LEGEND

- PROPOSED UTILITIES
- EXISTING UTILITIES
- FUTURE UTILITIES
- 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
- 2" G — EXISTING GAS LINE
- 2-6" E — EXISTING UNDERGROUND ELECTRICAL
- CATV — EXISTING CABLE TV
- TEL — EXISTING TELEPHONE
- OHP — 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 (OUTSIDE EDGE)
- C — CUT LIMIT LINE
- F — FILL LIMIT LINE

- 1 / CD1 — DRAWING NUMBER FOR DETAIL W/ REF. TO THE SHEET WHERE IT IS SHOWN
- XX / YYY — STANDARD DRAWING NUMBER / GOVERNING AGENCY
- BENCHMARK
- POTHOLE LOCATION
- EXISTING NVR RS-100
- EXISTING DROP INLET
- PROPOSED DROP INLET
- FUTURE DROP INLET
- EXISTING GATE VALVE
- PROPOSED GATE VALVE
- FUTURE GATE VALVE
- EXISTING WATER METER
- PROPOSED WATER METER
- EXISTING TRAFFIC SIGNAL PULL BOX
- PROPOSED SIGNAL PULLBOX
- EXISTING TELEPHONE MANHOLE
- EXISTING POWER POLE
- EXISTING ELEC MARKER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- FUTURE FIRE HYDRANT
- EXISTING UTILITY BOX
- EXISTING METER BOX
- 3005 — PROPOSED CONTOUR
- (3005) — EXISTING CONTOUR
- 60.50 TC — SPOT ELEVATION
- (60.50) TC — EXISTING SPOT ELEVATION
- [60.50] TC — FUTURE SPOT ELEVATION
- EXISTING CLARK COUNTY STREET LIGHT (STLT)
- 1.00% — ROAD SLOPE
- EXISTING SUMMERLIN STREET LIGHT (STLT)
- PROPOSED SUMMERLIN STREET LIGHT (STLT)
- TOP SLOPE / TOE SLOPE — 3:1 SLOPE UNLESS OTHERWISE NOTED ON PLAN

ABBREVIATIONS

A	AIR
AC	ASPHALT CONCRETE, ACRE
ACP	ASBESTOS CEMENT PIPE
ADD'L	ADDITIONAL
AP	ANGLE POINT
APN	ASSESSOR'S PARCEL NUMBER
APPROX	APPROXIMATELY
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVE	AVENUE
AVAR	AIR VALVE, AIR RELEASE ASSEMBLY
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BACK OF CURB
BCR	BEGIN CURB RETURN
BLM	BUREAU OF LAND MANAGEMENT
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOW-OFF
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
BW	BACK OF SIDEWALK
C, ℄	CENTERLINE
C&G	CURB AND GUTTER
CATV	UNDERGROUND CABLE TV
CCBM	CLARK COUNTY BENCH MARK
CCPW	CLARK COUNTY PUBLIC WORKS
CCTV	CLOSED-CIRCUIT TELEVISION
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT
CFS	CUBIC FEET PER SECOND
CIP	CAPITAL IMPROVEMENTS PROJECT, CORRUGATED IRON PIPE CAST IN PLACE
CIPM	CAST-IN-PLACE MANHOLE
CIPP	CAST-IN-PLACE PIPE
CIR	CIRCLE
CLR	CLEAR OR CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLV	CITY OF LAS VEGAS
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CNLV	CITY OF NORTH LAS VEGAS
CO	CLEANOUT
CONC	CONCRETE
COND	CONDUIT
CONST	CONSTRUCT OR CONSTRUCTION
COORD	COORDINATE
COR	CORNER
CPEP	CORRUGATED POLYETHELYNE PIPE
CT	COURT
CY	CUBIC YARD(S)
Δ	DELTA
DBL	DOUBLE
DCSWCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION)
DEFL	DEFLECTION
DG	DESIGN GRADE
DIA, ø	DIAMETER
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DR	DRIVE
DS	DOWNSPOUT
DTL	DETAIL
DW	DRIVEWAY
DWG	DRAWING
E	EAST
ECR	END CURB RETURN
ELE,ELEC	ELECTRICAL
ELEV	ELEVATION
EP, EOP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EXIST,EX	EXISTING
EXP	EXPANSION JOINT
FC	FACE OF CURB
FF, FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE

FH	FIRE HYDRANT
FL	FLOW LINE
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FINISH SURFACE
FT	FOOT/FEET
FTG	FOOTING
FUT	FUTURE
G	GAS
GA	GAGE, GUY ANCHOR
GB	GRADE BREAK
GND	GROUND
GRD	GRADE, GROUND
H, HGT	HEIGHT
HDWL	HEADWALL
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HIGH POINT, HIGH PRESSURE
HPS	HIGH PRESSURE SODIUM
IBC	INTERNATIONAL BUILDING CODE
INV	INVERT
INT	INTERIM
JT	JOINT
L	LENGTH
L, LT	LEFT
LF	LINEAR FEET
LIP	LIP OF GUTTER
LN	LANE
LP	LIGHT POLE
LSCP	LANDSCAPE
LVVWD	LAS VEGAS VALLEY WATER DISTRICT
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MLCP	MORTAR LINED AND COATED PIPE
MP	MESA PARK
MOD	MODIFY/MODIFIED
MON	MONUMENT
MPH	MILES PER HOUR
N	NORTH
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION
NO	NUMBER
NOSHA	STATE OF NEVADA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
NVE	NEVADA ENERGY
NTS	NOT TO SCALE
OB	OVERBUILD
OC	ON CENTER
OHC	OVERHEAD COX COMMUNICATION
OHP	OVERHEAD POWER LINE
P	POWER LINE
PB	PULL BOX
PBS	PLANTMIX BITUMINOUS SURFACE
PC	POINT OF CURVE, PRESSURE CLASS
PCC	POINT OF COMPOUND CURVE
PE	PROJECT ENGINEER OR POLYETHYLENE
PED	PEDESTRIAN
PGL	PROFILE GRADE LINE
PH	POTHOLE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
ℙ	PROPERTY LINE
PLCP	POLYURETHANE LINED AND COATED STEEL PIPE
PMF	PAVEMENT MARKING FILM
POB	POINT OF BEGINNING
POC	POINT ON CURVE
P.O.C.	POINT OF CONNECTION
POT	POINT ON TANGENT
PP	POWER POLE
PROP	PROPOSED
PRC	POINT OF REVERSE CURVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PZ	PRESSURE ZONE
R, RAD	RADIAL, RADIUS
R, RT	RIGHT

RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REC	RECTANGULAR
REF	REFERENCE
REINF	REINFORCED
REQD	REQUIRED
RIM	TOP OF RIM ELEVATION
RND	ROUND
ROW,R/W	RIGHT OF WAY
RP	RADIUS POINT
RPM	RAISED PAVEMENT MARKERS
RSGV	RESILIENT SEAT GATE VALVE
S	SOUTH
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SECT	SECTION
SF	SQUARE FOOT/FEET
SHLDR	SHOULDER
SHT	SHEET
SIS	SUMMERLIN IMPROVEMENT STANDARDS
SL	STREET LIGHT
SP	SERVICE POINT
SQ	SQUARE
SR	SEWER RECLAIM MAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STA	STATION
ST	STREET
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURE
SVZ	SIGHT VISIBILITY ZONE
SW	SIDEWALK
SWG	SOUTHWEST GAS
T	TELEPHONE OR TOP
TAN	TANGENT
TB	TOP OF BERM
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION ESMT
TEL,TELE	TELEPHONE
TEMP	TEMPORARY
TF	TOP OF FOOTING
TG	TOP OF GRATE
TMH	TOP OF MANHOLE
TOP	TOP OF PIPE
TP	TELEPHONE POLE
TRANS	TRANSITION
TRN	TRANSITION
TRW	TOP OF RETAINING WALL
TS	TRAFFIC SIGNAL
TW	TOP OF WALL
TYP,(TYP)	TYPICAL
UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)
UG	UNDERGROUND
ULT	ULTIMATE
USD	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
USDCCA	UNIFORM STD. DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION)
UT	UNDERGROUND TELEPHONE
VAR	VARIABLE/VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VG	VALLEY GUTTER
VOL	VOLUME
W	WATER, WEST
W/	WITH
WS	WATER SUPPLY
WT	WEIGHT
WTR	WATER
XING	CROSSING
YD	YARD, YARD DRAIN
Z	PRESSURE ZONE

IMPROVEMENT NOTES:

1/I INSTALL "A" TYPE ISLAND CURB PER SIS DWG NO. S-50
2/I INSTALL "L" TYPE CURB & GUTTER PER SIS DWG NO. S-47
3/I INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
4/I INSTALL HANDICAP RAMP CURB DEPRESSION
5/I VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION
6/I SAWCUT AND REPLACE EXISTING A.C. PAVEMENT
7/I INSTALL CONCRETE ENCASEMENT PER UDACS 2.22.01 AND 2.2202
8/I EXISTING RIPRAP TO BE REMOVED
9/I INSTALL "L" TYPE ISLAND CURB PER USD DWG NO. 219
10/I RELOCATE WATER APPURTENANCES (VALVES TO REMAIN ACCESSIBLE AT ALL TIMES)

WATER CONSTRUCTION NOTES:

1/W INSTALL FIRE HYDRANT & ASSEMBLY PER UDACS PLT. NO. 39 & 40
2/W INSTALL TEE/CROSS PER UDACS PLT. NO. 31 (*)
3/W INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR ∠) (*)
4/W INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
5/W INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
6/W INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
7/W 1° MAX. DEFLECTION (PVC), 2.5° MAX. DEFLECTION (DIP)
8/W INSTALL STEEL CASING PER UDACS PLT. 22 & 23
9/W INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (*)
10/W REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
11/W INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
12/W INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
13/W INSTALL 1 1/2" TYPE K COPPER W/SERVICE SADDLE, 1 1/2" METER & 1 1/2 RPPA PER UDACS PLATE NO. 4 & 8.

* SEE PLANS AND MAKE NOTE OF ATTACHED PIPE SIZE FOR TEE, BEND, GATE VALVE, REDUCER AND CAP SIZES

SEWER CONSTRUCTION NOTES:

1/S INSTALL 48" SEWER MANHOLE PER DCSWCS SD-1A, SD-1B & SD-4 WITH SINGLE COVER
1A/S INSTALL 60" SEWER MANHOLE PER DCSWCS SD-1A, SD-1B & SD-4 WITH SINGLE COVER
1B/S INSTALL 72" SEWER MANHOLE PER DCSWCS SD-1A, SD-1B & SD-4 WITH SINGLE COVER (4)
2/S INSTALL TEMPORARY PLUG AND CAP SEWER STUB
3/S REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE
4/S INSTALL CORROSION PROTECTION PER DCSWCS 3.16.8B AND 4.9.9

STORM DRAIN CONSTRUCTION NOTES:

1/SD INSTALL TYPE "CM2" DROP INLET PER USD DWG. NO. 412.1 AND 421
2/SD INSTALL TYPE I 60" MANHOLE PER USD DWG. NO. 403
3/SD INSTALL TYPE III MANHOLE PER USD DWG. NO. 406
4/SD INSTALL TYPE II-SD MANHOLE PER USD DWG. NO. 405.2
5/SD INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
6/SD INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
7/SD CULVERT HEADWALL (SEE DETAIL 1 ON SHEET 48)
8/SD REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE

** CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE

IRRIGATION CONSTRUCTION NOTES:

1/IR BANK "A": 1-6" & 2-4" SCH 40 PVC PER DETAIL 1 ON SHEET 34
2/IR BANK "B" : 2-4" SCHD. 40 PVC PER DETAIL 2 ON SHEET 34

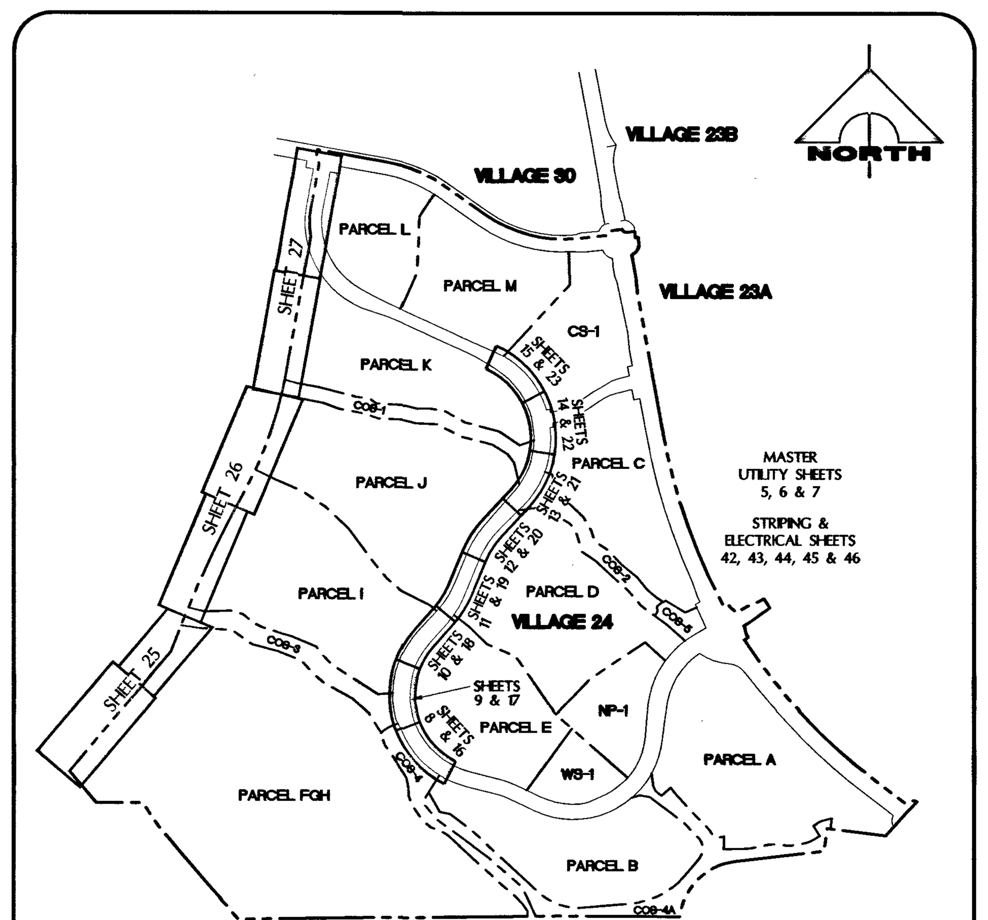
DEVIATIONS FROM STANDARDS

1. ADD RAISED MEDIAN TO NEIGHBORHOOD COLLECTOR LEVEL 2 (PER S.I.S. DWG NO S-6) TO ENHANCE MARKETING AND SALES ENTRIES INTO VILLAGE 24. RIGHT-OF-WAY (BC-BC) EXPANDS TO 67.34 FEET TO 84.00 FEET (AS MEDIAN ISLAND VARIES), IN LIEU OF 54.00 FEET. TRAVEL LANES REMAIN UNCHANGED.
2. REDUCE LANDSCAPE MEDIAN ISLAND IN FUTURE "GATED" PARCEL ENTRIES (PER S.I.S. DWG NO S-12A) FROM 15.00 FEET TO 13.34 FEET, IN EXCHANGE FOR WIDER COMMON AREAS WHICH ARE PROPOSED 20 FEET WIDE IN LIEU OF 15 FEET. THIS ADDITIONAL AREA WILL BE UTILIZED FOR GRADING AND SLOPE ADJUSTMENTS. CORRESPONDINGLY, THE RIGHT-OF-WAY IS REDUCED FROM 64.00 FEET TO 61.34 FEET. TRAVEL LANES REMAIN UNCHANGED.
3. STREET LIGHTS, AT ALL FUTURE PARCEL ENTRIES, WILL BE SET AT 10 FEET OUTSIDE OF BCR AND 2.5 FEET OF BC (IN LIEU OF LOCATIONS SET PER S.I.S. E-16 FOR MEANDERING SIDEWALK). THIS WILL ALLOW ADJUSTMENTS TO PARCEL ENTRIES WITHOUT AFFECTING STREET LIGHT LOCATIONS.

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

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
OR 1-800-227-2600
AND CLARK COUNTY TRAFFIC OPERATIONS 1-702-455-6000

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



LOCATION/SHEET INDEX MAP

NOTES TO CONTRACTOR:

1. ALL EXISTING UTILITY CROSSINGS MUST BE VERIFIED PRIOR TO CONSTRUCTION OF ANY MAIN LINES OR LATERALS THAT MAY BE ADVERSELY AFFECTED. ANY DISCREPANCIES IN LOCATION AND/OR ELEVATION MUST BE PROVIDED TO THE ENGINEER FOR ACCEPTANCE PRIOR TO CONSTRUCTION.
2. ALL COMMON LOTS AS SHOWN HEREIN TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN H.O.A. A FUTURE MEANDERING SIDEWALK WILL BE INSTALLED BY SUMMERLIN AS REQUIRED TO SERVICE THE DEVELOPMENT OF EACH PARCEL.
3. ALL WATER LINE GATE VALVES, SERVICE GATE VALVES, AND FIRE HYDRANT GATE VALVES ARE TO BE CONSTRUCTED UNDER A.C. PAVEMENT. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ALL WATER VALVE CANS DO NOT CREATE CONFLICTS WITH THE PROPOSED CURB LINE PRIOR TO PLACEMENT OF CONCRETE. ALL WATER FACILITIES SHOWN IN THESE DRAWINGS HAVE BEEN "SCALED-UP" FOR CLARITY ONLY.

SUMMERLIN STREET CLASSIFICATION

CROSSBRIDGE DRIVE: NEIGHBORHOOD COLLECTOR LEVEL 1 AND LEVEL 2 WITH SHARED BIKE LANES

STREET QUANTITIES (PUBLIC)

STREETS	
3" A.C. PAVEMENT	22,131 S.Y.
4" TYPE II AGGREGATE	2,871 C.Y.
8" TYPE "A" ISLAND CURB	3,883 L.F.
6" TYPE "L" CURB & GUTTER	7,466 L.F.
EXCAVATION	10,990 C.Y.
EMBANKMENT	133,591 C.Y.
ADJUST EXISTING FACILITIES TO GRADE	0 EA.
STREET LIGHTS	
SINGLE ARM ST. LT.	14 EA.
DOUBLE ARM ST. LT.	11 EA.
CONDUIT	5,108 L.F.
IRRIGATION	
IRRIGATION SLEEVES – BANK "A"	271 L.F.
IRRIGATION SLEEVES – BANK "B"	138 L.F.

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

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)

APPROVED FOR CONSTRUCTION 1st App'd 12/23/15 (4)
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. 123547 DATE: 9/27/16

STATE OF NEVADA — PROFESSIONAL ENGINEER — JOSHUA L. JOHNSON — CIVIL — No. 15789
DATE: 09/21/2016

REV	DATE	DESCRIPTION	DATE	AGEN APP	DATE	GCW APP
4	09/14/16	ADDED METERS & IRRIGATION SLEEVES, REVISED SEWER MANHOLES	10/11/16	SB		
1	01/22/16	SPLIT CONSTRUCTION OF WATER MAINS INTO PHASES				

PROJECT NO. 62024-222
DESIGN: GCW
DRAWN: GCW
CHECK: JLJ
PLOT DATE: 09-21-16
PLOT TIME: 07:41:29

G. C. WALLACE COMPANIES
ENGINEERS | PLANNERS | SURVEYORS
1555 S. RAINBOW BLVD · LAS VEGAS, NV 89146
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F:\Projects\600\62024-222\DWG\Production\24CB2c02_PD.dwg
Lupe Gracia

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 2
IMPROVEMENT PLANS
PROJECT DATA SHEET

DRAWING 2
107V6535
H#62303
2 OF 53 SHTS

SID NO. 812 PROJECT 9A, 9B AND 10A PROJ#:123547 AGR#: 115478 QS:137-33-SE XC 11081

gcw2436.dwg.070203.jav