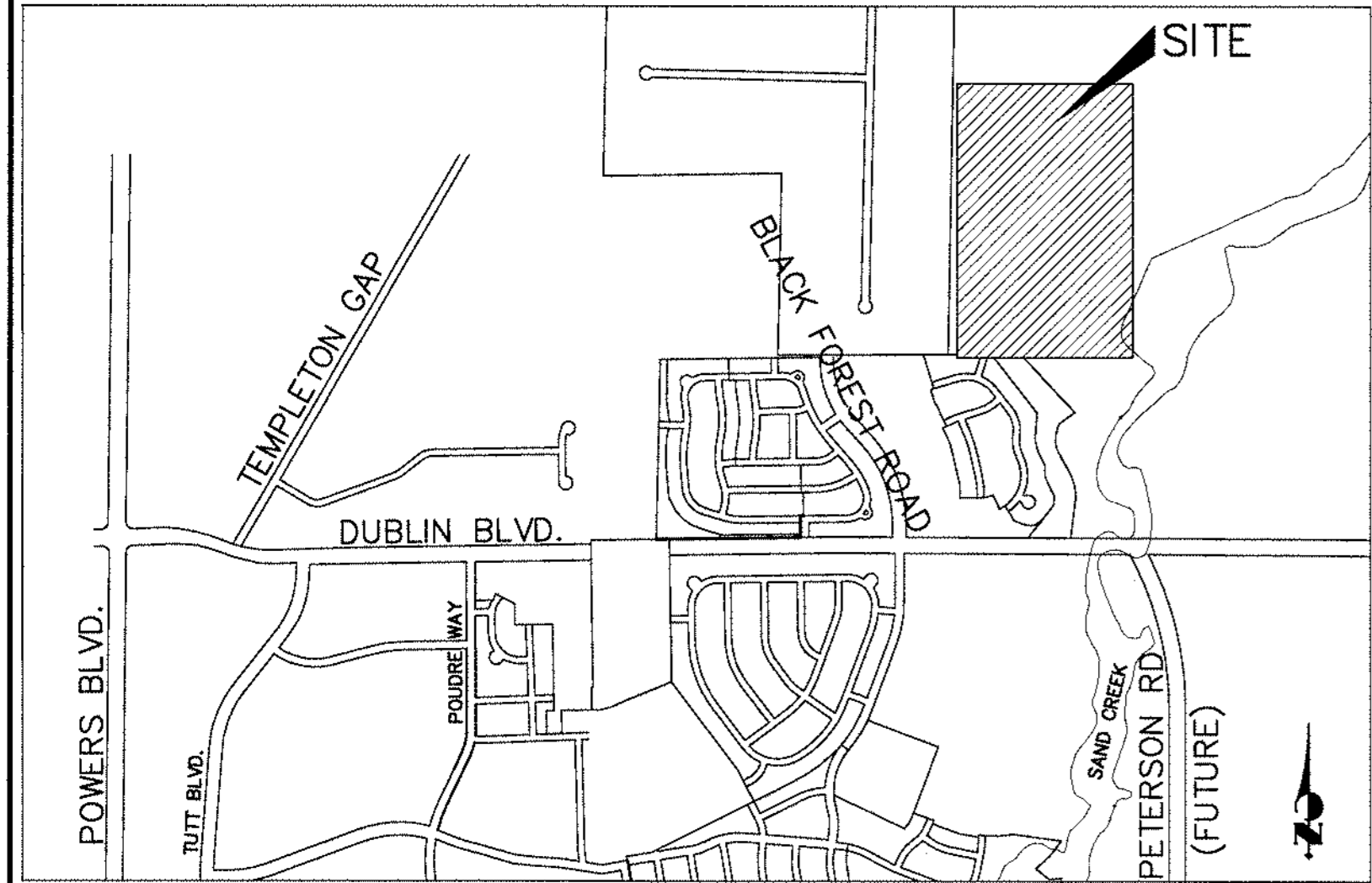


WOODMEN HEIGHTS 7, 8, & 9 MDDP

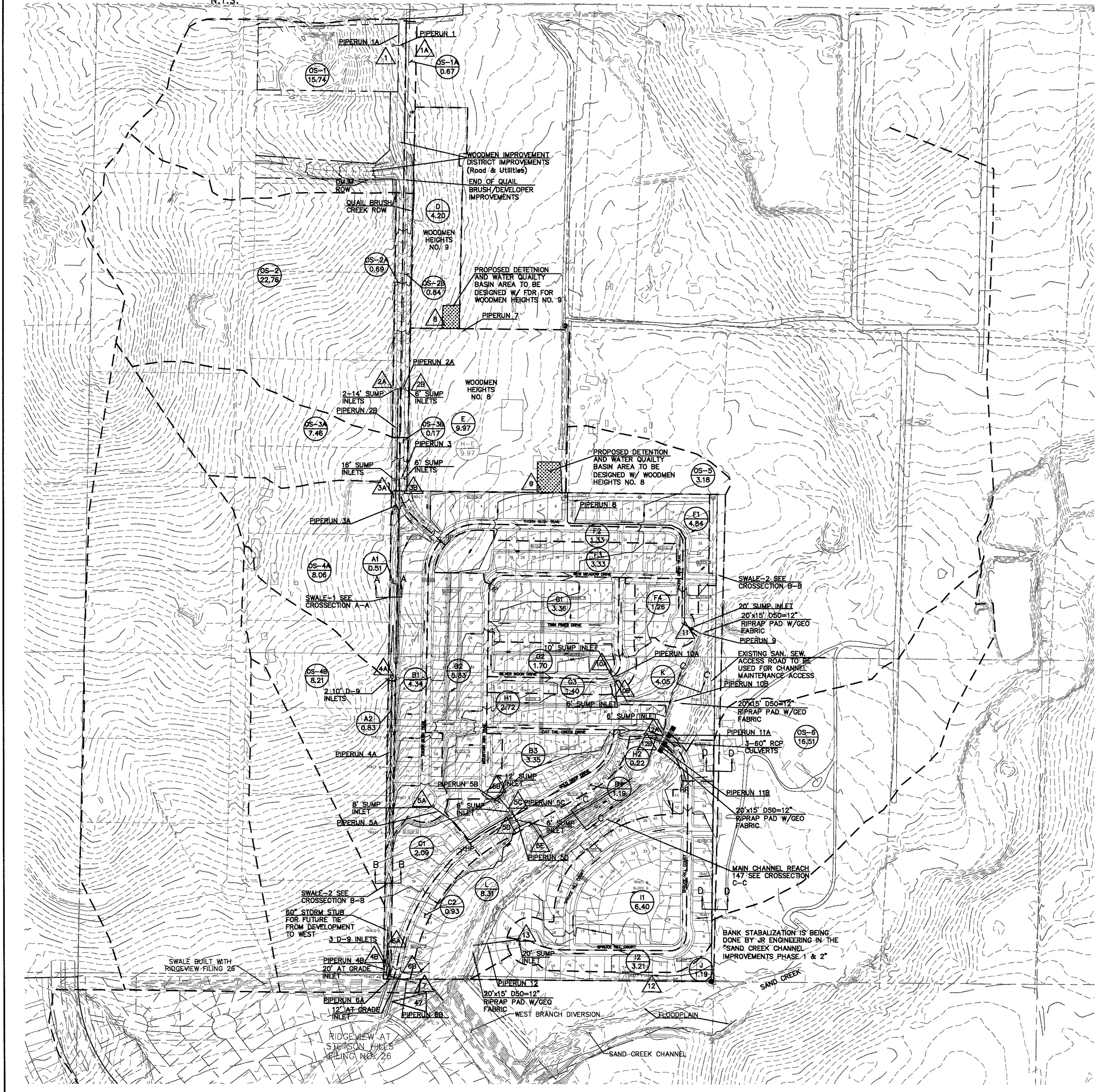
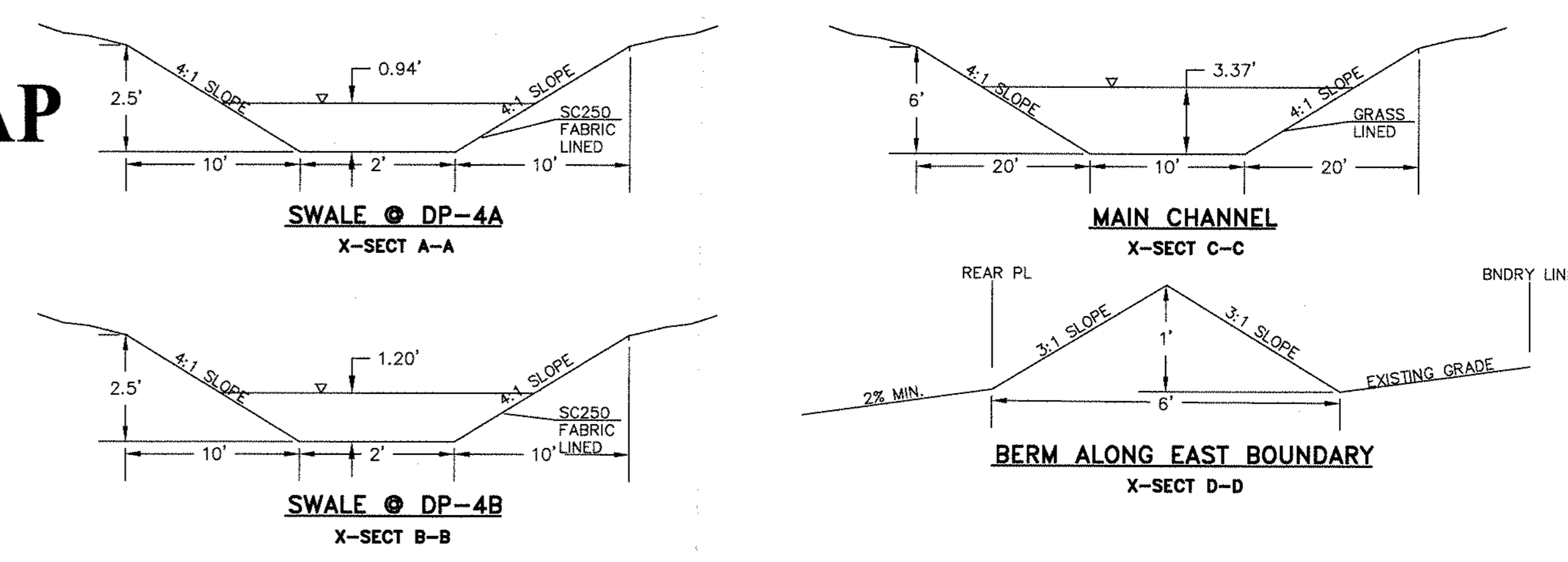
CITY OF COLORADO SPRINGS

DEVELOPED DRAINAGE MAP

MARCH 2007



VICINITY MAP
N.T.S.



NOTES:
 1. PIPE SIZES AND INLET SIZES AND LOCATION ARE SUBJECT TO CHANGE BASED UPON THE FINAL SITE LAYOUT AND FDR.
 2. ONSITE SOILS ARE TYPE "A" BLAKELAND "B" PER SCS SOILS MAP

PROPOSED CONDITIONS

BASIN	ACRES	Q5 CFS	Q100 CFS
OS-1	15.74	13	29
OS-1A	0.67	3	5
OS-2	22.76	17	38
OS-2A	0.69	3	5
OS-2B	0.84	3	6
OS-3A	7.46	7	15
OS-3B	0.17	1	1
OS-4A	8.06	8	18
OS-4B	8.21	8	18
OS-5	3.18	3	6
OS-6	16.51	9	20
A1	0.51	1	1
A2	0.83	1	2
B1	4.34	8	16
B2	5.33	10	20
B3	3.35	7	13
B4	1.19	2	4
C1	2.09	4	9
C2	0.93	2	4
H-D*	4.20	3	8
D	4.20	12	21
H-E*	9.97	8	20
E	9.97	30	51
F1	4.84	8	16
F2	1.33	3	6
F3	3.33	6	12
F4	1.26	2	5
G1	3.36	7	13
G2	1.70	3	7
G3	1.40	3	6
H1	2.72	2	5
H2	0.22	1	1
I1	6.40	13	25
I2	3.21	6	11
J	1.19	3	6
K	4.05	4	9
L	8.31	11	24

* BASIN H-D & H-E ARE THE HISTORIC BASINS FOR D & E FOR THE PURPOSE OF CALCULATING ALLOWABLE RELEASE RATES FOR FUTURE COMMERCIAL AREAS.

PIPE RUN SUMMARY

PIPE RUN	CONTRIBUTING DESIGN POINTS	Q5 CFS	Q100 CFS	MIN. SLOPE	SIZE
1	DP-1 & DP-1A	15	32	0.54%	30"
1A	DP-1A	3	5	0.23%	18"
2A	DP-2B	3	6	0.33%	18"
2B	DP-2A & DP-2B	21	44	0.44%	36"
3	DP-3B	1	1	0.01%	18"
3A	DP-3A, PR-3 & PR-2A	27	56	0.71%	36"
4A	DP-4A & PR-3A	33	71	0.24%	48"
4B	DP-4B & PR-4A	39	84	0.34%	48"
5A	DP-5A	8	16	0.50%	24"
5B	DP-5B	10	20	0.78%	24"
5C	PR-5A, PR-5B, DP-5C	24	48	0.52%	36"
5D	PR-5C & DP-5D	27	52	0.61%	36"
6A	PR-6A & DP-6B	42	90	0.12%	60"
6B	DP-9	49	93	0.13%	60"
7**	DP-8	3	8	0.58%	18"
8**	DP-9	12	27	0.43%	30"
9	DP-11 & PR-8	28	58	0.76%	36"
10A	DP-10A	10	19	0.71%	24"
10B	DP-10A & DP-10B	13	25	0.37%	30"
11A	DP-12A	2	5	0.23%	18"
11B	DP-12A & DP-12B	2	6	0.33%	18"
12	DP-13	20	40	0.95%	30"

** PIPE RUNS 7 AND 8 ARE BASED UPON THE ALLOWABLE HISTORIC RELEASE FOR BASINS D & E.

SWALE RUN SUMMARY

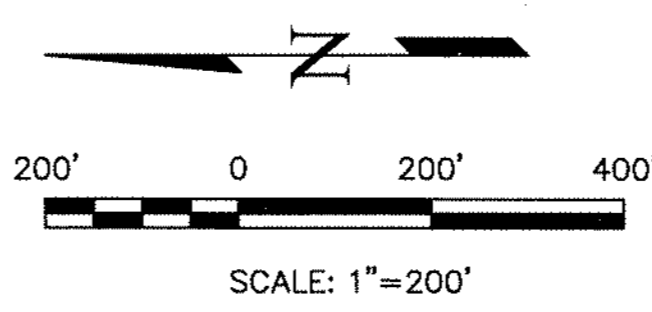
SWALE RUN	CONTRIBUTING DESIGN POINTS	Q5 CFS	Q100 CFS
1	DP-3A	27	56
2	DP-4A	33	71

DESIGN POINT SUMMARY

DP	CONTRIBUTING BASINS	Q5 CFS	Q100 CFS
1	OS-1	13	29
1A	OS-1A	3	5
2A	OS-2 & OS-2A	19	40
2B	OS-2B	3	6
3A	OS-3A	7	15
3B	OS-3B	1	1
4A	DP-2A, 2B, 3, A1 & OS-4A	33	71
4B	DP-4A, OS-4B & A2	39	84
5A	B1	8	16
5B	B2	10	20
5C	B3	7	13
5D	B4	2	4
5E	DP-5A & DP-5D	27	52
6A	C1	4	9
6B	C2	2	4
7	DP-2A, 4B, 6A & 6B	44	93
H-8*	H-D	3	8
8	D	12	21
H-9*	H-D & H-E	12	27
9	D & E	43	73
10A	G1 & G2	10	19
10B	G3	3	6
11	F1, F2, F3 & F4	18	35
12A	H1	2	5
12B	H2	1	1
13	I1, I2 & OS-6	20	40

* DESIGN POINTS H-8 & H-9 ARE THE HISTORIC FLOWS FOR DP-8 & DP-9 FOR THE PURPOSE OF CALCULATING DETENTION FOR FUTURE COMMERCIAL AREAS.

- LEGEND**
- EXISTING CONTOURS - INDEX
 - EXISTING CONTOURS - NOMINAL
 - PROPOSED CONTOURS - INDEX
 - PROPOSED CONTOURS - NOMINAL
 - PROPOSED STORM SEWER
 - BASIN LINES
 - BASIN ID
 - BASIN ACRES
 - DESIGN POINT
 - HIGH POINT



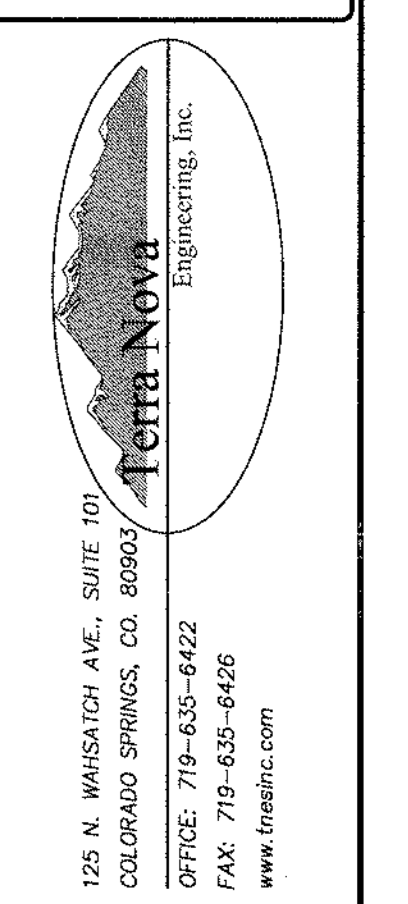
NOTE:
ALL TRACTS ARE DEDICATED AS DRAINAGE EASEMENTS.

REVISIONS

NO.	DESCRIPTION	DATE
1.	PER CITY COMMENTS	8/1/06
2.	PER CITY COMMENTS	11/30/06
3.	PER CITY COMMENTS	3/16/07

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE ENGINEERING DEPARTMENT OF THE CITY OF COLORADO SPRINGS, COLORADO, FOR THE PURPOSES OF THE PROJECT, THESE DRAWINGS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN AUTHORIZATION OF TERRA NOVA ENGINEERING, INC.

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MDDP WOODMEN HEIGHTS ADDITIONS 7, 8, & 9

PRELIMINARY/FINAL DRAINAGE REPORT FOR
QUAIL BRUSH CREEK
DEVELOPED DRAINAGE MAP

DESIGNED BY QNA
DRAWN BY QNA
CHECKED BY QNA

H-SCALE 1"=200'
V-SCALE NA

JOB NO. 0937-00
DATE ISSUED 3/16/07
SHEET NO. 1 OF 1