

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 2, 2020

Joseph Casares, Jr., P.E.
JCII Group
7225 Arenoso Pl NW
Rio Rancho, NM 87120

RE: Harwood Escuela Phase I
1114 7th Street NW
Grading and Drainage Plan
Engineer's Stamp Date: 12/20/19
Hydrology File: J14D136

Dear Mr. Casares:

Based upon the information provided in your submittal received 12/19/2019, the Grading & Drainage Plan is approved for Building Permit and Grading Permit.

PO Box 1293

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

Albuquerque

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

www.cabq.gov

Also as a reminder, please provide a Drainage Covenant for the proposed underground stormwater quality facility per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

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

Sincerely,

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 11/2018)

Project Title: Harwood Escuela Phase II Building Permit #: BP-2019-48806 Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Tract A Block 38 lands of Escuela Del Sol

City Address: 1114 7th Street NW, ABO, NM

Applicant: JCLI Group, LLC Contact: Jac Casales

Address: _____

Phone#: 505-264-6918 Fax#: _____ E-mail: jcligroup@aol.com

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL: _____ PLAT (# OF LOTS) _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

DEPARTMENT: _____ TRAFFIC/TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

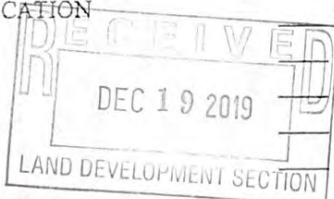
Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE MASTER PLAN
- ☒ DRAINAGE REPORT
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____



TE SUBMITTED: 12/20/19 By: [Signature]

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEES PAID:

GENERAL NOTES

1. PRIOR TO CONSTRUCTION, COORDINATE DETAILS WITH THE PROJECT ENGINEER/ARCHITECT AND OWNER.

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL 811 (505-260-1990), FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.

3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF SUSPECTED OBSTRUCTIONS INCLUDING EXISTING UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR WILL NOTIFY THE ENGINEER/OWNER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

4. ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH, OSHA 29 CFR 1926.650. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW AND COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970".

6. CONTRACTOR SHALL SCARIFY AREA UNDER CONCRETE DRIVEWAYS AND WALKWAYS TO A DEPTH OF 6" AND RECOMPACT SUBGRADE TO 95% MAX. DENSITY AS DETERMINED BY ASTM D-1557 UNLESS NOTED OTHERWISE.

7. EXERCISE CARE TO AVOID DISTURBING EXISTING UTILITIES. COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS, AND IN ORDER TO PREVENT SERVICE DISRUPTION.

8. CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO TEMPORARY FACILITIES WITHIN THE PROJECT AREA DURING CONSTRUCTION.

9. THE CONTRACTOR IS TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA.

10. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS AND ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION AS SOON AS POSSIBLE UNLESS OTHERWISE DIRECTED BY THE OWNER.

11. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH "AS-BUILT" DRAWINGS.

12. CONTRACTOR/OWNER IS RESPONSIBLE FOR GEOTECHNICAL REPORT. COORDINATE SITE IMPROVEMENTS WITH REPORT/OWNER RECOMMENDATIONS. IF ALL RECOMMENDATIONS AND CRITERIA CANNOT BE MET, CONTACT THE ENGINEERS FOR SUPPLEMENTAL RECOMMENDATIONS TO FACILITATE CONSTRUCTION.

13. WHEN BUTTING NEW CONCRETE TO EXISTING, PROVIDE A NEAT SAWCUT LINE, OR REMOVE EXISTING CONCRETE UP TO NEAREST JOINT AND PROVIDE NEW.

14. ALL LANDSCAPED AREAS SHALL BE DEPRESSED APPROXIMATELY 4" (MAX.) BELOW ADJACENT CONCRETE. ALL NEW SIDEWALKS ARE TO BE 4" ABOVE ADJACENT LANDSCAPE FINISH.

15. SITE SURVEY IS BASED FROM CITY OF ALBUQUERQUE CONTROL 12-J14 AND 12-J13. FILE WILL BE MADE AVAILABLE UPON REQUEST. TEMPORARY BENCHMARK AS SHOWN ON PLAN.

16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SWPPP THAT IS IN CONFORMANCE WITH THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE MOST CURRENT VERSION OF THE U.S. EPA CONSTRUCTION GENERAL PERMIT OR LOCAL EROSION AND SEDIMENTATION CONTROL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT. THE PLAN MUST LIST THE BEST MANAGEMENT PRACTICES (BMPs), PREVENT LOSS OF SOIL DURING CONSTRUCTION, PREVENT AND REDUCE SEDIMENT DISCHARGE, PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER, PREVENT RUNOFF AND INFILTRATION OF OTHER POLLUTANTS FROM CONSTRUCTION, AND PROTECT VEGETATION TO REMAIN (INCLUDING VSPZs).

17. A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF NEW MEXICO SHALL OVERSEE AND VERIFY ALL CONSTRUCTION MARKINGS, AND STAKING.

KEYED NOTES

A. GRADE AREA PER ELEVATION CALLOUTS SHOWN. 4H:1V MAX. SLOPE ANYWHERE ON SITE. ELEVATIONS SHOWN ARE AT TOP OF FINISHED LANDSCAPE, GRAVEL OR PAVED SURFACE.

B. CONSTRUCT GABION RETAINING WALL PER ELEVATIONS SHOWN, AND PER STRUCTURAL DETAIL.

C. INSTALL 4" THICK CONCRETE WITH WIRE MESH REINFORCING. SEE ARCHITECTURAL DETAILS FOR SCORE PATTERN AND EXPANSION/CONTRACTION JOINTS. COMPACT SUBGRADE PER GENERAL NOTE. LONGITUDINAL SLOPE SHALL NOT EXCEED 5.0%. CROSS SLOPE SHALL NOT EXCEED 1.0%. CONTROL JOINTS TO BE SAWCUT. SEE ARCHITECTURAL DETAILS FOR FINISH DETAILS.

D. CONSTRUCT 3" THICK STABILIZED CRUSHER FINES WALKWAY/BENCH AREA WITH BORDERING (COORDINATE WITH ARCHITECTURAL DETAIL). COMPACT WITH HEAVY EQUIPMENT AND ADJUST GRADE TO PLAN WITH CRUSHER FINES AS NECESSARY.

E. DEPRESS FINISHED GRADE TO PROVIDE 4" OF PONDING. VERIFY DETAILED VOLUMES WITH ENGINEER.

F. CONSTRUCT CONCRETE RAMP PER DETAIL SHOWN. COORDINATE COLOR AND PATTERNS WITH ARCHITECT AND/OR OWNER. RAMP TO SLOPE 8.3% MAX., AND LANDINGS TO SLOPE 0.52% MAX.

G. PROVIDE SITE AMENITIES PER ARCHITECTURAL DETAILS. NOT ALL SHOWN ON THIS PLAN.

H. INSTALL SIDEWALK CULVERT PER ARCHITECTURAL DETAIL. CONNECT ROOF DRAIN DOWN SPOUT TO INLET OF SIDEWALK CULVERT. SLOPE CULVERT INVERT TO DRAIN INTO STORMTECH (SEE NOTE I).

I. INSTALL UNDERGROUND DRAINAGE RETENTION SYSTEM (STORMTECH SC-310 OR EQUIVALENT, 1,000 SF). PER MANUFACTURER'S/ENGINEER'S RECOMMENDATIONS. COORDINATE WITH GENERAL NOTE 12 FOR INFILTRATION RATE, AND SOIL DRAINAGE CONDITIONS.

J. INSTALL 4" PVC DRAIN PIPE CONNECT TO ROOF DOWN SPOUT. PROVIDE PIPE OUTLET INTO NEW SIDEWALK CULVERT WALL IN ORDER TO DRAIN TO RETENTION.

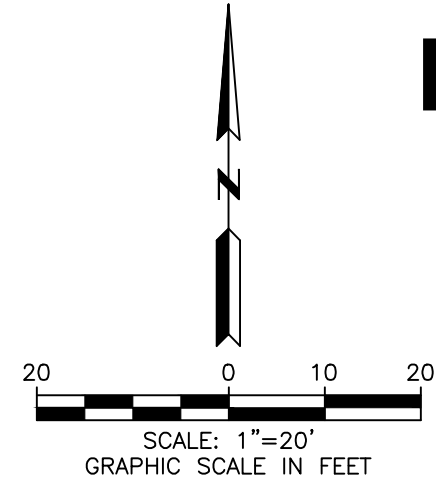
ESTIMATED QUANTITIES

645	SQ. YDS.	4" THICK REINFORCED CONCRETE SIDEWALK
335	SQ. YDS.	3" THICK STABILIZED CRUSHER FINES
205	LIN. FT.	GABION RETAINING WALL
286	CU. YDS.	RIPRAP (FOR GABION BASKET ONLY)
1,080	CU. YDS.	FILL EARTHWORK/EXCAVATION
850	CU. YDS.	CUT EARTHWORK/EXCAVATION
230	CU. YDS.	TOTAL IMPORT REQUIRED (NO SHRINK/SWELL ASSUMED)
45	LIN. FT.	SIDEWALK CULVERT
50	LIN. FT.	4" PVC DRAIN PIPE

CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES, AND ESTIMATING INCIDENTAL ITEMS AS MAY BE REQUIRED TO FACILITATE COMPLETE CONSTRUCTION OF THE PROJECT.

HARWOOD ART CENTER / ESCUELA DEL SOL PHASE A

TRACT A BLOCK 38, PLAT OF TRACT A BLOCK 38 LANDS
OF ESCUELA DEL SOL, ALBUQUERQUE, NEW MEXICO



OWNER INFORMATION

ESCUELA DEL SOL-MONTESSORI INC.
1114 7TH STREET NW
ALBUQUERQUE NM, 87102
PHONE: 505-242-6367

PROPERTY INFORMATION

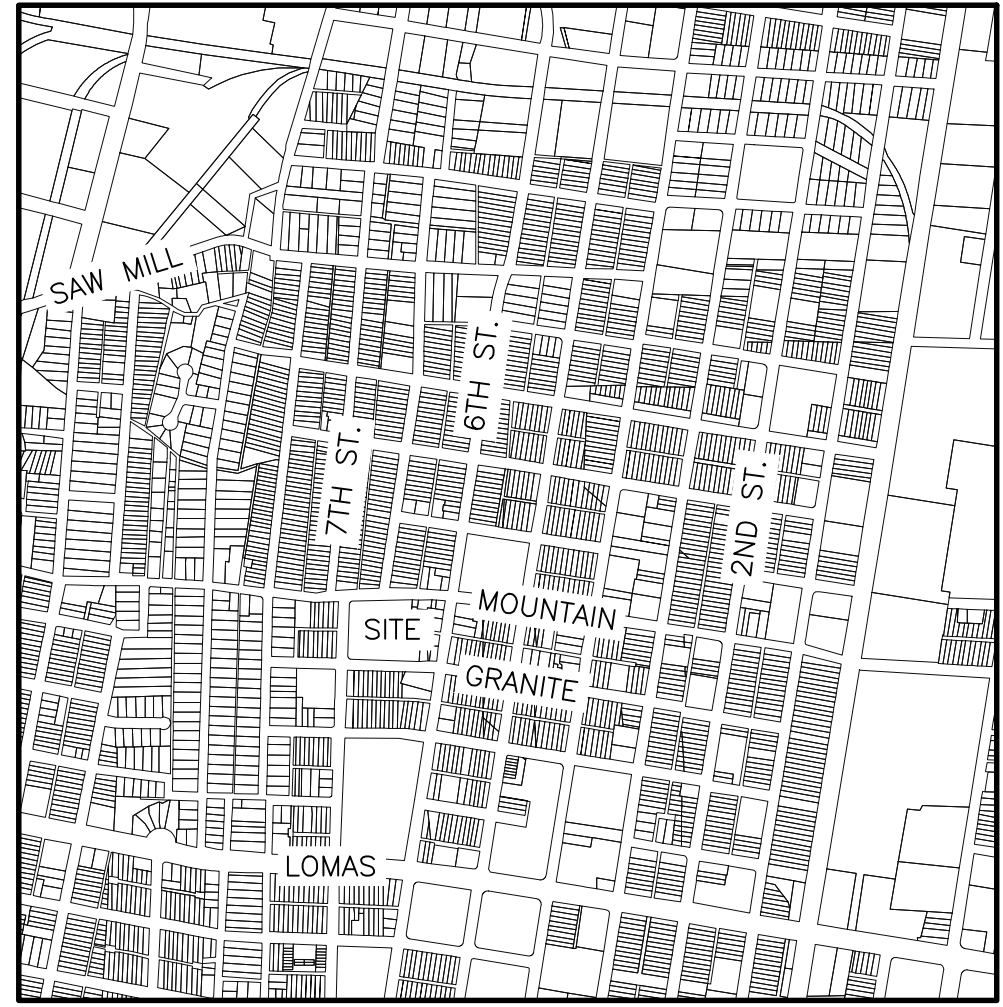
RECORDED: DEC. 29, 1892
SEC. 19, T. 10N, R. 3E, N.M.P.M.
LOT SIZE: 0.734 ACRE DEVELOPED

PROPERTY DESCRIPTION

ALL OF BLOCK NUMBERED THIRTY-EIGHT (38) OF PERFECTO ARMIJO BROTHERS ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS SHOWN AS DESIGNATED ON THE PLAT OF SAID ADDITION, FILED IN THE OFFICE OF THE RECORDER OF BERNALILLO COUNTY, NEW MEXICO ON JULY 8, 1887.

LEGEND

---	COMMUNICATION LINE
---	SEWER LINE
---	WATER LINE
---	OVERHEAD ELECTRIC
---	GAS LINE
---	CONCRETE WALL
---	CONCRETE EDGE
---	LANDSCAPE BORDER
---	PROPERTY LINE
---	STEEL FENCE
---	CHAIN LINK FENCE
---	EXISTING GRADE
---	WATER/GAS VALVE
---	POWER POLE
---	WATER METER
---	ELECTRIC METER
---	POLE LIGHT
---	F.H. FIRE HYDRANT
---	ON-SITE EX. CONCRETE
---	DOWN GUY
---	IMPERVIOUS AREA (TYPE D)
---	ABDN ABANDON UTILITY
---	BLDG BUILDING
---	BSW BACK OF SIDEWALK
---	CO CLEAN OUT
---	COMM COMMUNICATION LINE
---	EC EDGE OF CONCRETE
---	EP EDGE OF PAVEMENT
---	FL FLOWLINE
---	FNC FENCE
---	GD NATURAL GRADE
---	IRR IRRIGATION CONTROL
---	SW SIDEWALK
---	TA TOP OF ASPHALT
---	TBC TOP BACK OF CURB
---	WI WROUGHT IRON



LOCATION MAP

SCALE: 1"=1000'±
ZONE ATLAS MAP J-14-Z

DRAINAGE REPORT/ANALYSIS

PROJECT DESCRIPTION AND PURPOSE

THE PROJECT IS TO PROVIDE SITE IMPROVEMENTS TO THE WEST AREAS OF THE HARWOOD ESCUELA DEL SOL SCHOOL (ZONED SU-2). THE IMPROVEMENTS WILL INCLUDE WALKWAYS, AN AMPHITHEATER, GABION RETAINING WALLS, UNDERGROUND STORM DRAINS AND OTHER SITE AMENITIES. THE SITE IS LOCATED AT THE ADDRESS AS SHOWN ON THIS PLAN. SEE ABOVE FOR PROPERTY DESCRIPTION. THE FOLLOWING CALCULATIONS ANALYZE THE DRAINAGE FOR THE DEVELOPED CONDITIONS FOR A 100 YEAR, 24-HOUR RAINFALL EVENT. CALCULATIONS ARE IN ACCORDANCE WITH CHAPTER 22 OF THE DEVELOPMENT PROCESS MANUAL (DPM), VOLUME 1, AND COA DRAINAGE ORDINANCE.

SITE CHARACTERISTICS:

DRAINAGE AREA = 27,550 SF (WITHIN PROJECT LIMIT LINE)
LAND TREATMENT (DPM CH. 22, TABLE A-4)
PRECIPITATION ZONE = 2 (DPM CH. 22, TABLE A-1)

EXISTING

TOTAL AREA 27,550 SF = 0.633 ACRES
LAND TREATMENT
B = 80%
C = 0%
D = 20%
ANALYSIS RESULTS
Q = 1.7 CFS
V = 2,590 CF 24HR

PROPOSED

TOTAL AREA 20,010 SF = .368 ACRES (7,540 SF RETAINED)
LAND TREATMENT
B = 59%
C = 5%
D = 36%
ANALYSIS RESULTS
Q = 1.2 CFS (REDUCED)
V = 1,905 CF 24HR (REDUCED)

RETENTION DESCRIPTION AND VOLUME (V) CALCULATIONS:

THE AMPHITHEATER IS DESIGNED TO DRAIN TO AN UNDERGROUND RETENTION SYSTEM WITH ENOUGH VOLUME TO CONTAIN THE 100-YEAR 24-HOUR STORM EVENT. ACCORDING TO NOAA ATLAS 14, PRECIPITATION FOR THIS STORM IS 2.5 INCHES. THE AREA OF THE AMPHITHEATER AND ASSOCIATED AREAS IS 7,540 SF.

FURTHERMORE, THE SITE IS DESIGNED TO RETAIN THE STORM WATER QUALITY VOLUME IN ACCORDANCE WITH COA DRAINAGE ORDINANCE (90TH PERCENTILE = 0.44 INCH). THE HATCHED AREA REPRESENTS THE IMPERVIOUS AREA (TYPE D). THE INITIAL ABSTRACTION FOR IMPERVIOUS AREAS IS 0.10 INCH.

RETAINED AREA

TOTAL IMPERVIOUS AREA = 10,923 SF
 $V = [(0.44IN - 0.10IN)/12] \times 10,923 = 310 CF$

UNDERGROUND RETENTION SYSTEM

TOTAL AREA = 7,540 SF
PRECIPITATION = 0.208 FT
VOL. = (7,540 SF X 0.208 FT) = 1,569 CF
STORMTECH OR EQUIVALENT INSTALLED
PER MANUFACTURER'S SPECIFICATIONS

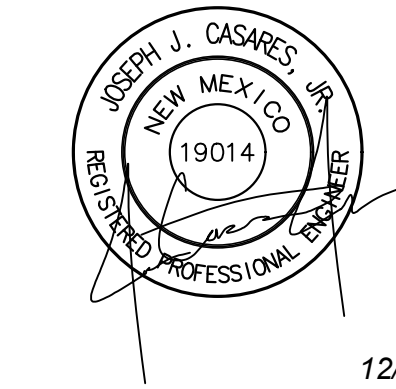
STORM WATER CONTROL MEASURES

TO MANAGE THE STORM WATER QUALITY VOLUME, LANDSCAPED AREAS WILL BE DEPRESSED APPROXIMATELY 4", AND THE SITE WILL BE GRADED TO DRAIN TO THESE AREAS AS WELL AS THE UNDERGROUND RETENTION SYSTEM.

CONCLUSION

THE PROPOSED DRAINAGE ALLOWS APPROPRIATE STORM WATER QUALITY RETENTION, AND PROVIDES UNDERGROUND RETENTION FOR UP TO A 100-YEAR, 24-HOUR STORM EVENT FOR THE AMPHITHEATER AND ASSOCIATED AREAS. ALSO, RE-DEVELOPMENT OF THIS SITE, IN ACCORDANCE WITH THIS PLAN, WILL NOT INCREASE RUN OFF ABOVE CURRENT LEVELS UP FOR THE 100-YEAR, 24-HOUR RAINFALL EVENT. EXISTING RUN-OFF DISCHARGE POINTS WILL BE MAINTAINED AT PROPERTY LINES. ON-SITE DRAINAGE FACILITIES WILL BE PRIVATELY OWNED, OPERATED AND MAINTAINED.

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12/20/2019

Project:

**HARWOOD ART CENTER /
ESCUELA DEL SOL PHASE A**
1114 7th Street NW
Albuquerque, New Mexico

Project:	2019-605	Original Date:	4-5-2019
Drawn by:		1st Revised Date:	11-11-2019
Scale:	As Shown	2nd Revised Date:	12-20-2019
Checked by:	JC	3rd Revised Date:	

Sheet:

GRADING & DRAINAGE PLAN

Number:

C101