

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 29, 2018

Mike Balaskovits, PE
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

**RE: Broadstone Highlands North Block
Cedar and Copper NE
Revised Grading and Drainage Plan
Engineer's Stamp Date: 6/20/18
Hydrology File: K15D034A**

Dear Mr. Balaskovits:

PO Box 1293

Based on submittal received on 6/20/18 the revised Grading and Drainage Plan is approved for Site Plan Building Permit, Grading, Foundation, and Building Permit.

Albuquerque

Prior Certificate of Occupancy (For Information):

NM 87103

www.cabq.gov

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
2. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.
3. The Drainage Certification will need to include all top of Retaining Wall Elevations.
4. Include a copy of the Bernalillo County Recorded Revocable Permit.
5. For Information. Hydrology and Transportation files are available online through the City's [GIS Viewer 2.0](#). Turn on the *Hydrology Polys* layer: *Operational Layers > Sites > Hydrology Polys*. Select the desired Hydrology Poly from the map and click *Link to Project Documents*.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana M. Peterson
Senior Engineer, Planning Dept.
Development Review Services

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335
www.bhinc.com
voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

CLIENT/COURIER TRANSMITTAL

To: James D. Hughes
City of Albuquerque
600 2nd St. NW
Albuquerque, NM 87102

Requested by: Michael Balaskovits

Date: June 20, 2018

Time Due: ☐ This A.M.
☒ This P.M.
☐ Rush
☐ By Tomorrow

Phone: (505) 924-3880

DELIVERY VIA

☒ Courier ☐ Federal Express
☐ Mail ☐ UPS
☐ Other

PICK UP

Item: _____

Job No.: 20160154

Job Name: Broadstone Highlands North
Block

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	1	Drainage Info Sheet
2	1	Drainage Management Plan
3	1	Grading Plan
4	1	Previous Approval Letters
5	1	Receipt of Payment in Lieu

COMMENTS / INSTRUCTIONS

James,

Please find attached the Drainage Management Plan for Broadstone Highlands North Block. We are requesting Hydrology approval in support of Site Plan for Building Permit Approval, Building Permit Approval, & Work Order Approval. Let me know if you have any questions.

Thanks,
Mike

REC'D BY: _____ DATE: _____ TIME: _____



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 3/2018)

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:** _____

Check all that Apply:

IS THIS A RESUBMITTAL?: ____ Yes ____ No

DEPARTMENT:

- ____ HYDROLOGY/ DRAINAGE
____ TRAFFIC/ TRANSPORTATION

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) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CITY OF ALBUQUERQUE



December 1, 2017

Mike Balaskovits, PE
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

**RE: Broadstone Highlands North Block
Grading and Drainage Plan
Engineer's Stamp Date: 11/10/17
Hydrology File: K15D034A**

Dear Mr. Balaskovits:

Based on the information provided in the submittal received on 11/13/17 the above-referenced Grading and Drainage Plan is approved Grading, Foundation, and Building Permit.

PO Box 1293 Prior to requesting Hydrology approval for Certificate of Occupancy the following will be required:

- Albuquerque
1. City acceptance and close-out of the public Work Order.
 2. The Drainage Certification will need to include all top of Retaining Wall Elevations.
 3. Include a copy of the Bernalillo County Recorded Revocable Permit.
- NM 87103

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

www.cabq.gov

Sincerely,

Dana M. Peterson
Senior Engineer, Planning Dept.
Development Review Services



September 13, 2017

Mike Balaskovits
Bohannon Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

RE: **Broadstone Highlands North Block**
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 8/31/17
Hydrology File: K15D034A

Dear Mr. Balaskovits:

Based on the information provided in the submittal received on 9/1/17 the above-referenced Conceptual Grading and Drainage Plan (not for construction) can be approved for Site Plan for Building Permit with the following conditions:

1. Any changes to the site plan will require the SPBP plans to be resubmitted to DRB for re-approval.
2. Prior to any site work, a For-Construction Grading and Drainage plan must be approved by Hydrology for Grading, Foundation, or Building Permit.

Prior to issuing Grading, Foundation, or Building Permit the following conditions must be met:

1. Provide multiple section views of the retaining walls along Tijeras, Cedar, and Copper to ensure that adjacent properties and ROW are not damaged or constrained in their use by these walls (per DPM Ch.22.5.B). These sections views should show the following:
 - a. Wall and footer, including dimensions and retained height.
 - b. ROW and easements.
 - c. Underground utilities and their trenching prisms.
 - d. Existing structures, such as sidewalk, curb and gutter, and roadway.
 - e. Temporary slope during construction.
2. Depending on the above potential conflicts, the following will be required:
 - a. Any private encroachment into the public ROW by the footer, retaining wall or any structure will require a revocable permit.



- b. Any private encroachment into public easements by the footer, retaining wall or any structure will require an encroachment agreement.
3. Provide size/type information for all ROW drainage improvements.
4. For the drop inlet replacement at the northwest corner, the 12" storm drain line will need to be replaced to the manhole with an 18" storm drain line, similar to what's being done at the southwest corner inlet.
5. Construction plans for work in the public ROW will be to be submitted to DRC for review.
6. Include note on grading plan: "No construction permitted in the public ROW without an approved Work Order."
7. Payment of the Fee in Lieu (Amount = 2,662CF x \$8/CF) for the required first flush volume must be made.

PO Box 1293

Prior to requesting Hydrology approval for Certificate of Occupancy the following will be required:

Albuquerque

1. City acceptance and close-out of the public Work Order.

If you have any questions, please contact me at 924-3986 or jhughes@cabq.gov.

NM 87103

Sincerely,

James D. Hughes
Principal Engineer, Planning Dept.
Development Review Services

www.cabq.gov



TREASURY DIVISION DAILY DEPOSIT

Transmittals for:
PROJECTS OnlyCity of Albuquerque Treasury
J-24 Deposit

Date: 11/13/2017 Office: ANNEX
Station ID Cashier: E29569
Batch: 8671 Trans: 15
Fund: 305 Activity ID7547210
Dept: 461615 Project ID24_MS4
Dept ID: Bus. Unit: PCDMD
Alloc Amt: \$21,312.00
Trans Amt: \$21,312.00
Check Tendered : \$21,312.00

Payment In-Lieu for Storm Water Quality
Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	\$ 21,312.00	461615	305	PCDMD	24_MS4	7547210	\$ 21,312.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$21,312.00

Hydrology#: K15D034A Name: Broadstone Highlands (North Block)
Payment In-Lieu For Storm Water Quality
Volume Requirement

Address/Legal Description: Tract 1, The Highlands

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Dana Peterson PHONE 924-3695

BUSINESS DATE

DUAL VERIFICATION OF DEPOSIT
EMPLOYEE SIGNATUREAND BY
EMPLOYEE SIGNATURE

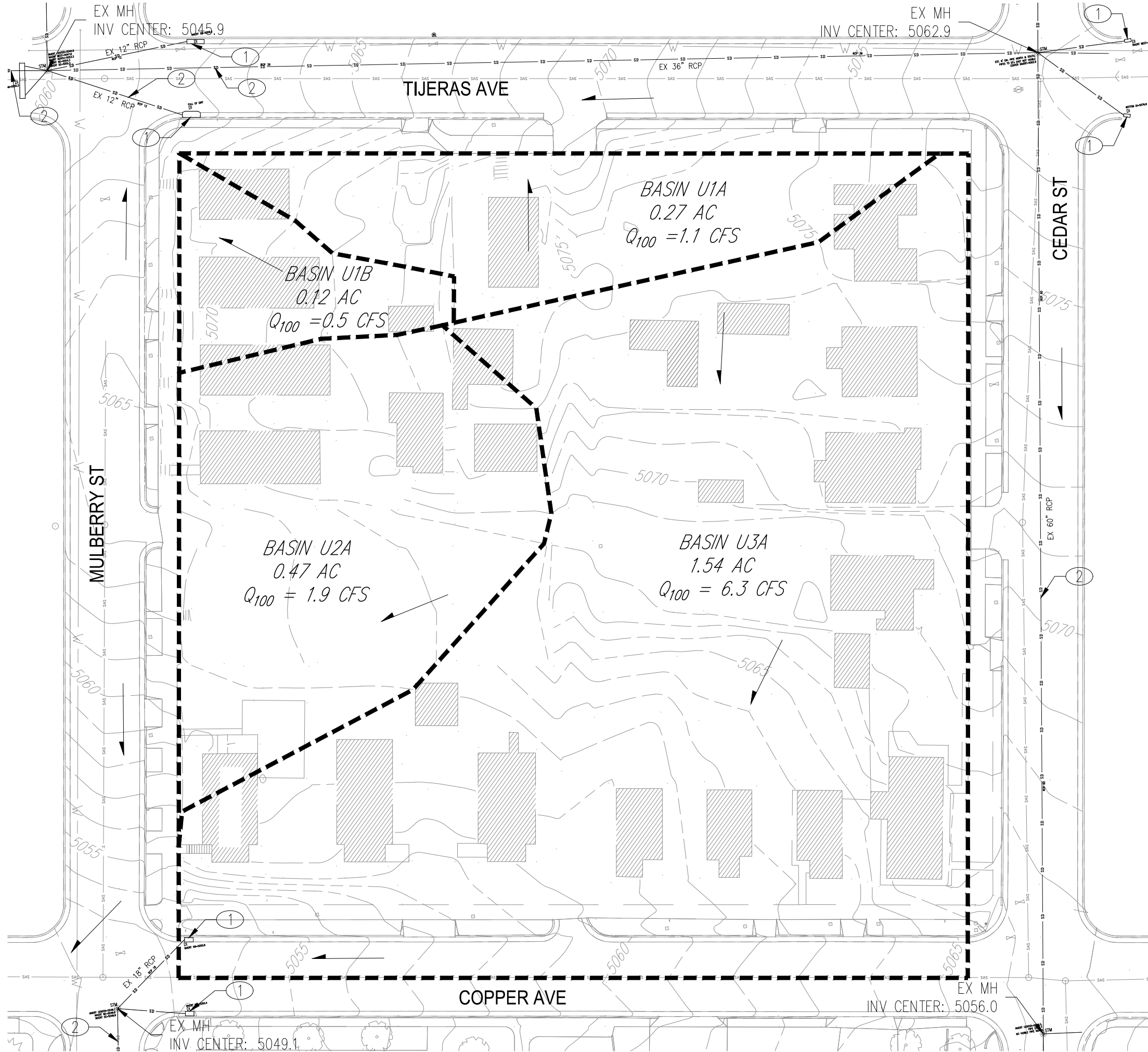
REMITTER:

AMOUNT:

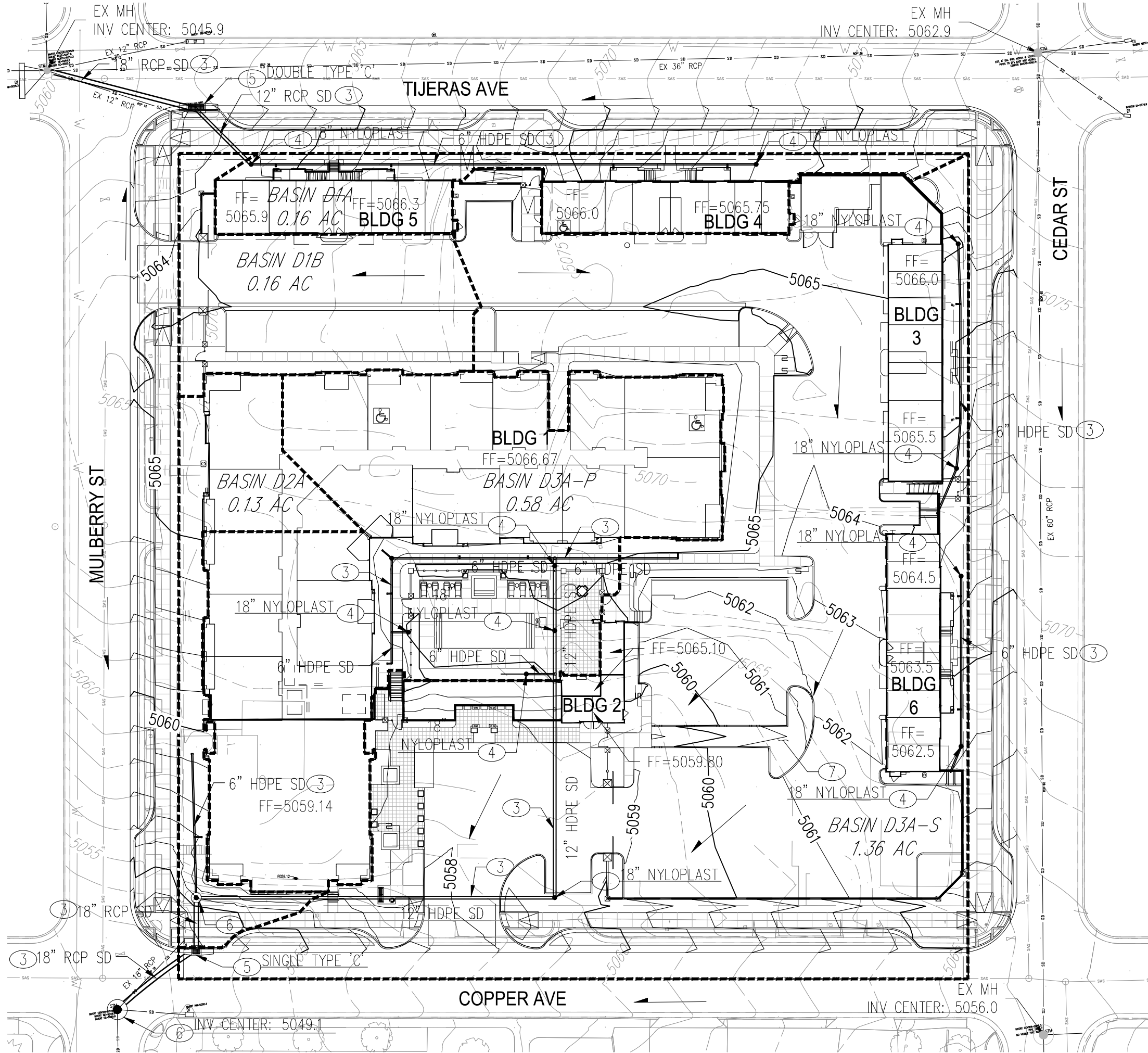
BANK:

CHECK #: DATE ON CHECK:

The Payment-in-Lieu can be paid at any City of Albuquerque Treasury location. **Bring three copies of this invoice to Treasury.** The most convenient may be at Plaza del Sol, 600 2nd St. NW. Provide a copy of the receipt to Hydrology, Suite 201 600 2nd St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.



EXISTING CONDITIONS



PROPOSED CONDITIONS

KEYNOTES

- EXISTING STORM DRAIN INLET
- EXISTING STORM DRAIN TO REMAIN
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- PROPOSED RELOCATED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED WATER HARVESTING AREA

GRADING LEGEND

---	PROPERTY LINE	=====	PROPOSED CURB & GUTTER
---5025---	EXISTING INDEX CONTOUR	----->	DIRECTION OF FLOW
---5024---	EXISTING INTERMEDIATE CONTOUR	-----	WATER BLOCK/GRADE BREAK
---5025---	PROPOSED INDEX CONTOUR	SD-----	PROPOSED STORM DRAIN LINE
---5024---	PROPOSED INTERMEDIATE CONTOUR	●	PROPOSED STORM DRAIN MANHOLE
---	EXISTING BASIN BOUNDARY	=====	PROPOSED STORM DRAIN INLETS
-----	PROPOSED BASIN BOUNDARY	=====	PROPOSED RETAINING WALL
---	EASEMENT		
BASIN UXX	EXISTING BASIN ID		
BASIN DXX	PROPOSED BASIN ID		
BASIN DXX-P	PROPOSED BASIN ID-PIPED		
BASIN DXX-S	PROPOSED BASIN ID-SHEET FLOW		

BASIN COMPARISON ID	Difference from Onsite Existing Conditions to Proposed Conditions
	Q(100yr) (CFS)
1A	-0.37
1B	0.26
2A	-1.34
3A	2.57

NOTE: '+' indicates an increase in Q from existing to proposed. '-' indicates a decrease in Q from existing to proposed.

DRAINAGE NARRATIVE

EXISTING CONDITIONS:

THE SITE IS APPROXIMATELY 2.4 ACRES (INCLUSIVE OF RECENTLY VACATED ALLEYS AND RIGHT OF WAYS), SITUATED AT THE NORTHEAST CORNER OF COPPER AVE AND MULBERRY ST. THIS SITE HAS HISTORICALLY BEEN FULLY DEVELOPED AS A DETACHED MULTI-FAMILY HOUSING DEVELOPMENT.

THIS PROJECT WAS RECENTLY APPROVED; HOWEVER ADDITIONAL UNITS WERE NECESSARY WHICH RESULTED IN MINOR MODIFICATIONS TO THE SITE PLAN. THE PREVIOUS DRAINAGE SCHEME AND BASINS REMAINS THE SAME AS WHAT WAS PREVIOUSLY APPROVED WITH MINOR MODIFICATIONS.

THE SITE IS DIVIDED INTO FOUR ONSITE BASINS THAT DRAIN TO DIFFERENT STORM DRAIN NETWORKS. BASIN U1A CURRENTLY SHEET FLOWS INTO TIJERAS AVE AND IS CAPTURED BY AN EXISTING INLET. BASIN U1B SHEET FLOWS TO MULBERRY ST AND DISCHARGES INTO A LARGE INLET WITHIN THE INTERSECTION OF TIJERAS AVE & MULBERRY ST. BASIN U2A SHEET FLOWS INTO MULBERRY AVE AND CONTINUES TO HEAD SOUTH TO COPPER AND ULTIMATELY WEST IN COPPER AVE TO AN INLET LOCATED IN OAK ST. BASIN U3A CURRENTLY DISCHARGES INTO COPPER AVE AND IS CAPTURED BY AN EXISTING INLET AT THE INTERSECTION OF COPPER AVE & MULBERRY ST. THERE IS NO OFFSITE DRAINAGE THAT ENTERS THE SITE.

THE TOTAL ONSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 9.8 CFS.

PROPOSED CONDITIONS:

THE BROADSTONE HIGHLANDS NORTH BLOCK WILL INCLUDE A NEW MULTI-FAMILY COMPLEX (BLDG 1), POOL RAMADA & EQUIPMENT BUILDING (BLDG 2), AND FOUR CARRIAGE UNITS (BLDG 3-6) THAT SIT AT THE NORTHEAST CORNER OF COPPER AVE & MULBERRY ST. ADDITIONAL ON STREET PARKING WILL BE PROVIDED AS A PART OF THIS PROJECT. A PUBLIC WORK ORDER WILL CONSTRUCT THESE SPACES AND INCLUDE MINOR INLET IMPROVEMENTS BASED ON THE NEW CURB LOCATION. THIS SITE HAS HISTORICALLY BEEN FULLY DEVELOPED AND IS CONSIDERED AN INFILL PROJECT. THE IMPERVIOUS AREA OF THE SITE WILL INCREASE TO 90% D AND 10% C FOR DEVELOPED FLOWS.

DEVELOPED BASINS

THE DEVELOPED BASINS WILL GENERALLY ADHERE TO THE HISTORIC FLOW WITH A FEW EXCEPTIONS. THE FOLLOWING IS A DESCRIPTION OF HOW EACH BASIN WILL DRAIN. PLEASE REFER TO THE 'ULTIMATE DEVELOPED CONDITIONS BASIN DATA TABLE', FOR THE PROPOSED BASIN FLOWS.

BASIN D1A HAS BEEN REDUCED AND WILL CONTINUE TO DISCHARGE INTO THE EXISTING STORM DRAIN WITHIN TIJERAS AVE. ROOF DRAINAGE FROM BUILDINGS 4 & 5 WILL BE ULTIMATELY PIPED INTO THE PROPOSED RELOCATED INLET IN TIJERAS AVE, AS WELL AS THE SURFACE DRAINAGE ALONG THE FRONTAGE OF THE BUILDINGS. THE REMAINDER OF THIS BASIN WILL DRAIN VIA SURFACE FLOW INTO THE ROADWAY TO THE SAME INLET.

BASIN D1B INCREASED SLIGHTLY AND WILL CONTINUE TO DISCHARGE (VIA SHEET FLOW) INTO THE LARGE EXISTING INLET WITHIN TIJERAS AVE & MULBERRY ST.

BASIN D2A IS A SMALL BASIN ALONG THE WESTERN FACE OF BUILDING 1 AND A PORTION OF THE BUILDING 1 ROOF DRAIN THAT WILL SURFACE FLOW INTO MULBERRY UNTIL IT REACHES INLETS LOCATED AT THE INTERSECTION OF COPPER AVE AND OAK ST. THIS BASIN AREA WAS REDUCED BASED ON THE PROPOSED GRADING FOR THIS BLOCK.

BASIN D3A-S INCLUDES A PORTION OF THE SITE'S HARDSCAPE AS WELL AS ROOF DRAINAGE FROM BUILDINGS 2, 3, & 6. THIS BASIN WILL SHEET FLOW INTO COPPER AVE AND BE CAPTURED IN THE PROPOSED RELOCATED INLET WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE THAT RUNS IN MULBERRY ST.

BASIN D3A-P INCLUDES ROOF DRAINAGE FROM BUILDING 1 AND THE POOL DECK AREA THAT WILL BE PIPED DIRECTLY INTO THE COPPER AVE PROPOSED RELOCATED INLET WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE THAT RUNS IN MULBERRY ST.

THE TOTAL ONSITE PROPOSED FLOW RATE FROM THE PROPOSED DEVELOPMENT IS APPROXIMATELY 10.9 CFS. COMPARISON OF THE FLOW BETWEEN EXISTING AND PROPOSED CONDITIONS WAS FOUND HAVE AN OVERALL INCREASE OF APPROXIMATELY 1.1 CFS, OVERALL INDICATING THAT THE HISTORICAL DEVELOPED FLOWS ARE CLOSE TO THE SITE'S PROPOSED DEVELOPED CONDITIONS.

CONCLUSION:

DUE TO THE SIGNIFICANT GRADE CHANGE OF APPROXIMATELY 24 FEET ACROSS THE SITE AND THE DENSITY OF THIS PROJECT IN AN INFILL DEVELOPMENT, THE OWNER HAS DISCUSSED WITH CITY STAFF THE USE OF CASH IN LIEU TO ACCOMPLISH THE 'FIRST FLUSH' REQUIREMENTS. ISLANDS WILL BE DEPRESSED WHERE APPLICABLE AND SERVE AS WATER HARVESTING AREAS BUT WILL NOT MEET THE FIRST FLUSH VOLUME REQUIRED.

THE DEVELOPED FLOWS FOR THIS SITE GENERALLY REMAINS UNCHANGED FROM THE EXISTING CONDITIONS, HOWEVER THIS PLAN DIVERTS FLOWS DIRECTLY INTO THE PROPOSED INLET WITHIN COPPER AVE. THE EXISTING ROADWAY SLOPES WILL REMAIN THE SAME. THESE ADJUSTMENTS DEMONSTRATE THAT THE DRAINAGE ELEMENTS PROPOSED WITH THE PROJECT ARE CAPABLE OF SAFELY CONVEYING THE 100 YR, 6 HR STORM EVENT IN ACCORDANCE WITH THE DEVELOPMENT PROCESS MANUAL. WITH THIS SUBMITTAL, WE ARE REQUESTING COA HYDROLOGY APPROVAL IN SUPPORT OF SITE PLAN FOR BUILDING PERMIT APPROVAL, BUILDING PERMIT APPROVAL, & WORK ORDER APPROVAL.

BROADSTONE HIGHLANDS NORTH

NWC CEDAR ST AND COPPER AVE
ALBUQUERQUE, NEW MEXICO



NOT FOR CONSTRUCTION



REVISIONS

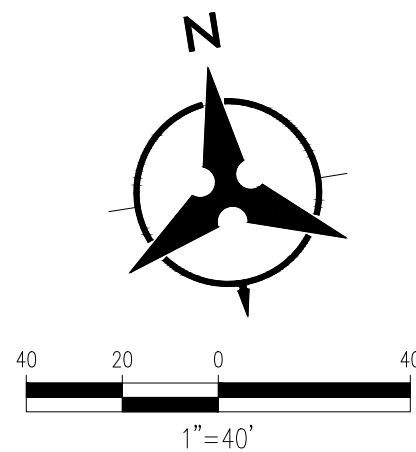
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2	8/30/17	DESIGN TEAM COORDINATION
3	10/12/17	2ND CITY REVIEW
4	10/12/17	DESIGN TEAM COORDINATION
5	05/18/18	3RD CITY REVIEW/OWNER CHANGES

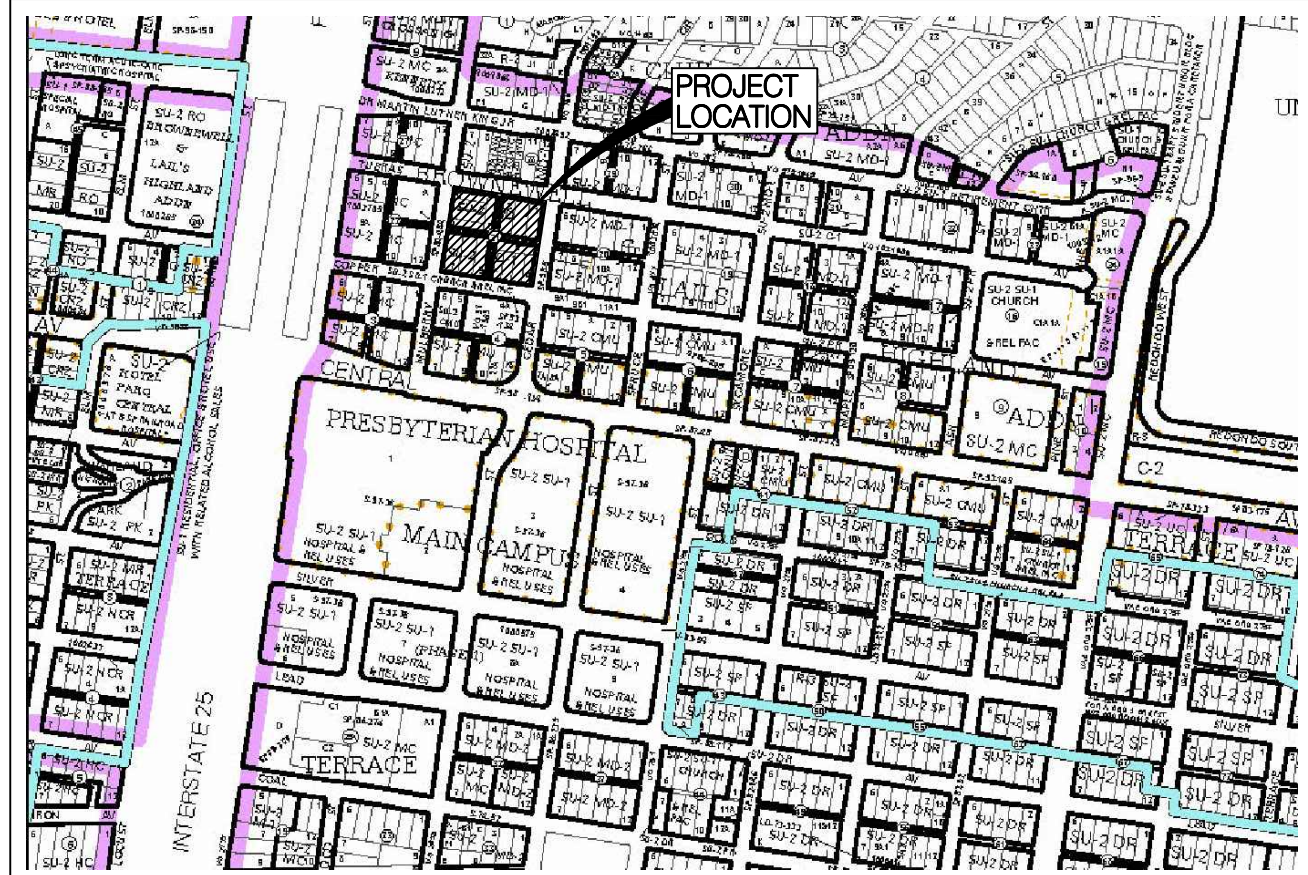
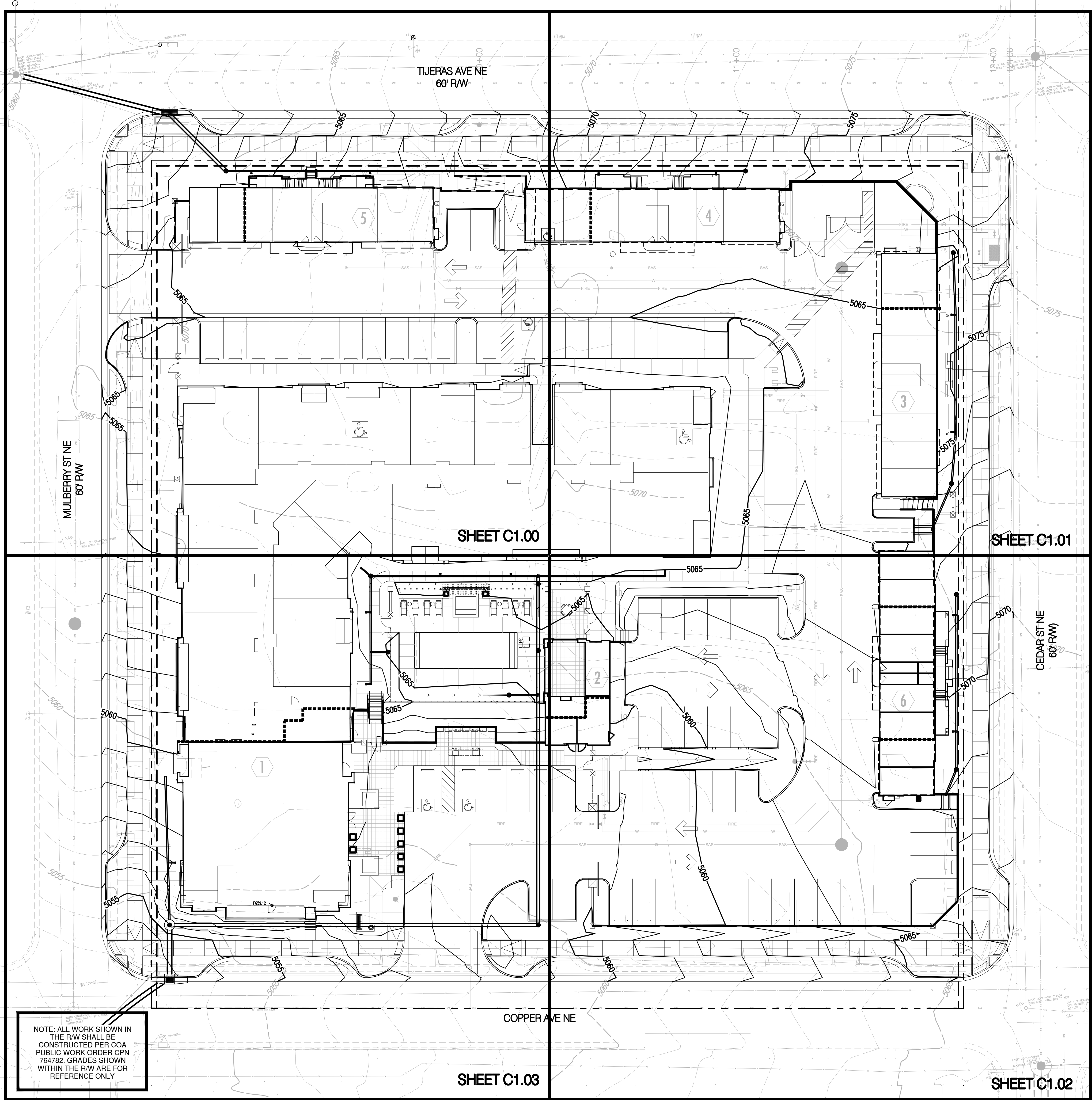
3RD CITY SUBMITTAL

DATE: MAY 18, 2018 ORB # 16-210

C0.01

DRAINAGE
MANAGEMENT PLAN





VICINITY MAP

ZONE MAP: K-15-Z

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 STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
- EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT 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 ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. 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 MEDIANS 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%.
- HDPE 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.

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 ENCOUNTERED 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., BARRICADING, TOPSOIL 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 BARRICADING 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.

BROADSTONE HIGHLANDS NORTH

NWC CEDAR ST AND COPPER AVE
ALBUQUERQUE, NEW MEXICO

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



Bohannon Huston
www.bhnc.com 800.877.5332

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

Do not reproduce these drawings and specifications without the expressed written permission of the Architect. The drawings and specifications are instruments of service and shall remain the property of the Architect whether the project for which they are made is executed or not. These drawings and specifications shall not be used by anyone on any other project, for additions to this project, or for completion of this project by others except by the expressed written permission of the Architect.
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REVISIONS

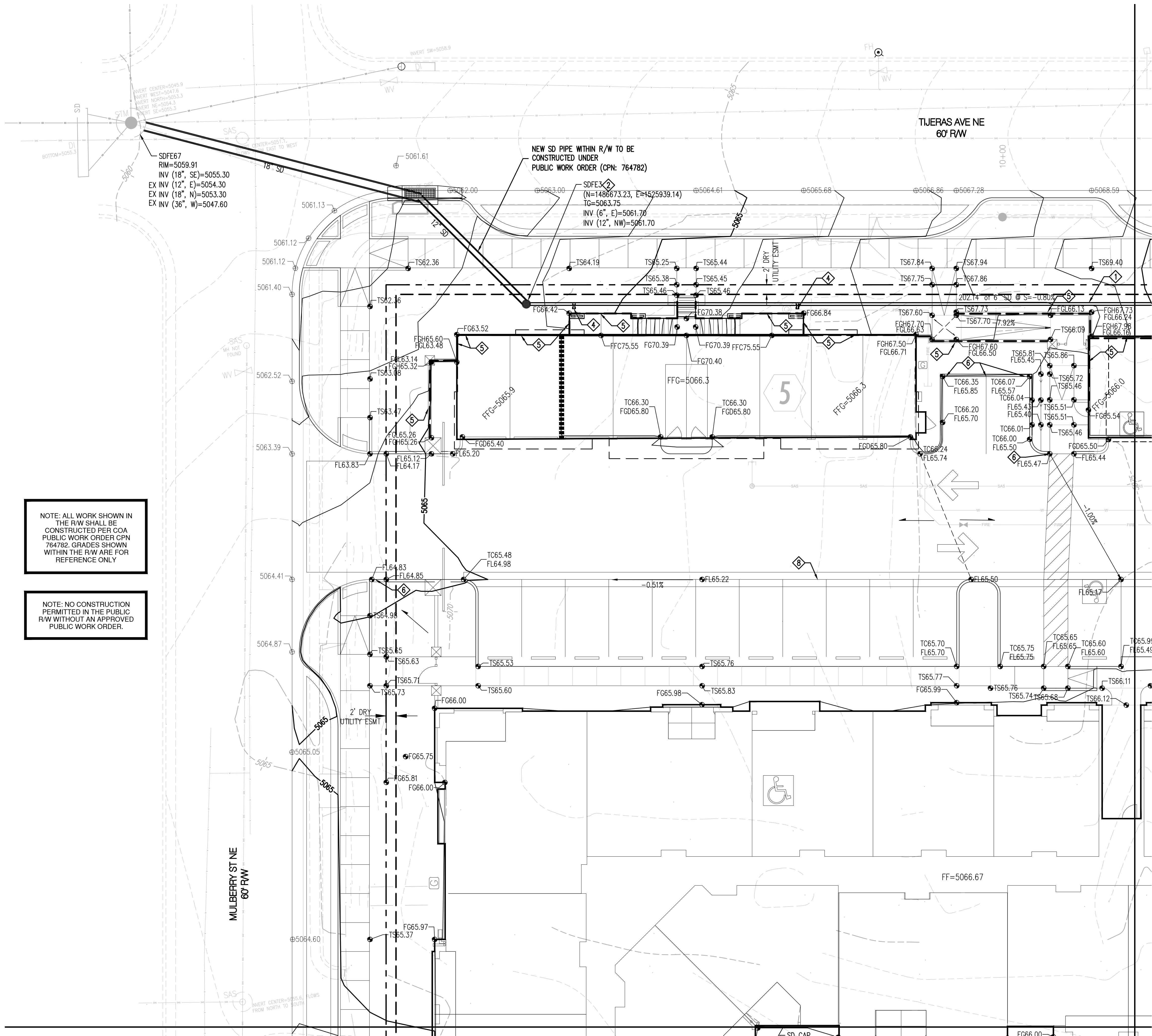
1	8/30/17	1ST CITY REVIEW
2	8/30/17	DESIGN TEAM COORDINATION
3	10/12/17	2ND CITY REVIEW
4	10/12/17	DESIGN TEAM COORDINATION
5	05/18/18	3RD CITY REVIEW/OWNER CHANGES

3RD CITY SUBMITTAL

DATE: MAY 18, 2018 ORB # 16-210

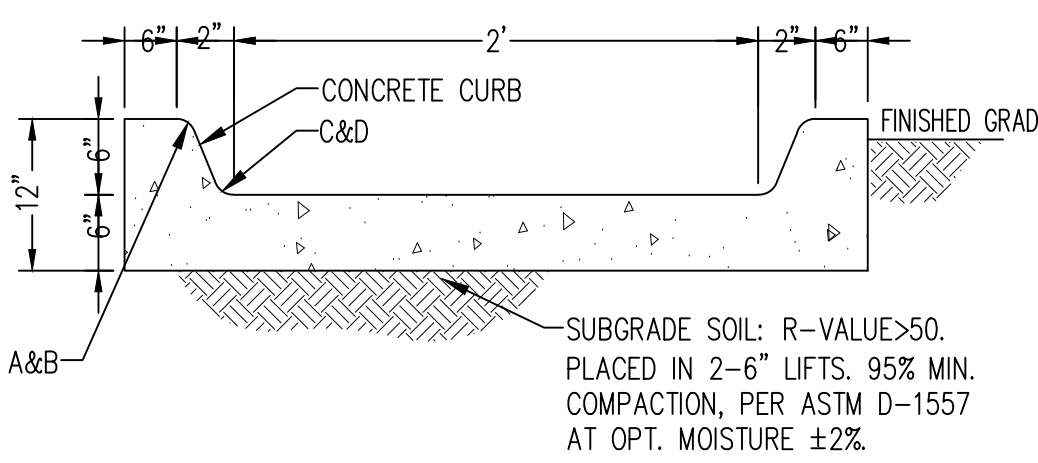
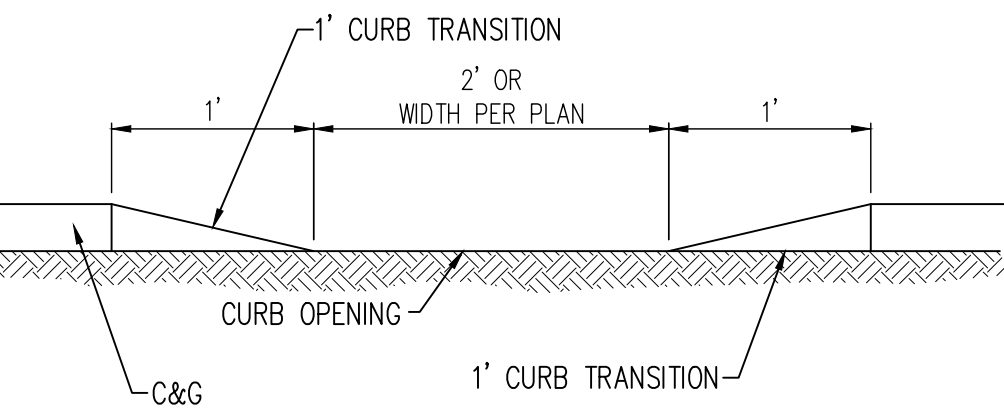
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OVERALL
GRADING PLAN



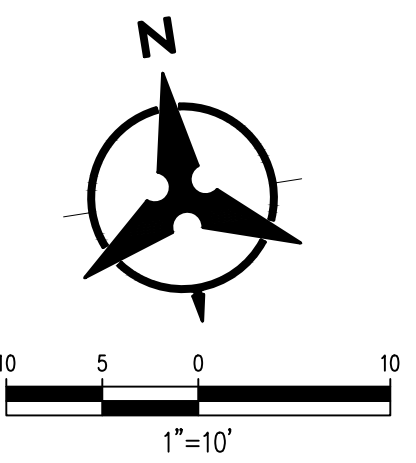
GRADING KEYNOTES

1. INSTALL HDPE (N12 WT, OR APPROVED EQUAL) STORM DRAIN PIPE (SIZE PER PLAN)
2. INSTALL 18" NYLOPLAST STORM DRAIN INLET OR APPROVED EQUAL PER MANUFACTURES SPECIFICATIONS.
3. INSTALL PRE-FABRICATED STORM DRAIN FITTING, EXTEND 6" LINE. CONNECT TO POOL DECK DRAINS; SEE POOL PLANS FOR EXACT LOCATION
4. STUB PROPOSED ROOF DRAIN CONNECTIONS WITHIN 5' OF THE BUILDING; SEE PLUMBING PLANS FOR CONTINUATION
5. INSTALL RETAINING WALL; SEE ARCHITECTURAL/STRUCTURAL PLANS FOR DETAILS
6. INSTALL CURB OPENING PER DETAIL A1, SHEET C1.00.
7. DAYLIGHT STORM DRAIN IN WALL INTO CURB AND GUTTER OF PARKING AREA.
8. INSTALL 3" WIDE CONCRETE VALLEY GUTTER PER COA STD. DWG. 2421
9. INSTALL 24" SIDEWALK CULVERT PER COA STD. DWG. 2236
10. INSTALL TYPE 'C' MANHOLE PER COA STD. DWG. 2101
11. INSTALL PRE-FABRICATED STORM DRAIN FITTING, EXTEND 6" LINE. SEE HARDSCAPE PLANS FOR EXACT LOCATION OF FIRE PIT INLET.
12. INSTALL 24" CONCRETE RUNDOWN PER DETAIL A2, SHEET C1.00.



- A. $\pm 0.75"$ RADIUS.
- B. DIMENSIONS AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES.
- C. $\pm 2"$ RADIUS.
- D. DIMENSIONS AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES.

CONCRETE RUNDOWN



GRADING LEGEND

---	PROPERTY LINE	---	PROPOSED CURB & GUTTER
---	PROJECT LIMITS OF GRADING	---	DIRECTION OF FLOW
---	EXISTING INDEX CONTOUR	---	WATER BLOCK/GRADE BREAK
---	EXISTING INTERMEDIATE CONTOUR	---	PROPOSED STORM DRAIN LINE
⊕ 5025.25	EXISTING GROUND SPOT ELEVATION	⊕	PROPOSED STORM DRAIN MANHOLE
---	PROPOSED INDEX CONTOUR	⊕	PROPOSED STORM DRAIN INLETS
---	PROPOSED INTERMEDIATE CONTOUR	---	PROPOSED RETAINING WALL
---	PROPOSED FLOW LINE	---	EASEMENT
⊕ 26.75	PROPOSED FINISHED GRADE SPOT ELEVATION	---	FF STEP
	TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW, FFG=FINISH FLOOR GARAGE, FFD=FINISH FLOOR CARRIAGE, FGD=FINISH GROUND DRIVEWAY		

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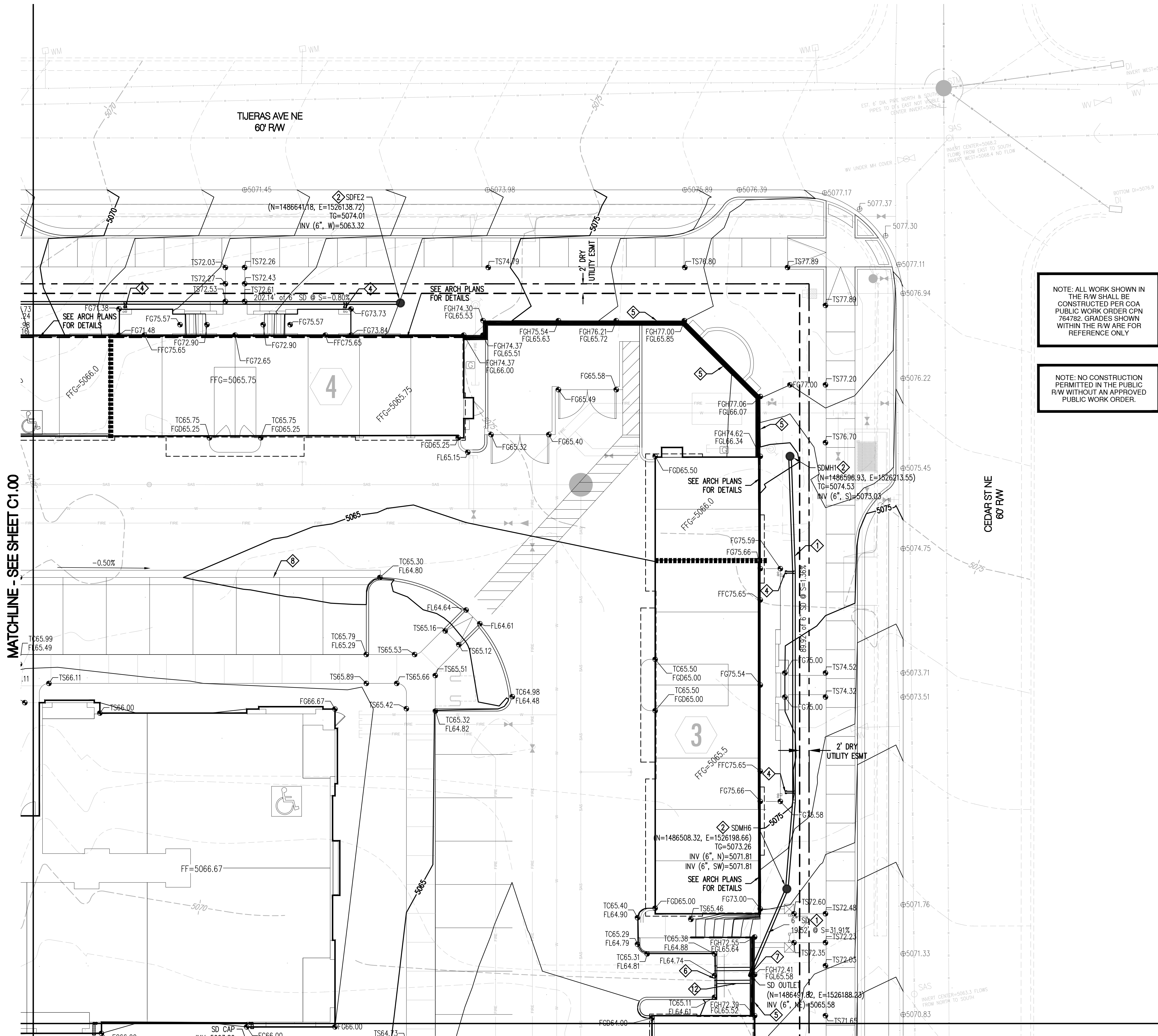
3RD CITY SUBMITTAL

DATE: MAY 18, 2018 ORB # 16-210

C1.00

OVERALL GRADING PLAN

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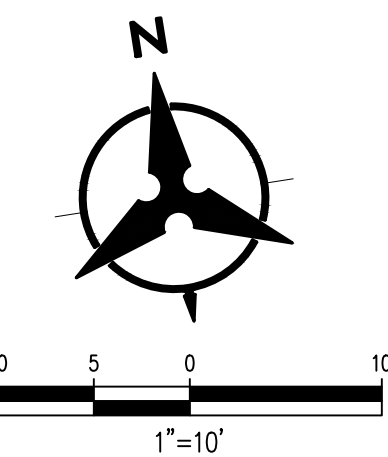


GRADING KEYNOTES

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12. INSTALL 24" CONCRETE RUNDOWN PER DETAIL A2, SHEET C1.00.

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NOTE: NO CONSTRUCTION PERMITTED IN THE PUBLIC R/W WITHOUT AN APPROVED PUBLIC WORK ORDER.



GRADING LEGEND

---	PROPERTY LINE	---	PROPOSED CURB & GUTTER
---	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 FLOW LINE	---	EASEMENT
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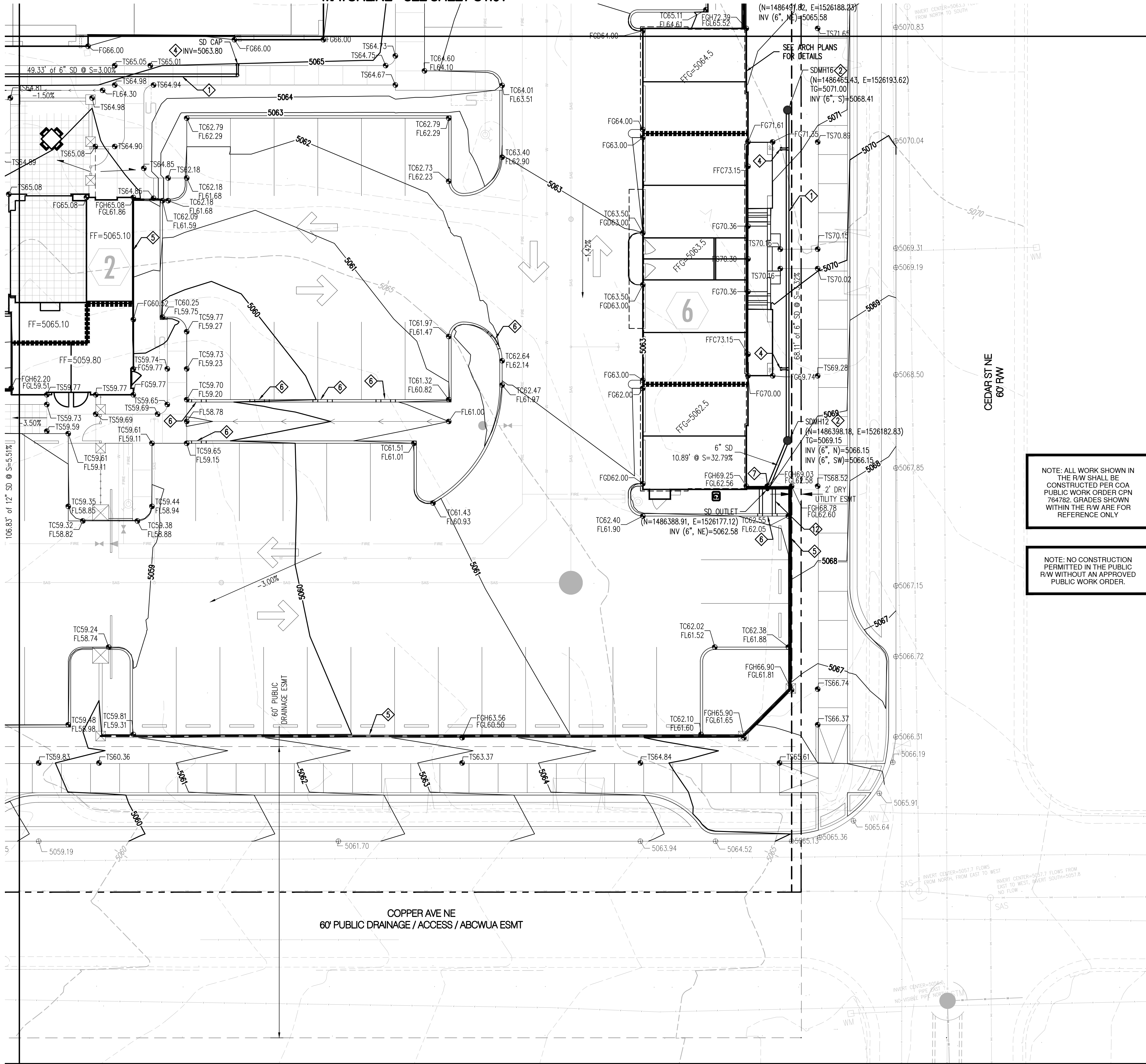
3RD CITY SUBMITTAL

DATE: MAY 18, 2018 ORB # 16-210

C1.01
OVERALL
GRADING PLAN

MATCHLINE - SEE SHEET C1.03

MATCHLINE - SEE SHEET C1.01

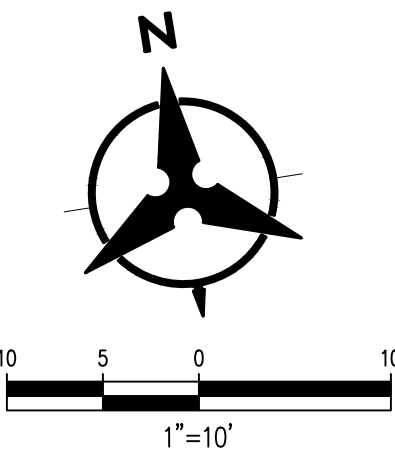


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12. INSTALL 24" CONCRETE RUNDOWN PER DETAIL A2, SHEET C1.00.

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GRADING LEGEND

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---	PROJECT LIMITS OF GRADING	---	DIRECTION OF FLOW
---	EXISTING INDEX CONTOUR	---	WATER BLOCK/GRADE BREAK
---	EXISTING INTERMEDIATE CONTOUR	---	PROPOSED STORM DRAIN LINE
⊕ 5025.25	EXISTING GROUND SPOT ELEVATION	⊙	PROPOSED STORM DRAIN MANHOLE
=====	PROPOSED INDEX CONTOUR	⊕	PROPOSED STORM DRAIN INLETS
---	PROPOSED INTERMEDIATE CONTOUR	---	PROPOSED RETAINING WALL
---	PROPOSED FLOW LINE	---	EASEMENT
⊕ 26.75	PROPOSED FINISHED GRADE SPOT ELEVATION	=====	FF STEP
---	TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW, FFG=FINISH FLOOR GARAGE, FFC=FINISH FLOOR CARRIAGE, FGD=FINISH GROUND DRIVEWAY		

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C1.02

OVERALL
GRADING PLAN

MATCHLINE - SEE SHEET C1.00

◆ GRADING KEYNOTES

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12. INSTALL 24" CONCRETE ROUNDOFF PER DETAIL A2, SHEET C1.00.

NOTE: ALL WORK SHOWN IN
THE R/W SHALL BE
CONSTRUCTED PER COA
PUBLIC WORK ORDER CPN
764782. GRADES SHOWN
WITHIN THE R/W ARE FOR
REFERENCE ONLY

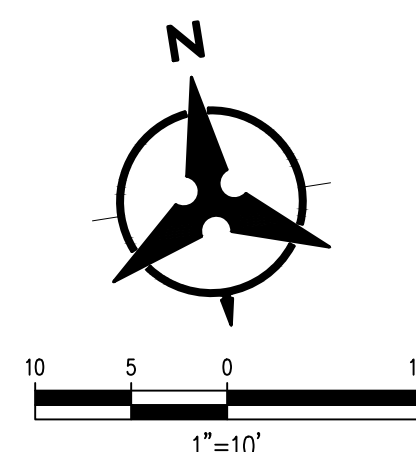
NOTE: NO CONSTRUCTION
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PUBLIC WORK ORDER.

MULBERRY ST NE
60' RAW

NEW SD PIPE WITHIN ESMT TO BE
CONSTRUCTED UNDER
PUBLIC WORK ORDER (CPN: 764782)

SDFE9
RIM=5052.48
INV (18", NE)=5049.20
INV (18", E)=5049.90
INV (21", S)=5049.10

COPPER AVE NE
60' PUBLIC DRAINAGE / ACCESS / ABCWUA ESMT



GRADING LEGEND

	PROPERTY LINE		PROPOSED CURB & GUTTER
	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 FLOW LINE		EASEMENT
	PROPOSED FINISHED GRADE SPOT ELEVATION TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGI=FINISH GROUND LOW, FFG=FINISH FLOOR CARRAGE FFC=FINISH FLOOR CARRIAGE FGD=FINISH GROUND DRIVEWAY		FF STEP

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C1.03

OVERALL GRADING PLAN