Native App Wireframes: cityofchicago.org

Erica Christian for DePaul | HCI 530 | Designing for Mobile

Introduction

I designed a native app to support the cityofchicago.org website. This website is information-dense and requires a deep hierarchy for organization. As a result, I chose list menus for both primary and secondary navigation to allow users to find information as quickly as possible.

I created wireframes to explore two scenarios that I believe would be of high importance to someone using the app in late February/early March, 2016. The first is registering to vote since the primaries are only a few weeks away. The second is paying a water bill via the app.

Methods

I. Android

I started wireframing for Android. I emphasized simple list menus with clearly labeled text instead of icons. I did not want to risk "mystery meat" navigation where the user would need to guess at approximately 8-10 icons per sub-menu. I used dividers to increase readability and scannability of the list menus. Full-bleed dividers separate primary lists while inset and shortened dividers separate sub-list navigation items.

Some items did not fit within my categories and were re-ordered from the website. Ideally, the website and app would both undergo user testing for their information architecture. For this project, I emphasized consistent UI patterns, error recovery, a fluid experience, and minimizing steps to achieve the user goal.

The users can navigate out of subscreens and back to the main screen in multiple ways. These include: a direct link via logo or title in the action bar, a breadcrumb trail, and access to a dropdown overlay sitemap menu from a hamburger menu that is always available in the action bar. The list menus in both primary and secondary navigation act the same within and across platforms. Persistent navigation provides consistency and a fluid experience for the users.

The list menus only show what a user needs to see to make a decision in the hierarchy. I kept the most relevant information above the fold to enable users to reach their destinations as quickly as possible. Each task can be completed within four screens from the launch of the app and users can easily and quickly back out of a screen they think is not what they wanted.

The menu options increase quite quickly from the home screen. In order to keep the user experience fluid, I diminshed the action bar on leaving the home screen. Users can still access the full functionality of the action bar. Adjusting the elements in this way frees up a enough screen real estate to view nearly full primary list menus and full sub-list menus on both devices without scrolling.

In the third level of the hierarchy, I created a three-item priority menu.This makes the app easier to use because seasonal (e.g. time-sensitive) and frequently used features are pulled to the top of the list menu and off-set from the rest of the choices. The items still appear within the sub-list, but it is a way to help a user find what he/she needs more quickly.

I used modals only in the case of an alert. The user activates the modal by clicking on the alert to get more information. This method allows the user to opt-in instead of forcing the user to focus on content he/she may not feel is worth the time.

II. iOS

I took the Android wireframes and looked at them through the lens of iOS standards. I found that both platforms have many of the same goals. In the iOS standards, there is a focus on content before design with the emphasis that both content and design are what support good user interface. They emphasize the importance of users being able to access content, that there be consistency in the methods, and that the system should have a familiar feel throughout.

To help achieve these goals, there are many stylistic rules in iOS. I worked with borderless buttons and translucent groupings and found that the wireframes I had done for Android worked within the iOS guidelines as well. Because of the density of information, the resultant list navigation is a fairly universal format. The primary difference in the two systems was in the format of the navigation bar.

Even though the format and titles are different, the tool and title bar in my iOS wireframes offers the same functionality as the navigatin bar in my Android versions. These bars tell users where they are in the app, how to get back to where they came from, and offer the ability to get anywhere they want on the site from the sitemap dropdown.

ANDROID

Task: Register to Vote

A. Action Bar; pinned to the top of the screen

ITEM	ACTION
Logo/Title	Return to opening screen from anywhere in the app.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.
Search Button	Search bar slides down on the home screen below the action bar and above the scrolling alerts.

B. Scrolling Action Bar; pinned to its location and transient because it is only there if there are alerts

ITEM	ACTION
Horizontal Scrolling Alert	Opens a modal overlay with more information; if there are no alerts the bar is not visible and the drawer content moves up.

C-I. Dropdown Drawer List Menu; arrows to the right indicate closed drawers, pointing down indicates open

ITEM	ACTION
List Items	Open drawer with additional information and content related to the list title.
Dropdown Arrows	[see above]

D. The title "I want to" is an affordance meant to direct users to actionable items. The other drawers focus on providing information.

OTHER:
The status bar is persistent on all pages. The footer information is on each page but moves with the content; it is not fixed.

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A

City of Chicago

The City of Chicago's Official Site

B

Scrolling alerts if there are any alerts to present ... Scroll

C   News Releases

D   I want to... (City Services)

E   Programs and Initiatives

F   From the Mayor

G   Rules and Regulations

H   Of Special Interest

I   About Chicago

Footer Information

02:18 PM
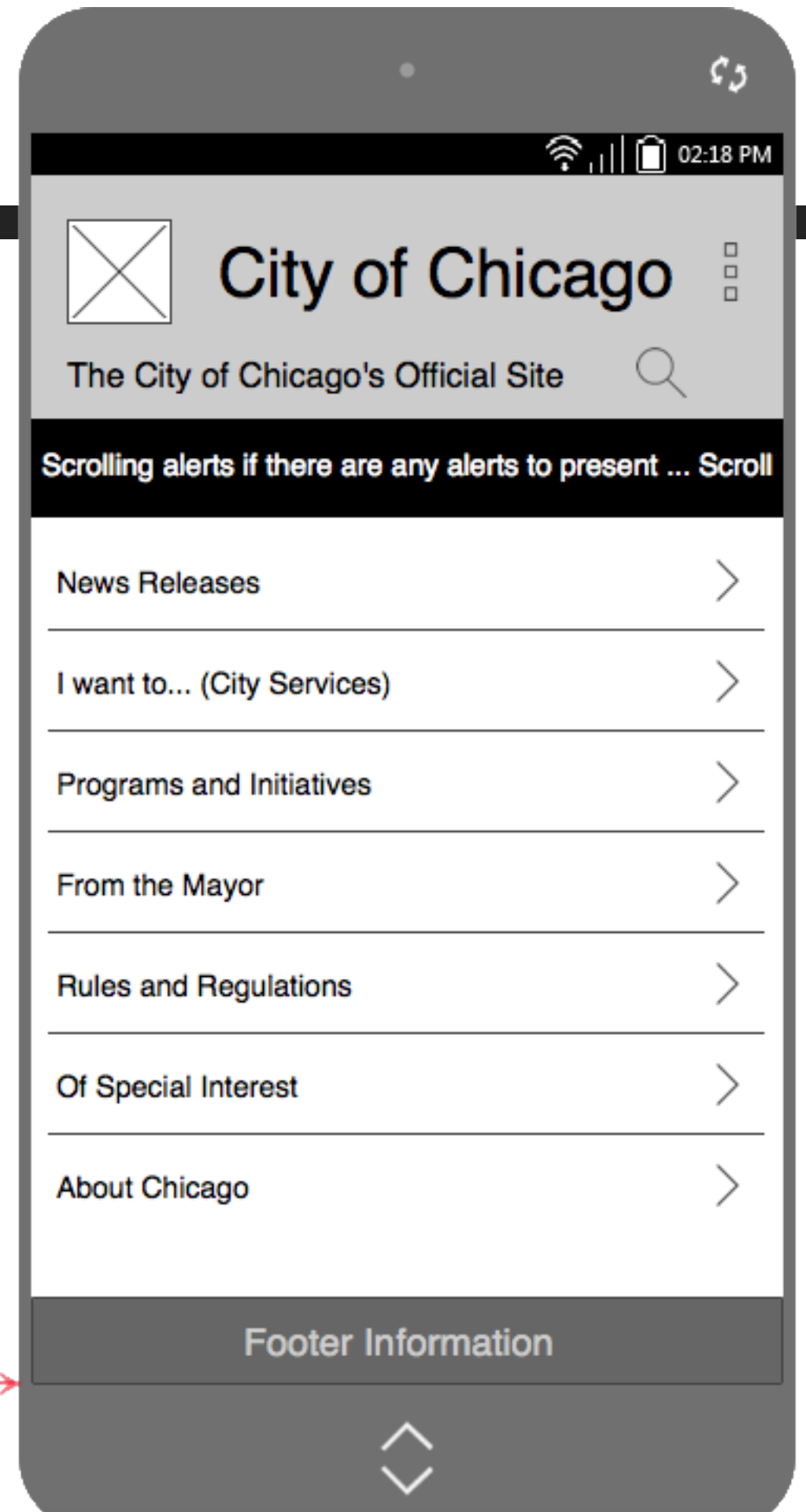
ANDROID

Task: Register to Vote
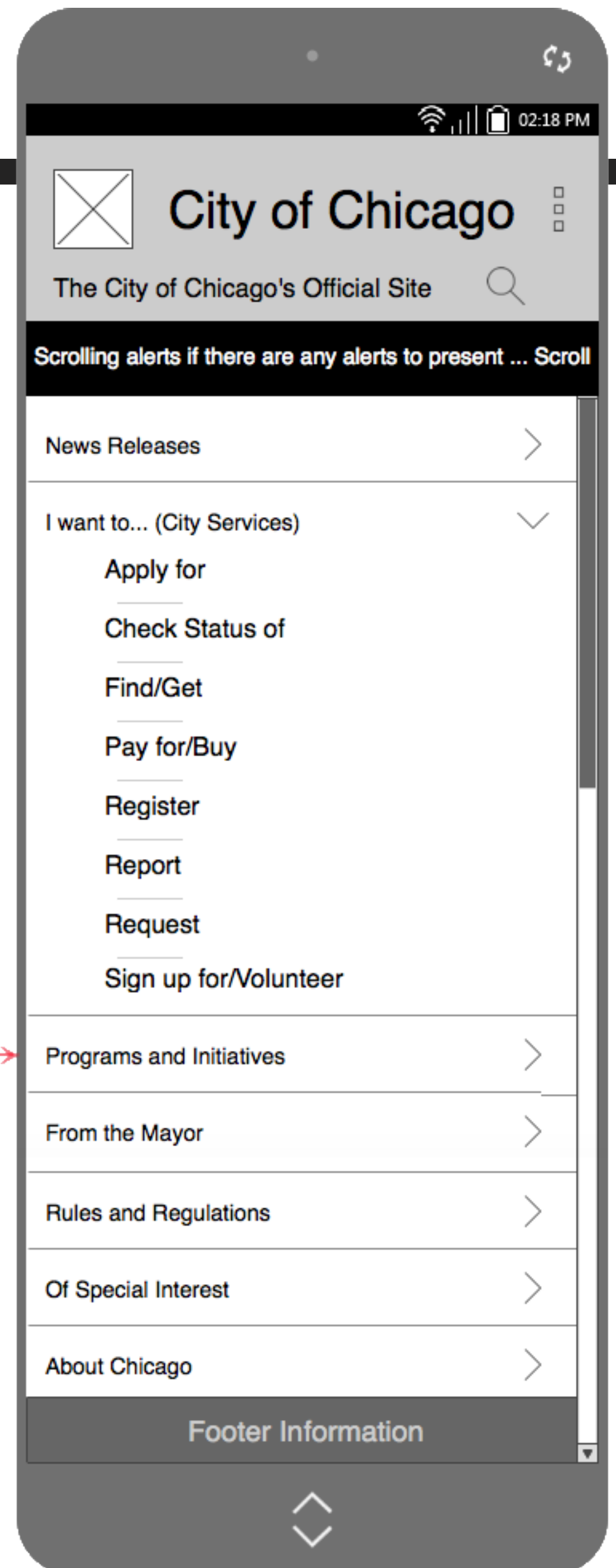
J. Drawer List Item

ITEM	ACTION
List Item	Sub-navigation lists appear under each item. Limiting list options to ten or fewer allows users to see all options for a list item at once. Users can make choices based on what they see and not from memory.

K. Sub-List Item

ITEM	ACTION
"Register"	Opens a new screen in the app.

Other:
Labelling list items eliminates "mystery meat" navigation. Items get more specific as the user drills down through the hierarchy.

City of Chicago

The City of Chicago's Official Site

Scrolling alerts if there are any alerts to present ... Scroll

News Releases

I want to... (City Services)

Apply for

Check Status of

Find/Get

Pay for/Buy

Register

Report

Request

Sign up for/Volunteer

Programs and Initiatives

From the Mayor

Rules and Regulations

Of Special Interest

About Chicago

Footer Information

ANDROID

Task: Register to Vote

L. Action Bar for Subpages

ITEM	ACTION
Image/Title	Return to opening screen from anywhere in the app.
Search Button	Search bar slides down on the home screen below the action bar and above the scrolling alerts.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.

M. Content Area Titling

ITEM	ACTION
Breadcrumb Trail	Allows user to navigate back through the path taken to the current screen.
Title	A static label persistent on this page; orients the user to the scrollable content beneath the line.

N. Content Area

ITEM	ACTION
3-item Priority Menu	Three items are presented in a priority menu before the list menu. The items take the following priority in this order: timeliness, frequency accessed by the user of the device. An item is prioritized by relevance during a certain time of the year (e.g., registering to vote in the Winter for primary elections). Following seasonal items, the next priority is to rank items by frequency with which users access them (e.g. more people are using the app to register students in school due to turnover in the housing market).

O. Drawer List

ITEM	ACTION
List Items	Items arranged alphabetically; a user can view all items in the drawer list simultaneously by scrolling.
Scroll Bar	When a user starts to scroll, the scroll bar will appear to show progress through the page and make it easier to navigate the list items.

P. List Item

ITEM	ACTION
"To Vote"	The second instance on the screen for a user to find the link to register to vote; leads to voting information page.

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City of Chicago
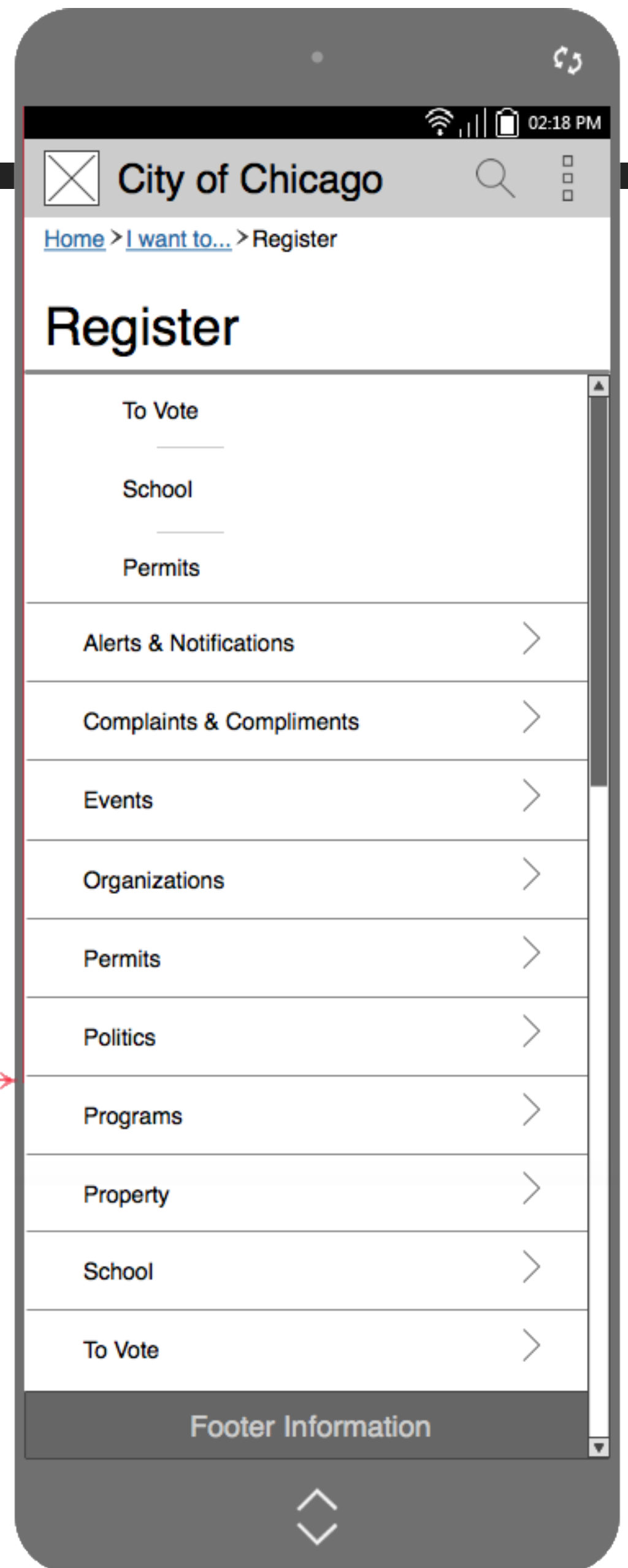
Home > I want to... > Register

Register

To Vote

School

Permits

Alerts & Notifications

Complaints & Compliments

Events

Organizations

Permits

Politics

Programs

Property

School

To Vote

Footer Information

02:18 PM

ANDROID

Task: Register to Vote

Q. Content Area

ITEM	ACTION
Summary	Succinct but informative paragraph explaining what the user can do on this landing screen.

R-S. Call to Action Buttons

ITEM	ACTION
Register	Leads to an external site.
Checking Status	Leads to an external site.

T. Contact Information

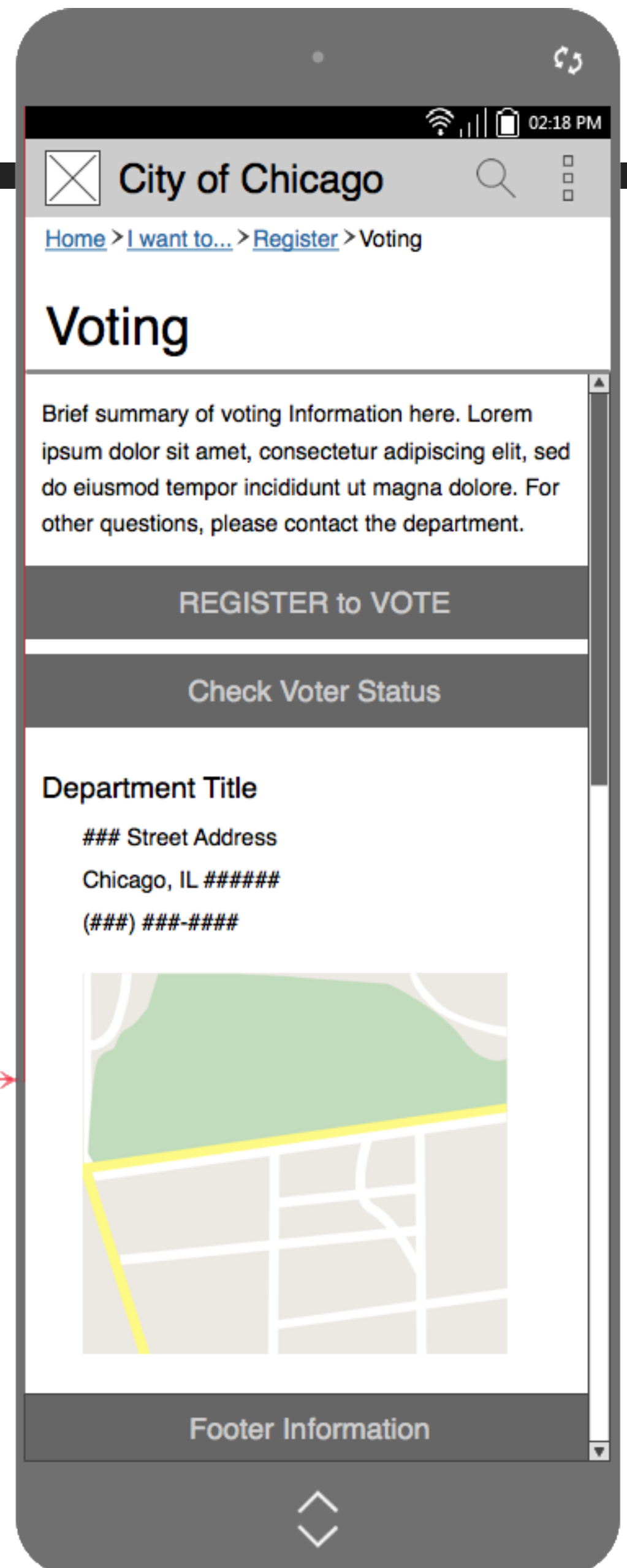| ITEM	ACTION
Department Title	Link to the department website.
Address	Shown on interactive embedded Google map.
Phone Number	Opens phone app to connect the call.

Other:
Scroll is transient, appearing during scrolling and fading away when not in use.

ANDROID

Task: Pay Water Bill

A. Action Bar; function is the same

ITEM	ACTION
Logo/Title	Return to opening screen from anywhere in the app.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.
Search Button	Search bar slides down on the home screen below the action bar and above the scrolling alerts.

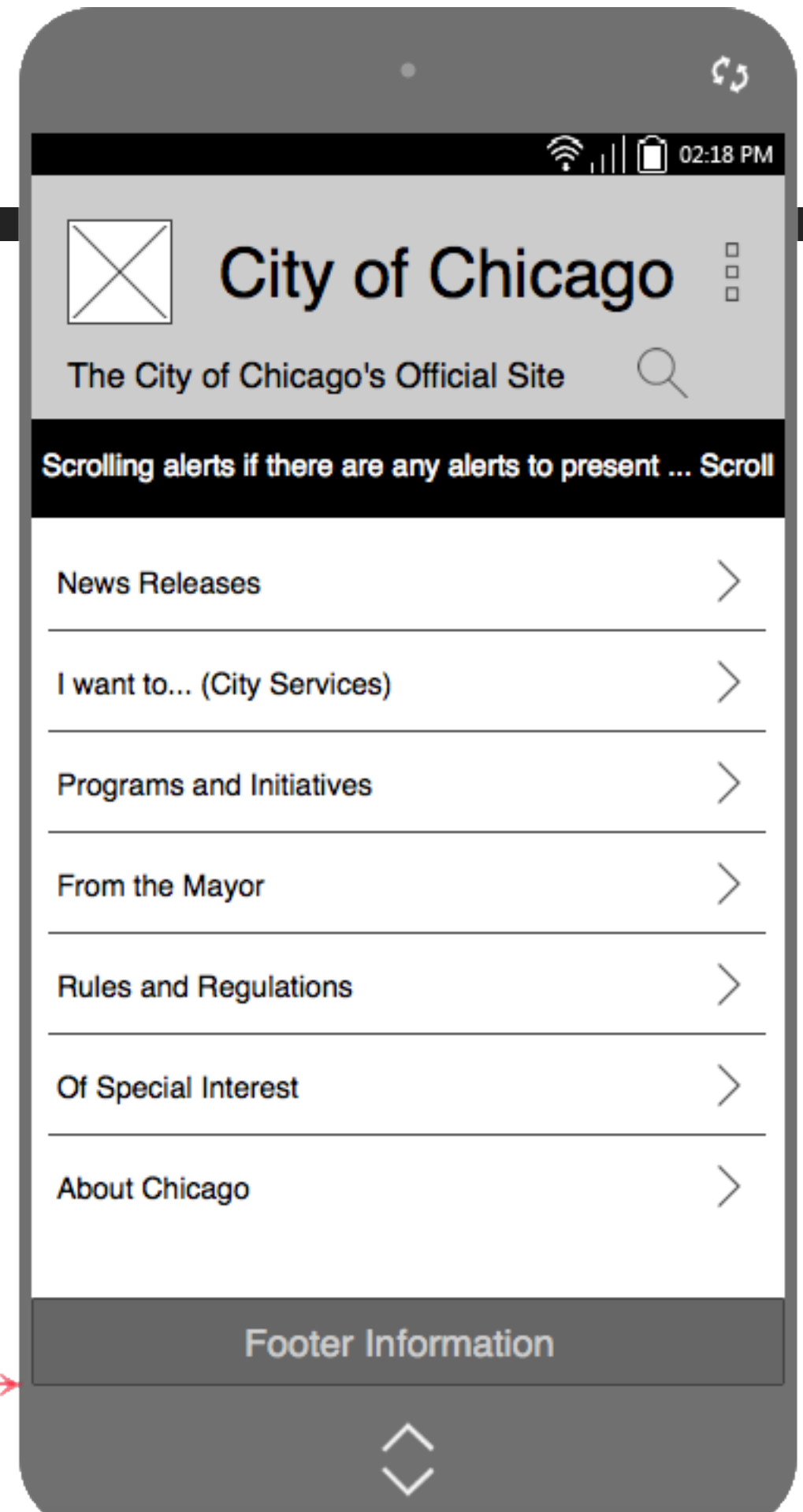**B.** Dropdown Drawer List Menu; function is the same

ITEM	ACTION
"I want to…"	Open drawer with additional information and content related to the list title.
Dropdown Arrows	[see above]

OTHER:
This is the same entry screen and menu as in the prior task.

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B

City of Chicago

The City of Chicago's Official Site

Scrolling alerts if there are any alerts to present … Scroll

News Releases

I want to... (City Services)

Programs and Initiatives

From the Mayor

Rules and Regulations

Of Special Interest

About Chicago

Footer Information

ANDROID

Task: Pay Water Bill

C. Sub-List Item

ITEM	ACTION
"Pay for/Buy"	Opens a new screen in the app.

OTHER:
This is the same sub-list item view as in the prior task. Each item listed is actionable.

ANDROID
Task: Pay Water Bill

D. Content Area

ITEM	ACTION
3-item Priority Menu	Three items are presented in a priority menu before the list menu. The items take the following priority in this order: timeliness, frequency accessed by the user of the device. An item is prioritized by relevance during a certain time of the year (e.g., registering to vote in the Winter for primary elections). Following seasonal items, the next priority is to rank items by frequency with which users access them (e.g. more people are using the app to register students in school due to turnover in the housing market). None of items are currently "in season." This view is by the frequency with which the app user viewed those three items.
"Water Bill"	The user can click on the item labelled "Water Bill" to reach the bill payment landing screen.

E. Drawer List; repeated functionality increases familiarity

ITEM	ACTION
List Items	Items arranged alphabetically; a user can view all items in the drawer list simultaneously by scrolling.
Scroll Bar	When a user starts to scroll, the scroll bar will appear to show progress through the page and make it easier to navigate the list items.

F. List Item

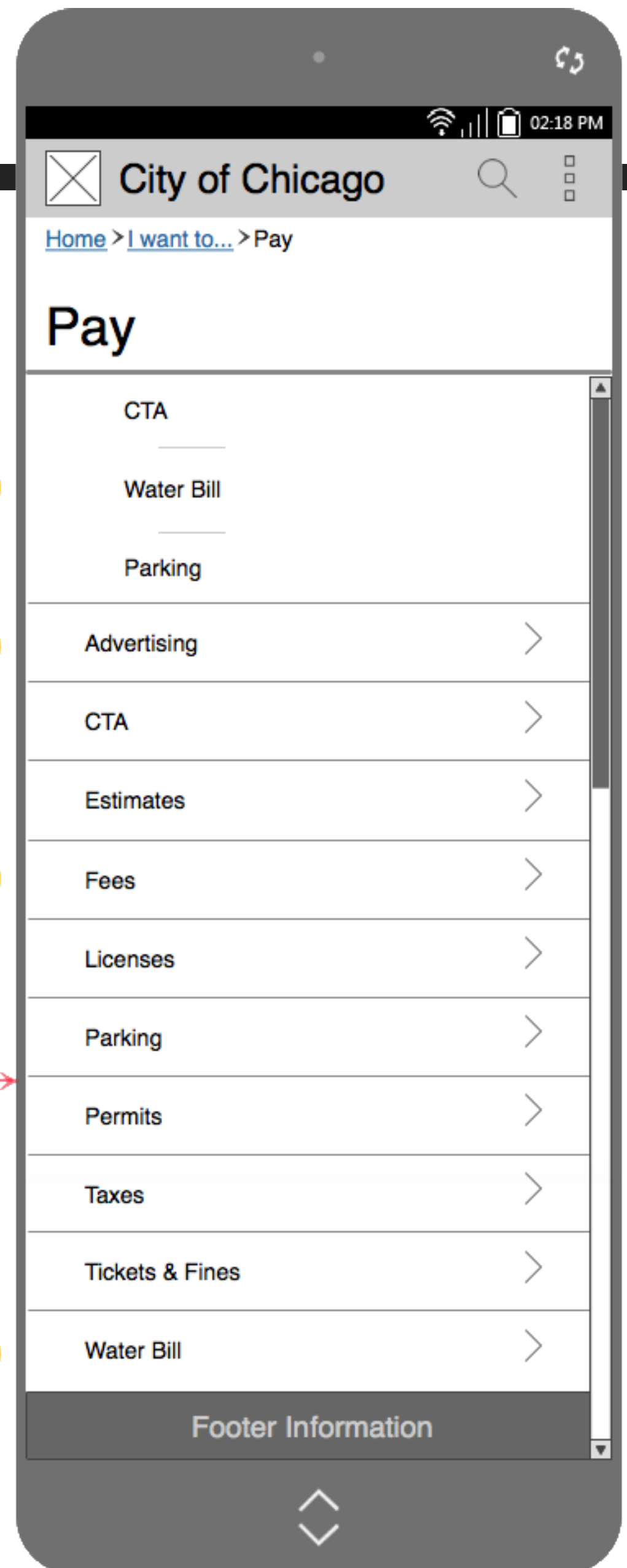| ITEM	ACTION
"Fees"	The second of three instances on the screen for a user to navigate to pay a water bill. "Fees" is a drop-down menu of different fees. A user will reach the water bill payment screen by clicking on "Water Bill" in the "Fees" sub-menu.

G. List Item

ITEM	ACTION
"Water Bill"	The user can click on the item labelled "Water Bill" to reach the bill payment landing screen.

ANDROID

Task: Pay Water Bill

Red arrow indicates the fold.

H. Call to Action BUtton

ITEM	ACTION
"Pay Bill"	Leads to an external site for bill paying.

I. Content Area; famiilar functionality to landing screen for last task

ITEM	ACTION
Summary	Succinct but informative paragraph explaining what the user can do on this landing screen.

J. Contact Information

ITEM	ACTION
Department Title	Link to the department website.
Address	Shown on interactive embedded Google map.
Phone Number	Opens phone app to connect the call.

iOS
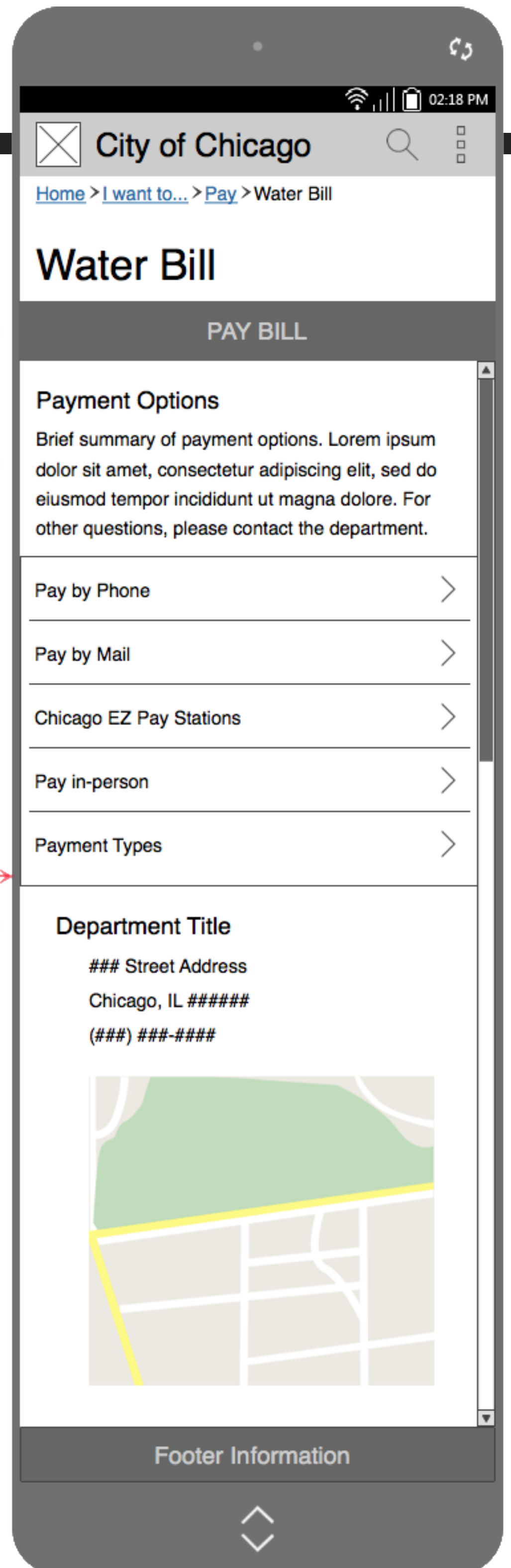
Task: Register to Vote

A. Tool and Title Bar

Item	Action
Logo/Title	Return to opening screen from anywhere in the app.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.
Search Button	Search bar slides down on the home screen below the tool/title bar and above the scrolling alerts.

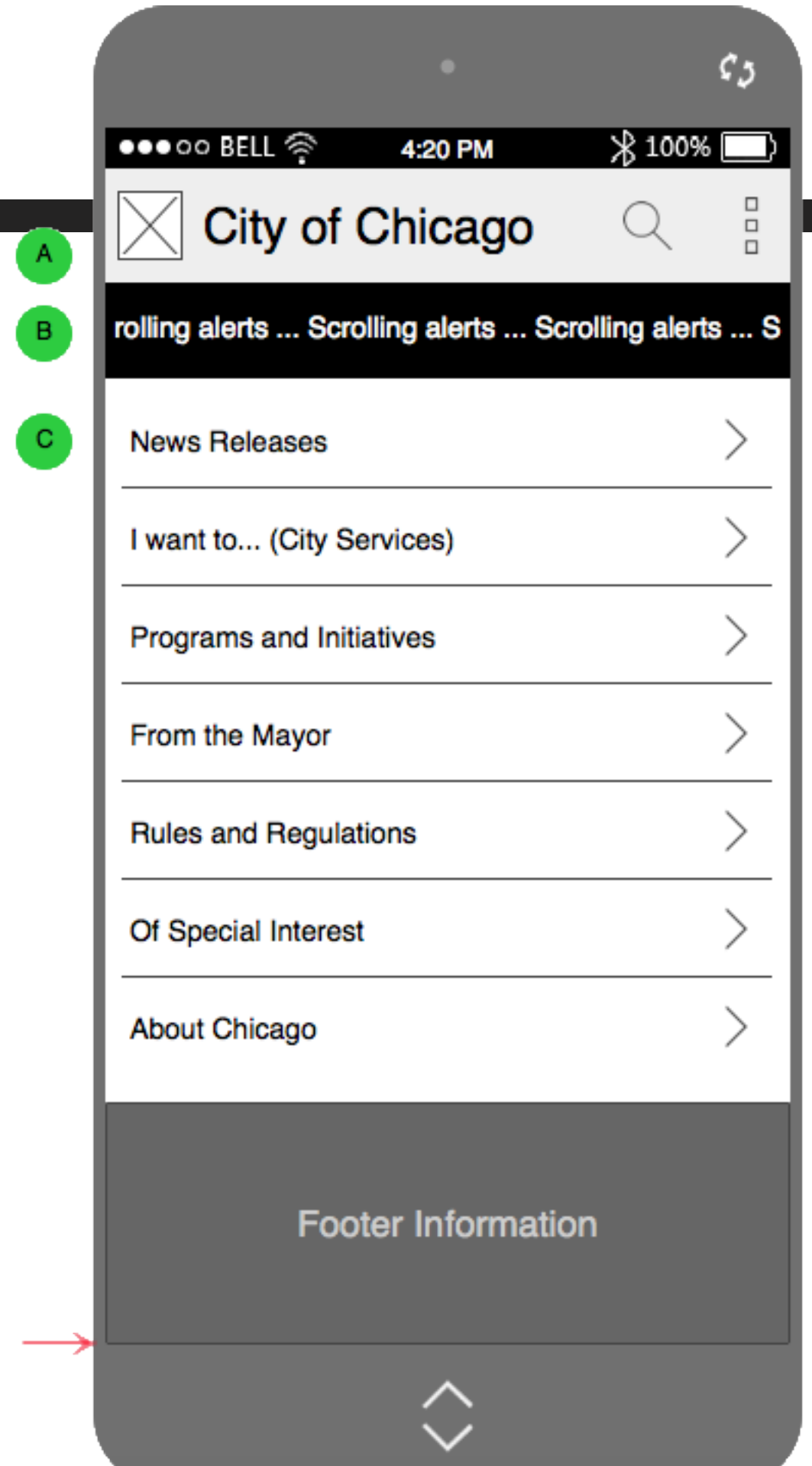**B.** Horizontally Scrolling Alert Bar; transient--appears if there are alerts

Item	Action
Horizontally scrolling alert bar	Opens a modal overlay with more information; if there are no alerts the bar is not visible and the drawer content moves up.

C. Dropdown Drawer List Menu; arrows to the right indicate closed drawers, pointing down indicates open

Item	Action
List Item	Opens drawer with additional information and content related to the list title.
Dropdown Arrows	[see above]

OTHER:
As with Android, the status bar is persistent on all pages. The footer information is on each page but moves with the content; it is not fixed.

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C

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☒ City of Chicago   🔍   ⬚

rolling alerts ... Scrolling alerts ... Scrolling alerts ... S

News Releases ⟩

I want to... (City Services) ⟩

Programs and Initiatives ⟩

From the Mayor ⟩

Rules and Regulations ⟩

Of Special Interest ⟩

About Chicago ⟩

Footer Information

iOS

Task: Register to Vote

D. Drawer List Item

ITEM	ACTION
"I want to..."	Sub-navigation lists appear under each list item.

E. Sub-List Item

ITEM	ACTION
"Register"	Opens a new screen in the app.

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City of Chicago

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News Releases

I want to... (City Services)

Apply for

Check Status of

Find/Get

Pay for/Buy

Register

Report

Request

Sign up for/Volunteer

Programs and Initiatives

From the Mayor

Rules and Regulations

Of Special Interest

About Chicago

Footer Information

iOS
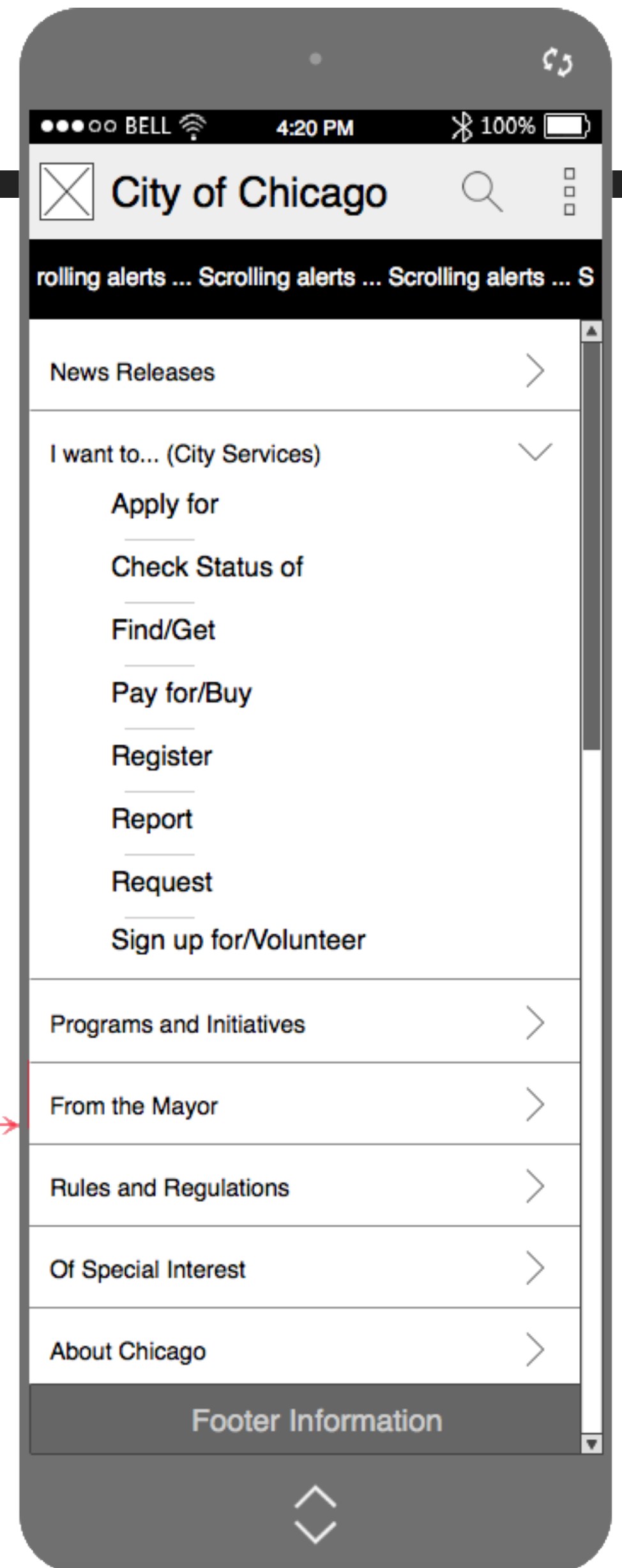
Task: Register to Vote

Red arrow indicates the fold.

F. Action Bar for Subpages

ITEM	ACTION
"Back" button	Allows user to step backwards through the navigation path to get back to the home screen.
Title	Return to opening screen from anywhere in the app.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.

G. Content Area

ITEM	ACTION
Search Bar	Search bar slides left into the content area below the action bar and above the Title Bar.
Title Bar	A static label persistent on this page; orients the user to the scrollable content beneath the line.

H. Content Area

ITEM	ACTION
3-item Priority Menu	[as explained in Android]

I. Drawer List

ITEM	ACTION
List Items	Items arranged alphabetically; a user can view all items in the drawer list simultaneously by scrolling.
Vertical Scroll Bar	When a user starts to scroll, the scroll bar will appear to show progress through the page and make it easier to navigate the list items.

J. List Item

ITEM	ACTION
"To Vote"	The second instance on the screen for a user to find the link to register to vote; leads to voting information page.

iOS
Task: Register to Vote
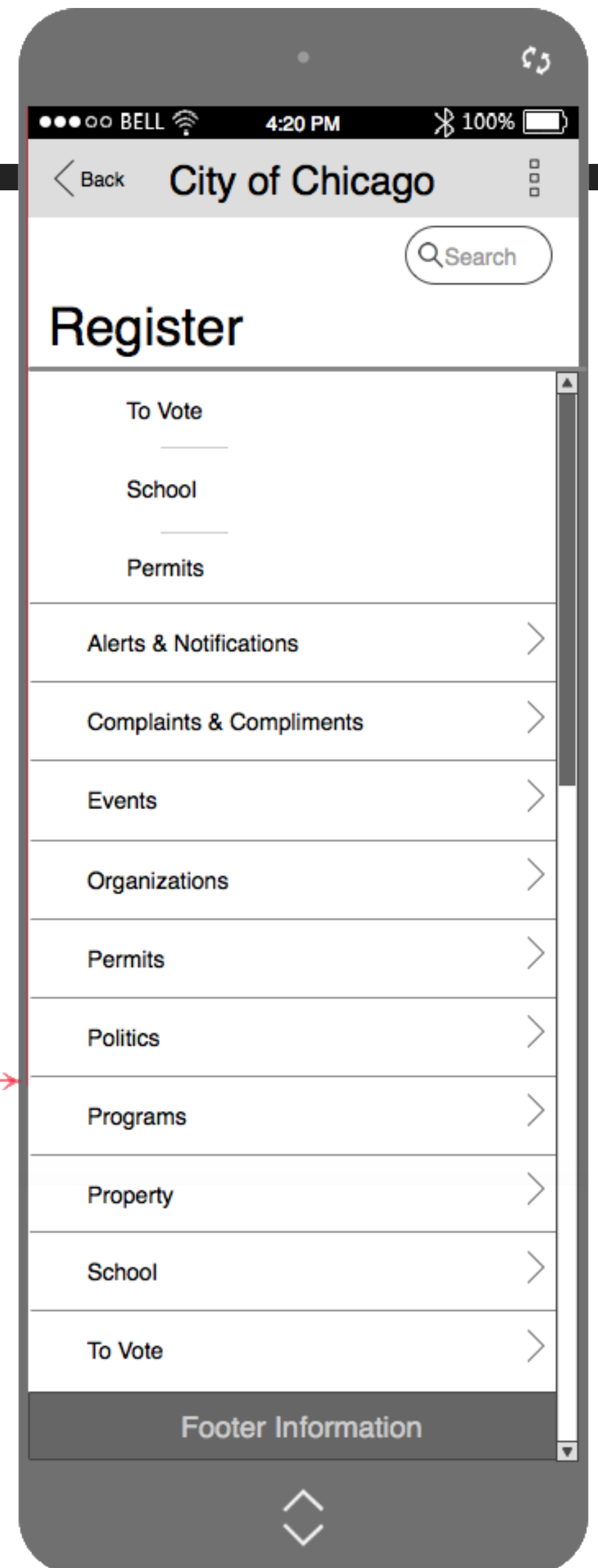
Red arrow indicates the fold.

K. Content Area

ITEM	ACTION
Summary	Succinct but informative paragraph explaining what the user can do on this landing screen.

L-M. Call to Action Buttons

ITEM	ACTION
"Register"	Leads to an external site.
"Check Status"	Leads to an external site.

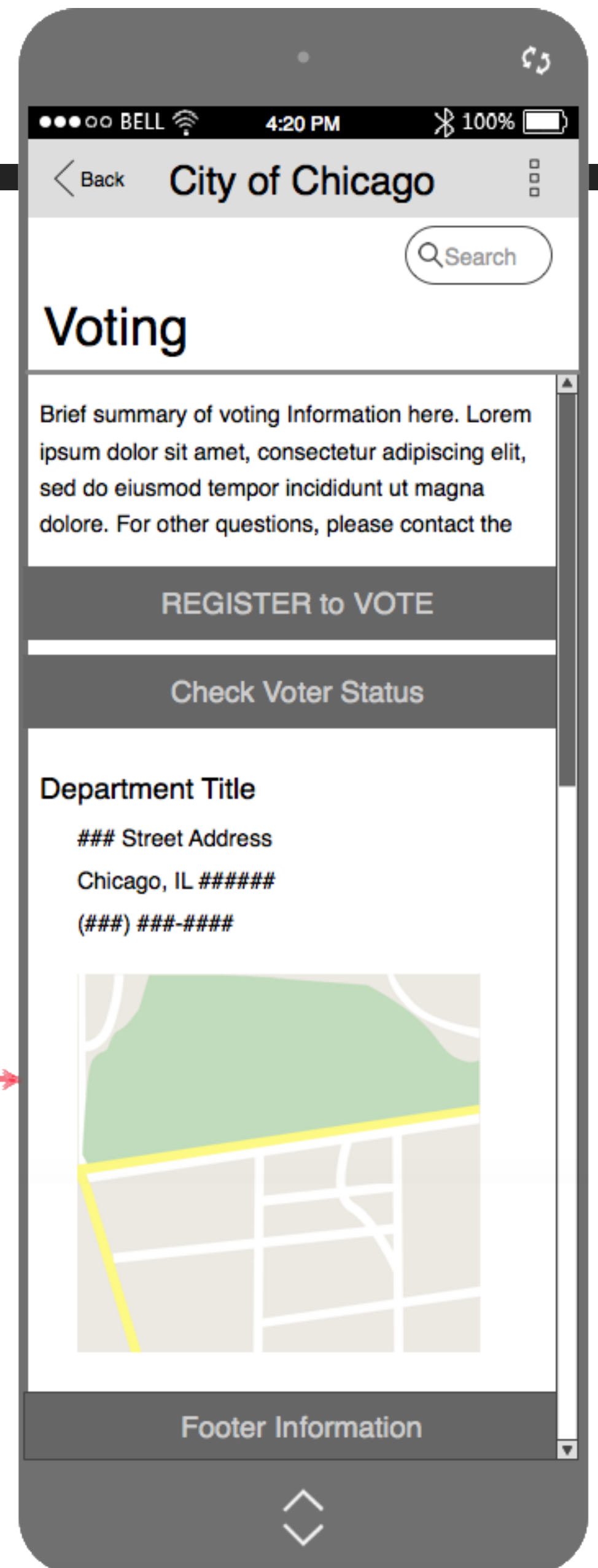**N.** Contact Information

ITEM	ACTION
Department Title	Link to the department website.
Address	Shown on interactive embedded Google map.
Phone Number	Opens phone app to connect the call.

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‹ Back   **City of Chicago**

🔍 Search

Voting

Brief summary of voting Information here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut magna dolore. For other questions, please contact the

K

REGISTER to VOTE

L

Check Voter Status

M

Department Title

N

Street Address

Chicago, IL ######

(###) ###-####

Footer Information

iOS
Task: Pay Water Bill

A. Action Bar

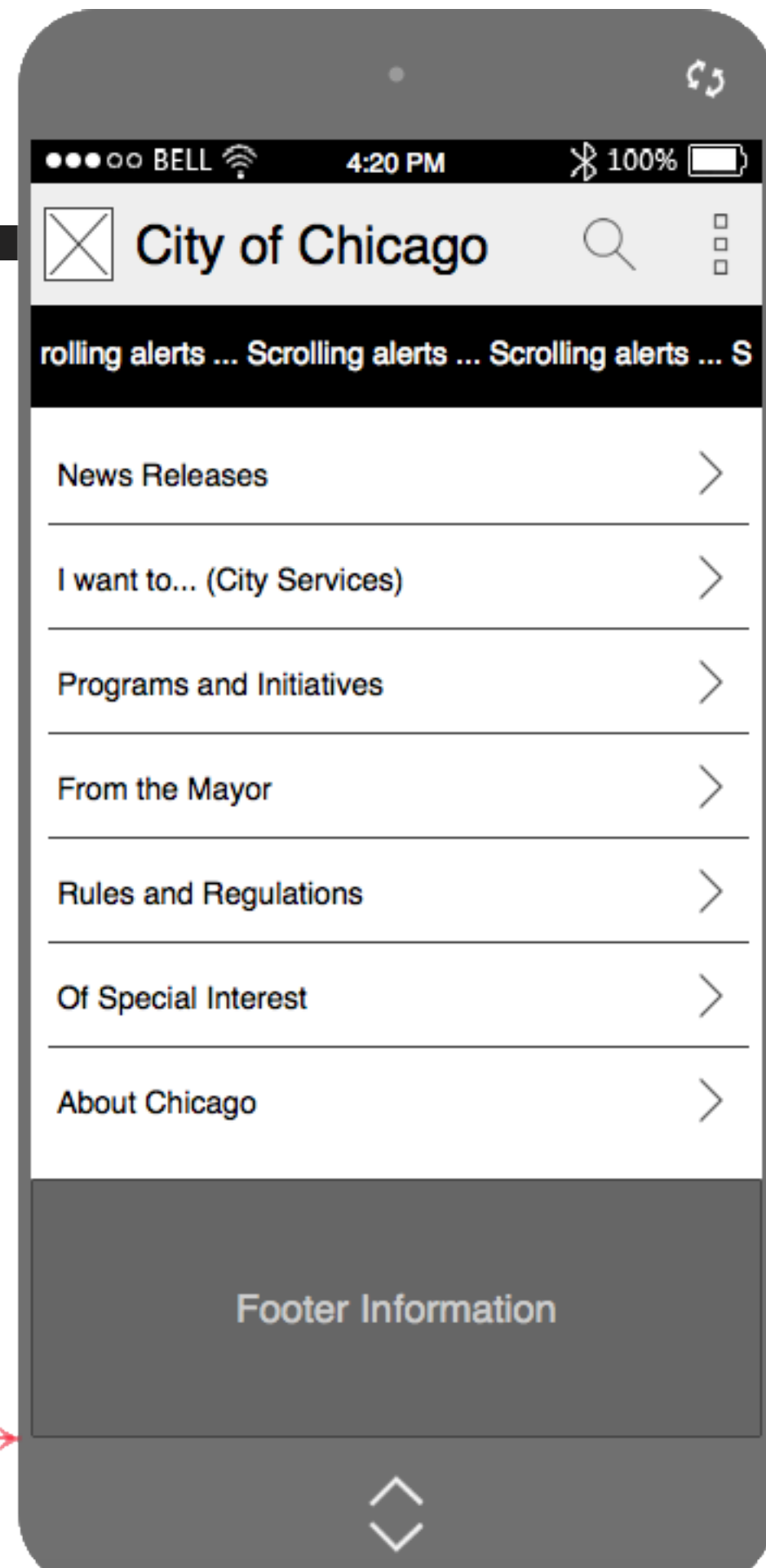| ITEM	ACTION
Logo/Title	Return to opening screen from anywhere in the app.
Hamburger Menu	Opens dropdown menu overlay; provides access to sitemap from any screen in the app.
Search Button	Search bar slides down on the home screen below the action bar and above the scrolling alert.

B. Dropdown Drawer List Menu

ITEM	ACTION
List Item	Open drawer with additional information and content related to the list title.
Dropdown Arrows	[see above]

OTHER:
This is the same entry screen and menu as in the prior task.

14

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●●●○○ BELL 📶   4:20 PM   ✳ 100% 🔋

City of Chicago

rolling alerts ... Scrolling alerts ... Scrolling alerts ... S

News Releases >

I want to... (City Services) >

Programs and Initiatives >

From the Mayor >

Rules and Regulations >

Of Special Interest >

About Chicago >

Footer Information

iOS

Task: Pay Water Bill

C. Sub-List Item

ITEM	ACTION
"Pay for/Buy"	Opens a new screen in the app.

OTHER:
This is the same sub-list item view as in the prior task. Each item listed is actionable.

iOS

Task: Pay Water Bill

D. Content Area

ITEM	ACTION
3-item Priority Menu	Three items are presented in a priority menu before the list menu as described above.
"Water Bill"	The user can click on the item labelled "Water Bill" to reach the bill payment landing screen.

E. Drawer List; repeated functionality increases familiarity

ITEM	ACTION
List Items	Items arranged alphabetically; a user can view all items in the drawer list simultaneously by scrolling.
Scroll Bar	When a user starts to scroll, the scroll bar will appear to show progress through the page and make it easier to navigate the list items.

F. List Item

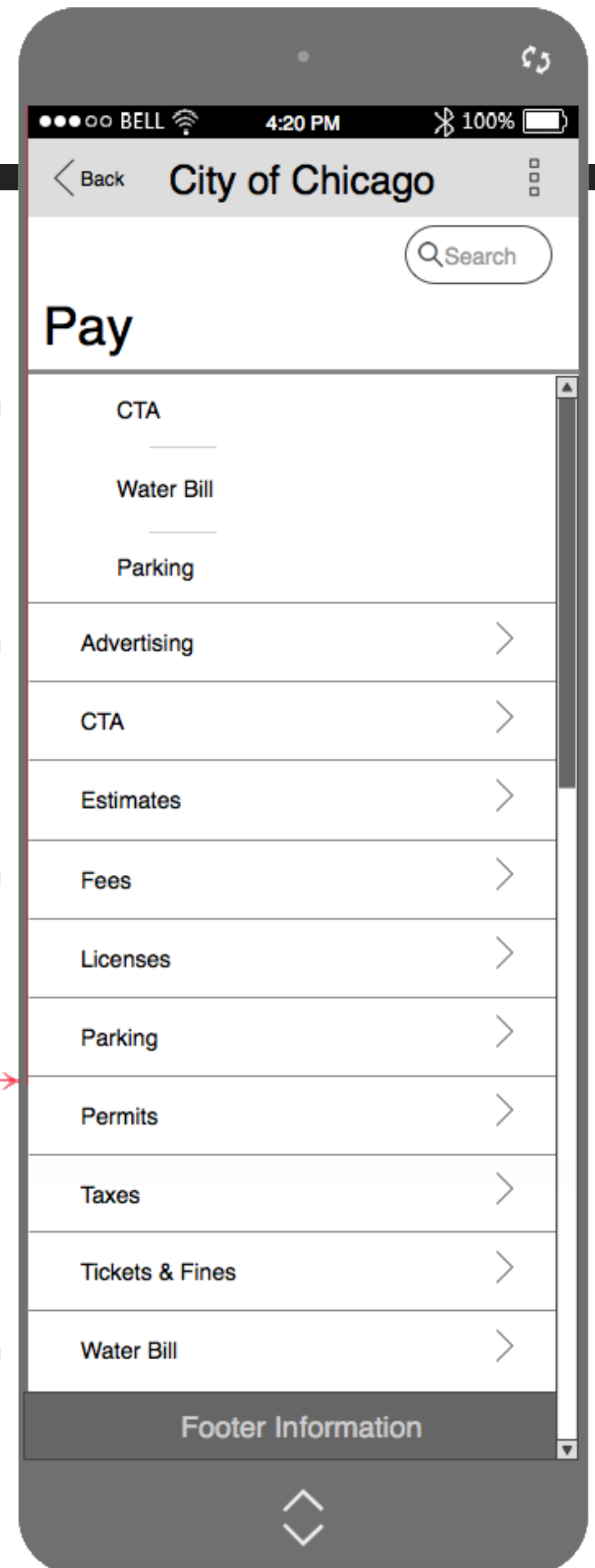| ITEM	ACTION
"Fees"	A user can reach the water bill payment screen by clicking on "Water Bill" in the "Fees" sub-menu.

G. List Item

ITEM	ACTION
Water Bill	The user can click on the item labelled "Water Bill" to reach the bill payment landing screen.

iOSTask: Pay Water Bill

H. Call to Action BUtton

ITEM	ACTION
Pay Bill	Leads to an external site for bill paying.

I. Content Area

ITEM	ACTION
Summary	Succinct but informative paragraph explaining what the user can do on this landing screen.

J. Contact Information

ITEM	ACTION
Department Title	Link to the department website.
Address	Shown on interactive embedded Google map.
Phone Number	Opens phone app to connect the call.

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‹ Back **City of Chicago**

Q Search

Water Bill

PAY BILL

Payment Options

Brief summary of payment options. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut magna dolore. For other questions, please contact the department.

Pay by Phone ›

Pay by Mail ›

Chicago EZ Pay Stations ›

Pay in-person ›

Payment Types ›

Department Title

Street Address

Chicago, IL ######

(###) ###-####

Footer Information