CITY OF ALBUQUERQUE

July 18, 2017

Scott Eddings, PE
Huitt-Zollers Inc.
6561 Americas Parkway NE
Albuquerque, NM 87110

Re: Winrock Town Center – Phase B
2100 Louisiana NE
Revised Grading and Drainage Plan
Engineer's stamp date: 7/17/17 (J19D058E)

Dear Mr. Eddings,

Based on the submittal received 7/17/17, this project cannot be approved for revised building permit until the following are addressed:

1. This grading and drainage plan needs to include all exterior improvement on the site, especially the design for draining the problem areas noted on the east side of the building at the last Hydrology inspection (6/22/17). Exterior work affecting drainage cannot be deferred to tenant improvements.
2. The rock lined channel needs to account for freeboard (see DPM Ch22.3.C.4). Also the channel slope does not match what's shown on the grading plan and a rectangular rock-lined channel does not seem constructible.
3. How does pond 2 outfall to the ROW?
4. Show the slope of all storm drain pipes on the plan.
5. Show the invert in and invert out on all inlets.

If you have any questions, please contact me at 924-3695.

Sincerely,

Dana Peterson, P.E.,
Senior Engineer, Planning Department
Development and Review Services

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: Winrock Town Center – Section 8 Building Permit #:_____ Hydrology File #: J19D

DRB#:_____ EPC#:_____ Work Order#:_____

Legal Description: Tract B-Hunt Development

City Address: 2100 Louisiana Blvd NE

Applicant: Huitt-Zollars, Inc Contact: Scott Eddings

Address: 333 Rio Rancho Blvd, Rio Rancho NM, 87124

Phone#: 505-892-5141 Fax#: 505-892-3259 E-mail: seddings@huitt-zollars.com

Other Contact: Goodman Realty Contact: Fred Gorenz

Address: 100 Sun Avenue

Phone#: 881-0100 Fax#: NA E-mail: NA

Check all that Apply:

DEPARTMENT:

X HYDROLOGY/ DRAINAGE

____ TRAFFIC/ TRANSPORTATION

____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION

____ CONCEPTUAL G & D PLAN

X GRADING PLAN

____ DRAINAGE MASTER PLAN

____ DRAINAGE REPORT

____ CLOMR/LOMR

____ TRAFFIC CIRCULATION LAYOUT (TCL)

____ TRAFFIC IMPACT STUDY (TIS)

____ EROSION & SEDIMENT CONTROL PLAN (ESC)

X OTHER (SPECIFY) Grading Plan Resubmittal for Shell

IS THIS A RESUBMITTAL?: X Yes ____ No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL

____ TEMPORARY CERTIFICATE OF OCCUPANCY

____ PRELIMINARY PLAT APPROVAL

____ SITE PLAN FOR SUB'D APPROVAL

____ SITE PLAN FOR BLDG. PERMIT APPROVAL

____ FINAL PLAT APPROVAL

____ SIA/ RELEASE OF FINANCIAL GUARANTEE

____ FOUNDATION PERMIT APPROVAL

____ GRADING PERMIT APPROVAL

____ SO-19 APPROVAL

____ PAVING PERMIT APPROVAL

____ GRADING/ PAD CERTIFICATION

____ WORK ORDER APPROVAL

____ CLOMR/LOMR

____ **PRE-DESIGN MEETING?**

____ OTHER (SPECIFY) _____

DATE SUBMITTED: July 17, 2017 By: Scott Eddings

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ____

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services

Richard J. Berry, Mayor

April 29, 2016

Scott Eddings, P.E.
Huitt-Zollars
6501 Americas Parkway NE
Albuquerque, New Mexico 87110

RE: **Winrock Town Center – Phase B (J19D058E)**
Grading Plan, Engineer's Stamp Date: 3-11-2016

Dear Mr. Eddings:

Based upon the information provided in your submittal received 3-31-16, the above referenced plan is approved for ESC Permit (Building Permit) with the following condition:

- Show the slope of all storm drain pipe on the plan
- Show the Invert in and invert out on all inlets

Curtis Cherne verbally confirmed that the ESC plan has been approved.

Please attach a copy of this approved plan in the construction sets when submitting for a building permit.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3695.

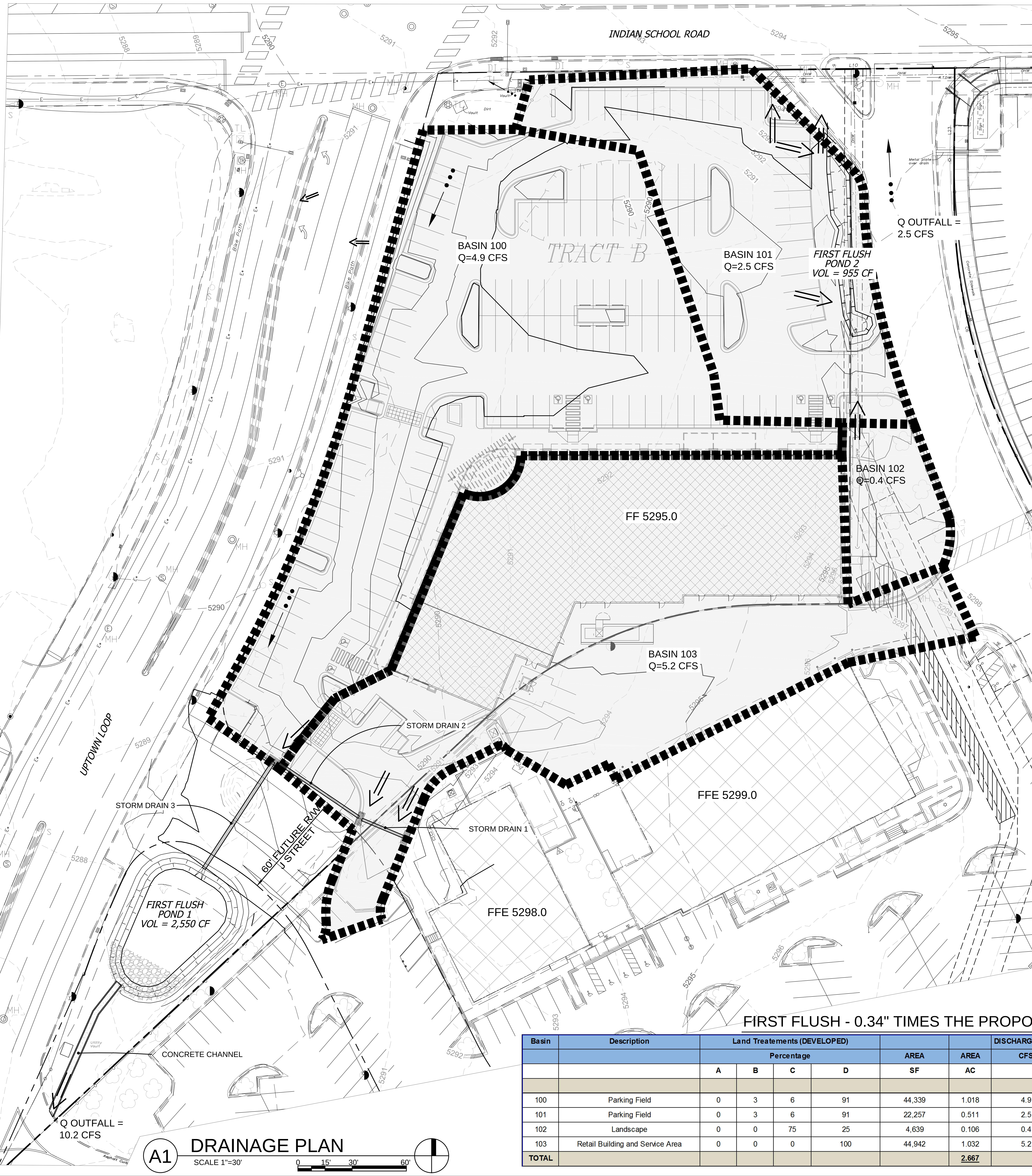
Sincerely,

Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf via Email: Recipient

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

J19D058E_BP_appr.doc



A1 DRAINAGE PLAN
SCALE 1"=30'

EXISTING DRAINAGE CONDITIONS

THIS SITE IS UNDEVELOPED AND DISCHARGES ONTO UPTOWN LOOP ROAD.

PROPOSED DRAINAGE CONDITIONS

DEVLOPMENT SHALL BE IN ACCORDANCE WITH EXISTING DRAINAGE PATTERNS. LANDSCAPE AREAS SHALL BE DEPRESSED AND GRADES SHALL BE DESIGNED TO PROVIDE POSITIVE DRAINAGE TOWARD DEPRESSED LANDSCAPE AREAS. STORM WATER DESIGN EVENT SHALL DISCHARGE INTO THE SITE IN ACCORDANCE WITH THE APPROVED DRAINAGE MASTER PLAN.

THE TOTAL SITE AREA IS APPROXIMATELY 2.67 ACRES WITH THE FOLLOWING ESTIMATED LAND TREATMENTS FOR BASIN 100 AND 101:
A: 0% B: 3% C: 6% D: 91%

BASIN 102:
A: 0% B: 0% C: 75% D: 25%

BASIN 103:
A: 0% B: 0% C: 0% D: 100%

FIRST FLUSH REQUIRED VOLUMES ARE SHOWN BELOW.

FLOOD ZONE

PER THE FEMA MAP NUMBER 35001 C0352G DATED SEPTEMBER 26, 2008 SHOWS THE SITE IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE AREA.

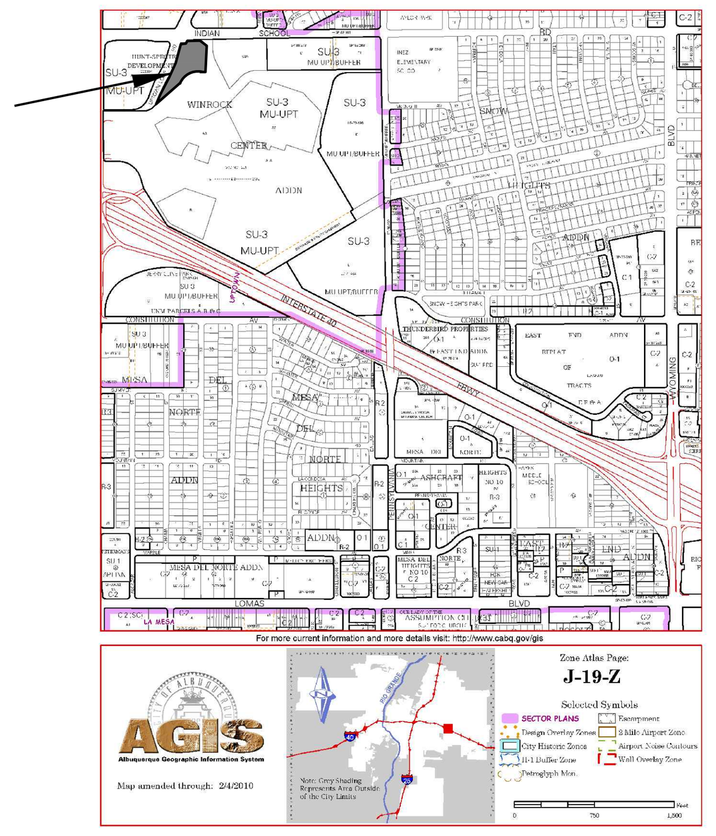
MASTER DRAINAGE PLAN

SITE DRAINAGE IS IN ACCORDANCE WITH THE APPROVED WINROCK TOWN CENTER MASTER DRAINAGE PLAN. DRAINAGE FROM THIS PROJECT DISCHARGES INTO BASIN 600 AND 300 OF THE MASTER DRAINAGE BASIN. OUTFALLS INTO INDIAN SCHOOL ROAD ARE REDUCED WITH THE PROJECT.

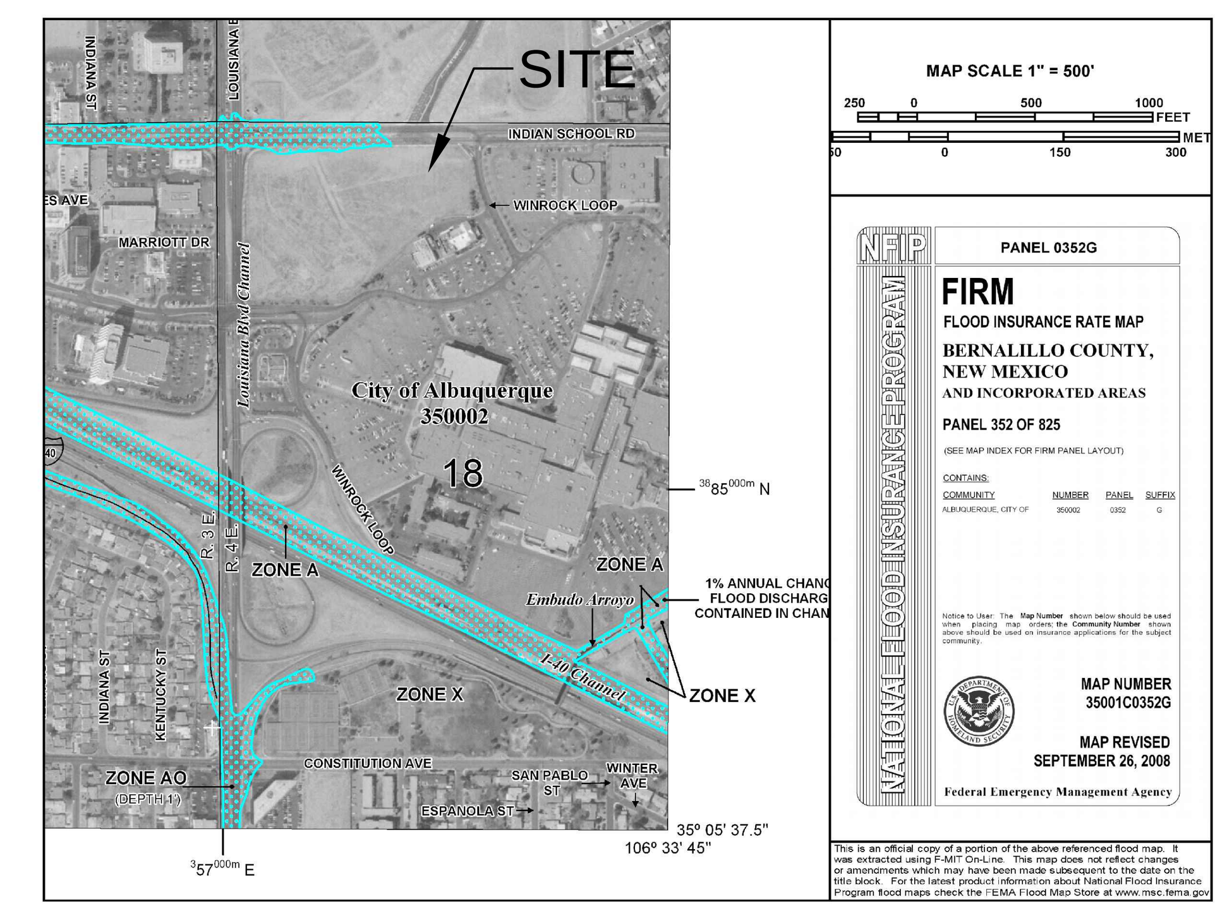
PUBLIC / TIDD INFRASTRUCTURE

THIS PROJECT DOES NOT REQUIRE ANY PORTIONS OF THE PHASED INFRASTRUCTURE. FIRST FLUSH POND 1 SHALL BE RECONFIGURED WITH FUTURE SITE DEVELOPMENT PLANS.

SITE



ZONE ATLAS PAGE J-19-Z



FIRM PANEL 35001C0352G

LEGEND

- PROJECT LIMITS
- BASIN BOUNDARY
- DISCHARGE LOCATION
- FLOW DIRECTION

FIRST FLUSH - 0.34" TIMES THE PROPOSED IMPERVIOUS AREA

Basin	Description	Land Treatements (DEVELOPED)						DISCHARGE RATE	FIRST FLUSH VOLUME REQUIRED	8" DEEP DEPRESSED LANDSCAPE AREA REQUIRED
		Percentage				AREA	AREA	CFS	VOLUME	SQUARE FEET
		A	B	C	D	SF	AC		CF	
100	Parking Field	0	3	6	91	44,339	1.018	4.9	1,143.21	
101	Parking Field	0	3	6	91	22,257	0.511	2.5	573.86	
102	Landscape	0	0	75	25	4,639	0.106	0.4	32.86	
103	Retail Building and Service Area	0	0	0	100	44,942	1.032	5.2	1,273.36	
TOTAL							2.667		3,023.28	4,534.92

AS BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
FOUND MONUMENT "20_H18"
STANDARD 3 1/4" ALUMINUM DISC (FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,493,154.978
E=1,545,048.210
PUBLISHED EL=5283.22 (NAVD 1988)
GROUND TO GRID FACTOR=0.999661580
DELTA ALPHA ANGLE=-0°11'00.11"

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
T. A. EDDINGS
NEW MEXICO
12856
REGISTERED PROFESSIONAL ENGINEER
7/17/17

REVISIONS
NO. DATE REMARKS BY

DESIGN
DESIGNED BY: KS DATE: OCTOBER, 2015
DRAWN BY: LT DATE: OCTOBER, 2015
DWG NAME: C100 DRAINAGE 17JUL17.dwg PROJ #: R303699.01
CHECKED BY: SE DATE: JANUARY, 2016

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

WINROCK TOWN CENTER
PHASE B

TITLE: DRAINAGE PLAN

Design Review Committee	City Engineer	Mo./Day/Yr.	Mo./Day/Yr.
	Last Update		

City Project No. 4553.00 | Zone Map No. J-19-Z | Sheet C100 Of

Plotted: 7/16/2017 9:01:18 PM, By:Eddings, Scott
H:\proj\R303645.01 Winrock\10 CADD & BIM\Sheet Set\BUILDING PERMIT\C100 DRAINAGE 17JUL17.dwg
Last Saved:7/16/2017 8:58:33 PM, seddings

BASIN 100 AREA = 44339 sf
AREA = 1.02 ac.

DRAINAGE ZONE 3
PRECIPITATION: 360 = 2.60 in.
1140 = 3.10 in.
10day = 4.90 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.66 in.	1.87 cfs/ac.
TREATMENT B	0.92 in.	2.60 cfs/ac.
TREATMENT C	1.29 in.	3.45 cfs/ac.
TREATMENT D	2.36 in.	5.02 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0.00 ac.	0.00 ac.
TREATMENT B	0.03 ac.	0.03 ac.
TREATMENT C	0.06 ac.	0.06 ac.
TREATMENT D	0.93 ac.	0.93 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.03)+(1.29)x(0.06)+(2.36)x(0.93)/ 1.02 ac.
= 2.25 in.
V100-360 = (2.25)x(1.02)/ 12 = 0.191074 ac-ft = 8323 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.03)+(3.45)x(0.06)+(5.02)x(0.93)= 4.94 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.03)+(1.29)x(0.06)+(2.36)x(0.93)/ 1.02 ac.
= 2.25 in.
V100-360 = (2.25)x(1.02)/ 12.0 = 0.191074 ac-ft = 8323 cf

V100-1440 = (0.19)+(0.93)x(3.10 - 2.60)/ 12 = 0.229668 ac-ft = 10004 cf

V100-10day = (0.19)+(0.93)x(4.90 - 2.60)/ 12 = 0.368610 ac-ft = 16057 cf

PROPOSED PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.03)+(3.45)x(0.06)+(5.02)x(0.93)= **4.94 cfs**

BASIN 100 - 44,339 SF
ZONE 3
$Q_{100, DEV}$ = 4.9 CFS
$V_{100\text{-}6HR, DEV}$ = 8,323 CF

BASIN 101 AREA = 22152 sf
AREA = 0.51 ac.

DRAINAGE ZONE 3
PRECIPITATION: 360 = 2.60 in.
1140 = 3.10 in.
10day = 4.90 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.66 in.	1.87 cfs/ac.
TREATMENT B	0.92 in.	2.60 cfs/ac.
TREATMENT C	1.29 in.	3.45 cfs/ac.
TREATMENT D	2.36 in.	5.02 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0.00 ac.	0.00 ac.
TREATMENT B	0.02 ac.	0.02 ac.
TREATMENT C	0.03 ac.	0.03 ac.
TREATMENT D	0.46 ac.	0.46 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.02)+(1.29)x(0.03)+(2.36)x(0.46)/ 0.51 ac.
= 2.25 in.
V100-360 = (2.25)x(0.51)/ 12 = 0.095461 ac-ft = 4158 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.02)+(3.45)x(0.03)+(5.02)x(0.46)= 2.47 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.02)+(1.29)x(0.03)+(2.36)x(0.46)/ 0.51 ac.
= 2.25 in.
V100-360 = (2.25)x(0.51)/ 12.0 = 0.095461 ac-ft = 4158 cf

V100-1440 = (0.10)+(0.46)x(3.10 - 2.60)/ 12 = 0.114744 ac-ft = 4998 cf

V100-10day = (0.10)+(0.46)x(4.90 - 2.60)/ 12 = 0.184159 ac-ft = 8022 cf

PROPOSED PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.02)+(3.45)x(0.03)+(5.02)x(0.46)= **2.47 cfs**

BASIN 101 - 22,152 SF
ZONE 3
$Q_{100, DEV}$ = 2.5 CFS
$V_{100\text{-}6HR, DEV}$ = 4,158 CF

BASIN 102 AREA = 4639 sf
AREA = 0.11 ac.

DRAINAGE ZONE 3
PRECIPITATION: 360 = 2.60 in.
1140 = 3.10 in.
10day = 4.90 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.66 in.	1.87 cfs/ac.
TREATMENT B	0.92 in.	2.60 cfs/ac.
TREATMENT C	1.29 in.	3.45 cfs/ac.
TREATMENT D	2.36 in.	5.02 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0.00 ac.	0.00 ac.
TREATMENT B	0.00 ac.	0.00 ac.
TREATMENT C	0.08 ac.	0.08 ac.
TREATMENT D	0.03 ac.	0.03 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.00)+(1.29)x(0.08)+(2.36)x(0.03)/ 0.11 ac.
= 1.59 in.
V100-360 = (1.59)x(0.11)/ 12 = 0.014067 ac-ft = 613 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.00)+(3.45)x(0.08)+(5.02)x(0.03)= 0.42 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.00)+(1.29)x(0.08)+(2.36)x(0.03)/ 0.11 ac.
= 1.59 in.
V100-360 = (1.59)x(0.11)/ 12.0 = 0.014067 ac-ft = 613 cf

V100-1440 = (0.01)+(0.03)x(3.10 - 2.60)/ 12 = 0.015177 ac-ft = 661 cf

V100-10day = (0.01)+(0.03)x(4.90 - 2.60)/ 12 = 0.019170 ac-ft = 835 cf

PROPOSED PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.00)+(3.45)x(0.08)+(5.02)x(0.03)= **0.42 cfs**

BASIN 102 - 4,639 SF
ZONE 3
$Q_{100, DEV}$ = 0.4 CFS
$V_{100\text{-}6HR, DEV}$ = 835 CF

BASINS SUMMARY

BASIN ID	LAND TREATMENT				DISCHARGE RATE	BASIN SIZE
	A	B	C	D		
100	0	3	6	91	4.94 CFS	1.02 AC
101	0	3	6	91	2.47 CFS	0.51 AC
102	0	0	75	25	0.42 CFS	0.11 AC
103	0	0	0	100	5.18 CFS	1.03 AC

BASIN 103 AREA = 44924 sf
AREA = 1.03 ac.

DRAINAGE ZONE 3
PRECIPITATION: 360 = 2.60 in.
1140 = 3.10 in.
10day = 4.90 in.

	EXCESS PRECIPITATION:	PEAK DISCHARGE:
TREATMENT A	0.66 in.	1.87 cfs/ac.
TREATMENT B	0.92 in.	2.60 cfs/ac.
TREATMENT C	1.29 in.	3.45 cfs/ac.
TREATMENT D	2.36 in.	5.02 cfs/ac.

	EXISTING CONDITIONS: AREA	PROPOSED CONDITIONS: AREA
TREATMENT A	0.00 ac.	0.00 ac.
TREATMENT B	0.00 ac.	0.00 ac.
TREATMENT C	0.00 ac.	0.00 ac.
TREATMENT D	1.03 ac.	1.03 ac.

EXISTING EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.00)+(1.29)x(0.00)+(2.36)x(1.03)/ 1.03 ac.
= 2.36 in.
V100-360 = (2.36)x(1.03)/ 12 = 0.202825 ac-ft = 8835 cf

EXISTING PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.00)+(3.45)x(0.00)+(5.02)x(1.03)= 5.18 cfs

PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.66)x(0.00)+(0.92)x(0.00)+(1.29)x(0.00)+(2.36)x(1.03)/ 1.03 ac.
= 2.36 in.
V100-360 = (2.36)x(1.03)/ 12.0 = 0.202825 ac-ft = 8835 cf

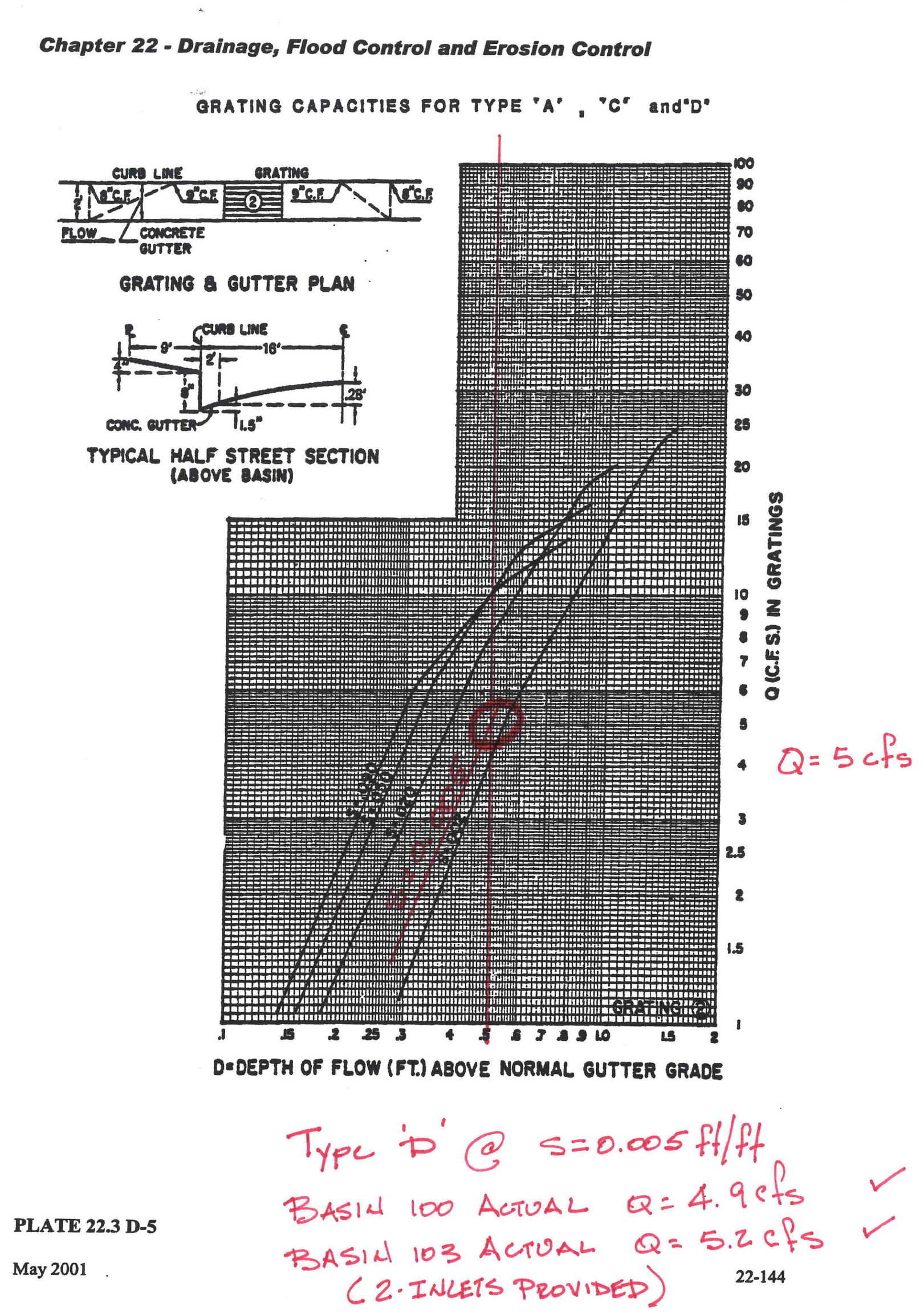
V100-1440 = (0.20)+(1.03)x(3.10 - 2.60)/ 12 = 0.245796 ac-ft = 10707 cf

V100-10day = (0.20)+(1.03)x(4.90 - 2.60)/ 12 = 0.400493 ac-ft = 17445 cf

PROPOSED PEAK DISCHARGE:

Q100 = (1.87)x(0.00)+(2.60)x(0.00)+(3.45)x(0.00)+(5.02)x(1.03)= **5.18 cfs**

BASIN 103 - 44,924 SF
ZONE 3
$Q_{100, DEV}$ = 5.2 CFS
$V_{100\text{-}6HR, DEV}$ = 8,835 CF



TYPE 'D' INLET CAPACITY
ROAD SLOPE = 0.005 ft/ft
Q = 5 cfs

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
FOUND MONUMENT "20_H18"
STANDARD 3 1/4" ALUMINUM DISC (FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,493,154.978
E=1,545,048.210
PUBLISHED EL=5283.22 (NAVD 1988)
GROUND TO GRID FACTOR=0.999661580
DELTA ALPHA ANGLE=-0°11'00.11"

SURVEY INFORMATION
FIELD NOTES
NO. — BY — DATE

ENGINEER'S SEAL


REVISIONS
NO. — DATE — REMARKS — BY
DESIGN
DESIGNED BY: KS — DATE: OCTOBER, 2015
DRAWN BY: LT — DATE: OCTOBER, 2015
DWG NAME: C100 DRAINAGE 17JUL17.dwg — PROJ #: R303699.01
CHECKED BY: SE — DATE: JANUARY, 2016

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

WINROCK TOWN CENTER
PHASE B

TITLE: HYDROLOGY

Design Review Committee	City Engineer	Last Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4553.00 | Zone Map No. J-19-Z | Sheet C100A Of

Plotted: 7/16/2017 9:03:54 PM, By:Eddings, Scott
H:\proj\R30564\5.01 Winrock\10 CADD & BIM\Sheet Set\BUILDING PERMIT\C100 DRAINAGE 17JUL17.dwg
Last Saved 7/16/2017 8:58:33 PM, seddings

ROCK CHANNEL

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.033	
Channel Slope	0.01000	ft/ft
Normal Depth	0.67	ft
Bottom Width	5.50	ft

Results

Discharge	10.99	ft³/s
Flow Area	3.69	ft²
Wetted Perimeter	6.84	ft
Hydraulic Radius	0.54	ft
Top Width	5.50	ft
Critical Depth	0.50	ft
Critical Slope	0.02499	ft/ft
Velocity	2.98	ft/s
Velocity Head	0.14	ft
Specific Energy	0.81	ft
Froude Number	0.64	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.67	ft
Critical Depth	0.50	ft
Channel Slope	0.01000	ft/ft
Critical Slope	0.02499	ft/ft

ROCK CHANNEL
CAPACITY = 10.99 CFS
REQUIRED = 10.1 CFS

STORM DRAIN 1

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.012	
Channel Slope	0.02080	ft/ft
Normal Depth	1.45	ft
Diameter	1.50	ft

Results

Discharge	17.53	ft³/s
Flow Area	1.75	ft²
Wetted Perimeter	4.16	ft
Hydraulic Radius	0.42	ft
Top Width	0.54	ft
Critical Depth	1.45	ft
Percent Full	96.7	%
Critical Slope	0.02074	ft/ft
Velocity	10.02	ft/s
Velocity Head	1.56	ft
Specific Energy	3.01	ft
Froude Number	0.98	
Maximum Discharge	17.65	ft³/s
Discharge Full	16.41	ft³/s
Slope Full	0.02372	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	96.67	%
Downstream Velocity	Infinity	ft/s

STORM DRAIN 1
CAPACITY = 17.5 CFS
REQUIRED = 5.2 CFS

STORM DRAIN 2

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.012	
Channel Slope	0.01450	ft/ft
Normal Depth	1.45	ft
Diameter	1.50	ft

Results

Discharge	14.63	ft³/s
Flow Area	1.75	ft²
Wetted Perimeter	4.16	ft
Hydraulic Radius	0.42	ft
Top Width	0.54	ft
Critical Depth	1.40	ft
Percent Full	96.7	%
Critical Slope	0.01430	ft/ft
Velocity	8.37	ft/s
Velocity Head	1.09	ft
Specific Energy	2.54	ft
Froude Number	0.82	
Maximum Discharge	14.74	ft³/s
Discharge Full	13.70	ft³/s
Slope Full	0.01654	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	96.67	%
Downstream Velocity	Infinity	ft/s

STORM DRAIN 2
CAPACITY = 14.6 CFS
REQUIRED = 5.2 CFS

STORM DRAIN 3

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.012	
Channel Slope	0.01250	ft/ft
Normal Depth	1.45	ft
Diameter	1.50	ft

Results

Discharge	13.59	ft³/s
Flow Area	1.75	ft²
Wetted Perimeter	4.16	ft
Hydraulic Radius	0.42	ft
Top Width	0.54	ft
Critical Depth	1.37	ft
Percent Full	96.7	%
Critical Slope	0.01242	ft/ft
Velocity	7.77	ft/s
Velocity Head	0.94	ft
Specific Energy	2.39	ft
Froude Number	0.76	
Maximum Discharge	13.69	ft³/s
Discharge Full	12.72	ft³/s
Slope Full	0.01426	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	96.67	%
Downstream Velocity	Infinity	ft/s

STORM DRAIN 3
CAPACITY = 13.7 CFS
REQUIRED = 10.1 CFS

HYRDAULIC SUMMARY

INFRASTRUCTURE	SIZE	SLOPE (FT/FT)	CAPACITY RATE	REQUIRED RATE
CONCRETE CHANNEL	3' X 8"	0.006	10.7 CFS	10.1 CFS
STORM DRAIN 1	18"	0.0208	17.5 CFS	5.2 CFS
STORM DRAIN 2	18"	0.0145	14.6 CFS	5.2 CFS
STORM DRAIN 3	18"	0.0125	13.7 CFS	10.1 CFS

AS BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

FOUND MONUMENT "20_H18"
STANDARD 3 1/4" ALUMINUM DISC (FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE–N.A.D. 1983)
N=1,493,154.978
E=1,545,048.210
PUBLISHED EL=5283.22 (NAVD 1988)
GROUND TO GRID FACTOR=0.999661580
DELTA ALPHA ANGLE=–0°11'00.11"

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

12856 REGISTERED PROFESSIONAL ENGINEER
7/17/17

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY: KS DATE: OCTOBER, 2015
DRAWN BY: LT DATE: OCTOBER, 2015
DWG NAME: C100 DRAINAGE 17JUL17.dwg PROJ #: R303699.01
CHECKED BY: SE DATE: JANUARY, 2016

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

WINROCK TOWN CENTER
PHASE B

TITLE: HYDROLOGY

Design Review Committee	City Engineer		Mo./Day/Yr.	Mo./Day/Yr.
		Last Update		

City Project No.	Zone Map No.	Sheet	Of
4553.00	J-19-Z	C100B	

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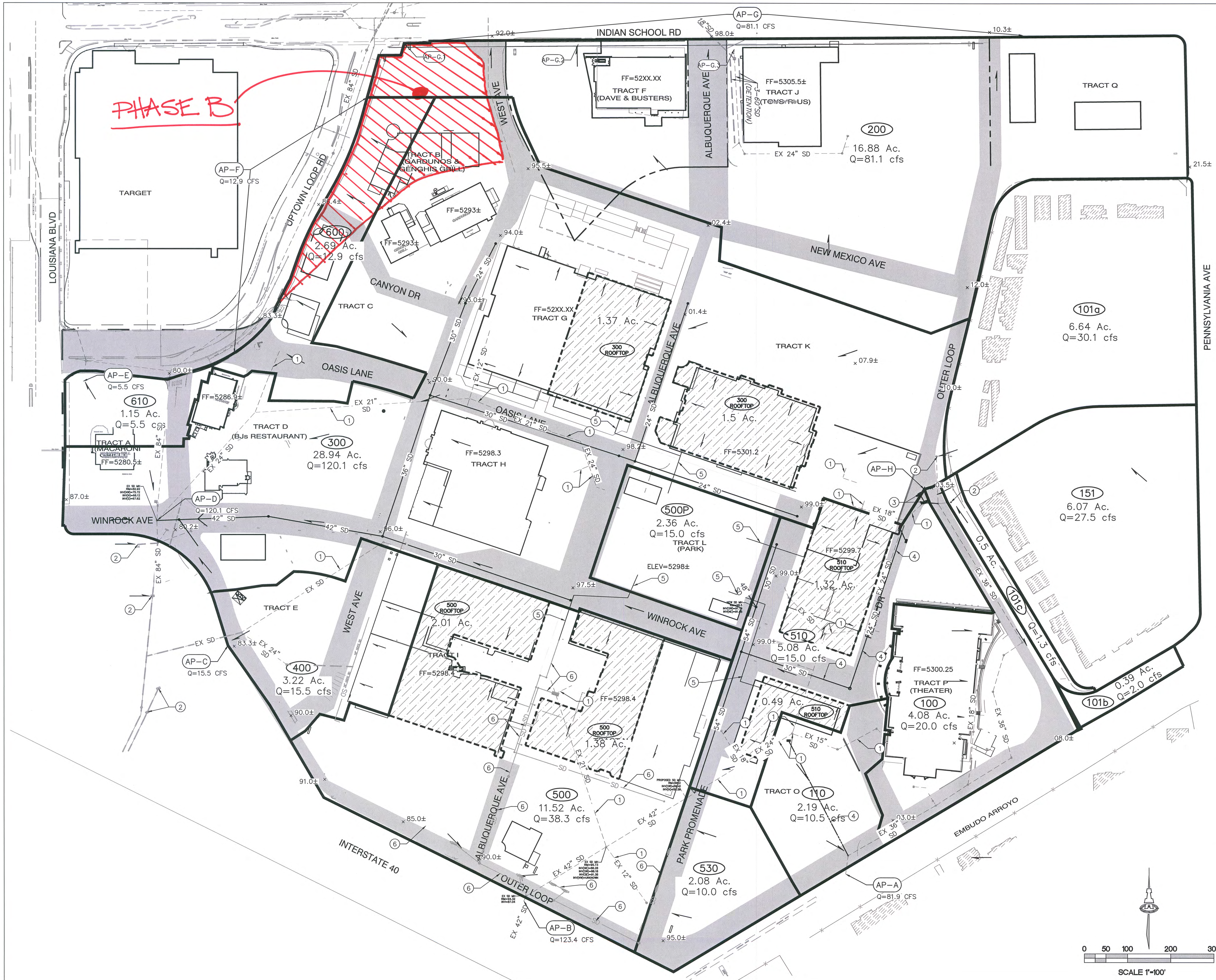
Last Saved:7/16/2017 9:12:32 PM, seddings


PHASE B
INDIAN SCHOOL RD
AP-G
Q=81.1 CFS
TARGET
AP-F
Q=12.9 CFS
LOUISIANA BLVD
UPTOWN LOOP RD
TRACT B (GARDUNOS & GENGHIS GRILL)
600
2.69 Ac.
Q=12.9 cfs
FF=5293±
CANYON DR
TRACT C
WEST AVE
TRACT F (DAVE & BUSTERS)
FF=52XX.XX
ALBUQUERQUE AVE
TRACT J (TOYS R US)
FF=5305.5±
EX 24" SD
200
16.88 Ac.
Q=81.1 cfs
TRACT Q
NEW MEXICO AVE
TRACT G
FF=52XX.XX
1.37 Ac.
300 ROOFTOP
TRACT K
300 ROOFTOP
1.5 Ac.
FF=5301.2
OUTER LOOP
101a
6.64 Ac.
Q=30.1 cfs
PENNSYLVANIA AVE
OASIS LANE
AP-E
Q=5.5 CFS
610
1.15 Ac.
Q=5.5 cfs
TRACT A (MACARONI GRILL)
FF=5280.5±
FF=5286.9±
TRACT D (BJs RESTAURANT)
300
28.94 Ac.
Q=120.1 cfs
AP-D
Q=120.1 CFS
WINROCK AVE
TRACT H
FF=5298.3
500P
2.36 Ac.
Q=15.0 cfs
TRACT L (PARK)
ELEV=5298±
AP-H
151
6.07 Ac.
Q=27.5 cfs
510 ROOFTOP
FF=5299.7
1.32 Ac.
101c
0.5 Ac.
Q=1.3 cfs
TRACT E
AP-C
Q=15.5 CFS
400
3.22 Ac.
Q=15.5 cfs
500 ROOFTOP
2.01 Ac.
TRACT I
FF=5298.4
FF=5298.4
500 ROOFTOP
1.38 Ac.
510
5.08 Ac.
Q=15.0 cfs
0.49 Ac.
510 ROOFTOP
TRACT P (THEATER)
FF=5300.25
100
4.08 Ac.
Q=20.0 cfs
101b
0.39 Ac.
Q=2.0 cfs
500
11.52 Ac.
Q=38.3 cfs
TRACT O
110
2.19 Ac.
Q=10.5 cfs
PARK PROMENADE
530
2.08 Ac.
Q=10.0 cfs
INTERSTATE 40
OUTER LOOP
AP-B
Q=123.4 CFS
AP-A
Q=81.9 CFS
EMBUDO ARROYO
0 50 100 200 300
SCALE 1"=100'

KEYED NOTES

1. EXISTING STORM DRAIN TO BE ABANDONED IN PLACE OR REMOVED.
2. EXISTING INLET.
3. 2 PROPOSED STORM INLETS TO BE BUILT WITH DEVELOPMENT IN BASIN 510. CONNECT TO EXISTING 36" SD THAT DISCHARGES AT AP-A.
4. POSSIBLE LOCATION FOR STORM DRAIN TO PICK UP FLOWS WITHIN THIS BASIN. FINAL CONFIGURATION AND SIZING TO BE DETERMINED BY GRADING & DRAINAGE PLAN FOR INDIVIDUAL SITE.
5. POSSIBLE LOCATIONS FOR ROOF DRAIN CONNECTIONS TO WATER FEATURE.
6. STORM DRAIN LOCATIONS FOR "SECTION 2". SEE INDIVIDUAL GRADING & DRAINAGE PLAN FOR SIZES AND INLET TYPES.

LEGEND

- EXISTING STORM DRAIN LINE
- 30" SD — NEW STORM DRAIN LINE
- NEW MANHOLE
- RD — NEW ROOF DRAIN
- BASIN LINE
- 400 — BASIN ID
- ROOFTOP BASIN HATCH
- AP-X — ANALYSIS POINT ID

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

2031 C-701 DRAINAGE BASIN EXHIBIT.dwg Jun 29,2015

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WINROCK TOWN CENTER (I-25 & LOUISIANA BLVD. NE)

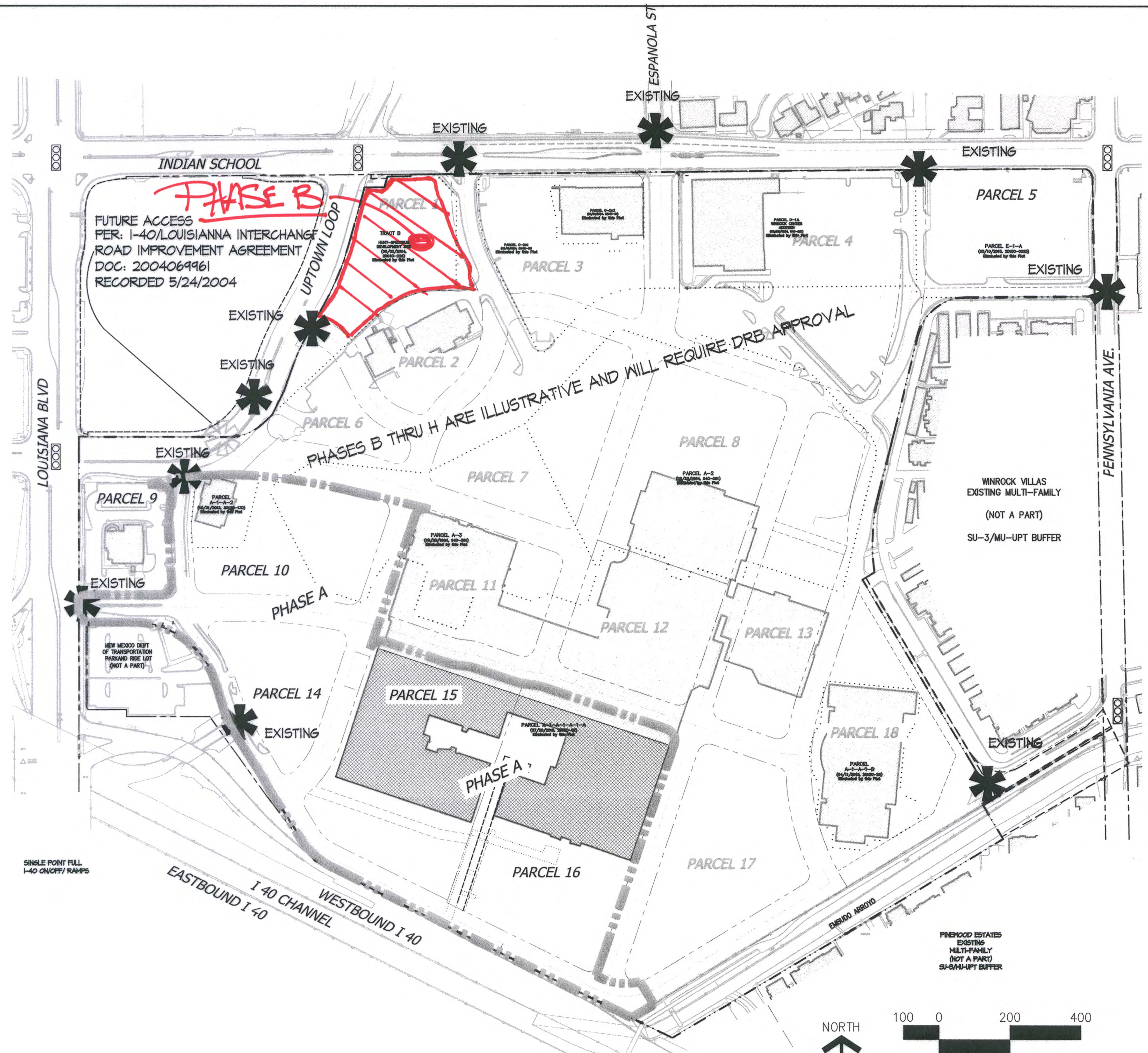
GOODMAN REALTY GROUP

BASIN MAP

Date:	No.	Revision:	Date:	Job No.
Drawn By:				C-701
Ckd By:				SH. OF

C101

M:\PROJECTS\2000-2099\2031\DWG\2031 C-701 DRAINAGE BASIN EXHIBIT.dwg, 6/29/2015 11:34:18 AM, GLD



SITE PLAN AMENDMENT FOR SUBDIVISION PUPRPOSES
PHASE A

WINROCK CENTER
ADDITION

TO AMEND OVERALL SITE CIRCULATION
WINROCK CENTER ADDITION
SECTION 18, T. 10N., R. 4.E., N.M.P.M.
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
NOVEMBER, 2015 - AMENDED PER DRB

PROJECT NUMBER: 1002202
APPLICATION NUMBER 15DRB-70305

IS AN INFRASTRUCTURE LIST REQUIRED? (X) YES ( ) NO IF YES, THEN A SET OF APPROVED DRC 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 APPROVAL:

[signature] TRAFFIC ENGINEERING, TRANSPORTATION DIVISION	11/18/15 DATE
ABCWUA	DATE
Carol S. Dumont PARKS AND RECREATION DEPARTMENT	11-18-15 DATE
[signature] CITY ENGINEER	11-18-15 DATE
ENVIRONMENTAL HEALTH DEPARTMENT (CONDITIONAL)	DATE
SOLID WASTE MANAGEMENT	DATE
DRB CHAIRPERSON, PLANNING DEPARTMENT	DATE

REVISION HISTORY: SITE PLAN FOR SUBDIVISION PURPOSES AND SUBDIVISIONS, CASE 1002202:

8.	MARCH 10, 2015 DRB#2015C0023 REPLAT PARCEL A-1-A-1-A AND E-1 INTO A-1-A-1-A-1 AND E-1-A
7.	APRIL 23, 2014 DRB #2015C0082 REPLAT PARCEL C-2A INTO C-2A1 AND C-2A2.
6.	OCTOBER 9, 2013 DRB #13-70670 AND DRB #13-70671 TO AMEND DEVELOPMENT OF TRACT C-2A. PHASING KEY MAP REVISED TO REFLECT DRB#13-70489.
5.	MAR. 27, 2013 DRB #13-70488 AND 70489 DIVIDING TRACT A-1-A-1 TO CREATE TRACT A-1-A-1-B AND RENAME BALANCE AS A-1-A-1-A. PHASING KEY MAP REVISED TO REFLECT 8-2-12 ADMIN. AMENDMENT.
4.	FEB. 25, 2013 ADMIN. AMENDMENT 13-10179 REVISING DRIVE AISLE AND LANDSCAPING FOR THEATER (NO SUBDIVISION EFFECT)
3.	SEPT. 26, 2012 EXISTING TRACT A-1-A DIVIDED INTO A-1-A-1 AND A-1-A-2 TO PROVIDE FOR BJ'S RESTAURANT (SHOWN PREVIOUSLY AS PHASE 2).
2.	AUG. 2, 2012 ADMINISTRATIVE AMENDMENT APPROVED REVISING BUILDING LOCATION FOR CINEMA AND REVISING PHASING LOCATIONS.
1.	MAY 9, 2012 SITE PLAN APPLICATION NO. 12-70106. PROPOSES TO CREATE 6 NEW "LOTS AND DESCRIBES THEN-CURRENT PHASING.

SITE PLAN FOR SUBDIVISION - REQUIRED INFORMATION

THIS SITE DEVELOPMENT PLAN FOR SUBDIVISION AMENDS THE PRIOR APPROVED WINROCK MARKET CENTER SITE DEVELOPMENT PLAN FOR SUBDIVISION 05EPC00876, PROJECT NO, 1002202 AND FOLLOWS THE ADMINISTRATIVE AMENDMENT APPROVED AUGUST 2, 2012 (FILE: 12-10073), AND SITE DEVELOPMENT PLAN AMENDMENT APPROVED BY DRB OCTOBER 9, 2013 (FILE: 13-70671).

THE SITE:
THE SITE CONSISTS OF APPROXIMATELY 83 ACRES. THE INTERIOR PARCEL LINES SHOWN ON SHEET SPSD-2 ARE ILLUSTRATIVE. FINAL PLATTING WILL OCCUR AS SPECIFIC DEVELOPMENT PROJECTS ARE PROPOSED. THE SUBJECT PROPERTY IS PROPOSED TO BE SUBDIVIDED INTO EIGHTEEN SEPARATE PARCELS.

PROPOSED USE:
THE SITE IS ZONED SU-3 (MU-UPT AND MU-UPT BUFFER) AS FOLLOWS:

PROPOSED PHASE A PARCELS
PARCEL 5 : 3.26 AC.
PARCEL 9 : 1.40 AC.
PARCEL 10 : 3.13 AC.
PARCEL 14 : 1.77 AC.
PARCEL 15 : 5.03 AC.
PARCEL 16 : 5.91 AC.

PROPOSED FUTURE PARCELS

PARCEL 1 : 2.24 AC.	PARCEL 7 : 4.01 AC.	PARCEL 13 : 3.44 AC.
PARCEL 2 : 1.66 AC.	PARCEL 8 : 4.00 AC.	
PARCEL 3 : 3.05 AC.		
PARCEL 4 : 6.31 AC.	PARCEL 10 : 3.13 AC.	
	PARCEL 11 : 2.61 AC.	PARCEL 17 : 3.57 AC.
PARCEL 6 : 1.26 AC.	PARCEL 12 : 2.70 AC.	PARCEL 18 : 4.47 AC.

THE BALANCE OF THE PROPERTY IS WITHIN PROPOSED RIGHT-OF-WAY AND SHALL BE DEDICATED TO THE CITY OF ALBUQUERQUE.

PROPOSED USE:
THE SITE IS ZONED SU-3 (MU-UPT AND MU-UPT BUFFER) LAND USES ARE AS FOLLOWS:

RETAIL/RESTAURANT/THEATER 915,482 S.F. *USES AND SQUARE FOOTAGES ARE APPROVED
*OFFICE 24,000 S.F. PER PREVIOUS SITE DEVELOPMENT PLAN FOR SUBDIVISION.
*HOTEL: 174 ROOMS
*MULTI-FAMILY 66 UNITS (AREA - 3.11 AC. GROSS DENSITY-21.11 DU/AC.)

PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS:
VEHICULAR ACCESS:
LOUISIANA BOULEVARD PROVIDES THE MAJOR SIGNALIZED ACCESS INTO WINROCK TOWN CENTER VIA UPTOWN LOOP. ADDITIONAL ACCESS POINTS ARE PROVIDED AT LOUISIANA BOULEVARD, INDIAN SCHOOL ROAD, AND PENNSYLVANIA STREET. THERE IS DIRECT ACCESS FROM WINROCK TOWN CENTER TO I-40 WEST. THESE ACCESS POINTS ARE CONSISTENT WITH THE UPTOWN SECTOR DEVELOPMENT PLAN AND PREVIOUS APPROVALS FOR WINROCK.

BICYCLE AND TRAIL ACCESS:
BICYCLE ACCESS IS PROVIDED BY 6 FOOT ON-STREET BIKE LANES IN LOUISIANA BOULEVARD, PENNSYLVANIA STREET, AND INDIAN SCHOOL ROAD. TRAIL ACCESS IS PROVIDED ACROSS PENNSYLVANIA VIA THE PASEO DE LAS MONTANAS TRAIL, CONTINUES ALONG WINROCK'S SOUTHERN EDGE, CONNECTS TO THE PEDESTRIAN OVERPASS AND CONTINUES ACROSS I-40. SIDEWALKS WILL PROVIDE PEDESTRIAN CONNECTIVITY WITHIN WINROCK TOWN CENTER CONSISTENT WITH THE REQUIREMENTS OF THE UPTOWN SECTOR DEVELOPMENT PLAN .

TRANSIT ACCESS:
LOUISIANA BOULEVARD IS DESIGNATED A MAJOR TRANSIT CORRIDOR, WITH A REGULAR BUS ROUTE AND A RAPID RIDE ROUTE AND INDIAN SCHOOL ROAD INCLUDES A COMMUTER ROUTE. THE UPTOWN TRANSIT CENTER IS LOCATED NEARBY OFF INDIAN SCHOOL ROAD, WEST OF LOUISIANA BOULEVARD. A TRANSIT FACILITY IS PROVIDED AT THE SOUTHWEST CORNER OF WINROCK TOWN CENTER, WITH 113 PARKING SPACES PROVIDED.

INTERNAL CIRCULATION REQUIREMENTS:
INTERNAL CIRCULATION IS PROVIDED THROUGH THE SITE VIA A RING ROAD SYSTEM, SIDEWALKS SHALL BE DEVELOPED CONSISTENT WITH THE REQUIREMENTS OF THE UPTOWN SECTOR DEVELOPMENT PLAN.

BUILDING HEIGHTS AND SETBACKS:
BUILDING HEIGHTS AND SETBACKS SHALL BE CONSISTENT WITH THE REQUIREMENTS IN THE UPTOWN SECTOR DEVELOPMENT PLAN AND THE CITY COMPREHENSIVE ZONING CODE.

FAR:
THE MINIMUM FLOOR AREA RATIO (FAR) IS .30 FOR WINROCK TOWN CENTER AS REQUIRED BY THE UPTOWN SECTOR DEVELOPMENT PLAN.

SU-3 AREA	BUILDING	F.A.R.
3,619,688 S.F.(83.10 AC.)	1,106,808 S.F.	.31

OWNER/DEVELOPER
WINROCK PARTNERS, LLC.

LANDSCAPE PLAN:
LANDSCAPE PLANS SHALL BE CONSISTENT WITH CITY STANDARDS AND POLICIES REGARDING WATER CONSERVATION AND POLLEN, THE UPTOWN SECTOR DEVELOPMENT PLAN, AND THE CITY'S COMPREHENSIVE ZONING CODE.

PHASING:
PHASE A - DEMOLITION OF PORTION OF EX. WINROCK MALL.
CONSTRUCT PORTION OF STREETS C, D, E, & F.
DEVELOP ALL OR PORTION OF PARCELS 10, 14, 15, & 16.

PHASE B - DEVELOP ALL OR PORTION OF PARCEL 1.

PHASE C - DEMOLITION OF PORTION OF EX. WINROCK MALL.
CONSTRUCT PORTION OF STREETS A, B, D, H, & E.
DEVELOP ALL OR PORTION OF PARCELS 2, 6, & 7.

PHASE D - DEMOLITION OF PORTION OF EX. WINROCK MALL.
CONSTRUCT PORTION OF STREETS B, E, & F.
DEVELOP ALL OR PORTION OF PARCEL 12.

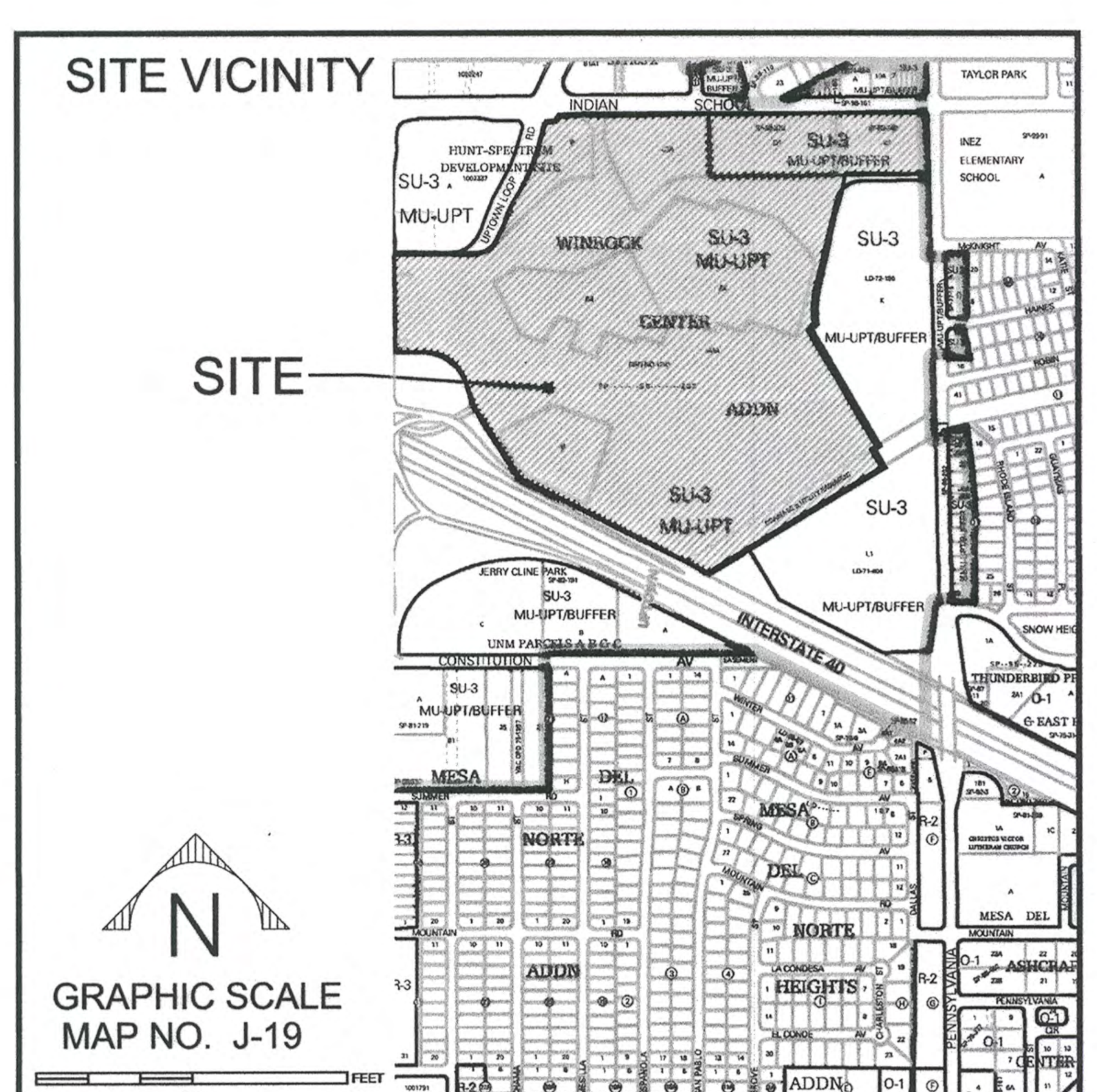
PHASE E - DEMOLITION OF PORTION OF EX. WINROCK MALL.
DEVELOP ALL OR PORTION OF PARCEL 11.

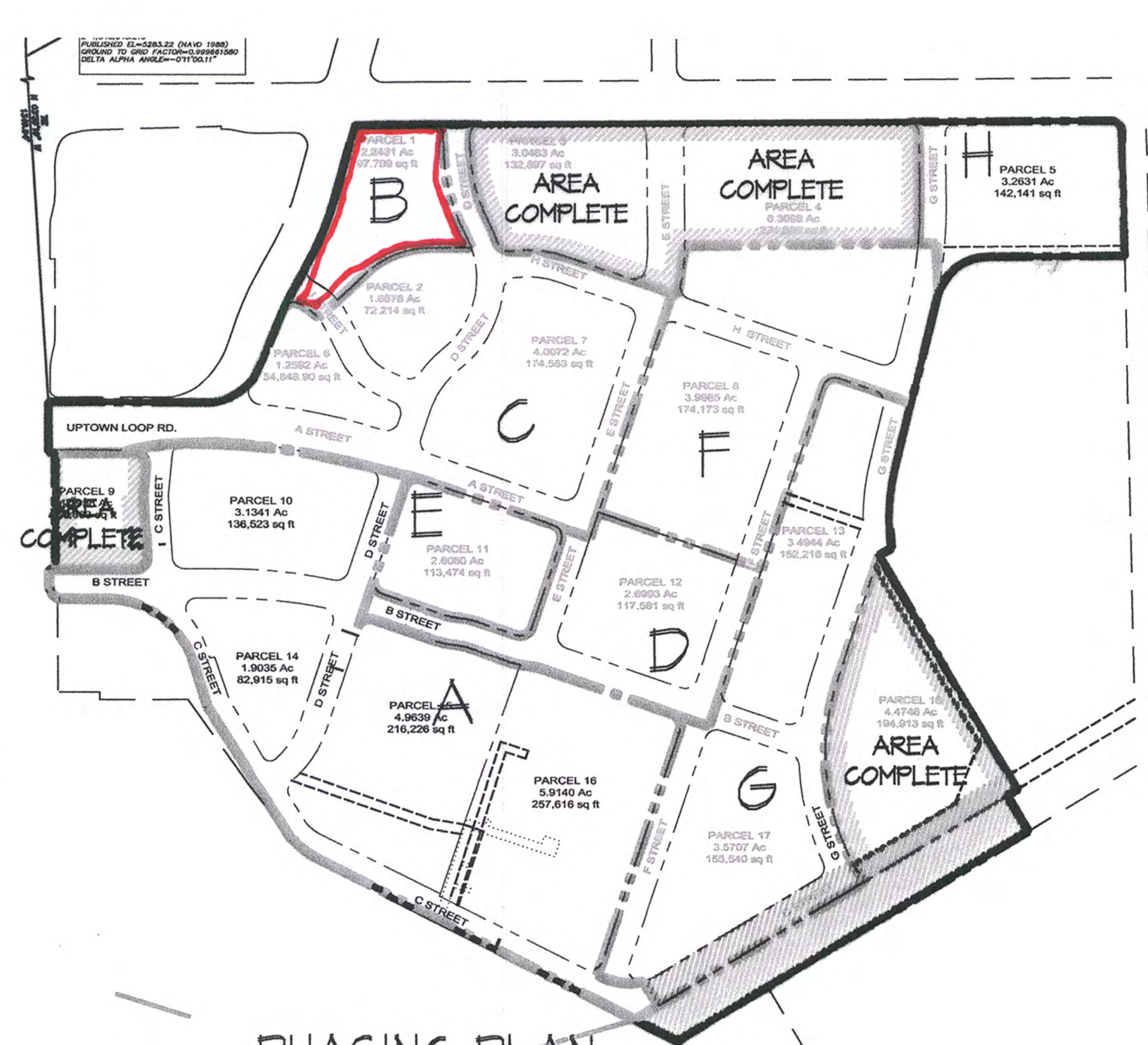
PHASE F - DEMOLITION OF PORTION OF EX. WINROCK MALL.
CONSTRUCT PORTION OF STREETS H, F, & G.
DEVELOP ALL OR PORTION OF PARCELS 4 & 8.

PHASE G - CONSTRUCT PORTION OF STREETS B, C, F, & G.
DEVELOP ALL OR PORTION OF PARCELS 13 & 17.

PHASE H - CONSTRUCT PORTION OF STREET G.
DEVELOP ALL OR PORTION OF PARCEL 5.

LEGEND
EXISTING BUILDING
BUILDING UNDER CONSTRUCTION
PHASE A





PHASES B THRU H ARE ILLUSTRATIVE AND WILL REQUIRE DRB APPROVAL

* APPROVED ACCESS POINTS PER PREVIOUS SITE DEVELOPMENT PLAN FOR SUBDIVISION. ACCESS POINTS TO BE DEVELOPED IN CONJUNCTION WITH FUTURE PHASES.

GENERAL NOTES:
1. LOT LINES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. FINAL PLATTING FOR THE WINROCK TOWN CENTER SHALL OCCUR AT THE END OF SITE AND BUILDING CONSTRUCTION WITH INDIVIDUAL LOT BOUNDARIES FOR THE SU-3 AREAS AS AGREED TO WITH THE PLANNING DIRECTOR.
2. PHASING AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE UPTOWN SECTOR DEVELOPMENT PLAN.
3. FUTURE APPROVALS FOR SPECIFIC DEVELOPMENT PROJECTS SHALL BE IN COMPLIANCE WITH THE UPTOWN SECTOR DEVELOPMENT PLAN AND THIS SITE DEVELOPMENT PLAN FOR SUBDIVISION.
4. PARKING AS SHOWN IS ILLUSTRATIVE AND SUBJECT TO COMPLIANCE WITH THE UPTOWN SECTOR DEVELOPMENT PLAN. A SHARED PARKING AGREEMENT WILL BE REQUIRED FOR THE SITE TENANTS.
5. WINROCK MANAGEMENT SHALL PROVIDE SUFFICIENT ON-SITE SECURITY
6. SUFFICENT WAYFINDING SIGNAGE AND RING ROAD STRIPING SHALL BE PROVIDED TO DIRECT USERS TO TENANT LOCATIONS AS WELL AS TO PROJECT EXITS.

Plotted: 11/18/2015 7:30:39 AM, By:Eddings, Scott
H:\proj\R303699 Winrock\CAD\Sheet Set\Section 2\DRB\SITE PLAN FOR SUBDIVISION.dwg
Last Saved:11/17/2015 1:46:18 PM, seddings

AS BUILT INFORMATION: CONTRACTOR / DATE
BENCH MARKS: FOUND MONUMENT "20_H18" STANDARD 3 1/4" ALUMINUM DISC (FOUND IN PLACE) NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983) N=1,483,154.978 E=1,545,048.210 PUBLISHED EL=5283.22 (NAVD 1988) GROUND TO GRID FACTOR=0.99965580 DELTA ALPHA ANGLE=-0°11'00.11"
SURVEY INFORMATION: FIELD NOTES / NO. / BY / DATE
ENGINEER'S SEAL: SCOTT A. EDDINGS, NEW MEXICO, 12856, REGISTERED PROFESSIONAL ENGINEER

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

NO.	DATE	REVISIONS / REMARKS	BY

DESIGN: DESIGNED BY: KS — DATE: OCTOBER, 2015; DRAWN BY: SE — DATE: OCTOBER, 2015; DWG NAME: SITE PLAN FOR SUBDIVISION — PROJ. #: 303399.01; CHECKED BY: KS — DATE: OCTOBER, 2015

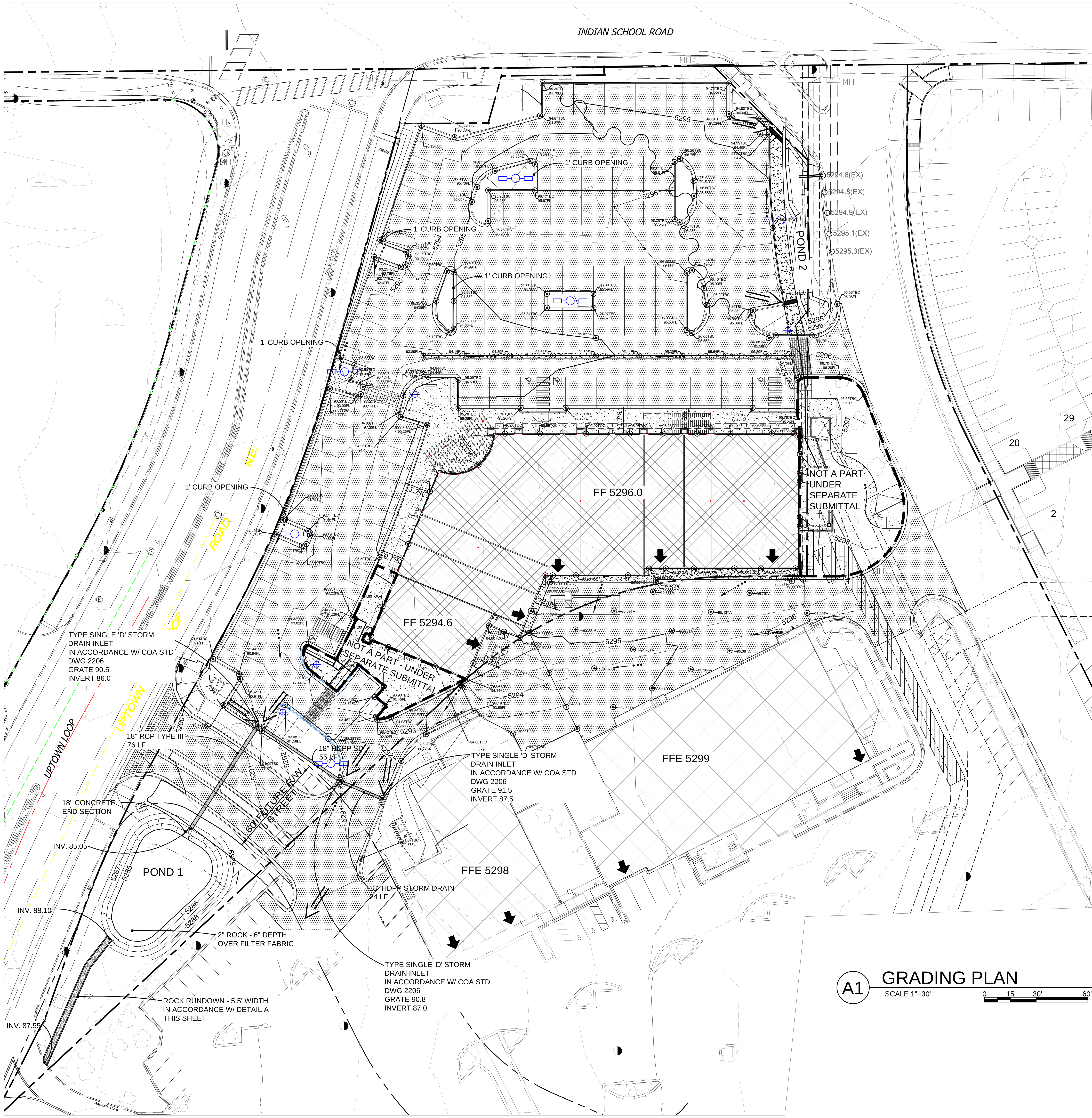
WINROCK TOWN CENTER

TITLE:
SITE PLAN FOR SUBDIVISION

Design Review Committee	City Engineer	Last Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet Of
4553.00	J-19-Z	SPSD-1

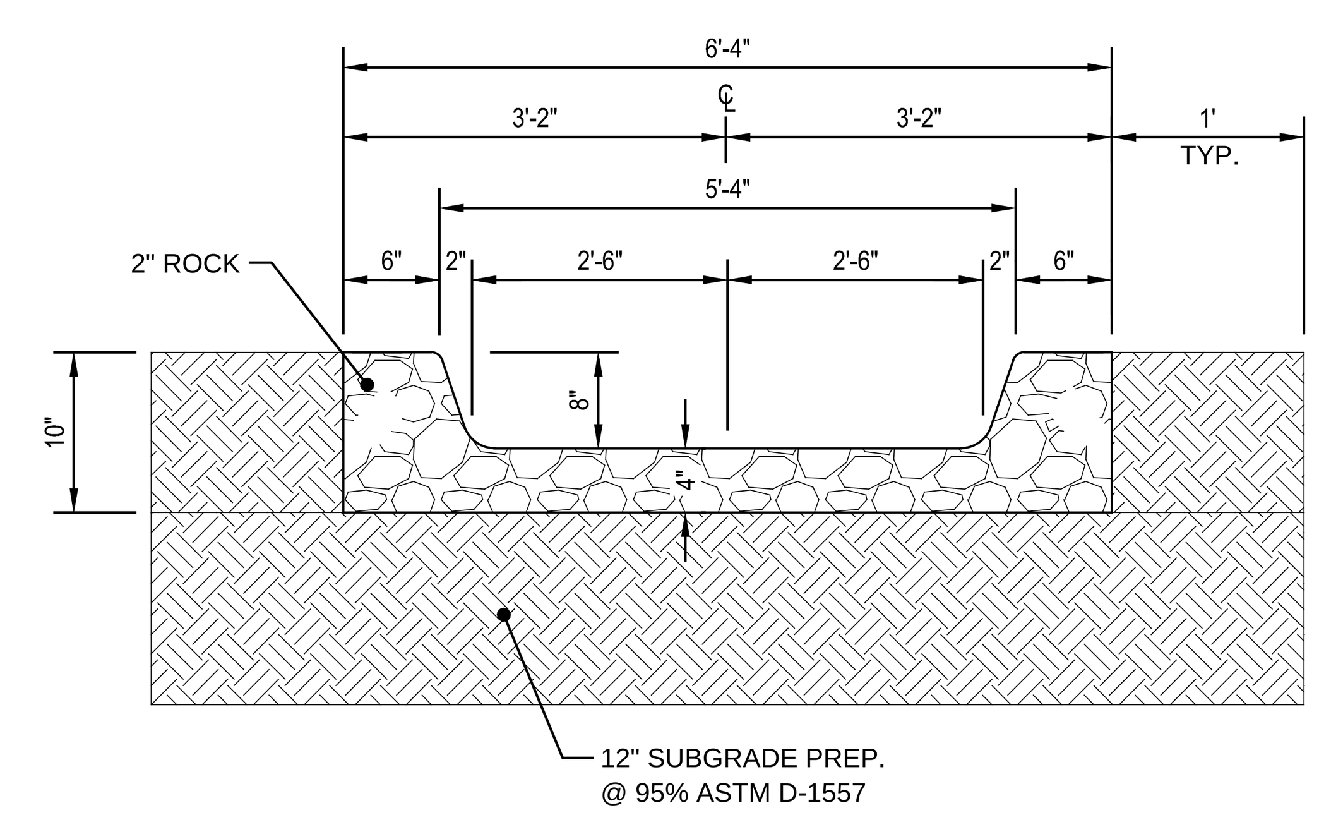
C101A



A1 GRADING PLAN
SCALE 1"=30'
0 15' 30' 60'

LEGEND

- BUILDING
- CONCRETE
- ASPHALT
- GRADE BREAK
- ROOF DRAIN LOCATION
- DIRECTION OF FLOW
- DISCHARGE LOCATION



ROCK RUNDOWN (A)
SCALE: N.T.S.

AS BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
FOUND MONUMENT "20_H18"
STANDARD 3 1/4" ALUMINUM DISC (FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,493,154.978
E=1,545,048.210
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GROUND TO GRID FACTOR=0.999661580
DELTA ALPHA ANGLE=-0°11'00.11"

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL

REVISIONS
NO. DATE REMARKS BY

DESIGN
DATE: OCTOBER, 2015
DATE: OCTOBER, 2015
PROJ #: R303699.01
DATE: JANUARY, 2016
DESIGNED BY: KS
DRAWN BY: LT
DWG NAME: C102 GRADING17JUL17.dwg
CHECKED BY: SE

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

WINROCK TOWN CENTER
PHASE B

TITLE: GRADING PLAN

Design Review Committee	City Engineer	Mo./Day/Yr.	Mo./Day/Yr.
		Last Update	

City Project No.	Zone Map No.	Sheet	Of
4553.00	J-19-Z	C102	

Plotted: 7/16/2017 8:47:01 PM, By:Eddings, Scott
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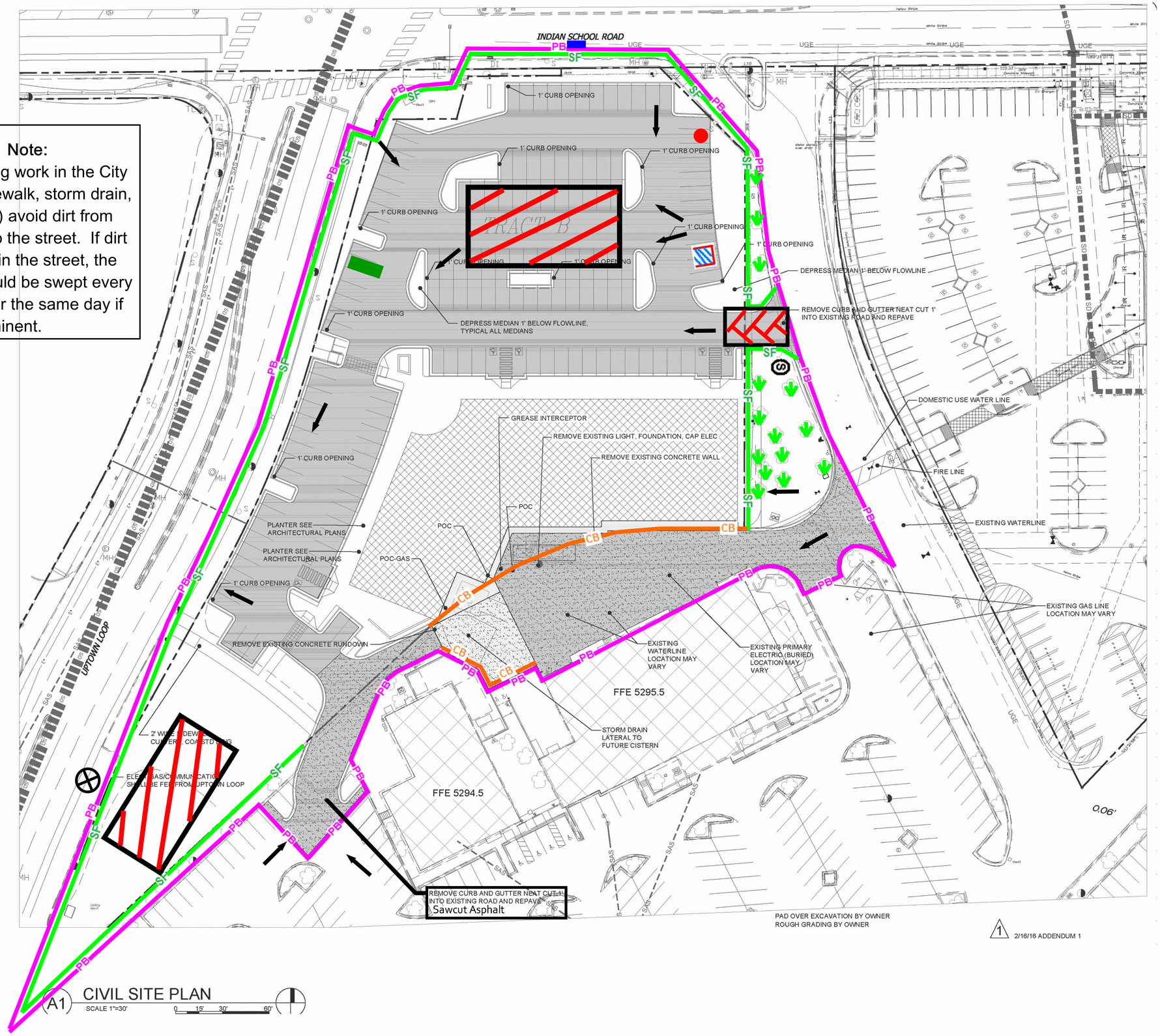
Last Saved:7/16/2017 8:45:37 PM, seddings

Inspections Plus, Inc.

Note:
When doing work in the City ROW (sidewalk, storm drain, drive pads) avoid dirt from getting into the street. If dirt is present in the street, the street should be swept every few days or the same day if rain is imminent.



A1 CIVIL SITE PLAN
SCALE 1"=30' 0 15' 30' 60'

1 2/16/16 ADDENDUM 1

Engineer Stamp

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

3/30/16

Legend

Erosion Sediment Control Plan

- PB — Project Perimeter & Disturbed Area
- SF — Silt Fence
- Pre Flow & Post Flow
- Outfall
- Posting Sign
- Preserved Vegetation
- Staging Area
- Stabilized Construction Entrance
- Trash Receptacle
- Chemical Toilet
- Concrete Washout
- CB — Cut Back at curb / Cut Below Grade

Section 8

Receiving Waters and Critical Habitat: Rio Grande is located 10.8 miles to the West.

Impairments: E. coli, Dissolved Oxygen, PCBs in Fish Tissue, Water Temperature

Grade: Before and After 0.5% to 1%