

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(Rev. 01/06)

PROJECT TITLE: MORNINGSIDE LOFTS ZONE MAP/DRG. FILE # K-17-2
 DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOT 11 BLOCK 4 MANKATO PLACE CITY OF AUB BERN CO, NM
 CITY ADDRESS: 2919 SILVER AVE, S.E. ALBUQUERQUE, NM 87193

ENGINEERING FIRM: MILLER ENGINEERING, CONS.
 ADDRESS: 3500 COMANCH NE, BUILD F.
 CITY, STATE: ALBUQUERQUE NM

CONTACT: Verlyn Miller/JOHN JARQUE
 PHONE: 882-1500
 ZIP CODE: 87107

OWNER: ROBERT STRELL
 ADDRESS: 120 MORNINGSIDE
 CITY, STATE: ALBUQUERQUE NM

CONTACT: 268 2321
 PHONE: ROBERT STRELL
 ZIP CODE: 87108

ARCHITECT: STRELL DESIGN
 ADDRESS: 120 MORNINGSIDE
 CITY, STATE: ALBUQUERQUE NM

CONTACT: Robert Strell
 PHONE: 268-2321
 ZIP CODE: 87107

SURVEYOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

PROFESSIONAL LICENSED SURVEYOR SIGNATURE

LICENSE NO.

DATE

CONTRACTOR: _____
 ADDRESS: _____
 CITY, STATE: _____

CONTACT: _____
 PHONE: _____
 ZIP CODE: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN 1st SUBMITTAL
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER/ARCHITECT CERT (TCL)
☐ ENGINEER/ARCHITECT (DRB SITE PLAN)
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM)
☐ CERTIFICATE OF OCCUPANCY (TEMP)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER (SPECIFY)

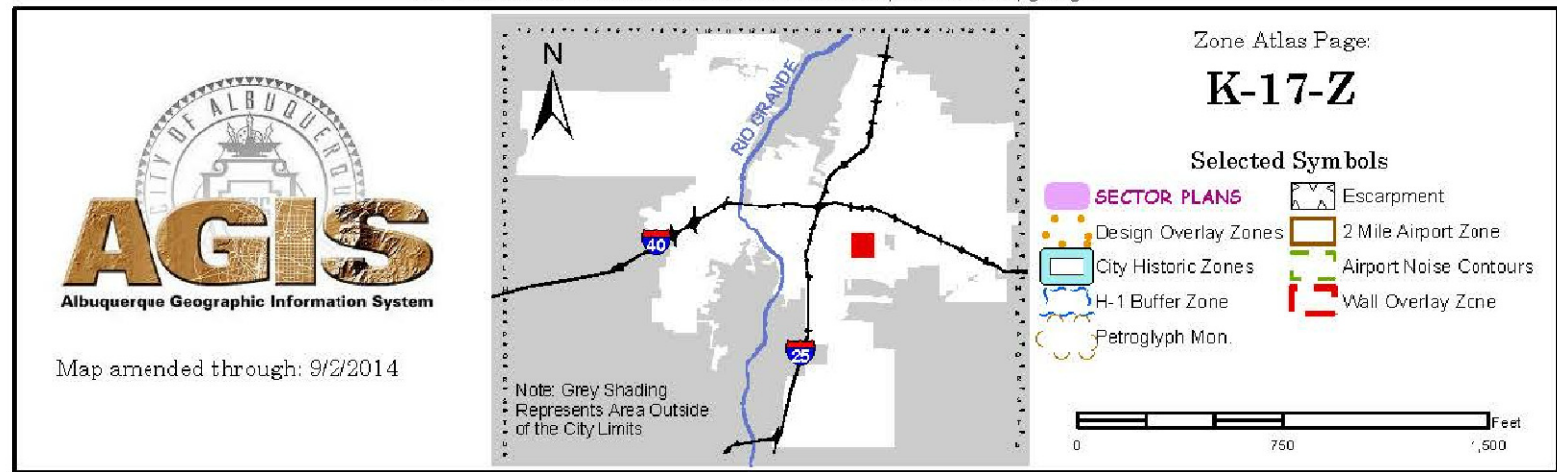
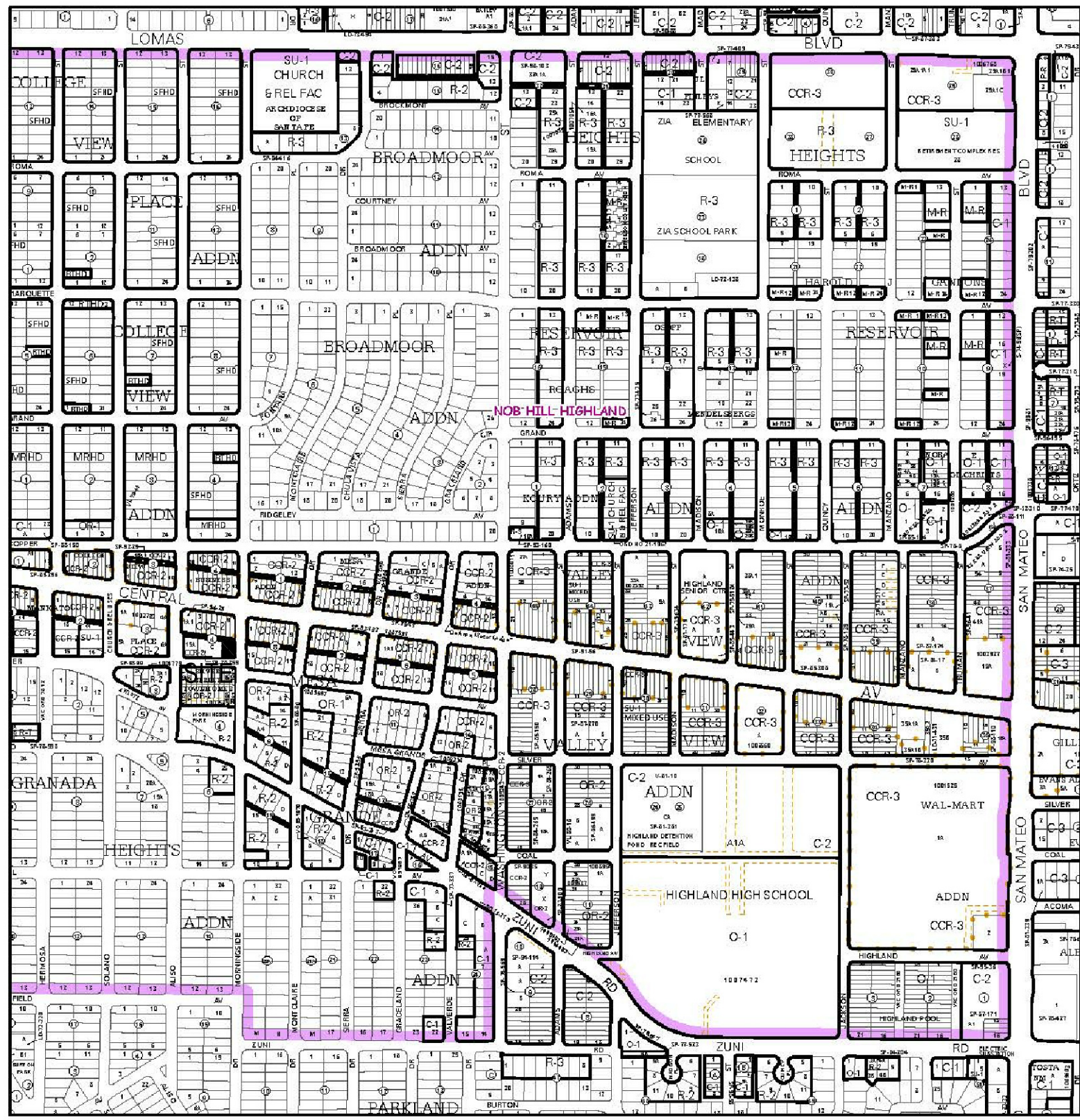
WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☒ NO
☐ COPY PROVIDED

SUBMITTED BY: _____ DATE: 6/25/15

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. Drainage Report: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.



SITE LOCATION
MORNINGSIDE LOFTS IS LOCATED AT 3919 SILVER AVE. S.E.. IN ALBUQUERQUE, NM. THE BOUNDARY IS RECTANGULAR IN SHAPE AND BOUNDED BY EXISTING APARTMENTS TO THE WEST, SILVER AVE. TO THE SOUTH, AN EXISTING ALLEY TO THE NORTH, AND MORNINGSIDE DRIVE, S.E. TO THE EAST.

EXISTING ON SITE CONDITIONS
THE SITE IS A VACANT LOT THAT IS PARTIALLY DEVELOPED WITH GARDEN AREA. THE SITE IS ACCESSED FROM THE EXISTING ALLEY ON THE NORTH SIDE OF THE SITE. THE PROPERTY HAS ONE DRAINAGE BASIN, WHICH IS IDENTIFIED AS BASIN A. THIS REPORT FOCUSES ON THE PRE AND POST HYDROLOGY. BASIN A DRAINS TO NORTHWEST INTO THE EXISTING ALLEY VIA SURFACE FLOW. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE EXISTING PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN A.

PROPOSED CONDITIONS
THE PROPOSED DEVELOPMENT OF THE SITE WILL CONSIST OF TWO APARTMENTS BUILDINGS, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, BASE COURSE PARKING AREA, AND LANDSCAPING. THE IMPROVEMENTS ARE ALL LOCATED IN EXISTING DRAINAGE BASIN A. A PORTION OF THE STORM WATER FLOW GENERATED FROM THE DEVELOPMENT OF THIS SITE WILL BE COLLECTED BY TWO NEW WATER HARVEST AREAS VIA SURFACE FLOW. THE REMAINING PORTION OF THE STORM WATER FLOW GENERATED FROM THE SITE WILL FREE DISCHARGE TO THE SOUTH INTO SILVER AVE., TO THE EAST ONTO MORNINGSIDE DRIVE, AND TO THE NORTH INTO THE EXISTING ALLEY. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE PROPOSED PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN A.

OFFSITE FLOWS
THERE ARE NO OFFSITE FLOWS THAT DRAIN ONTO THE SITE.

CONCLUSION
RUNOFF VOLUME AND FLOW RATE INCREASED AS A RESULT OF CHANGES IN LAND TREATMENTS FOR BASIN A BY 0.006 ACRE FEET AND THE PEAK FLOW RATE HAS INCREASED BY 0.068 CFS.

THE STORM WATER FLOWS FROM THE SITE WILL BE FREE DISCHARGED FROM THE SITE. WITH THE PROPOSED IMPROVEMENTS AS OUTLINED IN THE PLAN, A PEAK DISCHARGE OF 0.503 cfs WILL BE GENERATED FOR THE 100 YEAR, 24 HOUR EVENT AND VOLUME OF 0.02 AF WILL BE GENERATED FOR THE 100 YEAR, 24 HOUR EVENT. WITH THE FIRST FLUSH PONDS DESCRIBED BELOW THERE SHOULD BE NO ADVERSE EFFECTS ON THE CAPACITY OF DOWNSTREAM DRAINAGE FACILITIES.

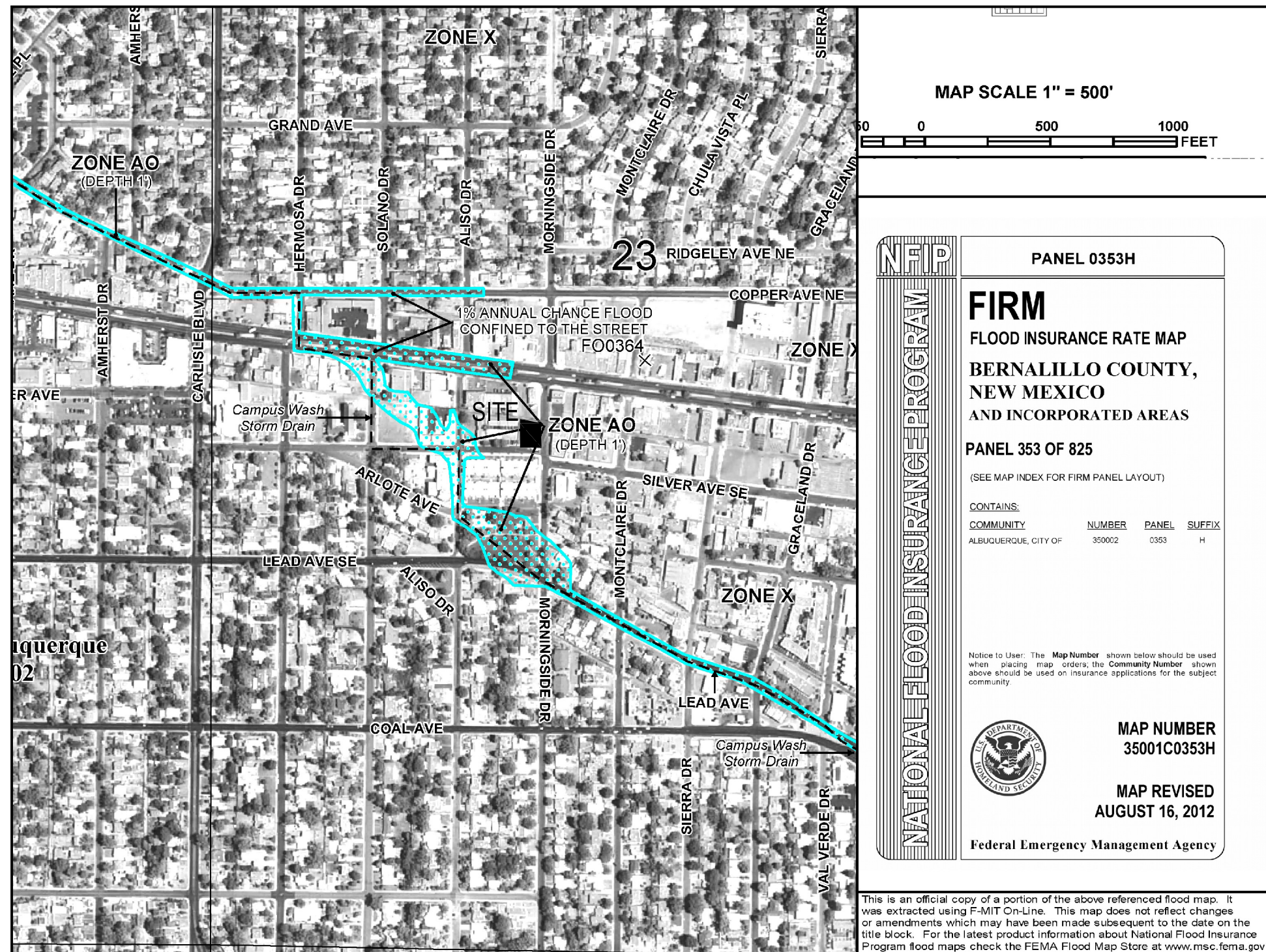
THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE SIDEWALK CULVERTS AND EARTHENED SWALES ALLOWING STORMWATER INTO PROPOSED WATER HARVESTING AREAS. THESE WATER HARVESTING AREAS WILL BE USED TO MANAGE THE FIRST FLUSH AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. THE VOLUME OF THE FIRST FLUSH (0.44-0.1 INCHES * IMPERVIOUS AREA)= 78 cf. THE WATER HARVEST AREA VOLUME = 183 cf > 78 cf. THEREFORE MANAGES THE FIRST FLUSH. (SEE CALCULATIONS BELOW)

GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY SURV TEK, INC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- PROJECT BENCHMARK IS ACS MONUMENT 5-K17A LOCATED IN CARLISLE MEDIAN S. OF INDIAN SCHOOL RD. ELEV. 5222.21 (NAVD 1988)
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WEETED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X. DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLANE ACCORDING TO THE FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO AND UNINCORPORATED AREAS PER MAP NO 35001C 0535H.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL, TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY THE NRCS FIELD OFFICE REPRESENTATIVE THAT IS APPROPRIATE FOR THE PROJECT LOCATION. ALL DISTURBED AREAS WITH SLOPES LESS THAN 3:1 SHALL RECEIVE CLASS "A" SEEDING. ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEEDING. THE STEEP SLOPE SEEDING SHALL CONSIST OF SEEDING IN CONJUNCTION WITH A 100% COCONUT FIBER BLEND EROSION BLANKET (NORTH AMERICAN GREEN C125) OR APPROVED EQUAL. ALL MATERIALS, EQUIPMENT AND LABOR ASSOCIATED WITH THE PROPER CONSTRUCTION OF THE STEEP SLOPE SEEDING WILL BE CONSIDERED INCIDENTAL AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS MATERIAL OR WORK. THE COCONUT FIBER EROSION BLANKET AND ASSOCIATED SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%. ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

C1 VICINITY MAP

ZONE ATLAS MAP H-17-C



A1 FLOOD ZONE MAP

FLOOD ZONE MAP: 35001C0353H

SPECIAL ORDER 19

DRAINAGE FACILITIES WITHIN THE CITY
RIGHT-OF-WAY NOTICE TO CONTRACTOR

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACK FILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24 - HOUR BASIS.

WATER HARVEST VOLUMES

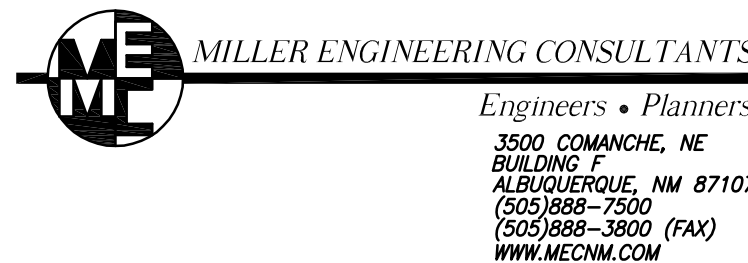
WATER HARVEST AREA 1 proposed					
Pond Rating Table					
Side Slope	4:1				
Depth	Area	Volume	Cum Volume		
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)	(cubic feet)
20.45	98	0.002	0.000	0.000	
21.45	28	0.001	0.001	0.0014	63.0000

WATER HARVEST AREA 2 proposed					
Pond Rating Table					
Side Slope	4:1				
Depth	Area	Volume	Cum Volume		
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)	(cubic feet)
19	208	0.005	0.000	0.000	
20	31	0.001	0.003	0.0027	119.5000

DRAINAGE DATA

Precipitation Zone 2 - 100-year Storm		P(360) = 2.33 in				P(1440) = 2.67 in			
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
		A	B	C	D				
Existing Conditions									
C	0.128	0.000	0.000	0.108	0.020	1.287	0.014	0.014	0.435
Total	0.128								0.435
Proposed Conditions									
C	0.128	0.000	0.000	0.063	0.065	1.63	0.017	0.020	0.503
Total	0.128								0.503

Precipitation Zone 2 - 10-year Storm				P(360) =		1.52 in		P(1440) :		1.8 in	
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)		
		A	B	C	D						
		(Acres)									
Existing Conditions											
C	0.128	0.000	0.000	0.108	0.020	0.650	0.007	0.007	0.249		
Total	0.128								0.249		
Proposed Conditions											
C	0.128	0.000	0.000	0.063	0.065	0.936	0.010	0.011	0.312		
Total	0.128								0.312		



Morningside Lofts
3919 Silver Ave. SE
Albuquerque, NM 87198



STRELL DESIGN

120 MORNINGSIDE S.E. ALBUQUERQUE N.M. 87108
TEL: 505-268-2321 FAX: 505-268-2328

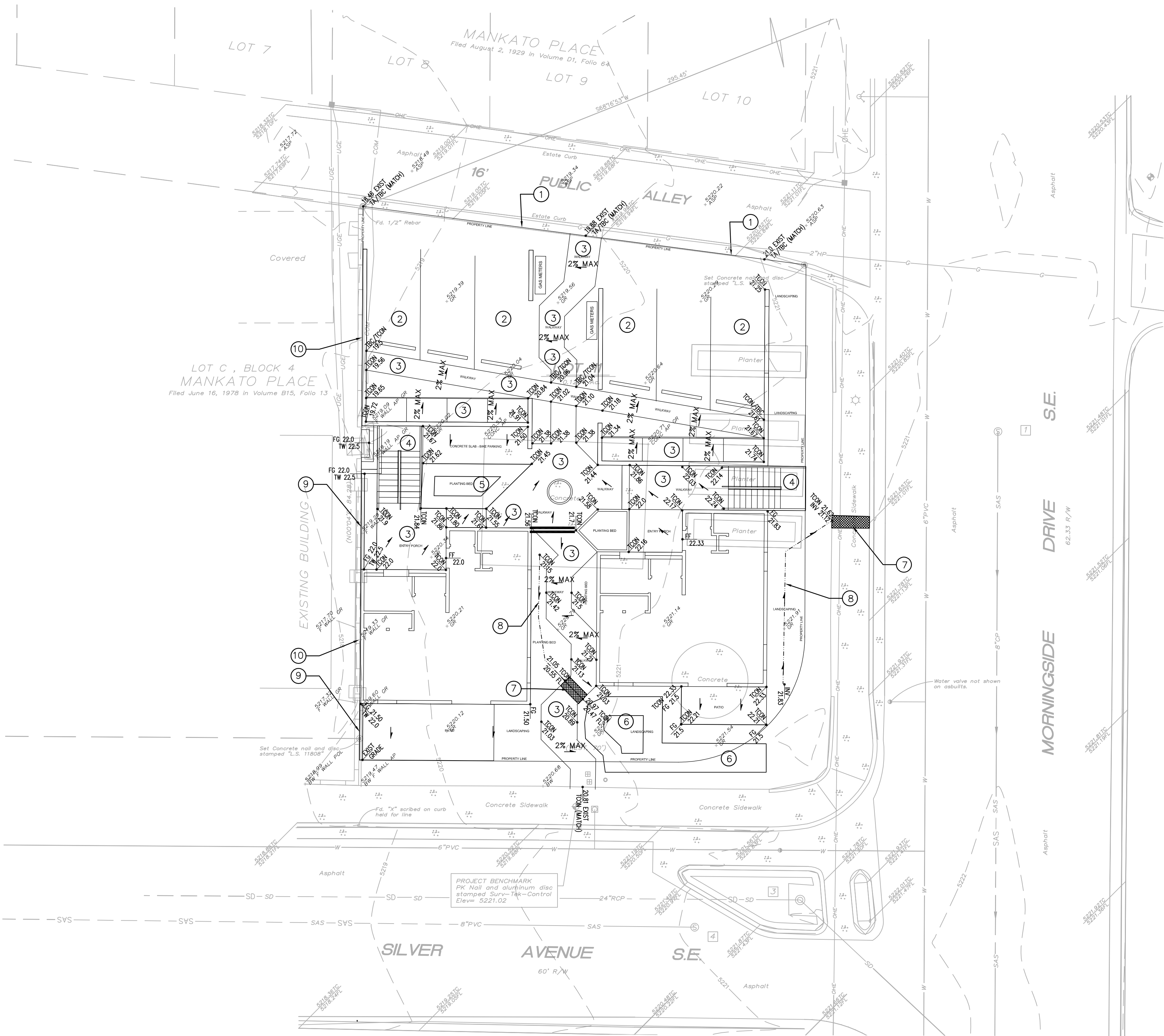


PERMIT SET


GRADING AND DRAINAGE
REPORT

C-001

T:\Clients\Strell Design\grad\sheet\grading and drainage plan.dwg, CD PLAN C-102 (2), 6/25/2019 4:03:16 PM, jlopez, 1:1

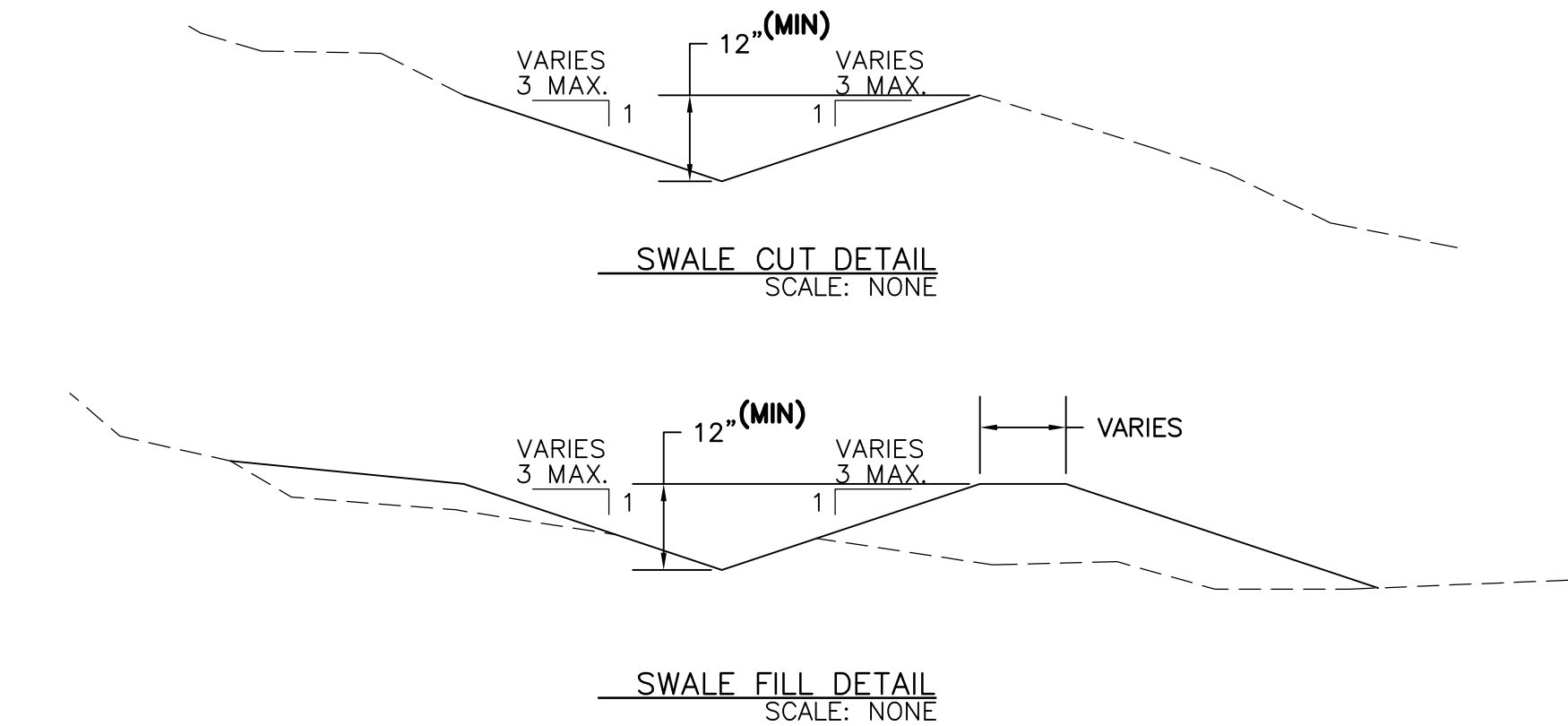


LEGEND:

38.00 FG	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)	=====	GRADE BREAK-HIGH POINT
MATCH (95.19)	MATCH EXISTING ELEVATIONS	-----	SWALE
TCON	TOP OF CONCRETE	-----SD-----	STORM DRAIN LINE
FL	FLOW LINE, CURB		
INV	INVERT		
FG	FINISH GRADE	=====5895=====	PROPOSED MAJOR CONTOUR
TBC	TOP OF BASE COURSE	-----	PROPOSED MINOR CONTOUR
TC	TOP OF CURB	-----5895-----	EXISTING MAJOR CONTOUR
TG	TOP OF GRATE	-----	EXISTING MINOR CONTOUR
	FLOW ARROW		

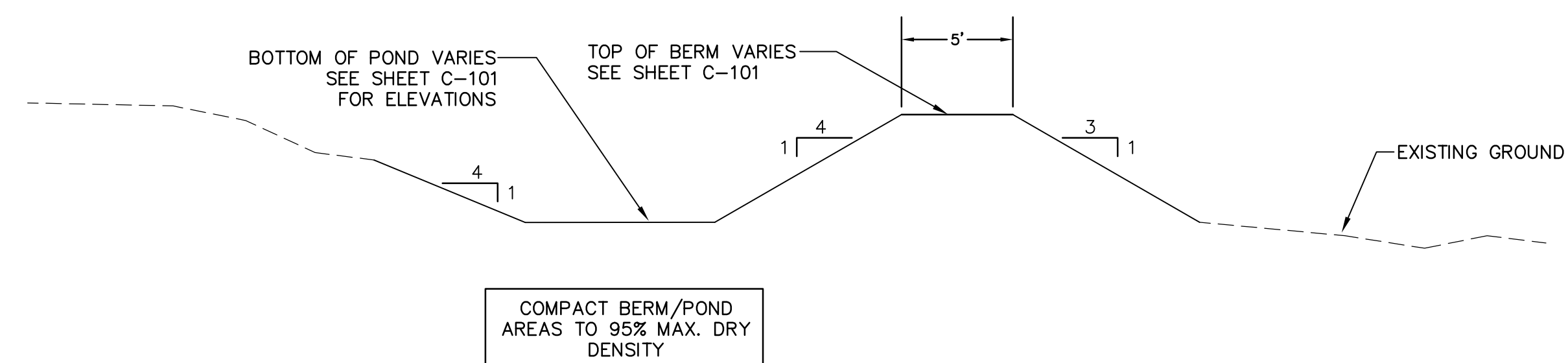
KEYED NOTES:

- MATCH NEW TOP OF BASE COURSE ELEVATION WITH EXISTING TOP BACK OF CURB. CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATION PRIOR TO CONSTRUCTION.
- NEW BASE COURSE PARKING LOT. SEE SECTION THIS SHEET.
- NEW CONCRETE SIDEWALK. AS PER COA STANDARD DWG 2430. CONTRACTOR SHALL SUBMIT A JOINT PATTERN TO THE PROJECT ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- NEW STAIRS SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW WATER HARVEST AREA 1. (PONDING REQUIRED TO MANAGE FIRST FLUSH AS DEFINED BY NEW COA DRAINAGE ORDINANCE). TOP=21.45, INV=20.45. VOLUME=63 CF. SEE DETAIL THIS SHEET.
- NEW WATER HARVEST AREA 2. (PONDING REQUIRED TO MANAGE FIRST FLUSH AS DEFINED BY NEW COA DRAINAGE ORDINANCE). TOP=20.0, INV=19.0. VOLUME=120 CF. SEE DETAIL THIS SHEET.
- NEW 24" WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP. AS PER COA STANDARD DETAIL 2236.
- NEW EARTHENED SWALE. SEE DETAIL THIS SHEET.
- NEW RETAINING WALL BY OTHERS. NEW WALL SHALL NOT PLACE ANY ADDITIONAL FORCES ON THE EXISTING WALL.
- BUILDING FOOTING SHALL NOT PLACE ANY ADDITIONAL FORCES ON THE EXISTING WALL.



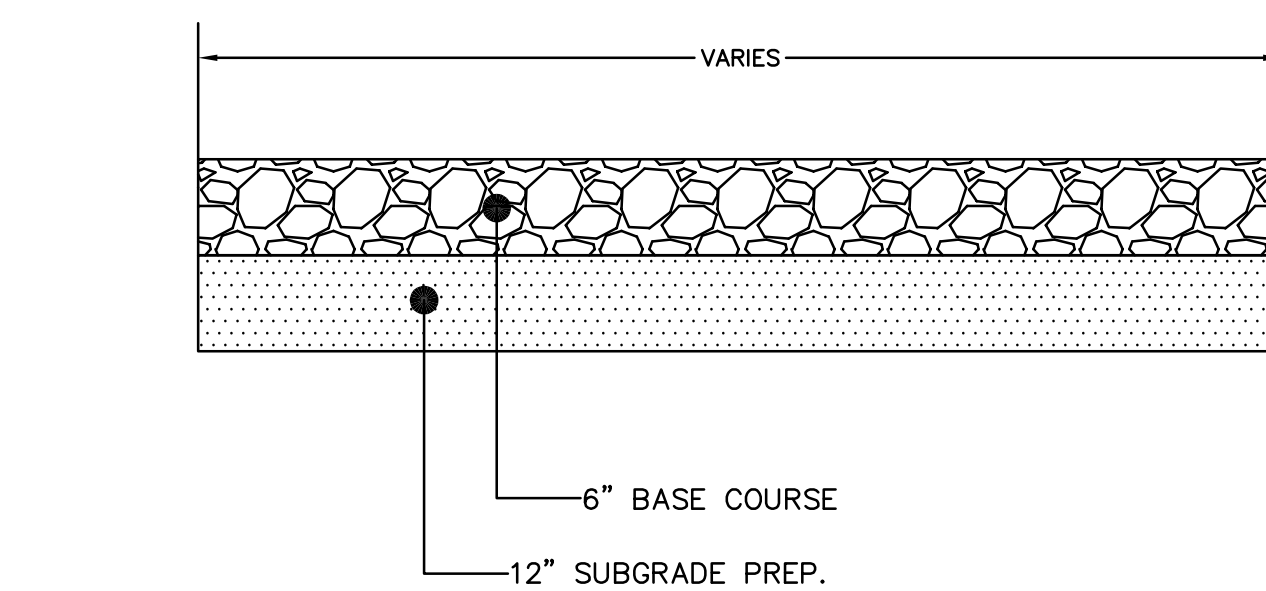
D5 EARTHENED SWALE DETAIL

SCALE:
NOT TO SCALE



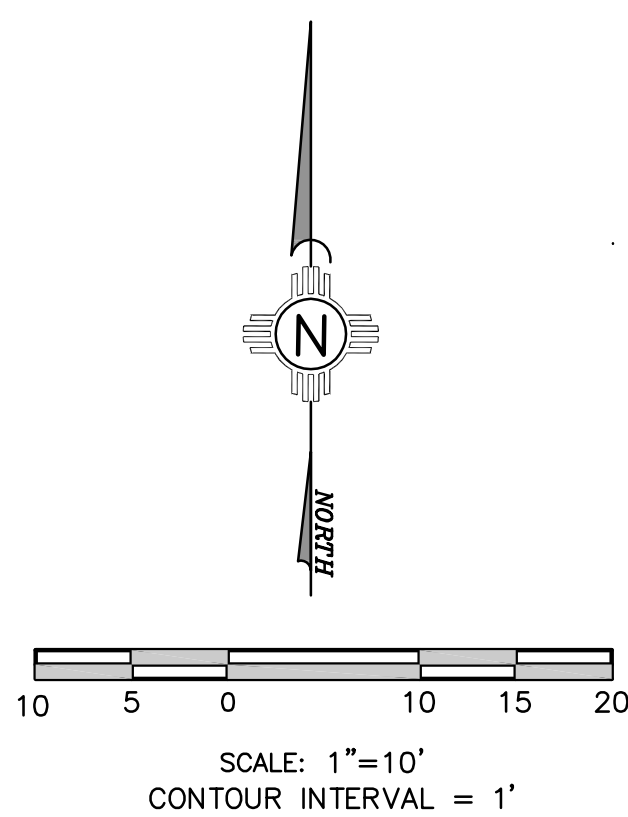
D5 TYPICAL WATER HARVEST SECTION DETAIL

SCALE: NOT TO SCALE



D1 TYPICAL BASE COURSE SECTION

SCALE: NOT TO SCALE



A1 GRADING AND DRAINAGE PLAN

SCALE: 1"=10'

Morningside Lofts
3919 Silver Ave. SE
Albuquerque, NM 87198



STRELL DESIGN

120 MORNINGSIDE S.E. ALBUQUERQUE N.M. 87108
TEL: 505-268-2321 FAX: 505-268-2328



PERMIT SET

GRADING AND DRAINAGE
PLAN

C-101

ME MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
BUILDING F
ALBUQUERQUE, NM 87107
(505) 888-7500
(505) 888-3800 (FAX)
WWW.MECHM.COM

CITY OF ALBUQUERQUE



July 21, 2015

Verlyn Miller, PE
Miller Engineering Consultants
3500 Comanche NE Bldg. F
Albuquerque, NM 87110

**Re: Morningside Lofts
3919 Silver Ave SE
Grading & Drainage Plan
Engineers Stamp Dated: 6/25/15 (K17D109)**

Dear Mr. Miller,

Based upon the information provided in your submittal received 6/24/15, the above referenced plan is approved for Site Plan for Building Permit action by the DRB. However before this plan can be accepted by the Hydrology section for building permit the following comments must be addressed,

- Provide the roof flows. These flows must pass through the first flush ponds before exiting the site.
- Provide the Finished Floor.
- The sidewalk culvert must extend 2 feet inside the property line.
- The first flush pond must stay inside the property line.

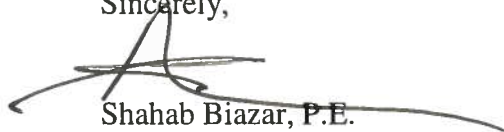
PO Box 1293

Albuquerque

New Mexico 87103 If you have any questions, you can contact me at 924-3999 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,


Shahab Biazar, P.E.
City Engineer, Albuquerque
Planning Department

C: RR/SB
email