

Chief Surveyor-General Property Search Web Application

July 2018



Content

1.	VERSION CONTROL				
2.	HON	ИЕ PAGE4			
3.	POP	-UPS4			
4.	SEAI	RCH WIDGETS5			
4	.1	SEARCH: PARENT FARM			
4	.2	SEARCH: FARM PORTION			
4	.3	SEARCH: 21 CODES			
4	.4	SEARCH: ERVEN9			
4	.5	SEARCH: HOLDINGS			
5.	BAS	EMAP WIDGET11			
6.	LAYI	ER LIST WIDGET12			
7.	SET	SCALE WIDGET14			
8.	PRIN	NT WIDGET14			
9.	BOC	0KMARK WIDGET16			
10.	N	AVIGATION			
11.	V	IEW PROPERTY SEARCH ON OTHER DEVICE19			

Figure

Figure 1: Overview of home page open on Desktop or Laptop screen	4
Figure 2: Pop-up menus	4
Figure 3 : Attribute data	
Figure 4 : Hide Attribute Table	5
Figure 5 : Property search widgets options (left on screen)	5
Figure 6 : Select the Parent Farm search options (left on screen)	5
Figure 7 : Search form query criteria	6
Figure 8 : Query results shown on form and on the map display	6
Figure 9 : Select one of the features found to display the Parent Farm query results	7
Figure 10 : Clear query results	7
Figure 11 : Select the Farm Portion search options (left on screen)	7
Figure 12 : Search form query criteria	8
Figure 13 : Query results shown on form and on the map display	8
Figure 14 : 21 Code added to query criteria	9
Figure 15 : Select the Erven search options (left on screen)	
Figure 16 : Search form query criteria	9
Figure 17 : Query results shown on form and on the map display	10
Figure 18 : Select the Holdings search options (left on screen)	10
Figure 19: Search form query criteria	11
Figure 20 : Query results shown on form and on the map display	11
Figure 21 : Select the Basemap Widgets on top banner	12
Figure 22 : Select the Layer List Widgets on top banner	12
Figure 23: Select the Layer List Widgets on top banner	13

Figure 24 : Zoom or set Transparency of the specified layer	13
Figure 25 : Zoom or set Transparency of the specified layer	
Figure 26 : Select Legend Widget and display which layers are on current on the map layout	
Figure 27 : Select Se tScale Widget	14
Figure 28 : Select the Print Widget type required info to create and view map layout	
Figure 29 : Set Force Scale option before printing	15
Figure 30 : A4 print example	
Figure 31: Select the Bookmark Widget	
Figure 32 : About Widgets	
Figure 33 : Draw Widget	17
Figure 34 : Measurement Widget	
Figure 35 : Esri World Geocoder	
Figure 36 : Zoom in or out	18
Figure 37 : Default extent	18
Figure 38 : My Location	
Figure 39 : Application open on phone	19

1. VERSION CONTROL

The purpose of the version control is to keep track of changes, additions and updated to the document as well as the person and date when updated occurred.

VERSION	TYPE OF CHANGE	DATE	PERSON
Version 1	Create document	May 2018	Louisa de Smit
Version 2	Modify document	July 2018	Louisa de Smit

2. HOME PAGE

Using a Desktop or Laptop the opening home page link for the Property Search will show an overview page that looks like the image below.



Figure 1 : Overview of home page open on Desktop or Laptop screen

3. POP-UPS

When the user zoom in or click on the map a pop-up menu appears. This indicate info on visible layers on the map. Also note if the user select the arrow (in the red box – left image) the user can see the other layer pop-ups. On the bottom the user can either click on Zoom to or the three dots that give more options to use.

			(1 of 5)	►□×
			Provinces:	
1 of 6)		× □ × l	Province Code NW	
			Province Name North V	
Provinces:			Country South A	frica
Province Co	de NW		Zoom to	•••
ovince Na	me North West		Pan	i to
Country	South Africa		- Add	d a marker
om to			aseru 🖬 Vie	w in Attribute Table

Figure 2 : Pop-up menus

When the user click on the View in Attribute Table the attribute tables appears. Navigate to the required one and view the data.



Figure 3 : Attribute data

In the middle of the screen is a black box with white arrow in. Tis can be used to hide the attribute table.



Figure 4 : Hide Attribute Table

4. SEARCH WIDGETS

On the left of the screen the user can use the different property search options that were set up.



Figure 5 : Property search widgets options (left on screen)

4.1 SEARCH: PARENT FARM

Select the Parent Farm Widget by click on the button to open the SEARCH FORM.



The first option is PROVINCE NAME (Required) option and must be select to start the filter query. Selecting the Administration District, Parcel Number or Farm Name are optional choice however it will help to limit the search results when they are also used. On the last selection on the form the user can either type part of the farm name or a number to use for the search. When all the selections on the drop down where select click on the green button APPLY to start the search.

Parent Farm			Parent Farm	
Tasks	Results		Tasks	Results
Parent F	arm		Parent	t Farm
Query criteria Select the Province Name (Required	1)	•	Query criteria Select the Province Name (Requir FREE STATE	red)
Select the Administration District (C	ptional)	•	Select the Administration District	(Optional)
Type the Parcel Number (Optional)			Type the Parcel Number (Optiona	
Type the Farm Name (Optional)			Type the Farm Name (Optional)	29
Appl	y		Api	ply

Figure 7 : Search form query criteria

The query results will then show on the form and displayed on the map. The user can click on one of the rows on the form to zoom to the exact farm that is required. The PARENT FARM QUERY will show results in the order of Province Name, Administration District (Major Region), Farm Name and Parcel Number.

Parent Farm	
Tasks	Results
Parent Farm _Query result	~
Number of features found: 16	
FREE STATE; BLOEMFONTE No. 752; 752	N; KLEIN RUST PLAATS
FREE STATE; FRANKFORT; E 752	ERSTE GELUK No. 752;
FREE STATE; HARRISMITH; T 752	HE SETTING SUN No. 752;



Figure 8 : Query results shown on form and on the map display

The user can click on one of the rows on the form to zoom to the exact farm that is required.

Tasks	Results			
Parent Farm _Query result	• •••			
lumber of features found: 16		-	(1 of 4)	► □ >
FREE STATE; BLOEMFONTEIN No. 752; 752	I; KLEIN RUST PLAATS		FREE STATE; FRANKFOR No. 752; 752	RT; EERSTE GELUK
FREE STATE; FRANKFORT; EE 752	RSTE GELUK No. 752;		Zoom to	***
FREE STATE; HARRISMITH; TH 752	IE SETTING SUN No. 752;			
FREE STATE; HEILBRON; BRO 752; 752	NKHORSTFONTEIN No.			

Figure 9 : Select one of the features found to display the Parent Farm query results

To clear the current selection the user, need to click on the three dots and then select the REMOVE THIS RESULT to clear the query results.

Parent Farm		×
Tasks		Results
Parent Farm _Query result		••••
Number of features found: 16	<u>o</u> (Zoom to
FREE STATE; BLOEMFONTEI No. 752; 752	,	Pan to
FREE STATE; FRANKFORT; EE	÷	Flash
	Σ	Statistics
FREE STATE; HARRISMITH; TI 752		View in Attribute Table
FREE STATE; HEILBRON; BRC 752; 752	×	Remove this result

Figure 10 : Clear query results

4.2 SEARCH: FARM PORTION

Select the Farm Portion Widget by click on the button to open the SEARCH FORM.



Figure 11 : Select the Farm Portion search options (left on screen)

The first option is PROVINCE NAME (Required) option and must be select to start the filter query. Selecting the Administration District, Sub Place Name, Parcel Number or Portion Number are optional choice however it will help to limit the search results when they are also used. When all the selections on the drop down where select click on the green button APPLY to start the search.

Farm Portion		Farm Portion	
Tasks	Results	Tasks	R
		Farm	Portion
		Query criteria	
Query criteria		Select the Province Name (Requi	ired)
Select the Province Name (Required)		FREE STATE	
		Select the Administration Distric	t (Optional)
Select the Administration District (Optio	nal)	BOTHAVILLE	
		Select the Sub Place Name (Opt	ional)
Select the Sub Place Name (Optional)		Matamong	
		Type the Parcel Number (Option	al)
Type the Parcel Number (Optional)			
		Type the Portion Number (Option	nal)
Type the Portion Number (Optional)			
Apply		Ap	oply

Figure 12 : Search form query criteria

The query results will then show on the form and displayed on the map. The user can click on one of the rows on the form to zoom to the exact farm that is required. The FARM PORTION FARM QUERY will show results in the order of Province Name, Administration District (Major Region) and Parcel Number.

Farm Portion	×
Tasks Results	
Farm Portion _Query result	
Number of features found: 3	
FREE STATE;BOTHAVILLE;1,195	
FREE STATE;BOTHAVILLE;1,195	
FREE STATE;BOTHAVILLE;1,195	

Figure 13 : Query results shown on form and on the map display

The user can click on one of the rows on the form to zoom to the exact farm that is required.

4.3 SEARCH: 21 CODES

The user selects can select either the Erven, Parent Farm, Farm Portion or Holding 21 CODE search just note that the correct SG Code need to be supplied for the search to work.

	21 Code
	Tasks
	n Erven
Query criteria	💦 Parent Farm
Type the 21 Digit Code	💦 Farm Portion
Eg. C01300130001111000000	R Holding

Figure 14 : 21 Code added to query criteria

4.4 SEARCH: ERVEN

Select the Erven Widget by click on the button to open the SEARCH FORM.



Figure 15 : Select the Erven search options (left on screen)

The first option is PROVINCE NAME (Required) option and must be select to start the filter query. Selecting the Administration District, Township, Sub Place Name, Parcel Number or Portion Number are optional choice however it will help to limit the search results when they are also used. When all the selections on the drop down where select click on the green button APPLY to start the search.

Erven		Erven	
Tasks	Results	Tasks	Results
Erv	ren	Erve	en
0		Query criteria	
Query criteria		Select the Province Name (Require	ed)
Select the Province Name (Requir	ed)	NORTHERN CAPE	
		Select the Administration District (Optional)
Select the Administration District	(Optional)	PRIESKA	
		Select the Township (Optional)	
Select the Township (Optional)		MARYDALE	
		Select the Sub Place Name (Optio	nal)
Select the Sub Place Name (Option	onal)		
		Select the Sub Place Name (Optio	nal)
Type the Parcel Number (Options	al)		
		Type the Parcel Number (Optional)
Type the Portion Number (Optior	al)		
iype alle renderin tambel (option		Type the Portion Number (Optiona	al)
Ар	ply	Apr	

Figure 16 : Search form query criteria

The query results will then show on the form and displayed on the map. The user can click on one of the rows on the form to zoom to the exact farm that is required. The ERVEN QUERY will show results in the order of Province Name, Administration District (Major Region), Minor Region and Parcel Number.



Figure 17 : Query results shown on form and on the map display

The user can click on one of the rows on the form to zoom to the exact farm that is required.

4.5 SEARCH: HOLDINGS

Select the Erven Widget by click on the button to open the SEARCH FORM.



Figure 18 : Select the Holdings search options (left on screen)

The first option is PROVINCE NAME (Required) option and must be select to start the filter query. Selecting the Administration District, Agricultural Holding, Sub Place Name, Parcel Number or Portion Number are optional choice however it will help to limit the search results when they are also used. When all the selections on the drop down where select click on the green button APPLY to start the search.

Holdings		Holdings	
Tasks	Results	Tasks	Results
Hold	ing	Hold	ding
Query criteria		Query criteria	
Select the Province Name (Require	:d)	Select the Province Name (Requir	ed)
		NORTH WEST	
Select the Adminisration District (Optional)	Select the Adminisration District (Optional)
		IQ	
Select the Agricultural Holding (O	otional)	Select the Agricultural Holding (C	ptional)
		SYFERBULT AH	
Select the Sub Place Name (Optic	nal)	Select the Sub Place Name (Optic	onal)
Type the Parcel Number (Optiona)	Type the Parcel Number (Optiona	1)
Type the Portion Number (Option	al)	Type the Portion Number (Option	al)
Ap	bly	Ap	ply

Figure 19 : Search form query criteria

The query results will then show on the form and displayed on the map. The user can click on one of the rows on the form to zoom to the exact farm that is required. The HOLDINGS QUERY will show results in the order of Province Name, Administration District (Major Region) and Minor Region.



Figure 20 : Query results shown on form and on the map display

The user can click on one of the rows on the form to zoom to the exact farm that is required.

5. BASEMAP WIDGET

To change the Basemap on the map the user need to select the Basemap Widget that will open a Basemap Gallery to view which maps can be used in the background of the map. Click on the required map and the changes will show on the map.





Figure 21 : Select the Basemap Widgets on top banner

6. LAYER LIST WIDGET

When the user selects the Layer list Widget that will open the list of operational layers.



Figure 22 : Select the Layer List Widgets on top banner

Note that not all the layers have a tick mark on the left, this means that that layer is not on and no data will be visible to see. Also if a layer on this list is grey out it means that a scale dependence were set on the layer and will only show when zoom in to the correct scale.



Figure 23 : Select the Layer List Widgets on top banner

Next to the CHIEF SURVEYOR-GENERAL main layer the user can click on the three dots to Zoom to, change Transparency, etc. for a specified layer.

		-	Chief Surveyor-General	
		•	Provinces	Zoom to
Layer List	≈ >	Þ	District Municipali	Transparency
Operational layers		•	Parent Farm	Move up
✓ Chief Surveyor-General		•	Farm Portion	Move down
▶ 🗹 Provinces		Þ	Allotment Townsh	Show item details

Figure 24 : Zoom or set Transparency of the specified layer

When the user clicks on three dots next to a sub layer they can disable the pop-up, view attributes or show item details.

▶ ✓ Provinces	•••
District Municip	Disable pop-up
▶ 🗹 Local Municipa	View in Attribute Table
▶ Parent Farm	Show item details

Figure 25 : Zoom or set Transparency of the specified layer

7. LEGEND WIDGET

On the third options the user can select the Legend Widget. All the layers that are switch on in the layer list will show on the Legend. For example if the user don't need to see holdings on the legend or when printing go back to the layer list option and switch that layer off. Open again the Legend and it will not show.

E 🖶 🎓 🔂 🏶)	⊙
Legend	1	
Chief Surveyor-General		
Provinces		
District Municipalities		
Local Municipalities		
Erven		

Figure 26 : Select Legend Widget and display which layers are on current on the map layout

8. SET SCALE WIDGET

Together with the Print Widget the user can also use the Set Scale Widget. Zoom to the required area and click on the Set Scale Widget. A pop-up will appear on the screen, type the value and press the Go button.



Figure 27 : Select Se tScale Widget

9. PRINT WIDGET

When done with the search of the and the user found the polygon that need to show on the map the user can use the Print Widget to create a layout. After the user clicked on the Print Widget

the Print form appears. In the Map Title space type the new heading of the map. Then select the Format option that is required. Click on the Print option to start the print process, when the new layout is created it will show on the print form. If needed navigate back to the map and zoom to correct place or change the title of the map and re-print. When needed click on the Clear prints to remove the layouts created.



Figure 28 : Select the Print Widget type required info to create and view map layout

If the user used the Set Scale Widget and wants to use the same scale that were selected on the print layout open the ADVANCED option on the Print Widget. Select the FORCE SCALE option and type the relevant scale option. After all changes were done click the PRINT option.

Map scale/e	xtent:			
Preserve:	⊙ map scale ⊙ map extent			
Force scale:	10000 <u>current</u>			
Layout meta	data:			
Author:	Web AppBuilder for Arc			
Copyright:				
Include lege	end: 🔽			
MAP_ONLY size:				
Width (px):	670			
Height (px):	500			
Print quality:				
DPI:	96			

Figure 29 : Set Force Scale option before printing



Figure 30 : A4 print example

10. BOOKMARK WIDGET

Select the Bookmark Widget. This will open the Bookmark list of already created bookmarks. To create new Bookmarks zoom to the required area open the tool and click on the Add option the new bookmark will be added on the bottom. Click to change the name and if needed the user can change the thumbnail. Note that if the user clear the cash history on the web the thumbnail will be removed.



Figure 31 : Select the Bookmark Widget

11. ABOUT WIDGET

On the About Widget the help document on how to use the Property Search Web Applications can be found.



Figure 32 : About Widgets

12. DRAW WIDGET

Open the Draw widget and select a draw mode to draw on the map. After the user selected a draw mode and draw for example a box on the map the Preview menu appears where the user can change the colour, transparency and outline of what was drawn. On the bottom of the menu the user can click to clear what was drawn on the map.



Figure 33 : Draw Widget

Click on the Measurement widget and select one of the options to measure on the map. The result of that will show on pop-up menu after the user did a measurement.

13. MEASURE WIDGET





Figure 34 : Measurement Widget

14. ESRI GEOCODER WIDGET

The user can also use the Esri World Geocoder option. Type the specified location info in the open space, a list of options will show select the required one.

		University of Freestate, Mangaun ($ imes$	Q
Esri World Geocoder	Q	University of Freestate	¥
		K ^	^

Figure 35 : Esri World Geocoder

15. NAVIGATION

The user can select the Zoom in and out buttons on the left bottom of the map to quickly zoom in or out.



Figure 36 : Zoom in or out

When the user click to on the Default Extent button it will zoom back to the default view the map layout were set on.



Figure 37 : Default extent

When the user click on My Location a pop-up will appear on the screen. When clicking on the Allow Location Access the map will then zoom on the location of the user on that time.





Figure 38 : My Location

16. VIEW PROPERTY SEARCH ON ANOTHER DEVICE

The layout can change and show differently. For example note that in the top right corner when the user click on the arrow option the other windows appears (right image).



Figure 39 : Application open on phone