



MONUMENTAL SPACES

Florence Ma and Andrew Younker

11.308 Ecological Urbanism

Professors Anne Whiston Spirn and Karilyn Crockett

Massachusetts Institute of Technology

Dec 2019

Prepared for Monumental Baptist Church



MONUMENTAL SPACES

Introduction

Monumental Baptist Church owns multiple properties, including physical spaces with special character. Some of these spaces seem to be currently under-utilized and are a valuable asset to Monumental's community development corporation. Before too many plans are made, it would be helpful to both take stock of the spaces owned, analyze how they are currently used, and imagine what they might become in the future.

This report is divided into two sections. It first addresses the current underutilization of built space in both the church building and the two annexes. The second section takes the parking lot as a potential site of intervention, which could combine stormwater management strategies with potential for community space in the future.



01_SPACE UTILIZATION

Monumental Baptist Church currently owns four properties: the main church building, two adjacent annex buildings and a rowhouse across the street next to the parking lot. The spaces in the church and two annexes are currently underutilized. Many potentially useful spaces are only used a few times a month, or only on Sunday during church services. Many other rooms are empty or serve as storage for miscellaneous items. The following pages highlight the spaces that are underutilized and provide ideas for their potential use.



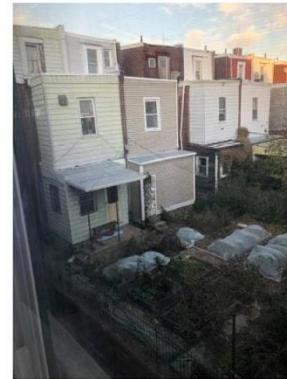
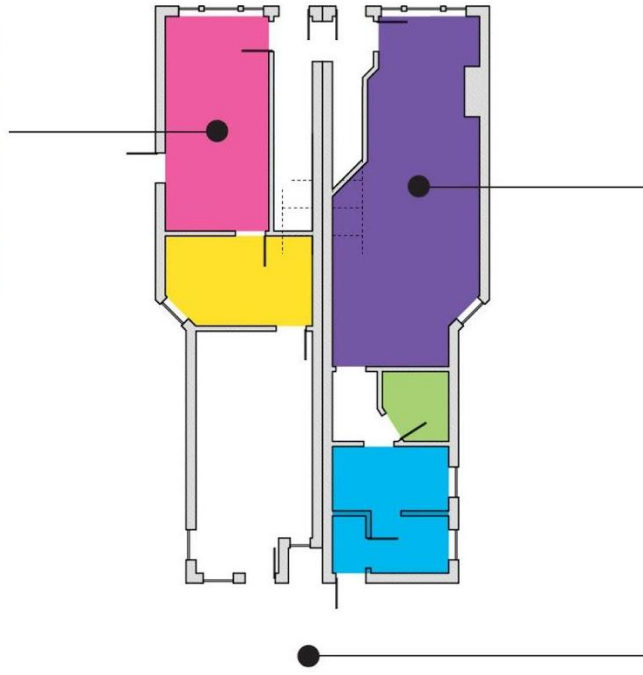


Site Plan – Monumental Properties

List of Current Activities - Daily / Monthly / Seasonally

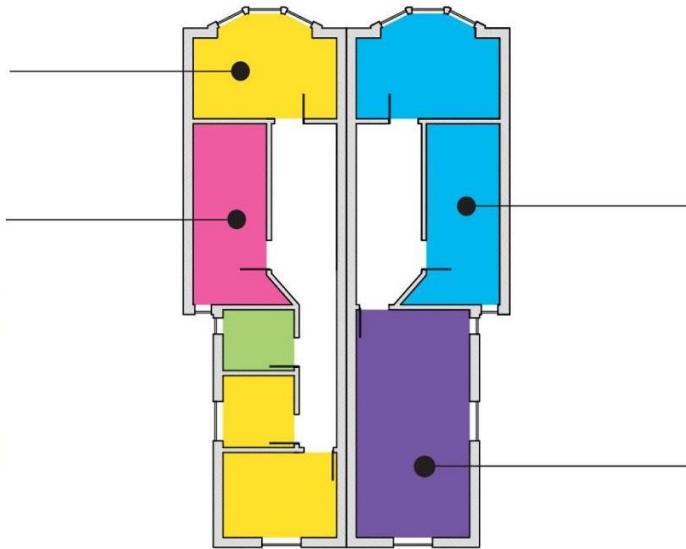
Church	Annex	Parking Lot
Sun: Church Service	Sun: Children's Church	Sun: Parking
Mon: ??	Mon: ??	Mon: ??
Tues: ??	Tues: Bible Study	Tues: ??
Wed: Feeding Ministry	Wed: ??	Wed: ??
Thurs: Choir Rehearsal	Thrs: ??	Thurs: ??
Fri: ??	Fri: ??	Fri: ??
Sat: Men's Ministry	Sat: Kids help w/ garden	Sat: ??
Monthly: Health Clinic	Monthly: AA Meeting Men of Moorehouse	Monthly: ?? Summer: Movie Nights Backpack Giveaway

Level 1 Plan



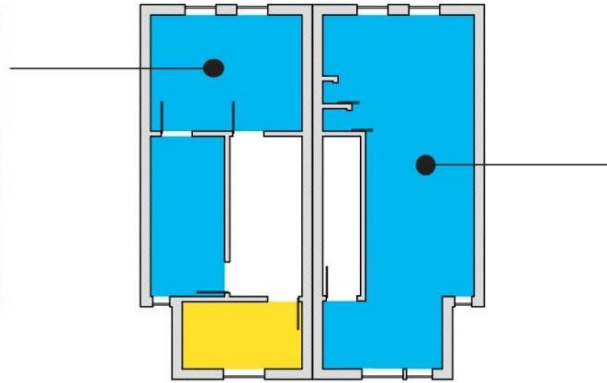


Level 2 Plan

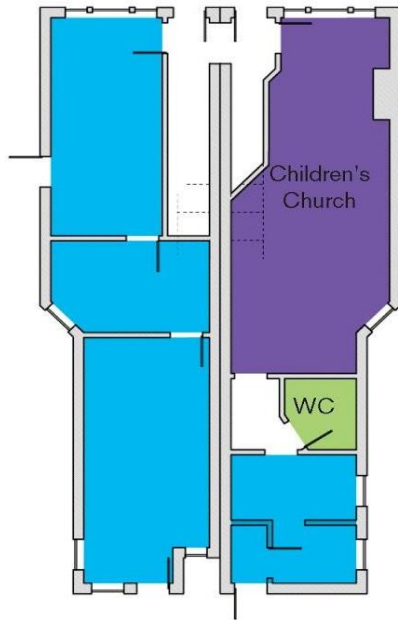


Annex – Level 2 Plan

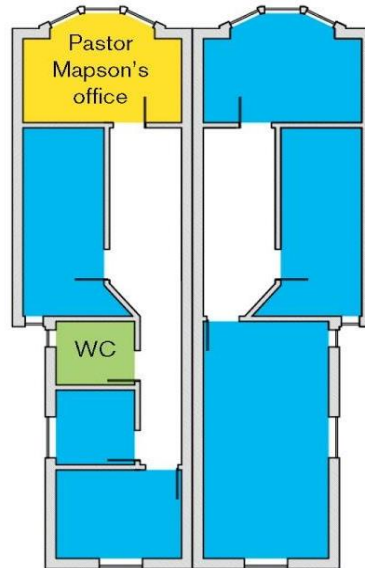
Level 3 Plan



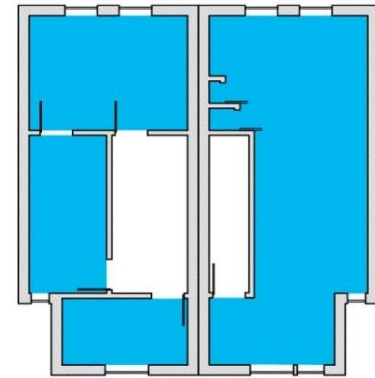
Level 1 Plan



Level 2 Plan

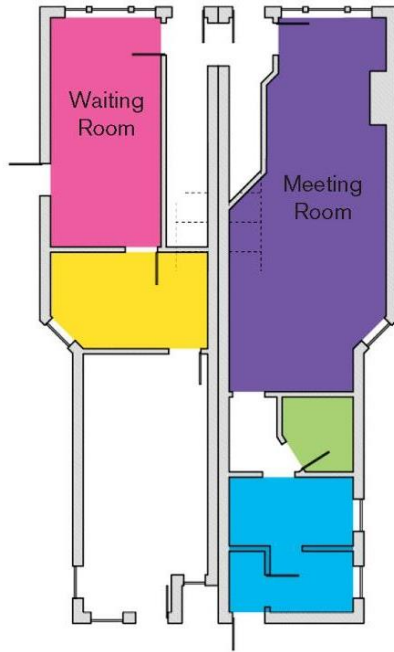


Level 3 Plan

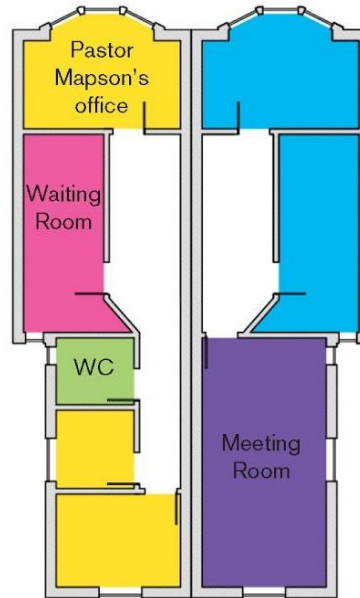


- Unused Space ■
- Offices ■
- Meeting Rooms ■
- Bathrooms ■
- Sitting Rooms ■

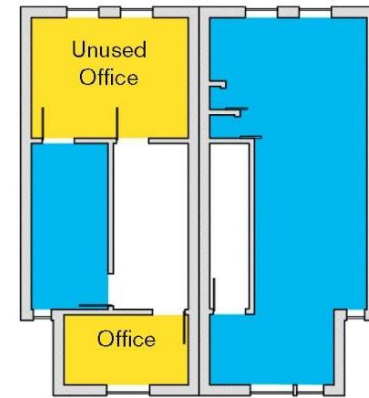
Level 1 Plan



Level 2 Plan

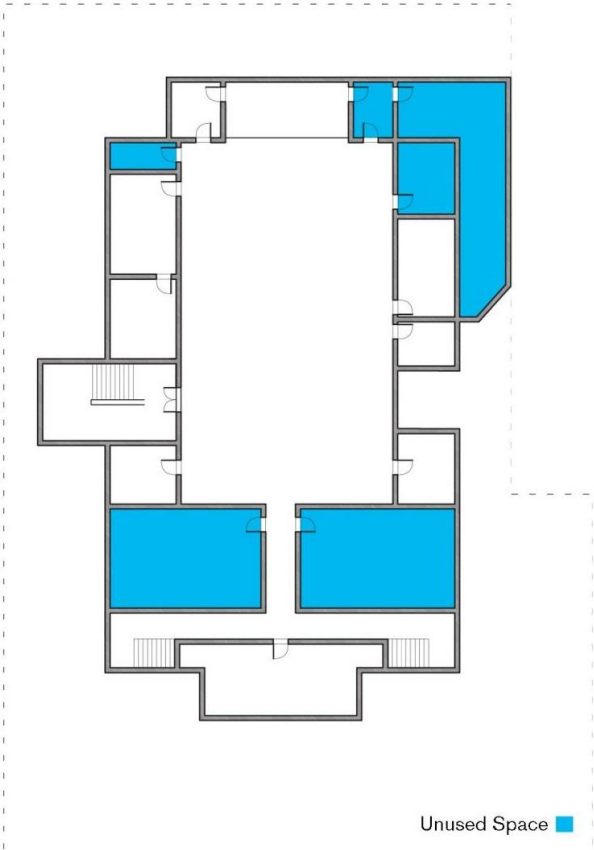


Level 3 Plan

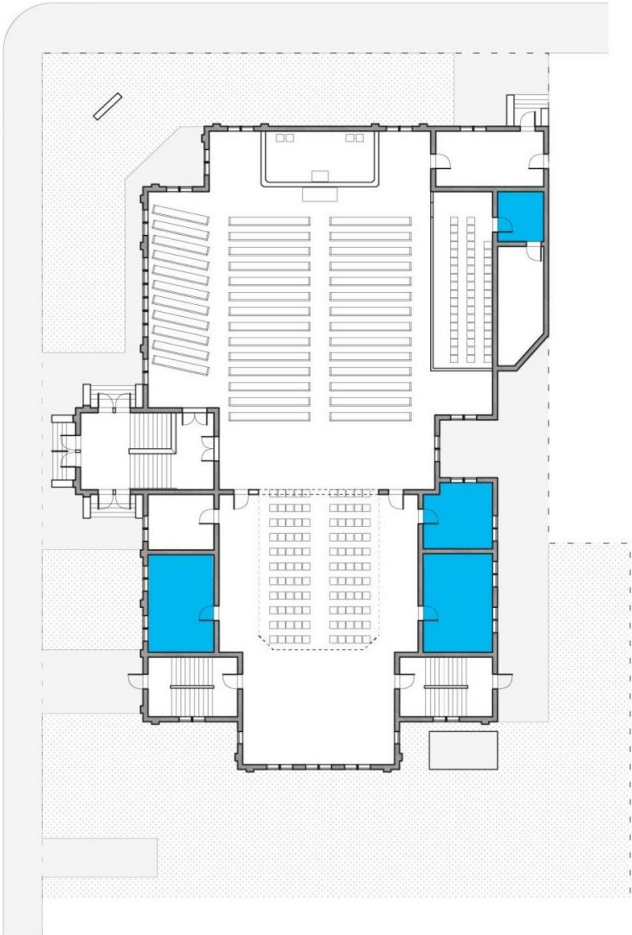


- Unused Space ■
- Offices ■
- Meeting Rooms ■
- Bathrooms ■
- Sitting Rooms ■

Level -1 Plan

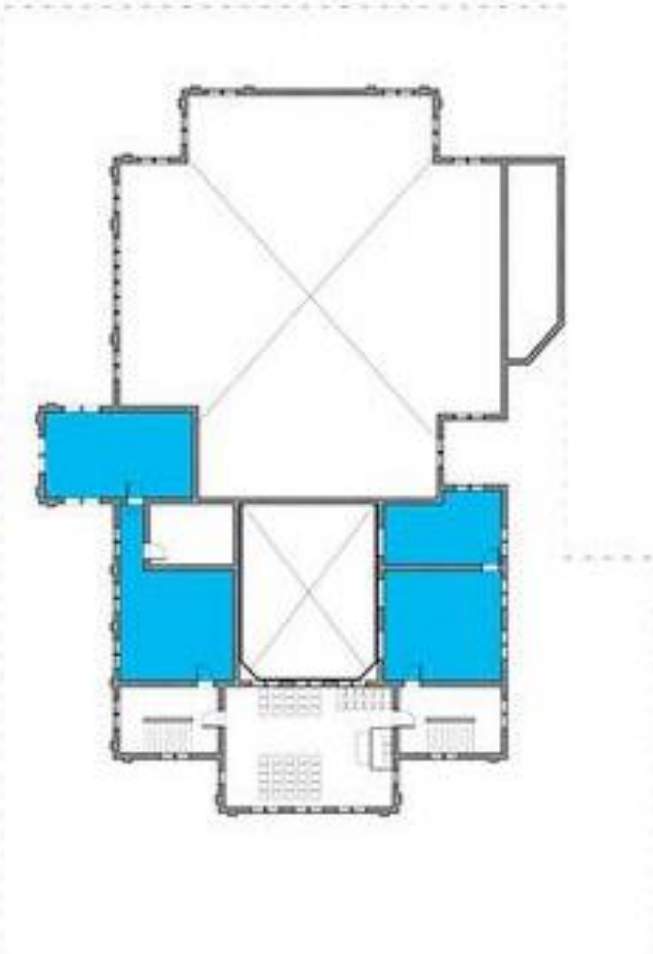


Level 1 Plan

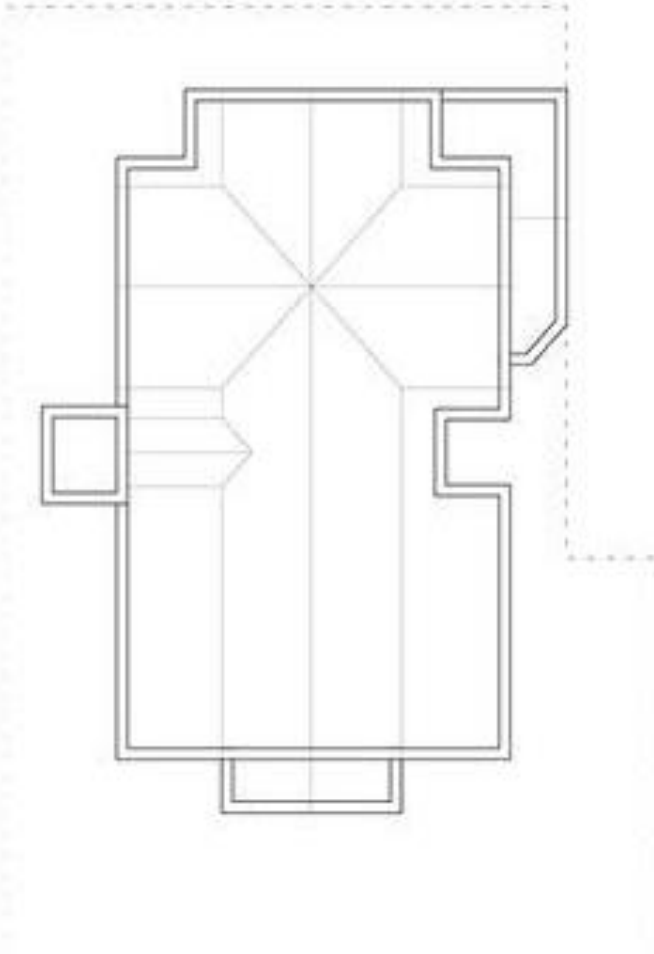


Church – Other Usage

Level 2 Plan

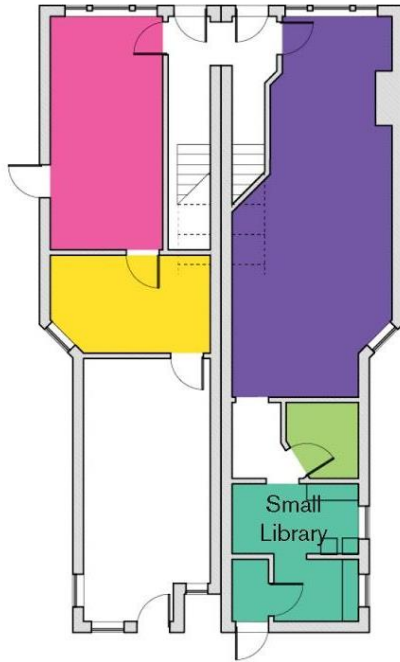


Roof Plan

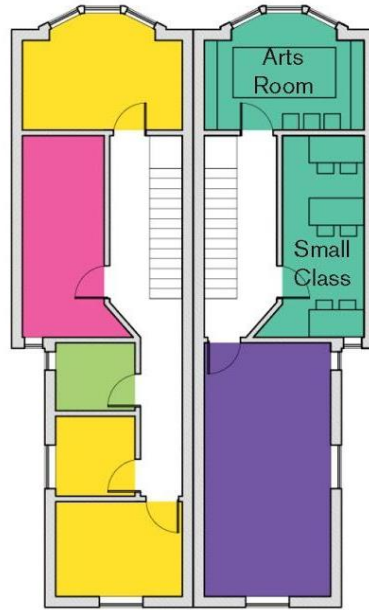


Church - Other Usage

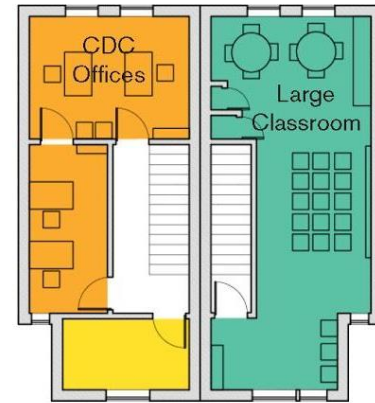
Level 1 Plan



Level 2 Plan



Level 3 Plan

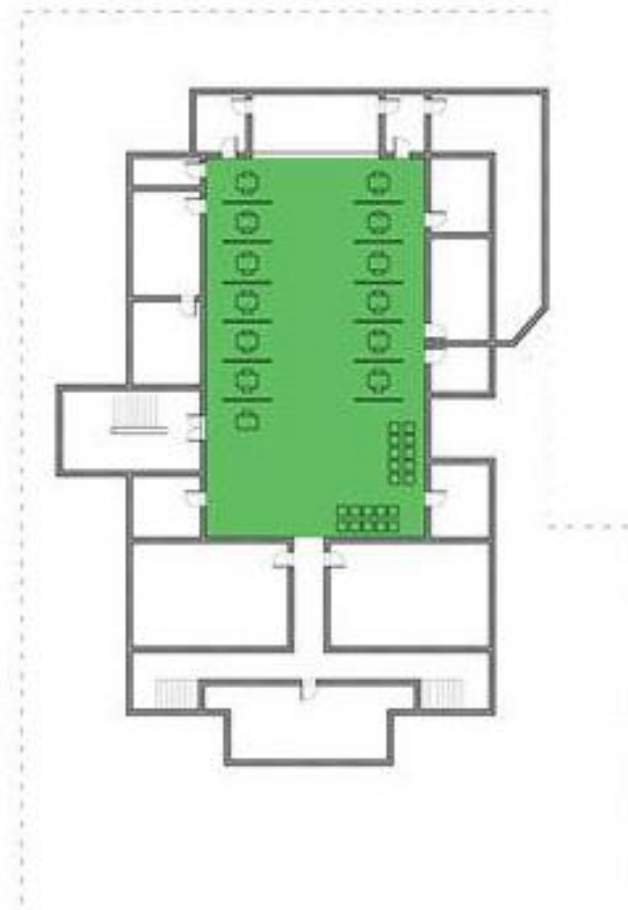


- CDC Offices ■
- Pre-School ■
- Offices ■
- Meeting Rooms ■
- Bathrooms ■
- Sitting Rooms ■

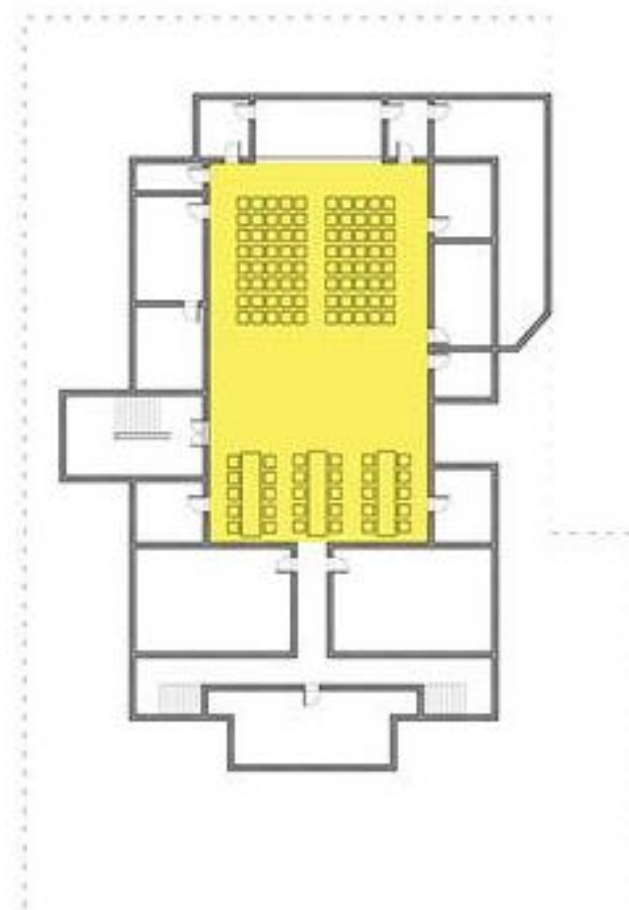
Annex - Potential Use

Church - Potential Use

Health Clinic



Housing Workshop



02_PARKING LOT

The parking lot provides an immediate opportunity to imagine potential future use, especially given the plan to renovate the surface in the near future. The renovation process, instead of merely re-surfacing the parking lot and continuing to operate the space as it currently is, could imagine new uses for this prominent space in the community. Strategies to mitigate stormwater runoff could be implemented in the process, which would save Monumental money in monthly stormwater fees, which are assessed by the Philadelphia Water Department on the basis of amount of impervious surfaces (paving and rooftops) on a property. A consideration of how Monumental could use the space to serve the community and expand the vision for the future Monumental CDC could also be discussed. A few potential designs are shown below to start the creative process, while blank plans are included in an appendix to support sketching and brainstorming.





Site Plan - Church + Parking Lot

Current Philadelphia Water Department Stormwater Charges (based on impervious surface area):

\$15.80 [4947 Locust St]

\$15.80 [4948 Locust St - Annex]

\$15.80 [4946 Locust St - Annex]

\$153.98 [241 S 50th St - Church]

\$180.70 [215-29 S 50th St - Parking lot]

Total [per month]: \$382.08

Total [per year]: \$4584.96 / year

Assessment of Parking Lot Impervious Surface Area:

Parking Lot:

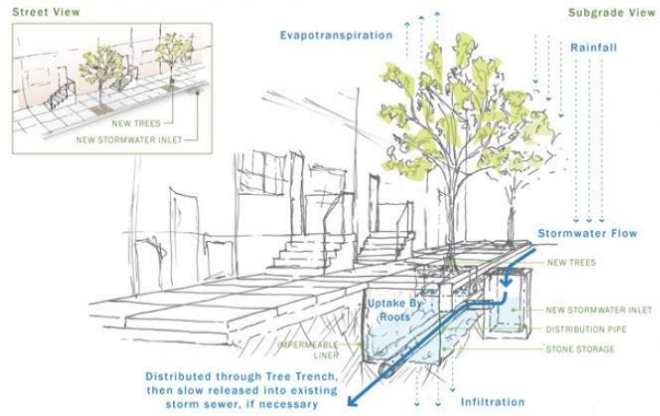
Gross Area: 14,673 sq ft

Impervious Area: 14,493 sq ft

98.7% Impervious



GREEN STREETS: STORMWATER TREE TRENCH



Stormwater Retrofit / Bioswale References

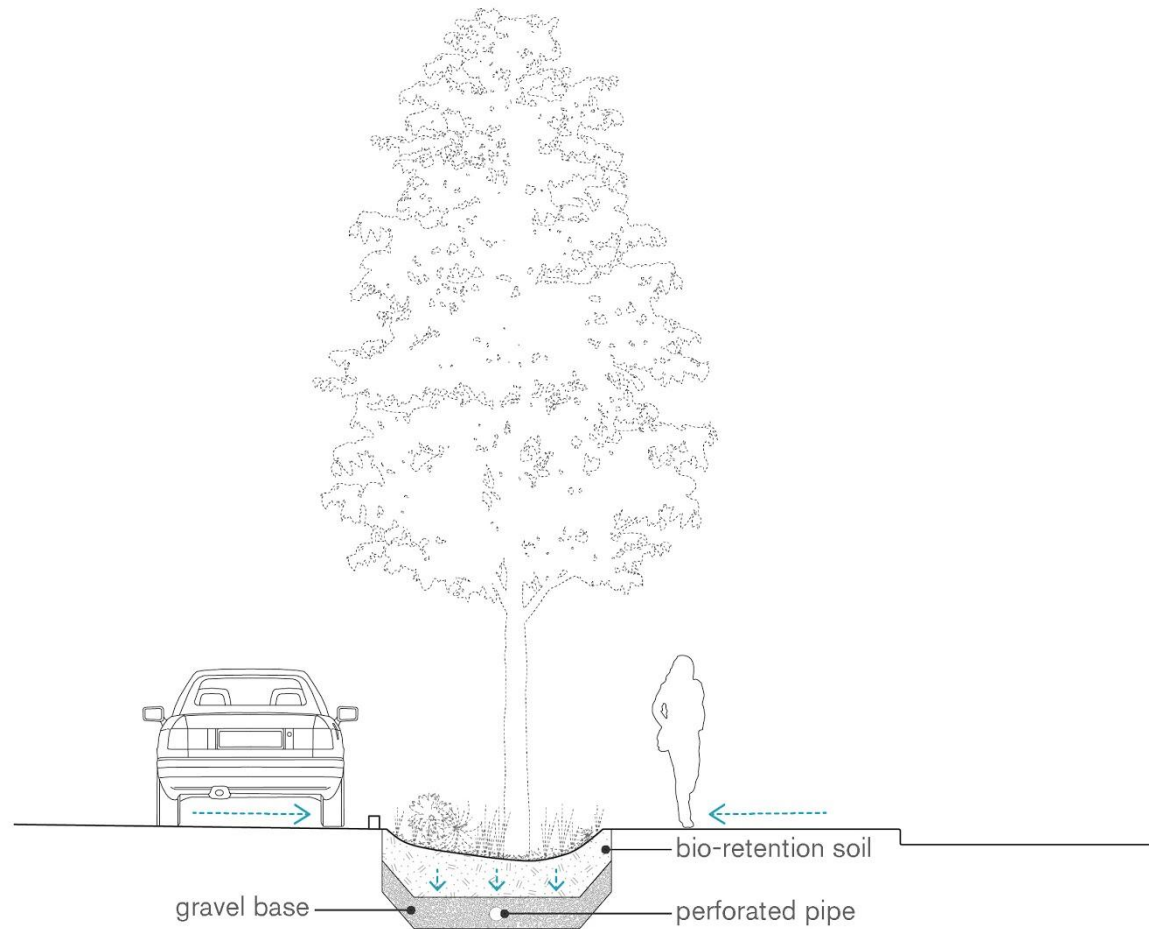
Parking Lot Site Plan - Parking lot revision potential includes:

- Street trees [25' to 35' on center]
- Modified parking layout [retains current parking capacity - 38 spaces]
- "Front Lawn" [@ corner of 50th St & Locust St]
- Bioswale edges [5' width around border w/ drainage away from residential]
- Bridges over bioswale edges for pedestrian access
- Configuration shown takes parking lot from 1.3% permeable surface area [180 sq ft] to approximately 21% permeable area [3,081 sq ft]



*Sidewalk Section - Stormwater
Retention Potential / Bioswale
Edge*

- Drainage from parking lot
- Curb with regular openings for drainage
- Bio-retention vegetation
- Bio-retention soil
- Gravel Base
- Perforated Pipe
- Street Trees
- Regularly-spaced bridges for pedestrian access

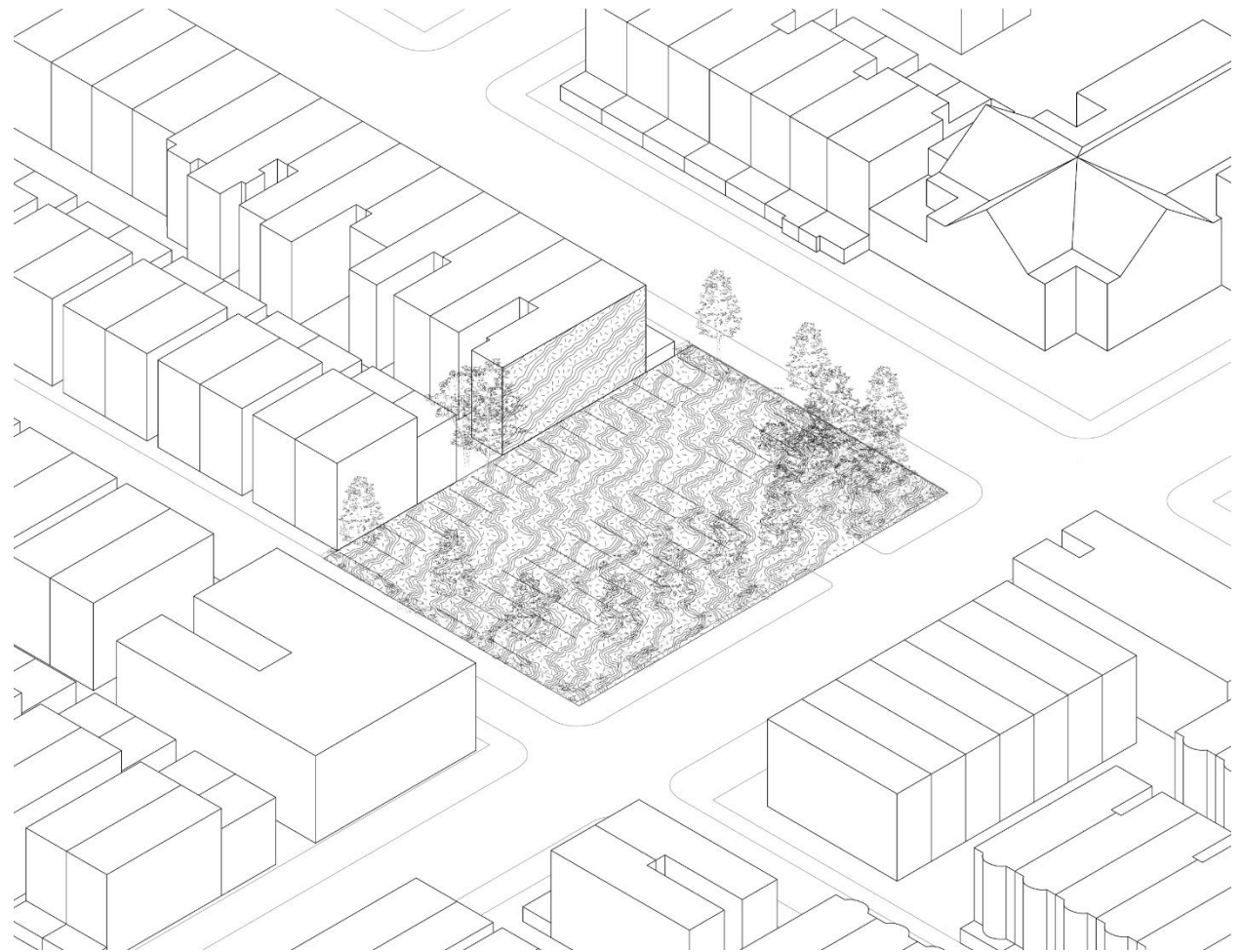


*Axonometric View - Parking Lot
Revision Possibilities:*

- Space for summer movie nights
- Backpack giveaway
- Community events
- CDC events
- Basketball court
- Food trucks
- Community market
- Community use throughout week
- BBQ / tailgate parties



Axonomic View - Space for Murals and Community Use Throughout Week





References for Mural Painting + Basketball Court

References

PWD Billing & Retrofits

<https://www.pwdplanreview.org/stormwater-101/stormwater-billing-retrofits>

PWD Private Development Services

<https://www.pwdplanreview.org/>

Stormwater Map Viewer

<https://stormwater.phila.gov/parcelviewer/help/credits>

Stormwater Grants

<https://www.phila.gov/water/wu/stormwater/Pages/Grants.aspx>

Appendices

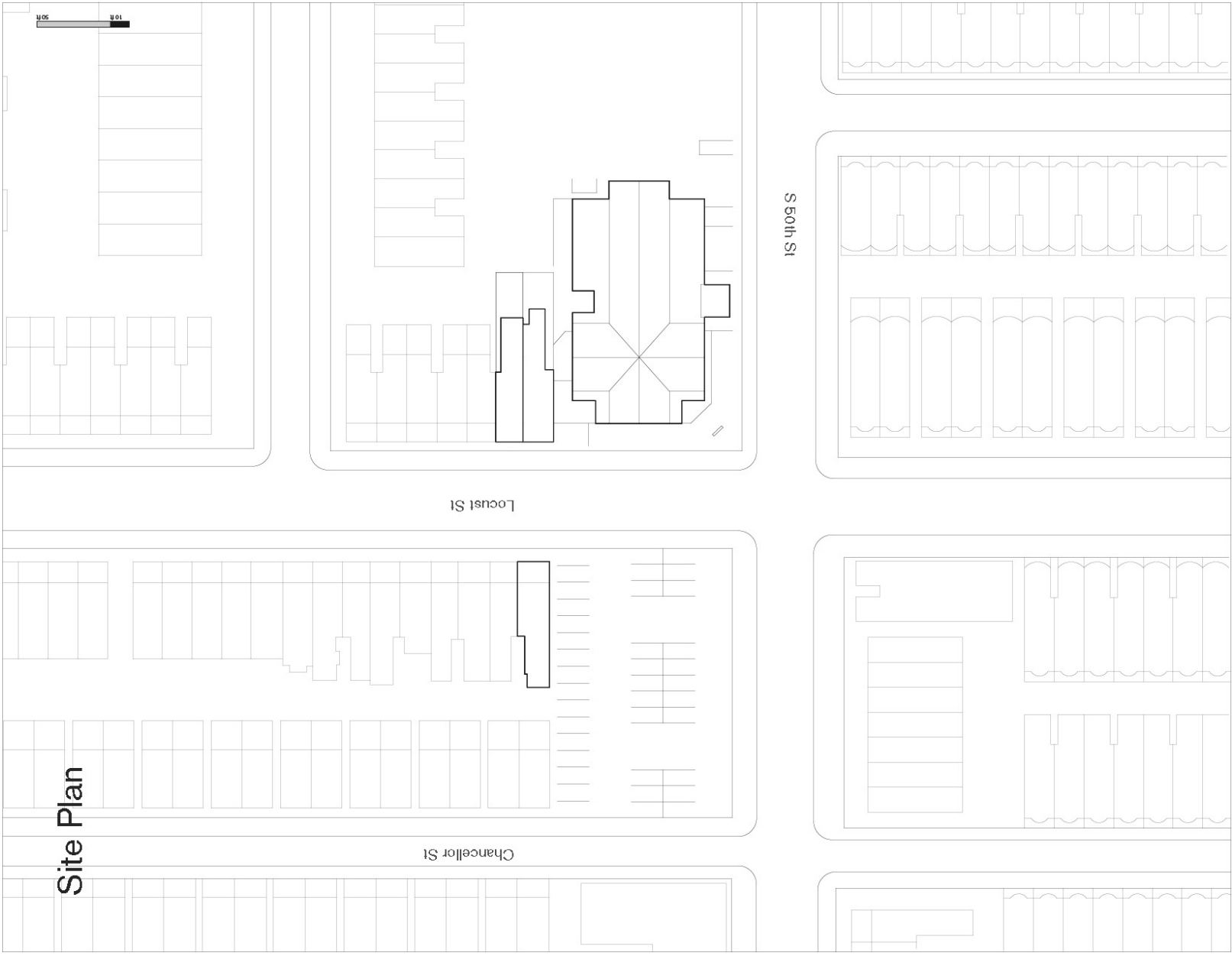
Site Plan

Church Plans

Annex Plans

Parking Lot Plans

Philadelphia Water Department - Stormwater Charge Documents from PWD website



Site Plan

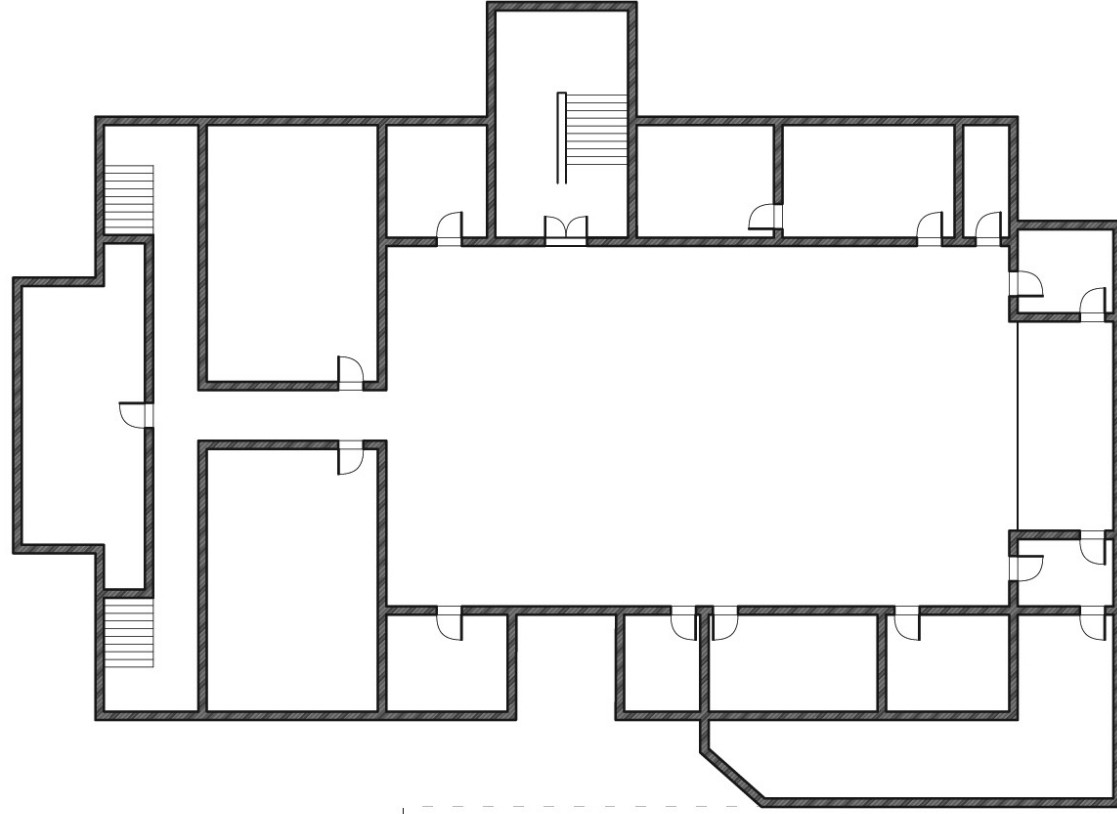
Chancellor St

Locust St

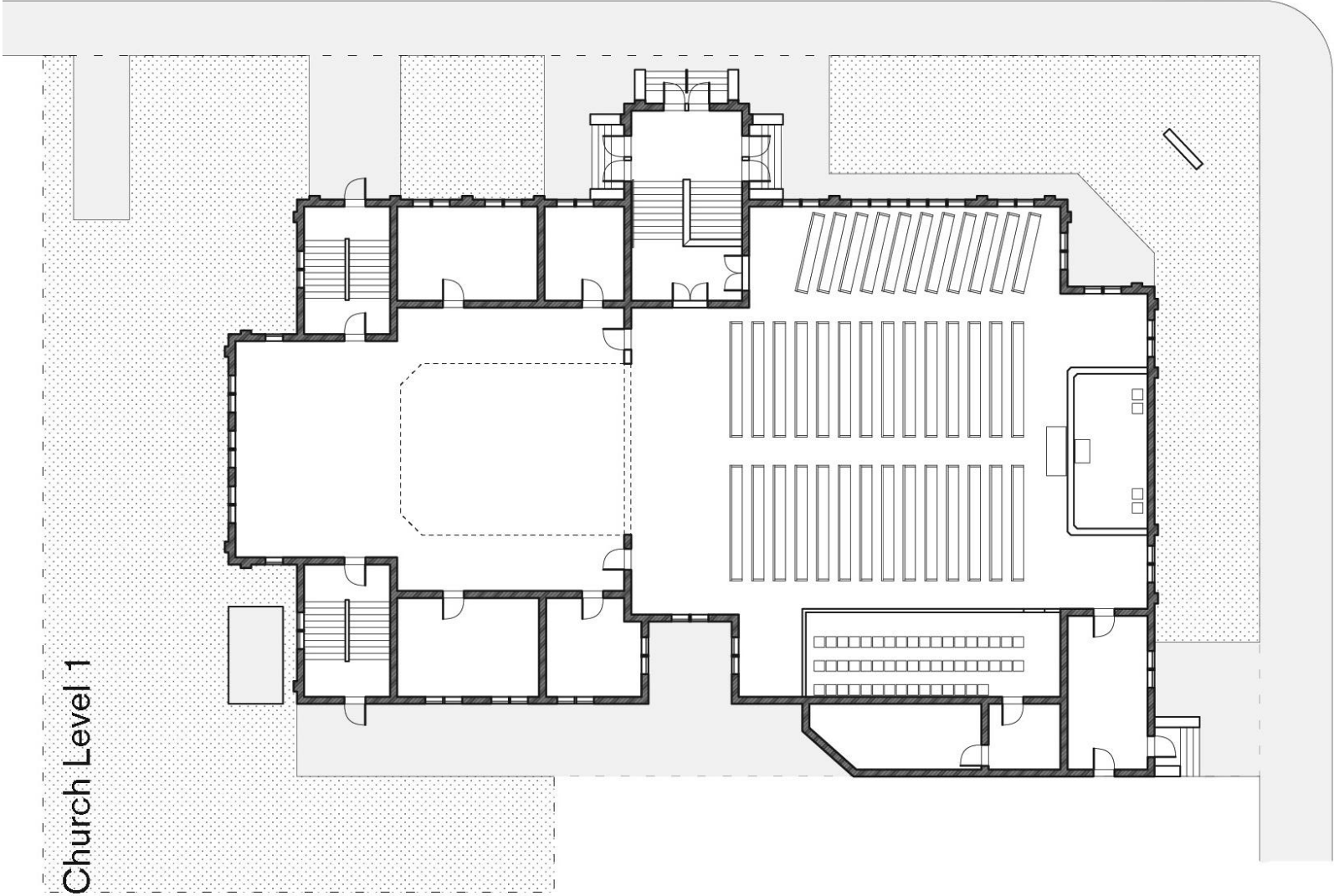
S 50th St

10 ft
50 ft

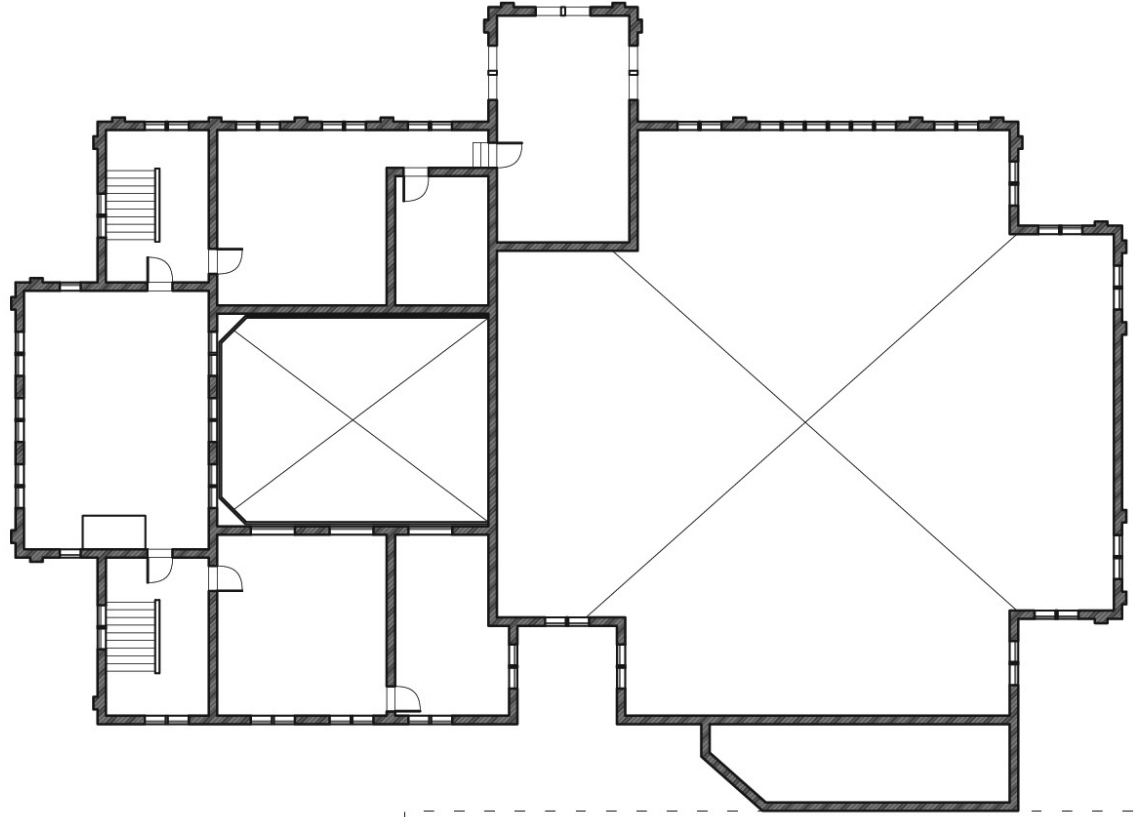
Church Level -1



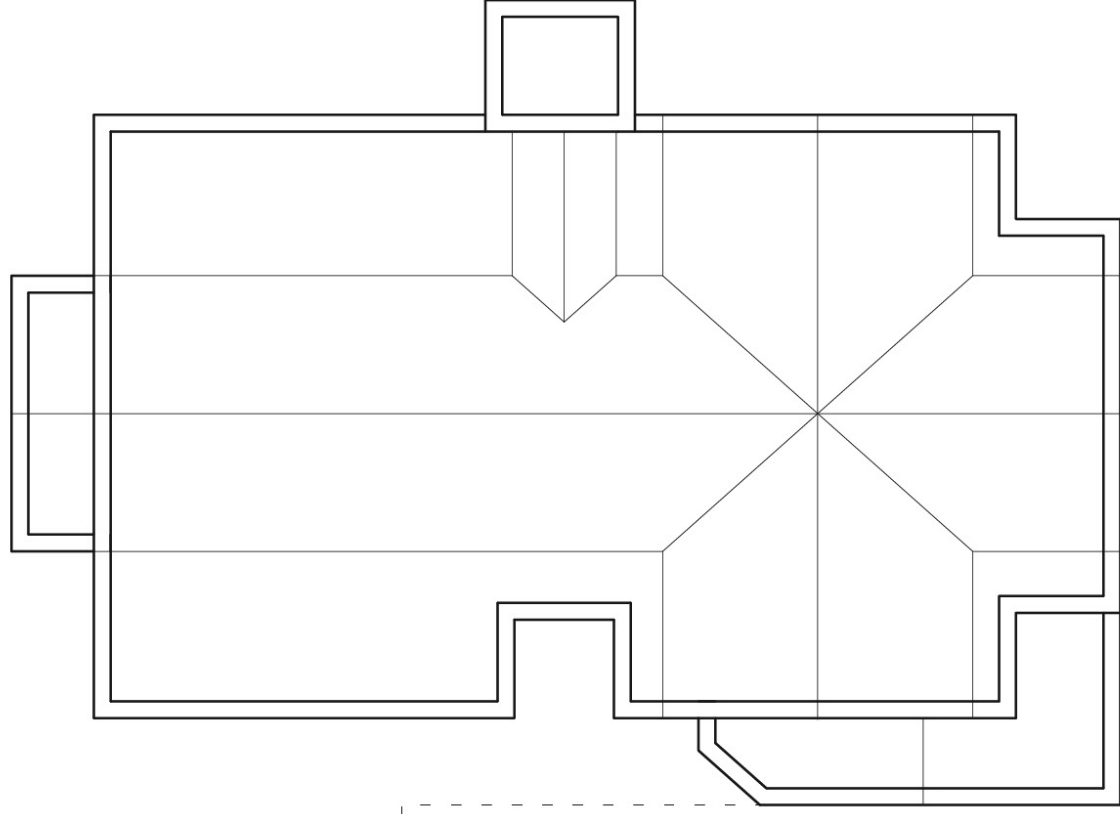
Church Level 1



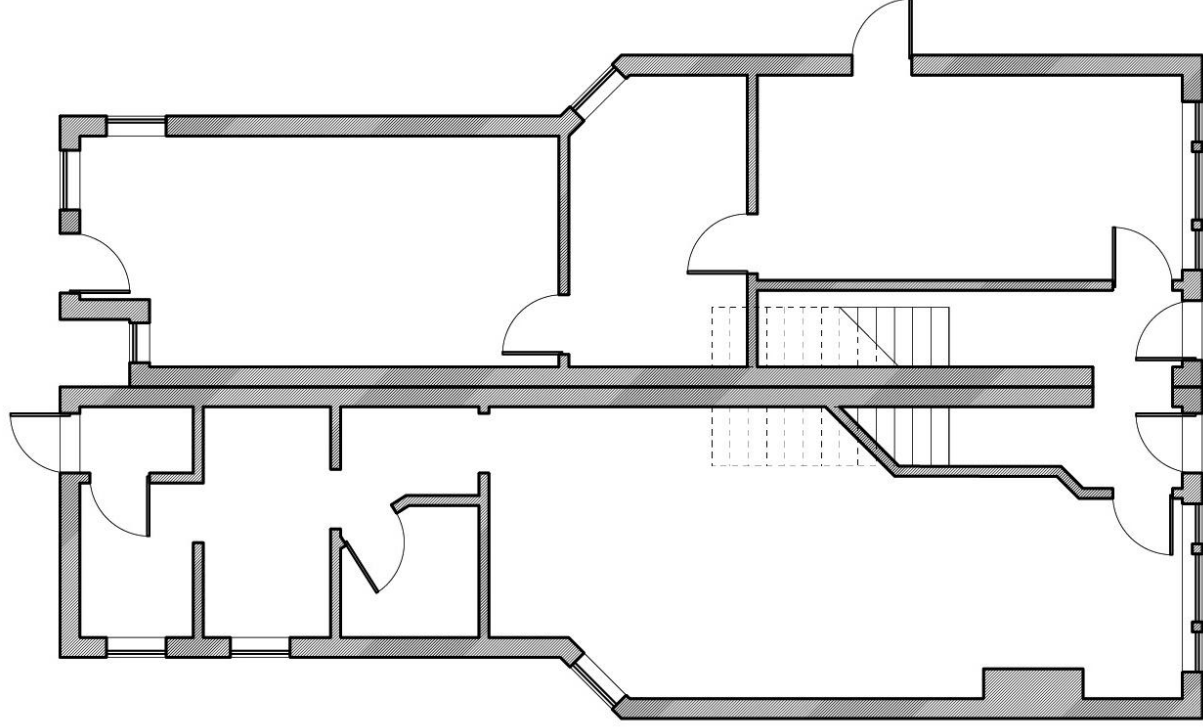
Church Level 2



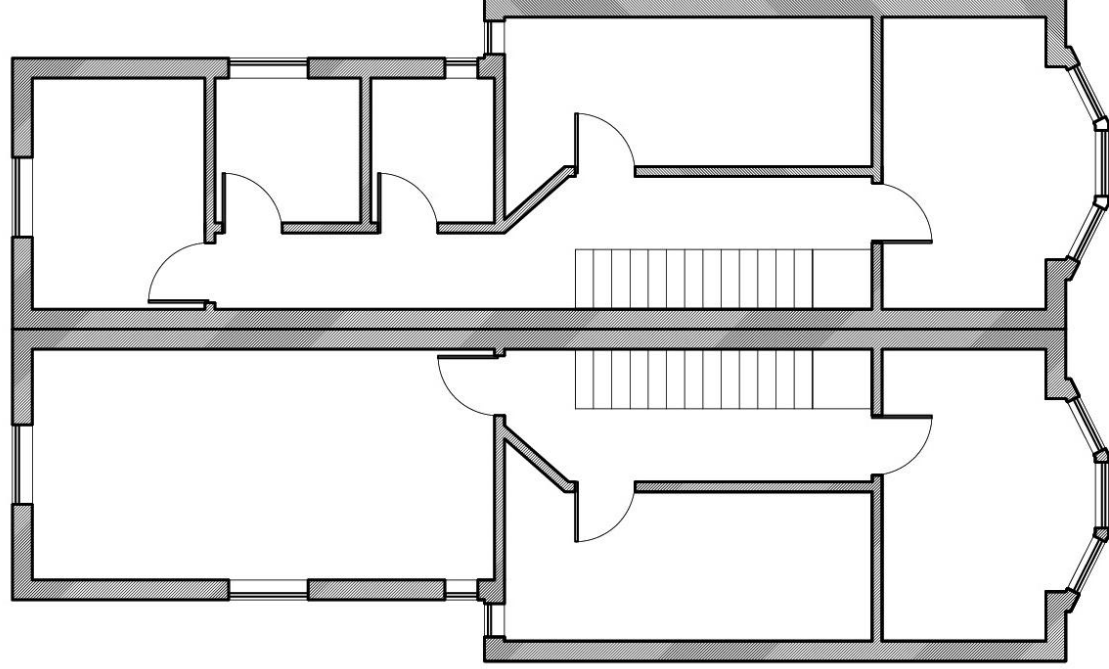
Church Roof



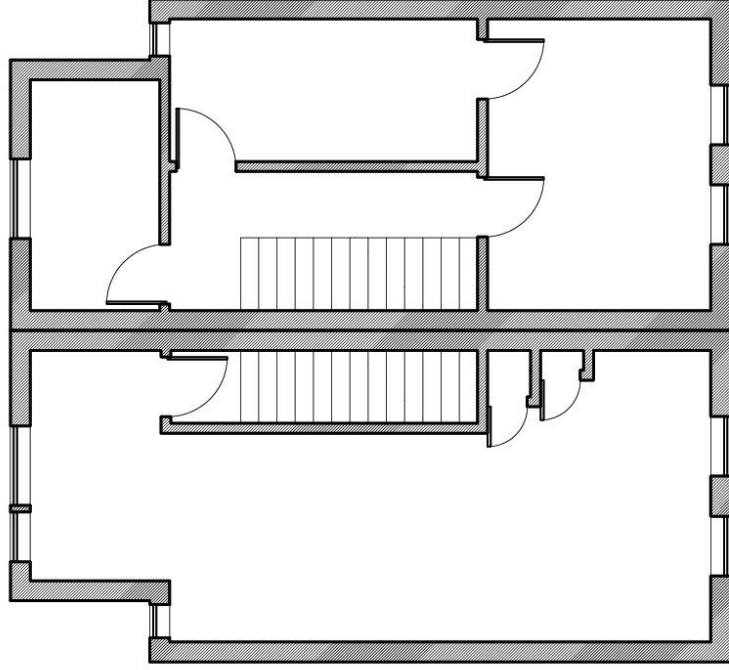
Annex Level 1



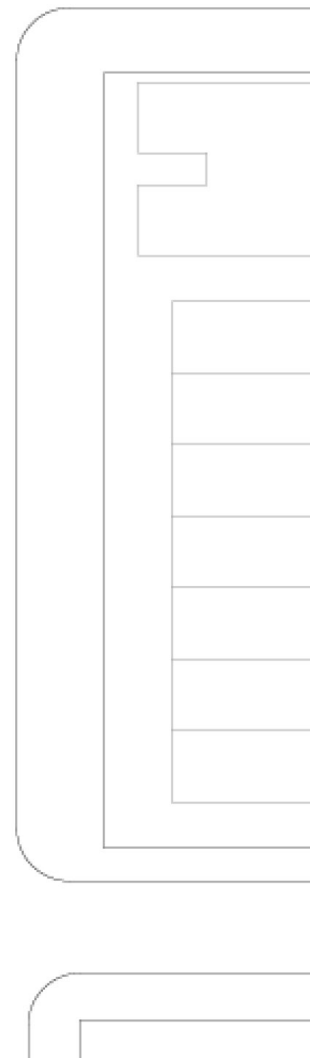
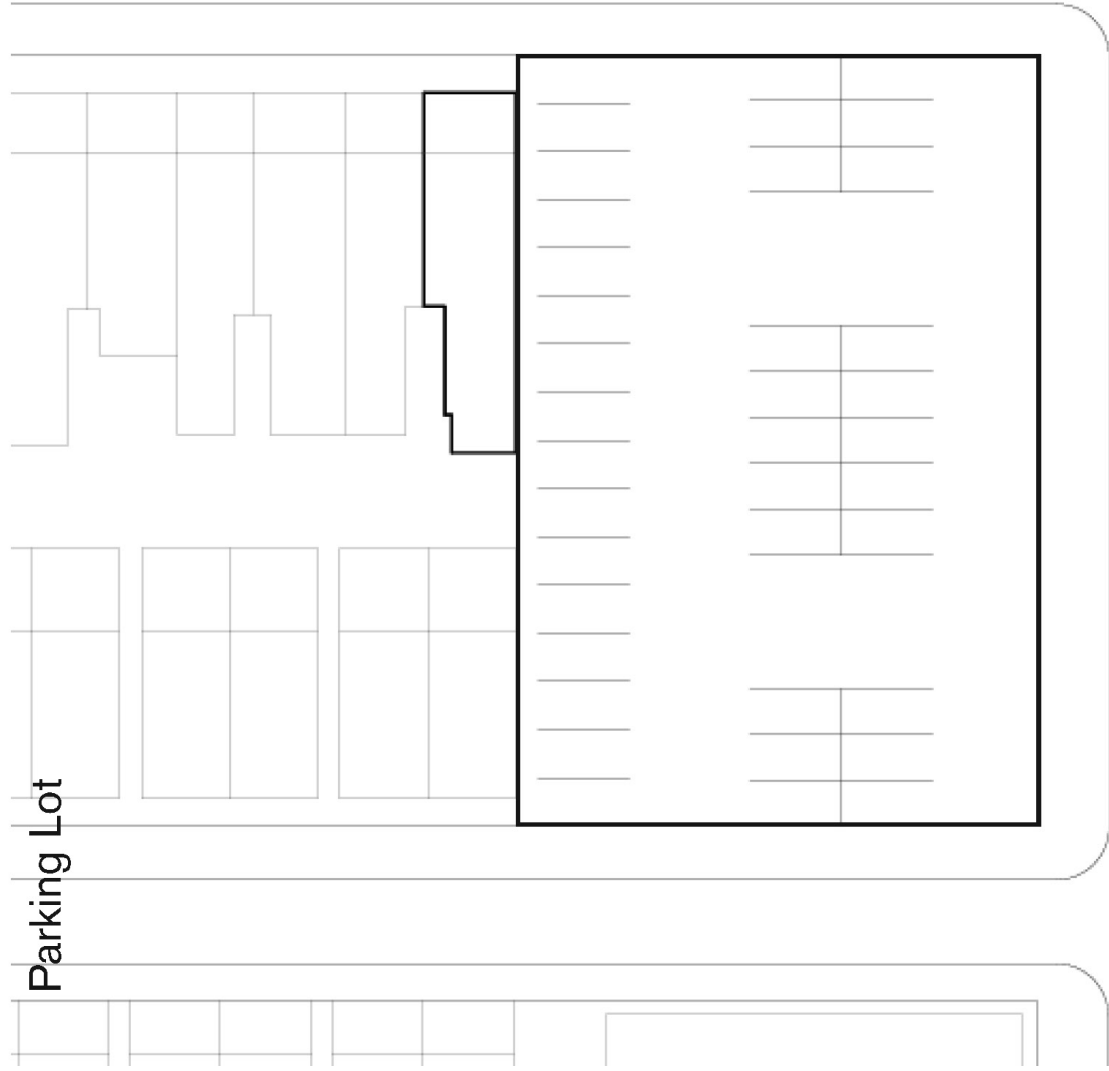
Annex Level 2



Annex Level 3



Parking Lot





BRT/OPA Account Number: 601057600

Stormwater Billing Class: Row

Parcel Address: 4947 LOCUST ST

Parcel Owner: MONUMENTAL BAPTIST CHURCH

Legend

- Selected Parcel
- Other Parcels
- Impervious Surfaces
- Roof
- Other Impervious



Parcel Area (square feet)

Gross Area	Impervious Area
Total: 1,244	Total: 1,065
Credit: 0	Credit: 0

Monthly Stormwater Charge

Fiscal Year	07/01/2014 - 06/30/2016	07/01/2016 - 06/30/2017	07/01/2017 - 06/31/2018	09/01/2018 - 08/31/2019	09/01/2019 - 08/31/2020
Parcel - Total	\$14.15	\$14.12	\$14.71	\$15.53	\$15.80
Account # - 049-51380-04947-001	\$14.15	\$14.12	\$14.71	\$15.53	\$15.80



BRT/OPA Account Number: 774393000
 Stormwater Billing Class: Non-Residential
 Parcel Address: 241 S 50TH ST
 Parcel Owner: MONUMENTAL BAPTIST CHURCH

Legend

- Selected Parcel
- Other Parcels
- Impervious Surfaces
- Roof
- Other Impervious



Parcel Area (square feet)

Gross Area	Total: 18,624	Impervious Area	Total: 11,330
	Credit: 0		Credit: 0

Monthly Stormwater Charge

Fiscal Year	07/01/2014 - 06/30/2016	07/01/2016 - 06/30/2017	07/01/2017 - 06/31/2018	09/01/2018 - 08/31/2019	09/01/2019 - 08/31/2020
Parcel - Total	\$133.77	\$133.97	\$139.89	\$150.97	\$153.98
Account # - 049-88790-00241-002	\$133.77	\$133.97	\$139.89	\$150.97	\$153.98



BRT/OPA Account Number: 774392000
 Stormwater Billing Class: Non-Residential
 Parcel Address: 215-29 S 50TH ST
 Parcel Owner: MONUMENTAL BAPTIST CHURCH

Legend

- Selected Parcel
- Other Parcels
- Impervious Surfaces
- Roof
- Other Impervious



Parcel Area (square feet)

Total:	14,673	Total:	14,493
Credit:	0	Credit:	0

Gross Area Impervious Area

Monthly Stormwater Charge

Fiscal Year	07/01/2014 - 06/30/2016	07/01/2016 - 06/30/2017	07/01/2017 - 06/31/2018	09/01/2018 - 08/31/2019	09/01/2019 - 08/31/2020
Parcel - Total	\$157.52	\$157.33	\$164.30	\$177.19	\$180.70
Account # - 049-88790-00215-003	\$157.52	\$157.33	\$164.30	\$177.19	\$180.70



BRT/OPA Account Number: 774241000

Stormwater Billing Class: Row

Parcel Address: 4948 LOCUST ST

Parcel Owner: MONUMENTAL BAPT CHURCH

Legend

- Selected Parcel
- Other Parcels
- Impervious Surfaces
- Roof
- Other Impervious



Parcel Area (square feet)

Total:	1,515	Total:	1,178
Credit:	0	Credit:	0

Monthly Stormwater Charge

Fiscal Year	07/07/2014 - 06/30/2016	07/07/2016 - 06/30/2017	07/07/2017 - 06/31/2018	09/01/2018 - 08/31/2019	09/01/2019 - 08/31/2020
Parcel - Total	\$14.15	\$14.12	\$14.71	\$15.53	\$15.80
Account # - 049-51380-04948-001	\$14.15	\$14.12	\$14.71	\$15.53	\$15.80