



## User Story Board #1:

The user would like current data concerning the area of land they hope to parcel:

From the opening page underneath the 'LO' logo there are three options 'Map Interactive', 'Analytics' and 'Trending'. For the user to attain current data concerning the area of land they would first select 'Trending' by double clicking on the item. This will take the user to a new window layout with a search box.

The user can type coordinates, words, the locations or even search terms (such as sound level results.)

- If the user types in a search terms that is either garbled text or information does not exist on it will result in the following text: “I am sorry there doesn’t seem to be any information on this topic perhaps you would like to search by location?” in which case check boxes like this will appear:

☐ Rio Claro

☐ Mayo

☐ Princess Town

When a check box is selected, and Search is clicked the information is returned in a list of articles and headings.

- If the search term is valid and is found, then the information returned will be in the form of articles and headings.

This feature is to facilitate the user searching for: residential indicators, nationwide datasets and statistics, trending and projected housing taxes and various electricity, squatting, water and building codes and trends in an area.

## User Story Board #2:

User generates a report on the Land to be parceled.

The user begins on the start menu where the user selects the Analytics Option. When selected, the user is confronted with a form which is used to determine the status of the land project.

The form will be sectioned into different categories of land development processes where the user will have to input information in fields and select checkboxes for the corresponding categories. Form categories include land information, description of development type, checklist of obtained permits, population statistics, preferred type of buildings, existing infrastructure on land and preferred drainage and road specifications. If the user is unable to fill a specific part of the list the default values will be placed in the area.

After pressing finish on the form, a pop-up window will appear contain all the default object specifications the program will use based on the undefined fields in the form. The default specifications will be based on the building code of the specified country or custom approved building presets.

After the user confirms settings, a window with two sectioned drop-down pages will appear labelled optimized land proposal and status report. Under optimized land proposal will be a computer-generated schematic of the building and road infrastructure in the form of a pdf which can be printed, downloaded or shared. The report will contain guidelines and links to relevant government information and applications to continue the approval process.

## User Story Board #3:

At the homepage for the Land Optimizer software, you are presented with 3 sub-links: “Map Interactive”, “Analytics”, and “Trending”. If you wish to analyze a plot of land and you know the location of it and the dimensions, you will go to Map Interactive.

Once you go to Map Interactive, you will be shown a detailed map of Trinidad and Tobago along with a sidebar with some editing tools. You can zoom in on the map to a closer location of the plot of land. Then, you can use the cropping tools on the sidebar to crop the actual shape of the land, whether it be rectangular or odd-shaped (just like how you would create shapes in Microsoft Paint).

There are invalid locations that you cannot crop such as the sea. If you attempt to do so, you will be met with an error message dialogue box – “Invalid location. Please try again.”

After cropping the piece of land, you will be asked to confirm. Upon confirmation, the dimensions of the land is calculated by the system (using the scale of the map), then further calculation is done to find the best layout for houses to be built on that land. The calculation accommodates for the best population density and the roads that have to be also be built.

After the optimizing is done, you are taken to a new page which shows you your cropped land, along with a housing scheme layout on top of it. Details such as the optimal number of houses and residents are also displayed on the page.

