CITY OF ALBUQUERQUE

Timothy M. Keller, Mayor

January 22, 2018

John Jacquez, E.I.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM, 87107

RE: Coors and Central – 100 Coors Blvd NW
Grading Plan
Engineer's Stamp Date: 01/16/18
Hydrology File: K10D017

Dear Mr. Jacquez:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your resubmittal received 01/16/2018, the Grading Plan is approved for Building Permit and SO-19 Permit.

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

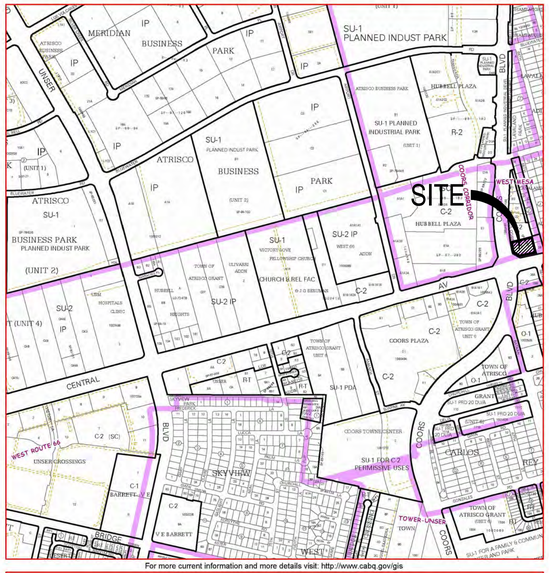
If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C Brissette

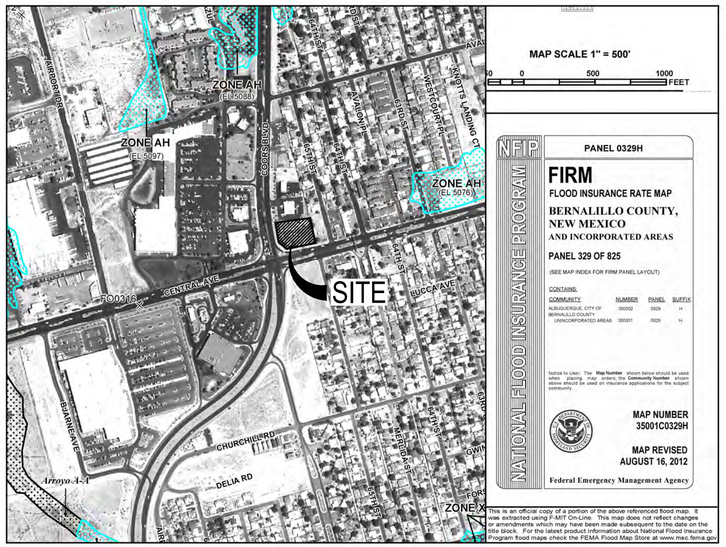
Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

Orig: Drainage File



C1 VICINITY MAP

ONE ATLAS MAP -10



A1 LOOD ONE MAP

LOOD ONE MAP 35001C0353

SITE LOCATION

100 COORS BLVD. N.W. IN ALBUQUERQUE, NM. THE BOUNDARY IS RECTANGULAR IN SHAPE AND BOUNDED BY EXISTING BUSINESS TO THE EAST, EXISTING BUSINESS TO THE NORTH, CENTRAL AVE. N.W. TO THE SOUTH, AND COORS STREET N.W. TO THE WEST.

EXISTING ON SITE CONDITIONS

THE SITE IS PARTIALLY DEVELOPED WITH AN EXISTING BUILDING AND AN EXISTING ASPHALT PAVED PARKING AREA ALONG CENTRAL NW AND COORS STREET NW. THE SITE IS ACCESSED FROM CENTRAL STREET NW ON THE SOUTH 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 THE WEST SOUTHWEST TO SOUTHEAST CORNER OF THE SITE VIA SURFACE FLOWS. 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 10,831 SQUARE FOOT BUILDING, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, ASPHALT PARKING LOT, AND LANDSCAPING. THE PROPOSED IMPROVEMENTS ARE ALL LOCATED IN PROPOSED DRAINAGE BASIN A. A SMALL PORTION OF OF BASIN A WILL FREE DISCHARGE INTO CENTRAL STREET VIA SURFACE FLOW. THE REMAINDER OF BASIN A, INCLUDING THE PROPOSED BUILDING WILL DISCHARGE INTO THE WATER HARVEST AREA (RETENTION) ALONG THE SOUTHEAST PORTION OF THE PROPERTY. 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 0.027 ACRE FEET AND THE PEAK FLOW RATE HAS INCREASED BY 0.43 CFS. THE PROPOSED RUNOFF VOLUME OF 0.168 AF MINUS THE PROPOSED POND VOLUME OF 0.050 AF IS 0.118 AF WHICH IS LESS THAN THE EXISTING RUNOFF VOLUME OF 0.141 AF. THEREFORE THE PROPOSED IMPROVEMENTS ON THE SITE WILL IMPROVE THE DOWNSTREAM CAPACITY.

THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE SIDEWALK CULVERTS, DRAINAGE SWALES, CURB AND GUTTERS AND CURB CUTS ALLOWING STORMWATER INTO AND OUT OF THE PROPOSED WATER HARVESTING AREA. THIS WATER HARVESTING AREA 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 FOR THE SITE (0.44–0.1 INCHES * IMPERVIOUS AREA)= 936.89 cf. THE WATER HARVEST AREA VOLUME = 2,178 cf (@ SPILLWAY INVERT) > 936.89 cf. THEREFORE THE PROPOSED POND MANAGES THE FIRST FLUSH. (SEE CALCULATIONS BELOW). ALL PROPOSED IMPERVIOUS AREAS WILL BE DISCHARGED THROUGH THE PROPOSED WATER HARVEST AREA.

GENERAL NOTES:

1. EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY SURV–TEK SURVEYING, INC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
2. VERTICAL DATUM IS BASED ON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK "12–E14" HAVING A PUBLISHED ELEVATION OF 4978.63' (NAVD 1988).

   TBM SET PK NAIL WITH ALUMINUM DISK "LS 9750" IN ALLEY JUST SOUTHWEST OF THE SOUTHWEST PROPERTY CORNER. ELEV. 4965.21.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
4. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260–1990 FOR LOCATION OF EXISTING UTILITIES.
6. ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
7. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
8. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
9. THE SUBJECT PROPERTY (AS SHOWN HEREON) APPEARS TO LIE WITHIN ZONE "X" (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.) IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 35001C0329 H, EFFECTIVE DATE 8–16–2012.
10. 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."
11. THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
12. 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.
13. 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.
14. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
15. 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.
16. 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.
17. 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.
18. 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.
19. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
20. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
21. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets shall be performed on a 24-hour basis.

CITY INSPECTOR APPROVAL

Signature Date

WATER HARVEST VOLUMES

WATER HARVEST AREA 1 proposed				
Pond Rating Table				
Side Slope		2:1		
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
88	415	0.010	0.000	0.000
89	499	0.011	0.010	0.010
90	910	0.021	0.016	0.027
91	1149	0.026	0.024	0.050

DRAINAGE DATA

Precipitation Zone 1 - 100-year Storm P(360) = 2.20 in P(1440) = 2.66 in

Basin	Basin Area (Ac)	Land Treatment Factors (Acres) A	B	C	D	Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
Existing Conditions									
A	1.00	0.20	0.00	0.24	0.56	1.43	0.119	0.141	3.39
Total	**1.00**								**3.39**
Proposed Conditions									
A	1.00	0.12	0.00	0.12	0.76	1.67	0.139	0.168	3.82
Total	**1.00**								**3.82**

Precipitation Zone 1 - 10-year Storm P(360) = 1.47 in P(1440) = 1.78 in

Basin	Basin Area (Ac)	Land Treatment Factors (Acres) A	B	C	D	Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)
Existing Conditions									
A	1.00	0.20	0.00	0.24	0.56	0.82	0.068	0.082	2.02
Total	**1.00**								**2.02**
Proposed Conditions									
A	1.00	0.12	0.00	0.12	0.76	1.00	0.084	0.103	2.40
Total	**1.00**								**2.40**

CONSULTANT:

MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
BUILDING E
ALBUQUERQUE, NM 87107
(505)888–7500
(505)888–3800 (FAX)
WWW.MECNM.COM

ARCHITECT:

Architect:
Clint Wilsey / 66Architect, LLC
clint.wilsey@gmail.com
505 280-0043

DRAWN BY: CJW

1	–	–

ISSUE: PERMIT SET

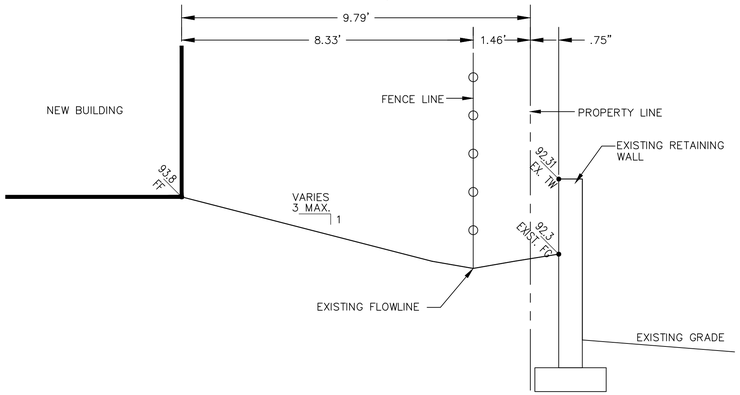
COORS AND CENTRAL

100 COORS BLVD. NW
Albuquerque, NM

DATE: 9/20/17

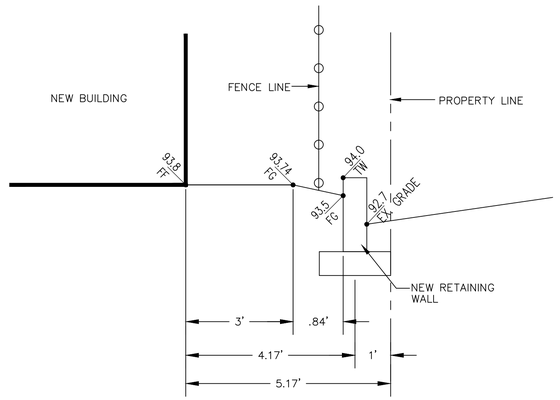
SHEET TITLE:
GRADING AND DRAINAGE REPORT

C-001



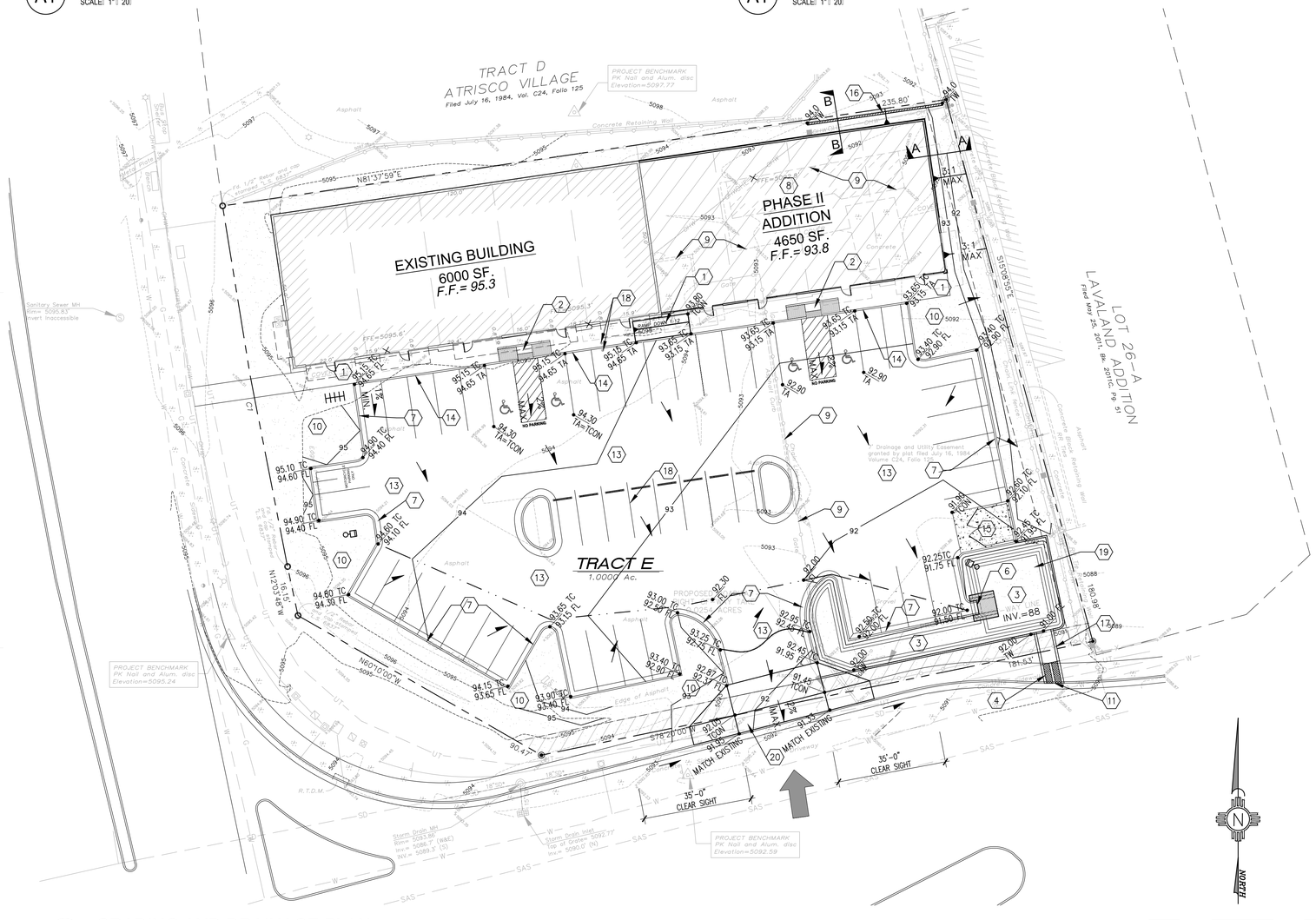
A1 SECTION A-A

SCALE: 1" = 20'



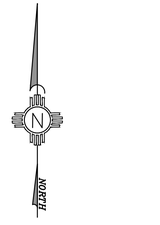
A1 SECTION B-B

SCALE: 1" = 20'



A1 GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'



20 10 0 20 30 40

SCALE: 1"=20'
CONTOUR INTERVAL=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	5895	PROPOSED MAJOR CONTOUR
FG	FINISH GRADE		PROPOSED MINOR CONTOUR
TBC	TOP OF BASE COURSE	5895	EXISTING MAJOR CONTOUR
TC	TOP OF CURB		EXISTING MINOR CONTOUR
TG	TOP OF GRATE		
	FLOW ARROW		

GRADING AND DRAINAGE NARRATIVE

THE PROJECT SITE IS LOCATED AT 100 COORS BLVD. N.W. IN ALBUQUERQUE, NM. THE PROPERTY BOUNDARY IS MOSTLY RECTANGULAR IN SHAPE WITH A PORTION OF THE SOUTHWEST CORNER OUT TO RIGHT–OF–WAY. THE PROPERTY IS BOUNDED BY AN EXISTING BUSINESS TO THE EAST, AN EXISTING BUSINESS TO THE NORTH, CENTRAL AVE. N.W. TO THE SOUTH, AND COORS ROAD N.W. TO THE WEST. THE SITE IS PARTIALLY DEVELOPED WITH AN EXISTING BUILDING AND AN EXISTING ASPHALT PAVED PARKING AREA LOCATED SOUTH OF THE BUILDING ALONG CENTRAL AVENUE N.W. AND COORS ROAD N.W. THE SITE IS ACCESSED FROM CENTRAL AVENUE N.W. ON THE SOUTH SIDE OF THE SITE. THE PROPERTY GENERALLY SLOPES FROM THE NORTHWEST TO THE SOUTHEAST AT APPROXIMATELY 1.7%.. THERE ARE EXISTING RETAINING WALLS THAT RUN ALONG THE NORTH SIDE OF THE PROPERTY AND ALONG THE EAST SIDE OF THE PROPERTY. THE PROPOSED BUILDING WILL BE CONSTRUCTED NEAR THE EAST SIDE OF THE PROPERTY, ADJACENT TO, AND ATTACHED TO THE EXISTING BUILDING LOCATED NEAR THE WEST SIDE OF THE PROPERTY. THE NEW BUILDING WILL HAVE A NEW ASPHALT PARKING LOT IMMEDIATELY SOUTH OF THE BUILDING.

THE PROPOSED DEVELOPMENT OF THE SITE WILL CONSIST OF 10831 SQUARE FOOT BUILDING, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, ASPHALT PARKING LOT, AND LANDSCAPING. THE GRADING IMPROVEMENTS WILL CONTINUE TO ALLOW STORM WATER TO FLOW FROM THE NORTHWEST TO THE SOUTHEAST. NEW CURB AND GUTTER, A CURB CUT, AND NEW RIP RAP RUNDOWN WILL CONVEY THE STORMWATER INTO A PROPOSED WATER HARVESTING AREA LOCATED AT THE SOUTHEAST CORNER OF THE PROPERTY. THIS WATER HARVESTING AREAS WILL BE USED TO MANAGE THE 90TH PERCENTILE STORM EVENTS (REQUIRED VOLUME = (0.33 IN. * 33,106 S.F.)/12 = 937 C.F.) THE PROPOSED WATER HARVEST AREA VOLUME IS GREATER THAN 937 CF, AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. ALL ROOF DRAINAGE AND PROPOSED ASPHALT PARKING AREAS WILL DISCHARGE INTO THE PROPOSED WATER HARVEST AREA LOCATED AT THE SOUTHEAST CORNER OF THE PROPERTY.

THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A F.E.M.A. DESIGNATED FLOOD ZONE AS ACCORDING TO F.E.M.A. MAP 35001C0329H.

KEYED NOTES:

1. NEW CONCRETE SIDEWALK OR CONCRETE FLATWORK AS PER C.O.A. STANDARD DWG 2430. CONTRACTOR SHALL SUBMIT A JOINT PATTERN TO THE PROJECT ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
2. NEW TYPE A HANDICAP RAMP, SEE DETAIL SHEET C–501.
3. NEW WATER HARVEST AREA. TOP=91.50 (INV IN), INV=91.00 (INV OUT). REQ'D. VOL.=0.049 AF. PROVIDED VOL. @ 91.00 (SPILLWAY ELEV.)=0.055 AF. MAX WSEL=91.00. SIDE SLOPE 2:1 WITH FILTER FABRIC. SEE DETAIL ON SHEET C–501.
4. NEW DOUBLE 24" WIDE SIDEWALK CULVERT AND EMERGENCY SPILLWAY WITH STEEL PLATE TOP. (FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION) INV. SLOPE AT 2% MIN. AS PER C.O.A. STANDARD DETAIL 2236.
5. NOTE NOT USED.
6. NEW CONCRETE RUNDOWN. INV.=91.5
7. NEW CURB AND GUTTER. SEE DETAIL SHEET C–501.
8. NEW BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
9. EXISTING BUILDING, ASPHALT, CONCRETE, FENCING AND WALL TO BE DEMOLISHED. SEE ARCHITECTURAL PLANS.
10. LANDSCAPE AREA. SEE ARCHITECTURAL PLANS FOR DETAILS.
11. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND EXISTING FLOWLINE ELEVATIONS PRIOR TO CONSTRUCTION.
12. NOTE NOT USED
13. NEW LIGHT DUTY HOT MIX ASPHALT (HMA) PAVING. SEE DETAIL SHEET C–501 FOR PAVING SECTIONS.
14. NEW CONCRETE TURNDOWN EDGE. SEE DETAIL SHEET C–501.
15. NEW TRASH ENCLOSURE. SEE ARCHITECTURAL PLANS FOR DETAILS.
16. NEW RETAINING WALL. SEE DETAIL SHEET C–502.
17. NEW CONCRETE CHANNEL. SEE DETAIL SHEET C–501.
18. EXISTING CLEANOUTS. ADJUST EXISTING CLEANOUT TO NEW GRADE ELEVATION.
19. NOTE NOT USED.
20. NEW TYPE 3A DRIVE PAD. SEE DETAIL SHEET C–502. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND EXISTING FLOWLINE ELEVATIONS AT DRIVE PAD PRIOR TO CONSTRUCTION.
21. ALL ROOF DRAINS SHALL CONVEY STORMWATER TOWARDS THE FRONT OF THE BUILDING AND DISCHARGE FREELY ONTO THE SIDEWALK UTILIZING SCUPPERS. SEE ARCHITECTURAL DRAWINGS.

CONSULTANT:

MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
BUILDING E
ALBUQUERQUE, NM 87107
(505)888–7500
(505)888–3800 (FAX)
WWW.MECNM.COM

ARCHITECT:

Architect:
Clint Wilsey / 66Architect, LLC
clint.wilsey@gmail.com
505 280-0043

DRAWN BY:	CJW	
1	1–20–17.	REVISED PER COA COMMENTS.
ISSUE:	PERMIT SET	

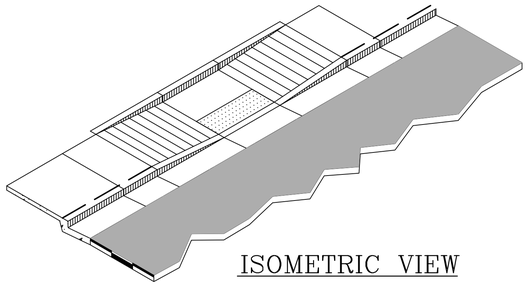
COORS AND CENTRAL

100 COORS BLVD. NW
Albuquerque, NM

DATE: 9/20/17

SHEET TITLE:
GRADING AND DRAINAGE PLAN

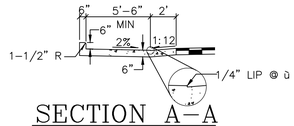
C-101



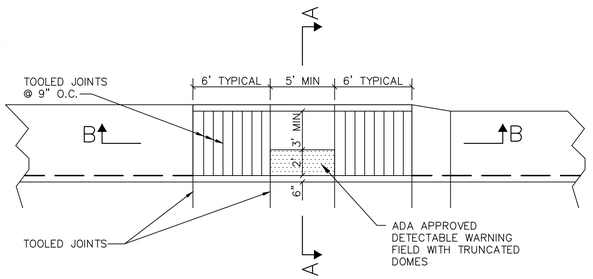
ISOMETRIC VIEW

GENERAL NOTES

1. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
2. RAMP SLOPES SHALL NOT BE STEEPER THAN 2%. THE TRANSITIONS SHALL HAVE A MAXIMUM SLOPE OF 1:12.
3. DETECTABLE WARNINGS SHALL BE ARMOR-TILE TACTILE SYSTEMS, CAST-IN-PLACE SYSTEMS, BRICK RED OR APPROVED EQUAL. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A



C1 TYPE A□ ANDICAP RAMP DETAIL
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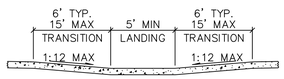
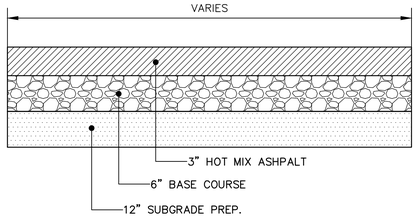
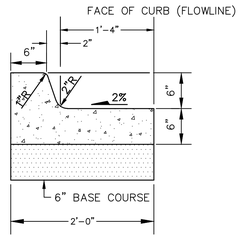


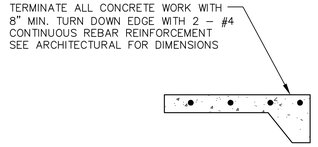
SECTION B-B



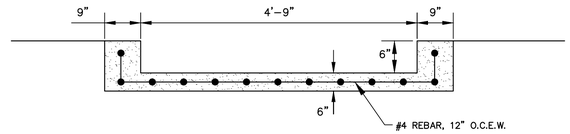
D4 LIG□ T DUTY □ OT MI□ ASP□ ALT PAVING SECTION
SCALE: NOT TO SCALE



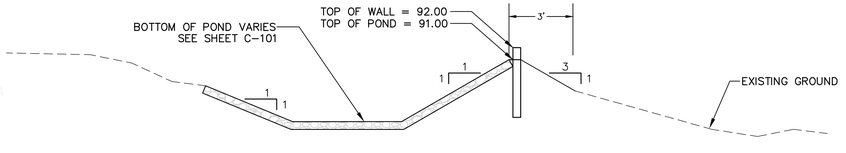
C3 TYPICAL CURB AND GUTTER
SCALE: NOT TO SCALE



C4 CONCRETE TURN DOWN EDGE
SCALE: NOT TO SCALE



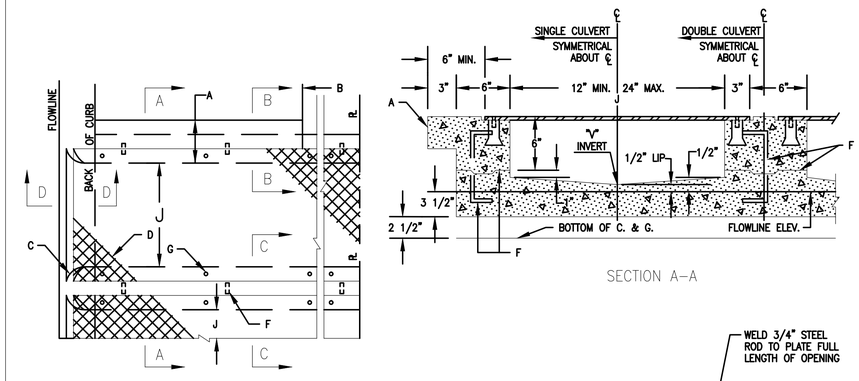
C5 CONCRETE C□ ANNEL DETAIL
SCALE: NOT TO SCALE



COMPACT BERM/POND AREAS TO 95% MAX. DRY DENSITY

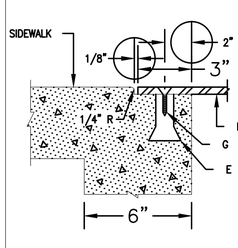
NOTE: ALL SIDE SLOPES SHALL RECEIVE FILTER FABRIC WITH 6" OF 2-3" COBBLE STONES.

A1 TYPICAL WATER□ ARVEST AREA SECTION
SCALE: NOT TO SCALE

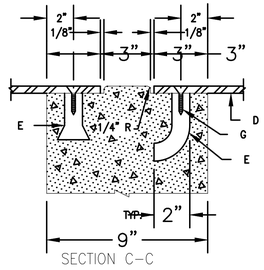


PLAN
SINGLE AND OR MULTIPLE CULVERT

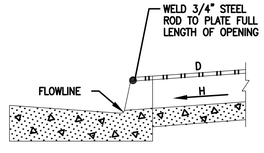
SECTION A-A



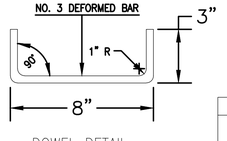
SECTION B-B



SECTION C-C



SECTION D-D



DOWEL DETAIL

GENERAL NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT ENTIRE SIDEWALK AND C & G STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED TO PARALLEL FLOWLINE AT OUTLET, UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H. MACHINE SCREW. ATTACH ANCHORS TO PLATE AND SECURE PLATE IN PLACE PRIOR TO POURING OF WALLS.
7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT W/ ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
8. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

A. MATCH NEAREST CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT.
B. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
C. 3" RADIUS (TYPICAL).
D. 3/8" CHECKERED STEEL PLATE (PAINT PER NOTE 7, ABOVE).
E. FOR SECURING PLATE USE 1" X 5" S.S. ROD ANCHOR, "RED HEAD MULTI-SET II SRM-38 ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C., A MINIMUM OF 2 PER SIDE AND ONE WITHIN 6" OF EACH END.
F. CONSTRUCTION JOINT IS OPTIONAL. IF USED, SPACE DOWELS AT 18" O.C. MAX., 1 1/2" MINIMUM FROM FACE OF CONCRETE.
G. 3/8" - 16 X 1 1/4" COUNTERSUNK, F.H., STAINLESS STEEL, MACHINE SCREW.
H. SLOPE 1/4" PER FT. MIN.
J. DRAIN WIDTH PER PLAN (12" MIN., 24" MAX.).

REVISIONS	CITY OF ALBUQUERQUE
	DRAINAGE SIDEWALK CULVERT WITH STEEL PLATE TOP DWG. 2236 AUG. 1986

A3 SIDEWAL□ CULVERT DETAIL
SCALE: NOT TO SCALE

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ISSUE:	PERMIT SET

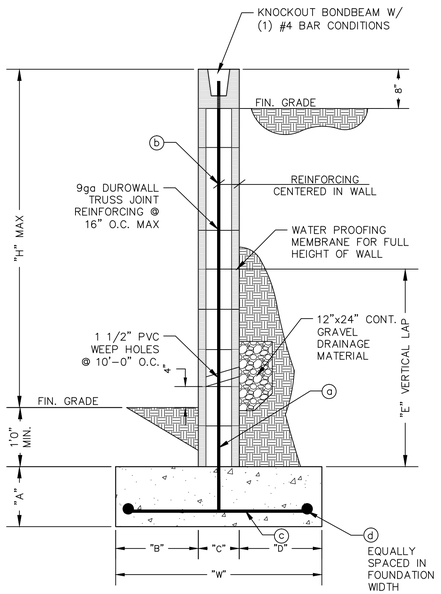
COORS AND CENTRAL

100 COORS BLVD. NW
Albuquerque, NM

DATE: 9/20/17

SHEET TITLE:
MISCELLANEOUS DETAILS

C-501



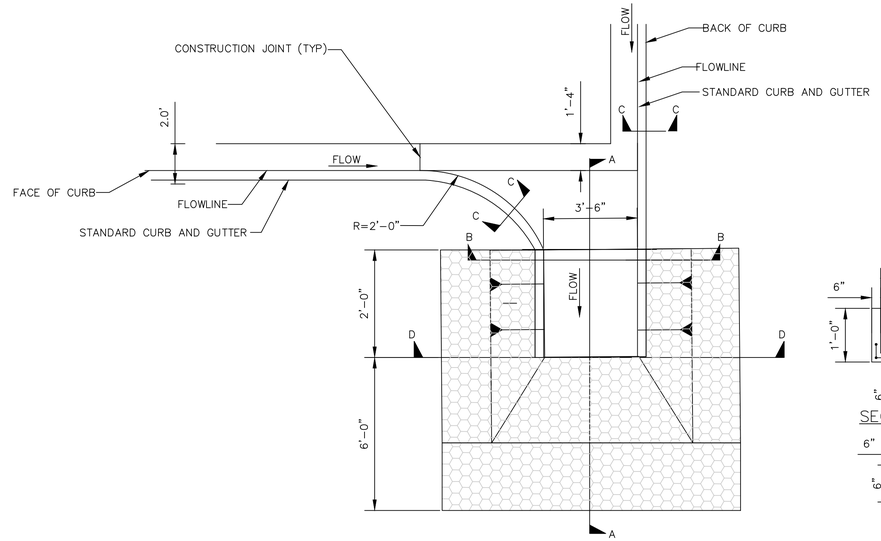
MASONRY SITE RETAINING WALL NOTES

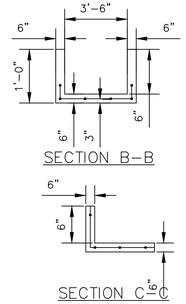
1. ALL MASONRY CELLS SHALL BE SOLID GROUTED W/ 2000psi GROUT FROM TOP TO BOTTOM OF WALL CLEANOUTS SHALL BE PROVIDED AT THE BOTTOM OF WALL WHERE GROUT PLACEMENT EXCEEDS 4'-0" IN HEIGHT.
2. LONGITUDINAL FOOTING REINFORCEMENT SHALL BE EQUALLY SPACED IN FOOTING WIDTH
3. WALL EXPANSION JOINTS SHALL BE INSTALLED AT A MAX. OF 20'-0" O.C.
4. ALL MASONRY SHALL BE TYPE 1 UNITS WITH TYPE M MORTAR. f'm=1900psi FULLY GROUTED ON THE NET AREA AND f'm=1900psi FULLY GROUTED ON GROSS AREA.
5. LAP ALL REINF. 40 BAR DIAMETERS OR 24" MINIMUM UNLESS OTHERWISE NOTED.
6. CONTRACTOR RESPONSIBLE FOR LATERAL BRACING OF CMU WALL DURING CONSTRUCTION.
7. CONCRETE COMPRESSIVE STRENGTH SHALL BE f'c=2500 psi @ 28 DAYS.
8. REINFORCING STEEL SHALL BE GRADE 60ksi.
9. MINIMUM COMPACTION UNDER FOOTINGS SHALL BE AT 95% OF OPTIMUM PER ASTM D 1557 FOR A DEPTH OF 12" BELOW FOOTINGS.
10. MOISTURE CONTENT SHALL BE +/- 2% OF OPTIMUM.
11. BACKFILL ADJACENT TO WALLS SHALL BE COMPACTED WITH RELATIVELY LIGHT, HAND OPERATED EQUIPMENT TO PREVENT OVER STRESSING THE WALL AND EXCESSIVE LATERAL DEFLECTIONS.

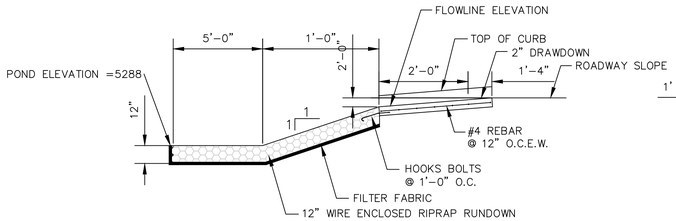
MASONRY SITE RETAINING WALL SCHEDULE

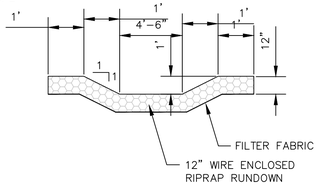
WALL TYPE	"H"	"W"	"A"	"B"	"C"	"D"	"E"	"a"	"b"	"c"	"d"
1	3'-0"	2'-0"	1'-0"	0'-8"	0'-8"	0'-8"	2'-6"	#4@24"	#4@48"	#4@16"	(3)#4
2	4'-0"	2'-7"	1'-0"	0'-11"	0'-8"	0'-11"	2'-6"	#4@24"	#4@48"	#4@16"	(3)#4
3	5'-0"	3'-2"	1'-0"	1'-3"	0'-8"	1'-3"	2'-6"	#5@8"	#4@48"	#4@16"	(4)#4

C1 MASONRY SITE RETAINING WALL DETAIL
SCALE: NOT TO SCALE

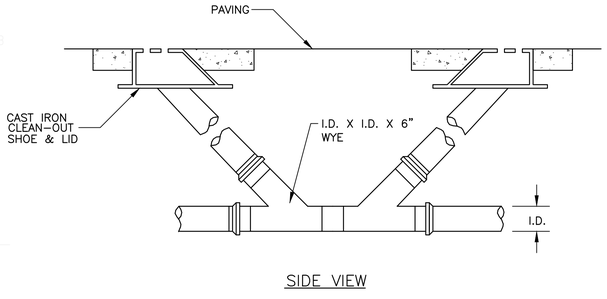








C4 CONCRETE RUNDOWN DETAIL
SCALE: NOT TO SCALE



A1 TYPICAL SEWER DOUBLE CLEAN OUT DETAIL
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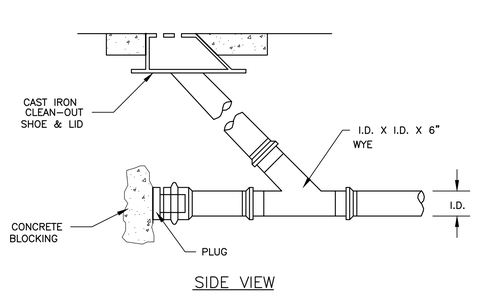
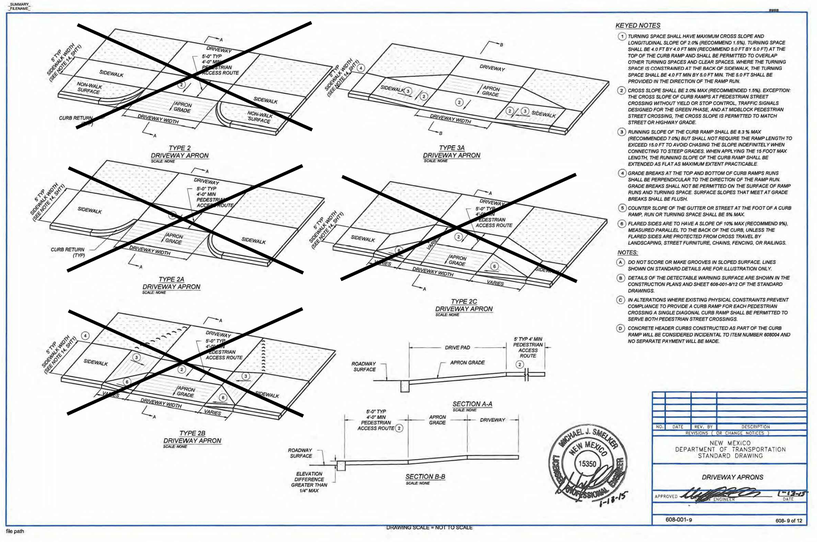


A3 TYPICAL SEWER SINGLE CLEAN OUT DETAIL
SCALE: NOT TO SCALE



A4 DRIVEPAD DETAIL
SCALE: NOT TO SCALE

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1	-	-

ISSUE: PERMIT SET

COORS AND CENTRAL

100 COORS BLVD. NW
Albuquerque, NM

DATE: 9/20/17

SHEET TITLE:
MISCELLANEOUS DETAILS

C-502