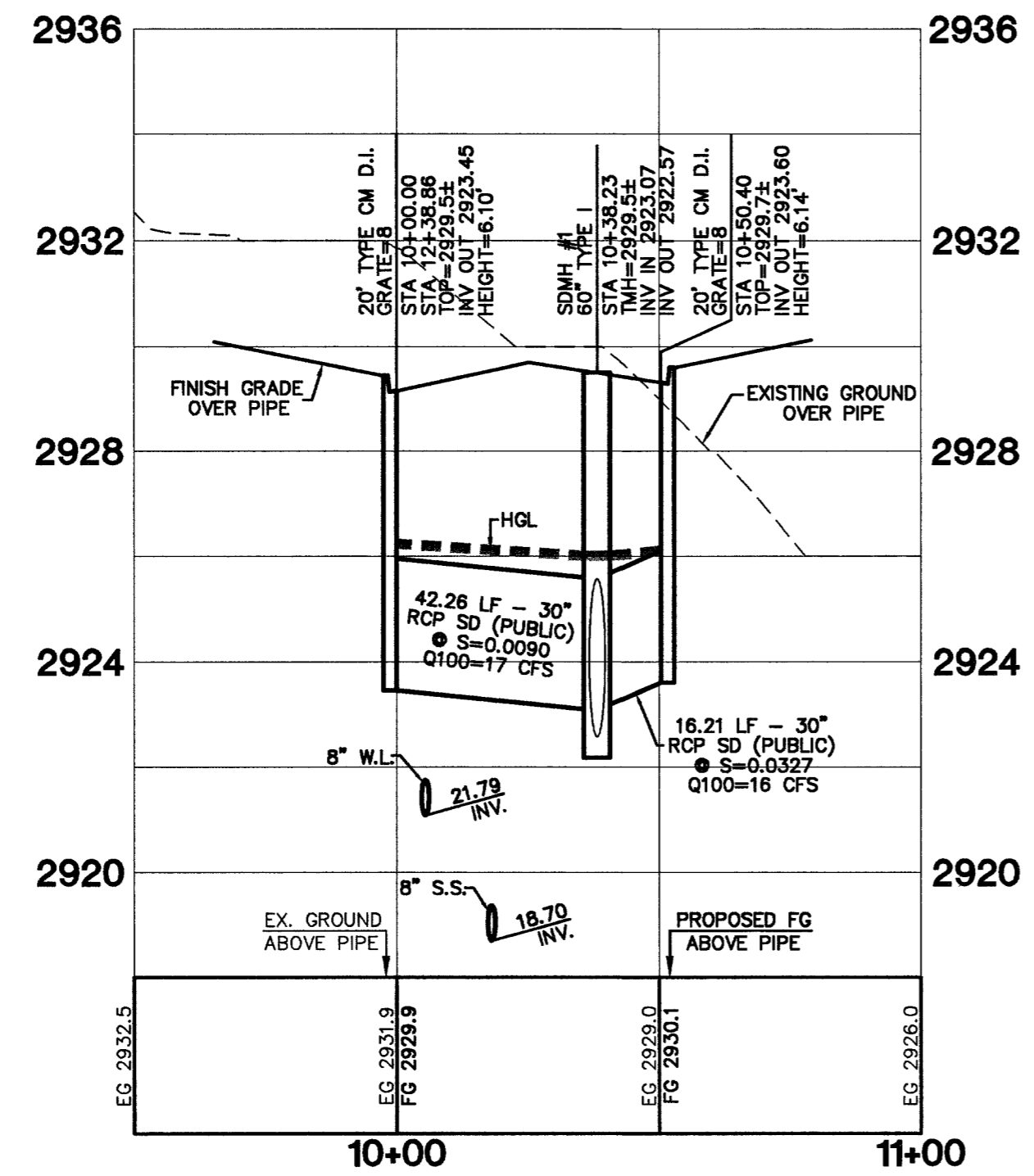


**30" STORM DRAIN PIPE**



**CITY OF LAS VEGAS GRADING NOTES**

- 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.
- 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 SUB GRADE, FINISH GRADE AND SLOPES SHOWN.
- 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.
- 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.
- 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.
- 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:
 

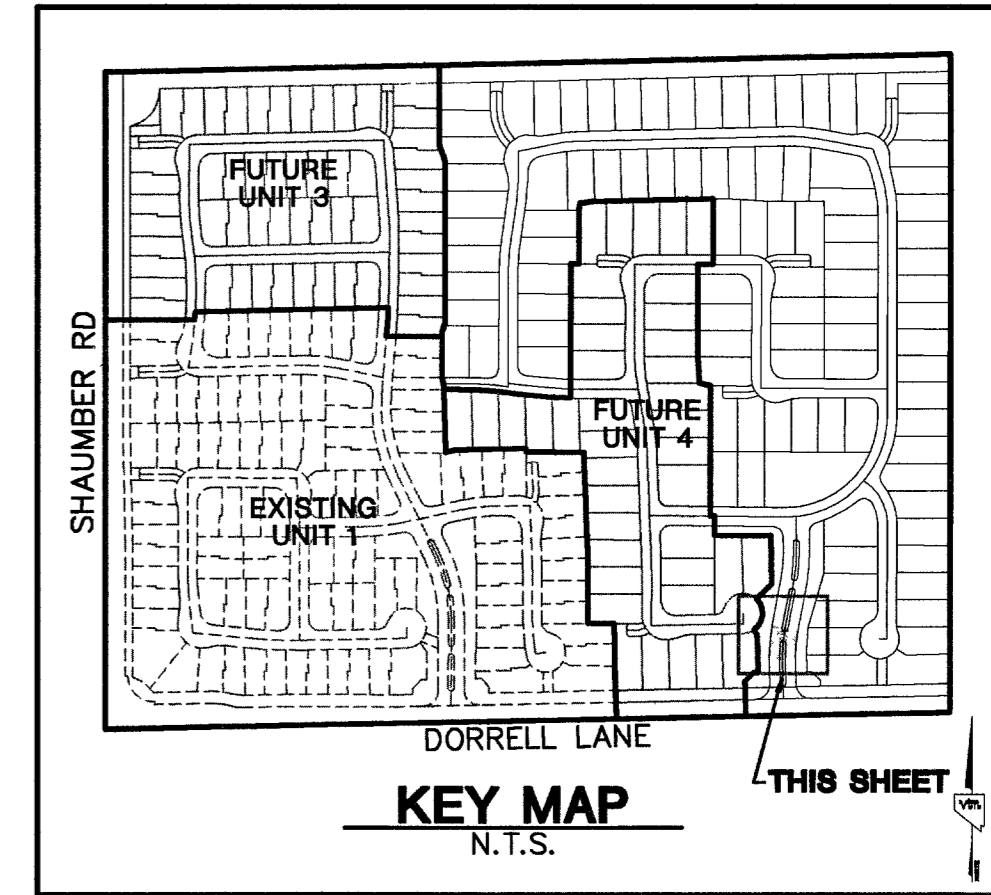
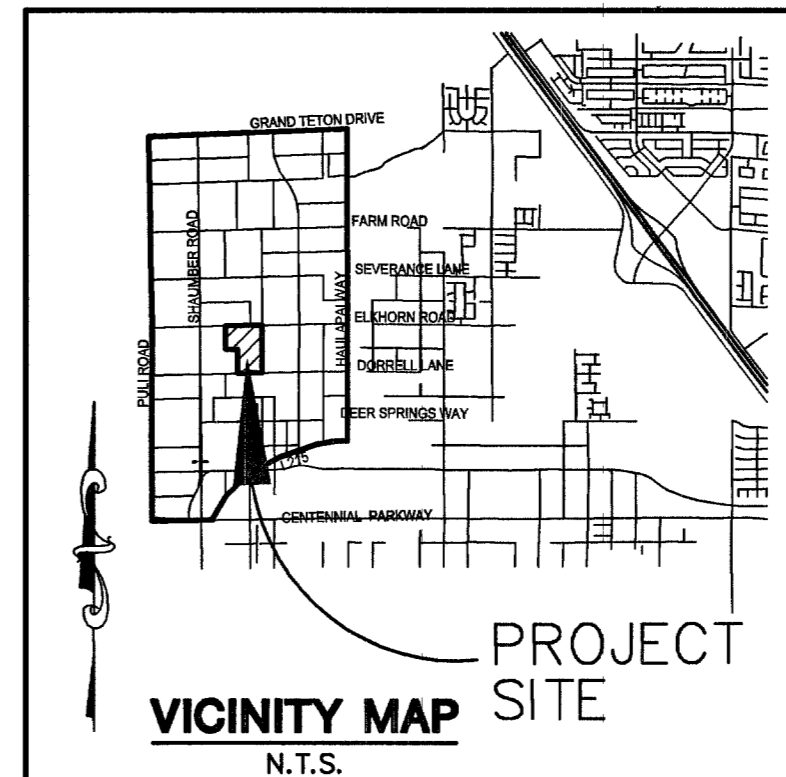
	HORIZONTAL	VERTICAL	COMPACTION
A. PAVEMENT AREA SUB GRADE	0.1'+	+0.1' TO -0.1'	SEE SOILS REPORT
B. ENGINEERED FILL	0.5'+	+0.1' TO -0.1'	SEE SOILS REPORT
- CONTRACTOR TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN IN PLACE.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACK FILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
- 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.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND 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.

**LEGEND**

- EX. CONTOUR(5' INTERVAL)
- EX. CONTOUR(1' INTERVAL)
- PROPOSED CONTOUR
- PROPOSED PAD GRADE
- FUT./EXIST. PAD GRADE
- SLOPE AND FLOW DIRECTION
- EDGE OF EXIST. A.C.
- SAW CUT & MATCH A.C.
- SIDEWALK RAMP
- PAD SWALE SLOPES
- SCARP AREA
- LOT NUMBER
- BLOCK NUMBER
- RETAINING HEIGHT (FEET) AS MEASURED FROM ROUGH GRADE
- SIGHT VISIBILITY ZONES
- PROJECT BOUNDARY LINE
- SETBACK LINE
- R/W OR P/L
- EXIST. IMPROVEMENTS
- FUTURE IMPROVEMENTS
- CENTER LINE
- RETAINING WALL
- CONC. BLOCK WALL
- EXIST. CONC. BLOCK WALL
- EXIST. DIRT ROAD
- EXIST. AC
- CONSTRUCTION PHASE LINE OR UNIT BOUNDARY LINE

**ABBREVIATIONS**

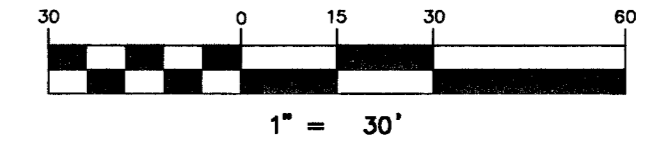
- FG FINISH GRADE
- FL FLOW LINE
- TC TOP OF CURB
- TRC TOP OF ROLL CURB
- EAC EDGE OF ASPHALT PAVEMENT
- FUT. FUTURE
- EXIST. EXISTING (EX.)
- VG VALLEY GUTTER
- NG NATURAL GROUND
- H.P. HIGH POINT
- L.P. LOW POINT
- C/L CENTER LINE
- O/C OFFSET CROWN
- BC BACK OF CURB
- BCR BEGIN CURB RETURN
- IF TOP OF FOOTING
- GB GRADE BREAK
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PRC POINT OF REVERSE CURVATURE
- POC POINT OF COMPOUND CURVATURE
- MVC MID-POINT OF VERTICAL CURVE
- EVC END VERTICAL CURVE
- PRVC POINT OF REVERSE VERTICAL CURVE
- VPI VERTICAL POINT OF INTERSECTION
- TPW TOP OF PLANTER WALL
- TRW TOP OF RETAINMENT WALL
- TOP TOP OF CHANNEL/SCARP
- TOE TOE OF CHANNEL/SCARP
- TOB TOP OF BOX
- PP POWER POLE
- TRANS. TRANSITION
- RET. RETAINMENT
- INT. INTERSECTION
- D.G. DESIGN GRADE
- TSW TOP OF SIDEWALK
- FF= FINISH FLOOR
- GFF= GARAGE FINISH FLOOR
- BFE= BASE FLOOD ELEVATION
- R/W RIGHT-OF-WAY
- S/W SIDEWALK



**CONSTRUCTION NOTES**

- CONSTRUCT 24" "L" TYPE CURB & GUTTER PER STD. DWG. NO. 216
- CONSTRUCT 30" "ROLL" TYPE CURB & GUTTER PER STD. DWG. NO. 217A
- CONSTRUCT "A" TYPE ISLAND CURB PER STD. DWG. NO. 219
- CONSTRUCT CONCRETE CROSS GUTTER PER STD. DWG. NO. 228
- CONSTRUCT 4" CONCRETE SIDEWALK PER STD. DWG. NO. 234
- CONSTRUCT WHEEL CHAIR RAMP PER STD. DWG. NO. 235 CASE 1
- CONSTRUCT 2" WIDE UNDER SIDEWALK DRAIN PER STD. DWG. NO. 236
- CONSTRUCT DEPRESSED CURB SECTION PER DETAIL ON SHEET DT1
- CONSTRUCT 10' "L" TO "ROLL" CURB TRANSITION PER DETAIL ON SHEET DT1.

**GRAPHIC SCALE**



**PROFILE SCALES:**  
HORIZ. = 1"=30'  
VERT. = 1"=3'

**PROJECT BENCHMARK**

DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)  
CITY OF LAS VEGAS BENCHMARK: BLV99-133ES  
NAVD88 ELEVATION: 869.606 METERS (2853.03 FEET)  
RIVET AND PLATE IN CONCRETE CYLINDER NW CORNER OF HUALAPAI AND ELKHORN

NOTE: WHEN THE SURVEYING FOR THIS PROJECT BEGAN, THE ABOVE REFERENCED BENCHMARK BLV99-133ES WAS NOT PUBLISHED. THE BASIS FOR THE DATUM FOR THIS PROJECT IS SHOWN ON RECORD OF SURVEY FILE 124 PAGE 94, CLARK COUNTY BENCHMARK 1000-6NS, WHICH AT THE TIME OF THE ORIGINAL SURVEY (PRIOR TO THE CURRENT 2003 COUNTY BENCHMARK PUBLISHING) HAD AN ELEVATION OF 2584.81 FEET. TO CONVERT THE CURRENT CITY OF LAS VEGAS BENCHMARK BLV99-133ES TO MATCH THE ORIGINAL PROJECT DATUM, 0.34' NEEDS TO BE ADDED TO THE ELEVATION OF 2853.03 FEET.

**BASIS OF BEARINGS**

THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 00°08'18" EAST BEING THE EAST LINE OF THE NORTHWEST QUARTER (NE 1/4) OF THE SECTION 24, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 123 AT PAGE 32.

**NOTE:**

ALL DRAINAGE EASEMENTS MUST BE COMMON LOTS & PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY H.O.A.

**NOTES:**

- ALL PRIVATE STREETS AND PRIVATE DRIVES ARE P.U.E., PUBLIC SEWER EASEMENT, & PUBLIC DRAINAGE TO BE PRIVATELY MAINTAINED BY H.O.A.
- SEE SHEET DT1 FOR SECTIONS AND DETAILS.

**HC RAMP DATA**

NO.	"A"	"B"	CASE
1	8'	8'	

CUT = 80,243 C.Y.  
FILL = 64,914 C.Y.  
(UNADJUSTED)

"I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT CITY OF LAS VEGAS, NEVADA FOR THIS PROJECT," DS3673  
*Christopher R. Grubbs* 11/19/05  
CHRISTOPHER R. GRUBBS DATE  
P.E. NO. 13956

**CONTRACTOR NOTE:**

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

Avoid overhead power lines. It's costly.  
**Call before you Overhead**  
1-702-227-2929

Avoid cutting underground utility lines. It's costly.  
**Call before you Dig**  
1-800-227-2600

Avoid hitting underground traffic signal systems and street light system conduits. It's costly. Call before you dig underground.  
**Call before you Underground**  
1-702-455-7511  
1-702-229-6611  
CLARK COUNTY TRAFFIC OPERATIONS AND LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

**KIMBALL HILL**  
8 SINISE WAY, SUITE 101  
HENDERSON, NEVADA 89014  
(702) 638-4686

**nevada**  
CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

**CITY OF LAS VEGAS**

**STORM DRAIN PLAN & PROFILE**  
**30" STORM DRAIN PIPE**

**BRIGHTON & KENSINGTON PROVIDENCE / CLIFFS EDGE UNIT 2**

DESIGNED BY: *Christopher R. Grubbs* 2/25/05  
CHECKED BY: *Christopher R. Grubbs* 2/25/05  
PROJECT NO: 6399-2  
SCALE: 1"=30' HORIZ. 1"=3' VERT.

EXPIRES 06-30-07  
SHEET **SD1** OF 52 SHEETS  
DRAWING NO. 10744890-2