On the above date, a core group meeting was held at the Dover Area School District Offices to review IT requirements for the Dover Area High School project. Pertinent issues and items of discussion are as follows.

1. Classroom and other education space display types were reviewed and marked up on the attached floor plan.
2. DASD is currently evaluating mobile display solutions (short throw vs LCD). The LCD solution is less costly.
3. The educational spaces that have fixed wall mounted displays (Science, Collaboration Classrooms, and Student Project Rooms) will use the same technology as the mobile displays. The following connections will be required:
   a. At Display – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
   b. At Presenter Station - (2) HDMI to display, (1) Power – quad receptacle, (2) USB to display, (1) Data.
   c. Presenter station for science to be located in the demo unit. Presenter station for Collaboration Classrooms and Student Project Rooms to be located in the wall adjacent to the display.
   d. Due to the size of the room, the Student Project rooms will use LCD displays regardless of decision on mobile displays.
4. Due to the size of the classrooms, Choral and Band will have projection screens with ceiling mounted projectors. The following connections will be required:
   a. At Projector – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
   b. At Presenter Station - (2) HDMI to projector, (1) Power – quad receptacle, (2) USB to projector, (1) Data.
   c. Presenter station to be located in the wall adjacent to the projection screen.
   d. Audio controls for recording systems to be located in floor box adjacent to the teacher podium.
   e. DASD to determine size of screen and location of projector.
5. The display systems in conference rooms were reviewed and the following items discussed:
   a. Displays to be fixed wall mounted LCDs.
   b. The presenter station will be centered in the conference table and be connected to a
floor box via ‘plug-in’ connections. The following connections will be required.

- At Display – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
- At Presenter Station - (2) HDMI to display, (1) Power – quad receptacle, (1) USB Power – single gang quad, (2) USB to display, (1) Data, (1) Phone.
- Large administrative conference room to have two locations in table. Presenter station to side of table furthest from display and additional station on other side of table containing (1) Power – quad receptacle, (1) USB Power – single gang quad.

6. DASD to determine if the CAD classroom is to have a mobile display unit or a projection screen with ceiling mounted projector.

7. The following classrooms will have hard wired desktop teacher stations and will need a data drop adjacent to the teacher station: CAD Classroom, Business Labs, and Graphics Classroom. These classrooms will have a mobile display and when presentations occur from the teacher desktop, the display will be tethered to the desktop.
   a. The CAD Classroom and Graphics Classroom will utilize desktop student workstations and should have hard wired data drops for each station: The Business Labs will utilize laptops with Wi-Fi and therefore only need power at each station.
   b. It was noted that the Art Studio currently has 8-10 laptops which need power. This was not noted during the faculty review of the space. DASD to provide more information on if these laptops will still be used, and if so in what location.

8. Change name of CTC Office to Faculty Planning.

9. The Display system in the Auditorium was reviewed and the following items discussed:
   a. The main large projection screen will be located in front of the proscenium.
   b. Two smaller side projection screens will be located in front of the proscenium on angles to the audience.
   c. Presenter stations to be located at the main control booth, stage right in house side of proscenium wall, and in the house side of orchestra pit wall, centered.
   d. The following connections will be required for each display location.
      - At Projector – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
      - At Presenter Station - (2) HDMI to projector, (1) Power – quad receptacle, (2) USB to projector, (1) Data.
      - A control system shall be incorporated so that the same image can be provided to each projection screen, or different images displayed on each projection screen. MEC to determine the additional requirements for this type of control.
   e. DASD to determine size of screen and location of projector.
   f. The head end for the sound system will be located in the scenery and prop room in a locked rack.

10. The Display system in the Gymnasium was reviewed and the following items discussed:
    a. One large projection screen will be located in front of the track above the main entrance side of the gymnasium.
    b. Presenter station to be located in gymnasium side of the rear wall of Concessions.
    c. The following connections will be required for each display location.
       - At Projector – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
       - At Presenter Station - (2) HDMI to projector, (1) Power – quad receptacle, (2) USB to projector, (1) Data.
       - Provide floor box at scorer’s table with power, data, and scoreboard controls.
    e. DASD to determine size of screen and location of projector.

11. The Display system in the Cafeteria was reviewed and the following items discussed:
    a. Two projection screens (one in front of the Student Run Bank and one in front of the
School Storage) will be located in the cafeteria. Presenter stations to be located adjacent to each projection screen. The following connections will be required for each display location.

- At Projector – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
- At Presenter Station - (2) HDMI to projector, (1) Power – quad receptacle, (2) USB to projector, (1) Data.
- A control system shall be incorporated so that the same image can be provided to each projection screen, or different images displayed on each projection screen. MEC to determine the additional requirements for this type of control.
- Both projection screens shall have the capability to function as a ‘digital trophy case’. Head end control for this function shall be located in the AV storage room.

b. A separate set of LCD displays shall be provided throughout the Cafeteria mounted to the columns for the purposes of broadcasting preset content.

- The headend for this system will be located in the administrative suite.
- DASD to determine connections requirements and additional details for this system.
- DASD to provide additional locations for broadcast displays throughout the building.

12. The display systems in the LGI were reviewed and the following items discussed:
   a. All displays to be fixed wall mounted LCDs.
   b. LGI Configuration: A display will be located to each side of the operable partition on the corridor wall. Presenter stations will be located adjacent to each display. The following connections will be required for each display location.
      - At Display – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
      - At Presenter Station - (2) HDMI to display, (1) Power – quad receptacle, (2) USB to display, (1) Data, (1) Phone.
      - When the room is divided, the screens will operate independently. When the room is open as one large room, both displays will be used simultaneously (the presentation wall will remain the same). MEC to determine the additional requirements for this type of control.
   c. Board Meeting Configuration: Four ceiling mounted displays will located to each side of the operable partition (2 facing board and 2 facing Audience). Presenter stations will be located centered on exterior wall and in floor box centered to board side of room. The following connections will be required for each display location.
      - At Display – (2) HDMI to presenter station, (1) Power – quad receptacle, (2) USB to presenter station, (1) Data.
      - At Presenter Station - (2) HDMI to display, (1) Power – quad receptacle, (2) USB to display, (1) Data, (1) Phone.
      - MEC to determine the additional requirements for the control of the two presenter locations.
      - Multiple floor boxes (power only) should be provided for the board table setup.
      - Public comment will occur in the front, middle of the Audience side of the room.
      - All microphones will be wireless.
   d. All general data connection needs will be provided via Wi-Fi (no data drops).
   e. Eliminate the AV Control room.
   f. Shift door adjacent to operable partition to the corner of the room.

13. Printer types and locations were reviewed and marked up on the attached floor plan.
   a. Locate copiers in Faculty Planning Rooms and Special Ed Resource Room adjacent to door.
b. Incorporate work counters and storage adjacent to copiers.
c. Student Printer model – Kyocera FS 4100
d. DASD IT to review CTC printers & equipment requiring data drops
   ▪ Provide a data drop at locations where a printer is controlled by a desktop computer (for networking of computer).
   ▪ Plasma Cutter in Metal Lab will need data drop.
   ▪ Provide perimeter data drops in CNC Lab for future equipment.

14. USB charging locations were reviewed and marked up on the attached floor plan.
   a. Life Skills Classroom has ipod charging unit that will need dedicated circuit.

15. Provide data drops for all Point of Sale locations: one for each cashier in the food court, two in the ticket booth, and two in each concessions stand.

16. Racks in MDF shall be 4 post enclosed type.

17. Racks in IDF's shall be 4 post open type.

18. Provide 30 amp power (twist lock connection type) above all racks for UPS. DASD to provide information on UPS units to be purchased.

19. Rename Storage room adjacent to MDF “IT Workroom.” Provide built-in work counter with wire mold power strip and 4 data drops. Add window into MDF.

20. Relocate the IDF adjacent to the loading dock so it is accessed off of the corridor.

21. Provide fiber line from IDF to baseball field dugout storage room.

22. Provide fiber line from North Salem IDF to softball field dugout storage room.

23. Fiber cabling colors were dictated as follows:
   a. Data - Blue
   b. Video – Orange
   c. VOIP – Grey or White
   d. Lighting control – TBD
   e. CCTV - TBD

24. Each data system to have a separate patch panel.

25. MEC to port counts by IDF for the following systems: Video, Data, VOIP, WAP.

26. The clock system was reviewed and the following items discussed:
   a. Corridor clocks to be wireless control with hard wired power.
   b. DASD to determine if clocks will be located in classrooms.
   c. DASD to provide locations for other clocks.

27. The PA system shall be integrated into the VOIP system so that paging can occur over all of the phones in the building.

Respectfully submitted,
CRABTREE, ROHRBAUGH & ASSOCIATES

Scott Cousin, AIA, LEED AP
Principal, Senior Project Manager

cc: Core Group
Design Consultants