

INTERLOCAL AGREEMENT
BETWEEN THE CITY OF RENO, THE CITY OF SPARKS
AND THE COUNTY OF WASHOE

2233806

FOR
DIGITAL BASE MAP STANDARDS FOR FINAL MAPS AND ASSOCIATED
IMPROVEMENT DRAWINGS

THIS AGREEMENT entered into this ~~14th~~ day of JULY, 1998, by and between the CITY OF RENO, hereinafter referred to as "RENO", the CITY OF SPARKS, hereinafter referred to as "SPARKS", and the COUNTY OF WASHOE, hereinafter referred to as "WASHOE COUNTY".

WHEREAS, RENO, SPARKS and WASHOE COUNTY desire to develop and maintain a multi-jurisdictional county-wide parcel database;

WHEREAS, RENO, SPARKS and WASHOE COUNTY desire to develop consistent regional base map requirements for use across jurisdictional boundaries;

WHEREAS these digital base map standards reflect formats for submission of the digital files and do not supercede existing development standards for RENO, SPARKS and WASHOE COUNTY.

WHEREAS, RENO, SPARKS and WASHOE COUNTY desire to enhance parcel database accuracy through the use of digital ortho-photography, COGO (*coordinate geometry*) processing of existing and new land divisions, the digital submission of final maps and associated improvement drawings;

WHEREAS, RENO, SPARKS and WASHOE COUNTY desire mapped data to be shared across organizational lines, establish communication links to each jurisdiction's mapping server to enable data sharing for submission and retrieval of the parcel based information;

WHEREAS, RENO, SPARKS and WASHOE COUNTY desire to create uniform fees and a central location for technical checks of digital files prior to final map recordation; and,

WHEREAS this Agreement is entered into by and between the parties hereto pursuant to the Interlocal Cooperative Agreements Act for the purpose of establishing consistent digital base map standards for RENO, SPARKS and WASHOE COUNTY.

RENO, SPARKS AND WASHOE COUNTY MUTUALLY AGREE AS FOLLOWS:

1. COMMITTEE. Establish a 'Base Map Committee', hereinafter referred to as 'COMMITTEE' consisting of two (2) representatives from each jurisdiction (*Surveyor, Engineer, Planner or GIS coordinator*), appointed by the respective City and County Manager, to: coordinate the implementation of digital submission standards; provide on-going review and update of the standards per ATTACHMENT A, which is incorporated by reference, and the fees per ATTACHMENT B, which is incorporated by reference; implement procedures to enhance the parcel base; and, densify control throughout SPARKS, RENO and WASHOE COUNTY. The

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- COMMITTEE is also authorized to select a chairman from the appointed representatives.
2. **GEODETIC POINTS.** Require final maps and improvement drawings to be tied to two (2) geodetic points, or more, and the basis of bearing on all maps shall be North American Datum 1983 (NAD83), except for the rural areas of WASHOE COUNTY where control is not available. The COMMITTEE is further directed to maintain an approved list of geodetic points.
 3. **STANDARDS.** Authorize the COMMITTEE to revise, update and implement digital base map standards for final maps and associated improvement drawings as described in ATTACHMENT A. Implementation will occur per Section 18, IMPLEMENTATION, below.
 4. **TECHNICAL MAP CHECKS.** Authorize WASHOE COUNTY as the central agency to perform technical map checks for RENO, SPARKS and WASHOE COUNTY.
 5. **TECHNICAL CHECK FEES.** Establish fees for Base Map technical checks of the proposed map recordation at the submission of the final map per ATTACHMENT B. Fees for technical checks of improvement drawings will be identified by the COMMITTEE as part of implementation for the Improvement Drawings per Section 18, IMPLEMENTATION, below.
 6. **FEE INCREASES.** Upon recommendation of the COMMITTEE, review and approval by the City/County Manager's and subsequent approval by the City Councils and County Commissioners; fees can be adjusted annually, as noted in ATTACHMENT B, by the percentage increase or decrease of the Consumer Price Index (CPI) for the 13 western states as annually published.
 7. **FEE ASSIGNMENT.** Fees collected by WASHOE COUNTY per Section 5, TECHNICAL CHECK FEES, and Section 8, PAYMENT, are to perform technical map checks for the respective jurisdiction, improve ground control and mosaic the digital files to WASHOE COUNTY's uniform GIS parcel base map.
 8. **PAYMENT.** A separate check will be made payable to WASHOE COUNTY for performing the technical map check. Upon delivery of the map, digital file and check WASHOE COUNTY will note the map name, time/date received and estimated time to complete the technical check. RENO and SPARKS will be provided with a weekly report listing the map, date received and when the technical map check is scheduled for completion, as identified in ATTACHMENT A.
 9. **LEVELS OF SERVICE.** The participating agencies agree to the establishment of the following goals for the level of service to be provided.
 - a) RENO, SPARKS and WASHOE COUNTY are responsible for COGOing existing land divisions within their respective jurisdiction over the next two (2) to four (4) years.
 - b) RENO, SPARKS and WASHOE COUNTY will share all mapped data and parcel based information daily as it is posted to their respective mapping servers via LAN network links to be established as a result of this agreement.
 - c) WASHOE COUNTY will improve parcel currency, over the next two (2) to three (3) years, from twice yearly to weekly after land divisions have been recorded by the Recorder's Office.
 - d) WASHOE COUNTY will create a central location for technical checks of digital files which will be accomplished within ten (10) days. Minor corrections discovered during the technical check would receive priority towards review and resolution.

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10. **PERFORMANCE.** Authorize the COMMITTEE to establish, monitor and update the performance standards for the technical map checks performed by WASHOE COUNTY and levels of service as discussed in Section 9, above.
11. **INDEMNIFICATION.** The parties agree that each will be responsible for any liability or loss that may be incurred as a result of any claim; demand, cost, or judgment made against that party arising from any negligent act or failure to act, by any of that party's employees, agents, or servants in connection with the performance of this agreement.

The parties further agree, to the extent allowed by law pursuant to Nevada Revised Statutes Section 41, to hold harmless, indemnify, and defend each other from and against any and all losses, liabilities, or expenses of any nature to the person or property of another to which each may be subjected as a result of any claim, demand, action, or cause of action arising out of the negligent acts, errors, omissions on the part of the employees, agents, or servants of the other.

12. **GOVERNING LAW.** This agreement shall be governed by the laws of the State of Nevada. Venue for any litigation shall be Washoe County, Nevada.
13. **MODIFICATION.** Modifications of the provisions of this agreement shall not be effective unless reduced to writing and signed by the parties of this agreement.
14. **INTEGRATION.** This Agreement contains the entire agreement between the parties and supersedes all prior written and/or oral discussions or agreements between RENO, SPARKS and WASHOE COUNTY with respect to digital base map standards.
15. **DISPUTE RESOLUTION.** The parties agree to the following resolution process if a dispute arises:
 - a) Attempt to resolve the disagreement with the COMMITTEE representatives from RENO, SPARKS and WASHOE COUNTY.
 - b) If the conflict remains unresolved, the COMMITTEE chairman will present the issues before a regular City/County Manager meeting to discuss and resolve the disagreement. The action taken at the City/County Manager, or their designee, will be regarded as final and binding to all parties.
16. **TERM.** This agreement shall be deemed effective upon approval of the Councils of RENO and SPARKS and the Board of Commissioners of WASHOE COUNTY.
17. **TERMINATION.** This agreement may be terminated by any party upon written notice to all other parties.
18. **IMPLEMENTATION.** The COMMITTEE is directed to first implement the procedures for the digital submission of the Base Map layers and resolve outstanding issues. Once issues are resolved, the COMMITTEE may proceed to implement procedures for the digital submission of the Improvement Drawing layers.

Depending on available resources, the COMMITTEE is directed to develop a transition schedule for implementing procedures for submission of digital Base Map layers tentatively commencing thirty (30) days after this agreement is executed with full implementation occurring in ninety (90) days. A schedule to implement procedures for submission of digital Improvement Drawings would occur after Base Map issues are resolved.

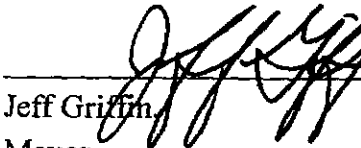
Prior to implementation of any phase or update to these standards, the COMMITTEE will provide notice to all engineering and surveying firms that submit final maps and improvement drawings to RENO, SPARKS or WASHOE COUNTY.

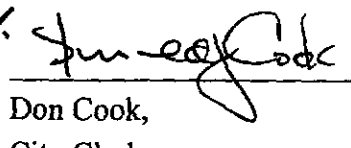
IN WITNESS WHEREOF, the Cities of RENO and SPARKS and the County of WASHOE COUNTY have executed this agreement on the date first above written.

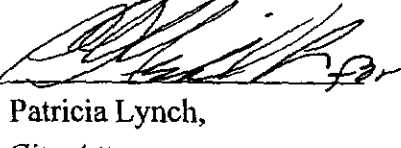
City of Reno, Nevada

ATTEST:

Approved as to Form


Jeff Griffin,
Mayor


Don Cook,
City Clerk


Patricia Lynch,
City Attorney

Date: 7/14/98

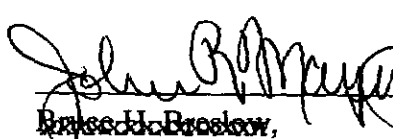
Date: 7/14/98

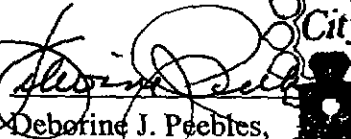
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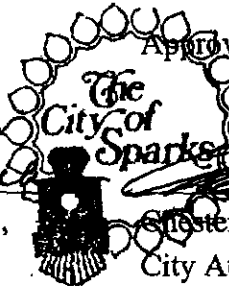
City of Sparks, Nevada

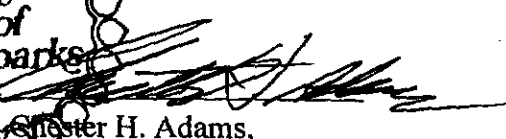
ATTEST:

Approved as to Form


Bruce H. Breslow,
John R. Mayer
Mayor Pro Tempore


Deborine J. Peebles,
City Clerk




Chester H. Adams,
City Attorney

Date: 6/30/98

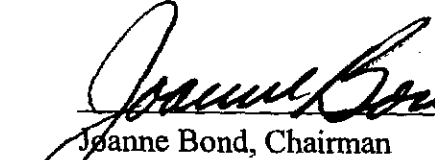
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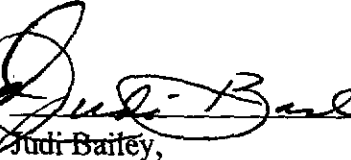
Date: 6/30/98

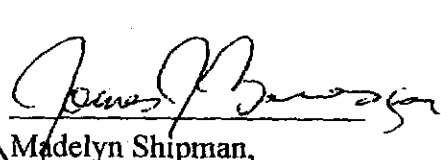
Washoe County, Nevada

ATTEST:

Approved as to Form


Jeanne Bond, Chairman
Board of County
Commissioners


Judi Bailey,
County Clerk



Madelyn Shipman,
Assistant District Attorney

Date: 6/25/98

Date: 6/30/98

Date: 6/31/98

I have reviewed the agreement and determined that it is in proper form and compatible with the laws of the state of Nevada.


Frankie Sue Del Papa
Attorney General State of Nevada

Date: 6/11/98

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**Digital Base Map Standards
for
Final Maps and
Associated Improvement Drawings**

City of Reno
City of Sparks
Washoe County

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Section 1.0 Purpose.

The purpose of the digital map standards is to develop a common parcel base, accurate and current, for use across jurisdictional boundaries as a means for recording and sharing mapped information.

This document represents an initial step in developing a uniform parcel base. Outlined are digital map standards for final maps and associated improvement drawings. The standards are intended to:

- develop and maintain a multi-jurisdictional county-wide parcel database;
- develop consistent regional mapping requirements within Reno, Sparks and Washoe County;
- improve parcel database currency from twice yearly to weekly after land divisions have been recorded by the Recorder's Office;
- enhance parcel database accuracy through the use of digital ortho-photography, COGO (*coordinate geometry*) processing and the digital submission of final maps and associated improvement drawings;
- enable mapped data to be shared across organizational lines;
- create a central library of parcel based information providing access to all (*for submission and retrieval*) via the internet; and,
- create a central location for technical checks of digital files which will be accomplished within ten (*10*) days. Minor corrections discovered during the technical check would receive priority towards review and resolution.

These requirements propose to standardize Sparks, Reno and Washoe County specifications for digital submission of Base Maps and Improvement Drawings such as: ground control, boundary, road, lot, right of way, easement, signals, water, sewer/storm information, topographic features, construction plans and text information (*street names, line information, lot area and easement type*).

Section 2.0 Final Maps and Improvement Drawings.

These standards should be used for digital submission of final maps and improvement drawings. *Appendix B - DWG Scheme* provides detailed information for the ASCII text 'read me' file and a listing of DWG layers indicating category, feature, layer name, layer definition, valid data elements and filename.

Final maps would include Base Map features for: subdivision and dedication tract maps; parcel maps; land maps; record of survey supporting boundary line adjustments, parcel map waivers, commercial and industrial developments; reversion to acreage; and, amended maps. Annotation is also to be submitted with the respective map. Improvement Drawings would include utility, engineering and planning features, where applicable, for: construction plans, topographic

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Digital Base Map Standards for Final Maps and Associated Improvement Drawings

Table of Contents

SECTION 1.0 PURPOSE	3
SECTION 2.0 FINAL MAPS AND IMPROVEMENT DRAWINGS.	3
SECTION 3.0 LAYER SCHEME.	4
SECTION 3.1 LABELING.....	4
SECTION 3.2 CATEGORY.	4
SECTION 3.3 FEATURE.	5
SECTION 3.4 LAYER NAME, LAYER DEFINITION, VALID DATA ELEMENTS, AND FILENAME.	5
SECTION 4.0 MEDIA REQUIREMENTS.....	5
SECTION 4.1 EXCHANGE FORMAT.....	5
SECTION 4.2 MEDIA.....	5
SECTION 5.0 CONVERSION FACTORS FOR MAPPING PURPOSES.....	6
APPENDIX A - GLOSSARY.....	7
APPENDIX B - DWG SCHEME.....	8

BK5319PG0471

features, hydrographic basins, hydrological resources, building envelopes, parking layout, sewer system, water system, reclaimed water system and utility annotation.

Digital information submitted according to these guidelines is consistent with direct *COGO* conversion methods and will be entered directly into the parcel base assuming no adjustment of the data. Small discrepancies may exist. Submission of the digital information may be used for computational purposes in checking the map, for maintaining the county-wide parcel base or in document retrieval systems.

Section 3.0 Layer Scheme.

Digital data submitted should be named according to the appropriate feature item as noted in *Appendix B - DWG Scheme*.

The digital data submitted in the DWG file must be what is proposed to be constructed on the paper map. **It is extremely important for line information not to be shortened to distances other than the dimension shown on the paper map.**

The following sections provide detailed information of the layering scheme discussed in these guidelines referencing *Appendix B - DWG Scheme*.

Section 3.1 Labeling.

All diskettes or CD-ROMs submitted should have labels attached with the same information contained in the 'read me' ASCII text file such as the following:

LAND DIVISION:	North Springs Estates Phase 2
DATE:	August 1995
COMPANY:	xyz Engineers & Surveyors
SURVEYOR:	John Doe
REGISTRATION NUMBER:	xxxxxxx
DESIGN ENGINEER:	
REGISTRATION NUMBER:	
ENGINEER OF RECORD:	
REGISTRATION NUMBER:	

Section 3.2 Category.

The *DWG Scheme* is separated into two (2) *categories* in which drawings are to be combined: Base Maps and Improvement Drawings. The Base Map *category* represents information associated with the submission of final subdivision maps, such as: subdivision tract map, parcel map, land map, record of survey supporting boundary line adjustment and parcel map waivers, reversion to acreage, and amended maps. Annotation is also to be submitted with the respective map. The Improvement Drawing *category* represents information associated with the submission of engineering, planning and utility layers.

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Section 3.3 Feature.

The *feature* identifies 17 map types associated with final subdivision maps or improvement drawings. These map *features* list requirements for Base Maps and Improvement Drawings are:

Base Maps: subdivision dedication tract maps; parcel maps; land maps; records of survey supporting a boundary line adjustment and parcel map waivers, commercial and industrial developments; reversion to acreage; and, amended maps. Annotation is also to be submitted with the respective map;

Improvement Drawings: construction plans; topographic, hydrographic basins, hydrological resources, building envelopes, and parking layout; sewer system, water system, reclaimed water system, and utility annotation.

Section 3.4 Layer Name, Layer Definition, Valid Data Elements, and Filename.

A *layer name* refers to AutoCAD's naming conventions. A *layer definition* discusses the type of information associated with the file and the *valid data elements* describe whether the file contains line, block or text information.

Filenames for the final subdivision map or improvement plan are used to contain the respective map feature and layer name of the mapped information on the disk or CD-ROM. There are only two (2) filenames: CAD1.DWG for Base Map information and CAD2.DWG for Improvement Drawing information.

The following conventions should apply for the naming of all DWG files. Example: a **Parcel Map** feature containing lot data should have:

- A *layer name* of *_LOT grouped with other feature layers such as *_BNDY, *_CL, *_ROW, *_ESMT, *_TIE and *_MISC. *Note: The * symbol in a layer name such as *_BNDY denotes the company's internal name given by the technician creating the layer.*
- A *filename* or CAD1.DWG which corresponds to the feature information being submitted.

Section 4.0 Media Requirements.

Section 4.1 Exchange Format.

Digital information should be provided in DWG file format Version 12. DWG is a drawing file developed by Autodesk for their AutoCAD product.

Section 4.2 Media.

Digital files can be accepted using CD-ROMs (680mb), DOS 3 1/2" diskettes (1.44mb) or Zip drives. Files requiring more than one 1.44mb diskette or CD-ROM should be written using the Windows 95 Backup utility. No other non-DWG files should be submitted with the media except for the separate ASCII text '*read me*' file. This read-me file is to include the land division name, date, company, surveyor/engineer, and respective registration number (*See Section 3.1 Labeling*).

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Section 5.0 Conversion Factors for Mapping Purposes.

For final maps and improvement drawings the conversion factor below 5,280 feet as related to seal level datum (*grid to ground*) is 1.000197939 as identified on the Record of Survey #2775 and filed in the office of the Washoe County Recorder September 21, 1994, Document Number 1834848. Above the sea level datum of 5,280 feet the conversion factor is 1.000263000 as established by Nevada Department of Transportation and the Washoe County Surveyor, March 1998.

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Appendix A - Glossary.

- Accuracy The closeness or nearness of measurements to the true or actual value of the quantity being measured.
- Base Maps Relating to land boundaries, subdivisions or parcels of land suitable for transfer of title. For this document, base maps are defined as subdivision tract maps, parcel map, land map, records of survey supporting a boundary line adjustment and parcel map waivers, reversion to acreage, and amended maps. Annotation is also to be submitted with the respective base map.
- Base Map Committee The committee established by the Interlocal Agreement between the city of Reno, the city of Sparks and the County of Washoe for digital base map standards for final maps and associated improvement drawings. This committee consists of two (2) representatives from each jurisdiction (*Surveyor, Engineer, Planner or GIS coordinator*), appointed by the respective City and County Manager, to: coordinate the implementation of digital submission standards; provide on-going review and update of the standards, and the fees; implement procedures to enhance the parcel base; and, density control throughout Sparks, Reno and Washoe County.
- CAD Computer aided drafting and design.
- COGO (*Coordinate Geometry*) A method of defining geometric features through the input of bearing and distance measurements from recorded documents.
- Coordinate Geometry A method of defining geometric features through the input of bearing and distance measurements from recorded documents.
- County-wide Applying to the entire geographic area of a County, including incorporated city areas and unincorporated lands.
- DOS (*Disk Operating System*) An operating system common on personnel computers.
- GIS (*Geographic Information System*) A computerized information system for analyzing spatially indexed information.
- Geodetic Control Coordinate points on Nevada State Plane coordinate system.
- Improvement Drawings Related to development's plans for construction, topography, hydrographic basins, hydrological resources, building envelopes, and parking layout; sewer system, water system, and reclaimed water system.
- NAD83 (*North American Datum 1983*) Defined by the National Geodetic Survey as the basis for geodetic coordinate measurements.
- Precision The closeness with which the measurements agree with each other.
- Record Data Documents bearing the certificate of a Recorder's Office. Generally these documents consist of deeds, records of survey, tract maps, and parcel maps.
- Technical Map Check For Base Maps, this review determines the geometric closure of a parcel.

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Appendix B - DWG Scheme.

LABEL	ascii text "read me" file containing land division name, date, company, surveyor or engineer and registration number					
CATEGORY	FEATURE	LAYER NAME (3)	LAYER DEFINITION	VALID DATA ELEMENTS	FILENAME	
Base Maps	Subdivision Map and Dedication Tract Maps, Parcel Map, Land Map, Record of Survey Supporting Boundary Line Adjustments, Parcel Map Waivers, Commercial and Industrial Developments, Reversion to Acreage or Amended Map.	*_BNDY	Boundary data	Line	CAD1.DWG	
		*_CL	Road centerline data	Line		
		*_LOT	Lot data	Line		
		*_ROW	Right-of-way data	Line		
		*_ESMT	Easement data	Line		
		*_TIE	Tie data for geodetic control network	Line		
	*_MISC	Miscellaneous data	Line			
	Annotation	*_SN	Street Name			Text
		*_DIMS	Line dimension & line bearing			Text
		*_LN	Lot number			Text
		*_LA	Lot area			Text
		*_ESMT	Easement type			Text
Improvement Drawings (1)	Construction Plans	*_CG	Curb & gutter or edge of pavement indicating top back of curb	Line	CAD2.DWG	
		*_SIGN	Traffic control signs indicating type	Blocks		
		*_SGLS	Signals	Blocks		
		*_CHAN	Channel/ditch flow line indicating channel/ditch cross section and lining	Line		
		*_FEMA	Regulatory flood plain and floodway indicating flood zone designation	Line		
		*_FPLAIN	Calculated flood plain indicating existing and proposed	Line		
		*_MISC	Miscellaneous data	Line		
	Topographic (2)	*_CONT 1	1 foot contour	Line		
		*_CONT 2	2 foot contour	Line		
		*_CONT 5	5 foot contour	Line		
		*_CONT10	10 foot contour	Line		
		*_RIDGE	Significant ridge line	Line		
	*_KNOLLS	Knolls or rock outcropping	Line			
	Hydrographic Basins	*_HYDB	Hydrographic basins	Line		
	Hydrological Resources	*_HYDR	Hydrological resources	Line		
	Building Envelopes	*_BLDG	Building footprint and height	Line		
	Parking Layout	*_PARKING	Parking layout for commercial, industrial, and multi-family	Line		
	Storm Drains	*_MAINS	Mains	Line		
		*_LAT	Laterals	Line		
		*_FMAINS	Force mains	Line		
		*_STUB	Stub outs	Line		
		*_MHOLE	Manholes	Blocks		
		*_COUTS	Cleanouts	Blocks		
		*_LSTA	Lift stations	Blocks		
	Sewer System	*_MAINS	Mains	Line		
		*_LAT	Laterals	Line		
		*_FMAINS	Force mains	Line		
		*_STUB	Stub outs	Line		
		*_MHOLE	Manholes	Blocks		
		*_COUTS	Cleanouts	Blocks		
		*_LSTA	Lift stations	Blocks		
	Water System	*_MAINS	Mains	Line		
		*_SLINE	Service lines	Line		
		*_FHYD	Fire hydrant lines	Line		
		*_FVAL	Flush valve lines	Line		
		*_AVAC	Air vac lines	Line		
		*_FSER	Fire service lines	Line		
		*_BPUM	Booster pump lines	Line		
		*_PRED	Pressure reduction lines	Line		
		*_AVACS	Air vacs	Blocks		
		*_BPUMS	Booster pumps	Blocks		
		*_FVALS	Flush valves	Blocks		
		*_FHYDS	Fire hydrants	Blocks		
		*_PREDV	Pressure reduction valves	Blocks		
		*_RED	Reducers	Blocks		
		*_WTANK	Water tanks	Blocks		
		*_WELL	Wells	Blocks		
*_MET	Meters	Blocks				
*_VALVS	Valves	Blocks				

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Appendix B - DWG Scheme - Continued.

CATEGORY	FEATURE	LAYER NAME (3)	LAYER DEFINITION	VALID DATA ELEMENTS	FILENAME
Improvement Drawings (1)	Reclaimed Water System	* MAINS	Mains	Line	CAD2.DWG
		* SLINE	Service lines	Line	
		* BPRE	Backflow prevention	Blocks	
		* AVAC	Air vacs	Blocks	
		* BPUM	Booster pumps	Blocks	
		* RED	Reducers	Blocks	
		* MET	Meters	Blocks	
		* VALVS	Valves	Blocks	
	Utility Annotation	* LDIS	Line distance, diameter & material	Text	

(1) Not required for Records of Survey, Boundary Line Adjustments, Divisions of Land, Reversions to Acreage or Amended Maps.

(2) All vertical information should be provided in 2 dimension and not 3 dimension format.

(3) The * symbol in a layer name such as *_BNDY denotes the company's internal name given by the technician creating the layer.

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ATTACHMENT B

Fees - Base Map Technical Checks

Fee	Map
\$210 Per subdivision PLUS \$15 a lot.	1. Subdivision and dedication tract map.
\$150 Per map.	2. Parcel map. 3. Maps of division into large parcels (<i>land maps</i>). 4. Record of survey supporting boundary line adjustments, commercial and industrial developments. 5. Record of survey required for waiver of the parcel map law. 6. Reversion to acreage maps. 7. Amended maps.

NOTE: Per Section 5, TECHNICAL CHECK FEES, of the inter-local agreement, fees can be adjusted annually based upon approval by the City/County Managers..

2233806

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY

Washoe Co. Engineering
98 JUL 22 PM 3:43

JOE MELCHER
COUNTY RECORDER

FEE 0 DEP Sg

Return to:
WASHOE COUNTY ENGINEERING

LM

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