

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Interim Director



Mayor Timothy M. Keller

February 11, 2022

Amit Pathak, P.E.  
Bohannon Huston, Inc.  
7500 Jefferson St NE  
Albuquerque, NM 87109

**RE: Highlands East Block  
1301 Central Ave NE  
Grading and Drainage Plans  
Engineer's Stamp Date: 02/11/21  
Hydrology File: K15D034C**

Dear Mr. Pathak:

PO Box 1293

Based upon the information provided in your submittal received 11/05/2021, the Grading & Drainage Plans are approved for Building Permit, Grading Permit, and Work Order. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto: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 6/2018)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ **PLAT (# of lots)** \_\_\_\_\_ **RESIDENCE** \_\_\_\_\_ **DRB SITE** \_\_\_\_\_ **ADMIN SITE** \_\_\_\_\_

**IS THIS A RESUBMITTAL?** \_\_\_\_\_ **Yes** \_\_\_\_\_ **No** \_\_\_\_\_

**DEPARTMENT** \_\_\_\_\_ **TRANSPORTATION** \_\_\_\_\_ **HYDROLOGY/DRAINAGE** \_\_\_\_\_

Check all that Apply:

### TYPE OF SUBMITTAL:

- \_\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION
- \_\_\_\_\_ PAD CERTIFICATION
- \_\_\_\_\_ CONCEPTUAL G & D PLAN
- \_\_\_\_\_ GRADING PLAN
- \_\_\_\_\_ DRAINAGE REPORT
- \_\_\_\_\_ DRAINAGE MASTER PLAN
- \_\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- \_\_\_\_\_ ELEVATION CERTIFICATE
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)
- \_\_\_\_\_ TRAFFIC IMPACT STUDY (TIS)
- \_\_\_\_\_ STREET LIGHT LAYOUT
- \_\_\_\_\_ 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) \_\_\_\_\_

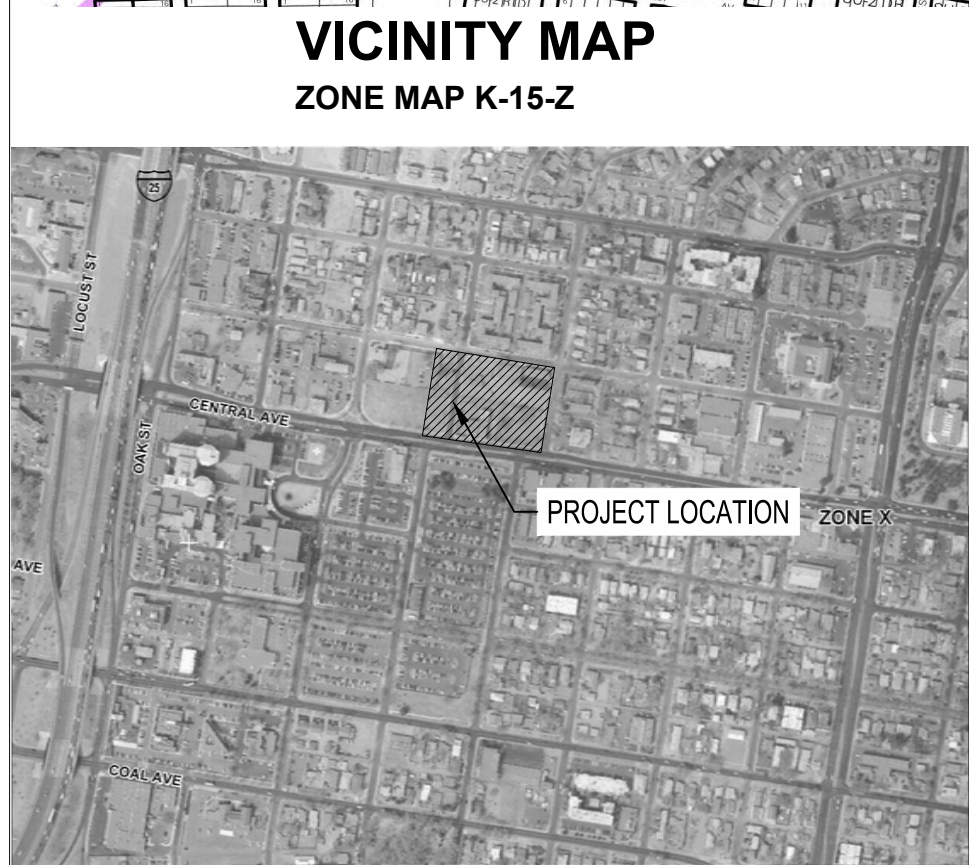
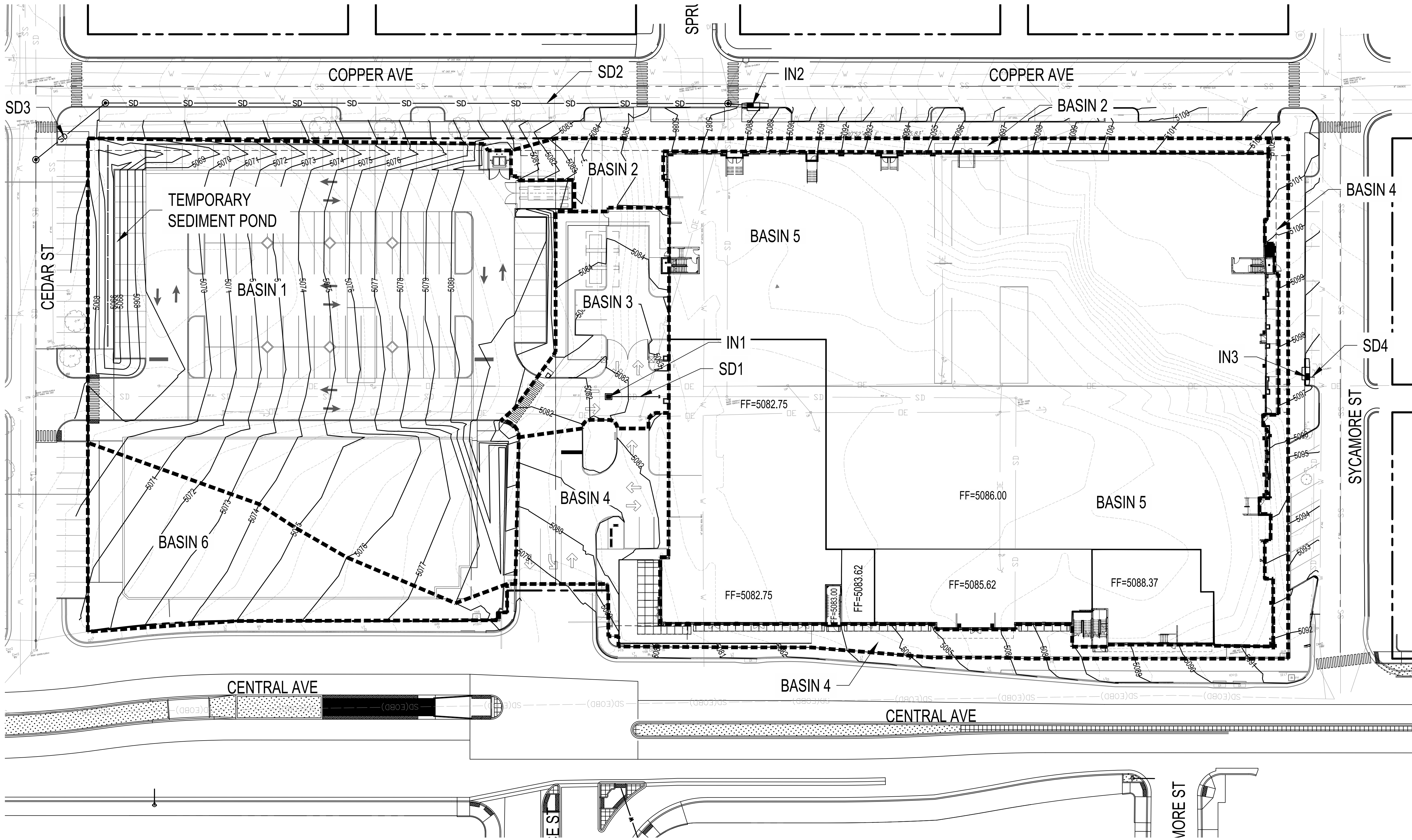
**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_





**FEMA FIRM**  
MAP #: 35001C0334G

### DRAINAGE NARRATIVE

**INTRODUCTION:**  
THIS PROJECT IS LOCATED AT THE NORTHWEST INTERSECTION CORNER OF SYCAMORE ST NE AND CENTRAL AVE NE. THE PROJECT AREA IS BOUND BY SYCAMORE ST, CENTRAL AVE, CEDAR ST, AND COPPER AVE. THE PROJECT PROPOSES TO CONSTRUCT A NEW MULTI-USE BUILDING. THE SITE IS NOT LOCATED IN A DESIGNATED FEMA FLOOD ZONE. (FEMA FIRM #5001C0334G). THE SITE IS IN REINFILL ZONE 2. THE PROJECT AREA IS 3.21 ACRES.

**METHODOLOGY:**  
THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE SUBMITTAL HAS BEEN PREPARED IN ACCORDANCE WITH THE RECENT ADOPTION OF THE NEW DEVELOPMENT PROCESS MANUAL, SPECIFICALLY CHAPTER 8 (DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL). LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ON-SITE BASIN AND ARE SUMMARIZED IN THE "BASIN DATA TABLE" (THIS SHEET). THIS SITE WAS ANALYZED FOR THE 100-YEAR, 24 HOUR STORM EVENT.

**EXISTING CONDITIONS:**  
THE PROJECT AREA HAS PREVIOUSLY BEEN DEVELOPED AND SLOPES FROM NORTHEAST TO SOUTHWEST. AN EXISTING 21" SD PIPE WHICH RUNS NORTH-SOUTH FROM COPPER ALONG THE OLD SPRUCE ST ALIGNMENT ACCEPTS FLOW FROM 3 EXISTING INLETS LOCATED AT THE INTERSECTION OF COPPER AVE & SPRUCE ST. ALSO THERE IS AN EXISTING 21" SD PIPE ALONG THE EXISTING ALLEYS OF THE PROJECT AREA THAT FLOWS WEST TO CEDAR. THESE EXISTING STORM DRAINS WILL BE IN CONFLICT WITH THE NEW BUILDING AND WILL HAVE TO BE REMOVED AND RELOCATED. THE ULTIMATE OUTFALL OF THE 21" SD PIPES IS THE EXISTING 60" SD IN CEDAR.

**PROPOSED CONDITIONS:**  
THE PROPOSED PROJECT WILL FOLLOW THE EXISTING DRAINAGE SCHEME AND OUTFALL LOCATIONS. THE FINISHED FLOOR ELEVATIONS HAVE BEEN SET TO GENERALLY ADHERE TO EXISTING ELEVATIONS AND PROMOTE POSITIVE DRAINAGE AWAY FROM BUILDINGS. A NEW 24" SD WILL BE CONSTRUCTED ALONG THE COPPER RW. THIS IMPROVEMENT WILL BE DONE AS A PART OF A PUBLIC WORK ORDER. IN ADDITION TO THE SD REALIGNMENT ALONG COPPER TWO NEW INLETS WILL BE ADDED TO COPPER AND SYCAMORE TO REPLACE THE EXISTING INLETS TO BE REMOVED. THE REPLACED INLETS WILL CONVERT THEIR RESPECTIVE BYPASS FLOWS.

**THE SITE HAS BEEN DIVIDED INTO SIX ON-SITE BASINS. BASIN 1 SURFACE DRAINS WEST AND NORTH TO A STORM WATER CONTROL BASIN THAT OUTLETS THE PUBLIC STORM DRAIN SYSTEM OF CEDAR. BASIN 1 INCLUDES LANDSCAPED AREAS, PAVED AREAS (PARKING, DRIVE AISLES, AND TRASH BIN), AND SIDEWALKS. BASIN 1 WAS ANALYZED USING LAND TREATMENTS "C" AND "D". BASIN 2 DRAINS TO THE TEMPORARY SEDIMENT BASIN AND THEN OVERFLOWS TO CEDAR TO MATCH EXISTING CONDITIONS. BASIN 2 IS SURFACE DRAINS NORTH TO THE PUBLIC STORM DRAIN SYSTEM OF COPPER. BASIN 2 INCLUDES LANDSCAPED AREAS AND SIDEWALKS AND WAS ANALYZED USING LAND TREATMENTS "C" AND "D". BASIN 3 SURFACE DRAINS TO AN INLET IN THAT CONNECTS TO THE EXISTING 21" SD THAT CONVEYS ON-SITE FLOWS WEST TO THE STORM DRAIN SYSTEM OF CEDAR. BASIN 3 INCLUDES LANDSCAPED AREAS, PAVED PARKING DRIVE LANES, AND SIDEWALKS. BASIN 3 WAS ANALYZED USING LAND TREATMENTS "C" AND "D". BASIN 4 SURFACE DRAINS TO THE PUBLIC STORM DRAIN SYSTEM OF CENTRAL. BASIN 4 INCLUDES LANDSCAPED AREAS, PAVED PARKING DRIVE LANES, AND SIDEWALKS. BASIN 4 WAS ANALYZED USING LAND TREATMENTS "C" AND "D". BASIN 5 ENCOMPASSES THE FOOT PRINT OF THE BUILDING AND ROOF AREA. THE DRAINAGE FROM THE BUILDING WILL BE HARD PIPED INTO A PROPOSED STORM DRAIN WHICH ULTIMATELY CONNECTS TO AN EXISTING 21" SD WEST OF THE BUILDING AND DISCHARGES INTO THE 60" SD IN CEDAR ST. BASIN 6 WAS ANALYZED USING LAND TREATMENT "D". BASIN 6 SURFACE DRAINS WEST AND NORTH TO THE PUBLIC STORM DRAIN SYSTEM OF CEDAR AS IT DOES IN CURRENT CONDITIONS. BASIN 6 INCLUDES LANDSCAPED AREAS AND WAS ANALYZED USING LAND TREATMENTS "C".**

**CONCLUSION:**  
THE SITE WILL REMAIN DEVELOPED, ALLOWING 100% OF THE PROPOSED FLOW TO REMAIN GENERALLY UNCHANGED FROM THE HISTORICALLY DEVELOPED FLOW. THE SURFACE DRAINAGE FROM THE PARKING WILL ENTER AN INLET WHICH ALSO CONNECTS TO THE EXISTING 21" SD WEST OF THE SITE. THE SOUTHERN ENTRANCE WILL CONTINUE TO SURFACE DRAIN HISTORICALLY INTO CENTRAL AVE. LANDSCAPED AREAS THROUGHOUT THE SITE WILL BE DEPRESSED WHERE APPLICABLE TO CAPTURE DRAINAGE IN AN ATTEMPT TO MEET THE FIRST FLUSH REQUIREMENTS. HOWEVER, ULTIMATELY THE CLIENT HAS DECIDED TO PAY CASH-IN-LIEU FOR THE FIRST FLUSH REQUIREMENTS. THE TOTAL AMOUNT OF FIRST FLUSH VOLUME REQUIRED IS 2769 CF.

### LEGEND

- PROPERTY LINE
- 5025 --- EXISTING INTERMEDIATE CONTOUR
- - - 5025 - - - EXISTING INDEX CONTOUR
- 5025 --- PROPOSED INDEX CONTOUR
- 5024 --- PROPOSED INTERMEDIATE CONTOUR
- EXISTING BASIN BOUNDARY
- PROPOSED BASIN BOUNDARY

## HIGHLANDS EAST

NEC EAST CENTRAL AVE. AND SPRUCE ST. N.E.  
ALBUQUERQUE, NEW MEXICO

Office of Rich Barber  
**ORB**  
Architecture, LLC  
WorldHQ@ORBArch.com

**TITAN**  
DEVELOPMENT



Contractor must verify all dimensions at project before proceeding with this work.

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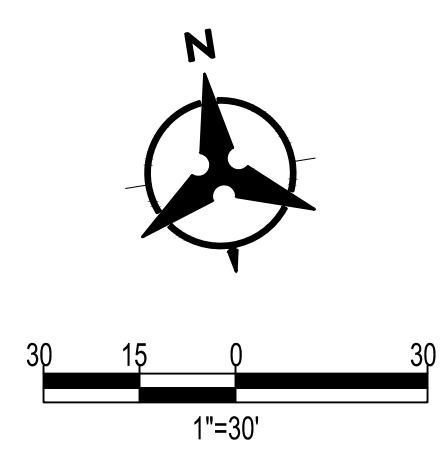
### REVISIONS/SUBMITTALS

DATE	DESCRIPTION
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CONSTRUCTION DOCUMENTS  
DATE: NOVEMBER 4TH, 2021 ORB #: 16-213

# DMP

**Bohannon & Huston**  
www.bhinc.com 800.877.5332



### 20220186 Highlands East Block

#### Basin Data Table

This table is based on page 6-10 of the DPM, Zone: 2

Basin ID	Area (SQ. FT.)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V <sub>i</sub> (100yr-24hr) (CF)	V <sub>i</sub> (100yr-10d) (CF)	SW Quality (CF)
			A	B	C	D					
EXISTING BASINS											
BASIN 1	58206	1.34	0.0%	0.0%	95.0%	5.0%	3.11	4.16	5384	5634	
BASIN 2	5709	0.13	0.0%	0.0%	95.0%	5.0%	3.11	0.41	528	553	
BASIN 3	8851	0.20	0.0%	0.0%	90.0%	10.0%	3.18	0.65	878	954	
BASIN 4	16373	0.38	0.0%	0.0%	95.0%	5.0%	3.11	1.17	1515	1585	
BASIN 5	96345	2.21	0.0%	0.0%	70.0%	30.0%	3.44	7.60	12123	14604	
BASIN 6	12844	0.29	0.0%	0.0%	90.0%	10.0%	3.18	0.94	1274	1384	
TOTAL	198328	4.55	-	-	-	-	-	14.93	8304	25237	
PROPOSED BASINS											
BASIN 1	58206	1.34	0.0%	0.0%	90.0%	10.0%	3.18	4.25	5772	6272	126
BASIN 2	5709	0.13	0.0%	0.0%	40.0%	60.0%	3.82	0.50	947	1241	74
BASIN 3	8851	0.20	0.0%	0.0%	25.0%	75.0%	4.02	0.82	1645	2215	144
BASIN 4	16373	0.38	0.0%	0.0%	5.0%	95.0%	4.28	1.61	3479	4814	337
BASIN 5	96345	2.21	0.0%	0.0%	0.0%	100.0%	4.34	9.60	21116	29385	2087
BASIN 6	12844	0.29	0.0%	0.0%	100.0%	0.0%	3.05	0.90	1102	1102	0
TOTAL	198328	4.55	-	-	-	-	-	17.67	34061	45029	2769
DIFFERENCE PROP - EXG									25757	19792	
EXISTING OFFSITE BASINS											
OS1 - COPPER	7461	0.17	0.0%	0.0%	0.0%	100.0%	4.34	0.74	1635	2276	162
OS2 - SYCAMORE	5424	0.12	0.0%	0.0%	0.0%	100.0%	4.34	0.54	1189	1654	118
TOTAL	12885	0.30	-	-	-	-	-	1.28	2824	3930	162

TEMPORARY SEDIMENT POND			
Elev (FT)	Storage Required (CF)	Storage Required (AC-FT)	Storage Provided (AC-FT)
65.6	0	0	0.00
68.60	5772	0.13	0.15

INLET TABLE				
Inlet #	Inlet Type	Basin	Actual Flow (cfs)	Capacity <sup>1</sup> (cfs)
IN1	COA SINGLE D	BASIN 3	0.82	3.98
IN-2	COA SINGLE A	OS1 - COPPER	0.74	On grade inlet <sup>2</sup>
IN-3	COA SINGLE A	OS2 - SYCAMORE	0.54	On grade inlet <sup>2</sup>

NOTE: The inlet calculations were based on the DPM PLATE 22.3 D-5 GRATING CAPACITIES FOR TYPE "A", "C" and "D"

<sup>1</sup>The capacity is calculated based on the depth for the Q<sub>100</sub> based on the assumed contributing basin area.

<sup>2</sup>On grade inlet capacity is dependant upon upstream flow and corresponding depth in street. Assuming full curb height, the capacity would be approximately 9 cfs with bypass flows.

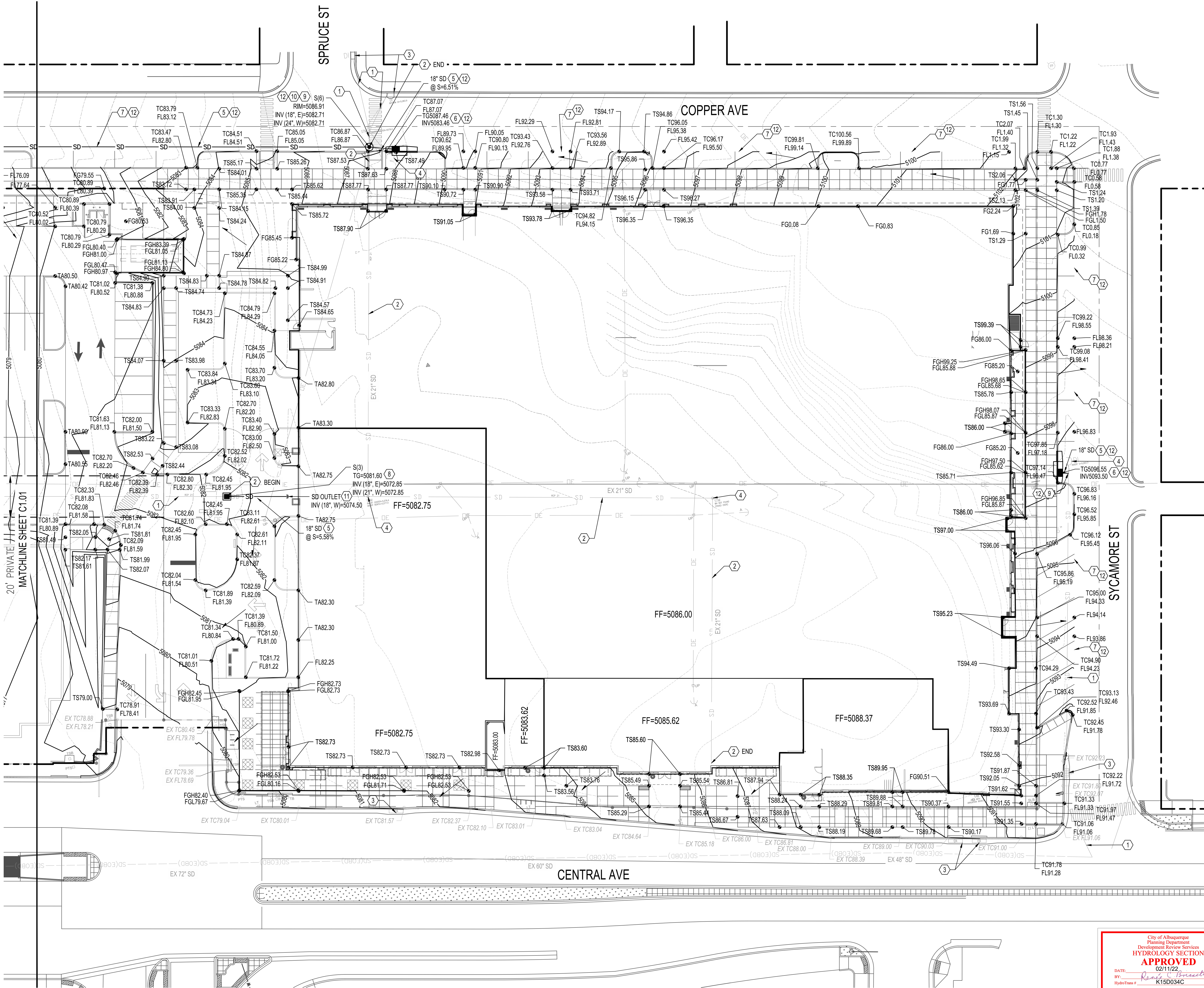
STORM DRAIN PIPE TABLE					
PIPE #	BASIN	Size in.	Slope	Capacity* cfs	ACTUAL FLOW cfs
SD1	BASIN 5	18	5.58%	24.81	9.60
SD2***	OS1 - COPPER	24	6.51%	57.72	0.74
SD3***	OS1 - COPPER	24	6.55%	57.90	0.74
SD4***	OS2 - SYCAMORE	18	6.60%	26.99	0.54

\*Capacity Based on Manning's Eq w/ N=0.013

\*\*Refer to grading plan for connection of SD3 to existing 60" SD in Cedar

\*\*\*Refer to inlet table note 2.





## GENERAL SHEET NOTES

- ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, COA PUBLIC WORKS STANDARDS SHALL APPLY.
- THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTED 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.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL 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.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 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.
- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADES, TOSOL, DISTURBANCE, EXCAVATION PERMITS, DRIVEWAY PERMITS, ETC.).
- ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE TRAFFIC ENGINEERING DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADES AT THE END AND BEGINNING OF EACH DAY.
- THE PROJECT MUST CONFORM WITH THE EROSION AND SEDIMENT REQUIREMENTS OF THE 2003 EPA CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS & CODES WHICHEVER IS MORE STRINGENT.

## GRADING SHEET NOTES

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION" AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE COA STANDARDS SPECIFICATIONS FOR PUBLIC WORKS.
- EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK/DISTURBANCE OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
- A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE BACKFILL PER MANUFACTURER'S SPECIFICATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- PAVING AND ROADWAY GRADES SHALL BE  $\pm 0.1'$  FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE  $\pm 0.05'$  FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIAN AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
- SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.
- HOPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

## GRADING KEYNOTES

- EXISTING STORM DRAIN TO REMAIN.
- EXISTING STORM DRAIN TO BE REMOVED.
- EXISTING STORM DRAIN INLET TO REMAIN.
- EXISTING PUBLIC STORM DRAIN INLET TO BE REMOVED.
- PROPOSED PUBLIC STORM DRAIN (SIZE PER PLAN).
- PROPOSED PUBLIC TYPE "A" STORM DRAIN INLET (SIZE PER PLAN).
- INSTALL VALLEY GUTTER.
- PROPOSED TYPE "D" STORM DRAIN INLET (SIZE PER PLAN).
- CONNECT TO EXISTING STORM DRAIN (SIZE PER PLAN).
- PROPOSED PUBLIC STORM DRAIN MANHOLE PER COA STD 2102.
- CONNECT TO BUILDING STORM DRAIN SYSTEM. CONTRACTOR TO INSTALL PRE-FABRICATED FITTING FOR DISSIMILAR MATERIALS AT CONNECTION. SEE MEP PLANS FOR CONTINUATION.
- TO BE CONSTRUCTED AS PART OF PUBLIC WORK ORDER NUMBER 764784.
- INSTALL ASPHALT PAVEMENT PER DETAIL B, SHEET C3.01.
- EDGE OF ASPHALT PAVEMENT.

## GRADING LEGEND

PROPERTY LINE	PROPOSED CURB & OUTER
PROJECT LIMITS OF GRADING	DIRECTION OF FLOW
EXISTING INDEX CONTOUR	WATER BLOCK/GRADE BREAK
EXISTING INTERMEDIATE CONTOUR	PROPOSED STORM DRAIN LINE
EXISTING GROUND SPOT ELEVATION	PROPOSED STORM DRAIN MANHOLE
PROPOSED INDEX CONTOUR	PROPOSED STORM DRAIN INLETS
PROPOSED INTERMEDIATE CONTOUR	PROPOSED RETAINING WALL
PROPOSED FINISHED GRADE SPOT ELEVATION	EASEMENT
TO=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRADE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW	EXISTING BASIN BOUNDARY
	PROPOSED BASIN BOUNDARY

# HIGHLANDS EAST

NEC EAST CENTRAL AVE. AND SPRUCE ST. N.E.  
ALBUQUERQUE, NEW MEXICO

Office of Rich Barber  
**ORB**  
Architecture, LLC  
WorldHQ@ORBArch.com

**TITAN**  
DEVELOPMENT



Contractor must verify all dimensions at project before proceeding with this work.

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## REVISIONS/SUBMITTALS

DATE DESCRIPTION

## CONSTRUCTION DOCUMENTS

DATE: NOVEMBER 4TH, 2021 ORB #: 16.213

**C1.00**  
GRADING PLAN  
EAST

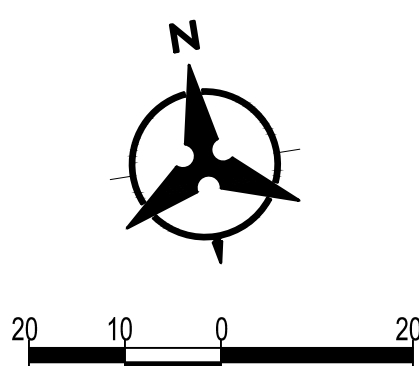
**NOTE:**  
HOPE PIPE AND FITTINGS SHALL BE INSTALLED AN DBACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

**NOTE:**  
SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.

**NOTE:**  
CONTRACTOR SHALL PROVIDE AS-BUILT GRADING INFORMATION STAMPED BY A PROFESSIONAL SURVEYOR. AS-BUILT INFORMATION REQUIRED SHALL BE COORDINATED WITH THE ENGINEER AND SHALL BE SUFFICIENTLY DETAILED TO VERIFY THAT THE DRAINAGE WILL FUNCTION IN ACCORDANCE WITH THE DESIGN. AS-BUILT DATA SHALL BE PROVIDED AT LEAST 5 WORKING DAYS PRIOR TO CONTRACTOR'S REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY. AT A MINIMUM, AS-BUILT DATA SHALL INCLUDE:  
- ALL GRATES AND INVERTS OF CATCH BASINS  
- APPROXIMATELY 75% OF ALL DESIGN SPOT ELEVATIONS & FINISHED FLOOR ELEVATIONS.

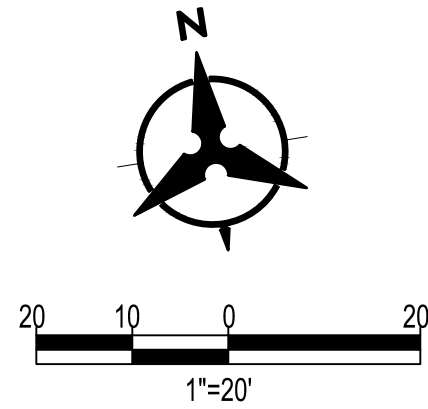
**NOTE:** NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW AND PUBLIC EASEMENTS WITHOUT AN APPROVED PUBLIC WORK ORDER.

**NOTE:** ALL WORK SHOWN IN THE R/W AND PUBLIC EASEMENTS SHALL BE CONSTRUCTED PER COA PUBLIC WORK ORDER CPN #764784. GRADES SHOWN WITHIN THE R/W AND PUBLIC EASEMENTS ARE FOR REFERENCE ONLY. IF PROPOSED GRADES IN R/W DIFFER FROM ON-SITE GRADES SHOWN, CONTACT ENGINEER IMMEDIATELY.



**Bohannon & Huston**  
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## GRADING PLAN WEST