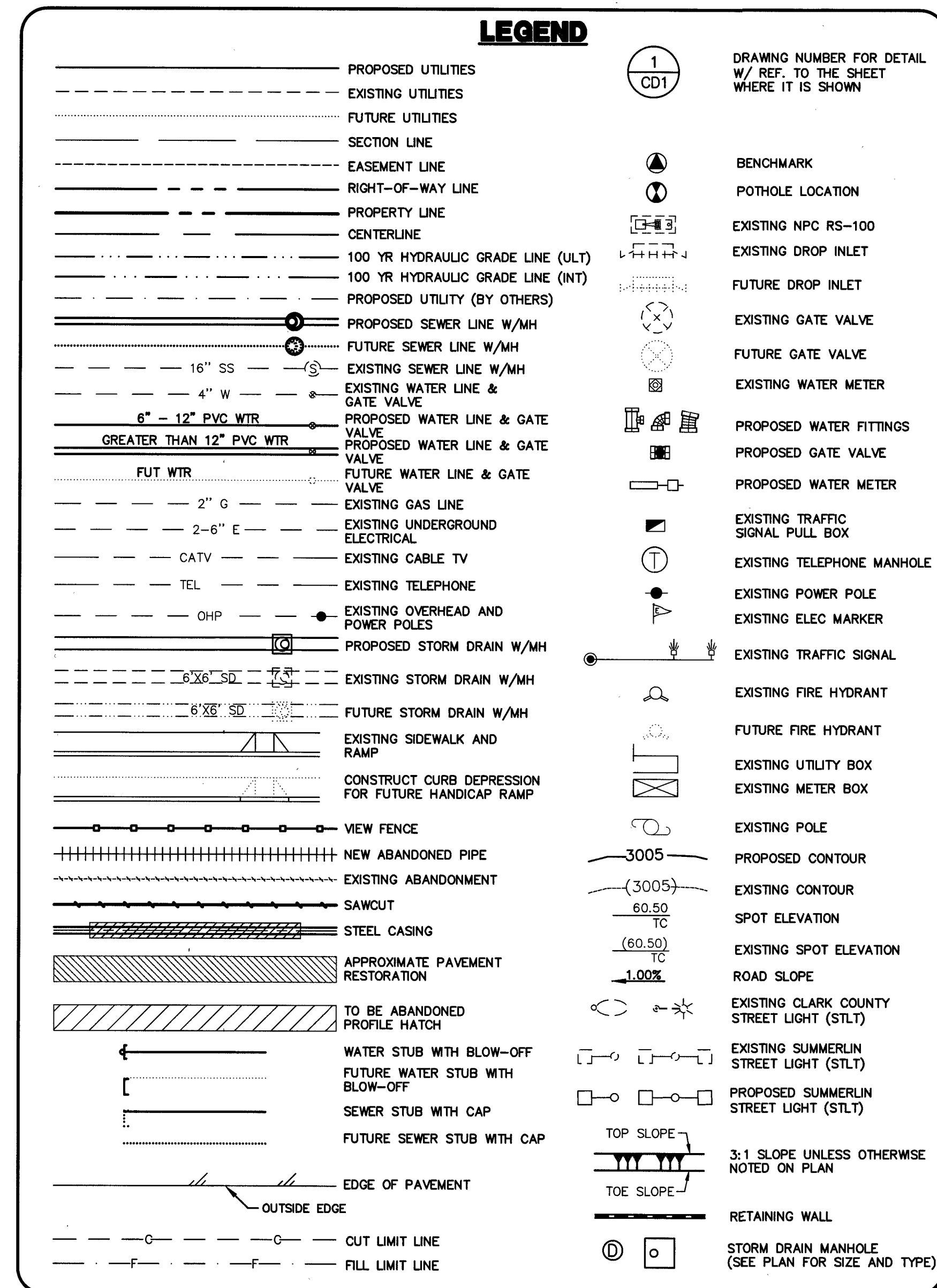




ABBREVIATIONS

A	AIR	FL	FIRE FLOW	R, RT	RIGHT
AC	ASPHALT CONCRETE, ACRE	FL	FLOW LINE	RCB	REINFORCED CONCRETE BOX
ACP	ADDITIONAL	FO	FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE
ADD'L	ADDITIONAL	FRP	FIBERGLASS REINFORCED PLASTIC	RD	ROAD
AP	ANGLE POINT	FS	FINISH SURFACE	RDWY	ROADWAY
APN	ASSESSOR'S PARCEL NUMBER	FT	FOOT/FEET	REC	RECTANGULAR
APPROX	APPROXIMATELY	FTG	FOOTING	REF	REFERENCE
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	FUT	FUTURE	REINF	REINFORCED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GAS	GAGE, GUY ANCHOR	REQD	REQUIRED
AVAR	AIR VALVE, AIR RELEASE	GA	GRADE BREAK	RIM	TOP OF RIM ELEVATION
AWWA	AMERICAN WATER WORKS ASSOCIATION	GB	GRADE	RND	ROUND
BC	BACK OF CURB	GND	GROUND	ROW, R/W	RIGHT OF WAY
BCR	BEGIN CURB RETURN	GRD	GRADE, GROUND	RP	RADIUS POINT
BLM	BUREAU OF LAND MANAGEMENT	H, HGT	HEIGHT	RPM	RAISED PAVEMENT MARKERS
BLVD	BOULEVARD	HDWL	HEADWALL	RSVG	RESILIENT SEAT GATE VALVE
BM	BENCHMARK	HGL	HYDRAULIC GRADE LINE	S	SEWER, SOUTH
BO	BLOW-OFF	HORIZ	HORIZONTAL	SD	SCHEDULE
BVC	BEGIN VERTICAL CURVE ELEVATION	HP	HIGH POINT, HIGH PRESSURE	SDH	STORM DRAIN
BVCS	BEGIN VERTICAL CURVE STATION	HPS	HIGH PRESSURE SODIUM	SDMH	STORM DRAIN MANHOLE
BVP	BEGIN VERTICAL POINT	IBC	INTERNATIONAL BUILDING CODE	SECT	SECTION
BW	BACK OF SIDEWALK	INVT	INVERT	SF	SQUARE FOOT/FEET
C, E	CENTERLINE	INT	INTERM	SHLDR	SHOULDER
C&G	CURB AND GUTTER	JOINT	JOINT	SHT	SHEET
CATV	CABLE AND GUTTER	L	LENGTH	SIS	SUMMERLIN IMPROVEMENT
CCBM	CLARK COUNTY BENCH MARK	L, LT	LEFT	SL	STANDARDS
CCPW	CLARK COUNTY PUBLIC WORKS	LP	LINEAR FEET	SP	STREET LIGHT
CCTV	CLOSED-CIRCUIT TELEVISION	LP	UP OF GUTTER	SQ	SQUARE
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	LN	LANE	SR	SEWER RECLAIM MAIN
CFS	CUBIC FEET PER SECOND	LSC	LANDSCAPE	SS	SANITARY SEWER
CIP	CAPITAL IMPROVEMENTS PROJECT, MONUMENT	LVWD	LAS VEGAS VALLEY WATER DISTRICT	SSMH	SANITARY SEWER MANHOLE
CPM	CURED-IN-PLACE MANHOLE	MAX	MAXIMUM	STA	STATION
CPI	CURED-IN-PLACE PIPE	MH	MANHOLE	ST	STREET
CIR	CIRCLE	MIN	MINIMUM	STD	STANDARD
CLR	CLEAR OR CLEARANCE	MCLP	MORTAR LINED AND COATED PIPE	STL	STEEL
CLSM	CONTROLLED LOW STRENGTH MATERIAL	MP	MESA PARK	STRUCT	STRUCTURE
CLV	CITY OF LAS VEGAS	MOD	MODIFY/MODIFIED	SVZ	SIGHT VISIBILITY ZONE
OMP	CORRUGATED METAL PIPE	MON	MONUMENT	SW	SIDEWALK
CMU	CONCRETE MASONRY UNIT	MPH	MILES PER HOUR	SWG	SOUTHWEST GAS
CNLV	CITY OF NORTH LAS VEGAS	N	NORTH	T	TELEPHONE OR TOP
CONC	CONCRETE	NDOT	NEVADA DEPARTMENT OF TRANSPORTATION	TAN	TANGENT
COND	CONDUIT	NO	NUMBER	TB	TOP OF BERM
CONST	CONSTRUCT OR CONSTRUCTION	NOSHA	STATE OF NEVADA OCCUPATIONAL SAFETY AND HEALTH	TC	TEMPORARY CONSTRUCTION ESMT
COORD	COORDINATE	NTS	NOT TO SCALE	TELE	TELEPHONE
COR	CORNER	NVE	NEVADA ENERGY	TEMP	TEMPORARY
CPPE	CORRUGATED POLYETHYLENE PIPE	OB	OVERBUILD	TF	TOP OF FOOTING
CT	COURT	OC	ON CENTER	TG	TOP OF GRADE
CY	CUBIC YARD(S)	OHC	OVERHEAD COX COMMUNICATION	TMH	TOP OF MANHOLE
DBL	DOUBLE	OHP	OVERHEAD POWER LINE	TOP	TOP OF PIPE
DCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION)	PB	POWER LINE	TP	TELEPHONE POLE
DCSWS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION)	PBS	PLANTMIX BITUMINOUS SURFACE	TRANS	TRANSITION
DEFL	DEFLECTION	PC	POINT OF CURVE, PRESSURE	TRW	TOP OF RETAINING WALL
DG	DESIGN GRADE	PCC	POINT OF COMPOUND CURVE	TS	TRAFFIC SIGNAL
DIA, Ø	DIAMETER	PE	PROJECT ENGINEER OR POLYETHYLENE	TW	TOP OF WALL
DIP	DUCTILE IRON PIPE	PED	PEDESTRIAN	TYP, (TYP)	TYPICAL
DIST	DISTANCE	PGL	PROFILE GRADE LINE	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)
DS	DOWNSPOUT	PH	POT HOLE	UG	UNDERGROUND
DTL	DETAIL	PI	POINT OF INTERSECTION	USD	UNDERGROUND
DW	DRIVEWAY	PV	POST INDICATOR VALVE	USDOCA, COAUSD	ULTIMATE
DWG	DRAWING	PLCP	PROPERTY LINE	UT	UNDERGROUND TELEPHONE
E	EAST	PMF	PAVEMENT MARKING FILM	VAR	VARIABLE/VARIES
EOR	END CURB RETURN	POB	POINT OF BEGINNING	VC	VERTICAL CURVE
ELEV	ELEVATION	POC	POINT ON CURVE, POINT OF CONNECTION	VCP	VITRIFIED CLAY PIPE
ELEC	ELECTRICAL	POT	POINT ON TANGENT	VERT	VERTICAL
ELEV	ELEVATION	PP	POWER POLE	VG	VALLEY GUTTER
EP, EOP	EDGE OF PAVEMENT	PROP	PROPOSED	VOL	VOLUME
EST	EASEMENT	PRC	POINT OF REVERSE CURVE	W	WATER, WEST
EVC	END VERTICAL CURVE	PRV	POINT OF REVERSE VERTICAL CURVE	W/	WITH
EVP	END VERTICAL POINT	PSI	POUNDS PER SQUARE INCH	WMH	WATER MANHOLE
EXIST, EX	EXISTING	PT	POINT OF TANGENCY	WS	WATER SUPPLY
EXP	EXPANSION JOINT	PUE	PUBLIC UTILITY EASEMENT	WT	WEIGHT
FC	FACE OF CURB	PVC	POLYVINYL CHLORIDE	WTR	WATER
FF, FFE	FINISH FLOOR ELEVATION	PVMT	PAVEMENT	XING	CROSSING
FG	FINISH GRADE	PZ	PRESSURE ZONE	YD	YARD, YARD DRAIN
		R, RAD	RADIAL, RADIUS	Z	PRESSURE ZONE

ESTIMATED ROAD IMPROVEMENT QUANTITIES

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

PUBLIC

SAWCUT	127	LF
3" A.C. PAVEMENT	3,720	SY
4" TYPE II AGGREGATE BASE	1,065	CY
24" "L" TYPE CURB & GUTTER	1,663	LF
24" REVERSE "L" TYPE CURB & GUTTER	250	LF
6" "A" TYPE CURB	210	LF
24" "L" TYPE CURB & GUTTER (REMOVAL)	117	LF
PAVEMENT STRIPING (INTERIOR)	1,400	LF
IRRIGATION SLEEVES	227	LF
SITE SIGNAGE	10	EA
HANDICAP RAMP	2	EA
8' CROSS GUTTER	965	SF
EXCAVATION	2,811	CY
EMBANKMENT	27,823	CY

ACCESS ROAD

2" CRUSHED ROCK/GRAVEL	7,669	SY
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ESTIMATED WATER QUANTITIES

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

PUBLIC

12" PVC WATER	924	LF
6" PVC WATER	28	LF
HYDRANT ASSEMBLY W/ 6" VALVE & 12"x6" TEE	2	EA
12" GATE VALVE	3	EA
6" GATE VALVE	2	EA
1-1/2" METER & 1-1/2" RPPA	2	EA

ESTIMATED STORM DRAIN QUANTITIES

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

PUBLIC

18" RCP	47	LF
24" RCP	146	LF
60" RCP	90	LF
NDOT TYPE II SDDI	2	EA
DROP INLET - 5' MODIFIED "C"	1	EA
DROP INLET - 7.5' MODIFIED "C"	1	EA
60" SD MANHOLE	1	EA
RIPRAP (D50=8")	5	CY

ESTIMATED STREETLIGHT QUANTITIES

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

PUBLIC

STREET LIGHT, 32' SINGLE	11	EA
STREET LIGHT, 32' SINGLE FOUNDATION	11	EA
1-1/4" CONDUIT W/ WIRE & T&B	1,150	LF
#3-1/2 PULLBOX	10	EA
#5 PULLBOX	1	EA
SERVICE PEDESTAL	2	EA
NVE TRANSFORMER	1	EA

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

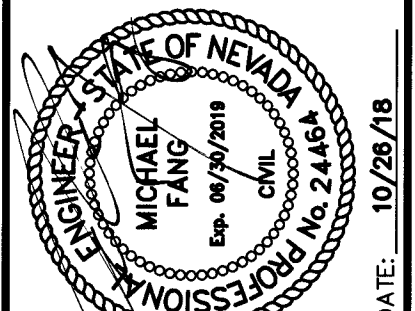
NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK

BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. 1	FND RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOON RD. AND SKY VALLEY DR. T20S.R59E.S34	3318.31 (FEET)	1,011.422 (METERS)

APPROVED FOR CONSTRUCTION

James H. Hedges
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135222 FIRST APPROVAL DATE: 12-10-18



PROJECT NO.	DATE	DESCRIPTION
62024-238	07/28/18	ENTRY ROAD IMPROVEMENT PLANS

DESIGN: LG/MF	CHECK: LG/MF
DRAWN: NPD/AS	PLOT DATE: 10-26-18
DATE: 10-26-18	TIME: 08:14:55

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

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS
PROJECT DATA SHEET

CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS" CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
2. DESIGN PROFESSIONAL AND CONTRACTOR SHALL VERIFY CITY'S LATEST LED FIXTURE SPECIFICATIONS AND APPROVED FIXTURES PER CLV WEBSITE, UNDER BUILDING AND SAFETY FORMS, PRIOR TO ORDERING MATERIALS.
3. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC ENGINEER AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE USS.
4. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE USS.
5. ALL EMPTY CONDUIT SHALL HAVE AT LEAST ONE GREEN NO. 88 AWG WIRE INSTALLED AS TRACER WIRE IN ACCORDANCE WITH SECTION 623 G.02.01 OF THE USS PRIOR TO BACKFILLING AND FINAL INSULATION.
6. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN COMPLIANCE WITH USD NO. 320A WHEN POLE IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
7. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
8. SERVICE POINT SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREETLIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED AT NO EXPENSE TO THE CITY OF LAS VEGAS.
10. THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.

REVISED 06/04/18 (LD VERSION)

CITY OF LAS VEGAS GRADING NOTES

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 |
7. REPORT COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
 8. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
 9. 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.
 10. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A SAFE AND USABLE CONDITION. THE PRESENCE 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.
 11. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THE OWNERS' PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

REVISED 4/15/10

LAS VEGAS VALLEY CONSTRUCTION STORMWATER RUNOFF MANAGEMENT - STANDARD NOTES

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 RIGHTS OF WAYS OF CLARK COUNTY 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 SPECIFIED IN CLARK COUNTY TITLE 24.40 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, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY: REFER TO NEVADA STORMWATER 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, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

CITY OF LAS VEGAS FIRE AND RESCUE GENERAL NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE #3623 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING WORK SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [IFC SECTION 105.7.12]
4. ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [IFC SECTION 3310, SECTION 3312]
5. TO IDENTIFY FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS. [IFC SECTION 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LOADING IS ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [IFC SECTION 106.3]
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [IFC SECTION 507.2.1, NFPA 24]
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [IFC SECTION 507]
9. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED. [IFC SECTION 507.5.7.1]
10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [IFC SECTION 507]
11. FIRE HYDRANTS SPACING SHALL BE AS FOLLOWS: [IFC SECTION C102] RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED. COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED.
12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1,000' FT SPACING. TO PROVIDE FOR TRANSPORTATION HAZARDS, WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES AND HAVE A TRAFFIC COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [IFC SECTION C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [IFC SECTION C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC SECTION C102.4]
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [IFC SECTION C102.7]
17. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [IFC SECTION C102.6]
18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN. [IFC SECTION C104]
19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. [IFC SECTION 503.2.3]
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [IFC SECTION 503.2.7, 503.2.8]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [IFC 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 IN. [IFC SECTION 503.2.1]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW-LINE TO FLOW-LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES, NOT LESS THAN 32 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD, NOT LESS THAN 24 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LINES THROUGH PARKING LOTS SHALL NOT BE LESS THAN 24 FT. [IFC SECTION 503.2.1.1]
24. A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL FO THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [IFC SECTION 503.1.1]
25. APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [IFC SECTION 503.1.2]
26. A DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [IFC SECTION 503.2.5]
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [IFC SECTION 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SIAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC SECTION 503.6 AND IFC APPENDIX M.

REVISED MARCH 1, 2016

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

LVVWD PROJECT # 135222
(REVISED 08/01/2017)

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASSING HEALTH WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2600
14. THE INSTALLATION OF LVVWD MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.
ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ADJUTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.
15. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

ADDITIONAL WATER NOTES:

1. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE #15.
2. ADJUST WATER VALVE BOX TO FINISHED GRADE PER UDACS PLATE #39. VALVE SHALL BE ACCESSIBLE AT ALL TIMES.
3. RELOCATE 6" MANUAL BLOW-OFF PER UDACS PLATE #37.
4. RELOCATE 4" COMBINATION AIR VALVE PER UDACS PLAT #38.
5. THE DISTRICT CANNOT GUARANTEE A WATERIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.
6. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE.
7. THIS PROJECT PROVIDES FOR THE INSTALLATION OF OFF-SITE MAINS ONLY, AND DOES NOT PROVIDE OR IMPLY ANY WATER COMMITMENT.
8. TREES, SHRUBS OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLIES AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.

WATER MAIN JOINT NOTES (DIP, 4"-12"):

DIP PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE TWO AND ONE-HALF (2.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 415 FEET, PER UDACS 2.07.03.

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

WATER MAIN JOINT NOTES (PVC, 4"-24"):

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02.

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

JOINT MATERIAL:

JOINT MATERIAL FOR THE PRECAST BOXES SHALL BE A PREFORMED JOINT MATERIAL MEETING ASTM C990, 6.2.1 (BUTYL RUBBER SEALANT). THE MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE MINIMUM SIZE OF JOINT SHALL BE 1-1/4 INCH. JOINT MATERIAL EXTRUDING FROM THE INTERIOR OF THE JOINT SHALL BE REMOVED FLUSH WITH THE BOX WALL.

EXISTING UTILITY NOTE:

EXISTING UTILITIES SHOWN HEREIN ARE APPROXIMATE ONLY AND MAY NOT SHOW ALL EXISTING FACILITIES WITHIN THE PROJECT AREA. CONTRACTOR MUST FIELD VERIFY AND POTHOLE EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO BEGINNING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE PROTECTED IN PLACE DURING CONSTRUCTION UNLESS OTHERWISE NOTED ON DRAWINGS. CONTACT UTILITY COMPANIES AT LEAST 24 HOURS PRIOR TO INTERRUPTION OF SERVICE.

MANHOLE RIM NOTE:

MANHOLE RIM ELEVATIONS ARE PROVIDED FOR ESTIMATING PURPOSES ONLY. ALL MANHOLE RIMS AND COVERS MUST BE ADJUSTED TO MATCH FINISH GRADE AT TIME OF CONSTRUCTION.

CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICADEING, AND TRAFFIC DEVIATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCED WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS. EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS COMPLETED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. 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 LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW SIGNS SHALL UTILIZE TYPE X RETROREFLECTIVE SHEETING IN ACCORDANCE WITH CCAUSS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM THAT IS A MATCHING COMPONENT TO, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL 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.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR OR HIS AGENT SHALL BE REQUIRED TO ATSSA TRAFFIC CONTROL TECHNICIAN OR IMSA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT-OF-WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA (RTC), IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY REPLACEMENT OF STOP.
13. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE #828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS OTHERWISE DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
15. CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT FINISHES, MARKINGS AND SIGNAGE THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

REVISED 06/04/18

SOUTHWEST GAS CONSTRUCTION NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-880-6020
2. THERE SHALL BE A MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 12-INCHES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC.
3. FOR VALVE ADJUSTMENT CONTACT 702-688-6107 48 HOURS PRIOR TO CONSTRUCTION.
4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099.

SOUTHWEST GAS APPROVAL

[Signature] 10/29/18
SOUTHWEST GAS CORPORATION DATE

FLOOD ZONE NOTE

SITE LOCATED ON THE FEDERAL EMERGENCY AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) CONTAINING COMMUNITY PARCEL NUMBER 32003C 2150C DATED SEPTEMBER 27, 2002. THE FIRM SHOWS THAT THE PROJECT AREA WITHIN A 200' X 200' AREA AS BEING OUTSIDE THE 500-YEAR FLOODPLAIN AND NOT LOCATED WITHIN FEMA DESIGNATED SPECIAL FLOOD ZONE HAZARD AREA (SFHA).

APPROVED FOR CONSTRUCTION

[Signature] 10/31/18
CITY OF LAS VEGAS FIRE DEPARTMENT DATE

APPROVED FOR CONSTRUCTION

[Signature]
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135222 FIRST APPROVED DATE: 12-10-18

Call before you Dig
Avoid cutting underground utility lines. IT'S COSTLY.

Call 811

OR

1-800-227-2600

CALL BEFORE YOU DIG
OVERHEAD

Avoid hitting overhead power lines. IT'S COSTLY.

Call before you Dig

UnderGround
1-702-432-5300

Freeway and Arterial System of Transportation (FAST)

CITY OF LAS VEGAS GENERAL NOTES

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 WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES 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 ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS 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 TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED TO ORIGINAL SATISFACTION BY THE CONTRACTOR AND 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 DESIGN TO BE APPROVED BY 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' 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 SHALL BE REMOVED AND REPLACED PER USD 216.
 10. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER USD 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
 11. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INCREASED AND FOR INCREASED NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
 12. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORTS AS PREPARED BY NOVA GEOTECHNICAL & INSPECTION SERVICES, REPORT # G-18-013, DATE MARCH 13, 2018, APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
 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 RELOCATION.
 14. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
 15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- 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.
 17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, SEWER CLEANOUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
 19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT AND CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
 20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE OFFSITE INSPECTOR AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
 21. AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLV OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
 22. CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED FOR THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADDITION.
 23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

DEVIATION FROM STANDARDS

NONE

PROJECT NO. 62024-238

DESIGN: LG/AF

DRAWN: NPD/AS

CHECK: LG/AF

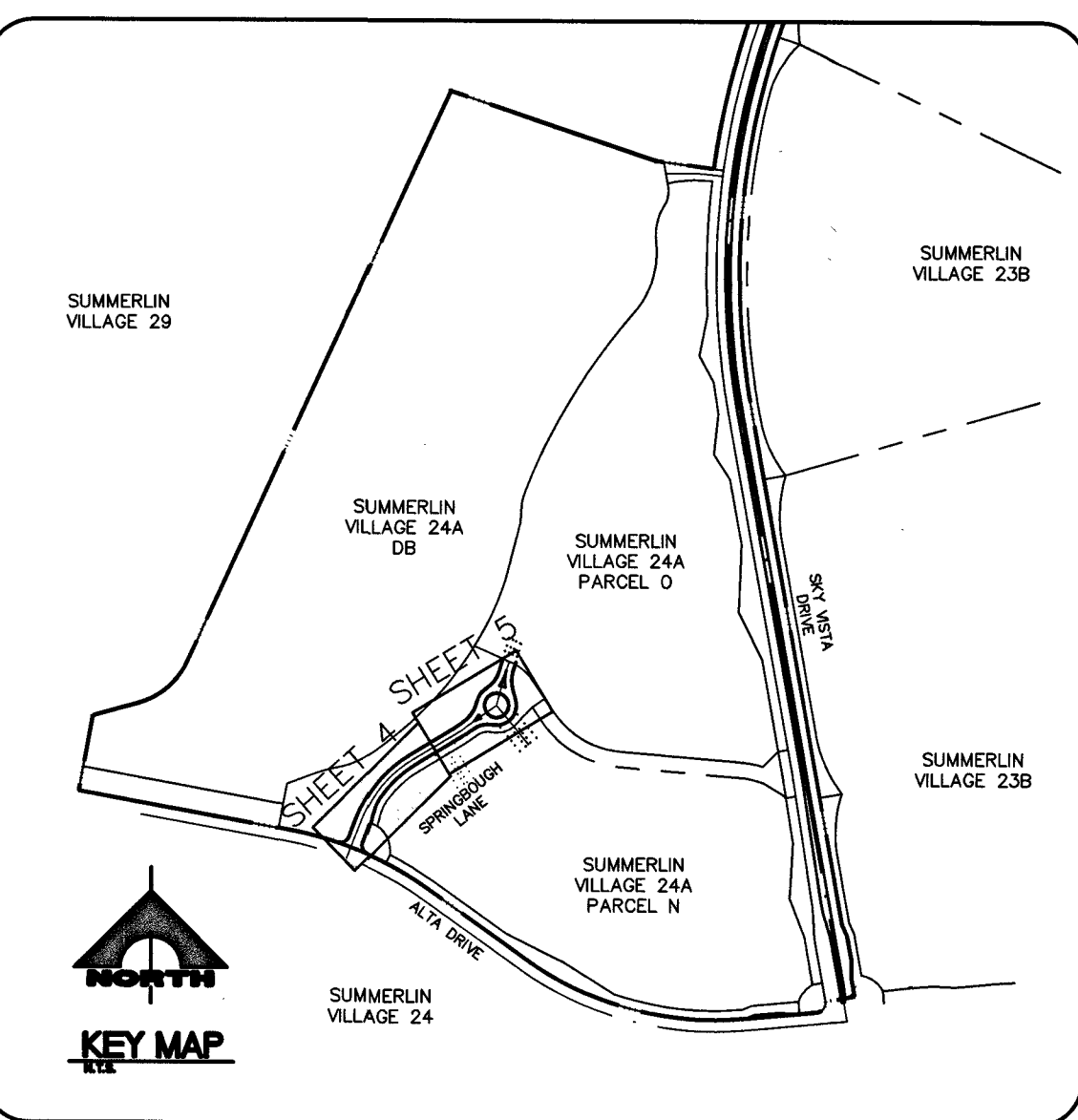
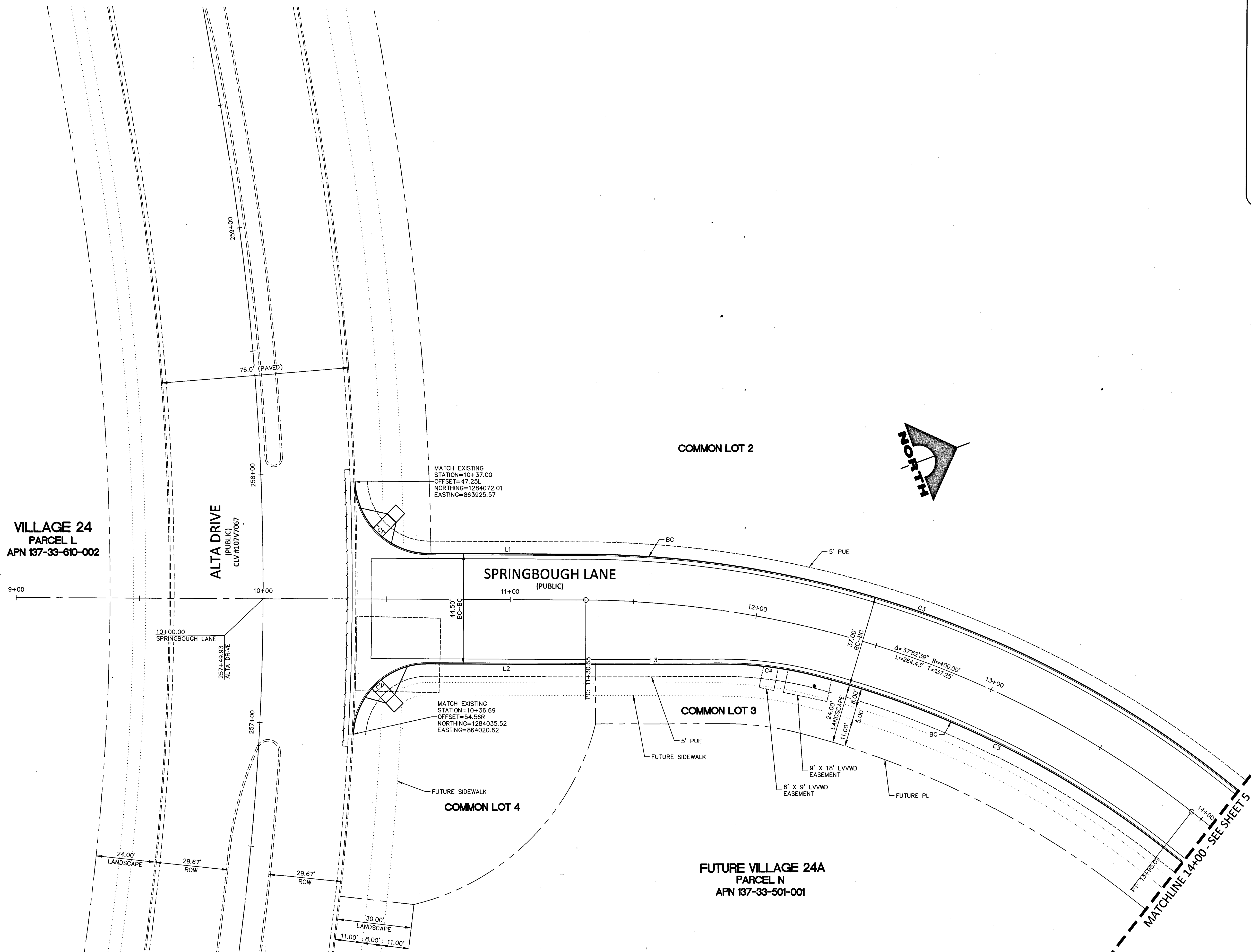
PLOT DATE: 10-26-18

PLOT TIME: 08:15:03

REV

DESCRIPTION

DATE



LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	63.66'	N20°49'37"E
L2	64.00'	S20°49'37"W
L3	55.22'	N20°19'24"E

CURVE TABLE				
CURVE #	LENGTH	RADIUS	TANGENT	DELTA
C1	45.88'	30.00'	28.78'	87°37'13"
C2	45.68'	30.00'	28.59'	87°15'07"
C3	276.66'	418.50'	143.60'	37°52'39"
C4	38.32'	150.00'	19.27'	14°38'18"
C5	158.09'	381.50'	80.19'	23°44'33"

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000.00 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM #	DESCRIPTION	NAVD 83 DATUM	NAVD 88 DATUM
CLV BM No. 7LV09345WB	FND RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOON RD. AND SKY VISTA DR. T205,R59E,S34	3318.31 (FEET)	1,011.422 (METERS)

SPRINGBOUGH LANE (PUBLIC)

HORIZ SCALE: 1" = 20'



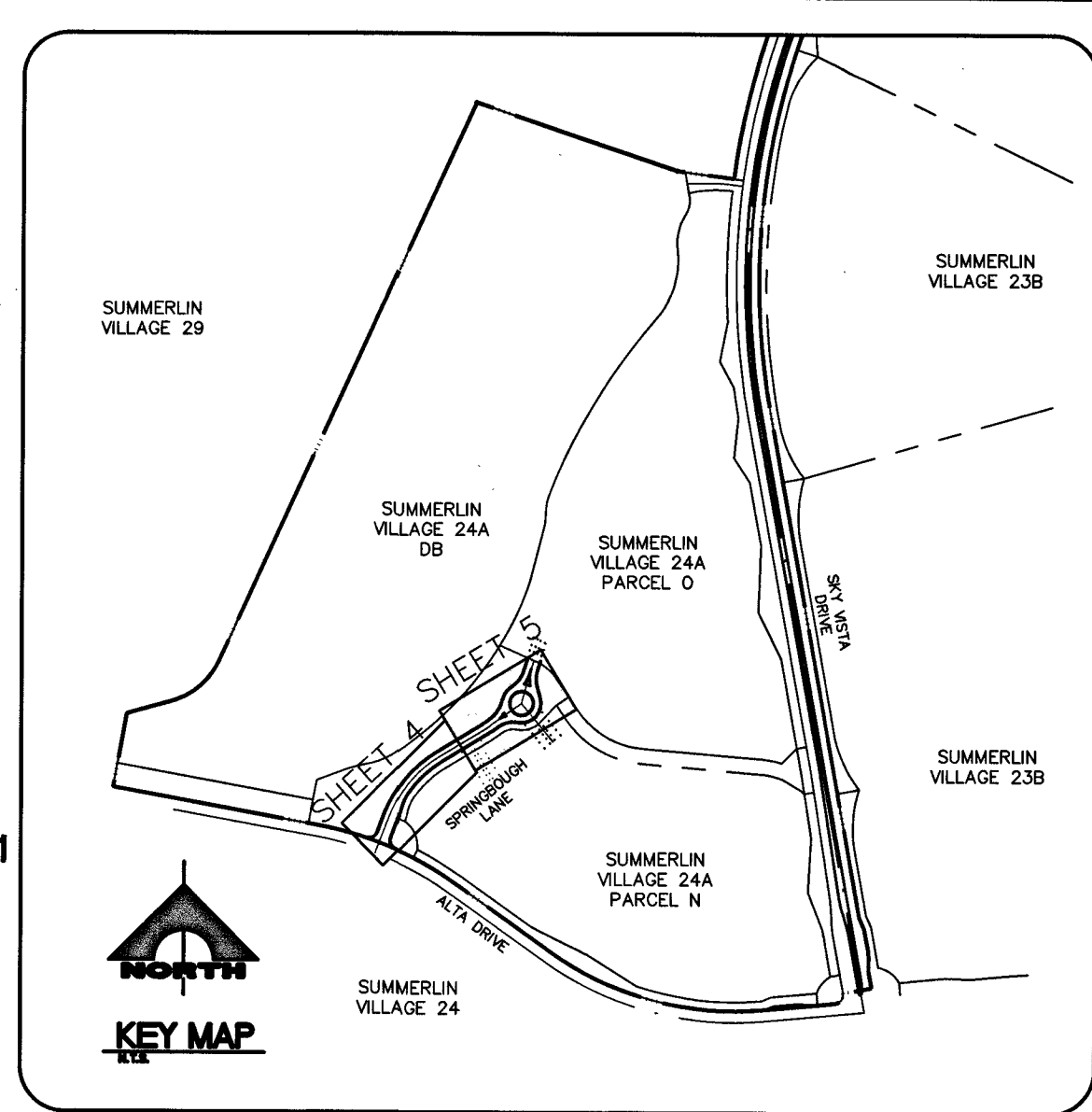
PROJECT NO. 62024-238
DESIGN: LG/MF
DRAWN: NPD/AS
CHECK: LG/MF
PLOT DATE: 12-04-18
PLOT TIME: 11:01:37

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

GCV
ENGINEERS & SURVEYORS

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS
HORIZONTAL CONTROL PLAN 1

DRAWING
4
4 OF 20 SHTS



CURVE TABLE				
CURVE #	LENGTH	RADIUS	TANGENT	DELTA
C6	19.80'	318.50'	9.90'	3'33"42"
C7	53.81'	281.50'	26.99'	10°57'09"
C8	60.97'	80.00'	32.05'	43°39'48"
C9	64.35'	110.00'	33.12'	33°30'57"
C10	129.95'	65.00'	101.14'	114°32'48"
C11	47.87'	65.00'	25.08'	42°11'41"
C12	56.62'	100.00'	29.09'	32°26'31"
C13	65.03'	100.00'	33.71'	37°15'43"
C14	2.77'	1.33'	2.28'	119°23'00"
C15	22.84'	131.17'	11.45'	9°58'35"
C16	0.90'	0.33'	1.59'	156°36'00"
C17	22.39'	101.17'	11.24'	12°40'55"
C18	2.71'	1.33'	2.16'	116°45'15"
C19	11.46'	65.17'	5.75'	10°04'44"
C20	2.76'	1.33'	2.26'	119°06'03"
C21	18.93'	65.17'	9.53'	16°38'43"
C22	2.88'	1.33'	2.51'	124°10'03"
C23	55.02'	121.17'	27.99'	26°01'04"
C24	2.61'	0.83'	INFINITY'	180°00'00"
C25	43.58'	121.17'	22.03'	20°36'20"

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FT/US)

DATE (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR

STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N

LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W

NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FT/US)

EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FT/US)

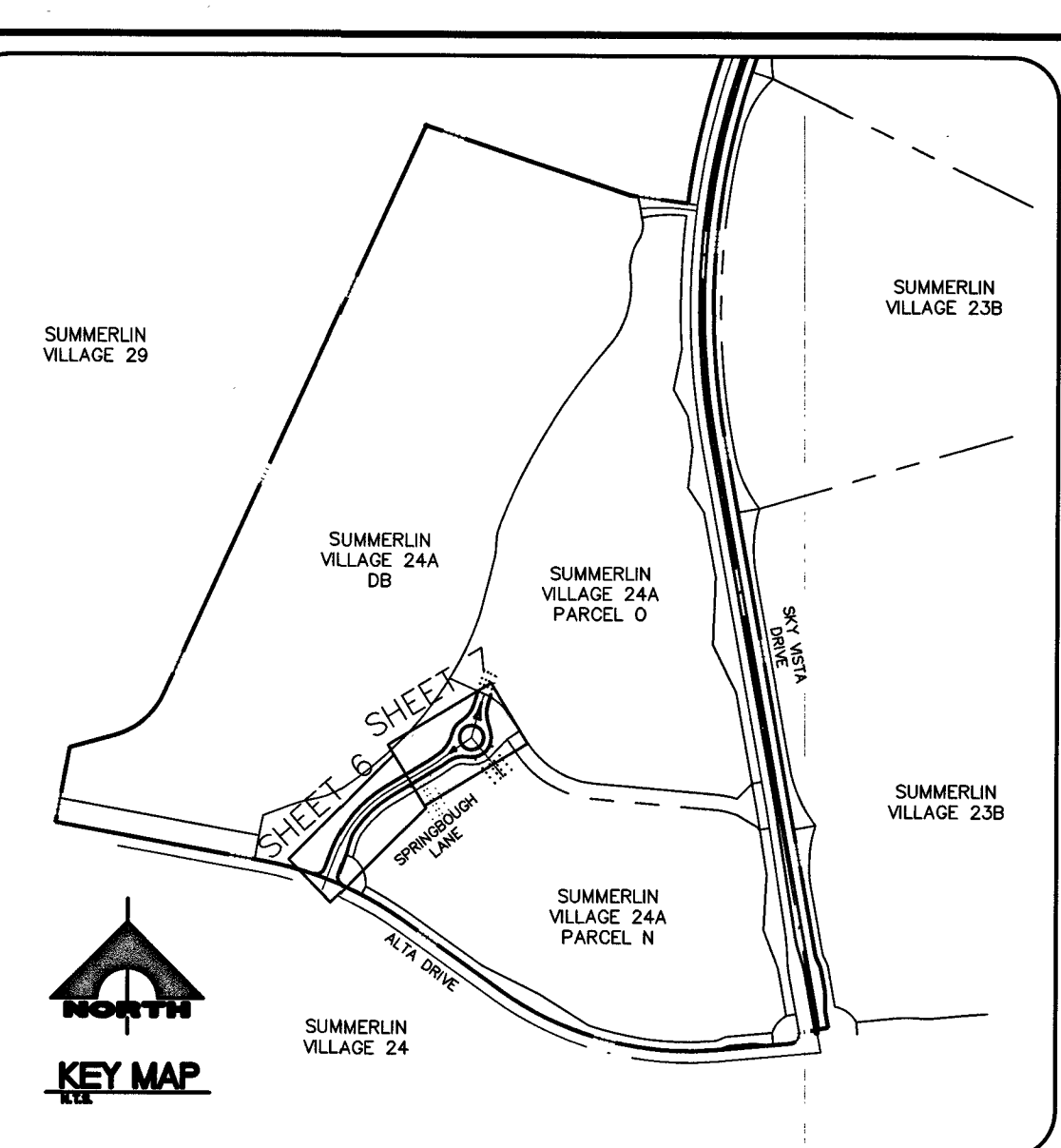
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECTED AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK

BLM #	DESCRIPTION	NAVD 88	NAVD 88
		DATUM	DATUM
GLV 003-345W6	FND RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOUNT RD. AND SKY VISTA DR	3318.31 (FEET)	1,011.422 (METERS)
	2020, R596, S34		



IMPROVEMENT NOTES:

1. VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS. PROTECT IN PLACE AND ADJUST TO GRADE AND BACK OF CURB AS REQUIRED. WATER VALVES TO REMAIN ACCESSIBLE AT ALL TIMES.

CIVIL CONSTRUCTION NOTES:

1. CONSTRUCT AC PAVEMENT SECTION PER STREET SECTION ON SHEET 12.
2. CONSTRUCT "L" CURB AND GUTTER PER USD DWG NO. 216.
3. CONSTRUCT "A" TYPE ISLAND CURB PER USD DWG NO. 219.
4. CONSTRUCT REVERSED "L" CURB AND GUTTER PER USD DWG NO. 216.
5. CONSTRUCT SIDEWALK RAMP PER USD DWG NO. 235 (CASE II) AND PER DETAIL 1 ON SHEET 12.
6. INSTALL 8" CROSS GUTTER PER USD DWG NO. 228.

WATER CONSTRUCTION NOTES:

1. INSTALL 1- $\frac{1}{2}$ " IRRIGATION WATER METER AND 1- $\frac{1}{2}$ " RPPA PER UDACS PL. NO. 4 AND 8 AND DETAIL 1 SHEET 9.
2. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36
3. INSTALL FIRE HYDRANT PER UDACS PL. NO. 31, 39 AND 40. (INCLUDES TEE AND 6-INCH GAGE VALVE)
4. INSTALL GAGE VALVE AND BOX PER UDACS PL. NO. 30 AND 39
5. INSTALL 12"X1-1/2" SERVICE SADDLE PER UDACS PL. NO. 4
6. INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31 (SEE PLAN FOR ANGLE)
7. CUT AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION).
8. INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE)
9. INSTALL TEE PER UDACS PL. NO. 31 (SEE PLAN FOR SIZE)

STORM DRAIN CONSTRUCTION NOTES:

1. CONSTRUCT TYPE "CM2" DROP INLET PER USD DWG NO. 412.1 AND 421
2. INSTALL NDOT TYPE II STORM DRAIN DROP INLET PER SHEET R-4.2.1 OF NDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION OR APPROVED EQUIV. (SEE DETAIL 4 ON SHEET 9).
3. INSTALL NDOT TYPE 2B STORM DRAIN DROP INLET PER SHEET R-4.2.2 OF NDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION OR APPROVED EQUIV. (SEE DETAIL 1 ON SHEET 19).

IRIGATION CONSTRUCTION NOTES:

1. INSTALL 1-6" & 2-4" SCH 40 PVC PER DETAIL 3 ON SHEET 9

APPROVED FOR CONSTRUCTION

James H. Hady

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 135222 FIRST APPROVED DATE: 12-10-18

LWVWD APPROVED FLOW FLOW: TOTAL 1500 GPM / ON SITE N/A GPM

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

3540

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

3530

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM #	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM NO. 7LV09.345W6	FND RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOON RD. AND SKY VISTA DR. T20S,R59E,S34	3318.31 (FEET)	1,011.422 (METERS)

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



or
1-800-227-2600
or
CLARK COUNTY TRAFFIC DIVISION
1-702-455-8000

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY



1-702-227-2929

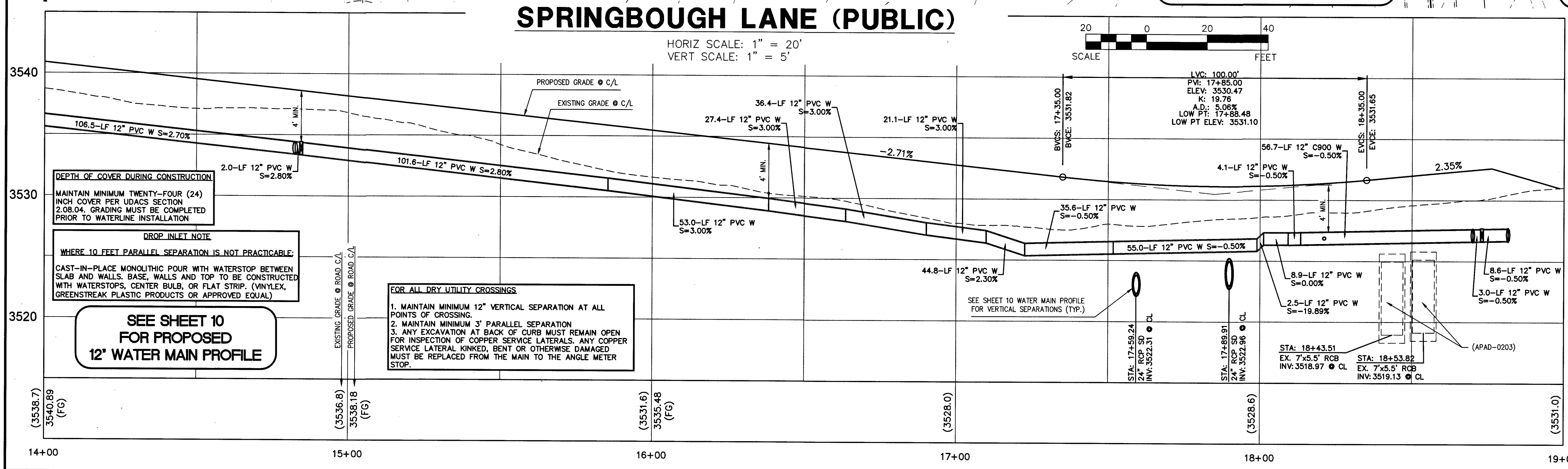
FAST

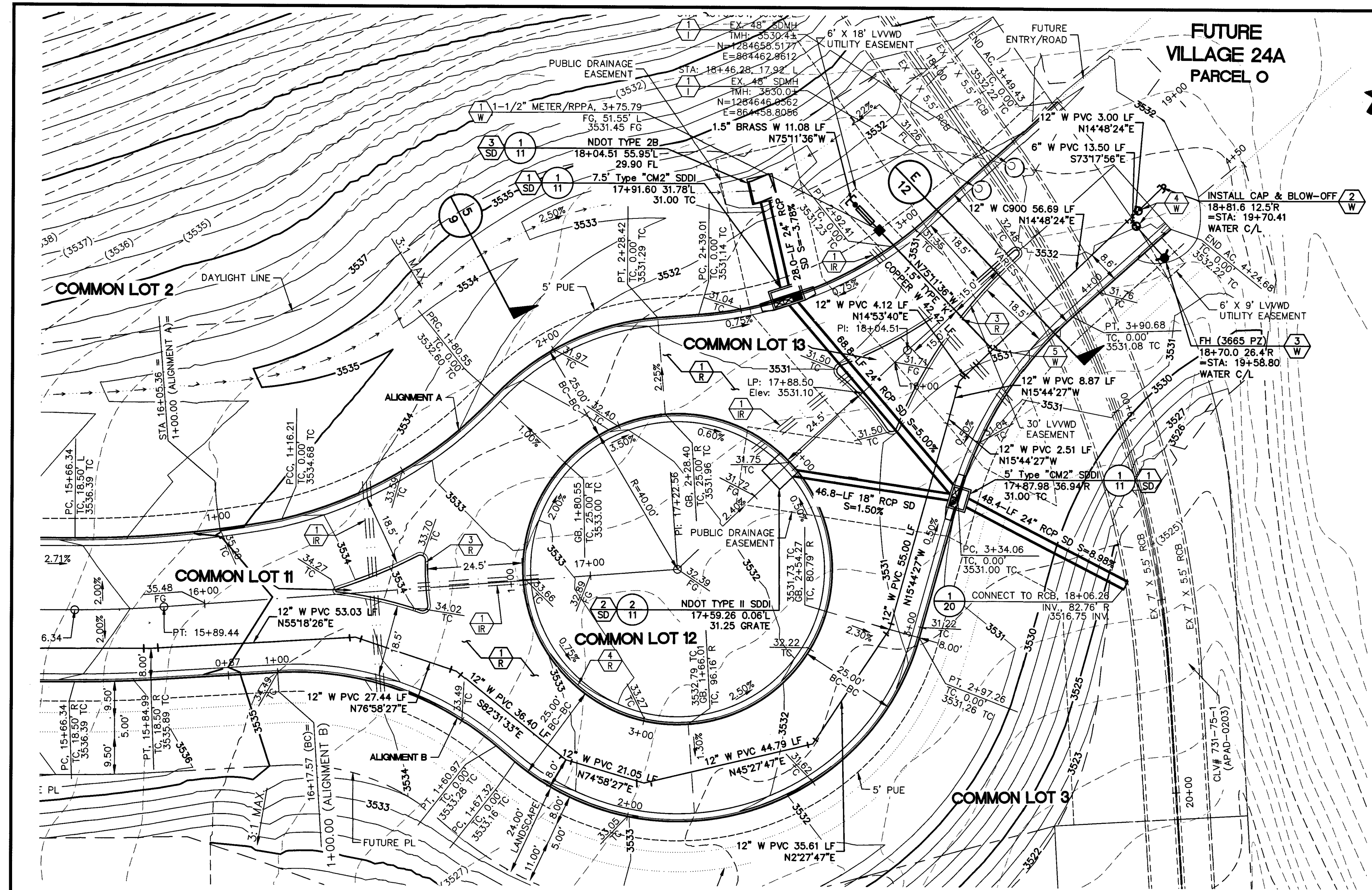
Call before you UnderGround

1-702-432-5300

PRIVATELY AND ANNUALLY SYSTEMS OF INSPECTION

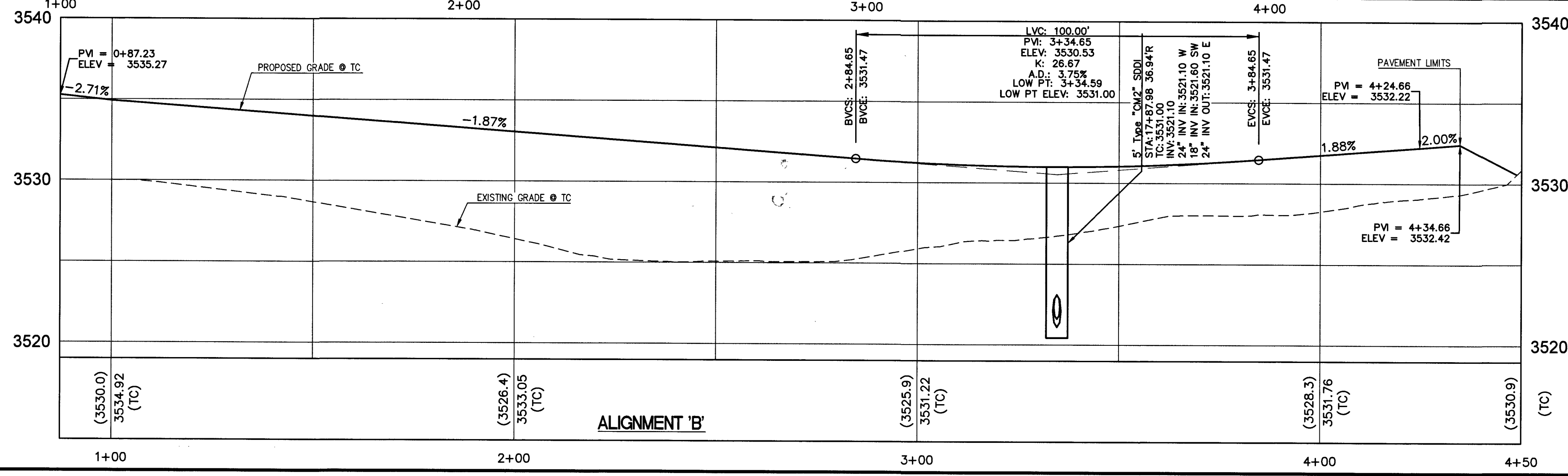
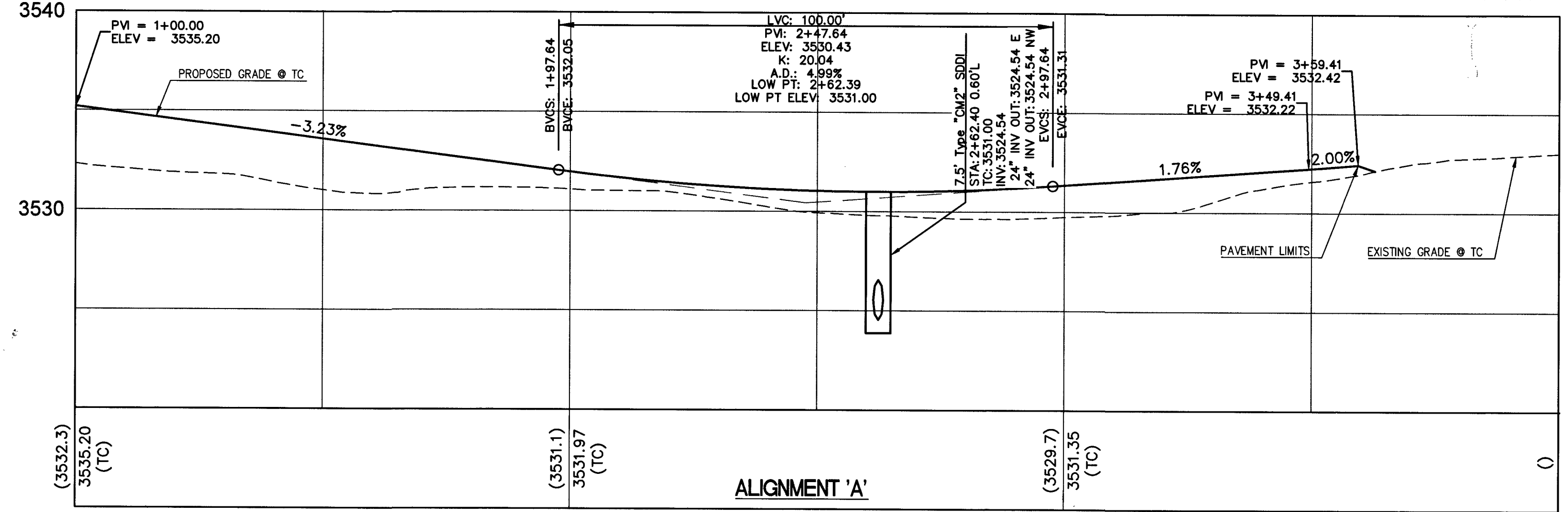
10151623





ROUNDAABOUT (PUBLIC)

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



DEPTH OF COVER DURING CONSTRUCTION

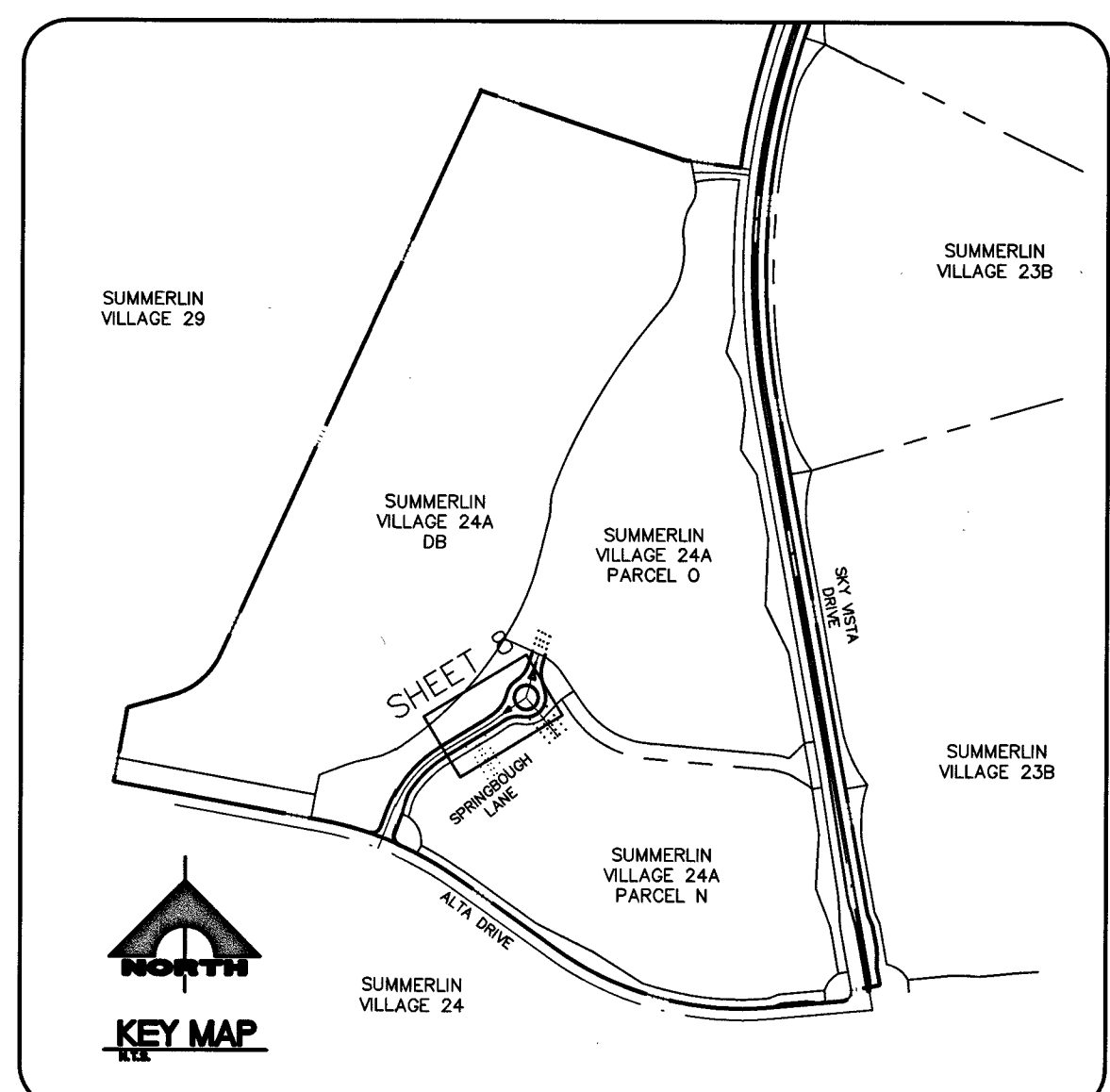
MAINTAIN MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION.

DROP INLET NOTE

WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE:
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP. (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

FOR ALL DRY UTILITY CROSSINGS

1. MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING.
2. MAINTAIN MINIMUM 3" PARALLEL SEPARATION
3. ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.



IMPROVEMENT NOTES

VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS. PROTECT IN PLACE AND ADJUST TO GRADE AND BACK OF CURB AS REQUIRED. WATER VALVES TO REMAIN ACCESSIBLE AT ALL TIMES.

CIVIL CONSTRUCTION NOTES

1. CONSTRUCT AC PAVEMENT SECTION PER STREET SECTION ON SHEET 12.
2. CONSTRUCT "L" CURB AND GUTTER PER USD DWG NO. 218.
3. CONSTRUCT "A" TYPE ISLAND CURB PER USD DWG NO. 219.
4. CONSTRUCT REVERSED "L" CURB AND GUTTER PER USD DWG NO. 216.
5. CONSTRUCT SIDEWALK RAMP PER USD DWG NO. 235 (CASE II) AND PER DETAIL 1 ON SHEET 12.
6. INSTALL 8" CROSS GUTTER PER USD DWG NO. 228.

WATER CONSTRUCTION NOTES

1. INSTALL 1-1/2" IRRIGATION WATER METER AND 1-1/2" RPPA PER UDACS PL. NO. 4 AND 8 AND DETAIL 1 SHEET 9.
2. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36.
3. INSTALL FIRE HYDRANT PER UDACS PL. NO. 30, 31, 39 AND 40. (INCLUDES TEE AND 6-INCH GATE VALVE)
4. INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39.
5. INSTALL 12"x1-1/2" SERVICE SADDLE PER UDACS PL. NO. 4.
6. INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31 (SEE PLAN FOR ANGLE)
7. CUT AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION).
8. INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE)
9. INSTALL TEE PER UDACS PL. NO. 31 (SEE PLAN FOR SIZE)

STORM DRAIN CONSTRUCTION NOTES

1. CONSTRUCT TYPE "CM2" DROP INLET PER USD DWG NO. 412.1 AND 421
2. INSTALL NDOT TYPE II STORM DRAIN DROP INLET PER SHEET R-4.2.1 OF NDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION OR APPROVED EQUAL (SEE DETAIL 4 ON SHEET 9).
3. INSTALL NDOT TYPE 2B STORM DRAIN DROP INLET PER SHEET R-4.2.2 OF NDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION OR APPROVED EQUAL (SEE DETAIL 1 ON SHEET 19).

IRRIGATION CONSTRUCTION NOTES

1. INSTALL 1-6" & 2-4" SCH 40 PVC PER DETAIL 3 ON SHEET 9

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135222 FIRST APPROVED DATE: 12-10-18
LVWMD APPROVED FIRE FLOW: TOTAL 1500 GPM / ON SITE N/A GPM

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

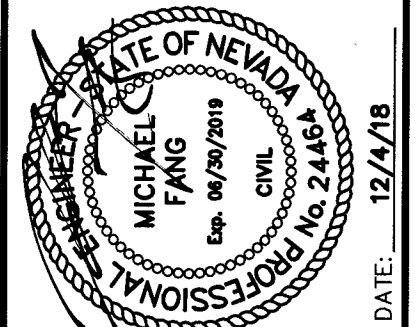
LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

- NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
 2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK

BM #	DESCRIPTION	NAVD 88 DATUM (FEET)	NAVD 88 DATUM (METERS)
CLV BM NO. 1	FND RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOON RD. AND SKY VISTA DR. T20S, R59E, S34	3318.31	1,011.422



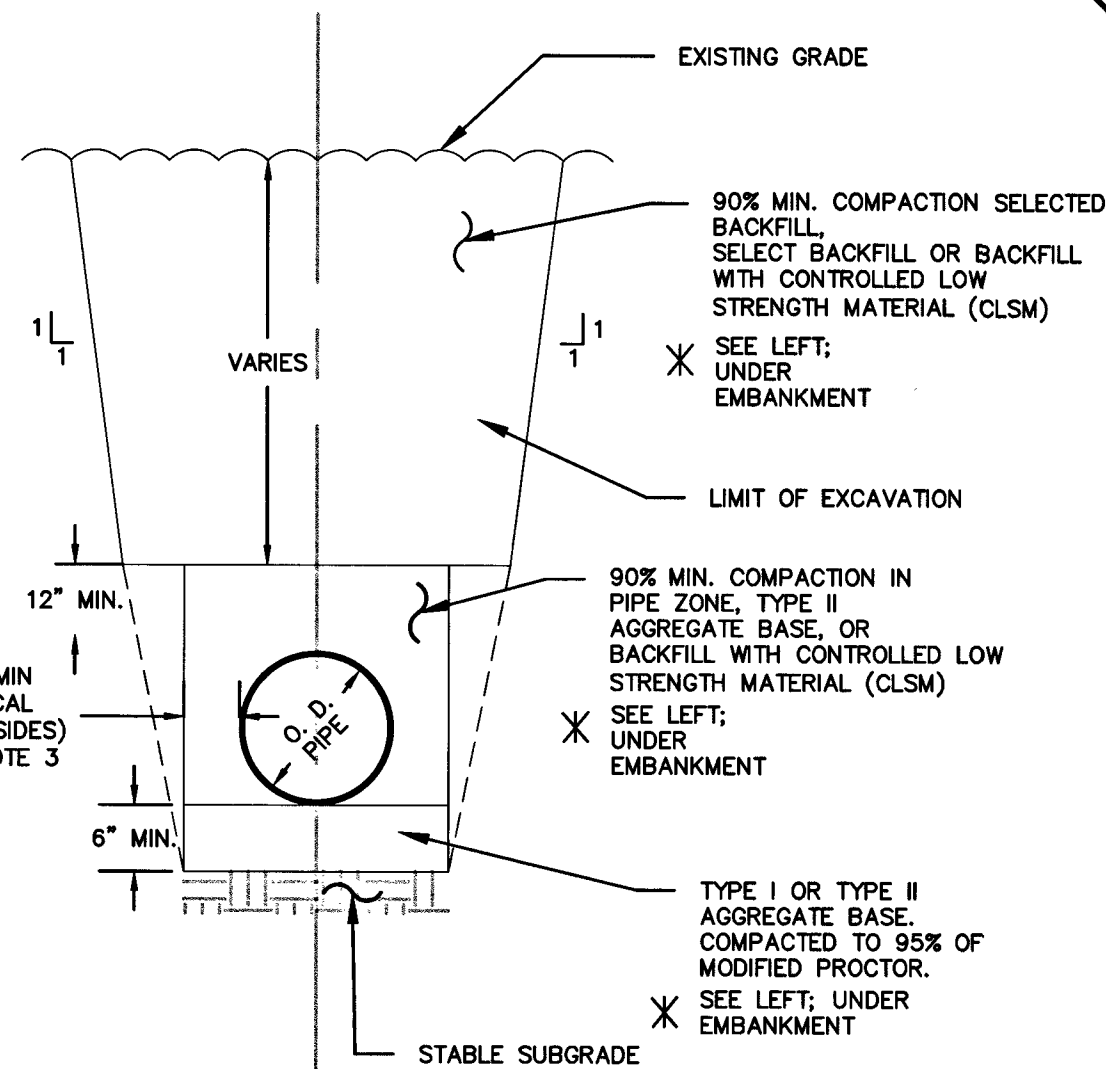
PROJECT NO.	DESIGN	DRAWN	CHECK	PLOT DATE	DATE	REVISION
62024-238	LG/NF	NPD/AS	LG/NF	12-04-18		

PROJECT NO. 62024-238
DESIGN: LG/NF
DRAWN: NPD/AS
CHECK: LG/NF
PLOT DATE: 12-04-18
DATE: 12/14/18

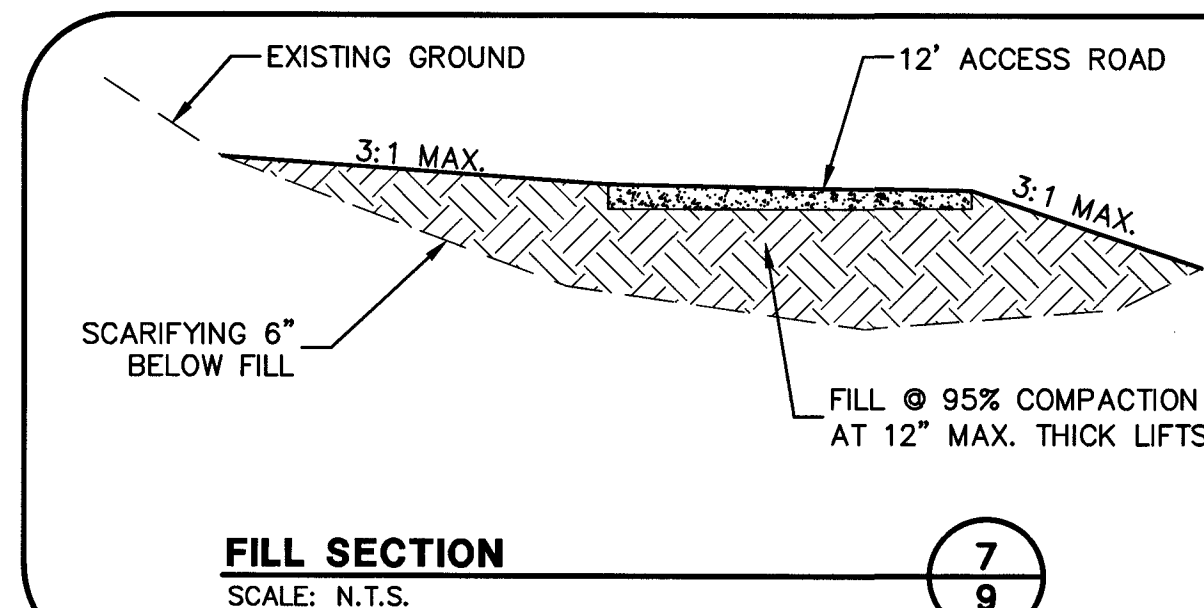
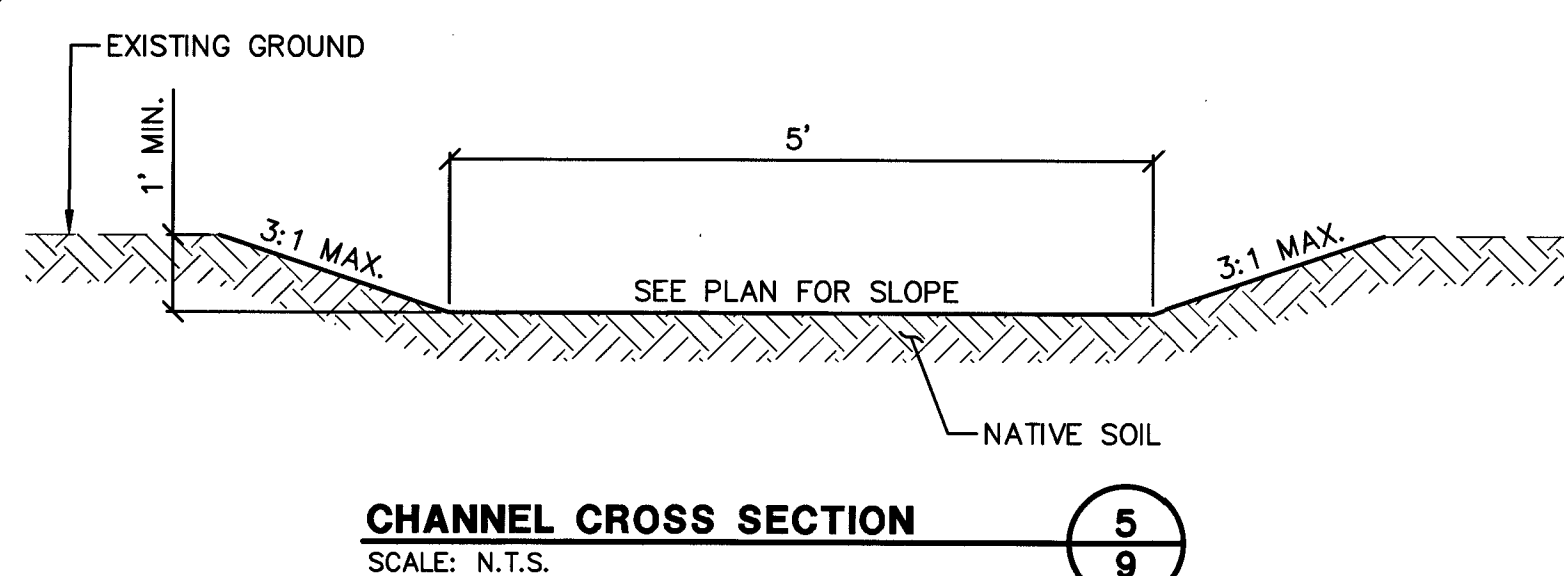
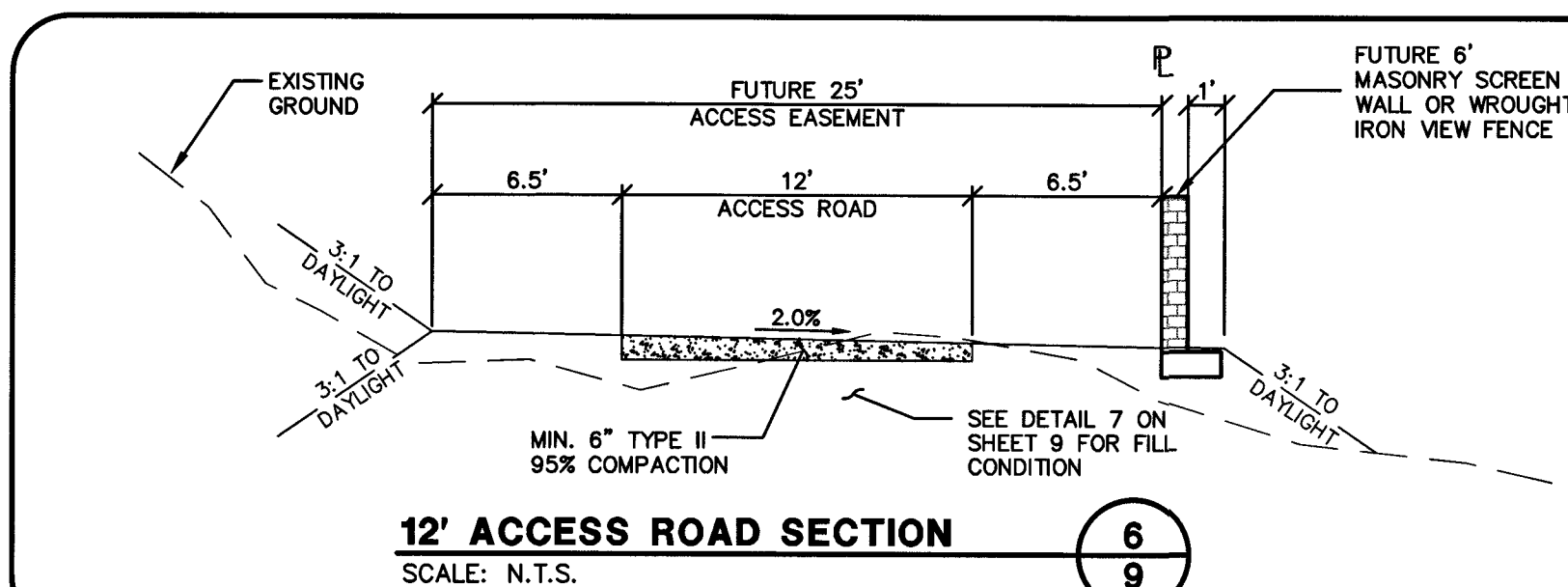
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
goverengineering.com

ENGINEERS & SURVEYORS

- NOTE: WHERE TRENCH EXCAVATION ENCOUNTER OVERSIZE BOULDERS (COBBLES AND BOULDERS GREATER THAN 12 INCHES). OR CEMENTED NATIVE MATERIALS IT IS RECOMMENDED THAT TRENCH EXCAVATIONS BE OVER-EXCAVATED TO A DEPTH OF AT LEAST 1 FEET BELOW THE PIPELINE ELEVATIONS TO REMOVE OVERSIZE BOULDERS. THE OVER-EXCAVATION SHOULD THEN BE BACKFILLED WITH COMPACTED SOIL FILL TO THE DESIGN PIPELINE ELEVATIONS

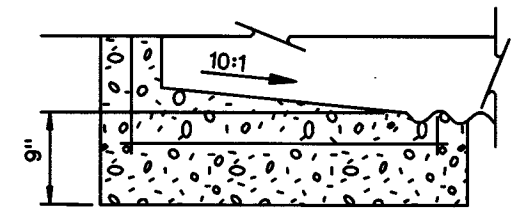
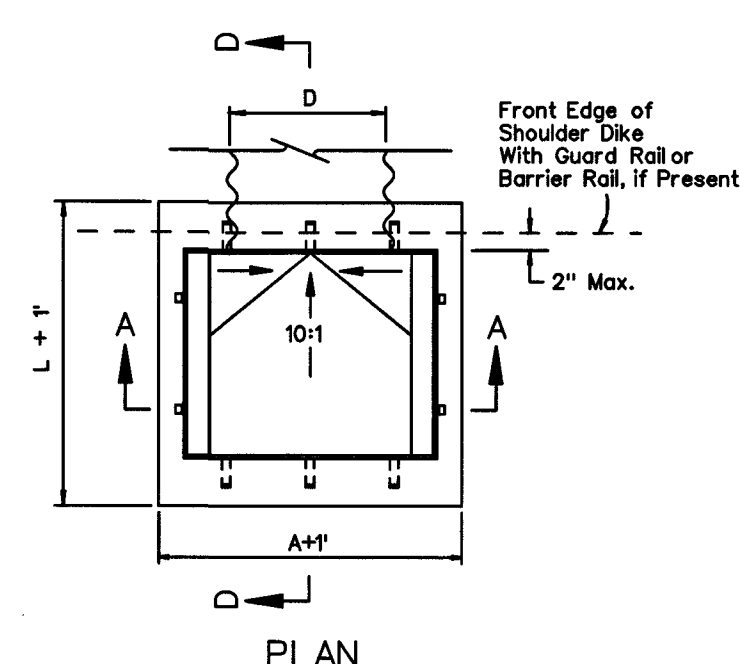
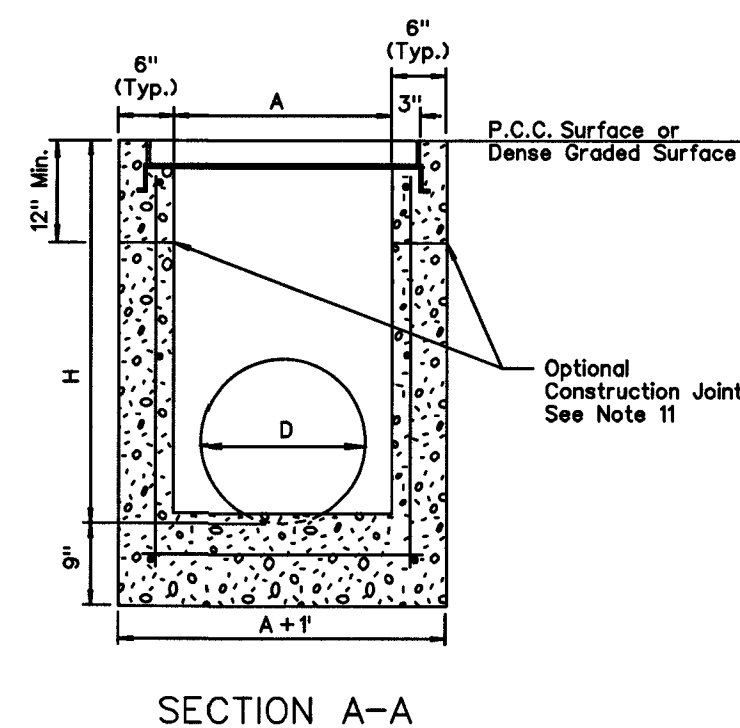
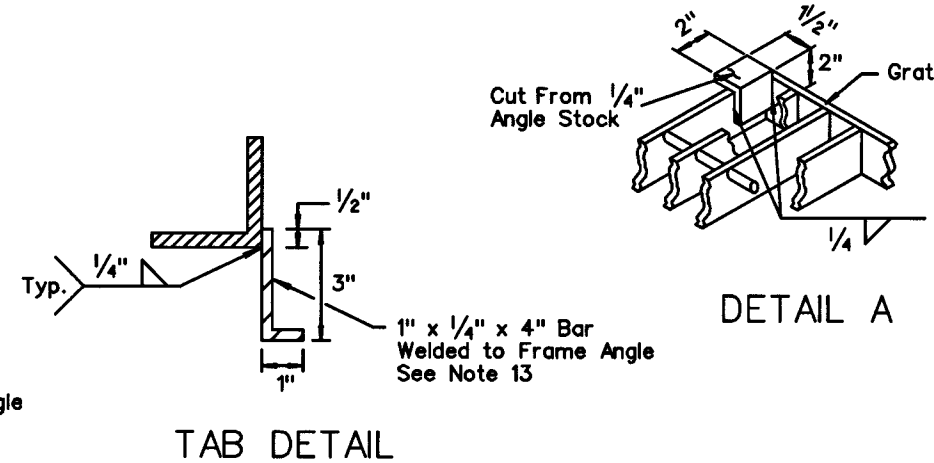


RCP TRENCH DETAIL
SCALE: N.T.S.



*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.

PIPE SIZE (INCH)	A	H Min. (FT)	MAIN BARS (INCH)	FRAME ANGLES (INCH)	FRAME BARS (INCH)	L (FT)		
						SINGLE GRATE	DOUBLE GRATE	TRIPLE GRATE
≤ 15	2'	3.50	3/2" X 3/4"	4 X 3 X 3/4"	4 X 3/4"	2	4	6
18	2'	3.00	1/2" X 3/4"	5 X 3 X 3/4"	5 X 3/4"	2	4	6
24	3'	2.50	1/2" X 3/4"	5 X 3 X 3/4"	5 X 3/4"	2	4	6
30	4'	4.00	1/2" X 3/4"	5 X 3 X 3/4"	5 X 3/4"	2	4	6
36	4'	4.50	5/8" X 3/4"	6 X 3 X 3/4"	6 X 3/4"	2	4	6
42	5'	5.00	5/8" X 3/4"	6 X 3 X 3/4"	6 X 3/4"	2	4	6
48	5'	5.50	5/8" X 3/4"	6 X 3 X 3/4"	6 X 3/4"	2	4	6

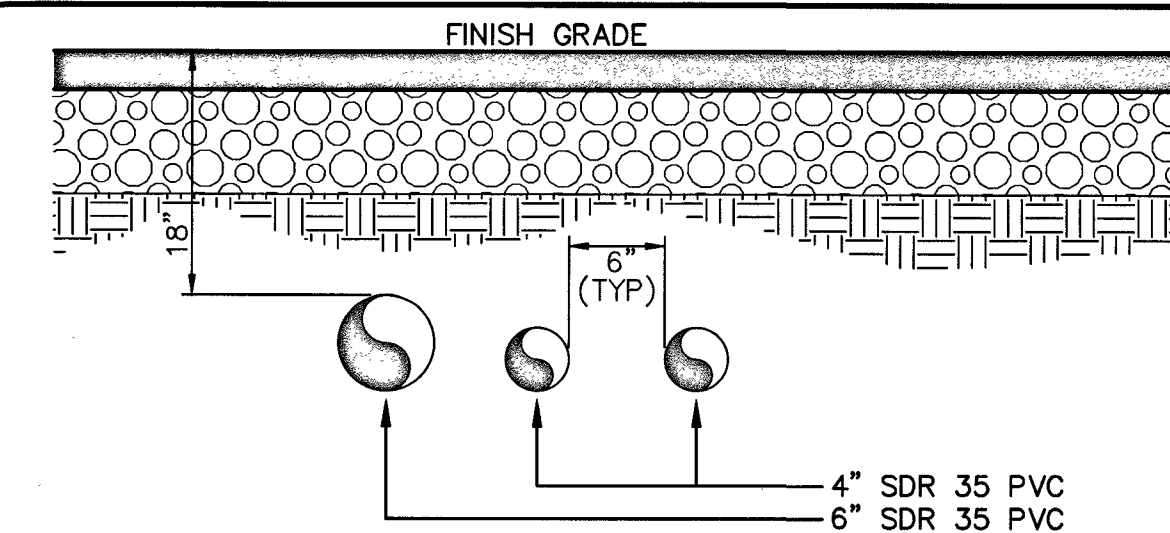


NEVADA DEPARTMENT OF TRANSPORTATION		
TYPE 2 DROP INLET		
Signed Original On File	R-4.2.1	(609
CHIEF HYDRAULICS ENGINEER	ADOPTED 11/70	REVISION 5/0

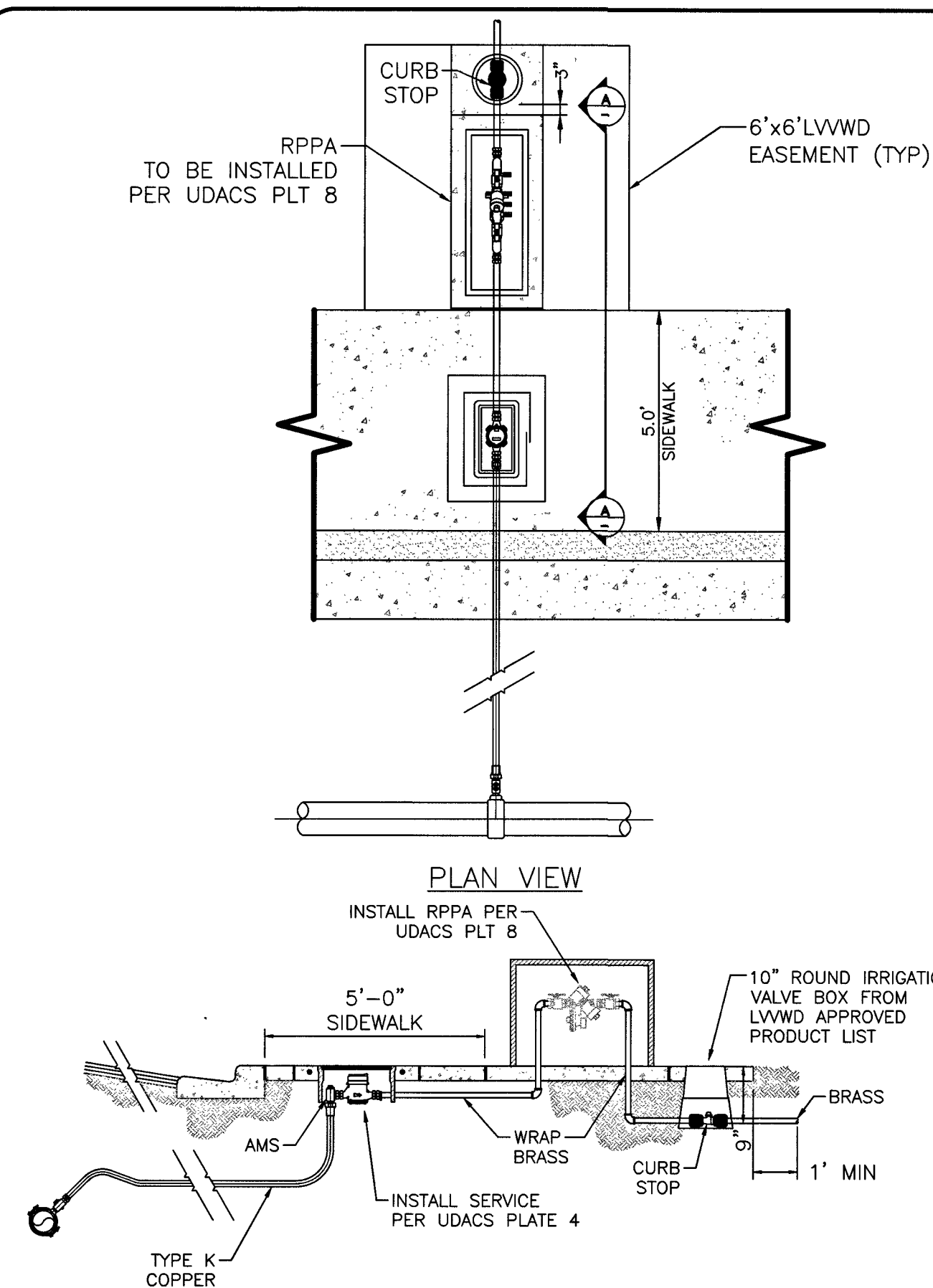
2. REINFORCING STEEL SHALL BE NO. 4 BARS WITH MAXIMUM SPACING AT 18" CENTERS, WROUGHT TIGHTLY AT ALL INTERSECTIONS AND EMBEDDED 2" CLEAR OF ALL CONCRETE SURFACES.
3. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1".
4. DIMENSIONS MAY BE VARIED TO FIT LOCAL CONDITIONS IF ORDERED BY THE ENGINEER.
5. COMMERCIAL PREFABRICATED GRATINGS APPROVED BY THE BRIDGE DIVISION MAY BE USED IN LIEU OF THE FIELD-WELDED GRATING SHOWN ABOVE.
6. EXTREME LOAD COVER SITUATIONS TO BE REVIEWED BY HYDRAULICS ENGINEER.
7. SLOPE SATCH BASIN FLOORS 10:1 FROM ALL DIRECTIONS TOWARD OUTLET PIPE. IF BASIN IS USED AS A JUNCTION, SHAPE FLOW LINE(S) TO OUTLET PIPE AND PROVIDE A 10:1 SLOPE TO FLOW LINE(S).
8. SEE SHEET R-2.9.1 FOR DETAILS IF CONNECTING HOPE PIPE.
9. A SINGLE TYPE 2 DROP INLET SHALL BE CONSTRUCTED UNLESS A DOUBLE OR TRIPLE IS SPECIFIED.
10. SINGLE GRATE CONFIGURATION SHOWN FOR CLARITY. OUTSIDE DIMENSIONS OF EACH GRATE SHALL MEASURE 2' BY 4'-4 1/4".
11. RUN REBAR CONTINUOUS THRU CONSTRUCTION JOINT. JOINT MUST BE A MINIMUM OF 3" FROM HORIZONTAL BARS.
12. WELD ONE TAB ON 6" OF GRATE AND REMAINING TWO TABS 6" FROM EDGE OF FRAME. SIX TABS PER INLET, THREE TABS ON EACH SIDE.
13. WELD TABS 6" FROM EDGE OF FRAME. FOUR TABS PER GRATE, TWO ON EACH SIDE.

- D1. ADDITIONAL PIPE PENETRATIONS MAY BE PLACED IN ANY WALL.

TYPE II DROP INLET
SCALE: N.T.S.



NO SCALE

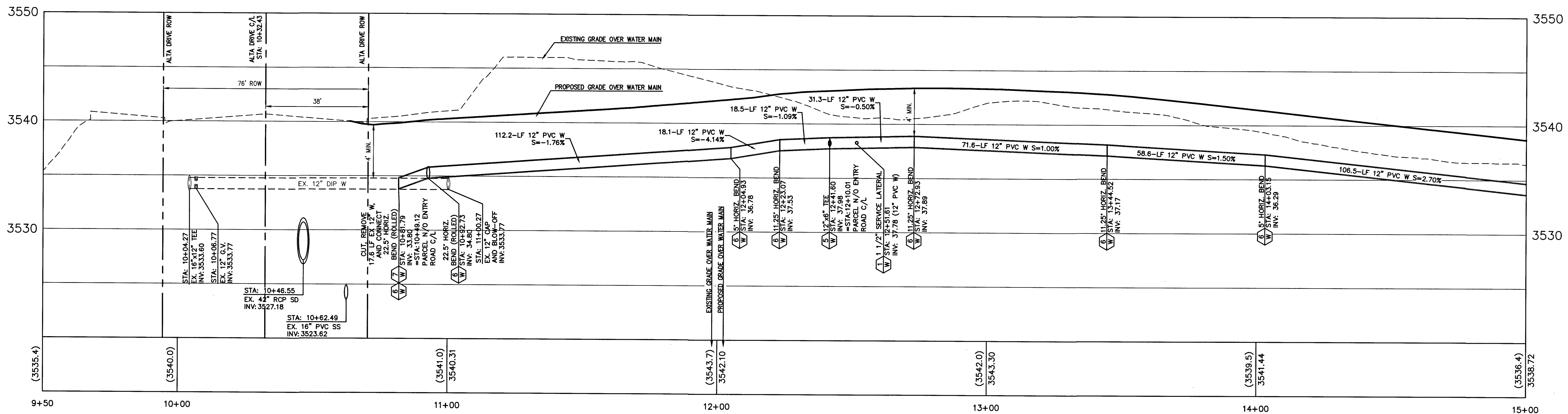


METER & RPPA PER UDACS PLATE NO. 4 & 8 W/ CURB STOP
SCALE: N.T.S.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 135222 FIRST APPROVED DATE: 1/10/10

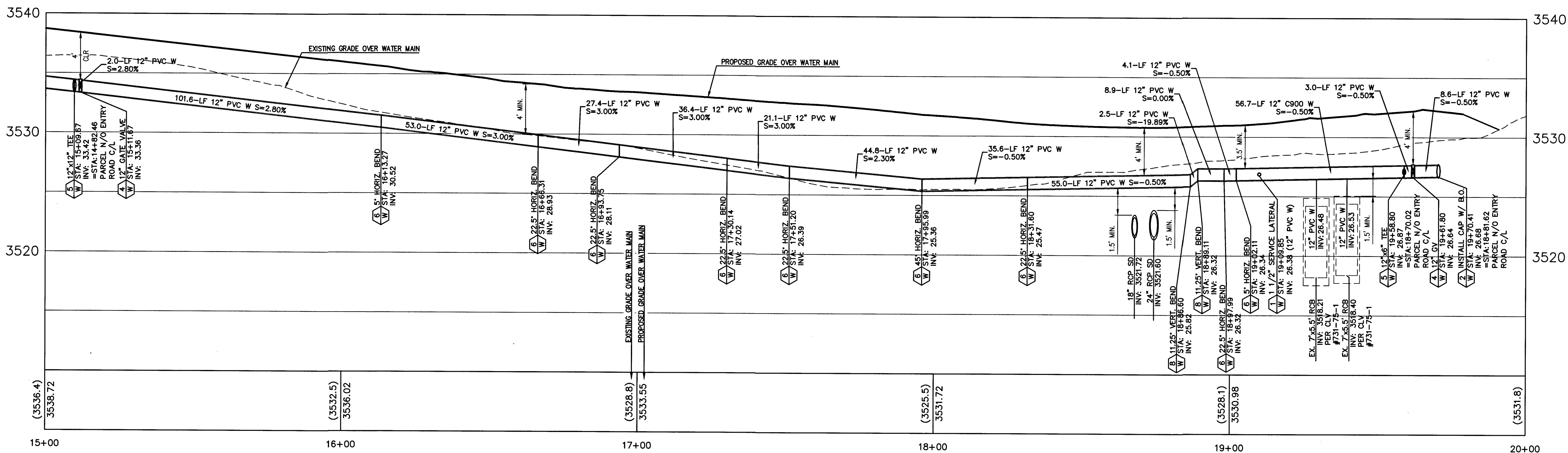


12 IN-WTR PROFILE

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

SHEET: 6

1
10



12 IN-WTR PVC PROFILE

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

SHEET: 7

1
10

WATER CONSTRUCTION NOTES:

1. INSTALL 1-1/2" WATER METER AND 1-1/2" RPPA PER UDACS PL. NO. 4 AND 8
2. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36
3. INSTALL FIRE HYDRANT PER UDACS PL. NO. 39 AND 40
4. INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39
5. INSTALL TEE PER UDACS PL. NO. 31
6. INSTALL HORIZONTAL BEND PER UDACS PL. NO. 31 (SEE PLAN FOR ANGLE)
7. CUT AND CONNECT TO EX WATER LINE (CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EX WATER PRIOR TO CONSTRUCTION)
8. INSTALL VERTICAL BEND PER UDACS PL. NO. 31 UNLESS OTHERWISE IDENTIFIED. (SEE PLAN FOR ANGLE)

DEPTH OF COVER DURING CONSTRUCTION
MAINTAIN MINIMUM TWENTY-FOUR (24)
INCH COVER PER UDACS SECTION
2.08.04. GRADING MUST BE COMPLETED
PRIOR TO WATERLINE INSTALLATION



APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135222 FIRST APPROVED DATE: 12-10-18

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS

WATER MAIN PROFILE

GCV
ENGINEERS & SURVEYORS

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

PROJECT NO. 62024-238

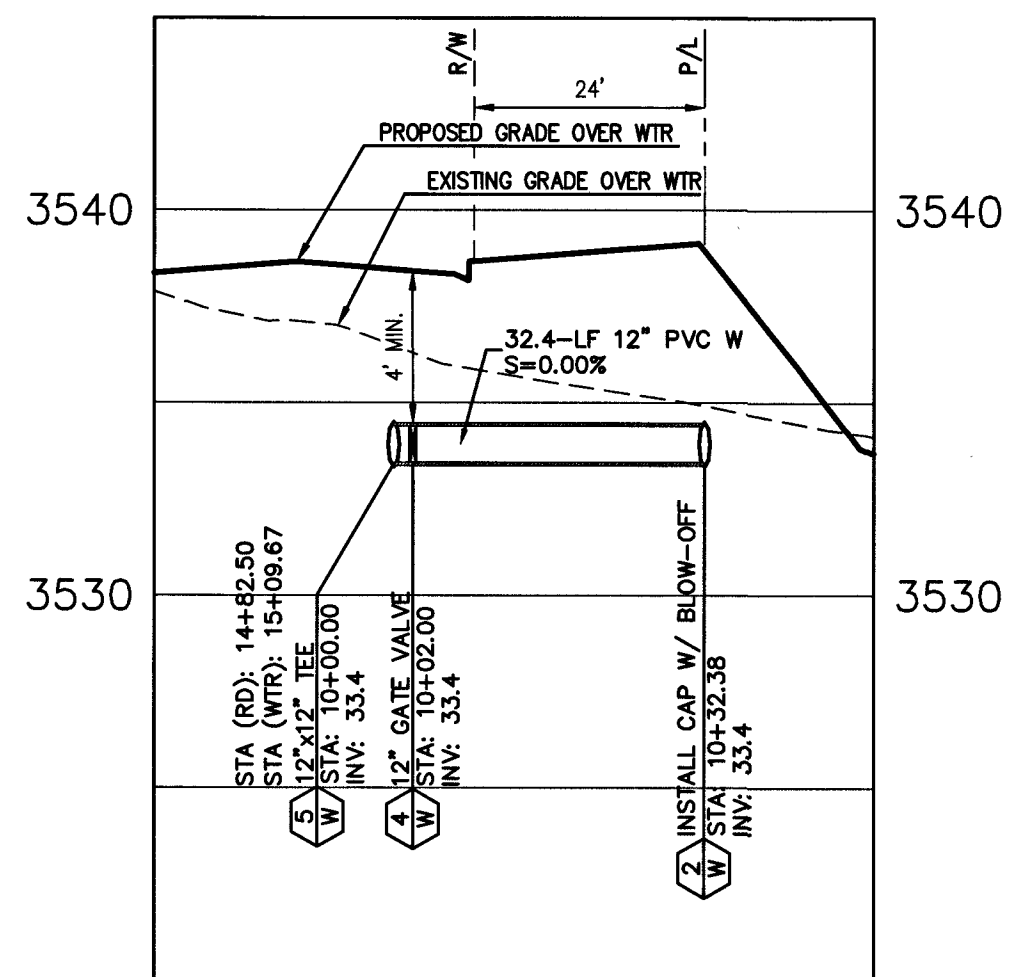
DESIGN: LG/MF
DRAWN: NPD/AS
CHECK: LG/MF
PLOT DATE: 12-08-18
PLOT TIME: 14:21:09

PROFESSIONAL SEAL OF NEVADA
MICHAEL FANG
CIVIL
No. 8729/2018
EXPIRATION DATE: 12/8/18

REV. DATE DESCRIPTION

DATE ASGN APP DATE GCW APP

PROJ# 135222A QS137-33-NE



**SPRINGBOUGH LANE @ 14+82.50
WATER LATERAL PROFILE**

SCALE: HORIZ. 1"=20', VERT. 1"=5'
STA: 15+09.67 (WATER C.L.)

SHEET: 7

3

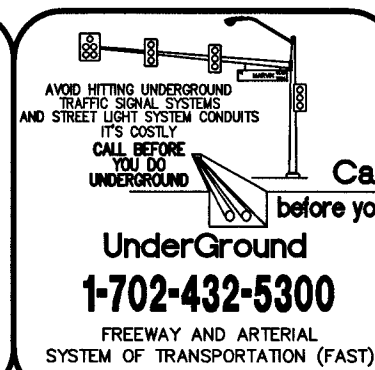
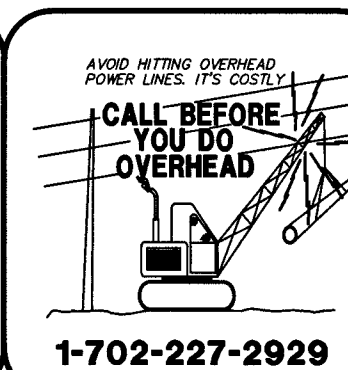
11

WATER CONSTRUCTION NOTES:

1. INSTALL CAP W/ 2" BLOW-OFF ASSEMBLY PER UDACS PL. NO. 36
2. INSTALL GATE VALVE AND BOX PER UDACS PL. NO. 30 AND 39
3. INSTALL TEE PER UDACS PL. NO. 31

STORM DRAIN CONSTRUCTION NOTES:

1. CONSTRUCT TYPE "CM2" DROP INLET PER USD DWG NO. 412.1 AND 421
2. INSTALL NDOT TYPE 2 STORM DRAIN DROP INLET PER SHEET R-4.2.1 OF NDOT "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" 2010 EDITION OR APPROVED EQUAL. (SEE SHEET 11)



APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135222 FIRST APPROVED DATE: 12-10-18

107W3628
L18-01682

DRAWING

11

11 OF 20 SHTS

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS

LATERAL PROFILES

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T: 702.804.2000
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gowengineering.com

GCA
ENGINEERS & SURVEYORS

1: Projects (600) 62024-238 (DWG) production V238-LATERAL PROFILES.dwg
Andrew Park-Murray

PROJECT NO.

62024-238

DESIGN: LG/MF

DRAWN: NPD/AS

CHECK: LG/MF

PLOT DATE: 10-26-18
PLOT TIME: 08:21:18

DESCRIPTION

DATE

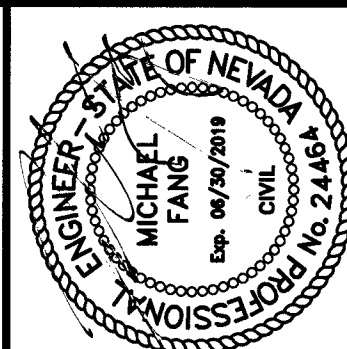
AGENCY

DATE

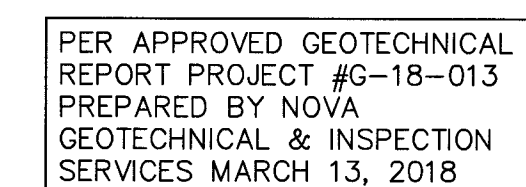
AGENCY

DATE

AGENCY



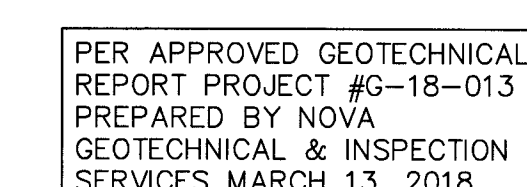
DATE: 10/26/18



SPRINGBOUGH LANE
(PUBLIC MINOR COLLECTOR)
15+66.34 TO 16+58.06 & 17+87.08 TO 18+76.18

SCALE: NTS

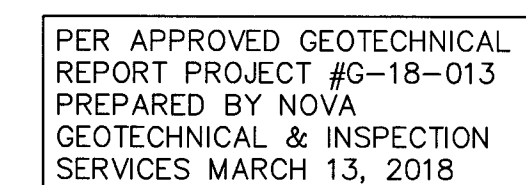
- ① - SCARIFY NATIVE 6" AND RECOMPACT TO 95%
- ② - LANDSCAPE AREA - EXCAVATE AND RECOMPACT TO 85% OR RIP ENTIRE AREA TO DEPTH INDICATED
- ③ - ROUGH GRADE (RG) TO BE 2" BELOW FINISHED GRADE (FG) FOR FUTURE LANDSCAPE PURPOSES
- ④ - FUTURE MEANDERING SIDEWALK (BY OTHERS)



SPRINGBOUGH LANE
(PUBLIC MINOR COLLECTOR)
11+30.65 TO 12+29.34

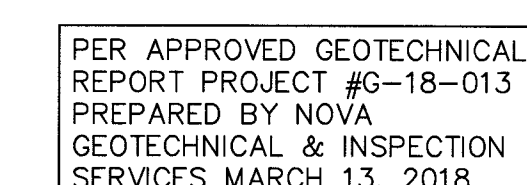
SCALE: NTS

- ① - SCARIFY NATIVE 6" AND RECOMPACT TO 95%
- ② - LANDSCAPE AREA - EXCAVATE AND RECOMPACT TO 85% OR RIP ENTIRE AREA TO DEPTH INDICATED
- ③ - ROUGH GRADE (RG) TO BE 2" BELOW FINISHED GRADE (FG) FOR FUTURE LANDSCAPE PURPOSES
- ④ - FUTURE MEANDERING SIDEWALK (BY OTHERS)



SPRINGBOUGH LANE ROUNDABOUT

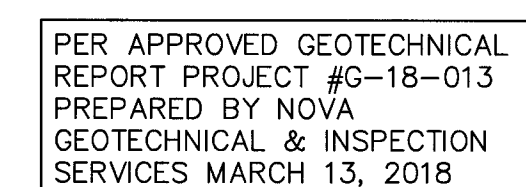
A circle with a horizontal line passing through its center. The center is labeled 'D' and the radius is labeled '12'.



SPRINGBOUGH LANE
(PUBLIC MINOR COLLECTOR)
10+66.60 TO 11+30.65

SCALE: NTS

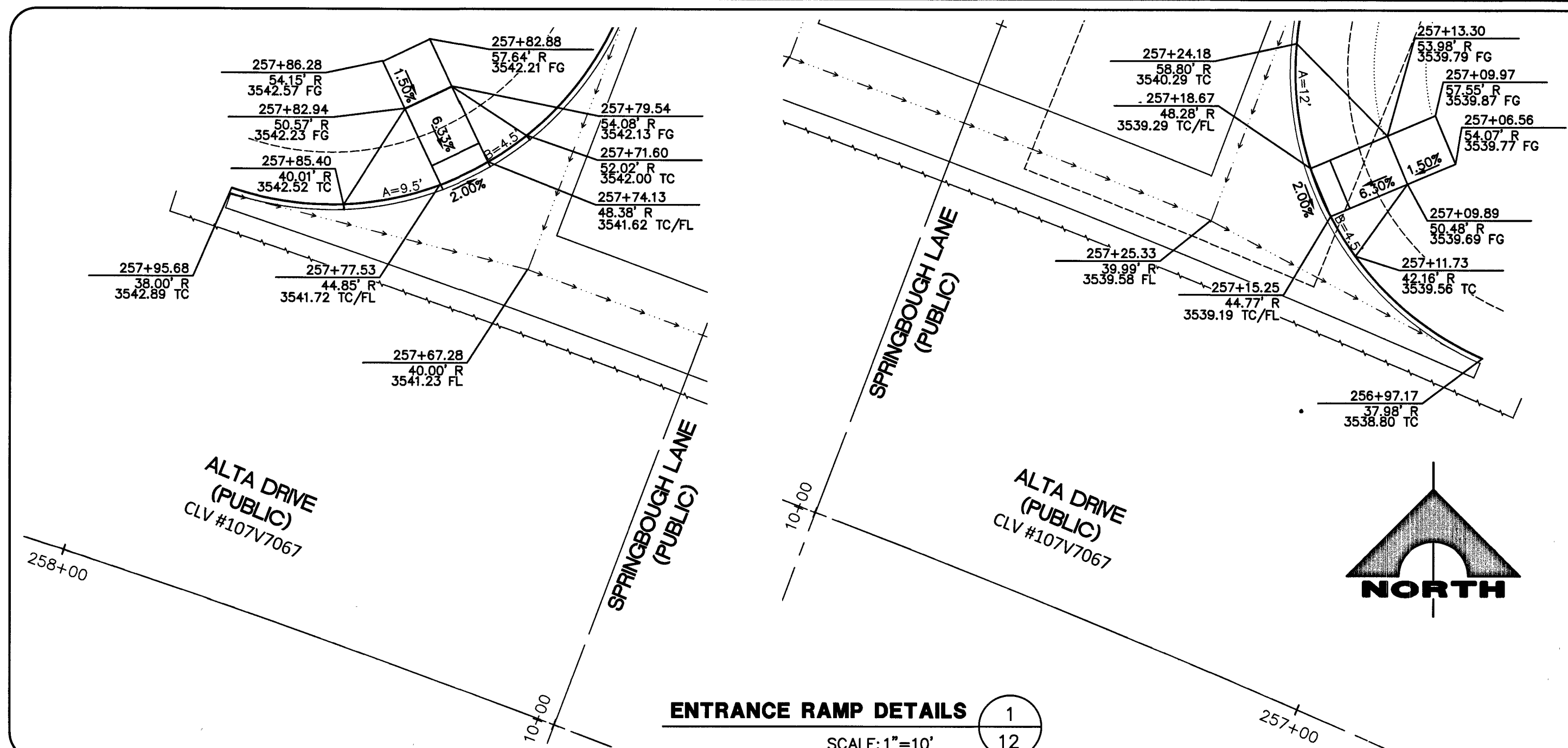
- ① - SCARIFY NATIVE 6" AND RECOMPACT TO 95%
- ② - LANDSCAPE AREA - EXCAVATE AND RECOMPACT TO 85% OR RIP ENTIRE AREA TO DEPTH INDICATED
- ③ - ROUGH GRADE (RG) TO BE 2" BELOW FINISHED GRADE (FG) FOR FUTURE LANDSCAPE PURPOSES
- ④ - FUTURE MEANDERING SIDEWALK (BY OTHERS)



SPRINGBOUGH LANE
(PUBLIC MINOR COLLECTOR)
12+29.34 TO 15+66.34

SCALE: NTS

- ① - SCARIFY NATIVE 6" AND RECOMPACT TO 95%
- ② - LANDSCAPE AREA - EXCAVATE AND RECOMPACT TO 85% OR RIP ENTIRE AREA TO DEPTH INDICATED
- ③ - ROUGH GRADE (RG) TO BE 2" BELOW FINISHED GRADE (FG) FOR FUTURE LANDSCAPE PURPOSES
- ④ - FUTURE MEANDERING SIDEWALK (BY OTHERS)



ENTRANCE RAMP DETAILS 1
12

SCALE: 1"=10'

[illegible]

PROJECT NO.	LG/MF
62024-238	NP/AS
DESIGN:	LG/MF
DRAWN:	
CHECK:	
LOT DATE: 10-26-18	
LOT TIME: 08:21:55	

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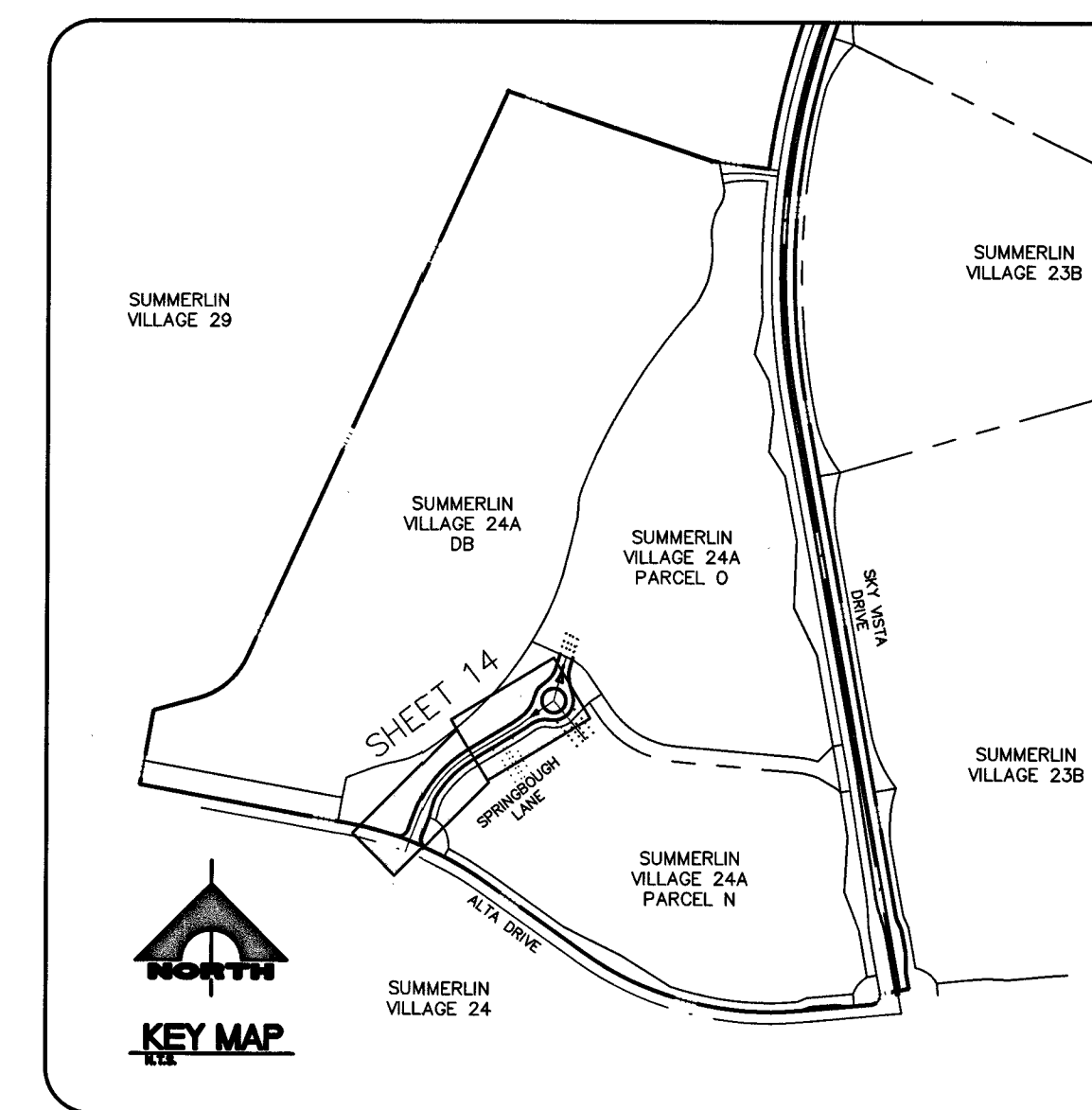
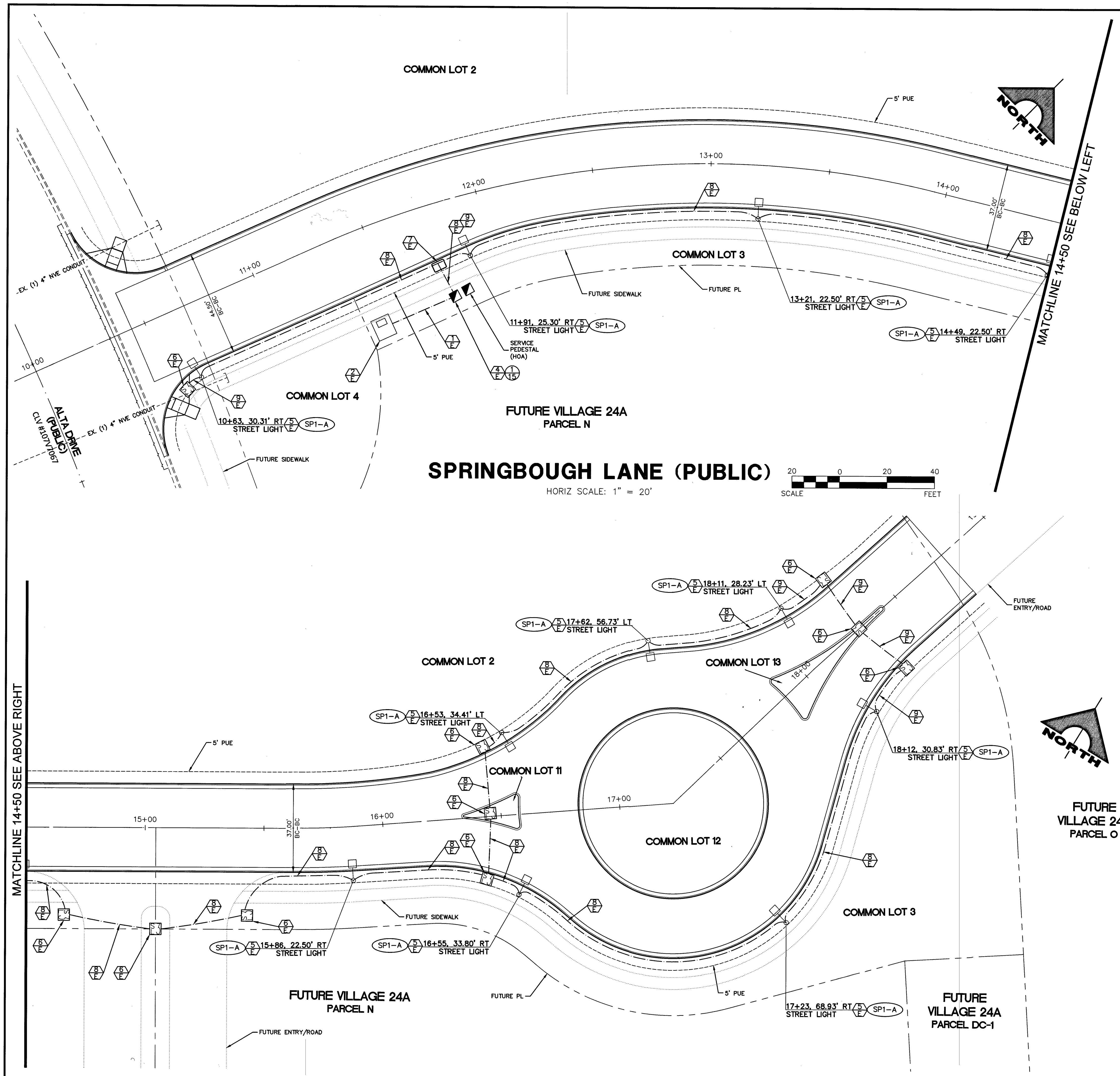
1555 S. RAINBOW BLVD.,
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T: 702.804.2000
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gwenengineering.com

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS

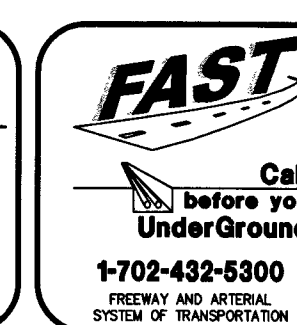
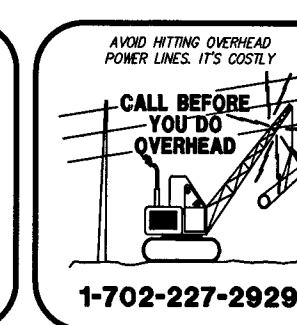
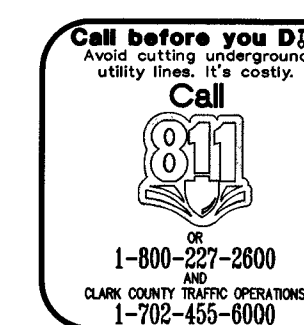
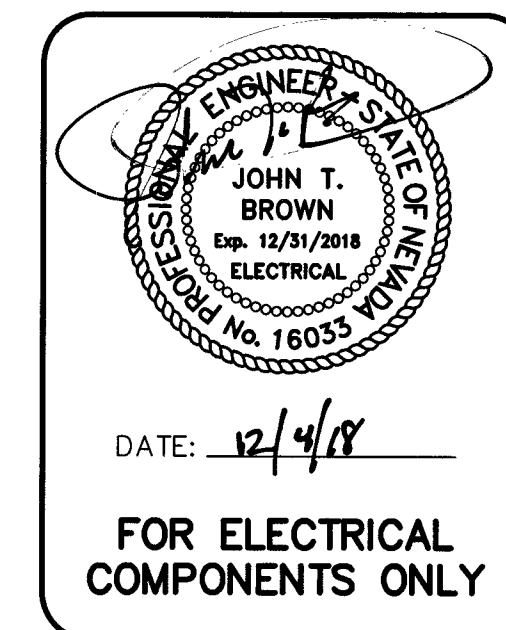
ROADWAY SECTIONS AND DETAILS

DRAWING
12
12 OF 20 SHTS



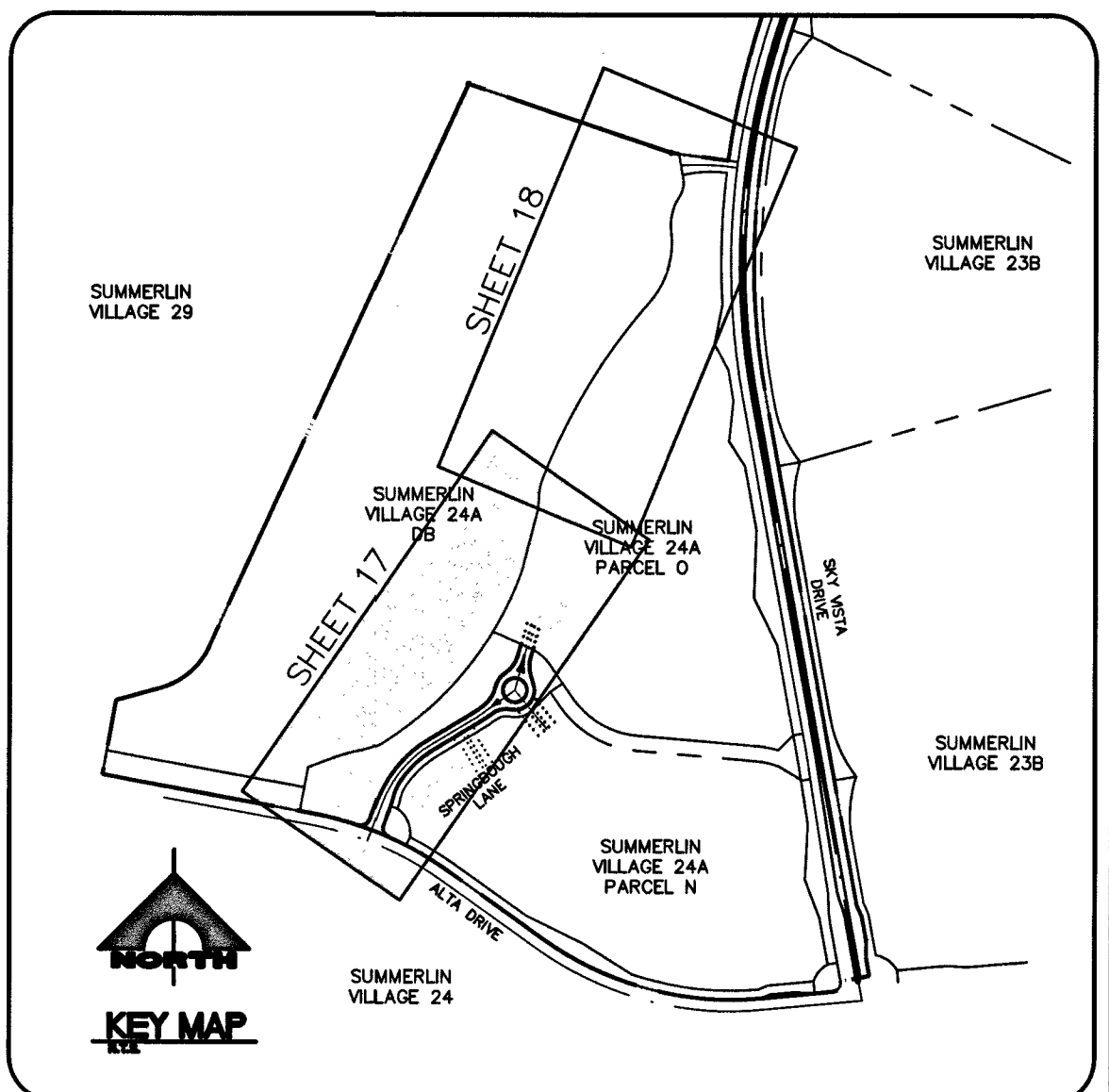
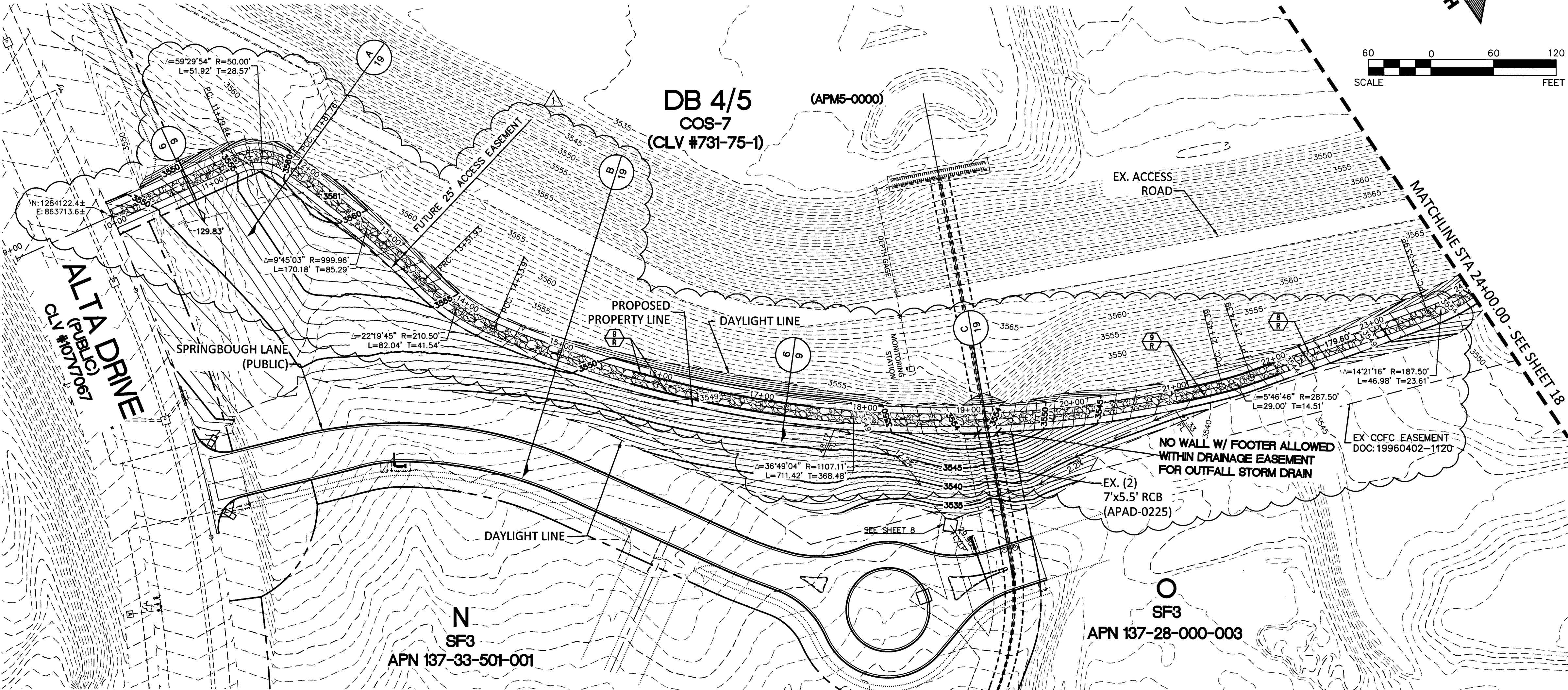
ELECTRICAL CONSTRUCTION NOTES:

- 1. PROPOSED 2" CONDUIT CONTAINING 2#3/0, 1#3/0 NEUT.
- 2. PROPOSED NV ENERGY TRANSFORMER.
- 3. NOT USED
- 4. SP1: PROPOSED SERVICE PEDESTAL. REFER TO ELECTRICAL SERVICE NOTES ON SHEET 15.
- 5. SUMMERLIN TYPE 5 LED STREETLIGHT PER SUMMERLIN LED LIGHTING ANALYSIS DRAWING NC-9.
- 6. PROPOSED NO. 3-1/2 PULLBOX PER USD DWG NO. 326.
- 7. PROPOSED NO. 5 PULLBOX PER USD DWG NO. 326.
- 8. PROPOSED 1-1/4" CONDUIT CONTAINING 2#4, 1#8 GND [STREETLIGHTING CONDUIT].
- 9. PROPOSED 1-1/4" CONDUIT ONLY WITH PULL STRING.



PROJECT NO. 62024-238	DATE: 12/4/18
DESIGN: LG/MF DRAWN: NPD/AS CHECK: LG/MF	AGENCY: GCW APP DATE: DATE:
DESCRIPTION:	
PROJECT NO. 62024-238 DESIGN: LG/MF DRAWN: NPD/AS CHECK: LG/MF DATE: 12-04-18 PLOT TIME: 11:05:09	
THE HOWARD HUGHES COMPANY, LLC VILLAGE 24A PARCEL N/O ENTRY ROAD IMPROVEMENT PLANS STREETLIGHT, CONDUIT AND ELECTRICAL PLAN	
DRAWING 14 14 OF 20 SHTS	

FOR EXISTING IMPROVEMENT PLANS,
REFER TO THE FOLLOWING SET:
"SUMMERLIN VILLAGE 24
ALTA DRIVE IMPROVEMENTS"



- CIVIL CONSTRUCTION NOTES**
- EXISTING STORM DRAIN MANHOLE PROTECT IN PLACE. RAISE COVER TO FINISH GRADE.
 - CONSTRUCT ACCESS ROAD PER DETAIL 6 SHEET 9.
 - CONSTRUCT 3' DEEP CONCRETE CUT-OFF WALL PER DETAIL 6 SHEET 19.

BASIS OF BEARINGS AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

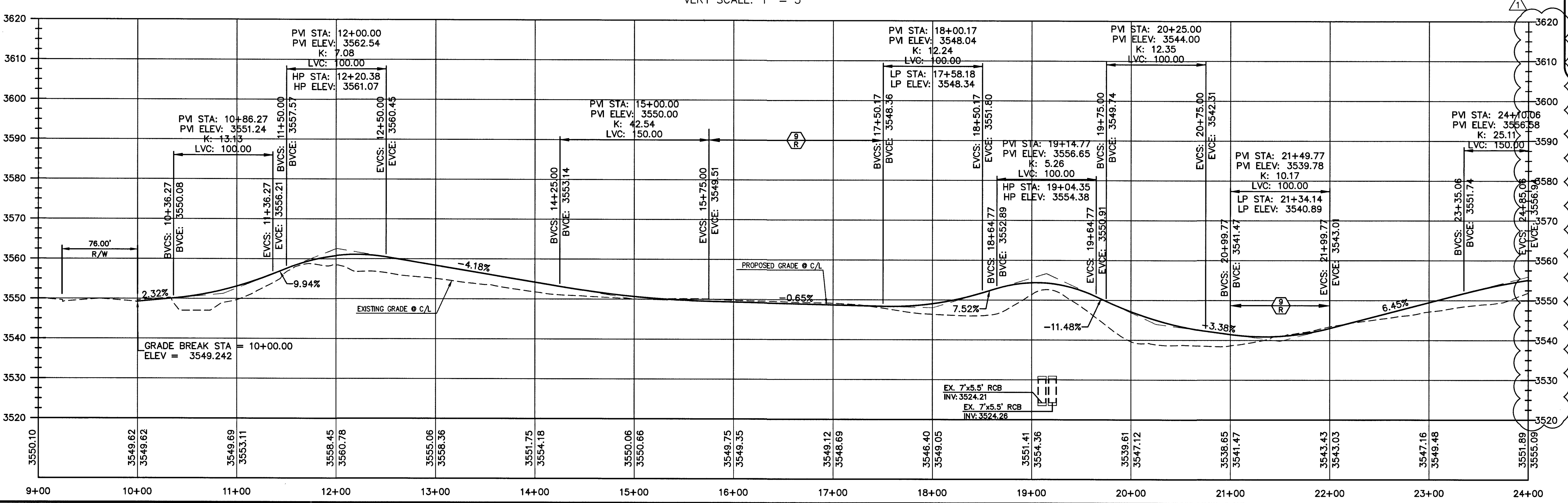
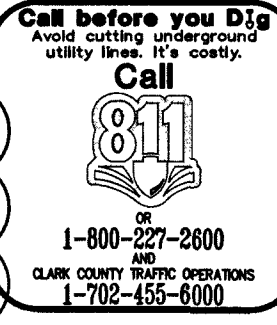
LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000.00 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

- ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
- GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM #	DESCRIPTION	NAD83 DATUM (FEET)	NAD83 DATUM (METERS)
CLV BM NO. 2100345W6	FIN RIVET AND PLATE IN TOP OF CURB SE CORNER OF DESERT MOON RD. AND SKY VISTA DR. T20S,R59E,S34	3318.31	1,011.422



PROJECT NO. 62024-238
DESIGN: LG/MF
DRAWN: NPD/AS
CHECK: LG/MF
PLOT DATE: 02-13-19
PLOT TIME: 09:05:11

1555 S. RAINBOW BLVD.
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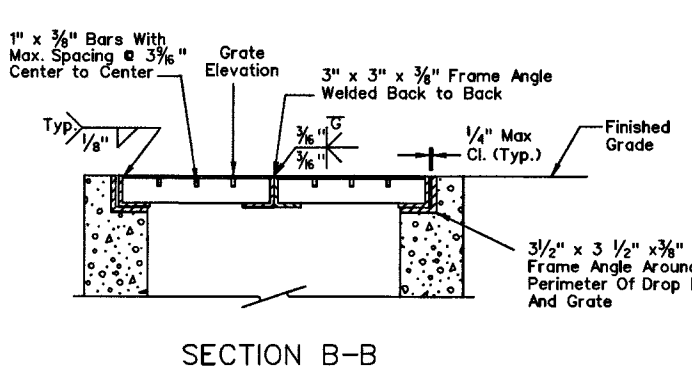
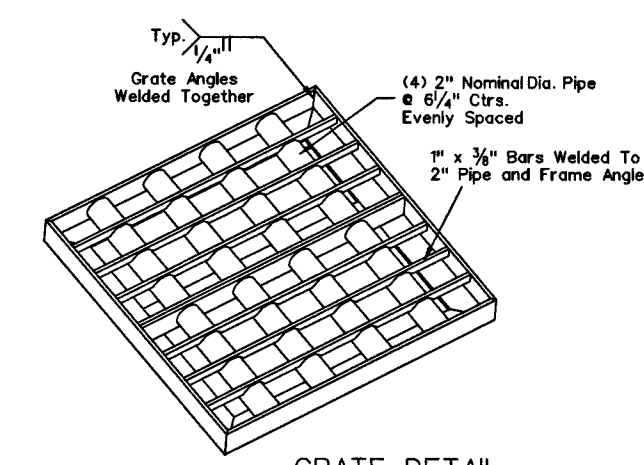
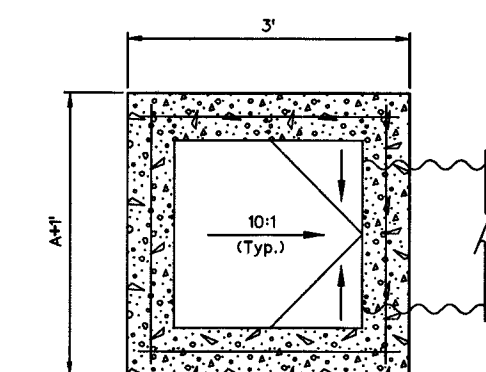
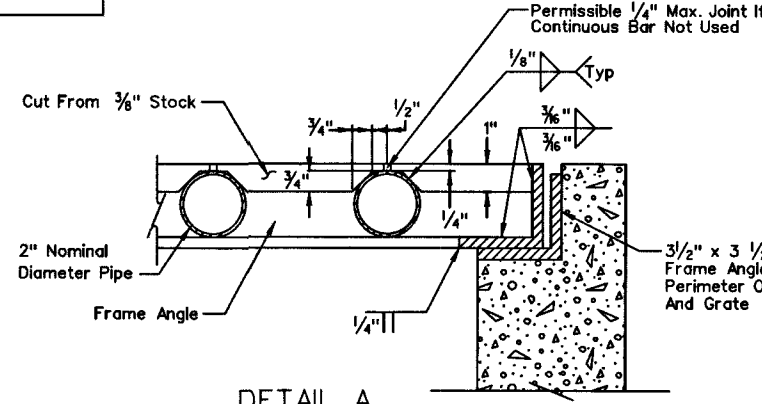
THE HOWARD HUGHES COMPANY, LLC
VILLAGE 24A PARCEL N/O
ENTRY ROAD IMPROVEMENT PLANS
12' ACCESS ROAD PROFILE 1

DRAWING 17
17 OF 20 SHOTS

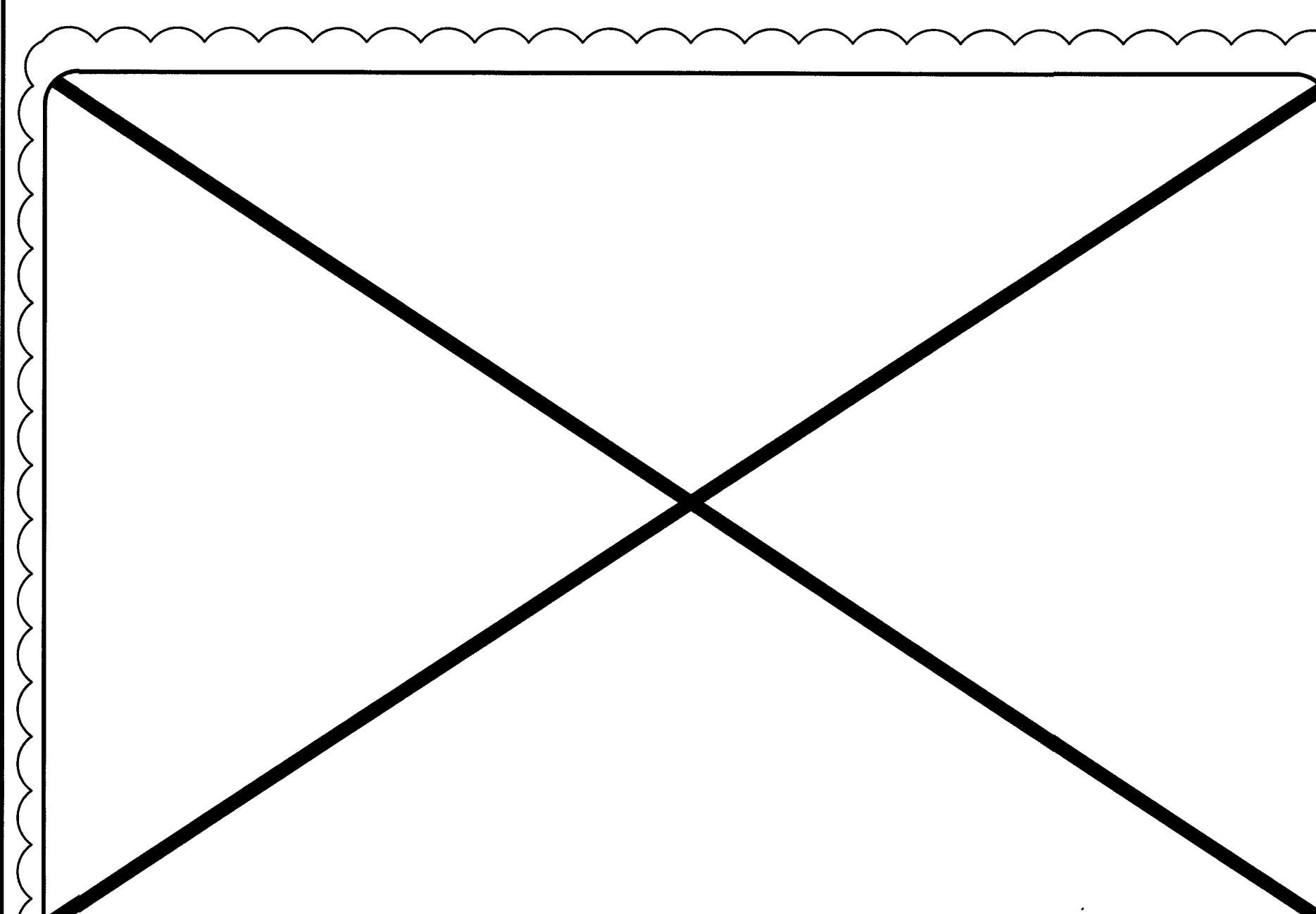


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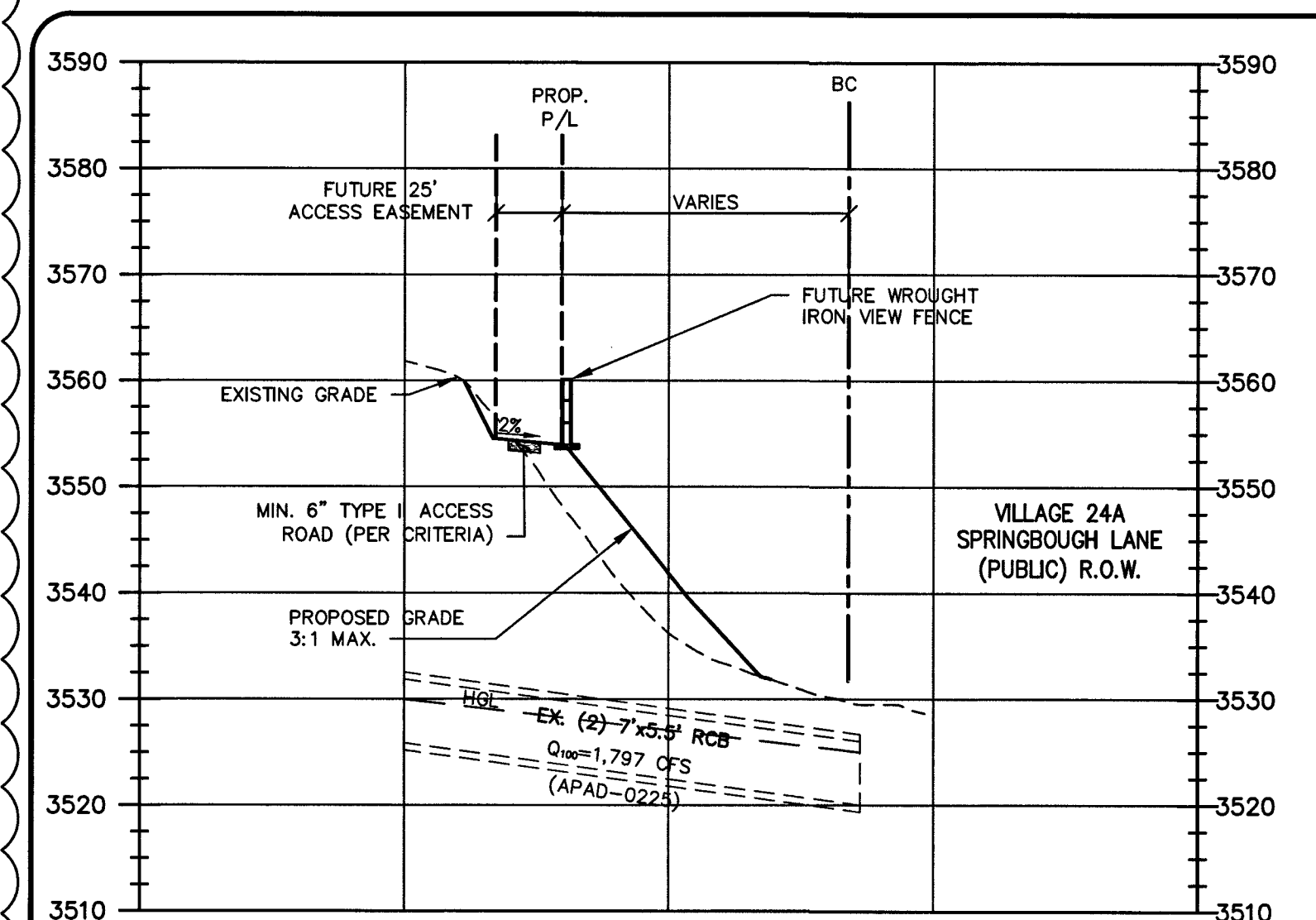
1. All concrete shall be class A or AA.
2. Reinforcing steel shall be No. 4 bars with maximum spacing at 18 inch centers, with a minimum of 4 inch intersections and embedded 12 inches clear of all concrete surfaces.
3. Exposed edges of concrete shall be chamfered 1 inch.
4. Structural steel weight includes the 2 inch nominal diameter pipe, standard weight and frame angles (3"x 3"x 3/8") and (3 1/2"x 3 1/2"x 3/8").
5. For 2 inch nominal diameter pipe see ASTM A53.
6. See sheet R-2.9.1 for details if connecting HDPE to pipe.
7. Slope catch basin floors 10:1 from all directions toward outside pipe. If basin is less than 10' from catch basin, slope line(s) to outlet pipe and provide a 10:1 slope to flow line(s).
8. Run rebar continuous thru construction joint. Joint must be a minimum 3 inches from horizontal bars.
9. Additional pipe penetrations may be placed in any wall.



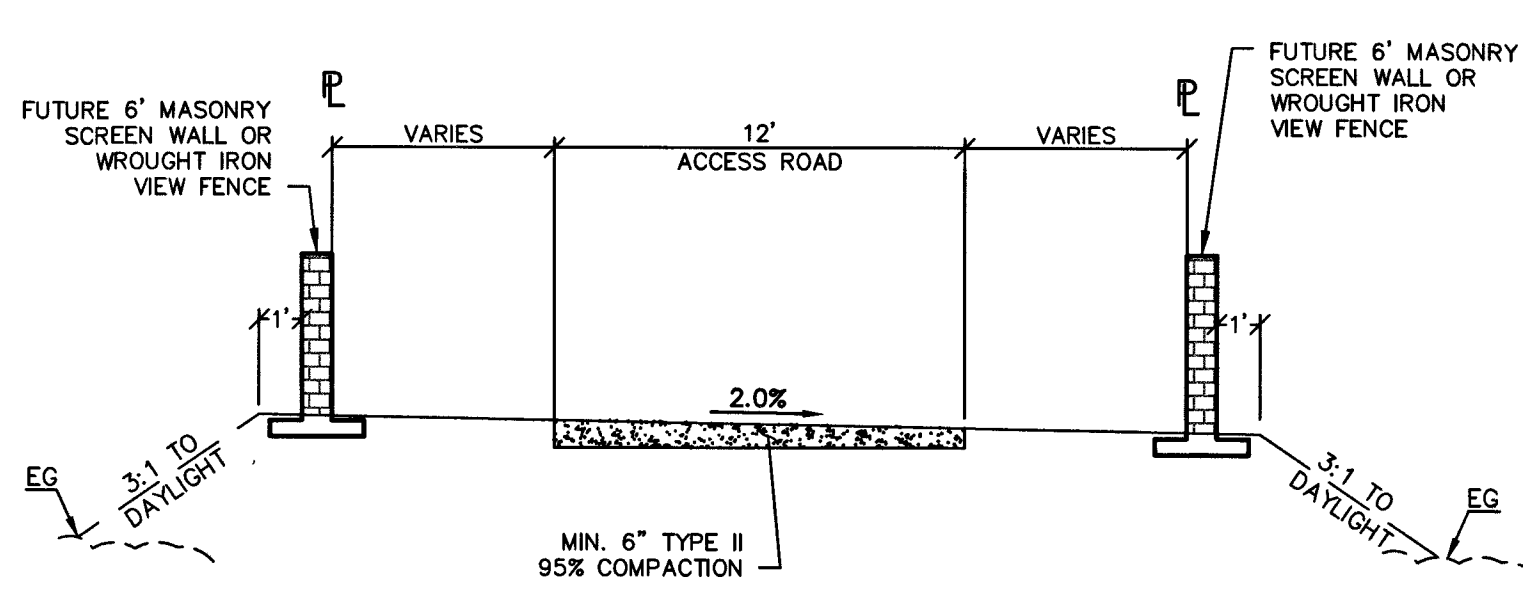
19 DROP INLET TYPE 2B
SCALE: N.T.S.



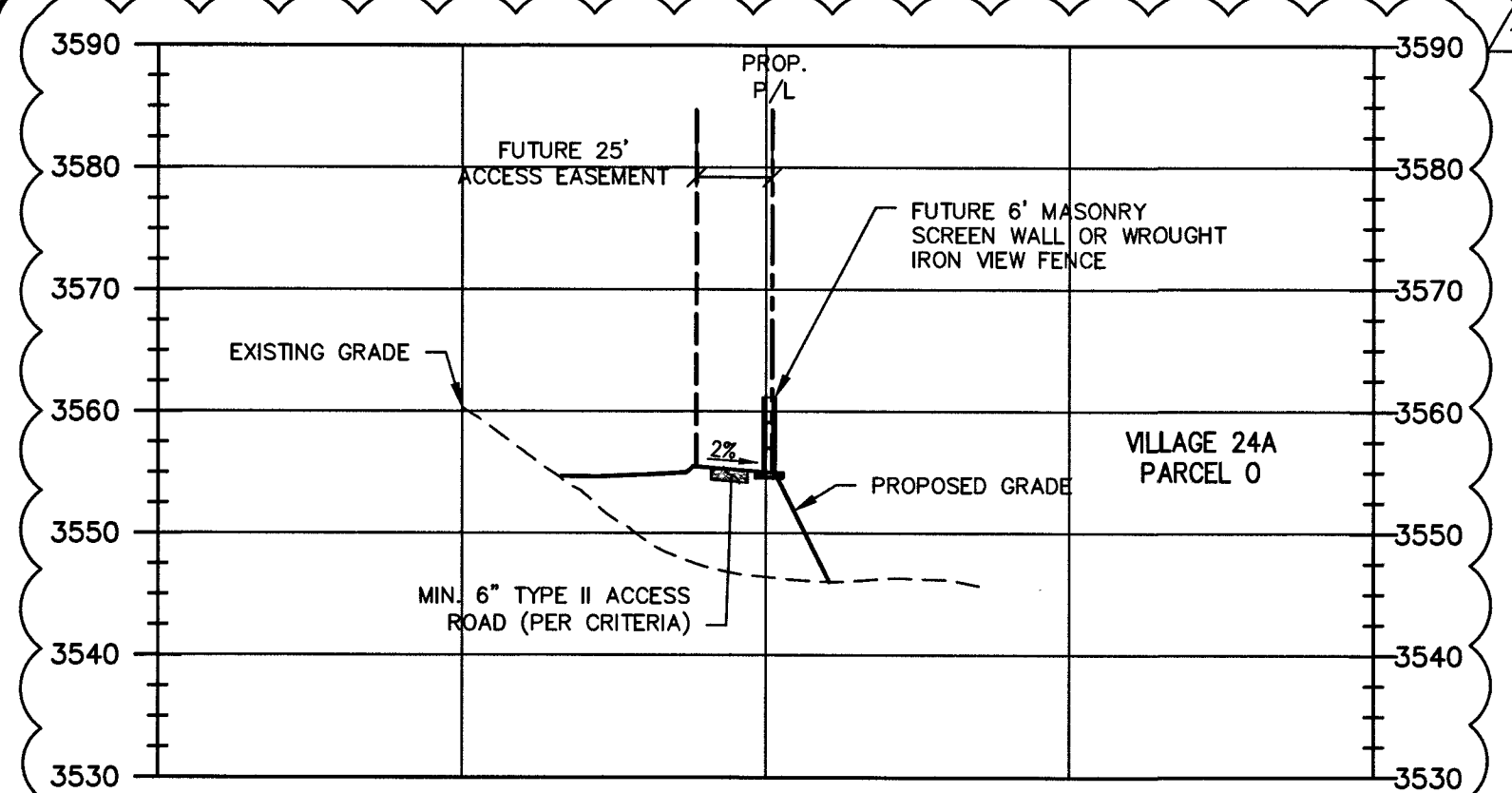
SECTION F
HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'



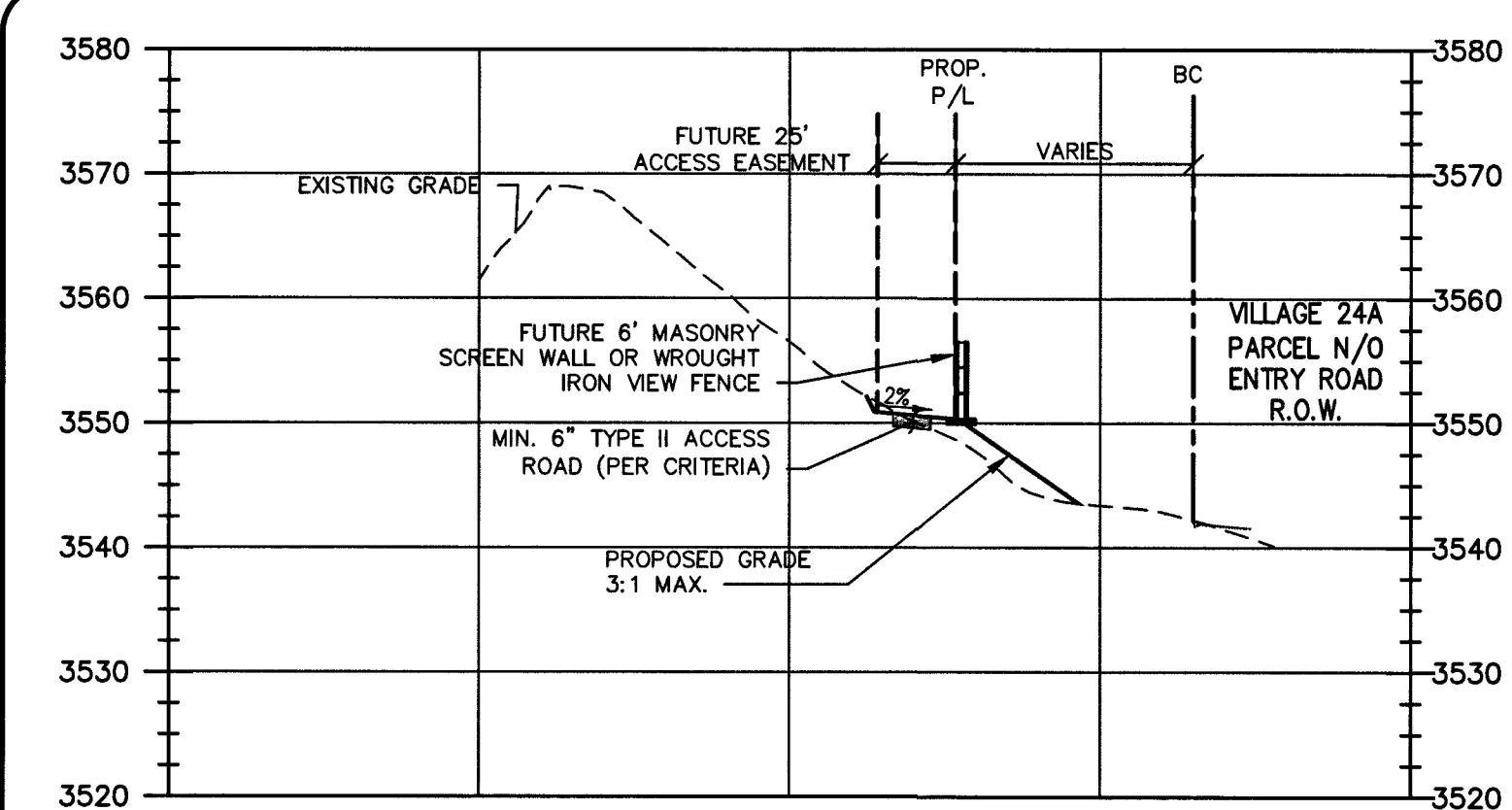
SECTION C
HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'



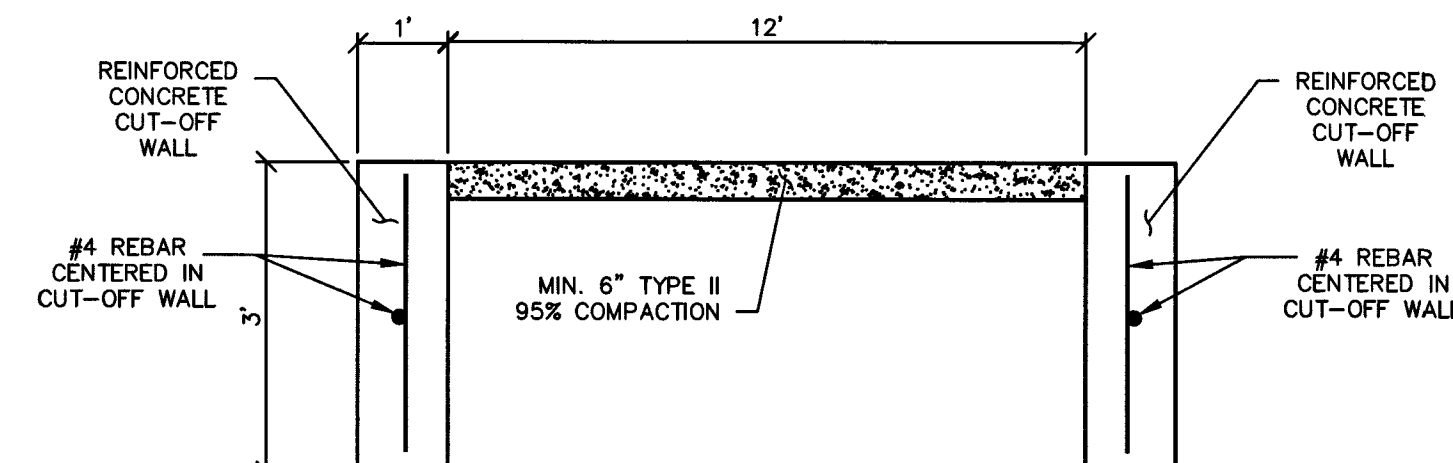
H SECTION G
19 SCALE: N.T.S.



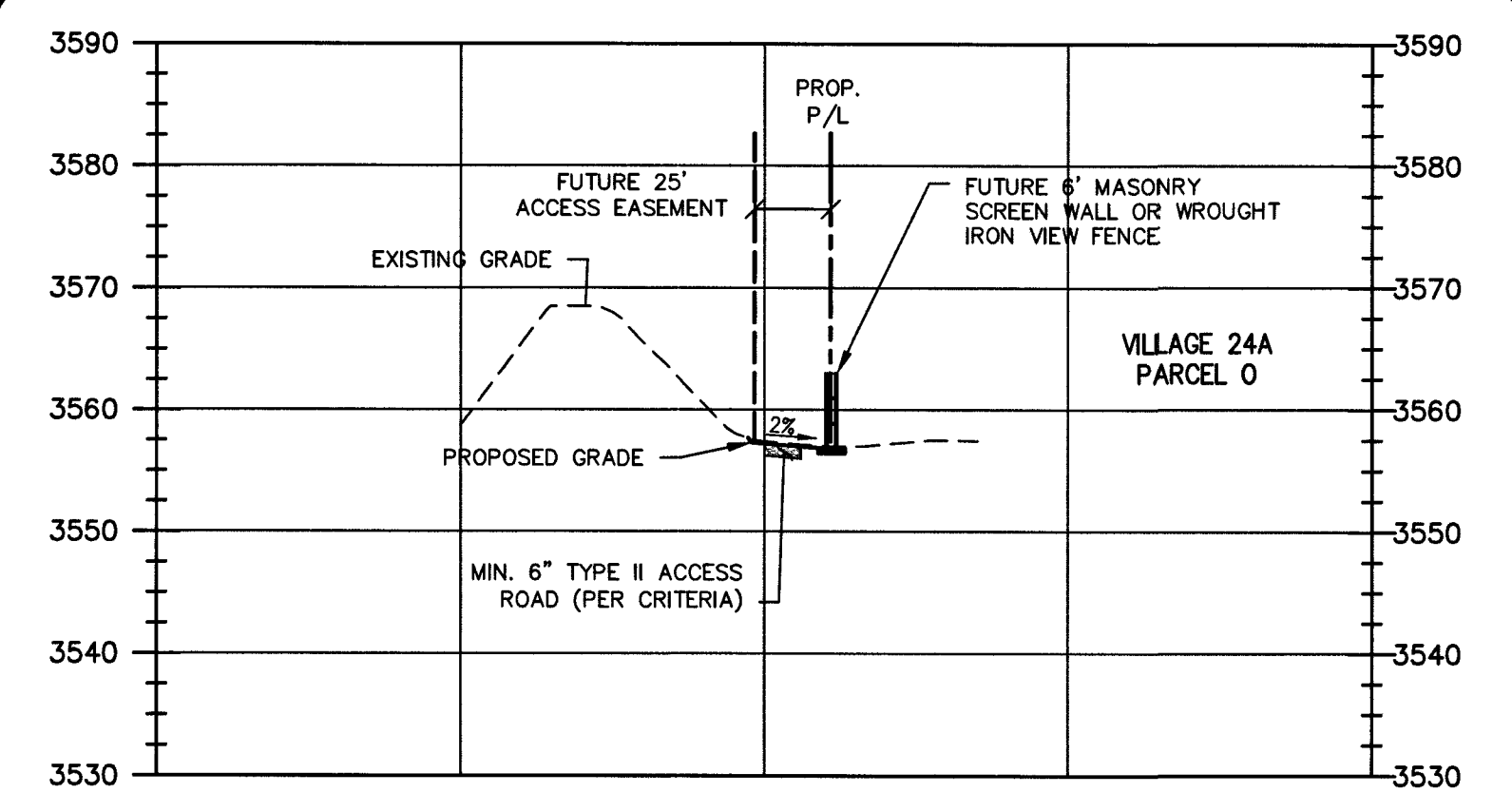
E SECTION E
19 HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'



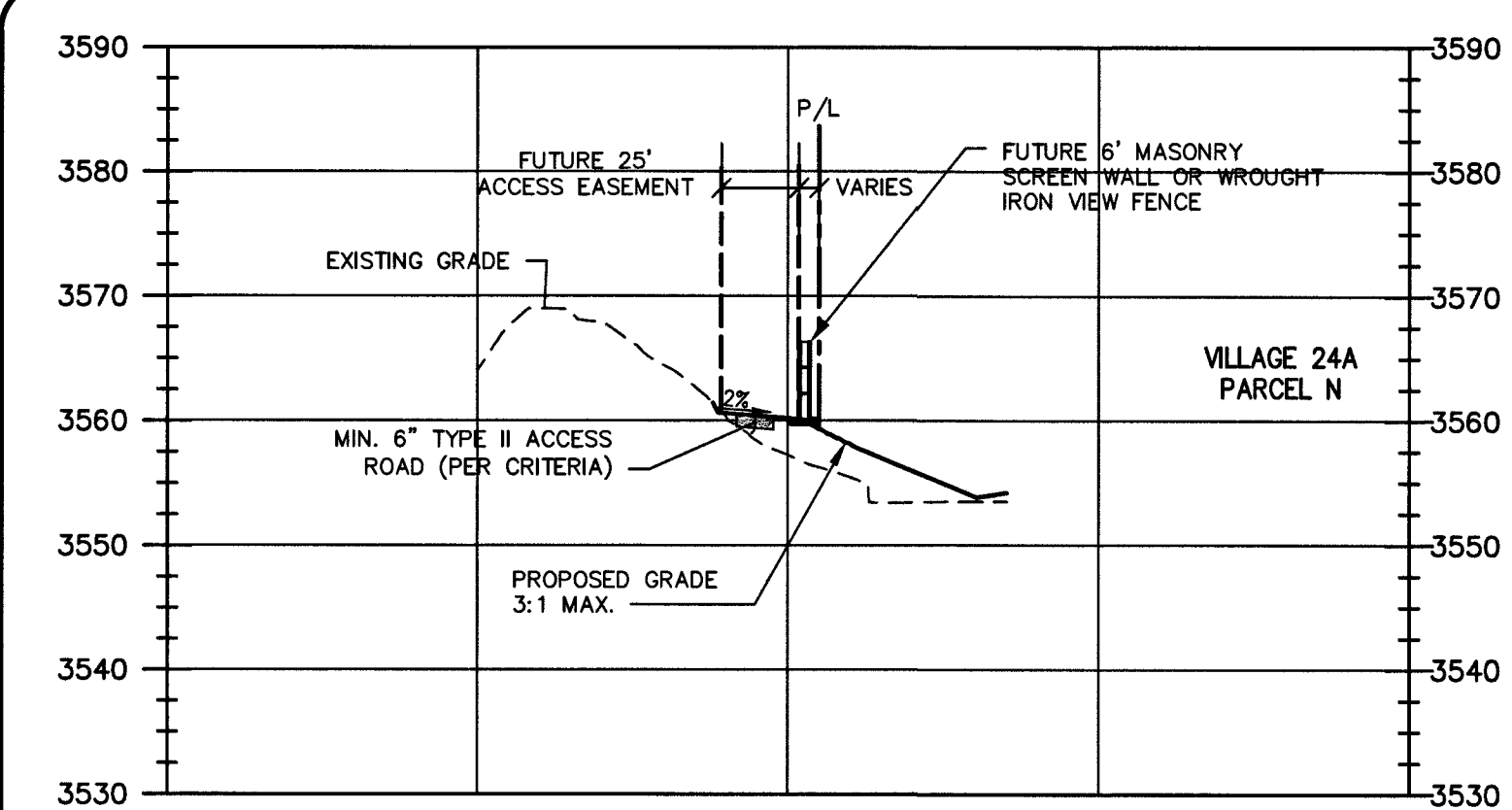
SECTION B
 19 HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'



G CUT-OFF WALL SECTION
19 SCALE: N.T.S.



D SECTION D
19 HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'



SECTION A
 HORIZ. SCALE: 1"=60' VERT. SCALE: 1"=15'

- [illegible]

GCI
ENGINEERS' SURVIVORS

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gowngineering.com

Projects 600162024 - 238 \WMC\production\Struct\238 - STRUCT.dwg
Andrew Park-Murray

PIPE PENETRATION DETAILS

20 OF 20 SHTS

