

# County of San Diego Assessor Maintained Parcels: An Update on Integrating Workflows with SanGIS

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# Agenda

- Quick Review of AMP Project
- Three Distinctive Workflows
  - Editing
  - Data Conversion
  - Assessor Parcel Map Production
- Current Parcel Workflows
- Future Parcel Workflows
  - Data Models and Data Flows
  - Business Complexity (Zones of Production)
- Anatomy of an Assessor Parcel Map
- Current Project Status
- Q & A

# Project Background - GeoSD

## 2014-2016 CoSD Geospatial Strategy Document (GeoSD)

### Functional Threading Chart and Benefits

Goals/Obj 2 3 Take ownership and the responsibility of day forward updates of the parcel layer (which currently resides with SanGIS) (Goal 2 and 6).  
Objective ID 11  
Description



There are redundant efforts to maintain both a CAD based tax parcel map and a GIS based tax parcel map. By moving towards a GIS tax parcel map in the ARCC office, this effort will save money and improve the timeliness of the information that is in the land base and tax parcels.

# AMP Project...and Benefits

- Eliminate and/or reduce duplicate workflows and increase timeliness of data
- Data has already improved due to AMP
  - APN\_ATR
  - Lots
- AMP will allow for programmatic integration with IPTS

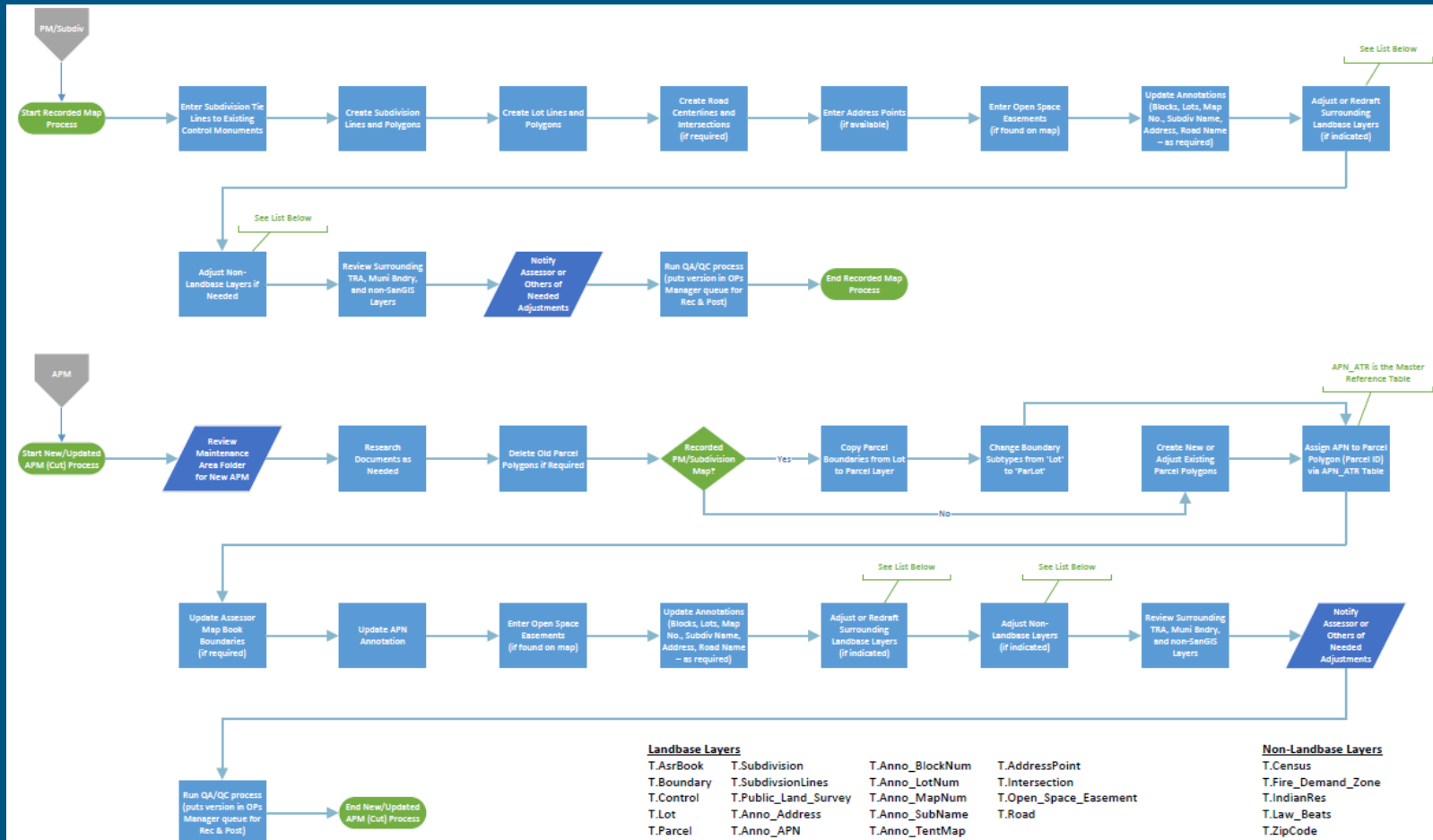
# Three Distinct Workflows

(and who cares about them)

- Editing of Parcel polygons
- Conversion of Assessor Parcel Map data
- Production of Assessor Parcel Maps

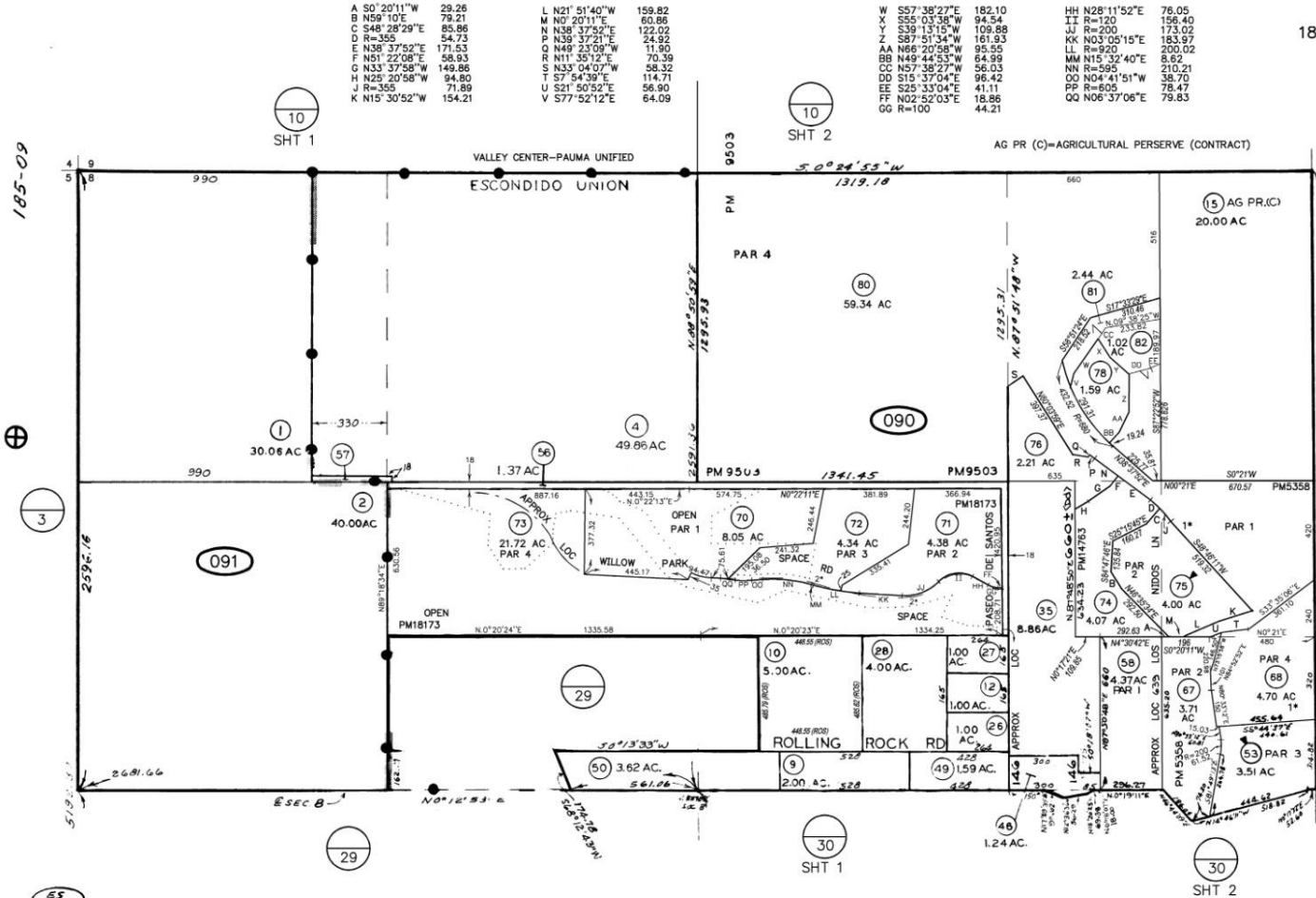


# Editing at SanGIS – The As-Is Workflow



# Editing at Assessor – The As-Is Assessor Parcel Map

185-09  1"=400'



A 50°20'11"W 29.26	L N2°1'51'40"W 159.82	W S57°35'27"E 182.10	HH N28°11'52"E 76.05
B N59°10'E 79.21	M N0°20'11"E 60.86	X S55°03'38"W 94.54	II R=120 156.40
C S48°28'29"E 85.86	N N38°37'52"E 122.02	Y S39°13'15"W 109.88	JJ R=200 183.97
D R=355 54.73	P N39°37'21"E 24.92	Z S87°51'34"W 161.93	KK N03°05'15"E 200.02
E N38°37'52"E 171.53	Q N49°23'09"W 11.90	AA N66°20'58"W 95.55	LL R=300 200.02
F N51°22'08"E 58.93	R N11°35'12"E 70.39	BB N49°44'53"W 64.99	MM N15°32'40"E 8.62
G N33°37'58"W 149.86	S N33°04'07"W 58.32	CC N57°36'27"W 56.03	NN S95 210.21
H N25°20'58"W 94.80	T S7°54'39"E 114.71	DD S15°37'04"E 96.42	OO N04°41'51"W 38.70
J R=355 71.89	U S21°50'52"E 56.90	EE S25°33'04"E 41.11	PP R=605 78.47
K N15°30'52"W 154.21	V S77°52'12"E 64.09	FF N02°52'03"E 18.86	QQ N06°37'06"E 79.83

CHANGES				
BLK	OLD	NEW	YR	CUT
8	43	70	2740	
7	44	72	2771	
36	38	46	72	2771
43	47	48	72	6870
46	45	29	74	7629
47	49	50	76	2843
50	51	54	77	2866
59	61	62	79	10030
69	63	76	80	5885
69	56	57	82	1972
69	55	56	84	2267
69	17	58	85	1327
69	61	64	86	901416
69	60	62	87	991527
69	60	68	89	991590
69	54	60	81	991416
69	6	70	73	991982
69	64	69	74	031455
69	63	78	79	061878
69	13	77	80	061553
69	70	73		065685

55  
6-13-70  
SAN DIEGO COUNTY  
ASSESSOR'S MAP  
BOOK 185 PAGE 09

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

SEC 8-T11S-R2W  
ROS 6978, 19933

# Editing at SanGIS – Business Logic and Rules

- Business rules enforced via:
  - Data Model
  - Topology
  - Subtypes
  - Domains
  - Custom Behavior
  - Workflows
- Goal was to develop workflows which did not significantly disrupt existing processes

## Layers Maintained as Part of Landbase

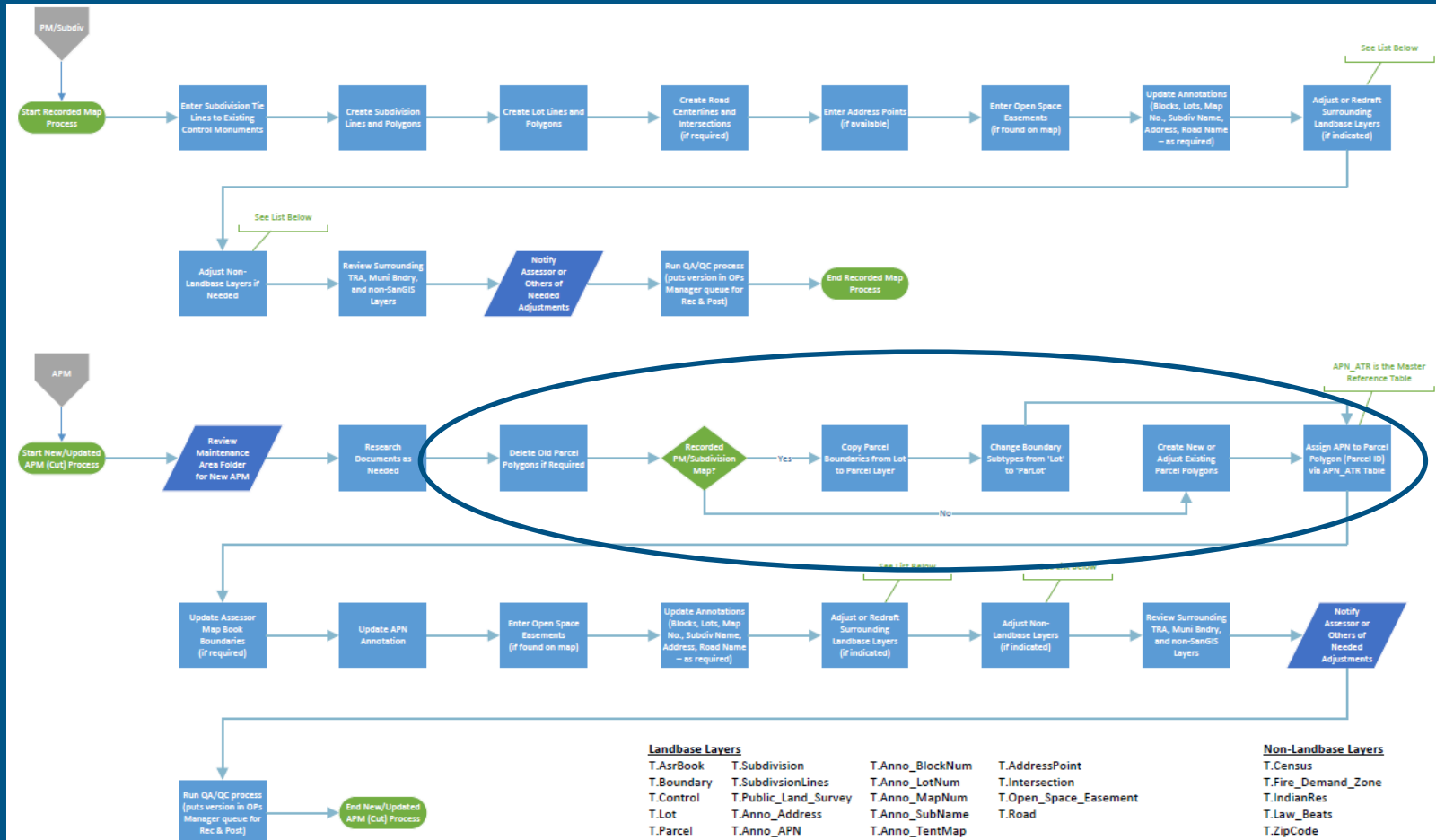
Edit Environment Layer	Description
T.Subdivision	Subdivisions – polygons and boundary lines
T.Lot	Lots – polygons and boundary lines
T.Parcel	Parcels – polygons and boundary lines
T.Census	Census Tract/Block Boundaries
T.Law_Beats	Law Beats
T.IndianRes	Reservation Boundaries
T.Public_Land_Survey	Public Lands Survey Boundaries
T.ZipCode	Zip Codes
T.Road	Roads – names, segments, address ranges
T.Intersection	Intersection Points
T.AddressPoint	Address Points
T.Open_Space_Easement	Open Space Easements – biological, recreational, and non-specified
T.Road	Trail and Public Access Easements shown on Assessor Parcel Maps (APMs)
T.EasFloodControl	Flowage and Drainage Easements – for County Flood Control Districts only
T.Fire_Demand_Zone	Fire Demand Zones – City of San Diego only
T.AsrBook	Assessor Book Boundaries
T.Anno_RoadName	Road Annotation – name, block range, address number (City only), one-way arrows
T.Anno_APN	Parcel Annotation – Assessor Parcel Number (APN)
T.Anno_LotNum	Lot Annotation – map number, lot number, block number, subdivision name
T.Boundary	Boundary lines - lots and parcels
T.Control	Survey Control Monuments - for internal editor use only
T.SubdivisionLines	Subdivisions – polygons and boundary lines

## Parcel Topologies

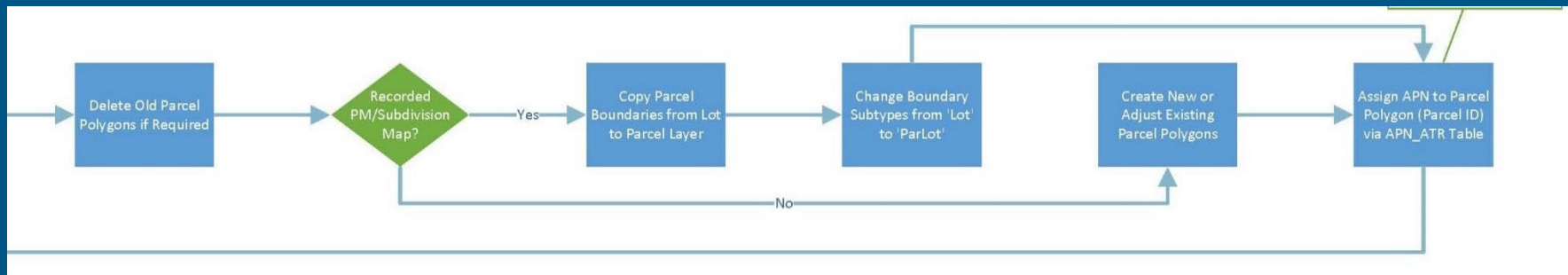
T.Parcel, Must Not Have Gaps  
 T.Parcel, Must Not Overlap  
 T.Parcel, Boundary Must Be Covered By, T.Boundary  
 T.Lot, Must Not Have Gaps  
 T.Lot, Must Not Overlap  
 T.Lot, Boundary Must Be Covered By, T.Boundary  
 T.Boundary, Must Not Self-Overlap  
 T.Boundary, Must Not Self-Intersect  
 T.Boundary, Must Not Overlap  
 T.Boundary : ROW Delimiter, Must Be Covered By Boundary Of, T.Parcel : Right Of Way  
 T.Boundary : Parcel, Must Be Covered By Boundary Of, T.Parcel : APN  
 T.Boundary : Lot, Must Be Covered By Boundary Of, T.Lot, 626,0  
 T.Boundary : ROW, Must Be Covered By Boundary Of, T.Parcel : Right Of Way  
 T.Boundary : ParLot, Must Be Covered By Boundary Of, T.Parcel : APN  
 T.Boundary : ParLot, Must Be Covered By Boundary Of, T.Lot



# Editing at Assessor – The To-Be Workflow

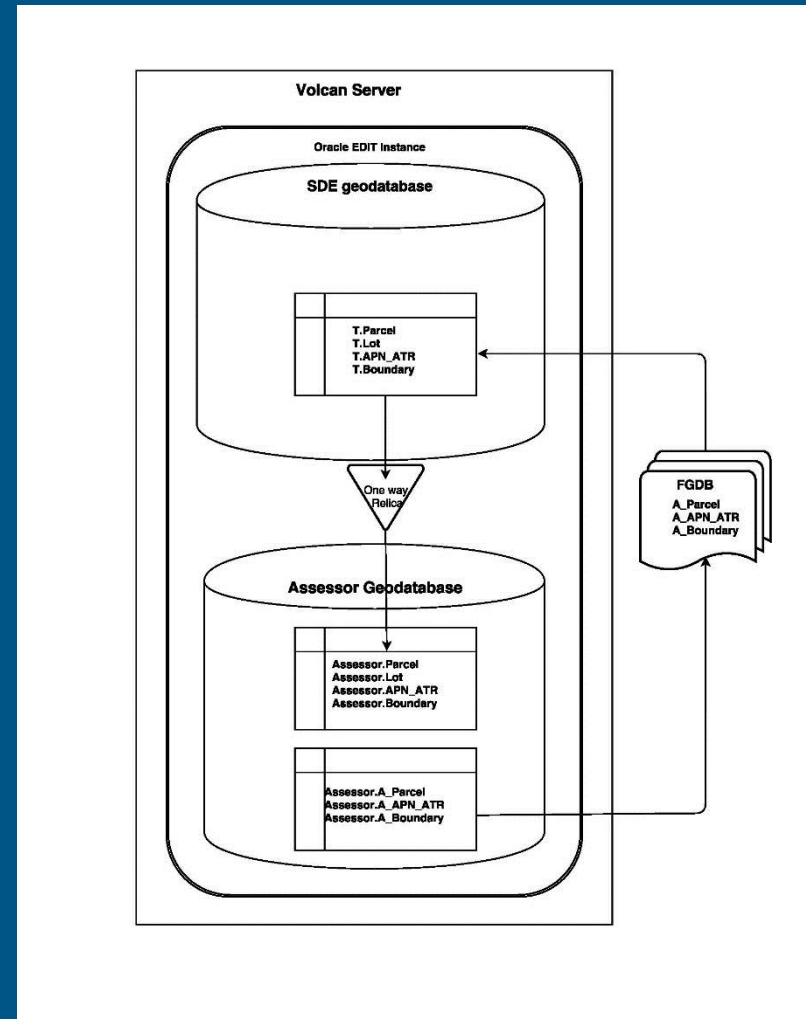


# Editing at Assessor – The To-Be Workflow



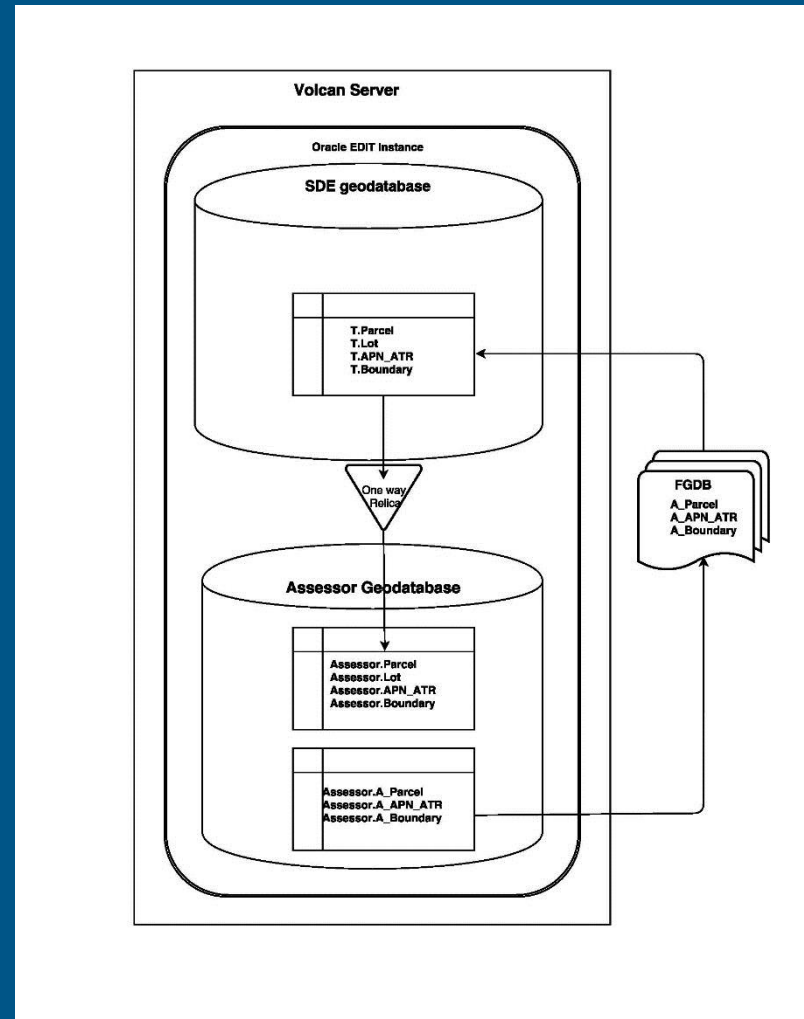
# Editing at Assessor – The Details

- APNs are determined via Pre-Cut Analysis process
- Assessor schema will live at SanGIS
- Will replicate specific FCs to serve as source layers
- Will have versioned FCs into which we will “fetch” data from these replicated FCs for editing/updating

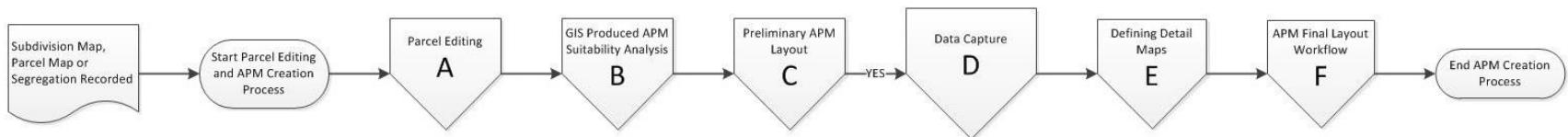


# Editing at Assessor – The Details

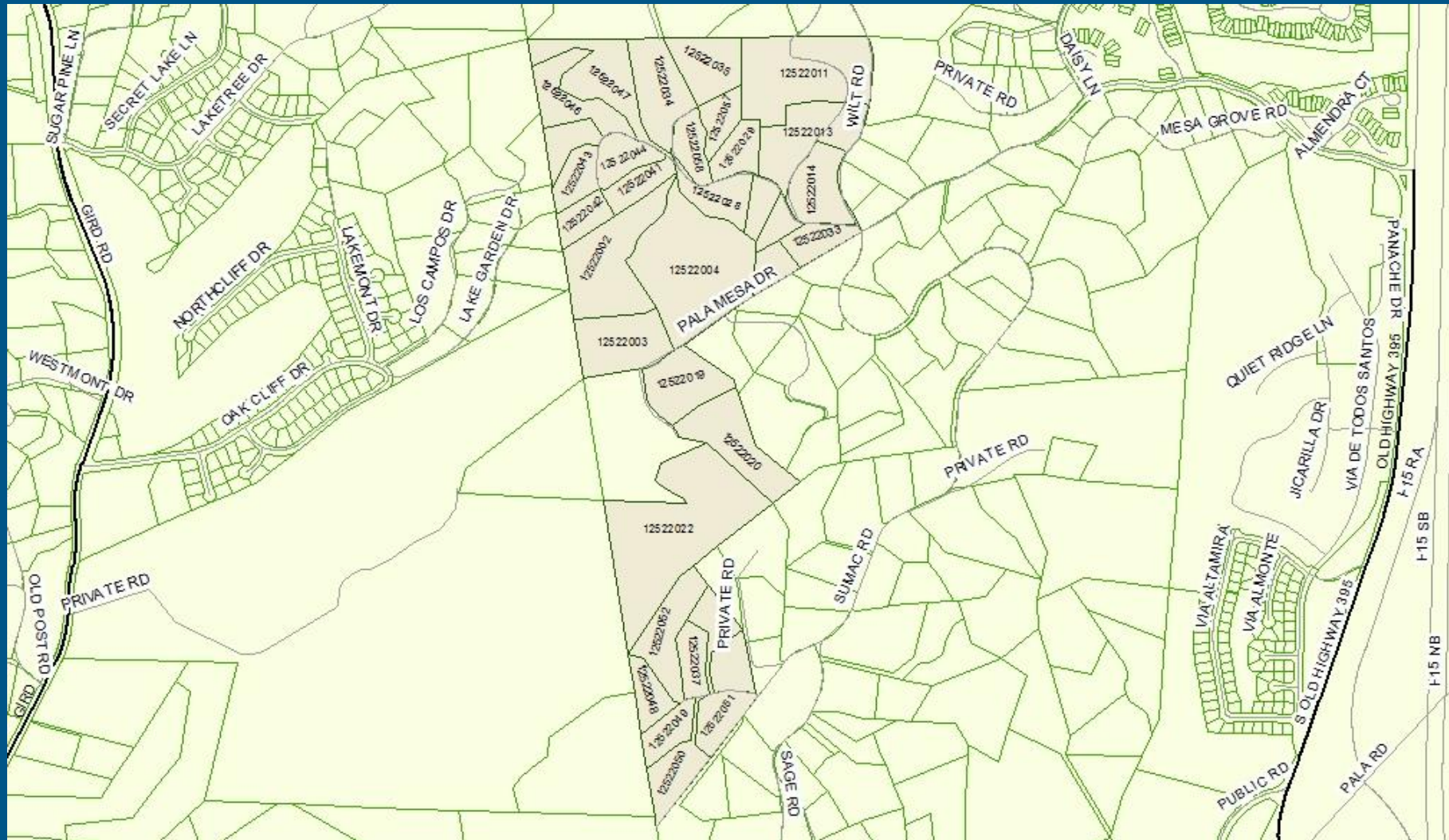
- We need to turn ON/OFF replication during specific times of the year (Zones of Production)
- Custom procedures will stamp each feature/anno with its Book, Page and Sheet value during editing
- A FGDB will be used to transmit Parcel polys and APNs back to SanGIS
- We can submit Cut Package at this point (data to MPR) – No need to wait for APM production



# Data Conversion & Assessor Parcel Map Generation at Assessor



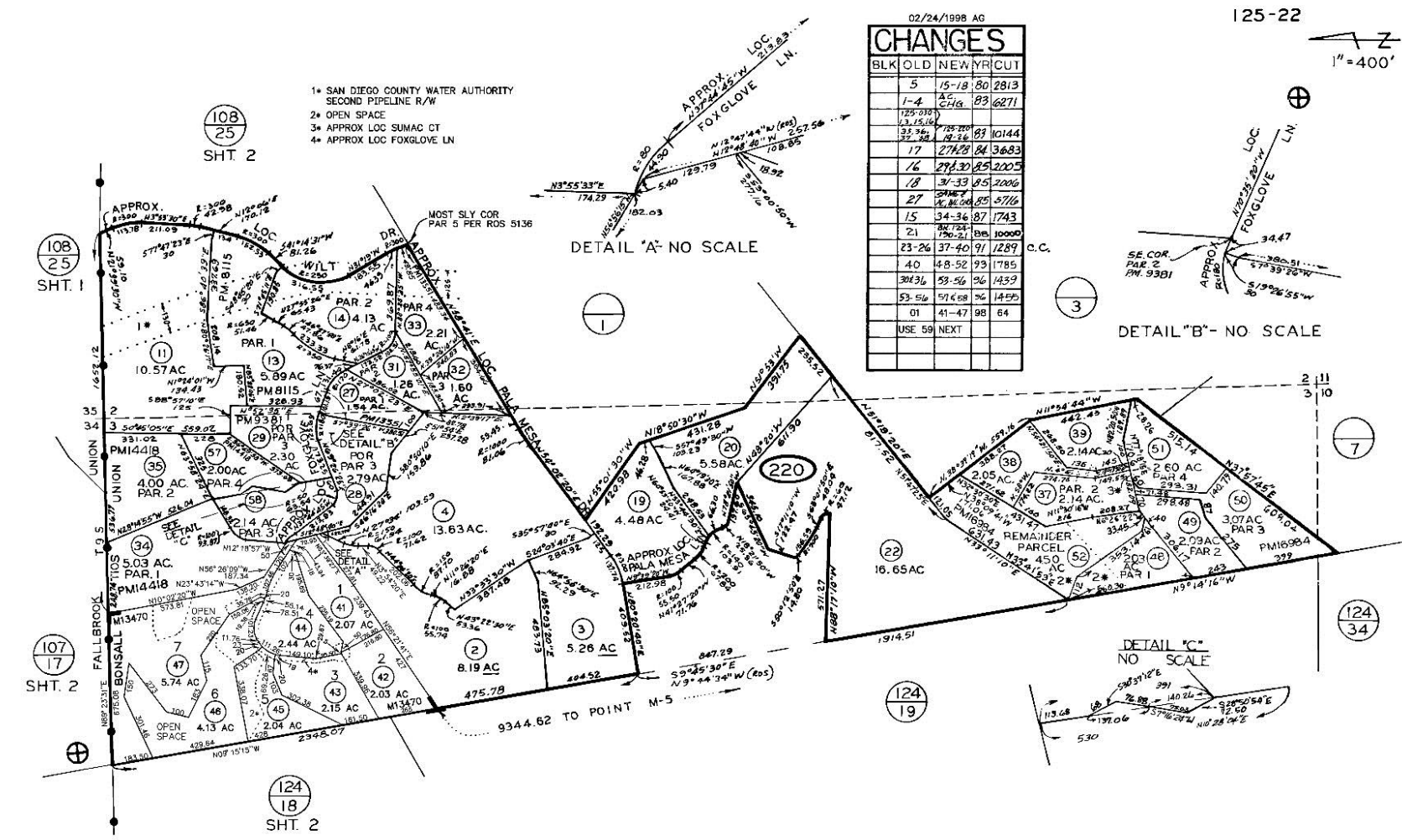
# SanGIS Parcel Polygons



# Anatomy of an Assessor Parcel Map

125-010  
-030

125 4-7-83



- 1+ SAN DIEGO COUNTY WATER AUTHORITY SECOND PIPELINE R/W
- 2+ OPEN SPACE
- 3+ APPROX LOC SUMAC CT
- 4+ APPROX LOC FOXGLOVE LN

02/24/1998 AG

BLK	OLD	NEW	YR	CU1
5	15-18	80	2813	
1-4	AC	83	6271	
125-010	CHG			
13-15,16		85	10144	
33-36		89-96	36883	
17	27428	84	36883	
16	27430	85	2005	
18	31-33	85	2006	
27	34-36	85	5716	
15	34-36	87	1743	
21	34-36	85	10000	
23-26	37-40	91	1289	
40	48-52	93	1785	
30-36	53-56	96	1459	
53-56	57-68	96	1459	
01	41-47	98	64	
USE 59	NEXT			

DETAIL "A" - NO SCALE

DETAIL "B" - NO SCALE

DETAIL "C" - NO SCALE

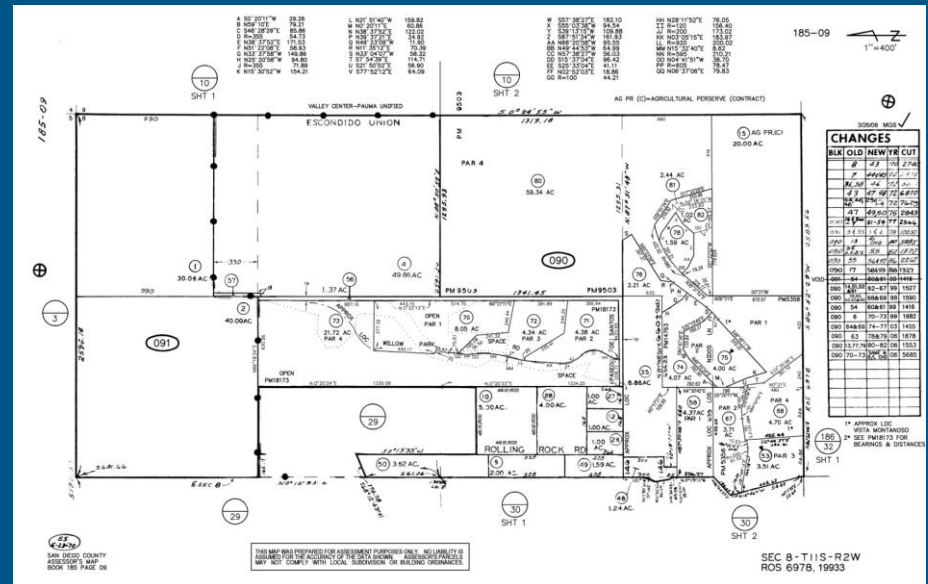
MAP 13470 - CO OF SD TCT NO 4961-1  
 PB I PG 108-RHO. MONSTERE -POR TCT A-MAP 827  
 (POR. SEC. 2 & 3 - T 105-R3W)  
 ROS 3659,7111, 9530,13068,14956

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5-30-83  
 SAN DIEGO COUNTY  
 ASSESSOR'S MAP  
 BOOK 125, PAGE 22

# Data Conversion at Assessor

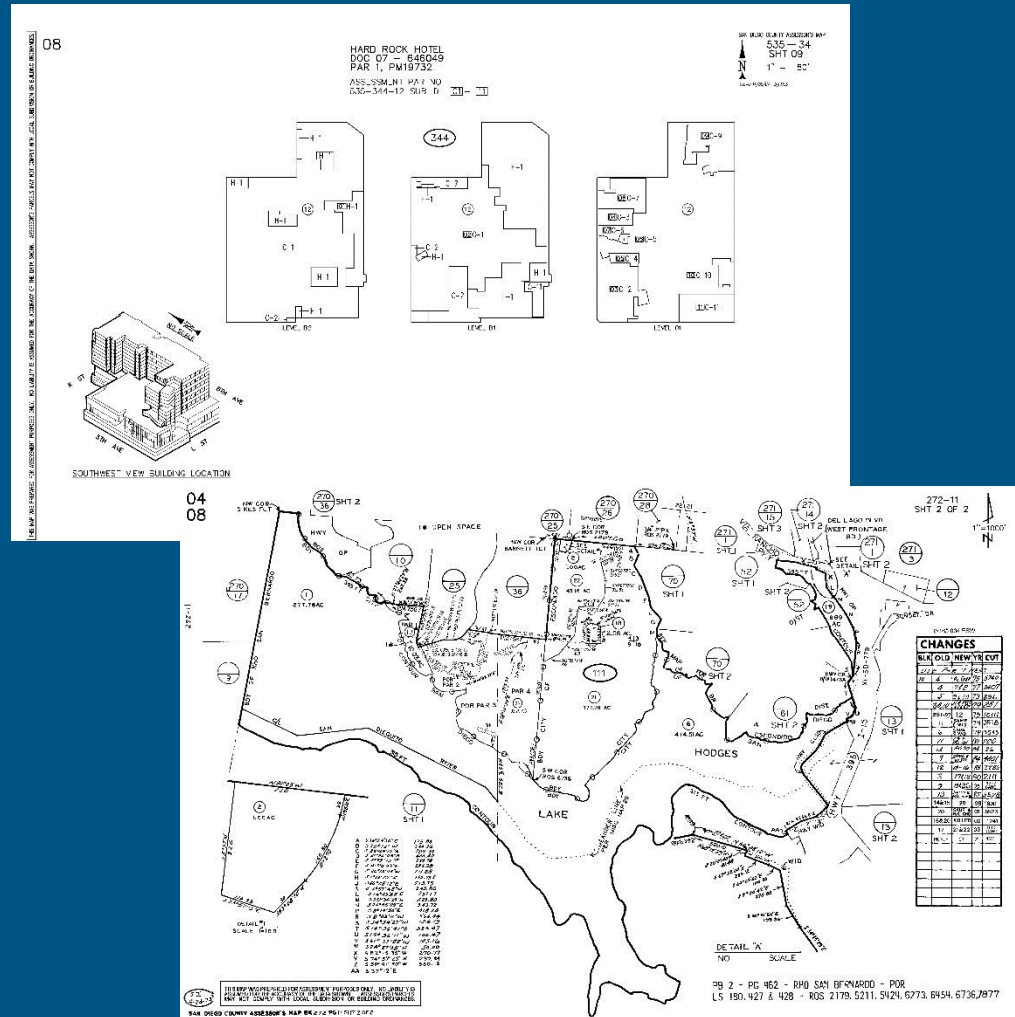
- Begins with a Preliminary APM Layout process to determine:
  - Preferred layout
  - What features are needed (Course Tables, Detail Maps, etc.)
- UI customizations will streamline the conversion process and preserve data integrity
- Assessor GDB have feature classes and tables to store:
  - Distances and Bearings and others annotations
  - GeoCarto Features
  - Tabular data





# Assessor Parcel Map Production

- We will produce the APM via GIS when a Cut occurs
- We will likely make some of the APMs via CAD
  - Have an APM via GIS Suitability Workflow
  - Condo floor plans
  - APM is “challenging”
- Geography is edited in GIS first regardless of APM generation
- UI customizations will streamline the conversion process and preserve data integrity
- Various features such as:
  - Distances and Bearings (Annos)
  - Miscellaneous Annotations
  - GeoCarto Features (FCs)
  - Recorded Maps (Tables)



# Future APM Prototypes

EC City 18x24 Map 22  
18 x 24

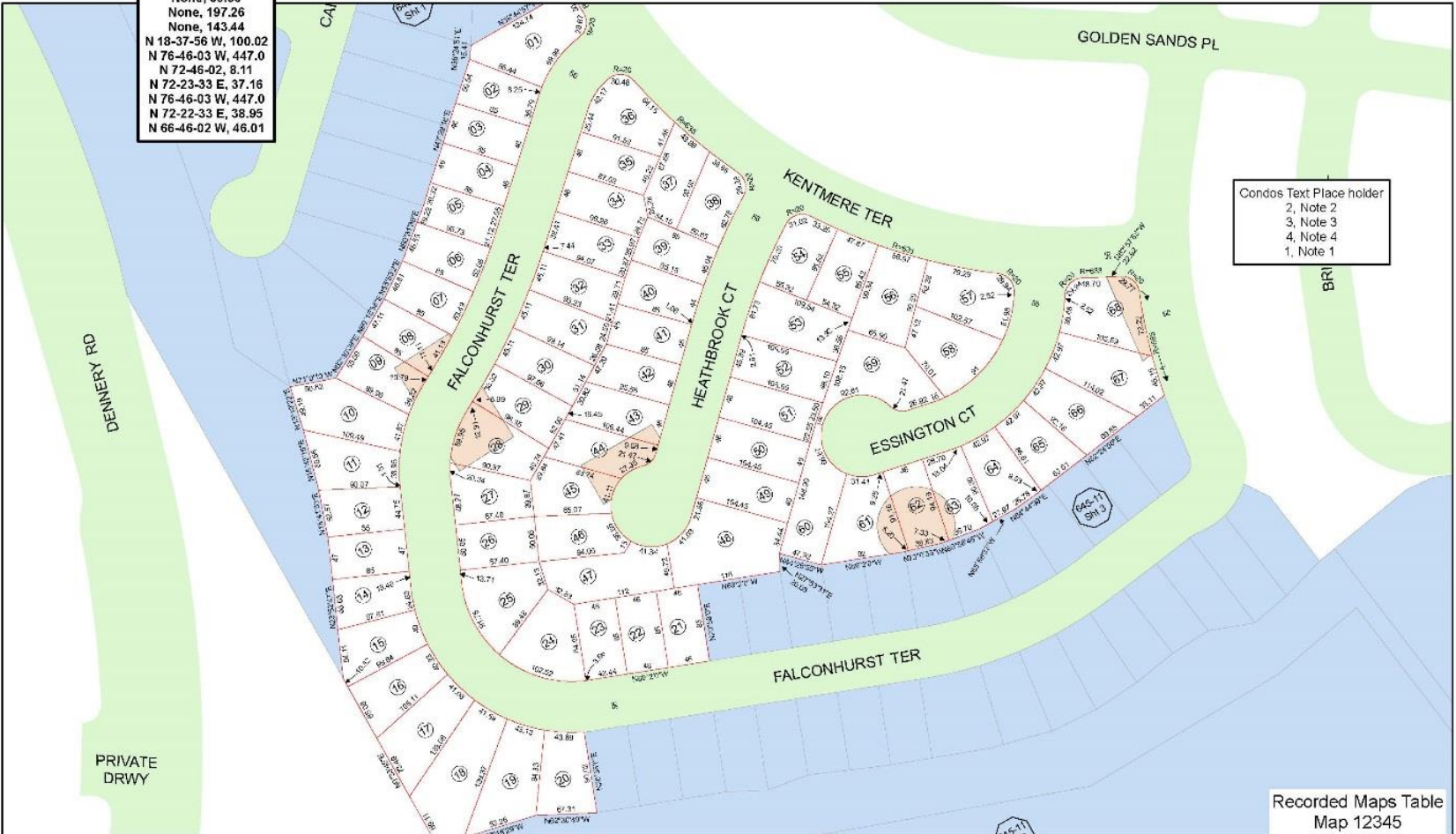
RecordedMaps info for 64511.02  
Update2

Notes Placeholder

645 - 11  
Sht 2 of 4  
1 inch = 100 feet

None, 63.96  
None, 197.26  
None, 143.44  
N 18-37-56 W, 100.02  
N 76-46-03 W, 447.0  
N 72-46-02, 8.11  
N 72-23-33 E, 37.16  
N 76-46-03 W, 447.0  
N 72-22-33 E, 38.95  
N 66-46-02 W, 46.01

Condos Text Placeholder  
2, Note 2  
3, Note 3  
4, Note 4  
1, Note 1



Recorded Maps Table  
Map 12345

Last Updated: 6/14/2016

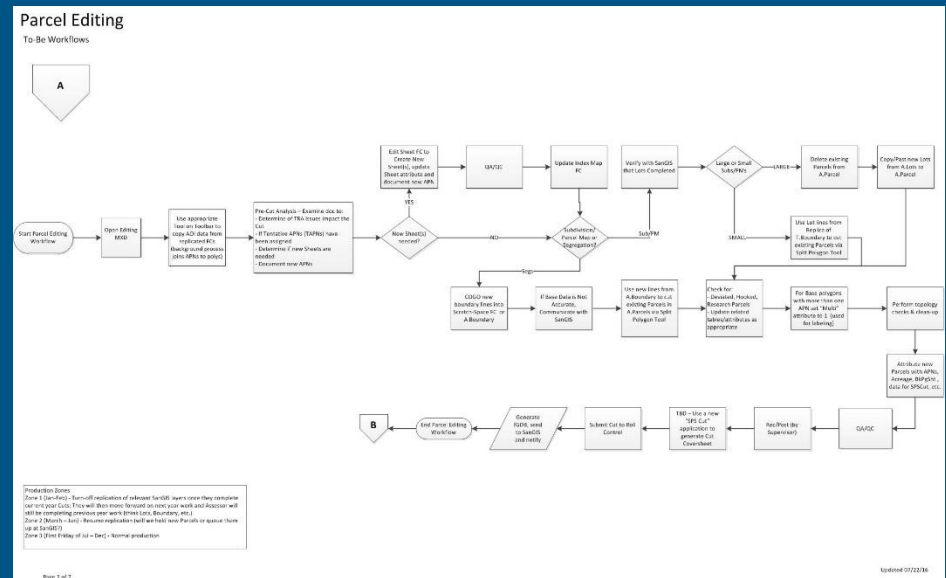
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# Current Project Status

- To-Be Processes are Mapped
- Customizations for Data Conversion and APM Production are underway
- Hope to be testing workflows and tools in August 2017



# Questions?

*Thank You!*