A. Legacy PDU
B. Electrical Panel
C. Legacy CRACs ~34" x 91.5"
D. Proposed Power routing under cold aisles
   - Underfloor power taps terminate at rear of racks

20" deep concrete shelf under floor
420A – InRow Cooling
N/S Row Arrangement

A. Room Infrastructure Row
1. Modular PDUs ala APC PDPM144F – 300mm
2. Potential UPS options
3. Networking/Network Services
4. Row arrangement is not final

B. Electrical Panel
C. APC ACRC/ACRP 500 InRow Chiller

20" deep concrete shelf under floor
A. Room Infrastructure Row
   1. Modular PDUs a la APC PDPM144F – 300mm
   2. Potential UPS options
   3. Networking/Network Services
   4. Row arrangement is not final
B. Electrical Panel
C. APC ACRC/ACRP 500 InRow Chiller
D. ISO-Base Seismic Isolation Planks
E. APC AR3100 600mm x 1070mm 42U
G. Location for equipment/supply cabinet

Underfloor Clearance
Work Area Clearance

20" deep concrete shelf under floor
A. Room Infrastructure Row
1. Modular PDUs (ala APC PDPM144F – 300mm)
2. Potential UPS options
3. Networking/Network Services
4. Row arrangement is not final

B. Electrical Panel

C. APC Unifair Chiller (Example)
1. 130KW Model - 28" clearance in front
2. ~ 34" x 101.6"
3. must have underfloor clearance for airflow

- Underfloor Clearance
- Work Area Clearance

20" deep concrete shelf under floor
420A – Whole Room Cooling CRAHs on South E/W Row Arrangement

A. Room Infrastructure Row
1. Modular PDUs ala APC PDPM144F – 300mm
2. Potential UPS options
3. Networking/Network Services
4. Row arrangement is not final

B. Electrical Panel

C. APC Uniflair Chiller (Example)
1. 130KW Model - 28” clearance in front
2. ~ 34” x 101.6”
3. must have underfloor clearance for airflow

Underfloor Clearance
Work Area Clearance

20" deep concrete shelf under floor
A. Room Infrastructure Row
   1. Modular PDUs ala APC PDPM144F – 300mm
   2. Potential UPS options
   3. Networking/Network Services
   4. Row arrangement is not final
B. Electrical Panel
C. APC Uniflair Chiller (Example)
   1. 130KW Model – 28” clearance in front
   2. ~ 34” x 101.6”
   3. must have underfloor clearance for airflow
D. Note collision between hot and cold air flow

20” deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on South
E/W Row Arrangement
420A – Whole Room Cooling
CRAHs on South
N/S Row Arrangement

20" deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on South
E/W Row Arrangement

20" deep concrete shelf under floor
420A – Whole Room Cooling CRAHs on West Weird E/W Row Arrangement

A. Room Infrastructure Row
   1. Modular PDUs aka APC PDPM144F – 300mm
   2. UPS/Networking/Network Service Options
C. APC Uniflair Chiller (Example)
   1. 130KW Model - 28’ clearance in front
   2. ~ 34” x 101.6”
   3. must have underfloor clearance for airflow
B. Electrical Panel
D. Air Curtains for Hot/Cold Aisle
   1. Note Buffer Zones between Hot/Cold
E. ISO-Base Seismic Isolation Planks
F. APC AR3100 600mm x 1070mm 42U
G. Equipment/Supply Cabinet

- Underfloor Clearance
- Work Area Clearance

20” deep concrete shelf under floor
420A – Whole Room Cooling CRAHs on West Ziggurat E/W Row Arrangement

A. Room Infrastructure Row
   1. Modular PDUs (ala APC PDPM144F – 300mm)
   2. UPS/Networking/Network Service Options
   C. APC Uniflair Chiller (Example)
      1. 130KW Model - 28" clearance in front
      2. “ 34" x 101.6”
      3. must have underfloor clearance for airflow
B. Electrical Panel
D. Air Curtains for Hot/Cold Aisle
   1. Note Buffer Zones between Hot/Cold
E. ISO-Base Seismic Isolation Planks
F. APC AR3100 600mm x 1070mm 42U
G. Equipment/Supply Cabinet

Underfloor Clearance
Work Area Clearance

20" deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on West
N/W Row Arrangement

- Underfloor Clearance
- Work Area Clearance

B. Electrical Panel
C. APC Uniflair Chiller (Example)
1. 130Kw Model - 28" clearance in front
2. ~ 34" x 101.6"
G. Possible location for In-Room PDU

20" deep concrete shelf under floor

0 ft. 3 ft. 5 ft. 10 ft.
12

420A – Whole Room Cooling CRAHs on West Shift E/W Row Arrangement

A. Room Infrastructure Row – many options
   1. Modular PDUs ala APC PDPM144F – 300mm
   2. Potential UPS options
   3. Networking/Network Services
   4. Layout shown is illustrative example

B. Air Curtains for Hot/Cold Aisle
   1. Note Buffer Zones between Hot/Cold

C. APC Unifair Chiller (Example) – 34" x 101.6"
   1. 130KW Model - 28" clearance in front
   2. must have underfloor clearance for airflow

D. ISO-Base Seismic Isolation Planks

E. ISO-Base Seismic Isolation Planks

F. APC AR3100 600mm x 1070mm 42U

H. Move Door west 8ft. Perhaps a sliding door?

Underfloor Clearance

Work Area Clearance

20" deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on North
N/S Row Arrangement

B. Electrical Panel
C. APC Unifair Chiller (Example)
1. 130KW Model - 28” clearance in front
2. ~ 34” x 101.6”
3. must have underfloor clearance for airflow
D. Could use 36” deep racks here for more clearance
   - n.b. may no longer be available
G. Possible location for In-Room PDU
420A – Whole Room Cooling
CRAHs on North E/W Row Arrangement

B. Electrical Panel

C. APC Uniflair Chiller (Example)
   1. 130KW Model - 28" clearance in front
   2. ~ 34" x 101.6"

H. Possible location for In-Room PDU(s)

20" deep concrete shelf under floor
15

420A – Whole Room Cooling
CRAHs on North, Move Panel
N/S Row Arrangement

A. Infrastructure Row for
1. Modular PDUs ala APC PDPM144F – 300mm
2. UPS
3. Network Aggregation/Services
4. Other options/uses TBD

B. Electrical Panel
C. APC Unifair Chiller (Example)
   1. 130KW Model - 28° clearance in front
   2. ~ 34" x 101.6"
   3. must have underfloor clearance for airflow

F. APC AR3100 600mm x 1070mm 42U
G. APC AR8561 Cable Troughs

- Underfloor Clearance
- Work Area Clearance

20" deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on North, Move Panel E/W Row Arrangement

A. Infrastructure Row for
1. Modular PDUs ala APC PDPM144F – 300mm
2. UPS
3. Network Aggregation/Services
4. Other options/uses TBD

B. Electrical Panel
C. APC Unifair Chiller (Example)
   1. 130KW Model - 28" clearance in front
   2. ~ 34" x 101.6"
   3. must have underfloor clearance for airflow

F. APC AR3100 600mm x 1070mm 42U
G. APC AR8561 Cable Troughs

Underfloor Clearance
Work Area Clearance

20" deep concrete shelf under floor
420A – Whole Room Cooling
CRAHs on North, Move Panel
Shift E/W Row Arrangement

A. Infrastructure Row for
1. Modular PDUs ex: APC PDPM144F – 300mm
2. UPS
3. Network Aggregation/Services
4. Doesn’t work well with airflow in this layout

B. Electrical Panel

C. APC Uniflair Chiller (Example)
1. 130KW Model - 28” clearance in front
2. ~ 34” x 101.6”
3. must have underfloor clearance for airflow

F. APC AR3100 600mm x 1070mm 42U

G. APC AR8561 Cable Troughs

Underfloor Clearance
Work Area Clearance

20” deep concrete shelf under floor