

LEGEND

- EX. FENCE LINE
- EX. WATERLINE
- EX. GAS LINE
- EX. STORM DRAIN LINE
- EX. OVER HEAD POWER LINE
- EX. UNDER GROUND ELECTRIC
- EX. FIBER OPTICS LINE
- EX. R/W AND PROPERTY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- STATION LINE
- SAW CUT / LIMITS
- EX. GRADE BREAK LINE
- 12'x3'x3/8'x3'x3' GABION BASKET
- 12'x3'x1.5/6'x3'x1.5' GABION BASKET
- UTILITY VALVE (WATER AND GAS)
- EX. CATCH BASIN / DROP INLET
- EX. POWER POLE
- MANHOLE (HOLLOW IF EXISTING)
- EX. SIGN
- SURVEY MONUMENT
- EX. UTILITY VAULT
- EX. FIRE HYDRANT
- PRECAST CULVERT
- CONCRETE REMOVAL / PLACEMENT
- PROP. GRADE
- EX. GRADE
- PROP. SLOPE
- 12'x3'x1' GABION BASKET
- 12'x6'x1' RENO MATTRESS

LA POSADA DRIVE

SWPPP NOTES

STANDARD NOTE No. 1
THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.

STANDARD NOTE No. 2
ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE CONTRACTOR AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE TRUCKEE MEADOWS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK.

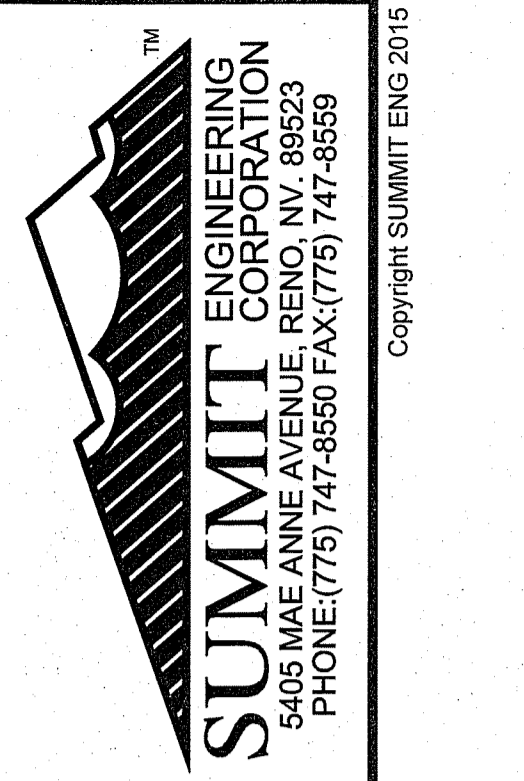
STANDARD NOTE No. 3
TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO STORM WATER GENERAL PERMIT NVR100000, SECTION 1.B.1.b.(2).

STANDARD NOTE No. 4
AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS. AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT AREA EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORM WATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OR SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO STORM WATER GENERAL PERMIT NVR100000, SECTION 1.B.1.g.

STANDARD NOTE No. 5
ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

ADDITIONAL NOTE No. 6
PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HAVE IN PLACE ALL NECESSARY BEST MANAGEMENT PRACTICES THAT SHALL BE USED TO MINIMIZE DUST, PREVENT EROSION, AND PREVENT POLLUTION LADEN RUNOFF FROM ENTERING THE ADJACENT STORM DRAIN FACILITIES. BMPs MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING BMPs: (1) SILT FENCING OR STRAW WADDELS AT THE DOWNHILL LIMITS OF GRADING, (2) STABILIZED CONSTRUCTION SITE ENTRY/EXIT, (3) PERMANENT SLOPE REVEGETATION ON ALL DISTURBED AREAS, (4) INLET PROTECTION AT EXISTING CATCH BASINS, (5) STOCKPILE MANAGEMENT BMPs, (6) DUST CONTROL BMPs, (7) AND A CONCRETE WASHOUT AREA. THE CONTRACTOR SHALL MAINTAIN, REPAIR, REPLACE, SUBSTITUTE, OR SUPPLEMENT BMPs AT THE CONSTRUCTION SITE AS CONDITIONS WARRANT DURING CONSTRUCTION.

ADDITIONAL NOTE No. 7
ALL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH THE "THE TRUCKEE MEADOWS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK, DATED JUNE 2008".



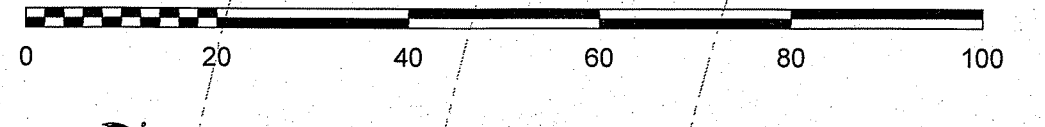
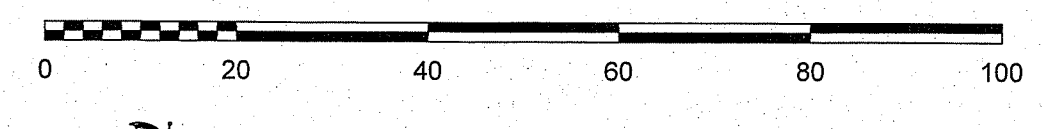
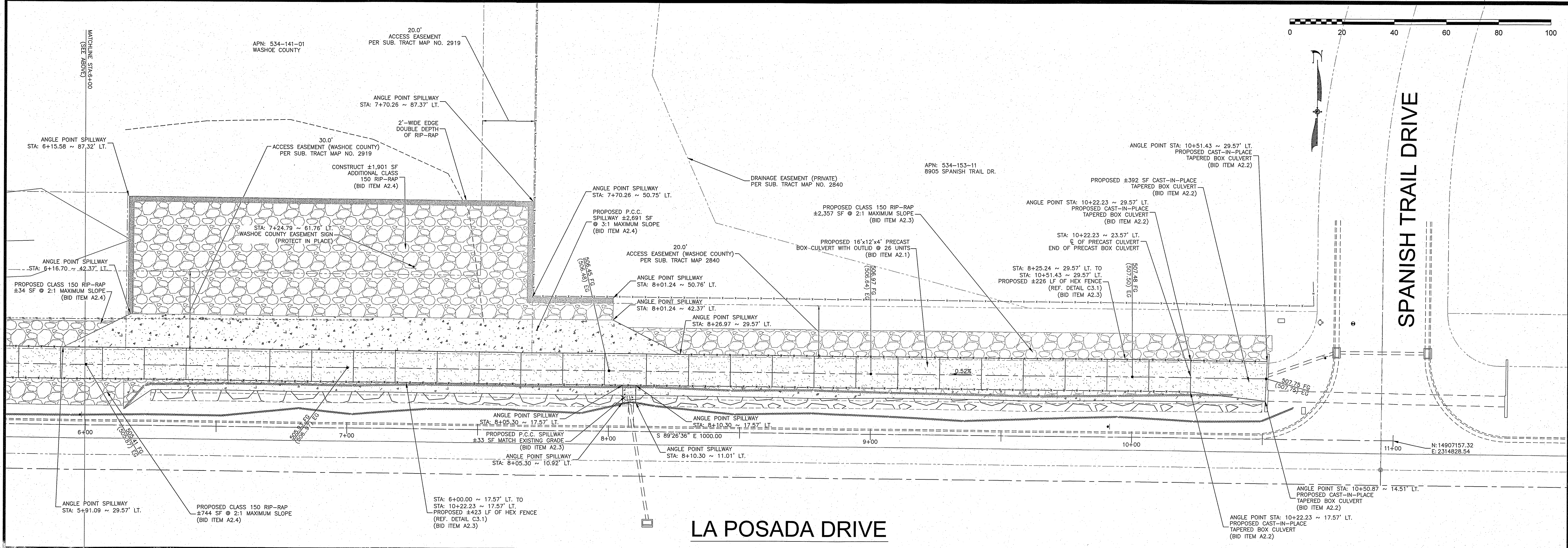
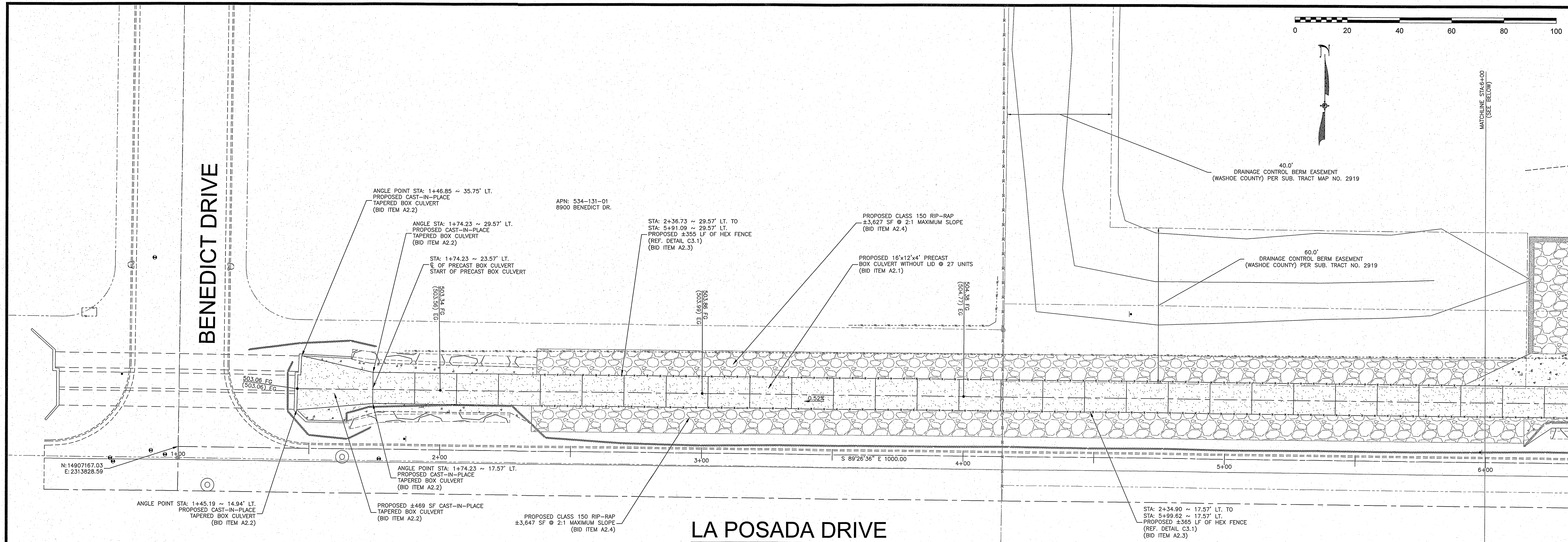
REV.	DATE	DESCRIPTION	BY	APP'D

CIVIL IMPROVEMENT PLANS FOR
LA POSADA DITCH REHABILITATION PROJECT
 DEMOLITION PLAN
 SPARKS WASHOE COUNTY NEVADA

DESIGNED BY: GR
 CHECKED BY: RP
 SCALE
 HORIZ: 1"=20'
 VERT: N.A.
 JOB NO: J30016

RICHARD PETTINARI
 CIVIL
 Exp. 12-31-25
 No. 20191

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REV.	DATE	DESCRIPTION	BY	APPD

CIVIL IMPROVEMENT PLANS FOR
LA POSADA DITCH REHABILITATION PROJECT
RCB CULVERT OPTION SITE PLAN
SPARKS WASHOE COUNTY NEVADA

DESIGNED BY: GR
CHECKED BY: RP
SCALE
HORIZ: 1"=20'
VERT: N.A.

JOB NO: J30016

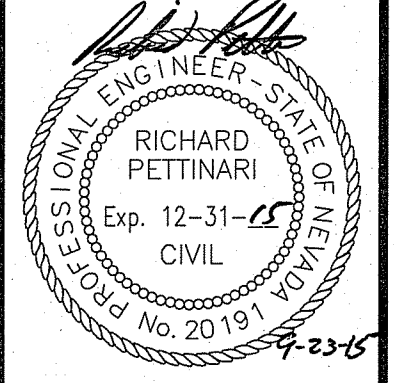
SHEET C2.1 OF 8

REV.	DATE	DESCRIPTION	BY	APPD

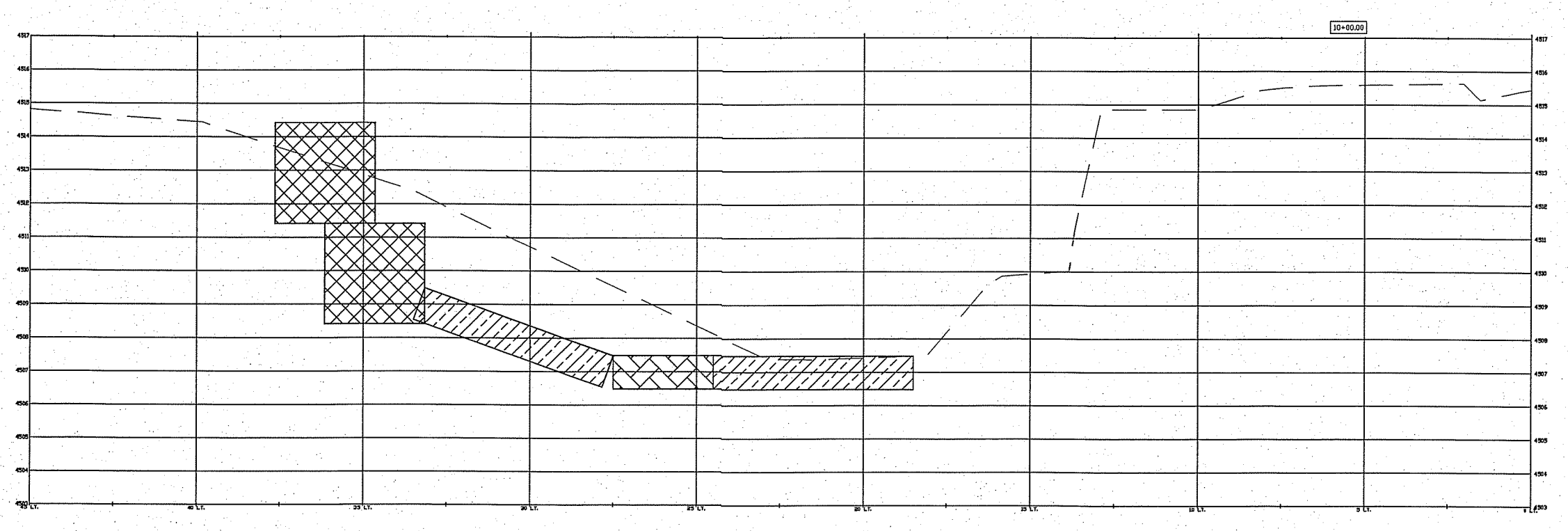
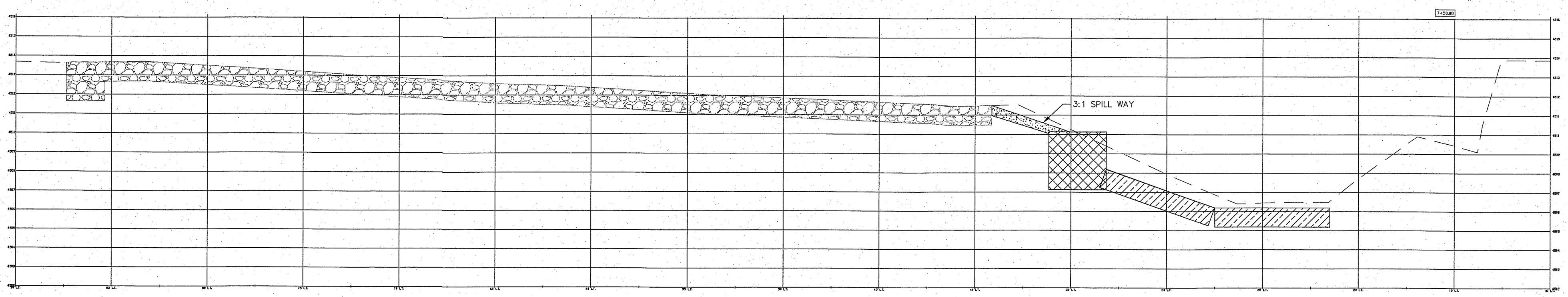
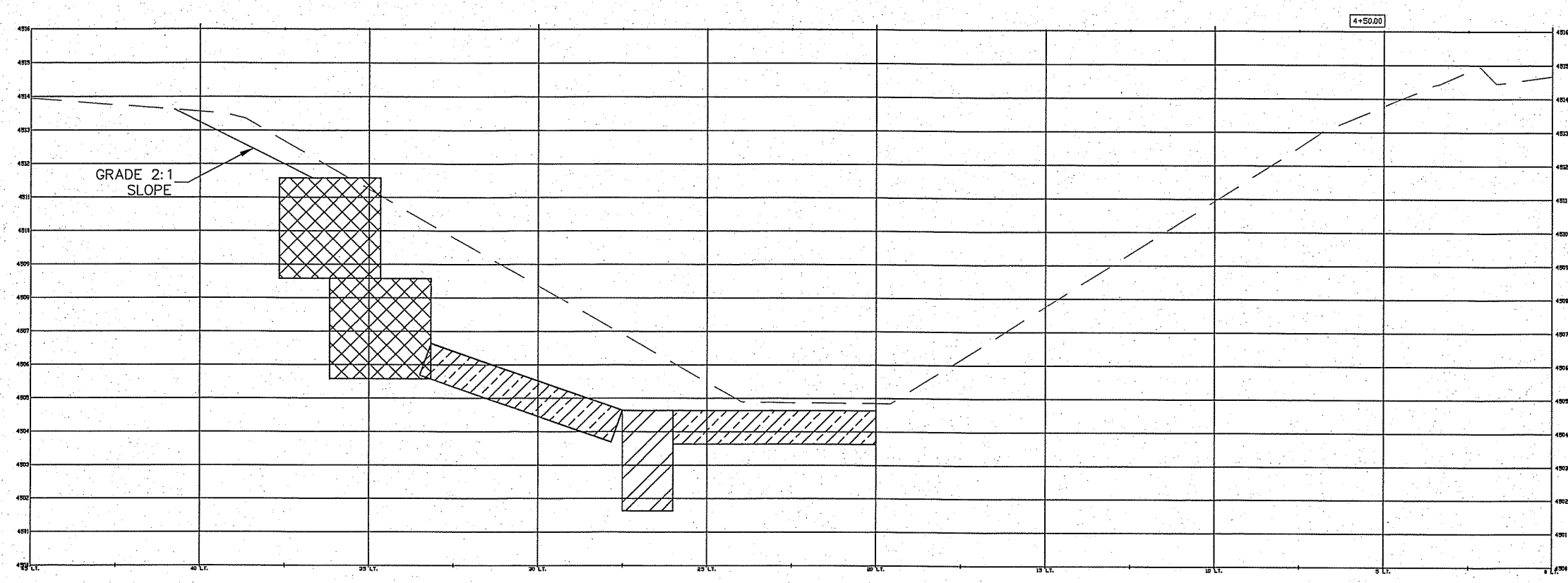
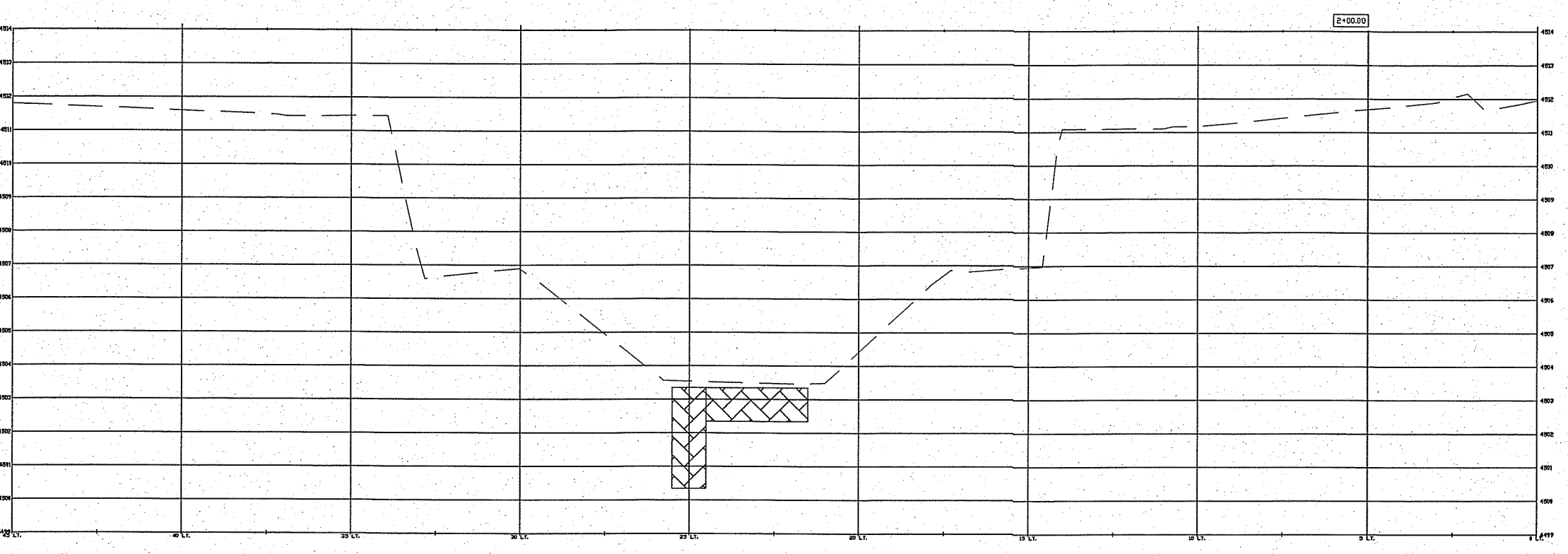
CIVIL IMPROVEMENT PLANS FOR
LA POSADA DITCH REHABILITATION PROJECT
 CROSS SECTION SHEET
 SPARKS WASHOE COUNTY NEVADA

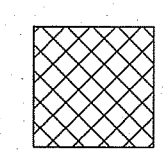
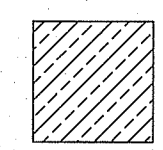
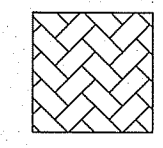
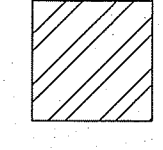
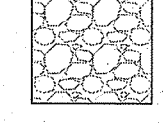
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 CHECKED BY: RP
 SCALE
 HORIZ: N/A
 VERT: N/A

JOB NO: J30016

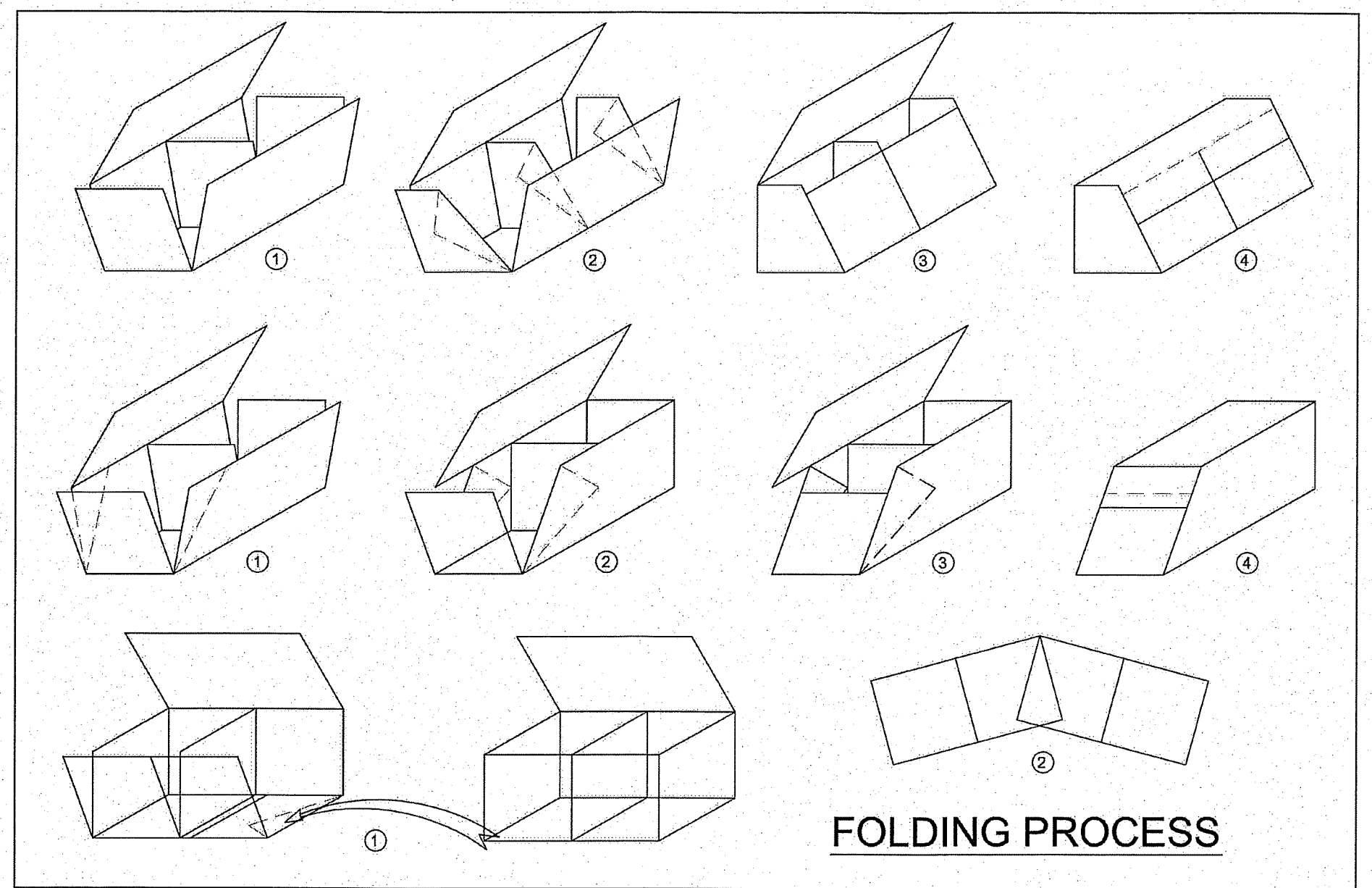
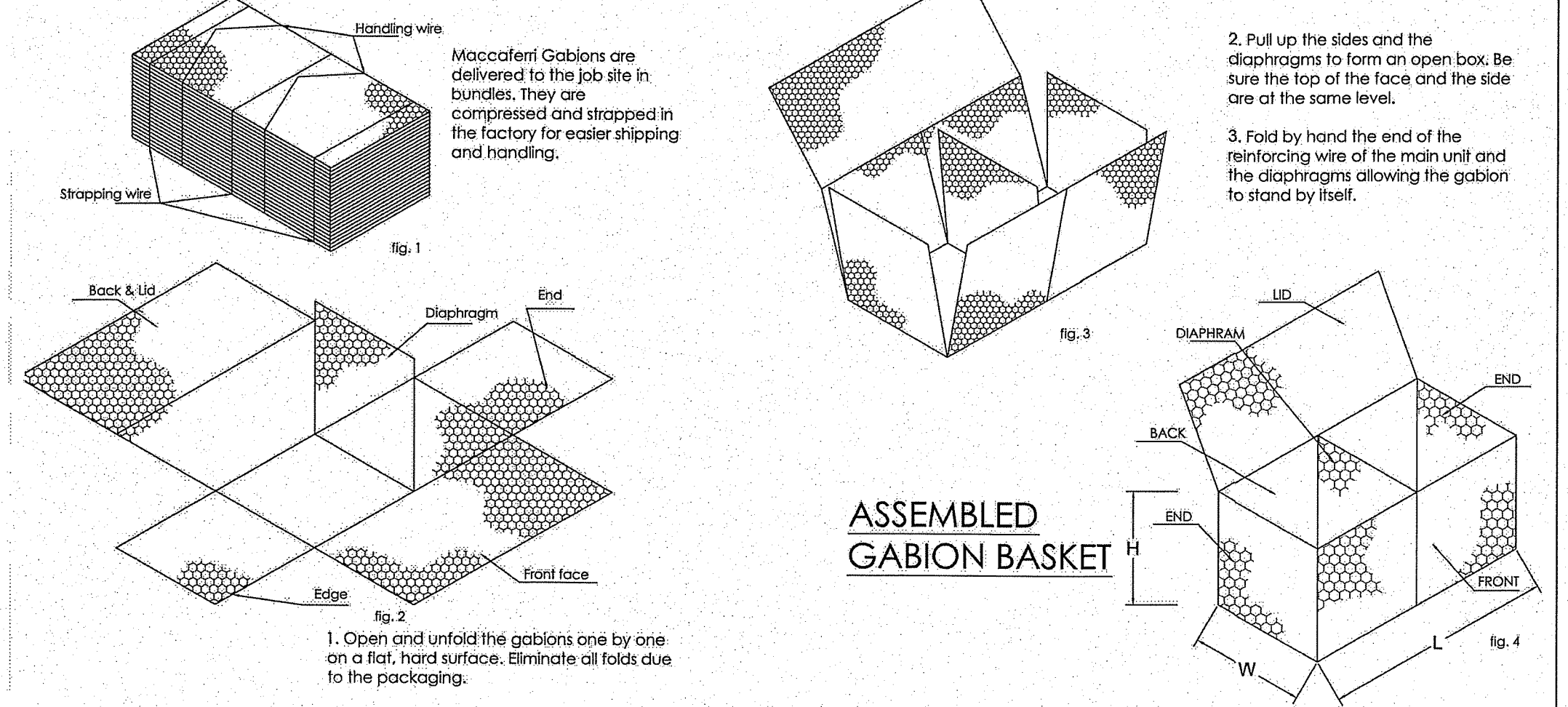


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C3.0 OF **8**

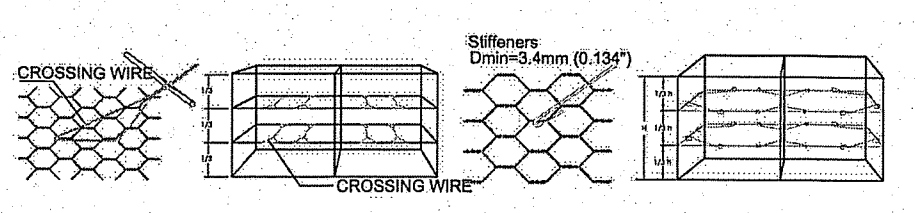


- — — EXISTING GROUND PROFILE
-  12x3x3 GABION
-  12x6x1 RENO MATTRESS
-  12x3x1 GABION
-  12x3x1.5 GABION
-  RIP-RAP SPILLWAY

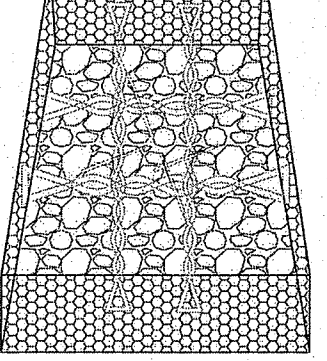
UNPACKING & ASSEMBLY PROCESS



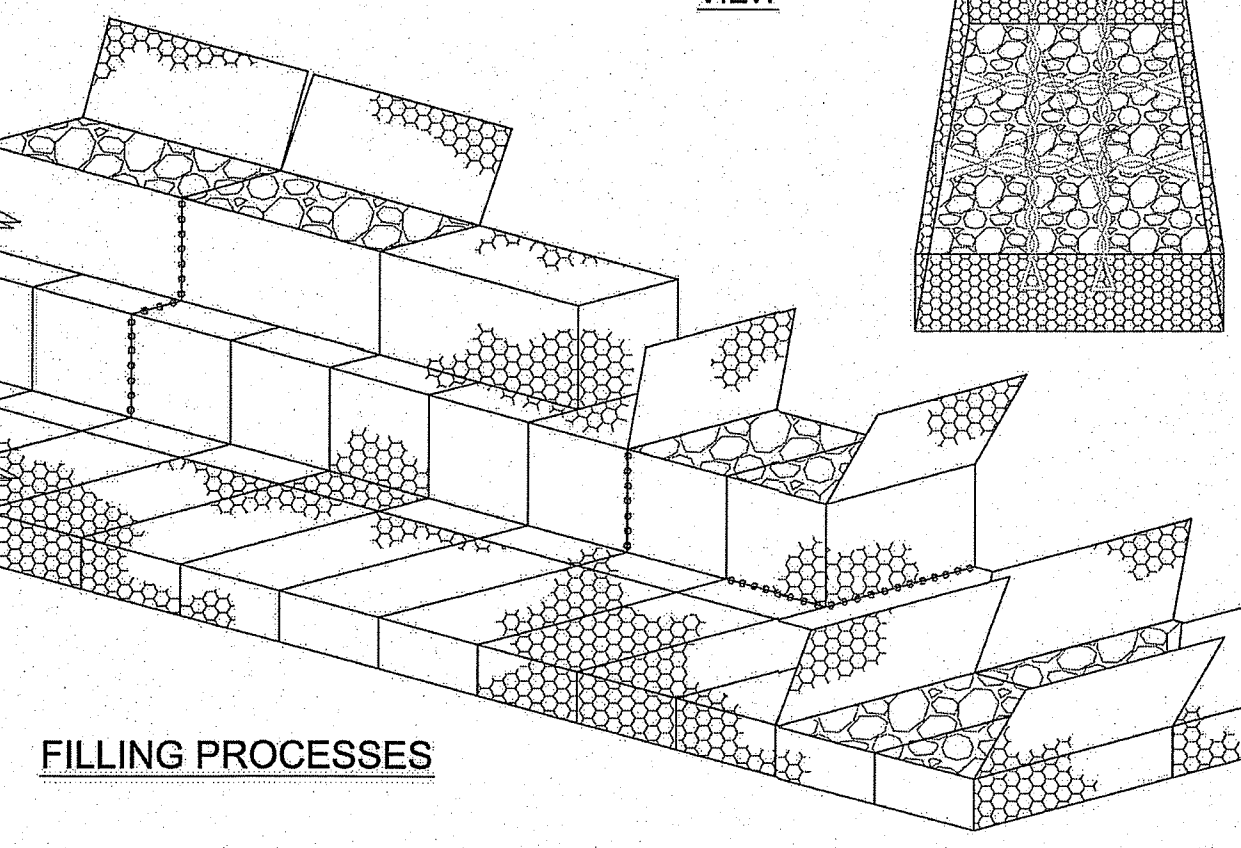
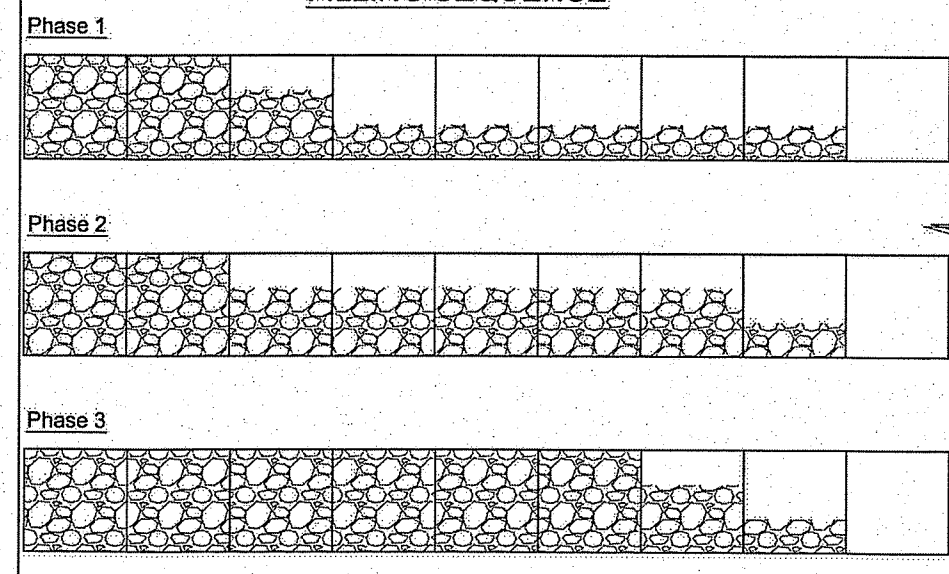
REINFORCING DETAIL



REINFORCEMENT VIEW

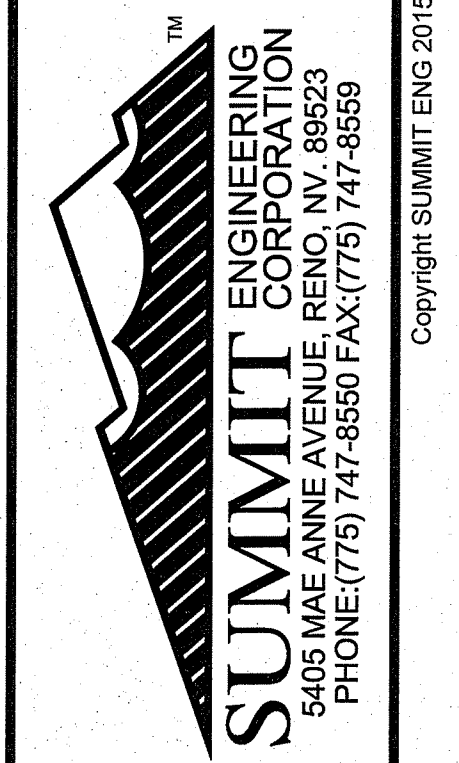
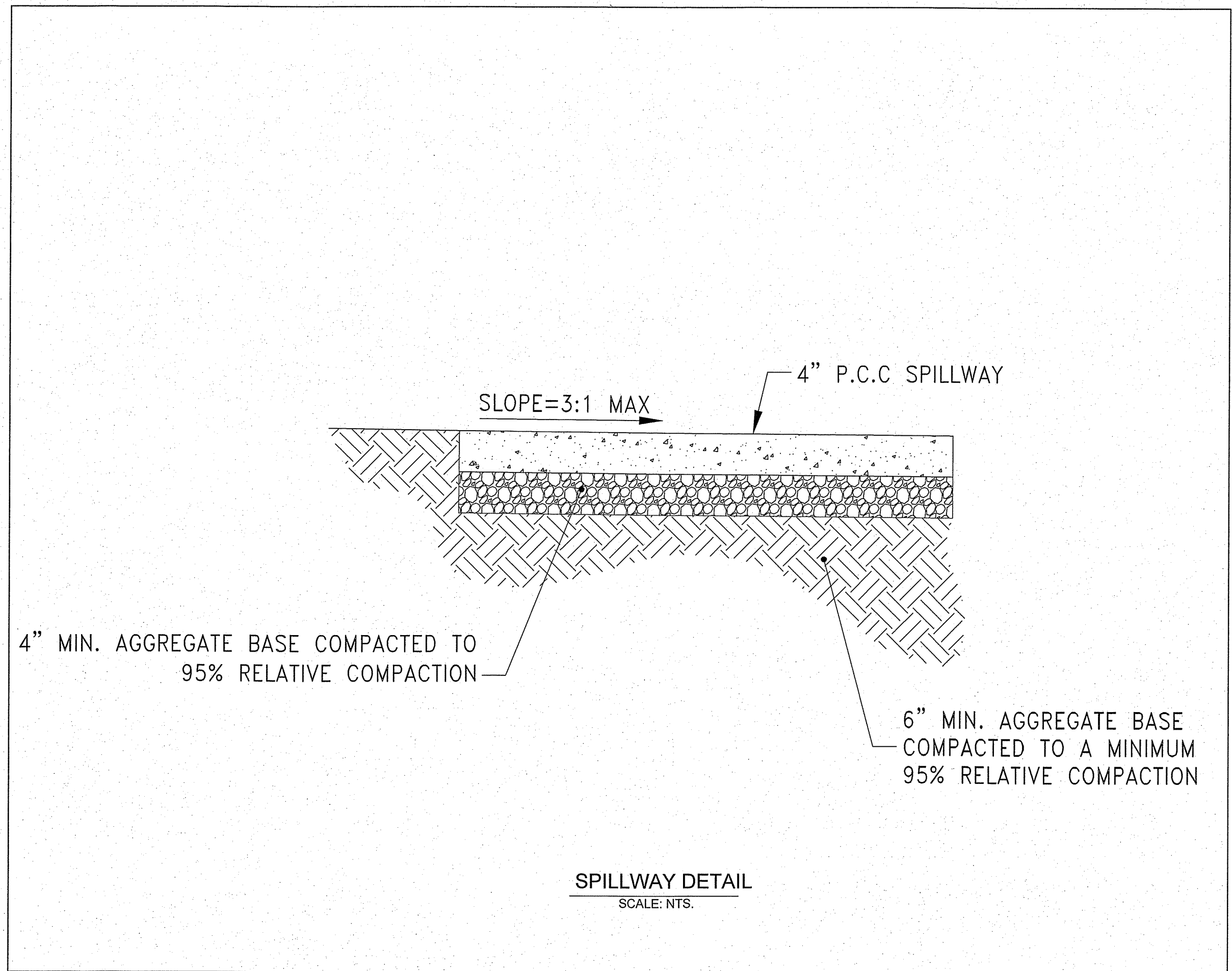
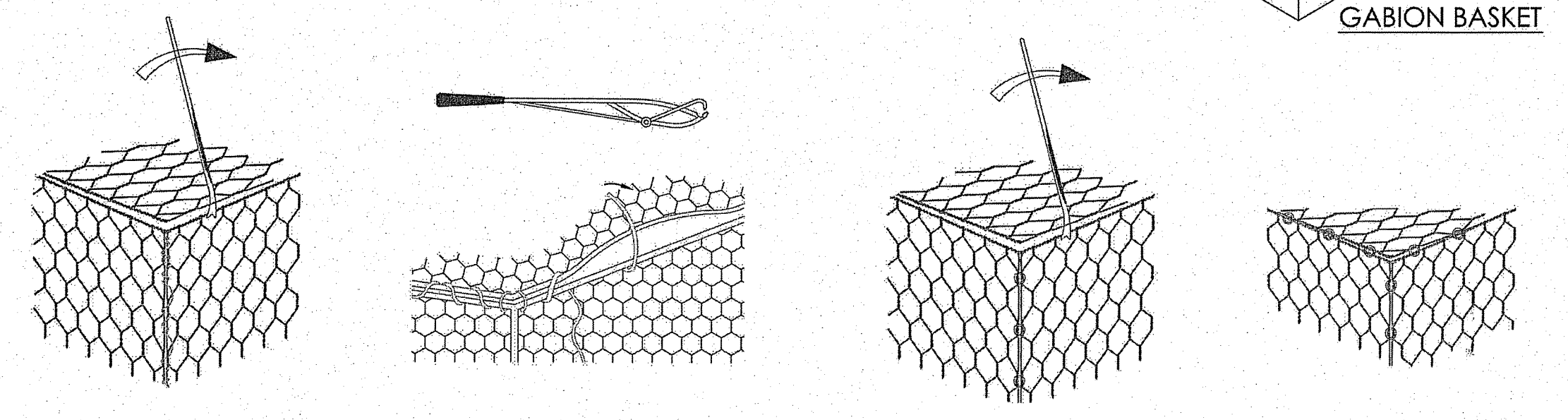
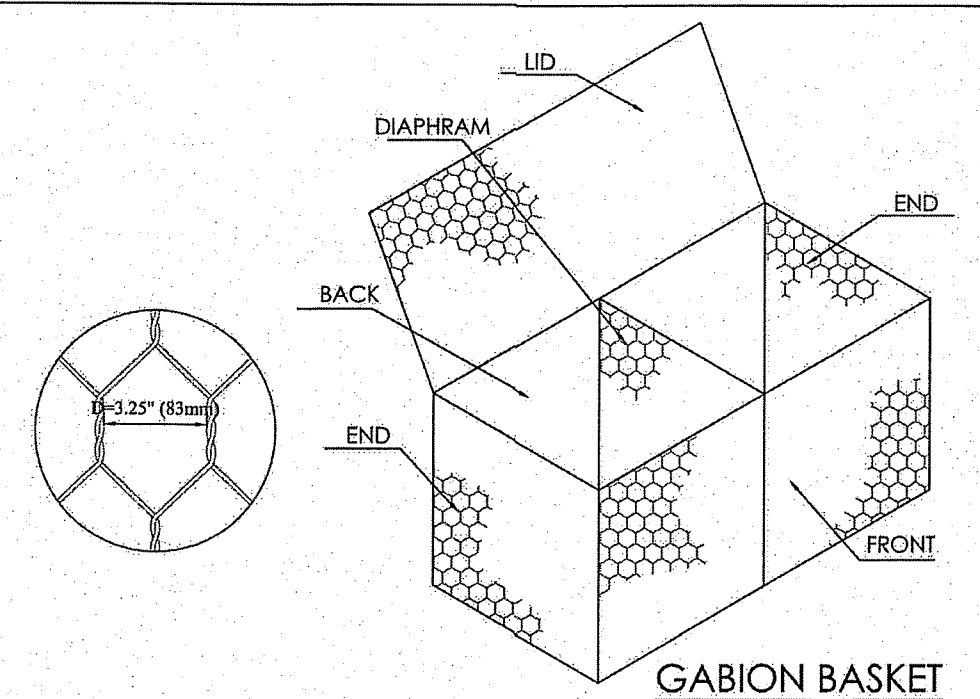
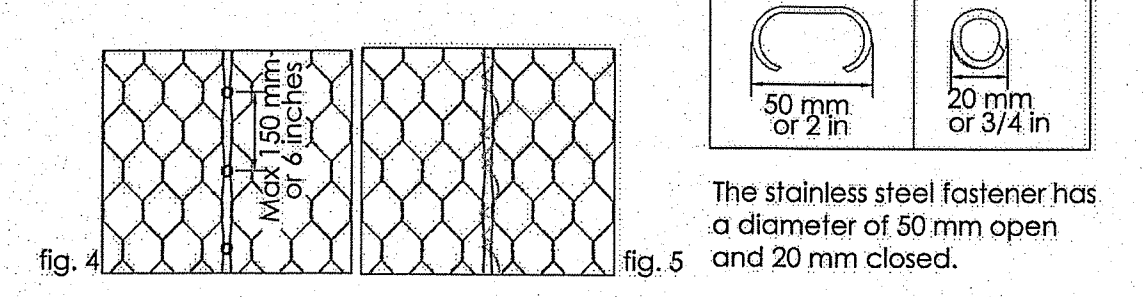


FILLING SEQUENCE



CLOSING PROCESS

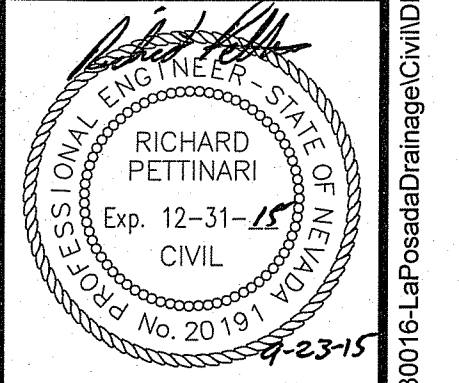
Edges are joined together, using the appropriate lacing techniques.
MANUAL: Continuous wire looped tightly around every other mesh opening, alternating single and double loops (fig. 5).
MECHANICAL: Using a pneumatic or hand power tool, employing stainless steel "C" shaped fasteners. For continuity and strength, the recommended spacing is 8 to 12 cm. Max 150mm (fig. 4).



REV.	DATE	DESCRIPTION	BY	APP'D

CIVIL IMPROVEMENT PLANS FOR
LA POSADA DITCH REHABILITATION PROJECT
DETAIL SHEET
 SPARKS WASHOE COUNTY NEVADA

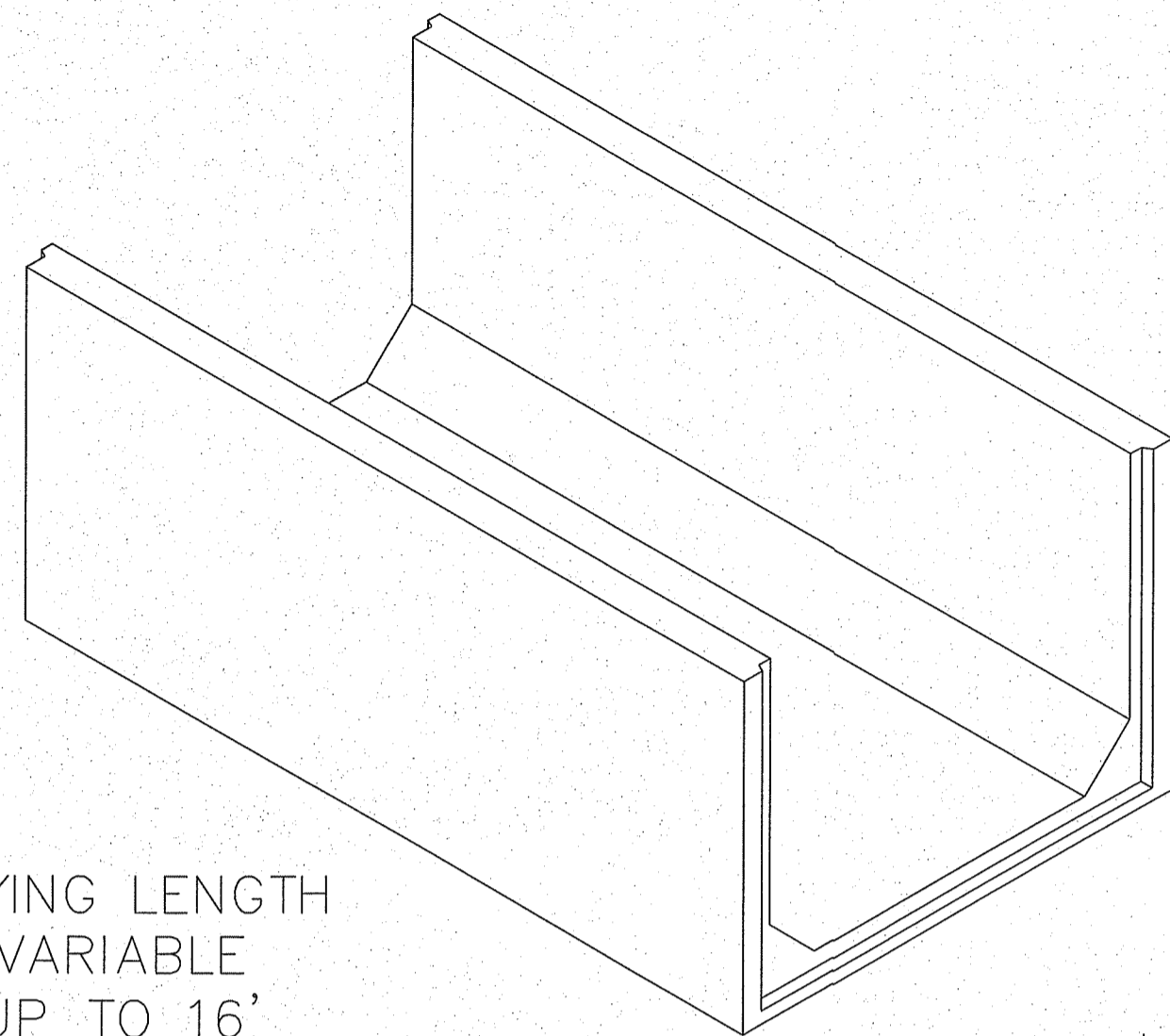
DESIGNED BY: EM
 CHECKED BY: RP
 SCALE
 HORIZ: N/A
 VERT: N/A
 JOB NO: J30016



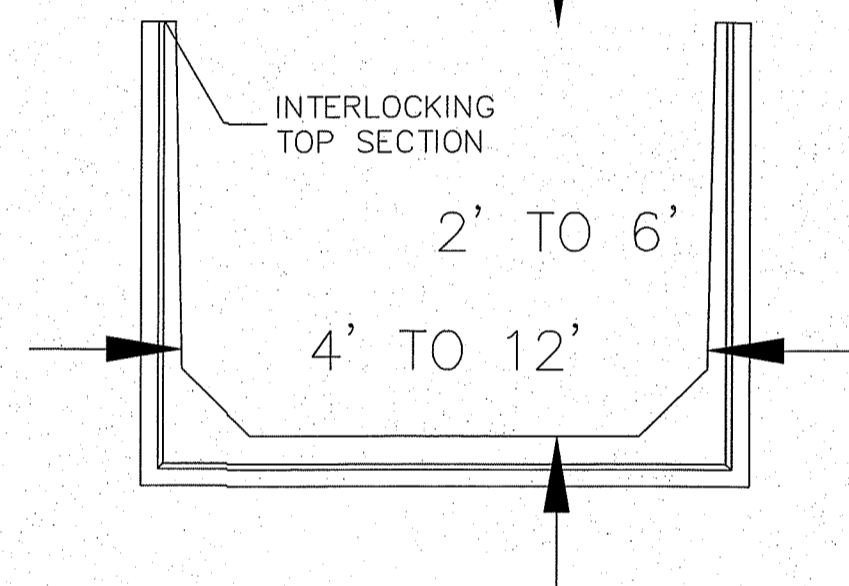
SHEET C3.2 OF 8

ENDS CAN BE SKEWED TO ALLOW FOR CURVES IN CULVERT RUN- NO NEED FOR SECONDARY FILLER POUR.

BOX CULVERT
4' TO 12' SPANS
TYPE I - CANTILEVER WALL DESIGN



LAYING LENGTH
VARIABLE
UP TO 16'



STANDARD DESIGNS MEET AASHTO HS-20 TRAFFIC LOADS IN ACCORDANCE WITH ASTM C1433, ACI 318 AND AASHTO SPECIFICATIONS.

DESIGNS BASED ON SPECIAL LOADINGS OR DEPTHS OF BURY ARE AVAILABLE ON REQUEST. CUSTOM COMPONENTS CAN BE ENGINEERED WITH OPENINGS, DOWELS, AND SKEWS. CUSTOM HEIGHTS AVAILABLE IN 1/2" INCREMENTS.

ROCK RIP-RAP GRADATION CLASSES			
RIp-RAP CLASS	PERCENT OF RIP-RAP SMALLER THAN	RIp-RAP GRAD. (INCHES)	d ₅₀ * (INCHES)
CLASS 150	100	10	6
	35-50	6	
	0-15	2	
CLASS 300	100	20	12
	35-50	12	
	0-15	4	
CLASS 400	100	26	16
	35-50	16	
	0-15	6	
CLASS 550	100	37	22
	35-50	22	
	0-15	8	
CLASS 700	100	45	28
	35-50	28	
	0-15	10	
CLASS 900	100	57	35
	35-50	35	
	0-15	14	

d₅₀* = MEAN STONE SIZE

GRADATION FOR GRANULAR RIP-RAP BEDDING		
RIp-RAP CLASS	GRANULAR BEDDING SIEVE SIZE (MM)	GRANULAR BEDDING PERCENT PASSING BY WEIGHT
CLASS 150	37.5	100
	19	35 - 100
	12.5	15 - 80
	9.5	5 - 60
	4.75	0 - 35
CLASS 300	100	100
	37.5	30 - 100
	25	15 - 80
	12.5	0 - 50
	4.75	0 - 20
CLASS 400	125	100
	50	30 - 100
	37.5	20 - 80
	19	0 - 45
	6.3	0 - 20
CLASS 550	150	100
	75	35 - 100
	50	15 - 80
	25	0 - 50
	6.3	0 - 30

NOTES: ROCK RIP-RAP SHALL BE USED TO PROTECT ALL SLOPES AND OPEN CHANNELS FROM EROSION AS NOTED ON THE PLANS. FOR 2:1 SLOPE PROTECTION (NOT IN AN OPEN CHANNEL) THE MINIMUM CLASS 150 RIP-RAP SHALL BE USED (D50=6 INCHES). SLOPE RIP-RAP SHALL BE PLACED TO A MINIMUM THICKNESS OF 12 INCHES. RIP-RAP USED AS OPEN CHANNEL LINING, BANK PROTECTION AND CULVERT ENDS SHALL BE PER THE GRADATION CLASS NOTED ON THE PLANS FOR THE SPECIFIC APPLICATION. THE MINIMUM THICKNESS (D) OF CHANNEL RIP-RAP SHALL BE 1.5 TIMES THE D50 (MEDIAN STONE DIAMETER). ALL ROCK RIP-RAP SHALL BE DUMPED BY MECHANIZED MEANS SUCH AS CRANE AND SKIP, DRAGLINE OR BUCKET TO PREVENT SEGREGATION OF THE ROCKS. HAND PLACING OF ROCK MAY BE REQUIRED IN SOME APPLICATIONS. GRADATION OF THE RIP-RAP SHALL BE CONTROLLED BY VISUAL INSPECTION BY THE GEOTECHNICAL ENGINEER WHO SHALL BE PROVIDED WITH FIELD SAMPLES PRIOR TO PLACEMENT. THE SUBGRADE OF ALL AREAS TO CONTAIN RIP-RAP SHALL BE GRADED AND COMPACTED PER THE PLANS PRIOR TO ROCK PLACEMENT.

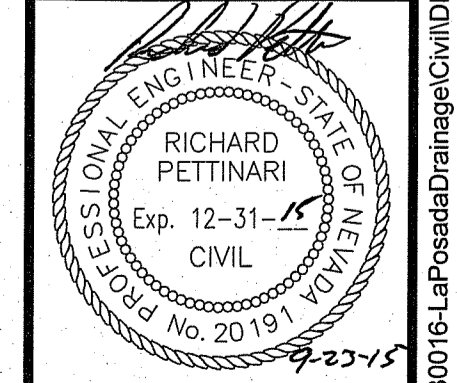
RIP-RAP DETAIL
SCALE: NTS.



REV.	DATE	DESCRIPTION	BY	APP'D

CIVIL IMPROVEMENT PLANS FOR
LA POSADA DITCH REHABILITATION PROJECT
DETAIL SHEET
SPARKS WASHOE COUNTY NEVADA

DESIGNED BY: EM
CHECKED BY: RP
SCALE
HORIZ: N/A
VERT: N/A
JOB NO: J30016



SHEET
C3.3 OF 8