Carriage Hills Shopping Center
LA 447 – Juried Design Studio
Michigan State University
Existing Site Conditions
Location Map

- The site is located within Ingham County in East Lansing, Michigan
- The site is part of Meridian Township

Cities within 10 Miles:
- East Lansing
- Haslett
- Okemos
- Lansing
- Dewitt
- Holt
- Bath
Site Map

• The Focus Site located at the corner of Hagadorn and Lake Lansing

• Each Student will select a 80-90 Acre site to “Re-develop”

• Each student’s site will fall within this site map.
Local Bus Routes

- #24 CATA Bus Route
- West Bound Stops
- East Bound Stops
Land Cover

- Single Family Homes
- Business and Retail
- Public Schools
- Carriage Hills Apartments
- Castle Point Apartments
- Edgewood Apartments
- Recreation Areas
- Hardwood Forests
- Farmland
Single Family Housing

• Homes range in size and price range

• All homes in the area serve the two Local Elementary Schools

• Public Transportation is easily accessible along Birch Row Drive
Business and Retail

• The Carriage Hills Shopping Center encompasses most of the Business and Retail within the site

• There are also other various businesses that line Lake Lansing Road

• Many small businesses to the east of the site along Lake Lansing Road
Local Public Schools

- There are two Public School buildings within walking distance of the site
  - Donley Elementary School
    - Kindergarten thru 4th Grade
  - Whitehills Elementary School
    - 5th and 6th Grades
- Both schools feed into the East Lansing School District
Carriage Hills Apartments

- 1-2 Bedroom Apartments

- Also feature 2 and 3 bedroom Condominiums with a basement

- Range in price from $400-$800 per person

- A social event building and pool are some of the amenities provided at Carriage Hill East
Castle Pointe Apartments

• 1, 2 and 3 bedroom apartments

• Rent ranges from $350-$800 per person

• Apartment community amenities:
  • Clubhouse
  • Business Center
  • Various recreational activities
  • Carports
Edgewood Apartments

• 135 Multi-family rentals

• Senior and physically impaired living opportunities

• 6 story high rise one bedroom apartments with a balcony
Recreation Areas

- To the Northwest of the site is the City of East Lansing Family Aquatic Center
- To the East of the site is Walnut Hills Country Club
Hardwood Forests

• Large undeveloped Natural Area to the North of the Site
• Opportunity for hiking trails.
• Good place for bike trails and various recreational opportunities
Open Farmland

• Previously was a Sod farm

• Multiple farm buildings still remain

• Not sure of the farms current uses
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Carriage Hills Shopping Center

• Located at the corner of Lake Lansing Road and Hagadorn Road
• Approximately 12 Acres in size
• No real “Grand Entrance” point
• Many of the existing buildings are currently vacant
• Buddies Pub and Grill is a key component to the shopping center
Gas Station

- Marathon Gas Station
- Tim Horton's
Oil Change and Vacant Building

- Pennzoil Oil Change
- Fitness Center
Shopping Center

- Wok and Roll
- Beauty Salon (Vacant)
- Chiropractic Office
- Vision Center
Option One Credit Union
Vacant Lot
Shopping Center and Buddies

• Buddies Pub & Grill
• Vacant Grocery Store
  • C&H Marketplace
• Hong’s Café
• Frames Unlimited
• Goodwill Drop off Center
Car Wash and Apartments

White Birch Apartments

Sunshine Auto Wash
Parking Zones

Parking Zone 1
Parking Zone 2
Parking Zone 3
Parking Zone 4
Parking Zone 5
Parking Zone 6
Parking Zone 7
Site Analysis
**Core Area Analysis**

**Good**
Access to major roads in five minutes or less on average; presence of power/utility lines; presence of neighborhood amenities

**Improve**
Vehicular movement at intersections (roundabout introduction); bicycle usage availability (roads currently not bike-friendly); vegetation (currently sparse); pedestrian movement; inner-area circulation (no current circle path and only two-sided entrance); public transit access (limited pickup locations)

**Remove**
Median in N Hagadorn Rd; unused/foreclosed buildings
Eastwood Town Center (<3 mi):
*7 min by car, 14 min by bike
I-127 (<3 mi):
*6 min by car
Saginaw Highway (<1 mi):
*2 min by car, 4 min by bike

MSU Campus (2.5 mi):
*6 min by car, 15 min by bike
Meridian Mall (<5 mi):
*8 min by car, 25 min by bike
Existing Shopping Centers in Surrounding Communities
Existing Shopping Centers in Surrounding Communities

- Carriage Hills
- DeWitt
- Bath
- Lansing
- Meridian Township
- East Lansing
- Holt
Bath, MI

- Carriage Hills
- Bath Main Street
- Friendly Corners: Outdoor strip mall
- Chandler’s Crossings: Outdoor strip mall
- Monticello’s: Specialty food store
- Meijer
Dewitt Charter Township, MI

- Carriage Hills
- Meijer
- Clarks Corner shopping center
- Mega Mall
- More for Less Grocery Shopping Center
- Main Street
Meridian Township, MI

- Carriage Hills
- Jolly Oak Center: strip mall
- Meridian Crossing: strip mall
- Meijer
- Meridian Mall
- Meridian Towne Center
- Central Park
- Haslett Village Square: strip mall
- Shop Town: strip mall
- Haslett Commerce Center
Holt, MI

Carriage Hills: 20 minutes to Holt

Cedar Park Shopping Center

Delhi Village Square

Holt Plaza
East Lansing, MI

- Carriage Hills
- Meijer
- Kroger
- Grand River
- Brookfield Plaza
- Hannah Plaza
Housing
Housing

Present to Future:

Legend
- Development Area
- Medium-Sized Homes
- Large-Sized Homes
- Apartment Complex/Condominiums
- Small-Sized Homes
Small-Sized Homes

- Siding exterior
- Usually no garage
- Small yards
- Older homes
Apartment Complexes And Condominiums

Whitegate Lane Condominiums

East Glen Apartments

- Condominiums: nice community with private drive
- Brick exterior apartments
Apartment Complexes And Condominiums

- Average Apartments
- Some covered parking
- Balconies
- Carriage Hill Apartments (Not Shown)

Castle Point Apartments
Medium Sized Homes

- Built in the 1980’s
- Mostly siding exterior with some brick
- Pull in garage
- Average yards
Large Homes

- Rudgate Hills Community
- Newer homes
- Brick exterior on multiple houses
- Secluded
- Winding roads
- Substantial yards
Future Development

Mixed Use Development

Benefits:
• Greater housing variety

• More affordable housing

• Access to fresh, healthy foods (grocery stores and farmers markets can be accessed on foot/bike or by transit)

• Stronger neighborhood character, a sense of place is created

• Walkable, bike-able neighborhoods/increased accessibility to transits

Apartments above shops
Trails and Pedestrian Connections
Trails and Pedestrian Connections

- Green Line shows current streets with pedestrian sidewalks
- Red Line represents the Northern Tier Trail end point at Towar Ave.
- Blue Line shows an onsite air/drainage way
Differences in Pedestrian Flow

- Main pedestrian flow is down Lake Lansing Rd. and other side streets (busy and sometimes unsafe)
- No connectivity between neighborhoods/apartment complexes
- No connectivity to nearby public hotspots such as MSU or Eastwood Town Center
- Solutions could be close by...
Northern Tier Trail Map

- 4.5 miles of paved trails
- 10ft wide surface creating room for bike and pedestrian traffic (30ft-40ft buffer zone from roadways and buildings)
- Non motorized traffic connects many East Lansing Neighborhoods as well as 8 local parks and recreation facilities
- Protective buffer zone for the Sanderson and Remy Chandler Drainage ways
- Accessible year round by 5 public parking lots
Trail and Drainage Connections

- Unused woodland area could create an ideal addition to the Northern Tier Trail
- Safer connectivity from Towar Ave. to the Carriage Hills Shopping Center, surrounding neighborhoods, parks, schools, and a struggling Walnut Hills Country Club
- Could create a protective buffer for the onsite drainage way
Other Successful Connecting Trails

Lakeshore Trail System
- Connects Grand Haven to Holland

Little Traverse Wheelway
- Connects Harbor Springs to Charlevoix
Site Circulation
Site Circulation

• Modes and associated conflicts
  ▫ Vehicle, Bicycle, and Pedestrian traffic need to be separated to promote safety.

• Problems
  ▫ Bicycle traffic is limited to either unmarked roadways or narrow sidewalks
  ▫ Crosswalks lack proper safety pavement markings and ADA warning plates
  ▫ Adjacent neighborhoods and living complexes need central unifying attractions to promote circulation and interactions

• Parking
  ▫ Implement green space and vegetation to break the impact of sheet pavement

• Enhancements
  ▫ Redesign sidewalk routes and improve their association to the outlying neighborhoods and on site renovations
  ▫ Add designated bike lanes to primary roadways
  ▫ On site greenway corridor connecting to existing East Lansing Trail System

• Nodes (See map)
Site Circulation
Storm Water Management

Carriage Hills and Towar Gardens neighborhood
John Gundry
Towar Rain Garden Drains

Low Impact Development project
Implemented by Ingham county drain commissioner Patrick Lindemann
The Neighborhood needed to update old storm water drainage pipes
Very flat area with nowhere to drain
Instead of traditional system LID cleans water naturally
Half the price to tax payers
Completed December 2007
Impacts of Impervious Surfaces on the Land

Land that would normally absorb and slow storm water now accelerates it

- **increase in stormwater runoff,**
  - Causes, increased flood frequency and can decrease base flows (Wang et al., 2001),

- **Increase in the velocity of storm water runoff.**
  - Causes increased erosion, instability of stream channels, increased sediment loads, and degradation of fish habitat (Booth and Jackson, 1997).

- **stormwater has a large number of pollutants**
  - road salts, nutrients, oxygen demanding substances, pathogens, petroleum hydrocarbons, heavy metals, and excess thermal energy (USEPA, 2005).
Low Impact Development (LID)

• Low Impact developments (LID) are designed to detain store, infiltrate, or treat urban runoff, and so reduce the impact of urban development (Elliott and Trowsdale. 2005)
• There are many available options for Low Impact Development
• Green roofs, Green Walls, Permeable paving, rain gardens, stormwater storage, detention/retention basins
Site Context

- The site is located in the looking glass river watershed
- All manipulation of land within a watershed has a direct effect on the that surface water within and down stream of that watershed
- Looking glass empties into the Grand river which empties into lake Michigan
- Improvements in water quality on our site will improve the Great lakes, the Grand River and the Looking Glass river
Recyclable, Renewable, and Reusable Materials
Recyclable, Renewable, and Reusable Materials

- Concrete
- Glass
- Metal
- Trees
- Shrubs
Streetscapes
Streetscape Existing Conditions

Core Site Relatives
- To neighborhood communities in the North portion (East of Core site)
- Sidewalk street perspective (South of core site)
- Crosswalk (Southeast Corner)
- In Plaza streetscape (Near by retails)
- Signage
Streetscape Existing Conditions

Other relatives and site details
- Lake Lansing Rd. Extension
- Road side vegetation
- Neighborhood housing
- Bus Stops
- Telephone Pole
- Pavement
Lighting
Paving

- Porous pavement
- Different types of pavement combinations
Crosswalks

- Crosswalks and Safety Islands
- Bulb-outs
Signage

- Way-finding signage
- Regulatory signage
- Place identity signage
Bus Stops
Green Space

• Bioswale
• Rain Garden
• Plant Diversity
Site Furniture

- Bike Racks
- Benches
- Trash Recepticals
Sidewalks and Bike Lanes

- Separated Sidewalks and Bike Lanes
- Heated Sidewalks
Telephone Poles

- Repainting
- Bury wiring
- Cleaning
- Redesigning
Questions For You...

- What kinds of things are you looking for within the new Carriage Hills Shopping Center?
- Is there anything the surrounding area needs?
- Is there a desire for an outdoor gathering space?
- Would a new park get use?