

NOTICE TO CONTRACTORS (SO 19)

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. 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.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

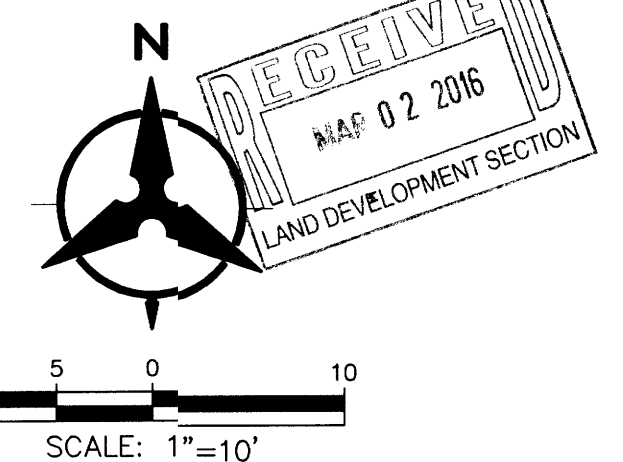
GRADING KEYNOTES

1. CONSTRUCT 2 - 18" WIDE SIDEWALK CULVERTS PER COA STD DWG 2236.
2. CONSTRUCT CONCRETE RIBBON CHANNEL, SEE DETAIL "E" SHEET C101.
3. CONSTRUCT RETAINING WALL, SEE STRUCTURAL PLANS FOR DETAILS.
4. SUMP PUMP, SEE MECHANICAL DRAWINGS.
5. DEPRESSED LANDSCAPE/WATER HARVESTING AREA.
6. CONSTRUCT 24" SIDEWALK CULVERT PER COA STD DWG 2236.
7. CONSTRUCT RIP-RAP SWALE, SEE SECTION "D" SHEET C101.
8. CONSTRUCT CHECK DAM, SEE DETAIL "G" SHEET C101.
9. CONSTRUCT TRENCH DRAIN WITH ADA COMPLIANT GRATE.
10. CONSTRUCT CURB OPENING, SEE DETAIL "F" SHEET C101.
11. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER TO ADJUST/RELOCATE COMMUNICATION PEDESTAL AND UNDERGROUND UTILITY IF REQUIRED.
12. CONSTRUCT TEMPORARY RETAINING WALL.
13. CONSTRUCT CURB OPENING, SEE DETAIL F SHEET C101.
14. 2' TO 6" CRUSHED STONE SLOPE PROTECTION, 12" THICK PLACED OVER NON-WOVEN FILTER FABRIC.
15. INSTALL EXTRUDED ASPHALT CURB PER COA STD DWG 2415B.

*** FOR TYPICAL CROSS-SECTIONS SEE SHEET C101

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED SPOT ELEVATION
TC=TOP OF CURB, FL=FLOW LINE
TW=TOP OF WALL, BW=BOTTOM OF WALL
EX=EXISTING, TG=TOP OF GRADE
- PROPOSED DIRECTION OF FLOW
- WATER BLOCK
- PROPOSED RETAINING WALL
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- EASEMENT
- PROPOSED STORM DRAIN LINE
- RIP-RAP
- STONE CHECK DAM
- CRUSHED STONE SLOPE PROTECTION



DRAINAGE CERTIFICATION

I, GLENN S. BROUGHTON, NMPE 14171, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6/25/2015. THE RECORD INFORMATION EDITED ON THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY TIM MARTINEZ, NMPS 13882, OF THE FIRM TM SURVEYING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 3/01/2016 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A TEMPORARY CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Glenn S. Broughton 3/2/16
GLENN S. BROUGHTON, NMPE 14171

3/02/2016

LEGEND

- FL70.22 DESIGN GRADE
- FL70.22 AS-BUILT GRADE

revision
by
date
rev

11/17/2015

rev

MH
Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144 [p]
505 268 4244 [f]

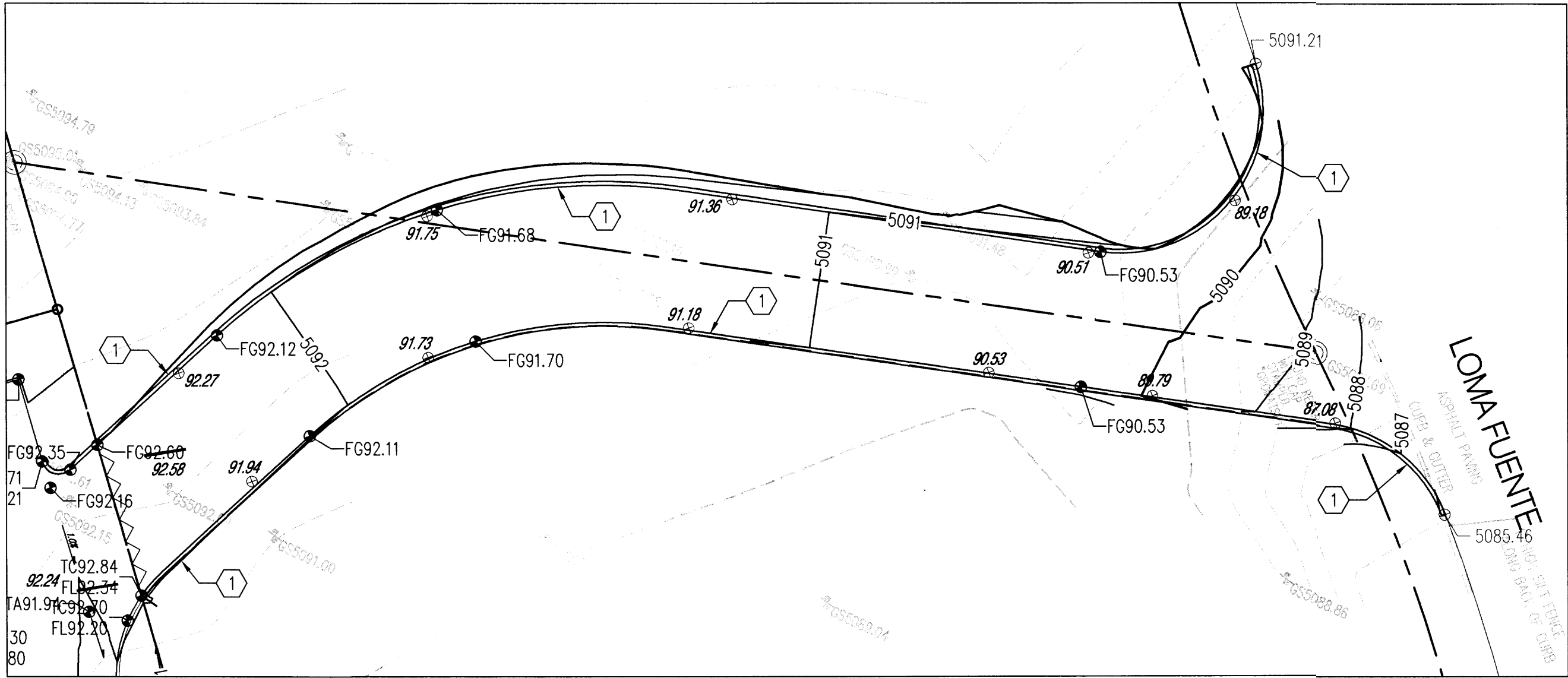
20150304
job number
20150304
drawn by
MHS
project manager
GSH
date
07/21/2015

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW
Albuquerque, New Mexico 87114
sheet
C100

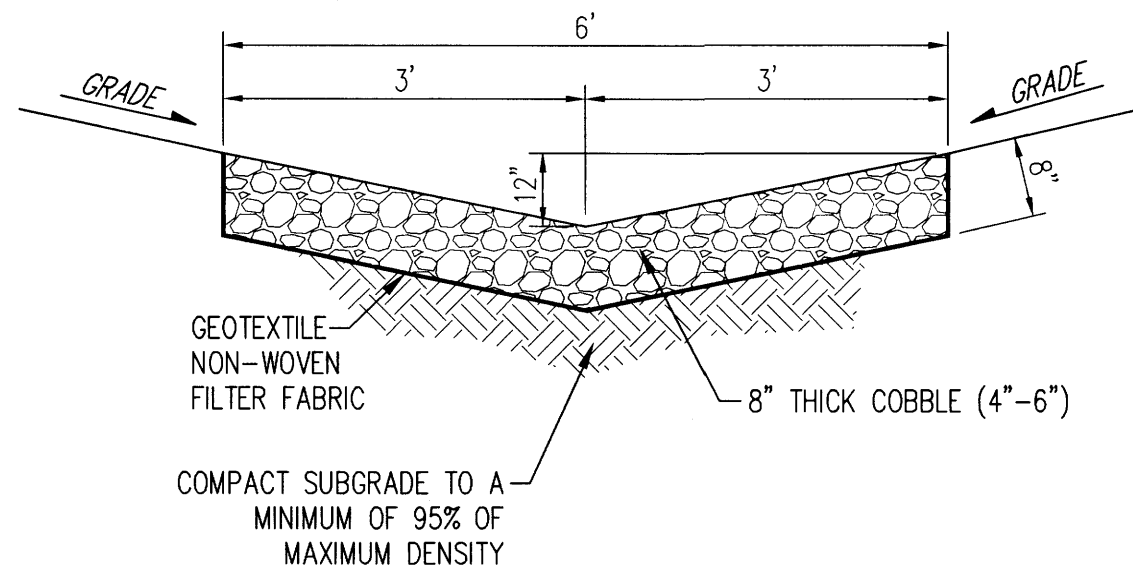
Grading Plan

GRADING KEYNOTES

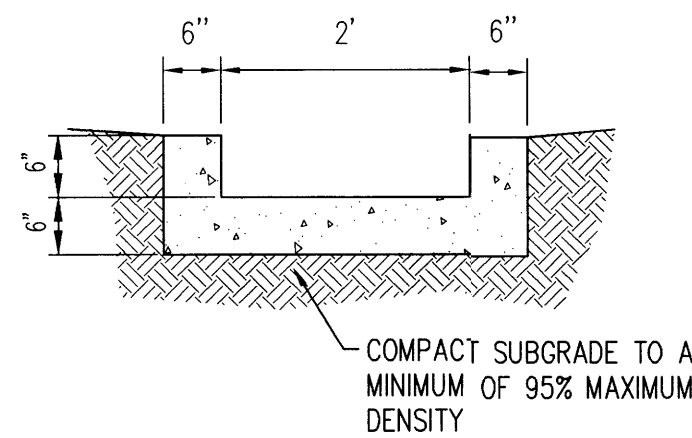
1. INSTALL EXTRUDED ASPHALT CURB PER COA STD DWG 2415B.



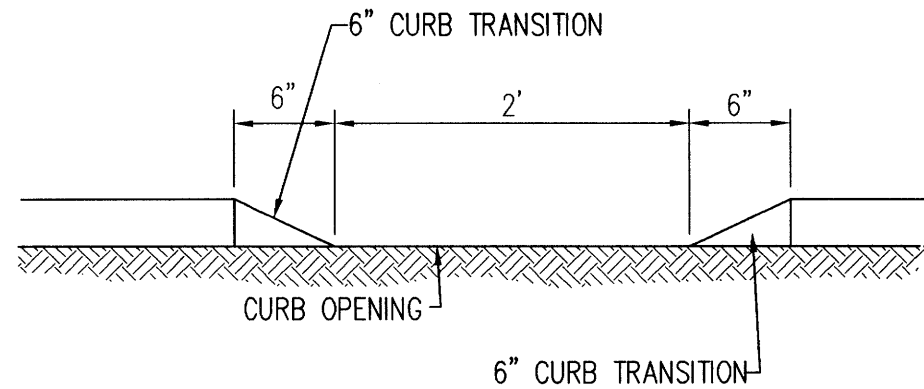
A ACCESS ROAD GRADING PLAN
1"=20'



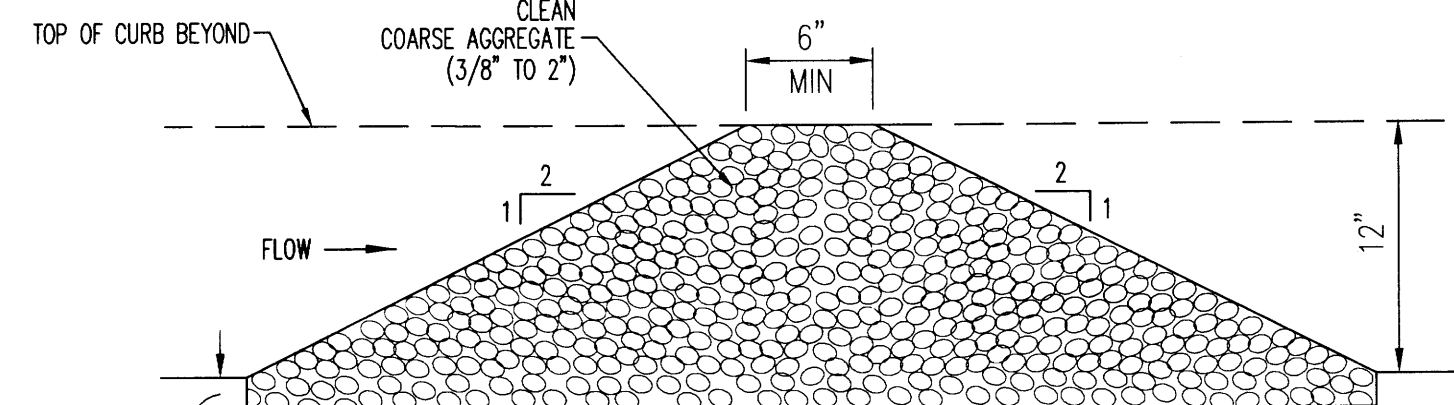
D LARGE RIP-RAP SWALE
N.T.S.



E CONCRETE RIBBON CHANNEL
N.T.S.

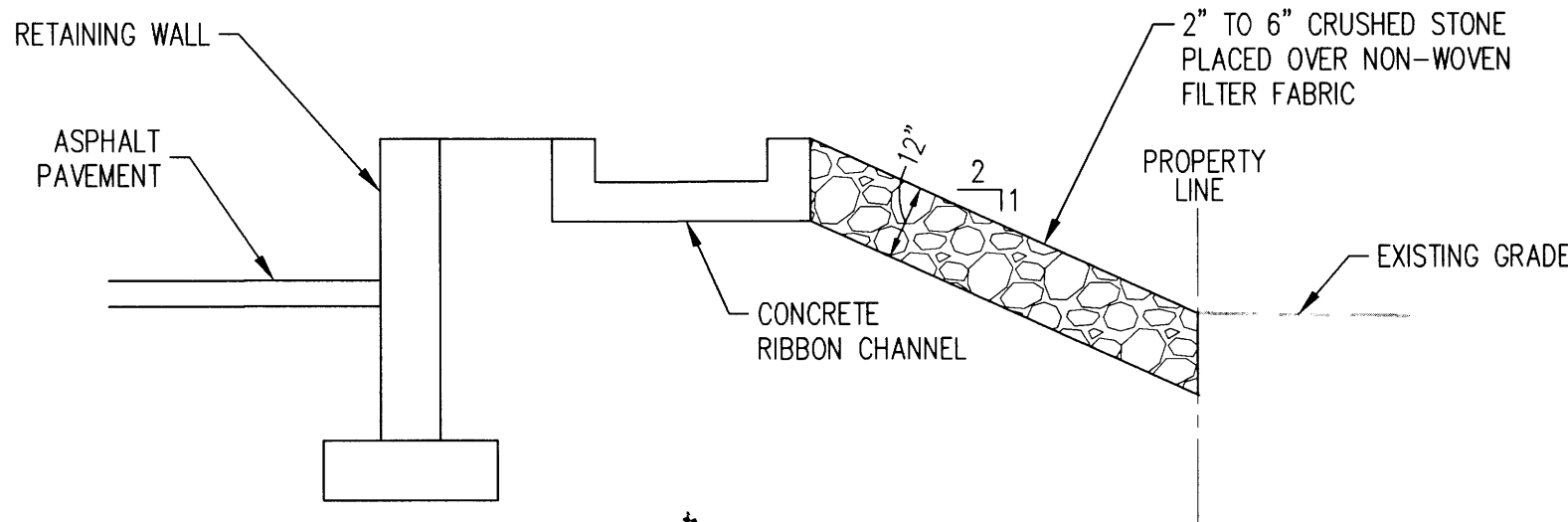


F TYPICAL CURB OPENING
N.T.S.

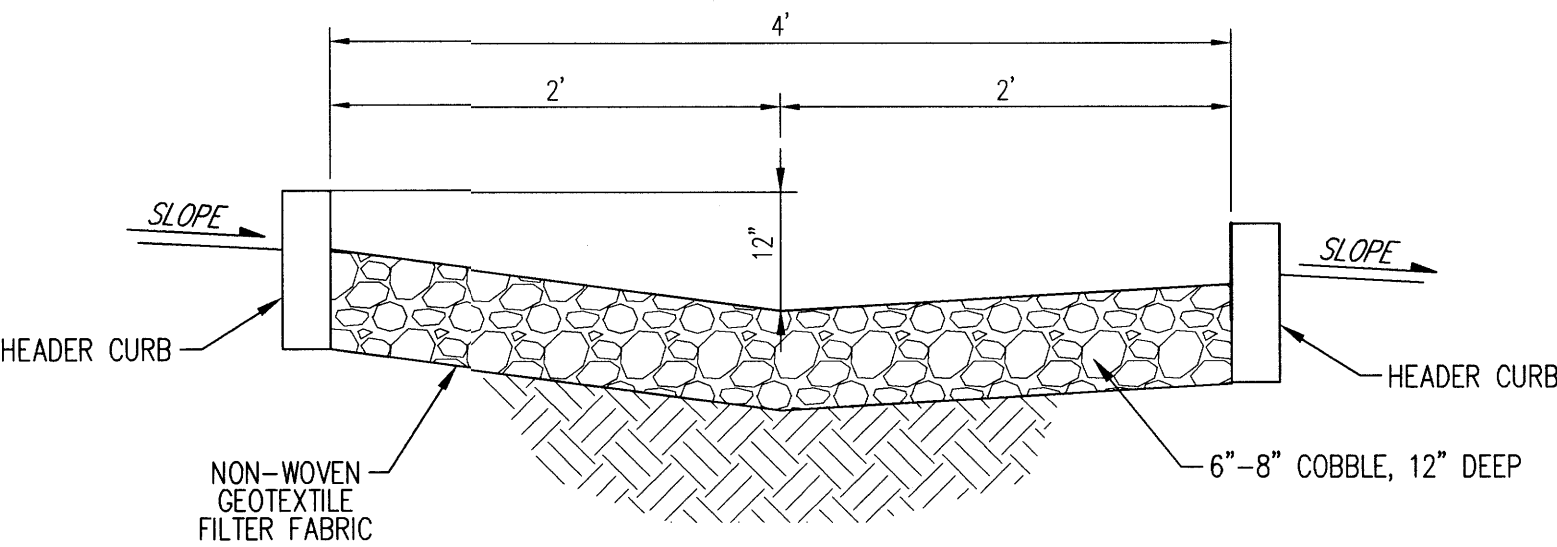


G CHECK DAM
N.T.S.

- NOTES:
1. SEE PLANS FOR LOCATION OF DAMS.
 2. CHECK DAMS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE CHECK DAM.



H TYPICAL RETAINING WALL SECTION
N.T.S.



I TYPICAL WATER HARVESTING SECTION
N.T.S.

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". ALL OTHER WORK SHALL UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK 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.

DRAINAGE CERTIFICATION

I, GLENN S. BROUGHTON, NMPE 14171, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6/25/2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY TIM MARTINEZ, NMPS 13982, OF THE FIRM TM SURVEYING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 3/01/2016 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A TEMPORARY CERTIFICATE OF OCCUPANCY.

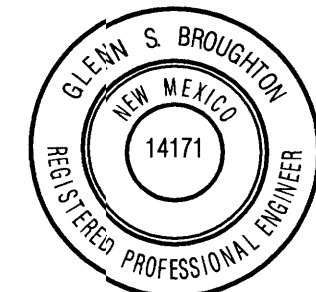
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Glenn S. Broughton 3/2/16
GLENN S. BROUGHTON, NMPE 14171

3/02/2016

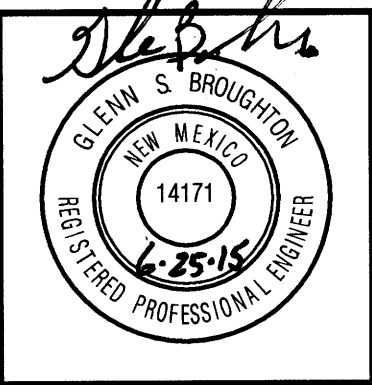
LEGEND

- FL70.22 DESIGN GRADE
FL82.24 AS-BUILT GRADE
FL70.12



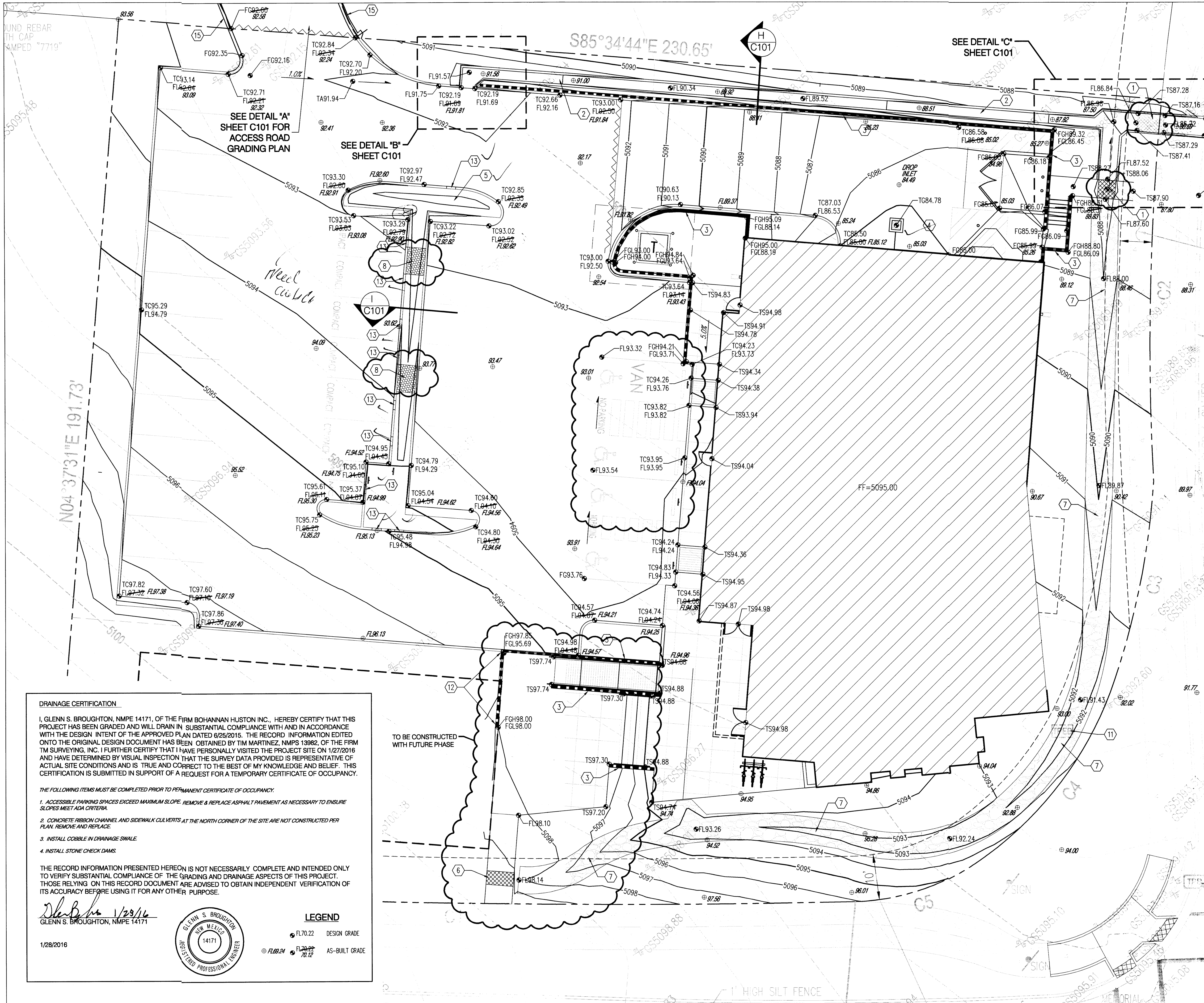
revision	by	date	rev
CRADING REVISION	BO/CSB	11/17/2015	1 2 3 4

Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque, NM 87102
505 268 4144 [p]
505 268 4244 [f]



20150304	NHS	CSB	07.21.2015
job number	drawn by	project manager	date

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW,
Albuquerque, New Mexico 87114
sheet title
Grading Plan Details



NOTICE TO CONTRACTORS (SO 19)

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
4. 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.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

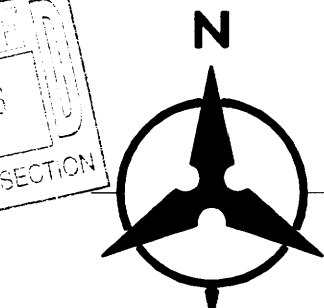
GRADING KEYNOTES

1. CONSTRUCT 2 - 18" WIDE SIDEWALK CULVERTS PER COA STD DWG 2236.
2. CONSTRUCT CONCRETE RIBBON CHANNEL, SEE DETAIL "E" SHEET C101.
3. CONSTRUCT RETAINING WALL, SEE STRUCTURAL PLANS FOR DETAILS.
4. SUMP PUMP, SEE MECHANICAL DRAWINGS.
5. DEPRESSED LANDSCAPE/WATER HARVESTING AREA.
6. ~~CONSTRUCT 24" SIDEWALK CULVERT PER COA STD DWG 2236~~
7. CONSTRUCT RIP-RAP SWALE, SEE SECTION "D" SHEET C101.
8. CONSTRUCT CHECK DAM, SEE DETAIL "G" SHEET C101.
9. ~~CONSTRUCT TRENCH DRAIN WITH ADA COMPLIANT GRATE~~
10. CONSTRUCT CURB OPENING, SEE DETAIL "F" SHEET C101.
11. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER TO ADJUST/RELOCATE COMMUNICATION PEDESTAL AND UNDERGROUND UTILITY IF REQUIRED.
12. ~~CONSTRUCT TEMPORARY RETAINING WALL~~
13. CONSTRUCT CURB OPENING, SEE DETAIL F SHEET C101.
14. ~~2" TO 6" CRUSHED STONE SLOPE PROTECTION, 12" THICK PLACED OVER NON-WOVEN FILTER FABRIC.~~
15. INSTALL EXTRUDED ASPHALT CURB PER COA STD DWG 24158.

*** FOR TYPICAL CROSS-SECTIONS SEE SHEET C101

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED SPOT ELEVATION
TC=TOP OF CURB, FL=FLOW LINE
TW=TOP OF WALL, BW=BOTTOM OF WALL
EX=EXISTING, TG=TOP OF GRADE
- PROPOSED DIRECTION OF FLOW
- WATER BLOCK
- PROPOSED RETAINING WALL
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- EASEMENT
- PROPOSED STORM DRAIN LINE
- RIP-RAP
- STONE CHECK DAM
- CRUSHED STONE SLOPE PROTECTION



SCALE: 1"=10'

DRAINAGE CERTIFICATION

I, GLENN S. BROUGHTON, NMPE 14171, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6/25/2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY TIM MARTINEZ, NMPS 13982, OF THE FIRM TM SURVEYING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 1/27/2016 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A TEMPORARY CERTIFICATE OF OCCUPANCY.

THE FOLLOWING ITEMS MUST BE COMPLETED PRIOR TO PERMANENT CERTIFICATE OF OCCUPANCY:

1. ACCESSIBLE PARKING SPACES EXCEED MAXIMUM SLOPE. REMOVE & REPLACE ASPHALT PAVEMENT AS NECESSARY TO ENSURE SLOPES MEET ADA CRITERIA.
2. CONCRETE RIBBON CHANNEL AND SIDEWALK CULVERTS AT THE NORTH CORNER OF THE SITE ARE NOT CONSTRUCTED PER PLAN. REMOVE AND REPLACE.
3. INSTALL COBBLE IN DRAINAGE SWALE.
4. INSTALL STONE CHECK DAMS.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

1/28/16
GLENN S. BROUGHTON, NMPE 14171



LEGEND

- FL70.22 DESIGN GRADE
- FL88.24 AS-BUILT GRADE

Bohannan & Huston
www.bhinc.com 800.877.5332

revision

by

date

rev

Mullen Heller
Architecture P.C.

924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144[p]
505 268 4244 [f]



job number

drawn by

project manager

date

20150304

MHS

GSH

07/21/2015

project title

Smiles for Kids Dental Office

9201 Eagle Ranch Road, NW,

Albuquerque, New Mexico 87114

sheet title

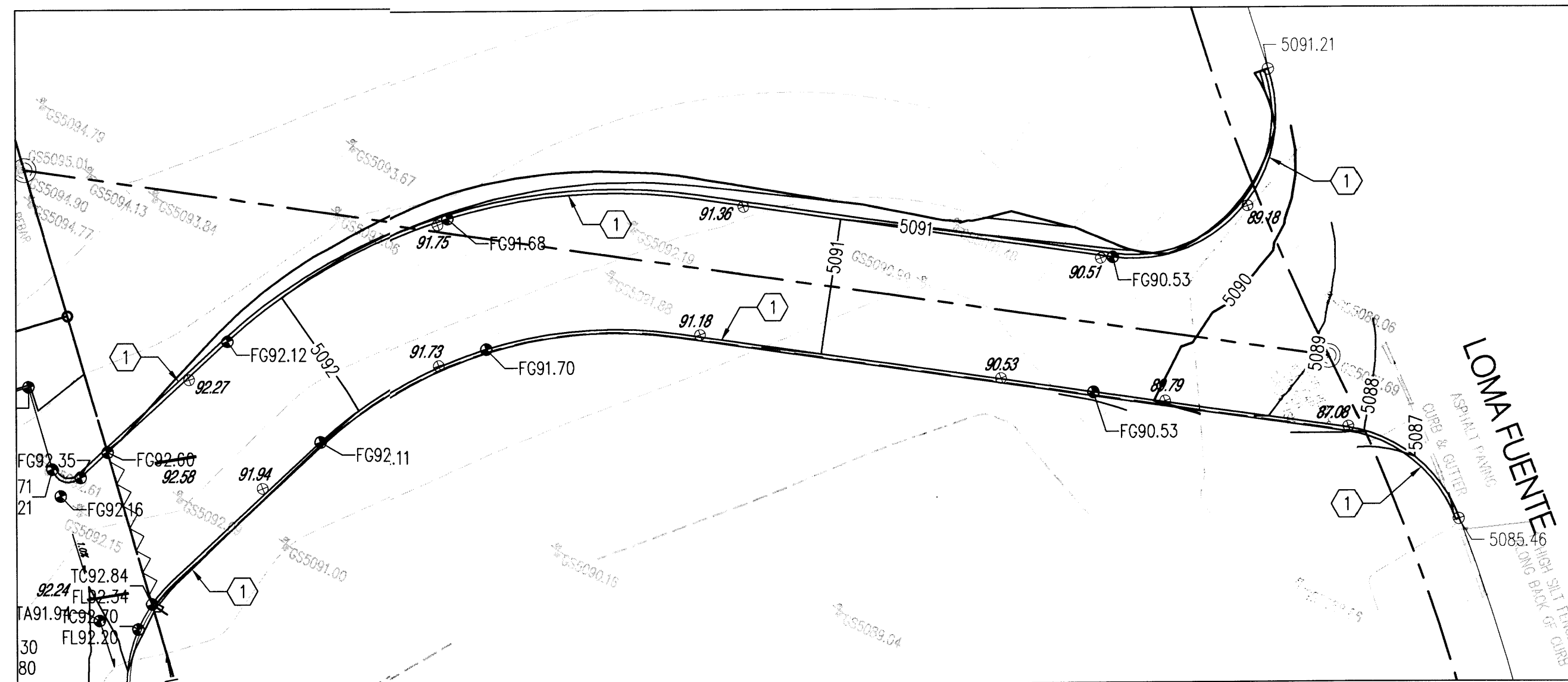
Grading Plan

sheet-

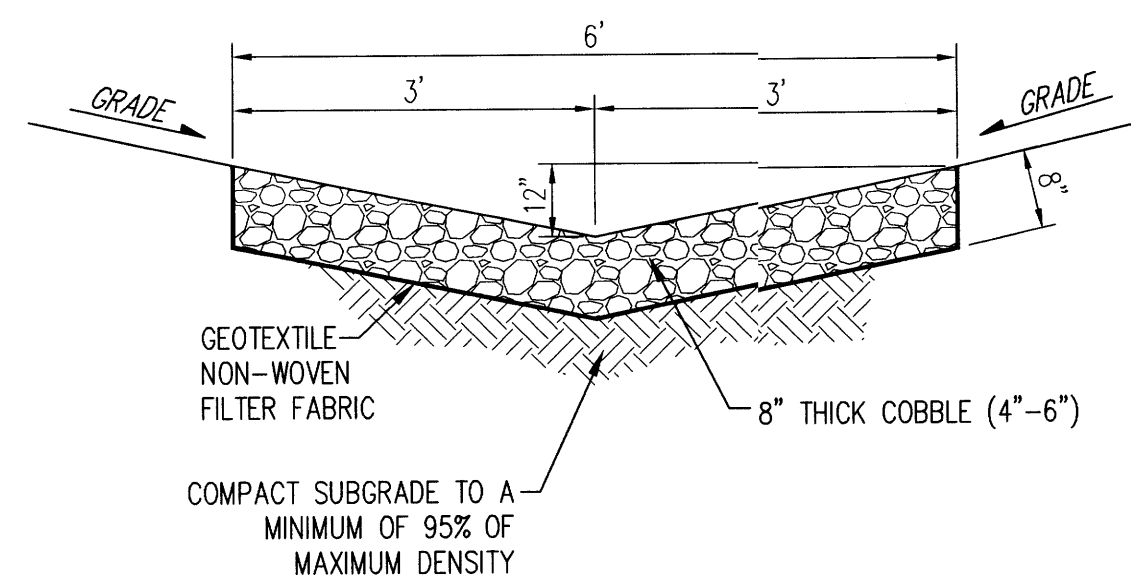
C100

GRADING KEYNOTES

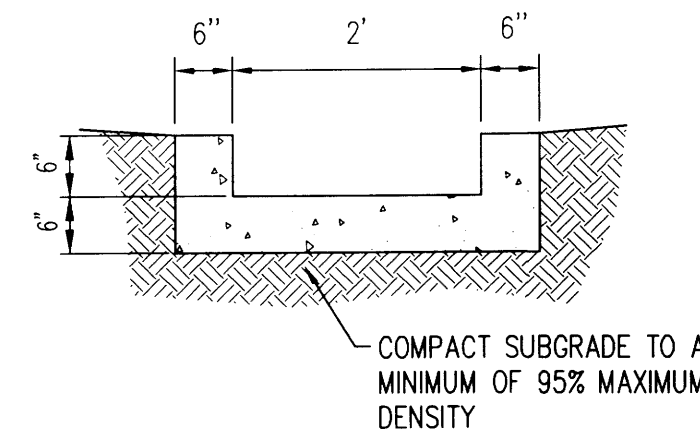
1. INSTALL EXTRUDED ASPHALT CURB PER COA STD DWG 2415B.



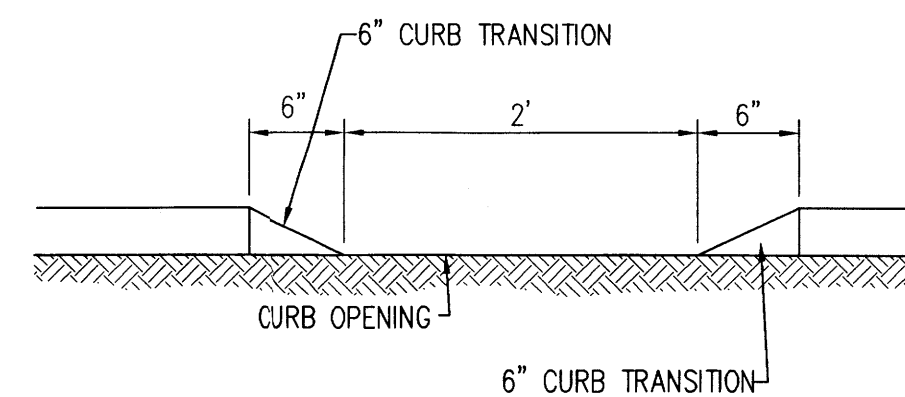
A ACCESS ROAD GRADING PLAN
1"=20'



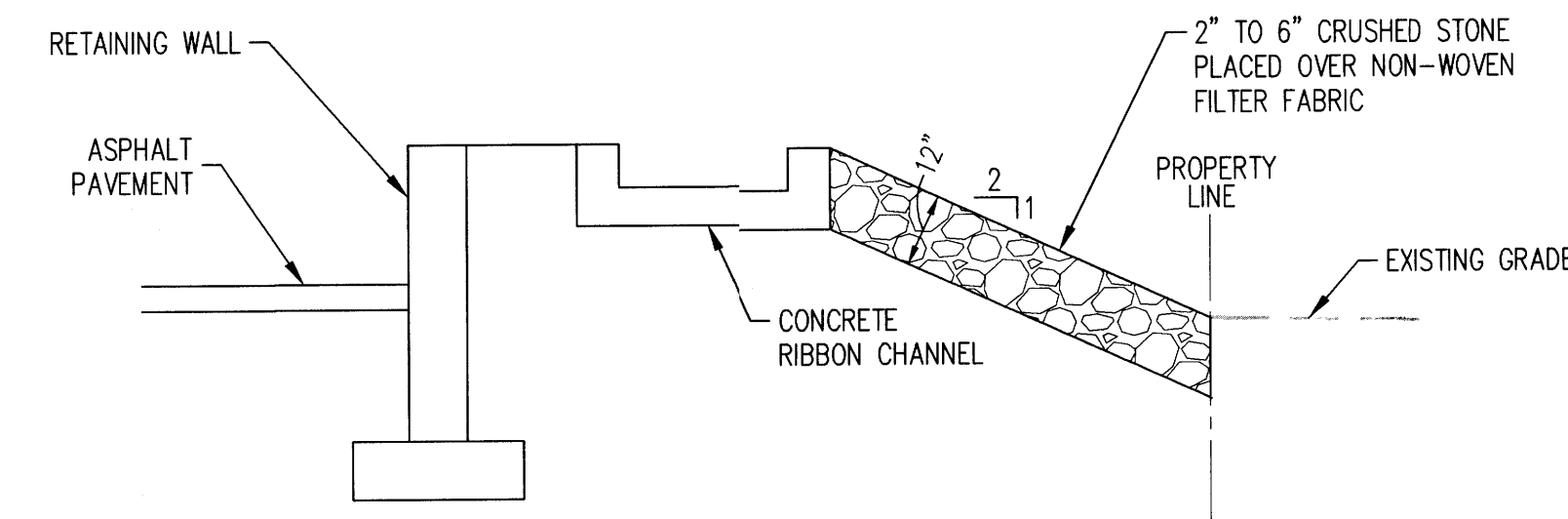
D LARGE RIP-RAP SWALE
N.T.S.



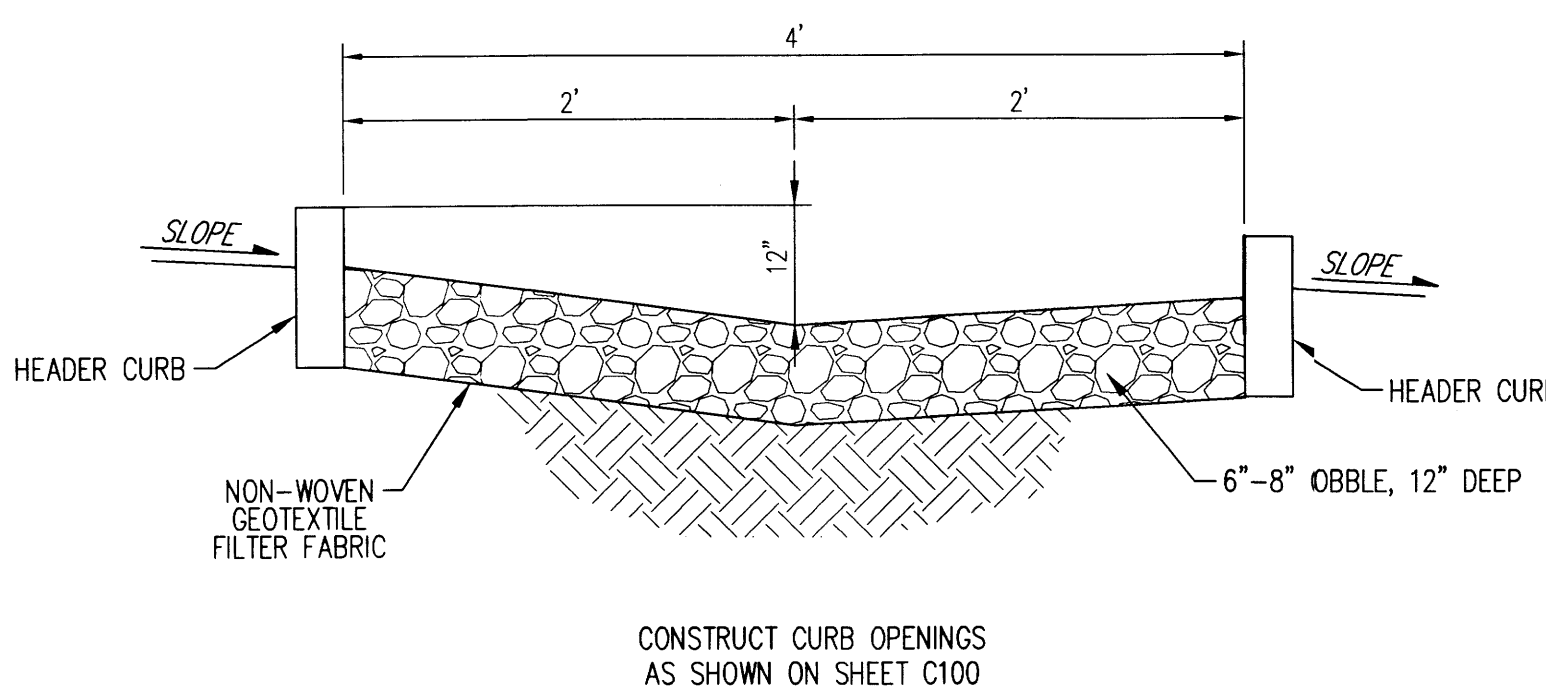
E CONCRETE RIBBON CHANNEL
N.T.S.



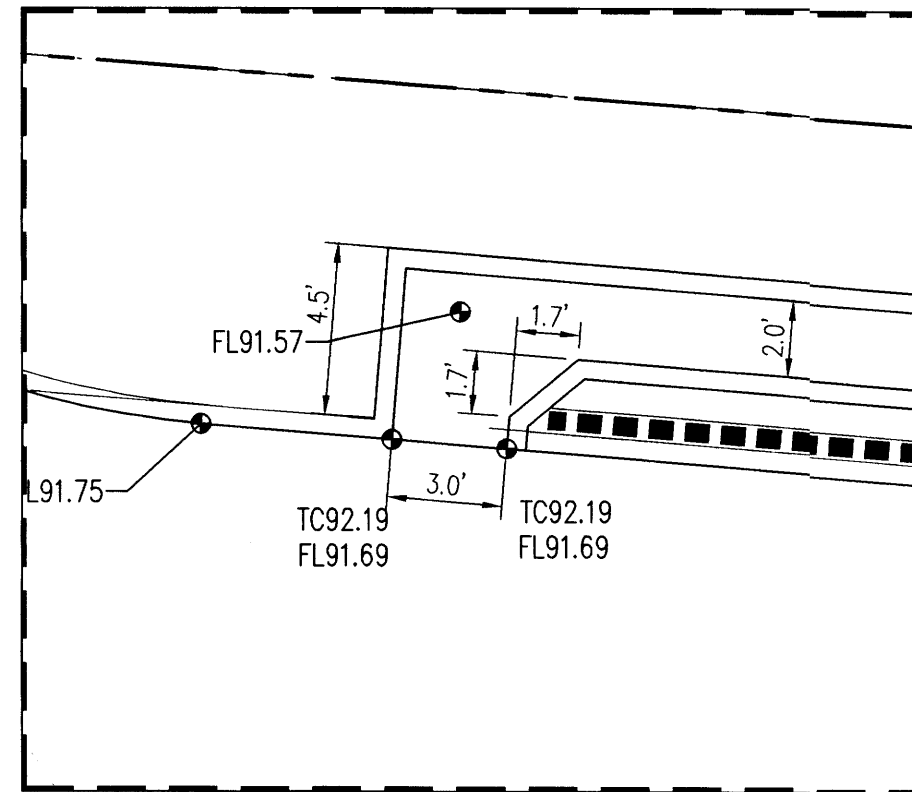
F TYPICAL CURB OPENING
N.T.S.



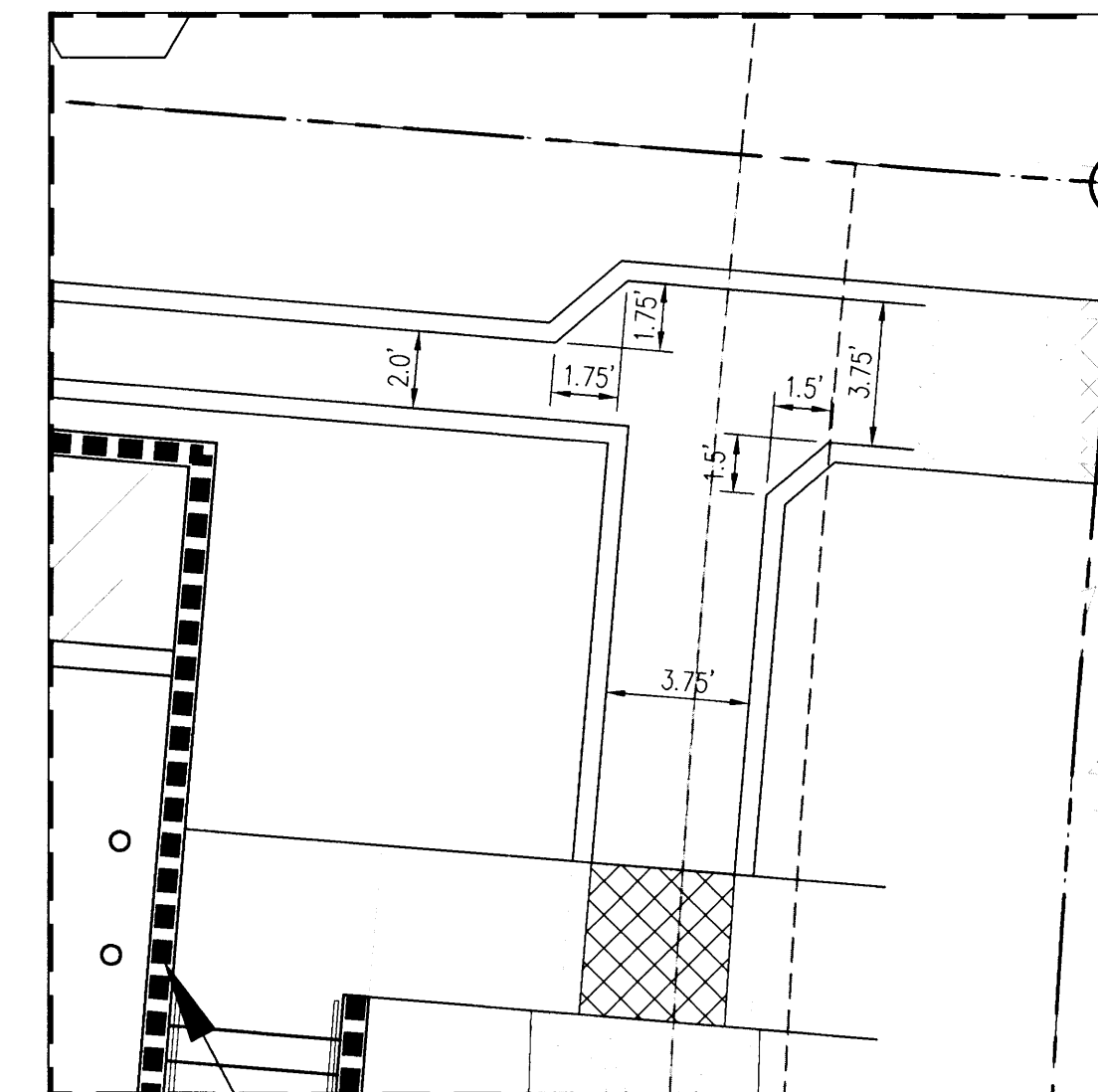
H TYPICAL RETAINING WALL SECTION
N.T.S.



I TYPICAL WATER HARVESTING SECTION
N.T.S.

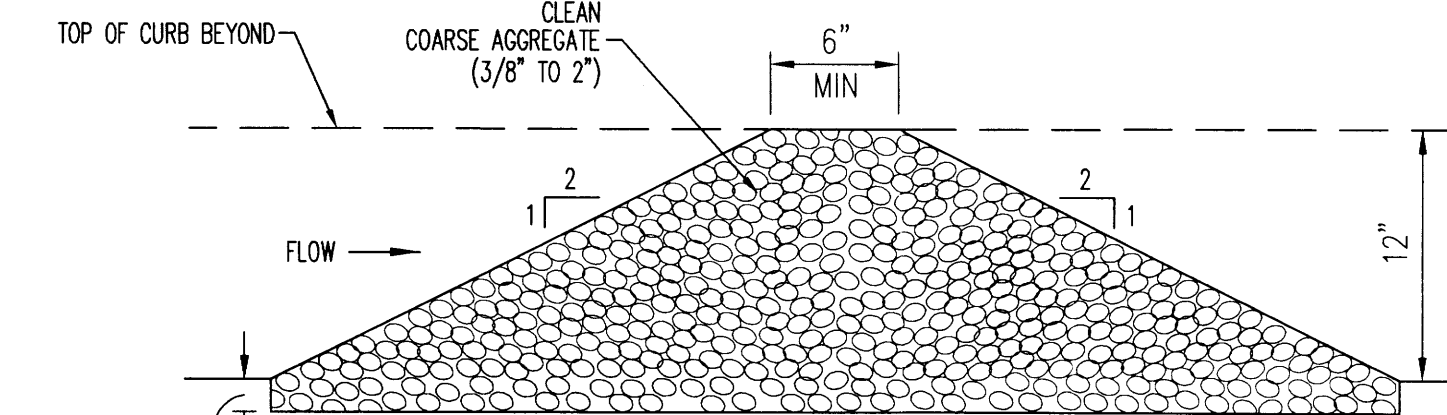


B DETAIL "B"
1"=5'



C DETAIL "C"
1"=5'

- NOTES:
1. SEE PLANS FOR LOCATION OF DAMS.
 2. CHECK DAMS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE CHECK DAM.



G CHECK DAM
N.T.S.

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". ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK 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 HAIL 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 $\pm 0.1'$ FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE $\pm 0.05'$ 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.

DRAINAGE CERTIFICATION

I, GLENN S. BROUGHTON, NMPE 14171, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6/25/2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY TIM MARTINEZ, NMPS 13982, OF THE FIRM TM SURVEYING, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 1/27/2016 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A TEMPORARY CERTIFICATE OF OCCUPANCY.

- THE FOLLOWING ITEMS MUST BE COMPLETED PRIOR TO PERMANENT CERTIFICATE OF OCCUPANCY:
1. ACCESSIBLE PARKING SPACES EXCEED MAXIMUM SLOPE. REMOVE & REPLACE ASPHALT PAVEMENT AS NECESSARY TO ENSURE SLOPES MEET ADA CRITERIA.
 2. CONCRETE RIBBON CHANNEL AND SIDEWALK CULVERTS AT THE NORTH CORNER OF THE SITE ARE NOT CONSTRUCTED PER PLAN. REMOVE AND REPLACE.
 3. INSTALL COBBLE IN DRAINAGE SWALE.
 4. INSTALL STONE CHECK DAMS.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Glenn S. Broughton
GLENN S. BROUGHTON, NMPE 14171

1/28/2016

LEGEND

- FL70.22 DESIGN GRADE
- FL88.24 AS-BUILT GRADE



Bohannon & Huston
www.bhinc.com 800.877.5332

revision	by	date	rev
GRADING REVISION	BO/CGB	11/17/2015	1



Mullen Helle
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144[p]
505 268 4244 [f]

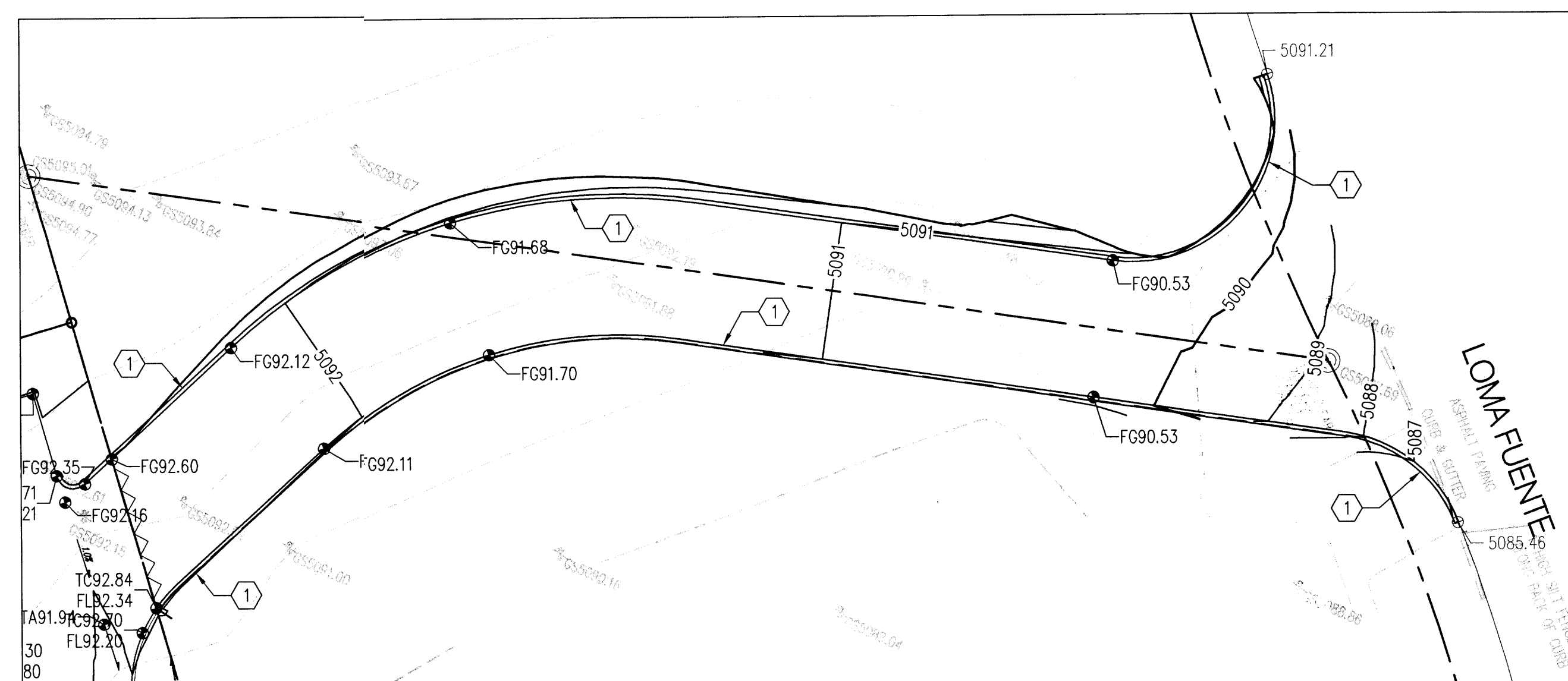


job number	drawn by	project manager	date
20150304	MHS	CGB	07/21/2015

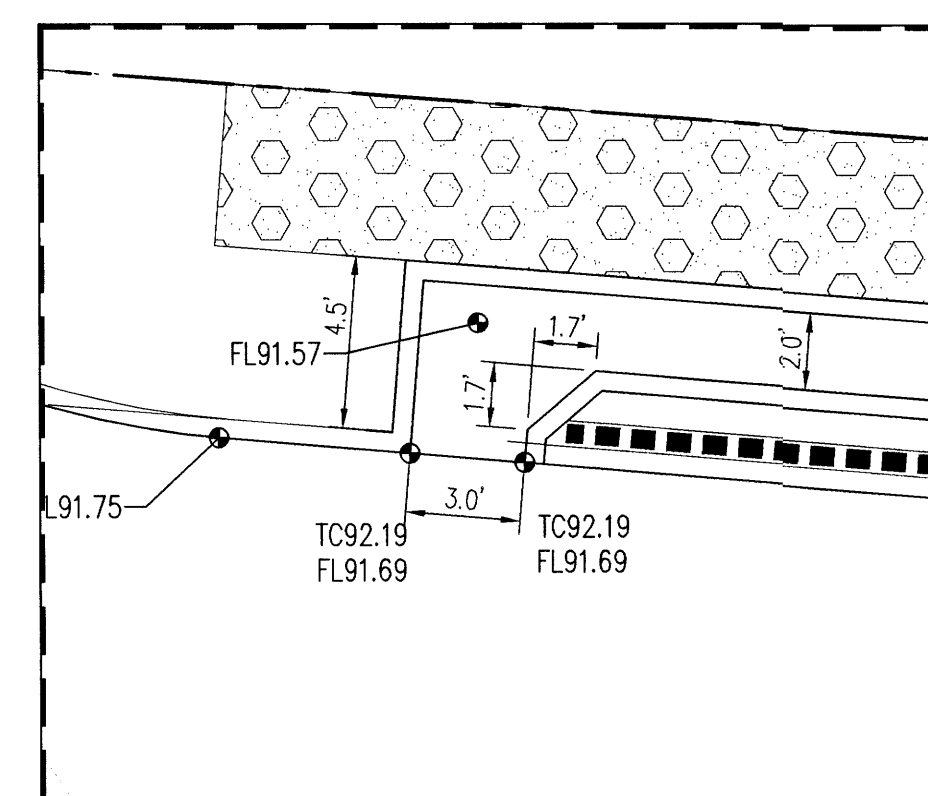
project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW,
Albuquerque, New Mexico 87114
sheet title
Grading Plan Details

sheet-
C101

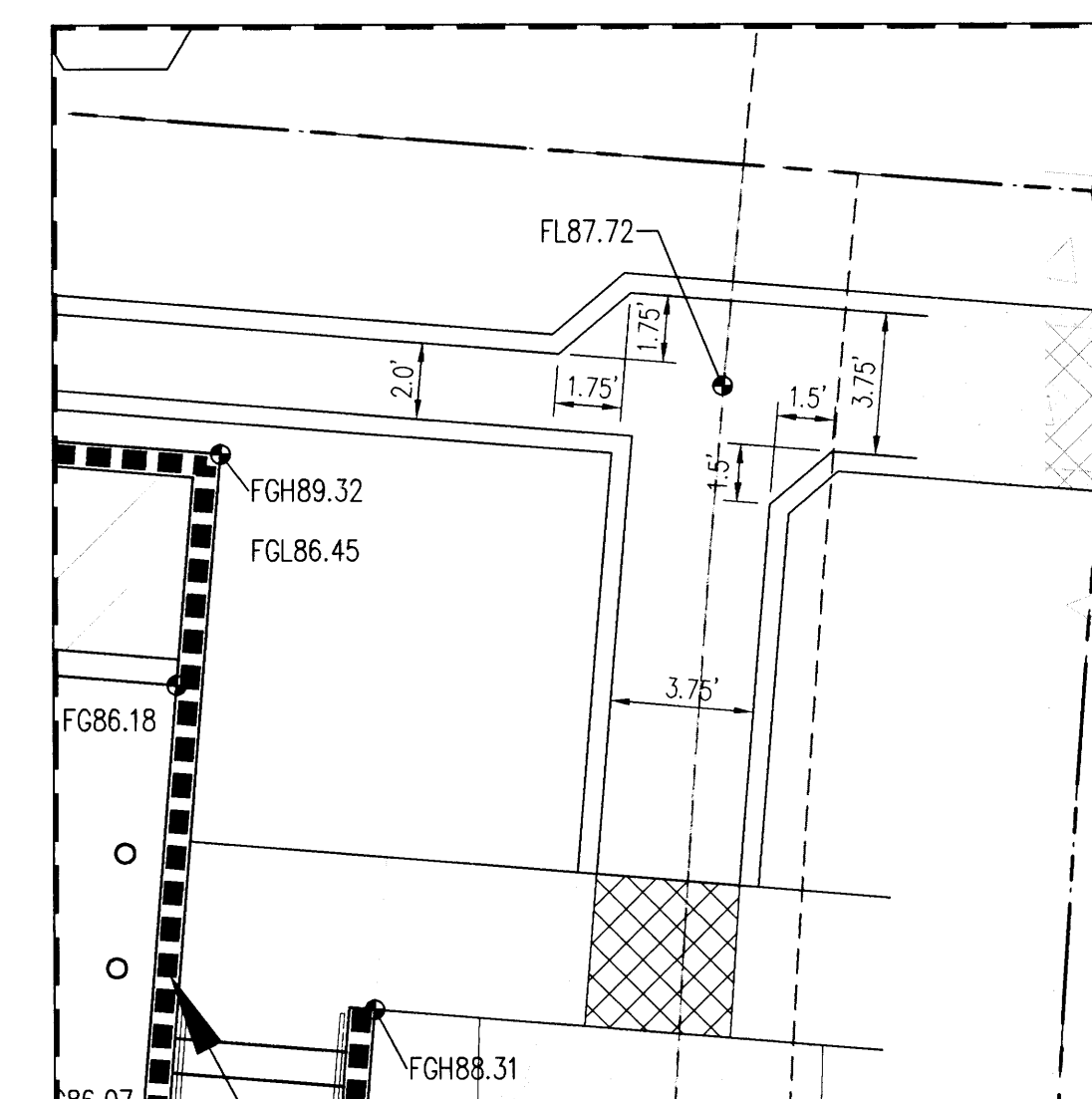
1. INSTALL EXTRUDED ASPHALT CURB PER COA STD DWG 2415B



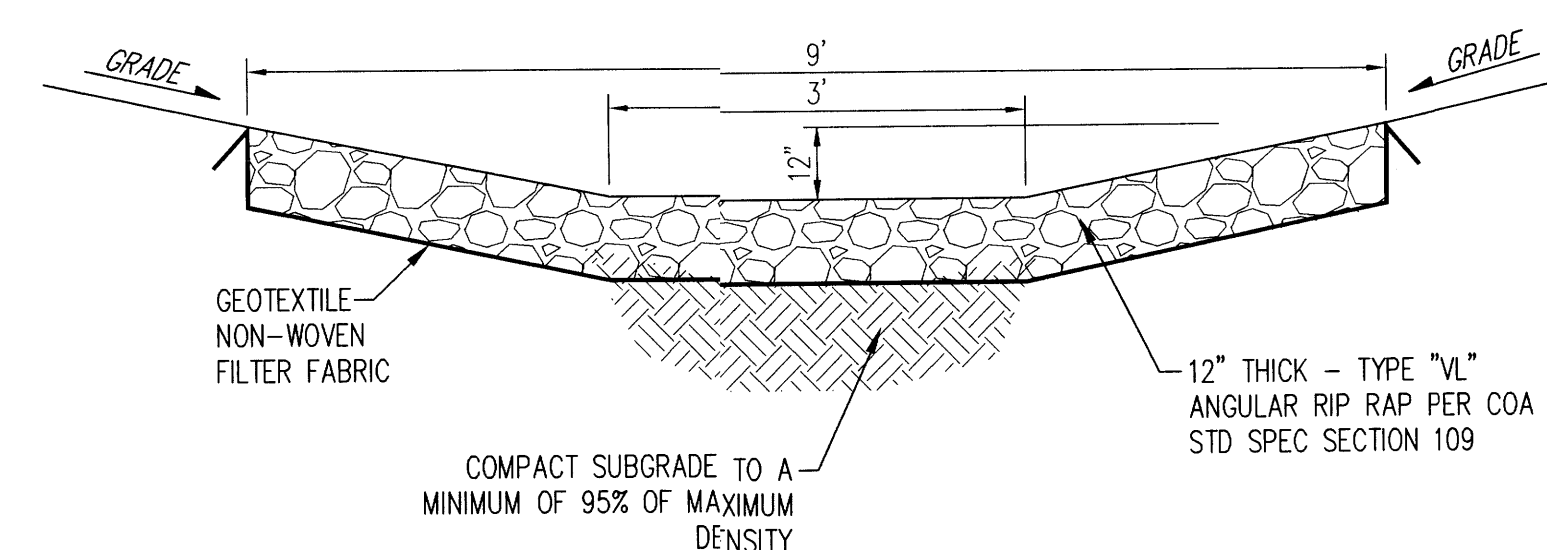
A ACCESS ROAD GRADING PLAN
1"=20'



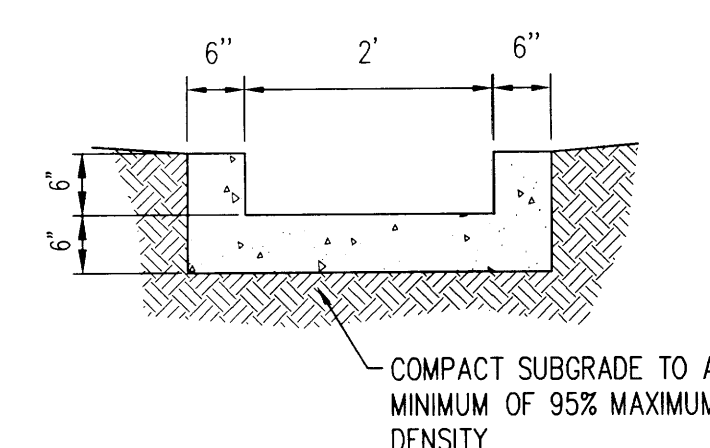
B DETAIL "B"
1"=5'



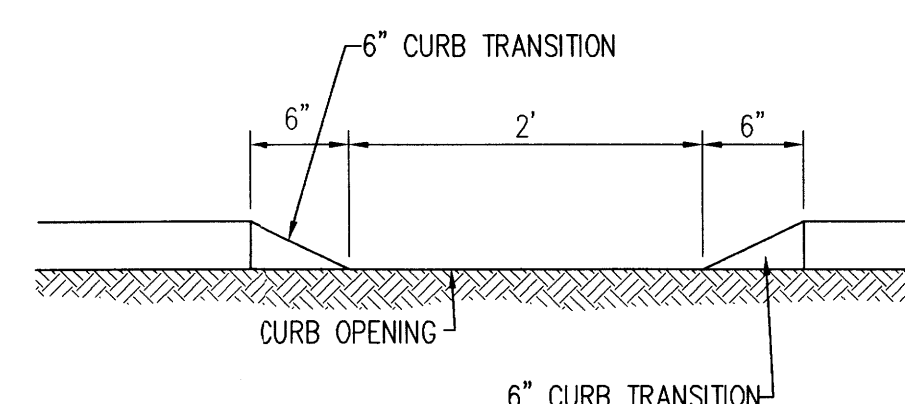
C DETAIL "C"
1"=5'



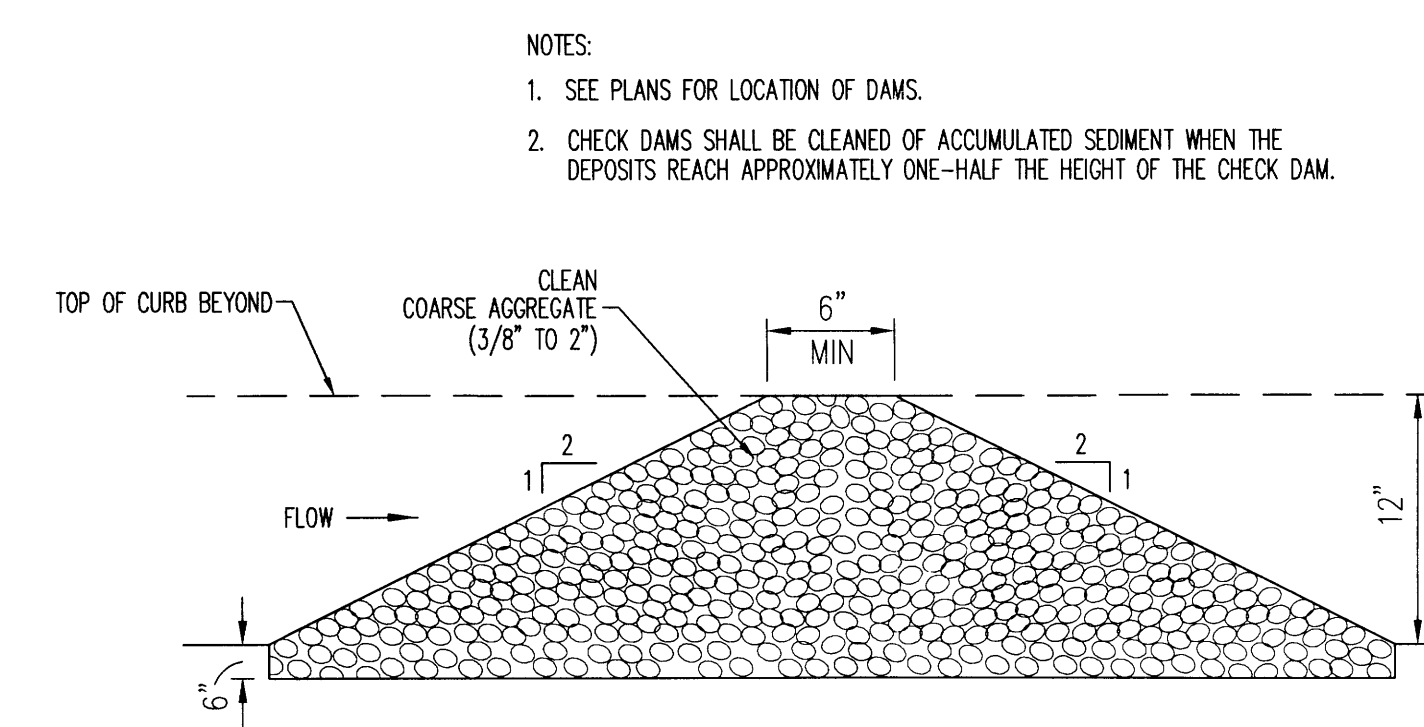
D LARGE RIP-RAP SWALE
N.T.S.



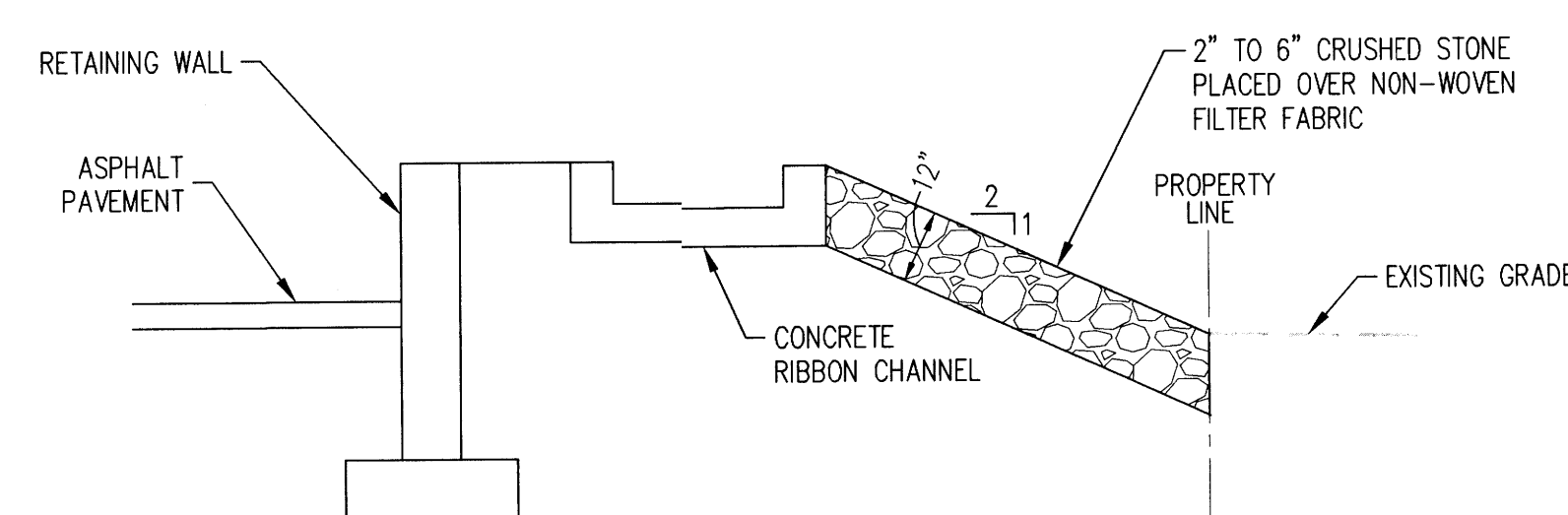
E CONCRETE RIBBON CHANNEL
N.T.S.



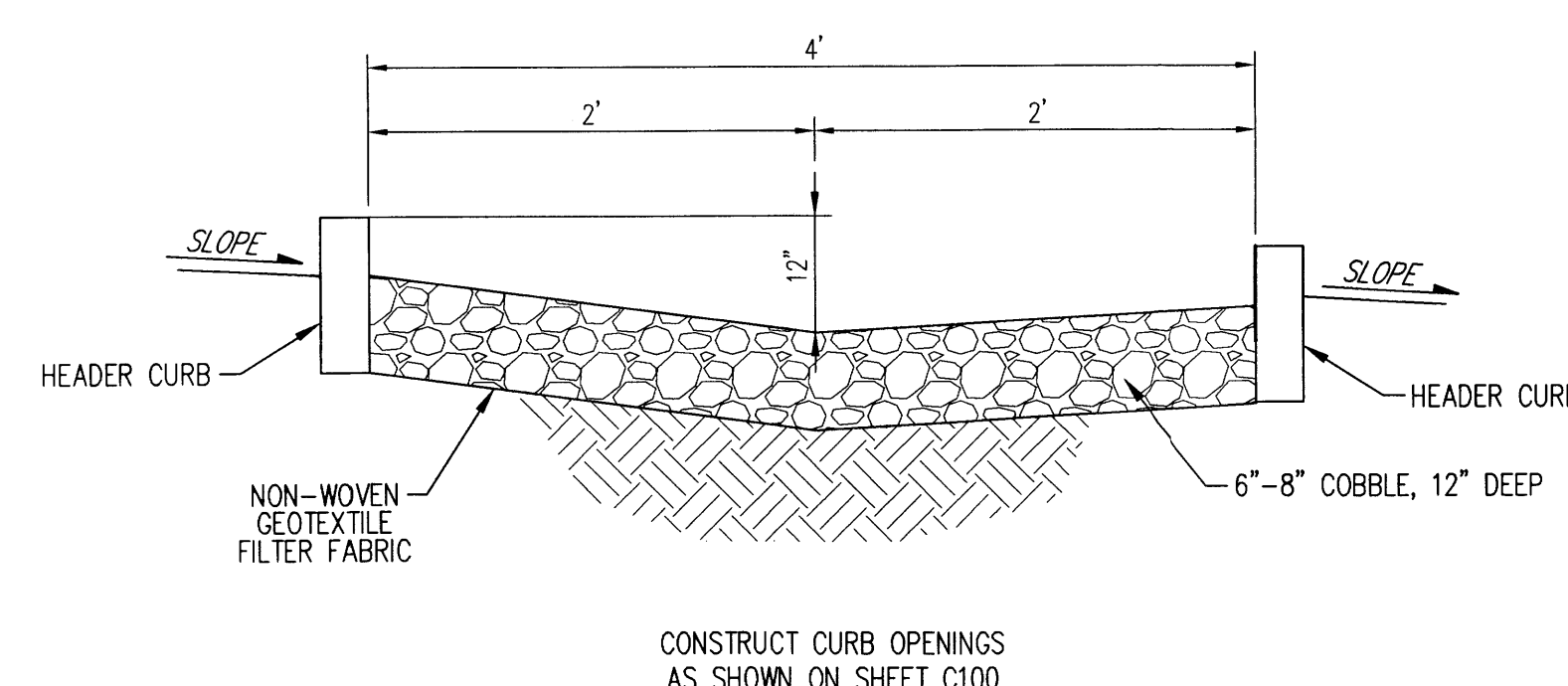
F TYPICAL CURB OPENING
N.T.S.



G CHECK DAM



H TYPICAL RETAINING WALL SECTION
N.T.S.



1 TYPICAL WATER HARVESTING SECTION
N.T.S.

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". ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).

4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.

5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK 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 PL 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

INTRODUCTION:

THE PROJECT IS LOCATED ON THE NORTHWEST INTERSECTION OF PASEO DEL NORTE BLVD AND EAGLE RANCH RD. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF SMILES FOR KIDS DENTIST OFFICE AND REQUEST BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

THE 0.88 ACRE SITE IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE NORTH / NORTHEAST WHERE THE RUNOFF OPENLY DISCHARGES INTO EAGLE RANCH RD.

BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE #C12/D3B), THE ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (THIS SHEET).

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED IN ACCORDANCE WITH A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS (AS MENTIONED ABOVE).

THE SITE IS DIVIDED INTO TWO SMALL DRAINAGE BASINS. THE ULTIMATE OUTFALL LOCATION FOR "BASIN 1" IS EAGLE RANCH ROAD THROUGH MEANS OF RIBBON CHANNEL AND A SMALL POND (POND 1) IN THE PARKING LOT USED TO MITIGATE THE FIRST FLUSH. THE SOUTHERN AND EASTERN PORTIONS OF THE SITE (BASIN 2) DIRECT THE RUNOFF TO THE SAME DISCHARGE POINT AS "BASIN 1". THE RAMP INTO THE PARKING GARAGE DRAINS INTO AN INLET. RUNOFF FROM THE RAMP AND PARKING GARAGE ARE CONVEYED TO A SUMP PUMP WHICH DISCHARGES TO THE SANITARY SEWER. THE TOTAL AREA OF THE RAMP IS 0.07 ACRES.

OFFSITE PRIVATE ACCESS ROAD IS NOT INCLUDED IN THE CALCULATION. RUNOFF FROM TRACT 10-A-1 WILL BE ADDRESSED WITH THE DEVELOPMENT OF THAT TRACT.

RUNDOWN CAPACITIES:

THE CONCRETE RIBBON CHANNEL WAS DESIGNED USING MANNING'S EQUATION AND THE WEIR EQUATION.

THE SITE CONTAINS ONE LARGE RIBBON CHANNEL TO DIRECT THE FLOW TO EAGLE RANCH ROAD. THE BEGINNING OF THE RIBBON CHANNEL (DENOTED AS "R-1") WAS SIZED USING THE WEIR EQUATION TO ACCEPT RUNOFF FROM "BASIN 1". ONCE THE FLOW ENTERS THE RIBBON CHANNEL (DENOTED AS "R-2"), THERE IS ENOUGH CAPACITY GIVEN THE RELATIVELY STEEP SLOPE TO DIRECT THE FLOW TO EAGLE RANCH ROAD. THE RIBBON CHANNEL WAS WIDENED IN THE NORTHEAST CORNER OF THE SITE (DENOTED AS "R-3") TO INCLUDE RUNOFF FROM "BASIN 2". FOR MORE DETAILS, SEE THE RUNDOWN CAPACITY TABLE (THIS SHEET).

SWALE CAPACITY:

THE RIPRAP SWALE WAS DESIGNED USING MANNING'S EQUATION.

THE LARGE SWALE RUNNING FROM THE SOUTH TO THE NORTHEAST CORNER WAS SIZED TO ACCEPT THE FLOWS FROM "BASIN 2". THE SLOPE OF THE SWALE CHANGES THROUGHOUT. TO PROPERLY DETERMINE CAPACITY, THE FLATTEST SLOPE WAS USED TO. FOR MORE DETAILS, SEE THE SWALE CAPACITY TABLE (THIS SHEET).

SIDEWALK CULVERT CAPACITIES:

THE SIDEWALK CULVERTS WERE DESIGNED USING THE WEIR EQUATION.

BOTH SIDEWALK CULVERTS ARE THE SAME WIDTH AND HEIGHT, MEANING THEY HAVE THE SAME CAPACITY. THE CULVERTS HAVE MORE THAN ENOUGH CAPACITY FOR THE DESIGN STORM EVENT. IN THE EVENT OF CLOGGING OR LARGER STORM EVENT, RUNOFF WILL FLOW OVER THE TOP OF THE SIDEWALK CULVERT IN THE DIRECTION OF ITS INTENDED FLOWPATH.

FIRST FLUSH CALCULATIONS:

IMPERVIOUS AREA: 29,952 SF (PAVED AREA 22,216 & ROOF AREA 7,736 SF)

*RAINFALL DEPTH: ROOF AREA = 0.44", PAVED AREA = 0.33"

VOLUME REQUIRED: 895 CF

VOLUME PROVIDED: 315 CF

*INITIAL ABSTRACTION OF 0.1" WAS USED FOR PAVED AREAS PER DPM CHAPTER 22, TABLE A-7.

THERE WERE MANY CONTRIBUTING FACTORS THAT LIMITED THE VOLUME THAT COULD BE INCORPORATED INTO THE SITE DESIGN. THE SITE HAS AN EXISTING SLOPE OF APPROXIMATELY 10.00%. STEEP SLOPE SITES MAKE IT CHALLENGING TO INCORPORATE SHALLOW RETENTION AREAS IN THE LANDSCAPE DESIGN AND REDUCE THE ACTUAL VOLUME INTERCEPTED. IN ADDITION, BUILDING AND SITE PARKING SET BACKS LIMITED THE AREA AVAILABLE TO PROVIDE RETENTION PONDS WHERE THEY WOULD BE MOST EFFECTIVE AT TREATING THE FIRST FLUSH. ANOTHER SITE CONSTRAINT IS AN EXISTING UTILITY EASEMENT (ALONG EAGLE RANCH AND PASEO DEL NORTE) CONTAINING COMMUNICATION AND GAS LINES. GIVEN THE SITE CONSTRAINTS, THIS DESIGN MAXIMIZED THE FIRST FLUSH RETAINED WITHIN THE PARKING LOT PONDING AREA.

CONCLUSION:

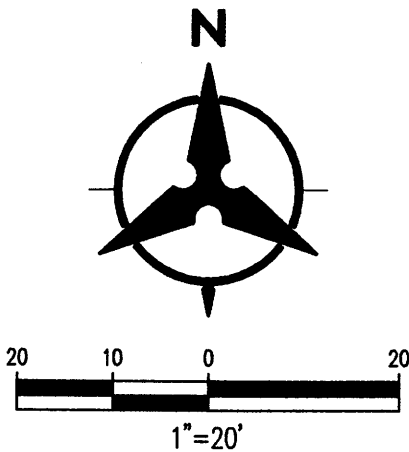
THE PEAK DISCHARGE FROM THE SITE IS 3.65 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE. THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST BUILDING PERMIT APPROVAL.

Smiles for Kids Dental Office											
Proposed Ultimate Development Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 1											
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q _(100yr) (cfs/ac.)	Q _(100yr-8hr) (CFS)	WT E (inches)	V _(100yr-8hr) (CF)	V _(100yr-10day) CF
Proposed											
1	26589	0.61	0.0%	0.0%	17.0%	83.0%	4.12	2.51	1.80	3996	6699
2	13140	0.30	0.0%	0.0%	40.0%	60.0%	3.77	1.14	1.58	1728	2694
TOTAL	39729	**0.91						3.65			***9393

CONCRETE RUNDOWN TABLE										
Rundown #	Basin ID	Rundown Type	Required Flow	Weir Height ft	Weir Length ft	Weir Capacity**	Channel Width ft	Channel Height ft	Minimum Slope	Capacity* CFS
R-1	BASIN 1	Rectangle	2.51	0.50	3.00	3.00		N/A		
R-2	BASIN 1	Rectangle	2.51		N/A		2.00	0.50	2.80%	9.20
R-3	BASINS 1 & 2	Rectangle	3.65		N/A		3.00	0.50	0.70%	7.46
Capacity Based on Manning's Eq w/ N=0.013 - *										
Weir Eq: Q=2.65L(h ^{1.5}) - **										

SWALE CAPACITY TABLE					
SWALE #	Contributing Basins & Flows	Required Flow	Manning's Coefficient	Channel Slope	Stream Capacity*
SW-1	BASIN 2	1.14	0.035	1.40%	22.47
Capacity Based on Manning's Eq - *					

SIDEWALK CULVERT CAPACITY TABLE					
WEIR #	Contributing Basins & Flows	Required Flow	Weir Height (FT)	Weir Length (FT)	Weir Capacity*
SDWK-1	MINIMAL ONSITE	0.50	0.50	3.00	3.00
SDWK-2	BASIN 2	1.14	0.50	3.00	3.00
Weir Coefficient = 2.65 - *					



Bohannon & Huston
www.bhinc.com 800.877.5332

revision

by

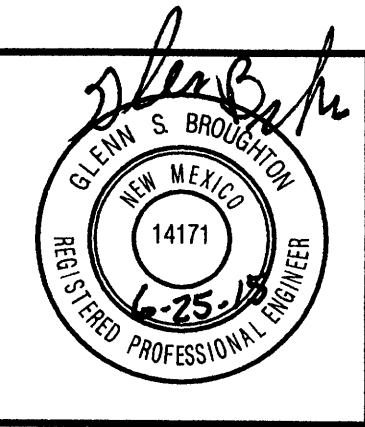
date

rev. <<<<<<



Mullen Heller
Architecture P.C.

924 Park Avenue SW
Suite B
Albuquerque, NM 87102
505 268 4144(p)
505 268 4244 (f)



20150304

MHS

CSB

06.25.2015

job number

drawn by

project manager

date

project title

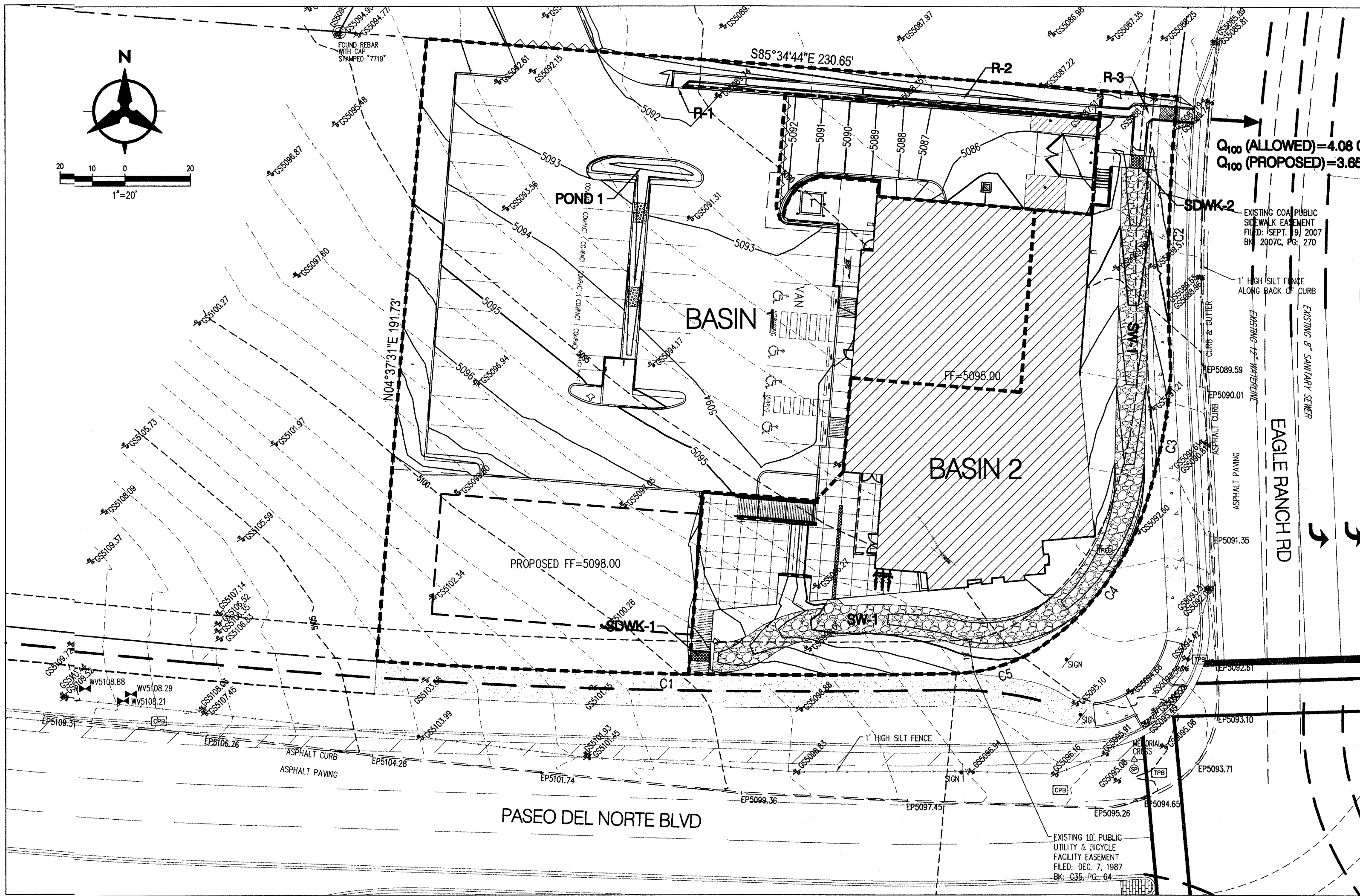
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW,
Albuquerque, New Mexico 87114

sheet title

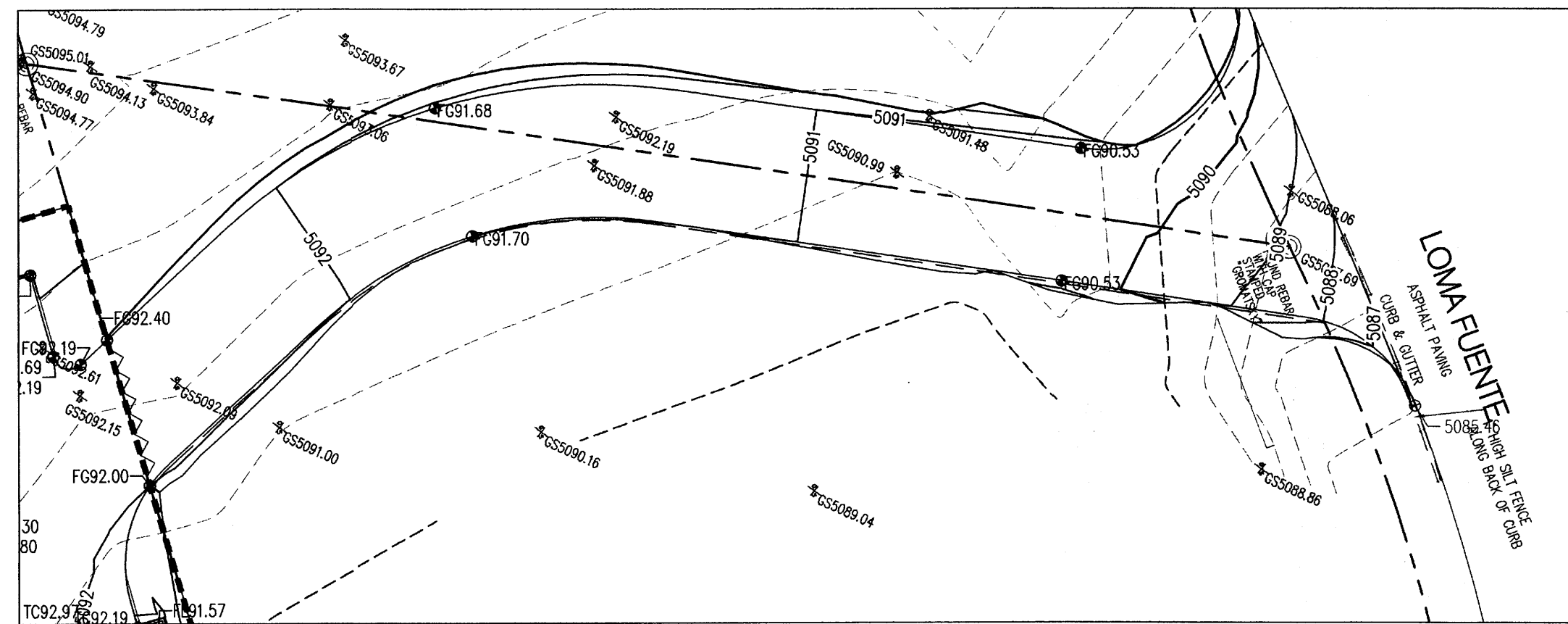
Drainage Management Plan

sheet-

C002

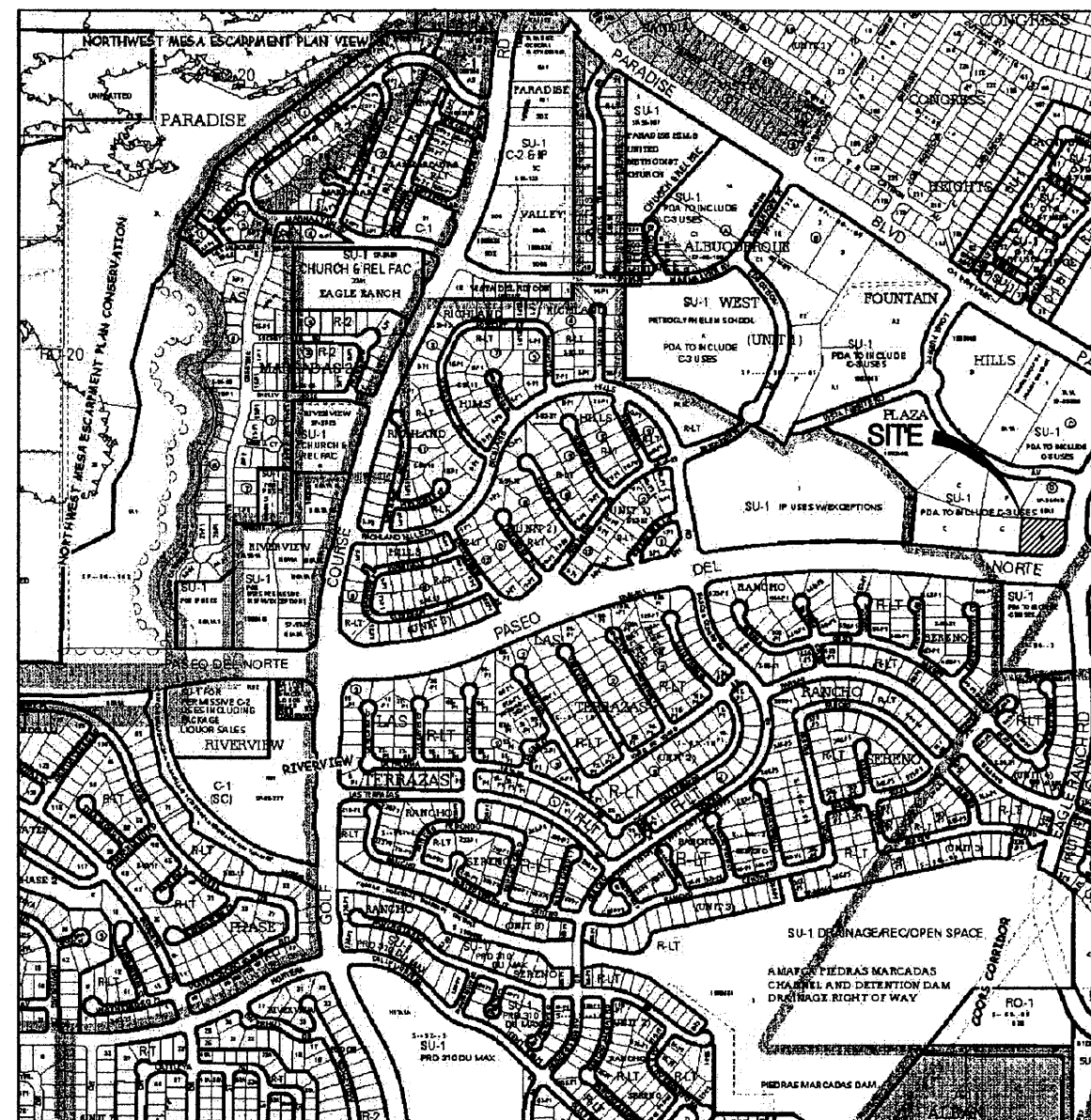


SITE DRAINAGE MANAGEMENT PLAN

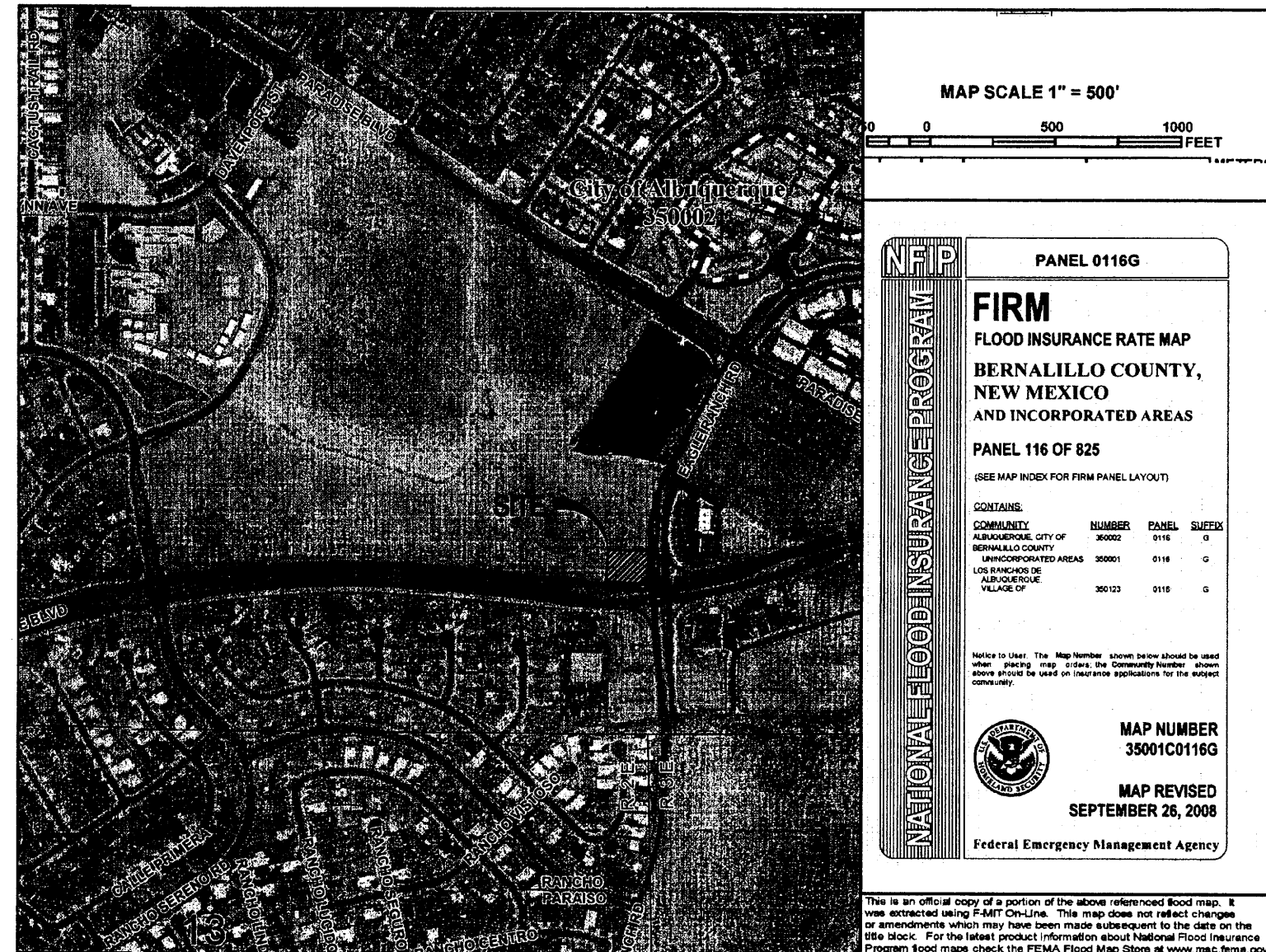


ACCESS ROAD GRADING PLAN

- LEGEND**
- PROPERTY LINE
 - - - - - EXISTING CONTOURS
 - 65.23 PROPOSED SPOT ELEVATION
 - TC=TOP OF CURB, FL=FLOW LINE
 - TW=TOP OF WALL, BW=BOTTOM OF WALL
 - EX=EXISTING, TG=TOP OF GRADE
 - S=2.0% PROPOSED DIRECTION OF FLOW
 - ~~~~~ WATER BLOCK
 - ===== PROPOSED RETAINING WALL
 - - - - - PROPOSED INDEX CONTOURS
 - - - - - PROPOSED INTER CONTOURS
 - ===== PROPOSED CURB & GUTTER
 - - - - - EASEMENT
 - SD PROPOSED STORM DRAIN LINE



VICINITY MAP: C-12

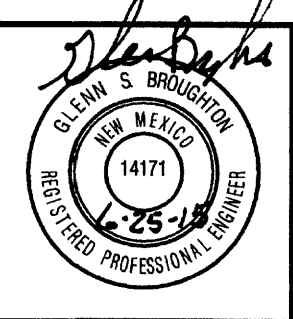


FEMA FIRM MAP # 35001C0116G

revision
by
date
rev

MH
Mullen Heller
Architecture P.C.

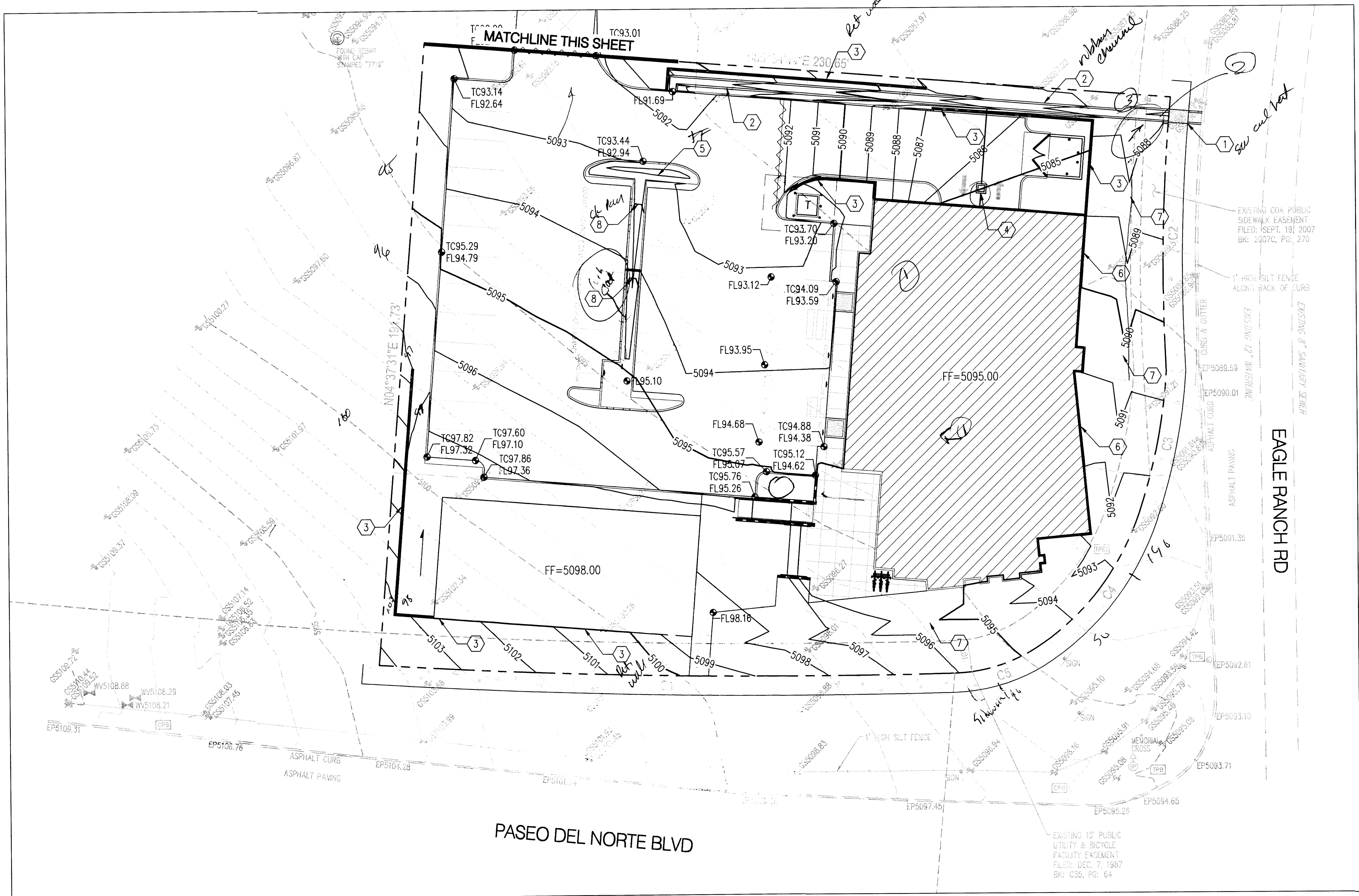
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144[p]
505 268 4244 [f]



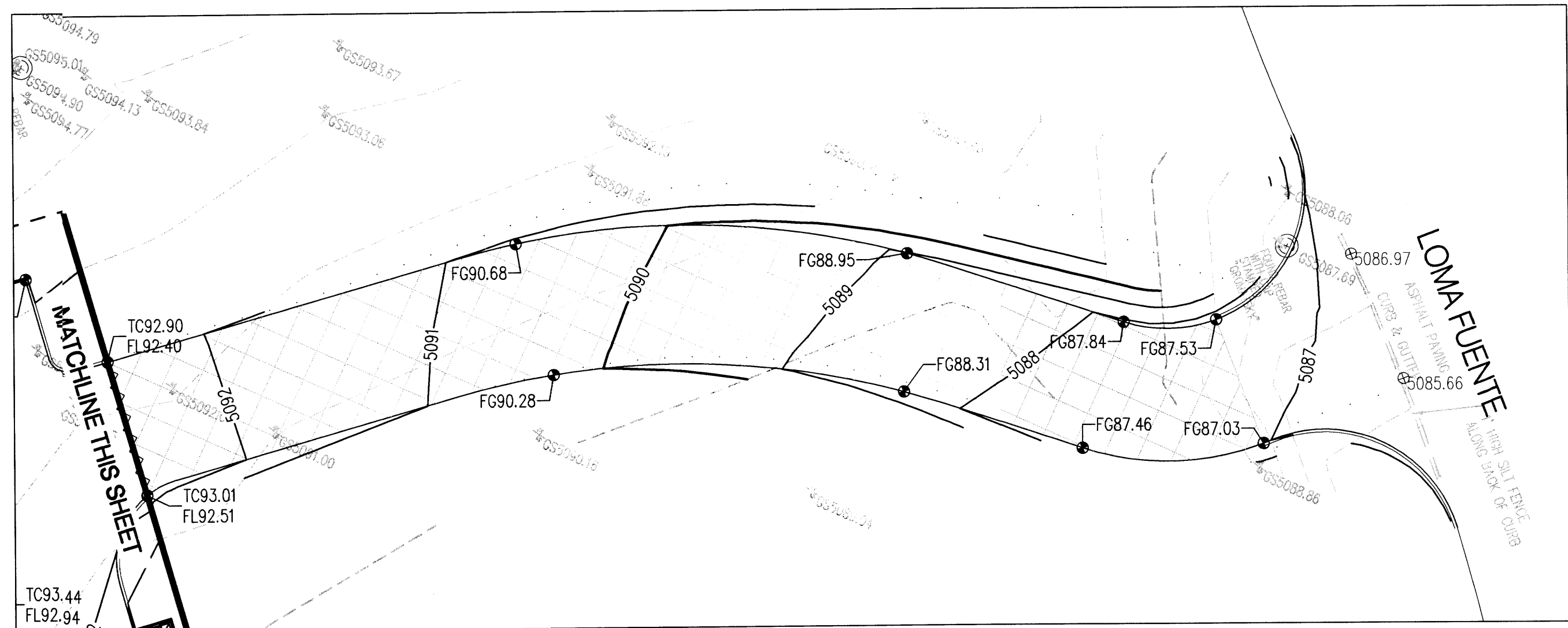
job number 20150304
drawn by MHS
project manager GSB
date 06.25.2015

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW
Albuquerque, New Mexico 87114
sheet title
Drainage Management Plan

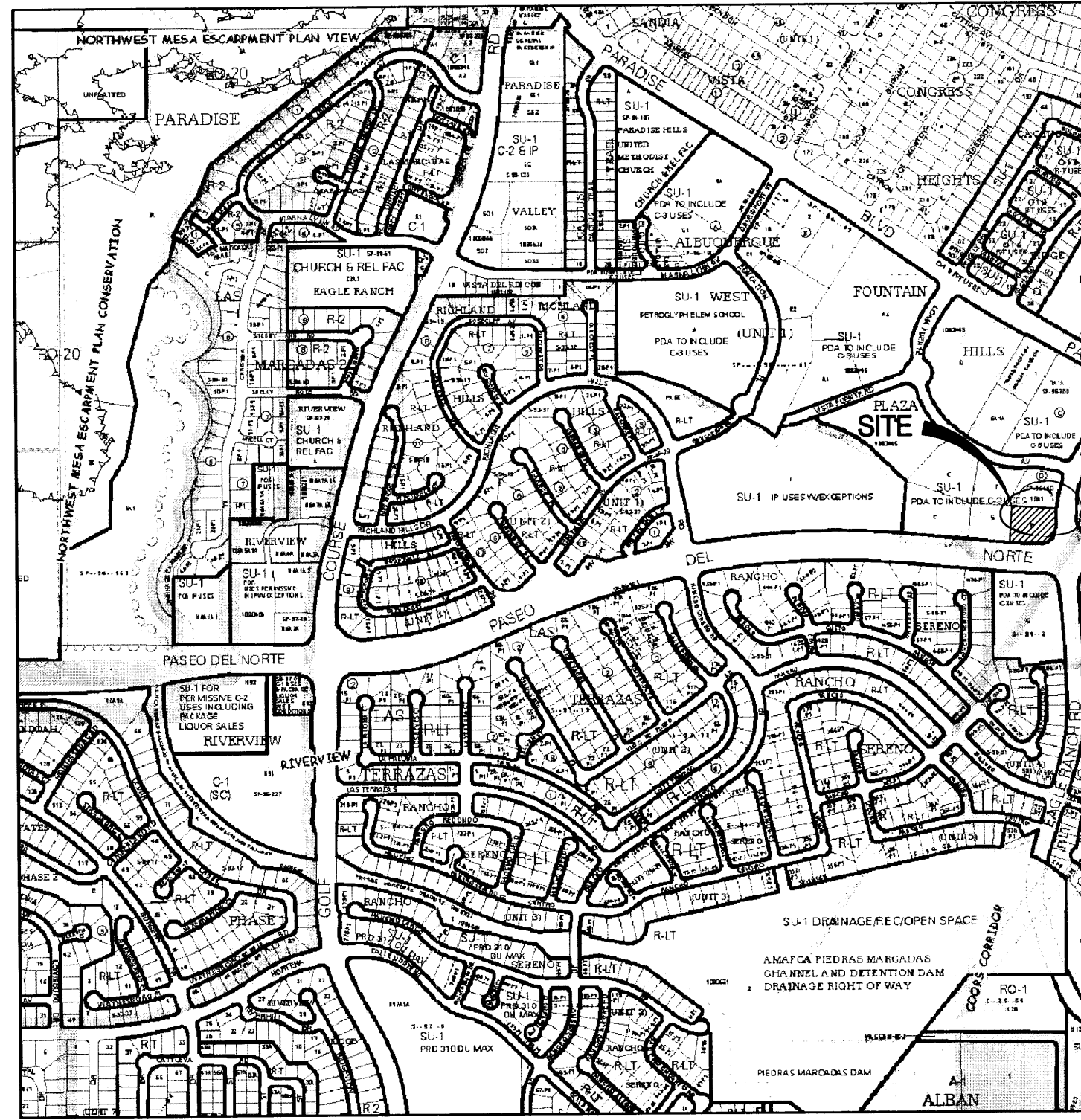
sheet-
C001



SITE CONCEPTUAL GRADING PLAN



ACCESS ROAD CONCEPTUAL GRADING PLAN



VICINITY MAP: C-12

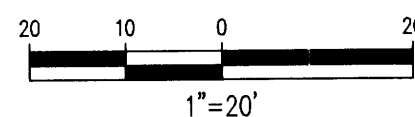
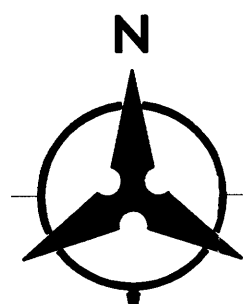
GRADING KEYED NOTES

1. INSTALL SIDEWALK CULVERT
2. INSTALL RIBBON CHANNEL
3. INSTALL RETAINING WALL
4. INSTALL SUMP PUMP
5. POND FOR FIRST FLUSH
6. BUILDING STEM WALL
7. SWALE TO KEEP RUNOFF AWAY FROM BUILDING AND RETAINING WALLS
8. CHECK DAM

Stable

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED SPOT ELEVATION
TC=TOP OF CURB, FL=FLOW LINE
TW=TOP OF WALL, BW=BOTTOM OF WALL
EX=EXISTING, TG=TOP OF GRADE
- PROPOSED DIRECTION OF FLOW
- WATER BLOCK
- PROPOSED RETAINING WALL
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- EASEMENT
- PROPOSED STORM DRAIN LINE



Bohannon & Huston
www.bhinc.com 800.877.5332

rev	△△△△△
date	
by	
revision	

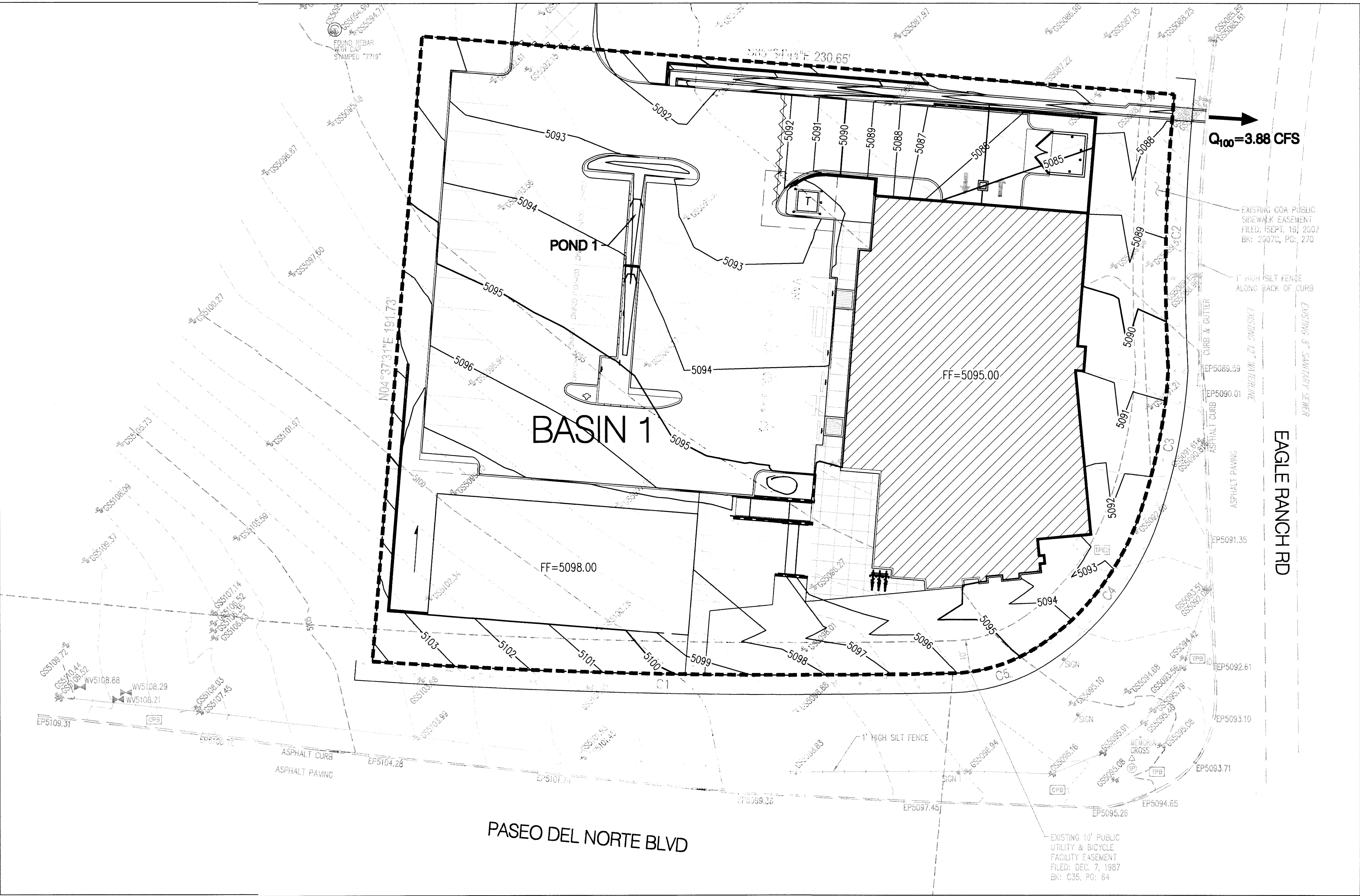


Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144 [p]
505 268 4244 [f]

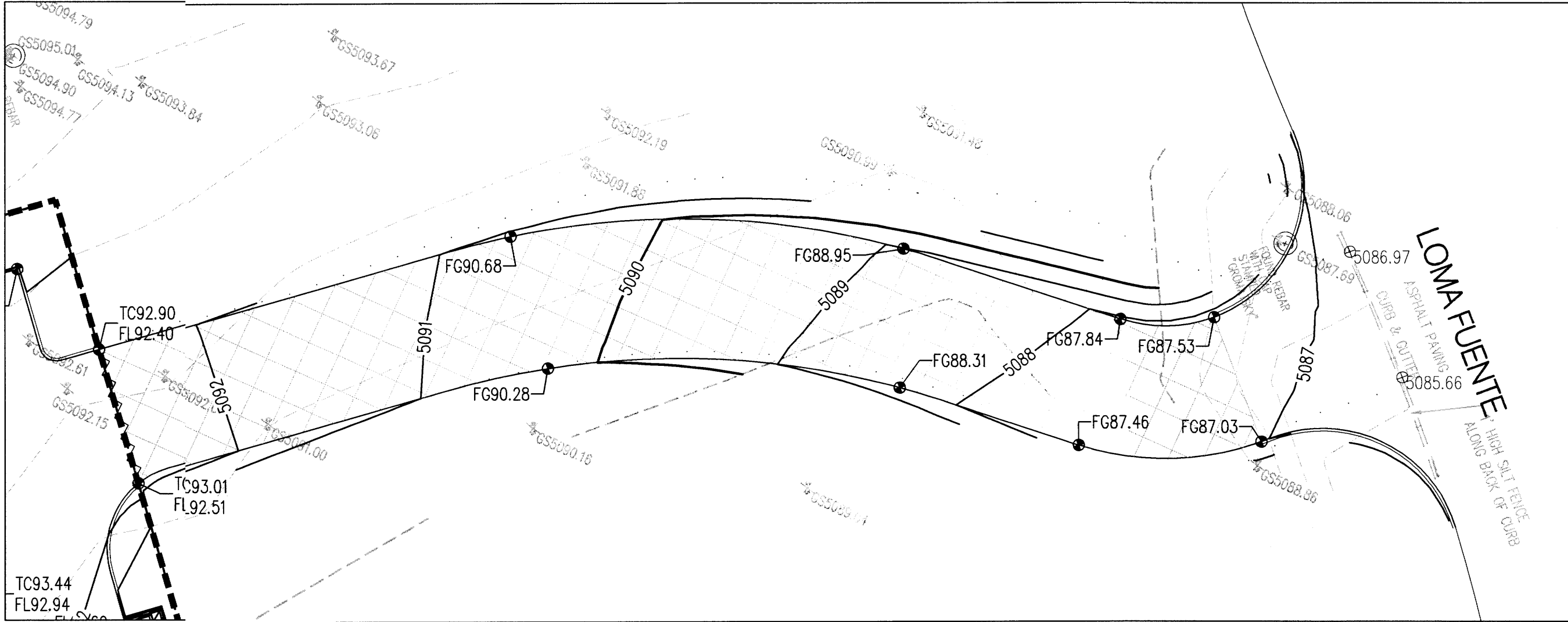
job number	20150304
drawn by	AVHS
project manager	CSB
date	12.12.2014

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW
Albuquerque, New Mexico 87114
sheet title
Conceptual Grading Plan

sheet-
C100

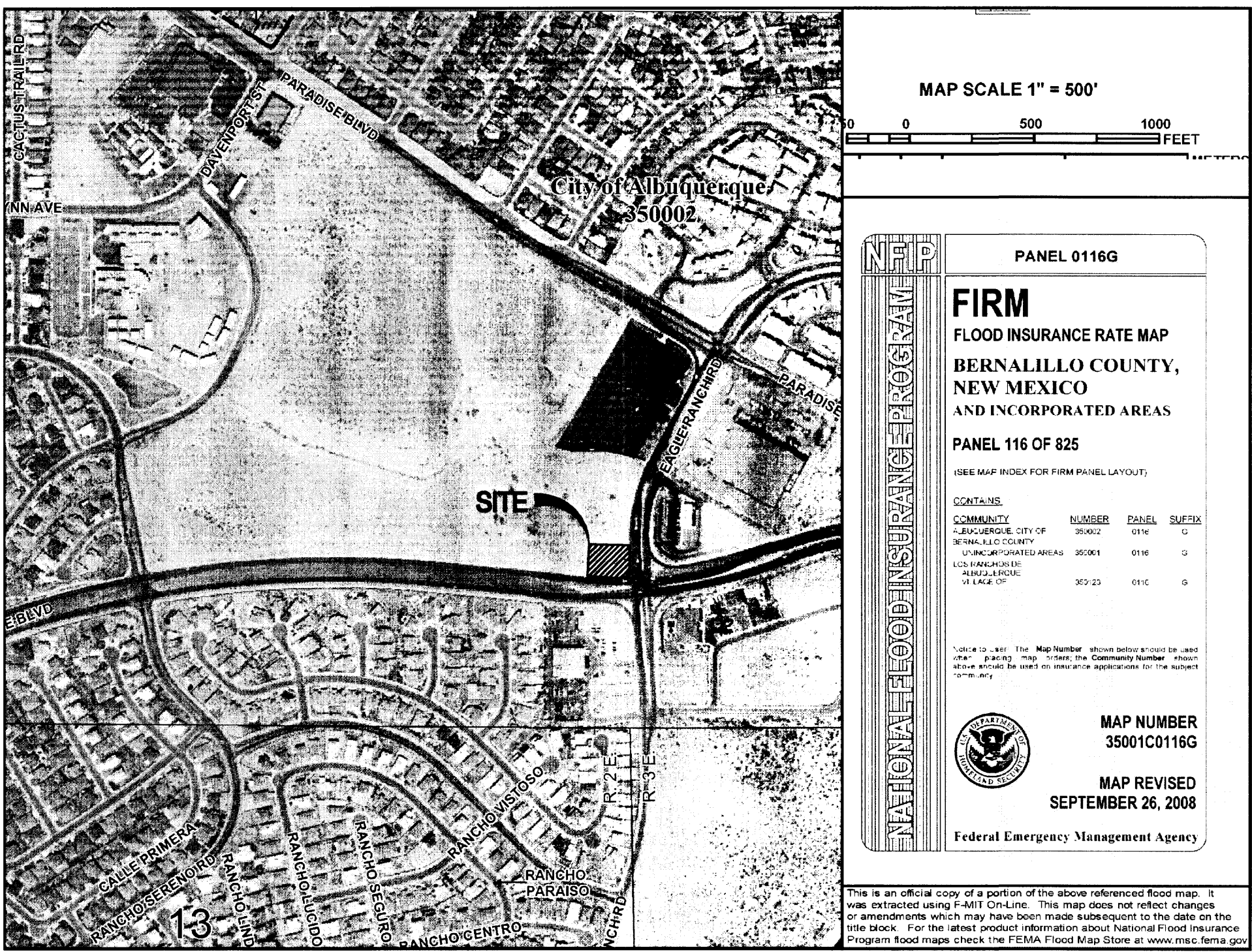


SITE CONCEPTUAL DRAINAGE MANAGEMENT PLAN



ACCESS ROAD CONCEPTUAL GRADING PLAN

- LEGEND**
- PROPERTY LINE
 - EXISTING CONTOURS
 - PROPOSED SPOT ELEVATION
 - TC=TOP OF CURB, FL=FLOW LINE
 - TW=TOP OF WALL, BW=BOTTOM OF WALL
 - EX=EXISTING, TG=TOP OF GRADE
 - PROPOSED DIRECTION OF FLOW
 - WATER BLOCK
 - PROPOSED RETAINING WALL
 - PROPOSED INDEX CONTOURS
 - PROPOSED INTER CONTOURS
 - PROPOSED CURB & GUTTER
 - EASEMENT
 - PROPOSED STORM DRAIN LINE



FEMA FIRM MAP # 35001C0116G

Smiles for Kids Dental Office											
Proposed Ultimate Development Conditions Basin Data Table											
This table is based on the DPM Section 22.2, Zone: 1											
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr-6hr) (CFS)	WT E (inches)	V(100yr-6hr) (CF)	V(100yr-10day) CF
Proposed											
1	42493	0.98	0.0%	0.0%	26.0%	74.0%	3.98	3.88	1.72	6074	9926
TOTAL	42493	**0.98						3.88			**9926

PROPOSED BASIN DATA TABLE

INTRODUCTION:

THE PROJECT IS LOCATED ON THE NORTHWEST INTERSECTION OF PASEO DEL NORTE BLVD AND EAGLE RANCH RD. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF SMILES FOR KIDS DENTIST OFFICE AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

THE 0.98 AC. SITE IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE NORTH / NORTHEAST WHERE THE RUNOFF OPENLY DISCHARGES INTO EAGLE RANCH RD. BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE #12/03B), THE ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE 100 GRADE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (THIS SHEET).

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED IN ACCORDANCE WITH A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS (AS MENTIONED ABOVE). THIS IS A SMALL SITE AND ACTS AS ONE DRAINAGE BASIN (BASIN 1).

THE ULTIMATE OUTFALL LOCATION IS EAGLE RANCH ROAD THROUGH MEANS OF RIBBON CHANNEL AND A SMALL POND (POND 1) IN THE PARKING LOT USED TO MITIGATE THE FIRST FLUSH. A PORTION OF THE SITE DRAINS INTO THE PARKING GARAGE, THAT FLOW IS THEN DIRECTED INTO A SUMP PUMP WHERE IT DISCHARGES INTO SANITARY SEWER.

OFFSITE PRIVATE ACCESS ROAD IS NOT INCLUDED IN THE CALCULATION. RUNOFF FROM TRACT 10-A-1 WILL BE ADDRESSED WITH THE DEVELOPMENT OF THAT TRACT.

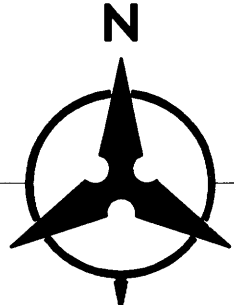
FIRST FLUSH CALCULATIONS:

IMPERVIOUS AREA: 28,868 SF
VOLUME REQUIRED: 1,058 CF
VOLUME PROVIDED: 315 CF

THERE WERE MANY CONTRIBUTING FACTORS THAT LIMITED THE VOLUME THAT COULD BE INCORPORATED INTO THE SITE DESIGN. THE SITE HAS AN EXISTING SLOPE OF APPROXIMATELY 10.00%. STEEP SLOPE SITES MAKE IT CHALLENGING TO INCORPORATE SHALLOW RETENTION AREAS IN THE LANDSCAPE DESIGN AND REDUCE THE ACTUAL VOLUME INTERCEPTED. IN ADDITION, BUILDING AND SITE PARKING SET BACKS LIMITED THE AREA AVAILABLE TO PROVIDE RETENTION PONDS WHERE THEY WOULD BE MOST EFFECTIVE AT TREATING THE FIRST FLUSH. ANOTHER SITE CONSTRAINT IS AN EXISTING UTILITY EASEMENT (ALONG EAGLE RANCH AND PASEO DEL NORTE) CONTAINING COMMUNICATION AND GAS LINES. GIVEN THE SITE CONSTRAINTS, THIS DESIGN MAXIMIZED THE FIRST FLUSH RETAINED WITHIN THE PARKING LOT PONDING AREA.

CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE IS 3.88 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE. THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.



20 10 0 20
1"=20'

Bohannon & Huston
www.bhinc.com 800.877.5332

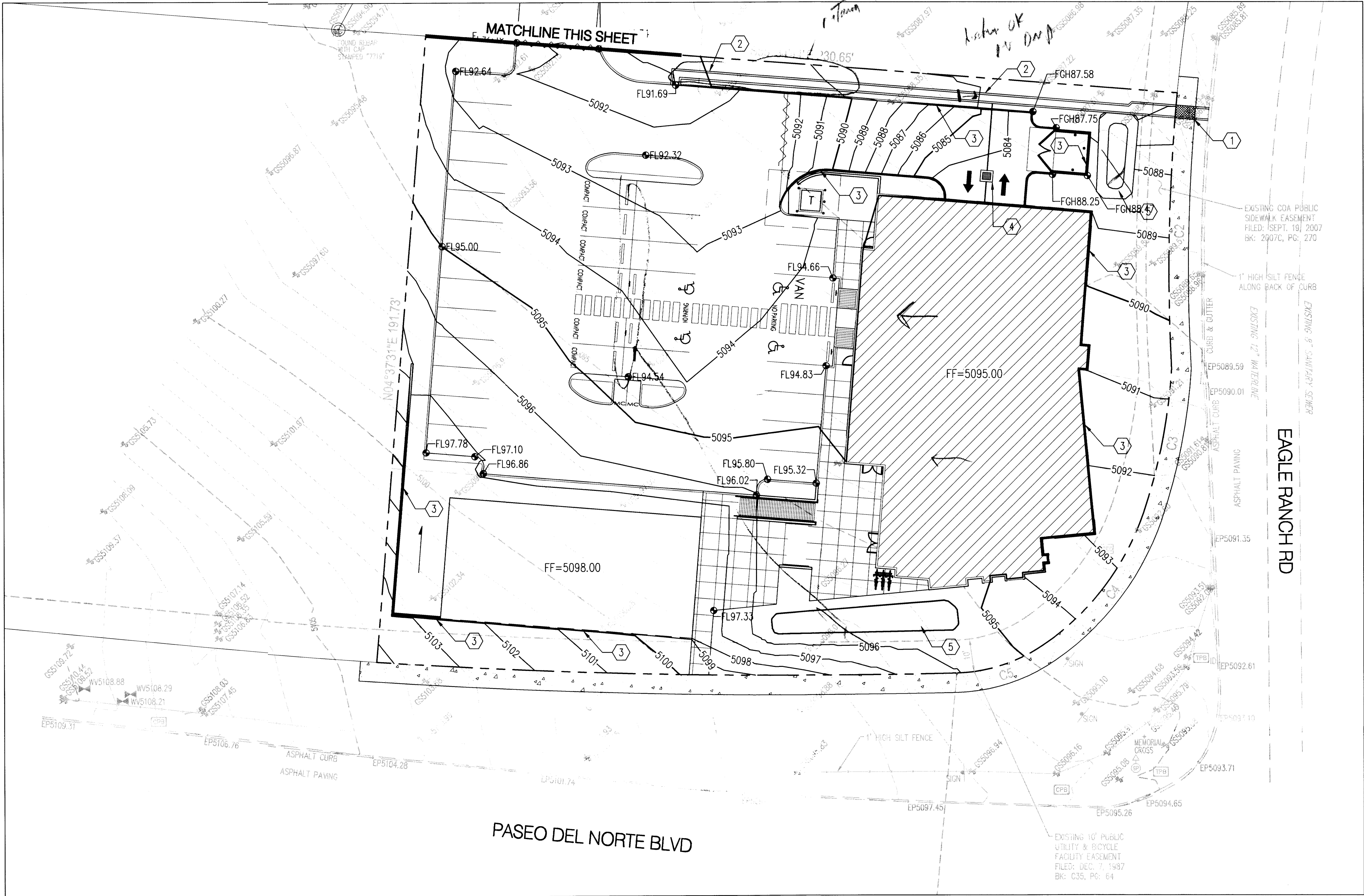
revision
by
date
rev

MH
Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144 [p]
505 268 4244 [f]

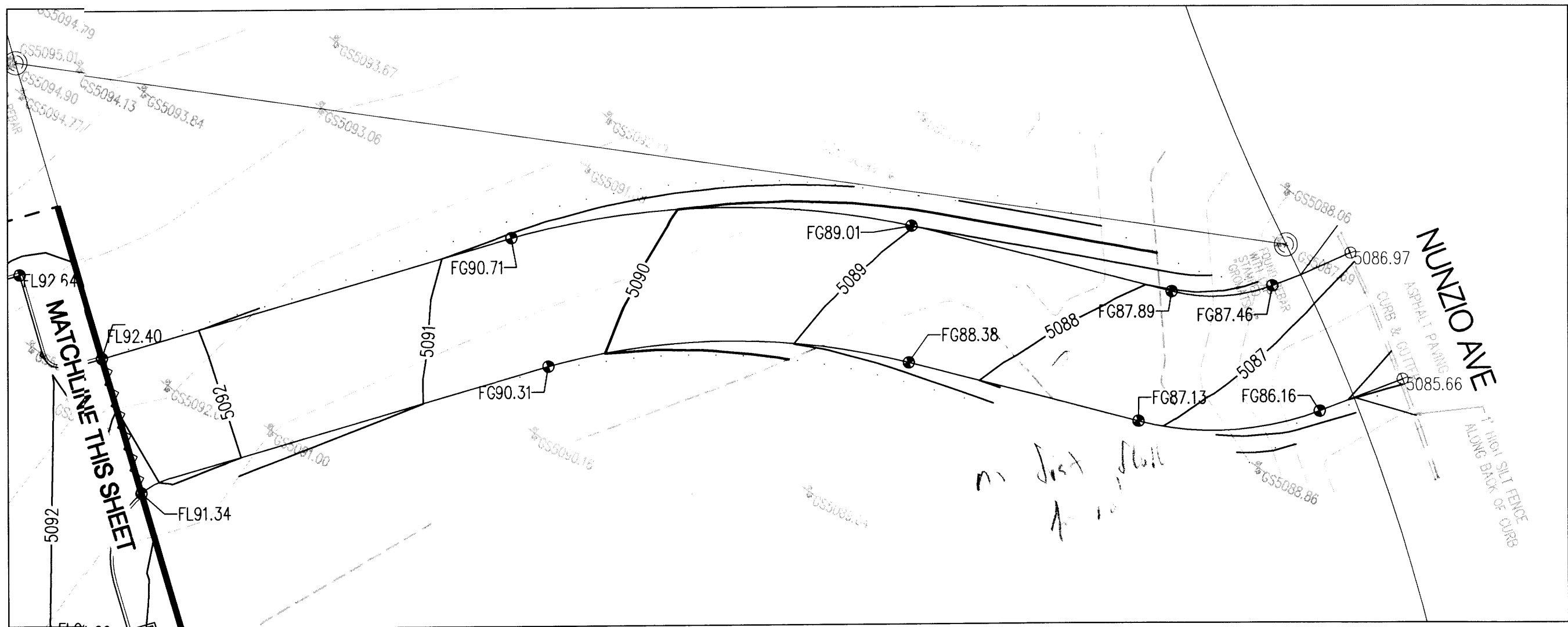
job number 20150304
drawn by MHS
project manager CSH
date 12.12.2014

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW,
Albuquerque, New Mexico 87114
sheet title
Conceptual Drainage Management Plan

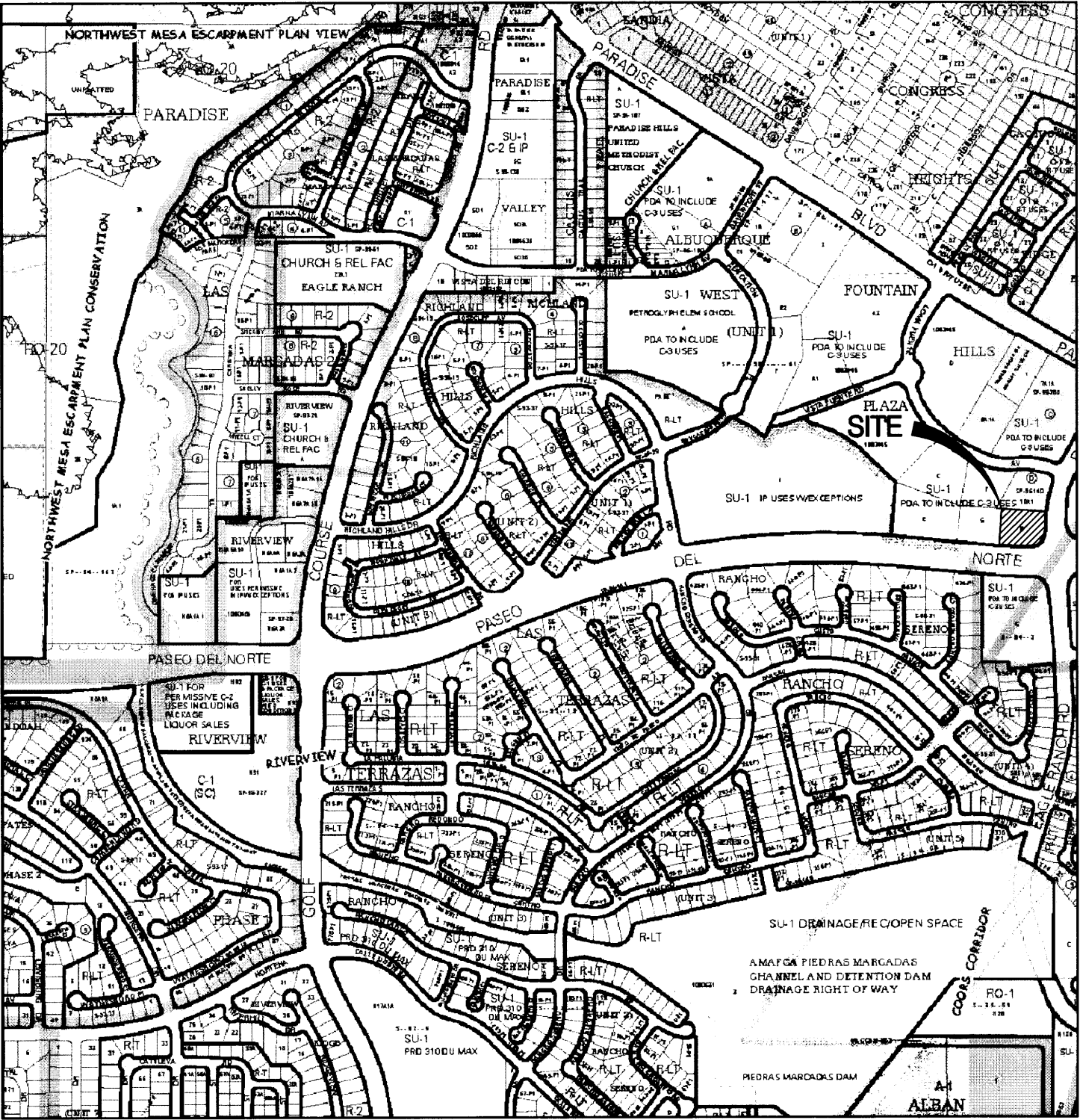
sheet-
C101



SITE CONCEPTUAL GRADING PLAN



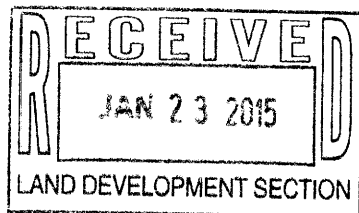
ACCESS ROAD CONCEPTUAL GRADING PLAN



VICINITY MAP: C-12

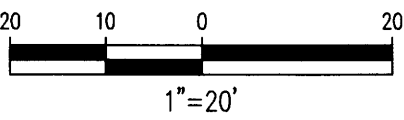
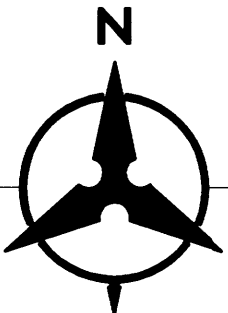
GRADING KEYED NOTES

1. INSTALL SIDEWALK CULVERT
2. INSTALL RIBBON CHANNEL
3. INSTALL RETAINING WALL
4. INSTALL SUMP PUMP
5. POND FOR FIRST FLUSH



LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED SPOT ELEVATION
TC=TOP OF CURB, FL=FLOW LINE
TW=TOP OF WALL, BW=BOTTOM OF WALL
EX=EXISTING, TC=TOP OF GRADE
- PROPOSED DIRECTION OF FLOW
- WATER BLOCK
- PROPOSED RETAINING WALL
- PROPOSED INDEX CONTOURS
- PROPOSED INTER CONTOURS
- PROPOSED CURB & GUTTER
- EASEMENT
- PROPOSED STORM DRAIN LINE



Bohannon & Huston
www.bhinc.com 800.877.5332

revision	
by	
date	
rev	◀◀◀◀

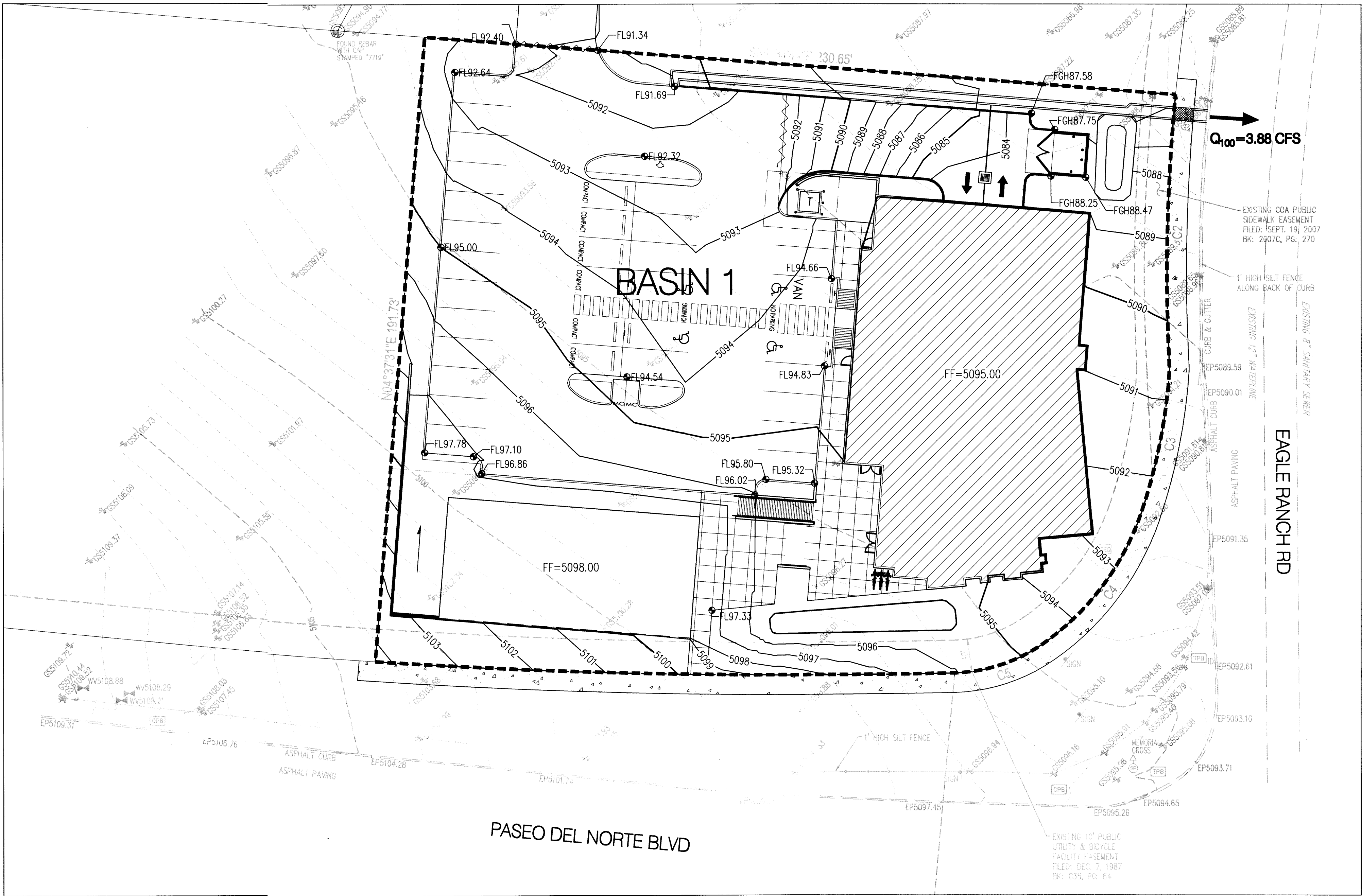


Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144[p]
505 268 4244 [f]

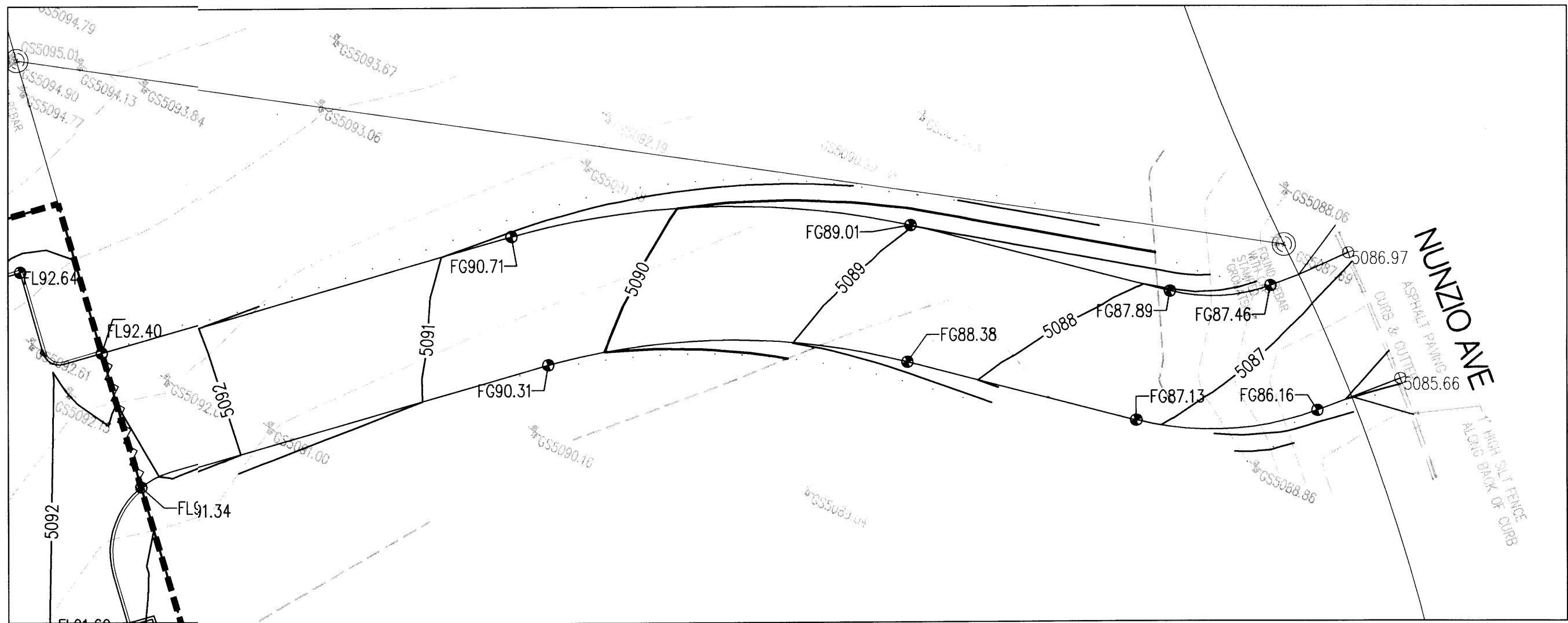
job number	20150304
drawn by	WHS
project manager	GSB
date	12.12.2014

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW
Albuquerque, New Mexico 87114
sheet title
Conceptual Grading Plan

sheet-
C100

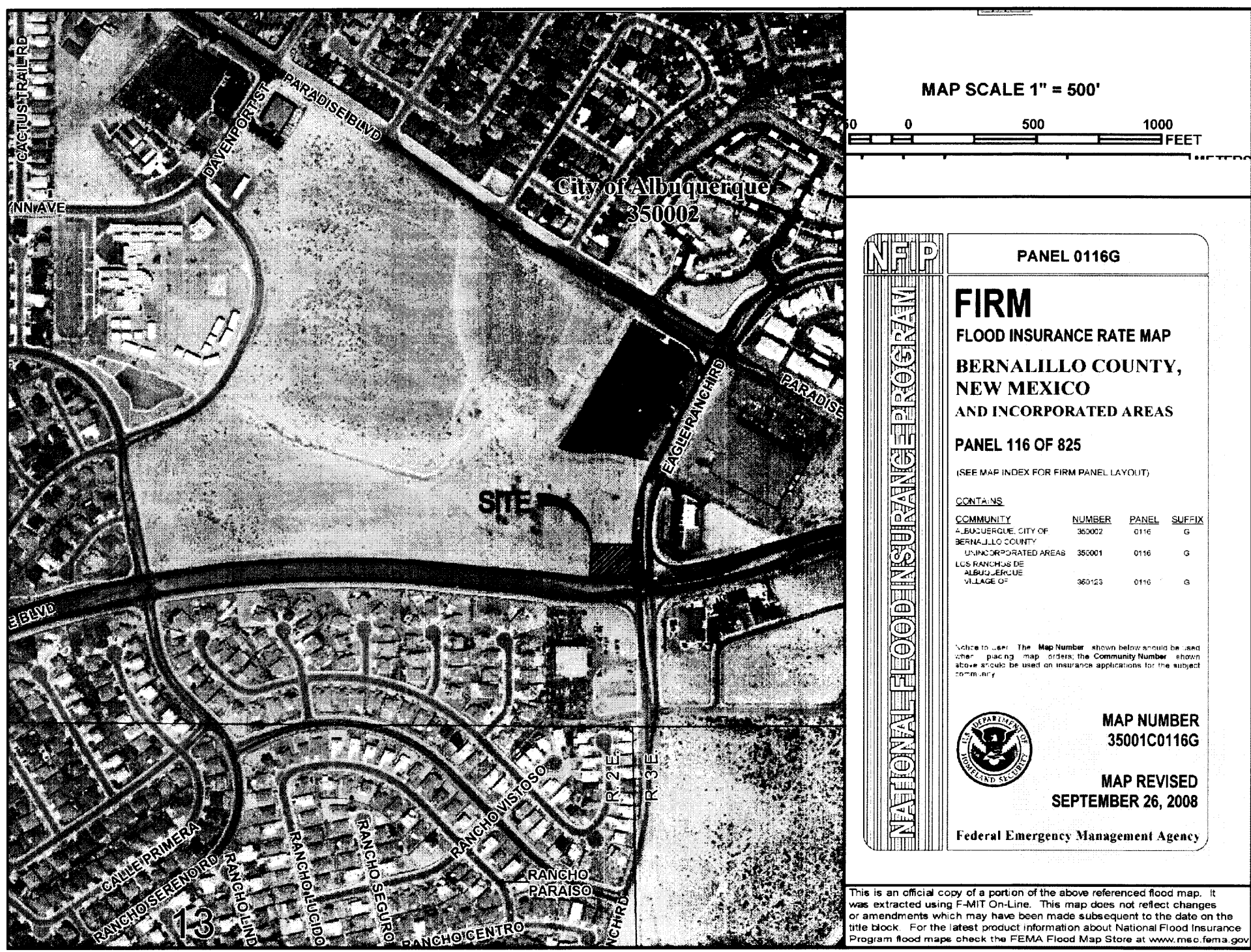


SITE CONCEPTUAL DRAINAGE MANAGEMENT PLAN



ACCESS ROAD CONCEPTUAL GRADING PLAN

- LEGEND**
- PROPERTY LINE
 - - - - - EXISTING CONTOURS
 - 65.23 PROPOSED SPOT ELEVATION
 - TC=TOP OF CURB, FL=FLOW LINE
 - TW=TOP OF WALL, BW=BOTTOM OF WALL
 - EX=EXISTING, TG=TOP OF GRADE
 - S=2.0% PROPOSED DIRECTION OF FLOW
 - ~~~~~ WATER BLOCK
 - ===== PROPOSED RETAINING WALL
 - - - - - PROPOSED INDEX CONTOURS
 - ===== PROPOSED INTER CONTOURS
 - ===== PROPOSED CURB & GUTTER
 - - - - - EASEMENT
 - SD PROPOSED STORM DRAIN LINE



FEMA FIRM MAP # 35001C0116G

Smiles for Kids Dental Office										
Proposed Ultimate Development Conditions Basin Data Table										
This table is based on the DPM Section 22.2, Zone: 1										
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/lac.)	Q(100yr-6hr) (CFS)	WTE (inches)	V(100yr-6hr) (CF)
			A	B	C	D				
1	42493	0.98	0.0%	0.0%	26.0%	74.0%	3.98	3.88	1.72	6074
TOTAL	42493	**0.98						3.88		***9926

PROPOSED BASIN DATA TABLE

INTRODUCTION:

THE PROJECT IS LOCATED ON THE NORTHWEST INTERSECTION OF PASEO DEL NORTE BLVD AND EAGLE RANCH RD. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF SMILES FOR KIDS DENTAL OFFICE AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

THE 0.98 ACRE SITE IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE NORTH / NORTHEAST WHERE THE RUNOFF OPENLY DISCHARGES INTO EAGLE RANCH RD.

BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE #C12/D3B), THE ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (THIS SHEET).

PROPOSED CONDITIONS:

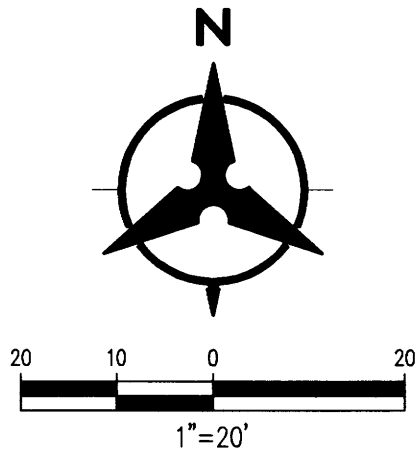
THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED IN ACCORDANCE WITH A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS (AS MENTIONED ABOVE). THIS IS A SMALL SITE AND ACTS AS ONE DRAINAGE BASIN (BASIN 1).

THE ENTIRE SITE ACTS AS BASIN 1. THE ULTIMATE OUTFALL LOCATION IS EAGLE RANCH ROAD THROUGH MEANS OF RIBBON CHANNEL AND SEVERAL SMALL PONDS USED TO MITIGATE THE FIRST FLUSH. A PORTION OF THE SITE DRAINS INTO THE PARKING GARAGE, THAT FLOW IS THEN DIRECTED INTO A SUMP PUMP WHERE IT DISCHARGES INTO THE ADJACENT RIBBON CHANNEL AND ULTIMATELY OUTFALLS INTO EAGLE RANCH RD.

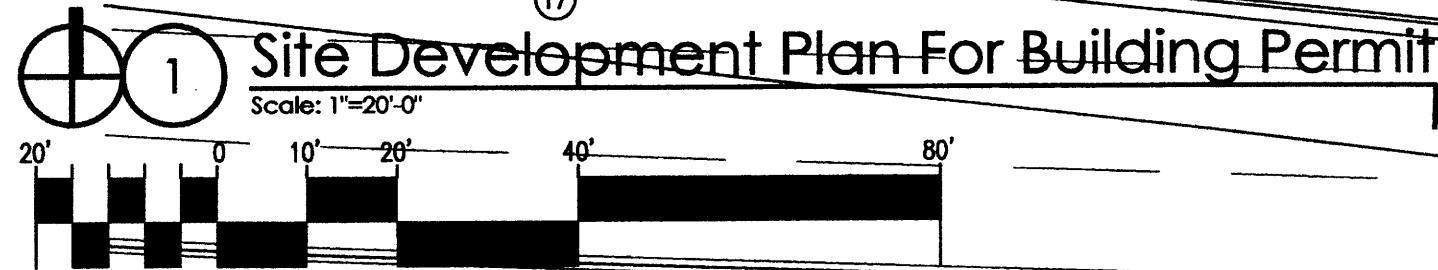
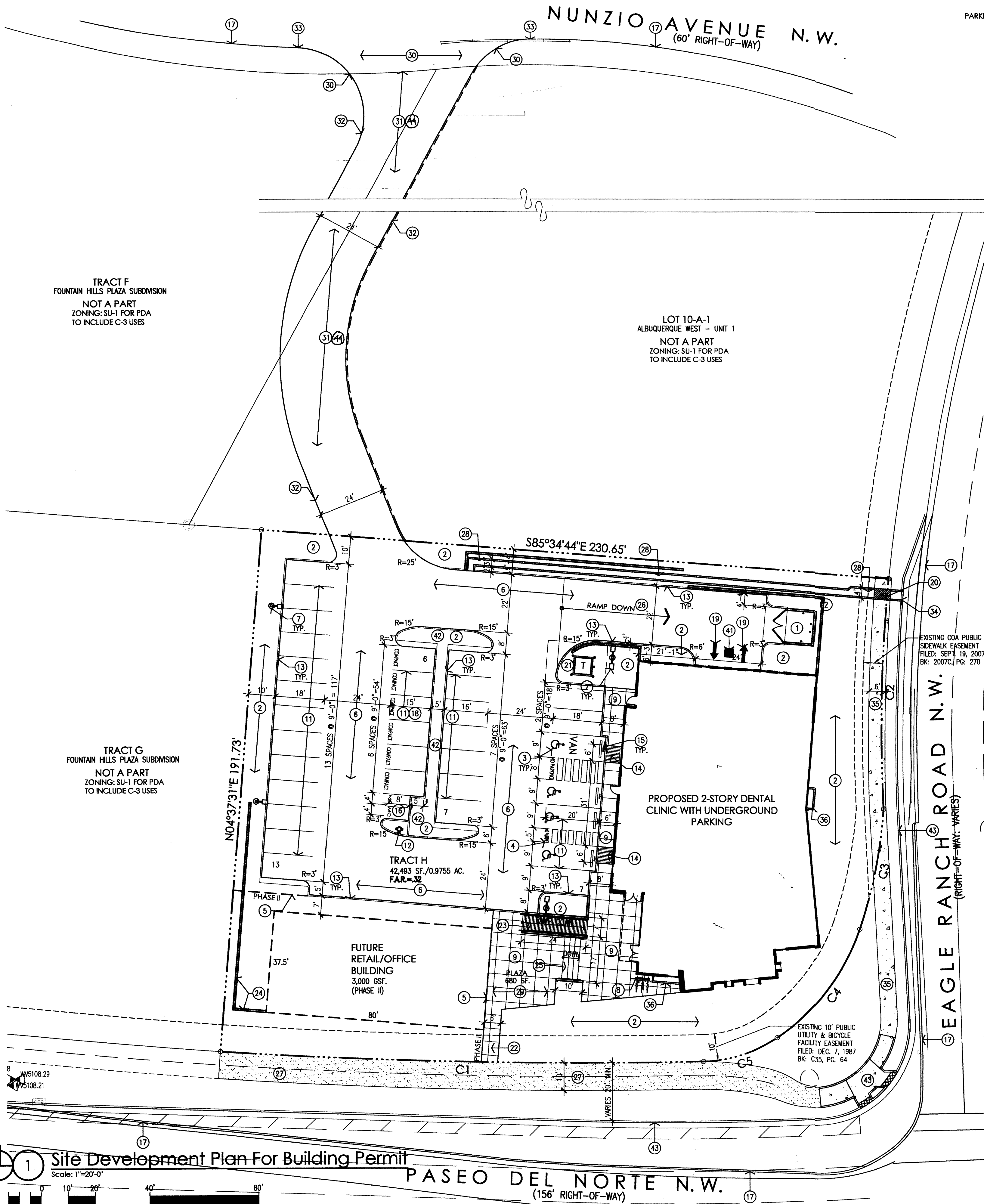
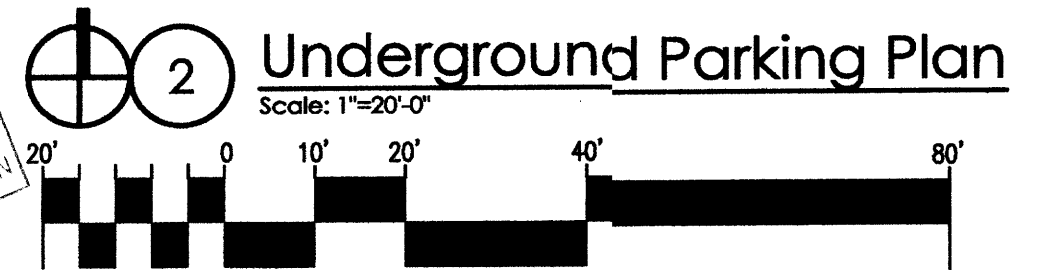
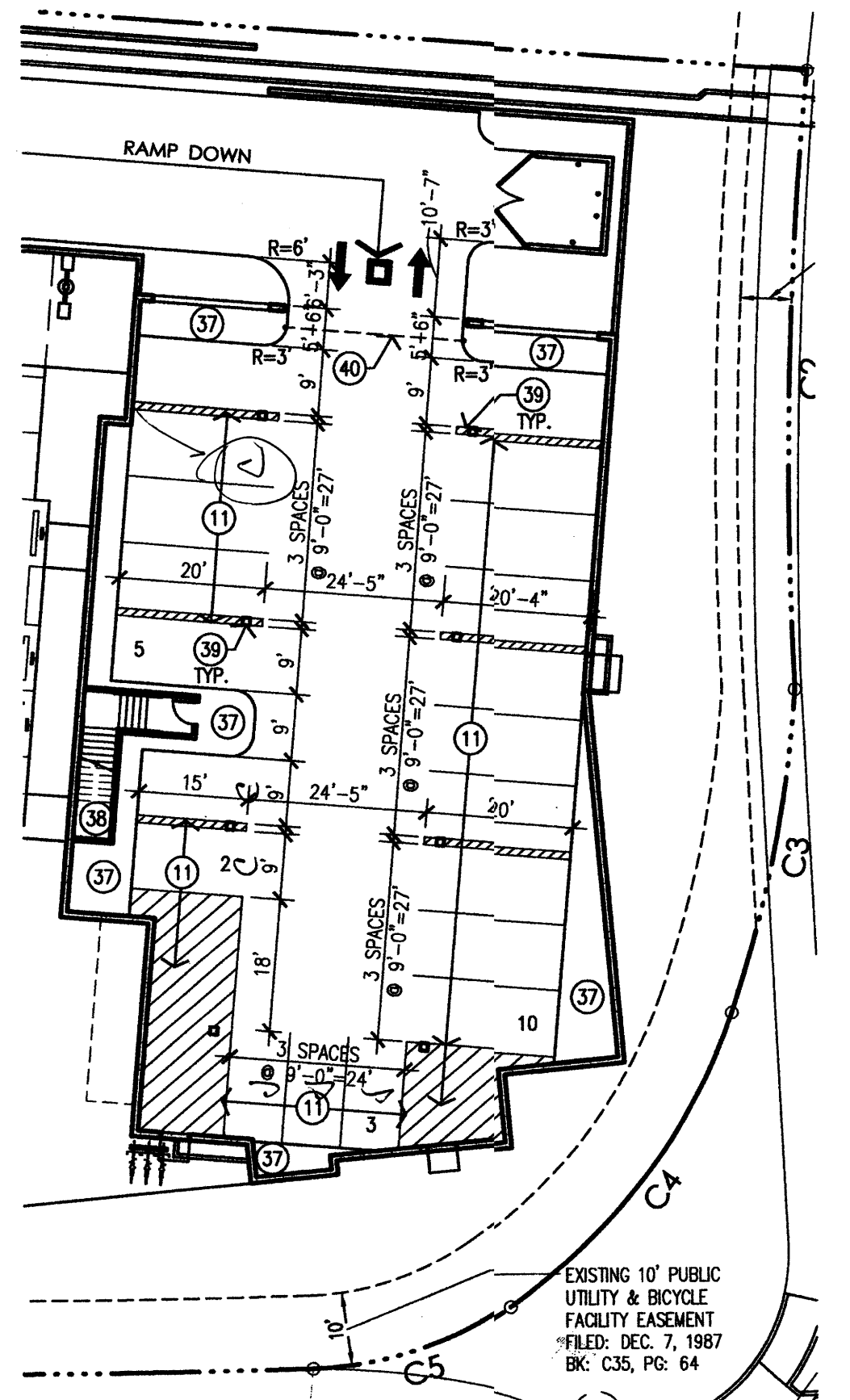
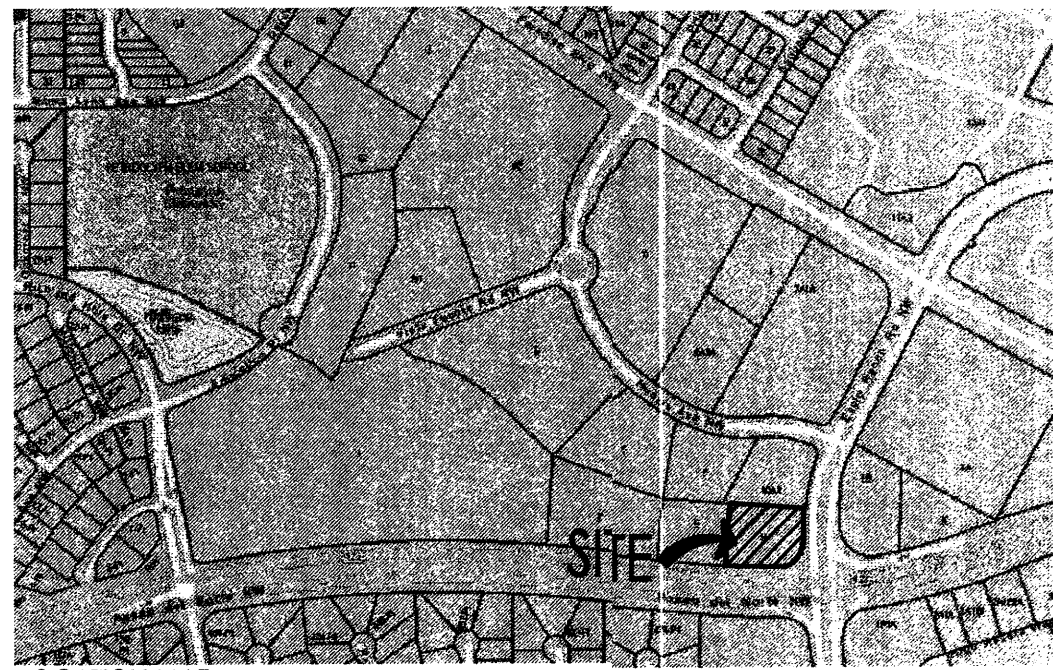
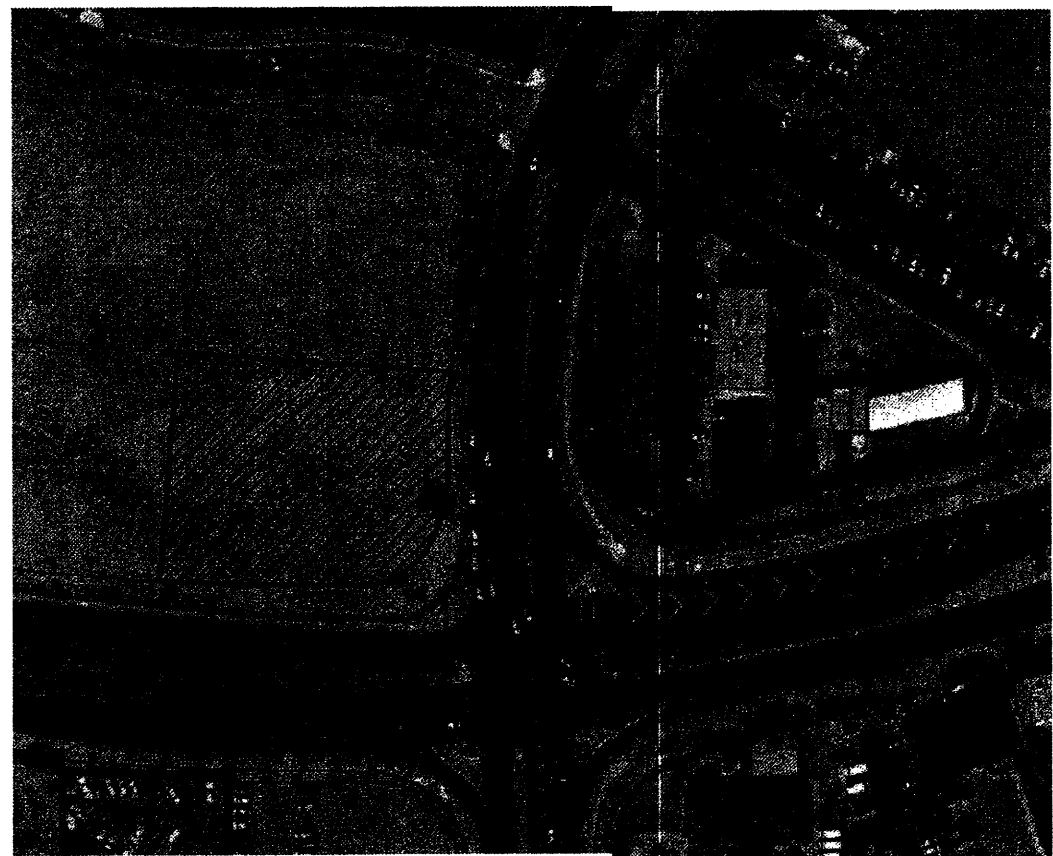
OFFSITE PRIVATE ACCESS ROAD IS NOT INCLUDED IN THE CALCULATION. RUNOFF FROM TRACT 10-A-1 WILL BE ADDRESSED WITH THE DEVELOPMENT OF THAT TRACT.

CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE IS 3.88 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.



ID	DELTA	TANGENT	ARC	RADIUS	CHORD	CHORD BEG
C1	05°17'48"	88.90'	177.88'	1922.00'	177.62'	N88°45'30"W
C2	08°32'05"	42.33'	84.50'	567.24'	84.42'	S01°17'15"W
C3	15°07'38"	22.57'	44.88'	170.00'	44.75'	S11°11'34"W
C4	36°33'40"	26.43'	51.05'	50.00'	50.19'	S37°07'26"W
C5	32°59'26"	14.81'	28.79'	50.00'	28.39'	S71°48'41"W



PARKING CALCULATIONS: (CONT'D)

COMPACT PARKING CALCULATION:
59 REQ'D SPACES \times 33% = 19 SPACES ALLOWED
TOTAL COMPACT SPACES = 6 SPACES PROVIDED

DISABLED PARKING REQUIREMENTS:
TOTAL DISABLED SPACES REQUIRED = 4 SPACES
TOTAL DISABLED SPACES PROVIDED = 4 SPACES

MOTORCYCLE REQUIREMENTS:
TOTAL MOTORCYCLE SPACES REQUIRED = 2 SPACES
TOTAL MOTORCYCLE SPACES PROVIDED = 2 SPACES

COMMERCIAL BICYCLE REQUIREMENTS:
1 BICYCLE SPACE FOR EACH 20 PARKING SPACES = 59 PARKING SPACES/20 = 3 TOTAL SPACE REQUIRED

TOTAL BICYCLE SPACES REQUIRED = 3 SPACES
TOTAL BICYCLE SPACES PROVIDED = 3 SPACES

KEY NOTES:

- PROPOSED REFUSE ENCLOSURE WITH STUCCO FINISH TO MATCH BUILDING COLOR.
- PROPOSED LANDSCAPING AREA. REFER TO LANDSCAPING PLAN.
- PROPOSED HANDICAP PAVEMENT SIGN.
- PROPOSED STAMPED CONCRETE HANDICAP AISLE WITH 12" HIGH PAINTED LETTERING "NO PARKING" PER 66-1-4.1.8 NMSA 1978.
- PHASE II AND LIMITS OF CONSTRUCTION LINE FROM BACK OF CURB/SIDEWALK.
- PROPOSED ASPHALT PAVING.
- PROPOSED SITE LIGHTING. HEIGHT NOT TO EXCEED 20' TALL.
- PROPOSED BIKE RACK WITH 3 SPACES.
- PROPOSED CONCRETE SIDEWALK.
- PROPOSED STAMPED CONCRETE PEDESTRIAN CONNECTION.
- PROPOSED PAINTED PARKING STRIPING.
- PROPOSED FIRE HYDRANT LOCATION. REFER TO UTILITY PLAN.
- PROPOSED CONCRETE CURB. SEE GRADING & DRAINAGE PLAN AND COA STD. DWG. 2415A.
- PROPOSED HANDICAP RAMP. REFER TO DETAIL.
- PROPOSED HANDICAP PARKING SIGN "VAN" WHERE NOTED. SIGN TO BE NOTED PER 66-7-352.4C NMSA 1978. VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING.
- PROPOSED 4'-0" WIDE \times 8'-0" LONG MOTORCYCLE SPACES WITH SIGNAGE AT EACH SPACE.
- CURRENT CURB LINE.
- COMPACT PARKING SPACES 9'-0" \times 15'-0" WITH PAINTED "COMPACT CAR" PAVEMENT DESIGNATION.
- PROPOSED PAINTED DIRECTION ARROW ON PAVEMENT.
- PROPOSED SIDEWALK CULVERT WITH METAL GRATE TOP TO BE FLUSH WITH TOP OF CONCRETE SIDEWALK. REFER TO CIVIL AND COA STD. DWG. 2236.
- PROPOSED ELECTRICAL TRANSFORMER LOCATION.
- PROPOSED CONCRETE SIDEWALK CONNECTION TO EXISTING SIDEWALK. MAX SLOPE 1:12.
- PROPOSED CONCRETE RAMP WITH STEEL PIPE HANDRAILS. PAINTED.
- PROPOSED CONCRETE RETAINING WALL. REFER TO GRADING AND DRAINAGE.
- PROPOSED CONCRETE STAIR WITH STEEL PIPE HANDRAILS. PAINTED.
- PROPOSED RAMP DOWN INTO PARKING GARAGE BELOW BUILDING.
- PROPOSED 10'-0" WIDE ASPHALT TRAIL.
- PROPOSED CONCRETE DRAINAGE CHANNEL ALONG PROPERTY LINE OUT TO EAGLE RANCH ROAD. REFER TO GRADING AND DRAINAGE PLAN.
- PROPOSED PLAZA (880 SF.) WITH BENCH SEATING.
- PROPOSED CONCRETE DRIVEWAY (STD. DWG. 2428) AND RAMPS (STD. DWG. 2426) TO BE CONSTRUCTED TO COA STANDARDS.
- TEMPORARY ASPHALT PAVING TO NEW DRIVEWAY LOCATION ON NUNZIO AVENUE (SHOWN HATCHED).
- TEMPORARY ASPHALT CURB ALONGSIDE TEMPORARY DRIVEWAY.
- THE NEW DRIVEWAY CURB INTO EXISTING CURB AND GUTTER SYSTEM. REFER TO GRADING AND DRAINAGE PLAN.
- PROPOSED OPENING IN EXISTING CURB AND GUTTER SYSTEM FOR DRAINAGE. REFER TO GRADING AND DRAINAGE PLAN.
- PROPOSED CONCRETE SIDEWALK (STD. DWG. 2430).
- PROPOSED CONCRETE VENT OPENING FROM UNDERGROUND PARKING TO GRADE ABOVE.
- PROPOSED CONCRETE ISLAND.
- PROPOSED STAIRWELL TO FIRST FLOOR.
- PROPOSED BUILDING COLUMNS.
- PROPOSED UNDERGROUND PARKING GATE.
- SUMP PUMP PIT WITH GRATE COVER REFER TO GRADING AND DRAINAGE.
- PARKING ISLAND TO SERVE AS FIRST FLUSH DRAINAGE AREA. PROVIDE CURB OPENINGS ON UPSTREAM SIDE.
- FUTURE OFFSITE IMPROVEMENTS.

SITE DEVELOPMENT DATA:

LEGAL DESCRIPTION:
TRACT H OF FOUNTAIN HILLS PLAZA SUBDIVISION.
CITY OF ALBUQUERQUE,
BERNALILLO COUNTY, NEW MEXICO

LAND AREA:
0.9755 ACRES (42,493 SQ. FT.)

CURRENT ZONING:
SU-1 FOR PDA TO INCLUDE C-3 USES (PERMISSIVE AND CONDITIONAL)

ZONE ATLAS PAGE:
C-12-Z

BUILDING AREAS: (GROSS BUILDING AREAS)
2-STORY DENTAL OFFICE: 10,674 GSF.
7,678 GSF.-1ST FLOOR
2,996 GSF.-2ND FLOOR
FUTURE BUILDING (PHASE II): 3,000 SF.
TOTAL GROSS BUILDING AREA: 13,674 SF.

SITE DEVELOPMENT PHASING:

- PHASE I:**
PHASE I WILL INCLUDE THE CONSTRUCTION OF PROPOSED 2-STORY DENTAL CLINIC, UNDERGROUND PARKING BELOW BUILDING FOOTPRINT, TEMPORARY PAVING OF ACCESS DRIVE THRU ADJACENT LOT 10-A-1 TO THE NORTH ONTO NUNZIO AVENUE NW, AND RELATED AT GRADE PARKING FOR PROPOSED USES.
- PHASE II:**
PHASE II WILL INCLUDE THE CONSTRUCTION OF THE FUTURE BUILDING ONLY. PHASE II SHALL BE REVIEWED AND APPROVED BY THE DEVELOPMENT REVIEW BOARD (DRB) AND ADHERE TO THE DESIGN STANDARDS INCLUDED IN THE PREVIOUSLY APPROVED SITE DEVELOPMENT PLAN FOR SUBDIVISION.
- SITE DEVELOPMENT GENERAL NOTES:**
- THE DESIGN STANDARDS INCLUDED IN THE APPROVED SITE DEVELOPMENT PLAN FOR SUBDIVISION-FOUNTAIN HILLS PLAZA (EPC APPROVAL: MAY 2007 & DRB APPROVAL: JUNE 2007) SHALL GOVERN ALL NEW BUILDINGS FOR TRACT H OF THIS DEVELOPMENT.
 - THE PARKING LOT DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB.
 - LANDSCAPING AND SIGNING WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THIS AREA.
 - ANY ENCROACHMENT OR OVERHANG INTO THE ROW FROM SIGNS, FENCES, CANOPY, ROOF LINES, ETC. WILL REQUIRE AN ANNUAL REVOCABLE ENCROACHMENT PERMIT.
 - ALL CURBS SURROUNDING LANDSCAPING, SHALL PROVIDE WATER RUNOFF OPENINGS TO ALLOW SURFACE DRAINAGE INTO THE LANDSCAPED AREAS (WATER HARVESTING).
 - ALL SIGNAGE AND FENCES WILL BE DONE UNDER SEPARATE PERMIT.
 - TRACTS C, F, & G ARE SUBJECT TO A TWENTY-FIVE FOOT WIDE FLOATING ACCESS, WATER, DRAINAGE AND SANITARY SEWER EASEMENT FOR THE BENEFIT OF AND TO BE MAINTAINED BY TRACTS E, F, & G GRANTED WITH THIS PLAT. THIS EASEMENT WILL BE CONFINED TO THE FINISH GRADE TO THE TOP OF THE POLE. PLAT OF FOUNTAIN HILLS PLAZA SUBDIVISION RECORDED ON: 08/19/07

SITE DEVELOPMENT SITE LIGHTING NOTES:

- THE LOCATION OF THE LIGHTING FIXTURES TOGETHER WITH ITS CUT-OFF ANGLE SHALL BE SUCH THAT IT DOES NOT DIRECTLY SHINE ON ANY PUBLIC RIGHT-OF-WAY OR ADJACENT RESIDENTIAL PROPERTY.
- THE MAXIMUM HEIGHT OF A LIGHT POLE MEASURED FROM THE FINISH GRADE TO THE TOP OF THE POLE SHALL BE 20'-0" MAXIMUM.
- LIGHTING TO BE PROVIDED ON COMMERCIAL BUILDING FACADES SHALL BE MOUNTED AT 12 FEET MAXIMUM.
- SITE LIGHTING SHALL BE FULLY SHIELDED, AND HIGH-PRESSURE SODIUM LIGHTING AND UN-SHIELDED UP LIGHTING SHALL BE PROHIBITED AT 12 FEET MAXIMUM.

PARKING CALCULATIONS: (NET LEASABLE AREAS)

PROPOSED 2-STORY DENTAL CLINIC:
7,178 NSF.-1ST FLOOR/200 = 36 SPACES
2,840 NSF.-2ND FLOOR/300 = 9 SPACES
REQUIRED SPACES: 45 SPACES

FUTURE BUILDING (PHASE II)
2,700 NSF./200 = 14 SPACES
TOTAL REQUIRED SPACES: 59 SPACES

TRANSIT REDUCTIONS:
59 SPACES REQ'D \times 10% REDUCTION = (PROXIMITY TO BUS ROUTE 84)
59 \times 10% = 5.9 TOTAL SPACES REQUIRED

TOTAL PARKING SPACES REQUIRED = 53 SPACES
TOTAL PARKING SPACES PROVIDED = 53 SPACES

43 REGULAR SPACES
6 COMPACT SPACE
4 HANDICAP VAN PARKING SPACE

PROJECT NUMBER: 1003445 APPLICATION NUMBER: 05EPC-00022

THIS PLAN IS CONSISTANT WITH THE SPECIFIC SITE DEVELOPMENT PLAN APPROVED BY THE ENVIRONMENTAL PLANNING COMMISSION (EPC) DATED: AUGUST 18, 2009 AND THE FINDINGS AND CONDITIONS IN THE OFFICIAL NOTIFICATION OF DECISION ARE SATISFIED.

IS AN INFRASTRUCTURE LIST REQUIRED? () YES () NO IF YES, THEN A SET OF APPROVED DRG PLANS WITH A WORK ORDER IS REQUIRED FOR ANY CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY OR FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS.

DRB SITE DEVELOPMENT PLAN SIGNOFF APPROVAL:

TRAFFIC ENGINEER, TRANSPORTATION DIVISION	3/25/15
UTILITIES DEVELOPMENT	05/11/15
PARKS AND RECREATION DEPARTMENT	9-25-15
CITY ENGINEER	3-25-15
ENVIRONMENTAL HEALTH DEPARTMENT (CONDITIONAL)	5-13-15
SOLID WASTE MANAGEMENT APPROVAL IS ATTACHED AS SEPARATE SHEET	
SOLID WASTE MANAGEMENT	5-13-15
DRB CHAIRPERSON, PLANNING DEPARTMENT	

project title
Smiles for Kids Dental Office
9201 Eagle Ranch Road, NW,
Albuquerque, New Mexico 87114

sheet title
Site Development Plan For Building Permit

sheet
SDPBP
SHEET 1 of 7