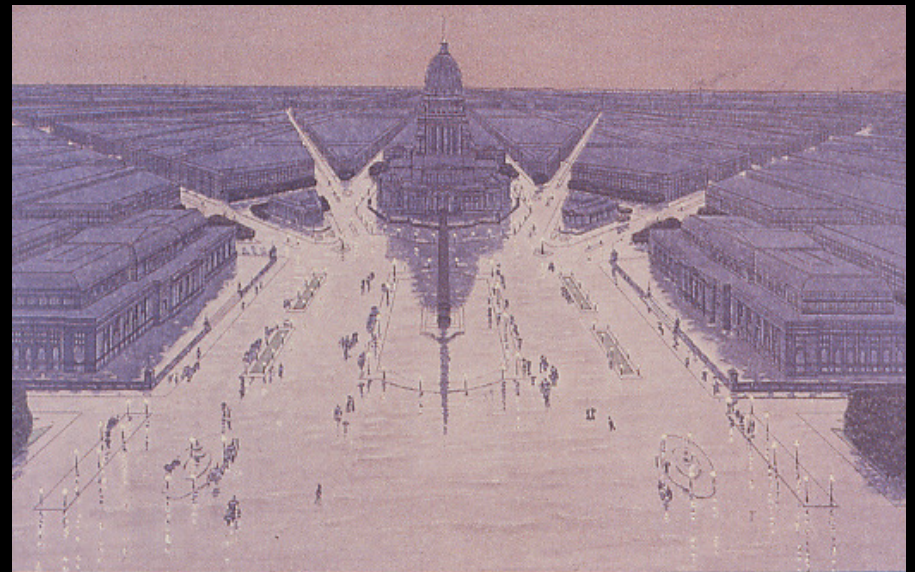
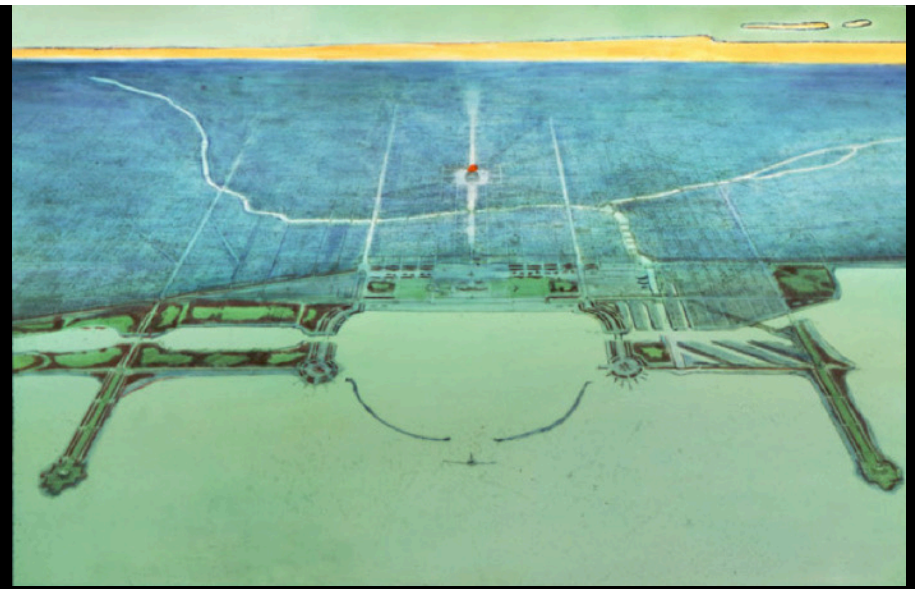


Chicago 2009, existing Metro & City

Chicago 2109, imagined Metro & City

Case Study #1: Our Lady's Plan of Chicago 2109

Re-Imagining Chicago After Daniel Burnham



Plan of Chicago (1909), by Daniel Burnham and Edward Bennett

Regional Planning and Classical Humanist Urbanism and Architecture

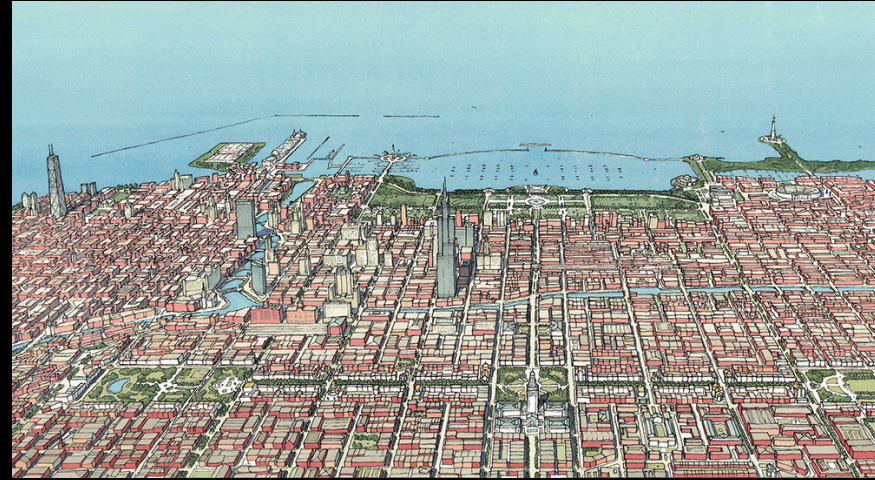
Landmark Document of confident “Muscular Protestant” Progressive-Era City Beautiful Movement

Christian Anthropology & Natural Law Principles of Catholic Social Teaching

- *The dignity of the human person* from conception to natural death
- The human person as both *social animal* and *moral agent*, requiring both virtue and grace to turn toward good and away from evil
- *Communal solidarity*
- Civil society as a realm of multiple authoritative institutions the relations of which are governed by *the principle of subsidiarity* (bearing affinities with Reformed Protestant Kuyperian sphere sovereignty)
- The *common good* as the purpose of civil government [n.b., civil society includes but ≠ civil government]
- Public policy with a bias for benefits to the involuntarily poor (the “preferential option”)
- The human *stewardship of creation* (*Laudato Si*’)
- *Religious freedom* as a fundamental human right (*Dignitatis humanae*)



Chicago 2009 -- The Order of Modern Global Capital



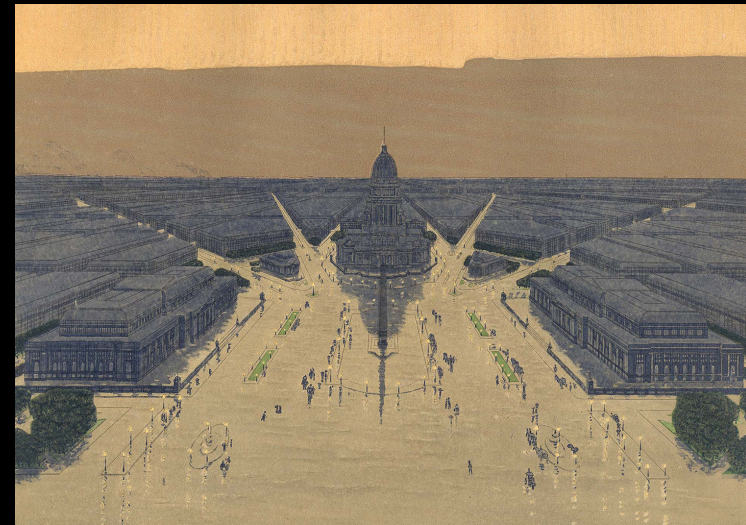
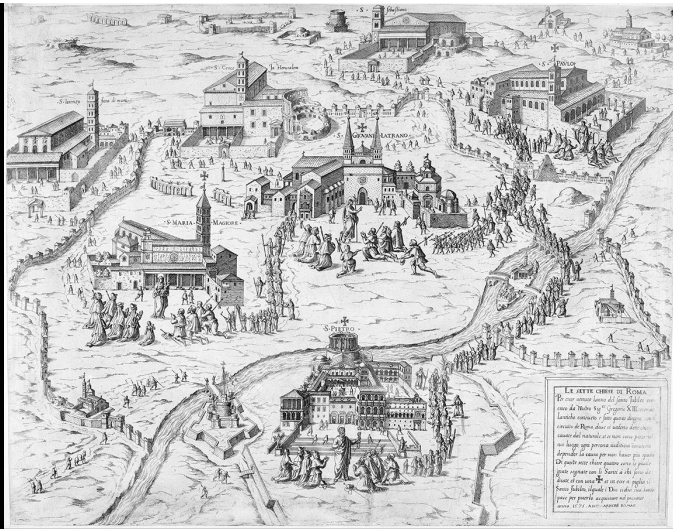
*~~“**Make no little plans.** They have no magic to stir men's blood...”~~*

— Daniel Burnham (attributed)

*“**Make no bad plans;** rather make good plans. Big ones? Sure!*

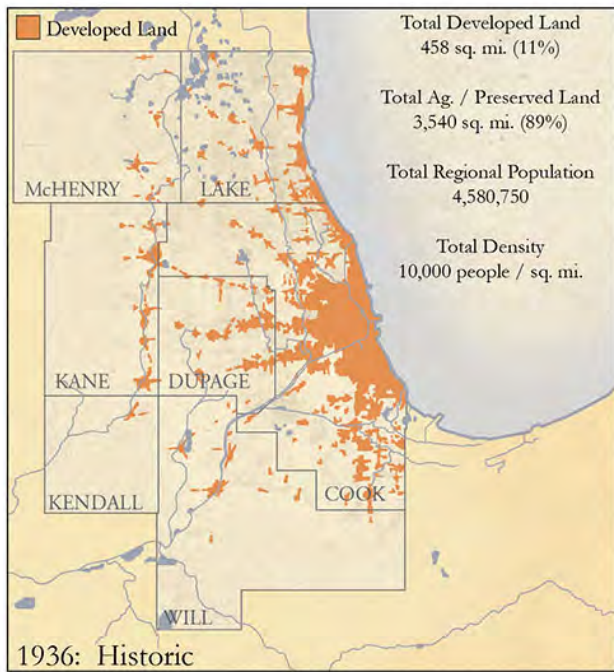
But with lots of room for communal and individual actors.”

-- Daniel Burnham (from Purgatory)

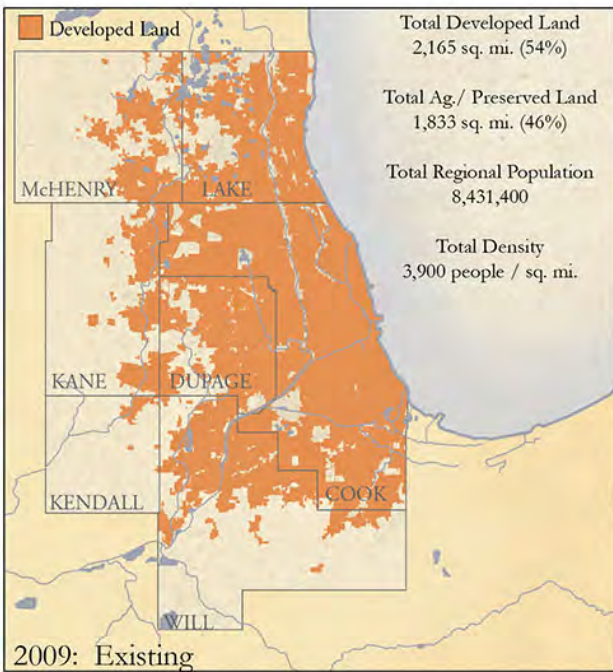


Icons of Classical Humanist Urbanism (clockwise from bottom left):

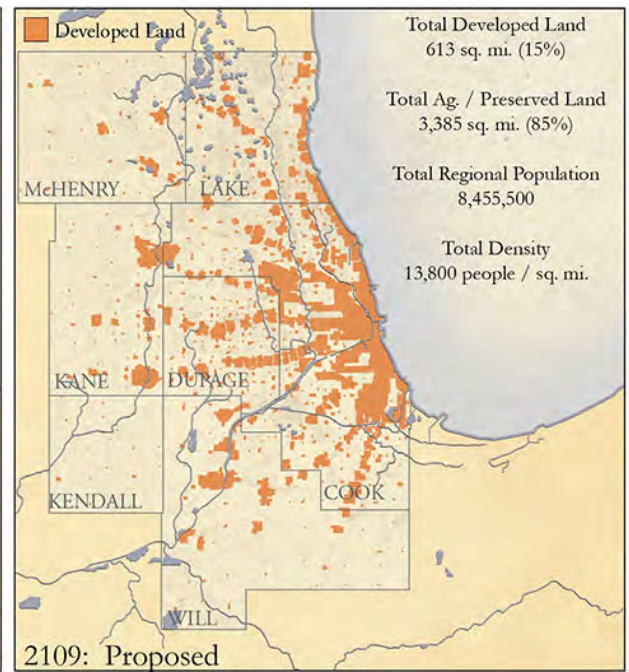
- *The Ghent Altarpiece* (1432, detail), Paradise as New Eden and New Jerusalem
- 1575 image of Rome depicted as her seven pilgrimage churches
- The World's Columbian Exposition, Chicago, (1893)
- Proposed City Hall and Plaza, *Plan of Chicago* (1909)



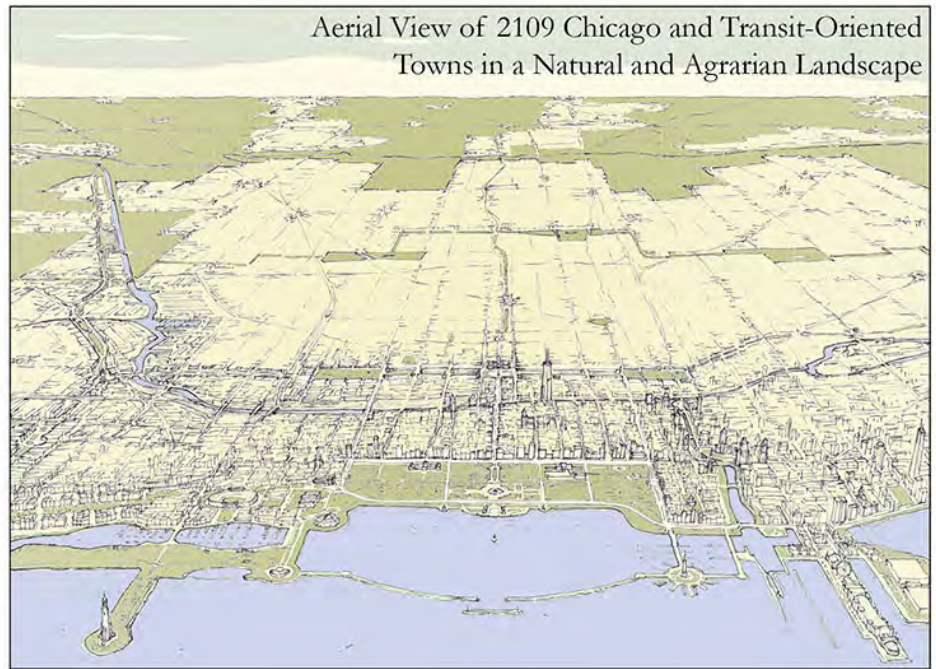
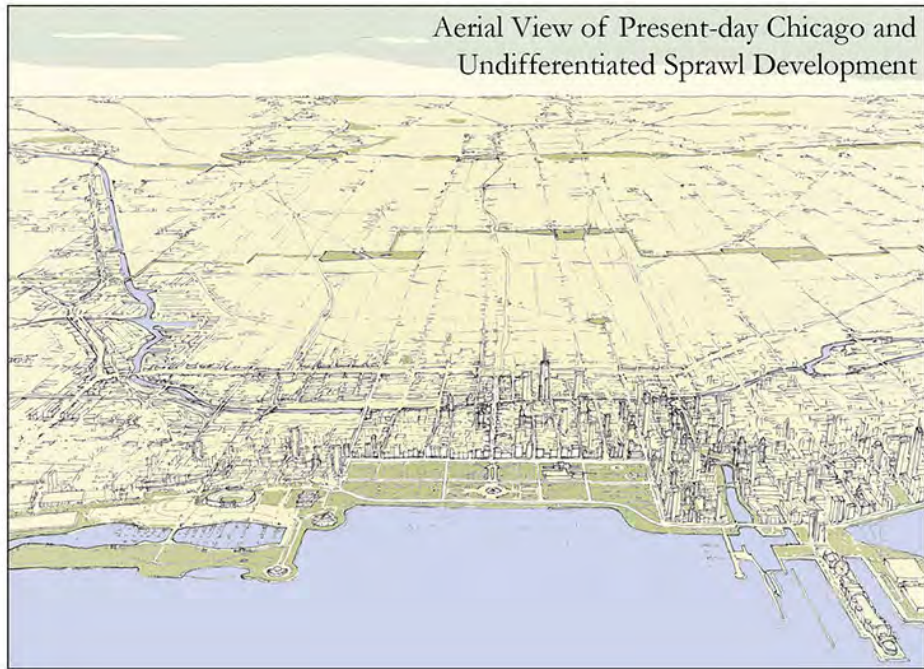
1936: Historic



2009: Existing



2109: Proposed



Project Overview: Seven-county Metro Chicago baseline: *Rural Land-Urban Land* (1936 land use, top left / 2009 land use, top center / proposed 2109 land use, top right)

- Build on Chicago's existing strengths, especially rail transit and proximity to fresh water and good agricultural land.
- Cut suburban losses, re-densify around existing commuter rail lines in known building and neighborhood types, and reclaim failed automobile suburbs as rural and agricultural landscape.
- Adopt form-based zoning codes based on density and building types to replace single-use zoning codes.
- In low-rise (walk-up) building districts, mandate (or at least incentivize) by law the use of a limited range of regionally-sourced low-embodied-energy building materials (stone, brick, wood timbers, slate and clay tiles, etc.)
- Create a more equitable regional regime of land value taxation that rewards agricultural and entrepreneurial activity and increases home ownership and housing supply by penalizing speculation in land.
- Make land value, natural resources and Pigouvian (sin) taxes *foundational* for governmental revenue at all levels, replacing as many other taxes as possible -- initially the property tax, but followed by sales tax, income tax, business tax, and capital gains tax if and as possible.



HAMLET

<40 Acres

Population: 4,800-8,000/Square Mile

Density: 3-5 Dwelling Units/Acre



VILLAGE

40-640 Acres

Population: 4,800-12,000/Square Mile

Density: 3-7.5 Dwelling Units/Acre

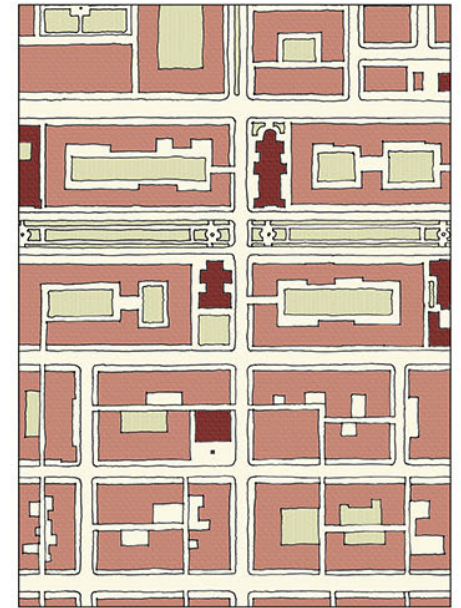


TOWN

1-4 Sq. Mi.

Population: 9,600-20,000/Square Mile

Density: 6-12.5 Dwelling Units/Acre

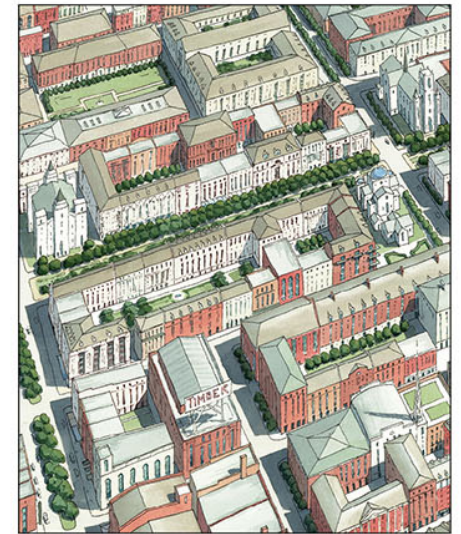
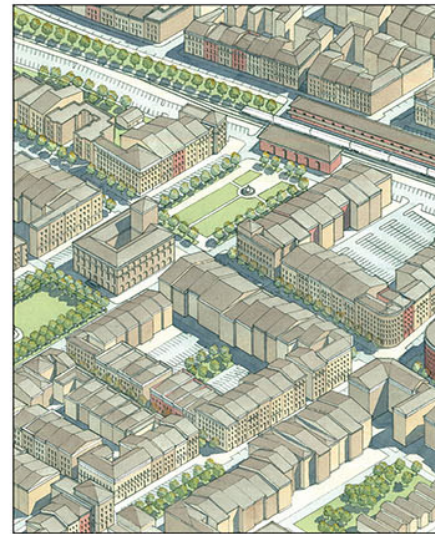


CITY (neighborhood)

> 4 Sq. Mi.

Population: 16,000-40,000/Square Mile

Density: 10-25 Dwelling Units/Acre



Proposed metro Chicago settlement types, *in a landscape*
Hamlets and Villages at major cross-roads / *Towns and Cities* around commuter rail lines

METROPOLITAN CHICAGO

REGIONAL TRANSPORTATION - PROJECTED 2109 -

SCALE
0 5 10 15 20mi

McHENRY COUNTY
LAKE COUNTY
KANE COUNTY
DUPAGE COUNTY
KENDALL COUNTY
WILL COUNTY
COOK COUNTY
CHICAGO

KEY:
NEIGHBORHOOD/TOWN/VILLAGE/HAMLET
METRA RAIL - EXISTING
METRA RAIL - PROJECTED
INTERSTATE HIGHWAY
INTERSTATE R.O.W.-TO-PARKWAY
MAJOR ROAD
AIRPORT/AIRFIELD

CITY OF CHICAGO

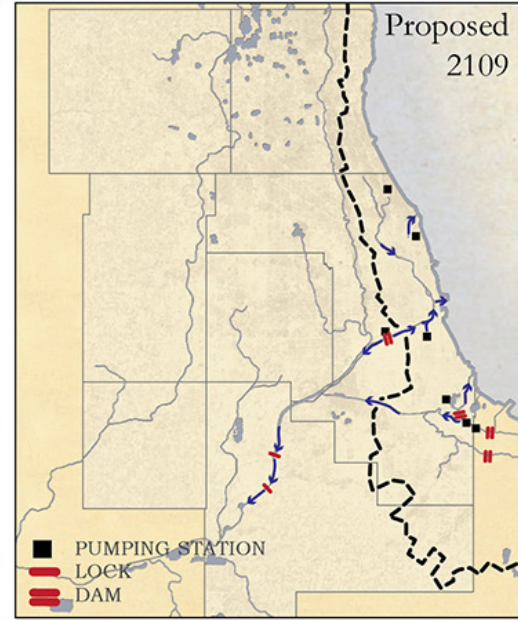
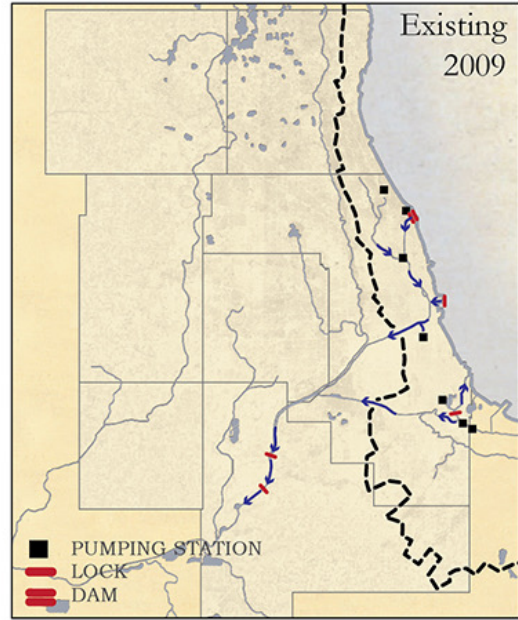
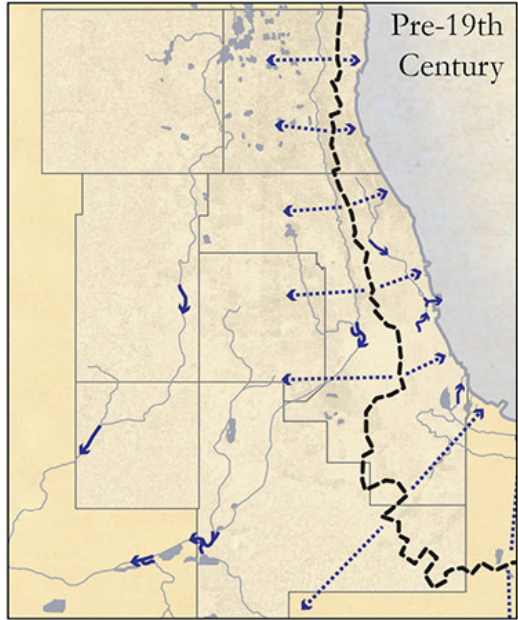
CITY TRANSPORTATION - PROJECTED 2109 -

SCALE
0 1 2 3 4 5mi

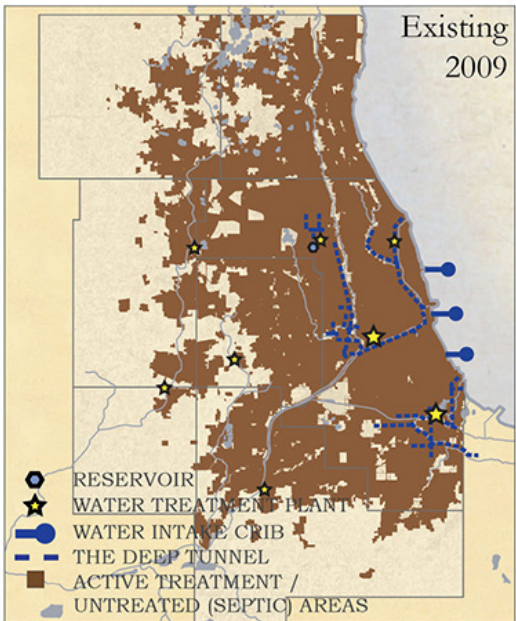
KEY:
NEIGHBORHOOD/TOWN/VILLAGE/HAMLET
PARKS/PRESERVES/OPEN LAND
EXISTING METRA RAIL
EXISTING CTA RAIL
PROJECTED CTA RAIL
PROJECTED CTA BRT
PROJECTED STREET CAR RAIL
INTERSTATE HIGHWAY
INTERSTATE R.O.W.-TO-PARKWAY
MAJOR ROAD
AIRPORT/AIRFIELD

Retain and Supplement Existing Regional and City Transportation Network (and relate to new land use policies)

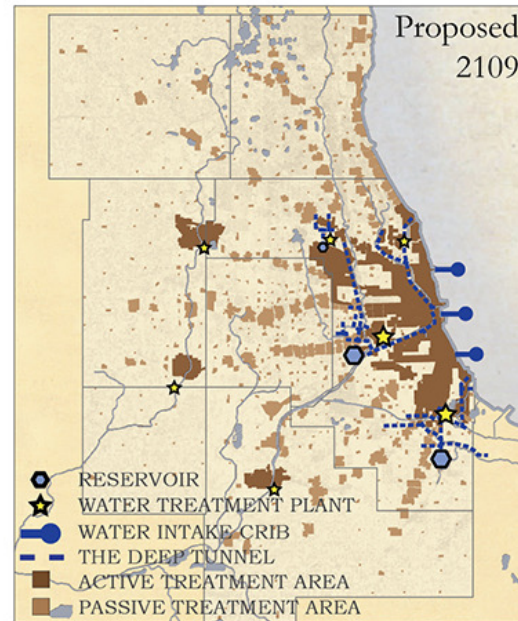
- **City** land rarely extends more than ½ Mile from rail stop, never more than One Mile
- **Town** land never extends more than One Mile from rail stop
- **Villages** and **Hamlets** to be built at intersections of existing rural State or County roads



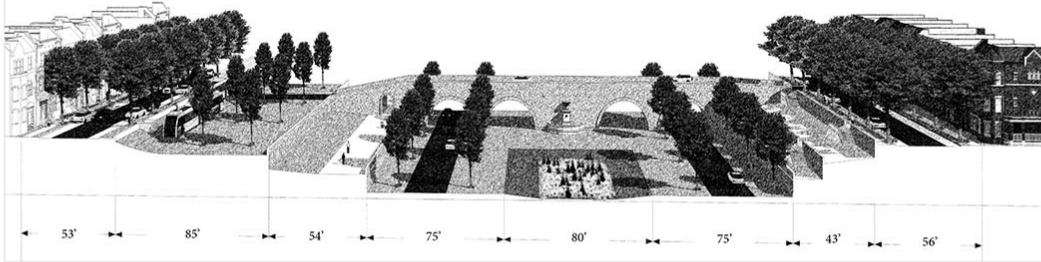
Chicago straddles a natural subcontinental divide separating the Great Lakes watershed from the Mississippi River watershed. Extensive engineering in the mid-19th and early 20th centuries linked the two watersheds and effectively reversed the flow of the Chicago River, redirecting it to the Mississippi River watershed. This carried Chicago's wastewater away from the the source of its drinking water, but has created subsequent environmental complications. For 2109, the project proposes to replenish Chicago's regional aquifer and address its storm and wastewater problems by vastly increasing the permeable surface in the region, re-reversing the Chicago River, and localizing city and regional storm water management and wastewater treatment.



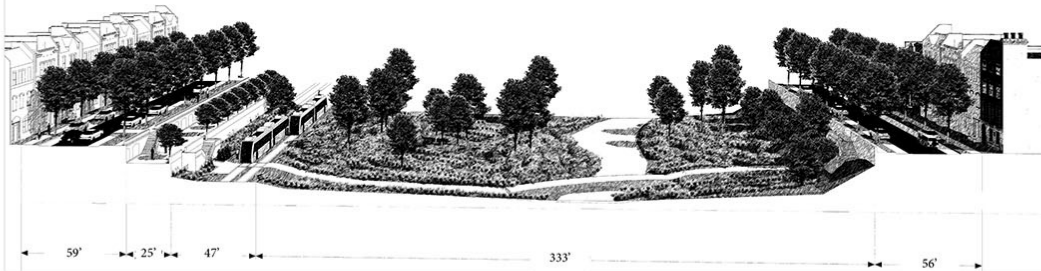
Constructed wetlands are a localized 'passive' wastewater treatment system that purifies wastewater through natural processes both environmentally friendly and aesthetically pleasing. Wetland cells remove pollutants through physical, chemical and biological processes, and dissipate ammonia with rushes and prairie grasses, returning pure water to the ground. Additionally, a variety of proposed Light Imprint strategies improve the ability to collect, store, and purify water, and return more of it to regional aquifers.



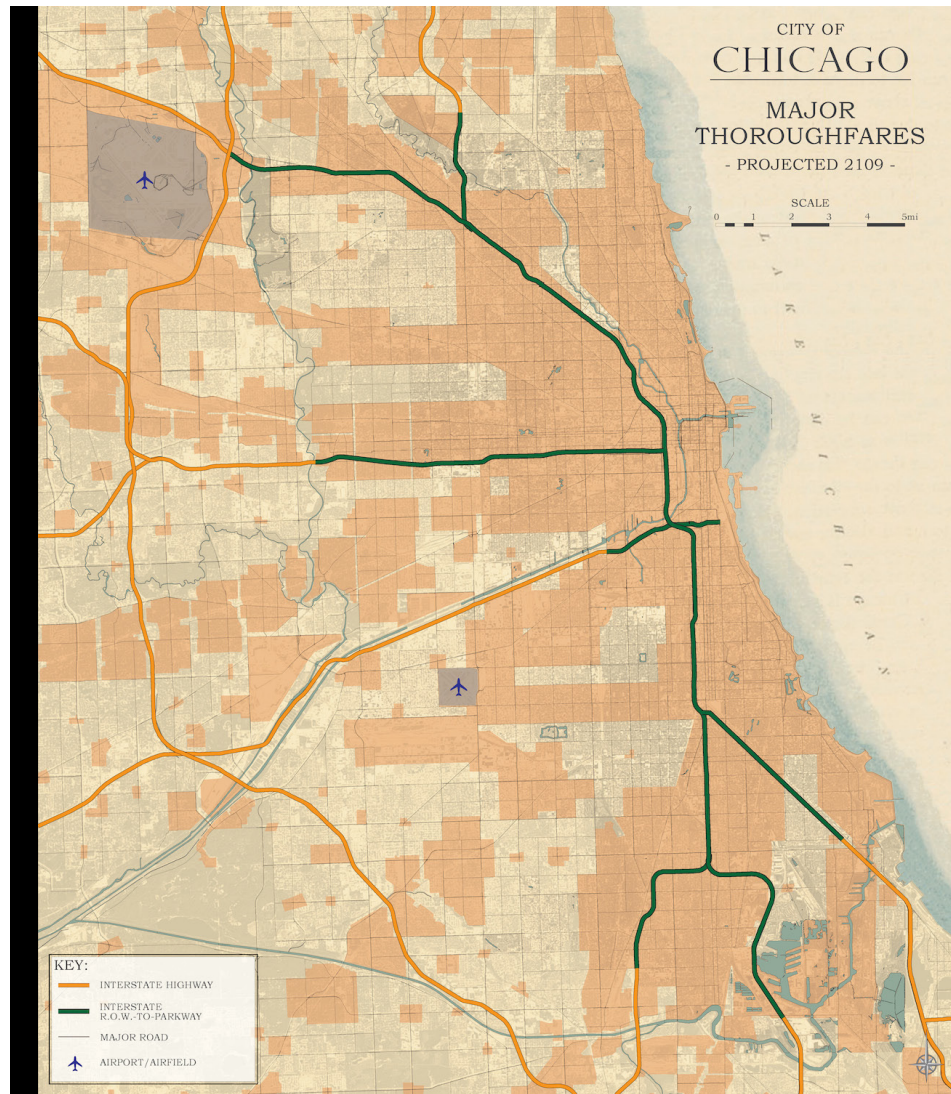
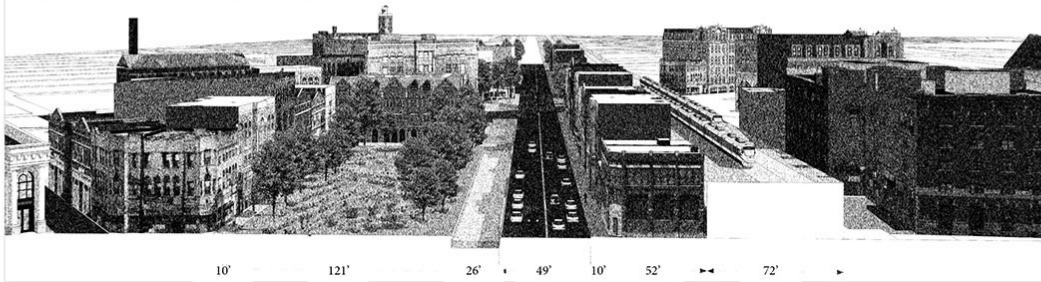
Proposed: Dan Ryan Expressway to Boulevard with Rail



Proposed: Dan Ryan Expressway to Boulevard with Wetlands with Rail



Proposed: Kennedy Expressway to Urban Street with Rail



In-City Interstate Rights-of-Way re-purposed as multi-use urban corridors:
boulevards, rail, parks, wetlands, real estate...



Detached Single Family



Row House



2-flat/3-flat



4-flat



6-flat



12-flat



U-Court Apartments



Mixed-Use (walk-up)



4-6 Story Apartments

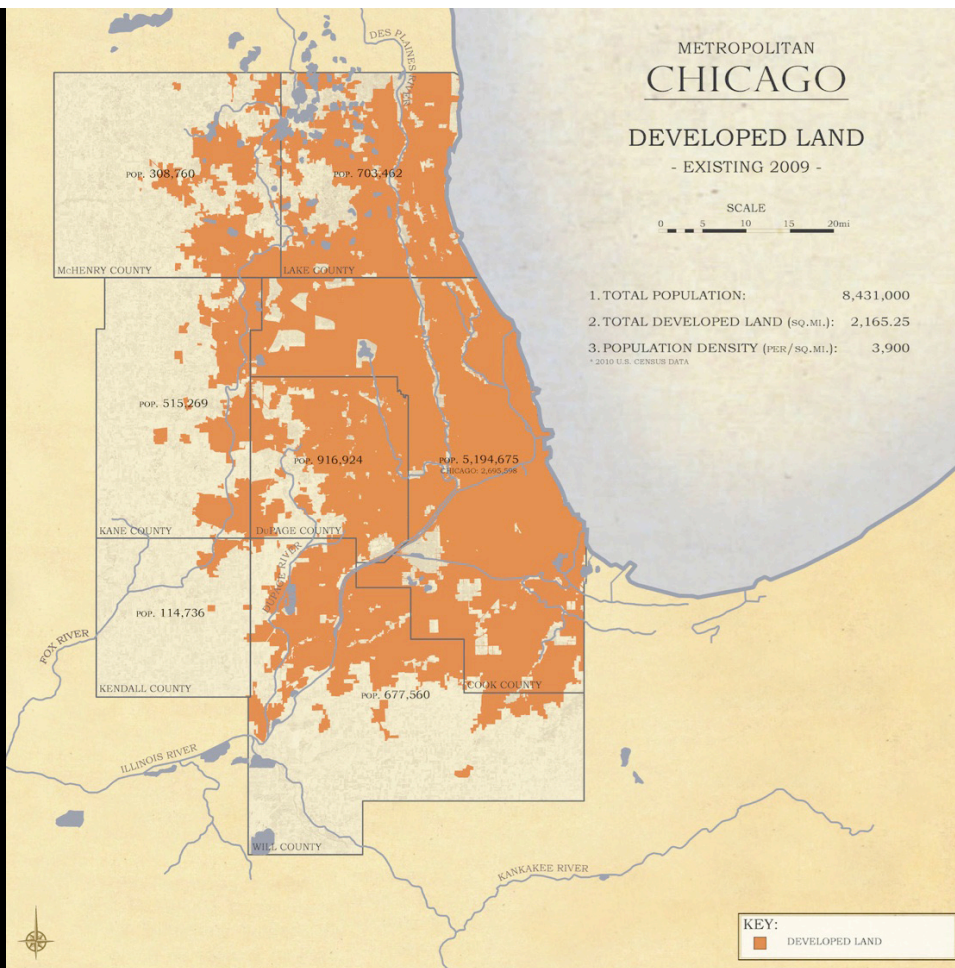


10-12 Story Apartments



Mixed-Use (elevator)

Transect-zone-specific "middle-housing" types permitted as-of-right per Form-based Codes



2009: 8,431,000

2,165 square miles @ 3,900 / square mile (gross)

CHICAGO = 2,700,000 / SUBURBS = 5,731,000

CHICAGO density = 11,700 / square mile (gross)
 SUBURBAN density = 3,000 / square mile (gross)

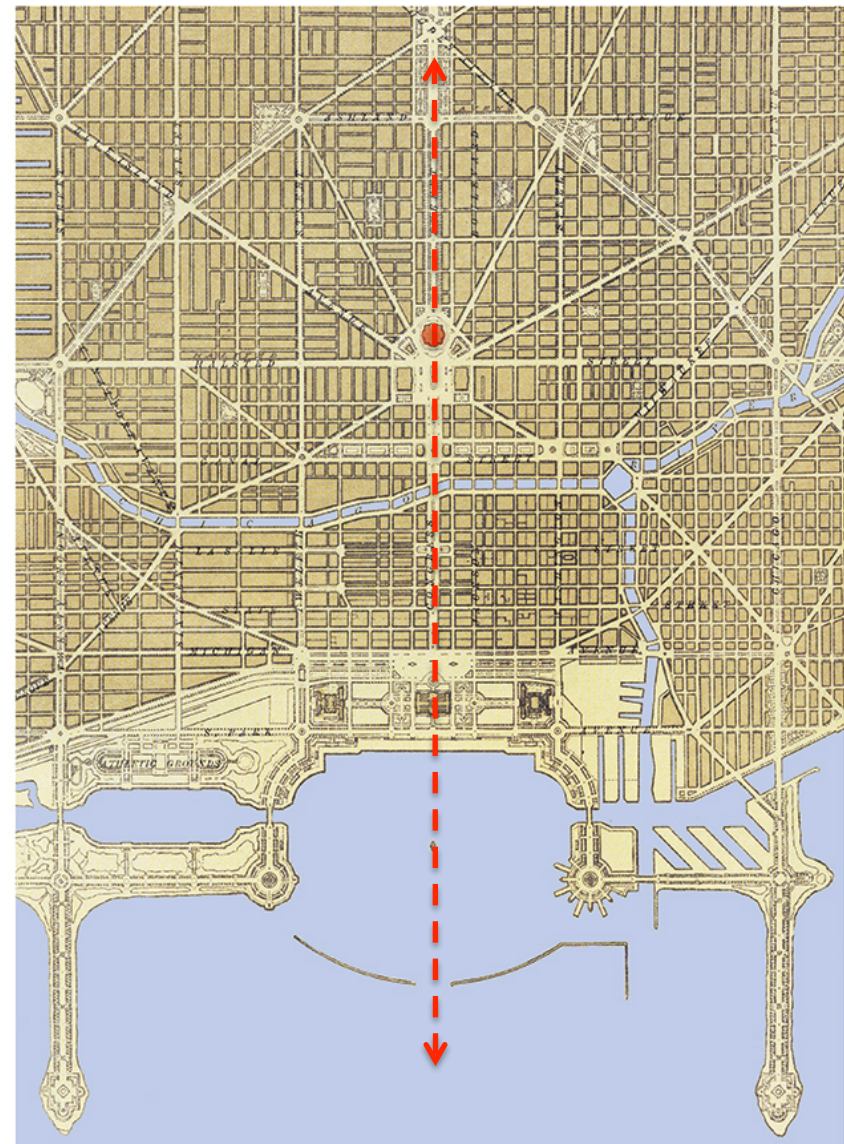
2109: 8,455,000

613 square miles @ 13,800 / square mile (gross)

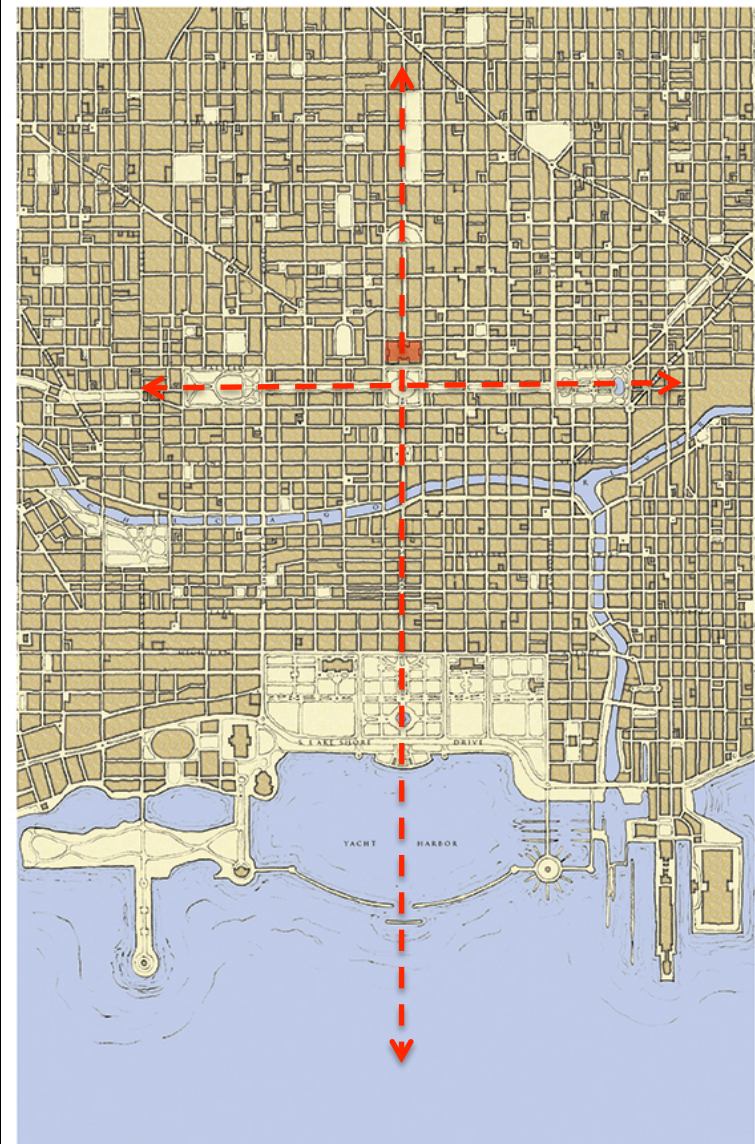
CHICAGO = 3,600,000 / T/V/H/C = 4,855,000

CHICAGO density = 15,600 / square mile (gross)
 T/V/H/C density = 12,700 / square mile (gross)

Metropolitan Chicago Population, Land Coverage, & Population Density



Plan of Chicago 1909



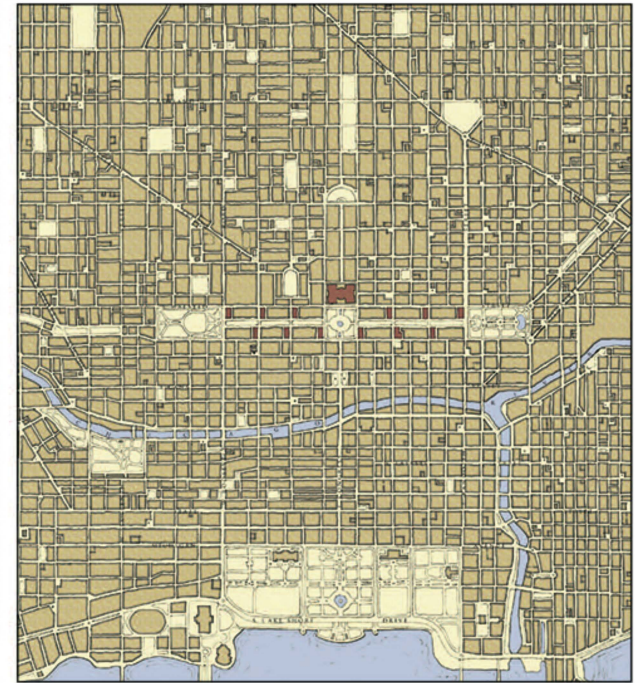
The Notre Dame Plan of Chicago 2109



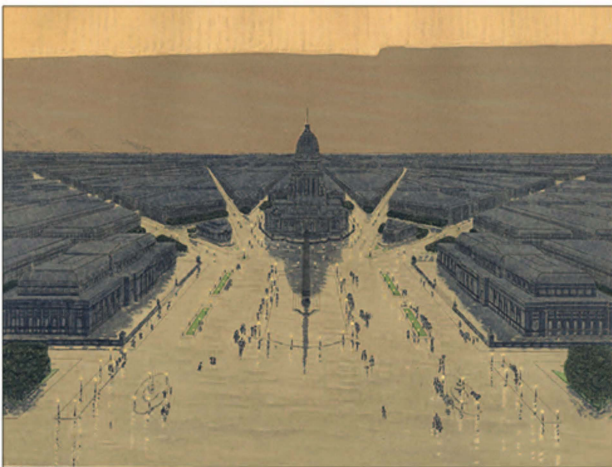
Plan of Chicago, 1909
“Proposed Civic Center Plaza and Buildings” at
Congress Parkway and Halsted Street



Existing Chicago, 2009
Aerial View of the Chicago Circle Interchange at
Congress Parkway and Halsted Street



Proposed, 2109
Aerial View of New City Hall at
Congress Parkway and Halsted Street



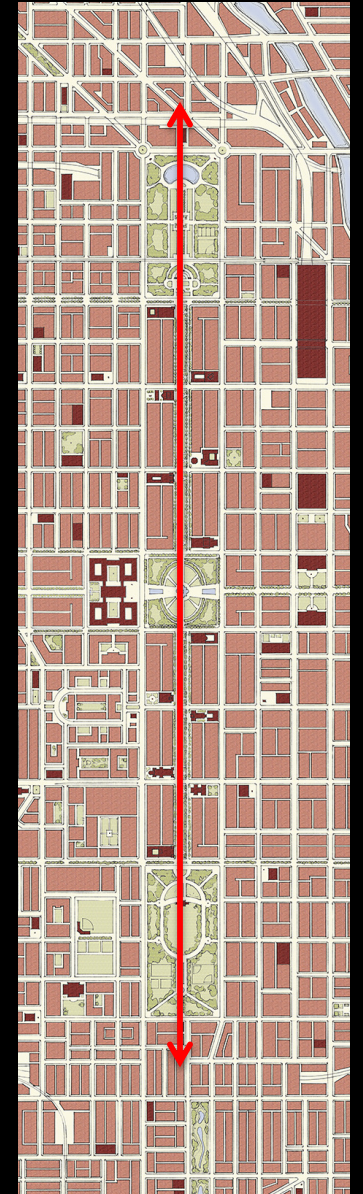
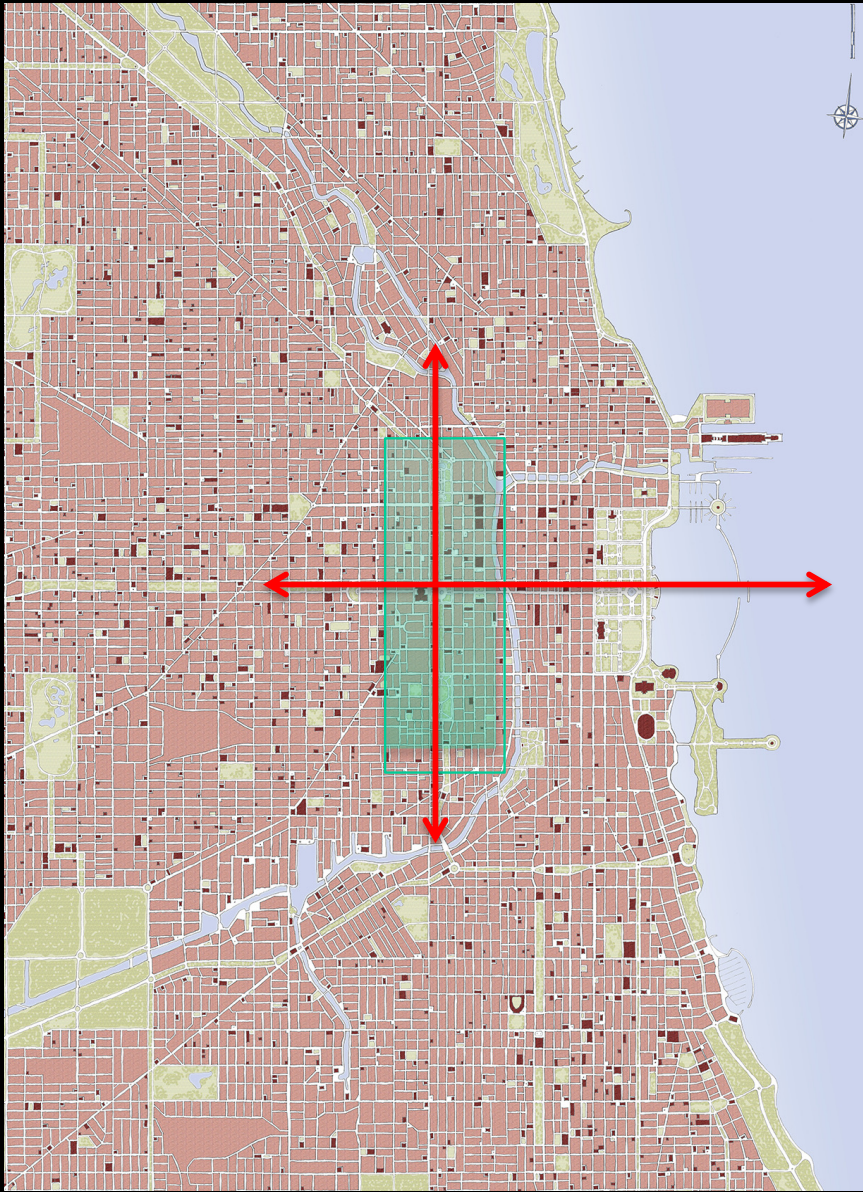
Plan of Chicago (1909, proposed)



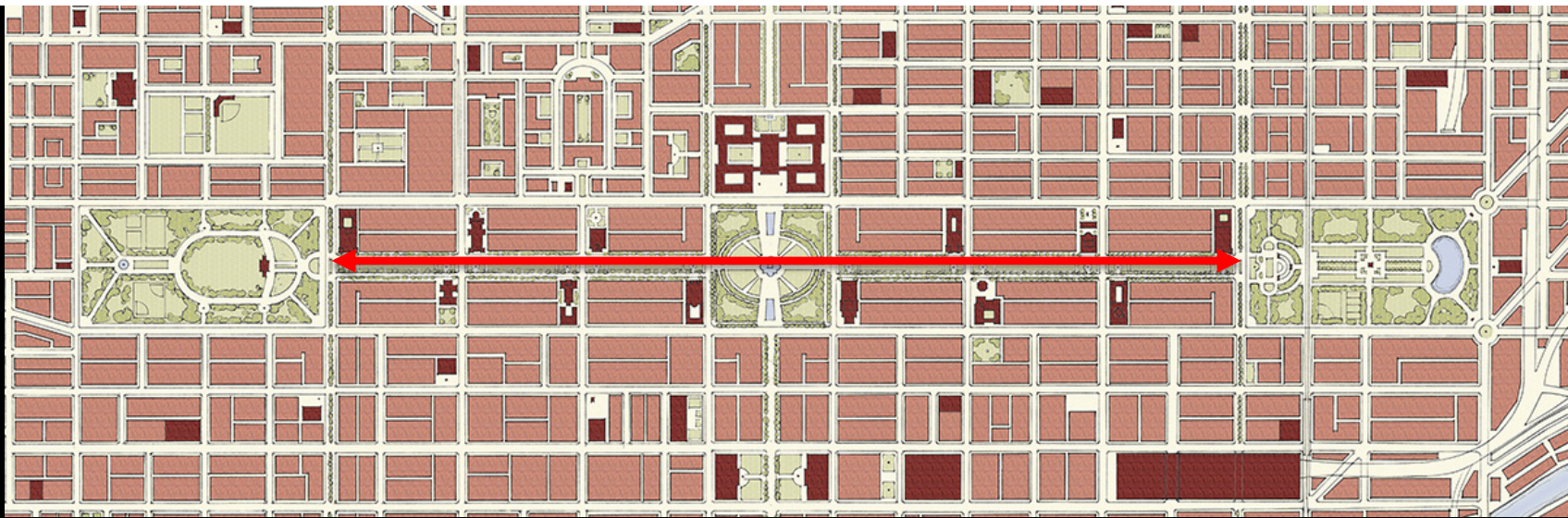
Chicago 2009 (existing)



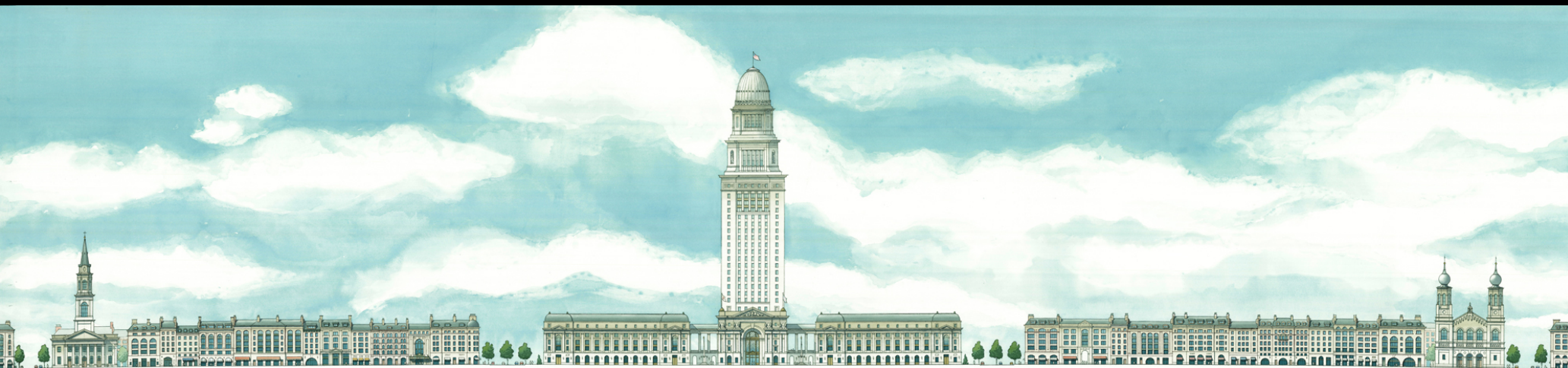
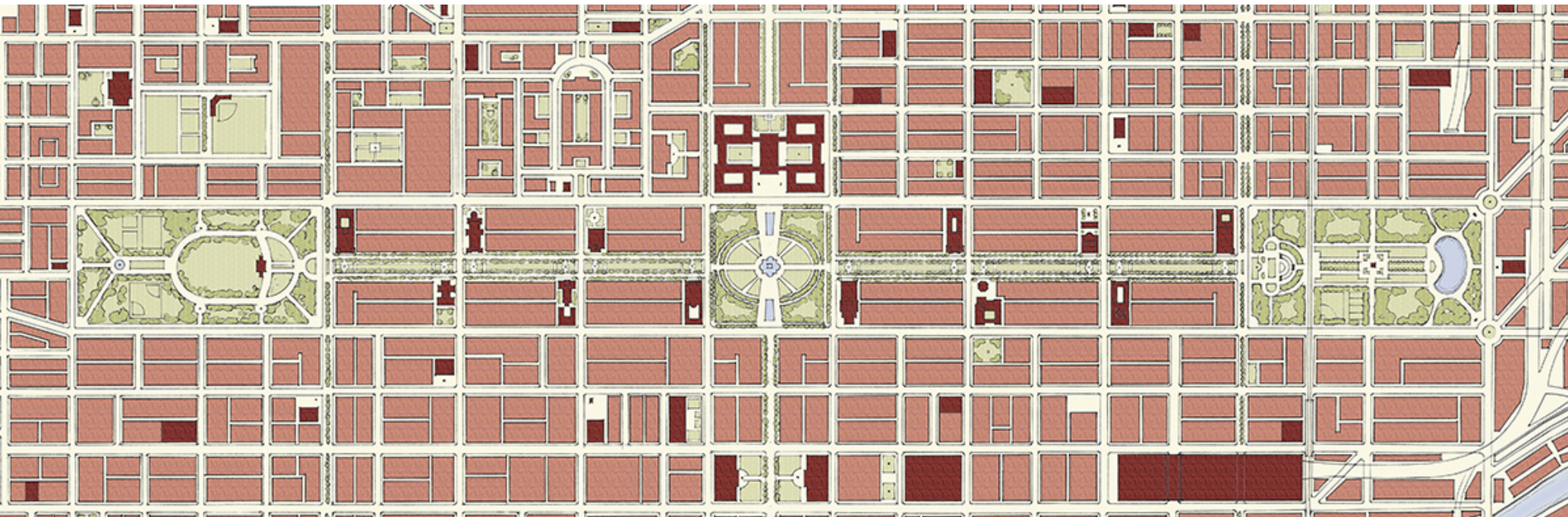
Our Lady's Plan 2109 (proposed)



Our Lady's Plan of Chicago 2109 proposed North - South Sacred Axis (right) crossing the original 1909 *Plan of Chicago* East - West Civic Axis (left)



Sacred Buildings (sampled) to front Chicago 2109's North - South Sacred Axis



East Elevation of Proposed Church (L), Chicago City Hall (C), and Synagogue (R)
fronting Columbian Exposition Boulevard (North - South Sacred Axis)



Proposed new high-rise city hall and boulevard fronted by sacred buildings.

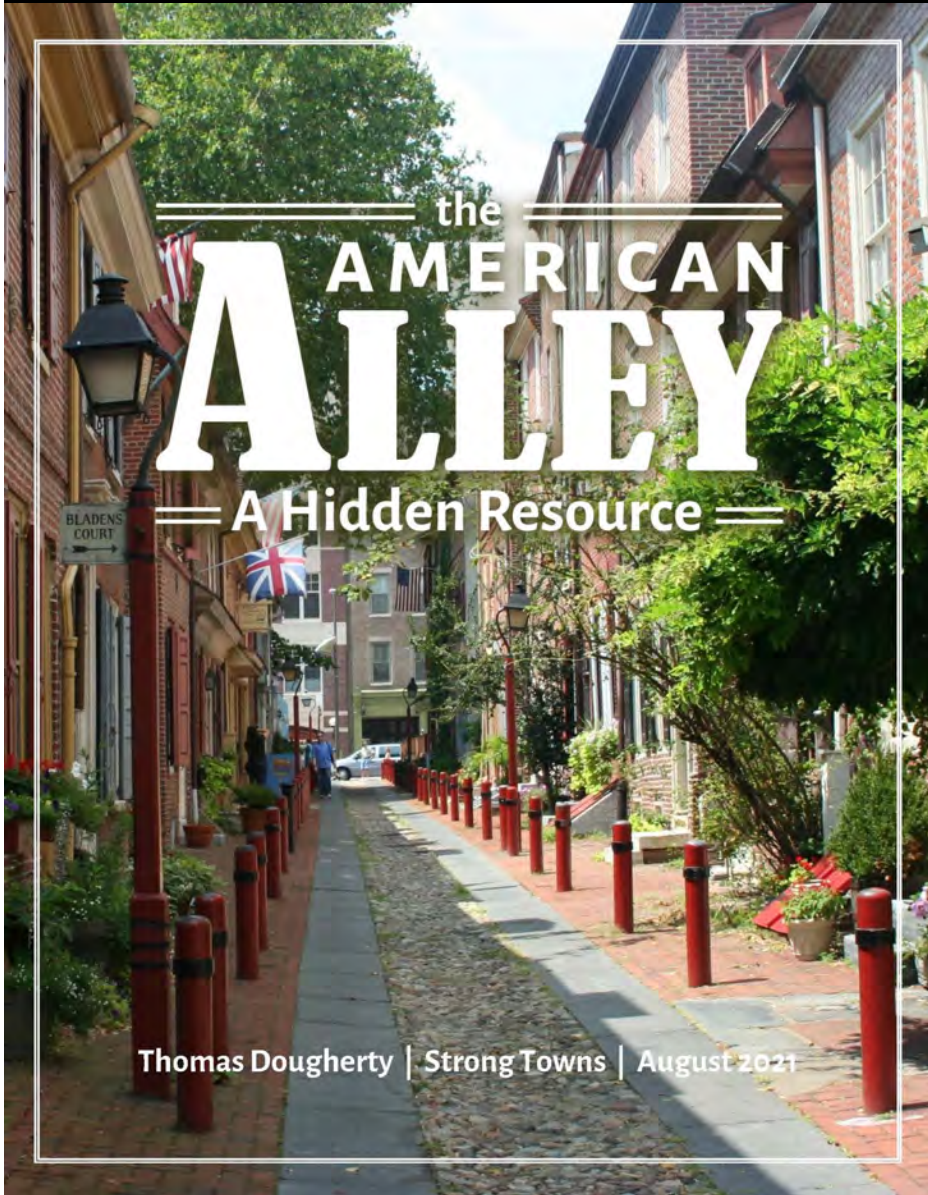
A crossing of Civic and Sacred axes
to replace the Interstate Highway interchange in Chicago's historic center.



Case Study #2: St. Patrick's and St. Hedwig's
Where Evangelization and Catholic Social Teaching Meet:
The Church as Neighborhood Developer
Fort Wayne / South Bend Diocese



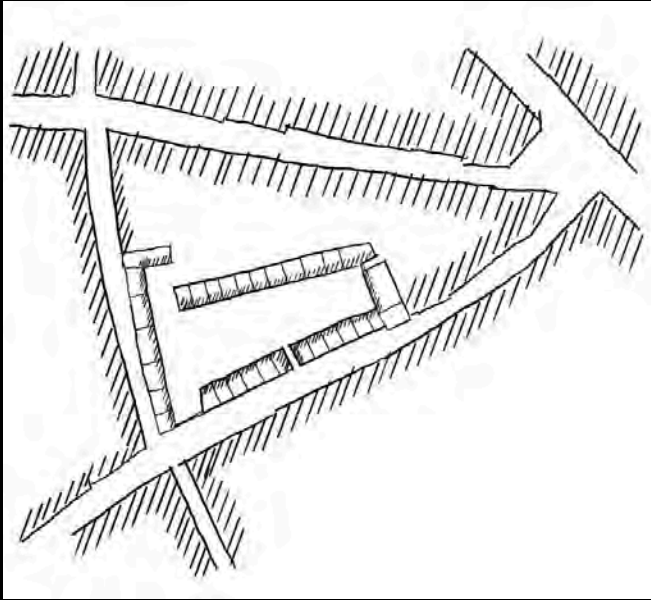
Existing Conditions: Two Church Buildings on single Eight Acre property



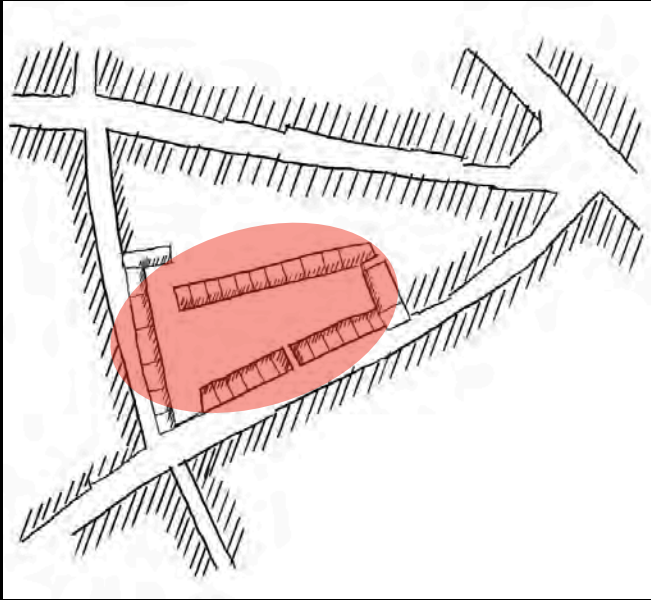
Dougherty ND 2019 – Alley and Interior Block Residential Development



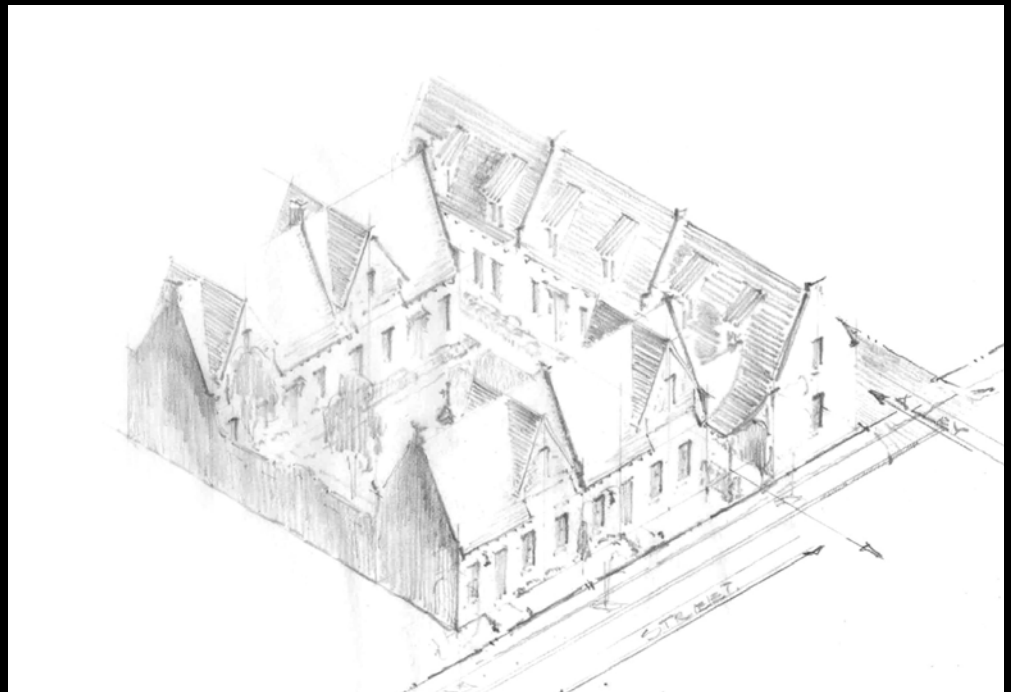
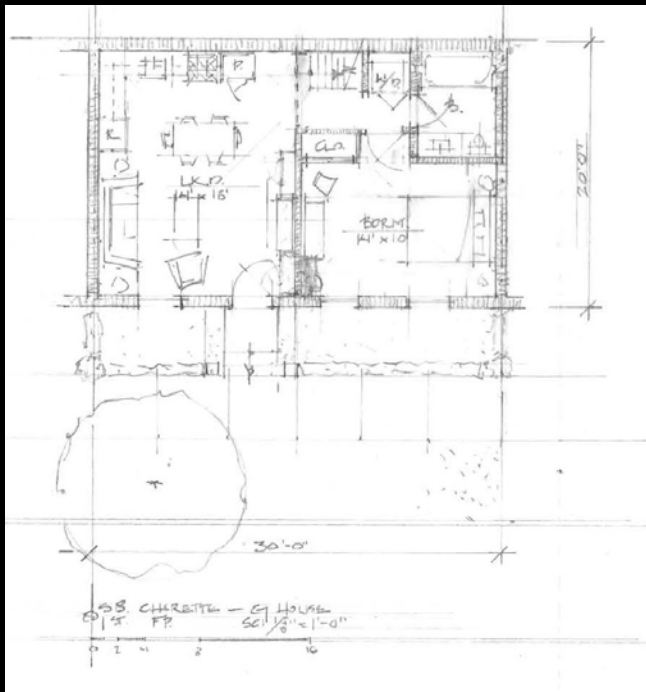
Dougherty ND 2019 – Alley Development (American precedent)



Dougherty ND 2019 – Interior Block Residential Development (Flemish precedent)



Dougherty ND 2019 – Interior Block Residential Development – same scale as South Bend block



Mork ND 2013 – Flemish *godshuis* adaptation study: 900 sf dwelling unit on 20' x 30' parcel footprint



Catania ND 2014 – Masonry Bearing Wall Construction



The American College of the Building Arts / Charleston, SC - TIMBER FRAMING



The American College of the Building Arts / Charleston, SC - MASONRY



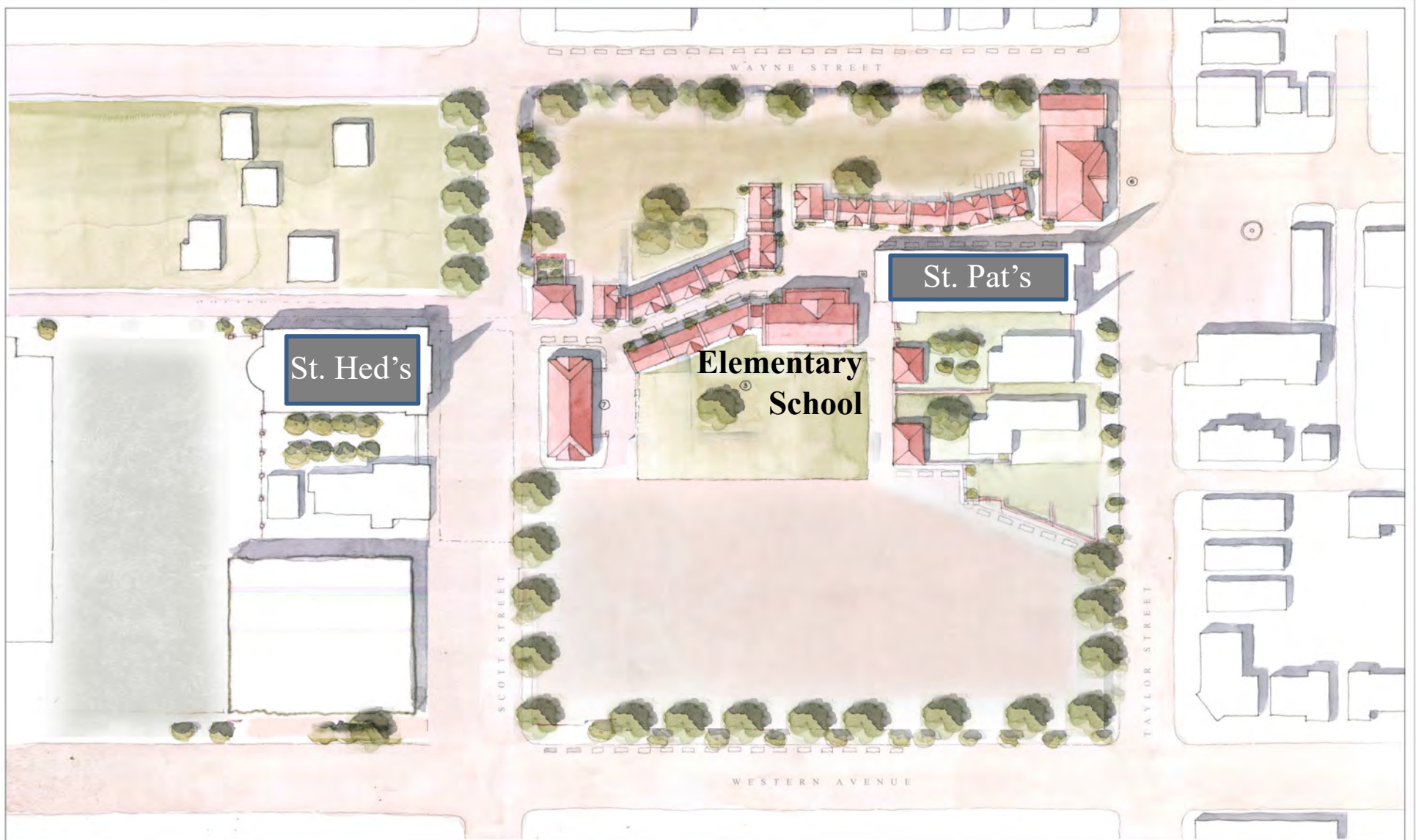
MASTERPLAN DEVELOPMENT:
PHASE 01

ST PATRICK'S & ST.HEDWIG'S PARISHES
309 S. TAYLOR ST. SOUTH BEND, INDIANA



SPRING 2022 GRADUATE STUDIO- PHILIP BESS
SAM USLE, PATRICK BECK, SHAUNI PRIYAM SIKDER

Existing 1960s Buildings to be Demolished (as indicated)



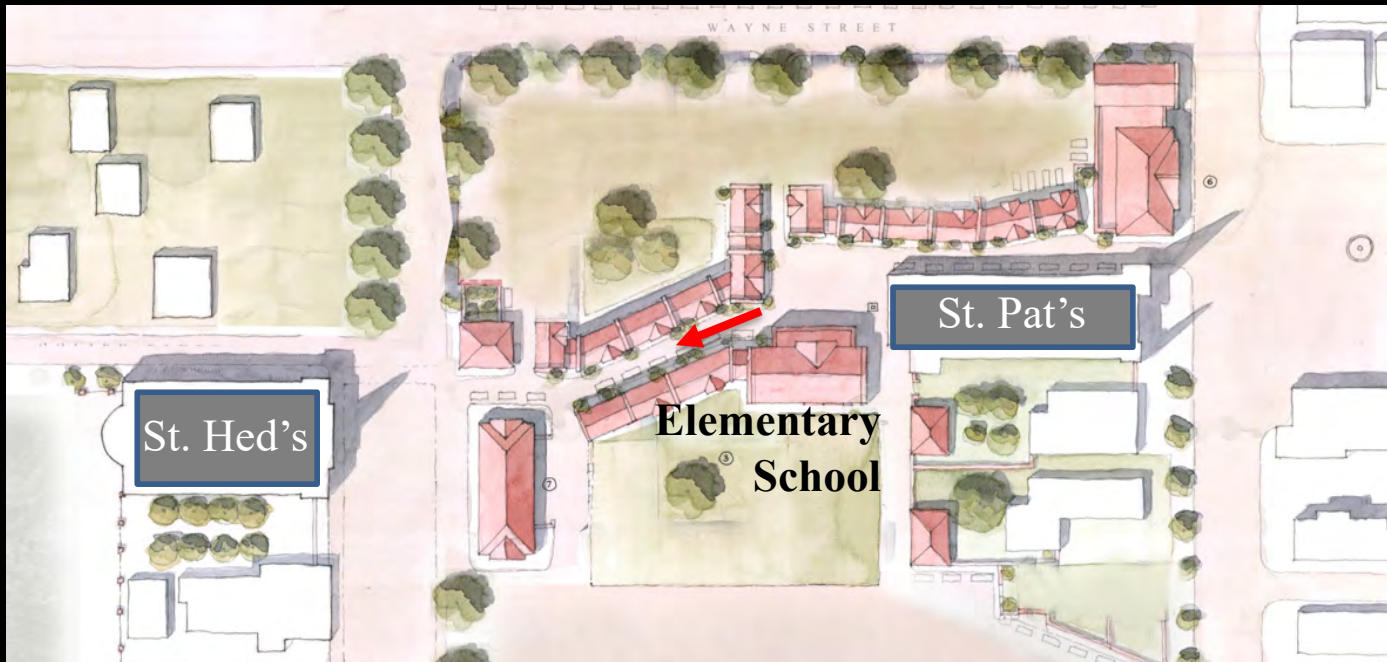
MASTERPLAN DEVELOPMENT:
PHASE 02

ST PATRICK'S & ST.HEDWIG'S PARISHES
309 S. TAYLOR ST. SOUTH BEND, INDIANA



SPRING 2022 GRADUATE STUDIO- PHILIP BESS
SAM USLE, PATRICK BECK, SHAUNI PRIYAM SIKDER

Master Plan Development Phase I
making a "complete street" with visual connection between the existing churches





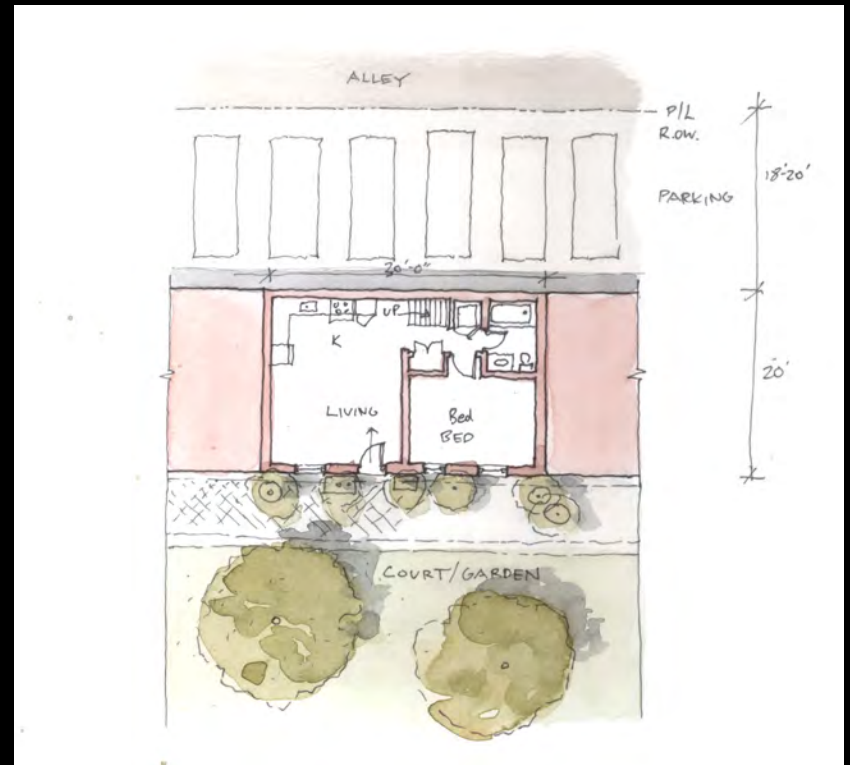
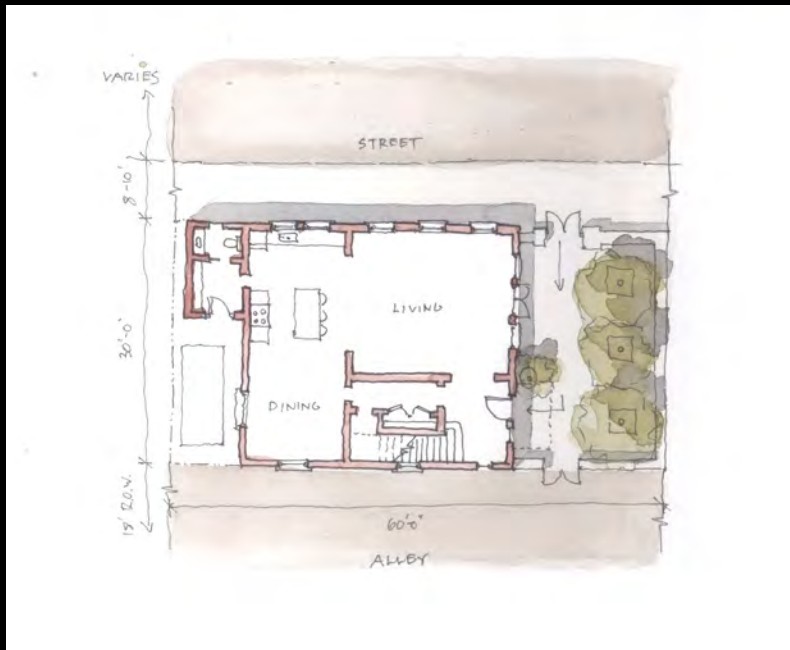
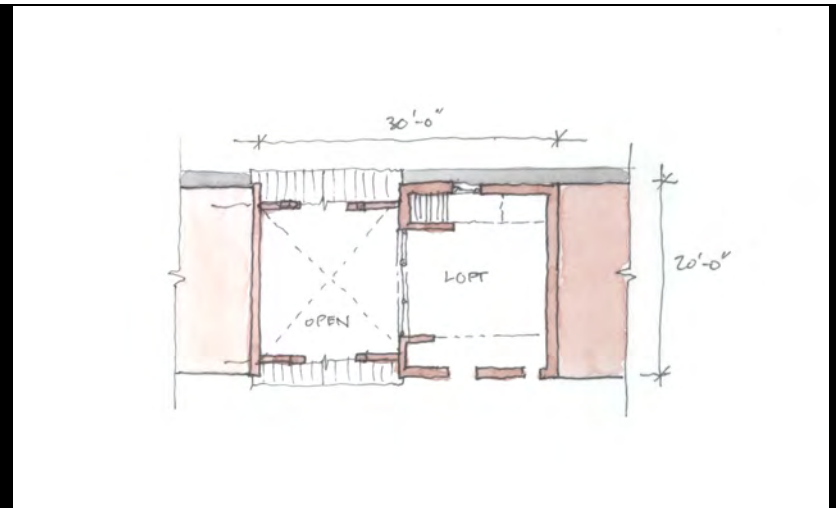
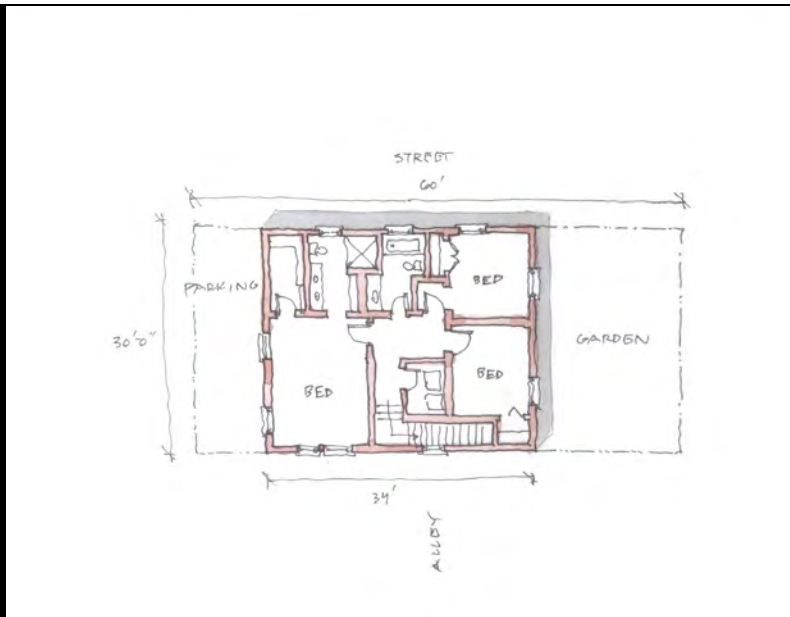
MASTERPLAN DEVELOPMENT:
PHASE 03

ST PATRICK'S & ST.HEDWIG'S PARISHES
309 S. TAYLOR ST. SOUTH BEND, INDIANA



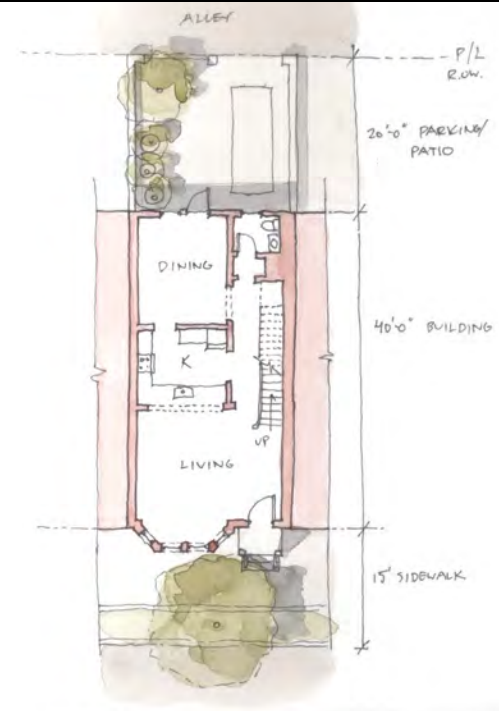
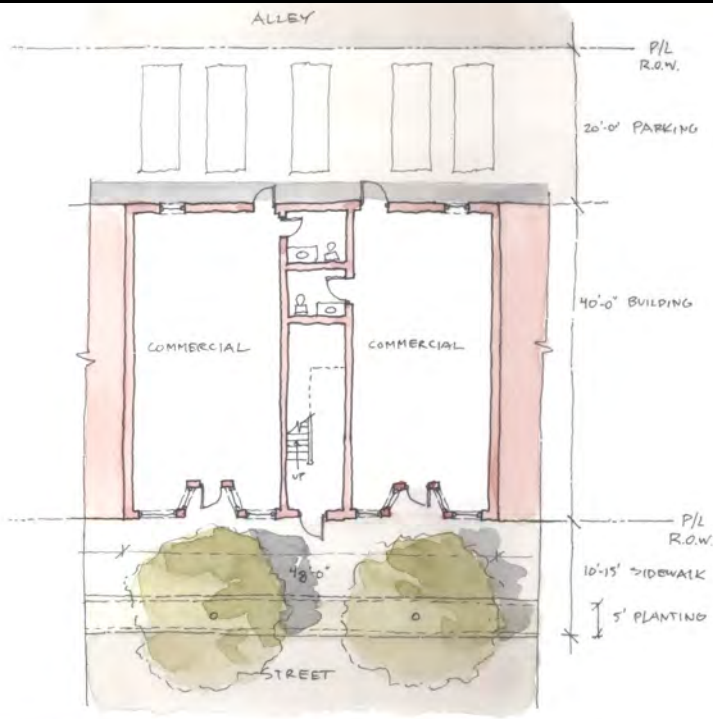
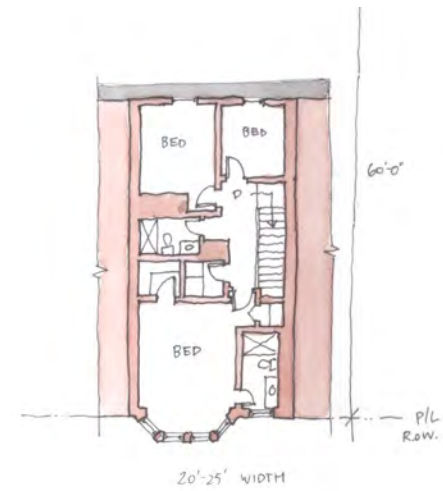
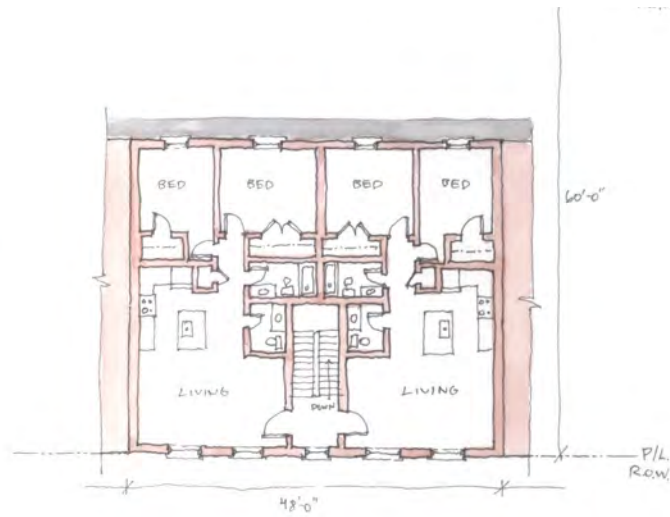
SPRING 2022 GRADUATE STUDIO- PHILIP BESS
SAM USLE, PATRICK BECK, SHAUNI PRIYAM SIKDER

Master Plan Development Phase II – perimeter buildings to the edge of the existing block



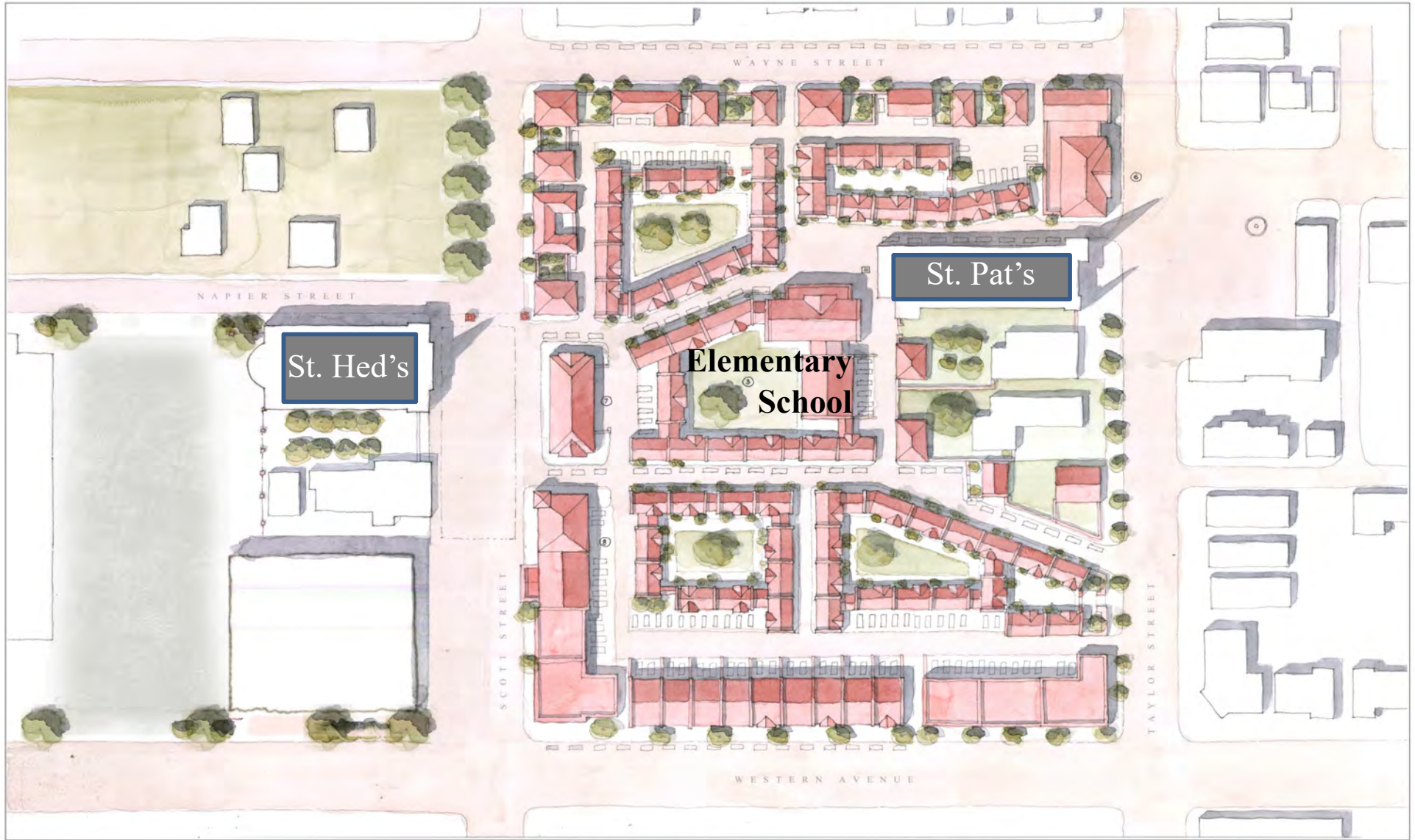
Master Plan Development Phase II

Holding the edge of the block with a special building type designed for a 30' x 60' building lot (left)



Master Plan Development Phase II

Holding the edge of the block with common building types (mixed-use storefront, left / row-house, right)



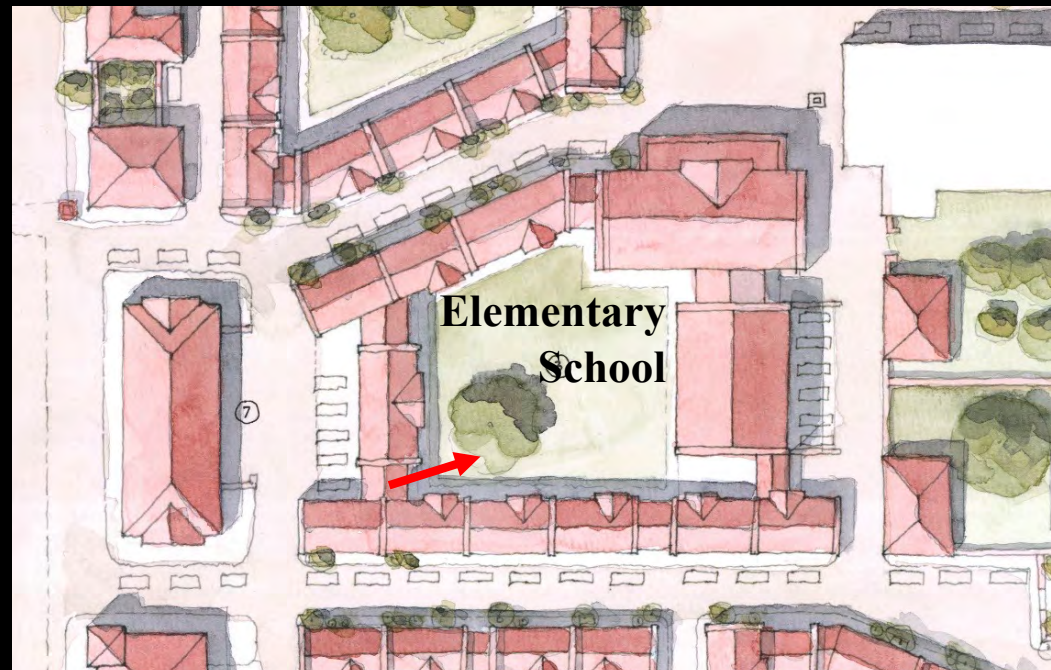
MASTERPLAN DEVELOPMENT:
PHASE 04

ST PATRICK'S & ST. HEDWIG'S PARISHES
309 S. TAYLOR ST. SOUTH BEND, INDIANA

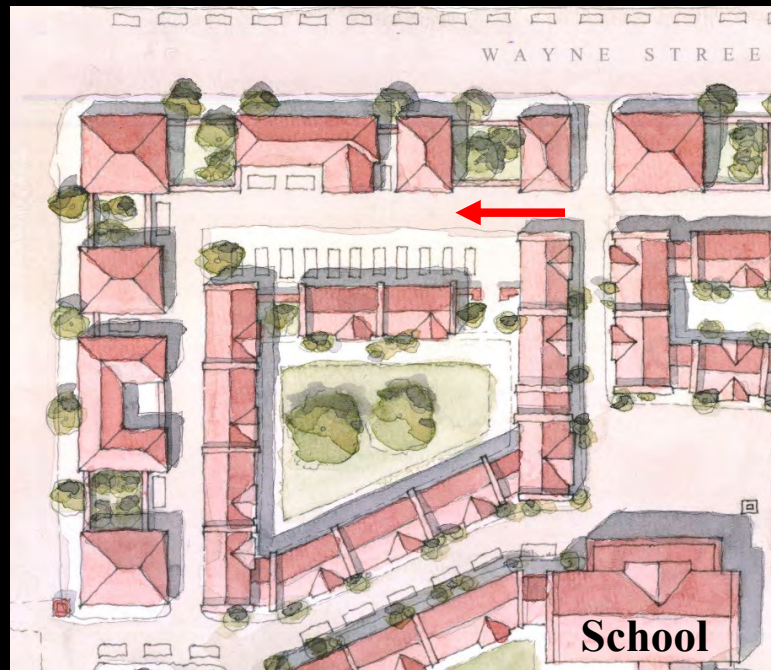


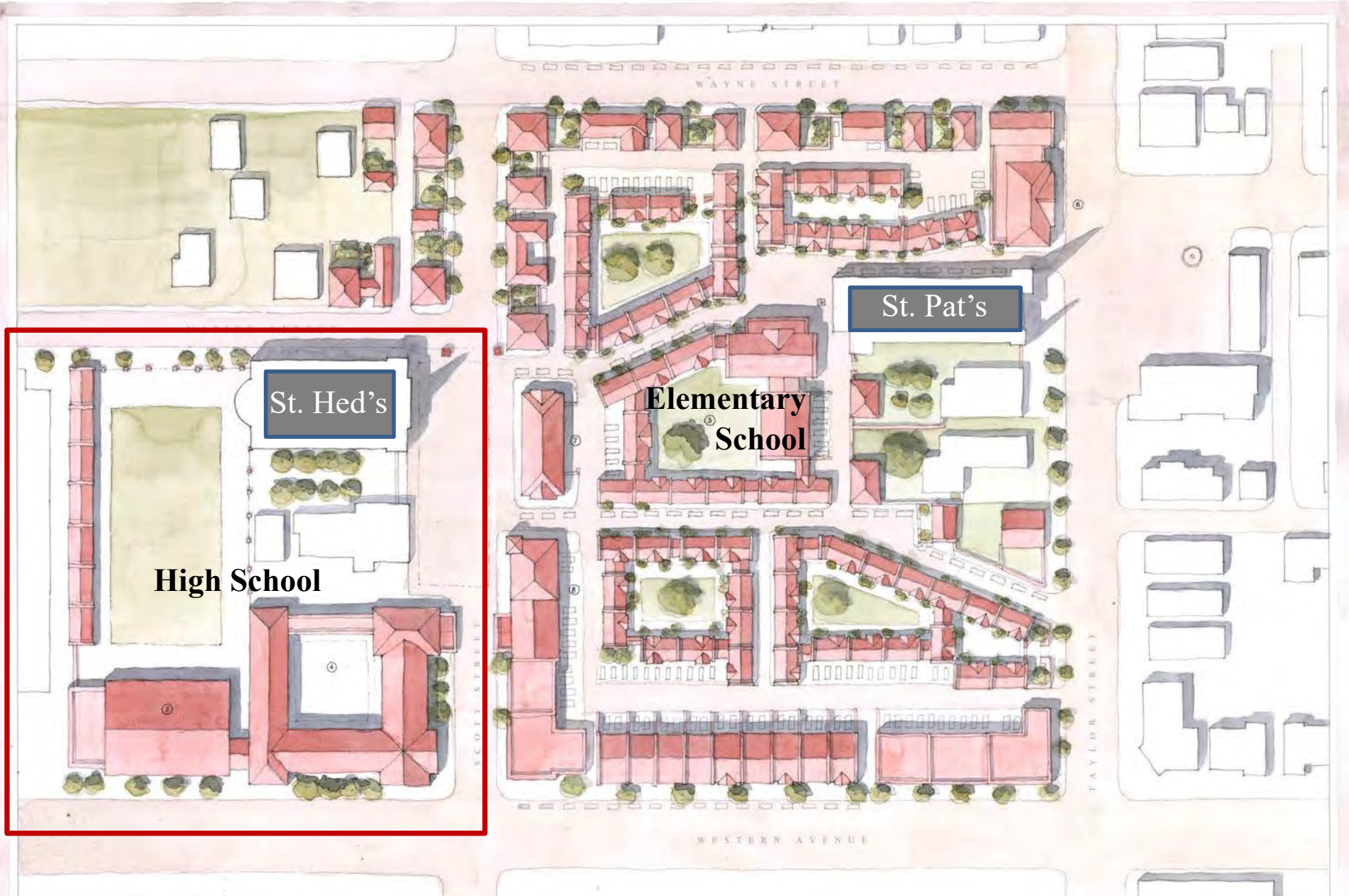
SPRING 2022 GRADUATE STUDIO- PHILIP BESS
SAM USLE, PATRICK BECK, SHAUNI PRIYAM SIKDER

Master Plan Development Phase III - internal block infill (housing & elementary school)

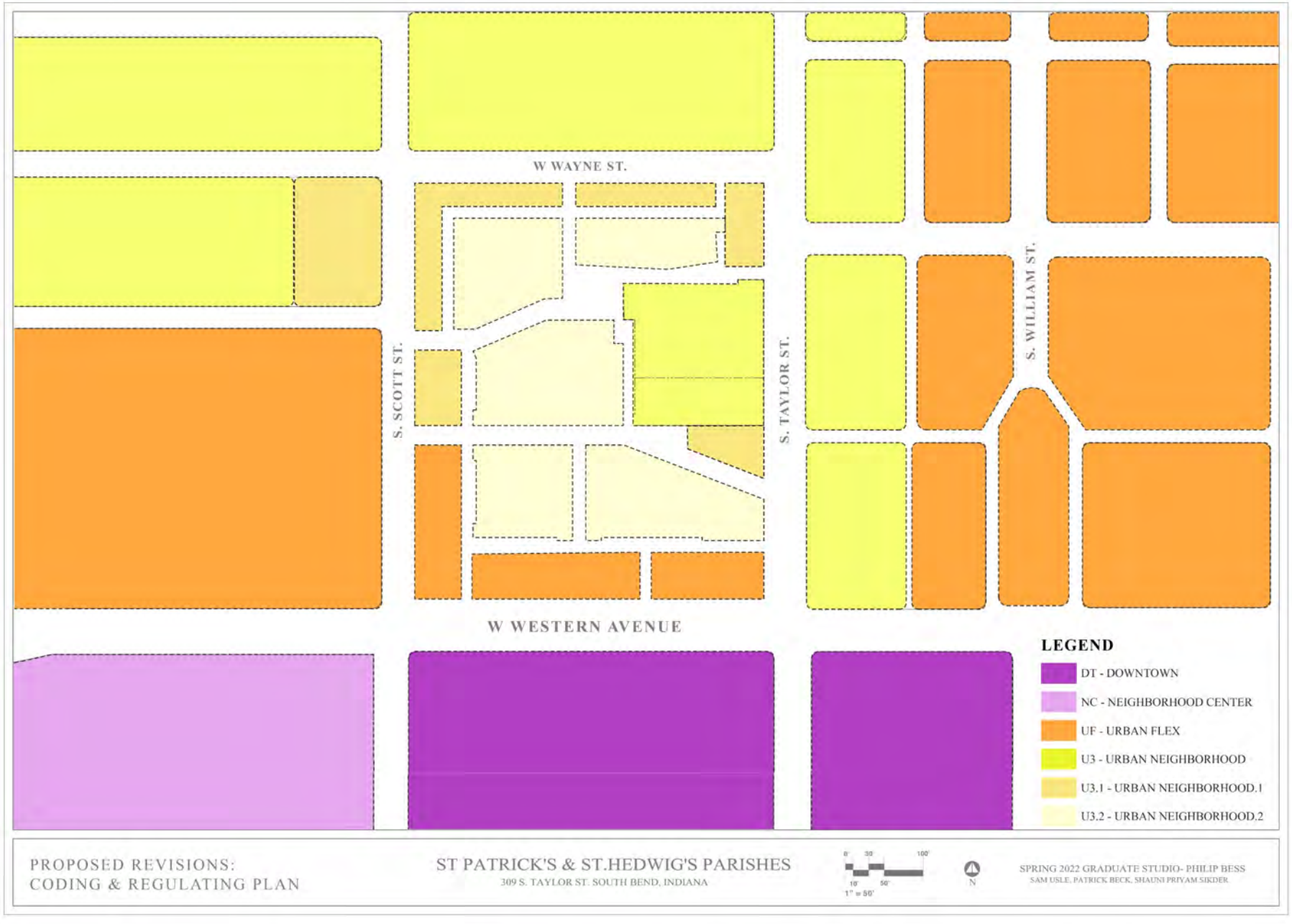








Master Plan Development Phase IV – final buildout (high school and athletic facilities)



Form-based Code Site Regulating Plan
(recently adopted by South Bend, authored by a Notre Dame Architecture graduate)



Internal Block Parcelization and Rights-of-Way



Internal Block Parking – 107 off-street spaces / 63 on-street spaces