

7-2-72

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

*REQUIRED NOTES - OTHERS ONLY IF APPLICABLE

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 SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA", LATEST EDITION, 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, OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS, 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 INTERFERENCES WHICH MAY AFFECT EXISTING UTILITY SERVICE LATERALS AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND POWER, GAS AND/OR OTHER UTILITIES IN ORDER TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS 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 SATISFACTORY TO THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- * 5. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT.
6. PERMITS ARE REQUIRED FOR ALL 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 EXTENDED TYPE CURB.
8. AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT HANDICAP RAMPS.
9. APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.
10. CURB & GUTTER WITH A GRADE OF LESS THAN FOUR TENTHS OF ONE PERCENT SHALL BE WATER CURED AS SOON AS POSSIBLE AFTER CONSTRUCTION. ANY CURB AND GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY SHALL BE REMOVED AND REPLACED.
- * 11. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
- * 12. 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 NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS, SHALL BE DESIGNATED IN THE FIELD BY A CITY INSPECTOR.
- * 13. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY WESTERN TECHNOLOGIES INC. APPROVED BY THE CITY ENGINEER.
14. EXACT LOCATION OF ALL SANCTU 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 REDUCTION.
- * 15. 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. 625-50.
- * 16. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC. SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAYS, ROW LINES, AND CROSS CURBS UNLESS WRITTEN APPROVAL IS OBTAINED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
17. WALL NOTES:
 - A. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN FOR THE PURPOSE OF GRADING RELATIONSHIPS.
 - B. THE STRUCTURAL AND ARCHITECTURAL DESIGN OF ALL WALLS (RETAINING OR NON-RETAINING) MUST BE APPROVED BY THE CIVIL BUILDING DEPARTMENT.

A.C.P.	ASBESTOS CEMENT PIPE
A.C.	ASPHALTIC CONCRETE
B.C.	BEGIN CURVE
B.F.	BOTTOM OF FOOTING ELEVATION
B.V.C.	BEGIN VERTICAL CURVE
B.S.	BACK OF SIDEWALK
C.B.	CATCH BASIN
C.	CENTERLINE
CH	CHORD
C.M.P.	CORRUGATED METAL PIPE
CONC.	CONCRETE
C.P.	CONCRETE PIPE
C.R.	CURB RETURN
D.I.	DROP INLET
D.	DETAIL
E	ELECTRICAL
ELEV.	ELEVATION
E.C.	END OF CURVE
E.V.C.	END OF VERTICAL CURVE
EXIST.	EXISTING
E.G.	EXISTING GRADE
F.F.	FINISHED FLOOR
F.F.C.	FRONT FACE OF CURB
F.G.	FINISHED GRADE
F.H.	FIRE HYDRANT
FL	FLOW LINE
G	GAS
G.B.	GRADE BREAK
HORIZ.	HORIZONTAL
H.S.	HOUSE SERVICE
INT.	INTERSECTION
I.E.	INVERT ELEVATION
LT	LEFT
L	LENGTH
L.F.F.	LINEAL FEET
M.H.	MANHOLE
P	PAD ELEVATION
PI	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVATURE
P.O.T.	POINT OF TANGENT
P.V.C.	POLYVINYL CHLORIDE PIPE
(R)	PROPERTY LINE
R	RADIUS
REF.	REFERENCE
R.C.P.	REINFORCED CONCRETE PIPE
R.G.	ROUGH PAD ELEVATION
RT	RIGHT
R/W	RIGHT OF WAY
S	SANITARY SEWER
S.W.	SIDEWALK
S	SLOPE
SHT.	SHEET
STA.	STATION
S.D.	STORM DRAIN
T	TANGENT
T	TELEPHONE
T.B.C.	TOP BACK OF CURB
T.C.	TOP OF CURB
T.P.	TOP OF PAVEMENT
TYP.	TYPICAL
VERT.	VERTICAL
V.C.	VERTICAL CURVE
V.P.I.	VERTICAL POINT OF INTERSECTION
W	WATER

- 1) CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITION BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE CITY ENGINEER.
- 2) EXISTING UTILITIES ARE LOCATED ON THE PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE UTILITIES NOT SHOWN ON THE PLANS.
- 3) CONSTRUCTION TO BE PER UNIFORM STANDARD SPECIFICATIONS AND DRAWINGS, CLARK COUNTY AREA, NEVADA.
- 4) CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.
- 5) ALL GRADING AND PAVING SHALL CONFORM TO THE SOLS REPORT PREPARED BY SUMMIT ENGINEERING CORPORATION DATED JANUARY 13, 1992 AND ANY THERETO.
- 6) POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO THE CITY OF LAS VEGAS.

- 1) ALL STREET LIGHTING INSTALLATIONS SHALL CONFORM TO THE LATEST ISSUE OF 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, NEVADA, 1986, UNLESS OTHERWISE NOTED.
- 2) SEE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION CITY OF LAS VEGAS DRAWING NO. 318.

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVMD. FOLLOWING APPROVAL OF THE PLANS, NOTICE SHALL BE GIVEN TO THE LVVMD CUSTOMER SERVICE DEPARTMENT (870-4194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION, AND 24 HOURS PRIOR TO AN INSPECTION.
2. CALL BEFORE YOU DIG 1-800-272-2600.
3. ALL WORK SHALL CONFORM TO LVVMD LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS.
4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS SHALL BE REQUIRED ON ALL 1" SERVICE LATERALS. SERVICE SADDLES ONLY SHALL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
6. COPPER SERVICE LATERAL: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS & STANDARD PLATES.
7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	ACP	DUCTILE IRON SLIP JOINT	DUCTILE IRON MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	2.5 DEGREES	2.5 DEGREES
14-16 INCH	2.0 DEGREES	1.5 DEGREES	1.5 DEGREES
18-24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

ON PVC PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 16 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, AND 9 INCHES FOR 10" AND 12" PIPE.

- IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURERS RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY GUTTERS.
10. DETECTOR TAPE SHALL BE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED, AND AS FOLLOWS:
 - A) OVER ALL MAINS NOT INSTALLED 5 FEET FROM BACK OF CURB.
 - B) OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
11. ALL WATER MAINS SHALL BE PRESSURE TESTED AT 200 psi FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.
12. ALL WATER MAINS SHALL BE DISINFECTED, FLUSHED, AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED, PRIOR TO THE CONNECTION OF THE WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICTS SYSTEM.
13. CONTRACTOR TO OBTAIN ALL METERS—2" AND SMALLER FROM LYVVOO CENTRAL STORES, TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

- 1) A.C. PAVEMENT TO BE 1/2" ABOVE LIP OF GUTTER AFTER COMPACTION.
- 2) SUBGRADE FOR TYPE 1 UNDER CURB AND GUTTER AND UNDER A.C. (WHERE REQUIRED) TO BE CONTINUOUS.
- 3) FOG SEAL TO BE APPLIED AFTER FINAL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.
- 4) THE MAXIMUM GRADE BREAK OCCURRING IN THE CROSS SECTION SHALL BE 2% AND SHALL FALL BETWEEN DRIVING LANES OR BETWEEN A DRIVING LANE AND A PARKING LANE.

A map showing the project location. The map includes a north arrow pointing upwards. The streets shown are Buckskin, Attwood Avenue, Cheyenne Avenue, Pioneer, and Tennax Way. A shaded area, representing the project location, is situated at the intersection of Attwood Avenue and Tennax Way, just north of Cheyenne Avenue. A road sign for '5050' is also visible on Tennax Way.

- 1) ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS," "HYDRANT INSTALLATIONS" AND ORDINANCE # 3545.
- 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 INSTALLATION, 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 BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE # 3545 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- 5) CALL THE LAS VEGAS BUILDING DEPARTMENT AT 799-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- 6) PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE # 3545 SHALL BE COMPLETE BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- 7) A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT, THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.
- 8) A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- 9) ALL ON SITE FIRE MAIN MATERIALS MUST BE U.S. LISTED AND F.M. APPROVED.
- 10) FIRE HYDRANT SPACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.
- 11) NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- 12) NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- 13) NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- 14) THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD/OR FIRE LANE, PUBLIC OR PRIVATE SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
- 15) A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN UFC 8B, SECTION 10.207).
- 16) ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANES PUBLIC OR PRIVATE IN EXCESS OF 150 FEET LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3545

1. All construction and materials shall be in accordance with the latest edition of the Design & Construction Standards For Wastewater Collection Systems and the Uniform Standard Specifications for Public Works' Construction Off-Site Improvements, Clark County Area, Nevada, as amended. In all cases, these Standards shall supersede the Uniform Standard Specifications. It will be the responsibility of the Contractor to be aware of the contents of the above specification books.
2. It shall be the Contractor's responsibility to perform construction as per plans. Any additions, deletions, or changes shall first meet with the approval of the controlling Agency.
3. Chisel "S" or "G" in curbs where sewer or gas laterals pass under the curb.
4. Polyvinyl (PVC) sewer pipe shall meet ASTM D-3034 SDR 35 specifications, installed with sand bedding and backfill of Type II gravel.
5. All manholes in paved streets 80" R/W and larger, shall have concrete collars.
6. 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.
7. A sewer main crossing over a water main or less than 18" under a water main, must be reinforced concrete encased for a distance not less than ten feet (10') to each side of the centerline of the water main.
8. All Contractors installing sewer mains that will be under the jurisdiction of the controlling Agency must be Class "A" Contractors.

CITY OF LAS VEGAS LEVEL
DATUM, BENCHMARK #OLVOO 15N4
ELEVATION=2333.431

APPROVALS

 11-24-93

DENNIS ANDERSON
CITY ENGINEER, CITY OF LAS VEGAS, NEVADA
NEVADA P.E. CERT. NO. 9160

DATE

Rita R. Allert 11/13/92
NEVADA POWER DATE

APPROVED FOR CONSTRUCTION - TIERRA DE FLORES

1276 JH 11/23/92
LUVWD (SHEETS 1 & 4) DATE

CALL BEFORE YOU DIG
1-800-227-2600

SHEET	SCALE	REV.	DATE	DESCRIPTION	BY	APP'D
	HORIZ. _____ VERT. _____					
7						

GENERAL NOTES AND APPROVAL SHEET
TERRA DE FLORES
CITY OF LAS VEGAS, CLARK COUNTY, NEVADA

DESIGNED BY: _____	 SUMMITTM ENGINEERING CORPORATION CONSULTING ENGINEERS AND SURVEYORS 18 E. ROAD AVE. LAS VEGAS, NEVADA 89101 (702) 735-1031
DRAWN BY: _____	
CHECKED BY: _____	
DATE: _____	

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