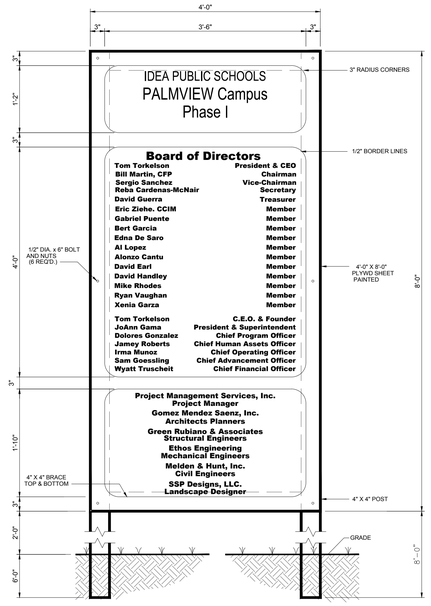
IDEA PUBLIC SCHOOLS

PALMVIEW

Academy and College Prep- PHASE I





01 PROJECT SIGN
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LANDSCAPE DRAWINGS

L1.01	IRRIGATION PLAN	
L1.02	IRRIGATION PLAN	
L1.03	IRRIGATION PLAN	
L1.04	IRRIGATION PLAN	
L1.05	IRRIGATION DETAILS	
L2.01	LANDSCAPE PLAN	
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2	EXISTING CONDITIONS
3	DIMENSIONAL CONTROL SITE PLAN
4	PROPOSED WATER & SANITARY SEWER LAYOUT
5	PROPOSED GRADING PLAN
6	PROPOSED DRAINAGE PLAN
7	TEMPORARY SEDIMENTARY CONTROL PLAN & DETAILS
8	WATER DETAILS
9	SANITARY SEWER DETAILS
10	PAVING & DRAINAGE DETAILS

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A1.03	SITE DETAILS
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A2.02	1ST FLOOR DIMENSION PLAN
A2.03	1ST FLOOR DIMENSION PLAN
A2.04	2ND FLOOR DIMENSION PLAN
A2.05	2ND FLOOR DIMENSION PLAN
A2.06	2ND FLOOR DIMENSION PLAN
A2.07	1ST FLOOR FIXTURE PLAN
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A2.11	CEILING DETAILS
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A2.13	ROOF DETAILS
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A2.15	INTERIOR PAINT LAYOUT
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A3.03	SCIENCE CLASSROOM PLAN & CABINETS
A3.04	MILLWORK
A3.05	MILLWORK SECTIONS
A3.06	KITCHEN ENLARGEMENT & SCHEDULE
A3.07	STAIR PLANS
A3.08	STAIR ELEVATION/SECTIONS
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A4.01	WALL SECTIONS
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A4.06	WALL SECTIONS
A4.07	WALL SECTIONS
A4.08	WALL SECTIONS
A4.09	WALL SECTIONS
A4.10	INTERIOR PARTITIONS
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S2.1	FOUNDATION PLAN
S2.1C	CONTROL JOINT PLAN
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S2.2C	CONTROL JOINT PLAN
S2.3	FOUNDATION DETAILS
S2.4	FOUNDATION DETAILS
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S4.3	FRAMING DETAILS
S4.4	FRAMING DETAILS
S4.5	FRAMING DETAILS

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E3.01	1st FLOOR LIGHTING PLAN
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E9.03	ELECTRICAL DETAILS
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P2.02	1st FLOOR PLUMBING PLAN
P2.03	2ND FLOOR PLUMBING PLAN
P2.04	2ND FLOOR PLUMBING PLAN
P3.01	1st FLOOR WASTE & VENT PLAN
P3.02	1st FLOOR WASTE & VENT PLAN
P3.03	2ND FLOOR WASTE & VENT PLAN
P4.01	KITCHEN PLUMBING PLAN
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P5.02	PLUMBING ROOF PLAN
P6.01	PLUMBING SCHEDULES AND DETAILS
P6.02	PLUMBING DETAILS
P6.03	PLUMBING DETAILS

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SSP LANDSCAPE DESIGN
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(956) 547-9788 FAX: (956) 547-9977

MECHANICAL ENGINEERS
ETHOS ENGINEERING - M.E.P.
119 VAN BUREN, SUITE 101 HARLINGEN, TEXAS 78550
(956) 230-3435 FAX: (956) 720-0830

STRUCTURAL ENGINEERS
GREEN RUBIANO & ASSOCIATES
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Brownsville TX 78526
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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW
IDEA Public Schools
PALMVIEW, TEXAS

DAVID A. MONREAL
REGISTERED ARCHITECT
19555
STATE OF TEXAS
5/16/2019

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Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: COVER

IDEA - PALMVIEW PHASE I

PALMVIEW, TEXAS

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING TYPE AND LOCATION OF UNDERGROUND UTILITIES AND ELECTRICAL UTILITIES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE LOCATIONS AND SIZES HAVE BEEN TAKEN FROM EXISTING RECORDS AND THE BEST AS-BUILT INFORMATION AVAILABLE; HOWEVER, IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES AND OMISSIONS IN THE LOCATIONS, QUALITIES AND SIZES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT TYPE, SIZE AND LOCATION OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE REPAIR AND RESTORATION OF CONTRACTOR DAMAGED UTILITIES. THE COST OF ANY REPAIR OR REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CURRENT LINE SPOTTING TOLL FREE NUMBER AND COORDINATE WITH ALL THE UTILITY COMPANIES FOR ACTUAL LOCATING AND UNCOVERING OF EXISTING LINES PRIOR TO EXCAVATION OPERATIONS.

2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY UNREPORTED OBSTACLES THAT MAY IMPEDE OR PREVENT THE PROPER CONSTRUCTION OF THIS PROJECT.

3. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE STATE STATUES AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (OSHA). COPIES OF THE O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AT 611 EAST 6TH STREET, ROOM 303, AUSTIN, TEXAS.

4. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT AND WORKMAN LIKE MANNER AT ALL TIMES. JOB SAFETY SHALL NOT BE COMPROMISED. ANY UNSAFE OR UNATTRACTIVE NUISANCE SHALL BE REMOVED OR OTHERWISE TAKEN CARE OF BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER OR PROJECT ENGINEER.

5. EXCAVATIONS, TRENCHES AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, LIGHTS AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.

6. CONSTRUCTION OF THIS PROJECT WILL BE SUBJECT TO INSPECTIONS AND TESTING AS DEEMED NECESSARY OR APPROPRIATE BY THE ENGINEER AND/OR THE CITY OF MISSION. THE CONTRACTOR SHALL FURNISH INCIDENTAL LABOR AND EQUIPMENT TO ALLOW FOR THE TESTING, PERSONAL ACCESS TO THE WORK, AND WILL COOPERATE FULLY WITH THE PERSONS CONDUCTING THE TESTING AND INSPECTION PROGRAM.

7. A PART OF THE WORK THAT IS NECESSARY OR REQUIRED TO MAKE EACH SYSTEM OR INSTALLATION SATISFACTORY AND OPERABLE FOR ITS INTENDED PURPOSE, EVEN THOUGH IT IS NOT SPECIFICALLY INCLUDED IN THE SPECIFICATIONS OR DRAWINGS, SHALL BE PERFORMED AS INCIDENTAL WORK AS IF IT WERE DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS.

8. THE DRAWINGS DO NOT ALWAYS INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS BY A DEFLECTION AT THE JOINTS OR THE INSTALLATION OF FITTINGS. DO NOT DEFLECT PIPE JOINTS MORE THAN 80% OF THE MANUFACTURERS RECOMMENDATION.

9. ALL PIPING MUST BE INSTALLED WITH A MINIMUM OF 36-INCHES OF COVER UNLESS OTHERWISE NOTED ON THE PLANS.

10. ALL EXCAVATION FOR THIS PROJECT SHALL BE UNCLASSIFIED.

11. ALL UTILITIES WHICH ARE TO REMAIN AND WHICH ARE DAMAGED OR REMOVED WILL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

12. PIPE SHALL BE BACKFILLED WITH JOINTS EXPOSED FOR TESTING, BEFORE NEW JOINTS ARE COVERED. PRESSURE LINES ARE TO BE HYDROSTATICALLY TESTED AT NOT LESS THAN 150 PSIG FOR A PERIOD OF TWO HOURS. THE OWNER SHALL OBSERVE AND APPROVE OR REJECT THE TEST. REPAIRS, IF REQUIRED, SHALL BE MADE AND THE LINE SHALL BE RETESTED UNTIL APPROVED. TEST SHALL NOT BEGIN UNTIL THRUST BLOCKS HAVE AGED A MINIMUM OF 24 HOURS.

13. AS SOON AS PRACTICAL, ALL PORTIONS OF EXCAVATIONS NOT OCCUPIED BY THE PERMANENT STRUCTURE SHALL BE BACKFILLED.

14. WHERE WATER LINE INTERSECTS SANITARY SEWER SYSTEM MAINS AT LESS THAN 9.0 FEET SEPARATION, THE CONTRACTOR SHALL INSTALL A 20 FOOT SECTION OF C-900 PVC PRESSURE PIPE CENTERED ON THE POINT OF INTERSECTION, PER TCEQ REQUIREMENTS.

15. CONTRACTOR SHALL REMOVE AND REINSTALL ALL SIGNS, MAILBOXES, FENCES, CULVERTS AND OTHER ITEMS IN WAY OF THE WORK.

16. CONTRACTOR SHALL REPAIR ALL OPEN CUTS OF PAVED AREAS BACK TO BETTER THAN ''AS-IS'' CONDITION WITH LIKE MATERIALS.

17. PROVIDE INTERIM DRAINAGE DURING CONSTRUCTION AS REQUIRED. USE PUMPS, TEMPORARY DITCHES, ETC. TO MAINTAIN A WELL DRAINED SITE FREE OF STANDING WATER AND WATER SOFTENED SOILS.

18. ANCHOR ALL UNDERGROUND PRESSURE PIPING AS NECESSARY TO PREVENT MOVEMENT UNDER PRESSURE TEST AND SERVICES.

19. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A-165, GRADE 60. ALL BARS SHALL CONFORM TO ASTM SPECIFICATION A-305.

20. ALL CONCRETE AND FORM WORK SHALL CONFORM TO CURRENT ACI CODE REQUIREMENTS.

21. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.

22. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS, AND ACCEPTANCE BY THE PROPER UTILITY PROVIDER, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, OF ALL THE DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS ACCEPTANCE.

23. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.

24. ALL WATERLINE TAPS AND WATER METERS SHALL BE INSTALLED BY CONTRACTOR. IN THE CASE THE CONTRACTOR WILL NOT BE INSTALLING SUCH IMPROVEMENTS, THE CONTRACTOR IS TO COORDINATE WITH THE CITY OF MISSION BEFORE COMMENCING ANY UTILITY WORK.

25. COORDINATE ALL UTILITY WORK WITH THE PLUMBING PLANS BEFORE COMMENCING ANY UTILITY WORK. REFER TO PLUMBING PLANS FOR CONTINUATION.

26. COORDINATE WITH GRADING PLANS FOR WATER LINE, STORM AND SANITARY SEWER LINES INSTALLATION.

27. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INCLUDING THOSE FROM THE CITY OF MISSION AND TXDOT PRIOR TO THE START OF CONSTRUCTION.

28. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED PAVEMENT GRADE. THE TOP ELEVATIONS OF MANHOLES AND CLEANOUTS CONSTRUCTED IN GRASSED AREAS SHALL BE SIX INCHES ABOVE FINISHED GRADE (UNLESS OTHERWISE NOTED ON PLANS).

29. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO VERIFY EXISTING CONDITIONS.

30. CONTRACTOR TO LEAVE OPENINGS IN CURB AT SIDEWALK RAMPS LOCATIONS.

31. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS (LOCATIONS & ELEVATIONS) PRIOR TO START OF CONSTRUCTION.

32. PERMIT NEEDED FROM THE CITY OF MISSION BUILDING DEPARTMENT AND PRE-CONSTRUCTION CONFERENCE NEEDED BEFORE CONSTRUCTION CAN BEGIN.

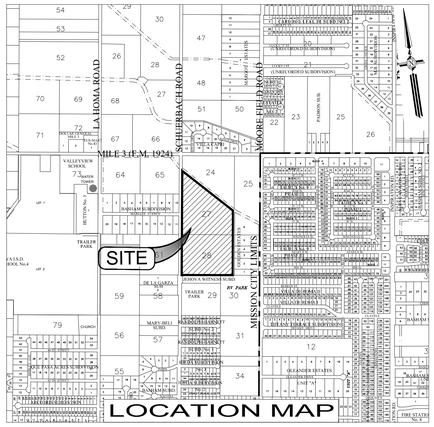
33. CONSULT WITH PROPERTY OWNER BEFORE RELOCATING EXISTING FENCES THAT MIGHT BE IN THE WAY OF THE CONSTRUCTION AREA AND/OR CONSTRUCTION PLANS.

34. BOTH SITE AND BUILDING CONTRACTORS TO VERIFY EXISTING SITE ELEVATIONS PRIOR TO POURING CONCRETE TO VERIFY ACCESIBILITY.

35. ALL PROPOSED STORM R.C.P. TO BE INSTALLED AT PLACES OTHER THAN EXISTING OR PROPOSED STRUCTURES SHALL INCLUDE SAFETY ENDS TREATMENT.

36. ALL STRIPING AND SIGNAGE SHALL BE IN ACCORDANCE WITH *TEXAS MUTCD REVISION 2, OCTOBER 2014*, PART 3 OF THE MANUAL AND/OR TXDOT STANDARDS FOR SPACING OF BROKEN LINES, RPM'S, ARROWS, AND ONLY'S. *TEXAS DEPARTMENT OF TRANSPORTATION, TRAFFIC OPERATIONS DIVISION, TYPICAL STANDARD PAVEMENT MARKINGS, PM (1)-12.*

37. COORDINATE ALL WORK WITHIN HIDALGO COUNTY WATER IMPROVEMENT DISTRICT NO. 3 (HCWID No. 3) RIGHT OF WAY INCLUDING NECESSARY SHUTDOWNS WITH DISTRICT PERSONNEL. ALL OF THE CONSTRUCTION OF IRRIGATION FACILITIES AND CROSSINGS OF IRRIGATION FACILITIES SHALL NOT BE PERFORMED WITHOUT THE KNOWLEDGE OF THE DISTRICT PERSONNEL. THE DISTRICT OFFICE PHONE NUMBER IS 956-686-8303.



1" = 1000'

2019

SHEET INDEX

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9 · · · · · · · · · SANITARY SEWER DETAILS
10 · · · · · · · · PAVING & DRAINAGE DETAILS

BENCHMARK INFO:
#1: SET MHI DISK LOCATED EAST OF WEST PROPERTY LINE.
NORTHING: 16619377.508, EASTING: 1032232.394, ELEVATION: 173.84
#2: SET MHI DISK LOCATED EAST OF WEST PROPERTY LINE.
NORTHING: 16620082.150, EASTING: 1032341.674, ELEVATION: 176.75

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SHEET 1 OF 10

JOB No. 18088.00

SET No.

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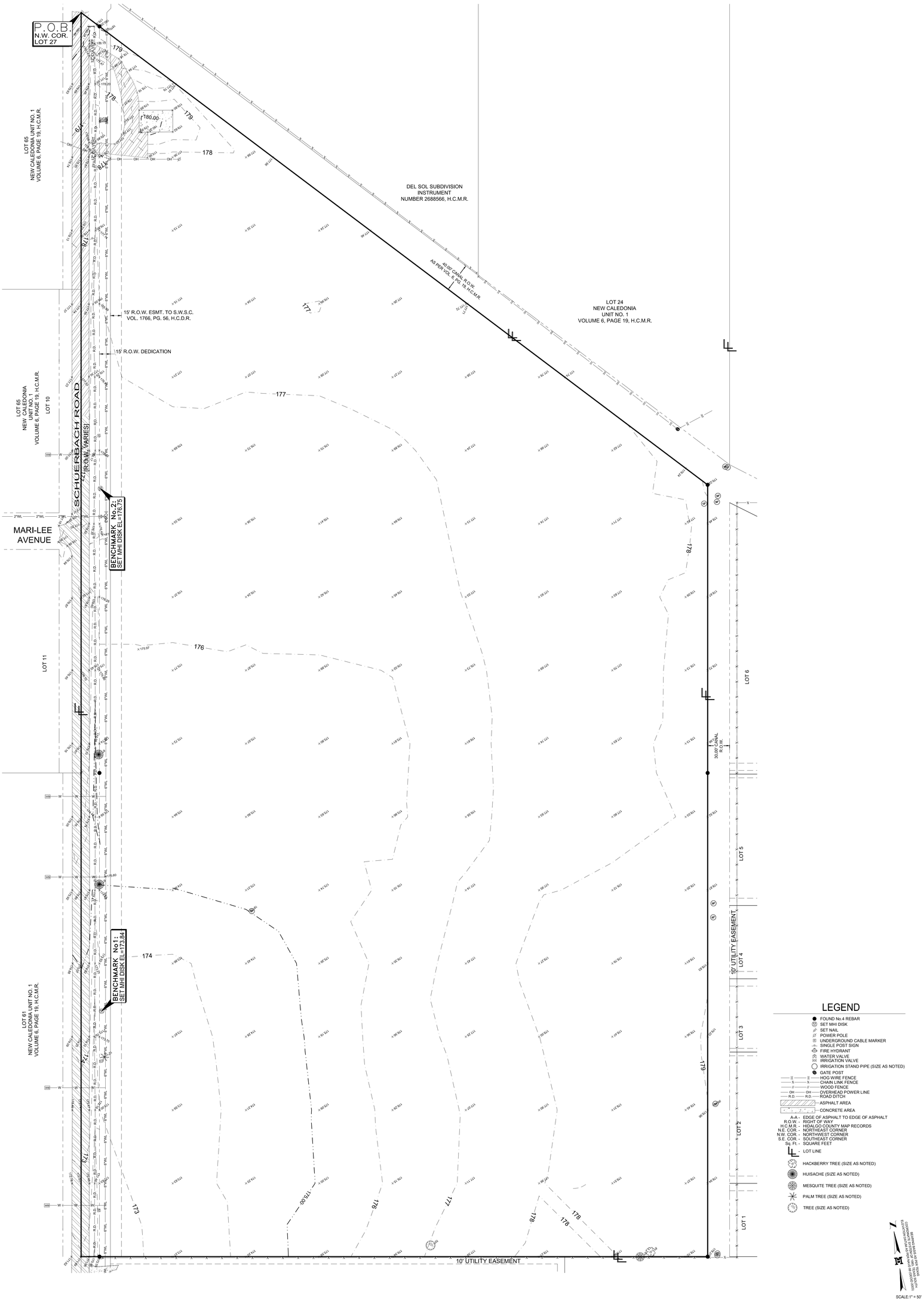

EXISTING CONDITIONS

ENG. TECH:	S.A.
PROJECT ENG:	K.A.H-V.
T-BOOK:	1059, PG. 46-47
1. RELEASE DATE:	
2. RELEASE DATE:	
3. RELEASE DATE:	
SCALE:	AS NOTED

REVISION | DATE | BY

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SHEET 2 OF 10

File Name: 18088.00

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

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No.	REVISIONS	BY

Date: 2019
Scale: As Noted
Project Architect: David Montreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase 1
Sheet:

5/16/2019

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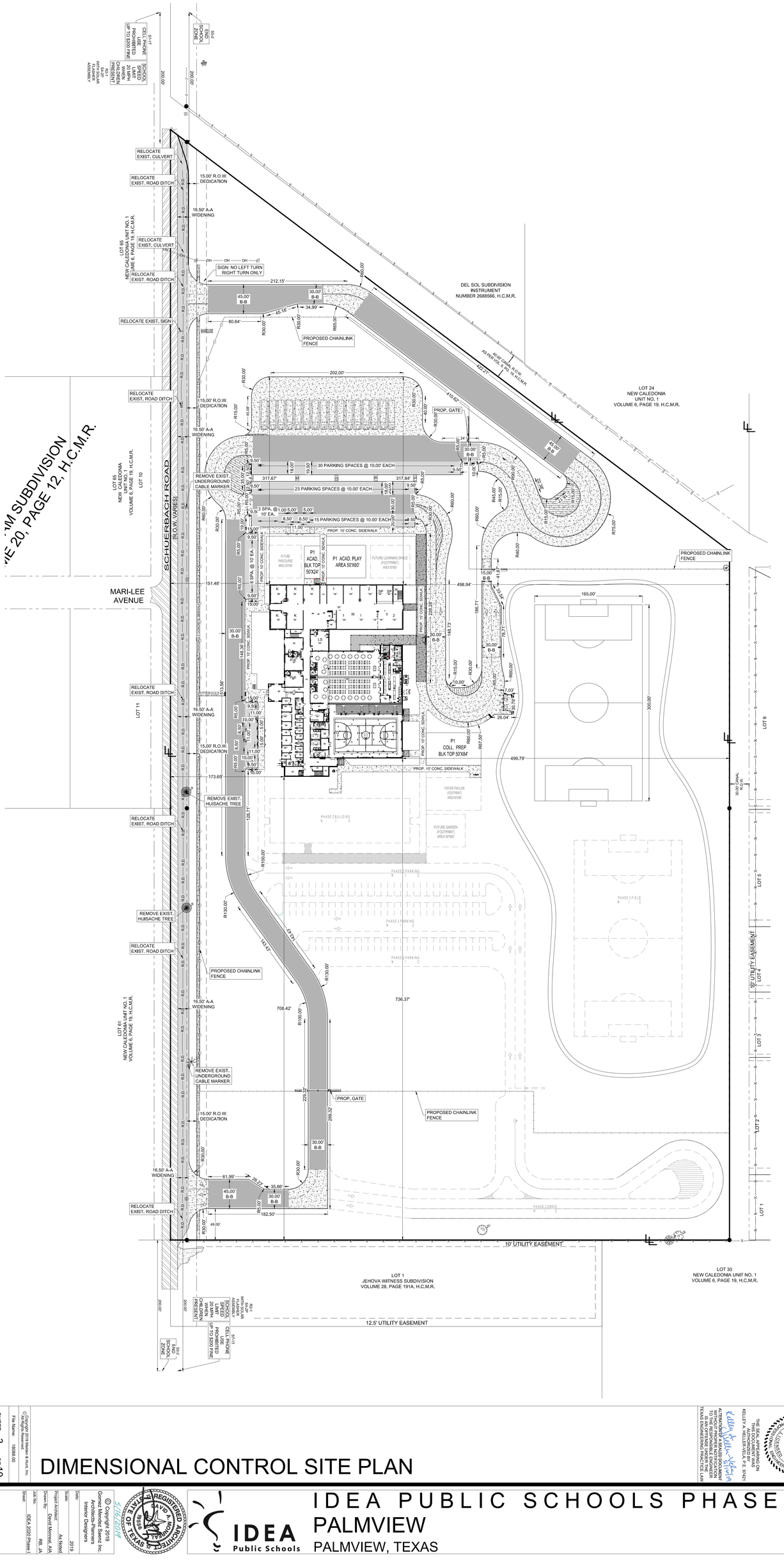

IDEA PALMVIEW SITE

	REQUIRED	PROVIDED
PARKING	139	190
GREEN AREAS	1.539 S.F.	705,413 S.F.
DETENTION	173,489 C.F.	204,164 C.F.

LEGAL DESCRIPTION:
A TRACT OF LAND CONTAINING 26.99 ACRES SITUATED IN HIDALGO COUNTY, TEXAS, BEING ALL OF LOTS 27 AND 28, NEW CALEDONIA UNIT No. 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 6, PAGE 19, HIDALGO COUNTY MAP RECORDS, WHICH SAID 26.99 ACRES WERE CONVEYED TO IDEA PUBLIC SCHOOLS, A TEXAS NON-PROFIT CORPORATION, BY VIRTUE OF A SPECIAL WARRANTY DEED RECORDED IN INSTRUMENT No. 2951230, HIDALGO COUNTY OFFICIAL RECORDS.

CURRENT ZONE:		PROPOSED
PUBLIC		QUEUING LENGTH:

LEGEND

- EXISTING ASPHALT AREA
- LIGHT DUTY FLEXIBLE PAVEMENT
- HEAVY DUTY FLEXIBLE PAVEMENT
- PROPOSED RIGID PAVEMENT

A-A - ASPHALT TO ASPHALT
B-B - BACK OF CURB TO BACK OF CURB
CONC. - CONCRETE
EA. - EACH
PROP. - PROPOSED
R.O.W. - RIGHT-OF-WAY
SDWLK - SIDEWALK
SPA. - SAPCES

COORDINATES SHOWN ARE BASED ON NAD83 TEXAS SOUTH ZONE (4205) SYSTEM. ELEVATIONS ARE BASED ON NAVD88 DATUM WITH GEOID12A (2009)

SCALE: 1" = 60

SHEET 3 OF 10

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DIMENSIONAL CONTROL SITE PLAN

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Keeley A. Nielsen-Vela

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PROJECT ENG:	K.A.H-V.
T-BOOK:	1059, PG. 46-47
1. RELEASE DATE:	
2. RELEASE DATE:	
3. RELEASE DATE:	
SCALE:	AS NOTED

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

GMS ARCHITECTS
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fax (956) 346-0196

NO.	REVISIONS	BY

Gonzalez Mendez Sanchez Architects-Planners Interior Designers

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Date: 2019
Scale: As Noted
Project Architect: Daniel Monreal, AIA
Drawn By: RB, JA
Job No: IDEA 2000 (Prelim.)
Sheet:

STATE OF TEXAS — REGISTERED — DANIEL A. MONREAL — 29868 — ARCHITECT

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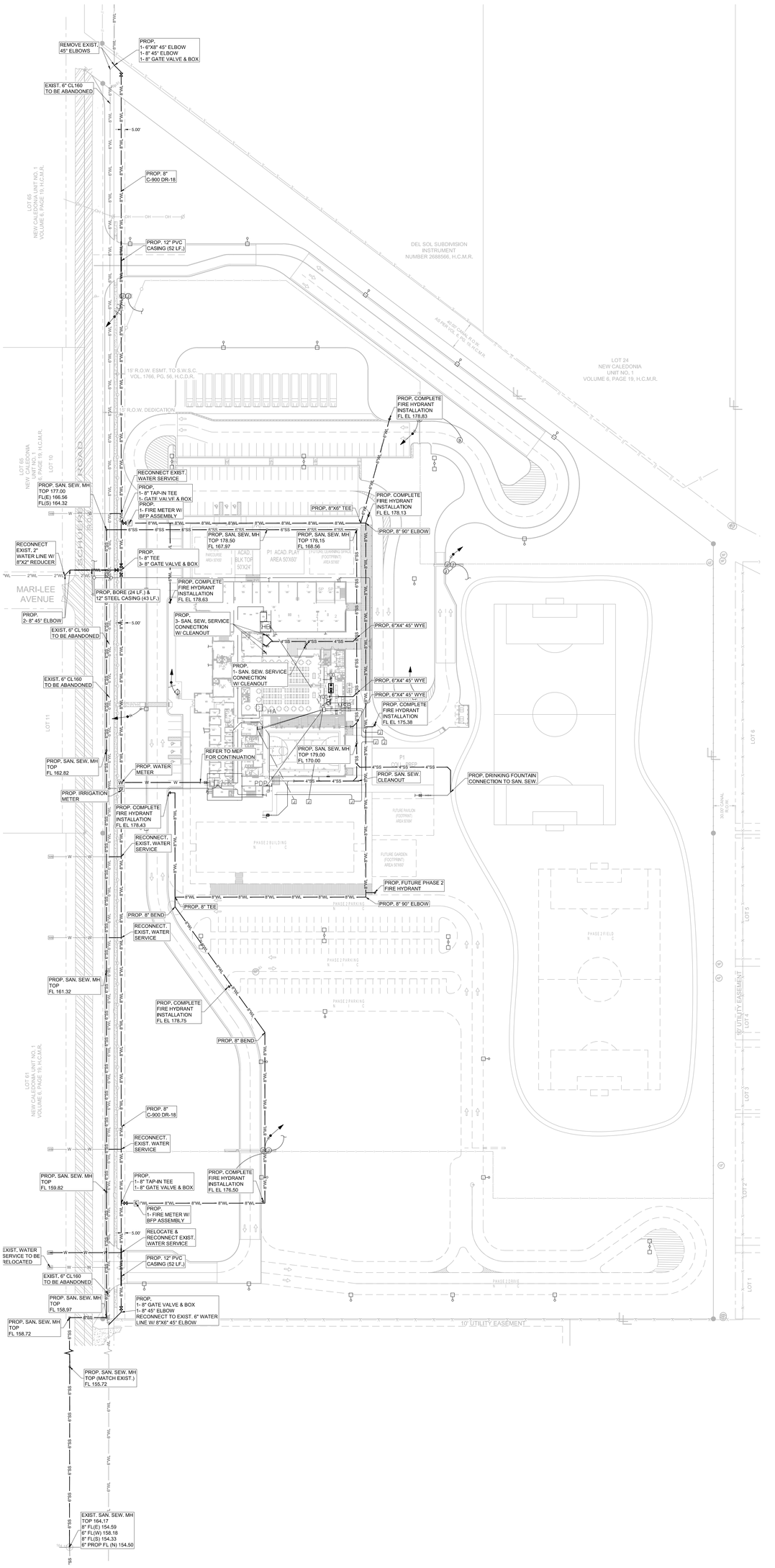

LEGEND

- POWER POLE
- FIRE HYDRANT
- IRRIGATION VALVE
- IRRIGATION STAND PIPE (SIZE AS NOTED)
- SANITARY SEWER MANHOLE
- OH — OVERHEAD POWER LINE
- R.D. — ROAD DITCH
- SS — EXISTING SANITARY SEWER LINE
- 8"WL — EXISTING WATER LINE
- 6"SS — PROPOSED SANITARY SEWER LINE
- 6"WL — PROPOSED WATER LINE
- EL - ELEVATION
- EXIST. - EXISTING
- FL - FLANGE
- PROP. - PROPOSED
- MH. - MANHOLE
- PROP. - PROPOSED
- SAN. SEW. - SANITARY SEWER
- W/ - WITH

BEARINGS ARE BASED ON TEXAS STATE PLANE COORDINATE SYSTEM OF 1983 (NAD83) SOUTH ELEVATIONS DATUM IS NAVD 88 (GEOID 2003)

SCALE:1" = 60'

PROPOSED WATER & SANITARY SEWER LAYOUT

SHEET 4 OF 10

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PROJECT ENG: K.A.H-V.	
T-BOOK: 1059, PG. 46-47	
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JOB No. 18088.00

Date: 2019
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Project Architect: Daniel Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
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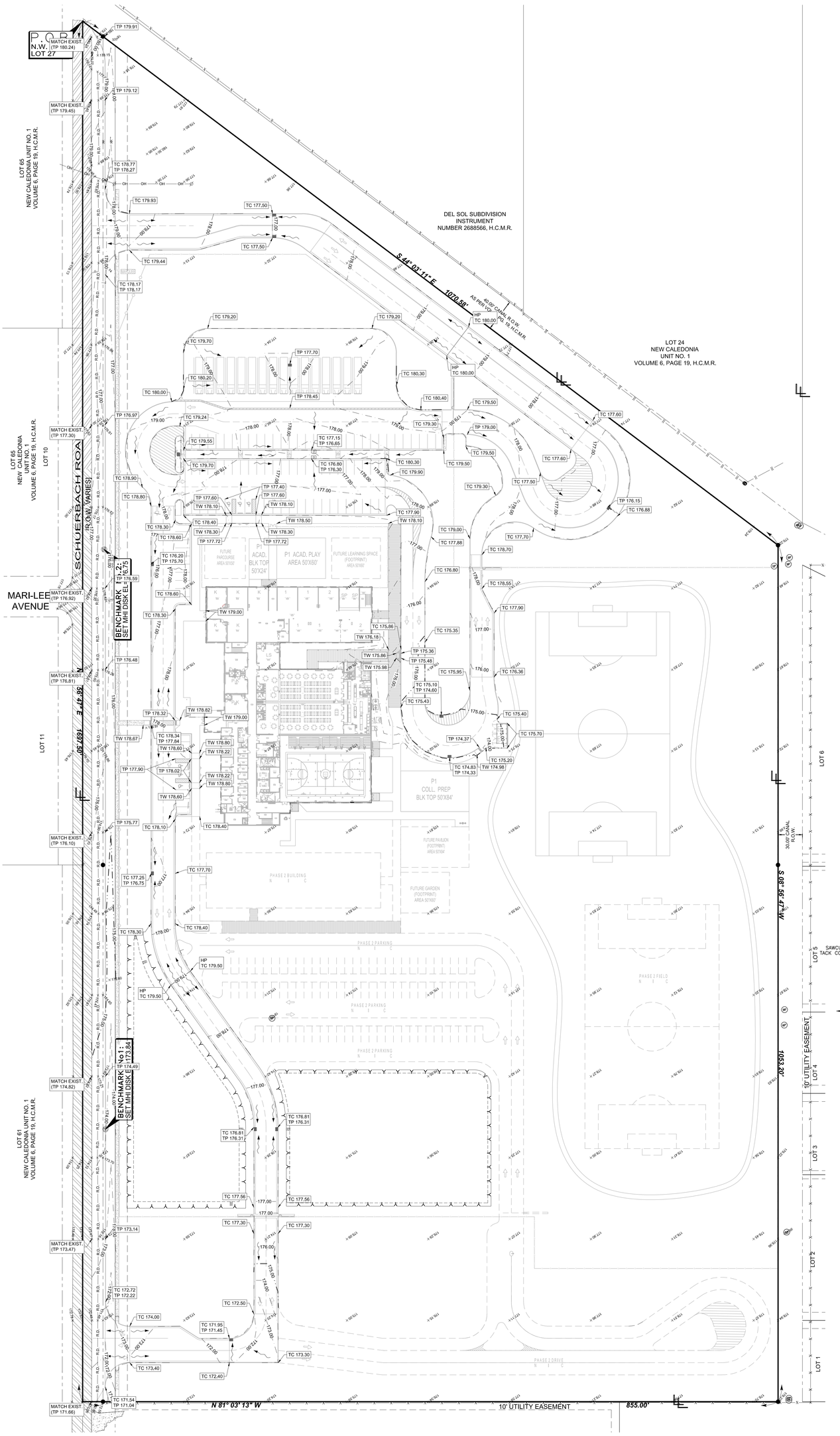
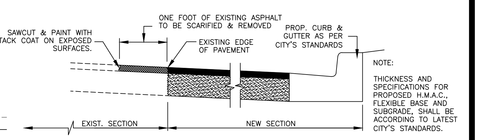
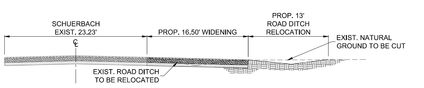




NEW ASPHALT MEETING EXISTING PAVEMENT
SCALE: N.T.S.



SCHUERBACH 16.5' ROAD WIDENING DETAIL
SCALE: 1" = 10'

LEGEND

- ⓢ STORM SEWER MANHOLE
- TYPE "A" INLET
- TYPE "C" INLET
- EL - ELEVATION
- EXIST. - EXISTING
- HP XXX.XX — HIGH POINT ELEVATION
- TC XXX.XX — TOP OF CURB ELEVATION
- TP XXX.XX — TOP OF PAVEMENT ELEVATION
- TW XXX.XX — TOP OF WALK ELEVATION
- STORM RUNOFF ARROW

BENCHMARKS AS PER TEXAS DEPARTMENT OF TRANSPORTATION SYSTEM OF REAL TIME GPS NETWORK ELEVATION DATUM NAVD 88 (2001)

SCALE:1" = 50'

PROPOSED GRADING PLAN

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SHEET 5 OF 10

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5/16/2019

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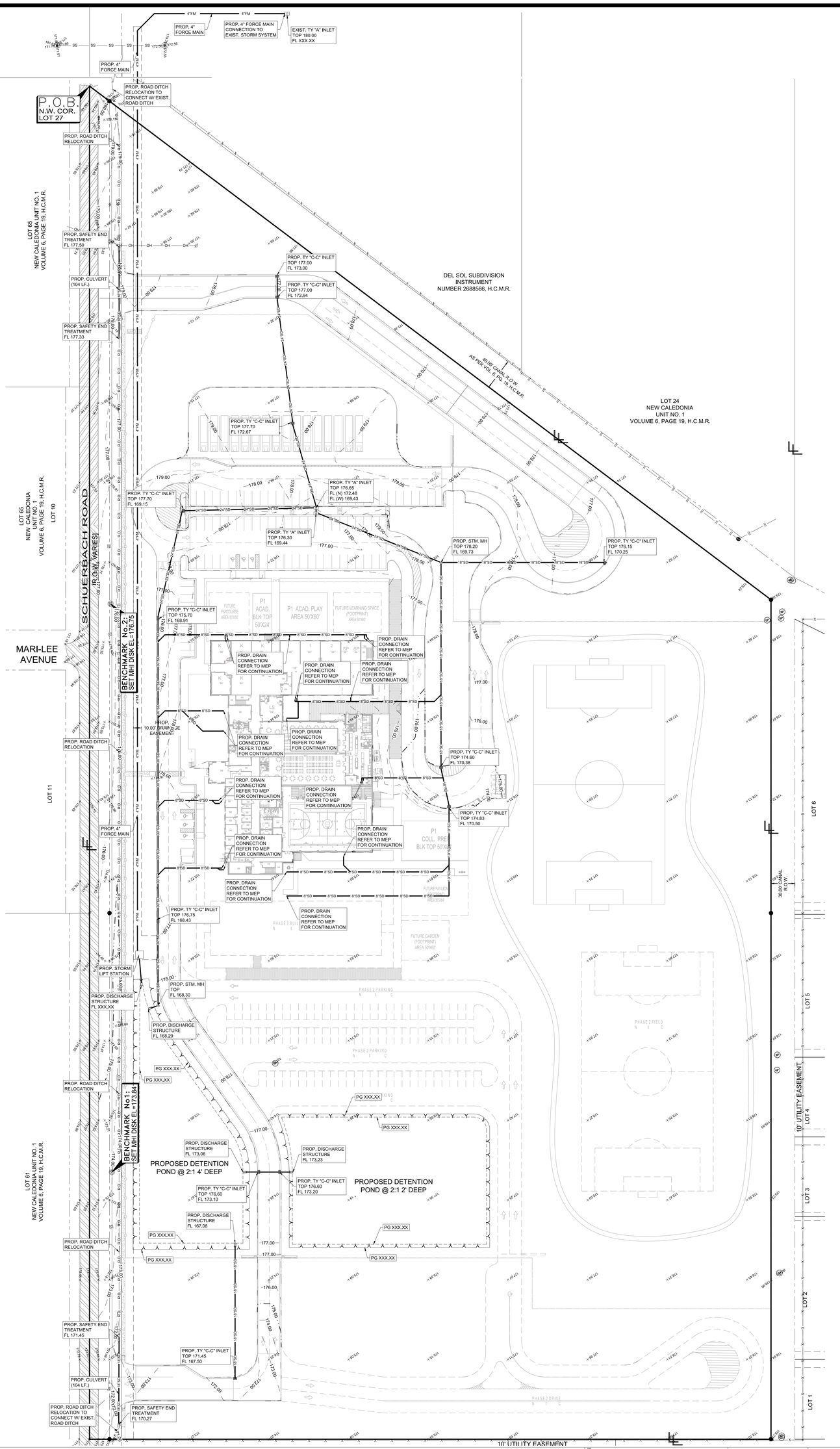

DETENTION VOLUMES:

REQUIRED DETENTION: 173,489 C.F.

PROVIDED DETENTION: 204,164 C.F.

PROPOSED DRAINAGE PLAN

SHEET 6 OF 10

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IDEA Public Schools

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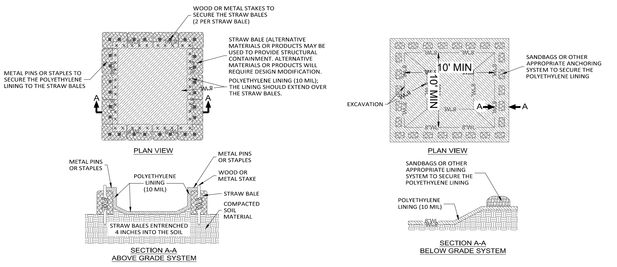
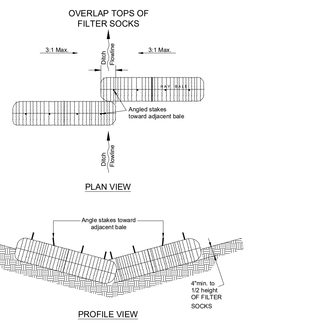
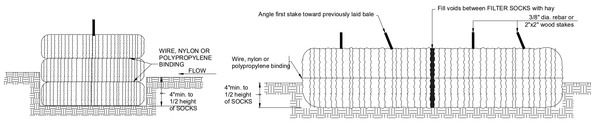


CONCRETE WASHOUT
N.T.S.

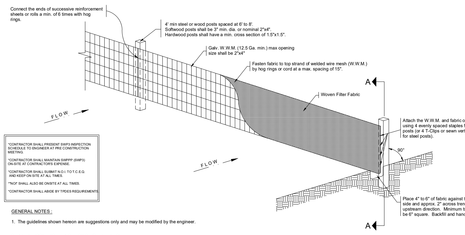


GENERAL NOTES :

1. Filter socks shall be a minimum of 8" diameter.
2. Filter shall be bound by either wire nylo or polypropylene string, the filter socks shall be composed entirely of vegetable matter.
3. Filter socks shall be embedded in the soil a minimum of 4" and where possible height of the hay sock.
4. Filter socks shall be placed in a row with ends tightly abutting the adjacent socks. the socks shall be placed with bindings parallel to the ground.
5. Filter socks shall be securely anchored in place with 3/8" dia. rebar or 2"x2" wood stakes, driven through the filter socks. The first stake shall be angled towards the previously laid sock to force the hay socks together.
6. The guidelines shown hereon are suggestion only any may be modified by the engineer.
7. No hay bales are allowed.



BALED HAY FOR EROSION CONTROL
N.T.S.



GENERAL NOTES:

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.

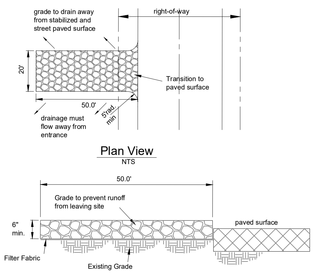
SEDIMENT CONTROL FENCE USAGE GUIDELINES:

A sediment control fence may be constructed near the downstream perimeter of a disturbed area to filter out sediment in sheet flow runoff. A 2-year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT.

Sediment control fence is not recommended to control erosion from a drainage area larger than two acres.

TEMPORARY SEDIMENTARY CONTROL FENCE
N.T.S.



Notes :

1. Construction entrance(s) shall be located at the time of pre-contruction meeting.
2. Stone shall be 4 to 8 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
3. When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on a area stabilized with crushed stone with drainage flowing away form both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
4. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed or tracked onto paved surfaces, must be removed immediately.
5. The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

STABILIZED CONSTRUCTION ENTRANCE
N.T.S.

LEGEND
- BALED HAY
- SF — SILT FENCE

SCALE:1" = 50'

TEMPORARY SEDIMENTARY CONTROL PLAN & DETAILS

SHEET 7 OF 10

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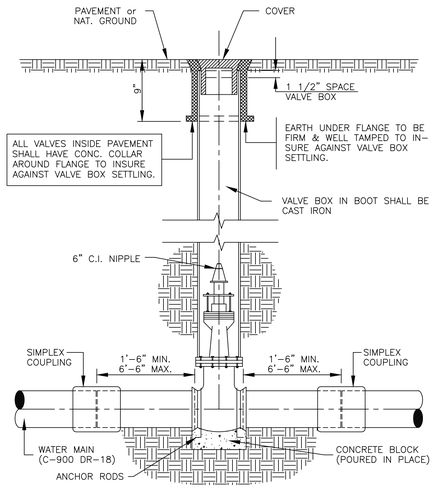
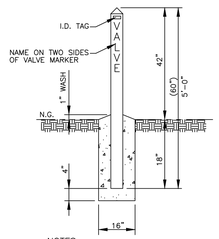
Drawn By: RB, JA
Job No.
Sheet: IDEA 2020 Phase 1

REGISTERED ARCHITECT DAVID A. MONREAL 7858 STATE OF TEXAS



VALVE and VALVE BOX INSTALLATION

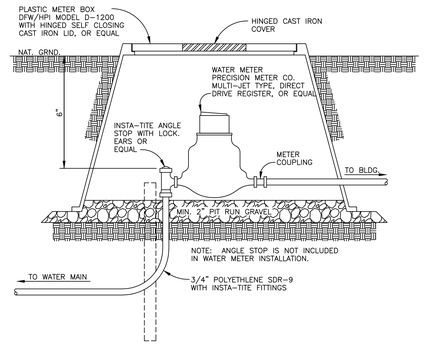
NOTE:
VALVE BOX FOR RE-USE WATER VALVES SHALL BE PURPLE



NOTES:
1. 4"x4"x9'-0" TREATED WOOD POST, TOP POINTED AT 45° ANGLE. PRIME AND PAINT WITH TWO COATS OF YELLOW SEMI-GLOSS ENAMEL. LETTERS TO BE 3" IN HEIGHT AND PAINTED WITH BLACK SEMI-GLOSS ENAMEL.
2. VALVE MARKERS SHALL BE INSTALLED AT EACH LINE VALVE AND FLUSH VALVE.

VALVE MARKER DETAIL

N.T.S.



TYPICAL WATER METER INSTALLATION

N.T.S.

NOTES AS PER TEXAS DEPT. OF HEALTH MANUAL

A. WATER LINE\NEW SEWER LINE SEPARATION.

WHEN NEW SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO WATERLINES THAN NINE FEET IN ALL DIRECTIONS. SEWERS THAT PARALLEL WATERLINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES WILL APPLY:

(1) WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.

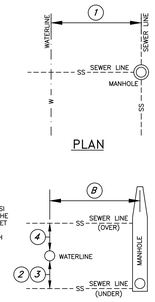
(2) WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 6 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.

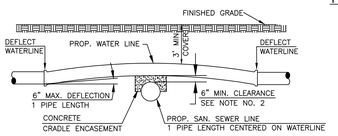
(3) WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SMLAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF SEWER WITHIN NINE FEET OF WATERLINE. THIS INITIAL BACKFILL SHALL BE FROM ONE QUARTER DIAMETER BELOW THE CENTERLINE OF THE PIPE TO ONE PIPE DIAMETER (BUT NOT LESS THAN 12 INCHES) ABOVE TOP OF PIPE.

(4) WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING BY AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT 5 FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.

B. WATER LINE\MANHOLE SEPARATION.

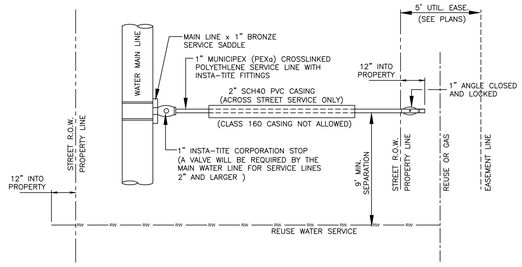
UNLESS SANITARY SEWER MANHOLES AND THE CONNECTING SEWER CAN BE MADE WATERTIGHT AND TESTED FOR LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, A CARRIER PIPE AS DESCRIBED IN SUBSECTION A(4) OF THIS SECTION MAY BE USED WHERE APPROPRIATE.





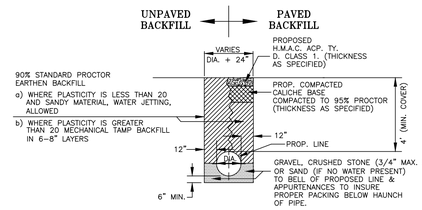
WATERLINE CROSSING OVER SANITARY SEWER MAIN

N.T.S.



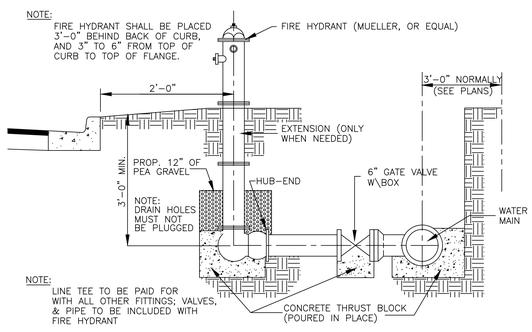
SINGLE WATER SERVICE CONNECTION

N.T.S.

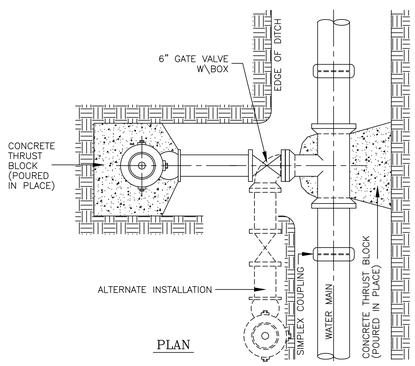


PIPE BEDDING DETAIL FOR S.W.S.C. DOMESTIC WATER LINE

N.T.S.



SECTION

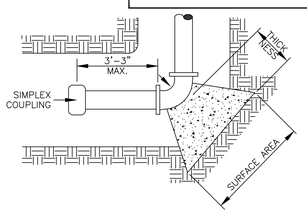


PLAN

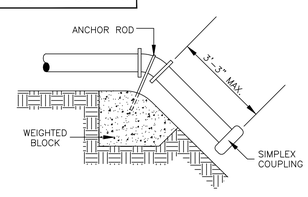
TYPICAL FIRE HYDRANT INSTALLATION

N.T.S.

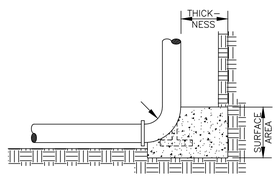
MEGA LUGS ARE REQUIRED FOR THE MJ FITTINGS ON THE SWSC DOMESTIC WATER LINE.
A FLANGED OUTLET IS REQUIRED ON TEE OUTLETS.



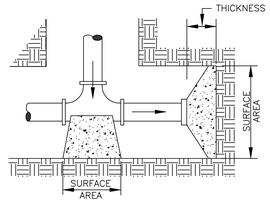
HORIZONTAL BENDS



VERTICAL BENDS



HYDRANT BURYS



TEES & DEAD ENDS

THRUST BLOCK DETAILS

N.T.S.

GENERAL NOTES FOR THRUST BLOCK:

1. ALL VALVES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 150 P.S.I. AND A SOIL RESISTANCE OF 2,000 LBS./SQ.FT WITH PIPELINE HAVING A MINIMUM OF 30" OF COVER.
2. THE CONTRACTOR SHALL CONSIDER REDUCTIONS OF THRUST BLOCK SURFACE AREA UPON SUBMITTAL OF APPROVED SOIL RESISTANT TEST RESULTS GREATER THAN 2000 LBS./SQ.FT.
3. THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE DIRECTION OF THRUST AND TYPE OF FITTINGS.
4. MECHANICAL JOINTS ARE REQUIRED FOR ALL FITTINGS
5. PLASTIC WRAP ON ALL FITTINGS

THRUST BLOCK SIZE

DIAMETER OF PIPE INCHES	HORIZONTAL BEND SURFACE AREA SQ. FT.	HORIZONTAL BEND THICKNESS INCHES	WEIGHT AT VERTICAL BENDS – lbs.
22°1/2 BENDS			
6 OR LESS	2	8	1,700
8	3	12	3,000
10	3.5	12	4,500
12	4	14	6,600
14	5	18	9,000
16	6	18	11,800
45° BENDS			
6 OR LESS	4	12	3,200
8	5	14	5,800
10	6	18	9,000
12	7	18	13,000
14	8	24	17,000
16	11.5	24	23,200
90° BENDS			
6 OR LESS	6	12	6,000
8	8	15	10,700
10	10	18	16,700
12	12	18	24,000
14	18	24	32,600
16	21	24	42,700
TEES & DEAD ENDS			
6 OR LESS	3	12	----
8	4	15	----
10	6	18	----
12	8.5	18	----
14	11.5	24	----
16	15	24	----

GENERAL NOTES FOR ELECTRICAL CONDUIT:

1. CONTRACTOR TO INSTALL CONDUIT WITH PULL STRING IN SPECIFIED STREET CROSSING LOCATIONS. EXTEND CONDUIT 5 FT. PAST RIGHT OF WAY WITH TEMPORARY 4" ELBOW.
2. WHEN GAS LINE EASEMENTS CROSS ELECTRICAL EASEMENTS, ENCASE CONDUIT IN CONCRETE (- 1 FT. COVERING). EXTEND CONDUIT 3 FT. BEYOND EASEMENTS.
3. USE PVC TO LOCATE CONDUIT. THE PVC UTILITY MARKERS ARE A MINIMUM OF 2 FEET ABOVE FINAL GRADE.

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File Name: 18088.00

SHEET 8 OF 10

JOB No. 18088.00

No.	REVISIONS	BY	DATE

MELDEN & HUNT, INC.
REVISION
CONSULTANTS • ENGINEERS • SURVEYORS
115 W. McINTYRE • EDINBURG, TX. 78541
P.O. BOX 1749 • EDINBURG, TX. 78540
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TBPE FIRM # F-1435

ENG. TECH: S.A.
PROJECT ENG: KAH/V
T-BOOK: 1059, PG. 46-47
1. RELEASE DATE:
2. RELEASE DATE:
3. RELEASE DATE:
SCALE: AS NOTED

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS — KELLEY A. HELLER-VELA — 97421 — LICENSED PROFESSIONAL ENGINEER

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5/16/2019

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WATER DETAILS - SHARYLAND WATER SUPPLY CORPORATION

IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW
IDEA Public Schools
PALMVIEW, TEXAS

REGISTERED ARCHITECT — DAVID A. MONREAL — 19556 — STATE OF TEXAS

5/16/2019

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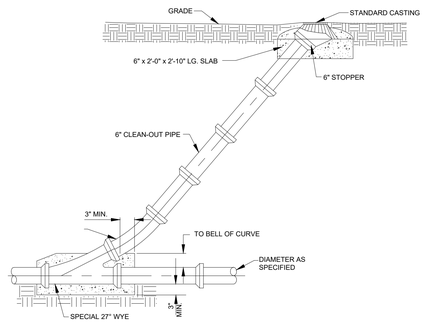
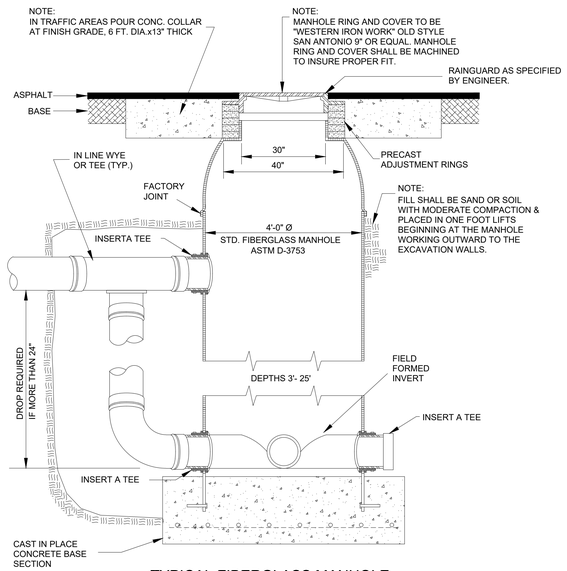
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet:

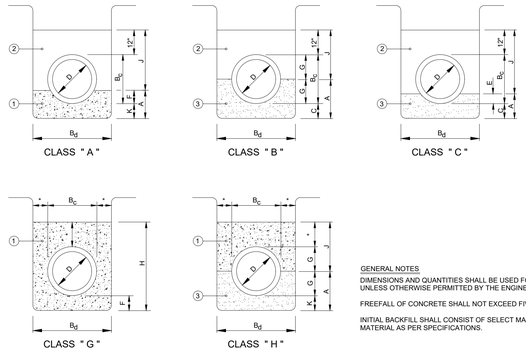
May 20, 2019 – 8:45am Y:\Miscellaneous Engineering\Educational Institutions\IDEA Academy\18088 – IDEA Palmview (Schuerbach)\18088.00 – Plat DevReportGen\Autocad Files\DWG\IDEA Palmview PHL_1_.dwg



STANDARD CLEANOUT
N.T.S.



TYPICAL FIBERGLASS MANHOLE
N.T.S.



LEGEND (ALL CLASSES)

1 2500 PSI CONCRETE
2 INITIAL BACKFILL
3 GRAVEL OR CRUSHED STONE
D NOMINAL PIPE SIZE (I.D.)
B_C PIPE O.D. AT BELLS
B_d TRENCH WIDTH
A SEE TABLE
C 1/8 B_C (EXCEPT AS NOTED)
E 1/6 B_C
F 1/4 B_C (EXCEPT AS NOTED)
G 1/2 B_C
H DEPTH OF CONCRETE
J SEE TABLE
K 1/4 B (EXCEPT AS NOTED)
* 4" MINIMUM

GENERAL NOTES

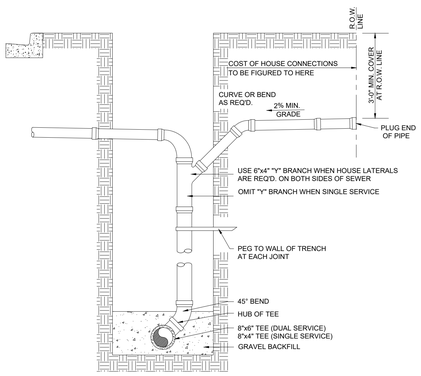
DIMENSIONS AND QUANTITIES SHALL BE USED FOR MEASUREMENT AND PAYMENT UNLESS OTHERWISE PERMITTED BY THE ENGINEER.

FREEFALL OF CONCRETE SHALL NOT EXCEED FIVE (5) FEET.

INITIAL BACKFILL SHALL CONSIST OF SELECT MATERIAL OR FINE GRANULAR MATERIAL AS PER SPECIFICATIONS.

CLASS	DIMENSIONS (INCHES)													QUAN. (C.Y. per 100 L.F.)				
	D	B_C	B_d	A In Earth	A In Rock	C e	C r	E	F	G	H	J	K In Earth	K In Rock	①	②	③ In Earth	③ In Rock
A	6	7.75	24		5.94				1.94			17.82		4.00	3.4	10.0		
	8	10.25	26		6.56				2.56			19.69		4.00	4.0	11.5		
	10	13.00	29		7.25				3.25			21.75		4.00	4.7	13.5		
	12	16.00	32		8.00				4.00			24.00		4.00	5.6	15.6		
	15	19.50	36		9.76				4.88			26.63		4.88	7.5	18.5		
	18	23.00	39		11.50				5.75			29.25		5.75	9.4	20.7		
	21	26.50	43		13.26				6.63			31.88		6.63	11.9	23.8		
B	6	7.75	24	7.88	9.88	4	6			3.88		15.88				9.2	4.3	5.5
	8	10.25	26	9.13	11.13	4	6			5.13		17.13				10.4	5.0	6.4
	10	13.00	29	10.50	12.50	4	6			6.50		18.50				12.1	6.1	7.6
	12	16.00	32	12.00	14.00	4	6			8.00		20.00				13.9	7.3	8.9
	15	19.50	36	13.75	15.75	4	6			9.75		21.75				16.3	8.9	10.7
	18	23.00	39	15.50	17.50	4	6			11.50		23.50				18.2	10.2	12.2
	21	26.50	43	17.25	19.25	4	6			13.25		25.25				20.8	12.0	14.2
C	6	7.75	24	5.29	7.29	4	6		1.29			18.46				10.3	3.1	4.4
	8	10.25	26	5.71	7.71	4	6		1.71			20.55				11.8	3.6	4.9
	10	13.00	29	6.17	8.17	4	6		2.17			22.83				14.0	4.2	5.7
	12	16.00	32	6.67	8.67	4	6		2.67			25.33				16.2	4.9	6.6
	15	19.50	36	7.25	9.25	4	6		3.25			28.25				19.3	5.9	7.7
	18	23.00	39	7.83	9.83	4	6		3.83			31.17				21.8	6.7	8.7
	21	26.50	43	8.42	10.42	4	6		4.42			34.08				25.1	7.8	10.0
G	6	7.75	24							4.00		16.0				8.7		
	8	10.25	24							4.00		18.0				9.0		
	10	13.00	24							4.00		21.0				9.5		
	12	16.00	24							4.00		24.0				9.6		
	15	19.50	28							4.88		28.5				12.8		
	18	23.00	32							5.75		33.0				16.5		
	21	26.50	36							6.63		37.0				20.1		
H	6	7.75	24	7.88	9.88					3.88		8.12	4.00	6.00	4.4		4.3	5.5
	8	10.25	24	9.13	11.13					5.13		8.87	4.00	6.00	4.4		4.6	5.8
	10	13.00	24	10.50	12.50					6.50		10.50	4.00	6.00	4.8		4.8	6.0
	12	16.00	24	12.00	14.00					8.00		12.00	4.00	6.00	4.8		4.8	6.1
	15	19.50	28	14.63	15.75					9.75		13.87	4.88	6.00	6.1		6.7	7.5
	18	23.00	32	17.25	17.50					11.50		15.75	5.75	6.00	7.6		8.9	9.1
	21	26.50	36	19.88	19.88					13.25		17.12	6.63	6.63	8.8		11.3	11.3

PIPE BEDDING REQUIREMENTS
N.T.S.



SANITARY SEWER SERVICE CONNECTION
N.T.S.

TYPICAL FIBERGLASS MANHOLE BASE
N.T.S.

NOTES AS PER TEXAS DEPT. OF HEALTH MANUAL

A. WATER LINE/NEW SEWER LINE SEPARATION.

WHEN NEW SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO WATERLINES THAN NINE FEET IN ALL DIRECTIONS. SEWERS THAT PARALLEL WATERLINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES WILL APPLY:

(1) WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.

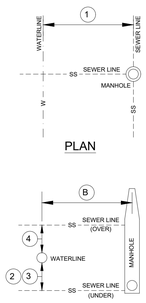
(2) WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF 6 INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.

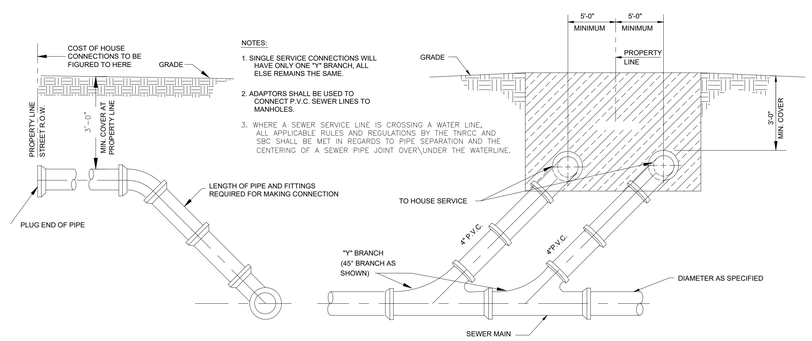
(3) WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF SEWER WITHIN NINE FEET OF WATERLINE. THIS INITIAL BACKFILL SHALL BE FROM ONE QUARTER DIAMETER BELOW THE CENTERLINE OF THE PIPE TO ONE PIPE DIAMETER (BUT NOT LESS THAN 12 INCHES) ABOVE TOP OF PIPE.

(4) WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT 5 FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.

B. WATER LINE/MANHOLE SEPARATION.

UNLESS SANITARY SEWER MANHOLES AND THE CONNECTING SEWER CAN BE MADE WATERTIGHT AND TESTED FOR LEAKAGE, THEY MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF HORIZONTAL CLEARANCE FROM AN EXISTING OR PROPOSED WATERLINE. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, A CARRIER PIPE AS DESCRIBED IN SUBSECTION A.(4) OF THIS SECTION MAY BE USED WHERE APPROPRIATE.





NOTES:

1. SINGLE SERVICE CONNECTIONS WILL HAVE ONLY ONE "Y" BRANCH, ALL ELSE REMAINS THE SAME.
2. ADAPTORS SHALL BE USED TO CONNECT P.V.C. SEWER LINES TO MANHOLES.
3. WHERE A SEWER SERVICE LINE IS CROSSING A WATER LINE, ALL APPLICABLE RULES AND REGULATIONS BY THE TNRCC AND SBC SHALL BE MET IN REGARDS TO PIPE SEPARATION AND THE CENTERING OF A SEWER PIPE JOINT OVER\UNDER THE WATERLINE.

SANITARY SEWER SERVICE CONNECTION
N.T.S.

JOB No.
18088.00

No.	REVISIONS	BY

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P.O. BOX 1749 - EDINBURG, TX. 78540
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ENG. TECH: S.A.
PROJECT ENG.: K.A.H-V.
T-BOOK: 1059, PG. 46-47
1. RELEASE DATE:
2. RELEASE DATE:
3. RELEASE DATE:
SCALE: AS NOTED

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
KELLEY A. HELLER-VELA
97421
LICENSED
PROFESSIONAL ENGINEER

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SCHOOLS PHASE 1

IDEA PUBLIC SCHOOLS
IDEA Public Schools
PALMVIEW
PALMVIEW, TEXAS

SANITARY SEWER DETAILS

REGISTERED ARCHITECT
ALVIN A. MONREAL
19556
STATE OF TEXAS
5/10/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet:

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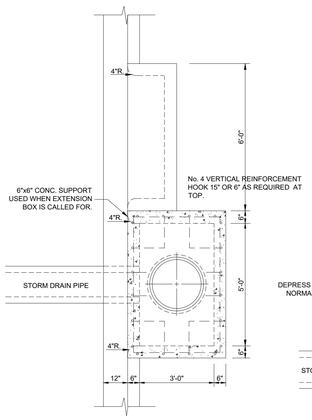
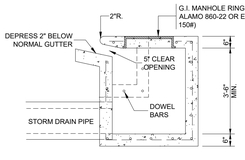


SLOPE BOTTOM OF INLET EXTENSION 1/2" / 1'-0" TOWARD INLET EXTENSION TO INLET TO BE MADE IN INCREMENTS OF 3'-0" OR 6'-0" ONLY. TRANSITION NORMAL GUTTER TO INLET SLOPE APPROXIMATELY 3'-0".

PLAN

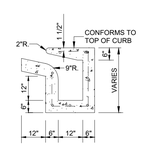


ALL STEEL TO BE No. 4 BARS 12" SPACING IN BOTH DIRECTIONS.

SECTION

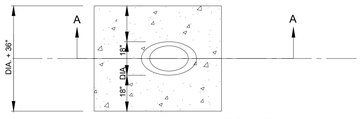
TYPE "A" INLET

N.T.S.

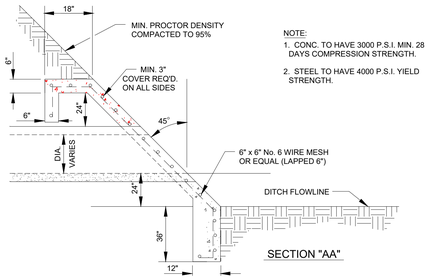


ALL STEEL TO BE No. 4 BARS ON 12" SPACING IN BOTH DIRECTIONS.

INLET EXTENSION



PLAN VIEW

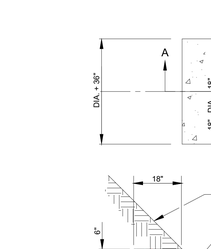


SECTION "AA"

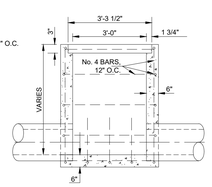
NOTE:
1. CONC. TO HAVE 3000 P.S.I. MIN. 28 DAYS COMPRESSION STRENGTH.
2. STEEL TO HAVE 4000 P.S.I. YIELD STRENGTH.

STORM DISCHARGE STRUCTURE

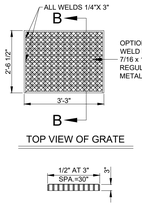
N.T.S.



TOP VIEW OF INLET



SECTION "A-A"



OPTION: (SEE SPECIFICATIONS) WELD TO TOP OF GRATE 1 5/8 x 3 7/16 x 10 GAUGE CARBON STEEL REGULAR MESH EXPANDED METAL

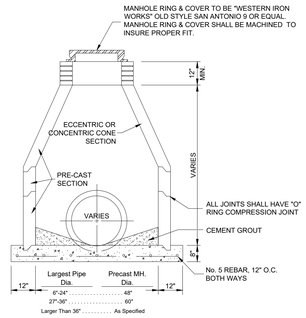
TOP VIEW OF GRATE



SECTION "B-B"

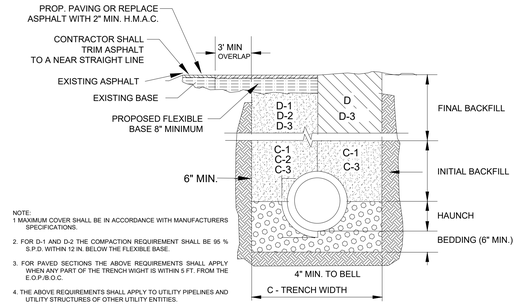
TYPE "C-C" GRATED INLET

(TWO GRATES PER INLET)
N.T.S.



STANDARD STORM SEWER PRE-CAST CONCRETE MANHOLE

N.T.S.



NOTE:
1 MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95 % S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIGHT IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

STORM TRENCH BEDDING AND BACKFILL DETAILS

N.T.S.

A. BEDDING FOR RCP CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - PIT RUN GRAVEL [" MIX SIZE.

B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS 1 OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12". MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.

C-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREET, PARKING AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C-2 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

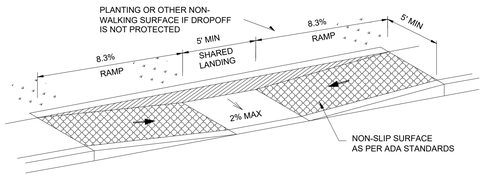
C-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D. FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS I, II, III, OR IV, COMPACTED TO 92% S.P.D., (12" LOOSE LIFTS, MECHANICAL COMPACTION).

D-1 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (AASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-2 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAY - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D., AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-3 FINAL BACKFILL OR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT BEYOND THE EDGE OF PAVEMNTT/BACK OF CURB SHALL HAVE CLASS I OR CLASS II (ASTM D2321 OR SOIL TYPE 1A, A2, OR A3 (AASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL STRUCTURES BEYOND 5 FT FROM THE E.O.P/B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WILLPOINTS, MINIMUM 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".



PARALLEL CURB RAMP BUILT ON SIDEWALK

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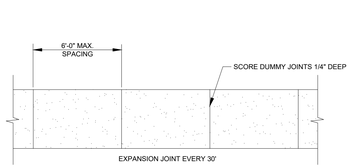

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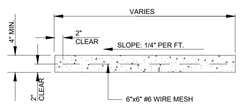


SECTION

SIDEWALK NOTES:

MINIMUM 4'-0" WIDE SIDEWALK.

SIDEWALK GRADIENT SHALL NOT EXCEED 1:20.

SIDEWALK CONCRETE SHALL BE 5 SACK CEMENT MIX AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.

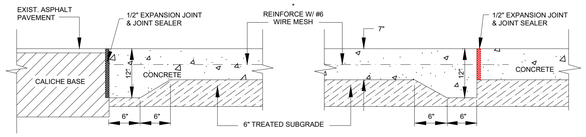
CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF EXISTING UTILITY LINES WITH APPROPRIATE COMPANIES TO AVOID PLACING SIDEWALKS ON TOP OF LINES.

PROVIDE DROP CURBS AT INTERSECTIONS.

CONTRACTOR SHALL COMPLY WITH LATEST REGULATIONS AS SET FORTH IN AMERICANS WITH DISABILITIES ACT (ADA).

SIDEWALK DETAILS

N.T.S.



SECTION

CONCRETE PAVING DETAIL

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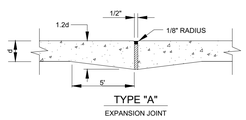
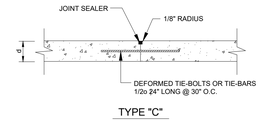
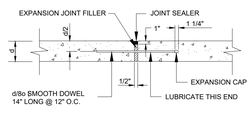


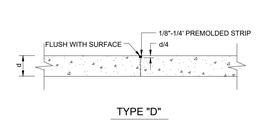
TYPE "A"
EXPANSION JOINT



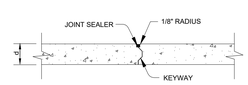
TYPE "C"
TIED BUTT LONGITUDINAL CONSTRUCTION JOINT



TYPE "A"
ALTERNATE EXPANSION JOINT



TYPE "D"
SAWED OR PREMOLDED STRIP LONGITUDINAL OR TRAVERSE

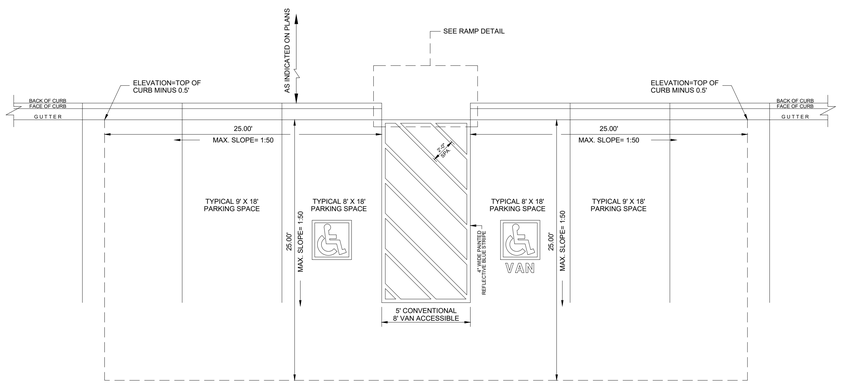


TYPE "B"
LONGITUDINAL CONSTRUCTION JOINT

CONCRETE JOINT DETAILS

N.T.S.

NOTE:
TYPE "D" JOINTS SHALL BE PERPENDICULAR TO TRAFFIC FLOW.
TYPE "B" & "C" JOINTS SHALL BE PARALLEL TO TRAFFIC FLOW.



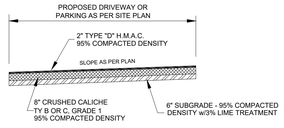
TYPICAL PARKING LOT GRADING FOR HANDICAP AREA

N.T.S.

FLEXIBLE PAVEMENT NOTES:

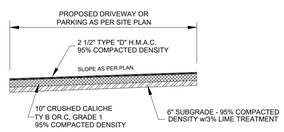
1. REFER TO GEOTECH REPORT FOR PREPARATION ACTIVITIES.

2. HMAC SHALL BE APPLIED IN TWO COURSES.
A.) FIRST COURSE THICKNESS SHALL BE 1" FOR (TY DI-1) & 1 1/2" FOR (TY DI-2) AND PLACED AT TIME OF BASE AND SUBGRADE.
B.) FINAL 1" COURSE WILL BE PLACED TOWARDS COMPLETION OF PROJECT.



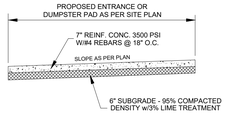
FLEXIBLE PAVEMENT SYSTEM (AUTOMOBILE PARKING AREAS)

N.T.S.



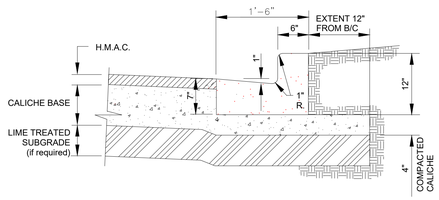
FLEXIBLE PAVEMENT SYSTEM (DRIVEWAYS & BUS LANES)

N.T.S.



RIGID PAVEMENT SYSTEM (ENTRANCES; DUMPSTER TURNS)

N.T.S.



CONCRETE CURB & GUTTER

N.T.S.

GMS ARCHITECTS
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Brownsville TX 78526
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fax (956) 546-0196

No.	REVISIONS	BY

MELDEN & HUNT, INC
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P.O. BOX 1749 - EDINBURG, TX. 78540
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JOB No.
18088.00

DATE | REVISION | BY

ENG. TECH: S.A.
PROJECT ENG: K.A.H-V.
T-BOOK: 1059, PG. 46-47
1. RELEASE DATE:
2. RELEASE DATE:
3. RELEASE DATE:
SCALE: AS NOTED

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
KELLEY A. HELLER-VELA
97421
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KELLEY A. HELLER-VELA, P.E. 97421

5/16/2019

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW
IDEA Public Schools
PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
19556
STATE OF TEXAS

5/16/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet:

PAVING & DRAINAGE DETAILS

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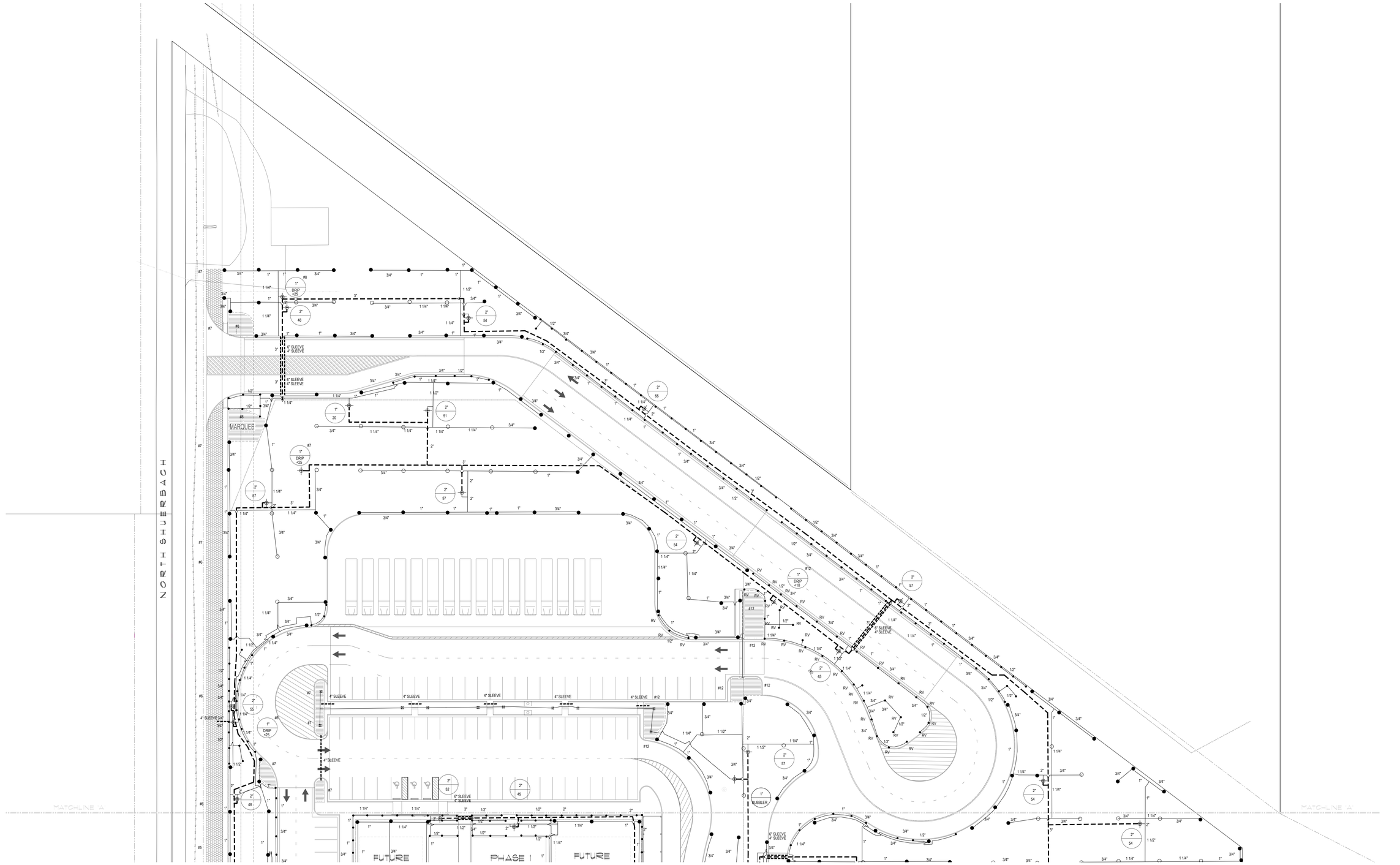
File Name: 18088.00

SHEET 10 OF 10



IRRIGATION LEGEND

- ● □V □AINBI□D □-VAN SE□IES □O□A□□ NO□□LE
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- ● □AINBI□D □000 PC - □O□O□S
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- ▲ □AINBI□D □UIC□ COUPLE□ VALVE □33-DL□C□
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- □AINBI□D PEB SE□IES ELEC□□IC VALVE
- CON□□OLLE□ □ESP-L□D □WO WI□E WI□H I□ NCC-3G; CELLULA□ CA□□□IDGE□ WI□H □LOW MGM□ AND □LOW SENSO□ □S-1 0-B AND SD210□U□□ DECODE□S AND WI□ELESS □AIN□□EE□E SENSO□ □ W□2□□C-□□ CON□□AC□O□ □O SE□ UP I□ SO□□WA□E WI□H OWNE□ INCL. □ES□ING AND □□AINING
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- BAC□□LOW P□EVEN□E□ □AS SI□ED□
- CLASS 200 PVC LA□E□AL PIPING
- CLASS 200 PVC MAINLINE
- SCH. □0 PVC SLEEVING □AS SI□ED□
- VALVE SI□E
- GPM

D□IPLINE □BED□

D□IPLINE □LAWN□

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1" BALL VALVE WI□H □EGULA□ED P□ESSU□E AND 200 MESH □IL□□A□ION
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INS□ALL ALL E□UIPMEN□ACCO□DING □O MANU□AC□U□E□S SPECI□ICA□IONS

NOTE:

Irrigation Contractor to coordinate with Landscape Contractor on layo□t o□ all beds. Adj□st drip line location per installed edging.

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SI□E O□ PIPE
1 - □	½"
6 - 10	¾"
11 - 20	1"
21 - 30	1 ¼"
31 - □0	1 ½"

SLEEVING NOTES:

1. Irrigation Contractor shall s□pply and □install sleeves and cond□its at twenty-o□r□2□", inches below □inish grade o□ the top o□ pavement. Bore as re□□ired.
2. Irrigation Contractor shall e□tend sleeves one □1□□oot beyond edge o□ all pavement.
3. Irrigation Contractor shall cap pipe ends □sing PVC caps.

□ All sleeves shall be Sched□le □0 PVC pipe.

1 I□□IGA□ION PLAN
SCALE: 1"=30'-0"

W—E

SSP Design
SITE PLANNING LANDSCAPE DESIGN
759 E. WASHINGTON ST.
BROWNSVILLE, TX 78575
TEL (956) 547-9788
FAX (956) 547-9977
www.sspdesign.com

No.	REVISIONS	BY

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brownsville
texas 78526
(956) 546-0110
fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

IDEA Public Schools

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
JOHN ANTHONY MENDEZ
851
LICENSED IRRIGATOR

□16:19

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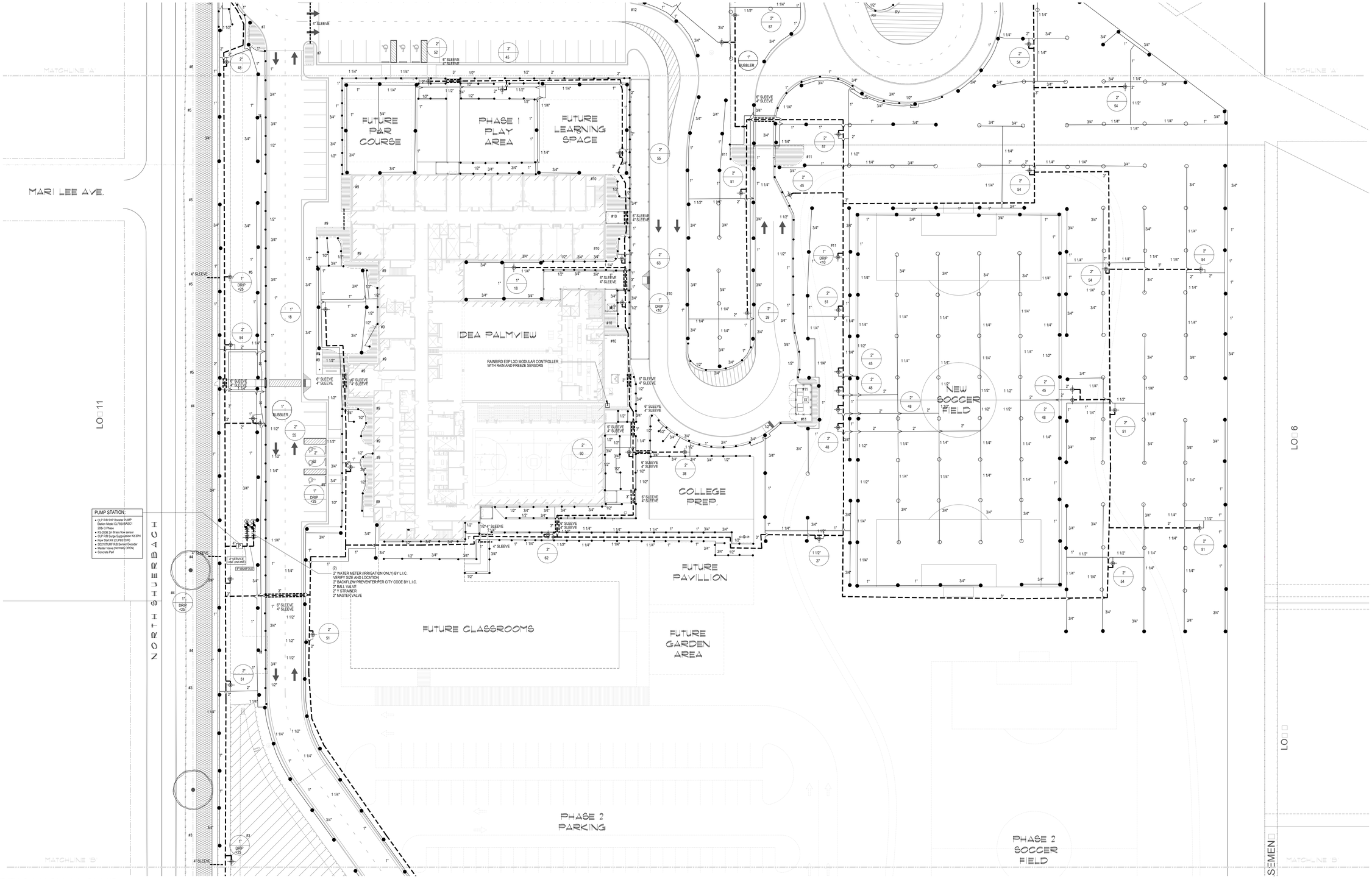
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: PLM
Job No. IDEA PALMVIEW PHASE 1
Sheet: L1.01



IRRIGATION LEGEND

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- WA□E□ ME□E□ □AS SI□ED□
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1 I□□IGA□ION PLAN
SCALE: 1"=30'-0"

GMS ARCHITECT
1150 poredes line rd.
brownsville
texas 78526
(956) 546-0110
fax (956) 546-0196

No.	REVISIONS	BY

IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW

IDEA Public Schools

STATE OF TEXAS
JOSE ANTONIO GOMEZ MENDEZ
REGISTERED
851
PROFESSIONAL
LANDSCAPE ARCHITECT

□16:19

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Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: PLM
Job No. IDEA PALMVIEW PHASE 1
Sheet: L1.02

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SITE PLANNING
LANDSCAPE DESIGN
789 E. WASHINGTON ST.
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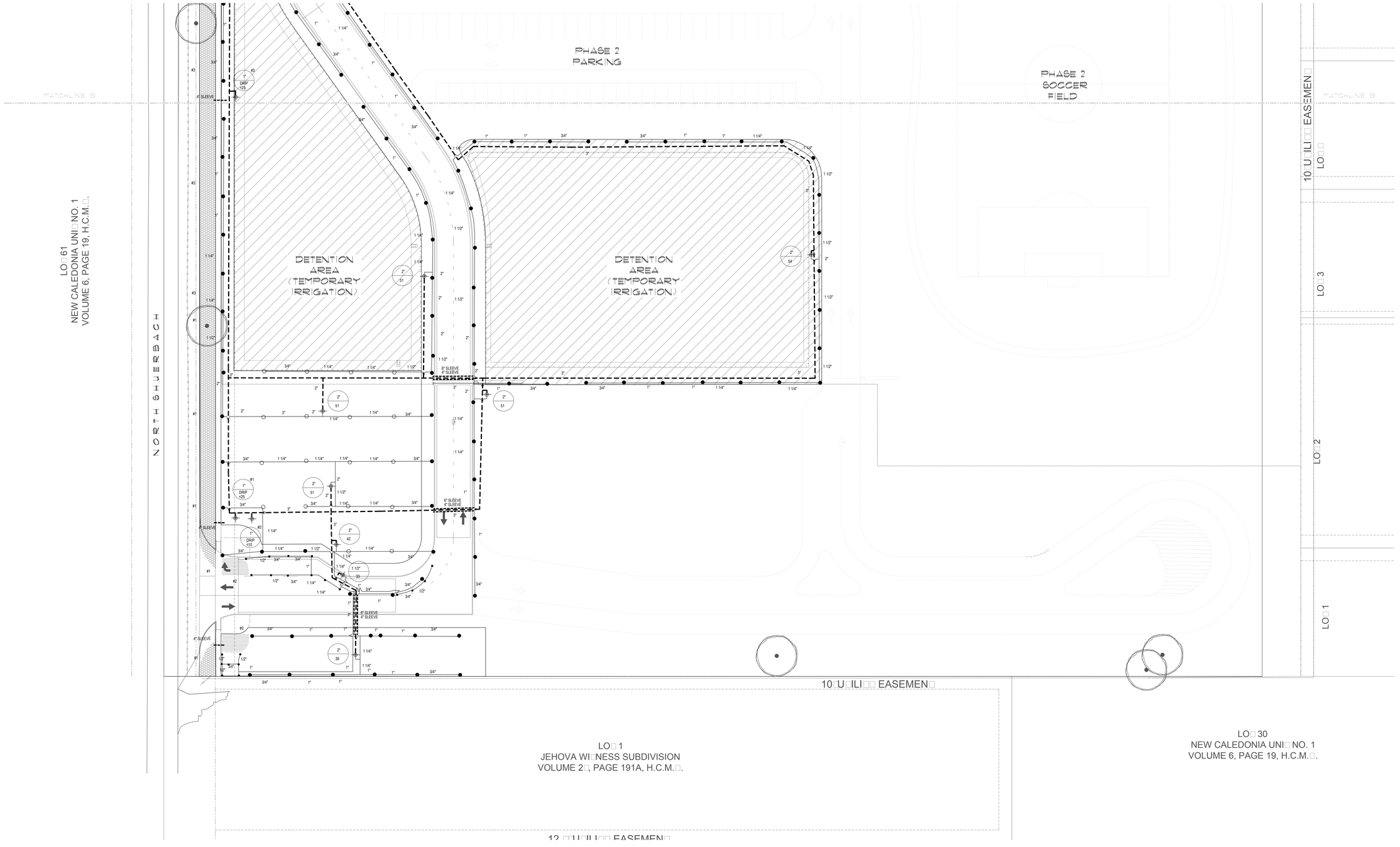

IRRIGATION LEGEND

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- ▲ □AINBI□D □UIC□ COUPLE□ VALVE □33-DL□C□ □UIC□ COUPLE□S SHALL BE CONNEC□ED □O MAINLINE ADD ONE □ONE □HA□ AC□IVA□ES MAS□E□ VALVE AND AC□IVA□ES □HE □UIC□ COUPLE□S, LABEL ON COLO□ED □ONING DIAG□AM
- □AINBI□D PEB SE□IES ELEC□□IC VALVE
- ◉ CON□□OLLE□ □ESP-L□D □WO WI□E WI□H □ NCC-3G: CELLULA□ CA□□□IDGE□ WI□H □LOW MGM□ AND □LOW SENSO□ □S-1□0-B AND SD210□U□□ DECODE□S AND WI□ELESS □AIN□□EE□E SENSO□ □W□2□□C-□□□ CON□□AC□O□ □O SE□ UP □ SO□□WA□E WI□H OWNE□ INCL. □ES□ING AND □□AINING
- WA□E□ ME□E□ □AS SI□ED□
- BAC□□LOW P□EVEN□E□ □AS SI□ED□
- CLASS 200 PVC LA□E□AL PIPING
- CLASS 200 PVC MAINLINE
- SCH. □0 PVC SLEEVING □AS SI□ED□
- VALVE SI□E
- GPM

D□IPLINE □BED□

D□IPLINE □LAWN□

□AINBI□D D□IPLINE □□S
□1□" LA□E□AL SPACING, 12" EMI□E□ SPACING□
□□ SE□IES □IE DOWN S□A□ES □DS-0□0□□ 36" O.C. □□WO ON EACH
□EE ELBOW PVC LA□E□AL PIPING SI□ED AS □E□UI□ED
□AINBI□D D□IP CON□□OL □ONE □□□C□-100-P□B-COM □EACH D□IP □ONE□
1" BALL VALVE WI□H □EGULA□ED P□ESSU□E AND 200 MESH □IL□□A□ION
□1□D□IP S□S□EM OPE□A□ION INDICA□O□ □OPE□IND□PE□ □□IGA□ION □ONE
ALL VALVE BO□ES SHALL BE □AINBI□D VB-S□D O□ APP□OVED E□UAL
ALL VALVE BO□ES SHALL HAVE □IL□E□ □AB□IC AND □" O□ G□AVEL A□ BASE
INS□ALL ALL E□UIPMEN□ ACCO□DING □O MANU□AC□U□E□S SPECI□ICA□IONS

NOTE:

Irrigation Contractor to coordinate with Landscape Contractor on layo□t o□all beds. Adj□st drip line location per installed edging.

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SI□E O□ PIPE
1 - □	½"
6 - 10	¾"
11 - 20	1"
21 - 30	1 ¼"
31 - □0	1 ½"

SLEEVING NOTES:

1. Irrigation Contractor shall s□pply and □install sleeves and cond□its at twenty-□o□r □2□" □inches below □inish grade o□ the top o□pavement. Bore as re□□ired.
2. Irrigation Contractor shall e□tend sleeves one □1□oot beyond edge o□all pavement.
3. Irrigation Contractor shall cap pipe ends □sing PVC caps.

□. All sleeves shall be Sched□le □0 PVC pipe.

1 I□□IGA□ION PLAN
SCALE: 1"=30'-0"

W—E

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

IDEA Public Schools

STATE OF TEXAS
JOHN J. WINGFIELD
851
LICENSED IRRIGATOR

□16:19

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Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: PLM
Job No. IDEA PALMVIEW PHASE 1
Sheet: L1.03

IRRIGATION LEGEND

● □V	□AINBI□D □-VAN SE□IES □O□A□□ NO□□LE
⊠	□AINBI□D 1□0□BUBBLE□ HEAD
●	□AINBI□D □000 PC - □O□O□S
○	□AINBI□D □000 □C - □O□O□S
▲	□AINBI□D □UIC□ COUPLE□ VALVE □33-DL□C□□UIC□ COUPLE□S SHALL BE CONNEC□ED □O MAINLINE ADD ONE □ONE □HA□ AC□IVA□ES MAS□E□ VALVE AND AC□IVA□ES □HE □UIC□ COUPLE□S, LABEL ON COLO□ED □ONING DIAG□AM - LOCA□ED ALONG MAINLINE 200□SPACING
	□AINBI□D PEB SE□IES ELEC□□IC VALVE
	CON□□OLLE□ □ESP-L□D □WO WI□E WI□H I□ NCC-3G: CELLULA□ CA□□IDGE□ WI□H □LOW MGM□ AND □LOW SENSO□ □S-1□0-B AND SD210□U□□ DECODE□S AND WI□ELESS □AIN□□EE□E SENSO□ □W□2□□C-□□□ CON□□AC□O□ □O SE□ UP I□ SO□□WA□E WI□H OWNE□ INCL. □ES□ING AND □□AINING
	WA□E□ ME□E□ □AS SI□ED□
	BAC□□LOW P□EVEN□E□ □AS SI□ED□
———	CLASS 200 PVC LA□E□AL PIPING
— — —	CLASS 200 PVC MAINLINE
------	SCH. □0 PVC SLEEVING □AS SI□ED□
	VALVE SI□E GPM

D□IPLINE □BED□

RAINBIRD DRIP XFS-P (.049" THICKNESS) SUBSURFACE DRIPLINE WITH COPPER SHIELD
(18" LATERAL SPACING, 12" EMIITER SPACING) ALL DRIPLINE TO BE BURIED 2" DEPTH MIN.
6" SOIL STAPLE (TDS-050 BEND) @ 36" O.C. & TWO ON EACH TEE/ELBOW
PVC LATERAL PIPING SIZED AS REQUIRED

D□IPLINE □LAWN□

RAINBIRD DRIP CONTROL ZONE KIT XCZ-100-PRB-R-COM (EACH DRIP ZONE)
1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION (75 MICRON SS)
INSTALL ALL EQUIPMENT ACCORDING TO
MANUFACTURERS SPECIFICATIONS
OR APPROVED EQUAL

(1) DRIP SYSTEM OPERATION INDICATOR (OPERIND) PER IRRIGATION ZONE

DESIGN PRESSURE 60 PSI

ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.

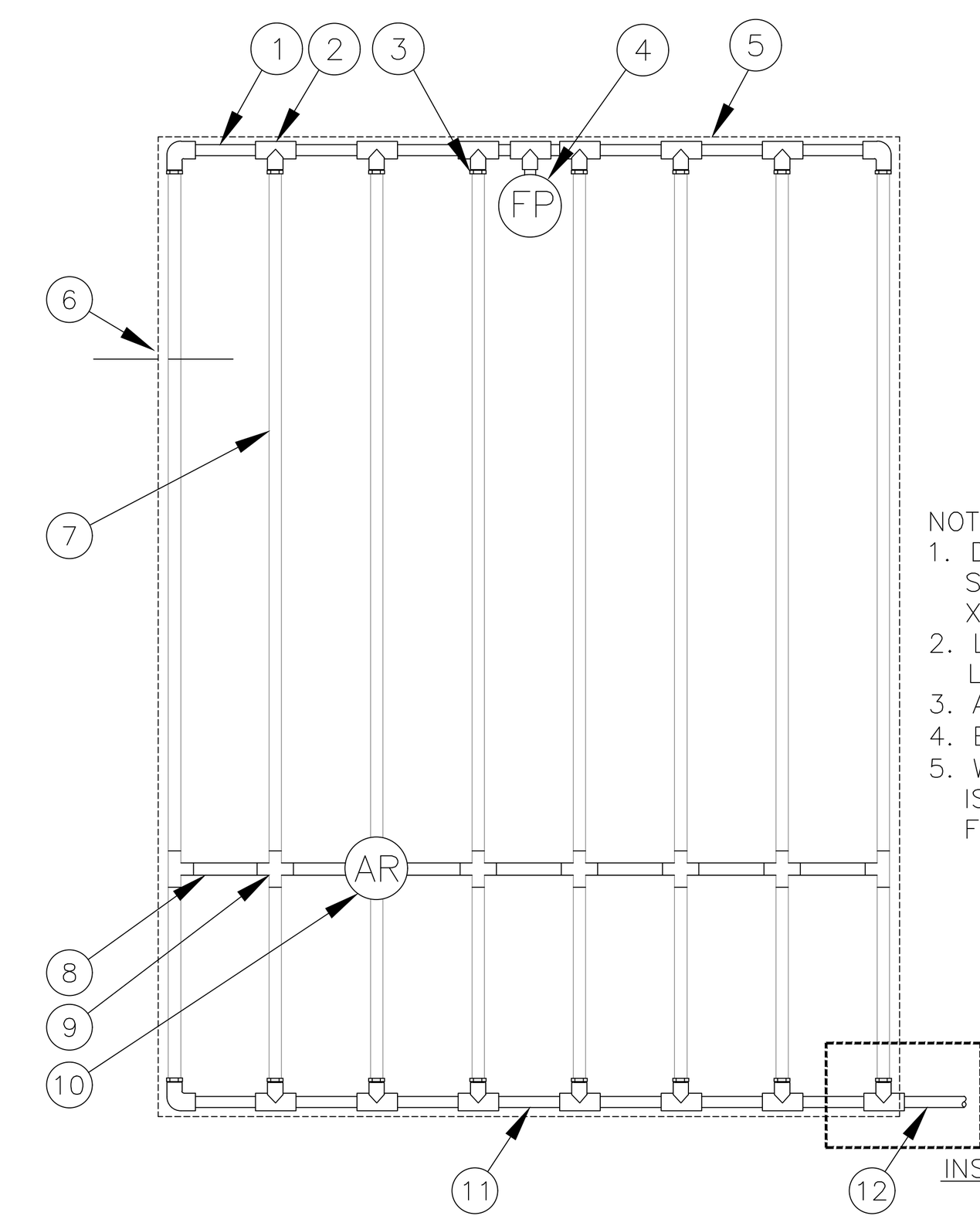
IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) MC-178/ P.O.BOX 13087, AUSTIN, TX 78711-3087. TECQ'S WEBSITE IS: www.tceq.state.tx.us

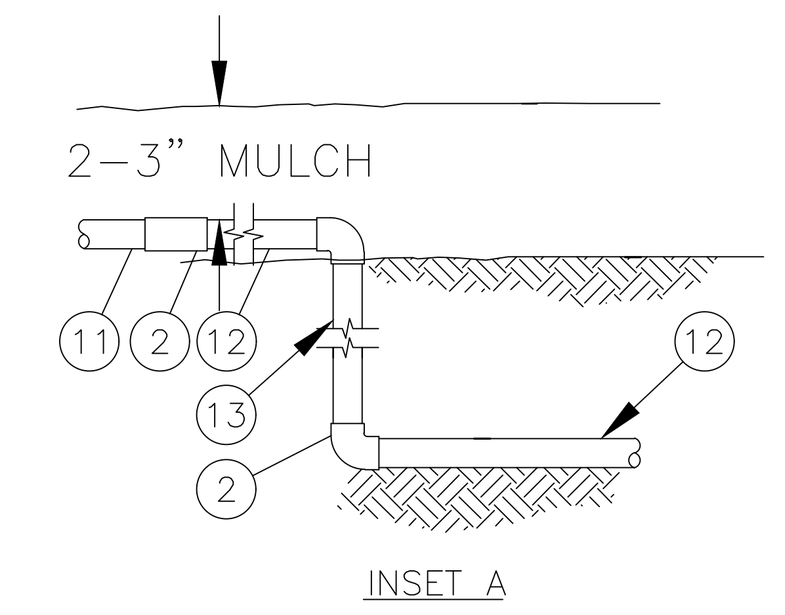
BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SI□E O□ PIPE
1 - □	½"
6 - 10	¾"
11 - 20	1"
21 - 30	1 ¼"
31 - □0	1 ½"

IRRIGATION NOTES

1. All e□□ipment n□mbers re□erence □ainbird e□□ipment catalog □nless otherwise indicated.
2. LAWN SP□A□ HEADS are □VAN installed as per detail.
3. SH□UB SP□A□ HEADS are □VAN installed as per detail.
□. ELEC□□IC CON□□OL VALVES shall be PEB installed as per detail shown. Size valves as shown on plans. Valves shall be installed in valve bo□es large eno□gh to permit man□al operation, removal o□solenoid and□or valve cover witho□t any earth e□cavation. □□e□er to Speci□ications□
□. AU□OMA□IC CON□□OLLE□ shall be installed at location shown. Power □120V□shall be located in a j□nction bo□within □ive □eet □□□o□controller location. Power s□pply and j□nction bo□to be provided by General Contractor.
6. All 2□volt valve wiring is to be U□1□single cond□ctor. All wire splices are to be permanent and waterproo□. □□e□er to Speci□ications□
7. SLEEVES shall be s□pplied and installed by Irrigation Contractor. Sleeve material shall be Sched□le □0. Bore □nder e□isting pavement as re□□ired. Sizes as indicated on plans.
□. □en days prior to start o□constr□ction, contractor shall veri□y static water press□re. I□static press□re is less than □0 PSI, do not start wor□□ntil noti□ied to do so by SSP Design.
9. All mainline and lateral piping shall have a minim□m o□12 inches o□cover. All piping □nder paving shall have a minim□m o□1□inches o□cover. □□e□er to Speci□ications□
10. □he irrigation contractor shall coordinate installation o□the system with the landscape contractor so that all plant material will be watered in accordance with the intent o□the plans and speci□ications.
11. □he irrigation contractor shall select the proper arc and radi□s □or each nozzle to ins□re 100□ and proper coverage o□all lawn areas and plant material. All nozzles in par□ing lots and planting beds shall be low angle to minimize overspray on pavement s□r□aces. No water will be allowed to spray on b□ilding.
12. □he irrigation contractor shall warranty all system co□Vonents □or a period o□one year pl□s 20 days. □□e□er to Speci□ications□
13. See speci□ications □or □□rther instr□ctions and project re□□irements. Contractor shall □ollow speci□ication section 32□000 - Site Irrigation □or any discrepancies between plans and speci□ications.





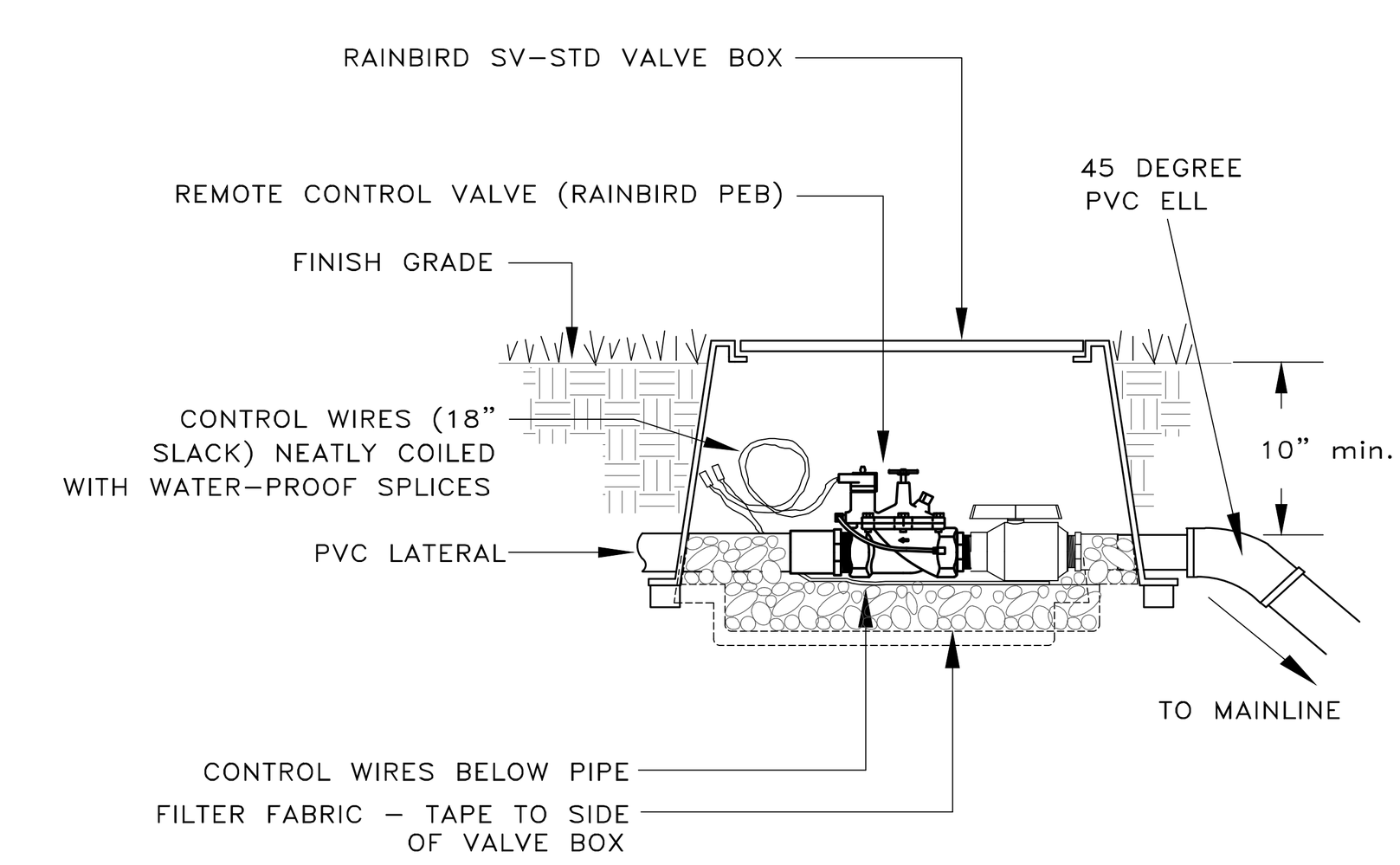
NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFS DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCORVANYING TABLE.
3. AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
4. BURY DRIP LINE MIN. 1" BELOW SOIL LEVEL THAN ADD 2" MULCH.
5. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLARVS BE INSTALLED ON EACH FITTING

□□S Dripline Ma□im□m Lateral Lengths □□eet□

Inlet Pressure	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (GPH)		Nominal Flow (GPH)		Nominal Flow (GPH)	
psi	0.6	0.9	0.6	0.9	0.6	0.9
15	255	194	357	273	448	343
20	291	220	408	313	514	394
30	350	266	494	378	622	478
40	396	302	560	428	705	541
50	434	333	614	470	775	594

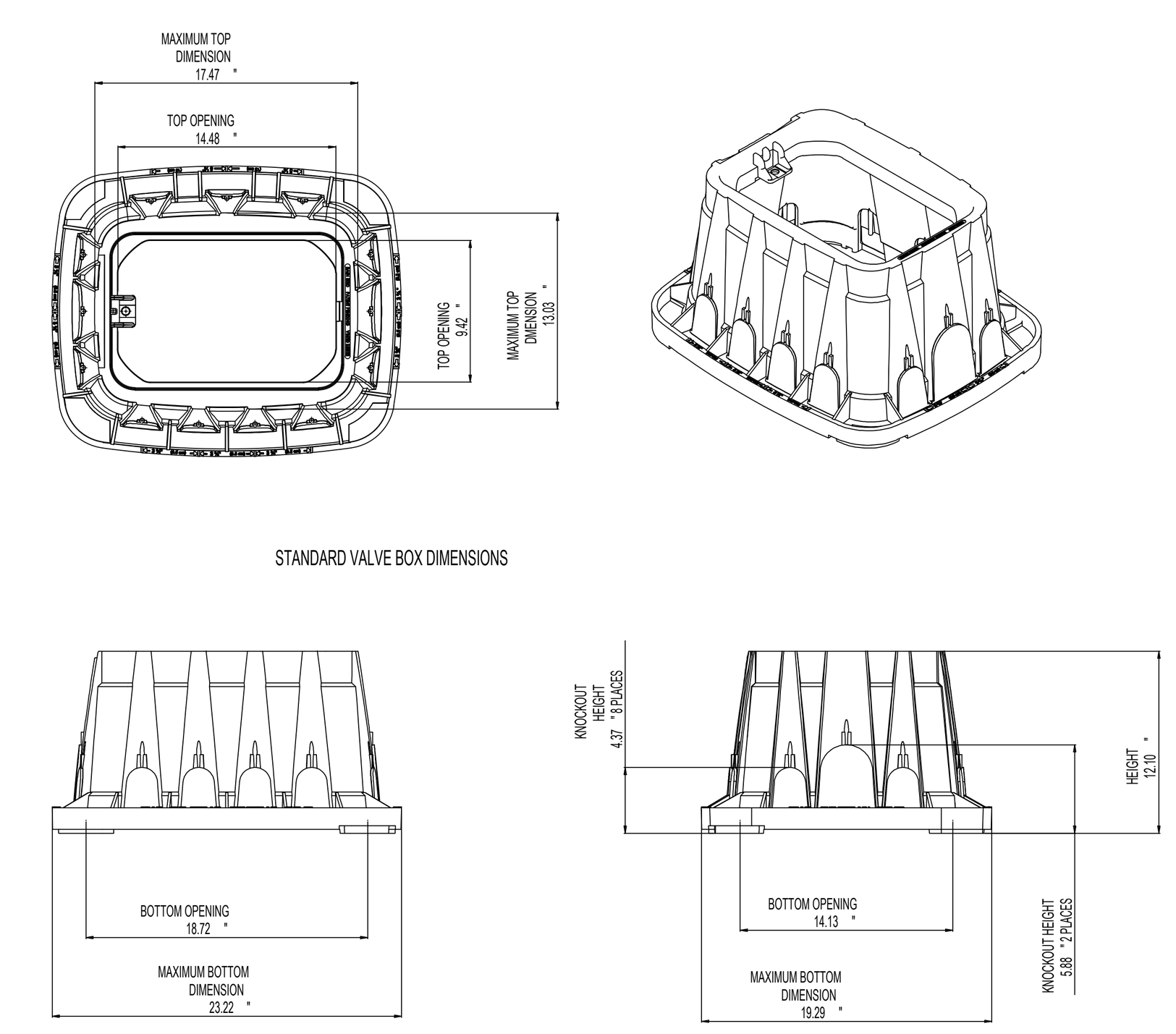
1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING: RAIN BIRD XFF–MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFS FLUSH POINT" OR "XFS FLUSH POINT WITH BALL VALVE"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"–4" FROM PERIMETER OF AREA
7. SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON–POTABLE: XFSP DRIPLINE
8. RAIN BIRD XF SERIES BLANK TUBING
9. BARB X BARB INSERT TEE OR CROSS: RAIN BIRD XFF–TEE OR RAIN BIRD XFD–CROSS (TYPICAL)
10. ½" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
11. PVC SUPPLY HEADER
12. PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
13. PVC SCH 40 RISER PIPE

4 XFS SUB-SURFACE DRIPLINE
END FEED LAYOUT INST. N.T.S.



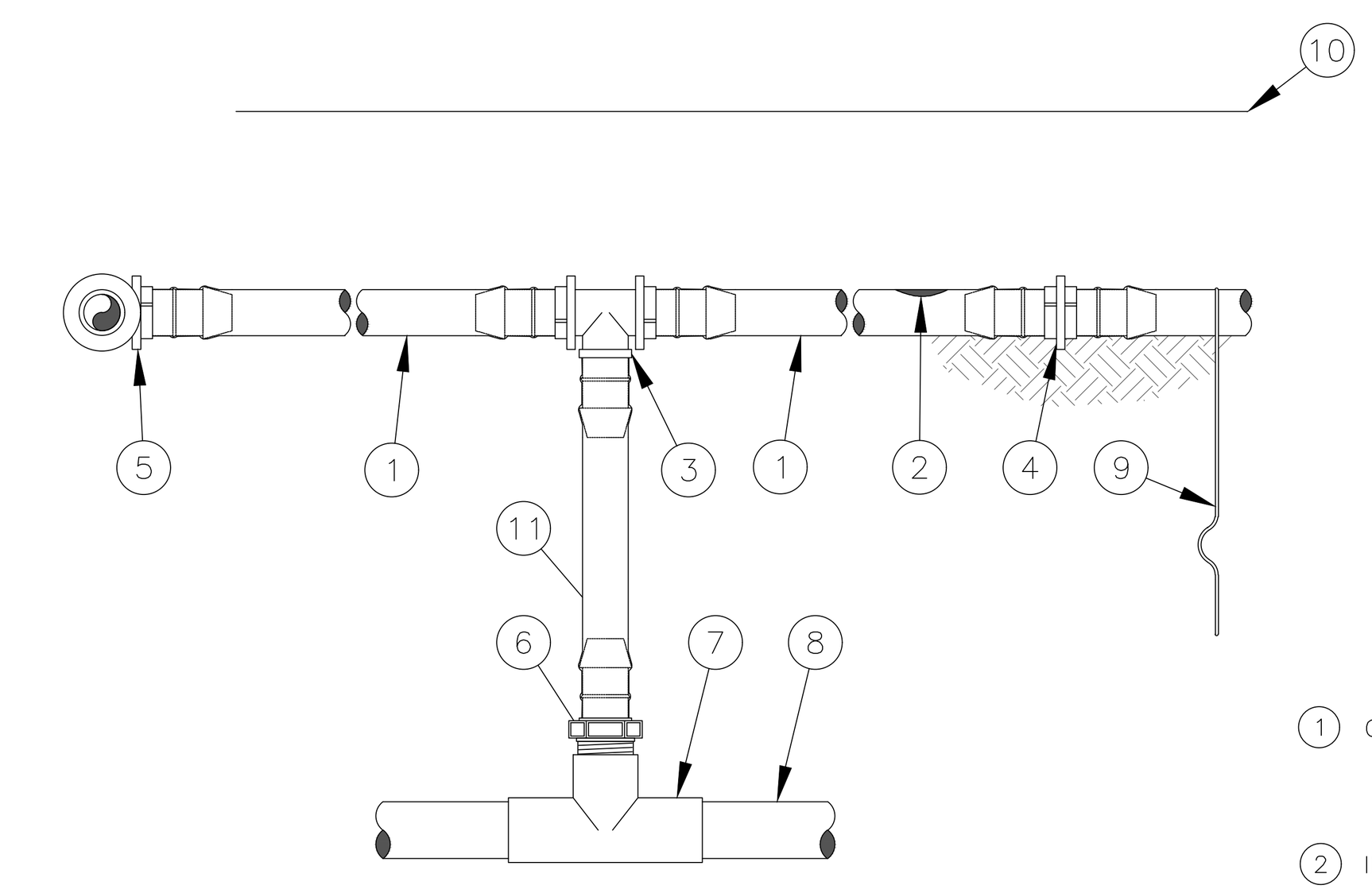
ALL VALVE BO□ES SHALL HAVE □IL□E□ □AB□IC AND □" O□ G□AVEL A□ BASE

3 REMOTE CONTROL VALVE
NOT TO SCALE



ALL VALVE BO□ES SHALL BE □AINBI□D VB-S□D O□ APP□OVED E□UAL
ALL VALVE BO□ES SHALL HAVE □IL□E□ □AB□IC AND □" O□ G□AVEL A□ BASE

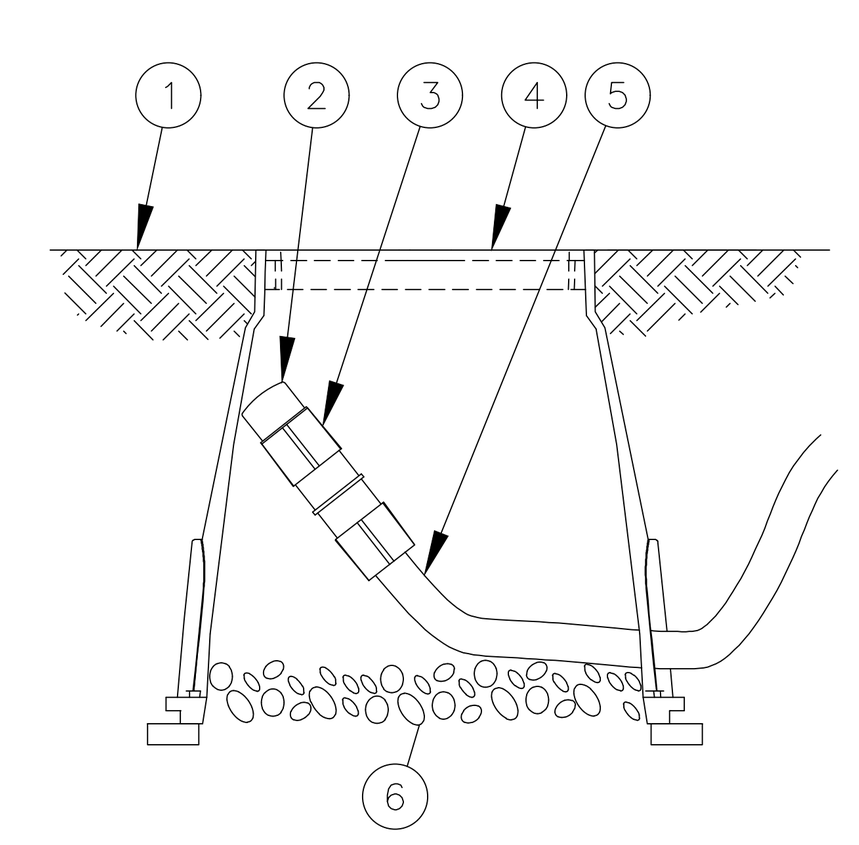
5 VALVE BOX (VB-STD)
NOT TO SCALE



NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
3. SAVE YOUR HANDS. USE THE RAIN BIRD FITTINS–TOOL XF INSERTION TOOL FOR FITTING ASSEMBLY.

1. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFS DRIPLINE NON–POTABLE: XFSP DRIPLINE
2. INLINE DRIP EMITTER OUTLET, SEE PLANS FOR DRIPLINE OUTLET SPACING.
3. BARB TEE 17x17x17mm RAIN BIRD XFF–TEE
4. BARB COUPLING 17x17mm RAIN BIRD XFF–COUP
5. BARB ELBOW 17x17mm RAIN BIRD XFF–ELBOW
6. BARB MALE ADAPTER 17mm X 1/2" RVT RAIN BIRD XFF–MA–050 17mm X 3/4" RVT RAIN BIRD XFF–MA–075
7. PVC TEE SxSxT
8. PVC LATERAL SUPPLY HEADER
9. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (TYPICAL)
10. MULCH
11. RAIN BIRD XF SERIES BLANK TUBING LENGTH AS REQUIRED

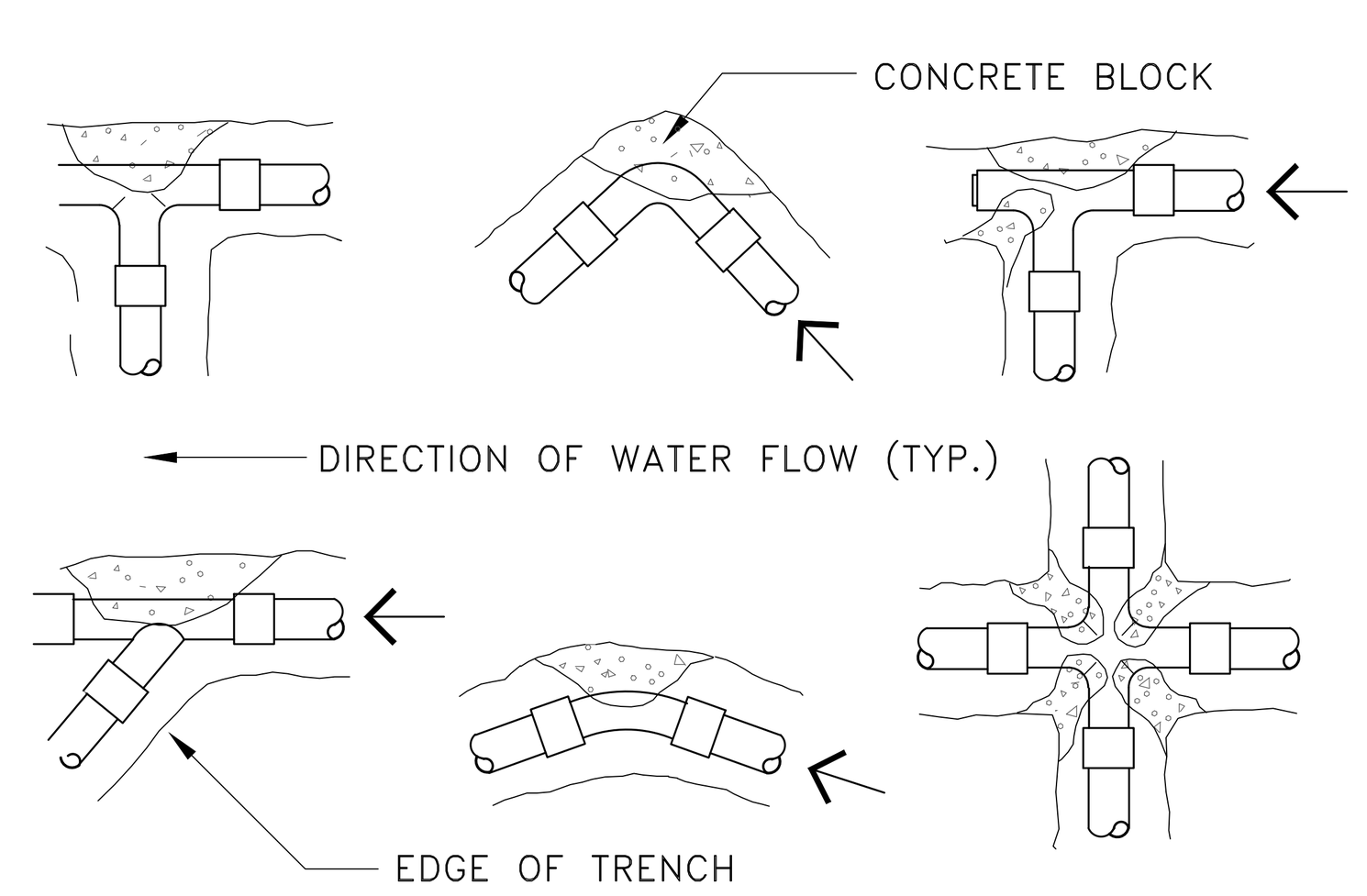
6 IRRIGATION SYSTEMS
SUB-HEADER INST. N.T.S.



1. FINISH GRADE
2. FLUSH CAP FOR EASY FIT CORVRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP NON–POTABLE: RAIN BIRD MDCFPCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. SUB–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFS DRIPLINE NON–POTABLE: XFSP DRIPLINE
6. 3–INCH MINIMUM DEPTH OF 3/4–INCH WASHED GRAVEL WITH FILTER FABRICK AT BASE

NOTE:
1. ALLOW A MINIMUM OF 6–INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

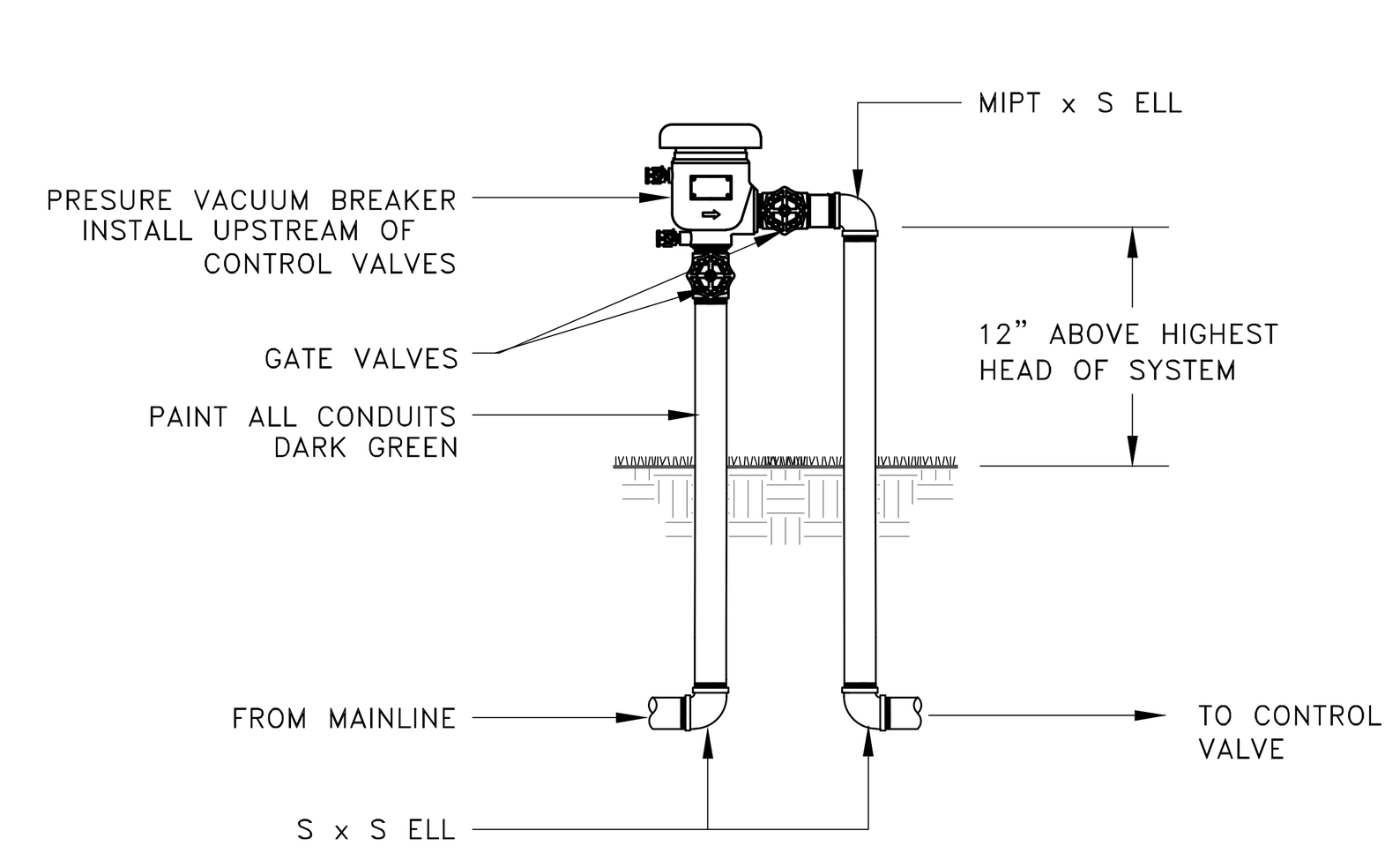
1 DRIPLINE
NOT TO SCALE



THRUST BLOCK BEARING AREA (SQ. FT.)				
PIPE SIZE	1 1/4" – 2 1/2"	3"	4"	
TEES/ELLS	1.00	1.00	1.25	3.2"
90 BENDS	1.00	1.25	2.00	4.5
45 BENDS	1.00	1.00	1.00	2.4

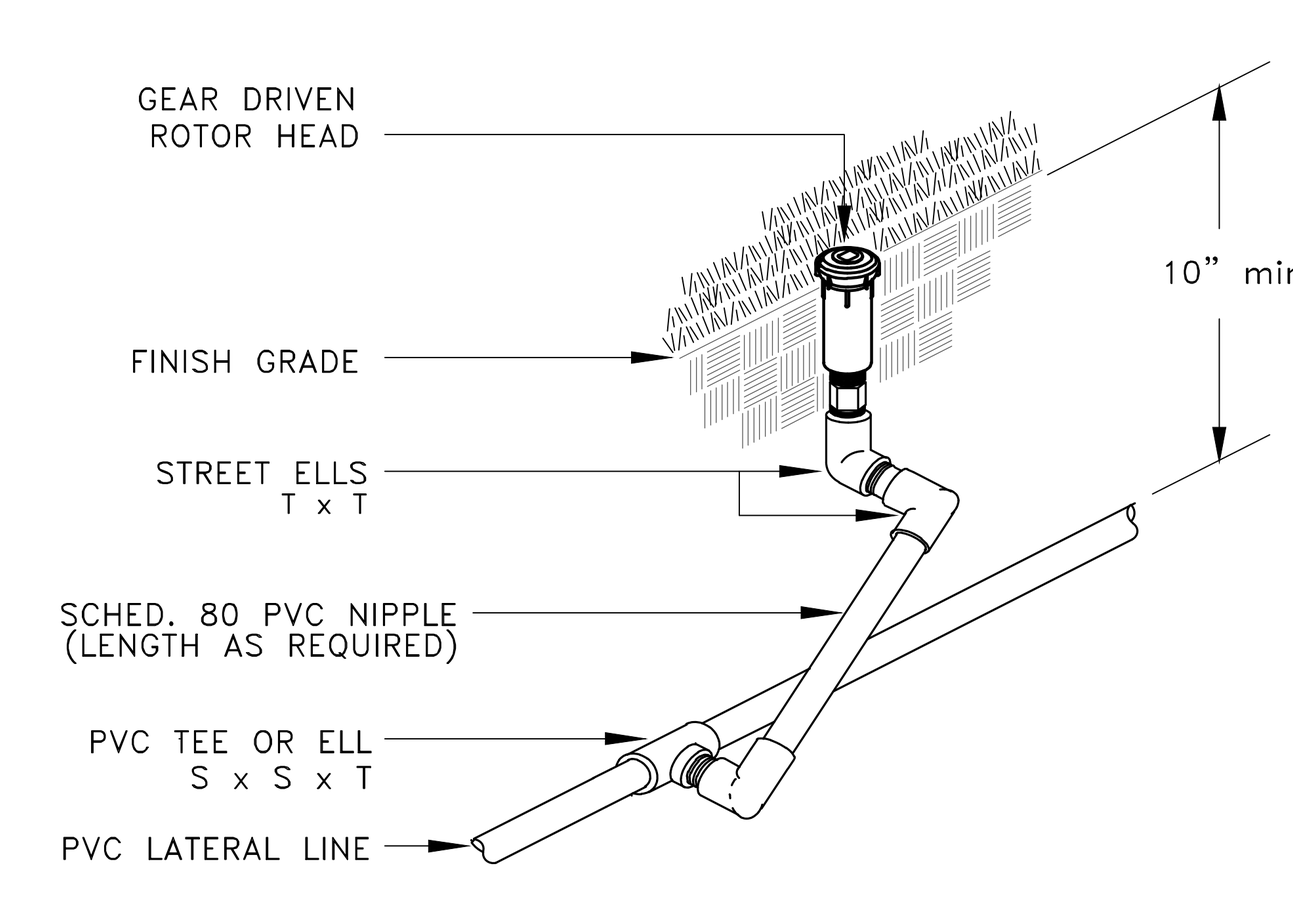
NOTE:
INSTALL THRUST BLOCK AT ALL MAINLINE BENDS, TEES OR ELLS AS SHOWN BELOW. THRUST BLOCKS SHALL BE MINIMUM OF (1) CU. FT. REDI–MIX CONCRETE OR 2500 PSI 28 DAY CONCRETE.

2 THRUST BLOCK DETAIL
NOT TO SCALE



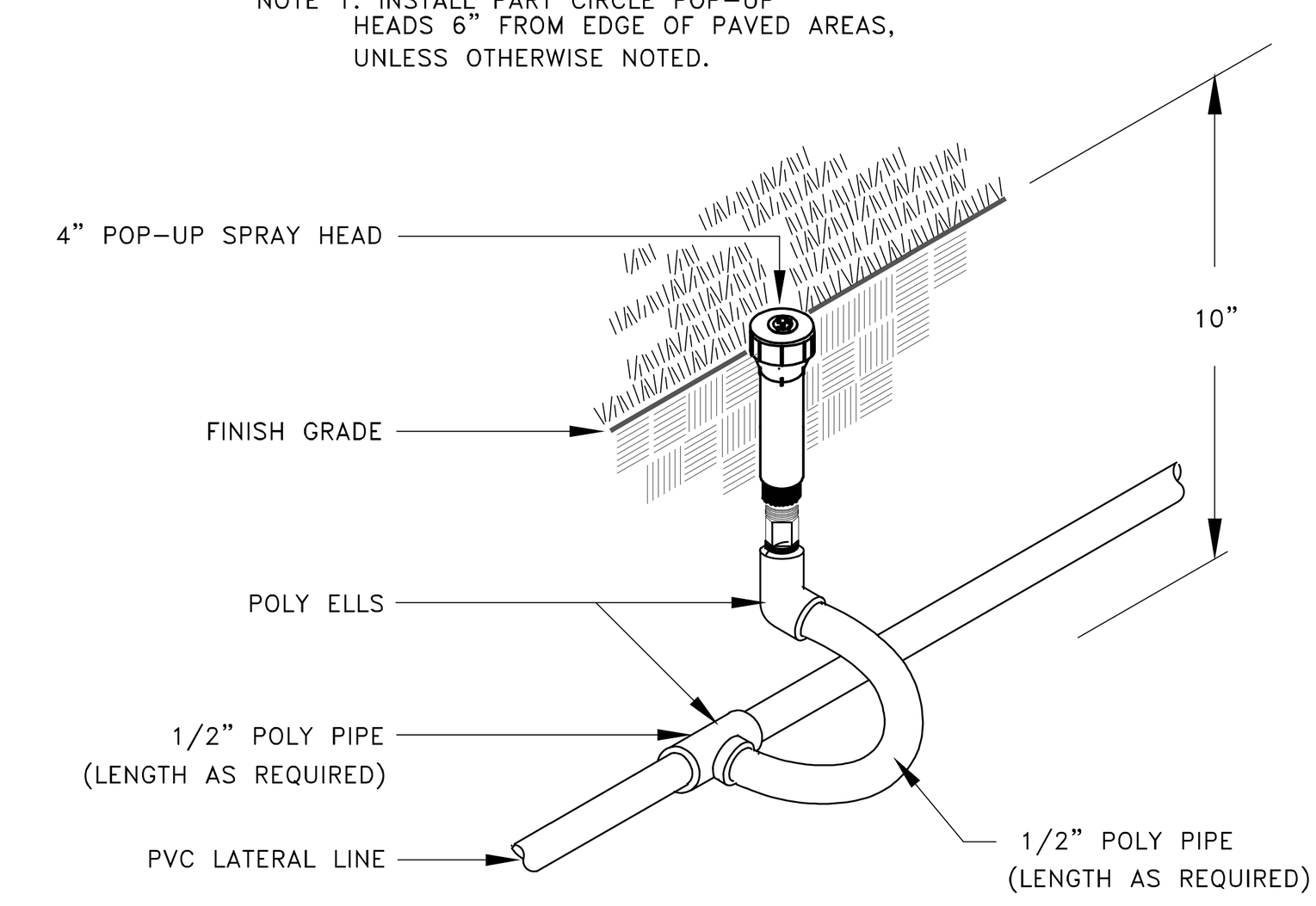
7 PRESSURE VACUUM BREAKER
NOT TO SCALE

NOTE: 1. KBI OR LASSCO SWING JOINT
2. INSTALL PART CIRCLE POP–UP HEADS 6" FROM EDGE OF PAVED AREAS.



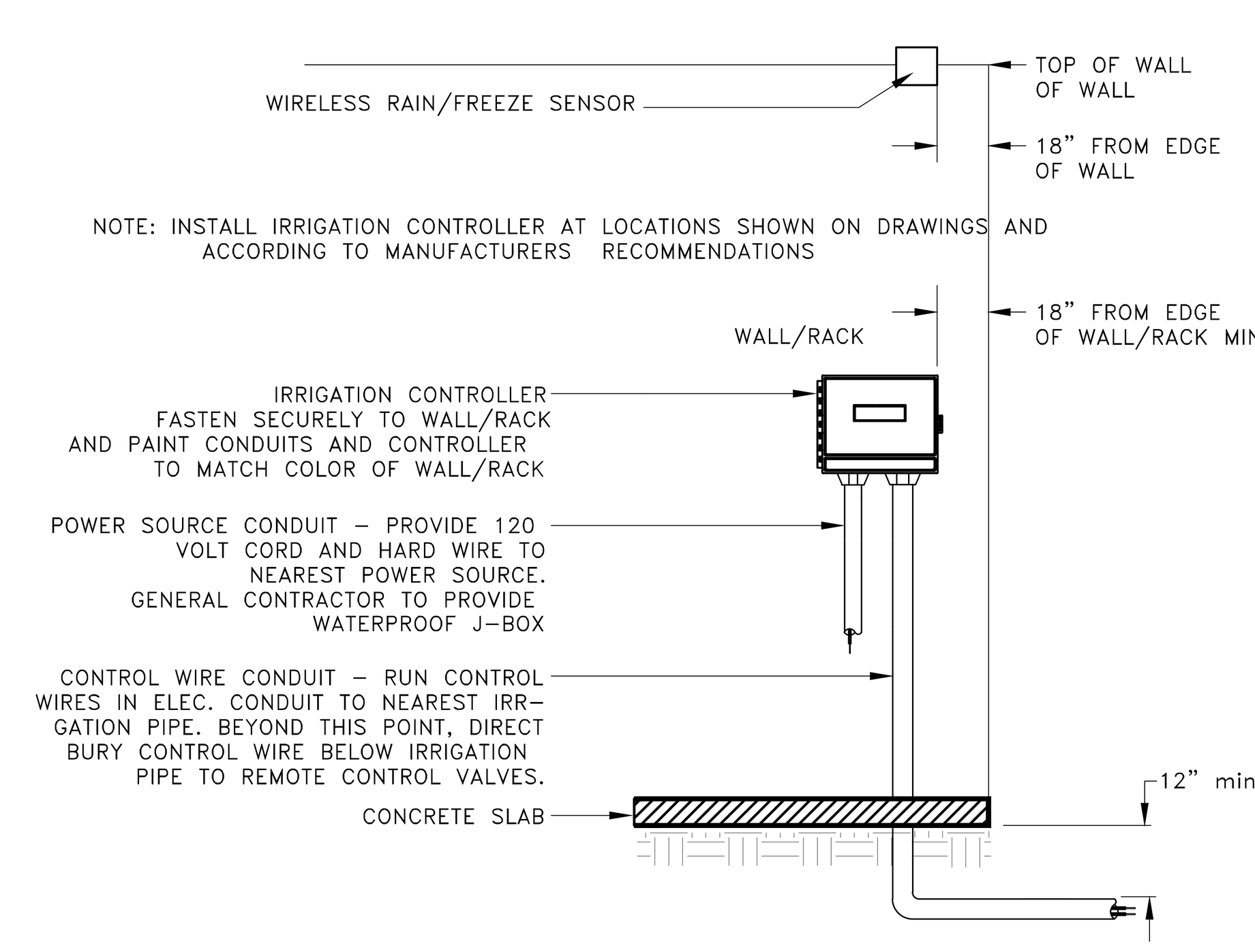
8 ROTOR POP-UP
NOT TO SCALE

NOTE 1. INSTALL PART CIRCLE POP–UP HEADS 6" FROM EDGE OF PAVED AREAS, UNLESS OTHERWISE NOTED.



9 LAWN POP-UP HEAD
NOT TO SCALE

NOTE: INSTALL IRRIGATION CONTROLLER AT LOCATIONS SHOWN ON DRAWINGS AND ACCORDING TO MANUFACTURERS RECOMMENDATIONS



10 WALL/RACK MOUNTED CONTROLLER
NOT TO SCALE

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

IDEA Public Schools

STATE OF TEXAS
JOHN JAY WINGFIELD
851
LICENSED IRRIGATOR
□16□19

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Project Architect: David Monreal, AIA
Drawn By:
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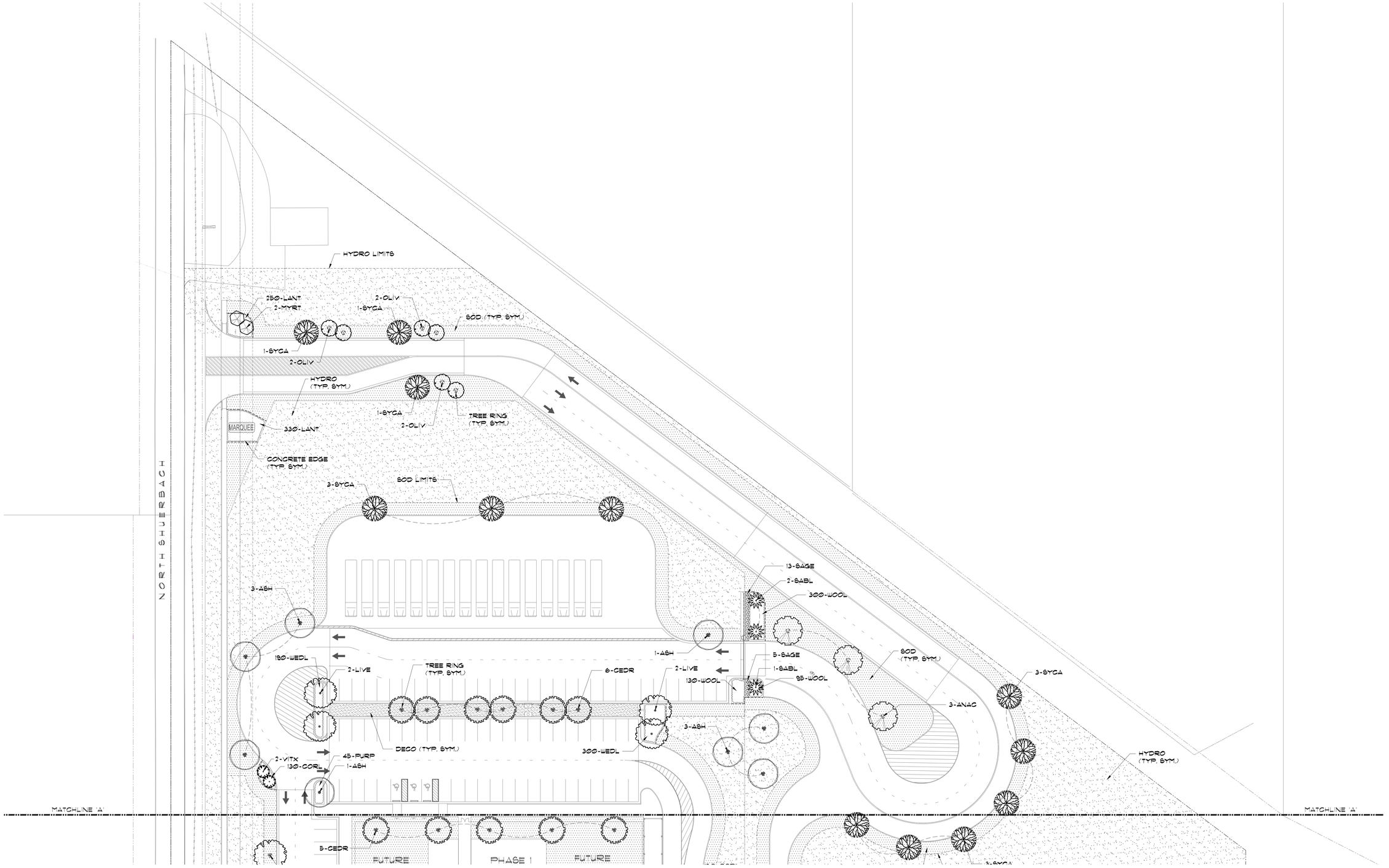

1 LANDSCAPE PLAN
SCALE: 1"=3Ø'-Ø"

W — E

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

IDEA Public Schools

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MATCHLINE 'A'

MATCHLINE 'A'

MARI LEE AVE.

LOT 11

NORTH SHUERBACH

DECO (TYP. SYM.)

2-VITX
130-CORL
45-PURP
1-ASH

300-WEDL

HYDRO
(TYP. SYM.)

5-CEDR
1-LIVE

FUTURE PAR COURSE

PHASE 1 PLAY AREA

FUTURE LEARNING SPACE

1-LAUR
140-BLUE
155-BLUE
3-PERS
1-LAUR
160-CORL
2-SYCA
4-VITX
1-CAES
15-ZEXM
1-VITX
1-CAES
210-BLUE
1-MYRT
1-JATR
2-MED
1-JATR
30-BULB
1-MYRT
220-BLUE
2-LIVE
2-CAES
4-VITX
165-CORL
1-LAUR
3-SYCA

2-TABB

IDEA PALMVIEW

5-ANAC
1-LAUR
2-PERS
75-GREE
75-GREE
1-LAUR
7-IRIS
2-PERS
120-FROG
28-CONF
21-CONF

1-ANAC

COLLEGE PREP.

FUTURE PAVILLION

FUTURE GARDEN AREA

FUTURE CLASSROOMS

1-LIVE

SOD (TYP. SYM.)

SOD LIMITS

180-CORL

SOD (TYP. SYM.)

3-SYCA

SOD LIMITS

180-CORL

130-CORL

2-SABL

2-ASH

HYDRO
(TYP. SYM.)

20-DURA CONCRETE EDGE (TYP. SYM.)

3-ASH

FIELD MARKERS (ALL CORNERS-TYP. SYM.)

FUTURE TRAIL

HYDRO-3 (TYP. SYM.)

FIELD STRIPING (ALL LINES AS SHOWN-TYP. SYM.)

NEW SOCCER FIELD

SOD (TYP. SYM.)

HYDRO-3 (TYP. SYM.)

HYDRO (TYP. SYM.)

LOT 6

LOT 5

SOD LIMITS
SOD (TYP. SYM.)

PHASE 2 PARKING

PHASE 2 SOCCER FIELD

2-ASH
TREE RING (TYP. SYM.)

MATCHLINE 'B'

MATCHLINE 'B'

TY EASEMENT

1 LANDSCAPE PLAN
SCALE: 1"=30'-0"

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

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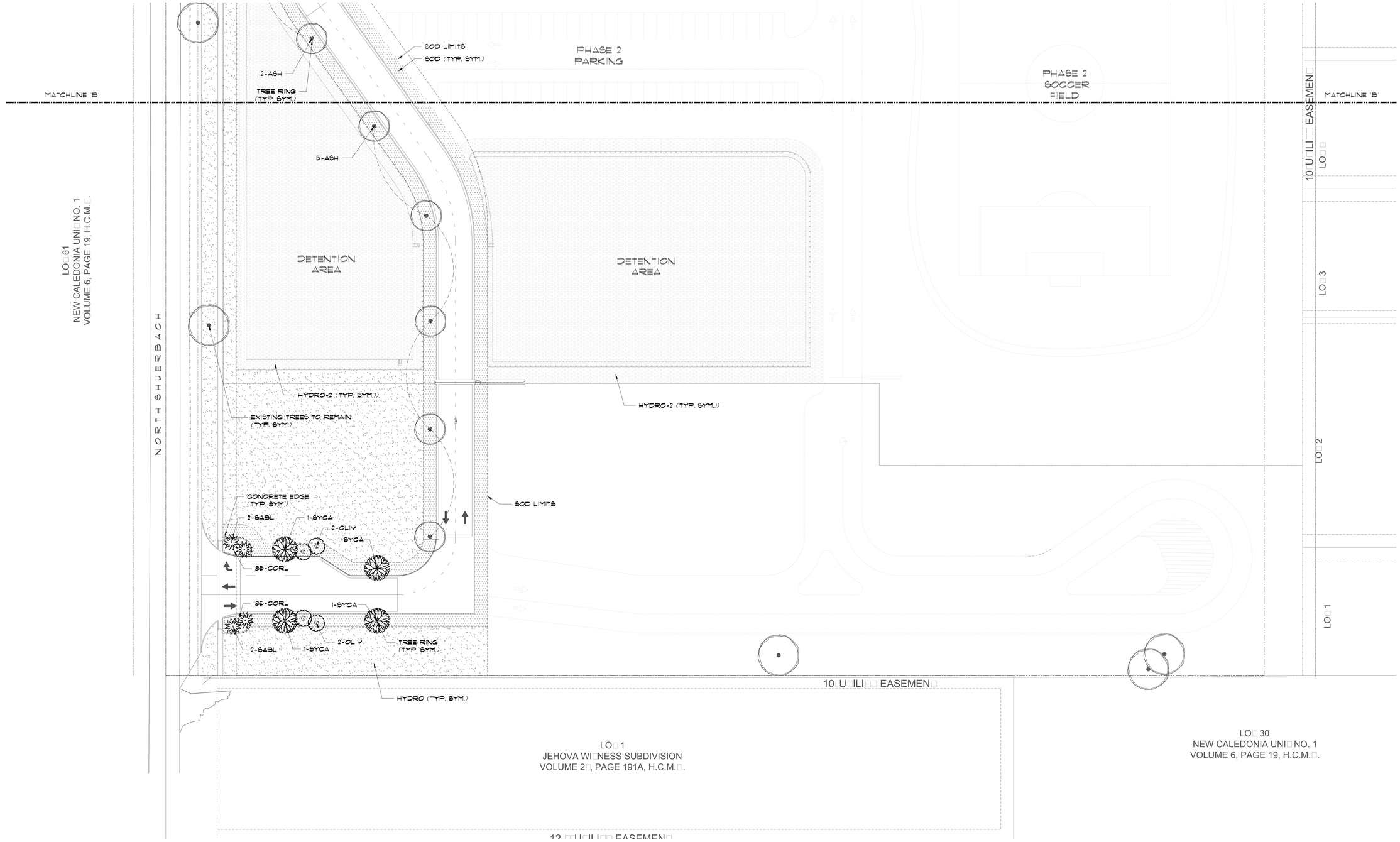

1 LANDSCAPE PLAN

SCALE: 1"=30'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW

IDEA Public Schools

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: PLM
Job No. IDEA PALMVIEW PHASE 1
Sheet: L2.03

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PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	SPACING	QTY
MED	CHAMAEROPS HUMILIS	MED. FAN PALM (MULTI)	B/B	12' TRUNK HT.	AS.	2
SABL	SABAL TEXANA	TEXAS SABAL PALM	B/B	6-8' TRUNK HT.	AS.	9
	TREES					
ASH	FRAXINUS P. 'FAN TEX'	'FAN TEX' ASH	B/B	3" CAL - 10'H X 6'W	AS.	20
ANAC	EHRETIA ANACUA	ANACUA	B/B	3" CAL 12' HT X 6' W	AS.	9
CEDR	ULMUS CRASSIFOLIA	CEDAR ELM (CONT. GROWN)	24" BOX	2-3" CAL 10' H x 6' W	AS.	11
LAUR	SOPHORA SECUNDIFLORA	MOUNTAIN LAUREL (CONT. GRN)	24" BOX	MULTI-TRUNK - 8'-0" HT	AS.	6
LIVE	QUERCUS VIRGINIANA	LIVE OAK (CONTAINER GROWN)	24" BOX	2-3" CAL 11' HT X 6' W	AS.	8
OLIV	CORDIA BOISSIERI	WILD OLIVE	B/B	2-3" CAL 8' HT X 4' W	AS.	10
MYRT	LAGERSTROEMIA X ' NATCHEZ'	'NATCHEZ' CRAPE MYRTLE	45 GAL	'MULTI' 12' HT. X 8' W	AS.	4
PERS	DIOSPYROS TEXANA	TEXAS PERSIMMON	B/B	2-3" CAL	AS.	9
SYCA	PLATANUS MEXICANA	MEXICAN SYCAMORE	65 GAL	2-3" CAL 12' HT X 6' W	AS.	21
TABB	TABEBUIA IMPETIGINOSA	PURPLE TABEBUIA	30 GAL	3-4" CAL 10'H X 6' W	AS.	2
VITX	VITEX AGNUS-CASTUS	CHASTE TREE	15 GAL	2-3" CAL 6' HT	AS.	11
	SHRUBS					
CAES	CAESALPINIA PULCHERRIMA	PRIDE OF BARBADOS	5 GAL	36"HT-BUSHY	AS.	4
DURA	DURANTA SP.	DWARF SAPPHIRE SHOWERS'	3 GAL	18"HT-BUSHY	AS.	20
IRIS	DIETES IRIDIOIDES	WHITE AFRICAN IRIS	3 GAL	18"HT-BUSHY	AS.	14
JATR	JATROPHA INTEGERRIMA	COMPACT JATROPHA	3 GAL	24"HT-BUSHY	AS.	2
SAGE	LEUCOPHYLLUM FRUTESCENS	'GREEN CLOUD' CENIZO	3 GAL	24"HT-BUSHY	AS.	18
	GROUND COVERS					
BLUE	RUELLIA SQUARROSA	BLUE SHADE RUELLIA	1 GAL	6"HT-BUSHY	12" O.C.	725
BULB	BULBINE FRUTESCENS	ORANGE BULBINE	1 GAL	12"HT-BUSHY	18" O.C.	30
CONF	TRACH. JASMINOIDES	CONFEDERATE JASMINE	1 GAL	36"HT-STAKED	AS.	48
CORL	BARLERIA REPENS	CORAL CREEPER	1 GAL		12" O.C.	1205
FROG	PHYLA INCISA	TEXAS FROG FRUIT	QTS.		12" O.C.	240
GREE	FICUS MICROCARPA	GREEN ISLAND FICUS	3 GAL	12"HT-BUSHY	AS.	150
LANT	LANTANA CAMARA	'RED SPREAD' LANTANA	1 GAL		18" O.C.	550
PURP	LANTANA MONTEVIDENSIS	PURPLE TRAILING LANTANA	1 GAL		18" O.C.	45
WEDL	WEDELIA TRILOBATA	WEDELIA	4" POTS		12" O.C.	480
WOOL	STEMODIA LANATA	WOOLY STEMODIA	4" POTS		12" O.C.	525
ZEXM	WEDELIA TEXANA	ORANGE ZEXMENIA	1 GAL		12" O.C.	115
	GRASS					
HYDRO	CYNODON DACTYLON	COMMON BERMUDA HYDROMULCH				218,700 S.F.
HYDRO(2)	CYNODON DACTYLON	COMMON BERMUDA HYDROMULCH WITH TACKIFIER				84,500 S.F.
SOD	CYNODON DACTYLON	# 1 CERTIFIED '419' HYBRID BERMUDA SOD				11,600 S.Y.

NOTE: CONTAINER GROWN MATERIAL SHALL BE GLEN FLORA FARMS OR APPROVED EQUAL.

MATERIAL SCHEDULE

DESCRIPTION	NOTES	QUANTITY
PREMIUM COMPOST	2" LAYER PREMIUM COMPOST (9 KIDS COMPOST MIX)	45 C.Y.
SCREENED TOP SOIL	8" DEPTH FOR ALL PLANTING BEDS	185 C.Y.
MULCH (HARDWOOD)	2" LAYER MIN. FOR ALL PLANTING BEDS AND WATERING BASINS (TEXAS NATIVES HARDWOOD)	675 BAGS (2 C.F.)
HERBICIDE	ALL PLANTING BED AREAS AS SPECIFIED	7,300 S.F.
FERTILIZER	ALL PLANT MATERIAL PER DETAILS / SPECIFICATIONS	--
PLANTING TABLETS	PER DETAILS / AS SPECIFIED	--
PRE-EMERGENT	ALL PLANTING BED AREAS AS SPECIFIED	7,300 S.F.
GUYING / STAKING	ALL TREES/PALMS PER DETAILS	--
CONCRETE EDGE	6" EXTRUDED COLORED CONCRETE EDGING 'TEXAS BUFF' COLOR PER PLANS/DETAILS	850 L.F.
DECO	4" COMPACTED DECOMPOSED GRANITE 1/4" MINUS FINES' PER PLANS / DETAILS	2,275 S.F.
FIELD STRIPING	SHERWIN-WILLIAMS 'SHERSTRIPE' FIELD STRIPING AS PER PLANS	--
FIELD MARKERS	PIONEER athletics 'FLEEFIX' FIELD MARKER AS PER PLANS	4
TREE RINGS	(36" DIA.) 6"X4" EXTRUDED COLORED CONCRETE EDGING PER PLANS/DETAILS	84
IRRIGATION SYSTEM	COMPLETE AUTOMATIC IRRIGATION SYSTEM PER PLANS/DETAILS BY LICENSED CONTR.	--

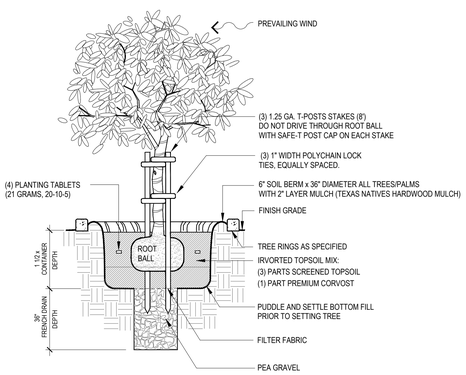
MATERIAL SCHEDULE - SOCCER FIELD

DESCRIPTION	NOTES	QUANTITY
HERBICIDE	ALL LANDSCAPE AREAS (ROUNDUP OR APPROVED EQUAL	49,500 S.F.
CLEAR/GRUB/SITE PREP	CLEAR ALL DEBRIS FROM TOP LAYER OF EXISTING SITE (BY SITE CONTRACTOR)	49,500 S.F.
GRADING	GRADING & LASER LEVELING OF ALL SITE PER PLANS	49,500 S.F.
SCREENED TOP SOIL	SCREENED TOPSOIL FOR SOCCER FIELDS (SLOPE FROM SIDE 4" TO 10" CENTER)	845 C.Y.
SAND*	MASONRY SAND FOR SOCCER FIELDS (SLOPE FROM SIDE 4" TO 10" CENTER)	1210 C.Y.
COMPOST**	PREMIUM COMPOST (9 KIDS COMPOST MIX (SLOPE FROM SIDE 4" TO 10" CENTER)	362 C.Y.
HYDRO (3)	'PAN-AM' HYBRID BERMUDA HYDROMULCH	57,200 S.F.
MAINTENANCE	90 DAY MAINTENANCE OF FIELDS WITH REEL MOWERS & FERTILIZATION PER SPECS	1

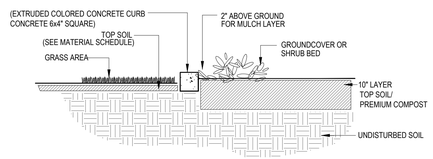
* MASONRY SAND - WRIGHT MATERIALS PLANT 3 (361) 387-0783
** NINE KIDS COMPOST (865) 432-4983

LANDSCAPE CONSTRUCTION NOTES

1. WORK UNDER THIS CONTRACT INCLUDES SITE REVIEW AND COORDINATION WITH EXISTING CONDITIONS, SITE CLEANUP, EXCAVATION, BED PREP, TILLING, EDGING, TREE/PALM, SPORTS FIELD, LASER GRADING, DECOMPOSED GRANITE, PLANTING, STAKING, MAINTENANCE, AND GUARANTEE.
2. LANDSCAPE CONTRACTOR SHALL FIELD VERIFY ALL QUANTITIES AND DIMENSIONS PRIOR TO BIDDING. QUANTITIES SHOWN IN SCHEDULE ARE FOR CONVENIENCE ONLY.
3. NOTIFY SSP DESIGN PRIOR TO BID OR ANY DISCREPANCIES IN DRAWINGS/DETAILS OR INSUFFICIENT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
4. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. SPOTTING OF ALL UTILITIES IS REQUIRED.
5. NOTIFY AND MEET WITH SSP DESIGN PRIOR TO ANY CONSTRUCTION FOR VERIFICATION/INTERPRETATION OF PLANS.
6. LANDSCAPE CONTRACTOR SHALL VERIFY ALL PROPERTY BOUNDARIES AND LIMITS OF WORK WITH GENERAL CONTRACTOR/CIVIL ENGINEER. DO NOT BEGIN LANDSCAPE CONSTRUCTION UNTIL ALL BOUNDARIES, EASEMENTS AND RIGHTS-OF-WAY HAVE BEEN VERIFIED IN THE FIELD.
7. LANDSCAPE CONTRACTOR SHALL STAKE OUT ALL BEDS, TREES, PALM LOCATIONS PRIOR TO INSTALLATION FOR APPROVAL BY SSP DESIGN.
8. LANDSCAPE CONTRACTOR TO COORDINATE WITH SSP DESIGN TO ENSURE PROPER PLACEMENT OF PLANT MATERIAL AND IRRIGATION EQUIPMENT.
9. LANDSCAPE CONTRACTOR TO INSTALL EXTRUDED CONCRETE EDGING AS SHOWN ON PLANS.
10. LANDSCAPE CONTRACTOR TO SUPPLY/INSTALL 36" DIA. TREE RINGS AS SHOWN ON PLANS/DETAILS.
11. NOTIFY SSP DESIGN PRIOR TO PLANTING OPERATIONS FOR APPROVAL OF ALL PLANT MATERIAL ON SITE. ANY PLANT MATERIAL NOT APPROVED BY SSP DESIGN WILL BE SUBJECT TO REJECTION.
12. IRRIGATION CONTRACTOR SHALL SUPPLY AND INSTALL CORVLETE AUTOMATIC IRRIGATION SYSTEM MAINLINE, SLEEVES, LATERALS, AND POP-UP HEADS, AND ADJUSTMENTS, TO COVER ALL LANDSCAPE AREAS AS PER PLANS/DETAILS. IRRIGATION SYSTEM SHALL BE INSTALLED BY A TEXAS LICENSED IRRIGATOR ONLY.
13. LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS/WEEDS BY HERBICIDING PRIOR TO BED PREP AND SOIL REPLACEMENT.
14. ALL LANDSCAPE CONTRACTOR SHALL REMOVE 12" OF EXSTG SOIL WITHIN ALL BED AREAS AND REPLACE WITH IRVORTED TOP SOIL/PREMIUM CORVOST MIX.
15. LANDSCAPE CONTRACTOR SHALL CONSTRUCT 6"X36" WATERING BASINS AROUND ALL TREES/PALMS WITH A MIN. 2" LAYER OF CYPRESS MULCH.
16. LANDSCAPE CONTRACTOR SHALL LOOSEN / GRADE ALL LAWN AREAS PRIOR TO HYDRO-MULCHING/SODDING TO ENSURE PROPER DRAINAGE AND UNIFORM SURFACE.
17. LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS AND WEEDS BY HERBICIDING, DISKING, FLOATING AND LIGHT GRADING OF ENTIRE PROJECT AREA PRIOR TO SODDING/HYDROMULCHING.
18. LANDSCAPE CONTRACTOR SHALL ESTABLISH AND MAINTAIN ALL PLANT MATERIAL FOR 90 DAYS AFTER SUBSTANTIAL COMPLETION AND SHALL GUARANTEE ALL TREES/PALMS FOR A PERIOD OF ONE YEAR.
19. IRRIGATION CONTRACTOR SHALL GUARANTEE ALL SYSTEM COMPONENTS FOR A PERIOD OF ONE YEAR.
20. SEE SPECIFICATIONS FOR FURTHER INSTRUCTIONS/REQUIREMENTS.

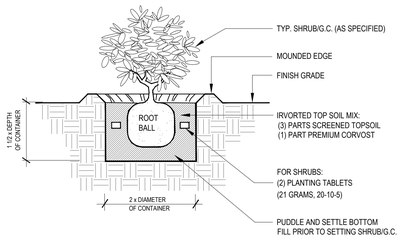


1 TREE PLANTING DETAIL
NOT TO SCALE

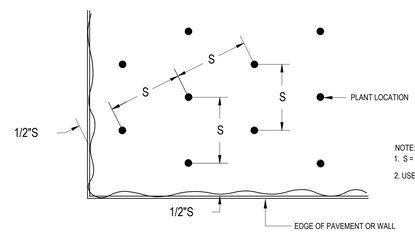


NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2.CONCRETE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
3. 2500-3000 PSI COMPRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
4.USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
5. SMOOTH NATURAL FINISH, COLOR TO MATCH BUILDING.
6.EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

2 CONCRETE EDGE DETAIL
NOT TO SCALE

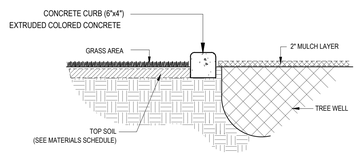


3 SHRUB/G.C. PLANTING DETAIL
NOT TO SCALE



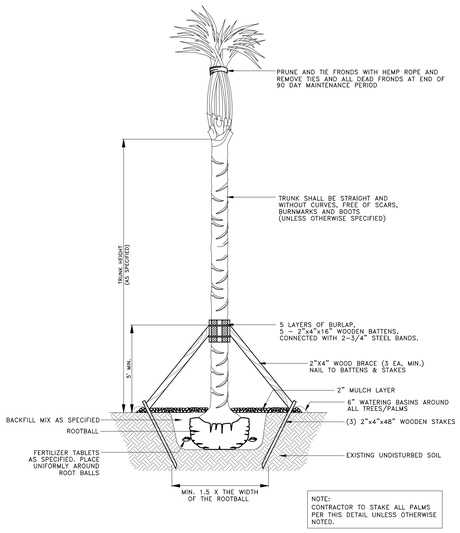
NOTE:
1. 'S' = SPACING, (REFER PLANT LIST FOR AMOUNT OF SPACING.)
2. USE SPACING LAYOUT FOR SHRUBS, GROUNDCOVERS AND ANNUALS.

4 TRIANGULAR PLANT SPACING DIAGRAM
NOT TO SCALE



NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2. CONCRETE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
3. 2500-3000 PSI CORVRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
4. USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
5. NATURAL FINISH AND TEXAS BUFF COLOR.
6. EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

5 TREE RING DETAIL
NOT TO SCALE



6 PALM PLANTING DETAIL
NOT TO SCALE

SPORTS FIELD NOTES

1. APPLY HERBICIDE/ROUNDUP TO ENTIRE FIELD AREA UNTIL ALL VEGETATED MATTER IS
2. CLEAR AND GRUB (REMOVE ALL DEBRIS) FROM FIELD AREA
3. RIP/TILL SOIL WITH AN AGRICULTURAL CULTIVATOR TO A DEPTH OF 3" ON FIELD
4. ROUGH GRADE FIELDS TO PREPARE FOR SAND/TOPSOIL/COMPOST
5. APPLY SAND/TOPSOIL/CORVOST MIX TO AND FINE GRADE TO FINISHED ELEVATIONS
6. CONTRACTOR TO GRADE FIELD WITH SPECIFIED GROUN/SLOPES UTILIZING FULLY AUTOMATED CORVTERIZED DUAL GPS SYSTEM WITH LASER AUGMENTATION TO ACHIEVE GRADES WITHIN 1/4" TOLERANCE. FIELD MUST DRAIN SMOOTHLY WITH NO BIRD BATHS OR LOW SPOTS
7. INSTALL IRRIGATION PER PLANS/SPECS, THOROUGHLY WATER IN WITH MULTIPLE WATERINGS
8. FIELD DRAINAGE WILL BE TESTED AND REVIEWED BY SSP PRIOR TO HYDORMULCH.
9. INSTALL HYDROMULCH AS PER PLANS AND SPECIFICATIONS
10. ROLL FIELDS WITH 2 TON MECHANICAL ROLLER/VIBRATOR. TOP DRESS WITH CLEAN SAND ALL LOW SPOTS OR DIVOTS
11. MONITOR WATERING FOR CONTINUOS MOISTURE ON HYDROMULCH UNTIL FULL GERMINATION.
12. COMMENCE MOWING USING A REEL TYPE MOWER ONLY. MOWING SHALL BE AT LEAST ONCE PER WEEK AND MUST BE REVIEWED, CHECKED AND APPROVED BY SSP ON OR ABOUT 45 DAYS AFTER INSTALLATION/GERMINATION. FERTILIZE WITH HI 23-0-0 WITH WOLFTRAX OR APPROVED EQUAL AT MANUFACTURERS RATES

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW

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Date: May 16, 2019
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4.2 SPACE ALLOWANCES AND REACH RANGES

TAS SECTIONS 4.2.1 – WHEELCHAIR PASSAGE WIDTH

A. The minimum clear width for single wheelchair passage shall be 32" at a point and 36" continuously

TAS SECTIONS 4.2.2 – WIDTH FOR WHEELCHAIR PASSING

A. The minimum clear width for two wheelchairs to pass is 60"

TAS SECTIONS 4.2.4.1 – SIZE AND APPROACH

A. Minimum clear floor space for a wheelchair and occupant shall be 30" wide x 48" long. Clear floor space shall be centered on the element it serves.

4.3 ACCESSIBLE ROUTE

TAS SECTIONS 4.3.2 – LOCATION

A. At least one accessible route shall be provided from public transportation stops, accessible parking and loading zones, and public streets or sidewalks to the accessible building entrance.

TAS SECTIONS 4.3.3 – WIDTH

A. The minimum clear width of an accessible route shall be 36" except at doors.

TAS SECTIONS 4.3.4 – PASSING SPACE

A. If an accessible route is less than 60" in width, then passing spaces of at least 60"x60" shall be provided at 200' max. spacing.

TAS SECTIONS 4.3.5 – HEAD ROOM

A. Accessible routes shall have 80" min. clear head room.

TAS SECTIONS 4.3.7 – SLOPE

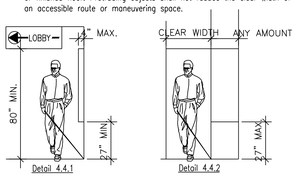
A. Running slope shall not exceed 1:20. (If slope exceeds 1:20, refer to section 4.8)

B. Cross slope shall not exceed 1:50

4.4 PROTRUDING OBJECTS (REFERENCE DETAIL 4.4.1 & 4.4.2)

TAS SECTIONS 4.4.1 – GENERAL

A. Objects projecting from walls (for example, telephones) with their leading edges between 27"-80" above the finished floor shall protrude no more than 4" into walks, halls, corridors, passageways, or aisles. Objects mounted with their leading edges at or below 27" above the finished floor may protrude any amount. Free-standing objects mounted on posts or pylons may overhang 12" maximum from 27"-80" above the ground or finished floor. Protruding objects shall not reduce the clear width of an accessible route or maneuvering space.



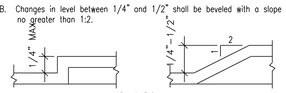
Detail 4.4.1 Detail 4.4.2

4.5 GROUND AND FLOOR SURFACES

TAS SECTIONS 4.5.2 – CHANGES IN LEVEL (REFERENCE DETAIL 5.1)

A. Changes in level up to 1/4" may be verticle and without edge treatment

B. Changes in level between 1/4" and 1/2" shall be beveled with a slope no greater than 1:2.



Detail 5.1

TAS SECTIONS 4.5.3 – CARPET

A. Carpet provided on a floor surface shall be securely attached; have a firm pad or backing, or no pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Maximum pile thickness shall be 1/2". Exposed edges of carpet shall be fastened to floor surfaces and have trim along the exposed edges.

TAS SECTIONS 4.5.4 – GRATINGS

A. If gratings are located in walking surfaces or along accessible routes, then they shall have spaces no greater than 1/2" wide in one direction.

B. If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

4.6 PARKING AND PASSENGER LOADING ZONES

TAS SECTIONS 4.6.3 – PARKING SPACES

A. Accessible parking shall be at least 96" wide.

B. Parking access aisles shall be 60" wide.
Van accessible access aisles shal be 96" wide.

C. Surface slope shall not exceed 1:50 in all directions
(Note : no built up curb ramp may be located in an accessible parking access aisle.)

TAS SECTIONS 4.6.4 – SIGNAGE

A. Each accessible parking space must have individual verticallly mounted or suspended sign. Required van accessible spaces must be designatred.

A. Characters and symbols on such signs shall be located 60" minimum above the ground.

B. Signage located within an accessible route shall be located 80" min. above the walking surface.

TAS SECTIONS 4.6.5 – VERTICAL CLEARANCE

A. Provide minimum verticle clearance of 114" at accessible passenger loading zones and along at least one vehicle access route from site entrances and exits.

TAS SECTIONS 4.6.6 – PASSENGER LOADING ZONE

A. Passenger loading zones shall provide an access aisle at least 60" wide and 20 ft long adjacent and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with 4.7 shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 in all directions.

4.7 CURB RAMPS

TAS SECTIONS 4.7.2 – SLOPE (REFERENCE DETAIL 4.7)

A. Slopes of curb ramps shall comply with 4.8.2.

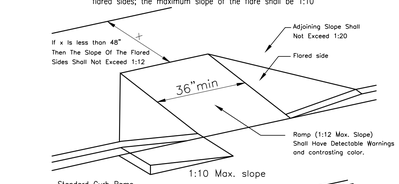
B. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1:20.

TAS SECTIONS 4.7.3 – WIDTH (REFERENCE DETAIL 4.7)

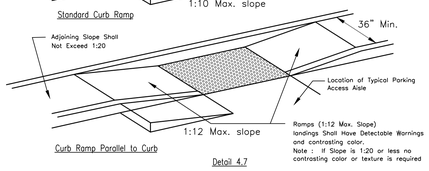
A. The minimum width of a curb ramp shall be 36", exclusive of flared sides.

TAS SECTIONS 4.7.5 – SIDES OF CURB RAMPS (REFERENCE DETAIL 4.7)

A. If a curb ramp is located where pedestrians must walk across the ramp or where it is not protected by handrails or guardrails, it shall have flared sides; the maximum slope of the flare shall be 1:10



Standard Curb Ramp



Curb Ramp Parallel to Curb

Detail 4.7

TAS SECTIONS 4.7.10 – DIAGONAL CURB RAMPS

A. If diagonal curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48" minimum clear space. If diagonal curb ramps are provided at marked crossings, the 48" clear space shall be within the markings. If diagonal curb ramps have flared sides, they shall also have at least a 24" long segment of straight curb located on each side of the curb ramp and within the marked crossing.

TAS SECTIONS 4.7.11 – ISLANDS

A. Any raised islands in crossings shall be cut through level with the street or curb ramps at both sides and a level area at least 48" long between the curb ramps in the part of the island intersected by the crossings.

4.8 RAMPS

TAS SECTIONS 4.8.1 – GENERAL

A. Any part of an accessible route with a slope greater than 1:20 shall be considered a ramp and shall comply with 4.8

TAS SECTIONS 4.8.2 – SLOPE AND RISE

A. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30".

TAS SECTIONS 4.8.3 – CLEAR WIDTH

A. The minimum clear width of a ramp 30 ft or less in length shall be 36". Ramps more than 30 ft. in length shall have a minimum clear width of 44".

TAS SECTIONS 4.8.4 – LANDINGS

A. Level landings required at top and bottom of each run, with the following features:
1. Minimum Width: Equal to width of ramp
2. Length: Minumum 60" clear
3. At change of direction landing shal be 60" x 60" min.

TAS SECTION 4.8.5 – HANDRAILS

A. Handrails are required at all ramps with > 6" rise.

B. Height: 34-38" above ramp surface

C. The clear space between the handrail and the wall shall be 1-1/2".

TAS SECTIONS 4.8.7 – EDGE PROTECTION

A. Ramps and landings with drop offs shall have curbs, walls, railings, or projecting surfaces that prevent slipping off the ramp. Curbs shall be a minimum of 2" high.

4.9 STAIRS

TAS SECTIONS 4.9.2 – TREADS AND RISERS

A. All steps on a flight of stairs shall have uniform riser heights and tread widths
1. Minimum tread depth shall be 11", measured from riser to riser (not including nosing)
2. Open risers are not permitted

TAS SECTION 4.9.4 – HANDRAILS

A. Non-continuous handrails shall extend 12" beyond the top riser and 12" plus the width of one tread beyond the bottom riser. At the top, the extension shall be parallel to the floor. At the bottom, the handrail shall continue to slope for a distance of one tread width (11"); the remaining extension shall be horizontal.

B. Height: 34" – 38", measured from the stair nosing.

4.10 ELEVATORS

TAS SECTIONS 4.10.3 – HALL CALL BUTTONS

A. Shall be centered 42" above floor

TAS SECTIONS 4.10.4 – HALL LANTERNS

A. Visible signals shall have the following features:
1. Fixtures shall be mounted with centerline at least 72" above the lobby floor
2. Visual elements shall be at least 2-1/2" in the smallest dimension

TAS SECTIONS 4.10.5 – RAISED AND BRAILLE CHARACTERS ON HOISTWAY ENTRANCES

A. All elevator hoistway entrances shall have raised and Braille floor no. designations provided on bolh jambs. Centerline of the characters shall be 60" above the floor. Characters shall be 2" high.

TAS SECTIONS 4.10.6 – DOOR PROTECTIVE AND REOPENING DEVICE

A. Elevator doors shall open and close automatically. They shall be provided with a reopening device that will stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

TAS SECTIONS 4.10.12 – CAR CONTROLS

A. All floor buttons shall be:
1. All control buttons shall be at least 3/4" in their smallest dim. They shall be flush or raised.
2. All control buttons shall be designated by Braille and by raised standard alphabet characters for letters, arabic characters for numerals. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation.
3. Maximum 54" above floor where side approach is provided
4. Maximum 48" where forward approach is provided

B. Emergency Controls:
1. Shall have centerlines 35" minimum above floor
2. Shall be grouped at bottom of panel

C. The emergency communication system shall not require voice communication.

4.11 PLATFORM LIFTS

NOTE : REQUIRES A VARIANCE FROM THE T.D.L.R. TO USE IN LIEU OF AN ELEVATOR

TAS SECTIONS 4.11.2, 4.27.3 – OTHER REQUIREMENTS
CONTROLS AND OPERATING SYSTEMS

A. Heights permitted:
Controls and operating mechanisms shall be located for either a forward or side approach from any direction of travel. They shall be located 28" min. and 48" maximum above the floor. They shall be operable with one hand. There shall be at least one handrail complying with 4.26.
Wheelstops and guardrails shall be provided where necessary.

4.13 DOORS

TAS SECTION 4.13.4 – DOUBLE – LEAF DOORWAYS

A. Doorways with two independently operated leaves shall have at least one active leaf that meets the requirements in 4.13.5 and 4.13.6.

TAS SECTION 4.13.5 – CLEAR WIDTH

A. Doorways shall provide a clear opening of 32" minimum, with the door open 90°.
1. Clear opening shall be measured between the face of the door and opposite stop.
2. Openings more than 24" in depth shall provide a clear opening of 36" minimum.
Exception: Doors not requiring full user passage, such as shallow closets, shall have a clear opening of 20" minimum.

TAS SECTION 4.13.6 – MANEUVERING CLEARANCES AT DOORS

Provide level (1:50 max. slope) and clear maueuvering area at doors as follows:

A. Front approach pull side – 60" min. width & 18" min. beside strike edge
Front approach push side – 48" min width & 0" beside strike edge
(12" @ strike if door has both a closer and a latch)

B. Hinge side approach pull side – 60" min. width; 36" min. beside strike edge or – 54" min. width; 42" min. beside strike edge
Hinge side approach push side – 42" min. width & 18" min. bside hinge edge (48"min. width if door has both a closer and a latch)

C. Latch side approach pull side – 48" min. width and 24" min. beside strike edge (54"min. width if door has a closer)
Latch side approach push side – 42" min. width and 24" min. beside strike edge (48"min. width if door has a closer)

TAS SECTION 4.13.8 – THRESHOLDS AT DOORWAYS

A. Maximum threshold height: 1/2" (3/4" at exterior sliding doors). Raised thresholds and floor level changes shall be beveled with a slope no greater than 1:2.

TAS SECTION 4.13.9 – DOOR HARDWARE

A. Handles, pulls, latches, locks, and other operating devices shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate.
1. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs.
2. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides.
3. Hardware required for accessibel door passage shall be mounted no higher than 48" above finished floor.

TAS SECTION 4.13.10 – DOOR CLOSERS

A. If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70°, the door will take at least 3 seconds to move to a point 3" from the latch, measured to the leading edge of the door.

TAS SECTION 4.13.11 – DOOR OPENING FORCE

A. The maximum force for pushing or pulling open a door shall be as follows:
1. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.
2. Other doors
a. Exterior hinged doors: no requirement.
b. Interior hinged doors: 5.0 lbf.
c. Sliding or folding doors: 5.0 lbf.
These forces do not apply to the force required to retract latch bolts or disengage othe devices that may hold the door in a closed position.

4.15 DRINKING FOUNTAINS

TAS SECTION 4.15.2 – SPOUT HEIGHT (REFERENCE DETAIL 4.15 for accessible unit)

A. Accessible spouts shall be no higher than 36", measured from the floor or ground surface to the spout outlet.

B. In addition to accessible unit, at least one drinking fountain shall be at standard height (may be "high/low" type if located in one location).

TAS SECTION 4.15.3 – SPOUT LOCATION

A. Spouts shall be located at the front of the unit and shall direct the water flow in a trajectory that is parallel or nearly parallel to the front of the unit.
1. The spout shall provide a flow of water at least 4" high.
2. If the fountain has a round or oval bowl, the spout must be positioned so the flow of water is within 3" of the front edge of the fountain.

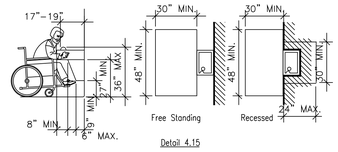
TAS SECTION 4.15.4 – CONTROLS

A. Unit controls shall be front mounted or side mounted near the front edge.

TAS SECTION 4.15.5 – CLEARANCES (REFERENCE DETAIL 4.15).

A. Wall and post mounted cantilever fountains shall have clear knee space as follows:
1. Minimum 27" high (from apron bottom to floor) minimum 30" wide, and 17" – 19" deep.
2. A minimum 30" by 48" clear floor space allowing a forward approach to the unit shall be provided.

B. Free standing or built-in units not having a clear knee space shall have a minimum 30" by 48" clear floor space allowing a parallel approach to the unit.



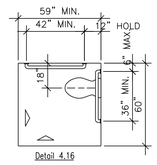
Detail 4.15

4.16 WATER CLOSETS

TAS SECTION 4.16.2 – CLEAR FLOOR SPACE

A. Clear floor space for water closets not in stalls shall be provided as follows:
Front approach – 48" min. wide x 66" min. long
Side approach – 56" min. to front of toilet x 48" min. wide
Both approach – 60" min. wide x 56" min. long (Reference Detail 4.16)

B. No doorswings are allowed in clear floor area.



Detail 4.16

TAS SECTION 4.16.3 – HEIGHT (REFERENCE DETAIL 4.16.2)

A. The height to the top of the toilet seat shall be 17" – 19" above floor.
1. Seats shall not be sprung to return to a lifted position.

TAS SECTIONS 4.16.4, 4.26 – GRAB BARS (REFERENCE DETAILS 4.16.1, 4.16.2 & 4.16.3)

A. For water closets not located in toilet stalls, the following grab bars shall be provided, 33" – 36" above the finish floor:
1. Side wall: 42" long minimum, hold 12" min. from back wall.
2. Back wall: 36" long minimum, 12" minimum each side of water closet centerline.

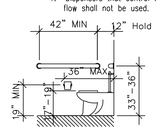
Refer to 4.26 Grab Bars for size and structural elements.

TAS SECTIONS 4.16.5, 4.27.4 – FLUSH CONTROLS (REFERENCE DETAIL 4.16.3)

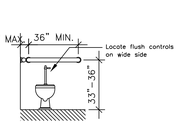
A. Controls shall be 44" maximum above the finish floor.
1. Lever controls or flush valves shall be mounted on the wide side of toilet areas.
2. Controls shall be hand operated or automatic.
3. Controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
4. The force required to activate controls shall be no greater than 5lbf.

TAS SECTION 4.16.6 – DISPENSERS (REFERENCE DETAIL 4.16.2)

A. Toilet paper dispensers shall be installed on the side wall, a minimum 19" above the floor, and a maximum 36" from the rear wall.
1. Dispensers that control delivery or do not permit continuous paper flow shall not be used.



Detail 4.16.2



Detail 4.16.3

4.17 TOILET STALLS

TAS SECTION 4.22.4 – WHERE APPLICABLE

A. If toilet stalls are provided in a toilet room or bathroom, then at least one shall be a "standard" accessible toilet stall (for wheelchair users) complying with this section. (REFERENCE DETAIL 4.17.1)

B. If 6 or more toilet stalls are provided in a toilet room or bathroom in addition to the 'standard' accessible stall required; an additional 'alternate A' accessible stall 36" wide (for ambulatory persons with disabilities) complying with this section shall be provided. (REFERENCE DETAIL 4.17.2)

C. Alterations/Existing Conditions: In alteration work, where provision of a 'standard' accessible stall is technically infeasible, or where plumbing code requirements prevent combining existing stalls to provide space, either 'alternate' stall (A or B) complying with this section may be provided in lieu of the standard stall. (Note :requires a variance from T.D.L.R.)

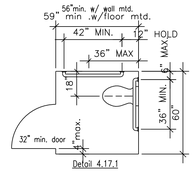
TAS SECTION 4.17.3 – SIZE AND ARRANGEMENT (REFERENCE DETAIL 4.17)

A. Toilet stalls may be arranged to provide either a left or a right handed approach. Accessible toilet stalls shall have the following dimensions:

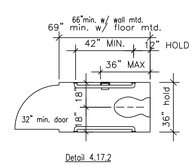
1. 'Standard' Accessible Stall
60" minimum width.
59" minimum depth, with floor mounted water closet
56" minimum depth, with wall mounted water closet
Door: outward swinging (if door swings into stall, depth shall be incressed by 36". Stall doors must have 18" on pull strike jamb.

2. 'Alternate A' Accessible Stall (required when more than 6 stalls provided, permitted in lieu of standard stall only with a variance from T.D.L.R.)
36" width – hold this dim.
69" minimum depth, with floor mounted water closet.
66" minimum depth with wall mounted water closet
Door: outward swinging.

3. 'Alternate B' Accessible Stall (permitted in lieu of standard stall only with variance from T.D.L.R.)
48" minimum width.
54" minimum depth.
Door : outward swinging.



Detail 4.17.1



Detail 4.17.2

TAS SECTION 4.17.4 – TOE CLEARANCES

A. In 'Standard' accessible stalls, the front partition and at least one side partition shall provide a toe clearance of at least 9" above the floor.

B. If the depth of the stall is greater than 60", the toe clearance is not required.

TAS SECTION 4.17.5 – DOORS

A. Toilet stall doors, including hardware, shall comply with 4.13 DOORS

B. If toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction shall be 42" minimum. (This is an exception from typical door maneuvering clearances)

TAS SECTION 4.17.6 – GRAB BARS (REFERENCE DETAILS 4.16.2, 4.16.3, 4.17.1 & 4.17.2)

A. Grab Bars shall be mounted 33" – 36" above the floor.

Refer to 4.26 Grab Bars for size and structural requirements.

4.18 URINALS

TAS SECTION 4.18.2 – HEIGHT (REFERENCE DETAIL 12.3.1)

A. Urinals shall be stall-type or wallhung with a tapered, elongated rim at 17" maximum above the finished floor.
The rim shall extend a minimum of 14" from the wall.

TAS SECTION 4.18.3 – CLEAR FLOOR SPACE (REFERENCE DETAIL 4.18.1)

A. A clear floor space 30" wide by 48" deep minimum shall be provided in front of urinal to allow forward approach.

1. This space shall adjoin or overlap an accessible route.

2. Urinal shield that do not extend beyond the front edge of the urinal rim may be provided with 29" clearence between them.

3. Urinals installed in alcoves deeper than 24" require a maneuvering area of at least 36" minimum wide, centered on fixture.

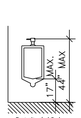
TAS SECTION 4.18.4 – FLUSH CONTROLS (REFERENCE DETAIL 4.18.2)

A. Controls shall be 44" maximum above the finished floor.

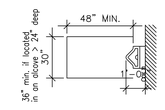
1. Controls shall be hand operated or automatic.

2. Controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

3. The force required to activate controls shall be no greater than 5 lfb.



Detail 4.18.1



Detail 4.18.2

4.19 LAVATORIES & MIRRORS

TAS SECTION 4.19.2 – HEIGHT & CLEARANCES (REFERENCE DETAIL 4.19.1 & 4.19.2)

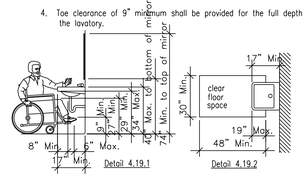
A. Lavatories shall be mounted with the rim or counter surface no higher than 34" above the finished floor.

1. Lavatories shall extend 17" minimum from the wall.

2. Clearance of 29" minimum shall be provided from the finished floor to bottom of apron.

3. Knee clearance of 27" minimum shall extend 8" minimum under the edge of the lavatory.

4. Toe clearance of 9" minimum shall be provided for the full depth of the lavatory.



Detail 4.19.1 Detail 4.19.2

No.	REVISIONS	BY

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Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: G1.00

TAS SECTION 4.19.4 – EXPOSED PIPES AND SURFACES

A. Hot water and drain pipes under lavatories shall be insulated or otherwise configured to protect against contact.

B. There shall be no sharp or abrasive surfaces under lavatories.

TAS SECTIONS 4.19.5, 4.27.4 – FAUCETS

A. Controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

B. The force required to activate controls shall be no greater than 5 lbf.

C. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs.

D. If self-closing valves are used the faucet shall remain open for at least 10 seconds.

TAS SECTION 4.19.6 – MIRRORS (REFERENCE DETAIL 4.19.1)

A. Mirrors shall be mounted with the bottom edge of the reflecting surface 40" maximum above the finished floor.

B. The top edge of the reflecting surface must be at least 74" AFF.

4.20 BATHTUBS

TAS SECTION 4.20.2 – FLOOR SPACE

A. Clear floor space shall be provided in front of bathtubs as follows:
30" wide x 60" long beside the bathtub for side approach
48" wide x 60" long beside the bathtub for front approach

with seat at head of tub – 30" wide x 75" long beside tub

TAS SECTION 4.20.3 – SEAT

A. An in-tub seat or a seat at the head end of the tub shall be provided. Seats shall be mounted securely and shall not slip during use.

TAS SECTIONS 4.20.4 – GRAB BARS

A. Heights permitted:

1. With in Tub Seat:
Foot Control wall: 24" long minimum, from outside wall, 33–36" above floor
Back wall: 2 bars, 24" long minimum, 12" maximum from foot wall, 24" maximum from head wall; one 33–36" above floor, one 9" above the tub
Head wall: 12" minimum, from outside wall, 33–36" above floor

2. With Seat at Head of Tub:
Control wall: 24" long minimum, from outside wall, 33–36" above floor
Back wall: 2 bars, 48" long minimum, 12" maximum from foot end, 15" maximum from head end; one 33–36" above floor, one 9" above the tub
Head wall: none

TAS SECTION 4.20.5

A. Controls must be located up front to the open side of tub

TAS SECTION 4.20.6 – SHOWER UNIT

A. A shower spray unit with a hose at least 60" long shall be provided that they can be used both as fixed and hand held.

4.21 SHOWER STALLS

TAS SECTION 4.21.2 – SIZE AND CLEARANCES

A. Shower stalls shall be either 36"x36" clear inside dimension (hold) at transfer type or 30" min. x 60" min. clear inside dimension at roll in type.

TAS SECTIONS 4.21.3 – SEAT

A. Seat is required in 36"x 36" stalls, and shall have the following features:

1. Shall be 17"–19" above bathroom floor
2. Shall extend the full depth of the stall
3. Shall be located on the wall opposite control wall
4. Maximum space between wall and seat edge shall be 1–1/2"
5. Shall project 16" maximum into stall width, except at the rear 15" maximum of the stall, where the seat may project 23"
6. Where a seat is provided in a roll in type shower it must be the fold-up type.

TAS SECTIONS 4.21.4 – GRAB BARS

A. Grab bars shall be mounted 33–36" above floor

TAS SECTIONS 4.21.5 – CONTROLS

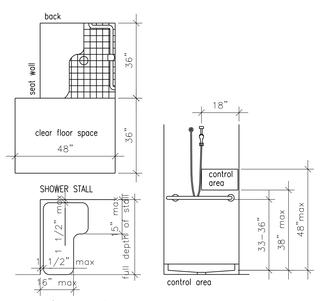
A. All shower controls shall be located 38" minimum and 48" maximum above the floor, up front on the open side.

TAS SECTION 4.21.6 – SHOWER UNIT

A. A shower spray unit with a hose at least 60" long that can be used both as a fixed shower head and as a hand held shower shall be provided. The mounting device shall comply with the requirements for Forward Reach.

TAS SECTIONS 4.21.7 – CURBS

A. If provided, curbs on transfer showers shall be no higher than 1/2" roll-in showers shall not have curbs



SHOWER SEAT DETAIL

4.22 TOILET ROOMS

TAS SECTIONS 4.22.2 – DOORS

A. All doors to accessible toilet rooms shall comply with 4.13. Doors shall not swing into clear floor space required for any fixture. Clear floor turning space may overlap door swings.

TAS SECTIONS 4.22.3 – CLEAR FLOOR SPACE

A. The accessible fixtures and controls required in 4.22.4, 4.22.5, 4.22.6 4.22.7 shall be on an accessible route. An unobstructed turning space complying with 4.2.3 shall be provided within an accessible toilet room. The clear floor space at fixtures and controls, the accessible route, and the turning space may overlap, however; the only turning space provided shall not be located within a stall.

TAS SECTIONS 4.22.4 – WATER CLOSETS

A. If toilet stalls are provided, then at least one shall be a standard toilet stall complying with 4.17; where 6 or more stalls are provided in addition to the stall complying with 4.17.3, at least one stall 36" wide with an outward swinging, self-closing door and parallel grab bars shall be provided. Water closets in such stalls shall comply with 4.16.

TAS SECTIONS 4.22.5 – URINALS

A. If urinals are provided, then at least one shall comply with 4.18.

TAS SECTIONS 4.22.6 – LAVATORIES AND MIRRORS

A. If lavatories and mirrors are provided, then at least one of each shall comply with 4.19. Accessible lavatories and mirrors shall not be located within toilet stalls unless other accessible lavatories and mirrors are provided in the toilet room.

TAS SECTIONS 4.22.7 – CONTROLS AND DISPENSERS

A. If controls, dispencers, receptacles, or other equipment are provided, then at least one of each shall be on an accessible route and shall comply with 4.27 – (Controls & Operating Mechanisms).

4.23 – BATHROOMS, BATHING FACILITIES, AND SHOWER ROOMS

TAS SECTION 4.23.8 – BATHING AND SHOWER FACILITIES

A. In addition to the requirements of 4.22. toilet rooms :
If tubs and showers are provided, then at least one accessible tub that complies with 4.20 or at least one accessible shower that complies with 4.21 shall be provided

4.24 – SINKS

TAS SECTION 4.24.2 – HEIGHT

A. Sinks shall be mounted with the rim or counter surface no higher than 34" above the finished floor.

TAS SECTIONS 4.24.3 – KNEE CLEARANCE

A. Knee clearance of 27" high minimum, 30" wide minimum, and 19" deep minimum shall be provided underneath sinks.

TAS SECTION 4.24.4 – DEPTH

A. Each sink shall be a maximum of 6–1/2" deep.

TAS SECTION 4.24.6 – EXPOSED PIPES AND SURFACES

A. Hot water and drain pipes under sinks shall be insulated or otherwise configured to protext against contact.

B. There shall be no sharp or abrasive surfaces under sinks.

TAS SECTION 4.24.7, 4.27.4 – FAUCETS

A. Controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

B. The force required to activate controls shall be no greater than 5 lbf.

C. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs.

D. If self-closing valves are used the faucet shall remain open for at least 10 seconds.

4.25 – STORAGE

TAS SECTION 4.25.1 – DEPTH (REFERENCE DETAIL 4.25.1)

A. Storage areas may be 36" in depth or less. If more than 36" in depth then area must allow 60" diameter of clear floor space for turning.

TAS SECTION 4.25.2 – CLEAR FLOOR SPACE: (REFERENCE DETAIL 4.25.2)

TAS SECTION 4.25.3 – HEIGHT (REFERENCE DETAIL 14.3 AND 4.25.3 & 4.25.4)

A. Where a forward reach is required, accessible storage spaces shall be 48" maximum and 15" minimum above the floor. If the forward reach is over an obstruction (with knee space equal to or greater than reach distance) 20"–25" deep, the maximum height shall be 44"; if the obstruction is less than 20", maximum height shall be 48".

B. Where a side reach is provided, accessible storage spaces shall be 54" maximum and 9" minimum above the floor. Maximum height shall be 46" for side reach over an obstruction 34" maximum high and 24" maximum deep.

C. Clothes rods or shelves shall be a maximum 54" above floor where a side reach is required.

D. Where the distance from the wheelchair to the clothes rod or shelf exceeds 10" (as at closets with inaccessible doors) the following criteria shall be met:

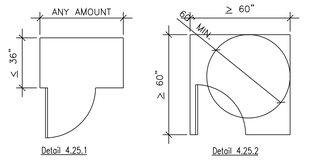
1. Shelves: Reach: 21" maximum; height: 48" maximum, 9" minimum.

2. Clothes rods: reach 21" maximum; height: 48" maximum.

TAS SECTIONS 4.25.4, 4.27.4 – HARDWARE

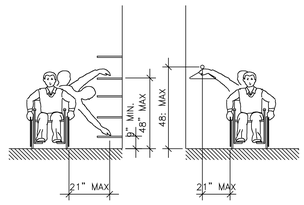
A. Hardware for accessible storage facilities shall be operable with one hand and shall not require tight grasping, pinching, or tisting of the wrist.

B. The force required to activate the hardware shall be no greater than 5 lbf

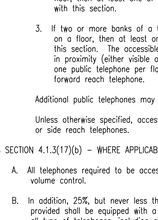


Detail 4.25.1

Detail 4.25.2



Detail 4.25.3



Detail 4.25.4

4.26 – GRAB BARS

TAS SECTION 4.26.2 – SIZE AND SPACING

A. Diameter or width of gripping surface shall be 1–1/4" to 1–1/2", or the shape shall provide an equivalent gripping surface.

1. The space between grab bars and adjacent walls shall be 1–1/2"

TAS SECTION 4.26.3 – STRUCTURAL STRENGTH

A. Grab bars and mounting devices shall meet the following requirements:

1. Bending stress induced by maximum bending moment from application of 250 lbf shall be less than allowable stress for material used.

2. Shear stress induced by application of 250 lbf shall be less than allowable shear stress for material used. If connection between grab bar and mounting bracket is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress.

3. Shear force induced in a fastener or mounting device from application of 250 lbf shall be less than allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.

4. Tensile force induced in a fastener by a direct tension force of 250 lbf plus the maximum moment from the application of 250 lbf shall be less than the allowable withdrawal load between the fastener and the supporting structure.

5. Grab bars shall not rotate within their fittings.

TAS SECTION 4.26.4 – ELIMINATING HAZARDS

A. Grab bars and adjacent wall surfaces shall be free of sharp or abrasive surfaces.

B. Edges shall have a radius of 1/8" minimum.

4.27 – CONTROLS AND OPERATING MECHANISMSS

TAS SECTION 4.27.3 – HEIGHT (REFERENCE DETAIL 4.30.3)

A. Front approach – 48" max. to 15" min.
Controls located in an alcove >24" deep must have 36" clear floor width.

B. Side approach – 54" max. to 9" min., except per below.

C. Electrical & communication system receptacls shall be mounted no less than 15" above the floor.

4.28 – ALARMS

TAS SECTION 4.28.1 – GENERAL

A. When required, visual alarms shall be provided in each of the following areas, as a minimum: restrooms and any other general usage areas (e.g., meeting rooms), hallways, lobbies, and any other area for common use.

TAS SECTION 4.28.2 – AUDIBLE ALARMS

A. If provided, audible alarms shall produce a sound that exceeds the prevailing equivalent sound level in the room or space by at least 15 dba or exceeds any maximum sound level with a duration of 60 seconds by 5 dba, whichever is louder.

B. Sound levels for alarm signals shall not exceed 120 dba.

TAS SECTION 4.28.3 – VISUAL ALARMS

A. Visual alarm signal appliances shall be integrated into the building or facility alarm system. If single station audible alarms are provided then single station visual alarm signals shall be provided.

Visual Alarm appliances shall have the following features:

1. The lamp shall be a xenon strobe type or equivalent.

2. The color shall be clear or nominal white (i.e. unfiltered or clear filtered white light).

3. The maximum pulse duration shall be two-tenths of one second with a maximum duty cycle of 40%. (The pulse duration is defined as the time interval between initial and final points of 10% of max signal)

4. The intensity shall be a minimum of 75 candela.

5. The flash rate shall be a minimum of 1 Hz and a maximum of 3 Hz

6. The appliance shall be placed 80" above the highest floor level within the space or 6" below the ceiling, whichever is lower.

7. In general, no place in any room or space shall be more than 50' from the signal (measured in a horizontal plane).

a. In large rooms and spaces exceeding 100' across, without obstructions 6' above the finished floor, such as auditoriums, devices may be place around the perimeter, spaced a maximum 100' apart, in lieu of suspending appliances from the ceiling.

8. No place in common corridors or hallways shall be more than 50' from the signal.

4.30 – SIGNAGE

TAS SECTIONS 4.1.2(7), 4.1.3(16)(a) – WHERE APPLICABLE

A. Signs which designate permanent rooms and spaces shall comply with the requirements listed below for:

1. Raised and Braille Characters, and Pictograms

2. Finish and Contrast

Exception: Employee name signs are not required to comply.

TAS SECTIONS 4.1.2(7), 4.1.3(16)(b) – WHERE APPLICABLE

A. Signs which provide direction to, or information about, functional spaces of the building shall comply with the requirements listed below for:

1. Character Proportion

2. Character Height

3. Finish and Contrast

Exception: Building directories, menus, and all other signs which are temporary are not required to comply.

TAS SECTION 4.1.2(7) – WHERE APPLICABLE (REFERANCE DETAIL 4.30.1)

A. Element and spaces of accessible facilities which shall be identified by the International Symbol of Accessibilty are:

1. Parking spaces designated as reserved for persons with disabilities.

2. Accessible passenger loading zones.

3. Accessible entrances when not all are accessible (inaccessible entrances shall have directional signage to indicate route to nearest accessible entrance).

4. Accessible toilet and bathing facilities when not all are accessible.

TAS SECTION 4.30.2 – CHARACTER PROPORTION (REFERENCE DETAIL 4.30.2)

A. Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1, and a stroke-width-to-height ratio between 1:5 and 1:10.

TAS SECTION 4.30.3 – OVERHEAD SIGNS

A. Characters and numbers on overhead signs shall be sized according to the viewing distance from which they are to be read.

1. For signs higher than 80" above the finished floor, character size shall be 3" minimum.

2. The minimum height is measured using an upper case X.

3. Lower case letters are permitted.

TAS SECTION 4.30.4 – RAISED AND BRAILLE CHARCTERS AND PICTOGRAMS

A. Letter and numerals shall be raised 1/32", upper case, sans serif and shall be accompanied by grade 2 Braille.

1. Raised character height: 5/8" minimum, 2" high maximum

2. Pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram.

3. The border dimension of the pictogram shall be 6" minimum

TAS SECTION 4.30.5 – FINISH AND CONTRAST

A. The character and background of the signs shall be eggshell, matte, or other non-glare finish. Chorcters and symbols shall contrast with their bachground (either light characters on a dark background or dark characters on a light background).

TAS SECTION 4.30.6 – MOUNTING LOCATION AND HEIGHT (REFERENCE DETAIL 4.30.3)

A. Where permanent identification is provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door.

B. Where there is no wall space to the latch side of the door, including at double-leaf doors, signs shall be placed on the nearest adjacent wall.

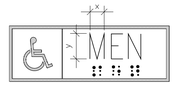
C. Mounting height shall be 60" above the finished floor to the centerline of the sign.

D. Mounting location for such signage shall be so that a person may approach within 3" of signage without encountering protruding objects or standing within the swing of a door.



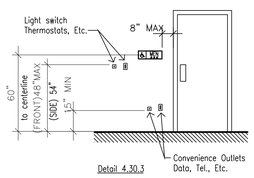
International Symbol of Accessibilty

Detail 4.30.1



Letter & numbers on signs shall have a width to height ratio of between 3:5 & 1:1 and a stroke – width to height ratio between 1:5 & 1:10. Letters and numbers shall be raised 1/32", upper case, sans serif or simple serif type and shall be accompanied with grade 2 Braille, raised characters shall be at least 5/8" high, but no higher than 2".

Detail 4.30.2



Detail 4.30.3

4.31 – PUBLIC TELEPHONES

TAS SECTION 4.1.3(17)(a) – WHERE APPLICABLE

A. If public pay telephones, public closed circuit telephones, or other public telephones if provided, then they shall comply with this section in the quantities below:

1. If one or more single unit of a type of public telephone is provided on a floor, then at least one of those phones shall comply with this section.

2. If one bank (defined as two or more adjacent public telephones, often installed as a unit) of a type of telephone is provided on a floor, then at least one of the telephones at the bank shall comply with this section.

3. If two or more banks of a type of public telephone are provided on a floor, then at least one telephone per bank shall comply with this section. The accessible unit may be installed as a single unit in proximity (either visible or with signage) to the bank. At least one public telephone per floor shall meet the requirements for a forward reach telephone.

Additional public telephones may be installed at any height.

Unless otherwise specified, accessible telephones may be either forward or side reach telephones.

TAS SECTION 4.1.3(17)(b) – WHERE APPLICABLE

A. All telephones required to be accessible shall be equipped with a volume control.

B. In addition, 25%, but never less than one, of all other public telephones provided shall be equipped with a volume control and shall be dispersed all type of telephones, including closed ciruit telephones, throughout the building or facility.

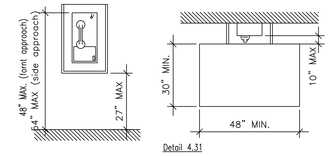
C. Signage displaying the International Symbol of Access for Hearing Loss shall be provided at each telephone equipped with a volume control.

TAS SECTION 51.3 – MOUNTING HEIGHT (REFERENCE DETAIL 4.31)

A. The highest operable part of the telephone shall be 48" maximum above the floor where a forward reach is required, and 54" maximum where a side reach is required.

B. If the forward reach is over an obstruction (with knee space equal to or greater than reach distance) 20"–25" deep the maximum height shall be 44"; if the obstruction is less than 20", maximum height shall be 48"

C. Maximum height shall be 46" for side reach over an obstruction 34" maximum high and 24" maximum deep.



Detail 4.31

4.32 – SEATING AND TABLES

TAS SECTION 4.32.2 – SEATING

A. If seating spaces for people in wheelchairs are provided at fixed tables or counters, clear floor space of 30" x 48" shall be provided. Floor space shall not overlap required knee space by more than 19"

TAS SECTION 4.32.3 – KNEE SPACE

B. If seating for people in wheelchairs is provided at fixed tables or counters, knee space at least 27" high, 30" wide and 19" deep shall be provided.

TAS SECTION 4.32.4 – HEIGHT OF TABLES OR COUNTER

C. The tops of accessible tables and counters shall be 28" minimum, and 34" maximum, above the finished floor.

4.34 – AUTOMATIC TELLER MACHINES

TAS SECTIONS 4.34.2 – CLEAR FLOOR SPACE

A. Floor space shall comply with 4.2.4 to allow a forward, parallel approach or both.

TAS SECTIONS 4.34.3 – REACH RANGES

A. Forward approach only: controls within forward approach specified in 4.2.5.

B. Parallel approach: controls within unobstructed reach range from clear floor space at protrusion of teller machinr surround per table as follows:

Reach Depth	Maximum Height	Reach Depth	Maximum Height	Reach Depth	Maximum Height
in inches	in inches	in inches	in inches	in inches	in inches
10 or less	54	15	51	20	48 1/2
11	53 1/2	16	50 1/2	21	47 1/2
12	53	17	50	22	47
13	52 1/2	18	49 1/2	23	46 1/2
14	51 1/2	19	49	24	46

Note : above does not apply to drive up machines.

4.35 DRESSING AND FITTING ROOMS

TAS SECTIONS 4.35.2

A. Clear floor area with a 60" dia. wheelchair turnaround is required. The turnaround area must be clear of door swings.

TAS SECTIONS 4.35.4 – BENCH

A. Every accessible dressing room shall have a 24"x 48" bench fixed to the wall along the larger dimension. The bench shall be mounted 17" to 19" above the finish floor.

TAS SECTIONS 4.35.5 – MIRROR

A. A full-length mirror, measuring at least 18" wide by 54" high, shall be mounted in a position affording a view to a person on the bench as well as to a person in a standing position.

No.	REVISIONS	BY

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SCHOOLS PHASE 1

IDEA PUBLIC SCHOOLS
PALMVIEW
IDEA Public Schools PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
79555
STATE OF TEXAS
5/16/2019

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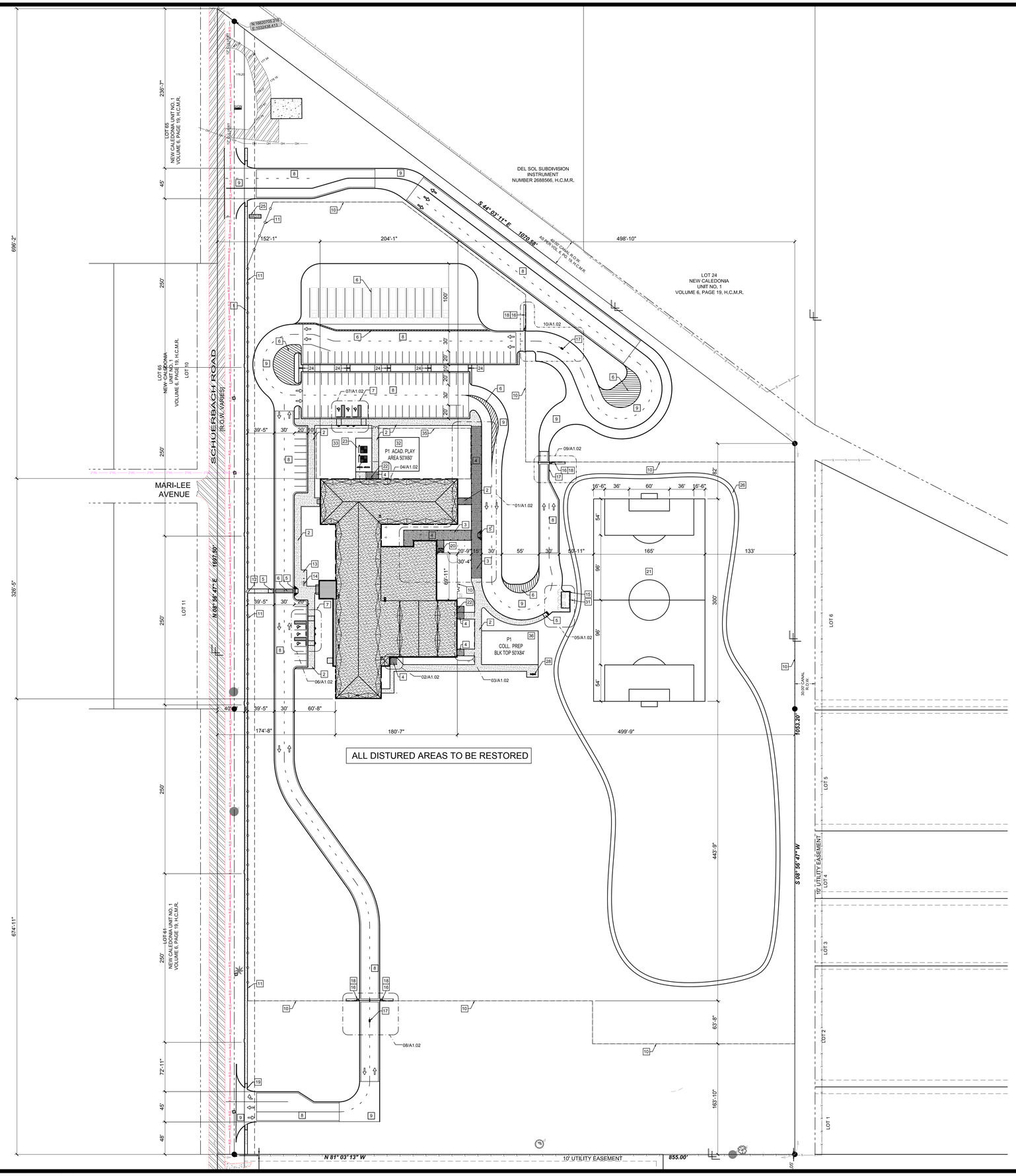
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: G1.01



SITE PLAN KEYED NOTES

1. 4'-0" WIDE CONCRETE WALK W/ 5' TURN AROUNDS @ 250' MAX REFER TO DTL'S 01,02,04/A1.03
2. 10'-0" WIDE CONCRETE WALK REFER TO DTL'S 01,02,03,04/A1.03
3. 15'-0" WIDE CONCRETE WALK REFER TO DTL'S 01,02,04/A1.03
4. PREFINISHED METAL WALKWAY CANOPIES. REFER TO SHEET 19/A1.03
5. ACCESSIBLE CURB RAMPS WITH DETECTABLE WARNING STRIPS. REFER TO 13/A1.03 TYPICAL
6. TRAFFIC STRIPING FOR PEDESTRIAN CROSSWALKS, LOADING ZONE, AND TRAFFIC CONTROL AS SHOWN.
7. HANDICAP ACCESSIBLE PARKING SPACES WITH POLE MOUNTED HANDICAP SIGN. REFER TO 12/A1.03.
8. ASPHALT PAVING WITH CONCRETE CURB AND GUTTER. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
9. CONCRETE PAVING WITH CONCRETE CURB AND GUTTER. REFER TO CIVIL FOR ADDITIONAL INFORMATION.
10. 7'-0" VINYL COATED CHAIN LINK FENCE REF. 08/A1.03
11. 7'-0" HIGH ALUMINUM FENCING AS SPECIFIED. REFER TO 06/A1.03
12. 3'-0" WIDE ALUMINUM ENTRY SWING GATES WITH HYDRAULIC HINGES AND KEYPAD LOCKSET AS SPECIFIED. REFER TO 05/A1.03.
13. (2) 30'-0" FLAGPOLES AS SPECIFIED. REFER TO DTL 11/A1.03
14. HD GALV WAVE IN GROUND MOUNT BIKE RACKS MODEL 116-1004 WWW.THEPARKCATALOG.COM
15. 6'-0" TALL CEDAR FENCING WITH DOUBLE SWINGING GATE REFER TO 09/A1.02
16. VINYL COATED CHAIN LINK EXIT SLIDING GATE AS SPECIFIED, WITH STEEL ANGLE GUIDE SET IN 12" WIDE CONCRETE APRON. REFER TO 15,16/A1.03
17. PEDESTAL MOUNTED KEYPAD CONTROL AND CALL SWITCH AS SPECIFIED.
18. MOTORIZED SLIDING GATE OPERATORS AS SPECIFIED.
19. POLE MOUNTED TRAFFIC SIGN - "STOP SIGN" REFER TO 12/A1.03.
20. CAN WASH AREA WITH METAL CANOPY PROVIDE CONC. CATCH BASIN GRATE COVER SET ONTO R-6670-O SERIES SQ. NEENAH FOUNDRY CO. REFER TO MEP FOR PLUMBING REQUIREMENTS
21. PRACTICE SOCCER FIELD WITH PAINTED STRIPPING AND TRAIL CHASER PLASTIC WHISKERS MARKING ALL CORNERS (GOALS AS SPECIFIED).
22. EXTERIOR DRINKING FOUNTAIN AS SPECIFIED. REFER TO MEP.
23. 50'X24' ASPHALT MULTI SPORT AREA WITH PAINTED LINES REF CIVIL FOR ADDITIONAL INFORMATION REF 11/A1.02
24. METAL TRENCH COVERS REFER TO DTL. 03/A1.03 FOR RECOMMENDED LOCATIONS REFER TO CIVIL DWGS (1'-0" WIDE)
25. BUILDING MARQUEE SIGN REF. 17, 18/A1.03.
26. PROVIDE TRAIL CHASER PLASTIC WHISKERS AND HD GALV. METAL STAKES TO MARK JOGGING TRAIL @ 50' O.C. REF CIVIL FOR MORE INFORMATION
27. DRAIN COVER EQUAL TO NEENAHR-6660-GP
28. BOTTLE FILLING STATION TRI-LEVEL PEDESTAL MODEL # LK4430BF1M
29. TEN (10) BENCHES MODEL #B6PERFSM BY T.F. HARPER & ASSOCIATES LP PROVIDED BY OWNER INSTALLED BY CONTRACTOR LOCATIONS TBD AT A LATER DATE
30. SIX (6) TRASH RECEPT. MODEL #TR32PERF BY T.F. HARPER & ASSOCIATES LP GROUND MOUNTED PROVIDED BY OWNER INSTALLED BY CONTRACTOR LOCATIONS TBD AT A LATER DATE
31. DRAINAGE ROCK SYSTEM REF LANDSCAPE
32. PLAYGROUND AREA BY OWNER
33. FUTURE PAR COURSE BY OWNER
34. FIRE LANE STRIPPING - ALL CURBS - COORDINATE STENCILING WITH FIRE MARSHALL
35. 4'-0" VINYL COATED CHAIN LINK FENCE REF. 08/A1.03
36. 50'X84' ASPHALT MULTI SPORT AREA REF CIVIL FOR ADDITIONAL INFORMATION

01 CAMPUS SITE PLAN

SCALE: 1" = 60'-0"

TRUE NORTH PLAN NORTH

REFER TO SHEET A1.02 FOR SITE PLAN ENLARGEMENTS

SITE NOTES:

1.) FINISH GRADE TO BE 6" BELOW FINISH FLOOR ELEVATION SLOPE AWAY FROM ALL IMPROVEMENTS AT A RATE OF 1/4" PER FOOT FOR THE FIRST 10'-0", THEN AT A RATE OF 1/8" PER FOOT FOR THE NEXT 20'-0"

2.) SIDE WALK SLOPE IS NOT TO EXCEED 1:20 WITH A CROSS SLOPE OF 1:50 AT ANY INSTANCE.

3.) REFER TO CIVIL, LANDSCAPE AND MECHANICAL DRAWINGS FOR ADDITIONAL WORK TO BE PERFORMED UNDER THIS CONTRACT.

4.) PLAY FIELDS, TRAFFIC STRIPPING & TRAFFIC SIGNS NOT SHOWN FOR CLARITY. REFER TO ARCHITECTURAL SHEETS A1.09 THRU A1.13 FOR NOTATION AND REQUIREMENTS

5.) AT ALL ENTRIES OF NEW BUILDINGS WARP CONCRETE SIDEWALKS SO AS TO PROVIDE A FLAT SURFACE WITH FINISHED FLOOR

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT
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STATE OF TEXAS
5/16/2019

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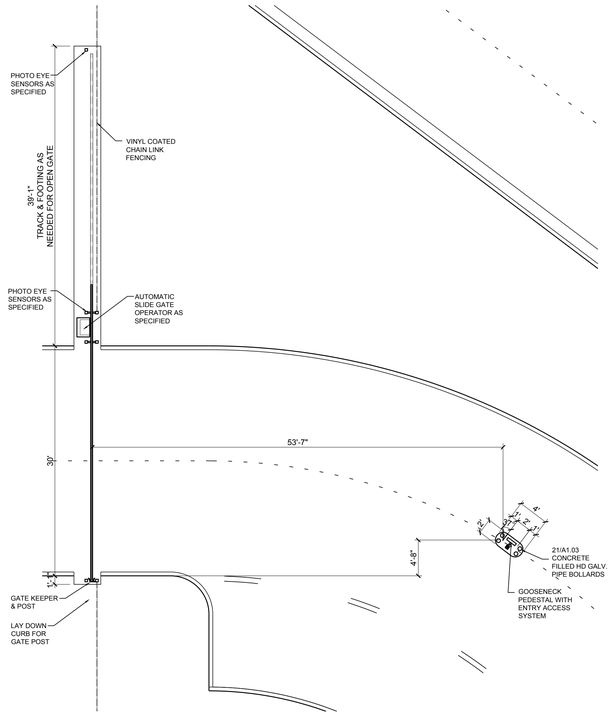
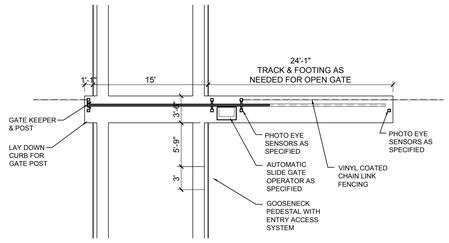
Architects-Planners
Interior Designers

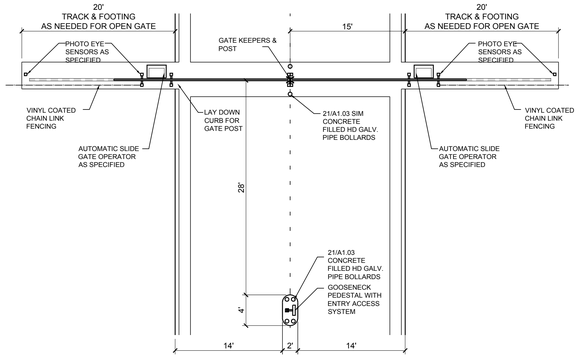
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.:	IDEA 2020 Phase I
Sheet:	A1.01



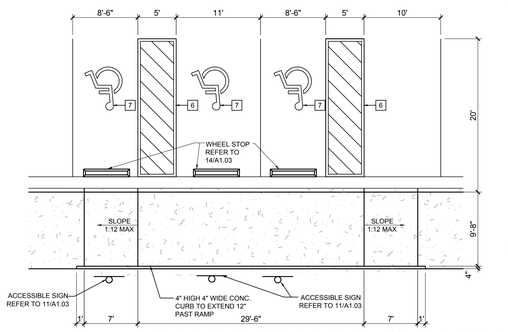
10 SITE PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



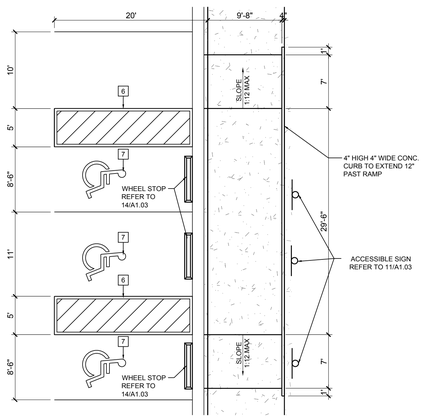
09 SITE PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



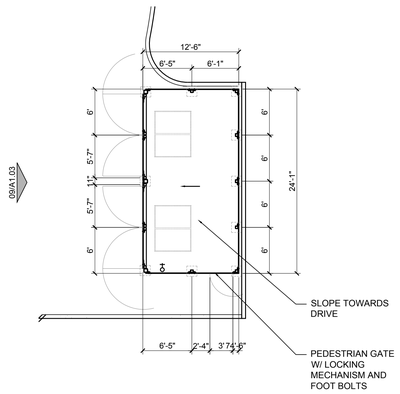
08 SITE PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



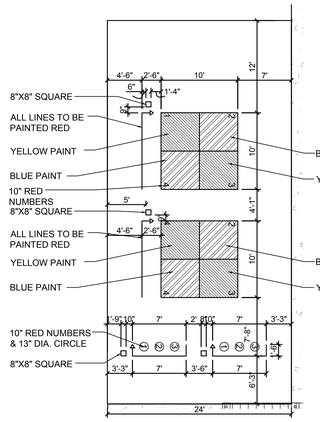
07 SITE PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



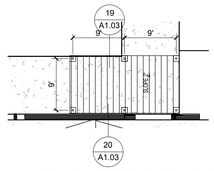
06 SITE PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



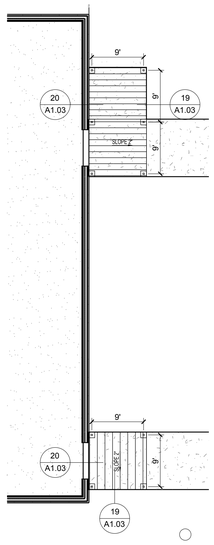
05 DUMPSTER PLAN
SCALE: 1/8" = 1'-0"



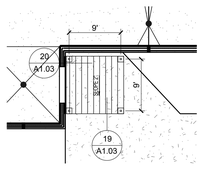
11 PLAYCOURT STRIPPING
SCALE: 1/8" = 1'-0"
NOTE 10'X10' SQUARES PAINT SOLID FILL CHECKER PATTERN BLUE AND YELLOW



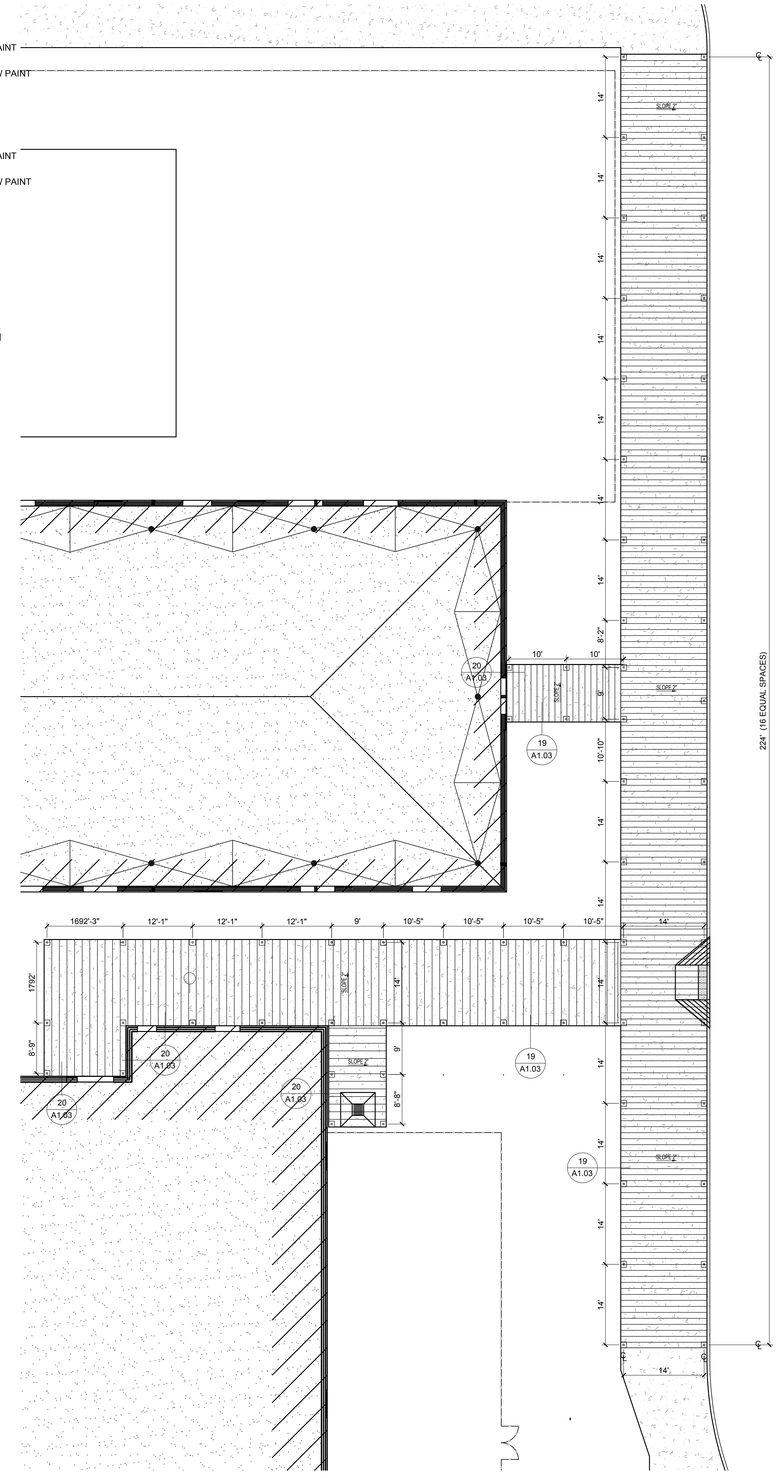
04 CANOPY PLAN
SCALE: 3/32" = 1'-0"



03 CANOPY PLAN
SCALE: 3/32" = 1'-0"



02 CANOPY PLAN
SCALE: 3/32" = 1'-0"



01 CANOPY PLAN
SCALE: 3/32" = 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

REGISTERED ARCHITECT
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5/16/2019

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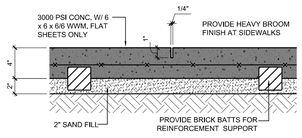
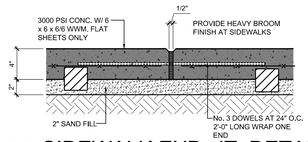
Interior Designers

Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A1.02



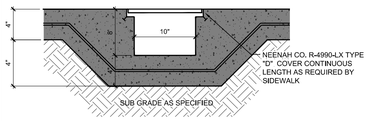
01 SIDEWALK CONTROL JT.

SCALE: 1-1/2"=1'-0"



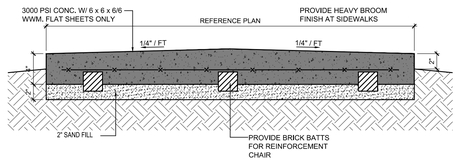
02 SIDEWALK EXP. JT. DETAIL

SCALE: 1-1/2"=1'-0"



03 TRENCH DETAIL

SCALE 1 1/2" = 1'-0"

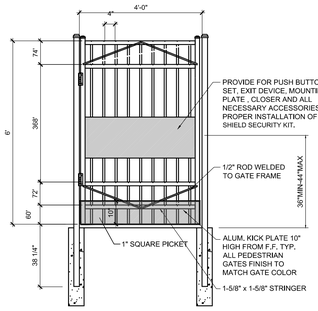


04 SIDEWALK DETAIL

SCALE: 1-1/2" = 1'-0"

1.) CONTRACTOR TO VERIFY ALL BUILDING ROOF DRAINS & DOWN SPOUTS THAT WILL SPILL ONTO A SIDEWALK AND PROVIDE A TRENCH GUTTER AT THAT LOCATION TO ALLOW FOR RAIN WATER TO DRAIN THRU GUTTER AND NOT OVER SIDEWALK (WHICH COULD CAUSE A TRIPPING HAZARD). CONTRACTOR TO VERIFY TRENCH GUTTERS NEEDED PRIOR TO ANY POURING OF SIDEWALKS AROUND PERIMETER OF BUILDING. TYPICAL AT ALL BUILDINGS.

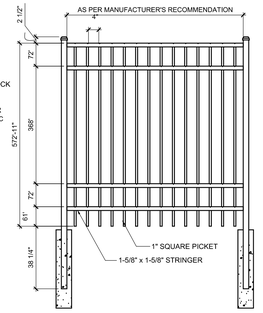
2.) REFER TO CIVIL DRAWINGS FOR ALL OTHER LOCATIONS OF TRENCH GUTTERS



05 GATE ELEVATION

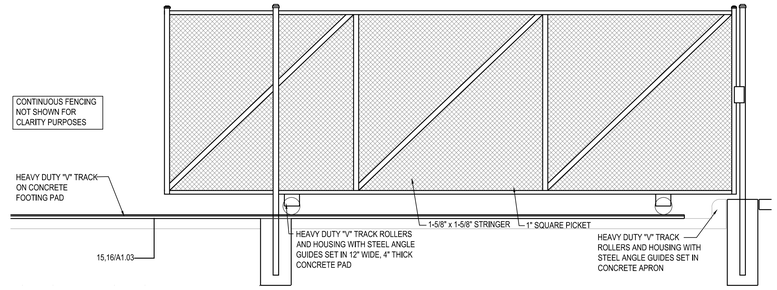
SCALE: 1/2"=1'-0"

NOTE: PROVIDE ALL NECCESSARY ACCESORIES FOR PROPER GATE INSTALLATION OF ALL GATE HARDWARE AND PLATES



06 FENCE ELEVATION

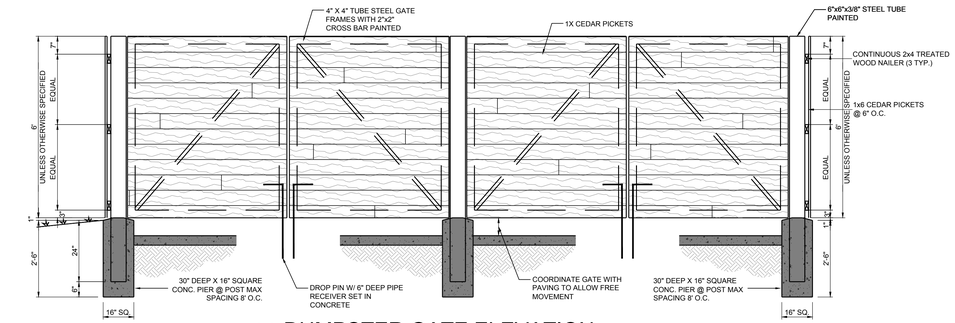
SCALE: 1/2"=1'-0"



07 SLIDING GATE ELEVATION

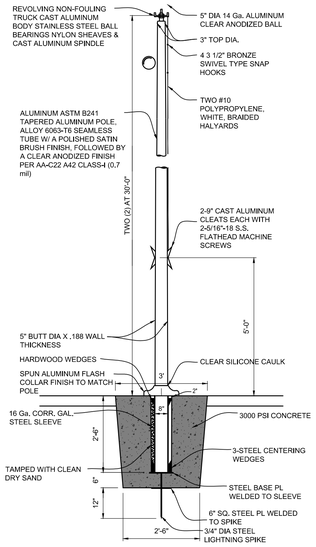
SCALE: 1/2"=1'-0"

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.



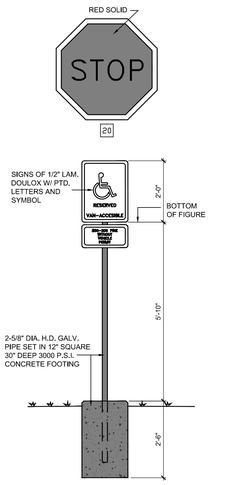
09 DUMPSTER GATE ELEVATION

SCALE: N.T.S.



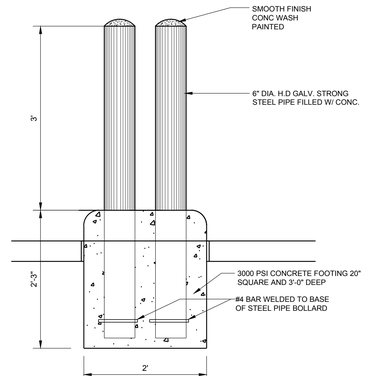
11 FLAG POLE DETAIL

SCALE: 1/2" = 1'-0" REFER TO PLANS FOR LOCATIONS



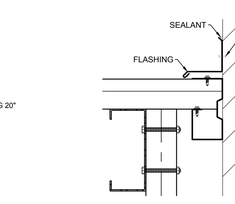
12 SIGN / ANCHOR DETAIL

SCALE: 1/2"=1'-0"



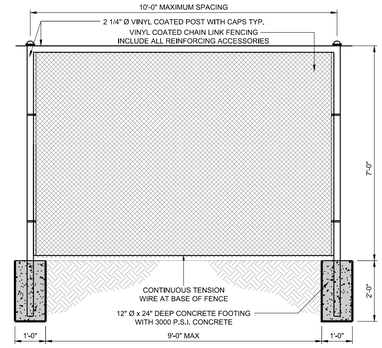
21 PIPE BOLLARD DETAIL

SCALE : 1"=1'-0"



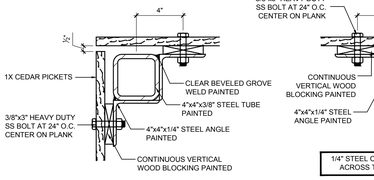
20 TRANSITION @ ENTRY DOOR

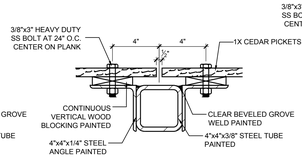
SCALE : NTS

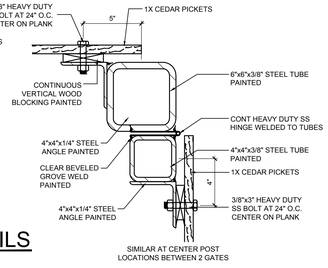


08 FENCE ELEVATION

SCALE 1/2" = 1'-0"



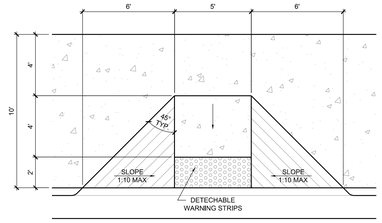




10 DUMPSTER ENCLOSURE DETAILS

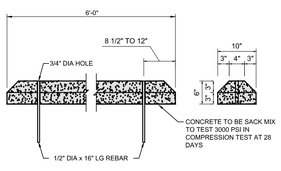
SCALE: N.T.S.

WHERE NOTED, REFER TO SECTION 09900 FOR PAINT SYSTEM.



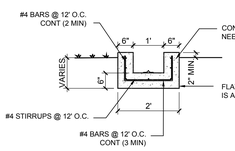
13 ACCESSIBLE RAMP ENLARGEMENT

SCALE: 1/4"=1'-0"



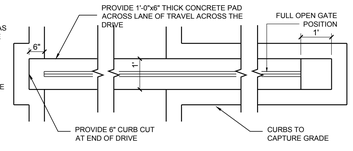
14 CONCRETE TIRE STOP

SCALE: 1-1/2" = 1'-0"



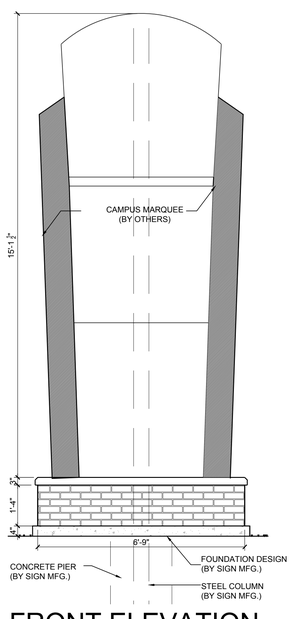
15 ROLLING GATE SECTION

SCALE: 1/2"=1'-0"



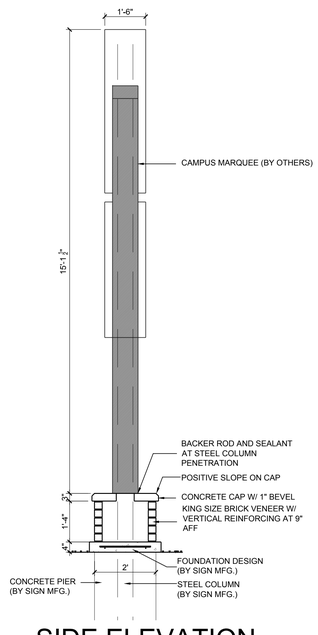
16 ROLLING GATE PAD

SCALE: 1/2"=1'-0"



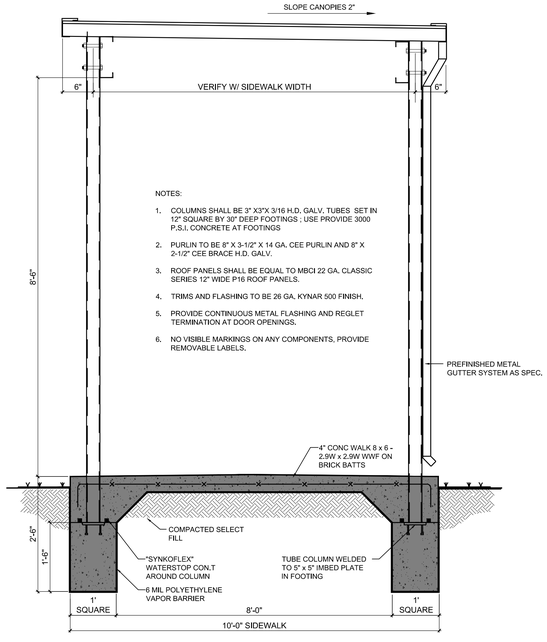
17 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



18 SIDE ELEVATION

SCALE: 1/2" = 1'-0"



19 SECTION DETAIL

SCALE 3/4" = 1'-0"

No.	REVISIONS	BY

GMS ARCHITECTS
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(956) 546-0110
fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS

REGISTERED ARCHITECT DAVID A. MONREAL 19556 STATE OF TEXAS
5/16/2019

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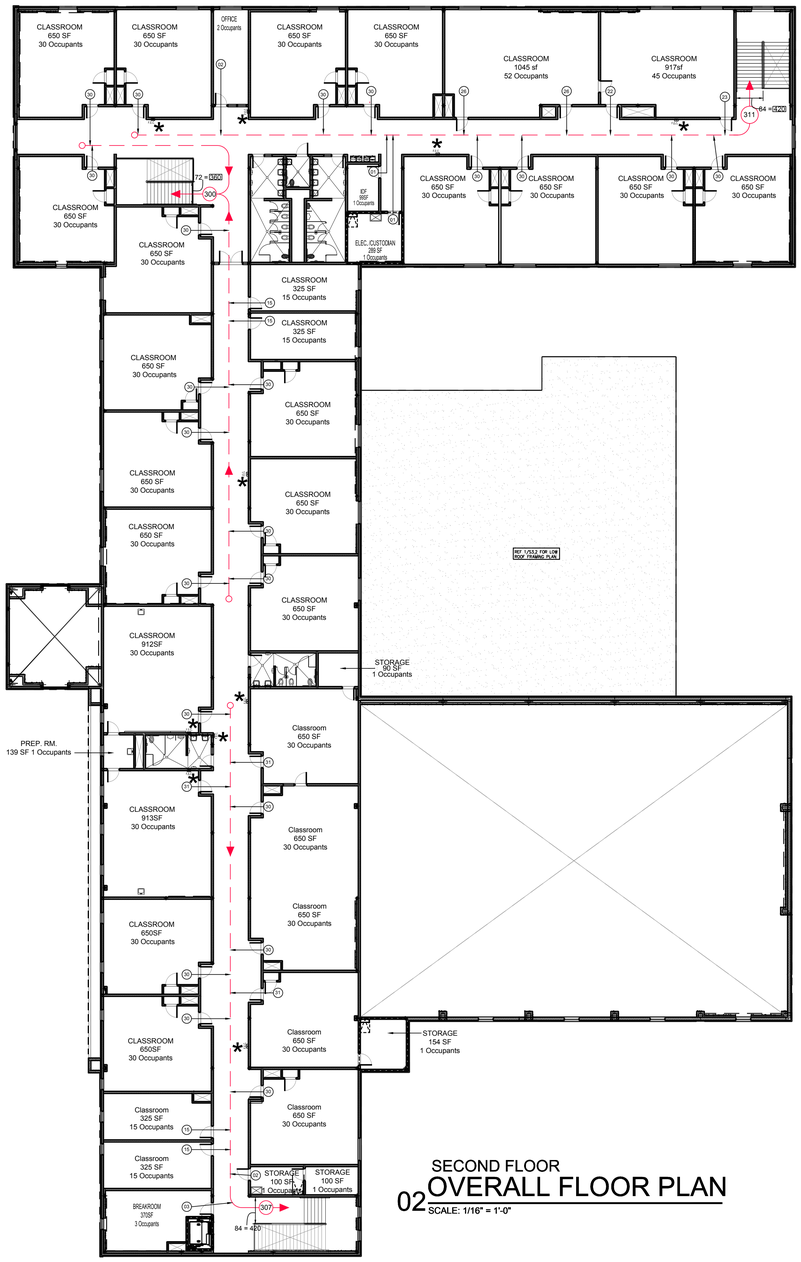
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A1.03



SECOND FLOOR
02 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

IDEA Public Schools
Code Analysis
2 Story Educational campus
International Building Code (IBC) 2012 Edition

Building Use and Occupancy Classification
- Educational Use - (E)
- Assembly - (A)
- Business - (B)
- Building will have an automatic sprinkler system.

General Area - Square Footages
- 1st Floor - 49,181 SF
- 2nd Floor - 29,865 SF
  - Total Building Square Footage - 79,046 SF

Construction Type for this building will be Type II-B
Fire Resistance Requirements - Type II-B
- 0 Structural Frame supporting floor/roof
- 0 Exterior non-load bearing walls
- 0 Interior non-load bearing walls
- 0 Floor construction
- 0 Roof construction

Allowable Building Heights and Areas - Table 503
- Type II-B - Education Occupancy Sprinklered
  - 14,500 SF per story
  - 55 feet max - 2 story max
- Type II-B - Assembly Occupancy Sprinklered
  - 9,500 SF per story
  - 55 feet max - 2 story max
- Type II-B - Business Occupancy Sprinklered
  - 23,000 SF per story
  - 55 feet max - 3 story max

Area and Frontage Increase - Section 506 (Equation 5-1 and Equation 5-2)
- Educational Occupancy (Type II-B)
  - 14,500 + [14,500 x .75] + (14,500 x2)
  - 54,375 SF per story
- Assembly Occupancy (Type II-B)
  - 9,500 + [9,500 x .75] + (9,500 x 2)
  - 35,625 SF per story
- Business Occupancy (Type II-B)
  - 23,000 + [23,000 x .75] + (23,000 x 2)
  - 86,250 SF per story

Maximum Floor area Allowances per Occupant - Table 1004.1.2
Occupant Load - 1st Floor Classroom Wings / Admin Offices

• Classrooms	494 persons + 60
• Storage	9 persons
• Office	26 persons + 3
• Gymnasium	475 persons
• Cafeteria	367 persons
• Kitchen	9 persons
Total	1,525 persons

Occupant Load - 2nd Floor Classroom Wings

• Classrooms	746 persons + 60
• Office	5 persons
• Staff	2 persons
Total	792 persons

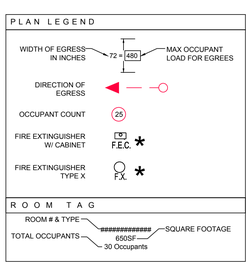
Means of Egress Sizing - Section 1005
Stairway Width - Section 1005.3.1 (Exception)
2nd Floor Egress
Occupancy 792 x .2 = 158.4 required
Stairways provided = 240.0 provided

Door Egress Width - Section 1005.3.2 (Exception)
1st Floor Egress
Total Occupancy 2,317 x .15 = 347.55 required
9 Sets of Double Doors (6'-0" Wide) = 648.00 provided

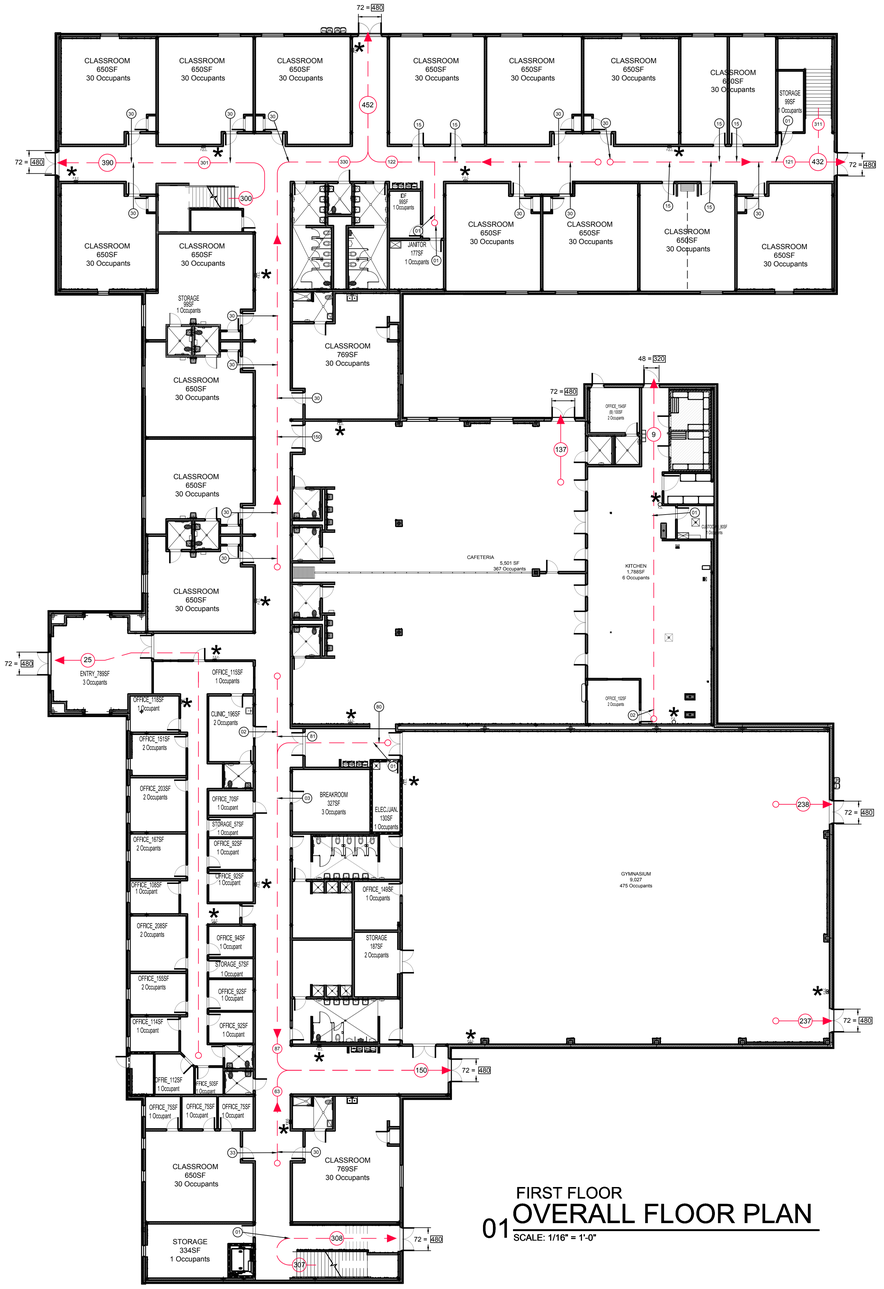
Plumbing Fixtures - Table 2902.1
Educational Occupancy 2,317 Occupants
Total Fixtures required 47 wc/47 lav/24 df/ 1 service sink

Total Fixtures provided 47 wc/47 lav/26 df/3 service sinks

PLAN LEGEND



ROOM TAG



FIRST FLOOR
01 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

EGRESS PLAN

No.	REVISIONS	BY

GMS ARCHITECTS
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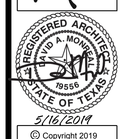
IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools



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Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
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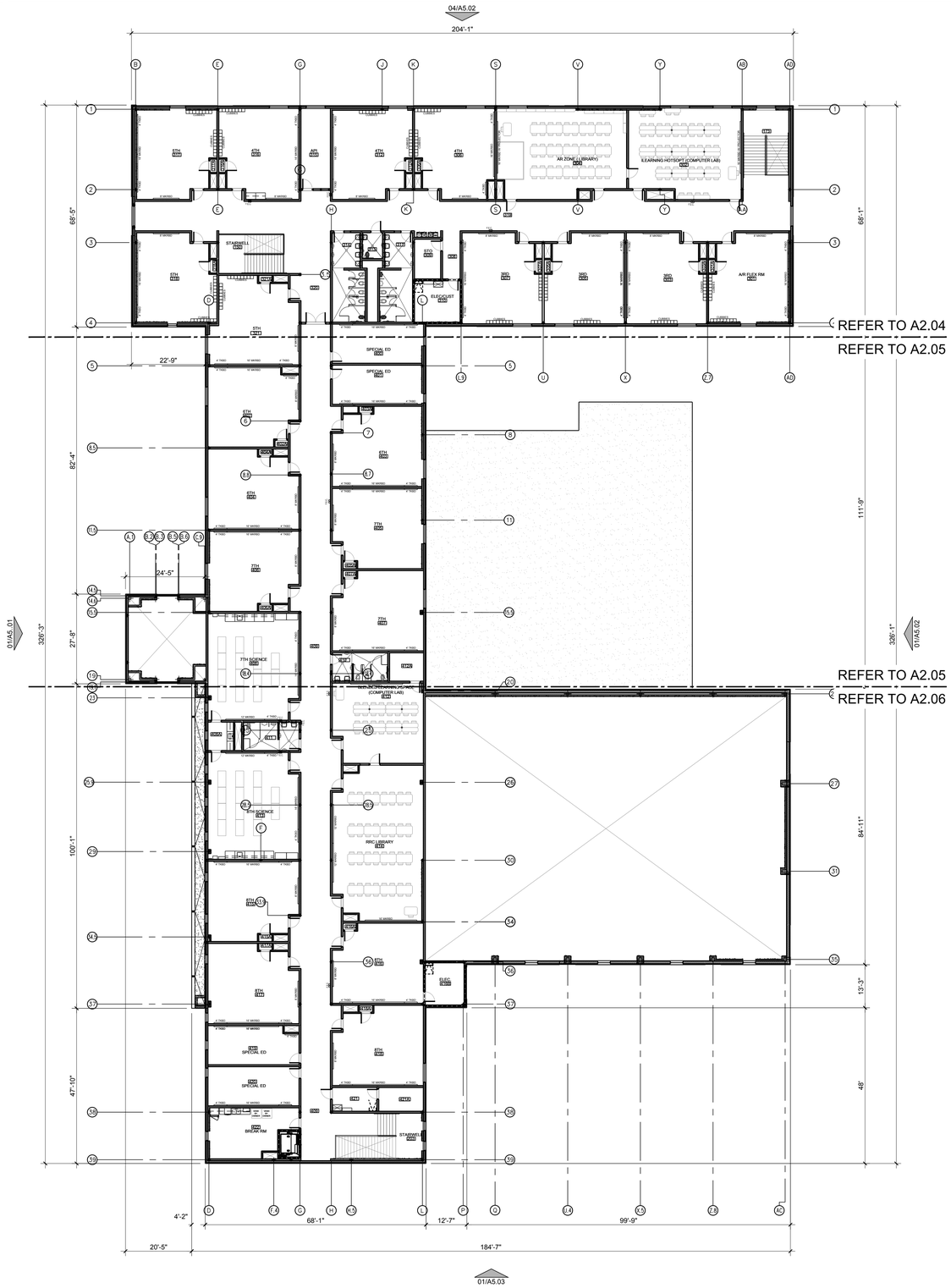
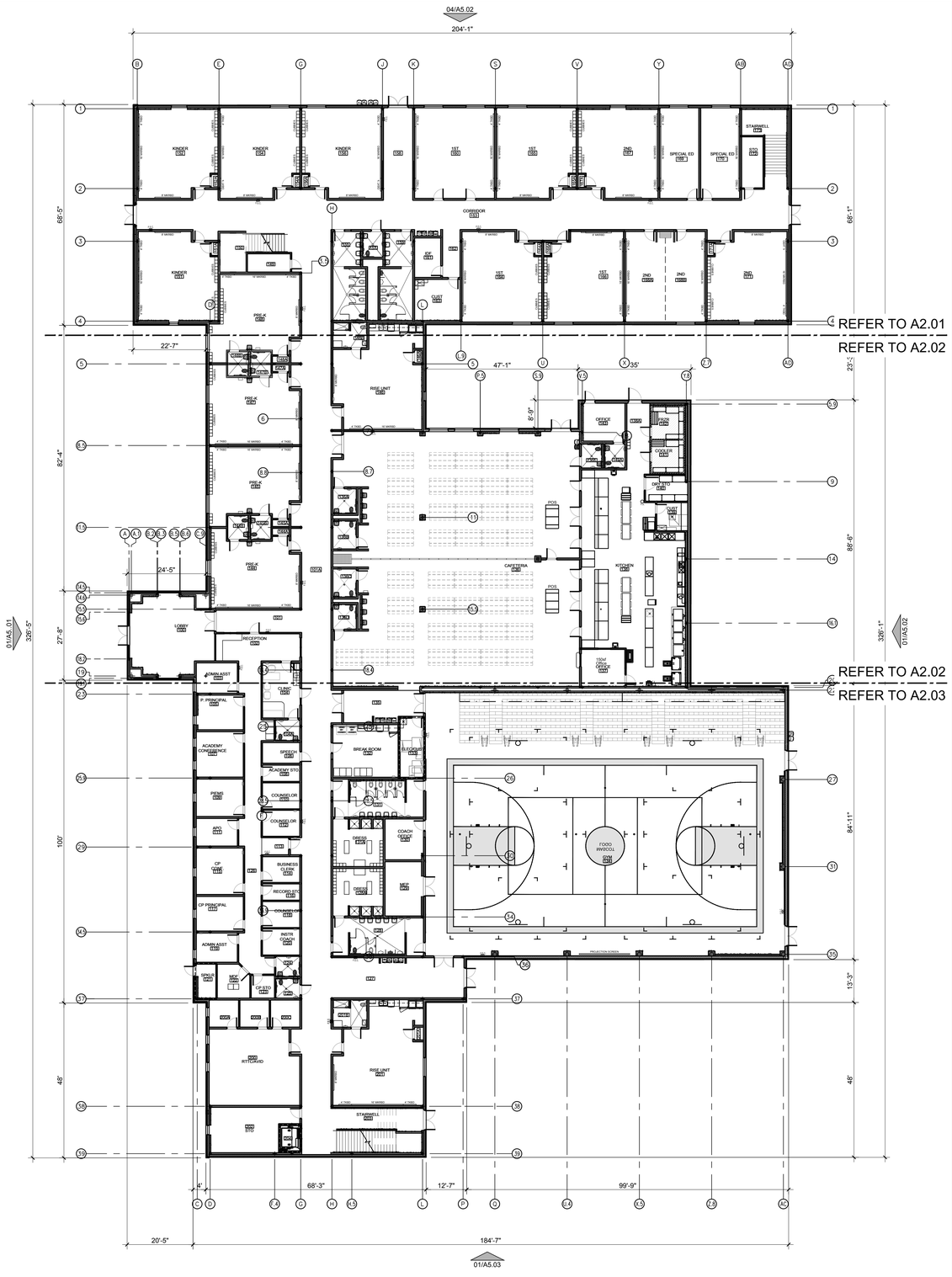
Job No. IDEA 2020 Phase I
Sheet: CODE



SECOND FLOOR
02 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"



FIRST FLOOR
01 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

PLAN NORTH

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
19556
STATE OF TEXAS
5/16/2019

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Architects-Planners
Interior Designers

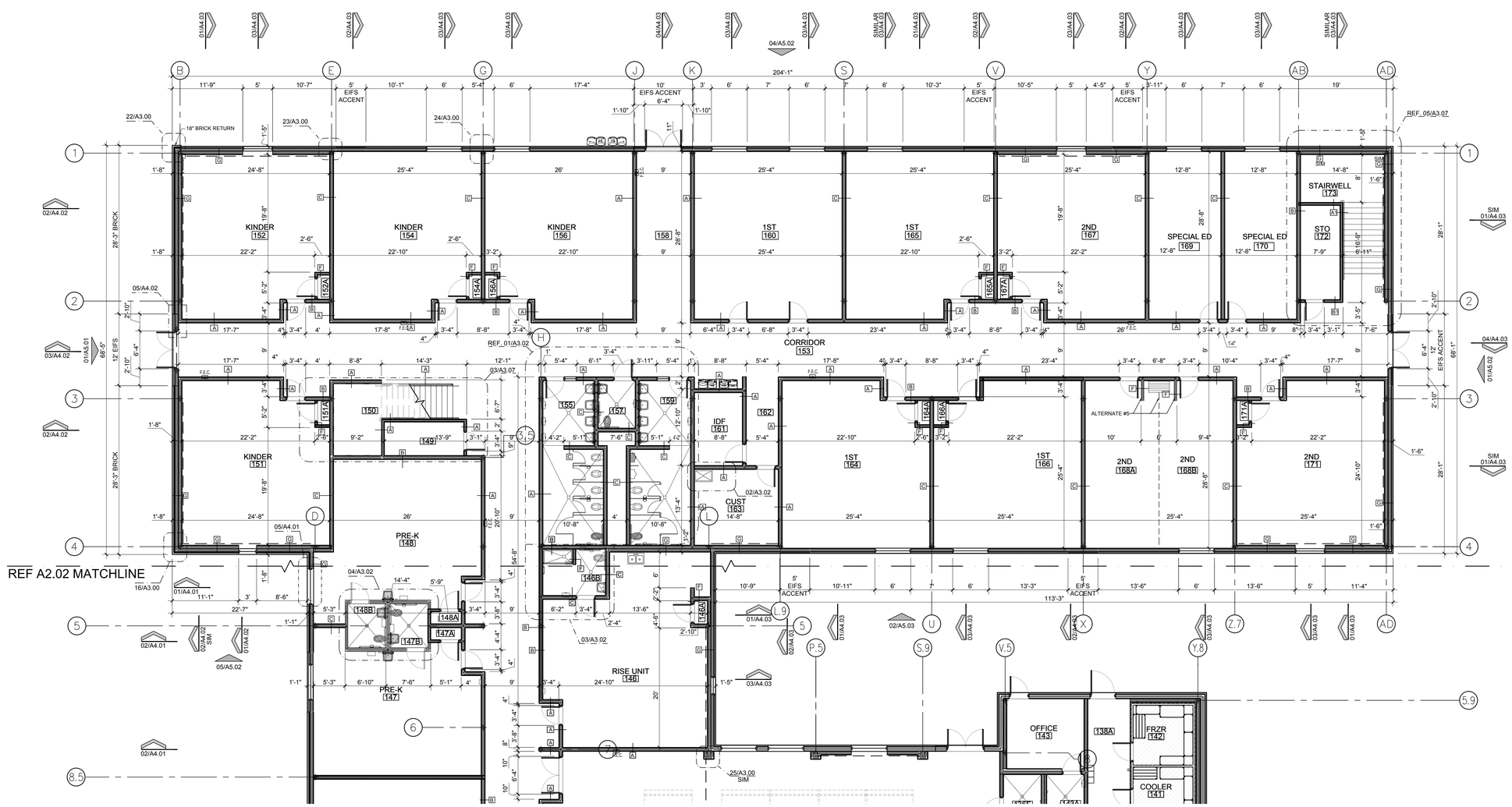
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A2.00

NOTE:
ALL GYPSUM BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
148	CLASSROOM	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
148A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
148B	TOILET	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
149	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD			
150	STAIRWELL	RUBBER	R.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD			CLG @ 2ND LVL | R.T. TREADS
151	CLASSROOM KINDER	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
151A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
152	CLASSROOM KINDER	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
152A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
153	CORRIDOR	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
154	CLASSROOM KINDER	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
154A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
155	GIRLS TOILETS	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
156	CLASSROOM KINDER	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
156A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
157	TOILET	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
158	CORRIDOR	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
159	BOYS TOILETS	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
160	CLASSROOM 1ST GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
161	IDF	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC IV	9'-4"	
162	CORRIDOR	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
163	CUSTODIAN	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD			4'-0" C.T. WAINSCOT @ MOP SINK
164	CLASSROOM 1ST GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
164A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
165	CLASSROOM 1ST GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
165A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
166	CLASSROOM 1ST GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
166A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
167	CLASSROOM 2ND GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
167A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
168A	CLASSROOM 2ND GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
168B	CLASSROOM 2ND GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
169	CLASSROOM SPECIAL ED	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
170	CLASSROOM SPECIAL ED	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
171	CLASSROOM 2ND GRADE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
171A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
172	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD			
173	STAIRWELL	RUBBER	R.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD			CLG @ 2ND LVL | R.T. TREADS



KEYPLAN

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
V.C.T.	VINYL COMPOSITE TILE
R.T.	RADIAL TILE
Q.T.	QUARRY TILE
WD.	WOOD
EXP/PTD	EXPOSED PAINTED
SUS\GYP	SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
S.A.C.	SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

WALL HATCH LEGEND:

1 HR — INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.

INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

1ST FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1. REFERENCE SERIES A4.10 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION —X
2. PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS, WHETHER NOTED OR NOT
3. PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
4. REFERENCE FIXTURE PLANS SHEET FOR FIXTURE, ACCESSORY REQUIREMENTS AND FLOOR TILE PATTERN LAYOUT
5. TYPICAL CORRIDOR WALLS TO BE EXTENDED TO UNDERSIDE OF DECK
6. REFERENCE SHEET A3.01 FOR TOILET ENLARGEMENTS
7. PROVIDE HORIZONTAL MINI BLINDS AT ALL EXTERIOR WINDOWS TYPICAL (EXCEPT AT CORRIDOR AND STAIRWELL)
8. ALL EXPOSED DRYWALL CORNERS TO RECEIVE PLASTIC CORNER GUARDS, AS SPECIFIED.
9. ALL EXPOSED COLUMNS ARE TO BE FURRED WITH METAL STUDS AND DRYWALL. REFER TO 17/A3.02 FOR DETAILS.
10. PROVIDE DOUBLE 6" METAL STUD PARTITION AT ALL STRUCTURAL BRACING LOCATIONS. REFER TO 15/A3.02 FOR DETAILS AND STRUCTURAL FOR LOCATIONS.
11. REFERENCE A3.02 FOR TYPICAL PLAN DETAILS
12. PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
13. PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
14. PROVIDE SCHULTER KERDI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
19556
STATE OF TEXAS
5/16/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: A2.01

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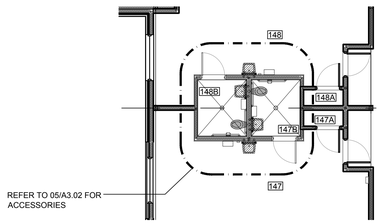


BASE BID AS SHOWN

02 DEDUCTIVE ALTERNATE

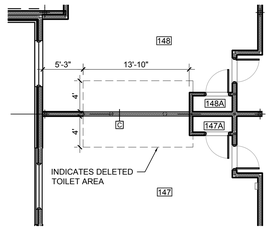
SCALE: 1/8" = 1'-0"

PRE-K RESTROOMS

GENERAL NOTES:

DELETE RESTROOMS INCLUDING BUT NOT LIMITED TO THE ACCESSORY ITEMS LISTED ON 05/A3.02 AND ITEMS LISTED BELOW

1. CERAMIC TILE WALLS & FLOORS
2. WOOD DOORS AND PAINTED FRAMES
3. METAL STUDS AND FINISHED GYPSUM BOARD WALLS
4. ACCESSORIES REFERENCE 05/A3.02
5. TOILETS AND LAVS REFER TO MEP FOR ADDITIONAL INFORMATION



DEDUCTIVE ALTERNATE APPLIED

03 DEDUCTIVE ALTERNATE

SCALE: 1/8" = 1'-0"

GENERAL NOTES:

PROVIDE THE FOLLOWING ITEMS IN-LIEU OF THE RESTROOMS INCLUDING BUT NOT LIMITED TO

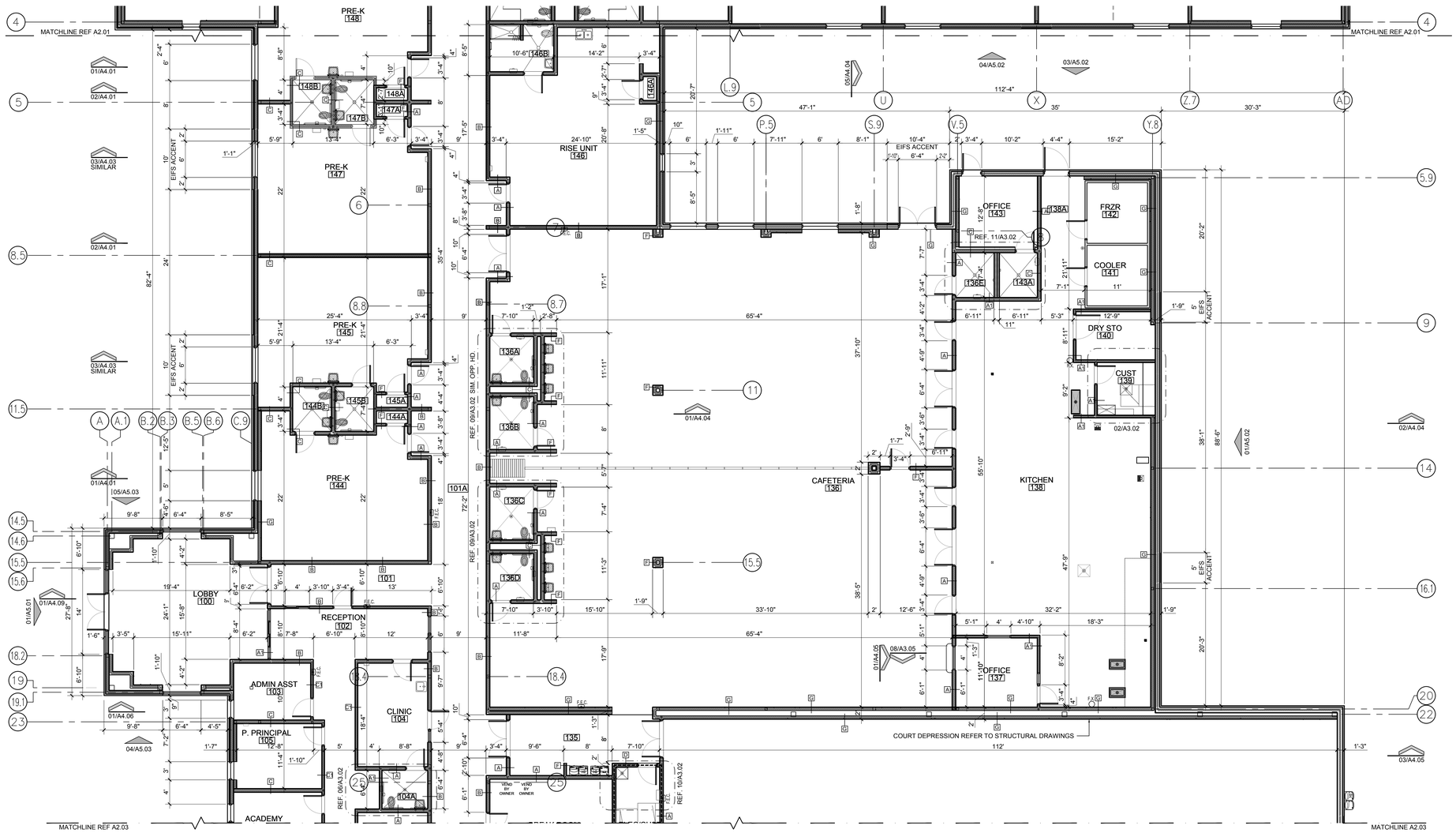
1. VCT FLOORING
2. SUSPENDED ACOUSTICAL CEILING
3. INTERIOR FINISHED GYPSUM BOARD METAL STUD PARTITION WALL
4. CAPPED UTILITIES AS PER MEP

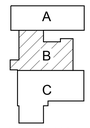
ROOM FINISH SCHEDULE

NOTE: **ALL GYPSUM** BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
100	LOBBY	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	VARIES	PAINT STRUCTURE BLACK
101	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
101A	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
102	RECEPTION	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
136	CAFETERIA	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD	VARIES	PAINT STRUCTURE
136A	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
136B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
136C	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
136D	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
136E	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
137	OFFICE	Q.T.	Q.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC V	9'-4"	
138	KITCHEN	Q.T.	Q.T.	FRP	FRP	FRP	FRP	SAC V	10'-0"	10'-0" FRP PANEL
138A	CORRIDOR	Q.T.	Q.T.	FRP	FRP	FRP	FRP	SAC V	9'-4"	10'-0" FRP PANEL
139	CUSTODIAN	Q.T.	Q.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-4"	4' C.T. WAINSCOT @ MOP SINK
140	DRY STORAGE	Q.T.	Q.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC V	9'-4"	
141	COOLER	Q.T.	Q.T.							RECESS FLOOR
142	FREEZER	Q.T.	Q.T.							RECESS FLOOR
143	OFFICE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
143A	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
144	CLASSROOM PRE - K	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
144A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
144B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
145	CLASSROOM PRE - K	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
145A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
145B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
146	CLASSROOM RISE UNIT	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
146A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
146B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
147	CLASSROOM PRE - K	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
147A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
147B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT





KEYPLAN

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
V.C.T.	VINYL COMPOSITE TILE
R.T.	RADIAL TILE
Q.T.	QUARRY TILE
WD.	WOOD
EXP/PTD	EXPOSED PAINTED
SUS/GYP	SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
S.A.C.	SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

WALL HATCH LEGEND:

1 HR — INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.

INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

1ST FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1. REFERENCE SERIES A4.10 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION —X
2. PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS, WHETHER NOTED OR NOT
3. PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
4. REFERENCE FIXTURE PLANS SHEET FOR FIXTURE, ACCESSORY REQUIREMENTS AND FLOOR TILE PATTERN LAYOUT
5. TYPICAL CORRIDOR WALLS TO BE EXTENDED TO UNDERSIDE OF DECK
6. REFERENCE SHEET A3.01 FOR TOILET ENLARGEMENTS
7. PROVIDE HORIZONTAL MINI BLINDS AT ALL EXTERIOR WINDOWS TYPICAL (EXCEPT AT CORRIDOR AND STAIRWELL)
8. ALL EXPOSED DRYWALL CORNERS TO RECEIVE PLASTIC CORNER GUARDS, AS SPECIFIED.
9. ALL EXPOSED COLUMNS ARE TO BE FURRED WITH METAL STUDS AND DRYWALL. REFER TO 17/A3.02 FOR DETAILS.
10. PROVIDE DOUBLE 6" METAL STUD PARTITION AT ALL STRUCTURAL BRACING LOCATIONS. REFER TO 15/A3.02 FOR DETAILS AND STRUCTURAL FOR LOCATIONS.
11. REFERENCE A3.02 FOR TYPICAL PLAN DETAILS
12. PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
13. PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
14. PROVIDE SCHULTER KERDI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
79556
STATE OF TEXAS
5/16/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A2.02

N.O.T.E:
ALL GYPSUM BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
119	OFFICE ADMIN ASST	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
120	OFFICE INSTR COACH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
121	FIRE RISER		CONC.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD		
122	MDF	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC IV	9'-4"	
123	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
124	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
125	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
126	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
127	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-0"	4'-0" HIGH GYPBRD REVEAL
128	BOYS TOILETS	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
128A	BOYS DRESSING	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
129	MEP	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	PTD		
130	OFFICE COACH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
131	GIRLS TOILETS	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
131A	GIRLS DRESSING	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SUS/GYP	9'-0"	6'-0" C.T. WAINSCOT
132	COPY / BREAKROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
133	ELECTRICAL / CUSTODIAN	RUBBER	CONC.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD		4' C.T. WAINSCOT @ MOP SINK
134	GYMNASIUM	RUBBER	WD.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD		
135	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-0"	

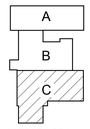
N.O.T.E:
ALL GYPSUM BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
200	CLASSROOM RTTC/AVID	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
200A	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
200B	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
200C	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
201	CLASSROOM RISE UNIT	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
201A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
201B	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
202	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
203	STAIRWELL	RUBBER	RT	GB/PTD	GB/PTD	GB/PTD	GB/PTD			CLG @ 2ND LVL R.T. TREADS
204	ELEVATOR	RUBBER	R.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD			
103	OFFICE ADMIN ASST	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
104	CLINIC	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
104A	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
105	OFFICE P. PRINCIPAL	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
106	OFFICE SPEECH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
107	ACADEMY CONFERENCE RM.	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
108	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
109	OFFICE PIEMS	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
110	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
111	OFFICE APO	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
112	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
113	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
114	OFFICE BUSINESS CLERK	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
115	PREP. CONFERENCE RM.	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
116	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
117	OFFICE CP PRINCIPAL	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	
118	OFFICE COUNSELOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	9'-4"	





KEYPLAN

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
V.C.T.	VINYL COMPOSITE TILE
R.T.	RADIAL TILE
Q.T.	QUARRY TILE
WD.	WOOD
EXP/PTD	EXPOSED PAINTED
SUS/GYP	SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
S.A.C.	SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

WALL HATCH LEGEND:

1 HR — INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.

INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

1ST FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1. REFERENCE SERIES A4.10 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION —[A]
2. PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS, WHETHER NOTED OR NOT
3. PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS
4. REFERENCE FIXTURE PLANS SHEET FOR FIXTURE, ACCESSORY REQUIREMENTS AND FLOOR TILE PATTERN LAYOUT
5. TYPICAL CORRIDOR WALLS TO BE EXTENDED TO UNDERSIDE OF DECK
6. REFERENCE SHEET A3.01 FOR TOILET ENLARGEMENTS
7. PROVIDE HORIZONTAL MINI BLINDS AT ALL EXTERIOR WINDOWS TYPICAL (EXCEPT AT CORRIDOR AND STAIRWELL)
8. ALL EXPOSED DRYWALL CORNERS TO RECEIVE PLASTIC CORNER GUARDS, AS SPECIFIED.
9. ALL EXPOSED COLUMNS ARE TO BE FURRED WITH METAL STUDS AND DRYWALL. REFER TO 17/A3.02 FOR DETAILS.
10. PROVIDE DOUBLE 6" METAL STUD PARTITION AT ALL STRUCTURAL BRACING LOCATIONS. REFER TO 15/A3.02 FOR DETAILS AND STRUCTURAL FOR LOCATIONS.
11. REFERENCE A3.02 FOR TYPICAL PLAN DETAILS
12. PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
13. PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
14. PROVIDE SCHULTER KERDI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

No.	REVISIONS	BY

GMS ARCHITECTS
1150 Paredes Line Rd.
Brownsville TX 78526
(956) 546-0110
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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

PALMVIEW, TEXAS

IDEA Public Schools

REGISTERED ARCHITECT
DAVID A. MONREAL
19556
STATE OF TEXAS
5/16/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

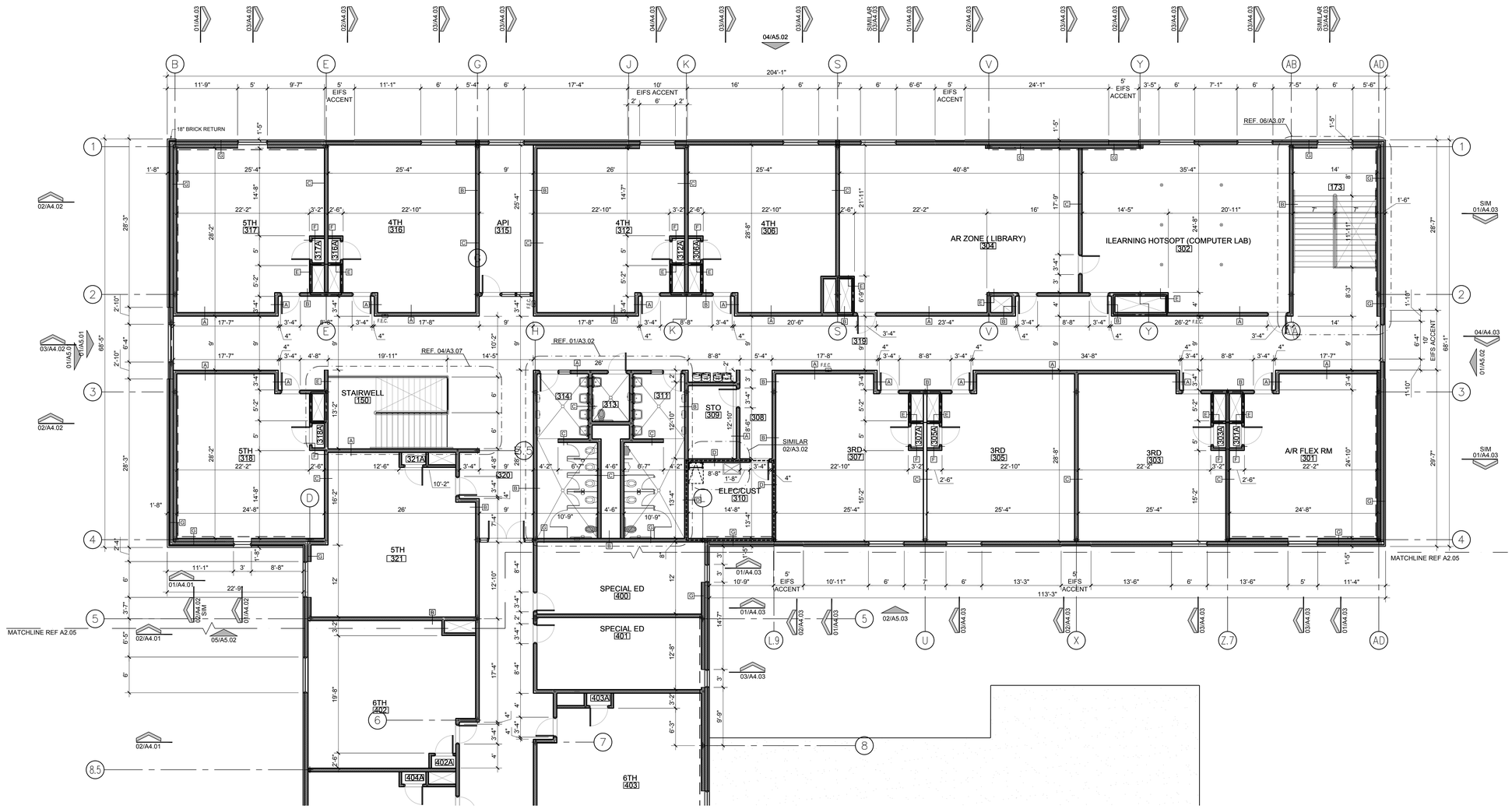
Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: A2.03

NOTE:
ALL GYPSUM BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

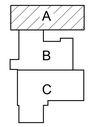
ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
301	CLASSROOM A/R FLEX	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
301A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
302	CLASSROOM I LEARN CP LAB	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
303	CLASSROOM 3RD	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
303A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
304	CLASSROOM AR ZONE LIB	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
305	CLASSROOM 3RD	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
305A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
306	CLASSROOM 4TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
306A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
307	CLASSROOM 3RD	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
307A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
308	CORRIDOR	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-4"	
309	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
310	ELECTRICAL / CUSTODIAN	RUBBER	CONC.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	EXP\PTD		4'-0" C.T. WAINSCOT @ MOP SINK
311	BOYS TOILETS	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	SUS\GYP		9'-0"	6'-0" C.T. WAINSCOT
312	CLASSROOM 4TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
312A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
313	TOILET	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
313A	CORRIDOR	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-4"	
314	GIRLS TOILETS	C.T.	C.T.	GB\PTD	GB\PTD	GB\PTD	SUS\GYP		9'-0"	6'-0" C.T. WAINSCOT
315	OFFICE API	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
316	CLASSROOM 4TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
316A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
317	CLASSROOM 5TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
317A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
318	CLASSROOM 5TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
318A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
321	CLASSROOM 5TH	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-4"	
321A	STORAGE	RUBBER	V.C.T.	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC I	9'-0"	
150	STAIRWELL	RUBBER	RT	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-4"	RADIAL TILE TREADS
173	STAIRWELL	RUBBER	RT	GB\PTD	GB\PTD	GB\PTD	GB\PTD	SAC II	10'-4"	RADIAL TILE TREADS



KEYPLAN



LEGEND

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
V.C.T.	VINYL COMPOSITE TILE
R.T.	RADIAL TILE
Q.T.	QUARRY TILE
WD.	WOOD
EXP/PTD	EXPOSED PAINTED
SUS\GYP	SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
S.A.C.	SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

WALL HATCH LEGEND:

1 HR — INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.

INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

2ND FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS

REGISTERED ARCHITECT
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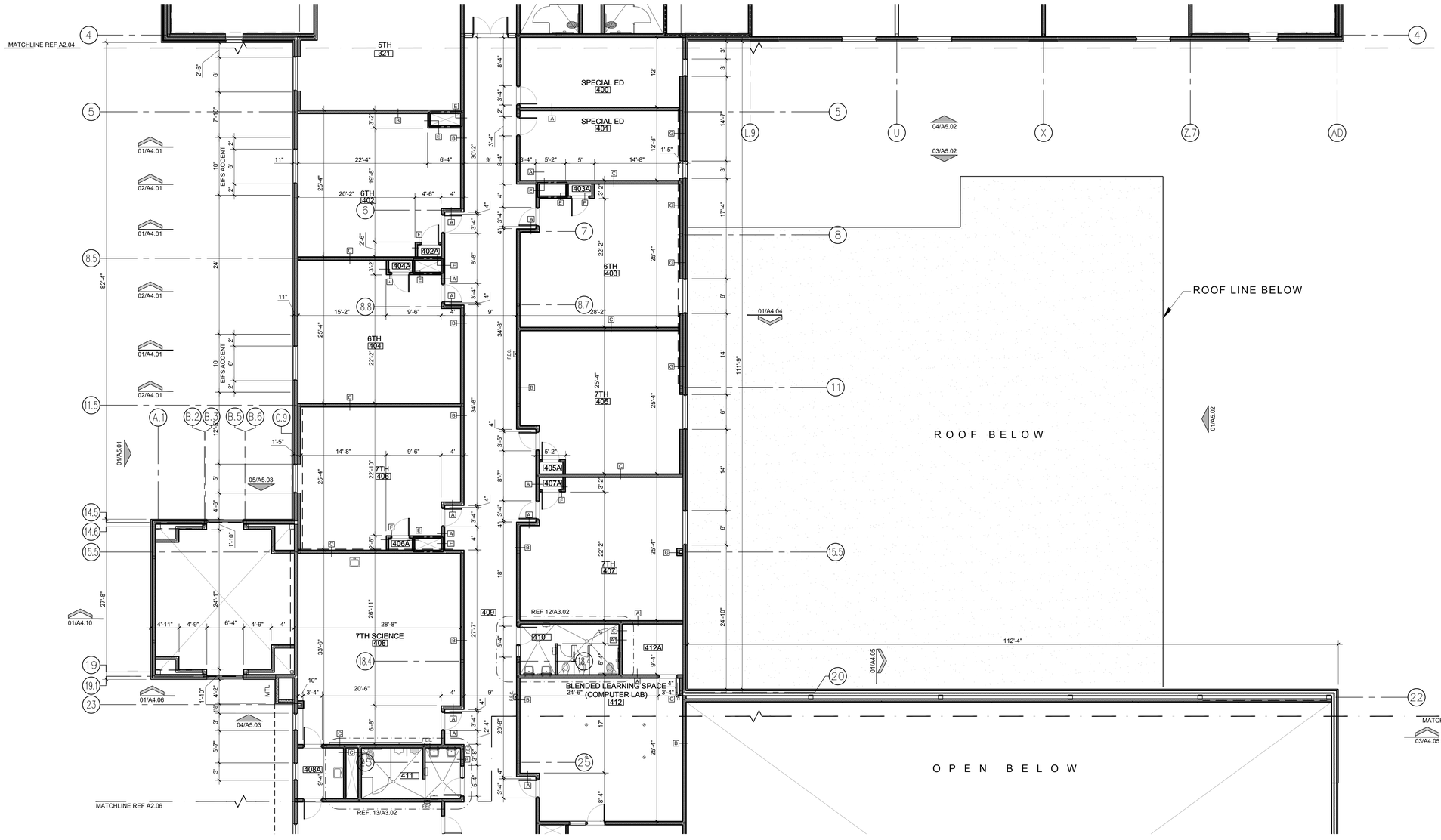
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A2.04

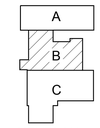
NOTE:
ALL GYPSUM BOARD TO BE **PAINTED** WHETHER NOTED OR NOT

ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
400	CLASSROOM SPECIAL ED.	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
401	CLASSROOM SPECIAL ED.	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
402	CLASSROOM 6TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
402A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
403	CLASSROOM 6TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
403A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
404	CLASSROOM 6TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
404A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
405	CLASSROOM 7TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
405A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
406	CLASSROOM 7TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
406A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
407	CLASSROOM 7TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
407A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
408	GENERAL SCIENCE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
408A	PREP	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
410	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
412	CLASSROOM CP LAB	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
412A	IDF	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC IV	9'-4"	





KEYPLAN

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
V.C.T.	VINYL COMPOSITE TILE
R.T.	RADIAL TILE
Q.T.	QUARRY TILE
WD.	WOOD
EXP/PTD	EXPOSED PAINTED
SUS\GYP	SUSPENDED 1/2" MOISTURE RESISTANT GYP BOARD - PAINTED
S.A.C.	SUSPENDED ACOUSTICAL CEILING REFERENCE SPECIFICATIONS FOR TYPES

LEGEND

WALL HATCH LEGEND:

1 HR — INDICATES THAT THIS WALL SHALL BE FIRE RATED AND SHALL BE EXTENDED TO UNDERSIDE OF ROOF DECK.

INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

2ND FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1. REFERENCE SERIES A4.10 FOR TYPICAL INTERIOR WALL SECTIONS NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION — X
2. PROVIDE DRYWALL CONTROL JOINTS AT ALL STRUCTURAL STEEL COLUMN CONDITIONS AND WALL OPENINGS, WHETHER NOTED OR NOT
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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT
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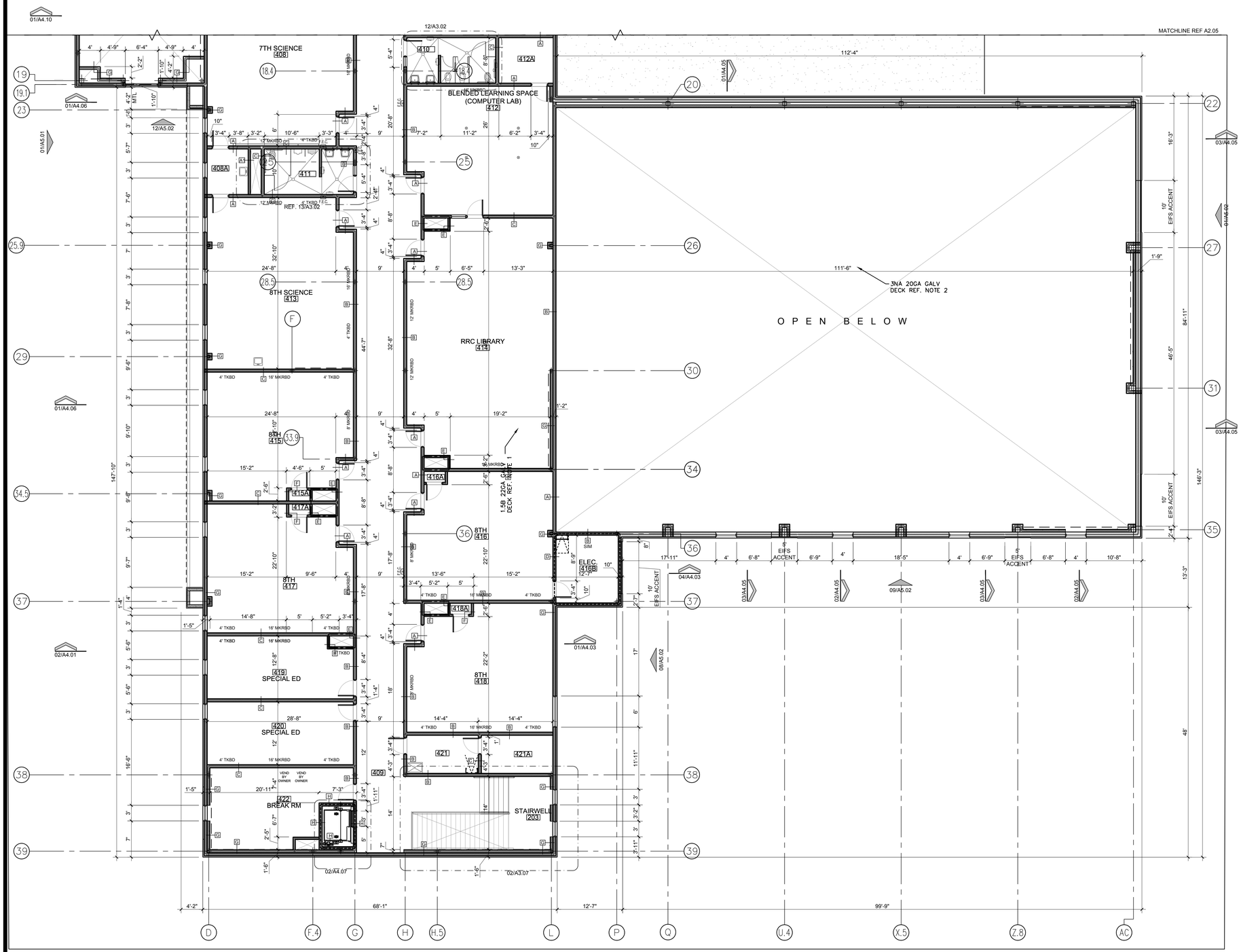
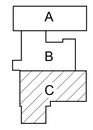
ROOM FINISH SCHEDULE

THIS SCHEDULE BASED ON PLAN NORTH ORIENTATION

ROOM	ROOM NAME	BASE	FLR.	WALLS N	WALLS S	WALLS E	WALLS W	CLG.	CLG. HEIGHTS	REMARKS
409	CORRIDOR	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC II	10'-4"	
411	TOILET	C.T.	C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC III	9'-0"	6'-0" C.T. WAINSCOT
413	GENERAL SCIENCE 8TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
414	CLASSROOM RRC / LIB	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
415	CLASSROOM 8TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
415A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
416	CLASSROOM 8TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
416A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
416B	ELECTRICAL	RUBBER	CONC.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD		
417	CLASSROOM 8TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
417A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
418	CLASSROOM 8TH	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
418A	STORAGE	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-0"	
419	CLASSROOM SPECIAL ED	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
420	CLASSROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
421	CUSTODIAN	RUBBER	CONC.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	EXP/PTD		4'-0" C.T. WAINSCOT @ MOP SINK
421A	IDF	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC IV	9'-4"	
422	BREAKROOM	RUBBER	V.C.T.	GB/PTD	GB/PTD	GB/PTD	GB/PTD	SAC I	9'-4"	
203	STAIRWELL	RUBBER	RT	GB/PTD	GB/PTD	GB/PTD	GB/PTD			O.G @ 2ND LVL R.T. TREADS





KEYPLAN

LEGEND

FINISH LEGEND:

CONC.	SEALED CONCRETE
C.T.	CERAMIC TILE
GB/PTD	GYPSUM BOARD PAINTED
PTD.	PAINTED
RUBBER	RUBBER BASE
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Q.T.	QUARRY TILE
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INDICATES METAL STUD W/ GYP/BRD WALL AS REQUIRED REFERENCE INTERIOR PARTITION SECTIONS

2ND FLOOR

01 FLOOR PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

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12. PROVIDE MTL. STUD BLOCKING FOR ALL WALL MOUNTED BOARDS & ACCESSORIES.
13. PROVIDE WOOD BLOCKING AT ALL CABINETS, PROJECTOR & RAILING LOCATIONS.
14. PROVIDE SCHULTER KERDI SHOWER PANS AT ALL LOCATIONS RECEIVING CERAMIC AND QUARRY TILE FLOORING.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT DAVID A. MONREAL 19556 STATE OF TEXAS

5/16/2019

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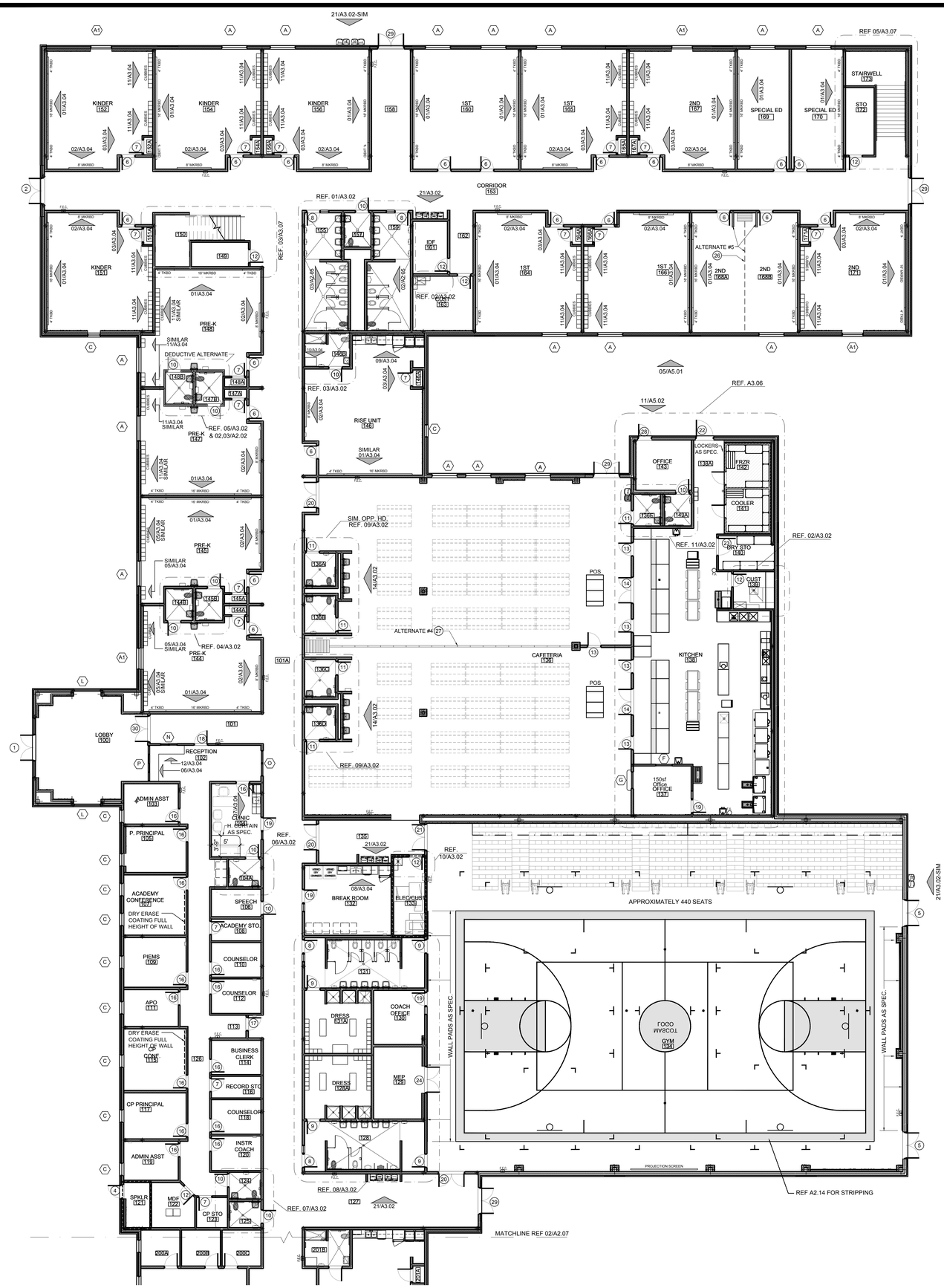
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A2.06



1ST FLOOR

01 FIXTURE PLAN

PLAN NORTH

SCALE: 3/32" = 1'-0"

NOTE:
PROVIDE FOR THE FOLLOWING

- 2- PRACTICE VOLLEYBALL COURTS
- 2- PRACTICE BASKETBALL COURTS
- COURT BORDER COLOR FILL
- FREE THROW AREA COLOR FILL
- CENTER CIRCLE COLOR FILL
- CUSTOM LOGO GRAPHICS

GENERAL NOTES:

1.) PROVIDE FOR TWO (2) FIRE EXTINGUISHERS AND CABINETS IN ADDITION TO THOSE SHOWN ON THIS PLAN - TO BE LOCATED AS PER ARCHITECT'S OFFICE.

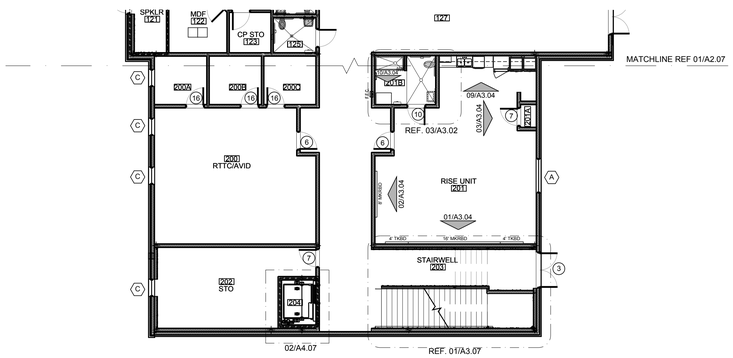
2.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

3.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

4.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.01 FOR ROOM FINISH INFORMATION

5.) PROVIDE FOR UP TO THREE VCT COLORS IN CORRIDORS AND WAITING.

6.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES



1ST FLOOR

02 FIXTURE PLAN

PLAN NORTH

SCALE: 3/32" = 1'-0"

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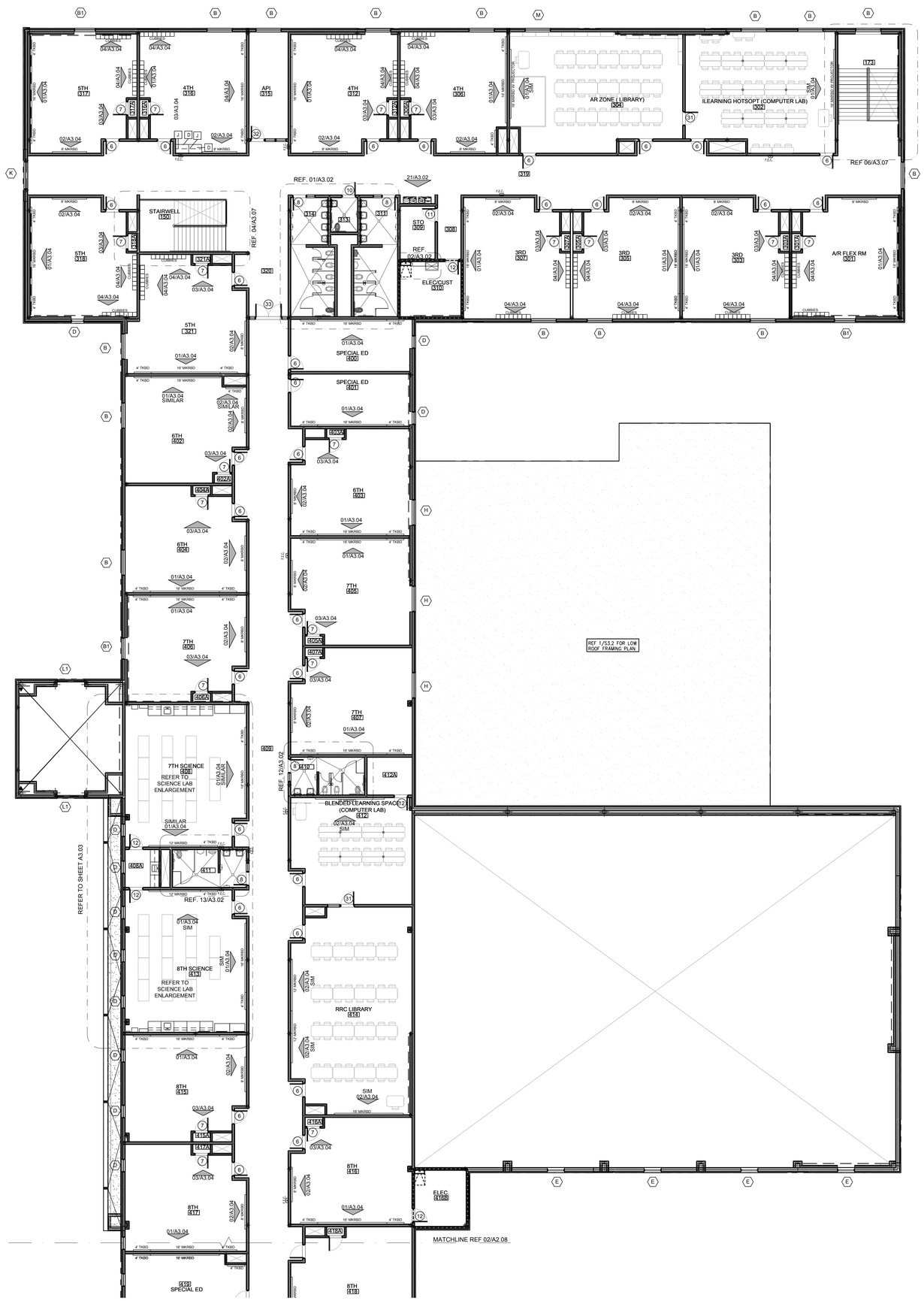


01 2ND FLOOR FIXTURE PLAN

PLAN NORTH

SCALE: 3/32" = 1'-0"

GENERAL NOTES:

1.) PROVIDE FOR TWO (2) FIRE EXTINGUISHERS AND CABINETS IN ADDITION TO THOSE SHOWN ON THIS PLAN - TO BE LOCATED AS PER ARCHITECT'S OFFICE.

2.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

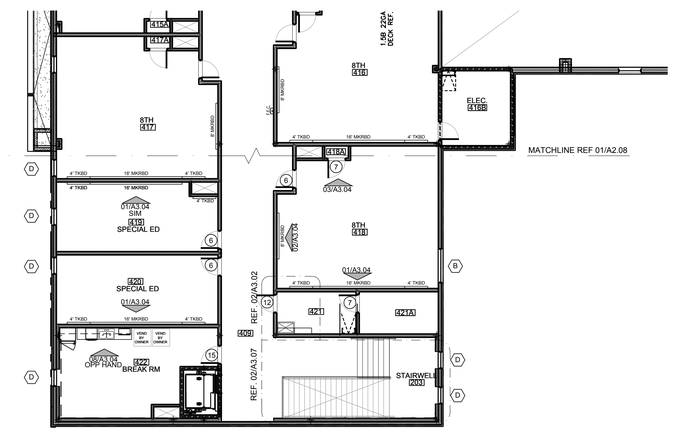
3.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

4.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.01 FOR ROOM FINISH INFORMATION

5.) PROVIDE FOR UP TO THREE VCT COLORS IN CORRIDORS AND WAITING.

6.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES

7.) PROVIDE HORIZONTAL BLINDS AT EACH WINDOW "E" IN ROOM 150. PROVIDE REMOVABLE WANDS AT EACH LOCATION.



02 2ND FLOOR FIXTURE PLAN

PLAN NORTH

SCALE: 3/32" = 1'-0"

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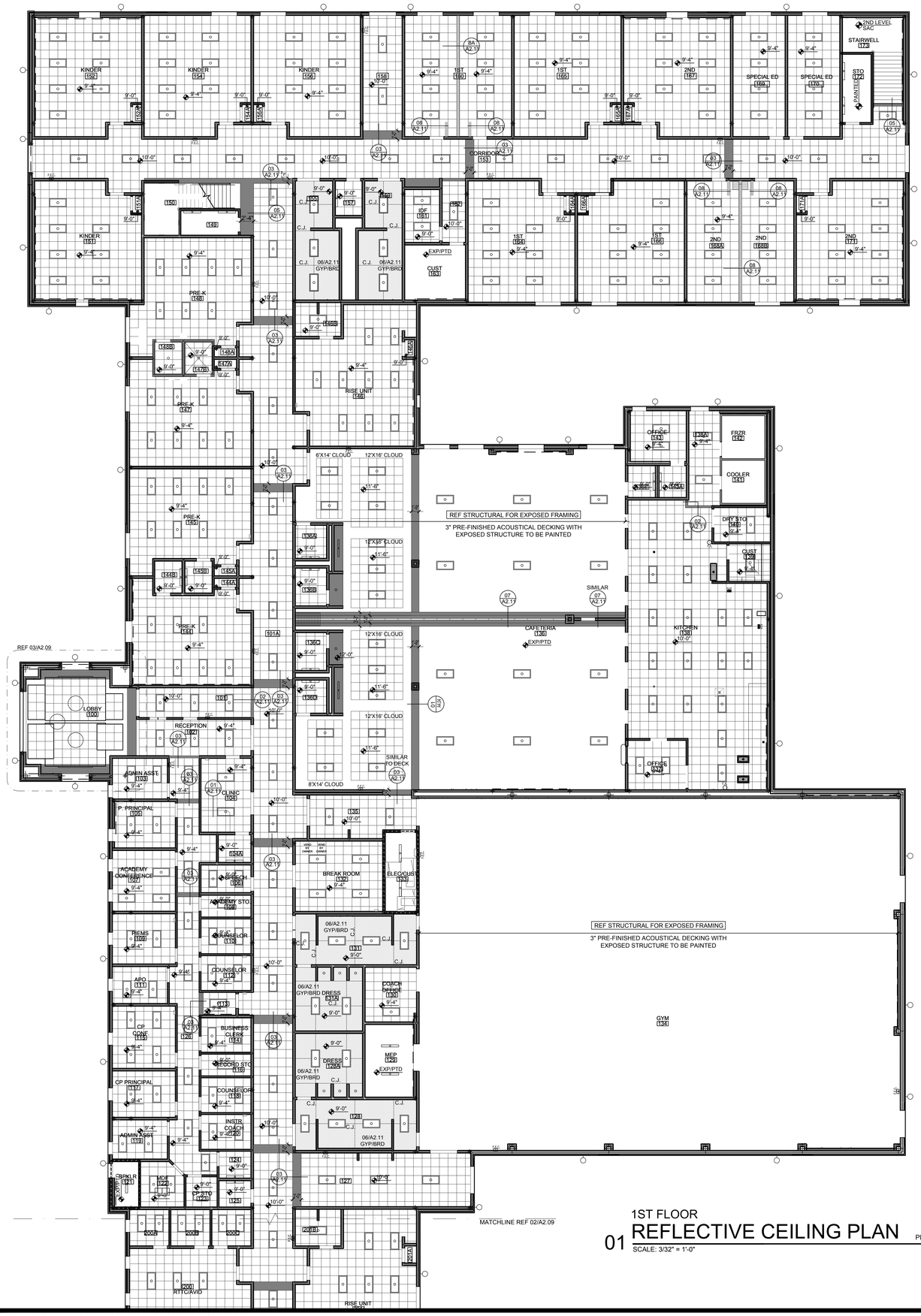
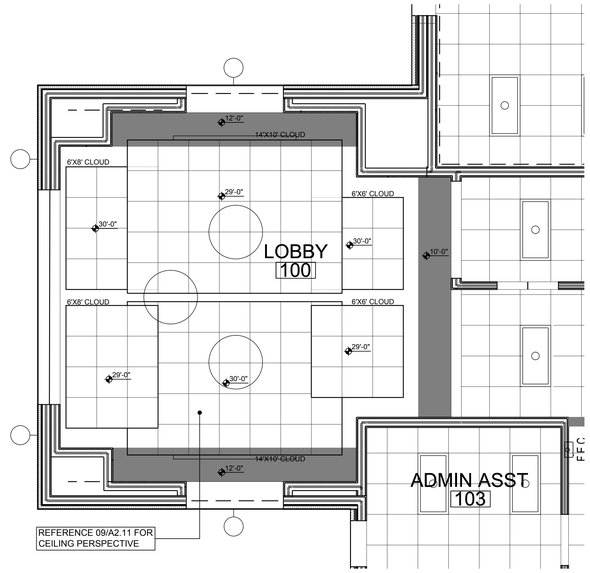
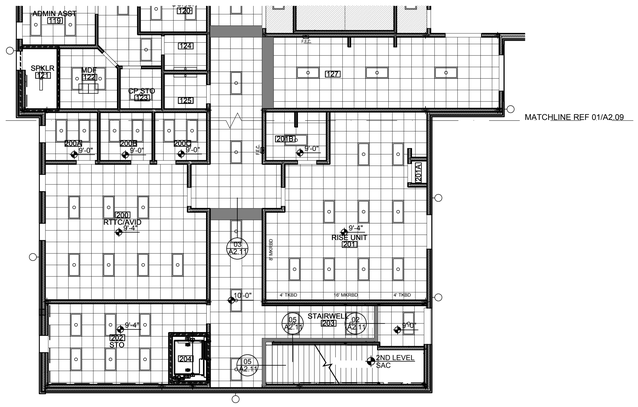


01 1ST FLOOR REFLECTIVE CEILING PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH



03 RCP ENLARGEMENT @ MAIN ENTRY
SCALE: 1/4" = 1'-0"



02 1ST FLOOR REFLECTIVE CEILING PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH

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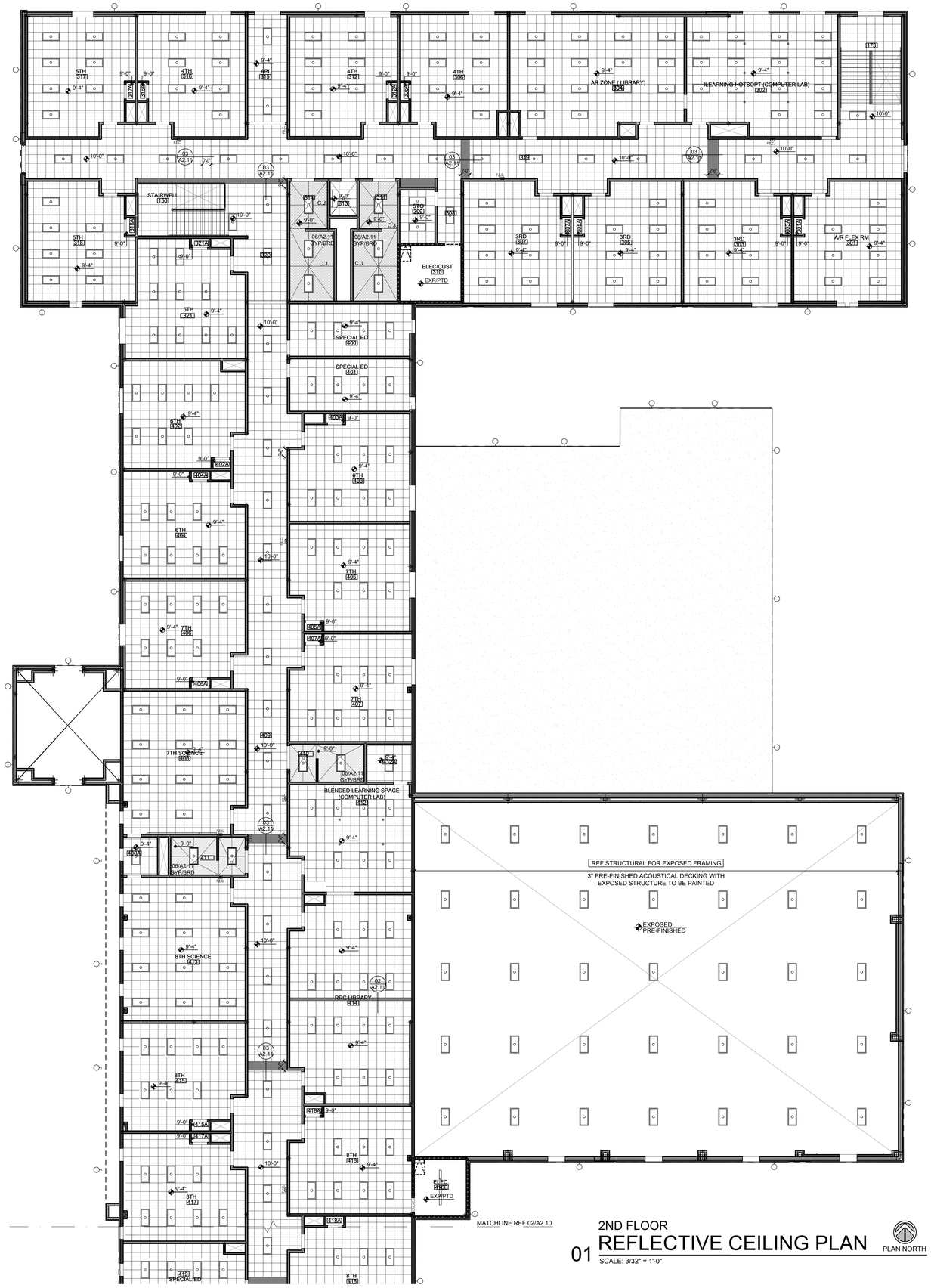
May 20, 2019 - 8:39amC:\Users\Station-1\appdata\local\temp\AcPublish_4712\A2.00.dwg



01 2ND FLOOR REFLECTIVE CEILING PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH

02 2ND FLOOR REFLECTIVE CEILING PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH

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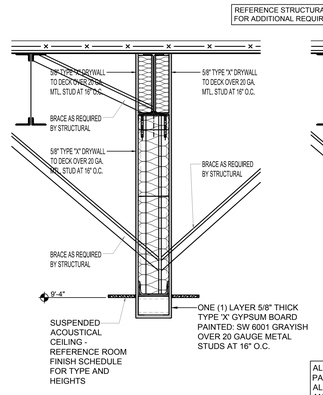
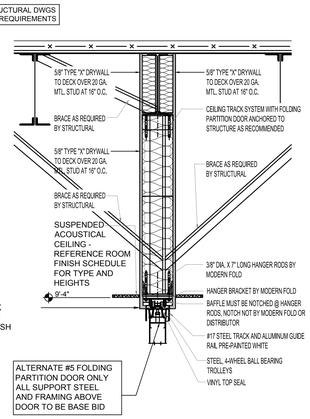
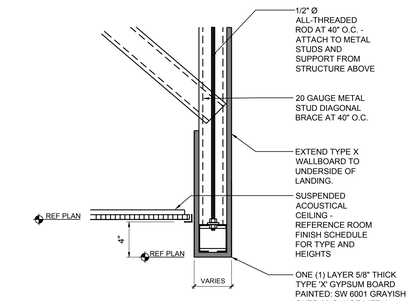


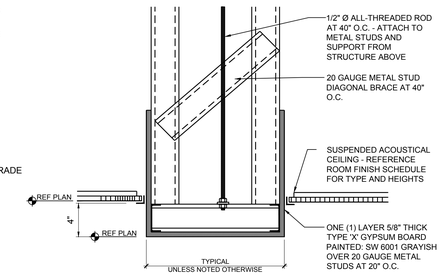
8A SECTION DETAIL
SCALE 1" = 1'-0"



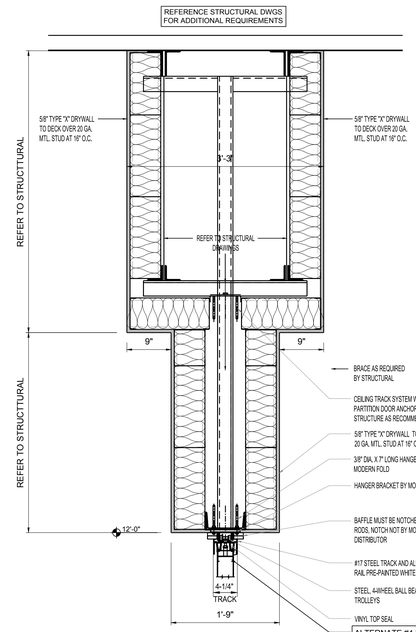
08 SECTION DETAIL
SCALE 1" = 1'-0"
NOTE: ALTERNATE #5 PARTITION DOOR @ SECOND GRADE



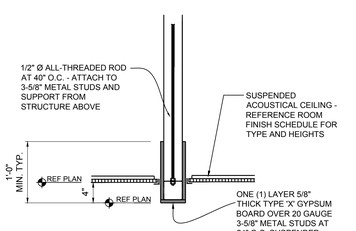
05 SECTION DETAIL
SCALE 1" = 1'-0"
NOTE: AT COOLER/FREZZER PROVIDE FURRDOWN DEPTH AS PER MFG. REQUIREMENTS



03 SECTION DETAIL
SCALE 1" = 1'-0"



07 SECTION DETAIL
SCALE 1" = 1'-0"
NOTE: ALTERNATE #4 PARTITION @ CAFETERIA



02 SECTION DETAIL
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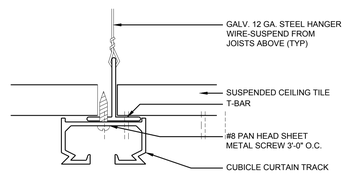
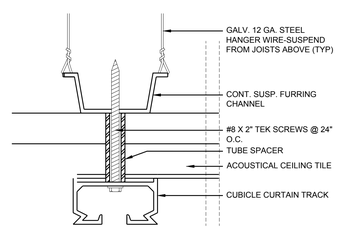
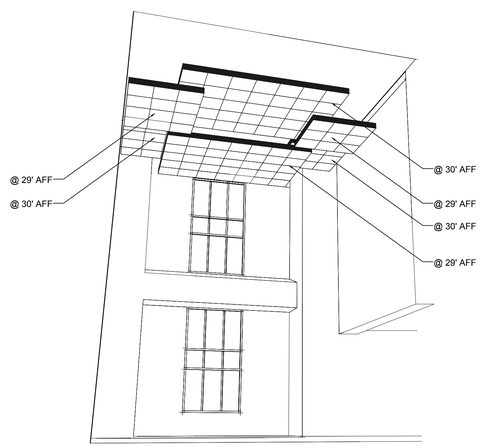


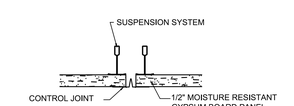
SUSPENDED ACOUSTICAL TILE CEILING



SUSPENDED TILE CEILING WITH HAT CHANNEL



09 CEILING PERSPECTIVE
SCALE 1" = 1'-0"



06 GYP BRD CTRL JNT

01 H. CURTAIN TRACK
SCALE: 3"= 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1
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REGISTERED ARCHITECT
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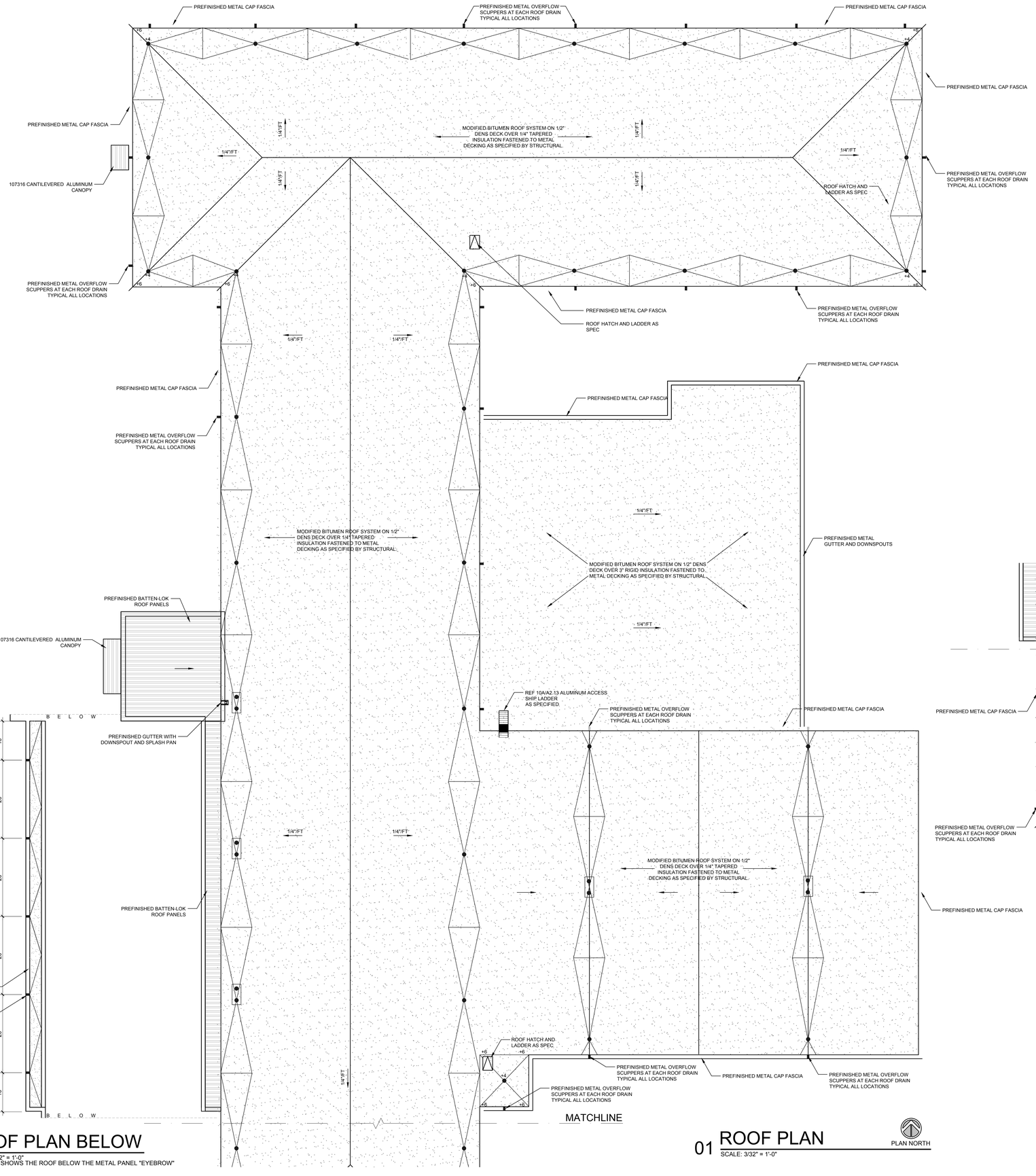
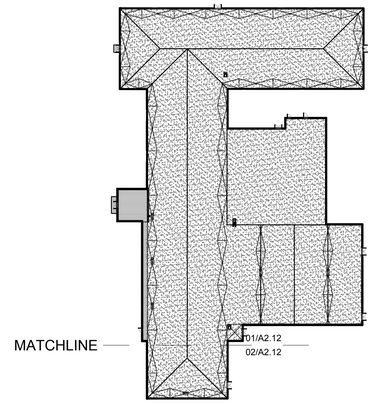
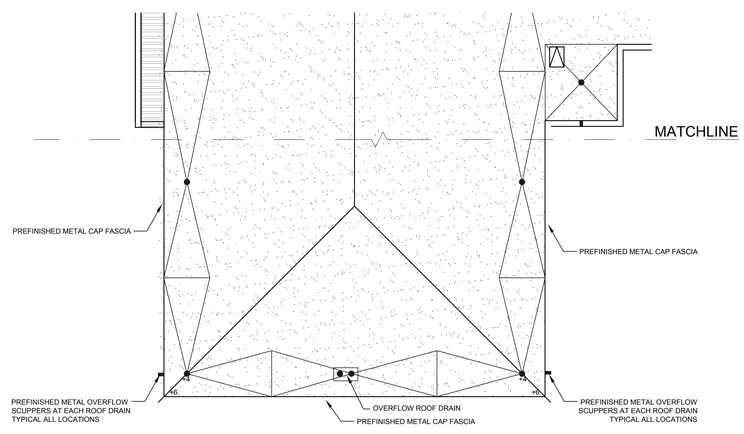
Sheet:	A2.11





KEY PLAN



02 ROOF PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH

03 ROOF PLAN BELOW
SCALE: 3/32" = 1'-0"
THIS PLAN SHOWS THE ROOF BELOW THE METAL PANEL "EYEBROW"

01 ROOF PLAN
SCALE: 3/32" = 1'-0"

PLAN NORTH

GENERAL ROOF NOTES:

1.) ALL PENETRATIONS SHALL BE COORDINATED WITH MECHANICAL SUBCONTRACTOR AND SHALL BE PERFORMED BY THE ROOFING CONTRACTOR

2.) PROVIDE WALKWAY SYSTEM AT ALL ROOF TOP EQUIPMENT

3.) PROVIDE POSITIVE DRAINAGE IN AND AROUND ALL ROOF TOP EQUIPMENT SO AS TO DRAIN INTO AREA ROOF DRAINS

4.) PROVIDE POSITIVE DRAINAGE TOWARDS DRAINS BY USE OF CRICKETS

5.) ALL ROOF PENETRATIONS SHALL BE COORDINATED WITH MECHANICAL / ELECTRICAL SUBCONTRACTOR AND THE ROOFING SUBCONTRACTOR

6.) PROVIDE PRE-MANUFACTURED CONCRETE SPLASH BLOCKS AT EACH ROOF DOWN SPOUT LOCATION AND OR AT EACH ROOF DRAIN NOZZLE OUTLET. SECURE SPLASH BLOCKS TO EITHER GROUND OR BUILDING

7.) REFER TO WALL SECTIONS (4.00 SERIES) FOR ADDITIONAL ROOF NOTES

8.) COORDINATE ALL DOWN SPOUT LOCATIONS SO AS TO ASSURE THAT NO DOWN SPOUTS ARE LOCATED OVER DOOR / WINDOW OPENINGS OR OTHER KEY BUILDING ELEMENTS

9.) CONTRACTOR TO PROVIDE AND COORDINATE ALL PIPING & ACCESSORIES WITH MEP ENGINEERS PRIOR TO COMMENCING ANY ROOF DRAINAGE PIPING

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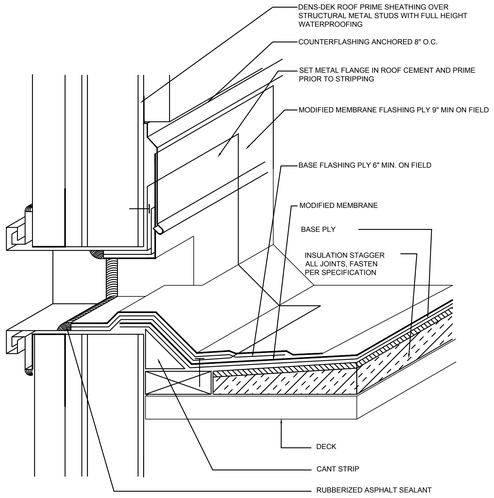
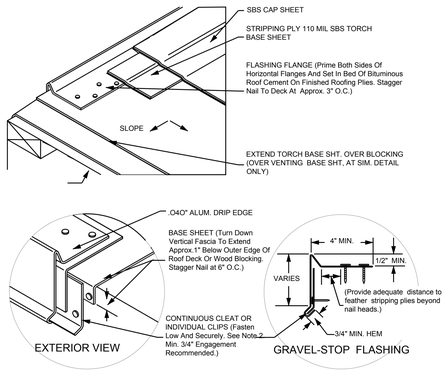


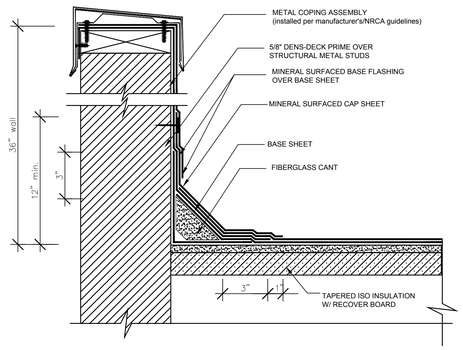
01 SCUPPER DETAIL

NOT TO SCALE
PROVIDE AT EACH ROOF DRAIN LOCATION. TYPICAL



04 EDGE DETAIL

NOT TO SCALE



07 PARAPET DETAIL

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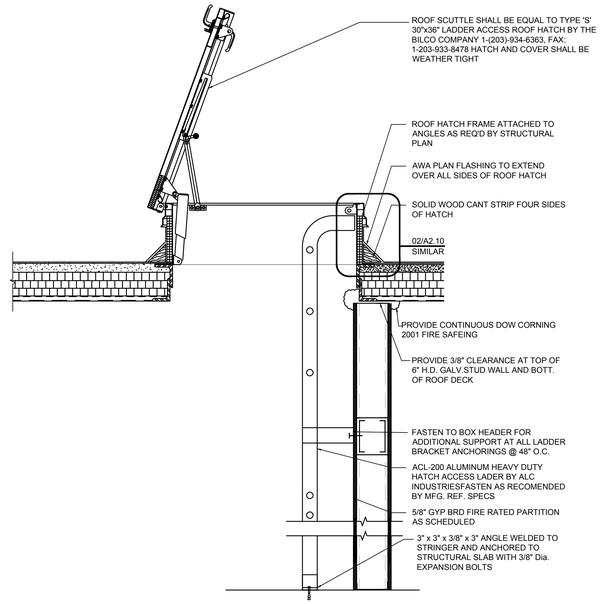

10B HATCH & LADDER DETAIL

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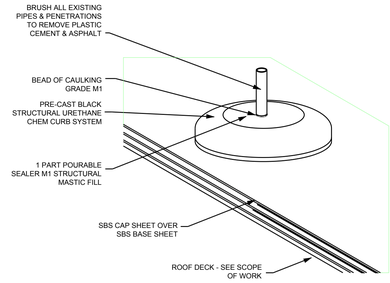
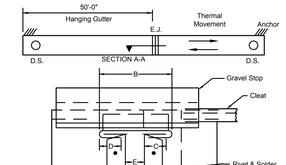
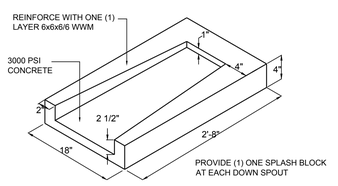


08 TYP. CHEM CURB DETAIL

NOT TO SCALE

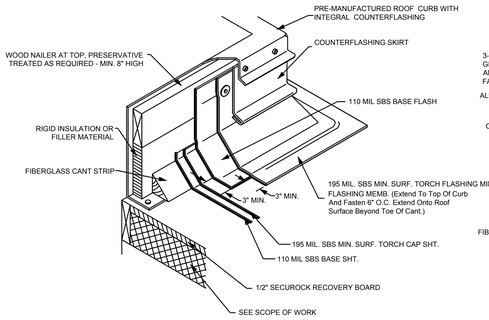


GUTTER EXPANSION JOINT



09 SPLASH BLOCK DTL

SCALE 1-1/2" = 1'-0"



02 TYP. A/C CURB DETAIL

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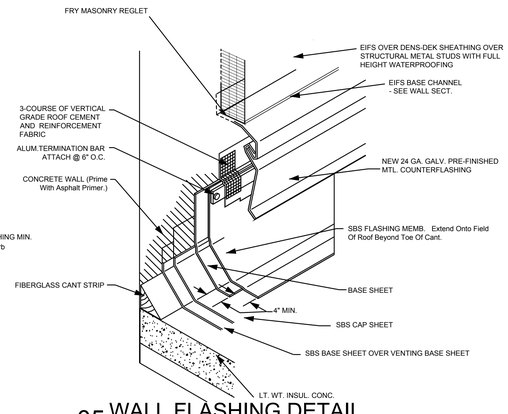
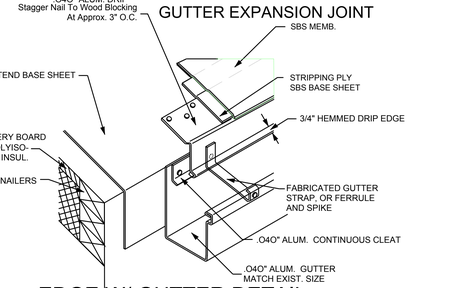


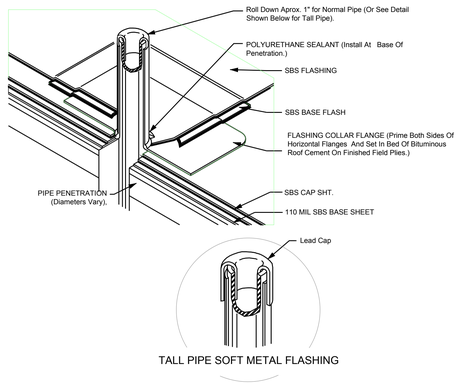
05 WALL FLASHING DETAIL

NOT TO SCALE



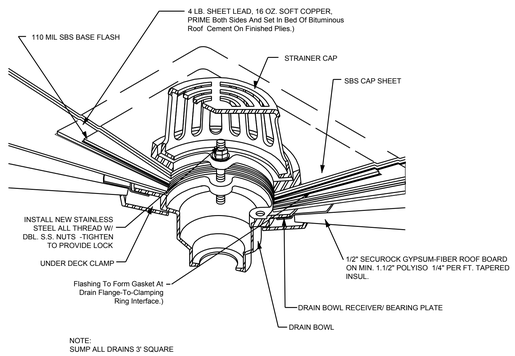
11 EDGE W/ GUTTER DETAIL

NOT TO SCALE



03 TYP. VENT PIPE DETAIL

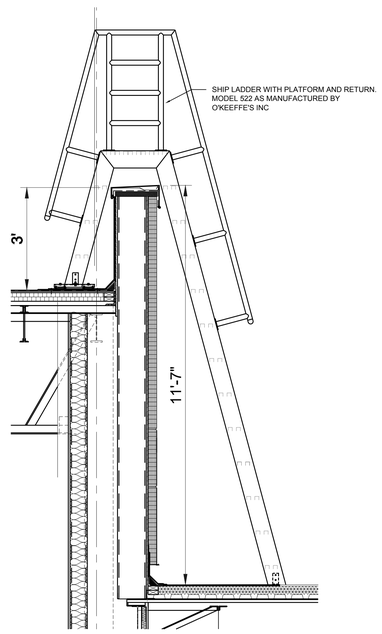
NOT TO SCALE



NOTE:
SUMP ALL DRAINS 3' SQUARE

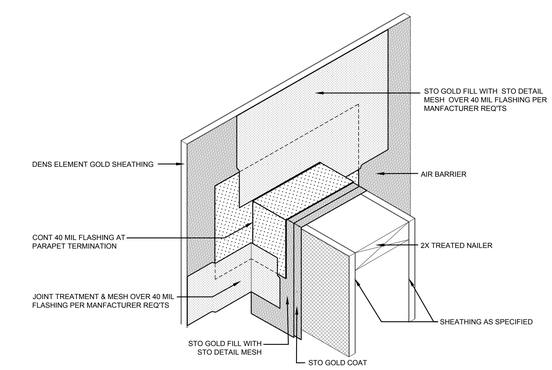
06 TYP. ROOF DRAIN DETAIL

NOT TO SCALE



10A SHIP LADDER DETAIL

SCALE NTS



12 PARAPET TERMINATION ISO

SCALE : NONE

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
PALMVIEW
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19556
STATE OF TEXAS
5/16/2019

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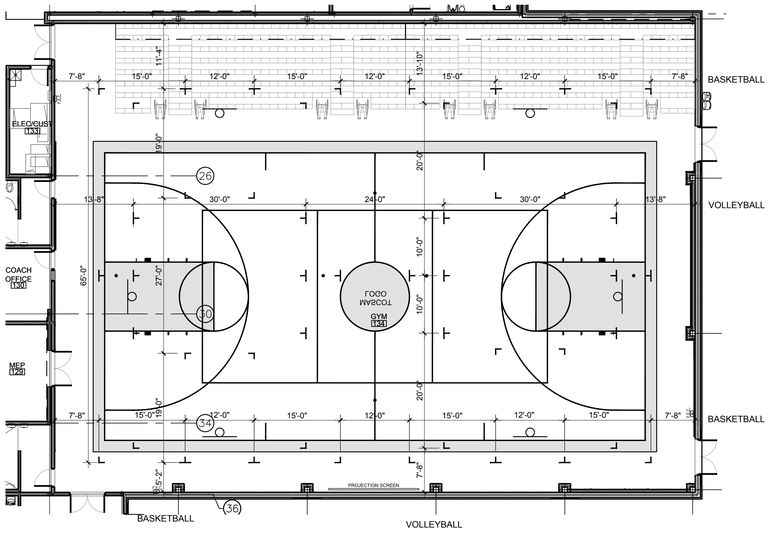
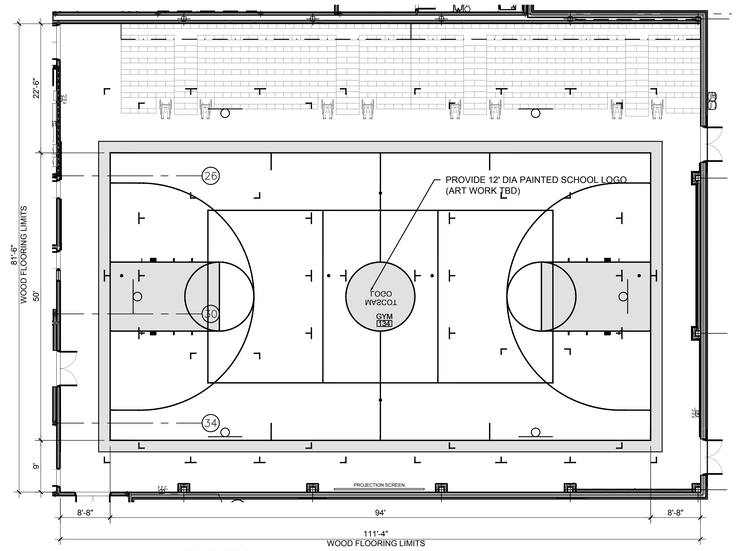
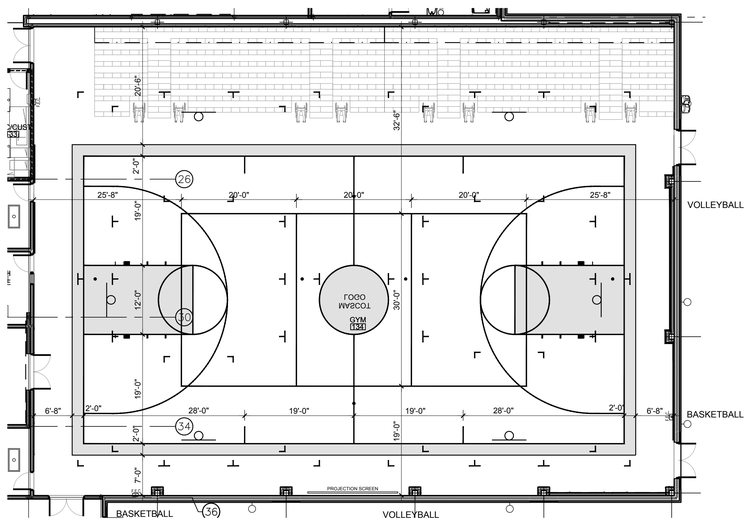
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A2.13



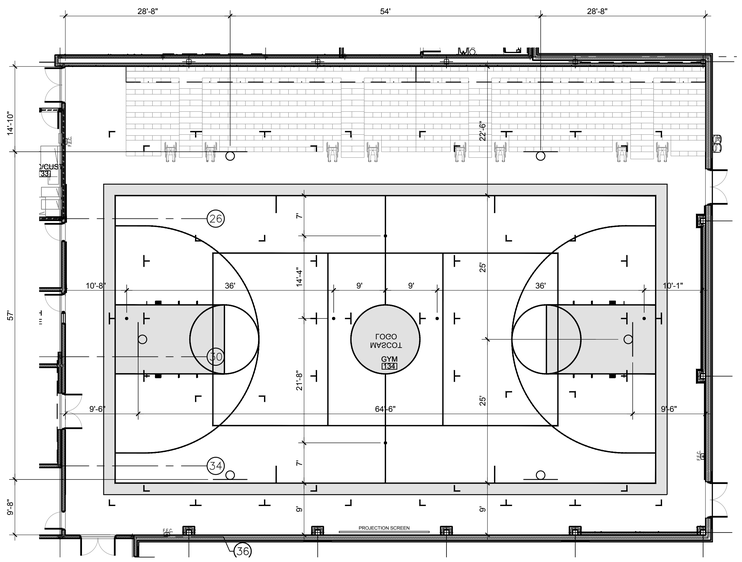
03 PRACTICE STRIPING PLAN
SCALE: 3/32" = 1'-0"



1ST FLOOR
04 WOOD FLOORING PLAN
SCALE: 3/32" = 1'-0"



02 COMPETITION STRIPING PLAN
SCALE: 3/32" = 1'-0"
SOLID COLOR STRIPING KIT FOR HS BASKETBALL AND VOLLEY BALL COURTS.



01 EQUIPMENT PLAN
SCALE: 3/32" = 1'-0"

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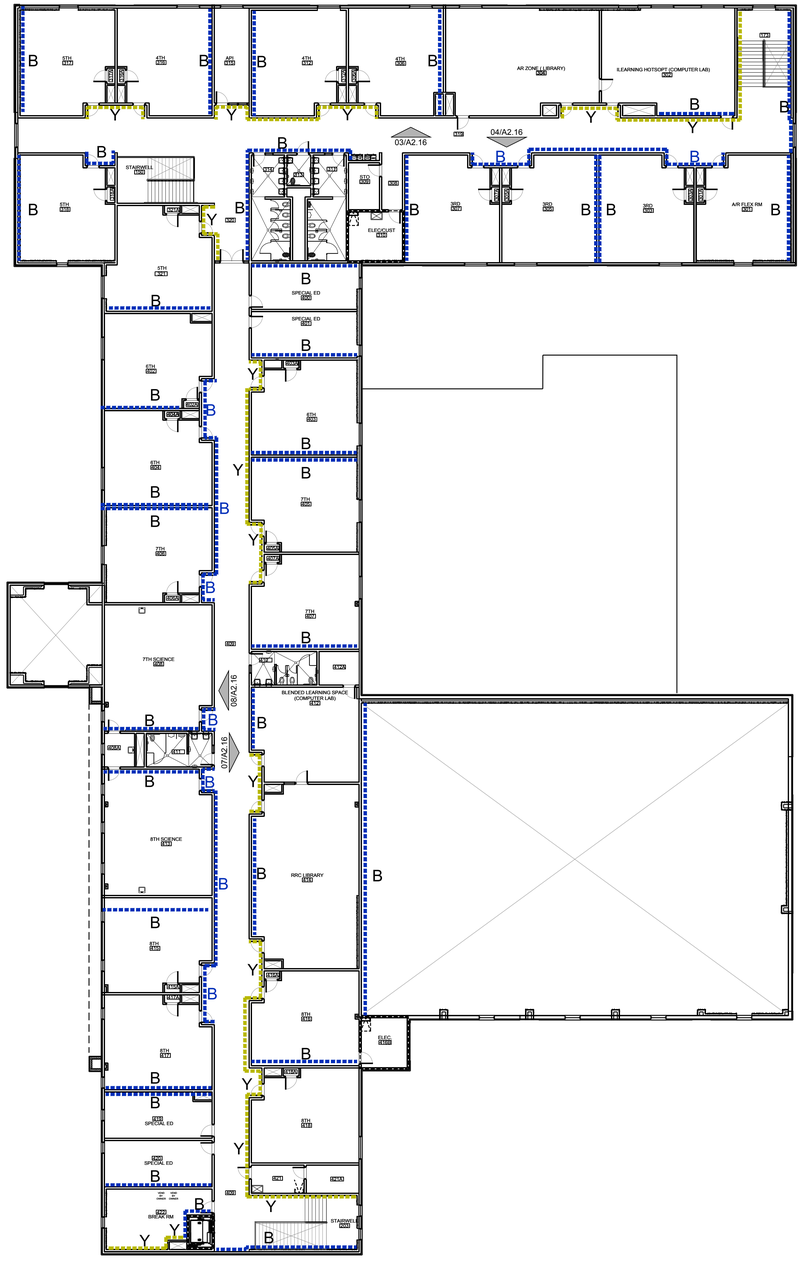
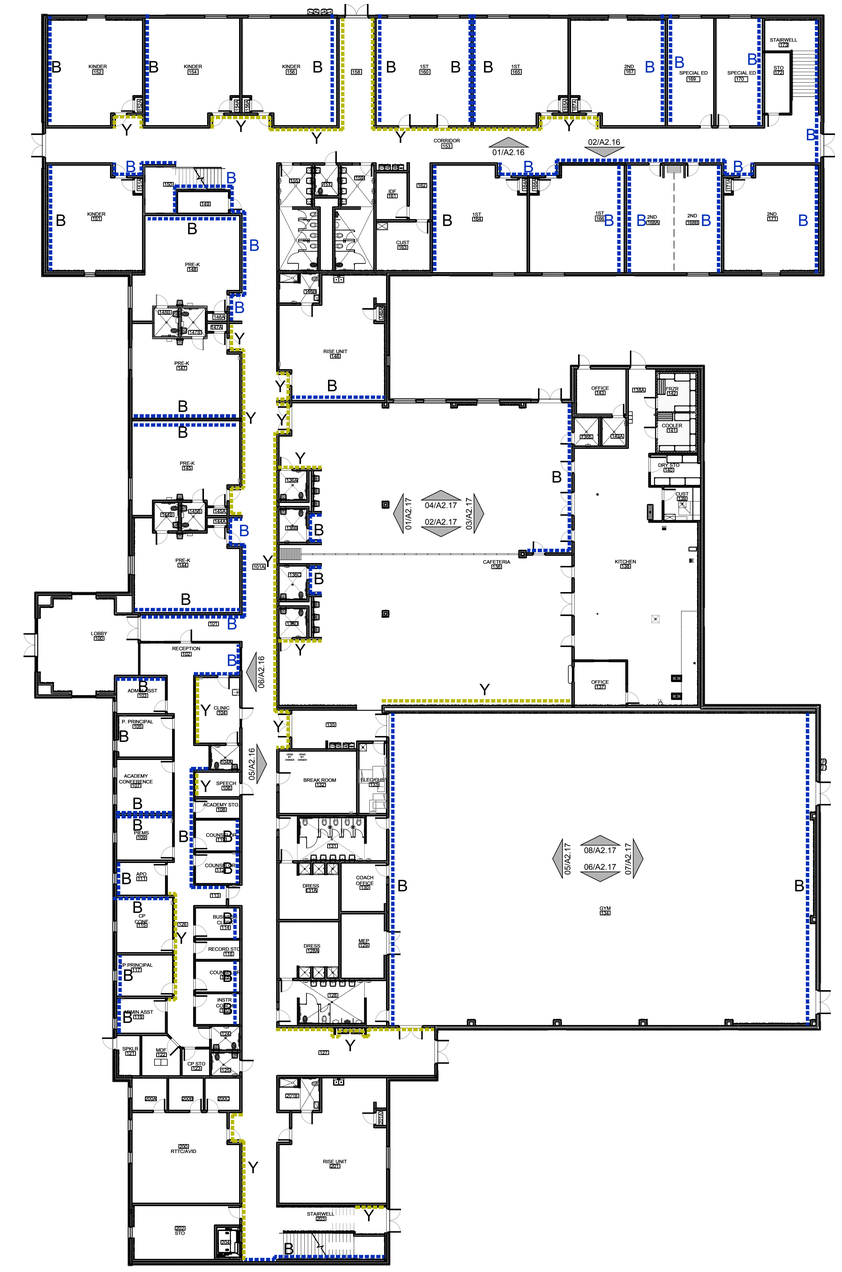




1ST FLOOR
01 INTERIOR PAINT LAYOUT
SCALE: 3/32" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1.) REFERENCE ROOM FINISH SCHEDULE ON SHEET FOR ROOM FINISH INFORMATION
2.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

Y = DENOTES YELLOW ACCENT WALL SW 6381 ANJOU PEAR REFER TO 04/A2.12
B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.12

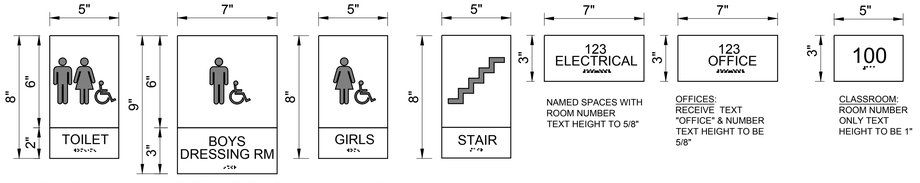
2ND FLOOR
02 INTERIOR PAINT LAYOUT
SCALE: 3/32" = 1'-0"

PLAN NORTH

GENERAL NOTES:

1.) REFERENCE ROOM FINISH SCHEDULE ON SHEET FOR ROOM FINISH INFORMATION
2.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

Y = DENOTES YELLOW ACCENT WALL SW 6381 ANJOU PEAR REFER TO 04/A2.12
B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.12



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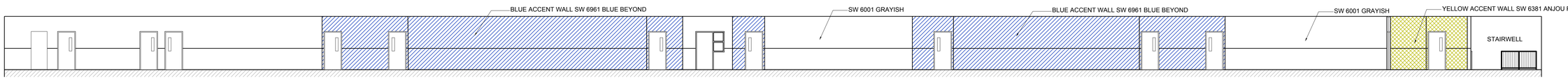
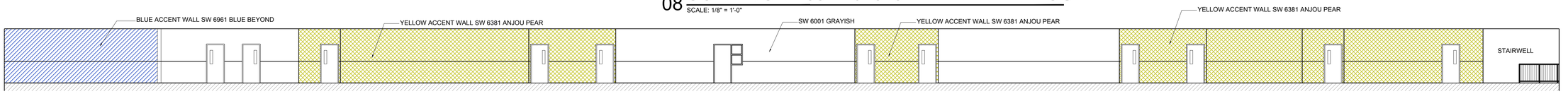
Job No.	IDEA 2020 Phase I
Sheet:	A2.15

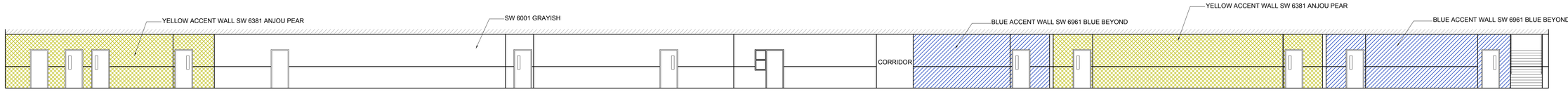
PRINT IN COLOR



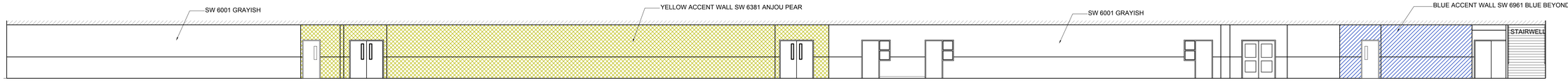
08 CORRIDOR 409 2nd level INT.PAINT LAYOUT
SCALE: 1/8" = 1'-0"



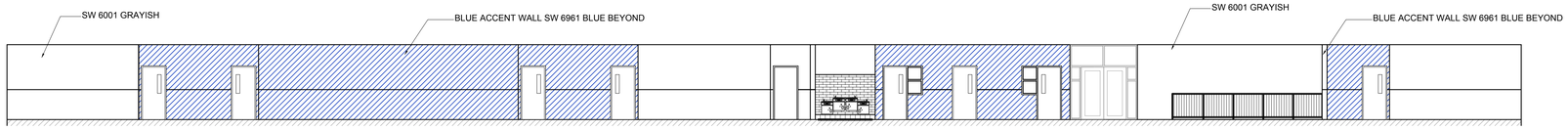
07 CORRIDOR 409 2nd level INT.PAINT LAYOUT
SCALE: 1/8" = 1'-0"



06 CORRIDOR 101A 1st level INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



05 CORRIDOR 101A 1st level INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



04 CORRIDOR 319 2nd level INT.PAINT LAYOUT
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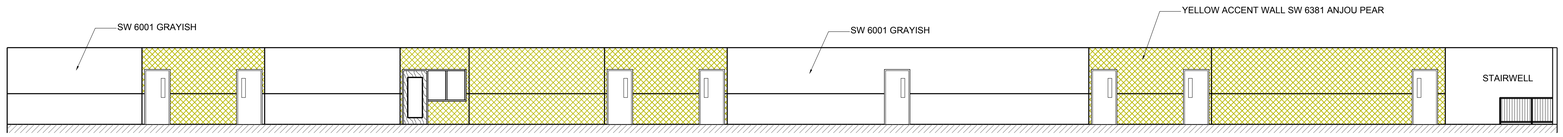
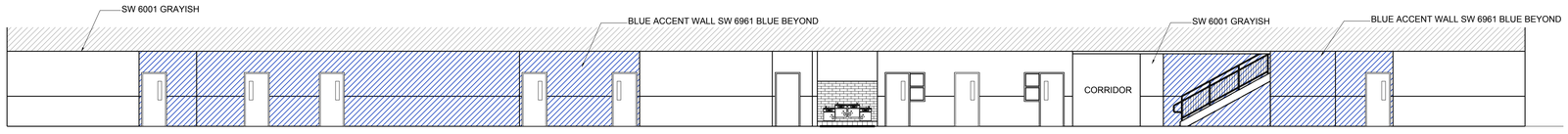
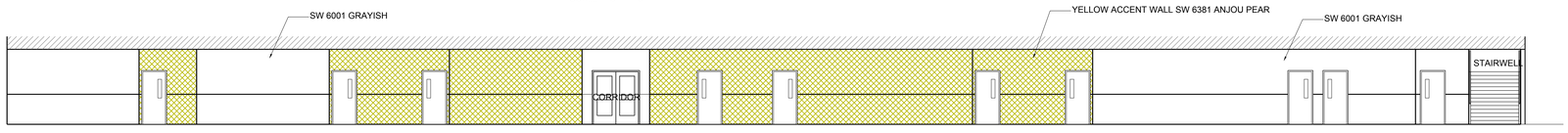


03 CORRIDOR 319 2nd level INT.PAINT LAYOUT
SCALE: 1/8" = 1'-0"



02 CORRIDOR 153 1st level INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



01 CORRIDOR 153 1st level INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"

REFERENCE PLANS FOR DOOR AND WINDOW SPECIFICS
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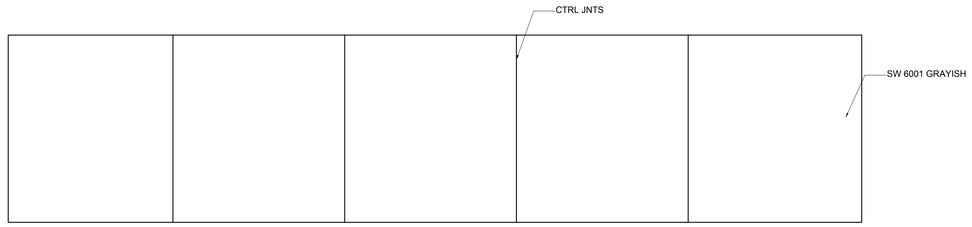
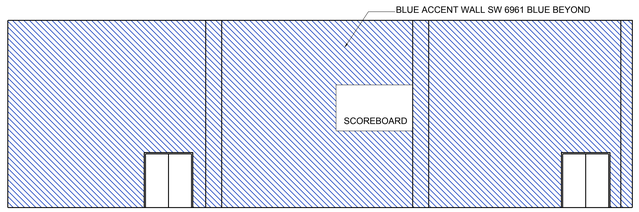


08 GYMNASIUM INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



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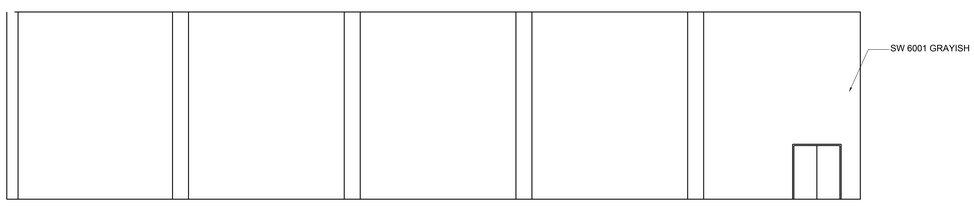

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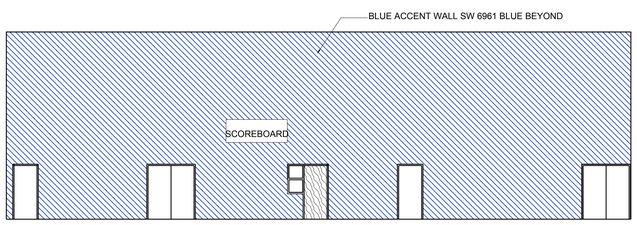
SCALE: 1/8" = 1'-0"



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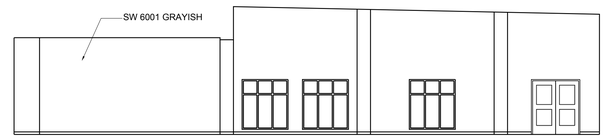
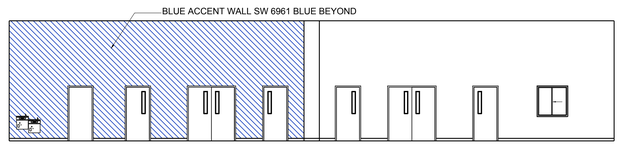
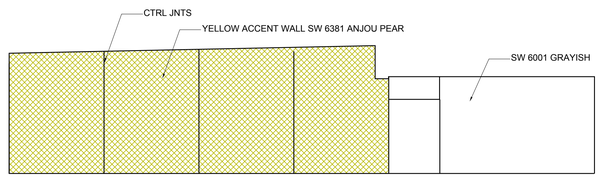


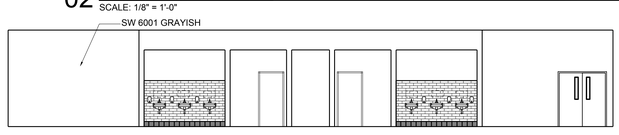
04 CAFETERIA INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



03 CAFETERIA INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



02 CAFETERIA INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"



01 CAFETERIA INT. PAINT LAYOUT
SCALE: 1/8" = 1'-0"

REFERENCE PLANS FOR DOOR AND WINDOW SPECIFICS
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Drawn By:	RB, JA
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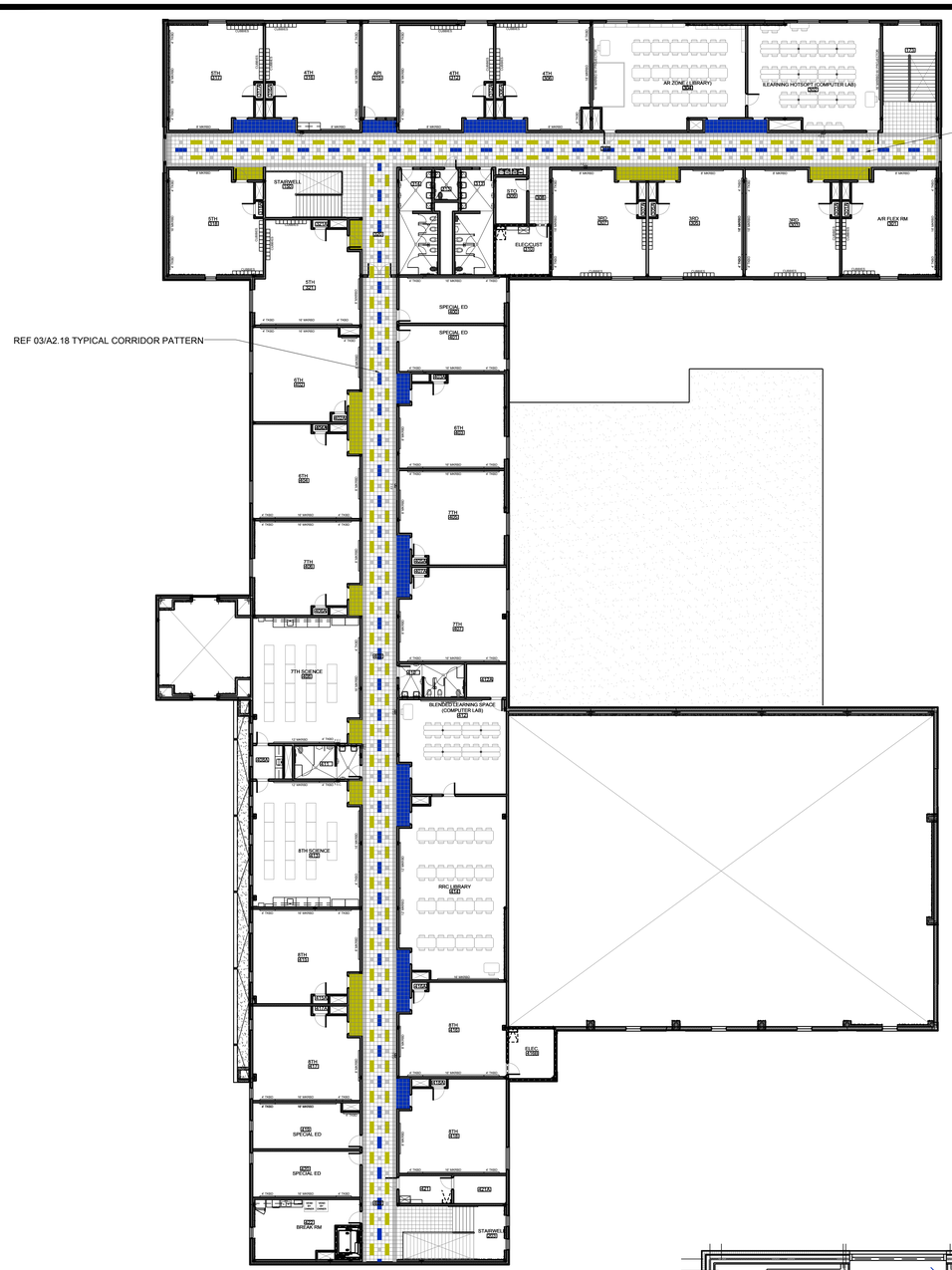
Sheet:	A2.17



SECOND FLOOR

02 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

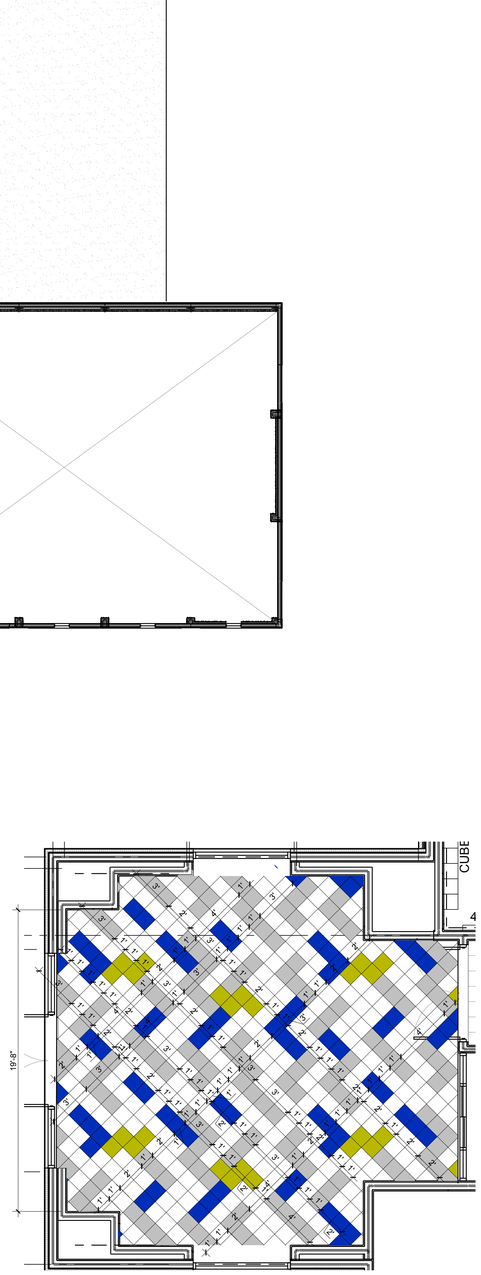
1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET FOR ROOM FINISH INFORMATION

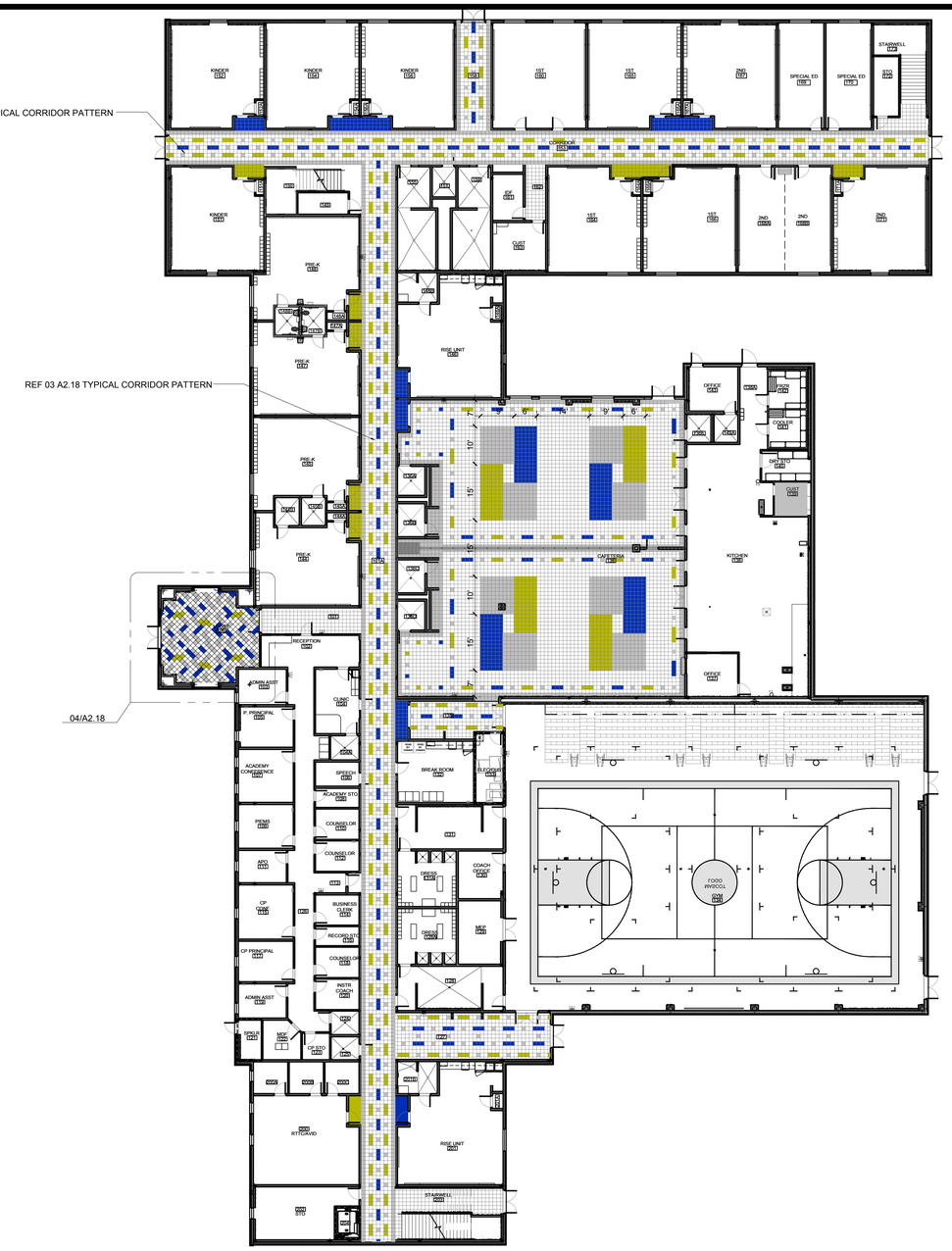
4.) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS

5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION



04 MAIN ENTRY VCT PATTERN

SCALE: 1/4" = 1'-0"



FIRST FLOOR

01 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

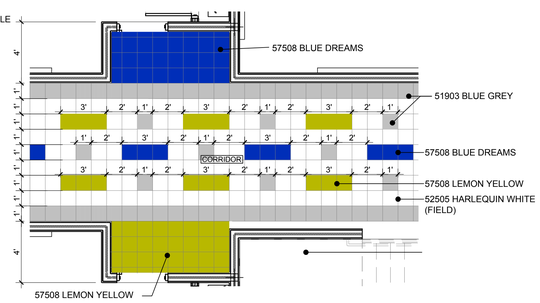
1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET FOR ROOM FINISH INFORMATION

4.) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS

5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION



03 TYPICAL VCT PATTERN

SCALE: 1/4" = 1'-0"

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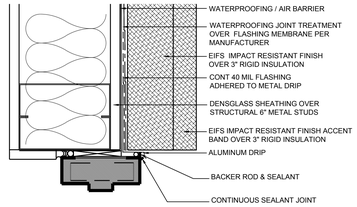
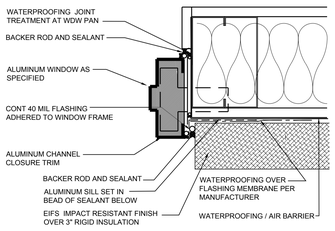
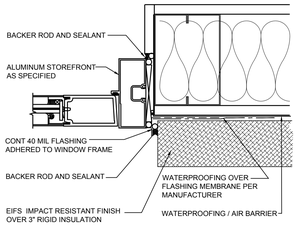


26 EIFS HEAD DTL
NOT TO SCALE

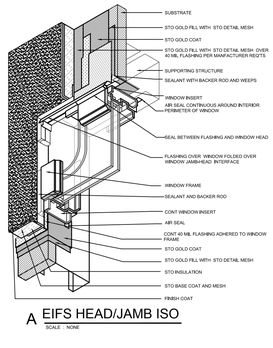


27 EIFS JAMB DTL
NOT TO SCALE



28 EIFS JAMB DTL
NOT TO SCALE

29 EIFS HEAD DTL
NOT TO SCALE



A EIFS HEAD/JAMB ISO
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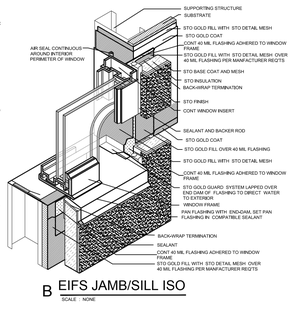

B EIFS JAMB/SILL ISO
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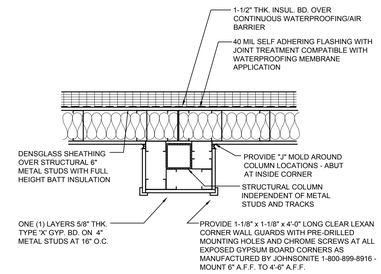
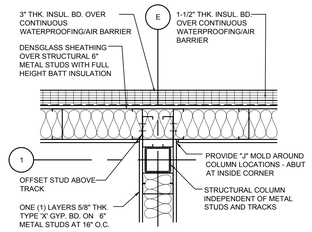


25 PLAN DETAIL
SCALE 1" = 1'-0"



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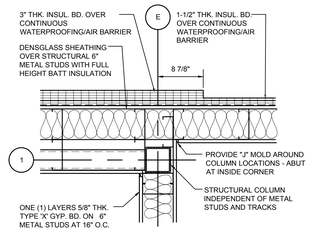
SCALE 1" = 1'-0"



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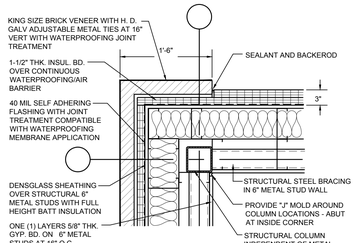

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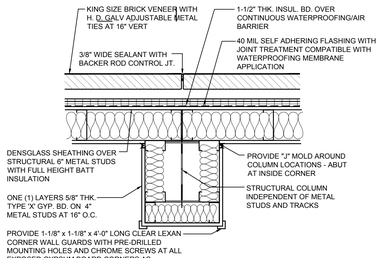
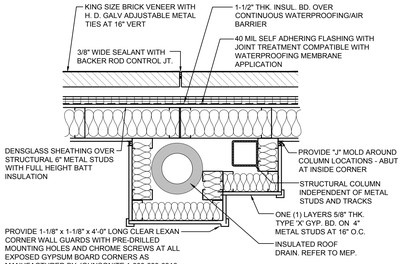
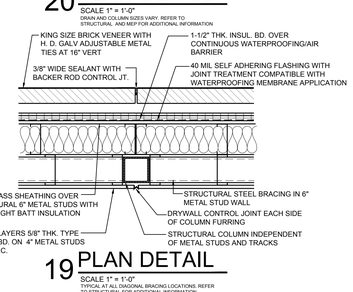
SCALE 1" = 1'-0"



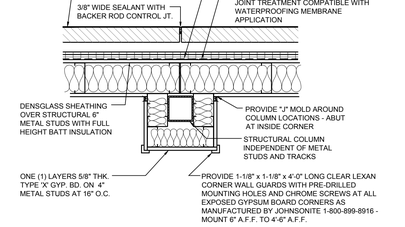
21 PLAN DETAIL
SCALE 1" = 1'-0"
COLUMN SIZES VARY. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION



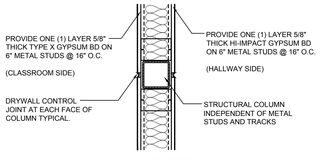
20 PLAN DETAIL
SCALE 1" = 1'-0"
DRAIN AND COLUMN SIZES VARY. REFER TO STRUCTURAL AND MEP FOR ADDITIONAL INFORMATION



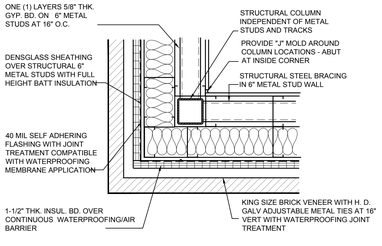
19 PLAN DETAIL
SCALE 1" = 1'-0"
TYPICAL AT ALL DIAGONAL BRACING LOCATIONS. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION



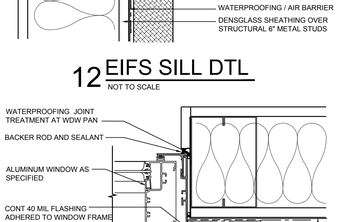
18 PLAN DETAIL
SCALE 1" = 1'-0"



17 PLAN DETAIL
SCALE 1" = 1'-0"

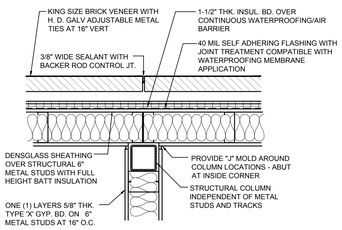


16 PLAN DETAIL
SCALE 1" = 1'-0"
TYPICAL AT ALL DIAGONAL BRACING LOCATIONS. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION

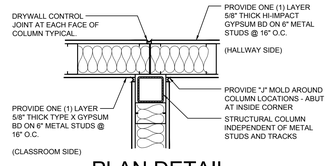


15 PLAN DETAIL
SCALE 1" = 1'-0"

13 EIFS JAMB DTL
NOT TO SCALE

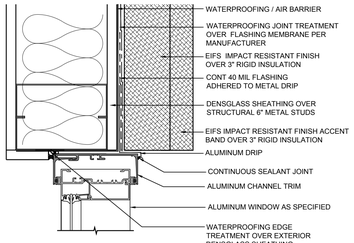


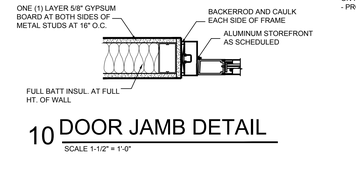
14 PLAN DETAIL
SCALE 1" = 1'-0"



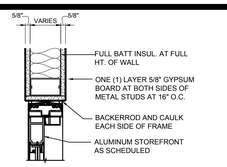
12 EIFS SILL DTL
NOT TO SCALE

11 EIFS HEAD DTL
NOT TO SCALE

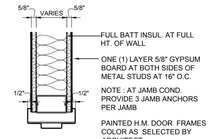




10 DOOR JAMB DETAIL
SCALE 1-1/2" = 1'-0"

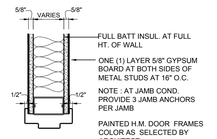


09 DOOR HEAD DETAIL
SCALE 1-1/2" = 1'-0"



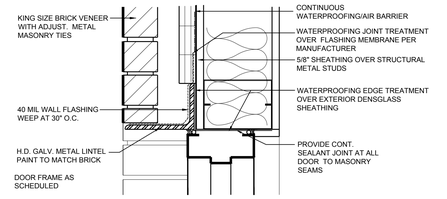
08 DOOR JAMB DETAIL
SCALE 1-1/2" = 1'-0"

N O T E :
- WALLS THAT REQUIRE GYP BOARD ARE AS SHOWN ON FLOOR PLAN
- PROVIDE DRYWALL CONTROL JOINTS TO CEILING

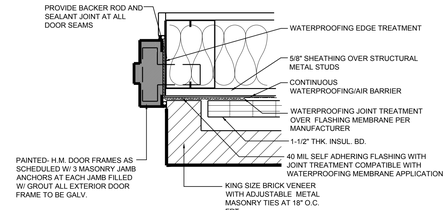


07 DOOR HEAD DETAIL
SCALE 1-1/2" = 1'-0"

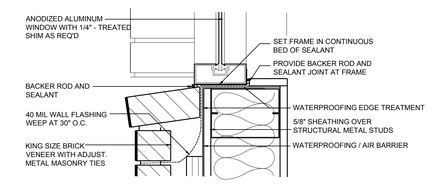
N O T E :
- WALLS THAT REQUIRE GYP BOARD ARE AS SHOWN ON FLOOR PLAN
- PROVIDE DRYWALL CONTROL JOINTS TO CEILING



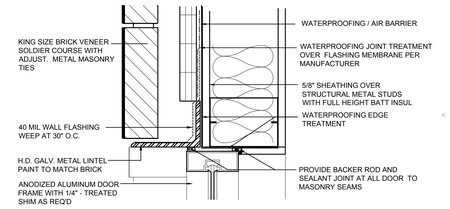
06 DOOR HEAD DETAIL
NOT TO SCALE



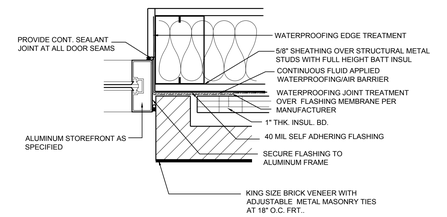
05 DOOR JAMB DETAIL
NOT TO SCALE



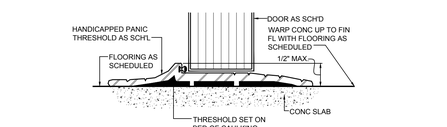
04 SILL DETAIL
NOT TO SCALE
WINDOW HEAD SIMILAR



03 WINDOW HEAD DETAIL
NOT TO SCALE
WINDOW HEAD SIMILAR



02 WINDOW JAMB DETAIL
NOT TO SCALE
WINDOW JAMB SIMILAR



01 THRESHOLD DETAIL
SCALE : NONE

No.	REVISIONS	BY

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IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS

REGISTERED ARCHITECT
JAIME A. MONREAL
19556
STATE OF TEXAS
5/10/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

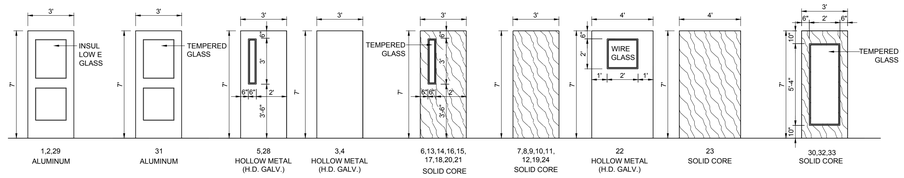
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A3.00

DOOR SCHEDULE

DOOR NO.	DOOR MATL.	DOOR W	DOOR H	DOOR T	FRAME MATL.	FRAME W	FRAME H	FRAME T	HDWR	DETAIL JAMB	DETAIL HEAD	DETAIL SILL	REMARKS
1	ALUM.	PR - 3'-0"	7'-0"	1 3/4"	ALUM.	14'-0"	10'-8"	VERIFY		28/A3.00	29/A3.00	01/A3.00	
2	ALUM.	PR - 3'-0"	7'-0"	1 3/4"	ALUM.	6'-4"	9'-8"	VERIFY		28/A3.00	29/A3.00	01/A3.00	
3	H.M.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	7'-2"	VERIFY		27/A3.00	26/A3.00	01/A3.00	
4	H.M.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		06/A3.00	05/A3.00	01/A3.00	
5	H.M.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	9'-0"	VERIFY		27/A3.00	26/A3.00	01/A3.00	
6	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
7	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
8	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	5'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
9	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
10	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
11	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
12	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		20 MIN AT ELECTRICAL ROOMS
13	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
14	S.C.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
15	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
16	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
17	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
18	S.C.	3'-0"	7'-0"	1 3/4"	ALUM	3'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		ELECTRIC LOCK
19	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	5'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
20	S.C.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
21	S.C.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
22	H.M.	4'-0"	7'-0"	1 3/4"	H.M.	4'-4"	7'-2"	VERIFY		27/A3.00	26/A3.00	01/A3.00	
23	S.C.	4'-0"	7'-0"	1 3/4"	H.M.	4'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
24	S.C.	PR - 3'-0"	7'-0"	1 3/4"	H.M.	6'-4"	7'-2"	VERIFY		10/A3.00	07/A3.00		
25	NOT USED												
26		28'-0"	9'-8"		OPERABLE PARTITION								ALTERNATE # 5
27		94'-10"	12'-0"		OPERABLE PARTITION								ALTERNATE # 4
28	H.M.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		27/A3.00	26/A3.00	01/A3.00	
29	ALUM.	PR - 3'-0"	7'-0"	1 3/4"	ALUM.	6'-4"	7'-2"	VERIFY		28/A3.00	29/A3.00	01/A3.00	
30	S.C.	PR - 3'-0"	7'-0"	1 3/4"	ALUM.	6'-4"	10'-0"	VERIFY		10/A3.00	09/A3.00		
31	ALUM.	PR - 3'-0"	7'-0"	1 3/4"	ALUM.	6'-4"	7'-2"	VERIFY		10/A3.00	09/A3.00		
32	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	9'-4"	7'-2"	VERIFY		10/A3.00	08/A3.00		
33	S.C.	3'-0"	7'-0"	1 3/4"	H.M.	3'-4"	7'-2"	VERIFY		10/A3.00	08/A3.00		

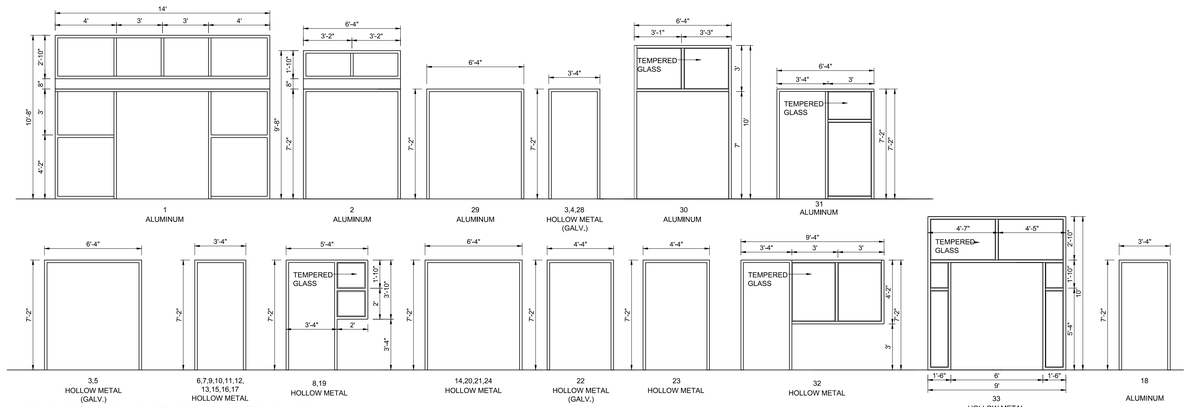
NOTE : PROVIDE LABELED DOORS AND HARDWARE AT ALL FIRE RATED PARTITIONS
NOTE : ALL EXTERIOR HOLLOW METAL DOORS & FRAMES TO BE HOT DIPPED Galv. - TYP.
NOTE : ALL GIVEN DIMENSIONS OF DOOR LITES ARE VISIBLE GLASS AREA - ACTUAL LIGHT OPENING TO VARY BY MANUFACTURE'S REQUIREMENTS

NOTE : REFER TO FIXTURE PLANS FOR CORRESPONDING DOOR HARDWARE SETS
NOTE : ALL GLAZING SHALL BE 1/4" WIRE GLASS U.N.O.
NOTE : PROVIDE CYLINDERS OF ALL LOCKSETS TO BE KEYED TO EXISTING GRANDMASTER SYSTEM.
NOTE : CONTRACTOR MUST PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS BETWEEN ROOMS AT DOOR SILLS



DOOR ELEVATIONS

SCALE 1/4" = 1'-0"
NOTE: 1. ALL EXTERIOR DOORS TO BE HOT DIPPED GALVANIZED REGARDLESS WHETHER NOTED OR NOT NOTED (DOES NOT APPLY FOR ALUMINUM DOORS)
2. ALL EXTERIOR DOORS TO MEET HURRICANE AND HIGH IMPACT RESISTANCE REQUIREMENTS WHETHER NOTED OR NOT NOTED

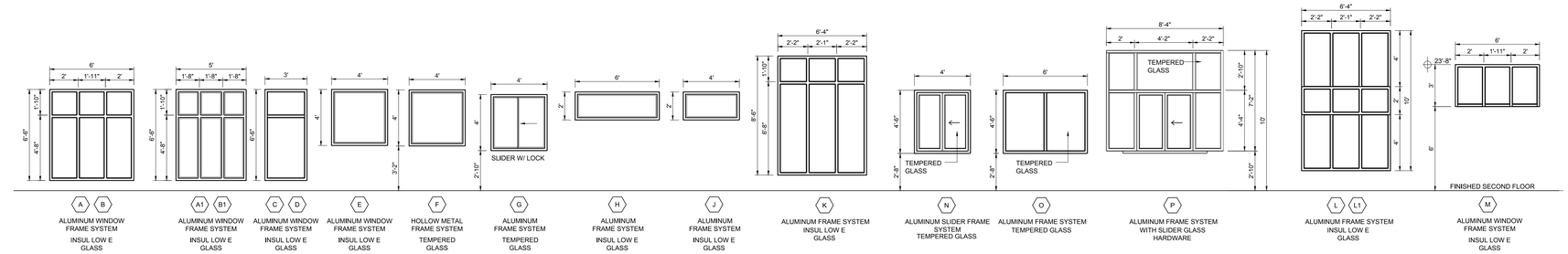


DOOR FRAME ELEVATIONS

SCALE 1/4" = 1'-0"
NOTE:
ALL EXTERIOR DOOR FRAMES TO BE GALVANIZED REGARDLESS WHETHER NOTE OR NOT NOTED (DOES NOT APPLY FOR ALUMINUM FRAMES)

WINDOW SCHEDULE

WDW NO.	MATL	SIZE W	SIZE H	GLASS	DETAIL JAMB	DETAIL HEAD	DETAIL SILL	REMARKS
A	ALUM	6'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	REF A,B/A3.00.--BRICK CONDITION REF. TO DTLS 2,3,4/A3.00
B	ALUM	6'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
A1	ALUM	5'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	REF A,B/A3.00.--BRICK CONDITION REF. TO DTLS 2,3,4/A3.00
B1	ALUM	5'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
C	ALUM	3'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	REF A,B/A3.00.--BRICK CONDITION REF. TO DTLS 2,3,4/A3.00
D	ALUM	3'-0"	6'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
E	ALUM	4'-0"	4'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
F	HM	4'-0"	4'-0"	TEMPERED	08/A3.00	08/A3.00	08/A3.00	
G	ALUM	4'-0"	4'-0"	TEMPERED				FRAMED SLIDER
H	ALUM	6'-0"	2'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
J	ALUM	4'-0"	2'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
K	ALUM	6'-4"	8'-6"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
L	ALUM	6'-4"	11'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
L1	ALUM	6'-4"	11'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
M	ALUM	6'-0"	3'-0"	LOW- E INSUL	13/A3.00	11/3.00	12/A3.00	
N	ALUM	4'-0"	4'-6"	TEMPERED				
O	ALUM	6'-0"	14'-8"	TEMPERED				
P	ALUM	6'-0"	3'-0"	TEMPERED				FRAMED SLIDER



WINDOW ELEVATIONS

SCALE 1/4" = 1'-0"

NOTE: 1.) ALL EXTERIOR WINDOW FRAMES AND GLAZING TO MEET STRUCTURAL WIND LOAD PRESSURES.

No.	REVISIONS	BY

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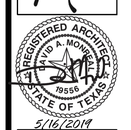
IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW, TEXAS

IDEA Public Schools



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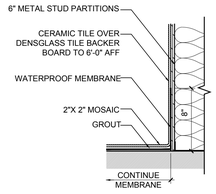
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

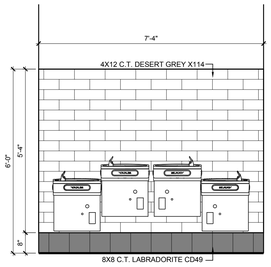
Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No.: IDEA 2020 Phase I
Sheet: A3.01



20 TYP.W/P DETAIL

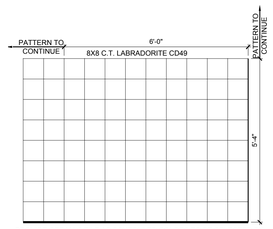
SCALE: 1-1/2" = 1'-0"

NOTE :
PROVIDE WATERPROOFING MEMBRANE AT ALL CERAMIC TILE APPLICATIONS. MEMBRANE IS TO BE CONTINUOUS AT CERAMIC TILE 1ST & 2ND FLOOR AND RISE UP AT WALLS A MIN OF 8".



21 EDF ELEVATION

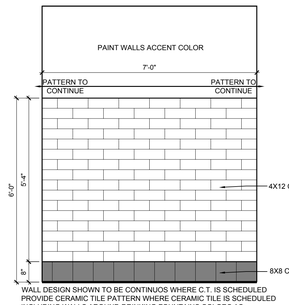
SCALE: 1/2" = 1'-0"



PROVIDE CERAMIC TILE AS SCHEDULED COLORS TO BE SELECTED BY ARCHITECT'S OFFICE THIS DESIGN TO APPLY TYPICAL AT ALL TOILET ROOMS ALL TILE TO BE SELECTED FROM DAL-TILE

22 FLOOR C.T. DESIGN

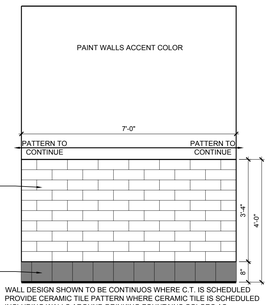
SCALE: 1/2" = 1'-0"



WALL DESIGN SHOWN TO BE CONTINUOS WHERE C.T. IS SCHEDULED PROVIDE CERAMIC TILE PATTERN WHERE CERAMIC TILE IS SCHEDULED INCLUDING WALLS AROUND DRINKING FOUNTAINS COLORS AS SELECTED BY ARCHITECT'S OFFICE THIS DESIGN TO APPLY TYPICAL AT ALL TOILET ROOMS ALL TILE TO BE SELECTED FROM DAL-TILE

23 WALL C.T. DESIGN

SCALE: 1/2" = 1'-0"



WALL DESIGN SHOWN TO BE CONTINUOS WHERE C.T. IS SCHEDULED PROVIDE CERAMIC TILE PATTERN WHERE CERAMIC TILE IS SCHEDULED INCLUDING WALLS AROUND DRINKING FOUNTAINS COLORS AS SELECTED BY ARCHITECT'S OFFICE THIS DESIGN TO APPLY TYPICAL AT ALL TOILET ROOMS ALL TILE TO BE SELECTED FROM DAL-TILE

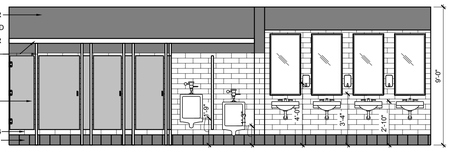
24 WALL C.T. DESIGN

SCALE: 1/2" = 1'-0"



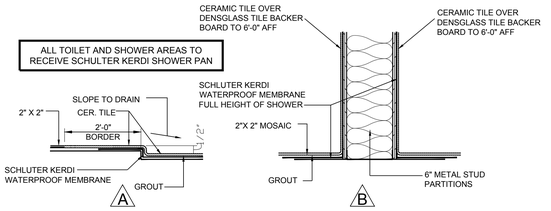
15 GIRLS TOILET ELEVATION

SCALE: 1/4" = 1'-0"



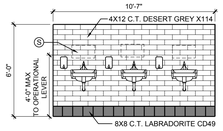
16 BOYS TOILET ELEVATION

SCALE: 1/4" = 1'-0"



17 SHOWER PAN DTLS

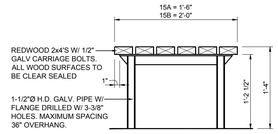
SCALE: 1-1/2" = 1'-0"



14 LAVATORY ELEVATION

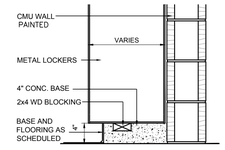
SCALE: 1/4" = 1'-0"

NOTE:MOUNT PAPER DISPENSER 4' AFF MAX TO LEVER



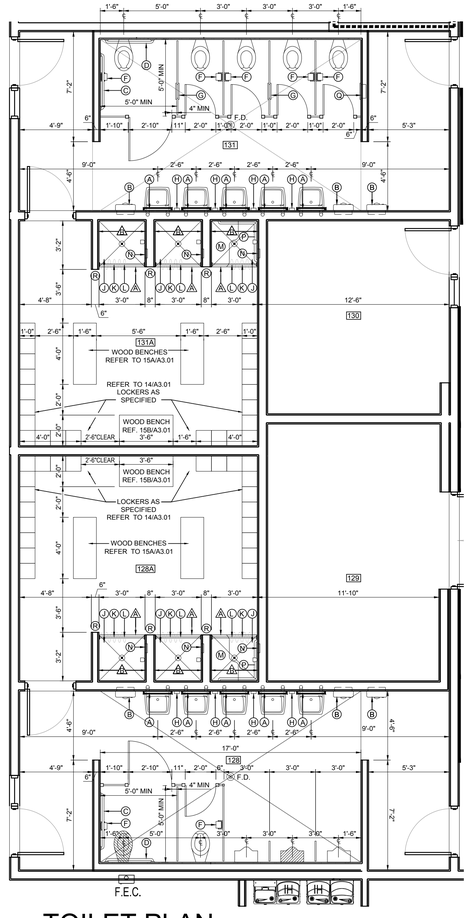
18 BENCH SECTION

SCALE: 1"=1'-0"



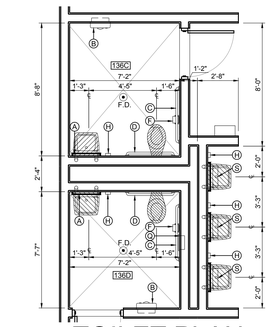
19 BASE SECTION

NOT TO SCALE



08 TOILET PLAN

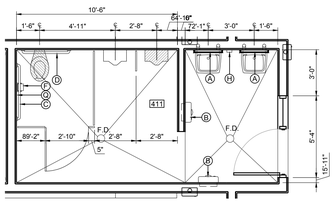
SCALE: 1/4" = 1'-0" @GYM



09 TOILET PLAN

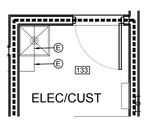
SCALE: 1/4" = 1'-0"

SIMILAR AT TOILETS 136A AND 136B



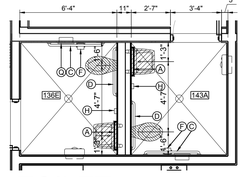
13 TOILET PLAN

SCALE: 1/4" = 1'-0" @2ND LEVEL



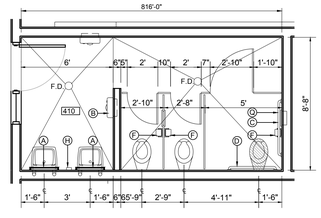
10 PLAN ENLARGEMENT

SCALE: 1/4" = 1'-0" @GYM



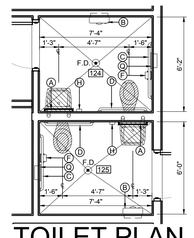
11 TOILET PLAN

SCALE: 1/4" = 1'-0" @KITCHEN



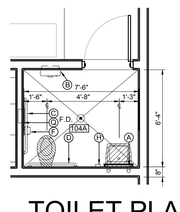
12 TOILET PLAN

SCALE: 1/4" = 1'-0" @2ND LEVEL



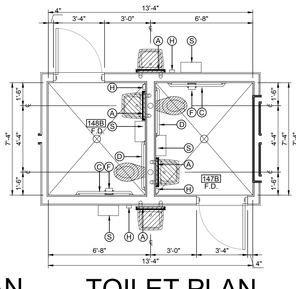
07 TOILET PLAN

SCALE: 1/4" = 1'-0" @ADMINISTRATION



06 TOILET PLAN

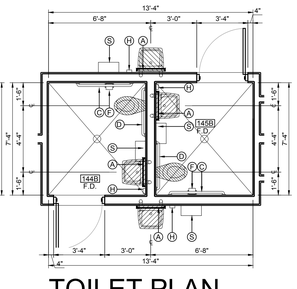
SCALE: 1/4" = 1'-0" @CLINIC



05 TOILET PLAN

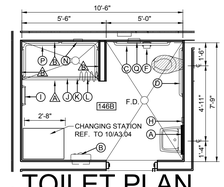
SCALE: 1/4" = 1'-0" @PRE K

NOTE: DEDUCT ALTERNATE



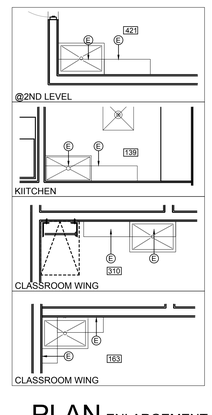
04 TOILET PLAN

SCALE: 1/4" = 1'-0" @PRE K



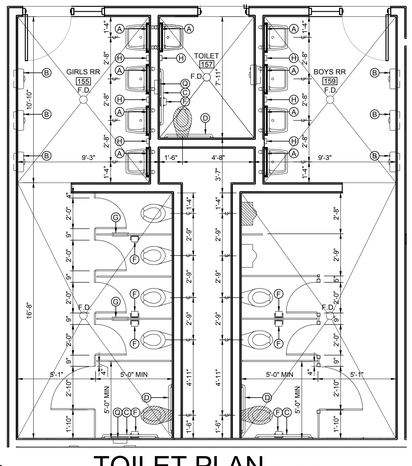
03 TOILET PLAN

SCALE: 1/4" = 1'-0" @RISE/LIFESKILLS



02 PLAN ENLARGEMENT

SCALE: 1/4" = 1'-0" @CUSTODIAN



01 TOILET PLAN @CLASSROOM WING

SCALE: 1/4" = 1'-0" SIMILAR AT TOILETS 318, 319 & 320

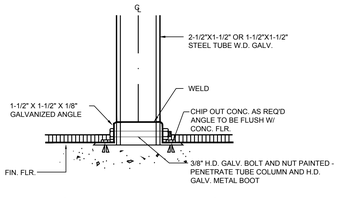
ACCESSORY LEGEND

No.	NAME
A	SS CHANNEL FRAME MIRROR
B	HOT AIR DRYER (REFER TO M.E.P.)
C	42" LONG GRAB BAR
D	36" LONG GRAB BAR
E	MOP AND BROOM HOLDER
F	TOILET TISSUE DISPENSER (By Owner)
G	PARTITION MOUNTED SANITARY NAPKIN DISPOSAL
H	LIQUID SOAP DISPENSER (By Owner)
I	TOWEL BAR 18"
J	SHOWER CURTAIN MOD # 204-2
K	SHOWER ROD MOD # B-6047
L	SHOWER HOOKS MOD # 204-1
M	SHOWER SEAT
N	SOAP DISH
P	CONTINUOS GRAB BAR MOD # B-6806 SERIES
Q	WALL MOUNTED SANITARY NAPKIN DISPOSAL
R	TOWEL HOOK
S	PAPER TOWEL DISPENSER (By Owner)

ALL MODEL NUMBERS SHOWN ARE FROM BOBRICK WASHROOM ACCESSORIES

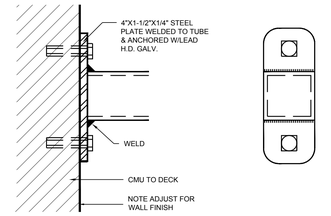
GENERAL NOTE FOR ALL TOILET ROOMS: PROVIDE CERAMIC TILE WAINSCOT BEHIND ALL MIRRORS, INCLUDING THE HANDICAP MIRRORS WHICH PROJECT ABOVE THE 6' HIGH TILE WAINSCOT.

CONTRACTOR TO INSTALL OWNER PROVIDED SURFACE MOUNTED PAPER TOWEL AND TOILET TISSUE DISPENSERS.



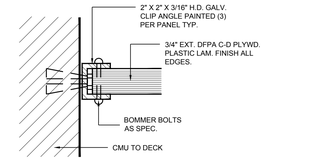
A TOILET PARTITION DETAIL

SCALE 3" = 1'-0"



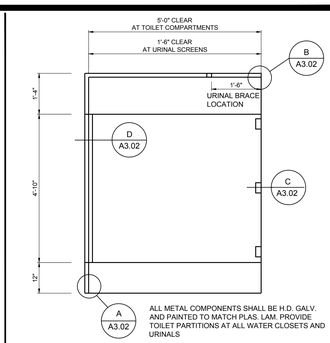
B TOILET PARTITION DETAIL

SCALE 1-1/2" = 1'-0"



C TOILET PARTITION DETAIL

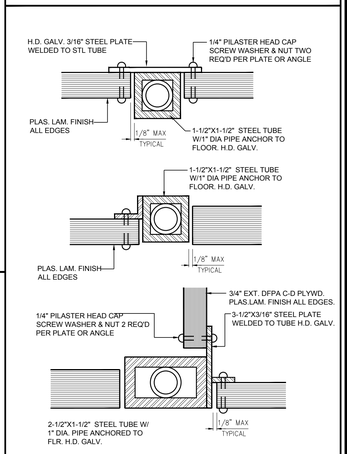
SCALE 1-1/2" = 1'-0"



ALL METAL COMPONENTS SHALL BE H.D. GALV. AND PAINTED TO MATCH PLAS. LAM. PROVIDE TOILET PARTITIONS AT ALL WATER CLOSETS AND URINALS

25 TOILET PARTITION DETAIL

SCALE 1-1/2" = 1'-0"



D TOILET PARTITION DETAIL

SCALE 1-1/2" = 1'-0"

NOTES:
1. GROUND SMOOTH ALL WELDS
2. PROVIDE NO SPLICES AT TOP RAIL.

No.	REVISIONS	BY

GMS ARCHITECTS
1150 Paredes Line Rd.
Brownsville TX 78526
(956) 546-0110
fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1

PALMVIEW

PALMVIEW, TEXAS

IDEA Public Schools

REGISTERED ARCHITECT DAVID A. MONREAL 79555 STATE OF TEXAS

5/16/2019

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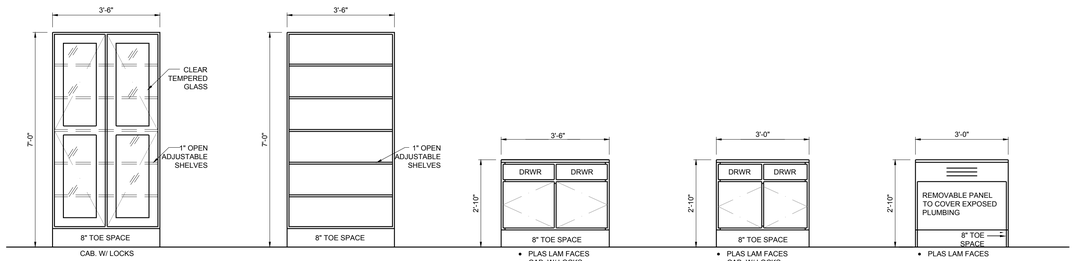
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: A3.02

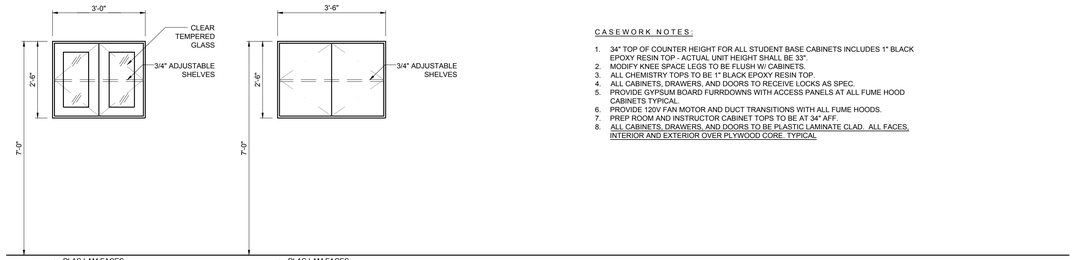
CASE WORK

CABINET ELEVATION

SCALE 1/2" = 1'-0"



ITEM A - ELEVATION | ITEM B - ELEVATION | ITEM C - ELEVATION | ITEM D - ELEVATION | ITEM E - ELEVATION



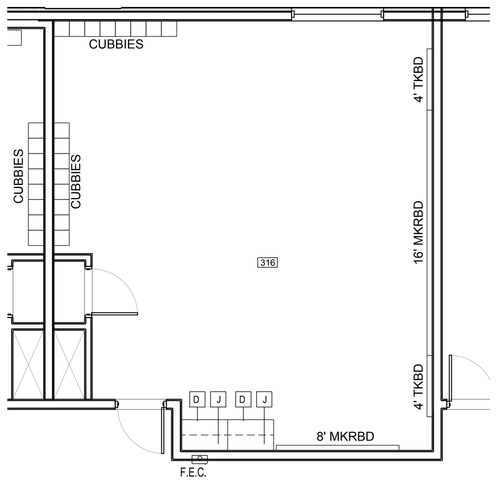
ITEM J - ELEVATION | ITEM K - ELEVATION

C A S E W O R K N O T E S :

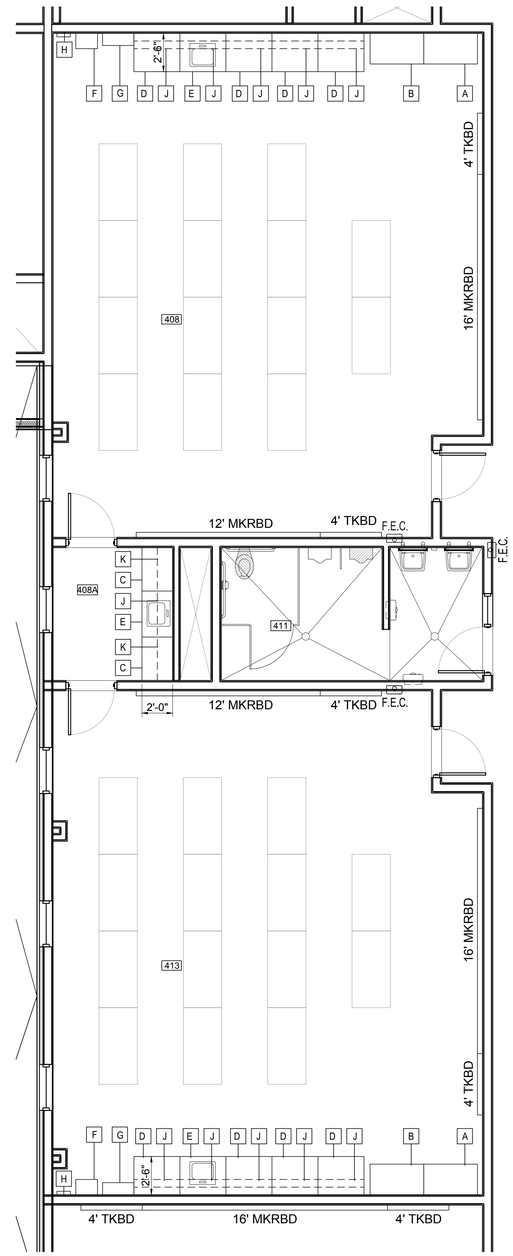
1. 34" TOP OF COUNTER HEIGHT FOR ALL STUDENT BASE CABINETS INCLUDES 1" BLACK EPOXY RESIN TOP - ACTUAL UNIT HEIGHT SHALL BE 33".
2. MODIFY KNEE SPACE LEGS TO BE FLUSH W/ CABINETS.
3. ALL CHEMISTRY TOPS TO BE 1" BLACK EPOXY RESIN TOP.
4. ALL CABINETS, DRAWERS, AND DOORS TO RECEIVE LOCKS AS SPEC.
5. PROVIDE GYPSUM BOARD FURRDOWNS WITH ACCESS PANELS AT ALL FUME HOOD CABINETS TYPICAL.
6. PROVIDE 120V FAN MOTOR AND DUCT TRANSITIONS WITH ALL FUME HOODS.
7. PREP ROOM AND INSTRUCTOR CABINET TOPS TO BE AT 34" AFF.
8. ALL CABINETS, DRAWERS, AND DOORS TO BE PLASTIC LAMINATE CLAD. ALL FACES, INTERIOR AND EXTERIOR OVER PLYWOOD CORE. TYPICAL

C A B I N E T S C H E D U L E

NO.	DESCRIPTION	H X D X L	MODEL NO.	REMARKS
A	TALL BOOKCASE	84 X 22 X 42		W/ 1" ADJUSTABLE SHELVES
B	TALL BOOKCASE	84 X 22 X 42		W/ 1" ADJUSTABLE SHELVES
C	BASE CABINET	33 x 24 x 42		COUNTER TOP AT 34" A.F.F.
D	BASE CABINET	34 x 24 x 42		COUNTER TOP AT 34" A.F.F.
E	SINK BASE CABINET	33 x 24 x 36		COUNTER TOP AT 34" A.F.F.
F	SAFETY GOGGLES CASE	VERIFY W/ MANUF.	6784	
G	FIRE BLANKET CASE	VERIFY W/ MANUF.	9960	
H	FIRST AID CASE	VERIFY W/ MANUF.	9962	
J	CUPBOARD STORAGE	30 X 12 X 36		
K	CUPBOARD STORAGE	30 X 12 X 42		



02 CASEWORK LAYOUT
SCALE: 1/4" = 1'-0"



01 SCIENCE CLASSROOM LAYOUT
SCALE: 1/4" = 1'-0"

No.	REVISIONS	BY

GMS ARCHITECTS

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(956) 546-0110
fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
IDEA Public Schools PALMVIEW, TEXAS

REGISTERED ARCHITECT DAVID A. MONREAL 19556 STATE OF TEXAS

5/16/2019

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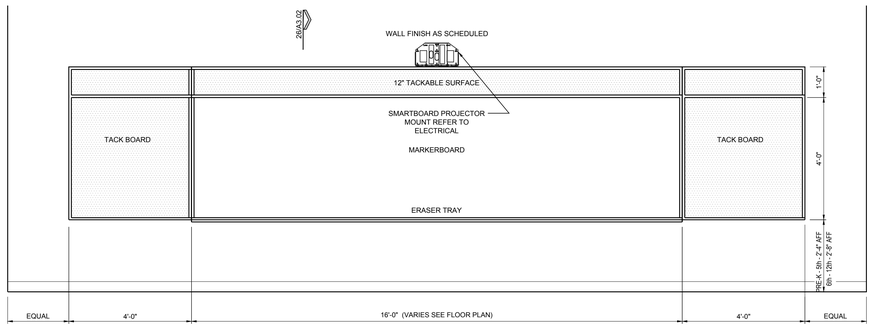
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

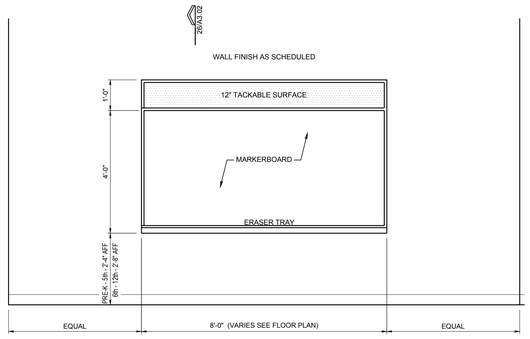
Date: 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: A3.03

PLASTIC LAMINATE COLORS
COUNTERTOPS: WILSONART 4941K-18 COSMIC STRANDZ
FACES: WILSONART D315-60 PLATINUM

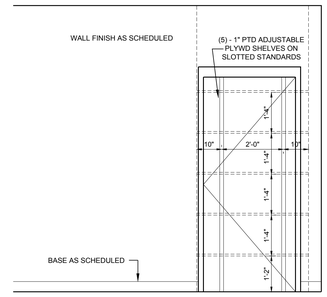
TACKBORD COLOR: NELSON ADAMS/ KOROSEAL
FRENCH BLUE B321-71



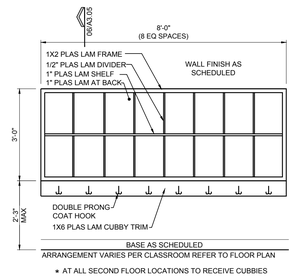
01 TYPICAL MARKER BOARD ELEVATION
SCALE 1/2" = 1'-0"



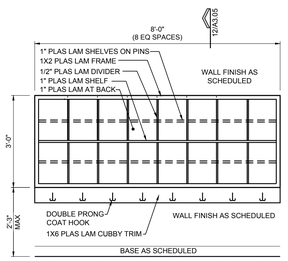
02 TYPICAL CLASSROOM ELEVATION
SCALE 1/2" = 1'-0"



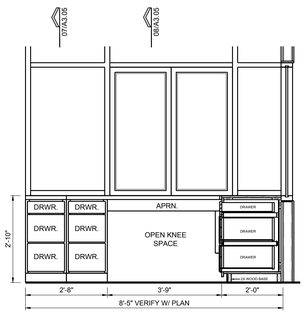
03 TYPICAL CLASSROOM ELEVATION
SCALE 1/2" = 1'-0"



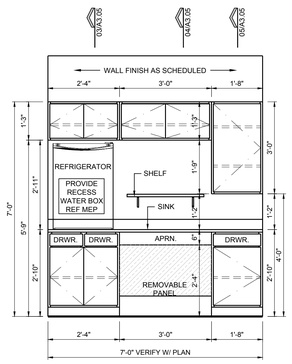
04 CUBICLES ELEVATION 3RD 4TH & 5TH
SCALE 1/2" = 1'-0"



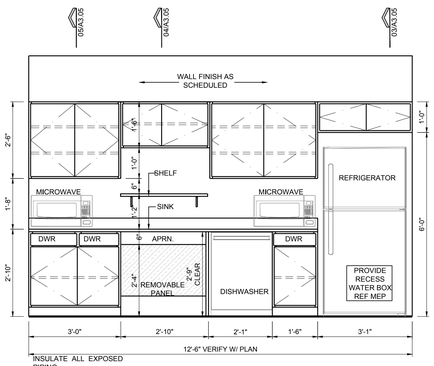
05 TYPICAL PRE-K CUBICLES ELEVATION
SCALE 1/2" = 1'-0"



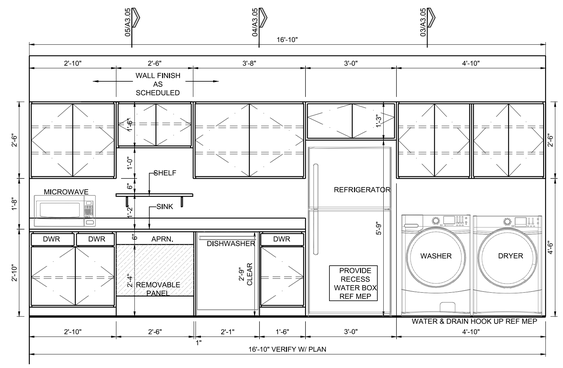
06 CABINET ELEVATION
SCALE 1/2" = 1'-0" @ RECEPTION



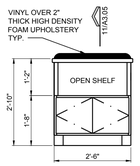
07 CABINET ELEVATION
SCALE 1/2" = 1'-0"



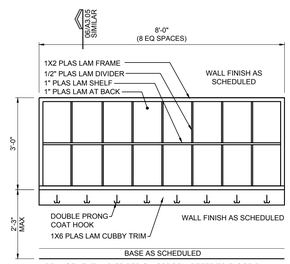
08 CABINET ELEVATION
SCALE 1/2" = 1'-0"



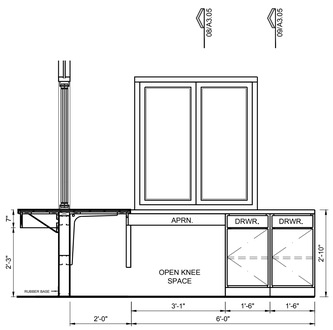
09 CABINET ELEVATION
SCALE 1/2" = 1'-0"



10 CABINET ELEVATION
SCALE 1/2" = 1'-0"



11 CUBICLES ELEVATION K,1ST & 2ND
SCALE 1/2" = 1'-0"



12 CABINET ELEVATION
SCALE 1/2" = 1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools

REGISTERED ARCHITECT
DAVID A. MONREAL
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STATE OF TEXAS
5/16/2019

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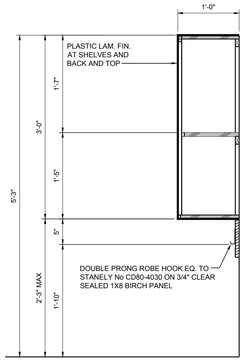
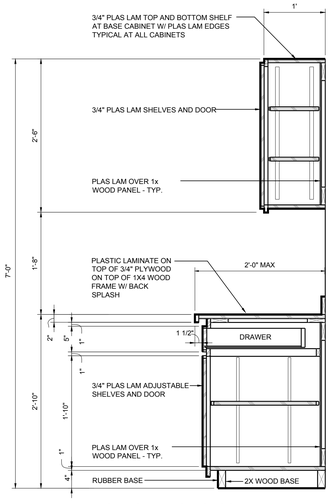
Project Architect: David Monreal, AIA
Drawn By: RB, JA
Job No.: IDEA 2020 Phase I
Sheet: A3.04

PLASTIC LAMINATE COLORS
COUNTERTOPS: WILSONART 4941K-18 COSMIC STRANDZ
FACES: WILSONART D315-60 PLATINUM
ALL MILLWORK TO HAVE PLYWOOD CORE



06 CABINET SECTION
SCALE 1" = 1'-0"



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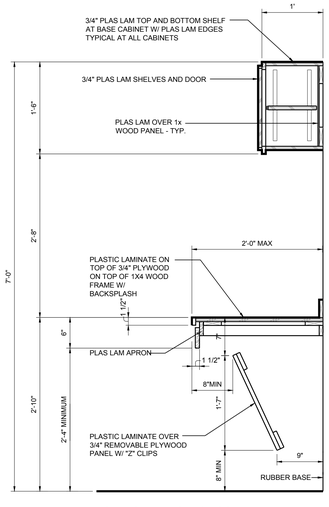

04 CABINET SECTION
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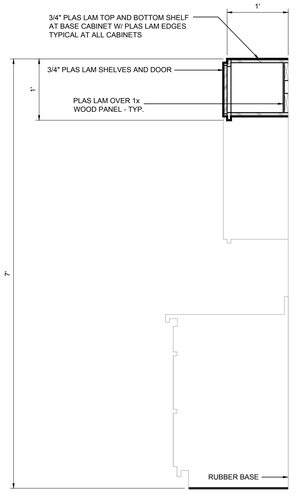
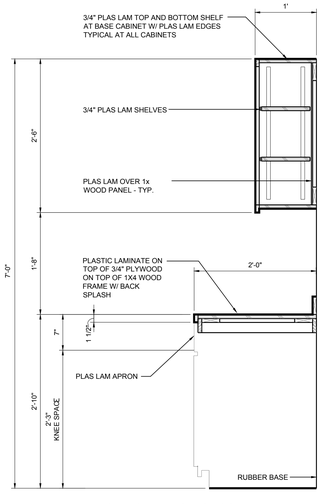


03 CABINET SECTION
SCALE 1" = 1'-0"



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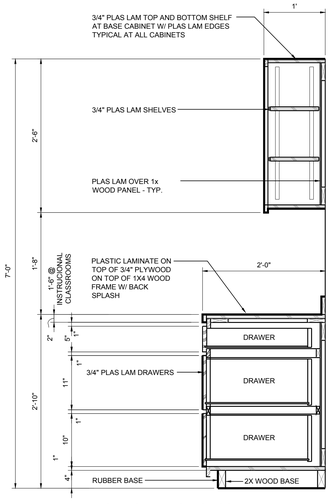
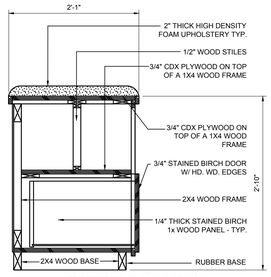


01 CABINET SECTION
SCALE 1" = 1'-0"

12 CABINET SECTION
SCALE 1" = 1'-0"



11 CABINET SECTION
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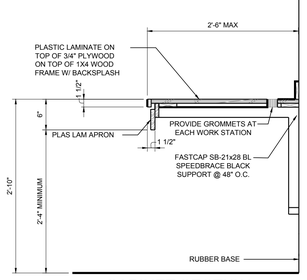

10 CABINET SECTION
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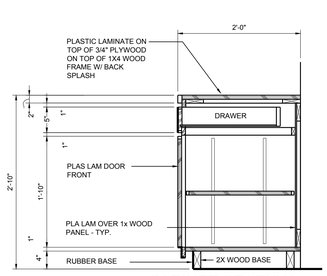

09 CABINET SECTION
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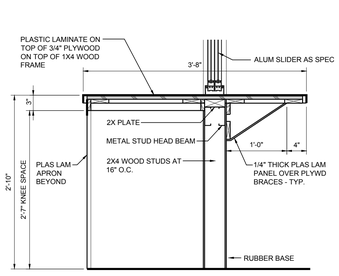

08 CABINET SECTION
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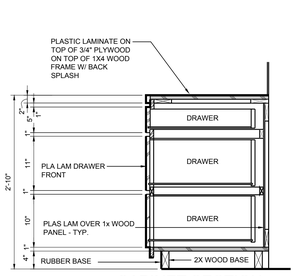

07 CABINET SECTION
SCALE 1" = 1'-0"

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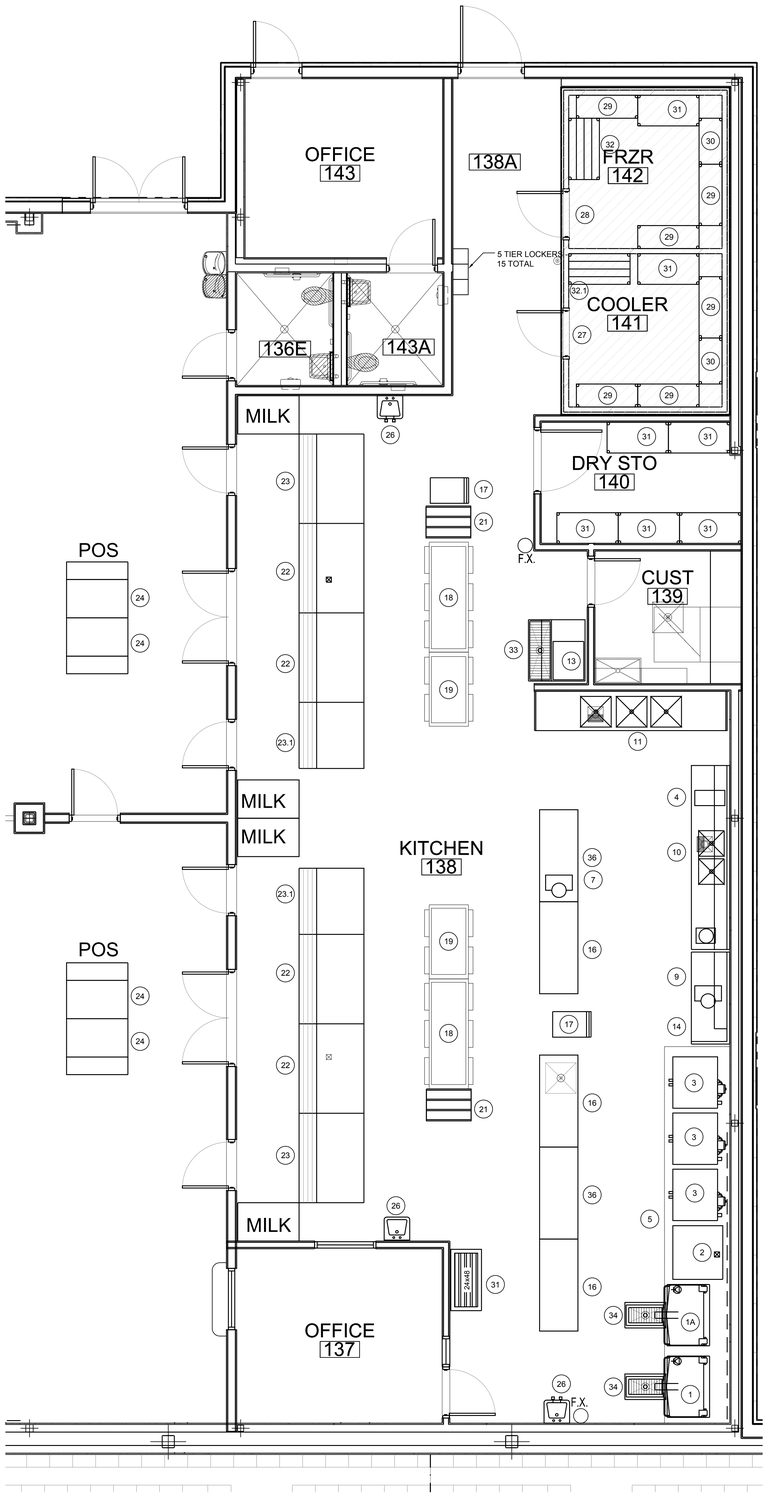
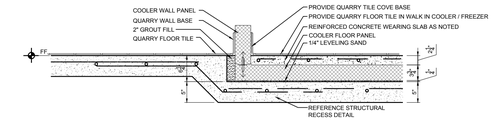
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A3.05



01 KITCHEN EQUIPMENT PLAN

SCALE: 1/4"=1'-0"

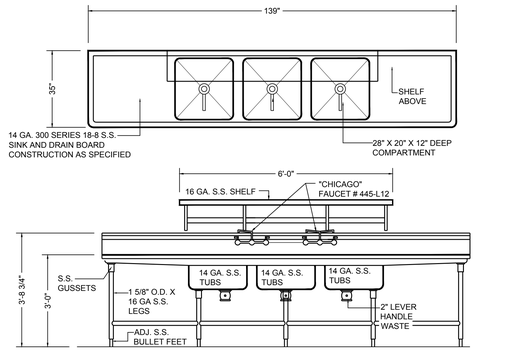


CONCRETE WEARING SLAB NOTE:
PROVIDE A TYPICAL 3,000 PSI CONCRETE MIX WITH A MAXIMUM SLUMP OF 3.1/2". THE SLAB SHOULD BE REINFORCED WITH #3 REBAR AT 12" ON CENTER. THE REBAR SHOULD BE SET A MID DEPTH OF THE SLAB. THE REBAR NEEDS TO BE KEPT PROPERLY SUPPORTED DURING CONCRETE PLACEMENT. ADDITIONALLY, THE CONCRETE MIX DESIGN SHOULD INCLUDE 1.0 TO 1.1/2 LBS OF FIBERMESH REINFORCEMENT PER CUBIC YARD OF READY MIX CONCRETE

WALK IN COOLER FREEZER FLOOR DETAIL

03 WALK IN COOLER FREEZER FLOOR DETAIL

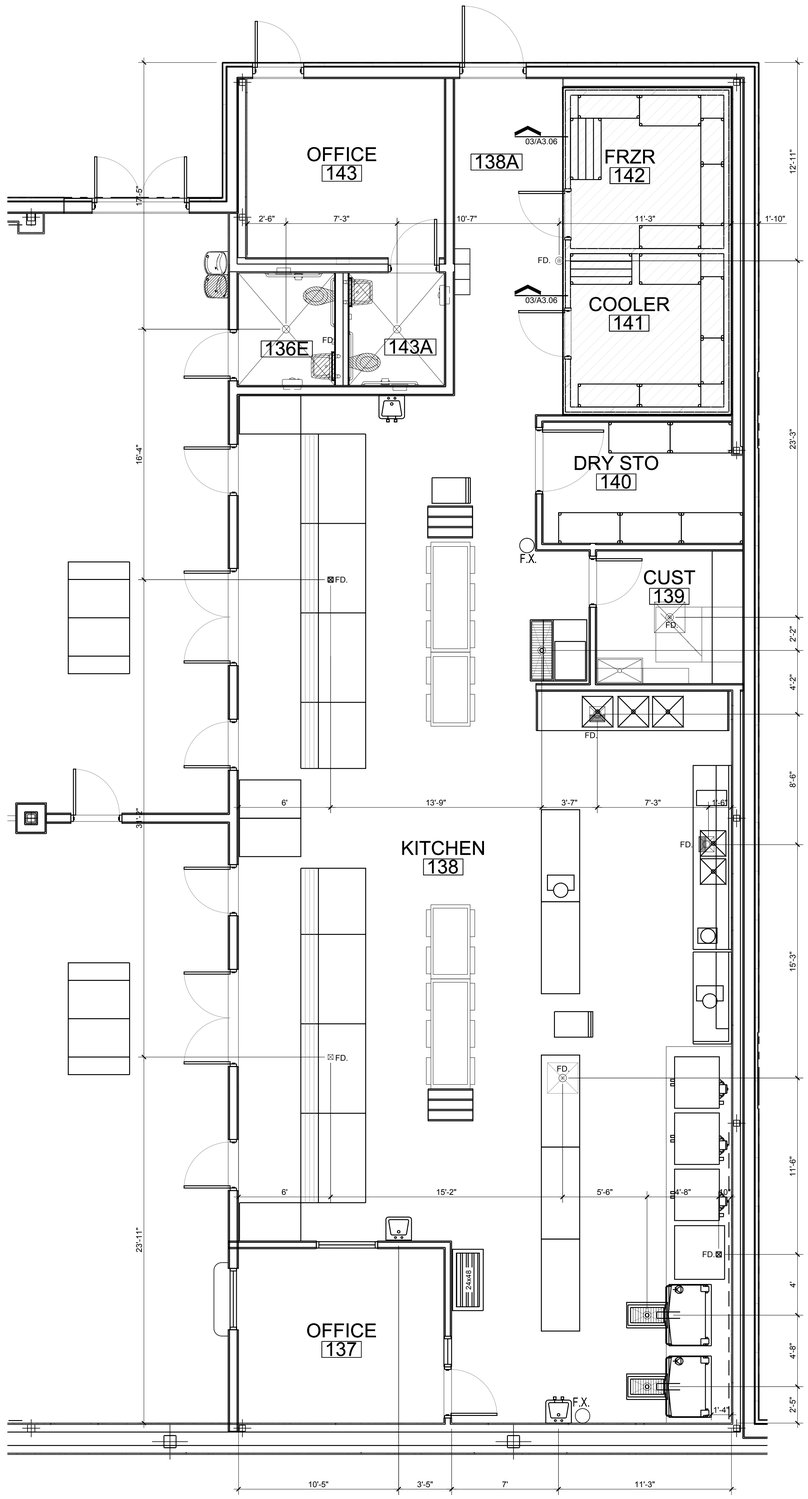
SCALE: 1/4"=1'-0"



11 POT SINK WITH SHELF OVER

SCALE 1/2" = 1'-0"

EQUIPMENT LEGEND		
No.	NAME:	MODEL NUMBER:
1	40 GALLON BRAISER	VULCAN MODEL VE40
1A	40 GALLON BRAISER	VULCAN MODEL VE40
2	COMBI OVEN STEAMER	VULCAN MODEL ABC7E-208
3	DOUBLE STACK CONVECTION OVEN	VULCAN MODEL VC44ED
4	HOT WATER DISPENSER	HATCO MODEL AWD-12
5	KITCHEN EXHAUST HOOD	REFER TO MEP
6	NOT USED	
7	MEAT SLICER	HOBART MODEL EDGE12-11
8	NOT USED	
9	FOOD PROCESSOR	VEGGIE ROBOT COUPE
10	144" X 30" WORK TABLE / 2 COMPARTMENT SINK	ADVANCE TABCO MODEL CUSTOM
11	THREE COMPARTMENT SINK	ADVANCE TABCO MODEL FSMOD-X
12	NOT USED	
13	ICE MACHINE	MANITOWOC MODEL IDT-0500A
14	72" X 30" WORK TABLE	ADVANCE TABCO MODEL SS-306
15	NOT USED	
16	72" X 30" WORK TABLE	ADVANCE TABCO MODEL SS-306
17	UTILITY CART	RUBBERMAID COMMERCIAL PRODUCTS
18	PASS THRU HEATED CABINET	TRAULSEN MODEL AHF332WP-FHS
19	PASS THRU REFRIGERATOR	TRAULSEN MODEL AHT232WPUT-FHS
20	NOT USED	
21	CAN RACK	NEW AGE MODEL 1250
22	HOT FOOD SERVING UNIT	ADVANCE TABCO MODEL BASETAB-X
23	FROST TOP SERVING UNIT	ADVANCE TABCO MODEL BASETAB-X
23.1	52" X 37" WORK TABLE / CABINET (SERVING LINE)	ADVANCE TABCO MODEL BASETAB-X
24	30" X 48" WORK TABLE / CABINET (CASHIER STAND)	ADVANCE TABCO MODEL BASETAB-X
25	NOT USED	
26	HAND SINK	ADVANCE TABCO MODEL 7-PS-90
27	WALK-IN REFRIGERATOR - 10'X10'	AMERICAN PANEL CORPORATION
28	WALK-IN FREEZER - 10'-10"X5'-8"	AMERICAN PANEL CORPORATION
29	STORAGE SHELVING 48" X 24"	METRO MODEL 5Q357G3
30	STORAGE SHELVING 36" X 18"	METRO MODEL 5Q357G3
31	STORAGE SHELVING 48" X 24"	METRO MODEL 5Q357G3
32	DUNNAGE RACKS 48" X 24"	NEW AGE MODEL 2009
32.1	DUNNAGE RACKS 48" X 24"	NEW AGE MODEL 2009
33	STAINLESS STEEL FLOOR TROUGH AND GRATE 48"X18"	ADVANCE TABCO MODEL FFTG-1848
34	STAINLESS STEEL FLOOR TROUGH AND GRATE 30"X18"	ADVANCE TABCO MODEL FFTG-1830
35	NOT USED	
36	72" X 30" WORK TABLE	ADVANCE TABCO MODEL SS-306



02 KITCHEN FLOOR DRAIN DIMENSION PLAN

SCALE: 1/4"=1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
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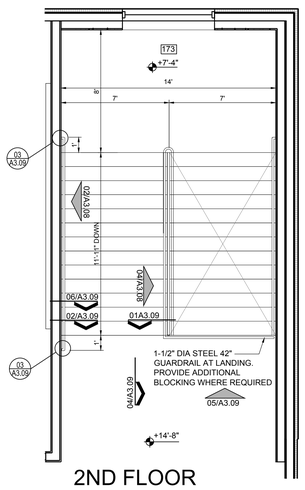
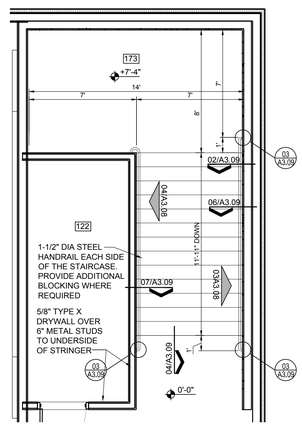
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A3.06



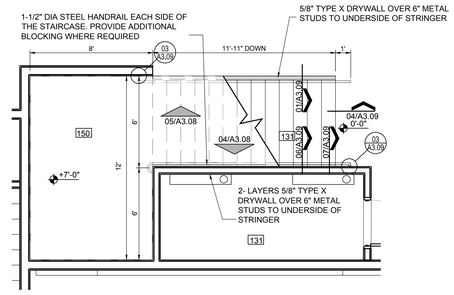
2ND FLOOR
06 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"



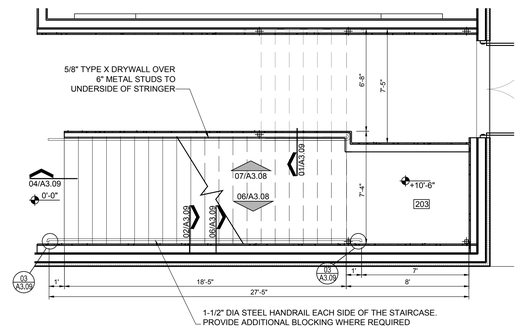
1ST FLOOR
05 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"

2ND FLOOR
04 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"

2ND FLOOR
02 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"



1ST FLOOR
03 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"



1ST FLOOR
01 STAIRWELL PLAN
SCALE: 1/4" = 1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
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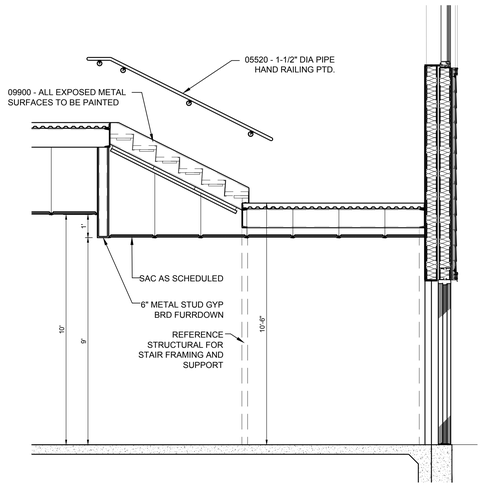
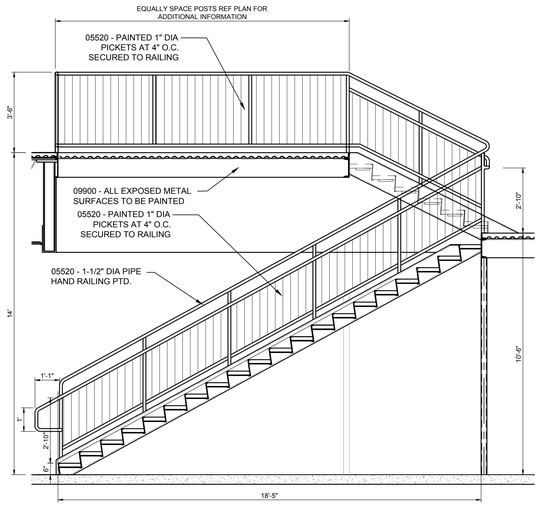
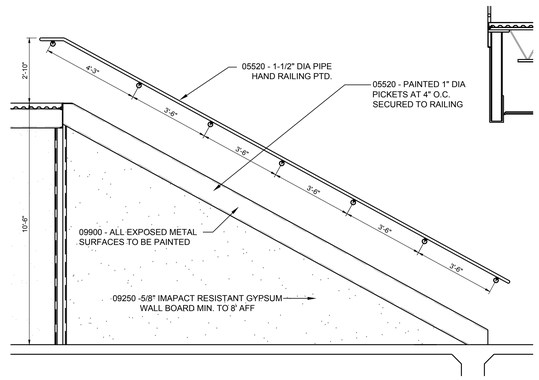
Sheet:	A3.07



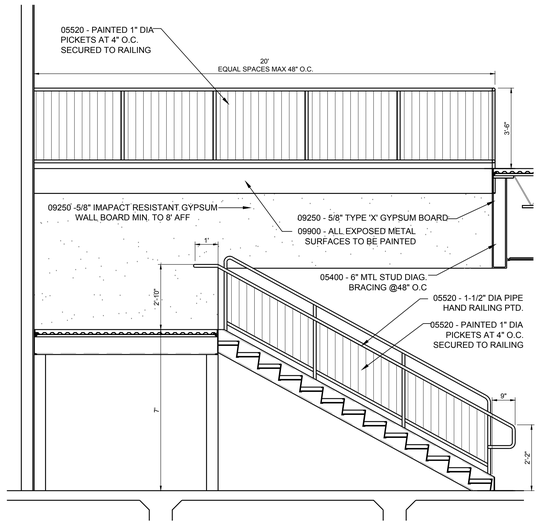
08 STAIRWELL ELEV/SECTION
SCALE: 1/4" = 1'-0"



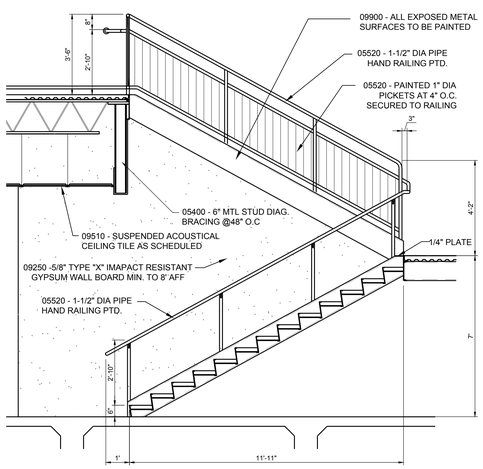
07 STAIRWELL ELEV/SECTION
SCALE: 1/4" = 1'-0"



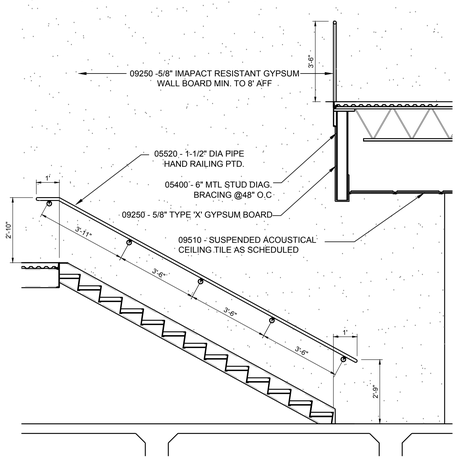
06 STAIRWELL ELEV/SECTION
SCALE: 1/4" = 1'-0"



05 STAIRWELL ELEV/SECTION
SCALE: 1/2" = 1'-0"



04 STAIRWELL ELEV/SECTION
SCALE: 1/2" = 1'-0"



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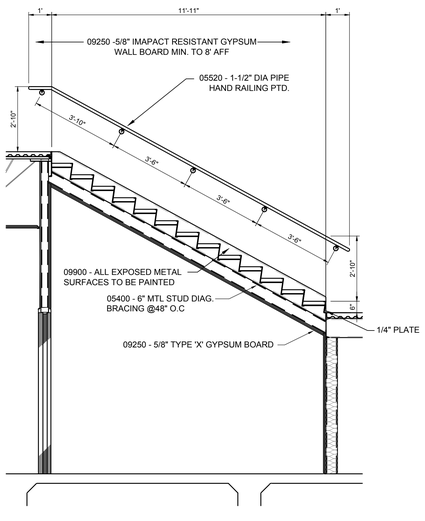
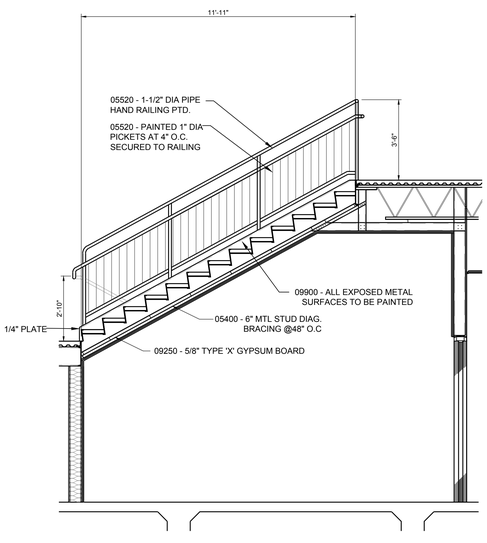


02 STAIRWELL ELEV/SECTION
SCALE: 1/2" = 1'-0"



01 STAIRWELL ELEV/SECTION
SCALE: 1/2" = 1'-0"

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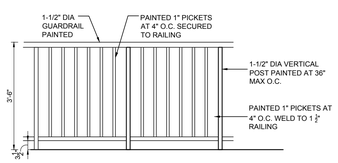
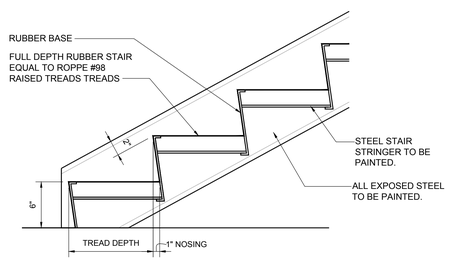
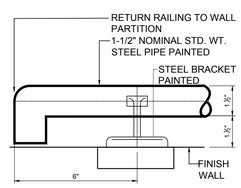
Drawn By: RB, JA
Job No. IDEA 2020 Phase I
Sheet: A3.08



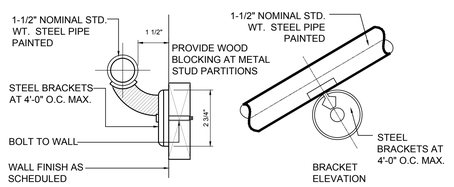
05 GUARDRAIL ELEV.
SCALE: 1/2" = 1'-0"
AT SECOND FLOOR LANDING. TYPICAL



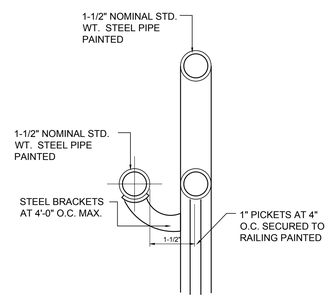
04 STAIRTREAD SECTION
SCALE: 1" = 1'-0"



03 HANDRAIL DETAIL
SCALE: 3" = 1'-0"



02 HANDRAIL DETAIL
SCALE: 3" = 1'-0"



01 GUARDRAIL DETAIL
SCALE: 3" = 1'-0"

07 HANDRAIL DETAIL
SCALE: 3" = 1'-0"

06 JOINT AT WALL PARTITION
SCALE: 1-1/2" = 1'-0"
TYPICAL AT BOTH SIDES OF STAIRS

No.	REVISIONS	BY

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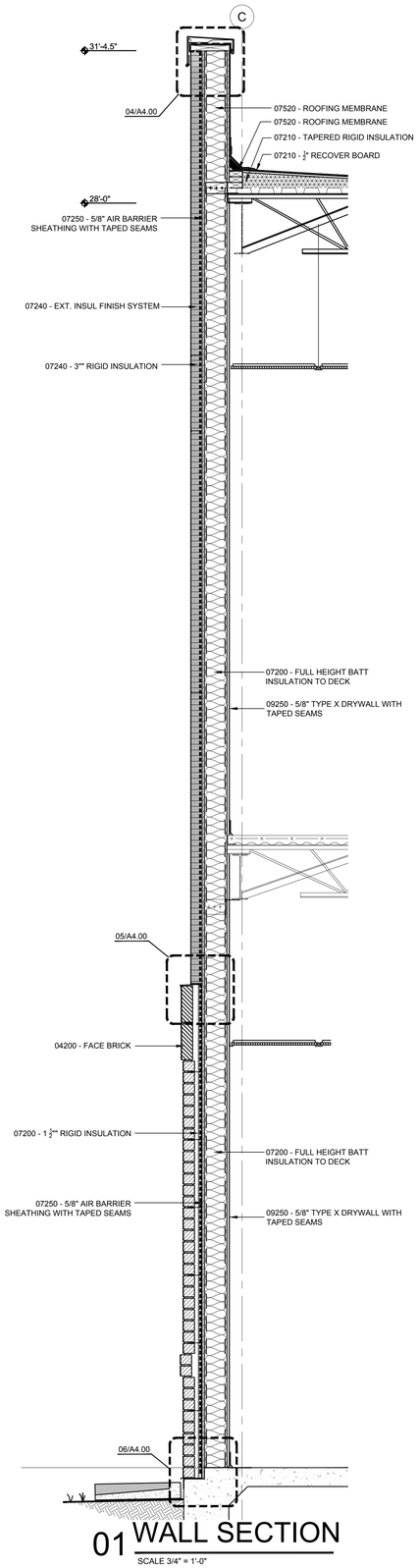
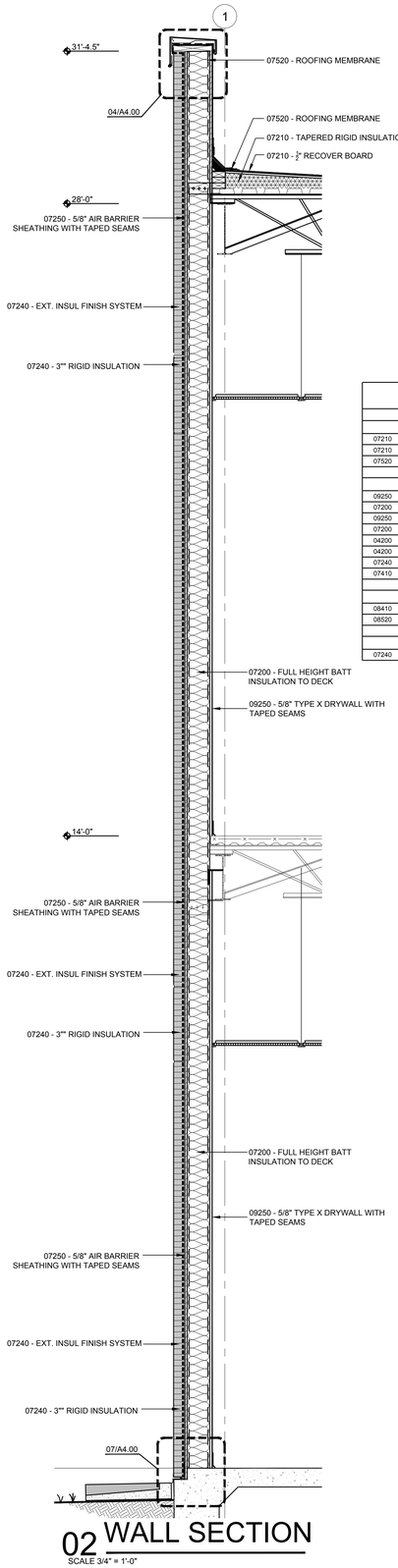
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A3.09



01 WALL SECTION

SCALE 3/4" = 1'-0"



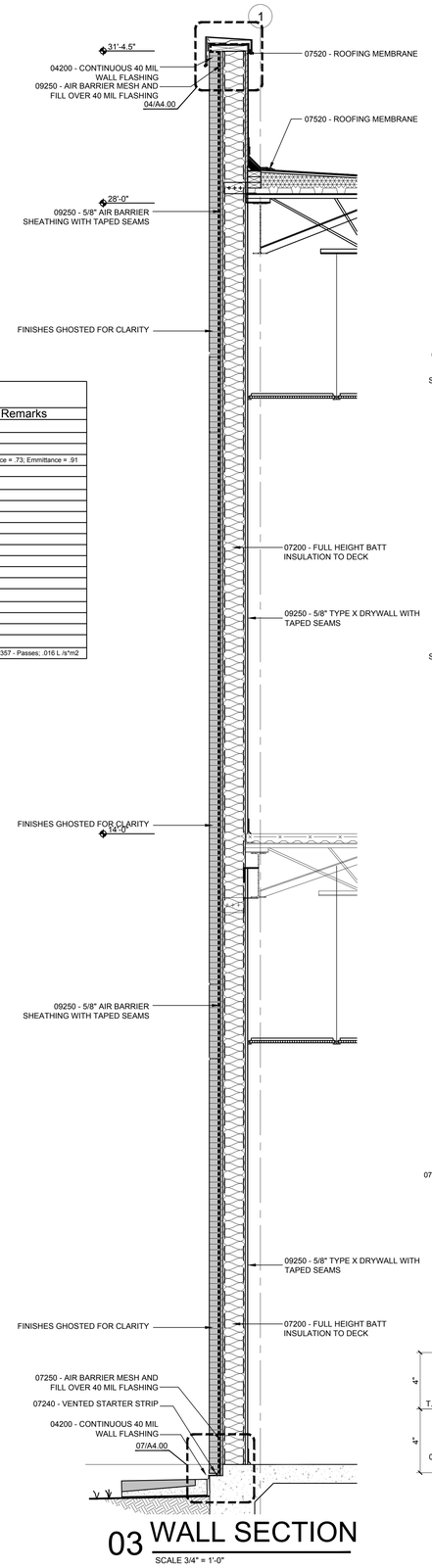
02 WALL SECTION

SCALE 3/4" = 1'-0"

IECC COMPONENT WALL SECTIONS

IECC Component Schedule - Prescriptive

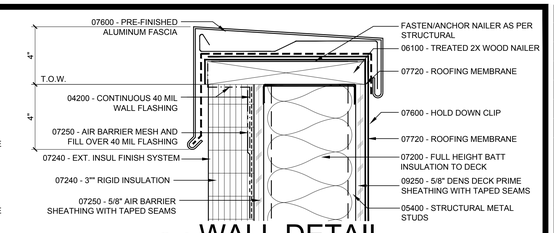
	Component Name	Design Material	Thermal Value	A	B	C	Remarks
	Roof						
07210	Tapered Rigid Insulation - Average	Jones Manville - Enrgy 3	Average R-Value = 34.2				
07210	1/2" Recover Board	GP DensDek Prime	R-Value = .56				
07520	Modified Bitumen Cap Sheet	Garland Roofing - Stress Ply IV					Reflectance = .73; Emmittance = .91
	Wall			A	B	C	
09250	5/8" Type X Drywall	GP 5/8" Type X Drywall	R-Value = .48	0.48	0.48	0.48	
07200	6" Batt Insulation	Owens Corning	R-Value = 19	19	19	19	
09250	5/8" Gyp Sheathing	GP Dens Glass Gold	R-Value = .56	0.56	0.56	0.56	
07200	1.5 Rigid Insulation	Owens Corning Foamular CW	R-Value = 7.5	7.5	7.5		
04200	1" Airspace	1" Airspace	R-Value = 1	1			
04200	3" King Size Face Brick	Acme Brick	R-Value = .33	0.33			
07240	3" Rigid Insulation - EIFS	ICSA-Lite EPS	R-Value = 14.4			14.4	
07410	Metal Wall Panel	MBCI PBU Wall Panel	R-Value = .61		0.61		
	Doors / Windows						
08410	Aluminum Storefront w/ Insulated Glazing	YKK Series YES w/ Solarban 70XL	U-Factor = .0.32 / SHGC = .25				
08520	Aluminum Window w/ Insulated Glazing	YKK Series YES w/ Solarban 70XL	U-Factor = .0.32 / SHGC = .25				
	Air Barrier						
07240	Fluid Applied Vapor Permeable Air Barrier	STO Corp. - StoGuard Gold Coat					ASTM E-2357 - Passes; .016 L /s*m2



03 WALL SECTION

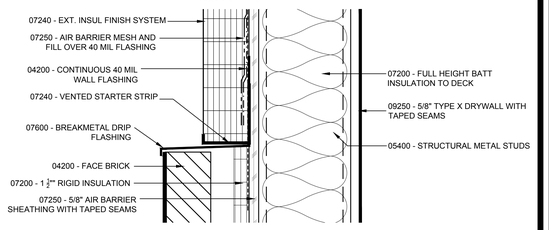
SCALE 3/4" = 1'-0"

THERMAL BARRIER SECTION



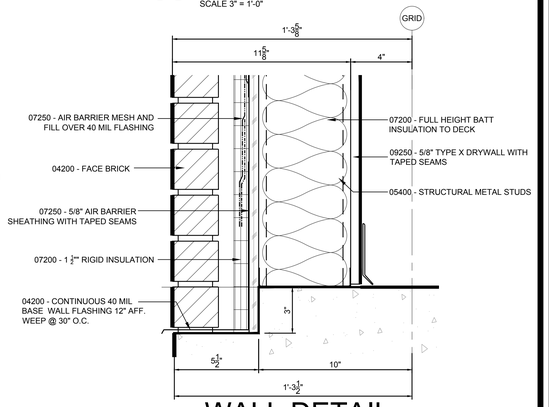
04 WALL DETAIL

SCALE 3" = 1'-0"



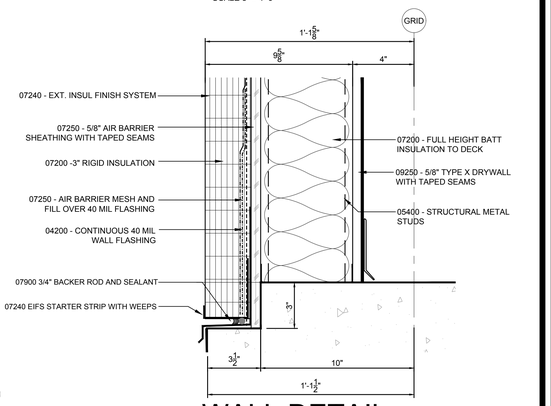
05 WALL DETAIL

SCALE 3" = 1'-0"



06 WALL DETAIL

SCALE 3" = 1'-0"



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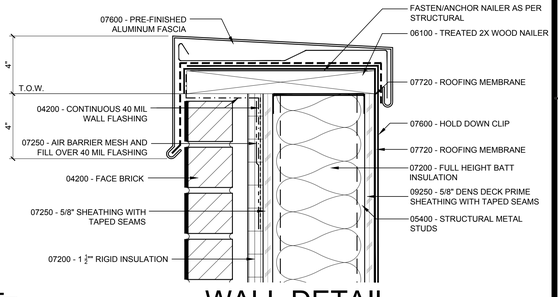
SCALE 3" = 1'-0"



08 WALL DETAIL

SCALE 3" = 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
19556
STATE OF TEXAS
5/16/2019

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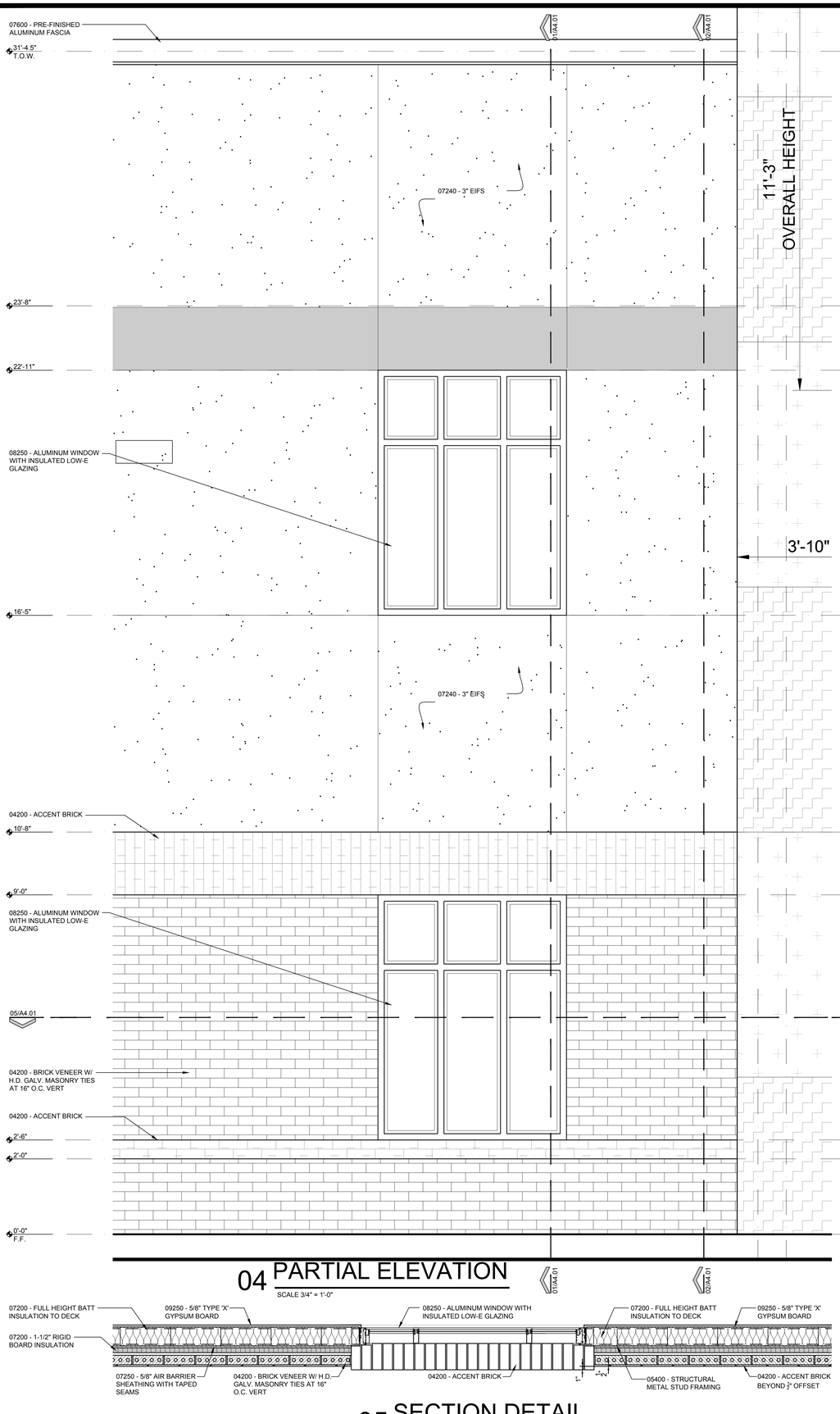
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A4.00

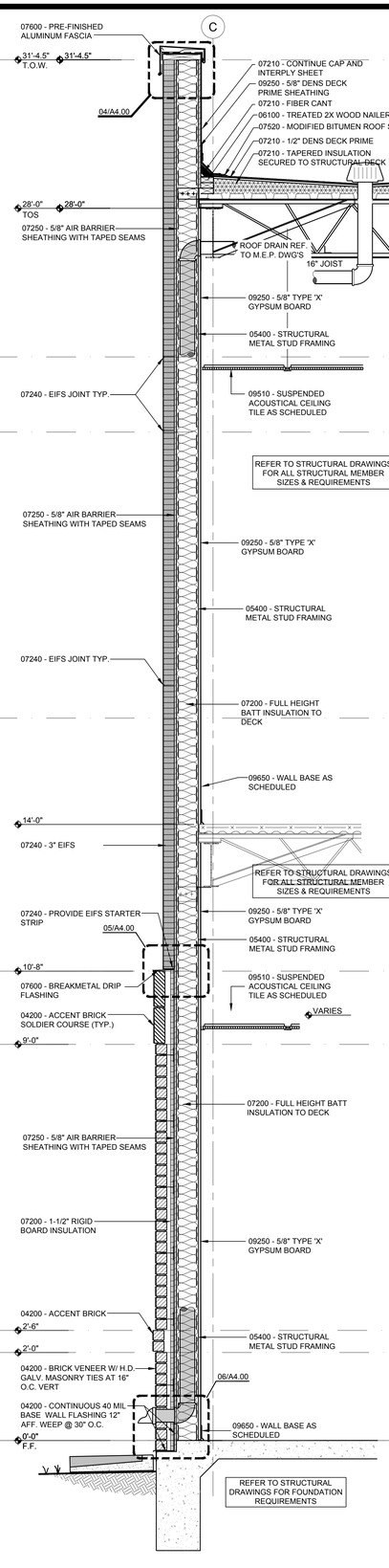


04 PARTIAL ELEVATION

SCALE 3/4" = 1'-0"

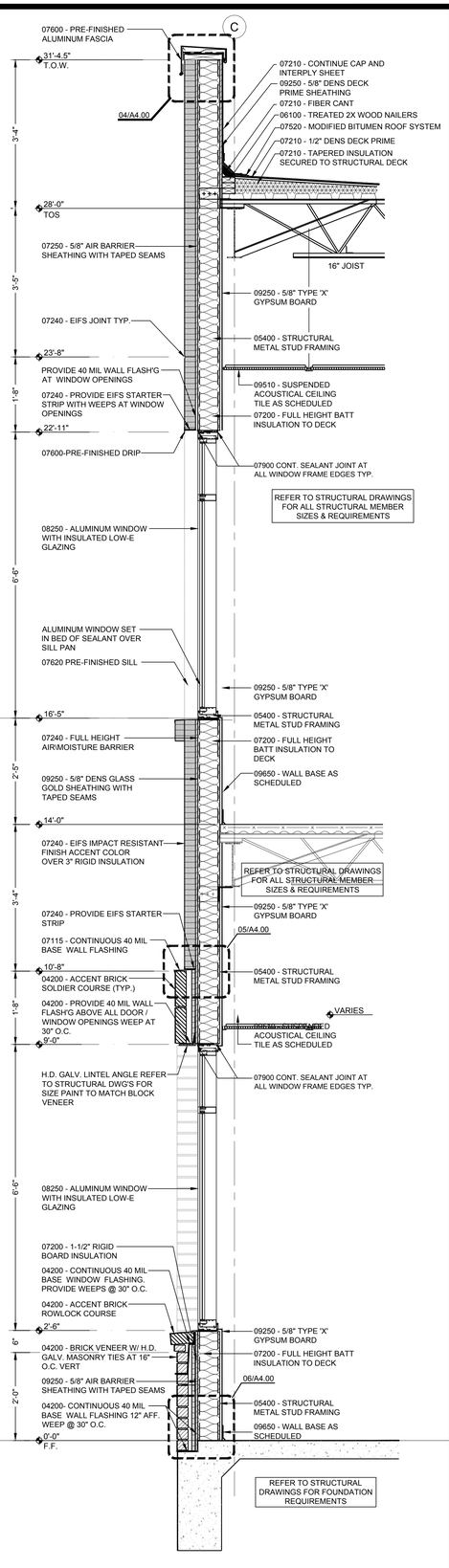
05 SECTION DETAIL

SCALE 3/4" = 1'-0"



02 WALL SECTION

SCALE 3/4" = 1'-0"



01 WALL SECTION

SCALE 3/4" = 1'-0"

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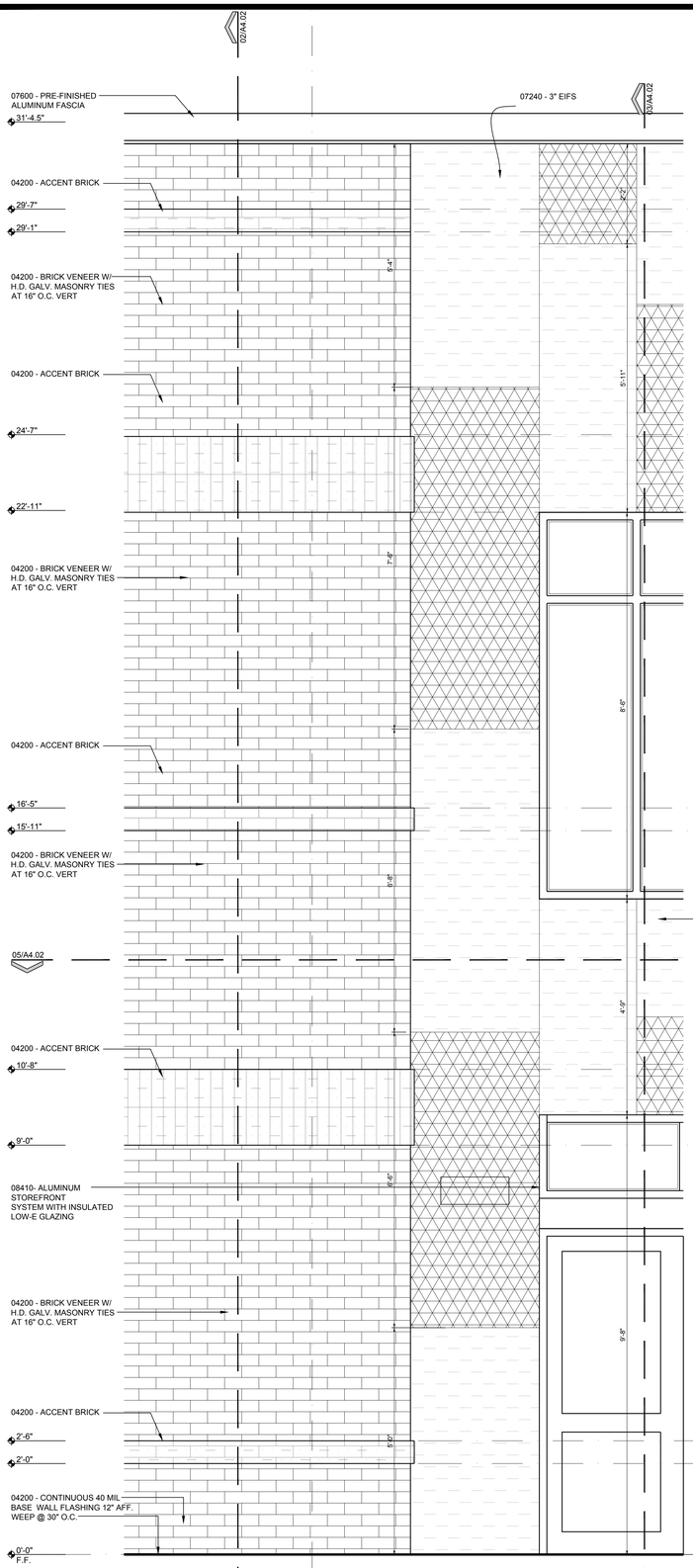
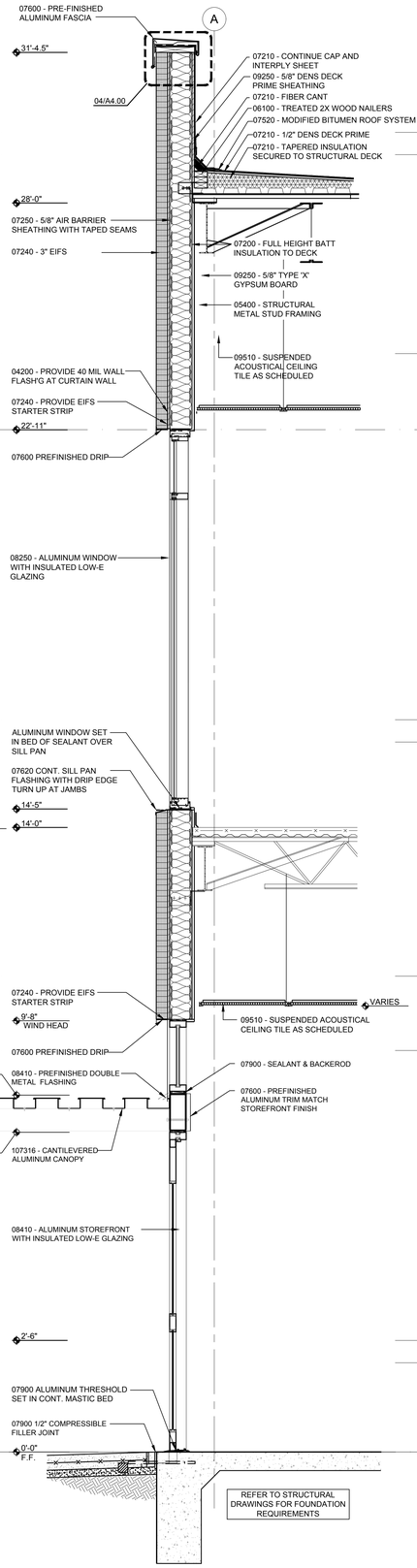
Job No.	IDEA 2020 Phase I
Sheet:	A4.01



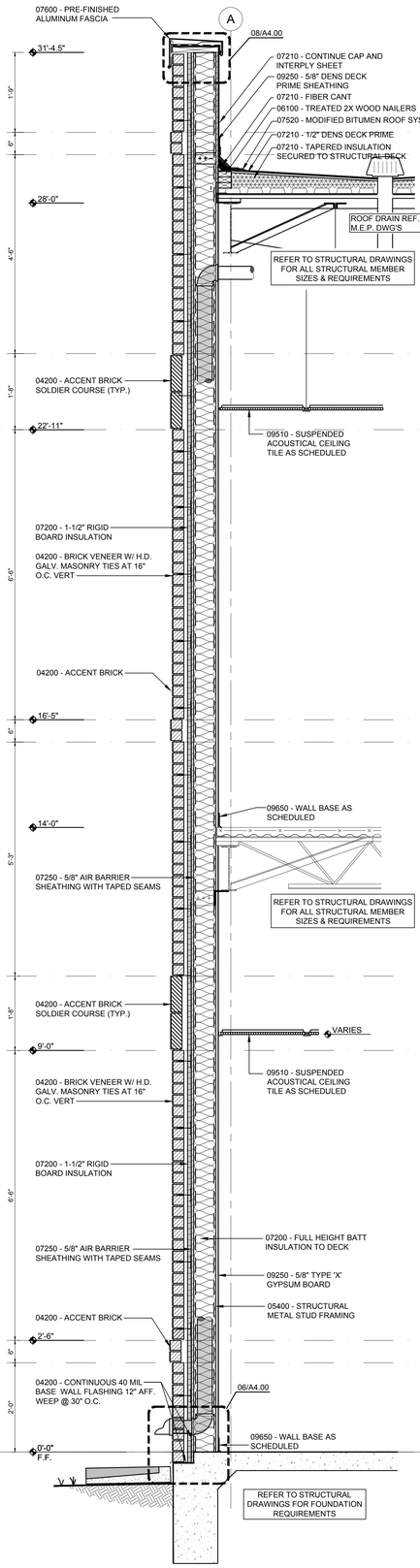
04 PARTIAL ELEVATION

SCALE 3/4" = 1'-0"



03 WALL SECTION

SCALE 3/4" = 1'-0"



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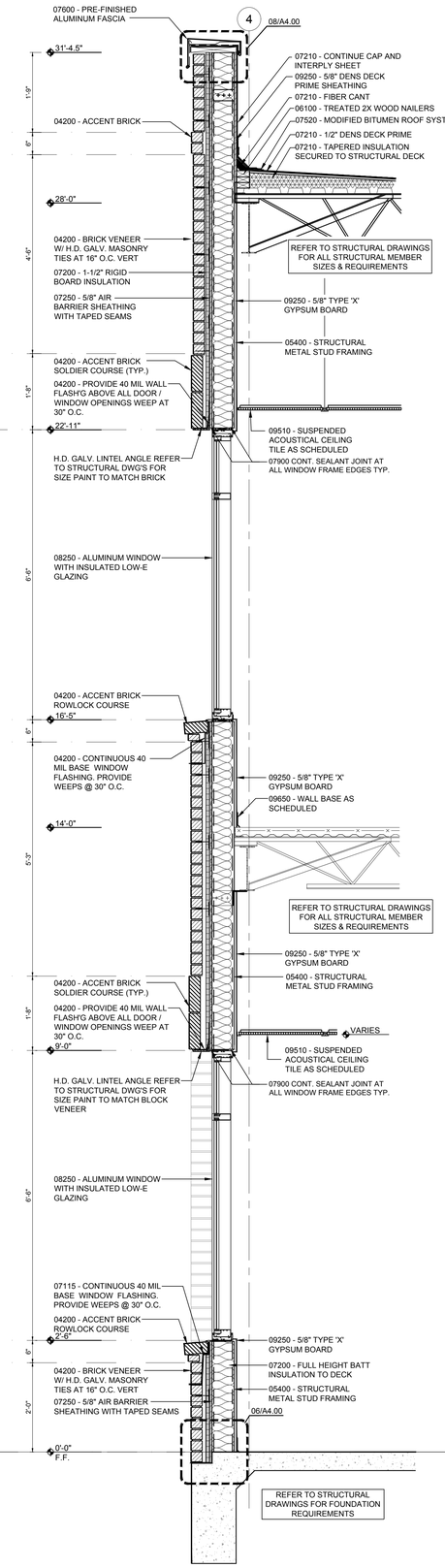

01 WALL SECTION

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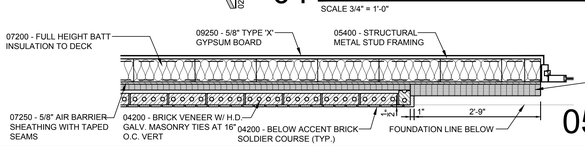

05 PLAN DETAIL

SCALE 3/4" = 1'-0"

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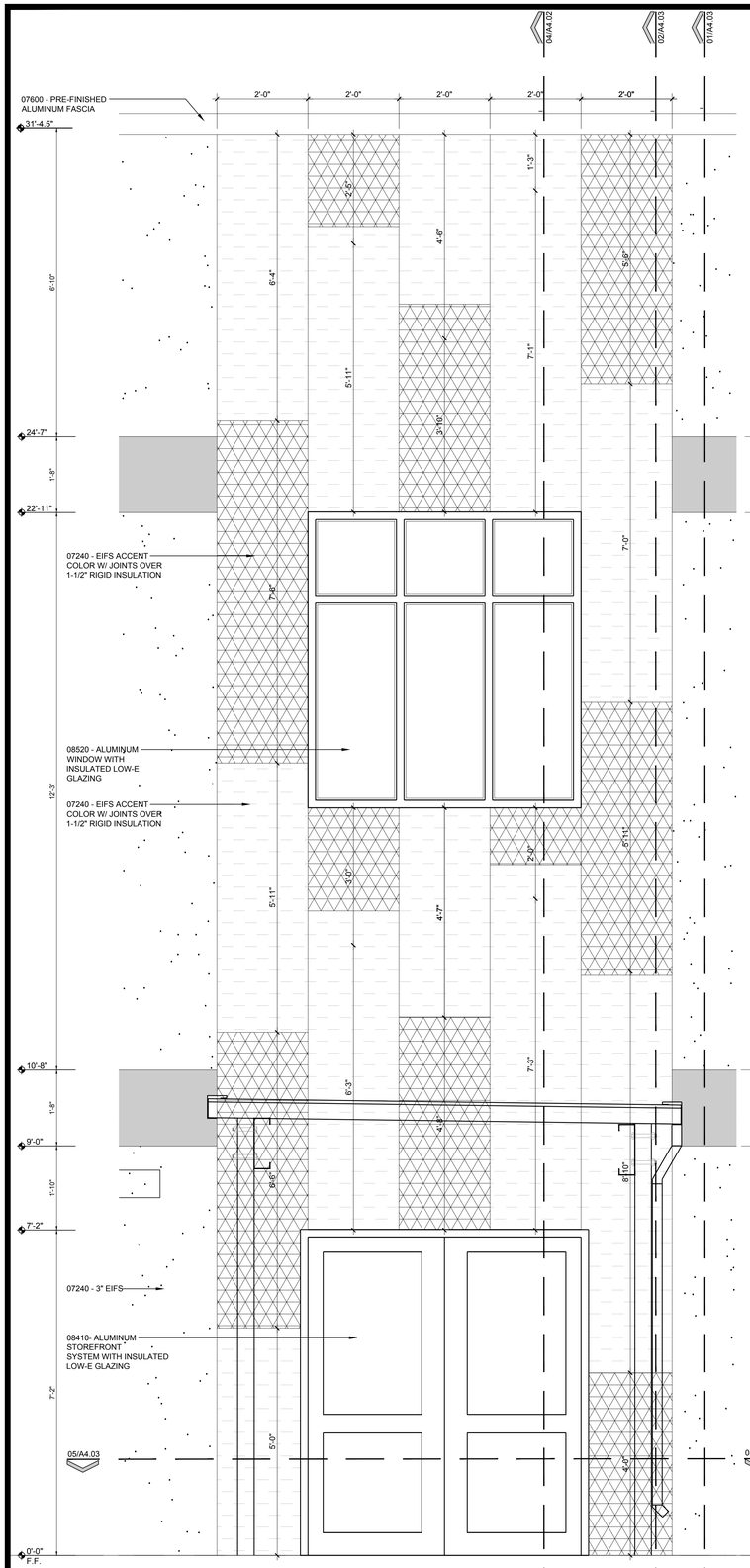

06 PARTIAL ELEVATION

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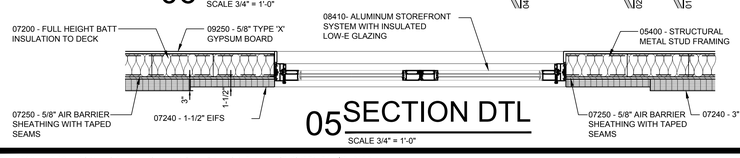

05 SECTION DTL

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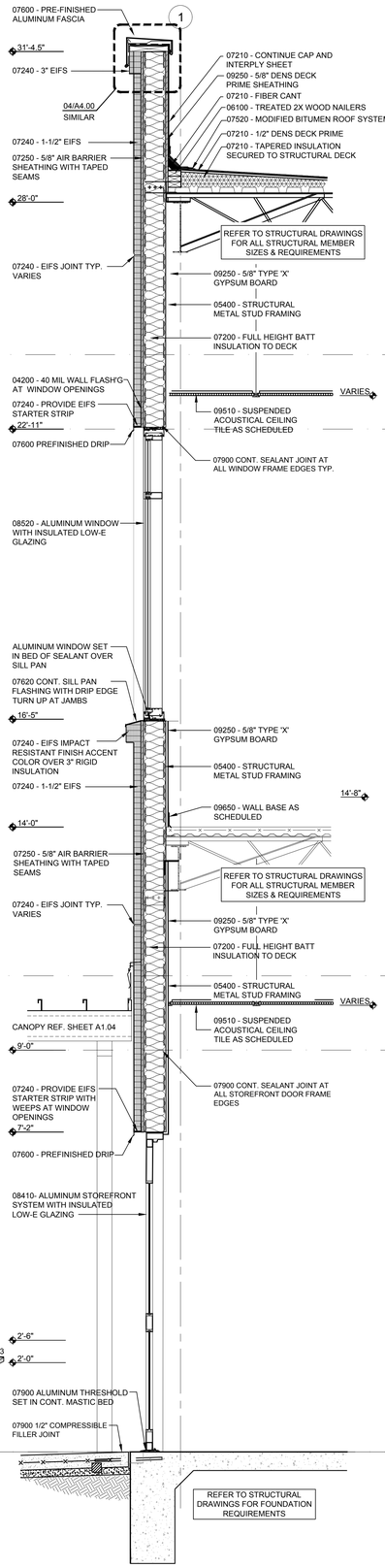

04 WALL SECTION

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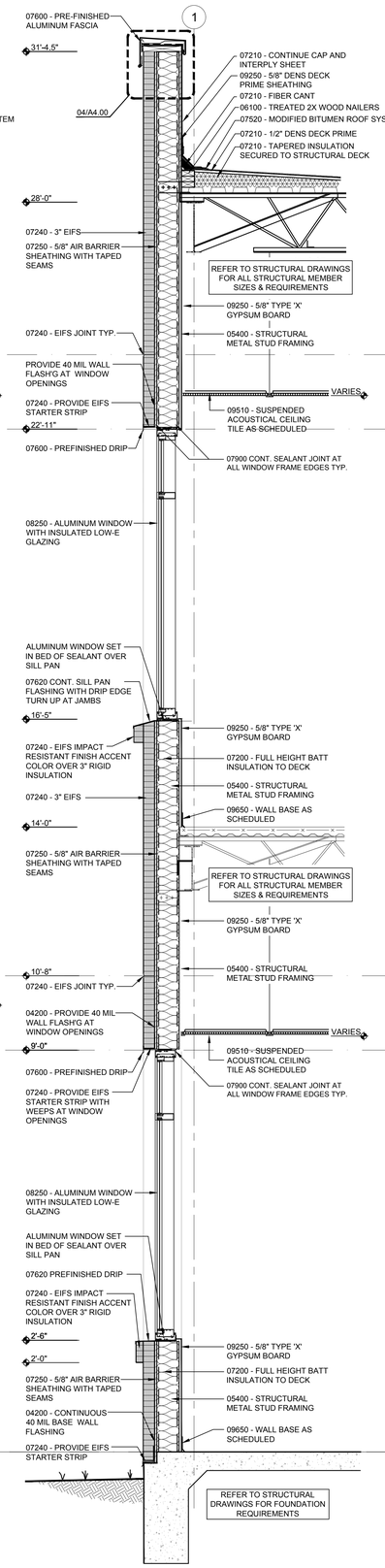

03 WALL SECTION

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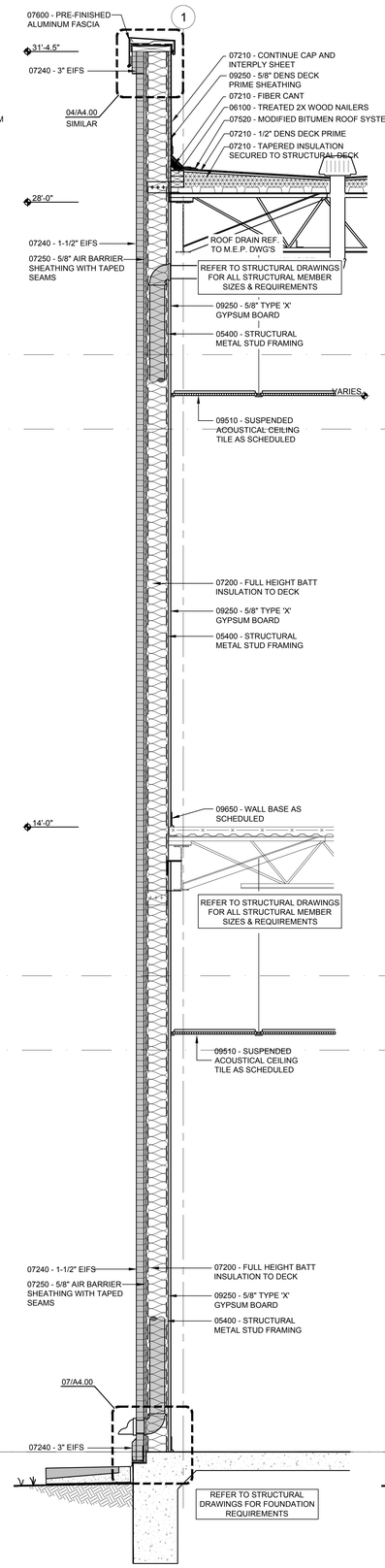
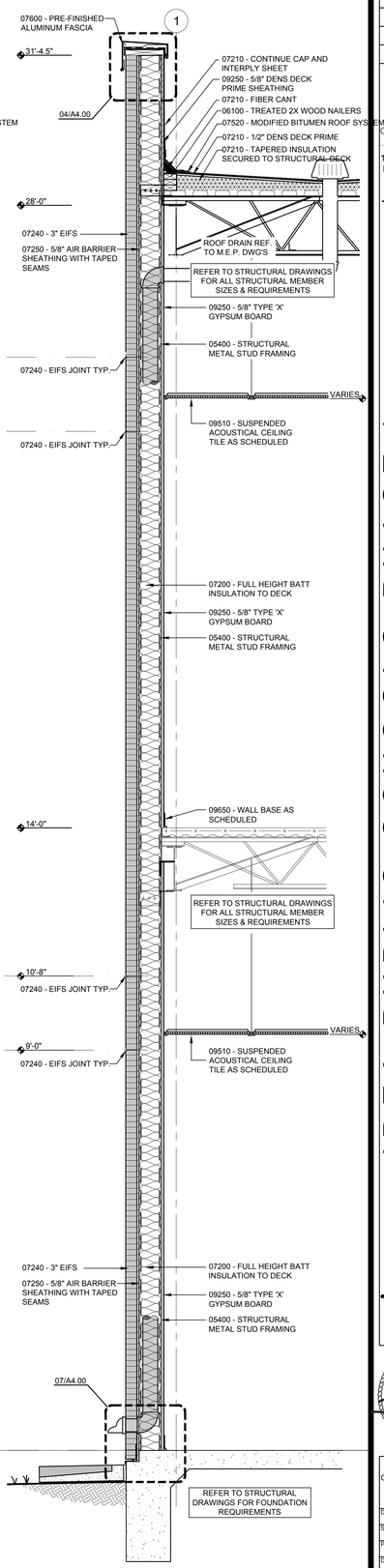


02 WALL SECTION

SCALE 3/4" = 1'-0"



01 WALL SECTION

SCALE 3/4" = 1'-0"

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SCHOOLS PHASE 1

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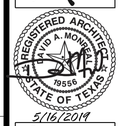

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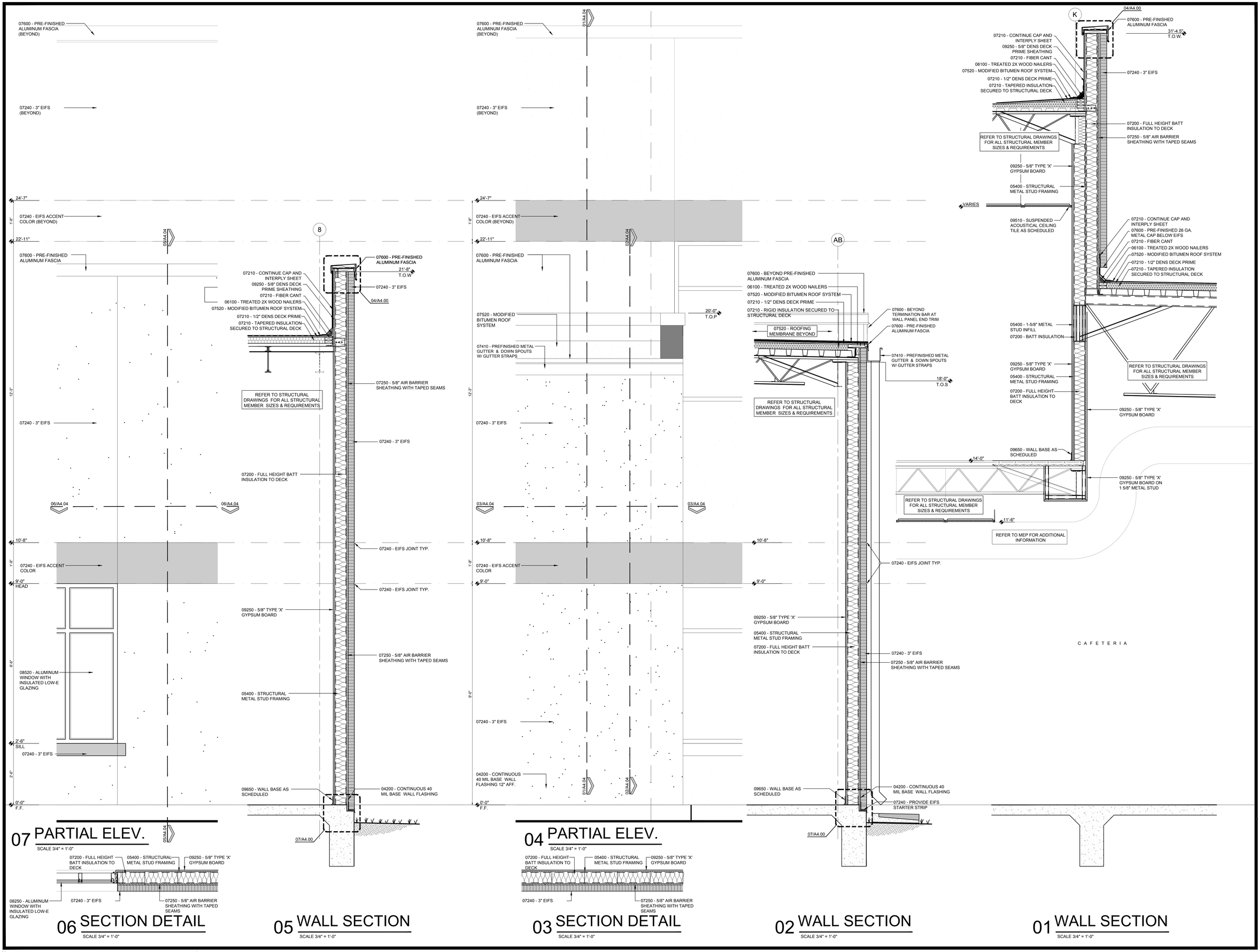

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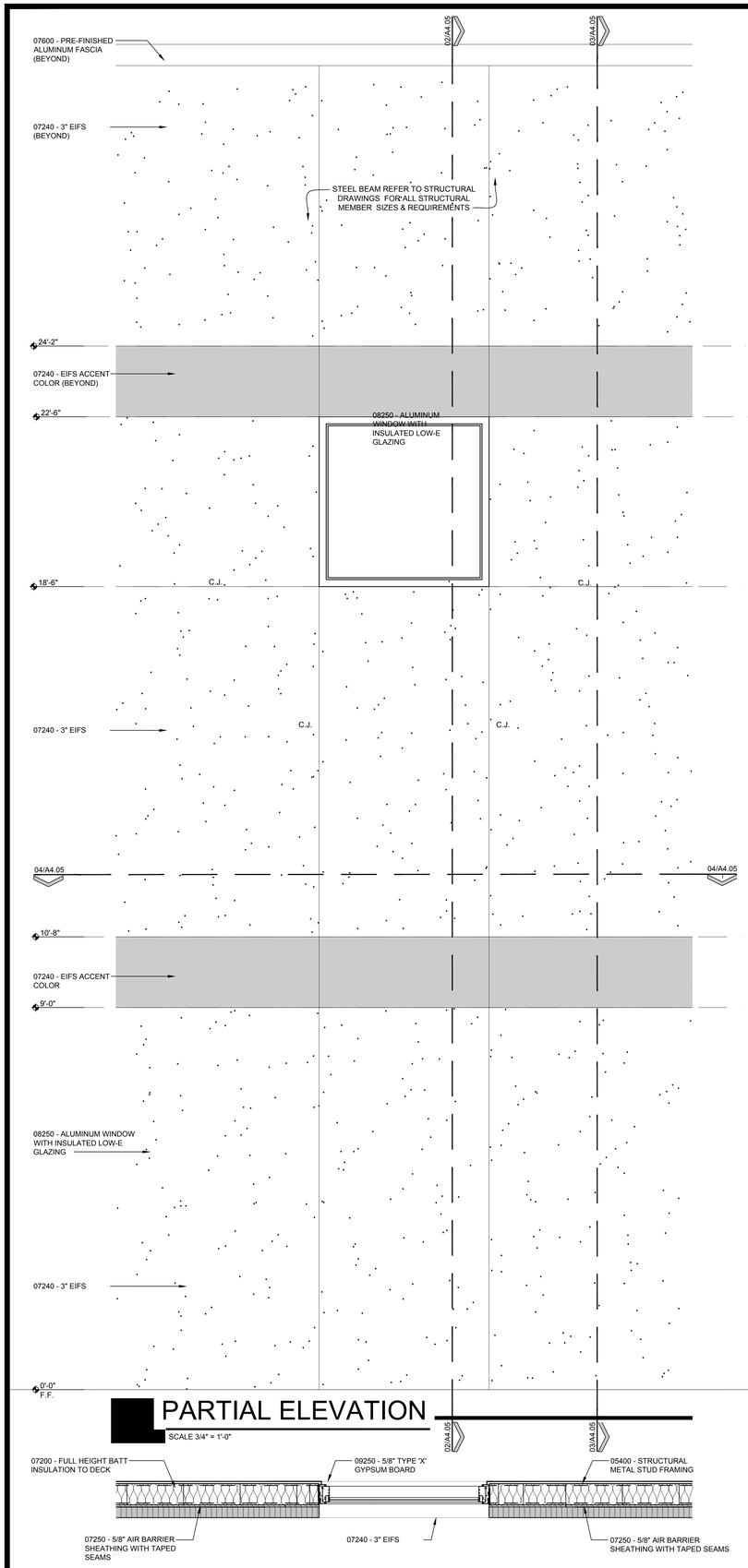
Sheet:	A4.04

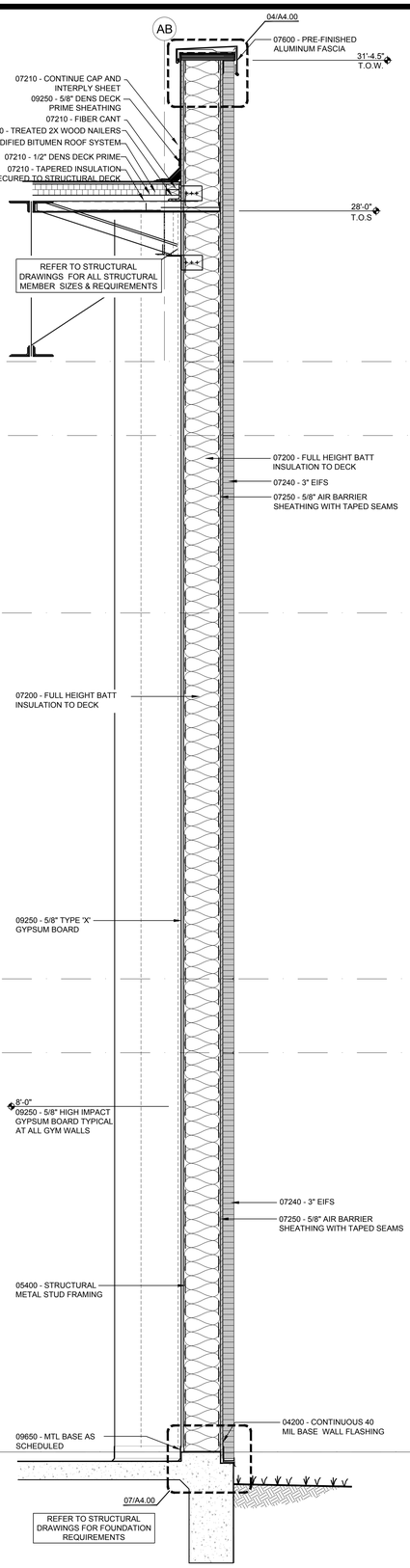


PARTIAL ELEVATION

SCALE 3/4" = 1'-0"

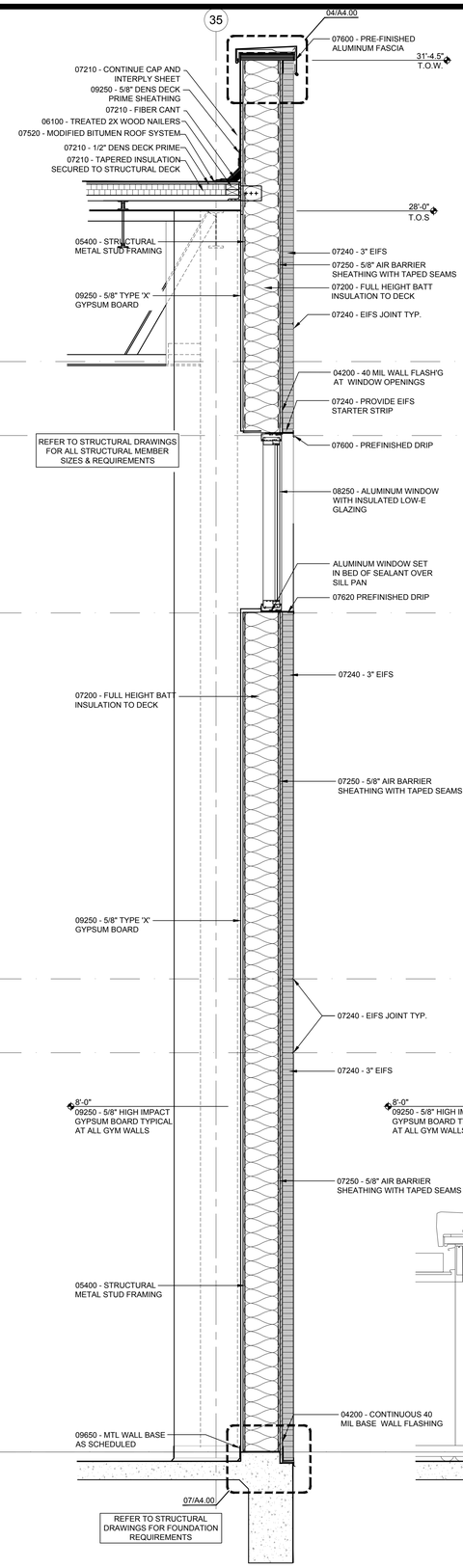
04 SECTION DETAIL

SCALE 3/4" = 1'-0"



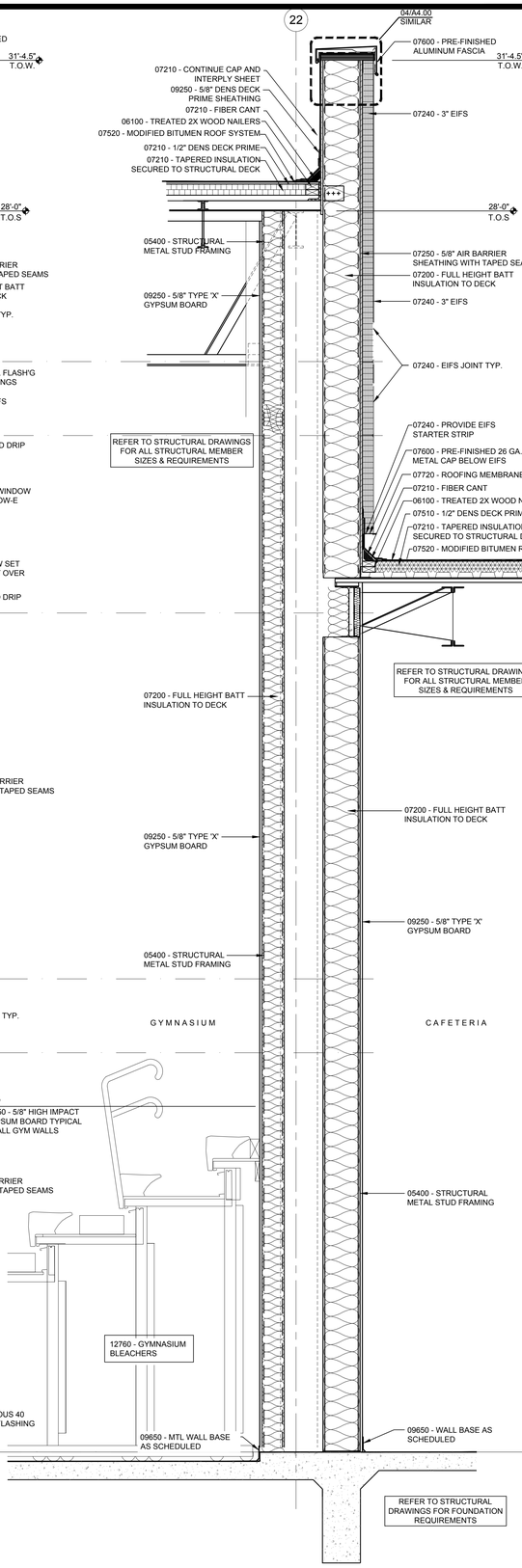
03 WALL SECTION

SCALE 3/4" = 1'-0"



02 WALL SECTION

SCALE 3/4" = 1'-0"



01 WALL SECTION

SCALE 3/4" = 1'-0"

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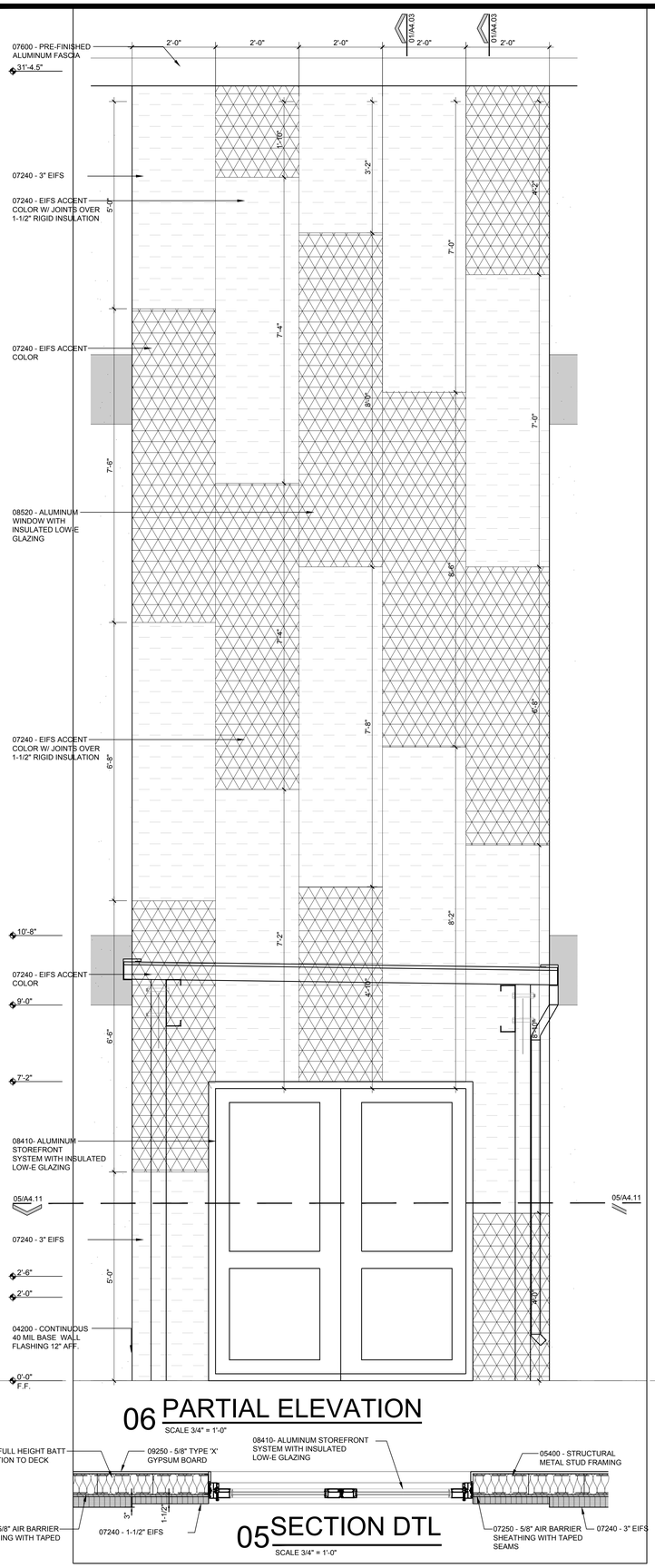
Job No.	IDEA 2020 Phase I
Sheet:	A4.05

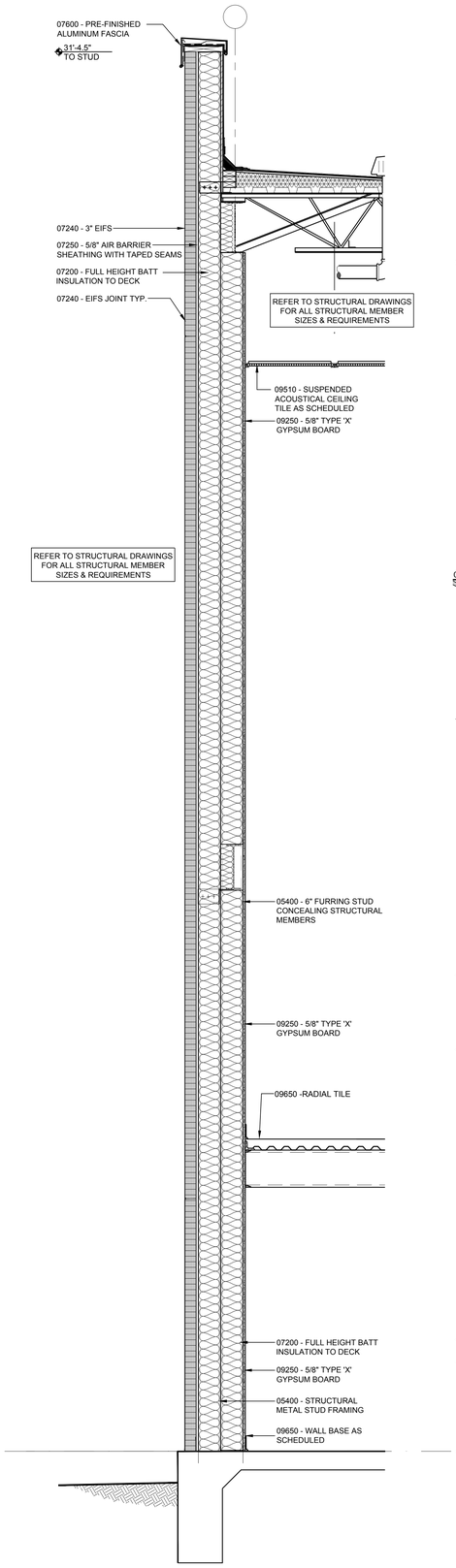


06 PARTIAL ELEVATION

SCALE 3/4" = 1'-0"

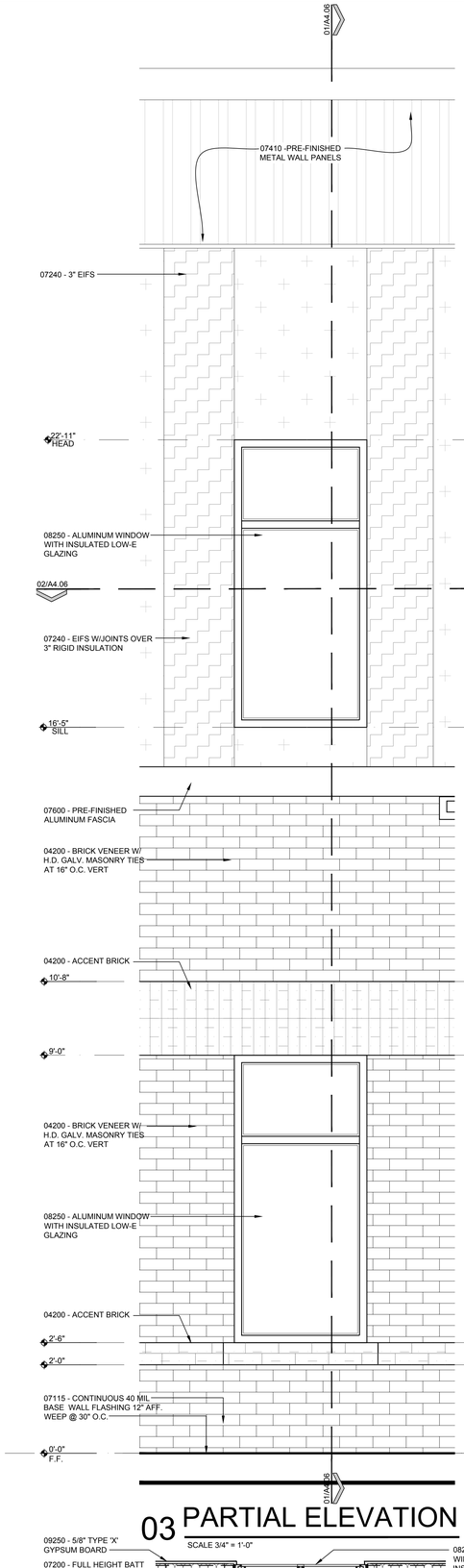
05 SECTION DTL

SCALE 3/4" = 1'-0"



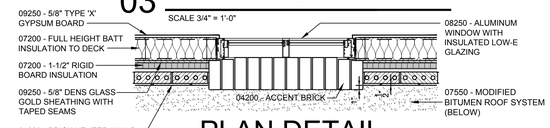
04 WALL SECTION

SCALE 3/4" = 1'-0"



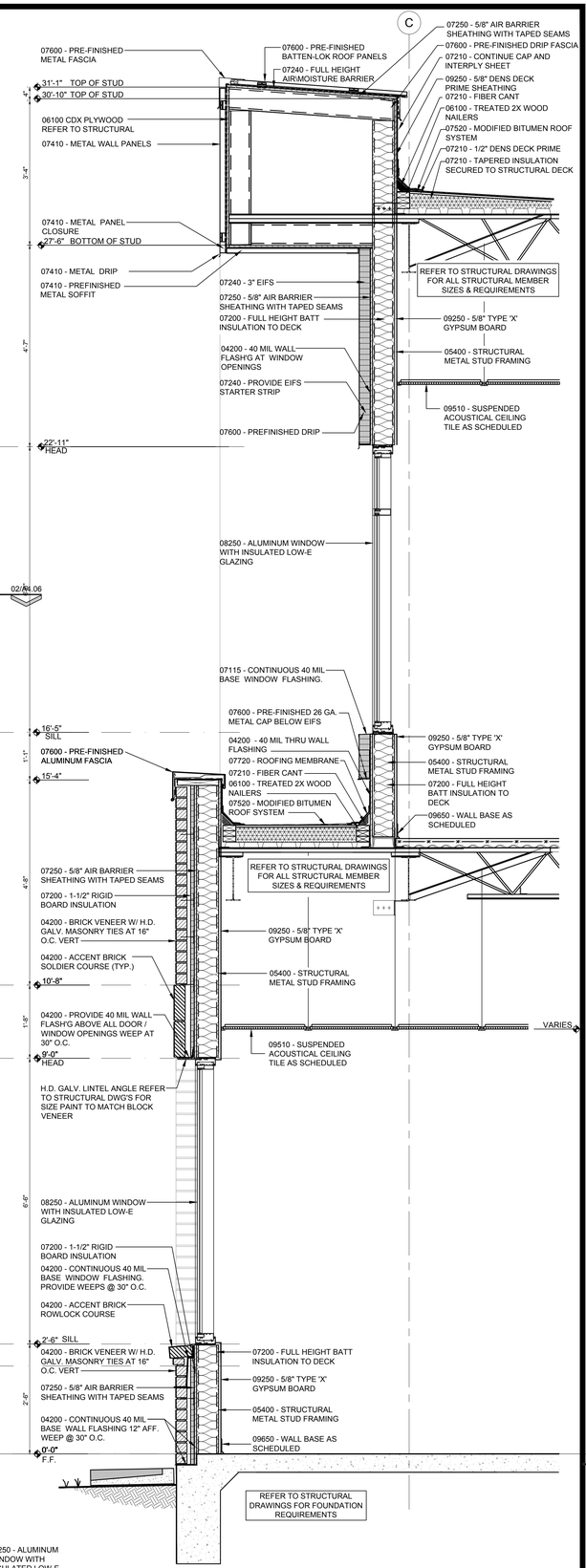
03 PARTIAL ELEVATION

SCALE 3/4" = 1'-0"



02 PLAN DETAIL

SCALE 3/4" = 1'-0"



01 WALL SECTION

SCALE 3/4" = 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1

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PALMVIEW

PALMVIEW, TEXAS

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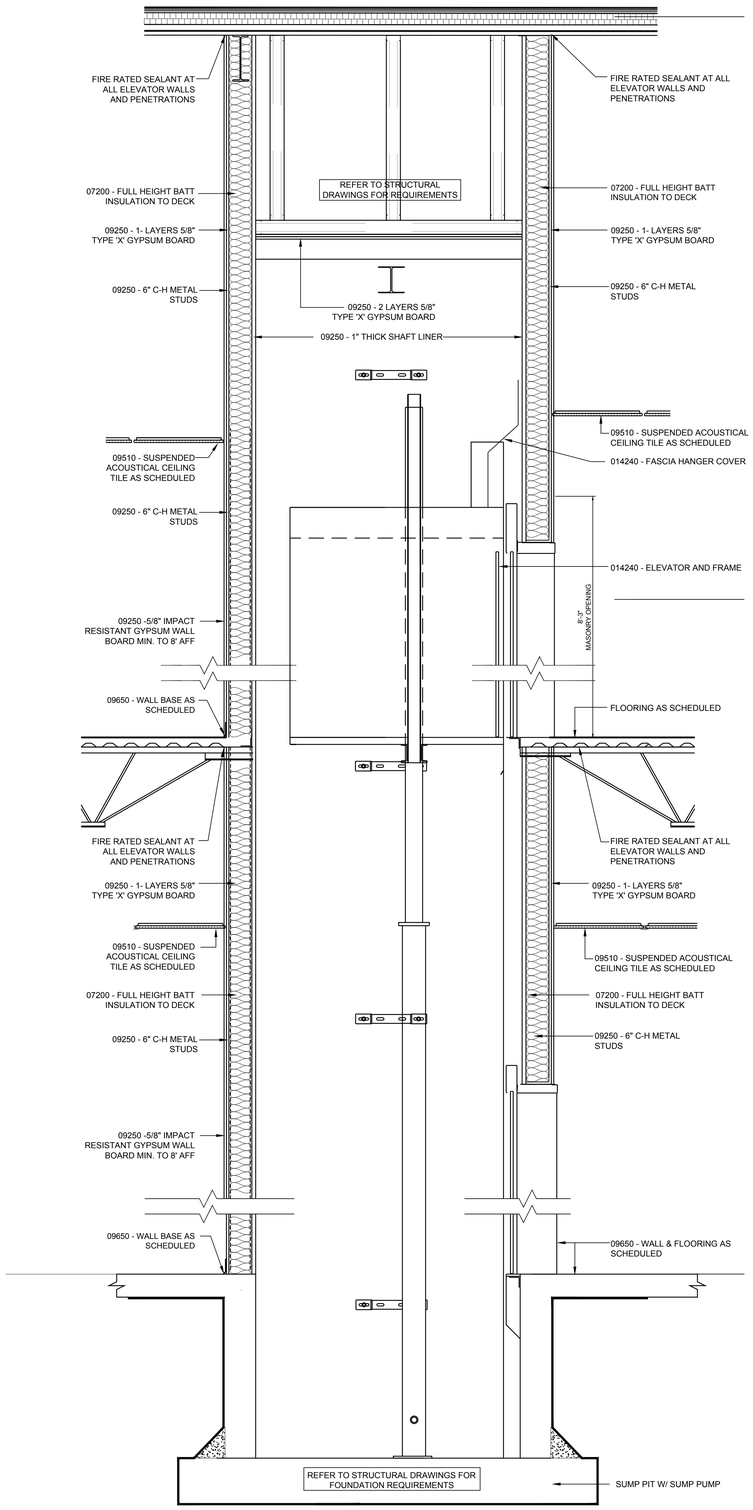
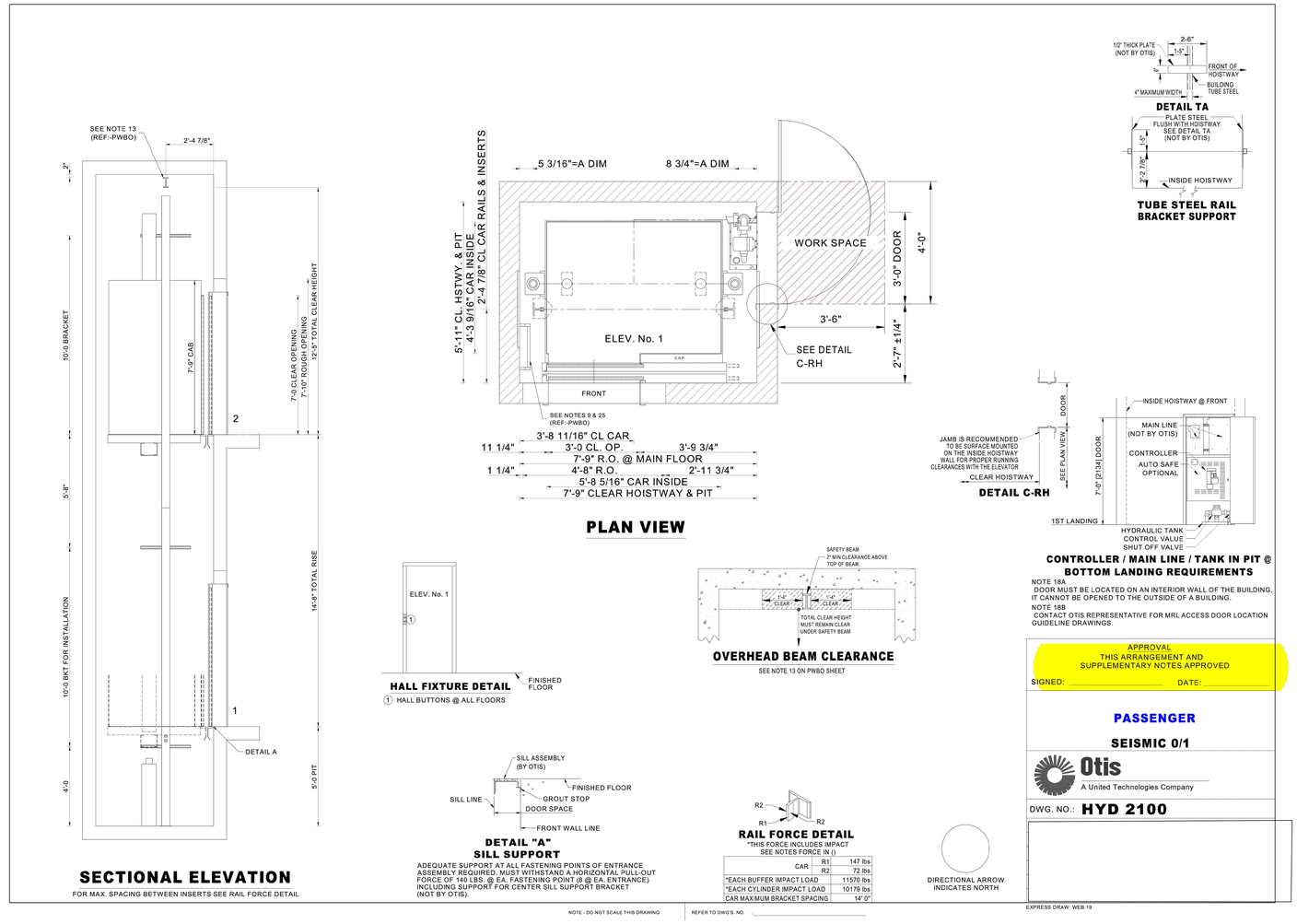
Job No.	IDEA 2020 Phase I
Sheet:	A4.06



01 WALL SECTION

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**



02 ELEVATOR SCHEMATIC

NOT TO SCALE

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

IDEA Public Schools PALMVIEW, TEXAS

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Project Architect: David Monreal, AIA
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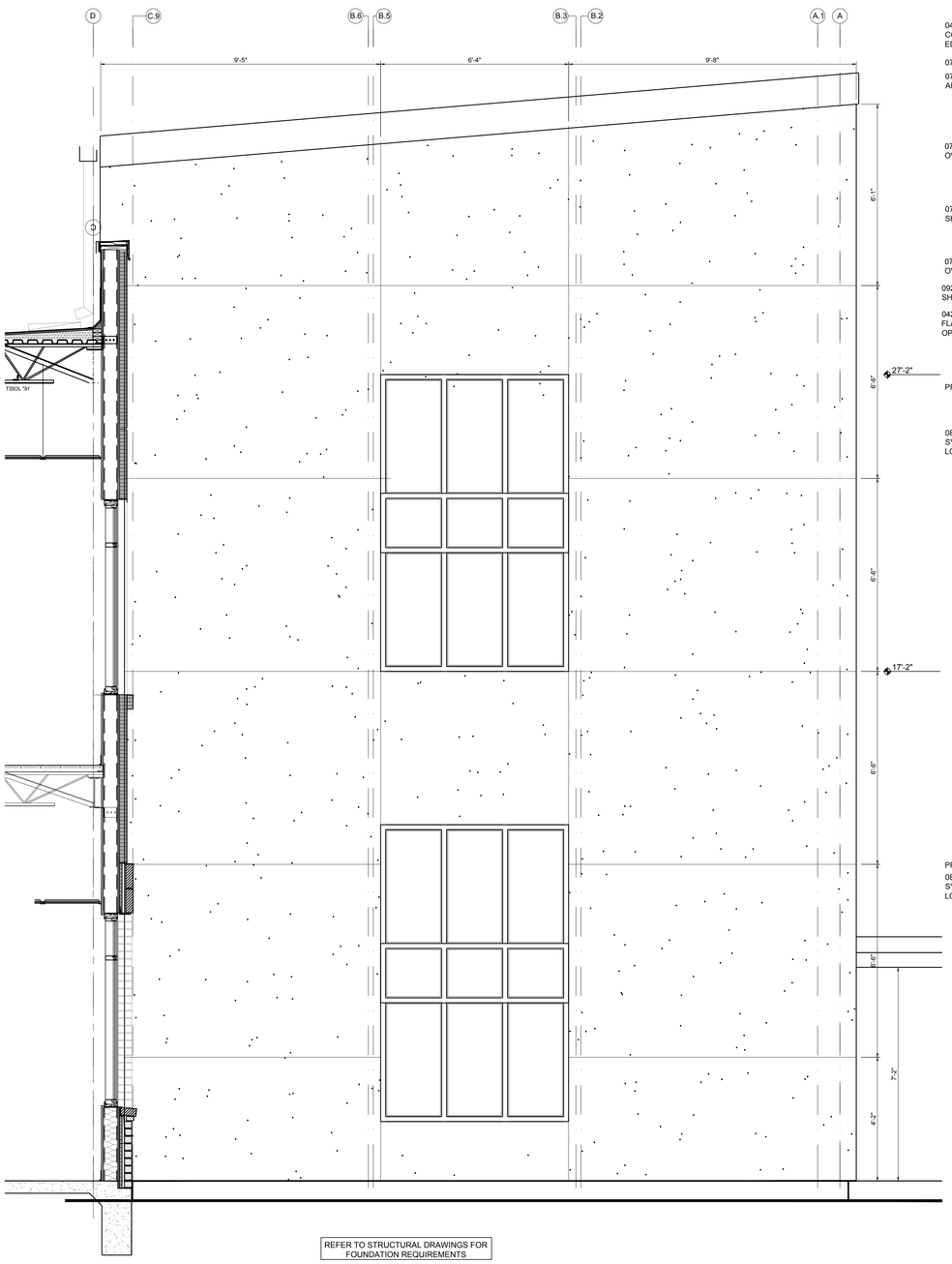
Sheet: A4.07

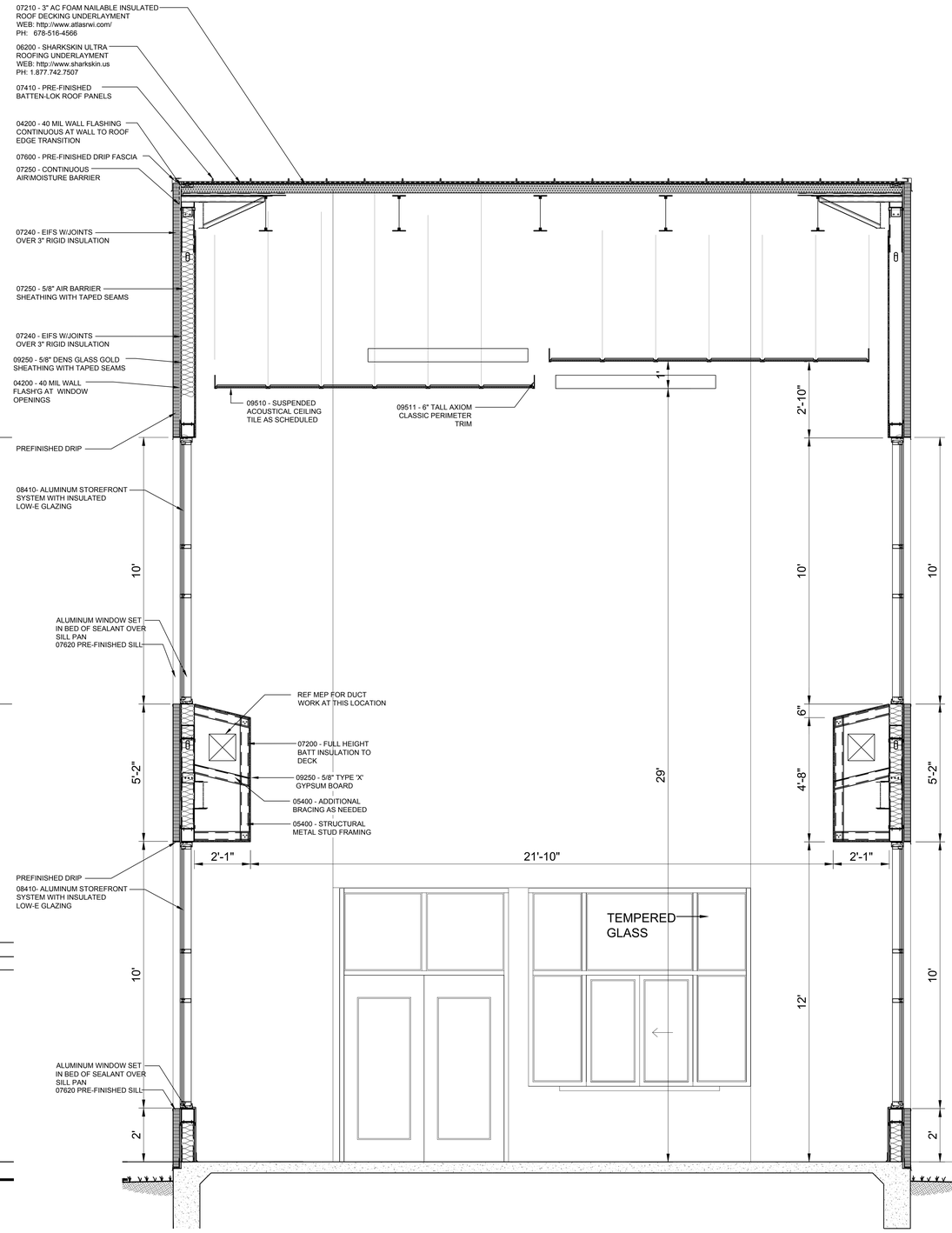


REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION REQUIREMENTS

02 ELEVATION ENLARGEMENT

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**



01 PARTIAL BUILDING SECTION

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
19555
STATE OF TEXAS
5/16/2019

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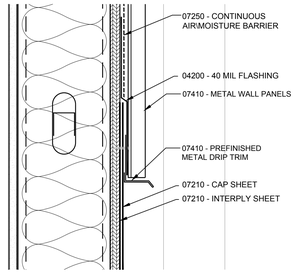
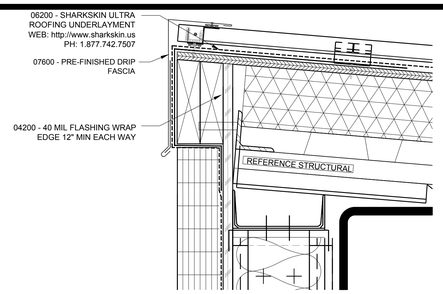
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A4.08



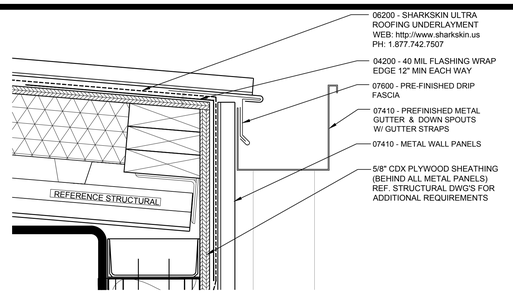
06 HIGH EAVE DETAIL

SCALE : 3"=1'



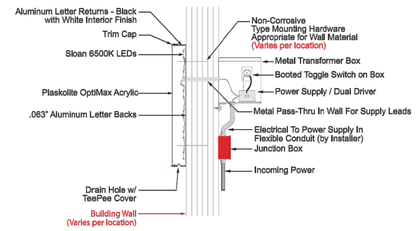
05 HIGH EAVE DETAIL

SCALE : 3"=1'



04 GUTTER DETAIL

SCALE : 3"=1'

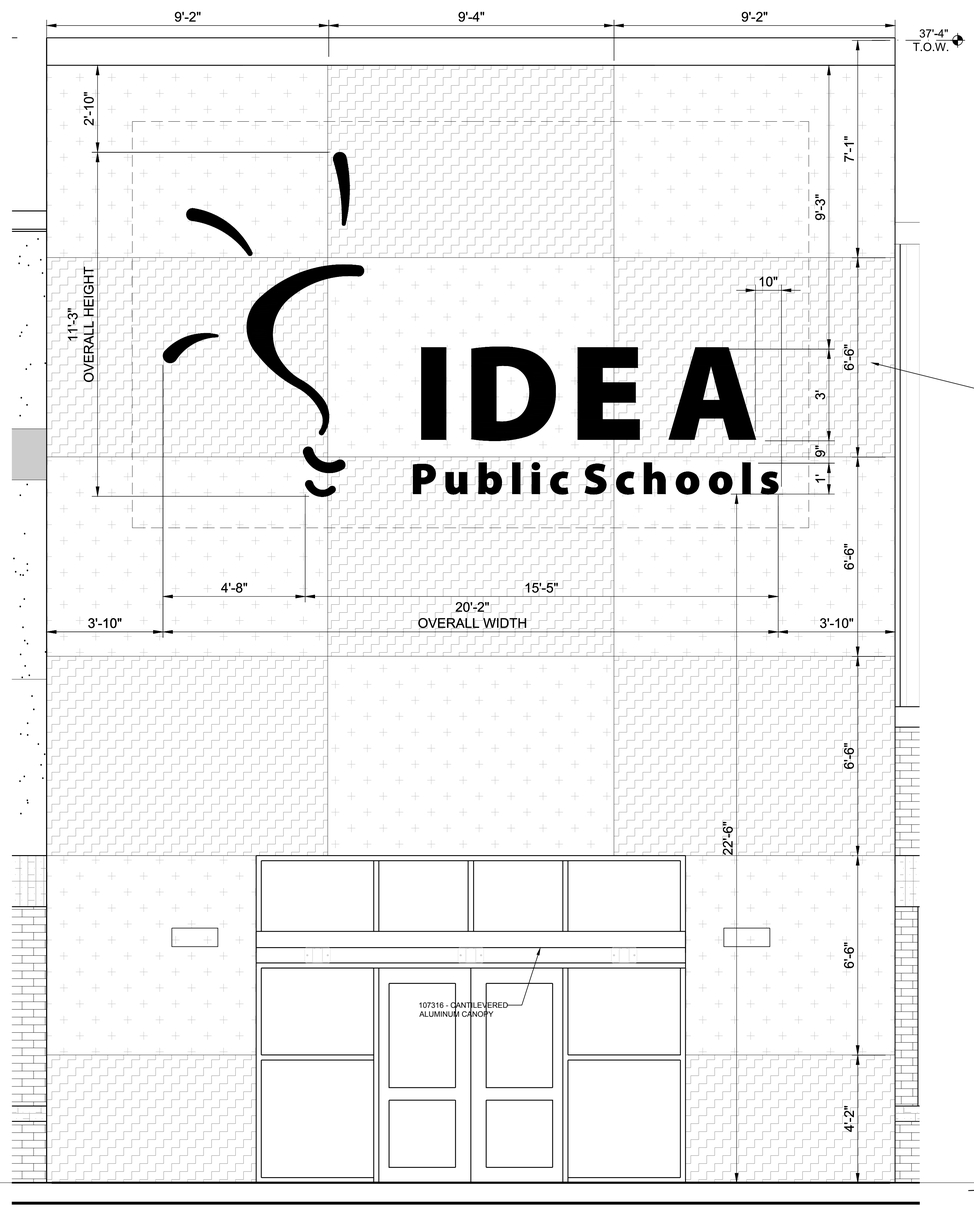


03 ILLUMINATED CHANNEL LETTERS

NOT TO SCALE

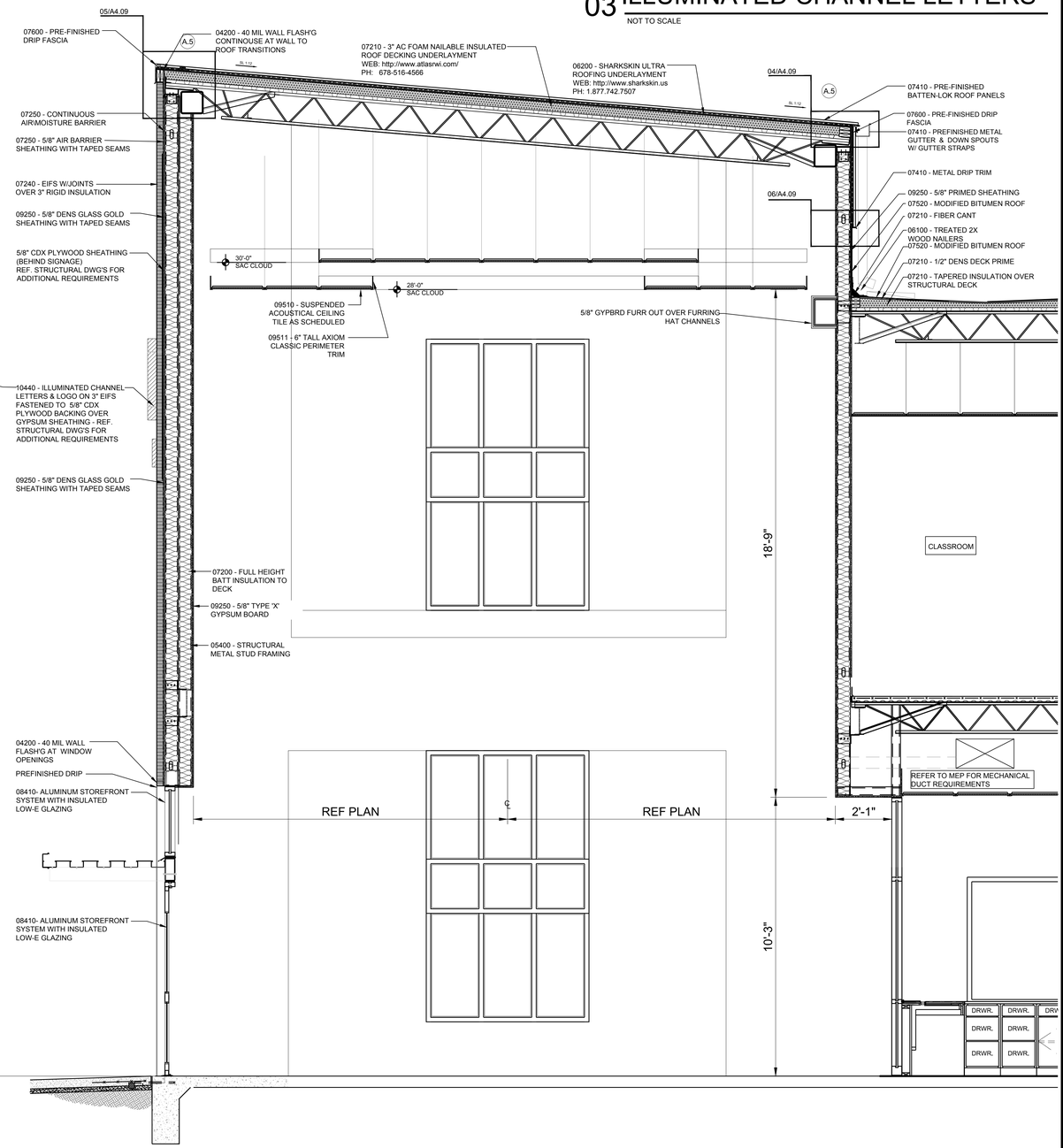
SIGNS & MORE
2108 CENTRAL BOULEVARD
BROWNSVILLE, TX. 78520

SALES REP: EDUARDO MONTEMAYOR
EMAIL: guayo86@hotmail.com
WEB: signsandmore.us
PHONE: (956)561-7283



02 ELEVATION ENLARGEMENT

SCALE 1/2" = 1'-0"



01 PARTIAL BUILDING SECTION

SCALE 1/2" = 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
IDEA Public Schools PALMVIEW, TEXAS

REGISTERED ARCHITECT DAVID A. MONREAL 19555 STATE OF TEXAS
5/16/2019

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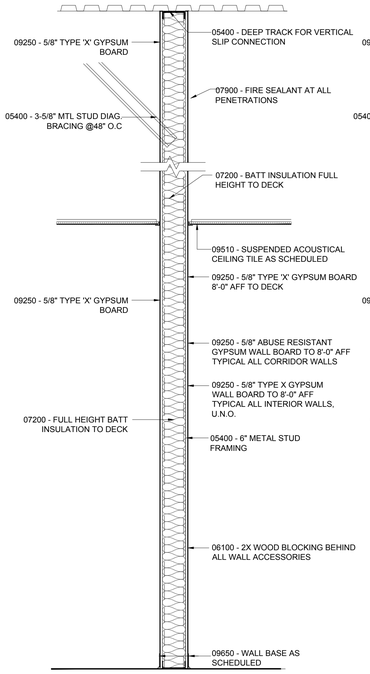
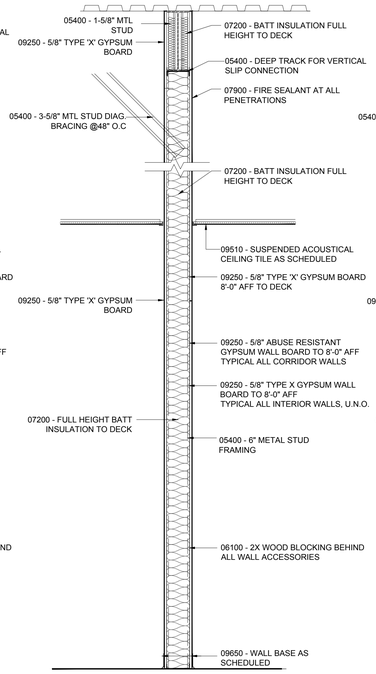
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A4.09



WALL SECTION A

SCALE 3/4" = 1'-0" A1- 3 5/8" STUD

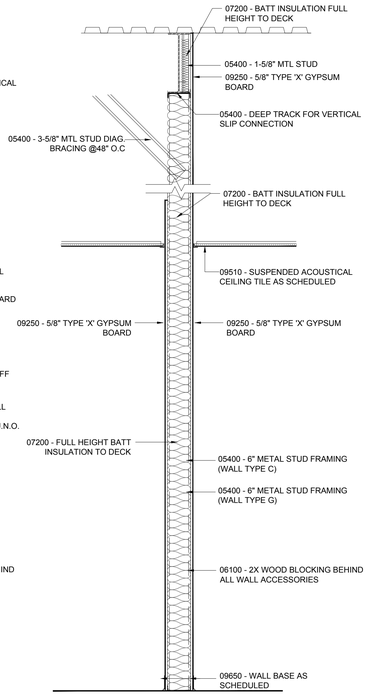
AT INTERIOR CLASS ROOM WALLS, WITH THIS WALL TYPE, PROVIDE TYPE "X" DRYWALL AT EACH FACE - TYPICAL ALL LOCATIONS



WALL SECTION B

SCALE 3/4" = 1'-0" B1- 3 5/8" STUD

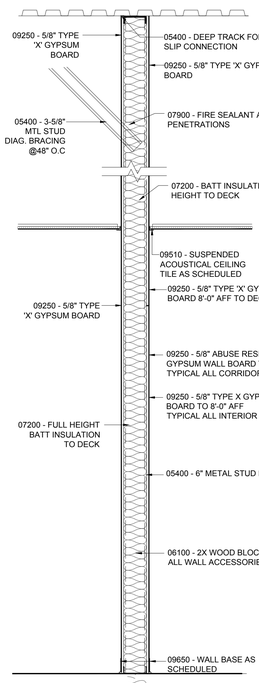
AT INTERIOR CLASS ROOM WALLS, WITH THIS WALL TYPE, PROVIDE TYPE "X" DRYWALL AT EACH FACE - TYPICAL ALL LOCATIONS



WALL SECTION C

SCALE 3/4" = 1'-0" C1- 3-5/8" STUD

WHERE NO BEAM IS PRESENT, EXTEND TO UNDERSIDE OF DECK

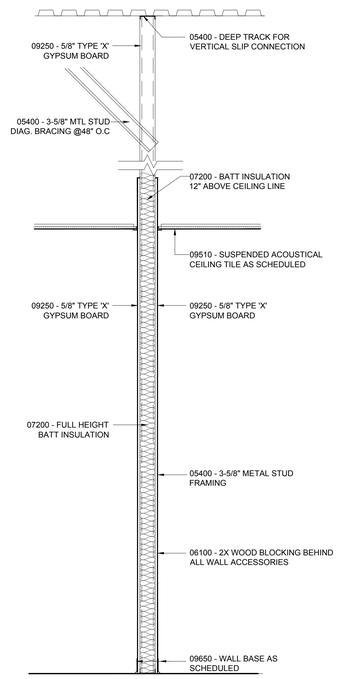


WALL SECTION D

SCALE 3/4" = 1'-0" D1-3-5/8" STUD

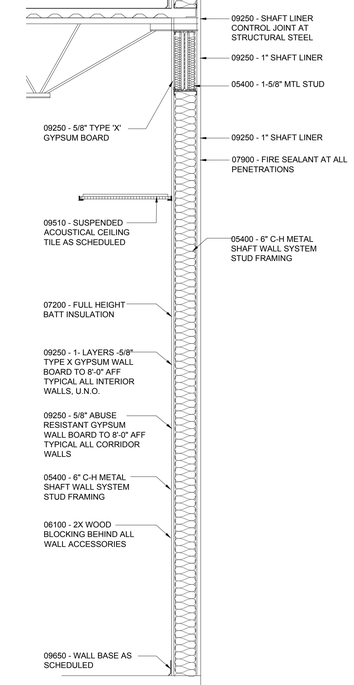
UL FIRE RESISTANT RATINGS:

INTERIOR PARTITION STEEL STUD (NON-LOAD BEARING) - UL DESIGN U465 1-HR
FIRE BARRIER RATING (REQUIRED) 1-HR



WALL SECTION F

SCALE 3/4" = 1'-0"

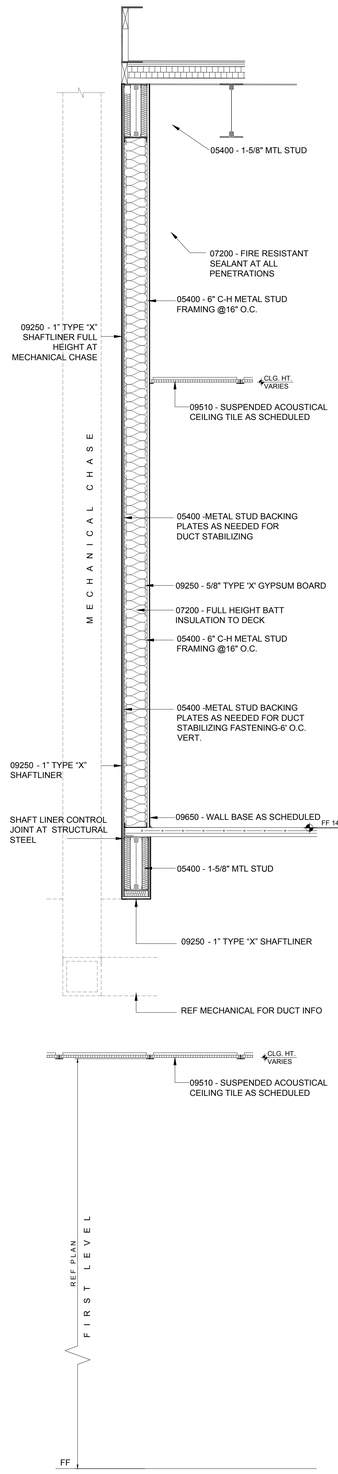


WALL SECTION H

SCALE 3/4" = 1'-0"

UL FIRE RESISTANT RATINGS:

INTERIOR PARTITION STEEL STUD (NON-LOAD BEARING) - UL DESIGN U415 1-HR
FIRE BARRIER RATING (REQUIRED) 1-HR

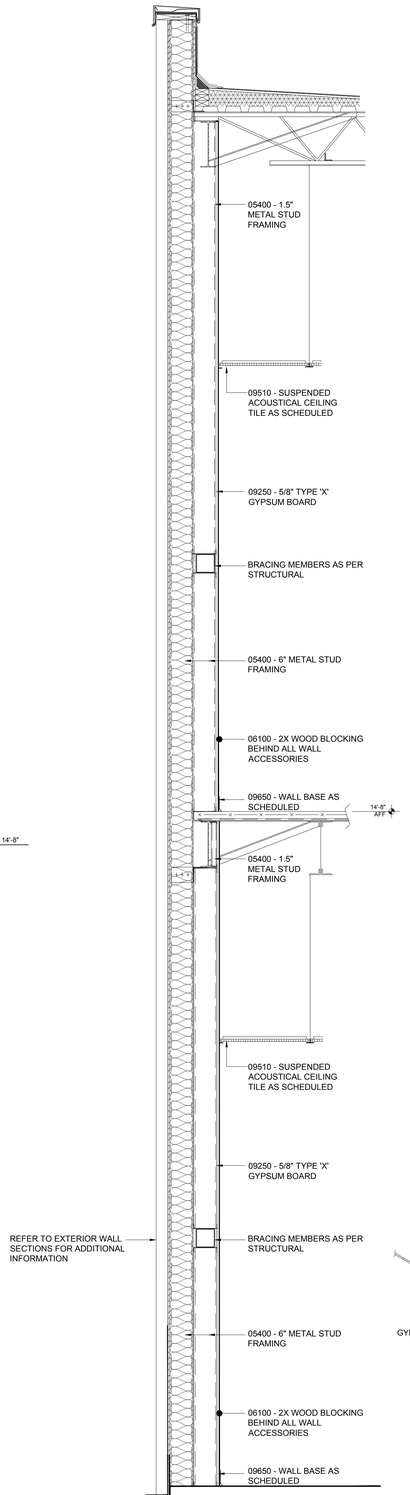


WALL SECTION E

SCALE 3/4" = 1'-0"

UL FIRE RESISTANT RATINGS:

INTERIOR PARTITION STEEL STUD (NON-LOAD BEARING) - UL DESIGN U415 1-HR
FIRE BARRIER RATING (REQUIRED) 1-HR



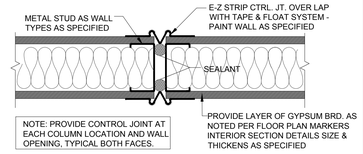
WALL SECTION G

SCALE 3/4" = 1'-0"

TYPICAL AT ALL DIAGONAL BRACING NOTED ON STRUCTURAL SHEETS

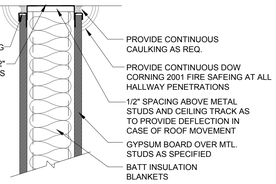
PARTITION TYPES GENERAL NOTES

1. REFER TO FLOOR PLANS FOR LOCATION OF PARTITION TYPES.
2. REFER TO SCHEDULES & DETAILS FOR FINISHES,
3. REFER TO STRUCTURAL FOR METAL STUD FRAMING DESIGN REQUIREMENTS.
4. ALL GYPSUM WALLBOARD SHALL BE 5/8", TYPE "X", UNLESS NOTED OTHERWISE.
5. PROVIDE MOISTURE RESISTANT GYPSUM WALLBOARD AT TOILET/SHOWER WALLS AND THROUGHOUT KITCHEN, UNLESS NOTED OTHERWISE.
6. PROVIDE CEMENT TILE BACKER BOARD BEHIND ALL WALL TILE WAINSCOTS, IN LIEU OF M.R. WALLBOARD.
7. PROVIDE HI-IMPACT GYPSUM WALLBOARD AT ALL INTERIOR HALLWAYS, CORRIDORS, ETC., UNLESS NOTED OTHERWISE. PROVIDE HI-IMPACT BOARD TO A HEIGHT OF 8'-0" AFF AND THEN CONTINUE THE REMAINDER OF THE WALL WITH TYPE "X" WALLBOARD TO DECK.
8. APPROPRIATE SUBMITTAL INFORMATION MUST BE PROVIDED TO SUBSTANTIATE THAT THE MATERIALS AND ASSEMBLY USED BY THE CONTRACTOR HAVE BEEN TESTED BY A RECOGNIZED TESTING AGENCY TO MEET THE FIRE RESISTANCE RATING SCHEDULED ON THESE PARTITION TYPES. SEE SPECIFICATION SECTION 08250.
9. REVIEW PLANS AND PROVIDE BACKING AND BRACING IN PARTITIONS AS REQUIRED FOR CASEWORK, WALL MOUNTED BOARDS, VERTICAL DUCT WORK AND ANY EQUIPMENT ETC. IF WOOD BLOCKING IS REQUIRED PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING.
10. SOUND ATTENUATION BLANKETS SHALL EXTEND FULL HEIGHT OF PARTITIONS TO DECK.
11. ALL DOOR/WINDOW JAMBS & HEADERS IN MTL. STUD WALLS SHALL BE DOUBLE STUDDED.
12. PROVIDE WALLBOARD CONTROL JOINTS AT EACH COLUMN LOCATION AND WALL OPENINGS, TYPICAL BOTH FACES. PROVIDE CONTROL JOINTS AT WALL MIDPOINTS IN CONTINUOUS WALL LENGTHS OVER 30'-0".
13. ALL EXPOSED OUTSIDE CORNERS TO RECEIVE CORNER GUARDS AS SPECIFIED.
14. ALTHOUGH ALL INTERIOR PARTITIONS ON THIS SHEET ARE DRAWN TO SIMILAR HEIGHT IT IS RESPONSIBILITY OF THE CONTRACTOR TO RESEARCH ALL INTERIOR PARTITION WALL HEIGHTS FROM FINISHED FLOOR TO UNDERSIDE OF ROOF DECK.
15. PROVIDE WOOD BLOCKING AT ALL PROJECTOR, HANDRAIL, GRAB BAR AND CABINET LOCATIONS. 12" WIDE, 16 GAUGE STRAP SUPPORTS ARE ACCEPTABLE AT ALL OTHER BLOCKING LOCATIONS.



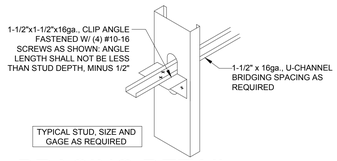
01 PARTITION DETAILS

SCALE: NTS



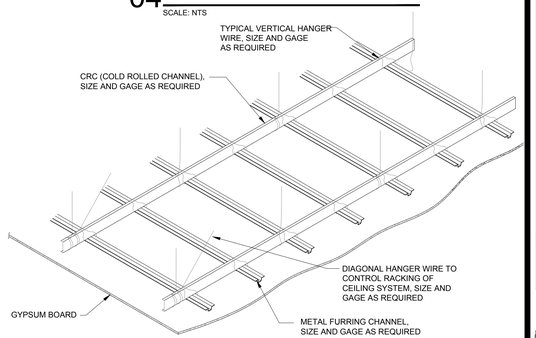
02 PARTITION DETAILS

SCALE: NTS



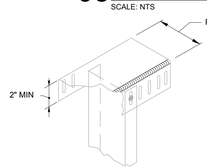
04 BRACING DETAIL

SCALE: NTS



05 CEILING DETAIL

SCALE: NTS



06 SLOTTED TRACK DETAIL

SCALE: NTS

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

IDEA Public Schools

PALMVIEW, TEXAS

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5/16/2019

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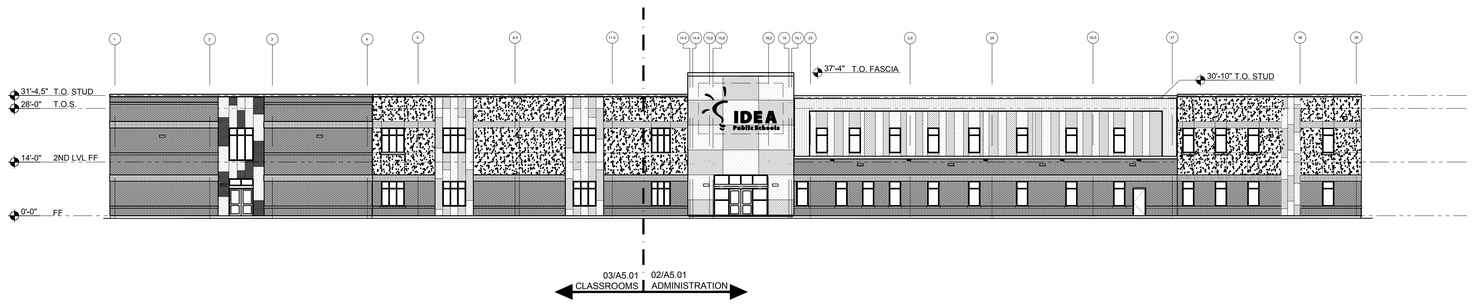
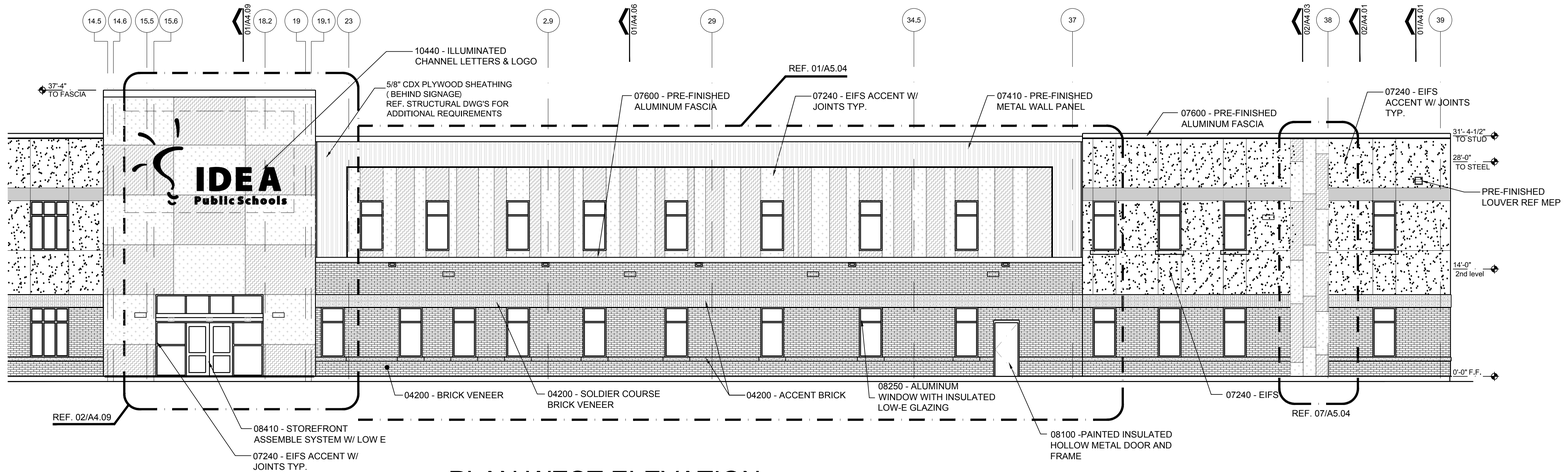
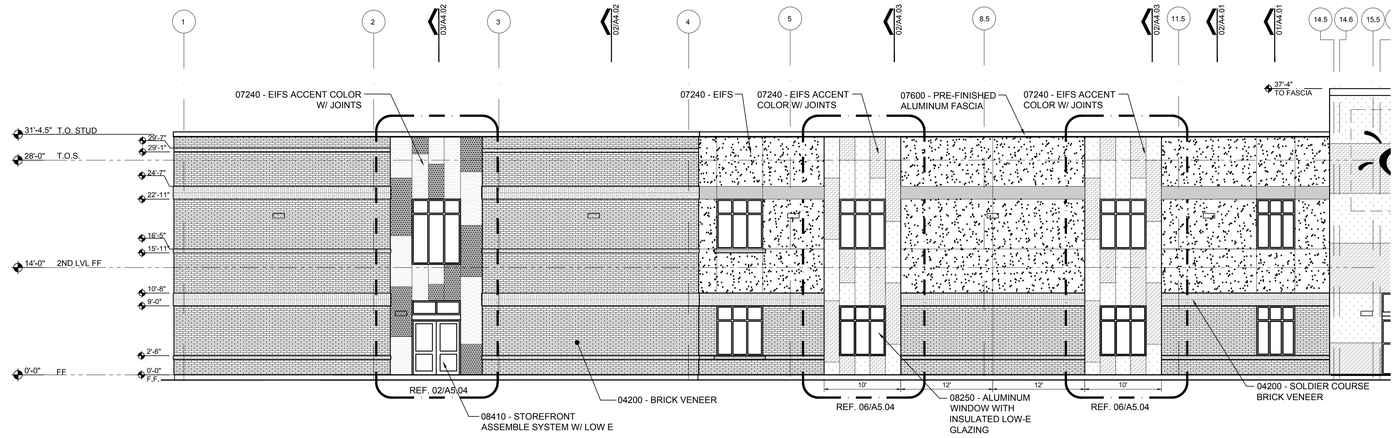
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A4.10



01 OVERALL PLAN WEST ELEVATION
SCALE: 3/32" = 1'-0"



02 PLAN WEST ELEVATION
SCALE: 1/8" = 1'-0"



03 PLAN WEST ELEVATION
SCALE: 3/32" = 1'-0"

MATERIAL LEGEND

- EIFS LIGHT BEIGE_107 SUNSET YELLOW
- EIFS DARK BEIGE_105 SUEDE
- EIFS DARK BLUE 35220
- EIFS LIGHT BLUE 35210
- EIFS DARK YELLOW 31301-130 TSW
- EIFS LIGHT YELLOW 31303-80130 TSW
- BRICK FIELD_206 BLEND
- BRICK ACCENT_215 BLEND
- METAL PANEL_SLATE GRAY

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
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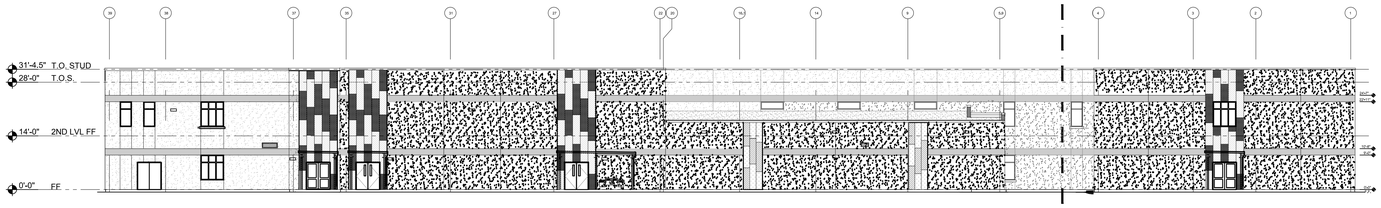
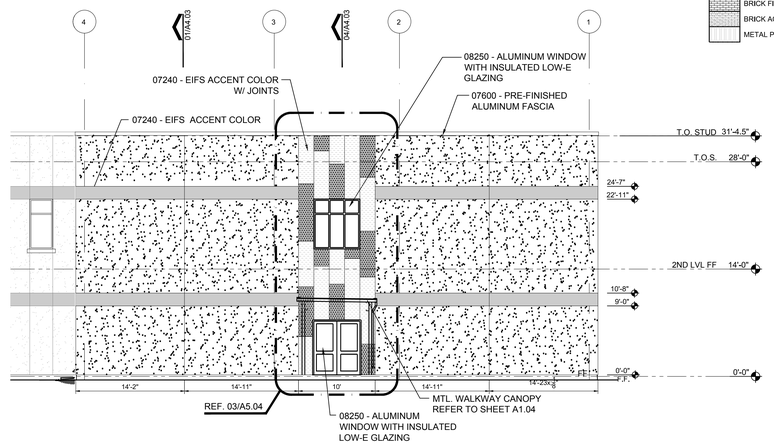
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A5.01

MATERIAL LEGEND

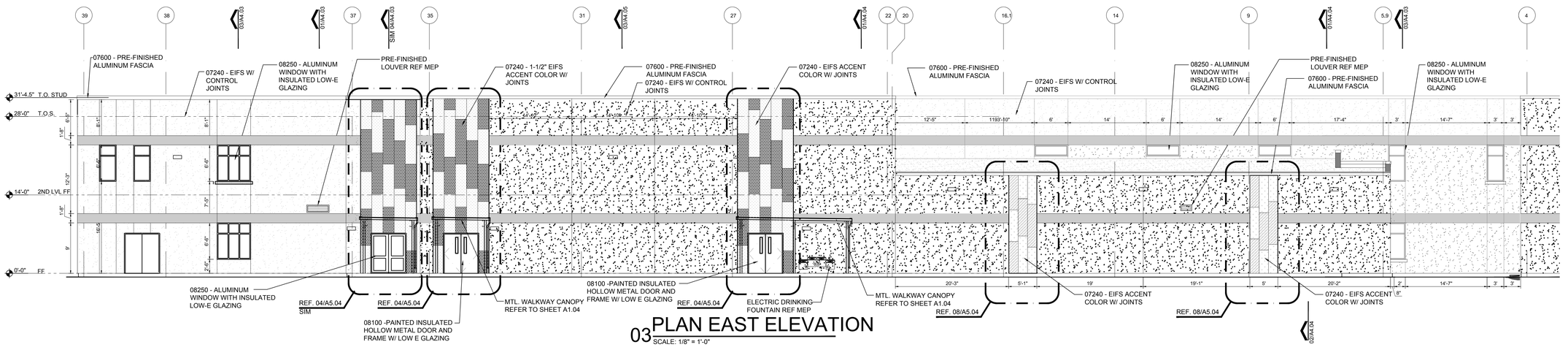
- EIFS LIGHT BEIGE_107 SUNSET YELLOW
- EIFS DARK BEIGE_105 SUEDE
- EIFS DARK BLUE 35220
- EIFS LIGHT BLUE 35210
- EIFS DARK YELLOW 31301-130 TSW
- EIFS LIGHT YELLOW 31303-80130 TSW
- BRICK FIELD_206 BLEND
- BRICK ACCENT_215 BLEND
- METAL PANEL_SLATE GRAY



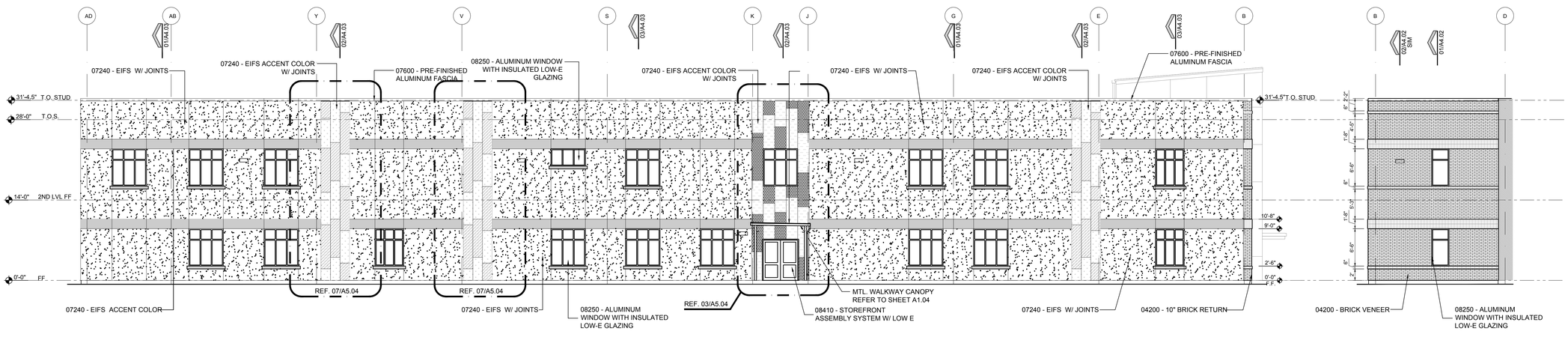
01 OVERALL PLAN EAST ELEVATION
SCALE: 1/16" = 1'-0"



02 PLAN EAST ELEVATION
SCALE: 1/8" = 1'-0"



03 PLAN EAST ELEVATION
SCALE: 1/8" = 1'-0"



04 PLAN NORTH ELEVATION
SCALE: 1/8" = 1'-0"

05 PLAN NORTH ELEVATION
SCALE: 1/8" = 1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW, TEXAS

IDEA Public Schools

REGISTERED ARCHITECT
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STATE OF TEXAS
5/16/2019

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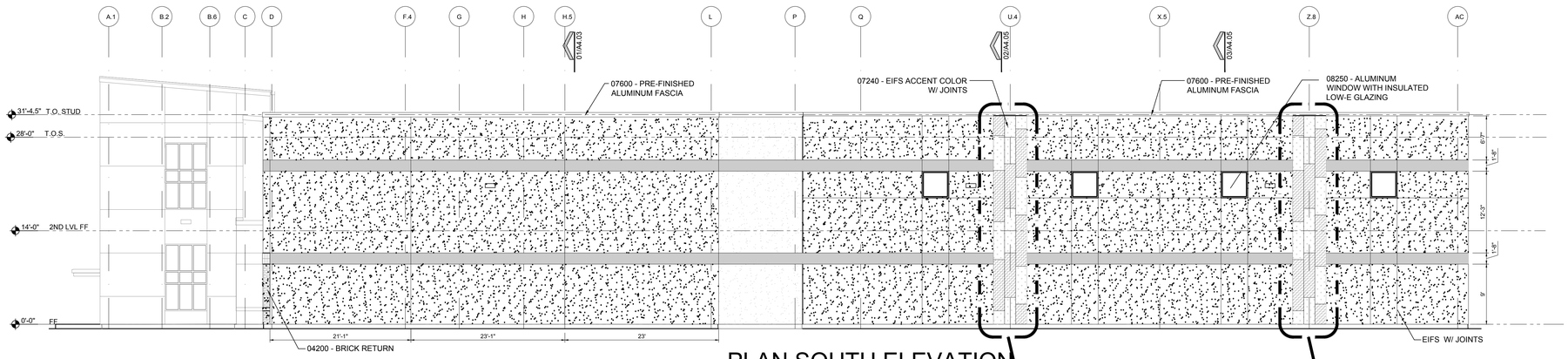
Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A5.02

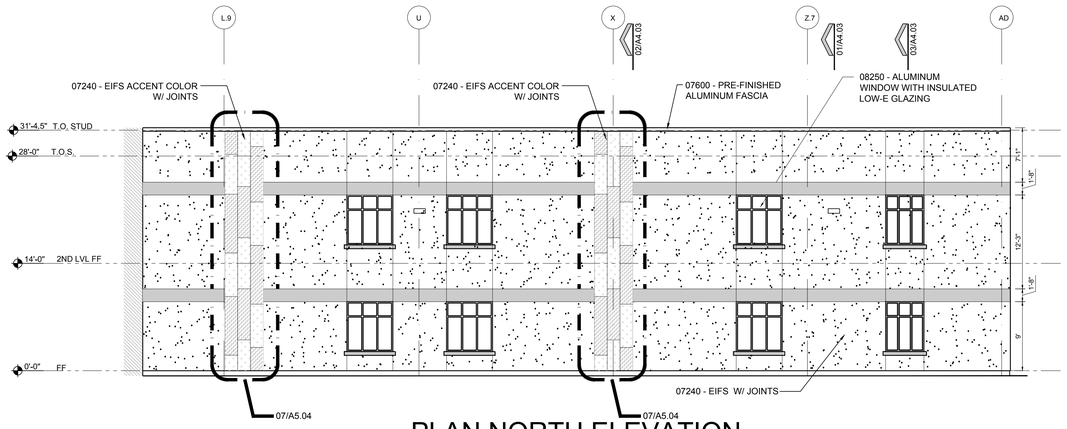
MATERIAL LEGEND

- EIFS LIGHT BEIGE_107 SUNSET YELLOW
- EIFS DARK BEIGE_105 SUEDE
- EIFS DARK BLUE 35220
- EIFS LIGHT BLUE 35210
- EIFS DARK YELLOW 31301-130 TSW
- EIFS LIGHT YELLOW 31303-80130 TSW
- BRICK FIELD_206 BLEND
- BRICK ACCENT_215 BLEND
- METAL PANEL_SLATE GRAY



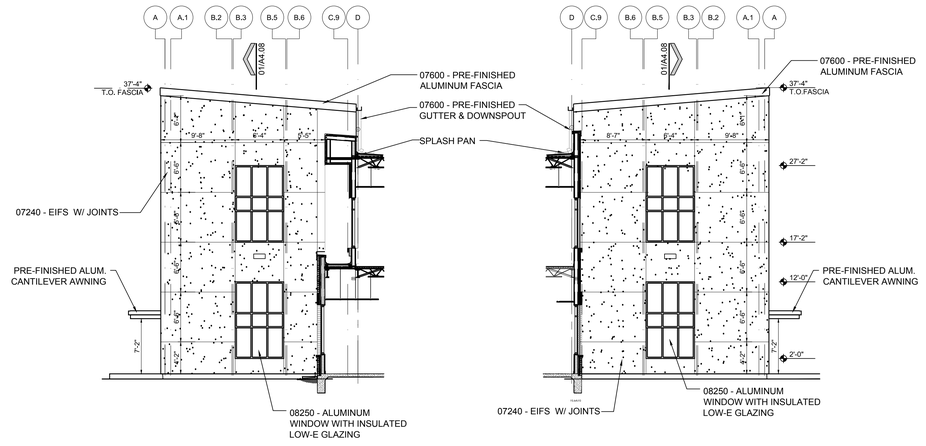
01 PLAN SOUTH ELEVATION

SCALE: 1/8" = 1'-0" @ GYMNASIUM



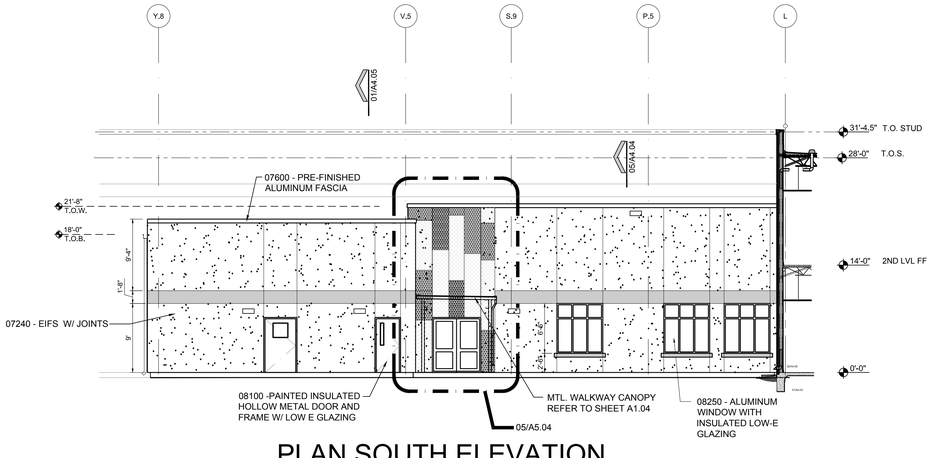
02 PLAN NORTH ELEVATION

SCALE: 1/8" = 1'-0" @ INTERIOR CLASSROOM WING



04 PLAN NORTH ELEVATION

SCALE: 1/8" = 1'-0" @ ENTRY



03 PLAN SOUTH ELEVATION

SCALE: 1/8" = 1'-0" @ CAFETERIA

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

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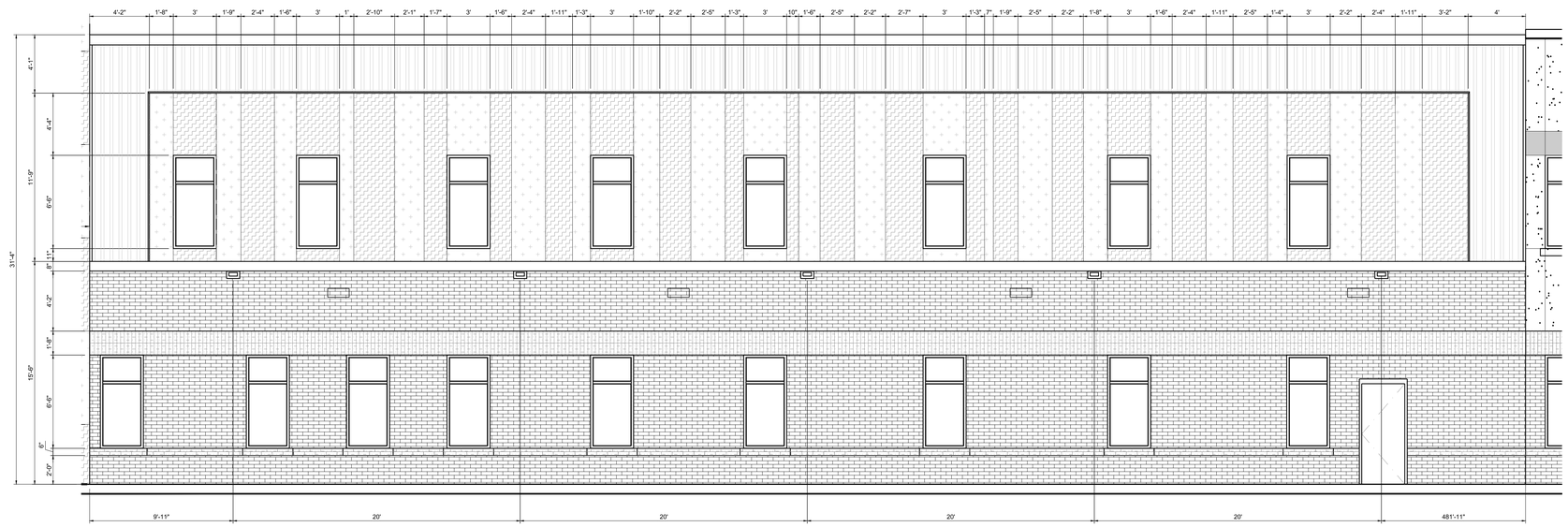
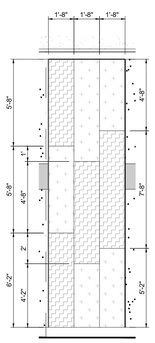
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A5.03

MATERIAL LEGEND

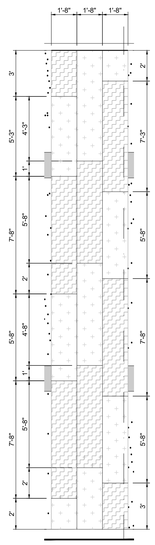
- EIFS LIGHT BEIGE_107 SUNSET YELLOW
- EIFS DARK BEIGE_105 SUEDE
- EIFS DARK BLUE 35220
- EIFS LIGHT BLUE 35210
- EIFS DARK YELLOW 31301-130 TSW
- EIFS LIGHT YELLOW 31303-80130 TSW
- BRICK FIELD_206 BLEND
- BRICK ACCENT_215 BLEND
- METAL PANEL_SLATE GRAY



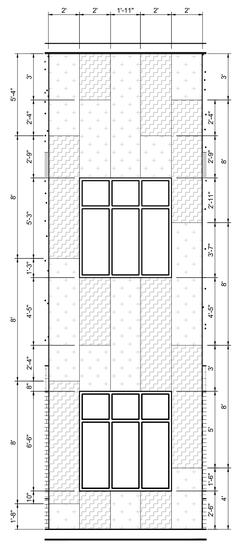
01 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0"



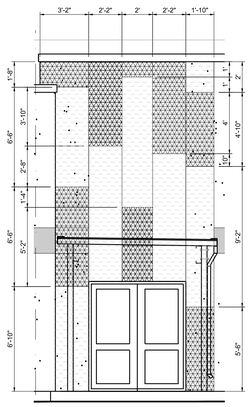
08 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



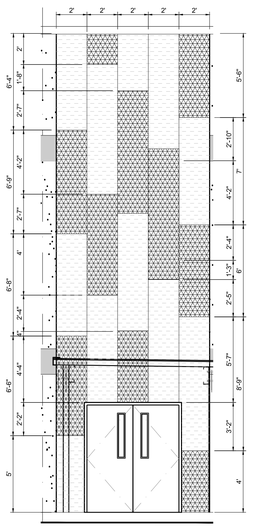
07 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



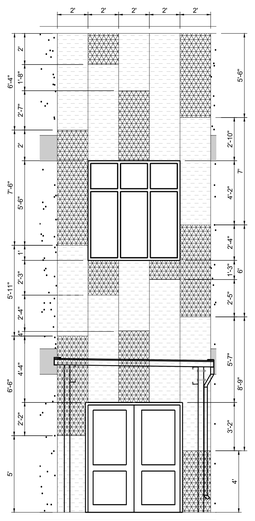
06 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



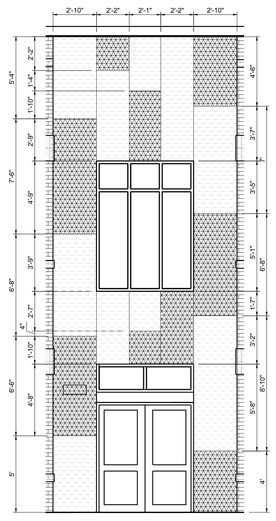
05 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



04 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



03 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)



02 EIFS DIMENSIONS
SCALE: 1/4" = 1'-0" (TYPICAL)

No.	REVISIONS	BY

GMS ARCHITECTS

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

REGISTERED ARCHITECT
DAVID A. MONREAL
1955
STATE OF TEXAS
5/16/2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	RB, JA
Job No.	IDEA 2020 Phase I
Sheet:	A5.04

GENERAL STRUCTURAL NOTES

THESE GENERAL NOTES SHALL APPLY UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS OR DETAILS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH ARCHITECTURAL & MECHANICAL DRAWINGS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR CONTRACTOR MEANS AND METHODS OF CONSTRUCTION OR SITE SAFETY. DESIGN, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE CONTROLLING PROVISIONS OF THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)

DESIGN CRITERIA

1. BASIS FOR DESIGN AND CODE COMPLIANCE

   A. GOVERNING BUILDING CODE.....IBC 2012 EDITION

2. GRAVITY DESIGN
   ROOF:
   DEAD LOAD.....SELF-WEIGHT OF STRUCTURE & ROOFING SYSTEM
   LIVE LOAD.....20 PSF (REDUCIBLE)
   ADDITIONAL POINT LOADS.....AS NOTED ON DRAWINGS

   SECOND FLOOR:
   CORRIDOR .....80 PSF
   STORAGE/OFFICE .....50 PSF
   CLASSROOMS .....40 PSF
   PARTITIONS .....15 PSF
   MECHANICAL .....100 PSF
   STAIRWELLS .....100 PSF

3. WIND DESIGN BASED ON:

   A. ASCE 7-10 REQUIREMENTS

   DESIGN WIND SPEED (VULT).....136 MPH
   OCCUPANCY CATEGORY.....III
   WIND EXPOSURE CATEGORY.....C
   INTERNAL PRESSURE COEFFICIENT (GCpi).....+/-0.18
   Kzt.....1.0
   Kd.....0.85

4. THESE BUILDINGS ARE DESIGNED TO MEET ASCE 7-10 WIND PRESSURES. ALL COMPONENTS AND CLADDINGS (E.G. WINDOWS, DOORS, ARCHITECTURAL SIDINGS AND ROOF PANELS) MUST MEET MINIMUM WIND CODE REQUIREMENTS.

FOUNDATION DESIGN CRITERIA

1. FOUNDATION DESIGN IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, AND IS BASED ON THE GEOTECHNICAL REPORT No.88185137 PREPARED BY TERRACON CONSULTANTS, INC., PHARR, TEXAS, DATED DEC. 13, 2018.

   GRADE BEAMS, FOOTINGS, AND SLAB:

   BEARING CAPACITY (NET TOTAL LOAD) ..... 2.5 KSF

   SUBSURFACE WATER WAS NOT ENCOUNTERED DURING OR AFTER TERMINATION OF DRILLING OPERATIONS (MAY FLUCTUATE WITH SEASON).

2. THE GEOTECHNICAL ENGINEER OF RECORD SHALL BE RETAINED TO PERFORM TESTING AND INSPECTIONS DURING SITE PREPARATION AND PLACEMENT OF BUILDING PAD FILL AS REQUIRED BY SPECIFICATIONS AND GENERAL STRUCTURAL NOTES.

FOUNDATION NOTES

1. REMOVE AT LEAST 14" INCHES (TO ELEVATION 174.5 FT) OF THE EXISTING SITE SOIL, VEGETATION, DEBRIS, ETC., FROM THE PROPOSED BUILDING AREA TO A DISTANCE OF 3'-0" OUTSIDE THE BUILDING AREA (EXTERIOR OF THE FOUNDATION, INCLUDING ATTACHED IMPROVEMENTS SUCH AS SIDE WALKS AND CANOPIES). DEPTH OF REMOVAL SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION.

2. AFTER TOP SOIL HAS BEEN REMOVED, THE SUBGRADE SHALL BE PROOF-ROLLED WITH APPROPRIATE CONSTRUCTION EQUIPMENT WEIGHING AT LEAST 15 TONS UNTIL THE GRADE OFFERS A RELATIVELY UNYIELDING SURFACE. SOFT SOIL AND YIELDING AREAS SHALL BE OVER EXCAVATED AND REPLACED WITH COMPACTED SELECT FILL IN ACCORDANCE WITH THE REQUIREMENTS BELOW.

3. PROOFROLLING OPERATIONS AND EXCAVATION/BACKFILL ACTIVITIES SHOULD BE PERFORMED DURING A PERIOD OF DRY WEATHER AND OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE TO DOCUMENT SUBGRADE CONDITIONS AND PREPARATION. IF SUBGRADE SOILS ARE ALLOWED TO BECOME WET OR SATURATED, REMOVAL AND REPLACEMENT OF SOFT SOILS OR LIME STABILIZATION PROCEDURES SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE. THE GEOTECHNICAL ENGINEER SHALL BE CONTACTED FOR ADDITIONAL RECOMMENDATIONS, IF REQUIRED.

4. SCARIFY, MOISTURE CONDITION, AND COMPACT THE TOP 12" OF THE EXPOSED SUBGRADE TO 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY TO WITHIN 4% ABOVE OF OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH TEST METHOD ASTM D-698 STANDARD PROCTOR. MOISTURE CONTENT SHALL BE AS NOTED IMMEDIATELY PRIOR TO PLACING SELECT FILL.

5. RESTORE GRADE USING SELECT FILL MINIMUM OF 4.0 FT OR AS REQUIRED TO PROVIDE THE SPECIFIED FINISH FLOOR ELEVATION OF 179 FT, WHICHEVER IS GREATER, AND PROPER SITE DRAINAGE, COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW. FINISH FLOOR SHALL BE VERIFIED WITH ARCHITECT AND CIVIL ENGINEER.

6. SELECT FILL SHALL BE COMPACTED IN THE FIELD IN LIFTS NOT TO EXCEED 8" LOOSE MEASURE (6" COMPACTED LIFT) TO A MINIMUM OF 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY FROM -2% OF OPTIMUM TO +2% ABOVE OPTIMUM MOISTURE CONTENT AS EVALUATED BY ASTM D-698 STANDARD PROCTOR.

7. SELECT FILL SHALL HAVE A PLASTICITY INDEX (PI) OF 7-20% AND NO CLAY BALLS LARGER THAN 2" IN DIAMETER.

8. FOUNDATION CONCRETE SHALL NOT BE PLACED ON SELECT FILL SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR WATER SEEPAGE. IF BEARING SOILS ARE SOFTENED BY WATER INTRUSION, OR BY DESICCATION, THE UNSUITABLE SOILS SHALL BE REMOVED FROM THE FOUNDATION EXCAVATION AND BE REPLACED WITH PROPERLY COMPACTED SELECT FILL PRIOR TO PLACEMENT OF FOUNDATION CONCRETE. ALL SOIL REMOVAL AND REPLACEMENT COSTS, INCLUDING ASSOCIATED COSTS TO REMOVE AND REINSTALL REINFORCEMENT AND VAPOR RETARDER MATERIALS, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. DEPTH OF SOIL REMOVAL AND RECOMPACTION REQUIREMENTS SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER.

9. SAMPLES OF PROPOSED SELECT FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND REVIEW BY THE GEOTECHNICAL ENGINEER.

10. LABORATORY MOISTURE-DENSITY CURVES SHALL BE DEVELOPED FOR SUBGRADE AND FILL. PROCTOR CURVES AND FIELD DENSITY TESTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. A MINIMUM OF ONE (1) IN PLACE DENSITY TEST PER 5,000 SQUARE FEET OF SLAB AREA SHALL BE TAKEN ON EACH LIFT DURING PLACEMENT OF SELECT FILL. DENSITY REPORTS SHALL BE TRANSMITTED TO ENGINEER WITHIN 3 DAYS AFTER TESTS ARE MADE.

11. GRAIN SIZE ANALYSIS AND ATTERBERG LIMITS TESTS SHALL BE PERFORMED DURING FILL PLACEMENT AT A RATE OF ONE TEST PER 2,000 CUBIC YARDS OF FILL BROUGHT TO THE SITE. SAMPLES FOR TEST SHALL BE TAKEN FROM JOBSITE MATERIALS.

12. SITE SHALL BE GRADED SO THAT WATER DOES NOT POND WITHIN 10 FEET OF THE PERIMETER FOUNDATION BEAM DURING OR AFTER CONSTRUCTION. THE SLOPE OF THE GROUND SURFACE AWAY FROM THE STRUCTURE SHOULD BE A MINIMUM OF FIVE (5%) PERCENT FOR A DISTANCE OF AT LEAST TEN (10') FEET. ELEVATION OF GROUND SURFACE ADJACENT TO THE FOUNDATION SHOULD BE AT LEAST 6 INCHES BELOW FINISH FLOOR.

13. FINAL DRAINAGE IS VERY IMPORTANT TO THE PERFORMANCE OF THE FOUNDATION. LANDSCAPING, PLUMBING, AND DOWNSPOUT DRAINAGE ARE ALSO VERY IMPORTANT. IT IS VITAL THAT ALL ROOF DRAINAGE BE TRANSPORTED AWAY FROM BUILDINGS SO THAT NO AREAS OF WATER POND AROUND BUILDINGS, WHICH CAN RESULT IN SOIL VOLUME CHANGE UNDER THE FOUNDATION. PLUMBING LEAKS SHOULD BE REPAIRED AS SOON AS POSSIBLE IN ORDER TO MINIMIZE THE MAGNITUDE OF MOISTURE CHANGE UNDER THE SLAB. LARGE TREES AND SHRUBS SHOULD NOT BE PLANTED IN THE IMMEDIATE VICINITY OF THE STRUCTURE, SINCE THE ROOT SYSTEMS CAN CAUSE A SUBSTANTIAL REDUCTION IN SOIL VOLUME IN THE VICINITY OF THE TREE DURING DRY PERIODS. BUSHES AND TREES SHOULD BE PLANTED A REASONABLE DISTANCE AWAY FROM THE STRUCTURE SO THAT THEIR CANOPY OR "DRIP LINE" DOES NOT EXTEND BEYOND THE PERIMETER OF THE FOUNDATION. WATERING OF VEGETATION SHOULD BE PERFORMED IN A TIMELY AND CONTROLLED MANNER. PROLONGED WATERING SHOULD BE AVOIDED.

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE SPECIFICATION, A.C.I. #301 AND BUILDING CODE REQUIREMENTS, A.C.I. #318, LATEST EDITION.

2. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.

3. CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 3,000 PSI AT 28 DAYS.

4. A MAXIMUM OF 25% FLYASH MAY BE USED AS A CEMENT SUBSTITUTE AND SHALL CONFORM TO ASTM C618, CLASS C. THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.6 AND SLUMPS SHALL BE 5 INCHES (±1 INCH). CONCRETE FOR PIERS SHALL BE DESIGNED TO ACHIEVE SPECIFIED STRENGTH WHEN PLACED WITH A SEVEN (7) INCH (±1) SLUMP. AGGREGATE SHALL BE WELL-GRADED, 1" MAXIMUM FOR THE SLAB ON GRADE, 1" MAXIMUM FOR CAST-IN-PLACE BEAMS AND ABOVE GRADE SLABS. COARSE AGGREGATE SHALL MEET ASTM C33, GRADATION #57. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO FURNISH MIX DESIGNS FOR ALL CLASSES OF CONCRETE. A SAMPLE OF FOUR CYLINDERS SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 100 YD3 OF CONCRETE. ONE CYLINDER SHALL BE TESTED AT 7 DAYS AND TWO AT 28 DAYS. THE FOURTH CYLINDER MAY BE DISPOSED OF AFTER 45 DAYS IF NOT USED.

5. ADMIXTURES CONTAINING WATER SOLUBLE CHLORIDE IONS GREATER THAN 0.06% BY WEIGHT OF CEMENT SHALL NOT BE USED.

6. REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60. #3 BARS MAY BE GRADE 40.

CONCRETE CONTINUED:

7. STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:

   WHERE CAST AGAINST DIRT OR FILL ..... 3 IN.
   EXPOSED TO EARTH OR WEATHER ..... 2 IN.
   SLABS AND WALLS ..... 1 IN.
   OTHER ..... 1-1/2 IN.

8. WELDED WIRE FABRIC MATS SHALL BE ASTM A185.

9. ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI 315, LATEST EDITION.

10. SLAB MAT TO BE SUPPORTED BY PLASTIC CHAIRS SPACED AT 4 FEET ON CENTER EACH WAY (MAX). BEAM CAGES SUPPORTED BY BATTS AT 4 FEET ON CENTER.

11. VERTICAL CONSTRUCTION JOINTS IN FLOOR SHALL BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO FORMING SLAB. CRACK CONTROL JOINTS SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS. CONTROL JOINTS SHALL BE SAWCUT (IMMEDIATELY SUBSEQUENT TO FINISHING SLAB) WITH "SOFF-CUT" SYSTEM. JOINTS SHALL BE CLEANED AND FILLED WITH "SONOLASTIC SL1" WITHIN TWO (2) DAYS AFTER SAWCUTTING. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS OR BEAMS UNLESS APPROVED BY THE ENGINEER.

12. INCLUDE IN BID AN ALLOWANCE FOR 3.0 TON OF REINFORCING BARS TO BE USED AS DIRECTED IN FIELD FOR SPECIAL CONDITIONS AT A COST OF $2,000.00 PER TON (LABOR FOR PLACING SAME TO BE INCLUDED). ANY UNUSED ALLOWANCE WILL BE CREDITED TO THE OWNER AT THE END OF THE PROJECT.

13. PROVIDE 2 TOP & BOTTOM CORNER BARS AT ALL DISCONTINUOUS GRADE BEAMS AND FOUNDATION CORNERS. CORNER BARS SHALL BE 4'-0" IN LENGTH (2'-0" LEG). SIZE OF THE CORNER BARS SHALL MATCH THE SIZE OF THE GRADE BEAM REINFORCING AS SHOWN BY STRUCTURAL DRAWINGS.

14. MAINTAIN A MINIMUM OF ONE AND ONE-HALF (1-1/2) TIMES THE MAXIMUM COARSE AGGREGATE SIZE BETWEEN ALL REINFORCING BARS (EXCEPT AT LAPS).

15. BARS SCHEDULED OR DETAILED "CONT" SHALL BE LAPPED 40 BAR DIAMETERS (24 INCHES MINIMUM) UNLESS OTHERWISE NOTED.

16. WHERE CONCRETE IS TO HAVE UNEXPOSED SURFACES, THE FORMS MAY BE CONSTRUCTED OF #2 LUMBER OR BETTER. WHERE SURFACES ARE EXPOSED, SUCH AS FOR FINISH PAINTING OR STUCCO DASH, THE FORMS SHALL BE COMMERCIAL STANDARD DOUGLAS FIR, MOISTURE-RESISTANT CONCRETE FORM PLYWOOD; MINIMUM 5-PLY AND AT LEAST 9/16" THICK, OR FORMS LINED WITH COMMERCIAL STANDARD DOUGLAS FIR, CONCRETE FORM EXTERIOR, 3-PLY, NOT LESS THAN 1/4" THICK. WHERE CONCRETE IS EXPOSED, A SMOOTH SURFACE IS REQUIRED, FREE FROM FINS, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.

17. EXPOSED SURFACES OF CONCRETE AT THE PERIMETER OF THE FOUNDATION SHALL BE FORMED WITH 2x10 #2 LUMBER OR BETTER. A SMOOTH SURFACE IS REQUIRED, FREE FROM FINS, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.

18. CONSTRUCT FORMS SO THAT JOINTS ARE LEAKPROOF. MAINTAIN FORMS SUFFICIENTLY RIGID TO PREVENT DEFORMATION UNDER LOAD.

19. CONCRETE MAY BE PLACED WITH CHUTES UP TO 25' MAXIMUM. SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.

20. CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:

   A. COARSE AGGREGATE SHALL BE GRADED FROM A MAXIMUM OF 1" DOWN

   B. MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.

   C. MAXIMUM WATER CEMENT RATIO SHALL BE 7-1/2 GALLONS PER SACK OF CEMENT. IF MORE WORKABILITY IS REQUIRED, AN ADMIXTURE MAY BE USED.

   D. MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES SHALL NOT EXCEED 2/3.

   E. REFER TO A.C.I. #301, LATEST EDITION, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.

   F. IN NO CASE SHALL CONCRETE BE PUMPED THROUGH AN ALUMINUM TUBE.

   G. SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.

21. FLOOR FINISH (TOLERANCES)

   A. STEEL TROWEL FINISH 1/8" IN 10'

   B. FLOAT FINISH 1/4" IN 10'

   C. SCRATCH FINISH 1/2" IN 10'

22. CONCRETE TO BE CURED IN ACCORDANCE WITH ACI RECOMMENDATIONS. PROPOSED METHOD OF CURING TO BE COORDINATED WITH ENGINEER PRIOR TO CONCRETE PLACEMENT.

23. SHOP DRAWINGS SHALL BE PREPARED FOR ALL REINFORCING STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. SUBMITTALS SHALL INCLUDE ELECTRONIC (PDF) COPIES OF EACH DRAWING. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.

24. THE CONTRACTOR SHALL REVIEW AND ANNOTATE SHOP DRAWINGS BEFORE SUBMITTING THEM TO THE ARCHITECT/ENGINEER FOR REVIEW. THE CONTRACTOR SHALL ALLOW ARCHITECT/ENGINEER 10 WORKING DAYS FOR REVIEW OF SHOP DRAWINGS.

25. ENGINEER TO BE NOTIFIED 48 HOURS PRIOR TO PLACEMENT OF FOUNDATION AND OF STRUCTURAL CONCRETE TO SCHEDULE REQUIRED OBSERVATIONS.

LIGHT POLE DRILLED PIERS

1. CONCRETE MIX FOR ALL DRILLED PIERS SHALL BE DESIGNED TO ACHIEVE MINIMUM OF 4,000 PSI 28-DAY COMPRESSIVE STRENGTH WHEN PLACED WITH A SEVEN (7) INCH (±1) INCH SLUMP.

2. THE CONTRACTOR SHALL COORDINATE POLE BASE PLATE/ANCHOR BOLT DIMENSIONS WITH POLE SUPPLIER PRIOR TO PLACING PIERS. CONFLICTS SHALL BE COORDINATED WITH ENGINEER.

3. INSTALL ALL PIERS AT THE LOCATIONS AND TO THE DEPTHS INDICATED ON THE DRAWINGS. BID SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND GENERAL CONDITIONS REQUIRED FOR INSTALLATION OF STRAIGHT SHAFT DRILLED PIERS, AS SHOWN ON THE DRAWINGS.

4. IF DIRECTED BY THE ARCHITECT/ENGINEER, PIERS SHALL BE ADJUSTED IN THE FIELD AS REQUIRED TO MEET DESIGN REQUIREMENTS.

5. PRIOR TO DEVELOPMENT OF THE PIER REINFORCEMENT SUBMITTALS, THE GENERAL CONTRACTOR, FOUNDATION CONTRACTOR, DRILLER, AND THE GEOTECHNICAL ENGINEER SHALL HAVE A PRE-CONSTRUCTION MEETING TO DISCUSS THE CONTRACTOR'S PROPOSED PIER INSTALLATION PROCEDURES. AT THE MEETING, THE CONTRACTOR NEEDS TO PERFORM A "TEST" PIER TO DETERMINE CURRENT SUBSURFACE WATER LEVELS AND THE CONSTRUCTABILITY OF THE DRILLED PIERS SPECIFIED. THE TEST PIER WILL NEED TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER OF RECORD FOR APPROVAL OF THE PROPOSED INSTALLATION PROCEDURES AND/OR ISSUANCE OF ADDITIONAL RECOMMENDATIONS, AS REQUIRED.

6. DRILL PIERS TO THE EXACT SIZE SHOWN. SHAFTS SHALL BE BORED PLUMB WITH A TOLERANCE OF TWO INCHES. INSTALL OFFSET STAKES ON OPPOSITE SIDES OF THE PIER AND USE TO MAINTAIN THE PIER CENTERS AND TO CHECK THE PIER PLUMBNESS. FOOTING BOTTOMS SHALL BE INSPECTED FOR A MAXIMUM OF ONE INCH (1") OF LOOSE DIRT AND TWO INCHES (2") OF GROUND WATER IMMEDIATELY PRIOR TO PLACING CONCRETE. IF MACHINE CLEANING IS NOT SATISFACTORY TO ARCHITECT/ENGINEER, HAND CLEANING WILL BE REQUIRED.

7. EACH PIER SHAFT AND DRILLING OPERATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO ENSURE PROPER BEARING AT SCHEDULED ELEVATION AND TO VERIFY STRATAS NOTED IN THE GEOTECHNICAL REPORT. INSPECTIONS SHALL ALSO VERIFY PIER SHAFT DIAMETER, DEPTH, REINFORCEMENT SIZE, QUANTITIES AND LOCATIONS. INSPECTION REPORTS SHALL BE TRANSMITTED TO ENGINEER WITHIN 3 DAYS OF INSPECTION.

8. PROVIDE SUITABLE ACCESS AND LIGHTING FOR INSPECTION OF THE EXCAVATIONS FOR CLEANLINESS AND FOR CORRECTNESS OF DIMENSIONS AND ALIGNMENT.

9. DUE TO SUBSURFACE STRATIGRAPHY AND WATER LEVELS ENCOUNTERED, IF THE CONTRACTOR CANNOT INSTALL THE RECOMMENDED PIER AT THE REQUIRED DEPTH, THE ENGINEER MUST BE CONTACTED IMMEDIATELY.

10. DUE TO SUBSURFACE WATER ENCOUNTERED DURING DRILLING OPERATIONS, THE FOUNDATION CONTRACTOR SHOULD BE PREPARED TO UTILIZE SLURRY OR CASINGS TO CONTROL SLOUGHING OR SUBSURFACE WATER INFLUX DURING EXCAVATION SHOULD IT OCCUR. CASING SHOULD ONLY BE USED IN DRILLED PIERS TERMINATING IN THE CLAYEY SOILS. PRIOR TO EXCAVATION, THE FOUNDATION CONTRACTOR SHOULD VERIFY THE SUBSURFACE WATER LEVELS. THE FOUNDATION CONTRACTOR SHOULD CONSIDER PERFORMING A "TEST" PIER EXCAVATION TO DETERMINE THE CONSTRUCTABILITY OF DRILLED PIER.

11. SHOULD A SLURRY BE USED TO CONTROL THE EXCAVATION PROCESS A CLEAN-OUT BUCKET SHOULD BE USED JUST PRIOR TO PIER COMPLETION IN ORDER TO REMOVE ANY CUTTINGS AND LOOSE SOILS WHICH MAY HAVE ACCUMULATED IN THE BOTTOM OF THE EXCAVATION. STEEL AND CONCRETE SHOULD BE PLACED IN THE EXCAVATION IMMEDIATELY AFTER PIER COMPLETION. A CLOSED-END TREMIE SHOULD BE USED TO PLACE THE CONCRETE COMPLETELY TO THE BOTTOM OF THE EXCAVATION IN A CONTROLLED MANNER TO EFFECTIVELY DISPLACE THE SLURRY DURING CONCRETE PLACEMENT.

12. SHOULD CASINGS BE USED TO CONTROL THE EXCAVATION PROCESS, CASING SHOULD BE METAL WITH AMPLE STRENGTH TO WITHSTAND HANDLING STRESSES, CONCRETE AND EARTH PRESSURES, AND SHALL BE WATERTIGHT.

13. PRECAUTIONS SHOULD BE TAKEN DURING THE PLACEMENT OF THE PIER REINFORCEMENT AND CONCRETE TO PREVENT LOOSE EXCAVATED MATERIAL FROM FALLING INTO THE EXCAVATION.

14. PLACEMENT OF CONCRETE SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER EXCAVATION IS COMPLETE, REINFORCING CAGE IS PLACED, INSPECTED AND APPROVED. THE CONCRETE SHOULD NOT BE ALLOWED TO RICOCHET OFF THE WALLS OF THE PIER EXCAVATION NOR OFF OF THE REINFORCING STEEL. PLACEMENT OF CONCRETE SHALL COMPLY WITH AMERICAN CONCRETE INSTITUTE (ACI) 318-05 CODE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 336.3R-14 ENTITLED "SUGGESTED DESIGN AND CONSTRUCTION PROCEDURES FOR PIER FOUNDATIONS", U.S. DEPARTMENT OF TRANSPORTATION-FEDERAL HIGHWAY ADMINISTRATION PUB. NO. FHWA-IF-99-025 "MANUAL ON DRILLED SHAFTS: CONSTRUCTION PROCEDURES AND DESIGN METHODS" AND ADSC: THE INTERNATIONAL ASSOCIATION OF FOUNDATION DRILLING CONTRACTORS PUB. NO. ADSC-TL-4, AUGUST 1999.

15. NO PIER EXCAVATION SHALL BE LEFT OPEN OVERNIGHT WITHOUT CONCRETING.

STRUCTURAL STEEL

1. TOP OF BEAM/PLATE (TOB OR TOP) IS USED INTERCHANGEABLY ON PLANS. REFERENCE APPLICABLE SECTION FOR CLARIFICATION.

2. STRUCTURAL STEEL WIDE FLANGE MEMBERS SHALL CONFORM TO ASTM SPECIFICATION A 572 AND/OR ASTM A 992 (Fy = 50 KSI) UNLESS OTHERWISE SHOWN OR NOTED. PLATE AND ANGLES MAY BE A36 (Fy = 36 KSI).

3. ALL STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM SPECIFICATION A-500, GRADE B (Fy = 46 KSI). STEEL PIPE SHALL COMPLY WITH ASTM A53 TYPE E OR S (Fy = 35 KSI).

4. ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND STEEL JOIST INSTITUTE.

5. ALL STEEL BAR JOISTS SHALL BE DESIGNED AND FABRICATED BY A MEMBER OF THE STEEL JOIST INSTITUTE. IF REQUESTED BY THE A/E, THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATE OF FABRICATOR'S MEMBERSHIP TO THE STEEL JOIST INSTITUTE AT TIME OF SHOP DRAWING SUBMITTAL.

6. BAR JOISTS SHALL BE BOLTED WHERE COLUMNS ARE FRAMED WITH STRUCTURAL STEEL MEMBERS IN ONLY ONE DIRECTION TO PROVIDE LATERAL STABILITY DURING CONSTRUCTION/ERECTION AS REQUIRED BY OSHA.

7. TOTAL LOAD DEFLECTION OF SPECIAL BAR JOIST SHALL NOT EXCEED L/240.

8. JOIST MANUFACTURER SHALL PROVIDE BRIDGING AS REQUIRED TO ADEQUATELY BRACE JOISTS AGAINST LATERAL MOVEMENT AND NET UPLIFT OF 30 PSF.

9. ALL BOLTS SHALL BE 3/4 DIAMETER ASTM A325. WASHERS SHALL BE PROVIDED AT OVERSIZED HOLES AND AT SLOTTED CONNECTIONS AT EXPANSION JOINTS. A325 CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE. ANCHOR BOLTS MAY BE ASTM A307 UNLESS NOTED OTHERWISE.

10. REFER TO ARCHITECTURAL & MECHANICAL PLANS FOR VERIFICATION OF ALL BOLTS, BLOCKING ANCHORS, ETC., FOR THE ANCHORAGE OF THEIR RESPECTIVE ITEMS.

11. ALL BEAMS AND COLUMNS SHALL BE FULL LENGTH WITHOUT SPLICES UNLESS INDICATED ON PLANS OR APPROVED BY THE ENGINEER IN WRITING.

12. ALL SHOP AND FIELD WELDS SHALL BE MADE BY WELDERS WHO HAVE BEEN QUALIFIED AND CERTIFIED TO MAKE THE REQUIRED WELDS IN ACCORDANCE WITH THE LATEST AMERICAN WELDING SOCIETY SPECIFICATIONS (A.W.S. D-1.1).

13. WELDS SHALL BE MADE WITH COVERED MILD STEEL ELECTRODES COMPLYING WITH AWS D1 CODE AND SERIES E 70XX.

14. ERECTION CONNECTORS SHALL BE PROVIDED IN ORDER TO PROPERLY ALIGN AND BE TRUE AND PLUMB WHEN WELDS ARE MADE.

15. ALL COMPLETE PENETRATION WELDS, BOTH SHOP AND FIELD, SHALL BE TESTED BY A QUALIFIED TESTING LABORATORY UTILIZING ULTRA SONIC TESTING PROCEDURES IN ACCORDANCE WITH AWSD1.1 ANY WELDS FOUND DEFECTIVE SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER. ALL X-RAYED WELDS SHALL BE GROUND SMOOTH.

16. THE FABRICATOR SHALL SUPPLY BACK-UP PLATES AND EXTENSION TABS FOR ALL COMPLETE PENETRATION WELDS.

17. INCLUDE IN BID AN ALLOWANCE FOR 3.0 TON OF FABRICATED AND PRIMED STRUCTURAL STEEL TO BE USED AS DIRECTED IN THE FIELD FOR SPECIAL CONDITIONS AT A COST OF $4,000.00 PER TON (LABOR FOR ERECTING SAME TO BE INCLUDED). ANY UNUSED ALLOWANCE WILL BE CREDITED TO THE OWNER AT THE END OF THE PROJECT.

18. ALL STEEL MEMBERS, INCLUDING BAR JOISTS, UNLESS NOTED OTHERWISE, SHALL BE PAINTED W/ ONE COAT OF SHOP PRIMER. DO NOT PRIME ITEMS TO BE EMBEDDED IN CONCRETE OR FIRE PROOFED W/ SPRAY ON MATERIAL WITHOUT COORDINATION W/ THE ARCHITECT. GALVANIZED DECK SHALL BE CONFORM TO ASTM A525, G60 (MINIMUM).

19. REINFORCE STEEL DECK OPENINGS (FLOOR & ROOF) FROM 6" TO 18" WITH 2 x 2 x 1/4 STEEL ANGLES. PLACE ANGLES PERPENDICULAR TO FLUTES, EXTEND MINIMUM OF TWO FLUTES BEYOND EACH SIDE OF OPENING AND WELD DECK AT EACH FLUTE. OPENINGS LARGER THAN 18" SHALL BE REINFORCED WITH 3 x 3 x 1/4 STEEL ANGLES WELDED TO TOP CHORD OF BAR JOISTS UNLESS SHOWN OTHERWISE ON PLANS. WELD DECK TO ANGLE AT 6" O/C AT PERIMETER OF OPENINGS.

20. STEEL LINTELS SUPPORTING BRICK VENEER AT EXTERIOR WALLS SHALL BE ONE HOT-DIPPED GALVANIZED 5 x 5 x 1/4 ANGLE, UNLESS NOTED OTHERWISE.

21. CONTRACTOR SHALL PROVIDE MISCELLANEOUS STEEL AS REQUIRED AT ELEVATOR RAIL SUPPORT POINTS. COORDINATE REQUIREMENTS WITH ELEVATOR MANUFACTURER.

22. WELDED HEADED STUDS (WHS) SHALL BE "NELSON ANCHORS", OR EQUAL, Fs = 60 KSI, DIAMETER AND LENGTH AS SHOWN ON PLANS. STUDS TO BE WELDED & SHOP TESTED IN ACCORDANCE W/ THE MANUFACTURER'S RECOMMENDATIONS.

23. AFTER ERECTION, PRIME WELDS, ABRASIONS AND SURFACES NOT PRIMED. USE PRIMER CONSISTENT WITH SHOP COAT. GALVANIZED SURFACES (HOT DIPPED OR COLD) SHALL BE CLEANED AND PAINTED WITH "ZRC". ROOF DECK WELDS TO BE CLEANED AND PAINTED PRIOR TO INSTALLING ROOF INSULATION.

24. FIELD WELDS AND BOLTED CONNECTIONS SHALL BE VISUALLY INSPECTED BY A QUALIFIED INDEPENDENT INSPECTOR. THE INSPECTOR SHALL PROVIDE A WRITTEN REPORT TO THE STRUCTURAL ENGINEER.

25. ELECTRONIC (PDF) SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL STEEL COMPONENTS AND SUBMITTED FOR REVIEW BY ENGINEER. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.

26. THE CONTRACTOR SHALL REVIEW AND ANNOTATE SHOP DRAWINGS BEFORE SUBMITTING THEM TO THE ARCHITECT/ENGINEER FOR REVIEW. THE CONTRACTOR SHALL ALLOW ARCHITECT/ENGINEER 10 WORKING DAYS FOR REVIEW OF SHOP DRAWINGS.

27. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED FOR A FRAMING OBSERVATIONS IMMEDIATELY AFTER ROOF DECK IS INSTALLED AND BEFORE INSTALLATION OF THE CEILING.

FASTENERS

1. CAST-IN-PLACE AND POST-INSTALLED ANCHORS SHALL BE PER ANCHOR DIAMETER AND EMBEDMENT DEPTH NOTED ON THE DRAWINGS. POST-INSTALLED ANCHORS SHALL BE UTILIZED ONLY WHERE SPECIFIED.

2. ALL ANCHORS NOTED BELOW SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL CONTACT MANUFACTURER'S REPRESENTATIVE FOR THE INITIAL TRAINING AND INSTALLATION OF ANCHORS, AND FOR PRODUCT RELATED QUESTIONS AND AVAILABILITY.

3. SPECIAL INSPECTIONS SHALL BE PROVIDED FOR ALL MECHANICAL AND ADHESIVE ANCHORS PER THE APPLICABLE EVALUATION REPORT NOTED BELOW. SPECIAL INSPECTIONS SHALL BE PERFORMED BY INDEPENDENT TESTING LABORATORY PERFORMING QA/QC SERVICES ON PROJECT.

4. EXPANSION BOLTS (EB) IN CONCRETE/CMU SHALL BE TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 A

GENERAL STRUCTURAL NOTES

SPECIAL INSPECTIONS

SPECIAL INSPECTIONS INDEPENDENT OF THE CONTRACTOR, THE ARCHITECT, OR THE ENGINEER, SHALL BE PROVIDED BY A SPECIAL INSPECTOR EMPLOYED BY THE OWNER ACCORDING TO CHAPTER 17 OF THE IBC 2003. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SEND WRITTEN REPORTS TO THE OWNER, THE ARCHITECT, THE ENGINEER AND THE CONTRACTOR. THE REPORTS SHALL INDICATE IF WORK INSPECTED WAS DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL BRING THE DISCREPANCIES TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE SPECIAL INSPECTION WORK WAS, TO THE BEST OF THEIR KNOWLEDGE, IN OR NOT IN CONFORMANCE WITH THE DRAWINGS, SPECIFICATIONS AND APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC 2012.

CONTINUOUS OR PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:

REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
VERIFY SOILS BELOW SHALLOW FOUNDATIONS ARE SUITABLE TO ACHEIVE THE BEARING CAPACITY FOR WHICH THEY WERE DESIGNED		X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X
PERFORM CLASSIFICATION AND TESTING OF COMPACTED SELECT FILL MATERIALS		X
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF SELECT FILL	X	
PRIOR TO PLACEMENT OF COMPACTED SELECT FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X

REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT		X
INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	X	
VERIFY USE OF REQUIRED DESIGN MIX		X
PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE AT THE TIME OF SAMPLING FRESH CONCRETE FOR MAKING SPECIMENS FOR STRENGTH TESTS PER ACI 318	X	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
INSPECTION OF PRESTRESSED CONCRETE APPLICATION OF PRESTRESSING FORCES AND GROUTING OF BONDED PRESTRESSING TENDONS	X	
VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
ERECTION OF PRECAST CONCRETE MEMBERS		X
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X

REQUIRED VERIFICATION AND INSPECTION OF ANCHORS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
CAST-IN-PLACE, POST-INSTALLED, MECHANICAL AND EPOXY SET ANCHORS: AS APPLICABLE, THE INSPECTION PROGRAM SHALL VERIFY THE ANCHOR TYPE, EMBEDMENT, TIGHTENING TORQUE, DIMENSIONS, HOLE DEPTH & DIAMETER AND CLEANOUT, EPOXY MIXING AND PLACEMENT PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE CURRENT ICC-ES EVALUATION REPORT		FREQUENCY OF INSPECTION SHALL BE IN ACCORDANCE WITH THE CURRENT ICC-ES EVALUATION REPORT, OR PER THE SPECIAL INSPECTION REQUIREMENTS OF THE ANCHOR SUBSTRATE AND ORIENTATION, WHICHEVER IS MORE STRINGENT

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

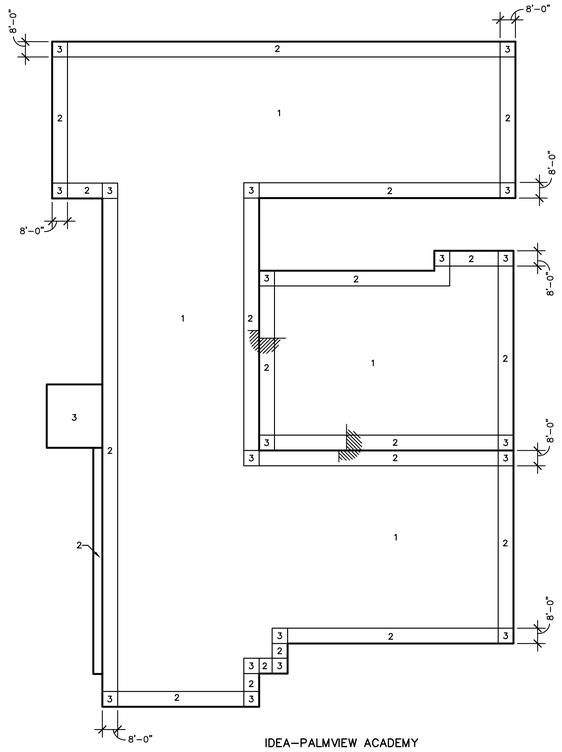
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS		X
INSPECTION OF HIGH STRENGTH BOLTING		X
INSPECTION OF WELDING:		
COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	X	
MULTIPASS FILLET WELDS	X	
SINGLE-PASS FILLET WELDS		X
FLOOR AND ROOF DECK WELDS		X
INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS		X

REQUIRED VERIFICATION AND INSPECTION OF COLD-FORMED LIGHTWEIGHT STEEL FRAME CONSTRUCTION (EXTERIOR METAL STUDS)

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
MATERIAL VERIFICATION OF COLD-FORMED LIGHTWEIGHT FRAMING MEMBERS AND ACCESSORIES		X
TYPE, SIZE AND GAGE OF FRAMING MEMBERS AND ACCESSORIES (AS PER SHOP DRAWINGS)		X
SPACING OF FRAMING MEMBERS, BRACING, BLOCKING, AND BRIDGING (AS PER SHOP DRAWINGS)		X
INSPECTION OF WELDING; TYPE, LENGTH, SPACING (AS PER SHOP DRAWINGS)		X
INSPECTION OF FASTENER ATTACHMENT: BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS.		X

REQUIRED VERIFICATION AND INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS

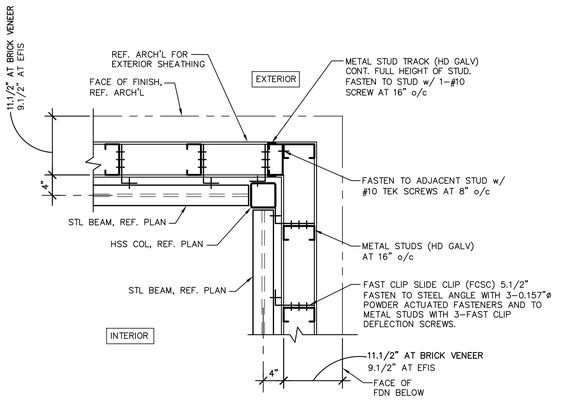
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
INSPECT THE INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS		X
INSPECT WELDED OR BOLTED END CONNECTIONS		X
INSPECT HORIZONTAL OR DIAGONAL STANDARD BRIDGING AND BRIDGING THAT DIFFERS FROM SJI SPECIFICATIONS		X



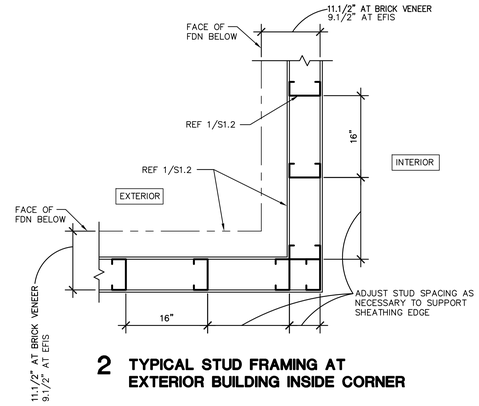
IDEA-PALMVIEW ACADEMY
AND COLLEGE PREP PHASE I
ROOF DESIGN WIND PRESSURE

DESIGN WIND PRESSURE FOR ROOF COMPONENTS & CLADDING	
ZONE	P- (UPLIFT)
1	-28 PSF
2	-47 PSF
3	-70 PSF

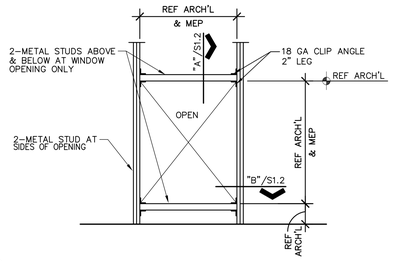
EXTERIOR FINISHES, DOORS & WINDOWS MAXIMUM DESIGN WIND PRESSURES
P+ = +26 PSF TOWARDS THE SURFACE
P- = -34 PSF AWAY FROM THE SURFACE



1 TYPICAL STUD FRAMING AT EXTERIOR BUILDING OUTSIDE CORNER

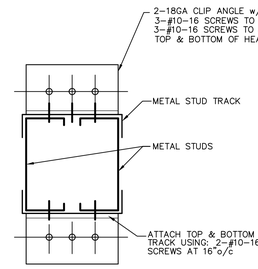


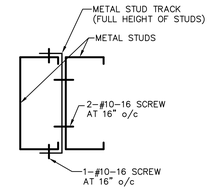
2 TYPICAL STUD FRAMING AT EXTERIOR BUILDING INSIDE CORNER

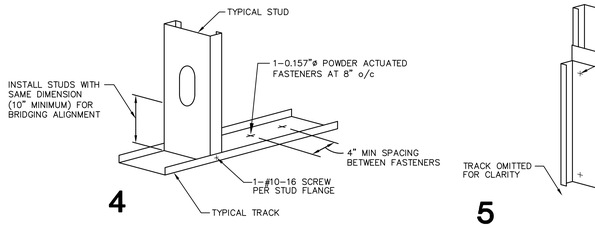


3 TYPICAL WINDOW/DOOR/LOUVER OPENING

NOTE:
1. METAL STUD JAMBS, HEADERS, AND SILLS WILL MATCH SIZE AND GAGE OF STUDS USED IN WALL THAT OPENING IS LOCATED IN. REFERENCE PLAN FOR STUD SIZES.







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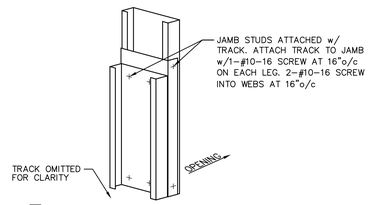

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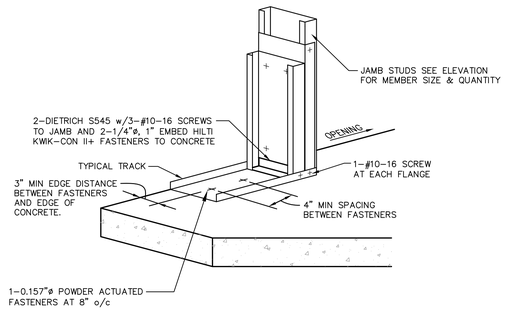

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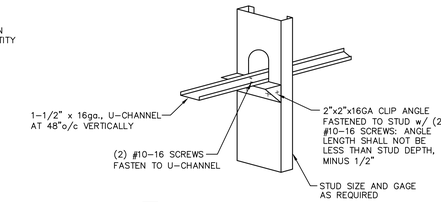
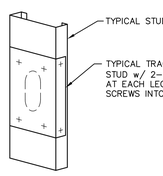
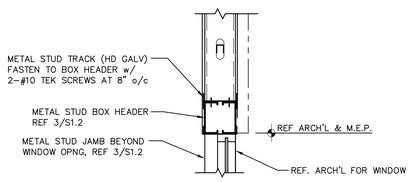


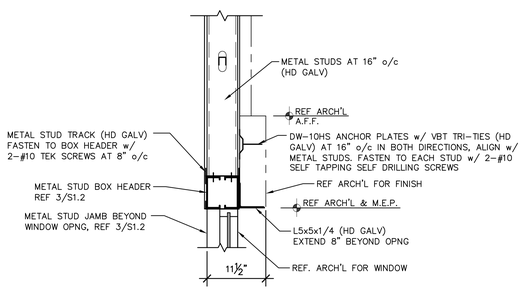
7 METAL STUD BRIDGING



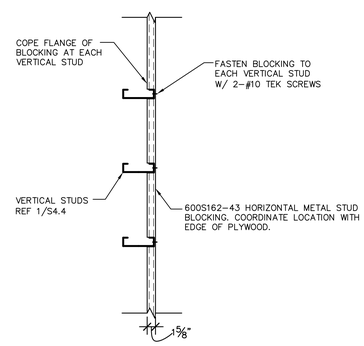
8 TYPICAL PUNCH-OUT REINFORCMENT DETAIL



9 TYPICAL WINDOW/DOOR/LOUVER OPENING HEADER DETAIL



10 TYPICAL WINDOW/DOOR/LOUVER OPENING HEADER DETAIL WITH BRICK VENEER



11 TYPICAL STUD BLOCKING DETAIL

No.	REVISIONS	BY

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Brownsville TX 78526
(956) 546-0110
fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW
IDEA Public Schools
PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
85369
LICENSED PROFESSIONAL ENGINEER
5-16-19

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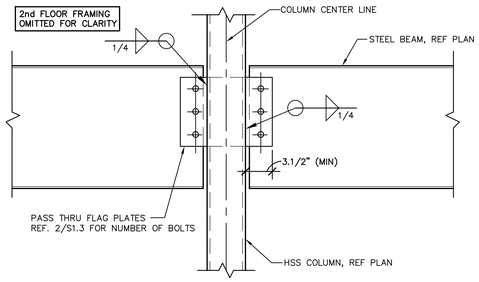
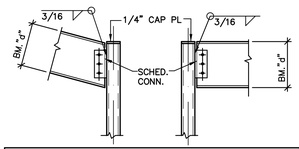
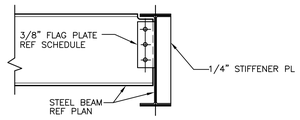


1 2nd FLOOR PASS THRU FLAG PLATE DETAIL



BEAM TO TUBE COLUMN CONNECTION SCHEDULE		
BEAM SIZE	PL SIZE	BOLTS
W8 & W10	PL 3/8x3.1/2x0'-6"	2-3/4"DIA.
W12 & W14	PL 3/8x3.1/2x0'-9"	3-3/4"DIA.
W16	PL 3/8x3.1/2x1'-0"	4-3/4"DIA.
W18	PL 3/8x3.1/2x1'-3"	5-3/4"DIA.
W21	PL 3/8x3.1/2x1'-6"	6-3/4"DIA.
W24	PL 3/8x3.1/2x1'-9"	7-3/4"DIA.

2 TYPICAL BEAM TO COLUMN CONNECTION



BEAM TO BEAM CONNECTION SCHEDULE		
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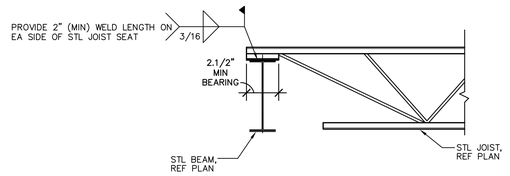
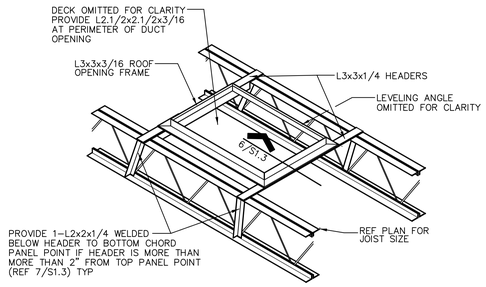
W16	PL 3/8x3.1/2x1'-0"	4-3/4"DIA.
W18	PL 3/8x3.1/2x1'-3"	5-3/4"DIA.
W21	PL 3/8x3.1/2x1'-6"	6-3/4"DIA.

3 TYPICAL BEAM TO BEAM CONNECTION

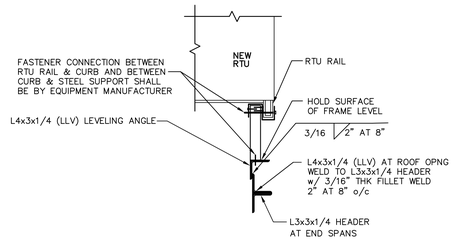


4 TYPICAL WELD LENGTH ON STL JOIST TO STL BEAM/STL PLATE CONNECTION

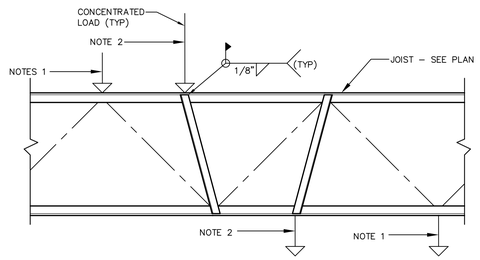


REF MECH'L OR ARCH'L FOR OPENING SIZE & LOCATION

5 ROOF OPENING FRAME DETAIL



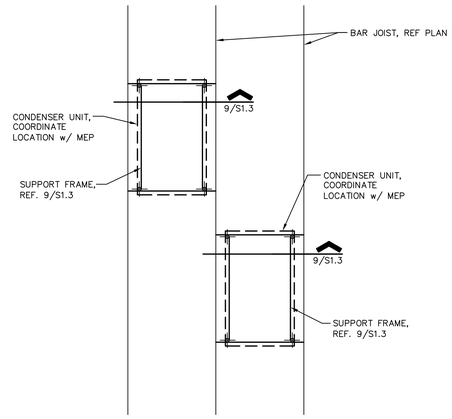
6 ROOF OPENING FRAME DETAIL (TYPICAL)



7 TYP. CONCENTRATED LOAD DETAIL

NOTES:

1. CONCENTRATED LOAD LOCATED AT JOIST PANEL POINT LOCATION - NO ADDTIONAL ANGLES REQUIRED.
2. CONCENTRATED LOAD (100 LBS. OR HEAVIER) NOT LOCATED AT JOIST PANEL POINT LOCATION - PROVIDE L2x2x1/4 TO PANEL POINT AS SHOWN.

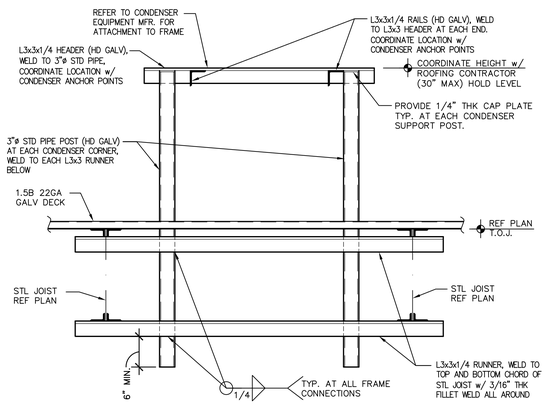


8 TYPICAL ROOF MOUNTED CONDENSER SUPPORT FRAMING PLAN

1/4" = 1'-0"

NOTES:

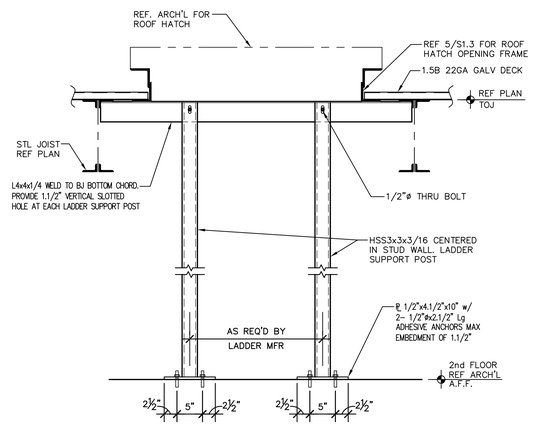
1. COORDINATE LOCATION AND ORIENTATION WITH MEP AND ARCHITECTURAL.



9

NOTE:

1. COORDINATE LOCATION OF SUPPORT FRAME WITH MEP & EQUIPMENT MANUFACTURER.
2. REFERENCE 8/S1.3 FOR TYPICAL CONDENSER UNIT SUPPORT FRAMING PLAN.



10 TYPICAL ROOF HATCH LADDER SUPPORT FRAMING

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
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LICENSED PROFESSIONAL ENGINEER
5-16-19

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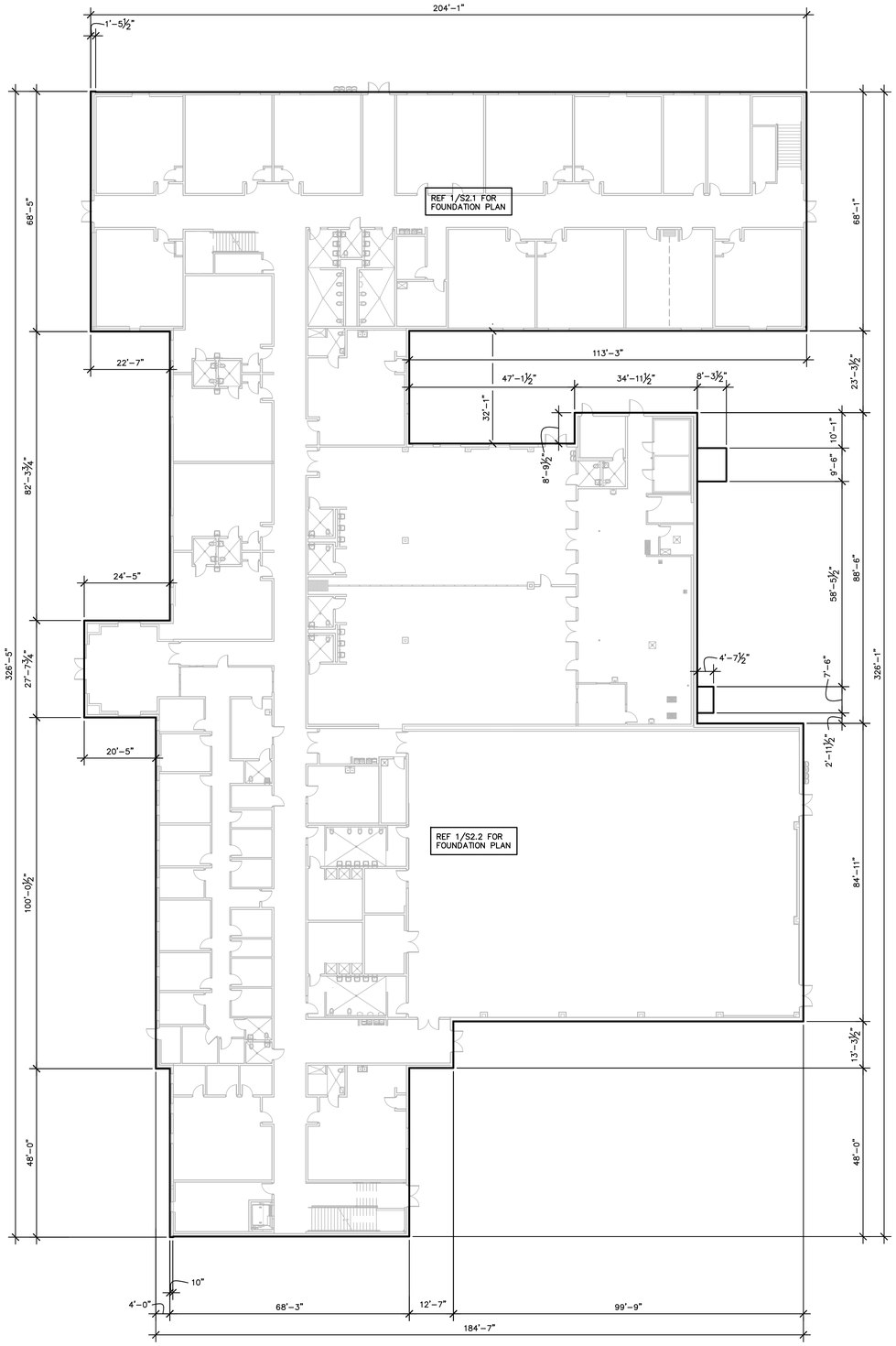

1 FOUNDATION DIMENSION LIMITS PLAN

1/16" = 1'-0"

N

PLAN NORTH

NOTES:

1. REFERENCE ARCHITECTURAL & CIVIL FOR BUILDING LOCATION AND ORIENTATION.
2. REFERENCE 1/S2.1 & 1/S2.2 FOR FOUNDATION PLANS.

KEY PLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

IDEA Public Schools

PALMVIEW, TEXAS

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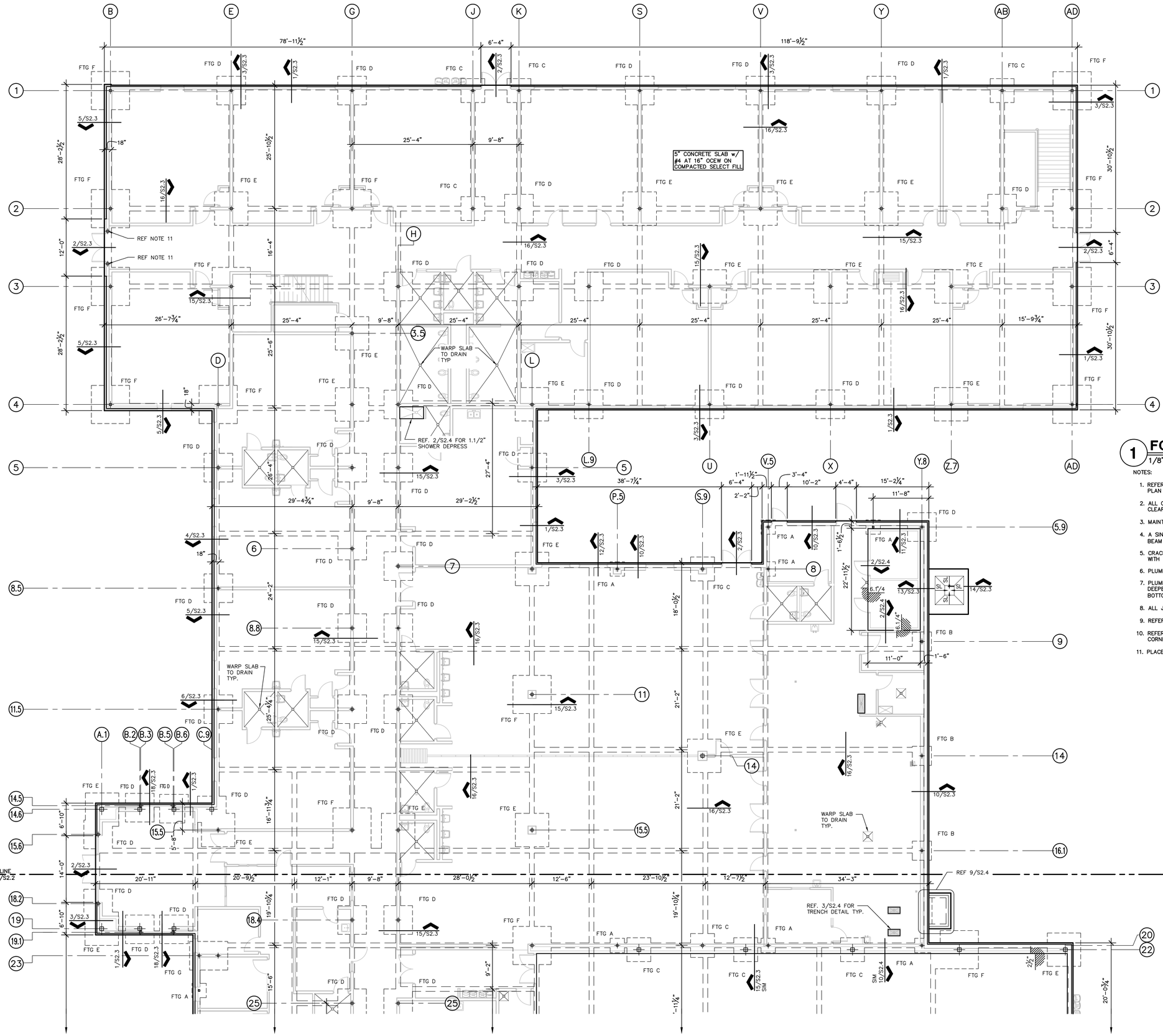

1 FOUNDATION PLAN

1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. REFERENCE ROOF FRAMING PLAN FOR COLUMN AB/ BASEPLATE LOCATIONS. FOUNDATION PLAN DIMENSIONS GENERALLY DENOTE GRADE BEAM CENTERLINE & OUTSIDE FACE CONCRETE.
2. ALL CONDUIT GREATER THAN 1" IN DIAMETER SHALL BE RECESSED TO PROVIDE 1.1/2" CLEAR DISTANCE BETWEEN SLAB REBAR & CONDUIT.
3. MAINTAIN 2" MINIMUM CLEAR DISTANCE BETWEEN ALL CONDUIT IN SLAB.
4. A SINGLE CONDUIT (MAX 3" O.D.) MAY BE PLACED WITHIN THE BEAM CAGE. ALL CONDUIT IN BEAM CAGES TO BE TIED TO STIRRUPS MINIMUM OF 4" FROM HORIZONTAL BARS.
5. CRACK CONTROL JOINTS ARE NOTED ON THE PLANS. CONTRACTOR TO COORDINATE CHANGES WITH THE ENGINEER PRIOR TO FORMING FOUNDATION.
6. PLUMBING LINES SHALL NOT BE PLACED IN BOTTOM OF GRADE BEAM TRENCHES.
7. PLUMBING LINES PASSING THROUGH GRADE BEAMS SHALL BE SLEEVED. BEAMS SHALL BE DEEPENED AND BENT REBAR PROVIDED IF LOCATION OF DRAIN LINES REQUIRES CUTTING BOTTOM BARS. REFERENCE 4/S2.4.
8. ALL JOINTS TO BE CLEANED AND FILLED w/ SONOLASTIC SL1 (SONNEBORN).
9. REFERENCE 1/S2.1C FOR CONTROL JOINT PLAN.
10. REFERENCE 1/S2.0 FOR FOUNDATION DIMENSION LIMITS PLAN SHOWING OVERALL BUILDING CORNER DIMENSION STRINGS.
11. PLACE BASEPLATES FOR WIND COLUMNS AND DIAGONAL BRACES FLUSH w/ FINISH FLOOR.

FOOTING SCHEDULE		
MARK	SIZE	REINFORCEMENT
FTG A	3'-0" x 3'-0"	#5 AT 12" O.C.E.W.
FTG B	4'-0" x 4'-0"	#5 AT 12" O.C.E.W.
FTG C	5'-0" x 5'-0"	#5 AT 12" O.C.E.W.
FTG D	6'-0" x 6'-0"	#5 AT 12" O.C.E.W.
FTG E	7'-0" x 7'-0"	#5 AT 12" O.C.E.W.
FTG F	8'-0" x 8'-0"	#5 AT 12" O.C.E.W.
FTG G	8'-0" x 6'-0"	#5 AT 12" O.C.E.W.

BASEPLATE SCHEDULE		
COLUMN	PLATE TxWxL	ANCHORS
HSS5 x 5	3/4 x 9 x 9	4-3/4" DIA x 8" WHS
HSS6 x 6	1 x 10 x 10	4-3/4" DIA x 8" WHS
HSS10 x 10	1 x 14 x 14	4-3/4" DIA x 8" WHS

KEY PLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

IDEA PALMVIEW
PALMVIEW, TEXAS

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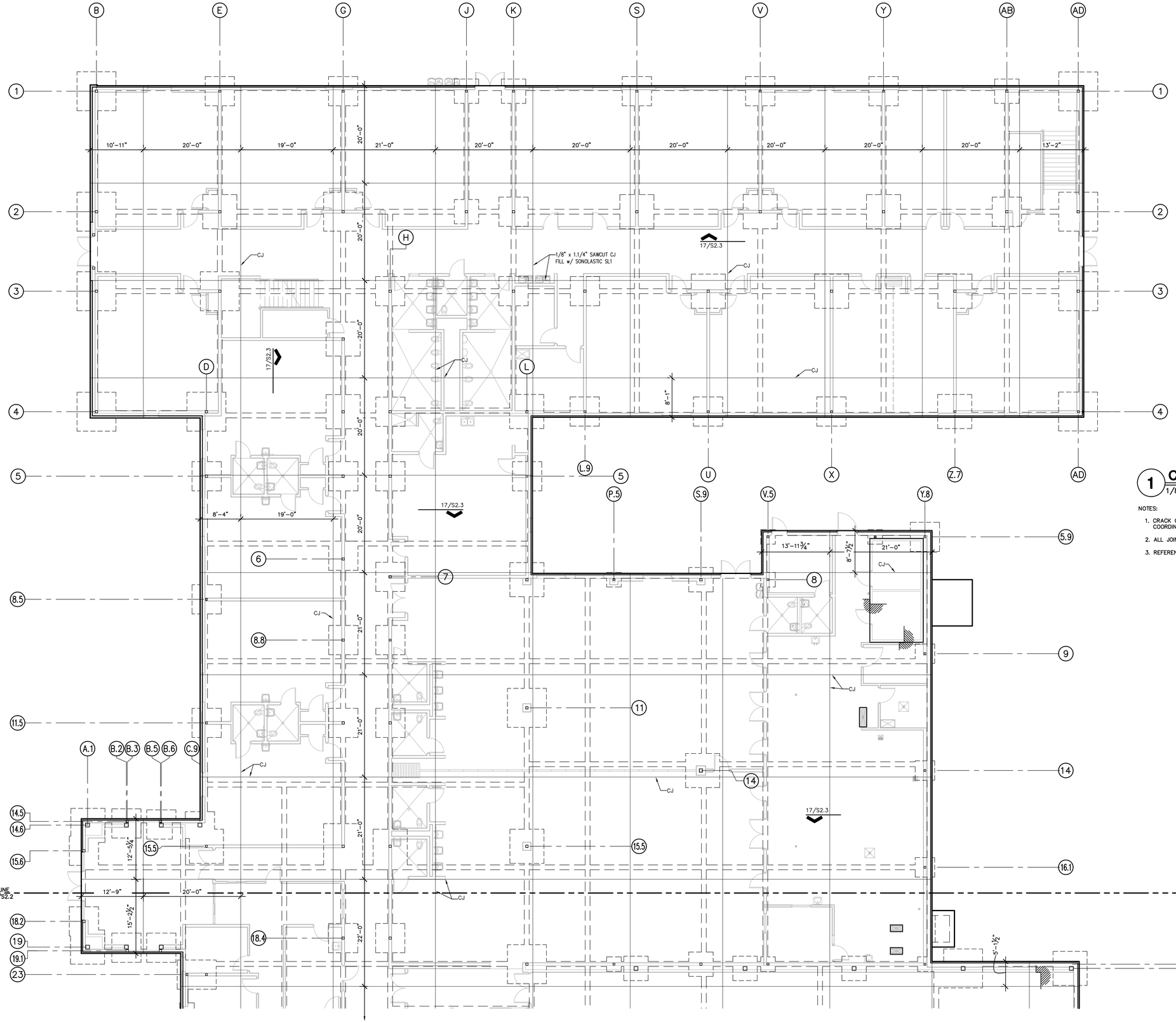

1 CONTROL JOINT PLAN

1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. CRACK CONTROL JOINTS ARE NOTED ON THE PLANS. CONTRACTOR TO COORDINATE CHANGES WITH THE ENGINEER PRIOR TO FORMING FOUNDATION.
2. ALL JOINTS TO BE CLEANED AND FILLED w/ SONOLASTIC SL1 (SONNEBORN).
3. REFERENCE 1/S2.1 FOR ADDITIONAL FOUNDATION NOTES AND REFERENCES.

KEY PLAN

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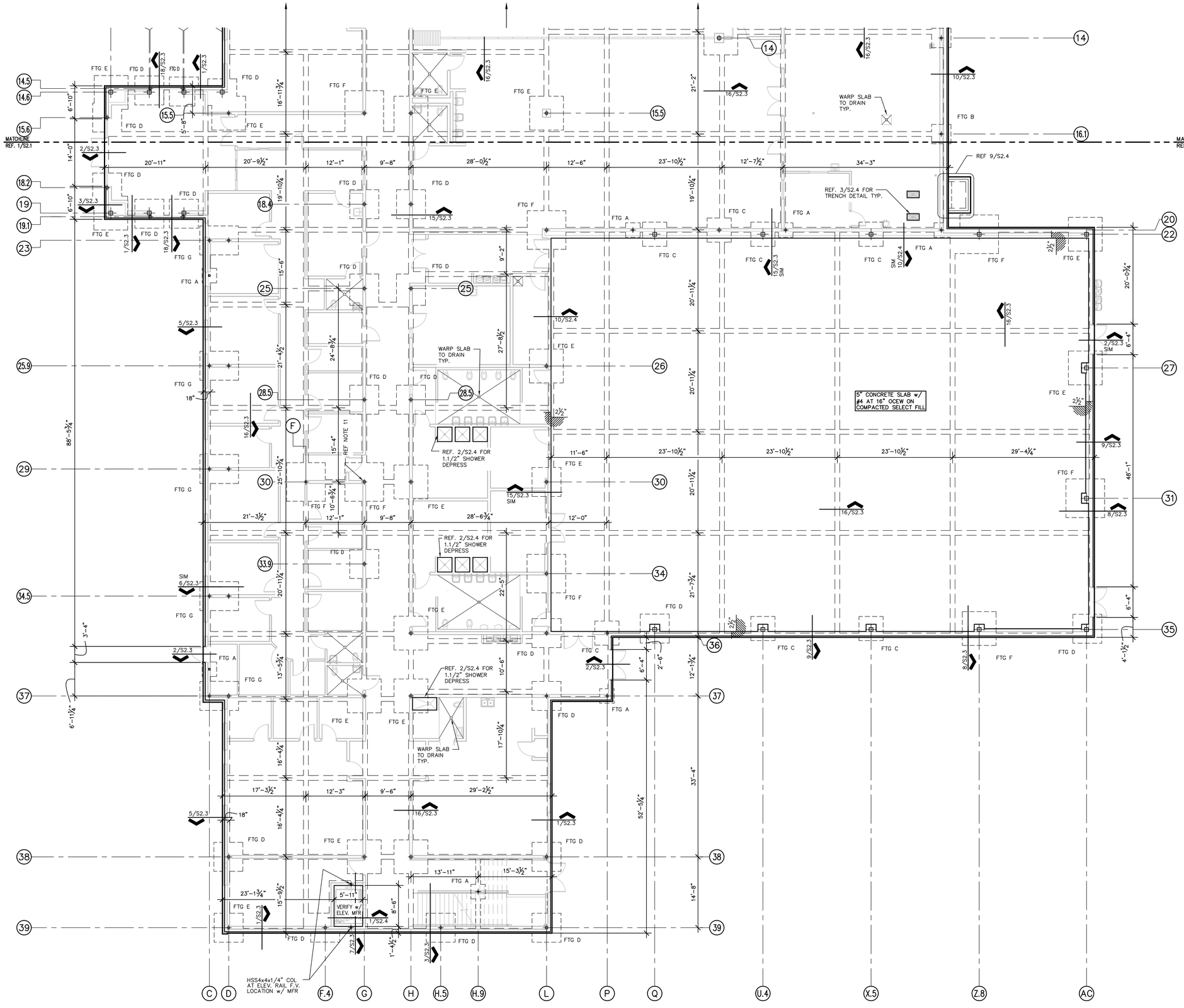

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PLAN NORTH

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9. REFERENCE 1/S2.2C FOR CONTROL JOINT PLAN.
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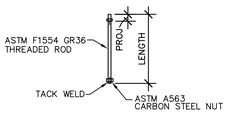
11. PLACE BASEPLATES FOR WIND COLUMNS AND DIAGONAL BRACES FLUSH w/ FINISH FLOOR.
12. PROVIDE 3/4"ø x 12" Lg ANCHOR RODS AT COLUMNS ALONG GRID 30 AT GRIDS F AND G AT BRACE 22. ANCHOR RODS SHALL BE ASTM F1554.



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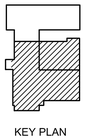

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IDEA PUBLIC SCHOOLS PHASE 1

PALMVIEW
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IDEA Public Schools

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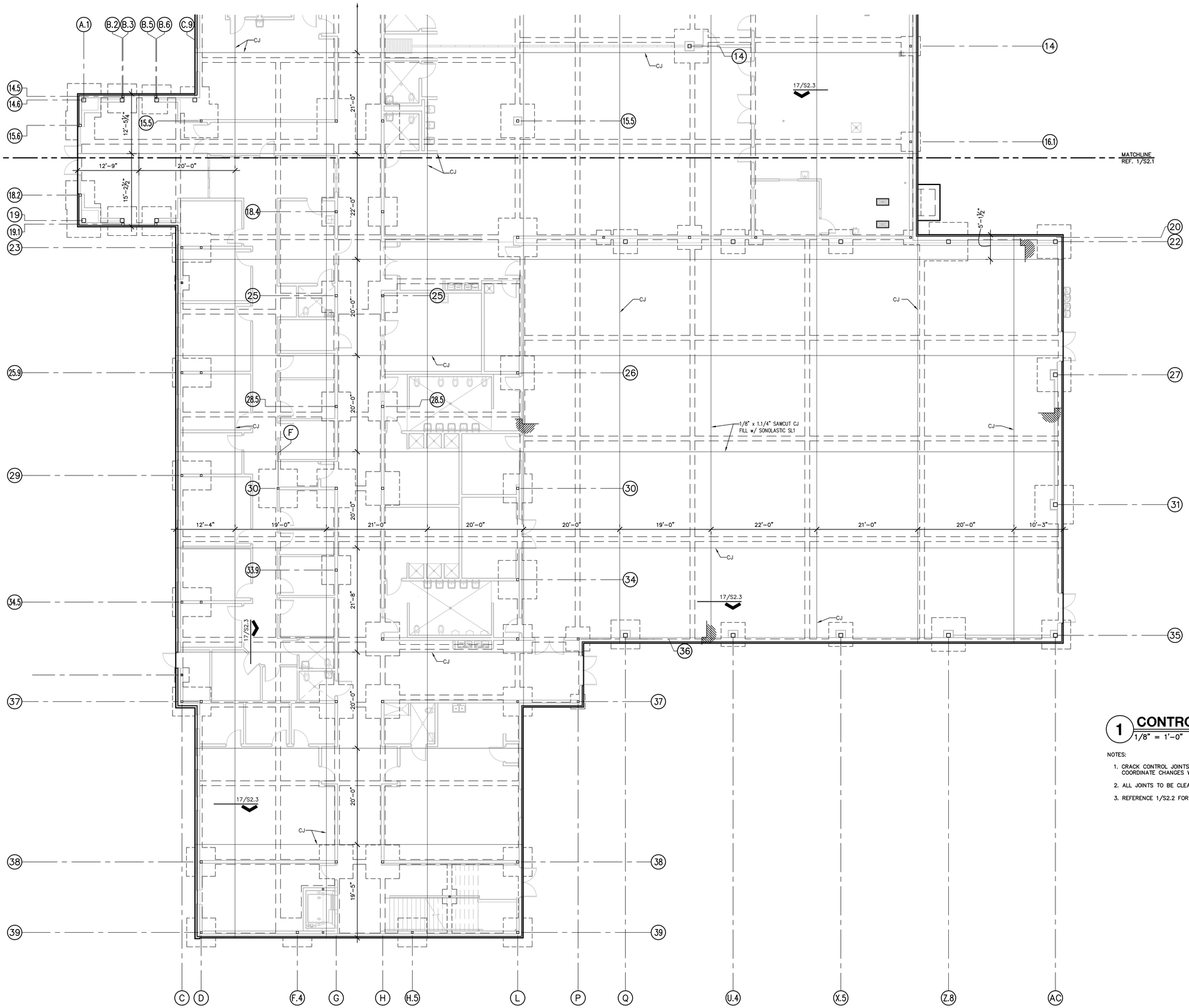

1 CONTROL JOINT PLAN

1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. CRACK CONTROL JOINTS ARE NOTED ON THE PLANS. CONTRACTOR TO COORDINATE CHANGES WITH THE ENGINEER PRIOR TO FORMING FOUNDATION.
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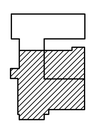
3. REFERENCE 1/S2.2 FOR ADDITIONAL FOUNDATION NOTES AND REFERENCES.



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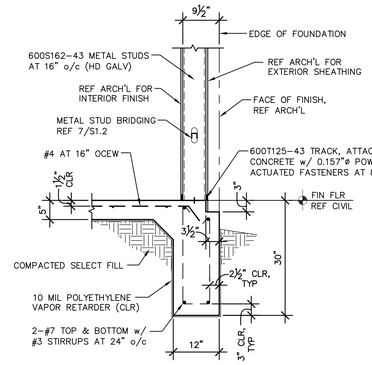

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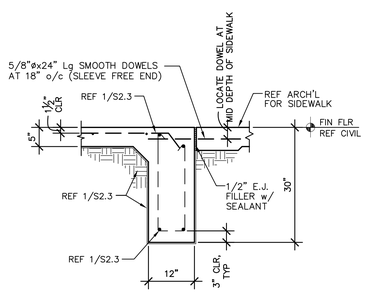

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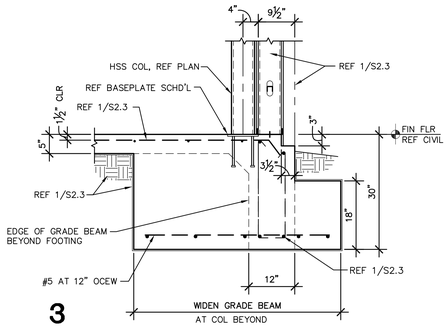

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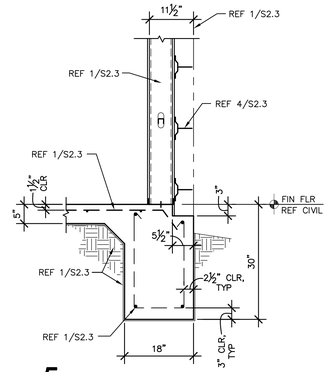

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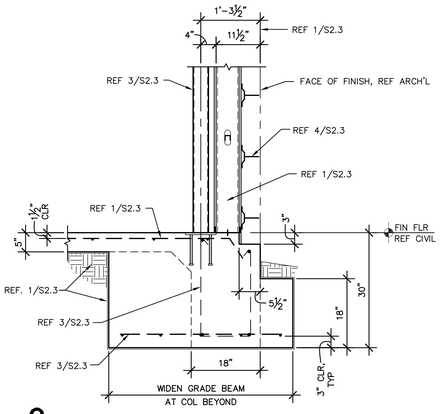

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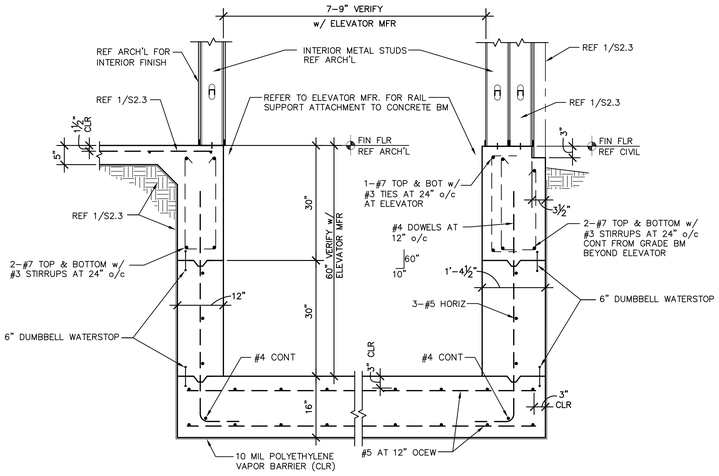
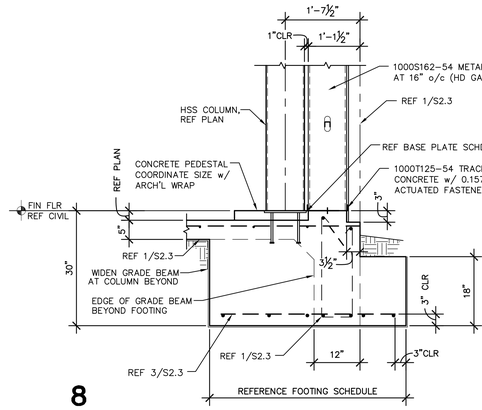


7 **ELEVATOR PIT SIDE WALLS**



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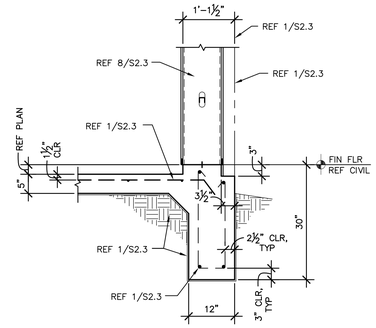

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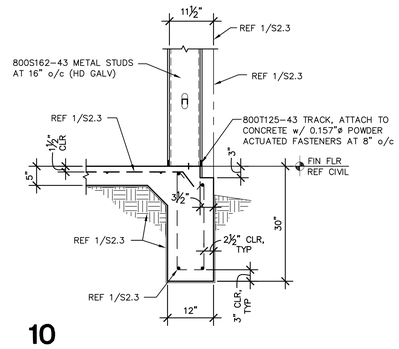

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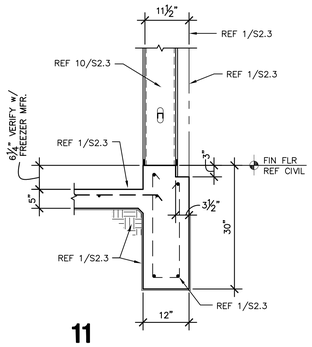

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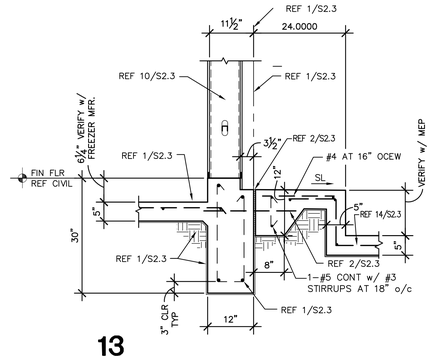
12



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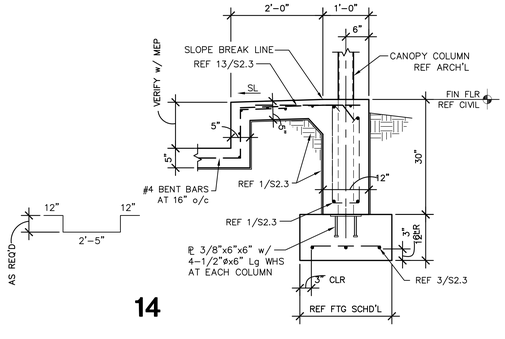

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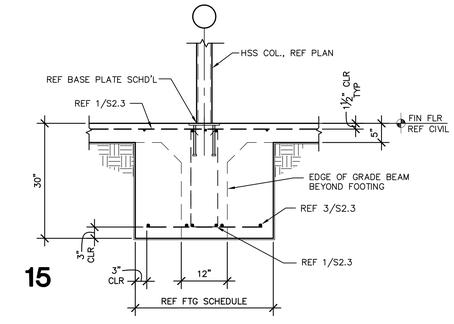

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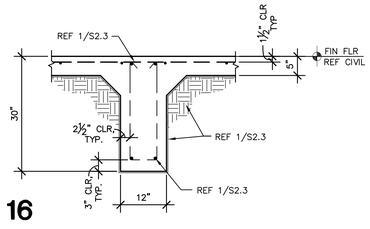

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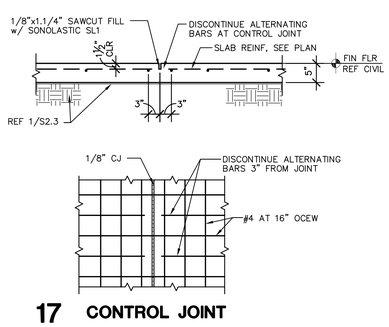
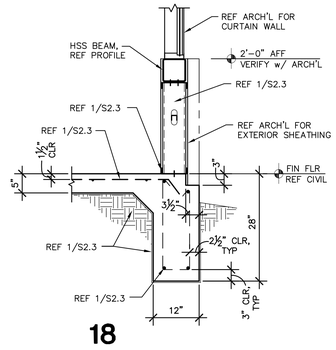


17 **CONTROL JOINT**

NOTE: ALL JOINTS ARE TO BE CLEANED AND FILLED WITH SONOLASTIC SL1 (SONNEBORN).



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IDEA PUBLIC SCHOOLS PHASE 1
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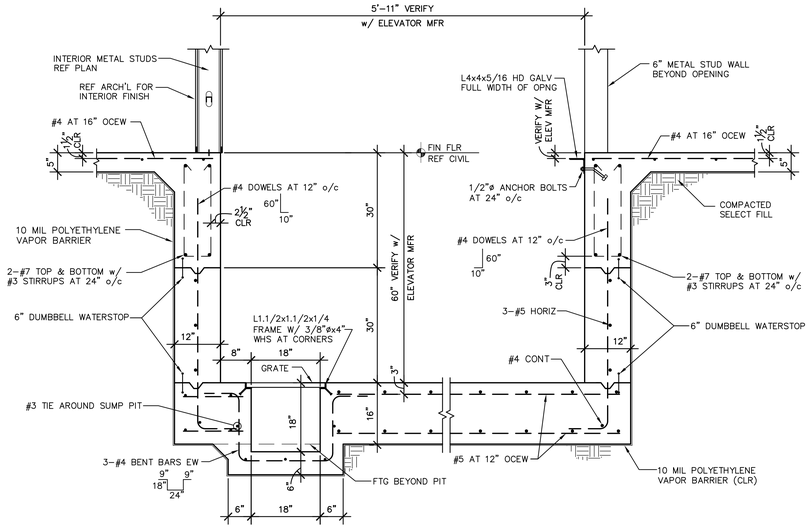
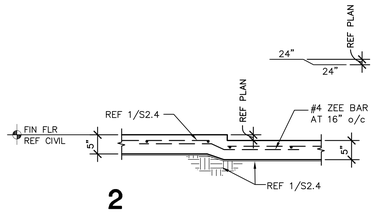


1 ELEVATOR PIT FRONT/REAR WALL

NOTE:
1. VERIFY SUMP PIT SIZE AND LOCATION WITH ELEVATOR MANUFACTURER PRIOR TO POURING CONCRETE.



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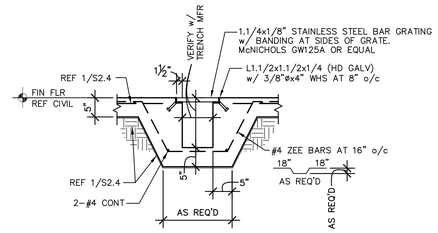
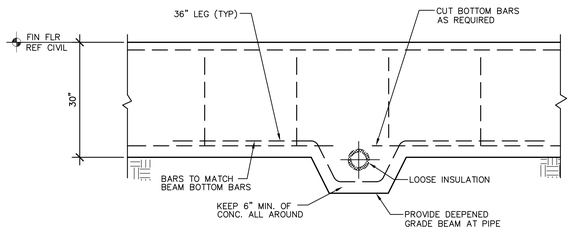
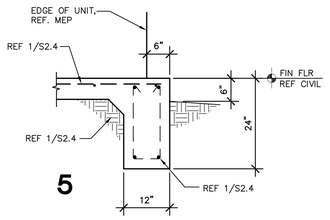


3 TRENCH DETAIL

VERIFY SIZE & LOCATION WITH PLUMBING PRIOR TO POURING



4 TOP OF SLEEVE INTERRUPTS REINFORCING



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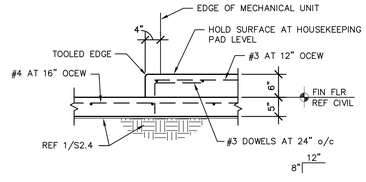
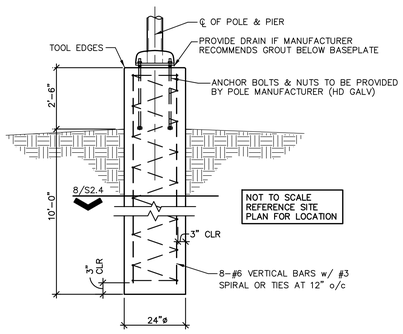


6 TYPICAL HOUSEKEEPING PAD DETAIL

NOTE: COORDINATE SIZE, LOCATION & QUANTITIES OF HOUSEKEEPING PADS WITH MEP & ARCHITECTURAL

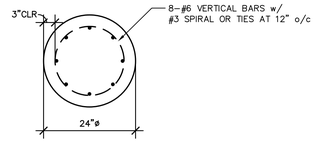


NOTES:

1. LIGHT POLE FOUNDATION WAS DESIGNED BASED ON PRESSURES CALCULATED FROM ASCE 7-05 REQUIREMENTS FOR 137 MPH WIND, IMPORTANCE FACTOR 0.77 AND EXPOSURE FACTOR C.
2. FOUNDATION DESIGN IS IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE, AND IS BASED ON THE VALUES RECOMMENDED IN TABLE 1804.2 – ALLOWABLE FOUNDATION & LATERAL PRESSURE, AS LISTED BELOW:

   LATERAL BEARING CAPACITY (PIER) ..... 100 PCF
3. ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE SPECIFICATION, A.C.I. #301 AND 2006 INTERNATIONAL BUILDING CODE REQUIREMENTS, A.C.I. #318, LATEST EDITION. CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 3,000 PSI AT 28 DAYS, A WATER/CEMENT RATIO NOT TO EXCEED 0.6 AND A MAXIMUM SLUMP OF 7 INCHES.

7 TYPICAL LIGHT POLE FOUNDATION DETAIL



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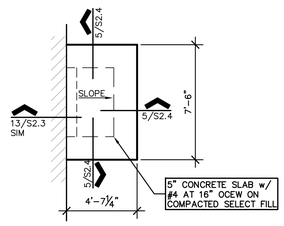
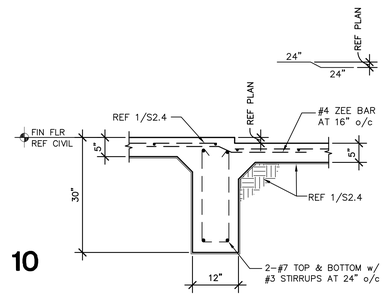


9 FOUNDATION PLAN

1/4" = 1'-0" ELECTRICAL SWITCH BOARD

NOTES:

1. COORDINATE LOCATION & SIZE OF ELECTRICAL SWITCH BOARD WITH M.E.P.



10

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IDEA Public Schools
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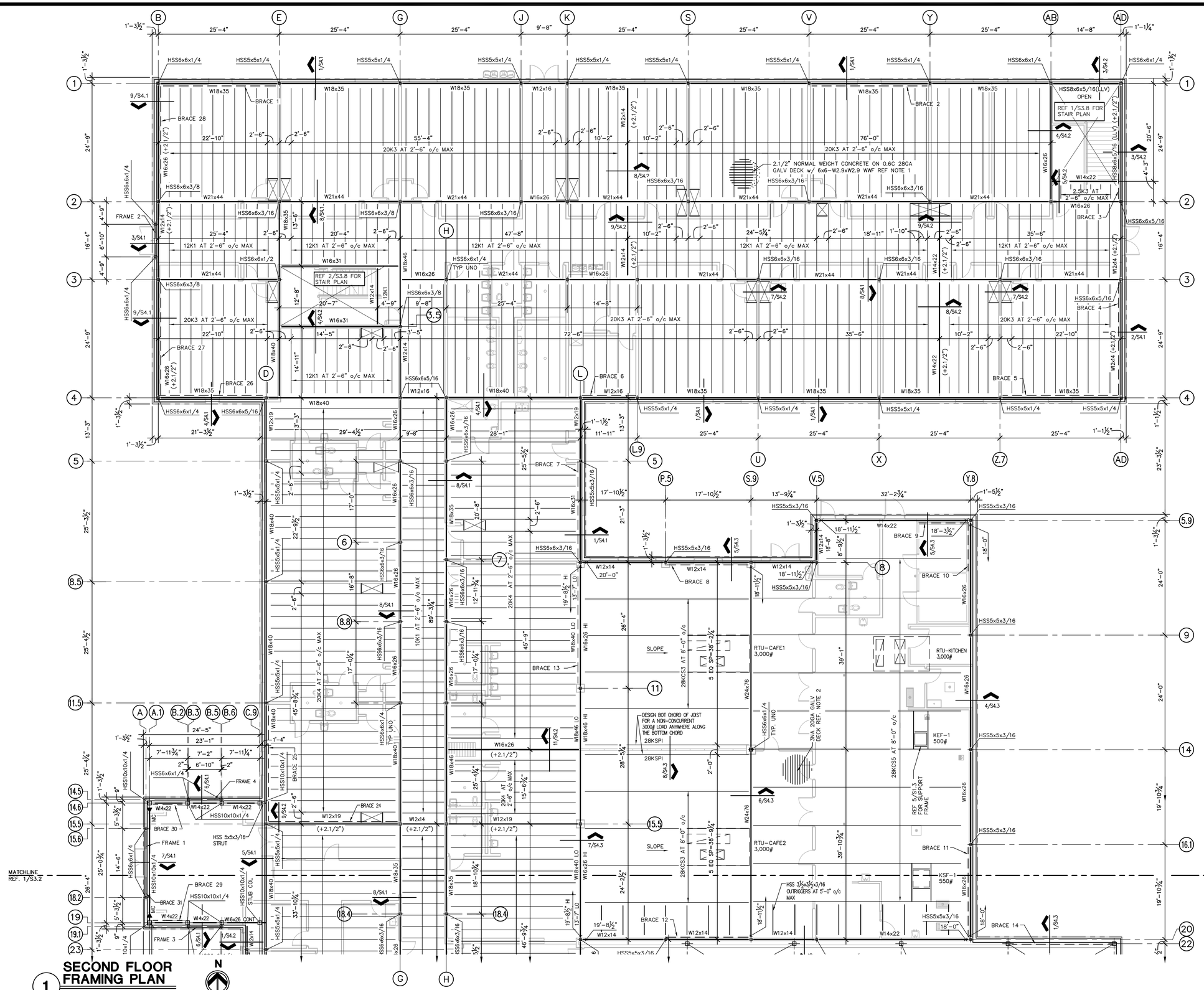

1 SECOND FLOOR FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. 2ND FLOOR DECK SHALL BE 0.6C 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.012 IN⁴/FT; Sp=0.035 IN³/FT; Sn=0.036 IN³/FT; Fy=60KSI). ATTACH DECK TO SUPPORTERS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN, AND 3-#10 TEK SCREW SIDE LAP FASTENERS WELD WASHERS REQUIRED.
2. ROOF DECK AT KITCHEN/DINING SHALL BE 3NA 20GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.848 IN/FT;In=1.079 IN/FT; SP=0.501 IN/FT; Sn=0.552 IN/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 24/4 PATTERN AND 11-#10 TEK SIDE LAP FASTENERS. DECK FINISH SHALL BE G60 AND WHITE PRIMED ON BOTTOM SIDE.
3. TOP OF BEAM SHALL BE 13'-7" UNLESS NOTED OTHERWISE.
4. ALL STEEL BEAM TO COLUMN CONNECTIONS AT SECOND FLOOR SHALL BE THRU PLATE CONNECTIONS, REFERENCE DETAIL 1/S1.3.
5. REFERENCE SHEETS S3.5-S3.7 FOR BRACE AND FRAME PROFILES.
6. FLOOR PENETRATIONS THROUGH SECOND FLOOR ARE BASED ON M.E.P. & ARCHITECTURAL DRAWINGS. CONTRACTOR SHOULD CONTACT ENGINEER IF THERE IS A CONFLICT BETWEEN FLOOR PENETRATIONS & FRAMING.
7. ALL COLUMNS SHALL BE HSS6x6x1/4 UNLESS NOTED OTHERWISE.
8. REFERENCE 9/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 1st FLOOR. COORDINATE LOCATIONS WITH M.E.P. AND ARCHITECTURAL.
9. EXTERIOR METAL STUDS ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
10. REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.

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PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
86369
LICENSED PROFESSIONAL ENGINEER
5-16-19

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MATCHLINE
REF. 1/S3.1

MATCHLINE
REF. 1/S3.1

1 SECOND FLOOR FRAMING PLAN

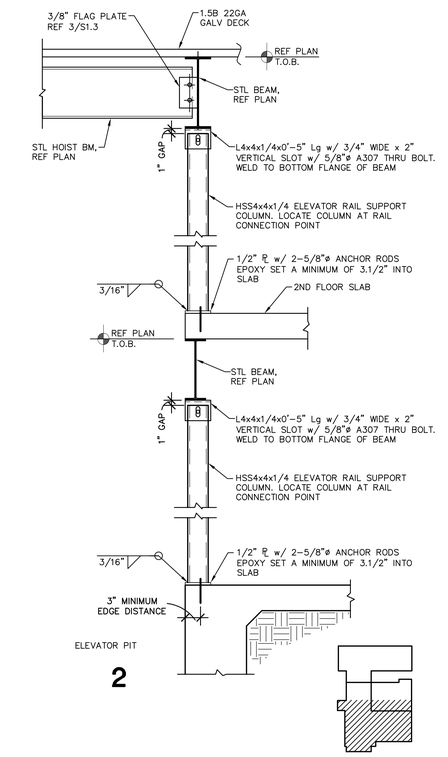
1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. 2ND FLOOR DECK SHALL BE 0.6C 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.012 IN^4/FT; Sp=0.035 IN^3/FT; SN=0.036 IN^3/FT; Fy=60KSI). ATTACH DECK TO SUPPORTERS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN, AND 3-#10 TEK SCREW SIDE LAP FASTENERS WELD WASHERS REQUIRED.
2. ROOF DECK AT DINNING SHALL BE 3NA 20GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.848 IN^4/FT; In=1.079 IN^4/FT; SP=0.501 IN^3/FT; Sn=0.552 IN^3/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 24/4 PATTERN AND 11-#10 TEK SCREW SIDE LAP FASTENERS. DECK FINISH SHALL BE G60 AND WHITE PRIMED ON BOTTOM SIDE.
3. ROOF DECK AT MAIN ENTRY SHALL BE 1.5B 22GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.155 IN^4/FT; In= 0.183 IN^4/FT; Sp=0.186 IN^3/FT; Sn=0.192 IN^3/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 36/7 PATTERN AND 2-#-10 TEK SCREW SIDE EAP FASTENERS.
4. TOP OF BEAM SHALL BE 13'-7" UNLESS NOTED OTHERWISE.
5. ALL STEEL BEAM TO COLUMN CONNECTIONS AT SECOND FLOOR SHALL BE THRU PLATE CONNECTIONS, REFERENCE DETAIL 1/S1.3.
6. REFERENCE SHEETS S3.5-S3.7 FOR BRACE AND FRAME PROFILES.
7. FLOOR PENETRATIONS THROUGH SECOND FLOOR ARE BASED ON M.E.P. & ARCHITECTURAL DRAWINGS. CONTRACTOR SHOULD CONTACT ENGINEER IF THERE IS A CONFLICT BETWEEN FLOOR PENETRATIONS & FRAMING.
8. ALL COLUMNS SHALL BE HSS6x6x1/4 UNLESS NOTED OTHERWISE.
9. REFERENCE 9/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 1st FLOOR. COORDINATE LOCATIONS WITH M.E.P. AND ARCHITECTURAL.
10. EXTERIOR METAL STUDS ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
11. REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.
12. PROVIDE AN HSS4x4x1/4 COLUMN FOR SUPPORT OF ELEVATOR RAIL. COORDINATE LOCATION w/ ELEVATOR MANUFACTURER. REFERENCE DETAIL 2/S3.2.
13. SPECIAL JOIST SHALL BE DESIGNED TO THE FOLLOWING CRITERIA.
    A. SPECIAL JOIST SHALL BE LIMITED TO DEFLECTION LIMIT OF L/240 FOR TOTAL LOAD AND L/360 FOR LIVE LOAD.
    B. WDL=200 PLF; WLL=200 PLF AND CONCENTRATED LOADS SHOWN ON PLAN. INDICATE DEAD LOAD AND LIVE LOAD ON STEEL JOIST RESPECTIVELY.
    C. SPECIAL JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 25 PSF.
14. REFERENCE 12/S3.7 FOR 44LHSP1 SPECIAL JOIST PROFILE.
15. ▶ MC DENOTES MOMENT CONNECTION REFERENCE DETAILS 9/S3.7 & 13/S3.7.



2

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IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
RUBANIO D. RUBIANO
86369
LICENSED
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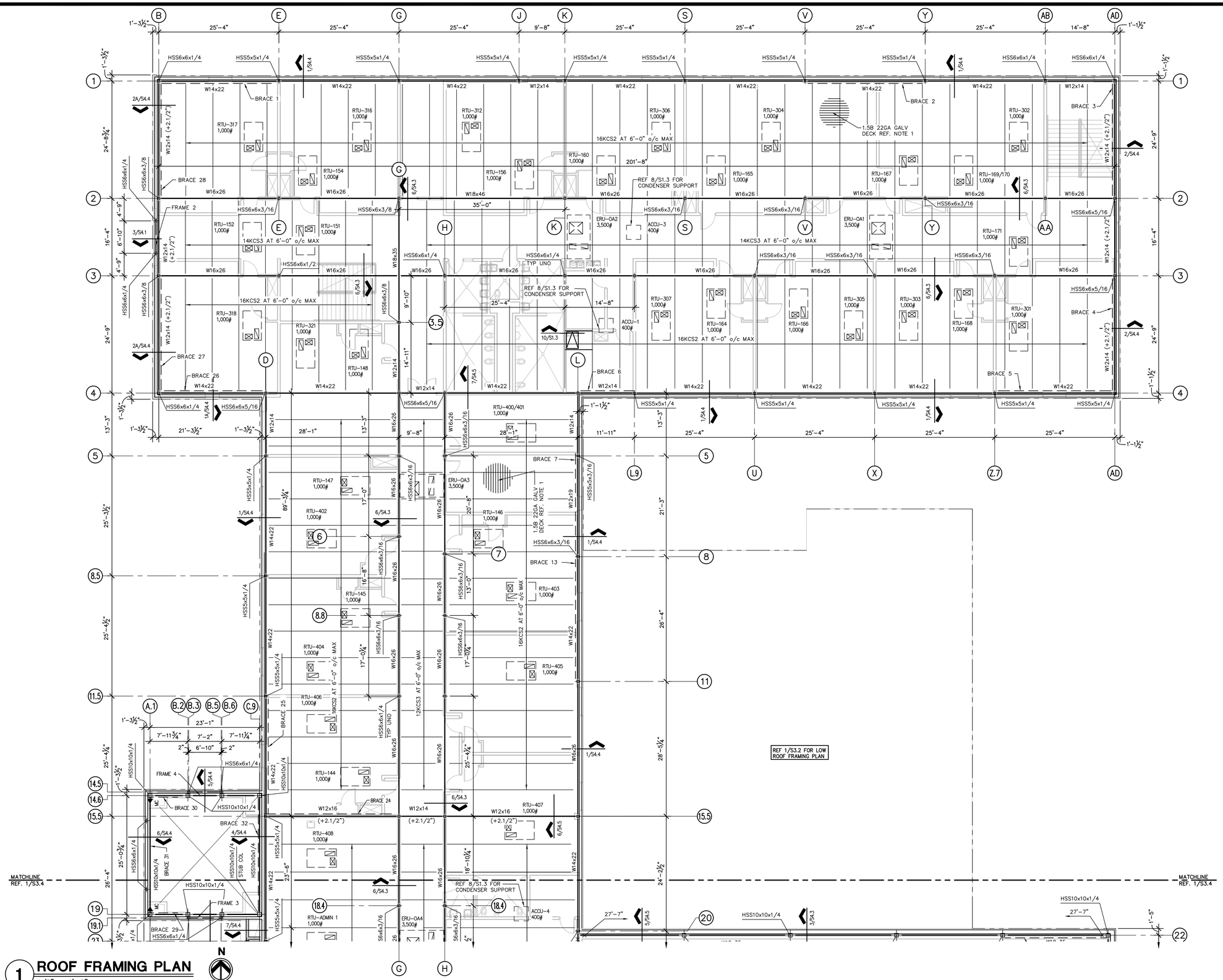

1 ROOF FRAMING PLAN

1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. ROOF DECK SHALL BE 1.5B 22GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.155 IN⁴/FT; In=0.183 IN⁴/FT; SP=0.186 IN⁴/FT; Sn=0.192 IN⁴/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 36/5 PATTERN AND 7–#10 TEK SCREW SIDE LAP FASTENERS.
2. ALL COLUMNS SHALL BE HSS6x6x1/4 UNLESS NOTED OTHERWISE.
3. TOP OF BEAMS SHALL BE 28'–0" UNLESS NOTED OTHERWISE.
4. REFERENCE SHEETS S3.5–S3.7 FOR BRACE AND FRAME PROFILES.
5. REFERENCE 5/S1.3 FOR ROOF HATCH & RTU FRAME DETAILS.
6. REFERENCE 9/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 2nd FLOOR. COORDINATE LOCATIONS WITH MEP AND ARCHITECTURAL.
7. EXTERIOR METAL STUDS ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
8. REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.
9. REFERENCE 8/S1.3 FOR TYPICAL CONDENSER SUPPORT FRAME PLAN AND 9/S1.3 FOR TYPICAL CONDENSER SUPPORT FRAMING DETAIL.

KEY PLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

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PALMVIEW, TEXAS

STATE OF TEXAS
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1 ROOF FRAMING PLAN

1/8" = 1'-0"

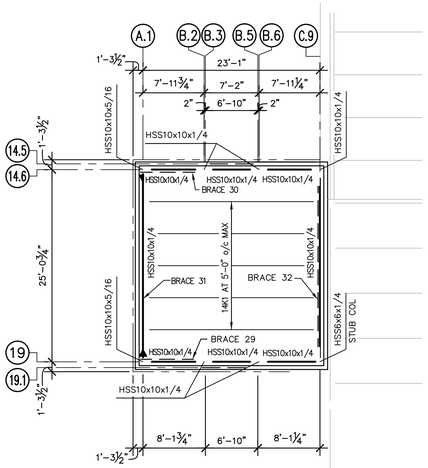
N

PLAN NORTH

NOTES:

1. ROOF DECK SHALL BE 1.5B 22GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.155 IN⁴/FT; In=0.183 IN⁴/FT; SP=0.186 IN⁴/FT; Sn=0.192 IN⁴/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 36/5 PATTERN AND 7–#10 TEK SCREW SIDE LAP FASTENERS.
2. ROOF DECK AT GYMNASIUM SHALL BE 3NA 20GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.848 IN⁴/FT;In=1.079 IN⁴/FT; SP=0.501 IN⁴/FT; Sn=0.552 IN⁴/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 24/4 PATTERN AND 11–#10 TEK SIDE LAP FASTENERS. DECK FINISH SHALL BE G60 AND WHITE PRIMED ON BOTTOM SIDE.
3. ALL COLUMNS SHALL BE HSS6x6x1/4 UNLESS NOTED OTHERWISE.
4. TOP OF BEAMS SHALL BE 28'–0" UNLESS NOTED OTHERWISE.
5. REFERENCE SHEETS S3.5–S3.7 FOR BRACE AND FRAME PROFILES.
6. REFERENCE 5/S1.3 FOR ROOF HATCH & RTU FRAME DETAILS.
7. REFERENCE 9/S1.2 FOR TYPICAL LOUVER OPENING DETAIL AT 2nd FLOOR. COORDINATE LOCATIONS WITH MEP AND ARCHITECTURAL.
8. EXTERIOR METAL STUDS ARE SPACED AT 16" o/c MAXIMUM AND ADDITIONALLY AS REQUIRED AT EDGE OF EXTERIOR SHEATHING UNLESS NOTED OTHERWISE.
9. REFERENCE 1/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR OUTSIDE BUILDING CORNER AND 2/S1.2 FOR TYPICAL STUD FRAMING AT EXTERIOR INSIDE BUILDING CORNER.
10. REFERENCE 8/S1.3 FOR TYPICAL CONDENSER SUPPORT FRAME PLAN AND 9/S1.3 FOR TYPICAL CONDENSER SUPPORT FRAMING DETAIL.
11. WALL SHEATHING SHALL BE 5/8" THK APA RATED EXPOSURE 1, SPAN RATED 24/16 AT LOCATIONS WITH METAL WALL PANELS OR SIGNAGE.
12. PROVIDE AN HSS4x4x1/4 COLUMN FOR SUPPORT OF ELEVATOR RAIL. COORDINATE LOCATION w/ ELEVATOR MANUFACTURER. REFERENCE DETAIL 2/S3.2.
13. SPECIAL JOIST SHALL BE DESIGNED TO THE FOLLOWING CRITERIA:
    A. SPECIAL JOIST SHALL BE LIMITED TO DEFLECTION LIMIT OF L/240 FOR TOTAL LOAD AND L/360 FOR LIVE LOAD.
    B. WDL= 200 PLF; WLL= 200 PLF AND CONCENTRATED LOADS SHOWN ON PLAN. INDICATE DEAD LOAD AND LIVE LOAD ON STEEL JOIST RESPECTIVELY.
    C. SPECIAL JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 25 PSF.
14. ▶ MC DENOTES MOMENT CONNECTION. REFERENCE DETAILS 9/S3.7 & 13/S3.7

WALL SHEATHING NAILING SCHEDULE AT LOCATIONS WITH METAL WALL PANELS OR SIGNAGE
FASTEN TO METAL STUDS WITH #10–16x1.1/4" LG SELF TAPPING FLAT HEAD SCREWS AT 6" o/c ALONG EDGE OF SHEET AND 12" o/c AT INTERIOR SUPPORTS



2 HIGH TOWER FRAMING PLAN

1/8" = 1'-0"

N

PLAN NORTH

NOTES:

1. ROOF DECK SHALL BE 1.5B 22GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (Ip=0.155 IN⁴/FT; In=0.183 IN⁴/FT; SP=0.186 IN⁴/FT; Sn=0.192 IN⁴/FT; Fy=33KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON A 36/5 PATTERN AND 2–#10 TEK SCREW SIDE LAP FASTENERS.
2. ▶ MC DENOTES MOMENT CONNECTION REFERENCE DETAILS 9/S3.7 & 13/S3.7.

MATCHLINE REF. 1/S3.3

REF 1/S3.2 FOR LOW ROOF FRAMING PLAN

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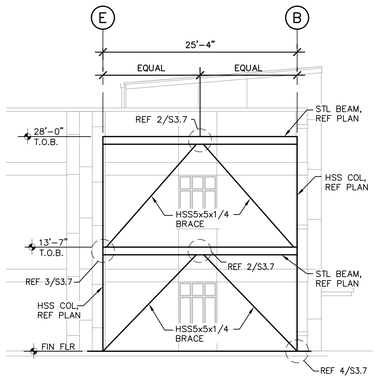
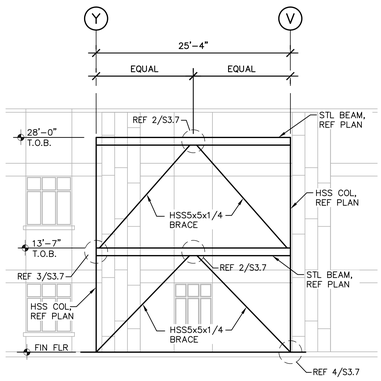


BRACE 1
ALONG GRID 1



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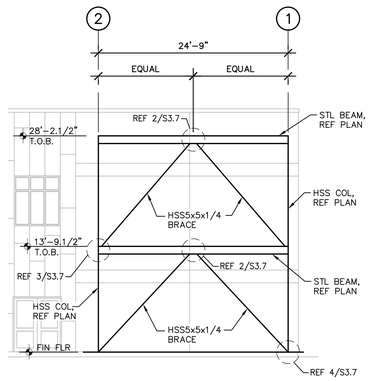

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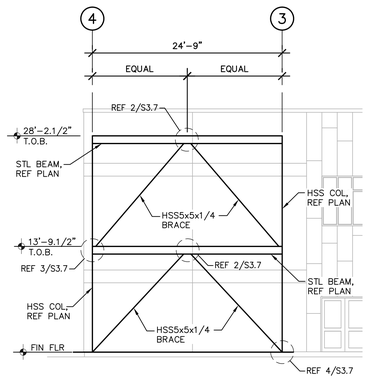

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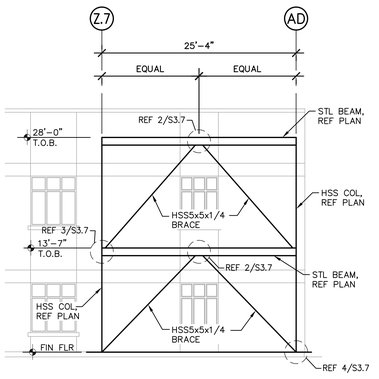

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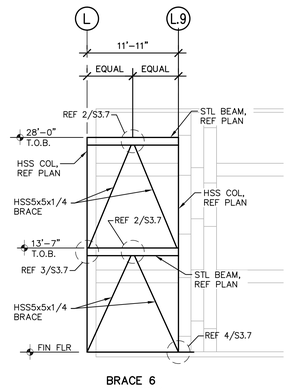

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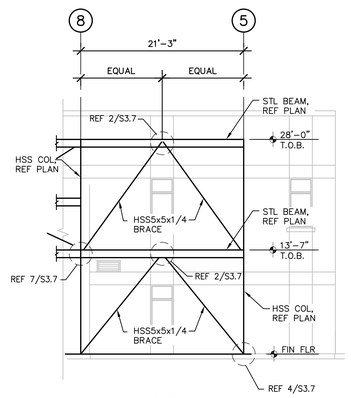

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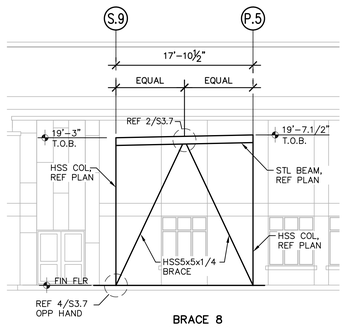
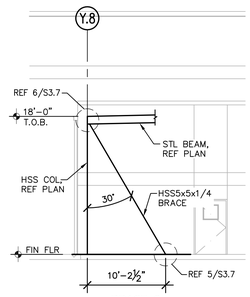


BRACE 8
ALONG GRID 8



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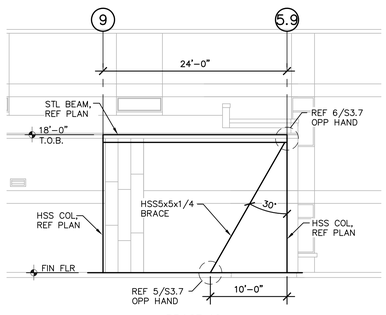

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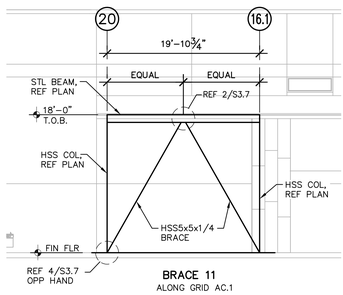

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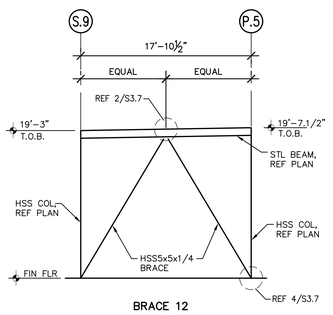

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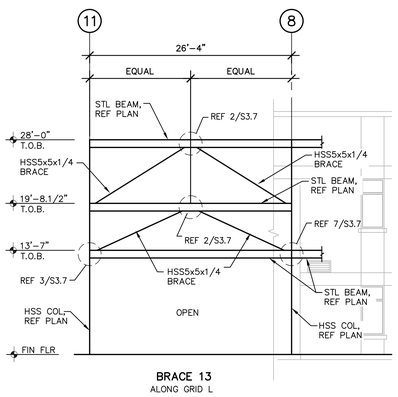

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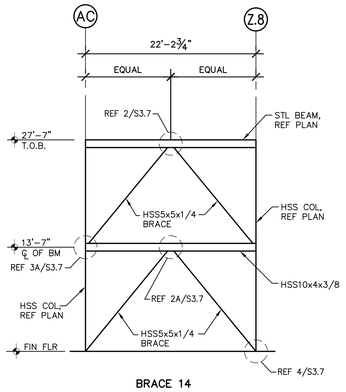

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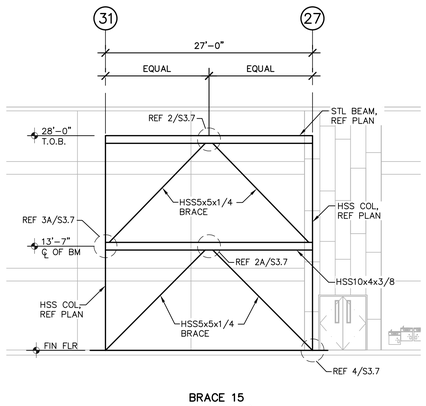

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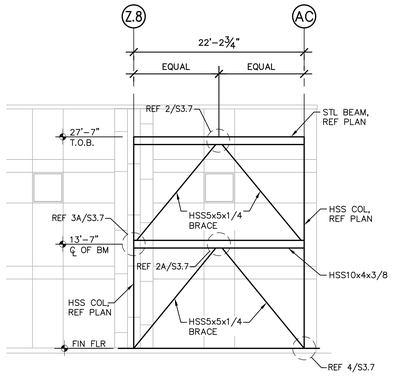

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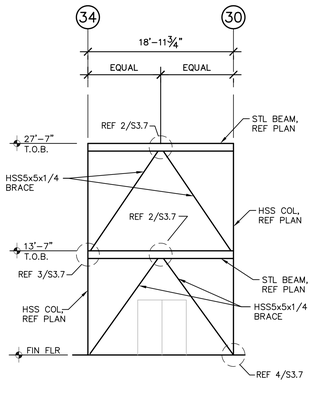

BRACE 17
ALONG GRID L

1 BRACE PROFILES
1/8" = 1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
86369
LICENSED
PROFESSIONAL
ENGINEER
5-16-19

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Date: May. 16, 2019
Scale: As Noted
DRAWN BY: KG, JJ
CHECKED BY: BD, JS
Job No. 192-520
Sheet: S3.5

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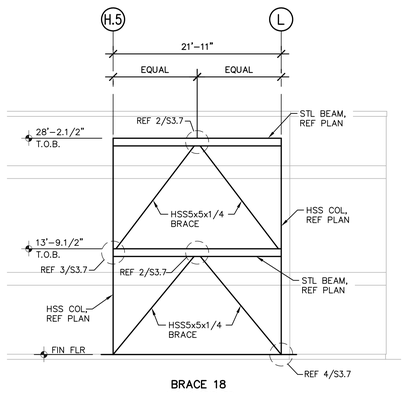

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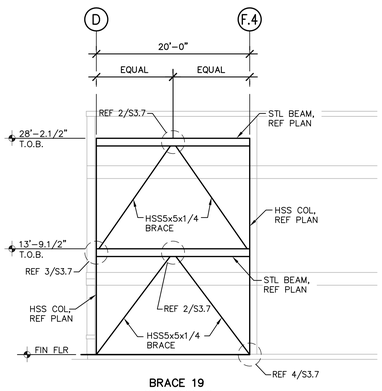

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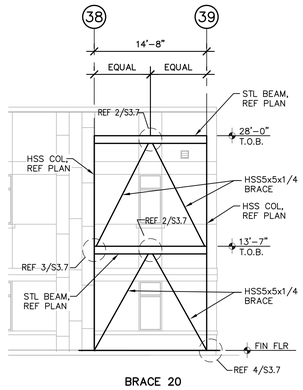

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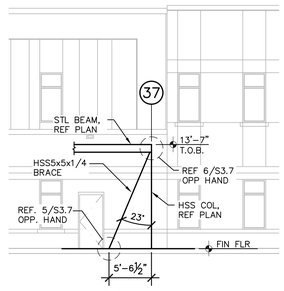

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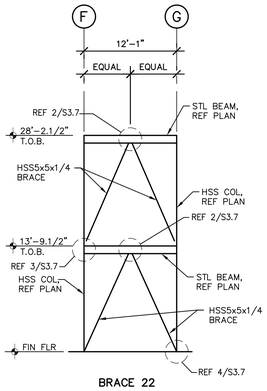

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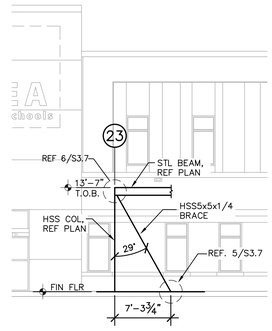
ALONG GRID 30



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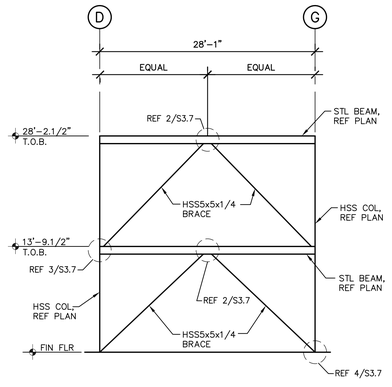

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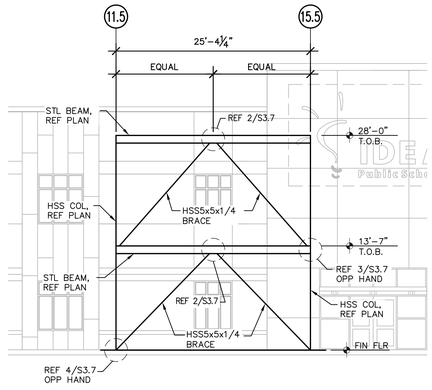

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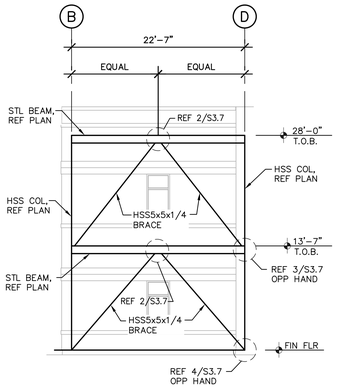

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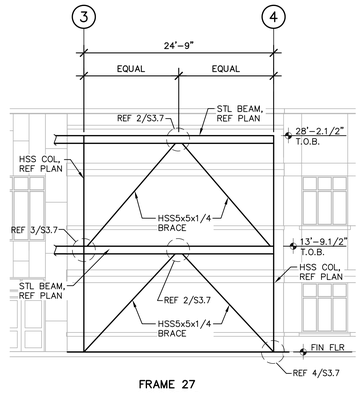

FRAME 27
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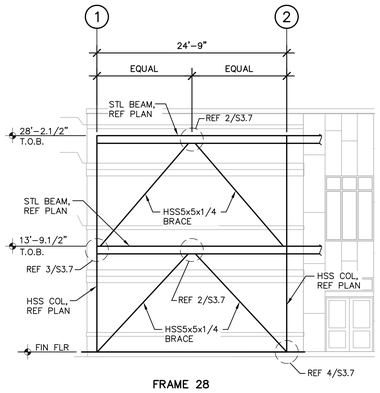

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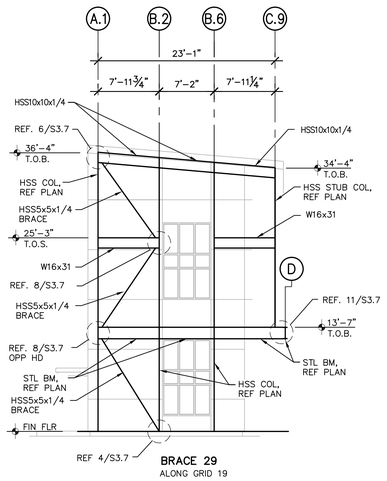

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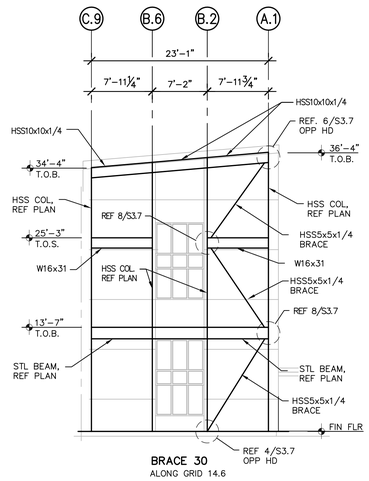

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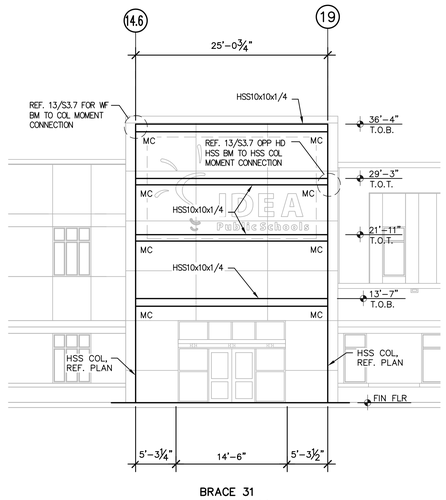

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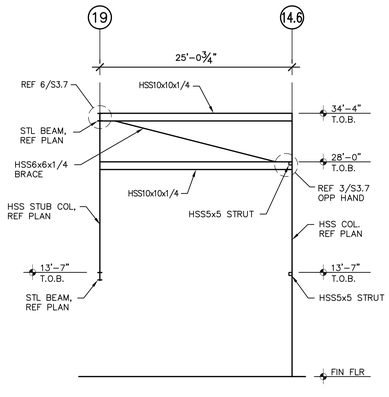

BRACE 32
ALONG GRID C.9

1 BRACE PROFILES
1/8" = 1'-0"

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
85369
LICENSED
PROFESSIONAL ENGINEER
5-16-19

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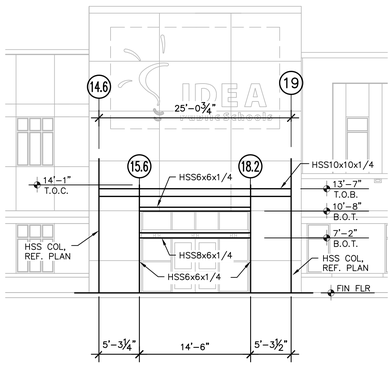
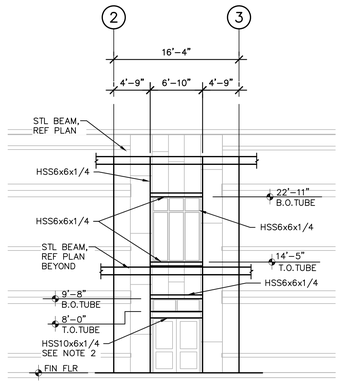


FRAME 1
ALONG GRID A



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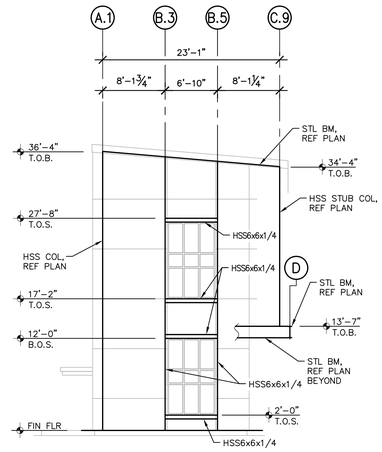
ALONG GRID B



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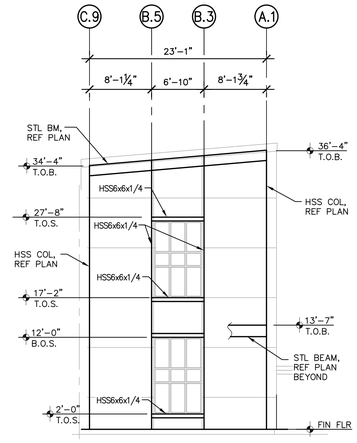
ALONG GRID 19.1

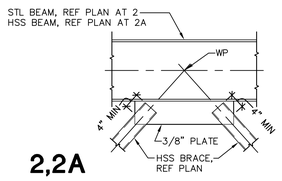


FRAME 4
ALONG GRID 14.5

1 FRAME PROFILES
1/8" = 1'-0"

NOTES:

1. MC DENOTES A MOMENT CONNECTION. REFERENCE DETAIL 9/S3.7.
2. CONTRACTOR SHALL COORDINATE LOCATION OF HSS10x6 WITH PRE-ENGINEERED ALUMINUM CANOPY LOCATION



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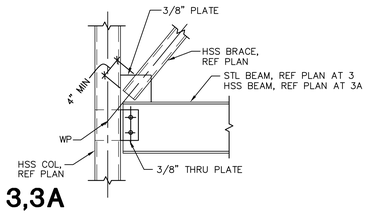

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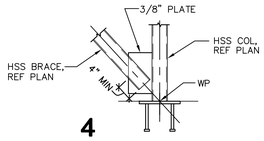

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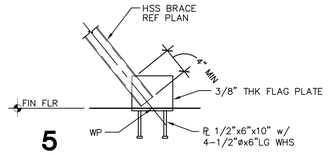

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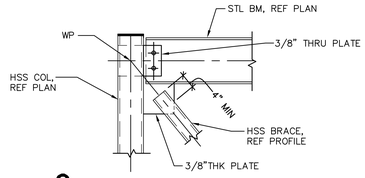

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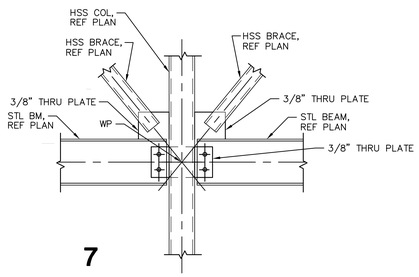

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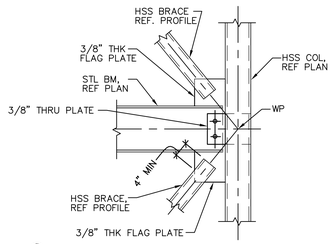

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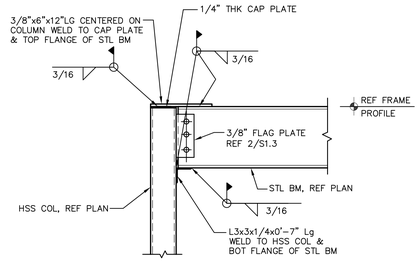
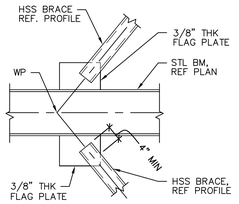


9 TYP WF BEAM-TO-HSS COLUMN MOMENT CONNECTION DETAIL AT TOP OF COLUMN



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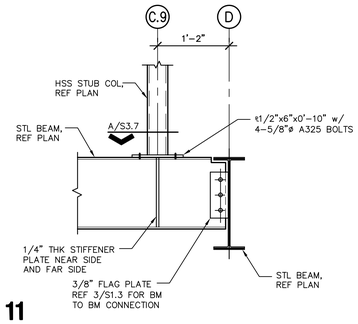

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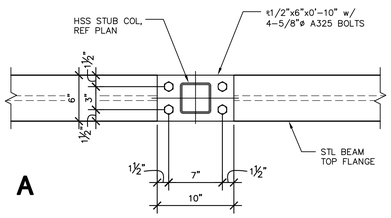

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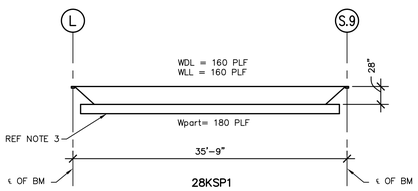
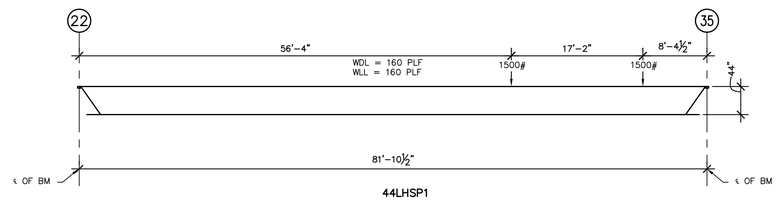


28KSP1

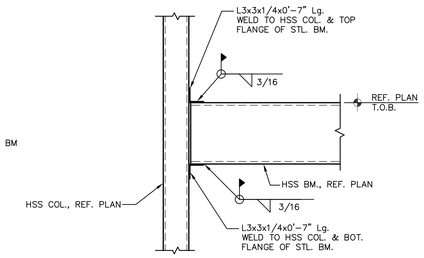


44LHSP1

12 SPECIAL JOIST PROFILES
1/8" = 1'-0"

NOTES:

1. SPECIAL JOIST SHALL BE LIMITED TO A DEFLECTION LIMIT OF L/600 FOR LIVE LOAD.
2. WDL AND WLL INDICATES UNIFORM DEAD LOAD & LIVE LOAD ON STEEL JOIST, RESPECTIVELY. Wpart INDICATES CONCENTRATED LOAD FROM FOLDING PARTITION.
3. DESIGN BOTTOM CHORD OF JOIST FOR A NON-CONCURRENT 3000# LIVE LOAD ANYWHERE ALONG THE BOTTOM CHORD.



13 MOMENT CONNECTION DETAIL AT TOP OF COLUMN

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
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CHECKED BY:	BD, JS
Job No.	192-520
Sheet:	S3.7

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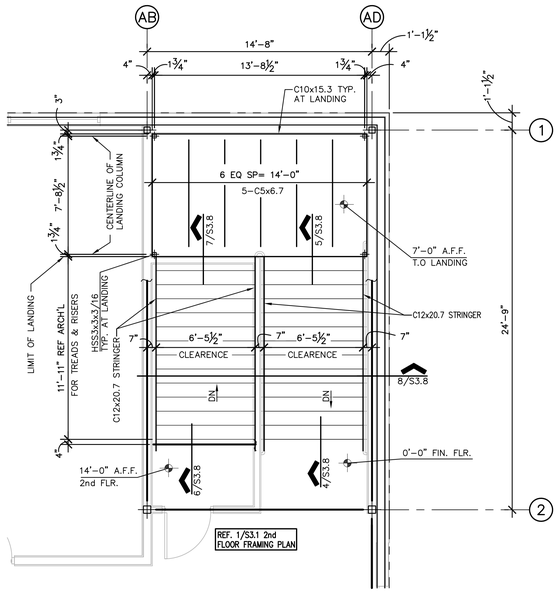


1 STAIR FRAMING PLAN

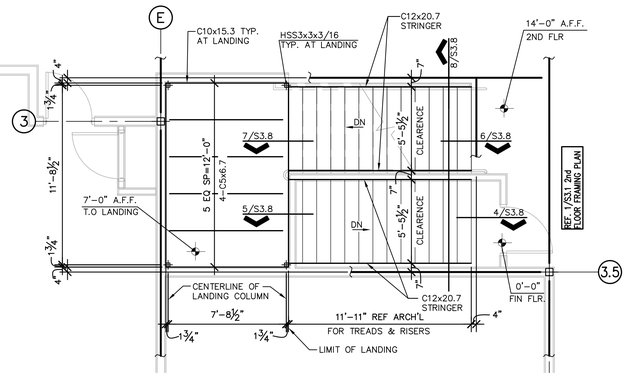
1/4" = 1'-0"

N

PLAN NORTH

NOTES:

1. FLOOR DECK SHALL BE 0.6C 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (i=0.012 IN⁴/FT; SP=0.035 IN³/FT; SN=0.036 IN³/FT; FY=60KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN WELDING WASHERS REQUIRED, AND 2-#10 TEK SCREW SIDE LAP FASTENERS.



2 STAIR FRAMING PLAN

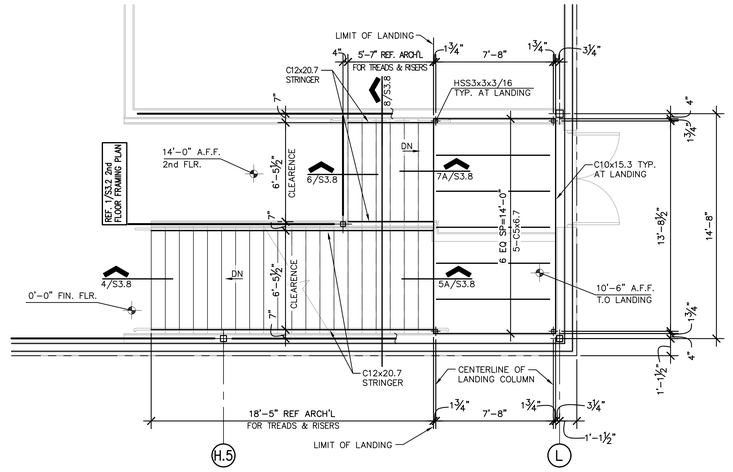
1/4" = 1'-0"

N

PLAN NORTH

NOTES:

1. FLOOR DECK SHALL BE 0.6C 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (i=0.012 IN⁴/FT; SP=0.035 IN³/FT; SN=0.036 IN³/FT; FY=60KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN WELDING WASHERS REQUIRED, AND 2-#10 TEK SCREW SIDE LAP FASTENERS.



3 STAIR FRAMING PLAN

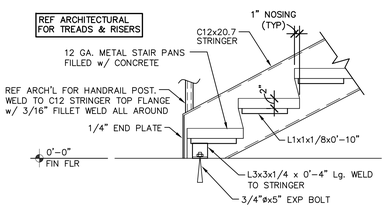
1/4" = 1'-0"

N

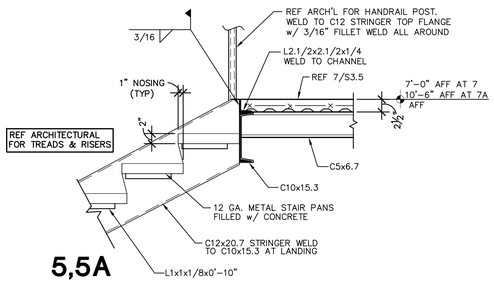
PLAN NORTH

NOTES:

1. FLOOR DECK SHALL BE 0.6C 28GA GALV DECK BY VULCRAFT OR APPROVED EQUAL. (i=0.012 IN⁴/FT; SP=0.035 IN³/FT; SN=0.036 IN³/FT; FY=60KSI). ATTACH DECK TO SUPPORTS USING 5/8" PUDDLE WELDS ON 30/4 PATTERN WELDING WASHERS REQUIRED, AND 2-#10 TEK SCREW SIDE LAP FASTENERS.



4 BASE OF STAIRWAY



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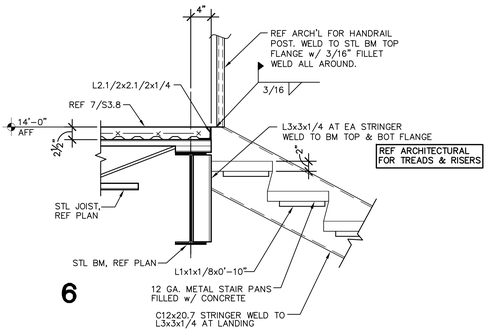

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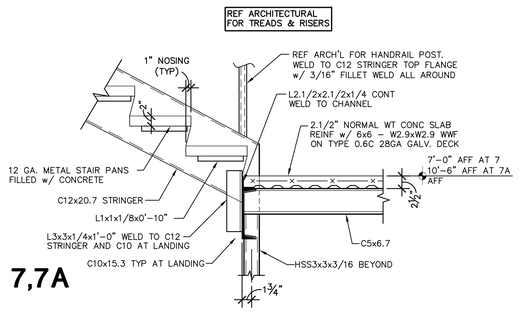

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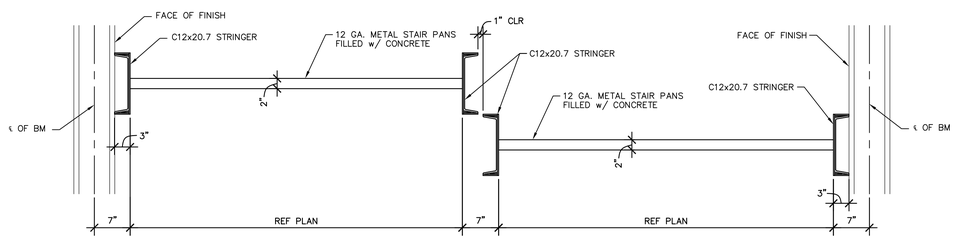

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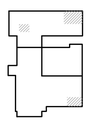

KEY PLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

STATE OF TEXAS
EDUARDO R. RUBIANO
86369
LICENSED
PROFESSIONAL ENGINEER
5-16-19

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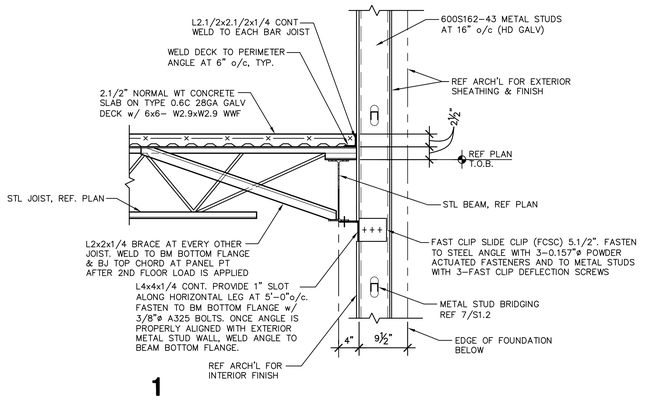
Sheet:	S3.8



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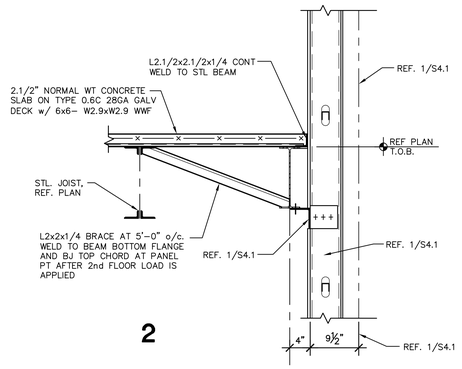

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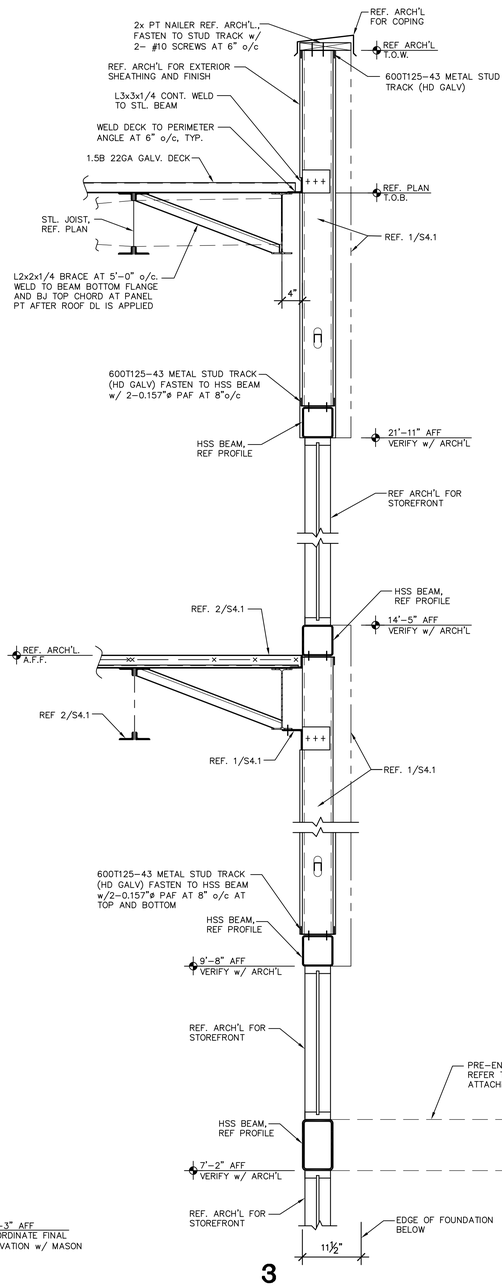

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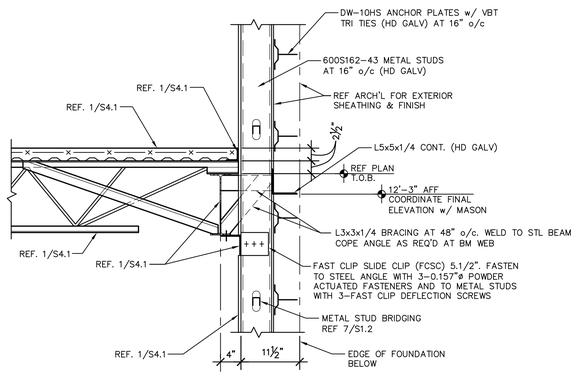

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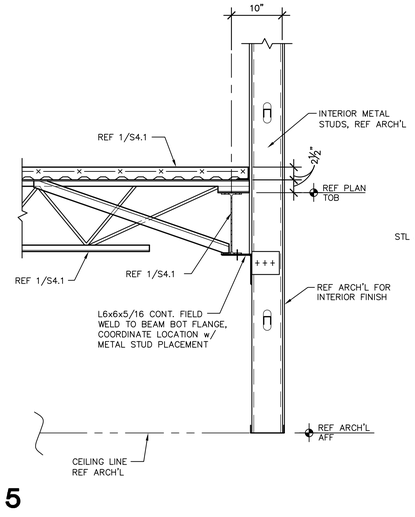

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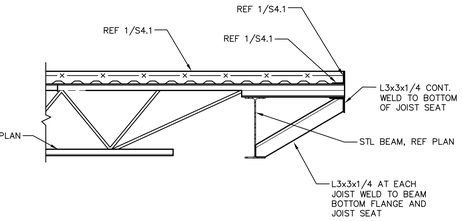

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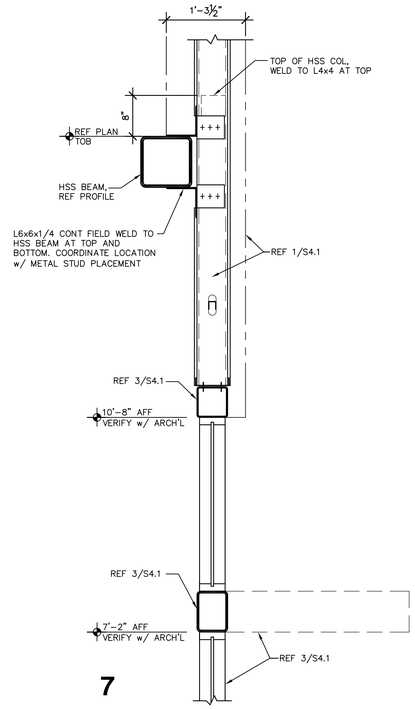

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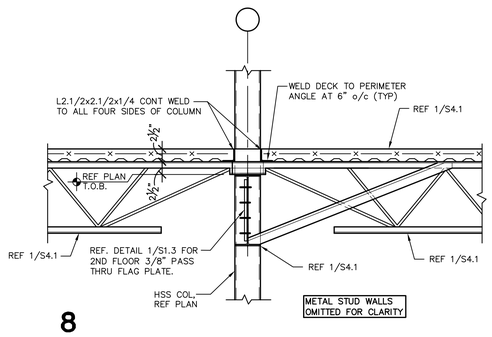

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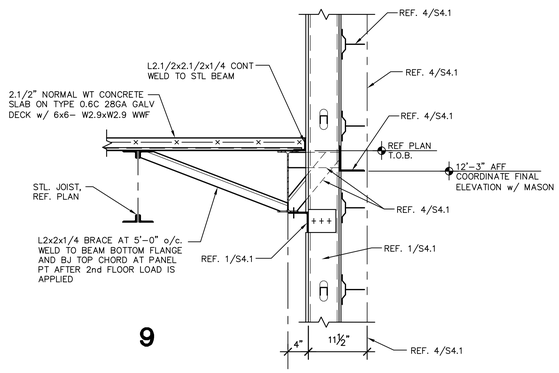

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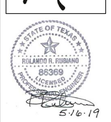
IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS



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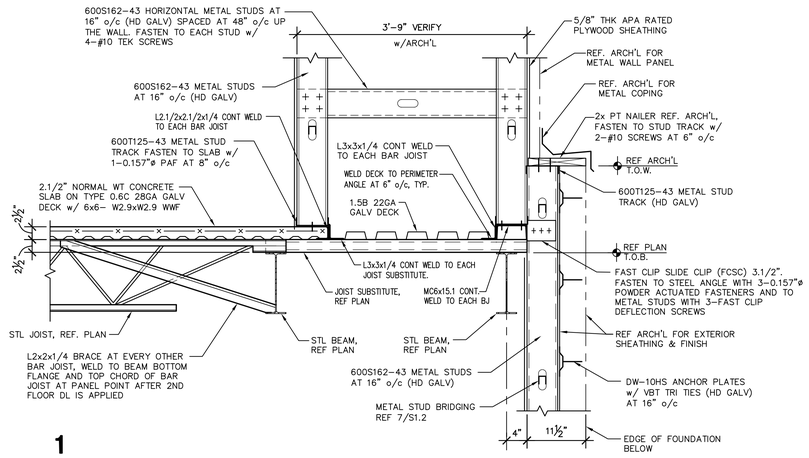

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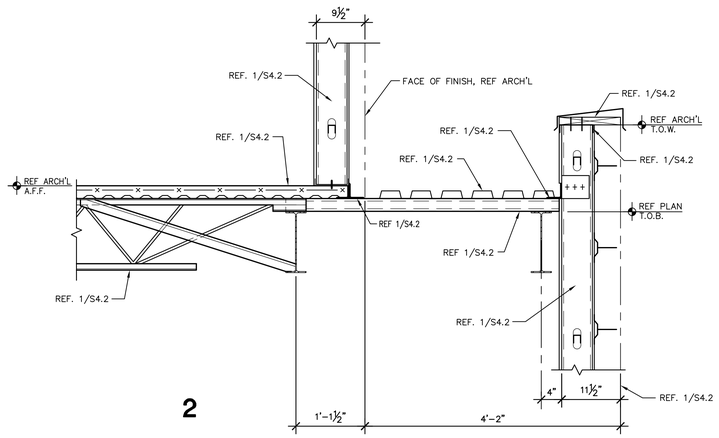

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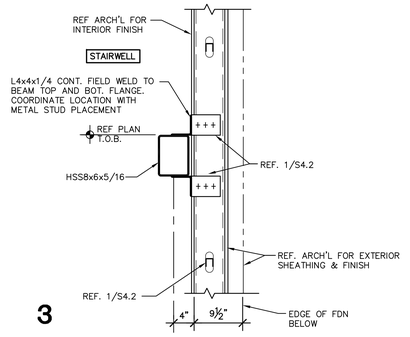

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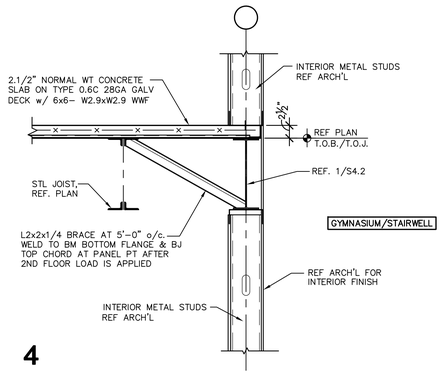

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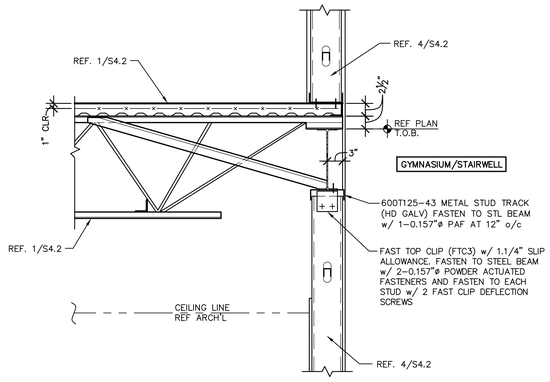
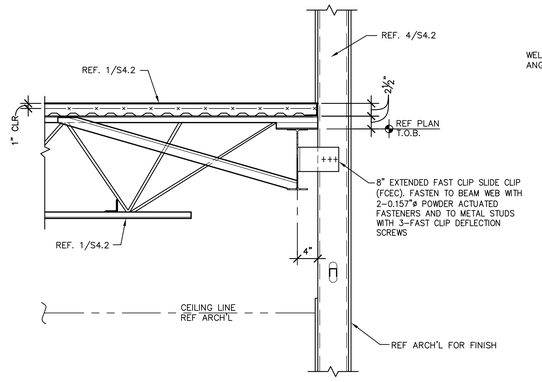
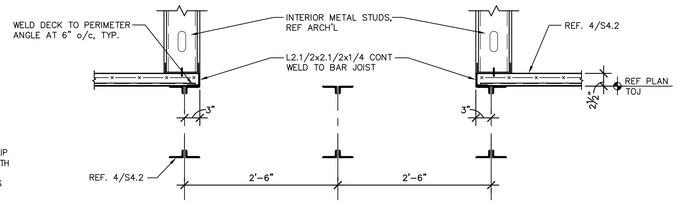


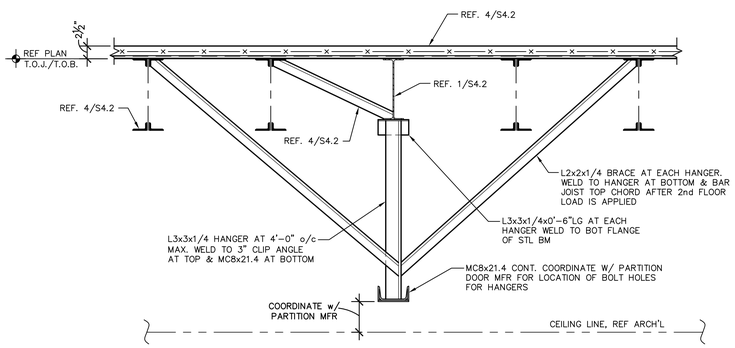
5 **TYPICAL INTERIOR STUD CONNECTION INLINE w/ STEEL FRAMING AT 2nd FLOOR**



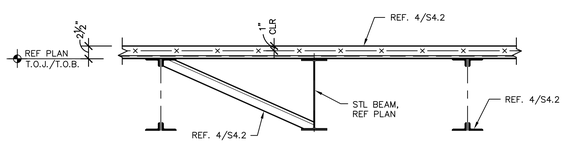
6 **TYPICAL INTERIOR STUD CONNECTION OFFSET FROM STEEL FRAMING AT 2nd FLOOR**



7 **TYPICAL DUCT PENETRATION OPENING AT 2nd FLOOR**



8 **TYPICAL MOVEABLE PARTITION PARALLEL TO BEAM AND JOIST**



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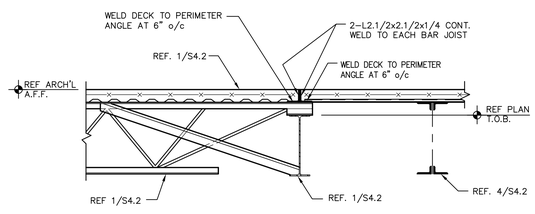

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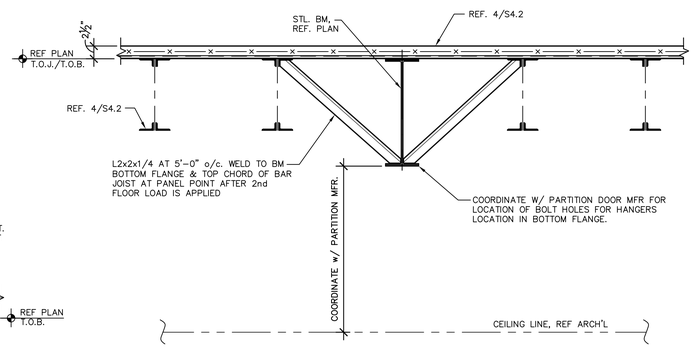

11 **TYPICAL MOVEABLE PARTITION PARALLEL TO BEAM AND JOIST**

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IDEA PUBLIC SCHOOLS PHASE 1

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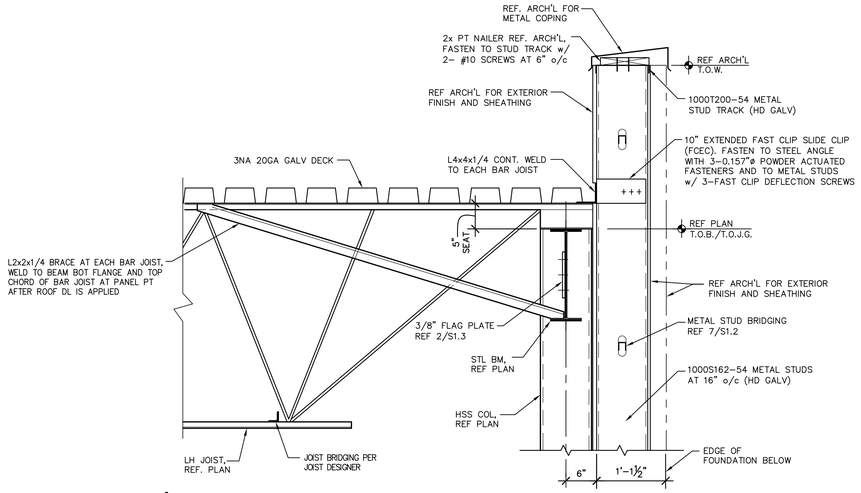

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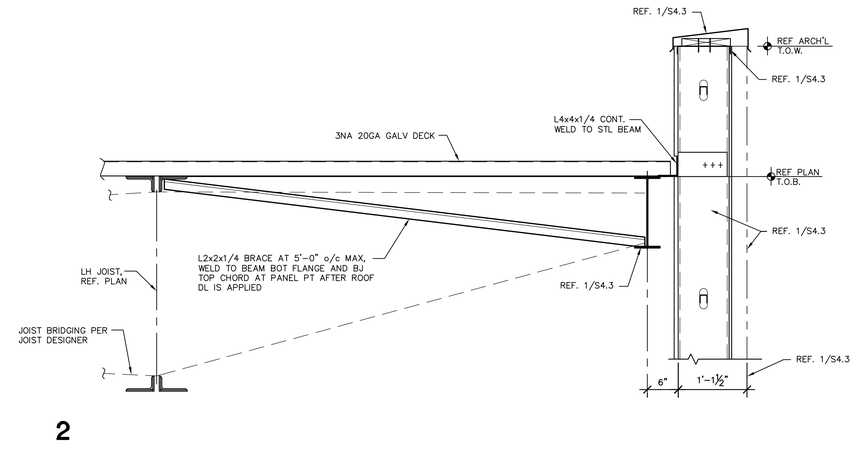

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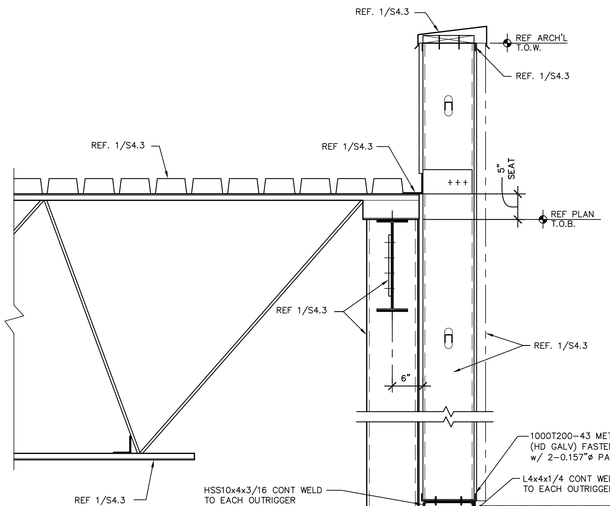

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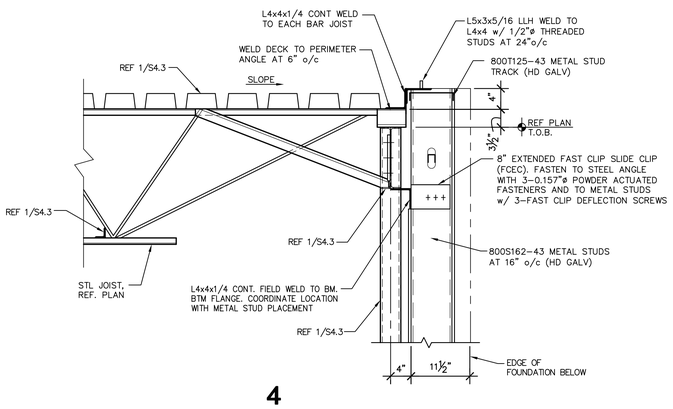

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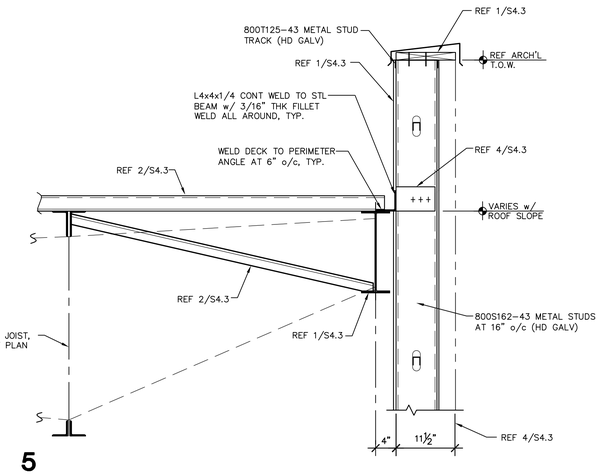

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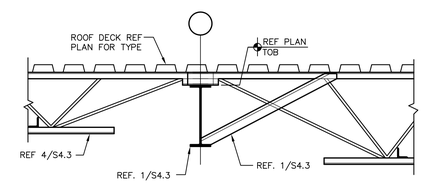
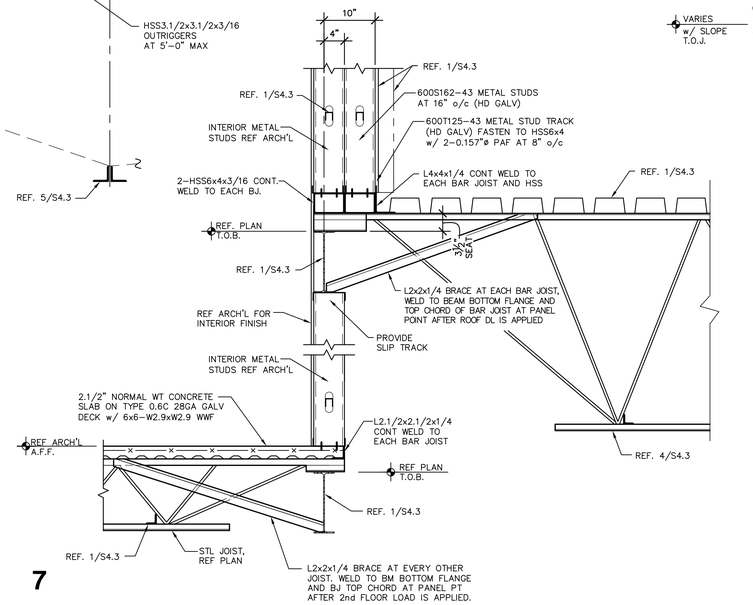


6 TYPICAL INTERIOR BEAM

NOTE: REFER TO PLAN NOTES FOR ROOF DECK ATTACHMENT.



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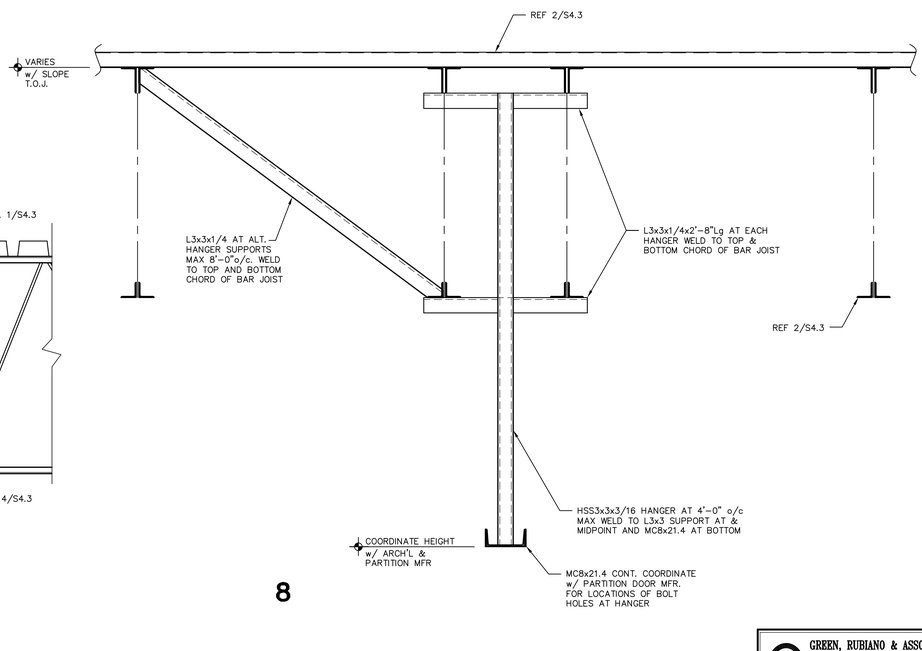

8

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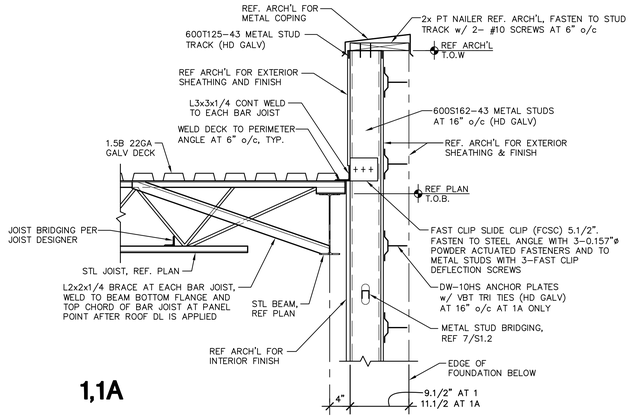

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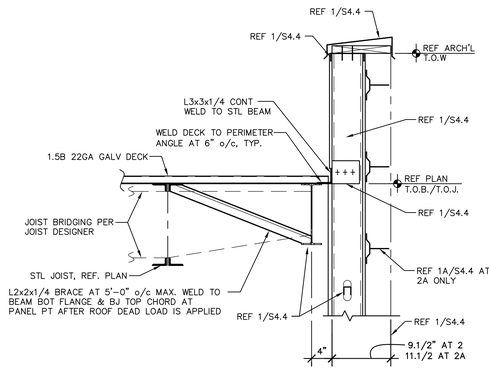

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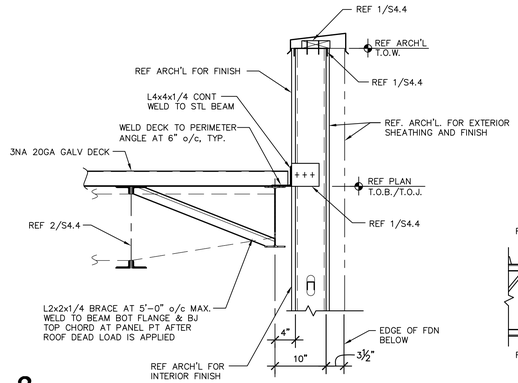

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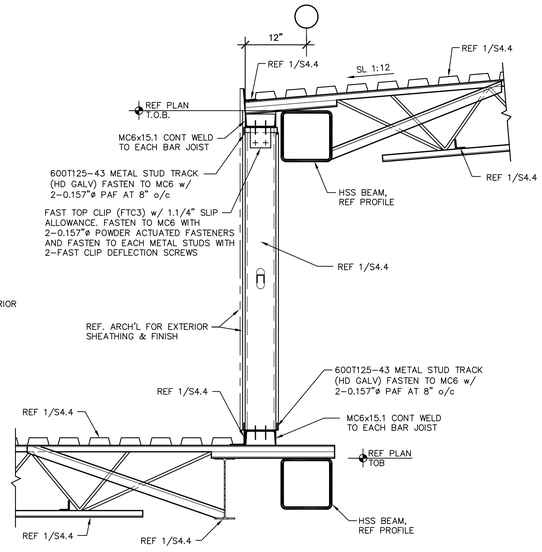

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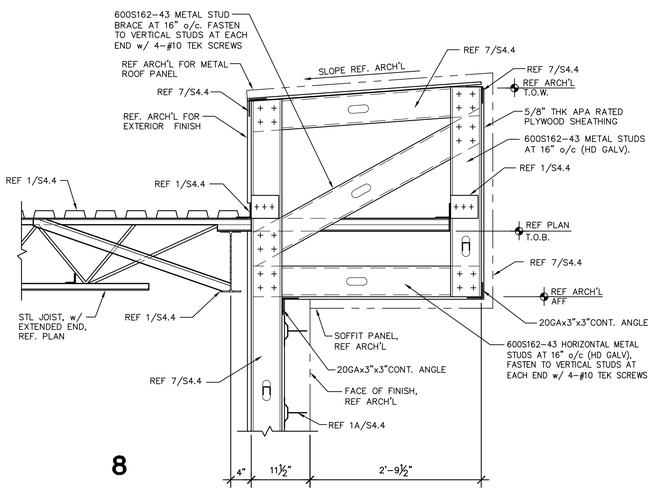

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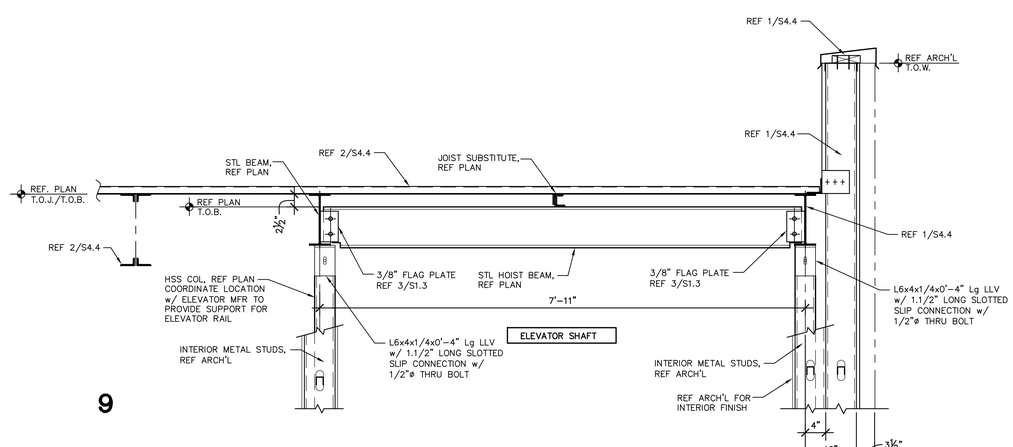

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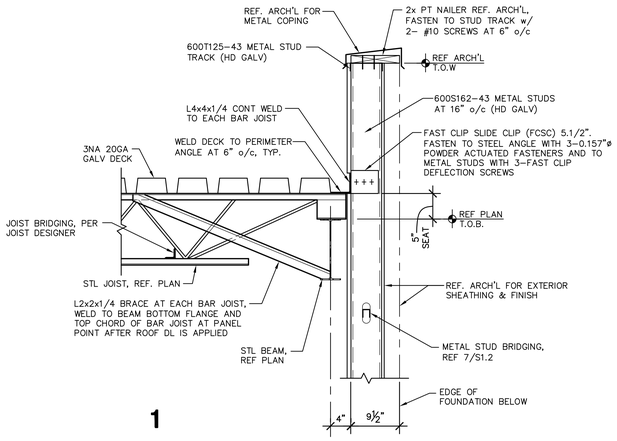

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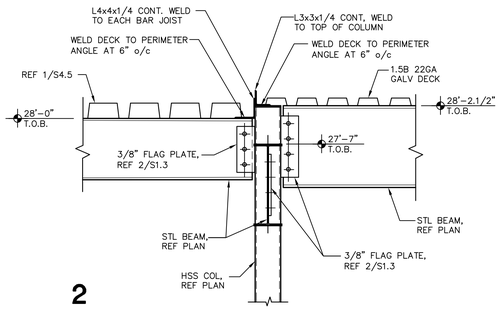

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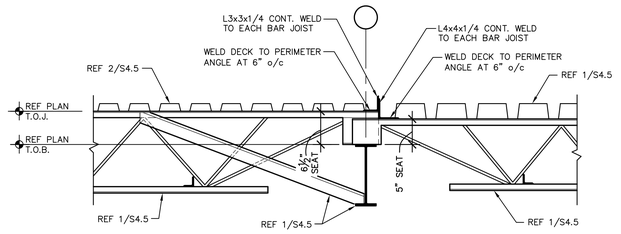

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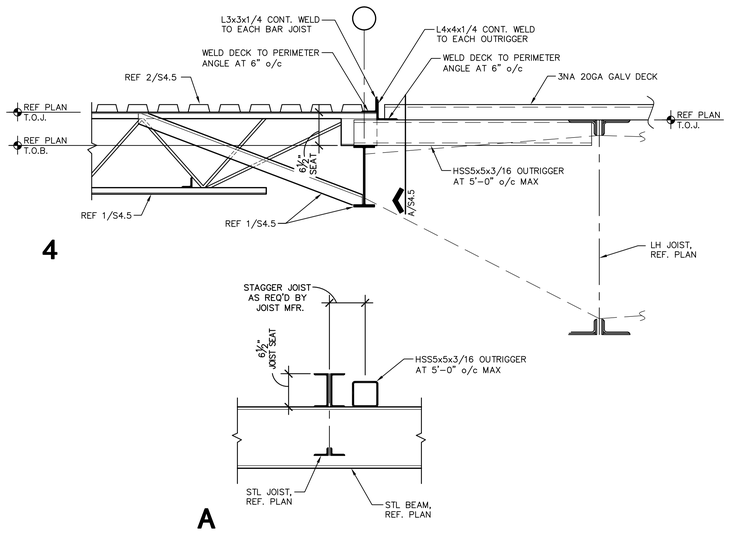

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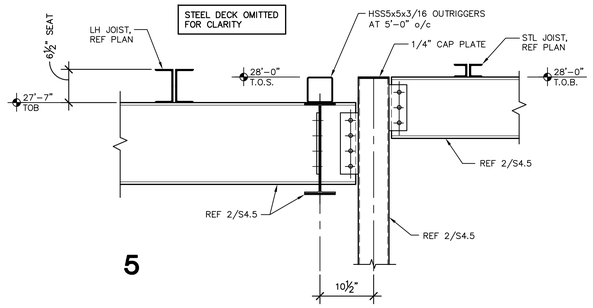

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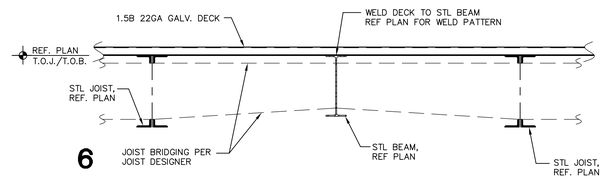

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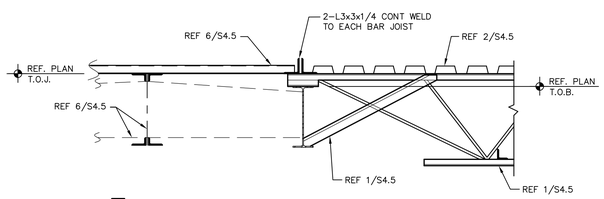

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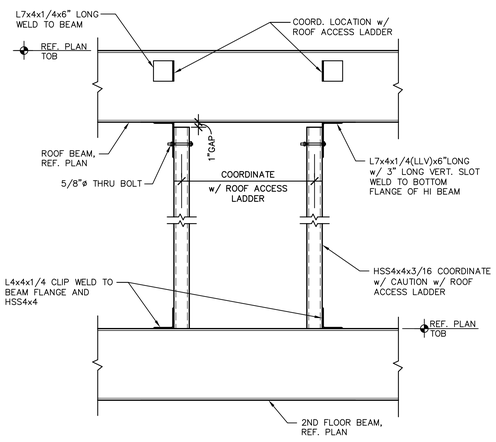
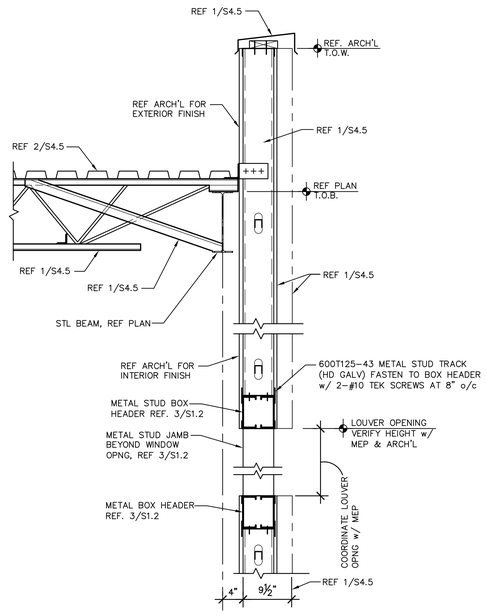


8 **TYPICAL LADDER SUPPORT FRAMING**

NOTE:

1. COORDINATE LOCATION OF LADDER ALONG GRID K TO ACCESS DINING ROOF WITH ARCHITECTURAL.



9 **TYP LOUVER OPENING AT 2ND FLOOR**

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW

PALMVIEW, TEXAS

STATE OF TEXAS
ROLANDO R. RUBIANO
86369
LICENSED PROFESSIONAL ENGINEER
5-16-19

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Interior Designers

Date: May 16, 2019
Scale: As Noted
DRAWN BY: KG, JJ
CHECKED BY: BD, JS
Job No. 192-520
Sheet: S4.5

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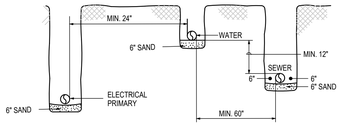


CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.

MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.

MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.

03 TRENCHING DETAIL
SCALE : NONE

GENERAL NOTES:

1. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
2. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
3. COORDINATE ELECTRICAL AND PLUMBING WITH GENERAL CONSTRUCTION.
4. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
5. FIELD VERIFY/SPOT EXACT LOCATIONS AND EXISTING CONDITIONS OF EXISTING PLUMBING, AND ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
6. DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE FOR EXISTING UTILITIES BEFORE EXCAVATING.
7. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
8. PROVIDE J-BOXES (POLYMER CONCRETE) AS REQUIRED FOR PULL WIRING.
9. ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
10. PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
11. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
12. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
13. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
14. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
15. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.

GENERAL NOTES:

16. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING PHASE.
17. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
18. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
19. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
20. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
21. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
22. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
23. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
24. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
25. SLEEVE ALL EXTERIOR WALL PENETRATIONS.
26. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

ELECTRICAL KEYED NOTES:

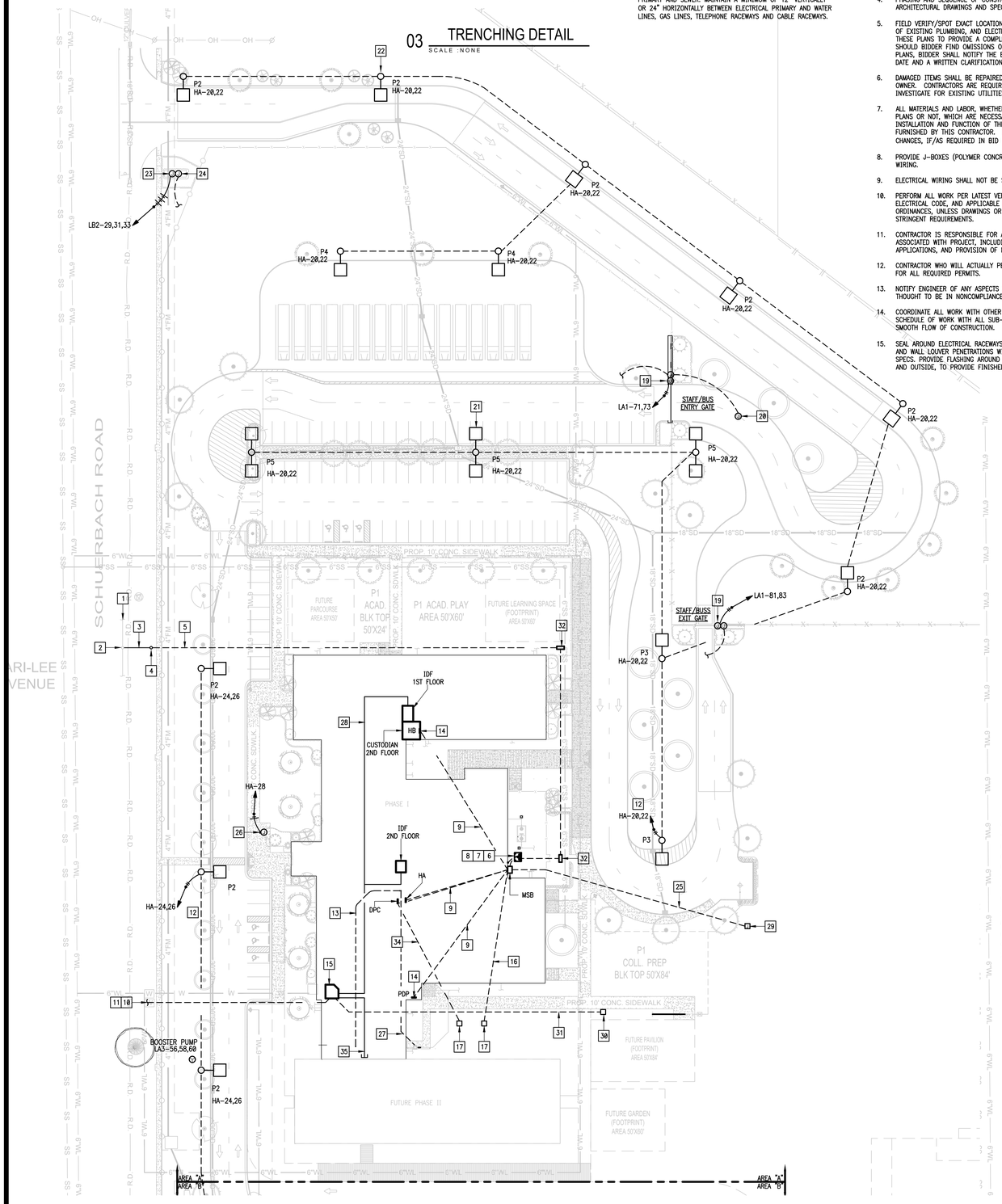
1. EXISTING ELECTRIC 3ø UTILITY OVERHEAD SERVICE LINES.
2. EXISTING ELECTRIC UTILITY POWER POLE.
3. PROVIDE NEW OVERHEAD UTILITY POWER LINE.
4. PROVIDE NEW ELECTRIC UTILITY POWER POLE WITH RISER DIP POLE.
5. PROVIDE NEW UNDERGROUND PRIMARY ELECTRIC CONDUITS WITH 2" RED CONCRETE. CONDUCTORS BY ELECTRICAL UTILITY.
6. PROVIDE NEW ELECTRIC UTILITY PAD MOUNT TRANSFORMER CONCRETE PAD.
7. PROVIDE NEW UNDERGROUND SECONDARY ELECTRIC LINE AND WITH 2" RED CONCRETE TOPPING.
8. PROVIDE NEW ELECTRIC UTILITY SERVICE METER.
9. PROVIDE NEW FEEDER TO NEW PANELBOARDS.
10. PROVIDE 4" TELEPHONE RACEWAY WITH PULLWIRE TO EXISTING TELEPHONE PEDESTAL. ROUTE TO BUILDING & TERMINATE IN M.D.F. ROOM. PRIOR TO TRENCHING COORDINATE TERMINATION POINT WITH AT&T.
11. PROVIDE 4" CCTV RACEWAY WITH PULLWIRE. CAP BELOW GRADE AT PROPERTY LINE, & ROUTE TO BUILDING & TERMINATE IN M.D.F. ROOM. PRIOR TO TRENCHING COORDINATE TERMINATION POINT WITH SPECTRUM.
12. SWITCH EXTERIOR POLE LIGHTS THROUGH LIGHTING CONTROL RELAY PANEL. BRANCH CIRCUIT: 1" – 2#8 & #10G. SEE CORRESPONDING PANEL SCHEDULE.
13. PROVIDE 1-1" RACEWAY WITH PULLWIRE – (ELEVATOR SERVICE ALERT PANEL)
14. RISE UP AT NEAREST WALL CAVITY UP TO PANELBOARDS.
15. RACEWAYS TO RISE AT MDF WIREWAY. SEE ENLARGED IDF ELECTRICAL PLANS ON SHEETS E4.02.
16. PROVIDE 2-4" RACEWAYS WITH PULLWIRE FROM SWITCHBOARD "MSB" FOR FUTURE USE.
17. PROVIDE NEW 36"X36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "ELECTRICAL" COVER LOGO – SEE DETAIL.
18. CONNECT ELECTRIC PUMP/DRIVE UNIT (208V, 1ø); BRANCH CIRCUIT: 2" – 2#4 & #8G (208V). PROVIDE 3/4" X 10' COPPER CLAD GROUND ROD WITHIN 3'-0" OF GATE OPERATOR. COORDINATE EXACT LOCATION OF COMPONENTS WITH ARCHITECT PRIOR TO ANY ROUGH-IN. GATE CONTRACTOR SHALL PROVIDE ALL INTERNAL WIRING INCLUDING SAFETY LOOPS & PHOTO EYES. SEE DETAIL ON SHEET E9.03.
19. CONNECT ELECTRIC DRIVE UNIT (208V, 1ø); BRANCH CIRCUIT: 2" – 2#4 & #8G. PROVIDE 3/4" X 10' COPPER CLAD GROUND ROD WITHIN 3'-0" OF GATE OPERATOR. COORDINATE EXACT LOCATION OF COMPONENTS WITH ARCHITECT PRIOR TO ANY ROUGH-IN. GATE CONTRACTOR SHALL PROVIDE ALL INTERNAL WIRING INCLUDING SAFETY LOOPS & PHOTO EYES. SEE DETAIL ON SHEET E9.03.
20. ACCESS CONTROL PEDESTAL. SEE DETAIL ON SHEET E9.03.
21. PROVIDE VIDEO DOOR STATION. SEE DETAIL ON SHEET E9.03.

ELECTRICAL KEYED NOTES:

22. PROVIDE POLE LIGHTS AS SCHEDULED – TYPICAL. SEE DETAIL.
23. CONNECT MARQUEE SIGN; BRANCH CIRCUIT: 2"-6 #4 & #8G; 3 BRANCH CIRCUITS.
24. PROVIDE 1" RACEWAY WITH PULLWIRE AND J-BOX (SIGN CONTROLS). STUB-UP 6" AFF AT MDF WIREWAY.
25. PROVIDE 2-4" RACEWAYS WITH PULLWIRE FROM SWITCHBOARD "MSB" FOR FUTURE USE.
26. PROVIDE FLAG POLE LIGHTING – SEE DETAIL. SWITCH LIGHTS THROUGH THE LIGHTING CONTROL RELAY PANEL; BRANCH CIRCUIT: 1" – 2#10 & #10G.
27. PROVIDE 1-1" RACEWAY WITH PULLWIRE – (INTERCEPTOR SERVICE ALERT PANEL)
28. PROVIDE 4" RACEWAY WITH PULLWIRE (FIBER OPTIC CABLE). ROUTE ABOVE ACCESSIBLE CEILING SPACE. PROVIDE TO EACH IDF ROOM 1ST AND SECOND FLOOR. SEE DETAIL.
29. PROVIDE NEW 24"X24" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "ELECTRICAL" COVER LOGO – SEE DETAIL.
30. PROVIDE NEW 36"X36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "COMMUNICATIONS" COVER LOGO – SEE DETAIL.
31. 1-2" RACEWAY WITH PULLWIRE – (F.A. RACEWAYS)
    1-2" RACEWAY WITH PULLWIRE – (INTERCOM)
    1-2" RACEWAY WITH PULLWIRE – (INTRUSION)
    1-4" RACEWAY WITH PULLWIRE – (DATA)
32. PROVIDE NEW ELECTRIC UTILITY PAD MOUNT SECTIONALIZER CONCRETE PAD.
33. PROVIDE 1-1/4" ELECTRICAL CONDUIT FOR FUTURE LIGHTING.
34. PROVIDE 1'-4" WITH PULLWIRE FROM PANEL DPC.
35. PROVIDE 4" DATA RACEWAY ABOVE CEILING (FUTURE PHASE II). SEE SHEET E4.02.

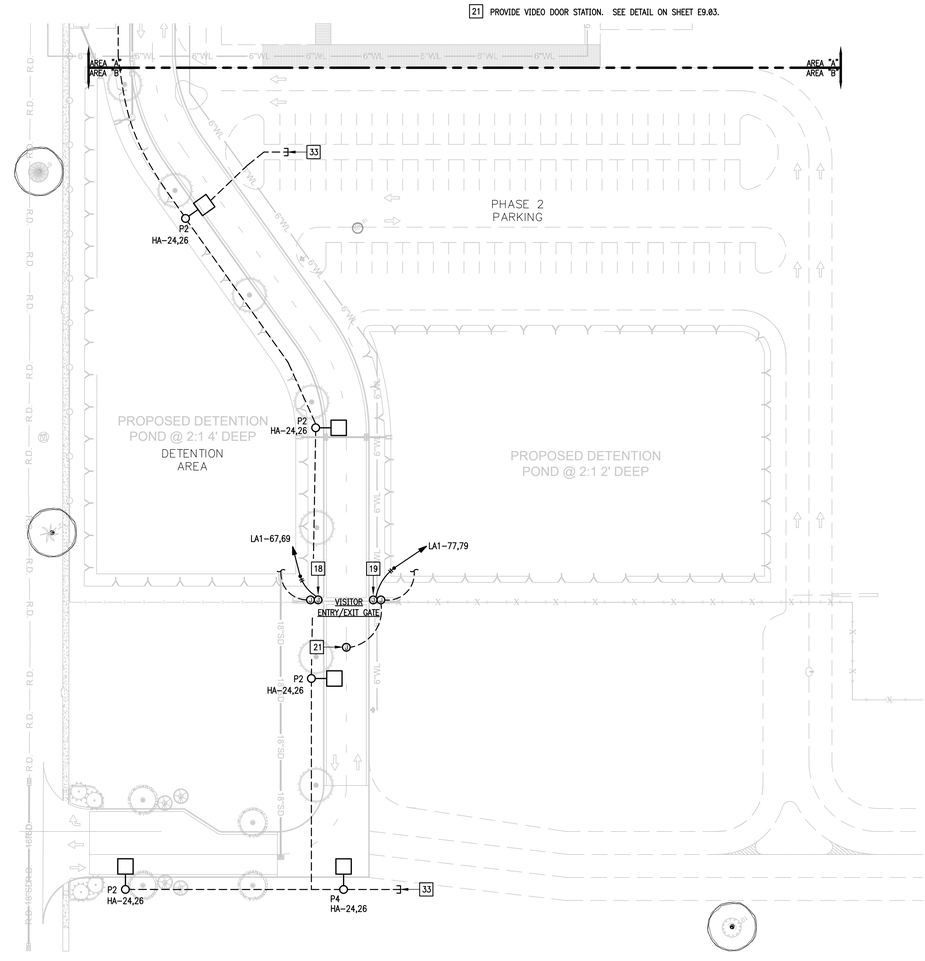
RACEWAYS EMBEDDED IN FOUNDATION GENERAL NOTES:

RACEWAYS EMBEDDED WITHIN THE SLAB SHALL COMPLY WITH THE FOLLOWING:
1. SHALL HAVE A MINIMUM SPACING OF 2".
2. SHALL NOT BE LARGER THAN 1".
3. SHALL NOT BE RUN THROUGH THE SURFACE AREA OF THE FOOTING.
4. SHALL NOT BE CROSSED OVER/UNDER EACH OTHER WITH THE SLAB.
5. SHALL NOT BE TIED TO THE REBAR.
6. SHALL BE A MINIMUM OF 1.5" AWAY FROM SLAB REBAR. IF SPACING CANNOT BE ACCOMPLISHED; IT SHALL BE PROVIDED BELOW GRADE.



01 M.E.P SITE PLAN
SCALE: 1"=40'-0"

NORTH



02 M.E.P SITE PLAN
SCALE: 1"=40'-0"

NORTH

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fax (956) 546-0196

IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, TEXAS

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
5.16.2019

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Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	MEP1.01

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HARLINGEN, TX
PHONE: 956-230-3435
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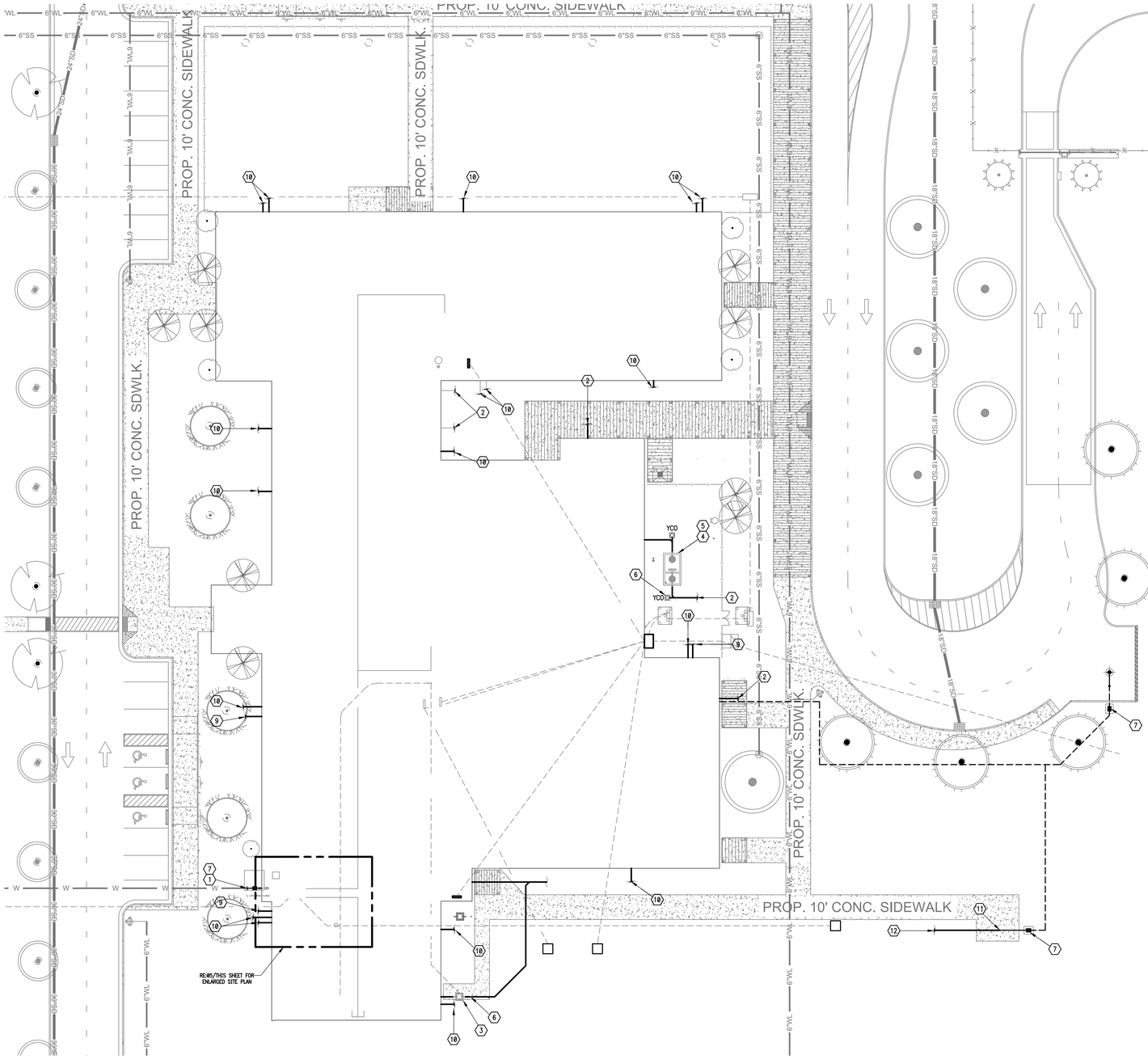
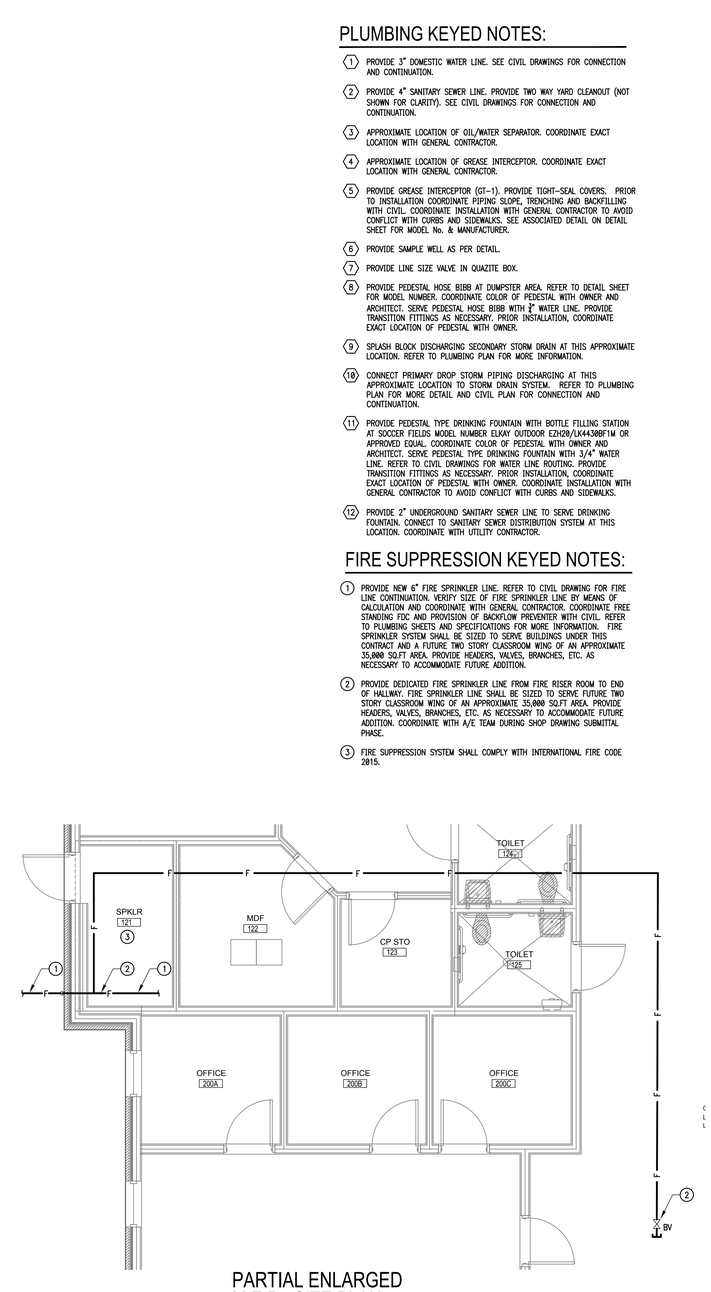
ENGINEERING FIRM
F-15998



01 M.E.P. PLUMBING SITE PLAN

SCALE: 1"=20'-0"

NORTH



05 PARTIAL ENLARGED M.E.P. SITE PLAN

SCALE: 1/4"=1'-0"

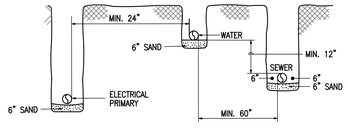
NORTH

PLUMBING KEYED NOTES:

1. PROVIDE 3" DOMESTIC WATER LINE. SEE CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
2. PROVIDE 4" SANITARY SEWER LINE. PROVIDE TWO WAY YARD CLEANOUT (NOT SHOWN FOR CLARITY). SEE CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
3. APPROXIMATE LOCATION OF OIL/WATER SEPARATOR. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
4. APPROXIMATE LOCATION OF GREASE INTERCEPTOR. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
5. PROVIDE GREASE INTERCEPTOR (GT-1). PROVIDE TIGHT-SEAL COVERS. PRIOR TO INSTALLATION COORDINATE PIPING SLOPE, TRENCHING AND BACKFILLING WITH CIVIL. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR TO AVOID CONFLICT WITH CURBS AND SIDEWALKS. SEE ASSOCIATED DETAIL ON DETAIL SHEET FOR MODEL No. & MANUFACTURER.
6. PROVIDE SAMPLE WELL AS PER DETAIL.
7. PROVIDE LINE SIZE VALVE IN QUAZITE BOX.
8. PROVIDE PEDESTAL HOSE BIBB AT DUMPSTER AREA. REFER TO DETAIL SHEET FOR MODEL NUMBER. COORDINATE COLOR OF PEDESTAL WITH OWNER AND ARCHITECT. SERVE PEDESTAL HOSE BIBB WITH 3/4" WATER LINE. PROVIDE TRANSITION FITTINGS AS NECESSARY. PRIOR INSTALLATION, COORDINATE EXACT LOCATION OF PEDESTAL WITH OWNER.
9. SPLASH BLOCK DISCHARGING SECONDARY STORM DRAIN AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE INFORMATION.
10. CONNECT PRIMARY DROP STORM PIPING DISCHARGING AT THIS APPROXIMATE LOCATION TO STORM DRAIN SYSTEM. REFER TO PLUMBING PLAN FOR MORE DETAIL AND CIVIL PLAN FOR CONNECTION AND CONTINUATION.
11. PROVIDE PEDESTAL TYPE DRINKING FOUNTAIN WITH BOTTLE FILLING STATION AT SOCCER FIELDS MODEL NUMBER ELKAY OUTDOOR EZH2O/LK4430BF1M OR APPROVED EQUAL. COORDINATE COLOR OF PEDESTAL WITH OWNER AND ARCHITECT. SERVE PEDESTAL TYPE DRINKING FOUNTAIN WITH 3/4" WATER LINE. REFER TO CIVIL DRAWINGS FOR WATER LINE ROUTING. PROVIDE TRANSITION FITTINGS AS NECESSARY. PRIOR INSTALLATION, COORDINATE EXACT LOCATION OF PEDESTAL WITH OWNER. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR TO AVOID CONFLICT WITH CURBS AND SIDEWALKS.
12. PROVIDE 2" UNDERGROUND SANITARY SEWER LINE TO SERVE DRINKING FOUNTAIN. CONNECT TO SANITARY SEWER DISTRIBUTION SYSTEM AT THIS LOCATION. COORDINATE WITH UTILITY CONTRACTOR.

FIRE SUPPRESSION KEYED NOTES:

1. PROVIDE NEW 6" FIRE SPRINKLER LINE. REFER TO CIVIL DRAWING FOR FIRE LINE CONTINUATION. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR. COORDINATE FREE STANDING FDC AND PROVESION OF BACKFLOW PREVENTER WITH CIVIL. REFER TO PLUMBING SHEETS AND SPECIFICATIONS FOR MORE INFORMATION. FIRE SPRINKLER SYSTEM SHALL BE SIZED TO SERVE BUILDINGS UNDER THIS CONTRACT AND A FUTURE TWO STORY CLASSROOM WING OF AN APPROXIMATE 35,000 SQ.FT AREA. PROVIDE HEADERS, VALVES, BRANCHES, ETC. AS NECESSARY TO ACCOMMODATE FUTURE ADDITION.
2. PROVIDE DEDICATED FIRE SPRINKLER LINE FROM FIRE RISER ROOM TO END OF HALLWAY. FIRE SPRINKLER LINE SHALL BE SIZED TO SERVE FUTURE TWO STORY CLASSROOM WING OF AN APPROXIMATE 35,000 SQ.FT AREA. PROVIDE HEADERS, VALVES, BRANCHES, ETC. AS NECESSARY TO ACCOMMODATE FUTURE ADDITION. COORDINATE WITH A/E TEAM DURING SHOP DRAWING SUBMITTAL PHASE.
3. FIRE SUPPRESSION SYSTEM SHALL COMPLY WITH INTERNATIONAL FIRE CODE 2015.



CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.

MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.

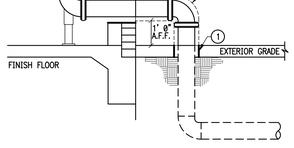
MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.

02 TRENCHING DETAIL

SCALE : NONE

KEYED NOTES

1. SLEEVE.
2. PROVIDE 1" CLOSED-CELL INSULATION WITH ALUMINUM METAL JACKET ON EXPOSED PIPING.



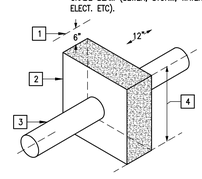
03 FIRE RISER ENTRANCE DETAIL

SCALE : NOT TO SCALE

INSTALL 12" THICK IMPERVIOUS BARRIER AT BUILDING LINE AND 15'-0" OUT FROM BUILDING ON ALL LINES WHICH TRAVEL UNDER BUILDING GRADE BEAM (SEWER, STORM, WATER, ELECT. ETC).

KEYED NOTES:

1. TOPSOIL.
2. IMPERVIOUS BARRIER OR CALICHE ROCK.
3. PIPE OR CONDUIT.
4. DITCH DEPTH MINUS 6" FOR TOP SOIL.



04 UNDERGROUND PIPING IMPERVIOUS BARRIER DETAIL

SCALE : NOT TO SCALE

ethos engineering
119 W. VAN BUREN AVE. STE.101
HARLINGEN, TX
PHONE: 956-230-3435
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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
5/16/2019

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Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.:	IDEA Palmview Phase I
Sheet:	MEP1.02

CODES & ORDINANCES:

1. GENERAL:
   a. UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS, PERFORM ALL WORK PER APPLICABLE VERSION OF INTERNATIONAL BUILDING CODES, AND LOCAL CODES AND ORDINANCES.
   b. PRIOR TO SUBMITTING PROPOSAL, NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
3. PERMITS:
   a. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
   b. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
4. APPROVALS AND INSPECTIONS:
   a. OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.
   b. COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS WITH PERMITTING OFFICER, OWNER AND ENGINEER.

GENERAL NOTES:

1. CONTRACT RELATED:
   a. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
   b. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
   c. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
2. TEST & BALANCE:
   a. TEST & BALANCE SHALL BE PERFORMED UNDER GENERAL CONTRACTOR, SEPARATE FROM MECHANICAL CONTRACT. DURING BIDDING, CONTRACTOR SHALL SUBMIT A COPY OF EVIDENCE THAT TAB AGENT MEETS THE QUALIFICATIONS SPECIFIED UNDER DIV. 23 SECTION 230593 TO PRIME CONTRACTOR.
   b. TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH DDC CONTROLS AND ENGINEER. PROVIDE TIME ALLOTMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.
   c. CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

COORDINATION:

1. GENERAL:
   a. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE. WORK BY OTHERS, AND MECHANICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
   b. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
   c. PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
2. SITE:
   a. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
3. ARCHITECTURAL AND STRUCTURAL:
   a. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS OF CONSTRUCTION, INCLUDING BEAMS, FLOOR AND WALL PENETRATIONS, CHASES, AND REFLECTED CEILING PLANS. VERIFY OPENING SIZES WITH EQUIPMENT FURNISHED.
   b. SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.
   c. SEAL AROUND DUCTS AND PIPING AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
4. SPATIAL COORDINATION:
   a. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
   b. SPACES ABOVE CEILING ARE CONGESTED. DESIGN INTENT IS THAT UTILITIES BE INSTALLED TIGHT AGAINST CEILING STRUCTURE TO EXTENT POSSIBLE, WHILE RETAINING ADEQUATE MAINTENANCE ACCESS PER CODES.
   c. IN CASE OF CONFLICTS, ITEMS SHALL BE ARRANGED ACCORDING TO THE FOLLOWING PRIORITIES: LIGHTING, FIRE PROTECTION, HVAC. PROVIDE OFFSETS/RISES/DROPS REQUIRED TO RESOLVE CONFLICTS WITH OTHER UTILITIES, AND TO ACCOMMODATE ALL UTILITIES ABOVE CEILINGS.
   d. IN GENERAL, REROUTE SMALLER DUCTS/PIPES THROUGH JOISTS TO RESOLVE CONFLICTS WITH LARGER. PERFORM REROUTING IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
   e. PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
   f. IN GENERAL ROUTE DUCTS/PIPES IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
   g. SEE ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL PANELS TO AVOID DUCTWORK AND PIPING RUNNING OVER THESE AREAS. COORDINATE WITH ELECTRICAL CONTRACTOR.
   h. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH OTHER TRADES TO AVOID CONFLICT AND ADJUST LOCATION IF NEEDED WITHOUT COMPROMISING AIR DEVICES PERFORMANCE.
5. CONTROLS:
   a. REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS AND DEVICES TO BE COORDINATED WITH MECHANICAL WORK.
   b. CONTROLS CONTRACTOR SHALL PROVIDE BUILDING AUTOMATION SYSTEM (BAS) THAT CONTROLS EQUIPMENT SHOWN ON DRAWINGS. CONTROLS CONTRACTOR IS RESPONSIBLE FOR INSTALLING LOW VOLTAGE POWER AND COMMUNICATIONS. REFERENCE SPECIFICATIONS FOR CONTROL COMPONENTS AND SEQUENCING TO BE COORDINATED W/ MECH. WORK.
   c. DRAWINGS SHOW GENERAL LOCATION OF DDC SENSORS (T, RH, AND CO2). UNLESS NOTED OTHERWISE, INSTALL SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE IN CONCEALED WALLS. IN CASE OF CONFLICTS WITH FURNITURE, WINDOWS, ETC., COORDINATE EXACT LOCATION WITH ARCHITECT AND ENGINEER.

EQUIPMENT:

1. EQUIPMENT INSPECTION:
   a. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
   b. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY EQUIPMENT CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
   c. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
2. EQUIPMENT ACCESS:
   a. FOR EQUIPMENT WHICH MAY REQUIRE PERIODIC SERVICING (SUCH AS VAV DIFFUSERS OR AIR HANDLERS) AND WHICH IS LOCATED ABOVE A SUSPENDED CEILING, CONTRACTOR IS TO PROVIDE A MARKER ON CEILING GRID WHICH CLEARLY INDICATES WHICH CEILING TILE IS TO BE REMOVED TO MOST CONVENIENTLY ACCESS EQUIPMENT SIDE NEEDING SERVICING. THE MARKER IS TO BE ROUND DOT OF HEAVY DUTY COLORED PAPER, WITH DIRECTION INDICATION, WITH ADHESIVE BACKING. OBTAIN OWNER APPROVAL FOR COLOR, SIZE, AND TYPE PRIOR TO INSTALLATION.
   b. INSTALL ALL VALVES, CONTROLS, DAMPERS, FANS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE ADEQUATELY SIZED ACCESS DOORS WHERE REQUIRED.
3. EQUIPMENT INSTALLATION:
   a. PROVIDE SPRING HANGER TYPE VIBRATION ISOLATORS TO SUPPORT SUSPENDED AHUS, FANS AND OTHER POWERED VIBRATING EQUIPMENT. PROVIDE FLEXIBLE DUCT CONNECTORS.
   b. FOR ALL AIR CONDITIONING UNITS WHICH ARE LOCATED ABOVE SUSPENDED CEILINGS, OR ABOVE HARDWOOD FLOORS, OR OTHER BUILDING SURFACES / MATERIALS WHICH COULD BE DAMAGED BY LEAKING WATER, PROVIDE A SECONDARY DRAIN PAN BENEATH THE UNIT, WITH EITHER: A) A SEPARATE CONDENSATE DRAIN LINE, COPPER, INSULATED WITH 1/2" ARMAFLEX, AND PIPED TO A SUITABLE DISPOSAL POINT (SUCH AS TO A LAVATORY DRAIN TAILPIECE, FLOOR DRAIN, ETC; DO NOT TERMINATE SECONDARY DRAIN PIPE THROUGH A SUSPENDED CEILING WHERE IT WILL DRIP INTO A SINK OR LAVATORY UNLESS APPROVED BY ENGINEER); OR B) A FLOAT SWITCH OR MOISTURE SENSING SWITCH, LOCATED IN SECONDARY DRAIN PAN, AND ELECTRICALLY INTERLOCKED WITH UNIT FAN TO TURN UNIT OFF WHEN MOISTURE IS SENSED.
   c. COMPLETELY WEATHERPROOF ALL EQUIPMENT, DUCTS, PIPES AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE THE BUILDING, IN PARKING AREA, OR OTHERWISE EXPOSED TO WEATHER. AS A MINIMUM, WEATHERPROOFING SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING: JACKETING FOR ALL PIPING INSULATION, VALVES AND ACCESSORIES RATED FOR OUTDOOR SERVICE, ELECTRICAL ENCLOSURES NEMA 4X-SS. PROVIDE ELECTRICAL HEAT TRACING FOR UTILITIES SUSCEPTIBLE TO FREEZING.
   d. AFFIX ID TAGS TO ALL MECHANICAL EQUIPMENT PER SPECIFICATIONS.
4. EQUIPMENT INSULATION:
   a. INSULATE ALL SURFACES THAT ARE CAPABLE OF BECOMING COLD AND COLLECTING CONDENSATE. THIS INCLUDES SUPPLY DIFFUSERS AND CONNECTING DUCTWORK / TRANSITION PIECES.
5. PLUMBING:
   a. PROVIDE CODE RECOMMENDED CLEARANCE OR MINIMUM 18" BETWEEN EXHAUST FANS DISCHARGES, PLUMBING VENTS AND AIR INTAKES. COORDINATE LOCATIONS WITH PLUMBING CONTRACTOR.
   b. PROVIDE INSULATED AND TRAPPED CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT AND TERMINATE TO NEAREST FLOOR DRAIN OR OTHER APPROVED RECEPTACLES. COORDINATE DRAINS WITH PLUMBING.
6. ELECTRICAL:
   a. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
   b. DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVEYED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.

CONTROLS:

1. CONTRACTOR SHALL COOPERATE AND COORDINATE WORK ACTIVITIES WITH DDC CONTROLS CONTRACTOR TO ENSURE SMOOTH TROUBLE-FREE INSTALLATION.
2. WHERE NOT SPECIFICALLY INDICATED ON PLANS, DDC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL RELAYS AND CONTACTORS, POWER TO DDC PANELS, AND OTHER CONTROL ELEMENTS. ALTHOUGH DDC CONTRACTOR MAY COORDINATE WITH OTHER TRADES TO PROVIDE MISCELLANEOUS ELECTRICAL WORK, THE FINAL RESPONSIBILITY FOR ACHIEVEMENT OF CONTROL SEQUENCES LIES WITH DDC CONTRACTOR.
3. ON THE GRAPHIC PAGES FOR ALL EQUIPMENT AND/OR MONITORED DEVICES (SUCH AS SENSORS, METERS, DAMPERS, ETC.) GIVE A CLEAR, GRAPHICAL INDICATION AS TO WHETHER EQUIPMENT OR DEVICE HAS BEEN PLACED IN MANUAL OPERATION, OVERRIDING AUTOMATIC OPERATION. (FOR EXAMPLE, PLACE AN "M" NEXT TO EQUIPMENT HAS BEEN PLACED IN MANUAL OPERATION.)
4. REFER TO OPERATING SEQUENCE IN SPECIFICATIONS FOR ALARMS AND SEQUENCES REQUIRED.
5. PROVIDE FULL COLOR GRAPHICS OF NEW SYSTEMS.
6. INTERCONNECT NEW CONTROLS WITH OWNER'S EXISTING COS.
7. PROVIDE WEB-SERVER. SEE SPECIFICATIONS.
8. RECOMMENDED DIVISION OF RESPONSIBILITIES BETWEEN SUB-CONTRACTORS IS AS FOLLOWS:
   a. WITH OWNER COORDINATE ETHERNET CONNECTION FOR DDC SYSTEM.
   b. WITH ELECTRICAL SUB CONTRACTOR, CONTROL CONTRACTOR COORDINATES 120V POWER WIRING AND CONDUIT TO NEW CONTROLLERS (AND CIRCUIT BREAKERS, IF NO SPARES EXIST).
   c. CONTROLS CONTRACTOR SUPPLIES DAMPERS, ETC. TO MECHANICAL CONTRACTOR FOR INSTALLATION. COORDINATE OUTSIDE AND RETURN AIR DAMPERS WITH AHU MANUFACTURER.
   d. CONTROLS CONTRACTOR IS RESPONSIBLE FOR:
      * DAMPER ACTUATORS
      * GATEWAY INTERFACES AND ALL RELATED ACCESSORIES FOR FULL COMMUNICATION BETWEEN EQUIPMENT AND DDC SYSTEM
      * ADJUSTABLE RANGE/FLAT PLATE THERMOSTATS, RH, CO2 SENSING DEVICES
      * EQUIPMENT CONTROLLERS, SOFTWARE, PROGRAMMING.
      * ALL NETWORK CONTROL PANELS, DDC CONTROLLERS, SOFTWARE, AND PROGRAMMING.
      * WIRING AND CONDUIT FOR CONTROL AND MONITORING DEVICES
      * CONTROL RELAYS
      * SHOP DRAWINGS PER SPECIFICATIONS
      * SYSTEM CHECK OUT, OWNER TRAINING, DDC SYSTEM WARRANTY WORK

INSULATION:

1. FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD PIPING SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.
2. PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.

DUCTWORK:

1. DUCTWORK GENERAL:
   a. DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST DUCT OFFSETS/RISES/DROPS ARE NOT SHOWN. WHERE DUCTS PENETRATE WALLS, INSTALL THEM PERPENDICULAR TO WALL.
   b. RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION, UNLESS NOTED OTHERWISE.
   c. VERIFY BOTTOM OF DUCT ELEVATION AND COORDINATE WITH OTHER TRADES.
   d. CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SPECIFICATIONS AND SMACNA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COORDINATE PRESSURE CLASSES WITH EQUIPMENT SCHEDULES.
   e. FLEXIBLE DUCTS MAXIMUM LENGTH SHALL NOT EXCEED 6 FEET. USE OF FLEXIBLE DUCTWORK IS LIMITED TO AREAS WITH AN ACCESSIBLE SUSPENDED CEILING. PINCHED DUCT WILL HAVE TO BE REPLACED.
   f. IN AREAS WHERE DUCT CONFLICTS CANNOT BE AVOIDED, ROUTE SMALLER DUCTS THROUGH ROO JOISTS.
   g. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH ELECTRICAL, IF NEEDED. RELOCATE DIFFUSER TO ADJACENT TILE.
2. DUCTWORK INSULATION:
   a. WRAP ALL OUTSIDE AIR, SUPPLY AND RETURN DUCTWORK UNLESS NOTED OTHERWISE.
   b. IN ADDITION, FOR ACOUSTICAL PERFORMANCE INTERNALLY LINE FIRST 10' OF SUPPLY AND LAST 10' OF RETURN DUCTWORK.
   c. PROVIDE ACOUSTICAL LINING FOR ALL TRANSFER DUCTS AND RETURN AIR ELBOWS.
   d. INSULATION ON DUCT SHOULD TO BE PROPERLY TAPED AND MASTICS MUST BE APPLIED ON SEAMS AND JOINTS AND AT ENDS ADJACENT TO DUCT FLANGES AND FITTINGS. FOR DUCT SIDES WITH DIMENSIONS LARGER THAN 18 INCHES, APPLY ADDITIONAL PINS AND CLIPS TO HOLD INSULATION TIGHTLY AGAINST SURFACE AT CROSS BRACING.
   e. INSULATE ALL EXHAUST DUCTWORK 10 FEET FROM EXTERIOR OPENING.
3. DUCT FITTINGS:
   a. WHERE RECTANGULAR TEE FITTINGS ARE SHOWN, PROVIDE FITTING WITH ADJUSTABLE DIVIDER SHEET AND TURNING VANES.
   b. WHERE RECTANGULAR MAIN AND BRANCH CONNECTIONS ARE SHOWN, PROVIDE EXTRACTOR VANES. NOT APPLICABLE TO DUCTWORK DOWNSTREAM OF VAV BOXES.
   c. PROVIDE TURNING VANES IN ALL ELBOWS PER SPECS.
4. DAMPERS:
   a. IN AN ACCESSIBLE LOCATION, PROVIDE MANUAL-TYPE VOLUME BALANCING DUCT DAMPERS IN ALL SUPPLY, RETURN AND EXHAUST DUCT BRANCHES TO INDIVIDUAL GRILLES, REGISTERS AND DIFFUSERS (GRD). TO MINIMIZE NOISE INSTALL DAMPERS CLOSER TO THE BRANCH CONNECTION THAN TO THE GRD. IN DUCTWORK, PROVIDE ACCESS DOORS TO ALL DAMPERS.
   b. ABOVE INACCESSIBLE CEILINGS AND IN CASE DUCT CONFIGURATION DOES NOT ALLOW FOR INSTALLATION OF DAMPER IN DUCTWORK, PROVIDE REMOTE MANUAL DAMPER BY YOUNG REGULATOR OR EQUAL, (CABLE OPERATED SYSTEM) WITH ENGINEER'S PERMISSION CONTRACTOR MAY PROVIDE VOLUME DAMPER THAT IS INTEGRAL TO GRD.
   c. PROVIDE BALANCING DAMPERS ON ALL EXHAUST GRILLES TO ACHIEVE DESIRED AIRFLOW.
   d. PROVIDE DYNAMIC FIRE DAMPERS (RUSKIN DIDB20, TYPE B OR EQUAL) IN ACCORDANCE WITH CODE REQUIREMENT, IN ALL PENETRATIONS OF FIRE RATED WALLS, OCCUPANCY SEPARATION WALLS, BARRIERS AND PARTITIONS, AND EXIT CORRIDORS. REFER TO ARCHITECTURAL PLANS FOR RATED WALLS. PROVIDE ACCESS DOORS AS PER CODE REQUIREMENTS, EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. WHERE GRILLE ACCESS IS INDICATED, ADDITIONAL DUCT ACCESS DOOR IS NOT REQUIRED. WHERE THE CEILING IS FIRE RATED PROVIDE FIRE RATED AIR DEVICES FOR TRANSFER & RETURN AIR GRILLES AND SUPPLY AIR DIFFUSERS AS PER CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR RATED CEILINGS.
   e. PROVIDE ACCESS DOORS (NOT SHOWN IN DRAWINGS) FOR INSPECTION OF DUCT MOUNTED EQUIPMENT SUCH AS FIRE/SMOKE DAMPERS, MANUAL BALANCING DAMPERS AND TURNING VANES. IN AREAS WITH HARD CEILING COORDINATE ACCESS DOOR LOCATIONS AND CEILING ACCESS PANELS WITH OTHER TRADES.

ABBREVIATIONS

A	AMPS	ENT.	ENTERING	NO	NORMALLY OPEN
ACCU	AIR COOLED CONDENSING UNIT	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
ACT	ACTUATOR	FCU	FAN COIL UNIT	OA	OUTSIDE AIR
AFF	ABOVE FINISHED FLOOR	FD	FIRE DAMPER	PH	PHASE
AHU	AIR HANDLING UNIT	FM	FLOW METER	RA	RETURN AIR
B.	BOTTOM	FS	FLOW SWITCH	RAG/RG	RETURN AIR GRILLE
BAS	BUILDING AUTOMATION SYSTEM	FPI	FINS PER INCH	RD	ROOF DRAIN
BOP	BOTTOM OF PIPE	G.	GROUND	RM.	ROOM
BOTT.	BOTTOM	GA.	GAGE	RPZ	REDUCED PRESSURE ZONE
C.	CONDUIT OR COMMON	GALV.	GALVANIZED	SA	SUPPLY AIR
CHR	CHILLED WATER RETURN	GPM	GALLONS PER MINUTE	SD	SUPPLY AIR DIFFUSER
CHS	CHILLED WATER SUPPLY	GRND.	GROUND	SS	STAINLESS STEEL
CHW	CHILLED WATER	HB	HOSE BIBB	SZ	SINGLE ZONE
CHWP	CHILLED WATER PUMP	HP	HORSEPOWER	TAB	TESTING & BALANCING
CR	CONDENSER WATER RETURN	HS	HUMIDITY SENSOR	T.O.L.	TOP OF LOUVER
CS	CONDENSER WATER SUPPLY	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	TS	TEMPERATURE SENSOR
CLG.	CEILING OR COOLING			TSTAT	THERMOSTAT
COMB.	COMBINATION	LVG.	LEAVING	UG	UNDERGROUND
CONC.	CONCRETE	MECH	MECHANICAL	UNO	UNLESS OTHERWISE NOTED
COND.	CONDUIT	MOT. STRTR.	MOTOR STARTER	V	VOLTS
CT	COOLING TOWER	MS	MOTOR STARTER	VAV	VARIABLE AIR VOLUME
CU.	COPPER	MZ	MULTI-ZONE	VFD	VARIABLE FREQUENCY DRIVE
CW	CITY WATER	NC	NORMALLY CLOSED	W	WIRE
DDC	DIRECT DIGITAL CONTROLS				
DMPR.	DAMPER				
DISC.	DISCONNECT				
EAG/EG	EXHAUST AIR GRILLE				
EMS	ENERGY MANAGEMENT SYSTEM				

MECHANICAL SYMBOLS LEGEND

12x12	DUCT SIZE: FIRST FIGURE IS SIDE SHOWN	T	THERMOSTAT
(12x12)	BELOW DUCT SIZE: FIRST FIGURE IS SIDE SHOWN	SH	SPACE HUMIDITY SENSOR
	DIRECTION OF FLOW-RETURN	DH	DUCT HUMIDITY SENSOR
	DIRECTION OF FLOW-SUPPLY	C	SPACE CARBON DIOXIDE SENSOR
		SP	STATIC PRESSURE SENSOR
FD	FIRE DAMPER	C	DUCT CARBON DIOXIDE SENSOR
8"ø	FLEXIBLE DUCT	CHR	CHILLED WATER RETURN
EG-X cfm	EXHAUST AIR GRILLE	CHS	CHILLED WATER SUPPLY
		CD	CONDENSATE PIPING
RG/TG-X cfm	RETURN AIR/TRANSFER AIR GRILLE		BUTTERFLY VALVE
SD-X cfm	SUPPLY AIR DIFFUSER		MANUAL VALVE
	SIDE TAP WITH DAMPER		AUTOMATIC VALVE
	BACKDRAFT DAMPER		CHECK VALVE
AFR	AUTO-FLOW REGULATOR		PRESSURE GAUGE & COCK
	DRAIN VALVE	TS	TEMPERATURE SENSOR
	BALL VALVE	TW	THERMOMETER WELL

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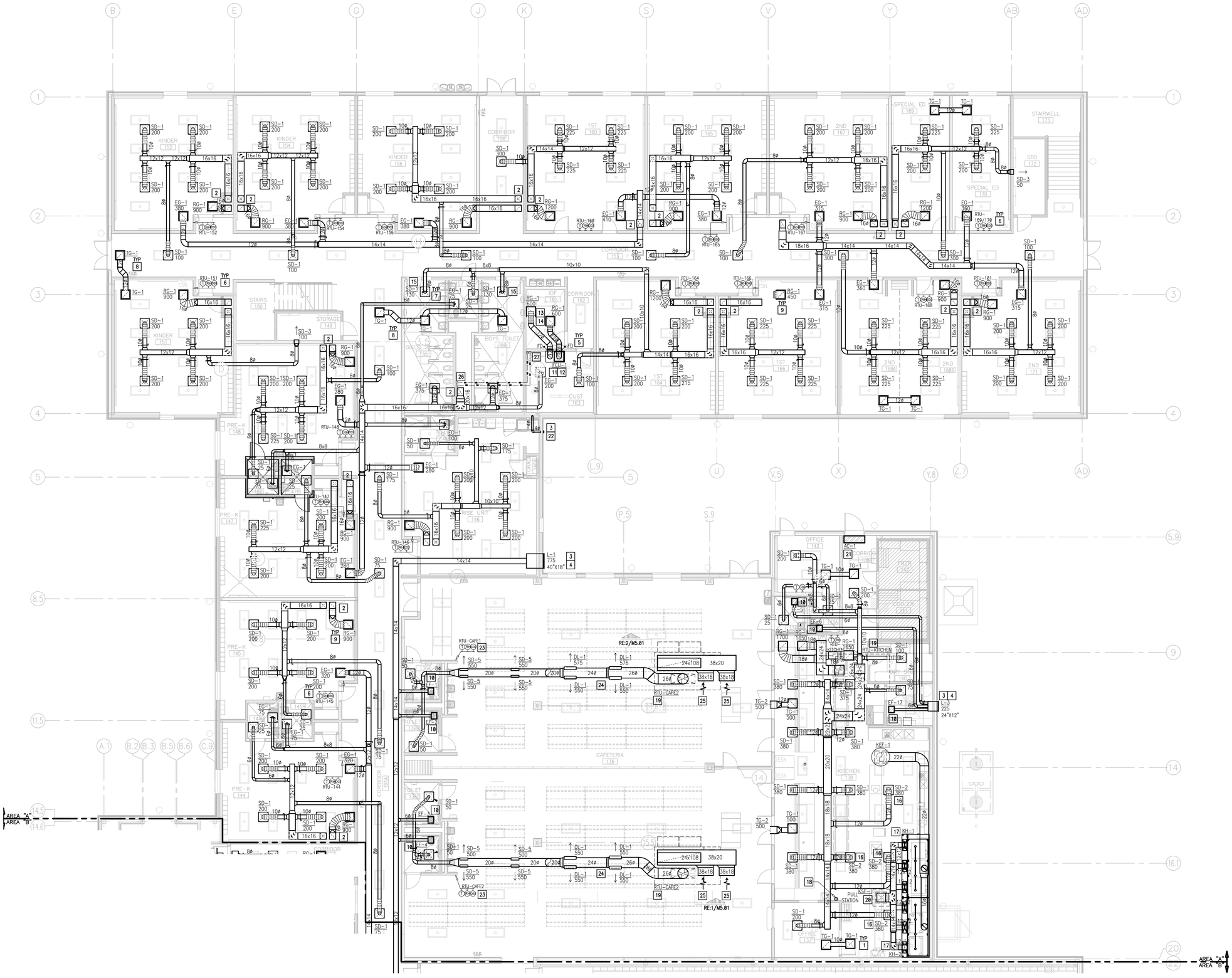
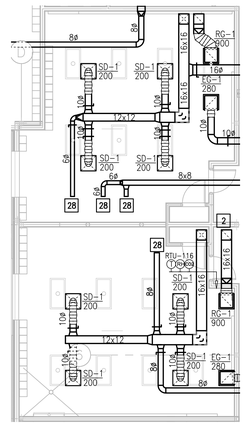


01 MECHANICAL PLAN (FIRST FLOOR)
SCALE : 1/8" = 1'-0"

NORTH

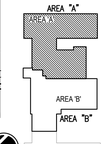
KEYED NOTES:

1. CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYPICAL)
2. DUCTWORK UP TO RTU ON ROOF. REFER TO SECOND FLOOR MECHANICAL PLAN FOR CONTINUATION.
3. SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYPICAL)
4. PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYPICAL)
5. PROVIDE 1-1/2 HOUR RATING, DYNAMIC FIRE DAMPER EQUAL TO RUSKIN DIBD2 AND DUCT ACCESS DOOR EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. (TYPICAL). PROVIDE FIRE DAMPER AT WALL PENETRATIONS AS SHOWN.: ACCESS PANEL SHALL BE IN CEILING SPACE. (TYPICAL)
6. PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
7. PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
8. PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
9. PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACOUSTICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACOUSTICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
10. PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
11. PROVIDE FAN COIL UNIT AS SCHEDULED. PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2009 SECTION 307.2.3. SEE DETAIL SHEET. ROUTE COPPER CONDENSATE LINE TO PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. DROP REFRIGERANT LINES NEXT TO UNIT TO AVOID INTERFERENCE WITH MAINTENANCE ACCESS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES.
12. PROVIDE FCU PLATFORM USING 3" X 3" X 1/4" GALVANIZED STEEL ANGLE IRON WITH WELDED JOINTS. PROVIDE 1" THICK MOISTURE RESISTANT GRADE PLYWOOD AND BOLT TO BRACKET WITH 1/4" GALVANIZED BOLTS. COORDINATE PLATFORM SIZE ON SITE. SET UNIT ON 1/2" NEOPRENE PAD ON PLATFORM. PLATFORM TO BE USED AS A RETURN AIR PLENUM. BOLT MOISTURE RESISTANT PLYWOOD AROUND THE FRAMING TO CREATE AN AIRTIGHT PLENUM BOX.
13. PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. ENSURE S/A DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
14. PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, I.T. DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR INSTALLATION.
15. PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AG-75 OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
16. REMOVE PATTERN DIFFUSER.
17. PROVIDE KITCHEN HOOD SYSTEM AS PER SPECIFICATIONS AND SCHEDULES. REFER TO ELEVATIONS AND DETAILS SHEET FOR MORE INFORMATION.
18. MOUNT MANUAL PULL STATION FOR KITCHEN HOOD CHEMICAL SUPPRESSION SYSTEM AT THIS LOCATION. COORDINATE WITH ARCHITECTURAL.
19. PROVIDE RTU ON ROOF CURB AS SCHEDULED. REFER TO MECHANICAL ROOF PLAN FOR MORE INFORMATION.
20. PROVIDE SUPPLY FAN AS SCHEDULED. REFER TO MECHANICAL SCHEDULES FOR FOR MORE INFORMATION.
21. PROVIDE AIR CURTAIN (AC-1) EQUAL TO 'POWERED AIRE' MODEL BCE 1-48 WITH MOTORS, 0.5 HP, 120/1/60, 7.3 AMP DRAW. UNIT WEIGHS 164 LBS. INTERLOCK FAN WITH DOOR USING MICROSWITCH. FURNISH TOGGLE SWITCH AS MEANS OF DISCONNECT.
22. PROVIDE 4"Ø SHEET METAL VENT PIPE FOR DRYER AND TERMINATE TO OUTSIDE THROUGH WALL WITH HOOD AS RECOMMENDED BY DRYER MANUFACTURER. INSTALL AS PER CODE REQUIREMENTS AND DRYER MANUFACTURER'S INSTRUCTIONS. COORDINATE MODEL NUMBER FOR WALL CAP WITH DRYER MANUFACTURER.
23. PROVIDE EXTRA HEAVY DUTY LOCKABLE COVERS TO PROTECT WALL MOUNTED THERMOSTAT, CO2, AND RH SENSORS LOCATED IN THE CAFETERIA AND GYMNASIUM.
24. PROVIDE DOUBLE WALL EXPOSED-PAINTED ROUND DUCT AS PER SPECIFICATIONS WITH DIFFUSERS AS SCHEDULED. PROVIDE HIGH PERFORMANCE PAINT AND COORDINATE FINAL COLOR OF DUCTS AND DIFFUSERS WITH ARCHITECT BEFORE ORDERING AND INSTALLING. ALL EXPOSED DUCTS SHALL BE PAINTED. COORDINATE FINISH AND COLOR WITH ARCHITECT.
25. PROVIDE FULL SIZE OPENING AT THE END OF THE RETURN AIR DUCT COVER OPENING WITH PAINTED WIRE MESH.
26. ROUTE CONDENSATE PIPING DOWN FROM 2ND FLOOR INSIDE CHASE AT THIS APPROXIMATE LOCATION.
27. SECURE PIPING TO WALL AND DISCHARGE CONDENSATE PIPING INTO FLOOR SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
28. CAP AND SEAL DUCT FOR FUTURE RESTROOM ADDITION.



02 DEDUCTIVE ALTERNATE
SCALE : 1/8" = 1'-0"

NORTH



KEYPLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
CESAR A. GONZALEZ
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LICENSED
PROFESSIONAL
ENGINEER
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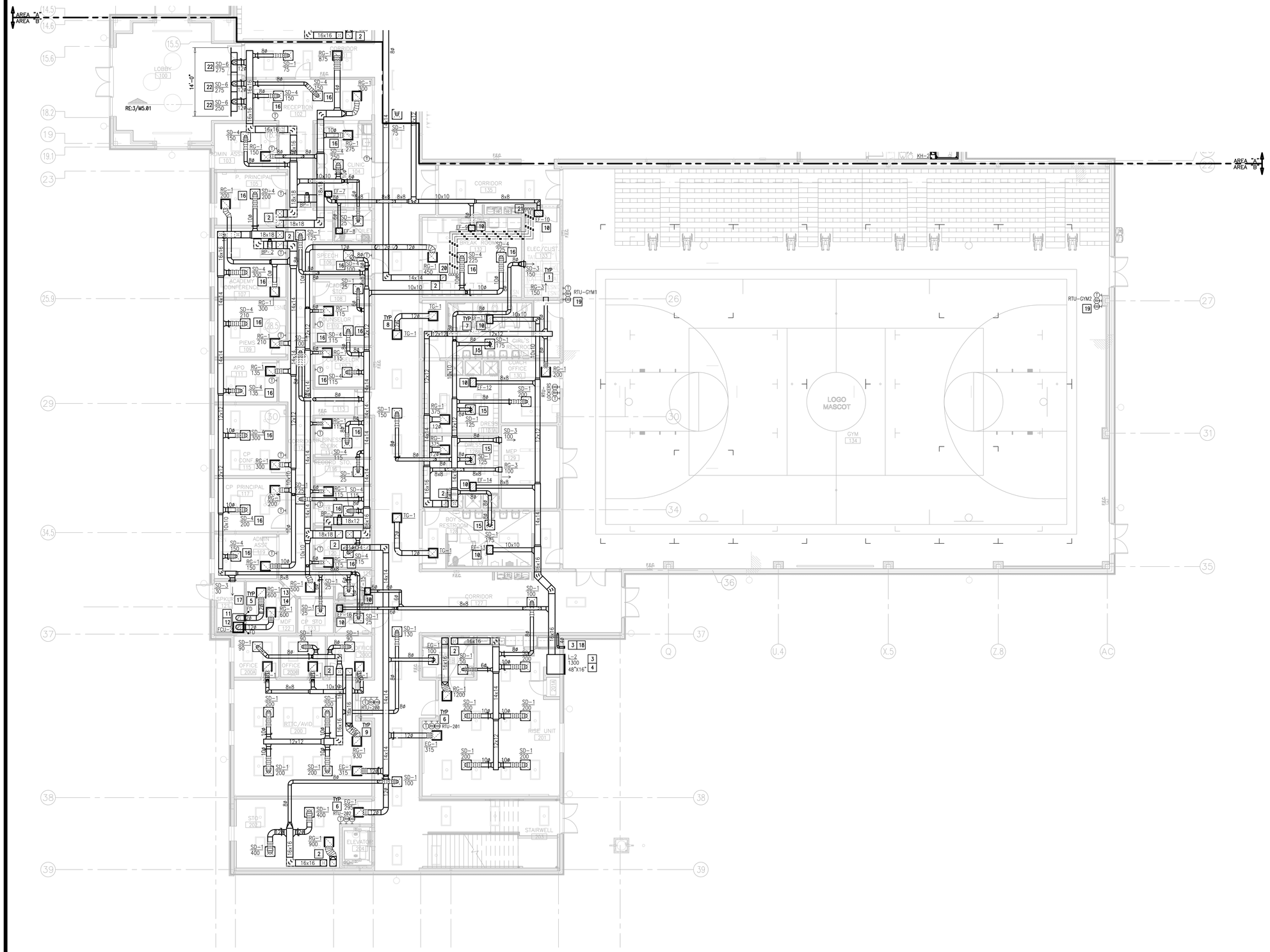
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No:	IDEA Palmview Phase I
Sheet:	M3.01



01 MECHANICAL PLAN (FIRST FLOOR)

SCALE :1/8" = 1'-0"

NORTH

KEYED NOTES:

1. CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYPICAL)
2. DUCTWORK UP TO RTU ON ROOF. REFER TO SECOND FLOOR MECHANICAL PLAN FOR CONTINUATION.
3. SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYPICAL)
4. PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYPICAL)
5. PROVIDE 1-1/2 HOUR RATING, DYNAMIC FIRE DAMPER EQUAL TO RUSKIN DIBD2 AND DUCT ACCESS DOOR EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. (TYPICAL). PROVIDE FIRE DAMPER AT WALL PENETRATIONS AS SHOWN.: ACCESS PANEL SHALL BE IN CEILING SPACE.
6. PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
7. PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
8. PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
9. PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACOUSTICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACOUSTICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
10. PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
11. PROVIDE FAN COIL UNIT AS SCHEDULED. PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2009 SECTION 307.2.3. SEE DETAIL SHEET. ROUTE COPPER CONDENSATE LINE TO PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. DROP REFRIGERANT LINES NEXT TO UNIT TO AVOID INTERFERENCE WITH MAINTENANCE ACCESS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES.
12. PROVIDE FCU PLATFORM USING 3" X 3" X 1/4" GALVANIZED STEEL ANGLE IRON WITH WELDED JOINTS. PROVIDE 1" THICK MOISTURE RESISTANT GRADE PLYWOOD AND BOLT TO BRACKET WITH 1/4" GALVANIZED BOLTS. COORDINATE PLATFORM SIZE ON SITE. SET UNIT ON 1/2" NEOPRENE PAD ON PLATFORM. PLATFORM TO BE USED AS A RETURN AIR PLENUM. BOLT MOISTURE RESISTANT PLYWOOD AROUND THE FRAMING TO CREATE AN AIRTIGHT PLENUM BOX.
13. PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. ENSURE S/A DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
14. PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, I.T. DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR INSTALLATION.
15. PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AG-7S OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
16. PROVIDE VAV ELECTRONIC DIFFUSER SPECIFIED CONTROLS MODEL SC-BN-XXC OR APPROVED EQUAL. PROVIDE WITH BACNET THERMOSTAT TO INTERFACE WITH BAS. FOR EACH THERMOSTAT, BAS GRAPHICS SHALL INDICATE SPACE TEMPERATURE AND SPACE TEMPERATURE SETPOINT. COORDINATE WITH CONTROLS CONTRACTOR. PROVIDE 120V/24V TRANSFORMER ABOVE CEILING TO POWER THERMOSTAT, VAV DIFFUSER AND BYPASS DAMPER (AS APPLICABLE). COORDINATE WITH ELECTRICAL. REFER TO ASSOCIATED DETAIL ON DETAIL SHEET.
17. FIRE SPRINKLER RISER LOCATION. DO NOT INSTALL ANY PIPING OR OTHER ITEMS OVER FIRE SPRINKLER PIPING IN THIS AREA.
18. PROVIDE 4"Ø SHEET METAL VENT PIPE FOR DRYER AND TERMINATE TO OUTSIDE THROUGH WALL WITH HOOD AS RECOMMENDED BY DRYER MANUFACTURER. INSTALL AS PER CODE REQUIREMENTS AND DRYER MANUFACTURER'S INSTRUCTIONS. COORDINATE MODEL NUMBER FOR WALL CAP WITH DRYER MANUFACTURER.
19. PROVIDE EXTRA HEAVY DUTY LOCKABLE COVERS TO PROTECT WALL MOUNTED THERMOSTAT, CO2, AND RH SENSORS LOCATED IN THE CAFETERIA AND GYMNASIUM.
20. ROUTE CONDENSATE PIPING DOWN FROM 2ND FLOOR INSIDE CHASE AT THIS APPROXIMATE LOCATION.
21. SECURE PIPING TO WALL AND DISCHARGE CONDENSATE PIPING INTO FLOOR SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
22. PROVIDE LINEAR DIFFUSER AS SCHEDULED. DIFFUSER SHALL HAVE CONTINUOUS LOOK WITH LENGTH AS SHOWN FOR AESTHETICS PURPOSES. PROVIDE FIELD FABRICATED PLENUM BOX BEHIND AIR DEVICE.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

AREA 'A'
AREA 'B'
FUTURE PHASE II
KEYPLAN

STATE OF TEXAS
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Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	M3.02

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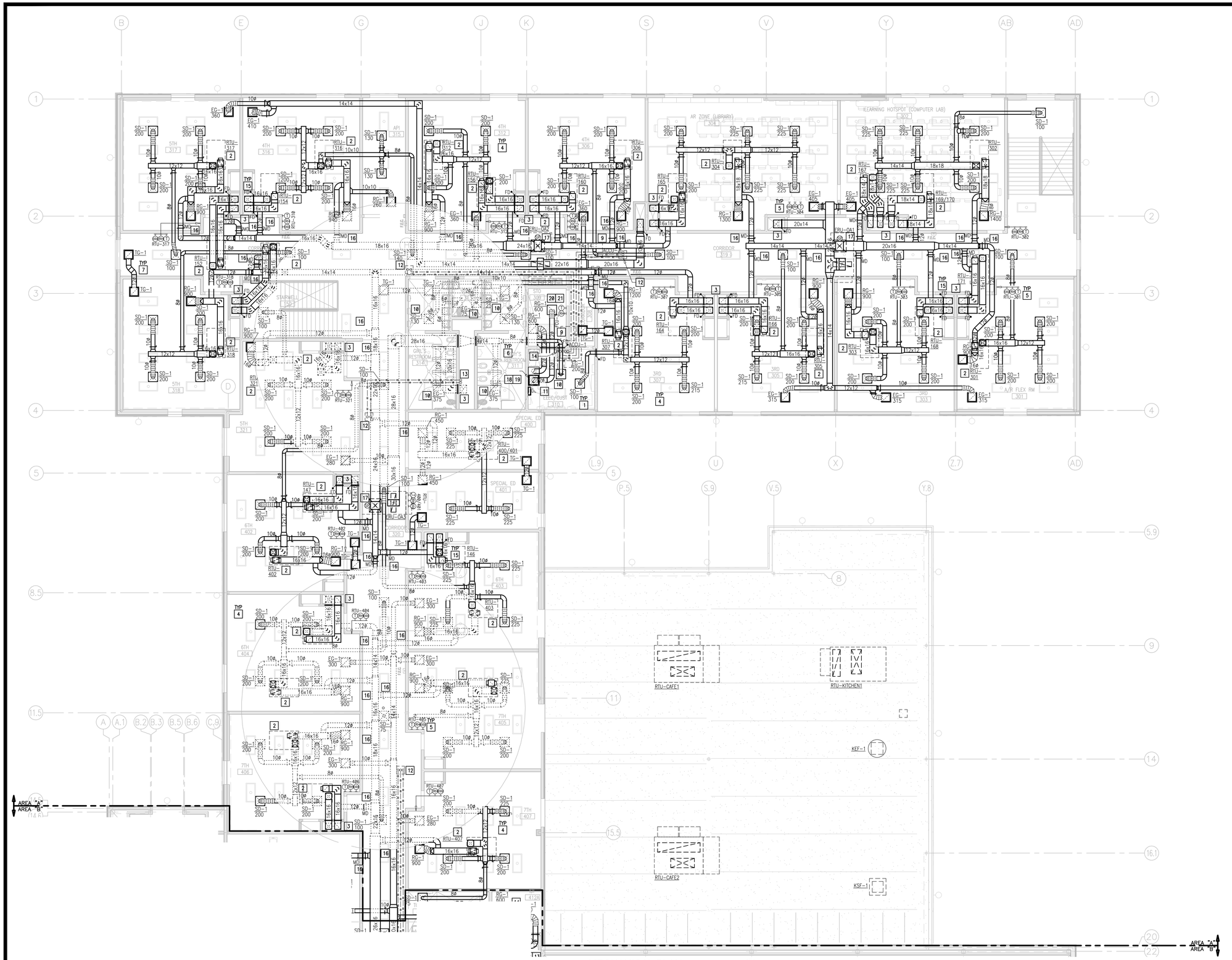

01 MECHANICAL PLAN (SECOND FLOOR)
SCALE : 1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.

KEYED NOTES:

1. CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYPICAL)
2. PROVIDE RTU ON ROOF CURB AS SCHEDULED. REFER TO MECHANICAL ROOF PLAN FOR MORE INFORMATION.
3. DUCTWORK DOWN TO FIRST FLOOR. REFER TO FIRST FLOOR MECHANICAL PLAN FOR CONTINUATION.
4. DUCTWORK ROUTING SHOWN IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS. (TYPICAL)
5. PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
6. PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
7. PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
8. PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACOUSTICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACOUSTICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
9. PROVIDE AIR COOLED CONDENSING UNIT ON ROOF AS SCHEDULED. REFER TO MECHANICAL ROOF PLAN FOR MORE INFORMATION.
10. PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AC-7S OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
11. REFER TO SPECIFICATION FOR DDC CONTROLS AND SEQUENCES OF OPERATION.
12. ROUTE CONDENSATE PIPING DOWN FROM ROOF AT THIS APPROXIMATE LOCATION.
13. ROUTE PIPING DOWN TO FIRST FLOOR CEILING SPACE. REFER TO FIRST FLOOR MECHANICAL PLAN FOR CONTINUATION.
14. SECURE PIPING TO WALL AND DISCHARGE CONDENSATE PIPING INTO FLOOR SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
15. PROVIDE 1-1/2 HOUR RATING, DYNAMIC FIRE DAMPER EQUAL TO RUSKIN DIBD2 AND DUCT ACCESS DOOR EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. (TYPICAL). PROVIDE FIRE DAMPER AT WALL PENETRATIONS AS SHOWN.: ACCESS PANEL SHALL BE IN CEILING SPACE.
16. PROVIDE MOTORIZED DUCT MOUNTED OUTSIDE AIR DAMPER AND ACTUATOR WITH CO2 SENSOR AS PER SPECIFICATIONS TO ACHIEVE DEMAND CONTROLLED VENTILATION SEQUENCE, REFER TO DDC CONTROLS SEQUENCES FOR MORE INFORMATION. CONTROLS CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY POWER, CONDUITS AND WIRING FOR A COMPLETE AND FUNCTIONAL DCV SYSTEM.
17. PROVIDE DUCT MOUNTED STATIC PRESSURE SENSOR DOWNSTREAM THE ERU ROOFTOP UNIT SUPPLY AIR DUCTWORK AND INTEGRATE WITH THE VAV OPERATION OF THE DOAS. COORDINATE WITH CONTROLS CONTRACTOR.
18. PROVIDE FAN COIL UNIT AS SCHEDULED. PROVIDE WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE FCU PRIOR TO OVERFLOW. AUXILIARY DRAIN SYSTEM SHALL BE AS PER IMC-2009 SECTION 307.2.3. SEE DETAIL SHEET. ROUTE COPPER CONDENSATE LINE TO PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. DROP REFRIGERANT LINES NEXT TO UNIT TO AVOID INTERFERENCE WITH MAINTENANCE ACCESS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES.
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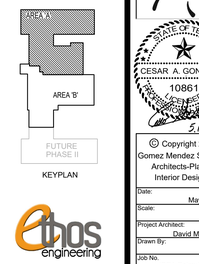
20. PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. REMOVE PATTERN DIFFUSER AND ENSURE S/A DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
21. PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, I.T. DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR INSTALLATION.



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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
IDEA PALMVIEW
PALMVIEW, TEXAS

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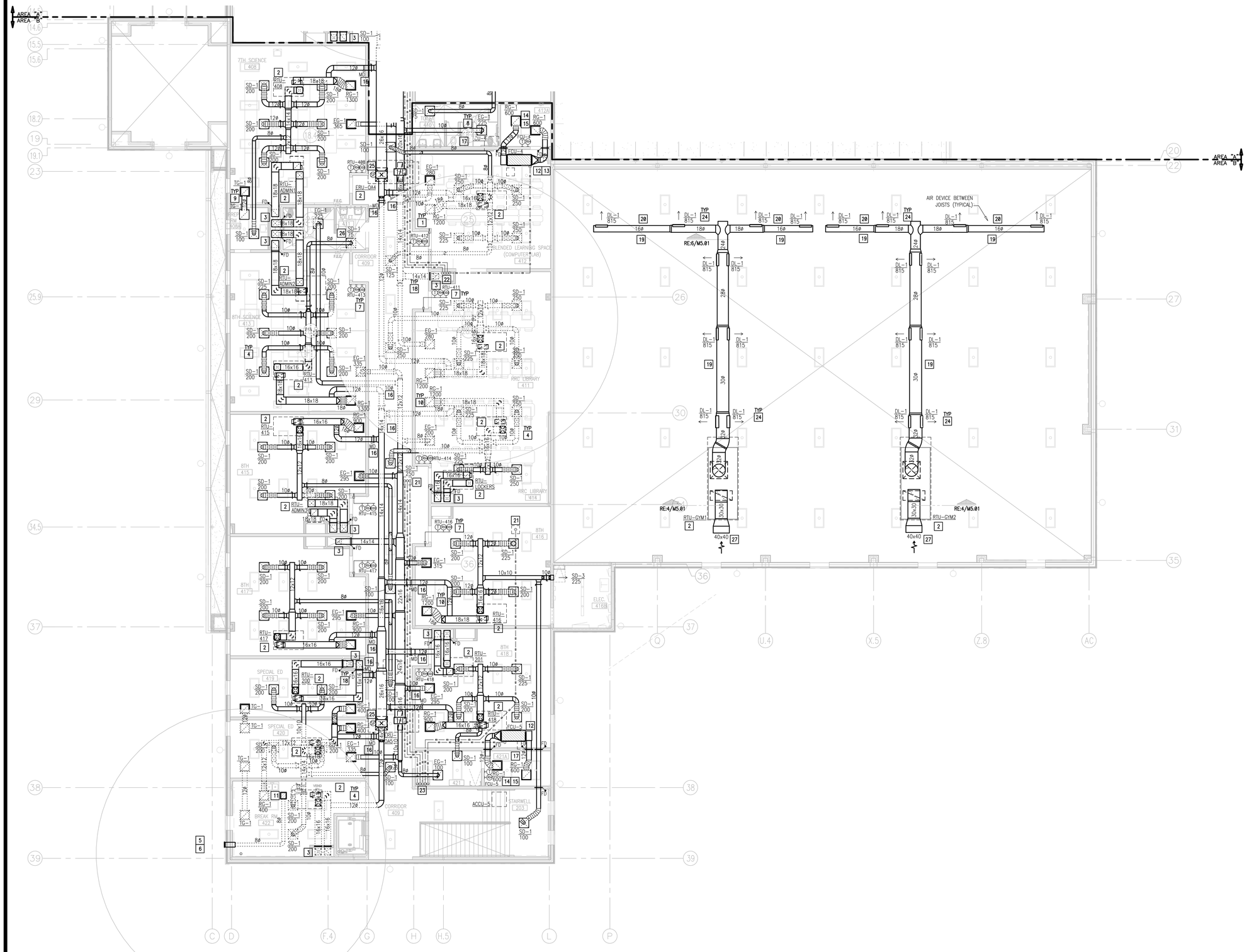
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	M3.03



01 MECHANICAL PLAN (SECOND FLOOR)
SCALE : 1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.

KEYED NOTES:

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5. SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYPICAL)
6. PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYPICAL)
7. PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. (TYPICAL)
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11. PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
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13. SUSPEND FCU USING SPRING VIBRATION ISOLATORS AS PER MANUFACTURER'S RECOMMENDATIONS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES. PROVIDE AUXILIARY DRAIN PAN WITH FLOAT SWITCH TO DISABLE FAN WHEN MOISTURE IS DETECTED. PROVIDE INSULATED COPPER CONDENSATE PIPING. ROUTE INSULATED CONDENSATE PIPING DOWN TO FIRST FLOOR INSIDE CHASE. TERMINATE CONDENSATE PIPING AT FLOOR SINK IN THE FIRST FLOOR ELECTRICAL/CUSTODIAN ROOM 138.
14. PROVIDE PLENUM BOX ON TOP OF AIR DEVICE FOR SIDE FLEX CONNECTION. REMOVE PATTERN DIFFUSER AND ENSURE S/A DEVICE DROPS AIR IN FRONT OF RACKS. COORDINATE EXACT LOCATION WITH OWNER AND ENGINEER PRIOR INSTALLATION. RG-1 TO BE USED AS SUPPLY AIR DEVICE.
15. PRIOR TO INSTALLATION OF FCU AND RELATED DUCTWORK, COORDINATE LOCATION OF COMMUNICATION AND DATA EQUIPMENT TO ENSURE RACKS ARE POSITIONED IN A PROPER MANNER CLEARLY IDENTIFYING THE COLD AND HOT ISLES. SUPPLY AIR DEVICES SHALL THROW AIR IN FRONT OF RACKS AND RETURN AIR DEVICES SHALL BE LOCATED ON BACK SIDE OF RACKS. DOCUMENT COORDINATION WITH OWNER, I.T. DEPARTMENT, AND ARCHITECT/ENGINEER PRIOR INSTALLATION.
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20. DOUBLE WALL DUCTWORK RUNNING PERPENDICULAR TO THE JOIST GIRDERS SHALL BE ROUTED THROUGH THE JOIST GIRDER WEBBING. COORDINATE WITH GENERAL CONTRACTOR.
21. ROUTE CONDENSATE PIPING DOWN FROM ROOF AT THIS APPROXIMATE LOCATION.
22. ROUTE PIPING DOWN TO FIRST FLOOR CEILING SPACE. REFER TO FIRST FLOOR MECHANICAL PLAN FOR CONTINUATION.
23. SECURE PIPING TO WALL AND DISCHARGE CONDENSATE PIPING INTO FLOOR SINK. REFER TO PLUMBING PLANS FOR EXACT LOCATION OF FLOOR SINK.
24. COORDINATE DUCTWORK ROUTING AND AIR DEVICE PLACEMENT WITH STRUCTURAL JOISTS, CROSS BRACING, AND BRIDGING. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
25. PROVIDE DUCT MOUNTED STATIC PRESSURE SENSOR DOWNSTREAM THE DOAS ROOFTOP UNIT SUPPLY AIR DUCTWORK AND INTEGRATE WITH THE VAV OPERATION OF THE DOAS. COORDINATE WITH CONTROLS CONTRACTOR.
26. PROVIDE ROUND NECK OPPOSED BLADE BALANCING DAMPER TITUS MODEL AG-75 OR APPROVED EQUAL FOR VOLUME CONTROL IN ROUND NECK DIFFUSER. DAMPER SHALL BE OPERABLE THRU THE FACE OF THE DIFFUSER. TYPICAL ON SQUARE DIFFUSERS LOCATED IN HARD CEILING AREAS.
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AREA 'A'
AREA 'B'
FUTURE PHASE II
KEYPLAN

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STATE OF TEXAS
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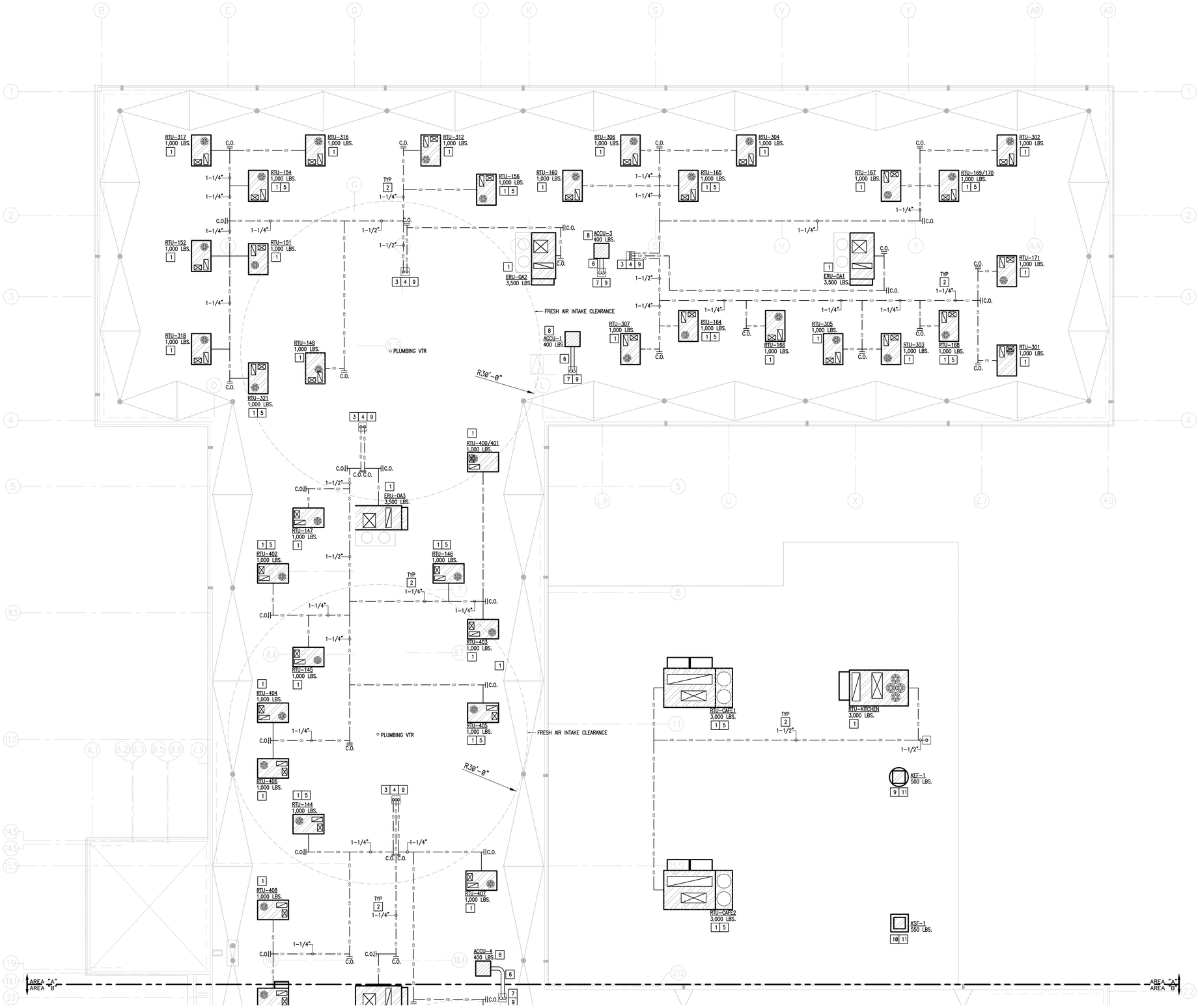
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No:	IDEA Palmview Phase I
Sheet:	M3.04



01 MECHANICAL ROOF PLAN

SCALE : 1/8" = 1'-0"

NORTH

KEYED NOTES:

1. PROVIDE RTU ON ROOF CURB AS SCHEDULED. ORIENT RTUS TO OPTIMIZE DUCTWORK. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE COPPER CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING IN PIPING SUPPORTS AS DETAILED. PROVIDE ROOF CURB TO INSTALL EQUIPMENT ON ROOF. SECURE EQUIPMENT TO ROOF CURB AND ROOF CURB TO ROOF STRUCTURE AS PER DIV. 7 SPECIFICATIONS. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES.
2. PROVIDE COPPER CONDENSATE PIPING ON ROOF AND PROVIDE SUPPORTS AS PER DETAIL. REFER TO DETAIL SHEET. (TYPICAL)
3. ROUTE CONDENSATE LINES DOWN TO CEILING SPACE BELOW AT THE APPROXIMATE LOCATION. REFER TO PLUMBING DRAWINGS.
4. PROVIDE ROOF PENETRATION SYSTEM FOR CONDENSATE PIPING. SEE ASSOCIATED DETAIL ON DETAIL SHEET. COORDINATE INSTALLATION WITH PLUMBING CONTRACTOR.
5. PROVIDE FACTORY INSTALLED CONVENIENCE ELECTRICAL OUTLET AT INDICATED RTUS. COORDINATE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ELECTRICAL CONTRACTOR.
6. PROVIDE 1" INSULATION & ALUMINUM METAL JACKET ON EXPOSED REFRIGERANT LINES. SEE SPECIFICATIONS. PROVIDE REFRIGERANT LINE SUPPORTS SUITABLE FOR ROOF APPLICATION.
7. PROVIDE ROOF PENETRATION SYSTEM FOR REFRIGERANT PIPING, HVAC CONTROL WIRING AND ELECTRICAL POWER CONDUITS. SEE ASSOCIATED DETAIL ON DETAIL SHEET. COORDINATE INSTALLATION WITH ELECTRICAL AND PLUMBING CONTRACTORS.
8. SECURE CONDENSING UNIT TO ROOF SUPPORT. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. REFER TO DIV. 7 FOR MORE INFORMATION.
9. SLEEVE ALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND PIPING WITH FIRE PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION BOTH INSIDE AND OUTSIDE TO PROVIDE FINISHED LOOK.
10. PROVIDE EXHAUST FAN ON ROOF CURB AS SCHEDULED. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT.
11. PROVIDE SUPPLY FAN ON ROOF CURB AS SCHEDULED. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT.

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW

PALMVIEW, TEXAS

AREA 'A'
AREA 'B'
FUTURE PHASE II

KEYPLAN

STATE OF TEXAS
CESAR A. GONZALEZ
106611
LICENSED
PROFESSIONAL ENGINEER
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

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Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.:	IDEA Palmview Phase I
Sheet:	M4.01

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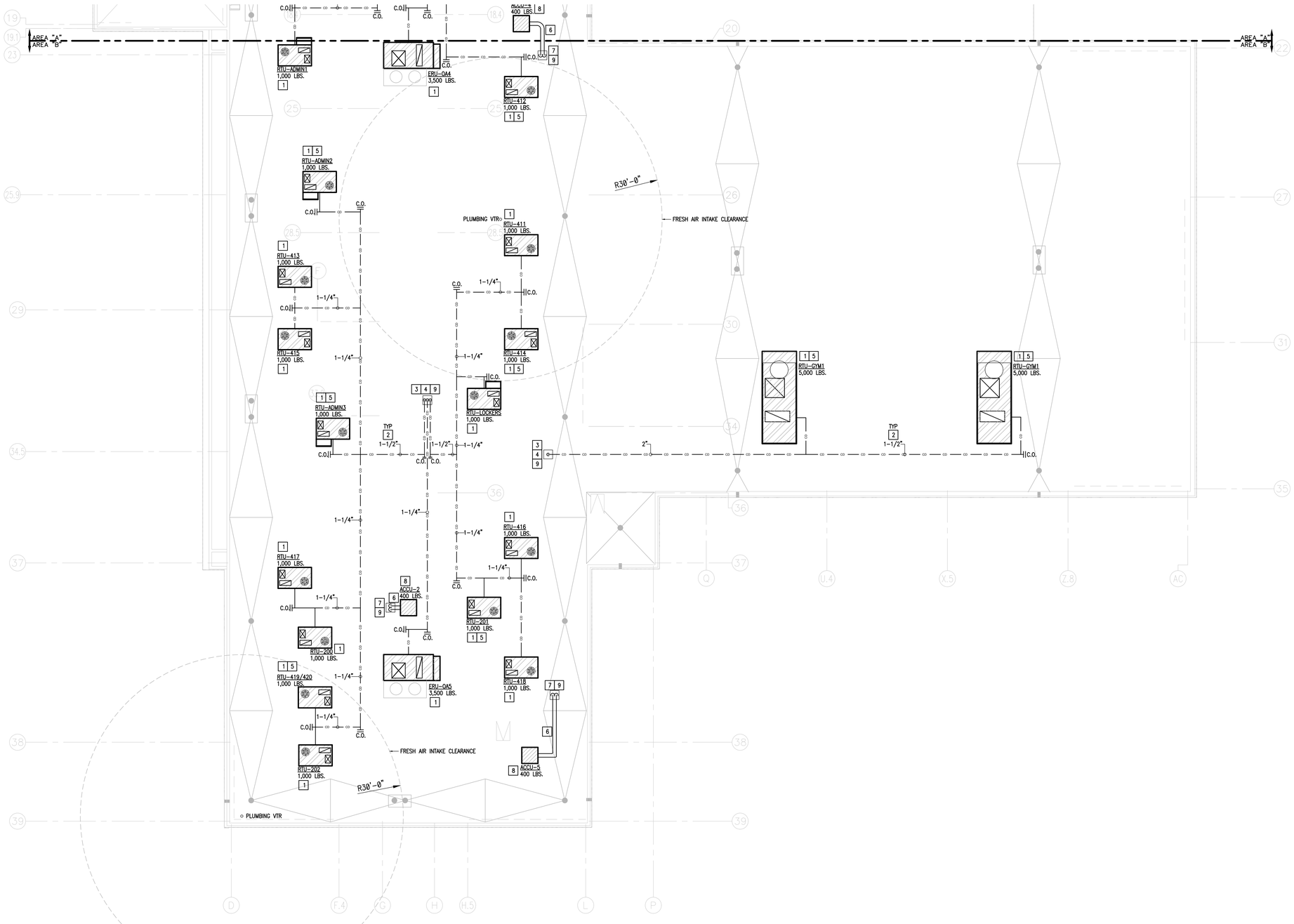

01 MECHANICAL ROOF PLAN

SCALE : 1/8" = 1'-0"

NORTH

KEYED NOTES:

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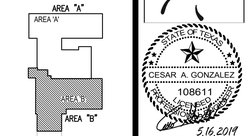
IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS



KEYPLAN

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Scale:	As Noted
Project Architect:	David Monreal, AIA
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Sheet:	M4.02

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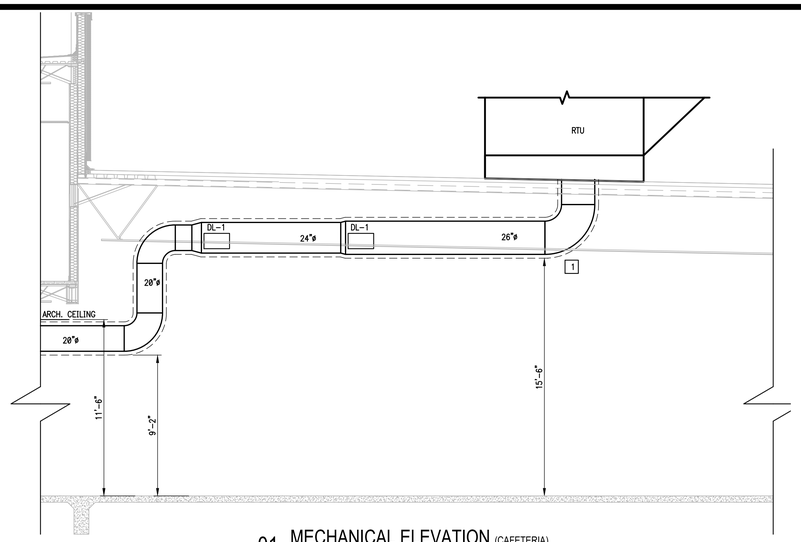
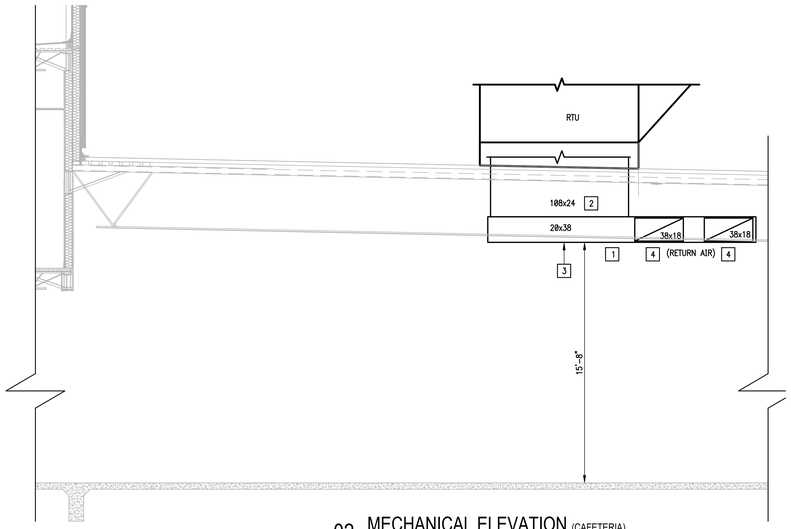


01 MECHANICAL ELEVATION (CAFETERIA)
SCALE :1/4" = 1'-0"



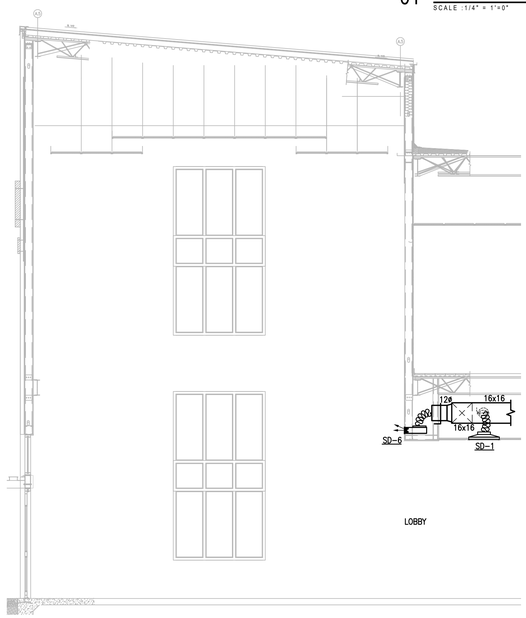
02 MECHANICAL ELEVATION (CAFETERIA)
SCALE :1/4" = 1'-0"

GENERAL NOTES:

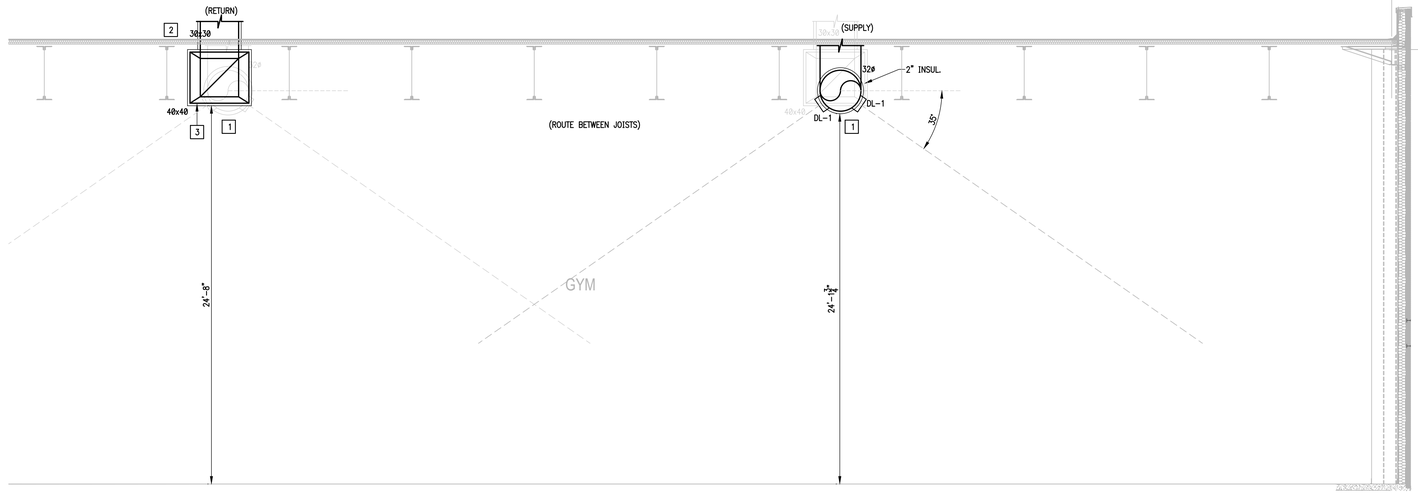
1. PAINT ALL EXPOSED DUCTWORK TO MATCH THE ARCHITECTURAL FINISHES. COORDINATE COLOR WITH ARCHITECT.

KEYED NOTES:

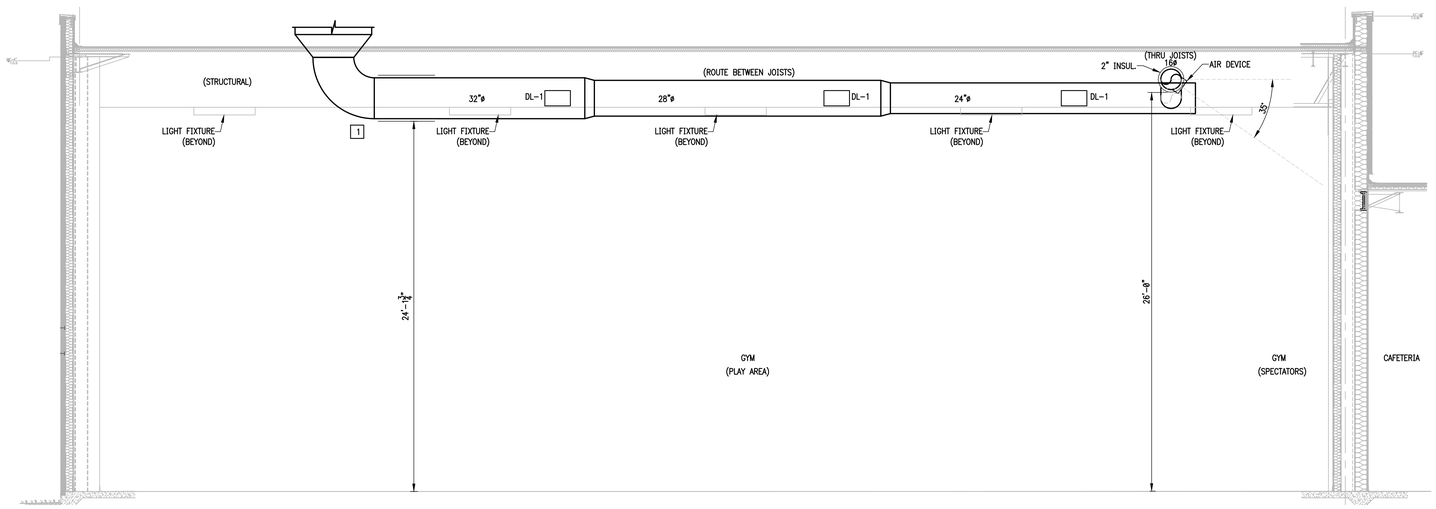
1. DUCTWORK ROUTING SHOWN IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS.
2. SMOKE DETECTOR TO BE INSTALLED AT RETURN AIR DUCT OF RTU. RE: ELECTRICAL.
3. PROVIDE 1" INTERNALLY LINED DUCT WITH NO EXTERIOR WRAP INSULATION. PAINT RETURN AIR DUCT TO MATCH SUPPLY.
4. PROVIDE FULL SIZE OPENING AT THE END OF THE RETURN AIR DUCT COVER OPENING WITH PAINTED WIRE MESH.



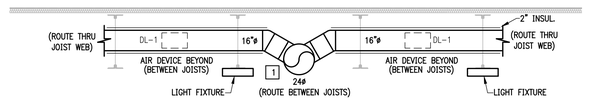
03 MECHANICAL ELEVATION (LOBBY ENTRANCE)
SCALE :1/4" = 1'-0"



04 MECHANICAL ELEVATION (GYMNASIUM)
SCALE :1/4" = 1'-0"



05 MECHANICAL ELEVATION (GYMNASIUM)
SCALE :1/4" = 1'-0"



GYM

06 MECHANICAL ELEVATION (GYMNASIUM)
SCALE :1/4" = 1'-0"

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
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DEDICATED OUTSIDE AIR SYSTEM (ENERGY RECOVERY UNIT) SCHEDULE

MARK	OUTSIDE/ SUPPLY AIR CFM	EXHAUST AIR CFM	MIN SUPPLY AIR 0.5" CFM	ESP SF/EF (in. water)	ELECT. V-PH-HZ	MOCP	MCA	SUPPLY FAN HP/BHP	EXHAUST FAN HP/BHP	EER	AHRI V-2011 CEF CLG/DEHUM	IEER	RETURN DBT/WBT	ENERGY RECOVERY MODE	WITH EAT 83.3F/79.4F EFFECTIVENESS TOTAL	SENSIBLE	DAT DBT/WBT	RECOVERY BTU/H	HEATING MODE WITH EAT 40F EFFECTIVENESS TOTAL	DAT DBT	RECOVERY BTU/H	COOLING CONDITION UNDER DEHUMIDIFICATION MODE CONDENSING DBT F	COIL EAT DBT/WBT	LAT (DB/WB)	TCAP BTU/H	SENS. BTU/H	UNDER COOLING MODE WITH OAT 100.4/76.46F CONDENSING DBT F	COIL EAT DBT/WBT	LAT (DB/WB)	TCAP BTU/H	SENS. BTU/H	COMPRESSORS QTY	STAGES	KW	ELECTRIC HEATING ENTERING OAT DBT	SIZE KW	STAGES	LAT DBT	MANUFACTURER MODEL DAIKIN	WEIGHT LBS	NOTES
RTU-OA1 to OA5	3800	3420	1160	0.5/0.5	460/3/60	45	37.1	4	4	11.0	14.7/19.5	18	75/62.5	0.62	0.65	78.3/70.5	139	0.65	53.4	113	83.3	78.3/70.5	55.1/55.1	191	96	100.4	84.9/68.8	54.7/54.7	169	125	2	INFINITE	11	54	18	SCR	68.3	DPS015A	3000	ALL

NOTES:

1. PROVIDE AHRI CERTIFIED ROOF-MOUNTED PACKAGED UNITS WITH DESICCANT DEHUMIDIFICATION ENERGY RECOVERY, INTEGRAL AIR COOLED CONDENSERS DESIGNED FOR 100% OUTSIDE AIR APPLICATION.
2. PROVIDE MODULATING HOT GAS REHEAT VALVES AND DEHUMIDIFICATION CONTROLS TO ACHIEVE SCHEDULED LEAVING AIR CONDITIONS. RESET AS HIGH AS 70F.
3. PROVIDE INVERTER COMPRESSORS FOR FULL MODULATION OF CAPACITY. COMPRESSORS SHALL MODULATE FROM 10 TO 100% OF CAPACITY, AND MAINTAIN CONSTANT LEAVING AIR TEMPERATURE.
4. FURNISH DIRECT DRIVE SUPPLY FANS WITH VFDS OR ECM, NON-OVERLOADING MOTORS. PROVIDE VAV AIRFLOW CONTROL BY DUCT STATIC PRESSURE SENSOR.
5. PROVIDE GALVANIZED FILTER FRAMES AND 304 STAINLESS STEEL DRAIN PANS.
6. PROVIDE CABINET WITH 1" R-7 (3-15 TONS) OR 2" R-13 (16+ TONS) DOUBLE WALL CONSTRUCTION WITH FOAM INSULATION.
7. FURNISH DIRECT DRIVE SUPPLY FANS WITH VFDS OR ECM MOTORS AND NON-OVERLOADING MOTORS.
8. E-COATED EVAPORATOR, HOT GAS REHEAT AND CONDENSER COILS TO MEET ASTM B117-90, ASTM D2247-92, AND ASTMD870-92 FOR 6,000 HRS SALT SPRAY, 1,000 HRS HUMIDITY IMMERSION RESISTANCE, AND 250 HRS WATER IMMERSION RESISTANCE.
9. ESP IS STRICTLY EXTERNAL STATIC PRESSURE AND IS IN ADDITION TO ANY FILTERS, COILS OR OTHER ACCESSORIES INCLUDED WITH THE DOAS
10. PROVIDE SINGLE POINT OF ELECTRICAL CONNECTION AND FACTORY INSTALLED PHASE VOLTAGE MONITORS. DISCONNECT BY DIV. 26.
11. PROVIDE HEAD PRESSURE CONTROL FOR LOW AMBIENT OPERATION TO 30°F.
12. PROVIDE FACTORY INSTALLED UNITARY CONTROLLER CAPABLE OF
    1) 100% OUTSIDE AIR CONTROL
    2) CAV AND VAV SUPPLY AIR FLOW CONTROL. VAV AIRFLOW CONTROL BY DUCT STATIC PRESSURE SENSOR.
    3) BACNET INTERFACE
    4) DEHUMIDIFICATION CONTROL
13. PROVIDE IBC 2012 COMPLIANT CURB AND ATTACHMENTS FROM UNIT TO CURB AND CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
    1) ATTACHMENT OF EQUIPMENT TO CURB.
    2) CURB TO STRUCTURE.
    3) CURB AND ATTACHMENT HARDWARE STRENGTH.
    REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS.
    EQUIPMENT OR CURB MANUFACTURER IS ALSO RESPONSIBLE FOR PROVIDING ENGINEERED INSTALLATION DRAWINGS FOR ITEMS 1 AND 2 LISTED ABOVE.
    BOTH, THE ENGINEERED ANALYSIS AND THE ENGINEERED INSTALLATION DRAWINGS SHALL BE PERFORMED SPECIFICALLY FOR THIS BUILDING AND PROJECT SITE AND STAMPED AND SEALED BY A TEXAS LICENSED ENGINEER.
    SUBMITTALS WILL NOT BE APPROVED UNTIL ALL DOCUMENTATION LISTED ABOVE IS PROVIDED ACCURATELY.

EXHAUST FAN SCHEDULE

MARK	ROOM NUMBER SERVING	TYPE	ELECTR. V/H/P	CFM	INPUT WATTS	MOTOR HP	E.S.P. IN. H20	SOUND IN SONES	MANUFACTURER & MODEL NUMBER	WEIGHT (LBS)	CONTROL NOTES	NOTES
First Floor												
EF-1	173A TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-2	173B TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-3	173C TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-4	173D TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-5	173F TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-6	181A TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-7	136 CLINIC	CEILING MOUNTED	120/60/1	100	54.5	–	0.4	1.5	LOREN COOK GC-186	13	B	1-6
EF-8	136A TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-9	139 BREAKROOM	CEILING MOUNTED	120/60/1	100	54.5	–	0.4	1.5	LOREN COOK GC-186	13	B	1-6
EF-10	138 STORAGE/CUSTODIAN	CEILING MOUNTED	120/60/1	200	75.0	–	0.4	1.3	LOREN COOK GC-622	35	B	1-6
EF-11	141 GIRLS RESTROOM	CEILING MOUNTED	120/60/1	375	195.0	–	0.4	2.0	LOREN COOK GC-740	29	A	A
EF-12	141A GIRLS DRESSING	CEILING MOUNTED	120/60/1	200	75.0	–	0.4	1.3	LOREN COOK GC-622	35	B	1-6
EF-13	144 BOYS RESTROOM	CEILING MOUNTED	120/60/1	375	195.0	–	0.4	2.0	LOREN COOK GC-740	29	A	A
EF-14	144A BOYS DRESSING	CEILING MOUNTED	120/60/1	200	75.0	–	0.4	1.3	LOREN COOK GC-622	35	B	1-6
EF-15	157 TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-16	151 TOILET	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	B	1-6
EF-17	176 CUST.	CEILING MOUNTED	120/60/1	100	54.5	–	0.4	1.5	LOREN COOK GC-186	13	B	1-6
Second Floor												
EF-18	420 BREAKROOM	CEILING MOUNTED	120/60/1	100	54.5	–	0.4	1.5	LOREN COOK GC-186	13	B	1-6

NOTES:

1. PROVIDE FACTORY MOUNTED DISCONNECT.
2. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL." REFER TO SPECIFICATIONS.
3. PROVIDE FIELD-INSTALLED FAN SPEED CONTROLLER. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
4. PROVIDE FAN WITH ALL ALUMINUM BACKDRAFT DAMPER.
5. PROVIDE DELUXE ALUMINUM GRILLE.
6. PROVIDE SPRING TYPE VIBRATION ISOLATORS FROM MANUFACTURER.

CONTROL NOTES:

A. PROVIDE DDC START/STOP POINTS. REFER TO SEQUENCES OF OPERATIONS.
B. FAN SHALL BE OPERATED BY A WALL SWITCH VIA THE OCCUPANCY SENSOR PROVIDED BY DIV.26 COORDINATE WITH ELECTRICAL.

FAN COIL UNIT SCHEDULE

MARK	TYPE	AREA SERVED	TOTAL CFM	ESP (IN.)	MIN. HP	ELECT. V/P/H	MCA	MOCP	COOLING TOTAL	COOLING SENSIBLE BTU/H	EAT DB/WB	LAT DB/WB	WT. LBS.	KEYED NOTES	MANUFACTURER & MODEL
FCU-1	VERTICAL MOUNTED	126 IDF ROOM	600	0.25	1/2	208/1/60	5.0	15.0	18,290	14,952	75.0/62.55	51.5/51.5	148	ALL	LENNOX CBX27UH
FCU-2	VERTICAL MOUNTED	159 MDF ROOM	600	0.25	1/2	208/1/60	5.0	15.0	18,290	14,952	75.0/62.55	51.5/51.5	148	ALL	LENNOX CBX27UH
FCU-3	VERTICAL MOUNTED	316 IDF ROOM	600	0.25	1/2	208/1/60	5.0	15.0	18,290	14,952	75.0/62.55	51.5/51.5	148	ALL	LENNOX CBX27UH
FCU-4	HORIZONTAL MOUNTED	409A IDF ROOM	600	0.25	1/2	208/1/60	5.0	15.0	18,290	14,952	75.0/62.55	51.5/51.5	148	ALL	LENNOX CBX27UH
FCU-5	HORIZONTAL MOUNTED	421 IDF ROOM	600	0.25	1/2	208/1/60	5.0	15.0	18,290	14,952	75.0/62.55	51.5/51.5	148	ALL	LENNOX CBX27UH

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
2. ESP IS STRICTLY EXTERNAL STATIC PRESSURE AND IS IN ADDITION TO ANY FILTERS, COILS OR OTHER ACCESSORIES INCLUDED WITH THE FCU.
3. FURNISH FANS WITH NON-OVERLOADING MOTORS.
4. PROVIDE SINGLE POINT OF ELECTRICAL CONNECTION. DISCONNECT BY DIV. 26.
5. PROVIDE CABINET MODULAR 1" THICK INSULATION
6. ELECTRIC HEAT COIL IS NOT REQUIRED.
7. PROVIDE FAN COIL FILTER CABINET AND FILTER KIT.

AIR COOLED CONDENSING UNIT SCHEDULE

MARK	SERVES	TOTAL BTU/H	COND DB	ELECTRIC V/P/H	SEER or ARI	MCA	MOCP	WEIGHT (LBS)	NOTES	MANUFACTURER & MODEL NUMBER
ACCU-1	FCU-1	18,290	100	208/1/60	16	12.4	20	138	ALL	LENNOX 14ACX
ACCU-2	FCU-2	18,290	100	208/1/60	16	12.4	20	138	ALL	LENNOX 14ACX
ACCU-3	FCU-3	18,290	100	208/1/60	16	12.4	20	138	ALL	LENNOX 14ACX
ACCU-4	FCU-4	18,290	100	208/1/60	16	12.4	20	138	ALL	LENNOX 14ACX
ACCU-5	FCU-5	18,290	100	208/1/60	16	12.4	20	138	ALL	LENNOX 14ACX

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL".
2. INSULATE REFRIGERANT LINES AS PER SPECIFICATIONS AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.
3. PROVIDE HAIL GUARD, LOW AMBIENT KIT, 5 YR COMPRESSOR WARRANTY, SIGHT GLASS, SERVICE VALVES, FILTER DRYER, TXVS, ANTI-SHORT CYCLE TIMER.
4. MOUNT CONDENSING UNIT ON ROOF. REFER TO STRUCTURAL FOR ROOF SUPPORT.
5. PROVIDE E-COATED COILS.

BIPOLAR ION GENERATOR SCHEDULE

MARK	AREA SUPPLIED	MAX. TREATED AIRFLOW CFM	QTY	DRY CONTACTS	POWER (W)	VARIABLE OUTPUT W/ AIRFLOW	MFR GPS MODEL NO.
RTU-CAFÉ 1	CAFÉ	4500	1	INCLUDED	10	INTEGRAL	GPS-FC48-AC
RTU-CAFÉ 2	CAFÉ	4500	1	INCLUDED	10	INTEGRAL	GPS-FC48-AC
RTU-GYM1	GYM	8000	2	INCLUDED	10	INTEGRAL	GPS-FC48-AC
RTU-GYM2	GYM	8000	2	INCLUDED	10	INTEGRAL	GPS-FC48-AC

NOTES:

1. INSTALL ION GENERATORS AT ENTERING SIDE OF COOLING COIL.
2. ION GENERATORS SHALL BE POWERED FROM 24V FAN CONTROL POWER OR 115V CONVENIENCE OUTLET.
3. PROVIDE A SELF-CLEANING, MAINTENANCE FREE DESIGN.
4. PROVIDE ALARM CONTACTS. FACTORY REPRESENTATIVE TO COORDINATE WITH RTU MANUFACTURER AND CONTROLS CONTRACTOR FOR PROPER WIRING AND INSTALLATION.
5. IONIZER SHALL BE UL LISTED.

ROOFTOP UNIT SCHEDULE (LENNOX)

MARK	NOMINAL TONNAGE	SUPPLY	OA CFM	OA FROM	ESP (INCHES)	MIN. HP	MCA A	MOCP A	ELECT. V-PH-HZ	AIR ON COND.	COOLING TOTAL BTUH	COOLING SENSIBLE BTUH	COOLING EAT DB/WB	COOLING LAT DB/WB	HEATING KW	HEATING STG.	HEATING ELECT. V-PH-HZ	MIN. S(EER)/IEER	WEIGHT LB	NOTES	LENNOX MODEL NUMBER
RTU-169/170	3	1200	400	ERU-OA1	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-166	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-167	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-168	3	1200	400	ERU-OA1	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-171	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-301	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-302	4	1400	450	ERU-OA1	0.8	0.75	27	30	460/3/60	100	45,472	33,757	76/64	53.3/52.6	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-303	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-304	4	1300	450	ERU-OA1	0.8	0.75	27	30	460/3/60	100	44,839	32,489	76/64	52.4/51.8	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-305	3	900	350	ERU-OA1	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-152	3	900	425	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-154	3	900	425	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-156	3	900	425	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-160	3	1200	450	ERU-OA2	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-165	3	900	425	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-306	3	900	400	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-312	3	900	400	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-316	3	1200	450	ERU-OA2	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-317	3	900	400	ERU-OA2	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-146	3	1200	375	ERU-OA3	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-147	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-148	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-151	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-164	3	1200	400	ERU-OA3	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-307	3	1200	400	ERU-OA3	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-318	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-321	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-400/401	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-402	3	900	375	ERU-OA3	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-144	3	900	400	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-145	3	900	400	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-403	3	900	375	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-404	3	900	375	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-405	3	900	375	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-406	3	900	375	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-407	3	900	350	ERU-OA4	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-408	4	1300	450	ERU-OA4	0.8	0.75	27	30	460/3/60	100	44,839	32,489	76/64	52.4/51.8	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-411	3	1200	350	ERU-OA4	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-412	3	1200	350	ERU-OA4	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-200	3	1200	400	ERU-OA5	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-201	3	1200	400	ERU-OA5	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-202	3	900	375	ERU-OA5	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-413	4	1300	425	ERU-OA5	0.8	0.75	27	30	460/3/60	100	44,839	32,489	76/64	52.4/51.8	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-415	3	900	375	ERU-OA5	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-414	3	1200	250	ERU-OA5	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-417	3	900	375	ERU-OA5	0.8	0.5	15	15	460/3/60	100	31,656	22,967	76/64	51.9/51.5	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-416	4	1400	400	ERU-OA5	0.8	0.75	27	30	460/3/60	100	45,472	33,757	76/64	53.3/52.6	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-419/420	4	1300	425	ERU-OA5	0.8	0.75	27	30	460/3/60	100	44,839	32,489	76/64	52.4/51.8	15	1	460/3/60	17.0 (12.8)	620	ALL	LCH048H4E
RTU-418	3	1200	375	ERU-OA5	0.8	0.5	26	30	460/3/60	100	33,625	26,791	76/64	55.0/54.3	15	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-LOCKERS	3	1200	120	NA	0.8	0.5	15	15	460/3/60	100	33,795	25,966	75.7/64.4	55.3/54.7	7.5	1	460/3/60	17.0 (12.5)	590	ALL	LCH036H4E
RTU-ADMIN 1	5	1600	225	NA	0.8	1	28	30	460/3/60	100	57,283	38,542	75.9/65.1	53.2/52.7	15	1	460/3/60	17.0 (12.7)	841	ALL	LCH060H4E
RTU-ADMIN 2	5	1600	225	NA	0.8	1	28	30	460/3/60	100	57,283	38,542	75.9/65.1	53.2/52.7	15	1	460/3/60	17.0 (12.7)	841	ALL	LCH060H4E
RTU-ADMIN 3	5	1600	225	NA	0.8	1	28	30	460/3/60	100	57,283	38,542	75.9/65.1	53.2/52.7	15	1	460/3/60	17.0 (12.7)	841	ALL	LCH060H4E
RTU-CAFÉ 1	15	4500	1250	NA	0.8	3	74	80	460/3/60	100	169,483	103,118	77.4/67.8	55.7/55.4	45	2	460/3/60	13.7 (12.0)	2,206	ALL	LCH180H4M
RTU-CAFÉ 2	15	4500	1250	NA	0.8	3	74	80	460/3/60	100	169,483	103,118	77.4/67.8	55.7/55.4	45	2	460/3/60	13.7 (12.0)	2,206	ALL	LCH180H4M
RTU-KITCHEN	15	5000	600	NA	0.8	3	74	80	480-3-60	100	165,793	116,246	75.8/64.8	53.9/53.3	45	2	480-3-60	13.7 (12.0)	2,327	ALL	LCH180H4M

NOTES:

1. PROVIDE ROOF CURBS WITH VERTICAL DUCT CONNECTION, COPPER CONDENSATE TRAP, TXV AND FREEZE-STAT OPTIONS.
2. PROVIDE STAINLESS STEEL OR CORROSION RESISTANT POLYCARBONATE DRAIN PANS, GALVANIZED FILTER FRAMES, E-COATED COILS, AND HAIL GUARDS.
3. FOR RTUs- LOCKERS, ADMIN, KITCHEN: PROVIDE HOT GAS REHEAT, OA HOOD, MOTORIZED DAMPERS, ACTUATORS FOR 100% COMPARATIVE ENTHALPY ECONOMIZER. DO NOT PROVIDE EXHAUST OR RELIEF AIR OPENINGS, OR SEAL THEM CLOSED.
4. FOR RTUs- CAFÉ: PROVIDE SAV UNIT WITH FAN VFD, HGRH, OA HOOD, MOTORIZED DAMPERS, ACTUATORS FOR 100% COMPARATIVE ENTHALPY ECONOMIZER. DO NOT PROVIDE EXHAUST OR RELIEF AIR OPENINGS.
5. PROVIDE UNIT MOUNTED UNITARY CONTROLLERS, BACNET/LONTALK INTERFACE CARD TO TIE TO DDC SYSTEM
6. HEATING KW IN RTU SCHEDULE IS RATED HEATING CAPACITY, NOT NOMINAL KW. FAN HP SHALL BE PER MFR'S RECOMMENDATION.
7. ELECTRICAL DISCONNECT BY DIV. 26. COORDINATE WITH ELECTRICAL CONTRACTOR.
8. P

AIR DEVICE & DIFFUSER SCHEDULE

SUPPLY AIR DIFFUSER (SD-1)

TITUS OMNI-AA NC < 20			DESCRIPTION: ALUMINUM SQUARE CEILING DIFFUSER, BORDER TYPE 3, COLOR WHITE WITH ROUND NECK AND FULL FACE		
CLG. MODULE SIZE INCHES	FACE SIZE INCHES	ROUND NECK SIZE	FLEX DUCT SIZE	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
24 X 24	24 X 24	TO MATCH NC CRITERIA	SEE PLAN	SD1-CFM	1-4,6

SUPPLY AIR DIFFUSER (SD-2)

TITUS PAS-AA NC < 20			DESCRIPTION: ALUMINUM PERFORATED SQUARE CEILING DIFFUSER, BORDER TYPE 3 WITH ROUND NECK INLET.		
CFM RANGE INCHES	CLG. MODULE SIZE INCHES	NOMINAL DUCT SIZE INCHES (INLET)	FLEX DUCT SIZE	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0-500	24 X 24	18 X 18	SEE PLAN	SD4-CFM	2-4

SUPPLY AIR GRILLE (SD-3) SIDE WALL

TITUS 272FS NC < 20			DESCRIPTION: AEROBLADE, ALUMINUM, DOUBLE DEFLECTION DIFFUSER BORDER TYPE 1 (SURFACE MOUNT) STATIC PRESSURE: < 0.05" W.G.		
NOMINAL DUCT SIZE INCHES (INLET)	FACE SIZE INCHES (INCLUDING FRAME)			DIFFUSER DIFFUSION PATTERN & CFM	NOTES
12 X 10	INLET SIZE PLUS 1-3/4"			SD3-CFM	1-4,6,7

SUPPLY AIR VAV DIFFUSER (SD-4)

SPECIFIED CONTROLS SC-BN-XXC NC < 20			DESCRIPTION: ALUMINUM SQUARE CEILING ELECTRONIC, VAV DIFFUSER BORDER TYPE 3, COLOR WHITE WITH ROUND NECK AND FULL FACE		
CLG. MODULE SIZE INCHES	FACE SIZE INCHES	ROUND NECK SIZE	FLEX DUCT SIZE	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
24 X 24	24 X 24	TO MATCH NC CRITERIA	SEE PLAN	SD4-CFM	1-4,6

SUPPLY AIR GRILLE (SD-5) DUCT MOUNTED

TITUS S300FL NC < 20			DESCRIPTION: AEROBLADE, ALUMINUM, DOUBLE DEFLECTION DIFFUSER, DUCT MOUNTED, CURVED END CAPS, AIR SCOOP DEVICE. STATIC PRESSURE: < 0.05" W.G.		
CFM RANGE	NOMINAL DUCT SIZE INCHES (INLET)	FACE SIZE INCHES (INCLUDING FRAME)		DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0 - 600	18 X 12	INLET SIZE PLUS 1-3/4"		SD5-CFM	1-4,6,8

SUPPLY AIR DIFFUSER (SD-6)

TITUS ML-40 NC < 18			DESCRIPTION: HORIZONTAL THROW, LINEAR SLOT DIFFUSER WITH TITUS PLENUM, 4'-0" LENGTH.		
CFM RANGE	# SLOTS	SIZE OF SLOTS INCHES	(ACTIVE SECTION) PLENUM LENGTH INCHES	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0 - 260	3	1-1/2"	60"	SD6-CFM	1-3, 6, 7,9

SUPPLY DRUM LOUVER (DL-1)

TITUS S-DL-SV NC < 20			DESCRIPTION: HIGH PERFORMANCE, ALUMINUM, SUPPLY DRUM LOUVER, DUCT MOUNTED, AIR SCOOP VOLUME EXTRACTOR.		
CFM RANGE	CLG. MODULE SIZE INCHES	LISTED SIZE INCHES (INLET)	NOMINAL LENGTH INCHES	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0 - 950	-	30 X 8	-	DL1-CFM	1, 4, 6

RETURN, EXHAUST, AND TRANSFER AIR GRILLE (RG-1, EG-1 & TG-1)

TITUS 50F NC < 20			DESCRIPTION: ALUMINUM GRID EGGCRATE RETURN GRILLE WITH BORDER TYPE 3 (LAY-IN).	
CFM RANGE	CLG. MODULE SIZE INCHES	NOMINAL DUCT SIZE INCHES (INLET)	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0 - 1600	24 X 24	18 X 18	EG1-CFM (EXHAUST AIR GRILLES ONLY)	1,2,4,5,6
0 - 1600	24 X 24	18 X 18	RG1-CFM (RETURN AIR GRILLES ONLY)	1,4,6
0 - 1600	24 X 24	18 X 18	TG1-CFM (TRANSFER AIR GRILLES ONLY)	1,4,6

RETURN AND TRANSFER AIR GRILLE (RG-3, TG-2) SIDE WALL

TITUS 50F NC < 20		DESCRIPTION: ALUMINUM GRID EGGCRATE RETURN GRILLE WITH BORDER TYPE 1 (SURFACE).	
CFM RANGE	FACE SIZE (INCHES) LENGTH X WIDTH	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0-600	24 X 24	RG3-CFM	1,4,6
0-600	24 X 24	TG2-CFM	1,4,6

NOTES:

1. PROVIDE MANUFACTURER'S STANDARD BAKED WHITE ENAMEL FINISH.
2. PROVIDE FULL SIZE BACK PAN WITH DUCT ADAPTER.
3. INSULATE BACK PAN ON ALL SUPPLY AIR DIFFUSERS AND GRILLES.
4. PROVIDE MOUNTING FRAME TYPE COMPATIBLE WITH SCHEDULED CEILING OR WALL (SURFACE OR LAY-IN).
5. PROVIDE BALANCING DAMPER ON ALL EXHAUST GRILLES.
6. AIR DEVICES SHALL MATCH ARCHITECTURAL FINISH. COORDINATE COLOR WITH ARCHITECT.
7. PROVIDE GRILLE MOUNTED VOLUME DAMPER EQUAL TO TITUS AG-15AA
8. PROVIDE ASD AIR SCOOP DEVICE.
9. PROVIDE SIDE WALL - HIDDEN FLANGE - BORDER 11 AND END FABRICATIONS TYPE - ECXX

KITCHEN HOOD FAN SCHEDULE

MARK	SERVES	PERFORMANCE												POWER V/P/H	NOTES
		EXHAUST						SUPPLY							
		CFM	SP IN (WC)	FAN MTR. HP	MANUF. MODEL #	SONES	WT. (LBS)	CFM	SP IN (WC)	FAN MTR. HP(W)	MANUF. MODEL #	SONES	WT. (LBS)		
KEF-1, KSF-1	KITCHEN HOOD KH-1 & KH-2	4258	1.75	5	COOK 195V17D	20	400	3610	0.5	1	COOK 150ASP	15.1	450	480/3/60	ALL

NOTES:

1. SUPPLY FAN SHALL BE INTERLOCKED WITH FIRE PROTECTION SYSTEM. UPON ACTIVATION, SUPPLY FAN SHALL TURN-OFF, EXHAUST FAN REMAINS ON.
2. EXHAUST FAN: NEMA 3 PRE-WIRED DISCONNECT, ROOF CURB, HINGED BASE ASSEMBLY, VENTED EXTENSION, AND KEYWAY GREASE TROUGH.
3. SUPPLY FAN: NEMA 3 PREWIRED DISCONNECT, ROOF CURB, HINGED BASE.
4. INSTALL FANS PER NFPA 96 REQUIREMENTS.
5. COORDINATE ROOF CURB INSTALLATION WITH ROOFING CONTRACTOR.
6. MOTOR STARTERS AND CONTROLLERS SHALL BE COORDINATED WITH KITCHEN HOOD SUPPLIER. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
7. SYSTEM SHALL MEET ALL REQUIREMENTS OF NFPA AND IMC CODES FOR TESTING AND OPERATION.
8. PROVIDE CURBS AS PER DN.7. REFER TO SPECIFICATIONS.
9. COORDINATE WITH KITCHEN SUPPLIER FOR KITCHEN HOODS.
10. FANS SHALL BE FURNISHED AND CONTROLLED WITH A DEMAND CONTROL VENTILATION SYSTEM INTEGRAL TO KITCHEN HOOD.
11. PROVIDE IBC 2012 COMPLIANT CURB AND ATTACHMENTS FROM UNIT TO CURB AND CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
    1) ATTACHMENT OF EQUIPMENT TO CURB.
    2) CURB TO STRUCTURE.
    3) CURB AND ATTACHMENT HARDWARE STRENGTH.
    REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS.
    EQUIPMENT OR CURB MANUFACTURER IS ALSO RESPONSIBLE FOR PROVIDING ENGINEERED INSTALLATION DRAWINGS FOR ITEMS 1 AND 2 LISTED ABOVE.
    BOTH, THE ENGINEERED ANALYSIS AND THE ENGINEERED INSTALLATION DRAWINGS SHALL BE PERFORMED SPECIFICALLY FOR THIS BUILDING AND PROJECT SITE AND STAMPED AND SEALED BY A TEXAS LICENSED ENGINEER.
    SUBMITTALS WILL NOT BE APPROVED UNTIL ALL DOCUMENTATION LISTED ABOVE IS PROVIDED ACCURATELY.

KITCHEN HOOD INFORMATION

HOOD NO.	FILTER(S) TYPE	QTY	HEIGHT	LENGTH	LIGHTS QTY	LIGHTS TYPE	LIGHTS WIRE GUARD	UTILITY CABINET(S) LOCATION	UTILITY CABINET(S) SIZE	OPTION	FIRE SYSTEM PIPING	HOOD WEIGHT (LBS.)
KH-1	CAPSTRATE SOLO FILTER	9	20"	16"	4	12" X 12" LED	NO	LEFT	12"x66"x30"	RIGHT END STANDOFF (FINISHED) 3" WIDE 54" LONG	YES	960
KH-2	CAPSTRATE SOLO FILTER	9	20"	16"	4	12" X 12" LED	NO			RIGHT END STANDOFF (FINISHED) 3" WIDE 54" LONG	YES	711

KITCHEN HOOD INFORMATION

HOOD NO.	MODEL	LENGTH	MAX. COOKING TEMP.	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S) DIA.	EXHAUST PLENUM RISER(S) CFM	EXHAUST PLENUM RISER(S) S.P.	SUPPLY PLENUM TOTAL SUP. CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	HOOD CONFIG. ROW
KH-1	6630 ND-2-PSP-F	12' - 2"	450 DEG.	2,129	14"	2,129	-0.872"	1,860	430 SS WHERE EXPOSED	LEFT	ALONE
KH-2	6630 ND-2-PSP-F	12' - 2"	450 DEG.	2,129	14"	2,129	-0.872"	1,750	430 SS WHERE EXPOSED	RIGHT	ALONE

NOTES:

1. ALL STAINLESS STEEL CONSTRUCTION, BAFFLE TYPE GREASE EXTRACTORS.
2. DOME STYLE COMPACT FLOURESCENT LIGHTS PRE-WIRED TO SWITCH; THREE FAN AND LIGHT SWITCHES PRE-WIRED TO J-BOX.
3. PROVIDE WET CHEMICAL FIRE PROTECTION SYSTEM PER NFPA REQUIREMENTS. SYSTEM TO BE FIELD INSTALLED OR BY MANUFACTURER.
4. MOUNT BOTTOM OF KITCHEN HOOD AT 6'-6" A.F.F.
5. HOOD MANUFACTURER TO PROVIDE STAINLESS STEEL 24" FILLER PANEL BETWEEN THE TOP OF THE HOOD AND THE CEILING. FIELD VERIFY EXACT HEIGHT AFTER SETTING HOOD.
6. PROVIDE A FIRE DAMPER IN THE SUPPLY DUCT COLLAR.
7. KITCHEN HOOD MUST EXTEND MINIMUM 6 INCHES BEYOND EDGE OF APPLIANCES ON ALL OPEN SIDES OF HOOD. VERIFY FINAL LOCATIONS AND DIMENSIONS OF KITCHEN EQUIPMENT PRIOR TO ORDERING KITCHEN HOOD.
8. SUPPLY FAN SHALL BE INTERLOCKED WITH FIRE PROTECTION SYSTEM. UPON ACTIVATION OF SYSTEM, SUPPLY FAN SHALL TURN-OFF, EXHAUST FAN REMAINS OPERATIONAL.
9. PROVIDE STAINLESS STEEL CABINET FOR MASTER CONTROL PANEL. COORDINATE WITH OWNER FOR LOCATION.
10. MASTER CONTROL SHALL INCLUDE KITCHEN HOOD MAKE-UP AIR AND EXHAUST FANS MOTOR STARTERS AND CONTROLLERS. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR. MOUNT CONTROLS ON WALL NEXT TO HOOD.

KITCHEN HOOD PERFORATED SUPPLY PLENUM(S)

HOOD NO.	POS.	LENGTH	WIDTH	HEIGHT	RISER(S) WIDTH	RISER(S) LENG.	RISER(S) CFM	RISER(S) S.P.
KH-1	FRONT	158"	14"	6"	10"	28"	620	0.177"
					10"	28"	620	0.177"
					10"	28"	620	0.177"
KH-2	FRONT	149"	14"	6"	10"	28"	583	0.158"
					10"	28"	583	.0158"
					10"	28"	583	0.158"

LOUVER SCHEDULE

MARK	SERVES	CFM RANGE	FACE SIZE (W X H)	MIN. FREE AREA (FT2)	RUSKIN MODEL NUMBER	NOTES
First Floor						
L-1	EF-1, EF-2, EF-3, EF-4 EF-7, EF-8, EF-9, EF-10	775	40 X 18	1.82	EME520MD	ALL
L-2	EF-11, EF-12, EF-13 EF-14, EF-15, EF-16	1300	48 X 18	2.21	EME520MD	ALL
L-3	EF-5, EF-6, EF-17	250	24 X 12	0.57	EME520MD	ALL
Second Floor						
L-4	EF-18	100	12 X 12	0.25	EME520MD	ALL

NOTES:

1. PRIOR TO ORDERING, COORDINATE LOUVER FINISH AND EXACT FACE SIZE WITH ARCHITECT.
2. PROVIDE STAINLESS STEEL BIRD SCREEN AND HARDWARE.
3. PROVIDE FACTORY APPLIED KYNAR 500 FINISH.
4. PROVIDE WITH TDI PRODUCT EVALUATION REPORT.

BYPASS DAMPER SCHEDULE

MARK	SERVES	AIRFLOW THROUGH DAMPER (CFM)	RECTANGULAR BYPASS DAMPER SIZE	DUCT SIZE	MANUFACTURER & MODEL NUMBER
BPD-1	RTU-ADMIN 1	1120	18X12	18X12	TITUS ZQCV-J
BPD-2	RTU-ADMIN 2	1120	18X12	18X12	TITUS ZQCV-J
BPD-3	RTU-ADMIN 3	1120	18X12	18X12	TITUS ZQCV-J

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
2. PROVIDE FIELD INSTALLED GASKETS TO ASSURE TIGHT SEAL.
3. PROVIDE FLANGE FOR FASTENING DEVICE TO METAL DUCT WITH SHEET METAL SCREWS.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools



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Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: M6.02

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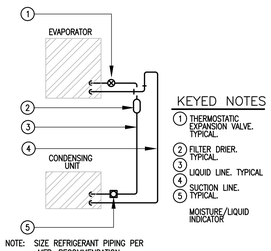
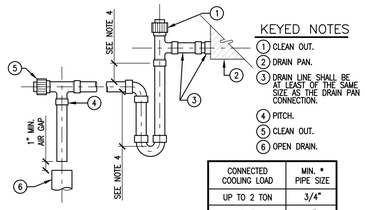


01 REFRIGERANT PIPING DIAGRAM

SCALE : NOT TO SCALE



NOTES:

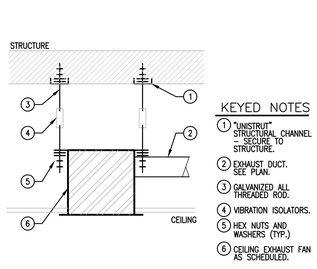
1. MANUALLY PRIME TRAP BEFORE START UP.
2. SUPPORT DRAIN LINES TO PREVENT SAG.
3. ALLOW SUFFICIENT SPACE BELOW PAN FOR TRAP AND PITCH TO DRAIN.
4. COORDINATE WITH MANUFACTURER OF AHU.

CONNECTED COOLING LOAD	MIN. * PIPE SIZE
UP TO 2 TON	3/4"
2-5	1"
5-30	1-1/4"
30-50	1-1/2"
50-160	2"
160-300	3"
300-430	4"

* NOT SMALLER THAN OUTLET SIZE.

02 CONDENSATE DRAIN TRAP PIPE

SCALE : NOT TO SCALE



03 CEILING EXHAUST FAN FAN MOUNTING DETAIL

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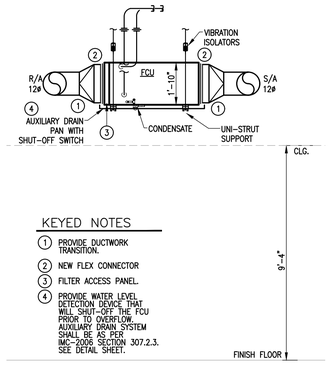

04 HORIZONTAL MOUNTED FCU DETAIL

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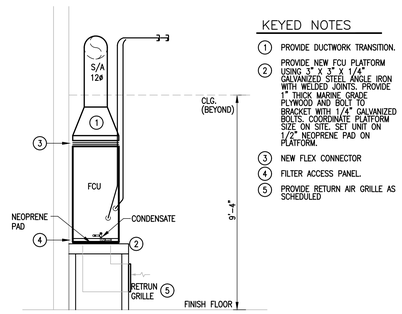

05 VERTICAL MOUNTED FCU DETAIL

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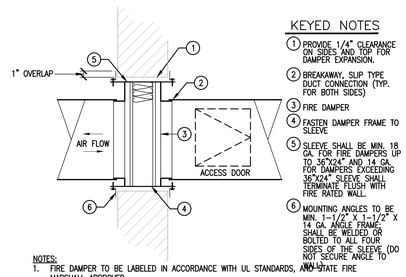
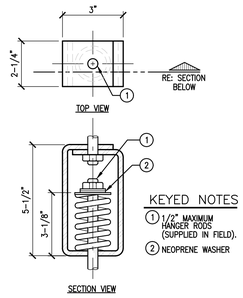


NOTES:

1. FIRE DAMPER TO BE LABELLED IN ACCORDANCE WITH UL STANDARDS, AND STATE FIRE MARSHALL APPROVED.
2. INSTALLATION DETAILS SHALL MEET NFPA 90A & B REQUIREMENTS.
3. LOCATE ACCESS DOOR FOR BEST ACCESS TO LINK.
4. FUSIBLE LINK TO BE RATED FOR 50% ABOVE MAXIMUM OPERATING TEMPERATURE OF SYSTEM.
5. FOR STAINLESS STEEL FIRE DAMPER METAL GAUGE, REFER TO MANUFACTURER RECOMMENDATIONS.
6. FIRE DAMPER SHALL BE RATED FOR DYNAMIC DUTY.
7. SLEEVE SHALL TERMINATE FLUSH WITH FIRE RATED WALL.
8. PROVIDE LABEL FOR FIRE DAMPER ACCESS DOOR.

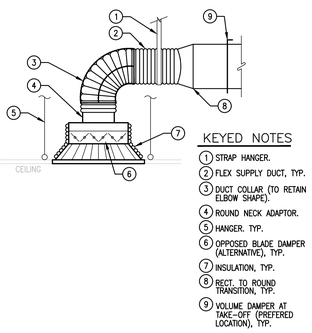
06 FIRE DAMPER WITH ACCESS PANEL

SCALE : NOT TO SCALE



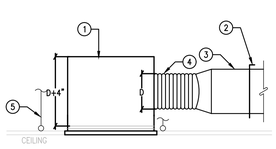
07 SPRING ISOLATION HANGER

SCALE : NOT TO SCALE



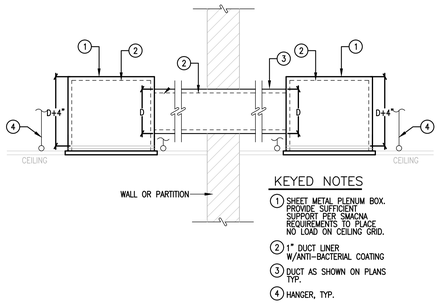
08 CEILING DIFFUSER SUPPORT

SCALE : NOT TO SCALE



CEILING 09 RETURN GRILLE DETAIL

SCALE : NOT TO SCALE



10 CEILING TRANSFER GRILLE DETAIL

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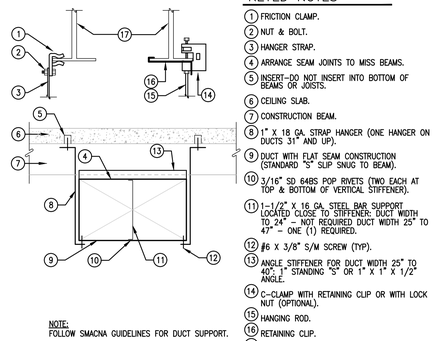
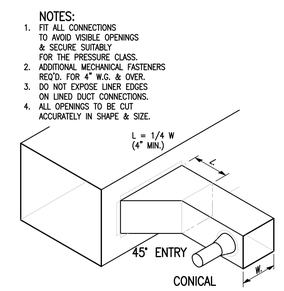


NOTE:
FOLLOW SMACNA GUIDELINES FOR DUCT SUPPORT.

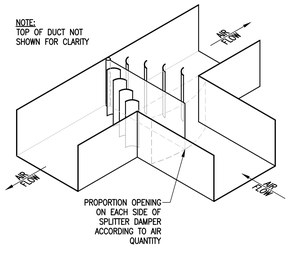
11 DUCT SUPPORT

SCALE : NOT TO SCALE



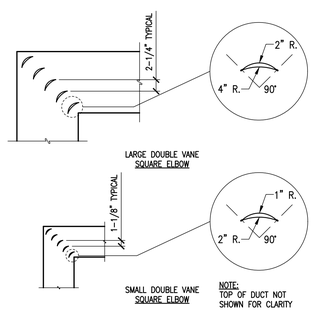
12 BRANCH CONNECTION DETAILS

SCALE : NOT TO SCALE



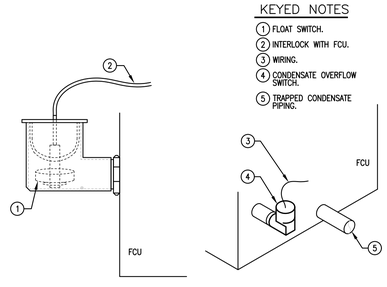
13 TYPICAL SPLITTER DAMPER

SCALE : NOT TO SCALE



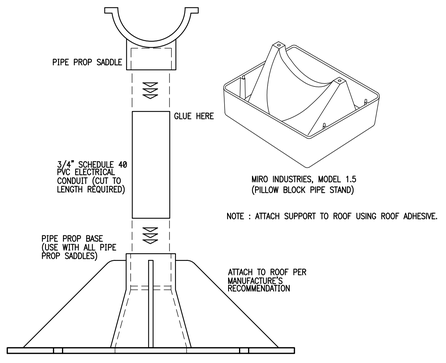
14 TYPICAL VANED DUCT ELBOWS

SCALE : NOT TO SCALE



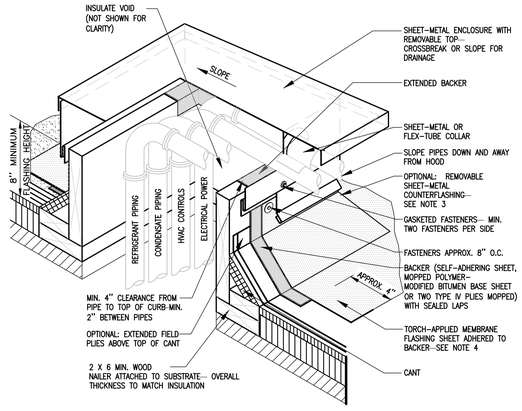
15 CONDENSATE OVERFLOW SWITCH DETAIL

SCALE : NOT TO SCALE



14 CONDENSATE PIPE SUPPORT DETAIL

SCALE : NOT TO SCALE



NOTES:

1. THIS DETAIL ILLUSTRATES ANOTHER METHOD OF ELIMINATING PITCH POCKETS AND AN OPTIONAL METHOD OF GROUPING PIPING THAT MUST PENETRATE THE ROOF.
2. MANY MANUFACTURERS OFFER PREFABRICATED BOOTS AND OTHER MATERIALS FOR THIS PURPOSE. SPECIFICS ABOUT THESE PROPRIETARY DESIGNS VARY GREATLY, AND INDIVIDUAL MANUFACTURERS' SPECIFICATIONS SHOULD BE CONSULTED FOR THEIR USE.
3. WHERE THE SHEET–METAL ENCLOSURE OVERLAPS THE BASE FLASHING AT LEAST 3 INCHES, THE REMOVABLE SHEET–METAL COUNTERFLASHING IS NOT REQUIRED.
4. WHEN POTENTIAL FIRE HAZARDS CAN BE MITIGATED, NRCA CONSIDERS IT ACCEPTABLE TO INSTALL TORCH–APPLIED POLYMER–MODIFIED BITUMEN SHEET OVER THE SPECIFIED BACKER FLASHING USING THE DIRECT TORCHING METHOD PROVIDED LOW OUTPUT (50,000 BTU OUTPUT OR LESS) TORCHING EQUIPMENT IS USED. WHEN POTENTIAL FIRE HAZARDS CANNOT BE ADEQUATELY MITIGATED, TORCH–APPLIED POLYMER–MODIFIED BITUMEN SHEET SHALL BE INSTALLED USING INDIRECT TORCHING METHODS, SUCH AS THE TORCH–AND–FLOP APPLICATION METHOD.
5. FOR ROOF SYSTEMS WITH FACTORY–APPLIED GRANULE SURFACING, PROPERLY PREPARE CAP SHEET TO RECEIVE FLASHING.
6. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

15 ACCUs PIPING ROOF PENETRATION DETAIL

SCALE : NOT TO SCALE

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED ARCHITECT
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	M7.01

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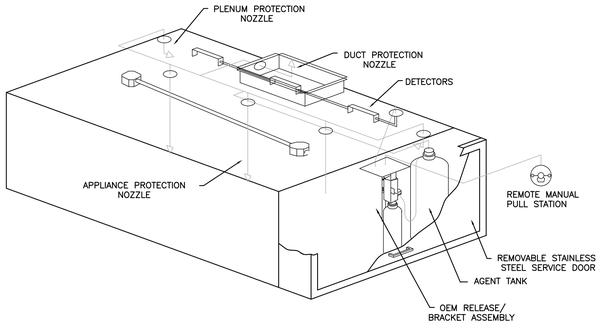

NOTE: DETAIL COURTESY OF CAPTIVE AIRE.

01 KITCHEN HOOD FIRE SUPPRESSION DETAIL

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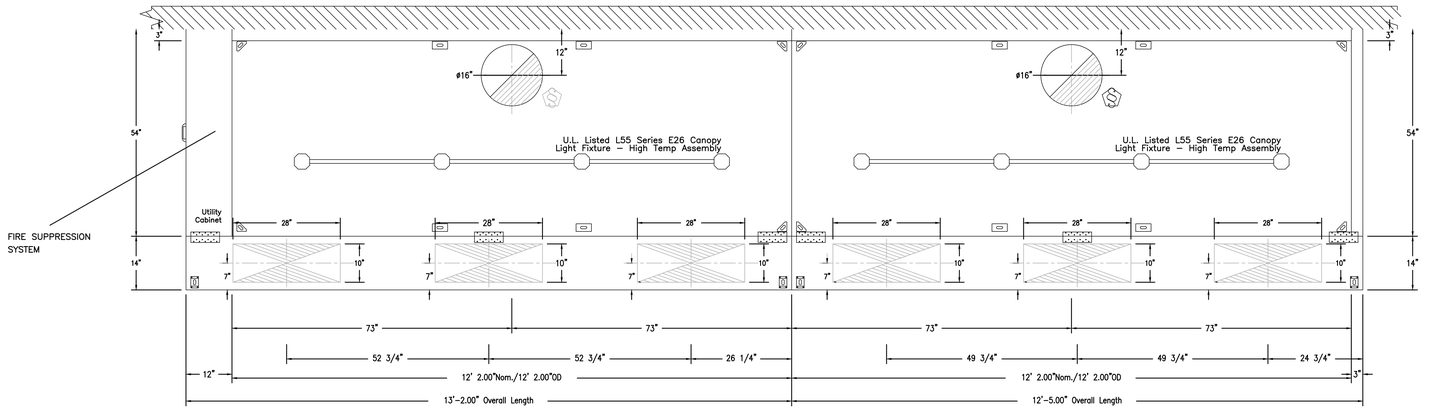

NOTE: DETAIL COURTESY OF CAPTIVE AIRE.

02 KITCHEN HOOD DETAIL

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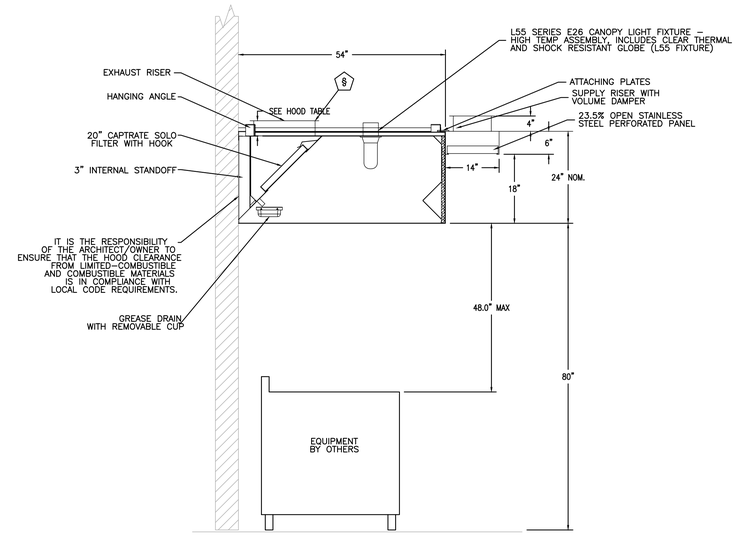

NOTE: DETAIL COURTESY OF CAPTIVE AIRE.

SECTION VIEW

03 KITCHEN HOOD DETAIL

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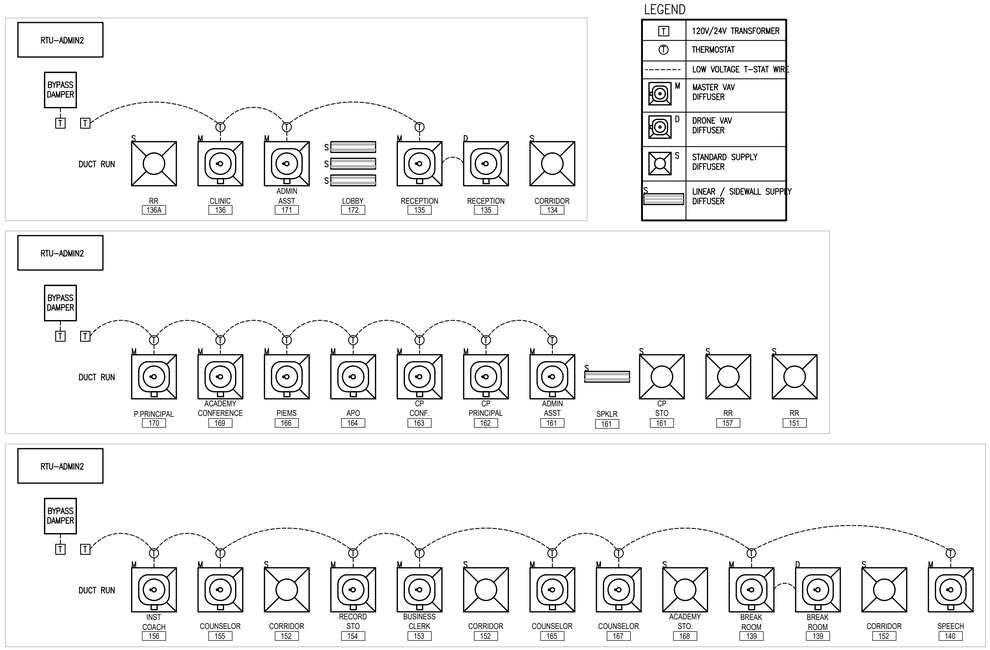

04 VAV DIFFUSER DETAIL

SCALE : NOT TO SCALE

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW

PALMVIEW, TEXAS

STATE OF TEXAS
CESAR A. GONZALEZ
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HARLINGEN, TX
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TEXAS REGISTERED
ENGINEERING FIRM
F-15896

SCOPE OF WORK

1. GENERAL: THE "IDEA PALMVIEW PHASE I" CONSISTS OF NEW TWO-STORY BUILDING, APPROXIMATE 79,000 S.F. THIS BUILDING WILL GENERALLY BE OPERATED FROM 7:00AM TO 6:00PM. (MONDAY THROUGH FRIDAY) WITH OCCASIONAL AFTER HOURS AND WEEKENDS USE.

2. ELECTRICAL: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL ELECTRICAL DISTRIBUTION SYSTEM. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:

(A) ELECTRICAL SERVICE:
- (I) PROVIDE A NEW UNDERGROUND ELECTRICAL SERVICE; IT SHALL CONSIST OF UNDERGROUND ELECTRICAL RACEWAYS AND CONCRETE PAD FOR UTILITY FURNISHED TRANSFORMER.
- (II) UTILITY COMPANY SHALL PROVIDE MEDIUM VOLTAGE CONDUCTORS AND PAD TRANSFORMER.
- (III) PROVIDE PAD MOUNT SWITCHBOARD OUTDOOR RATED WITH INTEGRAL METER AND SINGLE-PHASE PROTECTION – SEE ELECTRICAL SCHEDULE.

(B) LIGHTING SYSTEMS: INTERIOR AND EXTERIOR LIGHTING SYSTEM SHALL CONSIST OF LED TYPE.

(C) LIGHTING CONTROLS (SWITCHES, OCCUPANCY SENSORS, DAYLIGHT SENSORS, ETC.): PROVIDE AS NOTED ON PLANS SPECIFITCATIONS. IN SOME CASES, THEY WILL BE CEILING MOUNTED AND OTHERS WALL MOUNTED. IT'S THE INTENT FOR THEM TO BE WIRED TO AUTOMATICALLY CONTROL THE LUMINAIRES IN THEIR RESPECTIVE AREAS.

(D) COMMISSIONING: PROVIDE FOR THE LIGHTING EQUIPMENT AND LIGHTING CONTROLS AS REQUIRED PER IECC 2018.

(E) POWER SYSTEMS: PROVIDE MISCELLANEOUS DUPLEX RECEPTACLES, ISOLATED GROUND RECEPTACLES FOR COMPUTER TERMINALS, DUPLEX RECEPTACLES FOR FLAT SCREENS CONNECTIONS, AND POWER FOR MARQUEE/BUILDING SIGNS, BANKING, H.V.A.C. AND PLUMBING EQUIPMENT.

(F) FIRE ALARM SYSTEM:
- (I) PROVIDE AN ADDRESSABLE CONTROL PANEL WITH VOICE EVACUATION, MANUAL AND AUTOMATIC INITIATION DEVICES. MONITORING AND INTERFACING WITH ELEVATOR, FIRE SPRINKLE TAMPER AND FLOW SWITCHES. INDICATING DEVICES SHALL ALSO BE PROVIDED TO COMPLY WITH TDLR.
- (II) FULLY COORDINATE WITH THE ELEVATOR CONTRACTOR FOR THE FIRE ALARM INTERFACING.
- (III) FULLY COORDINATE WITH THE FOOD SERVICE CONTRACTOR FOR THE KITCHEN HOOD FIRE SUPPRESSION INTERFACING.

(G) COMMUNICATION AND DATA PROCESSING EQUIPMENT: PROVIDE CABLING, CONNECTORS, PATCH PANELS, RACKS, ETC.

(H) MULTIMEDIA SYSTEM: PROVIDE MULTIMEDIA OUTLET FOR WALL MOUNT PROJECTORS AND FLAT SCREENS, INCLUDING CONNECTORS, WIRING, ETC.

(I) SCHOOL INTERCOM SYSTEM: PROVIDE SPEAKERS AND CALL-IN SWITCHES IN CLASSROOMS AND OFFICES. HALLWAYS AND BUILDING EXTERIOR WALLS WITH SPEAKERS TO TRANSMIT GENERAL ANNOUNCEMENTS.

(J) GYMNASIUM SOUND SYSTEM: PROVIDE SPEAKERS, MICROPHONE OUTLETS, MICROPHONE, MICROPHONE STANDS, AND WIRING. SEE SPECIFICATIONS.

(K) CAFETERIA SOUND SYSTEM: PROVIDE PENDANT MOUNTED SPEAKERS, MICROPHONE OUTLETS, MICROPHONE, MICROPHONE STANDS, AND WIRING. SEE SPECIFICATIONS.

(L) ACCESS CONTROL:
- (I) CAMPUS ACCESS: PROVIDE POWER TO VEHICLE AND PEDESTRIAN GATES, RECEPTION AREA ENTRANCE DOOR MAGNETIC STRIKES AND INTERCOM AND CAMERA AT VEHICLE GATES ENTRANCES.
- (II) LOBBY ACCESS: PROVIDE CARD READERS, RELEASE BUTTONS, SOFTWARE PROGRAMMING AND EQUIPMENT INCLUDING POWER TO SECURED DOORS, POWER SUPPLIES AND RACEWAYS FOR WIRING. ELECTRIC STRIKES AND ELECTRIFIED HARDWARE PROVIDE BY DOOR HARDWARE SUB-CONTRACTOR.
- (III) BUILDING INTRUSION DETECTION SYSTEM: IT SHALL CONSIST OF A CONTROL PANEL, KEYPADS, GLASS BREAK SENSORS, MOTION DETECTORS AND MAGNETIC CONTACTS AS NOTED ON DRAWINGS.

(M) CCTV: PROVIDE DATA CONNECTORS FOR CAMERAS. CAMERAS AND EQUIPMENT BY OWNER.

ABBREVIATIONS:

A	AMPS	EMS	ENERGY MANAGEMENT SYSTEM	MOCP	MAX. OVERCURRENT PROTECTION
ABC	ABOVE CEILING LINE	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
AC	ABOVE COUNTER BACKSPLASH	FACP	FIRE ALARM CONTROL PANEL	OA	OUTSIDE AIR
ACCU	AIR COOLED CONDENSING UNIT	FCU	FAN COIL UNIT	OAU	OUTSIDE AIR UNIT
AHU	AIR HANDLING UNIT	FD	FIRE DAMPER	P	POLE(S)
AFF	ABOVE FINISHED FLOOR	FS	FLAT SCREEN	PA	PUBLIC ADDRESS
B.	BOTTOM	G.	GROUND	PH	PHASE
BLC.	BELOW CEILING LINE	GA.	GAGE	RM.	ROOM
C.	CONDUIT OR COMMON	GALV.	GALVANIZED	SS	STAINLESS STEEL
CLG.	CEILING	GRND.	GROUND	TSTAT	THERMOSTAT
COMB.	COMBINATION	HP	HORSEPOWER	UG	UNDERGROUND
COND.	CONDUIT	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
CU.	COPPER			V	VOLTS
DDC	DIRECT DIGITAL CONTROLS	IG	ISOLATED GROUND	VAV	VARIABLE AIR VOLUME
DISC.	DISCONNECT	INT.	INTRUSION DETECTION	VFD	VARIABLE FREQUENCY DRIVE
EDH	ELECTRIC DUCT HEATER	MECH	MECHANICAL	WACU	WALL AIR CONDITIONING UNIT.
EF	EXHAUST FAN	MS	MOTOR STARTER	W	WIRE

KITCHEN BELL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	KITCHEN DOOR BELL PUSH BUTTON – EDWARDS MODEL #852 W/ STAINLESS STELL WALL PLATE. PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO TRANSFORMER ABOVE ACCESSIBLE CLG.	48"AFF
T	KITCHEN DOOR BELL TRANSFORMER – EDWARDS MODEL #592 (120V–24V).	12" ABC
B	KITCHEN DOOR BELL CHIME – EDWARDS MODEL #340A–C5 (24V). PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO TRANSFORMER ABOVE ACCESSIBLE CLG.	12" BLC

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

GENERAL SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DISCONNECT SWITCH – NON FUSED	AS REQUIRED
	DISCONNECT SWITCH – FUSED	AS REQUIRED
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH	AS REQUIRED
	EQUIPMENT CONNECTION	AS REQUIRED
	MOTOR CONNECTION	AS REQUIRED
	ELECTRICAL PANELBOARD – SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD – RECESSED/FLUSH MOUNTED	AS REQUIRED
— — —	UNDERGROUND RACEWAY	AS REQUIRED
———	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED
SPD	SURGE PROTECTION DEVICE	– – – –

DOOR ACCESS SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
P	DOOR POWER SUPPLY – CONNECT TO NEAREST 120V NON–GFCI CIRCUIT.	12" ABC
ES	CONNECT DOOR ELECTRIC STRIKE – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO POWER SUPPLY ABOVE ACCESSIBLE CLG.	12" ABC
RB	CONNECT DOOR RELEASE BUTTON – BOSCH MODEL #47107). PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO POWER SUPPLY ABOVE ACCESSIBLE CLG.	4" ACB
MS	CONNECT SLIDE GATE AUDIO/MASTER MASTER STATION – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED INTO ACCESSIBLE CLG. SEE DETAIL	4" ACB

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
REFER TO DOOR ACCESS SYSTEM DETAIL.

LUTRON CONTROL SYMBOLS:

	DIMMING WALLSTATION – LUTRON PX–2BRL–GWH–I01	48"AFF
	WALLSTATION – LUTRON QSWS2–3BRLI–WH	48"AFF
	WALLSTATION – LUTRON QSWS2–5BRLI–WH	48"AFF
	KEYED WALLSTATION – LUTRON QSWS2–KS13MOC–WH	48"AFF
	VACANCY SENSOR – LUTRON LUT–WSPSM24V–360–CPN6111	CLG.
TC	TIME CLOCK – LUTRON QSGR–TC–3S–WH–CPN5825	---
ASTA	CONTROLLER INTERFACE – LUTRON QSE–CI–AP–D	ABV. CLG.
ESN	ENERGI SAVR NODE – LUTRON QSN–X, REFER TO LUTRON ONE–LINE DIAGRAM TYPE.	AS REQUIRED
	ENERGI SAVR NODE – LUTRON QSN–4T16–S	AS REQUIRED
KIT	KIT – LUTRON C–ESN–SETUP	AS REQUIRED
	CONTROL INTERFACE – LUTRON QSE–IO	12" BLC
	WALLSTATION – LUTRON QSWS2–7BI–WH	48"AFF
	INFRARED TRANSMITTER/RECIEVER – LUTRON GRX–IRPS–WH	ABV. CLG.

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE. REFERENCE LIGHTING CONTROL SCHEMATIC DETAILS FOR ALL LUTRON CONTROLS WIRING REQUIREMENTS.

LIGHTING SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	2'X4' LIGHT FIXTURE – TYPE AS NOTED	– – – –
	EMERGENCY 2'X4' LIGHT FIXTURE–TYPE AS NOTED CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SURFACE/WRAPAROUND LIGHT FIXTURE	– – – –
	SURFACE/WRAPAROUND EMERGENCY LIGHT FIXTURE CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SINGLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	DOUBLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	EMERGENCY LIGHTING UNIT	8'–0"AFF
	WALL MOUNT LIGHT FIXTURE – TYPE AS NOTED	– – – –

NOTES:
1.) REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SINGLE POLE TOGGLE SWITCH – HUBBELL MODEL #HBL1221X	48"AFF
S_3	THREE WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1223X	48"AFF
S_4	FOUR WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1224X	48"AFF
S_K	KEYED TOGGLE SWITCH CORBIN TYPE – HUBBELL MODEL #HBL1221RKLX	48"AFF
S_{VS}	VACANCY DIMMING WALL SENSOR SWITCH – LUTRON MODEL #MS–OPS6M2–DV–WH. PROVIDE 0–10V SIGNAL WIRE IN RACEWAY FROM SWITCH TO EACH CONTROLLED LIGHT FIXTURE.	48"AFF
S_{2PB}	2 QTY. 2 – BUTTON CONTROL STATION – LUTRON MODEL #PX–2B–GWH–101(CW–1–WH). REFER TO LUTRON ONE–LINE DIAGRAM	48"AFF
S_T	1P TOGGLE SWITCH–THERMAL TYPE – SQUARE "D" CLASS 2510 W/ RED PILOT LIGHT & HANDLE GUARD/LOCK OFF	AS REQUIRED
S_{DS}	DIGITAL SWITCH – ACUITY MODEL #CH1 X X PWH	48"AFF
S_{EF}	EXHAUST FAN TIMER SWITCH – SENSOR SWITCH MODEL #PTS 720 X	48"AFF
PC	DIGITAL OUTDOOR PHOTO CELL WALL MOUNTED – LC&D SEE DETAIL	12' AFF
OS_W	STANDARD RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR – LUTRON MODEL #LOS–CDT–2000–WH.	CLG.
OS_E	EXTENDED RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR – LUTRON MODEL #LOS–CDT–2000–WH.	CLG.
PP	POWER PACK FOR EXISTING FAN – LUTRON MODEL #PP–DV. INTERFACE WITH ROOM OCCUPANCY SENSOR.	ABV. CLG.

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DUPLEX TAMPER RESISTANT RECEPTACLE – HUBBELL MODEL #BR20XTR	18"AFF
GFCI	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE – HUBBELL MODEL #GFTRST20X	18"AFF
GFCI WCP	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE – HUBBELL MODEL #GFTWRST20X AND WHILE IN USE WEATHERPROOF COVER – PASS & SEYMOUR MODEL #WP26EH	18"AFF
AC	DUPLEX RECEPTACLE TAMPER RESISTANT – HUBBELL MODEL #8300XTR MOUNT @ +4" HORIZONTALLY ABOVE COUNTER BACKSPLASH (U.N.O.)	4"ACB
IG	DUPLEX RECEPTACLE ISOLATED GROUND TYPE – HUBBELL MODEL #IG5352TR	18"AFF
FS	DUPLEX RECEPTACLE FOR FLAT SCREEN – HUBBELL MODEL #CR5352X	84"AFF
	SPECIAL RECEPTACLE – TYPE AS NOTED	18"AFF
	JUNCTION BOX W/ BLANK STAINLESS STEEL COVERPLATE	AS REQUIRED
USB	DUPLEX TAMPER RESISTANT RECEPTACLE AND USB RECEPTACLE COMBINATION – HUBBELL MODEL #USB20X2X	18"AFF
WB	DUPLEX RECEPTACLE FOR WHITE BOARD PROJECTOR – HUBBELL MODEL #CR5352X	AS REQUIRED
	POLYMER CONCRETE PULL BOX W/ LOGO COVER – SEE DETAIL	AS REQUIRED
PP	TELE–POWER POLE W/ WIRING DEVICES AS NOTED	– – – –
	CLOCK HANGER FOR SINGLE FACE CLOCK – HUBBELL MODEL #HBL5235 ("2" INDICATES DUAL SIDED CLOCK)	9'–0"AFF
CR	DUPLEX RECEPTACLE W/ CORD REEL – SEE DETAIL	CLG.

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
AC INDICATES 4" ABOVE COUNTER TO BOTTOM OF DEVICE.
U.N.O. INDICATES UNLESS NOTED OTHERWISE.

FLOOR BOX SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	FLOOR BOX W/ COVER PLATES FOR WIRING DEVICES AS INDICATED. PROVIDE SPECIAL SYSTEMS RACEWAYS, TWO – 1.5" OR AS NOTED ON ELECTRICAL DRAWINGS. PROVIDE BLANK COVERS FOR UNUSED COMPARTMENTS – HUBBELL MODEL # CFB6G30/61OGCCVRBRZC.	FLOOR
	FLOOR BOX W/ COVER PLATES FOR WIRING DEVICES AS INDICATED. PROVIDE SPECIAL SYSTEMS RACEWAYS, 1 – 1.5" (DATA). PROVIDE BLANK COVERS FOR UNUSED COMPARTMENTS – HUBBELL MODEL #CFB4G30/24GCCVRALUC.	FLOOR

NOTES:
1.) TOP OF FLOOR BOX TO BE FLUSH WITH FINISHED FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES.

FIRE ALARM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
PS	FIRE ALARM MANUAL PULLSTATION – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
AV AV	FIRE ALARM STROBE HORN CEILING OR WALL MOUNTED – PROVIDE 15/75 CANDELA U.N.O. – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SS SS WG	FIRE ALARM SPEAKER STROBE CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE. PROVIDE WIREGUARD "WG" WHERE DESIGNATED.	80"AFF
SS WP	FIRE SPRINKLER RISER ALARM SPEAKER STROBE (WEATHER PROOF) – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
V V	FIRE ALARM STROBE LIGHT CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SD H SD	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
HD H HD	FIRE ALARM HEAT DETECTOR CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
DD	FIRE ALARM H.V.A.C. DUCT SMOKE DETECTOR W/ SHUNT TRIP RELAY – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE. PROVIDE A REMOTE TEST SWITCH.	– – – –
F	FIRE SPRINKLER FLOW SWITCH	– – – –
TS	FIRE SPRINKLER TAMPER SWITCH – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	– – – –
	FIRE ALARM CONTROL/VOICE EVACUATION PANEL (FLUSH MOUNTED)	– – – –
	FIRE ALARM ANNUNCIATOR PANEL (SURFACE MOUNTED)	– – – –

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

SPECIAL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
HDMI	3–GANG FLAT SCREEN OUTLET – PROVIDE LARGE CAPACITY WALL BOX HUBBEL MODEL NO. HBL263 WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG., PULL WIRE, MUD RING AND HBL981 LOW VOLTAGE DIVIDER.	72"AFF
HDMI #	MULTIMEDIA OUTLET – PROVIDE 2–GANG MUD RING SECURED TO METAL STUDS WITH METAL STRAP WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG. W/ PULL WIRE AND MUD RING – SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	18"AFF
	DATA OUTLET/VOICE OVER IP – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	18"AFF
WAP	WIRELESS ACCESS POINT – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL. NUMBER INDICATES AMOUNT OF DATA DROPS.	CLG.

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

BUILDING ACCESS/INTRUSION DETECTION SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
MD	INTRUSION DETECTION MOTION DETECTOR FULL COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
MD H	INTRUSION DETECTION MOTION DETECTOR HALLWAY COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
GB	INTRUSION DETECTION GLASS BREAK SENSOR	ABV. CLG.
KP	INTRUSION DETECTION KEYPAD PROVIDE WITH STI COVER – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
DC	INTRUSION DETECTION DOOR MAGNETIC CONTACT – PROVIDE WITH 1/2"C AND PULLWIRE.	– – – –
IS	INTRUSION DETECTION INDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
IS WP	INTRUSION DETECTION OUTDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	10'–0" AFF
	SECURITY CAMERA – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE. NUMBER INDICATES AMOUNT OF DATA DROPS.	AS REQUIRED

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

INTERCOM SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	INTERCOM OUTDOOR HORN WEATHER PROOF – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–6"AFF
IC	INTERCOM BUTTON – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE .	48"AFF
S	INTERCOM SPEAKER CEILING MOUNT	CLG.
IA	INTERCOM ADMINISTRATION CONTROL STATION HANDSET – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE STUBBED INTO ACCESSIBLE CLG.	18"AFF

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

CAFETERIA & GYMNASIUM SOUND SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SPEAKER – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE.	– – – –
HM	MICROPHONE OUTLET – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE.	18"AFF
AT	ASSISTIVE LISTENING TRANSMITTER	24"BLC
	AMPLIFIER (FLUSH MOUNTED)	– – – –
SC	CAFETERIA SPEAKER	CLG.

NOTES:
1.) 18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

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5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
Sheet: E2.01

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. MULTIPLE VACANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
7. UTILIZE J-HOOKS FOR LIGHTING LOW VOLTAGE CABLING.

KEYED NOTES:

1. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR–TYPICAL.
4. MOUNT LIGHT FIXTURE TYPE "ME" AT 8'–0"AFF TO CENTER OF FIXTURE – TYPICAL.
5. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
6. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.
7. WALL MOUNT LIGHT FIXTURE AT 7'–0" AFF.
8. SEE DETAIL 02/E9.03 FOR MOUNTING.
9. SURFACE MOUNT TO STRUCTURE STEEL JOIST – TYPICAL FOR THIS ROOM.

REFER TO ENLARGED LIGHTING PLAN ON E3.01/02.

AREA "A"
AREA "E"

AREA "A"
AREA "B"

CUBBIES

01 LIGHTING PLAN (1ST FLOOR)
SCALE: 1/8" = 1'-0"

NORTH

02 DEDUCTIVE ALTERNATE ENLARGED LIGHTING PLAN
SCALE: 1/4" = 1'-0"

NORTH

AREA 'A'
AREA 'B'
FUTURE PHASE II
KEYPLAN

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Date:	May 16, 2019
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Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
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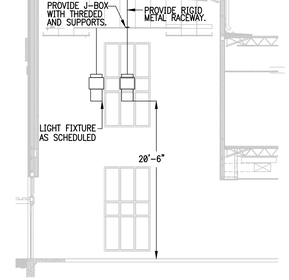
GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. MULTIPLE VACANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
7. UTILIZE J-HOOKS FOR LIGHTING LOW VOLTAGE CABLING.

KEYED NOTES:

1. PROVIDE UNISTRUT/THREADED ROD AND SUSPEND LIGHT FIXTURE AT 9'-0"AFF. COORDINATE INSTALLATION WITH HVAC DUCT WORK.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH - TYPICAL.
3. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR - TYPICAL.
4. PROVIDE 3-WAY LIGHT SWITCH LOCATED 4'-0" ABOVE BOTTOM LANDING NEXT TO TOP RUNG OF LADDER AND 3-WAY LIGHT SWITCH LOCATED 4'-0" ABOVE THE CONTROLLER LANDING FLOOR.
5. PROVIDE CLEAR LOCKING COVER.
6. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
7. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES - TYPICAL.
8. SEE ARCHITECTURAL DRAWINGS OF THE ELEVATOR PIT/SHAFT FOR THE EXACT LOCATION.
9. MOUNT LIGHT FIXTURE TYPE "ME" AT 8'-0"AFF TO CENTER OF FIXTURE - TYPICAL.
10. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E3.05. CONNECT TO NEAREST 277V CIRCUIT - TYPICAL.
11. SEE SHEET E3.04 FOR LIGHTING.
12. PROVIDE EMERGENCY LIGHT FIXTURE WALL MOUNTED AT 8'-5" AFF.
13. SUSPEND LIGHT FIXTURES TYPE "Q" REFER TO DETAIL.
14. WALL MOUNT LIGHT FIXTURE AT 7'-0" AFF.



LIGHT FIXTURE TYPE "Q" (MOUNTING DETAIL)

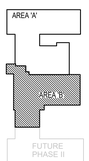
02 SCALE: 1/8" = 1'-0"

NORTH

01 LIGHTING PLAN (1ST FLOOR)

SCALE: 1/8" = 1'-0"

NORTH



KEYPLAN

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No.	REVISIONS	BY

IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

IDEA PALMVIEW

PALMVIEW, TEXAS

RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
5/16/2019

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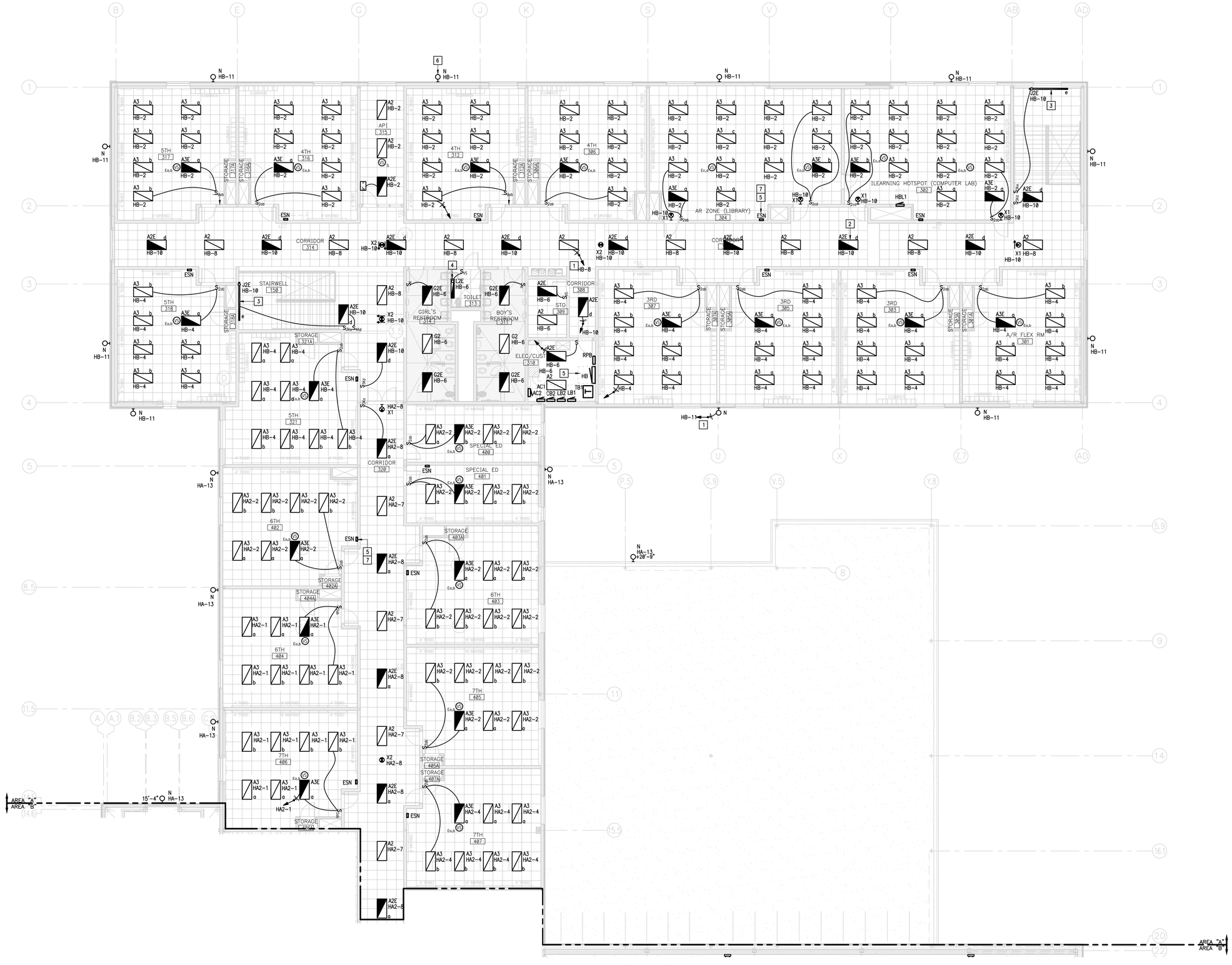
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E3.02



01 LIGHTING PLAN (2ND FLOOR)
SCALE: 1/8" = 1'- 0"

NORTH

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT FIXTURE TYPE "J2E" AT 15'-4" A.F.F. TO CENTER OF FIXTURE – TYPICAL.
4. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR – TYPICAL.
5. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
6. MOUNT LIGHT FIXTURE TYPE "N" AT 20'-9"AFF TO CENTER OF FIXTURE – TYPICAL (U.N.O.).
7. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW
PALMVIEW, TEXAS

AREA "A"
AREA "B"
FUTURE PHASE II
KEYPLAN

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Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E3.03

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
2. PROVIDE J-BOX AND 3/4" RACEWAY ROUTED ABOVE CEILING BACK TO LOGO SIGN POWER SUPPLIES LOCATION. COORDINATE EXACT LOCATIONS WITH SIGN CONTRACTOR PRIOR TO ANY ROUGH-IN. INDICATED HEIGHT IS APPROXIMATE – TYPICAL OF 3.
3. PROVIDE UNISTRUT AND THREADED ROD TO SUSPEND LIGHT FIXTURE AT 9'-0" AFF. COORDINATE INSTALLATION WITH HVAC DUCT WORK.
4. MOUNT FIXTURE TYPE "J2E" AT 15'-4" A.F.F. TO CENTER OF FIXTURE – TYPICAL.
5. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
6. CONNECT LOGO SIGN POWER SUPPLIES ABOVE CEILING. COORDINATE EXACT LOCATION WITH SIGN CONTRACTOR.
7. MOUNT LIGHT FIXTURE TYPE "N" AT 20'-9" AFF TO CENTER OF FIXTURE (U.N.O.) – TYPICAL.
8. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
9. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.
10. NIGHT LIGHT TO REMAIN UNSWITCHED.
11. MOUNT FIXTURE TYPE "E1" AT 80" ABOVE TOP OF BLEACHERS.
12. MOUNT FIXTURE TYPE "E1" AT 12'-0" A.F.F. (U.N.O.) TO TOP OF FIXTURE.
13. SEE DETAIL 01/E9.03 FOR MOUNTING.
14. PROVIDE CLASS II #18 WIRING IN 1/2" RACEWAY TO BETWEEN VACANCY SENSORS AND POWER PACKS AS PER MANUFACTURER INSTRUCTION TO OBTAIN SWITCHING SCHEMES AS NOTED.
15. MOUNT LIGHT FIXTURE TYPE "M" AT 13'-4" AFF TO CENTER OF FIXTURE (U.N.O.) – TYPICAL.
16. MOUNT LIGHT FIXTURE TYPE "ME" AT 13'-4" AFF TO CENTER OF FIXTURE (U.N.O.).

01 LIGHTING PLAN (2ND FLOOR)
SCALE: 1/8" = 1'-0"

NORTH

AREA 'A'
AREA 'B'
FUTURE PHASE II
KEYPLAN

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Date:	May 16, 2019
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Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
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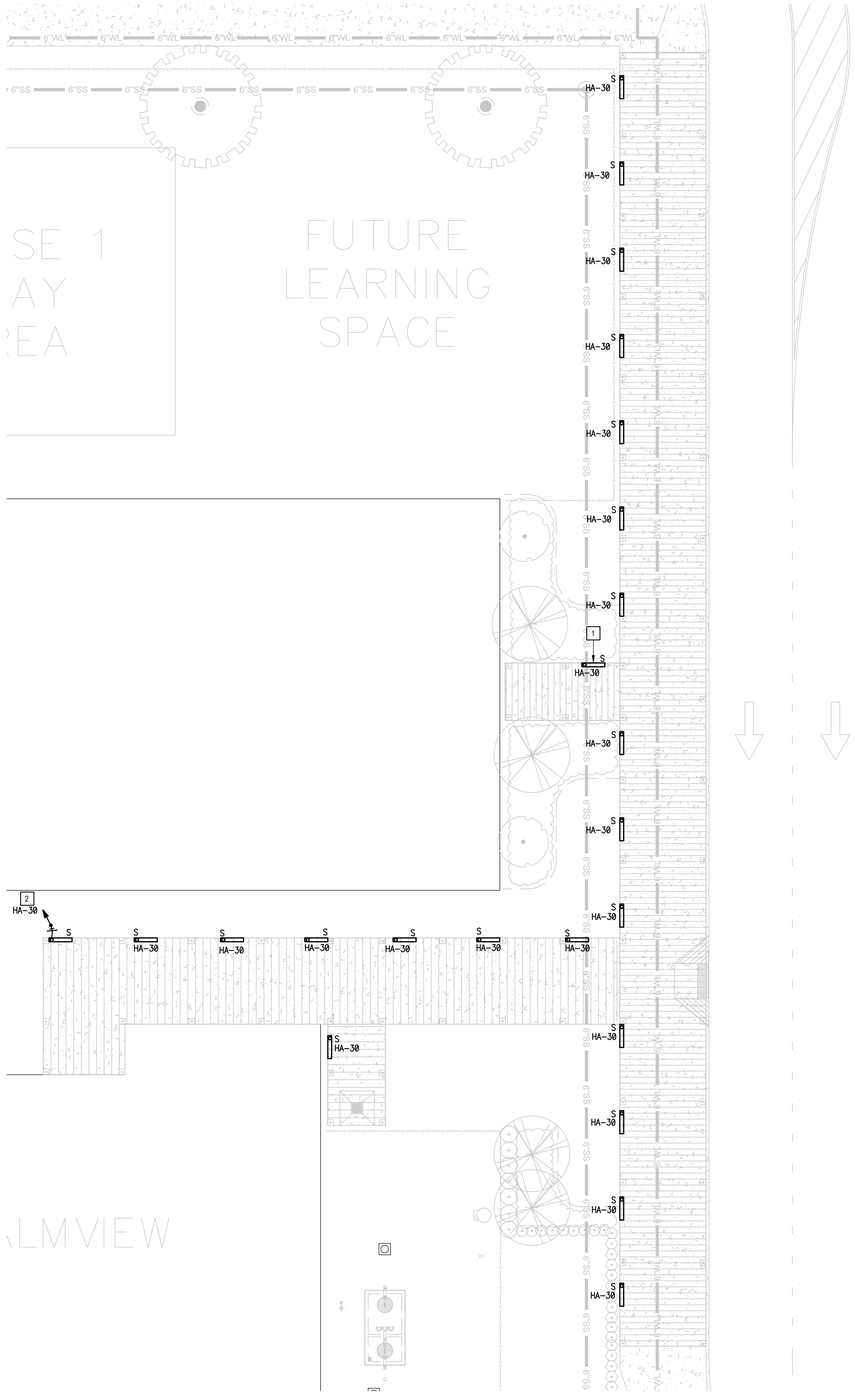
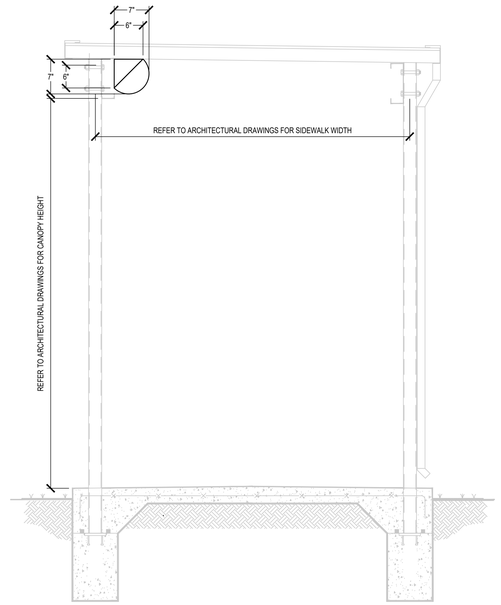
Sheet:	E3.04



01 CANOPY LIGHTING PLAN (1ST FLOOR)
SCALE: 3/32" = 1'- 0"



02 CANOPY LIGHT FIXTURE MOUNTING DETAIL (1ST FLOOR)
SCALE: 1" = 1'- 0"

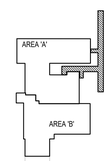
GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1 SECURE TO CANOPY HORIZONTAL STRUCTURAL STEEL – SEE DETAIL – TYPICAL.

2 VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.



FUTURE PHASE II

KEYPLAN

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No.	REVISIONS	BY

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5.16.2019

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Date: May 16, 2019
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Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: E3.05

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GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
3. PROVIDE ELECTRICAL RECEPTACLE FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
4. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. ROUGH-IN AT 17-7/16" TO CENTER OF J-BOX – TYPICAL. COORDINATE WITH PLUMBING CONTRACTOR.
5. CONNECT VIA CORRESPONDING RELAY PANEL,CONNECT CIRCULATING PUMP; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. CONNECT VIA LIGHTING CONTROL PANEL.
6. PROVIDED DATA RACK – SEE SPECIFICATIONS.
7. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
8. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
9. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2 – 2#12 & #12G.
10. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.
11. PROVIDE FIRE ALARM POWER SUPPLY, BRANCH CIRCUIT: 1/2" – 2–#12 & #12G.
12. PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
13. PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
14. PROVIDE SPECIAL RECEPTACLE FOR IDF-UPS (NEMA L5-30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.
15. CONNECT DISH WASHER; BRANCH CIRCUIT: 1/2" – 2#12 & #12G.
16. CONNECT REFRIGERATOR; BRANCH CIRCUIT: 1/2" – 2#12 & #12G.
17. CONNECT CLOTHES WASHER; BRANCH CIRCUIT: 1/2" – 2#12 & #12G.
18. PROVIDE SPECIAL RECEPTACLE FOR CLOTHES DRYER (NEMA 10-30R); BRANCH CIRCUIT: 3#10 & #10G.
19. MOUNT AT 15' AFF. STUB-OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM – TYPICAL.
20. PROVIDE PENDANT MOUNTED CAFETERIA SPEAKER – TYPICAL.
21. CONNECT IRRIGATION CONTROLLER; BRANCH CIRCUIT: 1/2" – 2#12 & #12G.
22. PROVIDE ASSISTIVE LISTENING TRANSMITTER; MOUNT AT 16' AFF. SHARE CIRCUIT WITH AMPLIFIER. PROVIDE DUPLEX RECEPTACLE 16' AFF.
23. PROVIDE 2" RACEWAY TO TERMINATE AT 2ND FLOOR IDF ROOM.
24. PROVIDE FLUSH MOUNTED AMPLIFIER FACING CAFETERIA ROOM SIDE. PROVIDE SINGLE CHANNEL PASSIVE LAPTOP DIRECT BOX, RAPCO HORIZON # LTIBLOX.
25. PROVIDE BACK BOX FOR MOTORIZED PROJECTION SCREEN SWITCH. PROVIDE 1/2" RACEWAY WITH PULLWIRE TO MOTORIZED SCREEN LOCATION.
26. CONNECT MOTORIZED PROJECTION SCREEN BELOW BEAM; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. SEE ARCHITECT DRAWINGS FOR EXACT LOCATION.
27. 2" RACEWAY TO TERMINATE AT 2ND FLOOR IDF ROOM.
28. INSTALL ALONG ROOF DRAIN PIPING.
29. ROUTE RACEWAY CONCEALING IN FURR DOWN/ABOVE CEILING AS MUCH AS POSSIBLE.
30. PENDANT TO BE FLUSH WITH CLOUD CEILING.

03 DEDUCTIVE ALTERNATE ENLARGED ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

NORTH

02 ENLARGED IDF ROOM 128 ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

NORTH

01 ELECTRICAL PLAN (1ST FLOOR)

SCALE: 1/8" = 1'-0"

NORTH

AREA "A"
AREA "B"

FUTURE PHASE II

KEYPLAN

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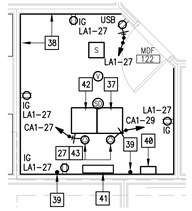
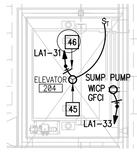
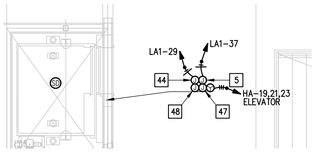


ENLARGED MDF 159
02 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



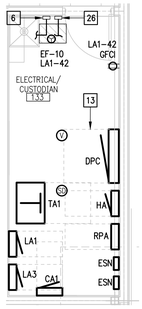
(FIRST FLOOR)



(SECOND FLOOR)

ENLARGED ELEVATOR
03 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

NORTH



ENLARGED ELEC/CUST
04 ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM, LIGHTING LOW VOLTAGE CABLING AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS; "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

40 PROVIDE INTRUSION DETECTION SYSTEM CONTROL PANEL; BRANCH CIRCUIT: 1/2 – 2#12 & #12G, CA1–42. PROVIDE A WIRELESS COMMUNICATOR.

41 PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.

42 INSTALL AND CONNECT INTERCOM SYSTEM CARD CAGE ON RACK. RACK PROVIDED BY CONTRACTOR.

43 PROVIDE SPECIAL RECEP FOR IDF–UPS(NEMA L5–30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.

44 ELEVATOR CONTROLS CONNECTION; BRANCH CIRCUIT: 1/2" RACEWAY – 2#12 & #12G. COORDINATE THE J–BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

45 SEE ARCHITECTURAL DRAWINGS OF THE ELEVATOR PIT/SHAFT FOR THE EXACT LOCATION.

46 CONNECT ELEVATOR SUMP PUMP. COORDINATE SWITCH LOCATION WITH ELEVATOR EQUIPMENT SUPPLIER.

47 ELEVATOR TELEPHONE ROUGH–IN. PROVIDE A J–BOX WITH A 3/4" RACEWAY & PULL WIRE STUBBED NEAR THE TELECOM ROOM. COORDINATE THE J–BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

48 ELEVATOR FIRE ALARM ROUGH–IN. PROVIDE A J–BOX WITH A 3/4" RACEWAY & PULL WIRE STUBBED NEAR THE ELECTRICAL ROOM. COORDINATE THE J–BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

49 PROVIDE GROMMETS THROUGH COUNTERTOP TO ACCESS RECEPTACLES BELOW COUNTER INSIDE KNEE SPACE, CONCEAL RACEWAYS WITHIN MILLWORK BACK TO WALL.

KEYED NOTES:

1 PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" C 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.

2 PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" CC 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.

3 PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J–BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.

4 CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" C 2#12 & #12G. ROUGH–IN AT 17–7/16" TO CENTER OF J–BOX. COORDINATE WITH PLUMBING CONTRACTOR. – TYPICAL

5 ELEVATOR LIGHTING CONNECTION. PROVIDE A 30A, 2PNF, 240 V NEMA 1 DISCONNECT; BRANCH CIRCUIT: 1/2" RACEWAY – 2#12 & #12G.

6 CONNECT INTERCEPTOR SERVICE ALERT PANEL PROVIDED BY PLUMBING CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR; BRANCH CIRCUIT: 1/2" – 2#12 & #12G, LA3–59. PROVIDE A 1/2" RACEWAY FROM SERVICE ALERT PANEL TO SOLID INTERCEPTOR FOR WIRING. COORDINATE EXACT LOCATIONS WITH PLUMBER.

7 CONNECT REFRIGERATOR; BRANCH CIRCUIT: 1/2 C 2#12 & #12G.

8 CONNECT DISH WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.

9 CONNECT COPY MACHINE; BRANCH CIRCUIT: 1/2" C 2#2 & 12G.

10 PROVIDE SPECIAL RECEPTACLE FOR CLOTHES DRYER (NEMA 10–30R); BRANCH CIRCUIT: 3#10 & #10G.

11 CONNECT CLOTHES WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.

12 CONNECT FLOW SWITCH; BRANCH CIRCUIT: 1/2" C 2#2 & 12G.

13 NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.

14 3/4" RACEWAY W/ PULLWIRE (SCOREBOARD CONTROLS RACEWAY).

15 1–1/4" RACEWAY W/ PULLWIRE (P.A. SYSTEM RACEWAY).

16 INSTALL DEVICES INSIDE FLUSH MOUNTED FLOORBOX. COORDINATE THE SCORE KEEPERS TABLE EXACT LOCATION PRIOR TO ROUGH–IN (COVER PLATE FLUSH MOUNTED).

17 ATTACH RECEPTACLE FLUSH TO THE CEILING & CONNECT MOTORIZED BACKSTOP. VERIFY POINT OF CONNECTION W/ BACKSTOP SUPPLIER PRIOR TO ROUGH–IN.

18 MOUNT AT 80" ABOVE TOP OF BLEACHERS.

19 TO MOTORIZED BACKBOARD KEYED SWITCH – SEE DETAIL. FURNISHED BY BACKSTOP SUPPLIER; INSTALLED & CONNECTED BY ELECTRICAL CONTRACTOR.

20 TO CONTROL MOTORIZED BACKBOARDS.

21 PROVIDE BACK BOX FOR MOTORIZED PROJECTION SCREEN SWITCH. PROVIDE 1/2" RACEWAY WITH PULLWIRE TO MOTORIZED SCREEN LOCATION.

22 CONNECT MOTORIZED PROJECTION SCREEN BELOW BEAM; BRANCH CIRCUIT: 1/2" C 2#12 & #12G. SEE ARCHITECT DRAWINGS FOR EXACT LOCATION.

23 PROVIDE AN EXTENSION RING ON WIRING DEVICES LOCATED ON THIS WALL TO INSTALL FLUSH MOUNTED WITH PROTECTIVE PADDING.

24 PROVIDE 1–1/4" RACEWAY W/ PULLWIRE (DATA). TERNIMATE AT MDF WIREWAY IN ROOM.

25 CONNECT MOTORIZED TELESCOPIC BLEACHERS. COORDINATE EXACT POINT OF CONNECTION AND LOCATION OF SAFETY SWITCH BELOW BLEACHERS WITH EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH–IN. SEE CONNECTION SCHEDULE.

26 CONNECT ELEVATOR SERVICE ALERT PANEL PROVIDED BY PLUMBING CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR; BRANCH CIRCUIT: 1/2" – 2#12 & #12G, LA3–57. SIGNAL WIRING TERMINATIONS AND INSTALLATIONS SHALL BE BY ELECTRICAL CONTRACTOR. PROVIDE A 6"X6"X6" NEMA 6XP SUBMERSIBLE J–BOX FOR WIRING IN ELEVATOR PIT. COORDINATE EXACT LOCATION OF ALL COMPONENTS WITH PLUMBER & ELEVATOR EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH–IN.

27 PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.

28 PROVIDE FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM; BRANCH CIRCUIT: 1/2" C 2#12 & #12G, LA3–55. PROVIDE TWO TELEPHONE CONNECTIONS.

29 PROVIDE SLIDE GATES GANGABLE BOXES BELOW KNEE SPACE – SEE DETAIL @5/E9.03.

30 PROVIDE RACK MOUNTED AMPLIFIER AND ASSISTIVE LISTENING TRANSMITTER; BRANCH CIRCUIT: 1/2" – 2#12 & #12G.

31 MOUNT TO STRUCTURAL STEEL. STUB–OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM – TYPICAL.

32 CONNECT SCOREBOARD ABOVE BEAM; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH–IN.

33 MOUNT AT 15" AFF. STUB–OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM – TYPICAL.

34 MOUNT AT 80" ABOVE TOP OF BLEACHERS. STUB–OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM.

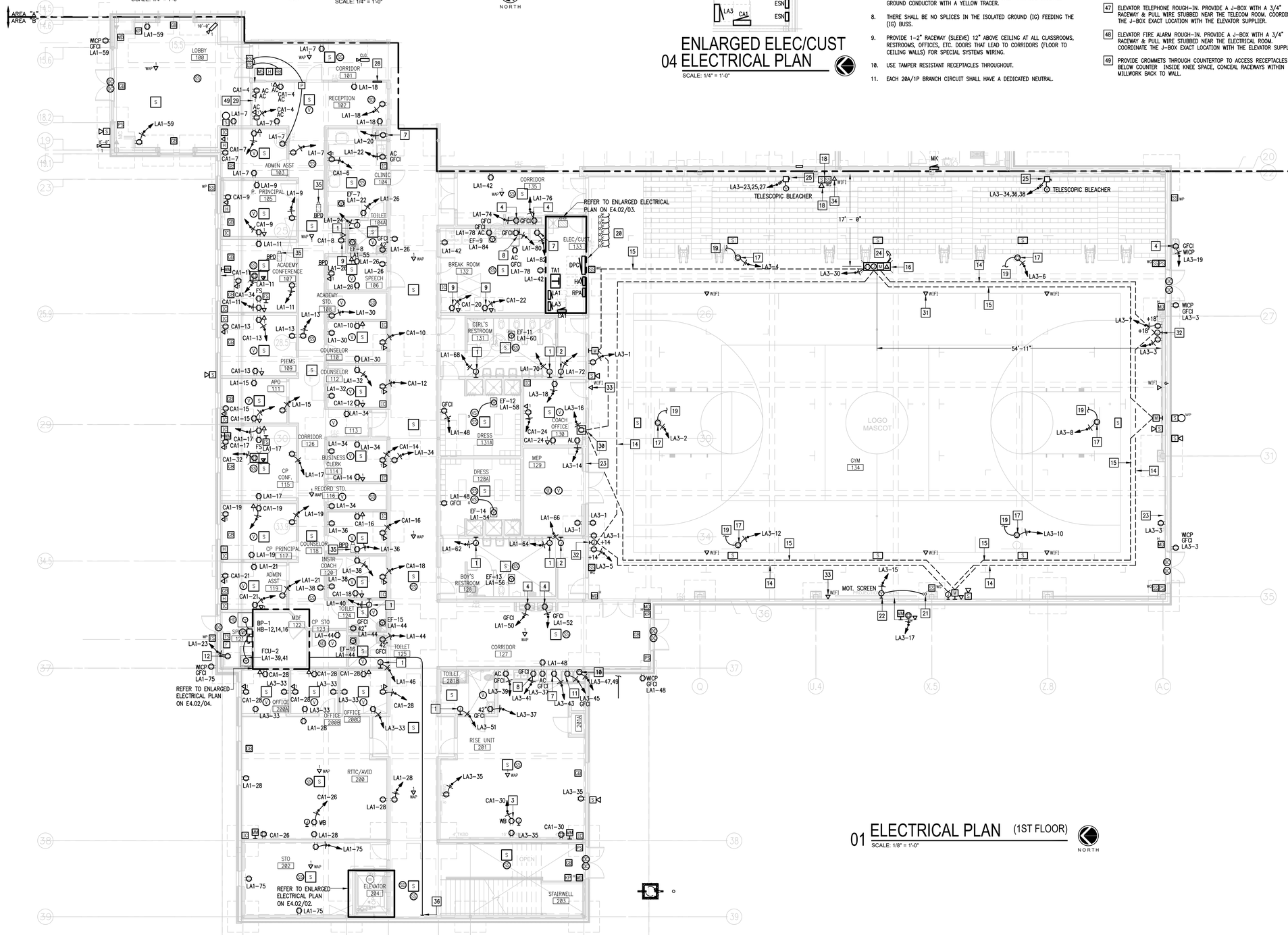
35 CONNECT BYPASS DAMPER (LABELED "BPD") STEP–DOWN TRANSFORMER TO NEAREST 120V NON–GFCI CIRCUIT. BRANCH CIRCUIT: 1/2" – 2#12 & #12G. BYPASS DAMPER TO BE CONNECTED BY HVAC CONTROLS CONTRACTOR – TYPICAL.

36 PROVIDE 4" DATA RACEWAY ABOVE CEILING (FOR FUTURE PHASE II).

37 PROVIDE DATA RACK – SEE SPECIFICATIONS..

38 PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A–D INT–APA). MOUNT AT 24" AFF.

39 PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.



01 ELECTRICAL PLAN (1ST FLOOR)
SCALE: 1/8" = 1'-0"

NORTH

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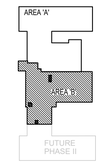
No.	REVISIONS	BY

IDEA PUBLIC SCHOOLS PHASE 1
IDEA Public Schools
PALMVIEW, PALMVIEW, TEXAS



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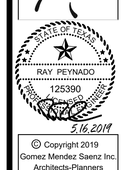

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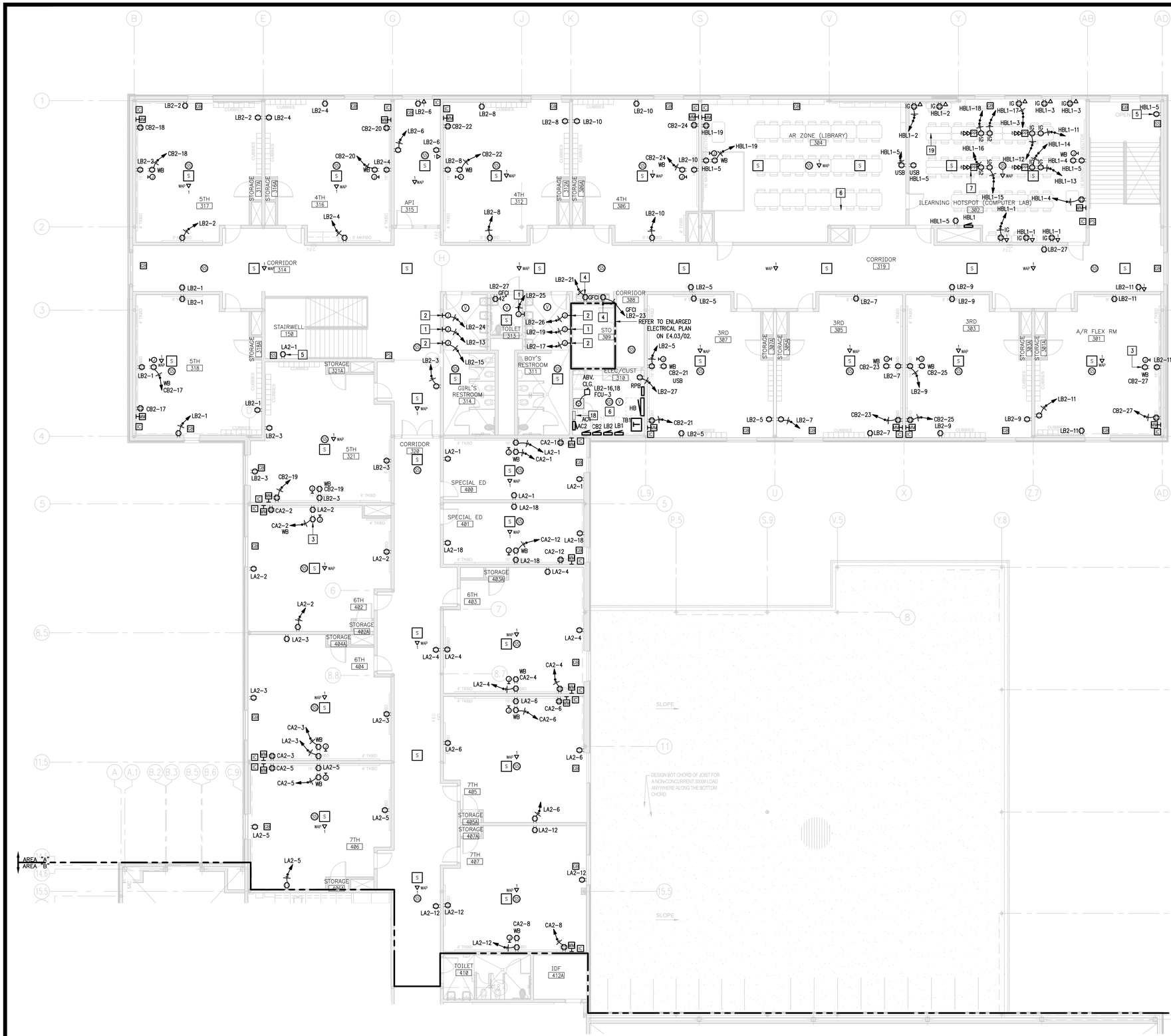
Interior Designers

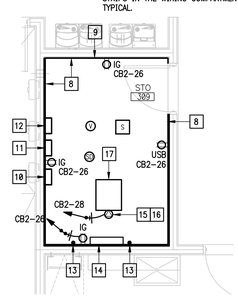
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E4.02



01 ELECTRICAL PLAN (2ND FLOOR)

SCALE: 1/8" = 1'-0"

NORTH



02 ENLARGED STO ROOM ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

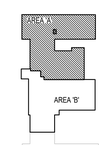
NORTH

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS - INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" - 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" - 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
3. PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR - TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES - SEE DETAILS.
4. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. ROUGH-IN AT 17-7/16" TO CENTER OF J-BOX. COORDINATE WITH PLUMBING CONTRACTOR.
5. MOUNTING HEIGHT TO BE FROM TOP OF LANDING.
6. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES - TYPICAL.
7. CONNECT TELE-POWER POLE. TELE-POWER POLE SHALL BE HUBBELL DUAL COMPARTMENT MODEL #SP11001CCXBI. FURNISH WITH (2) IG DUPLEX RECEPTACLES AND (2) OUTLET SPACES FOR COMMUNICATIONS CONNECTORS - TYPICAL.
8. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT @ 24" AFF.
9. PROVIDE (4)- 4" RACEWAYS ABOVE CEILING(PENETRATE FIRE RATED WALL)FOR SPECIAL SYSTEMS WIRING.
10. PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
11. PROVIDE FIRE ALARM POWER SUPPLY; BRANCH CIRCUIT: 1/2" - 2#12 & #12G, LB2-42.
12. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2 - 2#12 & #12G, LB2-40.
13. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
14. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE RACEWAYS THROUGH FLOOR DOWN TO 1ST FLOOR MDF ROOM. TERMINATE RACEWAYS AT 1ST FLOOR MDF WIREWAY. WALL MOUNT WIREWAY - SEE DETAIL.
15. PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
16. PROVIDE SPECIAL RECEP FOR IDF-UPS (NEMA L5-30P); BRANCH CIRCUIT: 3/4" - 2#10 & #10G.
17. PROVIDE DATA RACK - SEE SPECIFICATIONS.
18. CONNECT HVAC CONTROL PANEL TO NEAREST 120V NON-GFCI CIRCUIT.
19. OWNER TO PROVIDE THE NECESSARY EXTENSION CORDS AND POWER STRIPS IN THE WIRING COMPARTMENT TRAY TO CONNECT COMPUTERS - TYPICAL.



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IDEA PUBLIC SCHOOLS PHASE 1

IDEA PALMVIEW

PALMVIEW, TEXAS

IDEA Public Schools

STATE OF TEXAS
RAY PEYNADO
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LICENSED PROFESSIONAL ENGINEER
5/16/2019

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Architects-Planners
Interior Designers

Date:	May 16, 2019
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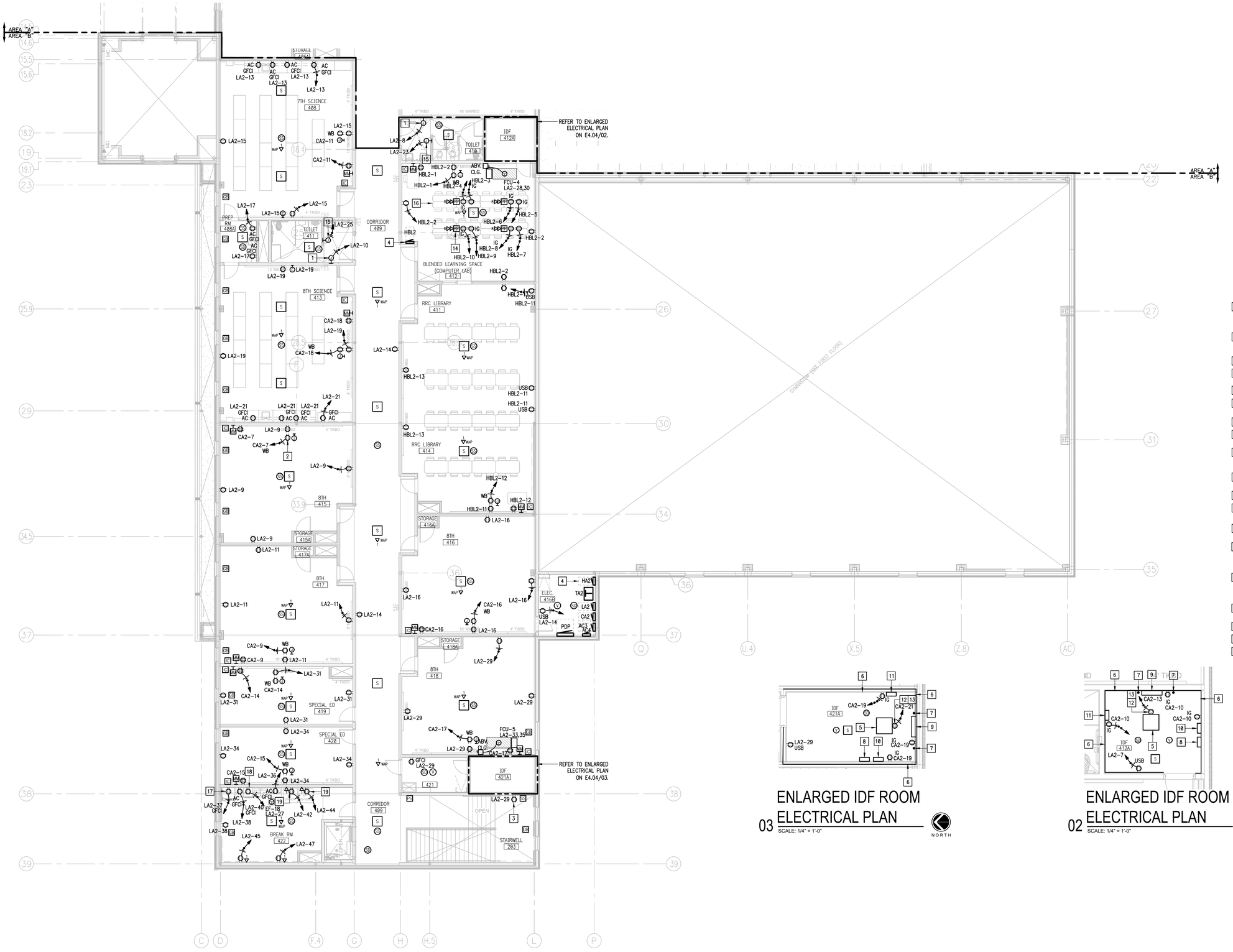
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E4.03



01 ELECTRICAL PLAN (2ND FLOOR)

SCALE: 1/8" = 1'-0"

NORTH

03 ENLARGED IDF ROOM ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

NORTH

02 ENLARGED IDF ROOM ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

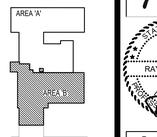
NORTH

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" C 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
3. MOUNTING HEIGHT TO BE FROM TOP OF LANDING.
4. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.
5. PROVIDE DATA RACK – SEE SPECIFICATIONS.
6. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
7. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
8. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2 – 2#12 & #12G, LA2-39.
9. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.
10. PROVIDE FIRE ALARM POWER SUPPLY, BRANCH CIRCUIT: 1/2" – 2-#12 & #12G, LA2-41.
11. PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
12. PROVIDE SPECIAL RECEPTACLE FOR IDF-UPS (NEMA L5-30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.
13. PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
14. CONNECT TELE-POWER POLE. TELE-POWER POLE SHALL BE HUBBELL DUAL COMPARTMENT MODEL #SP11001CCXCI. FURNISH WITH (2) IG DUPLEX RECEPTACLES AND (2) OUTLET SPACES FOR COMMUNICATIONS CONNECTORS – TYPICAL.
15. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" C 2#12 & #12G. MOUNT @ +44" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
16. OWNER TO PROVIDE THE NECESSARY EXTENSION CORDS AND POWER STRIPS IN THE WIRING COMPARTMENT TRAY TO CONNECT COMPUTERS – TYPICAL.
17. CONNECT REFRIGERATOR; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.
18. CONNECT DISH WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.
19. CONNECT VENDING MACHINE.



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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
5/16/2019

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Interior Designers

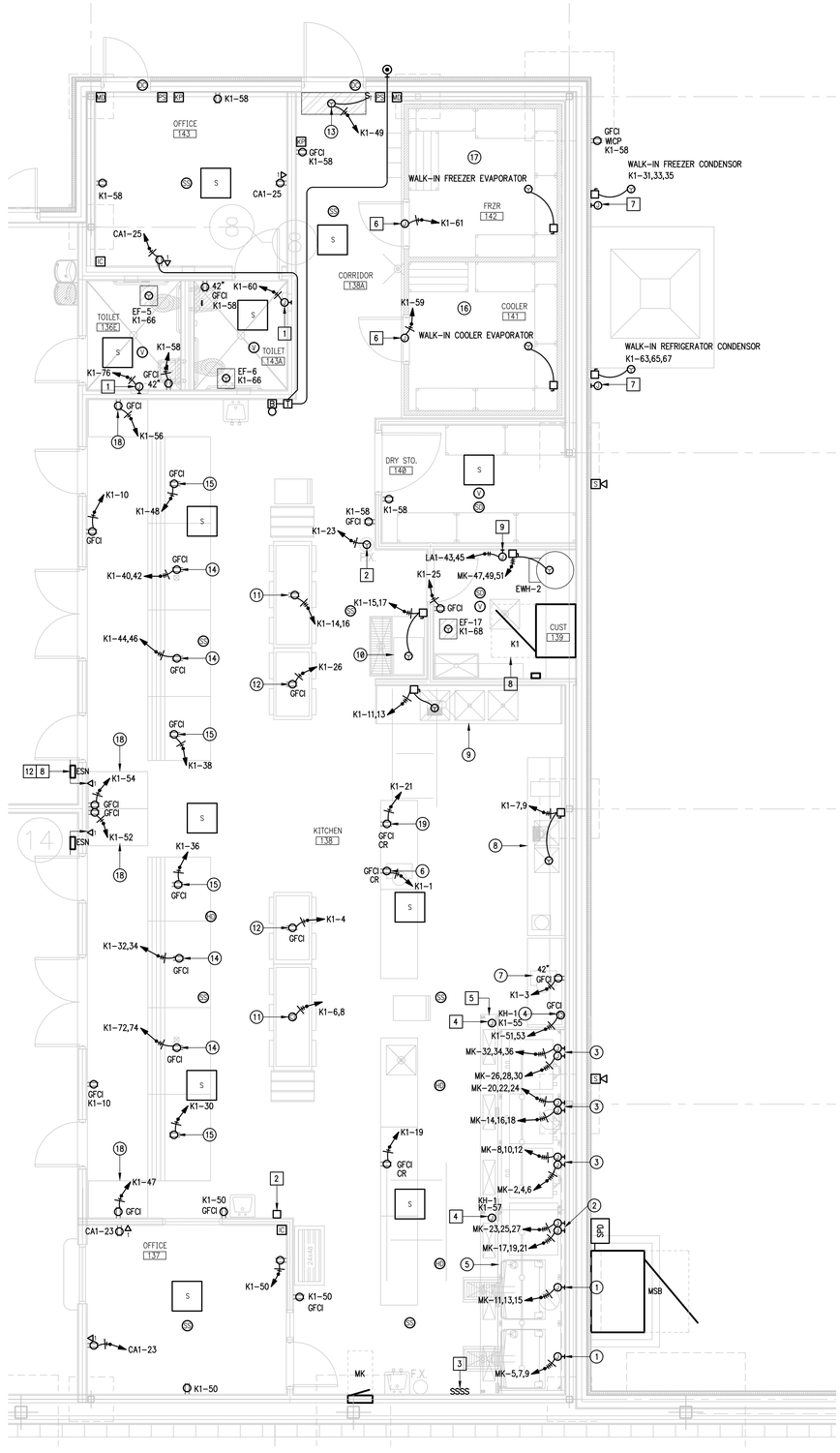
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E4.04

FOOD SERVICE EQUIPMENT CONNECTION SCHEDULE:

ITEM #	ITEM DESCRIPTION	LOAD	VOLTAGE	CONNECTION REQUIRED	BRANCH CIRCUIT
1	40 GAL. BRAISER (2)	12 KW	480V/3PH/60HZ	PROVIDE A HARDWIRE CONNECTION. INSTALL WALL MOUNTED AT 24"AFF.	3/4" – 4#12 & #12G
2	COMBI OVEN/STEAMER (1)	24 KW	480V/3PH/60HZ	PROVIDE J-BOX IN WALL AT 18"AFF BRANCH TO CONNECTION ON EQUIPMENT. FIELD COORDINATE MOUNTING HEIGHT.	3/4" – 4#8 & #10G
3	DBL. DECK CONV. OVEN (3)	12.5KW EA.	480V/3PH/60HZ TWO CONNECTIONS	PROVIDE (2) J-BOXES IN WALL AT (1)– 18"AFF & (1)– 36"AFF BRANCH TO CONNECTION ON EQUIPMENT. FIELD COORDINATE MOUNTING HEIGHT.	3/4" – 4#12 & #12G EACH
4	HOT WATER DISPENSER (1)	5KW	208V/1PH/60HZ	PROVIDE A L6-30R RECEPTACLE. INSTALL WALL MOUNTED.	3/4" – 3#10 & #10G
5	KITCHEN EXHAUST HOOD (1)	5HP KEF-1	480V/3PH/60HZ	KEF-1 CONNECT TO INTEGRAL DISCONNECT	3/4" – 3#12 & #12G
		2HP KSF-1	480V/3PH/60HZ	KSF-1 CONNECT TO INTEGRAL DISCONNECT PROVIDE INTERLOCK WIRING BETWEEN FANS AND SUPPLY FAN AND CONTROLS PANELS. MAGNETIC STARTERS FURNISHED BY DIV. 23.	3/4" – 3#12 & #12G
6	MEAT SLICER (1)	.6 KW	120V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE WALL MOUNTED.	3/4" – 3#12 & #12G
7	VEGGIE ROBOT COUPE (1)	.9 KW	120V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE WITH CORD REEL. INSTALL CEILING MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
8	2-COMPARTMENT SINK W/DISPOSAL (1)	1.5HP	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL AT 18"AFF. CONNECT SOLENOID VALVE AND CONTROL SWITCH.	3/4" – 3#12 & #12G
9	3-COMPARTMENT SINK W/DISPOSAL (1)	1.5HP	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL AT 18"AFF. CONNECT SOLENOID VALVE AND CONTROL SWITCH.	3/4" – 3#12 & #12G
10	ICE MACHINE (1)	2.5KW	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED AT +48" A.F.F.	3/4" – 3#12 & #12G
11	HOT FOOD PASS THRU CABINET (2)	1.5KW	208V/1PH/60HZ	PROVIDE A L14-20R RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 3#12 & #12G
12	PASS THRU REFRIGERATOR (2)	1.3KW	120V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
13	AIR CURTAIN (3)	1.2KW	120V/1PH/60HZ	PROVIDE THERMAL SWITCH AT 8'–0"AFF.	3/4" – 2#12 & #12G
14	HOT FOOD SERVING UNIT (4)	.9KW	120V/1PH/60HZ	PROVIDE A 30A SPECIAL RECEPTACLE. INSTALL PEDESTAL MOUNTED. SEE DETAIL.	3/4" – 3#10 & #10G
15	FROST TOP SERVING UNIT (4)	6.7A	208V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE. INSTALL PEDESTAL MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
16	WALK-IN REFRIGERATOR EVAPORATOR (1)	1.0A	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. COORDINATE LOCATION WITH SUPPLIER. POWER AND CONTROL CIRCUIT OBTAINED FROM CONDENSER.	3/4" – 2#12 & #12G
	WALK-IN REFRIGERATOR CONDENSER (1)	8.3A	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED. PROVIDE POWER AND CONTROL CIRCUIT TO EVAPORATOR.	3/4" – 3#12 & #12G
17	WALK-IN FREEZER EVAPORATOR (1)	8.2A	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. COORDINATE LOCATION WITH SUPPLIER. POWER AND CONTROL CIRCUIT OBTAINED FROM CONDENSER.	3/4" – 2#12 & #12G
	WALK-IN FREEZER CONDENSER (1)	14.8A	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED. PROVIDE POWER AND CONTROL CIRCUIT TO EVAPORATOR.	3/4" – 3#12 & #12G
18	MILK COOLER (2)	.6KW	120V/1PH/60HZ	PROVIDE 20A DUPLEX RECEPTACLE. INSTALL WALL MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
19	CAN OPENER (2)	.2KW	120V/1PH/60HZ	PROVIDE 20A DUPLEX RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
NOTE: VERIFY ELECTRICAL REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.



01 ENLARGED KITCHEN ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS). 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK: B-750 (NO SUBSTITUTIONS). BRANCH CIRCUIT: 3/4" RACEWAY – 2#10 & #10G. MOUNT AT +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE JUNCTION BOX FOR FIRE SUPPRESSION SYSTEM 120/10/10A ABOVE CEILING; BRANCH CIRCUIT: 3/4" – 2#12 & #12G. COORDINATE WITH FIRE SUPPRESSION SYSTEM CONTRACTOR FOR ALL REQUIREMENTS AND FINAL LOCATIONS. PROVIDE RECESSED MOUNTED OCTAGON J-BOX AND 3/4" RACEWAY FOR PULL STATION AT 48"AFF. FIRE SUPPRESSION SYSTEM IS TO BE INTERCONNECTED TO BUILDING FIRE ALARM SYSTEM.
3. TO CONTROL KITCHEN HOODS FANS AND LIGHTS.
4. CONNECT KITCHEN HOOD LIGHTS; BRANCH CIRCUIT: 3/4" – 2#12 & #12G.
5. CONNECT KITCHEN HOOD CONTROL PANEL.
6. CONNECT COOLER/FREEZER LIGHTS, DOOR HEATER AND PRESSURE RELIEF PORT; BRANCH CIRCUIT: 3/4" – 2#12 & #12G.
7. PROVIDE WEATHERPROOF J-BOX AND 3/4" RACEWAY WITH PULLWIRE BACK TO THE COOLER & FREEZER LOCATION. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
8. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.
9. CONNECT HEAT TRACE CABLE; CONNECT VIA LIGHTING CONTROL PANEL.
10. CONNECT WATER HEATER ELECTRONIC IGNITION AND BLOWER; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. CONNECT VIA LIGHTING CONTROL PANEL.
11. CONNECT ELECTRONIC PRIMER. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
12. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW, TEXAS

AREA 'A'

AREA 'B'

FUTURE PHASE II

KEYPLAN

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5.16.2019

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Architects-Planners
Interior Designers

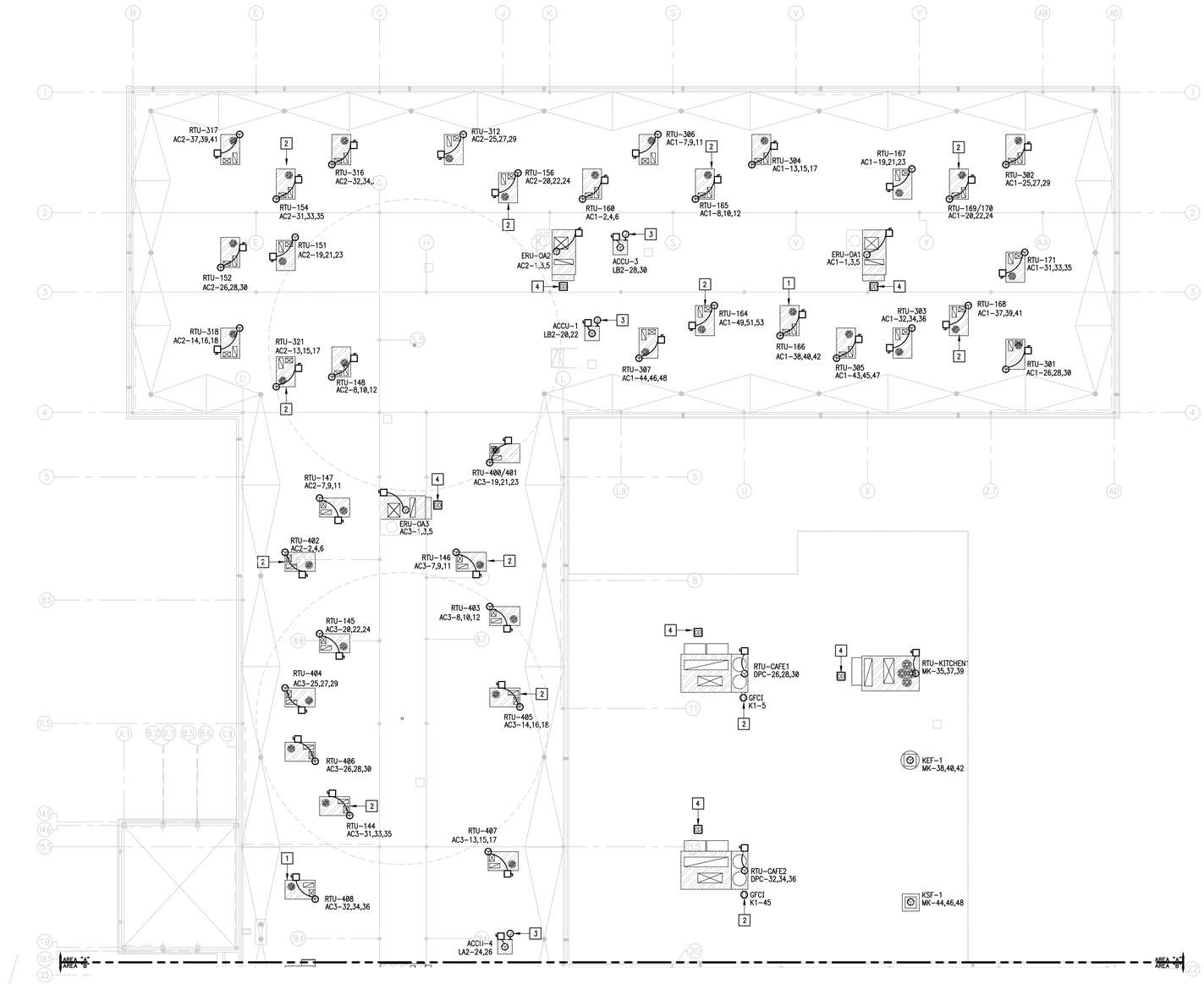
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E4.05

GENERAL NOTES:

1. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
2. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITING.
3. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
4. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
5. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

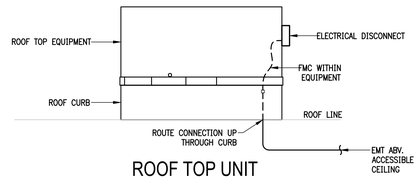
KEYED NOTES:

1. CONNECT ROOF TOP UNIT. ROUTE CONNECTION THROUGH ROOF CURB AND SECURE DISCONNECT TO EQUIPMENT. COORDINATE DISCONNECT LOCATION WITH HVAC CONTRACTOR TO ENSURE NOT TO OBSTRUCT ACCESSIBLE PANELS – TYPICAL.
2. CONNECT INTEGRAL GFCI RECEPTACLE TO NEAREST 120V NON-GFCI CIRCUIT.
3. PROVIDE WEATHERPROOF J-BOX ON ROOF AND 3/4" RACEWAY WITH PULLWIRE BACK TO THE ROOF FLASHING ROOF PENETRATION AND CONTINUE TO THE FCU LOCATION – TYPICAL
4. PROVIDE ABOVE CEILING/BELOW ROOF – TYPICAL.

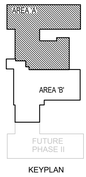


01 ELECTRICAL ROOF PLAN
SCALE: 3/32" = 1'-0"

NORTH



02 ROOF TOP UNIT CONNECTION DETAIL
SCALE : NOT TO SCALE



KEYPLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS



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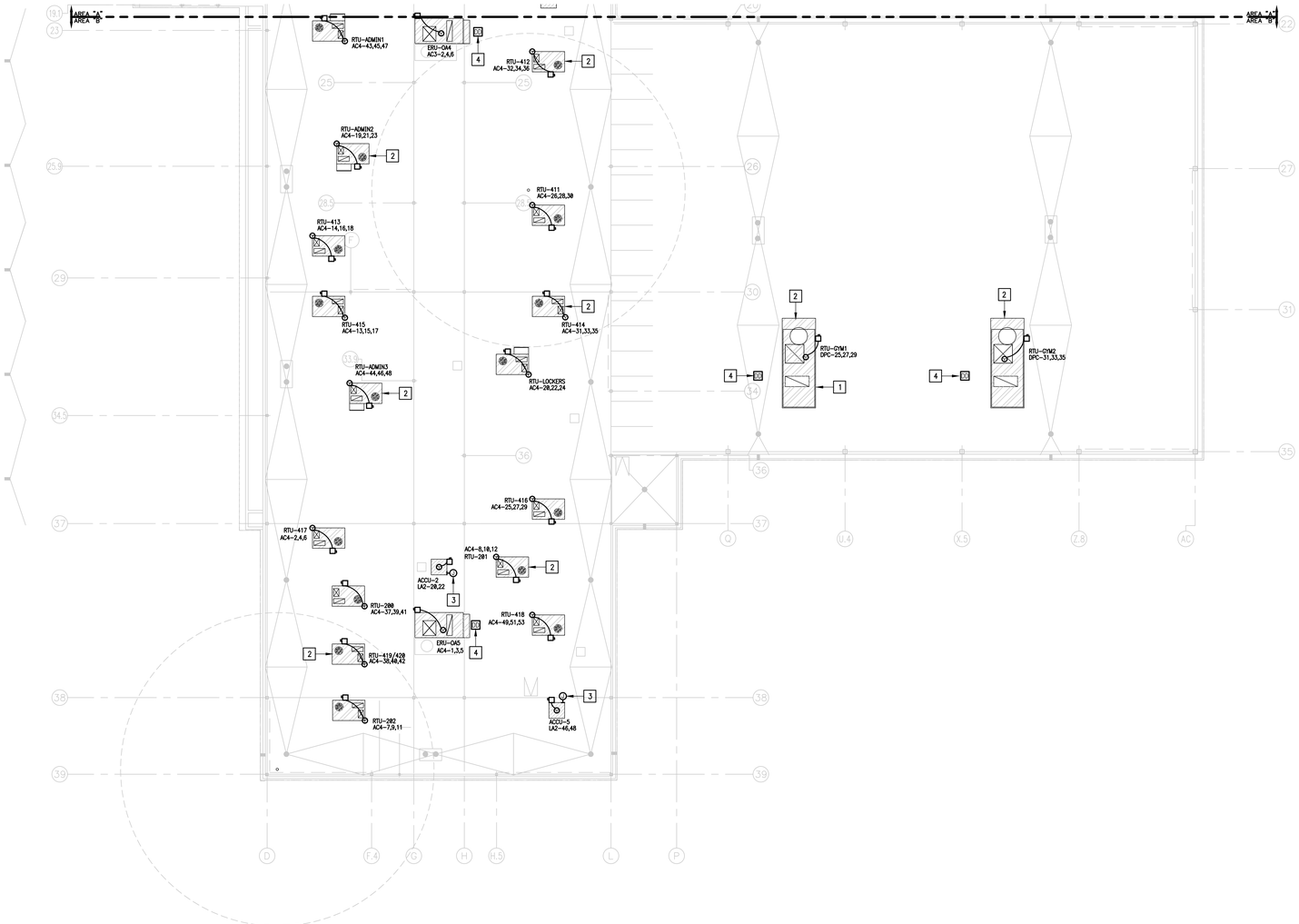
Architects-Planners
Interior Designers

Date:	May. 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No:	IDEA Palmview Phase I
Sheet:	E5.01



01 ELECTRICAL ROOF PLAN
SCALE: 3/32" = 1'- 0"

NORTH

GENERAL NOTES:

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KEYED NOTES:

1. CONNECT ROOF TOP UNIT. ROUTE CONNECTION THROUGH ROOF CURB AND SECURE DISCONNECT TO EQUIPMENT. COORDINATE DISCONNECT LOCATION WITH HVAC CONTRACTOR TO ENSURE NOT TO OBSTRUCT ACCESSIBLE PANELS – TYPICAL.
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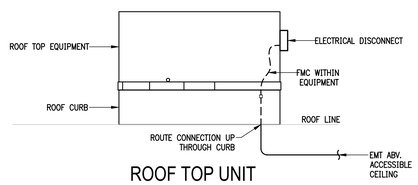
4. PROVIDE ABOVE CEILING/BELOW ROOF – TYPICAL.



ROOF TOP UNIT CONNECTION DETAIL
02 SCALE : NOT TO SCALE

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IDEA PUBLIC SCHOOLS PHASE 1
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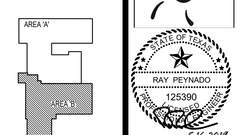
PALMVIEW, TEXAS
IDEA Public Schools



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Architects-Planners
Interior Designers

Date:	May. 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E5.02

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	HP/KW	FLA	MCA	MOCP	VOLTAGE	DISCONNECT	BRANCH CIRCUIT
RTU-166,167,171,301,303,305,152,154,156,165,306,312, 317,147,148,151,318,321,400/401,402,144,145,403, 404,405,406,407,202,415,417,LOCKERS.	–	–	15	15	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R.	1/2" – 3#12 & #12G
RTU-169/170,168,160,316,146,164,307,411,412,200,201, 414,418.	–	–	26	30	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R.	3/4" – 3#10 & #10G
RTU-302,304,408,413,416,419/420.	–	–	27	30	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R.	3/4" – 3#10 & #10G
RTU-ADMIN1,ADMIN2,ADMIN3	–	–	28	30	480V/3PHASE	30A, 3PNF, 600V, NEMA 3R.	3/4" – 3#10 & #10G
RTU-CAFE1,CAFE2,KITCHEN	–	–	74	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1" – 3#4 & #8G
RTU-GYM1,GYM2	–	–	87.4	100	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1.25" – 3#3 & #8G
ERU-OA1	–	–	37.1	45	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
ERU-OA2	–	–	37.1	45	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
ERU-OA3	–	–	37.1	45	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
ERU-OA4	–	–	37.1	45	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
ERU-OA5	–	–	37.1	45	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
FCU-1	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-1	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-2	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-2	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-3	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-3	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-4	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-4	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-5	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-5	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
EWH-1	24 KW	28.9	–	40	480V/3PHASE	60A, 3PNF, 600V, NEMA 1.	3/4" – 3#8 & #10G
EWH-2	54 KW	64.9	–	90	480V/3PHASE	100A, 3PNF, 600V, NEMA 1.	1.25" – 3#3 & #8G
CP-1	1/12 HP	–	–	20	120V/1PHASE	(3) THERMAL SWITCH.	1/2" – 2#12 & #12G
TELESCOPIC BLEACHER	2-1/2 HP	5.4	–	20	208V/3PHASE	30A, 3PNF, 240V, S/N, NEMA 1.	1/2" – 4#12 & #12G
SUMP PUMP	1/3HP	7.2	–	20	120V/1PHASE	(3) THERMAL SWITCH.	1/2" – 2#12 & #12G
ELEVATOR	30 HP	41.0	50	100	480V/3PHASE	(2) BUSSMANN POWER MODULE SWITCH.	1.25" – 4#3 & #3G
BOOSTER PUMP	5 HP	16.7	–	45	208V/3PHASE	INTEGRAL DISCONNECT	1" – 3#8 & #10G
ALTERNATE #2							
BP-1 (BOOSTER PUMP)	3 HP	9.6	–	30	480V/3PHASE	30A, 3PNF, 600V, NEMA 1.	3/4" – 3#10 & #10G

(1) MEANS OF DISCONNECT IS THE CIRCUIT BREAKER (WITHIN SIGHT).

(2) BUSSMAN: PS1, RATED FOR 100A, SHUNT TRIP, CONTROL POWER TRANSFORMER, FIRE SAFETY INTERFACE, KEY TO TEST SWITCH, PILOT LIGHT, MECHANICAL INTERLOCK AUXILIARY CONTACT, PHASE FAILURE/UNDER VOLTAGE RELAY, NEMA 1 ENCLOSURE.

(3) EATON MANUAL STARTER "MS" SERIES.

NOTE: LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL ON EQUIPMENT, BELOW DUCTWORK OR PLUMBING LINES.

EXHAUST FAN CONNECTION SCHEDULE:

DESIGNATION	HP/WATTS	FLA	VOLTAGE	CONNECTION FOR EACH	BRANCH CIRCUIT
EF-1	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-2	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-3	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-4	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-5	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-6	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-7	54.5 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-8	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-9	54.5 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-10	75.0 W	0.7	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-11	195 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF-12	75.0 W	0.7	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-13	195 W	1.8	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF-14	75.0 W	0.7	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-15	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-16	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-17	54.5 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF-18	54.5 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G

LUMINAIRE SCHEDULE

CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTES	LUMENS
A2	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 WILLIAMS: LT24 L40 AF DIM UNV	34	277V 1P 2W		4032
A2E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 EL14L WILLIAMS: LT24 L40 AF DIM UNV EM/10W	34	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4032
A3	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L EZ1 LP840 WILLIAMS: LT24 L52 AF DIM UNV	45	277V 1P 2W		5234
A3E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L EZ1 LP840 EL14L WILLIAMS: LT24 L52 AF DIM UNV EM/10W	45	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5234
B2	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 WILLIAMS: LT24 L40 AF DIM UNV	34	277V 1P 2W	PROVIDE LAMPS CENTER MOUNTED.	4032
B2E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 EL14L WILLIAMS: LT24 L40 AF DIM UNV EM/10W	34	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4032
C1	LED	6" LENSED DOWN LIGHT	0-10V	CEILING	LITHONIA: LDN6 40/05 L06AR MVOLT WILLIAMS: 6CR-TL-L10 8 40K DIM UNV	12	120V 1P 2W 277V 1P 2W		662
D2	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL 40L EZ1 LP840 LSI: WNA10 LED SS NW UE	32	277V 1P 2W		3994
D2E	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL4 40L EZ1 EL14L LP840 LSI: WNA10 LED SS NW UE EM	32	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	3994
E1	INC.	EMERGENCY LIGHTING UNIT		WALL	LITHONIA: IND12100 W H5012S SEL ELA WG2M MULE: WLPCL-BU	20	277V 1P 2W	PROVIDE WITH A WIREGUARD, SELF-DIAGNOSTICS, LOAD DISCONNECT, & TIME DELAY.	2950
F2E	LED	4' WRAPAROUND	0-10V	SURFACE	KENALL: MLHA8 4B F MW PP 45L40K DV LEL LUMINAIRE LED: VPF84-50W-4000K-120-277-CP-GRY-DIM-EMB310ST	45	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5072
F3	LED	24" X 48" SEALED LAY-IN TROFFER	0-10V	RECESSED	LITHONIA: 2GTL F4 48L FN PCL12187 SWL EZ1 ABC LP840 LSI: 2T GA24 LED SS NW UE TG PC187	47	277V 1P 2W	PROVIDE WITH .187" POLYCARBONATE DIFFUSER AND WITH AN ALUMINUM DOOR & ADDITIONAL GASKETING.	2950
F3E	LED	24" X 48" SEALED LAY-IN TROFFER	0-10V	RECESSED	LITHONIA: 2GTL F4 48L FN PCL12187 SWL EZ1 EL14L ABC LP840 LSI: 2T GA24 LED SS NW UE TG EM PC187	47	277V 1P 2W	PROVIDE WITH .187" POLYCARBONATE DIFFUSER AND WITH AN ALUMINUM DOOR & ADDITIONAL GASKETING.	2950
G2	LED	2'X4' FLANGED TROFFER	0-10V	RECESSED	LITHONIA: 2GLT F 4 40L GZ1 LP840 LSI: GA24 LED SS NW UE FK24	39	277V 1P 2W		4290
G2E	LED	2'X4' FLANGED TROFFER	0-10V	RECESSED	LITHONIA: 2GLT F 4 40L GZ1 LP840 EL14L LSI: GA24 LED SS NW UE EM FK24	39	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4290
H3	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LM SEF PFL GND MVOLT OZ10 40K 80CRI DWH LSI: CHB LED 18L DA UNV DIM 40	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS.	14218
H3E	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LM SEF PFL GND MVOLT OZ10 40K 80CRI PS10250 DWH LSI: CHB LED 18L DA UNV DIM 40 EM10	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS.	14218
H4	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LM SEF PFL GND MVOLT OZ10 40K 80CRI DWH WGIBG24 LSI: CHB LED 18L DA UNV DIM 40 WG	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	14218
H6	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 24000LM SEF PFL GND MVOLT OZ10 40K 80CRI DWH WGIBG24 LSI: CHB LED 24L DA UNV DIM 40 WG	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	23643
J2E	LED	8' LINEAR	0-10V	RECESSED	FINELITE: HP4R-H-80-40-F-277V-SC-VF LUX: EOS 4.0R G 750 840K 80 1 UNV S1 EB	56	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5808
K1	(2) XENON	EMERGENCY LIGHTING UNIT		WALL	LITHONIA: AFN _ X PREM MULE LIGHTING: MAKO-3 X SD	2	277V 1P 2W	PROVIDE WITH A NI-CAD BATTERY PACK & SELF DIAGNOSTICS. STANDARD FINISH TO BE SELECTED AT A LATER DATE.	0
L2	LED	WALL BRACKET	0-10V	WALL	LITHONIA, WL4 40L MVOLT SLD LP840 LSI: W44 4 HO NW UE	40	277V 1P 2W		2950
L2E	LED	WALL BRACKET	0-10V	WALL	LITHONIA, WL4 40L MVOLT SLD LP840 EL14L LSI: W44 4 HO NW UE EM	40	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	2950
M	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT X RAYON: T650LED DL 30 UN112 40 WT	22	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS.	2655
ME	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT ELCW X RAYON: T650LED DL 30 UN112 40 WT EM	22	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	2655
N	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 2 10A700/40K SR4 MVOLT X RAYON: T650LED DL 45 UN112 40 WT MTO	45	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	3404
P2	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LITHONIA: DSX1 LED 60C 1000 40K T3M 480V LSI: MRM LED 24L SIL 3 UNV DIM 40 70CRI XX	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	21909
P3	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LITHONIA: DSX1 LED 60C 1000 40K T5W 480V LSI: MRM LED 24L SIL 5 UNV DIM 40 70CRI XX	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	22977
P4	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LITHONIA: DSX1 LED 60C 1000 40K TFTM 480V	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	21875
P5	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	(2) LITHONIA: DSX1 LED 60C 1000 40K T5W 480V LSI: MRM LED 24L SIL 5 UNV DIM 40 70CRI XX	418	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	45954
Q	LED	DECORATIVE PENDANT	0-10V	PENDANT	LUMETTA:P5542-F7-D65MT/D24WASHI-L413-277V-CXX3 CHAM Custom 5542	55	277V 1P 2W		4260
R	LED	4" LINEAR LUMINAIRE	0-10V	RECESSED	FINELITE: HP-4 R-4'-B-840-F-MVOLT-SC-VF LUX: EOS 4.0R G 350 840K 80 1 UNV S1 EB	19	120V 1P 2W		1916
S	LED	SURFACE CORNER MOUNT	DRIVER	SURFACE	KENALL: MLHA8-48-R-LG-PP-45L40K-DCC-277-CMB LUNIMAIRE: VPF44 50W 4000K DIM 120-277 CP X	45	277V 1P 2W	PROVIDE CORNER MOUNT BRACKET.	5072
T	LED	8' LINEAR LUMINAIRE	0-10V	RECESSED	FINELITE: HP-4 R-8'-S-840-F-277-SC-VF LUX: EOS 4.0R G 500 840K 80 1 UNV S1 EB	28.8	277V 1P 2W		1525
X1	LED	SINGLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR1-UWW MULE LIGHTING: WLCX-1-R-W-U-SD	3	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0
X2	LED	DOUBLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR2-UWW MULE LIGHTING: WLCX-2-R-W-U-SD	5	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0

GENERAL NOTES:
1. LIGHT FIXTURE EQUALS MANUFACTURED BY COLUMBIA AND METALUX ARE ACCEPTABLE, PROVIDED THEY MEET OR EXCEED SPECIFICATIONS.
2. EXTRA MATERIALS: SEE SPECIFCATIONS.
3. EMERGENCY BATTERY PACKS SHALL BE COMPLETE FACTORY INSTALLED WITH NI-CAD BATTERY, CHARGER INDICATING LIGHT, ELECTRONIC CIRCUITRY, 1400 LUMENS OUTPUT, 90 MINUTES DURATION & FIVE FULL YEARS WARRANTY.
4. FURNISH ALL 2' X 4' LAY-IN LIGHT FIXTURES WITH INTEGRAL CEILING CLIPS.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools

STATE OF TEXAS
RAY PEYNADO
125390
REGISTERED
ENGINEER
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
Sheet: E6.01

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01 TYPE A2,A2E, A3, A3E & F3
SCALE : NOT TO SCALE



02 TYPE C1
SCALE : NOT TO SCALE



03 TYPE D2, D2E
SCALE : NOT TO SCALE



04 TYPE E1
SCALE : NOT TO SCALE



05 TYPE F2E
SCALE : NOT TO SCALE



06 TYPE FP
SCALE : NOT TO SCALE



07 TYPE H3, H3E, H4, H6
SCALE : NOT TO SCALE



08 TYPE G2 & G2E
SCALE : NOT TO SCALE



09 TYPE J2E
SCALE : NOT TO SCALE



10 TYPE K1
SCALE : NOT TO SCALE



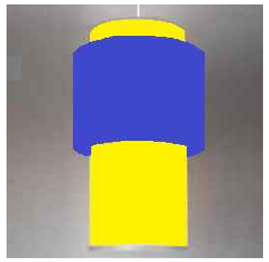
11 TYPE L2, L2E
SCALE : NOT TO SCALE



12 TYPE M, ME, N
SCALE : NOT TO SCALE



13 TYPE P1, P2, P3, P4, & P5
SCALE : NOT TO SCALE



14 TYPE Q
SCALE : NOT TO SCALE



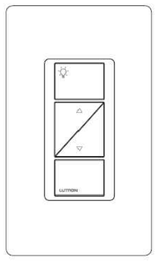
15 TYPE R & T
SCALE : NOT TO SCALE



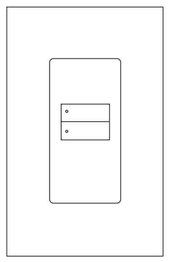
16 TYPE S
SCALE : NOT TO SCALE



17 TYPE X1, X2
SCALE : NOT TO SCALE



18 LUTRON PX-2BRL
DIMMING WALLSTATION
SCALE : NOT TO SCALE



19 LUTRON QSWS2-2BI
WALLSTATION
SCALE : NOT TO SCALE



20 ACUITY CH1
DIGITAL SWITCH
SCALE : NOT TO SCALE



21 LUTRON QSWS2-2BRLI
WALLSTATION
SCALE : NOT TO SCALE



22 LUTRON QSWS2-5BRLI
WALLSTATION
SCALE : NOT TO SCALE



23 LUTRON QSWS2-KISI3MOC
KEYED WALLSTATION
SCALE : NOT TO SCALE



24 LUTRON SENSOR
SCALE : NOT TO SCALE

No.	REVISIONS	BY

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Architects-Planners
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Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: E6.02

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Wiring Legend:

△Q — DEVICES IN THE SAME DOTTED-LINE BOX ARE TO BE CONNECTED ON THE SAME QS CONTROL LINK. CONSULT THE ONE-LINE DIAGRAM FOR DETAILED DEVICE WIRING ORDER AND TOPOLOGY.

QS WIRING AS REQUIRED BY CONTROL LINK LENGTH
(REFER TO QS SMART PANEL POWER SUPPLY WIRING GUIDE FOR SHADE WIRING NOTES):

TOTAL CONTROL LINK LENGTH	WIRE GAUGE	AVAILABLE FROM LUTRON IN ONE CABLE:
LESS THAN 500ft (152.4 m)	POWER (TERMINALS 1&2): 1 PAIR 18 AWG (1.0 mm²)	GRX-CBL-346S (NON-PLENUM) OR GRX-PCBL-346S (PLENUM)
	DATA (TERMINALS 3&4): 1 PAIR 22 AWG (0.5 mm²), TWISTED AND SHIELDED*	
500ft (152.4 m) TO 2,000ft (610 m)**	POWER (TERMINALS 1&2): 1 PAIR 12 AWG (4.0 mm²)	GRX-CBL-46L (NON-PLENUM) OR GRX-PCBL-46L (PLENUM)
	DATA (TERMINALS 3&4): 1 PAIR 22 AWG (0.5 mm²), TWISTED AND SHIELDED*	

*ALTERNATE DATA-ONLY CABLE: USE APPROVED DATA LINK CABLE (22 AWG [0.5 mm²] TWISTED/SHIELDED) FROM BELDEN (MODEL # 9461).

**TOTAL LENGTH OF THE QS LINK MUST NOT EXCEED 2,000 ft (600 m).

- **INPUT POWER (NORMAL-EMERGENCY)**
- **INPUT POWER (NORMAL)**
- **2 #12AWG (4 mm²)**
- **3 #12AWG (4 mm²)**
- **0-10V SIGNAL: 2 #18AWG (1.0 mm²)**
- **CAT5E OR BETTER CABLE FOR LUTRON NETWORK TERMINATED WITH RJ45 CONNECTORS (TO BE PROVIDED BY OTHERS). 328 ft (100 m) MAXIMUM RUN.**
- **1-WAY RF COMMUNICATION**
- **2-WAY RF COMMUNICATION**
- **2 #18AWG (1.0 mm²)**
- **3 #18AWG (1.0 mm²)**
- **LUTRON SENSOR CABLE C-CBL-522S OTHERWISE USE 3 #22 AWG (1.0 mm²)**
- **LUTRON SENSOR CABLE C-CBL-522S OTHERWISE USE 4 #22 AWG (1.0 mm²)**

Wiring Notes:

QS LINK RULES

THE FOLLOWING LINK RULES MUST BE OBSERVED FOR PROPER OPERATION:

- THIS IS A TOPOLOGY-FREE LINK (T-TAP, HOME-RUN, ETC. IS OK); REFER TO TABLE BELOW FOR WIRE RUN LIMITS.
- IF WIRED DIFFERENTLY THAN WHAT IS SHOWN, POWER DRAW UNIT REQUIREMENTS NEED TO BE CONFIRMED; SEE POWER DRAW UNITS (PDUs) SPECIFICATION SHEET INCLUDED IN THIS SUBMITTAL.
- MAXIMUM OF 512 OUTPUTS (BALLASTS, SHADES, CONTACT CLOSURES, ETC).
- MAXIMUM OF 100 OCCUPANCY SENSORS, 100 DAYLIGHT SENSORS/RADIO SHADOW SENSORS AND 100 KEYPADS.
- MAXIMUM OF 100 QS DEVICES (SUCH AS A GRAFIK EYE® QS, SEETOUCH® QS KEYPAD, SMART PANEL POWER SUPPLY [QSPS-Px-10-60], ESN, OR SIVOIA® QS SHADE / DRAPERY DRIVE UNIT). QUANTUM PROCESSOR COUNTS AS 1 DEVICE PER LINK.
- MAXIMUM OF 100 ZONES - SUCH AS A SIVOIA QS SHADE / DRAPERY DRIVE UNIT, OR A LIGHTING ZONE ON A GRAFIK EYE QS (DOES NOT APPLY TO QUANTUM SYSTEMS).
- THE 10 OUTPUTS ON A QSPS-Px-10-60 CANNOT EXCEED A COMBINED LENGTH OF 2,000 ft (600 m).

CONCEPT DRAWING NOTES:
CONTROL SYSTEM DRAWING IS PROVIDED FOR CONCEPTUAL PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION. EXACT EQUIPMENT REQUIREMENTS, INCLUDING LOCATIONS AND QUANTITIES, SHOULD BE VERIFIED IN ACCORDANCE WITH THE MOST UP-TO-DATE LIGHTING/ELECTRICAL REFLECTED CEILING PLANS, LIGHTING FIXTURE SCHEDULES, PANEL SCHEDULES, CONTROL INTENT AND SPECIFICATIONS. SHADE EQUIPMENT SHOULD BE VERIFIED IN ACCORDANCE WITH ARCHITECTURAL PLANS, SPECIFICATIONS AND WINDOW SCHEDULES/DETAILS.

LED DIMMING REQUIRES AN EXACT MATCH BETWEEN THE LED ARRAY, DRIVER AND CONTROL. LUTRON CANNOT GUARANTEE COMPATIBILITY OR PERFORMANCE WITHOUT TESTING THIS COMBINATION.

TO CONFIRM WHAT PRODUCTS LUTRON HAS AVAILABLE OR WHAT INTERFACES MAY BE REQUIRED, CALL 1-877-DIM-LED8 OR CHECK LUTRON'S PRODUCT COMPATIBILITY MATRIX ON-LINE AT WWW.LUTRON.COM/LED.

TO REQUEST THE TESTING OF AN LED PRODUCT BY LUTRON MANUFACTURERS CAN FILL OUT AN LED EVALUATION REQUEST FORM ON-LINE AT WWW.LUTRON.COM/LED OR CONTACT LEDS@LUTRON.COM.

LUTRON CAN GUARANTEE COMPATIBILITY AND PERFORMANCE OF LUTRON HI-LUME LED DRIVERS USED WITH APPROPRIATE LUTRON CONTROLS. PLEASE REFER TO THE SPECIFICATION SUBMITTAL SHEET FOR FURTHER INFORMATION.

IF USING UNTESTED, NON-LUTRON LED DRIVERS REQUIRING 0-10V CONTROL, PERFORMANCE AND COMPATIBILITY CANNOT BE GUARANTEED BY LUTRON. PRODUCTS FOLLOWING THE IEC STANDARD 60929 ARE MORE LIKELY TO PROVIDE ACCEPTABLE PERFORMANCE RESULTS. DETERMINATION OF RESULT ACCEPTABILITY IS UP TO THE USER'S DISCRETION.

IF USING UNTESTED, NON-LUTRON LED DRIVERS REQUIRING PHASE CONTROL, PERFORMANCE AND COMPATIBILITY CANNOT BE GUARANTEED BY LUTRON. HI-LUME OR ELV PRODUCTS PROVIDING HIGH END AND LOW END TRIM ADJUSTMENTS ARE MORE LIKELY TO PROVIDE ACCEPTABLE PERFORMANCE RESULTS. DETERMINATION OF RESULT ACCEPTABILITY IS UP TO THE USER'S DISCRETION.

DYNAMIC RISER DIAGRAM

GENERAL NOTES

1. REFER TO SUBMITTAL SYSTEM LAYOUT REPORT AND ONE-LINE (IF AVAILABLE) FOR DEVICE WIRING INFORMATION AND DETAILS.
2. REFER TO SUBMITTAL PANEL AND FIXTURE SCHEDULES FOR ADDITIONAL LOAD INFORMATION.
3. REFER TO SUBMITTAL SYSTEM LAYOUT OR LOOP SCHEDULE REPORTS FOR MORE INFORMATION ABOUT FIXTURES ON THE DIGITAL LOOP.

LUTRON SERVICES

QTY	SERVICE TITLE (MODEL NUMBER)	SERVICE DESCRIPTION
		THE QUANTITY OF SERVICES BELOW ARE TO BE INCLUDED AS PART OF THIS PROJECT'S SCOPE OF WORK AND SPECIFIED INTO THE WRITTEN SPEC DOCUMENTS
		PRE-STARTUP SERVICES
	ONSITE PRE-WIRE VISIT (LSC-PREWIRE)	AN ONSITE VISIT WITH THE ELECTRICAL CONTRACTOR TO DISCUSS LOGISTICAL CONSTRUCTION CONSIDERATIONS INCLUDING THE WIRING AND MOUNTING OF SYSTEM DEVICES, THE CONSTRUCTION SCHEDULE, AND LUTRON DOCUMENTATION. QUANTITY DICTATES THE NUMBER OF VISITS PURCHASED.
	SYSTEM & NETWORK INTEGRATION CONSULTATION (LSC-INT-VISIT)	A CONSULTATIVE VISIT WITH THIRD PARTY INTEGRATORS TO CONFIRM THE SPECIFIED SEQUENCE OF OPERATION AND DISCUSS INTEGRATION PROCEDURES NEEDED IN ORDER TO INTEGRATE WITH THE LUTRON EQUIPMENT. THIS MAY INCLUDE ANY OF THE FOLLOWING THIRD PARTY SYSTEMS: BMS, BAS, IT, NON-LUTRON SHADES, BACNET, AV, OR ENERGY DASHBOARDS.
	SENSOR LAYOUT & TUNING (LSC-SENS-LT)	LUTRON WILL TAKE RESPONSIBILITY FOR LUTRON-PROVIDED SENSOR PLACEMENT AND PERFORMANCE BY CREATING SENSOR LAYOUTS AND COORDINATING SENSOR PLACEMENT BEFORE AND AFTER INSTALLATION. ONCE THE BUILDING IS OCCUPIED, LUTRON WILL RETURN UP TO TWO TIMES TO PERFORM SENSOR FINE-TUNING.
		STARTUP SUPPORT SERVICES (THESE SERVICES ARE ADDITIONAL TO YOUR SPECIFIED STARTUP BASED ON YOUR REQUIREMENTS)
	AFTER HOURS STARTUP (LSC-AH-SU)	STARTUP PROVIDED BETWEEN THE HOURS OF 5:00PM – 7:00AM, MONDAY - FRIDAY. THIS SCOPE OF WORK DOES NOT INCLUDE HOLIDAY OR WEEKEND WORK. ADDITIONAL FEES MAY APPLY FOR WORK TO BE COMPLETED ON WEEKENDS (FRIDAY 5:00PM – MONDAY 7:00AM).
	ONSITE SCENE & LEVEL TUNING (LSC-AF-VISIT)	AN ONSITE VISIT WITH THE SPECIFIER OR CUSTOMER REPRESENTATIVE TO REVIEW THE DESIGN INTENT, FINE-TUNE THE SCENE LEVEL PROGRAMMING, AND MAKE ADJUSTMENTS TO TIMECLOCKS.
	ONSITE PERFORMANCE-VERIFICATION WALKTHROUGH (LSC-WALK)	AN ONSITE WALKTHROUGH WITH FACILITY REPRESENTATIVES OR PROJECT COMMISSIONING AGENTS TO DEMONSTRATE THAT THE SYSTEM FUNCTIONALITY MEETS THE DESIGN INTENT. THIS MAY INCLUDE ANY OF THE FOLLOWING ONSITE ACTIVITIES – CONSULTATION/TRAINING DEMOS, FUNCTIONAL TESTING ASSISTANCE, OR INVENTORY OF LUTRON EQUIPMENT.
	SYSTEM PERFORMANCE-VERIFICATION DOCUMENTATION (LSC-SPV-DOC)	COMPLETION OF DOCUMENTATION WHICH PROVIDES PERFORMANCE VERIFICATION CERTIFYING THE LUTRON EQUIPMENT HAS BEEN THOROUGHLY TESTED. IT SUPPORTS THE DOCUMENTATION REQUIREMENTS OF MANY BUILDING STANDARDS.
	TITLE 24 ACCEPTANCE TEST VISIT (LSC-SPV-DOC-T24)	ACCEPTANCE TESTING BY A LUTRON CERTIFIED LIGHTING CONTROL ACCEPTANCE TEST TECHNICIAN (CLCATT) TO FULFILL THE REQUIRED TITLE 24 INTERIOR LIGHTING CONTROL TESTS.
		POST-STARTUP SERVICES
	CUSTOMER-SITE SOLUTION TRAINING (LSC-TRAINING-SP)	A VISIT TO TEACH SYSTEM USERS HOW TO OPERATE AND MAINTAIN THE LIGHTING CONTROL SYSTEM.
	SYSTEM OPTIMIZATION (LSC-SYSOPT-SP)	AN ONSITE CONSULTATIVE VISIT TO IDENTIFY AND IMPLEMENT LIGHTING CONTROL ADJUSTMENTS TO SAVE ADDITIONAL ENERGY AND CREATE A MORE PRODUCTIVE WORK ENVIRONMENT.
		MAINTENANCE & SUPPORT SERVICES
1	COMMERCIAL SYSTEMS 2-YEAR LIMITED WARRANTY (LSC-B2)	A 2-YEAR SYSTEM WARRANTY PROVIDING 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A FIRST-AVAILABLE RESPONSE TIME.
	ENHANCED SILVER (LSC-E8S)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A FIRST-AVAILABLE RESPONSE TIME; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	ENHANCED GOLD (LSC-E8G)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A 72-HOUR RESPONSE TIME AND AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	ENHANCED PLATINUM (LSC-E8P)	YEARS 1-2 - 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR COVERAGE WITH A 24-HOUR RESPONSE TIME AND AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT; YEARS 3-5 - 50% PARTS ONLY COVERAGE; YEARS 6-8 - 25% PARTS ONLY COVERAGE.
	SILVER TECHNOLOGY SUPPORT PLAN (LSC-SILV-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR WITH A FIRST-AVAILABLE ONSITE OR REMOTE RESPONSE TIME.
	GOLD TECHNOLOGY SUPPORT PLAN (LSC-GOLD-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON LABOR WITH A 72-HOUR ONSITE OR REMOTE RESPONSE TIME. ALSO INCLUDES AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT EACH YEAR.
	PLATINUM TECHNOLOGY SUPPORT PLAN (LSC-PLAT-IW)	AN ANNUAL SERVICE PLAN THAT COVERS 100% REPLACEMENT PARTS AND 100% LUTRON DIAGNOSTIC LABOR WITH A 24-HOUR ONSITE OR REMOTE RESPONSE TIME. ALSO INCLUDES AN ANNUAL (1-DAY) SCHEDULED PREVENTIVE MAINTENANCE VISIT EACH YEAR.
	PREVENTIVE MAINTENANCE VISIT(S) (LSC-SCH-MAINT)	SCHEDULED MAINTENANCE VISIT TO PERFORM PREVENTIVE MAINTENANCE, MINOR PROGRAMMING, AND CONDUCT SYSTEM TRAININGS. QUANTITY IS IN ADDITION TO ANY YEARLY VISITS SPECIFIED WITH AN ENHANCED WARRANTY OR TECHNOLOGY SUPPORT PLAN.
		PLEASE GO TO WWW.LUTRON.COM/SERVICES FOR FURTHER INFORMATION.

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Interior Designers

Date:	May 16, 2019
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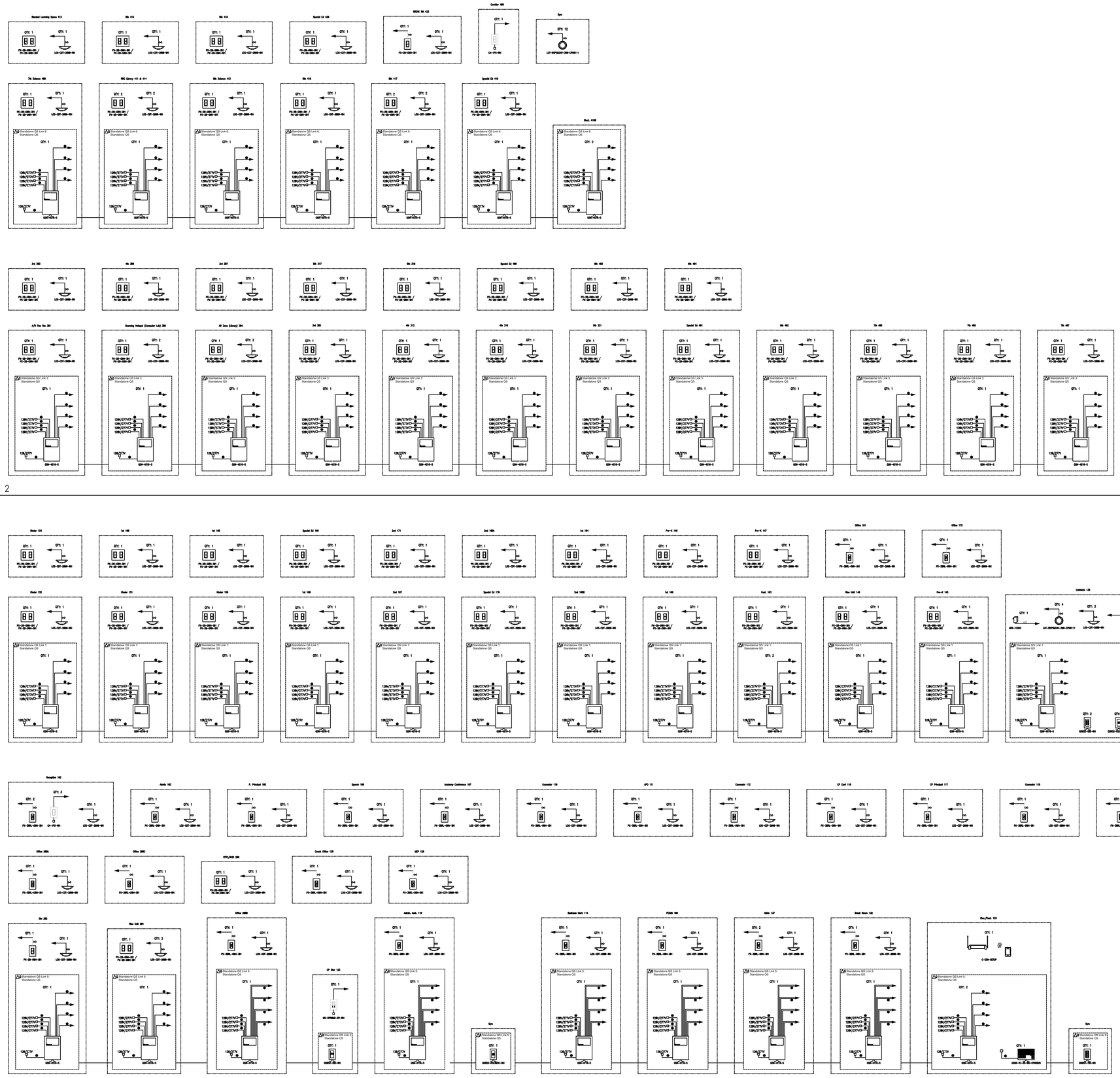
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E6.03



01 LUTRON ONE-LINE DIAGRAM
SCALE : NOT TO SCALE

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, TEXAS

RAY PEYNADO
125390
LICENSED
ARCHITECT
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E6.04

ethos engineering
119 W. VAN BUREN AVE. STE 101
HARLINGEN, TX
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TEXAS REGISTERED
ENGINEERING FIRM
F-15998

MSB

ROOM
MOUNTING FLOOR
FED FROM UTILITY
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

VOLTS 480Y/277V 3P 4W
BUS AMPS 2500
NEUTRAL 100%

AIC 100,000
MAIN BKR MLO
LUGS STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	800/3	PANEL DPC	182			2	300/3	PANEL HA	88.8		
3	|			183		4	|			87.1	
5	|				183	6	|				85.1
7	250/3	PANEL HB	50.7			8	1000/3	PANEL PDP	262		
9	|			56.4		10	|			262	
11	|				52.4	12	|				262
13	800/3	SPARE	0			14	400/3	SPARE	0		
15	|			0		16	|			0	
17	|				0	18	|				0
								TOTAL CONNECTED KVA BY PHASE	584	589	583

	CONN KVA	CALC KVA	
LIGHTING	42.8	53.4	(125%)
LARGEST MOTOR	33.3	41.6	(125%)
OTHER MOTORS	91.2	91.2	(100%)
RECEPTACLES	197	103	(50%>10)
KITCHEN EQUIP	204	133	(65%)

	CONN KVA	CALC KVA	
CONTINUOUS	50.7	63.3	(125%)
HEATING	1,040	1,040	(100%)
COOLING	163	0	(0%)
NONCONTINUOUS	95.7	95.7	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	1,760	1,620	
BALANCED 3-PHASE AMPS		1,950	

1. PROVIDE NEMA 3R (304 STAINLESS STEEL) ENCLOSURE.
2. PROVIDE MULTI-METERING PACKAGE.
3. PROVIDE SERVICE ENTRANCE RATED.
4. PROVIDE ALL BREAKERS 100% RATED.

*PROVIDE MULTI-METERING PACKAGE FOR TEMPORARY POWER.

FEEDER SCHEDULE - BASE BID:

FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
60	1" – 4#6, #10G & #10IG	CL1, HBL2
80	1.25" – 4#4, #8G & #8IG	CA1, HBL1
100	1.25" – 4#3 & #8G	LB1, LB2
100	1.25" – 4#3, #8G & #8IG	CA2
125	1.5" – 4#1 & #6G	LA2, LA3
150	2" – 4#1/0, #6G & #6IG	CB2
175	2" – 4#2/0 & #6G	LA1
200	2" – 4#3/0 & #6G	HA2, AC2
250	3" – 4#250KCMIL & #4G	HB, AC3
300	3" – 4#350KCMIL & #4G	AC1, HA
350	3" – 4#500KCMIL & #3G	AC4, MK
800	(2-RUNS) 4" – 4#600KCMIL & #1/0G	DPC
1000	(3-RUNS) 4" – 4#400KCMIL & #2/0G	PDP
2500	(6-RUNS) 4" – 4#600KCMIL	MSB

SIZING METHOD: COPPER 75°C

FEEDER SCHEDULE - ALT. BID #3:

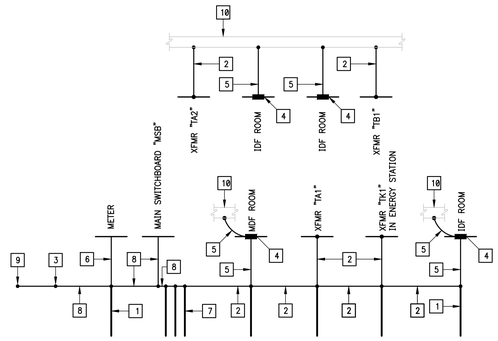
FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
60	1" – 4#4 #8G & #8IG	CL1, HBL2
80	1.5" – 4#2 #6G & #6IG	CA1, HBL1
100	1.5" – 4#1 & #6G	LB1, LB2
100	2" – 4#1, #6G & #6IG	CA2
125	2" – 4#2/0 & #4G	LA2, LA3
150	2.5" – 4#3/0 #4G & #4IG	CB2
175	2.5" – 4#4/0 & #4G	LA1
200	3" – 4#250KCMIL & #4G	HA2, AC2
250	3" – 4#350KCMIL & #2G	HB, AC3
300	3" – 4#500KCMIL & #2G	AC1, HA
350	(2-RUNS) 2.5" – 4#4/0 & #1G	AC4, MK
800	(3-RUNS) 3" – 4#400KCMIL & #3/0G	DPC
1000	(4-RUNS) 3" – 4#400KCMIL & #4/0G	PDP
2500	(8-RUNS) 4" – 4#600KCMIL	MSB

SIZING METHOD: ALUMINUM 75°C

TRANSFORMER SCHEDULE:

DESIGN	KVA	PV	SV	DEGREE RISE	CONNECTION	FREQ HZ	SERVES PANELS	CAT. NO.	PRIMARY FEEDER (75°C COPPER)
TA1	112.5	480	120/208	115	DELTA Y	60	LA1, LA3, CA1	POWER SMITHS: Esaver20M-112.5-480-208-HD-T115-F60	2" – 3#3/0 & #6G
TA2	75	480	120/208	115	DELTA Y	60	LA2, CA2, CL1	POWER SMITHS: Esaver20M-75-480-208-HD-T115-F60	2" – 3#1/0 & #6G
TB1	112.5	480	120/208	115	DELTA Y	60	LB1, LB2, CB2	POWER SMITHS: Esaver20M-112.5-480-208-HD-T115-F60	2" – 3#3/0 & #6G
*TK1	75	480	120/208	115	DELTA Y	60	K1	POWER SMITHS: ES-IPF466-75-E20M-480-208-BCMB	2" – 3#1/0 & #6G

* ENERGY STATION



02 GROUNDING RISER DIAGRAM
SCALE : NONE

GROUNDING RISER KEYED NOTES:

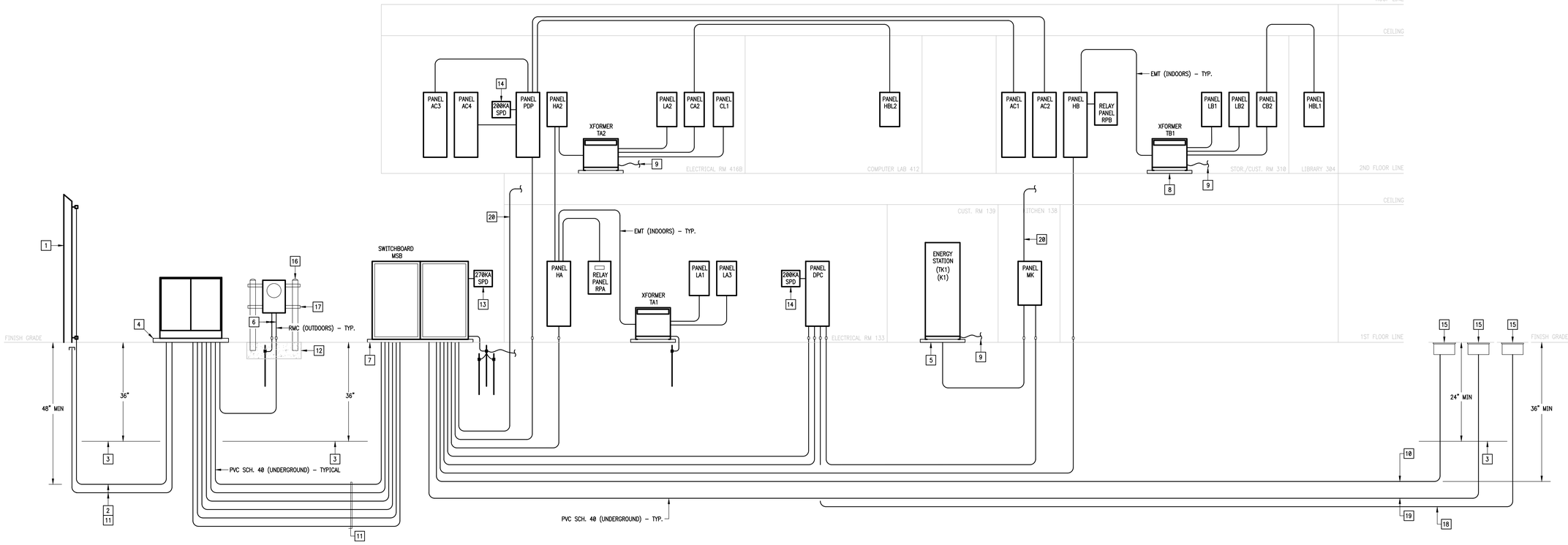
1. 3/4"X 10' COPPER CLAD GROUND RODS – TYPICAL.
2. #1/0 BARE COPPER GROUND ELECTRODE CONDUCTOR.
3. CADWELD CONNECT TO BUILDING REBAR STRUCTURE STEEL AND COPPER WATER LINE.
4. GROUNDING BUS BAR – TYPICAL.
5. #4 BARE COPPER GROUND CONDUCTOR.
6. #6 BARE COPPER GROUND CONDUCTOR.
7. INSTALL IN A TRIANGULAR PATTERN. MIN. 6' SPACING.
8. #500KCMIL BARE COPPER GROUND ELECTRODE CONDUCTOR.
9. CADWELD CONNECT TO REBAR AND STRUCTURE STEEL.
10. CADWELD TO BUILDING STRUCTURE STEEL.

RACEWAYS EMBEDDED IN FOUNDATION GENERAL NOTES:

RACEWAYS EMBEDED WITHIN THE SLAB SHALL COMPLY WITH THE FOLLOWING:
1. SHALL HAVE A MINIMUM SPACING OF 2".
2. SHALL NOT BE LARGER THAN 1".
3. SHALL NOT BE RUN THROUGH THE SURFACE AREA OF THE FOOTING.
4. SHALL NOT BE CROSSED OVER/UNDER EACH OTHER WITH THE SLAB.
5. SHALL NOT BE TIED TO THE REBAR.
6. SHALL BE A MINIMUM OF 1.5" AWAY FROM SLAB REBAR. IF SPACING CANNOT BE ACCOMPLISHED; IT SHALL BE PROVIDED BELOW GRADE.

ELECTRICAL RISER DIAGRAM KEYED NOTES:

1. ELECTRIC UTILITY DIP POLE.
2. PROVIDE (2)4" PVC CONDUITS. PROVIDE LONG SWEEP RADIUS ELBOWS.
3. PROVIDE CONTINUOUS DETECTABLE UNDERGROUND WARNING TAPE.
4. PROVIDE UTILITY TRANSFORMER CONCRETE PAD – SEE DETAIL.
5. PROVIDE STEP-DOWN TRANSFORMER AND 4" CONCRETE HOUSEKEEPING PAD.
6. PROVIDE 1-1/4" – #6.
7. PROVIDE SWITCHBOARD HOUSEKEEPING PAD – SEE STRUCTURAL DRAWINGS.
8. PROVIDE 4" HOUSEKEEPING CONCRETE PAD – TYPICAL.
9. SEE GROUNDING RISER DIAGRAM – TYPICAL.
10. PROVIDE (2)4" RACEWAYS WITH PULLWIRE FOR SPARES AND FUTURE BUILDING. STUB-OUT FROM MAIN SWITCHBOARD "MSB" AND TERMINATE AT PULLBOX. SEE SITE PLAN FOR TERMINATION POINTS.
11. PROVIDE 2" RED CONCRETE TOPPING.
12. 24" WIDE X 24" LONG X 24" DEEP (4" ABOVE GRADE) CONCRETE FOOTING WITH #4 REBAR WELDED ON TO 4" DIA. STEEL PIPE.
13. PROVIDE 270KA EXTERNALLY MOUNTED SPD ACT COMMUNICATIONS # ACT471-277Y-270-SEL-F-D-C1-SNM ***
14. PROVIDE 200KA EXTERNALLY MOUNTED SPD ACT COMMUNICATIONS # ACT471-120Y-200-F-C1-SNM ***
15. PROVIDE POLYMER CONCRETE PULLBOX – SEE SITE PLAN.
16. 4" DIA. X 6' (ABOVE GROUND) HOT DIP GALVD. STEEL PIPE WITH CAP.
17. 3-1/4" X 1-5/8", 12 GAUGE UNISTRUT, HOT DIP GALVD. AFTER FABRICATION.
18. PROVIDE 1-4" RACEWAY WITH PULLWIRE FOR SPARES AND FUTURE BUILDING. STUB-OUT FROM DISTRIBUTION PANEL "DPC" AND TERMINATE AT PULLBOX. SEE SITE PLAN FOR TERMINATION POINTS.
19. PROVIDE 1-4" RACEWAY WITH PULLWIRE FOR SPARES AND FUTURE BUILDING. STUB-OUT FROM MAIN SWITCHBOARD "MSB" AND TERMINATE AT PULLBOX. SEE SITE PLAN FOR TERMINATION POINTS.
20. PROVIDE 1-1/2" RACEWAY WITH PULLWIRE FOR BACNET COMMUNICATION. STUB UP ABOVE ACCESSIBLE CEILING SPACE.



01 ELECTRICAL RISER DIAGRAM
SCALE : NONE

No.	REVISIONS	BY

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PALMVIEW, TEXAS

STATE OF TEXAS
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125390
LICENSED PROFESSIONAL ENGINEER
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: E7.01

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HA

ROOM ELECTRICAL RM. 133 — VOLTS 480Y/277V 3P 4W — AIC 14,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR 300
FED FROM MSB — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	LIGHTING	1.43			2	20/1	LIGHTING	1.28		
3	20/1	|		0		4	20/1	LIGHTING		0.917	
5	20/1	LIGHTING			0.916	6	20/1	LIGHTING			0.959
7	20/1	LIGHTING	0.544			8	20/1	LIGHTING	0.959		
9	20/1	LIGHTING		0.681		10	20/1	LIGHTING		0.959	
11	20/1	LIGHTING			0.073	12	20/1	LIGHTING			0.959
13	20/1	LIGHTING	1.01			14	20/1	LIGHTING	0.959		
15	20/1	LIGHTING		0.215		16	20/1	LIGHTING		0.132	
17	20/1	LIGHTING			0.136	18	20/1	LIGHTING			0.333
19	100/3	ELEVATOR	11.1			20	20/2	LIGHTING	1.67		
21	|	|		11.1		22	|	|		1.67	
23	|	|			11.1	24	20/2	LIGHTING			0.836
25	200/3	PANEL HA2	26.3			26	|	|	0.836		
27	|	|		26.4		28	20/1	LIGHTING		0.036	
29	|	|			24.8	30	20/1	LIGHTING			1.04
31	20/1	SPACE	0			32	20/1	LIGHTING	1.22		
33	20/1	SPACE		0		34	20/1	SPARE		0	
35	20/1	SPACE			0	36	20/1	SPARE			0
37	200/3	*XFMR TA1 (112.5KVA)	41.5			38	20/1	SPARE	0		
39	|	|		45		40	20/1	SPARE		0	
41	|	|			43.9	42	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	88.8	87.1	85.1

	CONN KVA	CALC KVA	
LIGHTING	27.6	34.5	(125%)
LARGEST MOTOR	33.3	41.6	(125%)
OTHER MOTORS	36.1	36.1	(100%)
RECEPTACLES	120	65.1	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	26.3	32.9	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	17.7	17.7	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	261	228	
BALANCED 3-PHASE AMPS		274	

* PROVIDE ELECTRONIC TYPE WITH L.S.I. DIALS.

DPC

ROOM ELECTRICAL RM. 133 — VOLTS 480Y/277V 3P 4W — AIC 42,000
MOUNTING SURFACE — BUS AMPS 800 — MAIN BKR 800
FED FROM MSB — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	SPACE	0			2	20/1	SPACE	0		
3	20/1	SPACE		0		4	20/1	SPACE		0	
5	20/1	SPACE			0	6	20/1	SPACE			0
7	20/1	SPACE	0			8	20/1	SPACE	0		
9	20/1	SPACE		0		10	20/1	SPACE		0	
11	20/1	SPACE			0	12	20/1	SPACE			0
13	20/1	SPACE	0			14	20/1	SPACE	0		
15	20/1	SPACE		0		16	20/1	SPACE		0	
17	20/1	SPACE			0	18	20/1	SPACE			0
19	350/3	PANEL MK	106			20	20/1	SPACE	0		
21	|	|		107		22	20/1	SPACE		0	
23	|	|			107	24	20/1	SPACE			0
25	100/3	* RTU-GYM1	21.6			26	80/3	* RTU-CAFE1	16.3		
27	|	|		21.6		28	|	|		16.3	
29	|	|			21.6	30	|	|			16.3
31	100/3	* RTU-GYM2	21.6			32	80/3	* RTU-CAFE2	16.3		
33	|	|		21.6		34	|	|		16.3	
35	|	|			21.6	36	|	|			16.3
37	175/3	SPARE	0			38	20/1	SPARE	0		
39	|	|		0		40	20/1	SPARE		0	
41	|	|			0	42	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	182	183	183

	CONN KVA	CALC KVA	
LIGHTING	2.59	3.24	(125%)
LARGEST MOTOR	6.32	7.9	(125%)
OTHER MOTORS	1.88	1.88	(100%)
RECEPTACLES	7.32	7.32	(50%>10)
KITCHEN EQUIP	199	130	(65%)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	276	276	(100%)
COOLING	21.3	0	(0%)
NONCONTINUOUS	54	54	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	548	480	
BALANCED 3-PHASE AMPS		578	

1. PROVIDE WITH 100% RATED MAIN BREAKER.
2. PROVIDE TAYLOR PHASE GUARD PROTECTION TO PANEL "RTU" CIRCUIT BREAKER.

* PROVIDE SHUNT TRIP TYPE.

LA3

ROOM ELECTRICAL RM. 133 — VOLTS 208Y/120V 3P 4W — AIC 10,000
MOUNTING SURFACE — BUS AMPS 225 — MAIN BKR 125
FED FROM TA1 — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	RECEPT.	0.72			2	20/1	MOT. BACKBOARD	0.8		
3	20/1	RECEPT.		0.9		4	20/1	MOT. BACKBOARD		0.8	
5	20/1	SCOREBOARD			1.4	6	20/1	MOT. BACKBOARD			0.8
7	20/1	SCOREBOARD	1.4			8	20/1	MOT. BACKBOARD	0.8		
9	20/1	RECEPT.		1.08		10	20/1	MOT. BACKBOARD		0.8	
11	20/1	RECEPT.			0.9	12	20/1	MOT. BACKBOARD			0.8
13	20/1	MOT. SCREEN	0.1			14	20/1	REC ASST LISTENING	0.18		
15	20/1	MOT. SCREEN		0.1		16	20/1	RECEPT.		0.18	
17	20/1	RECEPT.			0.36	18	20/1	RECEPT.			0.18
19	20/1	DRINKING FOUNTAIN	0.8			20	20/1	DRINKING FOUNTAIN	0.8		
21	20/1	SPACE		0		22	20/1	HAND DRYER		1.5	
23	20/3	TELESCOPIC BLEACHER			0.305	24	20/1	HAND DRYER			1.5
25	|	|	0.305			26	20/1	HAND DRYER	1.5		
27	|	|		0.305		28	20/1	HAND DRYER		1.5	
29	20/1	AMPLIFIER			0.18	30	20/1	RECEPT.			0.18
31	20/1	REC ASST LISTENING	0.18			32	20/1	RECEPT.	0.36		
33	20/1	RECEPT.		1.08		34	20/3	TELESCOPIC BLEACHER		0.305	
35	20/1	RECEPT.			0.54	36	|	|			0.305
37	20/1	RECEPT.	0.36			38	|	|	0.305		
39	20/1	RECEPT.		0.18		40	20/1	SERVICE ALERT PANEL		0.1	
41	20/1	DISHWASHER			1.2	42	20/1	SERVICE ALERT PANEL			0.1
43	20/1	REFRIG	1.2			44	20/1	SPACE	0		
45	20/1	WASHER		1.2		46	20/1	SPACE		0	
47	30/2	DRYER			2.5	48	20/1	SPACE			0
49	|	|	2.5			50	20/1	SPARE	0		
51	20/1	HAND DRYER		1.5		52	20/1	SPARE		0	
53	20/1	AMPLIFIER			1	54	20/1	SPARE			0
55	20/1	FIRE ALARM CONTROL PANEL	1.2			56	45/3	(SHP) BOOSTER PUMP	2.11		
57	20/1	SERVICE ALERT PANEL		0.1		58	|	|		2.11	
59	20/1	SERVICE ALERT PANEL			0.1	60	|	|			2.11
								TOTAL CONNECTED KVA BY PHASE	15.6	13.7	14.5

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	6.32	7.9	(125%)
OTHER MOTORS	2.03	2.03	(100%)
RECEPTACLES	26.7	18.3	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	1.6	2	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	7.19	7.19	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	43.8	37.4	
BALANCED 3-PHASE AMPS		104	

K1

ROOM CUSTODIAN RM. 139 — VOLTS 208Y/120V 3P 4W — AIC 10,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR 250
FED FROM TK1 — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	MEAT SLICER	0.6			2	20/1	SPARE	0		
3	20/1	VEGGIE ROBOT		0.9		4	20/1	PASS THRU REFRIG.		1.39	
5	20/1	RECEPT.			0.18	6	20/2	HOT FOOD UNIT			0.75
7	20/2	(1.5HP) DISPOSAL	1.2			8	|	|	0.75		
9	|	|		1.2		10	20/1	RECEPT.		0.36	
11	20/2	(1.5HP) DISPOSAL			1.2	12	20/1	SPARE			0
13	|	|	1.2			14	20/2	HOT FOOD UNIT	0.75		
15	20/2	ICE MACHINE		0.05		16	|	|		0.75	
17	|	|			0.05	18	20/1	SPARE			0
19	20/1	RECEPT.	0.18			20	20/1	SPARE	0		
21	20/1	RECEPT.		0.18		22	20/1	SPARE		0	
23	20/1	FIRE SUPRESSION SYSTEM			1.2	24	20/1	SPARE			0
25	20/1	RECEPT.	0.18			26	20/1	PASS THRU REFRIG.	1.39		
27	20/1	SPARE		0		28	20/1	SPARE		0	
29	20/1	SPACE			0	30	20/1	FROST TOP UNIT			0.804
31	20/3	* WALK-IN FREEZER CONDENSOR	1.78			32	20/2	HOT FOOD UNIT	0.75		
33	|	|		1.78		34	|	|		0.75	
35	|	|			1.78	36	20/1	FROST TOP UNIT			0.804
37	20/1	SPARE	0			38	20/1	FROST TOP UNIT	0.804		
39	20/1	SPACE		0		40	20/2	HOT FOOD UNIT		0.75	
41	20/1	SPARE			0	42	|	|			0.75
43	20/1	SPARE	0			44	20/2	HOT FOOD UNIT	0.75		
45	20/1	RECEPT.		0.18		46	|	|		0.75	
47	20/1	MILK COOLER			0.529	48	20/1	FROST TOP UNIT			0.804
49	20/1	AIR CURTAIN	1.18			50	20/1	RECEPT.	0.72		
51	30/2	HOT WATER DISPENSER		2.5		52	20/1	MILK COOLER		0.529	
53	|	|			2.5	54	20/1	MILK COOLER			0.529
55	20/1	KITCHEN HOOD LIGHTING	0.1			56	20/1	MILK COOLER	0.529		
57	20/1	KITCHEN HOOD LIGHTING		0.1		58	20/1	RECEPT.		1.62	
59	20/1	SPACE			0	60	20/1	HAND DRYER			1.5
61	20/1	SPACE	0			62	20/1	SPARE	0		
63	20/3	WALK-IN REFRIGERATOR CONDENSOR		0.997		64	20/1	SPARE		0	
65	|	|			0.997	66	20/1	EF-5, EF-6			0.076
67	|	|	0.997			68	20/1	EF-17	0.06		
69	20/1	SPACE		0		70	20/1	RECEPT.		0.72	
71	20/1	SPACE			0	72	20/2	HOT FOOD UNIT			0.75
73	20/1	SPACE	0			74	|	|	0.75		
75	20/1	SPACE		0		76	20/1	HAND DRYER		1.5	
77	20/1	SPACE			0	78	20/1	SPARE			0
79	20/1	SPACE	0			80	20/1	SPARE	0		
81	20/1	SPACE		0		82	20/1	SPARE		0	
83	20/1	SPACE			0	84	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	14.7	17	15.2

	CONN KVA	CALC KVA	
LIGHTING	1.4	1.75	(125%)
LARGEST MOTOR	0.06	0.075	(125%)
OTHER MOTORS	0.076	0.076	(100%)
RECEPTACLES	7.32	7.32	(50%>10)
KITCHEN EQUIP	38	24.7	(65%)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	46.9	33.9	
BALANCED 3-PHASE AMPS		94.2	

1. ENERGY STATION

* PROVIDE H.A.C.R. TYPE.

MK

ROOM KITCHEN 138 — VOLTS 480Y/277V 3P 4W — AIC 42,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR 350
FED FROM DPC — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	LIGHTING	0.392			2	20/3	* DBL. STACK CONV. OVEN	4.17		
3	20/1	LIGHTING		0.799		4	|	|		4.17	
5	30/3	* 40 GAL. BRAISER			6.37	6	|	|			4.17
7	|	|	6.37			8	20/3	* DBL. STACK CONV. OVEN	4.17		
9	|	|		6.37		10	|	|		4.17	
11	30/3	* 40 GAL. BRAISER			6.37	12	|	|			4.17
13	|	|	6.37			14	20/3	* DBL. STACK CONV. OVEN	4.17		
15	|	|		6.37		16	|	|		4.17	
17	40/3	* COMBI OVEN			8	18	|	|			4.17
19	|	|	8			20	20/3	* DBL. STACK CONV. OVEN	4.17		
21	|	|		8		22	|	|		4.17	
23	40/3	* COMBI OVEN			8	24	|	|			4.17
25	|	|	8			26	20/3	* DBL. STACK CONV. OVEN	4.17		
27	|	|		8		28	|	|		4.17	
29	30/3	SPARE			0	30	|	|			4.17
31	|	|	0			32	20/3	* DBL. STACK CONV. OVEN	4.17		
33	|	|		0		34	|	|		4.17	
35	80/3	* RTU-KITCHEN1			16.3	36	|	|			4.17
37	|	|	16.3			38	20/3	(5HP) KEF-1	2.11		
39	|	|		16.3		40	|	|		2.11	
41	20/3	SPARE			0	42	|	|			2.11
43	|	|	0			44	20/3	(2HP) KSF-1	0.582		
45	|	|		0		46	|	|		0.582	
47	90/3	EWH-2			18	48	|	|			0.582
49	|	|	18			50	150/3	** XFMR TK1 (75KVA)	14.9		
51	|	|		18		52	|	|		15.8	
53	20/1	SPACE			0	54	|	|			16.1
55	20/3	SPACE	0			56	20/3	SPACE	0		
57	|	|		0		58	|	|	0		
59	|	|			0	60	|	|			0
								TOTAL CONNECTED KVA BY PHASE	106	107	107

	CONN KVA	CALC KVA	
LIGHTING	2.59	3.24	(125%)
LARGEST MOTOR	6.32	7.9	(125%)
OTHER MOTORS	1.88	1.88	(100%)
RECEPTACLES	7.32	7.32	(50%>10)
KITCHEN EQUIP	199	130	(65%)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	49	49	(100%)
COOLING	3.99	0	(0%)
NONCONTINUOUS	54	54	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	320	253	
BALANCED 3-PHASE AMPS		304	

1. PROVIDE WITH 100% RATED MAIN BREAKER.
2. PROVIDE TAYLOR PHASE GUARD PROTECTION TO PANEL "RTU" CIRCUIT BREAKER.
3. PROVIDE WITH MULTI-METERING PACKAGE. INTERFACE WITH BUILDING AUTOMATION SYSTEM (BAS). COORDINATE WITH DIV. 23.
4. INTERLOCK OVENS AND BRAISERS SHUNT TRIP BREAKERS WITH KITCHEN HOOD FIRE SUPPRESSION SYSTEM.
5. PROVIDE NEMA 3R (304 STAINLESS STEEL) ENCLOSURE.

* PROVIDE SHUNT TRIP TYPE.
** PROVIDE ELECTRONIC TYPE WITH L.S.I. DIALS.

LA1

ROOM ELECTRICAL RM. 133 — VOLTS 208Y/120V 3P 4W — AIC 10,000
MOUNTING SURFACE — BUS AMPS 225 — MAIN BKR 175
FED FROM TA1 — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	LIGHTING, RECEPT.	0.94			2	20/1	LIGHTING, RECEPT.	0.394		
3	20/1	LIGHTING, RECEPT.		0.76		4	20/1	REFRIG		1.2	
5	20/1	RECEPT.			0.9	6	20/1	DISHWASHER			1.2
7	20/1	RECEPT.	1.08			8	20/1	WASHER	1.2		
9	20/1	RECEPT.		0.36		10	30/2	DRYER		2.5	
11	20/1	FLAT SCREEN, RECEPT.			0.468	12	|	|			2.5
13	20/1	RECEPT.	0.36			14	20/1	RECEPT.	0.18		
15	20/1	RECEPT.		0.36		16	20/1	RECEPT.		0.54	
17	20/1	FLAT SCREEN, RECEPT.			0.468	18	20/1	RECEPT.			0.54
19	20/1	RECEPT.	0.36			20	20/1	REFRIG	1.2		
21	20/1	RECEPT.		0.36		22	20/1	EF-7, RECEPT.		0.24	
23	20/1	RECEPT.			0.18	24	20/1	HAND DRYER			1.5
25	20/1	IRR. CONTROLLER	0.18			26	20/1	RECEPT.	1.26		
27	40/1	IG DUPLEX, USB RECEPT.		3.18		28	20/1	RECEPT.		0.9	
29	20/1	ELEVATOR CONTROLS			0.1	30	20/1	RECEPT.			0.54
31	20/1	SUMP PUMP	0.1			32	20/1	RECEPT.	0.36		
33	20/1	RECEPT.		0.18		34	20/1	RECEPT.		0.9	
35	20/1	FIRE ALARM CONTROL PANEL			1.2	36	20/1	RECEPT.			0.36
37	20/1	ELEVATOR CONTROLS	0.1			38	20/1	RECEPT.	0.54		
39	15/2	FCU-2		0.9		40	20/1	HAND DRYER		1.5	
41	|	|			0.9	42	20/1	EF-10, RECEPT.			0.803
43	20/2	* HEAT TRACE CABLE	1.56			44	20/1	EF-15, EF-16, LIGHTING, RECEPT.	0.786		
45	|	|		1.56		46	20/1	HAND DRYER		1.5	
47	20/1	SPACE			0	48	20/1	RECEPT.			0.72
49	20/1	SPACE	0			50	20/1	DRINKING FOUNTAIN	0.8		
51	20/1	SPACE		0		52	20/1	DRINKING FOUNTAIN		0.8	
53	20/1	SPACE			0	54	20/1	EF-14			0.083
55	20/1	EF-8, LIGHTING	0.078			56	20/1	EF-13	0.216		
57	20/1	EF-1, EF-2, EF-3, EF-4, LIGHTING		0.374		58	20/1	EF-12		0.083	
59	20/1	RECEPT.			0.54	60	20/1	EF-11			0.216
61	20/1	HAND DRYER	1.5			62	20/1	HAND DRYER	1.5		
63	20/1	SPARE		0		64	20/1	HAND DRYER		1.5	
65	20/1	SPARE			0	66	20/1	HAND DRYER			1.5
67	20/2	* GATE OPERATOR	0.96			68	20/1	HAND DRYER	1.5		
69	|	|		0.96		70	20/1	HAND DRYER		1.5	
71	20/2	* GATE OPERATOR			0.96	72	20/1	HAND DRYER			1.5
73	|	|	0.96			74	20/1	RECEPT.	0.18		
75	20/1	RECEPT.		0.72		76	20/1	RECEPT.		0.18	
77	20/2	* GATE OPERATOR			0.96	78	20/1	RECEPT.			0.36
79	|	|	0.96			80	20/1	DISHWASHER	1.2		
81	20/2	* GATE OPERATOR		0.96		82	20/1	REFRIG		1.2	
83	|	|			0.96	84	20/1	EF-9			0.06
								TOTAL CONNECTED KVA BY PHASE	20.5	25.2	19.5

	CONN KVA	CALC KVA	
LIGHTING	0.456	0.57	(125%)
LARGEST MOTOR	1.92	2.4	(125%)
OTHER MOTORS	8.82	8.82	(100%)
RECEPTACLES	40.3	25.1	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	4.4	5.5	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	9.31	9.31	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	65.2	51.7	
BALANCED 3-PHASE AMPS		144	

* PROVIDE GFCI TYPE.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
5.16.2019

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Interior Designers

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Scale: As Noted
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HA2

ROOM ELECTRICAL RM. 416B | VOLTS 480Y/277V 3P 4W | AIC 14,000
MOUNTING SURFACE | BUS AMPS 225 | MAIN BKR 200
FED FROM HA | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	LIGHTING	0.63			2	20/1	LIGHTING	1.31		
3	20/1	LIGHTING		1.11		4	20/1	LIGHTING		1.7	
5	20/1	LIGHTING			0.63	6	20/1	LIGHTING			0.064
7	20/1	LIGHTING	0.34			8	20/1	LIGHTING	0.493		
9	20/1	LIGHTING		0.991		10	20/1	SPARE		0	
11	150/3	*XFMR TA2 (75KVA)			24.1	12	20/1	SPARE			0
13	|		23.6			14	20/1	SPARE	0		
15	|			22.6		16	20/1	SPARE		0	
17	20/1	SPACE			0	18	20/1	SPARE			0
19	20/1	SPACE	0			20	20/1	SPARE	0		
21	20/1	SPACE		0		22	20/1	SPARE		0	
23	20/1	SPACE			0	24	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	26.3	26.4	24.8

	CONN KVA	CALC KVA	
LIGHTING	7.36	9.2	(125%)
LARGEST MOTOR	4.45	5.56	(125%)
OTHER MOTORS	12.6	12.6	(100%)
RECEPTACLES	37.6	23.8	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	14.4	18	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	1.2	1.2	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	77.6	70.3	
BALANCED 3-PHASE AMPS		84.6	

* PROVIDE ELECTRONIC TYPE WITH L.S.I. DIALS.

LA2

ROOM ELECTRICAL RM. 416B | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 225 | MAIN BKR 125
FED FROM TA2 | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	RECEPT.	0.9			2	20/1	RECEPT.	0.72		
3	20/1	RECEPT.		0.72		4	20/1	RECEPT.		0.9	
5	20/1	RECEPT.			0.72	6	20/1	RECEPT.			0.72
7	20/1	USB RECEPT.	0.18			8	20/1	HAND DRYER	1.5		
9	20/1	RECEPT.		0.72		10	20/1	HAND DRYER		1.5	
11	20/1	RECEPT.			0.72	12	20/1	RECEPT.			0.9
13	20/1	RECEPT.	0.72			14	20/1	RECEPT., USB RECEPT.	0.54		
15	20/1	RECEPT.		0.54		16	20/1	RECEPT.		0.72	
17	20/1	RECEPT.			0.36	18	20/1	RECEPT.			0.72
19	20/1	RECEPT.	0.54			20	20/2	* ACCU-2	2.23		
21	20/1	RECEPT.		0.72		22	|			2.23	
23	20/1	HAND DRYER			1.5	24	20/2	* ACCU-4			2.23
25	20/1	HAND DRYER	1.5			26	|		2.23		
27	20/1	EF-18		0.06		28	15/2	FCU-4		0.9	
29	20/1	RECEPT.			1.26	30	|				0.9
31	20/1	RECEPT.	0.72			32	20/1	LOGO SIGN	0.1		
33	20/2	FCU-5		0.9		34	20/1	RECEPT.		0.72	
35	|				0.9	36	20/1	RECEPT.			0.18
37	20/1	REFRIG	1.2			38	20/1	RECEPT.	0.36		
39	20/1	INTRUSION DET. POWER SUPPLY		0.1		40	20/1	WASHER		1.2	
41	20/1	FIRE ALARM POWER SUPPLY			1.2	42	20/1	VENDING MACHINE			1
43	20/1	SPACE	0			44	20/1	VENDING MACHINE	1		
45	20/1	RECEPT.		0.18		46	30/2	ACCU-5		2.23	
47	20/1	RECEPT.			0.18	48	|				2.23
49	20/1	SPACE	0			50	20/1	SPACE	0		
51	20/1	SPACE		0		52	20/1	SPACE		0	
53	20/1	SPARE			0	54	20/1	SPARE			0
55	20/1	SPARE	0			56	20/1	SPARE	0		
57	20/1	SPARE		0		58	20/1	SPARE		0	
59	20/1	SPARE			0	60	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	14.4	14.3	15.7

	CONN KVA	CALC KVA	
LIGHTING	0.1	0.125	(125%)
LARGEST MOTOR	4.45	5.56	(125%)
OTHER MOTORS	12.6	12.6	(100%)
RECEPTACLES	24.9	17.4	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	1.3	1.63	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	1.2	1.2	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	44.5	38.5	
BALANCED 3-PHASE AMPS		107	

* PROVIDE GFCI TYPE.

CA2

ROOM ELECTRICAL RM. 133 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 100 | MAIN BKR 100
FED FROM TA2 | NEUTRAL 200% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS. | ISO GND BUS

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	RECEPT., WHITE BOARD	0.595			2	20/1	RECEPT., WHITE BOARD	0.595		
3	20/1	RECEPT., WHITE BOARD		0.595		4	20/1	RECEPT., WHITE BOARD		0.595	
5	20/1	RECEPT., WHITE BOARD			0.595	6	20/1	RECEPT., WHITE BOARD			0.595
7	20/1	RECEPT., WHITE BOARD	0.595			8	20/1	RECEPT., WHITE BOARD	0.595		
9	20/1	RECEPT., WHITE BOARD		0.595		10	30/1	IG DUPLEX		2.25	
11	20/1	RECEPT., WHITE BOARD			0.595	12	20/1	RECEPT., WHITE BOARD			0.595
13	30/1	IDF – UPS	2.88			14	20/1	RECEPT., WHITE BOARD	0.595		
15	20/1	RECEPT., WHITE BOARD		0.595		16	20/1	RECEPT., WHITE BOARD		0.595	
17	20/1	RECEPT., WHITE BOARD			0.595	18	20/1	RECEPT., WHITE BOARD			0.595
19	30/1	IG DUPLEX	2.25			20	60/3	PANEL HBL2	3.86		
21	30/1	IDF – UPS		2.88		22	|			4	
23	20/1	SPARE			0	24	|				3.32
25	20/1	SPARE	0			26	20/1	SPACE	0		
27	20/1	SPARE		0		28	20/1	SPACE		0	
29	20/1	SPARE			0	30	20/1	SPACE			0
31	20/1	SPARE	0			32	20/1	SPACE	0		
33	20/1	SPARE		0		34	20/1	SPACE		0	
35	20/1	SPARE			0	36	20/1	SPACE			0
37	20/1	SPARE	0			38	20/1	SPACE	0		
39	20/1	SPARE		0		40	20/1	SPACE		0	
41	20/1	SPARE			0	42	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	12	12.1	6.89

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	12.7	11.3	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	18.3	22.8	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	31	34.2	
BALANCED 3-PHASE AMPS		94.8	

CA1

ROOM ELECTRICAL RM. 137 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 100 | MAIN BKR 80
FED FROM TA1 | NEUTRAL 200% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS. | ISO GND BUS

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	RECEPT., WHITE BOARD	0.595			2	20/1	RECEPT., WHITE BOARD	0.595		
3	20/1	RECEPT., WHITE BOARD		0.595		4	20/1	RECEPT.		0.54	
5	20/1	RECEPT., WHITE BOARD			0.595	6	20/1	RECEPT.			0.18
7	20/1	RECEPT.	0.36			8	20/1	COPIER	1.2		
9	20/1	RECEPT.		0.36		10	20/1	RECEPT.		0.36	
11	20/1	RECEPT.			0.36	12	20/1	RECEPT.			0.36
13	20/1	RECEPT.	0.54			14	20/1	RECEPT.	0.36		
15	20/1	RECEPT.		0.36		16	20/1	RECEPT.		0.36	
17	20/1	RECEPT.			0.36	18	20/1	RECEPT.			0.36
19	20/1	RECEPT.	0.36			20	20/1	COPIER	1.2		
21	20/1	RECEPT.		0.36		22	20/1	COPIER		1.2	
23	20/1	RECEPT.			0.36	24	20/1	RECEPT.			0.36
25	20/1	RECEPT.	0.36			26	20/1	RECEPT., WHITE BOARD	0.595		
27	30/1	MDF-UPS		2.88		28	20/1	RECEPT.		1.08	
29	30/1	MDF-UPS			2.88	30	20/1	RECEPT., WHITE BOARD			0.595
31	20/1	SPARE	0			32	20/1	RECEPT.	0.36		
33	20/1	SPARE		0		34	20/1	RECEPT.		0.36	
35	20/1	SPARE			0	36	20/1	SPACE			0
37	20/1	SPARE	0			38	20/1	SPACE	0		
39	20/1	SPARE		0		40	20/1	SPACE		0	
41	20/1	SPARE			0	42	20/1	INTRUSION DET. PANEL			0.1
								TOTAL CONNECTED KVA BY PHASE	6.53	8.46	6.51

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	15.6	12.8	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	5.86	7.33	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	21.5	20.1	
BALANCED 3-PHASE AMPS		55.9	

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5.16.2019

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Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
Sheet: E8.02

HB

ROOM CUSTODIAN RM. 310 | VOLTS 480Y/277V 3P 4W | AIC 14,000
MOUNTING SURFACE | BUS AMPS 400 | MAIN BKR 250
FED FROM MSB | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	LIGHTING	2.29			2	20/1	LIGHTING	2.62		
3	20/1	LIGHTING		2.06		4	20/1	LIGHTING		1.98	
5	20/1	LIGHTING			0.508	6	20/1	LIGHTING			0.41
7	20/1	LIGHTING	0.306			8	20/1	LIGHTING	0.306		
9	20/1	LIGHTING		0.391		10	20/1	LIGHTING		0.55	
11	20/1	LIGHTING			0.561	12	30/3	(3HP) BP-1			1.33
13	200/3	*XFMR TB1 (112.5KVA)	35.7			14	|		1.33		
15	|			39.6		16	|			1.33	
17	|				39.1	18	40/3	EWH-1			8
19	20/1	SPARE	0			20	|		8		
21	20/1	SPARE		0		22	|			8	
23	20/1	SPARE			0	24	20/1	SPACE			0
25	20/1	SPARE SUMP PUMP	0.1			26	20/1	SPACE	0		
27	20/1	SPARE HOT WATER DISPENSER		2.5		28	20/1	SPACE		0	
29	20/1	SPARE			0	30	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	50.7	56.4	52.4

	CONN KVA	CALC KVA	
LIGHTING	12.6	15.7	(125%)
LARGEST MOTOR	4.45	5.56	(125%)
OTHER MOTORS	19.9	19.9	(100%)
RECEPTACLES	69.3	39.6	(50%>10)
KITCHEN EQUIP	5	5	(100%)

	CONN KVA	CALC KVA	
CONTINUOUS	24.4	30.5	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	24	24	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	160	140	
BALANCED 3-PHASE AMPS		169	

* PROVIDE ELECTRONIC TYPE WITH L.S.I. DIALS.

CB2

ROOM CUSTODIAN RM. 310 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 225 | MAIN BKR 150
FED FROM TB1 | NEUTRAL 200% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS. | ISO GND BUS

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	RECEPT., WHITE BOARD	0.595			2	20/1	RECEPT., WHITE BOARD	0.595		
3	20/1	RECEPT., WHITE BOARD		0.595		4	20/1	RECEPT., WHITE BOARD		0.595	
5	20/1	LOGO SIGN, RECEPT., WHITE BOARD			0.695	6	20/1	RECEPT., WHITE BOARD			0.595
7	20/1	RECEPT., WHITE BOARD	0.595			8	20/1	RECEPT., WHITE BOARD	0.595		
9	20/1	RECEPT., WHITE BOARD		0.595		10	20/1	RECEPT., WHITE BOARD		0.595	
11	20/1	RECEPT., WHITE BOARD			0.595	12	20/1	RECEPT., WHITE BOARD			0.595
13	20/1	RECEPT., WHITE BOARD	0.595			14	20/1	RECEPT., WHITE BOARD	0.595		
15	30/1	IDF - UPS		2.88		16	20/1	RECEPT., WHITE BOARD		0.595	
17	20/1	RECEPT., WHITE BOARD			0.595	18	20/1	RECEPT., WHITE BOARD			0.595
19	20/1	RECEPT., WHITE BOARD	0.595			20	20/1	RECEPT., WHITE BOARD	0.595		
21	20/1	RECEPT., WHITE BOARD		0.595		22	20/1	RECEPT., WHITE BOARD		0.595	
23	20/1	RECEPT., WHITE BOARD			0.595	24	20/1	RECEPT., WHITE BOARD			0.595
25	20/1	RECEPT., WHITE BOARD	0.595			26	30/1	IG DUPLEX, USB RECEPT.	2.43		
27	20/1	RECEPT., WHITE BOARD		0.595		28	30/1	IDF - UPS		2.88	
29	20/1	SPACE			0	30	20/1	SPACE			0
31	80/3	PANEL HBL1	6.3			32	20/1	SPACE	0		
33	|			5.3		34	20/1	RECEPT., WHITE BOARD		0.595	
35	|				7.48	36	20/1	SPACE			0
37	20/1	SPACE	0			38	20/1	SPACE	0		
39	20/1	SPACE		0		40	20/1	SPACE		0	
41	20/1	SPACE			0	42	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	14.1	16.4	12.3

	CONN KVA	CALC KVA	
LIGHTING	0.1	0.125	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	21.9	16	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	20.8	26	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	42.8	42.1	
BALANCED 3-PHASE AMPS		117	

PROVIDE ELECTRONIC TYPE WITH L.S.I. DIALS.

LB1

ROOM CUSTODIAN RM. 310 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 100 | MAIN BKR 100
FED FROM TB1 | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	RECEPT.	0.9			2	20/1	RECEPT.	0.72		
3	20/1	RECEPT.		1.08		4	20/1	GATE OPERATOR, RECEPT.		1.5	
5	20/1	RECEPT.			0.9	6	20/1	GATE OPERATOR, RECEPT.			1.5
7	20/1	RECEPT.	0.72			8	20/1	GATE OPERATOR, RECEPT.	1.5		
9	20/1	RECEPT.		0.54		10	20/1	GATE OPERATOR, RECEPT.		1.32	
11	20/1	RECEPT.			0.54	12	20/1	RECEPT.			0.72
13	20/1	RECEPT.	0.72			14	20/1	RECEPT.	0.72		
15	20/1	HAND DRYER		1.5		16	20/1	RECEPT.		0.9	
17	20/1	HAND DRYER			1.5	18	20/2	FCU-1			0.9
19	20/1	HAND DRYER	1.5			20	|		0.9		
21	20/1	HAND DRYER		1.5		22	30/1	IG DUPLEX, USB RECEPT.		2.43	
23	20/1	HAND DRYER			1.5	24	20/1	RECEPT.			0.18
25	20/1	RECEPT.	0.54			26	20/1	RECEPT.	0.18		
27	20/1	DRINKING FOUNTAIN		0.8		28	20/1	HAND DRYER		1.5	
29	20/1	DRINKING FOUNTAIN			0.8	30	20/1	HAND DRYER			1.5
31	20/1	CP-1	0.1			32	20/1	RECEPT.	0.9		
33	20/1	SPACE		0		34	20/1	RECEPT.		0.54	
35	20/1	SPACE			0	36	20/1	SPACE			0
37	20/1	SPACE	0			38	20/1	SPACE	0		
39	20/1	SPACE		0		40	20/2	SPACE		0	
41	20/1	SPACE			0	42	|				0
								TOTAL CONNECTED KVA BY PHASE	10.4	14.6	12

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	1.92	2.4	(125%)
OTHER MOTORS	7.66	7.66	(100%)
RECEPTACLES	25.1	17.5	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	2.25	2.81	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	36.9	30.4	
BALANCED 3-PHASE AMPS		84.4	

LB2

ROOM CUSTODIAN RM. 310 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 100 | MAIN BKR 100
FED FROM TB1 | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	RECEPT.	0.9			2	20/1	RECEPT.	0.72		
3	20/1	RECEPT.		0.9		4	20/1	RECEPT.		0.72	
5	20/1	RECEPT.			0.9	6	20/1	RECEPT.			0.54
7	20/1	RECEPT.	0.72			8	20/1	RECEPT.	0.72		
9	20/1	RECEPT.		0.9		10	20/1	RECEPT.		0.72	
11	20/1	RECEPT.			0.9	12	20/1	SPACE			0
13	20/1	HAND DRYER	1.5			14	20/1	SPACE	0		
15	20/1	HAND DRYER		1.5		16	15/2	FCU-3		0.9	
17	20/1	HAND DRYER			1.5	18	|				0.9
19	20/1	HAND DRYER	1.5			20	20/2	* ACCU-1	2.23		
21	20/1	DRINKING FOUNTAIN		0.8		22	|			2.23	
23	20/1	DRINKING FOUNTAIN			0.8	24	20/1	HAND DRYER			1.5
25	20/1	HAND DRYER	1.5			26	20/1	HAND DRYER	1.5		
27	20/1	RECEPT., USB RECEPT.		0.54		28	20/2	* ACCU-3		2.23	
29	20/1	MARQUEE SIGN			0.5	30	|				2.23
31	20/1	MARQUEE SIGN	0.5			32	20/1	SPACE	0		
33	20/1	MARQUEE SIGN		0.5		34	20/1	SPACE		0	
35	20/1	SPARE			0	36	20/1	SPACE			0
37	20/1	SPARE	0			38	20/1	SPACE	0		
39	20/1	SPARE		0		40	20/1	INTRUSION DET. POWER SUPPLY		0.1	
41	20/1	SPARE			0	42	20/1	FIRE ALARM POWER SUPPLY			1.2
								TOTAL CONNECTED KVA BY PHASE	11.8	12	11

	CONN KVA	CALC KVA	
LIGHTING	0.5	0.625	(125%)
LARGEST MOTOR	4.45	5.56	(125%)
OTHER MOTORS	6.25	6.25	(100%)
RECEPTACLES	22.3	16.1	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	1.3	1.63	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	34.8	30.2	
BALANCED 3-PHASE AMPS		83.8	

* PROVIDE HACR TYPE.

HBL1

ROOM LIBRARY 304 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING FLUSH | BUS AMPS 100 | MAIN BKR 80
FED FROM CB2 | NEUTRAL 200% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS. | ISO GND BUS

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	COMP. RECEPT.	1.5			2	20/1	COMP. RECEPT.	1		
3	20/1	COMP. RECEPT.		1.5		4	20/1	RECEPT., WHITE BOARD		0.595	
5	20/1	RECEPT., USB RECEPT.			1.08	6	20/1	SPACE			0
7	20/1	SPACE	0			8	20/1	SPACE	0		
9	20/1	SPACE		0		10	20/1	SPACE		0	
11	20/1	IG DUPLEX			1.6	12	20/1	IG DUPLEX			1.6
13	20/1	IG DUPLEX	1.6			14	20/1	IG DUPLEX	1.6		
15	20/1	IG DUPLEX		1.6		16	20/1	IG DUPLEX		1.6	
17	20/1	IG DUPLEX			1.6	18	20/1	IG DUPLEX			1.6
19	20/1	RECEPT., WHITE BOARD	0.595			20	20/1	SPARE	0		
21	20/1	SPACE		0		22	20/1	SPARE		0	
23	20/1	SPARE			0	24	20/1	SPARE			0
25	20/1	SPARE	0			26	20/1	SPARE	0		
27	20/1	SPARE		0		28	20/1	SPARE		0	
29	20/1	SPARE			0	30	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	6.3	5.3	7.48

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	6.27	6.27	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	12.8	16	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	19.1	22.3	
BALANCED 3-PHASE AMPS		61.8	

HBL2

ROOM COMPUTER LAB 412 | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING FLUSH | BUS AMPS 100 | MAIN BKR 60
FED FROM CA2 | NEUTRAL 200% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS. | ISO GND BUS

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	20/1	RECEPT., WHITE BOARD	0.595			2	20/1	RECEPT.	0.72		
3	20/1	IG DUPLEX		1		4	20/1	IG DUPLEX		1	
5	20/1	IG DUPLEX			1	6	20/1	IG DUPLEX			1
7	20/1	IG DUPLEX	1			8	20/1	IG DUPLEX	1		
9	20/1	IG DUPLEX		1		10	20/1	IG DUPLEX		1	
11	20/1	RECEPT., USB RECEPT.			0.72	12	20/1	RECEPT., WHITE BOARD			0.595
13	20/1	RECEPT.	0.54			14	20/1	SPACE	0		
15	20/1	SPACE		0		16	20/1	SPACE		0	
17	20/1	SPACE			0	18	20/1	SPACE			0
19	20/1	SPACE	0			20	20/1	SPACE	0		
21	20/1	SPACE		0		22	20/1	SPACE		0	
23	20/1	SPACE			0	24	20/1	SPARE			0
25	20/1	SPARE	0			26	20/1	SPARE	0		
27	20/1	SPARE		0		28	20/1	SPARE		0	
29	20/1	SPARE			0	30	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	3.86	4	3.32

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	3.17	3.17	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	8	10	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	11.2	13.2	
BALANCED 3-PHASE AMPS		36.6	

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Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: E8.03

AC3

ROOM ELECTRTICAL RM. 416B — VOLTS 480Y/277V 3P 4W — AIC 35,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR MLO
FED FROM PDP — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	45/3	ERU-OA3	8.45			2	45/3	ERU-OA4	8.45		
3	|			8.45		4	|			8.45	
5	|				8.45	6	|				8.45
7	30/3	RTU-146	5.61			8	15/3	RTU-403	3.11		
9	|			5.61		10	|			3.11	
11	|				5.61	12	|				3.11
13	15/3	RTU-407	3.11			14	15/3	RTU-405	3.11		
15	|			3.11		16	|			3.11	
17	|				3.11	18	|				3.11
19	15/3	RTU-400/401	3.11			20	15/3	RTU-145	3.11		
21	|			3.11		22	|			3.11	
23	|				3.11	24	|				3.11
25	15/3	RTU-404	3.11			26	30/3	RTU-406	3.11		
27	|			3.11		28	|			3.11	
29	|				3.11	30	|				3.11
31	15/3	RTU-144	3.11			32	30/3	RTU-408	5.86		
33	|			3.11		34	|			5.86	
35	|				3.11	36	|				5.86
37	20/3	SPACE	0			38	20/3	SPACE	0		
39	|			0		40	|			0	
41	|				0	42	|				0
43	20/1	SPARE	0			44	20/1	SPARE	0		
45	20/1	SPARE		0		46	20/1	SPARE		0	
47	20/1	SPARE			0	48	20/1	SPARE			0
49	20/1	SPARE	0			50	20/1	SPARE	0		
51	20/1	SPARE		0		52	20/1	SPARE		0	
53	20/1	SPARE			0	54	20/1	SPARE			0
55	20/1	SPARE	0			56	20/1	SPARE	0		
57	20/1	SPARE		0		58	20/1	SPARE		0	
59	20/1	SPARE			0	60	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	53.3	53.3	53.3

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	7.32	1.83	(25%)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	0	0	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	160	160	(100%)
COOLING	33.7	0	(0%)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	160	162	
BALANCED 3-PHASE AMPS		194	

1. PROVIDE ALL BREAKERS H.A.C.R. TYPE.

AC2

ROOM ELECTRICAL RM. 310 — VOLTS 480Y/277V 3P 4W — AIC 35,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR 200
FED FROM PDP — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	45/3	ERU-OA2	8.45			2	15/3	RTU-402	3.11		
3	|			8.45		4	|			3.11	
5	|				8.45	6	|				3.11
7	15/3	RTU-147	3.11			8	15/3	RTU-148	3.11		
9	|			3.11		10	|			3.11	
11	|				3.11	12	|				3.11
13	15/3	RTU-321	3.11			14	15/3	RTU-318	3.11		
15	|			3.11		16	|			3.11	
17	|				3.11	18	|				3.11
19	15/3	RTU-151	3.11			20	15/3	RTU-156	3.11		
21	|			3.11		22	|			3.11	
23	|				3.11	24	|				3.11
25	15/3	RTU-312	3.11			26	15/3	RTU-152	3.11		
27	|			3.11		28	|			3.11	
29	|				3.11	30	|				3.11
31	15/3	RTU-154	3.11			32	30/3	RTU-316	5.61		
33	|			3.11		34	|			5.61	
35	|				3.11	36	|				5.61
37	15/3	RTU-317	3.11			38	20/3	SPACE	0		
39	|			3.11		40	|			0	
41	|				3.11	42	|				0
43	20/3	SPACE	0			44	20/3	SPACE	0		
45	|			0		46	|			0	
47	|				0	48	|				0
49	20/3	SPACE	0			50	20/1	SPACE	0		
51	|			0		52	20/1	SPACE		0	
53	|				0	54	20/1	SPACE			0
55	20/1	SPACE	0			56	20/1	SPACE	0		
57	20/1	SPACE		0		58	20/1	SPACE		0	
59	20/1	SPACE			0	60	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	48.3	48.3	48.3

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	7.32	1.83	(25%)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	0	0	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	143	143	(100%)
COOLING	29.3	0	(0%)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	145	145	
BALANCED 3-PHASE AMPS		174	

1. PROVIDE ALL BREAKERS H.A.C.R. TYPE.

AC1

ROOM ELECTRICAL RM. 310 — VOLTS 480Y/277V 3P 4W — AIC 35,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR 300
FED FROM PDP — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	45/3	ERU-OA1	8.45			2	30/3	RTU-160	5.61		
3	|			8.45		4	|			5.61	
5	|				8.45	6	|				5.61
7	15/3	RTU-306	3.11			8	15/3	RTU-165	3.11		
9	|			3.11		10	|			3.11	
11	|				3.11	12	|				3.11
13	30/3	RTU-304	5.86			14	20/3	SPACE	0		
15	|			5.86		16	|			0	
17	|				5.86	18	|				0
19	15/3	RTU-167	3.11			20	30/3	RTU-169/170	5.61		
21	|			3.11		22	|			5.61	
23	|				3.11	24	|				5.61
25	30/3	RTU-302	5.86			26	15/3	RTU-301	3.11		
27	|			5.86		28	|			3.11	
29	|				5.86	30	|				3.11
31	15/3	RTU-171	3.11			32	15/3	RTU-303	3.11		
33	|			3.11		34	|			3.11	
35	|				3.11	36	|				3.11
37	30/3	RTU-168	5.61			38	15/3	RTU-166	3.11		
39	|			5.61		40	|			3.11	
41	|				5.61	42	|				3.11
43	15/3	RTU-305	3.11			44	30/3	RTU-307	3.11		
45	|			3.11		46	|			3.11	
47	|				3.11	48	|				3.11
49	30/3	RTU-164	5.61			50	20/3	SPACE	0		
51	|			5.61		52	|			0	
53	|				5.61	54	|				0
55	20/3	SPACE	0			56	20/1	SPACE	0		
57	|			0		58	20/1	SPACE		0	
59	|				0	60	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	70.6	70.6	70.6

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	7.32	1.83	(25%)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	0	0	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	212	212	(100%)
COOLING	36.2	0	(0%)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	212	214	
BALANCED 3-PHASE AMPS		257	

1. PROVIDE ALL BREAKERS H.A.C.R. TYPE.

AC4

ROOM ELECTRICAL RM. 416B — VOLTS 480Y/277V 3P 4W — AIC 35,000
MOUNTING SURFACE — BUS AMPS 400 — MAIN BKR MLO
FED FROM PDP — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	45/3	ERU-OA5	8.45			2	15/3	RTU-417	3.11		
3	|			8.45		4	|			3.11	
5	|				8.45	6	|				3.11
7	15/3	RTU-202	3.11			8	30/3	RTU-201	5.61		
9	|			3.11		10	|			5.61	
11	|				3.11	12	|				5.61
13	15/3	RTU-415	3.11			14	30/3	RTU-413	5.86		
15	|			3.11		16	|			5.86	
17	|				3.11	18	|				5.86
19	30/3	RTU-ADMIN2	6.03			20	15/3	RTU-LOCKERS	3.11		
21	|			6.03		22	|			3.11	
23	|				6.03	24	|				3.11
25	30/3	RTU-416	5.86			26	30/3	RTU-411	5.61		
27	|			5.86		28	|			5.61	
29	|				5.86	30	|				5.61
31	30/3	RTU-414	5.61			32	30/3	RTU-412	5.61		
33	|			5.61		34	|			5.61	
35	|				5.61	36	|				5.61
37	30/3	RTU-200	5.61			38	30/3	RTU-419/420	5.86		
39	|			5.61		40	|			5.86	
41	|				5.61	42	|				5.86
43	30/3	RTU-ADMIN1	6.03			44	30/3	RTU-ADMIN3	6.03		
45	|			6.03		46	|			6.03	
47	|				6.03	48	|				6.03
49	30/3	RTU-418	5.61			50	20/1	SPARE	0		
51	|			5.61		52	20/1	SPARE		0	
53	|				5.61	54	20/1	SPARE			0
55	20/1	SPARE	0			56	20/1	SPARE	0		
57	20/1	SPARE		0		58	20/1	SPARE		0	
59	20/1	SPARE			0	60	20/1	SPARE			0
								TOTAL CONNECTED KVA BY PHASE	90.2	90.2	90.2

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	7.5	9.38	(125%)
OTHER MOTORS	15	15	(100%)
RECEPTACLES	0	0	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	248	248	(100%)
COOLING	42.6	0	(0%)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	271	272	
BALANCED 3-PHASE AMPS		328	

1. PROVIDE ALL BREAKERS H.A.C.R. TYPE.

PDP

ROOM ELECTRICAL RM. 416B — VOLTS 480Y/277V 3P 4W — AIC 42,000
MOUNTING SURFACE — BUS AMPS 1200 — MAIN BKR 1000
FED FROM MSB — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	B	C
1	300/3	PANEL AC1	70.6			2	200/3	PANEL AC2	48.3		
3	|			70.6		4	|			48.3	
5	|				70.6	6	|				48.3
7	250/3	PANEL AC3	53.3			8	350/3	PANEL AC4	90.2		
9	|			53.3		10	|			90.2	
11	|				53.3	12	|				90.2
13	20/3	SPACE	0			14	20/3	SPACE	0		
15	|			0		16	|			0	
17	|				0	18	|				0
19	20/3	SPACE	0			20	20/3	SPACE	0		
21	|			0		22	|			0	
23	|				0	24	|				0
								TOTAL CONNECTED KVA BY PHASE	262	262	262

	CONN KVA	CALC KVA	
LIGHTING	0	0	(125%)
LARGEST MOTOR	7.5	9.38	(125%)
OTHER MOTORS	15	15	(100%)
RECEPTACLES	0	0	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0	0	(125%)
HEATING	763	763	(100%)
COOLING	142	0	(0%)
NONCONTINUOUS	0	0	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	787	787	
BALANCED 3-PHASE AMPS		947	

1. PROVIDE TAYLOR PHASE GUARD PROTECTION TO MAIN BREAKER.
2. PROVIDE SHUNT TRIP MAIN BREAKER.

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS
IDEA Public Schools



5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: E8.04

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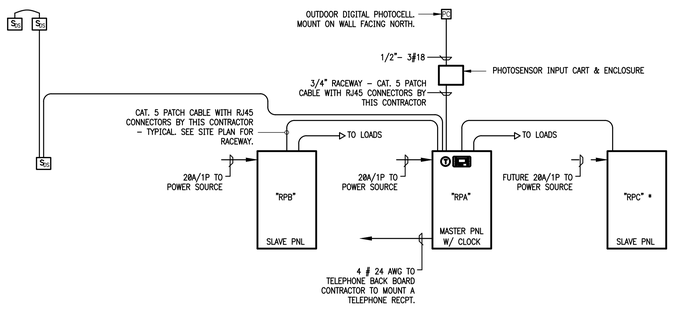

*DELIVER TO OWNER FOR FUTURE PHASE II

LIGHTING MANAGEMENT SYSTEM RISER DETAIL

01

SCALE : NOT TO SCALE

GENERAL NOTES:

1. FURNISH ALL COMPONENTS AND HARDWARE AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM - SEE SPECIFICATIONS "NETWORK LIGHTING CONTROLS".
2. REFER TO SCHEDULES FOR RELAY PANEL MODEL NUMBERS.
3. MASTER RELAY PANEL WITH CLOCK AND PHOTO CELL TO CONTROL SLAVE RELAY PANELS.
4. RELAY PANEL CONTROLS CIRCULATING PUMP, EXTERIOR, AREA AND CORRIDOR LIGHTING (SWEEPER SWITCHES) WHERE NOTED.

PANEL NAME: "RPB" (LC & D)
PANEL DESCRIPTION: 277/480V - Relays
CATALOG NUMBER (INTERIOR): GR1416 LTD INT 16CFR DTCMOD DV
CATALOG NUMBER (ENCLOSURE): GR1416 LTD ENC HL SMNE1
PANEL ID: GR1400 Series
MOUNTING: Surface

RELAY		CONTROL	LOAD			
NO.	TYPE	SOURCE	VAC	LOAD W/VA	CIRCUIT DESCRIPTION	FIXTURE TYPE
1	NC	NORMAL	277V	---	CORRIDOR LIGHTING (HB-7)	LED
2	NC	NORMAL	277V	---	CORRIDOR LIGHTING (HB-8)	LED
3	NC	NORMAL	277V	---	EXT. LIGHTING (HB-11)	LED
4	NC	NORMAL	120V	---	CIRCULATING PUMP (LB1-35)	---
5	NC	NORMAL	277V	---	SPARE	---
6	NC	NORMAL	277V	---	SPARE	---
7	NC	NORMAL	277V	---	SPARE	---
8	NC	NORMAL	277V	---	SPARE	---
9	NC	NORMAL	277V	---	SPARE	---
10	NC	NORMAL	277V	---	SPARE	---
11	NC	NORMAL	277V	---	SPARE	---
12	NC	NORMAL	277V	---	SPARE	---
13	NC	NORMAL	277V	---	SPARE	---
14	NC	NORMAL	277V	---	SPARE	---
15	NC	NORMAL	277V	---	SPARE	---
16	NC	NORMAL	277V	---	SPARE	---

PANEL NAME: "RPA" (LC & D)
PANEL DESCRIPTION: 277/480V - Relays
CATALOG NUMBER (INTERIOR): GR1416 LTD INT 16CFR DTCMOD DV
CATALOG NUMBER (ENCLOSURE): GR1416 LTD ENC HL SMNE1
PANEL ID: GR1400 Series
MOUNTING: Surface

RELAY		CONTROL	LOAD			
NO.	TYPE	SOURCE	VAC	LOAD W/VA	CIRCUIT DESCRIPTION	FIXTURE TYPE
1	NC	NORMAL	277V	---	CORRIDOR LIGHTING (HA2-7)	LED
2	NC	NORMAL	277V	---	EXTERIOR LIGHTING (HA-13)	LED
3	NC	NORMAL	480V	---	AREA LIGHTING (HA-20)	LED
4				---	AREA LIGHTING (HA-22)	
5	NC	NORMAL	480V	---	AREA LIGHTING (HA-24)	LED
6				---	AREA LIGHTING (HA-26)	
7	NC	NORMAL	277V	---	FLAG LIGHTING (HA-28)	LED
8	NC	NORMAL	277V	---	CANOPY LIGHTING (HA-30)	LED
9	NC	NORMAL	277V	---	CORRIDOR LIGHTING (HA2-7)	LED
10	NC	NORMAL	277V	---	SIGN LIGHTING (LA2-32)	LED
11	NC	NORMAL	120V	---	SPARE	---
12	NC	NORMAL	120V	---	SPARE	---
13	NC	NORMAL	120V	---	SPARE	---
14	NC	NORMAL	120V	---	SPARE	---
15	NC	NORMAL	120V	---	SPARE	---
16	NC	NORMAL	120V	---	SPARE	---

PANEL NAME: "RPC" (LC & D)
PANEL DESCRIPTION: 277/480V - Relays
CATALOG NUMBER (INTERIOR): GR1416 LTD INT 16CFR DTCMOD DV
CATALOG NUMBER (ENCLOSURE): GR1416 LTD ENC HL SMNE1
PANEL ID: GR1400 Series
MOUNTING: Surface

RELAY		CONTROL	LOAD			
NO.	TYPE	SOURCE	VAC	LOAD W/VA	CIRCUIT DESCRIPTION	FIXTURE TYPE
1	NC	NORMAL	277V	---	SPARE	---
2	NC	NORMAL	277V	---	SPARE	---
3	NC	NORMAL	277V	---	SPARE	---
4	NC	NORMAL	277V	---	SPARE	---
5	NC	NORMAL	277V	---	SPARE	---
6	NC	NORMAL	277V	---	SPARE	---
7	NC	NORMAL	277V	---	SPARE	---
8	NC	NORMAL	277V	---	SPARE	---
9	NC	NORMAL	277V	---	SPARE	---
10	NC	NORMAL	277V	---	SPARE	---
11	NC	NORMAL	277V	---	SPARE	---
12	NC	NORMAL	277V	---	SPARE	---
13	NC	NORMAL	277V	---	SPARE	---
14	NC	NORMAL	277V	---	SPARE	---
15	NC	NORMAL	277V	---	SPARE	---
16	NC	NORMAL	277V	---	SPARE	---

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

STATE OF TEXAS
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125390
LICENSED PROFESSIONAL ENGINEER
5/16/2019

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Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
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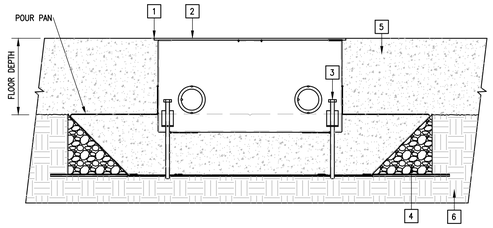
NOTE: ATTACH NAMEPLATES TO ALL ELECTRICAL GEAR AS NOTED ON SECTION 260553.

01 EQUIPMENT IDENTIFICATION LABEL DETAIL

SCALE : NOT TO SCALE

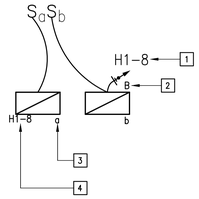


KEYED NOTES:

1. ENCLOSURE TOP IS TO BE PLUMB, LEVEL AND FLUSH WITH THE FINISHED SURFACE.
2. TEMPORARY CONSTRUCTION COVER TO BE REPLACED BY FINISH COVER PRIOR TO CARPET/TILE/WOOD INSTALLATION.
3. ADJUSTMENT SCREWS PROVIDED IN THE PAN KIT.
4. NEW 3/4" - DIA. GRAVEL FILL.
5. CONCRETE SLAB.
6. GRADE.

02 FLOOR BOX WITH POUR PAN DETAIL

SCALE : NOT TO SCALE

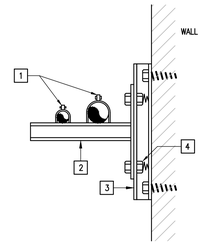


KEYED NOTES:

1. CIRCUIT HOMERUN
2. FIXTURE TYPE - REFER TO LIGHT FIXTURE SCHEDULE
3. INDICATES SWITCH CONTROLLING LIGHT FIXTURE.
4. INDICATES BRANCH CIRCUIT LIGHT FIXTURE IS CONNECTED TO

03 LIGHTING LEGEND DETAIL

SCALE : NOT TO SCALE

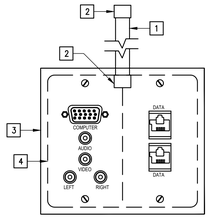


KEYED NOTES:

1. PROVIDE CONDUIT CLAMPS.
2. PROVIDE GALVANIZED UNISTRUT WALL BRACKET.
3. PROVIDE RAWSET OR BOLT GALVANIZED UNISTRUT TO WALL.
4. PROVIDE SELF HOLDING CLAMPING NUT WITH SPRING.

04 RACEWAY RUNS SUPPORT DETAIL

SCALE : NOT TO SCALE

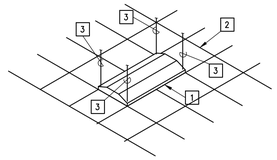


KEYED NOTES:

1. PROVIDE 1.5" EMT STUBBED ABOVE CLG.
2. PROVIDE INSULATING BUSHING.
3. PROVIDE 2-GANG MUD RING.
4. PROVIDE MULTI-MEDIA OUTLET RAPID RUN MODEL NO. 2212-60028-001, INCLUDING DATA CONNECTOR AND CAT6 WIRING

05 MULTI MEDIA OUTLET DETAIL

SCALE : NOT TO SCALE

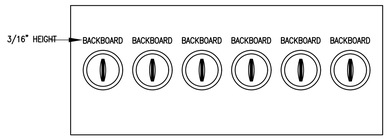


KEYED NOTES:

1. PROVIDE 2'x 4' LAY-IN LIGHT FIXTURE
2. SUSPENDED CEILING
3. PROVIDE TIE WIRE, CONNECT TO ALL FOUR CORNERS OF FIXTURE TO STRUCTURE ABOVE, INDEPENDENT OF CEILING SUPPORTS.

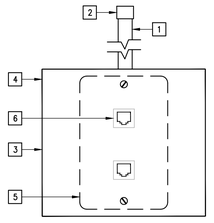
06 TYPICAL LAY-IN FIXTURE SUPPORT

SCALE : NOT TO SCALE



07 LABELED GYM KEYED SWITCH COVERPLATE DETAIL

SCALE : NOT TO SCALE

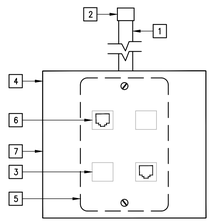


KEYED NOTES:

1. PROVIDE 1" EMT STUBBED ABOVE CLG.
2. PROVIDE INSULATING BUSHING
3. PROVIDE 4"X4"X2-5/8" DEEP BOX
4. PROVIDE COVERPLATE
5. PROVIDE STEEL MUD RING
6. PROVIDE CATEGORY SIX JACK

08 TYPICAL DATA OUTLET DETAIL

SCALE : NOT TO SCALE



KEYED NOTES:

1. PROVIDE 1" EMT STUBBED ABOVE CLG.
2. PROVIDE INSULATING BUSHING
3. PROVIDE BLANK FILLER COVER
4. PROVIDE COVERPLATE
5. PROVIDE STEEL MUD RING
6. PROVIDE CATEGORY SIX JACK
7. PROVIDE 4"X4"X2-5/8" DEEP BOX

09 TYPICAL DATA/TELEPHONE OUTLET DETAIL

SCALE : NOT TO SCALE

NOTES:

1. INSTALL ALL ROUGH-INS IN STRICT ACCORDANCE WITH MANUFACTURER PUBLISHED TEMPLATES. PROVIDE MOCK-UP FOR OWNER REPRESENTATIVE APPROVAL.
2. TEMPLATE TO BE PROVIDED BY PROJECTOR MANUFACTURER/OWNER. COORDINATE WITH OWNER PRIOR TO ANY ROUGH-IN.

10 WALL PROJECTOR MOUNTING BRACKET DETAIL

SCALE : NOT TO SCALE

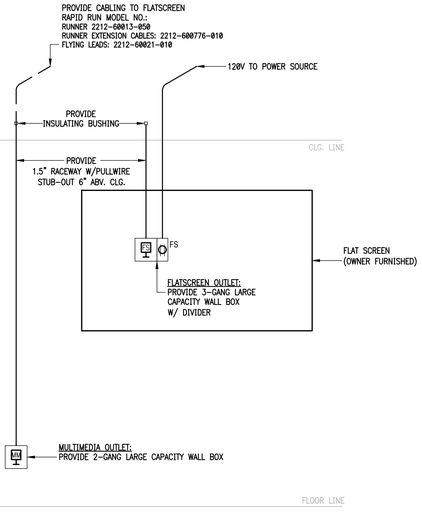
KEYED NOTES:

1.
2. PROVIDE UNISTRUT STRUCTURAL CHANNEL SECURED TO TO JOIST AT BOTH ENDS.

   PROVIDE 1/2" GALVANIZED ROD MINIMUM.
3. PROVIDE LOCKNUT.
4. PROVIDE GALVANIZED UNISTRUT 8'-0" O/C MAXIMUM.
5. PROVIDE 8'-1" MAXIMUM SIZE ON BOTTOM OF UNISTRUT.
6. VARIES.

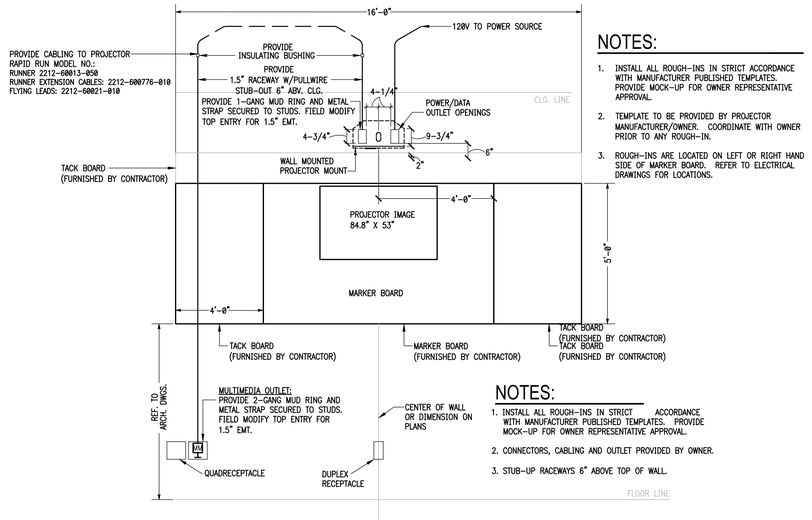
11 HORIZONTAL RACEWAYS SUPPORT DETAIL

SCALE : NOT TO SCALE



12 TYPICAL FLAT SCREEN DETAIL

SCALE : NOT TO SCALE



NOTES:

1. INSTALL ALL ROUGH-INS IN STRICT ACCORDANCE WITH MANUFACTURER PUBLISHED TEMPLATES. PROVIDE MOCK-UP FOR OWNER REPRESENTATIVE APPROVAL.
2. TEMPLATE TO BE PROVIDED BY PROJECTOR MANUFACTURER/OWNER. COORDINATE WITH OWNER PRIOR TO ANY ROUGH-IN.
3. ROUGH-INS ARE LOCATED ON LEFT OR RIGHT HAND SIDE OF MARKER BOARD. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS.

13 TYPICAL CLASSROOM WALL PROJECTOR ROUGH-IN

SCALE : NOT TO SCALE

KEYED NOTES:

1. PROVIDE ISIMET UTILITY CONTROLER WITH PANIC BUTTON (PURGE), ADDITIONAL LOW SPEED SWITCH, FIELD CONFIGURE CONTROLS SYSTEM.
2. PROVIDE 120VAC POWER SUPPLY WIRING IN CONDUIT MAKE CONNECTION @ J-BOX.
3. ENERGY MANAGEMENT CONTROL CONTACTOR TO MAKE CONNECTIONS TO TERMINAL 1.
4. PROVIDE 1/2"EMT AND CONTROL WIRING FROM AIR HANDLING DEVICE.
5. TO HVAC CONTROL PANEL.
6. EXHAUST FAN BY MECHANICAL CONTRACTOR. EXHAUST FAN SHALL ACTIVATE HIGH SPEED TO PURGE MODE ON PANIC. PROVIDE ADDITIONAL LOW SPEED CONTROL SWITCH. SEE CONTROLS SEQUENCE.
7. PROVIDE 208V, 3ø LINE & NEUTRAL FROM PANELBOARD.
8. CONNECT OUTPUT CIRCUIT WIRING TO TERMINAL 2.
9. PROVIDE 1/2" EMT FIELD INSTALLED. PROVIDE NEW 18AWG TO EACH SOLENOID AND RELAY.
10. TO ADJACENT LAB ISIMET UTILITY CONTROLLER.
11. PROVIDE SOLENOID ENCLOSURE.
12. PROVIDE CONTACTOR ENCLOSURE.
13. PROVIDE 120VAC TO CONVENIENCE OUTLETS AT STUDENT WORK STATIONS.
14. PROVIDE 120V FROM PANELBOARD.
15. PROVIDE CONNECTIONS TO SCIENCE LAB TABLES - TYPICAL.

14 TYPICAL SCIENCE LAB UTILITY CONTROLS DETAIL

SCALE : NOT TO SCALE

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IDEA PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED
PROFESSIONAL ENGINEER
5/16/2019

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Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
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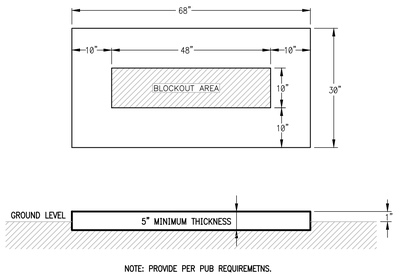


NOTE: PROVIDE PER PUB REQUIREMETNS.

A.E.P. SECTIONALIZER CONCRETE PAD DETAIL

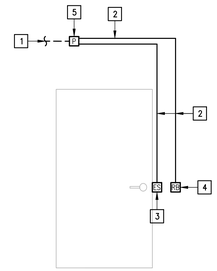
01 SCALE : NOT TO SCALE

DOOR ACCESS SYSTEM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
– – –	DIVISION 26 TO PROVIDE RACEWAY AND WIRING .	– – – –
———	DIVISION 26 TO PROVIDE RACEWAY AND LOW VOLTAGE CABLING.	– – – –

NOTES:

1. PRIOR TO ANY ROUGH-IN COORDINATE EXACT LOCATION OF BACK BOXES WITH DOOR ACCESS SYSTEM SUPPLIER.
2. ALL 120V CONNECTIONS, WIRING AND RACEWAYS SHALL BE BY ELECTRICAL CONTRACTOR.

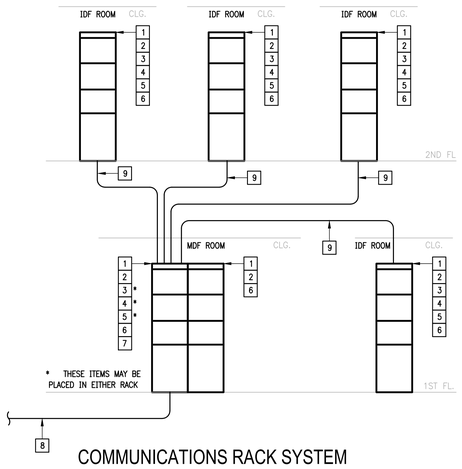


DOOR ACCESS SYSTEM KEYED NOTES:

1. PROVIDE 120V CONNECTION.
2. PROVIDE LOW VOLTAGE WIRING.
3. CONNECT ELECTRIC STRIKE FURNISHED BY DOOR HARDWARE CONTRACTOR.
4. PROVIDE RELEASE BUTTON. SEE PLAN FOR LOCATION.
5. PROVIDE POWER SUPPLY.

DOOR ACCESS SYSTEM DETAIL

02 SCALE : NOT TO SCALE

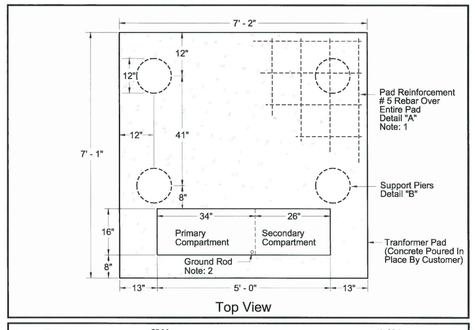


KEYED NOTES:

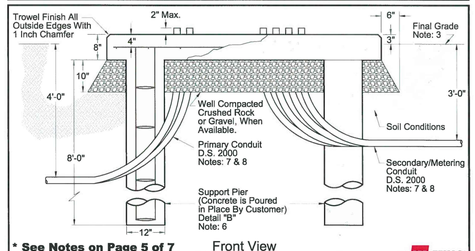
1. PROVIDE DATA RACK – SEE SPECIFICATIONS.
2. PROVIDE CABLE MANAGER – SEE SPECIFICATIONS.
3. PROVIDE DATA PATCH PANEL (PORT QTY AS REQ'D) – SEE SPECIFICATIONS.
4. PROVIDE VOICE PATCH PANEL (PORT QTY AS REQ'D) – SEE SPECIFICATIONS.
5. PROVIDE DATA SWITCH (PORT QTY AS REQ'D) – SEE SPECIFICATIONS.
6. PROVIDE UPS – SEE SPECIFICATIONS.
7. HEAD-END EQUIPMENT – PROVIDED BY OWNER.
8. INTERNET SERVICE PROVIDER CABLING.
9. PROVIDE FIBER OPTIC CABLE – SEE SPECIFICATIONS – TYPICAL.

COMMUNICATIONS RACK SYSTEM RISER DETAIL

04 SCALE : NOT TO SCALE



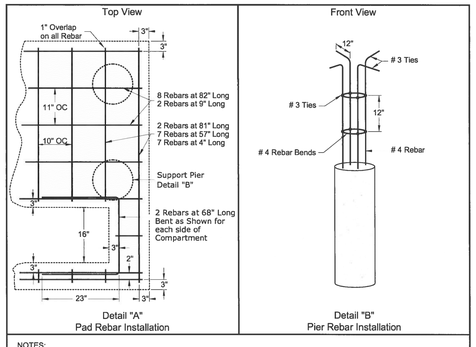
Top View



*** See Notes on Page 5 of 7** Front View

Concrete Pad & Piers for Three Phase Pad-Mounted Transformer

DATE:	Revised Date:	SCALE:	
04/30/2012	10/02/2013	None	Page 3 of 7



Detail "A" Pad Rebar Installation

Detail "B" Pier Rebar Installation

NOTES:

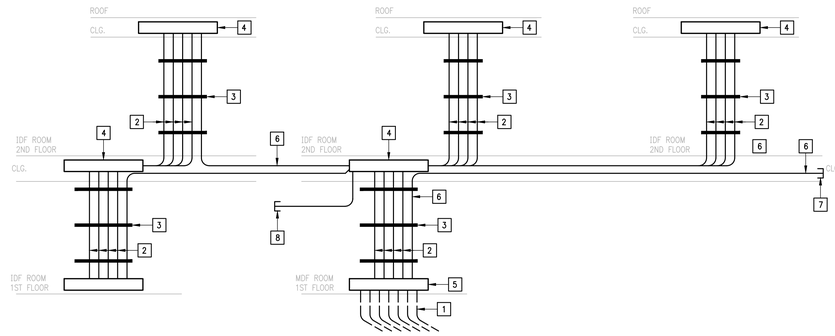
1. Slab Reinforcement shall be #5 Rebars On Center (O/C), spacing to follow Dimensions shown on the drawing with 4" Cover. Reinforcing Bars shall conform to ASTM A615 Grade 60. Concrete shall have a Minimum Compressive Strength of 4000 PSI after 28 Days.
2. For Ground Rod Placement, Refer to DS 2235 or 2236.
3. Final Grade shall be established before installation of Pad.
4. Concrete Pad will be installed with piers.
5. Piers shall be 12" Minimum in Diameter, 8 Feet Deep with 4 - #4 Verticle Rebar and #3 Ties at 12" On Center (O/C), and provide a Minimum 3" Cover. The #4 Bend Bars should be 12" Long in the Horizontal Direction.
6. Pier Rebar bent in the horizontal direction so that it may tie in with Pad Rebar.
7. The number and placement of Secondary Conduits to be determined by Engineering. Conduit may extend in any direction as required by the Customer.
8. Burial depth for Conduit is defined as the distance between Final Grade and the top of the Conduit. Unless otherwise designated by Engineering, Conduits shall be installed at a Burial Depth of not less than 4'-0" and Secondary Conduits shall be installed at a Burial Depth of not less than 3'-0". These initial depths are to allow for changes to the Surface Conditions. Local Agreements and Codes may require additional depth. If there are known extensive changes to the Final Grade such that their depths are not maintained, corrective action shall be taken.

Concrete Pad and Piers for Three Phase Pad-Mounted Transformer 75 KVA -2500 KVA

Date:	Revised Date:	Scale:	
04/30/2012	10/02/2013	None	Page 4 of 7

AEP TRANSFORMER CONCRETE PAD DETAIL

03 SCALE : NOT TO SCALE

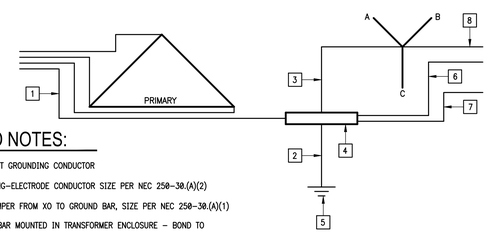


SPECIAL SYSTEMS RACEWAYS WIREWAY DETAIL

05 SCALE : NOT TO SCALE

KEYED NOTES:

1. PROVIDE RACEWAYS WITH PULLWIRE (FIBER OPTIC CABLE). SEE SHEET MEP1.01.
2. PROVIDE (4) – 4" RACEWAYS.
3. PROVIDE UNISTRUT WALL BRACKET AS REQUIRED. SECURE RACEWAYS WITH "U" CLAMPS TYPICAL.
4. PROVIDE WIREWAY 12" ABOVE CEILING AS NOTED ON ELECTRICAL DRAWINGS.
5. PROVIDE WIREWAY AT FLOOR LEVEL.
6. PROVIDE 4" RACEWAY WITH PULLWIRE (FIBER OPTIC CABLE). ROUTE ABOVE ACCESSIBLE CEILING SPACE.
7. SEE SHEET E4.02 FOR TERMINATION POINT (FUTURE PHASE II).
8. 2" RACEWAY TO TERMINATE AT KITCHEN AREA (ABOVE CEILING).

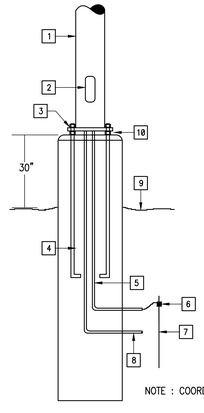


KEYED NOTES:

1. EQUIPMENT GROUNDING CONDUCTOR
2. GROUNDING–ELECTRODE CONDUCTOR SIZE PER NEC 250–30.(A)(2)
3. BOND JUMPER FROM XO TO GROUND BAR, SIZE PER NEC 250–30.(A)(1)
4. GROUND BAR MOUNTED IN TRANSFORMER ENCLOSURE – BOND TO FRAME.
5. GROUNDING ELECTRODES PER NEC 250–30. (A)(3)REBAR FOUNDATION.
6. GREEN/YELLOW IG GROUNDING CONDUCTOR, SIZE PER NEC 250–146, 250–146.(D)
7. GREEN EQUIPMENT GROUNDING CONDUCTOR, SIZE PER NEC 250–122.
8. OUTPUT NEUTRAL – 200% SIZE FOR NONLINEAR LOADS.

TRANSFORMER WIRING DIAGRAM DETAIL

06 SCALE : NOT TO SCALE



KEYED NOTES:

1. LIGHTING POLE – SEE SCHEDULE.
2. HANDHOLE COVER.
3. DOUBLE NUTS FOR ADJUSTMENT OF POLE VERTICAL ALIGNMENT.
4. ANCHOR BOLTS AS REQUIRED BY POLE MANUFACTURER FURNISHING POLE. (MAX. 24" DIAM. BOLT CIRCLE).
5. 1/2" PVC – #8G.
6. CONNECTOR.
7. 3/4" X 10' COPPER CLAD GROUND ROD.
8. CONDUIT 36" BELOW GRADE.
9. GRADE LINE OR PARKING LOT SURFACE.
10. DO NOIT FILL IN WITH GROUT.

NOTE : COORDINATE WITH GENERAL CONTRACTOR.

LIGHT POLE FOUNDATION DETAIL

07 SCALE : NOT TO SCALE

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS

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5.16.2019

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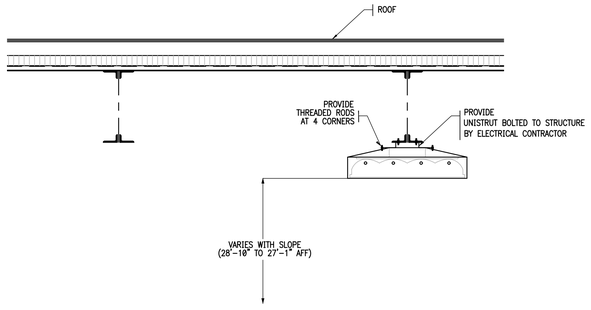
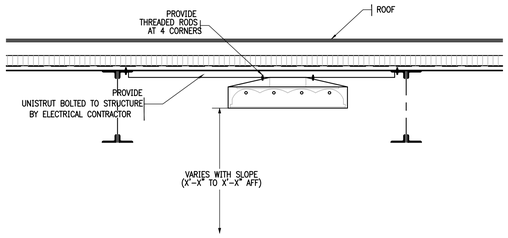
Architects-Planners
Interior Designers

Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E9.02



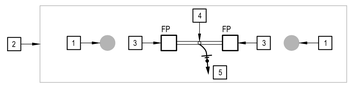
01 GYMNASIUM LIGHT FIXTURE MOUNTING DETAIL

SCALE : NOT TO SCALE

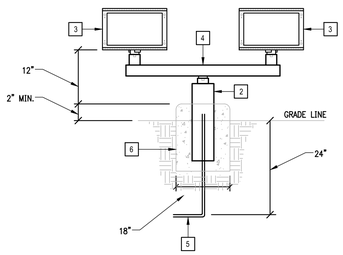


02 CAFETERIA LIGHT FIXTURE MOUNTING DETAIL

SCALE : NOT TO SCALE



PLAN VIEW



03 FLAG POLE LIGHTING DETAIL

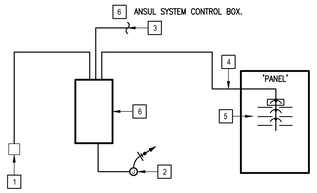
SCALE : NOT TO SCALE

KEYED NOTES:

1. FLAG POLE.
2. FLAG POLE CONCRETE PAD.
3. PROVIDE FLOOD LIGHT TYPE "FP" – SEE LIGHT FIXTURE SCHEDULE.
4. PROVIDE SQUARE BULL HORN FOR MOUNTING TWO LIGHT FIXTURES IN LINE.
5. PROVIDE HOMERUN TO POWER SOURCE.
6. PROVIDE CONCRETE FOOTING. COORDINATE WITH ARCHITECTURAL/STRUCTURAL. TOP OF FOOTING TO BE 2" MINIMUM ABOVE GRADE.
7. PROVIDE STANCHION.

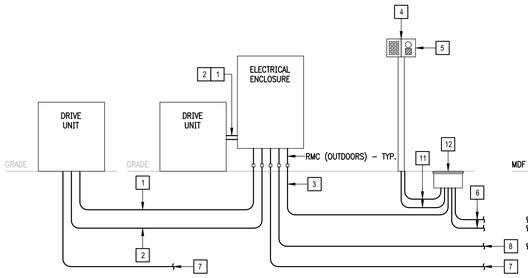
KEYED NOTES:

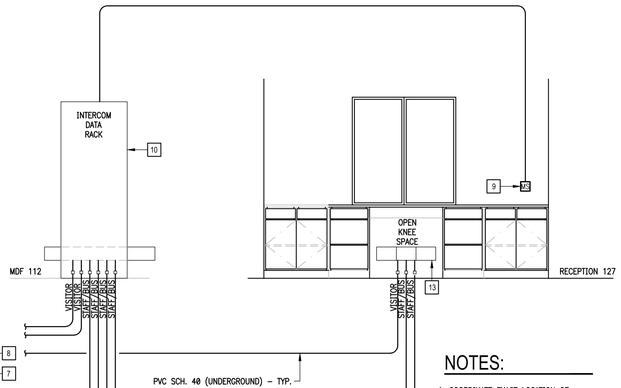
1. PROVIDE PULL STATION (FLUSH MOUNTED).
2. PROVIDE J-BOX FOR ANSUL SYSTEM POWER.
3. CONTRACTOR SHALL COORDINATE SIGNAL SYSTEM REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER.
4. PROVIDE CONTROL SIGNAL TO SHUNT-TRIP BREAKERS.
5. PROVIDE SHUNT-TRIP BREAKERS AS NOTED ON PANELBOARD SCHEDULES.
6. ANSUL SYSTEM CONTROL BOX.



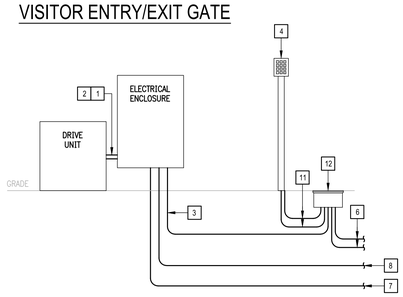
04 ANSUL SYSTEM DIAGRAM

SCALE : NONE

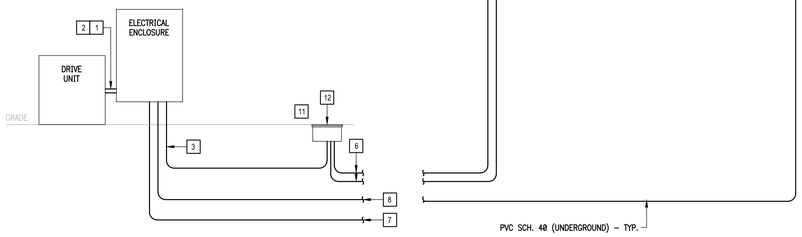




VISITOR ENTRY/EXIT GATE



STAFF/BUS ENTRY GATE



STAFF/BUS EXIT GATE

05 SLIDE GATE OPERATOR DETAIL

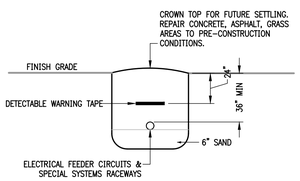
SCALE : NOT TO SCALE

NOTES:

1. COORDINATE EXACT LOCATION OF COMPONENTS WITH GATE EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH-IN.
2. INTERCOM/VIDEO CAMERA AND CAT5 WIRING BY THIS CONTRACTOR. PROVIDE NEW AIPHONE SYSTEM.
3. ALL COMMUNICATIONS WIRING SHALL BE "AQUASEAL" WEATHER RESISTANT TYPE.
4. ALL GATES CONTROL WIRING SHALL BE PROVIDED BY GATE EQUIPMENT SUB-CONTRACTOR.
5. INTERFACE AIPHONE EQUIPMENT WITH BUILDING ACCESS SYSTEM.

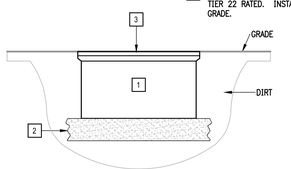
KEYED NOTES:

1. PROVIDE 1-2" RACEWAY-(POWER).
2. PROVIDE 1-2" RACEWAY-(CONTROL WIRING).
3. PROVIDE 1-2" – CONTROL WIRING.
4. ACCESS CONTROL: PEDESTAL PROVIDED BY SLIDE GATE SUPPLIER.
5. PROVIDE VIDEO DOOR STATION AIPHONE MODEL #JK-DVF WALL MOUNTED (FLUSH) ADJACENT TO MAIN ENTRY DOOR.
6. PROVIDE 1-2" RACEWAY WITH CAT5 CABLE FOR VIDEO DOOR STATION INTERCOM & VIDEO CAMERA AND 1-2" RACEWAY FOR SPARE. TERMINATE AT MDF ROOM WIREWAY.
7. PROVIDE 1-2" RACEWAY TO POWER SOURCE. SEE MEP SITE PLAN.
8. PROVIDE 1-2" RACEWAY TO RECEPTION 116 FOR CONTROLS. TERMINATE AT WIREWAY BELOW DESK.
9. PROVIDE AIPHONE MODEL #AX-8MV-W MASTER STATION.
10. PROVIDE AIPHONE MODEL #AX-084C-SS CENTRAL EXCHANGE UNIT MOUNTED ON RACK.
11. PROVIDE 2-1.25" RACEWAYS FOR PEDESTAL AND AIPHONE WIRING/SPARE.
12. PROVIDE NEW 15"X17" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "COMMUNICATIONS" COVER LOGO – SEE DETAIL.
13. PROVIDE 3 – 2-GANG GANGABLE LARGE CAPACITY WALL BOXES HUBBEL MODEL # HBL985 FLUSH MOUNTED IN WALL. PROVIDE A BLANK COVER PLATE.



06 BURIAL DETAIL FOR ELECTRICAL RACEWAYS

SCALE : NONE

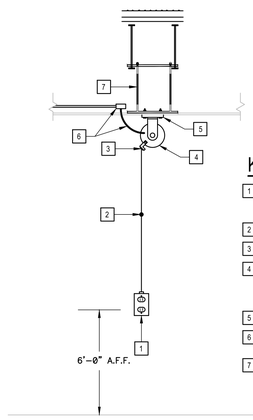


KEYED NOTES:

1. PROVIDE POLYMER CONCRETE PULL BOX TIER 22 RATED. COMPLYING WITH ANSI/SCTE 77 AND NEC 314.30.
2. PROVIDE 8" OF GRAVEL OR CRUSHED ROCK.
3. PROVIDE ONE PIECE LOCKING COVER WITH LOGO TIER 22 RATED. INSTALL COVER LEVEL WITH GRADE.

07 POLYMER CONCRETE PULLBOX DETAIL

SCALE : NONE



KEYED NOTES:

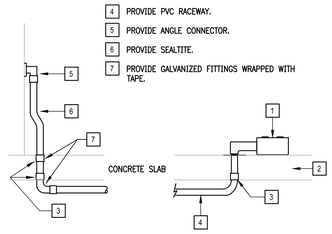
1. PROVIDE TWO DUPLEX RECEPTACLES SHALL BE HUBBELL MODEL NO. HBL45123R20W IN CAST "BELL BOX" & STAINLESS STEEL PLATE.
2. PROVIDE BALL STOP.
3. PROVIDE FOUR ROLLER OUTLET.
4. PROVIDE CORD REEL HUBBELL MODEL NO. HBL45123W WITH 340" CONTINUOUS SWIVEL BASE, BALL STOP, 45FT. OF NO. 12 CABLE, CABLE LOCKING RATCHET.
5. PROVIDE BOLT TO UNISTRUT – SPANNING JOIST.
6. PROVIDE JUNCTION BOX WITH FLEX CONNECTION TO REEL.
7. PROVIDE THREADED ROD AND UNISTRUT SUPPORT.

08 CORD REEL MOUNTING DETAIL

SCALE : NOT TO SCALE

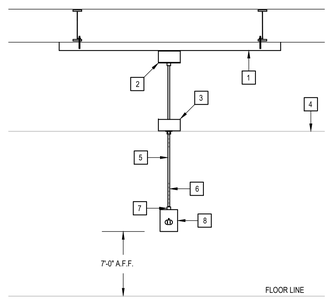
KEYED NOTES:

1. PROVIDE CROUSE-HINDS SINGLE GANG CAST DEVICE BOX (FS). LAY FLAT ON FLOOR WITH WEATHERPROOF COVER.
2. PROVIDE RIGID GALVANIZED WRAPPED WITH TAPE.
3. PROVIDE COUPLING.
4. PROVIDE PVC RACEWAY.
5. PROVIDE ANGLE CONNECTOR.
6. PROVIDE SEALTITE.
7. PROVIDE GALVANIZED FITTINGS WRAPPED WITH TAPE.



09 KITCHEN EQUIPMENT CONNECTION DETAIL

SCALE : NONE



KEYED NOTES:

1. PROVIDE UNISTRUT BOLTED TO BUILDING STRUCTURE STEEL.
2. PROVIDE J-BOX ATTACHED TO UNISTRUT.
3. PROVIDE J-BOX SECURE TO BUILDING STRUCTURE STEEL.
4. SUSPENDED CEILING LINE.
5. PROVIDE 3#12 "SO" CORD.
6. PROVIDE STAINLESS STEEL MESH BY KELLEMS AT BOTH ENDS.
7. PROVIDE ALUMINUM BODY STRAIGHT MALE THREADED CONNECTOR BY KELLEMS.
8. PROVIDE CAST ALUMINUM BOX WITH GFCI RECEPTACLE AS NOTED.

10 PENDANT MOUNTED RECEPTACLE DETAIL

SCALE : NONE

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
IDEA Public Schools
PALMVIEW, TEXAS

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED ARCHITECT
5/16/2019

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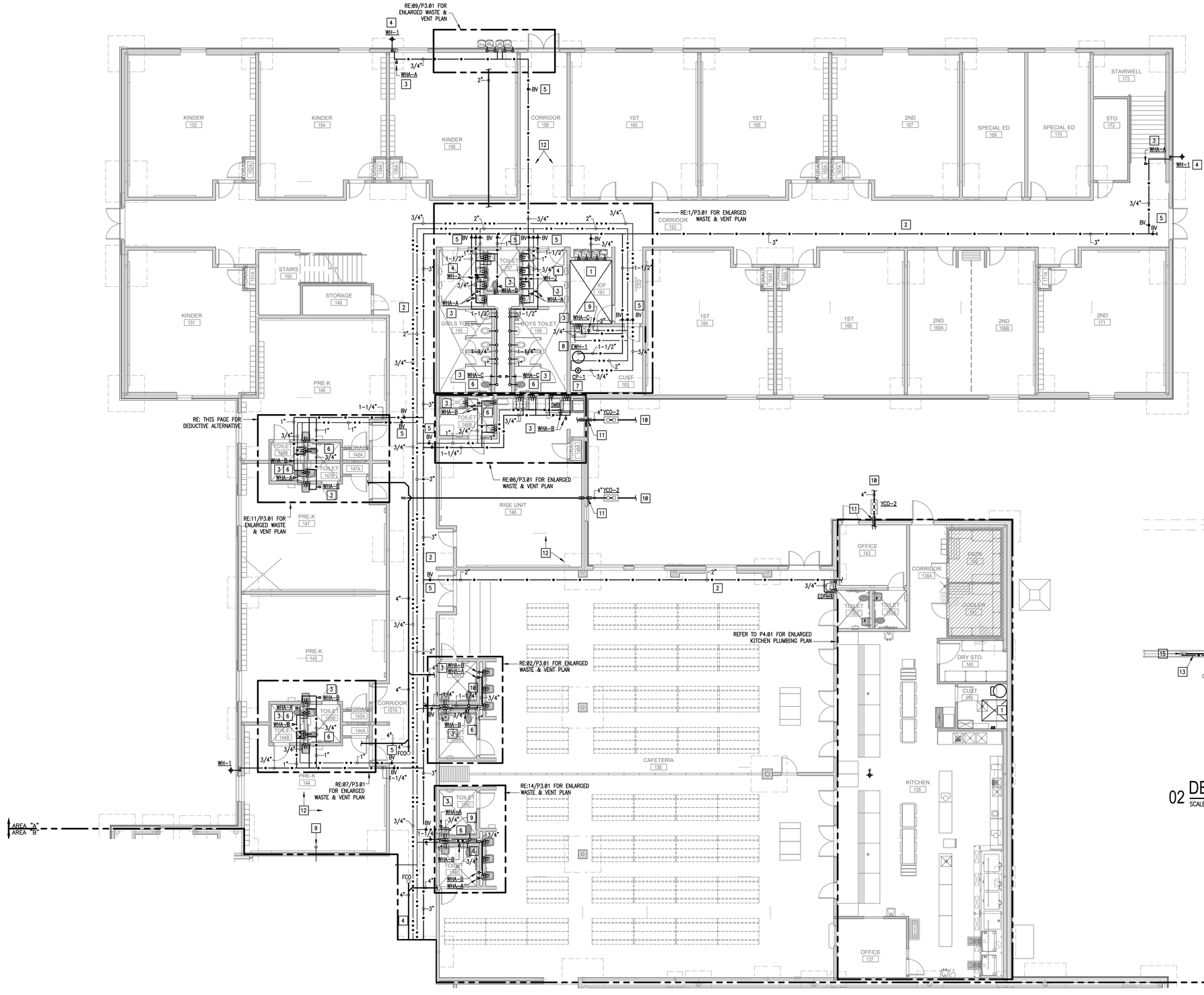
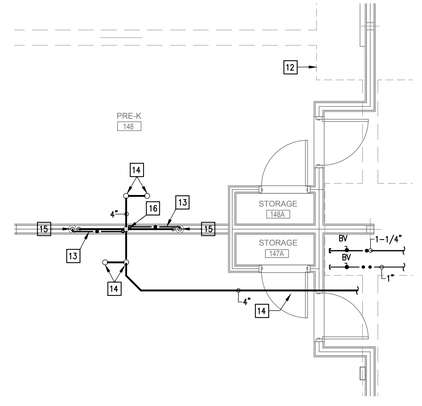
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	E9.03

PLUMBING KEYED NOTES:

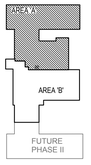
1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
3. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA. (TYPICAL)
5. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
6. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
7. PROVIDE CIRCULATING PUMP CP-1 AS SCHEDULED. REFER TO SCHEDULES SHEET AND DETAILS FOR MORE INFORMATION.
8. PROVIDE ELECTRIC WATER HEATER AS SCHEDULED.
9. RUN HOT WATER PIPING UP TO 2ND FLOOR AT THIS APPROXIMATE LOCATION.
10. REFER TO MEP SITE PLAN FOR CONTINUATION.
11. SLEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
12. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
13. PROVIDE 1/2" SOFT DRAWN COPPER UNDER CONCRETE FLOOR SLAB. ROUTE PIPING UNDERNEATH THE POLYETHYLENE VAPOR BARRIER. PIPING SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL (TYPICAL). AT ONE END, CAP PIPING AT P-TRAP UNDER CONCRETE FLOOR SLAB. AT OPPOSITE END, RISE UP AND CAP PIPING APPROXIMATELY ONE (1) FOOT ABOVE FINISHED CONCRETE FLOOR SLAB INSIDE WALL CAVITY.
14. 2" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
15. PROVIDE 4" ROUGH-IN FOR WATER CLOSET. CAP PIPING FLUSH WITH FINISHED CONCRETE FLOOR SLAB.
16. PROVIDE 3" P-TRAP ROUGH-IN FOR 3" FLOOR DRAIN. CAP PIPING FLUSH WITH FINISHED CONCRETE FLOOR SLAB.
17. PROVIDE A 3" VENT ROUGH-IN. CAP PIPING APPROXIMATELY 1FT ABOVE FINISHED CONCRETE SLAB INSIDE WALL CAVITY.



01 PLUMBING PLAN
SCALE: 1/8" = 1'- 0"



02 DEDUCTIVE ALTERNATE
SCALE: 1/4" = 1'- 0"



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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

PALMVIEW
PALMVIEW, TEXAS



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Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No:	IDEA Palmview Phase I
Sheet:	P2.01

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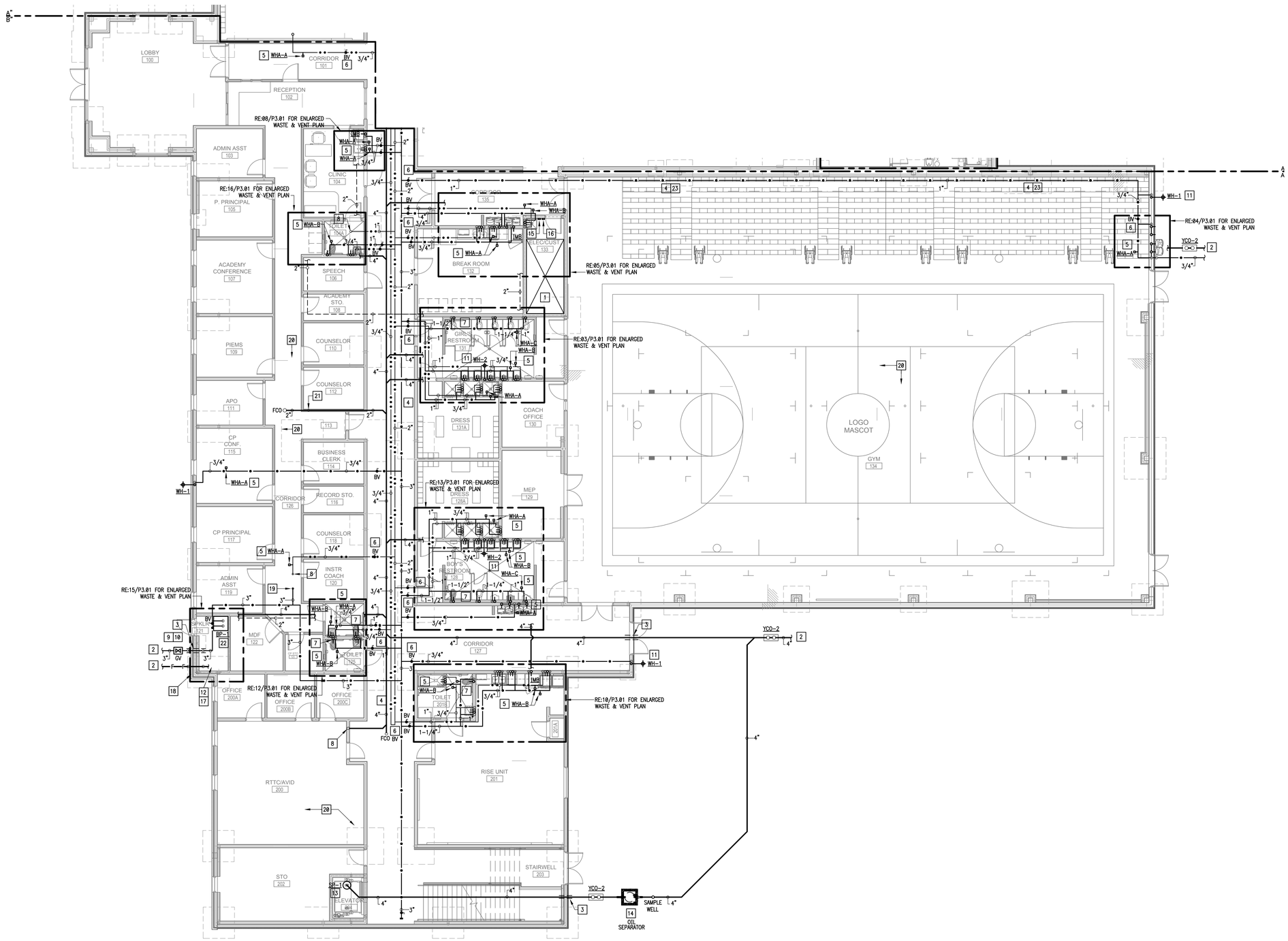

01 PLUMBING PLAN

SCALE: 1/8" = 1'- 0"

NORTH

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. REFER TO MEP SITE PLAN FOR CONTINUATION.
3. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
4. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
5. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
6. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
7. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
8. RUN HOT WATER PIPING UP TO 2ND FLOOR AT THIS APPROXIMATE LOCATION.
9. PROVIDE GATE VALVE IN QUAZITE BOX. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
10. PROVIDE 1" CLOSED-CELL INSULATION WITH METAL JACKET ON EXPOSED PIPING. PENETRATE EXTERIOR WALL AS LOW AS POSSIBLE. TURN DOWN TO UNDERGROUND.
11. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA. (TYPICAL)
12. FIRE SPRINKLER RISER LOCATION. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
13. PROVIDE SUMP PUMP SP-1 FOR ELEVATOR PIT. SEE ASSOCIATED DETAIL ON DETAIL SHEET. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS AND STRICTLY IN ACCORDANCE WITH TDLR AND IPC REQUIREMENTS.
14. PROVIDE OIL/WATER SEPARATOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
15. PROVIDE OIL/WATER SEPARATOR HIGH OIL ALARM PANEL.. FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
16. PROVIDE SUMP PUMP ALARM PANEL. FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
17. PROVIDE FIRE SPRINKLER LINE WITH BACK FLOW PREVENTER ON RISER. REFER TO CIVIL DRAWING FOR FIRE LINE CONTINUATION. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR.
18. COORDINATE FREE STANDING FDC AND PROVISION OF BACK FLOW PREVENTER WITH CIVIL.
19. RUN COLD WATER PIPING UP TO 2ND. FLOOR AT THIS APPROXIMATE LOCATION
20. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
21. 2" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
22. PROVIDE BOOSTER PUMP BP-1 AS SCHEDULED (ALTERNATE #4).
23. PAINT ALL EXPOSED PIPING TO MATCH ARCHITECTURAL FINISHES. COORDINATE COLOR WITH ARCHITECT.

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

IDEA PALMVIEW
PALMVIEW, TEXAS

AREA 'A'
AREA B
FUTURE PHASE II

KEYPLAN

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STATE OF TEXAS
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LICENSED
PROFESSIONAL ENGINEER
5/16/2019

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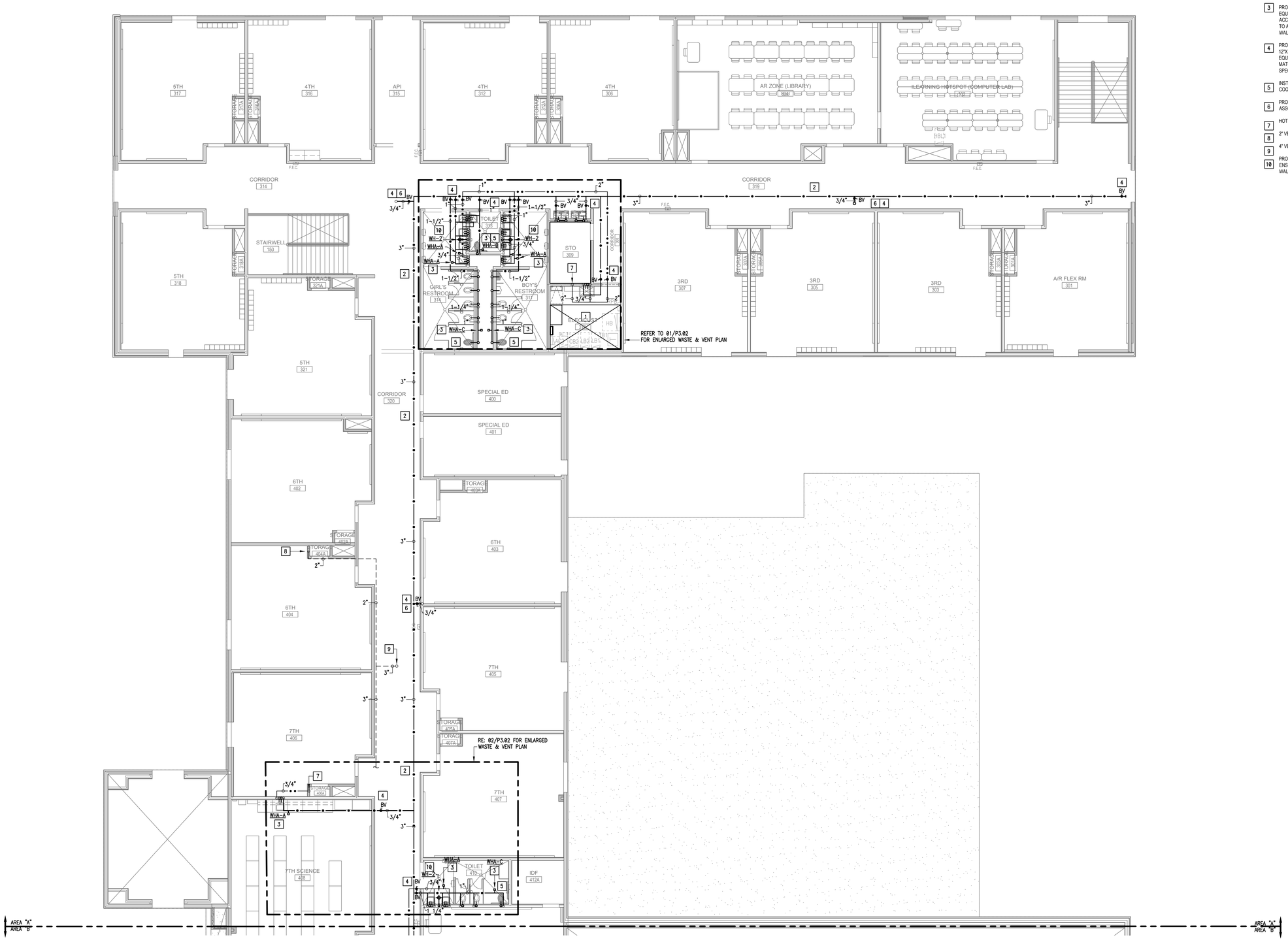
Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	P2.02



01 PLUMBING PLAN (2ND FLOOR)

SCALE: 1/8" = 1'- 0"

NORTH

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
3. PROVIDE A BELLOWS TYPE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
6. PROVIDE DOMESTIC WATER PIPING TO ROOF AND CONNECT WATER HOSE BIBB. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
7. HOT WATER PIPING FROM 1ST. FLOOR AT THIS APPROXIMATE LOCATION
8. 2" VENT UP FROM 1ST. FLOOR AT THIS APPROXIMATE LOCATION.
9. 4" VENT THRU ROOF.
10. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA - TYPICAL.

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IDEA PUBLIC SCHOOLS PHASE 1
PALMVIEW
PALMVIEW, TEXAS

IDEA Public Schools

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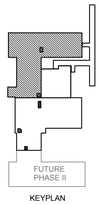

KEYPLAN

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Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: P2.03

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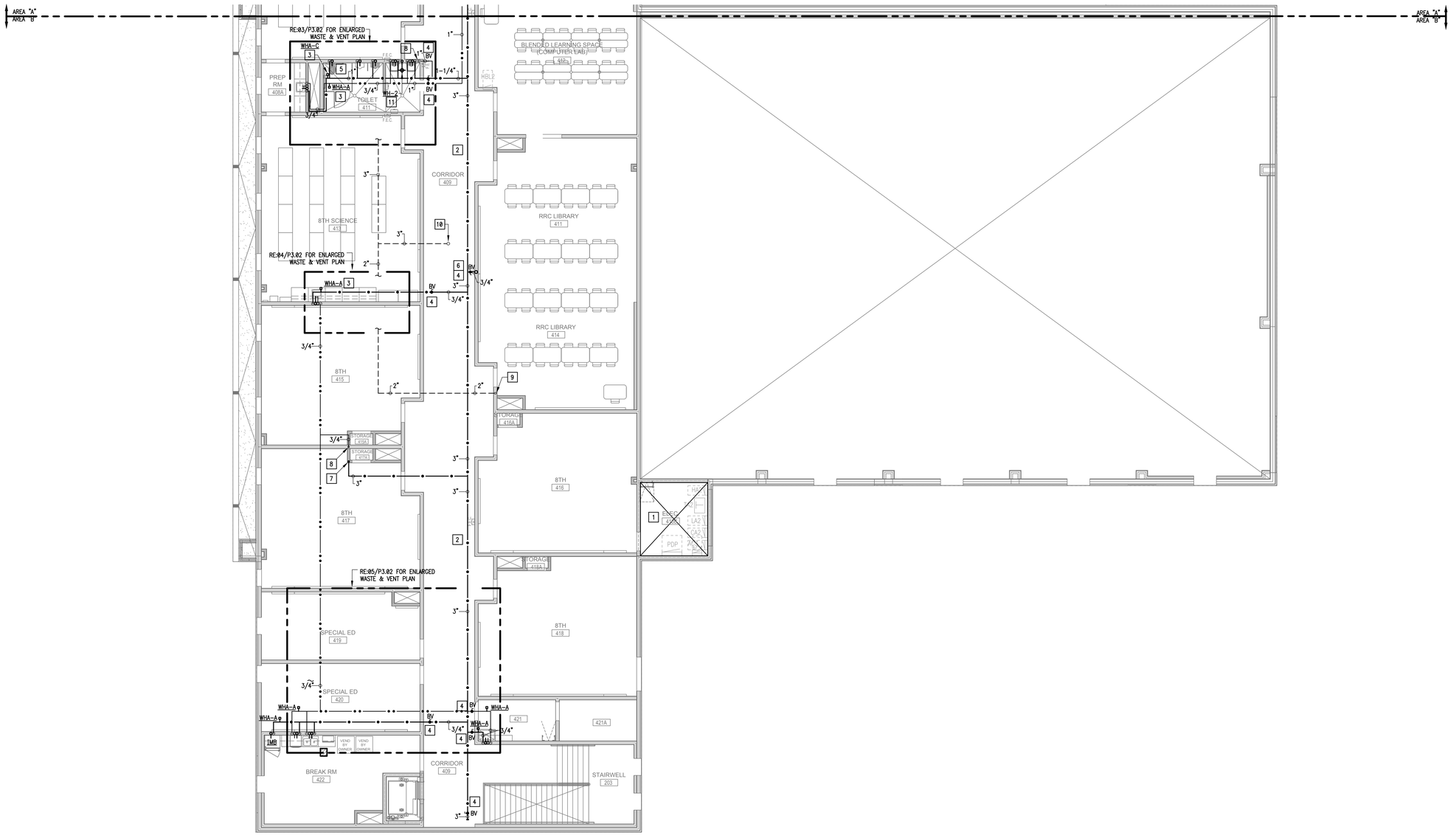
PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
3. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
6. PROVIDE DOMESTIC WATER PIPING UP TO ROOF TO SERVE ROOF HYDRANT. COORDINATE WITH GENERAL CONTRACTOR.
7. COLD WATER PIPING FROM 1ST. FLOOR AT THIS APPROXIMATE LOCATION.
8. HOT WATER PIPING FROM 1ST. FLOOR AT THIS APPROXIMATE LOCATION
9. 2" VENT UP FROM 1ST. FLOOR AT THIS APPROXIMATE LOCATION.
10. 4" VENT THRU ROOF.
11. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
12. 4" SANITARY SEWER LINE DOWN TO 1ST FLOOR AT THIS APPROXIMATE LOCATION.



01 PLUMBING PLAN (2ND FLOOR)
SCALE: 1/8" = 1'-0"

NORTH

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1
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FUTURE PHASE II

KEYPLAN

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Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
Sheet: P2.04

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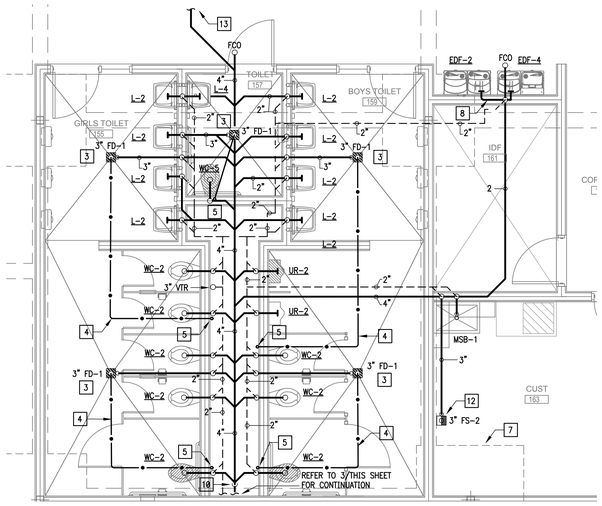
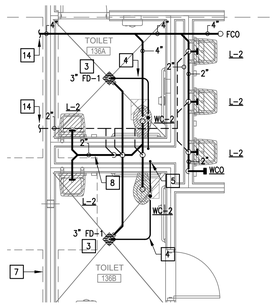
Xref: \Y18V64_TP.dwg

KEYED NOTES:

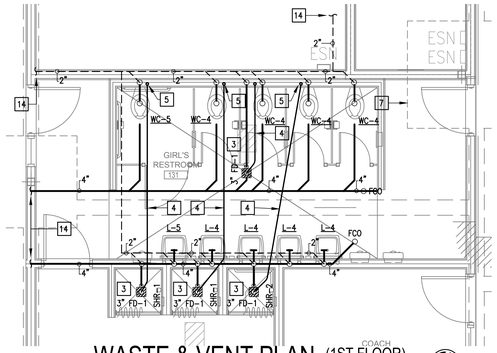
1. REFER TO MEP SITE PLAN FOR CONTINUATION.
2. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
3. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
4. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
5. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
6. DISHWASHING MACHINE MUST DISCHARGE BY MEANS OF AN AIR GAP TO PREVENT SEWAGE FROM BACKING UP INTO THE DISHWASHING COMPARTMENT IN THE EVENT OF A STOPPAGE IN THE DRAINAGE SYSTEM.
7. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
8. ROUTE ABOVEGROUND THROUGH METAL STUD WALL.
9. PROVIDE 2" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
10. PROVIDE 4" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
11. PROVIDE 2" VENT PIPING UP TO 2ND FLOOR.
12. PROVIDE FLOOR SINK TO COLLECT RTU CONDENSATE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
13. REFER TO SHEET P2.01 FOR CONTINUATION
14. REFER TO SHEET P2.02 FOR CONTINUATION
15. CONNECT TO LAVATORY P-TRAP TRAP PRIMER ZURN Z1021 OR APPROVED EQUAL.



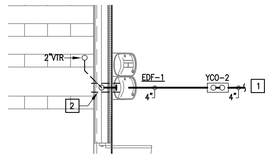
01 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



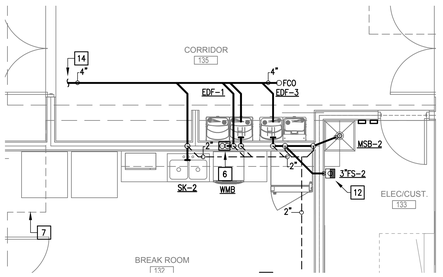
02 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



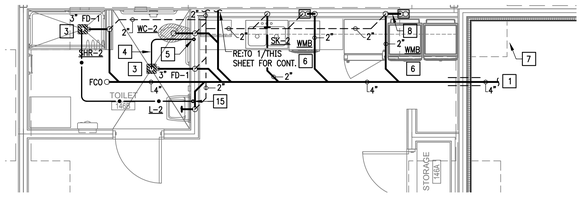
03 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



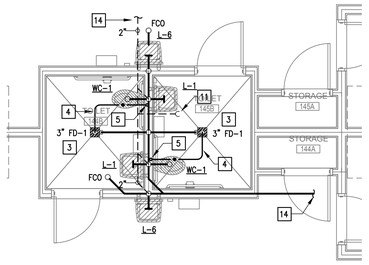
04 WASTE & VENT PLAN
SCALE: 1/4" = 1'- 0"



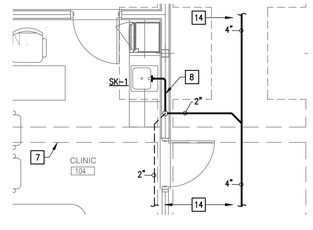
05 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



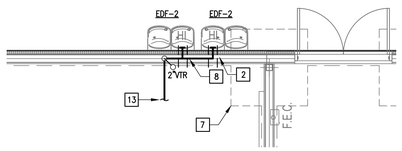
06 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



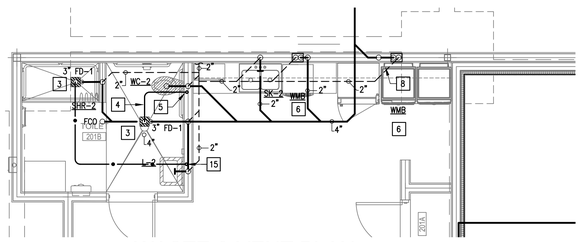
07 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



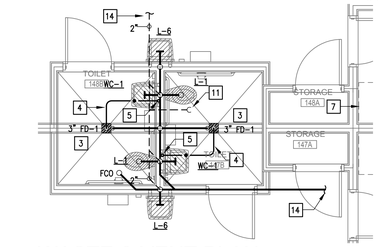
08 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



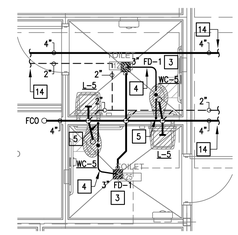
09 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



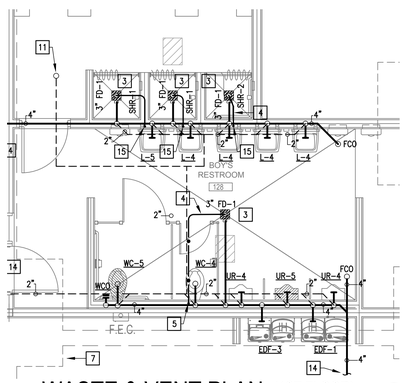
10 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



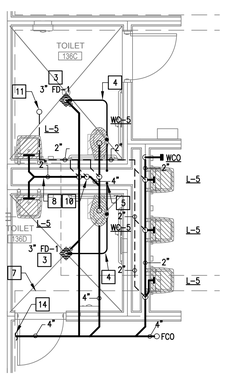
11 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



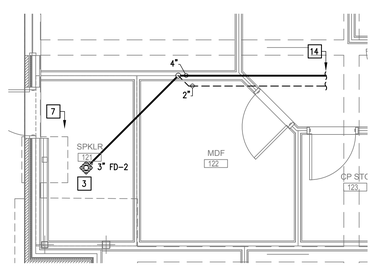
12 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



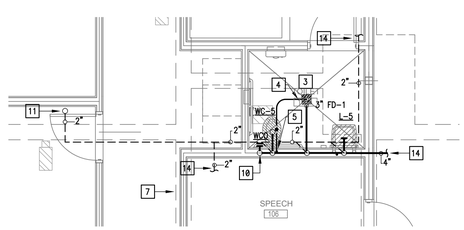
13 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



14 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



15 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"



16 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'- 0"

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PALMVIEW, TEXAS

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Date: May. 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No: IDEA Palmview Phase I
Sheet: P3.01

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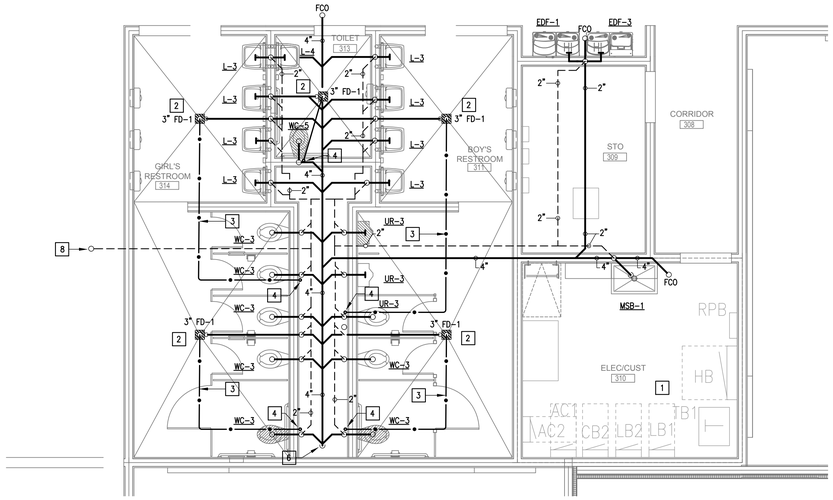
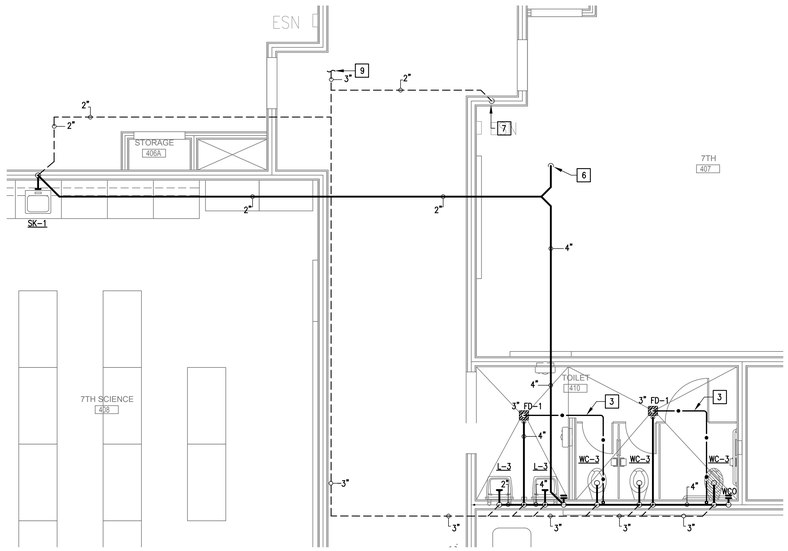


01 WASTE & VENT PLAN (2ND FLOOR)

SCALE: 1/4" = 1'- 0"

NORTH



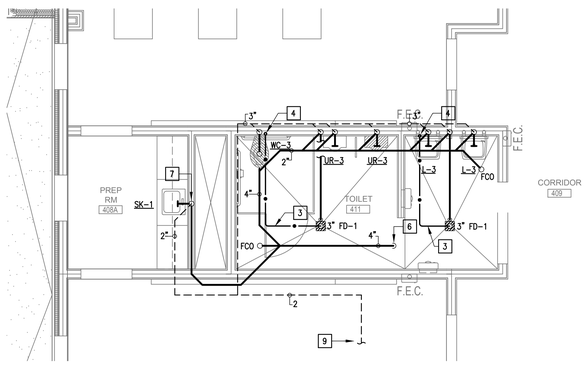
02 WASTE & VENT PLAN (2ND FLOOR)

SCALE: 1/4" = 1'- 0"

NORTH

KEYED NOTES:

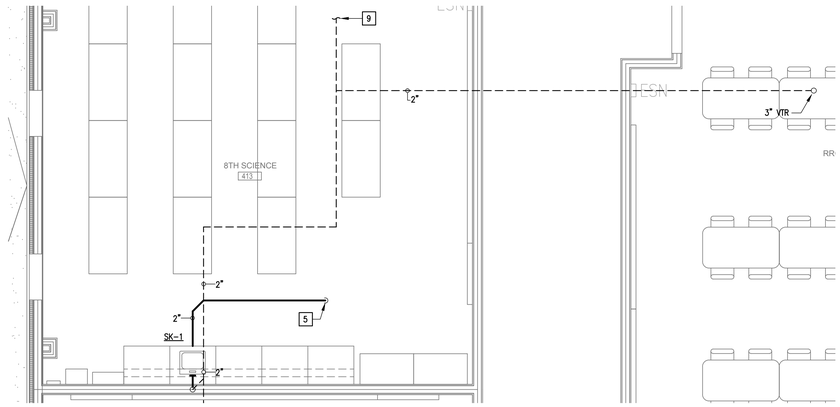
1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
3. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
4. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC OR UR). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL.)
5. PROVIDE 2" SANITARY SEWER PIPING DOWN TO FIRST FLOOR.
6. PROVIDE 4" SANITARY SEWER PIPING DOWN TO FIRST FLOOR.
7. PROVIDE 2" VENT UP FROM 1ST FLOOR
8. PROVIDE 4" VENT UP THRU ROOF.
9. REFER TO SHEET P2.04 FOR CONTINUATION.
10. DISHWASHING MACHINE MUST DISCHARGE BY MEANS OF AN AIR GAP TO PREVENT SEWAGE FROM BACKING UP INTO THE DISHWASHING COMPARTMENT IN THE EVENT OF A STOPPAGE IN THE DRAINAGE SYSTEM.



03 WASTE & VENT PLAN (2ND FLOOR)

SCALE: 1/4" = 1'- 0"

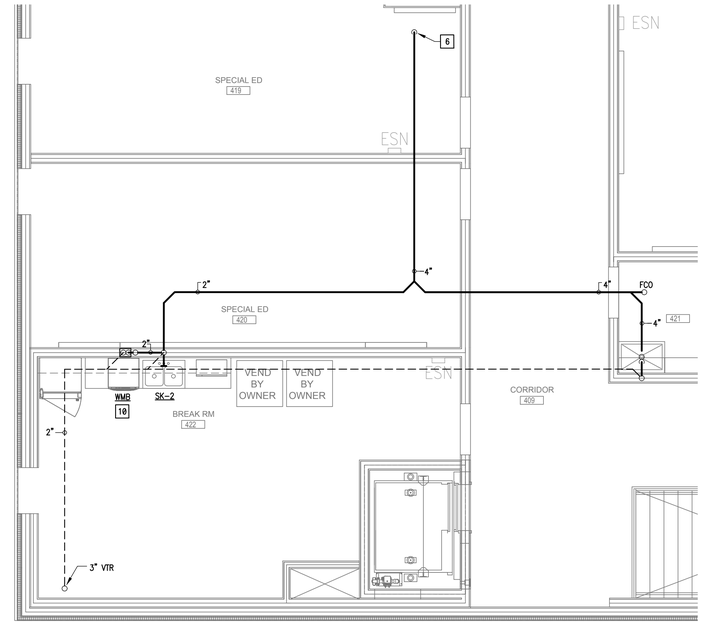
NORTH



04 WASTE & VENT PLAN (2ND FLOOR)

SCALE: 1/4" = 1'- 0"

NORTH



05 WASTE & VENT PLAN (2ND FLOOR)

SCALE: 1/4" = 1'- 0"

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools

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Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	P3.02

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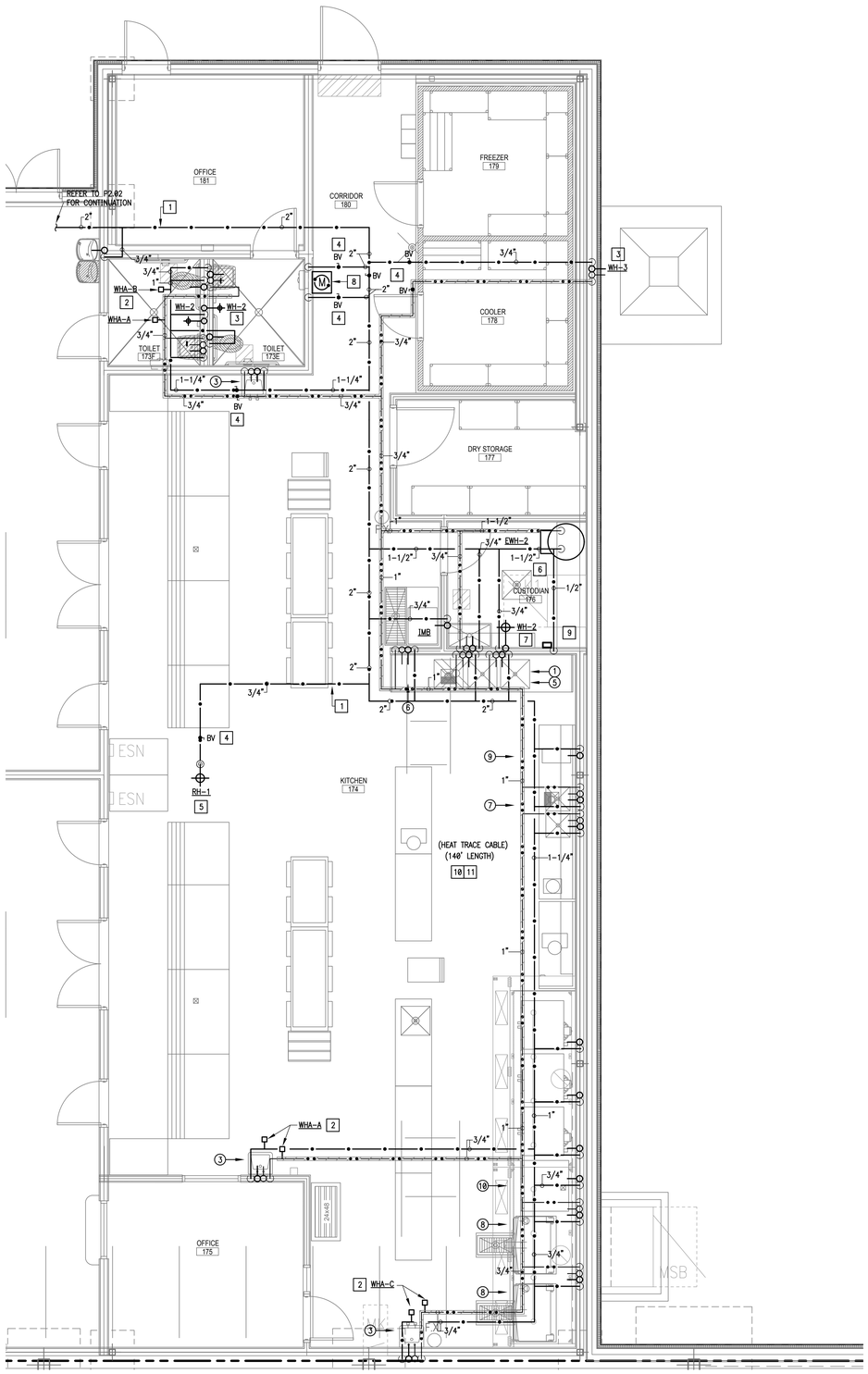
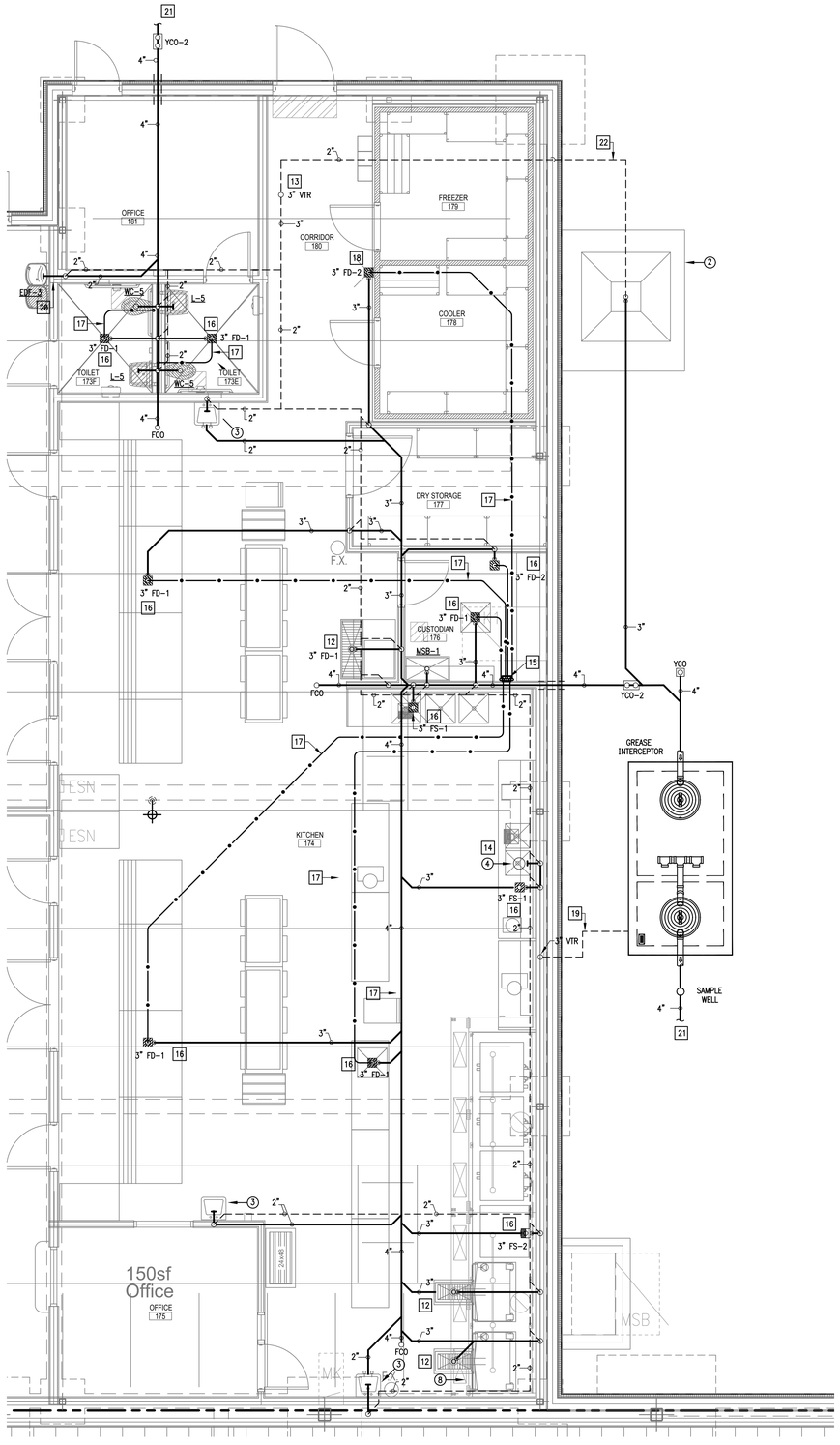


01 PLUMBING PLAN (KITCHEN)
SCALE: 1/4" = 1'- 0"

NORTH



01 WASTE & VENT PLAN (KITCHEN)
SCALE: 1/4" = 1'- 0"

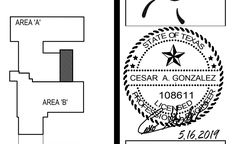
NORTH

PLUMBING KEYED NOTES:

1. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
2. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
3. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
6. PROVIDE ELECTRIC WATER HEATER AS SCHEDULED AND AS SHOWN ON DETAIL. REFER TO PLUMBING SCHEDULES AND DETAILS SHEETS FOR MORE INFORMATION.
7. PROVIDE WALL HYDRANT IN JANITOR ROOM. COORDINATE MOUNTING HEIGHT WITH OWNER DURING CONSTRUCTION
8. PROVIDE 2" WATER METER MODEL DLJ–200 OR APPROVED EQUAL. INSTALL METER WITHIN THE WALL WITH AN ACCESS DOOR FACING THE KITCHEN. LABEL ACCESS DOOR "WATER SUB–METER". PROVIDE LINE SIZE ISOLATION VALVES AT THE INLET AND AT THE OUTLET OF METER. COORDINATE EXACT LOCATION WITH OWNER PRIOR INSTALLATION.
9. PROVIDE ELECTRONIC TRAP PRIMER SIOUX CHIEF 695–ES10 OR APPROVED EQUAL. PROVIDE SURFACE MOUNT CABINET WITH ACCESS DOOR. PROVIDE A COPPER DISTRIBUTION MANIFOLD WITH 5 OUTLETS, AND CAP UNUSED OUTLETS. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
10. PROVIDE HEAT MAINTENANCE SYSTEM AS INDICATED. HEAT TRACE SHALL BE THERMON MODEL HSX WARM TRACE OR APPROVED EQUAL. CONTACT RYAN MONTGOMERY WITH INDUSTRIAL SYSTEMS INC. AT 210–493–4200.
11. ESTIMATED HEAT TRACE CABLE LENGTH. CONTRACTOR TO FIELD VERIFY PRIOR ORDERING AND INSTALLATION OF HEAT TRACE CABLE SYSTEM. COORDINATE WITH HEAT TRACE CABLE MANUFACTURER.
12. TROUGH SPECIFIED BY ARCHITECT. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT SUPPLIER AND GENERAL CONTRACTOR.
13. PROVIDE 3" VENT UP TO 3" VENT THRU ROOF.
14. PROVIDE SANITARY SEWER CONNECTION FOR DISPOSER.
15. CONNECT TO ELECTRONIC TRAP–PRIMER. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
16. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
17. 1/2" SOFT DRAWN COPPER FROM TRAP–PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY–SLEEVE" OR EQUAL.
18. PROVIDE FLOOR DRAIN TO COLLECT WALK–IN COOLER/FREEZER CONDENSATION. COORDINATE WITH KITCHEN EQUIPMENT CONTRACTOR.
19. PROVIDE 2" VENT PIPING UNDERGROUND TO SERVE GT–1.
20. ROUTE ABOVEGROUND THROUGH METAL STUD.
21. REFER TO MEP SITE PLAN FOR CONTINUATION.
22. PROVIDE 2" VENT PIPING UNDERGROUND TO SERVE CATCH BASIN.

KITCHEN EQUIPMENT SCHEDULE

DESIG.	DESCRIPTION	WATER CONNECTIONS		
		HW	CW	ROUGH–IN
①	THREE COMPARTMENT SINK & FAUCETS. SPECIFIED BY ARCHITECT.	3/4"	3/4"	8" O.C. 16" A.F.F.
②	CATCH BASIN SPECIFIED BY ARCHITECT. RE: SEE DETAIL SHEET FOR MORE INFO.	--	--	--
③	HAND SINK. SPECIFIED BY ARCHITECT. PROVIDE POINT OF USE THERMOSTATIC VALVE LEONARD #270–LF–BRKT–BV OR EQUAL.	3/4"	3/4"	8" O.C. 16" A.F.F.
④	DISPOSER – CONNECT 1/2"CW THRU SOLENOID VALVE VACUUM BRKR. & FLOW CONTROL. CONNECT WASTE LINE.	--	--	--
⑤	PRE–RINSE UNIT SPECIFIED BY ARCHITECT. COORDINATE LOCATION WITH KITCHEN EQUIPMENT SUPPLIER.	--	--	--
⑥	HOSE REEL SPECIFIED BY ARCHITECT. INSTALL CONCEALED PIPING REEL INSTALLATION KIT FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. CONNECT HOT AND COLD WATER AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	--
⑦	TWO COMPARTMENT SINK & FAUCETS. SPECIFIED BY ARCHITECT.	3/4"	3/4"	8" O.C. 16" A.F.F.
⑧	BRAISING PAN – CONNECT HOT AND COLD WATER TO DOUBLE PANTRY DECK MOUNTED FAUCET AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	8" O.C. 42" A.F.F.
⑨	HOT WATER DISPENSER – CONNECT WATER LINES AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	--
⑩	COMBI OVEN STEAMER – CONNECT WATER LINES AS PER MANUFACTURER'S RECOMMENDATIONS.	--	--	--



KEYPLAN

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
PALMVIEW, TEXAS

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5.16.2019

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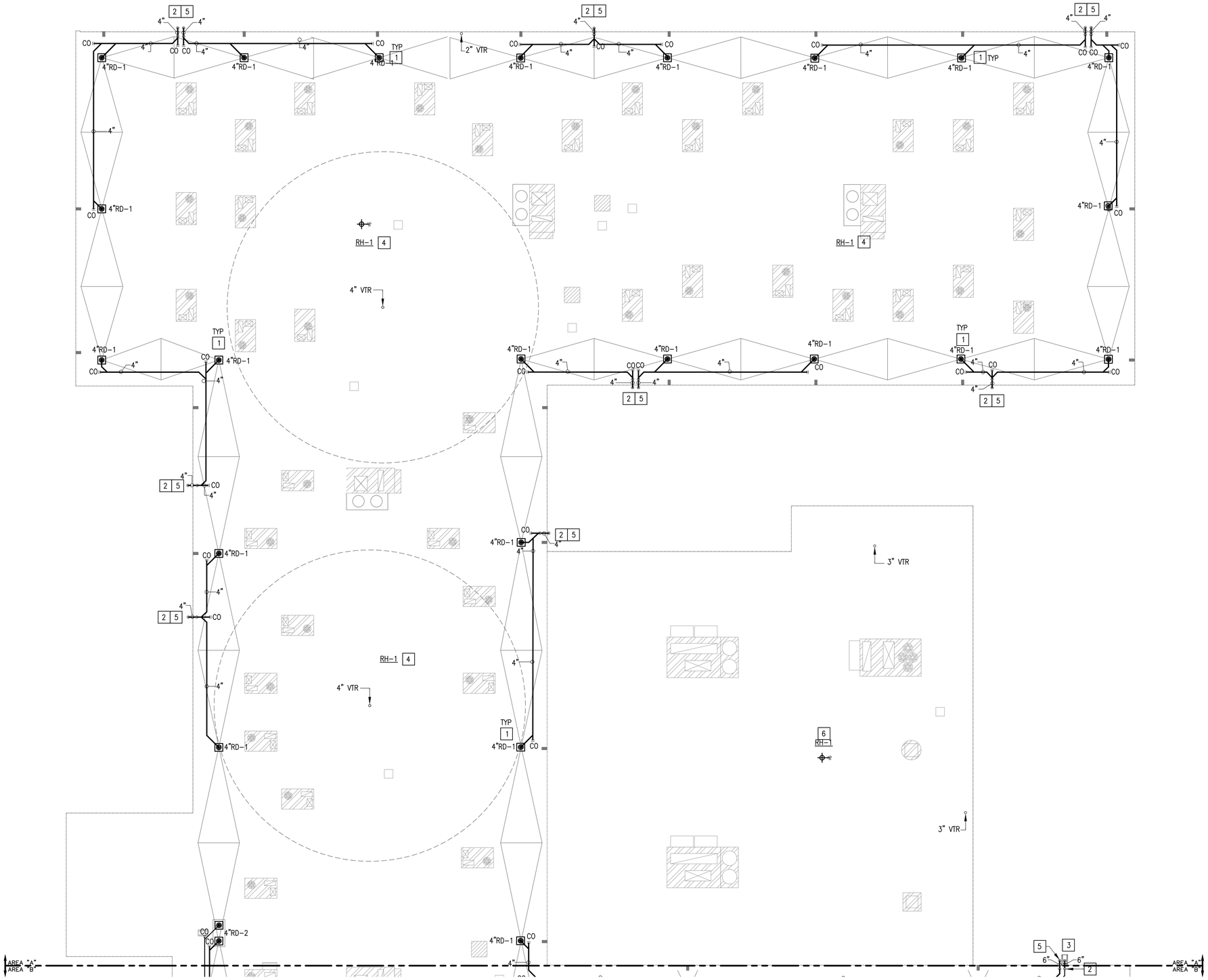
Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Palmview Phase I
Sheet: P4.01



01 ROOF PLAN
SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. ALL HORIZONTAL LEADERS TO BE A MINIMUM OF 1/8" PER FOOT SLOPE.
2. ALL VERTICAL LEADER LINES DOWN AND CONCEALED IN PLUMBING CHASE UNLESS OTHERWISE NOTED. REFER TO DRAWINGS.
3. COORDINATE ROOF DRAIN PIPING WITH GENERAL CONTRACTOR AND HVAC CONTRACTOR.
4. PROVIDE INSULATION ON ALL ABOVE GROUND STORM LINES. REFER TO SPECIFICATIONS FOR DETAILS.
5. STORM DRAIN PIPING AND SEWER PIPING SHOWN ON THIS PLAN TO BE INSTALLED UNDER THE ROOF AND ABOVE THE CEILING OF SECOND FLOOR.

KEYED NOTES:

1. PROVIDE ROOF DRAIN AS SCHEDULED. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
2. DROP STORM PIPING IN PIPE WALL. REFER TO ARCHITECTURAL SHEET AND COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
3. PROVIDE SPLASH BLOCK AS SHOWN. (TYPICAL)
4. PROVIDE DOMESTIC WATER PIPING TO CONNECT HOSE BIBB. PROVIDE HOSE BIBB AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
5. PRIMARY ROOF DRAIN PIPING DISCHARGING AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE DETAIL AND CIVIL PLAN FOR CONNECTION AND CONTINUATION. (TYPICAL)
6. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAILS ON DETAIL SHEET (TYPICAL).

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IDEA PUBLIC SCHOOLS PHASE 1

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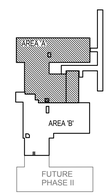

KEYPLAN



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Date:	May 16, 2019
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	P5.01

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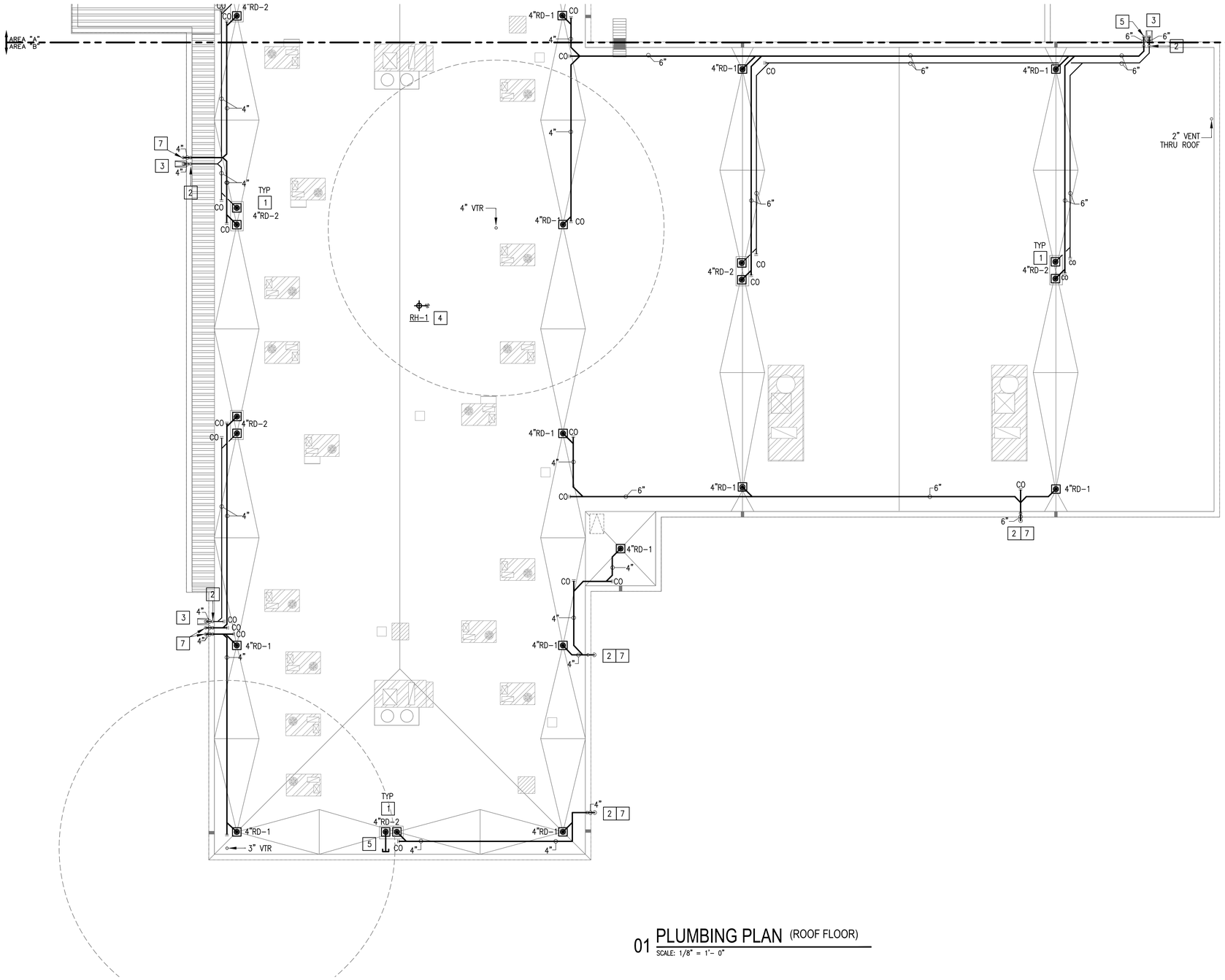

GENERAL NOTES:

1. ALL HORIZONTAL LEADERS TO BE A MINIMUM OF 1/8" PER FOOT SLOPE.
2. ALL VERTICAL LEADER LINES DOWN AND CONCEALED IN PLUMBING CHASE UNLESS OTHERWISE NOTED. REFER TO DRAWINGS.
3. COORDINATE ROOF DRAIN PIPING WITH GENERAL CONTRACTOR AND HVAC CONTRACTOR.
4. PROVIDE INSULATION ON ALL ABOVE GROUND STORM LINES. REFER TO SPECIFICATIONS FOR DETAILS.
5. STORM DRAIN PIPING AND SEWER PIPING SHOWN ON THIS PLAN TO BE INSTALLED UNDER THE ROOF AND ABOVE THE CEILING OF SECOND FLOOR.

KEYED NOTES:

1. PROVIDE ROOF DRAIN AS SCHEDULED. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
2. DROP STORM PIPING IN WALL CAVITY. REFER TO ARCHITECTURAL SHEET AND COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
3. PROVIDE SPLASH BLOCK AS SHOWN.
4. PROVIDE DOMESTIC WATER PIPING TO CONNECT HOSE BIBB. PROVIDE HOSE BIBB AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
5. CAP SECONDARY ROOF DRAIN FOR FUTURE ADDITION OF BUILDING WHICH WILL ELIMINATE THE GUTTER OVERFLOW SYSTEM INSTALLED ON THIS PHASE. REFER TO ARCHITECTURAL ROOF PLAN.
6. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAILS ON DETAIL SHEET (TYPICAL).
7. PRIMARY ROOF DRAIN PIPING DISCHARGING AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE DETAIL AND CIVIL PLAN FOR CONNECTION AND CONTINUATION. (TYPICAL)

01 PLUMBING PLAN (ROOF FLOOR)
SCALE: 1/8" = 1'- 0"

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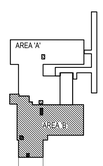

KEYPLAN

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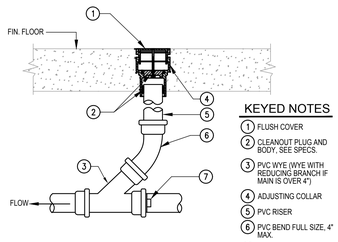
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Palmview Phase I
Sheet:	P5.02

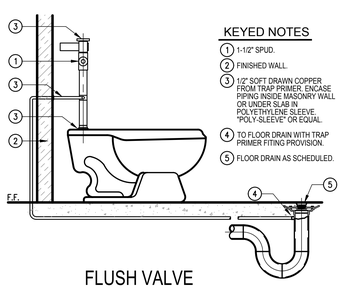


KEYED NOTES

1. FLUSH COVER
2. CLEANOUT PLUG AND BODY, SEE SPECS.
3. PVC WYE (WYE WITH REDUCING BRANCH IF MAIN IS OVER 4")
4. ADJUSTING COLLAR
5. PVC RISER
6. PVC BEND FULL SIZE, 4° MAX.
7. PLUG IF END OF LINE

01 FLOOR CLEANOUT DETAIL

SCALE : NOT TO SCALE

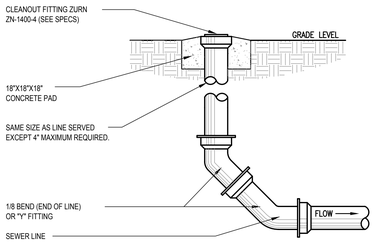


KEYED NOTES

1. 1-1/2" SPUD.
2. FINISHED WALL.
3. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL
4. TO FLOOR DRAIN WITH TRAP PRIMER FITTING PROVISION.
5. FLOOR DRAIN AS SCHEDULED.

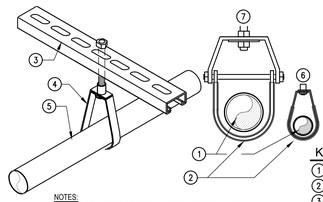
02 FLUSH VALVE TRAP PRIMER DETAIL

SCALE : NOT TO SCALE



03 YARD CLEANOUT DETAIL

SCALE : NOT TO SCALE



KEYED NOTES

1. SCHEDULED PIPE.
2. PLASTIC COATING.
3. UNI-STRUT.
4. PIPE HANGER.
5. DOMESTIC WATER LINE, COPPER DRAIN LINE FROM AHU'S.
6. BAND HANGER.
7. CLEVIS HANGER.

NOTES:
1. PROVIDE PLASTIC COATED HANGERS: COOPER B-LINE
2. MODEL: B3100C OR APPROVED EQUAL FOR CLEVIS
3. HANGERS. MODEL: B3172C OR APPROVED EQUAL FOR BAND HANGERS.

04 DOMESTIC WATER LINE PIPING SUPPORT DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. PROVIDE "HEAVY DUTY" NICKLE BRONZE COVER FOR ALL EXTERIOR CLEANOUTS.
2. 40"X24"X8" DEEP CONCRETE CLEANOUT BOX (BOX IS INDEPENDANT OF PIPE AND THEREFORE IS FREE TO MOVE WITH THE SETTLEMENT OF GRADE)
3. CLEANOUT FITTING ZURN ZN-1400-4 (SEE SPECS).
4. SAME SIZE AS LINE SERVED EXCEPT 4" MAXIMUM REQUIRED. SHORT LENGTH OF C.I. PIPE FURNISHED WITH CLEANOUT BOX.
5. DOUBLE 2-WAY CLEANOUT.
6. SEWER LINE.

05 2-WAY YARD CLEANOUT DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. GRADE BEAM.
2. GALV. SCH.40 STEEL SLEEVE. SIZE PER SPECS. CENTER PIPE IN SLEEVE.
3. PIPING PASSING HORIZ. THROUGH GRADE BEAM SHALL BE LOCATED NO LESS THAN 6" ABOVE BOTTOM OF BEAM.
4. PIPING PASSING HORIZ. UNDER GRADE BEAM SHALL BE LOCATED A MINIMUM OF 8" BELOW BEAM. PROVIDE A SLEEVE.
5. COORDINATE LOCATIONS OF PIPING IN 3,4,5 ABOVE AS RELIEVING ARCHES OR ADDITIONAL CONCRETE MAY BE REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF BEAM.

06 GRADE BEAM SLEEVE DETAIL

SCALE : NOT TO SCALE

PUMP SCHEDULE (ALTERNATE # 4)

MARK	TYPE	LOCATION	GPM	HEAD FT WG	MOTOR HP (QTY)	MOTOR RPM	MIN. PUMP EFFICIENCY	ELECTRICAL V-PH-HZ	ELECTRICAL MOCP	ELECTRICAL AMPS	NOTES	MANUFACTURER AND MODEL
BP–1	DUPLEX END SUCTION	FIRE RISER 128	175	70	3 (2)	3500	65%	460–3–60	30.0	9.6	ALL	BELL & GOSSETT AQUABOOST 2B304B-VS

NOTES:
1. PROVIDE TEFC, PREMIUM EFFICIENCY, NON–OVERLOADING MOTORS.
2. THE DOMESTIC BOOSTER SYSTEM SHALL BE NSF–61 APPROVED
3. THE SYSTEM WILL BE SUPPLIED WITH SINGLE POINT POWER CONNECTION POINT
4. DIV. 26 TO PROVIDE SAFETY DISCONNECT. COORDINATE WITH ELECTRICAL CONTRACTOR.
5. PROVIDE BLADDER TANK WESSELS MODEL FXA–85 OR APPROVED EQUAL.

CIRCULATING PUMP SCHEDULE

MARK	TYPE	SERVES	LOCATION	GPM	HEAD FT WG	MIN. HP	RPM	CONN. SIZE (IN.)	IMPELLER DIA. (IN.)	ELEC. V–PH–HZ	WEIGHT (LBS)	NOTES	MANUFACTURER AND MODEL
CP–1	CIRCULATING PUMP	EWH–1	STOR/CUST 125	5	20	1/12	3300	3/4	3	120–1–60	13	ALL	BELL & GOSSETT PL–300

NOTES:
1. PROVIDE BRONZE BOOSTER BODY.
2. PUMPS SHALL BE OPERATED AND CONTROLLED THRU THE LIGHTING RELAY PANEL AND THRU AQUASTAT. COORDINATE WITH ELECTRICAL CONTRACTOR.
3. REFER TO DETAIL SHEET FOR MORE INFORMATION.

GENERAL NOTES:

1. ALL PLUMBING WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
2. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
3. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH THE WORK OF OTHER TRADES. COORDINATE WITH MECHANICAL, ELECTRICAL AND STRUCTURAL FOR PROPER CLEARANCES.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION WORK.
5. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR.
6. SLEEVE ALL OUTSIDE WALLS, FOUNDATION GRADE BEAMS, INTERIOR WALL PENETRATIONS, AND FIRE SEAL ALL PENETRATION THROUGH FIRE WALLS AND FLOORS WHETHER SHOWN ON PLANS OR NOT.
7. PROVIDE MINIMUM 15' OF SEPARATION BETWEEN HVAC INTAKES AND VENT THRU ROOFS.
8. RECORD INVERT ELEVATIONS OF ALL YARD CLEAN OUT (YCO) ON "AS-BUILT" DRAWINGS.
9. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.
10. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
11. PROVIDE ANY BACKFLOW PREVENTION DEVICE REQUIRED BY CODE OR LOCAL AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY AND LOCAL AGENCIES AND INCLUDE COST IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
12. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR INDIVIDUAL PIPE CONNECTIONS TO FIXTURES.
13. PRIOR TO POURING FOUNDATION AND ERECTING CMU WALLS, COORDINATE INSTALLATION OF PLUMBING FIXTURE CARRIERS WITH GENERAL CONTRACTOR.
14. METAL STUDS AT DRY WALLS SHALL NOT BE CUT THRU HORIZONTAL DIRECTION. COORDINATE WITH DRY WALL CONTRACTOR.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS WASTE	VENT	CW	HW	NOTES	REMARKS
WH–1	ZURN # Z1300–SS–34UN HYDRANT	ENCASED NON–FREEZE ANTI–SIPHON WALL HYDRANT, BRONZE, NON–TURNING OPERATING ROD STOP VALVE IN SUPPLY, KEY OPERATED CONTROL VALVE, STAINLESS STEEL BOX WITH HINGED COVER.	–	–	3/4"	–		
WH–2	ZURN # Z1350 HYDRANT	ENCASED MODERATE CLIMATE WALL HYDRANT FOR NARROW WALL, CHROME, SCREWDRIVER OPERATED STOP VALVEIN SUPPLY, KEY OPERATED CONTROL						
WH–3	WOODFORD # B22 WALL FAUCET	ENCASED FREEZELESS WALL FAUCET, CHROME, HANDLE OPERATED, STOP VALVE IN SUPPLY, VALVE OPERATED CONTROL, CHROME BOX WITH HINGED COVER.	–	–	3/4"	3/4"		
HB–1	WOODFORD 24	WALL FAUCET WITH ANTI–SIPHON VACUUM BREAKER,3/4" INLET AND 3/4" MALE HOSE THREAD, FLUSH MOUNTED, POLISHED BRASS, FOR MILD CLIMATE AREAS.	–	–	3/4"	–		
FD–1	ZURN # ZN415B–P	BODY ASSEMBLY WITH TYPE B STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		
FD–2	ZURN # ZN415I	BODY ASSEMBLY WITH TYPE I STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		
FS–1	MIFAB FS1730–FL–1. # Z1023 TRAP PRIMER CONNECTION DAPTER	BOTTOM OUTLET CAST IRON BODY, 12" SQUARE NICKEL BRONZE FULL GRATE AND RIM, ANCHOR FLANGE, 8" DEEP SUMP WITH A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS.	4"	2"	–	–		
FS–2	MIFAB FS1730–FL–150. # Z1023 TRAP PRIMER CONNECTION DAPTER	BOTTOM OUTLET CAST IRON BODY, 12" SQUARE NICKEL BRONZE HALF–GRATE AND RIM, ANCHOR FLANGE, 8" DEEP SUMP WITH A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS.	4"	2"	–	–		
RD–1	MIFAB 1200–W	15" DIA. LARGE SUMP ROOF DRAIN, GALV. SUMP RECEIVER CAST IRON DRAIN BODY, C.I. WATERPROOFING MEMBRANE CLAMP RING WITH INTEGRAL GRAVEL STOP,OVERFLOW STANDPIPE, SELF–LOCKING POLYETHYLENE DOME STRAINER.	SEE PLANS					
RD–2	MIFAB 1270	15" DIA. COMBINED LARGE SUMP ROOF DRAIN W/ SECONDARY OVERFLOW, 24"X42" GALV. SUMP RECEIVER, CAST IRON DRAIN BODIES, C.I. WATERPROOFING MEMBRANE CLAMP RINGS WITH INTEGRAL GRAVEL STOP, OVERFLOW STANDPIPE, TWO SELF–LOCKING POLYETHYLENE DOME STRAINERS.	SEE PLANS					
WMB	GUY GRAY B200	GALVANIZED STEEL WASHING MACHINE BOX, FURNISHED WITH QUARTER TURN BALL VALVE AND TWO 1/2" MIP/SWEAT CONNECTON VALVE AND A 1–1/2" OR 2" THREADED DRAIN FITTING & LOCKNUT.	1–1/2" OR 2"	–	3/4"	3/4"		
EDF–1	ELKAY VRCTLBSC LKAPREZL APRON ZURN Z–1225 CARRIER	BI–LEVEL ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P–TRAP, APRON AND CARRIER. FOR ADULT STANDARD & ADA MOUNTING. OUTDOOR RATED, VANDAL RESISTANT.PROVIDE WATER SENTRY FILTER 51300C	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF–2	ELKAY VRCTLBSC LKAPREZL APRON ZURN Z–1225 CARRIER	BI–LEVEL ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P–TRAP, APRON AND CARRIER FOR ELEMENTARY MOUNTING. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF–3	ELKAY VRCTLBWSK LKAPREZL APRON ZURN Z–1225 CARRIER	BI–LEVEL ELECTRIC DRINKING FOUNTAIN W/ ELECTRONIC BOTTLE FILLER BUTTON MECHANICAL FRONT BUBBLER ACTIVATION. 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P–TRAP, APRON AND CARRIER. FOR ADULT STD & ADA MOUNTING. VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF–4	ELKAY VRCTLBWSK LKAPREZL APRON ZURN Z–1225 CARRIER	BI–LEVEL ELECTRIC DRINKING FOUNTAIN W/ ELECTRONIC BOTTLE FILLER BUTTON MECHANICAL FRONT BUBBLER ACTIVATION. 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P–TRAP, APRON AND CARRIER. FOR ELEMENTARY STD & ADA MOUNTING. OUTDOOR RATED, VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
RH–1	JAY R. SMITH 5906	NON–FREEZE ROOF HYDRANT WITH GALV. CASING AND ADJUSTABLE FLOW WHEEL LOCK HANDLE WITH DECK FLANGE AND UNDEER DECK CLAMP.	2"	–	3/4"	–		
MSB–1	FIAT TSB 3003 MOP BASIN #832–AA HOSE & BRACKET #830–AA FAUCET #889–CC MOP BRACKET #MSG 3624 WALL GUARD #1453–BB STRAINER	36X24X12 PRECAST TERRAZO MOP SERVICE BASIN WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER.	3"	2"	3/4"	3/4"		
MSB–2	FIAT TSB 3000 MOP BASIN #832–AA HOSE & BRACKET #830–AA FAUCET #889–CC MOP BRACKET #MSG 2424 WALL GUARD #1453–BB STRAINER	24X24X12 PRECAST TERRAZO MOP SERVICE BASIN WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER.	3"	2"	3/4"	3/4"		
SHR–1	LEONARD AQUATROL 4508–H–06–1.5GPM–VS 515P(G)–30–D2L ADA RATED SHOWER	CONCEALED MOUNTED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. HIGH SCHOOL STANDARD MOUNTING.	3"	2"	3/4"	3/4"		
SHR–2	LEONARD AQUATROL 4508–H–06–1.5GPM–VS 515P(G)–30–D2L ADA RATED SHOWER	CONCEALED MOUNTED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. PROVIDE HAND SHOWER, DIVERTER VALVE, STAINLESS STEEL SEAT AND GRAB BARS. HIGH SCHOOL ADA MOUNTING.	3"	2"	3/4"	3/4"		
IMB	GUY GRAY BIM875	VALVE, STAINLESS STEEL BOX WITH HINGED COVER GALVANIZED STEEL ICE MACHINE BOX, FURNISHED WITH 1/2" FIP INLET X 1/4" OD OUTLET COMPRESSION ANGLE VALVE.	–	–	3/4"	–		

ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	SERVING	GALLON CAPACITY	KW	NUMBER OF ELEMENTS	RECOVERY IN GPH AT 120F RISE	ELECT. V/P/H	MANUFACTURER & MODEL	NOTES
EWH–1	STOR/CUST 125	SEE PLANS	100	24	6	83	480/3/60	RHEEM E100A–24–G	ALL
EWH–2	CUSTODIAN 176	KITCHEN	120	54	9	186	480/3/60	RHEEM E120A–54–G	ALL

NOTES:
1. MANUFACTURER & MODEL NUMBER ARE "OR APPROVED EQUAL".
2. PROVIDE IMMERSION TYPE THERMOSTAT.
3. EWH–1: PROVIDE HOTWATER CIRCULATING PUMP. REFER TO PUMP SCHEDULE FOR MORE INFORMATION.
4. EWH–2: PROVIDE HEAT TRACE CABLE SYSTEM. REFER TO PLUMBING PLANS FOR MORE INFORMATION
   HEAT TRACE CABLE SHALL BE CONTROLLED THROUGH THE LIGHTING CONTROL SYSTEM. COORDINATE WITH ELECTRICAL CONTRACTOR.

PLUMBING SYMBOLS LEGEND

—•—•—	COLD WATER SUPPLY	WCO	WALL CLEANOUT
—••—	HOT WATER SUPPLY		*GATE VALVE (GV)
----G----G----	GAS LINE		*BALL VALVE
	SOIL & WASTE LINE - ENLARGED PLANS		VALVE IN RISER TYPE AS NOTED
- - - - - - - -	VENT LINE - ENLARGED PLANS	WC	WATER CLOSET
—AW—	ACID WASTE LINE - ENLARGED PLANS	UR	URINAL
—GW—	GREASE WASTE LINE - ENLARGED PLANS	L	LAVATORY
—F—	FIRE SPRINKLER LINE	SK	SINK
FCO	FLOOR CLEANOUT	EDF	ELECTRIC DRINKING FOUNTAIN
FCO-2	FLOOR CLEANOUT - 2 WAY	MSB	MOP SERVICE BASIN
FD FD	FLOOR DRAIN (FD) WITH DEEP SEAL TRAP	EESHR	EMERGENCY EYE/SHOWER
HDCC	HUB DRAIN WITH DEEP SEAL TRAP	TP	TRAP PRIMER
	FLOOR SINK	EWH	ELECTRIC WATER HEATER
YCO	YARD CLEANOUT	VTR	VENT THRU ROOF
YCO-2	YARD CLEANOUT - 2 WAY	CO	CLEANOUT
WH	WALL HYDRANT	A.F.F.	ABOVE FINISH FLOOR
	TRAP PRIMER	ADT	ACID DILUTION TANK
	*WATER HAMMER	GT	GREASE TRAP

* PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS WASTE	VENT	CW	HW	NOTES	REMARKS
WC–1	AMERICAN STD. 2282.001 SLOAN ROYAL #111–1.28 SEAT 5001G.055	10–1/4" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR PRE–K ADA MOUNTING.	4"	2"	1"	–	1,2,3	12" TO TOP OF SEAT
WC–2	AMERICAN STD. 2599.001 SLOAN ROYAL #111–1.28 SEAT 5901.100	14" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ELEMENTARY STANDARD AND ADA MOUNTING.	4"	2"	1"	–	1,2,3	14" TO TOP OF SEAT
WC–3	AMERICAN STD. 2599.001 SLOAN ROYAL #111–1.28 SEAT (1" THICK) 5901.100	14" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR JR. HIGH STANDARD AND ADA MOUNTING.	4"	2"	1"	–	1,2,3	15"–17" TO TOP OF SEAT
WC–4	AMERICAN STD. 3451.001 SLOAN ROYAL #111–1.28 SEAT 5901.100	15" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ADULT STANDARD MOUNTING.	4"	2"	1"	–	1,3	15" TO TOP OF RIM
WC–5	AMERICAN STD. 3461.001 SLOAN ROYAL #111–1.28 SEAT 5901.100	16–1/2" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ADULT ADA MOUNTING.	4"	2"	1"	–	1,2,3	17"–19" TO TOP OF SEAT
UR–1	AMERICAN STD. 6590.001 SLOAN ROYAL #186–0.5 ZURN #Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ELEMENTARY STANDARD MOUNTING	3"	2"	3/4"	–	2,3	21" TO RIM OF BASIN
UR–2	AMERICAN STD. 6590.001 SLOAN ROYAL #186–0.5 ZURN #Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ELEMENTARY ADA MOUNTING	3"	2"	3/4"	–	2,3	14" TO RIM OF BASIN
UR–3	AMERICAN STD. 6590.001 SLOAN ROYAL #186–0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR JR HIGH STANDARD AND ADA MOUNTING	3"	2"	3/4"	–	2,3	16–21" TO RIM OF BASIN
UR–4	AMERICAN STD. 6590.001 SLOAN ROYAL #186–0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ADULT STANDARD MOUNTING	3"	2"	3/4"	–	3	22" TO RIM OF BASIN
UR–5	AMERICAN STD. 6590.001 SLOAN ROYAL #186–0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ADULT ADA MOUNTING	3"	2"	3/4"	–	2,3	17" TO RIM OF BASIN
L–1	KOHLER K1729–0 K–15597–F–CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270–LF–BRKT–BV	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR PRE–K ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES.	2"	2"	3/4"	3/4"	4	24" FROM FLOOR TO RIM
L–2	KOHLER K1729–0 K–15597–F–CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270–LF–BRKT–BV	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ELEMENTARY STANDARD AND ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES.	2"	2"	3/4"	3/4"	4	30" FROM FLOOR TO RIM
L–3	KOHLER K1729–0 K–15597–F–CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270–LF–BRKT–BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR JR HIGH ADA AND STANDARD MOUNTING	2"	2"	3/4"	3/4"	4	32" FROM FLOOR TO RIM
L–4	KOHLER K1729–0 K–15597–F–CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270–LF–BRKT–BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ADULT STANDARD MOUNTING	2"	2"	3/4"	3/4"	4	32" FROM FLOOR TO RIM
L–5	KOHLER K1729–0 K–15597–F–CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270–LF–BRKT–BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ADULT ADA MOUNTING	2"	2"	3/4"	3/4"	4	34" FROM FLOOR TO RIM
L–6	ELKAY LUSTERTONE DRKAD222855C FAUCET LKD2439C BUBBLER LK1141A STRAINER LK35 ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270–LF–BRKT–BV	22" X 19.5" TOP MOUNT, SINGLE BOWL CLASSROOM SINK WITH 2–HANDLE FAUCET, GOOSENECK AND BUBBLER. CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR PRE–K ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES. PROVIDE ALL NECESSARY MOUNTING HARDWARE.	2"	2"	3/4"	3/4"	4	24" FROM FLOOR TO RIM
SK–1	ELKAY LRAD–1919–60–1 SINK CHICAGO FAUCET .5 GPM # 1100–GN2AE3–317ABCP LK–335 DRAIN LEONARD # 270–LF–BRKT–BV 0.5GPM AERATOR	19" x 19" SINGLE COMPARTMENT, 18 GAUGE TYPE 302 STAINLESS STEEL, SELF–RIMMING SINK WITH 6"DEEP BOWL, FULLY COATED UNDERSIDE, TWO HANDLE DECK MOUNT GOOSE NECK FAUCET, 3.5" DRAIN WITH CUP STRAINER, 1–1/2" 17 GAUGE CHROME PLATED TAILPIECE AND P–TRAP WITH CLEANOUT AND CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS AND POINT–OF–USE THERMOSTATIC VALVE.	2"	2"	3/4"	3/4"	4	SEE ARCHITECTURAL
SK–2	ELKAY # LRAD–3321–3 CHICAGO FAUCET 0.5 GPM # 1100–GN2AE3–317ABCP DRAIN # LKAD18 17 GA. DRAIN AND 17 GA. P–TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270–LF–BRKT–BV	33" X 22" DOUBLE COMPARTMENT SINK, #18 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL. 6" DEEP, TOP MOUNTED INSTALLATION ON 4"CENTER HOLES,OFF–CENTER DRAIN OPENINGS,DUAL HANDLE, TOP MOUNTED MIXING FAUCET WITH STAINLESS STEEL ESCUTCHEON. PROVIDE CHROME PLATED STOPS AND FLEXIBLE STAINLESS STEEL RISERS. CHROME PLATED DRAIN GRID & TAILPIECE.	2"	2"	3/4"	3/4"	4	SEE ARCHITECTURAL

NOTES:
1. INSTALL FLUSH VALVE ON THE WIDE SIDE OF STALL.
2. PROVIDE ADA APPROVED FLUSH VALVE HANDLE FOR ALL ADA PLUMBING FIXTURES.
3. REFER TO PLUMBING PLAN FOR FIXTURES THAT WILL REQUIRE TRAP PRIMER CONNECTIONS.
4. PROVIDE TRUEBRO LAVATORY GUARD MODEL #103 COLOR WHITE. COVER SHALL BE SECURED WITH SNAP–SLIP FLUSH REUSABLE FASTENERS.

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PHONE: 956-230-3435
TEXAS REGISTERED ENGINEERING FIRM F-15998

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IDEA PUBLIC SCHOOLS PHASE 1
IDEA PALMVIEW
PALMVIEW, TEXAS
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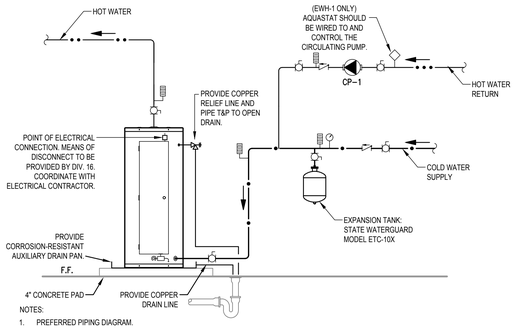
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: P6.01



NOTES:

1. PREFERRED PIPING DIAGRAM.
2. THE TEMPERATURE AND PRESSURE RELIEF VALVE SETTING SHALL NOT EXCEED PRESSURE RATING OF ANY COMPONENT IN THE SYSTEM.
3. PROVIDE HEAT TRAP DEVICE OR AN ARRANGEMENT OF TUBING AS PER IECC. INSULATE THE FIRST 8' OF OUTLET PIPING AND THE INLET PIPING BETWEEN THE STORAGE TANK AND HEAT TRAP (INCLUDE THE HEAT TRAP).

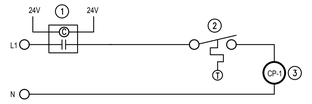
LEGEND			
TEMPERATURE & PRESSURE RELIEF VALVE	CHECK VALVE	FULL PORT BALL VALVE	PRESSURE GAUGE
AQUASTAT	DRAIN	TEMPERATURE GAGE	CIRCULATING PUMP

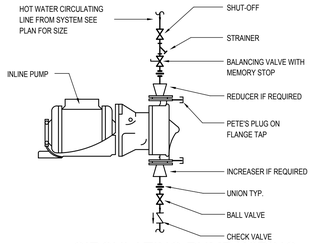
01 FLOOR MOUNTED EWH-1 & EWH-2 DETAIL

SCALE : NOT TO SCALE

NOTES:

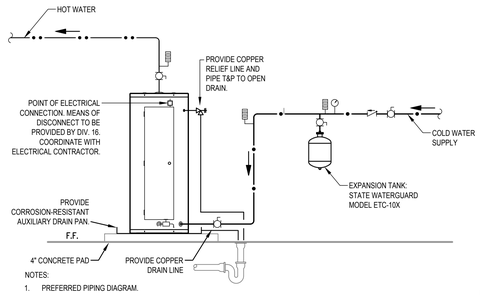
1. POWER TO PUMP TO BE CONTROLLED BY LIGHTING RELAY PANEL. COORDINATE WITH ELECTRICAL CONTRACTOR.
2. LINE VOLTAGE AQUASTAT CONTROLLER FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR. CONNECTED BY ELECTRICAL CONTRACTOR. AQUASTAT CLOSES WHEN DOMESTIC HOT WATER RETURN LINE TEMPERATURE DROPS BELOW 120°F (ADJ.).
3. CIRCULATING PUMP FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR. CONNECTED BY DIV. 26.





02 CIRCULATING PUMP WIRING SCHEMATIC & DETAIL

SCALE : NOT TO SCALE



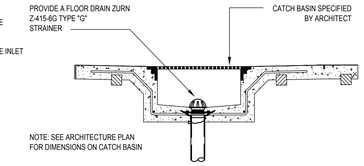
NOTES:

1. PREFERRED PIPING DIAGRAM.
2. THE TEMPERATURE AND PRESSURE RELIEF VALVE SETTING SHALL NOT EXCEED PRESSURE RATING OF ANY COMPONENT IN THE SYSTEM.
3. PROVIDE HEAT TRAP DEVICE OR AN ARRANGEMENT OF TUBING AS PER IECC. INSULATE THE FIRST 8' OF OUTLET PIPING AND THE INLET PIPING BETWEEN THE STORAGE TANK AND HEAT TRAP (INCLUDE THE HEAT TRAP).
4. PROVIDE HEAT TRACE

LEGEND			
TEMPERATURE & PRESSURE RELIEF VALVE	CHECK VALVE	FULL PORT BALL VALVE	PRESSURE GAUGE
AQUASTAT	DRAIN	TEMPERATURE GAGE	CIRCULATING PUMP

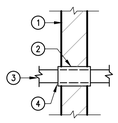
01 FLOOR MOUNTED EWH-2 DETAIL

SCALE : NOT TO SCALE



03 (AT DUMPSTER AND CAN WASH AREAS) CATCH BASIN WITH FLOOR DRAIN DETAIL

SCALE : NOT TO SCALE

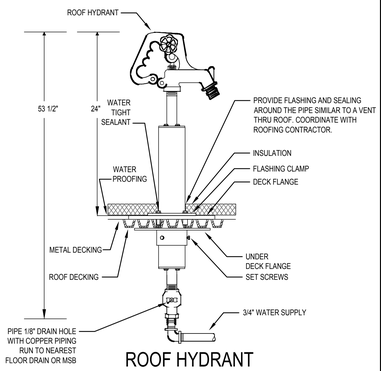


KEYED NOTES

1. MASONRY WALL.
2. GALVANIZED SCH.40 STEEL OR COPPER SLEEVE. SIZE TO BE MINIMUM 3/8" LARGER IN DIAMETER THAN PIPE AND INSULATION.
3. PLUMBING PIPE (RELIEF LINES DOMESTIC WATER, AIR, AND GAS PIPING.)
4. FILL VOID WITH MINERAL WOOL AND CAULK VERMIN TIGHT.

04 WALL SLEEVE DETAIL

SCALE : NOT TO SCALE



05 ROOF HYDRANT DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. N.S. STRAINER.
2. ADJUSTABLE DRAIN HEAD.
3. CONCRETE.
4. MEMBRANE.
5. FLASHING COLLAR.
6. TRAP PRIMER FITTING PROVISION.
7. S.S. "NO-HUB" ASSEMBLY.
8. PIPE SIZE AS INDICATED ON PLAN.
9. DEEP SEAL P-TRAP.
10. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.

06 FD-1 FLOOR DRAIN WITH TRAP PRIMER DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. STRAINER.
2. ADJUSTABLE DRAIN HEAD.
3. CONCRETE.
4. MEMBRANE.
5. FLASHING COLLAR.
6. TRAP PRIMER FITTING PROVISION.
7. S.S. "NO-HUB" ASSEMBLY.
8. PIPE SIZE AS INDICATED ON PLAN.
9. DEEP SEAL P-TRAP.
10. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
11. SET EXTENEDED RIM FLUSH WITH FINISHED FLOOR.

07 FD-2 FLOOR DRAIN WITH TRAP PRIMER DETAIL

SCALE : NOT TO SCALE

NOTE:LOCATE MIN. 25'-0" FROM MECHANICAL EQUIP.

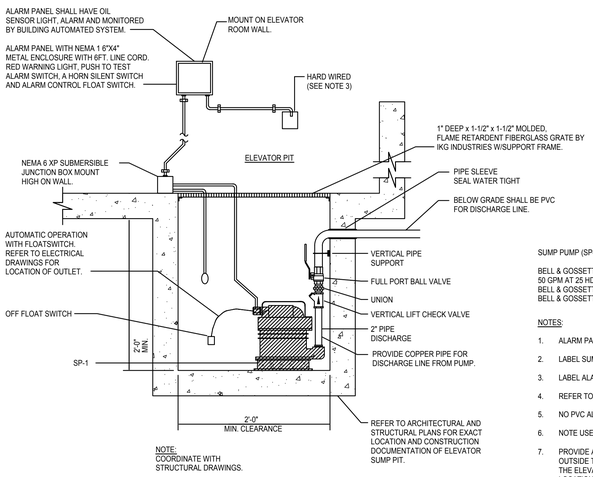
08 VENT THRU ROOF DETAIL

SCALE : NOT TO SCALE

1. VANDAL PROOF, REMOVABLE CAP
2. COVER WITH LOCKABLE DOOR
3. ANTI-SIPHON, SELF-DRAINING, FROST-PROOF SILL COCK WITH REMOVABLE HANDLE
4. FREEZE-RESISTANT, 1/2" REINFORCED, NYLOBRAID TUBING
5. MOST DEPENDABLE FOUNTAINS, MODEL # MDF-24. PHONE: 1-800-552-6331 FAX: 901-794-4272
6. 2' X 3' X 1' DEEP CONCRETE FOOTING
7. 10" ACCESS BOX WITH COVER
8. TYPICAL HOOKUP (VALVE AND TEE)
9. SEE PLAN FOR SIZE AND CONTINUATION

09 PEDESTAL TYPE HOSE BIBB DETAIL

SCALE : NOT TO SCALE



SUMP PUMP (SP-1)

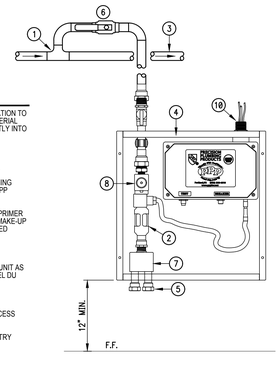
BELL & GOSSETT SERIES "2EC" MODEL "2EC0511", EFFLUENT SUMP PUMP
50 GPM AT 25 HD., 1/2 HP, 115 V, 1PH.
BELL & GOSSETT PN# A2T32U DOUBLE FLOAT SWITCH
BELL & GOSSETT PN# S10020N1 NEMA 1 SIMPLEX CONTROL PANEL.

NOTES:

1. ALARM PANEL MAY BE DIRECT WIRED.
2. LABEL SUMP PUMP DEDICATED RECEPTACLE "FOR SUMP PUMP ONLY".
3. LABEL ALARM PANEL "FOR ALARM PANEL ONLY".
4. REFER TO DETAIL DRAWINGS FOR BASIN REQUIREMENTS.
5. NO PVC ALLOWED FOR PUMP DISCHARGE PIPING.
6. NOTE USED
7. PROVIDE AND INSTALL A LOCAL VISUAL/AUDIBLE ALARM JUST OUTSIDE THE ELEVATOR IN ADDITION TO THE ALARM PANEL IN THE ELEVATOR WALL. COORDINATE WITH ARCHITECT FOR LOCATION.

09 SP-1 SUMP PUMP DETAIL

SCALE : NOT TO SCALE

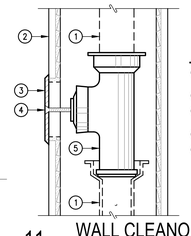


KEYED NOTES

1. AVOID DIRECT INSTALLATION TO PREVENT FOREIGN MATERIAL FROM ENTERING DIRECTLY INTO PRIMER.
2. AIR GAP FITTING.
3. DOMESTIC WATER LINE.
4. ELECTRONIC TRAP PRIMING MANIFOLD WITH BOX. (PPP MODEL MPB-500)
5. TO FLOOR DRAIN TRAP PRIMER. (MINIMUM 1/2" COPPER MAKE-UP WATER LINE. CAP UNUSED LINES)
6. SERVICE VALVE.
7. COPPER DISTRIBUTION UNIT AS APPLICABLE. (PPP MODEL DU SERIES)
8. SOLENOID VALVE.
9. PROVIDE LOCKABLE ACCESS DOOR.
10. ELECTRICAL POWER ENTRY

10 ELECTRONIC TRAP PRIMER CONNECTION DETAIL

SCALE : NOT TO SCALE

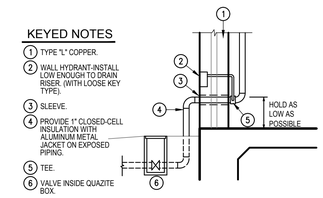


KEYED NOTES

1. PIPE SIZE AS INDICATED ON PLAN.
2. WALL.
3. S.S. SMOOTH ACCESS COVER.
4. SECURING SCREW.
5. NEW CLEANOUT.

11 WALL CLEANOUT DETAIL

SCALE : NOT TO SCALE



KEYED NOTES

1. TYPE "L" COPPER.
2. WALL HYDRANT-INSTALL LOW ENOUGH TO DRAIN. RISER. (WITH LOOSE KEY TYPE).
3. SLEEVE.
4. PROVIDE 1" CLOSED-CELL INSULATION WITH ALUMINUM METAL JACKET ON EXPOSED PIPING.
5. TEE.
6. VALVE INSIDE QUAZITE BOX.

12 WATER ENTRANCE DETAIL

SCALE : NOT TO SCALE

No.	REVISIONS	BY

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IDEA PUBLIC SCHOOLS PHASE 1

IDEA Public Schools
IDEA PALMVIEW
PALMVIEW, TEXAS



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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 16, 2019
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Palmview Phase I
Sheet: P6.02

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SPECIFICATIONS FOR: GT-1

CONCRETE : CLASS 1 CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE-IN TYPE IS NOT ACCEPTABLE)

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

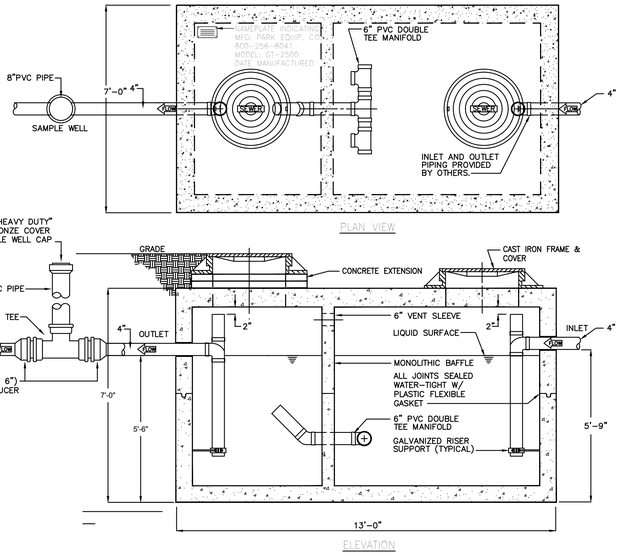
C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30. MANHOLE SHALL HAVE 24 INCH INSIDE DIAMETER AND BE TRAFFIC DUTY.

ENGINEERING DATA: INTERCEPTOR IS STRUCTURALLY AND HYDRAULICALLY ENGINEERED CONFORMING TO UNIFORM PLUMBING CODE.

NOMINAL LIQUID CAPACITY AS INDICATED ON PLAN. SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL & BOUYANCY CALCULATIONS CERTIFIED BY A REGISTERED ENGINEER.

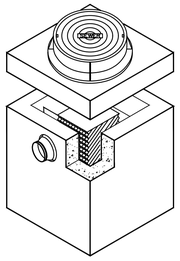
FIELD EXCAVATION AND PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF INTERCEPTOR. USE DIMENSIONAL DATA AS SHOWN.

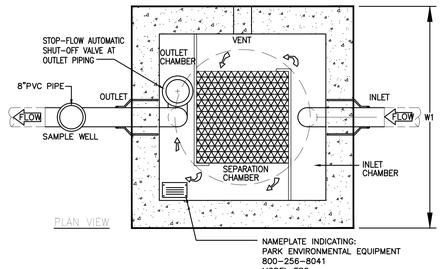
GREASE INTERCEPTOR SCHEDULE								
MODEL NO.	CAPACITY USGal	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2
GT-2500	2,500	5,700	27,000	13'-0"	7'-0"	7'-0"	5'-9"	5'-6"

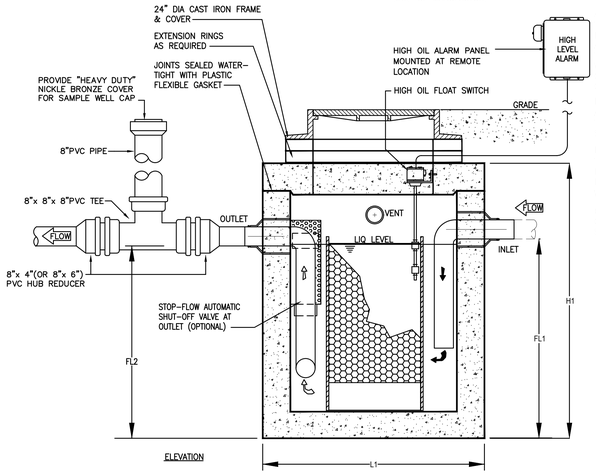


01 GREASE INTERCEPTOR DETAIL

SCALE : NOT TO SCALE







ELEVATOR SEPARATOR SCHEDULE										
MODEL NO.	CAPACITY USGal	OIL SPILL CAP (GAL)	FLOW RATE (GPM)	ELEVATOR SHAFTS	EMPTY WT (LBS)	LENGTH L1	WIDTH W1	HEIGHT H1	INLET FL1	OUTLET FL2
ESC-100	100	50	50	1	3000	37"	37"	54"	45"	42"

OTHER SIZES ARE AVAILABLE. CONTACT US FOR MORE INFORMATION

02 OS-1 OIL SEPARATOR DETAIL

SCALE : NOT TO SCALE

PARK ESC SEPARATOR

LOCAL CODES TYPICALLY USE THE ASME A17.1/CSA B 44-07 – "SAFETY CODE FOR ELEVATORS AND ESCALATORS" FOR ELEVATOR DESIGNS. THE ASME STANDARD REQUIRES THAT EACH ELEVATOR SHAFT HAVE A PUMP/DRAIN CAPABLE OF REMOVING A MINIMUM OF 3000 GAL/HR (50 GAL/MIN) OF WATER PER SHAFT.

THIS WASTEWATER SHOULD BE TREATED PRIOR TO DISCHARGING INTO THE LOCAL SEWER. THE PARK ELEVATOR SEPARATOR IS DESIGNED FOR THIS PURPOSE.

SERIES ESC COALESCING PLATE SEPARATORS ARE DESIGNED TO RECEIVE OILY WASTEWATER BY GRAVITY OR PUMP FLOW AND PROCESS IT ON A ONCE-THRU OR CIRCULATING BASIS. THERE ARE NO MOVING PARTS TO FAIL OR THAT REQUIRE EXPENSIVE MAINTENANCE.

GUARANTEED PERFORMANCE
PRE-ENGINEERED COALESCING MEDIA PACKS ARE UTILIZED FOR ENHANCED SEPARATION WHICH PROVIDE SUPERIOR PERFORMANCE COMPARED TO OTHER SEPARATORS WHICH DEPEND ON BAFFLES ONLY.

APPLICATIONS
THE PARK ESC SEPARATOR IS SPECIFICALLY DESIGNED FOR ELEVATOR SUMPS WHICH ARE SUBJECT TO CONTAMINATION FROM THE ELEVATOR EQUIPMENT. THE SEPARATOR WILL REMOVE HYDRAULIC AND LUBRICATION OILS WHICH COULD BE HARMFUL TO THE CITY SEWER.

FAIL-SAFE DESIGN
AN AUTOMATIC STOP-VALVE IS BUILT INTO THE SEPARATOR WHICH STOPS FLOW WHEN SEPARATOR REACHES MAXIMUM OIL CAPACITY.

MAINTENANCE
THE PARK ESC SEPARATOR ONLY REQUIRES MINIMAL MAINTENANCE. OILS ARE REMOVED FROM THE SEPARATOR BY A LICENSED WASTE DISPOSAL COMPANY.

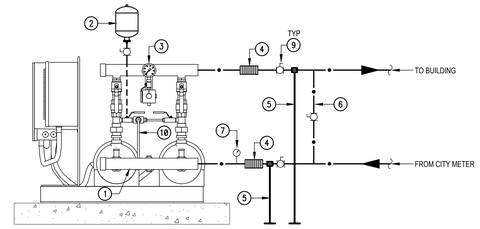
CALL US
CONTACT OUR ENGINEERING DEPT. @ FOR SPECIFIC PERFORMANCE INFORMATION.

SPECIFICATIONS FOR: OS-1

CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced. No. 4 steel rebar to conform to ASTM A615 on required centers or equal. Bar bending and placement shall conform the latest ACI standards.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

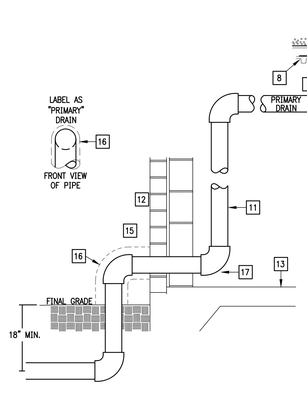


KEYED NOTES:

1. PROVIDE 1/4" TAP ON THE SUCTION MANIFOLD FOR LOW-SUCTION PRESSURE SWITCH.
2. PROVIDE TANK.
3. PROVIDE DISCHARGE GAUGE.
4. PROVIDE VIBRATION ELIMINATOR.
5. ANCHOR PIPE SECURELY.
6. PROVIDE BYPASS LINE. KEEP THIS VALVE CLOSED DURING NORMAL OPERATION. DO NOT INSTALL A CHECK VALVE.
7. PROVIDE SUCTION GAUGE.
8. PROVIDE CONTROLLER: AQUAVAR CPC.
9. PROVIDE ISOLATION VALVE.
10. PROVIDE COPPER PIPING AND ROUTE TO DRAIN.

03 BOOSTER PUMP DETAIL

SCALE : NOT TO SCALE



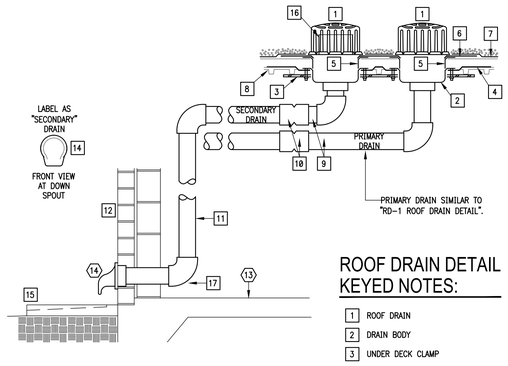
ROOF DRAIN DETAIL KEYED NOTES:

1. ROOF DRAIN
2. DRAIN BODY
3. UNDER DECK CLAMP
4. ROOF SUMP RECEIVER
5. EXTENSION COLLAR
6. 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
7. COUNTER FLASHING
8. ROOF DECK
9. MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
10. RUBBER "O" RINGS TYPE EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN.
11. RAIN WATER CONDUCTOR INSIDE PIPE CHASE
12. WALL
13. FLOOR
14. ROOF
15. PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 2510.
16. ALUMINUM METAL JACKET

FILL BLOCK WITH CONCRETE AT ELBOW AREA

04 RD-1 PRIMARY ROOF DRAIN DETAIL

SCALE : NOT TO SCALE

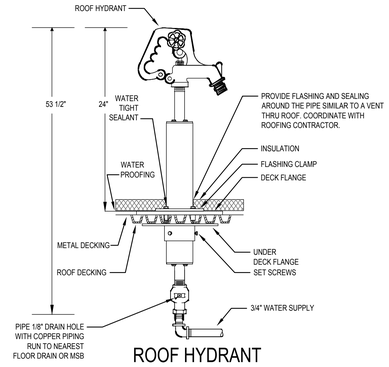


ROOF DRAIN DETAIL KEYED NOTES:

1. ROOF DRAIN
2. DRAIN BODY
3. UNDER DECK CLAMP
4. ROOF SUMP RECEIVER
5. EXTENSION COLLAR
6. 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
7. COUNTER FLASHING
8. ROOF DECK
9. MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
10. EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN.
11. RAIN WATER CONDUCTOR INSIDE PIPE CHASE
12. WALL
13. FLOOR
14. PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 25010.
15. SPLASH BLOCK (GENERAL CONTRACTOR)
16. ADJUSTABLE STANDPIPE.
17. FILL BLOCK WITH CONCRETE AT ELBOW AREA

05 RD-2 COMBINATION SECONDARY WITH PRIMARY ROOF DRAIN DETAIL

SCALE : NOT TO SCALE



06 ROOF HYDRANT DETAIL

SCALE : NOT TO SCALE

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PALMVIEW, TEXAS

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LICENSED PROFESSIONAL ENGINEER
5.16.2019

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

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