

# CITY OF ALBUQUERQUE

Planning Department  
David Campbell, Director



Mayor Timothy M. Keller

June 27, 2018

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

**RE: Broadstone Highlands Hotel Block- Springhill Suites  
Central and Mulberry NE  
Grading and Drainage Plan  
Engineer's Stamp Date: 6/18/18  
Hydrology File: K15D034B**

Dear Mr. Balaskovits:

PO Box 1293

Based on the submittal received on 6/18/18 the above-referenced Grading and Drainage Plan cannot be approved for Building Permit until the following are addressed:

Prior to Building Permit:

Albuquerque

NM 87103

www.cabq.gov

1. The private encroachment into the Copper public easement by the stem wall footer requires an encroachment agreement. The original notarized form, encroachment exhibit, (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for encroachment agreements.
2. Payment of the fee in lieu (Amount = \$8/cf x 1214cf = \$12912) for the first flush volume is required (Treasury deposit slip attached). Be sure to provide a copy of the paid receipt with your resubmittal.
3. This project requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, ccherne@cabq.gov or 924-3420).

Prior to Certificate of Occupancy (For Information):

4. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
5. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

# CITY OF ALBUQUERQUE

*Planning Department*  
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*Mayor Timothy M. Keller*

6. The encroachment agreement must be recorded with Bernalillo County and a copy included with the drainage certification.

If you have any questions, please contact me at 924-3695 or [dpeterson@cabq.gov](mailto:dpeterson@cabq.gov).

Sincerely,



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

PO Box 1293

Albuquerque

NM 87103

[www.cabq.gov](http://www.cabq.gov)

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: Dana M. Peterson  
City of Albuquerque  
600 2nd St. NW  
Albuquerque, NM 87102

Requested by: Michael Balaskovits

Date: June 18, 2018

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

Phone: (505) 924-3695

Job No.: 20160155

Job Name: Highlands Hotel

### DELIVERY VIA

☒ Courier ☐ Federal Express  
☐ Mail ☐ UPS  
☐ Other

### PICK UP

Item: \_\_\_\_\_

<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	Comment Response Letter
5	1	Wall Sections Exhibit

### COMMENTS / INSTRUCTIONS

Dana,

Please find attached the Drainage Management Plan for the Highlands Hotel. We are requesting Hydrology approval in support of Building Permit Approval.  
Let me 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: \_\_\_\_\_

June 18, 2018

Mr. Dana M. Peterson, PE  
City of Albuquerque  
Planning Department  
600 2<sup>nd</sup> Street NW  
Albuquerque, NM 87103

Re: Broadstone Highlands Hotel Block / Hydrology File K15D034B

Dear Mr. Peterson:

Enclosed for your review and comment is a re-submittal of the Highlands Hotel Grading & Drainage Plan. Please see the responses to your comments dated 05/09/18 below:

1. Clearly define which elements of the grading plan and drainage improvements are public and to be constructed by work order, and which elements are private and to be constructed by building permit.

*Response: The improvements located within the ROW/Public Easement have been better distinguished that they shall be constructed within a public work order set. Please see revised grading plans.*

2. Add note on the plan that "No work shall be performed in the public ROW and public easements without an approved Work Order".

*Response: This note has been added to the grading plan.*

3. The 18" HDPE penetration into the new (public?) type-A inlet cannot be accepted. This will either need to be RCP, or be 12" or less and piped into back on inlet, similar to std dwg 2237.

*Response: Noted. The pipe to be accepted by the public inlet will be 18" RCP, not HDPE.*

4. Provide valley gutter across the drive entrance on Copper and across the intersection of Copper and Mulberry.

*Response: A valley gutter has been added to the drive entrance along Copper and to the intersection of Copper and Mulberry.*

5. Provide alley gutter along Mulberry, between the east parking and the drive aisle, where the drainage will concentrate.

*Response: A valley gutter has been provided at the entrance into the parking garage where flow will concentrate.*

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

6. Clarify how standing water will be prevented in the NW corners of the west parking along Mulberry. Curb cuts that allow water to drain across the sidewalk are not acceptable.

*Response: A slope label has been added to the grading plan to indicate that the grades are to convey a slope of 0.50% to get the drainage back into Mulberry St. A curb cut has been added next to the ramp so that excess flow can be captured in the landscape island and later discharged through the other curb cut so that it does not drain across the proposed sidewalk.*

7. Provide sections of the proposed retaining walls/stem walls and show the property line, existing and proposed grades on the section views. In accordance with DPM Ch.22, section 5 part B, grading and wall construction near the property line may not endanger adjacent property or constrain its use.

*Response: Please see the attached exhibit, "Highlands Hotel, Proposed Street Sections".*

8. 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.

*Response: Noted. The foundation along Copper Ave will require an encroachment agreement. The sections along Mulberry St and Central Ave will not require any permit or agreement per the provided exhibit.*

9. Please update the land treatments to reflect the subbasins so that the first flush requirement/fee-in-lieu amount can be determined. For instance it is unlikely that the rooftop drainage basins have 10% land treatment C. Payment of the fee in lieu for the required first flush volume will then be needed.

*Response: The land treatments have been updated to reflect the uses. It is noted that the fee in lieu will be paid based on a volume of 1,426 cubic feet.*

10. This project requires an ESC Plan, submitted to the Stormwater Quality Engineer (Curtis Cherne PE, [ccherne@cabq.gov](mailto:ccherne@cabq.gov) or 924-3420).

*Response: Noted.*





Courtyard I  
7500 Jefferson St. NE  
Albuquerque, NM  
87109-4335

[www.bhinc.com](http://www.bhinc.com)

voice: 505.823.1000  
facsimile: 505.798.7988  
toll free: 800.877.5332

We are requesting Hydrology Approval in support of Building Permit approval, Foundation Permit approval, and Grading Approval. Please feel free to contact me at 823-1000 with questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Balaskovits".

Mike Balaskovits, PE  
Vice President  
Community Development and Planning

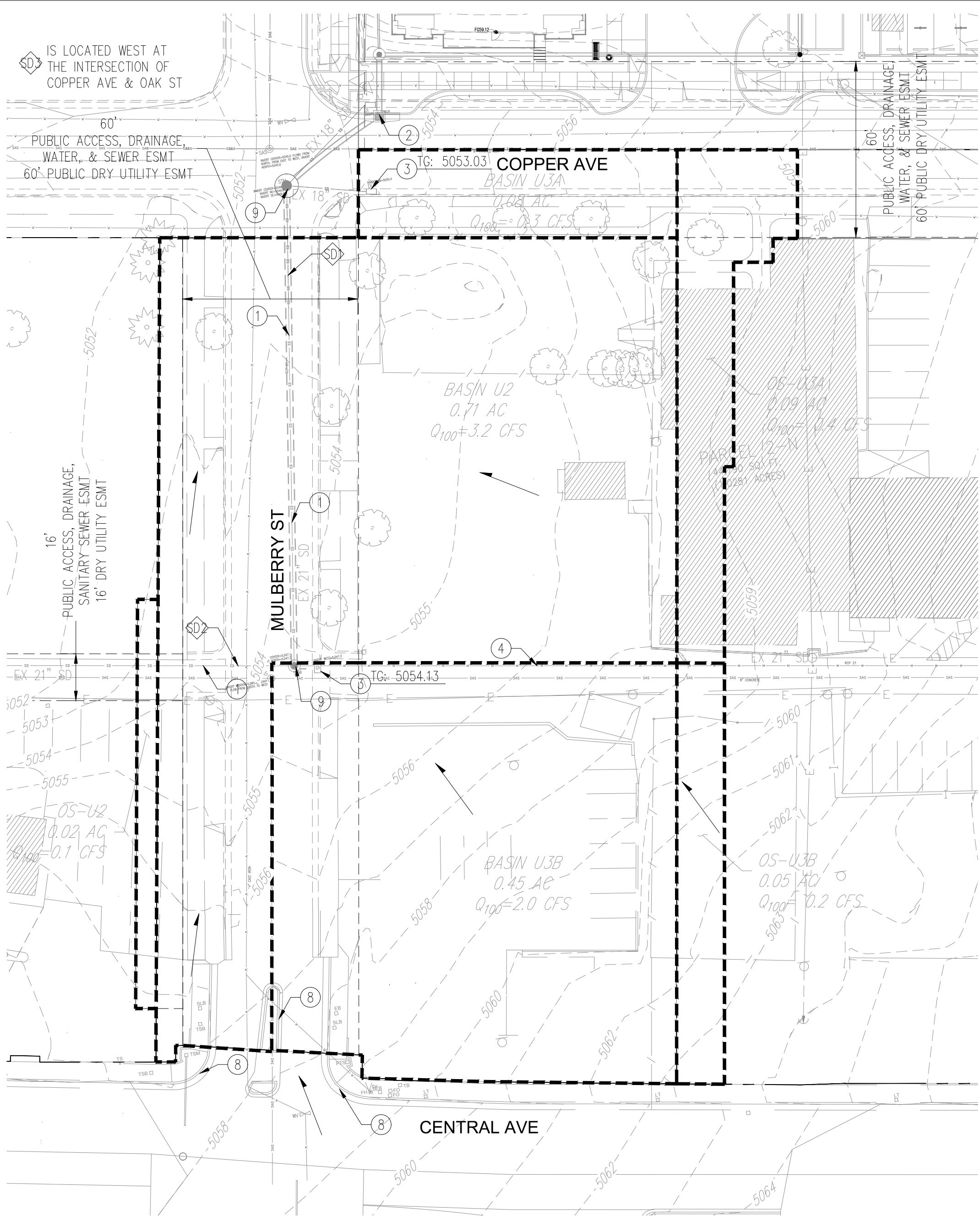
MJB/egn  
Enclosure

Engineering ▲

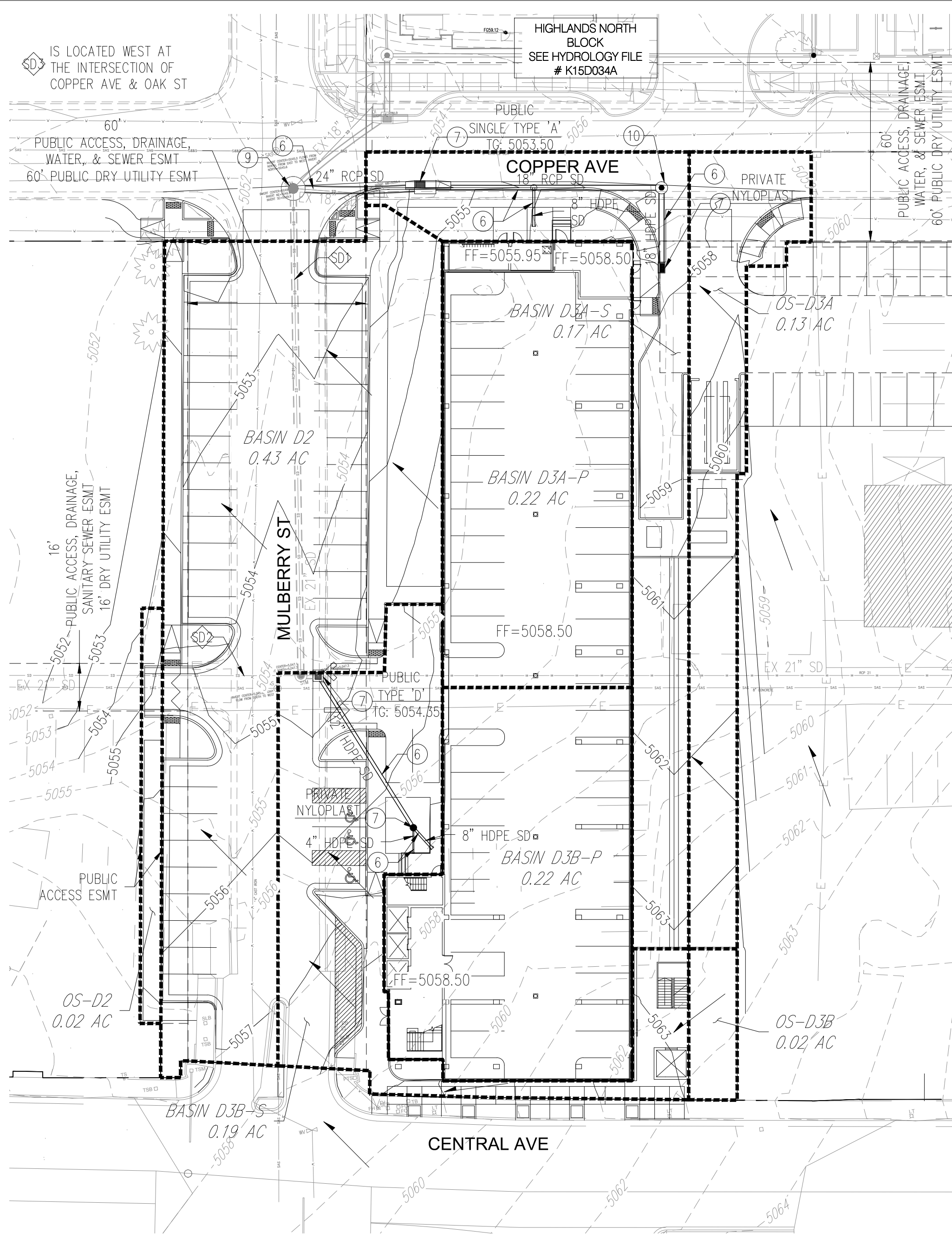
Spatial Data ▲

Advanced Technologies ▲





EXISTING CONDITIONS



PROPOSED CONDITIONS

Highlands Hotel Development										
Existing Developed Conditions Basin Data Table										
This table is based on the DPM Section 22.2, Zone: 2										
Basin ID	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V(100yr-6hr)
	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)
CURRENT ONSITE BASINS										
U2	30848	0.71	0.0%	0.0%	15.0%	85.0%	4.47	3.16	1.97	5069
U3A	3267	0.08	0.0%	0.0%	15.0%	85.0%	4.47	0.33	1.97	537
U3B	19680	0.45	0.0%	0.0%	15.0%	85.0%	4.47	2.02	1.97	3233
TOTAL	53795	1.23	-	-	-	-	-	5.52	-	8838
CURRENT OFFSITE BASINS										
OS-U2	978	0.02	0.0%	0.0%	0.0%	100.0%	4.70	0.11	2.12	173
OS-U3A	3943	0.09	0.0%	0.0%	20.0%	80.0%	4.39	0.40	1.92	632
OS-U3B	2341	0.05	0.0%	0.0%	20.0%	80.0%	4.39	0.24	1.92	375
TOTAL	7262	0.17	-	-	-	-	-	0.74	-	1179

Highlands Hotel Development											
Proposed Developed Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 2											
Basin ID	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V(100yr-6hr)	V(100yr-24hr)
	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
PROPOSED ONSITE BASINS											
D2	18549	0.43	0.0%	0.0%	10.0%	90.0%	4.54	1.93	2.02	3124	3680
D3A-P	9578	0.22	0.0%	0.0%	0.0%	100.0%	4.70	1.03	2.12	1692	2011
D3A-S	7618	0.17	0.0%	0.0%	10.0%	90.0%	4.54	0.79	2.02	1283	1512
D3B-P	9630	0.22	0.0%	0.0%	0.0%	100.0%	4.70	1.04	2.12	1701	2022
D3B-S	8412	0.19	0.0%	0.0%	10.0%	90.0%	4.54	0.88	2.02	1417	1669
TOTAL	53787	1.23	-	-	-	-	-	5.68	-	9217	10895
PROPOSED OFFSITE BASINS											
OS-D2	978	0.02	0.0%	0.0%	0.0%	100.0%	4.70	0.11	2.12	173	205
OS-D3A	5455	0.13	0.0%	0.0%	10.0%	90.0%	4.54	0.57	2.02	919	1082
OS-D3B	829	0.02	0.0%	0.0%	10.0%	90.0%	4.54	0.09	2.02	140	164
TOTAL	7262	0.17	-	-	-	-	-	0.76	-	1231	1452

STORM DRAIN ANALYSIS POINT COMPARISON					
AP ID	Pipe Size	Existing Contributing Basins	Proposed Contributing Basins	Project Existing Conditions Q(100yr) (CFS)	Project Proposed Conditions Q(100yr) (CFS)
SD1	21"	U3A, OS-U3A	D3A-P, D3A-S, OS-D3A	0.73	2.40
SD2	21"	U3B, OS-U3B	SD1, D3B-P, D3B-S, OS-D3B	2.99	4.40
SD3 (IN OAK ST)	24"	U2, OS-U2	D2, OS-D2	3.27	2.04

NOTE: '+' indicates an increase in Q from existing to proposed. '-' indicates a decrease in Q from existing to proposed. In the event the proposed increase of flow in SD2 (1.41 CFS) were to exceed the existing capacity of the pipe, the flow would continue to SD3 which occurs today.

## DRAINAGE NARRATIVE

### EXISTING CONDITIONS

THIS SITE IS LOCATED AT THE NORTHEAST CORNER OF MULBERRY ST NE AND CENTRAL AVE NE. IT IS CURRENTLY DEVELOPED AND SLOPES FROM SOUTHEAST TO NORTHWEST. THE DRAINAGE ULTIMATELY OUTFALLS TO THE EXISTING PUBLIC STORM DRAIN SYSTEM LOCATED WEST OF THE SITE, UNDER I-25. THIS SITE HAS HISTORICALLY BEEN FULLY DEVELOPED AS COMMERCIAL DEVELOPMENT.

THE SITE LIES WITHIN TWO EXISTING ONSITE BASINS, U2 & U3. BASIN U2 IS A PART OF A LARGER BASIN THAT SURFACE DRAINS NORTH IN MULBERRY ST TO COPPER AVE AND WEST TO AN INLET IN OAK ST. THIS STORM DRAIN SYSTEM ULTIMATELY HEADS WEST UNDERNEATH I-25. BASIN U3 IS ALSO A PART OF A LARGER BASIN THAT SURFACE DRAINS TO AN EXISTING 21" STORM DRAIN SYSTEM LOCATED WITHIN THE ALLEY WEST OF THE SITE. PORTIONS OF THIS BASIN DRAIN TO THE NORTH INTO AN EXISTING TYPE 'C' INLET IN COPPER AVENUE AND WEST INTO AN EXISTING MODIFIED TYPE 'D' INLET AT THE INTERSECTION OF THE ALLEY AND MULBERRY STREET DISCHARGE INTO THIS SYSTEM.

THE ONSITE BASINS HAVE BEEN DELINEATED WITHIN THE PROPERTY LINE AND THE OFFSITE BASINS ARE PROPOSED IMPROVEMENTS OUTSIDE OF THE PROPERTY LINE, BUT ARE ULTIMATELY A PART OF THE EXISTING BASINS U2 & U3.

THE TOTAL ONSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 5.5 CFS. THE TOTAL OFFSITE EXISTING FLOW RATE FROM THE CURRENT DEVELOPMENT IS APPROXIMATELY 0.7 CFS.

### PROPOSED CONDITIONS

THE DEVELOPMENT WILL INCLUDE A NEW HOTEL THAT SITS AT THE NORTHEAST INTERSECTION OF CENTRAL AVE AND MULBERRY ST. ON STREET PARKING WILL BE PROVIDED AS A RESULT OF THIS PROJECT. TWO EXISTING STORM DRAIN INLETS WILL BE REMOVED AND RELOCATED AS A RESULT OF NEW CURB AND GUTTER IMPROVEMENTS AND GRADING. THIS IMPERVIOUS AREA OF THE SITE WILL INCREASE SLIGHTLY OVER THE HISTORIC CONDITIONS TO 90% D AND 10% C FOR DEVELOPED FLOWS. 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 DECDED TO PAY CASH-IN-LIEU FOR THE FIRST FLUSH REQUIREMENTS.

### DEVELOPED BASINS

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

BASIN D2 INCLUDES A PORTION OF THE SITE'S PROPOSED PARKING IMPROVEMENTS AS WELL AS MULBERRY ST. THIS AREA WILL CONTINUE TO SHEET FLOW TO COPPER AVE HEADING WEST INTO THE INLETS AT COPPER AVE AND OAK ST.

OFFSITE BASIN OS-D2 INCLUDES A PORTION OF SITE'S PROPOSED SIDEWALK TO THE WEST OF MULBERRY ST. THIS SIDEWALK HAS BEEN GRANTED A PUBLIC ACCESS EASEMENT AND WILL SHEET FLOW INTO MULBERRY ST AND CONTINUE TO THE INLET AT OAK ST.

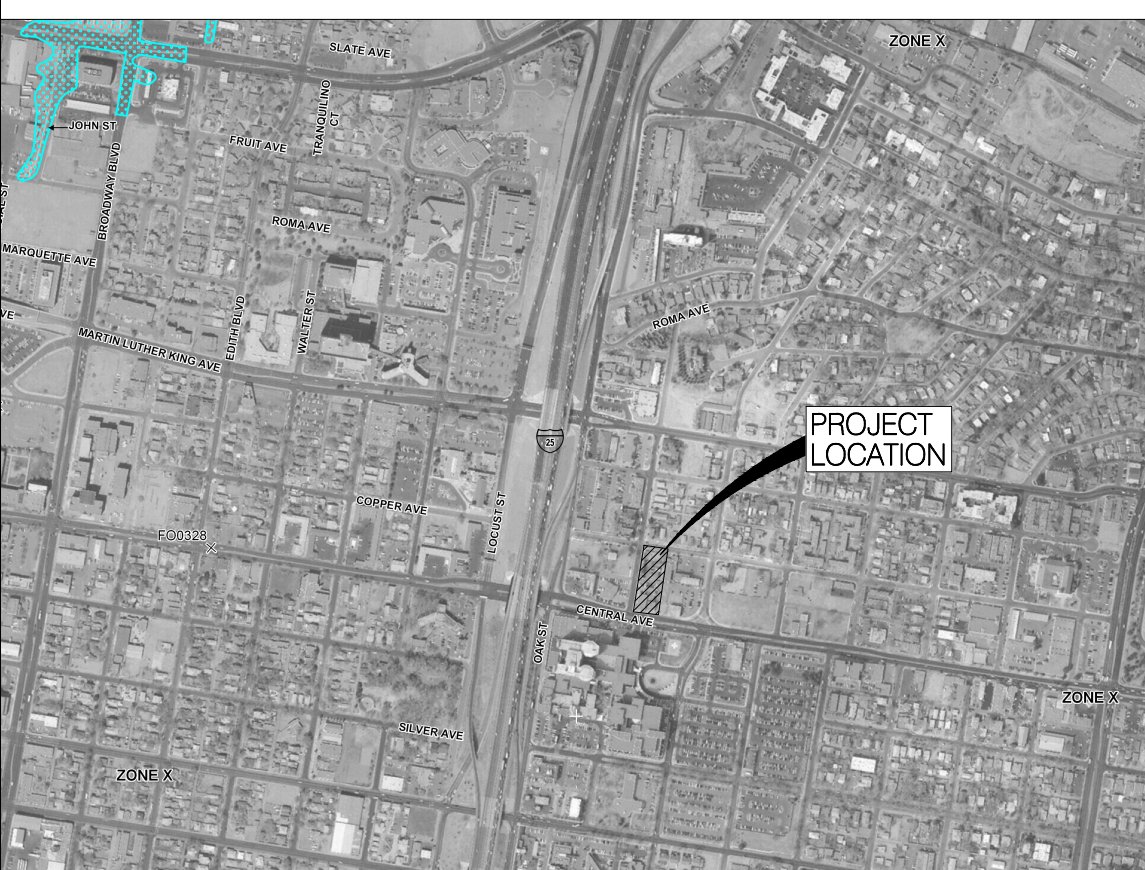
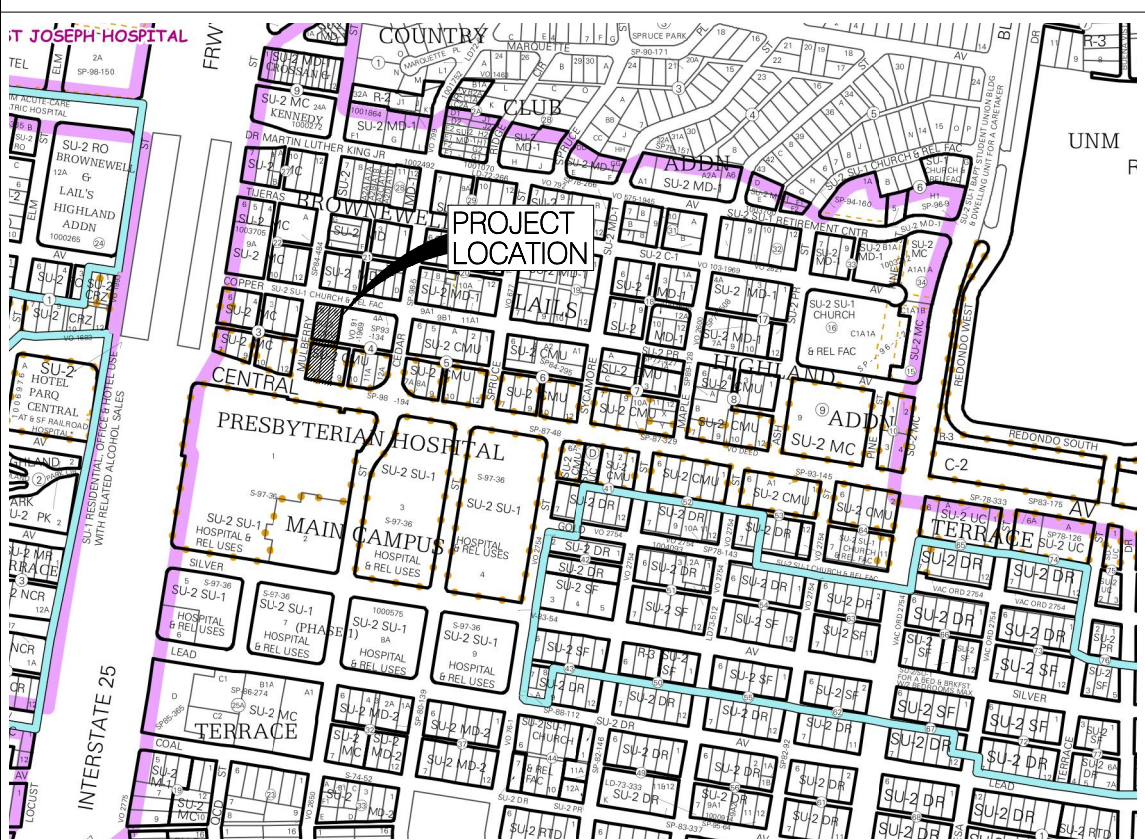
BASIN D3A-P INCLUDES ROOF DRAINAGE FROM THE HOTEL THAT WILL BE PIPED DIRECTLY INTO THE COPPER AVE PROPOSED RELOCATED INLET WHICH ULTIMATELY TIES TO THE EXISTING 21" RCP LINE THAT RUNS IN MULBERRY ST.

BASIN D3A-S INCLUDES A PORTION OF THE SITE'S EASTERN HARDSCAPE AND LANDSCAPING FEATURES WHICH WILL CONTINUE TO SHEET FLOW INTO THE PROPOSED RELOCATED INLET WITHIN COPPER AVE AND INTO A PROPOSED PRIVATE INLET ONSITE.

OFFSITE BASIN OS-D3A INCLUDES A PORTION OF THE SITE'S ENTRANCE, TRASH ENCLOSURE, & HARDSCAPE BETWEEN THE PROPOSED DEVELOPMENT TO THE EAST. THIS AREA WILL SHEET FLOW TO A PROPOSED PRIVATE INLET ONSITE. THIS PROPOSED PRIVATE INLET COULD BE UTILIZED TO CAPTURE DRAINAGE FROM THE ADJACENT PARCEL IN THE FUTURE AS IT CURRENTLY DRAINS TO THE SAME DISCHARGE POINT. A SMALL PORTION OF DRAINAGE WILL CONTINUE TO SHEET FLOW INTO COPPER AVE AND COLLECTED WITH THE PROPOSED RELOCATED INLET (THE DUMPSITE ENCLOSURE WILL HAVE A SEPARATE DRAIN THAT CONNECTS TO THE SANITARY SEWER SERVICE).

## VICINITY MAP

### ZONE MAP K-15-Z



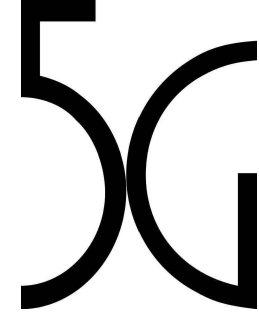
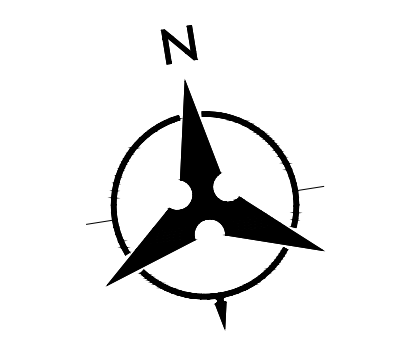
FEMA FIRM MAP #: 35001C0334G

## KEYNOTES

- EXISTING STORM DRAIN TO REMAIN.
- STORM DRAIN INLET AND IMPROVEMENTS TO BE CONSTRUCTED AS A PART OF PROJECT DRB #1010879 / CPN # 764782.
- EXISTING INLET TO BE REMOVED AND RELOCATED.
- EXISTING STORM DRAIN TO BE REMOVED.
- EXISTING STORM DRAIN INLET TO BE REMOVED.
- PROPOSED NEW STORM DRAIN.
- PROPOSED NEW STORM DRAIN INLET.
- EXISTING ART CURB & GUTTER CONSTRUCTED WITH ART PROJECT.
- MANHOLE TO BE CONSTRUCTED AS A PART OF PROJECT DRB # 1010879 / CPN # 764782.
- PROPOSED NEW STORM DRAIN MANHOLE.

## GRADING LEGEND

---	PROPERTY LINE	=====	PROPOSED CURB & GUTTER
---	PROJECT LIMITS OF GRADING	S=2.0%	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
---	TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FG=FINISH GROUND HIGH, FQ=FINISH GROUND LOW	-----	EXISTING BASIN BOUNDARY
BASIN DXX-S	PROPOSED BASIN ID-SHEET FLOW	-----	EXISTING BASIN ID
BASIN DXX-P	PROPOSED BASIN ID-PIPED FLOW	-----	



ARCHITECT  
SG Studio Collaborative, LLC.  
1217 Main Street  
Dallas, TX 75202  
(214) 670-0050 Christine Robbins-Elrod)

CIVIL ENGINEER  
Bohannon Huston  
7500 Jefferson Street NE  
Albuquerque, New Mexico 87109  
(505) 853-1000 Mike Balsakovits

LANDSCAPE  
Heds Up Landscaping  
7525 Second Street NW  
Albuquerque, New Mexico 87107  
(505) 858-9815 John Brady

STRUCTURAL ENGINEER  
MK Engineers and Associates, Inc  
400 Chisholm Place, Suite 106  
Plano, TX 75075  
(214) 501-3364 Mohammad Kabilir

MEP ENGINEER  
MEP Systems Design & Engineering, Inc.  
918 Dragon Street, Suite 500  
Dallas, TX 75207  
(214) 515-0925 Mark Portnoy

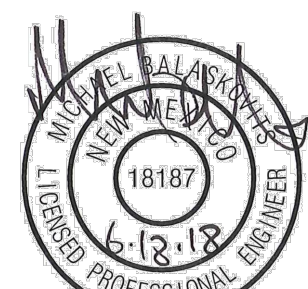
INTERIOR DESIGNER  
IRC, LLC  
2360 Tower Drive, Suite 101  
Monroe, LA 71201  
(318) 812-7708 Colby Weaver Walker

OWNER/DEVELOPER  
Titan Development  
6300 Riverside Plaza Lane NW, Ste 200  
Albuquerque, New Mexico 87120  
(505) 858-0163 Josh Rogers

OPERATOR  
Intermountain Management, LLC  
2390 Tower Drive  
Monroe, Louisiana 71201  
(318) 812-7125 Dave Raymond

DATE	ISSUE TITLE
01/12/18	ISSUE FOR DESIGN DEVELOPMENT
04/20/18	ISSUE FOR PERMIT
06/08/18	ISSUE FOR MARIOTT'S 90% SET

REV.	DATE	ISSUE TITLE



NOT FOR CONSTRUCTION  
SPRINGHILL SUITES - ALBUQUERQUE  
CENTRAL AVE. & MULBERRY ST.  
ALBUQUERQUE, NM 87106  
DRAINAGE  
MANAGEMENT PLAN

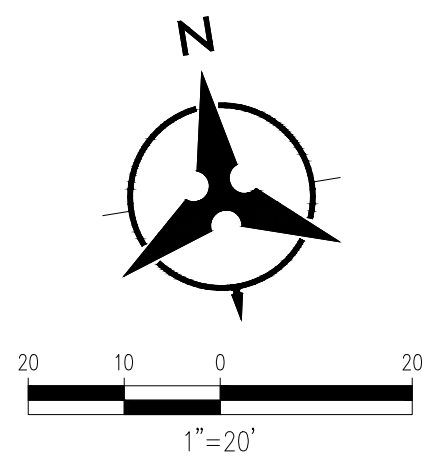


NOTE: NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW AND PUBLIC EASEMENTS WITHOUT AN APPROVED PUBLIC WORK ORDER.

NOTE: ALL WORK SHOWN IN THE RW AND PUBLIC EASEMENTS SHALL BE CONSTRUCTED PER COA PUBLIC WORK ORDER CPN #764783. GRADES SHOWN WITHIN THE RW AND PUBLIC EASEMENTS ARE FOR REFERENCE ONLY.

SHEET C-101

SHEET C-102



### GENERAL SHEET NOTES

1. 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.
2. 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.
3. 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.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.).
10. 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.
11. 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.
12. 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.
13. 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.
14. 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

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. 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.
4. EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT UNLESS SHOWN OTHERWISE.
5. 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.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
7. 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.
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
11. SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.
12. 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.

5G

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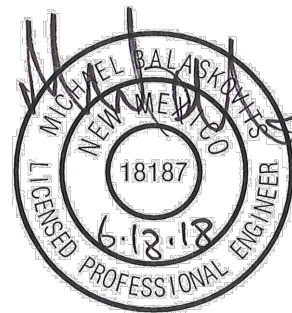
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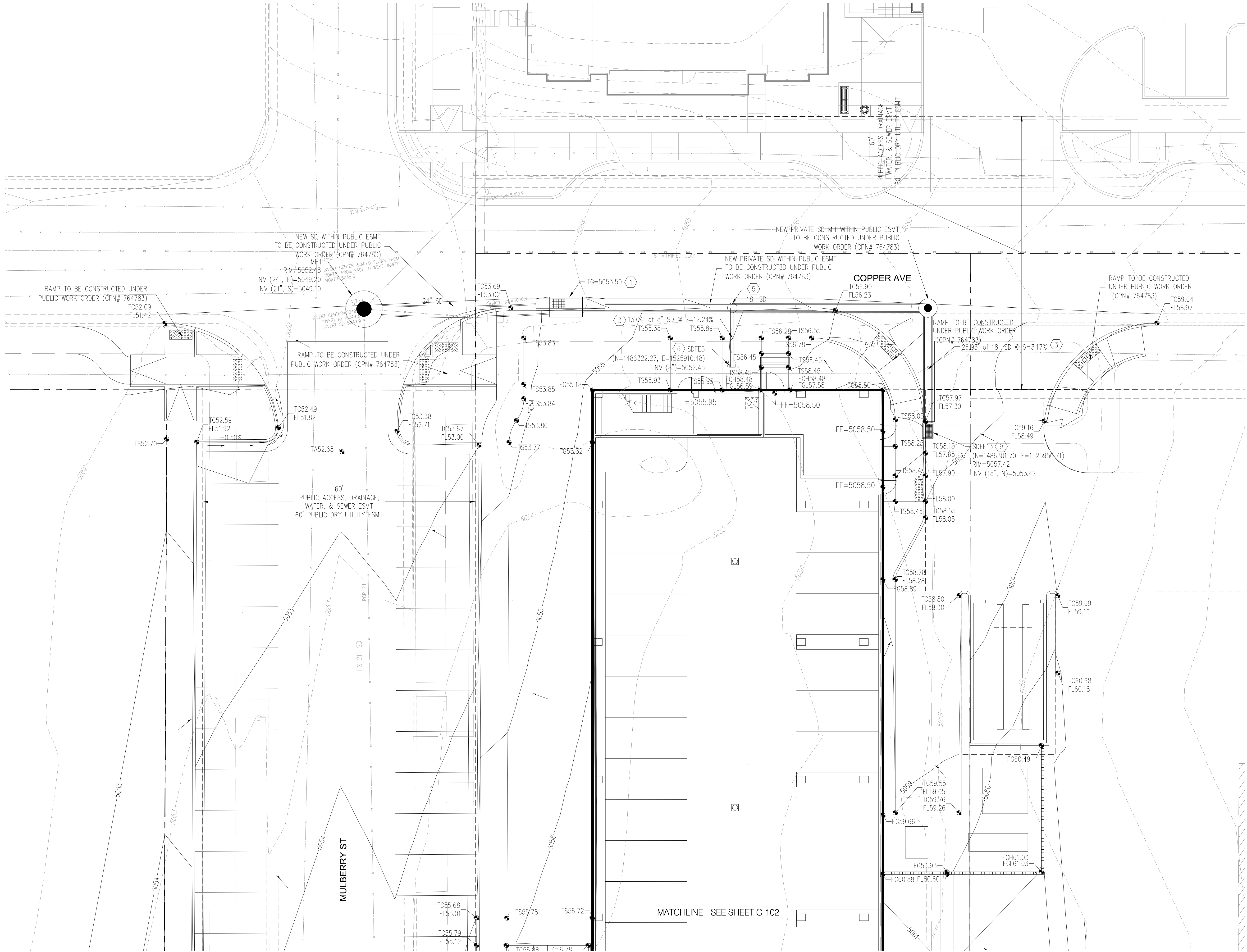
OVERALL GRADING &  
DRAINAGE PLAN

IMM012  
PROJECT NUMBER

C-100  
SHEET NUMBER

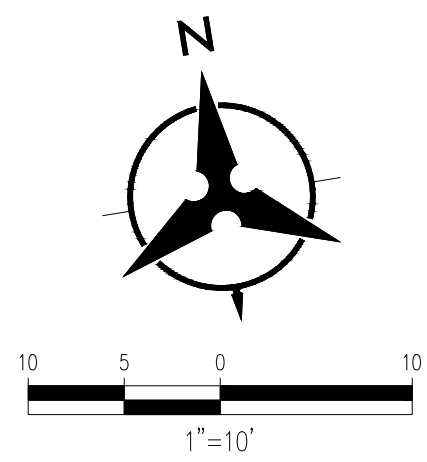
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NOTE: NO WORK SHALL BE PERFORMED IN THE PUBLIC RW AND PUBLIC EASEMENTS WITHOUT AN APPROVED PUBLIC WORK ORDER.

NOTE: ALL WORK SHOWN IN THE RW AND PUBLIC EASEMENTS SHALL BE CONSTRUCTED PER COA #764783. GRADES SHOWN WITHIN THE RW AND PUBLIC EASEMENTS ARE FOR REFERENCE ONLY.

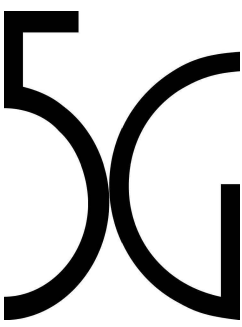


## GRADING KEYNOTES

- PUBLIC SINGLE GRATE TYPE 'A' INLET. SEE PUBLIC WORK ORDER (CPN # 764783). GRATE ELEVATION FOR REFERENCE ONLY.
- PUBLIC TYPE 'D' INLET. SEE PUBLIC WORK ORDER (CPN #764783). GRATE ELEVATION FOR REFERENCE ONLY.
- INSTALL HDPE (N12WT, OR APPROVED EQUAL) STORM DRAIN PIPE (SIZE PER PLAN).
- INSTALL 18" NYLOPLAST STORM DRAIN INLET OR APPROVED EQUAL PER MANUFACTURER'S SPECIFICATIONS.
- INSTALL PRE-FABRICATED STORM DRAIN FITTING.
- STUB PROPOSED ROOF DRAIN CONNECTIONS WITHIN 5' OF THE BUILDING. SEE PLUMBING PLANS FOR CONTINUATION.
- REMOVE EXISTING STORM DRAIN.
- EXISTING STORM DRAIN INLET TO BE REMOVED. SEE PUBLIC WORK ORDER (CPN # 764783).
- INSTALL 18" 2'X3' NYLOPLAST STORM DRAIN TRAFFIC RATED INLET OR APPROVED EQUAL PER MANUFACTURER'S SPECIFICATIONS.
- INSTALL MEDIAN CURB & GUTTER PER COA STD. DWG. 2415B.

## 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 FINISHED GRADE SPOT ELEVATION	---	EASEMENT
---	TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW		



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GRADING &  
DRAINAGE PLAN

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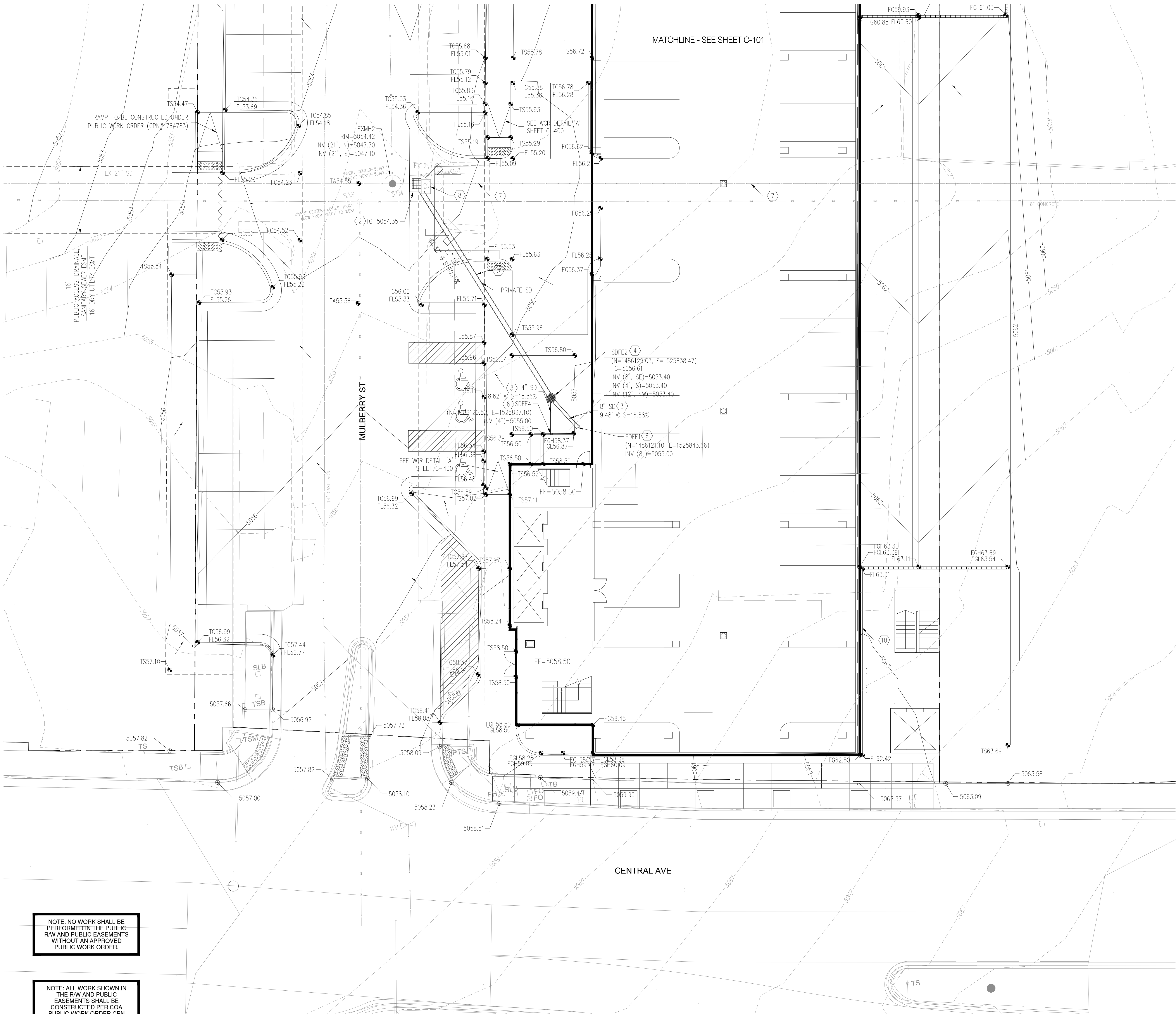
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C-101

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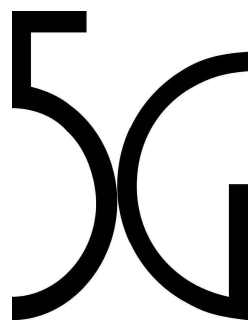


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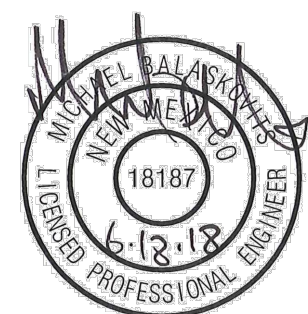
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GRADING &  
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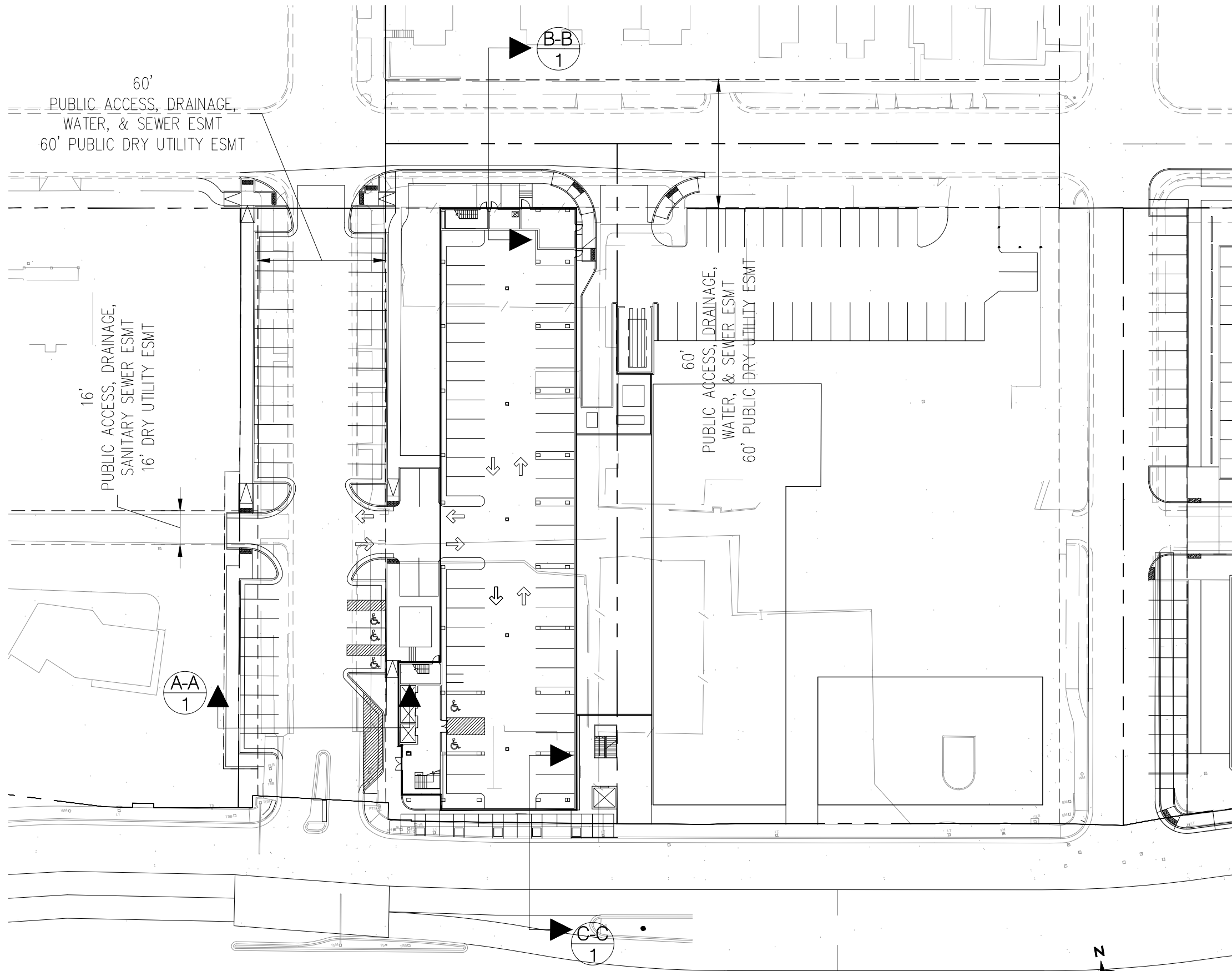
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PROJECT NUMBER

C-102

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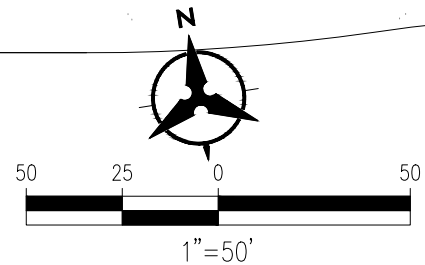


A-A  
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B-B  
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C-C  
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**THE HIGHLANDS  
HIGHLANDS HOTEL**

**PROPOSED STREET SECTIONS**

DRAWN BY:	EGN	DATE:	06/14/2018
CHECKED BY:	MJB	PROJECT NO.	20160155
		SHEET NO.	1 of 2



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Cross Sections

