CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

January 4, 2018

David Aube, P.E. Hartman & Majewski Design Group 120 Vassar Dr SE, Suite 100 Albuquerque, NM, 87106

RE: De Anza Grading Plan and Drainage Master Plan Stamp Date: 12/13/17 Hydrology File: K17D106

Dear Mr. Aube:

PO Box 1293 Based upon the information provided in your submittal received 01/02/2018, the Grading Plan and Drainage Master Plan **are not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

- 1. Sheet CD1 & CD2. Please provide an engineer's stamp with a signature and date on sheets.
- NM 871032.The first flush required is 1,571.8 cubic feet. If you want to do the Fee in Lieu,
then the payment (Amount = 1,571.8 CF x \$8/CF = \$12,574.40) for the required
first flush volume must be made. Please add a note on CD1 that states a payment
for the Fee in Lieu for the required first flush volume will be made instead of
building the first flush ponds.

Please just resubmit Sheets CD1 & CD2.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title:	Building Permi	t #: Hydrology File #:
DRB#:	EPC#:	Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Other Contact:		Contact:
Address:		
		E-mail:
Check all that Apply:		
DEPARTMENT:		TYPE OF APPROVAL/ACCEPTANCE SOUGHT:
HYDROLOGY/ DRAINAGE		BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY
TRAFFIC/ TRANSPORTATION		
TYPE OF SUBMITTAL:		PRELIMINARY PLAT APPROVAL
ENGINEER/ARCHITECT CERTIFICATI	ION	SITE PLAN FOR SUB'D APPROVAL
		SITE PLAN FOR BLDG. PERMIT APPROVAL
CONCEPTUAL G & D PLAN		FINAL PLAT APPROVAL
GRADING PLAN		
DRAINAGE MASTER PLAN		SIA/ RELEASE OF FINANCIAL GUARANTEE
DRAINAGE REPORT		FOUNDATION PERMIT APPROVAL
CLOMR/LOMR		GRADING PERMIT APPROVAL
		SO-19 APPROVAL
TRAFFIC CIRCULATION LAYOUT (TO	CL)	PAVING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)		GRADING/ PAD CERTIFICATION
		WORK ORDER APPROVAL
OTHER (SPECIFY)		CLOMR/LOMR
PRE-DESIGN MEETING?		
IS THIS A RESUBMITTAL?: Yes	No	OTHER (SPECIFY)
DATE SUBMITTED:	Ву:	
COA STAFF:	ELECTRONIC SU	BMITTAL RECEIVED:

FEE PAID:

I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING DRAINAGE CONDITIONS AS WELL AS THE PROPOSED DRAINAGE CONDITIONS OF THE DE ANZA MOTOR LODGE ON CENTRAL AVENUE IN ALBUQUERQUE, NM. THE ZONE ATLAS PAGE FOR THE SITE IS K-17-Z.

II. SITE DESCRIPTION AND HISTORY

THE PROJECT SITE IS LOCATED AT THE NORTHWEST CORNER OF WASHINGTON STREET AND CENTRAL AVENUE.

THE SITE IS CURRENTLY COMPOSED OF ONE 2.3 ACRE LOT WITH AN UNOCCUPIED MOTEL ON THE PROPERTY. THE ORIGINAL DE ANZA MOTOR LODGE AND RESTAURANT WAS BUILT IN 1939, BUT BECAME UNOCCUPIED IN THE 1990S.

III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON SECTION 22.2, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL RELEASED JUNE 1997. TABLES WITHIN SECTION 22.2 WERE USED TO AID IN THE STUDY OF THE SITE HYDROLOGY.

IV. PRECIPITATION

С

THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-6HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 2.

V. EXISTING DRAINAGE CONDITIONS (REFER TO CD1)

CURRENTLY THE STORM WATER RUN-OFF DRAINS FROM THE SOUTHERN END OF THE PROPERTY NEAR CENTRAL THROUGH THE PARKING LOT TO THE NORTHERN PART OF THE PROPERTY INTO COPPER AVE (BETWEEN WASHINGTON ST. AND GRACELAND DR.). THE SITE IS CURRENTLY A VERY LOW GRADE SLOPING DOWN TO THE NORTH.

THERE ARE CURRENTLY MOTEL ROOM STRUCTURES THAT LINE THE WEST, NORTH AND EAST SIDES OF THE PROPERTY. A MAJORITY OF THESE MOTEL ROOMS WILL BE DEMOLISHED PRIOR TO THE PROPOSED RESIDENTIAL DEVELOPMENT.

THREE BUILDINGS WILL BE RETAINED AS PART OF THE REDEVELOPMENT, THEY ARE AS FOLLOWS: THE BASEMENT UNDERNEATH ONE OF THE BUILDINGS. THE 6 MOTEL ROOM BUILDING NEAR WASHINGTON AND CENTRAL, AND THE TURQUOISE CAFE.

THE 6 MOTEL ROOM BUILDINGS AND TURQUOISE CAFE ROOFS DRAIN TOWARD THE SURROUNDING STREETS AND WILL NOT BE CONSIDERED IN THE COMPUTATION OF THE FIRST FLUSH REQUIREMENTS.

FOR A 100YR-6HR STORM EVENT THE MAIN PORTION OF THE SITE DRAINS OUT THROUGH AN ASPHALT RUNDOWN IN TO COPPER. THIS BASIN (EX 1) GENERATES A PEAK RUNOFF OF 6.77 CFS. THE SMALLER BASINS FOR THE 6 MOTEL ROOMS (EX 2) AND TURQUOISE CAFE (EX 3) GENERATE PEAK RUNOFF RATES OF 0.30 CFS AND 0.15 CFS RESPECTIVELY. THE MOTEL ROOM THAT SURROUND THE MOTOR COURT DRAIN TOWARD THE PUBLIC STREETS. EXISTING BASIN EX 4 GENERATES A PEAK RUNOFF OF 0.82 CFS AND EX5 IS 1.12 CFS.

ALL EXCESS RUNOFF FROM THE SITE FLOW TOWARD COPPER AND GRACELAND. FOR THE PURPOSE OF THIS DRAINAGE STUDY AN ADDITIONAL ANALYSIS POINT IS CONSIDERED AT THAT CORNER. THE COMBINE SITE RUNOFF AT THAT LOCATION IS 9.16 CFS.

VI. PROPOSED DRAINAGE CONDITIONS (REFER TO CD2)

THIS PROJECT IS PROPOSING TO RE-CONSTRUCT THE DE ANZA MOTOR LODGE AND RESTAURANT INTO THREE PARTS. THE NORTHERN SECTION OF THE PROPERTY WILL BE COMPRISED OF RESIDENTIAL STRUCTURES. THE TURQUOISE CAFE AND BUILDING NEAR WASHINGTON WILL BE RECONSTRUCTED TO MATCH THE HISTORIC CHARACTER AND WILL BE USED AS OFFICES.

THE TWO BUILDINGS TO REMAIN THAT DRAIN DIRECTLY INTO THE PUBLIC STREETS WILL REMAIN AS DESCRIBED IN THE EXISTING CONDITIONS. THESE SMALLER BASINS FOR THE 6 MOTEL ROOMS (PRO 2) AND TURQUOISE CAFE (PRO 3) GENERATE PEAK RUNOFF RATES OF 0.30 CFS AND 0.15 CFS RESPECTIVELY THAT MATCH THE HISTORIC DISCHARGE RATES AND OUTFALL LOCATIONS.

THE MAIN PORTION OF THE SITE (BASIN PRO 1) WILL REMAIN FLOWING NORTH TO COPPER AVENUE. THE PEAK DISCHARGE INTO COPPER WILL BE 8.50 CFS. THE NEW PEAK DISCHARGE OF 8.50 IS A 0.21 CFS REDUCTION FROM THE EXISTING SITE CONDITION OF 8.71 (IF THE FORMER MOTEL ROOM WOULD HAVE DRAINED INWARD TOWARD THE MOTOR COURT). ONCE AGAIN USING THE ANALYSIS POINT AT COPPER AND GRACELAND THE TOTAL FLOWRATE LEAVING THE SITE IN THE PEAK RUNOFF CONDITION PRIOR TO MSSSS PONDING WOULD BE 8.95 CFS.

THIS IS MENTIONED BECAUSE TO COMPLY WITH THE MSSSS PERMIT REQUIREMENTS THE NEW ROOFS ARE BEING DESIGNED TO DRAIN THE EXCESS RUNOFF TOWARD THE CORE OF THE SITE AS OPPOSED TO THE SURROUNDING STREETS. THIS WOULD ALLOW THE RUNOFF TO BE ROUTED THROUGH STORM WATER RETENTION BASINS TO MANAGE AND RETAIN THE FIRST FLUSH VOLUME.

THE EXCESS RUNOFF VOLUME OF THE REDEVELOPED SITE IS .31 AC-FT.

SEVERAL ONSITE RETAINING PONDS WERE INITIALLY DESIGNED TO HOLD THE FIRST FLUSH REQUIREMENT OF 2,055 CUBIC FEET (REDEVELOPMENT SITE REQUIRING 0.26" OF RETENTION FOR THE IMPERVIOUS SURFACES). THE OWNER FOR THE PROJECT WOULD PREFER TO PAY IN LIEU OF PONDING.

ON SITE PONDING TO RESTRICT EXCESS RUNOFF IS NOT REQUIRED AS THE PROPOSED CONDITIONS WILL CONTAIN LESS IMPERVIOUS AREA THAN THE CURRENT CONDITIONS. A MAJORITY OF THE STORM RUNOFF WATER WILL LEAVE THROUGH A SIDEWALK CULVERT AND INTO COPPER AVENUE.

WHILE THE DISCHARGE POINTS TO THE STREET DO NOT MATCH EXACTLY TO THE HISTORIC, THE WATER IS CONTAINED WITHIN THE PROJECT SITE AND THEREFORE REDUCING THE FLOWS IN THE SURROUNDING STREETS UNTIL THE SINGLE DISCHARGE POINT ENTERS COPPER AVENUE. WITH THE ALREADY APPROVED DRC PLANS THAT ADD PARALLEL PARKING AND A VALLEY GUTTER ON COPPER THE DRAINAGE CAPACITY OF THAT STREET HALF SECTION HAS BEEN INCREASED FROM THE HISTORIC AND SHOULD NOT BE AFFECTED BY THE MORE CONCENTRATED FLOWS FROM THE SITE.

VII. CONCLUSIONS

THE EXISTING SITE DID NOT CONTAIN ANY ON-SITE PONDING FACILITIES. THE PROPOSED DEVELOPMENT WILL CONTAIN LESS IMPERVIOUS AREA, AND WILL BE ALLOWED FREE DISCHARGE OF STORM RUNOFF INTO THE SURROUNDING STREETS. THE OWNER OF THE PROJECT WILL BE CREATING AN AGREEMENT TO PAY THE CITY TO ELIMINATE THE ON SITE MSSSS STORM RUNOFF REQUIREMENTS. THE PEAK RUNOFF RATE WITHOUT THE RETAINED WATER IS LESS THAN THE HISTORIC RATES. DISCHARGE POINTS FROM THE SITE ARE SLIGHTLY DIFFERENT BUT THE EXCESS RUNOFF FROM THE SITE WAS ANALYZED AT A COMMON POINT AT COPPER AND GRACELAND TO ENSURE THAT CAPACITIES OF DOWNSTREAM SYSTEMS WOULD NOT BE AFFECTED BY THE PROPOSED DEVELOPMENT. THE FLOW RATE AT THIS ANALYSIS POINT IS LESS THAN HISTORIC.

Drainage

Project: Project Numbe: Date: Bv:

Site Location

Precipitaion Zo Existing sum

Basin Name

Area (acres) %A Land treatme %B Land treatme %C Land treatme %D Land treatme Soil Treatment Area "A"

Area "B" Area "C" Area "D" Excess Runoff 100yr. 6hr.

10yr. 6hr. 2yr. 6hr. 100yr. 24hr. Peak Discharge 100 yr.

10yr. 2vr. Proposed sur

Basin Name

Area (acres) %A Land treatme %B Land treatme %C Land treatme %D Land treatme Soil Treatment

Area "A" Area "B" Area "C" Area "D" Excess Runoff (

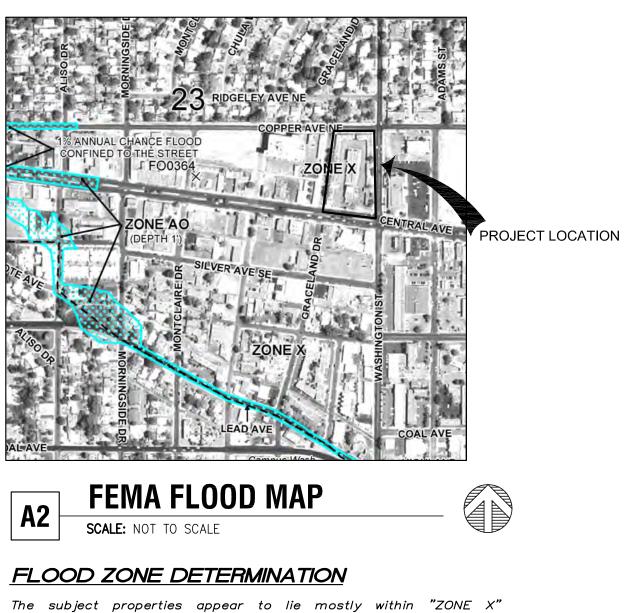
100yr. 6hr. 10yr. 6hr. 2yr. 6hr. 100yr. 24hr. Peak Discharge

100 yr.

First Flush Pondir First Flush Acre Feet



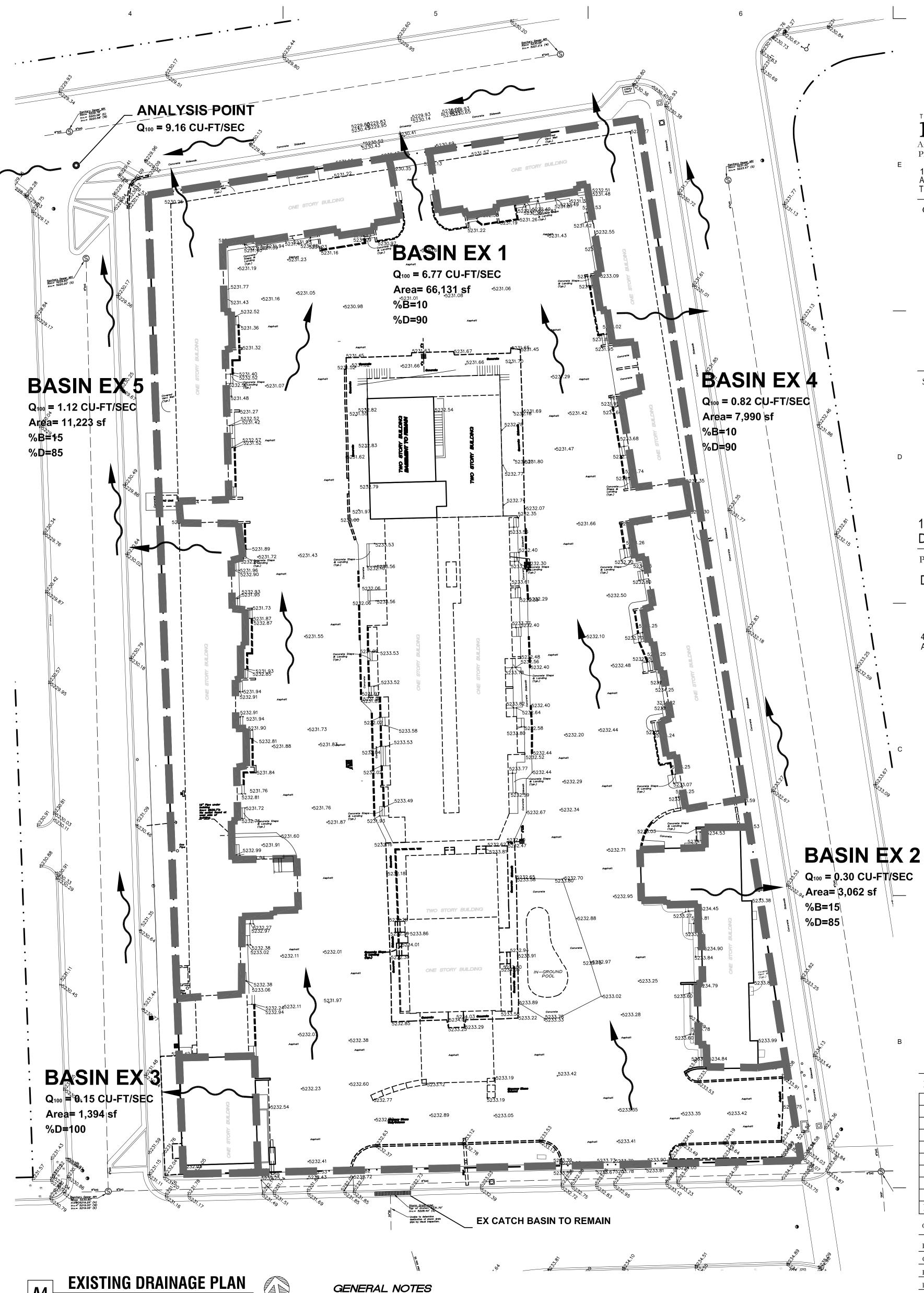




Summary			
	De Anza		
	2500		
	10/05/17		
	Dave A		

one	2 Per Table A-1 COA DPM Section 22.2				
nmary					
	Ex 1	Ex 2	Ex 3	Ex 4	Ex 5
Area (sf)	66131	3062	1394	7990	11223
	1.52	0.07	0.03	0.18	0.26
nent	0	0	0	0	0
nent	10	15	0	10	15
nent	0	0	0	0	0
ent	90	85	100	90	85
(acres)					
	0.00	0.00	0.00	0.00	0.00
	0.15	0.01	0.00	0.02	0.04
	0.00	0.00	0.00	0.00	0.00
	1.37	0.06	0.03	0.17	0.22
(acre-feet)	0.0540	0.0440	0.0057	0.0004	0.0440
	0.2513	0.0112	0.0057	0.0304	0.0412
	0.1561 0.0902	0.0069 0.0040	0.0036 0.0021	0.0189 0.0109	0.0254 0.0145
	0.2968	0.0040	0.0021	0.0359	0.0485
(F)	0.2000	0.0102	0.0001	0.0000	0.0100
e (cfs)	6 77	0.20	0.45	0.00	1 10
	6.77 4.43	0.30 0.20	0.15 0.10	0.82 0.54	1.12 0.72
	2.55	0.20	0.10	0.34	0.72
imman/					
Immary					
	Pro A	Pro B	Pro B		
Area (sf)	85344	3062	1394		
	1.96	0.070	0.032		
nent	0 15	0 15	0 0		
nent nent	0	0	0		
ent	85	85	100		
(acres)					
(acres)	0.00	0.00	0.00		
	0.29	0.00	0.00		
	0.00	0.00	0.00		
	1.67	0.06	0.03		
acre-feet)					
()	0.3133	0.0112	0.0057		
	0.1928	0.0069	0.0036		
	0.1101	0.0040	0.0021		
	0.3688	0.0132	0.0067		
e (cfs)					
. <i>.</i>	8.50	0.30	0.15		
	5.51	0.20	0.10		
	3.12	0.11	0.06		
ling Voulme (cf	1674 0				
ling Voulme (cf)	1571.8				

(areas determined to be outside 0.2 % annual chance flood plain), with "ZONE A" (No base Flood Elevations determined) shown in Copper Avenue at the northerly boundary and Central Avenue at the southerly boundary as shown on National Flood Insurance Program Flood Insurance Rate Map Number 35001C0353G, Map Revised September 26, 2008.



A4

SCALE: 1'' = 20' - 0

GENERAL NOTES

- 1. Bearings are New Mexico State Plane Grid Bearings (Central Zone - NAD83) originated at the Albuquerque Control Survey
- Monument "5-K17A". 2. Distances are ground.

hereon.

3. Distances along curved lines are arc lengths.

shown in parentheses ().

- 4. Record Plat or Deed bearings and distances, where they differ from those established by this field survey, are
- 5. All corners found in place and held were tagged with a brass disk stamped "HUGG L.S. 9750" unless otherwise indicated
- 6. All corners that were set are either a 5/8" rebar with cap stamped "HUGG L.S. 9750" or a concrete nail with brass disk stamped "HUGG L.S. 9750" unless otherwise indicated hereon.
- 7. Vertical Datum is based upon the Albuquerque Control Survey Benchmark "5–K17A", Elevation = 5222.211 (NAVD 1988)



120 Vassar Dr SE Suite 100 Albuquerque New Mexico 87106 T 505 242 6880 • F 505 242 6881 CONSULTANT

STAMP

100% CONSTRUCTION DOCUMENT SUMBITTAL PROJECT NAME DE ANZA MOTOR LODGE

4301 CENTRAL AVENUE NE

ALBUQUERQUE, NM 87108

REV	ISIONS		
NO.	DATE	DESCRIPTION	
Copyright: Design Group			
Drawn by DAA			

DAA

2500

OCTOBER 25, 2017

Checked by

Project number

DRAINAGE

PLAN

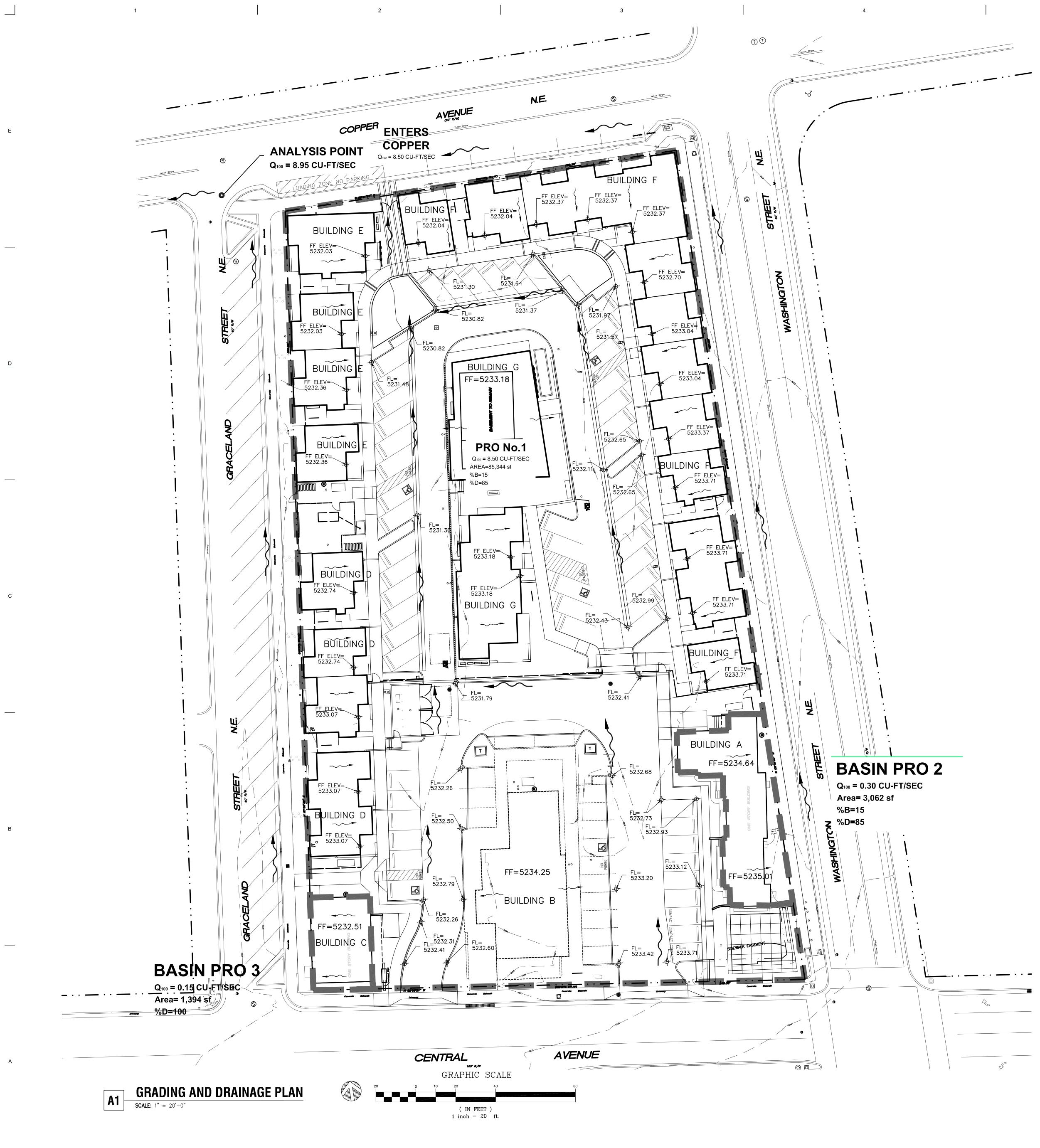
MANAGEMENT

SHEET TITLE

SHEET NUMBER

Date





2

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6

Sidewalk Culvert Calculation Q=k/n*A*R^(2/3)*S^(1/2)

Depth of Curb (ft)	0.5
Width of Culvert (ft)	2
Conversion	
Coefficient (k)=	1.486
Manning's Roughness	
Coefficient (n)=	0.013
Cross Sectional Area	
of Fluid Flow (A)=	1
Wetted Perimeter	
(P)=	3
Hydraulic Radius (R)=	0.33
Slope (S)=	0.01
Max Flow Rate (Q)=	5.50
Number of Culverts	
(#c)	3.00
Max with # of	
Culverts	16.49

6

4

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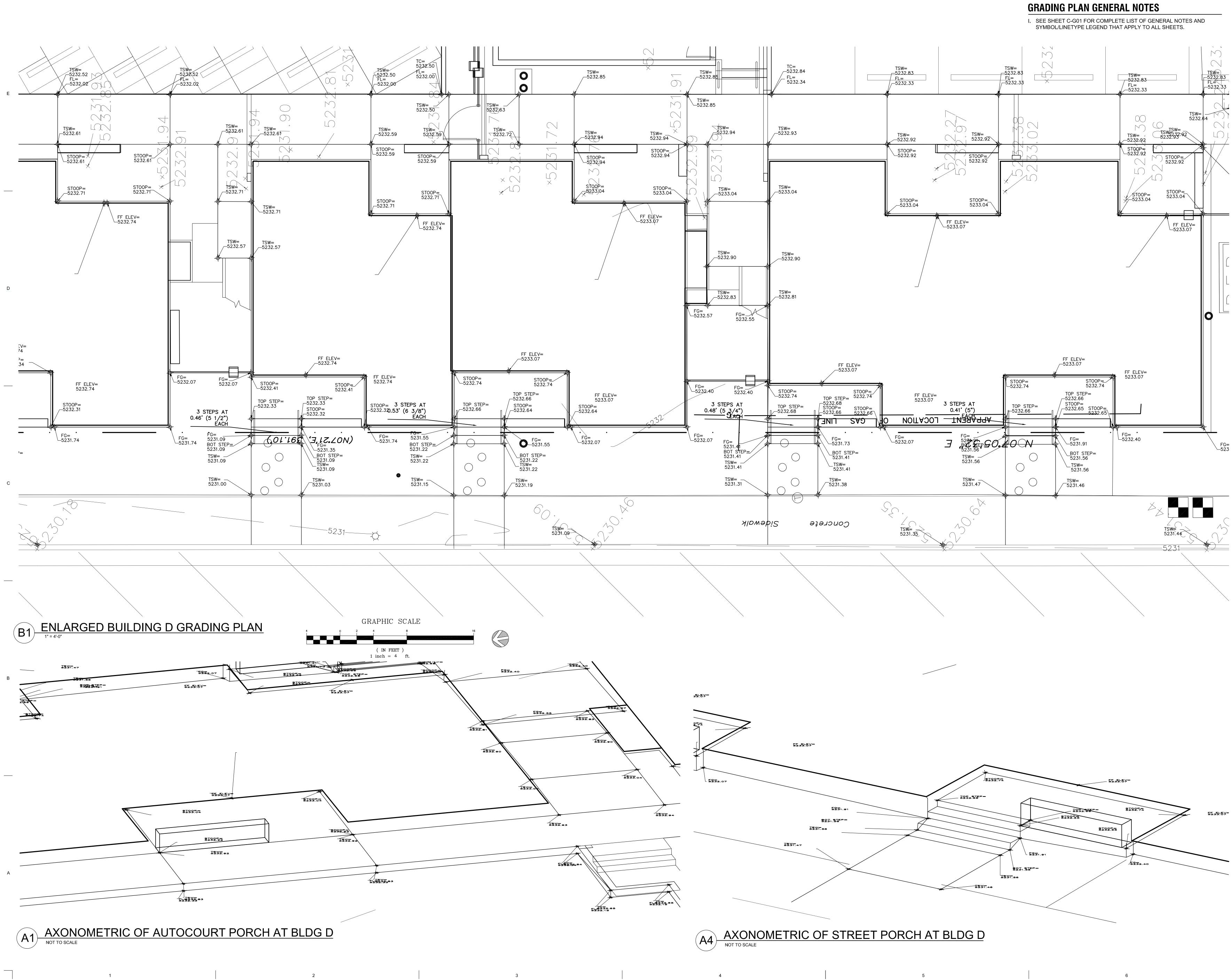
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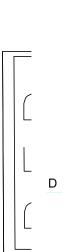
100% CONSTRUCTION DOCUMENT SUMBITTAL PROJECT NAME DE ANZA MOTOR LODGE

4301 CENTRAL AVENUE NE ALBUQUERQUE, NM 87108

REVISIONS _____ NO. DATE DESCRIPTION Copyright: Design Group Drawn by DAA Checked by DAA OCTOBER 25, 2017 Date 2500 Project number SHEET TITLE GRADING AND DRAINAGE PLAN SHEET NUMBER CD2







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Drawn	by	DAA	

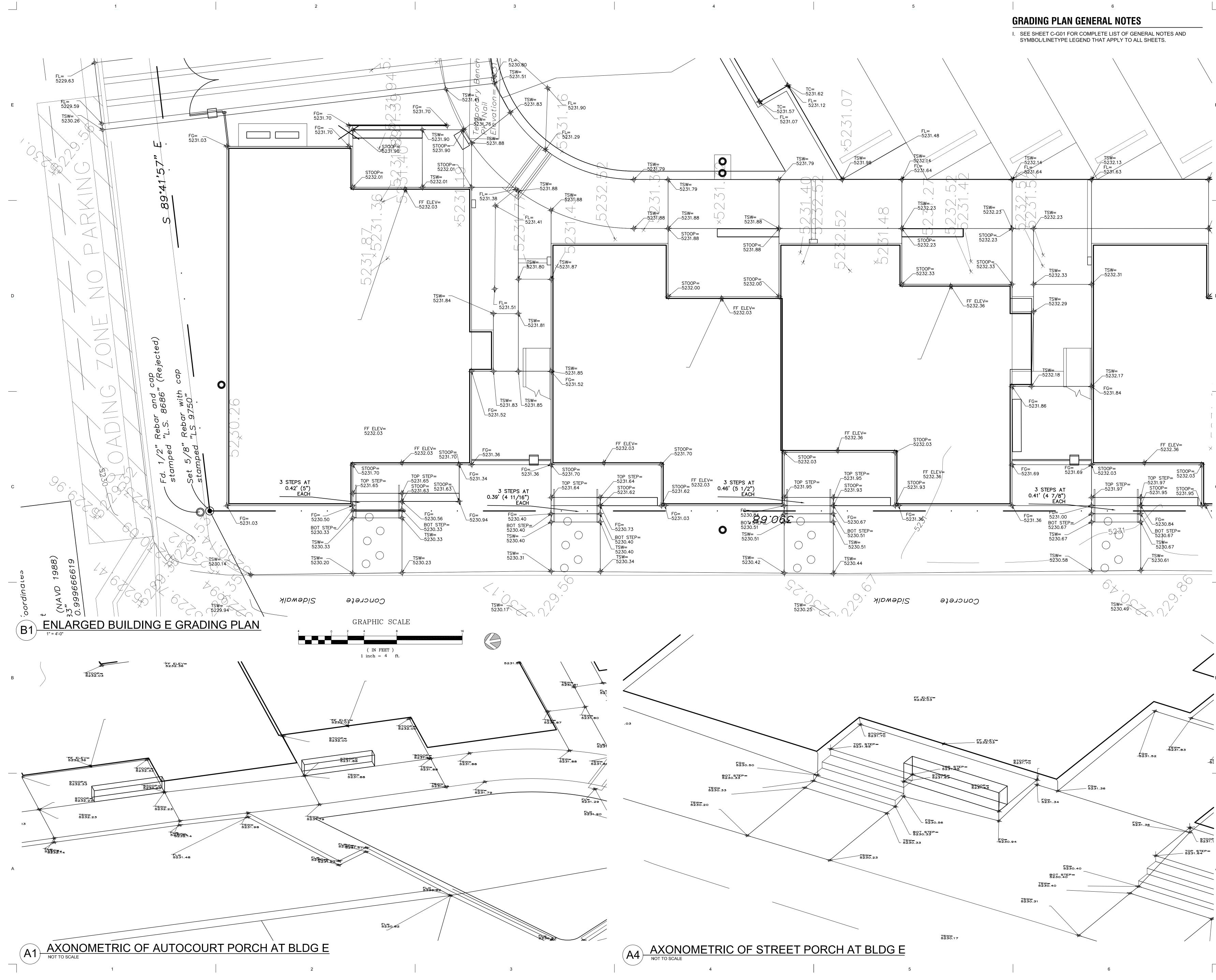
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SHEET TITLE

ENLARGED **BUILDING D** GRADING PLAN

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C-204





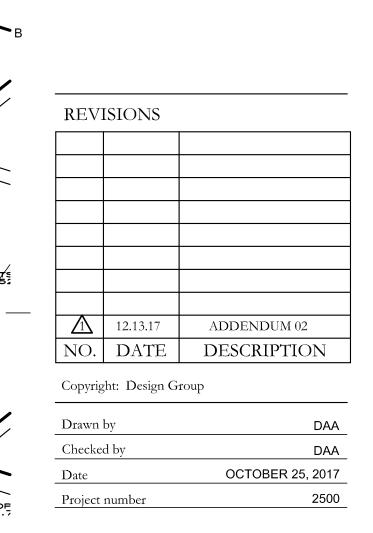
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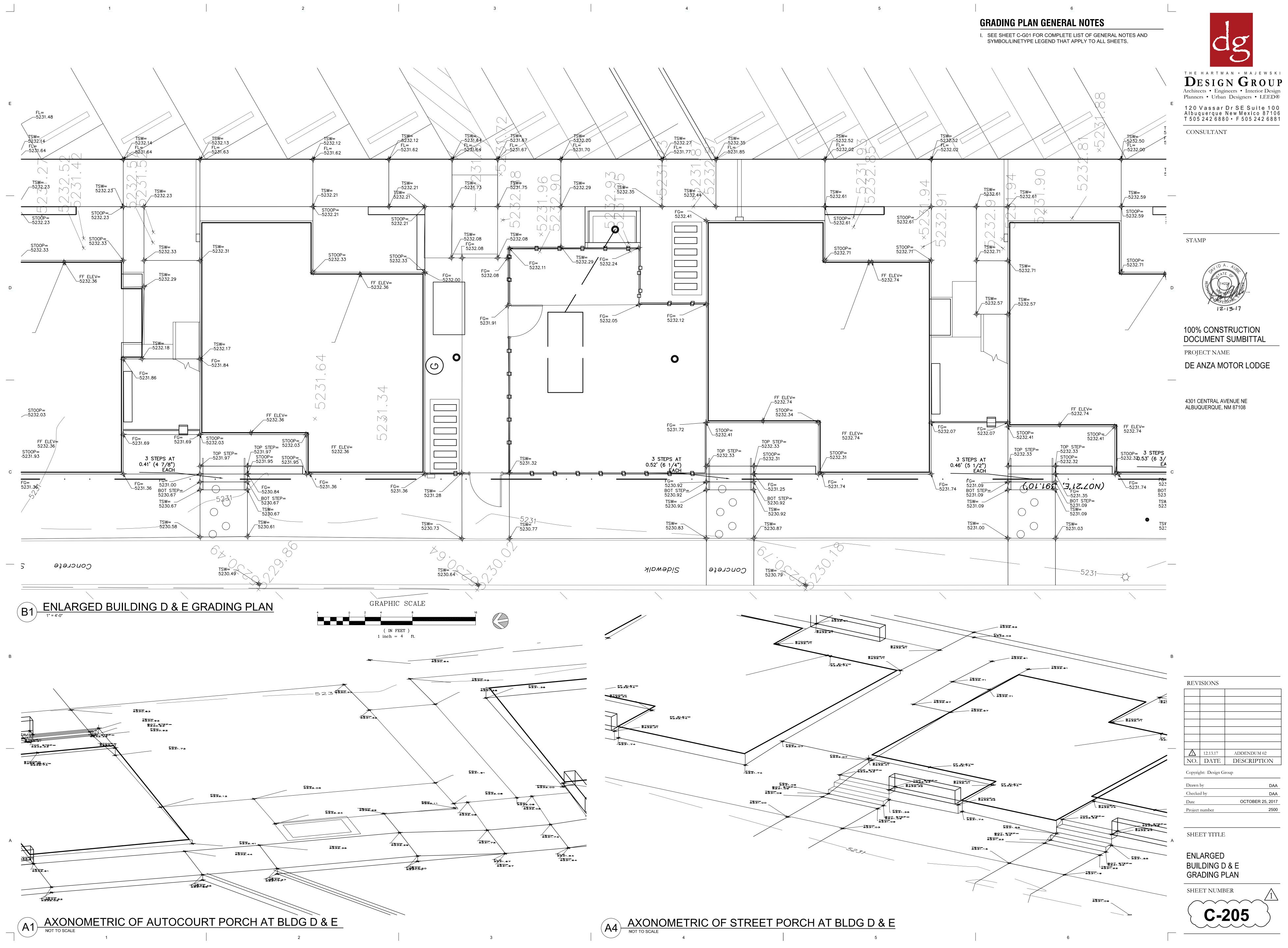
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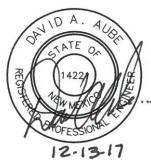
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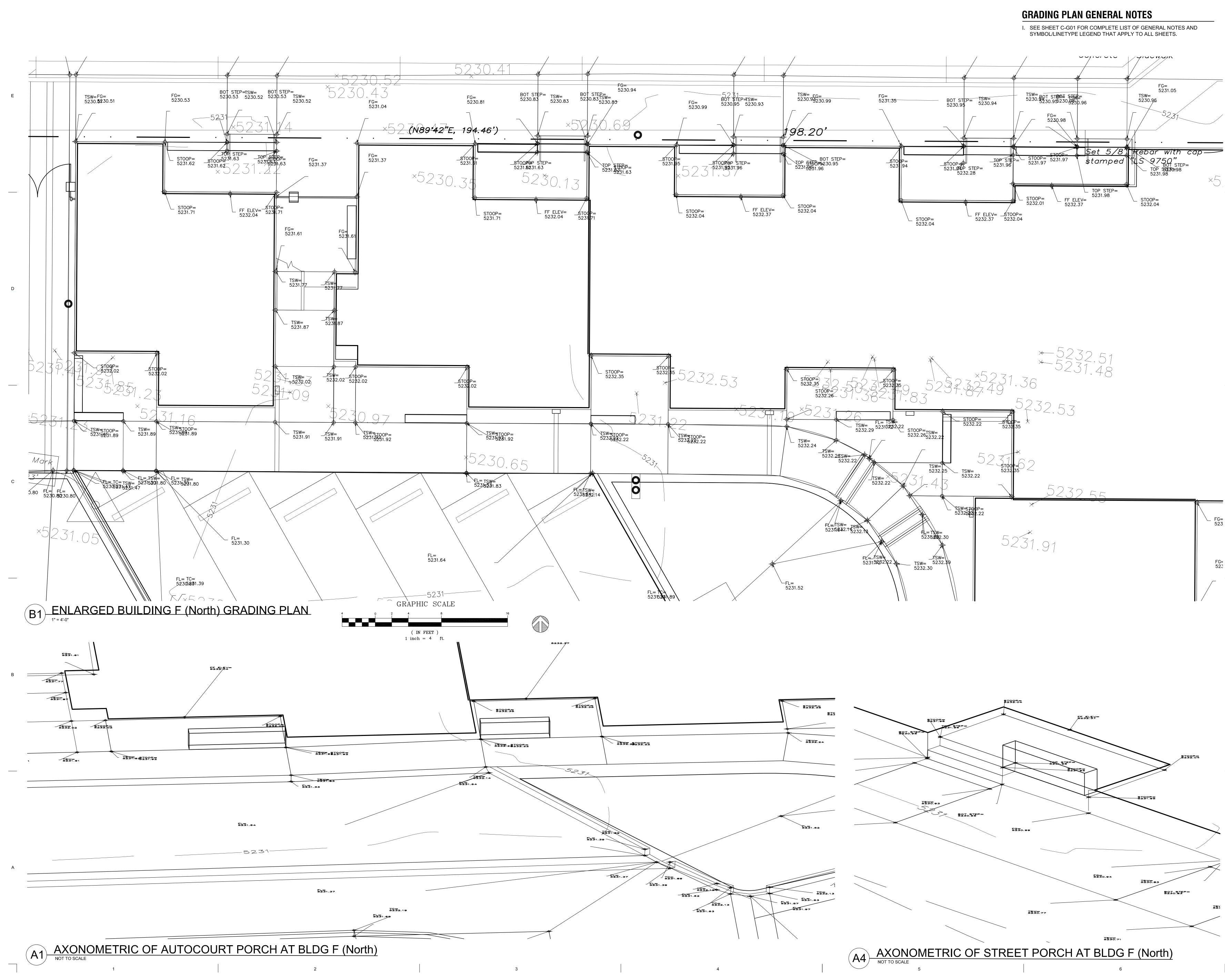
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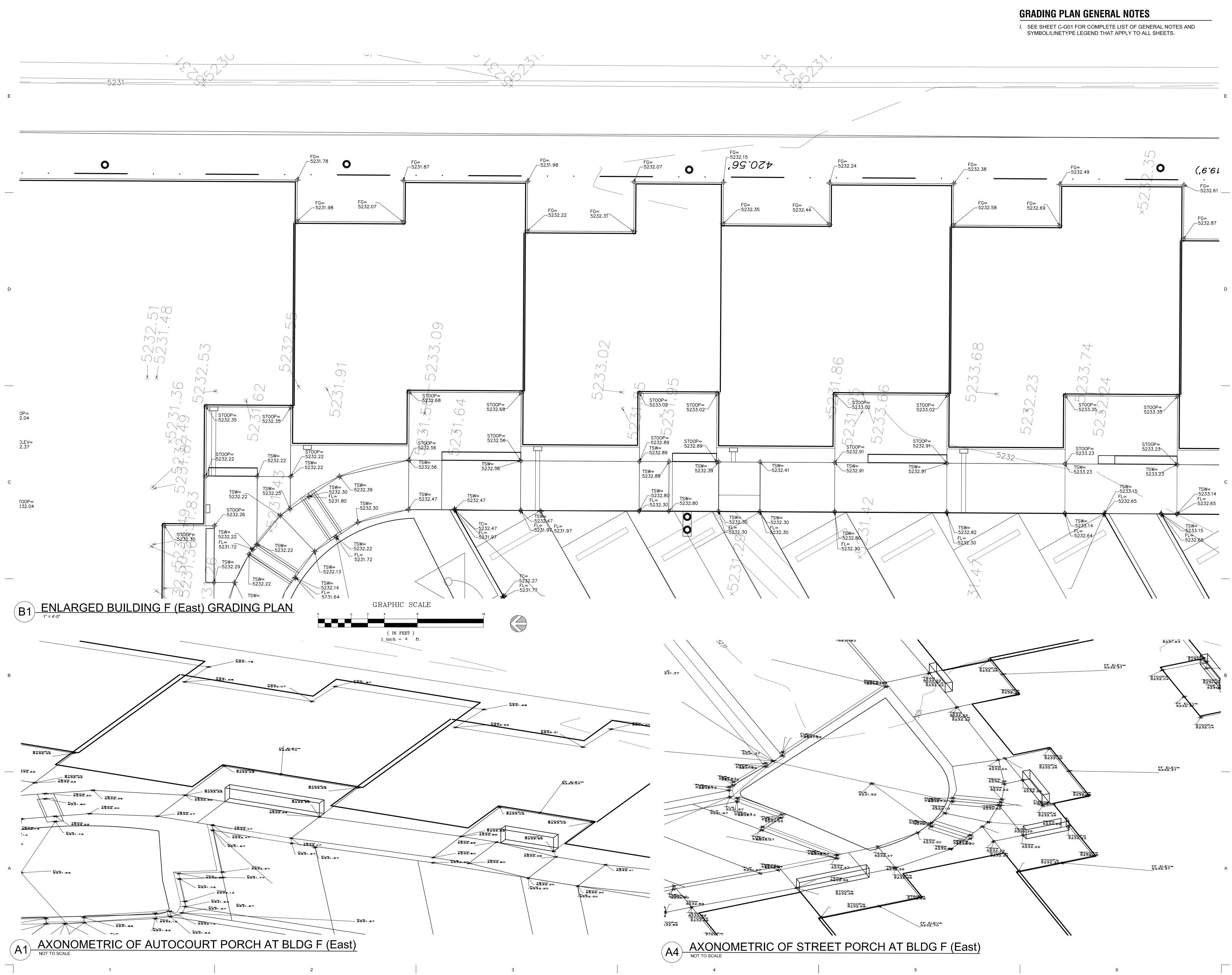
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ENLARGED BUILDING F (NORTH) GRADING PLAN

SHEET NUMBER

C-207



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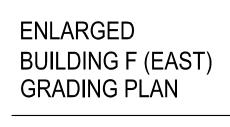
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Drawn	by	DAA		
Checke	d by	DAA		
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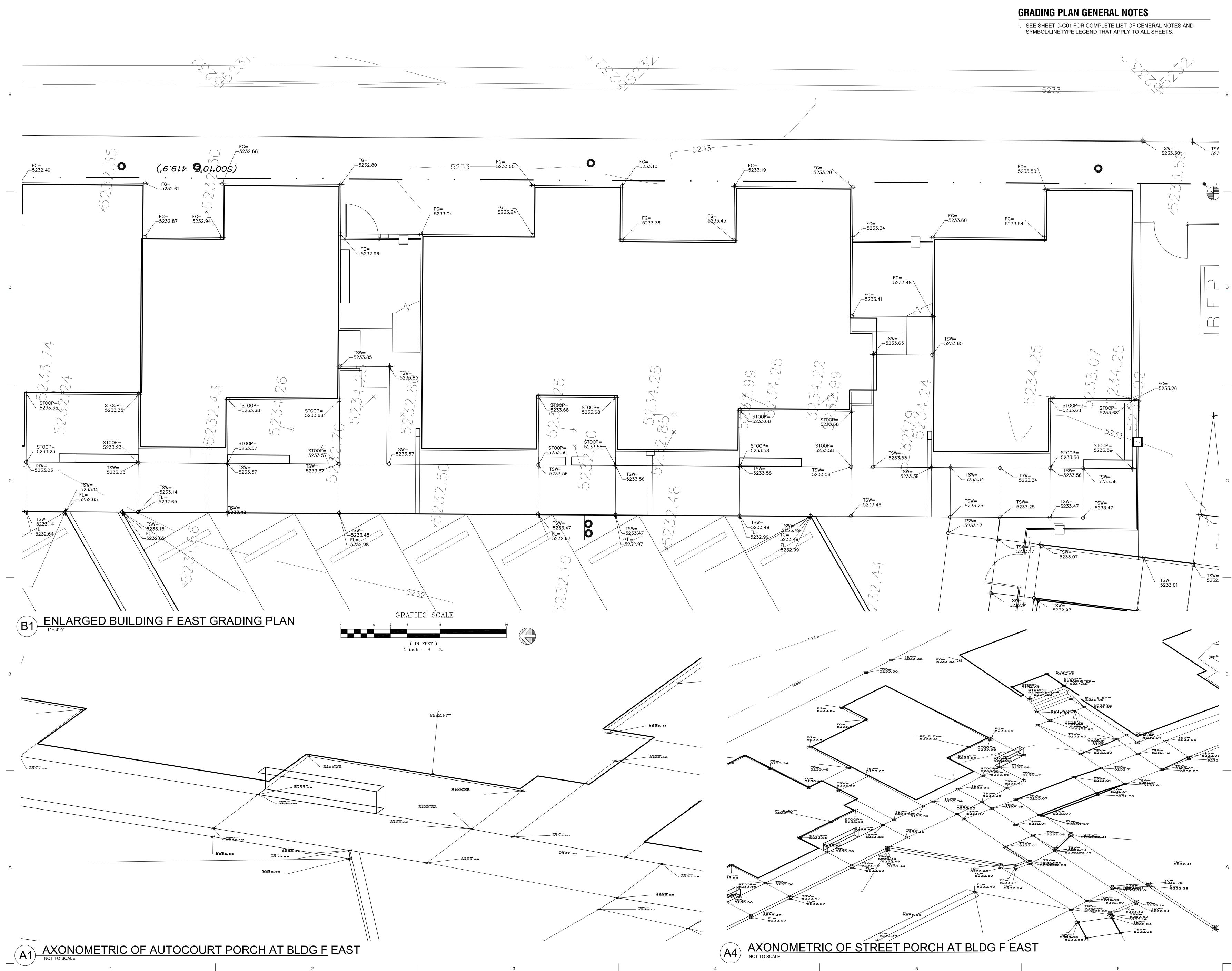
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C-208

SHEET NUMBER $\sim \sim \sim$



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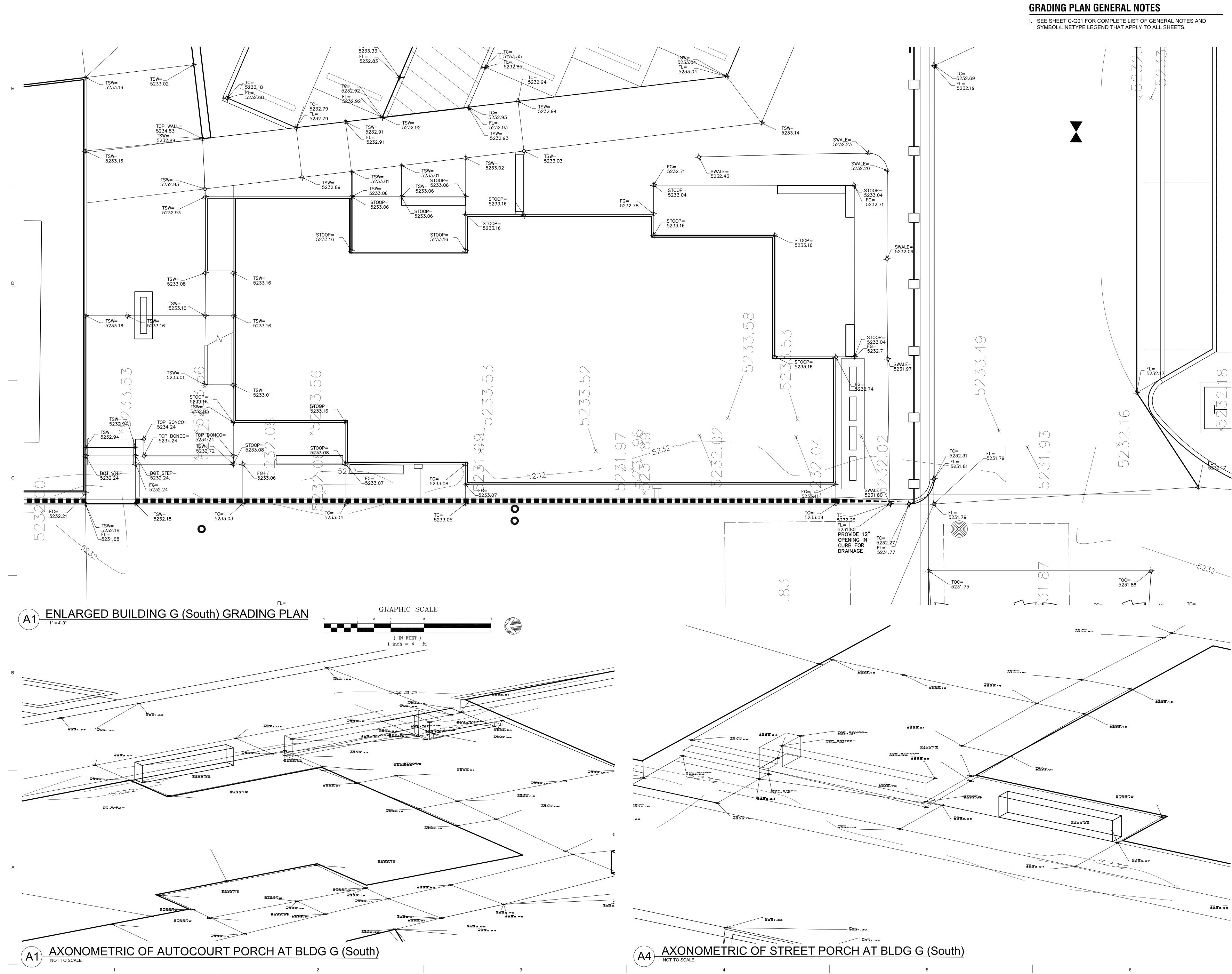
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OCTOBER 25, 2017
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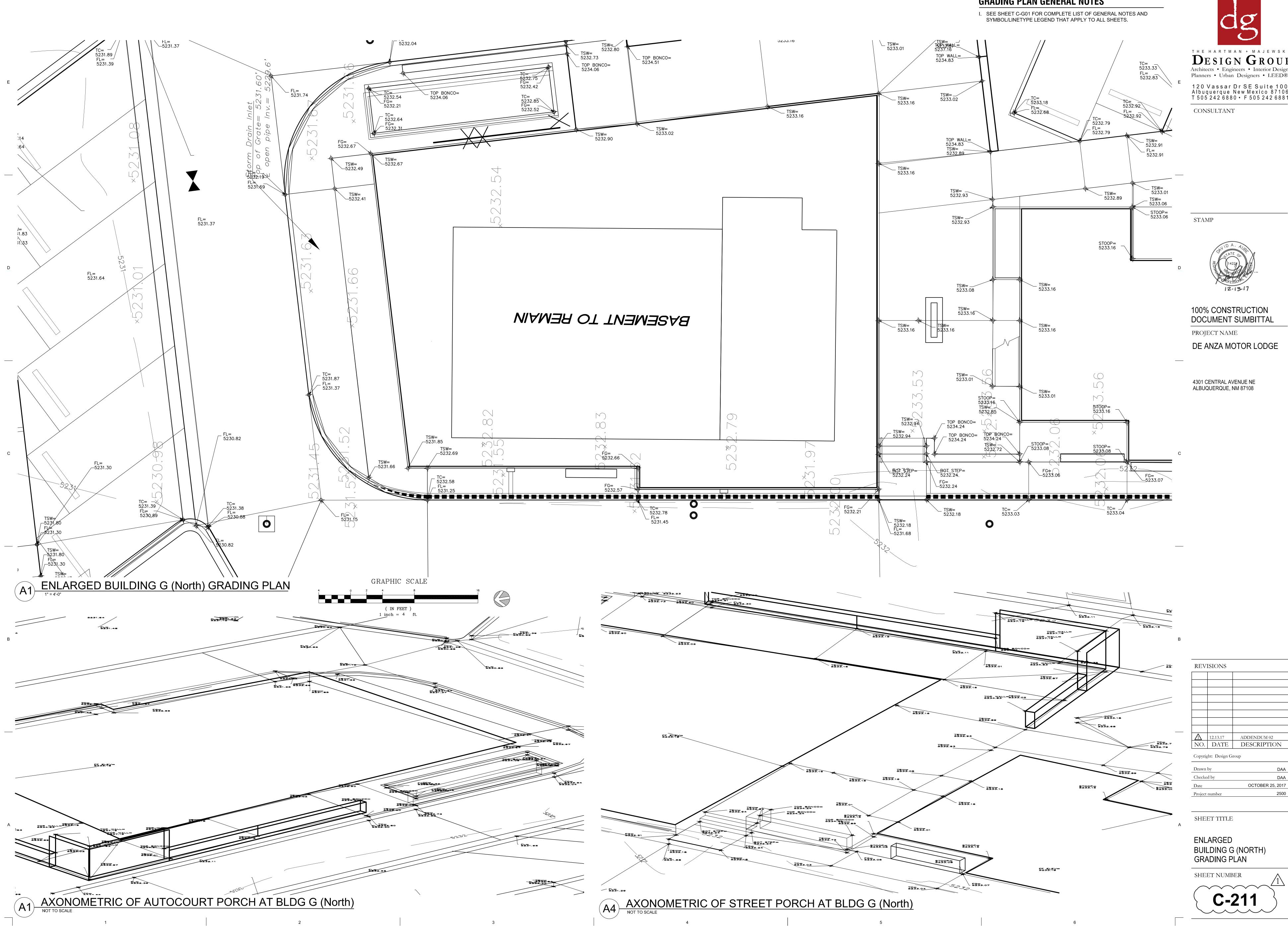
SHEET TITLE

ENLARGED BUILDING G (SOUTH) GRADING PLAN

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C-210

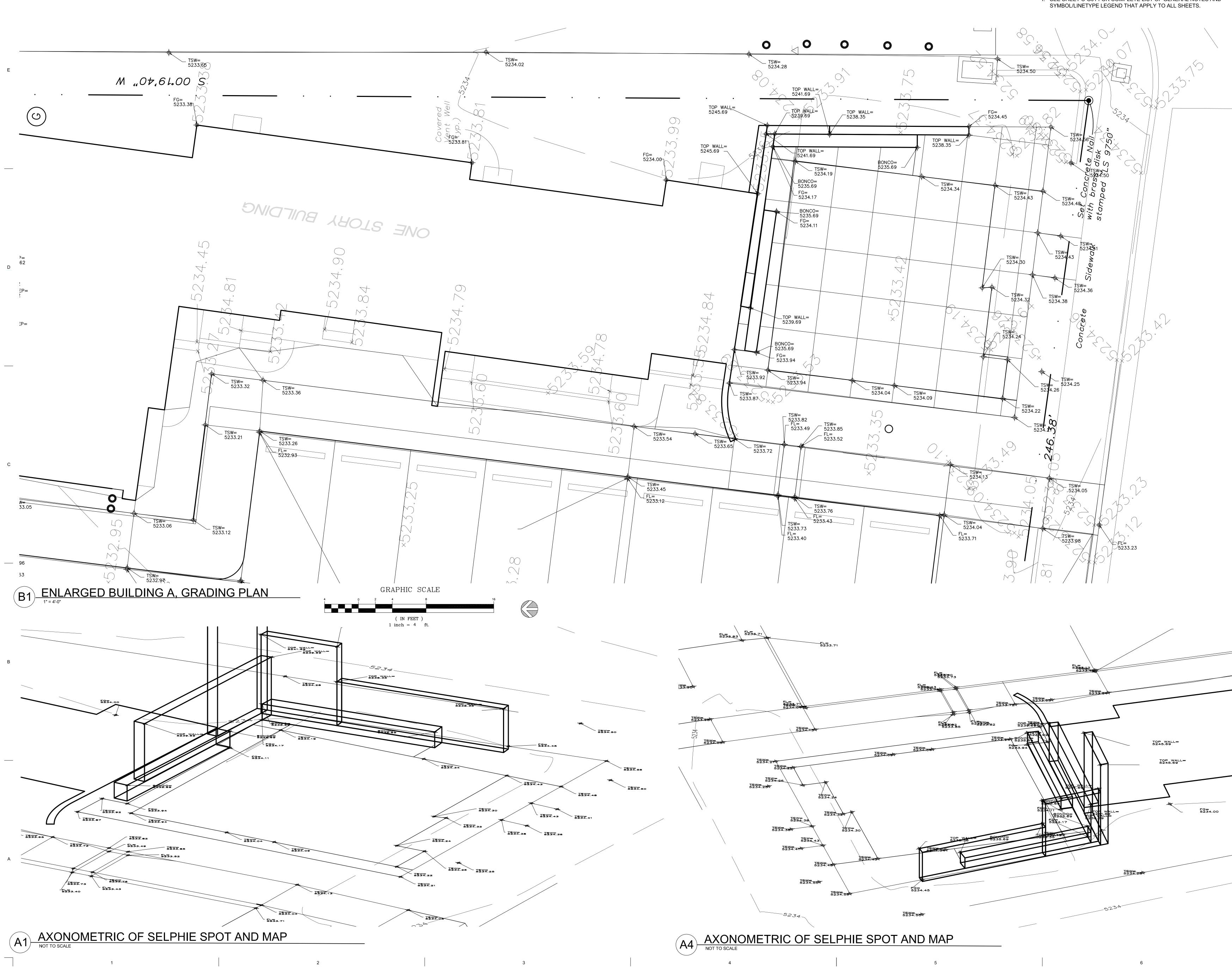
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GRADING PLAN GENERAL NOTES







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GRADING PLAN GENERAL NOTES

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I. SEE SHEET C-G01 FOR COMPLETE LIST OF GENERAL NOTES AND SYMBOL/LINETYPE LEGEND THAT APPLY TO ALL SHEETS.

6

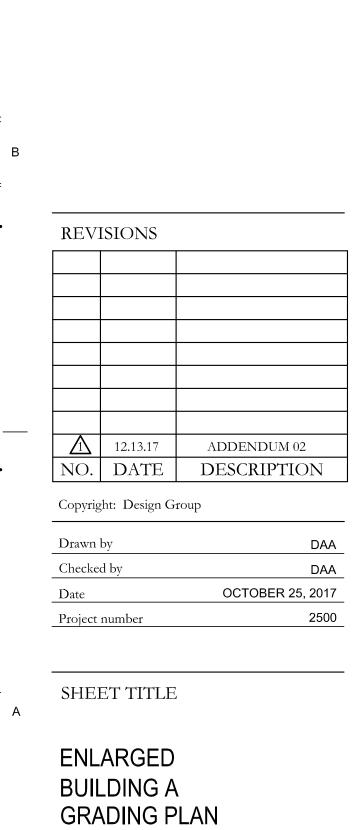


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4301 CENTRAL AVENUE NE ALBUQUERQUE, NM 87108



SHEET NUMBER

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C-212