

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Director



Mayor Timothy M. Keller

November 1, 2019

Hugh Floyd, P.E.  
Respec  
5971 Jefferson St. NE  
Albuquerque, NM, 8710

**RE: Kassam Legacy Uptown Apartments  
Grading and Drainage Plan  
Engineer's Stamp Date: 10/29/19  
Hydrology File: J18D033**

Dear Mr. Floyd:

PO Box 1293

Based upon the information provided in your resubmittal received 10/30/2019, the Grading & Drainage Plan and Drainage Report are approved for Building Permit.

Albuquerque

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.

NM 87103

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.

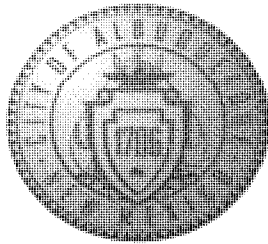
[www.cabq.gov](http://www.cabq.gov)

Also as a reminder, please provide a Drainage Covenant for the proposed stormwater quality ponds drain 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](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 11/2018)

**Project Title:** Kassam Legacy Uptown **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** J18D033  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** Tracts A-2-A1-A  
**City Address:** \_\_\_\_\_

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

**Address:** 5971 Jefferson Street NE Suite 101 Albuquerque NM 87109

**Phone#:** (505) 253-9811 **Fax#:** \_\_\_\_\_ **E-mail:** Jeremy.shell@respec.com

**Owner:** Kassam Land Acquisition 10, LLC **Contact:** \_\_\_\_\_

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

**Phone#:** (505) 243-6000 **Fax#:** \_\_\_\_\_ **E-mail:** akassam@legacy-hospitality.com

**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) \_\_\_\_\_

**DATE SUBMITTED:** 10-30-19

**By:** Jeremy Shell

COA STAFF:

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

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



Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Section 22.2

Runoff Rate:

Treatment Type Areas

Subbasin	Area <sub>A</sub> (ac)	Area <sub>B</sub> (ac)	Area <sub>C</sub> (ac)	Area <sub>D</sub> (ac)	Area <sub>E</sub> (ac)	Total (ac)
Subbasin 1	0.00	0.11	0.11	1.59		1.81
Subbasin 2	0.00	0.01	0.01	0.10		0.12
Subbasin 3.1	0.00	0.02	0.02	0.09		0.13
Subbasin 3.2	0.00	0.02	0.02	0.32		0.36
Total	0.00	0.16	0.16	2.10		2.42

Peak Discharge values based on Zone 3 from Table A-9

$Q_A = 1.87 \text{ cfs/ac}$      $Q_B = 2.60 \text{ cfs/ac}$      $Q_C = 3.45 \text{ cfs/ac}$      $Q_D = 5.02 \text{ cfs/ac}$

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

Subbasin	Discharge (cfs)
Subbasin 1	8.7
Subbasin 2	0.6
Subbasin 3.1	0.6
Subbasin 3.2	1.7
Total	11.5

Water Quality:

Required Water Quality volume for first flush of 0.34"

Subbasin	Volume (cu. ft.)
Subbasin 1	1,966
Subbasin 2	129
Subbasin 3.1	107
Subbasin 3.2	392
Total	2,595

Water Quality Pond Rating Curves

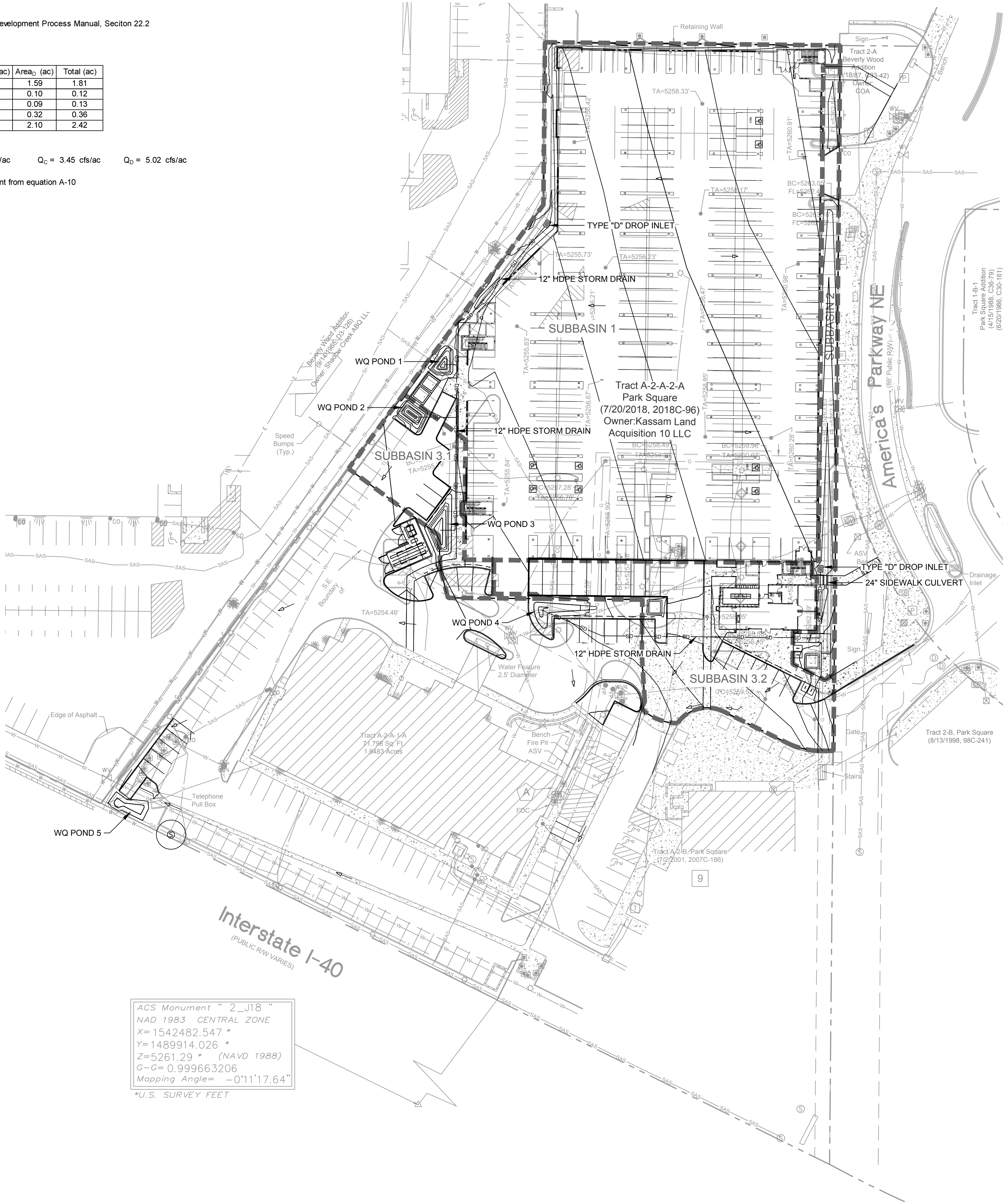
WQ Pond 1	Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
	5,251.8	3	0	0
	5,252.6	27	13	13
	5,254.5	148	165	178

WQ Pond 2	Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
	5,251.5	3	0	0
	5,253.6	79	88	88
	5,254.7	150	124	212
	5,255.8	244	212	425

WQ Pond 3	Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
	5,251.2	12	0	0
	5,252.0	58	27	27
	5,253.5	232	222	249
	5,254.2	359	225	474
	5,255.0	519	334	807

WQ Pond 4	Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
	5,253.80	6	0	0
	5,254.00	21	3	3
	5,255.00	271	146	149
	5,255.30	421	104	253

WQ Pond 5	Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
	5,249.25	4	0	0
	5,249.50	22	3	3
	5,250.00	88	28	31
	5,250.75	225	118	148



LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- SUBBASIN BOUNDARY

BACKGROUND

TRACT A-2-A-2-A, PARK SQUARE IS APPROXIMATELY 2.4 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED JUST WEST OF AMERICAS PARKWAY BETWEEN INDIAN SCHOOL ROAD AND INTERSTATE 40. THE SITE CURRENTLY IS A PARKING LOT. THE PROPOSED PROJECT IS AN APARTMENT BUILDING. THIS PROPERTY RECEIVES NO OFFSITE FLOWS. THERE IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE. A GRADING PLAN WAS DONE FOR THE PARKING LOT BY AFRA CONSTRUCTION & DESIGN FOR TRACT A-2-A-2-A (J18-D33). THIS FILE CAN BE REFERENCED FOR GENERAL BACKGROUND RELATED TO THE PROPERTY.

METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) SECTION 22.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES IN ORDER TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.34". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE PROPOSED PROJECT AREA, IN GENERAL, SLOPES FROM EAST TO WEST AT AT AN APPROXIMATE SLOPE OF 3% - 4%. STORM WATER RUNOFF GENERATED BY TRACT A-2-A-2-A SHEET DRAINS INTO TRACT A-2-A-1-A, THE ADJACENT PROPERTY TO THE SOUTH, AND IS CONCENTRATED INTO A CONCRETE RUNDOWN AT THE SOUTHWEST CORNER OF TRACT A-2-A-1-A. THE CONCRETE RUNDOWN DIRECTS WATER INTO A DROP INLET, WHICH THEN FLOWS IN A RCP UNDER THE WEST BOUND LANES OF INTERSTATE 40 AND DISCHARGES INTO THE I-40 CHANNEL.

PROPOSED CONDITIONS

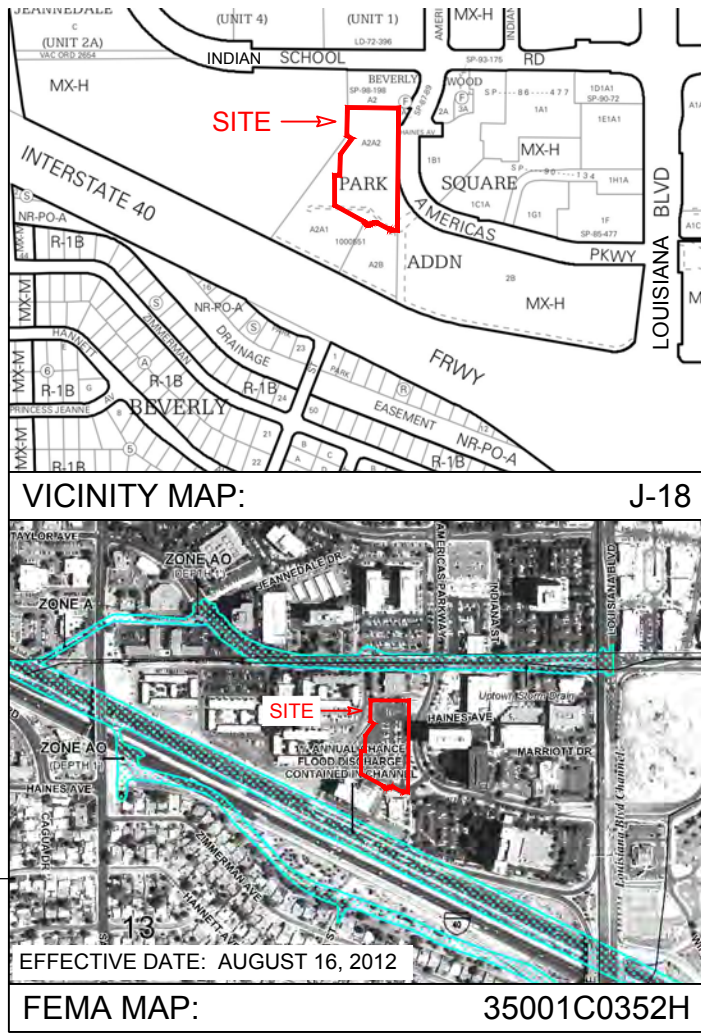
THE PROPOSED PROJECT WILL CONSIST OF A PARKING GARAGE AT GRADE, ANOTHER LEVEL OF PARKING GARAGE ABOVE, AND FOUR FLOORS OF APARTMENT UNITS ABOVE THE PARKING GARAGE LEVELS. THE PROPERTY HAS BEEN SPLIT INTO 3 SUBBASINS.

SUBBASIN 1 IS 1.81 ACRES AND GENERATES 8.7 CFS. THIS SUBBASIN CONSISTS PRIMARILY OF THE RUNOFF GENERATED BY THE ROOF OF THE BUILDING. THE ROOF WILL FLOW WEST AND FLOW INTO SCUPPERS AND DOWNSPOUTS. STORM WATER IS THEN ROUTED THROUGH A 12" STORM DRAIN THAT DISCHARGES INTO WATER QUALITY PONDS 1, 2 AND 3. THE REQUIRED WATER QUALITY VOLUME FOR THIS SUBBASIN IS 1,966 CUBIC FEET. WATER QUALITY PONDS 1, 2 AND 3 PROVIDE A COMBINED 1,410 CUBIC FEET. ONCE FULL, RUNOFF ENTERS THE PARKING LOT AND FLOWS TO THE SOUTHWEST CORNER OF THE PROPERTY ALONG THE PROPERTY LINE AS THE SITE HAS DONE HISTORICALLY.

SUBBASIN 2 IS 0.12 ACRES AND GENERATES 0.6 CFS. THIS SUBBASIN CONSISTS PRIMARILY OF THE RUNOFF GENERATED BY THE LANDSCAPING TO THE EAST OF THE BUILDING. THE LANDSCAPING AREA EAST OF THE BUILDING WILL FLOW SOUTH UNTIL ENTERING THE DROP INLET NEAR THE SOUTHEAST CORNER OF THE BUILDING. FROM THERE, A STORM DRAIN CONVEYS THE RUNOFF TO WATER QUALITY POND 4. THE REQUIRED WATER QUALITY VOLUME FOR THIS SUBBASIN IS 129 CUBIC FEET. WATER QUALITY POND 4 PROVIDES 253 CUBIC FEET. ONCE FULL, THE POND DISCHARGES INTO THE PARKING LOT AND FLOWS TO THE SOUTHWEST CORNER OF THE PROPERTY ALONG THE PROPERTY LINE AS THE SITE HAS DONE HISTORICALLY.

SUBBASIN 3 IS 0.49 ACRES AND GENERATES 2.3 CFS. THIS SUBBASIN CONSISTS OF THE PARKING LOT LOCATED ON THE SUBJECT PROPERTY. SUBBASIN 3.1 FLOWS SOUTH ALONG THE WEST BOUNDARY OF THE SITE AND SUBBASIN 3.2 FLOWS SOUTH INTO THE VALLEY GUTTER TO THE SOUTHWEST CORNER OF THE PROPERTY AS THE SITE HAS HISTORICALLY DONE. THE REQUIRED WATER QUALITY VOLUME FOR THIS SUBBASIN IS 499 CUBIC FEET. WATER QUALITY POND 5 PROVIDES 148 CUBIC FEET.

THE TOTAL REQUIRED STORMWATER QUALITY VOLUME FOR THIS DEVELOPMENT IS 2,595 CF. THE TOTAL STORMWATER QUALITY VOLUME PROVIDED IS 1,811 CF. THE OWNER HAS ELECTED TO PAY THE PAYMENT IN LIEU FOR THE REMAINING VOLUME OF 784 CF. THIS PAYMENT AMOUNT = 784 CF X \$8/CF = \$6,272.00.



MARKANA UPTOWN

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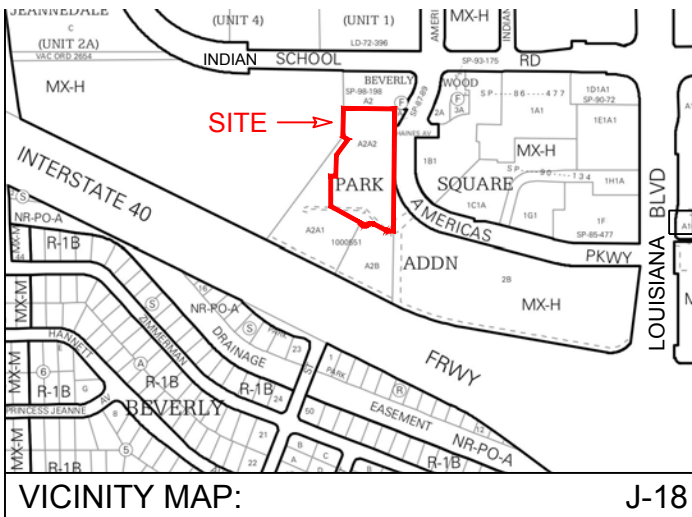
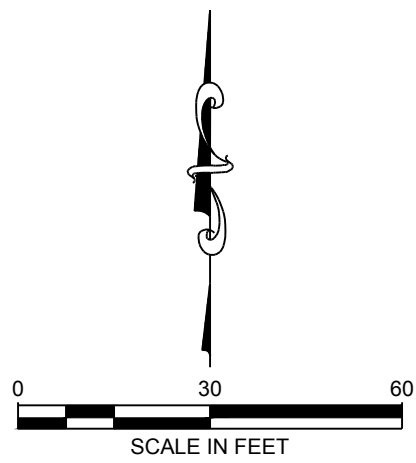
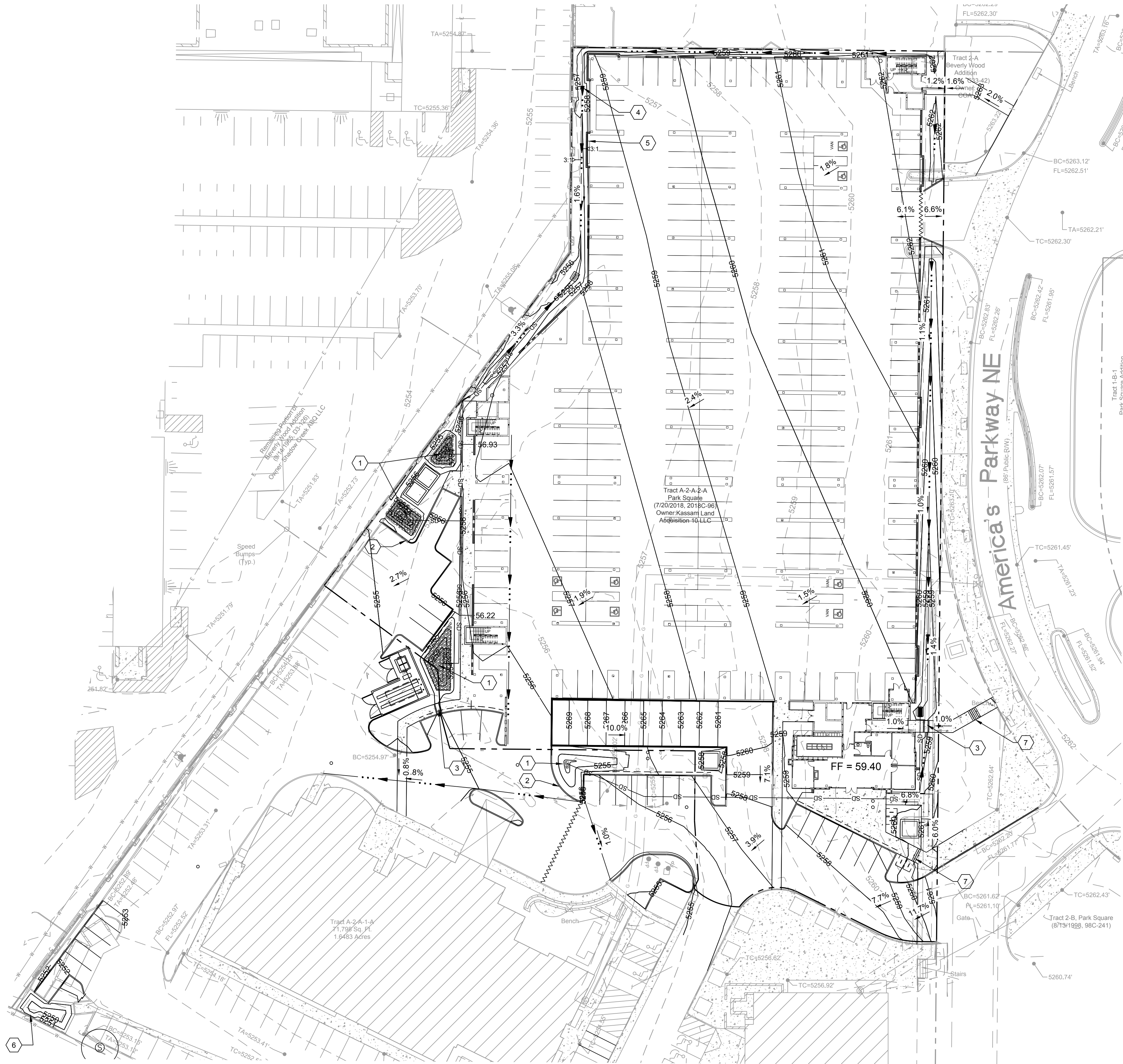
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DATE: October 30, 2019 ORB # 16-221

C-101

DRAINAGE PLAN



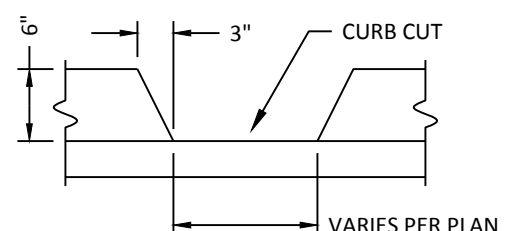


- LEGEND**
- EXISTING PROPERTY BOUNDARY
  - PROPOSED PROPERTY BOUNDARY
  - EXISTING MAJOR CONTOUR
  - EXISTING MINOR CONTOUR
  - PROPOSED CONTOUR
  - PROPOSED WATER BLOCK
  - PROPOSED FLOW LINE
  - PROPOSED RIPRAP
  - PROPOSED SPOT ELEV
  - EXISTING SPOT ELEV

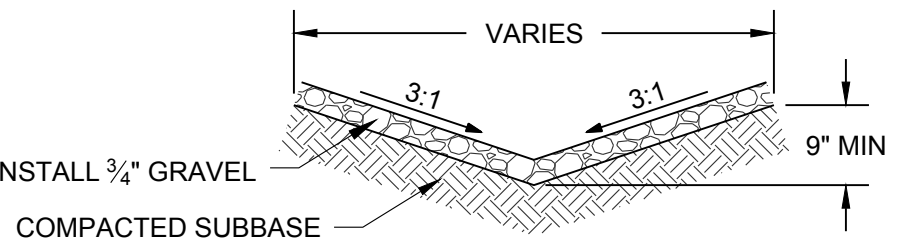
KEYED NOTES	
I.D.#	DESCRIPTION
1	INSTALL RIP RAP D <sub>86</sub> 2'-3"
2	INSTALL 4" CURB CUT, SEE DETAIL THIS SHEET
3	INSTALL 24" SIDEWALK CULVERT SEE DETAIL THIS SHEET
4	INSTALL SWALE WITH 1% MIN SLOPE PER DETAIL C-201
5	INSTALL ¾" GRAVEL ON 3:1 SLOPES
6	EXISTING DROP INLET
7	INSTALL STAIRS: 7" RISE/11" RUN, SEE C-203 FOR ELEVATIONS.

**NOTE:**

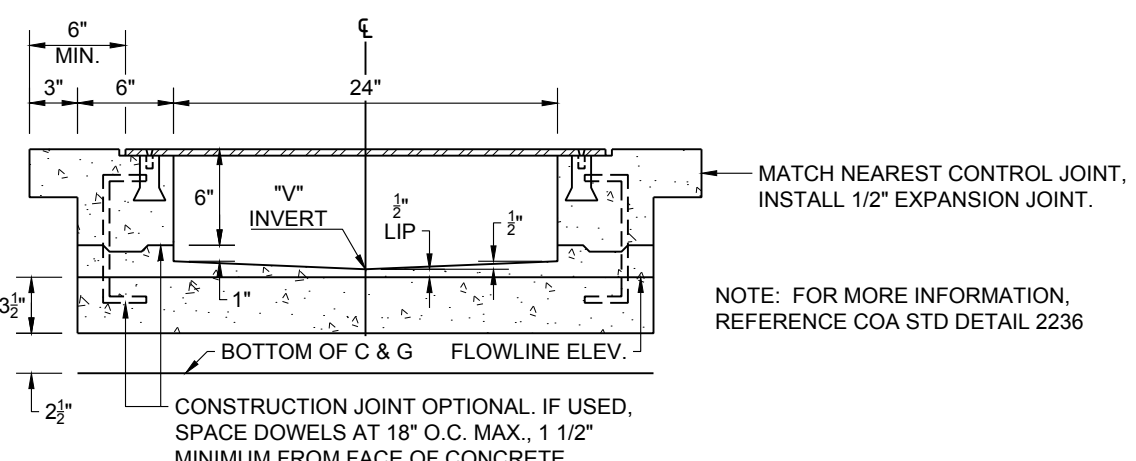
1. ALL PROPOSED ELEVATIONS ARE AT FLOW LINE UNLESS OTHERWISE SPECIFIED.



CURB CUT DETAIL  
NTS



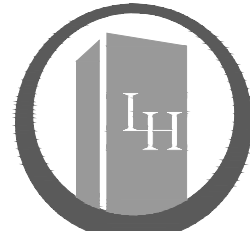
SWALE DETAIL  
NTS



SIDEWALK CULVERT DETAIL  
NTS

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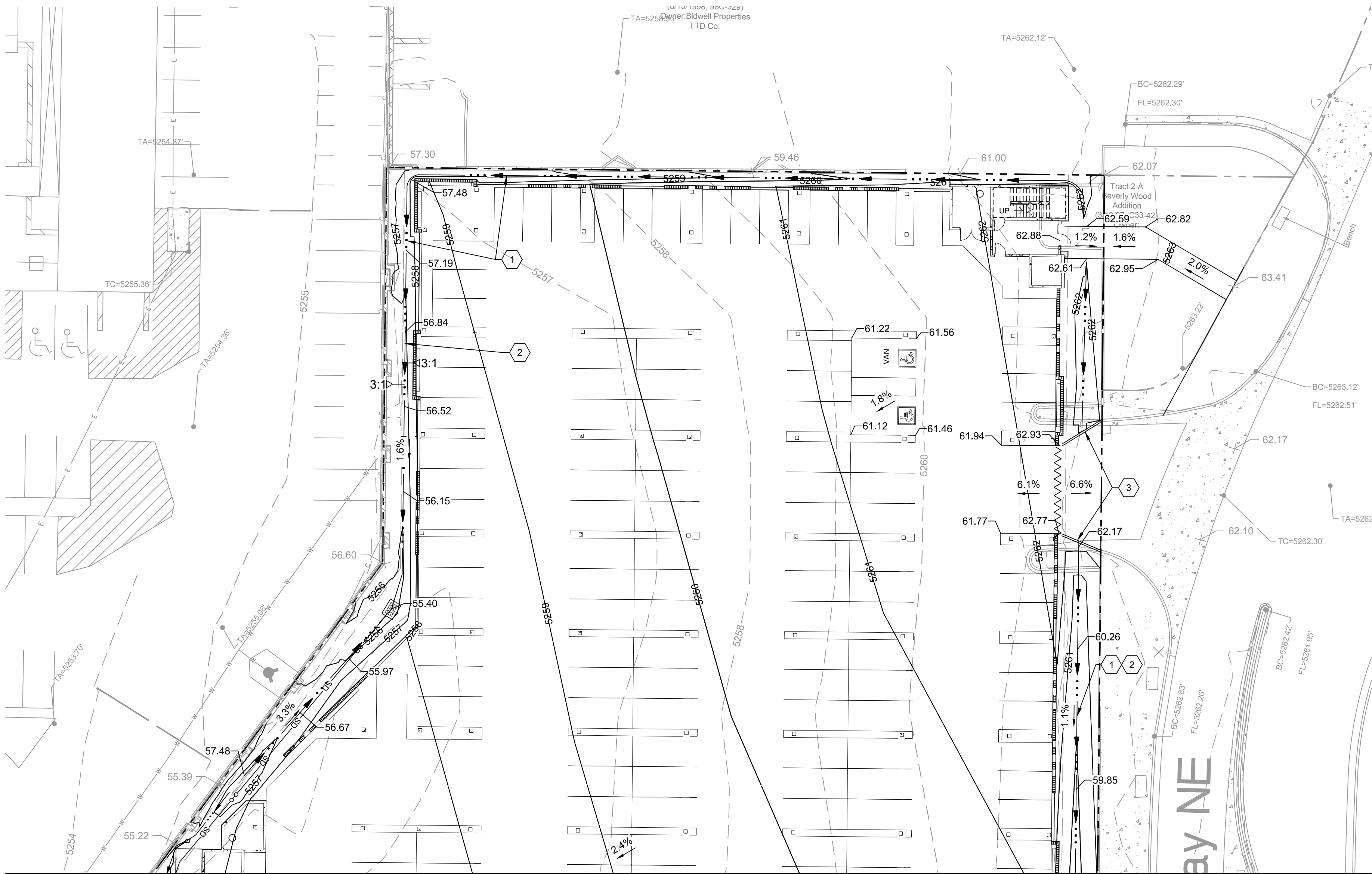
DATE: October 30, 2019 ORB # 16-221

# C-201

OVERALL GRADING PLAN



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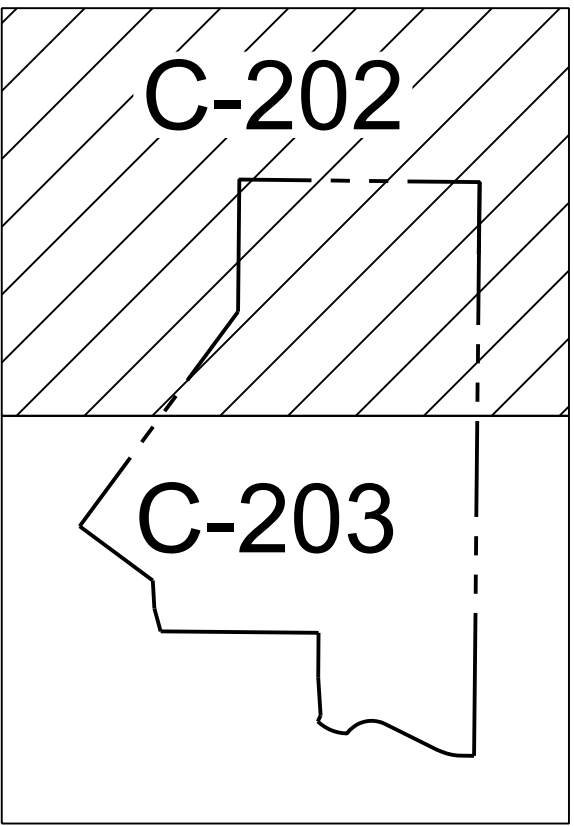


- LEGEND
- EXISTING PROPERTY BOUNDARY
  - - - PROPOSED PROPERTY BOUNDARY
  - - - 4965 EXISTING MAJOR CONTOUR
  - - - 4964 EXISTING MINOR CONTOUR
  - - - 4964 PROPOSED CONTOUR
  - ~~~~~ PROPOSED WATER BLOCK
  - PROPOSED FLOW LINE
  - ~~~~~ PROPOSED RIPRAP
  - XX.XX PROPOSED SPOT ELEV
  - XX.XX EXISTING SPOT ELEV

KEYED NOTES	
I.D.#	DESCRIPTION
1	INSTALL SWALE PER DETAIL C-201
2	INSTALL ¾" GRAVEL ON 3:1 SLOPES
3	BUILD NEW STANDARD CURB AND GUTTER. SEE DETAIL THIS SHEET.

NOTE:

1. ALL PROPOSED ELEVATIONS ARE AT FLOW LINE UNLESS OTHERWISE SPECIFIED.

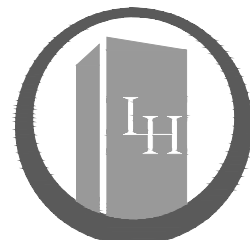


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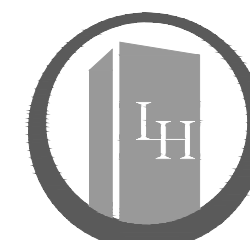
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# C-202

GRADING PLAN

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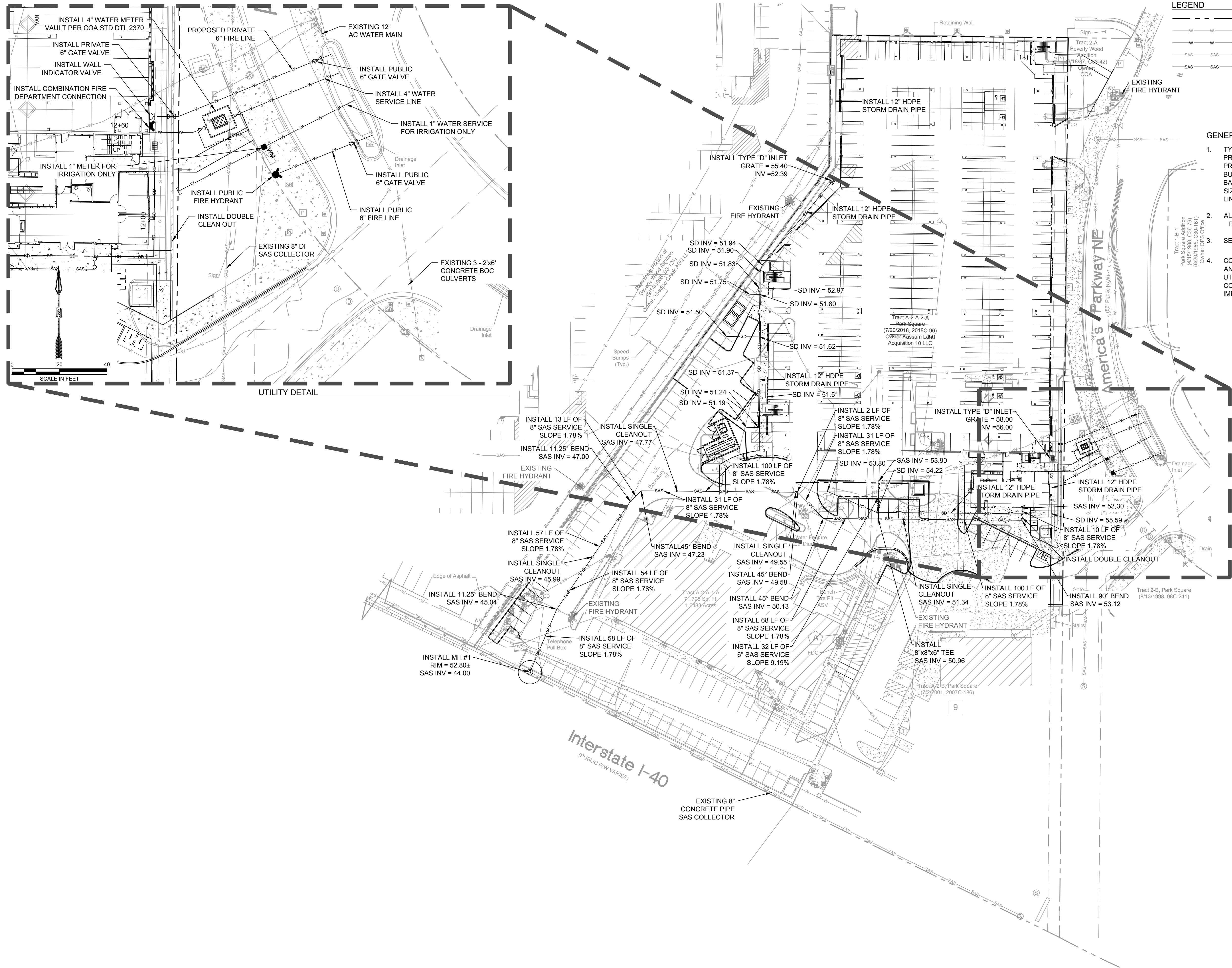
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## GRADING PLAN



FILE: Active Projects\03064-Kassam Legacy Uptown\3. DWG\Streets\03064 Utility.dwg USER: psh.tapia DATE: Oct. 29 2019 TIME: 04:09 pm

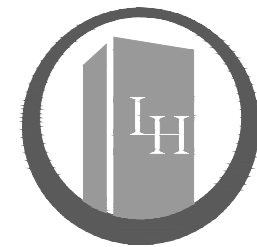


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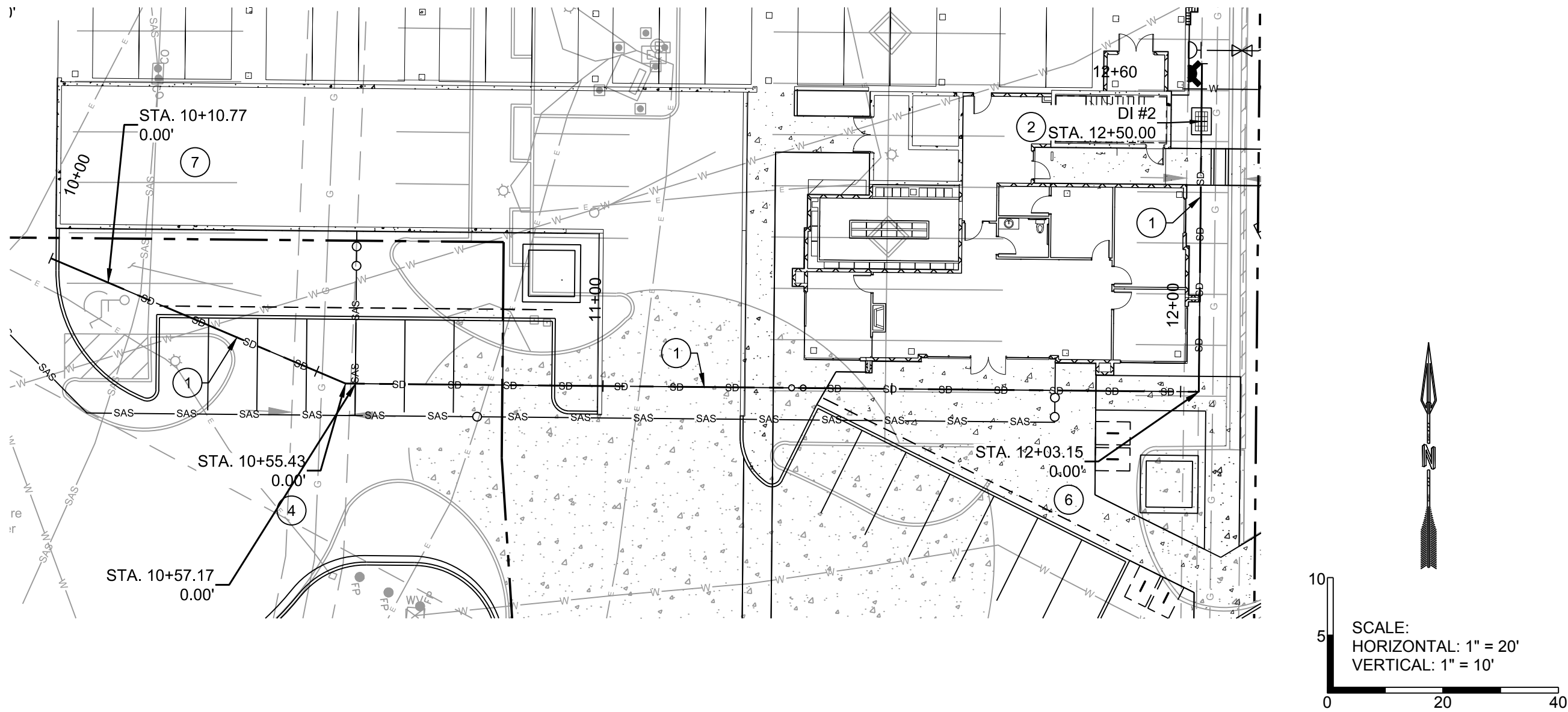
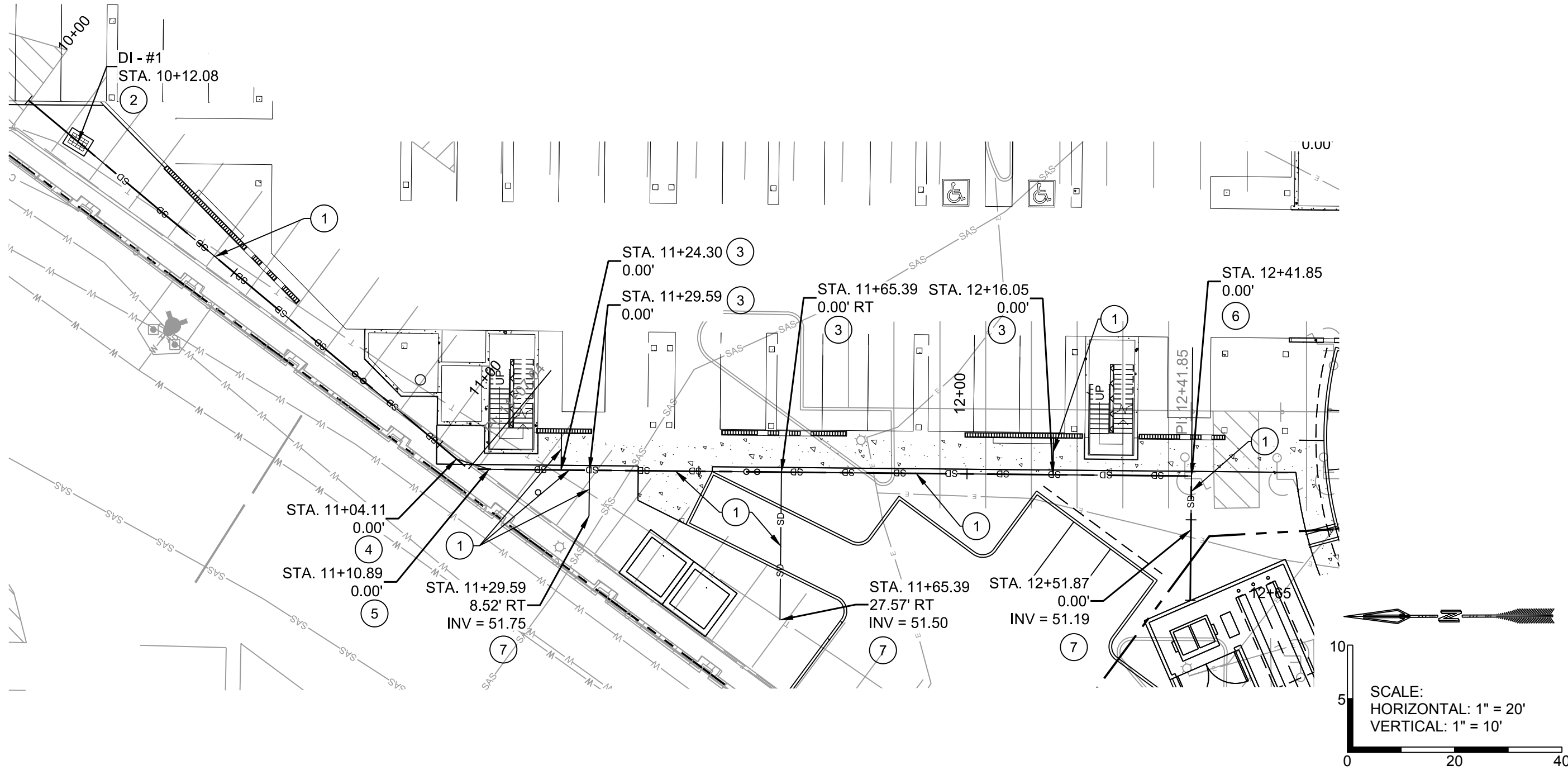
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# C-301

UTILITY PLAN

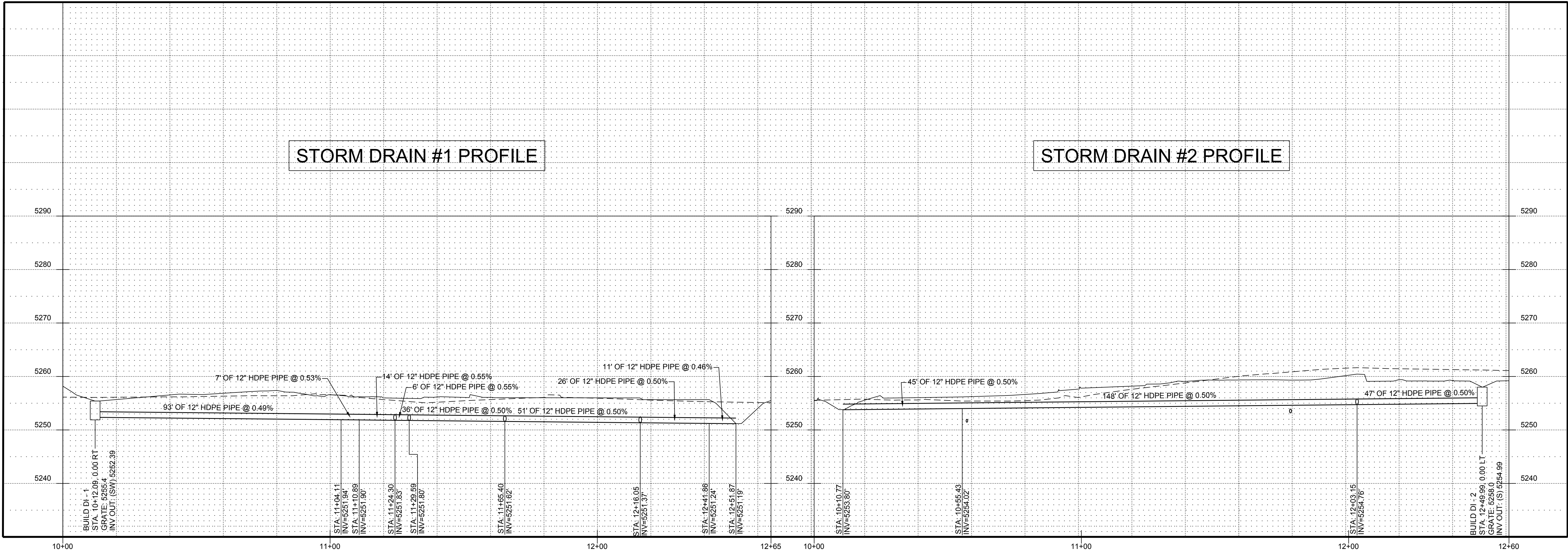
FILE: L:\Active Projects\03064-Kassam Legacy Uptown\3. DWG\Streets\03064 Utility.dwg USER: jsh.tapia DATE: Oct. 29 2019 TIME: 04:09 pm



STORM DRAIN CONSTRUCTION NOTES	
I.D.#	DESCRIPTION
1	INSTALL 12" STORM DRAIN PIPE
2	INSTALL TYPE D CATCH BASIN - SINGLE PER NM APWA STD. DTL. 2205, 2202
3	INSTALL 12"x12"x12" TEE
4	INSTALL 12" - 22.5° BEND
5	INSTALL 12" - 11.25° BEND
6	INSTALL 12" - 90° BEND
7	INSTALL 3' X 3' RIPRAP PLUNGE POOL DETAIL PER SHEET C-203

LEGEND	
	PROPOSED PROPERTY BOUNDARY
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE

NOTE:  
1. BASIS OF STATION LINE IS BASED ON CENTERLINE OF STORM DRAIN.

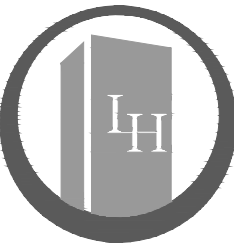


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## CD SET

DATE: October 30, 2019 ORB # 16-221

# C-302

STORMDRAIN PLAN AND PROFILE