

C L V GENERAL NOTES

* REQUIRED NOTES - OTHERS OPTIONAL

- * 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 EDITION; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST EDITION; ANY OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE DRAWINGS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS ARE NOT SHOWN ON THE PLANS.
- * 3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING 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 RECONSTRUCTED SATISFACTORY TO THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL NOT BACKFILL ANY TRENCHES IN WHICH WATERLINES HAVE BEEN UNCOVERED UNTIL THE WATERLINES HAVE BEEN INSPECTED BY THE LAS VEGAS VALLEY WATER DISTRICT. THE WATER DISTRICT SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF CONSTRUCTION IN THE VICINITY OF WATER LINES.
- * 5. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY ALTERATIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- * 6. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE DESIGNED FOR A 5.5 SACK MIX WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 (OR AS DESIGNATED BY THE SOILS ENGINEER). MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT.
7. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL OVERHEAD INTERFERENCES 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 OR UNDERGROUND POWER AND/OR TELEPHONE FACILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS AND LIABILITY IN CONNECTION THEREWITH.
- * 8. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION PRIOR TO COMMENCING ANY CONSTRUCTION.
9. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
10. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTER & VALLEY GUTTER AFTER COMPACTION.
11. APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.
12. CURB & GUTTER WITH A GRADE OF LESS THAN FOUR TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
13. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
14. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS, OR AS DESIGNATED IN THE FIELD BY A CITY INSPECTOR.
15. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER.
16. EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS INSPECTOR IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.
- * 17. 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.E.S. STATUTE NO. 625.550.

C L V SEWER NOTES

1. ALL SANITARY SEWER INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTED.
2. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
3. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING AND BACKFILL OR TYPE II GRAVEL.
4. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
5. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
6. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED PIPE FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.

LAS VEGAS VALLEY WATER DISTRICT

1. ALL WORK TO CONFORM TO LAS VEGAS VALLEY WATER DISTRICT LATEST STANDARD PLATES AND SPECIFICATIONS.
2. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE NO. 1, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA.
3. NOTICE TO BE GIVEN ENGINEERING DEPARTMENT OF THE LAS VEGAS VALLEY WATER DISTRICT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
4. SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1 1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
5. ALL LINES TO BE PRESSURE TESTED AT 200 PSI.
6. DEFLECTION ANGLE SHALL NOT EXCEED 2 1/2 DEGREES PER 13 FOOT SECTION OF PIPE FOR PIPE SIZES SMALLER THAN 14 INCHES, AND SHALL NOT EXCEED 2 DEGREES FOR PIPE SIZES BETWEEN 14" AND 16".
7. ALL METERS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS.
8. DETECTOR TAPE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED AS FOLLOWS:
 - A. OVER ALL MAINS NOT INSTALLED AT 6' FROM BACK OF CURB.
 - B. OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAINS.
9. CALL BEFORE YOU DIG - - - 1-800-277-2600

TRAFFIC NOTES

1. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
2. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK - 1985", AND TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - 1978", REV. NO. 4, MARCH 1986.
3. 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 MATERIAL TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
4. THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON PLANS. STREET NAME SIGNS SHALL CONFORM, IN THEIR ENTIRETY, TO LAS VEGAS CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH LAS VEGAS CITY STANDARDS.
5. IF A PROPOSED STREET LIGHT STANDARD IS FIELD LOCATED TO WITHIN (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, THEN CHANGE SIGN MOUNTING TO ONE ON THE STREET LIGHT STANDARD.
6. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTION(S) OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.

UTILITY NOTE

THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE OR FROM INFORMATION OBTAINED FROM THE UTILITY COMPANIES. THE ENGINEER ACCEPTS NO LIABILITY FOR THE EXISTENCE OR NON-EXISTENCE OF UTILITY LINES. CONTRACTORS AND OTHERS USING THIS MAP MUST CONFIRM THE LOCATION OF UNDERGROUND LINES OR STRUCTURES WITH THE UTILITY COMPANIES PRIOR TO COMMENCING ANY EXCAVATION.

STREET LIGHT NOTE

ALL STREET LIGHTING INSTALLATIONS EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE UNIFORM STANDARDS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.

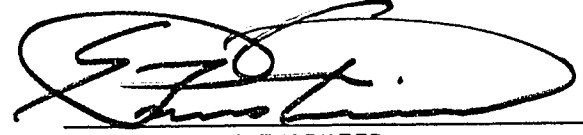
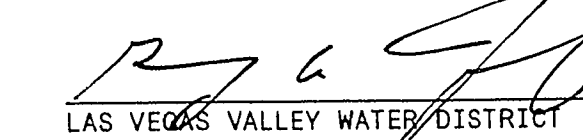
FIRE HYDRANT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3318.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - A - KENNEDY GUARDIAN
 - B - MUELLER A-423 CENTURIAN
 - C - CLOW MODEL 2546 MEDALLION
3. ON ANY NEW HOME OR BUILDING CONSTRUCTION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
4. CONTRACTOR SHALL PLACE A GREEN REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANTS.
5. CALL THE LAS VEGAS FIRE DEPARTMENT AT 383-2888 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
6. PAINTING OF CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3318 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR WATER LINE AND FIRE HYDRANT INSTALLATIONS ON THE PRIVATE SIDE OF THE METER.
8. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT FOR VERIFICATION OF ON-SITE WATER SUPPLY.
9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.
10. FIRE HYDRANT SPACING:
 - RESIDENTIAL - 600 FT. MAXIMUM
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 500 FT. MAXIMUMFIRE HYDRANTS SHALL BE LOCATED WITHIN 500 FT. OF ANY CONSTRUCTION OR COMBUSTIBLE OPEN STORAGE.
11. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT. OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FT. OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
13. ENSURE THAT FIRE HYDRANTS ARE CONNECTED TO A DEPENDABLE WATER SUPPLY CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW.
14. DESIGNATE FIRE LANE WITH APPROVED SIGNS
15. PAINT CURB RED AND INSTALL FIRE DEPARTMENT APPROVED SIGNS AT 40' O.C. OR AS NEEDED EXCEPT ON THOSE CURBS ADJACENT TO PARKING STALLS OR BUILDING.

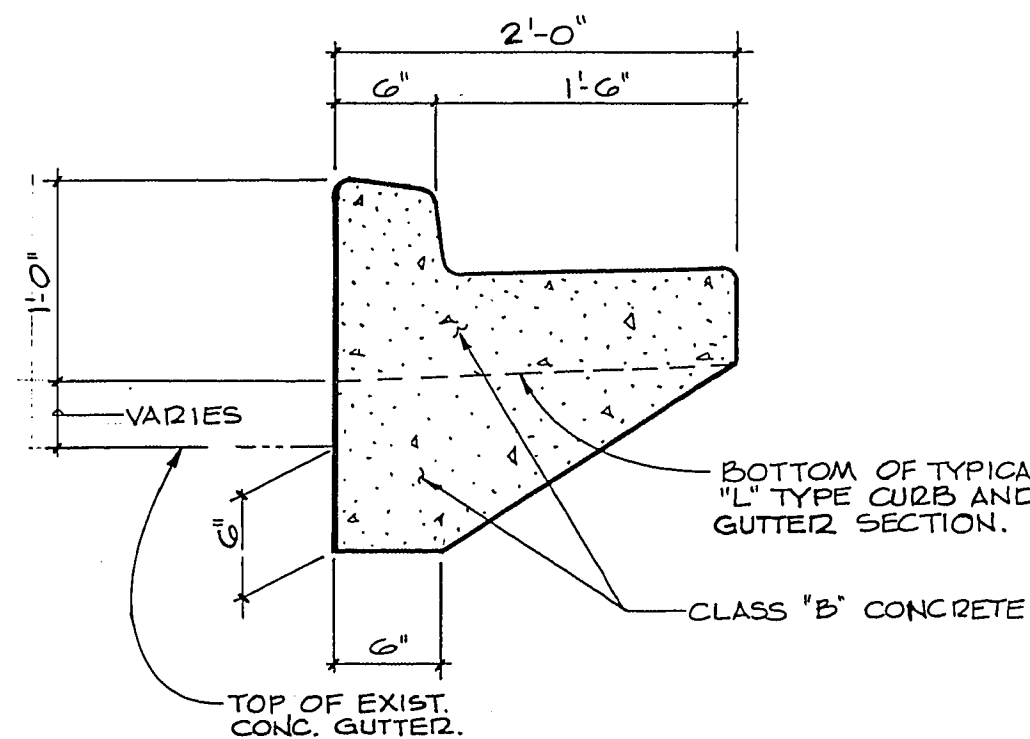
GENERAL NOTES

1. A SEPARATE PERMIT IS REQUIRED FOR ANY OFF-SITE CONSTRUCTION.
2. A GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB-SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
3. UNLESS OTHERWISE INDICATED, ALL DIMENSIONS ARE TO FRONT FACE OF CURB WHERE CURBS ARE INDICATED ON THE PLAN.
4. EXISTING IMPROVEMENTS SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF NEW IMPROVEMENTS.
5. SEE LANDSCAPE DRAWINGS FOR LANDSCAPE WATER AND PIPING.
6. ALL EARTHWORK, BASE, PAVEMENT, AND OTHER CONSTRUCTION SHOWN SHALL CONFORM WITH THE PROVISIONS OF CONVERSE GEOTECHNOLOGICAL INVESTIGATION CCSW PROJECT NO. 89-33563-01, NOVEMBER 3, 1989.
7. ALL PARKING AREAS SHOWN SHALL BE PAINT STRIPED PER DRAWINGS. USE NDOT APPROVED NON-REFLECTIVE TRAFFIC PAINT.
8. THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAGPERSONS NECESSARY TO INSURE THE SAFETY OF WORKMEN AND VISITORS.
9. WATER LINES MUST BE PLACED AT LEAST 18" ABOVE SEWER PIPES WITH 3' MINIMUM COVER.
10. INSTALL ALL OFF-SITE AND ON-SITE SIDEWALKS IN CONFORMANCE TO CLARK COUNTY UNIFORM STD. DRWG. NO. 234.
11. INSTALL ALL COMMERCIAL DRIVEWAYS IN CONFORMANCE TO CLARK COUNTY STD. DRWG. NO. 224.
12. INSTALL 4" OF TYPE II BASE UNDER ALL ON-SITE SIDEWALK.
13. THE INSTALLATION OF WATER METERS SHALL BE REQUIRED ON ALL WATER SERVICES.
14. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND OF INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE CITY ENGINEER.
15. WHERE OTHER AGENCIES, SUCH AS THE NEVADA DEPARTMENT OF TRANSPORTATION, HAVE JURISDICTION WITHIN THE PROJECT AREA, IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN THE AGENCY'S APPROVAL PRIOR TO START OF CONSTRUCTION.
16. FOLLOW CCSD CONSTRUCTION STANDARDS FOR ALL SEWER AND STORM DRAIN TRENCHING.
17. FOLLOW LVVWD CONSTRUCTION STANDARDS FOR ALL WATER PIPE TRENCHING.

APPROVALS

	2-7-90
C.L.V. CITY ENGINEER	DATE
	1-29-90
LAS VEGAS VALLEY WATER DISTRICT	DATE
	1-29-90
CITY OF LAS VEGAS FIRE MARSHAL	DATE
	1-19-90
NEVADA POWER COMPANY	DATE

THIS APPROVAL IS ONLY FOR THE PLACEMENT AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATIONS.



MODIFIED "L" TYPE CURB & GUTTER

SCALE: 1 1/2" = 1'-0"

				DESIGN	SCALE
				DRAWN	ACCT. NO.
				CHECKED	F.B. NO.
REV	BY	DATE	DESCRIPTION		DATE

CRS CALDWELL,
RICHARDS &
SORENSEN, INC.
CONSULTING ENGINEERS

UNITED CONSTRUCTION
OFFICE CLUB

APPROVALS

SHEET 3
OF 3
DRWG. NO.
LV-55