



# Memorandum

Department of Public Works  
City Engineer Division  
Survey Section  
333 North Rancho Dr., 8<sup>th</sup> Floor  
Las Vegas, Nevada 89106  
Phone (702) 229-6217  
Fax (702) 804-8582

To: Michael Cunningham, Manager  
Building and Safety Department

From: Alan R. Riecki, PLS  
City Surveyor

C: Ross Doyle, PLS  
Tri-Core Surveying

Tim Parks, P.E., Engineering Project Manager  
Sanitary Sewers Section, Engineering Planning

Date: March 30, 2017

Re: Sanitary Sewer Final Location Map  
ANN & DURANGO  
(Drawing No. 107Y5049, L-Civil No. 63427)

---

The Survey Section has reviewed the Final Location Map and as far as our jurisdiction of this project is concerned, we find that the map is:

Acceptable: March 30, 2017



Signature

City Surveyor

Title

Public Works/Survey

Department/Division

ARR/OS:js





**City of Las Vegas**  
**Department of Public Works**  
**Survey Section**

**REVIEW CHECKLIST**  
**SANITARY SEWER**  
**FINAL LOCATION MAP**

JOB NUMBER H63427 SS1  
PROJECT NAME ANN & DURANGO  
WORK AUTH. NO. P28000  
SUBMITTED BY Tri-Core Surveying (Ross Doyle)  
PROJECT TYPE CIP  Land Dev  Street Rehab   
DATE 3/29/17  
REVIEWED BY D. SANTANA

**REVIEW DETERMINATION**

Approved

Not Acceptable

**TO BE RE-SUBMITTED**

Two bond copies (no mylar)

Electronic media with comma-separated coordinate file

REVIEW ITEM	OK	SEE R/L	N/A	COMMENTS
<b>Submittal Contents</b>				
Two bond copies (no mylar)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Electronic media containing comma-separated coordinate file	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>General Map Contents</b>				
Sheet size 24" x 36"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sheet number and number of sheets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
North arrow (pointing up, left or right)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Scale (written & graphic, correctly shown, appropriate scale used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lettering legibility (minimum text size 0.08")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Map title shown ("Sanitary Sewer Final Location Map")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV project name shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV Hansen No. shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLV Drawing No. shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Preparer's company name and contact information shown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Legend (all linetypes and symbols defined)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Non-standard abbreviations defined	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Distances, coordinates and elevations labeled using decimal feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Approximate limits of streets shown (improvements or right-of-way)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Street names labeled (identified as public or private)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**REVIEW CHECKLIST – SANITARY SEWER FINAL LOCATION MAP**

REVIEW ITEM	OK	SEE R/L	N/A	COMMENTS
<b>Sanitary Sewer Improvements Data</b>				
<b>*NOTE</b> As of December 1, 2015 <b>manhole cover locations</b> are no longer required.				
Manhole Barrel/Base: (measured horizontally at centerline of structure barrel/base, vertical location does not apply)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vaults and Junction Structures: (measured horizontally at all outer extents of structure, vertically at top of structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Lateral/Main/Interceptor Pipes: locate at all connections to other pipes and structures, all horizontal and vertical deflections, points of termination (stubs), point at which pipe exits the public right-of-way or easement (measured horizontally at centerline of pipe, vertically at top of pipe)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PLEASE LOCATE PIPE INTERSECTIONS (ANGLE POINTS) DO NOT LOCATE WYE FITTING @ CENTER OF FITTING.
<b>*NOTE</b> All pipe connections to manholes and other structures should be located at outside face of structure before backfilling due to accuracy limitations of pipe measurements from the structure's surface access point.				
<b>Coordinate Information</b>				
Data acquisition completion date indicated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coordinate system indicated (only CLV approved coordinate systems are to be used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Horizontal datum, datum adjustment, and epoch date indicated (only CLV approved datums are to be used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Benchmark ID, description, elevation indicated	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Statement of positional accuracy per the tolerances indicated below	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>*NOTE</b> For all projects with improvement plans approved prior to <b>March 1, 2015</b> coordinates provided must be accurate to within <b>±0.5 feet</b> horizontally and vertically. For all projects with improvement plans approved after <b>March 1, 2015</b> coordinates provided must be accurate to within <b>±0.3 feet</b> horizontally and vertically.				
Coordinate accuracy QA/QC (when available)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PLEASE SEE MAP FOR WYE FITTING SHOT

ADDITIONAL COMMENTS
COORDINATES ARE WITHIN TOLERANCE. ALTHOUGH IT APPEARS THAT THE WYE FITTINGS WERE NOT LOCATED AT THE PIPE INTERSECTIONS. THERE ARE DEVIATIONS OF 0.3' TO 0.4' ON LATERAL & MAIN LINE INTERSECTION. WHEN COMPARED TO CLV COORDINATES. ALL OTHER COMMON POINTS WERE AT ABOUT 0.1'.