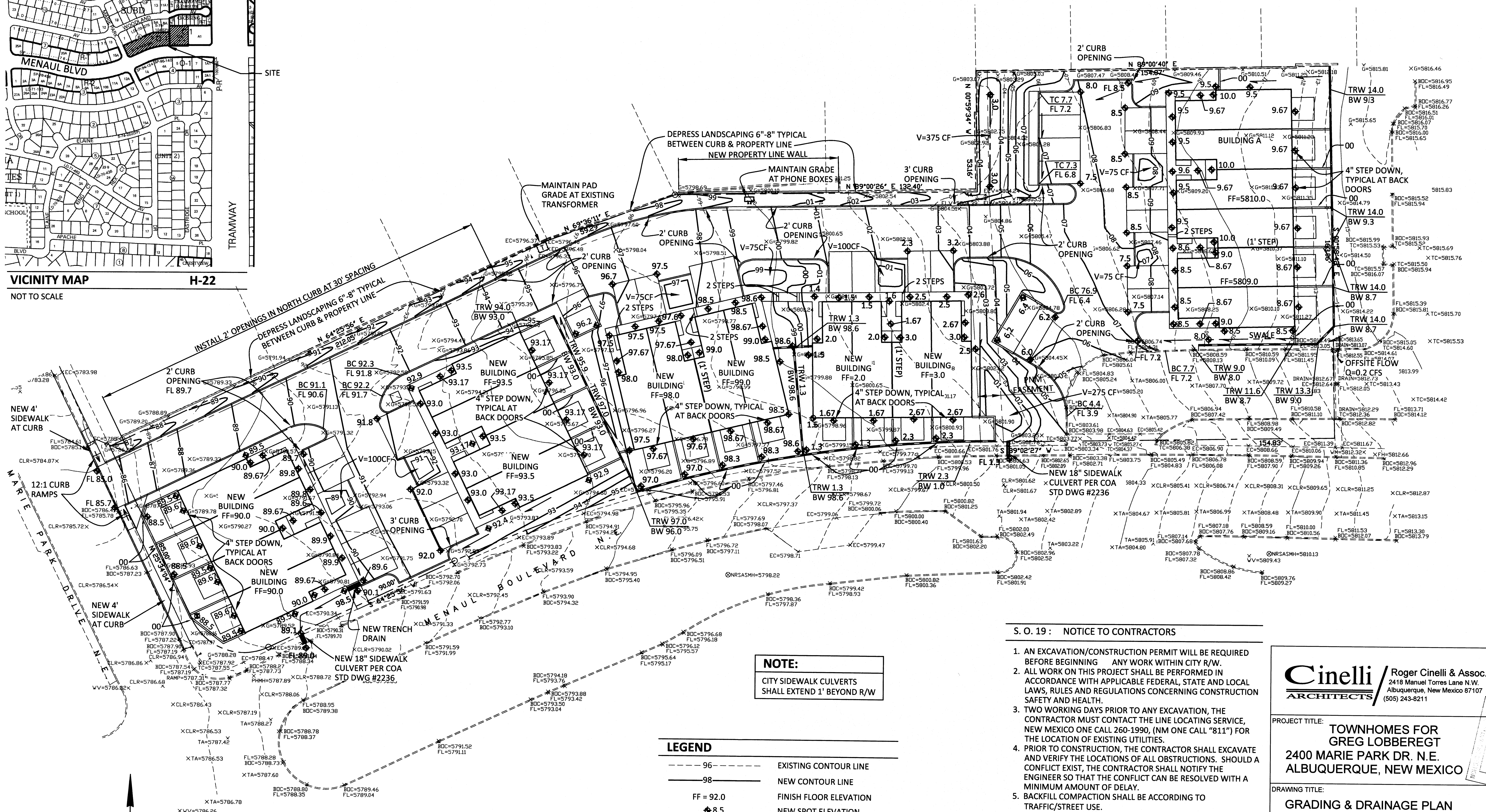




VICINITY MAP

H-22

NOT TO SCALE



GRADING AND DRAINAGE PLAN

1" = 20'-0"



LEGEND

---	96---	EXISTING CONTOUR LINE
---	98---	NEW CONTOUR LINE
FF=92.0		FINISH FLOOR ELEVATION
8.5		NEW SPOT ELEVATION
TC		TOP OF CURB
FL		FLOW LINE
BC		BACK OF CURB
TRW		TOP OF RETAINING WALL
BW		BOTTOM OF WALL

NOTE:

CITY SIDEWALK CULVERTS SHALL EXTEND 1' BEYOND R/W

S. O. 19 : NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R/W.
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 THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") 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.

APPROVAL

NAME

DATE

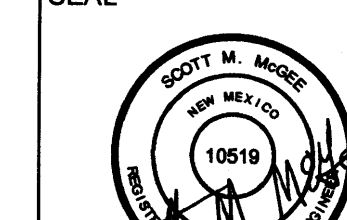
INSPECTOR

Cinelli / Roger Cinelli & Assoc.
ARCHITECTS
2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

PROJECT TITLE:
TOWNHOMES FOR GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO

DRAWING TITLE:
GRADING & DRAINAGE PLAN

SEAL



DATE

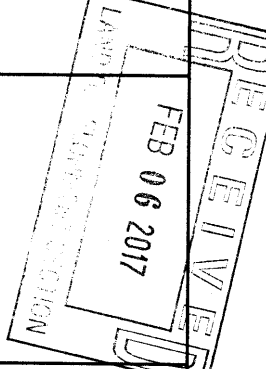
Dec 20, 2016

PROJECT NO.

BUCH14

DRAWING NO.

CIVIL103



DRAINAGE CALCULATIONS

ADDRESS: 2400 Marie Park Drive NE, Albuquerque, NM
LEGAL DESCRIPTION: Tracts A-2-A-1, Block 13, Brentwood Hills
SITE AREA: 67,870 SF (1.558 acres)

BENCHMARK: City of Albuquerque Station '12-H22' being a brass cap
ELEV= 5778.827 (NAVD 1988)

SURVEYOR: The Survey Office dated August, 2016
PRECIPITATION ZONE: 4

FLOOD HAZARD: From FEMA Map 35001C0376G (9/26/08), this site is identified as being within Zone 'X' which is located outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The site is vacant and slopes down to the west at 2-3%. It sheet flows west and discharges to Menaul Blvd and Marie Park Drive.

OFFSITE FLOW: The adjacent property to the east is a developed gas station which drains to Menaul via a paved roadway. A small landscape area (130 x 25' = 3,250 SF) abuts and drains to this site. That runoff (Q = 0.2 CFS), is accepted onsite, carried between a retaining wall and an existing curb, and flows west.

PROPOSED IMPROVEMENTS: The proposed improvements include 22 townhomes with an interior access drive, paved parking, and landscape areas.

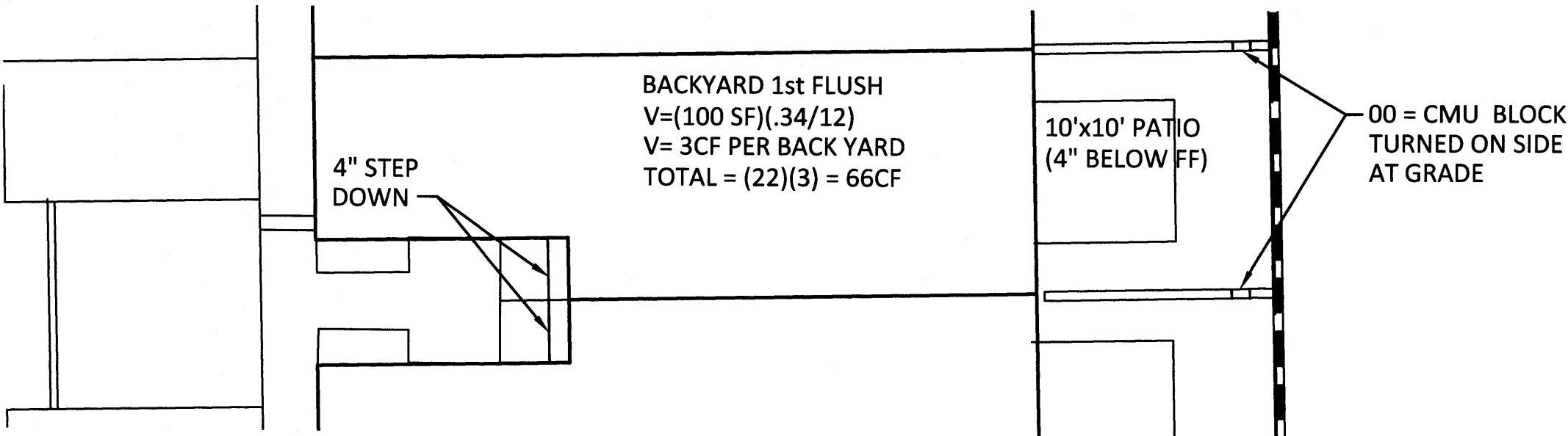
DRAINAGE APPROACH: The site drainage pattern will remain unchanged as the site will continue to drain to the south and west per historic conditions.

Existing land treatment: 100% A Precipitation Zone: 4
Q= (2.20)(1.558)= 3.4 CFS

Proposed land treatment: 6% B, 29% C and 65% D
Q= [(0.06)(2.92)+(.29)(3.73)+(.65)(5.25)](1.558) = 7.3 CFS

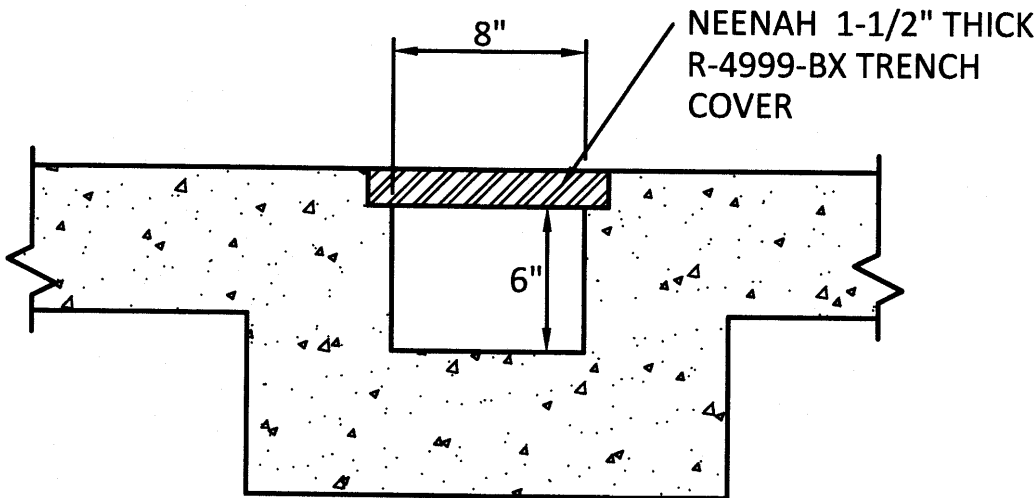
First flush V= (44,114) (0.34/12) = 1,250CF
Onsite pond volumes = 375+ 275+ 600 = 1,250 CF
Backyard pond volumes (22) (3 CF) = 66 CF
Total V = 1,316 CF (>1,250 OK)

The proposed detention ponding areas contain the first flush volume. Runoff increases slightly but there will be no adverse impact on downstream drainage facilities.



TYPICAL UNIT PLAN

1"=10'



TRENCH DRAIN

NOT TO SCALE

Cinelli

ARCHITECTS

Roger Cinelli & Assoc.

2418 Manuel Torres Lane N.W.

Albuquerque, New Mexico 87107

(505) 243-8211

PROJECT TITLE:

TOWNHOMES FOR
GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO

DRAWING TITLE:

GRADING & DRAINAGE
CALCULATIONS & DETAILS

SEAL

SCOTT M. HODGE

10519

2/6/17

DATE

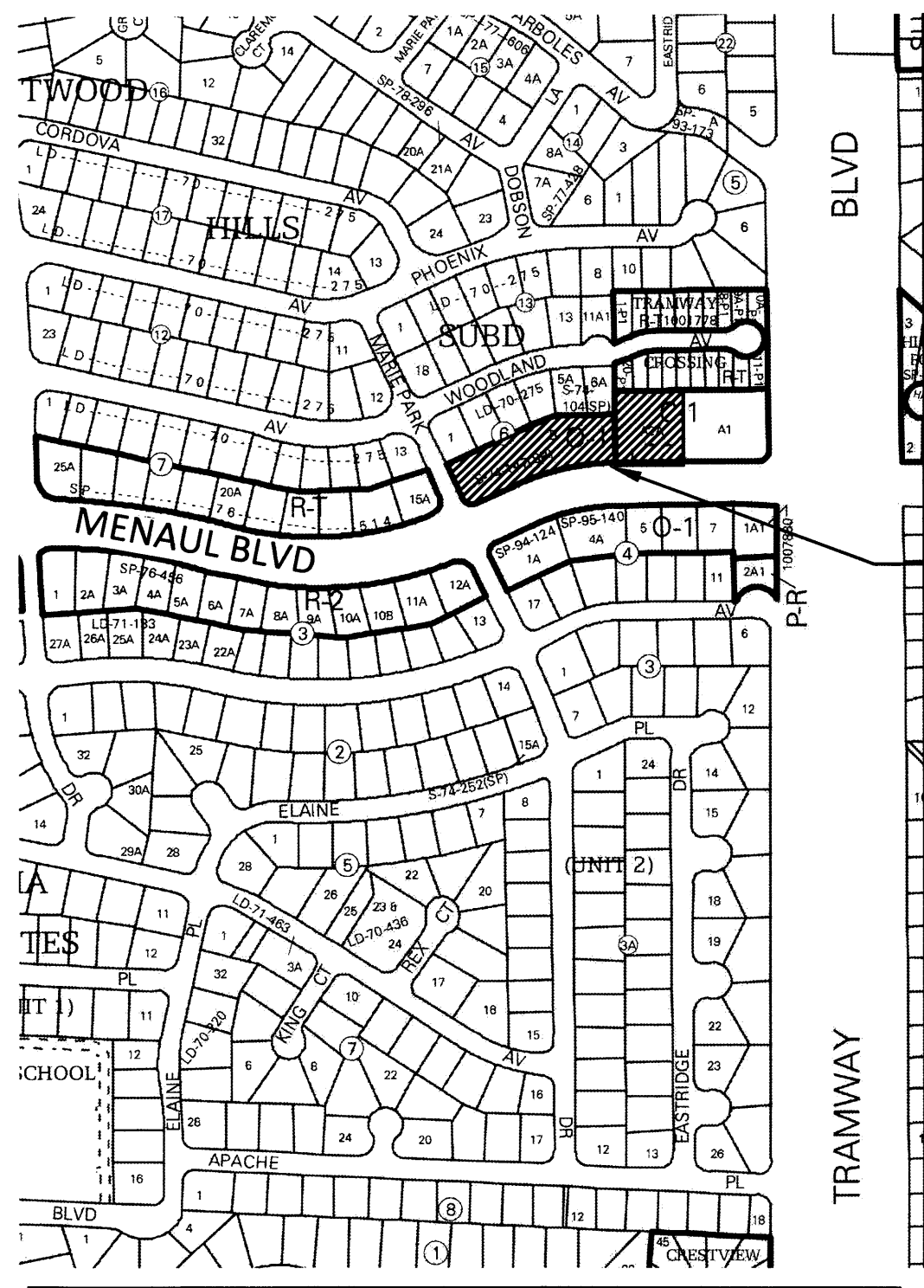
FEB 6, 2017

PROJECT NO.

BUCH14

DRAWING NO.

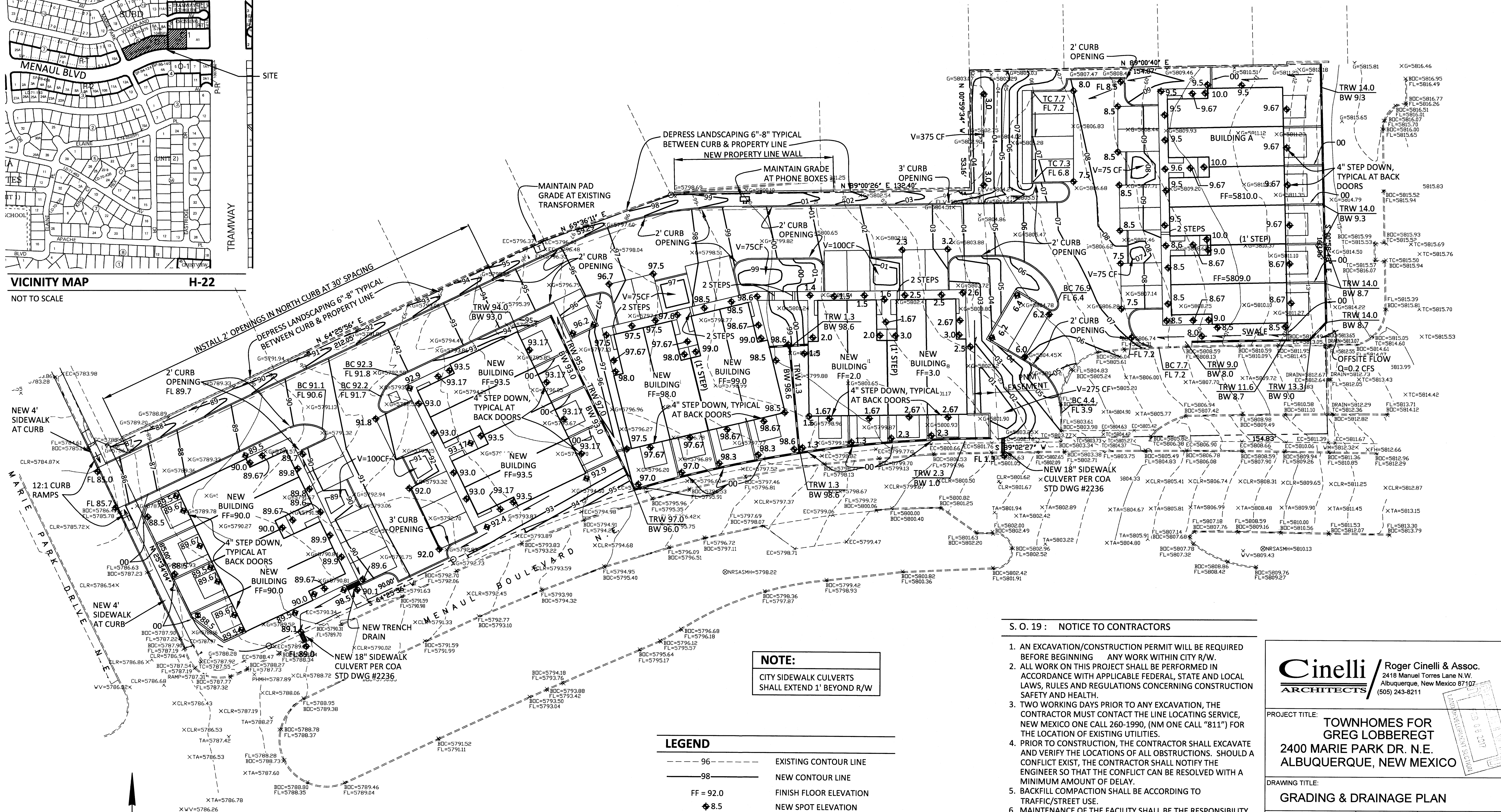
CIVIL104



VICINITY MAP

H-22

NOT TO SCALE



NOTE:
CITY SIDEWALK CULVERTS
SHALL EXTEND 1' BEYOND R/W

LEGEND

- | | | |
|----------|----|------------------------|
| --- | 96 | EXISTING CONTOUR LINE |
| --- | 98 | NEW CONTOUR LINE |
| FF= 92.0 | | FINISH FLOOR ELEVATION |
| 8.5 | | NEW SPOT ELEVATION |
| TC | | TOP OF CURB |
| FL | | FLOW LINE |
| BC | | BACK OF CURB |
| TRW | | TOP OF RETAINING WALL |
| BW | | BOTTOM OF WALL |

S. O. 19 : NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R/W.
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 THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") 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.

APPROVAL

NAME

DATE

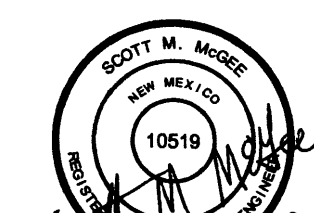
INSPECTOR

Cinelli / Roger Cinelli & Assoc.
2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

PROJECT TITLE:
**TOWNHOMES FOR
GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO**

DRAWING TITLE:
GRADING & DRAINAGE PLAN

SEAL

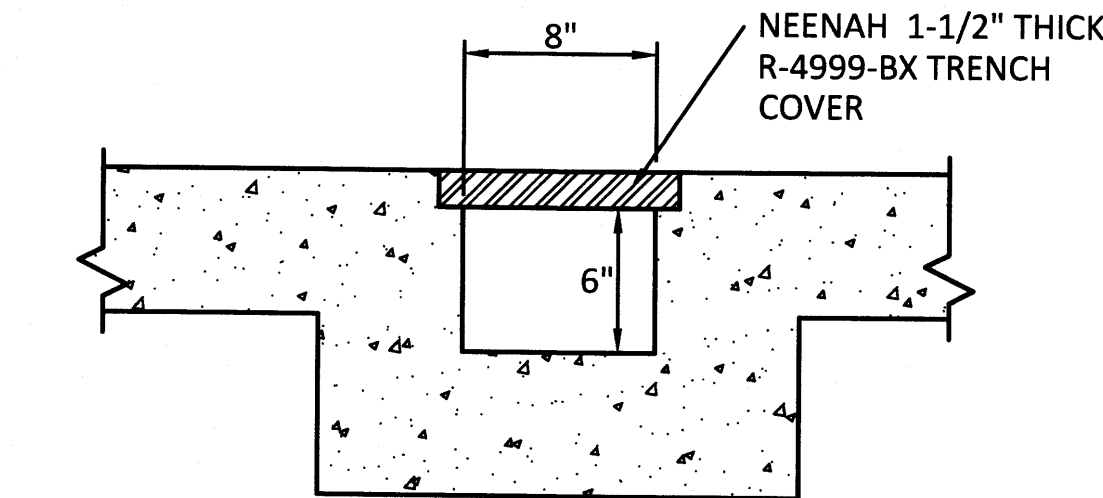
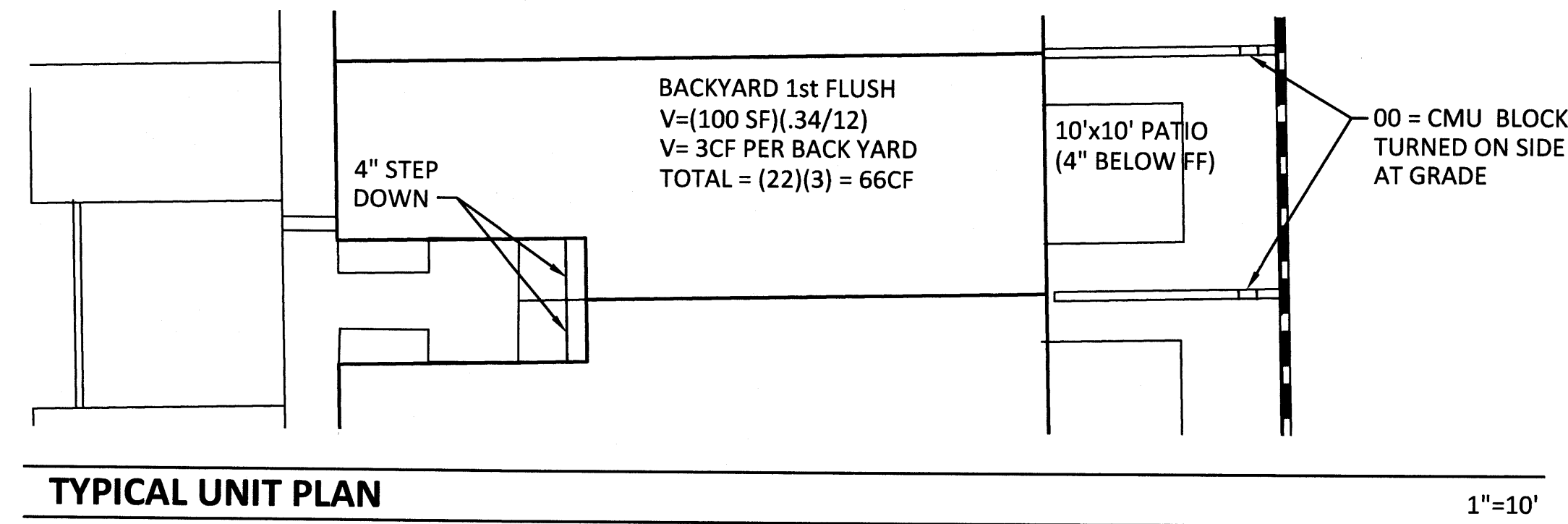


DATE
Dec 20, 2016

PROJECT NO.
BUCH14

DRAWING NO.

CIVIL103



DRAINAGE CALCULATIONS

ADDRESS: 2400 Marie Park Drive NE, Albuquerque, NM
LEGAL DESCRIPTION: Tracts A-2-A-1, Block 13, Brentwood Hills
SITE AREA: 67,870 SF (1.558 acres)

BENCHMARK: City of Albuquerque Station '12-H22' being a brass cap
ELEV= 5778.827 (NAVD 1988)

SURVEYOR: The Survey Office dated August, 2016
PRECIPITATION ZONE: 4

FLOOD HAZARD: From FEMA Map 35001C0376G (9/26/08), this site is identified as being within Zone 'X' which is located outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The site is vacant and slopes down to the west at 2-3%. It sheet flows west and discharges to Menaul Blvd and Marie Park Drive.

OFFSITE FLOW: The adjacent property to the east is a developed gas station which drains to Menaul via a paved roadway. A small landscape area (130 x 25' = 3,250 SF) abuts and drains to this site. That runoff (Q = 0.2 CFS), is accepted onsite, carried between a retaining wall and an existing curb, and flows west.

PROPOSED IMPROVEMENTS: The proposed improvements include 22 townhomes with an interior access drive, paved parking, and landscape areas.

DRAINAGE APPROACH: The site drainage pattern will remain unchanged as the site will continue to drain to the south and west per historic conditions.

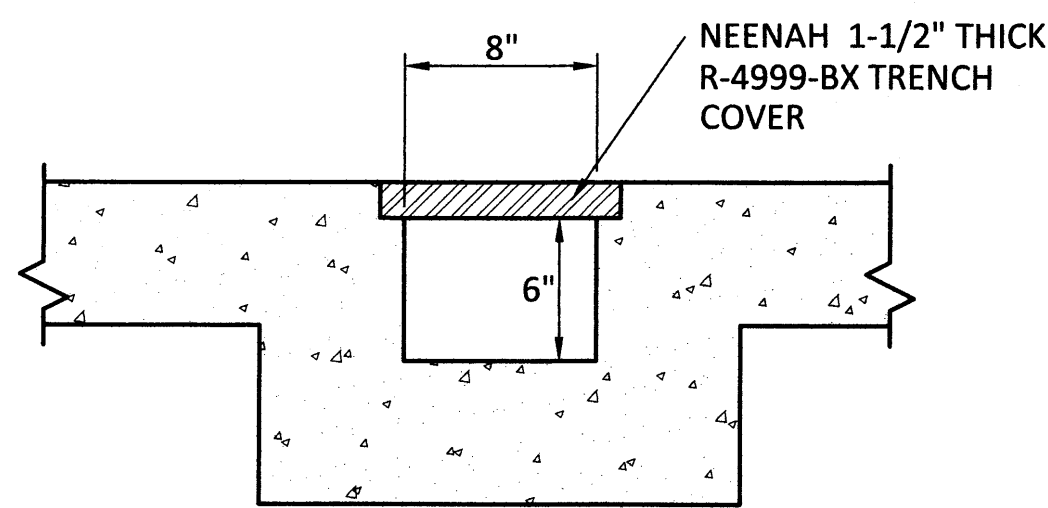
Existing land treatment: 100% A Precipitation Zone: 4
Q= (2.20)(1.558)= 3.4 CFS

Proposed land treatment: 6% B, 29% C and 65% D
Q= [(0.06)(2.92)+(.29)(3.73)+(.65)(5.25)](1.558) = 7.3 CFS

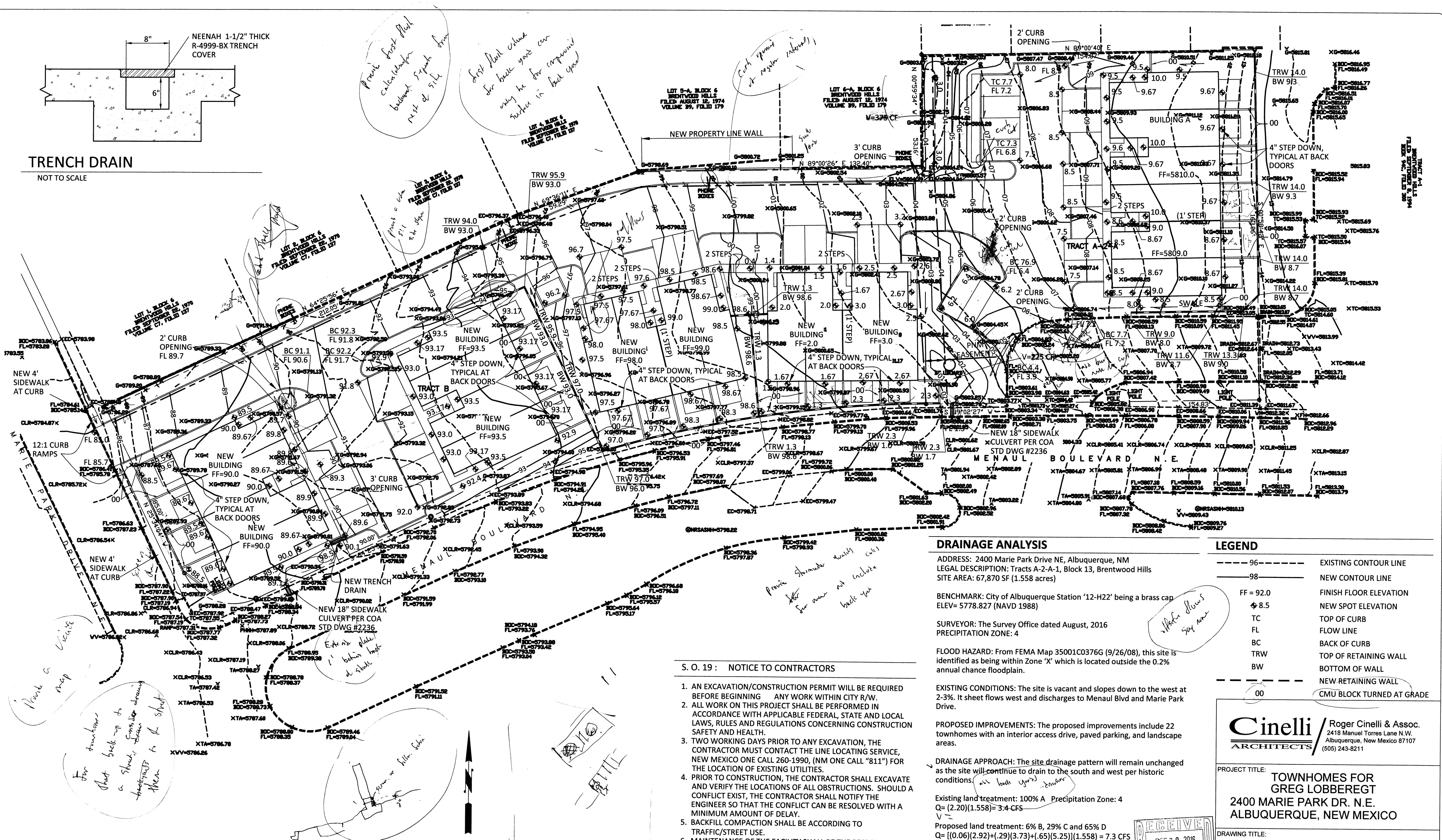
First flush V= (44,114) (0.34/12) = 1,250CF
Onsite pond volumes = 375+ 275+ 600 = 1,250 CF
Backyard pond volumes (22) (3 CF) = 66 CF
Total V = 1,316 CF (>1,250 OK)

The proposed detention ponding areas contain the first flush volume. Runoff increases slightly but there will be no adverse impact on downstream drainage facilities.

Cinelli / Roger Cinelli & Assoc. ARCHITECTS 2418 Manuel Torres Lane N.W. Albuquerque, New Mexico 87107 (505) 243-8211		
PROJECT TITLE: TOWNHOMES FOR GREG LOBBEREGET 2400 MARIE PARK DR. N.E. ALBUQUERQUE, NEW MEXICO		
DRAWING TITLE: GRADING & DRAINAGE CALCULATIONS & DETAILS		
SEAL	DATE FEB 6, 2017	PROJECT NO. BUCH14
	DRAWING NO. CIVIL104	

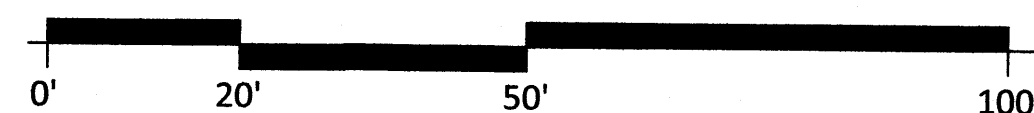


TRENCH DRAIN
NOT TO SCALE



GRADING AND DRAINAGE PLAN

1" = 20'-0"



S. O. 19 : NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R/W.
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 THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") 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.

APPROVAL
NAME
INSPECTOR

DATE

DRAINAGE ANALYSIS

ADDRESS: 2400 Marie Park Drive NE, Albuquerque, NM
LEGAL DESCRIPTION: Tracts A-2-A-1, Block 13, Brentwood Hills
SITE AREA: 67,870 SF (1.558 acres)

BENCHMARK: City of Albuquerque Station '12-H22' being a brass cap
ELEV = 5778.827 (NAVD 1988)

SURVEYOR: The Survey Office dated August, 2016
PRECIPITATION ZONE: 4

FLOOD HAZARD: From FEMA Map 35001C0376G (9/26/08), this site is identified as being within Zone 'X' which is located outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The site is vacant and slopes down to the west at 2-3%. It sheet flows west and discharges to Menaul Blvd and Marie Park Drive.

PROPOSED IMPROVEMENTS: The proposed improvements include 22 townhomes with an interior access drive, paved parking, and landscape areas.

DRAINAGE APPROACH: The site drainage pattern will remain unchanged as the site will continue to drain to the south and west per historic conditions.

Existing land treatment: 100% A Precipitation Zone: 4

$Q = (2.20)(1.558) = 3.4 \text{ CFS}$

Proposed land treatment: 6% B, 29% C and 65% D

$Q = [(0.06)(2.92) + (.29)(3.73) + (.65)(5.25)](1.558) = 7.3 \text{ CFS}$

First flush $V = (44,114) (0.34/12) = 1,250 \text{ CF}$

Onsite pond volumes = $375 + 225 \text{ CF} = 600 \text{ CF}$

Backyard pond volumes (22) at $16' \times 6' \times 0.33' (x22) = 697 \text{ CF}$

Total $V = 1,297 \text{ CF} (>1,250 \text{ OK})$

The proposed detention ponding areas contain the first flush volume. Runoff increases slightly but there will be no adverse impact on downstream drainage facilities.

LEGEND

---	96---	EXISTING CONTOUR LINE
---	98---	NEW CONTOUR LINE
FF = 92.0		FINISH FLOOR ELEVATION
8.5		NEW SPOT ELEVATION
TC		TOP OF CURB
FL		FLOW LINE
BC		BACK OF CURB
TRW		TOP OF RETAINING WALL
BW		BOTTOM OF WALL
---	00	NEW RETAINING WALL
---	00	CMU BLOCK TURNED AT GRADE

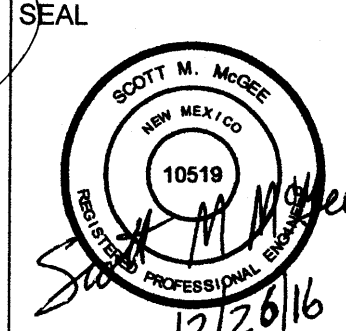
Cinelli / Roger Cinelli & Assoc.
ARCHITECTS
2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

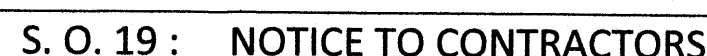
PROJECT TITLE: **TOWNHOMES FOR GREG LOBBEREGET**
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO

DRAWING TITLE: **GRADING & DRAINAGE PLAN**

DATE: Dec 20, 2016 PROJECT NO.: BUCH14
DRAWING NO.:

CIVIL103





1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R/W.
2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFE AND HEALTH.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990, (NM ONE CALL "811") 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.

APPROVAL
NAME _____ DATE _____

INSPECTOR

DRAINAGE ANALYSIS

ADDRESS: 2400 Marie Park Drive NE, Albuquerque, NM
LEGAL DESCRIPTION: Tracts A-2-A-1, Block 13, Brentwood Hills
SITE AREA: 67,870 SF (1.558 acres)

BENCHMARK: City of Albuquerque Station '12-H22' being a brass cap
ELEV= 5778.827 (NAVD 1988)

SURVEYOR: The Survey Office dated August, 2016
PRECIPITATION_ZONE: 4

FLOOD HAZARD: From FEMA Map 35001C0376G (9/26/08), this site is identified as being within Zone 'X' which is located outside the 0.2% annual chance floodplain.

EXISTING CONDITIONS: The site is vacant and slopes down to the west at 2-3%. It sheet flows west and discharges to Menaul Blvd and Marie Park Drive.

PROPOSED IMPROVEMENTS: The proposed improvements include 22 townhomes with an interior access drive, paved parking, and landscape areas.

DRAINAGE APPROACH: The site drainage pattern will remain unchanged as the site will continue to drain to the south and west per historic conditions.

Existing land treatment: 100% A Precipitation Zone: 4
 $Q = (2.20)(1.558) = 3.4 \text{ CFS}$

Proposed land treatment: 6% B, 29% C and 65% D
 $Q = [(0.06)(2.92) + (.29)(3.73) + (.65)(5.25)](1.558) = 7.3 \text{ CFS}$

First flush V = (44,114) (0.34/12) = 1,250CF
Onsite pond volumes = 375+ 225 CF = 600 CF
Backyard pond volumes (22) at 16'x6'x0.33' (x22) = 697 CF
Total V = 1,297 CF (>1,250 OK)

The proposed detention ponding areas contain the first flush volume. Runoff increases slightly but there will be no adverse impact on downstream drainage facilities.

LEGEND

-----96-----	EXISTING CONTOUR LINE
—————98—————	NEW CONTOUR LINE
FF = 92.0	FINISH FLOOR ELEVATION
◆ 8.5	NEW SPOT ELEVATION
TC	TOP OF CURB
FL	FLOW LINE
BC	BACK OF CURB
TRW	TOP OF RETAINING WALL
BW	BOTTOM OF WALL
-----	NEW RETAINING WALL
00	CMU BLOCK TURNED AT GRADE

Cinelli / Roger Cinelli & Assoc.
ARCHITECTS 2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

PROJECT TITLE: TOWNHOMES FOR
GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO

DRAWING TITLE:

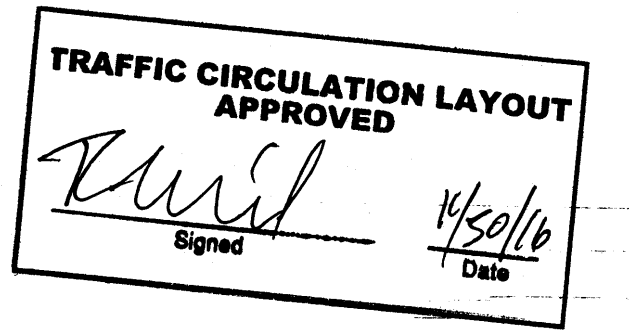
GRADING & DRAINAGE PLAN

SEAL 	DATE Dec 20, 2016	PROJECT NO. BUCH14
	DRAWING NO.	

CIVIL103

TOWN HOMES FOR GREG LOBBEREGET MARIE PARK DRIVE NORTHEAST ALBUQUERQUE, NEW MEXICO

ALL WHEELCHAIR RAMPS LOCATED
WITHIN THE PUBLIC RIGHT OF WAY
MUST HAVE TRUNCATED DOMES.



DESIGN CRITERIA

A 22 UNITS TOWNHOUSE DEVELOPMENT FOR GREG LOBBEREGET

PROJECT LOCATION: NORTHEAST CORNER OF INTERSECTION OF MENAUL BLVD. N.E. AND MARIE PARK DRIVE N.E.
2400 MARIE PARK DR. N.E., ALBUQUERQUE, NM

ZONE ATLAS MAP: H-22

LEGAL DESCRIPTION: TRACT "A-2-A-1" IN BLOCK NUMBERED (13) OF BRENTWOOD HILLS SUBD. ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

ZONING: R-2

TOTAL ACREAGE: 1.56 ACRES

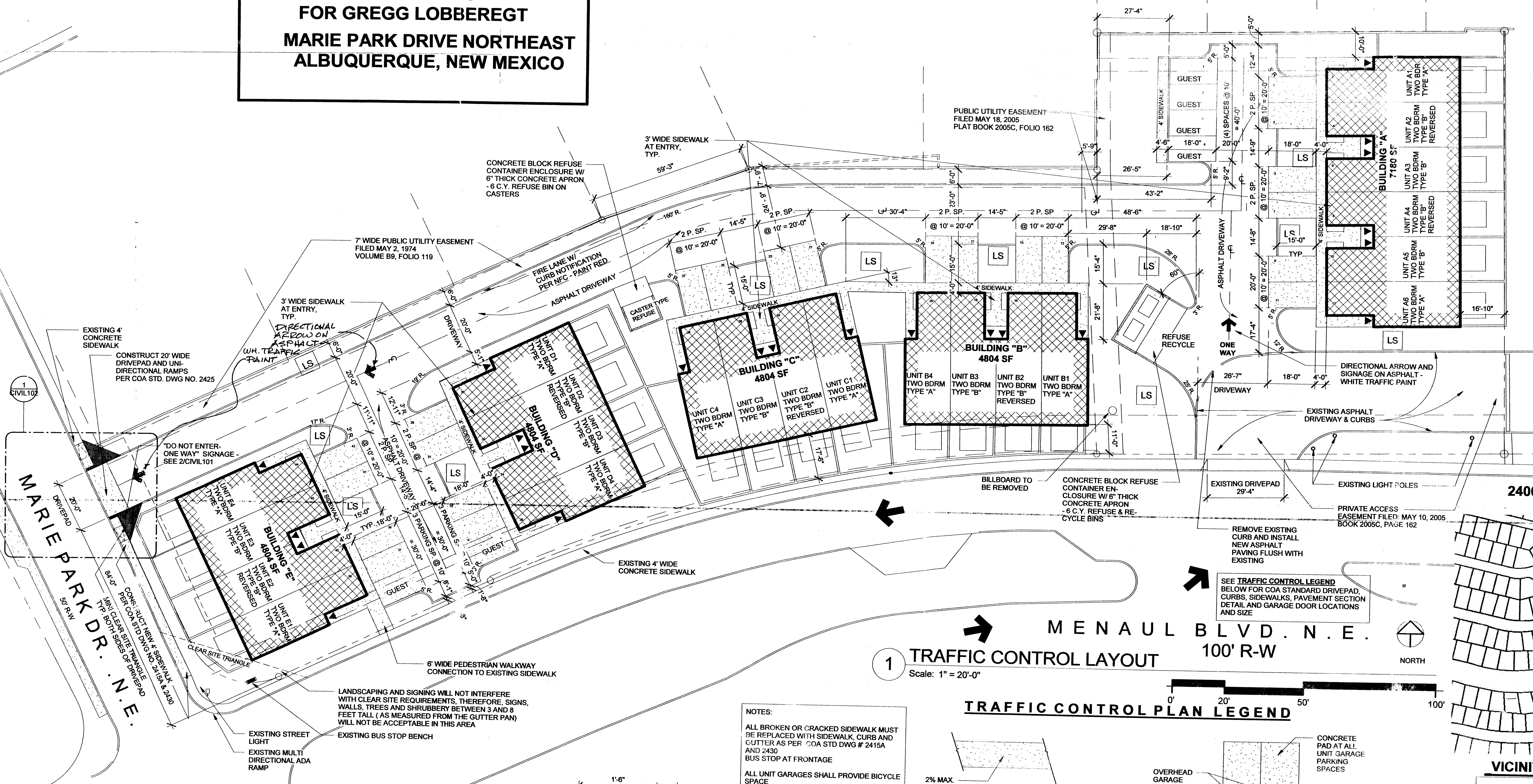
PROPOSED USES: RESIDENTIAL DWELLINGS

REQUIRED PARKING PER R-2:
TOWNHOUSE UNITS - 22 UNITS X 2 PARKING SPACES = 44 PARKING SPACES
TRANSIT ROUTE REDUCTION - 44 X 10% = 4 PARKING SPACES
44 SPACES - 4 SPACES = 40 SPACES REQUIRED

PARKING PROVIDED (INCLUDING GARAGES):
OFF STREET PARKING = 44 PARKING SPACES - COMPLIES

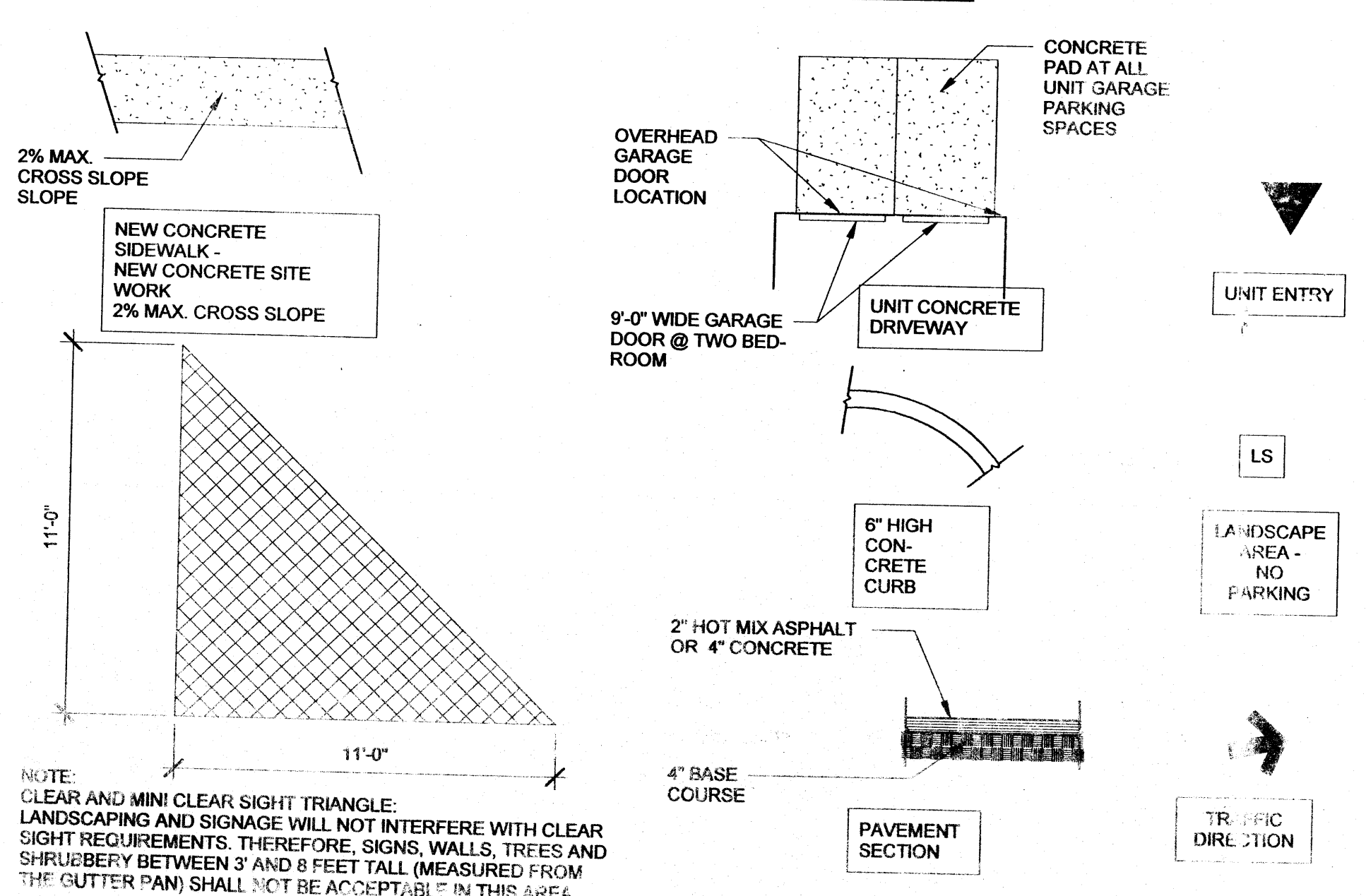
GUEST PARKING PROVIDED:
OFF STREET PARKING = 6 PARKING SPACES
PROVIDED - 14% OF TOTAL REQUIRED SPACES

TOTAL PARKING PROVIDED:
OFF STREET PARKING - 50 PARKING SPACES

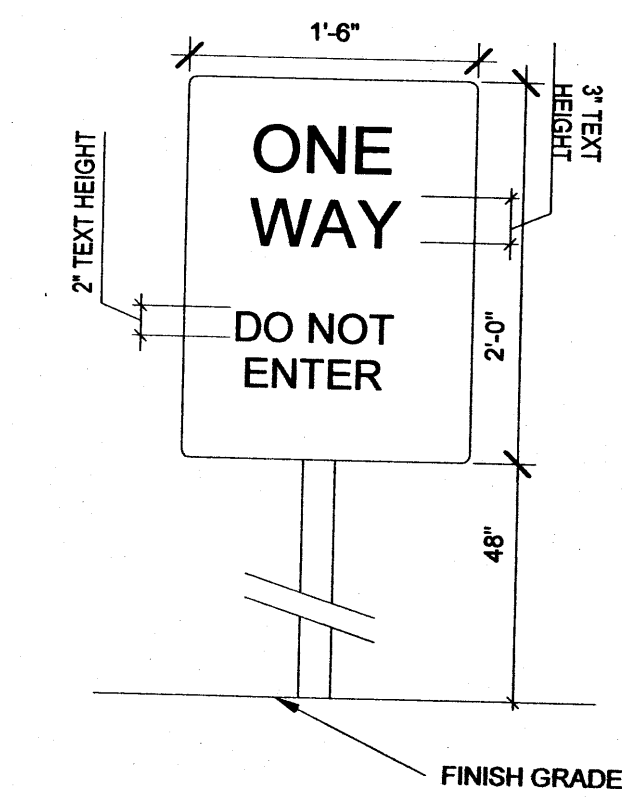


1 TRAFFIC CONTROL LAYOUT Scale: 1" = 20'-0"

TRAFFIC CONTROL PLAN LEGEND



2 ONE WAY SIGNAGE Scale: 1" = 1'-0"

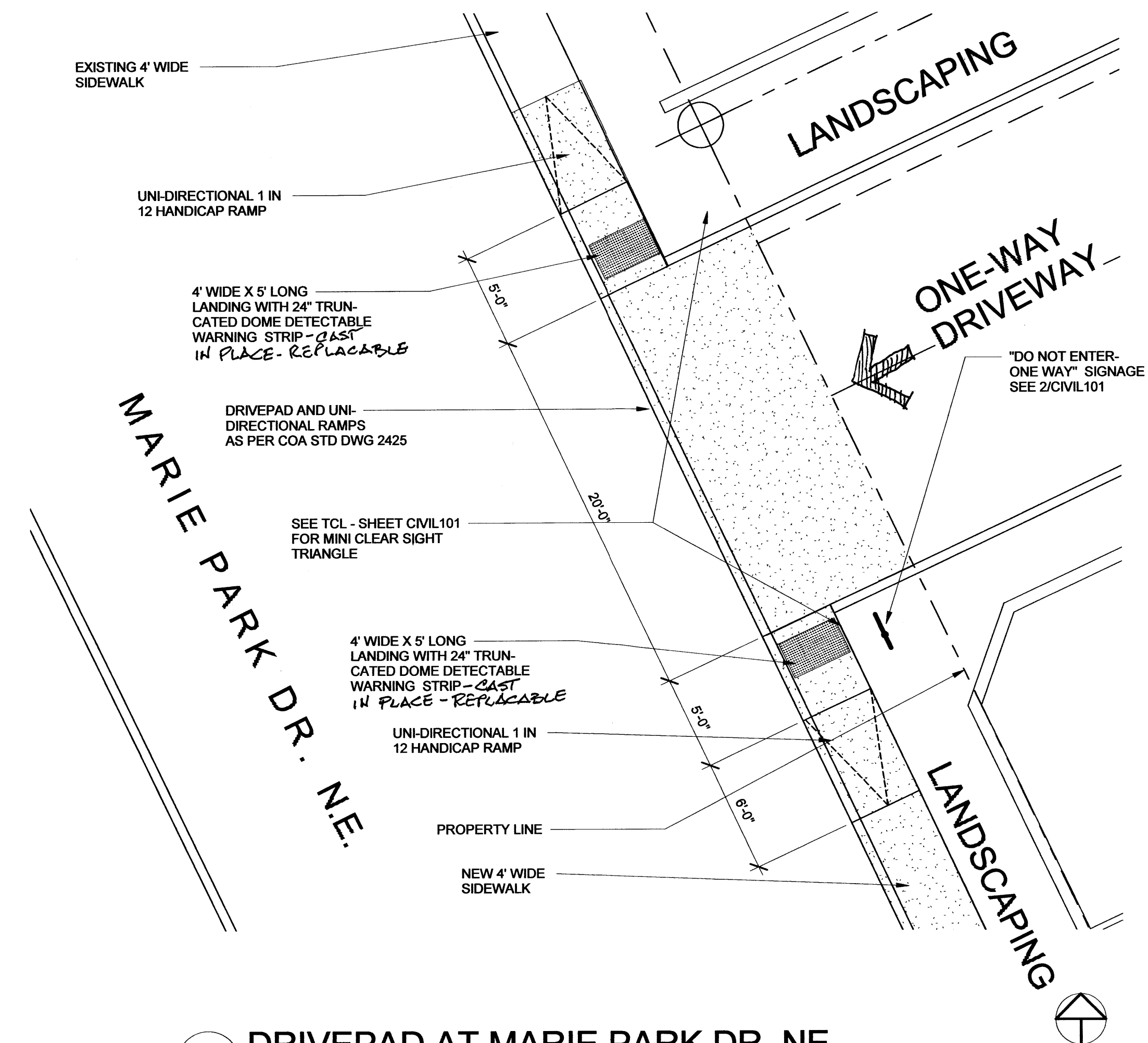


Cinelli / Roger Cinelli & Assoc.
ARCHITECTS
2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

PROJECT TITLE: TOWNHOMES FOR GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO

DRAWING TITLE: TRAFFIC CONTROL LAYOUT

SEAL: [Professional Seal]
DATE: NOV. 22, 2016
PROJECT NO.: BUCH14
DRAWING NO.:
CIVIL101

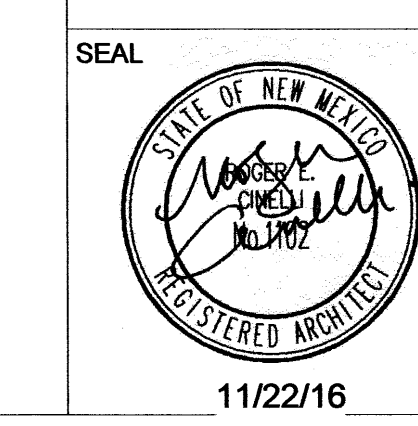


1 DRIVEPAD AT MARIE PARK DR. NE
Scale: 3/16" = 1'-0"

Cinelli / Roger Cinelli & Assoc.
ARCHITECTS
2418 Manuel Torres Lane N.W.
Albuquerque, New Mexico 87107
(505) 243-8211

PROJECT TITLE:
**TOWNHOMES FOR
GREG LOBBEREGET
2400 MARIE PARK DR. N.E.
ALBUQUERQUE, NEW MEXICO**

DRAWING TITLE:
ENLARGED DRIVEPAD PLAN

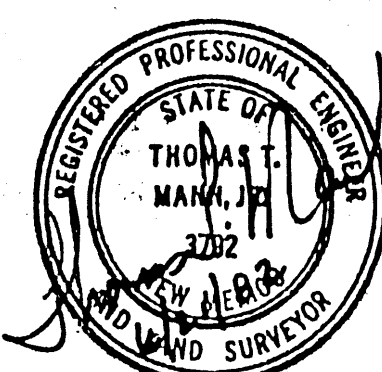


DATE NOV. 22, 2016	PROJECT NO. BUCH14
DRAWING NO. CIVIL102	

Sandy Eeds AIA Architect

510 SECOND ST. NW
SUITE 204
ALBUQUERQUE NM
87102 505 842 1511
ARCHITECT

ENGINEER



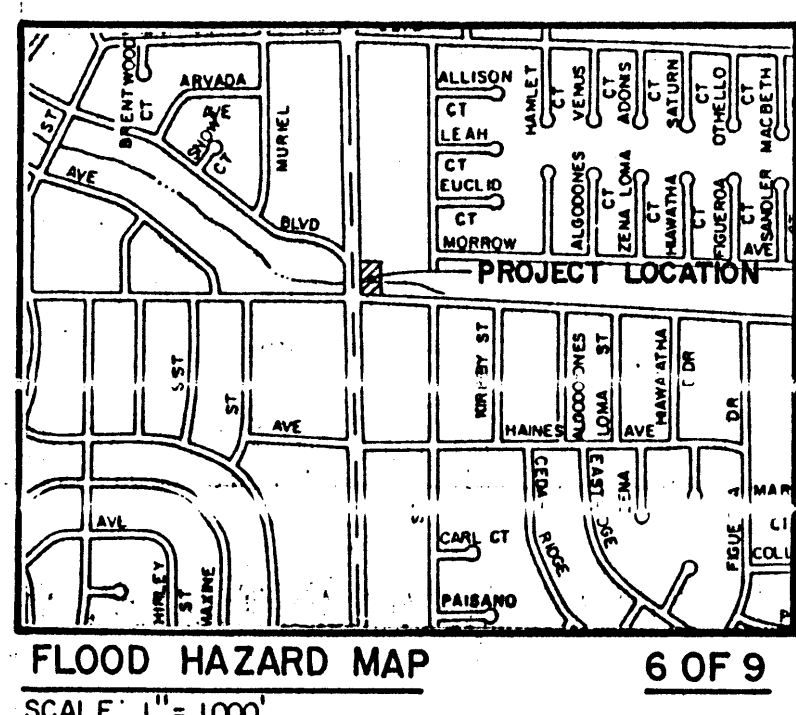
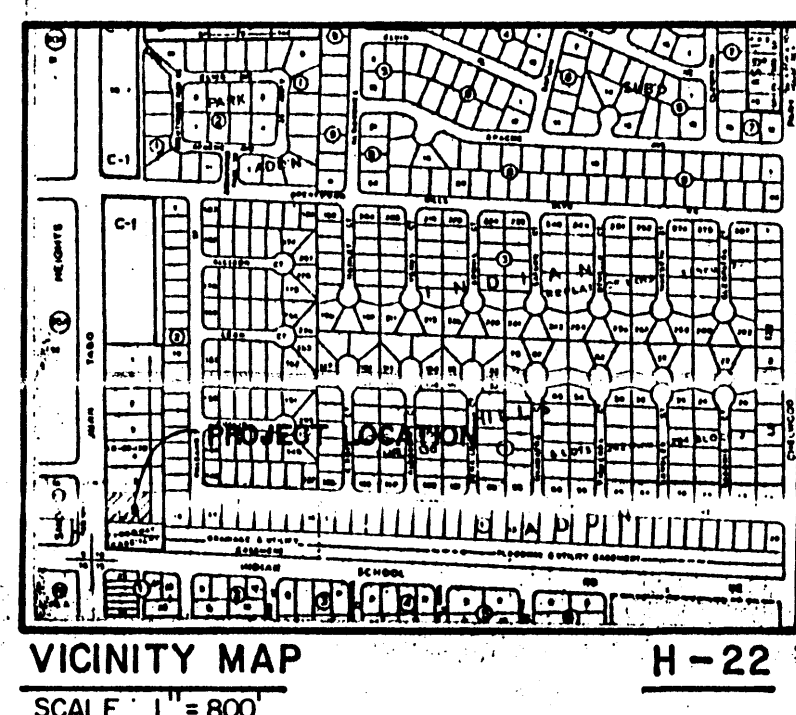
AN OFFICE FOR
THE VAUGHAN COMPANY
JUAN TABO BLVD
ALBUQUERQUE NEW MEXICO

SHEET TITLE
GRADING AND
DRAINAGE PLAN
LEGAL RESUB
UTILITY LOC.

REVISIONS

DATE JUNE 1982
PROJECT NO. 8115

SHEET NO.
C 1



DRAINAGE PLAN

The following items concerning the Vaughn Company Office Building Drainage Plan are contained hereon:

1. Vicinity Map
2. Flood Hazard Map
3. Grading Plan
4. Calculations

The proposed improvements consist of an office building with associated paved parking which is located on Lot 6, as shown by the Vicinity Map. At present, the site is undeveloped.

The site does not lie within a flood hazard zone, as shown by the Flood Hazard Map. The Flood Hazard Map was taken from the "City of Albuquerque, New Mexico, Bernalillo County Flood Hazard Boundary Map" prepared by the U. S. Department of H. U. D., Federal Insurance Program. An existing wall prevents flows from entering the site from the east, and flows created on the parcel to the north run parallel to the site down to Juan Tabo Boulevard. There is an existing drainage channel on the south side of the site.

The Grading Plan shows (1) existing grades indicated by spot elevations and contours at 1'-0" intervals, (2) proposed grades indicated by spot elevations and contours at 1'-0" intervals, (3) continuity between proposed and existing elevations and (4) the limit and character of proposed improvements. The basic drainage concept is to allow stormwater that is created onsite to flow in a controlled manner westward to Juan Tabo Boulevard. From this point flows will stay in the north gutterline of Juan Tabo Boulevard and flow east to an inlet into the existing channel.

The calculations which appear below analyze the proposed development utilizing the rational formula. The calculations show the existing stormwater flows created onsite in both the existing and proposed states.

CALCULATIONS

EXISTING STORMWATER FLOWS

Area = 0.59 ac
i = 5.4 inches
C = 0.40
 $Q_{100} = CIA$
 $= (0.40)(5.4)(0.59)$
 $= 1.27 \text{ cfs}$

DEVELOPED STORMWATER FLOWS

Total Area: 0.59 ac
Pervious Area: 0.07 ac
Impervious Area: 0.52 ac
Composite "C" = $\frac{(0.52)(0.95) + (0.07)(0.40)}{0.59}$
 $= 0.90$

$Q_{100} = CIA$
 $= (0.90)(5.4)(0.59)$
 $= 2.87 \text{ cfs}$

$R_{100} = \frac{(1.27)(5.4) + (2.87)(5.4)}{5.4}$
 $= 2.95 \text{ cfs}$

LEGEND

- 20-- EXISTING CONTOUR
- 20- PROPOSED CONTOUR
- ⊕ EXISTING SPOT ELEVATION
- ⊙ PROPOSED SPOT ELEVATION
- ▭ PROPOSED LANDSCAPE
- 1997 VERIFICATION ELEVATIONS

DESCRIPTION

LOT NUMBER SIX (6) OF INDIAN HILLS ADDITION

ADDRESS

1804 JUAN TABO BLVD NE
ALBUQUERQUE, NEW MEXICO

SOILS

EMBOLD GRAVELLY FINE SANDY LOAM.

HYDROLOGICAL SOIL GROUP B

REFERENCE POINT

ELEVATIONS REFERENCED TO C.A.N.M. MONUMENT 10-222A

This is from August 1982 Submittal

UPDATED DRAINAGE PLAN

The existing building and site were developed in 1982. The drainage plan shown hereon was approved at that time. A review of the site on March 11, 1997 indicates that the site was developed in substantial compliance with the approved plan. There are minor variations from the design grades, but the runoff follows the design route.

There are retaining walls along the north and east property lines and a curb along the south property line. The lands to the north, east and south of the project site are graded such that runoff does not enter the site. The site is higher than Juan Tabo Blvd to the west.

The current building owner proposes to construct a carport in the northwest corner of the east parking lot. The roof will drain to the east onto the existing asphalt parking lot. The runoff will follow the same existing route as it would before construction of the carport. The rate of runoff will not increase since asphalt and concrete is being covered by roof.

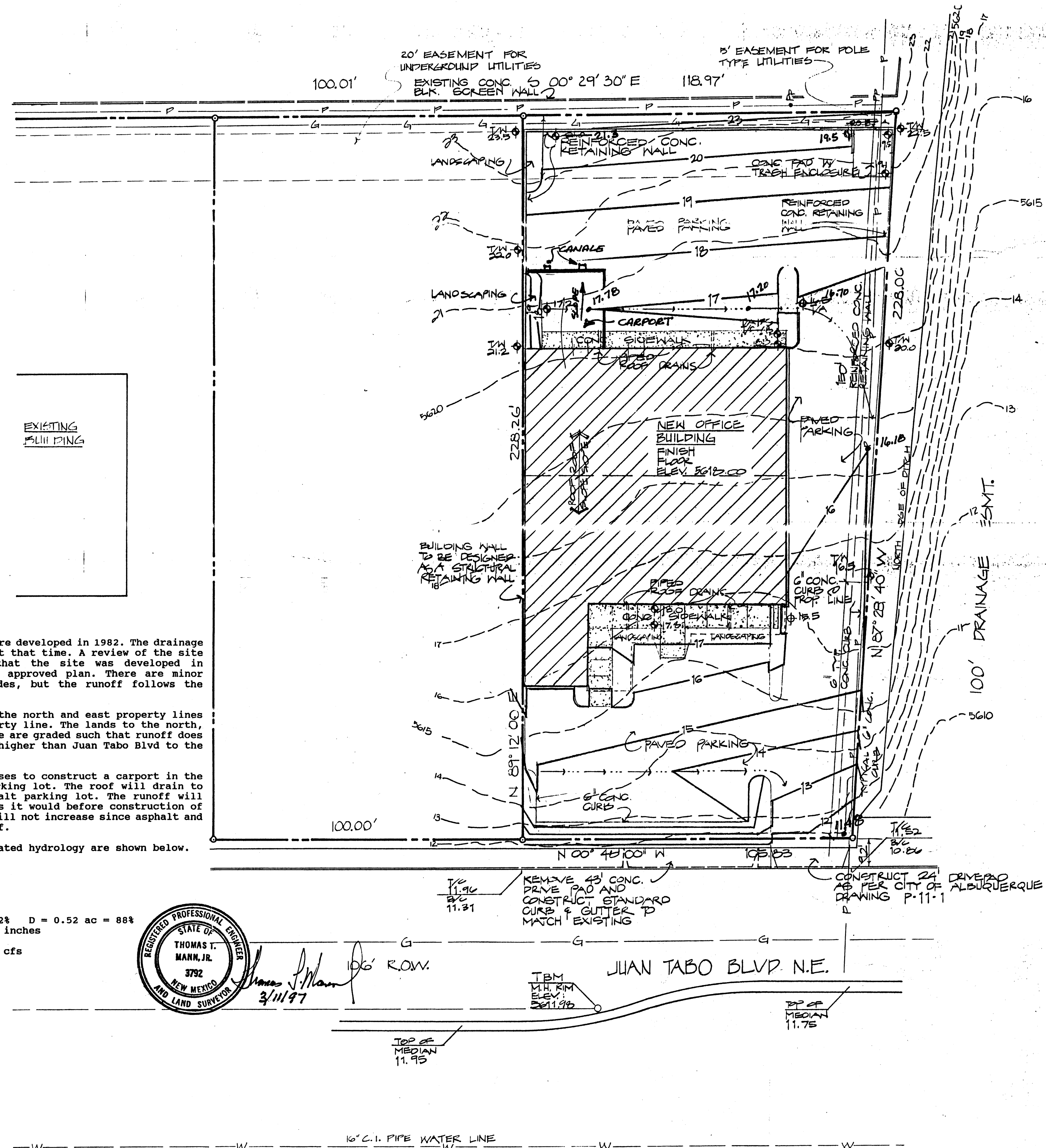
The calculations showing the updated hydrology are shown below.

CALCULATIONS

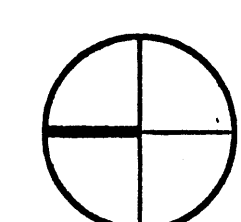
Precipitation Zone = 4
Area = 0.59 acres
Updated Developed Conditions
Land Treatment B = 0.07 ac = 12% D = 0.52 ac = 88%
 $E = 1.08 \times 0.12 + 2.64 \times 0.88 = 2.45 \text{ inches}$
 $V = 2.45 \times 0.59 / 12 = 0.12 \text{ ac ft}$
 $Q = 2.92 \times 0.07 + 5.25 \times 0.52 = 2.93 \text{ cfs}$



3/11/97

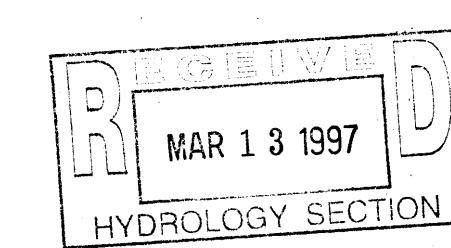


16" C.I. PIPE WATER LINE



GRADING PLAN / UTILITY PLAN

1" = 20'



[illegible]