

Vicinity Map - Zone Map H-13 PRAGER STATION ADDR

- 9' FRONT SETBACK @18TH STREET (10' P.U.E. FOR DRY UTILITIES)
  - 5' SIDE SETBACK @ PARK (13' PROVIDED)
- TOPOGRAPHY/ DRAINAGE: SWALES WILL PASS THROUGH ORCHARD AND OTHER LANDSCAPING TO AUGMENT IRRIGATION. PERVIOUS WALKWAYS AND PARKING
- AREAS WILL DECREASE RUNOFF, SEE CIVIL FOR DRAINAGE PLAN.
  NO RAMPS ARE REQUIRED OTHER THAN CURB RAMPS. ALL SITE WALKWAYS SHOWN
  ARE FULLY ACCESSIBLE PER ADA REQUIREMENTS. GRAVEL SECONDARY
- DRIVEWAYS AND ACCESSIBLE PARKING ASPHALT-PAVED. OTHER PARKING SPACES ARE PERMEABLE PAVING. PRIMARY ACCESSIBLE ROUTES SHALL BE POURED CONCRETE OR CONCRETE PAVERS, AND ARE SHADED BY TREES OR
- E. PARKING REQUIRED (1.5 PER UNIT): 69. PROVIDED: 70.
- 1. BENCH, TYPICAL OF (18), <u>DUMOR</u> 88-60PL WITH OPTIONAL ARMREST AND S-1 (EMBEDMENT) ATTACHMENT SUPPORT.

- . REFUSE BIN / DUMPSTER ENCLOSURE WITH GATE, SEE 1/C-2.2.

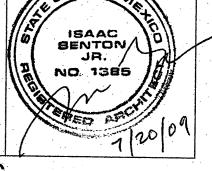
- 9. PATIO, TYPICAL. AT 18TH STREET THESE INCLUDE 3' SECURITY
- 10.3' STEEL PICKET FENCE AT BACK OF SIDEWALK.

PERVIOUS PARKING - COMPACTED GRAVEL

JAN 6 2011

JUL 2 3 2009 HYDROLOGY



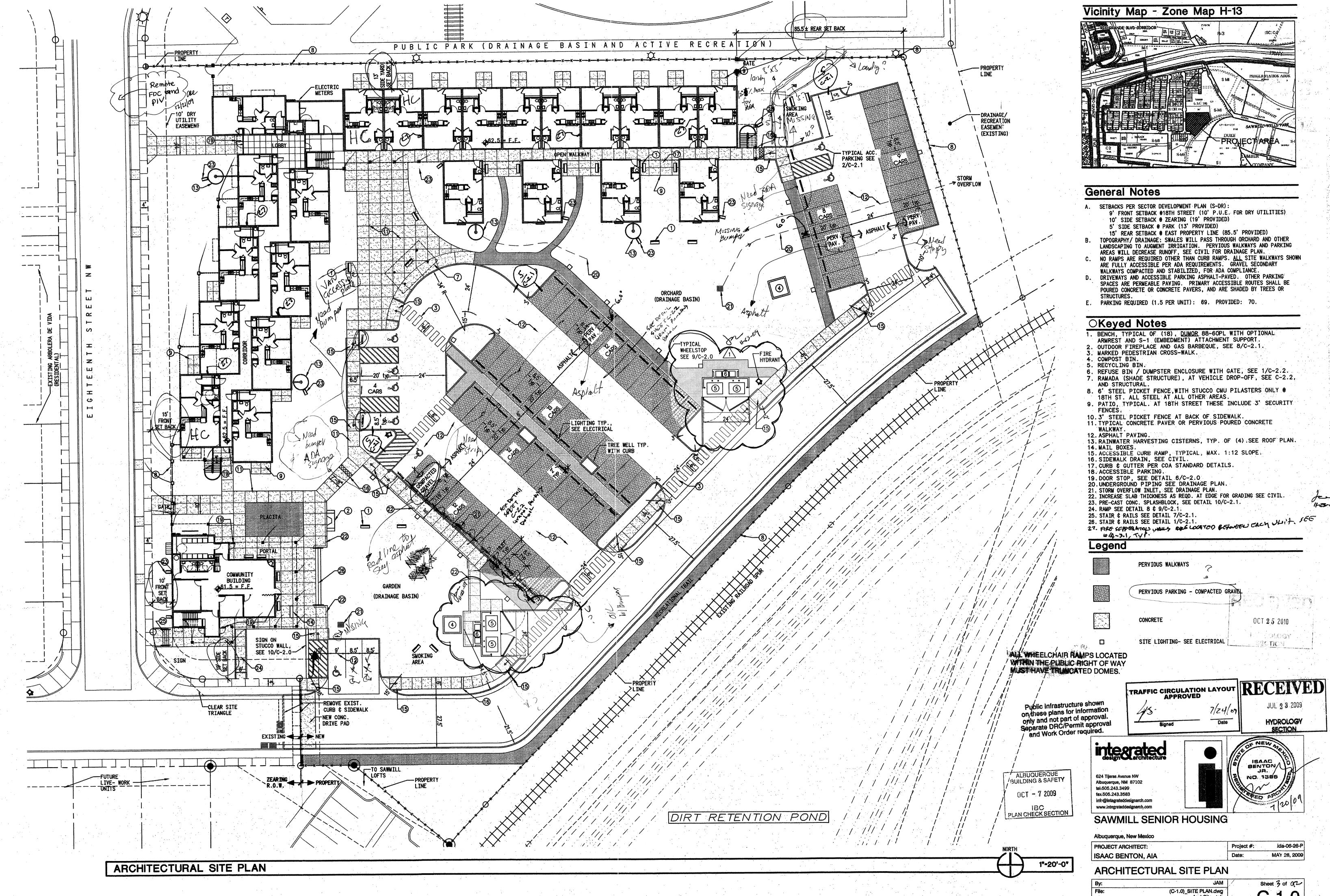


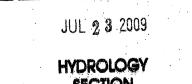
Project #: ida-06-26-P MAY 28, 2009

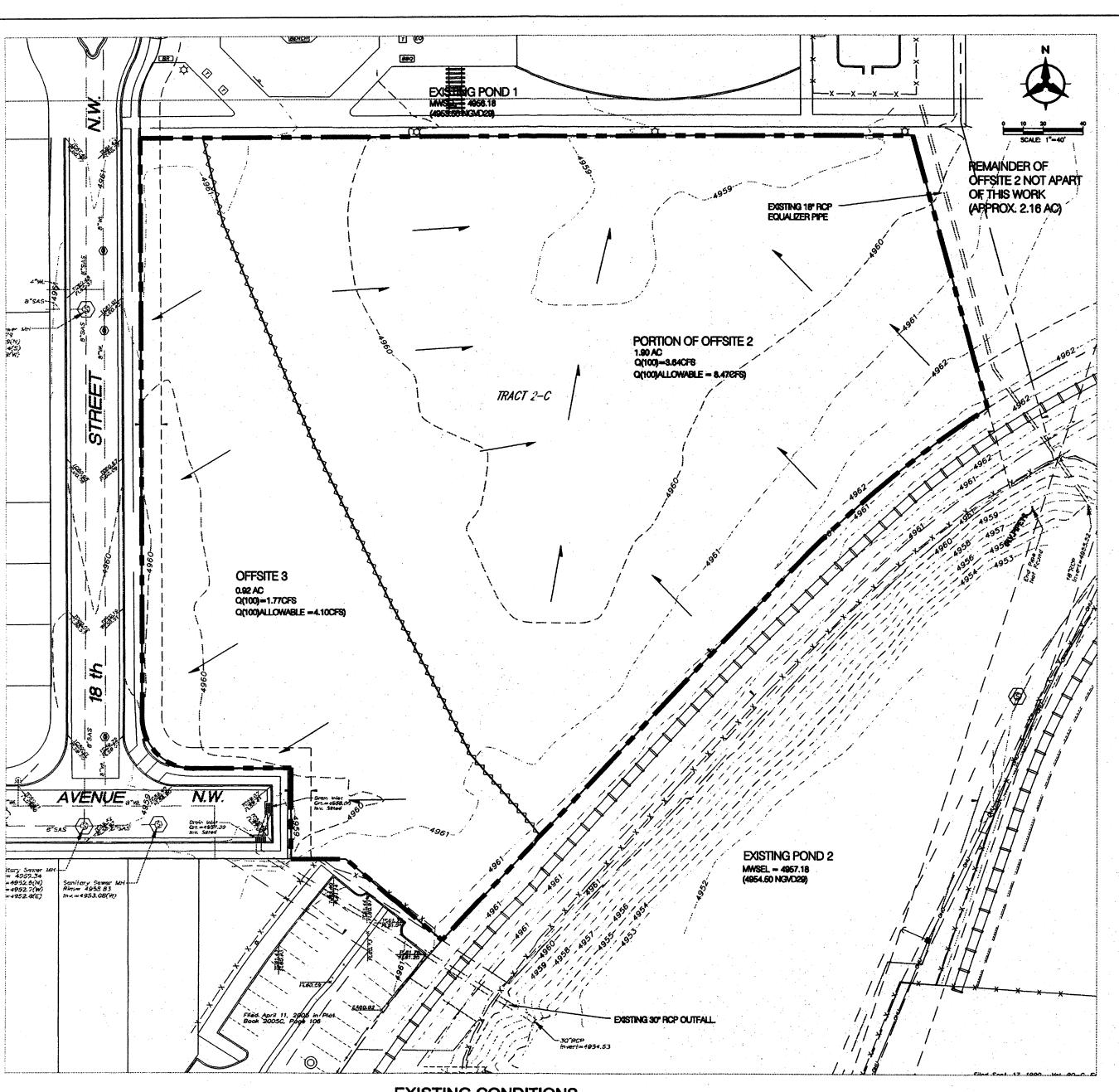
(C-1.0)\_SITE PLAN.dwg ArchSite - tab

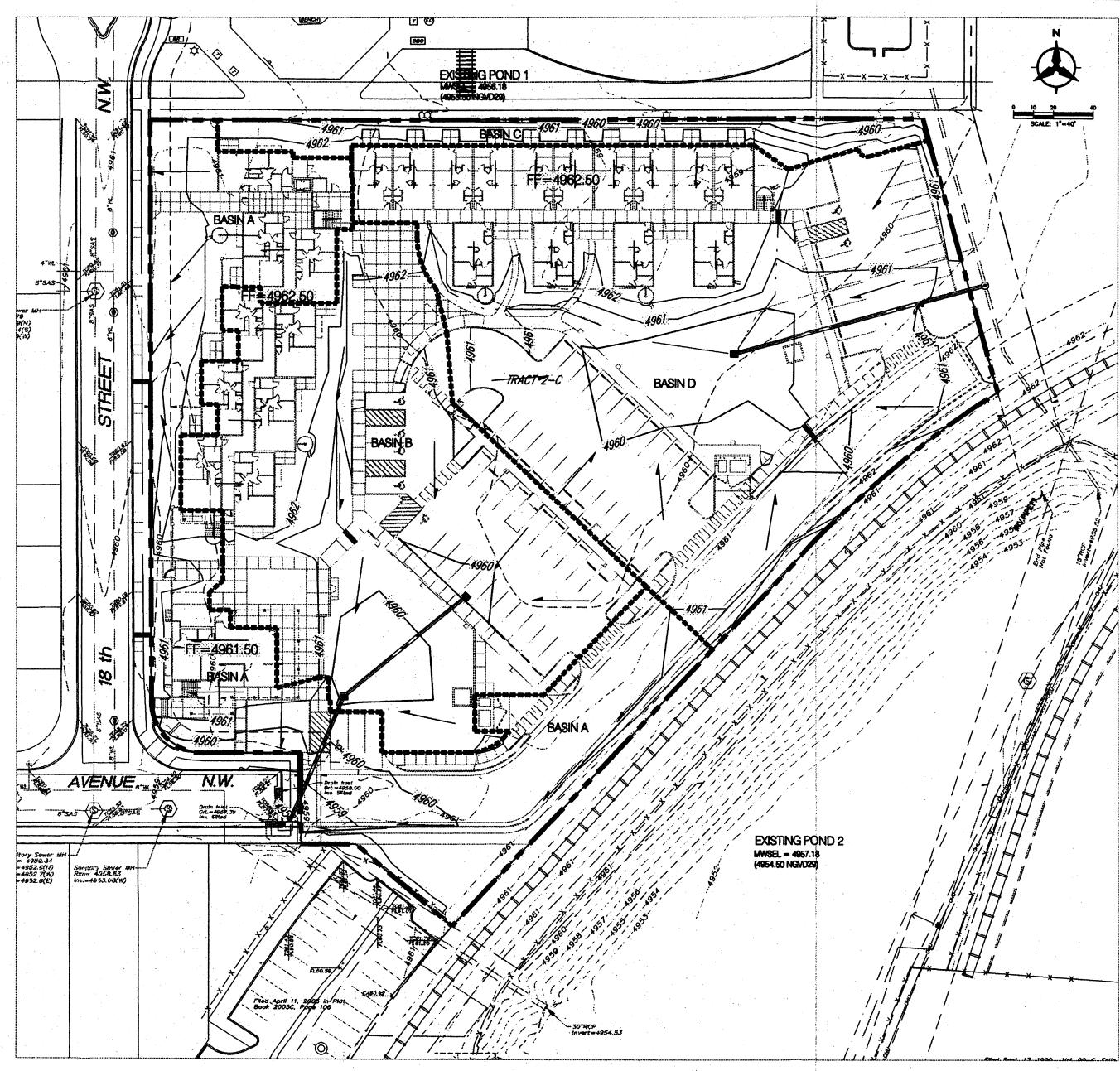
C-1.0

Sheet 3 of QO









# **EXISTING CONDITIONS**

### DRAINAGE MANAGEMENT PLAN

and storm drainage tie-ins to public infrastructure.

The purpose of this submittal is to present a final grading and drainage plan for the sawmill senior center. The site is Tract 2—C of Arbolera de Vida Unit 2 and is located on the northeast corner of 18th Street and Zearing Ave. There is an existing park/ponding area to the north, 18th Street to the west, Zearing Ave. to the south and existing railroad tracks along with an existing drainage pond just beyond the tracks to the southeast. The project will include one "L" shaped building for the housing units to be located along the north and east sides of the property and a community center that will be located at the southwest corner of the property. In addition to the buildings, this project will also construct associated parking and landscaping areas. Finished grades will reflect full build out. With this submittal we are seeking Hydrology approval for Rough Grading Permit Approval, Foundation Permit approval and Building Permit approval. In addition we are seeking SO-19 approval for inlet conversions

The site is approximately 2.8 acres and currently undeveloped. There are two existing ponds that this site drains to that are directly to the north and southeast of the property. The two adjacent detention ponds (POND 1 and POND 2) function as one during the larger storms and outfall a small amount to the existing Bellamah storm drainage system. They have both been constructed (per previously approved grading and drainage plans) to accept developed flows from the entire development including this site.

Based on the existing conditions map shown and the approved grading and drainage plan (Arbolera de Vida, Engineer's stamp/Letter date August 9, 2006 - H13/D25), the site is divided into two basins; 'OFFSITE 3' and a 'portion of OFFSITE 2'. 'OFFSITE 3' drains directly to 18th Street and Zearing Ave. via surface flow until it reaches two type 'A' inlets located at the end of Zearing Ave. at which point it enters a 30" storm drain which out falls directly into POND 2.

Only a portion of the OFFSITE 2 basin will be affected by this plan (approx. 1.9 ac); however this entire basin currently drains directly to pond 1 via

(Refer to TABLE 1 for calculations of the existing basins as well as allowable discharge rates associated with each basin per the approved G & D plan.)

### III. PROPOSED HYDROLOGIC CONDITIONS

The new construction of this site will include a senior housing facility along with a shared community center. In addition, there will be two onsite ponding areas that will only be used for onsite water harvesting purposes and not contribute to the existing volume of POND 1 and POND 2. Also, as a sustainable site, various portions of the pavement will be treated with pervious pavement; however the land treatment percentages associated with these areas will still reflect land treatment 'D' where needed and not reduce the total runoff. Lastly there will be 4 cisterns installed around the site to capture runoff from the roof in order to use for irrigation purposes. These also will not reduce the total runoff from the site and are used strictly from a sustainable site standpoint.

The proposed conditions are much like the existing conditions, as the site will continue to drain to both POND 1 and POND 2. Per the proposed conditions map and TABLE 2, the site is broken up into 4 basins:

BASIN A consists of the western portion of the site and will drain much like OFFSITE 3 into 18th Street and Zearing Ave. and head to the inlets at the end of Zearing Ave. Zearing Ave. will no longer be a dead end but continue into the Sawmill Senior Center site. This will cause the type 'A' inlet at the dead end side of Zearing Ave. to be relocated to the south side of Zearing Ave. directly adjacent to the other existing Type'A' inlet. The total runoff contributing to these two inlets in sump condition will remain as noted in the orginal approved grading and drainage plan."

BASIN B consists of the western interior portion of the site and will drain directly to a storm drainage tied to the existing inlets within Zearing Ave. Approximately half of the parking lot will be collected in a new inlet located at the western edge of the parking area. The remainder of this basin will enter a water harvesting area in-between the community center and parking area where it will eventually outfall to a new inlet which will be tied to the new storm drainage. This new storm drainage will tie directly to the back of the proposed type 'D' double grate inlet. The total developed drainage contributing to this storm drain is 3.55cfs and the new storm drainage pipe was sized to accept this flow.

### BASIN C is along the north end of the site and will continue to drain directly to POND 1 via surface flow.

BASIN D included the remainder eastern edge of the site. This drainage enters another water harvesting area via surface flow at which point it will enter an inlet and discharge to a storm drain that will be tied directly to the 18" equalizer pipe between POND 1 and POND 2. The new pipe was sized to accept the 5.31 cfs (18° at 0.5%)

The Maximum Water Surface Elevation (MWSEL) of the ponds is equal to 4957.18 which is well below the proposed finished floors of 4962.50 and 4961.50 allowing these connections to the existing storm drainage infrastructure to NOT adversely effect the development.

There is currently no offsite drainage that will affect this site. All offsite drainage either directly enters the pond via surface flow or enters the pond via existing storm drainage infrastructure.

Floodplain
In accordance with FEMA Community Map Panel #35001C0331G, this site does not lie within a designated flood hazard zone.

IV. CONCLUSION

The total 100yr peak discharge from the site is approximately 12.58cfs which within an acceptable range of the 12.57 allowable discharge rate based on the previously approved grading and drainage plan. The maximum water surface elevation of the existing ponds is well below the finished floor elevations. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm event and meets city and approved Arbolera de Vida drainage report. With this submittal we are seeking Hydrology approval for Grading Permit approval and Building Permit approval. In addition we are requesting SO-19 approval for the inlet conversion and tie-in as well as the tie in to the existing 18" equalizer pipe.

### PROPOSED CONDITIONS

				TAB	LE 2				· .	
	SAWMI	LL SENIOI	R CENTER	R - PROP	OSED HY	DRAULIC	CALCULA	TIONS		· · · · · · · · · · · · · · · · · · ·
			PROPOSE	ED Conditio	ns Basin D	ata Table				
		This table	is based on th	e DPM Section	on 22.2, Zone:					
SUB-BASIN	Area	Area	Land Treatment Percentages				Q(100)	Q(100)	WT E <sub>100YR</sub>	V(100) <sub>360</sub>
!D	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(cfs)	(inches)	(CF)
ISCHARGE DIRECTLY	18TH ST AND 2	ZEARING								
BASIN A	30783	0.71	0.0%	0.0%	15.0%	85.0%	4.47	3.16	1.97	5057
ISCHARGE DIRECTLY	TO POND 2								·	
BASIN B	34673	0.80	0.0%	0.0%	15.0%	85.0%	4.47	3.55	1.97	5697
ISCHARGE DIRECTLY	TO POND 1									
BASINC	5439	0.12	0.0%	0.0%	15.0%	85.0%	4.47	0.56	1.97	894
ISCHARGE DIRECTLY	TO EQUILIZER	PIPE BETW	EEN POND	1 AND PO	ND 2	·				
BASIND	51803	1.19	0.0%	0.0%	15.0%	85.0%	4.47	5.31	1.97	8511

					TABLE	1					
		SAWMILL	SENIOR (	CENTER -	EXISTIN	G HYDRA	ULIC CALC	ULATION	IS		
			E	XISTING C	onditions B	asin Data 1	able				•
		This table	This table is based on the DPM Section 22.2, Zone: 2								
SUB-BASIN	Area	Area	Land Treatment Percentages				Q(100)	Q(100)	*Q(100)	WT E <sub>100YR</sub>	V(100) <sub>360</sub>
ID	(SQ. FT)	(AC.)	A	В	С	D	(cfs/ac.)	(cfs)	ALLOWABLE	(inches)	(CF)
			-			•					
OFFSITE 3	40075	0.92	50.0%	50.0%	0.0%	0.0%	1.92	1.77	4.10	0.66	2187
ADTION OF OFFICE										1.	
PORTION OF OFFSITE 2	82607	1.90	50.0%	50.0%	0.0%	0.0%	1.92	3.64	8.47	0.66	4509
Total	122682.40	2.82					·	5.41	12.57		6696.41

624 Tijeras Avenue NW Albuquerque, NM 87102 tel: 505.243.3499 fax: 505.243.3583 info@integrateddesignarch.com SAWMILL SENIOR HOSENGETVEL www.integrateddesignarch.com AUG 11 2009 Albuquerque, New Mexico PROJECT ARCHITECT: da-xx-xx-P ISAAC BENTON, AJA

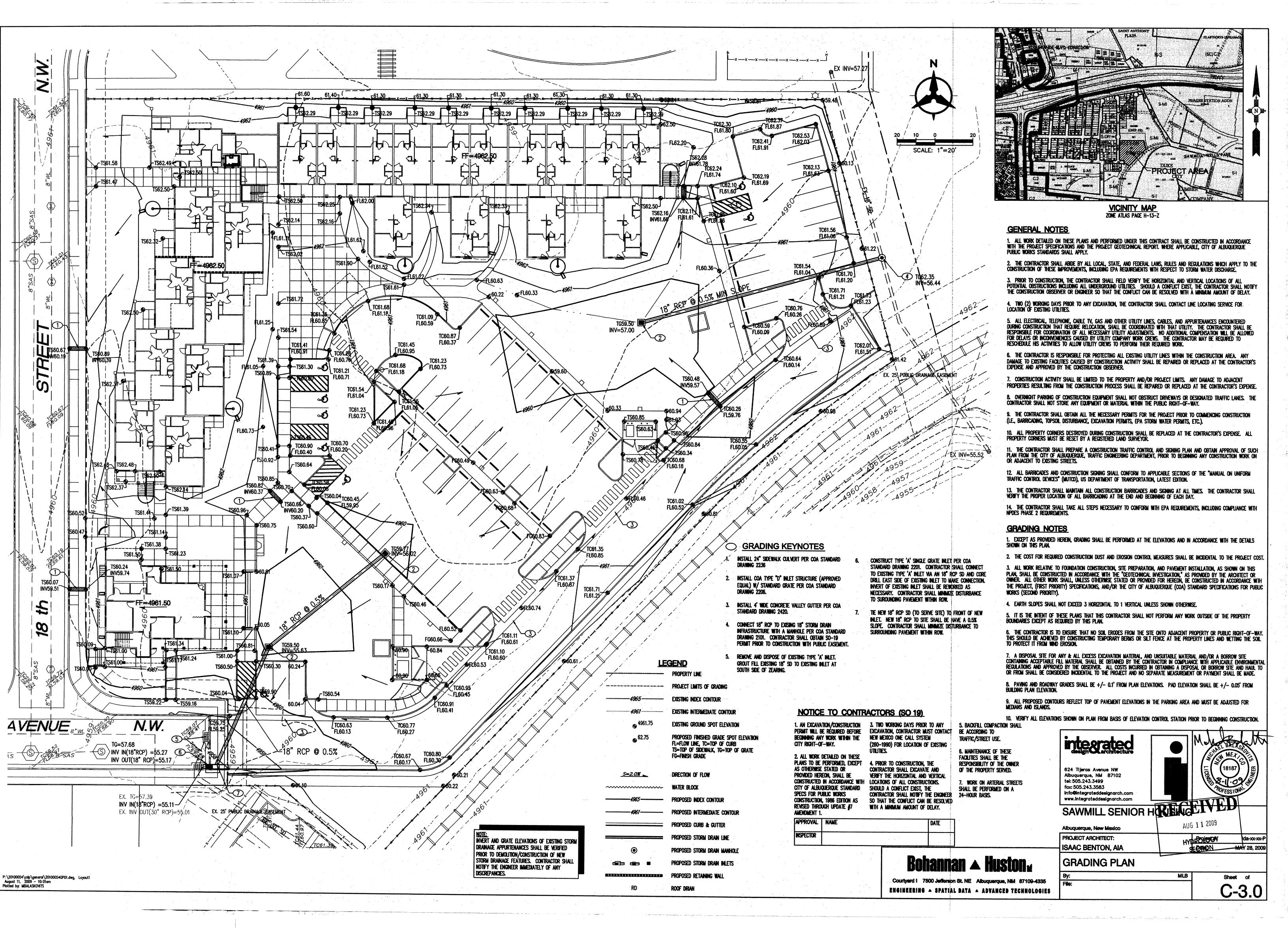
Sheet of

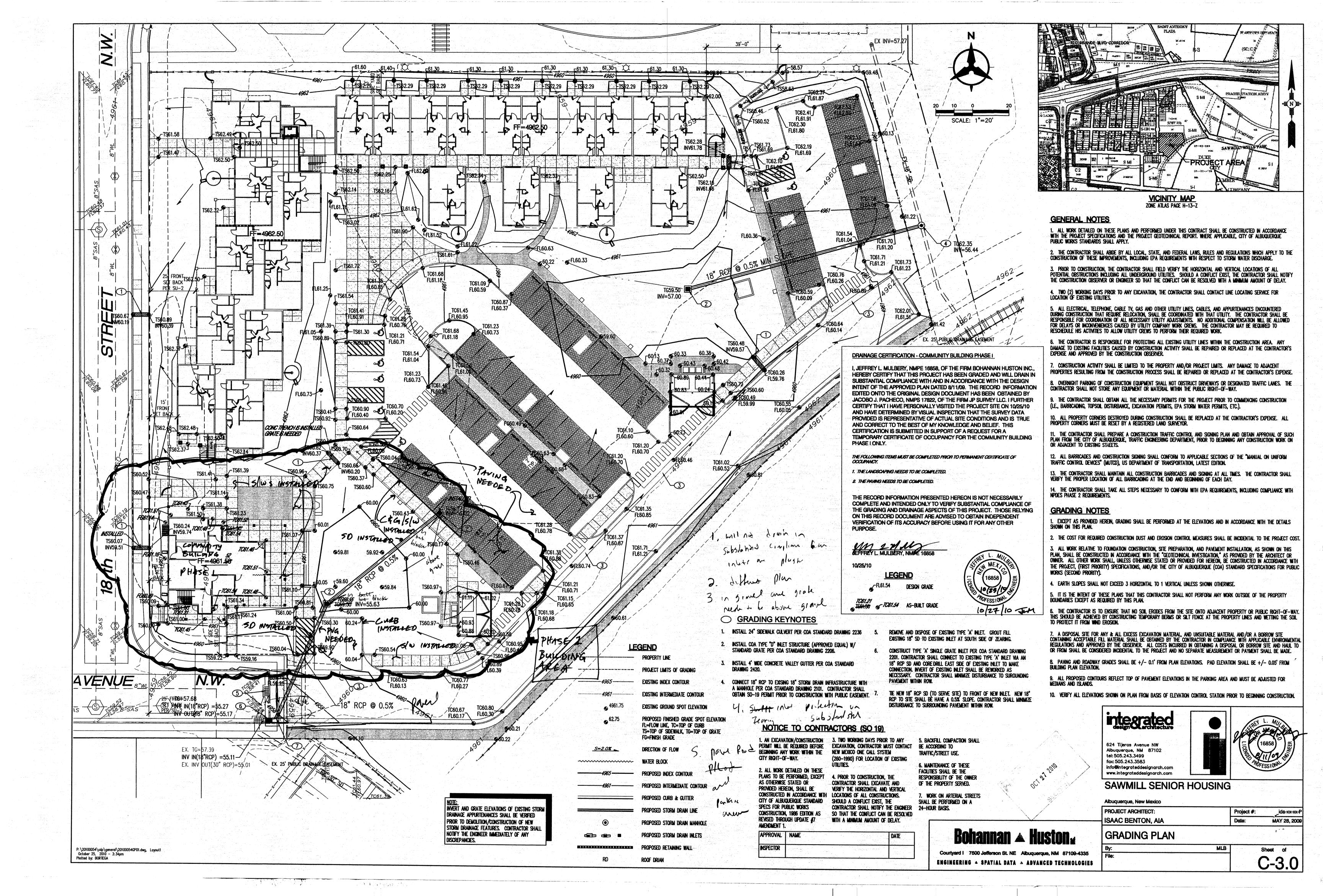
C-0.

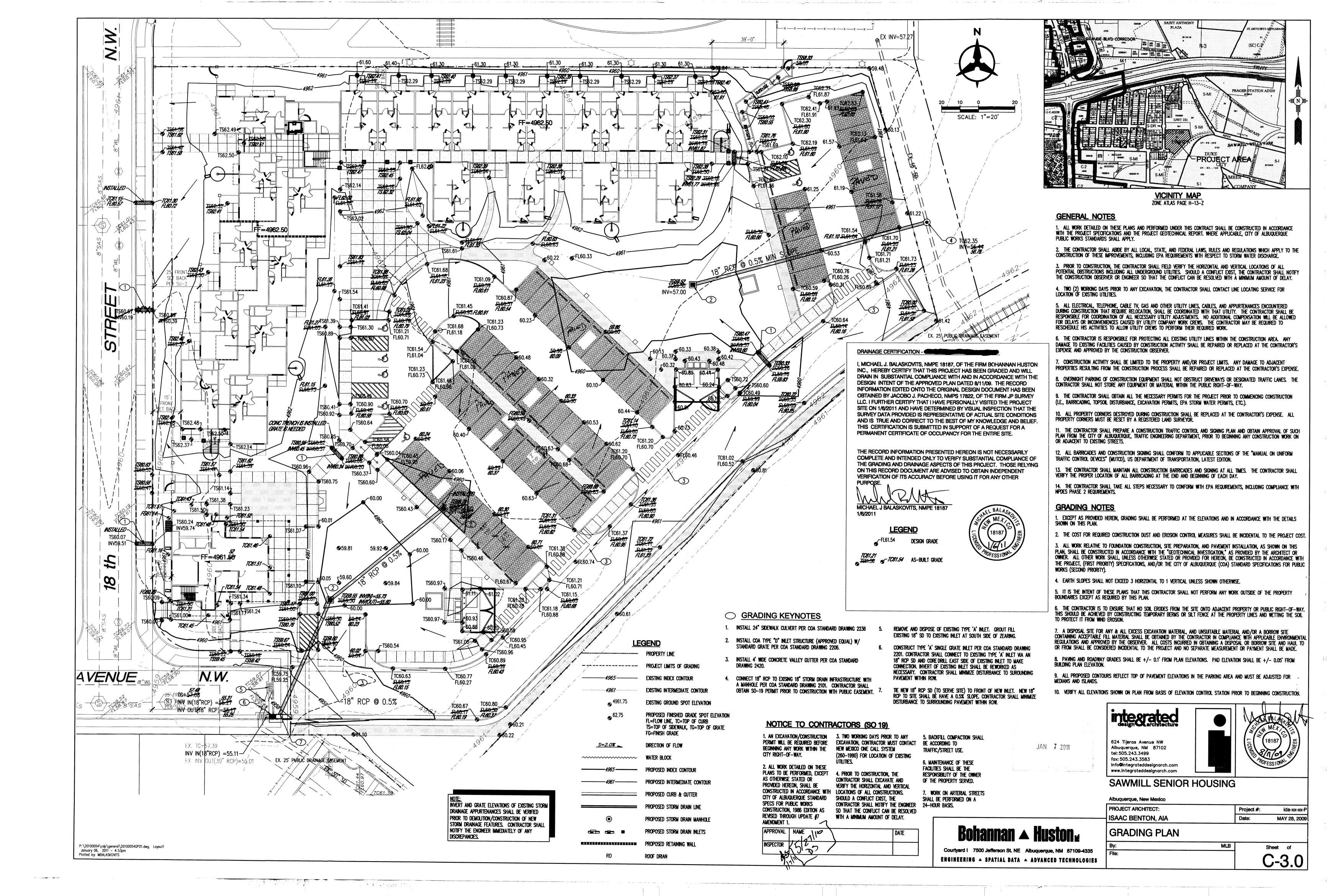
**Bohannan A Huston** 

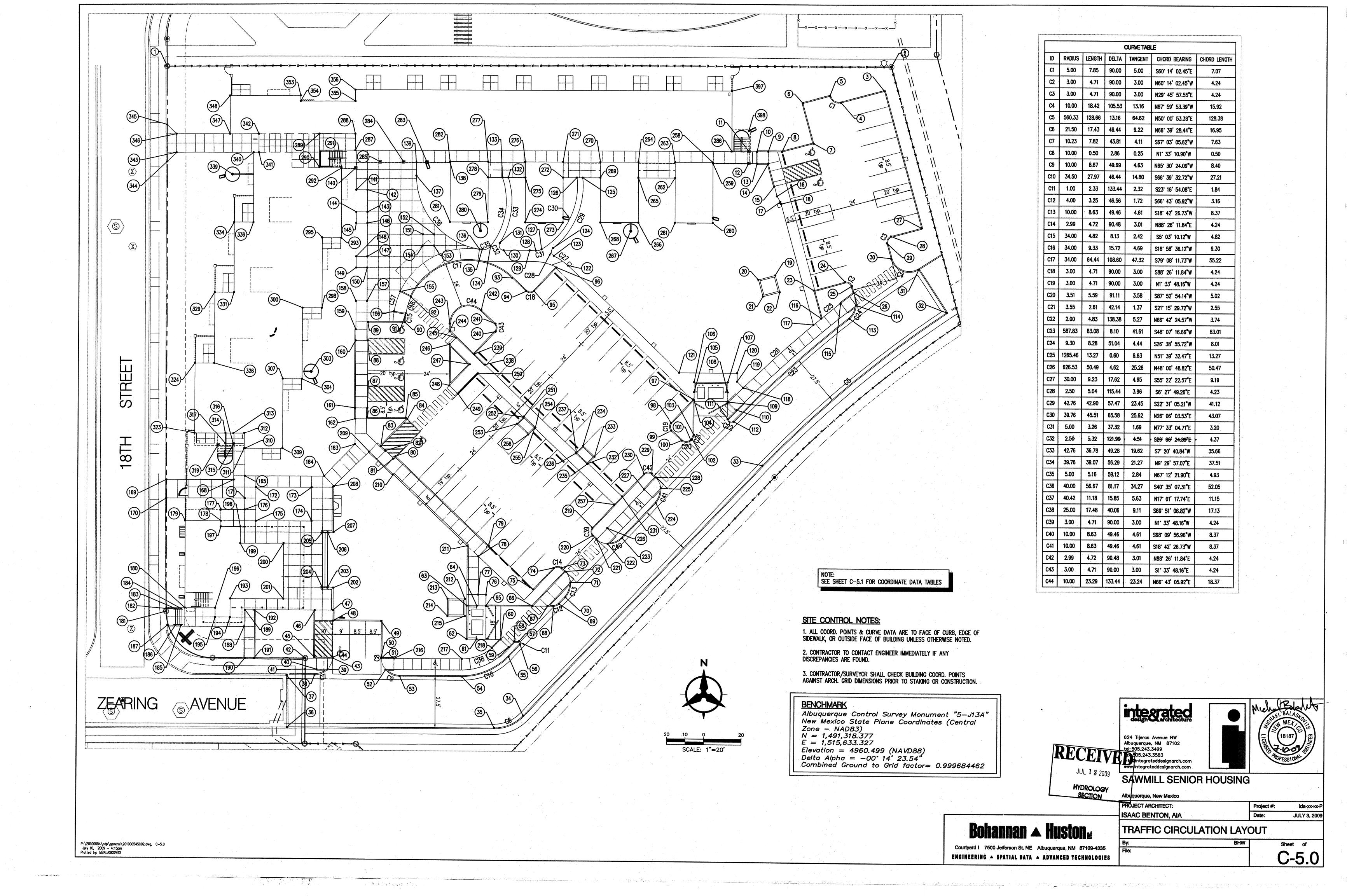
ENGINEERING . SPATIAL BATA . ADVANCED TECHNOLOGIES

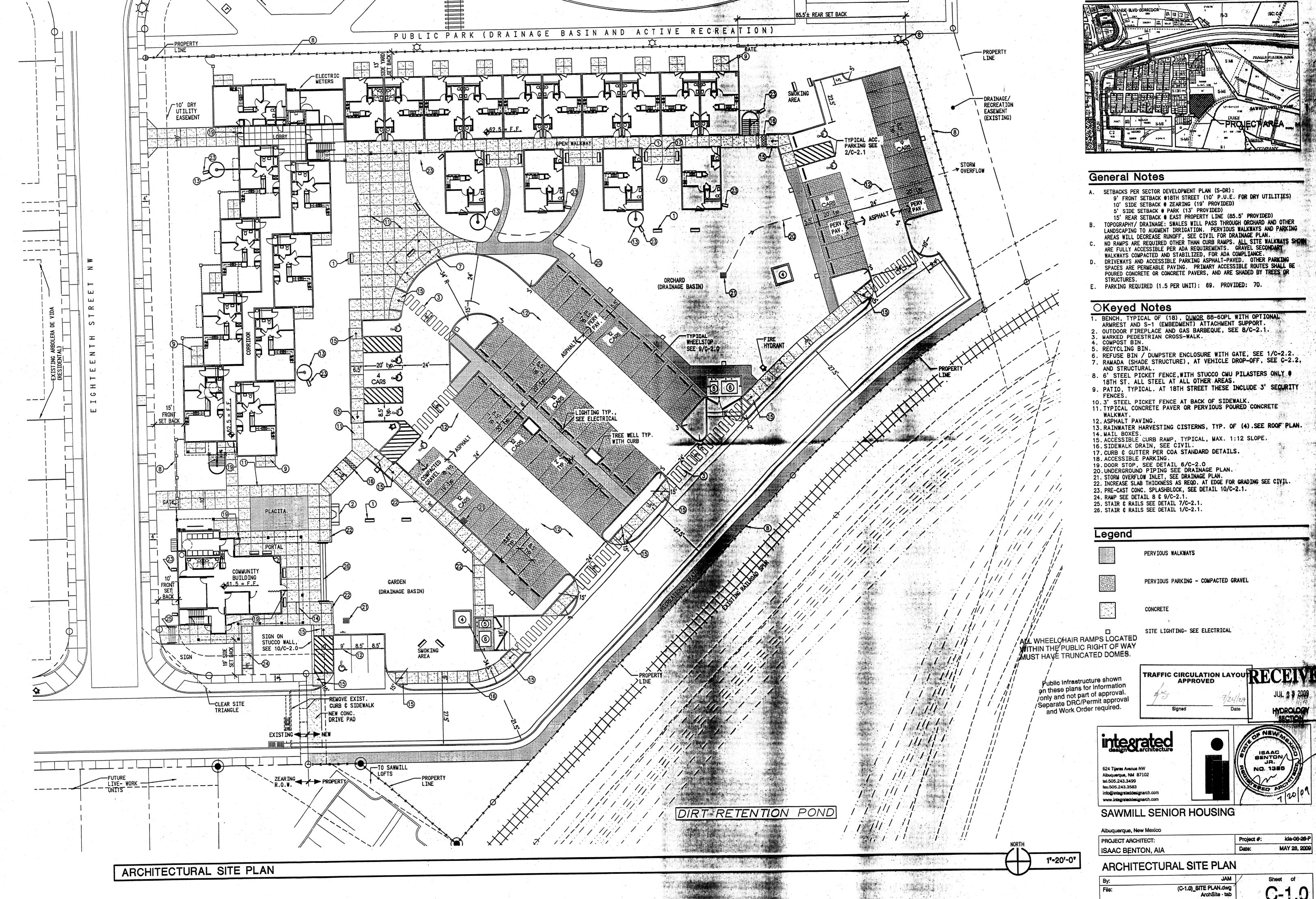
DRAINAGE MANAGEMENT PLAN



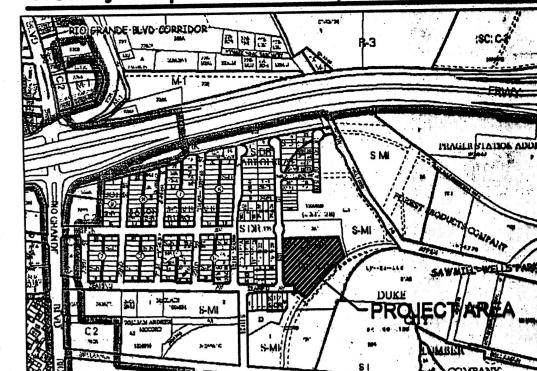


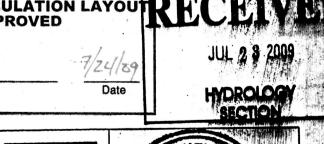




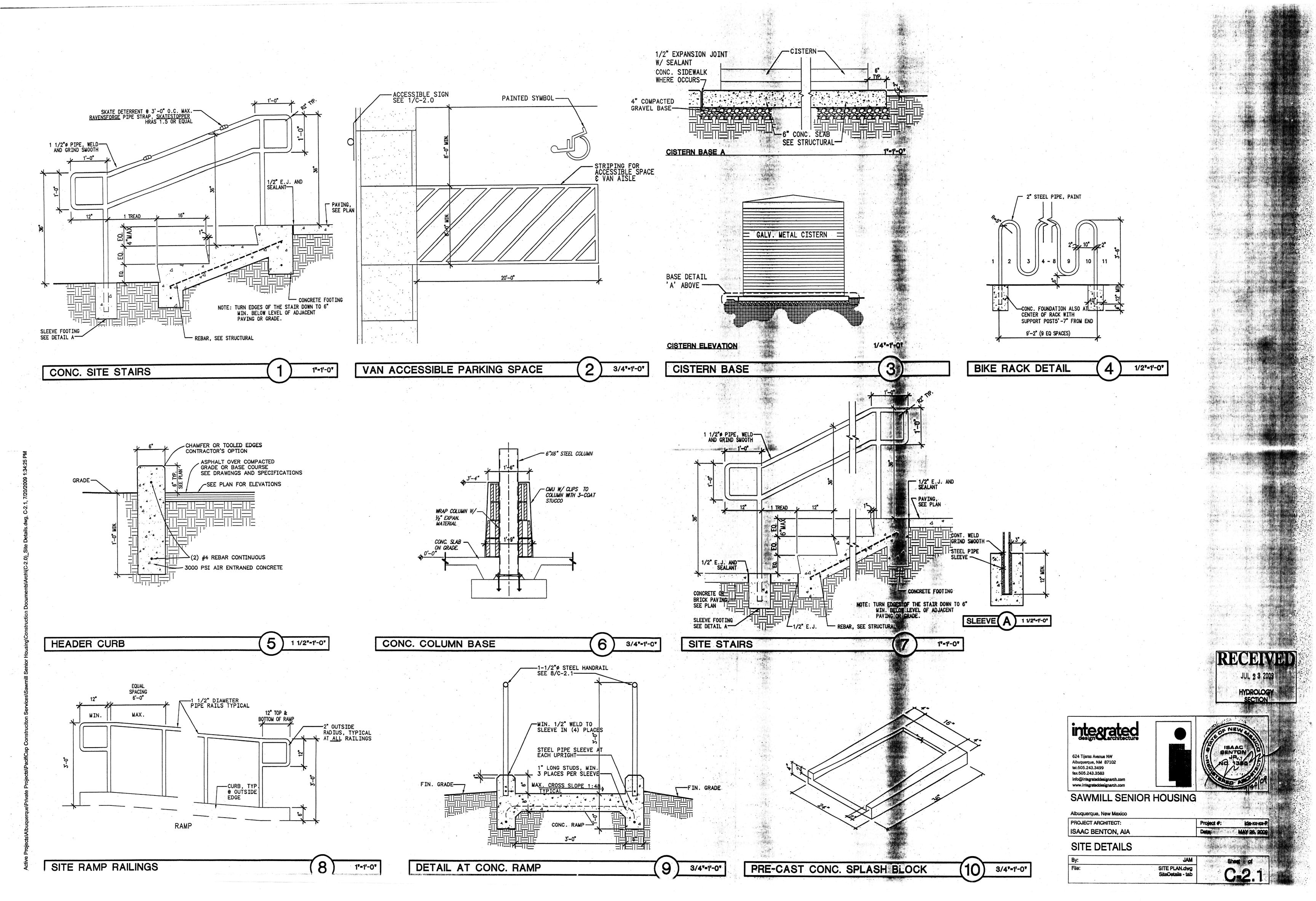


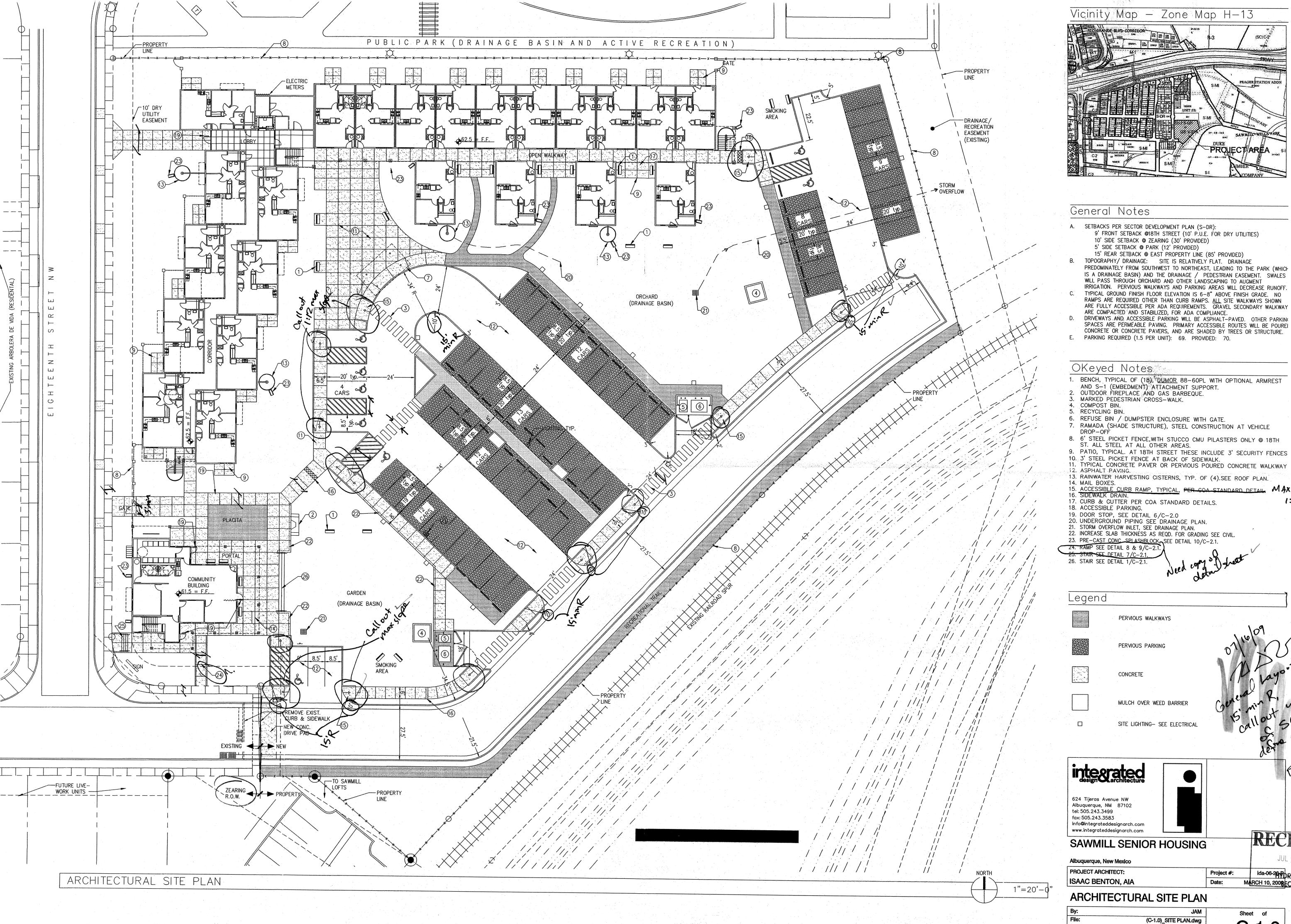
Vicinity Map - Zone Map H-13



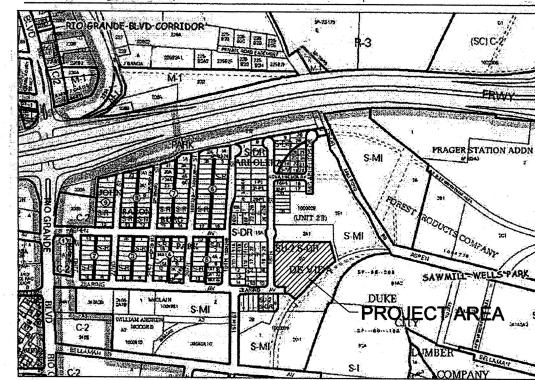


C-1.0





Vicinity Map - Zone Map H-13



## General Notes

- A. SETBACKS PER SECTOR DEVELOPMENT PLAN (S-DR): 9' FRONT SETBACK @18TH STREET (10' P.U.E. FOR DRY UTILITIES) 10' SIDE SETBACK @ ZEARING (30' PROVIDED) 5' SIDE SETBACK @ PARK (12' PROVIDED)
  - 15' REAR SETBACK @ EAST PROPERTY LINE (85' PROVIDED) TOPOGRAPHY/ DRAINAGE: SITE IS RELATIVELY FLAT. DRAINAGE PREDOMINATELY FROM SOUTHWEST TO NORTHEAST, LEADING TO THE PARK (WHICH
- IS A DRAINAGE BASIN) AND THE DRAINAGE / PEDESTRIAN EASEMENT. SWALES WILL PASS THROUGH ORCHARD AND OTHER LANDSCAPING TO AUGMENT IRRIGATION. PERVIOUS WALKWAYS AND PARKING AREAS WILL DECREASE RUNOFF. TYPICAL GROUND FINISH FLOOR ELEVATION IS 6-8" ABOVE FINISH GRADE. NO RAMPS ARE REQUIRED OTHER THAN CURB RAMPS. ALL SITE WALKWAYS SHOWN
- ARE COMPACTED AND STABILIZED, FOR ADA COMPLIANCE. DRIVEWAYS AND ACCESSIBLE PARKING WILL BE ASPHALT-PAVED. OTHER PARKING SPACES ARE PERMEABLE PAVING. PRIMARY ACCESSIBLE ROUTES WILL BE POURE!
- CONCRETE OR CONCRETE PAVERS, AND ARE SHADED BY TREES OR STRUCTURE. E. PARKING REQUIRED (1.5 PER UNIT): 69. PROVIDED: 70.

# OKeyed Notes

- BENCH, TYPICAL OF (18) DUMOR 88-60PL WITH OPTIONAL ARMREST AND S-1 (EMBEDMENT) ATTACHMENT SUPPORT.
   OUTDOOR FIREPLACE AND GAS BARBEQUE.
- MARKED PEDESTRIAN CROSS-WALK.
- 5. RECYCLING BIN.
- 3. REFUSE BIN / DUMPSTER ENCLOSURE WITH GATE.
- 7. RAMADA (SHADE STRUCTURE), STEEL CONSTRUCTION AT VEHICLE
- 8. 6' STEEL PICKET FENCE, WITH STUCCO CMU PILASTERS ONLY @ 18TH ST. ALL STEEL AT ALL OTHER AREAS.
- 9. PATIO, TYPICAL. AT 18TH STREET THESE INCLUDE 3' SECURITY FENCES
- 10. 3' STEEL PICKET FENCE AT BACK OF SIDEWALK.
  11. TYPICAL CONCRETE PAVER OR PERVIOUS POURED CONCRETE WALKWAY
- 13. RAINWATER HARVESTING CISTERNS, TYP. OF (4). SEE ROOF PLAN. 14. MAIL BOXES.

14. MAIL BOXES.

15. ACCESSIBLE CURB RAMP, TYPICAL, PER COA STANDARD DETAIL

16. SIDEWALK DRAIN.

17. CURB & GUTTER PER COA STANDARD DETAILS.

18. ACCESSIBLE PARKING.

19. DOOR STOP, SEE DETAIL 6/C-2.0

20. UNDERGROUND PIPING SEE DRAINAGE PLAN.

21. STORM OVERFLOW INLET, SEE DRAINAGE PLAN.

22. INCREASE SLAB THICKNESS AS REQD. FOR GRADING SEE CIVIL.

23. PRE-CAST CONC. SPLASHBLOCK, SEE DETAIL 10/C-2.1.

24. RAMP SEE DETAIL 8 & 9/C-2.1.

25. STAIR SEE DETAIL 7/C-2.1.

Legend

PERVIOUS WALKWAYS

PERVIOUS PARKING

CONCRETE

MULCH OVER WEED BARRIER

SITE LIGHTING- SEE ELECTRICAL



624 Tijeras Avenue NW Albuquerque, NM 87102 tel: 505.243.3499 fax: 505.243.3583



SAWMILL SENIOR HOUSING

Albuquerque, New Mexico PROJECT ARCHITECT: ISAAC BENTON, AIA

ARCHITECTURAL SITE PLAN

(C-1.0)\_SITE PLAN.dwg

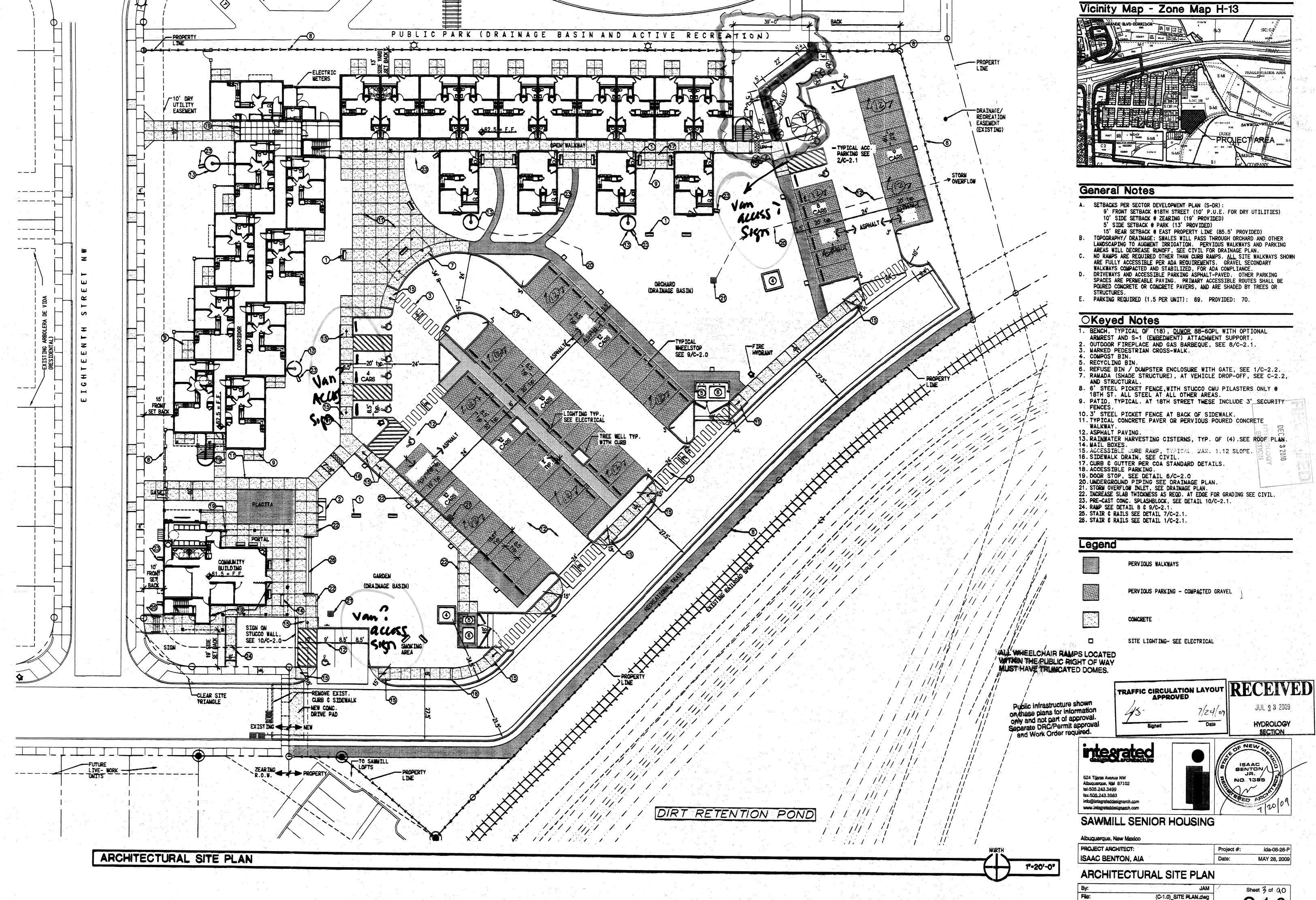
C-1.0

Project #:

Date:

JUL 2 3 2009

ida-06-26 P MARCH 10, 2008 ECTION



C-1.0