Setting the BAR IN LAFAYETTE Southside High School Youngsville Community

LEBLANC

SOUTHSIDE HIGH SCHOOL

PROJECT

LEED & CAREER PATHWAYS

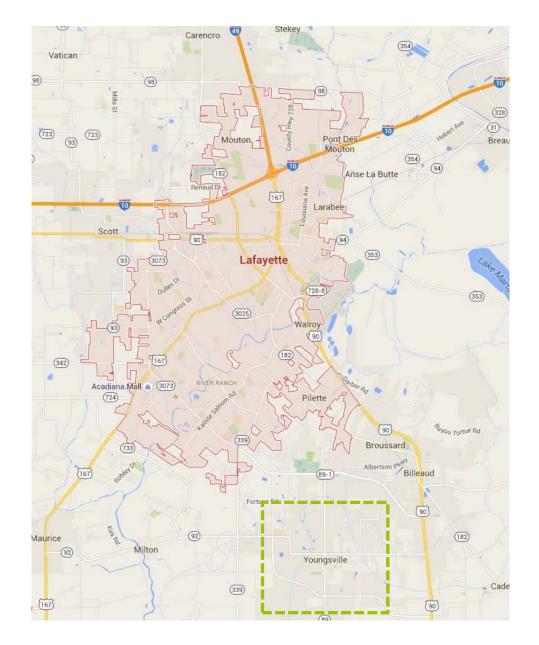
COLLABORATION & ENGAGEMENT

CMR & FAST TRACK

MAKERSPACE

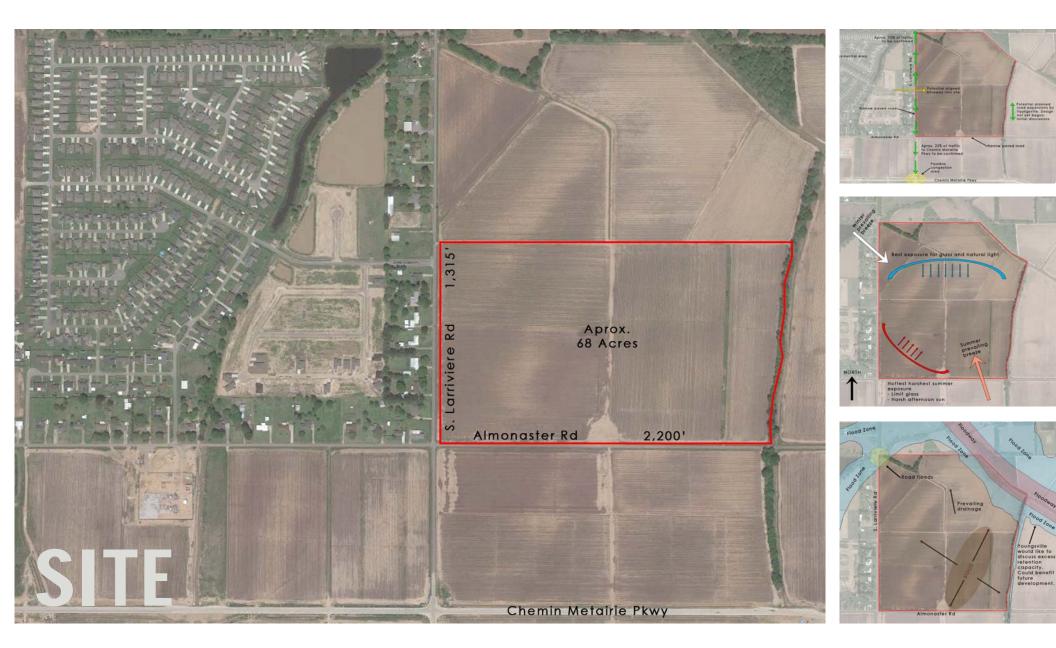
THE FACTS

68 MILLION DOLLARS 256,000 SQUARE FEET **PHASE I - 1,400 STUDENTS PHASE II - BUILDOUT FOR 2,000 STUDENTS 68 ACRES** LEED CERTIFIED **JOINT-VENTURE/FAST TRACK/CMR**





SITE



Lafayette High School







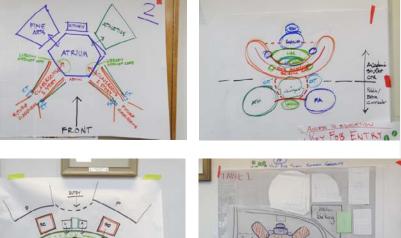
Acadiana High School



EXISTING SCHOOLS



DESIGN IDEAS CHARRETTE DAY 2



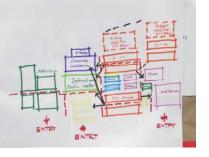






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NNOVALIVE LEAFNING DESIGNS



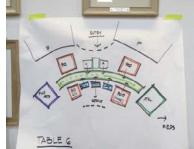
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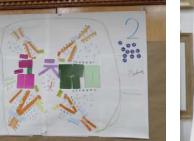
TABLE

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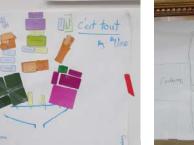


A12



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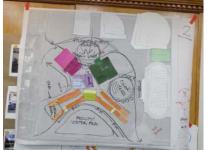
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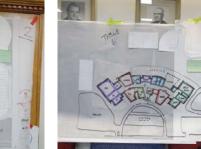


ABIE#-







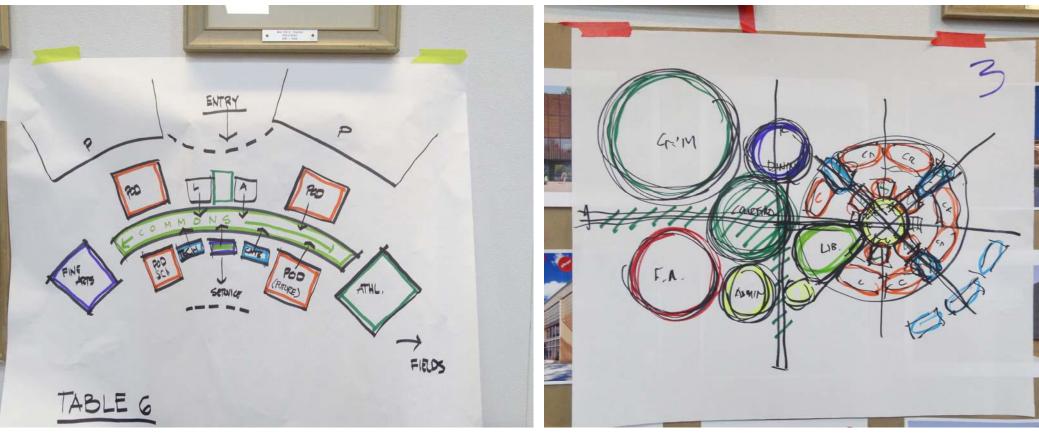


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MAIN STREET

COMPACT PLAN

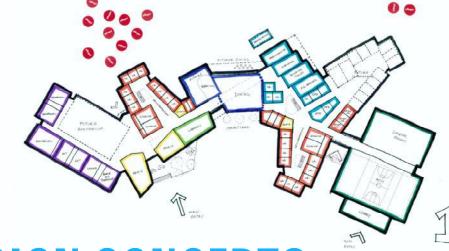


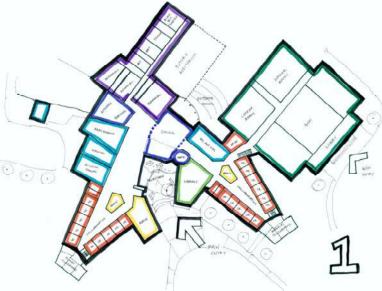






FINAL DESIGN CONCEPTS





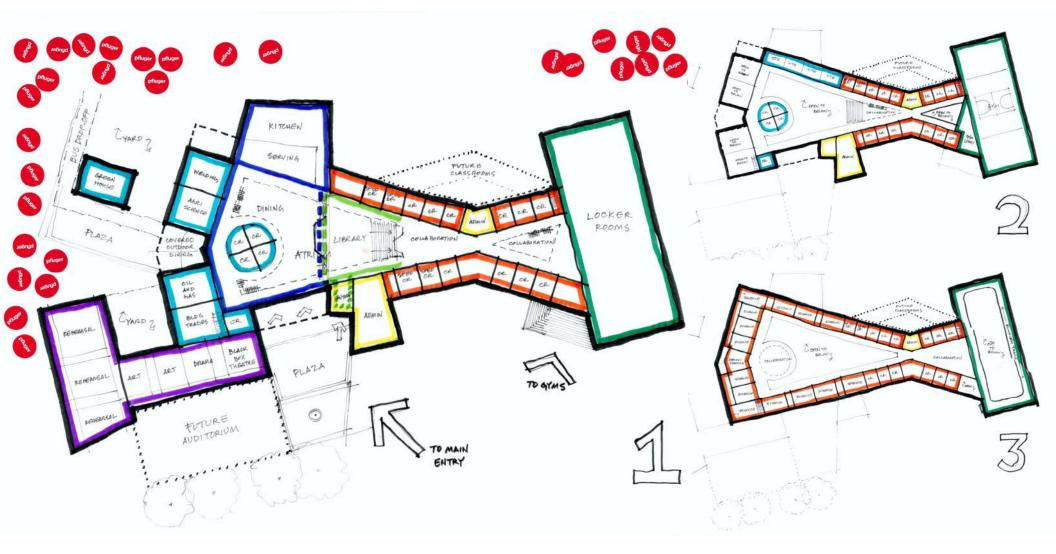


MAIN STREET

TABI

FIELDS





FINAL CONCEPT SKETCH

REVIT MODEL – FIRST FLOOR PLAN



DISCUSSION OF A LEED SCHOOL DESIGNED TO ENCOURAGE STUDENT PARTICIPATION IN CAREER PATHWAYS.

- Why Energy, Agriculture and Natural Resources; community influence
- How career pathways were integrated into the school
- Challenges associated with LEED
- CTE front and center for exposure to students
- Fast-track created challenges for LEED
- CMR approach and philosophy regarding LEED; points compromised
- Statewide challenges associated with recycling
- Integrated arts and CTE for collaboration on projects
- Us and them analogy regarding CTE; visibility into workshops







Career Pathways Career & Technology Education

- Community influence on CTE programs
- Career pathway integration
- CTE forefront for exposure to students
- Collaboration through CTE and Arts integration
- Visual connection to CTE workshops

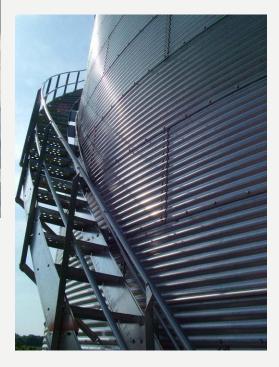


LEED Goals

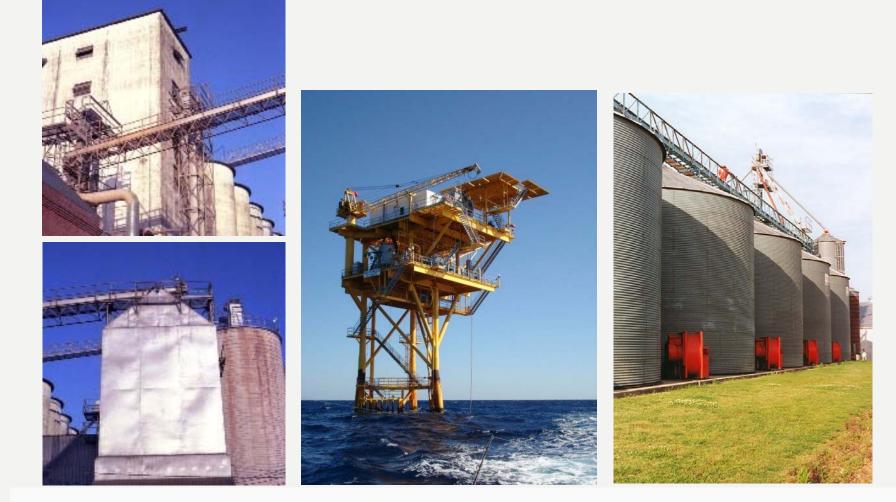
- Challenges associated with LEED
- Local trade familiarity with process
- Regional limitation with construction waste recycling
- LEED related to Fast Track project delivery
- Introduce LEED integration early in bidding process to ensure compliance with requirements and cost



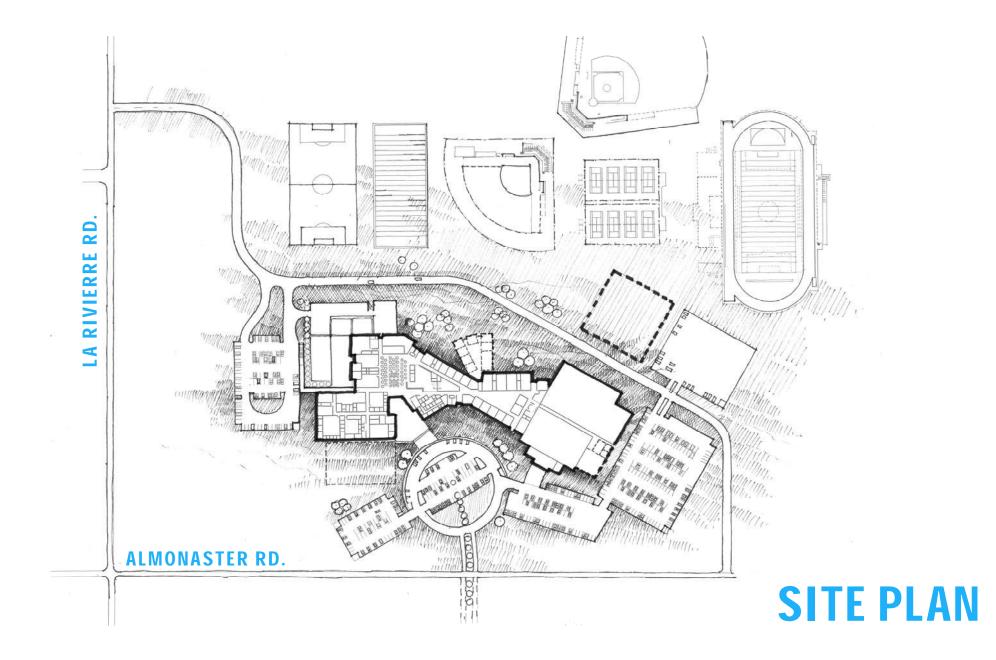


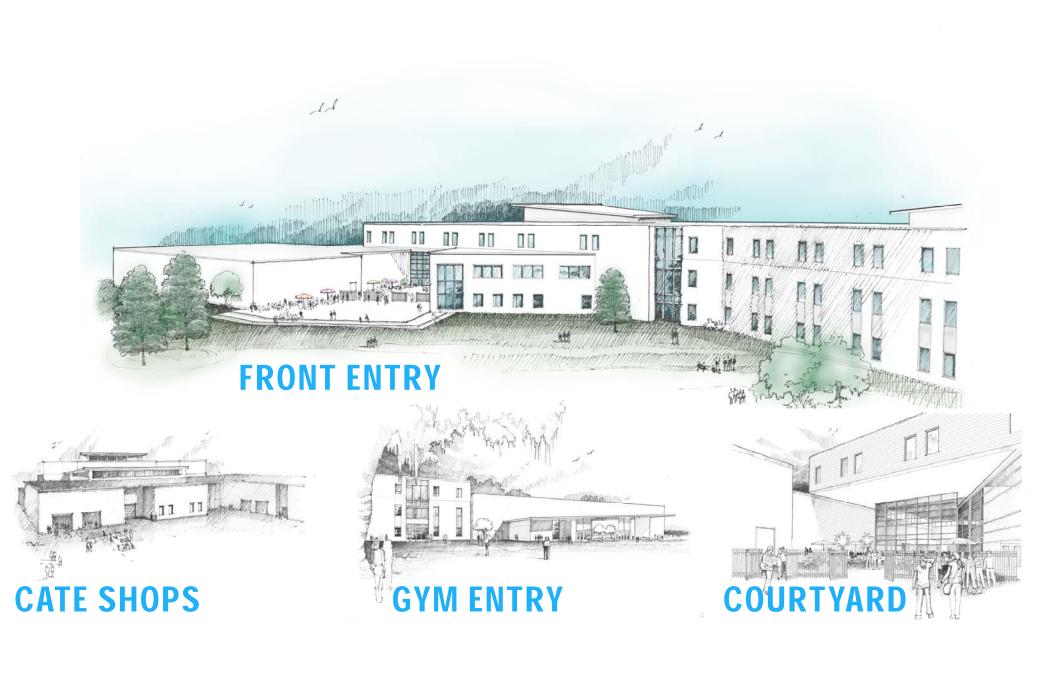


EXTERIOR CONCEPT IMAGES



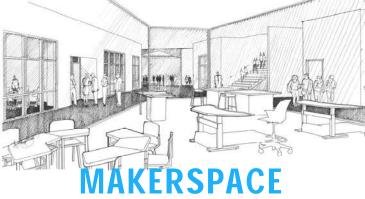
EXTERIOR CONCEPT IMAGES







TEACHER RESOURCE CENTER







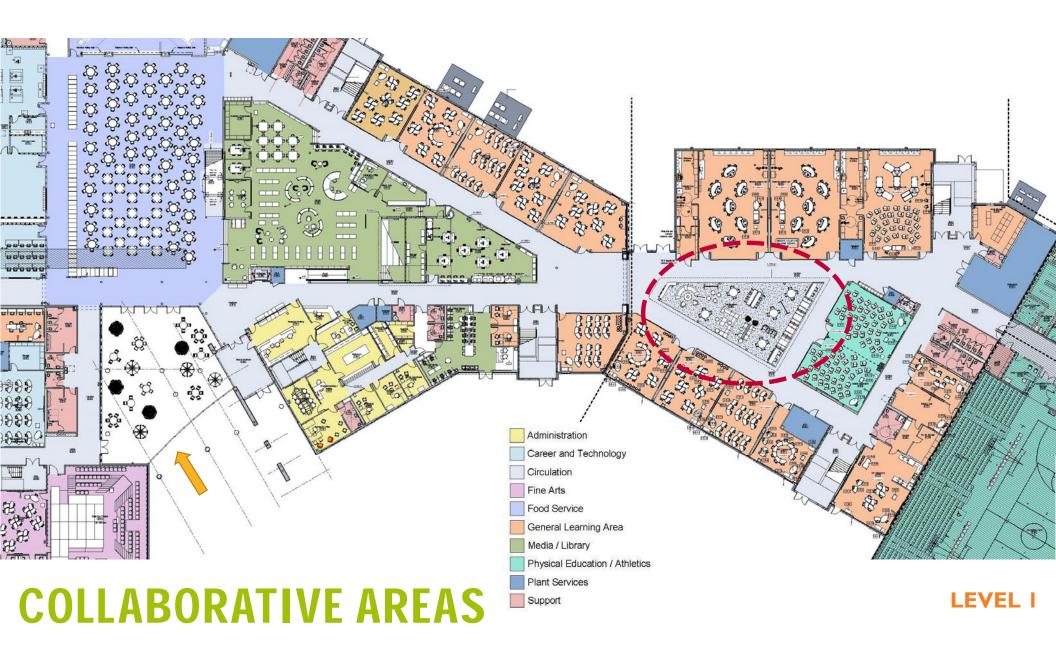
DISCUSS THE ORGANIZATION OF A CAMPUS TO PROMOTE COLLABORATION AND ENGAGEMENT.

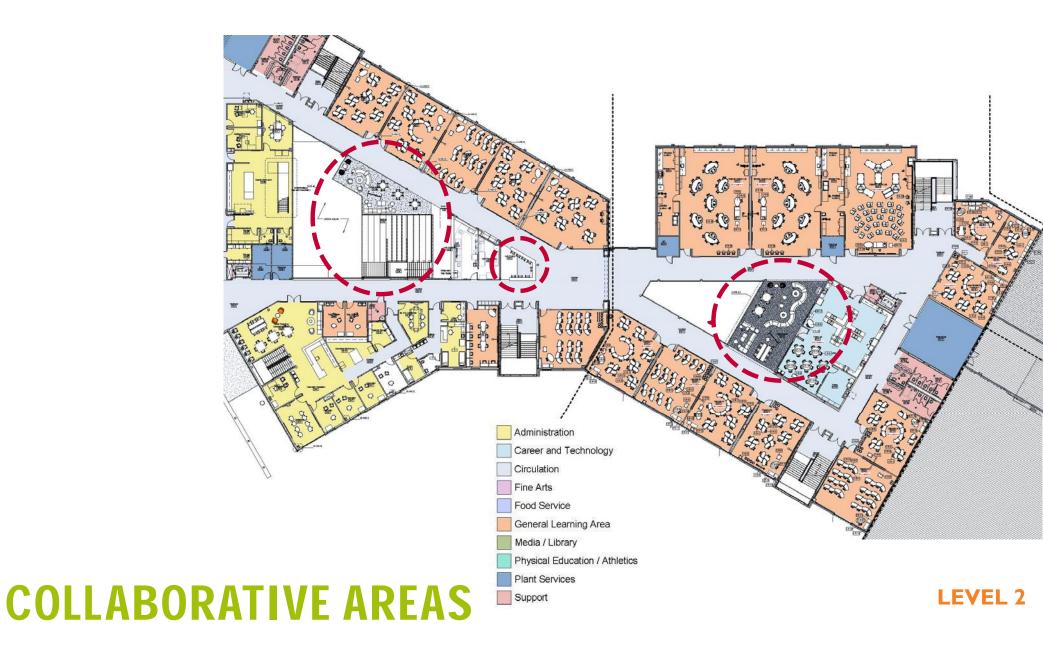
- Provide opportunities for interaction of students (and staff)
- FF&E selection; built for collaboration and mobility
- Opportunities for spontaneous learning, incidental and independent study, brainstorming
- Appeal to the students in classrooms; students are facilitators
- Transparency (safety, improves behavior of students and staff)
- Mobile environment, I:I devices both students and staff
- Create an advisory board with community involvement; collaboration that extends beyond the school and goes into the community; Town Hall meetings, etc.

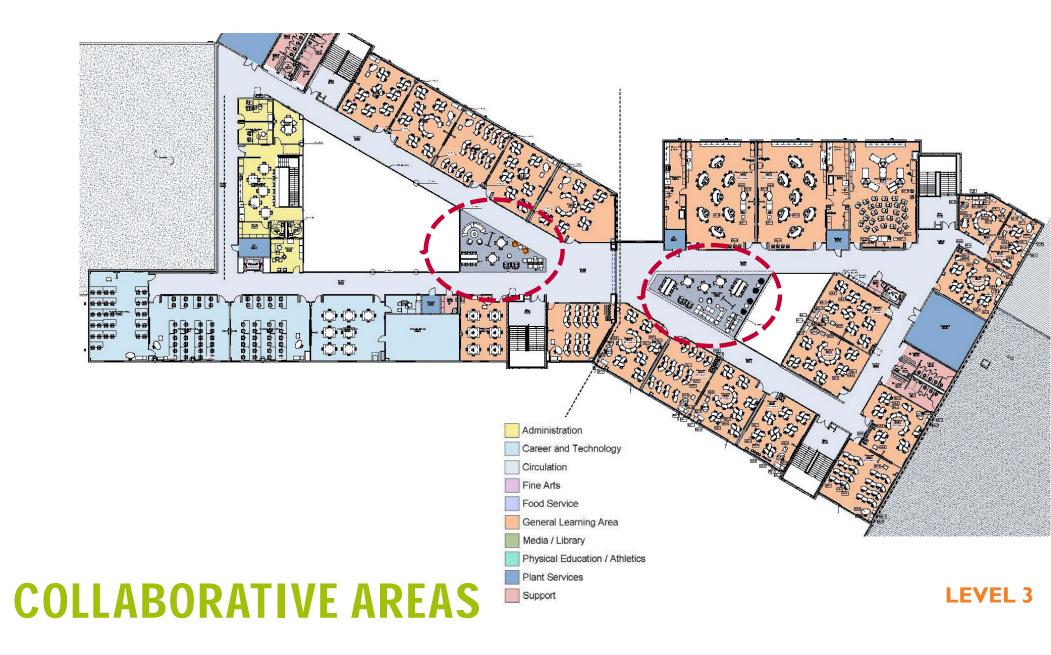




FLOOR PLANS











DEMONSTRATE HOW A CMR DELIVERY METHOD CAN BE SUCCESSFULLY UTILIZED TO FAST-TRACK CONSTRUCTION.

- Provide schedule of packages released; juxtapose original vs now
- Design and construction overlap discuss challenges
- Discuss history of CMR with public projects in LA (no precedent); why best for LPSS
- Initial thoughts still under construction; how it has evolved
- Fast-track issues; schedule affected everyone; decision making
- LPSS time and leadership commitments; good team with Lemoine
- Everyone engaged from 30% DD; SD would have been better
- Premium more for fast-track than for CMR; quality of final project
- What would you do differently? Started sooner?
- Green light on project from LPSS, how many months it took
- Any advice? Put the FF&E in CMR? USDA funding factor requires open competition; openly bid technology package

CM-AT-RISK & FAST TRACK

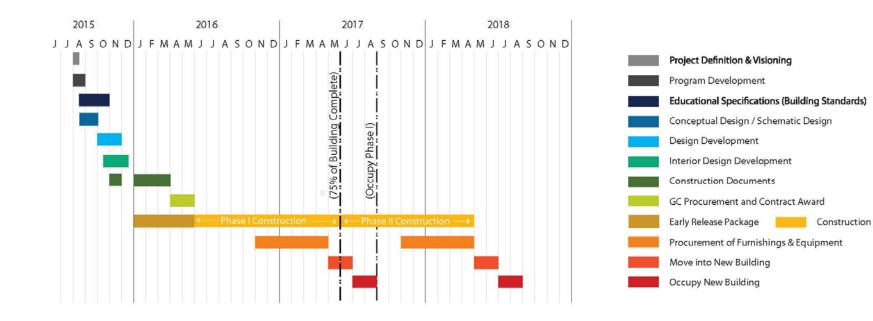
- 3 year project timeline compressed into 22 months
- First Design Workshops held August 2015
- CM-at-Risk engaged November 2016 (began releasing pricing packages)
- GMP issued March 2016

 Site work & deep foundation early release packages issued March 2016

- Construction began (site work) May 2016
- Permit set issued June 2016
 - CD's completed August 2016 (including all early release packages)

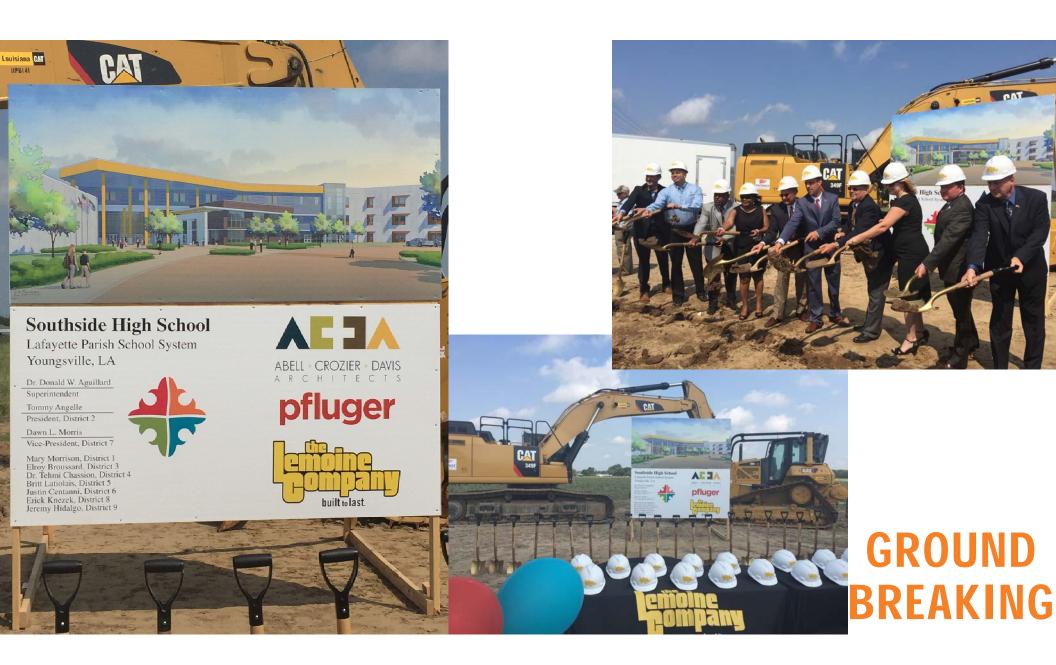


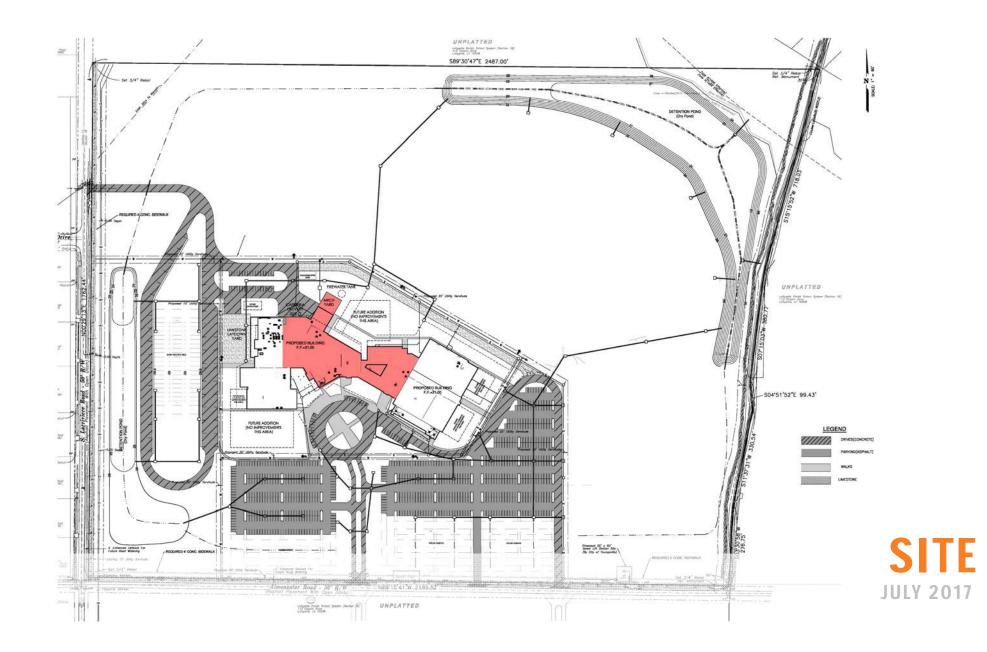


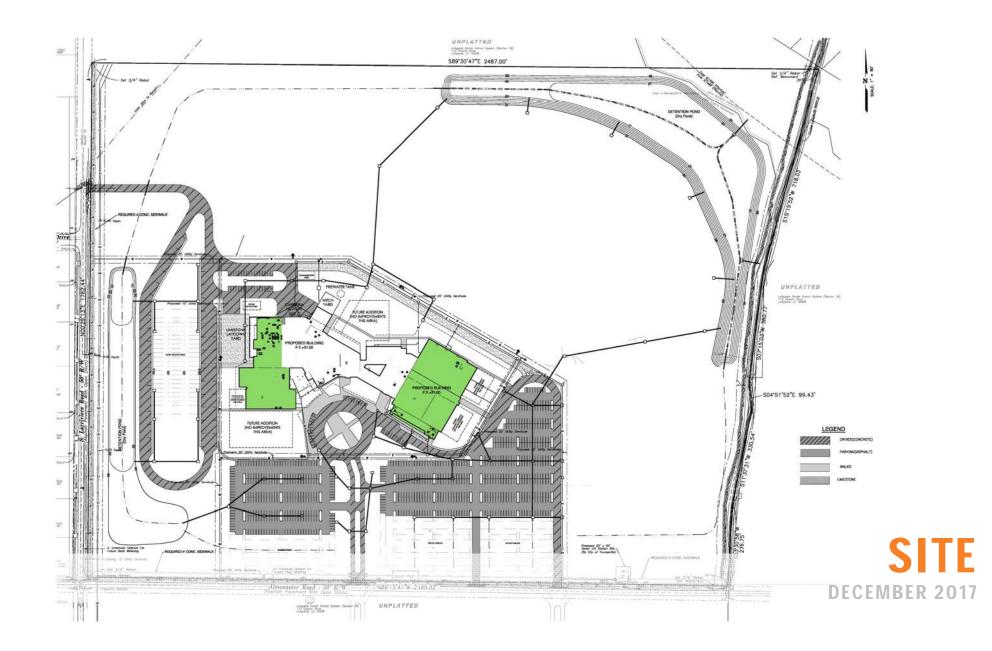


- CMAR Design input in design for phasing
- Organize Program and Design Charrettes to jump start process
- Early release of site, infrastructure, building pad and possibly structure
- Phase development to accommodate 9th and 10th grade by Fall '17

SCHEDULE





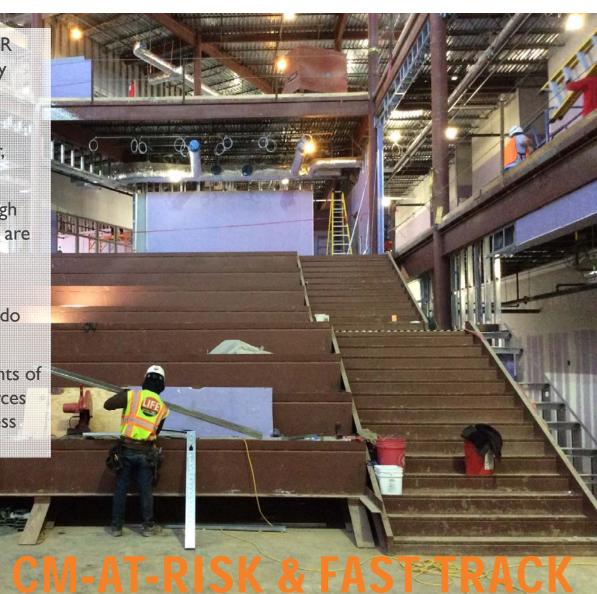


- Optimal if all parties engaged during Schematic Design
- Assisted LPSS with writing contracts
- Challenges of parallel design & construction
- Architect's office organized into 2
 - studios design &
 - construction



Why was the CMR process chosen by LPSS?

- Why did you, as Facilities Director, prefer CMR?
- After going through the process, what are your thoughts on project delivery?
- What would you do differently?
- Know requirements of your funding sources early in the process



HOW DO YOU BUILD A 256K SF HIGH SCHOOL IN 18-MONTHS?



What is a Makerspace?

- Current trend in 21st century K-12 schools and higher ed
- Needs a champion that is an engineer/scientist type
- Place where students can research, invent, create, and learn
- Curriculum designed to support use (Genius Hour elective); projects that require it
- Students use physical and virtual tools to create things
- Feature a variety of equipment
 - No set list
 - High tech and low tech
 - Physical and virtual



Although there's no set equipment list, what's some common equipment found in these spaces?

Fabrication:

- 3D printers
- Laser cutting machines
- CNC milling machines
- Sewing and embroidery machines

Circuitry and coding materials:

• Makey-Makey, littleBits

Physical Computing:

- Arduino boards
- Raspberry Pi
- Robotics

Programming

Other Basic Stocks:

- Legos / blocks
- Electronic parts and tools (ex. LEDs, soldering iron, wire, copper tape, resistors, capacitors, conductive paint, etc.)
- Computers, cameras, software (caBles, green screen, video camera, microphones, headsets, etc.)
- Craft and art supplies (ex. Rubber bands, paper clips, scissors, duct tape, modeling clay, glue gun, etc.)
- Building materials and traditional tools (ex. wire cutter, strippers, small pliers, etc.)
- Junk (ex. old phones, televisions, unwanted electronics, etc.)

What are some items that should be considered when building a formal space?

Location:

- If it can be built near a shop class, this is important because shop teachers often have more tools that can be integrated or utilized for students' projects. It may not be feasible to build this space directly next to the library; however, it would be great to make the transportation of a project easy between these locations.
- Laser cutting machines work best if you can ventilate them outside

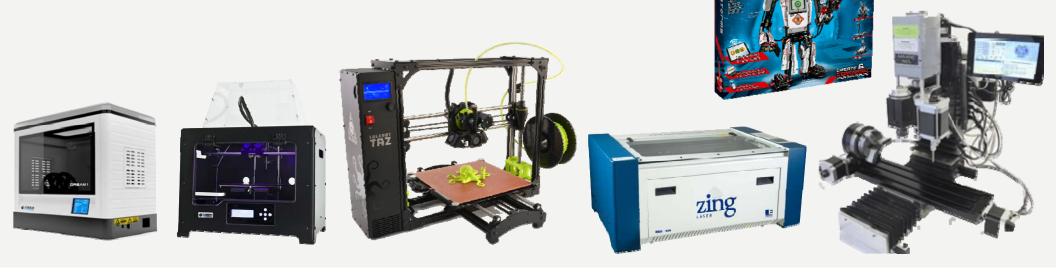
Flooring: projects can get messy; use flooring that is easy to clean (possibly avoid carpet)

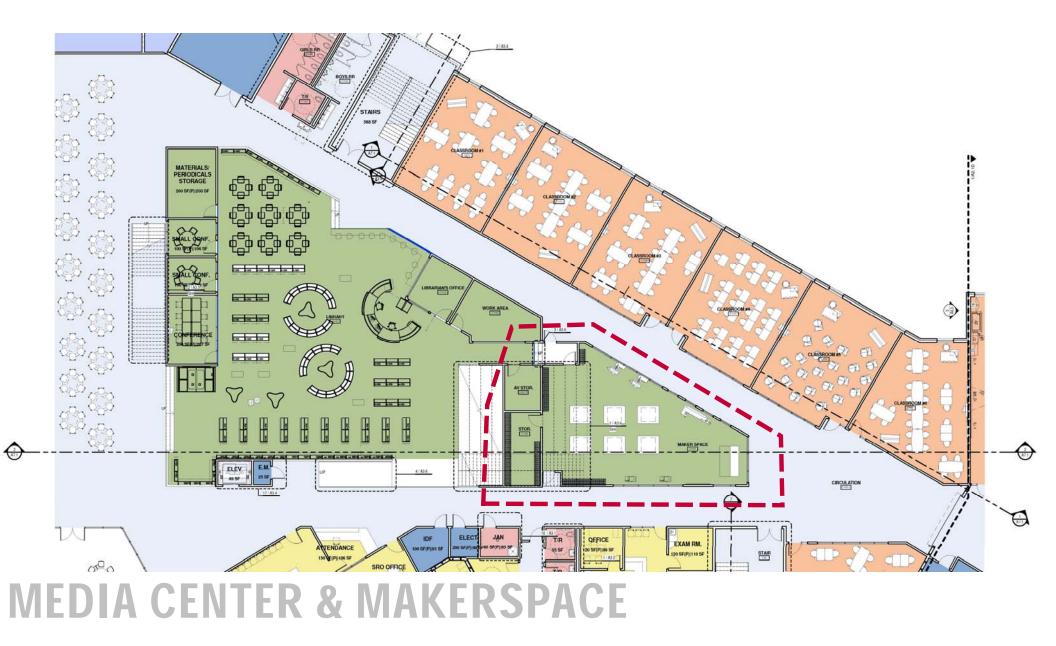
Storage & Furniture:

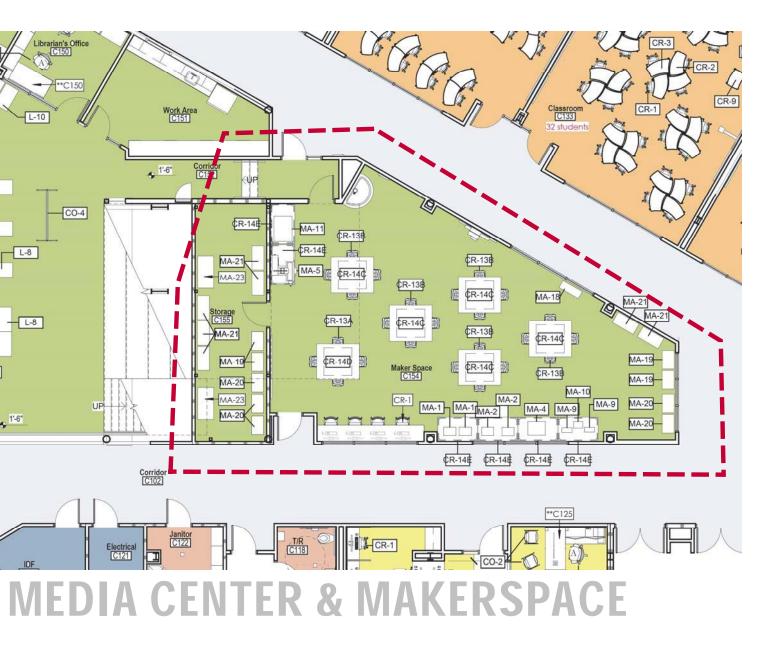
- some storage space is necessary (have bins to account for small parts and cabinets for other materials / tools)
- Have a space to store in progress projects
- Need clearly defined areas for equipment- some equipment will connect to computers or laptops for design purposes

What are some other features to have that would be nice for this space?

- Writable walls or surface projects require planning, thinking, and collaboration. It would be good to have a space where students can work through the design cycle
- Smart TV or Active board
- Collaborative space for design cycle or individual planning spaces







What's included in the Southside High School Makerspace?

| CR-I | Computer Chairs |
|--------|----------------------------|
| CR-13A | Stools |
| CR-13B | Stools |
| CR-14C | Student Tables |
| CR-14D | Student Tables |
| CR-14E | Student Tables |
| MA-I | 3D Printer |
| MA-2 | 3D Printer |
| MA-3B | Filament |
| MA-3A | Filament |
| MA-4 | 3D Printer |
| MA-8 | Mill |
| MA-5 | Filament |
| MA-6 | Filament |
| MA-7 | Extruder Tool |
| MA-9 | Sewing Machine |
| MA-10 | Embroidery Machine |
| MA-11 | Laser Cutter |
| MA-12 | Robotics |
| MA-13 | Electronic Building Blocks |
| MA-14 | Electronic Building Blocks |
| MA-15 | Electronic Building Blocks |
| MA-16 | Electronic Building Blocks |
| MA-17 | Electronic Building Blocks |
| MA-18 | Vinyl Cutter Machine |
| MA-19 | Storage Cabinet |
| MA-20 | Storage Cabinet |
| MA-21 | Storage Cabinet |
| MA-22 | Caster Kit |
| | |

