SAN JUAN COUNTY
FIRE STATIONS

ADDITIONS/RENOVATIONS TO LA PLATA FIRE STATION #2

BID #19-20-05

R&H ARCHITECTURE

RODAHL & HUMMELL ARCHITECTURE, P.C.
609 NORTH DUSTIN
FARMINGTON, N.M.
(505)326-6442 (PHONE)

INDEX OF DRAWINGS

COUNTY COMMISSIONERS

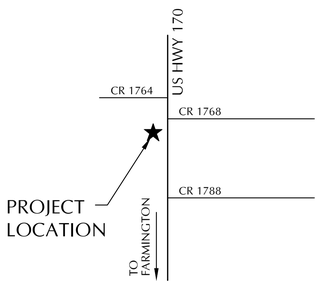
CHAIRMAN:
JACK FORTNER

COMMISSIONERS:
GLOJEAN TODACHEENE
MIKE SULLIVAN
JIM CROWLEY
JOHN BECKSTEAD

COUNTY MANAGER:
MIKE STARK

FIRE CHIEF:
JOHN MOHLER

VICINITY MAP



LA PLATA
FIRE STATION #2

PROJECT CONSULTANTS

STRUCTURAL ENGINEER
WILSON STRUCTURAL ENGINEERING
1235 THOROUGHBRED RD.
DURANGO CO 81301
970-385-6774/970-385-6774 FAX.

MECHANICAL /ELECTRICAL ENGINEER
M E & E ENGINEERING
463 TURNER DRIVE, 104a
DURANGO CO 81303
970-385-1570 / 970-385-1569 FAX

CIVIL ENGINEER
CHENEY-WALTERS-ECHOLS
909 W. APACHE
FARMINGTON,NM 87401
505-327-3303

PROJECT DATA

APPLICABLE CODES:
2015 INTERNATIONAL BUILDING CODE
2015 UNIFORM MECHANICAL CODE
2017 NATIONAL ELECTRICAL CODE
2015 INTERNATIONAL FIRE CODE
2015 UNIFORM PLUMBING CODE
CABO/ANSI A 117.1-2009
2015 NEW MEXICO BUILDING CODE
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

OCCUPANCY TYPE (PER SECTION 302): B/S-2

CONSTRUCTION TYPE (PER TABLE 601): VB

MAX. ALLOWABLE SQUARE FOOTAGE PER FLOOR: (PER TABLE 503) 9,000 S.F.

BUILDING AREA:

EXISTING:	3,200 S.F.
NEW:	1,320 S.F.
TOTAL:	4,520 S.F.

OCCUPANT LOAD:

S-2:	2,400 S.F. / 500 = 5
B:	2,120 S.F. / 100 = 21
TOTAL:	26

PLUMBING FIXTURE REQUIREMENTS: (PER TABLE 2902.1)
REQUIRED: 1 W.C., 1 LAV & PER SEX
PROVIDED: 1 W.C., 1 LAV PER SEX, PLUS 1 SHOWER

PROPERTY OWNER: SAN JUAN COUNTY

PROPERTY ADDRESS: #679 NM HWY 170
LA PLATA, NM 87418

STATE OF NEW MEXICO
T.E. HUMMELL
NO. 1424
REGISTERED ARCHITECT
04.13.20

DATE:
April 13, 2020

PROJ. No. 190920

GENERAL NOTES:

SPECIFICATIONS

ALL WORK DETAILED ON THESE PLANS IS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREIN, IN ACCORDANCE WITH THE "NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" - 2008 EDITION (REFERRED HEREIN BY SECTION OR DRAWING NUMBER) AND THE SUPPLEMENTAL SPECIFICATIONS AND DRAWINGS PROVIDED IN THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL FAMILIARIZE HIM/HER SELF WITH THE PLANS, THE REPORT OF THE GEOTECHNICAL INVESTIGATION AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY AMBIGUITIES, CONTRADICTIONS OR IRREGULARITIES IN THE PLANS.

IF, DURING BIDDING OR CONSTRUCTION, THE CONTRACTOR IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE PLANS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS, OR DISCREPANCIES IN OR POSSIBLE OMISSIONS FROM THE DRAWINGS OR SPECIFICATIONS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND REQUEST AN INTERPRETATION OR CORRECTION THEREOF, DURING THE BIDDING PROCESS AND ADDENDUM (IF NEEDED) WILL BE ISSUED.

THE CONTRACTOR IS RESPONSIBLE FOR APPLICABLE PORTIONS OF THE EPA STORM WATER DISCHARGE REGULATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND PERMIT COMPLIANCE REQUIRED FOR CONSTRUCTION OF THE PROJECT.

EXISTING UTILITIES & OBSTACLES TO WORK

THE LOCATION, SIZE, AND CONDITION OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN IN THESE PLANS ARE BASED ON AVAILABLE RECORDS. TO THE BEST OF THE ENGINEERS KNOWLEDGE, THERE ARE NO EXISTING UNDERGROUND UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS, AND IS RESPONSIBLE FOR LOCATION OF, PROTECTION OF OR ANY DAMAGE TO THESE LINES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES AND OBTAINING LINE SPOTS.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. UTILITY LINES IDENTIFIED ON PLANS SHALL BE LOCATED BY THE CONTRACTOR FAR ENOUGH IN ADVANCE OF CONSTRUCTION WORK THAT THE UTILITY LINES CAN RAISE, LOWER, REALIGN OR REMOVE LINES AND STRUCTURES (IF NECESSARY) AND THE ENGINEER CAN MAKE NECESSARY LINE AND GRADE CHANGES (SHOULD THE EXISTING UTILITY LINES CONFLICT WITH THE WORK UNDER CONSTRUCTION). PROVIDING SUCH ADJUSTMENTS DO NOT MATERIALLY AFFECT THE WORK.

CONTRACTOR SHALL BE HELD RESPONSIBLE FOR COSTS OF REPAIR OF ANY AND ALL DAMAGE TO ANY UTILITY (WHICH IS PREVIOUSLY KNOWN AND DISCLOSED TO HIM BY THE UTILITY OR SHOWN ON THESE PLANS) AS MAY BE CAUSED BY HIS OPERATIONS.

FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE-CALL SYSTEM, INC. 811, FOR LOCATION OF EXISTING UTILITIES,

CONTRACTOR SHALL GIVE ALL PUBLIC AND PRIVATE UTILITY COMPANIES NOTICE AS SOON AS POSSIBLE, IN NO EVENT LESS THAN FORTY EIGHT (48) HOURS, FOR ANY WORK THAT IS UNDERSTOOD TO INTERFERE WITH THE SERVICE OF ANY EXISTING PUBLIC OR PRIVATE UTILITY. IF SUCH PUBLIC OR PRIVATE UTILITY DOES NOT COOPERATE FOR THE PROTECTION OF IT'S SERVICES, CONTRACTOR SHALL NOTIFY ENGINEER.

CONTRACTOR SHALL IMMEDIATELY REPORT ANY DAMAGES TO PUBLIC OR PRIVATE PROPERTY TO THE OWNERS OF THE PROPERTY INVOLVED AND TO THE ENGINEER. CONTRACTOR SHALL REPAIR OR RESTORE AT HIS OWN EXPENSE ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY, FOR WHICH HE IS DIRECTLY OR INDIRECTLY RESPONSIBLE, TO A CONDITION EQUAL TO THAT EXISTING BEFORE DAMAGE. CONTRACTOR SHALL PROMPTLY NOTIFY HIS INSURANCE CARRIER OF SUCH DAMAGE. IF CONTRACTOR FAILS TO GIVE SUCH NOTICE TO HIS INSURANCE CARRIER OF SUCH DAMAGE OR REFUSES TO EFFECT SUCH REPAIRS OR RESTORATION UPON RECEIPT OF NOTICE, THE ENGINEER MAY CAUSE SUCH REPAIRS OR RESTORATION AND DEDUCT THE COST THEREOF FROM MONEYS DUE, OR WHICH MAY BECOME DUE, TO THE CONTRACTOR.

SITE CONDITIONS

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES ADJACENT TO THE CONSTRUCTION AREA.

DUST ABATEMENT/CONSTRUCTION WATER: THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS REQUIRED OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND COORDINATING CONSTRUCTION WATER SUPPLY WITH LOWER VALLEY WATER USER'S ASSOCIATION SHALL ARRANGE FOR AND PAY FOR ANY COSTS FOR PERSONNEL AS CONTRACTOR THE CONSTRUCTION WATER FREE OF CHARGE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

COMMUNICATION

CONTRACTOR SHALL KEEP THE OWNER AND THE ENGINEER UPDATED ON THE CONSTRUCTION SCHEDULE AND/OR PHASE SCHEDULE, AND PROGRESS TO DATE.

SUBMITTALS

CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL EQUIPMENT, MATERIALS, PROCESSES AND SCHEDULES AND AS REQUESTED BY THE ENGINEER.

EROSION CONTROL / ENVIRONMENTAL PROTECTION / STORM WATER POLLUTION PREVENTION PLAN

1. THE CONTRACTOR SHALL CONFORM TO ALL COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST AND/OR EROSION CONTROL PERMITS FROM REGULATORY AGENCIES, INCLUDING POSTING ITS APPROVED SWPPP.

2. THE CONTRACTOR SHALL PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY TO KEEP IT FROM WASHING OFFSITE OF THE PROJECT SITE.

3. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO OTHER PROPERTY BY CONSTRUCTING TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES.

4. THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING CHECK DAMS IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS SPECIFIED.

5. THE CONTRACTOR SHALL WET THE SOIL AS NEEDED TO KEEP IT FROM BLOWING. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFORE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH LOCAL STATE, FEDERAL AND COUNTY ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.

6. ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR AN IMPERVIOUS SURFACE SHALL BE REVEGITATED WITH NATIVE GRASS SEEDING. WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME WITHIN 21 DAYS, STABILIZATION MEASURES MUST BE IMPLEMENTED. UNLESS INDICATED OTHERWISE ON THESE PLANS OR THE LANDSCAPING PLAN, NATIVE GRASS SEEDING SHALL BE "BLM" SEEDING.

7. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.) GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC., SHALL BE APPROPRIATELY DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES AND ARCHAEOLOGICAL RESOURCES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINTS, ETC., WHICH MAY BE A THREAT THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE AT 1 (505) 827-9329.

9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHOULD BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.

10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND OPERATION HOURS.

11. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ONSITE AT ALL TIMES AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN.

DATE	REVISION	BY

CHENEY·WALTERS·ECHOLS
ENGINEERS · SURVEYORS
909 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303
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CONSTRUCTION NOTES
FIRE STATION EXPANSION

LaPLATA FIRE STATION DISTRICT No. 4
LaPLATA NEW MEXICO

DATE:04/01/2020
DRAWN BY: HWS
PROJ. 20127
SCALE:NOTED
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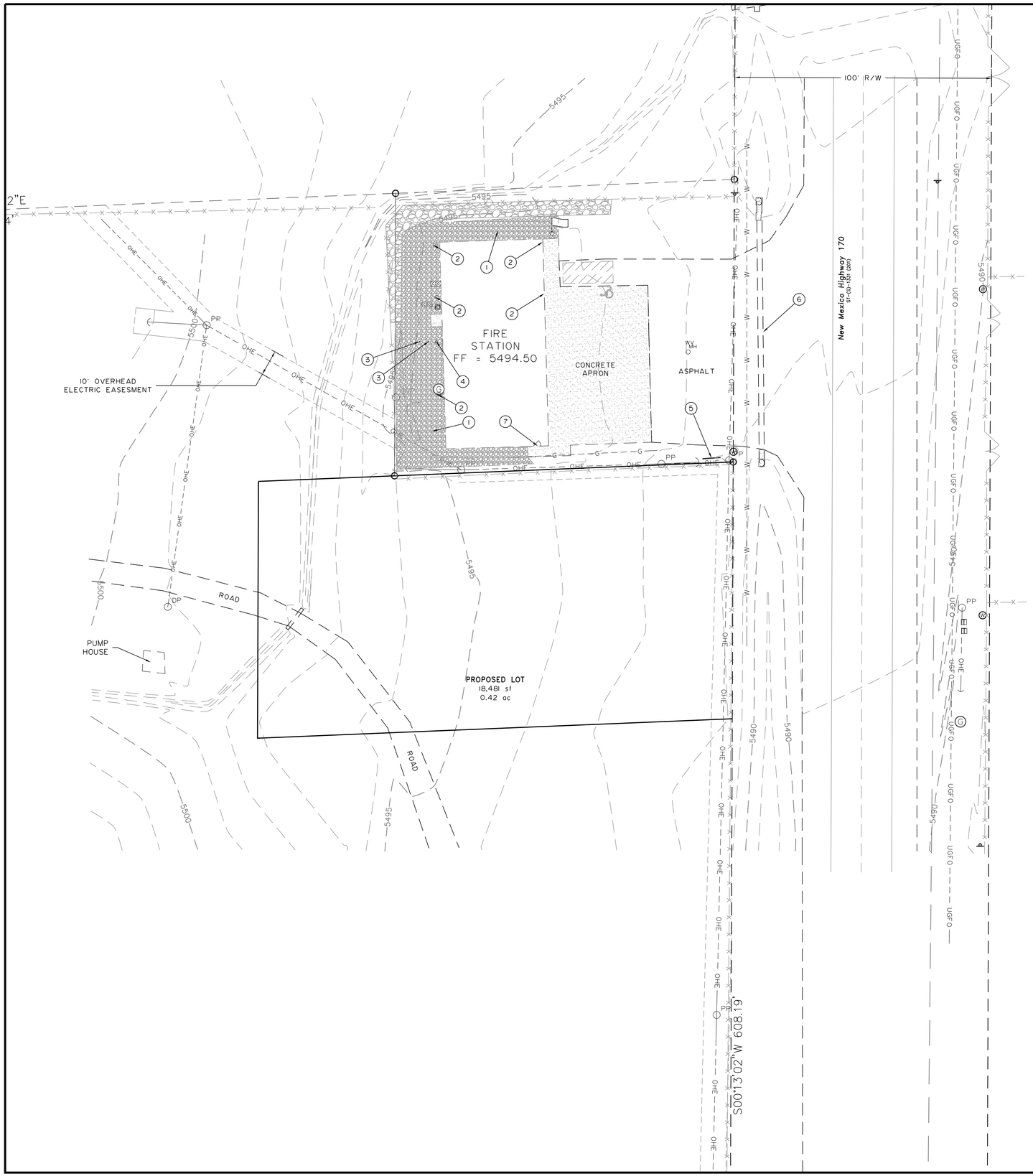
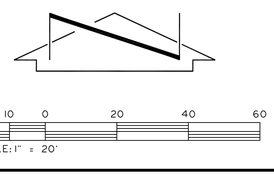
KEYED NOTES:

1. GRAVELED AREA SMALL DRAINAGE INVERT ON WEST AND SOUTH SIDE OF EXISTING STATION.
2. 4"Φ ROOF DRAIN WITH CONCRETE SLASH PAD.
3. 2" POST FOR SATELLITE DISH.
4. 12" TRIANGLE STEEL COMMUNICATIONS TOWER.
5. LaPLATA FIRE STATION SIGN.
6. 24"Φ CMP CULVERT, INLET AND OUTLET SILTED OVER.
7. EXISTING SECURITY LOCKED DOOR.





BY	REVISION	DATE

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EXISTING SITE CONDITIONS
FIRE STATION EXPANSION

LaPLATA FIRE STATION DISTRICT No. 4
LaPLATA NEW MEXICO

DATE:04/01/2020
DRAWN BY: HWS
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SCALE:1" = 20'
FILE:20127SET-031820
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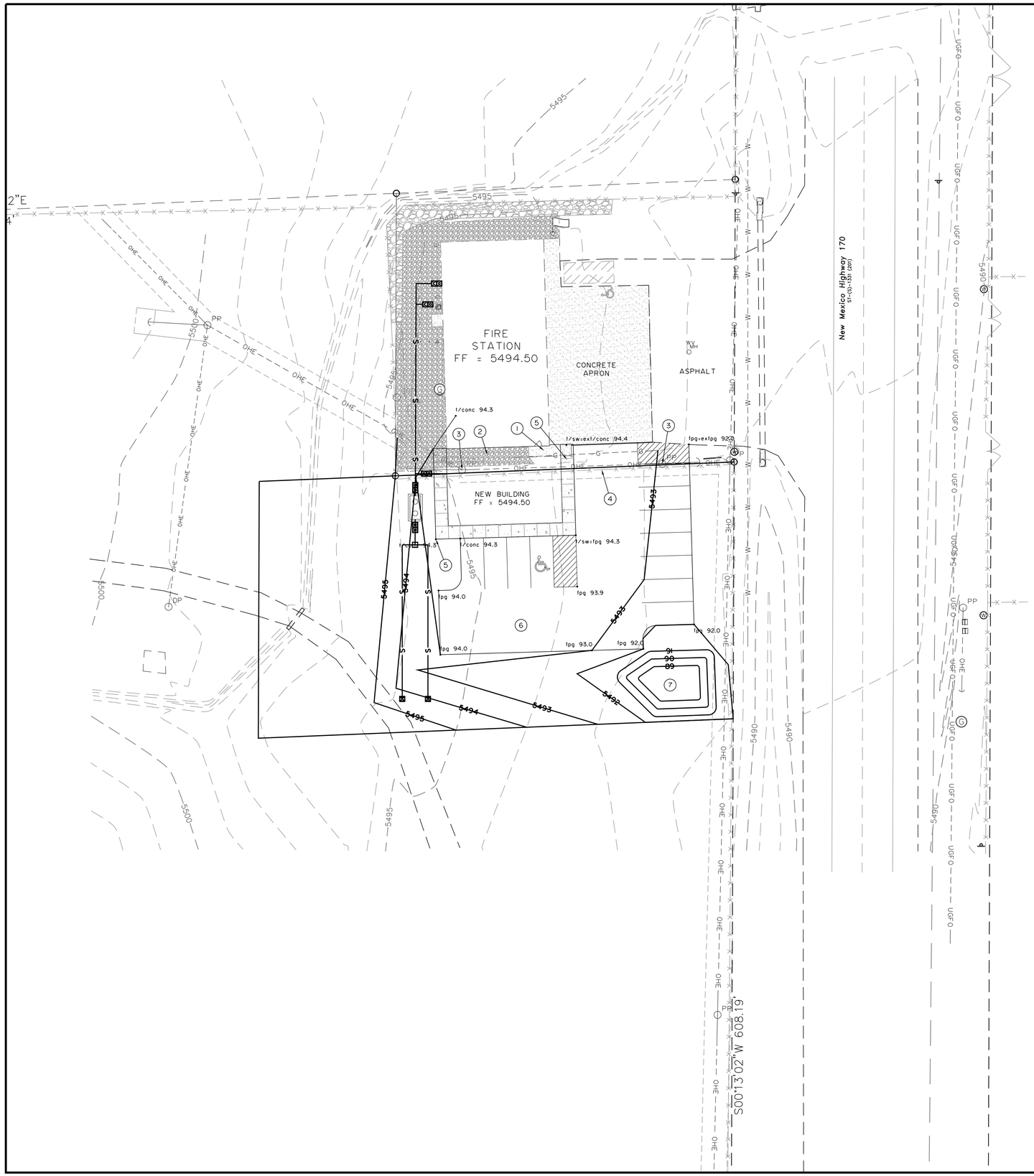

KEYED NOTES:

1. REMOVE EXISTING CONCRETE SIDEWALK 17.0'±x4.0'± FOR NEW BUILDING CONSTRUCTION.
2. REMOVE 32.0'± OF EXISTING GRAVEL ALONG THE SOUTH SIDE OF THE EXISTING BUILDING.
3. REMOVE EXISTING POWER POLES AND OVERHEAD ELECTRICAL. SEE ARCHITECTURAL/ELECTRIC PLANS.
4. REMOVE EXISTING 6.0' CHAIN LINK FENCE AND SALVAGE FOR OWNER.
5. NEW 5.0' WIDE CONCRETE SIDEWALK. MATCH EXISTING FINISH GRADES AT EDGE OF EXISTING CONCRETE APRON. SEE DETAIL D5/C-4 & DD3/C-4.
6. NEW ASPHALT PAVEMENT. SEE DETAIL D2/C-4.
7. PLACE 3" TO 6" CLEAN ROCK ON FABRIC TO INCLUDE POND "A" INVERT AND SIDE SLOPES TO ELEVATION 5491.00.

96- HOUR POND DRAIN PER NMDSE

SOIL TYPE - FRUITLAND SANDY (FR)
ANTICIPATED POND WATER DEPTH = 12"
PERCOLATION RATE - 2.0 - 6.0 IN/HR USE 3 IN/HR
TIME TO DRAIN - 12 INCHES / 3 IN/HR = 4 HOURS

20 10 0 20 40 60
SCALE: 1" = 20'

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SITE GRADING PLAN
FIRE STATION EXPANSION
LaPLATA FIRE STATION DISTRICT No. 4
LaPLATA NEW MEXIOC

DATE:04/01/2020
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SCALE:1" = 20'
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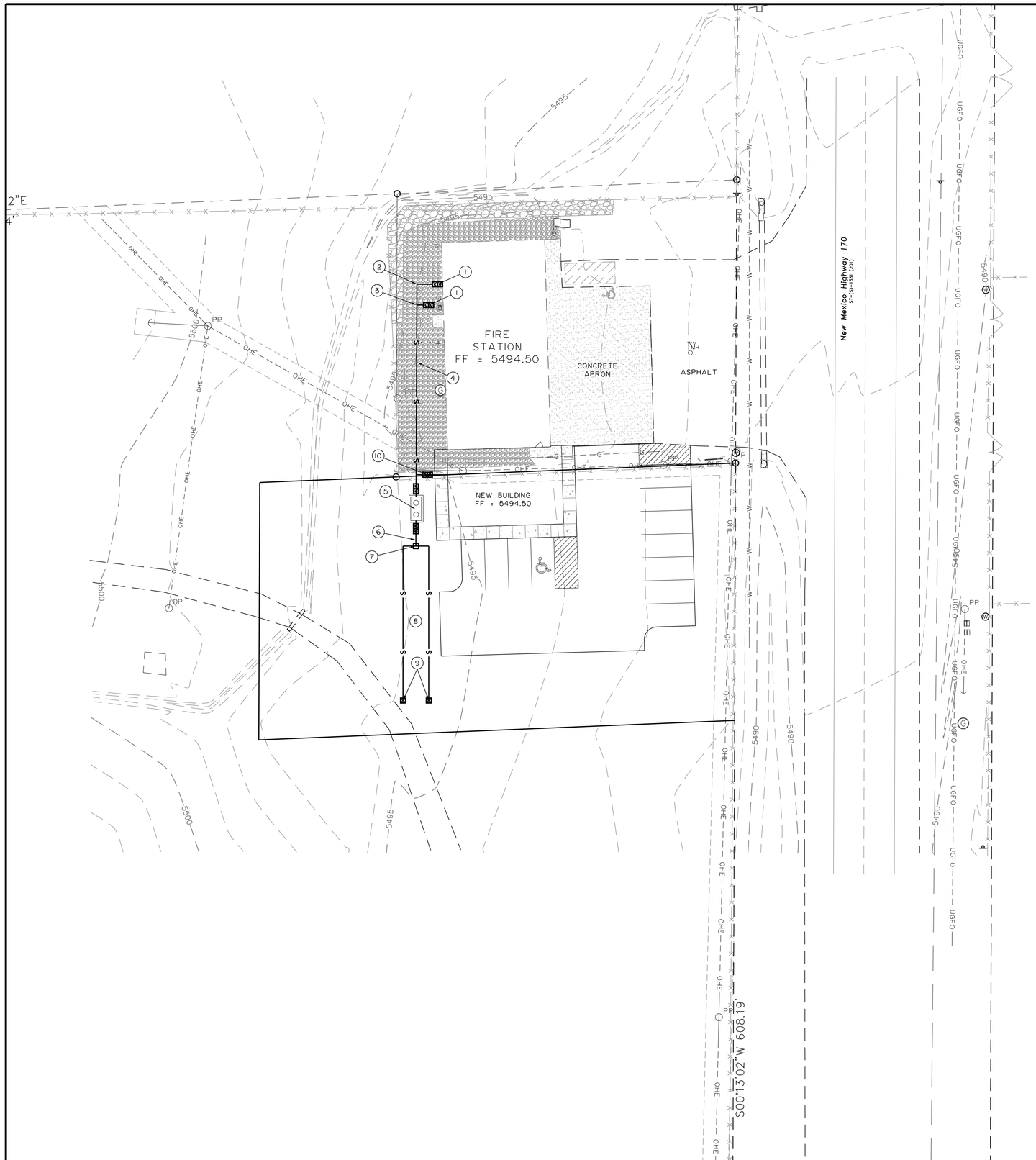

KEYED NOTES:

1. REPLACE EXISTING SEWER CLEAN OUTS WITH NEW 4" TWO WAY CLEAN OUT. SEE DETAIL D7/C-4. CONTRACTOR TO FIELD VERIFY NEW INVERT OF CLEAN OUT. THIS INVERT WILL BE THE CONTROLLING FACTOR IN DETERMINING THE DEPTH OF ALL THE PIPING AND SEPTIC SYSTEM. ALL SANITARY SEWER PIPES SHALL MAINTAIN A MINIMUM OF 2.0% SLOPE GRADE.
2. 14.1'± 4"Ø SCH40 PVC DRAIN LINE FOR FLOOR DRAINS WITH EXISTING TWO WAY CLEAN OUT REPLACED WITHIN 5.0' OF BUILDING. SEE PLUMBING PLAN FOR CONTINUATION.
3. INSTALL 4" SANITARY WYE TO CONNECT BOTHE SEWER LINES TOGETHER.
4. 74.6'± 4"Ø SCH40 PVC SEWER LINE @ MINIMUM 2.0% GRADE.
5. INSTALL 1500 GAL. SEPTIC TANK WITH TWO WAY CLEAN OUTS AT INLET AND OUTLET. SEE DETAIL D1/C-4.
6. 10.0'± 4"Ø SCH40 PVC SEWER LINE @ MINIMUM 2.0% GRADE.
7. LEACH FIELD DISTRIBUTION BOX.
8. LEACH FIELD: INFILTRATOR SYSTEM - 2 - 45' EZ FLOW 1204V-GEO WITH INSPECTION PORTS - SPACE MIN. 10' O.C. SEE DETAIL D6/C-4
9. 4"Ø PVC INSPECTION PORT AT END OF LEACH FIELD RUN. SEE DETAIL D4/C-4.
10. INSTALL NEW 4" TWO WAY CLEAN OUT WITHIN 5.0' OF BUILDING. THE INVERT OF THIS LINE SHALL BE DETERMINED BY THE VERIFIED CONDITIONS OF KEYED NOTE No. 1. SEE DETAIL D7/C-4.

CONTRACTOR NOTES:

1. CONTRACTOR TO LOCATE AND UNCOVER EXISTING SEPTIC TANK.
2. THE EXISTING SEPTIC TANK TO BE ABANDONED BY FILLING WITH SOILS IN AN APPROVED MANNER AS PER THE ED.
3. EXISTING LEACH FIELD TO BE ABANDONED IN PLACE.
4. NO PART OF THE EXISTING SEPTIC SYSTEM SHALL BE USED WITH THE NEW INSTALLATION.
5. CONTRACTOR TO VERIFY THE INVERTS OF THE EXISTING SANITARY SEWER CLEAN OUTS AND CONNECTION POINTS TO DETERMINE THE DEPTH OF ALL THE NEW SEWER LINES AND SEPTIC SYSTEM. ALL SANITARY SEWER PIPING SHALL HAVE A MINIMUM OF 2.0% SLOPE GRADE.

SEPTIC SYSTEM DESIGN:

FLOW RATE OF 78gpd BASED ON SIMILAR SAN JUAN COUNTY FIRE STATION 12 MONTH WATER METER RECORDS.

SEPTIC TANK CALCULATIONS

78gpd X 2.5 = 195gal MIN. TANK CAPACITY
USE 1500 GAL. TANK

LEACH FIELD CALCULATIONS

78gpd X 1.5 SAFETY FACTOR = 117gpd DESIGN FLOW (Q)
SAND CLAY = 5.0 ABSORPTION RATE (AR)
AR x Q = sq.ft. = 5.0 x 117 = 585 sq.ft.
INFILTRATOR SYSTEM BY EZ FLOW PRODUCTION
TRENCH WIDTH = 18" EZ FLOW 1204V-GEO-7.0 sf/ft
REQUIRED LEACH FIELD AREA = 5x117 = 585 sf
585 sF/7.0sf = 83.57 USE 90.0' TOTAL
INSTALL 2 - EACH FIELD LINES 45' LONG EACH AT A MINIMUM OF 48" TRENCH DEPTH

UTILITY PROVIDERS:

THE FOLLOWING UTILITIES ARE AVAILABLE TO PROVIDE SERVICE TO THE SITE BUT CONSIDER ALL EQUIPMENT, LINES, ETC. THAT LIE INSIDE THE SITE AND OUTSIDE OF THEIR RESPECTIVE EASEMENTS TO BE THE PROPERTY OF AND THE RESPONSIBILITY OF THE OWNERS OF THE SITE:

UTILITY LOCATIONS ARE APPROXIMATE AS LOCATED BY ABOVE GROUND EVIDENCE. NO EXCAVATION WAS DONE FOR LOCATIONS. CHENEY-WALTERS-ECHOLS, INC. MAKES NO STATEMENT AS TO UNDERGROUND UTILITY LOCATIONS.

UTILITY COMPANIES THAT SERVICE THIS AREA ARE:
ELECTRIC SERVICE PROVIDED BY:
FARMINGTON ELECTRIC UTILITY SERVICE, 800 MUNICIPAL DRIVE, FARMINGTON, NEW MEXICO, 87401 : TIM HENSON 505-599-8327
WATER SERVICE PROVIDED BY:
UPPER LaPLATA WATER USERS ASSOCIATION
No. 10 ROAD 1330, LaPLATA, NEW MEXICO
(505) 326-1751(CONTACT DWIGHT JAMES)
SOLID WASTE DISPOSAL PROVIDED BY:
WASTE MANAGEMENT OF FOUR CORNERS, 101 SPRUCE STREET, FARMINGTON, NEW MEXICO : 1-866-897-4705.
TELEPHONE SERVICE PROVIDED BY:
CENTURYLINK : LAURENCE JOE 505-409-8042

20 10 0 20 40 60
SCALE:1" = 20'

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UTILITY PLAN
FIRE STATION EXPANSION
LaPLATA FIRE STATION DISTRICT No. 4
LaPLATA NEW MEXICO

DATE:04/01/2020
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PROJ. 20127
SCALE:1" = 20'
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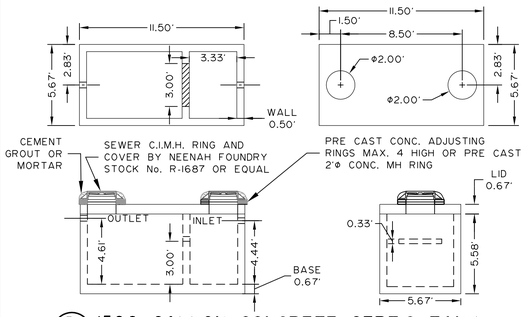
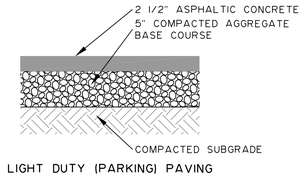
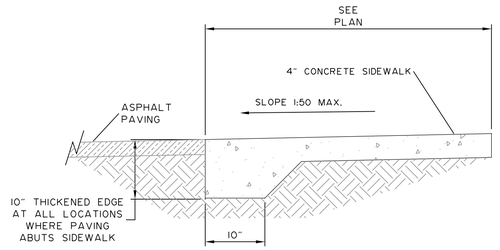
NOTE: INSTALL POLYLOK A100-12 FILTER ON OUTLET (IN TANK) BY ZABEL FILTERS OR EQUAL.



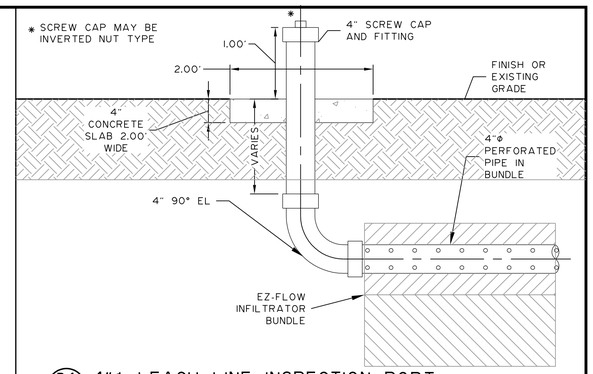
D1 / C-4 1500 GALLON CONCRETE SEPTIC TANK
SCALE 1" = 5'



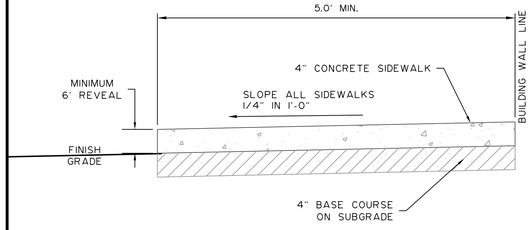
D2 / C-4 ASPHALT PAVING SECTION
NOT TO SCALE



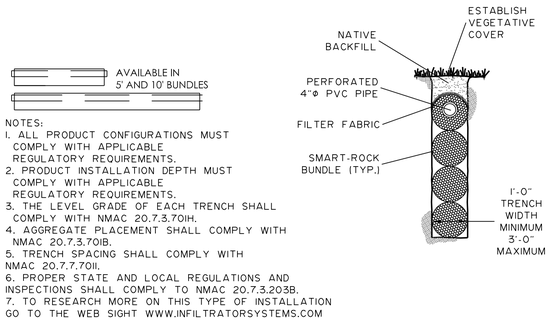
D3 / C-4 SIDEWALK DETAIL (NO CURB NO REVEAL)
SCALE: 1" = 1'-0"



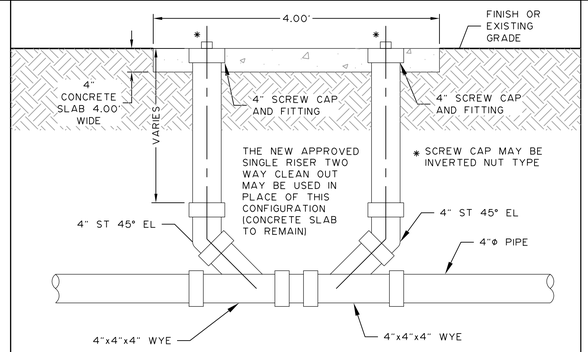
D4 / C-4 4"Φ LEACH LINE INSPECTION PORT
SCALE 1" = 1'



D5 / C-4 BUILDING PERIMETER SIDEWALK DETAIL
SCALE: 1" = 1'-0"



D6 / C-4 INFILTRATOR SMART-ROCK EZ FLOW 1204V DETAIL
SCALE 1/2" = 1'



D7 / C-4 4" TWO WAY CLEAN OUT ON 4"Φ SEWER LINE
SCALE 1" = 1'

BY	DATE
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CHENEY·WALTERS·ECHOLS
ENGINEERS · SURVEYORS
909 W. APACHE · FARMINGTON, NEW MEXICO 87401 · (505)327-3303

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CONSTRUCTION DETAILS
FIRE STATION EXPANSION

LaPLATA FIRE STATION DISTRICT No. 4
LaPLATA NEW MEXICO

DATE:04/01/2020
DRAWN BY: HWS
PROJ. 20127
SCALE:NOTED
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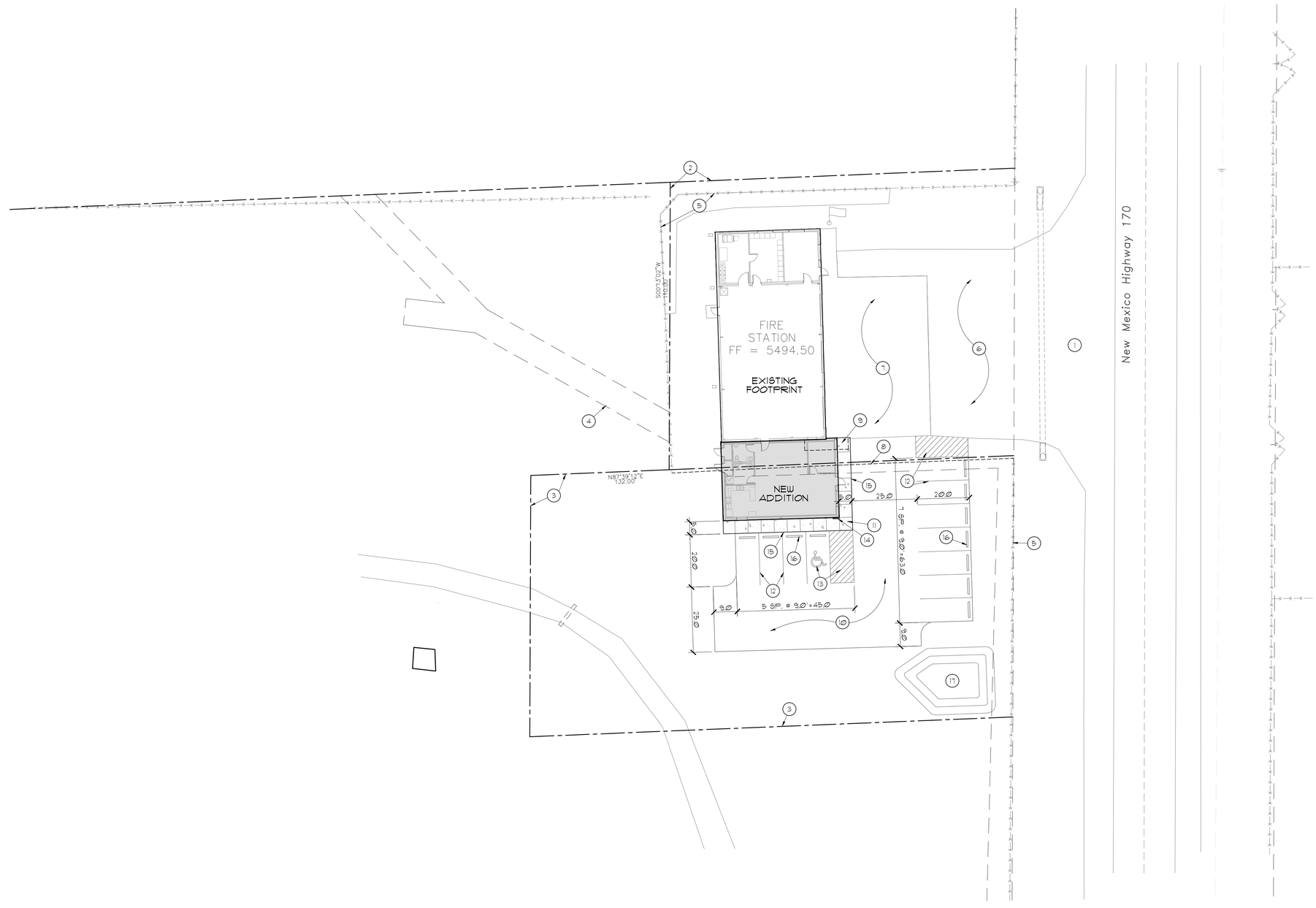
SHEET
C-4
OF
4



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

SITE PLAN KEYED NOTES

1. EXISTING HIGHWAY ACCESS
2. EXISTING PROPERTY LINE
3. NEW PROPERTY LINE- SEE CIVIL
4. EXISTING EASEMENT LINE
5. EXISTING CHAIN LINK FENCING TO REMAIN
6. EXISTING ASPHALT PAVING TO REMAIN
7. EXISTING CONCRETE APRON TO REMAIN
8. REMOVE EXISTING CHAIN LINK FENCING
9. REMOVE EXISTING CONCRETE SIDEWALK
10. NEW ASPHALT PAVING-SEE CIVIL.
11. NEW CONCRETE SIDEWALK- SEE
12. NEW 4" WHITE TRAFFIC STRIPING
13. HANDICAP PARKING SYMBOL & "NO PARKING" STRIPING TO BE BLUE TRAFFIC PAINT-NOTE: SLOPE THIS AREA NOT TO EXCEED 2% SLOPE
14. NEW HANDICAP PARKING SIGN
15. TOP OF ASPHALT TO MATCH TOP OF CONCRETE SIDEWALK, TYP.
16. PROVIDE 6' LONG PRECAST CONCRETE PARKING BUMPERS, TYP.
17. DETENTION POND- SEE CIVIL

STATE OF NEW MEXICO
T.E. HUMMELL
NO. 1424
REGISTERED ARCHITECT

04.13.20

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Farmington, NM 87401
Phone: (505) 326-6442

LA PLATA
FIRESTATION #2
SAN JUAN COUNTY

SITE PLAN

Drawn:	Checked:	Date:
BTW	TEH	04.13..20

Filename: 0920_SITE
Project: 190920
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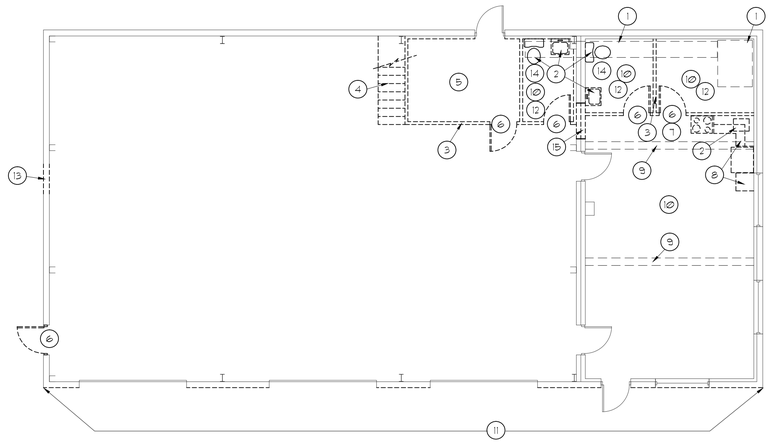

N

DEMOLITION PLAN

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

(A1) DEMOLITION PLAN KEYED NOTES

1. REMOVE PORTION OF EXISTING CONCRETE SLAB TO ALLOW FOR NEW SEWER LINE AND ALSO FOR REQUIRED 12" THICK SLAB AT NEW GEAR WASHER LOCATION.
2. REMOVE EXISTING PLUMBING FIXTURES COMPLETELY - REFER TO PLUMBING PLANS FOR MORE INFORMATION
3. REMOVE EXISTING FRAME PARTITIONS COMPLETELY.
4. REMOVE EXISTING WOOD FRAMED STAIRS COMPLETELY.
5. REMOVE EXISTING 2ND LEVEL FLOOR FRAMING AND WALLS COMPLETELY.
6. REMOVE EXSITING DOOR/FRAME COMPLETELY.
7. SALVAGE COMBINATION LOCK FROM THIS DOOR FOR REUSE.
8. REMOVE EXISTING MILLWORK AND APPLIANCES. SALVAGE APPLIANCES TO OWNER.
9. REMOVE PORTION OF EXISTING ACOUSTICAL TILE CEILING TO ALLOW FOR CONSTRUCTION OF NEW PARTITION.
10. REMOVE EXISTING FLOORING (COMBINATION OF TILE/CAPETING) AND BASE IN RESTROOMS/OFFICE.
11. REMOVE EXISTING EXTERIOR METAL SIDING TO ALLOW FOR INSTALLATION OF NEW INSULATED WALLS PANELS. REMOVE /RELOCATE DOORS/WINDOWS AND EXTERIOR MOUNTED LIGHTING AND ACCESSORIES AS REQUIRED FOR INSTALLATION OF NEW PANELS.
12. REMOVE EXISTING CEILING COMPLETELY.
13. REMOVE PORTION OF EXTERIOR WALL TO ALLOW FOR INSTALLATION OF NEW DOOR/FRAME.
14. REMOVE EXISTING TOILET ACCESSORIES, GRAB BARS, MIRRORS, ETC.
15. REMOVE PORTION OF EXISTING WALL TO ALLOW FOR INSTALLATION OF NEW DOOR/FRAME.

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LA PLATA
FIRESTATION #2
FARMINGTON,NM

Filename: 0920_DEMO
Project: 190920

DEMOLITION PLAN

Sheet: A1
Of: 0

Drawn:	Checked:	Date:
BTW	TEH	04.13.20

ROOM FINISH SCHEDULE

RM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CLG. HT.
100	OFFICE	F-1	B-1	W-1	C-1	8'-0"
101	DAY ROOM	F-1	B-1	W-1	C-1	9'-0"
102	KITCHEN	F-1	B-1	W-1	C-1	9'-0"
103	RESTROOM	F-1	B-1	W-1	C-1	8'-0"
104	RESTROOM	F-1	B-1	W-1	C-1	8'-0"
105	I.T.	F-2	B-1	W-1	C-2	---
106	MECHANICAL	F-2	B-1	W-1	C-2	---
107	APP. BAY	F-2	---	W-2	C-2	---
108	GEAR WASH	F-2	B-1	W-1	C-2	---
109	GEAR STORAGE	F-2	B-1	W-1	EXIST	8'-0"
110	GEN. STORAGE	F-2	B-1	W-1	EXIST	8'-0"

FINISH MATERIAL KEY

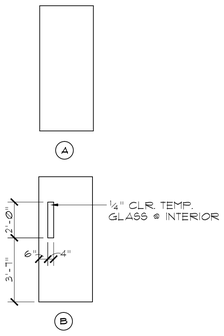
FLOORS
- F-2: SEALED CONCRETE
- F-1: VINYL PLANK

WALLS
- W-1: 5/8" GYP. BD. PAINTED
- W-2: EXISTING LINER PANEL

BASE
- B-1: 4" VINYL COVE, SEE SPEC.

CEILINGS
- C-1: 2'X4' ACOUSTICAL TILE, SEE SPEC.
- C-2: EXPOSED STRUCTURE

DOOR TYPES

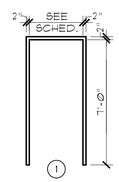


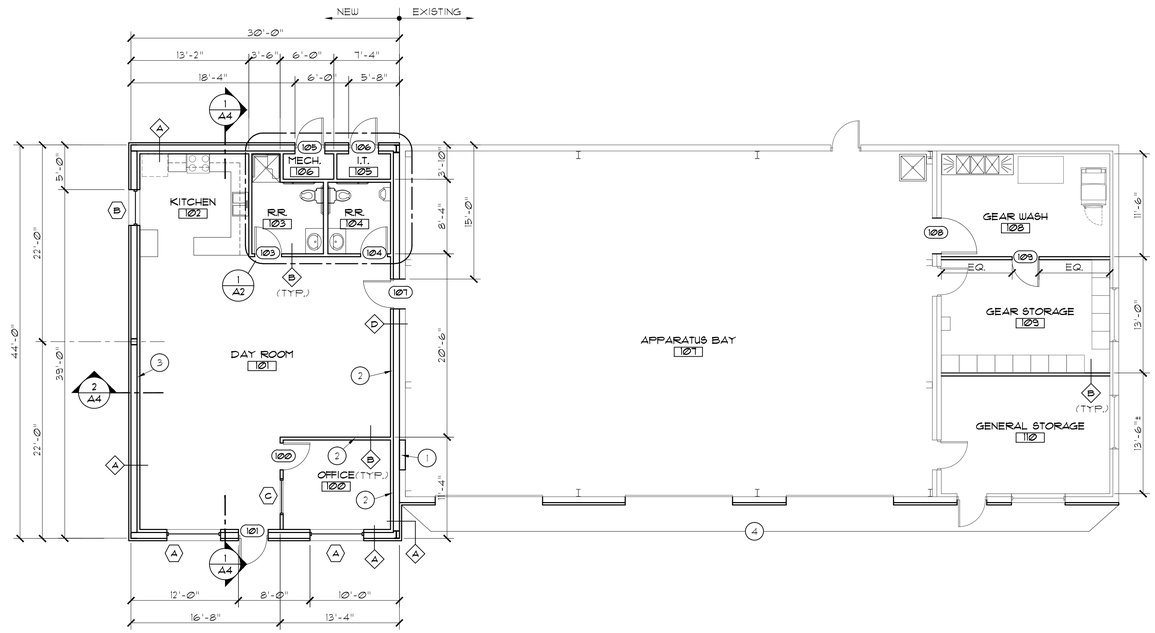
NOTE:
PROVIDE 1½ HR. RATED GLAZING @ DOOR 107

DOOR SCHEDULE

	DOORS TYPE	DOORS MATERIAL	DOORS WIDTH	DOORS HEIGHT	FRAMES TYPE	FRAMES MATERIAL	FRAMES DETAIL	DETAILS SILL	MISC. SIGN	MISC. HDWE	MISC. LABEL	NOTES
100	A	WD	3'-0"	7'-0"	1	HM			X			
101	B	HM	3'-0"	7'-0"	1	HM		X	X			
103	A	WD	3'-0"	7'-0"	1	HM			X			
104	A	WD	3'-0"	7'-0"	1	HM			X			
105	A	HM	3'-0"	7'-0"	1	HM		X				
106	A	HM	3'-0"	7'-0"	1	HM		X				
107	B	HM	3'-0"	7'-0"	1	HM			X		30MIN	
108	A	HM	3'-0"	7'-0"	1	HM			X			
109	A	HM	3'-0"	7'-0"	1	HM						

FRAME TYPES



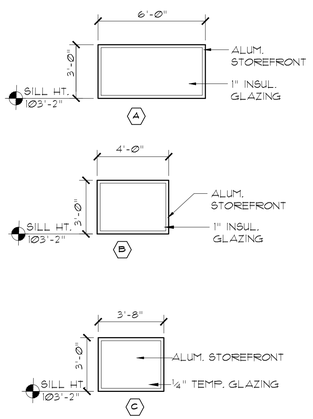


N
FLOOR PLAN
SCALE: 1/8"=1'-0"

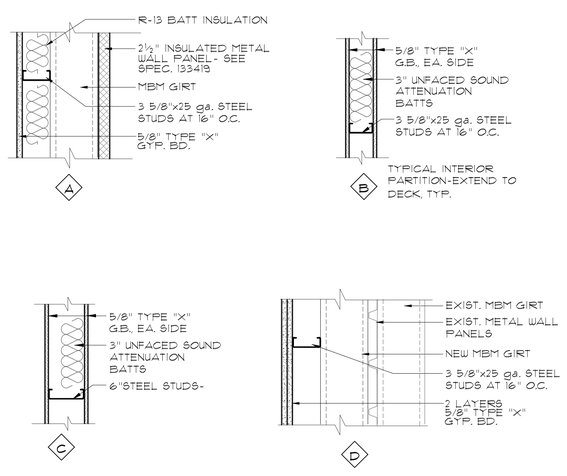
FLOOR PLAN KEYED NOTES

1. INFILL OPENING WITH CONSTRUCTION TO MATCH EXISTING.
2. INSTALL 2x8 CONTINUOUS BLOCKING @ 3'-0" & 7'-0"
3. INSTALL 2x8 CONTINUOUS BLOCKING @ 3'-0" & 7'-0" ON , AND AT ELECTRICAL OUTLETS MOUNTED @ 84" & 96" (TYP. OF 3 LOCATIONS)
4. NEW INSULATED METAL WALL PANELS TO BE INSTALLED OVER EXISTING METAL BUILDING GIRTS, SEE SPEC. 133419

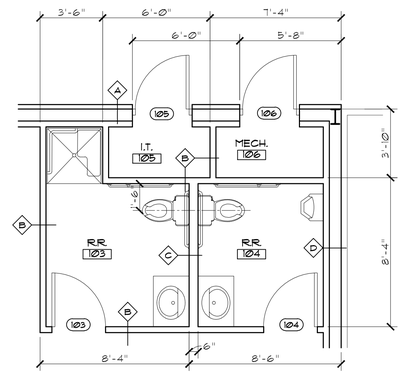
WINDOW TYPES



WALL TYPES



ENLARGED PLANS



1/A2 ENLARGED PLAN
SCALE: 1/4"=1'-0"

STATE OF NEW MEXICO
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LA PLATA FIRESTATION #2
FARMINGTON, NM

FLOOR PLAN

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Filename: 0920_FLOOR
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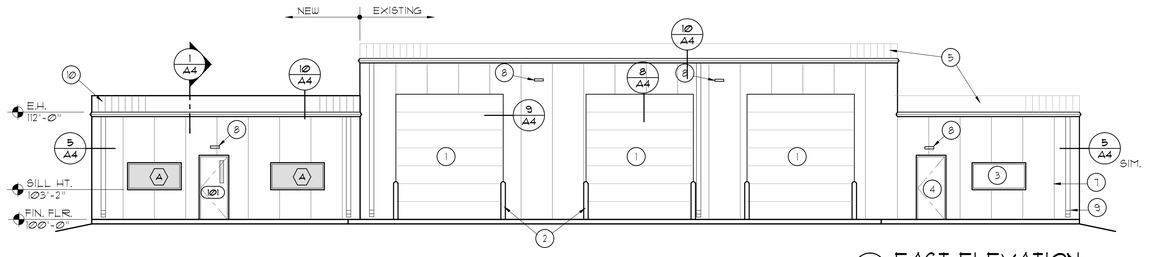
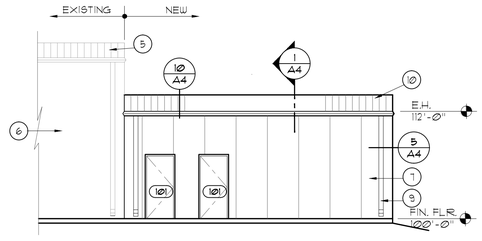
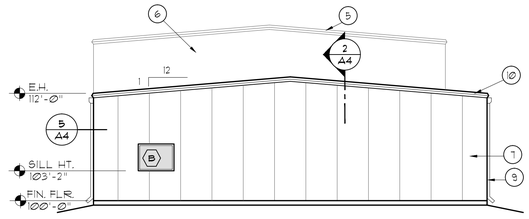


1/A3 EAST ELEVATION
SCALE: 1/8"=1'-0"



3/A3 WEST ELEVATION
SCALE: 1/8"=1'-0"



2/A3 SOUTH ELEVATION
SCALE: 1/8"=1'-0"

KEYED NOTES

1. EXISTING OVERHEAD SECTIONAL DOOR TO REMAIN
2. EXISTING STEEL PIPE BOLLARDS, PAINT
3. EXISTING WINDOW TO REMAIN
4. EXISTING DOOR TO REMAIN
5. EXISTING ROOF PANELS TO REMAIN
6. EXISTING METAL WALL PANELS TO REMAIN
7. NEW INSULATED METAL WALL PANELS, SEE SPEC. 133419
8. WALL MOUNTED LIGHT FIXTURE, TYP. -SEE ELECT
9. NEW GUTTERS & DOWNSPOUTS, TYP., PROVIDE CONCRETE SPLASHBLOCKS AT WEST SIDE
10. PREFINISHED 24ga METAL ROOFING PANELS-SEE SPEC.

GENERAL NOTES

A. ROOF PANELS ARE ALLIANCE STEEL BUILDING KYNAR LIGHT STONE 9K)

B. INSULATED METAL WALL PANELS ARE BUTLER ADOBE II

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LA PLATA
FIRESTATION #2
FARMINGTON,NM

Filename: 0920_ELV
Project: 190920

BUILDING ELEVATIONS

Sheet: A3 Of: 0

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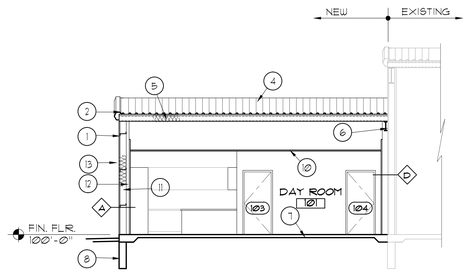
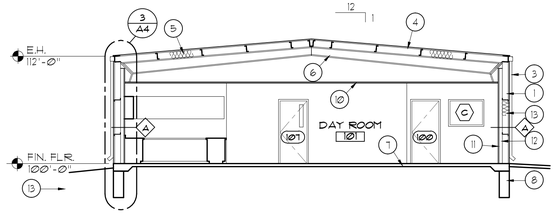


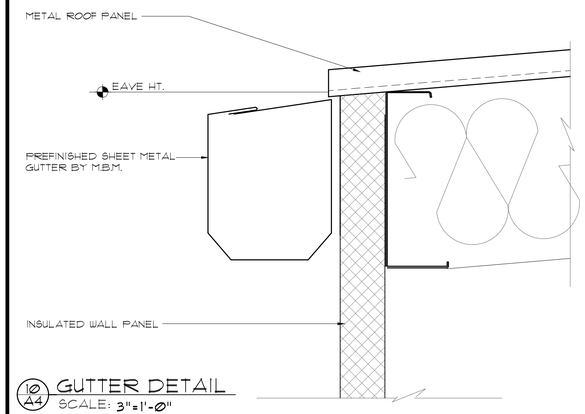
2/A4 BUILDING SECTION
SCALE: 1/8"=1'-0"



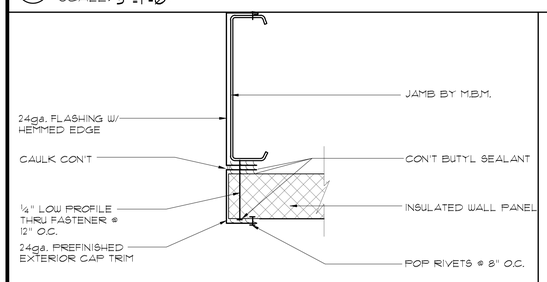
1/A4 BUILDING SECTION
SCALE: 1/8"=1'-0"

KEYED NOTES

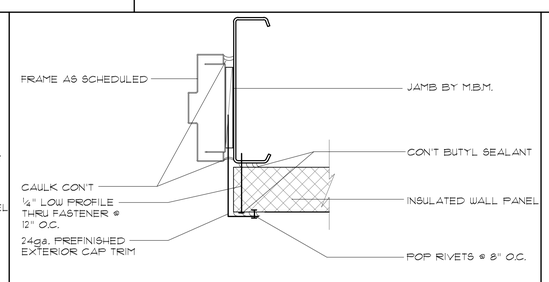
1. INSULATED METAL WALL PANELS- SEE SPEC. 133419
2. NEW METAL BUILDING TRIM
3. NEW GUTTERS & DOWNSPOUTS
4. NEW PREFINISHED 24ga. METAL ROOFING PANELS
5. R-30 VINYL FACED INSULATION
6. RIGID FRAME BEYOND BY M.B.M.
7. NEW CONC. SLAB-SEE STRUCTURAL DRAWINGS.
8. CONCRETE FOOTING-SEE FOUNDATION PLAN.
9. CAULK CONTINUOUS
10. ACOUSTICAL TILE CEILING, SEE SPEC 095113
11. 5/8" GYP. BD.
12. STEEL STUD FRAMING
13. R-13 BATT INSULATION
14.
15.



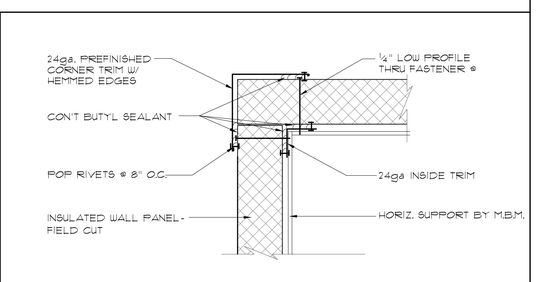
10/A4 GUTTER DETAIL
SCALE: 3"=1'-0"



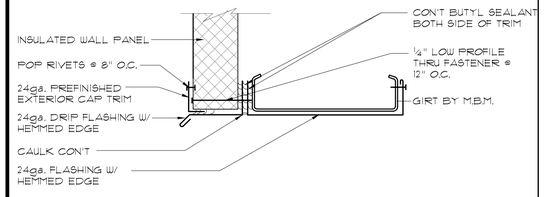
9/A4 OVERHEAD DOOR JAMB
SCALE: 3"=1'-0"



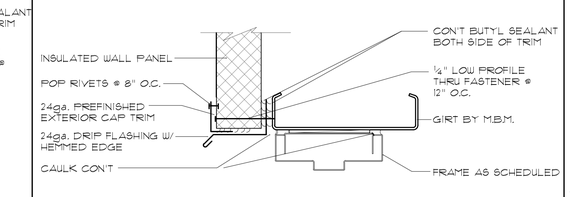
7/A4 TYP. DOOR JAMB
SCALE: 3"=1'-0"



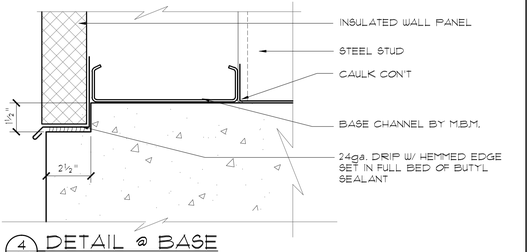
5/A4 TYP. OUTSIDE CORNER
SCALE: 3"=1'-0"



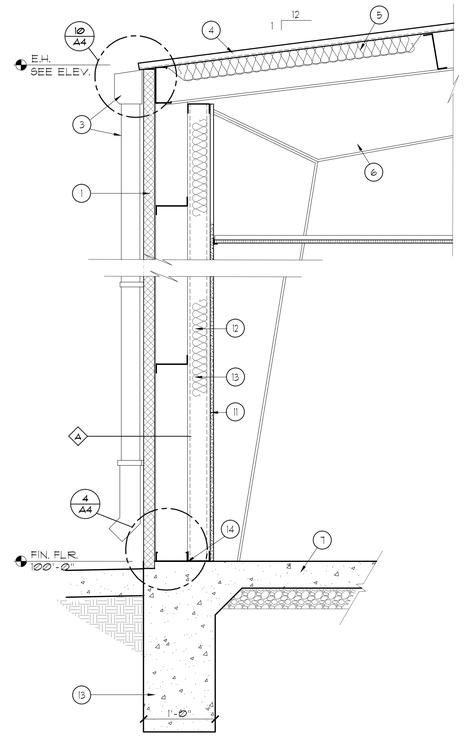
8/A4 TYP.OVERHEAD DOOR HEAD
SCALE: 3"=1'-0"



6/A4 TYP. DOOR HEAD
SCALE: 3"=1'-0"



4/A4 DETAIL @ BASE
SCALE: 3"=1'-0"



3/A4 TYP. WALL SECTION
SCALE: 3/4"=1'-0"

04.13.20

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LA PLATA FIRESTATION #2
FARMINGTON, NM

Filename: 0920_ELV
Project: 190920

BUILDING SECTIONS/DETAILS

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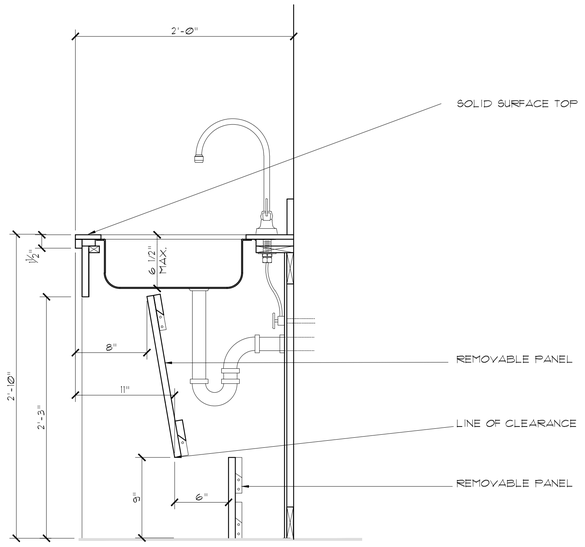
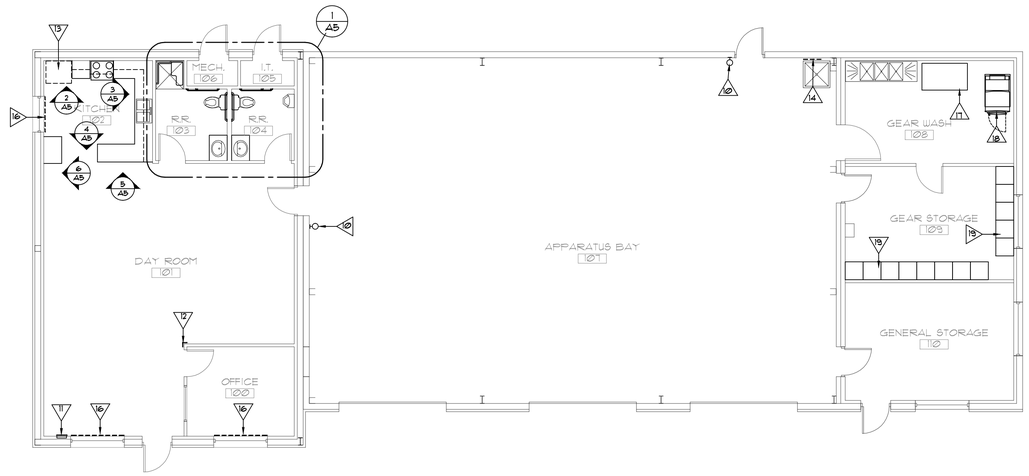


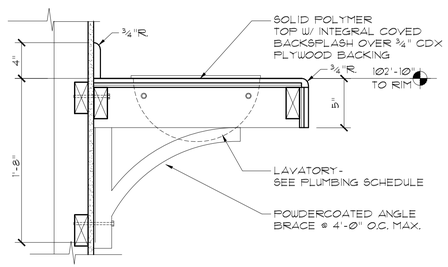
8/A5 HANDICAP SINK @ KITCHEN
SCALE: 1½"=1'-0"



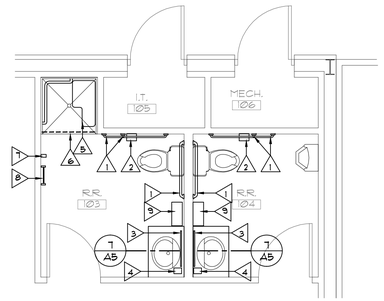
N EQUIPMENT PLAN
SCALE: ⅛"=1'-0"

EQUIPMENT SCHEDULE

1. GRAB BARS- BOBRICK 550-36 AT REAR, 550-42 AT SIDE & 550-18 VERTICALLY AT SIDE
2. TOILET PAPER HOLDER- OWNER PROVIDED, CONTRACTOR INSTALLED
3. MIRROR- BOBRICK B-290-2430
4. SOAP DISPENSER- BOBRICK B-2111
5. PREMANUFACTURED SHOWER- SEE MECH
6. SHOWER ROD & CURTAIN- BOBRICK B-207 AND 204-2, WITH 7-204-1
7. ROBE HOOK- BOBRICK B6707
8. TOWEL BAR- BOBRICK B330-24"
9. PAPER TOWEL DISPENSER- OWNER PROVIDED, CONTRACTOR INSTALLED
10. FIRE EXTINGUISHER & BRACKET- SEE SPEC. 104400
11. FIRE EXTINGUISHER AND CABINET- SEE SPEC. 104400
12. STAINLESS STEEL CORNER GUARDS- SEE SPEC. 102600
13. REFRIGERATOR- SEE SPEC BELOW
14. MOP HOLDER- BOBRICK B-22x34, MOUNT @ 48" A.F.F.
15. AIR COMPRESSOR BY OWNER
16. HORIZONTAL METAL BLIND, TYP. ALL WINDOWS- SEE SPEC. 122413
17. GEAR DRYER- SEE
18. GEAR WASHER- SEE
19. GEAR LOCKERS BY OWNER



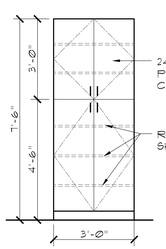
7/A5 LAVATORY TOP
SCALE: 1½"=1'-0"



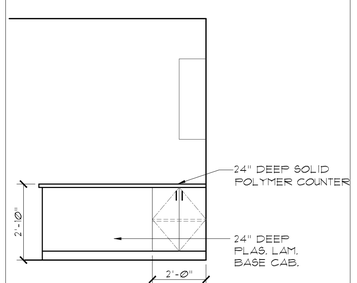
1/A5 ENLARGED EQUIPMENT PLAN
SCALE: ¼"=1'-0"

APPLIANCE SCHEDULE-

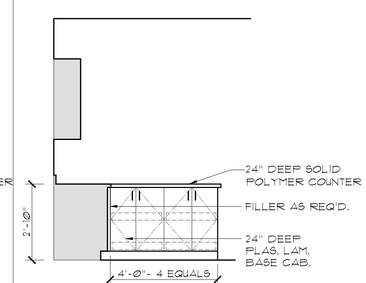
STOVE:	FRIGIDAIRE FPGH3077RF
EXH. FAN:	BROAN F403004
REFRIGERATOR:	FRIGIDAIRE FGB2868TF
DISHWASHER:	FRIGIDAIRE FDB2410HIC
GARBAGE DISPOSAL	KITCHEN AID KCD1075B



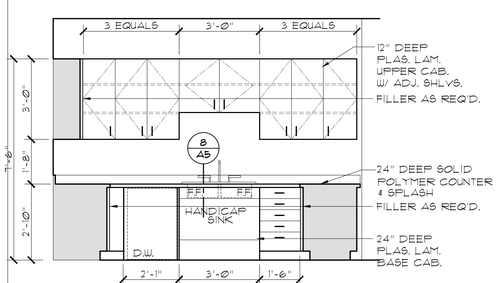
6/A5 ELEVATION @ KITCHEN 102
SCALE: ⅜"=1'-0"



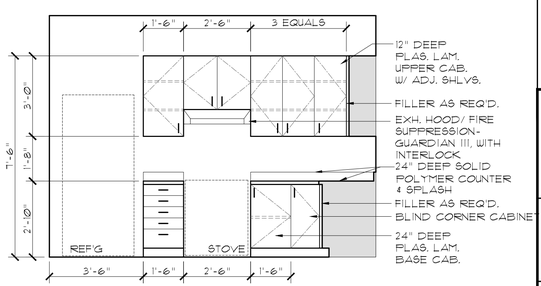
5/A5 ELEVATION @ KITCHEN 102
SCALE: ⅜"=1'-0"



4/A5 ELEVATION @ KITCHEN 102
SCALE: ⅜"=1'-0"



3/A5 ELEVATION @ KITCHEN 102
SCALE: ⅜"=1'-0"



2/A5 ELEVATION @ KITCHEN 102
SCALE: ⅜"=1'-0"

STATE OF NEW MEXICO
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REGISTERED ARCHITECT
04.13.20

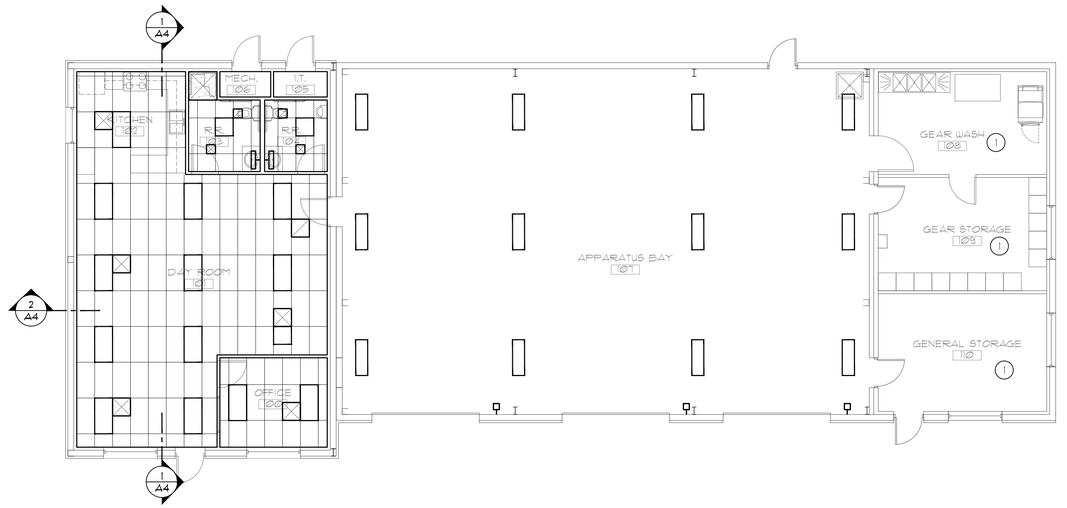
RODAHL & HUMMELL ARCHITECTURE, P.C.
609 North Dustin
Farmington, NM 87401
Phone: (505) 326-6442

LA PLATA
FIRESTATION #2
FARMINGTON, NM

EQUIPMENT PLAN

Drawn:	Checked:	Date:
BTW	TEH	04.13.20

Filename: 0920_equip
Project: 190920
Sheet: A5
Of: 0



N

REFLECTED CEILING PLAN

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

KEYED NOTES

1. PATCH/REPAIR EXISTING CEILING GRID & TILE AFTER CONSTRUCTION OF NEW WALLS. RELOCATE EXISTING LIGHTING AS REQUIRED.

STATE OF NEW MEXICO
T.E. HUMMELL
NO. 1424
REGISTERED ARCHITECT

04.13.20

R&H ARCHITECTURE

RODAHL & HUMMELL
ARCHITECTURE, P.C.

609 North Dustin
Farmington, NM 87401
Phone: (505) 326-6442

LA PLATA
FIRESTATION #2
FARMINGTON,NM

REFLECTED CEILING PLAN

Drawn:	Checked:	Date:
BTW	TEH	04.13.20

Filename: 0920_ceil
Project: 190920
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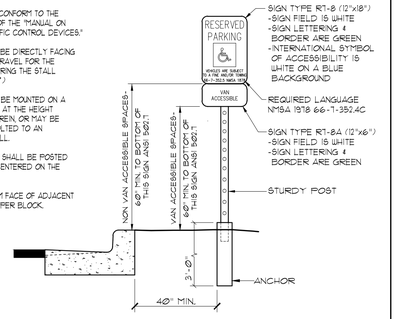
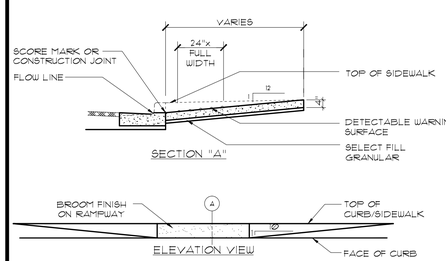
NOTES:

1. SIGNS SHALL CONFORM TO THE STANDARDS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
2. SIGNS SHALL BE DIRECTLY FACING THE LINE OF TRAVEL FOR THE VEHICLE ENTERING THE STALL (NOT 45°)
3. SIGNS SHALL BE MOUNTED ON A STURDY POST AT THE HEIGHT SPECIFIED HEREIN, OR MAY BE SECURELY BOLTED TO AN ADJACENT WALL.
4. EACH SPACE SHALL BE POSTED WITH A SIGN CENTERED ON THE STALL.
5. 40" MIN. FROM FACE OF ADJACENT CURB OR BUMPER BLOCK.

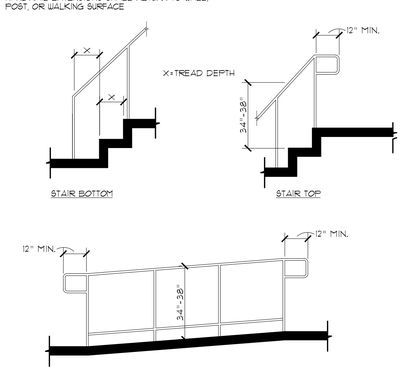


1 HC-1 HANDICAP PARKING SIGN

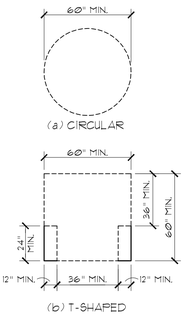


2 HC-1 CURB RAMP IN SIDEWALK

NOTE:
HANDRAIL EXTENSIONS SHALL RETURN TO WALL, POST, OR WALKING SURFACE



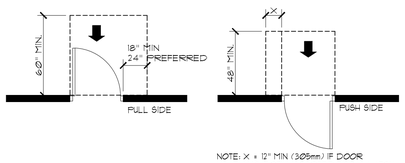
3 HC-1 TYPICAL HANDRAILS



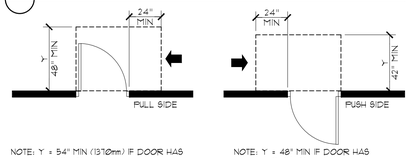
4 HC-1 SIZE OF WHEELCHAIR TURNING SPACE

GENERAL DOOR NOTES

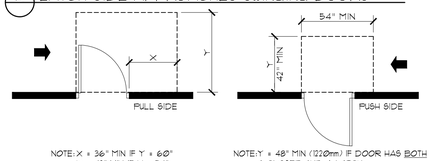
1. DOOR HARDWARE. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. SUCH HARDWARE SHALL BE 34 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND.
2. CLOSING SPEED. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM.
3. DOOR-OPENING FORCE. THE MAXIMUM FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
   A. INTERIOR HINGED DOOR: 5.0 POUNDS.
   B. SLIDING OR FOLDING DOOR: 5.0 POUNDS.
4. DOOR SURFACE. DOOR SURFACES WITHIN 10 INCHES OF THE FLOOR OR GROUND MEASURED VERTICALLY SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAFFED.
5. VISION LITES. DOORS AND SIDELITES ADJACENT TO DOORS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL 43 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND.
6. MANEUVERING CLEARANCES AT DOOR. MINIMUM MANEUVERING CLEARANCES AT DOORS SHALL COMPLY WITH DETAIL 5/HC1.



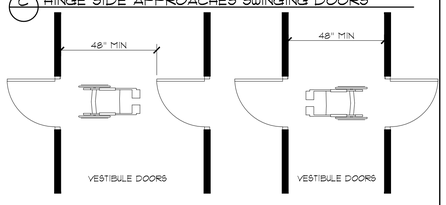
A FRONT APPROACHES SWINGING DOORS



B LATCH SIDE APPROACHES SWINGING DOORS

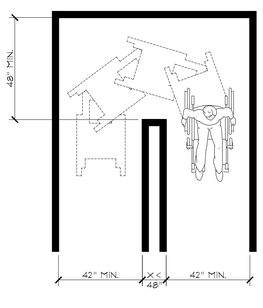


C HINGE SIDE APPROACHES SWINGING DOORS



D TWO HINGED DOORS IN SERIES

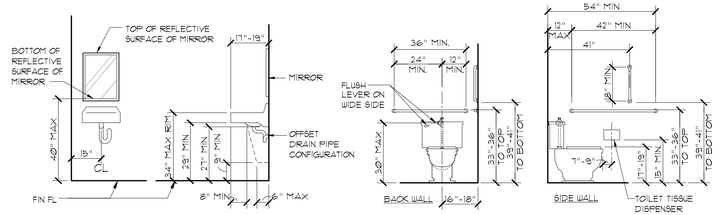
5 HC-1 TYPICAL DOOR CLEARANCES



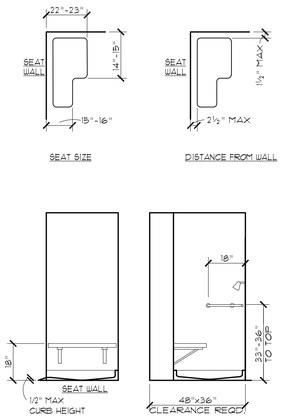
6 HC-1 CLEAR WIDTH AT TURN

NOTES

- THE HEIGHTS SHOWN ON THESE DRAWINGS ARE TYPICAL & DO NOT NECESSARILY SHOW ALL CONDITIONS. SEE ACTUAL ROOM PLAN & ELEVATIONS FOR UNIQUE INFORMATION.
- THE INTENT OF THESE ELEVATIONS IS TO ESTABLISH GUIDELINES FOR THE VERTICAL LOCATION OF WALL MOUNTED DEVICES GENERALLY THROUGHOUT THE PROJECT.
- DIMENSIONS ARE TO FINISHED SURFACES.
- CONTACT ARCHITECT IN THE EVENT OF ANY DISCREPENCIES BETWEEN THESE STANDARDS & OTHER DRAWINGS.

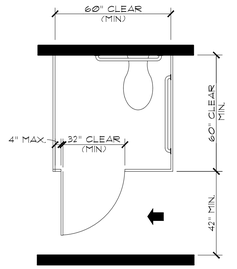


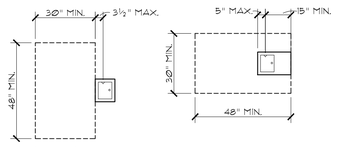
7 HC-1 RESTROOM FIXTURES & ACCESSORIES



8 HC-1 36"x36" TRANSFER TYPE SHOWER STALL COMPARTMENT

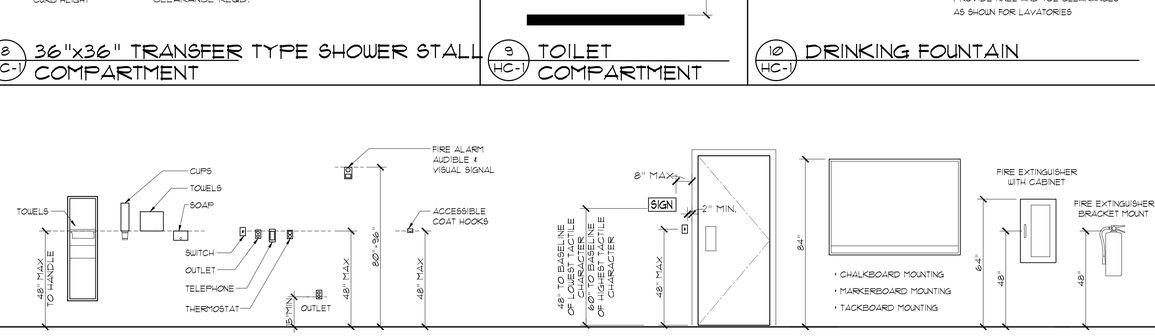
9 HC-1 TOILET COMPARTMENT



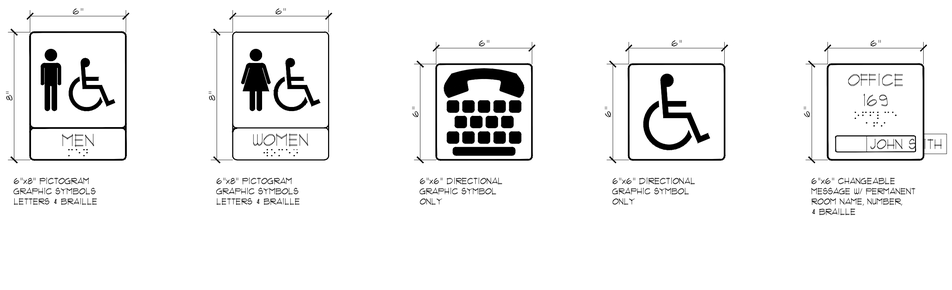


NOTE
PROVIDE KNEE AND TOE CLEARANCES AS SHOWN FOR LAVATORIES

10 HC-1 DRINKING FOUNTAIN



11 HC-1 STANDARD ACCESSIBLE MOUNTING HEIGHTS



12 HC-1 TYPICAL SIGNAGE - SEE STANDARD ACCESSIBLE MOUNTING HEIGHT BELOW

GENERAL NOTES

1. ACCESSIBLE ROUTES. ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING COMPONENTS: WALKING SURFACES WITH A SLOPE NOT STEEPER THAN 1:20, DOORWAYS, RAMPS, ELEVATORS, AND WHEELCHAIR (PLATFORM) LIFTS.
2. WALKING SURFACES. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48.
3. CLEAR WIDTH. CLEAR WIDTH OF AN ACCESSIBLE ROUTE SHALL BE 36" (MIN.).
4. CLEAR WIDTH AT TURN. WHERE AN ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND AN OBJECT WHICH IS LESS THAN 48 INCHES WIDE, CLEAR WIDTHS SHALL BE 42 INCHES MINIMUM APPROACHING THE TURN, 48 INCHES MINIMUM DURING THE TURN, AND 42 INCHES MINIMUM LEAVING THE TURN.
5. DOORS AND DOORWAYS. DOORWAYS SHALL HAVE A CLEAR OPENING OF 32 INCHES MINIMUM. CLEAR OPENING OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE CLEAR OPENING WIDTH LOWER THAN 34 INCHES ABOVE THE FLOOR OR GROUND. PROJECTIONS INTO THE MINIMUM CLEAR OPENING WIDTH MORE THAN 27 INCHES AND UP TO 80 INCHES ABOVE THE FLOOR OR GROUND ARE PERMITTED BUT SHALL NOT EXCEED 4 INCHES.
6. PARKING SPACES. ACCESSIBLE PARKING SPACES SHALL BE PROVIDED IN ACCORDANCE WITH C.O.F. CODE SECTION 27-29-6.
7. VEHICLE SPACES. CAR AND VAN PARKING SPACES SHALL BE 96 INCHES WIDE MINIMUM AND SHALL HAVE AN ADJACENT ACCESS AISLE 60" WIDE MINIMUM. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES WIDE MINIMUM. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE AND SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.
8. GROUND SURFACES. PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 1:48. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.
9. IF ONLY ONE ACCESSIBLE PARKING SPACE IS REQUIRED IT SHALL BE SIZED AND NOTED FOR VAN PARKING.
10. HANDRAILS. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCHBACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS. CLEAR SPACE BETWEEN HANDRAILS AND WALL SHALL BE 1 ½ INCHES MINIMUM.
11. DRINKING FOUNTAINS. A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH DETAIL 10/HC1 SHALL BE PROVIDED. SPOUT OUTLETS SHALL BE 36 INCHES MAXIMUM ABOVE THE FLOOR.
12. TOILET ROOMS. A WHEELCHAIR TURNING SPACE COMPLYING WITH DETAIL 4/HC1 SHALL BE PROVIDED WITHIN THE ROOM. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR OR GROUND SPACE OR CLEARANCE FOR ANY FIXTURE.

    EXCEPTIONS: WHERE THE ROOM IS FOR INDIVIDUAL USE AND A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH DETAIL 7/HC1 IS PROVIDED WITHIN THE ROOM, BEYOND THE ARC OF THE DOOR SWING.
13. CHECKOUT COUNTERS. CHECKOUT COUNTER SURFACES SHALL BE 38 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND. THE TOP OF THE COUNTER EDGE PROTECTION SHALL BE 2 INCHES MAXIMUM ABOVE THE COUNTER SURFACE.
14. SERVICE COUNTERS. COUNTERS FOR SALES OR DISTRIBUTION OF GOODS AND SERVICES TO THE PUBLIC SHALL HAVE A PORTION OF THE COUNTER 36 INCHES LONG MINIMUM BY 36 INCHES HIGH MAXIMUM ABOVE THE FLOOR OR GROUND.
15. DOORS WITH THRESHOLD SHALL HAVE A MAXIMUM OF ½" FROM THE FLOOR OR LANDING TO THE TOP OF THE THRESHOLD.

STATE OF NEW MEXICO
T.E. HUMMELL
NO. 1424
REGISTERED ARCHITECT

04.13.20

R&H ARCHITECTURE

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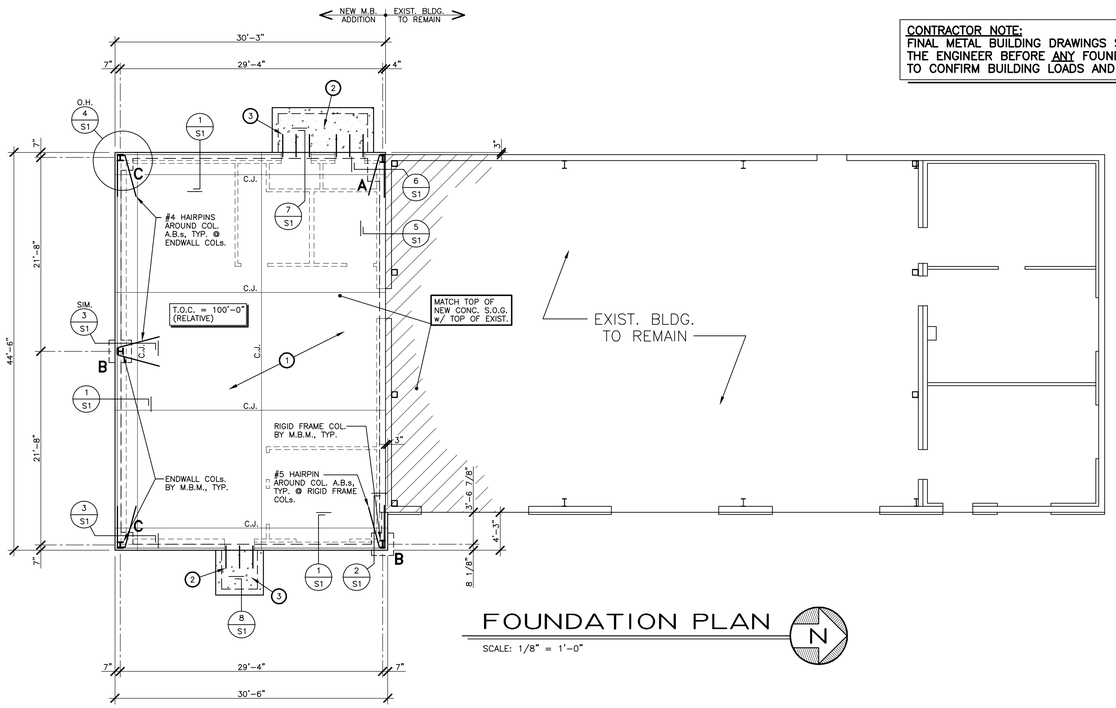
Phone: (505) 326-6442

LA PLATA
FIRE STATION #2
FARMINGTON, NM

HANDICAP REQUIREMENTS

Drawn:	Checked:	Date:
BTW	TEH	04.13.20

Filename: HCSHEET
Project: 190920
Sheet: HC-1
Of:



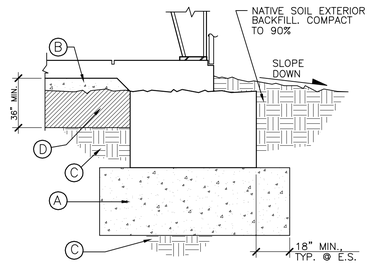
FOUNDATION PLAN

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

CONTRACTOR NOTE:
FINAL METAL BUILDING DRAWINGS SHALL BE PROVIDED TO THE ENGINEER BEFORE ANY FOUNDATION WORK IS STARTED TO CONFIRM BUILDING LOADS AND COLUMN LOCATIONS.

EARTHWORK NOTES:

1. ALL FILL TO BE COMPACTED SHALL BE MOISTURE CONDITIONED TO WITHIN REQUIRED LIMITS.
2. SEE FOUNDATION NOTES, FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. FINISHED GRADE AT AREAS NOT PROTECTED BY PAVING SHALL SLOPE AWAY FROM THE BUILDING 6" MINIMUM IN THE FIRST 10 FT. AND 3" MINIMUM IN THE NEXT 10 FEET.



KEYED EARTHWORK NOTES:

(A) 36" MIN. OF STRUCT. B.F. COMPACTED TO 95% OF ASTM D-698. OMIT BACKFILL @ G.B.s

(B) 4" OF 3/4" AGGREGATE BASE COURSE COMPACTED TO 95%, U.N.O.

(C) SCARIFY NATIVE SUBGRADE 8" MIN., MOISTURE CONDITION TO 2% ABV. OPTIMUM AND RE-COMPACT TO 95% OF ASTM D-698.

(D) 36" MIN. OF STRUCT. B.F. COMPACTED TO 95% OF ASTM D-698.

A/S1 TYP. MINIMUM EARTHWORK REQUIREMENTS @ FTGs. & S.O.G.

FOUNDATION NOTES:

1. SEE SHEET S2 FOR GENERAL STRUCTURAL NOTES, DESIGN LOADS, MATERIAL DESCRIPTIONS, CONSTRUCTION REQUIREMENTS, RECOMMENDED OBSERVATIONS, SPECIAL INSPECTION REQUIREMENTS AND TYPICAL DETAILS NOT REFERENCED BUT WHICH SHALL APPLY TO THE APPROPRIATE CONDITIONS.
2. SEE DETAIL A/S1 FOR TYPICAL MINIMUM EARTHWORK REQUIREMENTS
3. DIMENSIONS ARE TO OUTSIDE FACE-OF-CONCRETE AND TO CENTERLINES OF FOOTINGS AS INDICATED, U.N.O.
4. TYPICAL INTERIOR CONCRETE S.O.G.
   - 4 1/2" THICK CONC. w/ f'c = 3000 psi MIN. @ 28 DAYS.
   - REINFORCE w/ #4 @ 24"o.c. E.W. @ CTR. OF THICKNESS.
   - PLACE ON 4" OF 3/4" A.B.C. COMPACTED TO 95%.
5. TYPICAL EXTERIOR CONCRETE S.O.G. STOOP / WALK:
   - 4 1/2" THICK CONC. w/ f'c = 4000 psi MIN. @ 28 DAYS.
   - REINFORCE w/ #4 @ 24"o.c. E.W. @ CTR. OF THICKNESS.
   - PLACE ON 4" OF 3/4" A.B.C. COMPACTED TO 95%.
   - PROVIDE CONTRACTION JOINTS (C.J.) @ APPROXIMATELY 15 F.T. o.c. MAXIMUM.
   - SLOPE SLABS DOWN AND AWAY FROM BUILDING @ 1/4"/FT MIN. FOR DRAINAGE.
6. TYPICAL FOUNDATIONS SHALL BE STEPPED AS REQUIRED FOR SITE CONDITIONS AND TO MAINTAIN FROST PROTECTION EMBEDMENT. ACTUAL GRADE BEAM STEP LOCATIONS AND STEP HEIGHTS SHALL BE DETERMINED BY THE CONTRACTOR BASED ON FIELD CONDITIONS.
7. C.J.: CONTRACTION JOINT IN CONC. FLR./S.O.G.
8. T.O.C. = FINISHED FLOOR ELEVATIONS = TOP OF CONCRETE SLAB-ON-GRADE ELEVATION
9. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
10. SEE ARCHITECTURAL PLANS FOR EXTERIOR SLAB LOCATIONS AND EXTENTS.
11. SEE PLANS BY METAL BUILDING MANUFACTURER (M.B.M.) FOR SPECIFIC ANCHOR BOLT LOCATION DIMENSIONS.
12. SEE METAL BUILDING NOTES ON S2 FOR DESIGN LIMITATIONS FOR ALLOWABLE DEFLECTIONS FOR THE BUILDING SUPERSTRUCTURE, (WHICH SHALL BE DESIGNED AND PROVIDED BY OTHERS).
13. TYPICAL BOTTOM OF FOOTING ELEVATION = 97'-0", U.N.O.
14. LATERAL BRACING SHOWN FOR THE BUILDING SHALL BE VERIFIED WITH M.B.M. DESIGN REQUIREMENTS. IF BRACING IS DIFFERENT THAN SHOWN IS REQ'D. BY M.B.M., THE ENGINEER SHALL BE NOTIFIED FOR POSSIBLE FOUNDATION REVISIONS.
15. FOUNDATIONS ARE DESIGNED FOR COLUMNS/GIRTS TO BE PROVIDED IN A "FLUSH-PASS" FRAMED CONDITION AT SIDE-WALLS & ENDWALLS.
16. FINAL METAL BUILDING DRAWINGS SHALL BE PROVIDED TO THE ENGR. FOR REVIEW & APPROVAL BEFORE ANY CONSTRUCTION BEGINS.

FOUNDATION KEYED NOTES:

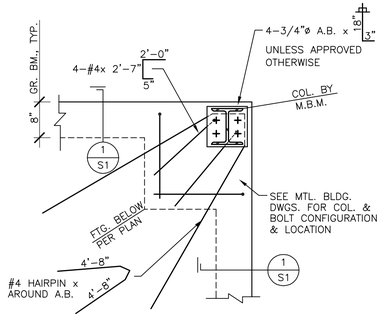
(1) INTERIOR CONC. S.O.G. PER TYP. INT. S.O.G. NOTE ON THIS SHEET.

(2) EXTERIOR CONC. APRON/STOOP PER EXT. S.O.G. APRON NOTE ON THIS SHEET WITH THICKENED SLAB EDGES PER 8/S1. SIZE, LOCATION, & QUANTITY AS DIRECTED BY THE OWNER. SLOPE DOWN & AWAY FROM BUILDING @ 1/4" PER FT. PROVIDE CONTRACTION JOINTS @ 15'o.c. E.W.

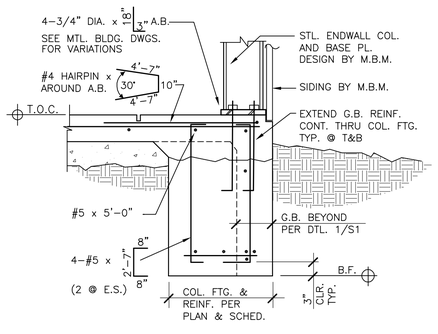
(3) DOWEL STOOP/APRON TO SLAB EDGE w/ #4x24" @ 24"o.c. DOWELS INTO SLAB EDGE 6" MIN.

FOOTING SCHEDULE

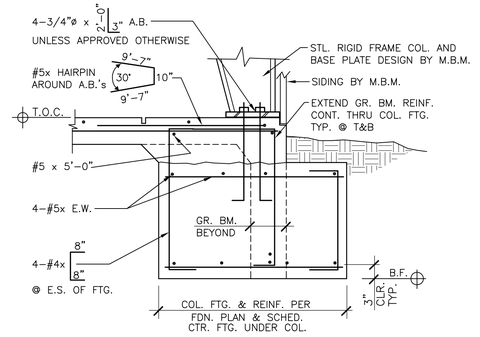
TYPE	SIZE	REINFORCEMENT
A	2'-0"x 3'-0" x 2'-2" THICK	#5 @ 8"o.c. E.W.
B	2'-6"x 2'-6" x 2'-2" THICK	4-#5 EACH WAY
C	2'-0"x 2'-0" x 2'-2" THICK	3-#5 EACH WAY



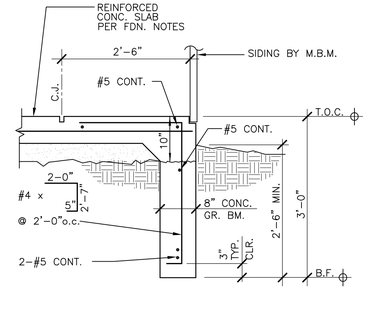
4/S1 CORNER COL. FDN. FOR ENDWALL FRAMING



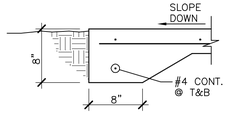
3/S1 TYP. ENDWALL COL. FOUNDATION (FLUSH GIRT CONDITION)



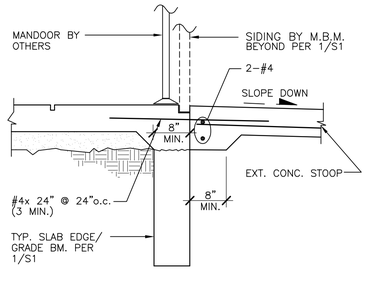
2/S1 TYP. RIGID FRAME COLUMN FDN. (SECTION)



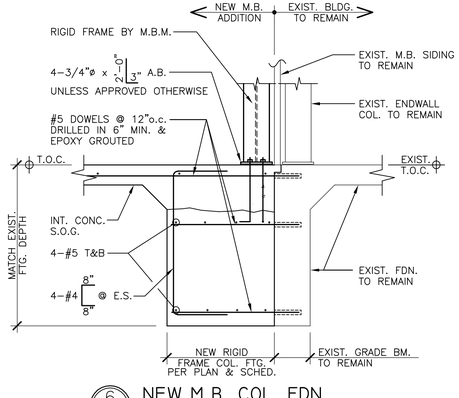
1/S1 TYP. PERIMETER GRADE BEAM



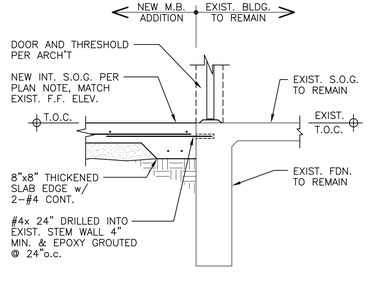
8/S1 TYP. THICKENED SLAB EDGE @ APRONS & STOOPS



7/S1 TYP. THRESHOLD @ MAN DOORS



6/S1 NEW M.B. COL. FDN. ADJ. EXIST. COL. FDN.



5/S1 NEW INT. S.O.G. & CONN. TO EXIST. FDN.

4-8-2020

FINAL FOR CONSTRUCTION
4-8-2020

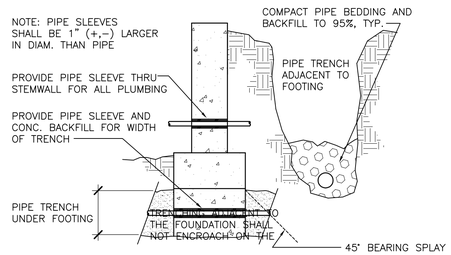
TUCKER R. SITTNER NEW MEXICO 20678 PROFESSIONAL ENGINEER

WILSON STRUCTURAL ENGINEERING, INC.
1235 THOROUGHBRED RD.
DURANGO, CO 81303
Phone: (970) 385-6774

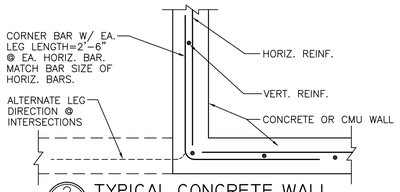
A PROPOSED FOUNDATION DESIGN FOR THE ADDITION:
LA PLATA FIRE STATION #2
FARMINGTON, NEW MEXICO
FOUNDATION PLAN & DETAILS

FILE NAME: 01720.S1
PROJECT: 01720
SHEET: S1 OF S2

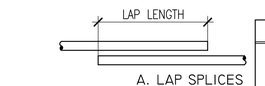
DRAWN:	CHECKED:	DATE:
GW	DW	4-8-2020



1 S2 TYPICAL PIPING & TRENCHING AT FOUNDATIONS

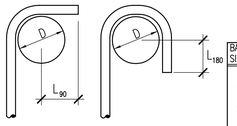


2 S2 TYPICAL CONCRETE WALL CORNER REINFORCING



LAP SPLICE SCHEDULE

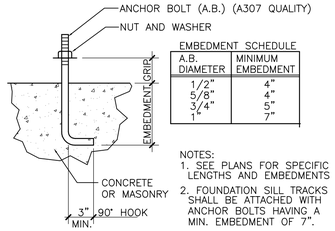
BAR SIZE	LAP LENGTH
# 3	18"
4	24"
5	30"
6	40"
7	54"
8	70"



BEND AND HOOK SCHEDULE

BAR SIZE	D	L_{90}	L_{180}
3	2–1/4"	4–1/2"	2–1/2"
4	3"	6"	2–1/2"
5	3–3/4"	7–1/2"	2–1/2"
6	4–1/2"	9"	3"
7	5–1/4"	10–1/2"	3–1/2"
8	6"	12"	4"

3 S2 TYPICAL REINFORCING DETAILS FOR CONCRETE REINFORCEMENTS



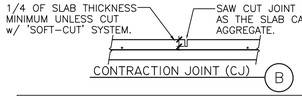
EMBEDMENT SCHEDULE

A.B. DIAMETER	MINIMUM EMBEDMENT
1/2"	4"
5/8"	4"
3/4"	5"
1"	7"

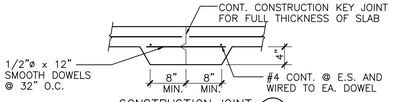
NOTES:
1. SEE PLANS FOR SPECIFIC LENGTHS AND EMBEDMENTS
2. FOUNDATION SILL TRACKS SHALL BE ATTACHED WITH ANCHOR BOLTS HAVING A MIN. EMBEDMENT OF 7".

4 S2 TYPICAL ANCHOR BOLTS (NOT APPLICABLE TO M.B. MAIN FRAME COLUMNS)

NOTE: CONTRACTION JOINTS MAY ALSO BE FORMED WITH PREFABRICATED JOINT FORMING MATERIAL CAST INTO CONC.



NOTE: TYPICAL JT. SPACING SHALL BE 15'–0" O.C. (+,–) AND 20'–0" MAX. w/ ENGINEER'S APPROVAL, U.N.O. ON PLANS.



5 S2 TYP. JOINTS IN CONC. SLABS

ABBREVIATIONS

A.A. = Adhesive anchor
A.B. = anchor bolt
AB = post above
ABC = aggregate base course
ABV. = above
ADJ = adjacent
AGG = aggregate
ARCHT = architect
B.B. = bond beam
B.F. = bottom of footing elev., or = backfill
BLK = block
BLDG = building
BLKG. = blocking
BM = beam
BRG = bearing
BTWN = between
B.U. = built-up
CJ = construction joint or, = contraction joint or = ceiling joist
CLG. = ceiling
CMU = concrete masonry unit
COL. = column
CONC. = concrete
CONN. = connection
CONT. = continuous
CONTR. = contractor
CTR. = center
CTRD = centered
DAS = deformed anchor stud
DBL. = double
D.F. = Douglas Fir - Larch
DIA. = diameter
DL = dead load
DTL. = detail
DWG. = drawing
DWL. = dowel
EA = each
EE = each end
E.F. = each face
E.J. = expansion joint
ENGR. = engineer
EQ. = equal
E.S. = each side
E.W. = each way
EXP = expansion
EXT = exterior
FDN = foundation
FF = finished floor elevation
F.J. = floor joist
FG = finished grade elevation
F.O. = face of
FOC = face of concrete
FOS = face of stud
FOM = face of masonry
FRMG = framing
F.S. = far side
FTG. = footing
GA = gage
GALV = galvanized
G.B. = Grade Beam
GL = glue laminated beam
GR. = grade
HAS = headed anchor stud
HDR. = header
H.F. = Hem-fir
HORIZ = horizontal
H.S. = high strength
INFO = information
INT = interior
JST. = joist
JT. = joint
KS = king stud
LD = load
LL = live load
LLH = long leg horizontal
LLV = long leg vertical
LVL = laminated veneer lumber
MAS = masonry
MAT = material
MAX = maximum
M.B.M. = metal building mfr.
Mfr. = manufacturer
MIN = minimum
NA = not applicable
NLG = nailing
N.S. = near side
NTS = not to scale
O/ = over
O.C. = on center
O.H. = opposite hand
OPNG. = opening
OSB = oriented strand board
P/C = precast
PL = plate
PLYWD = plywood
PNL = panel
P.T. = pressure treated
REINF. = reinforcing
R.J. = roof joist
SH/ = Simpson hardware
SHT. = sheet
SHTG. = sheathing
SIM = similar
SPA = space
STL = steel
SL = snow load
S.O.G. = slab-on-grade
S.S. = steel stud
SW = shearwall
T.B. = top of beam
T.J. = top of joist
T.L. = top of ledger
T.M. = top of masonry
TN = toe nail
T.O. = top of
T.O.C. = top of concrete
T.O.S. = top of steel
T.O.SHTG. = top of sheathing
T.O.W. = top of wall
T.P. = top of parapet
T. PL = top of plate
T.R. = threaded rod
TS = trim studs or, = tube steel
TYP = typical
UNO = unless noted otherwise
VERT = vertical
WWF = welded wire fabric

RECOMMENDED OBSERVATIONS

1. The agreement for the design of these structural plans does not include a fee for construction observation or inspections of any kind to verify compliance. However, it is recommended that the owner/contractor contract with the Architect or Engineer or other qualified third party observer to make the following observations.
2. Exposed native bearing soils shall be observed and approved by a Soils Engineer before placing structural fill or forming for concrete.
3. Material for structural backfill shall be observed and approved by a Soils Engineer before use. Structural backfill placement and compaction shall be observed, tested, and approved by a Soils Engineer before placing foundations.
4. Concrete reinforcing and formwork shall be observed and approved by the Engineer before placing concrete.
5. Structural steel and light steel framing shall be observed and approved by the Engineer before covering.
6. The Metal building assembly and connection to foundations shall be observed and approved before completely assembled
7. Contractor shall provide 24 hour notice for observations.

NOTICE:

These plans by Wilson Structural Engineering, Inc. are only of the foundation design. The Metal Building shall be designed and provided by others. No check or warranty will be offered or implied by Wilson Structural Engineering, Inc. in any regard to the Metal Building superstructure. These plans indicate the appropriate minimum loads and other minimum requirements for which the building shall be designed and for which the foundation is designed. However, it is the responsibility of the Contractor ordering the building and the Metal Building Manufacturer designing and providing the building to insure that all the proper loads and combination of loads are accounted for in the actual building design. The Metal Building Manufacturer shall provide a separate engineered and stamped set of plans and calculations for the building superstructure.

STATEMENT OF SPECIAL INSPECTIONS

Per Chapter 17 of the 2015 International Building Code, it is required that special inspections be performed to verify that the materials and construction methods used in the construction of the project, as described in the construction documents, complies with these documents and applicable standards. The owner or the owner's agent shall be responsible for employing qualified third party inspectors for each of the building materials described in the table below. The materials shall be inspected at frequencies as listed in the table below, as required in the details and as required to verify compliance with the construction documents. If a condition in question arises, the special inspector shall request clarification from the Engineer of Record.

The special inspector shall provide written reports of each material/activity inspected detailing the observations. The reports shall include, at a minimum, the time, date, and location on the project (described by areas, grids, materials, activity, etc.). Reports shall be organized in a numerical order for each material/activity. The report shall indicate if the inspection found the material/activity in conformance with the inspection documents or not. Non-conforming materials/activities shall be re-inspected after corrections have been made and followed by additional inspections and reporting until conformance is achieved.

SOILS CONSTRUCTION (IBC 1705.6)

Item			Detailed Instructions and Frequencies
Verify excavations extend to proper depth and material	☐ Continuous	☒ Periodic	Prior to placement of compacted fill, determine if additional compactions are required by the Geotechnical Engineer. Inspections shall be conducted at a frequency sufficient to verify excavation depth and material comply with Geotechnical specifications for all areas of construction.
Verify that subgrade has been appropriately prepared prior to placing compacted fill	☐ Continuous	☒ Periodic	Prior to placement of compacted fill, inspections shall be conducted at a frequency sufficient to verify that subgrade complies with Geotechnical specifications for all areas of construction.
Verify subgrade is adequate to achieve design bearing capacity	☐ Continuous	☒ Periodic	Prior to placement of concrete, inspections shall be conducted at a frequency sufficient to verify that subgrade complies with Geotechnical specifications for all areas of construction.
Perform classification and testing of compacted fill materials	☐ Continuous	☒ Periodic	All materials shall be checked at each lift for proper classifications and gradations not less than once for each 5,000ft² of surface area.
Verify proper materials, densities and lift thicknesses during placement and compaction.	☒ Continuous	☐ Periodic	The minimum frequency of testing shall be at least once every 100 linear feet of backfill per lift & one moisture test for every 600 linear ft. of backfill per lift.

CONCRETE CONSTRUCTION (IBC 1705.3)

Item			Detailed Instructions and Frequencies
Reinforcing steel	☐ Continuous	☒ Periodic	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Welding of reinforcing steel	☐ Continuous	☒ Periodic	Verify weldability of reinforcing steel other than A706.
Cast–in bolts & embeds	☒ Continuous	☐ Periodic	
Post–installed anchors or dowels	☒ Continuous	☐ Periodic	All post–installed anchors/dowels shall be specially inspected as required by the approved ICC–ES report.
Use of required mix design	☐ Continuous	☒ Periodic	Verify that all mixes used comply with the approved construction documents; ACI 318; Ch. 4, 5.2–5.4; and IBC 1904.3, 1913.2, 1913.3.
Concrete sampling for strength tests, slump, air content, and temperature	☒ Continuous	☐ Periodic	
Concrete placement	☒ Continuous	☐ Periodic	
Curing temperature and techniques	☐ Continuous	☒ Periodic	Verify that ambient temperature for concrete is kept at > 50°F for at least 7 days after placement. High–early–strength concrete shall be kept at > 50°F for at least 3 days. Accelerated curing methods may be used (see ACI 318; 5.11.3). The ambient temperature for shotcrete shall be > 40°F for the same period of time as noted for concrete. Shotcrete shall be kept continuously moist for at least 24 hours after shotcreting. All concrete materials, reinforcement, forms, filler, and ground shall be free from frost. In hot weather conditions ensure that appropriate measures are taken to avoid plastic shrinkage cracking and that the specified water/cement ratio is not exceeded.
Strength verification	☐ Continuous	☒ Periodic	Verify that the adequate strength has been achieved prior to the removal of shores and forms.
Formwork	☐ Continuous	☒ Periodic	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents.

CONCRETE AND REINFORCING

1. Concrete shall be made from an approved commercial mix of aggregates, potable water and Portland Cement (type II) meeting ASTM C150 specifications. Admixtures meeting appropriate ASTM requirements may be used when approved by the Engineer.
2. The Concrete shall have a minimum of 517 lb. of Portland Cement per yard and have a maximum water to cementitious material ratio of 0.52. Fly ash meeting ASTM specifications maybe substituted for up to 25% of the Portland Cement in the mix designs at ratio of 1.0 lb. of fly ash for 1.0 lb. of Portland Cement.
3. Concrete shall achieve the following minimum compressive strengths (f 'c) in 28 days:
   footings and grade beams..... 3000 psi
   interior slabs on grade..... 3000 psi
   exterior slabs on grade..... 4000 psi
4. Provide the following minimum thickness of concrete coverage around reinforcement:
   footings:
   to earth.....3"
   to formed surfaces.....2"
   slabs:
   to earth.....1"
   stemwalls and retaining walls:
   interior face.....3/4"
   exterior face.....1 1/2"
   face exposed to earth.....2"
5. Maximum allowable slump of concrete at the point of placement shall be 4" unless specifically approved otherwise by the Engineer and designed accordingly.
6. All concrete (including slabs) shall be thoroughly consolidated by mechanical vibration.
7. Reinforcing bars shall conform to ASTM A615. Reinforcing to be welded shall conform to ASTM A706:
   #3 to #5.....grade 40 (U.N.O.)
   #6 to #11.....grade 60
8. Welded Wire Fabric (WWF) shall conform to ASTM A185 and shall be provided in flat sheets. WWF in rolls shall not be used. WWF shall be chaired in place within 2" of the conc. final surface U.N.O.
9. All reinforcing, anchorages and embedments shall be securely wired in place during concrete placement.
10. Reinforcing shall not be heated to be bent.
11. See typical details for reinforcing bending and splicing requirements. Welded Wire Fabric shall be lapped a minimum of 1-1/2 wire spaces.
12. Reinforcing shall be held above earth on concrete adobes, chairs or by suspension. Bars driven into the earth shall not be used to support reinforcing.
13. All openings in slabs or walls shall be reinforced with a minimum of 2-#5 on 4 sides extending 2'-0" minimum beyond opening corners.
14. Chamfer all exposed concrete edges unless detailed or noted otherwise.
15. Openings in concrete shall be formed, cored or sawcut. Chipping and breaking out shall not be done unless specifically approved.
16. Concrete exposed to freezing environment either during construction or in place shall be air entrained. Air entrainment of the mix shall be 4% minimum to 8% maximum based on volume.
17. Typical slab on grade, unless noted otherwise: See sheet S1 for specific slabs.
18. All concrete slabs shall have contraction joints provided in the slabs according to the placement shown in plan or at approximately 10 to15 feet maximum on center each way if not indicated otherwise. The joints shall be made according to the typical details.
19. Concrete Curing: Final concrete quality is highly dependant on curing. Inadequate curing can cause excessive shrinkage, cracking, low strength, slab curling and other detrimental effects. Concrete shall be cured as follows: slabs shall be moist cured with water and an impermeable barrier or with a water saturated cover. No portion of the slab shall be allowed to dry for 7 days. Other concrete shall be moist cured or cured with a curing compound conforming to ASTM C 309 applied immediately after formwork is removed. Special protection measures shall be provided during windy and or hot weather.

METAL BUILDING

1. All dimensions for footing locations, anchors bolts, and all other entities of the foundation system shown relative to the metal building connections shall be cross-checked and verified with the final shop drawings by the Metal Building Manufacturer before excavation, earthwork or forming is begun.
2. If the Metal Building Manufacturer wishes to use an alternate framing layout to that which has been assumed and designed for in this set of structural plans, the metal building design engineer shall notify the Wilson Structural Engineering before submitting the shop drawings and calculations. Otherwise, the shop drawings will be rejected.
3. All structural components and the lateral resisting systems shall be designed for the loads, factors, and criteria described in the contract documents.
4. Concentrated loads such as mechanical units and any others which are not specifically shown in the structural plans but are supported by the metal building structure shall be accounted for in the design of the supporting members. The General Contractor shall coordinate the location and weights with the Metal Building Manufacturer (M.B.M.).
5. The metal building design shall be done under the direct supervision of an Engineer experienced in the design of metal buildings for at least 5 years. The Engineer shall be licensed in the state where the building is to be erected and shall stamp and sign the calculations, shop drawings and erection drawings. Stamped copies shall be submitted to the Architect for approval before production according to the specification requirements.
6. Structural steel shall be detailed, fabricated, and erected in accordance with the AISC manual for steel construction, the latest edition, using either the ASD or LFRD design. The metal building design shall also be in conformance with the "Metal Building System Manual" by the Metal Building Manufacturer's Association. The most stringent criteria for design shall apply when there is differences between the two standards.
7. Minimum anchor bolts sizes shall be determined by the M.B.M. and shown in the erection drawings based on the design requirements for the superstructure. Anchor bolts of greater size may be required governed by the foundation design. The contractor shall provide the largest size governing the design.
8. All required field modifications required shall be brought to the attention of the Architect and Engineer. Repairs shall be approved. Specific repair details may be required. The expense of the repair design and detailing shall be borne by the Contractor.
9. Reactions of all metal building components directly supported by the foundation shall be reported in the calculations for approval and comparison to design assumptions. The reactions shall include the loads from each individual load case with a description of case.
10. Deflection of flexural members due to gravity loads shall not exceed the span divided by 180, (L/180). Deflection of the lateral system shall not exceed 3" under wind or seismic loads unless approved otherwise by the Architect or Engineer.
11. The deflection limits of 10. above for gravity loads are for total dead load plus snow load.
12. The M.B.M. shall determine, design, and locate the buildings lateral load resisting system. The system shall limit movements to those described in 8. above. Components shall not interfere with windows, doors or other architectural features. All Lateral shears, uplift loads, and moments shall be submitted with their locations to the Engineer for approval before fabrication. Any foundation re-design because of the system requirements or loads in excess of the foundation design capacity shall be paid for by the contractor.
13. Design loads for metal building:
    Dead Loads:
    a) superstructure load.....weight of building provided by the M.B.M.
    b) collateral load.....5 psf
    c) insulation load.....weight of insulation provided by the M.B.M.
    Live Loads:
    a) roof snow load.....25 psf
    Wind Load: (per chapter 16 of the 2015 International Building Code)
    a) wind speed.....115 mph (3 sec. gust)
    b) wind exposure.....exposure 'C'
    c) importance factor(I).....1.15
    Seismic Load:
    a) see design criteria on this sheet

GENERAL NOTES

1. In the absence of specific details refer to appropriate typical details or similar details for information. If any questions remain call the Engineer for clarification.
2. The plans and details in some areas represent assumptions made of existing conditions. The Contractor shall notify the Engineer immediately if conditions are found different from those assumed. The Engineer shall also be notified if field conditions necessitate changes from the plans. In either case detail changes may be required before work can proceed.
3. The plans shall not be scaled to obtain working dimensions. If dimensions are missing from the plans get clarification from the Architect or the Engineer. Cross-check all dimensions with the architectural plans. All layout dimensions shall be closed from both directions.
4. See architectural plans for all other non-structural information.
5. All openings or modifications to structure not shown on the structural plans shall be verified with the Engineer before doing the work.
6. The Contractor shall repair or replace all damaged materials.
7. The Contractor shall notify the Architect and Engineer of any discrepancies found in the contract documents (plans and specifications). Clarifications shall be received from the Architect or Engineer before proceeding with the work. The most restrictive condition shall govern when clarification is not obtained.
8. All mechanical-unit weights shall be verified with loads shown on the structural drawings. Notify the Engineer, if weights are different than those shown or units are required where not shown on the structural drawings.
9. These plans represent a design for final in-place conditions. It shall be the Contractors' responsibility to account for all construction conditions, loads, sequences, temporary bracing requirements, all safety considerations, OSHA regulations, and all other applicable standards.
10. Construction shall follow the plans, details, notes and specifications. The Contractor shall be directly responsible for uncorrected errors or deviations from the plans without the Engineers approval. The Engineer will be available for considerations and repairs. Excessive repair detailing or revision to the contract documents shall be paid for by the Contractor.
11. Each sub-contractor shall inspect the conditions and work in place before they begin. Errors, problems and unacceptable conditions shall be repaired before beginning the new work. Beginning the new work shall be interpreted as acceptance of the previous work and conditions.
12. Shop drawings and product information are required for review by the Architect/Engineer, the Contractor shall allow 2 weeks for the review period. When shop drawings and product information are provided in large format (i.e. larger than 8 1/2" x 11"), three sets shall be provided to the Engineer for review.

DESIGN CRITERIA

1. Applicable Building Code = 2015 International Building Code
2. Superimposed Loads:
   Roof Dead Load DL_R = 10 psf (For Foundation Design)
   Roof Snow Load SL = 25 psf (Includes Importance Factor = 1.2 for snow loads)
3. Wind Design Criteria:
   Basic Wind Speed v = 115 mph (3 sec. gust)
   Exposure C
   Importance Factor I = 1.15
4. Seismic Design Criteria
   Importance Factor I = 1.5
   Short period spectral response acceleration S_S = 0.169g
   Site class D => Short period spectral response coefficient S_{DS} = 0.18g
   Seismic design category B

SPECIALTY CONNECTIONS / ANCHORAGES / FASTENERS

1. Expansion bolts, adhesive anchors, shotpins, headed anchor studs (HAS), self-tapping screws and other proprietary devices shall have ICBO approvals. These approvals along with load capacities shall be submitted to the Engineer for review and approval.
2. Devices shall be used in full accordance with manufacturer's requirements.
3. Headed anchor studs shall be welded all around the base of the stud with a 5/16" fillet unless noted otherwise. Stud guns may be used provided the attachment will develop the strength of the stud.
4. Typical acceptable anchors (when called out in plans) unless noted otherwise:
   Expansion Bolts: 5/8" diameter by Hilti or Redhead with a minimum embedment of 4"
   Shotpins: 0.145" diameter minimum by Hilti or Ramset with 1" minimum embedment in concrete and a minimum safe working load in shear of 200 lb.
   Headed Anchor Studs: 1/2" diameter x 6" long by Nelson Stud
   Adhesive Anchors: Hilti HIT or HVA system sized for bolts required
   Self-Tapping Screws: #10 TEK screws

EARTHWORK FOR FOUNDATIONS

1. The foundation designs are based on a Geotectnical Investigation by Geomat Inc., Project #202-3458, Dated March 2, 2020.
   Allowable soil bearing pressure on structural fill:
   @ 2'-6" minimum depth below lowest adjacent ext. grade = 2500 psf
2. All column foundations shall bear entirely on approved compacted structural fill placed over proof-compacted native soils. Slabs shall bear on a structural backfill pad placed over proof-compacted native soils. The structural fill shall be compacted to a minimum of 95% of ASTM D-698. See minimum earthwork detail A/S1 for specifics.
3. Unless noted otherwise footings shall bear a minimum of 30" below lowest adjacent grade and 12" minimum below original native grade unless approved otherwise.
4. All earthwork cuts and fills shall be made in level benches.
5. All structural backfill materials (where necessary) shall be approved by a Soils Engineer. Unless approved otherwise, imported structural (or engineered) backfill shall be granular non-expansive material meeting the following minimum criteria: no more than 5% shall pass a 200 screen, 100% shall pass a 2 inch screen, and the material shall be well graded unless it is sand or 3/4 inch washed gravel. Some site material may be useable for structural backfill when approved by a Soils Engineer.
6. Structural backfill shall be moisture conditioned, placed in thin lifts and mechanically compacted. Lifts shall not exceed 6" of compacted depth and shall be of depths compatible with the capabilities of the machinery used.
7. Backfill shall be uniformly moisture controlled to maintain specified compaction densities.
8. Unless noted otherwise all backfill shall be compacted to a minimum of 95% of the maximum density as determined by ASTM method D-698. All compaction densities noted in the plans are relative to maximum density per ASTM D-698 at optimum moisture content plus or minus 3% unless noted otherwise.
9. Foundations shall be constructed of concrete cast in clean trenches cut neatly in engineered earth or in secure formwork if the native soils and compacted backfill won't allow clean open trenches.
10. Reinforcement for concrete foundations shall be supported 3" minimum from earth on all sides. Reinforcements shall not be supported on bars driven into the earth. It shall be supported on approved chairs or adobes or suspended from above.
11. Foundations shall not be placed on frozen earth or unstable conditions. Frozen earth shall be thawed and re-compacted before placing foundations. All soft materials discovered shall be over-excavated as directed by the Soils Engineer and replaced with compacted engineered material. Geotextile fabric shall be provided for stabilization when conditions dictate.
12. Water shall not be allowed from any source to accumulate in excavations. The Contractor shall provide de-watering.
13. The Contractor shall be responsible for safely retaining all earth embankments.
14. Exterior grades adjacent structures without paving shall slope away from the structure on all sides at a minimum slope of 10% for 20 feet. A positive water flow shall be provided for all locations to natural water courses. Provide swales where necessary. No ponding of water shall be allowed.
15. Planters shall not be adjacent structure except when a design is specifically provided.
16. Roof drains shall not empty onto exterior grade within five feet of the foundations. Splash blocks, leaders, concrete swales, or other means shall be used to direct water away from the structure for at least 5'-0" from the structure.
17. Deep rooted vegetation shall not be placed closer than 8-0" to the structure.
18. Backfill shall be tested for compaction. Material failing the tests shall be re-compacted and then re-tested. Failing tests shall be paid for by the earthwork contractor. One compaction test shall be provided for every 32 cubic yards of backfill material. Compaction densities shall also be made under all foundations where the native earth is scarified and re-compacted. One compaction test shall be made for every 50 linear feet of footing. Deviations from this schedule shall require the approval of the Engineer.

FINAL FOR CONSTRUCTION 4–8–2020

Tucker R. Stettner 4–8–2020

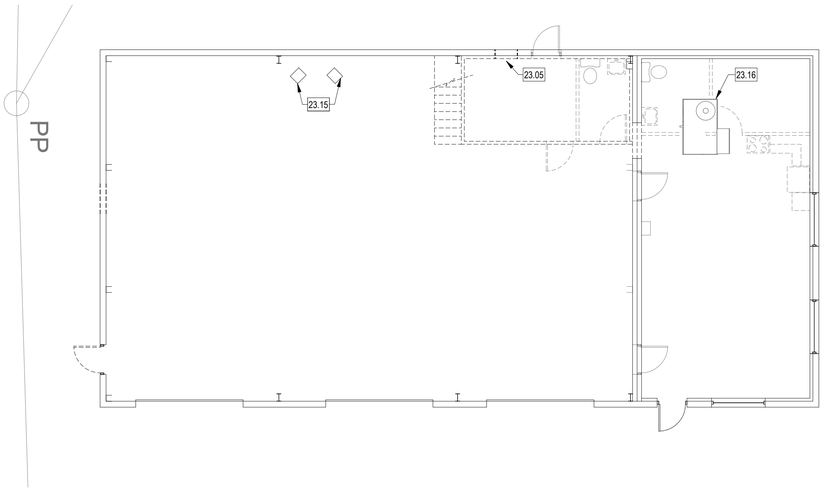
TUCKER R. STETTNER NEW MEXICO 20678 PROFESSIONAL ENGINEER

WILSON STRUCTURAL ENGINEERING, INC.
1235 THOROUGHBRED RD.
DURANGO, CO 81303
Phone: (970) 385–6774

A PROPOSED FOUNDATION DESIGN FOR THE ADDITION:
LA PLATA FIRE STATION #2
FARMINGTON, NEW MEXICO
GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

FILE NAME: 01720.NOT
PROJECT: 01720
SHEET: S2 OF S2

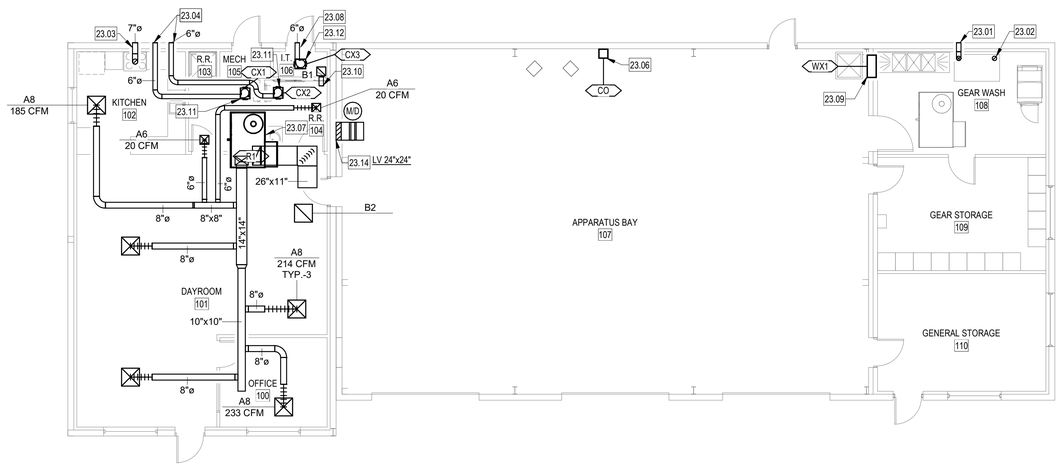
DRAWN:	CHECKED:	DATE:
TS	DW	4–8–2020



MECHANICAL DEMOLITION PLAN

1/8" = 1'-0"

KEYED NOTES	
23.01	ROUTE 6" DRYING CABINET INTAKE DUCT THROUGH SIDEWALL. TERMINATE PER MANUFACTURER'S INSTRUCTIONS.
23.02	ROUTE 6" DIAMETER DRYING CABINET EXHAUST DUCT THROUGH THE ROOF. TERMINATE PER MANUFACTURER'S INSTRUCTION.
23.03	ROUTE 7" KITCHEN EXHAUST HOOD DUCT THROUGH THE SIDEWALL. TERMINATE WITH WALL CAP WITH BIRDSCREEN AND BACKDRAFT DAMPER. SEE ARCHITECT FOR HOOD SPECIFICATION.
23.04	ROUTE 6" BATH EXHAUST DUCT THROUGH THE SIDEWALL. TERMINATE WITH WALL CAP WITH BIRDSCREEN AND BACKDRAFT DAMPER.
23.05	DEMO EXISTING THROUGH THE WALL AIR CONDITIONING UNIT. PATCH AND SEAL OPENING IN THE WALL.
23.06	CARBON MONOXIDE/NITROGEN DIOXIDE CONTROLLER WITH INTEGRAL 50' RADIUS SENSOR. CONNECT TO INTAKE LOUVER'S MOTORIZED DAMPER (M/D). DAMPER TO OPEN UP ACTIVATION. CONNECT TO WALL EXHAUSTER (WX). WX TO START UPON ACTIVATION.
23.07	ROOFTOP UNIT LOCATED ON ROOF ABOVE. SEE ROOFTOP UNIT DETAIL ON M500.
23.08	ROUTE 6" I.T. EXHAUST DUCT THROUGH THE SIDEWALL. TERMINATE WITH WALL CAP WITH BIRDSCREEN AND BACKDRAFT DAMPER.
23.09	WALL EXHAUSTER (WX) TO BE ACTIVATED BY THE CO/NO2 CONTROLLER. INTERCONNECT WITH MOTORIZED DAMPER ON INTAKE LOUVER. LOCATE HIGH ON WALL. LOCATE MINIMUM 10' AWAY FROM EXISTING ROOFTOP UNIT.
23.10	6" RELIEF DUCT. ROUTE TO PLENUM AND TERMINATE.
23.11	CEILING EXHAUSTER TO BE CONTROLLED BY WALL SWITCH.
23.12	THERMOSTAT TO CONTROL CEILING EXHAUSTER.
23.14	LOCATE LOUVER HIGH ON WALL ABOVE ROOF OF NEW ADDITION. MAINTAIN 10' CLEARANCE FROM R1 ROOFTOP UNIT.
23.15	EXISTING UNIT HEATERS IN APPARATUS BAY TO REMAIN.
23.16	EXISTING ROOFTOP UNIT TO REMAIN.



MECHANICAL FLOOR PLAN

1/8" = 1'-0"

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04-13-2020

LA PLATA
FIRESTATION #2
SAN JUAN COUNTY

MECHANICAL FLOOR PLAN

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JB	DS	04-13-2020

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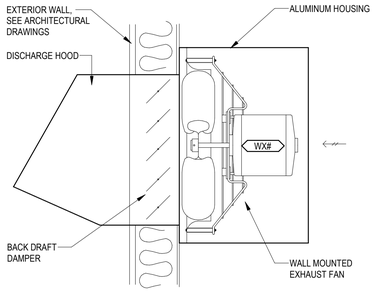
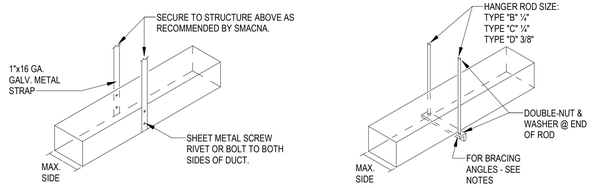


1 WALL EXHAUST FAN DTL



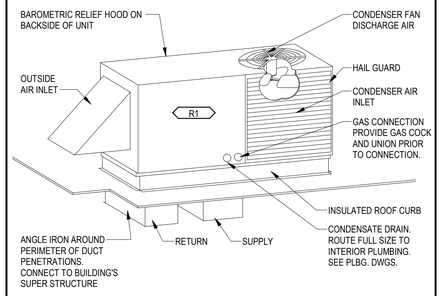
TYPE "A":
8 FT. MAX. HANGER SPACING. ALSO PROVIDE 3 HANGERS AT EACH TAKE-OFF OR BRANCH

TYPE "B", "C" & "D":
8 FT. MAX. HANGER SPACING.

DUCT SCHEDULE		
DUCT DIMENSIONS INCHES		TYPE HANGER
UP THRU	12	A
14	18	A
20	30	A/B
32	42	B
44	54	B
56	60	B
62	84	C
86	96	C
OVER	96	D

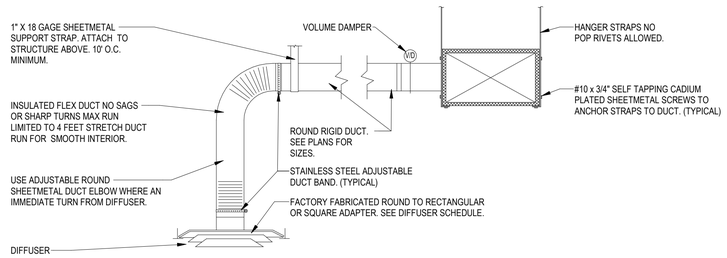
NOTES:
1. FOR SEVERAL DUCTS ON ONE HANGER TYPE "B"-"C" OR "D" MAY BE USED. SIZE OF HANGER WILL BE SELECTED ON THE SUM OF DUCT WIDTHS EQUAL TO MAX. WIDTH OF DUCT SCHEDULE.
2. SCHEDULE FOR ANGLES FOR BRACING: TYPE "B" 1½"x1½"x1/8" ANGLE MAX. SPACING 8'-0" CENTERS; TYPE "C" 1½"x1½"x3/16" ANGLE MAX. SPACING 8'-0" CENTERS; TYPE "D" 2"x2"x¼" MAX. SPACING 4'-0" CENTERS.

2 DUCT HANGER DETAIL



4 ROOFTOP UNIT DETAIL

NOTE:
INSULATE ALL BRANCH DUCT AND COVER CONNECTIONS WITH DUCT WRAP



3 TYPICAL DIFFUSER CONNECTION DETAIL

MECHANICAL SYMBOLS LEGEND

SYMBOL	DESCRIPTION
A6 / ...CFM	DIFFUSER DESIGNATION
1	UNIT DESIGNATION
23.00	KEYED NOTE
	POINT OF CONNECTION
C	CONDENSATE DRAIN
HWS	HEAT PUMP WATER SUPPLY
HWR	HEAT PUMP WATER RETURN
	GAS COCK
	THERMOMETER
	PLUG, CIRCUIT SETTER OR GAUGE COCK
	CHECK VALVE
	2-WAY VALVE
	3-WAY VALVE
	RELIEF VALVE
	BUTTERFLY VALVE
	BALL VALVE
	STRAINER
	UNION
	GATE VALVE
	SOLENOID
	PRV
	REDUCED PRESSURE BACKFLOW PREVENTER
10"x10"	CLEAR INSIDE DUCT DIMENSION (NEW)
	SUPPLY DIFFUSER
	RETURN GRILLE
	SIDEWALL SUPPLY
	SIDEWALL RETURN
M/D F/D F/S V/D	MOTORIZED, FIRE, FIRE/SMOKE OR VOLUME DAMPER
T R H	THERMOSTAT, REMOTE SENSOR OR HUMIDISTAT
CO	CARBON MONOXIDE SENSOR

NOTE: SYMBOLS ILLUSTRATED ABOVE MAY NOT APPEAR ON THE PLANS

MECHANICAL GENERAL NOTES

1. PROVIDE AND INSTALL ALL MATERIAL AND EQUIPMENT AS REQUIRED BY UPC, UMC, NFPA, LIFE SAFETY CODE, GAS CODE, AND ALL OTHER LOCAL CODES AND ORDINANCES THAT APPLY. WHERE THERE IS A DISCREPANCY BETWEEN THE CODES OR ORDINANCES AND THE DRAWINGS, THE MORE STRINGENT APPLICATION SHALL APPLY.
2. LAYOUT AND INSTALL COMPLETE AND FUNCTIONAL MECHANICAL SYSTEMS, INCLUDING TEMPORARY CUTOFF OF EXISTING UTILITIES. PERFORM ALL CUTTING, PATCHING, AND REPAIR ASSOCIATED WITH INSTALLING THE SYSTEMS.
3. VIBRATIONALLY ISOLATE ALL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. COORDINATE TO ASSURE THAT AS QUIET AN OPERATING SYSTEM AS POSSIBLE IS INSTALLED.
4. VERIFY THAT DIFFUSERS, REGISTERS, GRILLES, DUCTWORK AND ALL EQUIPMENT SPECIFIED IS CORRECT FOR FIELD INSTALLATION BEFORE ORDERING OR FABRICATING. PROVIDE A WRITTEN REQUEST FOR INFORMATION TO THE ENGINEER FOR A RULING ON HOW TO PROCEED IF CONDITIONS EXIST THAT WILL NOT ALLOW FOR THE INSTALLATION OF THE EQUIPMENT SPECIFIED.
5. PROVIDE ALL DUCTWORK CONNECTIONS AND TRANSITIONS AT GRILLES, DIFFUSERS, REGISTERS, FILTERS, COILS, AND OTHER LOCATIONS WHERE REQUIRED. CONSTRUCT ALL TRANSITIONS AND CONNECTIONS ACCORDING TO SMACNA STANDARDS.
6. PROVIDE AND INSTALL DAMPERS IN THE BRANCH DUCTS, NEAR THE MAIN, SERVING DIFFUSERS AND GRILLES TO ALLOW PLUS OR MINUS 10% OF THE CFM REQUIRED FROM EACH DIFFUSER AND REGISTER AS LISTED ON THE PLANS.
7. TESTING AND BALANCING AGENCY: PROVIDE AND INSTALL SHEAVES AND ALL EQUIPMENT NECESSARY TO PROVIDE PLUS OR MINUS 10% OF THE CFM REQUIRED FROM EACH DIFFUSER AND REGISTER.
8. COORDINATE WORK WITH THE GENERAL CONTRACTOR TO HAVE THE ROOFTOP EQUIPMENT, DUCTWORK, AND INSULATION JACKETS PAINTED TO THE ARCHITECT'S REQUIREMENTS.
9. PROVIDE AND INSTALL ALL MECHANICAL EQUIPMENT, TRANSFORMERS, RELAYS, AND OTHER ELEMENTS NECESSARY FOR A COMPLETE OPERATING SYSTEM. COMPLETE ALL 24 VOLT CONTROL WIRING AND EQUIPMENT TO THE ABOVE. ALL LINE VOLTAGE WIRING TO THE ABOVE SHALL BE COMPLETED BY THE ELECTRICAL CONTRACTOR. REFER TO COORDINATION SCHEDULE ON ELECTRICAL DRAWINGS.
10. ALTER DIMENSIONS OF THE DUCTWORK IN THE CEILING SPACE FROM SIZES INDICATED ON THE DRAWINGS AT SPECIFIC LOCATIONS WHEN NECESSARY TO FIT THE DUCTWORK IN THE SPACE PROVIDED. REROUTE DUCTWORK IN CEILING SPACE TO AVOID OTHER MECHANICAL EQUIPMENT, LIGHT FIXTURES, ETC. MAINTAIN THE SAME FREE AREA AND SUBMIT PROPOSED CHANGES TO THE ENGINEER FOR APPROVAL. BE RESPONSIBLE FOR VERIFYING SPACE LIMITATIONS BEFORE DUCTWORK FABRICATION AND MAKE CHANGES ACCORDINGLY. PROVIDE ALL NECESSARY TRANSITIONS.
11. COORDINATE WITH THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LAYOUT OF DIFFUSERS, GRILLES AND CEILING MOUNTED EQUIPMENT.
12. PROVIDE ACOUSTICAL LINER ON ALL SOUND TRAPS AT ALL RETURN AIR GRILLES. PROVIDE ACOUSTICAL LINER ON ALL TRANSFER DUCTS.
13. REVIEW THE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE ON THE ELECTRICAL DRAWINGS FOR CLARIFICATION OF WORK BETWEEN DISCIPLINES.
14. PROVIDE TURNING VANES IN ALL RECTANGULAR DUCTWORK AT ELBOWS AND TEES WHETHER SHOWN ON THE PLANS OR NOT. THE ONLY EXCEPTION IS RETURN AIR TRANSFER DUCTS BETWEEN ROOMS.
15. FIELD VERIFY THAT ALL NEW DUCTWORK CAN FIT WITHIN THE SPACE PROVIDED PRIOR TO FABRICATING ANY NEW DUCTWORK. EXISTING DUCTWORK SHOWN IS FROM ORIGINAL AS-BUILT DRAWINGS AND NOT ALL CONFIGURATIONS HAVE BEEN VERIFIED.
16. PROVIDE DUCT SMOKE DETECTORS, SHUTDOWN CONTROLS, AND AUDIBLE/VISIBLE NOTIFICATION DEVICES PER MECHANICAL CODE AND BUILDING CODE WHERE REQUIRED. COORDINATE CONNECTION TO BUILDING FIRE ALARM SYSTEM, IF REQUIRED.

ROOFTOP UNIT SCHEDULE

ROOFTOP UNIT: 14.0 SEER, SINGLE ZONE, CONSTANT VOLUME, NATURAL GAS FIRED, R-410A ELECTRIC COOLING, LOUVERED HAIL GUARD, 5,500' ASL HIGH ALTITUDE HEATING, SINGLE STAGE SCROLL COMPRESSOR, 2-STAGE HEATING, ALUMINUM HEAT EXCHANGER, BAROMETRIC RELIEF, DRY-BULB ECONOMIZER, ECM DIRECT DRIVE SUPPLY FAN, INTEGRAL DISCONNECT SWITCH, INTEGRAL CONVENIENCE OUTLET, CO2 SENSOR, HINGED ACCESS DOORS, 1" MERV 8 FILTERS AND RACK, PROGRAMMABLE THERMOSTAT, AMBIENT CONDITIONS = 94°F/63°F COOLING. "CARRIER"

UNIT NO.	MODEL	COOLING		HEAT	ESP	OSA			INLET	OUTLET		WEIGHT	ELECTRICAL			
		CFM	MBH	MBH		CFM	EAT DB	EAT WB	(W"xH")	(W"xH")	DISCHARGE	LBS.	MCA	MOCP	VOLTS	PHASE
R1	48FCTA04A2	1100	29	67	1	140	83 °F	63 °F	26"x11"	18"x12"	DOWN	678	24	30	208 V	3
R1	48FCTA04A2	1100	29	67	1	140	83 °F	63 °F	26"x11"	18"x12"	DOWN	678	24	30	208 V	3

DIFFUSER SCHEDULE

A CEILING DIFFUSER: 4-WAY, ADJUSTABLE VERTICAL/HORIZONTAL THROW STEEL CEILING DIFFUSER, ROUND NECK. SEE PLAN FOR CFM, CEILING TYPE, FACE AND NECK SIZE. NC<30.
"KRUEGER" 1450A

B CEILING RETURN GRILLE: EGG-CRATE STYLE, 24"X24" FACE UNLESS OTHERWISE INDICATED ON THE PLANS. SEE PLAN FOR SIZE, CFM AND CEILING TYPE. PROVIDE OBD WHEN GRILLE IS USED FOR EXHAUST. NC<30.
"KRUEGER" MODEL EGC-5

LV LOUVER: ALUMINUM, WEATHER RESISTANT BLADE DESIGN, COLOR PER ARCHITECT. A MINIMUM OF 0.10 OZ. OF WATER CARRY-OVER AT 1023FPM FREE AREA VELOCITY AND 0.185"W.C. PRESSURE DROP.
"RUSKIN" ELF6375DXH

CONTROLLER SCHEDULE

CO CARBON MONOXIDE/NITROGEN DIOXIDE CONTROLLER: DIGITAL CONTROLLER WITH PROGRAMMING INTERFACE, TWO 24V OUTPUT RELAYS TO CONTROL FAN AND DAMPER, FIVE INPUT CONTACTS. PROVIDE REMOTE COMBINATION CO/NO2 SENSORS WITH MANUAL OVERRIDE CAPABILITIES. 120V/1A.
"ARMSTRONG" AMC-1AD1

CEILING EXHAUSTER SCHEDULE

CEILING EXHAUSTER: CEILING MOUNTED FAN WITH INTEGRAL ALUMINUM GRILLE, VIBRATION ISOLATORS, HANGING RODS AND BACKDRAFT DAMPER. "COOK"

UNIT NO.	MODEL	CFM	ESP ("W.C.)	ELECTRICAL			CONTROL
				WATTS	VOLTS	PHASE	
CX1	GC-148	127	0.25	38	115 V	1	WALL SWITCH
CX2	GC-148	127	0.25	38	115 V	1	WALL SWITCH
CX3	GC-166	140	0.25	40	115 V	1	THERMOSTAT

WALL EXHAUSTER SCHEDULE

WALL EXHAUSTER: ALUMINUM FAN IN ALUMINUM HOUSING, BIRDSCREEN, CARBON MONOXIDE SENSOR CONTROL AND BACKDRAFT DAMPER. "COOK"

UNIT NO.	MODEL	CFM	ESP ("W.C.)	ELECTRICAL			WEIGHT (LBS.)
				HP	VOLTS	PHASE	
WX1	20XMP	1710	0.25	1/3	115 V	1	106

DAMPER SCHEDULE

M/D MOTORIZED DAMPER: EXTRUDED ALUMINUM OPPOSED BLADE WITH BELIMO 24V POWER, 0-10VDC CONTROL INPUT, SPRING RETURN ACTUATOR. CLASS 1 MAXIMUM LEAKAGE RATE AT 4 CFM PER SQ.FT. AT 1.0"W.C. AMCA 500D TESTED. PROVIDE 120V/24V TRANSFORMER.
"RUSKIN" MODEL TED50

V/D VOLUME DAMPER: GALVANIZED STEEL, PARALLEL BLADE, LOCKING QUADRANT
"RUSKIN" MDRS25

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04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

MECHANICAL DETAILS AND SCHEDULES

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JB	DS	04-13-2020

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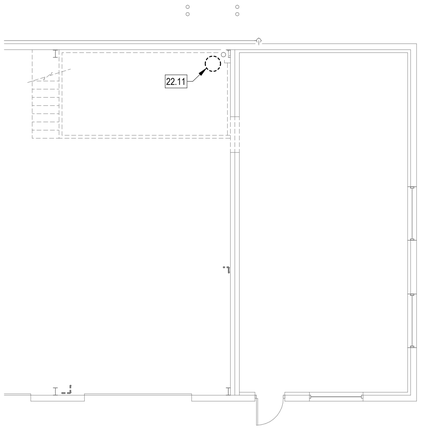
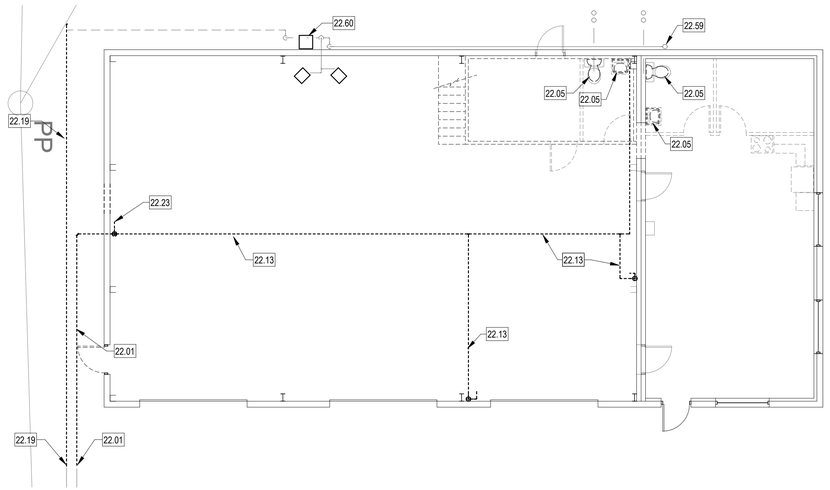


N 2 PLUMBING DEMOLITION PLAN - MEZZANINE

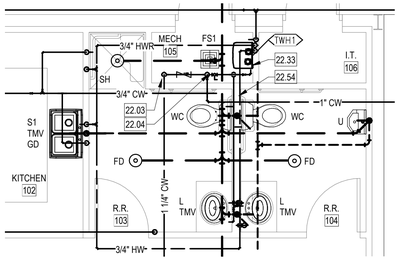
1/8" = 1'-0"



N 1 PLUMBING DEMOLITION PLAN

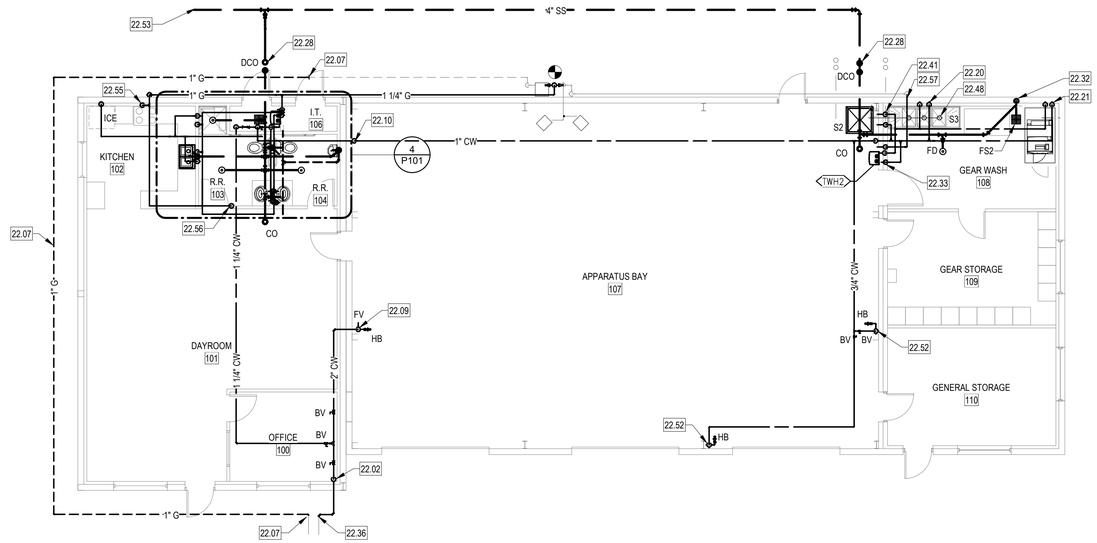
1/8" = 1'-0"

KEYED NOTES	
22.01	REMOVE EXISTING 2"CW BELOW NEW ADDITION BACK TO POINT OF NEW CONNECTION.
22.02	2"CW RISE TO STRUCTURE OVERHEAD.
22.03	1-1/4"CW DROP TO NEW WATER ENTRANCE. SEE DETAIL.
22.04	1-1/4"CW FROM WATER ENTRANCE. OFFSET 3/4"CW TO PLUMBING CHASE, 3/4"CW TO WATER HEATER (TWH1) AND 1" CW RISE TO ABOVE CEILING.
22.05	REMOVE EXISTING PLUMBING FIXTURE. CAP WASTE BELOW FINISHED FLOOR. REMOVE WATER AND VENT PIPING AS INDICATED.
22.07	REROUTE GAS SERVICE LINE AROUND NEW ADDITION BY UTILITY COMPANY. PLUMBING CONTRACTOR TO COORDINATE WITH UTILITY COMPANY SERVICE REROUTE AND A NEW LOAD OF 700 CFH.
22.09	2"CW DROP SECURED TO WALL TO FILL VALVE (FV) MOUNTED AT 32" ABOVE FLOOR. COORDINATE VALVE THREAD PATTERN WITH OWNER.
22.10	1"CW RISE TO HIGH STRUCTURE.
22.11	REMOVE EXISTING ELECTRIC WATER HEATER AND ASSOCIATED PIPING. CAP AND ABANDON COLD WATER SUPPLY BELOW FINISHED FLOOR. COORDINATE FLOOR PATCH WITH GENERAL CONTRACTOR.
22.13	FIELD VERIFY EXISTING WATER DISTRIBUTION PIPE ROUTING. DISCONNECT, PURGE, CAP AND ABANDON BELOW FLOOR WATER PIPING. SEE NEW WORK PLAN FOR NEW CONNECTIONS.
22.19	REMOVE EXISTING GAS SERVICE LINE BELOW NEW ADDTION.
22.20	3/4"CW, 3/4"HW DROP TO SINK (S3) FAUCETS. SEE DETAIL.
22.21	3/4"CW, 3/4"HW DROP TO WASHER/EXTRACTOR AND FULL SIZE INDIRECT WASTE TO FLOOR SINK.TERMINATE WITH ELBOW TURNED DOWN. PROVIDE WATER HAMMER ARRESTERS (WHA) ON DROPS.
22.23	REMOVE EXISTING 2"FILL VALVE. SEE NEW WORK PLAN FOR REPLACEMENT.
22.28	2-WAY GRADE CLEANOUT. SEE DETAIL.
22.32	4"SS DOWN AND 2"V RISE FROM FLOOR SINK.
22.33	3/4"CW DROP, 3/4"HW RISE FROM WATER HEATER. ROUTE 2"PVC FLUE AND INTAKE THROUGH ROOF. TERMINATE WITH FACTORY VENT KIT. SEE WATER HEATER DETAIL SHEET P501.
22.36	NEW 2"CW CONNECTION TO EXISTING ON SITE. EXTEND TO NEW ADDITION AND RISE TO ABOVE CEILING.
22.41	3/4"CW, 3/4"HW DROP, 3"SS DOWN AND 2"V RISE FROM MOP SINK (S2).
22.48	CONNECT 2"IW FROM EACH SINK (S5) COMPARTMENT. ROUTE TO MOP SINK. TERMINATE WITH ELBOW TURNED DOWN.
22.52	3/4"CW DROP TO HOSE BIB MOUNTED AT 24" ABOVE FLOOR.
22.53	RUN 4" SEWER LINE 10' FROM BUILDING. SEE CIVIL FOR CONTINUATION.
22.54	1" CW AND 3/4" HW.
22.55	3/4" GAS ROUGH IN FOR OVEN.
22.56	3/4" GAS UP TO R1 ROOFTOP UNIT.
22.57	CONNECT TWH2 TO EXISTING GAS LINE. IF EXISTING GAS LINE IS LESS THAN 1-1/4" INSTALL NEW 1-1/4" GAS LINE TO SERVE TWH2 AND EXISTING ROOFTOP UNIT.
22.59	EXISTING GAS LINE UP TO EXISTING ROOFTOP UNIT.
22.60	EXISTING GAS METER TO REMAIN.



N 4 ENLARGED PLUMBING FLOOR PLAN

1/4" = 1'-0"



N 3 PLUMBING FLOOR PLAN

1/8" = 1'-0"

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04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

PLUMBING PLANS

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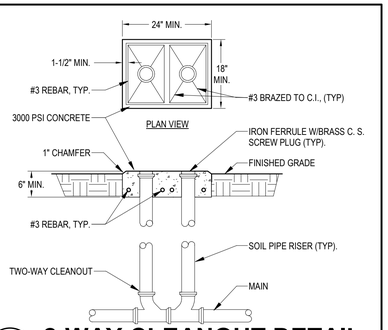
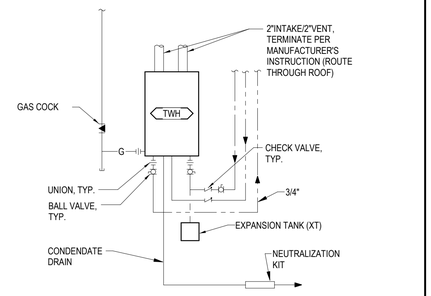
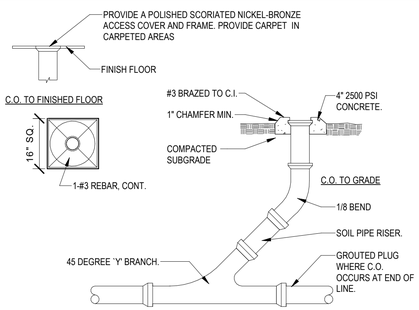


2 2-WAY CLEANOUT DETAIL



1 TANKLESS WTR HTR DTL



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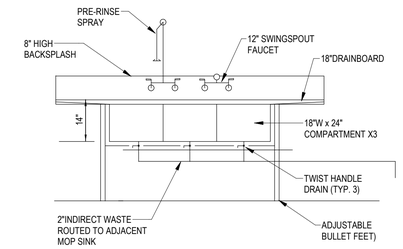
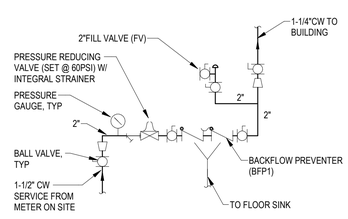
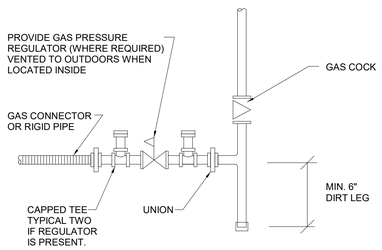


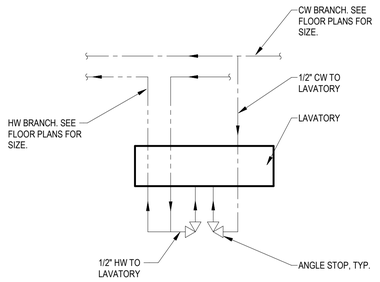
3 SINK S3 DETAIL



6 WATER ENTRY



5 GAS CONNECTION DETAIL



7 LAVATORY PIPING DETAIL

PLUMBING GENERAL NOTES

1. COMPLETE ALL WORK IN FULL COMPLIANCE WITH THE UMC, UPC, IBC, LIFE SAFETY CODE, N.F.P.A. AND ALL LOCAL CODES AND ORDINANCES.

2. CAREFULLY LAYOUT AND INSTALL THE PLUMBING SYSTEMS INCLUDING ALL COORDINATION WITH NEW AND EXISTING SERVICES, MECHANICAL EQUIPMENT, DUCTWORK, ELECTRICAL EQUIPMENT, CONDUIT, CEILING GRID, AND ANY OTHER EQUIPMENT THAT MAY REQUIRE COORDINATION EFFORTS. COORDINATE TEMPORARY CUT-OFF OF WATER AND SEWER WITH UTILITY PROVIDERS. PERFORM ALL NECESSARY TRENCHING, BACK FILLING, CUTTING, PATCHING, REPAIRING, ETC. ASSOCIATED WITH THE INSTALLATION OF THE PLUMBING SYSTEM SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

3. VERIFY ALL INVERTS BEFORE ROUTING ANY AND ALL PIPING. NO COMPENSATION WILL BE MADE FOR THE CONTRACTOR'S FAILURE TO COORDINATE WORK WITH SITE CONDITIONS. BECOME TOTALLY FAMILIAR WITH ALL ASPECTS OF THE WORK AND ALL CONSTRAINTS AND LIMITATIONS OF THE WORK REQUIRED.

4. ROUTE PIPING AS NEARLY AS POSSIBLE TO THE ROUTING INDICATED ON THE PLANS, BUT MAKE MINOR CHANGES IN ROUTING TO ACCOMMODATE THE CONDITIONS AT THE SITE. DO NOT UNDERTAKE MAJOR REROUTING OF PIPING WITHOUT WRITTEN APPROVAL FROM ENGINEER. MAKE ALL REQUIRED TRANSITIONS, OFFSETS, MINOR RE-LOCATIONS, AND ALL ASSOCIATED FITTINGS, PIPING, AND EQUIPMENT TO INSTALL A COMPLETE AND OPERATIONAL SYSTEM.

5. THE PROXIMITY OF WATER AND SEWER LINES SHALL BE AS FOLLOWS, UNLESS WRITTEN APPROVAL FROM THE STATE HEALTH DEPARTMENT SPECIFIES DIFFERENT CONDITIONS: WHENEVER POSSIBLE, IT IS DESIRABLE TO LAY PARALLEL WATER AND SEWER LINES AT LEAST TEN FEET APART HORIZONTALLY, AND THE WATER LINE SHOULD BE AT A HIGHER ELEVATION THAN THE SEWER LINE. IF THIS IS NOT POSSIBLE, SEPARATE TRENCHES WILL BE REQUIRED IN ALL CASES (THIS SHALL BE EFFECTIVE EVEN THOUGH ONE LINE HAS BEEN INSTALLED PRIOR TO THE OTHER), AND THE WATER LINE SHALL BE AT LEAST ONE FOOT ABOVE THE SEWER LINE. WHERE LINES INTERSECT THE WATER LINE SHALL BE SLEEVED FOR TEN FEET ON EACH SIDE OF THE INTERSECTION.

6. ALL CONTRACTORS BIDDING ON THIS PROJECT ARE CAUTIONED TO VISIT THE SITE AND MAKE ALL NECESSARY INQUIRIES TO DETERMINE THE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BIDS. NO SUBSEQUENT ALLOWANCE WILL BE MADE TO COMPENSATE FOR LACK OF PRE-BID INSPECTIONS BY THE SUCCESSFUL CONTRACTOR. ANY LINES ENCOUNTERED WHICH MAY INTERFERE WITH NEW CONSTRUCTION SHALL BE RELOCATED IF ACTIVE AND ABANDONED IF INACTIVE BY THIS CONTRACTOR UNDER THIS CONTRACT BY FIRST CONTACTING THE ARCHITECT FOR A RULING AS TO THEIR REMOVAL, RELOCATION, ETC.

7. PROVIDE ACCESS PANELS TO ALL INACCESSIBLE PLUMBING EQUIPMENT.

8. INSULATE ALL NEWLY INSTALLED PIPING (DOMESTIC HOT, COLD, AND RECIRC. WATER) IN THE BUILDING. LABEL PIPE WITH FLUID TYPE AND FLOW DIRECTION.

9. INSULATE ALL COLD AND HOT WATER SUPPLY TUBING AND P-TRAPS AT HANDICAP LAVATORIES AND SINKS WITH AN A.D.A. APPROVED ENCLOSURE. INCLUDE ALL FITTINGS FOR A COMPLETE INSTALLATION.

10. PERFORM PRESSURE TEST OF WASTE/VENT LINE PER CODE. COMPLETE A SUCCESSFUL TEST PRIOR TO COVERING THE WORK.

11. PRESSURE TEST, FLUSH AND DISINFECT ALL DOMESTIC WATER PIPING PER CHAPTER 6 OF THE PLUMBING CODE PRIOR TO CALLING FOR FINAL INSPECTION.

12. AFTER ALL PIPING HAS BEEN INSTALLED, TESTED, CLEANED, AND PHOTOGRAPHED BACKFILL THE SPACE UNDER THE FLOOR AND TAMP TO PROCTOR 95%. REPAIR THE REBAR AND PATCH THE FLOOR IN ACCORDANCE WITH THE SPECIFICATIONS.

13. ALL PLENUM INSTALLED MATERIALS MUST BE PLENUM RATED OR WRAPPED IN A LISTED SYSTEM TO ACHIEVE A VALUE LOWER THAN 25 FLAME SPREAD AND 50 SMOKE DEVELOPMENT RATING.

14. FLUSHING LEVERS/MECHANISMS SHALL BE PLACED ON THE ACCESSIBLE SIDE OF THE FIXTURE.

15. ALL EXPOSED PIPE WALL PENETRATIONS IN FINISHED SPACES SHALL BE FITTED WITH CHROME PLATED ESCUTCHEONS SECURED RIGIDLY FLUSH WITH WALL SURFACE.

SCHEDULE

WC	FLUSH TANK WATER CLOSET: A.D.A COMPLIANT, 1.28 GPF FLOOR MOUNTED VITREOUS CHINA, SIPHON JET, ELONGATED TOILET, EVERCLEAN SURFACE. OPEN FRONT SEAT LESS COVER, BOLT CAPS. FLUSH LEVER OPPOSITE SIDEWALL. "AMERICAN STANDARD" CADET MODEL 3339.128. WASTE = 3", VENT = 2", CW = 3/4"
U	URINAL: WATER SAVING, VITREOUS CHINA W/ WASHOUT ACTION, 3/4" TOP SPUD INLET, 2 IN. OUTLET, ADJUSTABLE FLOOR SUPPORTED WALL CARRIER AND 1.0 PINT MANUAL FLUSH VALVE. "AMERICAN STANDARD" WASHBROOK MODEL 6590.001 WASTE = 2 IN., VENT = 1 - 1/2 IN., CW = 1 IN.
L	LAVATORY: A.D.A. COMPLIANT,COUNTERTOP, VITREOUS CHINA,, 4" FAUCET CENTERS, CHROME PLATED GRID DRAIN, OFFSET TAILPIECE "TRUE-BRO" LAV GUARD "AMERICAN STANDARD" 7385.003 SINGLE LEVER CHROME PLATED FAUCET LESS POP-UP DRAIN, 1.5 GPM AERATOR. "AMERICAN STANDARD" AQUALYN 0476.028 WASTE = 2 IN., VENT = 1 - 1/2 IN., CW = 1/2 IN. HW = 1/2"
S1	SINK: (KITCHEN) A.D.A. COMPLIANT, STAINLESS STEEL TWO COMPARTMENT SINK CONSTRUCTED OF 18 GAUGE TYPE 302 SS, REAR OFFSET DRAIN LOCATION. ELKAY LKA-4100 FAUCET LESS SPRAYER, 1.5 GPM AERATOR. "ELKAY" MODEL LRAD-3319 (6-1/2" DEEP). WASTE = 2"., VENT = 1-1/2"., CW = 1/2"; HW = 1/2"
S2	MOP SINK: 36"x36" PRECAST TERRAZZO, STAINLESS STEEL CAPS ON ALL CURBS, WALL MOUNTED 3 STATION MOP HOLDER. RIGID SPOUT, VACUUM BREAKER, PAIL HOOK, WALL BRACE AND 3/4" THREADED HOSE OUTLET. "CHICAGO" MODEL 445-897SRCXKCP FAUCET. "FIAT" MODEL TSB500 WASTE = 3 IN., VENT = 2 IN., CW & HW = 3/4 IN.
S3	SINK: (GEAR WASH) 3-COMPARTMENT TYPE 304 16 GA. STAINLESS STEEL SINK WITH DUAL DRAINBOARDS, SEAMLESS CONSTRUCTED, REAR 8" BACKSPLASH WITH (2) 8" CENTER PUNCHES FITTED WITH K-112 12" SWINGSPOUT FAUCET AND DTA-53 PRE-RINSE SPRAY. (3)18"x 24" COMPARTMENTS EACH FITTED WITH TWIST HANDLE DRAIN VALVE WITH STRAINER, "ADVANCE-TABCO" 93-63-54-18RL INDIRECT WASTE = 2" (X3)., CW = 3/4"; HW = 3/4"
SH	SHOWER, PRESSURE BALANCING VALVE WITH LEVER HANDLE, INTEGRAL STOPS, 30"SLIDE BAR AND 69"METAL HOSE, 1.5GPM FLOW CONTROL, 39" x 39" x 75-3/4" HIGH MOLDED VIKRELL 3-WALL MODULAR SURROUND AND BASE COMPLETE WITH CHROME PLATED BRASS GRID DRAIN, FOLDING SEAT AND GRAB BARS. "MOEN" 8346EP15 FAUCET AND TRIM. "STERLING" 62050115 WASTE = 2 IN., VENT = 1 - 1/2 IN., CW & HW = 1/2 IN.
BFP1	BACKFLOW PREVENTER: SEE PLAN FOR SIZE, LEAD FREE, BRONZE BODY WITH STAINLESS STEEL SPRINGS, REDUCED PRESSURE PRINCIPLE, TWO "Y" PATTERN CHECK VALVES AND ONE HYDRAULICALLY DEPENDENT DIFFERENTIAL RELIEF VALVE, BALL SHUT OFF VALVES AND FUNNEL DRAIN KIT. ASSE STANDARD 1013. "FEBCO" MODEL LF825Y
FD	FLOOR DRAIN: CAST IRON FLOOR DRAIN WITH TRAP GUARD, VANDAL PROOF SECURED TOP, NICKEL BRONZE STRAINER. "ZURN" MODEL Z-415 W/ TYPE B STRAINER WASTE = 2 IN., VENT = 2 IN.
HB	HOSE BIBB: ANTI-CONTAMINATION CLOSE COUPLED TRIMLINE WALL HYDRANT EQUIPPED WITH A VACUUM BREAKER-BACKFLOW PREVENTER, CAPABLE OF FITTING IN A 4" WALL THICKNESS. "WOODFORD" MODEL B75
FS1	FLOOR SINK: 8"x8"x6" CAST IRON, SANITARY FLOOR SINK W/ SQUARE TOP HALF GRATE AND A.R.E. SEDIMENT BUCKET. "ZURN" MODEL FD2396 WASTE = LINE SIZE, SEE PLAN, VENT = 2 IN
FS2	FLOOR SINK: 12"x12"x6" CAST IRON, SANITARY FLOOR SINK W/ SQUARE TOP HALF GRATE AND A.R.E. SEDIMENT BUCKET. "ZURN" MODEL Z-1900-2-5 WASTE = 4 IN, VENT = 2 IN
GD	GARBAGE DISPOSER, WITH DISHWASHER PORT WHERE APPLICABLE. KITCHEN AID KCD1075B (BY G.C., SEE ARCH.). ELECTRICAL: 115V-1PH, 3/4 HP
ICE	ICE MAKER BOX: 20 GAUGE, GALVANIZED STEEL RECESSED BOX WITH 1/2"INLET, 1/2" OUTLET ANGLE VALVE. "GUY GRAY" MODEL BIM875
PRV	PRESSURE REDUCING VALVE: LEAD FREE BRONZE BODY, 300 PSI INLET RATING, SET TO 60PSI OUTLET PRESSURE, ASSE 1003 CERTIFIED, NSF CERTIFIED. "WATTS" SERIES LFX65B (SEE PLAN FOR SIZE)
TMV	THERMOSTATIC MIXING VALVE: 1/2"-1" (SEE PLAN FOR SIZE) ASSE 1070 AND 1017 POINT-OF-USE MIXING VALVE. SET AT 105 DEGREES F. "WATTS" MODEL LFMMV
CO	INTERIOR FLOOR CLEAN OUT: CAST IRON CLEAN OUT WITH THREADED ADJUSTABLE HOUSING, SV HUB OUTLET, FLANGED FERRULE WITH PLUG AND ROUND SCORIATED CAST IRON, POLISHED RONZE TRACTOR TOP. "ZURN" MODEL ZB-1400 (VERIFY SURFACE TYPE)
DCO	TWO-WAY CLEANOUT: TWP EXTERIOR CLEANOUTS, PVC OR ABS FEMALE ADAPTER WITH CLEANOUT PLUG. LOCATED 2 IN. BELOW GRADE.
TWH	TANKLESS WATER HEATER:LPG-FIRED CONDENSING WALL MOUNTED WATER HEATER, 67°F TEMPERATURE RISE @ 5.6 GPM FLOW, 199.9 MBH INPUT, INTEGRAL CIRCULATING PUMP, DUAL STAINLESS STEEL HEAT EXCHANGERS, INTERNAL CONTROL SYSTEM, 2" PVC VENT KIT AND CONDENSATE NEUTRALIZATION KIT. ELECTRICAL: 120V-1∅-60Hz. 4.0AMPS "NAVIEN" MODEL NPE-240A
WHA	WATER HAMMER ARRESTER: PRE-CHARGED AIR CHAMBER PERMANENTLY SEALED FROM WATER SYSTEM, BALL VALVE FOR ISOLATION, NPT BRASS ADAPTER. PROVIDE A 12"x12" ACCESS PANEL. "WATTS" SERIES 15.
XT	EXPANSION TANK: POTABLE WATER USE, 175 MAX. WORKING PRESSURE, 2.0 GALLONS TOTAL VOLUME, 40 PSIG FACTORY PRECHARGE. "AMTROL" MODEL ST-5C

PLUMBING SYMBOLS LEGEND

SYMBOL	DESCRIPTION
#	UNIT DESIGNATION
#	KEYED NOTE
D	CONDENSATE DRAIN
	VENT
	COLD WATER
	HOT WATER SUPPLY (140°F)
	HOT WATER RETURN
G	GAS (NATURAL OR PROPANE)
	WASTE
	GAS COCK
	THERMOMETER
	CHECK VALVE
	RELIEF VALVE
	BALL VALVE
	STRAINER WITH DRAIN VALVE
	UNION
S	SOLENOID
PRV	PRV
	REDUCED PRESSURE BACKFLOW PREVENTER
	BACKFLOW PREVENTER
	FLOOR SINK
	VENT THRU ROOF
DCO	2-WAY CLEAN OUT
CO	CLEAN OUT
	FLOOR DRAIN
	GAS FLEX
M	METER
R	REGULATOR
VB	VALVE IN VALVE BOX

NOTE: SYMBOLS ILLUSTRATED ABOVE MAY NOT APPEAR ON THE PLANS

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04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

PLUMBING DETAILS AND SCHEDULES

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Filename:
Project: 20.10
Sheet: P501
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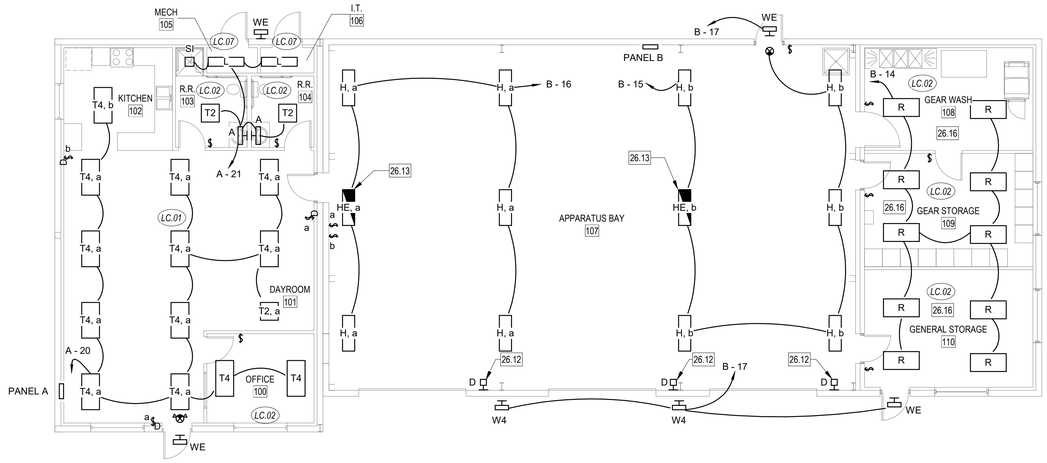
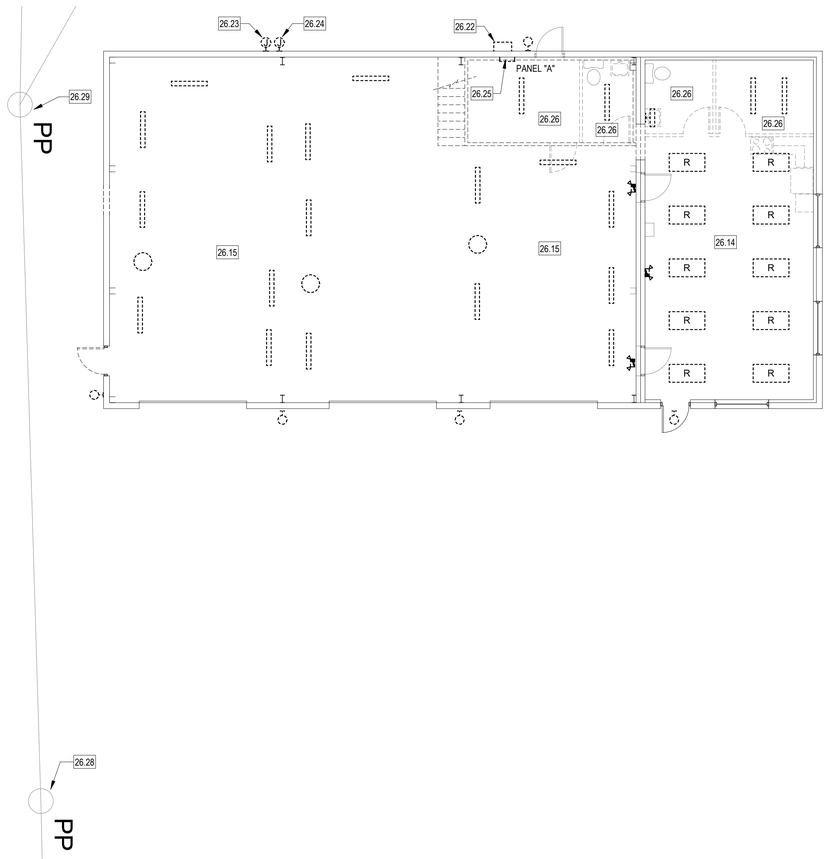


N 2 **ELECTRICAL LIGHTING PLAN**

1/8" = 1'-0"

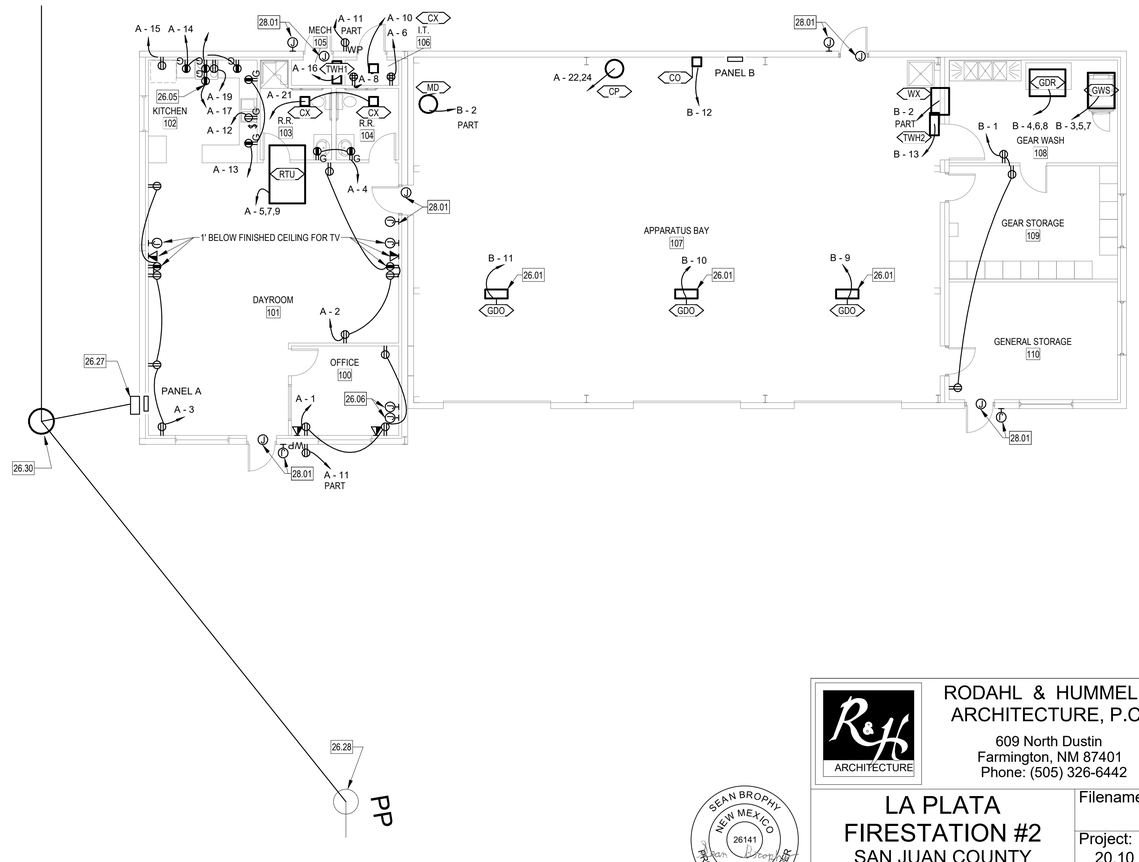
KEYED NOTES

26.01	GARAGE DOOR OPENER TO INDICATE WHEN DOOR IS FULLY OPEN. CONNECT TO RED/GREEN SIGNAL LIGHT ADJACENT TO DOOR (SEE LIGHTING PLAN). INDICATOR LIGHT TO CHANGE TO GREEN ONLY WHEN DOOR IS FULLY OPEN, AND REMAIN RED OTHERWISE. PROVIDE CONTACTOR AT BACK OF OVERHEAD DOOR TRACK IF REQUIRED. COORDINATE WITH OWNER.
26.05	PROVIDE ONE RECEPTACLE AT 24" AFF FOR GAS RANGE, ONE RECEPTACLE IN CABINET ABOVE FOR BROAN F403004 HOOD, AND ONE FOR GUARDIAN II FIRE SUPPRESSION SYSTEM. FOR RECEPTACLES MARKED AS GFCI BUT NOT IN READILY ACCESSIBLE LOCATION, PROVIDE GFCI BREAKER AT PANEL. THE SWITCH CONTROLLING THE HOOD FAN TO BE AT 44" AFF.
26.06	PROVIDE SINGLE GANG J-BOXES AT 18" AFF WITH 1"1/2" CONDUIT TO ABOVE CEILING.
26.12	GARAGE DOOR OPENER TO INDICATE WHEN DOOR IS FULLY OPEN. CONNECT TO RED/GREEN SIGNAL LIGHT ADJACENT TO DOOR (SEE LIGHTING PLAN). INDICATOR LIGHT TO CHANGE TO GREEN ONLY WHEN DOOR IS FULLY OPEN, AND REMAIN RED OTHERWISE. PROVIDE CONTACTOR AT BACK OF OVERHEAD DOOR TRACK IF REQUIRED. COORDINATE WITH OWNER.
26.13	TYPE H FIXTURES INCLUDE AN INTEGRAL OCCUPANCY/DAYLIGHT SENSOR, AND WALL SWITCHES FUNCTION AS A MANUAL OVERRIDE TO OFF. TYPE HE FIXTURES ARE UNSWITCHED, AND HAVE NO SENSOR.
26.14	REMOVE LIGHT FIXTURES. CLEAN AND STORE FIXTURE FOR RELOCATION IN NEW CONSTRUCTION. REMOVE LOCAL LIGHT SWITCHING. REFER TO NEW PLANS FOR LOCATION OF SWITCHES AND SWITCH LEGS.
26.15	REMOVE LIGHT FIXTURES. REMOVE WIRE AND CONDUIT BACK TO NEAREST JUNCTION BOX. MAINTAIN CIRCUIT CONTINUITY FOR DOWNSTREAM DEVICES. REMOVE LOCAL LIGHT SWITCHING. REFER TO NEW PLANS FOR LOCATION OF SWITCHES AND SWITCH LEGS.
26.16	INSTALL LIGHT FIXTURES FROM DEMOLITION. REUSE EXISTING CIRCUIT FROM DEMOLITION. REFER TO DEMOLITION FLOOR PLAN.
26.22	REMOVE EXISTING SERVICE ENTRY DISCONNECT AND METER SOCKET.
26.23	EXISTING 1-INCH CONDUIT. CONTRACTOR TO TRACE WIRE AND CONDUIT TO LOAD AND PROVIDE RFI FOR SIZE OF CIRCUIT BREAKER.
26.24	EXISTING 3/4-INCH CONDUIT. CONTRACTOR TO TRACE WIRE AND CONDUIT TO LOAD AND PROVIDE RFI FOR SIZE OF CIRCUIT BREAKER.
26.25	REMOVE EXISTING PANEL. EXTEND EXISTING CIRCUITS FEED FROM EXISTING PANEL TO PANEL B.
26.26	REMOVE RECEPTACLES FROM WALLS BEING DEMOLISHED. MAINTAIN CIRCUIT CONTINUITY TO DEVICES DOWNSTREAM.
26.27	NEW EXTERIOR METER SOCKET AND CT CABINET, COORDINATE REQUIREMENTS WITH UTILITY.
26.28	EXISTING UTILITY POLE COORDINATE WITH UTILITY ON CONNECTION TO NEW POWER POLE.
26.29	REMOVE EXISTING POWER POLE MAINTAIN EXISTING CABLING TO BE RECONNECT TO NEW POWER POLE
26.30	NEW POWER POLE COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH IN. COORDINATE WITH OWNER TO RECONNECT PASS THRU CABLING.
28.01	EXTERIOR BOX AT 48" AFF WITH 1/2" CONDUIT TO ABOVE CEILING. CONDUIT FROM J-BOX ABOVE CEILING DOWN INSIDE DOOR JAMB TO LATCH.



N 1 **ELECTRICAL DEMOLITION PLAN**

1/8" = 1'-0"



N 3 **ELECTRICAL POWER FLOOR PLAN**

1/8" = 1'-0"

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04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

ELECTRICAL FLOOR PLANS

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Project: 20.10
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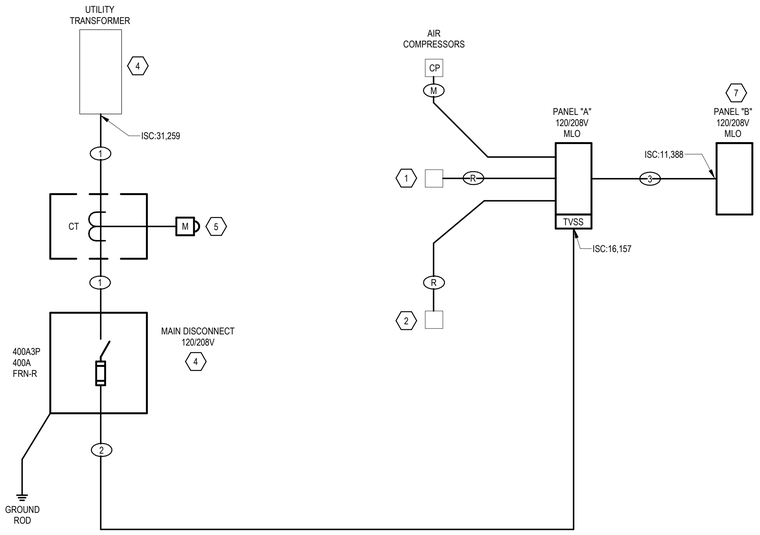
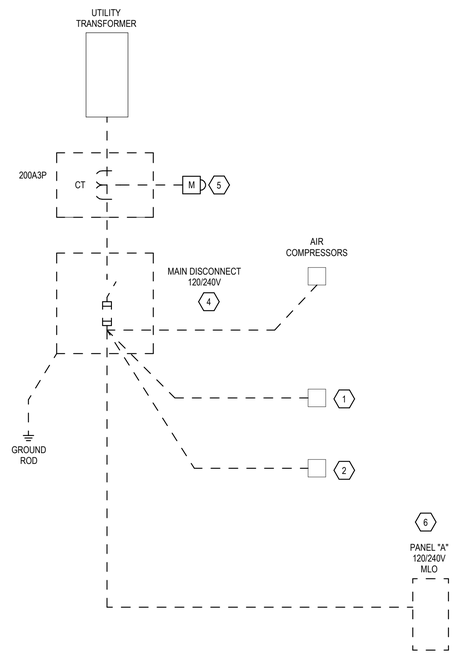


NEW ONE LINE DIAGRAM



DEMOLITION ONE LINE DIAGRAM

1 ONE LINE DIAGRAM1

LEGEND

NEW OR MODIFIED IN THIS PROJECT

EXISTING TO REMAIN

EXISTING TO BE DEMOLISHED

GENERAL NOTES

1. ALL UNDERGROUND CONDUIT TO BE SCHEDULED 80 PVC.
2. ALL EXPOSED EXTERIOR CONDUIT TO BE RIGID STEEL.
3. THIS DIAGRAM IS SCHEMATIC, AND NOT INTENDED TO SPECIFY CONDUIT ROUTING OR FEED SIDE OF PANELS.
4. WHERE ALUMINUM FEEDERS ARE SPECIFIED, VERIFY THAT ASSOCIATED PANELS ARE RATED FOR ALUMINIUM CONDUCTORS.
5. TERMINAL SCREWS ON ALL ALUMINUM FEEDERS SHALL BE TORQUED TO CONDUCTOR MANUFACTURER'S SPECIFICATIONS AT CONSTRUCTION, AND RE-TORQUED 90 DAYS AFTER COMMISSIONING.
6. ALL FEEDERS ARE COPPER UNLESS INDICATED OTHERWISE.

KEYED NOTES

1. EXISTING 1-INCH CONDUIT. CONTRACTOR TO TRACE WIRE AND CONDUIT TO LOAD AND PROVIDE RFI FOR SIZE OF CIRCUIT BREAKER.
2. EXISTING 3/4-INCH CONDUIT. CONTRACTOR TO TRACE WIRE AND CONDUIT TO LOAD AND PROVIDE RFI FOR SIZE OF CIRCUIT BREAKER.
3. NEW POLE AND TRANSFORMER BY UTILITY, SIZE AND EXACT LOCATION TO BE DETERMINED BY UTILTY.
4. REMOVE AND REPLACE EXTERIOR SERVICE ENTRY DISCONNECT
5. REMOVE AND REPLACE EXTERIOR METER SOCKET AND CT CABINET. COORDINATE REQUIREMENT WITH UTILTY.
6. REMOVE EXISTING PANEL. MAINTAIN EXISTING BRANCH CIRCUITS TO BE RECONNECT TO NEW PANEL.
7. EXTEND EXISTING CIRCUITS TO NEW PANEL.

FEEDER NOTES

1. 2{(4#3/0)2"C}
2. 2{(4#3/0 & 1#6G)2"C}
3. {4#3/0 & 1#6G}2"C

M. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR FEEDER SIZE.

R. Provide RFI once circuit trace is done.

MDP LOAD SUMMARY

EXISTING MAX DEMAND (KVA) * :	12.78	
ITEM	DEMAND LOAD (KVA)	
	ADDED	REMOVED
Additional 25% per NEC 220	3.19	0.00
Panel A	52.00	-5.00
SUBTOTALS:	*55.19*	*-5.00*
NEW SERVICE TOTAL:	62.97 KVA 174.9 AMPS @ 208V, 3 PH	
NEW SERVICE CAPACITY:	400 AMPS	

** Maximum demand over last 12 months, per serving utility.*

PANEL A

Location: **Volts:** 120/208 Wye **A.I.C. Rating:** 22K
Enclosure: Type 1 **Phases:** 3 **Mains Type:** MLO
Mounting: Recessed **Wires:** 4 **Mains Rating:** 400 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - OFFICE 100	20	1	540	720					1	20	REC - N DAYRM	2
3	REC - SOUTH DAYRM	20	1			900	360			1	20	REC - RRs	4
5	RTU	30	3					2703	360	1	20	REC - IT	6
7	--	--	--	2703	360					1	20	REC - IT	8
9	--	--	--			2703	48			1	20	CX IN IT	10
11	REC - EXTERIOR	20	1					360	1656	1	20	GARBAGE DISPOSER	12
13	REC - KITCH N COUNTER	20	1	3200	3200					1	20	REC - KITCH W COUNTER	14
15	REC - REFRIGERATOR	20	1			1300	480			1	20	TWH1	16
17	REC - GUARDIAN SYSTEM	20	1					180	180	1	20	REC - KITCH HOOD	18
19	REC- STOVE	20	1	50	542					1	20	DAY ROOM LIGHTS	20
21	REST ROOM LIGHTS AND...	20	1			280	2640			2	40	CP	22
23	ONE LINE NOTE 1	65	3					0	2640	--	--	--	24
25	--	--	--	0	0					1	20	Spare	26
27	--	--	--			0	0			1	20	Spare	28
29	ONE LINE NOTE 2	50	3					0	0	1	20	Spare	30
31	--	--	--	0	0					1	20	Spare	32
33	--	--	--			0	0			1	20	Spare	34
35	Spare	20	1					0	0	1	20	Spare	36
37	Spare	20	1	0	7551					3	200	B	38
39	Spare	20	1			0	8723			--	--	--	40
41	TVSS	20	1					0	6373	--	--	--	42
		Total Load:		18487 VA		17245 VA		14233 VA					
		Total Amps:		158 A		148 A		119 A					

Load Classification	Connected Load	Demand Factor	Demand	Panel Totals	
Lighting	3355 VA	125.00%	4194 VA		
Motor	28343 VA	111.43%	31583 VA	Total Conn. Load:	49864 VA
Other	120 VA	100.00%	120 VA	Total Est. Demand:	52651 VA
Receptacle	12556 VA	89.82%	11278 VA		
Refrigeration	6490 VA	100.00%	6490 VA		
Commercial Kitchen Equipment	50 VA	100.00%	50 VA		
				Total Conn.:	138 A
				Total Est. Demand:	146 A

PANEL B

Location: APPARATUS BAY 107 **Volts:** 120/208 Wye **A.I.C. Rating:** 22K
Enclosure: Type 1 **Phases:** 3 **Mains Type:** MLO
Mounting: Surface **Wires:** 4 **Mains Rating:** 200 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC- GEAR ROOMS	20	1	540	711					1	20	WX, MD	2
3	GEAR WASHER	15	3			961	4320			3	50	GEAR DRYER	4
5	--	--	--					961	4320	--	--	--	6
7	--	--	--	961	4320					--	--	--	8
9	DOOR OPENER NORTH	20	1			864	864			1	20	DOOR OPENER MIDDLE	10
11	DOOR OPENER SOUTH	20	1					864	120	1	20	CO MONITOR	12
13	TWH2	20	1	480	640					1	20	STORAGE LIGHTS	14
15	NORTH BAY LIGHTS	20	1			933	930			1	20	SOUTH BAY LIGHTS	16
17	EXTERIOR LIGHTS	20	1					120	0	1	20	Spare	18
19	Spare	20	1	0	0					1	20	Spare	20
21	Spare	20	1			0	0			1	20	Spare	22
23	Spare	20	1					0	0	1	20	Spare	24
25	Spare	20	1	0	0					1	20	Spare	26
27	Spare	20	1			0	0			1	20	Spare	28
29	Spare	20	1					0	0	1	20	Spare	30
31	Spare	20	1	0	0					1	20	Spare	32
33	Spare	20	1			0	0			1	20	Spare	34
35	Spare	20	1					0	0	1	20	Spare	36
37	Space	--	--	0	0					--	--	Space	38
39	Space	--	--			0	0			--	--	Space	40
41	Space	--	--					0	0	--	--	Space	42
		Total Load:		7551 VA		8723 VA		6373 VA					
		Total Amps:		64 A		74 A		53 A					

Load Classification	Connected Load	Demand Factor	Demand	Panel Totals	
Lighting	2623 VA	125.00%	3279 VA		
Motor	19610 VA	116.52%	22850 VA	Total Conn. Load:	22634 VA
Other	120 VA	100.00%	120 VA	Total Est. Demand:	26474 VA
Receptacle	540 VA	100.00%	540 VA		
Refrigeration	15 VA	100.00%	15 VA		
				Total Conn.:	63 A
				Total Est. Demand:	73 A

RODAHL & HUMMELL ARCHITECTURE, P.C.
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SEAN BROPHY NEW MEXICO 26141 PROFESSIONAL ENGINEER

04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

ELECTRICAL RISER

Filename:
Project: 20.10
Sheet: E501
Of:

Drawn: NB | Checked: SB | Date: 04-13-2020

EQUIPMENT CONNECTION SCHEDULE

NOTES: 1. Confirm neutral conductor requirements with equipment installer prior to installing branch circuits. 2. All VFDs are provided by mechanical contractor and installed by electrical contractor, but VFD startup and programming must be by VFD factory authorized representative. 3. Route power to rooftop units within building. If field conditions make exposed rooftop conduit necessary, submit RFI for revised conductor sizes.

UNIT	DESCRIPTION	ELECTRICAL	HP	FLA	MCA	CB AT PANEL	DISC. AT UNIT	PANEL	CIRCUIT #	CONDUCTORS/CONDUIT	NOTES
CO	CARBON MONOXIDE/NITROGEN DIOXIDE DETECTOR	120 V/1-120 VA				15 A	STO	B	12	(2#12 & 1#12G)3/4"C	
CP	AIR COMPRESSOR	208 V/2-5280 VA		25.38		40 A	CORD AND PLUG	A	22,24	(2#8 & 1#10G) 1"C	
CX	CEILING EXHAUSTER	120 V/1-48 VA				20 A	STO	A		(2#12 & 1#12G)3/4"C	
GDO	GARAGE DOOR OPENER, 1/3HP	120 V/1-864 VA				20 A	STO	B		(2#12 & 1#12G)3/4"C	
GDR	GEAR DRYER	208 V/3-12960 VA			36	50 A	60A / NF/ BY EC	B	4,6,8	(3#8 & 1#10G)1"C	
GWS	GEAR WASHER	208 V/3-2882 VA		8		15 A	30A / NF / BY EC	B	3,5,7	(2#12 & 1#12G)3/4"C	
MD	MECHANICAL DAMPER	120 V/1-15 VA				20 A	STO	B	2	(2#12 & 1#12G)3/4"C	
RTU	ROOFTOP UNIT	208 V/3-8109 VA		22.5	24	30 A	WITH UNIT	A	5,7,9	(3#10 & 1#10G) 3/4"C	
TWH1	TANKLESS WATER HEATER	120 V/1-480 VA				20 A	STO	A	16	(2#12 & 1#12G)3/4"C	
TWH2	TANKLESS WATER HEATER	120 V/1-480 VA				20 A	STO	B	13	(2#12 & 1#12G)3/4"C	
WX	WALL EXHAUSTER	120 V/1-696 VA	0.25		5.8	20 A	STO	B	2	(2#12 & 1#12G)3/4"C	

LIGHTING FIXTURE SCHEDULE

NOTES: 1. Unless otherwise noted, all interior fixtures shall be 35K CCT, all exterior 30K. Interior fixtures shall have minimum 80 CRI, unless higher CRI noted below. 2. All heights shown are to bottom of fixture. 3. Proposed substitutions must be APPROVED PRIOR TO BIDDING, meet all requirements listed here, and have IES files available. See specification section for detailed substitution requirements.

TYPE	DESCRIPTION	MOUNTING	HEIGHT	MAKE	MODEL	LAMP	WATTS	BATTERY	LUMENS	OPTIC	CRI	NOTES
A	ASSYMETRIC UP/DOWN WALL FIXTURE, DIMMABLE	WALL	8' AFF	FINELITE	S17-LED	LED	37	NONE	2,500	ASSYMETRIC	MIN 80	
D	DOOR EXIT SIGNAL LIGHT	WALL	6' AFF	LIGHTING SPECIALTIES	SG20-12RG-LED	LED	10	NONE	2,500	N/A	N/A	SEE PLAN KEYNOTES FOR CONTROL
E	EXIT SIGN	UNIVERSAL				LED	3		N/A	N/A	N/A	
EXL	EXIT SIGN WITH LIGHTS	UNIVERSAL				LED	3		N/A	N/A	N/A	
H	HIGH BAY, WIDE DISTRIBUTION, WITH INTEGRAL OCCUPANCY SENSOR	SUSPENDED	17' AFF	COLUMBIA	LLHV4	LED	155	NONE	16,000	WIDE	MIN 80	
HE	HIGH BAY, WIDE DISTRIBUTION, WITH INTEGRAL OCCUPANCY SENSOR AND EM BATTERY	SUSPENDED	17' AFF	COLUMBIA	LLHV4	LED	155	INTEGRAL	16,000	WIDE	MIN 80	UNSWITCHED
L	4' LINEAR LENSED	SURFACE	CEILING	COLUMBIA	LCL4-40LW-EU	LED	25	NONE	2,500	DIFFUSE	MIN 80	
R	RELOCATED TROFFER, 2'X4'	RECESSED-GRID	CEILING			T8	64	NONE	4,787	WIDE	0	
SI	SQUARE LIGHT, INDOOR WET LOCATION, NO PHOTOCELL	SURFACE	CEILING	KENALL	MS11FL	LED	22	NONE	1,350	DIFFUSE	MIN 80	
T2	TROFFER, 2'X2'	RECESSED-GRID	CEILING	COLUMBIA	LCAT22-40MWG-EU	LED	22	NONE	2,200	WIDE	MIN 80	
T4	TROFFER, 2'X4'	RECESSED-GRID	CEILING	COLUMBIA	LCAT24-40MLG-EDU	LED	40	NONE	4,787	WIDE	MIN 80	
W4	WALLPACK WITH PHOTOCELL	WALL	ABOVE DOOR	LITHONIA	OLW-31	LED	45	NONE	3,970	-	N/A	OWNER STANDARD FIXTURE, NO SUBSTITUTIONS
WE	WALLPACK WITH PHOTOCELL WITH EM BATTERY PACK	WALL	ABOVE DOOR	LITHONIA	WDGE1 LED	LED	15	INTEGRAL	2,000	FORWARD THROW	MIN 80	

LIGHTING CONTROL SCENARIO SCHEDULE

NOTES: 1. All lighting control devices shall be sourced from same manufacturer. See specifications for approved manufacturers. 2. For rooms with occupancy or daylight sensing, sensor locations and quantities shown should be considered approximate. Contractor is responsible for adjusting quantity and locations according to the selected manufacturer's recommendations for complete coverage of room.

LC	DESCRIPTION	APPLIES TO	OCCUPANCY SENSING	SENSOR COVERAGE	CONTROL ZONES	MANUAL DIMMING	MANUAL SWITCHING	SCENE SELECTOR	SCHEDULED ON/OFF	DAYLIGHT SENSING
LC.01	CONTROL BY LOCAL DEVICES ONLY. PROVIDE DIMMERS AND ON/OFF SWITCH AT LOCATIONS INDICATED ON PLANS. SENSOR CONTROL SHALL BE MANUAL ON / AUTO OFF.	DAY ROOM, KITCHEN	Yes	MINOR MOTION	4	Yes	Yes	No	No	No
LC.02	CONTROL BY LOCAL DEVICES ONLY. PROVIDE WALLBOX OCCUPANCY SENSOR WITH INTEGRAL MANUAL DIMMING (OR HIGH CORNER MOUNT SENSOR WITH SEPERATE DIMMER). SENSOR CONTROL SHALL BE MANUAL ON / AUTO OFF.	RESTROOMS, OFFICES, STORAGE	Yes	MINOR MOTION	1	No	Yes	No	No	No
LC.07	CONTROL BY LOCAL DEVICES ONLY. CONTROL SHALL BE MANUAL ON / OFF.	MECHANICAL, I.T. ROOM	No		1	No	Yes	No	No	No

GENERAL ELECTRICAL NOTES

1. PRODUCT SUBSTITUTIONS: ALL PROPOSED PRODUCT SUBSTITUTIONS MUST BE SUBMITTED FOR APPROVAL PRIOR TO BIDDING. REFER TO DIVISION 1 SPECIFICATIONS FOR SUBSTITUTION REQUEST DEADLINE. REFER TO THE APPROPRIATE DIVISION 26 SPECIFICATION SECTION FOR DETAILED REQUIREMENTS FOR EACH TYPE OF PRODUCT. SUBSTITUTION REVIEWS WILL BE ISSUED IN ADDENDA TO ALL BIDDERS, NO LATER THAN FINAL ADDENDUM BEFORE BID DUE DATE.

2. DIVISION 26 SCOPE: ALL LINE VOLTAGE WIRING AND CONDUIT SYSTEMS REQUIRED BY ANY DIVISION SHALL BE THE RESPONSIBILITY OF THE DIVISION 26 CONTRACTOR. EVERY ATTEMPT WILL BE MADE TO REFLECT THESE REQUIREMENTS ON THE ELECTRICAL SHEETS, BUT IT IS THE DIVISION 26 CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE DRAWING SET, FAMILIARIZE HIMSELF WITH THE COMPLETE PROJECT SCOPE, AND COORDINATE WITH OTHER DIVISIONS.

3. EXISTING CONDITIONS: THE CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK, FULLY INFORM HIMSELF AS TO ALL EXISTING CONDITIONS, DIMENSIONS AND LIMITATIONS BEFORE STARTING WORK. IF DISCREPANCIES ARE FOUND BETWEEN EXISTING CONDITIONS AND CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ENGINEER FOR DIRECTION BEFORE PROCEEDING.

4. SURFACE REPAIR: COORDINATE WITH GENERAL CONTRACTOR FOR REPAIR OF ADJACENT CONSTRUCTION AND FINISHES DAMAGED OR EXPOSED DURING DEMOLITION WORK. REPAIRS SHALL MATCH EXISTING FINISHES, AND INCLUDE PAINT ON ENTIRE WALL WHERE REQUIRED TO MATCH COLOR.

5. CODES: PERFORM ALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER IN FULL COMPLIANCE WITH ALL APPLICABLE, ADOPTED CODES: INCLUDING, BUT NOT LIMITED TO: THE NATIONAL ELECTRICAL CODE (NEC), UBC, IBC, NFPA, AND ADA. IF ANY IF DISCREPANCIES ARE FOUND BETWEEN CONTRACT DOCUMENTS AND ANY ASSOCIATED LEGAL OR SAFETY REQUIREMENTS, CONTRACTOR SHALL SUBMIT RFI TO ENGINEER FOR DIRECTION BEFORE PROCEEDING.

6. UTILITY COORDINATION: WHEN INSTALLING OR MODIFYING SERVICE OR METERING EQUIPMENT, COORDINATE WITH UTILITY COMPANY TO ENSURE THAT THEIR STANDARDS ARE BEING MET. IF ANY DISCREPANCY IS FOUND BETWEEN UTILITY STANDARDS AND CONTRACT DOCUMENTS, SUBMIT RFI TO ENGINEER FOR DIRECTION.

7. STRUCTURAL PENETRATIONS: OBTAIN PERMISSION FROM STRUCTURAL ENGINEER BEFORE DRILLING OR CUTTING STRUCTURAL MEMBERS.

8. EXACT LOCATIONS: WHERE DEVICES ARE SHOWN IN CASEWORK, COORDINATE EXACT LOCATIONS WITH ARCHITECTURAL CASEWORK DETAILS PRIOR TO ROUGH-IN. VERIFY FINAL LOCATIONS OF ALL SINKS WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN OF NEARBY ELECTRICAL DEVICES. COORDINATE THE EXACT LOCATION OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS WITH OTHER TRADES PRIOR TO ROUGH IN. THE OWNER RESERVES THE RIGHT TO RELOCATE ANY ELECTRICAL DEVICE UP TO A DISTANCE OF 12", PRIOR TO INSTALLATION, WITHOUT ADDITIONAL CHARGE.

9. GROUNDING CONDUCTORS: INSTALL WIRE-TYPE EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS. CONDUIT OR CABLE SHEATH IS NOT ALLOWED TO BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR, UNLESS EXPLICITLY CALLED FOR OR ALLOWED IN A PARTICULAR LOCATION ON CONSTRUCTION DRAWINGS.

10. GROUNDING CONNECTIONS: ALL GROUNDING AND BONDING CONNECTORS SHALL BE UL LISTED FOR THE APPLICATION AND ENVIRONMENT IN WHICH THEY ARE USED, AND FOR SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS CONNECTED.

11. GROUNDING OF POLES: IF THE POLE STRUCTURE IS SUPPLIED BY ONLY A SINGLE BRANCH CIRCUIT, A SEPARATE GROUNDING ELECTRODE (ROD) IS NOT REQUIRED. BOND THE EQUIPMENT GROUNDING CONDUCTOR OF THE SUPPLY CIRCUIT TO POLE BASE REBAR AND EXPOSED METALLIC POLE COMPONENTS. IF THE POLE STRUCTURE IS SUPPLIED BY MULTIPLE BRANCH CIRCUITS, INSTALL AN 8 FT GROUND ROD AT THE POLE, AND BOND TO POLE BASE REBAR, EXPOSED METALLIC POLE COMPONENTS, AND EQUIPMENT GROUNDING CONDUCTORS OF ALL SUPPLY CIRCUITS.

12. GROUNDING OF FENCES: FENCES ENCLOSING TRANSFORMERS, GENERATORS, OR SOLAR/WIND GENERATION EQUIPMENT SHALL BE BONDED TO THE GROUNDING ELECTRODE(S) ASSOCIATED WITH THE EQUIPMENT.

13. PANEL SCHEDULES: PROVIDE TYPED SCHEDULES FOR ALL PANELS, CONTAINING ALL NEW CIRCUITING AS INSTALLED, AND ALL EXISTING CIRCUIT INFORMATION AVAILABLE TO CONTRACTOR. PRINTING SCHEDULES FROM THE DRAWING SET IS NOT ACCEPTABLE; RE-ATTACHING OLD SCHEDULES FROM REPLACED PANELS IS NOT ACCEPTABLE.

14. NEUTRAL CONDUCTORS: PROVIDE DEDICATED NEUTRAL CONDUCTORS FOR ALL CIRCUITS, OF SAME SIZE AS PHASE CONDUCTOR(S). SHARED NEUTRALS ARE NOT ACCEPTABLE WITHOUT SPECIFIC WRITTEN PERMISSION FROM ENGINEER.

15. ROMEX: FLEXIBLE NONMETALLIC CABLE (ROMEX) IS NOT ACCEPTABLE IN ANY LOCATION WITHOUT SPECIFIC WRITTEN PERMISSION FROM ENGINEER.

16. MC CABLE: FLEXIBLE METALLIC CABLE (MC) IS ACCEPTABLE ONLY IN CONCEALED LOCATIONS, AND ONLY FOR CIRCUITS 20 AMPS OR LESS. SEE SPECIFICATIONS FOR DETAILED INSTALLATION REQUIREMENTS.

17. CRAWL SPACES: CRAWL SPACES ARE CONSIDERED WET LOCATIONS. CONDUIT MUST BE PVC OR RMC, AND ANY MC CABLE MUST BE PVC JACKETED.

GENERAL DEMOLITION NOTES

1. UNEXPECTED CONDITIONS: IF CONCEALED CONDITIONS ARE UNCOVERED THAT ARE AT VARIANCE WITH CONDITIONS SHOWN IN THE CONTRACT DOCUMENTS, OR OF AN UNUSUAL NATURE NOT ORDINARILY ENCOUNTERED IN WORK OF THIS KIND, CONTRACTOR SHALL INFORM THE ENGINEER FOR DIRECTION BEFORE PROCEEDING. NO CLAIM FOR ADDITIONAL COST OR TIME EXTENSION WILL BE ALLOWED WITHOUT PROPER NOTICE, PRIOR DETERMINATION OF COST OR TIME, AND EXPENSE TO THE OWNER.

2. DEMOLITION SCOPE: THE DEMOLITION PLAN SHALL BE USED AS A SCHEMATIC GUIDE. IF ADDITIONAL DEMOLITION WORK OR INCREASED COST IS REQUIRED TO COMPLETE THE NEW CONSTRUCTION / REMODELING AS INDICATED ON THE DRAWINGS, CONTRACTOR SHALL INFORM THE ENGINEER FOR DIRECTION BEFORE PROCEEDING.

3. SURFACE REPAIR: WHERE DIRECTED TO REMOVE EXISTING EQUIPMENT / DEVICES FROM AN ARCHITECTURAL SURFACE THAT IS TO REMAIN, CONTRACTOR IS RESPONSIBLE FOR ASSOCIATED REPAIR, PATCHING, AND PAINTING OF SURFACE TO MATCH EXISTING.

4. CONTRACTOR CAUSED DAMAGE: DAMAGE ON THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR OR A PARTY TO THE CONTRACTOR DURING THE DEMOLITION OR CONSTRUCTION PHASE SHALL BE REPAIRED PRIOR TO CONTRACT DATE OF SUBSTANTIAL COMPLETION AT NO ADDITIONAL EXPENSE TO THE OWNER.

5. REMOVED MATERIALS: UNLESS OTHERWISE NOTED IN DRAWINGS, ALL EXISTING REMOVED EQUIPMENT SHALL BE STOCKPILED AT THE SITE AT AN OWNER APPROVED LOCATION UNTIL AN INSPECTION BY THE OWNER'S REPRESENTATIVE DETERMINES WHAT WILL BE SALVAGED. ALL EQUIPMENT NOT SALVAGED SHALL BE HAULED OFF THE SITE BY THE CONTRACTOR.

6. MATERIALS TO BE REUSED: VERIFY THAT ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUCTORS, OR CONDUIT TO BE RELOCATED OR RECONNECTED ARE IN WORKING ORDER PRIOR TO ANY DEMOLITION WORK. IF THE EXISTING MATERIAL IS FOUND TO BE DEFICIENT, OR APPEARS TO BE AN INAPPROPRIATE SIZE OR TYPE, CONTRACTOR SHALL INFORM THE ENGINEER FOR DIRECTION BEFORE PROCEEDING.

ELECTRICAL SYMBOLS LEGEND

LIGHTING

- RECTANGULAR FIXTURE, CEILING MOUNTED (DIMENSIONS AS SHOWN)
- ROUND FIXTURE, CEILING MOUNTED (DIMENSIONS AS SHOWN)
- TRACK LIGHTING (LENGTH AS SHOWN, HEADS NOT TO SCALE)
- POLE MOUNTED FIXTURE (HEADS NOT TO SCALE)
- ARM SYMBOL ADDITION INDICATES WALL MOUNTING
- DOT SYMBOL ADDITION INDICATES PENDANT MOUNTING
- HALF FILLED SYMBOL INDICATES EMERGENCY VERSION
- EXIT SIGNS (FILL INDICATES NUMBER OF FACES)

WITH LIGHTS · WITH ARROW · DOUBLE FACE

NOTES:
1. LOWER CASE LETTERS AFTER A COMMA IN THE FIXTURE DESIGNATION INDICATE SWITCHING. FOR EXAMPLE, "A3, b" INDICATES A A3 FIXTURE CONTROLLED BY SWITCH b.
2. A FIXTURE DESIGNATION ENDING IN "-E" INDICATES AN EMERGENCY FIXTURE, EVEN WHERE THE FIXTURE SYMBOL MAY BE TOO SMALL TO SHOW A HALF-FILL CLEARLY.
3. DIMENSIONS AND MOUNTING HEIGHTS IN THE LIGHTING FIXTURE SCHEDULE SUPERCEDE INFORMATION IMPLIED BY THESE SYMBOLS. SYMBOLS ARE FOR GENERAL REFERENCE ONLY.

SWITCHING

- 20A, 1 POLE TOGGLE SWITCH
- 20A, 3-WAY TOGGLE SWITCH
- 20A, 4-WAY TOGGLE SWITCH
- 20A, 1 POLE KEY OPERATED SWITCH
- 20A, NETWORKED SWITCH
- DIMMER SWITCH
- PUSHBUTTON SWITCH
- TIME CLOCK SWITCH
- PHOTOSENSOR
- ROOM CONTROLLER (ABOVE CEILING)
- CEILING OCCUPANCY SENSOR (ARROWS INDICATE VIEW)
- WALL OCCUPANCY SENSOR (ARROWS INDICATE VIEW)

POWER OUTLETS

- SIMPLEX TYPE RECEPTACLE
- 20A, 120V, DUPLEX RECEPTACLE
- 20A, 120V, FOURPLEX RECEPTACLE
- 2P-4W RECEPTACLE (SEE PANEL SCHEDULE FOR DETAILS)
- 20A, 120V - GROUND FAULT PROTECTED (AT RECEPT. OR BREAKER, AS REQUIRED FOR ACCESSIBILITY)
- 20A, 120V - WEATHERPROOF IN USE COVER GROUND FAULT PROTECTED (AT RECEPT OR BREAKER, AS REQUIRED FOR ACCESSIBILITY)
- 20A, 120V, DUPLEX RECEPTACLE, ABOVE COUNTER
- SPECIAL RECEPTACLE
- CEILING MOUNTED DUPLEX RECEPTACLE, 20A, 120V
- FLOOR MOUNTED DUPLEX RECEPTACLE, 20A, 120V
- FLOOR MOUNTED FOURPLEX RECEPTACLE, 20A, 120V
- MULTI-GANG FLOOR BOX (P=1 GANG DUPLEX POWER, D1-4 = 1 GANG 1-4 DATA PORTS, H1=1 GANG MINI HDMI

FB2P1D2

NO. OF GANGS	1ST GANG	2ND GANG	ETC.
FB2	P1	D2	--

POWER DISTRIBUTION

- DISCONNECT SWITCH
- METER
- RELAY
- THERMOSTAT OUTLET BOX: SINGLE GANG BACK BOX, PLASTER RING (UNLESS OTHERWISE NOTED) 1/2" CONDUIT AND PULL CORD TO MECH UNIT.
- JUNCTION BOX, CEILING, WALL AND FLOOR MOUNTED, RESPECTIVELY
- BRANCH CIRCUIT PANEL BOARD, SEE SCHEDULE FOR MOUNTING
- PAD MOUNT TRANSFORMER
- WALL MOUNT TRANSFORMER
- SURGE PROTECTION DEVICE
- GROUND
- CONDUIT STUB-OUT

COMMUNICATIONS

- DATA OUTLET
- DATA OUTLET, ABOVE COUNTER
- ANALOG PHONE OUTLET
- ANALOG PHONE OUTLET, ABOVE COUNTER
- COMBINATION DATA & ANALOG PHONE OUTLET
- COMBINATION DATA & ANALOG PHONE OUTLET, ABOVE COUNTER
- SUBSCRIPT INDICATES QUANTITY OF PORTS (IF MORE THAN 1)
- CIRCLE INDICATES FLUSH MOUNTING IN CEILING
- BOX INDICATES FLUSH MOUNTING IN FLOOR
- WIRELESS ACCESS POINT
- MICROPHONE: CEILING, WALL AND FLOOR MOUNTED RESPECTIVELY
- SPEAKER: CEILING, WALL AND FLOOR MOUNTED RESPECTIVELY
- INTERCOM CONTROL SWITCH
- SECURITY SYSTEM INFRARED MOTION SENSOR
- SECURITY SYSTEM CAMERA

FIRE ALARM

- FIRE ALARM (FA) CONTROL PANEL
- FA ANNUNCIATOR
- FA ADA HORN/STROBE. V=VOICE/STROBE
- FA CEILING MOUNTED FA HORN/STROBE
- FA ADA STROBE
- FA CEILING MOUNTED FA STROBE
- FA FIRE ALARM PULL STATION
- FA FIRE/SMOKE DAMPER
- FA REMOTE INDICATOR
- FA FLOW SWITCH
- FA TAMPER SWITCH
- FA SMOKE DETECTOR
- FA HEAT DETECTOR
- FA DUCT SMOKE DETECTOR

DOOR CONTROLS

- REMOTE INTERFACE
- AUTOMATIC DOOR OPENER (A.D.A. OPENER)
- MAGNETIC DOOR HOLDER
- DOOR POSITION SWITCH
- ELECTRIC LOCK
- ELECTRIC STRIKE
- KEY PAD
- KEY CARD READER
- BUZZ-IN INTERCOM SYSTEM

NURSE CALL

- PULL CORD, WALL MOUNTED
- PULL CORD, CEILING MOUNTED
- CALL BUTTON
- INDICATOR LIGHT
- CONTROL STATION

ABBREVIATIONS

AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ARCH	ARCHITECTURAL
BC	BELOW COUNTER
C	CONDUIT
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
GC	GENERAL CONTRACTOR
GEC	GROUND ELECTRODE CONDUCTOR
GRC	GALVANIZED RIGID CONDUIT
GRD	GROUND
GFI	GROUND FAULT INTERRUPTER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
LA	LIGHTNING ARRESTOR
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRICAL FEEDER
OHP	OVERHEAD PRIMARY FEEDER
OHS	OVERHEAD SECONDARY FEEDER
PVC	POLYVINYL CHLORIDE
PLMBG	PLUMBING
PNL	PANEL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRICAL FEEDER
UGP	UNDERGROUND PRIMARY FEEDER
UPS	UNINTERRUPTABLE POWER SUPPLY
WP	WEATHERPROOF
XFMR	TRANSFORMER

LINETYPES

- SOLID BLACK INDICATES NEW DEVICE
- GRAY INDICATES EXISTING DEVICE TO REMAIN
- DASHED INDICATES EXISTING DEVICE TO BE DEMOLISHED
- DASHED WITH "R" INDICATES EXISTING DEVICE TO BE RELOCATED

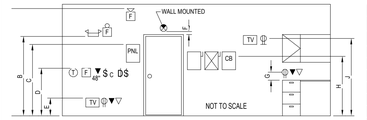
SITE PLAN

- UGP — UNDERGROUND ELECTRICAL PRIMARY FEEDER
- UGE — UNDERGROUND ELECTRICAL FEEDER
- UGC — UNDERGROUND COMMUNICATIONS
- OHE — OVERHEAD ELECTRICAL FEEDER
- OHP — OVERHEAD ELECTRICAL PRIMARY FEEDER
- TV — UNDERGROUND TELEVISION CABLE
- T — UNDERGROUND TELEPHONE CABLE

GENERAL NOTES

- 26.## — KEYED NOTE
- M.## — MECHANICAL EQUIPMENT IDENTIFICATION
- K.# — KITCHEN EQUIPMENT IDENTIFICATION
- LC.# — LIGHTING CONTROL SCENARIO IDENTIFICATION

MOUNTING



KEY	MOUNTING HEIGHTS
A	90" TO TOP AND NOT LESS THAN 6" BELOW FINISHED CEILING WHERE REQUIRED
B	80" TO BOTTOM AND NOT GREATER THAN 96" TO BOX / LUM.
C	6'-0"
D	48" TO TOP AFF
E	20" TO TOP AFF
F	3"
G	5"AC
H	5'-0" TO HANDLE
J	6'-6"MAX

NOTES:
1. VERIFY ALL MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO ROUGH-IN.
2. DIMENSIONS ARE TO TOP OF DEVICE WITH TRIM. ADJUST BACK BOX LOCATION AS REQUIRED.
3. ALL MOUNTING HEIGHTS SHALL CONFORM TO THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT. (ADA)

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SEAN BROPHY NEW MEXICO 26141 PROFESSIONAL ENGINEER

04-13-2020

LA PLATA FIRESTATION #2
SAN JUAN COUNTY

ELECTRICAL SCHEDULES AND NOTES

Drawn:	Checked:	Date:
NB	SB	04-13-2020

Filename:
Project: 20.10
Sheet: E601
Of: