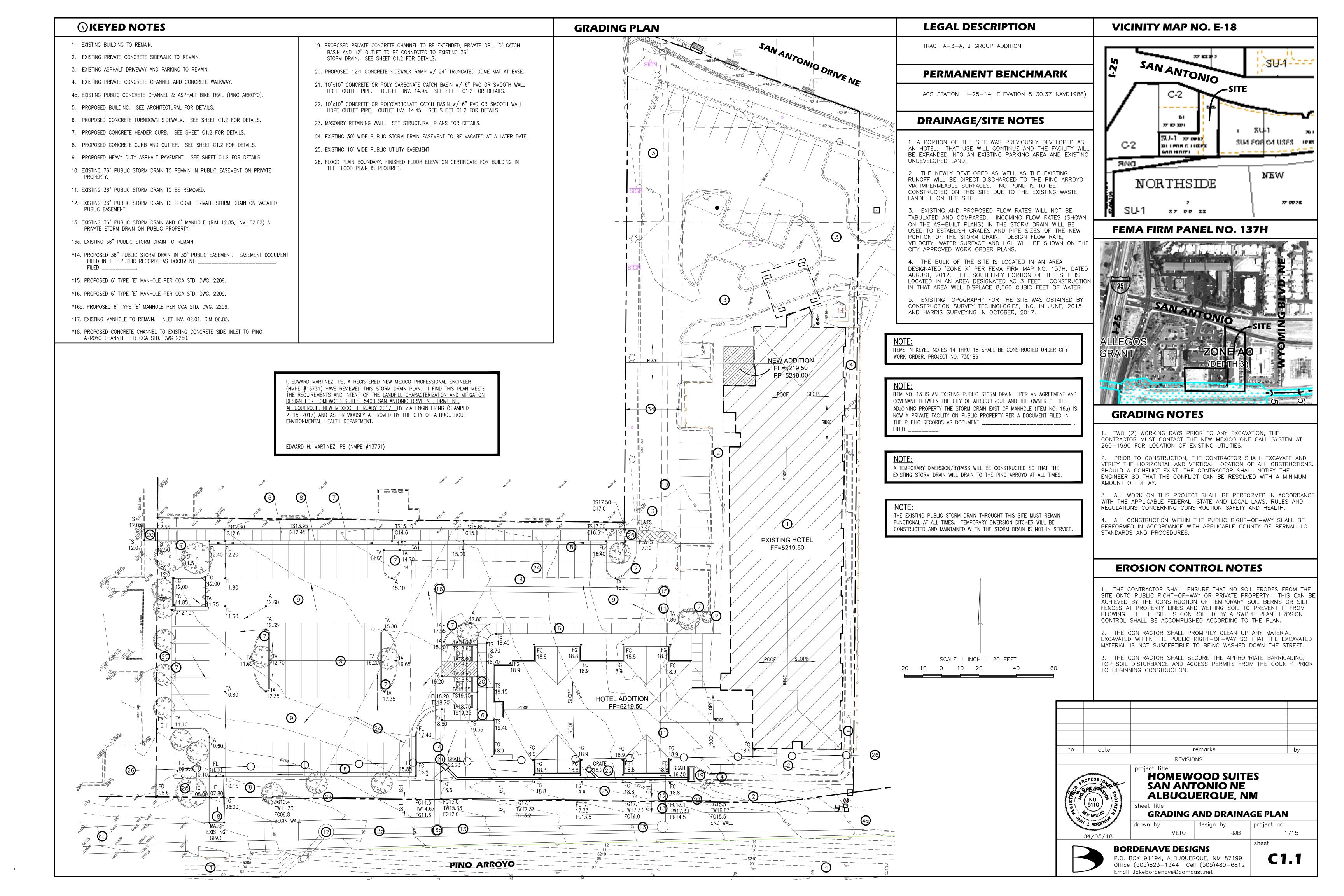
City of Albuquerque

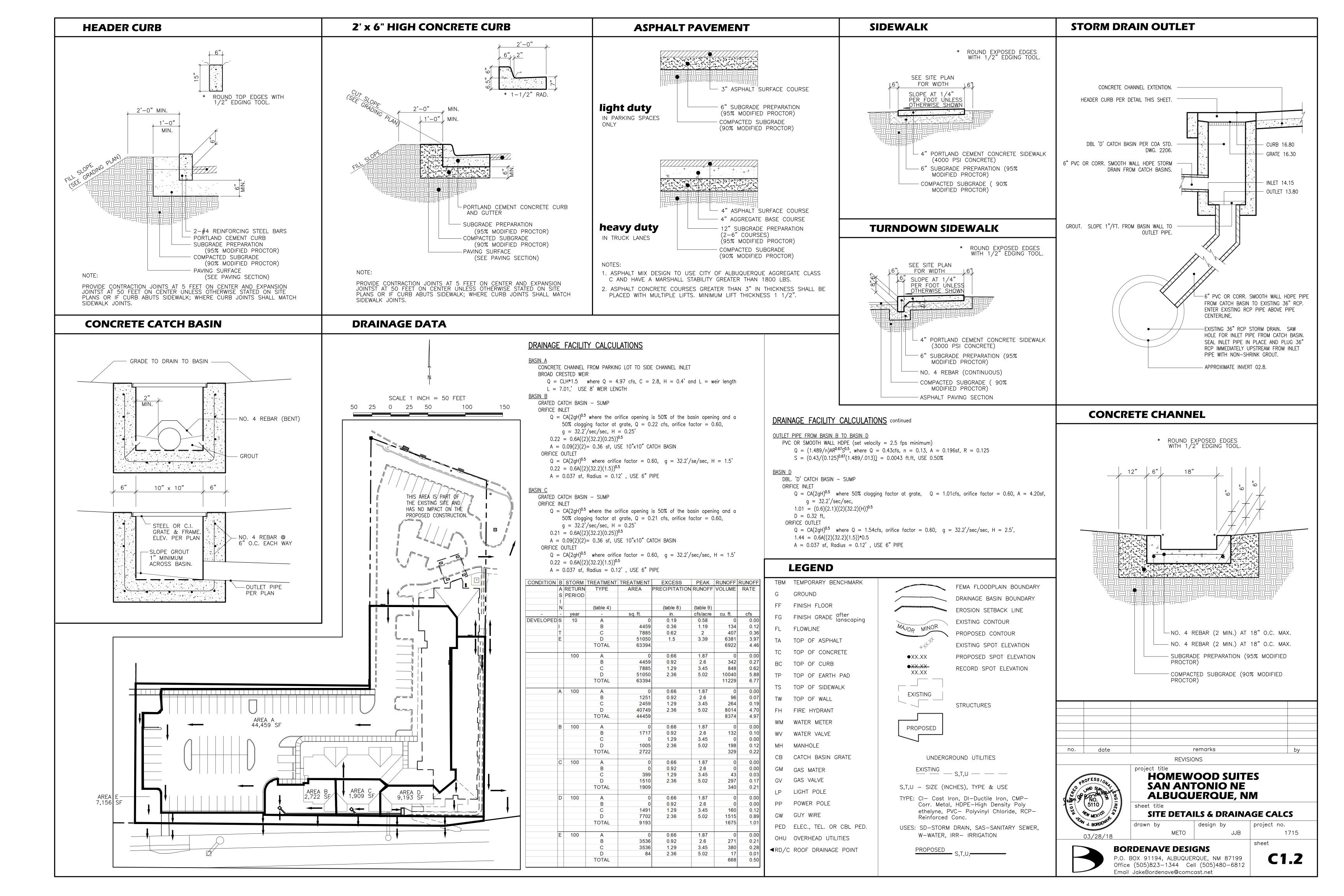
Planning Department

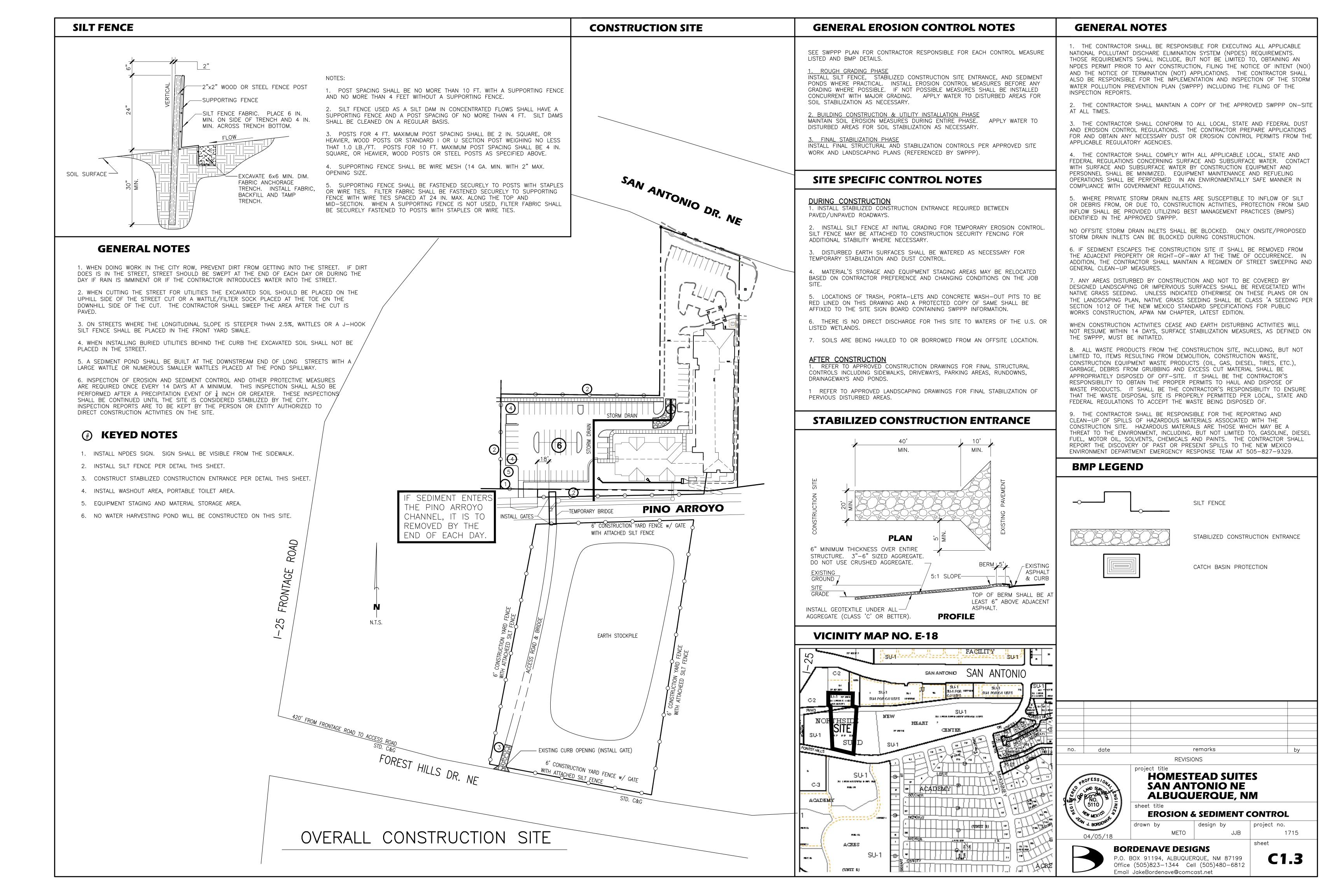
Development & Building Services Division

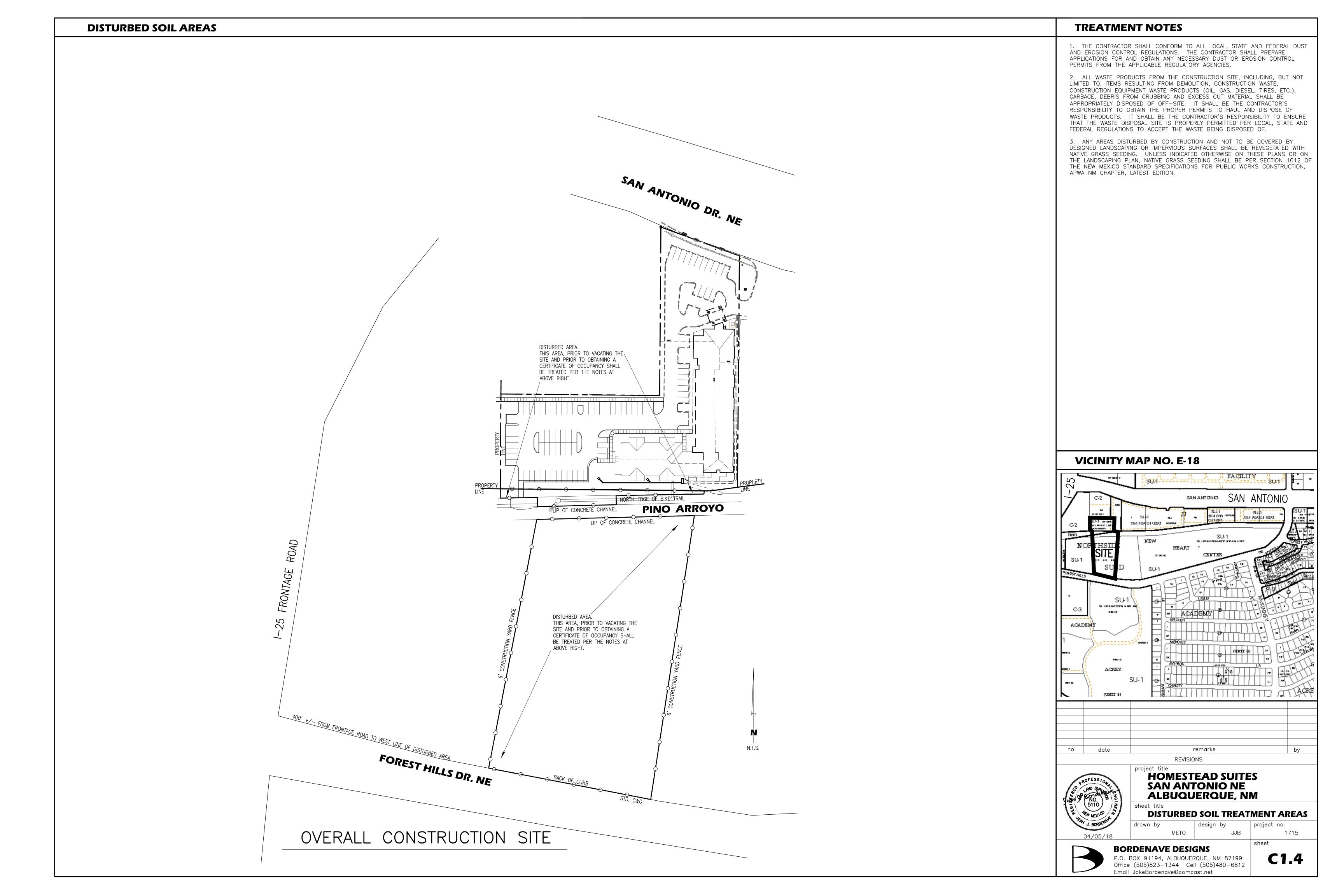
DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: HOMEWOOD SUIDRB#:	FPC#	ermit #:	Work Order#
Legal Description: TRACT A-	3-0		work Order#.
City Address: 5400 SAN		DOWE NE	
	214101410	DEIVE IN	
Applicant: BORDENOUE	DESIGN	5	Contact: AKE
Address: Po Box 911	94 ALB	NM 971	99
Phone#: 505-823-1344	Fax#:_50	5-821-910	5 E-mail: Jako hordonau
Other Contact:			COMAC = - 1
Address:			Contact:
Phone#:	Fax#:		E-mail:
Check all that Apply:			
DEPARTMENT:		TYPE OF AP	PROVAL/ACCEPTANCE SOUGHT:
X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION			NG PERMIT APPROVAL
MS4/ EROSION & SEDIMENT CON	TROL		ICATE OF OCCUPANCY
TYPE OF SUBMITTAL:		PRELIM	INARY PLAT APPROVAL
ENGINEER/ARCHITECT CERTIFICA	TION	SITE PL	AN FOR SUB'D APPROVAL
(CONCURRENT) (CONCURRENT)		X SITE PL.	AN FOR BLDG. PERMIT APPROVAL
CONCEPTUAL G & D PLAN GRADING PLAN		FINAL F	PLAT APPROVAL
DRAINAGE MASTER PLAN		~~	
DRAINAGE REPORT			LEASE OF FINANCIAL GUARANTEE
CLOMR/LOMR			ATION PERMIT APPROVAL
		SO-19 A	IG PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)		PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)			G/PAD CERTIFICATION
EROSION & SEDIMENT CONTROL	PLAN (ESC)		RDER APPROVAL
		* **	LOMR
OTHER (SPECIFY)	-		
		I RE-DES	SIGN MEETING?
S THIS A RESUBMITTAL?: X Yes	No	OTHER	(SPECIFY)
DATE SUBMITTED: 04/06/(8	Ву:	Su Ph.	









EXISTING STORM DRAIN SYSTEM

The existing system drains a group of catch basins on the north and south sides of San Antonio Drive due north of the HomeStuites Hotel. The existing system was constructed in 1989 and is composed of a 36" RCP and several manholes. The outlet of the storm drain is to the Pino Arroyo near the southwest corner of the Hotel site. The storm drain pierces a high area located between the San Antonio Dr. and the Pino Arroyo. It crosses an existing waste land fill that has been closed for a number of years. The land fill is approximately 35 deep.

The existing storm drain is a public facility located on the hotel site in a public easement.

PROPOSED STORM DRAIN SYSTEM

The proposed system will also be a 36" RCP with several manholes. The new system will be in a Z configuration and have one more manhole that the existing system which is in an L configuration. The length of the two systems are essentially the same. The new system departs from the existing system on the long leg of the L and returns to the existing system on the short leg of the L.

The hydraulics of the two systems are essentially identical as they use the same type of conduit, travel the same distance and have the same drop in elevation. The only difference being the new system has one additional manhole with it's attendant losses albeit the losses are quite small due to the relatively flat grades and low velocities.

The existing waste material in the area under the storm drain is being removed full depth and backfilled with clean, compacted earth. Waste material is being hauled to an approved wasted disposal site and the backfill is being inspected and tested as the site is returned to grade.

STORM DRAIN CALCULATIONS

Due to the flat grade of the pipe the conduit velocity is small and resulting head losses in the manholes is low. Therefore the hydraulics will be analyzed by HY8 using the tailwater in each section as the headwater in the preceding section. The result will be a conservative estimate of the HGL.

ARROYO TO MANHOLE 1

Table 2 - Culvert Summary Table: Culvert 1

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
0.00	0.00	5205.30	0.000	3.200	0-NF	0.000	0.000	3.000	3.230	0.000	0.000
4.15	4.15	5205.31	0.864	3.208	4-FFf	0.674	0.632	3.000	3.230	0.587	0.000
8.30	8.30	5205.33	1.246	3.234	4-FFf	0.970	0.904	3.000	3.230	1.174	0.000
12.45	12.45	5205.38	1.561	3.276	4-FFf	1.209	1.117	3.000	3.230	1.761	0.000
16.60	16.60	5205.43	1.871	3.335	4-FFf	1.425	1.300	3.000	3.230	2.348	0.000
20.75	20.75	5205.51	2.147	3.411	4-FFf	1.628	1.463	3.000	3.230	2.936	0.000
24.90	24.90	5205.60	2.400	3.503	4-FFf	1.829	1.606	3.000	3.230	3.523	0.000
29.05	29.05	5205.71	2.643	3.613	4-FFf	2,038	1.741	3.000	3.230	4.110	0.000
33.20	33.20	5205.84	2.884	3.739	4-FFf	2.269	1.867	3.000	3.230	4.697	0.000
37.35	37.35	5205.98	3.133	3.882	4-FFf	2.582	1.983	3.000	3.230	5.284	0.000
41.50	41.50	5206.14	3.395	4.042	4-FFf	3.000	2.096	3.000	3.230	5.871	0.000

Straight Culvert

Inlet Elevation (invert): 5202.10 ft, Outlet Elevation (invert): 5202.07 ft Culvert Length: 12.00 ft, Culvert Slope: 0.0025

MANHOLE 1 TO MANHOLE 2

Table 2 - Culvert Summary Table: Culvert 2

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
0.00	0.00	5206.14	0.000	3.740	0-NF	0.000	0.000	3.000	3.970	0.000	0.000
4.15	4.15	5206.15	0.862	3.750	4-FFf	0.593	0.632	3.000	3.970	0.587	0.000
8.30	8.30	5206.18	1.244	3.779	4-FFf	0.848	0.904	3.000	3.970	1.174	0.000
12.45	12.45	5206.23	1.558	3.828	4-FFf	1.048	1.117	3.000	3.970	1.761	0.000
16.60	16.60	5206.30	1.869	3.897	4-FFf	1.224	1.300	3.000	3.970	2.348	0.000
20.75	20.75	5206.38	2.144	3.985	4-FFf	1.390	1.463	3.000	3.970	2.936	0.000
24.90	24.90	5206.49	2.397	4.093	4-FFf	1.546	1.606	3.000	3.970	3.523	0.000
29.05	29.05	5206.62	2.640	4.220	4-FFf	1.701	1.741	3.000	3.970	4.110	0.000
33.20	33.20	5206.77	2.881	4.367	4-FFf	1.855	1.867	3.000	3.970	4.697	0.000
37.35	37.35	5206.93	3.130	4.534	4-FFf	2.016	1.983	3.000	3.970	5.284	0.000
41.50	41.50	5207.12	3.393	4.720	4-FFf	2.181	2.096	3.000	3.970	5.871	0.000

Straight Culvert

Inlet Elevation (invert): 5202.40 ft, Outlet Elevation (invert): 5202.17 ft Culvert Length: 54.00 ft, Culvert Slope: 0.0043

MANHOLE 2 TO MANHOLE 3

Table 2 - Culvert Summary Table: Culvert 2

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
0.00	0.00	5207.12	0.000	4.390	0-NF	0.000	0.000	3.000	4.570	0.000	0.000
4.00	4.00	5207.13	0.848	4.401	4-FFf	0.763	0.620	3.000	4.570	0.566	0.000
8.00	8.00	5207.16	1.224	4.435	4-FFf	1.103	0.887	3.000	4.570	1.132	0.000
12.00	12.00	5207.22	1.526	4.491	4-FFf	1.380	1.095	3.000	4.570	1.698	0.000
16.00	16.00	5207.30	1.831	4,569	4-FFf	1.636	1.275	3.000	4.570	2.264	0.000
20.00	20.00	5207.40	2.100	4.670	4-FFf	1.889	1.436	3.000	4.570	2.829	0.000
24.00	24.00	5207.52	2.348	4.793	4-FFf	2.159	1.577	3.000	4.570	3.395	0.000
28.00	28.00	5207.67	2.583	4.939	4-FFf	2.502	1.708	3.000	4.570	3.961	0.000
32.00	32.00	5207.84	2.815	5.107	4-FFf	3.000	1.832	3.000	4.570	4.527	0.000
36.00	36.00	5208.03	3.052	5.298	4-FFf	3.000	1.947	3.000	4.570	5.093	0.000
40.00	40.00	5208.24	3.300	5.511	4-FFf	3.000	2.057	3.000	4.570	5.659	0.000

Straight Culvert

Inlet Elevation (invert): 5202.73 ft, Outlet Elevation (invert): 5202.55 ft

Culvert Length: 123.00 ft, Culvert Slope: 0.0015

MANHOLE 3 TO MANHOLE 4

Table 2 - Culvert Summary Table: Culvert 2

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
0.00	0.00	5208.24	0.000	4.910	0-NF	0.000	0.000	2.000			(,,,,
4.00	4.00	5208.25	0.847	4.921	4-FFf			3.000	5.310	0.000	0.000
8.00	8.00	5208.28	1.221		_	0.609	0.620	3.000	5.310	0.566	0.000
12.00	12.00			4.954	4-FFf	0.873	0.887	3.000	5.310	1.132	0.000
		5208.34	1.523	5.008	4-FFf	1.085	1.095	3.000	5.310	1.698	
16.00	16.00	5208.41	1.828	5.085	4-FFf	1.265	1.275	3.000			0.000
20.00	20.00	5208.51	2.097	5.183	4-FFf	1.439			5.310	2.264	0.000
24.00	24.00	5208.63	2.345	5.304			1.436	3.000	5.310	2.829	0.000
28.00	28.00	5208.78			4-FFf	1.604	1.577	3.000	5.310	3.395	0.000
32.00			2.580	5.446	4-FFf	1.768	1.708	3.000	5.310	3.961	0.000
	32.00	5208.94	2.812	5.610	4-FFf	1.933	1.832	3.000	5.310		
36.00	36.00	5209.13	3.049	5.796	4-FFf	2.108	1.947			4.527	0.000
40.00	40.00	5209.33	3.297	6.003	4-FFf			3.000	5.310	5.093	0.000
			5.231	0.000	4-771	2.305	2.057	3.000	5.310	5.659	0.000

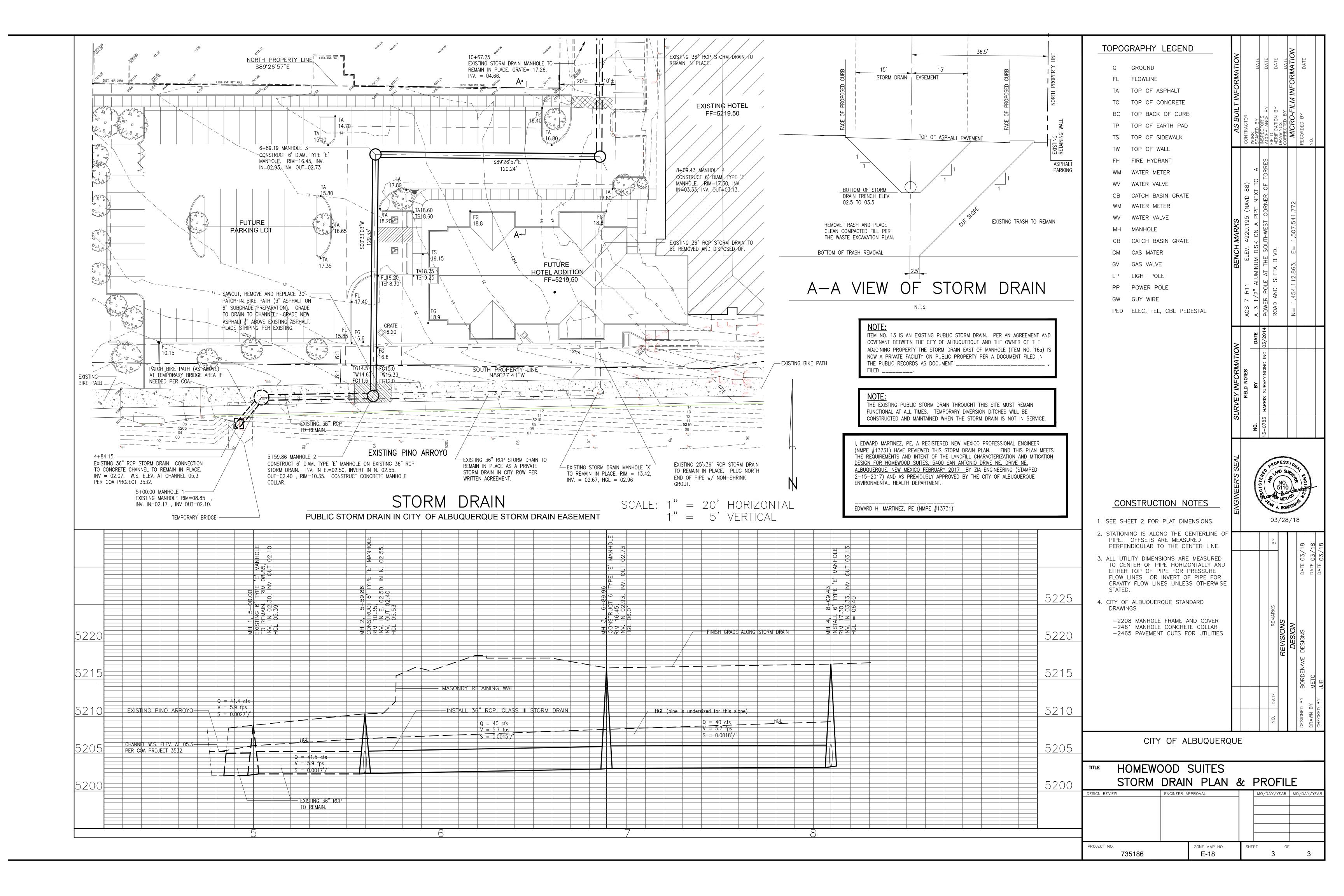
Straight Culvert

Inlet Elevation (invert): 5203.33 ft, Outlet Elevation (invert): 5202.93 ft Culvert Length: 114.00 ft, Culvert Slope: 0.0035

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		FIELD NOTES			CONTRACTOR
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ROF B					FIELD VERIFICATION BY
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ANG I NEEP					RECORDED BY
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			REMARKS	REVISIONS	DESIGN	BORDENAVE DESIGNS DATE 02/1	METO DATE 02/1	JJB DATE 02/1	
			DATE						
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™ HOMEW HYDRAU		SUITES CALCULA	TIO	NS	<u> </u>	
DESIGN REVIEW	ENGINEER A	PPROVAL		M	O/DAY/YEAR	MO/DAY/YEAR
PROJECT NO	1	ZONE MAR NO	SL	ICCT	OF	-



DEVELOPMENT PLANS FOR THE RELOCATION OF THE STORM DRAIN FROM SAN ANTONIO DR.

TO THE PINO ARROYO

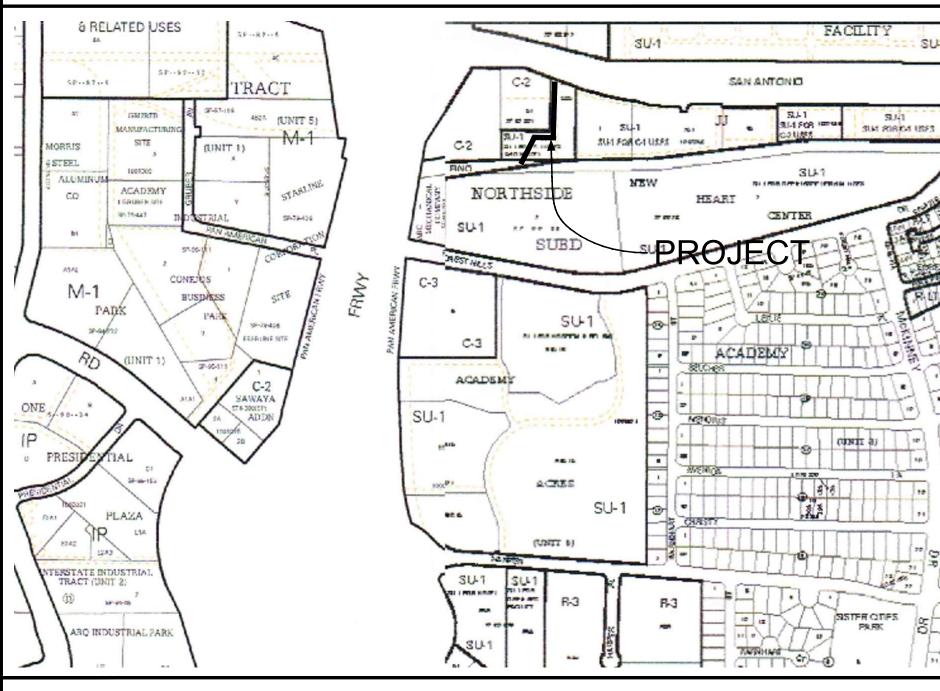
UTILITY COMPANY CONTACTS

BUSINESS	PHONE/E-MAIL	PERSON
ABCWUA 600 2nd St. NW Alb., NM 87102	Office phone: (505)289-3307 Office fax: (505)768-3629 dggutierrez@abcwua.org	David Gutierrez Prin. Engr., Utilities Dev.
AT&T 111 3rd Street NW Alb., NM 87103	Office phone: (505)842-2911 Office fax: (505)842-2890 dcrowel@att.com	David Crowell Resource Supervisor
Comcast 4611 Montbel NE Alb., NM 87107	Office phone: (505)761-6235 Office fax: (505)761-0599 rita_erickson@cable.comcast.com	Rita Erickson Planning and Design Supervisor
Xspedius Management Co. 505 Marquette NW, Suite 1605 Alb., NM 87102	Office phone: (505)998-2220 Office fax: (505)345-6559 steve.merrill@xspedius/com	Steve Merrill
BCG Assets 721 4th Street NW Alb., NM 871	Office phone: (505)243-2153 Office fax: (505)314-0900 john@bcgassets.com	John Brown Operations Manager
MCI Worldcom 6001 Midway Park NE Alb., NM 87109	Office phone: (505)346-4470 Office fax: (505)346-4481 andy.darnell@mci.com	Andy Darnell Operations Manager
McLeod USA 505 Marquette NW, Suite 1600 Alb., NM 87102	Office phone: (505)244-3161 Office fax: (505)244-0094 Cell Phone: (505)228-3329 rdmueller@mcleodusa.com	Rick Mueller Supervisor of Outside Techs.
PNM—Electric 4201 Edith NE MS—ES61 Alb., NM 87107	Office phone: (505)241-3581 Office fax: (505)241-0559 jhill@pnm.com	Jim Hill
PNM—Gas 4625 Edith NE Alb., NM 87107	Office phone: (505)241-7752 Office fax: (505)241-7740 kbouska@pnm.com	Kelly Bouska District Engineer
Time—Warner Telecom 3830 Singer NE, Suite 1000 Alb., NM 87109	Office phone: (505)938-7339 Office fax: (505)938-7380 Royal.Harrison@twtelcom.com	Royal Harrison Plant Manager
Century Link 400 Tijeras NW, Room 710 Alb., NM 87102	Office phone: (505)767-7445 Office fax: (505)245-6733 natalia.antonio@centurylink.com	Natalia Antonio Engineering

GENERAL NOTES

- All work detailed on these plans to be performed under this contract shall, except as otherwise stated or provided for herein, be constructed in accordance with the details and specifications of "City of Albuquerque Standard Specifications for Public Works Construction. 1986 Edition" as amended
- 2. Five (5) working days prior to beginning utility construction, the Contractor shall submit to Construction Coordination Division a detailed construction schedule. Two (2) working days prior to the start of consturction, the Contractor shall obtain a barricading permit from County and Contractor shall notify the Construction Coordination Engineer (924—3400) prior to occupying any intersection. Refer to Section 19 of the General Conditions of the Standard Specifications.
- 3. An Excavation Permit and Grading and Paving Permit will be required before beginning any work within City of Albuquerque right-of-way.
- -. Two working days prior to any excavation, the Contractor shall contact the New Mexico One Call
- 5. All public way striping and signing altered or destroyed shall be replaced. Striping shall be replaced with plastic reflectorized pavement markings by the Contractor. Striping shall be placed in the pre-construction location or as indicated by this plan set.
- 6. Prior to construction, the Contractor shall excavate and verify the horizontal and vertical location o all obstructions including existing utilities. Should a conflict exist, the Contractor shall notify the Engineer or Surveyor so that the conflict can be resolved with a minimum amount of delay.
- 7. The Contractor shall coordinate with the Water Utility Authority seven (7) days in advance of performing work that will affect the public water or sanitary sewer infrastructure. Work requiring shutoff of Well Collectors, Transmission Lines, or facilities designated and Master Plan facilities must be coordinated with the water Authority 14 days in advance of performing such work. Only Water Authority crews are authorized to operate public valves. Shut—off requests must be made online at (http://www.abcwua.org/water_shut_off_and_turn_on_procedures.aspx)
- 3. Back fill compaction requirements shall be according to residential street use.
- 9. The Contractor shall assume responsibility for any damage to existing pavement, pavement markings, curb and gutter, drivepads, wheel chair ramps and sidewalk during construction, apart from those sections indicated for removal on the plans; and shall repair or replace damaged items per City of Albuquerque Standards at the Contractor's own expense.
- 10. Contractor shall record data on all utility lines and accessories as required by the City of Albuquerque Standards for the preparation of "As Constructed" drawings. Contractor shall not cover utility lines and accessories until all data has been recorded.
- 11. The Contractor shall notify the Engineer not less than seven (7) days prior to starting work in order that the Engineer may take necessary measures to insure the preservation of survey monuments. Contractor shall not disturb permanent survey monuments without the consent of the Engineer and shall notify the Engineer and bear the expense of replacing any that may be disturbed without permission. Replacement shall be done only by the City Surveyor.
- 12. The Contractor will be responsible for disposing of all debris, including but not limited to hazardous waste at disposal sites approved by governmental agencies regulating the disposal of such
- 13. All excavation will be governed by Federal State and Local laws, rules and regulations concerning construction safety and health.
- 14. All signs and coding will be in accordance with the "Manual of Uniform Traffic Control Devices"
- 15. The Contractor agrees to take necessary safety precautions as required by Federal, State and Local Authorities to protect pedestrian and vehicular traffic in the construction area, which includes but is not limited to: maintaining adequate warning signs, barricades, lights, guard fences, walks and
- 16. All excavating, trenching and shoring activities must be carried out in accordance with OSHA 29CFR 1926.650, Subpart P.
- 17. The Contractor shall perform all work in accordance with the National Pollutant Discharge Elimination System (NPDES) and site specific Storm Water Pollution Prevention Plan (SWPPP)
- 18. The Contractor will confine his work within the construction easement limits and/or right-of-way or provide copies of agreements with adjacent landowners to the City of Albuquerque.
- 19. The Contractor shall submit field test reports to the Project Engineer for review. Sampling and testing schedule shall comply with plan specifications. The Contractor shall also be responsible for recording any changes on the plans and submit detailed as—constructed construction project plans (As-Builts) to the Design and/or Project Engineer.
- 20. Contractor shall maintain bicycle and pedestrian access along the bike path. A detour shall be provided when construction activities preclude bicycle and pedestrian traffic.

VICINITY MAP NO. E-17/18



SHEET INDEX

SHEET NO. | SHEET DESCRIPTION

1	TITLE SHEET
2	FILED PLAT
3	PROPOSED STORM DRAIN PLAN & PROFILE
4	CALCULATIONS
5	ESC PLAN
6	TEMPORARY BRIDGE DATA
7	WASTE DATA
8	MISCELLANEOUS DATA
9	PROPOSED SITE GRADING & DRAINAGE PLAN (E18/D050
10	PROPOSED SITE DETAILS (E18/D050)

THE EXISTING PUBLIC STORM DRAIN THROUGHT THIS SITE MUST REMAIN FUNCTIONAL AT ALL TIMES. TEMPORARY DIVERSION DITCHES WILL BE CONSTRUCTED AND MAINTAINED WHEN THE STORM DRAIN IS NOT IN SERVICE.



P.O. BOX 91194, ALBUQUERQUE, NM 87199 (505) 823-1344 FAX (505) 821-9105

REV. SHEETS USER DEPT. DATE USER DEPT. DATE USER DEPT. APPROVED FOR

CONSTRUCTION

CITY ENGINEER

DATE



DATE **APPROVAL** ENGINEER DRC CHAIR TRANSPORTATION ABCWUA HYDROLOGY ENVIRONMENTAL

DESIGN ENGINEER

SHEET OF CITY PROJECT NO. 735186

I, EDWARD MARTINEZ, PE, A REGISTERED NEW MEXICO PROFESSIONAL ENGINEER (NMPE #13731) HAVE REVIEWED THIS STORM DRAIN PLAN. I FIND THIS PLAN MEETS THE REQUIREMENTS AND INTENT OF THE <u>LANDFILL CHARACTERIZATION AND MITIGATION</u> DESIGN FOR HOMEWOOD SUITES, 5400 SAN ANTONIO DRIVE NE, DRIVE NE, ALBUQUERQUE, NEW MEXICO FEBRUARY 2017 BY ZIA ENGINEERING (STAMPED 2-15-2017) AND AS PREVIOUSLY APPROVED BY THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DEPARTMENT.

EDWARD H. MARTINEZ, PE (NMPE #13731)

DRB PROJECT NUMBER 1000216

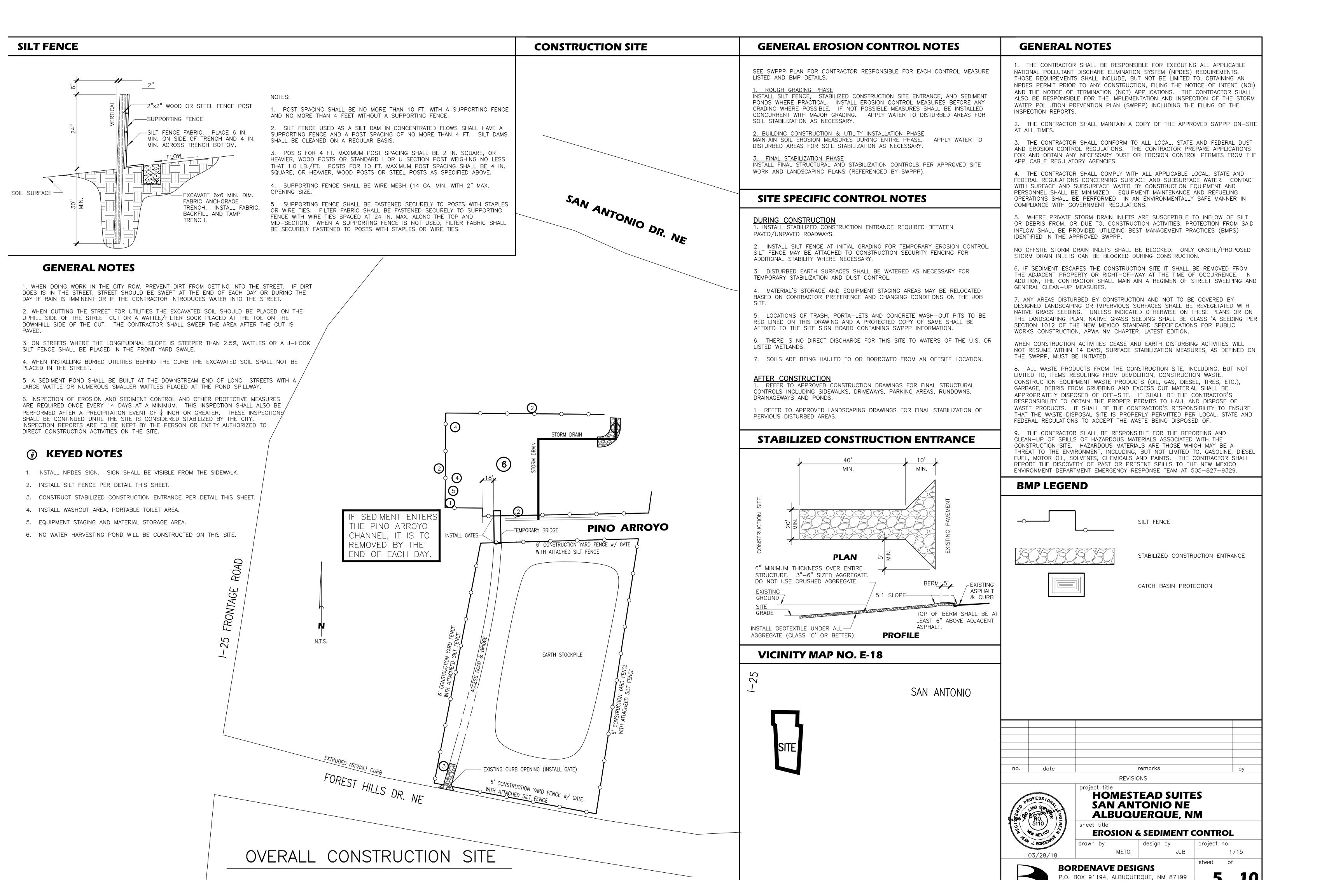
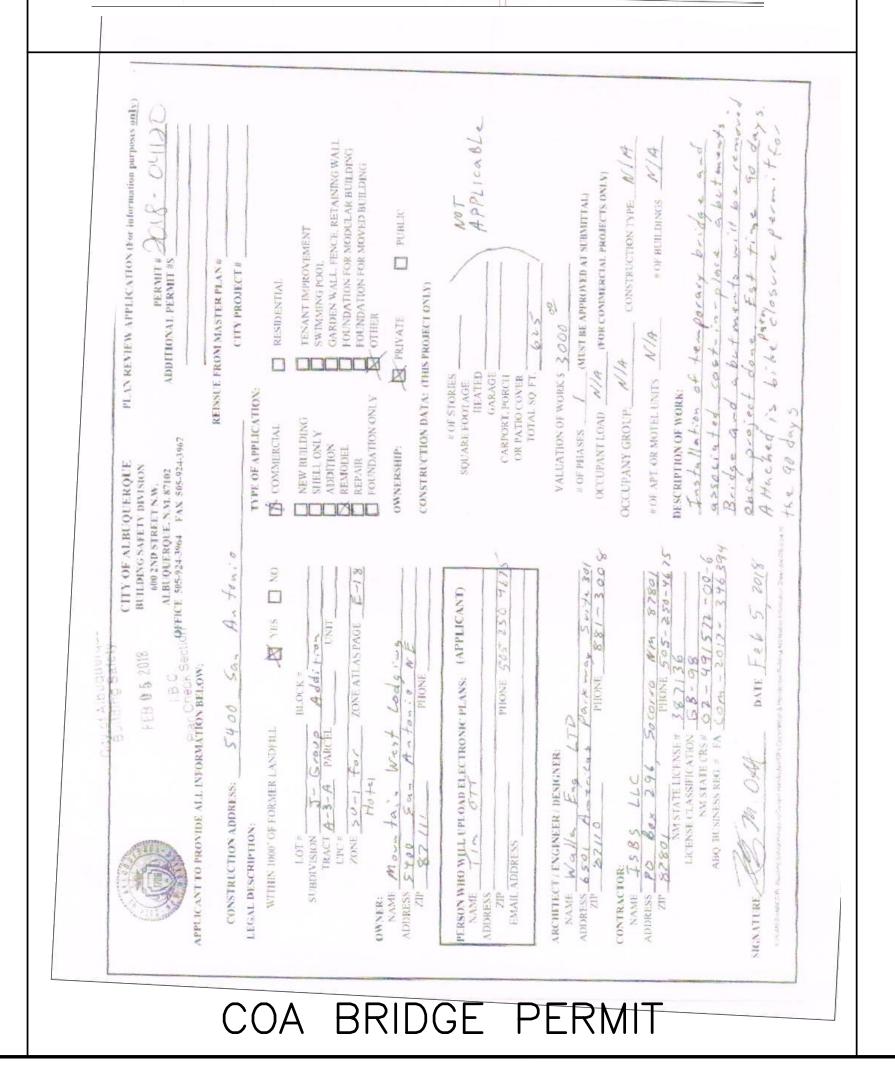




PHOTO OF BRIDGE IN PLACE





24 Derrick Road Bradford, PA 16701-3350 814-362-5546 Fax 814-362-3023 www.emengineers.com Glenn D. Cooley, PE Roy R. Pedersen, PE James A. Nearhood, PLS Jeffrey C. Bahret, PE Allan R. Vanderpoel, PE Christopher M. Ernst, PE

October 27, 2005

Re: Bridge Submittals

To Whom It May Concern:

This is certify that the attached bridge drawings (File HS25-50, dated 10/27/05) with specifications as listed below will have an HS25 (45 ton) load capacity.

- The bridge is designed in accordance with the 2002 AASHTO Standard Specification for Highway Bridges, 17th Edition with the following load criteria and exceptions.
- 2. The bridge design will be able to handle HS-25 loads, based on bending moment and shear stress requirements. Deflection limitations recommended by AASHTO have not been taken into account, resulting in some deflection under loads larger than allowed by AASHTO (length in inches/800). Impact to the bridge has been estimated at 10% maximum based on the restriction that the bridge will have a 10 mph speed limit.
- 3. 50' total length, center of tow bar to center of tow bar, with center to center bearing length of 48' maximum.
- 4. Axle loads: 10,000 lb (steering axle), 40,000 lb (driving axle), 40,000 lbs (trailer axle), with 14' spacing between the steering axle and driving axle, and a minimum of 14' spacing between the driving axle and the trailer axle.
- 5. Deck: The typical laminated decking system is nominal 2" x 4" treated southern yellow pine, laid edgeways perpendicular to the bearing stringers. 3½" x 6" white oak has been tested and field proven to be an acceptable alternate, although horizontal shear stress is larger than recommended in the National Design Specification for wood construction by the National Forest Products Association.

Very truly yours, E & M ENGINEERS AND SURVEYORS, P.C.

Allan R. Vanderpoel, P.E.

Project Engineer

PROSERSIONAL A

R. VANDERPOEL

ENGINEER

III. CESSIS9

MANUFACTURER'S STATEMENTS



Hinged Bridge Handling Procedures

TEMPORARY FOUNDATIONS/BEARING SURFACES

The foundation/bearing requirements are dependent on the stability of the stream banks and local soil conditions. It is the customer's responsibility to determine the appropriate level of analysis/design given their specific use, however given the temporary nature and limited use/traffic volume, most customers do not perform a formal analysis/design but rather rely on their construction expertise to provide an appropriate bearing surface. Examples of temporary bearing surfaces that have been successfully used in the past with the bridges include precast concrete blocks, timber mats, and rock-filled gabion baskets. In some situations it is possible to place the bridges on a crushed stone pad or even directly on native ground.

TRANSPORT & INSTALLATION

The hinged design allows the bridge to be transported as one assembly with guardrail and timber deck preinstalled, while still hauling as a legal-width load. The bridges are designed with heavy duty towbars, tapered
beam ends, and additional reinforcing and are designed for "skidding" via pushing/pulling with heavy
equipment at one or both ends, and can also be carried between two pieces of equipment. They can be set
in place utilizing a crane or, if the "far" side of the crossing can be accessed with a piece of heavy equipment
(ideally an excavator), they can often be pulled across and into position. Once in place the bridge is folded
open, and four pins are installed to maintain it in the open position. Lastly a series of steel "center panels"
drop in place by hand to cover the hinge location. Typical installation time is one hour with one laborer, plus
equipment/operators. It is possible to remove the top hinge pins and split the sections apart to set them
individually and cut handling weight approximately in half.

PRIOR TO INSTALLATION AND OPENING

- 1. Provide a level and uniform bearing surface at each end of the bridge.
- Inspect the area between the double hinge plates to ensure it is free of mud or debris. Any foreign matter located between these plates will prevent the bridge from opening fully.
 Ensure lower hinge pins are removed.

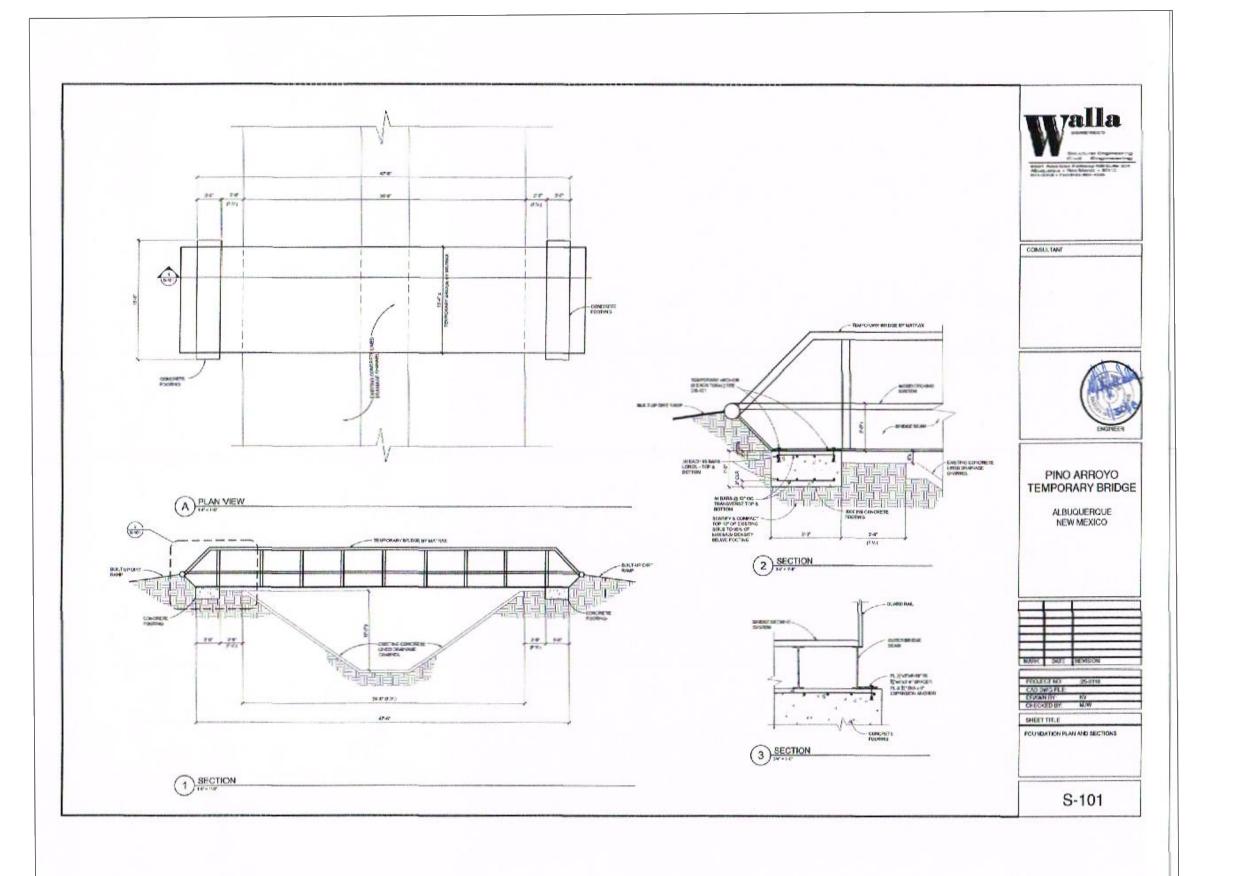
OPENING THE BRIDGE

- 1. Ensure the area to be occupied by the section being opened is completely clear of any
- obstructions, as well as personnel.

 2. Place rigging around exterior stringer/towbar on the folded half (at either end), using a basket hitch (see attached photo). Nylon straps are ideal, although chains will also work. Approximately 3' of strap/chain above the stringer is required to maintain clearance between the machine and the guide
- rail as the bridge is folded open.3. Swing the folded half open in a smooth, controlled manner. The rigging should slide/rotate as the section is unfolded.

Matrax Inc. / 855.MAT.ROAD / info@matraxinc.com

www.matraxinc.com



BRIDGE ENGINEER'S DETAILS & STATEMENT

N



February 2, 2018

Mr. Tim Ott ISBS, LLC P.O. Box 296 Socorro, NM 87801

Re: Pino Arroyo Temporary Bridge Albuquerque, NM

Mr. Ott,

I have completed a structural review of the 50' Portable Bridge design and drawings provided by Matrax, Inc. that you will be using to span the Pino Arroyo to provide truck access across an existing concrete lined drainage channel. The channel is approximately 36 feet wide and the bridge will be supported by concrete footings designed and detailed by this office, constructed on either side of the channel. The structural calculations indicate that the bridge is constructed with three W21x62 steel beams per side with wood planking used for a driving surface. The bridge is designed to support an AASHTO HS-25 truck loading as defined by the 2002 AASHTO Standard Specification for Highway Bridges, 17th Edition. This loading consists of 3 axles that are defined as 10,000 lb (steering), 40,000 lb (driving) and 40,000 (trailer). These axles will be spaced at 14 ft between the steering and driving axles and a minimum of 14 ft between the driving and trailer axles. My review of this bridge drawing indicates that the bridge is adequate to support this load and is an appropriate structure for this use and loading. Please be aware that the bridge is designed for a maximum speed of 10 MPH and this limit should not be exceeded in order to limit deflection of the structure.

If you have any questions regarding this information please do not hesitate to contact me,



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Contractor Name: ISBS LLC	
Contact Person: / / OTT	
Contact Telephone: (50\$ - 250 - 4675 Fraffic Control Firm: HIGHWAY SUPPLY	Fax: _() -
ertified Traffic Control Supervisor:	
Contact Telephone: (505) 250 - 46 7 5 Work Zone Location Information:	
Route: Egst Frontage Rd	Forest Hills to Pino Arrayo
Or Intersection: Forest Hills Prive	To:
Direction (NB, SB, EB, WB, or both):	
	Lane Road Divided Undivided MPH to MPH
Proposed Speed Limit reduction within work zone (If Ap	plicable): NA MPH
Working Duration: Start Date: Feb /3 2018 Daily Start Time 24 4-5	End Date: May 5 2018
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urpose of Permit: Roadway Construction/Rehab. Signal and Lighting Work	Utility work
Drainage/Excavation work	Soil Testing
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CP Plan Enclosed (TC Permit will not be processed with	out a TCP plan)
no, describe why:	
Approval is conditioned on the following terms that are deemed according to the Control for operations under this permit shall conform with the Manual on Uniform.	
Approved (see conditions below) Contractor/TCP firm SHALL contact the District Office and contract Number: Proved By NMDOT District Office - Traffic Section	mended Not Approved
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NEW MEXICO DEPARTMENT OF TRANSPORTATION (NMDOT)

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Day.	
Stor	mwater Control Permit for Erosion and Sediment Control
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nust m	erty Owner: (Note: If applying for a Building Permit, the "Company" or "Owner" name on this for atch the "Owner" name on the Building Permit.)
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Respo	Name: Vinos/6 Percon/
	E-mail: Vinodh Q vetningt, gor Con
Site (Contact: (if different than Property Owner info above)
Name	Tin Ott
Phone	: 505 250 4675
e-mail	: true mind lle @ gmail. com
For (City personnel use only:
City P	ersonnel Signature: Curte C chine Date 3-2-18
Rev Ju	ne 2017) EIREO 50

Floodplain Development Permit Form Planning Dept., City of Albuquerque

Section 1: General Provisions (Applicant to read and sign)

- No work of any kind may start until a permit is issued.
- 2. Applicant is hereby informed that other permits may be required to fulfill local, state, and federal regulatory requirements.
- 3. Applicant hereby gives consent to the Floodplain Administrator and his/her
- representative to make reasonable inspections required to verify compliance.
- 4. Applicant must provide a Critical Habitat for Threatened & Endangered Species report if working on or near an endangered species area.
- 5. The applicant certifies that all statements herein and in attachments to this

application are, to the best of my knowledge, true and accurate. Applicant Printed Name VINODH Parunge Phone #: 505-879-7168 (Cell).

Owner Printed Name _____ Phone #: ____

Section 2: Proposed Development in Special Flood Hazard Area (to be completed by Applicant)

Brief Project Description Adding 26 Quest nome, Fitnes Center Laurdy room.

Applicant is (check one): Owner _____ Builder _____ Engineer/Architect _____

Project address/Legal Disc/Location: 5400 Scan Antonio Do NB ABOR, NOM 87109 TRACT 3A3 I Group Addition

Description of Work in Special Flood Hazard Area (SFHA):

A. Development Activities

Clearing ____ Fill ___ Drilling ____ Excavation ____

Watercourse Alteration ____(Including Dredging and Channel Modifications)

Drainage Improvements _____ Road, Street or Bridge Construction ____

Rev. August 2017

FLOODPLAIN DEV. PERMIT

ACCESS LICENSE

This agreement is between Presbyterian Healthcare Services. (licensor) and ISBS LLC

The licensee wishes to obtain a license to use vacant real estate located at 7202 Frontage Road NE owned by licensor for the purpose of storage of material, placement of material storage containers, and placement of temporary access bridge, and transport of material off the property. The period allowed access for the storage, placement and transport of the material is for eight (8) months beginning on

January 22nd of 2018. The period of the access for placement of a temporary bridge is for Five (5) months starting on January 22nd of 2018. The permitted activities by the licensee will be limited to activities involved in the excavation of material from property owned by the licensee, stockpiling the material on the licensor's vacant land, placement of the stock piled material in storage containers for re-location and transport off the property and placement of the temporary bridge.

The licensee will access the licensor's property as indicated on the attached photo in order to place material (Exhibit 1). The material that will be placed in storage and moved off the property will move through the licensor's property as indicated on the photo.

The licensee's activities will be limited to 6 AM to 6 PM for the period of time for access. The licensee indemnifies and holds harmless the licensor for any and all acts, conditions, harm, or impacts caused by the licensee or its agents, employees, or contractors to third parties or to the licensor related to this license agreement. In addition, the licensee's shall name the licensor as an additional insured on its liability policy for the project that is being performed pursuant to this license, Certificate of Additional Insured to be read as Presbyterian Healthcare Services, PO Box 26666, Albuquerque, NM 87125-666. The licensee is allowed to utilize the license described herein through contractors and agents in performance of a project for the benefit of the licensee. This

license will extend to both the licensee, and its contractors, agents and employees. This license will terminate as follows:

- For the temporary access bridge on June 25, 2018.
- For the storage and placement, access, and transport on November, 2018.

In the event the licensee is making significant progress on the project and needs additional time, it may request that this license be extended.

The licensee agrees that it will return the vacant land to the licensor in the same condition as when the property existed when the license began. The parties may document the condition of the property prior to license and the licensee shall be obligated to restore the property to that same or better condition.

It is so agreed.

Presbyterian Healthcare Services Inc.

ISBS LLC

PHS AGREEMENT

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ZONE MAP NO.

SHEET

DESIGN REVIEW

PROJECT NO.

CITY OF ALBUQUERQUE



February 6, 2018

Mr. Edward Martinez, P.E.

This Letter serves as approval that landfill buffer requirements by Zia Engineering for the Homewood Suites site at 5400 San Antonio Drive, NE Albuquerque, NM. This approval is based on the 2017 Mitigation Report by Zia Engineering (Stamped 2-15-2017) with addendum date February 5, 2018.

Please note the following requirements:

DRC plans will require review and approval by the landfill gas engineer, Zia

Building permit and/or any other permit for construction of this project shall require the following conditions of approval:

Condition of approval: PO Box 1293

The following documents must be uploaded to the Documents folder to the Planning

Building Permit Review system: Albuquerque

 a. The 2017 Mitigation Report by Zia Engineering (Stamped 2-15-2017) with addendum dated February 5, 2018. b. This letter showing EHD review of the assessment report

c. Letter from the owner agreeing to the requirements of the mitigation plan and amendment by Zia Engineering

www.cabq.gov

NM 87103

Please submit a copy of this letter with all paper and electronic submissions for all permit reviews.

Thank you,

Paul Olson, PE Environmental Health ESD 505/768-2633

February 6, 2018

I Vinodh N Perumal Authorized Manager of Mountain West Lodging, LLC

DBA Homewood Suites located at 5400 San Antonio Dr, Albuquerque, New

Mexico. We agree to do the work designed and Approved by Mr.Eddie H

Maritnez of Zia Environmental Engineering Service for Methane Mitigation

Plan, with addendum dated on February 5th of 2018 approved by Mr,. Paul

Vinodh Perumal

Mr. Paul Olson PE,

Environmental Health ESD

Mountain West Lodging LLC,

Olson with City of Albuquerque.

Homewood Suites

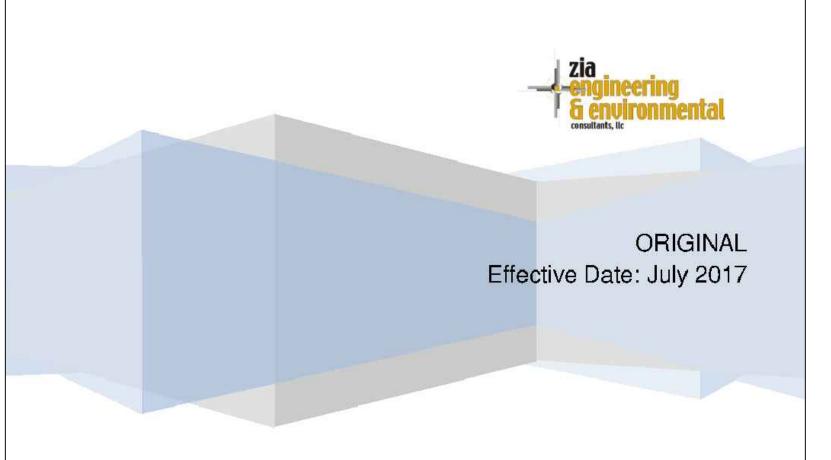
5400 San Antonio Dr NE

Albuquerque NM 87109 Cell: 505-879-7168

Email:Vinodh@vetrimgt

HEALTH AND SAFETY PLAN

Waste Excavation at the San Antonio Landfill **Homewood Suites** 5400 San Antonio Drive, NE Albuquerque, New Mexico



NOTE: THIS IS A MULTI-PAGE DOCUMENT

Actual excavation Procedures for Homewood Suites Remodel and Addition

The excavation area outlined in the Waste excavation plan will be excavated as follows:

The landfill cap will be removed and stored on site for later use

The trash area will be excavated down to the existing storm drain

The storm drain will be removed from the excavation area

A temporary catch basin will be created adjacent to the excavation area

A temporary pump and conveyance channel daylighting at the current west run down into the Pino Arroyo will be built to handle any discharge from the existing remaining storm drain.

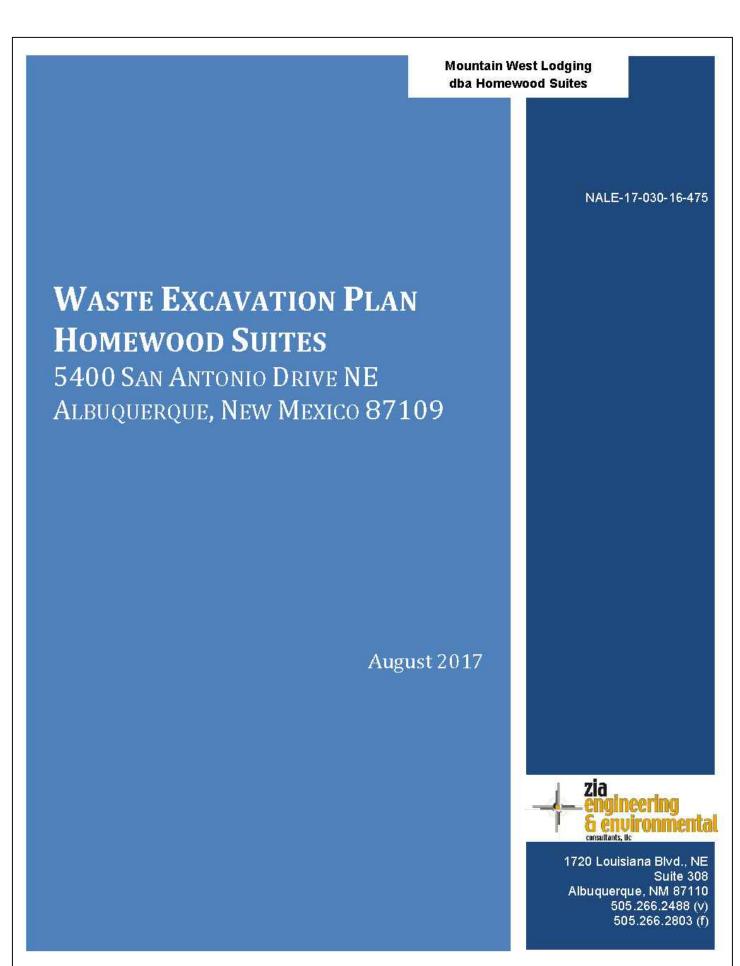
Trash excavation will then be completed, with the area immediately below the proposed storm drain alignment free of trash

Back fill up to the level of the new storm drain will be done

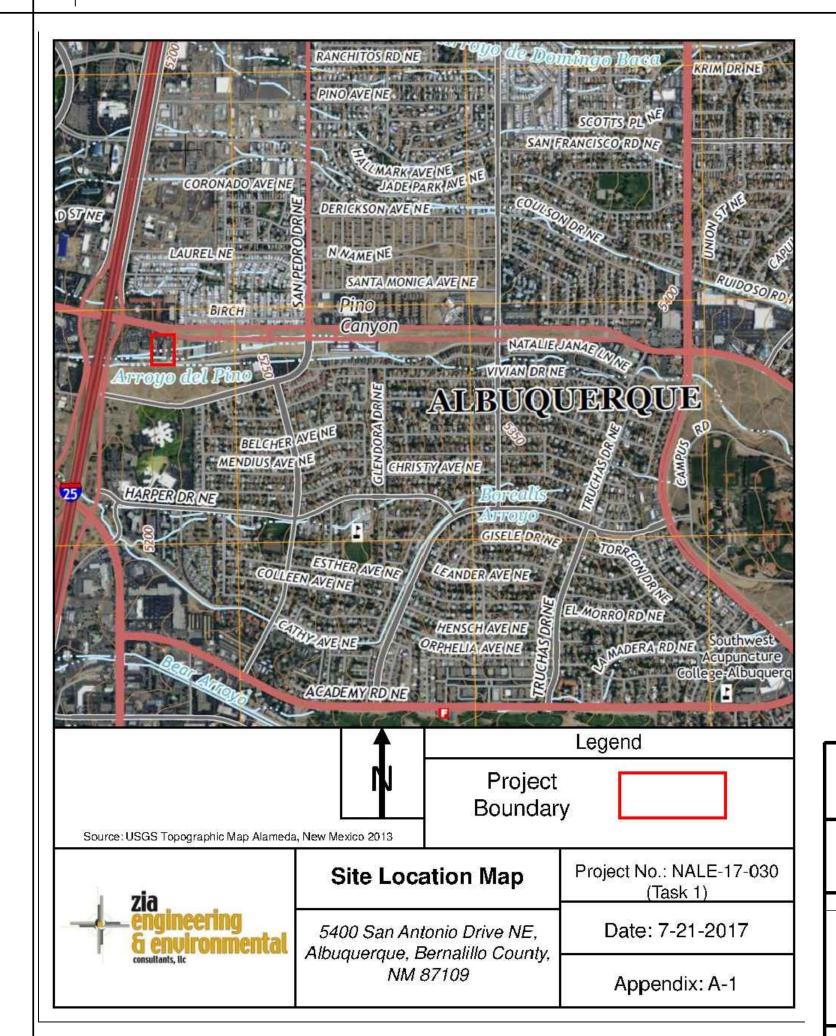
Placement of the new storm drain manholes and piping will then be done

Backfill will continue until all the excavation area is up to final grade

Please see the Waste Excavation Plan and the Landfill Gas Mitigation Plan for technical details associated with the above work sequence decription.



NOTE: THIS IS A MULTI-PAGE DOCUMENT



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