Uplifting the human experience®

Cuningham



WELCOME!

Design Advisory Team Meeting 01

February 1, 2024

BOULDER TEC

Design team / Cuningham



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FCI Constructors, Inc.



AGENDA

- WELCOME! / INTRODUCTIONS
- COMMUNICATIONS
- SUSTAINABILITY
- PARAMETERS
- OVERVIEW OF CTE
- VISION OF BOULDER TEC
- HIGHEST HOPES
- PACKING FOR THE FUTURE
- APPRECIATION + NEXT STEPS

BUILDING FOR STUDENT SUCCESS
BOULDER VALLEY SCHOOL DISTRICT



Design Advisory Team

Guidelines

DAT Guidelines

- Advisory in nature
- Assists the project architect understand the user's needs
- Provide input during design
- Represent the school community during meetings with architect + team
- Serve as an informal liaison with the school and community by sharing progress and communication
- Have fun!

Communications

Sustainability

Green Building Guiding Principles

1. BVSD has a strong commitment to sustainability and goals which are supported by Board policy and outlined in detail in the District's Sustainability Management System and Sustainable Energy Plan. This document provides an overview of relevant areas for building and construction on BVSD sites, but is not comprehensive. Please review the technical specifications for more detail.

2. All **new schools** and buildings will be designed to meet **LEED v. 4.1 GOLD standard**. In addition, new buildings will be designed as zero net energy or zero net energy ready, targeting a site EUI of 18.7 for primary schools and 19.0 for secondary schools.

3. All projects will be designed to maximize LEED points for Indoor Environmental Quality. All projects will target a CO2 (ppm) of <1200 for occupied spaces. (ASHRAE Standard 62 recommends carbon dioxide (CO2) concentration 700 ppm above the outdoor concentration as the upper limit for occupied classrooms (usually around 1,000 ppm)).

4. Schools identified for **deep energy retrofits** will reduce existing average kBtu/SF to the following levels, which represent an average reduction of approximately 50%: § secondary schools: 40 kBtu/SF § elementary schools: 35 kBtu/SF.

5. **All remaining projects will target a 20% reduction in energy use , or target 55 EUI (whichever is less)**. Other upgrades intended to boost sustainability include installing LED lighting in some locations, particularly gyms; replacing old, inefficient boilers with efficient models, replacing windows and installing pipe insulation. All projects call for energy modeling as well as commissioning of mechanical systems upon completion to ensure all systems are performing optimally. **New roof structures will be designed to be solar ready.** All projects will design and plan for future integration of renewables.

6. All projects will push **water efficiency** beyond code requirements and will decrease water consumption by 5% Kgals. Focus on local stormwater management; plumbing improvements based on design standards; use of independent meters for irrigation meters; landscape design and green school yards to optimize evapotranspiration irrigation systems; and use efficient and life-cycle costing to evaluate design choices and options.

https://docs.google.com/document/d/1y6lTfxSpzhoWdygjejaSHZuDUyMy-5urf8-oDoje5Uk/edit

7. Where these alternatives exist, all projects should use **materials** that are durable, repairable, and reusable or recyclable; limit toxins and indoor air pollutants; are made with high postconsumer recycled content; and are resource and energy efficient in their manufacturing, use and disposal.

8. All projects will target a **75% diversion rate for construction waste**. BVSD will provide contacts and priorities for waste reduction, collection and removal.

9. All projects will consider access to the site by all modes of transportation, with preference for **sustainable modes of transportation** including biking, walking, carpooling and busing. When redesigning existing sites, where reasonable, we will increase accessibility for sustainable modes of transportation including biking, walking, carpooling and busing. During any project, where reasonable, will will add infrastructure to support electric vehicle charging and bicycling (e.g. bike racks).

10. Projects should **support our educational mission** by striving to incorporate teachable moments such as lessons about the construction work in the school and energy efficient or sustainable features; designing features that teach, such as a truth wall; and including student groups in the design and construction process.

11. **Creating outdoor classrooms, access to outdoors and access to natural light** supports our sustainability goals. It is BVSD's goal that by 2026 all elementary schools will have green schoolyards and outdoor learning spaces that may include but are not limited to gardens, nature play areas and access to natural habitat. All secondary schools will have increased outdoor seating and shaded areas. The use of landscape plantings that require treatment with systemic pesticides, especially neonicotinoids, or have been pretreated with these pesticides is not allowed.

Parameters

WHAT WE KNOW

PARAMETERS

- Construction budget is ~ $19M
- Design will be through fall 2024
- Construction will start spring 2025 and complete fall of 2026
- Focus is on the Boulder TEC program
- Some areas will have light to no scope. Some areas will be heavy renovation.



Investing in our Schools

BOULDER VALLEY SCHOOL DISTRICT



Arapahoe Ridge High School

Boulder TEC

Boulder Universal

6600 E. Arapahoe Avenue | Boulder, CO 80303

Gross Square Footage: 144,313 sq. ft.
Original Construction Date: 1965
Estimated Project Budget: $3,620,000*
**Final budget will be determined during the design phase.*

Overview of work to be completed:

Building Systems	• Replace deteriorating HVAC, electrical, & plumbing systems components to avoid potential system failure • Update obsolete HVAC controls • Replace kitchen dishwasher
Safety/Code	• Address various ADA needs • Install fire suppression system
Interior Space Improvement	• Interior finish improvements such as flooring, paint, and ceilings • Renovate select restrooms to be ADA compliant
Career & Technical Education Improvements	$21.45M will be invested in renovation at Boulder TEC to modernize current spaces to transform them into more accurate industry environments that mimic what students will experience in the workforce.

Project Parameters

Deferred Maintenance

All Together for All Students

BOULDER VALLEY SCHOOL DISTRICT

CAREER TECHNICAL EDUCATION **MASTER PLAN**



RE-ENVISIONING
CAREER TECHNICAL EDUCATION

FALL 2023

DLRGROUP

Project Parameters

CTE Master Plan

Project Parameters | CTE Master Plan

The design components include:

- *Brand Identification at the “front door” that celebrates a true connection between education and industry as described in BVSD’s Grad+ initiative. Investing in a new front door and welcoming visitors into new state of the art facilities will motivate students, staff, industry partners, and the community to expect great things from BVSD CTE.
- Provision of *Experiential Graphics that reflects the enhanced programs of each school within the overall context of the Boulder Valley economy. This commitment at Boulder TEC will provide a visible symbol that all BVSD high schools are connected through CTE.
- Enhance the recently renovated Commons Area so that it can connect with all BVSD high schools and support learning on display.
- Enhancing existing spaces and places based on program clarification and curriculum development. (Each pathway space should be programmed to be flexible and adaptable for long term use.)
- Connecting pathways to circulation and core curriculum both visually and programmatically.
- Provision for new low and high-density labs that reinforce Boulder TEC’s ability to connect to industry.

Project Parameters

CTE Master Plan



Phase 1:
Main Entry Branding and New Commons

Phase 1 will support a dedicated branding effort that creates an immersive and cohesive point of entry for Boulder TEC students and visitors. Entry renovations will include exterior signage. On the interior, the existing administrative suites and adjacent rooms are to be converted into a new, collaborative I-Commons space. The administration will shift to a newly renovated location adjacent to the I-Commons. The remainder of the work on Level 01 is dedicated to renovating the existing IT and Digital wing of the building, as seen on the Phase 1 plan diagram following.

Phase 1:
Access to Outdoors

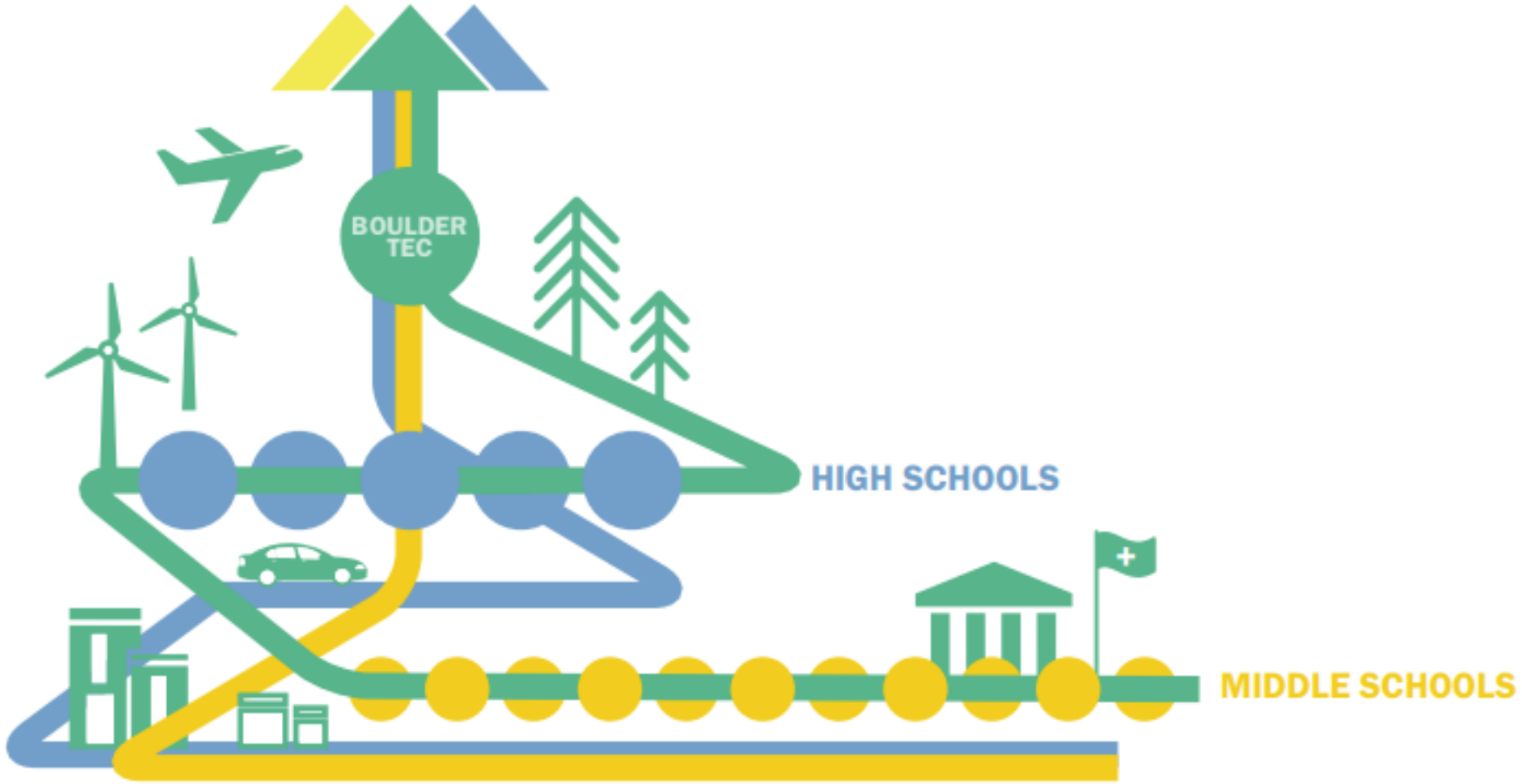
The Phase 1 work on Level 02 focuses on expanding the I-Commons space up into the existing Level 02 commons; this will expand opportunities for collaboration and support a sense of visual wayfinding. From the I-Commons, wayfinding continues into the corridors of the main academic portion of Boulder TEC through the introduction of new collaborative spaces at major intersections, as seen on the Phase 1 plan diagram following. Phase 1 also includes provisions to expand access to the outdoors in the perimeter shop classrooms.

Overview of CTE

BOULDER VALLEY SCHOOL DISTRICT

District Leadership

CAREER TECHNICAL EDUCATION



CTE Pathways Next Steps



Finalize BVSD CTE branding and renaming the TEC Center



Convene school Design Advisory Teams for CTE bond construction



Establish Industry Launch Partners

CTE Master Plan Highlights

MIDDLE SCHOOL

- Re-envisioning middle school through various STEAM program offerings to ensure students are aware of how their career interests are supported throughout the District
- Branding & program development to embrace students' aspirations whether they are college bound, career bound, undecided or somewhere in between
- Central area that supports direct connections to learning on display

HIGH SCHOOL

- Enhancing and expanding existing spaces based on program clarification and curriculum development
- Brand identification centralized that celebrates a connection between education and industry as described in BVSD's Grad+ framework
- Central area that supports direct connections to learning on display

CTE Project Construction Schedule

Phase 1

Construction Starts 2024

- Angevine Middle
- Broomfield Heights Middle
- Broomfield High
- Centaurus High
- New Vista High School

Phase 2

Construction Starts 2025

- Boulder TEC
- Boulder High
- Casey Middle
- Louisville Middle
- Monarch High
- Monarch K-8
- Summit Middle

Phase 3

Anticipated 2026

- Aspen Creek K-8
- Centennial Middle
- Fairview High
- Platt Middle
- Southern Hills Middle

Phase 4

Anticipated 2027

- Eldorado K-8
- Manhattan Middle
- Nederland MS/HS



BVSD vision for Accelerate:

1. Provide access to multiple high demand, high wage, and high growth careers.
2. Provide access to higher education and industry partners.
3. Align to priority grade level content standards that include Concurrent Enrollment (CE) and industry certification opportunities.
4. Consist of at least four semester courses, wherein at least two must be level two or higher as defined by the Colorado Community College System (CCCS).
5. Be taught by a CTE-credentialed teacher.
6. Lead to completion of one or more of the four quadrants of the Grad+ Framework.

Vision of Boulder TEC


AEROSPACE
TRANSPORTATION
(AUTOMOTIVE AND AVIATION)
HEALTH
BIOTECH AND
PHARMACY
IMMERSIVE
TECH AND AI
HOSPITALITY
AND TOURISM
BVSD
CAREER TECHNICAL
EDUCATION
INFRASTRUCTURE
CLEAN
ENERGY
OUTDOOR
REC
NATURAL
PRODUCTS
IT
ADVANCED
MANUFACTURING

Boulder TEC Program Expansion Timeline

2023-2024	2024-2025	2025-2026	2026 & 2027
New programs: • **Physical Therapy** • **EMT** • **Teacher Academy**	**New programs:** • **Culinary Arts** • **Environmental Science**	**New programs:** • **Video Production Year 2** • **Pharmacy Technician**	**New programs:** • **Aviation Technology** • **Advanced Computer Science** • **Quantum Technology Manufacturing** • **Medical Assisting**
Programs Ending: • Nail Technician	Programs Ending: • Esthetics • Hairstyling 1	Programs Ending: • Hairstyling 2	

Pre-Bond Construction

Post-Bond Construction

Changing the Image / Changing the Culture



Humboldt High School - AFTER with learning on display



Humboldt High School - BEFORE

Co-Creative Mindset



LET'S BEGIN!

RELAX & ALLOW.

Constant self monitoring will get in the way of group performance. Let go…

DON'T WORRY ABOUT WHO GETS CREDIT.

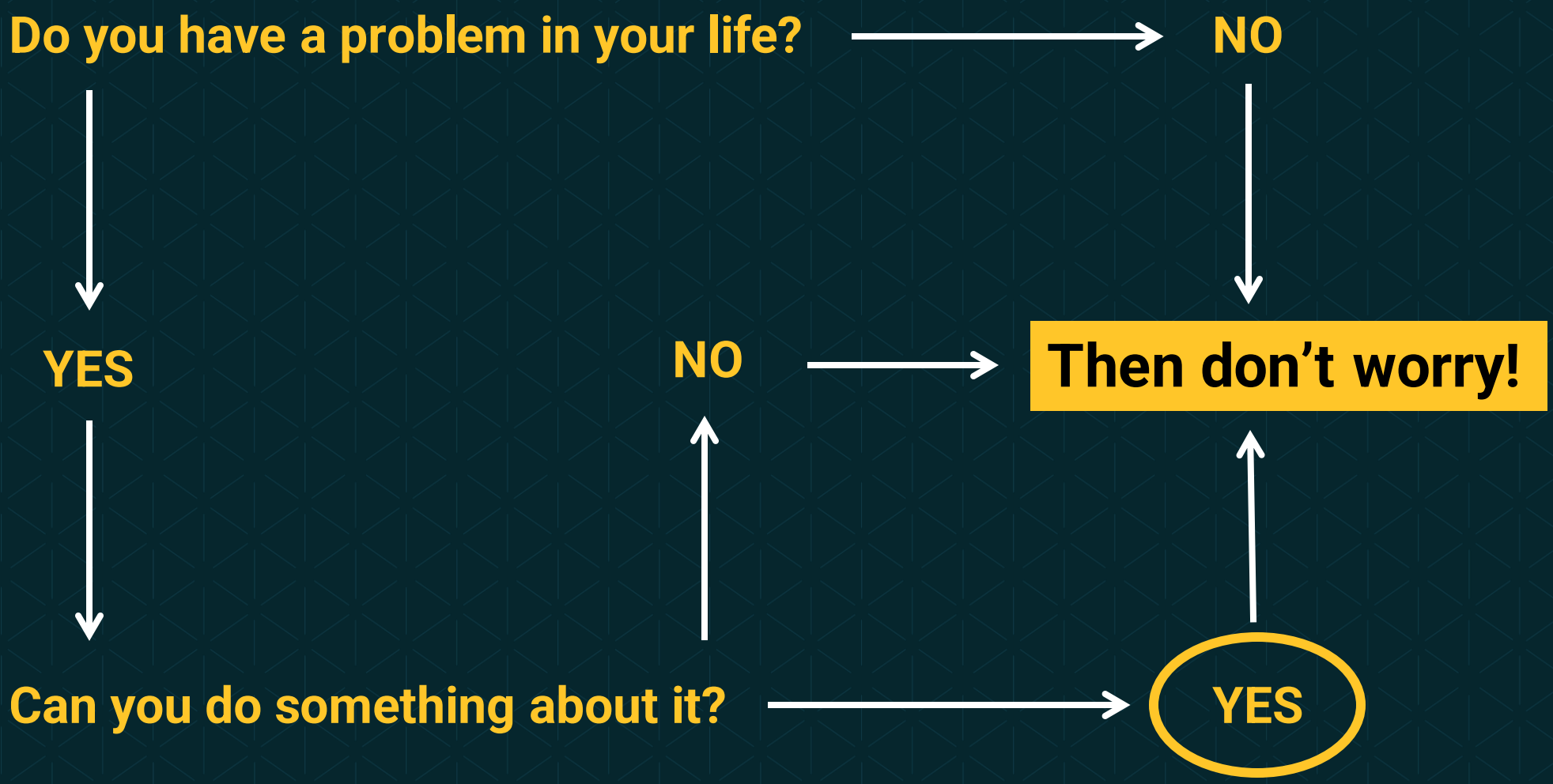
When everyone genuinely collaborates, everyone ends up being more creative.

CLARITY IS NOT A VIRTUE.

If everything you say is detailed and explicit, you won't give your collaborators room to run. Put ideas out there that are half-baked.

CREATIVITY IS RISKY.

Nurture an environment that rewards failure. Successful creative teams are the ones who fail the most often.


Do you have a problem in your life?
NO
YES
NO
Then don’t worry!
Can you do something about it?
YES

HIGHEST HOPES

Please introduce yourself and your role, and one highest hope you have for the outcome of this project.

Packing for the Future

- WHAT DO YOU WANT TO BRING ALONG?
- WHAT CAN YOU LEAVE BEHIND?
- WHAT DO YOU NEED TO ADD?



REPORT OUT

- BRING ALONG?
- LEAVE BEHIND?
- NEED TO ADD?



THANK YOU!



UPCOMING DAT MEETINGS:

02: Thursday, February 29

03: Thursday, March 21

04: Thursday, April 25

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