INDEX

GENERAL

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
CO07G-001.DGN	GCE1-170	-	COVER
3 1 CO07G-002.DGN	GCE1-170	G-002	INDEX
CO07G-101.DGN	GCE1-170	G-101	PROJECT LOCATION AND VICINITY MAPS
CO07G-102.DGN	GCE1-170	G-102	GENERAL PLAN - SHEET 1 OF 2
3 CO07G-103.DGN	GCE1-170	G-103	GENERAL PLAN - SHEET 2 OF 2

SURVEYING & MAPPING

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
CO07V-101.DGN	GCE1-170	V-101	EXISTING SITE CONDITIONS - AREA 1 - SHEET 1 OF 6
CO07V-102.DGN	GCE1-170	V-102	EXISTING SITE CONDITIONS - AREA 2 - SHEET 2 OF 6
CO07V-103.DGN	GCE1-170	V-103	EXISTING SITE CONDITIONS - AREA 3 - SHEET 3 OF 6
CO07V-104.DGN	GCE1-170	V-104	EXISTING SITE CONDITIONS - AREA 4 - SHEET 4 OF 6
3 CO07V-105.DGN	GCE1-170	V-105	EXISTING SITE CONDITIONS - AREA 5 - SHEET 5 OF 6
CO07V-106.DGN	GCE1-170	V-106	EXISTING SITE CONDITIONS - AREA 6 - SHEET 6 OF 6
CO07VC101.DGN	GCE1-170	VC101	SOUTH GOOSE CREEK CHANNEL ALIGNMENT - HORIZONTAL CONTROL - SHEET 1 0F 2
CO07VC102.DGN	GCE1-170	VC102	SOUTH GOOSE CREEK CHANNEL ALIGNMENT - HORIZONTAL CONTROL - SHEET 2 0F 2
CO07VC103.DGN	GCE1-170	VC103	MEANDER CHANNEL #1 ALIGNMENT - HORIZONTAL CONTROL
CO07VC104.DGN	GCE1-170	VC104	MEANDER CHANNEL #2 & #2A ALIGNMENTS - HORIZONTAL CONTROL
CO07VC105.DGN	GCE1-170	VC105	BIKEWAY RELOCATION ALIGNMENT - HORIZONTAL CONTROL
CO07VC601.DGN	GCE1-170	VC601	HORIZONTAL ALIGNMENT, CURVE DATA, AND SURVEY CONTROL TABLES - SHEET 1 OF 2
CO07VC602.DGN	GCE1-170	VC602	HORIZONTAL ALIGNMENT, CURVE DATA, AND SURVEY CONTROL TABLES - SHEET 2 OF 2
CO07VC603.DGN	GCE1-170	VC603	BIKEWAY RELOCATION - HORIZONTAL ALIGNMENT TABLE, CURVE DATA TABLE AND TYPICAL BIKEWAY X-SECTION

GEOTECHNICAL

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
CO07B-001.DGN	GCE1-170	B-001	SOIL BORING LOGS - SHEET 1 OF 2
CO07B-002.DGN	GCE1-170	B-002	SOIL BORING LOGS - SHEET 2 OF 2

CIVIL

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
3 CO07C-101.DGN	GCE1-170	C-101	REMOVAL PLAN - AREA 1 - SHEET 1 OF 6
CO07C-102.DGN	GCE1-170	C-102	REMOVAL PLAN - AREA 2 - SHEET 2 OF 6
CO07C-103.DGN	GCE1-170	C-103	REMOVAL PLAN - AREA 3 - SHEET 3 OF 6
CO07C-104.DGN	GCE1-170	C-104	REMOVAL PLAN - AREA 4 - SHEET 4 OF 6
CO07C-105.DGN	GCE1-170	C-105	REMOVAL PLAN - AREA 5 - SHEET 5 OF 6
CO07C-106.DGN	GCE1-170	C-106	REMOVAL PLAN - AREA 6 - SHEET 6 OF 6
CO07CD501.DGN	GCE1-170	CD501	COTTONWOOD POND HIGH-FLOW POND OUTLET - DETAILS
CO07CD502.DGN	GCE1-170	CD502	SOUTH GOOSE CREEK - CHANNEL BANK PROT. DETAILS @ WETLAND AREAS AND CHANNEL BLOCK DETAILS
3 CO07CG101.DGN	GCE1-170	CG101	GRADING PLAN - AREA 4 - SHEET 1 OF 2
1 CO07CG102.DGN	GCE1-170	CG102	GRADING PLAN - AREA 5 - WITH CONTRACT OPTIONS - SHEET 2 OF 2
CO07CG201.DGN	GCE1-170	CG201	SOUTH GOOSE CREEK CHANNEL - PROFILE - SHEET 1 0F 3
CO07CG202.DGN	GCE1-170	CG202	SOUTH GOOSE CREEK CHANNEL - PROFILE - SHEET 2 0F 3
CO07CG203.DGN	GCE1-170	CG203	SOUTH GOOSE CREEK CHANNEL - PROFILE - SHEET 3 0F 3
CO07CG204.DGN	GCE1-170	CG204	MEANDER CHANNEL #1, #2 & #2A - PROFILES
3 CO07CG301.DGN	GCE1-170	CG301	REACH #2 GRADING - CROSS SECTIONS- SHEET 1 OF 2
3 CO07CG302.DGN	GCE1-170	CG302	REACH #2 GRADING - CROSS SECTIONS- SHEET 2 OF 2
3 CO07CG303.DGN	GCE1-170	CG303	COTTONWOOD POND WETLAND GRADING - CROSS SECTIONS- SHEET 1 OF 2
3 CO07CG304.DGN	GCE1-170	CG304	COTTONWOOD POND WETLAND GRADING - CROSS SECTIONS- SHEET 2 OF 2
CO07CT101.DGN	GCE1-170	CT101	BIKEWAY RELOCATION - PLAN
CO07CT201.DGN	GCE1-170	CT201	BIKEWAY RELOCATION - BOULDER CREEK PATH - PROFILE

LANDSCAPING

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
3 CO07LP101.DGN	GCE1-170	LP101	PLANTING PLAN - AREA 1 - SHEET 1 OF 6
CO07LP102.DGN	GCE1-170	LP102	PLANTING PLAN - AREA 2 - SHEET 2 OF 6
CO07LP103.DGN	GCE1-170	LP103	PLANTING PLAN - AREA 3 - SHEET 3 OF 6
CO07LP104.DGN	GCE1-170	LP104	PLANTING PLAN - AREA 4 - SHEET 4 OF 6
1 CO07LP105.DGN	GCE1-170	LP105	PLANTING PLAN - AREA 5 - SHEET 5 OF 6
3 CO07LP106.DGN	GCE1-170	LP106	PLANTING PLAN - AREA 6 - SHEET 6 OF 6

STRUCTURAL

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
CO07S-001.DGN	GCE1-170	S-001	SMALL MAMMAL ACCESS RAMP AND LEDGE

RIGHT-OF-WAY

DESIGN FILE	FILE NUMBER	SHEET NO.	DESCRIPTION
CO07RW001.DGN	GCE1-170	RW001	PROJECT RIGHT-OF-WAY - AREA 1 - SHEET 1 OF 6
CO07RW002.DGN	GCE1-170	RW002	PROJECT RIGHT-OF-WAY - AREA 2 - SHEET 2 OF 6
CO07RW003.DGN	GCE1-170	RW003	PROJECT RIGHT-OF-WAY - AREA 3 - SHEET 3 OF 6
CO07RW004.DGN	GCE1-170	RW004	PROJECT RIGHT-OF-WAY - AREA 4 - SHEET 4 OF 6
CO07RW005.DGN	GCE1-170	RW005	PROJECT RIGHT-OF-WAY - AREA 5 - SHEET 5 OF 6
CO07RW006.DGN	GCE1-170	RW006	PROJECT RIGHT-OF-WAY - AREA 6 - SHEET 6 OF 6

FOR INFORMATION ONLY AS-BUILT DRAWINGS

DESIGN FILE	PROJECT NUMBER	SHEET NO.	DESCRIPTION
-	CO-UD-12	1 OF 52	COVER SHEET
-	CO-UD-12	2 OF 52	GENERAL NOTES & DETAILS
-	CO-UD-12	3 OF 52	DETAILS
-	CO-UD-12	9 OF 52	NORTH GOOSE CREEK PLAN & PROFILE STA. 131+09 TO STA. 143+78.98
-	CO-UD-12	24 OF 52	SOUTH GOOSE CREEK TYPICAL CROSS SECTIONS SCHEDULE ONE
-	CO-UD-12	25 OF 52	SOUTH GOOSE CREEK PLAN & PROFILE STA. 0+00 TO STA. 14+18
-	CO-UD-12	26 OF 52	SOUTH GOOSE CREEK PLAN & PROFILE STA. 14+18 TO STA. 24+38
-	CO-UD-12	27 OF 52	SOUTH GOOSE CREEK PLAN & PROFILE STA. 24+38+00 TO STA. 38+50
-	CO-UD-12	28 OF 52	POND INLET AND OUTLET PLAN AND DETAILS
-	CO-UD-12	28A OF 52	GOOSE CREEK CHANNELS SO. GOOSE CREEK
-	CO-UD-12	28B OF 52	GOOSE CREEK SEDIMENT POND OVERFLOW WEIR W/ BOX CULVERTS
-	CO-UD-12	29 OF 52	STORM DRAIN CONNECTION DETAIL
-	CO-UD-12	30 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 95+68.71 TO STA. 97+47.71
-	CO-UD-12	31 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 97+97.71 TO STA. 100+47.71
-	CO-UD-12	32 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 100+97.71 TO STA. 103+97.71
-	CO-UD-12	33 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 104+47.71 TO STA. 107+50
-	CO-UD-12	34 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 108+00 TO STA. 110+50
-	CO-UD-12	35 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 111+00 TO STA. 113+00
-	CO-UD-12	36 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 113+50 TO STA. 116+08
-	CO-UD-12	37 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 116+29.13 TO STA. 118+79.13
-	CO-UD-12	38 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 119+29.18 TO STA. 120+29.18
-	CO-UD-12	39 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 120+29.05 TO STA. 122+58.69
-	CO-UD-12	40 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 123+04.62 TO STA. 125+34.26
-	CO-UD-12	41 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 125+80.21 TO STA. 128+30.21
-	CO-UD-12	42 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 128+80.21 TO STA. 131+30.21
-	CO-UD-12	43 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 131+74.08 TO STA. 132+66.85
-	CO-UD-12	44 OF 52	SOUTH GOOSE CREEK CROSS SECTIONS STA. 133+11.57
-	CO-UD-12	46 OF 52	SOUTH GOOSE CREEK DROP STRUCTURE LAYOUT
-	CO-UD-12	47 OF 52	SOUTH GOOSE CREEK DROP STRUCTURE DETAILS STA. 8+39
-	CO-UD-12	49 OF 52	VERTICAL DROP STRUCTURE DETAILS NORTH GOOSE CREEK
-	CO-UD-12	50 OF 52	DROP STRUCTURE DETAILS SOUTH GOOSE CREEK SCHD. ONE

INDEX LEGEND:

1. SHEET IDENTIFICATION NUMBERS:

CG2 0 1

- CG2 — DISCIPLINE DESIGNATOR w/ Level 2 Designator *(see A/E/C CADD STANDARD RELEASE 3.0 for Level 2 Designator)*
- 0 — SHEET TYPE DESIGNATOR
- 1 — SHEET SEQUENCE NUMBER

2. DISCIPLINE DESIGNATORS:

G	GENERAL
H	HAZARDOUS MATERIALS
V	SURVEY / MAPPING
B	GEOTECHNICAL
C	CIVIL
L	LANDSCAPE
S	STRUCTURAL
A	ARCHITECTURAL
I	INTERIORS
Q	EQUIPMENT
F	FIRE PROTECTION
P	PLUMBING
D	PROCESS
M	MECHANICAL
E	ELECTRICAL
T	TELECOMMUNICATIONS
R	RESOURCE
RW	RIGHT OF WAY
VC	HORIZONTAL & VERTICAL CONTROL

3. SHEET TYPE DESIGNATORS:

0	GENERAL
1	PLANS
2	ELEVATIONS
3	SECTIONS
4	LARGE-SCALE VIEWS
5	DETAILS
6	SCHEDULES & DIAGRAMS
7	USER DEFINED
8	USER DEFINED
9	3D REPRESENTATIONS

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB
1	REVISED IN ACCORDANCE WITH AM. #01	14-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: DSG
DWN BY: DSG
CKD BY:
SUBMITTED BY: SMB
FILE NAME: CO07G-002.dgn
FILE NUMBER: GCE1-170
DATE: JULY 2012
SOLICITATION NO.: W912BF-12-B-0038
CONTRACT NO.: W912BF-12-C-0XXX
PLOT DATE: 8/20/2012
SIZE: 33.1X22
PLOT SCALE: 0:1 1/2" = 1 in.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

INDEX

SHEET IDENTIFICATION NUMBER
G-002

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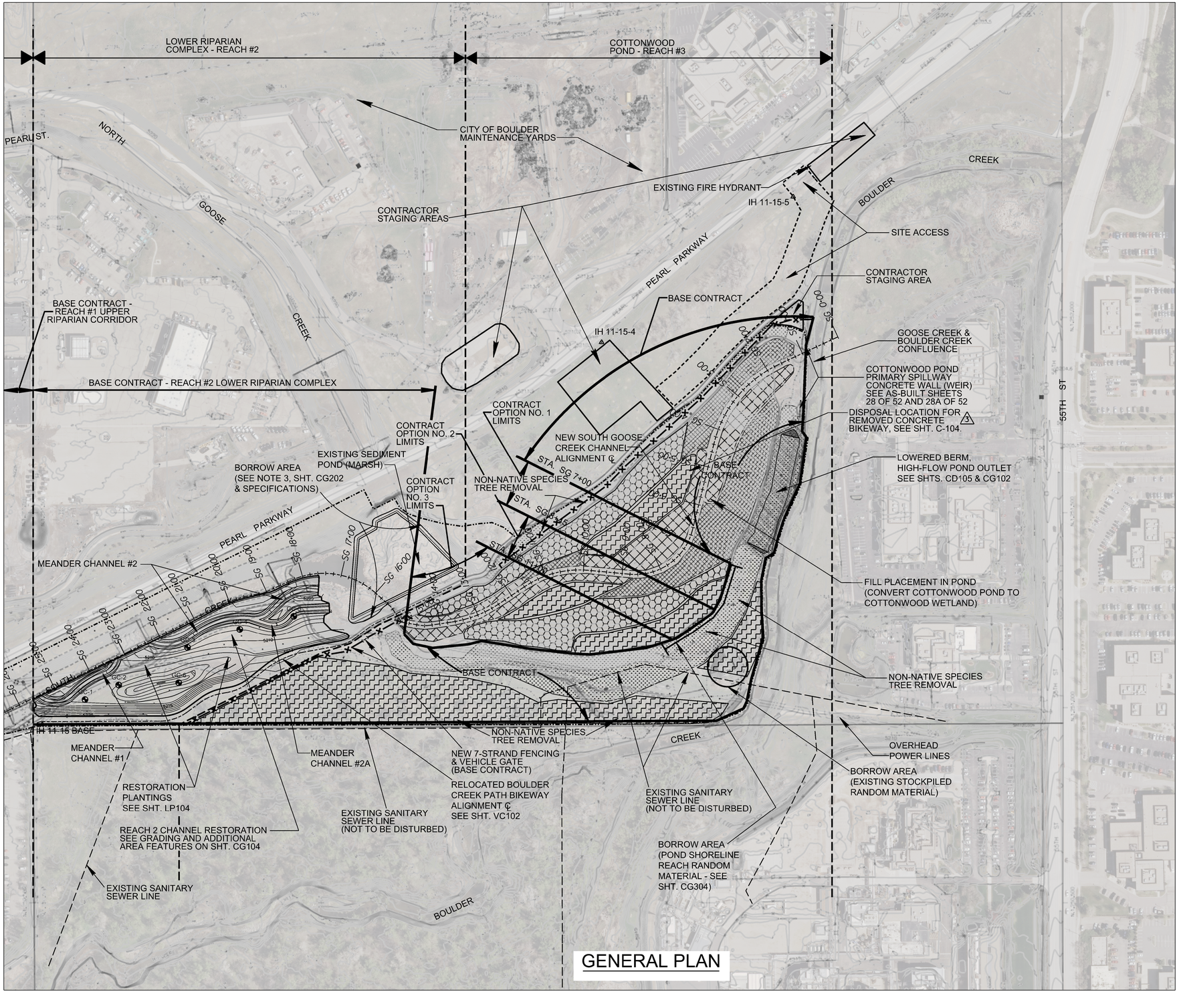

GENERAL PLAN

LEGEND

5250	MAJOR CONTOUR
	MINOR CONTOUR
SG 9+00	CHANNEL ALIGNMENT ℄ WITH STATIONING
	PRAIRIE (UPLAND BUFFER) SEED MIX
	EM - EMERGENT WETLAND (PLANTS AT EL. 5198.0' TO 5199.5') CONES/PLUGS OF SPECIES AND EMERGENT WETLAND SEED MIX PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE
	WM - WET MEADOW (PLANTS AT EL. 5199.5' TO 5200.5') CONES/PLUGS OF SPECIES AND WET MEADOW SEED MIX PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE
	WILLOW RIPARIAN CUTTINGS (PLANTS AT EL. 5199.5' TO 5200.5') PLANTING DENSITY: 3 FT. CENTERS OR 4780 PLANTS PER ACRE SEED AREA WITH WILLOW UNDERSTORY SEED MIX
	COTTONWOOD RIPARIAN (PLANTS AT EL. 5200.5' TO 5202.5') PLANTING DENSITY: 10 FT. - 15 FT. CENTERS PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX
IH 11-15-2	HORIZONTAL & VERTICAL CONTROL POINT
	LIMITS OF CONSTRUCTIONS
GC-2	SUBSURFACE EXPLORATORY BORING LOCATION (DRILLING MARCH 2012)
	NEW 7-STRAND HIGH-TENSILE FENCE 3

NOTES:

1. PLANTING PLANS ARE GIVEN ON SHEETS LP101 THRU LP106.

2. FOR ADDITIONAL TREE REMOVAL NOT SHOWN ON THIS SHEET, SEE REMOVAL PLAN SHEETS C-101 THRU C-106.

3. BORROW MATERIAL RETRIEVED FROM THE SEDIMENT POND (MARSH) SHALL BE PLACED AT THE VERY BOTTOM OF COTTONWOOD POND AND COVERED WITH SUCCEEDING FILL PLACEMENT.

N

100' 50' 0 100'

DISTANCE IN FEET

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

DESIGNED BY: DSC
DATE: JULY 2012
DWN BY: DSG
CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB
CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007G-103.dgn
FILE NUMBER: CCE1-170
SIZE: 33.1X22
PLOT SCALE: 0.083 sf / in.
PLOT DATE: 8/17/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

GENERAL PLAN
SHEET 2 OF 2

3

SHEET IDENTIFICATION NUMBER
G-103

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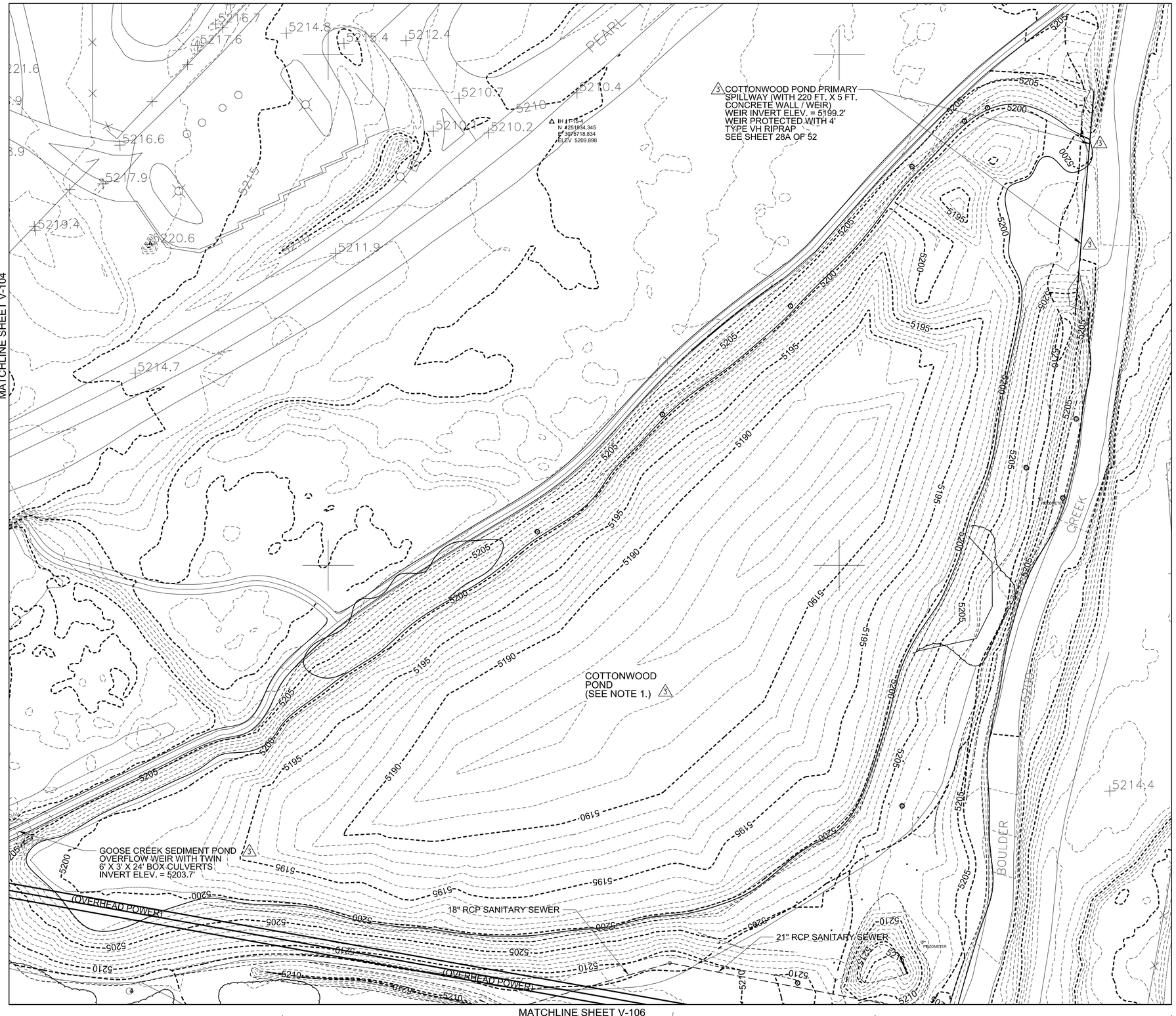
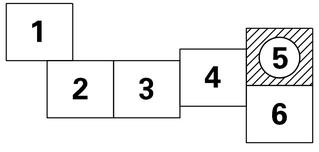


LEGEND

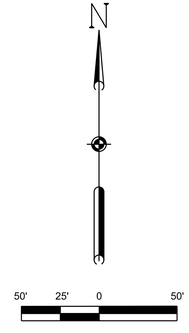
- GPS CONTROL POINT
- RELIEF WELL LOCATION
- PIEZOMETER
- DECIDUOUS TREE
- FIRE HYDRANT
- LIGHT POLE
- PULL BOX
- SANITARY MANHOLE
- SIGN
- STORM MANHOLE
- LIGHT POLE
- TELEPHONE JUNCTION BOX
- WATER VALVE
- ELECTRICAL VAULT

NOTES:

1. COTTONWOOD POND CURRENT AVERAGE DAILY POND WATER SURFACE ELEVATION = 5199.5'



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: DSG
DWN BY: DSG
CKD BY: SMB
SUBMITTED BY: SMB
FILE NAME: C007V-105.dgn
SIZE: 33.1K22
PLOT SCALE: 0.0833 ft / in.
DATE: JULY 2012
SOLICITATION NO.: W912BF-12-B-0038
CONTRACT NO.: W912BF-12-C-0XXX
FILE NUMBER: CCE1-710
PLOT DATE: 8/20/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3 EXISITING SITE CONDITIONS
AREA 5
SHEET 5 OF 6

SHEET IDENTIFICATION NUMBER
V-105

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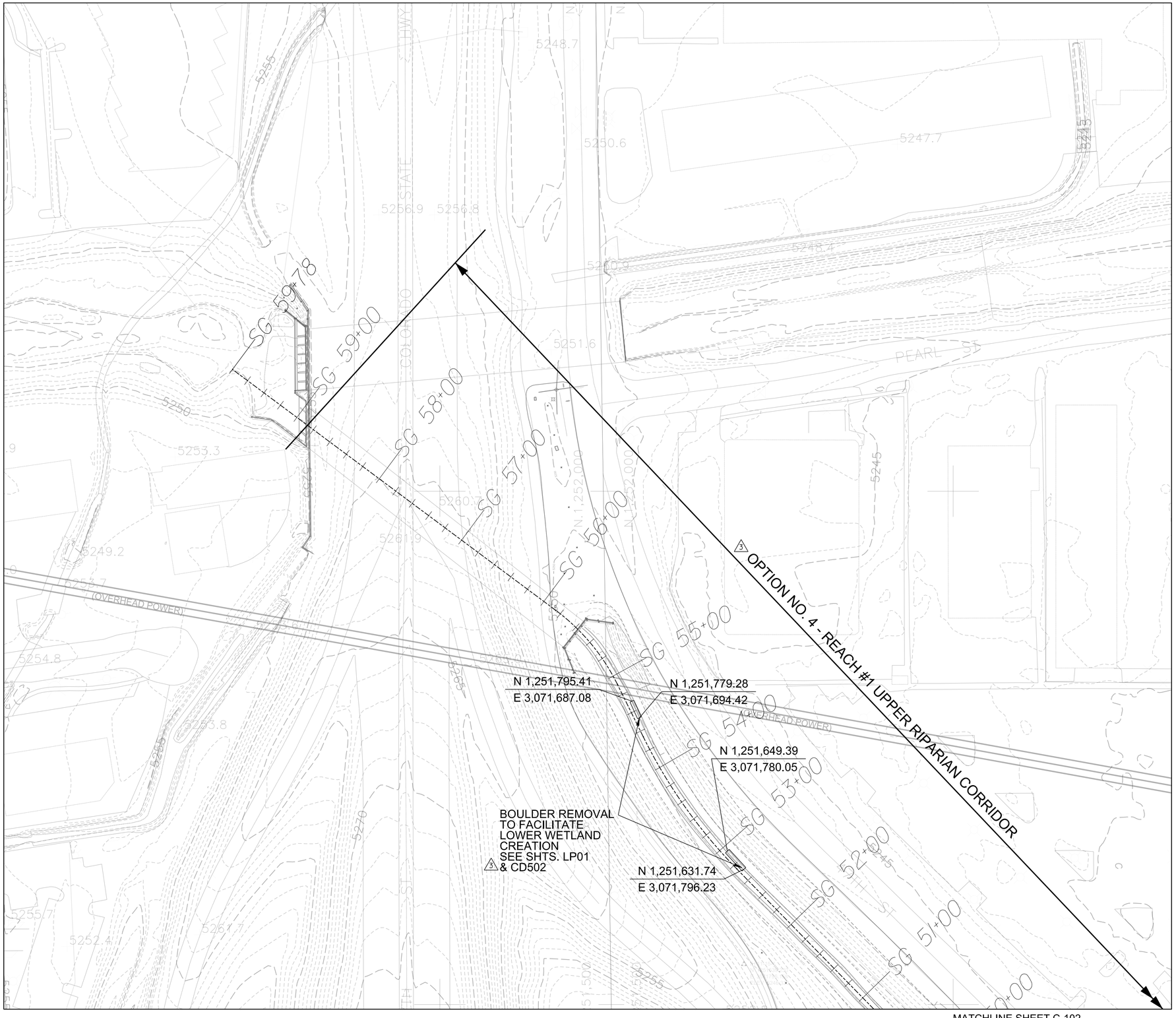


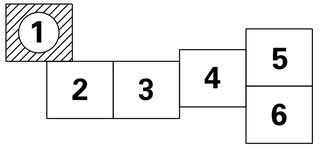
LEGEND

SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NOTE:

BOULDERS IDENTIFIED FOR REMOVAL SHALL BE SALVAGED AND RETAINED FOR USE IN THE CONSTRUCTION OF THE GROUTED LOW FLOW CHANNEL BLOCKS. SEE SHTS. CG101 AND CD502.



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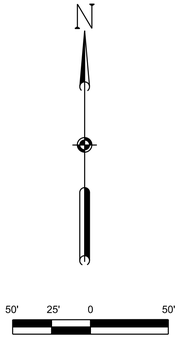

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSC | DATE: JULY 2012
DWN BY: DSC | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB | CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007C-101.dgn | FILE NUMBER: GCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 1
SHEET 1 OF 6

3

SHEET IDENTIFICATION NUMBER
C-101

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MATCHLINE SHEET C-101

OPTION NO. 4 - REACH #1 UPPER RIPARIAN CORRIDOR

BASE CONTRACT - REACH #1 UPPER RIPARIAN CORRIDOR

N 1,251,254.11
E 3,072,355.94

N 1,251,261.14
E 3,072,339.46

N 1,251,217.29
E 3,072,431.44

BOULDER REMOVAL TO FACILITATE LOWER WETLAND CREATION SEE SHTS. LP102 & CD502

N 1,251,224.16
E 3,072,420.45

N 1,251,101.39
E 3,072,720.30

N 1,251,098.34
E 3,072,735.83

BOULDER REMOVAL TO FACILITATE LOWER WETLAND CREATION SEE SHTS. LP102 & CD502

MATCHLINE SHEET C-103

LEGEND

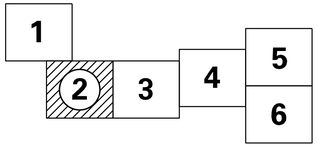
SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NOTES:

1. BOULDERS IDENTIFIED FOR REMOVAL SHALL BE SALVAGED AND RETAINED FOR USE IN THE CONSTRUCTION OF THE GROUTED LOW FLOW CHANNEL BLOCKS. SEE SHTS. CG101 AND CD502.

2. SEE SPECIFICATION SECTION 31 11 00 CLEARING AND GRUBBING / HERBICIDE TREATMENT FOR DISPOSAL OF REMOVED TREES AND SHRUBS.



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: DSC
DWN BY: DSC
CKD BY: SMB
SUBMITTED BY: SMB
DATE: JULY 2012
SOLICITATION NO.: W912BF-12-B-0038
CONTRACT NO.: W912BF-12-C-20XX
FILE NUMBER: CCE-170
FILE NAME: C007C-102.dgn
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/20/2012
SIZE: 33.1X22

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 2
SHEET 2 OF 6

SHEET IDENTIFICATION NUMBER
C-102

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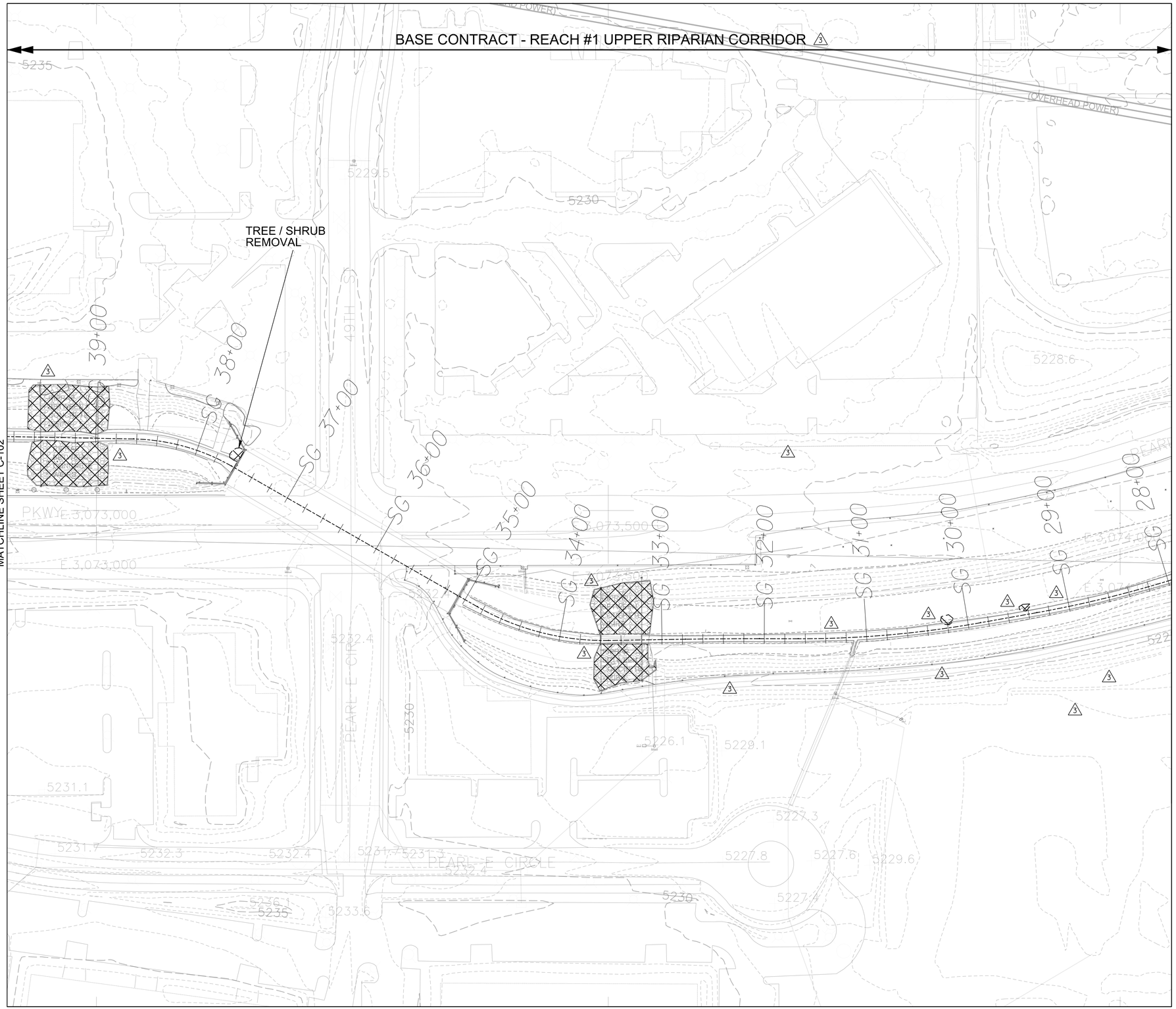


LEGEND

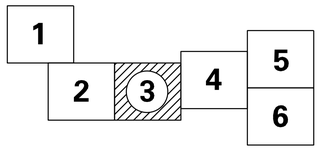
SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NOTES:

1. BOULDERS IDENTIFIED FOR REMOVAL SHALL BE SALVAGED AND RETAINED FOR USE IN THE CONSTRUCTION OF THE GROUTED LOW FLOW CHANNEL BLOCKS. SEE SHTS. CG101 AND CD502.

2. SEE SPECIFICATION SECTION 31 11 00 CLEARING AND GRUBBING / HERBICIDE TREATMENT FOR DISPOSAL OF REMOVED TREES AND SHRUBS.



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSG | DATE: JUL Y 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: | CONTRACT NO.: W912BF-12-C-20XX
FILE NAME: C007C-103.dgn | FILE NUMBER: GCE-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 3
SHEET 3 OF 6

3

SHEET IDENTIFICATION NUMBER
C-103

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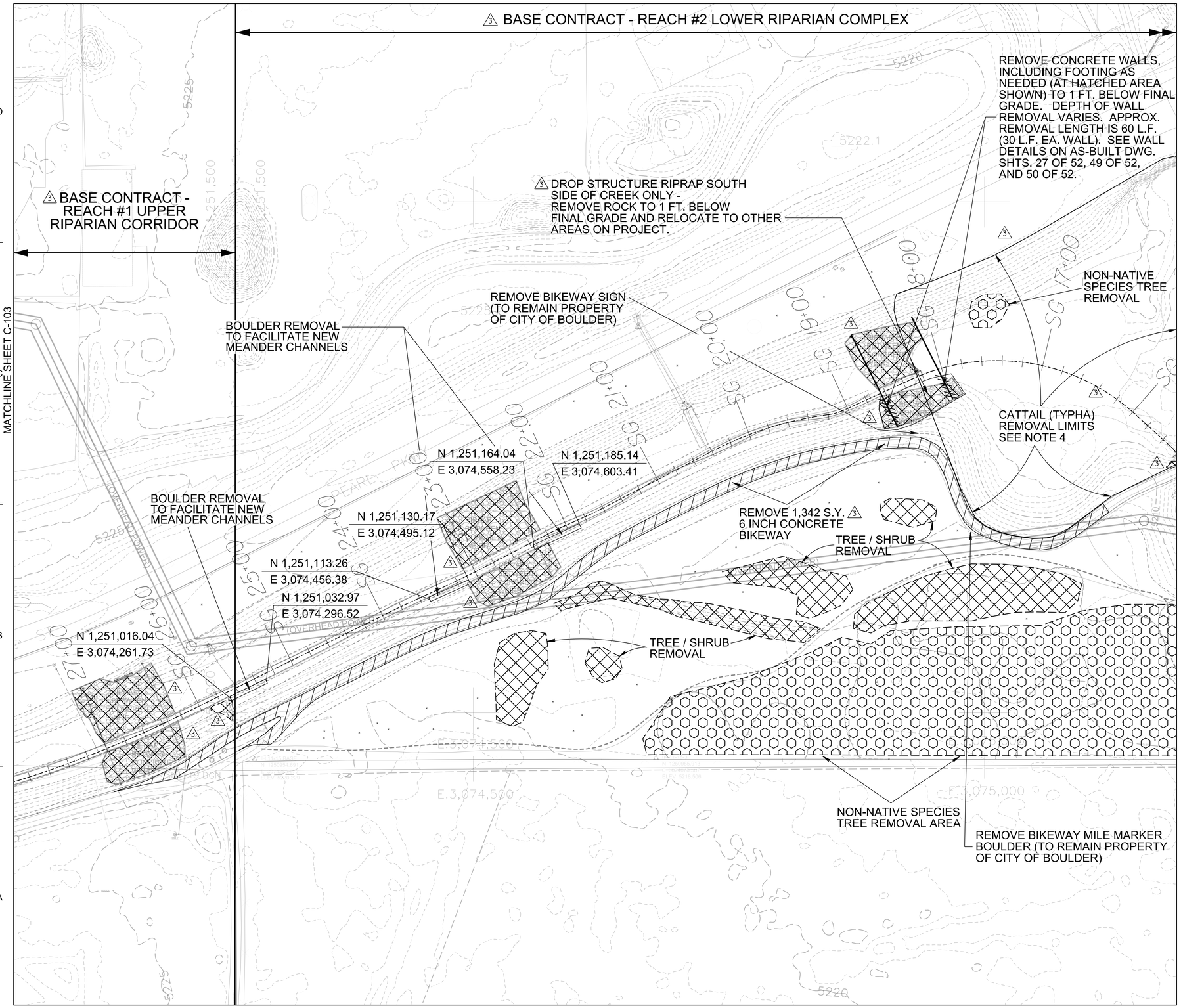
g6edxcas



LEGEND

SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NON-NATIVE SPECIES HERBICIDE TREATMENT (3)

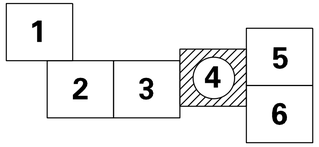
NOTES:

1. SEE SPECIFICATION SECTION 31 11 00, CLEARING AND GRUBBING / HERBICIDE TREATMENT, FOR DISPOSAL OF REMOVED TREES AND SHRUBS.

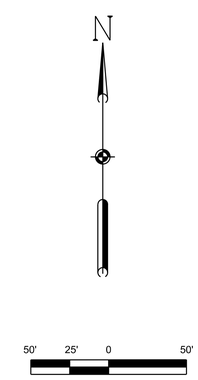
2. SEE SPECIFICATION SECTION 02 41 00 DEMOLITION, FOR DISPOSAL OF REMOVED 6-INCH THICK CONCRETE BIKEWAY.

3. PROVIDE SOIL COVER LAYER AND PRAIRIE (UPLAND BUFFER) SEED MIX IN SPACES BETWEEN ROCK (TYP.).

(3) 4. REMOVE CATTAILS (TYPHA) IN ACCORDANCE WITH SPECIFICATION SECTION 31 11 00 CLEARING AND GRUBBING.



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSG | DATE: JULY 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: | CONTRACT NO.: W912BF-12-C-XXXX
FILE NAME: C007C-104.dgn | FILE NUMBER: CCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 4
SHEET 4 OF 6

(3)

SHEET IDENTIFICATION NUMBER
C-104

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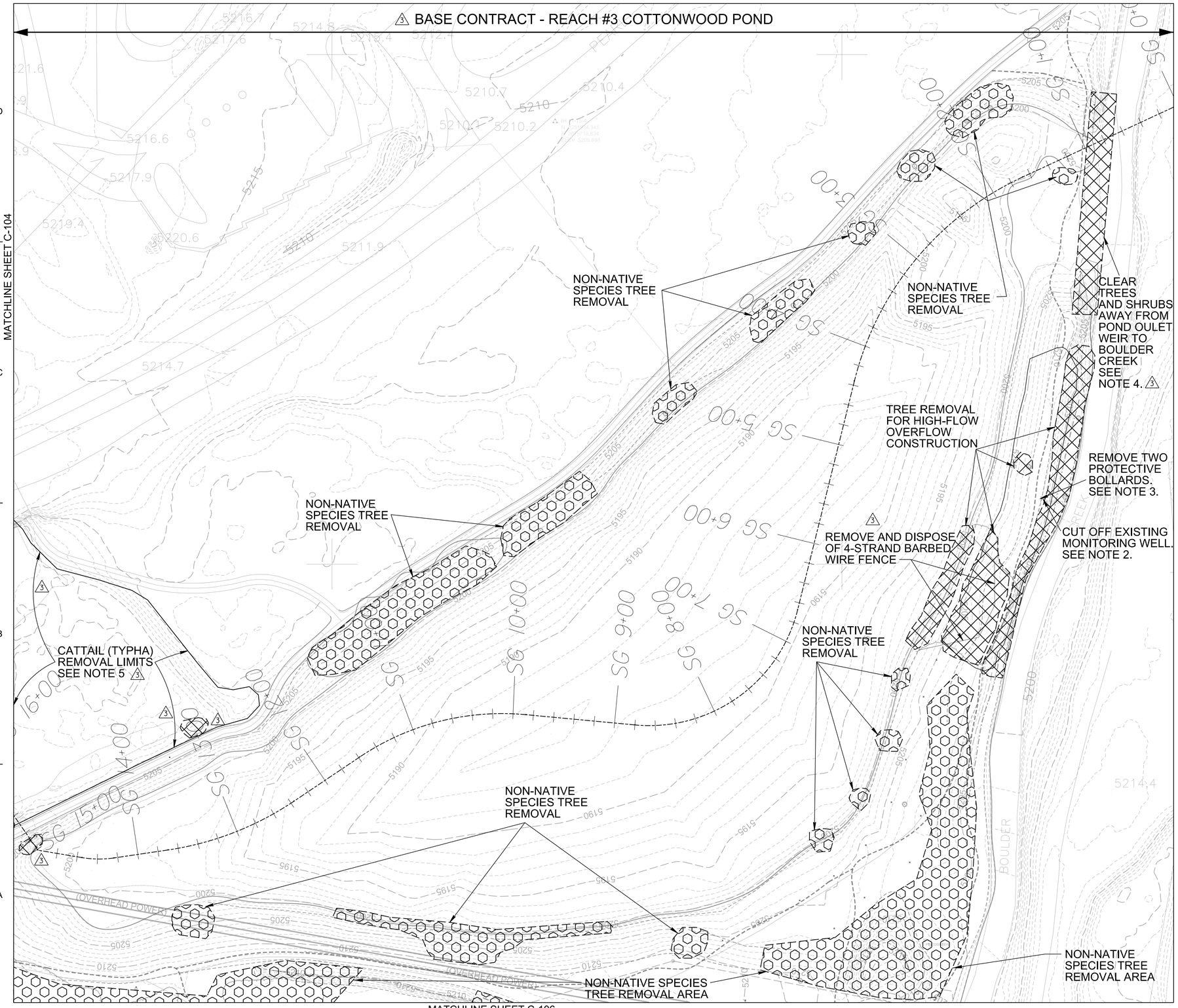
g6edxcas



LEGEND

SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NON-NATIVE SPECIES HERBICIDE TREATMENT (3)

NOTES:

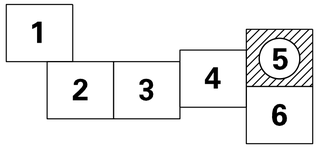
1. TREE AND SHRUB REMOVAL SHALL BE IN ACCORDANCE WITH SPECIFICATION 31 11 00 CLEARING AND GRUBBING / HERBICIDE TREATMENT.

2. MONITORING WELL SHALL BE CUT OFF AND ABANDONED IN ACCORDANCE WITH SPECIFICATION 02 41 00 DEMOLITION.

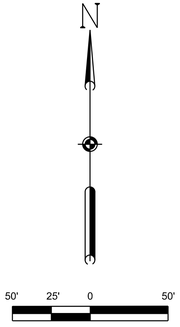
3. REMOVED PROTECTIVE BOLLARDS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFFSITE.

(3) 4. EXISTING TYPE VH RIPRAP SHALL REMAIN AS IS.

(3) 5. REMOVE CATTAILS (TYPHA) IN ACCORDANCE WITH SPECIFICATION SECTION 31 11 00 CLEARING AND GRUBBING.



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSG | DATE: JUL Y 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912EF-12-B-0038
SUBMITTED BY: | CONTRACT NO.: W912EF-12-C-XXXX
FILE NAME: C007C-105.dgn | FILE NUMBER: CCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 5
SHEET 5 OF 6

(3)

SHEET IDENTIFICATION NUMBER
C-105

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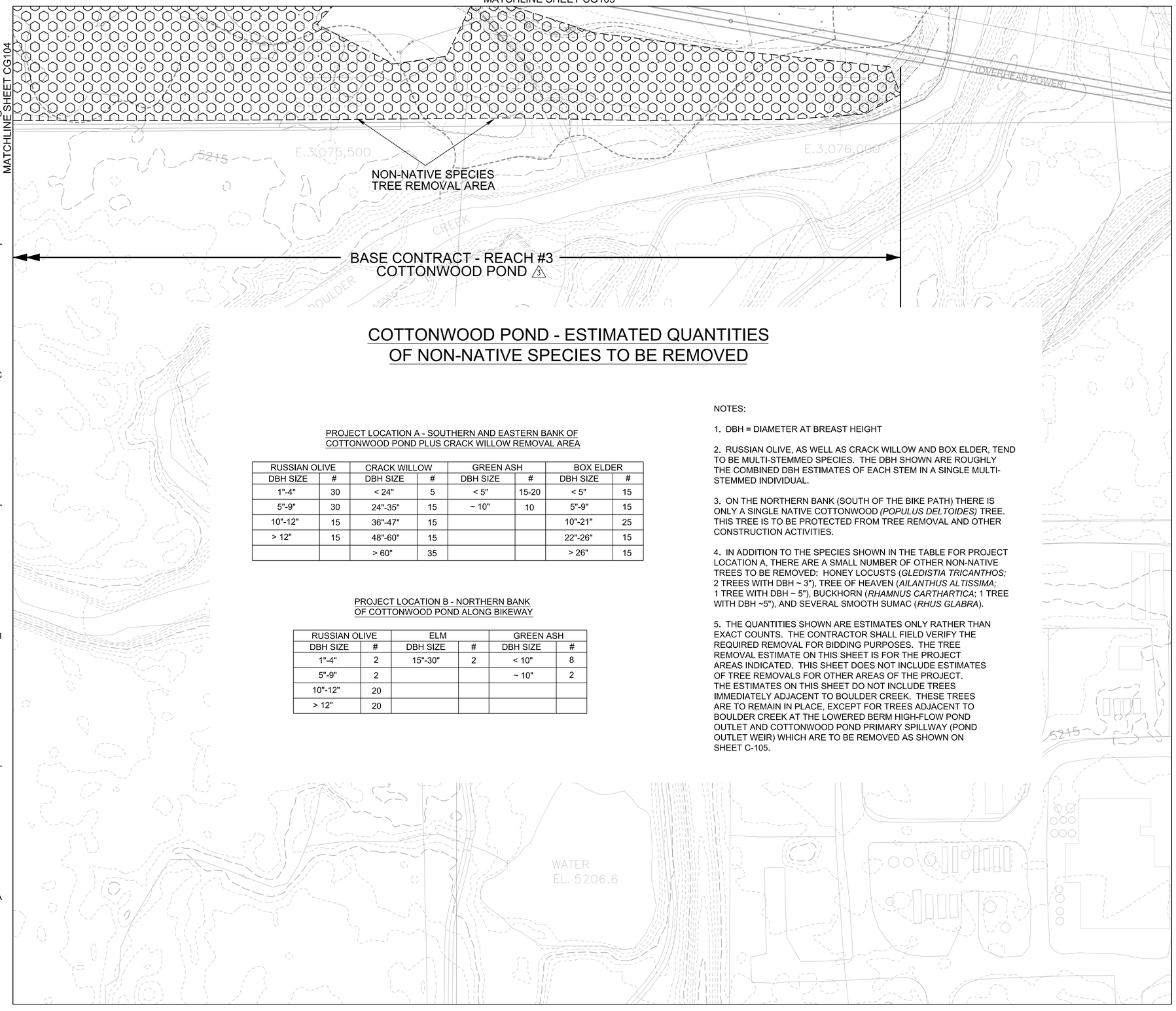
g6edxcas



COTTONWOOD POND - ESTIMATED QUANTITIES OF NON-NATIVE SPECIES TO BE REMOVED

PROJECT LOCATION A - SOUTHERN AND EASTERN BANK OF COTTONWOOD POND PLUS CRACK WILLOW REMOVAL AREA

RUSSIAN OLIVE		CRACK WILLOW		GREEN ASH		BOX ELDER	
DBH SIZE	#	DBH SIZE	#	DBH SIZE	#	DBH SIZE	#
1"-4"	30	< 24"	5	< 5"	15-20	< 5"	15
5"-9"	30	24"-35"	15	~ 10"	10	5"-9"	15
10"-12"	15	36"-47"	15			10"-21"	25
> 12"	15	48"-60"	15			22"-26"	15
		> 60"	35			> 26"	15

PROJECT LOCATION B - NORTHERN BANK OF COTTONWOOD POND ALONG BIKEWAY

RUSSIAN OLIVE		ELM		GREEN ASH	
DBH SIZE	#	DBH SIZE	#	DBH SIZE	#
1"-4"	2	15"-30"	2	< 10"	8
5"-9"	2			~ 10"	2
10"-12"	20				
> 12"	20				

NOTES:

1. DBH = DIAMETER AT BREAST HEIGHT

2. RUSSIAN OLIVE, AS WELL AS CRACK WILLOW AND BOX ELDER, TEND TO BE MULTI-STEMMED SPECIES. THE DBH SHOWN ARE ROUGHLY THE COMBINED DBH ESTIMATES OF EACH STEM IN A SINGLE MULTI-STEMMED INDIVIDUAL.

3. ON THE NORTHERN BANK (SOUTH OF THE BIKE PATH) THERE IS ONLY A SINGLE NATIVE COTTONWOOD *(POPULUS DELTOIDES)* TREE. THIS TREE IS TO BE PROTECTED FROM TREE REMOVAL AND OTHER CONSTRUCTION ACTIVITIES.

4. IN ADDITION TO THE SPECIES SHOWN IN THE TABLE FOR PROJECT LOCATION A, THERE ARE A SMALL NUMBER OF OTHER NON-NATIVE TREES TO BE REMOVED: HONEY LOCUSTS (*GLEDISTIA TRICANTHOS;* 2 TREES WITH DBH ~ 3"), TREE OF HEAVEN (*AILANTHUS ALTISSIMA;* 1 TREE WITH DBH ~ 5"), BUCKHORN (*RHAMNUS CARTHARTICA*; 1 TREE WITH DBH ~5"), AND SEVERAL SMOOTH SUMAC (*RHUS GLABRA*).

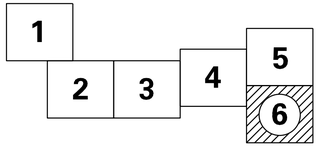
5. THE QUANTITIES SHOWN ARE ESTIMATES ONLY RATHER THAN EXACT COUNTS. THE CONTRACTOR SHALL FIELD VERIFY THE REQUIRED REMOVAL FOR BIDDING PURPOSES. THE TREE REMOVAL ESTIMATE ON THIS SHEET IS FOR THE PROJECT AREAS INDICATED. THIS SHEET DOES NOT INCLUDE ESTIMATES OF TREE REMOVALS FOR OTHER AREAS OF THE PROJECT. THE ESTIMATES ON THIS SHEET DO NOT INCLUDE TREES IMMEDIATELY ADJACENT TO BOULDER CREEK. THESE TREES ARE TO REMAIN IN PLACE, EXCEPT FOR TREES ADJACENT TO BOULDER CREEK AT THE LOWERED BERM HIGH-FLOW POND OUTLET AND COTTONWOOD POND PRIMARY SPILLWAY (POND OUTLET WEIR) WHICH ARE TO BE REMOVED AS SHOWN ON SHEET C-105.

LEGEND

SG 9+00 — CENTERLINE ALIGNMENT WITH STATIONING

TREE AND SHRUB CLEARING AND GRUBBING

NON-NATIVE SPECIES HERBICIDE TREATMENT 3



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSC | DATE: JULY 2012
DWN BY: DSC | CKD BY: SMB
SUBMITTED BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
CONTRACT NO.: W912BF-12-C-0XXX
FILE NUMBER: CCE-170
FILE NAME: C007C-106.dgn
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

REMOVAL PLAN
AREA 6
SHEET 6 OF 6

3

SHEET IDENTIFICATION NUMBER
C-106

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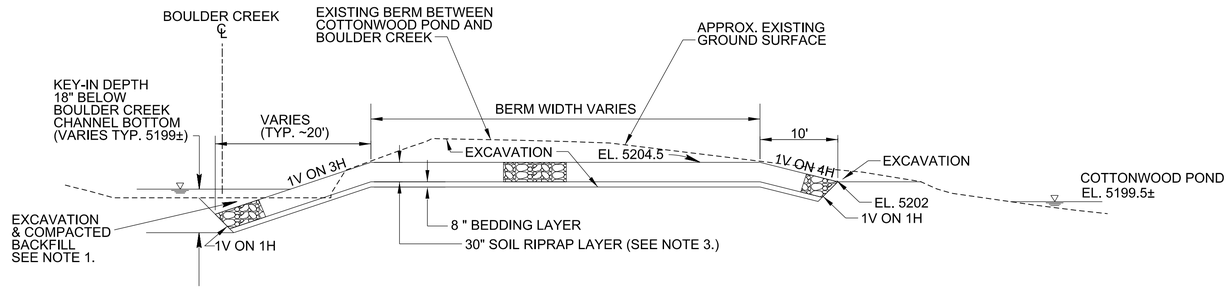
g6edxcos



COTTONWOOD POND - HIGH FLOW POND OUTLET
TYPICAL BERM EROSION PROTECTION
X-SECTION DETAILS

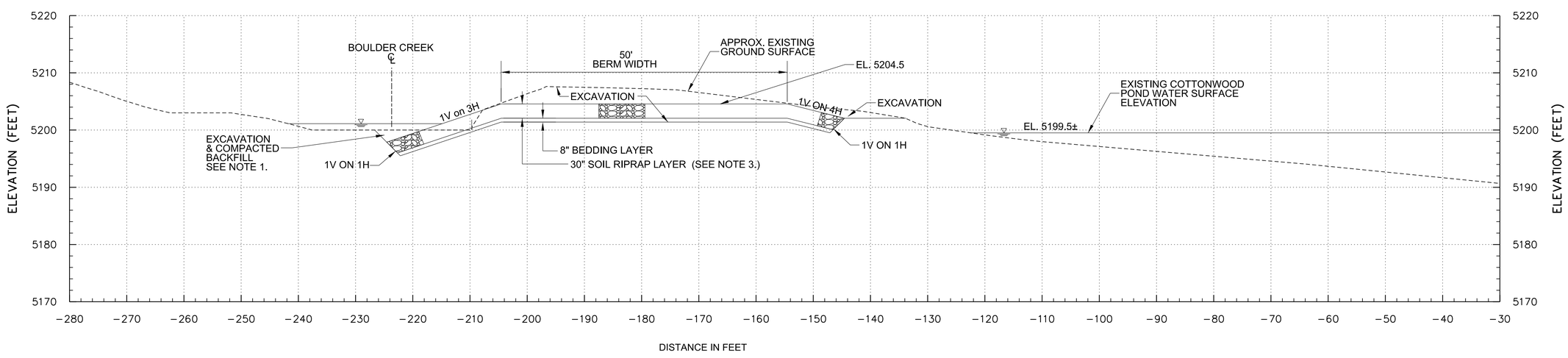
SCALE: 1 INCH = 10 FEET
10' 0 10'

NOTES:

1. EXCAVATION AND BACKFILL IS CONSIDERED TO BE INCIDENTAL TO PLACEMENT OF THE RIPRAP.

2. FOR PLAN VIEW OF LOWERED BERM HIGH-FLOW POND OUTLET, SEE SHTS. G-103 & CG102.

3. SOIL RIPRAP SHALL BE CONSTRUCTED IN ACCORDANCE WITH URBAN DRAINAGE AND FLOOD CONROL DISTRICT SPECIFICATION SECTION 31 37 00 RIPRAP, BOULDERS, SOIL RIPRAP AND BEDDING. THE REQUIRED TOP SURFACE OF 4-IN. THICK NATIVE SOIL IS NOT SHOWN ON THIS SHEET.



COTTONWOOD POND - HIGH FLOW POND OUTLET
BERM EROSION PROTECTION
X-SECTION AT STA. SG 6+40

SCALE: 1 INCH = 10 FEET
10' 0 10'

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

DESIGNED BY: DSC
DWN BY: CJP
CKD BY: SMB
SUBMITTED BY: SMB
DATE: JULY 2012
SOLICITATION NO.: W912BF-12-B-0038
CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007CD501.dgn
FILE NUMBER: CCE1-170
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/17/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

COTTONWOOD POND HIGH-FLOW POND OUTLET DETAILS

3

SHEET IDENTIFICATION NUMBER
CD501

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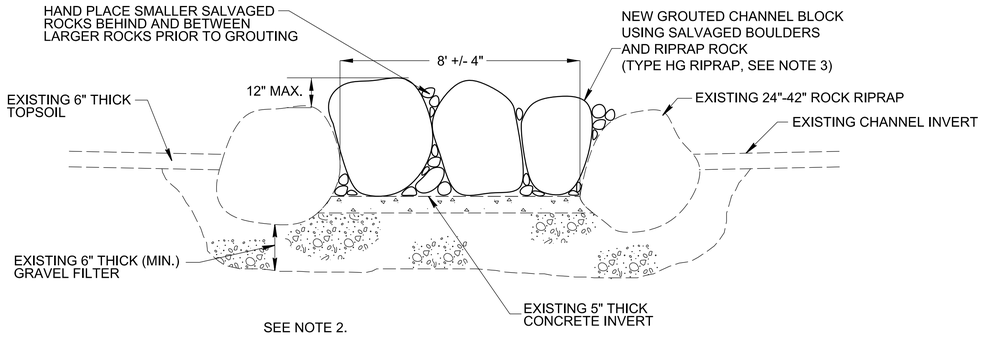
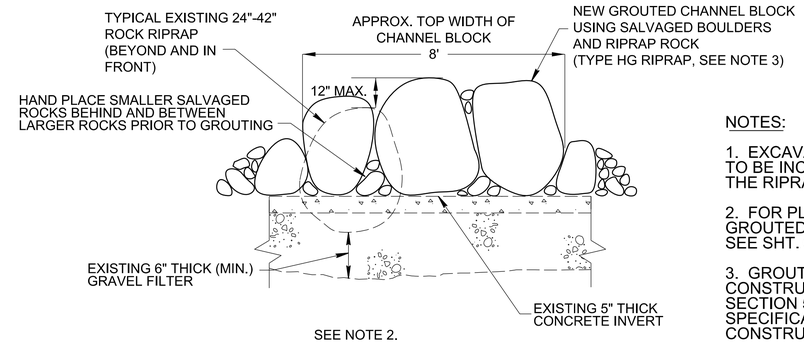


DETAIL C – SOUTH GOOSE CREEK - GROUTED LOW FLOW CHANNEL BLOCK USING SALVAGED BOULDERS TYPICAL X-SECTION

NO SCALE



DETAIL D – SOUTH GOOSE CREEK - GROUTED LOW FLOW CHANNEL BLOCK USING SALVAGED BOULDERS TYPICAL PROFILE

NO SCALE

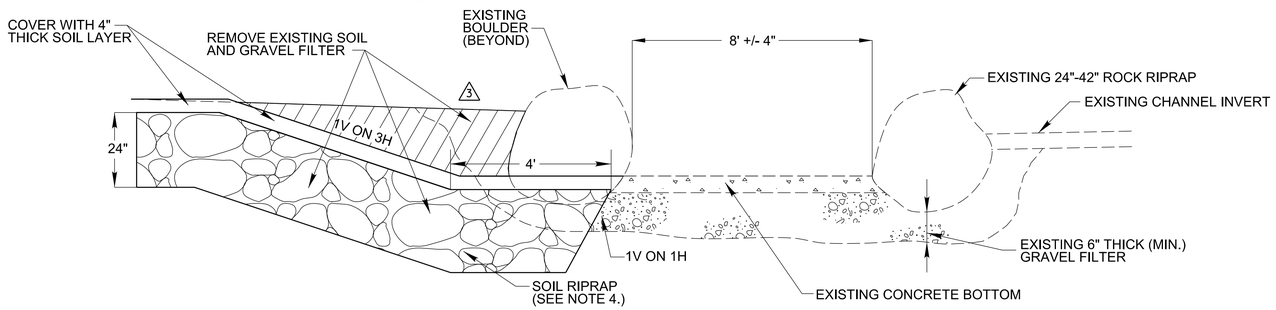
NOTES:

1. EXCAVATION AND BACKFILL IS CONSIDERED TO BE INCIDENTAL TO PLACEMENT OF THE RIPRAP.

2. FOR PLAN VIEW SHOWING LOCATION OF GROUTED LOW FLOW CHANNEL BLOCKS, SEE SHT. CG101.

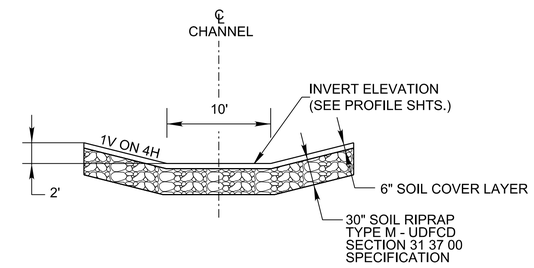
3. GROUTED BOULDERS / RIPRAP SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 507 OF THE CDOT 2011 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

4. SOIL RIPRAP SHALL BE CONSTRUCTED IN ACCORDANCE WITH URBAN DRAINAGE AND FLOOD CONROL DISTRICT SPECIFICATION SECTION 31 37 00 RIPRAP, BOULDERS, SOIL RIPRAP AND BEDDING.



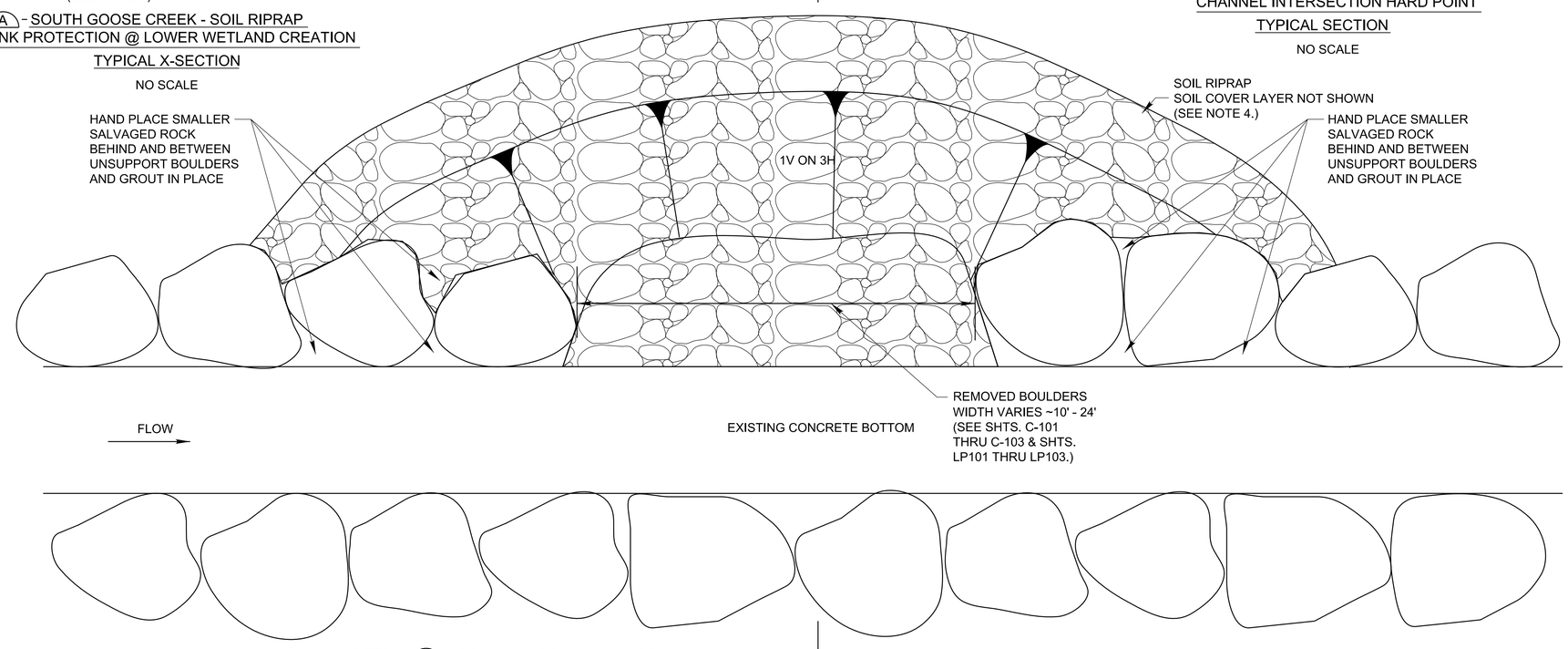
3 DETAIL A – SOUTH GOOSE CREEK - SOIL RIPRAP BANK PROTECTION @ LOWER WETLAND CREATION TYPICAL X-SECTION

NO SCALE



DETAIL E – SOUTH GOOSE CREEK - SOIL RIPRAP CHANNEL INTERSECTION HARD POINT TYPICAL SECTION

NO SCALE



DETAIL B – SOUTH GOOSE CREEK - SOIL RIPRAP BANK PROTECTION @ LOWER WETLAND CREATION PLAN VIEW

NO SCALE

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

DESIGNED BY: DSC
DATE: JULY 2012
DWN BY: CJP
CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB
CONTRACT NO.: W912BF-12-C-00XX
FILE NAME: C007CD502.dgn
FILE NUMBER: GCE1-170
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/20/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3 SOUTH GOOSE CREEK - CHANNEL BANK PROT. DETAILS @ WETLAND AREAS AND CHANNEL BLOCK DETAILS

SHEET IDENTIFICATION NUMBER
CD502

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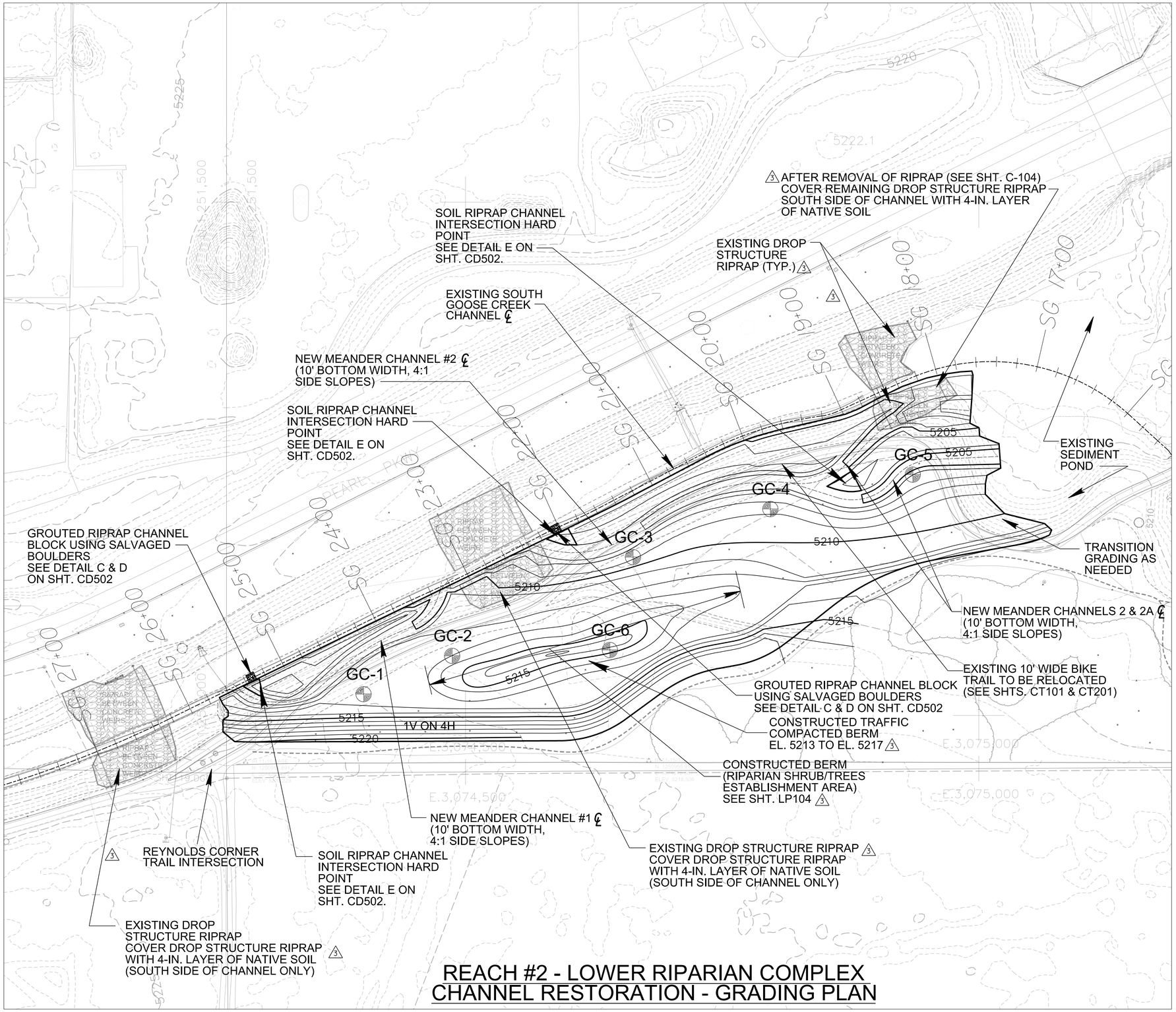


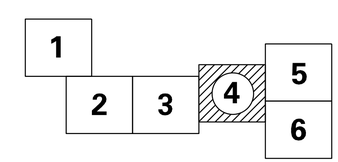
REACH #2 - LOWER RIPARIAN COMPLEX CHANNEL RESTORATION - GRADING PLAN

LEGEND

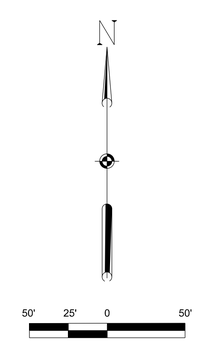
- 5250 — MAJOR CONTOUR
- MINOR CONTOUR
- 5250 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING
- GC-1 — SOIL BORING LOCATION AND DESIGNATION

NOTES:

1. SEE SHTS. VC103 AND VC104 FOR MEANDER CHANNEL #1, 2 AND 2A HORIZONTAL CONTROL ALIGNMENTS.
2. SEE SHEET VC602 FOR HORIZONTAL ALIGNMENT AND CURVE DATA TABLES.
3. FOR SOUTH GOOSE CREEK CHANNEL PROFILE, SEE SHEETS CG201 THROUGH CG203.
4. CROSS SECTIONS OF REACH #2 GRADING ARE SHOWN ON SHEETS CG301 AND CG302.



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.

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3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

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SUBMITTED BY: | CONTRACT NO.: W912BF-12-C-20XX
FILE NAME: C007CG101.dgn | FILE NUMBER: CCE-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

GRADING PLAN
AREA 4
SHEET 1 OF 2

3

SHEET IDENTIFICATION NUMBER
CG101

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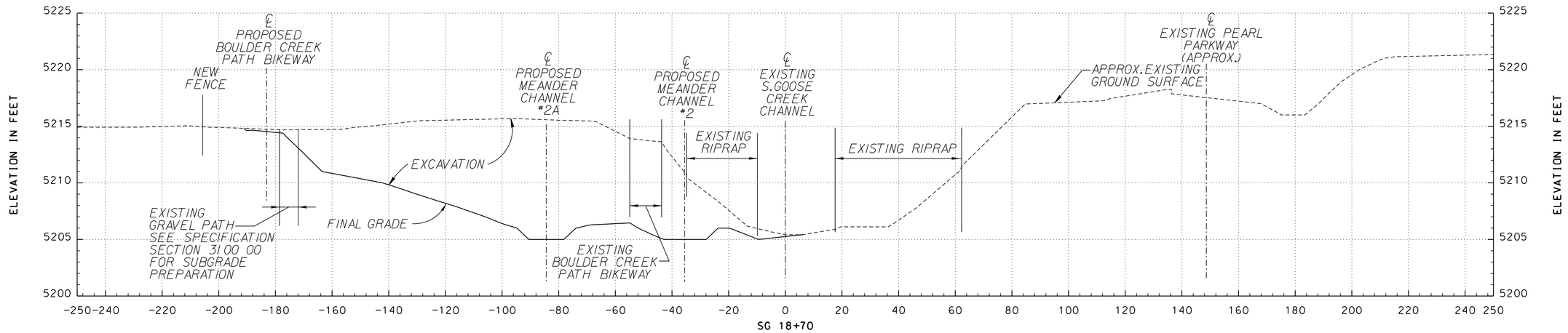

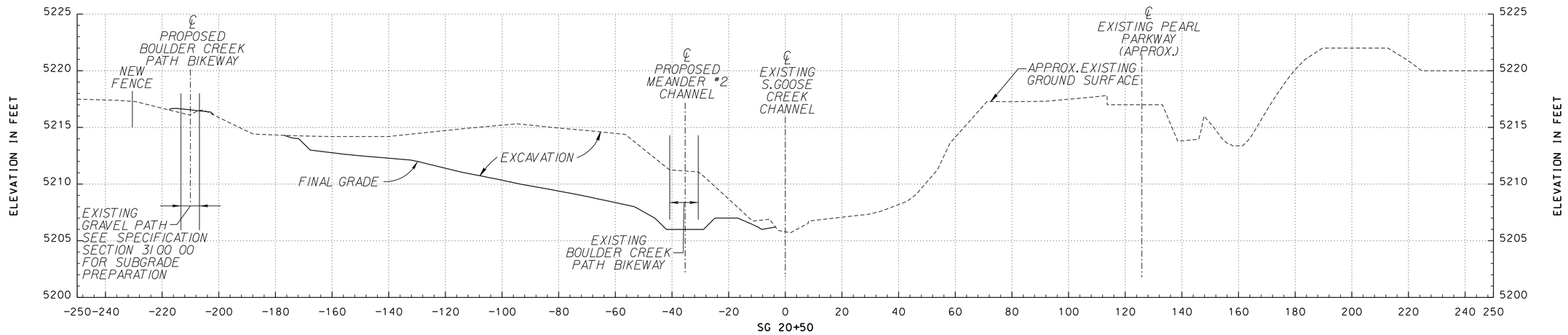

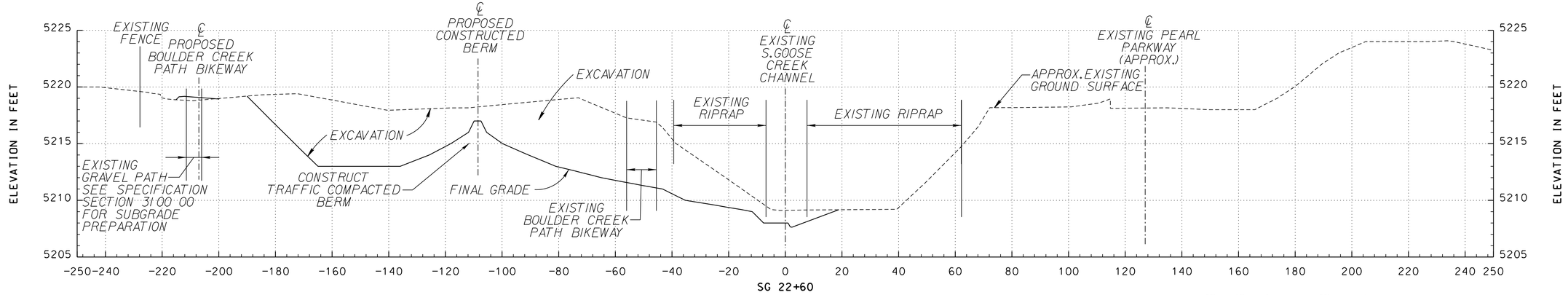

NOTES:

3 1. CROSS SECTIONS SHOWN ARE PERPENDICULAR TO THE SOUTH GOOSE CREEK CHANNEL CENTERLINE.
2. CROSS SECTIONS ARE LOOKING IN UPSTATION (UPSTREAM) DIRECTION.
3. SEE SHT. CG101 FOR REACH #2 GRADING PLAN.

HORIZONTAL SCALE: 1" = 20'-0"

VERTICAL SCALE: 1" = 5'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

DESIGNED BY: DSG	DATE: JULY 2012
DWN BY: DSG	CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY:	CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007CG301.dgn	FILE NUMBER: CCE-170
SIZE: 33.1X22	PLOT SCALE: 0.0833 sf / in.
PLOT DATE: 8/20/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3

REACH #2 GRADING
CROSS SECTIONS
SHEET 1 OF 2

SHEET IDENTIFICATION NUMBER
CG301

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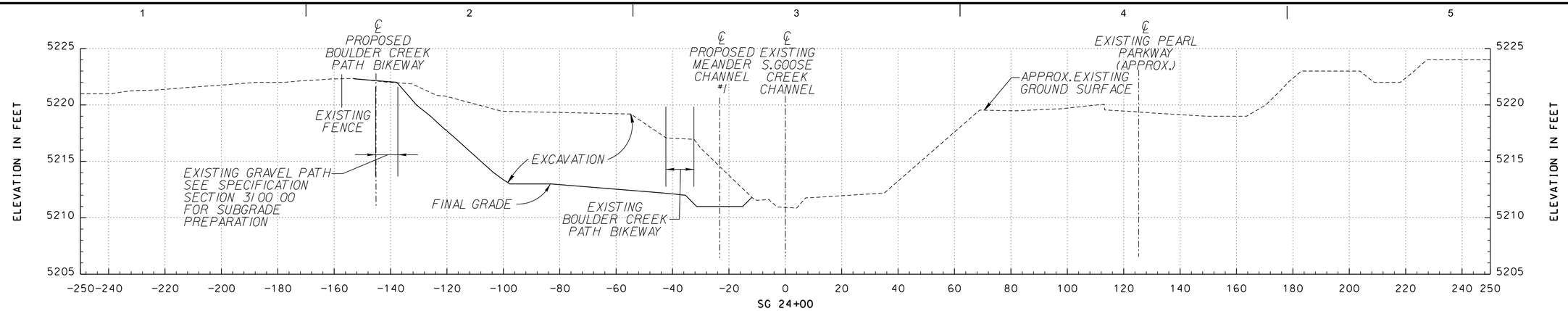

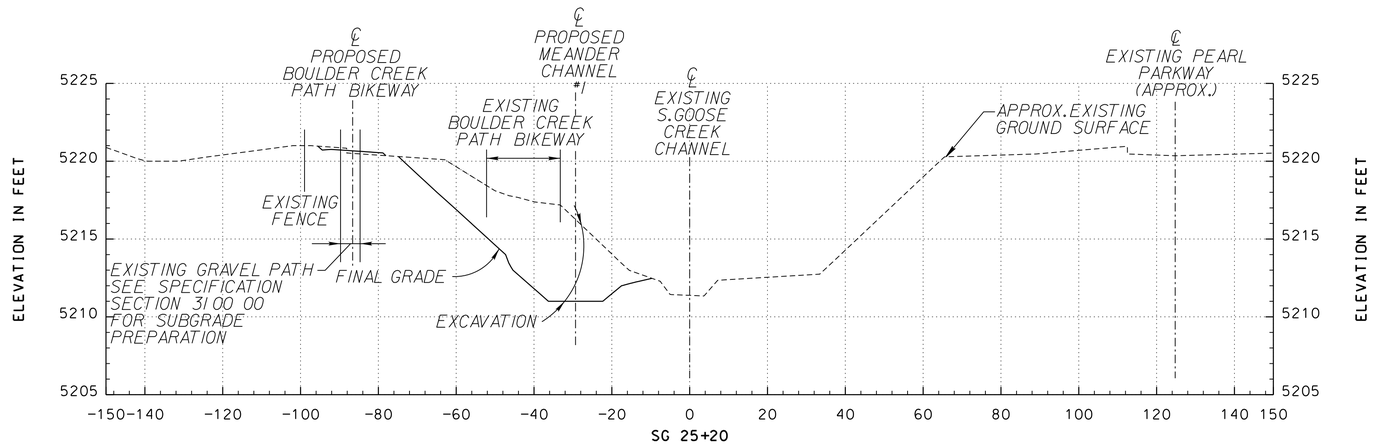

NOTES:

3
1. CROSS SECTIONS SHOWN ARE PERPENDICULAR TO THE SOUTH GOOSE CREEK CHANNEL CENTERLINE.
2. CROSS SECTIONS ARE LOOKING IN UPSTATION (UPSTREAM) DIRECTION.
3. SEE SHT. CG101 FOR REACH #2 GRADING PLAN.

20' 10' 0 20'
HORIZONTAL SCALE: 1" = 20'-0"

5' 2.5' 0 5'
VERTICAL SCALE: 1" = 5'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: DSG | DATE: JULY 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB | CONTRACT NO.: W912BF-12-C-200XX
FILE NAME: C007CG302.dgn | FILE NUMBER: CCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3

REACH #2 GRADING
CROSS SECTIONS
SHEET 2 OF 2

SHEET IDENTIFICATION NUMBER
CG302

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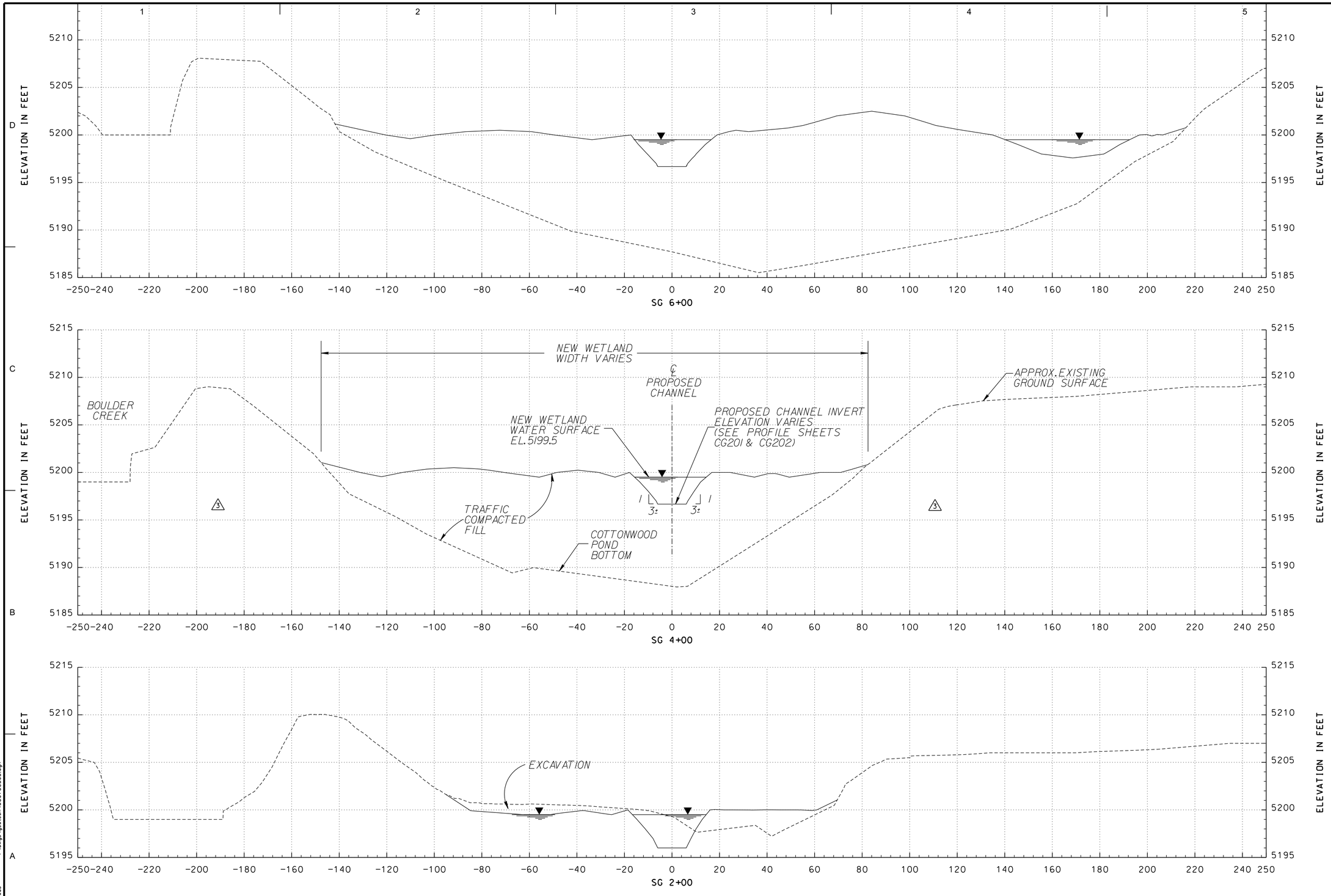
g6ed2cas



NOTES:

3

1. CROSS SECTIONS SHOWN ARE PERPENDICULAR TO THE NEW GOOSE CREEK CENTERLINE.
2. CROSS SECTIONS ARE LOOKING IN UPSTATION (UPSTREAM) DIRECTION, SEE GRADING PLAN ON SHTS. CG101 AND CG102.

20' 10' 0 20'
HORIZONTAL SCALE: 1" = 20'-0"

5' 2.5' 0 5'
VERTICAL SCALE: 1" = 5'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING (REMOVED EXTRANEOUS LINE)	20-AUG-12	SMB

DESIGNED BY: DSG
DATE: JULY 2012
DWN BY: DSG
CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB
CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007CG303.dgn
FILE NUMBER: GCE1-170
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/20/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3

COTTONWOOD POND WETLAND
CROSS SECTIONS
SHEET 1 OF 2

SHEET IDENTIFICATION NUMBER
CG303

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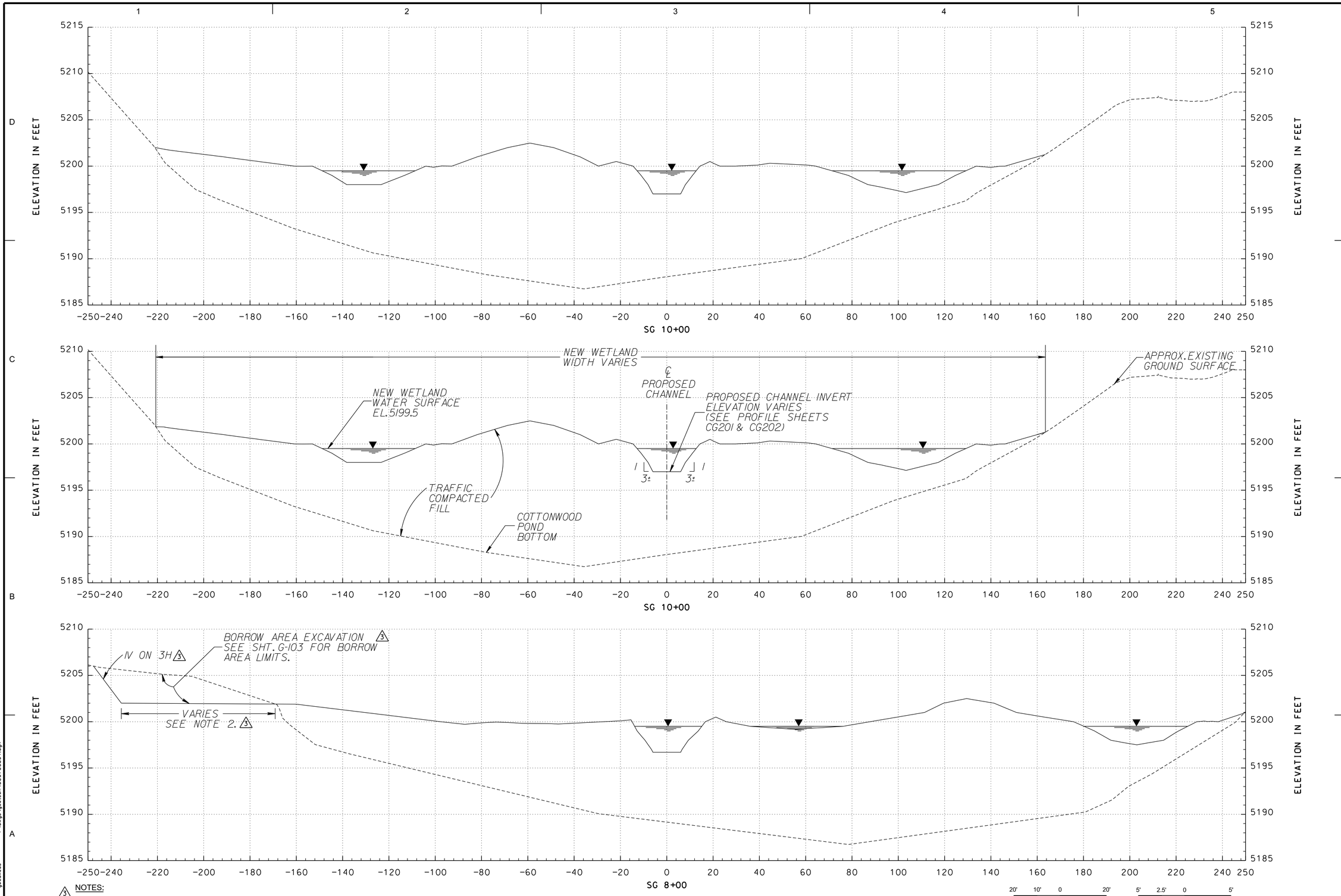
g6edxcos



3 NOTES:

1. CROSS SECTIONS SHOWN ARE PERPENDICULAR TO THE NEW GOOSE CREEK CENTERLINE.
2. CROSS SECTIONS ARE LOOKING IN UPSTATION (UPSTREAM) DIRECTION, SEE GRADING PLAN ON SHTS. CG101 AND CG102.
3. EXCAVATION WIDTH SHALL BE LIMITED TO PREVENT REMOVING THE ENTIRE BERM LOCATED BETWEEN COTTONWOOD POND AND BOULDER CREEK, AND ALSO TO PREVENT DISTURBING NEARBY UTILITIES.

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

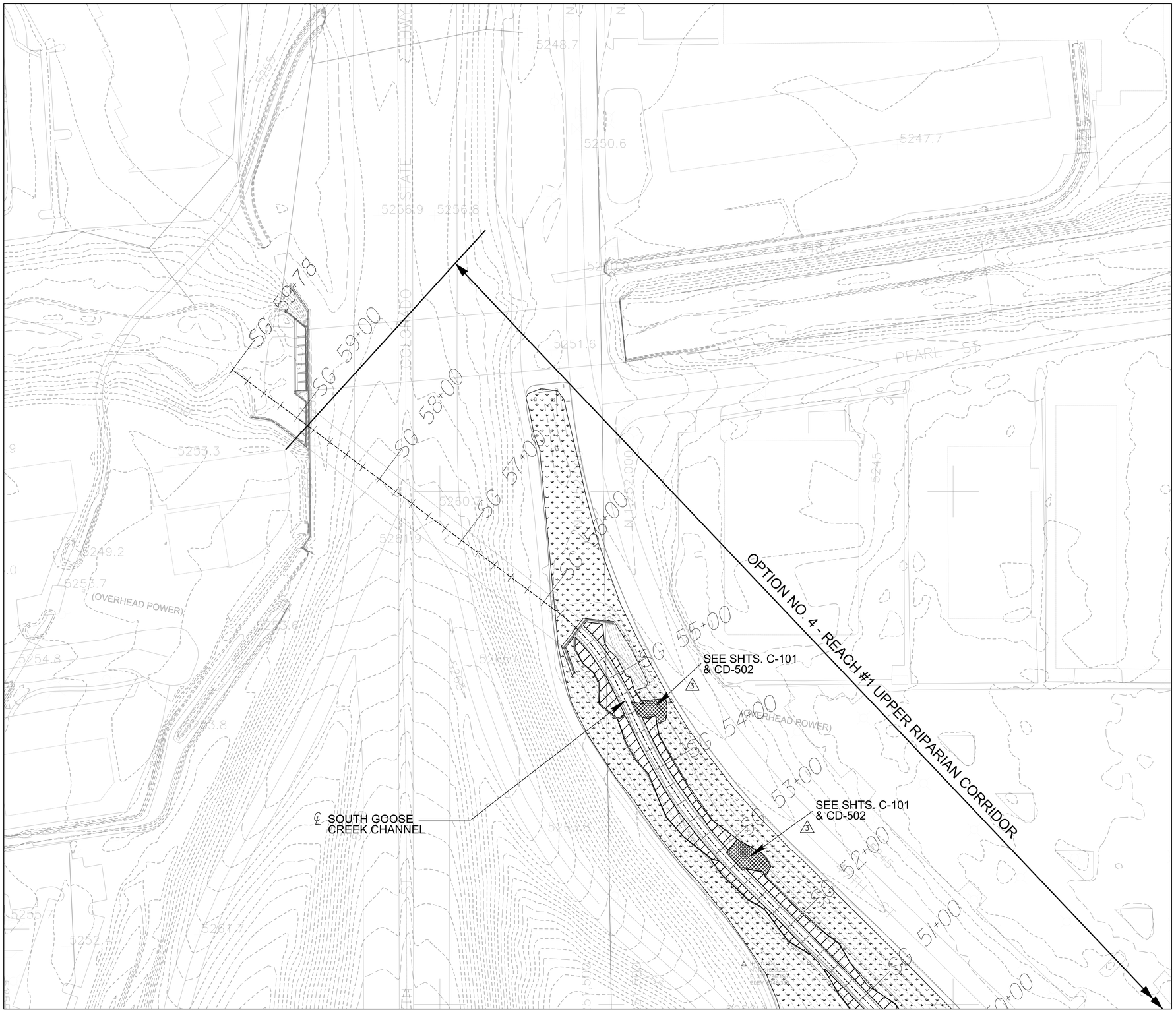
DESIGNED BY: DSG | DATE: JULY 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB | CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007CG304.dgn | FILE NUMBER: CCE-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

3 COTTONWOOD POND WETLAND CROSS SECTIONS SHEET 2 OF 2

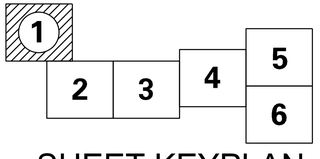
SHEET IDENTIFICATION NUMBER
CG304

I:\dwgs\geotech\C007CG304.dgn
g6edxces

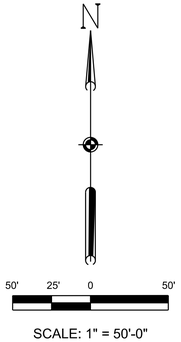


LEGEND

- 5250 — MAJOR CONTOUR
- MINOR CONTOUR
- SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING
- PRAIRIE (UPLAND BUFFER) SEED MIX
- TRANSITION / WETLAND EDGE SEED MIX
- WET PRAIRIE / TRANSITION MIX SEED MIX
- RIPARIAN SHRUBS / TREES
  PLANTING DENSITY: 8 FT. CENTERS OR 680 PLANTS PER ACRE
  SEED AREA WITH PRAIRIE BUFFER UNDERSTORY SEED MIX
- COTTONWOOD RIPARIAN
  PLANTING DENSITY: 10 FT. - 15 FT. CENTERS
  PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES
  SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: CSU
DATE: JULY 2012
DWN BY: DSC
CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB
CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007LP101.dgn
FILE NUMBER: CCE-170
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/20/2012

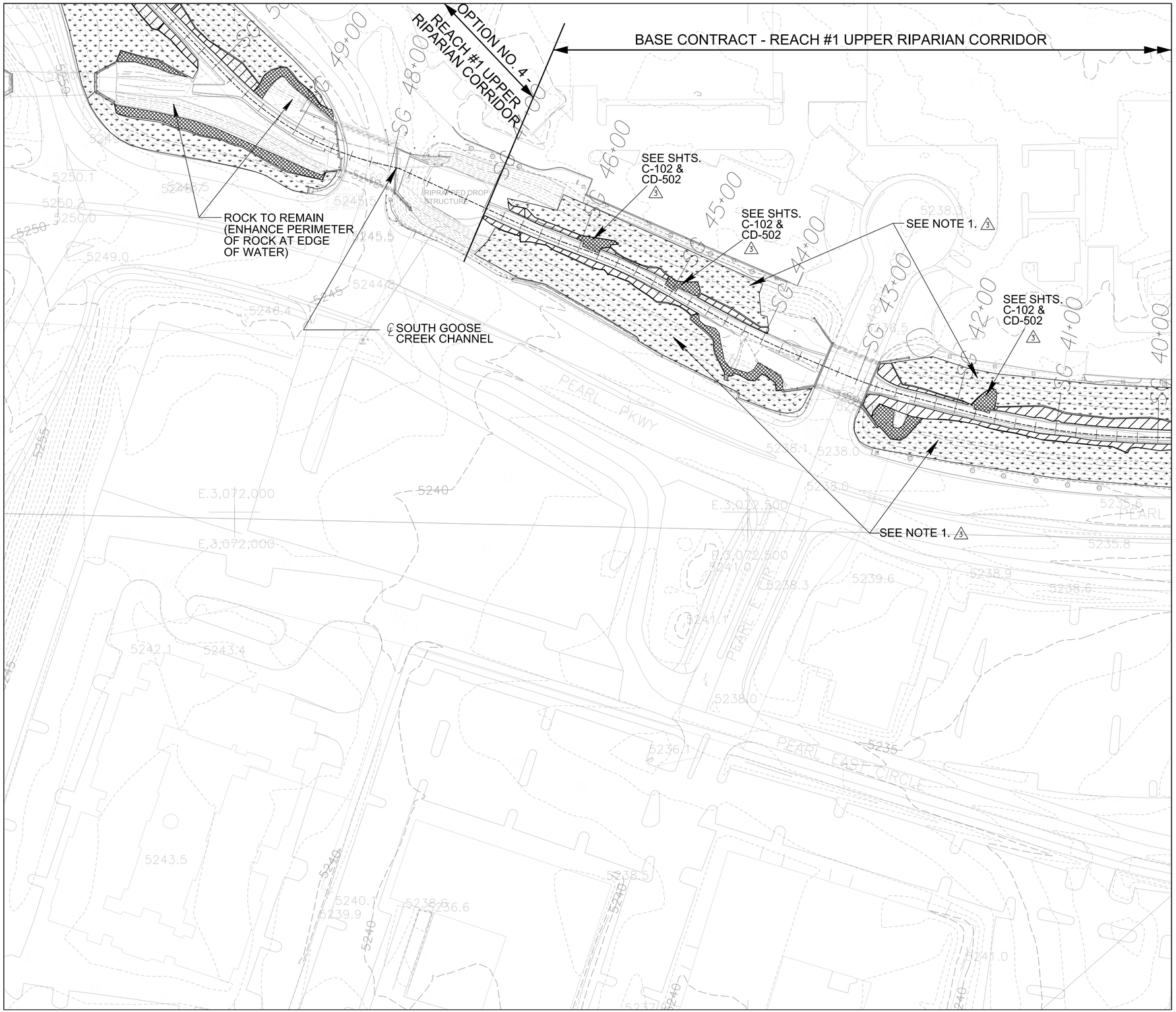
GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 1
SHEET 1 OF 6

3

SHEET IDENTIFICATION NUMBER
LP101

I:\dwgs\geotech\C007LP101.dgn
g6edx.cas

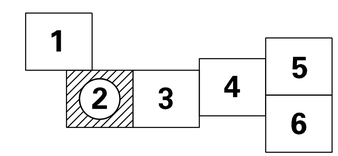


LEGEND

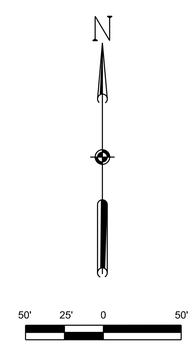
- MAJOR CONTOUR (5250)
- MINOR CONTOUR
- CHANNEL ALIGNMENT ℄ WITH STATIONING (SG 9+00)
- PRAIRIE (UPLAND BUFFER) SEED MIX
- TRANSITION / WETLAND EDGE SEED MIX
- WET PRAIRIE / TRANSITION MIX SEED MIX
- RIPARIAN SHRUBS / TREES
  PLANTING DENSITY: 8 FT. CENTERS OR 680 PLANTS PER ACRE
  SEED AREA WITH PRAIRIE BUFFER UNDERSTORY SEED MIX
- COTTONWOOD RIPARIAN
  PLANTING DENSITY: 10 FT. - 15 FT. CENTERS
  PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES
  SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX

3 NOTES:

1. CONTRACTOR SHALL NOT DISTURB EXISTING LAWN SPRINKLER SYSTEM.



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: CSU | DATE: JULY 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB | CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007LP102.dgn | FILE NUMBER: GCE-170 | PLOT DATE: 8/20/2012
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 2
SHEET 2 OF 6

SHEET IDENTIFICATION NUMBER
LP102

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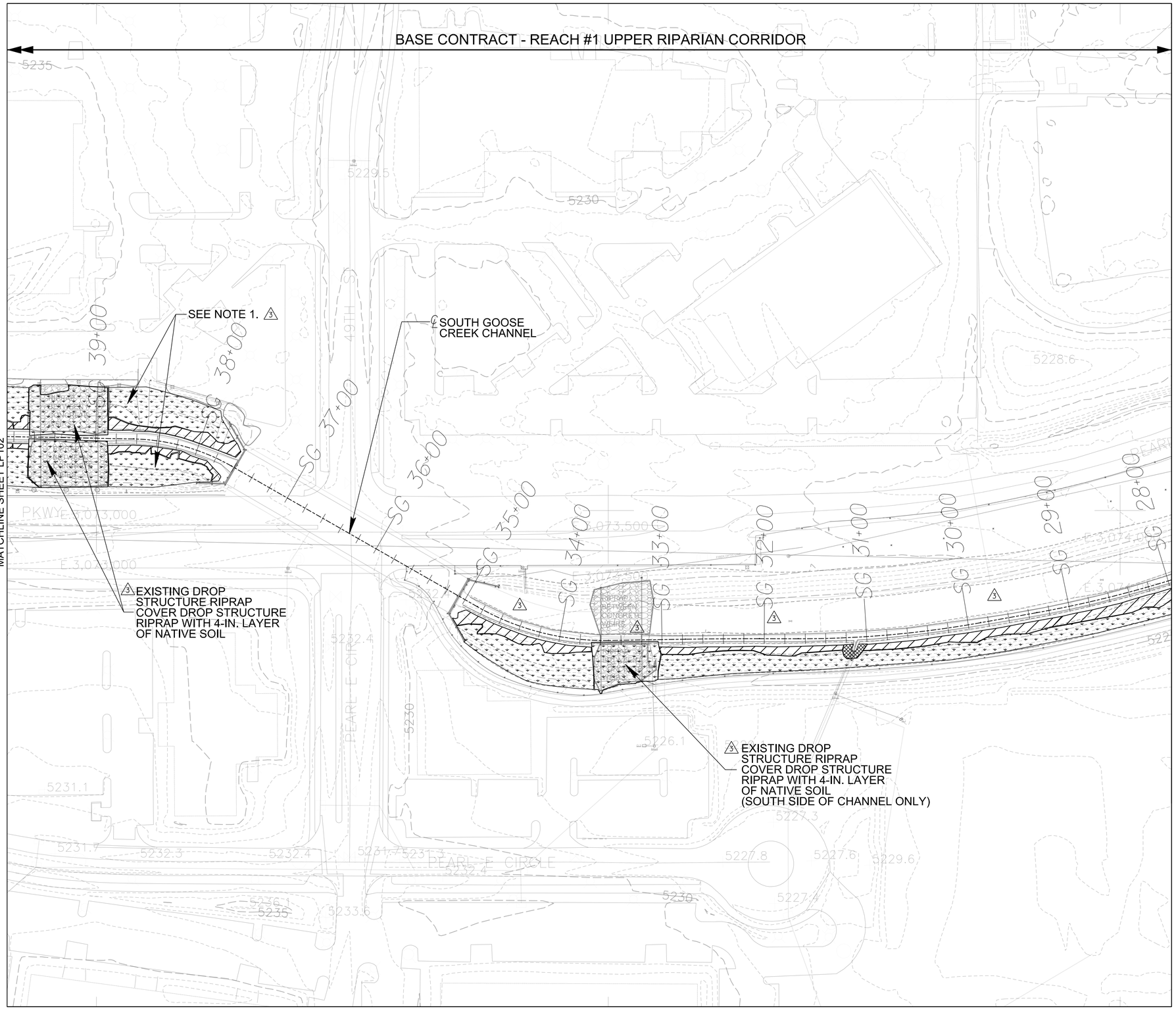
g6edxcos

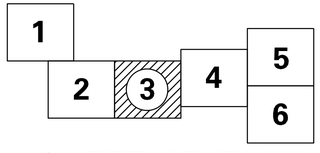


LEGEND

- 5250 — MAJOR CONTOUR
- MINOR CONTOUR
- SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING
- PRAIRIE (UPLAND BUFFER) SEED MIX
- TRANSITION / WETLAND EDGE SEED MIX
- WET PRAIRIE / TRANSITION MIX SEED MIX
- RIPARIAN SHRUBS / TREES
  PLANTING DENSITY: 8 FT. CENTERS OR 680 PLANTS PER ACRE
  SEED AREA WITH PRAIRIE BUFFER UNDERSTORY SEED MIX
- COTTONWOOD RIPARIAN
  PLANTING DENSITY: 10 FT. - 15 FT. CENTERS
  PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES
  SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX

3 NOTES:

1. CONTRACTOR SHALL NOT DISTURB EXISTING LAWN SPRINKLER SYSTEM.



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: CSU
DWN BY: DSG
CKD BY: SMB
SUBMITTED BY:
FILE NAME: C007LP103.dgn
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
DATE: JULY 2012
SOLICITATION NO.: W912EF-12-B-0038
CONTRACT NO.: W912EF-12-C-0XXX
FILE NUMBER: CCE-170
PLOT DATE: 8/20/2012

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 3
SHEET 3 OF 6

SHEET IDENTIFICATION NUMBER
LP103

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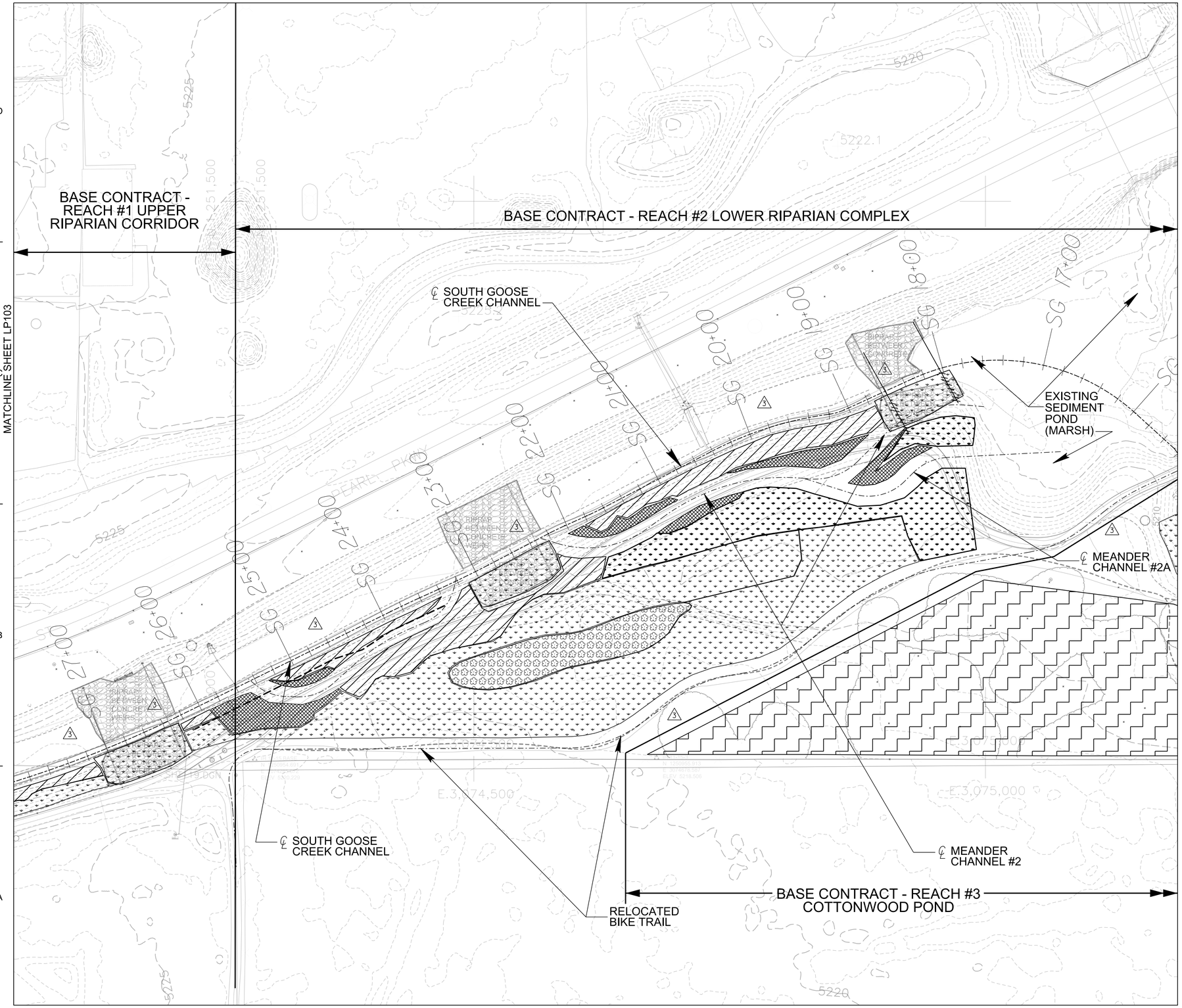
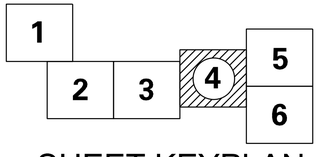
g6edccas

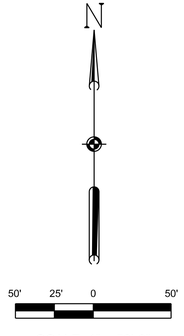


LEGEND

- 5250 — MAJOR CONTOUR
- MINOR CONTOUR
- SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING
- PRAIRIE (UPLAND BUFFER) SEED MIX
- TRANSITION / WETLAND EDGE SEED MIX
- WET PRAIRIE / TRANSITION MIX SEED MIX
- RIPARIAN SHRUBS / TREES
  PLANTING DENSITY: 8 FT. CENTERS OR 680 PLANTS PER ACRE
  SEED AREA WITH PRAIRIE BUFFER UNDERSTORY SEED MIX
- COTTONWOOD RIPARIAN
  PLANTING DENSITY: 10 FT. - 15 FT. CENTERS
  PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES
  SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX



SHEET KEYPLAN



SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: CSU | DATE: JULY 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: | CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007LP104.dgn | FILE NUMBER: CCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 4
SHEET 4 OF 6

SHEET IDENTIFICATION NUMBER
LP104

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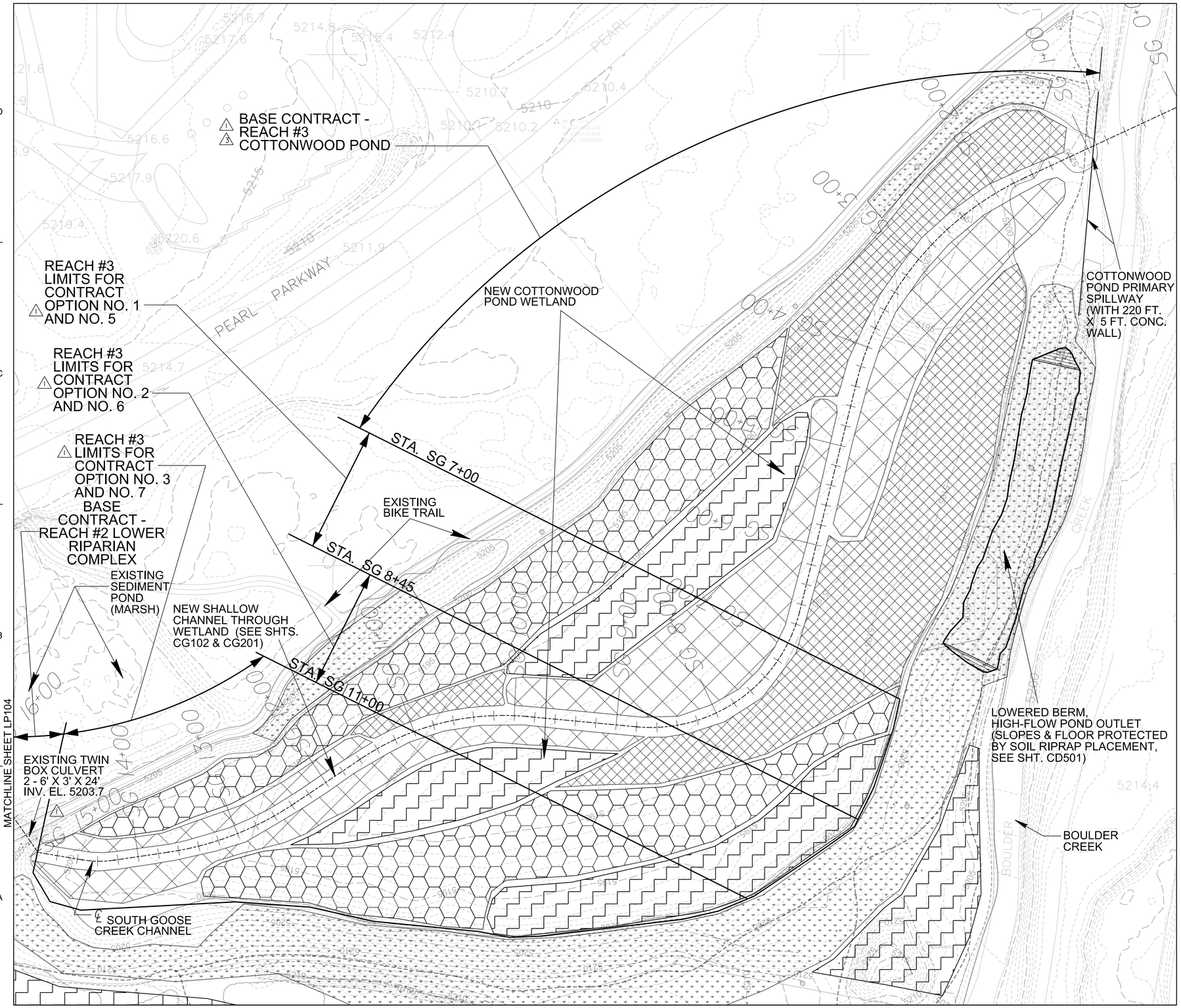
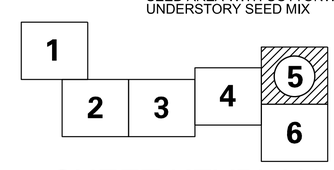
g6edxcas



LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING
- PRAIRIE (UPLAND BUFFER) SEED MIX
- 3 EM - EMERGENT WETLAND (PLANTS AT EL. 5198.0' TO 5199.5') - PLANT CONES/PLUGS OF SAME SPECIES, AND IN SAME PROPORTION, AS IN EMERGENT WETLAND SEED MIX. ALSO SEED AREA WITH EMERGENT WETLAND SEED MIX. PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE
- 3 WM - WET MEADOW (PLANTS AT EL. 5199.5' TO 5200.5') - PLANT CONES/PLUGS OF SAME SPECIES, AND IN SAME PROPORTION, AS IN WET MEADOW SEED MIX. ALSO SEED AREA WITH WET MEADOW SEED MIX. PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE
- WILLOW RIPARIAN CUTTINGS (PLANTS AT EL. 5199.5' TO 5200.5')
  PLANTING DENSITY: 3 FT. CENTERS OR 4780 PLANTS PER ACRE SEED AREA WITH WILLOW UNDERSTORY SEED MIX
- COTTONWOOD RIPARIAN (PLANTS AT EL. 5200.5' TO 5202.5')
  PLANTING DENSITY: 10 FT. - 15 FT. CENTERS
  PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES
  SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB
1	AM #0001 - REISSUED DRAWING	14-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: CSU | DATE: JUL Y 2012
DWN BY: DSG | CKD BY: SMB | SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: | CONTRACT NO.: W912BF-12-C-0XXX
FILE NAME: C007LP105.dgn | FILE NUMBER: CCE1-170
SIZE: 33.1X22 | PLOT SCALE: 0.0833 ft / in. | PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 5
SHEET 5 OF 6

SHEET IDENTIFICATION NUMBER
LP105

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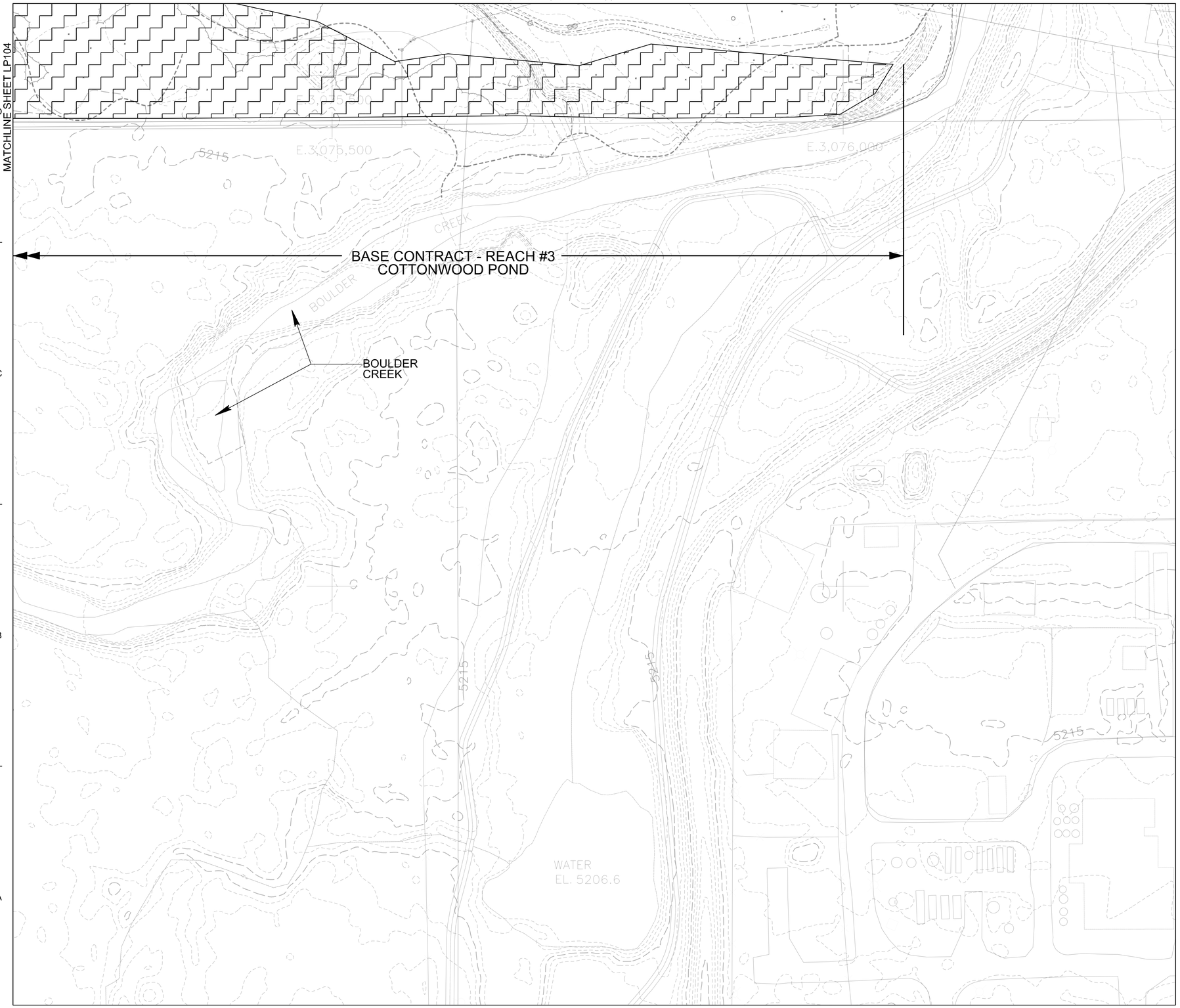


LEGEND

5250 — MAJOR CONTOUR

MINOR CONTOUR

SG 9+00 — CHANNEL ALIGNMENT ℄ WITH STATIONING

PRAIRIE (UPLAND BUFFER) SEED MIX

3 EM - EMERGENT WETLAND (PLANTS AT EL. 5198.0' TO 5199.5') - PLANT CONES/PLUGS OF SAME SPECIES, AND IN SAME PROPORTION, AS IN EMERGENT WETLAND SEED MIX. ALSO SEED AREA WITH EMERGENT WETLAND SEED MIX. PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE

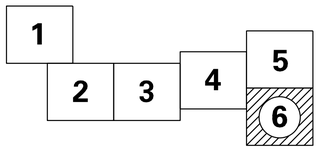
3 WM - WET MEADOW (PLANTS AT EL. 5199.5' TO 5200.5') - PLANT CONES/PLUGS OF SAME SPECIES, AND IN SAME PROPORTION, AS IN WET MEADOW SEED MIX. ALSO SEED AREA WITH WET MEADOW SEED MIX. PLANTING DENSITY: 4 FT. CENTERS OR 2,722 PLANTS PER ACRE

WILLOW RIPARIAN CUTTINGS (PLANTS AT EL. 5199.5' TO 5200.5')

PLANTING DENSITY: 3 FT. CENTERS OR 4780 PLANTS PER ACRE SEED AREA WITH WILLOW UNDERSTORY SEED MIX

COTTONWOOD RIPARIAN (PLANTS AT EL. 5200.5' TO 5202.5')

PLANTING DENSITY: 10 FT. - 15 FT. CENTERS PLANT 30%-40% AS 3" DIA. TREES WITH REMAINDER 1" DIA. TREES SEED AREA WITH COTTONWOOD UNDERSTORY SEED MIX



SHEET KEYPLAN

N

50' 25' 0 50'

SCALE: 1" = 50'-0"

US ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

MARK	DESCRIPTION	DATE	APPR.
3	AM #0003 - REISSUED DRAWING	20-AUG-12	SMB

MARK	DESCRIPTION	DATE	APPR.

U. S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

DESIGNED BY: CSU
DATE: JULY 2012
DWN BY: DSG
CKD BY: SMB
SOLICITATION NO.: W912BF-12-B-0038
SUBMITTED BY: SMB
CONTRACT NO.: W912BF-12-C-20XX
FILE NAME: C007LP106.dgn
FILE NUMBER: CCE1-170
SIZE: 33.1X22
PLOT SCALE: 0.0833 ft / in.
PLOT DATE: 8/20/2012

GOOSE CREEK
ECOSYSTEM RESTORATION PROJECT
BOULDER, COLORADO

PLANTING PLAN
AREA 6
SHEET 6 OF 6

3

SHEET IDENTIFICATION NUMBER
LP106

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g6edxcos