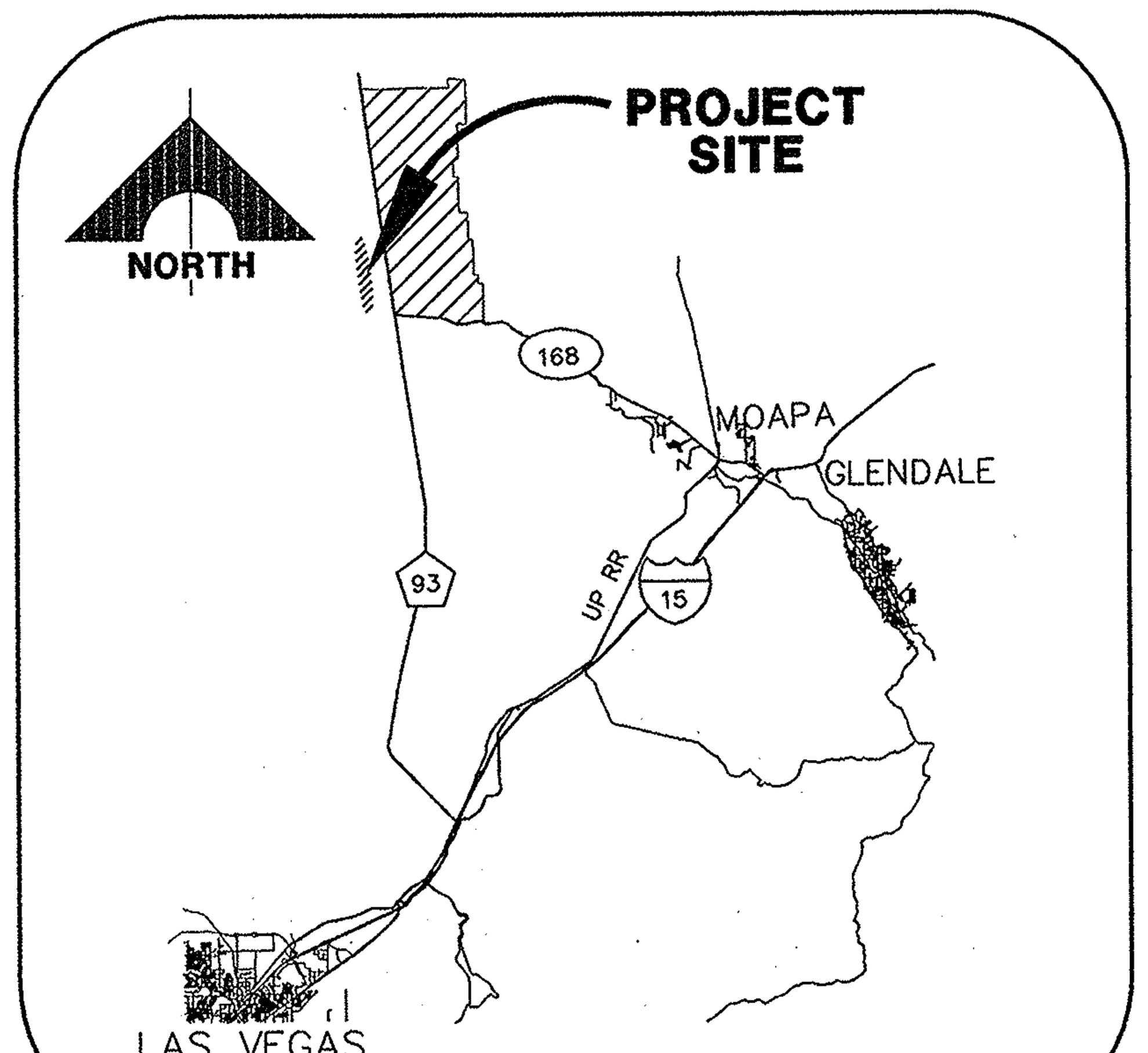
PardeeHomes
OF NEVADA

COYOTE SPRINGS DETENTION BASIN 1

APN# 009-00-002-002 & 009-00-001-009

PardeeHomes
10880 WILSHIRE BOULEVARD
SUITE 1900
LOS ANGELES, CALIFORNIA 90024
(213) 475-3525/FAX (213) 475-3092



VICINITY MAP

gcw2438.dwg.030624.wsk

NOTE: NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C0225E, DATED SEPTEMBER 27, 2002. THIS PANEL SHOWS THAT THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

LEGAL DESCRIPTION

A PORTION OF SECTIONS 17 AND 20, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUTNY, NEVADA

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941"
3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

Pre-development meeting with Department of Development Services, Civil Engineering Division, Off-site Inspector required. Contact Civil Engineering Inspector at 455-4610.

OWNER/DEVELOPER

PARDEE HOMES OF NEVADA
10880 WILSHIRE BLVD., #1990
LOS ANGELES, CA 90024
(310) 475-3525

THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (HTE#06-51511) ON FILE WITH CLARK COUNTY.

[illegible] 7/19/07
GRANT Y. TOKUMI, P.E. #15517

RELEASED FOR ☐ BID ☐ CONSTRUCTION

PARDEE HOMES OF NEVADA DATE

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL BEFORE YOU DIG
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING UNDERGROUND TRAFFIC SIGNALS SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
CALL BEFORE YOU UNDERGROUND
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
AND
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU OVERHEAD
1-702-227-2929
UNDERGROUND SERVICE (USA)

STATE OF NEVADA
PROFESSIONAL ENGINEER
GRANT Y. TOKUMI
Exp. 06/30/2008
CIVIL
No. 15517
DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN. APP.	DATE	GCW. APP.

DESIGN:
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ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:50:13

G. C. WALLACE COMPANIES
ENGINEERS | PLANNERS | SURVEYORS
1555 S. RAINBOW BOULEVARD · LAS VEGAS, NV 89146
T: 702.804.2000 · F: 702.804.2299 · GCWALLACE.COM

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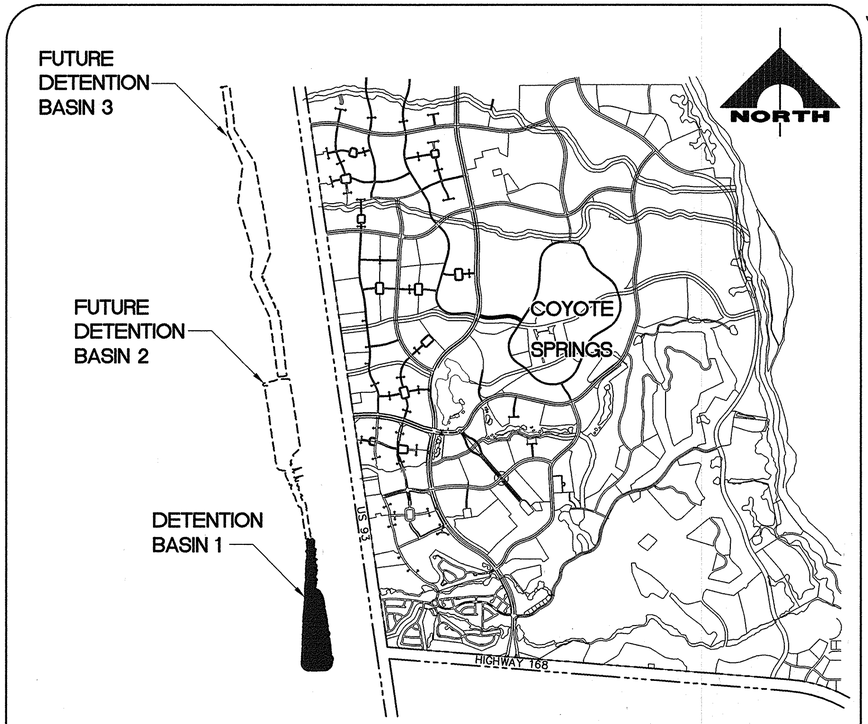
PARDEE HOMES OF NEVADA
COYOTE SPRINGS
DETENTION BASIN 1
COVER SHEET

DRAWING
G1
1 OF 26 SHTS
HTE: 07-3265



LOCATION MAP
NOT TO SCALE

Estimate of Quantities

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTALS
	RIPRAP (D50=8")	CY	1,171
	RIPRAP (D50=12")	CY	6,722
	RIPRAP (D50=18")	CY	9,013
	RIPRAP (D50=24")	CY	512
	EXCAVATION AND EMBANKMENT – CUT	CY	1,836,454
	EXCAVATION AND EMBANKMENT – FILL	CY	301,566
	CUTOFF WALL (1'x3')	LF	1,752
	CUTOFF WALL (1'x5')	LF	2,500
	18" CMP	LF	169
	60" OUTFALL STRUCTURE	EA	1
	84" OUTFALL STRUCTURE	EA	1
	6' HIGH CHAIN–LINK FENCE	LF	65
	20' WIDE CHAIN–LINK FENCE GATE	EA	1
	WARNING SIGN	EA	3
	60" CL III RCP	LF	210
	60" CL V RCP	LF	256
	84" CL III RCP	LF	327
	84" CL V RCP	LF	199
	NDOT TYPE II HEADWALL (MODIFIED)	EA	2
	TEE TYPE MANHOLE	EA	1
	NDOT TYPE IV MANHOLE (MODIFIED)	EA	1
	POST AND CABLE RAILING	LF	283
	CONCRETE ACCESS ROAD	CY	221

STATE OF NEVADA
PROFESSIONAL ENGINEER
GRANT Y. OKUMA
No. 15517
Exp. 6/30/2008
CIVIL
DATE: 7/20/07

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COYOTE SPRINGS
DETENTION BASIN 1
LOCATION MAP

DRAWING
G2
2 OF 26 SHTS
HTE: 07-3265

GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITION BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND OF INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE COUNTY ENGINEER.
2. EXISTING UTILITIES ARE LOCATED ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AND THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON PLANS OR NOT IN THE LOCATION SHOWN ON THE PLANS. (CALL BEFORE YOU DIG 800-227-2600).
3. CONSTRUCTION SURVEY:
GRADES ARE GIVEN FROM TOP OF STAKES OR NAILS. THE CONTRACTORS ARE CAUTIONED TO OBSERVE THE FOLLOWING RULE IN USING THE GRADE STAKES GIVEN BY PROJECT SURVEYOR. THREE CONSECUTIVE POINTS THAT ARE SHOWN TO BE ON THE SAME RATE OF SLOPE MUST BE USED IN COMMON IN ORDER THAT ANY VARIATION OUT OF A PERFECT STRAIGHT GRADE MAY BE DETECTED. IN CASE ANY SUCH DISCREPANCY IS FOUND, THE SAME MUST BE REPORTED, OTHERWISE THE PROJECT SURVEYOR WILL NOT BE RESPONSIBLE FOR ANY ERROR IN THE GRADE OF THE FINISH WORK.
4. STANDARD STREET SECTIONS PER CLARK COUNTY STANDARD DRAWINGS UNLESS OTHERWISE NOTED.
5. VALLEY GUTTER WITH A GRADE OF FOUR TENTHS OF ONE PERCENT OR LESS SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE PROPER DRAINAGE ACROSS ALL VALLEY GUTTERS.
6. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE TECHNICAL SPECIFICATIONS FOR COYOTE SPRINGS DETENTION BASIN 1.
7. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES OR STRUCTURES NOT SHOWN ON THE DRAWINGS. CONTRACTOR TO VERIFY THE EXACT LOCATION OF UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR'S RESPONSIBILITIES REGARDING UTILITIES SHALL BE AS REQUIRED UNDER SUB SECTION 107.17 TECHNICAL SPECIFICATIONS. THE CONTRACTOR SHALL USE EXTREME CARE WORKING OVER OR NEAR ANY EXISTING GAS MAINS.
8. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
10. FENCES, SIGNS, STRUCTURES, LIGHTS AND OTHER EXISTING IMPROVEMENTS WITHIN STREET R/W SHALL BE REMOVED WHERE SHOWN ON THE CONTRACT DRAWINGS, AND AS REQUIRED BY THE ENGINEER.
11. REPLACEMENT, RELOCATION OR RECONSTRUCTION OF ALL EXISTING IMPROVEMENTS INCLUDING FENCES, WALL SIGNS, AND ALL OTHER ITEMS APPLICABLE TO THIS CONTRACT SHALL BE AS REQUIRED BY THE ENGINEER.
13. THE CONTRACTOR SHALL BACKFILL AND FINAL GRADE ALL CUT OR FILL SLOPES TO MATCH EXISTING CONDITIONS TO THE SATISFACTION OF THE ENGINEER.
14. ALL GRADING SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND TECHNICAL SPECIFICATIONS WHERE CONFLICTS OCCUR THE MOST RESTRICTIVE SHALL GOVERN.
15. 48 HOURS PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT:

NEVADA POWER COMPANY	PHONE – 1-800-227-2600
EMBARQ	PHONE – 1-800-227-2600
LAS VEGAS VALLEY WATER DISTRICT	PHONE – (702) 870-2011

DEPARTMENT OF DEVELOPMENT SERVICES CIVIL ENGINEERING DIVISION NOTES

1. INSPECTIONS ARE REQUIRED. CALL 24 HOURS IN ADVANCE, 455-4610. YOUR PERMIT, APPROVED PLANS, AND BARRICADE PLANS FOR THIS WORK MUST BE ON THE JOB SITE AT ALL TIMES.
2. EXACT LOCATION OF ALL SAWCUTS SHALL BE DETERMINED IN THE FIELD BY A CLARK COUNTY INSPECTOR.
3. CURB AND GUTTER WITH A GRADE OF LESS THE 4/10 OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
4. FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE ONE-HALF INCH (1/2") ABOVE THE LIP OF THE GUTTER (INCLUDING OPEN GRADE).
5. ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS AND STANDARD DRAWINGS CLARK COUNTY AREA NEVADA" AND "CLARK COUNTY SUPPLEMENT TO UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS", LATEST REVISION.
6. PRIVATE STREETS, CURB & GUTTER AND VALLEY GUTTERS REFLECTED ON THESE PLANS ARE TO BE INSPECTED BY A CLARK COUNTY INSPECTOR.
7. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS SHALL BE DETERMINED IN FIELD BY A CLARK COUNTY PUBLIC WORKS INSPECTOR.
8. PROPER SIGNS, BARRIERS, BARRICADES AND LIGHTS SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE LATEST "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" TRAFFIC, SCHOOL, OR STREET SIGNS OF ANY KIND ARE NOT TO BE MOVED FOR ANY REASON WITHOUT FIRST COORDINATING WITH THE DEPARTMENT OF DEVELOPMENT SERVICES, CIVIL ENGINEERING DIVISION INSPECTOR @ 455-4610.
9. THIS PLAN DOES NOT AUTHORIZE CLOSURE OF ANY ROAD OR STREET.
10. NO OPEN TRENCH SHALL BE ALLOWED ACROSS ANY STREET OR WITHIN TEN FEET (10') OF ANY TRAVEL-WAY, EXCEPT WHEN WORK IS IN ACTUAL PROGRESS. AREAS COVERED BY ACCEPTABLE STEEL PLATES ARE NOT TO BE CONSTRUED AS A TRENCH. NO OPEN TRENCH PERMITTED IN EXCESS OF 500 FEET OR LENGTH NECESSARY TO ACCOMMODATE PIPE INSTALLATION IN A SINGLE DAY, WHICHEVER IS GREATER. ALL TRENCH CROSSINGS AND BACKFILL SHALL MEET THE STANDARD SPECIFICATION UNLESS OTHERWISE STATED.
11. A TEMPORARY PATCH IS TO BE IN PLACE AT THE END OF EACH WORK DAY WHERE THE BACKFILL IN THE TRENCH HAS BEEN COMPLETED AND PRIOR TO OPENING THE WORK AREA BACK TO TRAFFIC AND IS TO BE MAINTAINED BY THE PERMITTEE. A PERMANENT PATCH IS TO BE IN PLACE WITHIN THIRTY (30) DAYS AFTER THE INSTALLATION OF THE TEMPORARY PATCH.
12. COMPACTION TESTS ARE REQUIRED.

TRAFFIC NOTES

1. ALL PERMANENT TRAFFIC DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
2. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY GROUND MOUNTED STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING COUNTY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
3. ALL CONSTRUCTION SIGNING, BARRICADING AND PAVEMENT MARKING SHALL CONFORM TO THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK – 1986 AND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
4. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH WITH LIKE MATERIALS TO THE SATISFACTION OF THE COUNTY TRAFFIC MANAGER.
5. THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CLARK COUNTY AREA STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE TYPE III SHEETING.
6. IF A PROPOSED STREET LIGHT STANDARD IS FIELD LOCATED TO WITHIN FIVE (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, THEN CHANGE SIGN MOUNTING TO ONE ON THE STREETLIGHT STANDARD.
7. PRIOR TO CONSTRUCTION, THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE CURRENT PLANNING DIVISION OF THE DEPARTMENT OF COMPREHENSIVE PLANNING.
8. ALL TRAFFIC SIGNAL POLE ASSEMBLIES, STEEL PEDESTALS FOR CABINETS, AND STREET LIGHT POLES SHALL BE GALVANIZED PER ASTM A.123.
9. ALL STREET LIGHTING INSTALLATIONS EXCEPT NOTED ON STREET LIGHTING PLAN SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORK, CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST EDITION OF EACH.
10. THE FOLLOWING CLARK COUNTY UNDERGROUND FACILITIES MAY BE LOCATED IN YOUR PROJECT AREA: STREET LIGHTING, TRAFFIC SIGNALS, FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION (FAST) INTERCONNECT CABLE. YOU MUST CONTACT CLARK COUNTY TRAFFIC MANAGEMENT DIVISION, OPERATIONS UNIT AT 455-7511 FOR LOCATIONS AT LEAST 48 HOURS PRIOR TO WORKING IN THE AREA. CLARK COUNTY IS NOT A MEMBER OF CALL BEFORE YOU DIG (UNDERGROUND SERVICE ALERT), AND A CALL TO THAT ORGANIZATION DOES NOT RELIEVE YOU OF LIABILITY FOR CLARK COUNTY FACILITIES.
11. FAST INTERCONNECT CABLE POLICY IS IN EFFECT. INTERCONNECT CABLE MUST BE MAINTAINED AT ALL TIMES. DEVELOPER/CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD INTERCONNECT CABLE, WHILE PERMANENT CABLE IS BEING RELOCATED. TEMPORARY AERIAL INSTALLATION MUST BE ACCEPTABLE TO THE COUNTY TRAFFIC MANAGER AND TO FAST. ANY DAMAGE TO THIS CABLE IS DEEMED AN EMERGENCY BY FAST, CITY OF LAS VEGAS, CLARK COUNTY AND NDOT AND MUST BE REPAIRED IMMEDIATELY TO FAST ACCEPTANCE. $2,500 PER DAY DAMAGES MAY BE ASSESSED AFTER 24 HOURS HAS ELAPSED FROM TIME OF BREAK OR DAMAGE.
12. ALL NEW OR REPLACEMENT TRAFFIC SIGNAL LOOPS SHALL BE INSTALLED USING CABLE-IN-DUCT WIRING, SHALL HAVE INDEPENTENT LEAD-IN WIRES FOR EACH LOOP FROM THE CONTROLLER TO THE PULL-BOX, AND EACH LEAD-IN SHALL BE INDIVIDUALLY TAGGED.
13. TRAFFIC SIGNAL PEDESTRIAN HEADS SHALL BE THE L.E.D. TYPE.
14. ELECTRICAL POWER SERVICE POINT LOCATION(S) FOR STREET LIGHTING AND TRAFFIC SIGNALS MUST BE INDICATED ON THE PLANS. IF CONNECTING TO AN EXISTING CIRCUIT, INDICATE LOCATION OF EXISTING SERVICE POINT FOR EACH CIRCUIT.
15. WHEN STREETLIGHTS ARE TO BE CONNECTED TO AN EXISTING CIRCUIT, AN ELECTRICAL ENGINEER OR A CLARK COUNTY APPROVED LICENSED ELECTRICIAN MUST CERTIFY THAT THE EXISTING CIRCUIT IS CAPABLE OF HANDLING THE ADDITIONAL CIRCUIT LOAD.
16. CLARK COUNTY RESERVES THE RIGHT TO REJECT STREET LIGHT AND TRAFFIC SIGNAL POLES AND ASSEMBLIES WHICH HAVE A "STRIPED" APPEARANCE.
17. PRIOR TO BEGINNING OF CONSTRUCTION, MODIFICATION, OR RELOCATION OF ANY TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION OF THE DATE THAT WORK WILL BEGIN.
18. THREE (3) NORMAL WORKING DAYS PRIOR TO TURN-ON OR COMPLETION OF MODIFICATION(S) TO A TRAFFIC SIGNAL SYSTEM, WRITTEN NOTICE SHALL BE SUBMITTED TO THE CLARK COUNTY TRAFFIC MANAGEMENT DIVISION THAT WORK IS BEING COMPLETED AND THE PROPOSED DATE OF COMPLETION.
19. "THIS SET OF PLANS ARE CERTIFIED TO CONFORM TO THE REQUIREMENTS OF THE TRAFFIC STUDY ACCEPTANCE LETTER."

LEGEND AND ABBREVIATIONS

LEGEND

(00.0) / INV	EXIST. ELEVATION
00.0 / INV	PROPOSED ELEVATION
	PROPERTY OR RIGHT-OF-WAY LINE
	CENTERLINE
	HYDRAULIC GRADE LINE (HGL)
	ENERGY GRADE LINE (EGL)
	EASEMENT
	CONSTRUCTION LIMITS
T	EXISTING TELEPHONE CABLE
X	EXISTING CHAIN-LINK FENCE
X	PROPOSED CHAIN-LINK FENCE
SS	EXISTING SANITARY SEWER LINE
SS	PROPOSED SANITARY SEWER LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
UGE	EXISTING UNDERGROUND POWER
OHP	EXISTING OVERHEAD POWER
SD	EXISTING STORM DRAIN
SD	PROPOSED STORM DRAIN
CATV	EXISTING CABLE TELEVISION
1730	EXISTING CONTOUR
1730	PROPOSED INDEX CONTOUR
	PROPOSED CONTOUR
///	SAWCUT LINE
○	EXISTING MANHOLE
●	PROPOSED MANHOLE
	EXISTING FIRE HYDRANT
⊗	EXISTING VALVE
⊗	PROPOSED VALVE
	PROPOSED DROP INLET
	PROPOSED REUSE HYDRANT
	PROPOSED CHANNEL
	WARNING SIGN ON POST
	RIPRAP
	ACCESS ROAD
	PORTLAND CEMENT CONCRETE (PCC)

ABBREVIATIONS

A = AREA
AC = ASPHALTIC CONCRETE
AC FT = ACRE-FEET
ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS
BCR = BEGIN CURB RETURN
BW = BACK OF WALK
CC = CLARK COUNTY
CF = CURB FACE
CFS = CUBIC FEET PER SECOND
CL/℄ = CENTERLINE
CLSM = CONTROLLED LOW STRENGTH MATERIAL
CNTL = CONTROL LINE
DS = DOWN SPOUT
EA = EACH
ELEV./ EL = ELEVATION
EP = EDGE OF PAVEMENT
EXIST./ EX = EXISTING
FF = FINISH FLOOR
FG = FINISHED GRADE
FG = FINISH GRADE
FL = FLOW LINE
FNC = FENCE
FT = FEET
FUT = FUTURE
G = GAS
GB = GRADE BREAK
GR = GRATE ELEVATION
HDPE = HIGH DENSITY POLYETHYLENE
HP = HIGH POINT
INV = INVERT
LF = LINEAR FEET
LVVWD = LAS VEGAS VALLEY WATER DISTRICT
NG = NATURAL GRADE
NP = NEVADA POWER
O.C. = ON CENTER
OCS = ORIGIN OF CONICAL SURFACE
O.D. = OUTSIDE DIAMETER
PC = POINT OF CURVE
PCC = POINT OF COMPOUND CURVE
PL = PLATE
PMF = PROBABLE MAXIMUM FLOOD
PRC = POINT REVERSE CURVE
PT = POINT OF TANGENT
PVC = POLYVINYL CHLORIDE PIPE
Q = FLOW RATE
Q_{100} = 100-YEAR FLOWRATE
R = RADII
R/W = RIGHT-OF-WAY
RCA = REINFORCED CONCRETE ARCH
RCB = REINFORCED CONCRETE BOX
RCC = ROLLER COMPACTED CONCRETE
RCP = REINFORCED CONCRETE PIPE
RR = RAILROAD
S = STORAGE
SD = STORM DRAIN
SDDI = STORM DRAIN DROP INLET
SDMH = STORM DRAIN MANHOLE
SMH = SEWER MANHOLE
SQ MI = SQUARE MILES
SS = SEWER
STA = STATION
STLT = STREET LIGHT
t = TIME
THK = THICK
TC = TOP BACK OF CURB
TOE = TOE OF CHANNEL
TOP = TOP OF CHANNEL
TRANS = TRANSITION
TRW = TOP OF RETAINING
TW = TOP OF WALL
UDACS = UNIFORM DESIGN AND CONSTRUCTION STANDARDS
USDCCA = UNIFORM STANDARD DRAWING CLARK COUNTY AREA
VAR. = VARIES
W = WATER
W/ = WITH
WSE = WATER SURFACE ELEVATION

NOTES

1. THE BORROW AREA SHALL BE WITHIN THE LIMITS OF THE DETENTION BASIN GRADING.
2. STRIPPING SHALL CONSIST OF OVER-EXCAVATING BELOW EMBANKMENT 12-18 INCHES TO 10 FEET BEYOND THE PLACEMENT OF FILL AND SCARIFYING TO DEPTH OF 8 INCHES MINIMUM. AREA OF STRIPPING SHALL INCLUDE ACCESS ROADS, MAINTENANCE ROADS, OUTLET PIPE TRENCHING, CHANNELS, EMBANKMENT, AND ANY AREA TO BE SCARIFIED AND RECOMPACTED.
3. SURPLUS MATERIAL FROM GRADING OPERATIONS SHALL BE PLACED FROM THE EXISTING GROUND UP, DOWNSLOPE FROM THE EMBANKMENT. SURPLUS MATERIAL SHALL NOT BE PLACED WITHIN THE SPILLWAY LIMITS.

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

Avoid cutting underground utility lines. It's costly.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY

1-702-227-2929

PROFESSIONAL ENGINEER STATE OF NEVADA
GRANT Y. TOKUMI
Exp. 06/30/2008
CIVIL
No. 15517

DATE: 7/19/07

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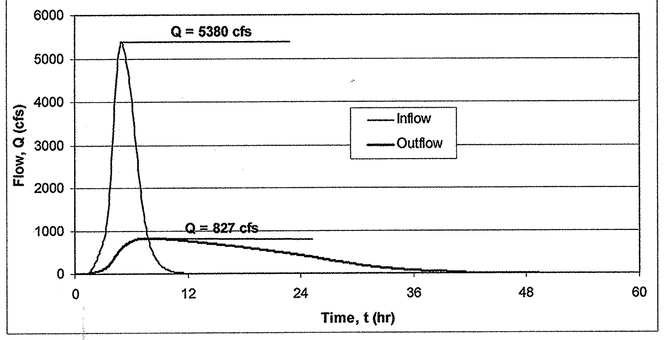
COYOTE SPRINGS
DETENTION BASIN 1
NOTES, LEGEND AND ABBREVIATIONS

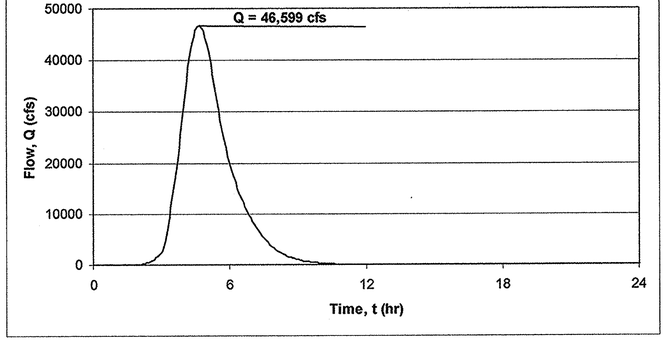
DRAWING
G3
3 OF 26 SHTS
HTE: 07-3265

gcw2436.dwg.030624.wsk

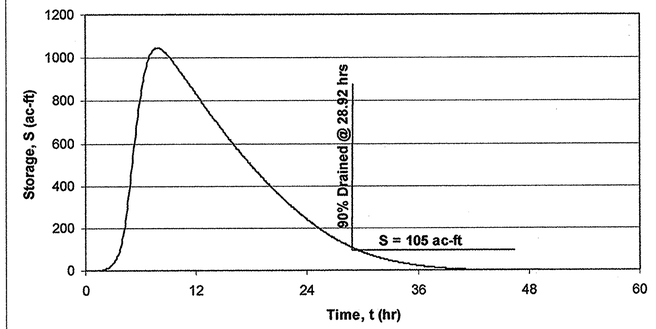
DETENTION BASIN 1
INFLOW-OUTFLOW HYDROGRAPHS



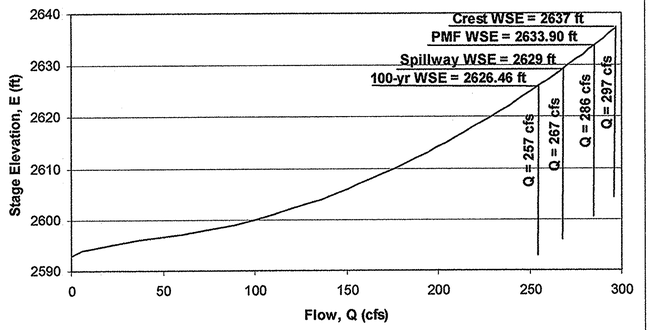
DETENTION BASIN 1
PMF INFLOW HYDROGRAPH



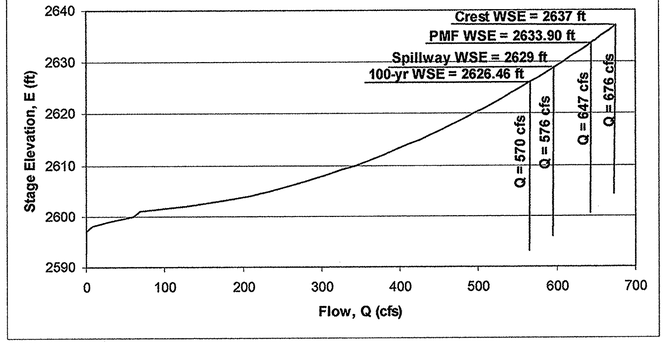
DETENTION BASIN 1
DRAIN TIME



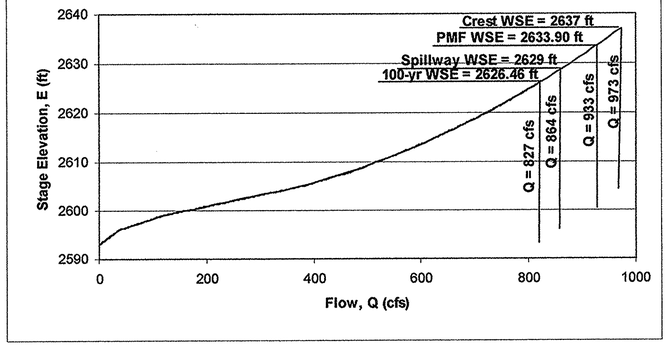
DETENTION BASIN 1
LOW LEVEL OUTLET STAGE-DISCHARGE



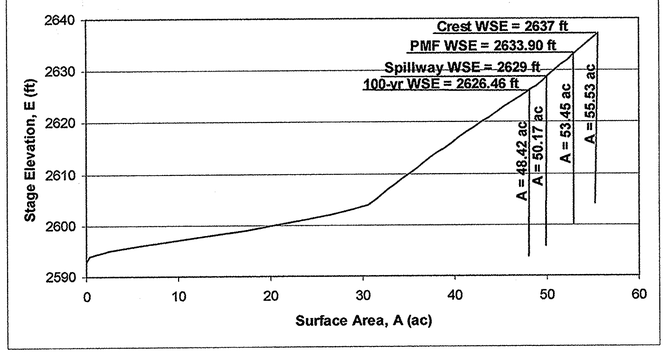
DETENTION BASIN 1
HIGH LEVEL OUTLET STAGE-DISCHARGE



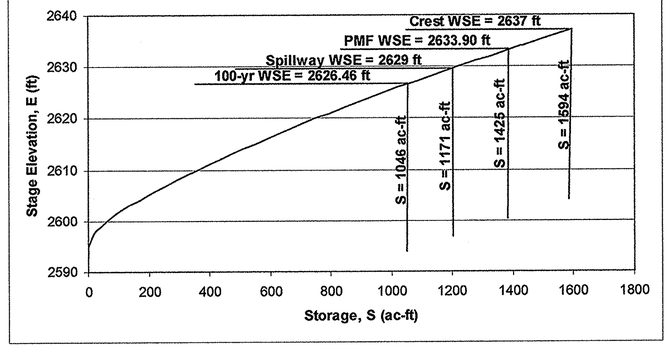
DETENTION BASIN 1
COMBINED OUTLET STAGE-DISCHARGE



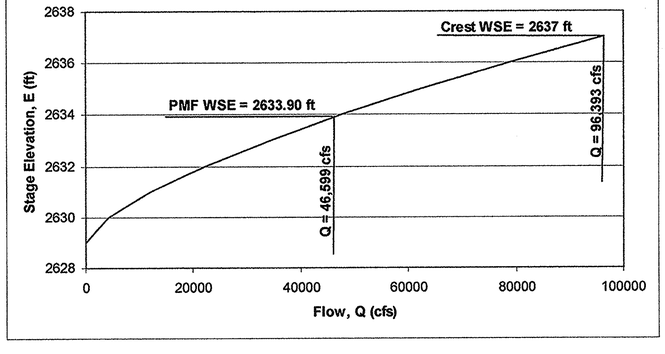
DETENTION BASIN 1
STAGE-SURFACE AREA



DETENTION BASIN 1
STAGE-STORAGE



DETENTION BASIN 1
EMERGENCY SPILLWAY STAGE-DISCHARGE



STATE OF NEVADA
GRANT Y. TOKUMI
No. 10519
PROFESSIONAL ENGINEER
CIVIL
DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE AGEN. APP	DATE GCW APP

DESIGN:
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G.C. WALLACE COMPANIES
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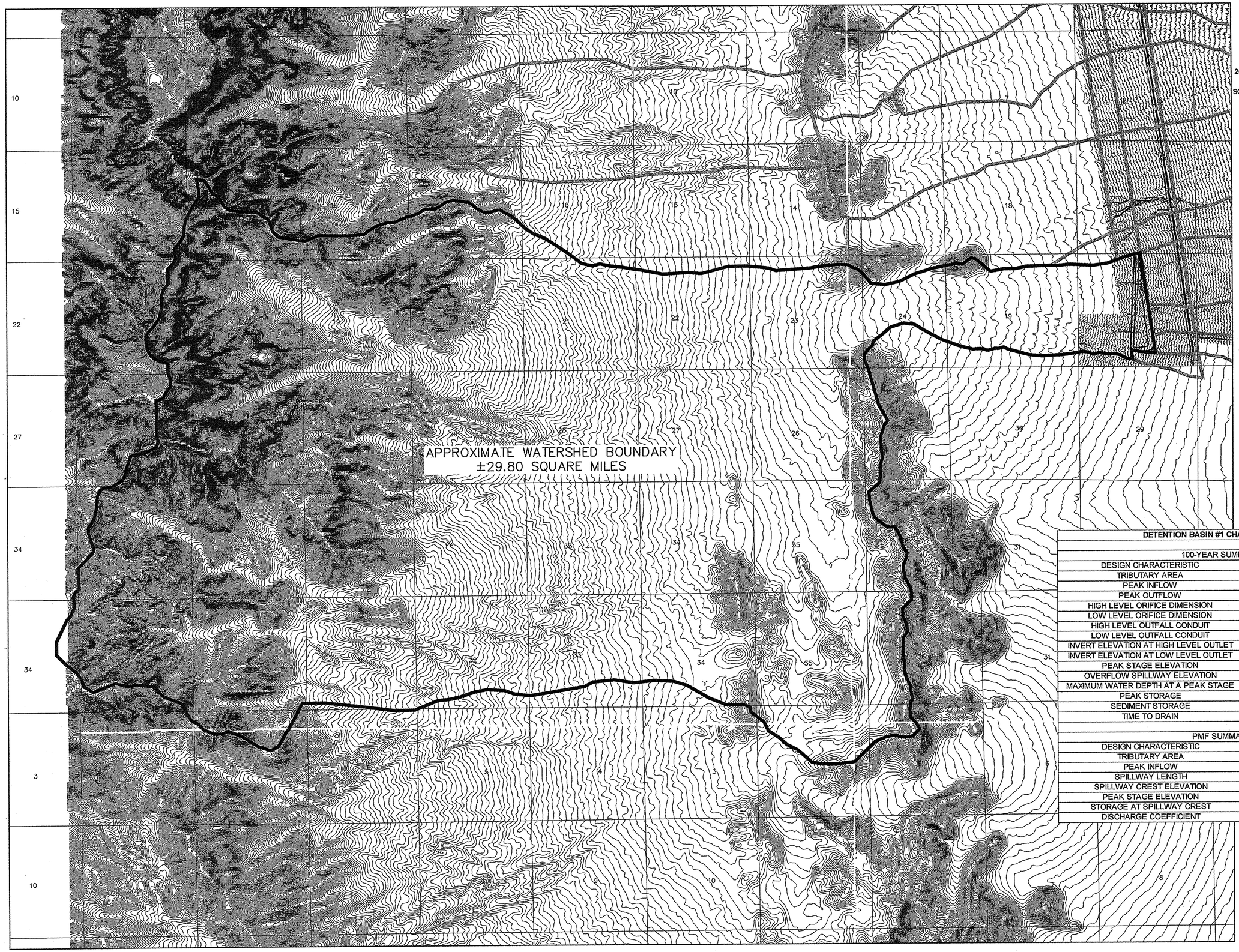
T: 702.804.2000 - F: 702.804.2299 - GCWALLACE.COM

F:\552101-0916\Dwg\Hydro\Improv-R2\GCSB1_-004-R2.dwg KNguyen

COYOTE SPRINGS
DETENTION BASIN 1
CAPACITY CURVES AND HYDROLOGIC INFORMATION

DRAWING
G4
4 OF 26 SHTS
HTE: 07-3265

cre2435.dwg 030924.wdt



NORTH

2000 0 2000 4000
SCALE FEET

DETENTION BASIN #1 CHARACTERISTICS	
100-YEAR SUMMARY	
DESIGN CHARACTERISTIC	DESIGN PARAMETER
TRIBUTARY AREA	29.80 SQ MI
PEAK INFLOW	5380 CFS
PEAK OUTFLOW	827 CFS
HIGH LEVEL ORIFICE DIMENSION	64"
LOW LEVEL ORIFICE DIMENSION	41"
HIGH LEVEL OUTFALL CONDUIT	84" RCP
LOW LEVEL OUTFALL CONDUIT	60" RCP
INVERT ELEVATION AT HIGH LEVEL OUTLET	2596.88 FT
INVERT ELEVATION AT LOW LEVEL OUTLET	2593.27 FT
PEAK STAGE ELEVATION	2626.46 FT
OVERFLOW SPILLWAY ELEVATION	2629.00 FT
MAXIMUM WATER DEPTH AT A PEAK STAGE	33.46 FT
PEAK STORAGE	1046 AC FT
SEDIMENT STORAGE	40 AC FT
TIME TO DRAIN	28.92 HRS
PMF SUMMARY	
DESIGN CHARACTERISTIC	DESIGN PARAMETER
TRIBUTARY AREA	29.80 SQ MI
PEAK INFLOW	46599 CFS
SPILLWAY LENGTH	1420 FT
SPILLWAY CREST ELEVATION	2629.00 FT
PEAK STAGE ELEVATION	2633.9 FT
STORAGE AT SPILLWAY CREST	1171.3
DISCHARGE COEFFICIENT	3.0

STATE OF NEVADA
GRANT Y. TOKUMI
Exp. 06/30/2008
No. 15511
PROFESSIONAL ENGINEER
DATE 7/19/07

REV.	DATE	DESCRIPTION	DATE	AGEN.	APP.	DATE	GCW.	APP.

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COYOTE SPRINGS
DETENTION BASIN 1
WATERSHED BOUNDARY MAP

DRAWING
G5
5 OF 26 SHTS

HTE: 07-3265

gs2x36.dwg,030924.stb

(00) COORDINATE KEYNOTES

No.	NORTHING	EASTING	DESCRIPTION
15	27001618.5656	840325.3784	CNTL–SPILLWAY
200	26998168.7107	842457.7239	CNTL–OUTFLOW
205	26996391.3330	843013.7310	BC SC S20–S21/S29–S28
206	27001747.2770	840332.2440	BC 1/4 S17/S20
213	26999647.2530	842517.3860	FND NDOT MON
214	26999625.5820	842370.0690	FND NDOT MON
215	27002323.3900	842123.6240	FND NDOT MON
216	27002301.6420	841976.0660	FND NDOT MON
217	27005173.0580	841704.9160	FND NDOT MON
218	27005151.1280	841555.9740	FND NDOT MON
219	27006954.1780	841442.3430	FND NDOT MON
220	27006932.4420	841294.3630	FND NDOT MON
244	26999019.2940	842973.2980	BC 1/4 S20–S21
245	27001651.8670	842925.6440	BC SC S17–S16/S20–S21
246	27004278.4270	842856.8680	BC 1/4 S17–S16
247	27006918.9580	842736.9540	BC SC S8–S9/S17–S16
408	26996399.0620	845682.0240	BC 1/4 S21/S28
409	26996407.2050	848350.6100	BC SC S21–S22/S28–S27

NORTH
SCALE 1"=400'

400 0 400 800
SCALE FEET

SECTION CORNER 8 | 9 17 | 16 FOUND 3 1/4" BRASS CAP "BLM 2003"

N02°36'01"W 2643.25'

17 | 16 1/4 FOUND 3 1/4" BRASS CAP "BLM 2003"

N01°30'00"W 2627.46'

SECTION CORNER 17 | 16 20 | 21 FOUND 3 1/4" BRASS CAP "BLM 2003"

N01°02'13"W 2633.00'

20 | 21 1/4 FOUND 3 1/4" BRASS CAP "BLM 2003"

N00°52'53"W 2628.38'

SECTION CORNER 20 | 21 29 | 28 FOUND 3 1/4" BRASS CAP "BLM 2003"

N17°22'15"W 1862.31'

SECTION CORNER 21 | 22 28 | 27 FOUND 3 1/4" BRASS CAP "BLM 2003"

2668.60'

1/4 FOUND 3 1/4" BRASS CAP "BLM 2003" 21 | 28

5336.90'

N89°49'48"E BASIS OF BEARINGS PER FILE 98, PAGE 57 OF PARCEL MAPS

2668.30'

STATE HIGHWAY 168

200'

200'

100.00' SPECIAL USE PERMIT BLM PERMIT APPLICATION# N82373 FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED

US HIGHWAY 93

FOUND 3 1/2" BRASS DISC "NHD" STA: A1873+49.90 P.O.T. DIST: 75.10

FOUND 3 1/2" BRASS DISC "NHD" STA: A1855+49.70 P.O.T. DIST: 75.47

FOUND 3 1/2" BRASS DISC "NHD" STA: A1826+70.00 P.O.T. DIST: 74.58

FOUND 3 1/2" BRASS DISC "NHD" STA: A1873+49.90 P.O.T. DIST: 74.50

FOUND 3 1/2" BRASS DISC "NHD" STA: A1855+49.70 P.O.T. DIST: 75.20

FOUND 3 1/2" BRASS DISC "NHD" STA: A1826+70.00 P.O.T. DIST: 74.60

FOUND 3 1/2" BRASS DISC "NHD" STA: A1799+65.33 P.O.T. DIST: 74.50

FOUND 3 1/2" BRASS DISC "NHD" STA: A1799+65.33 P.O.T. DIST: 74.49

2595.15'

N87°53'35"W

17 | 20 1/4 FOUND 3 1/4" BRASS CAP "BLM 2003"

128.89 S03°03'12"W

FUTURE GREAT BASIN ELECTRIC TRANSMISSION LINES

1293.00' SPECIAL USE PERMIT BLM PERMIT APPLICATION# N82373 FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, (TO BE PRIVATELY MAINTAINED)

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941"
3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

LEGAL DESCRIPTION

A PORTION OF SECTIONS 17 AND 20, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA

STATE OF NEVADA PROFESSIONAL SURVEYOR PATRICIA DELGADO Exp. 12-31-08 No. 16811

DATE: 7/9/07

DESCRIPTION	REV	DATE	AGEN.	APP.	DATE	GOV. APP.	DATE

DESIGN:
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PLOT DATE: 07-18-07
PLOT TIME: 14:52:04

G.C. WALLACE COMPANIES
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KKnguyen
F:\552101-0916\Dwg\Vistro\mircro-R2\C52581_G06-R2.dwg

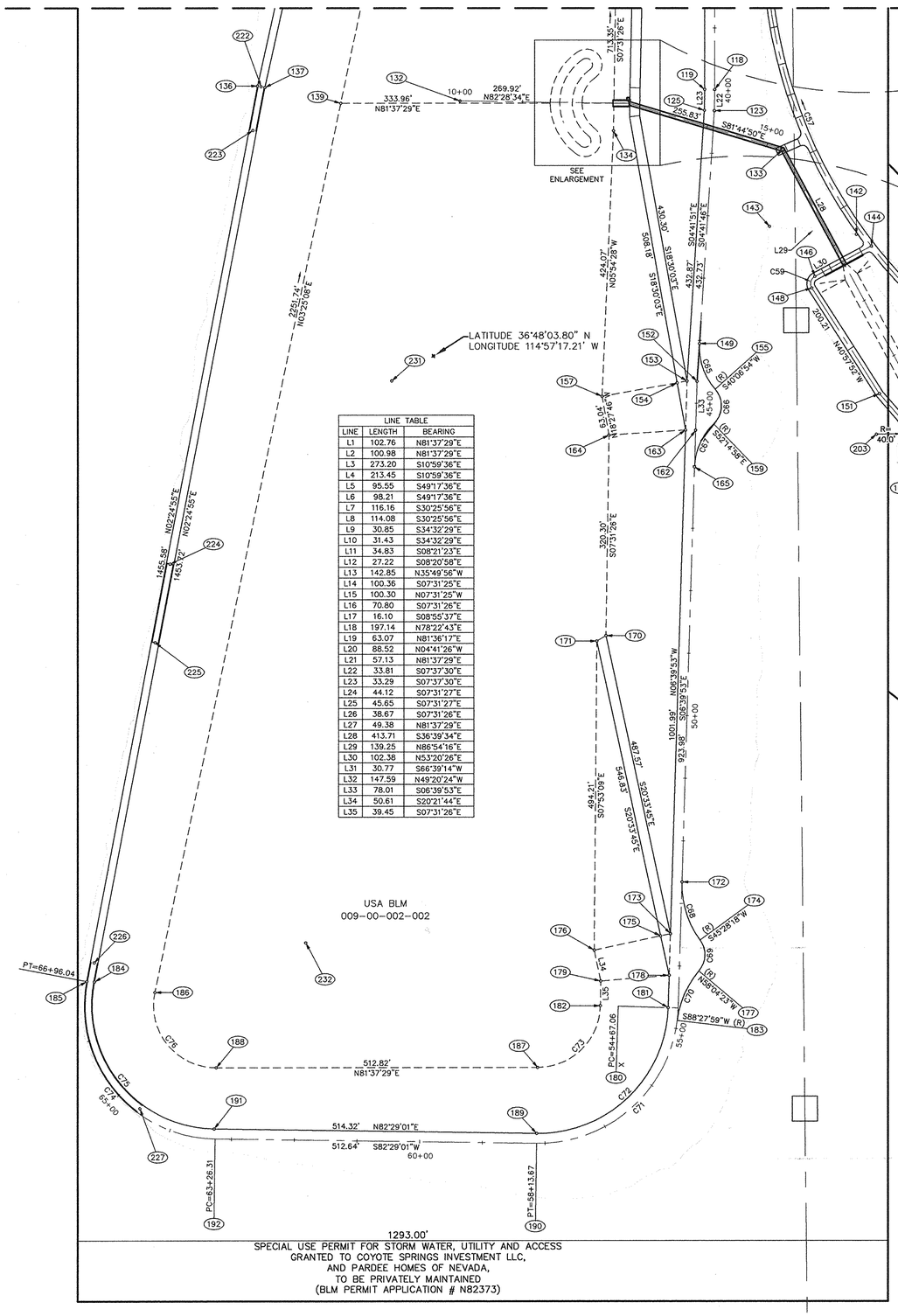
COYOTE SPRINGS
DETENTION BASIN 1
HORIZONTAL CONTROL PLAN

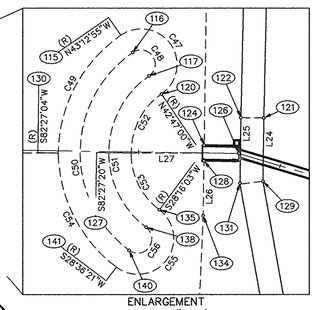
DRAWING
G6
6 OF 26 SHTS

HTE: 07-3265

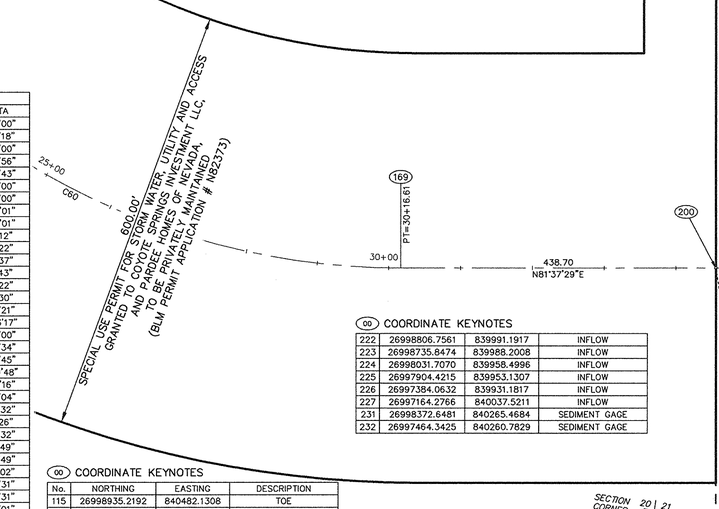
pw2538.dwg 030924.wdt

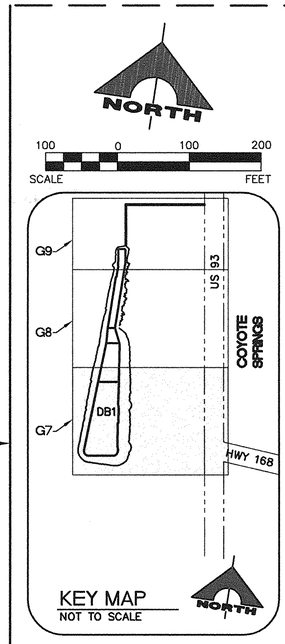
MATCHLINE – SEE SHEET G8





100.00'
SPECIAL USE PERMIT FOR
STORM WATER, UTILITY AND ACCESS
GRANTED TO COYOTE SPRINGS
INVESTMENT LLC, AND
PARDEE HOMES OF NEVADA,
TO BE PRIVATELY MAINTAINED
(BLM PERMIT APPLICATION # N82373)





LINE TABLE		
LINE	LENGTH	BEARING
L1	102.76	N81°37'29"E
L2	100.98	N81°37'29"E
L3	273.20	S10°59'36"E
L4	213.45	S10°59'36"E
L5	95.55	S49°17'36"E
L6	98.21	S49°17'36"E
L7	116.16	S30°25'56"E
L8	114.08	S30°25'56"E
L9	30.85	S34°32'29"E
L10	31.43	S34°32'29"E
L11	34.83	S08°21'23"E
L12	27.22	S08°20'58"E
L13	142.85	N35°49'56"W
L14	100.36	S07°31'25"E
L15	100.30	N07°31'25"W
L16	70.80	S07°31'26"E
L17	16.10	S08°55'37"E
L18	197.14	N78°22'43"E
L19	63.07	N81°36'17"E
L20	88.52	N04°41'26"W
L21	57.13	N81°37'29"E
L22	33.81	S07°37'30"E
L23	33.29	S07°37'30"E
L24	44.12	S07°31'27"E
L25	45.65	S07°31'27"E
L26	38.67	S07°31'26"E
L27	49.38	N81°37'29"E
L28	413.71	S36°39'34"E
L29	139.25	N86°54'16"E
L30	102.38	N53°20'26"E
L31	30.77	S66°39'14"W
L32	147.59	N49°20'24"W
L33	78.01	S06°39'53"E
L34	50.61	S20°21'44"E
L35	39.45	S07°31'26"E

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	15.00	23.56	15.00	90°00'00"
C2	200.00	91.53	46.58	26°13'18"
C3	50.00	78.54	50.00	90°00'00"
C4	67.01	108.19	70.00	92°29'56"
C5	52.92	86.35	56.25	93°29'43"
C6	25.00	39.27	25.00	90°00'00"
C7	25.00	39.27	25.00	90°00'00"
C8	52.97	81.11	50.92	87°44'01"
C9	64.97	99.49	62.45	87°44'01"
C10	242.71	36.44	18.26	8°36'12"
C11	222.72	33.58	16.82	8°38'22"
C12	200.00	31.22	15.64	8°56'37"
C13	500.00	80.10	40.14	9°10'43"
C14	522.63	36.24	18.13	3°58'22"
C15	496.68	35.90	17.96	4°08'30"
C16	100.00	89.11	47.76	51°03'21"
C17	40.00	71.25	49.44	102°03'17"
C18	40.00	41.89	23.09	60°00'00"
C19	486.07	490.42	268.38	57°48'34"
C20	15.00	16.79	9.40	64°08'45"
C21	15.00	43.50	123.62	166°09'48"
C22	20.00	16.59	8.81	47°32'16"
C23	116.45	52.81	26.87	25°59'04"
C24	200.00	95.04	48.43	27°13'32"
C25	500.00	20.43	10.21	2°20'26"
C26	241.96	57.05	28.66	13°30'32"
C27	242.39	51.74	25.97	12°13'49"
C28	225.96	53.69	26.97	13°36'49"
C29	226.39	48.27	24.23	12°13'02"
C30	141.00	69.67	35.56	28°18'31"
C31	125.00	61.76	31.52	28°18'31"
C32	200.00	66.79	33.71	19°08'01"
C33	542.21	26.91	13.46	2°50'37"
C34	500.00	26.68	13.34	3°03'25"
C35	25.01	78.43	INFINITE	179°41'35"
C36	10.00	31.42	INFINITE	180°00'00"
C37	49.39	82.47	54.54	95°40'19"
C38	65.00	107.18	70.29	94°28'46"
C39	85.00	140.18	91.94	94°29'27"
C40	100.78	164.25	106.91	93°22'58"
C41	25.01	79.63	1186.57	182°27'21"
C42	10.00	31.42	INFINITE	180°00'00"
C43	15.00	24.53	16.00	93°42'17"
C44	1200.00	33.71	16.86	1°36'34"
C45	23.00	66.29	176.28	165°07'58"
C46	1200.00	110.88	55.48	5°17'39"
C47	25.01	78.73	INFINITE	180°22'43"
C48	10.00	31.42	INFINITE	180°00'00"
C49	101.76	96.50	52.22	54°20'01"
C50	85.00	161.05	118.20	108°33'25"
C51	65.00	123.15	90.39	108°33'25"
C52	48.65	47.96	26.13	56°28'05"
C53	48.66	46.02	24.90	54°11'16"
C54	101.74	92.67	49.83	52°11'04"
C55	25.01	78.72	INFINITE	180°21'16"
C56	10.00	31.42	INFINITE	180°00'00"
C57	800.00	601.31	315.66	43°03'57"
C58	100.00	37.67	19.06	21°35'00"
C59	13.00	21.40	14.02	94°18'18"
C60	1000.00	1077.15	597.49	61°42'58"
C61	13.00	21.90	14.57	96°30'43"
C62	13.00	14.52	8.12	64°00'22"
C63	202.04	116.79	60.08	33°07'10"
C64	199.90	83.98	42.62	24°04'10"
C65	100.00	78.87	41.61	45°11'15"
C66	40.00	61.18	38.38	87°38'08"
C67	100.00	77.52	40.82	44°24'55"
C68	150.00	99.13	51.45	37°51'49"
C69	40.00	53.38	31.51	76°27'19"
C70	150.00	87.60	45.09	33°27'38"
C71	222.77	346.62	219.48	89°08'54"
C72	206.77	321.72	203.72	89°08'54"
C73	100.00	155.59	98.52	89°08'54"
C74	211.98	369.73	252.33	99°55'55"
C75	197.98	345.31	235.66	99°55'55"
C76	100.00	177.66	123.04	101°47'40"

(00) COORDINATE KEYNOTES

No.	NORTHING	EASTING	DESCRIPTION
115	26998935.2192	840482.1308	TOE
116	26998924.4761	840492.1506	TOP/BERM
117	26998909.8503	840505.7919	TOP/BERM
118	26998907.4924	840707.5371	CNTL–SPILLWAY
119	26998905.2644	840691.6926	ACCESS ROAD
120	26998898.6448	840516.2430	TOE
121	26998892.6417	840589.2418	ACCESS ROAD
122	26998890.6034	840573.3720	ACCESS ROAD
123	26998873.9853	840712.0227	CNTL–SPILLWAY
124	26998867.9570	840550.8309	TOE
125	26998872.2675	840696.1100	ACCESS ROAD
126	26998865.6878	840575.6543	CNTL–OUTFALL
127	26998855.1009	840501.2716	TOE
128	26998857.0517	840552.2713	TOE
129	26998848.9055	840595.0185	ACCESS ROAD
130	26998847.6913	840450.9325	TOE
131	26998845.2863	840579.3575	ACCESS ROAD
132	26998830.3451	840308.0599	CNTL–OUTFALL
133	26998828.9661	840828.8368	CNTL–OUTFALL
134	26998818.9581	840557.3025	TOE
135	26998818.6298	840526.4675	TOE
136	26998807.0970	839985.2008	ACCESS ROAD
137	26998806.4152	839997.1827	ACCESS ROAD
138	26998805.1595	840519.1726	TOP/BERM
139	26998799.0460	840120.5303	TOE/GB
140	26998787.5728	840509.6485	TOP/BERM
141	26998774.6517	840502.6510	TOE
142	26998711.8854	840964.8330	SWALE
143	26998704.3661	840825.7871	SWALE
144	26998696.8587	840991.1222	CNTL–ACCESS ROAD
145	26998648.7857	841046.0849	CNTL–ACCESS ROAD
146	26998635.7344	840908.9962	CNTL–ACCESS ROAD
147	26998620.3740	841070.4795	CNTL–ACCESS ROAD
148	26998616.7831	840906.9414	CNTL–ACCESS ROAD
149	26998502.8416	840742.5199	ACCESS ROAD
150	26998497.0895	841075.8438	CNTL–OUTFALL
151	26998465.5977	841038.1999	CNTL–ACCESS ROAD
152	26998442.7048	840747.4519	CNTL–SPILLWAY
153	26998440.8478	840731.5600	ACCESS ROAD
154	26998435.7707	840716.3869	ACCESS ROAD/GB
155	26998434.5559	840777.7515	ACCESS ROAD
203	26998400.8767	841042.9600	CENTER
204	26998497.5248	841194.0410	CENTER
207	26998417.5256	841194.2091	CENTER
208	26998386.1857	841121.5995	CENTER

(00) COORDINATE KEYNOTES

No.	NORTHING	EASTING	DESCRIPTION
156	26998397.9620	841198.1552	CNTL–ACCESS ROAD
157	26998397.1441	840600.9504	TOE
158	26998379.5543	841192.0325	CNTL–ACCESS ROAD
159	26998379.4768	840783.6058	ACCESS ROAD
160	26998369.4340	841150.1582	CNTL–ACCESS ROAD
161	26998367.3600	841163.7803	CNTL–ACCESS ROAD
162	26998365.2268	840756.5051	CNTL–SPILLWAY
163	26998363.3699	840740.6132	ACCESS ROAD
164	26998337.3443	840620.9159	TOE
165	26998306.6483	840763.3499	ACCESS ROAD
166	26998293.2409	842919.5980	CNTL–OUTFALL
167	26998254.8412	842845.6065	CNTL–OUTFALL
168	26998210.1885	842739.4482	CNTL–OUTFALL
169	26998104.8104	842023.7015	CNTL–OUTFALL
170	26998019.8225	840662.8488	TOE
171	26998009.1396	840649.7675	TOE
172	26997647.9217	840840.3213	ACCESS ROAD
173	26997563.3154	840834.0986	ACCESS ROAD
174	26997560.1412	840882.3722	ACCESS ROAD
175	26997557.6957	840819.1180	ACCESS ROAD
176	26997519.6030	840717.5728	TOE
177	26997510.9372	840887.8050	ACCESS ROAD
178	26997497.1522	840841.8297	ACCESS ROAD
179	26997472.1572	840735.1822	TOE
180	26997447.4896	840863.7416	CNTL–SPILLWAY
181	26997445.6327	840847.8497	ACCESS ROAD
182	26997433.0468	840740.3476	TOE
183	26997427.5971	840865.1672	ACCESS ROAD
184	26997353.9857	839935.9183	ACCESS ROAD
185	26997352.8126	839923.8582	CNTL–SPILLWAY
186	26997351.2197	840034.0317	TOE
187	26997321.0194	840655.7743	TOE
188	26997246.3225	840148.4195	TOE
189	26997216.6400	840669.5234	ACCESS ROAD
190	26997200.7775	840671.6163	CNTL–SPILLWAY
191	26997149.3612	840159.6228	ACCESS ROAD
192	26997133.7185	840163.3814	CNTL–SPILLWAY
200	26998168.7107	842457.7239	CNTL–OUTFALL
205	26996391.3330	843013.7310	S20–S21/S29–S28
409	26996407.2050	848350.6100	BC SC S21–S22/S28–S27

(00) COORDINATE KEYNOTES

222	26998806.7561	839991.1917	INFLOW
223	26998735.8474	839988.2008	INFLOW
224	26998031.7070	839958.4996	INFLOW
225	26997904.4215	839953.1307	INFLOW
226	26997384.0632	839931.1817	INFLOW
227	26997164.2766	840037.5211	INFLOW
231	26998372.6481	840265.4684	SEDIMENT GAGE
232	26997464.3425	840260.7829	SEDIMENT GAGE

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941" 3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

LEGAL DESCRIPTION

A PORTION OF SECTIONS 17 AND 20, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA

STATE OF NEVADA PROFESSIONAL SURVEYOR PATRICIO DELGADO Exp. 12-31-08 No. 16857

DATE: 7/9/07

REV.	DATE	DESCRIPTION	DATE AGEN. APP	DATE GCW APP.

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:52:23

G.C. WALLACE COMPANIES
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1555 S. RAINBOW BOULEVARD - LAS VEGAS, NV 89146
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F:\352101-0916\Dwg\Vistro Improv-R2\352101_G07-R2.dwg KNguyen

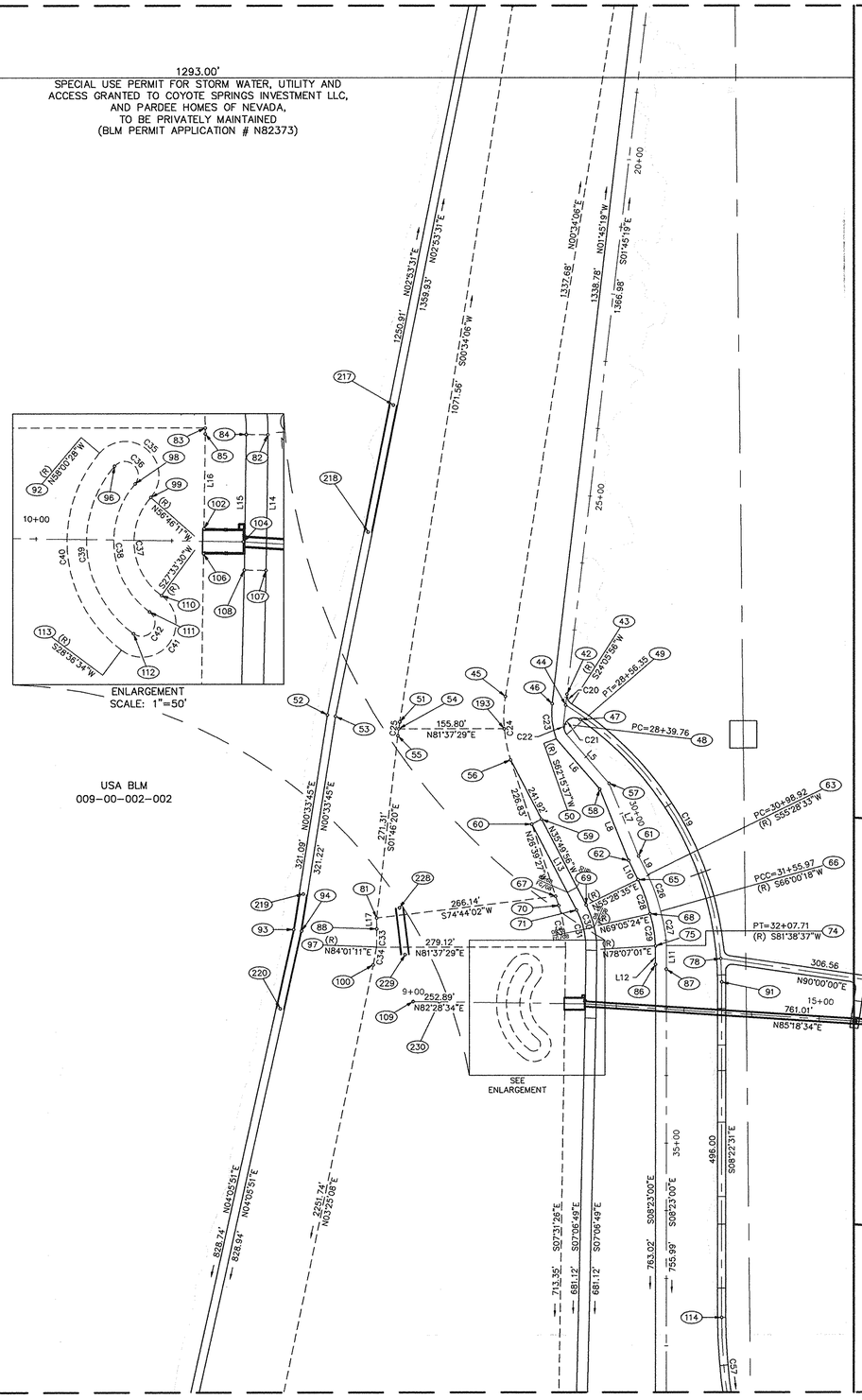
COYOTE SPRINGS
DETENTION BASIN 1
HORIZONTAL CONTROL PLAN

DRAWING
G7

7 OF 26 SHTS
HTE: 07-3265

gcx2438.dwg 030824.wdt

MATCHLINE – SEE SHEET G9



(00) COORDINATE KEYNOTES

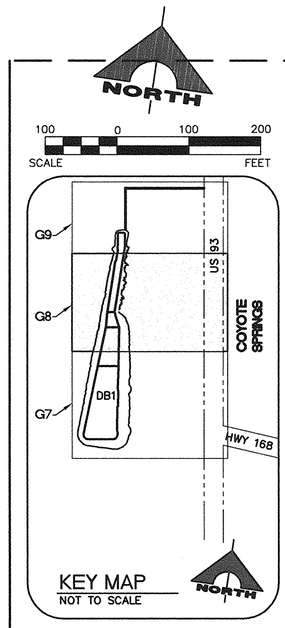
No.	NORTHING	EASTING	DESCRIPTION
42	27000036.1456	840392.8115	ACCESS ROAD
43	27000022.9125	840401.6798	ACCESS ROAD
44	27000020.0383	840393.3052	CNTL–ACCESS ROAD
45	27000019.9361	840303.4089	TOE
46	27000019.2444	840373.3201	ACCESS ROAD
47	27000001.9704	840417.7349	ACCESS ROAD
48	26999991.8154	840394.1701	CNTL–SPILLWAY
49	26999977.2669	840401.1169	CNTL–SPILLWAY
50	26999968.6073	840386.6495	ACCESS ROAD
51	26999959.8711	840154.6296	TOE
52	26999954.7990	840047.5697	ACCESS ROAD
53	26999954.4372	840059.5667	ACCESS ROAD
54	26999949.6573	840154.5283	TOE/GB
55	26999939.4479	840154.8442	TOE
56	26999928.2216	840324.6580	TOE
57	26999914.9505	840473.5490	CNTL–SPILLWAY
58	26999904.5548	840461.0995	ACCESS ROAD
59	26999847.9084	840382.6505	ACCESS ROAD/GB
60	26999838.5418	840369.6787	TOE
61	26999814.7916	840532.3877	CNTL–SPILLWAY
62	26999806.1923	840518.8827	ACCESS ROAD
63	26999789.3764	840549.8821	CNTL–SPILLWAY
64	26999786.4575	842623.8579	CNTL–OUTFALL
65	26999780.3064	840536.7012	ACCESS ROAD
66	26999739.0164	840576.4000	CNTL–SPILLWAY
67	26999738.3396	840419.9818	TOE/GB
68	26999732.8907	840561.6128	ACCESS ROAD
69	26999732.0911	840466.2797	ACCESS ROAD
70	26999725.5043	840426.4253	TOE
71	26999722.7245	840453.3079	ACCESS ROAD
72	26999696.3399	842011.7631	CNTL–OUTFALL
73	26999690.9233	841037.5426	CNTL–ACCESS ROAD
74	26999689.8686	840592.2551	CNTL–SPILLWAY
75	26999687.0651	840576.4952	ACCESS ROAD
76	26999685.2766	841901.4740	CNTL–OUTFALL
77	26999684.9588	840997.0310	CNTL–ACCESS ROAD
78	26999682.6022	840674.4665	CNTL–ACCESS ROAD
79	26999682.6022	840981.0247	CNTL–ACCESS ROAD
80	26999677.5383	841273.5757	CNTL–ACCESS ROAD
81	26999668.2646	840163.2354	TOE/GB
82	26999668.0095	840491.7523	ACCESS ROAD
83	26999666.2673	840445.3459	TOE/GB
84	26999665.9146	840475.8900	ACCESS ROAD
85	26999661.9611	840445.9624	TOE
86	26999660.1352	840580.4476	ACCESS ROAD
87	26999655.4054	840597.3174	CNTL–SPILLWAY
88	26999652.3605	840165.7336	TOE
89	26999651.6827	841277.3786	CNTL–OUTFALL
90	26999649.3982	841243.7475	CNTL–OUTFALL
91	26999648.5414	840681.0239	CNTL–ACCESS ROAD
92	26999636.6450	840370.7999	
93	26999633.7216	840044.4179	ACCESS ROAD
94	26999633.2335	840056.4137	ACCESS ROAD
95	26999632.0467	841276.9067	CNTL–ACCESS ROAD
96	26999628.7610	840383.1912	TOP/BERM
97	26999625.6108	840169.1997	TOE/GB
98	26999618.0194	840400.0619	TOP/BERM
99	26999609.7932	840412.9940	TOE
100	26999598.9518	840168.3197	TOE
101	26999596.7374	841004.2696	CNTL–ACCESS ROAD
102	26999592.5138	840455.1346	TOE
103	26999592.3337	841083.8075	CNTL–ACCESS ROAD
104	26999587.1653	840485.2821	CNTL–OUTFALL
105	26999583.1248	841021.4094	CNTL–ACCESS ROAD
106	26999574.1731	840457.5570	TOE
107	26999568.5152	840504.8927	ACCESS ROAD
108	26999566.4770	840489.0229	ACCESS ROAD
109	26999554.0525	840234.5714	CNTL–OUTFALL
110	26999538.9451	840431.4559	TOE
111	26999525.7410	840424.4478	TOP/BERM
112	26999508.0751	840415.0715	TOP/BERM
113	26999494.7800	840408.0150	TOE
114	26999157.8351	840753.2698	CNTL–ACCESS ROAD
193	26999972.3509	840308.6672	TOE/GB
206	26999731.3096	841137.8383	CENTER
209	26999687.4512	841204.7445	CENTER
210	26999723.4645	841276.1801	CENTER
211	26999559.0767	841150.4497	CENTER
212	26999612.2132	841210.2536	CENTER
221	26999586.9897	841286.1732	CENTER
217	27000422.1773	840077.1878	INFLOW
218	27000231.2241	840067.5415	INFLOW
219	26999687.7032	840050.9481	INFLOW
220	26999515.0876	840041.9347	INFLOW
228	26999688.1548	840194.3339	ACCESS ROAD
229	26999620.8954	840212.6913	ACCESS ROAD
230	26999559.1222	840272.9563	SEDIMENT GAGE

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	15.00	23.56	15.00	90°00'00"
C2	200.00	91.53	46.58	26°13'18"
C3	50.00	78.54	50.00	90°00'00"
C4	67.01	108.19	70.00	92°29'56"
C5	52.92	86.35	56.25	93°29'43"
C6	25.00	39.27	25.00	90°00'00"
C7	25.00	39.27	25.00	90°00'00"
C8	52.97	81.11	50.92	87°44'01"
C9	64.97	99.49	62.45	87°44'01"
C10	242.71	36.44	18.26	8°36'12"
C11	222.72	33.58	16.82	8°38'22"
C12	200.00	31.22	15.64	8°56'37"
C13	500.00	80.10	40.14	9°10'43"
C14	522.63	36.24	18.13	3°58'22"
C15	496.68	35.90	17.96	4°08'30"
C16	100.00	89.11	47.76	51°03'21"
C17	40.00	71.25	49.44	102°03'17"
C18	40.00	41.89	23.09	60°00'00"
C19	486.07	490.42	268.38	57°48'34"
C20	15.00	16.79	9.40	64°08'45"
C21	15.00	43.50	123.62	166°09'48"
C22	20.00	16.59	8.81	47°32'16"
C23	116.45	52.81	26.87	25°59'04"
C24	200.00	95.04	48.43	27°13'32"
C25	500.00	20.43	10.21	2°20'26"
C26	241.96	57.05	28.66	13°30'32"
C27	242.39	51.74	25.97	12°13'49"
C28	225.96	53.69	26.97	13°36'49"
C29	226.39	48.27	24.23	12°13'02"
C30	141.00	69.67	35.56	28°18'31"
C31	125.00	61.76	31.52	28°18'31"
C32	200.00	66.79	33.71	19°08'01"
C33	542.21	26.91	13.46	2°50'37"
C34	500.00	26.68	13.34	3°03'25"
C35	25.01	78.43	INFINITE	179°41'35"
C36	10.00	31.42	INFINITE	180°00'00"
C37	49.39	82.47	54.54	95°40'19"
C38	65.00	107.18	70.29	94°28'46"
C39	85.00	140.18	91.94	94°29'27"
C40	100.78	164.25	106.91	93°22'58"
C41	25.01	79.63	1166.57	182°27'21"
C42	10.00	31.42	INFINITE	180°00'00"
C43	15.00	24.53	16.00	93°42'17"
C44	1200.00	33.71	16.86	1°36'34"
C45	23.00	66.29	176.28	165°07'58"
C46	1200.00	110.88	55.48	5°17'39"
C47	25.01	78.73	INFINITE	180°22'43"
C48	10.00	31.42	INFINITE	180°00'00"
C49	101.76	96.50	52.22	54°20'01"
C50	85.00	161.05	118.20	108°33'25"
C51	65.00	123.15	90.39	108°33'25"
C52	48.65	47.96	26.13	56°29'05"
C53	48.66	46.02	24.90	54°11'16"
C54	101.74	92.67	49.83	52°11'04"
C55	25.01	78.72	INFINITE	180°21'16"
C56	10.00	31.42	INFINITE	180°00'00"
C57	800.00	601.31	315.66	43°03'57"
C58	100.00	37.67	19.06	21°35'00"
C59	13.00	21.40	14.02	94°18'18"
C60	1000.00	1077.15	597.49	61°42'58"
C61	13.00	21.90	14.57	96°30'43"
C62	13.00	14.52	8.12	64°00'22"
C63	202.04	116.79	60.08	33°07'10"
C64	199.90	83.98	42.62	24°04'10"
C65	100.00	78.87	41.61	45°11'15"
C66	40.00	61.18	38.38	87°38'08"
C67	100.00	77.52	40.82	44°24'55"
C68	150.00	99.13	51.45	37°51'49"
C69	40.00	53.38	31.51	76°27'19"
C70	150.00	87.60	45.09	33°27'38"
C71	222.77	346.62	219.48	89°08'54"
C72	206.77	321.72	203.72	89°08'54"
C73	100.00	155.59	98.52	89°08'54"
C74	211.98	369.73	252.33	99°55'55"
C75	197.98	345.31	235.66	99°55'55"
C76	100.00	177.66	123.04	101°47'40"

LINE TABLE

LINE	LENGTH	BEARING
L1	102.76	N81°37'29"E
L2	100.98	N81°37'29"E
L3	273.20	S10°59'36"E
L4	213.45	S10°59'36"E
L5	95.55	S49°17'36"E
L6	98.21	S49°17'36"E
L7	116.16	S30°25'56"E
L8	114.08	S30°25'56"E
L9	30.85	S34°32'29"E
L10	31.43	S34°32'29"E
L11	34.83	S08°21'23"E
L12	27.22	S08°20'58"E
L13	142.85	N35°49'56"W
L14	100.36	S07°31'25"E
L15	100.30	N07°31'25"W
L16	70.80	S07°31'26"E
L17	16.10	S08°55'37"E
L18	197.14	N78°22'43"E
L19	63.07	N81°36'17"E
L20	88.52	N04°41'26"W
L21	57.13	N81°37'29"E
L22	33.81	S07°37'30"E
L23	33.29	S07°37'30"E
L24	44.12	S07°31'27"E
L25	45.65	S07°31'27"E
L26	38.67	S07°31'26"E
L27	49.38	N81°37'29"E
L28	413.71	S36°39'34"E
L29	139.25	N86°54'16"E
L30	102.38	N53°20'26"E
L31	30.77	S66°39'14"W
L32	147.59	N49°20'24"W
L33	78.01	S06°39'53"E
L34	50.61	S20°21'44"E
L35	39.45	S07°31'26"E



BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941"
3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168. APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

LEGAL DESCRIPTION

A PORTION OF SECTIONS 17 AND 20, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA

PROFESSIONAL LAND SURVEYOR STATE OF NEVADA PATRICIA DELGADO Exp. 12-31-18 No. 15881 — DATE: 7/9/07

REV	DATE	DESCRIPTION	DATE AGEN. APP	DATE GCW APP.	DATE

DESIGN:
DRAWN:
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ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:52:45

G.C. WALLACE COMPANIES
ENGINEERS | PLANNERS | SURVEYORS
1555 S. RAINBOW BOULEVARD · LAS VEGAS, NV 89146
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COYOTE SPRINGS
DETENTION BASIN 1
HORIZONTAL CONTROL PLAN

DRAWING
G8
8 OF 26 SHTS
HTE: 07-3265

MATCHLINE – SEE SHEET G7

gcx2538.dwg 050624.wdt

1293.00'
SPECIAL USE PERMIT FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED (BLM PERMIT APPLICATION # N82373)

SPECIAL USE PERMIT FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED (BLM PERMIT APPLICATION # N82373)

1396.00'

1625.52
N81°37'29"E

100.00'
SPECIAL USE PERMIT
FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED (BLM PERMIT APPLICATION # N82373)

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	15.00	23.56	15.00	90°00'00"
C2	200.00	91.53	46.58	26°13'18"
C3	50.00	78.54	50.00	90°00'00"
C4	67.01	108.19	70.00	92°29'56"
C5	52.92	86.35	56.25	93°29'43"
C6	25.00	39.27	25.00	90°00'00"
C7	25.00	39.27	25.00	90°00'00"
C8	52.97	81.11	50.92	87°44'01"
C9	64.97	99.49	62.45	87°44'01"
C10	242.71	36.44	18.26	8°36'12"
C11	222.72	33.58	16.82	8°38'22"
C12	200.00	31.22	15.64	8°56'37"
C13	500.00	80.10	40.14	9°10'43"
C14	522.63	36.24	18.13	3°58'22"
C15	496.68	35.90	17.96	4°08'30"
C16	100.00	89.11	47.76	51°03'21"
C17	40.00	71.25	49.44	102°03'17"
C18	40.00	41.89	23.09	60°00'00"
C19	486.07	490.42	268.38	57°48'34"
C20	15.00	16.79	9.40	64°08'45"
C21	15.00	43.50	123.62	166°09'48"
C22	20.00	16.59	8.81	47°32'16"
C23	116.45	52.81	26.87	25°59'04"
C24	200.00	95.04	48.43	27°13'32"
C25	500.00	20.43	10.21	2°20'26"
C26	241.96	57.05	28.66	13°30'32"
C27	242.39	51.74	25.97	12°13'49"
C28	225.96	53.69	26.97	13°36'49"
C29	226.39	48.27	24.23	12°13'02"
C30	141.00	69.67	35.56	28°18'31"
C31	125.00	61.76	31.52	28°18'31"
C32	200.00	66.79	33.71	19°08'01"
C33	542.21	26.91	13.46	2°50'37"
C34	500.00	26.68	13.34	3°03'25"
C35	25.01	78.43	INFINITE	179°41'35"
C36	10.00	31.42	INFINITE	180°00'00"
C37	49.39	82.47	54.54	95°40'19"
C38	65.00	107.18	70.29	94°28'46"
C39	85.00	140.18	91.94	94°29'27"
C40	100.78	164.25	106.91	93°22'58"
C41	25.01	79.63	1166.57	182°27'21"
C42	10.00	31.42	INFINITE	180°00'00"
C43	15.00	24.53	16.00	93°42'17"
C44	1200.00	33.71	16.86	1°36'34"
C45	23.00	66.29	176.28	165°07'58"
C46	1200.00	110.88	55.48	5°17'39"
C47	25.01	78.73	INFINITE	180°22'43"
C48	10.00	31.42	INFINITE	180°00'00"
C49	101.76	96.50	52.22	54°20'01"
C50	85.00	161.05	118.20	108°33'25"
C51	65.00	123.15	90.39	108°33'25"
C52	48.65	47.96	26.13	56°29'05"
C53	48.66	46.02	24.90	54°11'16"
C54	101.74	92.67	49.83	52°11'04"
C55	25.01	78.72	INFINITE	180°21'16"
C56	10.00	31.42	INFINITE	180°00'00"
C57	800.00	601.31	315.66	43°03'57"
C58	100.00	37.67	19.06	21°35'00"
C59	13.00	21.40	14.02	94°18'18"
C60	1000.00	1077.15	597.49	61°42'58"
C61	13.00	21.90	14.57	96°30'43"
C62	13.00	14.52	8.12	64°00'22"
C63	202.04	116.79	60.08	33°07'10"
C64	199.90	83.98	42.62	24°04'10"
C65	100.00	78.87	41.61	45°11'15"
C66	40.00	61.18	38.38	87°38'08"
C67	100.00	77.52	40.82	44°24'55"
C68	150.00	99.13	51.45	37°51'49"
C69	40.00	53.38	31.51	76°27'19"
C70	150.00	87.60	45.09	33°27'38"
C71	222.77	346.62	219.48	89°08'54"
C72	206.77	321.72	203.72	89°08'54"
C73	100.00	155.59	98.52	89°08'54"
C74	211.98	369.73	252.33	99°55'55"
C75	197.98	345.31	235.66	99°55'55"
C76	100.00	177.66	123.04	101°47'40"

LINE TABLE		
LINE	LENGTH	BEARING
L1	102.76	N81°37'29"E
L2	100.98	N81°37'29"E
L3	273.20	S10°59'36"E
L4	213.45	S10°59'36"E
L5	95.55	S49°17'36"E
L6	98.21	S49°17'36"E
L7	116.16	S30°25'56"E
L8	114.08	S30°25'56"E
L9	30.85	S34°32'29"E
L10	31.43	S34°32'29"E
L11	34.83	S08°21'23"E
L12	27.22	S08°20'58"E
L13	142.85	N35°49'56"W
L14	100.36	S07°31'25"E
L15	100.30	N07°31'25"W
L16	70.80	S07°31'26"E
L17	16.10	S08°55'37"E
L18	197.14	N78°22'43"E
L19	63.07	N81°36'17"E
L20	88.52	N04°41'26"W
L21	57.13	N81°37'29"E
L22	33.81	S07°37'30"E
L23	33.29	S07°37'30"E
L24	44.12	S07°31'27"E
L25	45.65	S07°31'27"E
L26	38.67	S07°31'26"E
L27	49.38	N81°37'29"E
L28	413.71	S36°39'34"E
L29	139.25	N86°54'16"E
L30	102.38	N53°20'26"E
L31	30.77	S66°39'14"W
L32	147.59	N49°20'24"W
L33	78.01	S06°39'53"E
L34	50.61	S20°21'44"E
L35	39.45	S07°31'26"E

(00) COORDINATE KEYNOTES

No.	NORTHING	EASTING	DESCRIPTION
1	27003324.2140	841698.6883	CNTL–ACCESS ROAD
2	27003087.4440	840090.5050	CNTL–ACCESS ROAD
3	27003070.4191	840077.8499	CNTL–ACCESS ROAD
4	27001734.1844	840280.6460	ACCESS ROAD
5	27001731.4820	840268.9145	ACCESS ROAD
6	27001678.0044	840248.9547	CNTL–SPILLWAY
7	27001674.7324	840226.7307	ACCESS ROAD
8	27001673.9901	840283.4437	CNTL–ACCESS ROAD
9	27001665.8735	840248.9444	ACCESS ROAD
10	27001663.0371	840147.2941	CNTL–SPILLWAY
11	27001651.1651	840149.0420	ACCESS ROAD
12	27001649.7555	840313.8801	ACCESS ROAD
13	27001638.5808	840252.4895	TOE
14	27001624.0148	840153.5560	TOE
15	27001618.5656	840325.3785	CNTL–SPILLWAY
16	27001618.0232	840309.3767	ACCESS ROAD
17	27001617.4887	840280.8643	TOE
18	27001595.6400	840132.4640	TOE
19	27001593.1197	840104.0858	ACCESS ROAD
20	27001591.8426	840092.1540	CNTL–SPILLWAY
21	27001394.3578	840348.4549	CNTL–SPILLWAY
22	27001390.7618	840328.7809	ACCESS ROAD
23	27001390.0303	840162.7356	TOE
24	27001388.6671	840314.5533	TOE
25	27001384.6803	840126.3948	ACCESS ROAD
26	27001382.8537	840114.5218	ACCESS ROAD
27	27001358.1517	840352.2966	CNTL–SPILLWAY
28	27001357.5518	840316.6764	TOE
29	27001357.3967	840332.3104	ACCESS ROAD
30	27001348.5275	840128.7843	ACCESS ROAD
31	27001312.6371	840128.1787	ACCESS ROAD
32	27001310.1909	840168.0189	TOE
33	27001307.4983	840127.9191	ACCESS ROAD
34	27001301.5668	840085.8661	ACCESS ROAD
35	27001251.8629	840180.9389	TOE
36	27001243.9611	840140.2617	ACCESS ROAD/GB
37	27001240.9100	840124.5553	ACCESS ROAD
38	27001239.7210	840092.4544	ACCESS ROAD
39	27001204.1150	840110.6812	ACCESS ROAD
40	27001039.3118	840180.0163	TOE
41	27001031.3815	840165.2577	TOE
206	27001747.2770	840332.2440	1/4 S17/S20
245	27001651.8670	842925.6440	S17–S16/S20–S21
194	27001768.2909	840249.8466	CULVERT
195	27001804.8252	840284.5743	CULVERT
196	27001897.3063	840235.9000	CULVERT
197	27001897.7563	840269.5006	CULVERT
198	27001940.4005	840228.9624	CULVERT
199	27001955.2890	840261.7744	CULVERT
201	27002788.9454	840099.6364	CULVERT
202	27002798.0655	840144.9438	CULVERT
215	27001523.3390	840105.5201	INFLOW
216	27001471.2804	840111.0919	INFLOW

1411.48
N08°22'31"W

USA BLM
009-00-001-009

USA BLM
009-00-002-002

1/4 17/20 FOUND 3 1/4" BRASS CAP "BLM 2003"

PC=11+02.76
PT=10+00.00
10+00
PC=9+00.51
PT=12+10.95
L1
L2
100.00'
N81°37'29"E
126.89
S00°01'12"W
209.63
210.18
207.83'
231.29'
228.09'
225.39'
S08°22'31"E
S04°52'49"E
S05°52'35"E
N06°08'33"W
N84°13'56"E
N88°12'18"E
S86°57'45"E
N79°38'30"E
S46°03'12"E
S1°29'23"E
59.74'
N32°53'31"E
S00°14'35"W
211.53'
N00°54'08"E
N01°45'19"W
1332.68'
1338.78'
S01°45'19"E
1366.68'
N87°53'35"W
2595.15'
SECTION 17 | 16
CORNER 20 | 21
FOUND 3 1/4" BRASS CAP "BLM 2003"
N01°30'00"W 2627.46'
N01°02'13"W
2633.00'

US HIGHWAY 93

MATCHLINE – SEE SHEET G8

NORTH
100 0 100 200
SCALE FEET

KEY MAP
NOT TO SCALE
NORTH
US 93
COYOTE SPRINGS
HWY 168
G9
G8
G7
DB1

BASIS OF BEARINGS
NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK
USC&GS BENCHMARK STAMPED "X 301 1941" 3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

LEGAL DESCRIPTION
A PORTION OF SECTIONS 17 AND 20, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M., CLARK COUNTY, NEVADA

PROFESSIONAL ENGINEER STATE OF NEVADA PATRICIA DELGADO Exp. 12-31-07 No. 16870
DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE AGEN. APP'J	DATE COW. APP'J

DESIGN:
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ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:53:03

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T: 702.804.2000 · F: 702.804.2299 · GCWALLACE.COM

F:\552101-09\6 Dwg\Xrefs\Vmprov-R2\C3D81-G09-R2.dwg KNguyen

COYOTE SPRINGS
DETENTION BASIN 1
HORIZONTAL CONTROL PLAN

DRAWING
G9
9 OF 26 SHTS

HTE: 07-3265

cs-2438.dwg 030624.wdt

FOR CONTINUATION SEE SHEET C11

1293.00' SPECIAL USE PERMIT FOR STORM WATER, UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED (BLM PERMIT APPLICATION # N82373)

SECTION LINE 17 20

USA BLM 009-00-001-009

USA BLM 009-00-002-002

APPROXIMATE DAYLIGHT LINE

FUTURE POWER LINE

INSTALL 37 LF 18"CMP @ 5.55% PER 7/C12

INSTALL 34 LF 18"CMP @ 5.95% PER 7/C12

INSTALL 51 LF 18"CMP @ 4.37% PER 7/C12

PC=10+00.00

PT=11+02.76

PC=9+00.51

PT=12+10.95

WARNING SIGN 8/C14

RIPRAP D_{50}=12" THK=24"

RIPRAP D_{50}=18" VARIES THK=36"

RIPRAP D_{50}=8" THK=16"

RIPRAP D_{50}=18" THK=36"

FUTURE POWER POLE

MAINTENANCE ACCESS ROAD (MAINTAINED BY COYOTE SPRINGS CHARTER ASSOCIATION, INC.)

MAINTENANCE ACCESS ROAD (MAINTAINED BY COYOTE SPRINGS CHARTER ASSOCIATION, INC.)

MAINTENANCE ACCESS ROAD (MAINTAINED BY COYOTE SPRINGS CHARTER ASSOCIATION, INC.)

STA. 14+36.34 BEGIN SPILLWAY

0.0%

0.5%

2.0%

1.37%

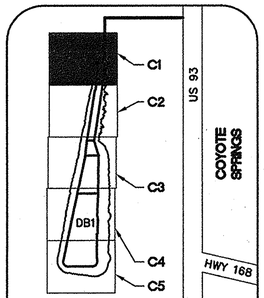
MATCHLINE – SEE SHEET C2

NORTH

SCALE 1"=50'

50 0 50 100

SCALE FEET



KEY MAP
NOT TO SCALE

CLARK COUNTY
DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY_____

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM THE CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO CLARK COUNTY.

THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (UTE05-5151) ON FILE WITH CLARK COUNTY.

GRANT Y. TOKUMI, P.E. #15517 — DATE 7/19/07

NOTE: NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C0225E, DATED SEPTEMBER 27, 2007. THIS PANEL SHOWS THAT THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941" 3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

Avoid cutting underground utility lines. It's costly.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

STATE OF NEVADA — PROFESSIONAL ENGINEER — GRANT Y. TOKUMI — No. 15517 — CIVIL — DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE: ASSN. APP	DATE: ECW. APP

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ISSUE EDITOR:
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F:\552101 - 08161\Dwg\Hydro\Improv—R2\CS01B1_C01-R2.dwg BJohnson

COYOTE SPRINGS
DETENTION BASIN 1
GRADING PLAN

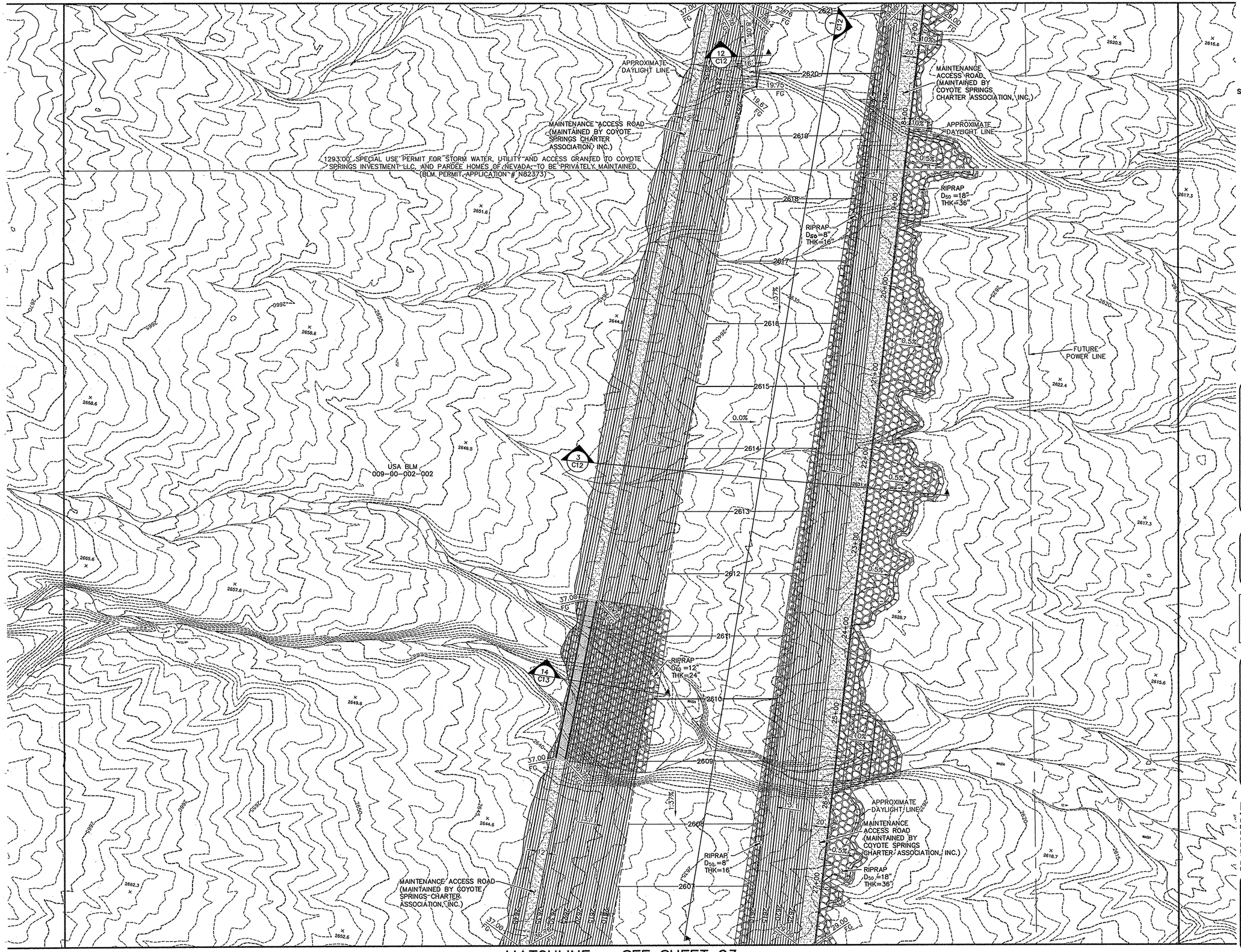
DRAWING
C1

10 OF 26 SHTS

HTE: 07-3265

z:\2435.dwg,03052k4.mdl

MATCHLINE – SEE SHEET C1



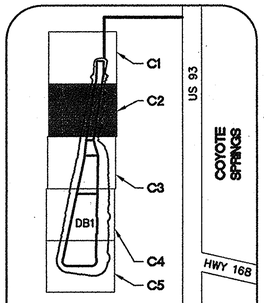
MATCHLINE – SEE SHEET C3

NORTH

SCALE 1"=50'

50 0 50 100

SCALE FEET



KEY MAP
NOT TO SCALE

NORTH

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY_____

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NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO CLARK COUNTY.

THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (NTE06-51511) ON FILE WITH CLARK COUNTY.

GRANT Y. TOKUMI, P.E. #15517 — 7/19/07 DATE

NOTE: NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C0225E, DATED SEPTEMBER 27, 2005. THIS PANEL SHOWS THAT THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

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NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

DISCLAIMER NOTE

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UNDERGROUND SERVICE (USA)

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1-702-227-2929

STATE OF NEVADA — GRANT Y. TOKUMI — No. 15517 — CIVIL — PROFESSIONAL ENGINEER — 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	CCW APP

DESIGN:
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ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:53:27

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F:\552101 - 0916\Dwg\Hydro\Improv-R2\C52B1_C02-R2.dwg KNguyen

COYOTE SPRINGS
DETENTION BASIN 1
GRADING PLAN

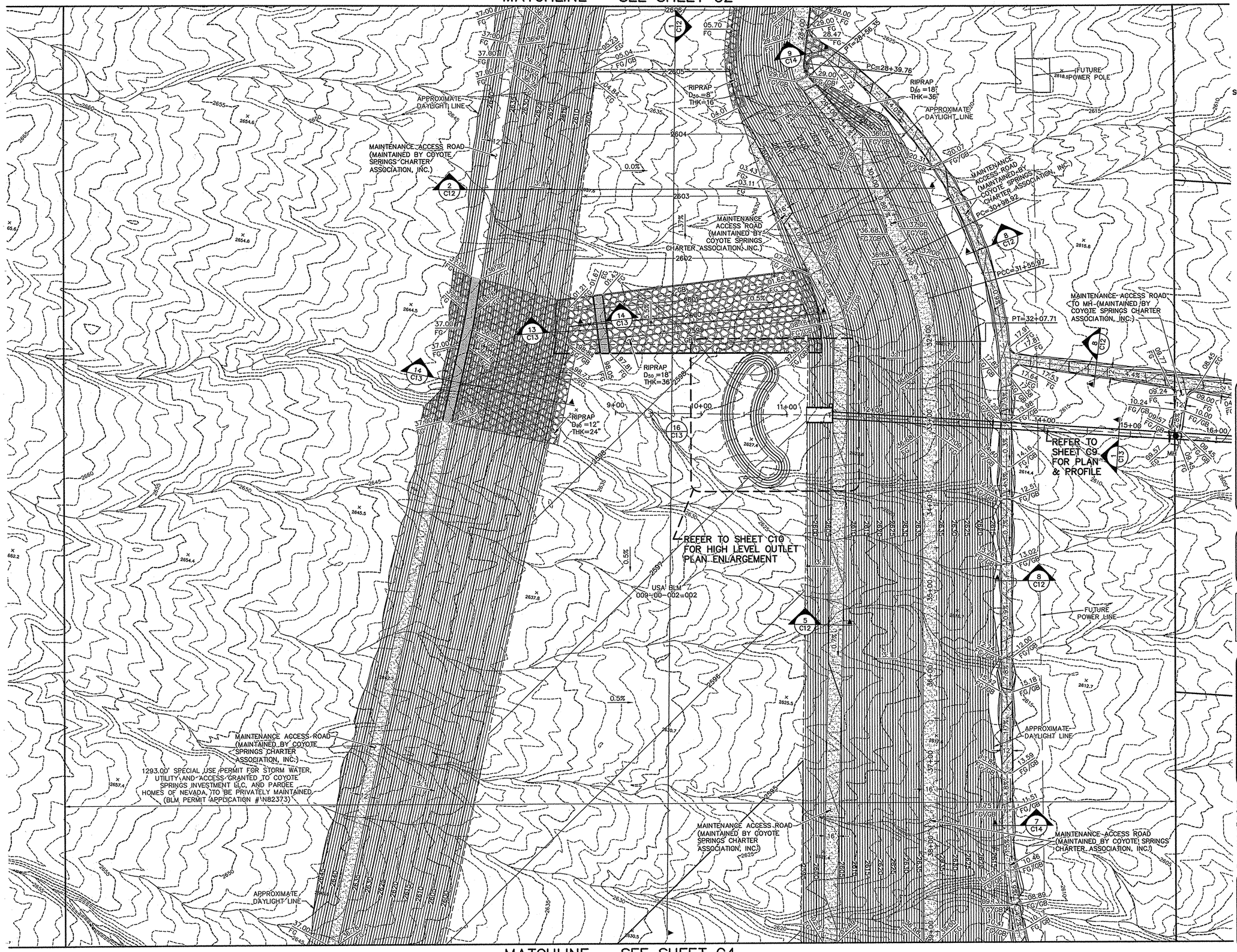
DRAWING
C2

11 OF 26 SHTS

HTE: 07-3265

cor2436.dwg 030624.wds

MATCHLINE – SEE SHEET C2



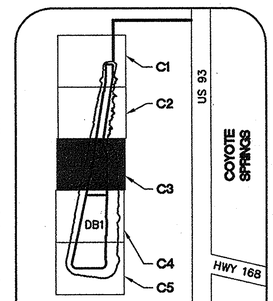
MATCHLINE – SEE SHEET C4

NORTH

SCALE 1"=50'

50 0 50 100

SCALE FEET



KEY MAP

NOT TO SCALE

NORTH

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY _____

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THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (HTE#06-51511) ON FILE WITH CLARK COUNTY.

GRANT Y. TOKUMI, P.E. #15517 — 7/19/07 DATE

NOTE: NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 3200030225E, DATED SEPTEMBER 27, 2002. THIS PANEL SHOWS THAT THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

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NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

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UNDERGROUND SERVICE (USA)

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CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

STATE OF NEVADA — GRANT Y. TOKUMI — No. 15517 — CIVIL — Exp. 06/30/2008 — PROFESSIONAL ENGINEER — 7/19/07 DATE

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ISSUE EDITOR:							
PLOT DATE: 07-18-07							
PLOT TIME: 16:05:11							
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F:\552101-091\Dwg\Hydro\Improv-R2\CSDB1_G03-R2.dwg KNguyen

COYOTE SPRINGS
DETENTION BASIN 1
GRADING PLAN

DRAWING C3

12 OF 26 SHTS

HTE: 07-3265

20x24(36).dwg 030924.ctb

MATCHLINE – SEE SHEET C3

MATCHLINE – SEE SHEET C5

MAINTENANCE ACCESS ROAD (MAINTAINED BY COYOTE SPRINGS CHARTER ASSOCIATION, INC.)

APPROXIMATE DAYLIGHT LINE

RIPRAP D50 =12" THK=24"

REFER TO SHEET C10 FOR LOW-LEVEL OUTLET PLAN ENLARGEMENT

REFER TO SHEET C8 FOR PLAN AND PROFILE

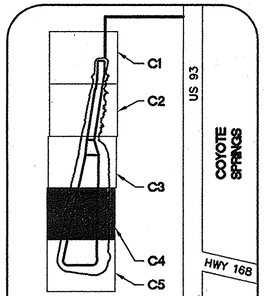
GRADE TO DRAIN

FUTURE POWER POLE

FUTURE POWER LINE

1293.00' SPECIAL USE PERMIT FOR STORMWATER UTILITY AND ACCESS GRANTED TO COYOTE SPRINGS INVESTMENT LLC, AND PARDEE HOMES OF NEVADA, TO BE PRIVATELY MAINTAINED (BLM PERMIT APPLICATION #:N82373)

USA BLM 009-00-002-002



KEY MAP
NOT TO SCALE

NORTH

SCALE 1"=50'
50 0 50 100
SCALE FEET

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY _____

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GRANT Y. TOKUMI, P.E. #15517 — DATE 7/19/07

NOTE: NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C0225E, DATED SEPTEMBER 27, 2002. THIS PANEL SHOWS THAT THE PROJECT IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

BASIS OF BEARINGS

NORTH 89°49'48" EAST, BEING THE BEARING OF THE SOUTH LINE OF SECTION 21, TOWNSHIP 13 SOUTH, RANGE 63 EAST, M.D.M. AS SHOWN ON THAT PARCEL MAP ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 98 OF PARCEL MAPS, AT PAGE 57.

BENCHMARK

USC&GS BENCHMARK STAMPED "X 301 1941" 3" DIAMETER BRASS DISK SET IN THE NORTH END OF A CONCRETE HEADWALL, 15 FEET EAST OF THE CENTERLINE OF OLD HIGHWAY 93, 6.1 MILES EAST OF THE INTERSECTION OF US 93 AND SR 168, APPROXIMATELY 1 MILE NORTH OF STATE ROUTE 168 ALONG OLD HIGHWAY 93.

NAVD88 ELEVATION – 783.873 (METERS), 2571.76 (FEET)

DISCLAIMER NOTE

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Avoid cutting underground utility lines. It's costly.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

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CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

NEVADA PROFESSIONAL ENGINEER — STATE OF NEVADA — GRANT Y. TOKUMI — No. 15517 — CIVIL — DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	CCW APP

DESIGN:
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ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 16:05:45

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F:\352101-0910\Dwg\Hydro\mpraw-R2\C5D91_C04-R2.dwg KNguyen

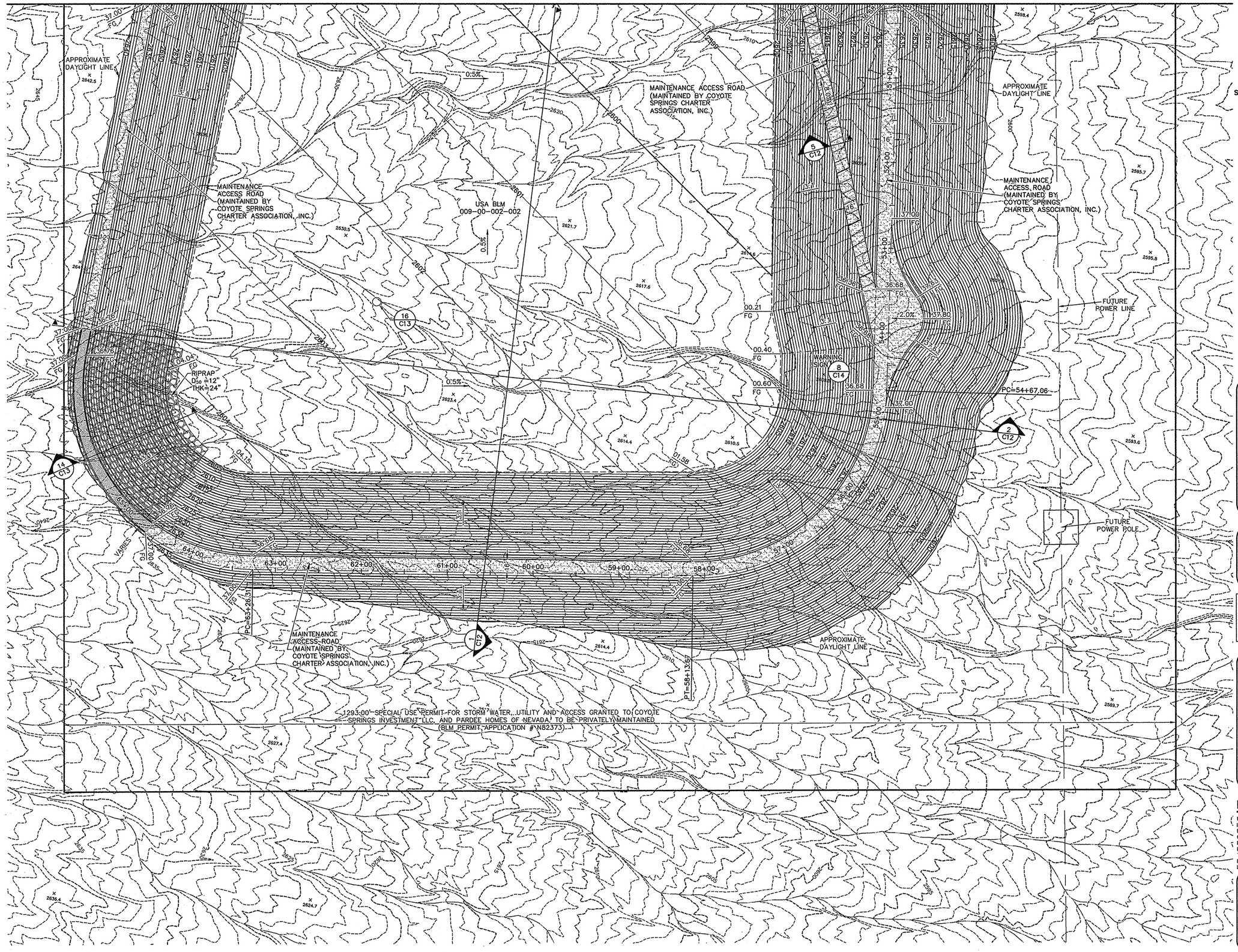
COYOTE SPRINGS
DETENTION BASIN 1
GRADING PLAN

DRAWING
C4

13 OF 26 SHTS
HTE: 07-3265

ce2426.dwg,030524.wtb

MATCHLINE – SEE SHEET C4

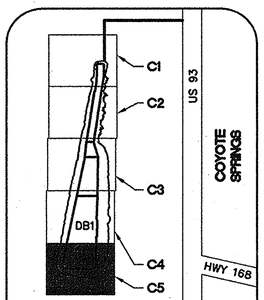


NORTH

SCALE 1"=50'

50 0 50 100

SCALE FEET



KEY MAP

NOT TO SCALE

NORTH

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY _____

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GRANT Y. TOKUMI, P.E. #15517 — 7/19/07 DATE

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UNDERGROUND SERVICE (USA)

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STATE OF NEVADA — GRANT Y. TOKUMI — No. 15517 — CIVIL — REGISTERED PROFESSIONAL ENGINEER

DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE AGEN. APP.	DATE CCW APP.

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 15:06:15

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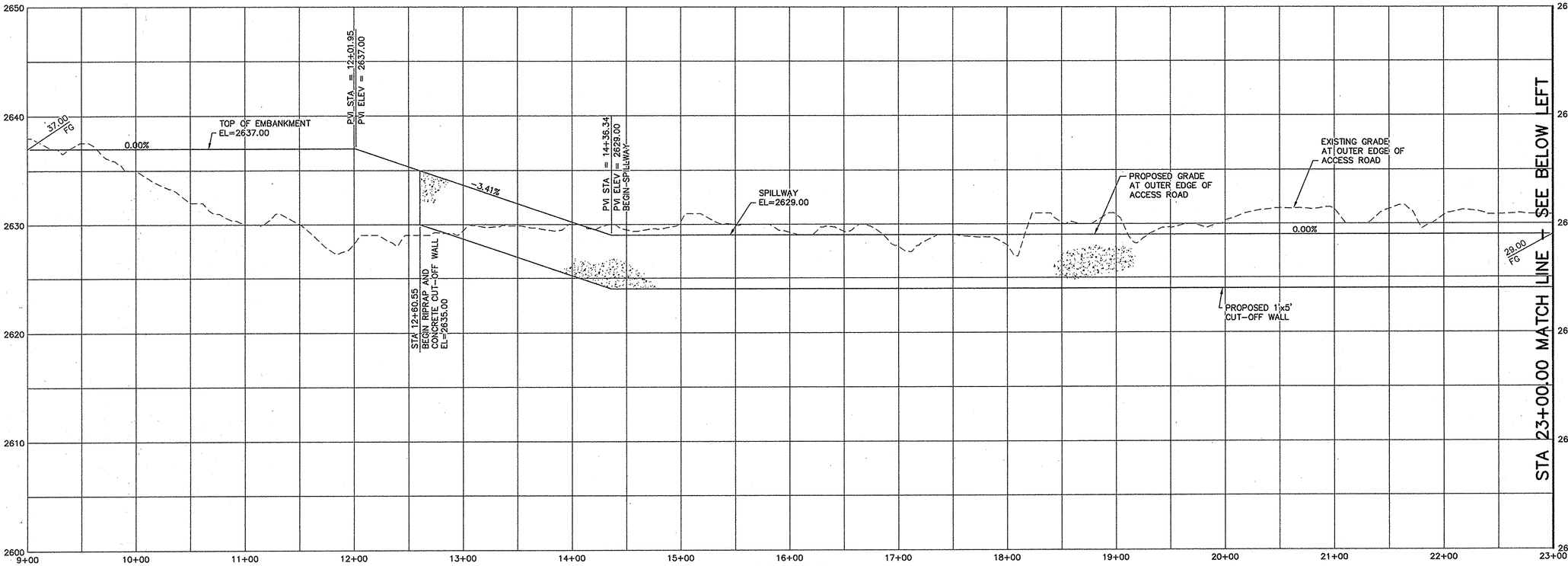
COYOTE SPRINGS
DETENTION BASIN 1
GRADING PLAN

DRAWING
C5
14 OF 26 SHTS

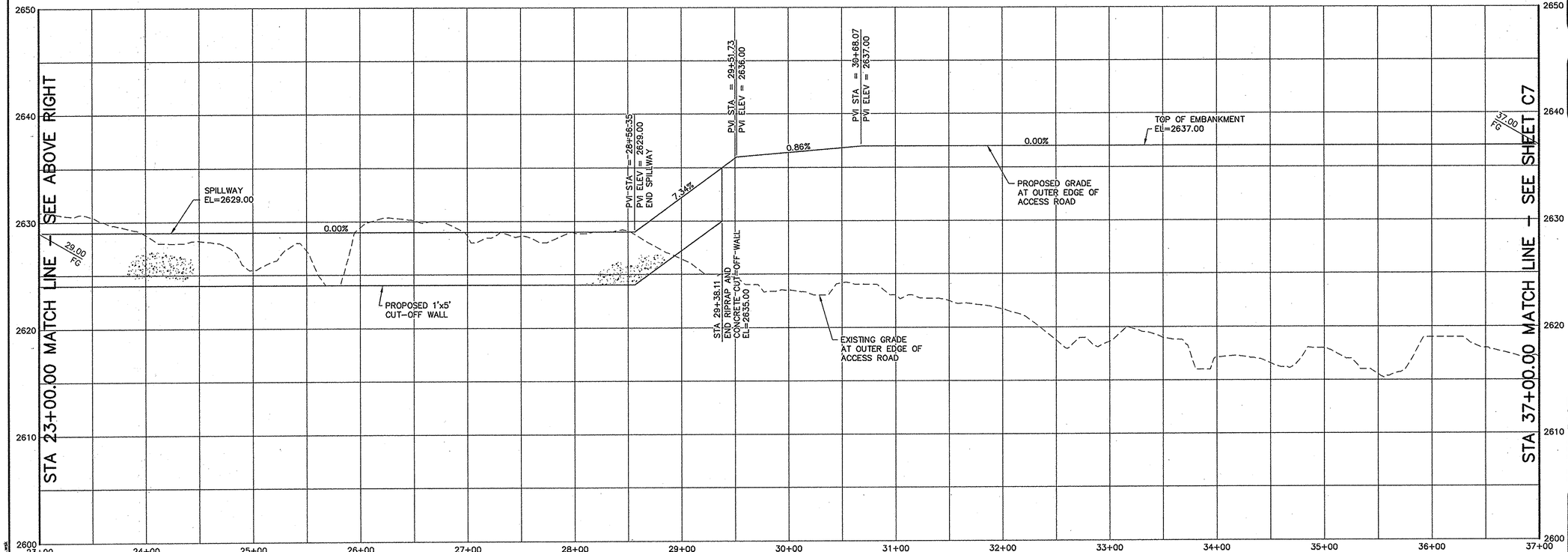
HTE: 07-3265

gce2438.dwg 030924.wat



PROFILE

SCALE: HORIZ. 1" = 50'/VERT. 1" = 5'



PROFILE

SCALE: HORIZ. 1" = 50'/VERT. 1" = 5'

50 0 50 100

SCALE FEET

STATE OF NEVADA — PROFESSIONAL ENGINEER — GRANT Y. TOKUMI Exp. 06/30/2008 CIVIL No. 15517

DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	GCW APP

DESIGN:
DRAWN:
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ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 16:06:33

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY_____

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GRANT Y. TOKUMI, P.E. #15517 — DATE 7/19/07

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COYOTE SPRINGS

DETENTION BASIN 1

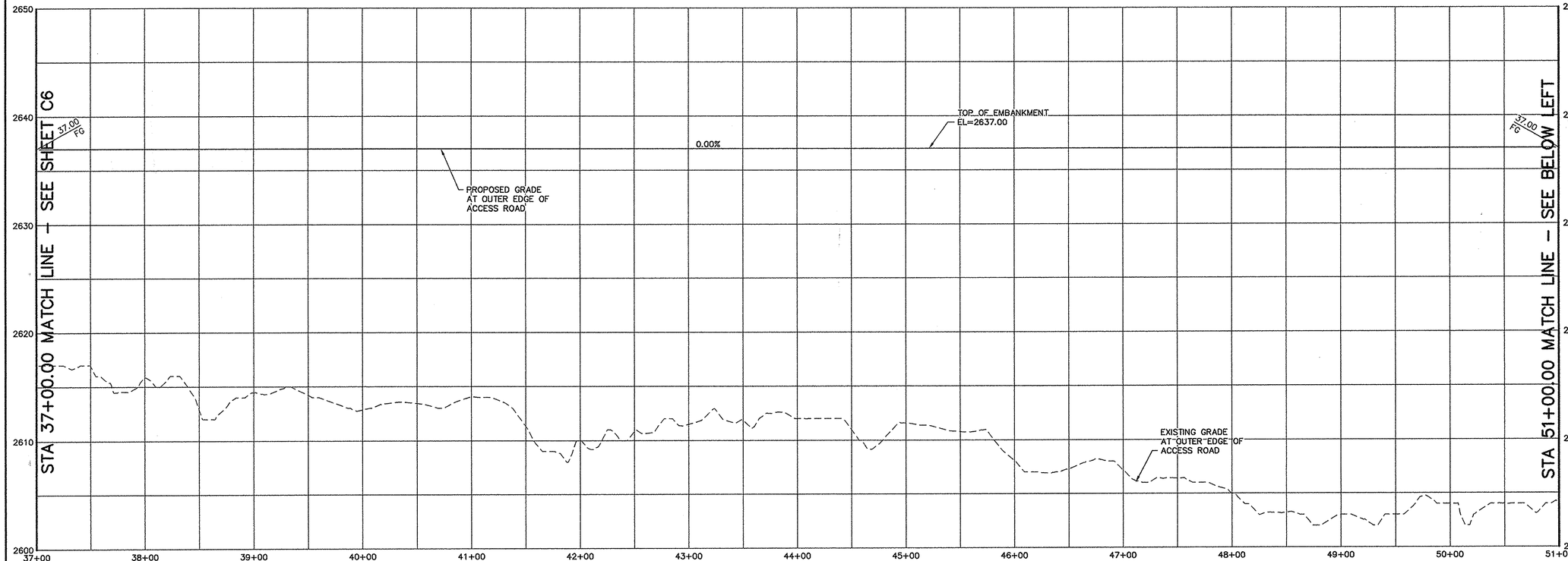
EMBANKMENT AND ACCESS ROAD PROFILE

DRAWING
C6

15 OF 26 SHTS

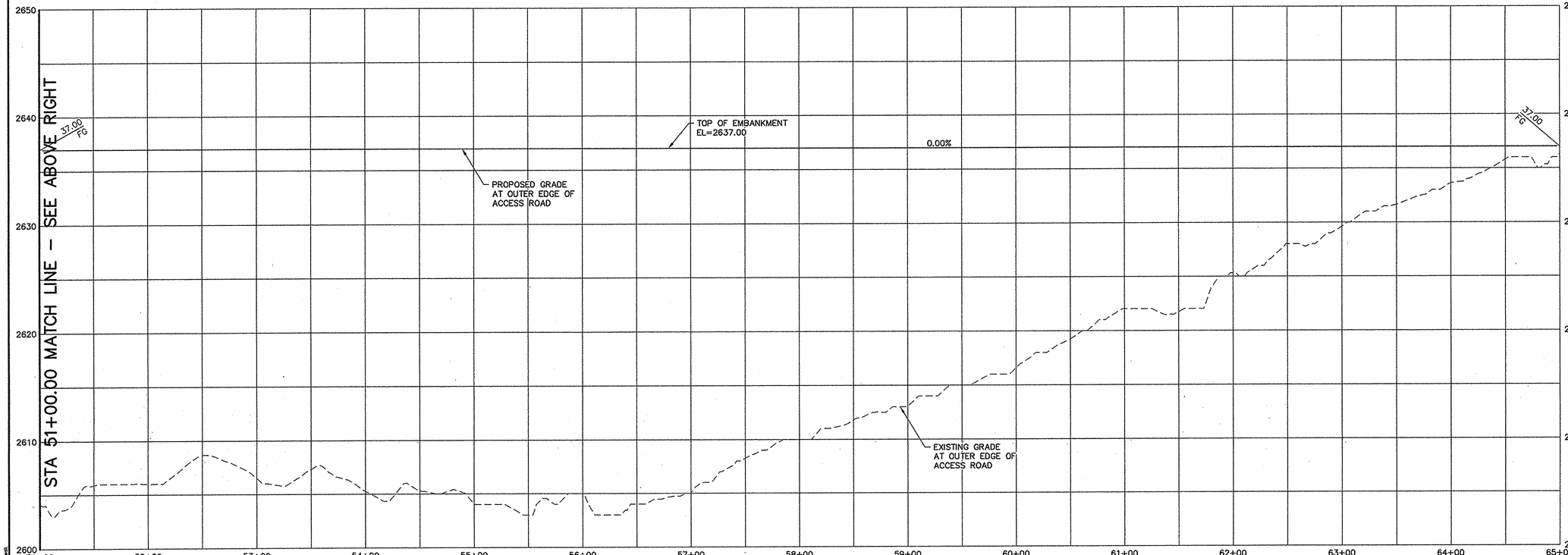
HTE: 07-3265

gcw2426.dwg 03/02/4.web



PROFILE

SCALE: HORIZ. 1" = 50'/VERT. 1" = 5'



PROFILE

SCALE: HORIZ. 1" = 50'/VERT. 1" = 5'

50 0 50 100

SCALE FEET

STATE OF NEVADA — PROFESSIONAL ENGINEER — GRANT Y. TOKUMI Exp. 06/30/2008 CIVIL No. 15517

DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN.	APP	DATE	GCW	APP

DESIGN:
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ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:55:17

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

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BY _____

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COYOTE SPRINGS

DETENTION BASIN 1

EMBANKMENT, ACCESS ROAD, AND SPILLWAY PROFILE

DRAWING
C7
16 OF 26 SHTS

HTE: 07-3265

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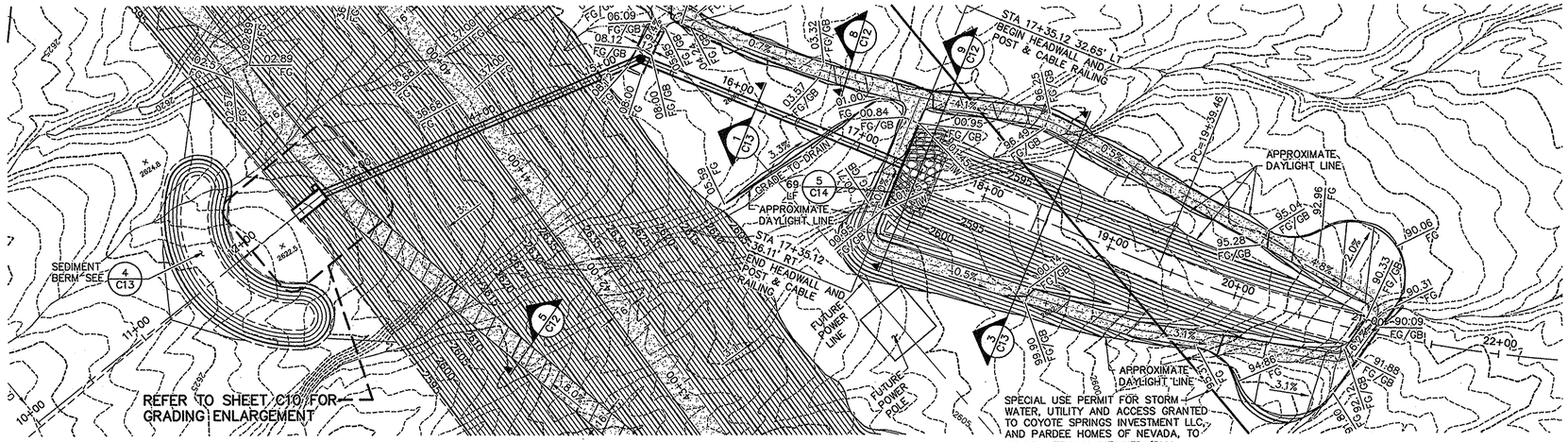
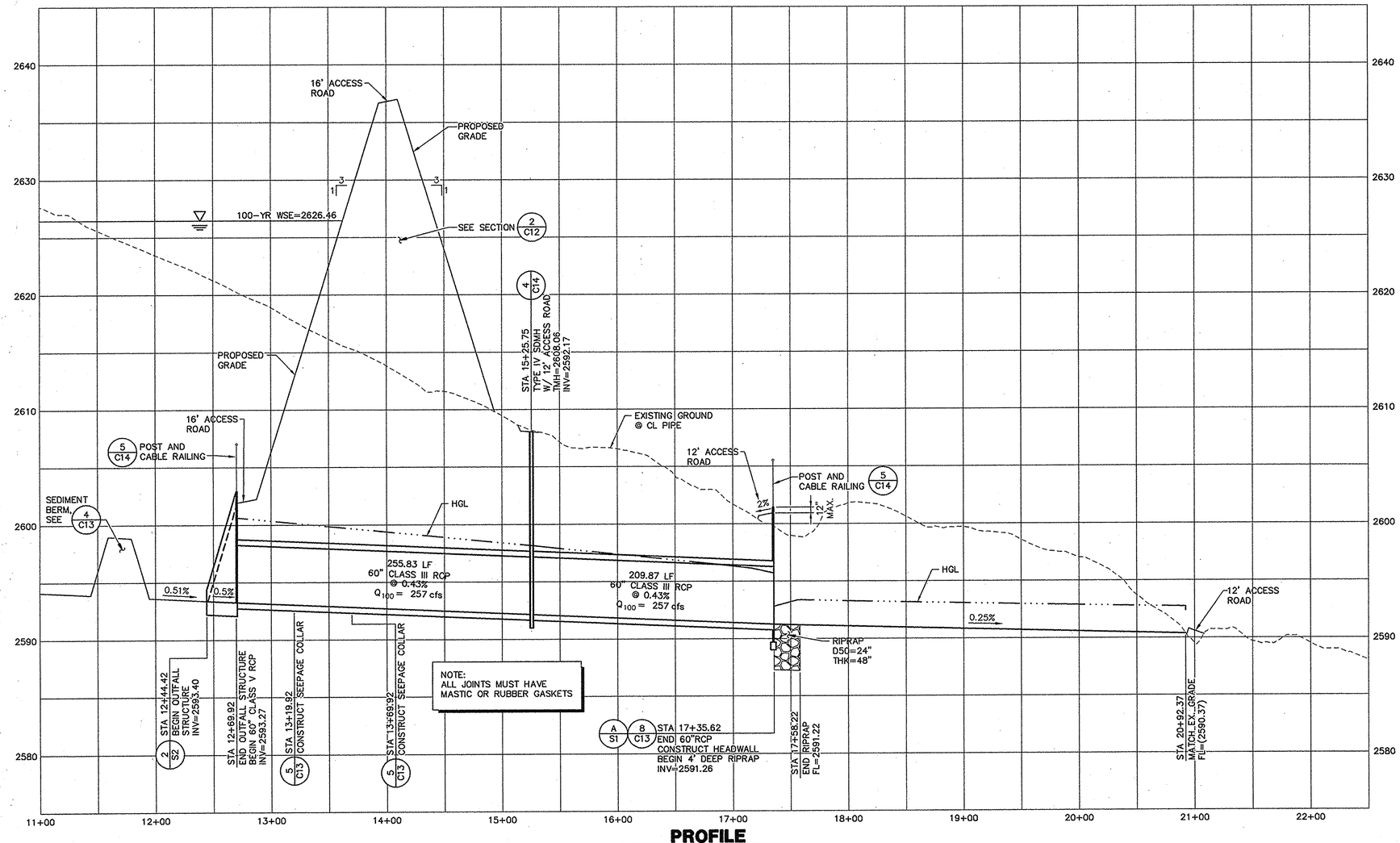


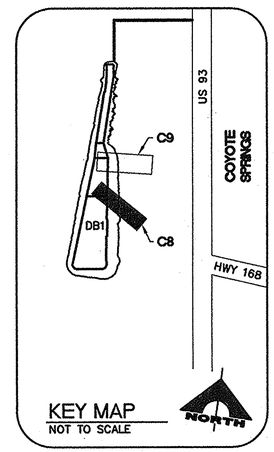
PLAN

SCALE: 1" = 50'



PROFILE

SCALE: HORIZ. 1" = 50'/VERT. 1" = 5'



KEY MAP

NOT TO SCALE

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

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GRANT Y. TOKUMI, P.E. #15517 — DATE 7/19/07

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Avoid cutting underground utility lines. It's costly. Call before you Dig. 1-800-227-2600 UNDERGROUND SERVICE (USA)

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STATE OF NEVADA — GRANT Y. TOKUMI Exp. 06/30/2008 CIVIL — PROFESSIONAL ENGINEER — No. 15517 — 7/19/07

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	GCW APP

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COYOTE SPRINGS
DETENTION BASIN 1
LOW LEVEL OUTLET PLAN AND PROFILE

DRAWING C8

17 OF 26 SHTS

HTE: 07-3265

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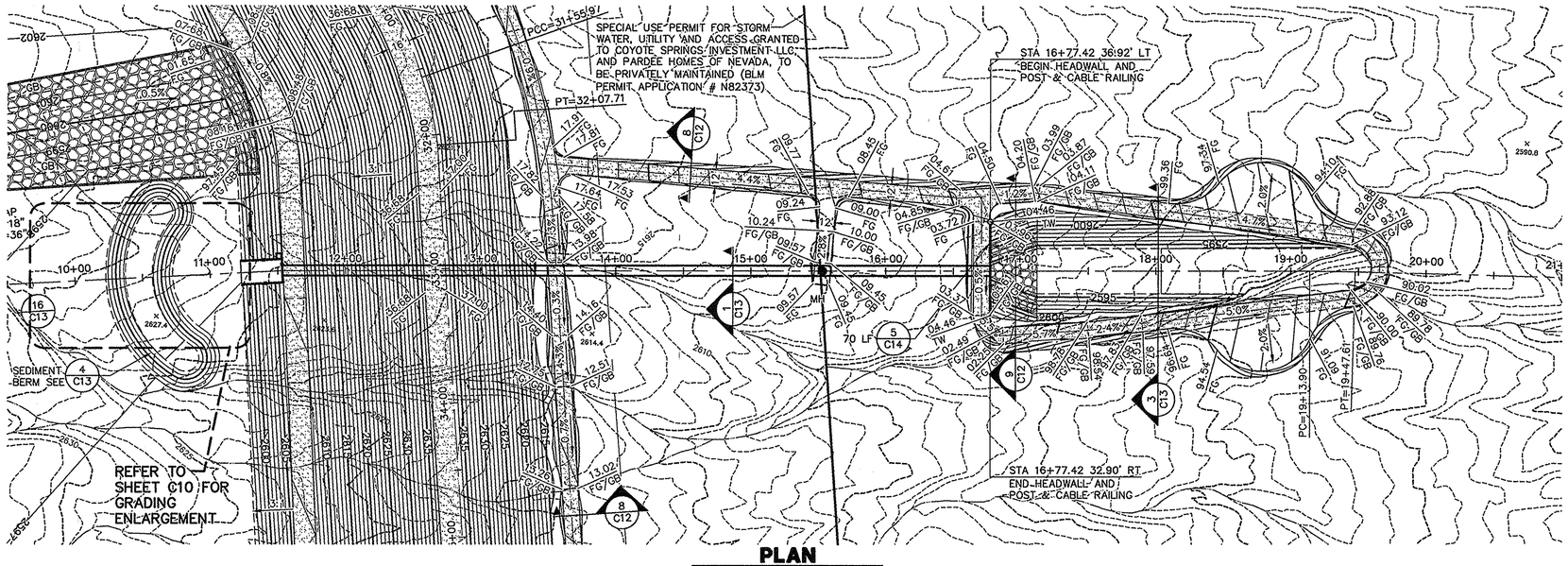
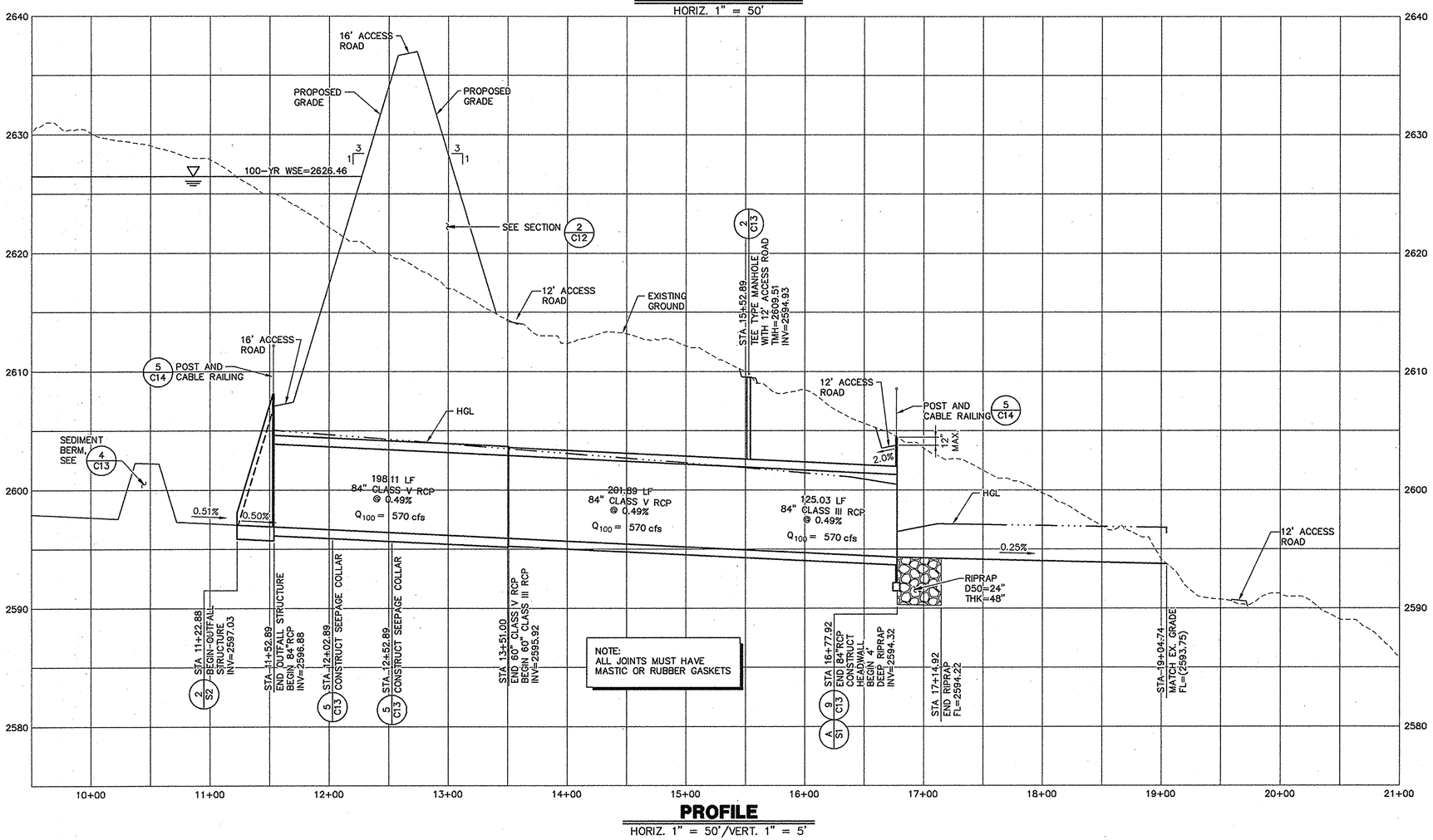


PLAN

HORIZ. 1" = 50'



PROFILE

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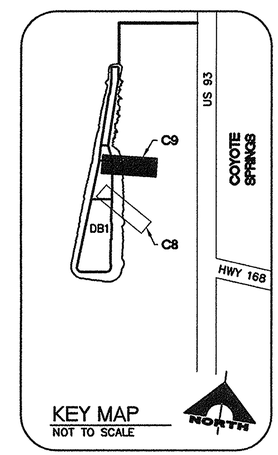

KEY MAP
NOT TO SCALE

SCALE 1"=50'
50 0 50 100
SCALE FEET

CLARK COUNTY
DEPARTMENT OF DEVELOPMENT SERVICES

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STATE OF NEVADA — PROFESSIONAL ENGINEER — GRANT Y. YOKUMI — No. 15517 — CIVIL — Exp. 06/30/2008

DATE: 7/19/07

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PLOT DATE: 07-18-07
PLOT TIME: 14:56:08

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COYOTE SPRINGS
DETENTION BASIN 1
HIGH LEVEL OUTLET PLAN AND PROFILE

DRAWING
C9

18 OF 26 SHTS
HTE: 07-3265

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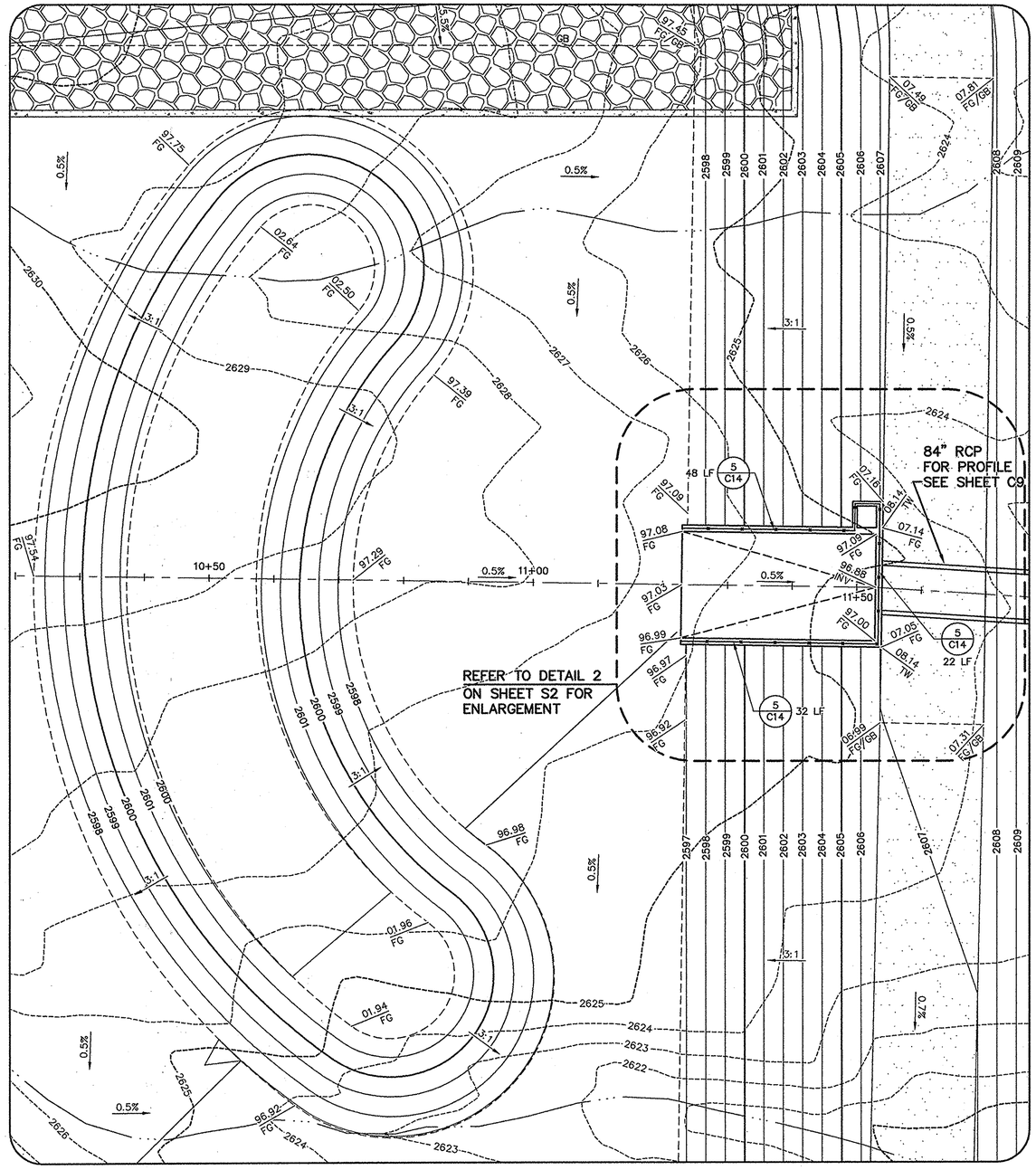
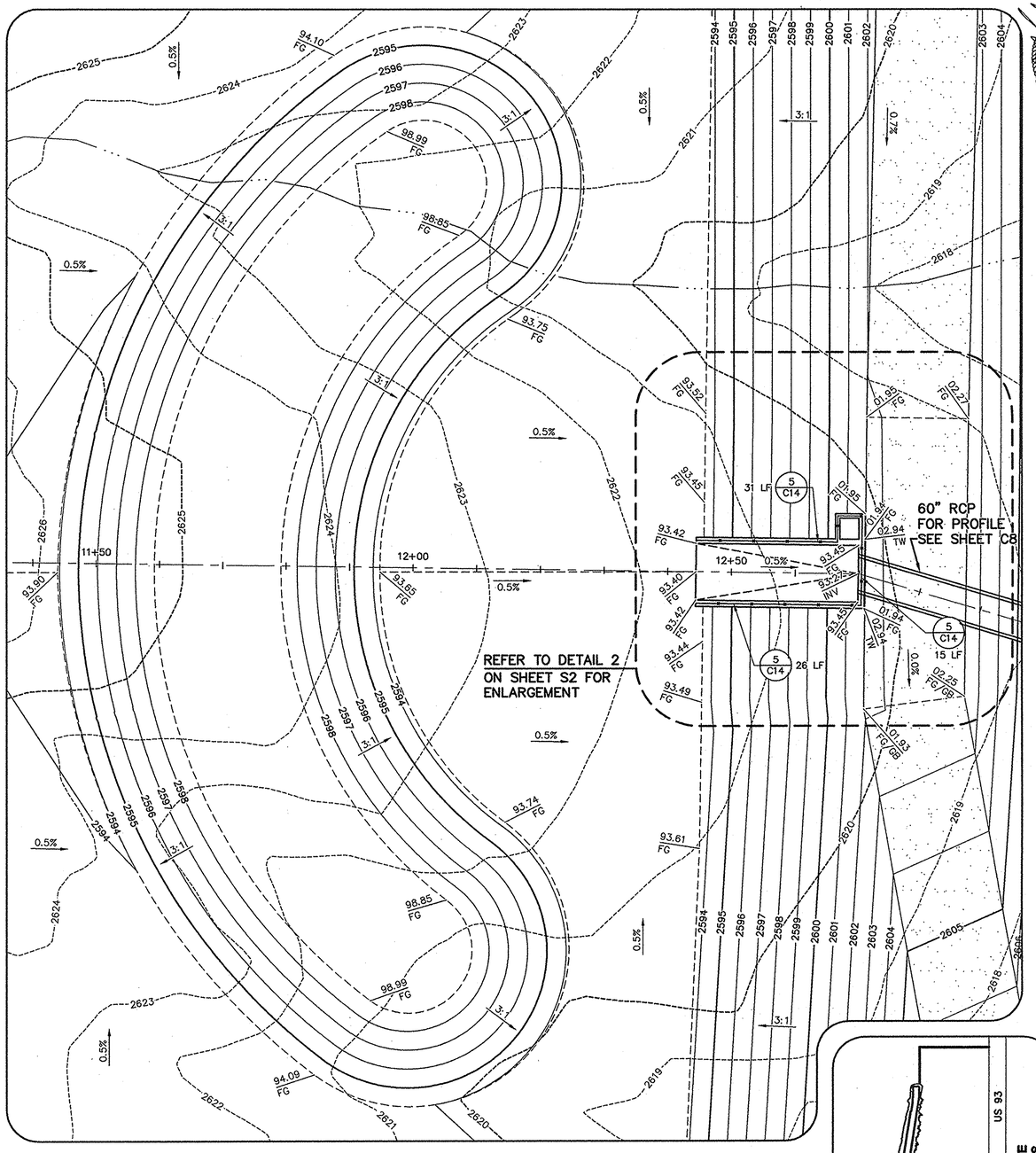


HIGH LEVEL OUTLET ENLARGED GRADING PLANS



LOW LEVEL OUTLET ENLARGED GRADING PLANS

CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

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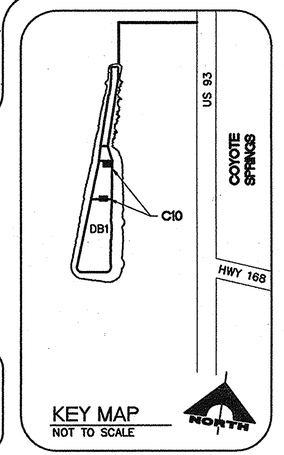
NORTH
SCALE 1"=10'
10 0 10 20
SCALE FEET

THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (HTE06-51511) ON FILE WITH CLARK COUNTY.

GRANT Y. TOKUMI, P.E. #15517 — 7/19/07 DATE



KEY MAP
NOT TO SCALE

STATE OF NEVADA — GRANT YOKUMI — Exp. 06/30/2008 — CIVIL — No. 15517 — PROFESSIONAL ENGINEER — DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE AGEN. APP.	DATE CCW APP.

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-19-07
PLOT TIME: 08:55:14

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2535 S. RAINBOW BOULEVARD · LAS VEGAS NV 89146
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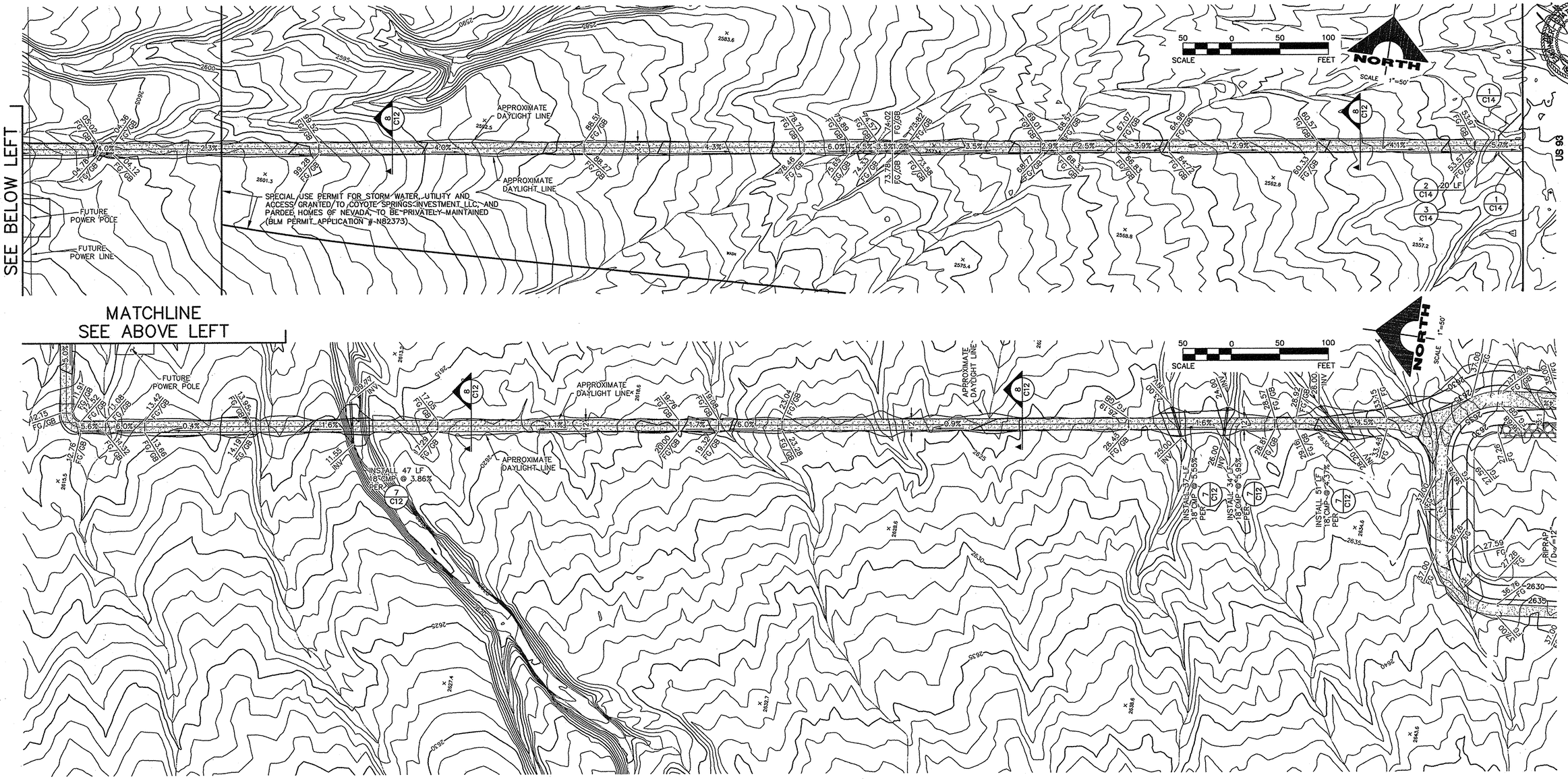
F:\552101-0916\Dwg\Vlydrlv\Improv-R2\C5D91_C10-R2.dwg RBlanchard

COYOTE SPRINGS
DETENTION BASIN 1
OUTLET ENLARGED GRADING PLANS

DRAWING
C10

19 OF 26 SHTS
HTE: 07-3265

cse2435.dwg 030824.mdl



THESE PLANS COMPLY WITH THE APPROVED DRAINAGE STUDY (HTE#06-515HT) ON FILE WITH CLARK COUNTY.

GRANT Y. TOKUMI, P.E. #15517 — DATE 7/19/07

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

Avoid cutting underground utility lines. It's costly.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

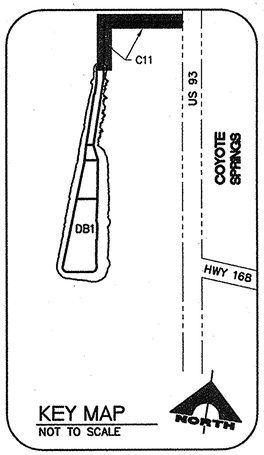
CLARK COUNTY DEPARTMENT OF DEVELOPMENT SERVICES

ACCEPTANCE OF PLANS FOR FILING

BY _____

ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM THE CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN.

NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO CLARK COUNTY.



KEY MAP
NOT TO SCALE

STATE OF NEVADA
GRANT Y. TOKUMI
No. 15517
Exp. 06/30/2008
CIVIL
PROFESSIONAL ENGINEER

DATE: 7/19/07

REV	DATE	DESCRIPTION	DATE AGEN. APP	DATE ECW APP

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:57:16

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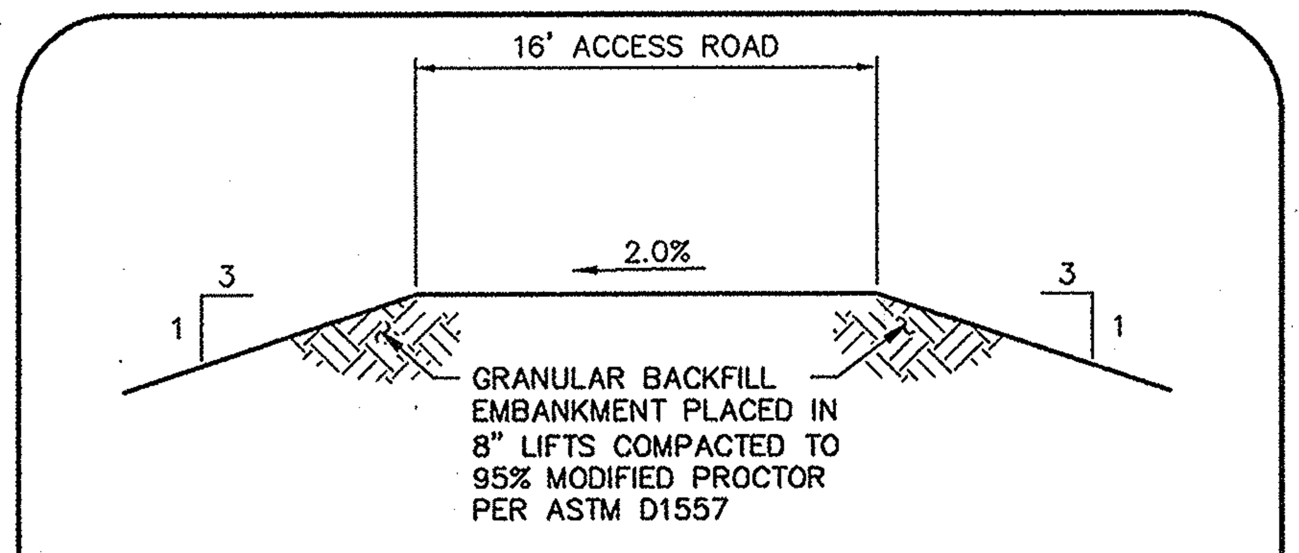
COYOTE SPRINGS
DETENTION BASIN 1
ACCESS ROAD GRADING PLAN

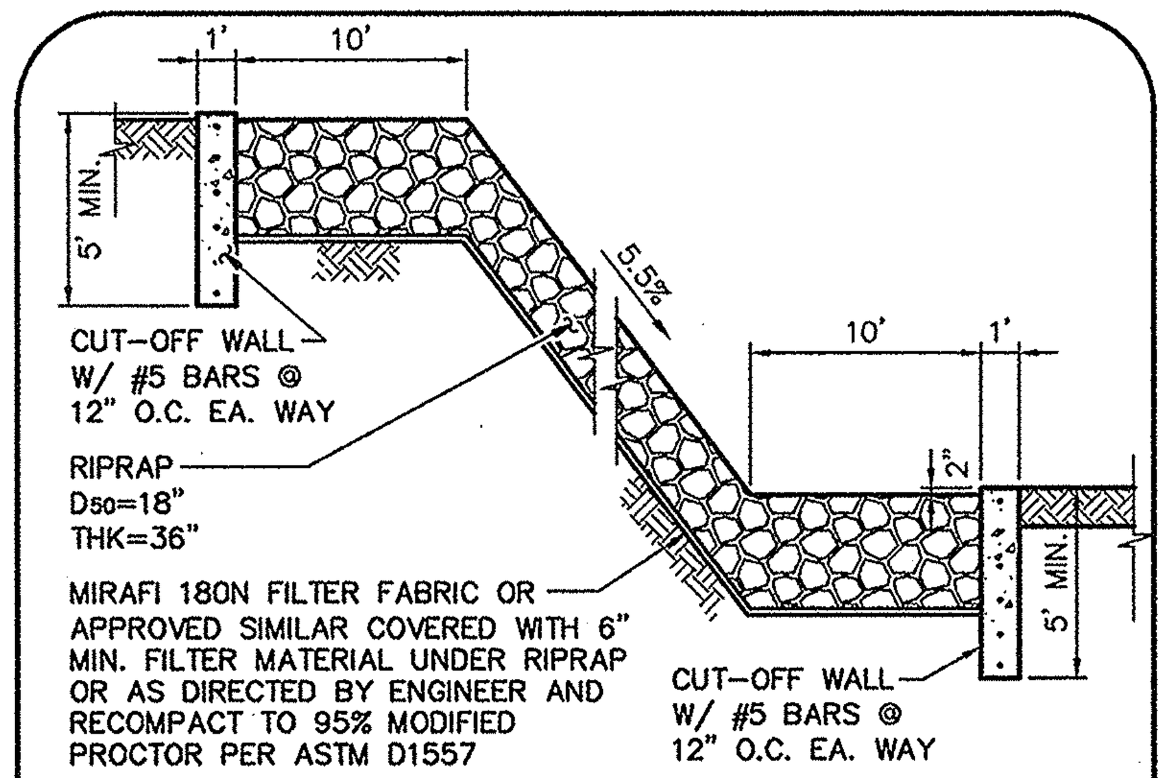
DRAWING
C11

20 OF 26 SHTS
HTE: 07-3265

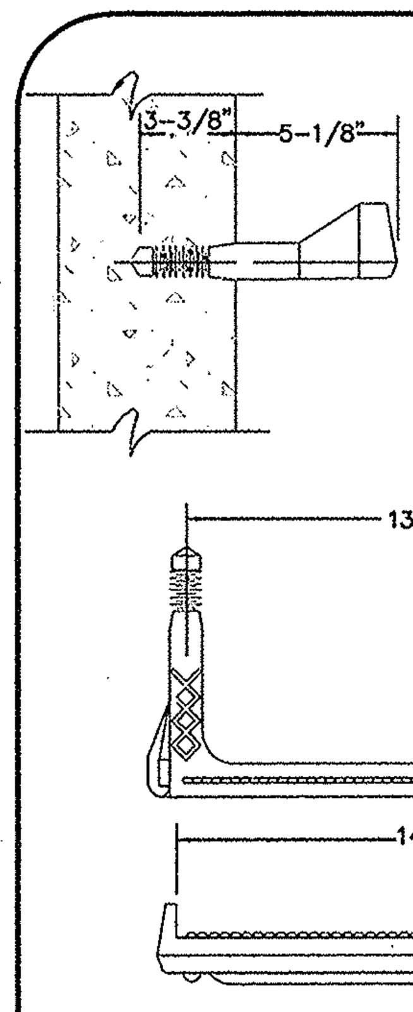
pc2430.dwg 030624.wdt



16' ACCESS ROAD (10/C12)
NOT TO SCALE

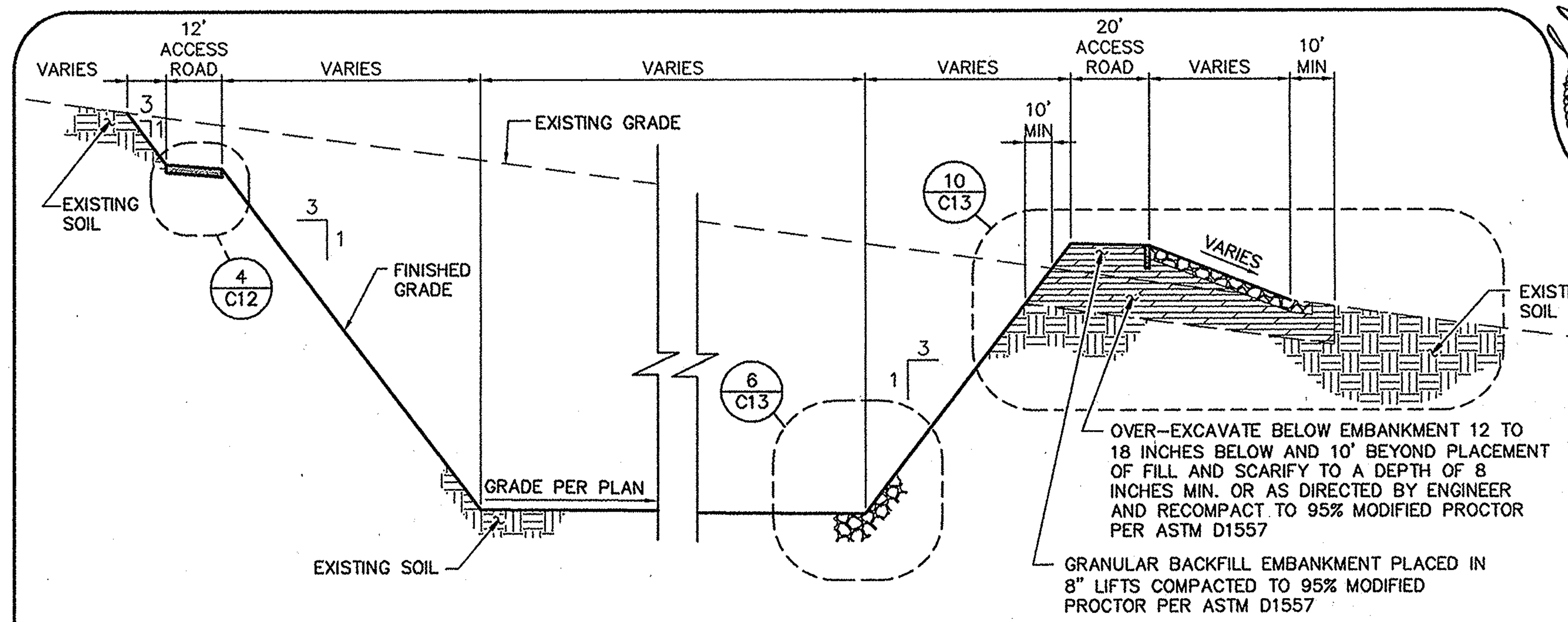


SECTION (6/C12)
NOT TO SCALE

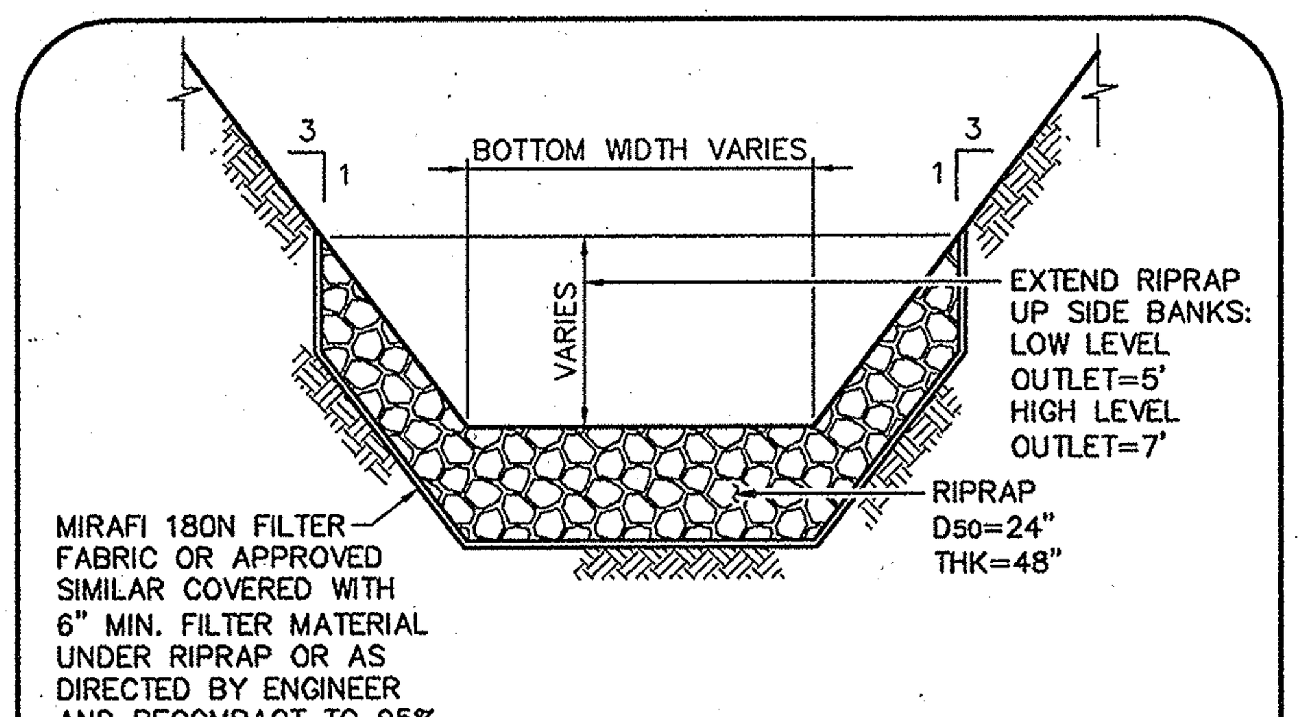


NOTES:
1. MANHOLE STEP SHALL CONFORM TO A.S.T.M. C-478 AND C-497.
2. ALUMINUM STEPS SHALL BE SOLID, MADE FROM MATERIAL IN CONFORMANCE WITH A.S.T.M. B221 (ALLOY 6005-TS).
3. REINFORCED PLASTIC STEPS SHALL BE POLYPROPYLENE PLASTIC, WITH NO. 3 (MIN.) DEFORMED STEEL ROD (GRADE 60/A.S.T.M. A-615).
4. STEPS SHALL BE EVENLY SPACED FROM 12" TO 16".
5. ALL STEPS MUST BE EPOXIED IN PLACE DURING THE INSTALLATION PROCESS.

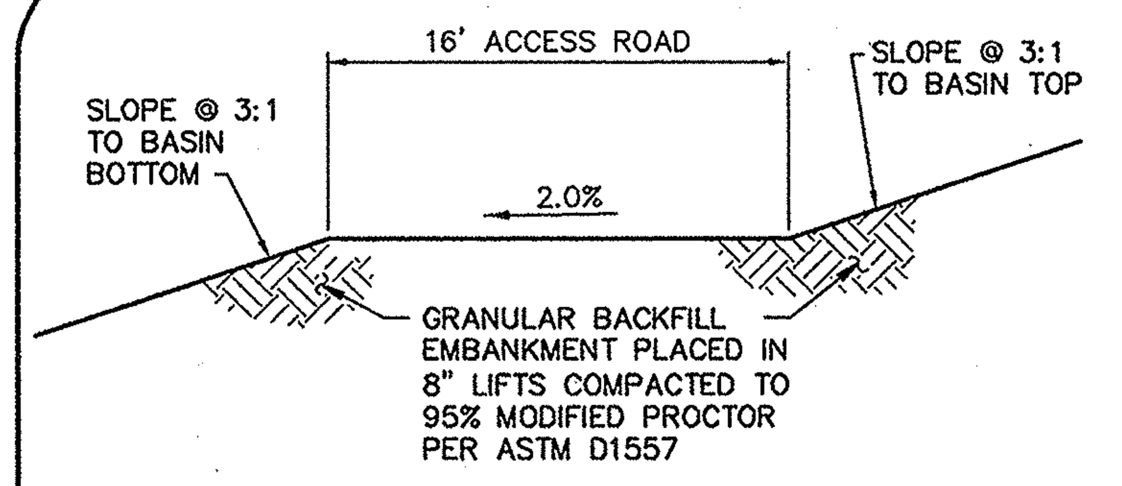
MANHOLE STEPS (11/C12)
NOT TO SCALE



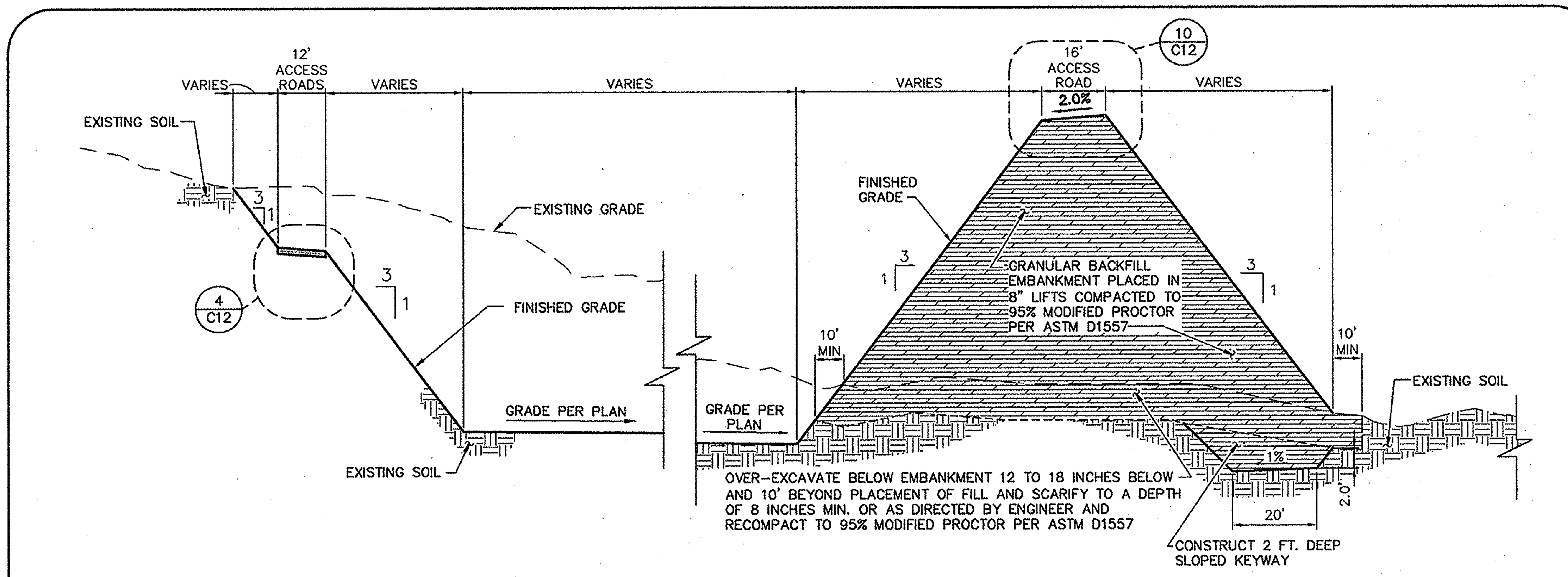
DETENTION BASIN CROSS SECTION (SPILLWAY, WEST TO EAST) (3/C12)
NOT TO SCALE



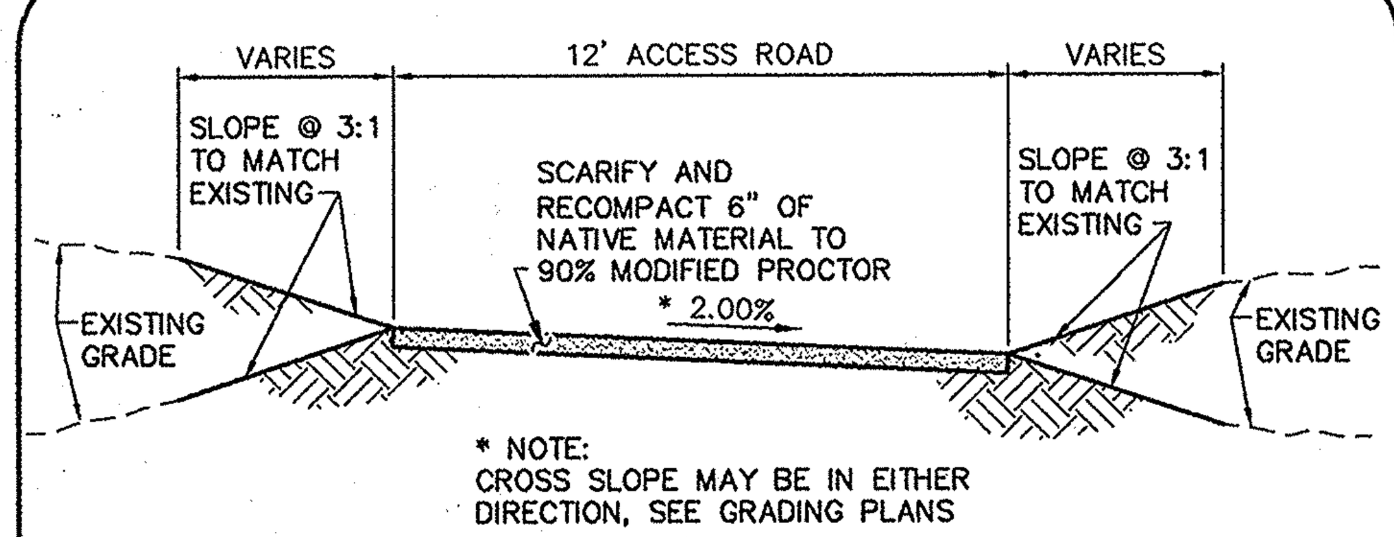
SECTION (9/C12)
NOT TO SCALE



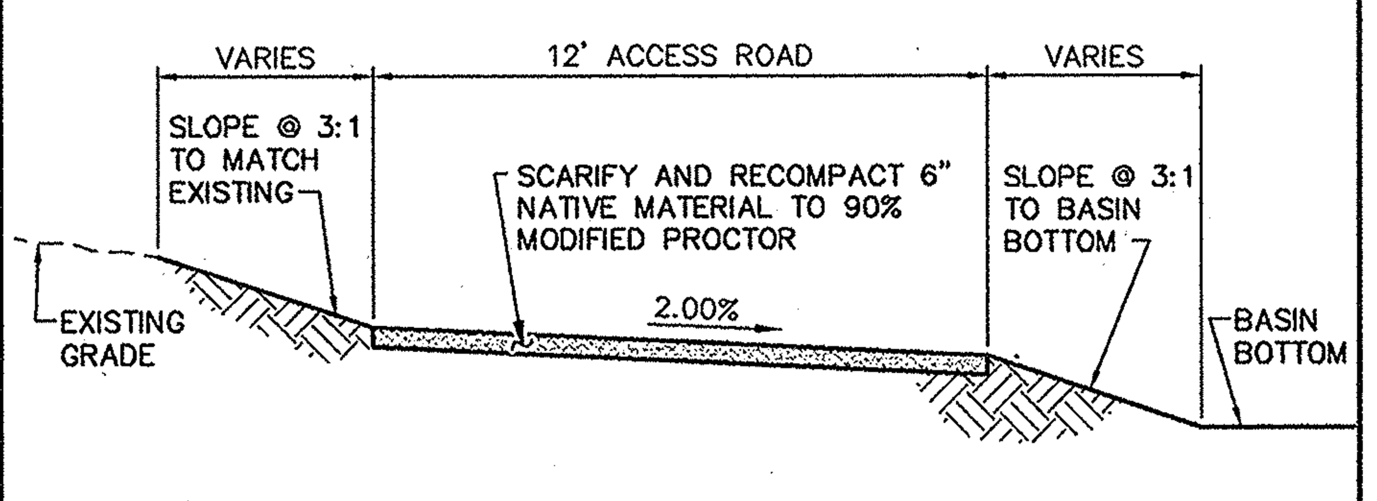
16' ACCESS ROAD (5/C12)
NOT TO SCALE



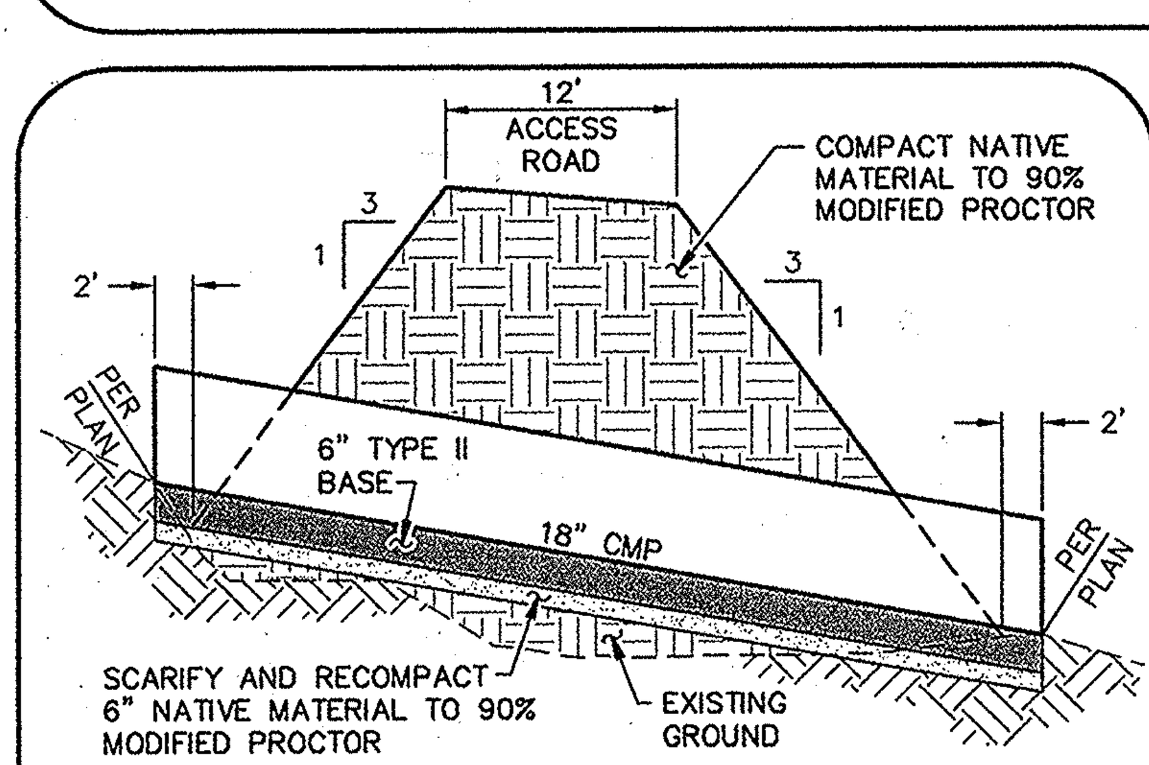
DETENTION BASIN CROSS SECTION (WIDE, WEST TO EAST) (2/C12)
NOT TO SCALE



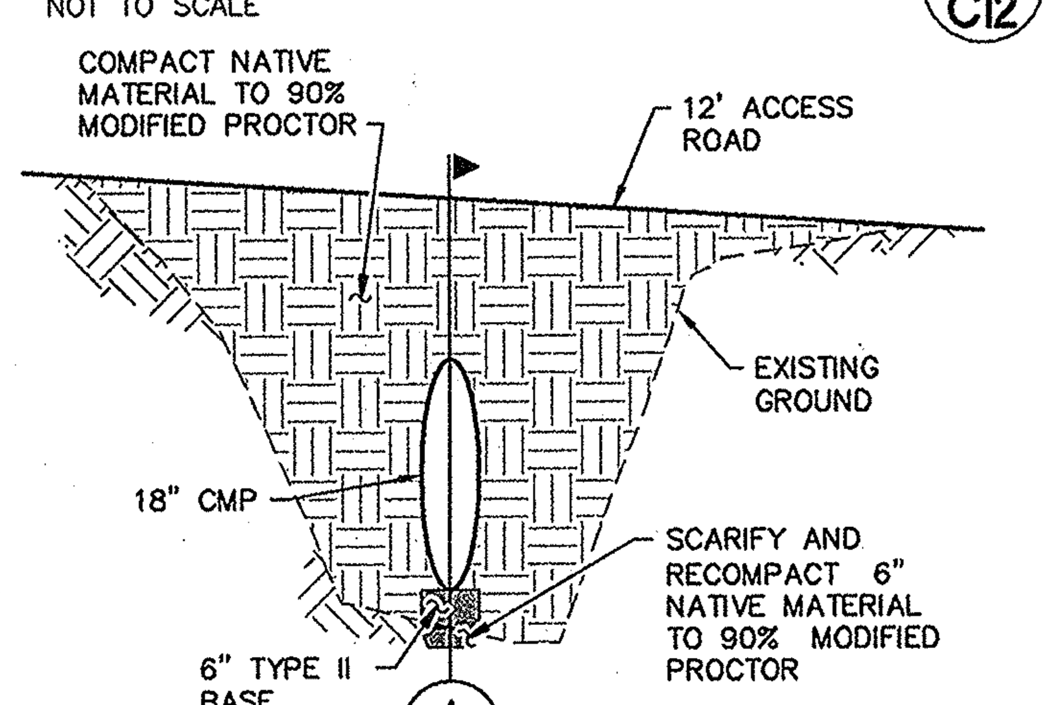
12' ACCESS ROAD (8/C12)
NOT TO SCALE



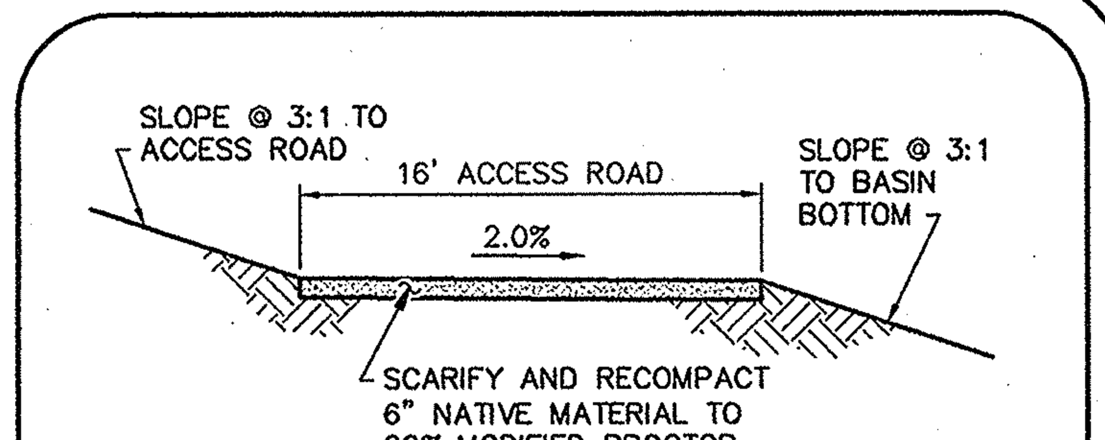
12' ACCESS ROAD (4/C12)
NOT TO SCALE



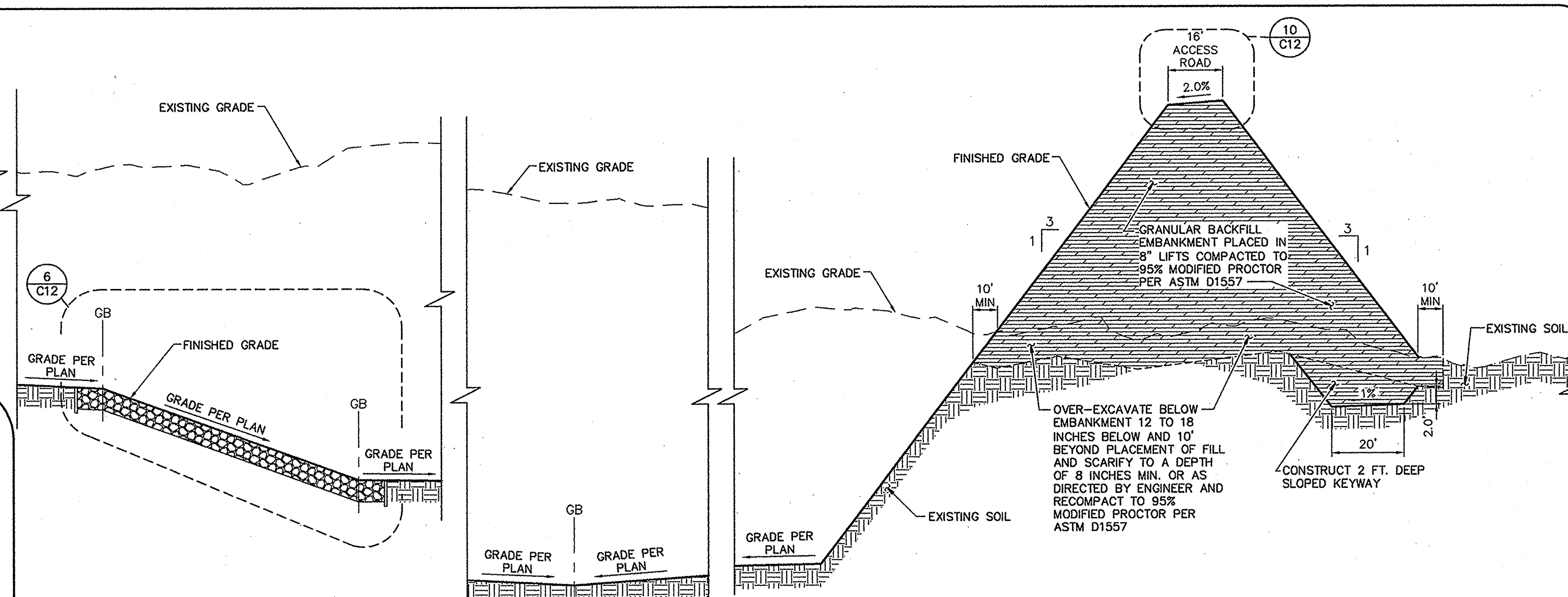
SECTION (A/C12)
NOT TO SCALE



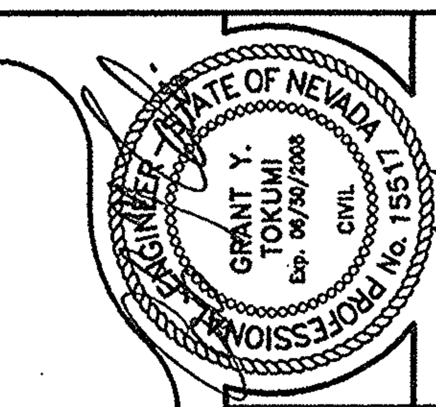
SECTION (7/C12)
NOT TO SCALE



16' ACCESS ROAD (12/C12)
NOT TO SCALE



DETENTION BASIN LONGITUDINAL SECTION (NORTH TO SOUTH) (1/C12)
NOT TO SCALE



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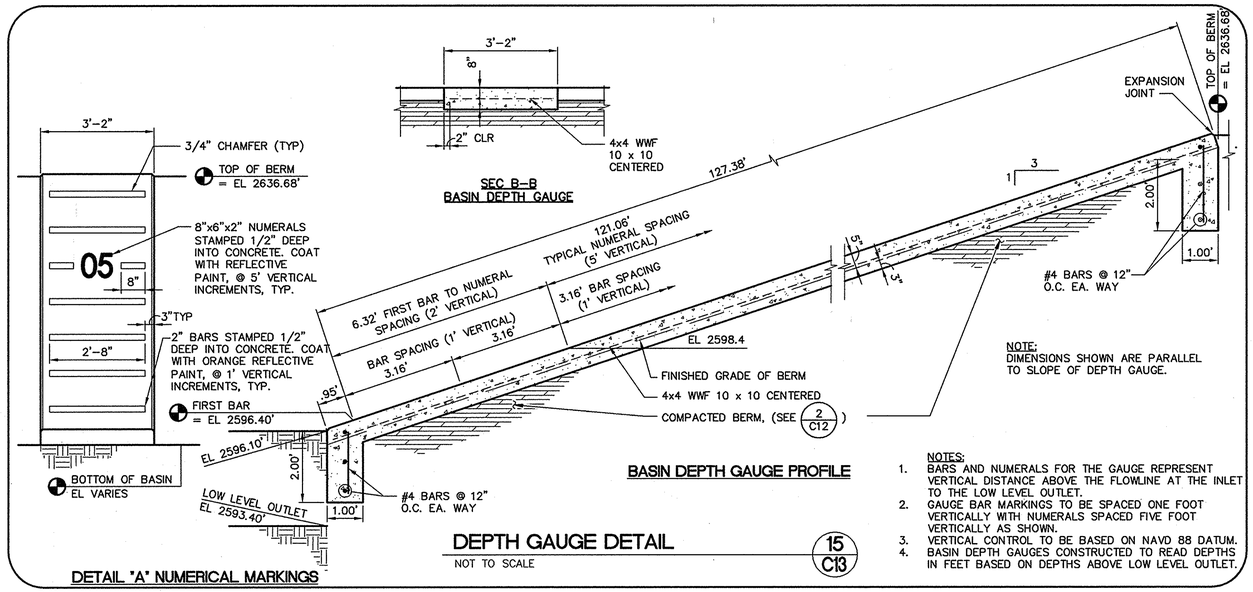
F:\552101-0916\Dwg\Hydro\Improv-R2\CSDB1_C12-R2.dwg KNguyen

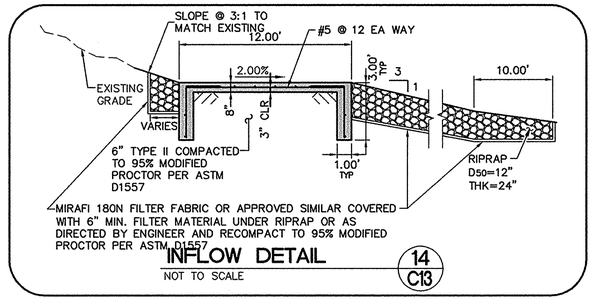
COYOTE SPRINGS
DETENTION BASIN 1
TYPICAL CROSS SECTIONS

DRAWING
C12
21 OF 26 SHTS
HTE: 07-3265

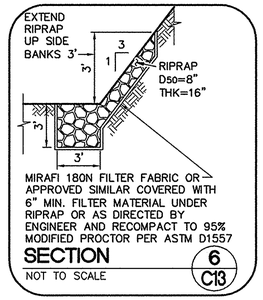
gcw2436.dwg.030624.wsk



DEPTH GAUGE DETAIL — 15 C13
NOT TO SCALE



INFLOW DETAIL — 14 C13
NOT TO SCALE



SECTION — 6 C13
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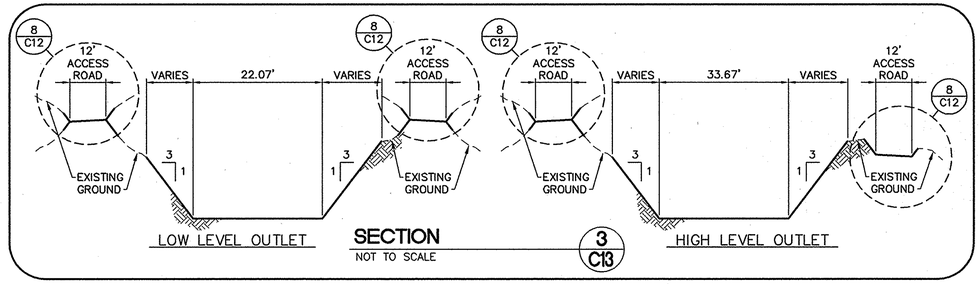

SECTION — 3 C13
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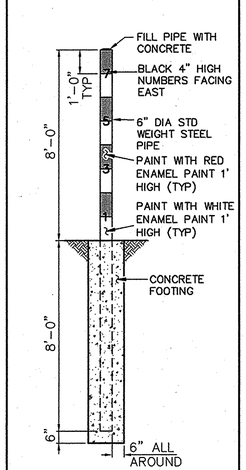
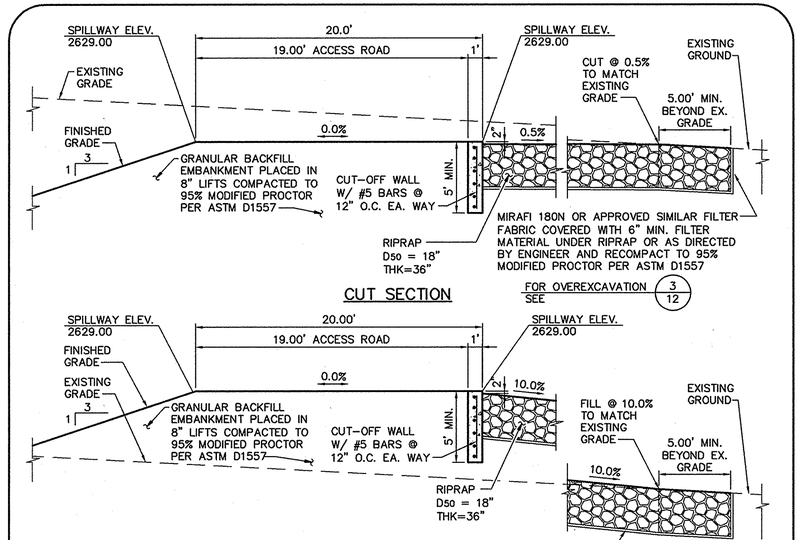
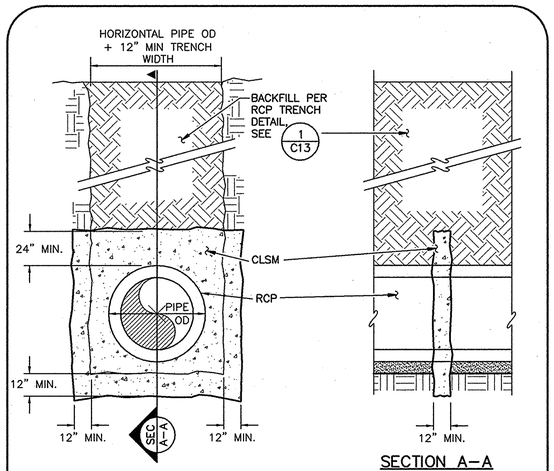


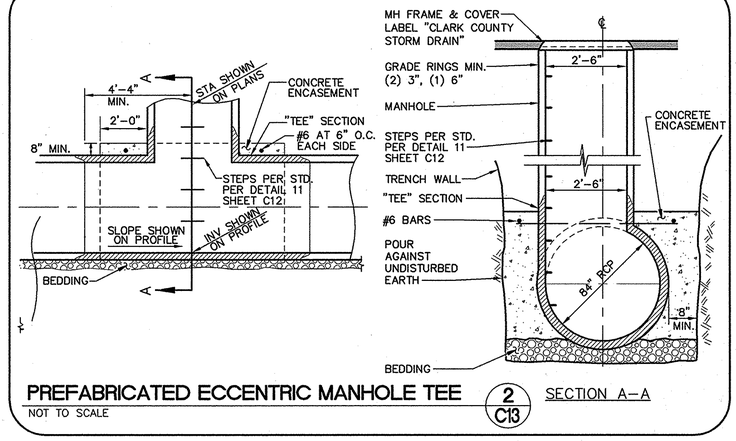
SEDIMENT DEPTH GAUGE — 16 C13
NOT TO SCALE



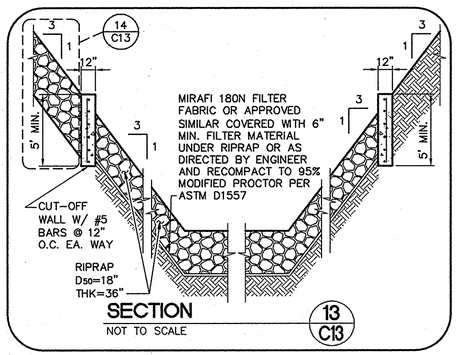
SPILLWAY SECTION — 10 C13
NOT TO SCALE



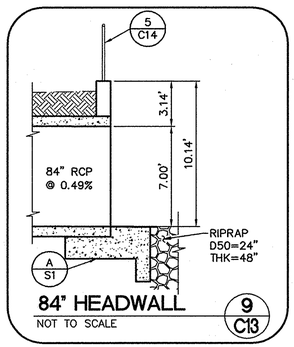
SEEPAGE COLLAR DETAIL — 5 C13
NOT TO SCALE



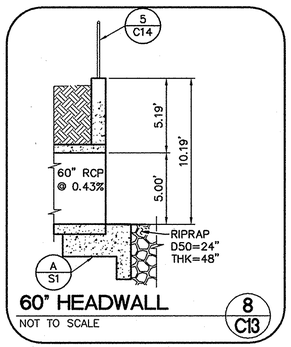
PREFABRICATED ECCENTRIC MANHOLE TEE — 2 C13 — SECTION A-A
NOT TO SCALE



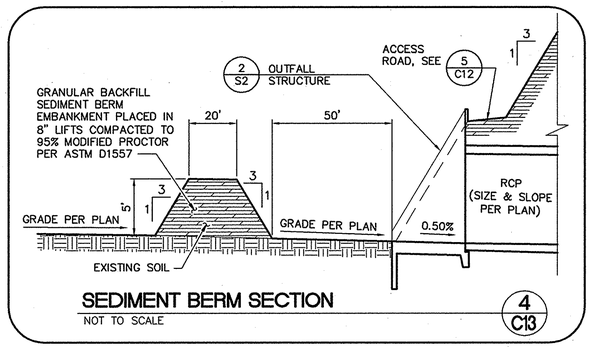
SECTION — 13 C13
NOT TO SCALE



84" HEADWALL — 9 C13
NOT TO SCALE



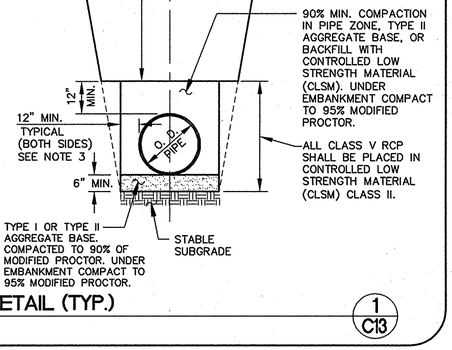
60" HEADWALL — 8 C13
NOT TO SCALE



SEDIMENT BERM SECTION — 4 C13
NOT TO SCALE

NOTES:
1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND RCP ZONE REQUIREMENTS FOR INSTALLATIONS SHALL CONFORM TO OSHA REGULATIONS. SLOPES SHOWN ARE BASED ON TYPE "B" SOILS. OTHER SLOPES MAY BE APPLICABLE AS STIPULATED BY THE ENGINEER.
3. TRENCH WIDTH MAY BE REDUCED WHEN USING CLSM AS APPROVED BY THE ENGINEER.

* UNDER EMBANKMENT: 95% MIN. COMPACTION GRANULAR BACKFILL OR BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) HIGH LEVEL OUTFALL – STA. 11+52.89 TO STA. 13+51.00 LOW LEVEL OUTFALL – STA. 12+69.92 TO STA. 15+04.00



RCP TRENCH DETAIL (TYP.) — 1 C13
NOT TO SCALE

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COYOTE SPRINGS
DETENTION BASIN 1
TRENCH, MANHOLE DETAILS AND TYPICAL SECTIONS

DRAWING C13
22 OF 26 SHTS
HTE: 07-3265

DESIGN: KNguyen
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-19-07
PLOT TIME: 15:13:11

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DATE: 7/19/07
DESCRIPTION
REV. DATE
DATE AGEN. APP DATE GOW APP.

STATE OF NEVADA — GRANT Y. TOKUMI — No. 19517 — PROFESSIONAL ENGINEER — CIVIL — Exp. 06/30/2008

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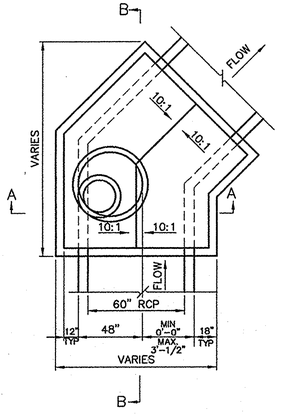
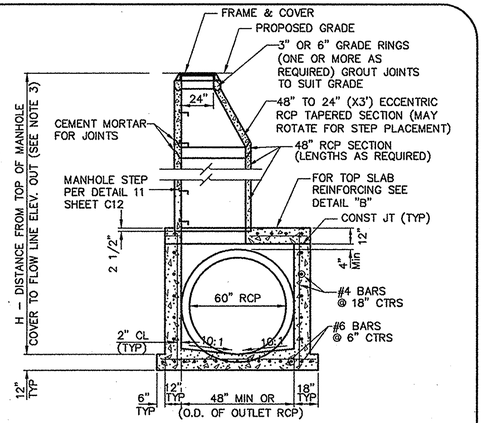
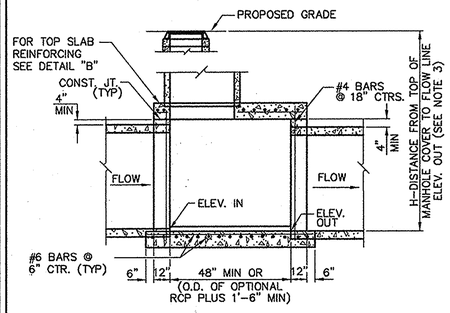


PLAN

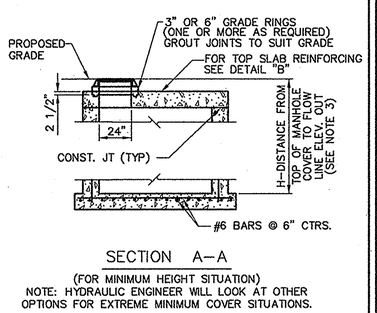


SECTION A–A

(FOR VARIABLE HEIGHT SITUATIONS)



SECTION B–B



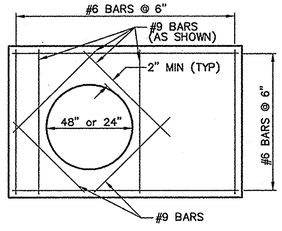
SECTION A–A

(FOR MINIMUM HEIGHT SITUATION)

NOTE: HYDRAULIC ENGINEER WILL LOOK AT OTHER OPTIONS FOR EXTREME MINIMUM COVER SITUATIONS.

GENERAL NOTES:

1. ALL CONCRETE SHALL BE CLASS A OR CLASS AA.
2. MANHOLES WITH MORE THAN ONE PIPE: THE INFLOW PIPE INVERT ELEVATIONS SHALL BE GREATER THAN OR EQUAL TO 0.1' ABOVE THE OUTFLOW PIPE INVERT ELEVATION.
3. FOR VALUES OF "H", SEE PLANS. "H" IS THE DIFFERENCE IN ELEVATION BETWEEN THE OUTFLOW PIPE INVERT ELEVATION AND THE TOP OF MANHOLE ELEVATION AT PROPOSED GRADE.
4. PRECAST CONCRETE PIPE SECTIONS, TAPERED SECTIONS, LIDS, GRADE RINGS, AND STEPS SHALL CONFORM TO AASHTO M 199 (ASTM C–478).
5. MANHOLE COVER SHALL BEAR ENTITY IDENTIFICATION AND SYSTEM FUNCTION (IF APPLICABLE).
6. SHAPE FLOWLINE IN MANHOLE TO OUTLET PIPE, AND PROVIDE A 10:1 MINIMUM SLOPE FROM ALL DIRECTIONS TOWARD FLOW LINE.



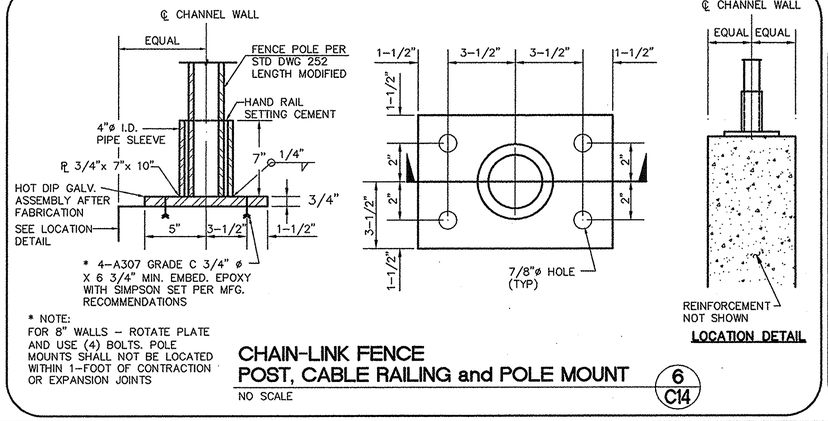
DETAIL "B"

(TOP SLAB REINFORCING)

MODIFIED NDOT TYPE IV SD MANHOLE

NOT TO SCALE

4 C14



LOCATION DETAIL

* NOTE:
FOR 8" WALLS – ROTATE PLATE AND USE (4) BOLTS. POLE MOUNTS SHALL NOT BE LOCATED WITHIN 1-FOOT OF CONTRACTION OR EXPANSION JOINTS

CHAIN-LINK FENCE POST, CABLE RAILING and POLE MOUNT

NO SCALE

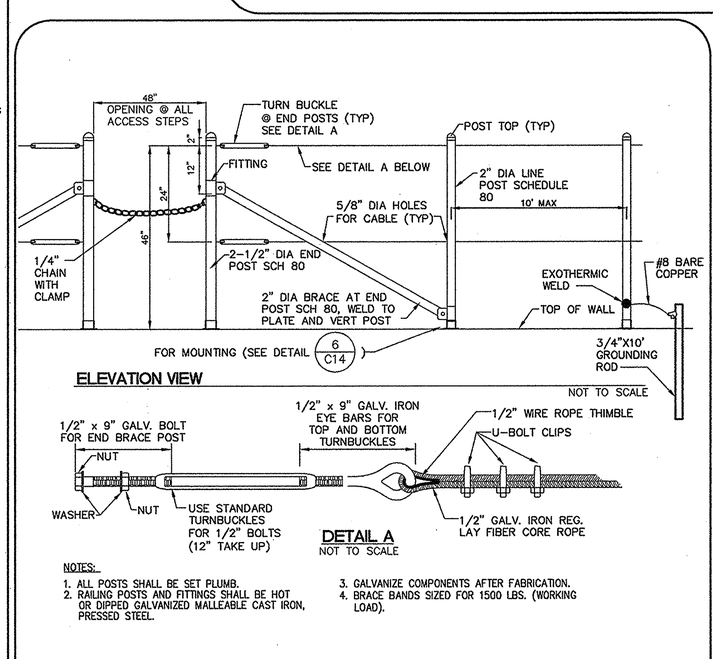
6 C14

WARNING SIGN – FLOOD CHANNEL DETAIL

NOT TO SCALE

NOTE: LETTERS TO BE CENTERED

3 C14



ELEVATION VIEW

NOT TO SCALE

DETAIL A

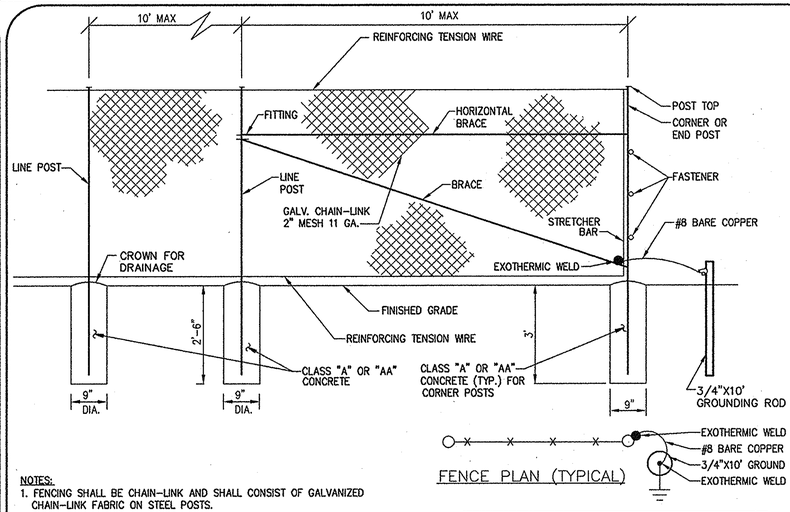
NOT TO SCALE

NOTES:
1. ALL POSTS SHALL BE SET PLUMB.
2. RAILING POSTS AND FITTINGS SHALL BE HOT OR DIPPED GALVANIZED MALLEABLE CAST IRON, PRESSED STEEL.
3. GALVANIZE COMPONENTS AFTER FABRICATION.
4. BRACE BANDS SIZED FOR 1500 LBS. (WORKING LOAD).

POST AND CABLE RAILING

NOT TO SCALE

5 C14



FENCE PLAN (TYPICAL)

NOTES:
1. FENCING SHALL BE CHAIN-LINK AND SHALL CONSIST OF GALVANIZED CHAIN-LINK FABRIC ON STEEL POSTS.
(A) ALL POST TOPS SHALL BE FITTED WITH SUITABLE FINIALS.
(B) BRACES SHALL BE SPACED APPROXIMATELY 12" BELOW TOP OF TERMINAL POSTS AND SHALL EXTEND FROM END, GATE, OR CORNER POSTS TO FIRST ADJACENT LINE POST.
(C) ALL FITTINGS SHALL BE HOT DIPPED GALVANIZED MALLEABLE, CAST IRON, OR PRESSED STEEL
(D) TOP AND BOTTOM SELVAGES OF THE FENCE SHALL HAVE A TWISTED AND BARBED FINISH.

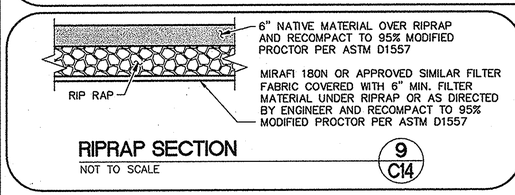
TABLE I
FOR 6' HIGH CHAIN-LINK FENCE

LOCATION	MIN. SIZE	MIN. WEIGHT
END, CORNER AND PULL	2.351 O.D.	3.10
LINE	2.00 O.D.	2.72
BRACES	1.63 O.D.	2.27
TOP RAIL	1.63 O.D.	2.27

CHAIN-LINK FENCE DETAIL

NOT TO SCALE

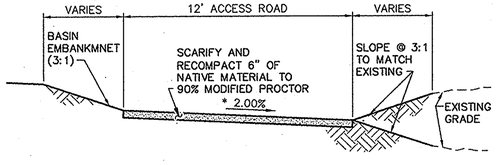
1 C14



RIPRAP SECTION

NOT TO SCALE

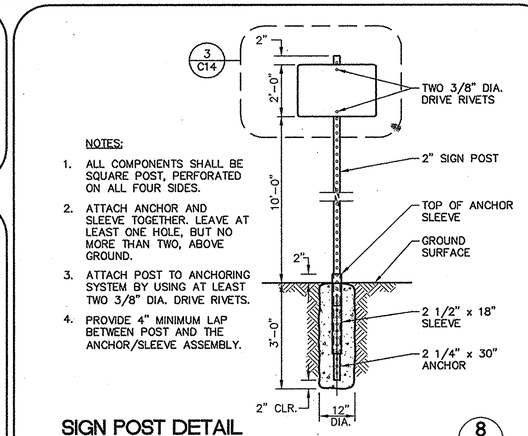
9 C14



12' ACCESS ROAD

NOT TO SCALE

7 C14

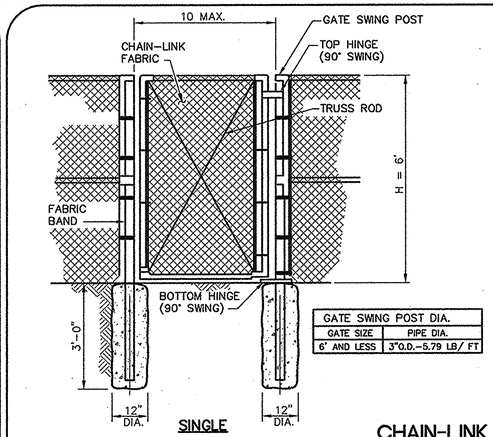


NOTES:
1. ALL COMPONENTS SHALL BE SQUARE POST, PERFORATED ON ALL FOUR SIDES.
2. ATTACH ANCHOR AND SLEEVE TOGETHER. LEAVE AT LEAST ONE HOLE, BUT NO MORE THAN TWO, ABOVE GROUND.
3. ATTACH POST TO ANCHORING SYSTEM BY USING AT LEAST TWO 3/8" DIA. DRIVE RIVETS.
4. PROVIDE 4" MINIMUM LAP BETWEEN POST AND THE ANCHOR/SLEEVE ASSEMBLY.

SIGN POST DETAIL

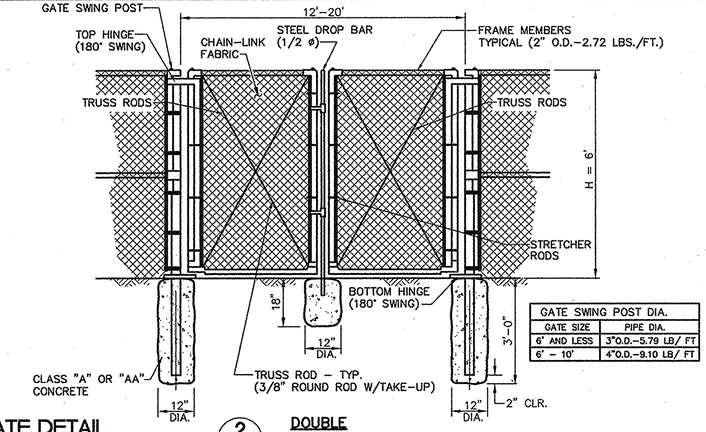
NOT TO SCALE

8 C14



SINGLE

GATE SWING POST DIA.	
GATE SIZE	PIPE DIA.
6' AND LESS	3"O.D.–5.79 LB/ FT



DOUBLE

GATE SWING POST DIA.	
GATE SIZE	PIPE DIA.
6' AND LESS	3"O.D.–5.79 LB/ FT
6' – 10'	4"O.D.–9.10 LB/ FT

CHAIN-LINK GATE DETAIL

NOT TO SCALE

2 C14

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F:\552101-091E\Dwg\Hydro\Improv-R2\CSDBI_C14-R2.dwg KNguyen

COYOTE SPRINGS
DETENTION BASIN 1
FENCING DETAILS

DRAWING C14

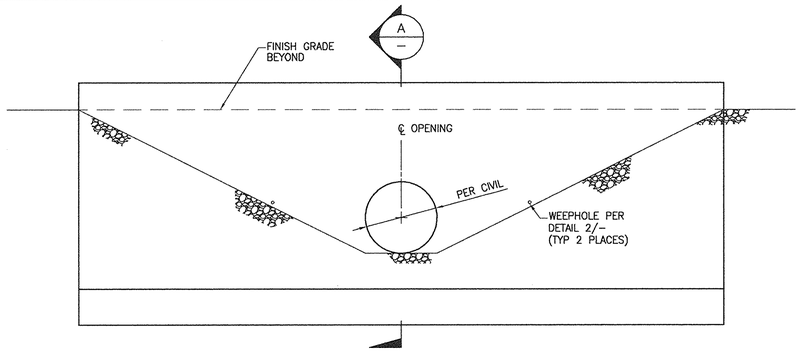
23 OF 26 SHTS

HTE: 07-3265

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-18-07
PLOT TIME: 14:57:47

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	GOV. APP.

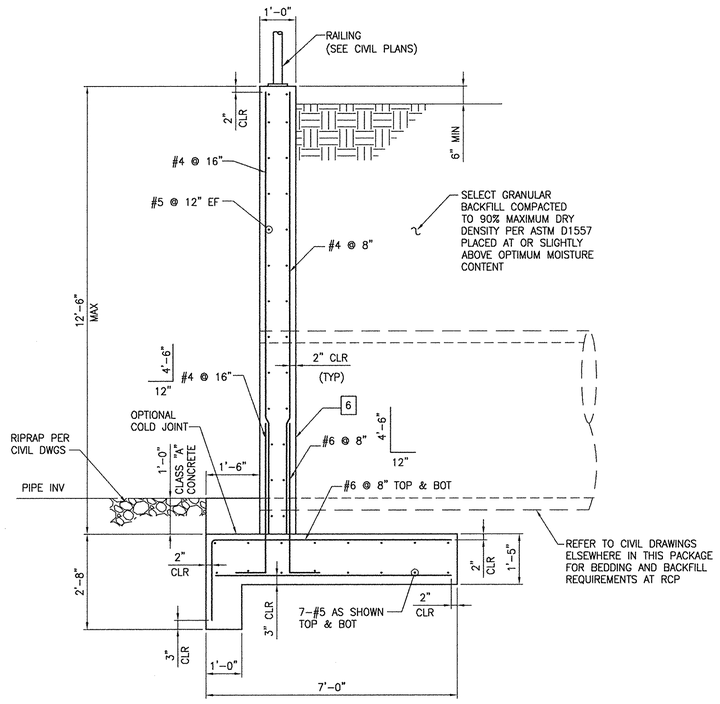
GRANT K. TOKUMI
No. 9870
CIVIL
7/19/07
DATE:



NOTE: FOOTING MAY BE STEPPED PER DETAIL 1/– AT CONTRACTOR'S OPTION. MAINTAIN 1'–0" MINIMUM COVER PER SECTION A/–.

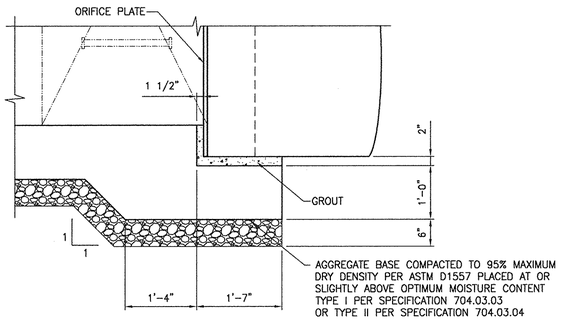
B – ELEVATION

SCALE: 1/4" = 1'–0"



A – SECTION

SCALE: 1/2" = 1'–0"

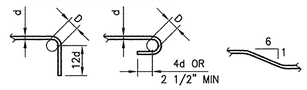


6 – THICKENED FOOTING AT RCP DETAIL

SCALE: NONE

BEND NOTES:

1. ALL BENDS SHALL BE MADE COLD.
2. #14 AND #18 BARS SHALL BE BEND TESTED AND LAB APPROVED PRIOR TO BENDING.

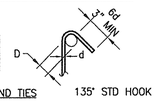


90° STD HOOK | 180° STD HOOK | MAX OFFSET BEND

D=6d FOR #3 TO #8
D=8d FOR #9 TO #11
D=10d FOR #14 AND #18

PRINCIPAL REINFORCING

MIN D=1 1/2" FOR #3
MIN D=2" FOR #4
MIN D=2 1/2" FOR #5



STIRRUPS AND TIES | 135° STD HOOK

BAR BENDS

BAR SIZE	LAP CLASS	f'c = 4500 psi TOP BARS CASE 1	TOP BARS CASE 2	OTHER BARS CASE 1	OTHER BARS CASE 2
#3	A	18	27	14	21
	B	23	35	18	27
#4	A	24	35	18	27
	B	31	46	24	35
#5	A	30	44	23	34
	B	38	57	30	44
#6	A	35	53	27	41
	B	46	69	35	53
#7	A	51	77	40	59
	B	67	100	51	77
#8	A	59	88	45	68
	B	76	114	59	88
#9	A	66	99	51	76
	B	86	128	66	99
#10	A	74	111	57	86
	B	96	144	74	111
#11	A	82	123	64	95
	B	107	160	82	123

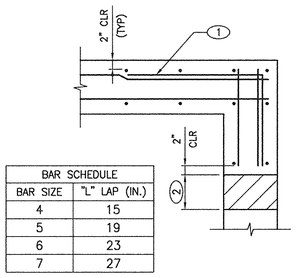
LAP SCHEDULE

LAP SPLICE NOTES:

1. TABLE FOR USE WITH NORMAL WEIGHT HARDROCK CONCRETE AND GRADE 60 UNCOATED REINF BARS.
2. CLASS A – HALF OR LESS OF THE BARS ARE SPLICED WITHIN A REQ'D LAP LENGTH. CLASS B – MORE THAN HALF OF THE BARS ARE SPLICED WITHIN A REQ'D LAP LENGTH.
3. TOP BARS ARE HORIZ BARS W/ 12" OR MORE OF CONCRETE CAST IN THE MEMBER BELOW THE BAR.
4. LAP SPLICES OF INDIVIDUAL BARS WITHIN A BUNDLE SHALL BE 1.2 Ld FOR THAT BAR IN A 3–BAR BUNDLE AND 1.33 Ld FOR A 4–BAR BUNDLE. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED AT THE SAME LOCATION. SPLICES FOR INDIVIDUAL BARS WITHIN A BUNDLE SHALL BE STAGGERED SUCH THAT THEY DO NOT OVERLAP.
5. Ld–ASIC LAP LENGTH, SHOWN AT RIGHT, (IN INCHES).
6. CASE SELECTION:
   –FOR FOUNDATION REINF USE CASE 1 UNO
   –FOR COLUMN REINF AND DOWELS USE CASE 1 UNO
   –FOR BEAM REINF USE CASE 1 UNO
   –FOR STRUCT SLAB REINF USE CASE 2 UNO
   –FOR SLAB ON GRADE REINF USE CASE 1 UNO
   –FOR WALL REINF AND DOWELS USE CASE 1 (EXCEPT AS NOTED BELOW) UNO
   –FOR WALLS WITH A SINGLE MAT OF STEEL CENTERED IN THE WALL, USE CASE 1 FOR WALL REINF AND DOWELS UNO
   –FOR CHORD STEEL REINF USE CASE 2 UNO
   –FOR DRILLED SHAFTS USE CASE 1 UNO

5 – REINFORCING LAP SPLICING

SCALE: 1/2" = 1'–0" SCH1–0004



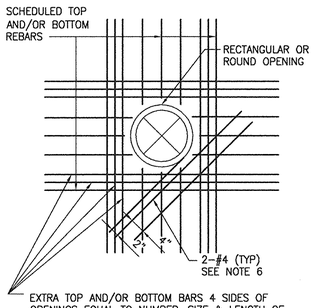
BAR SCHEDULE	
BAR SIZE	"L" LAP (IN.)
4	15
5	19
6	23
7	27

(1) MATCH SIZE, SPACING, AND NUMBER, AND LAP WITH HORIZ BARS "L" "L"

(2) PIPE WALL, WHERE OCCURS (TERMINATE CORNER BAR WHERE REQ'D TO CLEAR PIPE)

4 – TYPICAL CONCRETE CORNER DETAIL

SCALE: 3/4" = 1'–0"



EXTRA TOP AND/OR BOTTOM BARS 4 SIDES OF OPENINGS EQUAL TO NUMBER, SIZE & LENGTH OF BARS DISCONTINUOUS AT OPENING WHERE ODD NUMBERS OF BARS ARE DISCONTINUOUS PROVIDE (ODD NUMBER +1)/2 BARS ON EACH SIDE OF OPENING.

NOTES:

1. FOR OPENINGS IN WALLS THE WORDS "EACH FACE" SHALL BE SUBSTITUTED FOR "TOP AND/OR BOTTOM."
2. EVERY REBAR DISCONTINUOUS AT AN OPENING SHALL BE REPLACED BY AN EXTRA REBAR PLACED AT THE SIDE OF THE OPENING AS SHOWN. THE LENGTH OF THE EXTRA REBARS SHALL EQUAL THE LENGTH OF THE SCHEDULED REBARS THAT ARE NOT DISCONTINUED AT THE OPENINGS.
3. BEFORE POURING CONCRETE WALLS, FLOORS, BASE SLABS OR ROOFS, THE CONTRACTOR SHALL CHECK W/ OTHER TRADES FOR REQUIRED OPENINGS.
4. OPENINGS 12" OR LESS IN SLABS AND AT OPENINGS 18" OR LESS IN WALLS NO EXTRA REBARS ARE REQ'D, UNLESS NOTED OTHERWISE, SCHEDULED REBARS SHALL BE SPREAD (NOT CUT) TO ALLOW FOR OPENINGS TO BE MADE.
5. UNLESS NOTED OTHERWISE ON DRAWINGS, PROVIDE EXTRA REBARS AROUND OPENINGS AS SHOWN AND INDICATED ABOVE.
6. ALL BAR MINIMUM LENGTHS TO BE WIDTH OR DIAMETER OF OPENING, PLUS 3'–6" AND CENTERED ON THE OPENING.

3 – CONCRETE PENETRATION DETAIL

SCALE: NONE

GENERAL STRUCTURAL NOTES:

[N] – REPRESENTS A FLAG NOTE.

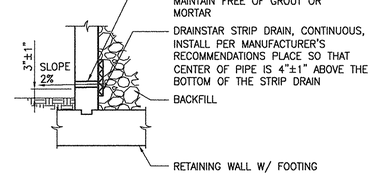
1. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (2000 IBC), AND PER TECHNICAL SPECIFICATIONS FOR THE CLARK COUNTY, NEVADA, BUILDING DEPARTMENT.
2. ALL WALLS ARE SUBJECT TO APPROVAL BY THE CLARK COUNTY, NEVADA, BUILDING DEPARTMENT.
3. CONCRETE CONSTRUCTION:
   · ALL CONCRETE: CLASS "D" UNLESS NOTED OTHERWISE
   RATIO = 0.45 PER ASTM C–150.
   · FOOTING CONCRETE: DESIGN CALCULATION BASIS MINIMUM f'c = 2,500 psi AT 28 DAYS (THEREFORE NO SPECIAL INSPECTION REQUIRED FOR FOOTING).
   · REINFORCING STEEL: ASTM A–615 GRADE 60.
   · CHAMFER ALL EXPOSED CORNERS 3/4".
4. GEOTECHNICAL REPORT: GEOCON INC. PROJECT NO. V1000–14–10, DATED OCTOBER 11, 2006:

   ALLOWABLE SOILS BEARING PRESSURE = 3,000 psf (1/3 INCREASE FOR TEMPORARY WIND OR SEISMIC)
   MAX ALLOWABLE SOIL BEARING PRESSURE = 6000 psf (EMBEDMENT AND SHORT TERM)
   SOIL ACTIVE PRESSURE = 35 psf/ft (LEVEL)
   SOIL PASSIVE PRESSURE = 350 psf/ft
   COEFFICIENT OF FRICTION = 0.40
   SOIL SITE CLASS = B
   Ss = 0.6
   Kн = 0.16

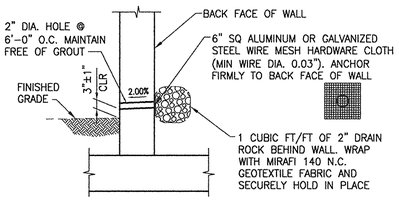
5. OMITTED.

[6] PROVIDE DRAIN PER DETAIL.

7. SEE CIVIL DRAWINGS FOR PIPE SIZE, INVERT ELEVATIONS, BEARINGS FOR DRAINAGE STRUCTURES, AND STATIONS.
8. THE CONTRACTOR SHALL PROVIDE SLOPE STABILIZATION, SHEETING, BRACING, AND/OR SHORING AS REQUIRED TO PROTECT EXISTING EMBANKMENTS, STRUCTURES, AND UNDERGROUND ITEMS.
9. SEE CIVIL GRADING PLANS FOR FINISH GRADE ELEVATIONS.
10. STEEL TO CONFORM TO THE FOLLOWING:
    HSS RECTANGULAR SHAPES: ASTM A500 Gr B (Fy = 46 ksi)
    MISCELLANEOUS PLATE MATERIAL: ASTM A36 (Fy = 36 ksi)
    STRUCTURAL BOLTS: ASTM A325
    OTHER BOLTS: ASTM A307 (UNLESS OTHERWISE NOTED)
11. ALL EXPOSED METAL PARTS SHALL BE GALVANIZED. REPAIR DAMAGED AREAS WITH TWO COATS OF GALVANOX OR EQUAL.
12. GROUT: MINIMUM COMPRESSIVE STRENGTH @ 28 DAYS = 5000 PSI; USE TYPE V CEMENT PER ASTM C150



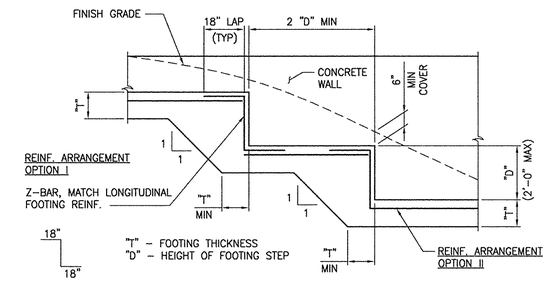
DRAIN DETAIL – OPTION I



DRAIN DETAIL – OPTION II

2 – DRAIN DETAIL

SCALE: NONE



1 – TYP. STEPPED FOOTING DETAIL

SCALE: NONE

STAMP: ENGINEER'S CERTIFICATE – STATE OF NEVADA – JAMES C. HAYES – No. 14471 – PROFESSIONAL ENGINEER – CIVIL STRUCTURAL – Exp. 06/30/2009 – DATE: 17JUL 07

REV	DATE	DESCRIPTION	DATE	AGEN. APP	DATE	GOW APP
0	19AUG07	CLARK COUNTY SUBMITTAL				

DESIGN: RDB
DRAWN: RDB
CHECK: PKH
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07–19–07
PLOT TIME: 10:30:47

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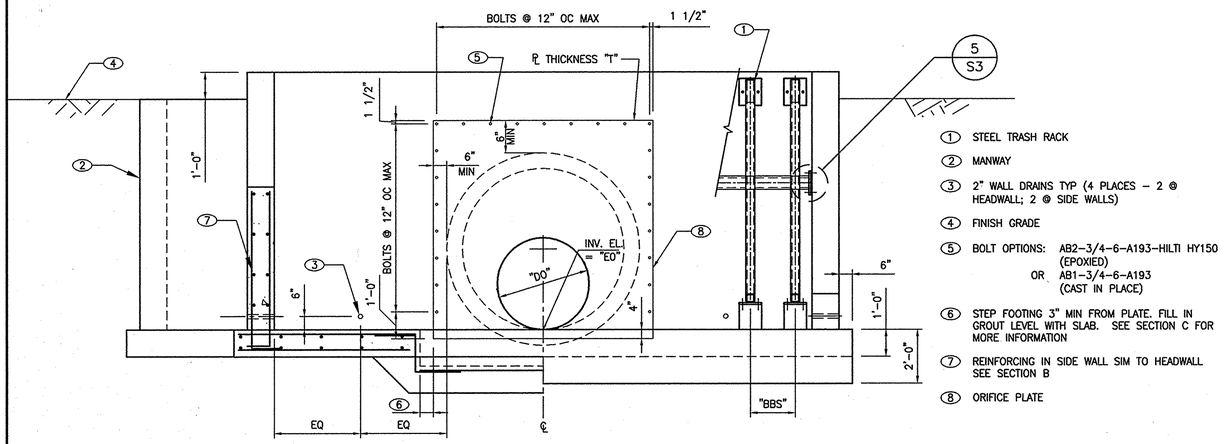
F:\352101–0916\Dwg\Struct\CSDB1_S01.dwg Plot!

COYOTE SPRINGS
DETENTION BASIN 1
STANDARD DETAILS, NOTES AND HEADWALLS

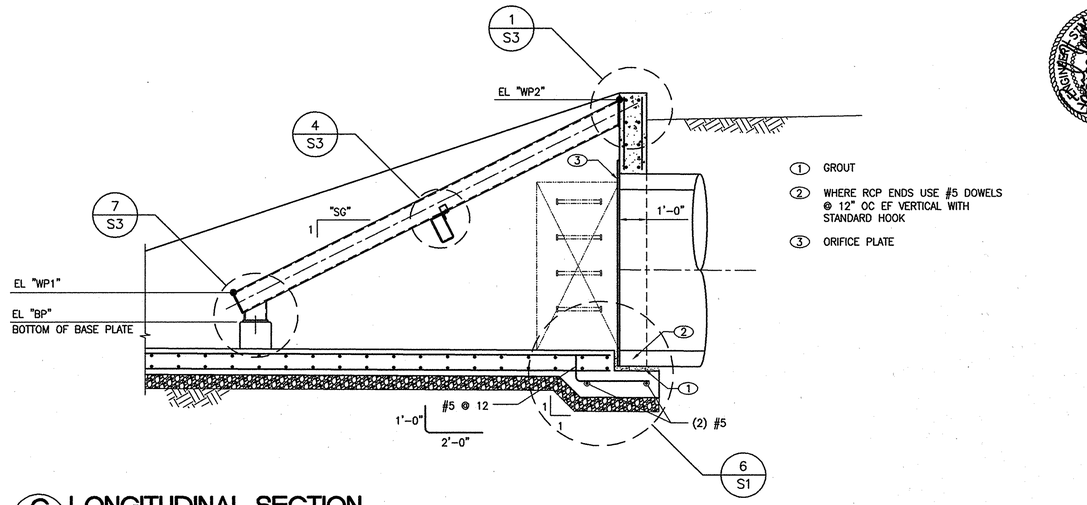
DRAWING S1
24 OF 26 SHTS
HTE: 00–00000

pw2438.dwg 030624.wdt



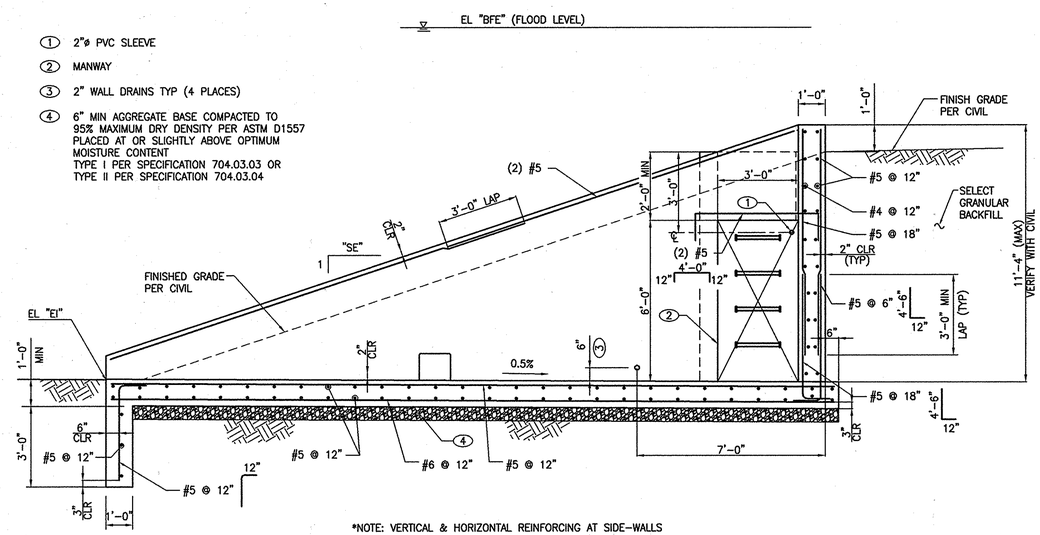
1. STEEL TRASH RACK
2. MANWAY
3. 2" WALL DRAINS TYP (4 PLACES – 2 @ HEADWALL; 2 @ SIDE WALLS)
4. FINISH GRADE
5. BOLT OPTIONS: AB2-3/4-6-A193-HILTI HY150 (EPOXIED) OR AB1-3/4-6-A193 (CAST IN PLACE)
6. STEP FOOTING 3" MIN FROM PLATE. FILL IN GROUT LEVEL WITH SLAB. SEE SECTION C FOR MORE INFORMATION
7. REINFORCING IN SIDE WALL SIM TO HEADWALL SEE SECTION B
8. ORIFICE PLATE

A TRANSVERSE SECTION
SCALE: 3/8" = 1'-0"



1. GROUT
2. WHERE RCP ENDS USE #5 DOWELS @ 12" OC EF VERTICAL WITH STANDARD HOOK
3. ORIFICE PLATE

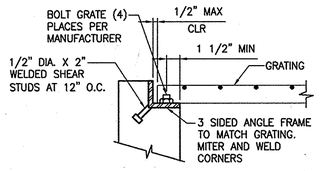
C LONGITUDINAL SECTION
SCALE: 3/8" = 1'-0"



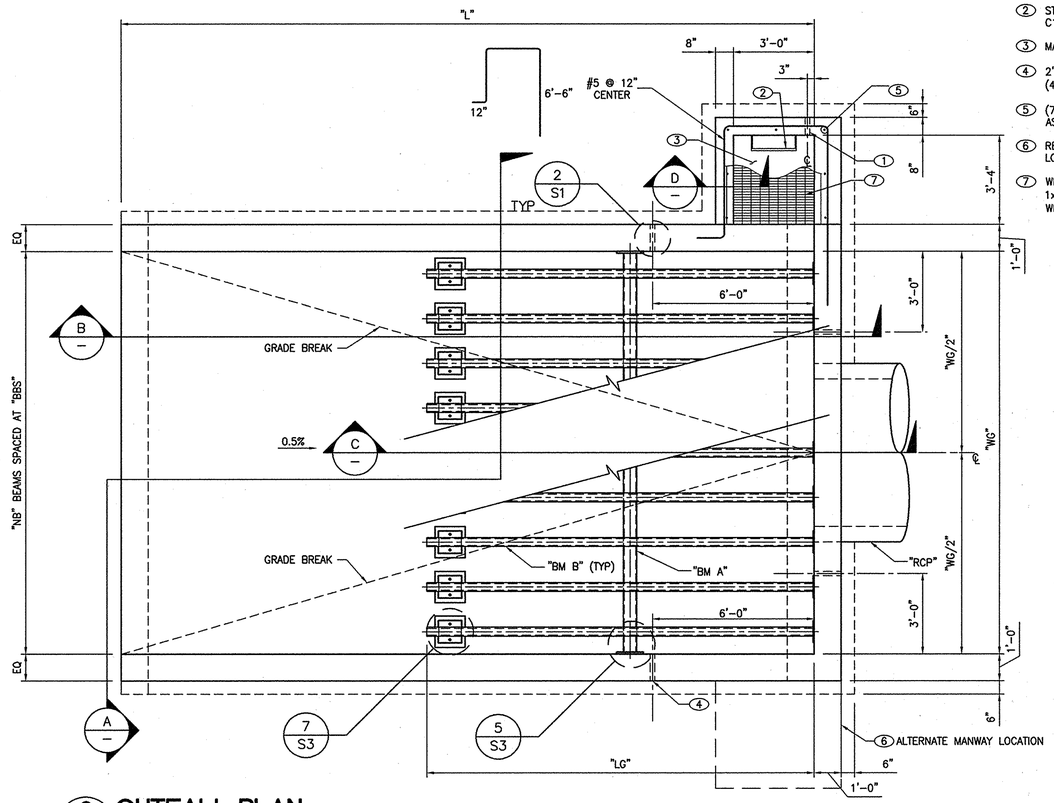
*NOTE: VERTICAL & HORIZONTAL REINFORCING AT SIDE-WALLS SIM TO HEAD-WALL

1. 2"ø PVC SLEEVE
2. MANWAY
3. 2" WALL DRAINS TYP (4 PLACES)
4. 6" MIN AGGREGATE BASE COMPACTED TO 95% MAXIMUM DRY DENSITY PER ASTM D1557 PLACED AT OR SLIGHTLY ABOVE OPTIMUM MOISTURE CONTENT TYPE I PER SPECIFICATION 704.03.03 OR TYPE II PER SPECIFICATION 704.03.04

B LONGITUDINAL SECTION
SCALE: 3/8" = 1'-0"



D SECTION
SCALE: 1 1/2" = 1'-0"



1. 2" PVC SLEEVE
2. STEPS PER DETAIL 11, SHEET C12
3. MAN-WAY
4. 2" WALL DRAINS TYP (4 PLACES)
5. (7) #5 @ MAN-WAY VERTICAL AS SHOWN
6. REFER TO CIVIL PLANS FOR LOCATION OF MANWAY
7. WELDFORGED TYPE WB 1x3/16", SPACED 1 3/16" OC WELD CROSS BARS @ 4" OC

2 OUTFALL PLAN
SCALE: 3/8" = 1'-0"

INLET NAME	DESIGN SCHEDULE																
	GEOMETRICS												BEAM SIZE/SPACING				ORIFICE PLATE
	RCP (IN)	BFE (FT)	WP1 (FT)	EI (FT)	WP2 (FT)	EO (FT)	BP (FT)	WG (FT)	LG (FT)	SG	L (FT)	SE	BM A	BM B	NB	BBS (IN)	DO (IN)	T (IN)
LOW	60	2626.46	2594.77	2593.40	2602.70	2593.27	2593.90	9.00	15.86	2	25.50	3	HSS12x4x3/8	HSS8x4x1/4	5	20	41	5/8
HIGH	84	2626.46	2598.54	2597.04	2607.79	2596.88	2597.60	16.50	18.50	2	30.00	3	HSS16x8x1/2	HSS8x4x5/16	9	20	64	3/4

1 OUTFALL SCHEDULE
SCALE: 1/4" = 1'-0"

STATE OF NEVADA — REGISTERED PROFESSIONAL ENGINEER — THOMAS C. HAYES — No. 09/30/2009 — STRUCTURAL — No. 14411 — PROFESSIONAL ENGINEER — DATE: 24 JULY 07

REV	DATE	DESCRIPTION	DATE	AGEN.	APP.	DATE	GCW	APP.
0	19JUL07	CLARK COUNTY SUBMITTAL						

DESIGN: RDB
DRAWN: JMH
CHECK: PKH
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 07-24-07
PLOT TIME: 15:09:16

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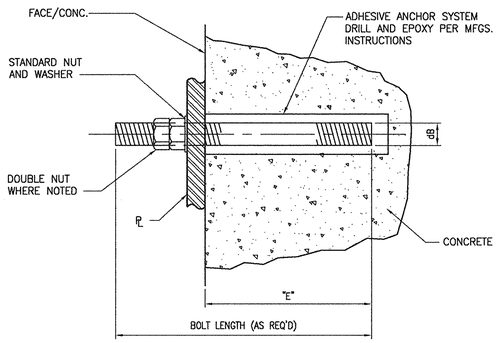
COYOTE SPRINGS
DETENTION BASIN 1
LOW/HIGH OUTFALL STRUCTURE DETAILS

DRAWING
S2
25 OF 26 SHTS

HTE: 00-00000

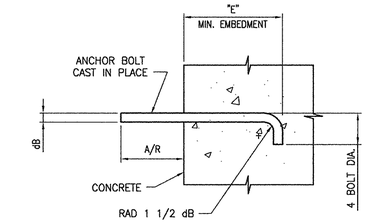
cs2s2d.dwg 030924.wk



EXAMPLE CALL-OUT
AB2- 1/2 - 4 1/2-A193-HILTI HY150
(TYPE- dB - E -MATL- PRODUCT)

6 AB2 - ADHESIVE ANCHOR (CONCRETE/GROUTED MASONRY)

SCALE: 3/4" = 1'-0"

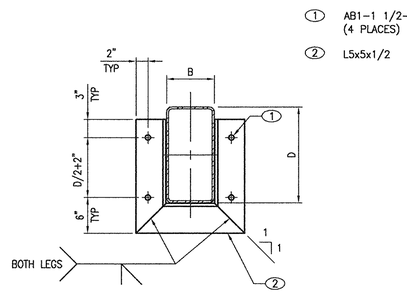


NOTES:
1. MINIMUM EDGE DISTANCE OF 6 BOLT DIAMETERS.

EXAMPLE CALL-OUT
AB1- 1/2 - 4 - A193
(TYPE- dB - E - MATL)

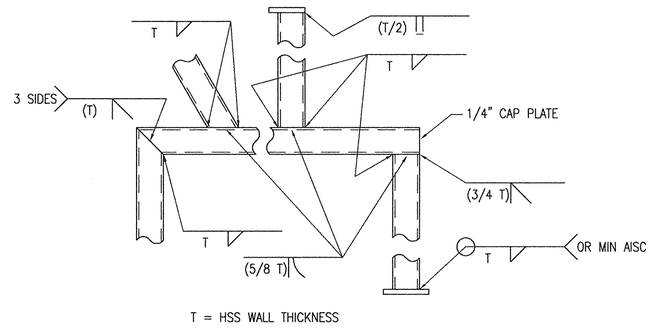
3 AB1 - CIP ANCHOR BOLT (CONCRETE)

SCALE: 3/4" = 1'-0"



5 STEEL HANGER AT CONCRETE

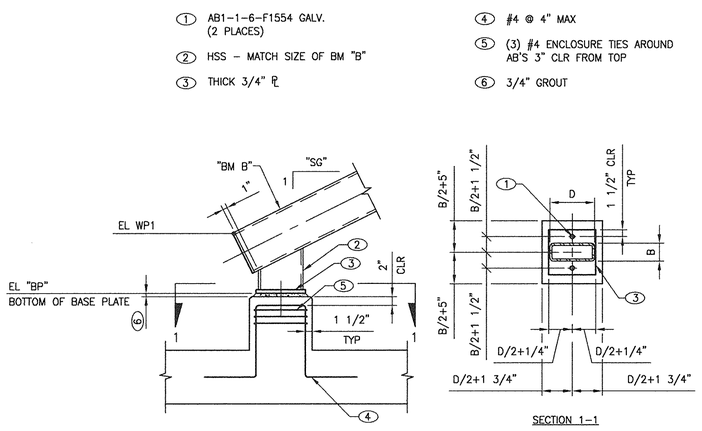
SCALE: 1" = 1'-0"



T = HSS WALL THICKNESS

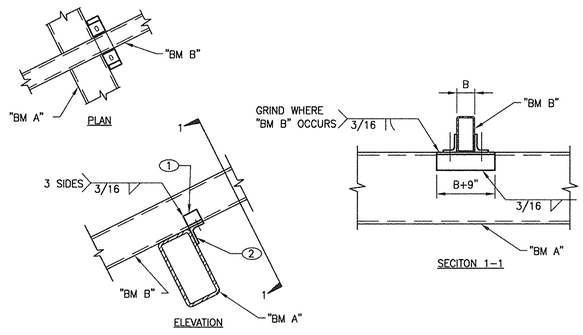
2 TYPICAL HSS WELDS

SCALE: 3/4" = 1'-0"



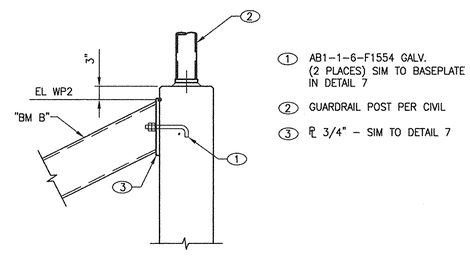
7 BASE PLATE

SCALE: 3/4" = 1'-0"



4 BEAM TO BEAM CONNECTION

SCALE: 3/4" = 1'-0"



1 BEAM TO CONCRETE CONNECTION

SCALE: 3/4" = 1'-0"

G.C. WALLACE COMPANIES
ENGINEERS | PLANNERS | SURVEYORS
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T: 702.804.2000 - F: 702.804.2299 - GCWALLACE.COM

F:\552101-09116\Dwg\Struct\CSDB1_S03.dwg

PLOT DATE: 07-19-07
PLOT TIME: 10:31:18

REV	DATE	DESCRIPTION	DATE	AGEN. APP.	DATE	GCW APP.
0	19JUL07	CLARK COUNTY SUBMITTAL				

DESIGN: RDB
DRAWN: JMH
CHECK: PKH
ISSUE DATE:
ISSUE EDITOR:

COYOTE SPRINGS
DETENTION BASIN 1
OUTFALL STRUCTURE DETAILS

DRAWING
S3
26 OF 26 SHTS
HTE: 00-00000

gcw2436.dwg 030624.wdt