

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

	HORIZONTAL	VERTICAL	COMPACTION
A. PAVEMENT AREA SUBGRADE	0.1" ±	+0.0' TO -0.1'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5" ±	+0.1' TO -0.1'	SEE SOILS REPORT
- COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
8. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
9. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC, RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
10. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 4/15/10

1. THE OWNER, SITE DEVELOPER, 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 ACCUMULATE IN, THE PUBLIC AREAS OF THE CITY OF LAS VEGAS 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.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SET FORTH IN THE CITY OF LAS VEGAS AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL.
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 NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMPs WEEKLY AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY TO REFLECT CHANGES TO THE CONSTRUCTION ACTIVITY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVRI00000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT. IF THE SEDIMENT CANNOT BE REMOVED WHEN BMP DESIGNATED CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA", LATEST ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS FOR THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY ORDINANCES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
2. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS BE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON THE ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE'S WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE SHOWN IN PLANS FROM DAMAGE DURING CONSTRUCTION. ALL STRUCTURES OR DAMAGES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' UP IN EXTRUDED-TYPE CURB.
8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE UP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
9. CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY AS LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.

13. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.

WALL NOTES:

16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.

19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

OR

SANITARY SEWER AND STORM DRAIN FACILITIES SHOWN ON THESE PLANS SHALL BE USED TO MEET THE REQUIREMENTS ON NRS 455 AND SHALL SHOW AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS, AND THE CONNECTION TO THE STORM DRAIN MANHOLE AT THE PROPERTY LINE. THE LOCATION OF THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY. ANY DEVIATIONS FROM THE INFORMATION SHOWN ON THESE PLANS SHALL BE NOTED AND SUBMITTED AS REVISIONS TO THE PLANS AND APPROVED PRIOR TO ACCEPTANCE OF FACILITY VIDEO INSPECTION.

23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 32003C2150E, DATED SEPTEMBER 27, 2002, TO REFLECT A LOWR. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A ZONE X AND NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

	EXISTING UTILITIES		CD1
	FUTURE UTILITIES		XX YYY
	SECTION LINE		
	EASEMENT LINE		
	RIGHT-OF-WAY LINE		
	PROPERTY LINE		
	CENTERLINE		
	100 YR HYDRAULIC GRADE LINE (ULT)		
	100 YR HYDRAULIC GRADE LINE (INT)		
	PROPOSED UTILITY (BY OTHERS)		
	PROPOSED SEWER LINE W/MH		
	FUTURE SEWER LINE W/MH		
	EXISTING SEWER LINE W/MH		
	EXISTING WATER LINE & GATE VALVE		
	PROPOSED WATER LINE & GATE VALVE		
	FUTURE WATER LINE & GATE VALVE		
	EXISTING GAS LINE		
	EXISTING UNDERGROUND ELECTRICAL		
	EXISTING CABLE TV		
	EXISTING TELEPHONE		
	EXISTING OVERHEAD AND POWER POLES		
	PROPOSED STORM DRAIN W/MH		
	EXISTING STORM DRAIN W/MH		
	FUTURE STORM DRAIN W/MH		
	EXISTING SIDEWALK AND RAMP		
	CONSTRUCT CURB DEPRESSION FOR FUTURE HANDICAP RAMP		
	VIEW FENCE		
	NEW ABANDONED PIPE		
	EXISTING ABANDONMENT		
	SAWCUT		
	STEEL CASING		
	APPROXIMATE PAVEMENT RESTORATION		
	TO BE ABANDONED PROFILE HATCH		
	WATER STUB WITH BLOW-OFF		
	FUTURE WATER STUB WITH BLOW-OFF		
	SEWER STUB WITH CAP		
	FUTURE SEWER STUB WITH CAP		
	EDGE OF PAVEMENT		
	CUT LIMIT LINE		
	FILL LIMIT LINE		

[illegible]

1. NONE

THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS
DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE
OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS

SOUTH 89°47'23" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)

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AND
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1-702-455-6000



FAST

Call
before you
UnderGround

1-702-432-5300

FREeway and ARTERIAL
SYSTEM of TRANSPORTATION

CLV #107Y6769

THE HOWARD HUGHES COMPANY, LLC

**VILLAGE 24 - US WATERS
COS-2 WASH IMPROVEMENT PLANS**

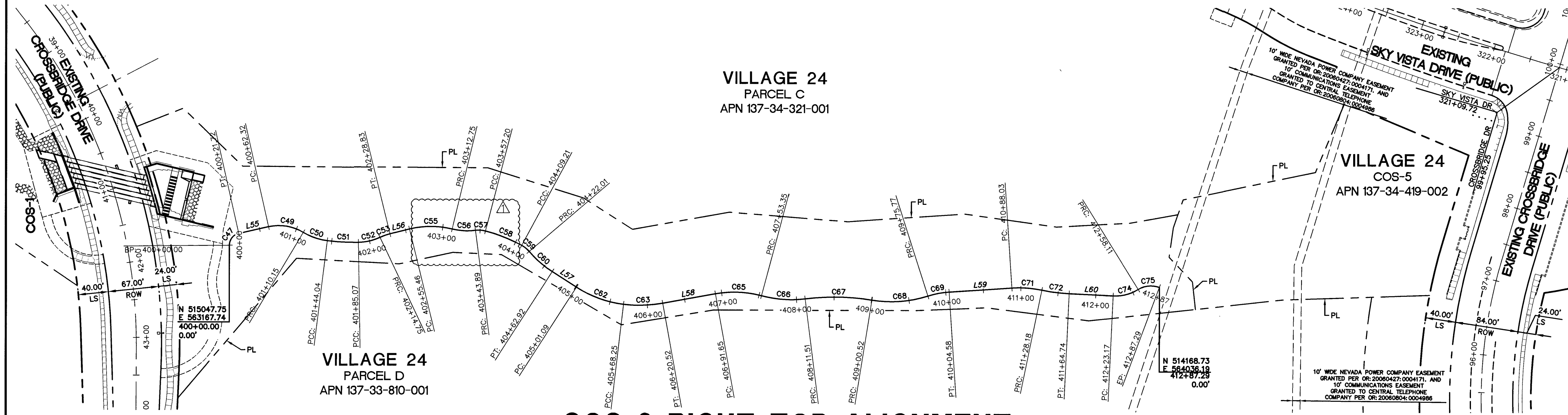
GENERAL NOTES

DRAWING

2

2 OF 19 SHTS

HH#68365



COS-2 RIGHT TOP ALIGNMENT

HORIZ SCALE: 1" = 80'

80
0
80
160

SCALE
FEET

NOTE

THIS SET OF DRAWINGS IS BASED UPON NVD. 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS

BASIS OF BEARINGS

SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK

BM #	DESCRIPTION	NVD 88 DATUM	NVD 88 DATUM
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 1-702-435-8000

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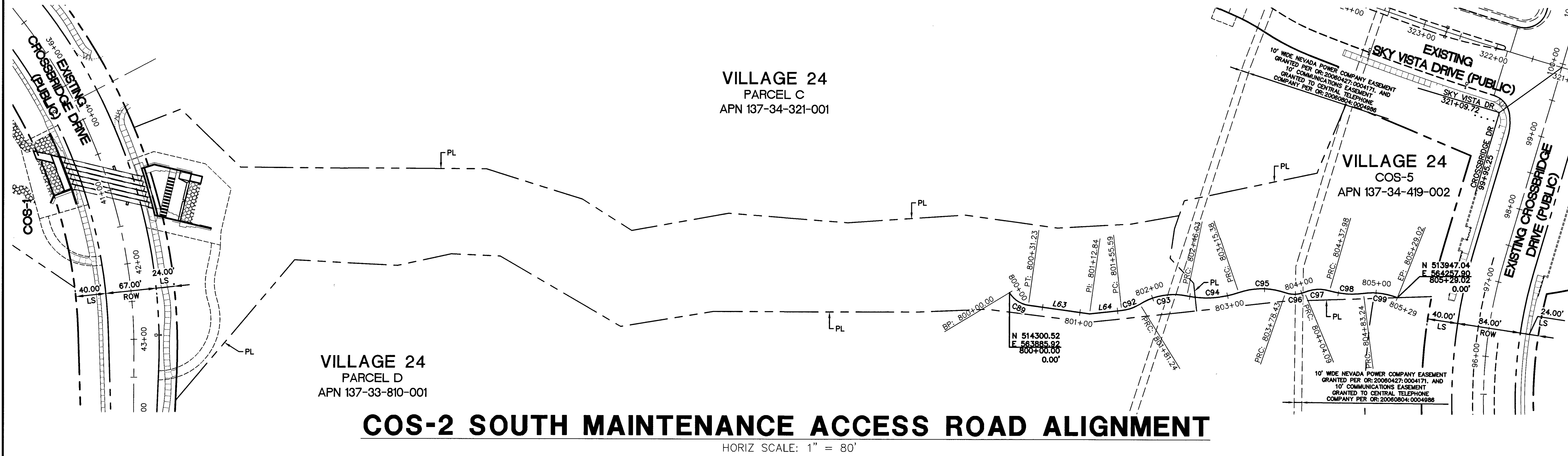
FAST

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1-702-432-5300
FIREARM AND AMMUNITION SYSTEM OF TRANSPORTATION

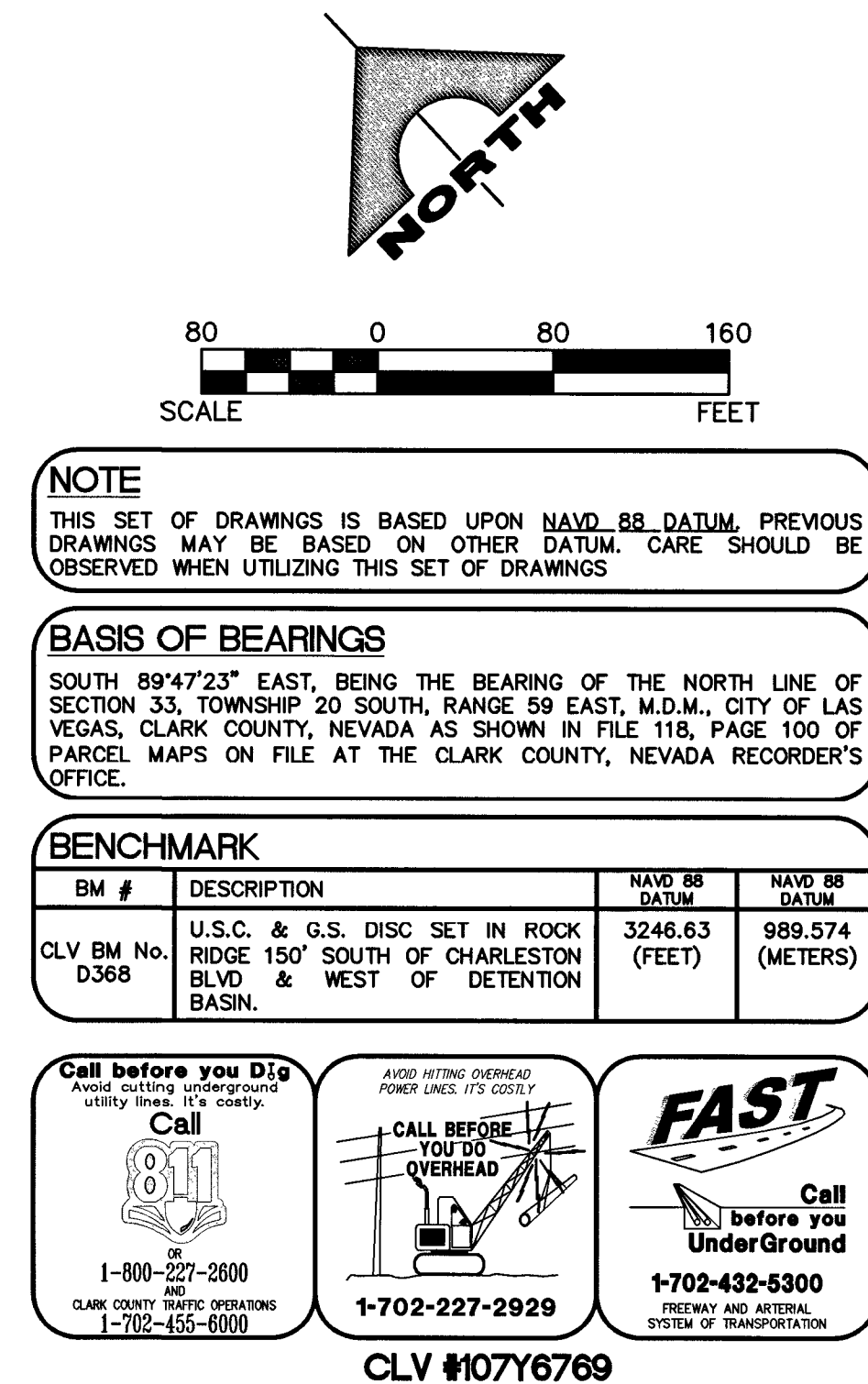
CLV #107Y6769

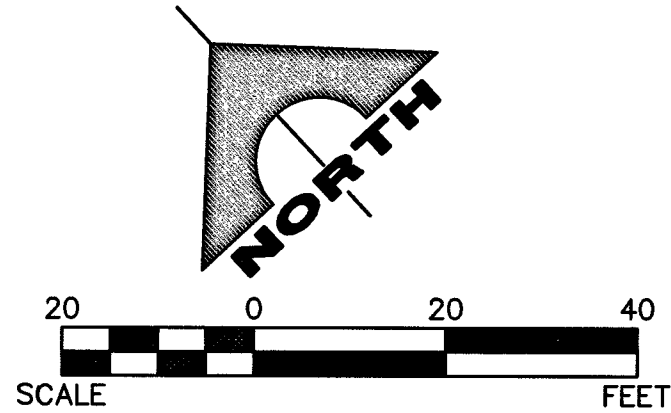
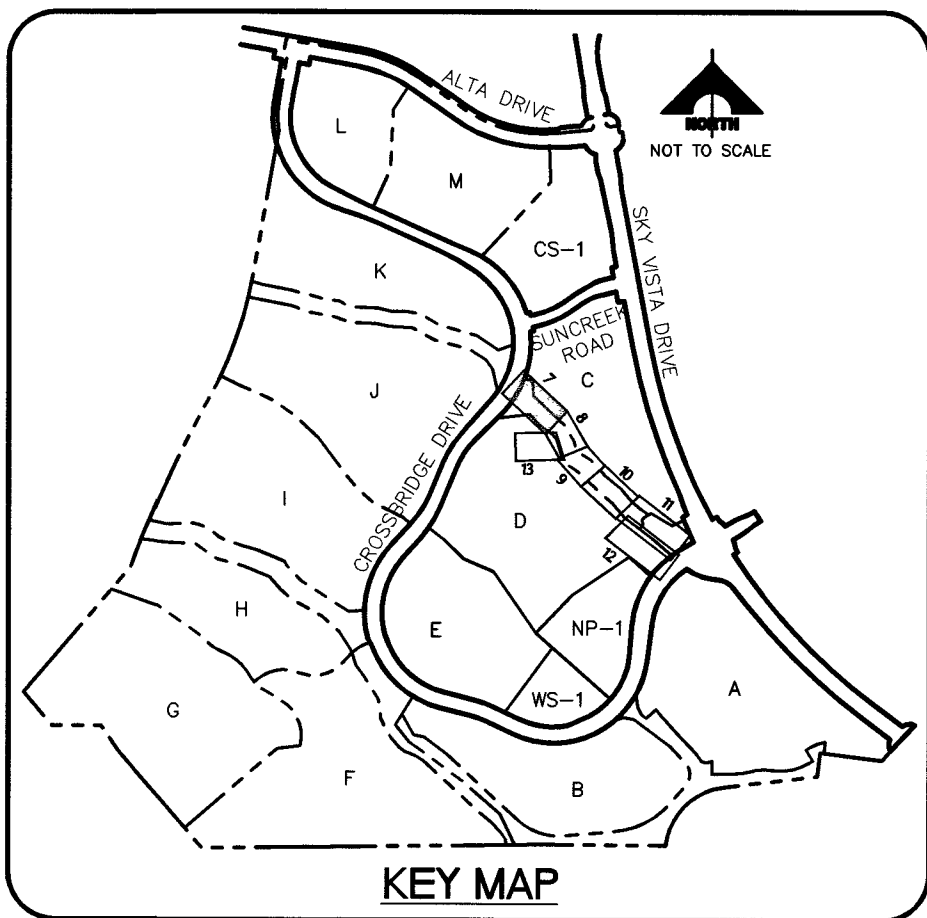
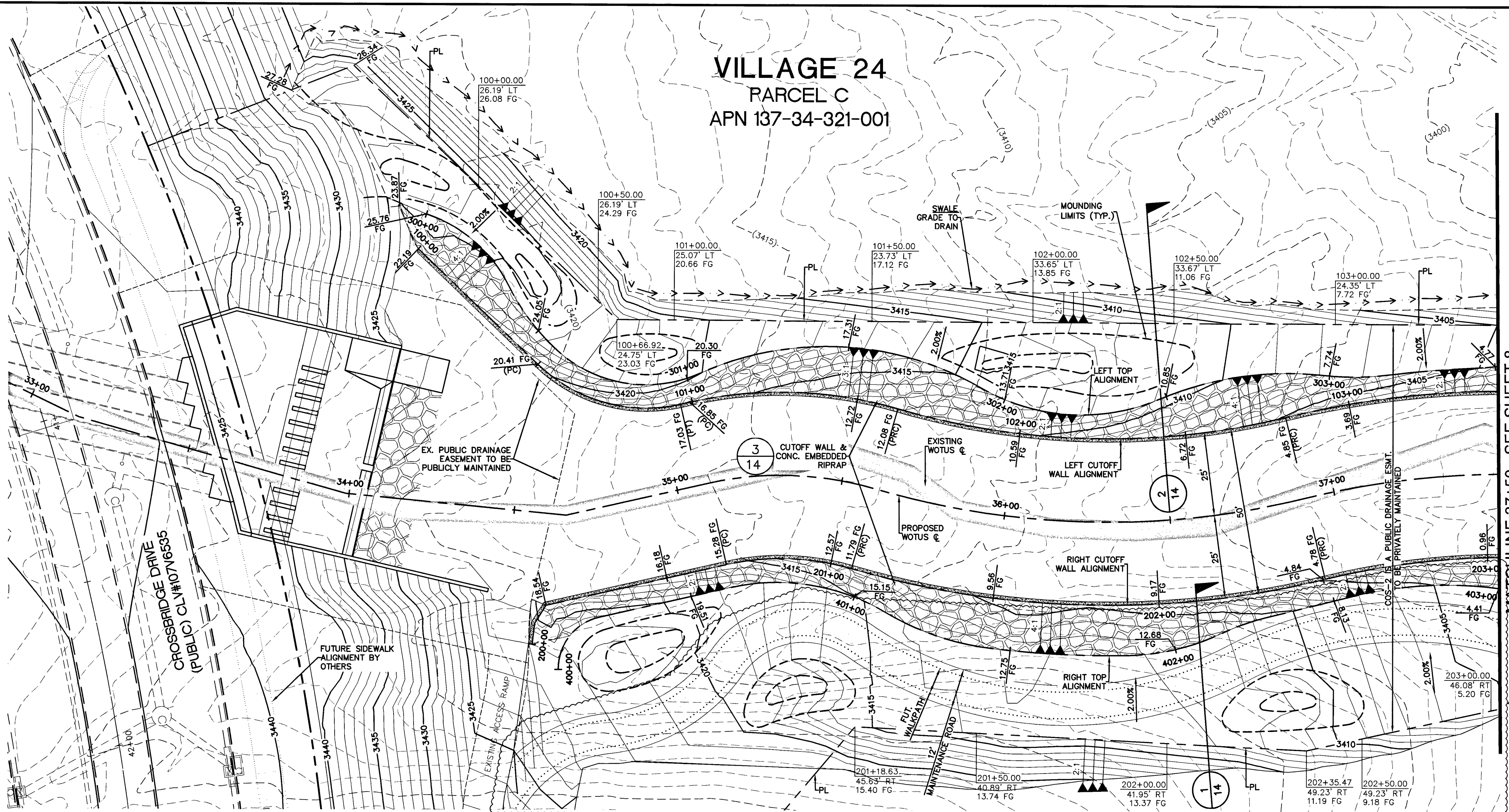
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CURVE TABLE				
CURVE #	LENGTH	RADIUS	TANGENT	DELTA
C76	38.99'	40.00'	21.20'	55°50'47"
C77	43.31'	50.00'	23.12'	49°37'44"
C78	44.22'	28.00'	28.24'	90°29'42"
C79	120.43'	110.00'	67.05'	62°43'46"
C80	103.11'	110.00'	55.69'	53°42'16"
C81	8.17'	37.00'	4.10'	12°38'47"
C89	31.23'	35.00'	16.74'	51°07'39"
C92	25.65'	57.00'	13.05'	25°47'10"
C93	64.79'	85.00'	34.06'	43°40'29"
C94	69.35'	130.00'	35.52'	30°33'58"

CURVE TABLE				
CURVE #	LENGTH	RADIUS	TANGENT	DELTA
C95	63.04'	94.50'	32.75'	38°13'27"
C96	25.66'	35.00'	13.44'	42°00'18"
C97	33.89'	50.00'	17.62'	38°49'58"
C98	45.26'	110.00'	22.96'	23°34'30"
C99	45.78'	90.00'	23.40'	29°08'48"



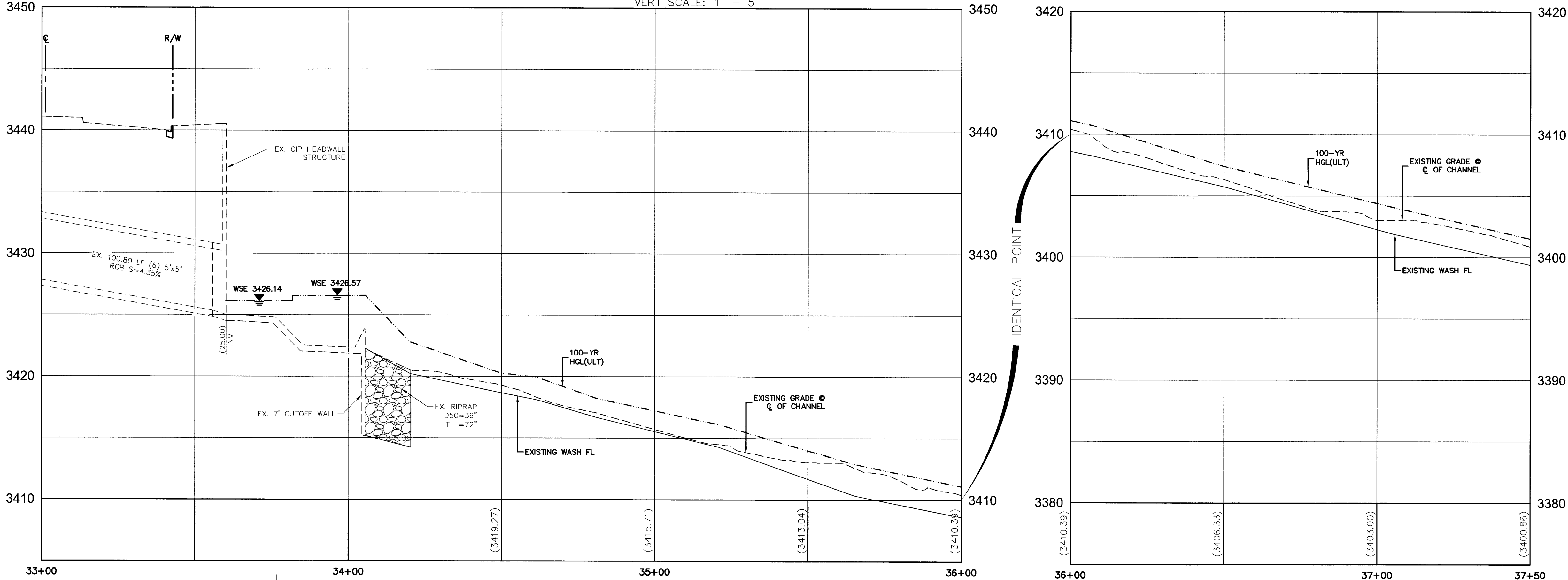


COS-2 (WATERS OF THE US)

GRAVEL MAINTENANCE ROAD

HORIZ SCALE: 1" = 20'
VERT SCALE: 1" = 5'

2" CRUSHED ROCK/GRAVEL @ 95%



RIPRAP GENERAL NOTE:
ALL RIPRAP SHALL ADHERE TO REQUIREMENTS OF UNIFORM STANDARD SPECIFICATION SECTION 610 "SLOPE AND CHANNEL PROTECTION."

FOR GROUTED RIPRAP LARGE ROCK, SEE ADDITIONAL REQUIREMENTS TO SECTION 610 "SLOPE AND CHANNEL PROTECTION ADDITIONAL NOTES" PER DETAIL 3 SHEET 14.

COS WASH MAINTENANCE GENERAL NOTE:
HOA TO MAINTAIN DESIGN GRADES AND RIPRAP ALONG CUTOFF WALLS AFTER EVERY MEASURABLE STORM EVENT. IF THERE IS MEASURABLE RAINFALL DEPTH IN THE CORFCD GAUGES 4329 AND 4344, THE COS WASH SHOULD BE INSPECTED BY HOA AFTER CESSATION OF THE STORM EVENT.

CORFCD RAINFALL GAUGE 4329 IS LOCATED IN BROWNSTONE CANYON UPSTREAM OF VILLAGE 24.

CORFCD RAINFALL GAUGE 4344 IS LOCATED IN THE RED ROCK DETENTION BASIN DOWNSTREAM OF VILLAGE 24.

NOTE
THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS

BASIS OF BEARINGS
SOUTH 89°47'23" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK		NAVD 88 DATUM	NAVD 88 DATUM
BM #	DESCRIPTION		
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)

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1-702-432-5300

CLV #107Y6769

DATE: 7/17/17

DATE	7/17/17
AGENCY	CLV
PROJECT NO.	62024-232
DESIGN	MBB
DRAWN	MBB
CHECK	JLJ
PLOT DATE	07-07-17
PLOT TIME	10:34:47

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24 - US WATERS

COS-2 WASH IMPROVEMENT PLANS

GRADING PLAN 1

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
growingengineering.com

DRAWING

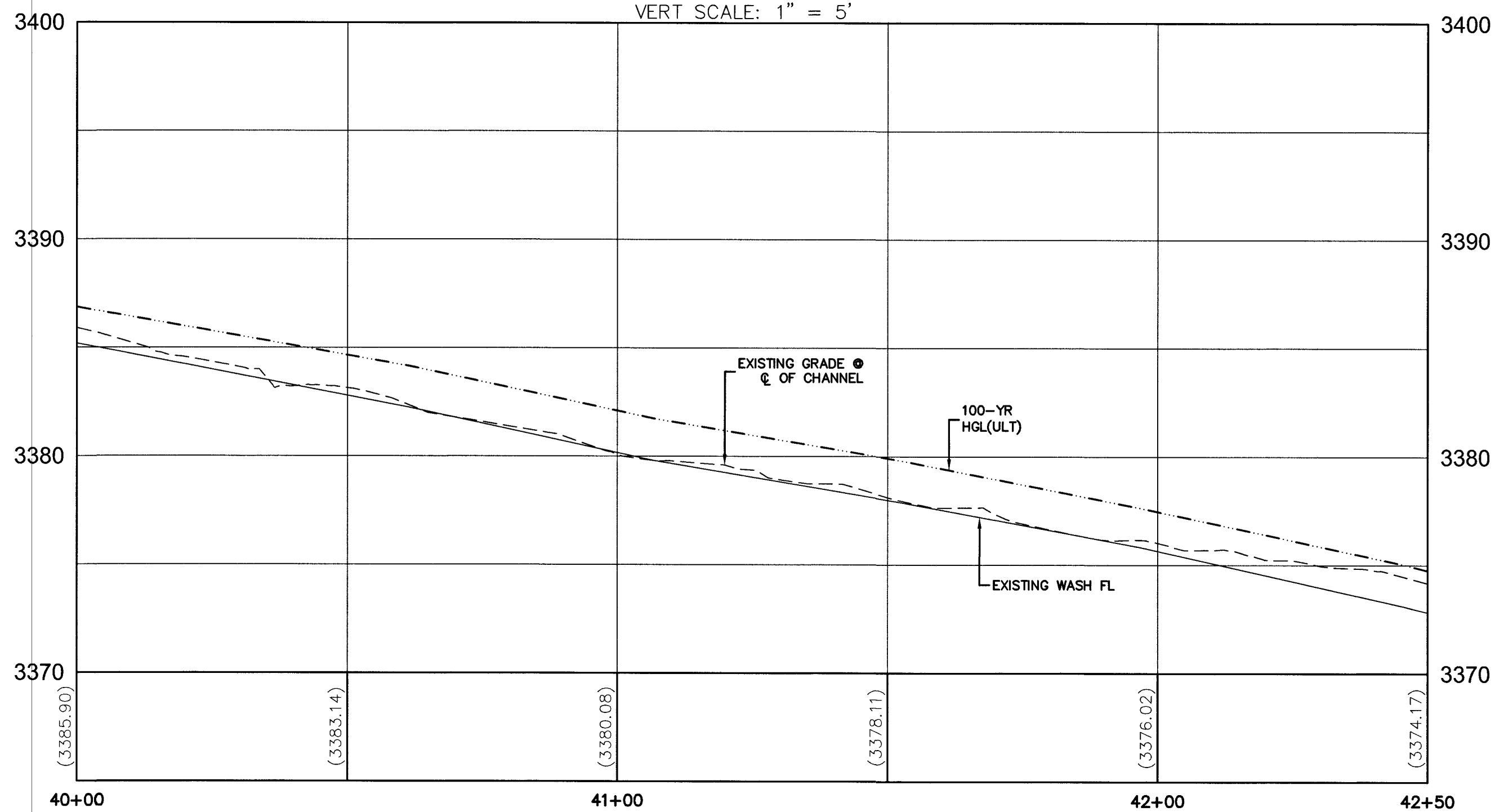
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7 OF 19 SHEETS

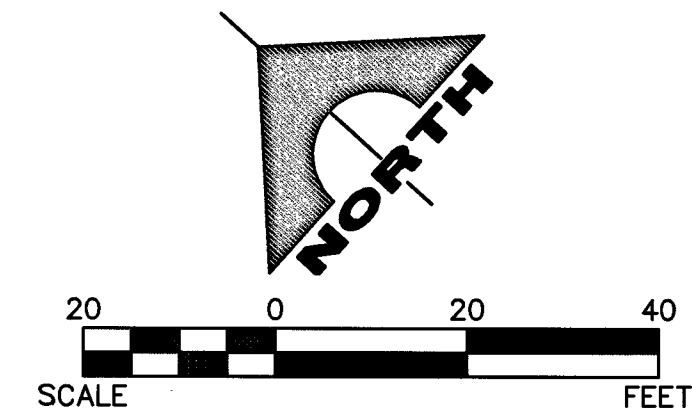
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CL V #107Y6769



HORIZ SCALE: 1" = 20'
VERT SCALE: 1" = 5'



RIPRAP GENERAL NOTE:
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UPSTREAM OF VILLAGE 24.

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BENCHMARK			
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CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION	3246.63 (FEET)	989.5 (METER)

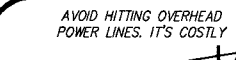
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ANY SUBSURFACE
SYSTEM OF TRANSPORTATION

[illegible]

ROAD PFD. BRIDGE ABUTMENT/FOOTING, GRADING, & STRUCTURAL SHEET. ADJUST TOP ALIGNMENTS & GRADING NEAR BRIDGE FOUNDATION STRUCTURES. ADJUST MAINTENANCE ACCESS ROAD ALIGNMENT. ADJUST MOUNDING LIMITS AND MOUNDING GRADING AROUND MAINTENANCE ROAD. ADJUST PARCEL C STORM DRAIN SLOPE. PRECIPITATION

[illegible]

GCVA
ENGINEERS\ SURVEYORS

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

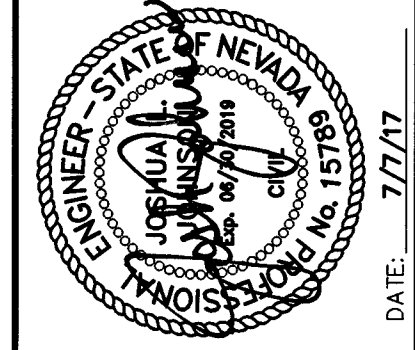
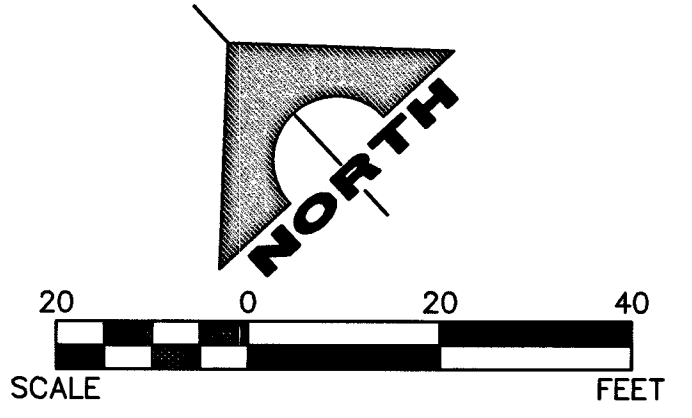
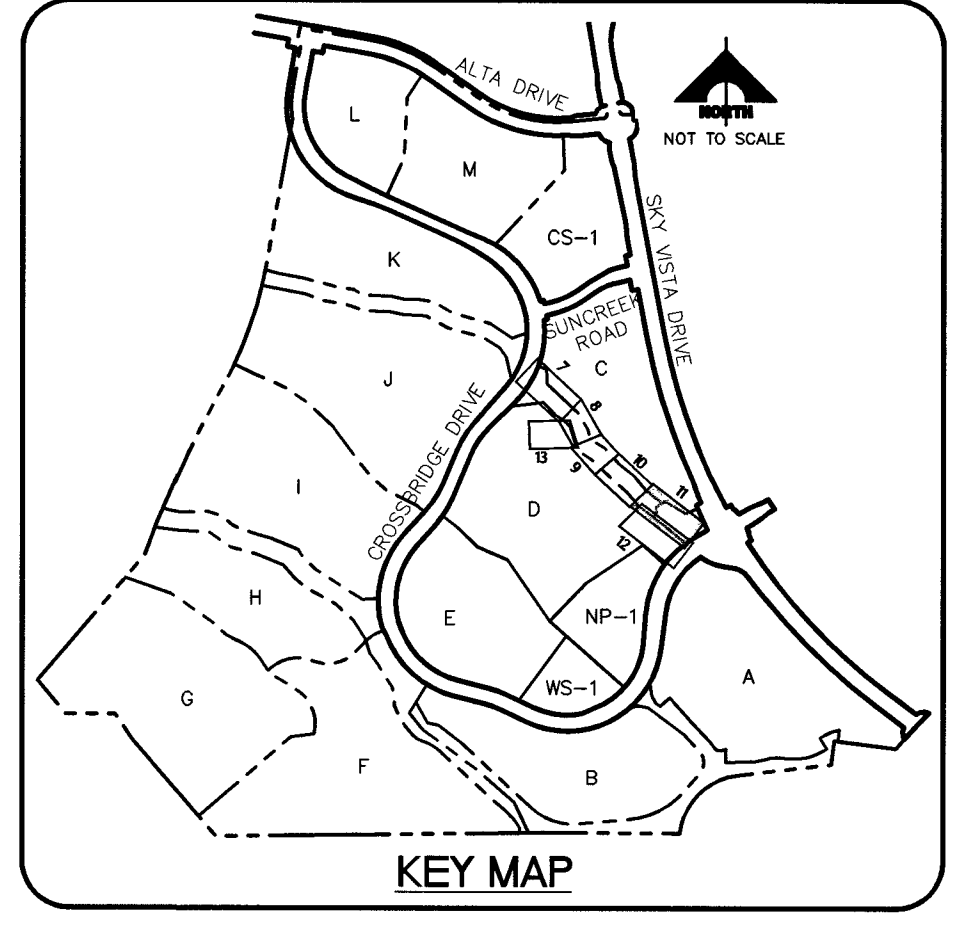
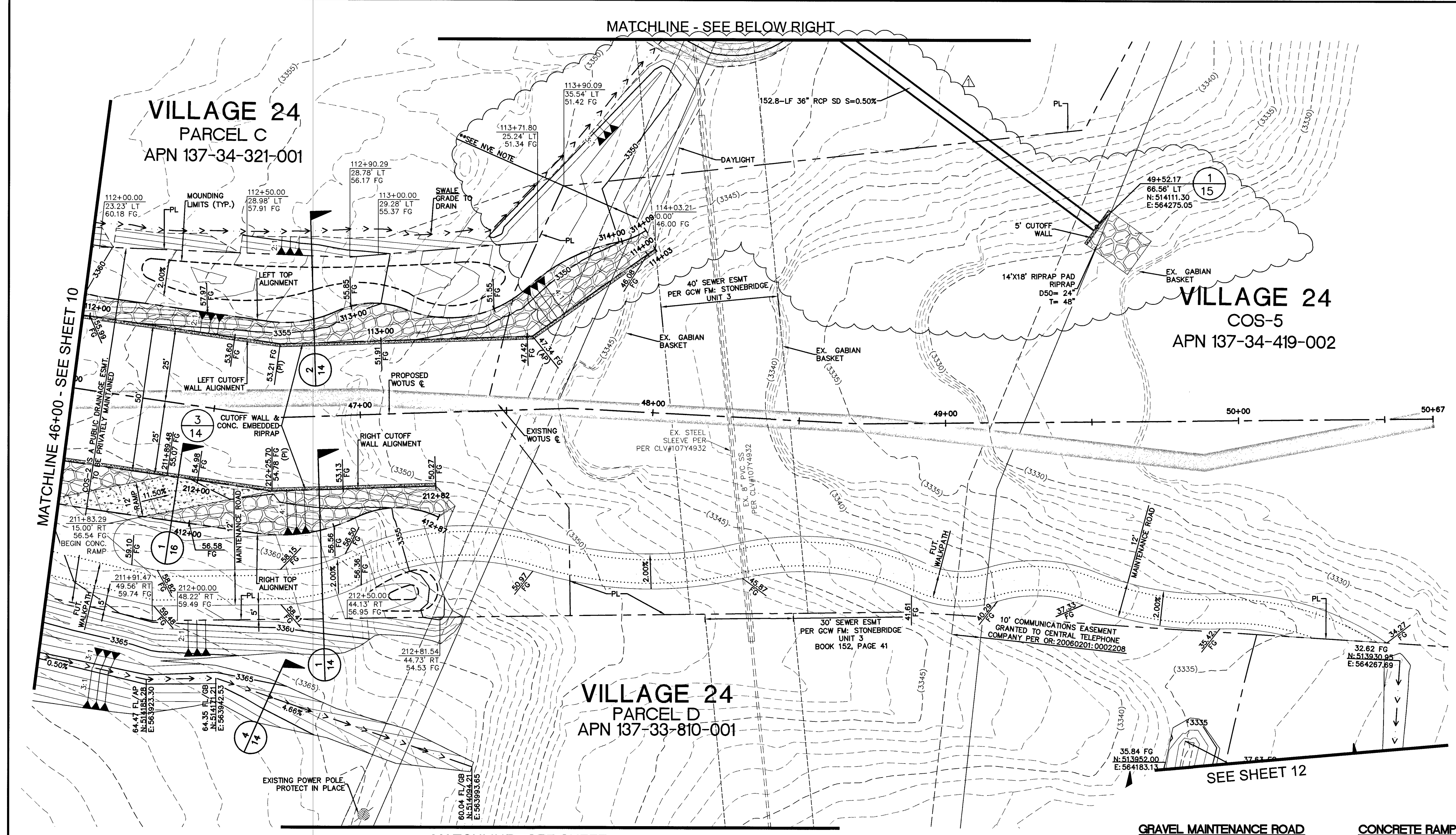
THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24 - US WATERS
COS-2 WASH IMPROVEMENT PLANS

GRADING PLAN 3

DRAWING
9
9 OF 19 SHTS

HH68365



REV	DATE	DESCRIPTION
1	7/13/17	5.6
2	7/13/17	5.6
3	7/13/17	5.6
4	7/13/17	5.6
5	7/13/17	5.6
6	7/13/17	5.6
7	7/13/17	5.6
8	7/13/17	5.6
9	7/13/17	5.6
10	7/13/17	5.6
11	7/13/17	5.6
12	7/13/17	5.6
13	7/13/17	5.6
14	7/13/17	5.6
15	7/13/17	5.6
16	7/13/17	5.6
17	7/13/17	5.6
18	7/13/17	5.6
19	7/13/17	5.6
20	7/13/17	5.6
21	7/13/17	5.6
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100	7/13/17	5.6

PROJECT NO.	62024-232
DESIGN	MBB
DRAWN	MBB
CHECK	JLJ
PLOT DATE	07-07-17
PLOT TIME	10:36:42

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gceengineering.com

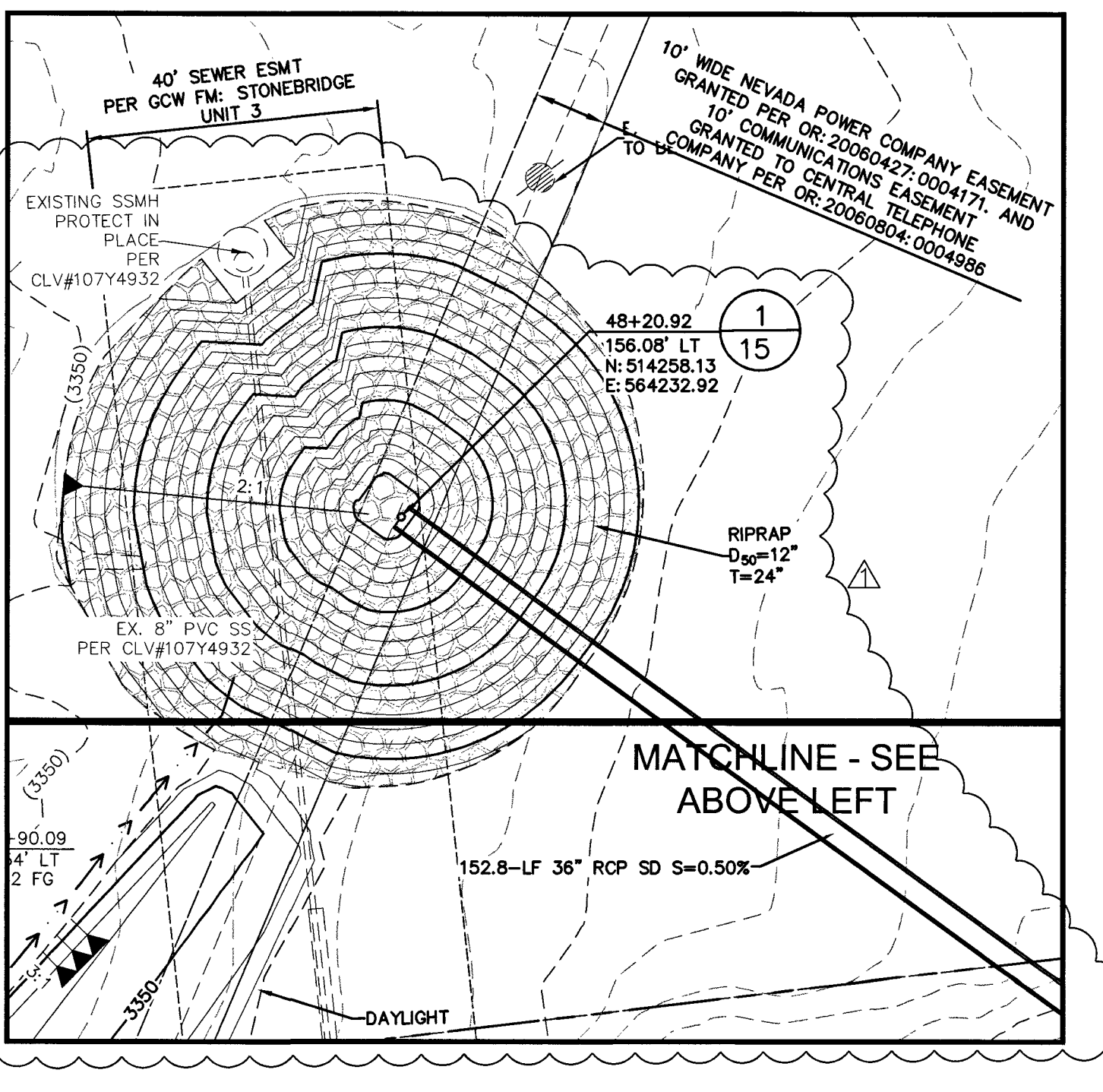
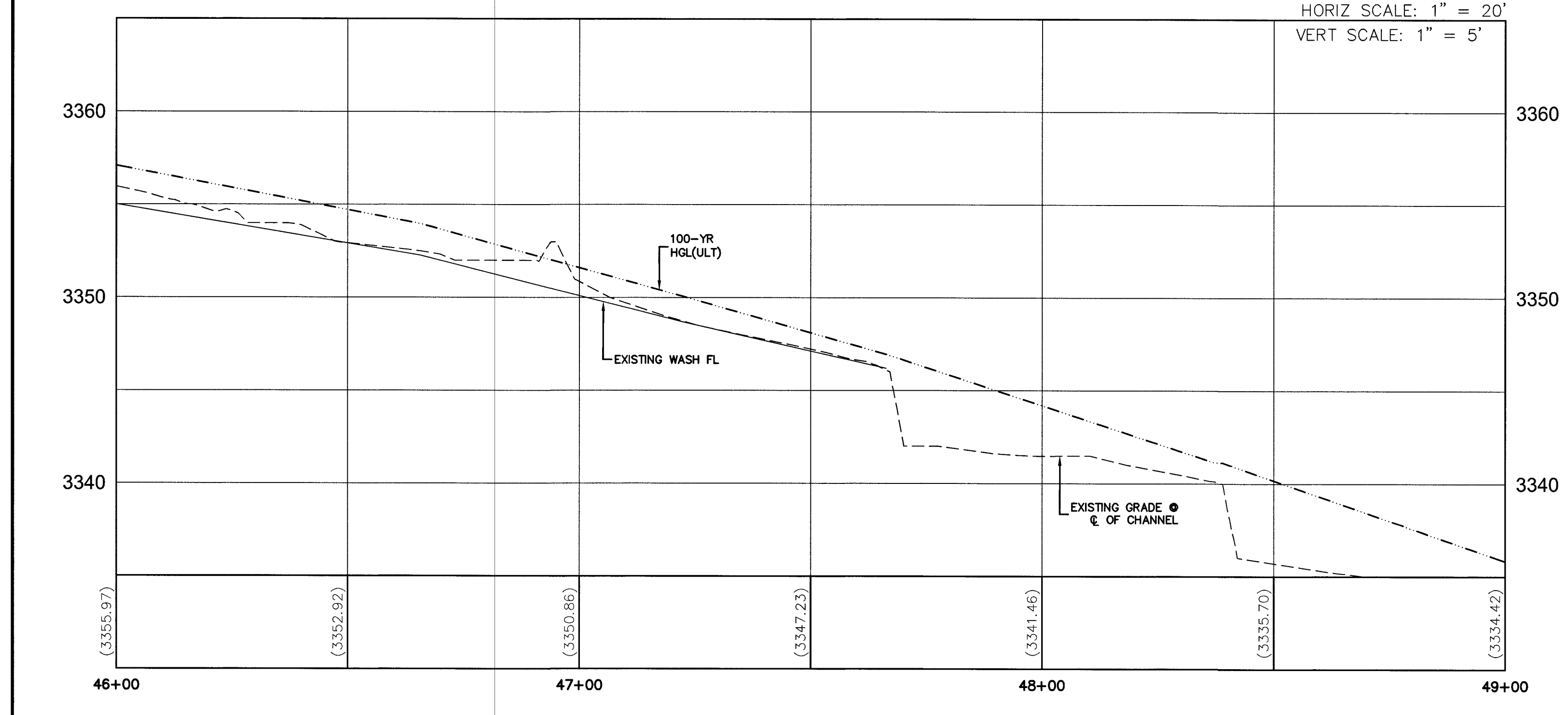
GCE
ENGINEERS \ SURVEYORS

F:\Projects\600\62024-228-2\DWG\Production\V24-228-2_GD.dwg
Lupé Gracia

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24 - US WATERS
COS-2 WASH IMPROVEMENT PLANS
GRADING PLAN 5

DRAWING
11
11 OF 19 SHTS



NVE NOTE:
10' WIDE NEVADA POWER COMPANY EASEMENT GRANTED PER OR: 20060427:0004171. AND 10' COMMUNICATIONS EASEMENT GRANTED TO CENTRAL TELEPHONE COMPANY PER OR: 20060804:0004986

RIPRAP GENERAL NOTE:
ALL RIPRAP SHALL ADHERE TO REQUIREMENTS OF UNIFORM STANDARD SPECIFICATION SECTION 610 "SLOPE AND CHANNEL PROTECTION."
FOR GROUTED RIPRAP LARGE ROCK, SEE ADDITIONAL REQUIREMENTS TO SECTION 610 "SLOPE AND CHANNEL PROTECTION ADDITIONAL NOTES" PER DETAIL 3 SHEET 14.

COS WASH MAINTENANCE GENERAL NOTE:
HOA TO MAINTAIN DESIGN GRADES AND RIPRAP ALONG CUTOFF WALLS AFTER EVERY MEASURABLE STORM EVENT. IF THERE IS MEASURABLE RAINFALL DEPTH IN THE CORFCD GAUGES 4329 AND 4344, THE COS WASH SHOULD BE INSPECTED BY HOA AFTER CESSATION OF THE STORM EVENT.
CORFCD RAINFALL GAUGE 4329 IS LOCATED IN BROWNSTONE CANYON UPSTREAM OF VILLAGE 24.
CORFCD RAINFALL GAUGE 4344 IS LOCATED IN THE RED ROCK DETENTION BASIN DOWNSTREAM OF VILLAGE 24.

NOTE
THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM. PREVIOUS DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE OBSERVED WHEN UTILIZING THIS SET OF DRAWINGS

BASIS OF BEARINGS
SOUTH 89°47'23" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 89 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)



H#6866

MATCHLINE - SEE SHEET 11

VILLAGE 24
PARCEL D
APN 137-33-810-001

COS-2 (WATERS OF THE US)

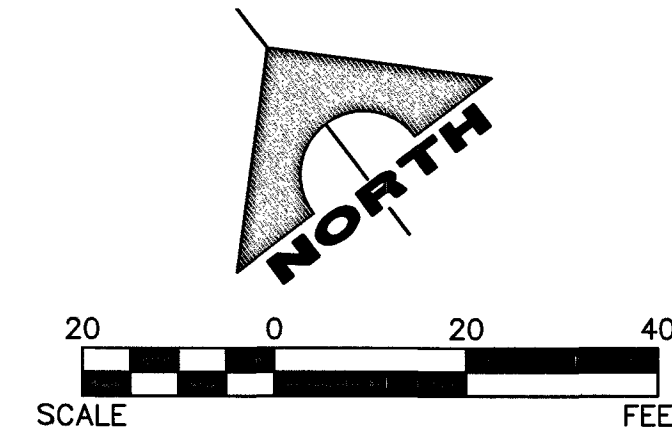
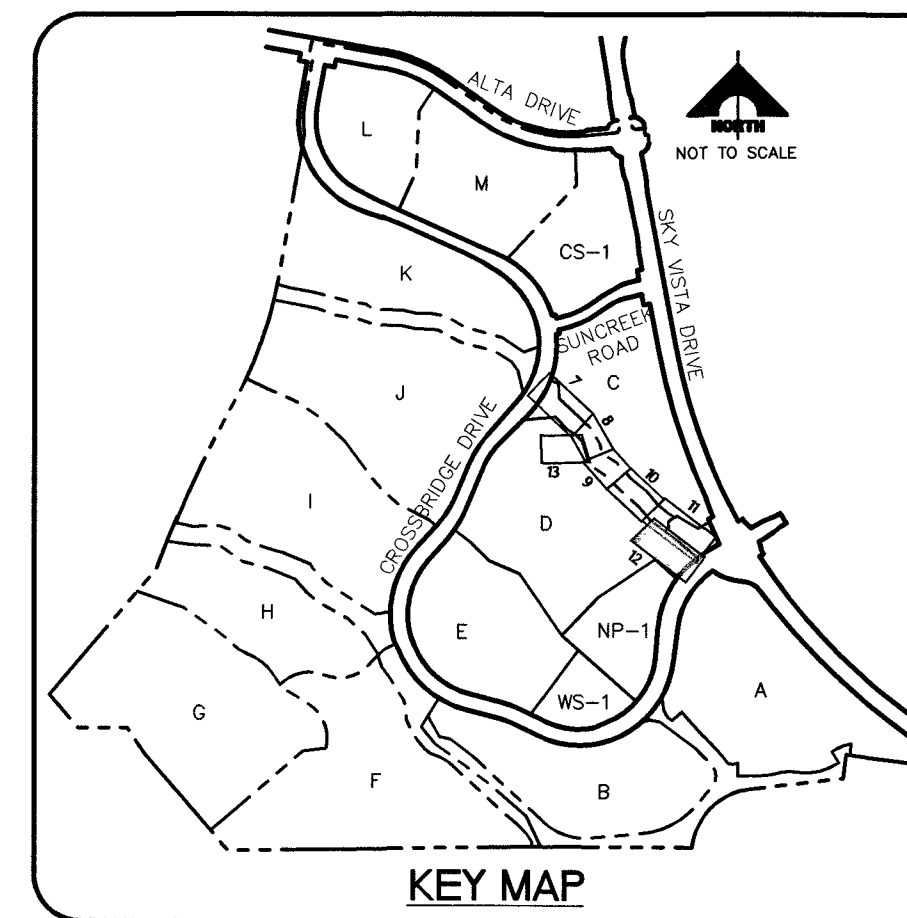
HORIZ SCALE: 1" = 20'

GRAVEL MAINTENANCE ROAD

2" CRUSHED ROCK/GRAVEL @ 95%

CONCRETE RAMP

6" THICK CONCRETE RAMP PER
DETAIL 1 DRAWING 16.



NVE NOTE:
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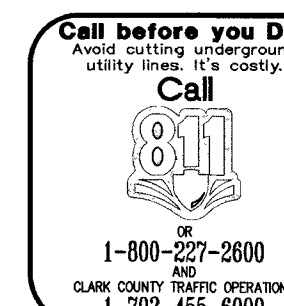
CORFCD RAINFALL GAUGE 4329 IS LOCATED IN BROWNSTONE CANYON UPSTREAM OF VILLAGE 24.

CORFCD RAINFALL GAUGE 4344 IS LOCATED IN THE RED ROCK DETENTION BASIN DOWNSTREAM OF VILLAGE 24.

NOTE
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BENCHMARK		NAVD 88 DATUM	NAVD 88 DATUM
BM #	DESCRIPTION		
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)



CLV # 107Y676A

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24 - US WATERS

COS-2 WASH IMPROVEMENT PLANS

PROJECT NO:

62024-232

DESIGN:

MOB

DRAWN:

MOB

CHECK:

JLJ

PLOT DATE:

01-20-17

PLOT TIME:

08:40:47

REV

DATE

DESCRIPTION

DATE

ACED APP

DATE

GCW APP

DATE

1/20/17

1555 S. RAINBOW BLVD.

LAS VEGAS, NV 89146

T: 702.804.2000

F: 702.804.2299

gowingengineering.com

F:\Projects\600\62024-226-2\DWG\Production\24-226-2_2D.dwg

Matthew Buge

ENGINEERS' SURVEYORS

GOWING ENGINEERING

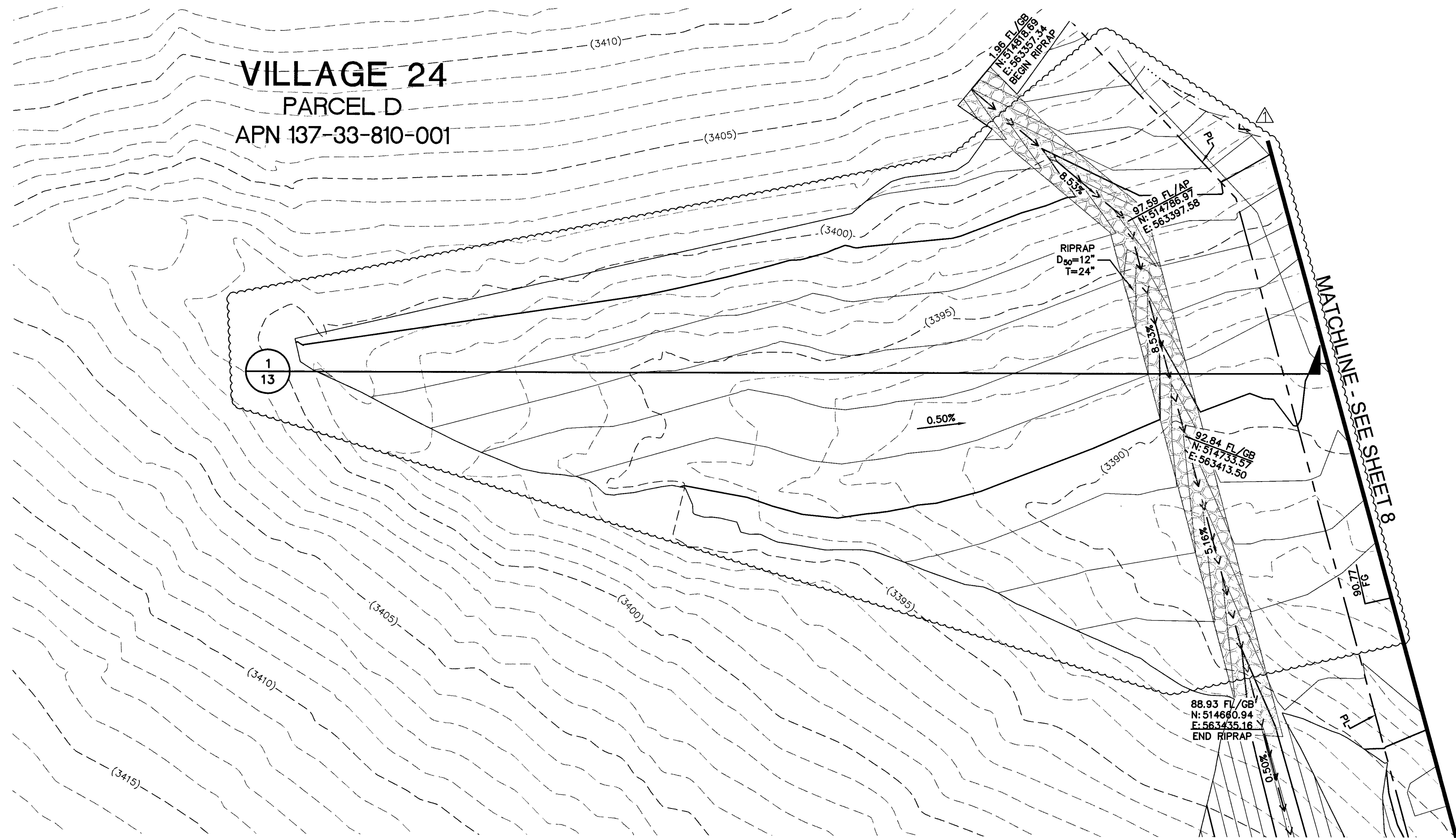
DRAWING

12

OF 16 SHEETS

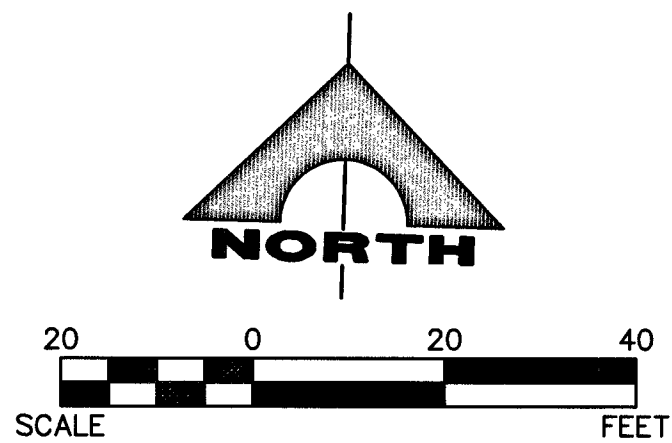
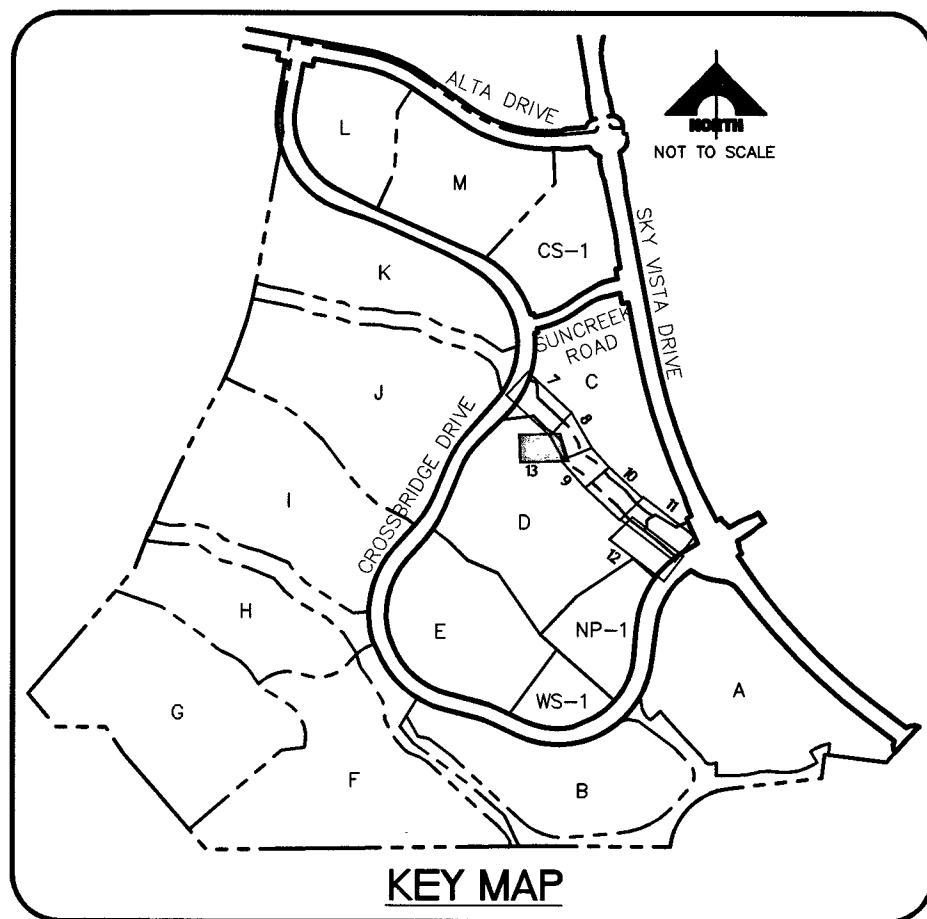
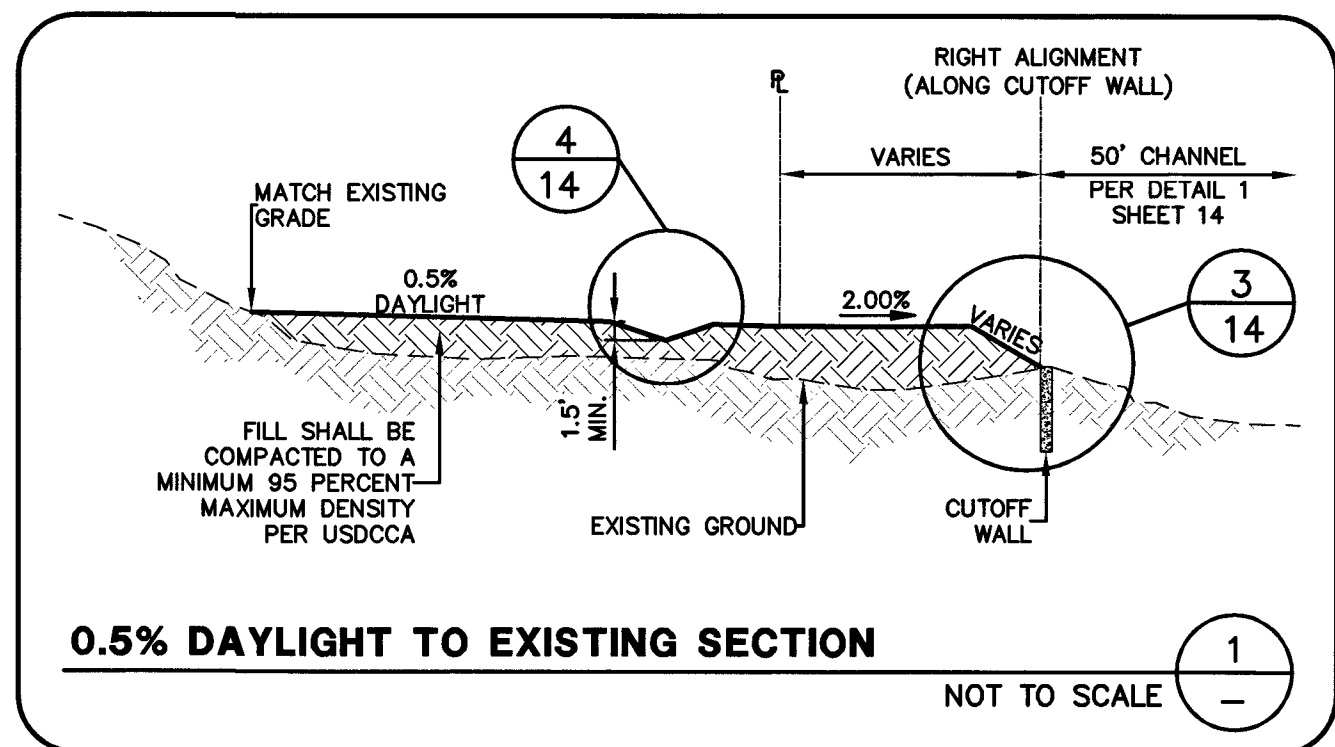
GRADING PLAN 6

1468365



0.5% DAYLIGHT TO EXISTING GRADE

HORIZ SCALE: 1" = 20'



RIPRAP GENERAL NOTE:
ALL RIPRAP SHALL ADHERE TO REQUIREMENTS OF UNIFORM STANDARD SPECIFICATION SECTION 610 "SLOPE AND CHANNEL PROTECTION."

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BASIS OF BEARINGS

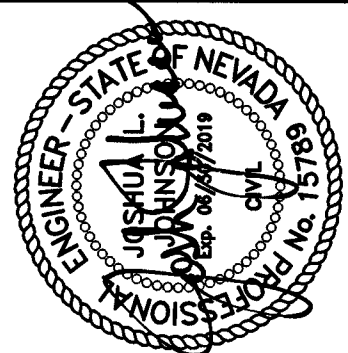
SOUTH 89°47'23" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 100 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)



CLV #107Y6769



DATE	AGENCY	DATE	AGENCY	DATE	AGENCY
7/13/17	SB				

REV	DATE	DESCRIPTION
1	4/12/17	ADD PED. BRIDGE ABUTMENT/FOOTING GRADING & STRUCTURAL SHEET. ADJUST TOP ALIGNMENTS & GRADING NEAR BRIDGE FOUNDATION STRUCTURES. ADJUST WASHING LINES AND MOUNDING GRADING AROUND MAINTENANCE ROAD. ADJUST PARCEL C STORM DRAIN SUB.

PROJECT NO.	62024-232
DESIGN:	MD
DRAWN:	MD
CHECK:	LL
PLOT DATE:	07-07-17
PLOT TIME:	10:37:19

GCM
ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcmengineering.com

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 24 - US WATERS
COS-2 WASH IMPROVEMENT PLANS
GRADING PLAN 7

DRAWING

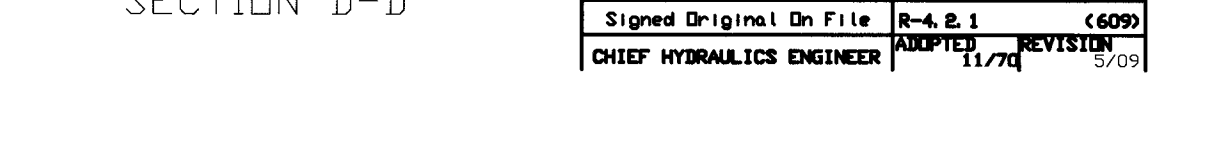
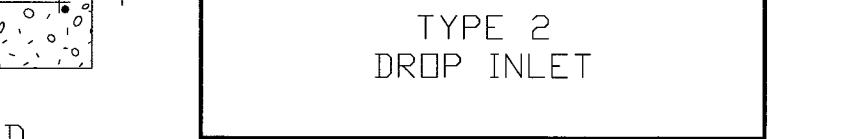
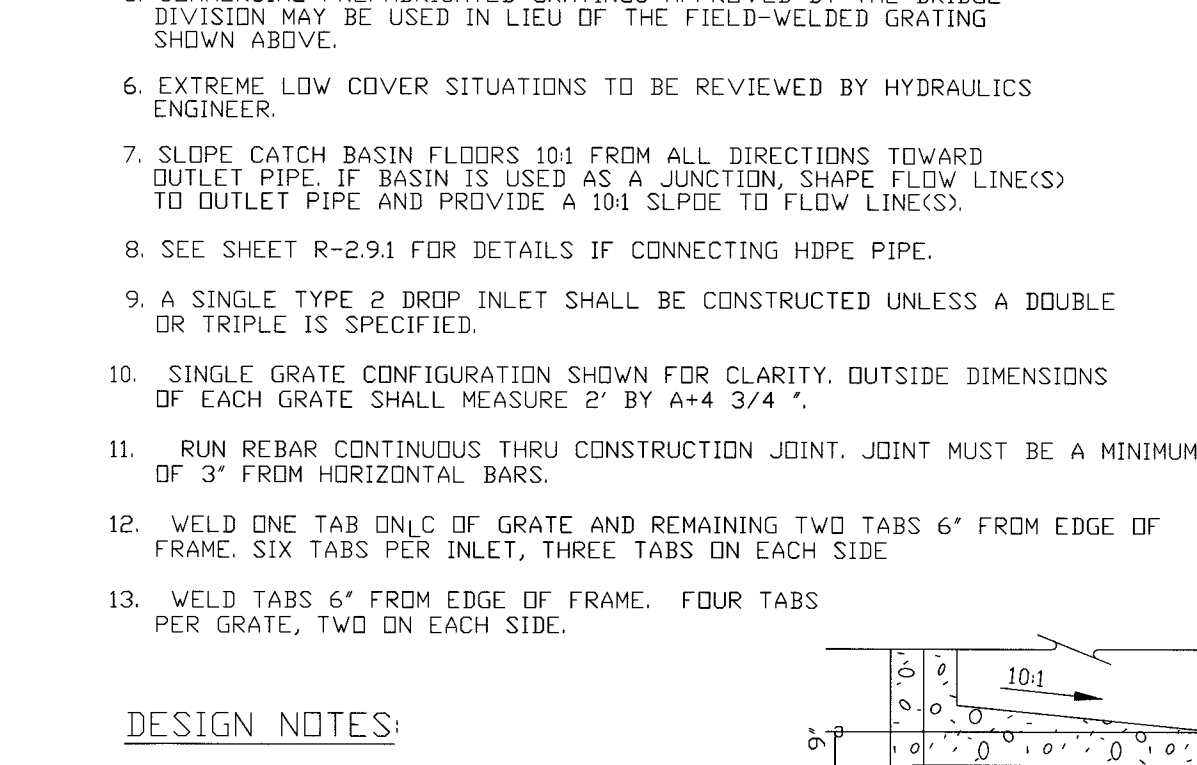
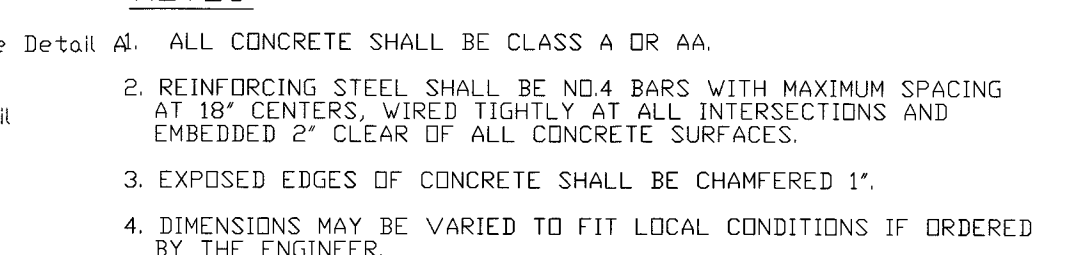
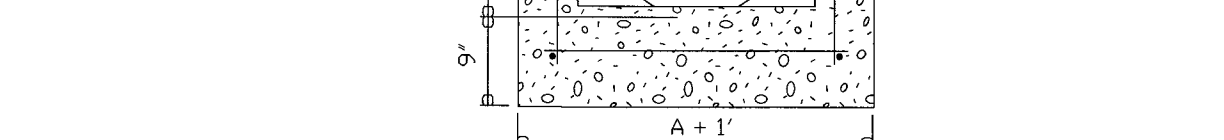
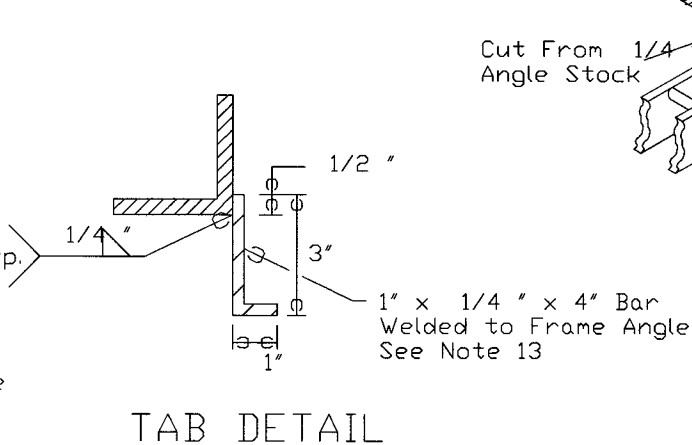
13

13 OF 19 SHTS

H#68365

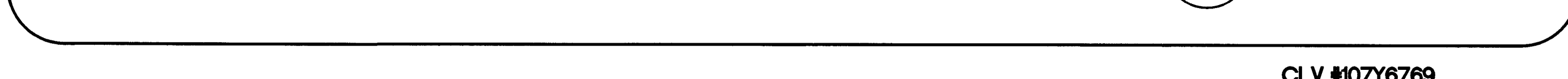
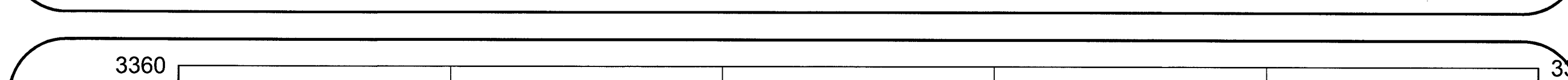


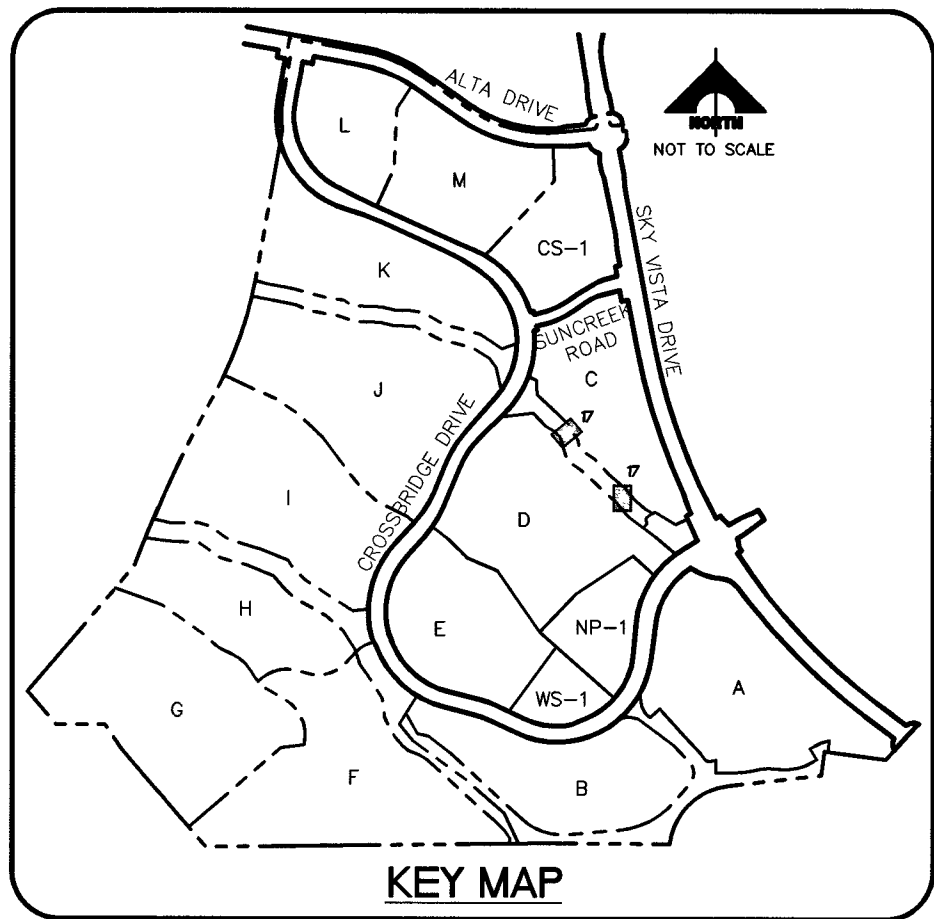
*The Concrete And Reinforcing Quantities Are Based On The H Min. Shown. Increase The Concrete And Reinforcing Base Quantity By The Corresponding Add Rate (Per Foot Of Increased H) If The H Specified Is Larger Than H Min.

6*

NOT TO SCALE

A





PEDESTRIAN BRIDGE ABUTMENT/FOOTING

PEDESTRIAN BRIDGE ABUTMENTS/FOOTINGS
PER STRUCTURAL DETAILS ON DRAWING 10

CONCRETE RAMP

6" THICK CONCRETE RAMP PER
DETAIL 1 DRAWING 16.

GRAVEL MAINTENANCE ROAD

2" CRUSHED ROCK/GRAVEL @ 95%

NOTE

THIS SET OF DRAWINGS IS BASED UPON NAVD 88 DATUM, PREVIOUS
DRAWINGS MAY BE BASED ON OTHER DATUM. CARE SHOULD BE
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BASIS OF BEARINGS

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BENCHMARK

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. D368	U.S.C. & G.S. DISC SET IN ROCK RIDGE 150' SOUTH OF CHARLESTON BLVD & WEST OF DETENTION BASIN.	3246.63 (FEET)	989.574 (METERS)

Call before you Dig
Avoid cutting underground
utility lines. It's costly.

Call

OR
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-8000

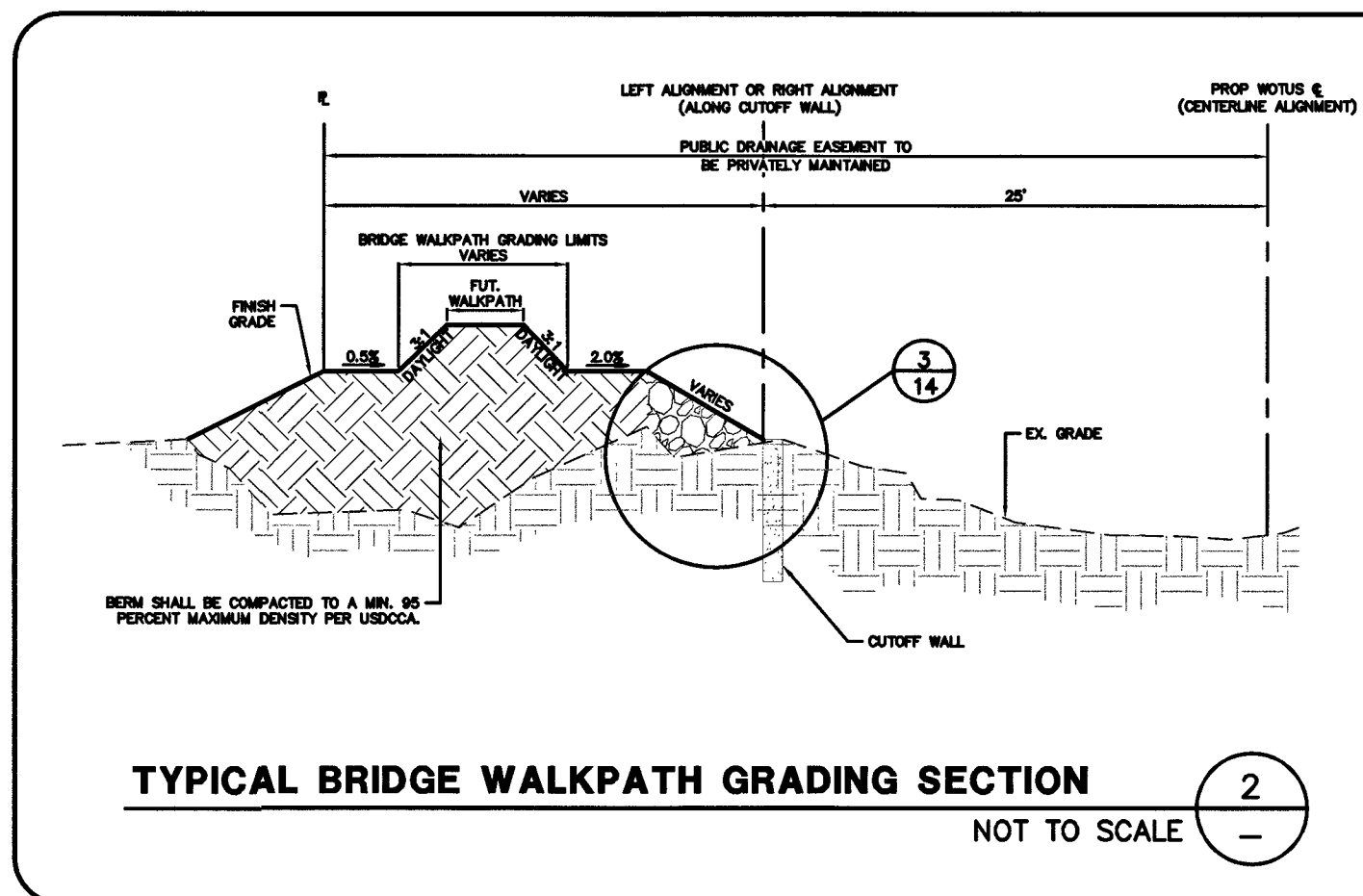
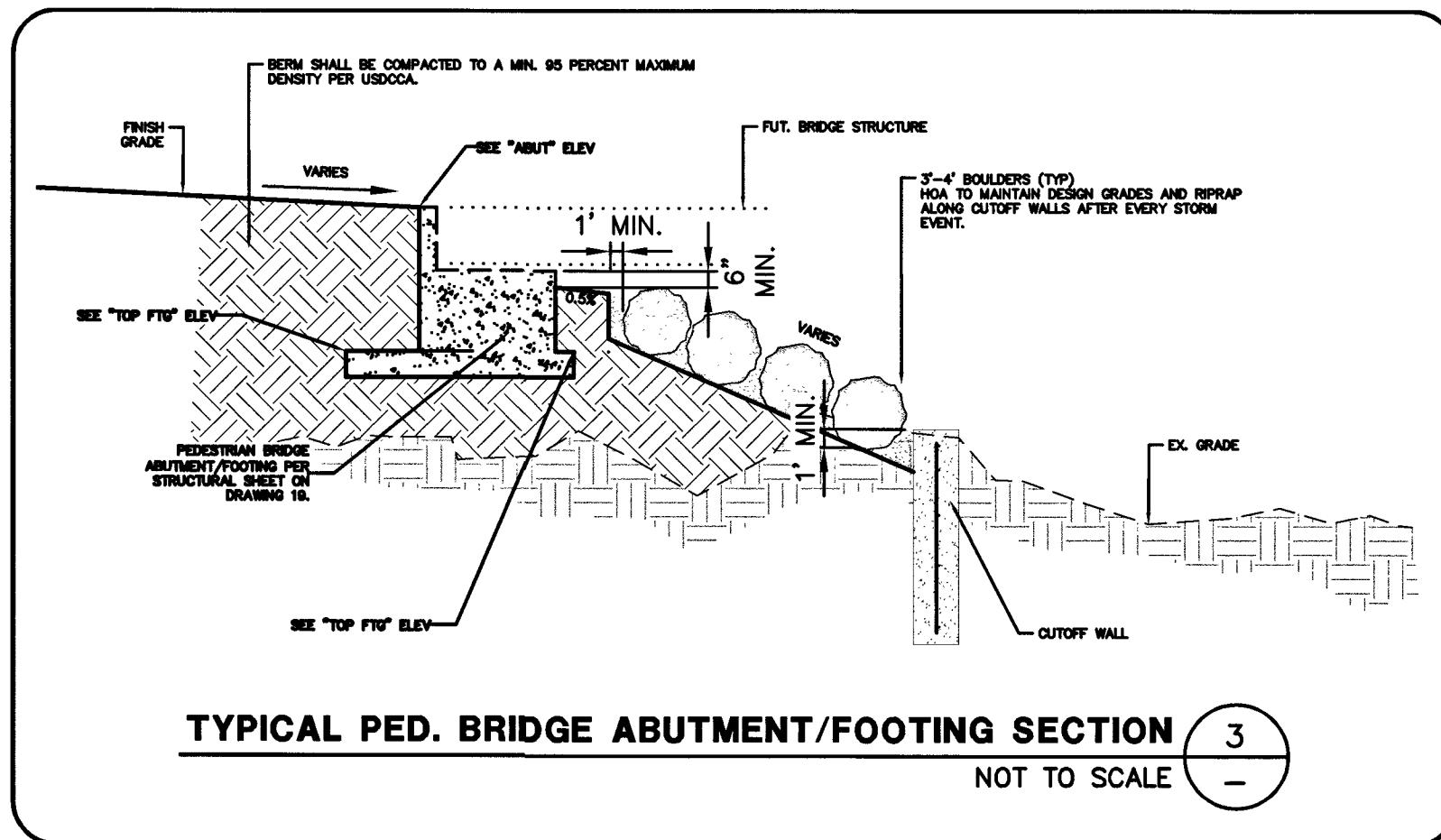
AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.

**CALL BEFORE
YOU DO
OVERHEAD**

1-702-227-2929

FAST
Call
before you
UnderGround
1-702-432-5300
FREEWAY AND ARTERIAL
SYSTEM OF TRANSPORTATION

CLV #107Y6769

[illegible][illegible]

PROJECT NO.	62024-232
DESIGN:	MDB
DRAWN:	MDB
CHECK:	JLL
PLOT DATE:	07-07-17
W9	
PLOT TIME:	10:41:41

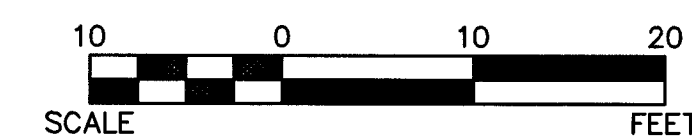
1555 S. RAINBOW BLVD.
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F: 702.804.2299
gcwengineering.com

GCL
ENGINEERS & SURVEYORS

THE HOWARD HUGHES COMPANY, LLC

**VILLAGE 24 - US WATERS
COS-2 WASH IMPROVEMENT PLANS**

PED. BRIDGE ABUTMENT/FOOTING DETAILS 1



2" CRUSHED ROCK/GRAVEL @ 95%

FAST
Call before you UnderGround
1-702-432-5300
FREeway and ARterial
SYSTEM of TRANSPORTATION

