FIRE PROTECTION

Building is not sprinklered; a 10,000 gallon water tank with a fire dept. connection is provided Standpipe not reg'd per sec 905 Fire alarm not req'd per 907.2.2 and 907.2.4 (occupancy load not great enough)

CONSTRUCTION CLASSIFICATION:

AREA/HEIGHT OF BUILDING:

Allowable height = 40' (IBC Table 503), actual 38' at top of pitch at highest point (tunnel) Number of stories - 2 allowed, actual: split level

Allowable area: 9,000 sf for B and F-2 Total area actual - 6713 sf

Area modification not required

OCCUPANCY SEPARATION (FIRE BARRIERS)

B separated from F-2 - 1 hour (IBC Table 508.4)

Max. size of a single opening - 120 sf (IBC 706.7), 90 min. label (715.2) Openings in fire barrier - max. aggregate width of 25% of wall (IBC 706.7) = 25% of 201 sf Allowed - 50 sf, Actual - 42 sf

All storage areas < 1,000 sf - no separation required (IBC Table 508.2.5)

Occupancy separation not required at

mech rooms <40,000 BTU, boiler <15 psi and <10 HP (Table 508.2.5)

FIRE RESISTANCE RATINGS/SEPARATIONS

For V-B (IBC table 602)

Structural frame, interior bearing walls, interior non-bearing walls and partitions, floor construction, roof construction - 0 rating

Exterior bearing walls - 0 hour

Exterior non-bearing walls - Group B and S-2 (IBC Table 602)

Fire separation distance <10' = 1 hour

Fire separation distance >= 10' = 0 hour

Wall/ceilings of all spaces/corridors/exitways - Class C (IBC 803.5)

Maximum area of exterior wall openings (IBC Table 704.8, IBC 704.8.1) all adjacent buildings >30' - no limit

TOTAL: 42 **OCCUPANT LOAD:** based on occupancies (Table 1004.1.1) - within building

Width of egress required - .2"/occupant x 42 occupants = 8.4" (IBC1005.1)

Doors cannot reduce required width to less than 1/2 (IBC 1005.2) Doors cannot project >7" into required width (IBC 1005.2)

Egress is continuous to public way (IBC 1007.2)

Number of exits required - 1 for <49 occupants (IBC 1015.1), Provided - 2

Exit signs not required in rooms which require only one exit (IBC 1011)

Corridor fire resistance rating - 1 hours (IBC Table 1018.1) Required corridor width - 44" (IBC 1018.2), Provided - 70"

Dead end corridor length - 20' (IBC 1018.4), Max. provided - 0'

Max. length egress travel 100' (IBC 1014.3 exception 1 for B and F), max. provided 78'-0" Max. length exit access travel 200' for B, 300' for F-2 (IBC 1016.1), max. provided 78'-0"

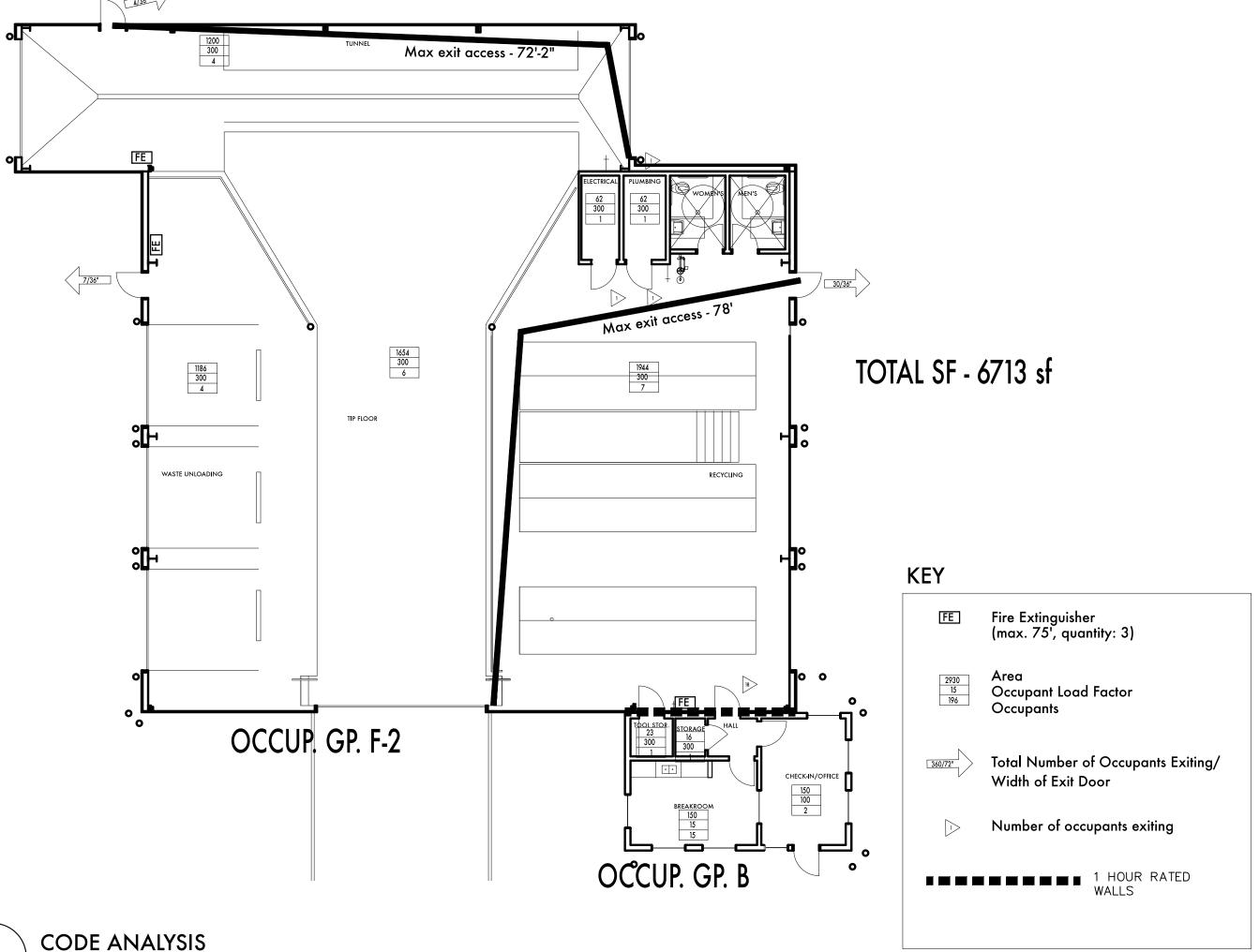
PLUMBING COUNTS:

Occupant load = 42 (21 male, 21 female)

Public Restrooms:	toilets men		women		lavs men		women	
Admin Area (B) 19 occupants: 10 men/10 women	1:25 =	.40	1:25 =	.40	1:40 =	.25	1:40 =	.25
Waste Collection (F-2) 23 occupants: 12 men/12 women	1:100 =	.12	1:100 =	.12	1:100 =	.12	1:100 =	.12
total required	.52 = 1		.52 = 1		.37 = 1		.37 = 1	
total provided	1		1		1		1	

DFs - 1:100 = 1 required, bottled water provided

1 service sink required, 1 sink provided in breakroom (IBC Chapter 29)



JACONA COLLECTION CENTER

SANTA FE COUNTY

GENERAL NOTES

- All references to the Building Code or Building Department shall be construed to mean the rules and regulations adopted by the State of New Mexico.
- 2. The Contractor shall visit the Project Site to familiarize himself with existing conditions and to verify all elevations, dimensions and conditions of existing building(s) and site. Discrepancies between the Contract Documents and the actual field conditions shall be reported to the Architect in writing for correction prior
- 3. It is the responsibility of the Contractor to secure the worksite to render it adequately protected at all times. The Contractor shall be responsible for damages resulting from failure to provide adequate protection.
- 4. The Contractor shall perform his work so that there is a minimum of disruption caused to those portions of the building(s) and site where there is no work taking place.
- 5. All construction refuse and debris shall be removed from the job site not less than once a week and shall be properly disposed of off the property.
- 6. Work for this project shall be carried out in accordance with State and Local Codes and requirements of any other agency having jurisdiction. In all cases the most restrictive requirements shall apply.
- 7. Where conflicts occur between the Contract Drawings, Specifications, Field Conditions and/or the Building Code the most stringent requirements shall apply, in the sole udament of the Architect.
- 8. Dimensions have preference over scale. Where dimensions conflict, the most restrictive shall apply.
- 9. All work shall be executed in accordance with the best accepted trade practices and per manufacturers'
- 10. The Contractor shall coordinate his work with all the Subcontractors. The work shall be coordinated in such a manner that any Subcontractor shall not delay or interfere with carrying forward the work of any other
- 11. Where pipes, wires, conduits, ducts, etc., pierce the Fire Protection of individually encased structural members or fire-rated walls and ceilings, such penetrations shall not exceed 2 % of the area of fire protection on any one face. The penetrations are to be closed off with close fitting metal escutcheons or plates and the concealed space shall be fire stopped in accordance with the requirements of the International Building Code, (2009 Edition).
- 12. The Contractor shall be solely responsible for delivery of materials and equipment to the Project Site.
- 13. After site work is laid out, it must be reviewed by the Architect prior to construction. 14. Blocking is required for all wall and ceiling mounted
- specialties and equipment. 15. The Contractor is responsible for ensuring that there
- 16. Positive Drainage away from the building is the responsibility of the Contractor

are no breaches in vapor barriers.

- 17. Sprinkler and alarm system shop drawings must be submitted to State Fire Marshal and Architect prior to
- 18. Paint all exposed fire protection, mechanical, ducts, pipes, conduit.
- 19. Slope all concrete sidewalks and all grades adjacent to building 1/4%/foot for positive drainage.

21. Contractor shall verify all field conditions and shop drawings

conduit and all site items.

- 20. Contractor shall be responsible for locating conduit/cable tray/sprinkler pipes such that adequate access to duct controls is
- and shall alert architect immediately to conflicts in the drawings. 22. Contractor shall remove all items associated with demolition, including but not limited to electrical and mechanical devices, outlets, switches, wiring,
- 23. It is the Contractor's responsibility to position ducts in relation to pipes/ceilings to maintain access to controls. 24. Provide 2% min. for surface runoff. All walkways 1:20 max. 25. If keyed notes are now shown, Contractor must find the reference on another sheet or submit a question during Bidding. All items keyed must be provided/installed.
- 26. Coordinate mechanical and electrical items in mechanical rooms. Conflicts must be brought to the attention of the architect prior to installation.
- 27. DO NOT SPLIT SETS; SOME SUB-CONTRACTOR ITEMS ARE SHOWN SOLELY ON ARCHITECTURAL SHEETS. ITEMS NOT SHOWN ON THE SHEET FOR A SPECIFIC SUB-CONTRACTOR DISCIPLINE ARE STILL THE RESPONSIBILITY OF THE SUB-CONTRACTOR.

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Door/Window Schedules, Types Door/Window Details Finish Schedule, Details

A7.0 HVAC Plan, Details, Equipment Schedule Sanitary Sewer Plan

Water Piping Plan P2.1 Symbol Legend, Details and Fixture Schedule

Mechanical Equipment Power Plan E2.1 Lighting Plan Special Systems Plan E3.1 Power Riser Diagrams, Fault Current Calcs, Grounding

Panel Schedules and Load Calcs IECC Lighting Calculations, Fixture Schedule and Legend

Electrical Specifications

NOTE

The Contractor shall obtain the ED permit and the well permit and shall prepare a SWPP Plan. The Contractor shall submit the ED Permit, well permit and SWPP Plan to County Land Use for review and approval prior to beginning any Work on the project.

PROJECT TEAM

Owner: SANTA FE COUNTY Contact: Joe Martinez 102 Grant Ave., Santa Fe, NM 87504 phone: 505.992.3014
Architect of Record: RISKIN ASSOCIATES ARCHITECTURE, INC. Contact: Marci Riskin 227 E. Palace Avenue, Suite C Santa Fe, NM 87501 phone: 505.983.0722
Structural Engineer LUCHINI TRUJILLO STRUCTURAL ENGINEERS

Contact: Eric Trujillo 1919 5th St., Santa Fe, NM 87505 phone: 505.424.3232

Mechanical/Plumbing/Electrical Engineering: TARLETON ENGINEERING Contact Mechanical: Larry Feight (505.263.2368) Contact Plumbing: Scott Haugland (505.264.7053) Contact Electrical: Chris Harling (505.263.6704) PO Box 2234 Taos, NM 87571

phone: see above Civil Engineering: WALKER ENGINEERING (Contact: Morey Walker) Contact: Morey Walker 905 Camino Sierra Vista

phone: 505-820-7990 fax: 505-820-3539

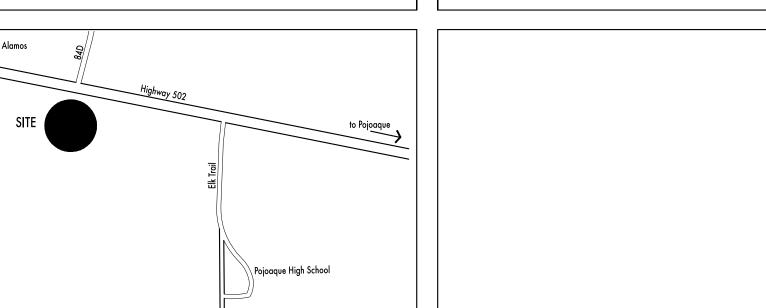
Santa Fe, NM 87501

ALTERNATES

VICINITY MAP

SITE ∖Pojoaque High School

SET NUMBER



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47 of 49

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49 of 49

227 E. Palace Avenue, Suite C Santa Fe, New Mexico 87501 tel 505.983.0722 fax 773.913.0722 www.riskinassociates.com

BID SET 2.3.16

CTION

Revisions

Marci L

Riskin

'ER SHEET : ANALYSIS

COVE

A0.0

1 of 49



A0.0 / 3/32" = 1'-0"

REFRENCE DOCUMENTS:

PLAT: ENTILED "PLAT OF SURVEY REQUESTED BY THE JACONA LAND GRANT ASSOCIATION", PREPARED BY PETER LUJAN, NMPS #7220, FILED IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 324, PAGE 010, AS DOCUMENT #930-348, ON JANUARY 15th, 1996.

BOUNDARY NOTES:

1. BASIS OF BEARINGS FOR THIS SURVEY PLAT WAS TAKEN FROM SANTA FE COUNTY CONTROL MONUMENTS SFC-17 (TIE REFERENCED HEREON).

2. ALL EXSITING FENCES HAVE BEEN EXCLUDED FROM THIS DRAWING EXCEPT FOR THE RIGHT OF WAY BARBED WIRE FENCE.

LEASE PARCEL - "The Cooperative Association of the Jacona Gant" and "County of Santa Fe"

A Parcel of land for Lease, lying within the Jacona Grant, projected Section 15, T.19 N., R.8 E., N.M.P.M., Santa Fe County, New Mexico and being more particularly described as follows:

Beginning at a point on the Northwest corner (POB) of the herein described lease parcel, being a No.4 rebar set (NMPS #11597), also being a point located on the westerly Jacona Grant line common to the easterly San Ildefonso Pueblo Grant line from which point a NMDOT right of way brass monument for NM State Road 502, stamped "STA.134+27.75, L.S.#5221", bears N.00deg.09'46"W. a distance of 101.97 feet; thence continuing along said common grant line, N.00deg.09'54"W, a distance of 1148,38 feet to a U.S.G.L.O brass monument, stamped "U.S.G.L.O., T.19N., R.8E., CC S10/S15, 1914";

Thence from said Northwest corner, point of beginning (POB), S.78deg.53'35"E., a distance of 837.87 feet to the Northeast lease parcel corner, being a No. 4 rebar set (NMPS #11597), from which corner a NMDOT right of way brass monument for NM State Road 502, stamped "STA.245+37.30, LS #5221", bears N.79deg.20'48"E., a distance of 269.74 feet, also from said Northeast lease parcel corner a GPS plastic control monument, stamped "Metes and Bounds", bears N.25deg.16'32"E., a distance of 291.74 feet; Thence from said Northeast lease corner S.27deg.38'24"E. a distance of 192.93 feet to an angle point on the said lease parcel, also being a No. 4 rebar set (NMPS #11597); Thence S.00deg.56'39"W., a distance of 675.36 feet to the Southeast lease parcel corner, being a No.4 rebar set (NMPS #11597), from which corner a Santa Fe County Control monument, SF-17, bears N.82deq.53'44"E., a distance of 4824.71 feet, also from said Southeast lease parcel corner a U.S.G.L.O. brass monument, stamped "U.S.G.L.O., T.19N., R.8E., JG, S14/S23, 1929" bears S.32deq.38'20"E., a distance of 4050.48 feet; Thence from said Southeast lease corner S.85deg.42'27"W. a distance of 900.02 feet to the southwest lease parcel corner, being a U.S.G.L.O. brass monument, stamped "U.S.G.L.O., T.19N, R.8E., SIPG, 1M/S15, 1914", also being a point on the grant line common to the Jacona Grant and the San Ildefonso Pueblo Grant, from which point another U.S.G.L.O. brass monument stamped "U.S.G.L.O., T.19N., R.8E., SIPG, ½ M, S15, 1914", bears S.00deg.10'33"E. a distance of 2632.26 feet; Thence from said Southwest lease corner N.00deg.09'46"W., along said common grant line, a distance of 1074.96 feet to the Northwest lease parcel corner, being the said point and place of beginning.

Said lease parcel described above contains: 855, 186.84 sq.ft. (19.6324 acres) more or less.

AFFIDAVIT:

KNOW ALL MEN, THAT THIS FOREGOING BOUNDARY SURVEY PLAT WAS PREPARED TO ONLY IDENTIFY THE LEASE PARCEL "A". AS SHOWN AND DELINEATED HEREON. THIS BOUNDARY SURVEY PLAT WAS PREPARED WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER(S), PROPRIETOR(S) & TRUSTEES, THEREOF; THIS BOUNDARY SURVEY PLAT WAS CREATED IN ORDER TO IDENTIFY THE PERIMETER OF LEASE PARCEL "A", PER DIRECTIONS OF THE OWNERSHIP INVOLVED, FOR PURPOSES OF SANTA FE COUNTY LEASING THE PARCEL SHOWN FROM THE COOPERATIVE ASSOCIATION OF THE JACONA GRANT, FOR FUTURE SITE DEVELOPMENT BY SANTA FE COUNTY. THE LEASE PARCEL SHOWN IS LYING AND BEING SITUATE WITHIN PROJECTED SECTION 15, TOWNSHIP 19 NORTH, RANGE 8 EAST, N.M.P.M., WITHIN THE JACONA GRANT, IN THE COUNTY OF SANTA FE, STATE OF NEW MEXICO. THE LEASE PARCEL AS SHOWN HEREON IS NOT AN EXISTING LEGAL PARCEL OF RECORD AND IS NOT HEREBY CREATED AS A SEPARATE LOT OF RECORD. THE SURVEY IS TO BE USED FOR IDENTIFICATION PURPOSES ONLY TO FACILITATE THE LEASE AGREEMENT. INGRESS AND EGRESS FROM NM STATE ROAD 502 WILL BE GRANTED ACROSS LANDS OWNED OR CONTROLLED BY THE COOPERATIVE ASSOCIATION OF THE JACONA GRANT WITHIN THE RECORDED LEASE AGREEMENT TO BE EXECUTED.

DATE APPROVED

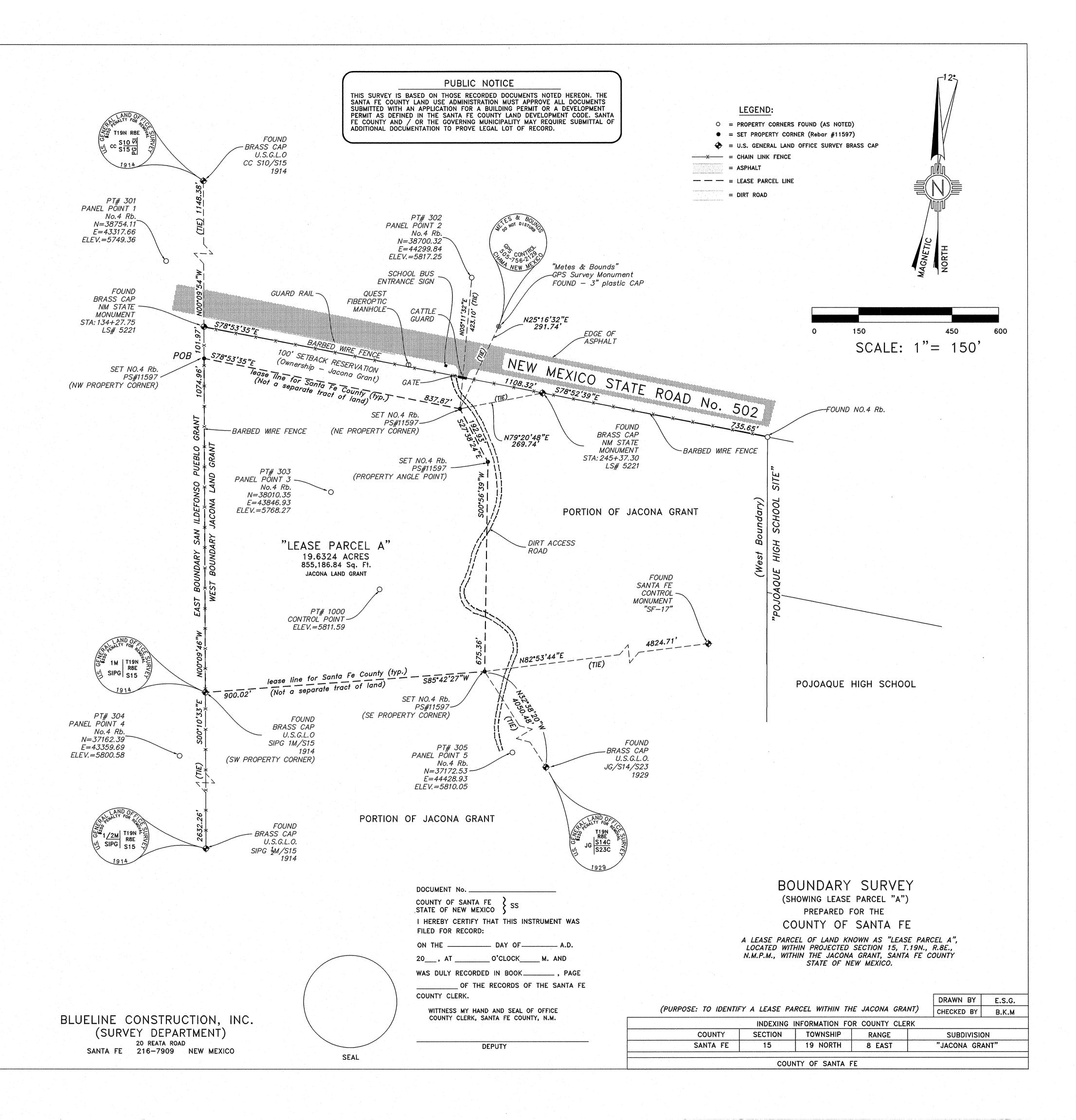
SURVEYOR'S CERTIFICATION

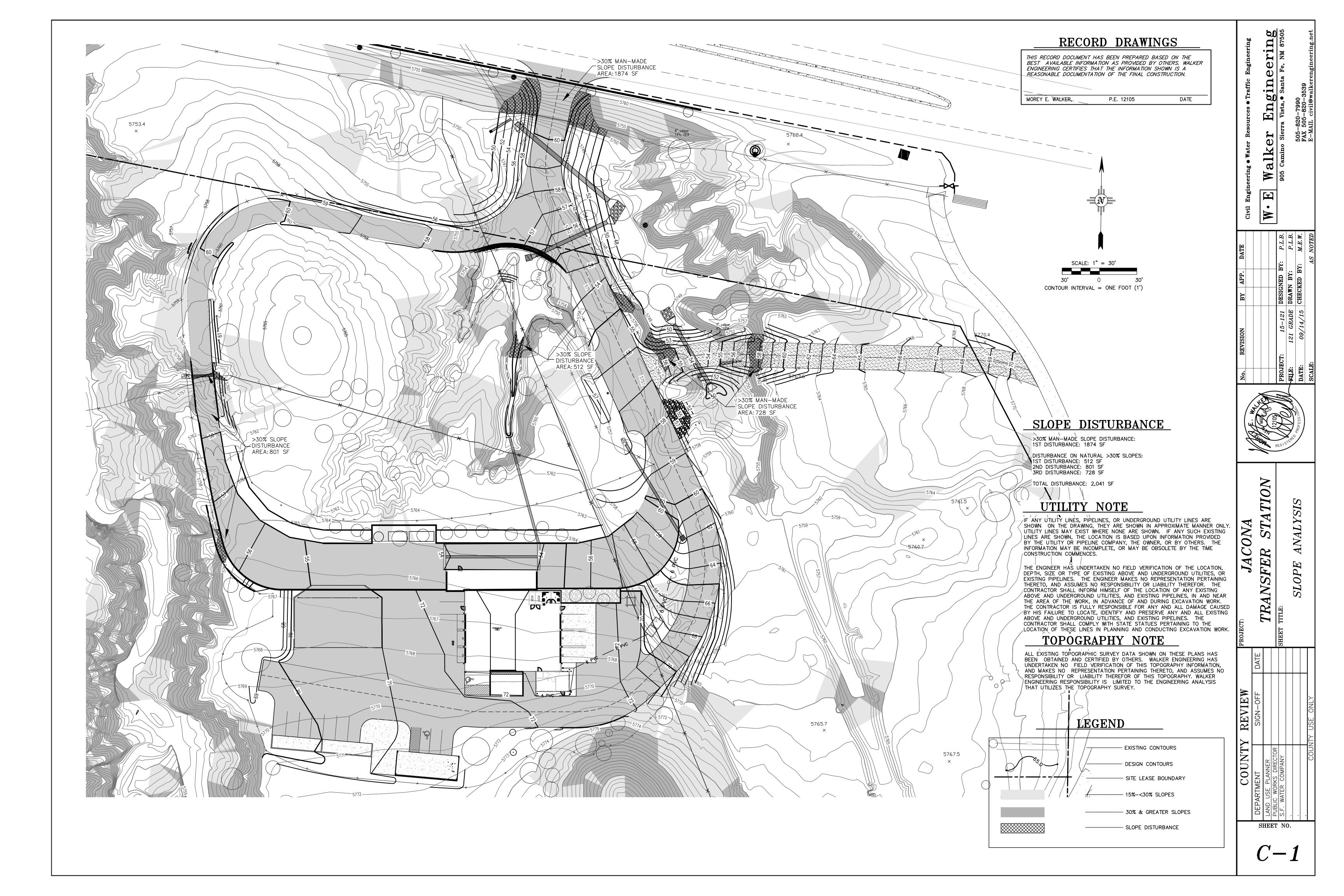
I, BRIAN K. McCLINTOCK, NEW MEXICO PROFESSIONAL SURVEYOR, HEREBY CERTIFY THAT THIS SURVEY PLAT WAS PREPARED FROM AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND OF A LEASE PARCEL ONLY, ON MAY 28th, 2014, BY ME OR UNDER MY DIRECT SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY PLAT AND THE FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN THE STATE OF NEW MEXICO, ALSO THIS SURVEY DOES NOT LEGALLY SEPARATE THE LEASE PARCEL INTO A LEGAL LOT OF RECORD, AND IS SHOWN FOR ORIENTATION PURPOSES ONLY.

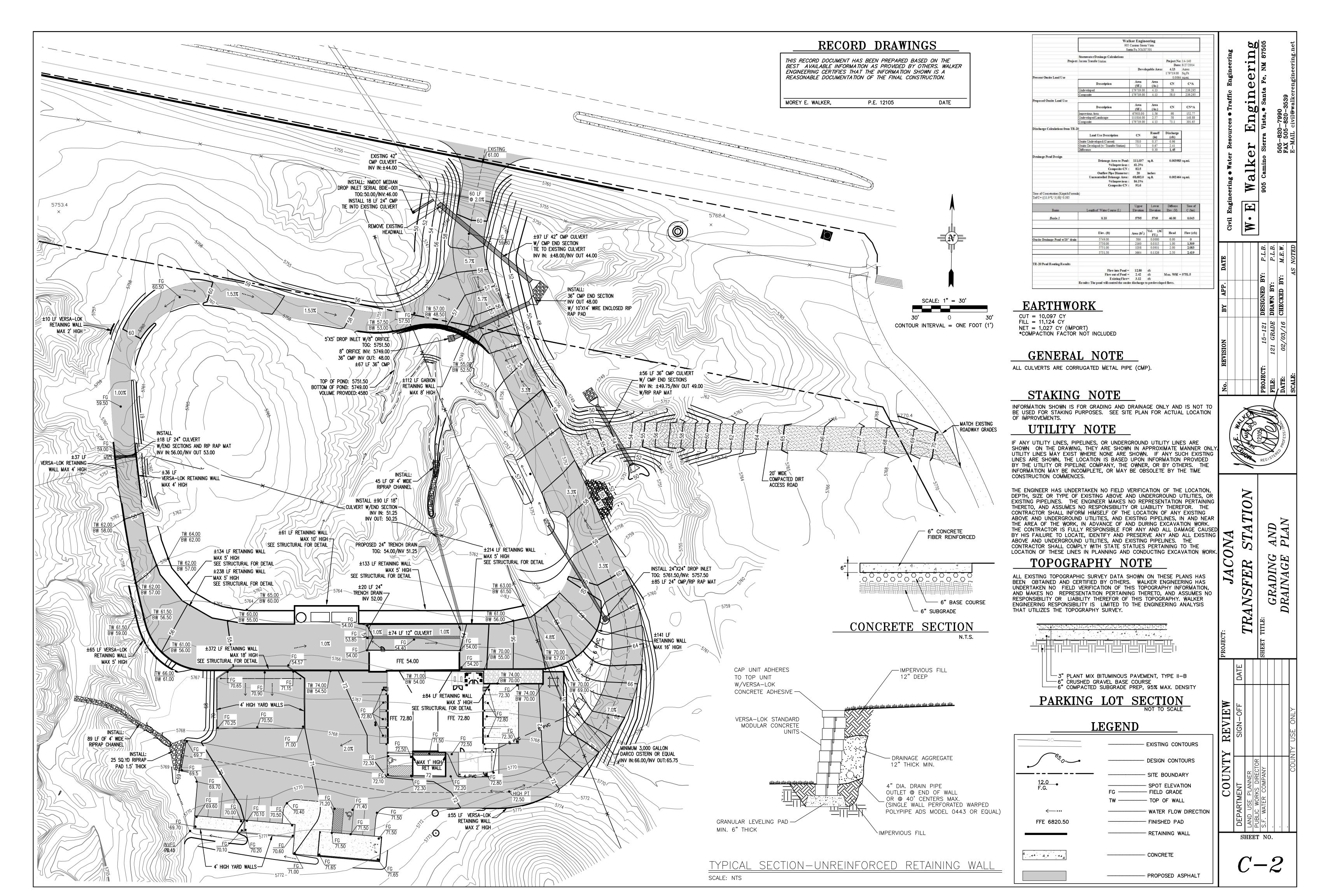
BRIAN K. McCLINTOCK N.M.P.S. No. 11597

5/29/2014

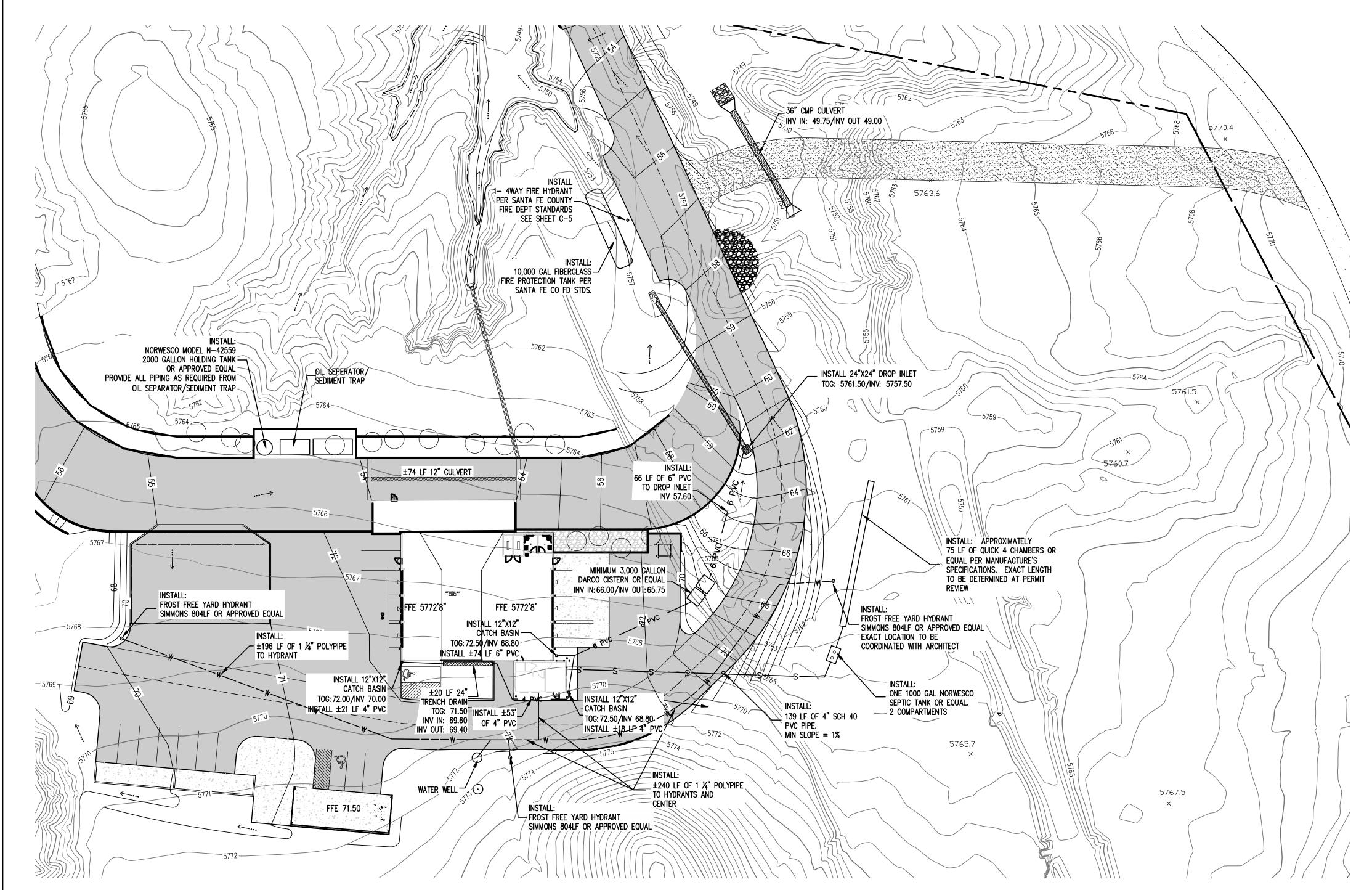








TRENCH DRAIN CROSS SECTION NEENAH R-4990-CX TYPE P GRATE OR EQUAL OR EQUAL OR EQUAL OR EQUAL TRENCH DRAIN LONGITUDINAL SECTION NTS NTS



RECORD DRAWINGS

THIS RECORD DOCUMENT HAS BEEN PREPARED BASED ON THE BEST AVAILABLE INFORMATION AS PROVIDED BY OTHERS. WALKER ENGINEERING CERTIFIES THAT THE INFORMATION SHOWN IS A REASONABLE DOCUMENTATION OF THE FINAL CONSTRUCTION.

MOREY E. WALKER, P.E. 12105 DATE

STAKING NOTE

INFORMATION SHOWN IS FOR GRADING AND DRAINAGE ONLY AND IS NOT TO BE USED FOR STAKING PURPOSES. SEE SITE PLAN FOR ACTUAL LOCATION OF IMPROVEMENTS.

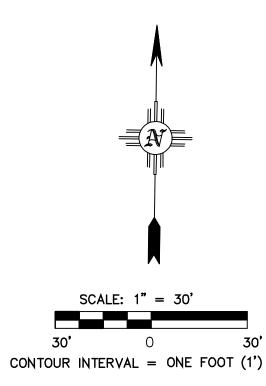
UTILITY NOTE

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWING, THEY ARE SHOWN IN APPROXIMATE MANNER ONLY. UTILITY LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS. THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.

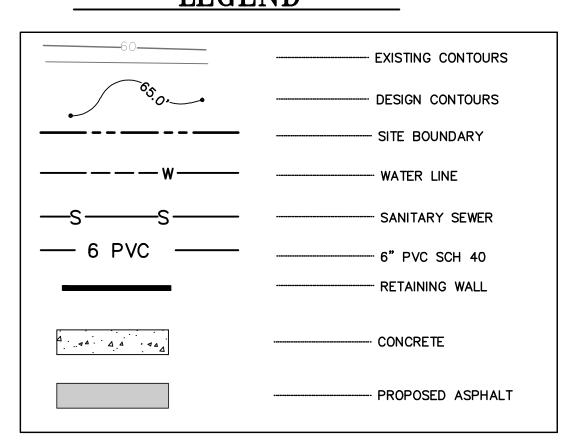
THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING ABOVE AND UNDERGROUND UTILITIES, OR EXISTING PIPELINES. THE ENGINEER MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM HIMSELF OF THE LOCATION OF ANY EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES, IN AND NEAR THE AREA OF THE WORK, IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUES PERTAINING TO THE LOCATION OF THESE LINES IN PLANNING AND CONDUCTING EXCAVATION WORK.

TOPOGRAPHY NOTE

ALL EXISTING TOPOGRAPHIC SURVEY DATA SHOWN ON THESE PLANS HAS BEEN OBTAINED AND CERTIFIED BY OTHERS. WALKER ENGINEERING HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS TOPOGRAPHY INFORMATION, AND MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR OF THIS TOPOGRAPHY. WALKER ENGINEERING RESPONSIBILITY IS LIMITED TO THE ENGINEERING ANALYSIS THAT UTILIZES THE TOPOGRAPHY SURVEY.



LEGEND



Civil Engineering • Water Resources • Traffic Engineering

W• E

Walker Engineering

905 Camino Sierra Vista, • Santa Fe, NM 87505

FAX 505-820-7990

FAX 505-820-3539



DATE

DATE

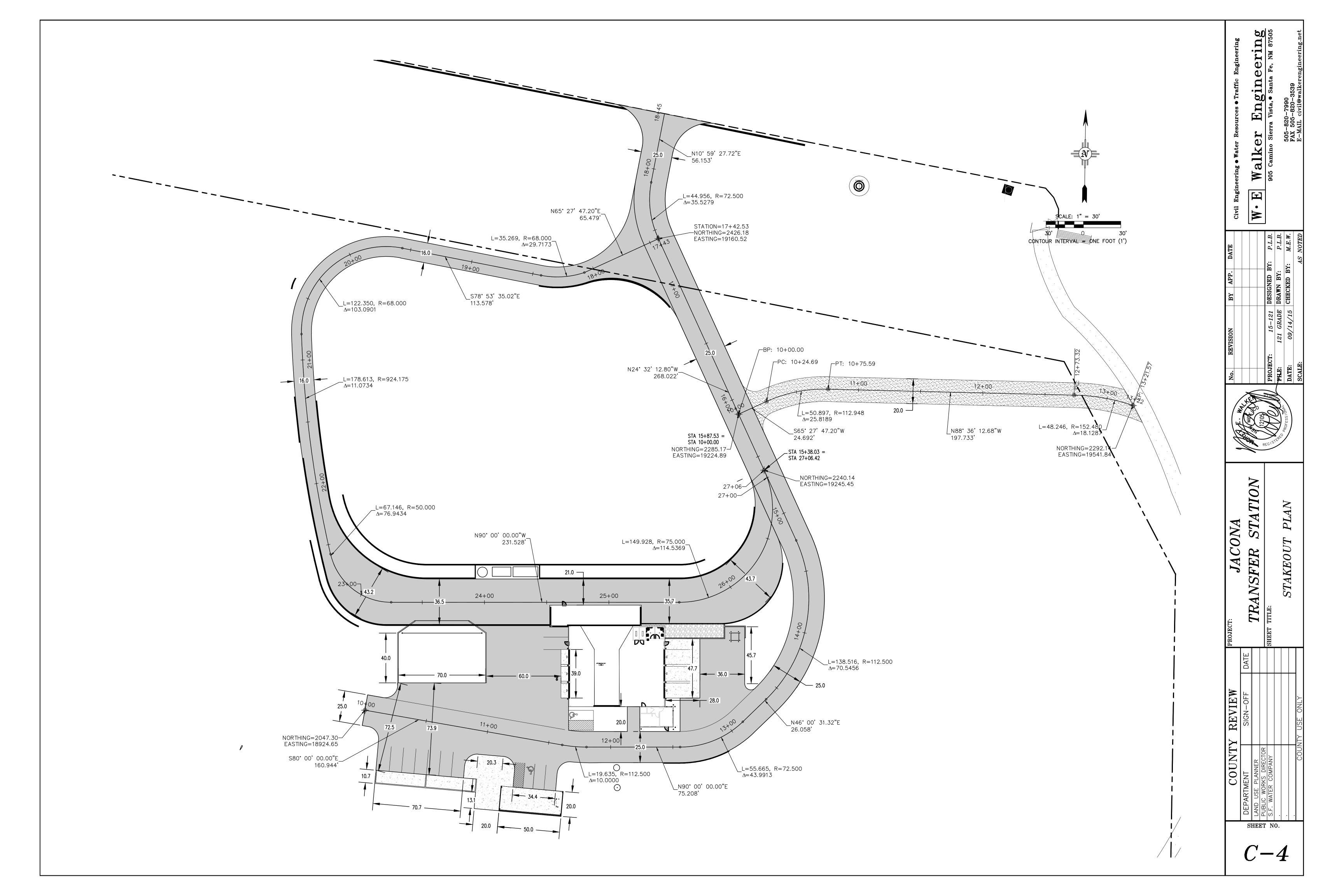
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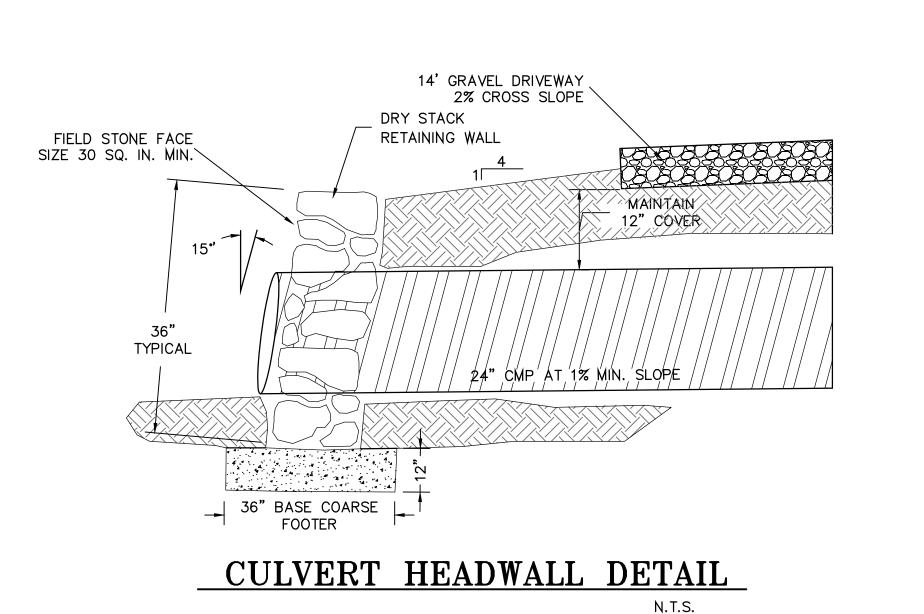
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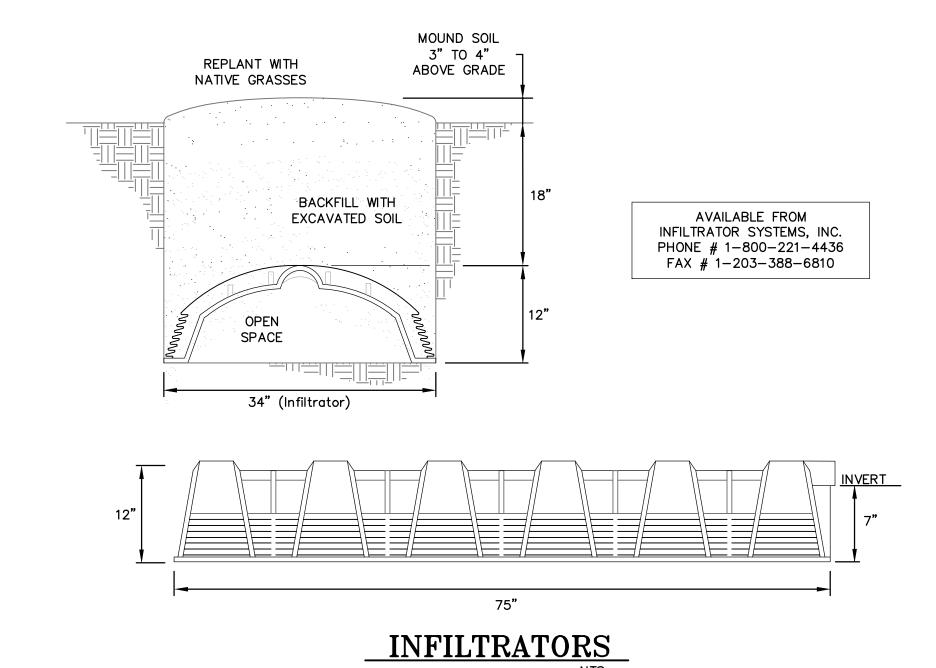
ONSITE

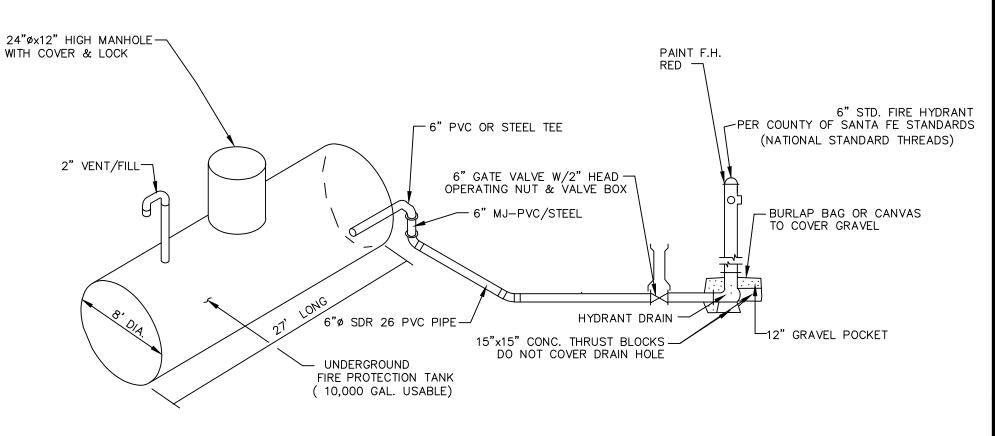
UITILITY PLAN

C-3



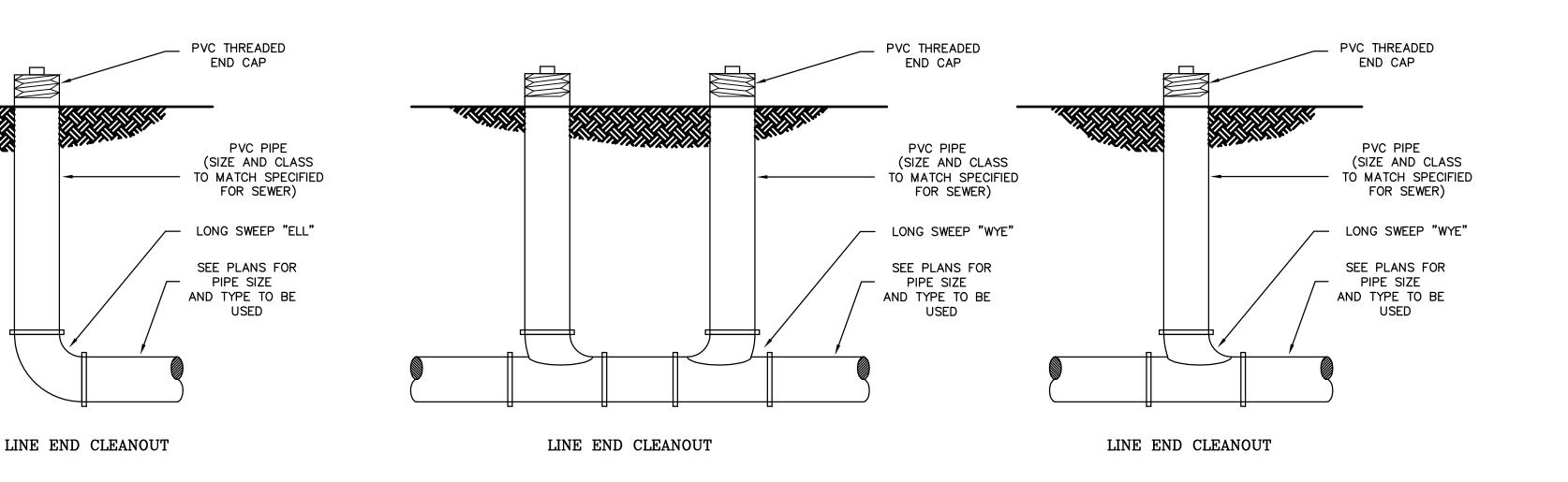






FIRE PROTECTION STORAGE TANK AND DRAFT DISCHARGE FIRE HYDRANT NO SCALE

GENERAL CONSTRUCTION NOTES



NOT TO SCALE

TYPICAL CLEANOUT DETAIL

PAVEMENT MATCHES

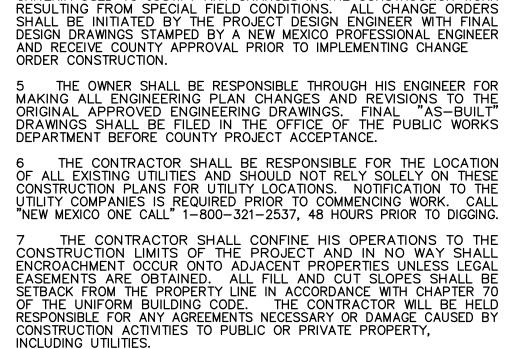
CONCRETE LANDING GRADE

→ 60" LANDING

__-

VAN ACCESSIBLE

NOT TO SCALE



1 STREET CONSTRUCTION WORK SHALL CONFORM WITH THE NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATION FOR HIGHWAY

AND BRIDGE CONSTRUCTION, 1994 EDITION. UTILITY CONSTRUCTION SHALL CONFORM TO THE AMERICAN PUBLIC WORKS ASSOCIATION,

PUBLIC WORKS CONSTRUCTION MANUAL, 1979 EDITION. ALL CONSTRUCTION SHALL CONFORM WITH COUNTY STANDARDS AND SPECIFICATIONS AS APPLICABLE.

THE CONTRACTOR SHALL NOT COMMENCE CONSTRUCTION WITHOUT CONSTRUCTION PLAN APPROVAL BY THE COUNTY ENGINEER.
A COPY OF THE APPROVED PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS.

THE CONTRACTOR SHALL NOTIFY THE OFFICE OF THE COUNTY

ENGINEER OF THE PROPOSED COMMENCEMENT OF CONSTRUCTION AT LEAST 24 HOURS PRIOR TO THE START UP. A PRE-CONSTRUCTION

CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION

THE COUNTY'S ENGINEER SHALL SUBMIT TO THE COUNTY SUBDIVISION ENGINEER THE APPROPRIATE WORKING DRAWINGS AND DESIGN CRITERIA USED TO JUSTIFY ANY CHANGES IN THE CONSTRUCTION WORK

RESPONSIBLE FOR ANY AGREEMENTS NECESSARY OR DAMAGE CAUSED BY INCLUDING UTILITIES. 8. THE COUNTY/CONTRACTOR SHALL MAINTAIN THE PROPER TRAFFIC CONTROL DEVICES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AS APPROVED BY THE

COUNTY ENGINEER. 9 ASTM OR AASHTO CERTIFICATES OF MATERIAL COMPLIANCE ARE TO BE SUBMITTED TO THE COUNTY ENGINEER. 10 THE CONTRACTOR SHALL IMPLEMENT THE NECESSARY SITE EROSION CONTROL MEASURES FOR INHIBITING DUST WIND AND AIR SEDIMENT MOVEMENT OFFSITE DURING ALL PHASES OR STAGES OF CONSTRUCTION SEE SECTION 211 OF THE NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

SURFACE COURSE REQUIRE COMPACTION TESTS FOR EACH 100 LINEAR FEET. 12 THE CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE TO THE SURROUNDING NEIGHBORHOOD. ALL DEBRIS SHALL BE CONTAINED IN SUCH A MANNER

SUBGRADE, BASE MATERIAL, ASPHALT TREATED BASE AND ASPHALT

THAT WILL PREVENT SCATTERING. ALL DEBRIS, INCLUDING TREES AND COUNTY UNDERGROWTH SHALL BE DISPOSED OF PROPERLY WITHIN THE LANDFILL. ALL DEBRIS SHALL BE REMOVED FROM THE SITE PRIOR TO FINAL SITE INSPECTION.

13 ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH, AT 28 DAYS OF 3,000 PSI. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH. AIR ENTRAINMENT, IN THE CONCRETE, SHALL BE BETWEEN 4 AND 7 PERCENT. 14 THREE CONCRETE CYLINDER SAMPLES ARE TO BE TAKEN FOR EACH 500 LINEAR FEET OR 50 CUBIC YARDS INSTALLED OR A MINIMUM OF ONE SAMPLE PER DAY WHICH EVER IS GREATER. CONCRETE CYLINDERS ARE TO BE TESTED AT 7, 28, AND 45 DAYS (IF NEEDED) INTERVALS WITH TEST RESULTS SUBMITTED DIRECTLY TO THE SUBDIVISION INSPECTOR.

A MINIMUM OF 12 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN UTILITY LINES.

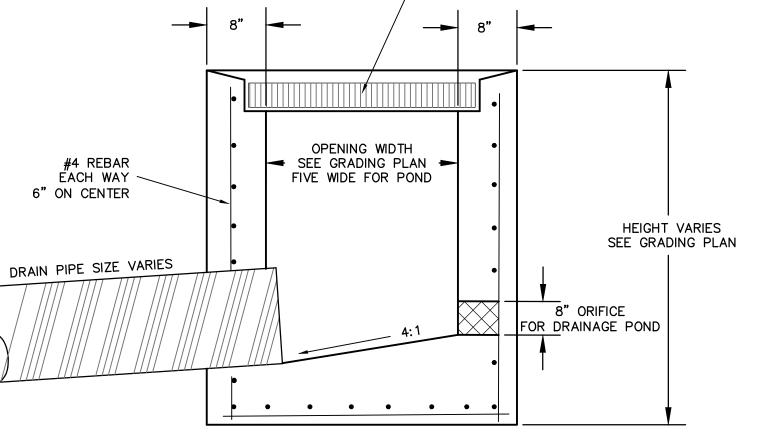
ALL UTILITY APPURTENANCES SUCH AS TELEPHONE PEDESTALS, ELECTRICAL TRANSFORMERS, GAS AND CABLE TV APPURTENANCES SHALL BE PLACED OUTSIDE THE PUBLIC RIGHT-OF-WAY AND WITHIN THE UTILITY EASEMENTS. THE COUNTY WILL BE RESPONSIBLE FOR RELOCATING MISPLACED UTILITY STRUCTURES PRIOR TO PROJECT ACCEPTANCE. WATER VALVES AND METER BOXES ARE NOT TO BE PLACED WITHIN MAINTENANCE AREAS OF GRAVEL ROADS. 17 WALKER ENGINEERING WAIVES ANY AND ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN

18 THE CONTRACTOR SHALL CONTACT THE COUNTY'S ENGINEER TO VERIFY THE DENSITY TESTS RESULTS PRIOR TO COMMENCING INSTALLATION OF THE PAVEMENT STRUCTURAL SECTION TRENCH DENSITY COMPACTION TESTS ARE REQUIRED FOR EACH 100 LINEAR FEET OF MAINLINE. ALL LATERALS, MANHOLES, INLETS AND ALL STRUCTURES THAT REQUIRE COMPACTED FOUNDATIONS OR CONTROLLED BACKFILL. ALL TEST RESULTS FROM THE LABORATORY ARE TO BE SENT DIRECTLY TO THE COUNTY ENGINEER.

AND/OR FOLLOW WALKER ENGINEERING'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS.

19 THE CONSTRUCTION SURVEYOR SHALL VERIFY PROPOSED GRADES AND INVERT ELEVATIONS, FLOW LINES, ALIGNMENTS, SETBACKS AND TOPOGRAPHY PRIOR TO CONSTRUCTION

20. THE CONTRACTOR SHALL HOLD PRE-CONSTRUCTION MEETINGS WITH ALL APPROPRIATE UTILITY COMAPANIES PRIOR TO COMMENCEMENT OF CONSTRUCITON.



HANDICAP RAMP SECTION A-A NOT TO SCALE

ACCESS RAMP

1:15 MAX SLOPE

1/4" PER FOOT SIDEWALK

1:48 MAX CROSS SLOPE

60" CONCRETE LANDING

<u>--</u> 6' RAMP (TYP.)

AT PAVEMENT GRADE

6" CURB (TYP.)

CURB SLOPES WITH RAMP 1:15 (TYP.)

CROSS SLOPE ____

60" LANDING

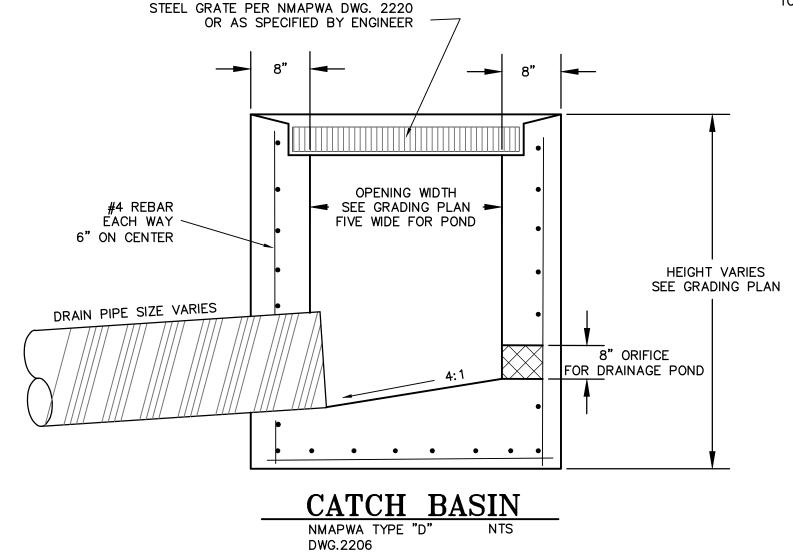
STANDARD

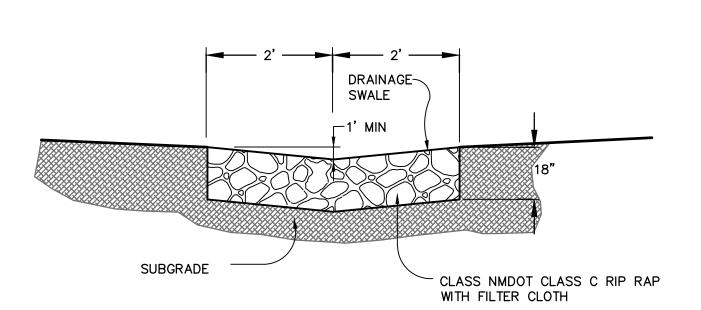
HANDICAP PARKING

NOT TO SCALE

1:15 MAX SLOPE

20'-0"





RIP RAP CHANNEL NOT TO SCALE

CONREVI COUN SHEET NO.

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alk

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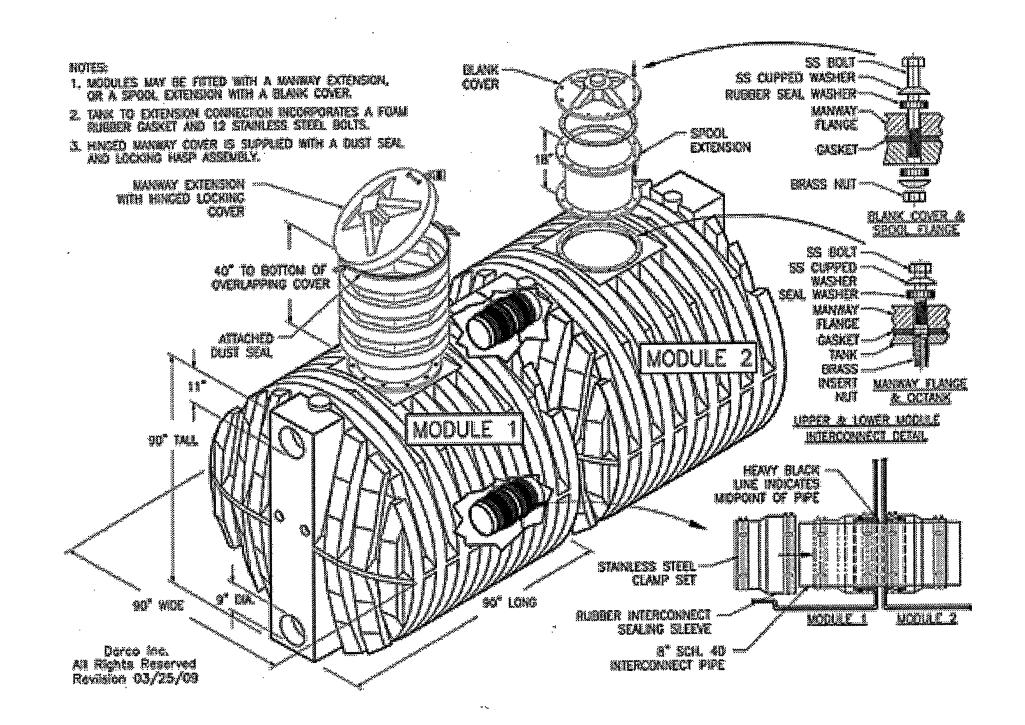
. $R \mid P$

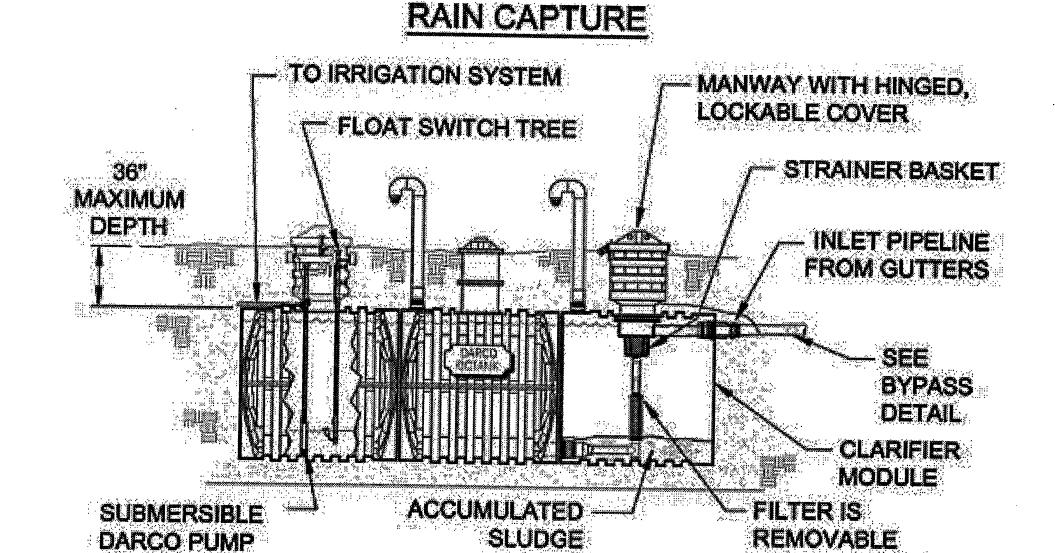
AND

DETAILS ISTRUCTIOI

0

C-5





NOT TO SCALE, FOR ILLUSTRATION CHAY

FOR CLEANING

STANDARD STABLE SOIL SITE REQUIREMENTS

- 1. Soil bearing must be at least 2000 lbs. / sq. ft. (consult geotechnical engineer).
- 2. Soil cohesion or backslope angle must be adequate for side wall stability.
- 3. Follow OSHA 1926.650/P safety guidelines for trenching and tank hole excavation.
- 4. If site is subject to seasonal or unpredictable ground water, do consider:
- Using deadman anchors to avoid possible floatation.
- Burying the tank above probable groundwater with mounded soil cover.
- Installing a tank bed underdrain ground water collection and discharge pipelines.

BEDDING AND BACKFILL MATERIAL REQUIREMENTS

- 1. Backfill medium must totally surround and cover every module completely.
- 2. Use only dry, clean, washed and graded material.
- 3. No individual particles should be over 1/2 inch screen size.
- 4. Material must be free of trash, ice, snow, and powdered soil fines.
- 5. The following are examples of common approved materials:
- Coarse sand or squeegee
- Pea gravel or B-B gravel
- Crushed and screened rock chips

6. Do not use generic structural fill, road base, or crusher fines as backfill.

BURY DEPTH OPTIONS

- 1. Above ground in a constructed "sand box" for support.
- Fabricate cover or roof over sand box to reduce direct sunlight exposure.
- 2. Partial burial to spring line or deeper for proper support of the tank belly.
- Mound soil cover to depth necessary for frost protection.
- 3. Full bury below grade with maximum cover depth of 36 inches.
- Insulate with underground rated foam board for frost protection.

HOLE SIZE RECOMMENDATIONS

WARNING: Review OSHA 1926.650/P EXCAVATIONS

- 1. Allow a minimum of 18 inches between tanks and the excavation walls.
- 2. Tank rows in manifolded assemblies should be spaced 18 inches apart.
- 3. Bedding depth underneath modules must be at least 6 inches deep.

FULL BURY INSTALLATION PROCEDURE

- 1. Always follow the Darco Installation Manual and call if you have questions.
- 2. Excavate to the appropriate hole size and depth and bed properly.
- 3. Position and assemble the modules in the prepared excavation.
- 4. Add 10% water ballast if water is available. Burial may be done dry (without water).
- 5. Backfill in 12 inch deep lifts working evenly around the tank.
- 6. Hand probe under and around each module as illustrated.
- 7. Backfill until sand completely covers all modules and rake smooth.
- 8. Apply geotextile fabric or approved underground foam board insulation.
- 9. Cover and mound soil to 36 inch maximum bury depth.
- 10. Fill tank with water immediately after installation to avoid floatation.
- 11. Chain or bolt the manway at all times to discourage children and vandals.
- 12. Disinfect potable water systems as directed by your local Health Department.
- 13. Review the following illustration depicting the probing process.
- Probe tool is a 3/4 inch metal pipe about 4 feet long with tee handle and flattened tip for easy penetration deep into the sand backfill.
- No voids or air pockets may exist under the tank for proper support.
- Probe thoroughly from 4 o'clock around to 8 o'clock along both sides.
- Probe deeply, but avoid violent tamping which may disturb the tank.

OPTIONAL DEADMAN ANCHORS

OcTanks are not approved for use in sites known to be subject to high ground water, extreme run off, or riparian flooding conditions. Anchoring is insurance against occasional wet years or unusual temporary conditions when ground water may be elevated for a short period of time.

- 1. Pour 12 inch diameter reinforced concrete anchors in advance for proper cure.
- 2. Use only approved hardware as specified in your OcTank Installation Manual.
- 3. Locate anchor cables at the proper tank locations.
- 4. Soil cover must be 36 inch deep and extend at least 3 feet beyond tank sides.
- 5. Deadmen may be eliminated if a bed drain can be used to discharge any water accumulation.

TRAFFIC SLABS

Install OcTanks under a slab floor or driveway only when there is no other suitable site or option available for the water storage system. Follow our OcTank Installation Manual carefully and call if you have questions or concerns.

- 1. Bury depth below the 8 inch slab must be approximately 28 inches.
- 2. Select backfill (sand preferred) must be used exclusively between tank and slab.
- No native soil may be used between the tank bed and the traffic slab.
- 3. Backfill must be compacted in 12 inch lifts using a vibrating plate machine.
- Do not use a jumping jack style high impact compactor around OcTanks.
- 4. If insulation is necessary, use 25 psi rated polystyrene extruded foam board positioned just above the tank, as illustrated.

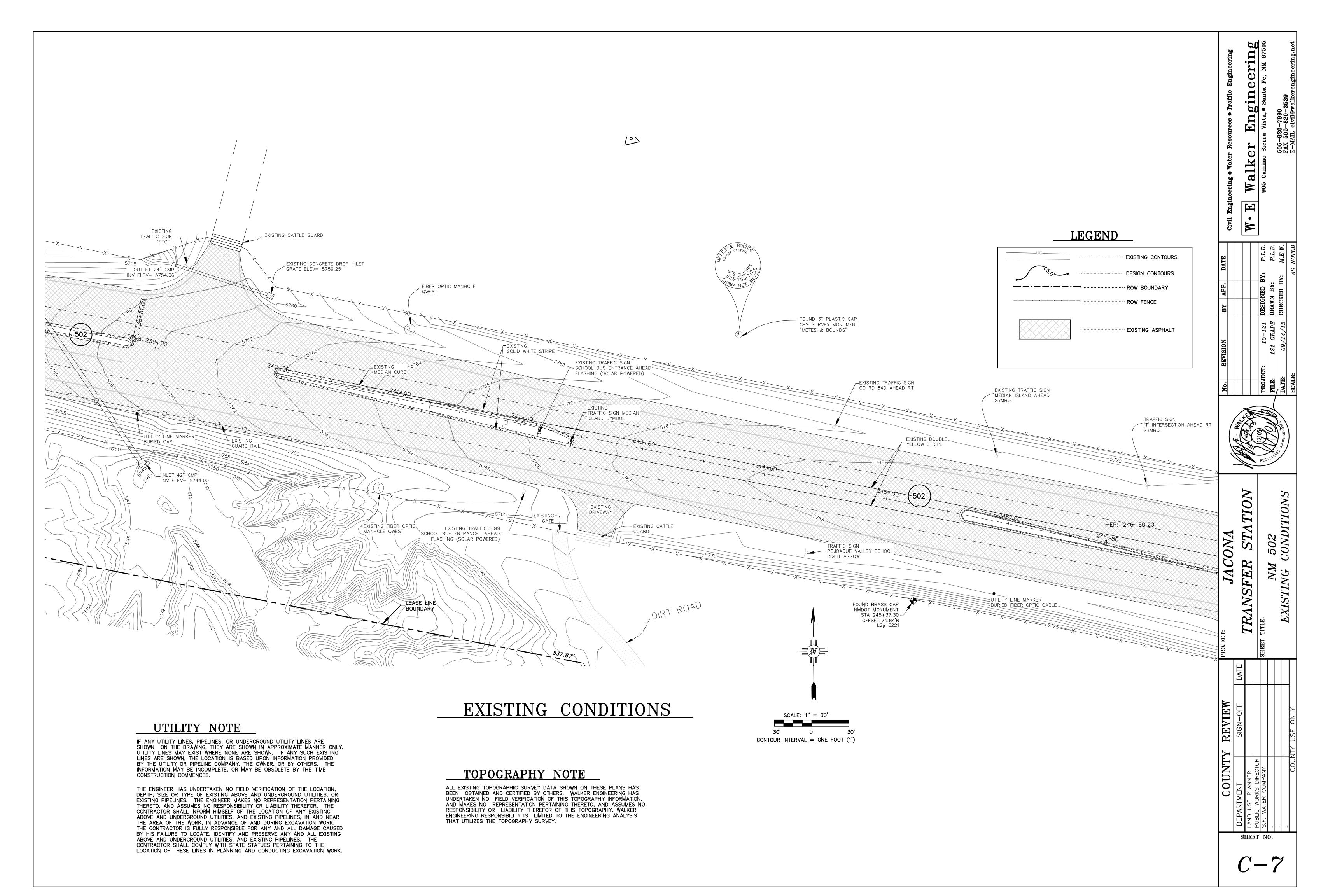
VENTING, WEEP TUBES, AND OVERFLOWS

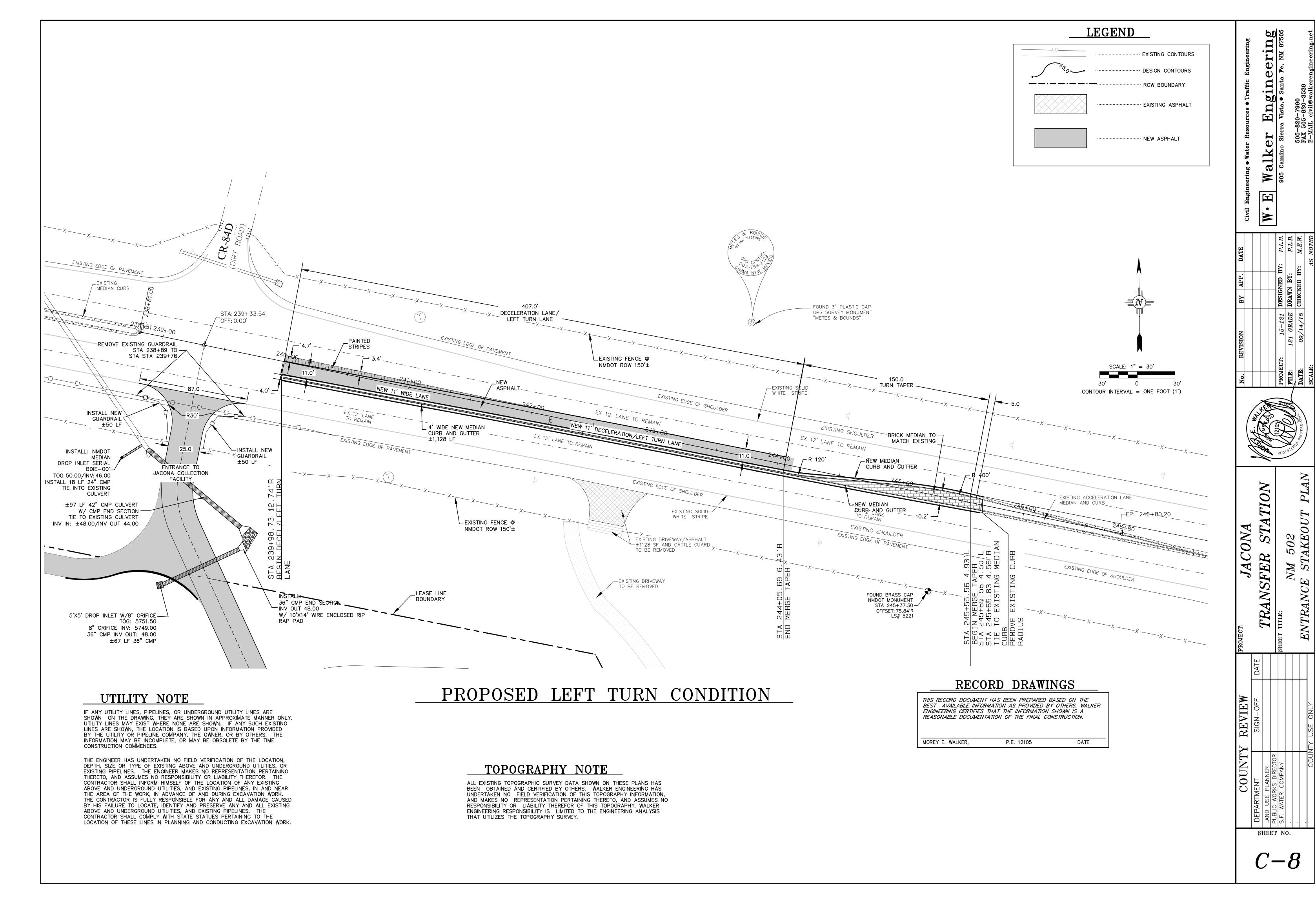
- All OcTank systems must be adequately vented to the atmosphere to avoid potentially destructive internal vacuum or pressure conditions.
- 1. Vent size must match or exceed the system's maximum pipeline diameter.
- 2. A few inches of air space must be maintained at the top of every module.
- 3. Overflow piping or a weep tube must discharge any excess water.

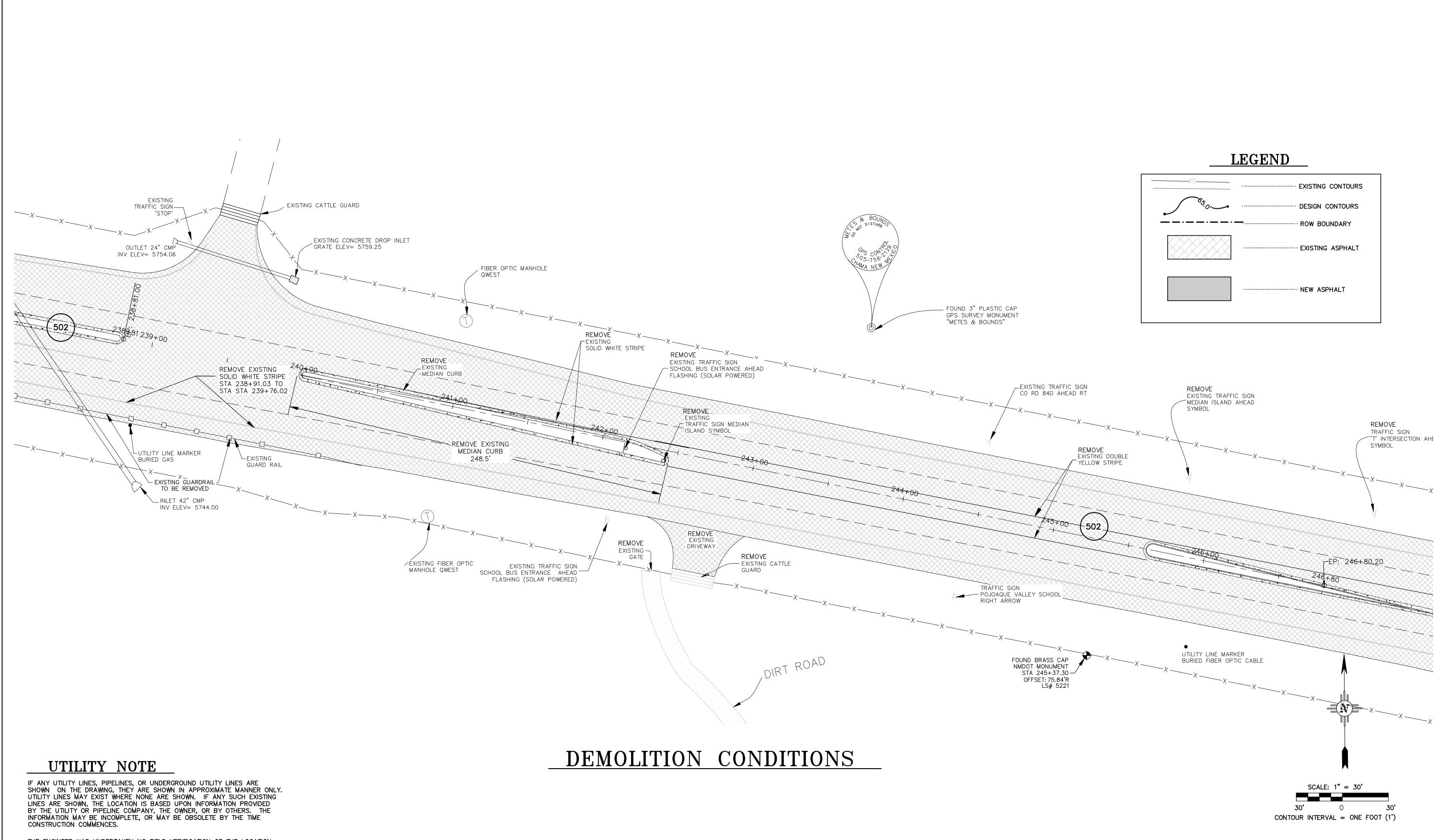
"BOLT- IN" STYLE FIELD INSTALLED FITTINGS

- Molded polypropylene or stainless steel bolt-in style fittings are well suited to OcTank applications.
- 1. Fittings are available in 2 and 3 inch pipe sizes with female pipe threads.
- 2. "Bolt-ins" come with stainless steel hardware and EPDM rubber gaskets.

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THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING ABOVE AND UNDERGROUND UTILITIES, OR EXISTING PIPELINES. THE ENGINEER MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM HIMSELF OF THE LOCATION OF ANY EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES, IN AND NEAR THE AREA OF THE WORK, IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUES PERTAINING TO THE LOCATION OF THESE LINES IN PLANNING AND CONDUCTING EXCAVATION WORK.

TOPOGRAPHY NOTE

ALL EXISTING TOPOGRAPHIC SURVEY DATA SHOWN ON THESE PLANS HAS BEEN OBTAINED AND CERTIFIED BY OTHERS. WALKER ENGINEERING HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS TOPOGRAPHY INFORMATION, AND MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR OF THIS TOPOGRAPHY. WALKER ENGINEERING RESPONSIBILITY IS LIMITED TO THE ENGINEERING ANALYSIS THAT UTILIZES THE TOPOGRAPHY SURVEY.

SHEET TITLE:

SHEET TITLE:

NM 502

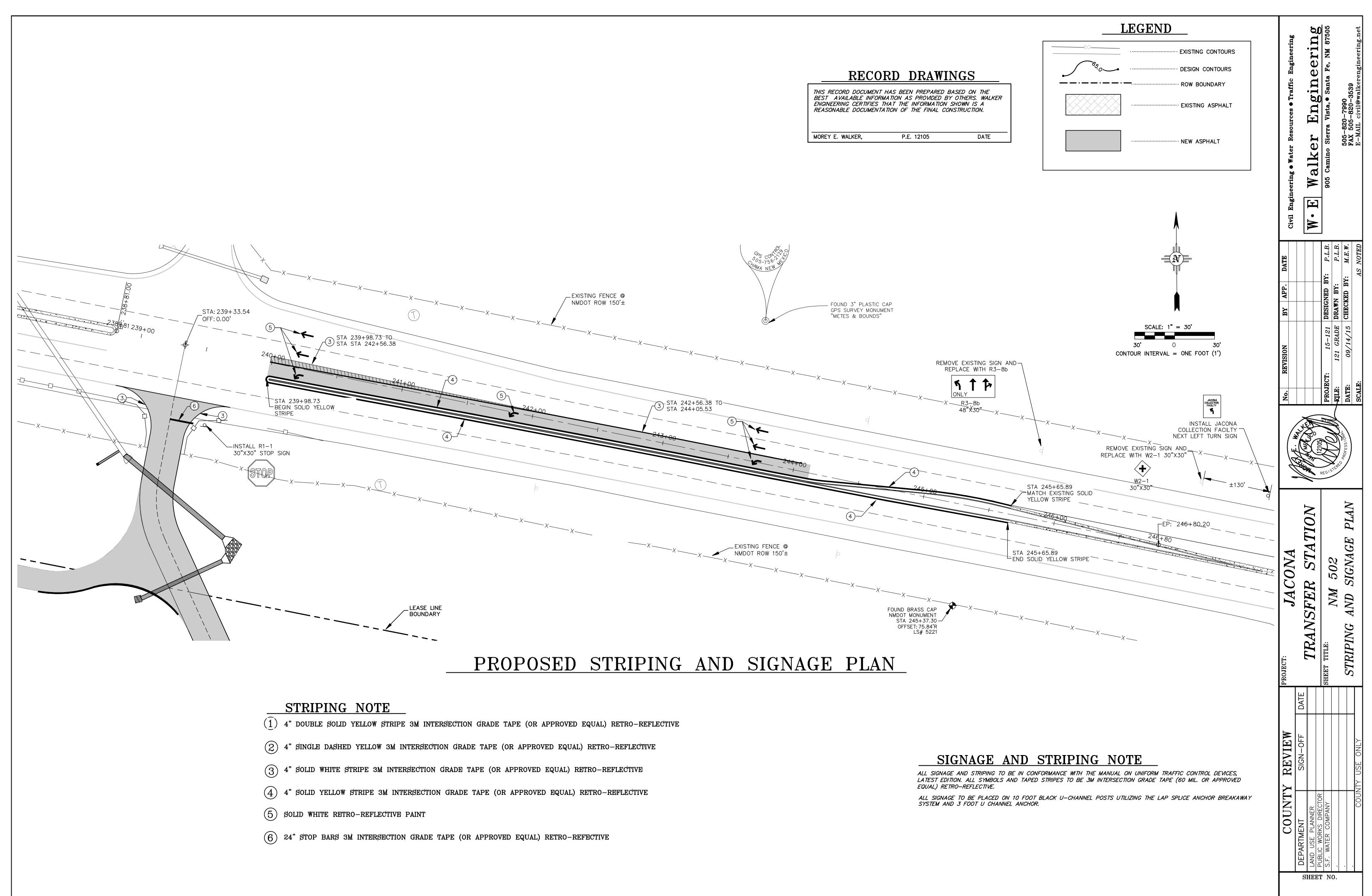
DEMOLITION PLAN

COUNTY REVIEW

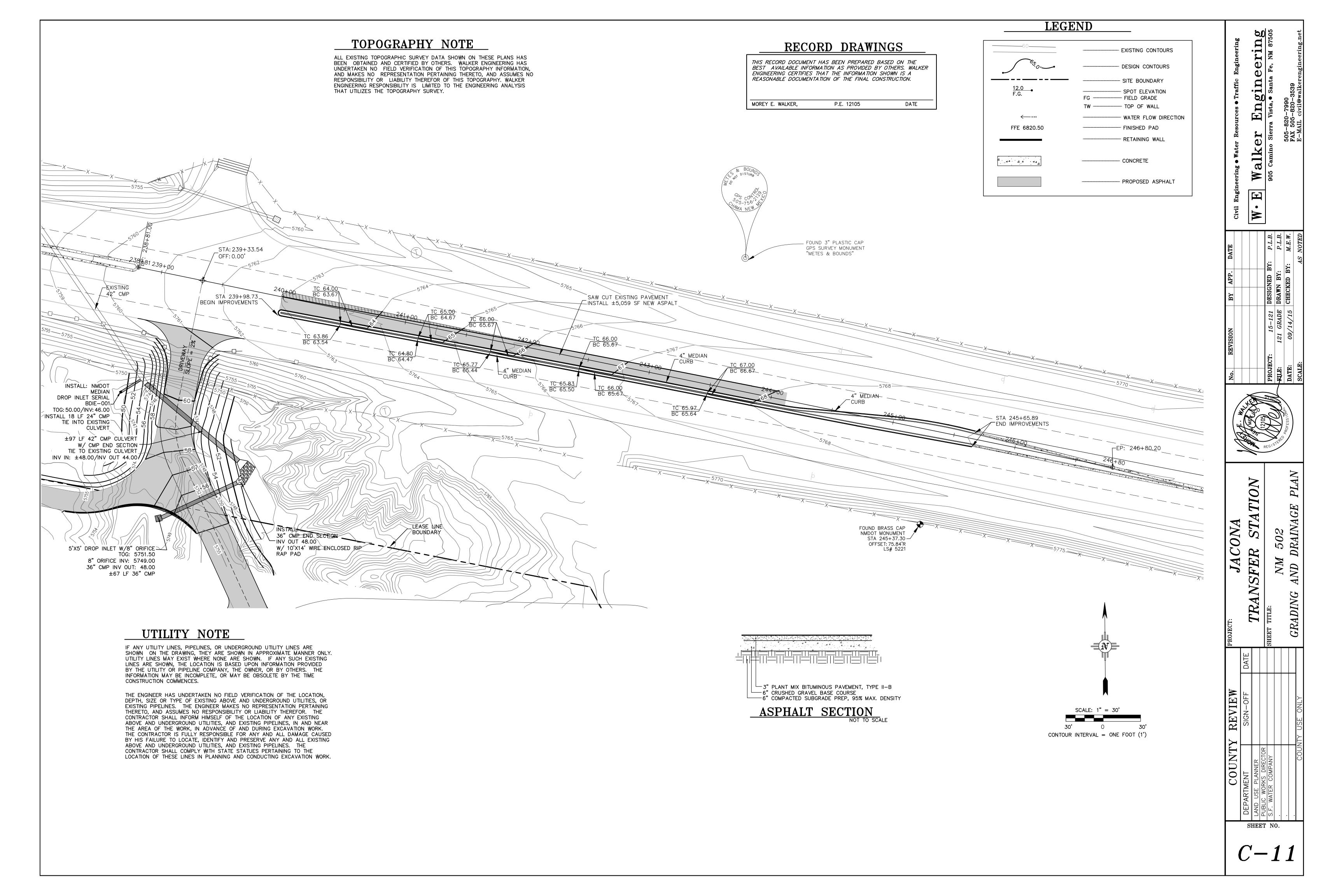
DEPARTMENT SIGN—OFF DATI
LAND USE PLANNER
PUBLIC WORKS DIRECTOR
S.F. WATER COMPANY
.

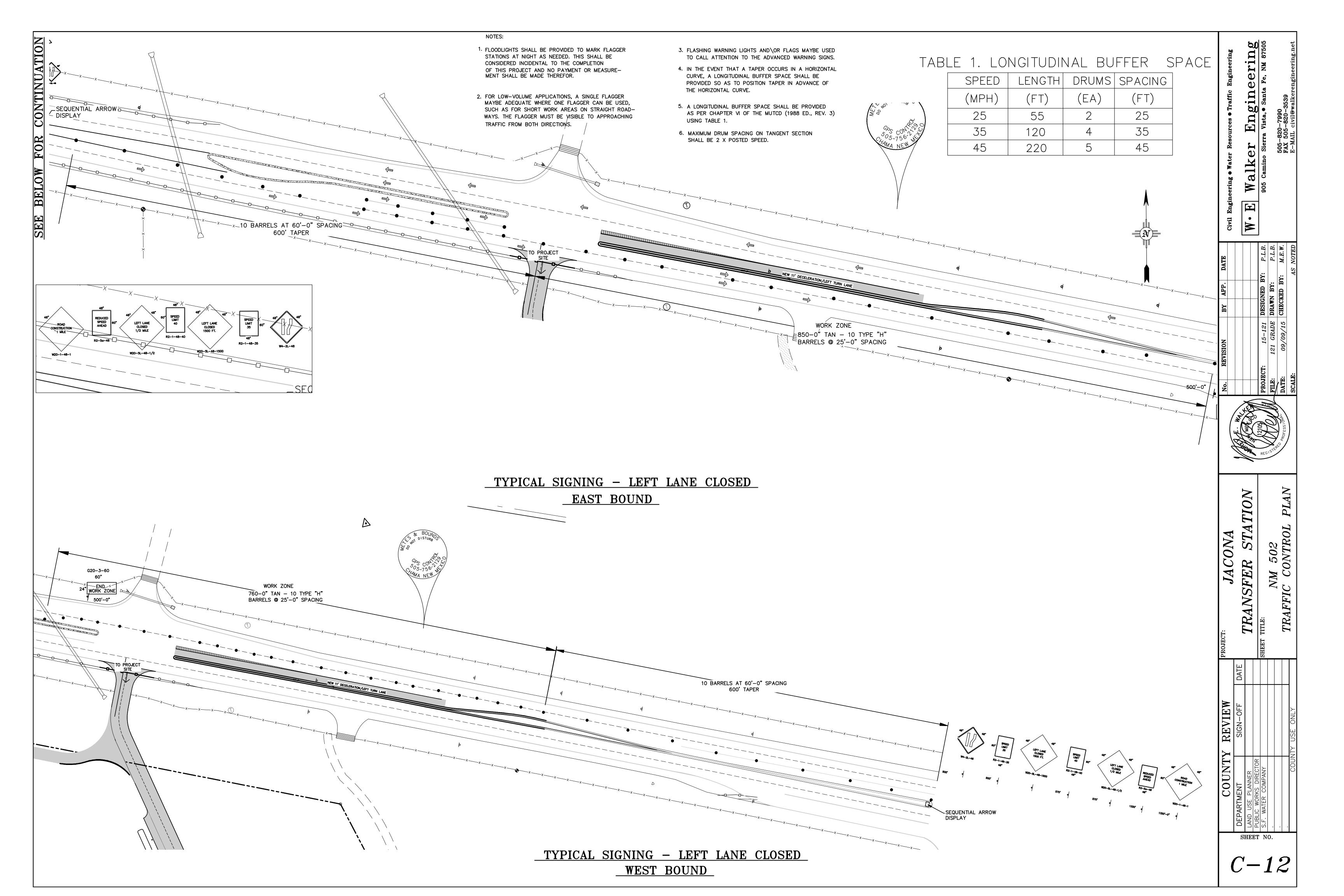
C-9

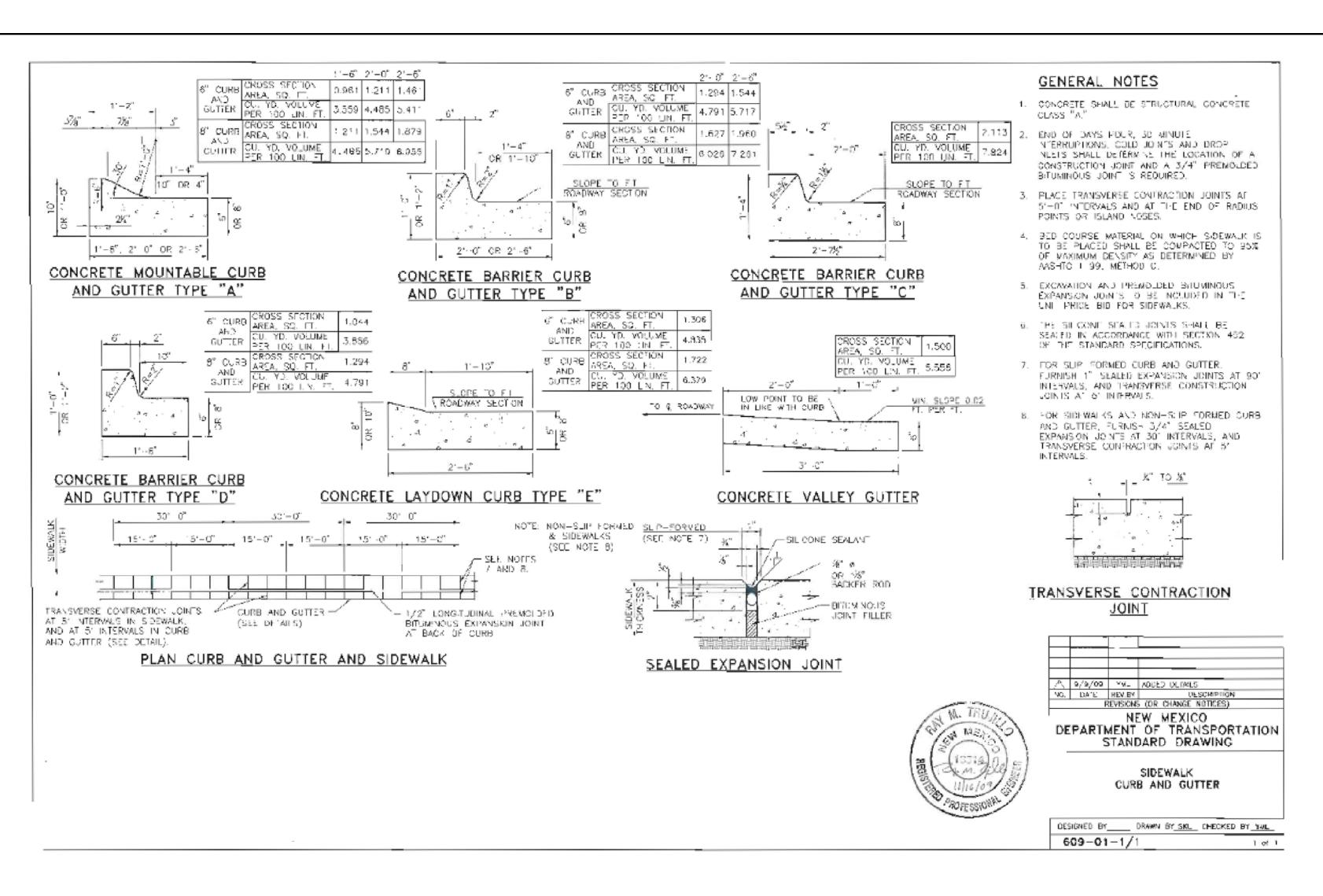
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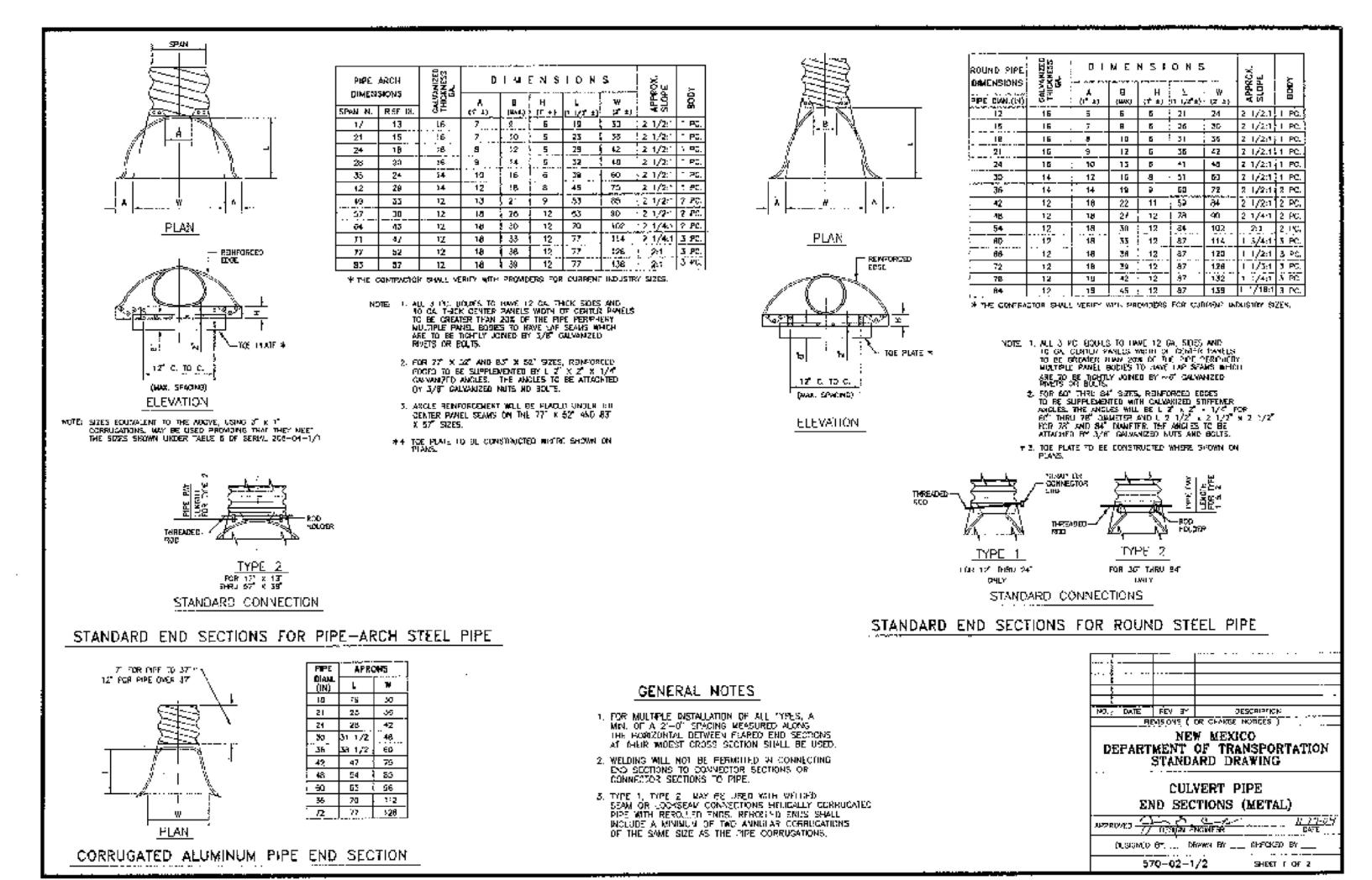


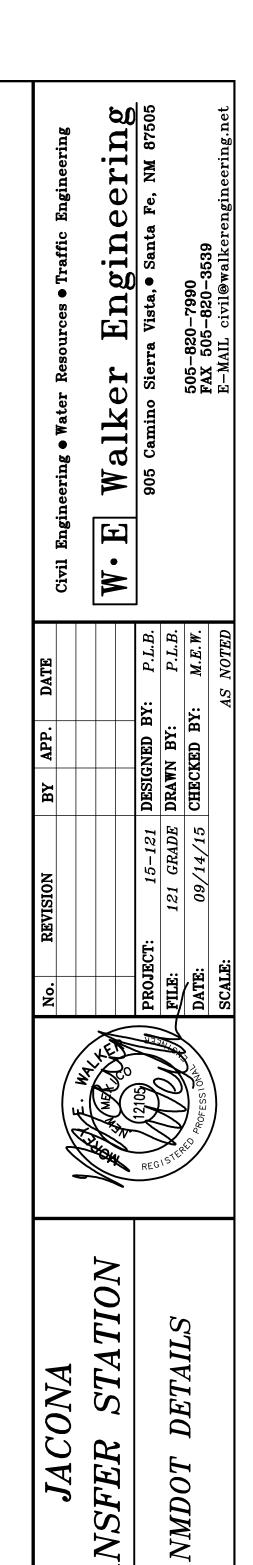
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REVIEW

SHEET NO.

ABBREVIATIONS

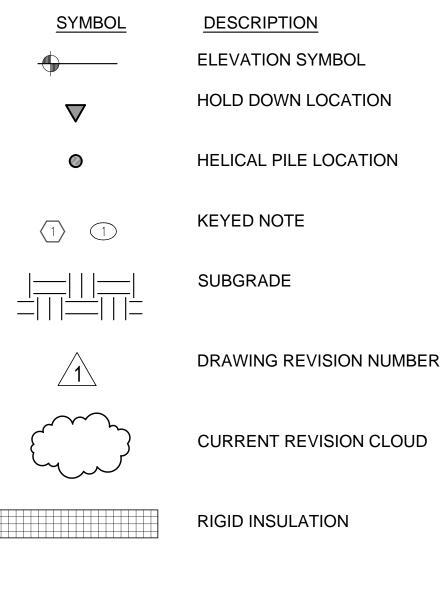
,	Dow	ELD	Floor	DC	Drocast
/	Per	FLR FDTN	Floor	PC PEN	Precast Penetration
@ ^ P	At Anchor Polt		Foundation	PERP	
ABDAU	Anchor Bolt	FO	Face Of		Perpendicular
ADDNL	Additional	FP FDN4C	Full Penetration	PL	Plate Pounds Par Lineal Foot
ADJ	Adjacent	FRMG	Framing	PLF	Pounds Per Lineal Foot
AFF	Above Finish Floor	FS	Far Side	PREFAB	Prefabricated
ALT	Alternative	FT	Footing	PRELIM	Prestraced
APA	American Plywood Association	FTG	Footing	PS DCF	Prestressed
APPROX	Approximate	FV	Field Verify	PSF	Pounds Per Square Foot
ARCH	Architect or Architectural	C A	Cogo or Cougo	PSI	Pounds Per Square Inch
5/ 50	5	GALY	Gage or Gauge	PT	Pressure Treated
B/ , B.O.	Bottom of	GALV	Galvanized	OT\/	0 111
BG	Backgouge	GL	Glu-lam	QTY	Quantity
BLDG	Building	GR CR RM4	Grade Bears	DAD D	Dadina
BLKG	Blocking	GR BM	Grade Beam	RAD or R	Radius
BM	Beam	LLAC	Llag dad Arabar Ctud	RC	Reinforced Concrete
BN	Boundary Nail	HAS	Headed Anchor Stud		Refer to (Reference)
BOT or B	Bottom	HD	Hold Down	REINF	Reinforce(ing)(d)(ment)
BOF	Bottom of Footing	HDG	Hot Dipped Galvanized	RET	Return
BOS	Bottom of Steel	HK	Hook	REQD	Required
BRG	Bearing	HORIZ	Horizontal	REQT(S)	Requirement(s)
BSMT	Basement	HT	Height	RO	Rough Opening
BTWN	Between	HVAC	Heating-Ventilating and A/C	(-)	
CC	Contour to County	15	La cida Dia	(S)	Salvaged
CC	Center to Center	ID	Inside Diameter	SCHED	Schedule
CG	Center of Gravity	I.F.	Inside Face	SEC	Section
CIP	Cast-In-Place	IN	Inch	SIM	Similar
CJ	Control Joint	INT	Interior	SLH	Short Leg Horizontal
CJP	Complete Joint Penetration	IT	Precast Inverted Tee Beam	SLV	Short Leg Vertical
CL	Centerline	JST	Joist	SOG	Slab on Grade
CLG	Ceiling	JT	Joint	SP @	Space At
CLR	Clear			SP	Space(s)
CMU	Concrete Masonry Unit	K	Kip	SPECS	Specifications
COL	Column	KSI	Kips per Square Inch	SPRT	Support
CONC	Concrete			SS	Stainless Steel
CONN	Connection	L or LG	Length	STD	Standard
CONST	Construction	LB (S)	Pound(s)	STIFF	Stiffener
CONT	Continue or Continuous	LL	Live Load	STL	Steel
CONTR	Contractor	LLH	Long Leg Horizontal	STR	Structural
COORD	Coordinate	LLV	Long Leg Vertical	SW	Shearwall
CSJ	Construction Joint	LOC (S)	Location(s) or Locate	SYM	Symmetrical
CTR(D)	Center(ed)	LONG	Longitudinal		
		LSL	Laminated Strand Lumber	T&B	Top & Bottom
d	Penny	LT	Light	Т	Тор
DBL	Double	LT WT	Light Weight	T/	Top of
DEG	Degree	LVL	Level or Lam Veneer Lumber	TH	Thick or Thickness
DIA or Ø	Diameter	LWC	Light Weight Concrete	Th.ROD	Threaded Rod
DIAG	Diagonal			TL	Total Load
DIM	Dimension	MAS	Masonry	T.O.	Top of
DL	Dead Load	MATL	Material	TOC	Top of Concrete
DN	Down	MAX	Maximum	TOF	Top of Footing
DP	Drilled Pier	MBS	Metal Building Supplier	TOM	Top of Masonry
DT	Precast Double Tee	MCJ	Masonry Control Joint	TOPG	Topping
DTL (S)	Detail(s)	MECH	Mechanical	TOS	Top of Steel
DWL(S)	Dowel(s)	MEP	Mechanical/Electrical/Plumbing	TOW	Top of Wall
E\//C=		MIL(S)	Millimeter(s)	TRANS	Transverse
EXIST	Existing	MIN	Minimum	TYP	Typical
EA	Each	MISC	Miscellaneous		
EC	Epoxy Coated	ML	Micro-Lam	ULT	Ultimate
EE	Each End	MNFR	Manufacturer	UNO	Unless Noted Otherwise
EF	Each Face	MO	Masonry Opening		
EJ	Expansion Joint	MTL	Metal	VERT	Vertical
EL	Elevation			VIF	Verify In Field
EMBED	Embedded	N	North		
EN	Edge Nail	NS	Non-Shrink or Near Side	W/O	Without
ENGR	Engineer	NIC	Not in Contact	W/	With
EOR	Engineer-of-Record	NO or #	Number	WD	Width or Wood
EOS	Edge of Slab	NOM	Nominal	WF	Wide Flange
EQ	Equal	NTS	Not To Scale	WT	Weight
EQ SP	Equally Spaced	NWC	Normal Weight Concrete	WWR	Welded Wire Reinforcement
EQUIP	Equipment			WxH	Width x Height
ES	Each Side	OAE	Or Approved Equivalent		S
EW	Each Way	OC	On Center		
EXP ANCH	Expansion Anchor	OCEW	On Center Each Way		
EXP	Expansion	OD	Outside Diameter		
EXT	Exterior	O.F.	Outside Face		
		OPNG	Opening		
FAB	Fabricate	OPP	Opposite		
FF	Finished Floor				
FLG	Flange	PΔF	Powder Actuated Fastener		

Powder Actuated Fastener

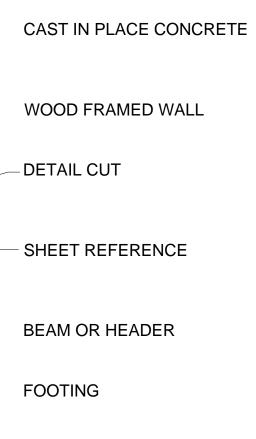
FLG

Flange

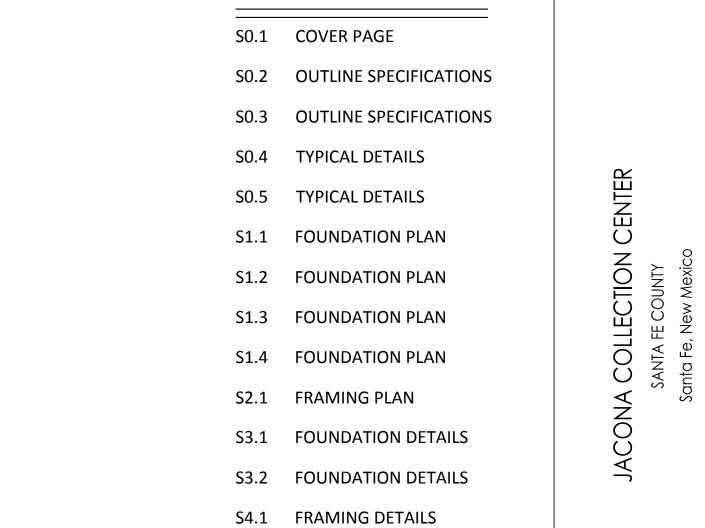
LEGEND



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FLOOR PLAN KEY



SHT S1.3 SHT S1.4

SHT S2.1

SHT S1.3
SHT S1.1

PLAN SET INDEX



Revisions



STRUCTURAL OUTLINE SPECIFICATIONS FOR JACONA COLLECTION CENTER, SANTA FE, NEW MEXICO

DESIGN CRITERIA & GENERAL NOTES

A. Design Codes and Manuals:

- 1. 2009 International Building Code (IBC)
- 2. ASCE 7-05, Minimum Design Loads for Buildings and Other Structures
- 3. AISC Manual of Steel Construction, 13th Edition
- 4. ACI 318-05, Building Code Requirements for Reinforced Concrete
- 5. American Society for Testing and Materials (ASTM)
- 6. American Welding Society (AWS) D1.1, "Structural Welding Code Steel", Latest

...30 PSF

..25.2 PSF

..1.0

7. Metal Building Systems Manual, Latest Edition

DESIGN LOADS:

- 1. Minimum Uniformly Distributed Live Loads
 - a) Roof Live.
 - b) Roof Design Snow Load
 - .30 PSF (1) Ground Snow Load, pg..
 - .1.0 Exposure Factor, ce..
 - Snow Thermal Factor, ct.,

Sloped Roof Snow Load, ps.

- Snow Importance Factor, I
- (6) Drift Surcharge Load, pd
- Per Metal Building Manufacturer
- (7) Width of Snow Drift, w Per Metal Building Manufacturer
- ..40 PSF c) Floor Live..
- 2. Minimum Uniformly Distributed Design Dead Loads
- .per Metal Building Manufacturer a) Roof..
 - b) Roof Collateral Load. .5 PSF
- 3. Wind Loading ASCE 7-05
- a) Occupancy Category II
- b) Basic Wind Velocity (V) (3 SECOND GUST) 90 MPH
- c) Category II Importance Factor = 1.0 Exposure "C"
- d) Design Wind Pressures for Components and Cladding:
- e) Main Building
- (1) Roof:
- Zone 1. p = -16.92 psf / +10.66 psf
- Zone 2. p = -29.46 psf / +10.66 psf
- Zone 3. p = -43.56 psf / +10.66 psf
- - Zone 4. p = -20.06 psf / +18.49 psf
- Zone 5. p = -24.76 psf / +18.49 psf
- (3) Effective Wind Area = 10 sf
- f) Tunnel Building
 - (1) Roof:
 - Zone 1. p = -18.76 psf / +11.81 psf
 - Zone 2. p = -32.66 psf / +11.81 psfZone 3. p = -48.29 psf / +11.81 psf
- - Zone 4. p = -22.23 psf / +20.50 psf
 - Zone 5. p = -27.44 psf / +20.50 psf
- (3) Effective Wind Area = 10 sf
- g) Three-Sided "Shed" Building
- (1) Roof:
 - Zone 1. p = -22.13 psf / +16.02 psf
- Zone 2. p = -34.34 psf / +16.02 psf
- Zone 3. p = -48.07 psf / +16.02 psf
- - Zone 4. p = -25.18 psf / +23.65 psf
- Zone 5. p = -29.76 psf / +23.65 psf
- (3) Effective Wind Area = 10 sf
- 4. Earthquake Design Data ASCE 7-05:
 - a) IBC Site Classification "C" b) Occupancy Category II
 - c) Seismic Importance Factor = 1.0
 - d) Mapped Spectral Response Accelerations

- (1) Ss = 0.464, S1 = 0.151
- e) Spectral Response Coefficients
 - SDs = 0.371,SD1 = 0.166
- f) Seismic Design Category = "C"
- g) Basic Seismic-Force-Resisting System = Ordinary Steel Moment Frame and Ordinary Steel Concentrically Braced Frames - per Metal Building Manufacturer
- h) Seismic Response Coefficient, per Metal Building Manufacturer
- Response Modification Factor, per Metal Building Manufacturer
- Analysis Procedure Used = per Metal Building Manufacturer

C. GENERAL NOTES

- 1. See architectural, mechanical, electrical and plumbing drawings for exact location and arrangement of any pads, support frames, etc., required for mechanical and electrical equipment and not with other trades concerning plates, anchors, notches, etc., to be placed in concrete.
- 2. Any conflict between structural drawings, architectural drawings and/or specifications shall be brought to the attention of the architect prior to proceeding with the work affected.
- 3. OPENINGS
- a) Openings, sleeves, etc. to be placed through any structural member shall first be approved by the structural engineer. Sleeves shall be provided for openings prior to placing of concrete. Cutting of hardened concrete shall not be permitted except by special structural approval which will be on an individual
- 4. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include, but not be limited to bracing and shoring for loads due of hydrostatic, earth, wind or seismic forces, construction equipment, etc. Observation visits to the site by the structural engineer shall not include inspection of the above items.
- 5. Cost of additional field and office work necessitated by requests by the contractor for an option of due to errors or omissions in construction shall be borne by the contractor. Options are for contractor's convenience, he shall be responsible for all changes necessary if he chooses an option and he shall coordinate all details

D. Foundation Notes

- 1. Foundation design is based on the metal building design provided by RIGID Global Buildings, 10 Inverness Dr. East, Suite 220, Englewood, CO 80112. Contact: Ken Olsen, Senior District Manager Western Region. Phone: 720-931-2991 or 303-845-0662. Email: KenO@rigidbuilding.com.
- a) Cost of additional field and office work necessitated by requests by the contractor for other metal building designs that require foundation revisions shall be borne by the contractor. Options are for contractor's convenience, he shall be responsible for all changes necessary if he chooses an option and he shall coordinate all details.
- 2. Geotechnical engineering study and recommendations for this project has been performed by Earthworks Engineering Group, LLC, project number A15-296, dated May 29, 2015.
 - a) Important additional information concerning specific soil conditions is contained in this report and shall be reviewed prior to the start of construction.
- 3. Design is based on recommendations provided by the geotechnical engineering
 - a) Allowable soil Bearing Pressure = 2000 psf
 - b) Frost Depth / Minimum Exterior Footing Embedment = 24"
 - c) Requirements for granular base and capillary barriers is specified in this report. Areas where the capillary barriers are required shall be coordinated with the architect prior to construction.
- 4. The geotechnical engineering study contains specific requirements concerning clearing and grubbing, site, subfloor and bearing surface preparation, structural fill requirements, compaction requirements, and drainage and sloping requirements not necessarily shown on these drawings. Refer any conflicts between these drawings and the report to the architect for direction prior to beginning any work.
- a) The contractor shall engage and bear the cost of a geotechnical engineer or designated representative to monitor site preparation, foundation construction and retaining wall construction. The geotechnical engineer shall provide continuous on-site observation by experienced personnel during construction of controlled earthwork. The contractor shall notify the geotechnical engineer at least two working days in advance of any field operations of controlled earthwork or of any resumption of operations after stoppages. Tests of fill materials and embankments shall be made in accordance to the recommendations for observation and testing provided within the geotechnical recommendations, and at the following suggested minimum
 - (1) At least one moisture-density (proctor) test, atterberg limits test, and percent finer than #200 sieve test should be performed per each subgrade soil type and engineered fill material. The geotechnical engineer must review the test results for conformance with specifications and approve of fill materials and their intended use, prior to construction.
- (2) A minimum of one field density and moisture test should be performed per 2000 square feet of building pad fill or pavement subgrade

per each 1 foot of compacted fill thickness (or at least one test per each 1 foot of compacted fill thickness in each area worked per day if smaller sections).

- (3) A minimum of one field density and moisture test should be performed per 50 linear feet of foundation excavation bottom prior to placement of reinforcing steel and concrete (or at least one test per area worked per day if smaller sections).
- (4) A minimum of one field density and moisture test should be performed per 100 linear feet of retaining wall backfill and/or utility trench backfill per each 1 foot of compacted fill thickness (or at least one test per each 1 foot of compacted fill thickness in each area worked per day if smaller sections).
- b) An earthwork certification letter shall be submitted prior to placing any concrete. The letter shall include certification that all recommendations presented within the geotechnical recommendations have been completed in acceptable conformance.

QUALITY ASSURANCE PLAN AND STATEMENT OF SPECIAL INSPECTION

- A. The contractor shall engage independent inspectors to implement special inspection. Special inspection shall conform to the IBC 2009, section 110 and chapter 17.
- B. After each inspection and test, promptly submit copy of laboratory report to owner, architect/engineer, and to contractor. Report shall include:
 - 1. Date issued, Project title and number, Name of inspector, Date and time of sampling or inspection, Identification of project specifications section, Location of project, Type of inspection or test, Date of tests, Results of tests, Conformance with contract documents

Required inspections:

- 1. Soils as outlined in Outline Specifications Section titled "Foundation Notes"
- 2. Concrete as outlined in the Outline Specifications Section titled "Structural Concrete"
- a) Installation of embedded bolts and plates supporting structure
- b) Reinforcing steel placement
- c) Field bending of reinforcing steel
- d) Reinforcing couplers
- e) Anchored rebar or threaded rods into hardened concrete
- 3. Cold-Formed Metal Framing

c) Metal connectors

- a) Holdown anchors/strap ties
- b) Shear wall/diaphragm fastening
- Steel as outlined in Outline Specifications Section titled "Structural Steel"
- D. Special inspection is to be provided in addition to inspections conducted by the building department and shall not be construed to relieve the owner or his authorized agent from requesting the period and called inspections required by section 1704 of the International Building Code.
 - 1. Periodic inspection is defined as the part-time or intermittent observation of work requiring inspection by an approved inspector who is present in the area where the work has been or is being performed at the completion of work.

2. Special inspection is required for the following:

High strength bolts.

- a) Steel construction
- .periodic (3) Structural Steel & Cold-Formed Steel Deck... .periodic b) Concrete construction Reinforcing steel. (2) Bolts installed prior to and during concrete placement... ..periodic
- (3) Mix design(s). .periodic (4) At the time fresh concrete is sampled. .periodic (5) Inspection of concrete placement... .periodic (6) Inspection for maintenance of specified curing
- .periodic c) Special case

Expansion or adhesive anchor.

- SHOP DRAWING SUBMITTAL
- Contractor to submit to Structural Engineer:
 - Concrete Mix Designs
 - Structural Steel 3. Cold-Formed Metal Framing

- 4. Steel Deck
 - 5. Metal Building

6. Reinforcing Bars

B. All shop drawings and submittals must be reviewed and stamped by the contractor prior to submittal. Shop drawings and submittals shall be accompanied by sealed calculations as required by the specifications. No fabrications shall proceed before shop drawings covering

- A. All concrete edges shall be chamfered 3/4" on exposed corners unless otherwise noted.
- B. Basis for design, strength at 28 days:
 - 1. Unless indicated otherwise, all concrete shall be ready- mixed concrete with standard stone aggregate (144 PCF).
 - 2. Air entrainment shall conform to the requirements of ACI 318-05 Table 4.2.1
 - Shrinkage-compensating concrete shall conform to the recommendations of ACI
 - 4. Structural design is based upon ACI 318-05 and construction shall conform to
 - a) F'c = 4000 psi (normal weight, air entrained)
 - (1) Exposed concrete flatwork, Footings, Tie beams, Stem walls, Grade

 - (1) all other concrete

 - (1) Grout to comply with ASTM C1107. Non-shrink flowable grout shall
 - 5. Unless otherwise indicated, concrete cover shall be:
 - a) Foundations.
 - b) Grade Beams.
 - d) Columns (Vertical Reinf.)...
 - e) Slabs (Not exposed to weather)...

..periodic

.periodic

- ..ASTM A185 2. Welded Wire Fabric...
- 4. All reinforcing shall be held securely in position with standard accessories during
- 5. Slab and beam bolsters and hi-chairs shall have vinyl-tipped turned-up legs
- 6. All field bending of reinforcing shall be done cold. Heating of bars will not be
- 7. Unless otherwise indicated, splice reinforcing as follows:
- - 1. Strict adherence to the specified water-to-cement ratio of 0.45 is required. Water
 - Moist curing of slabs-on-ground is required.
 - 4. Contraction joints (control joints) shall be installed on all concrete slabs on grade. Verify locations of all joints with Architect prior to placing concrete. The joints shall be spaced no further than 36 times the slab thickness or 15 ft . L or T shapes be avoided when placing crack control joints. If the shape of the area contained by the

crack control joints is not square, the aspect ratio of this area should not exceed 1.5

to 1. The control joints should be placed such that they are continuous and not

staggered or offset. Placement shall be in accordance to ACI 302.1. a) Timing of early entry slab saw cuts is critical to slab curing performance. Saw cuts for control joints (contraction joints) shall be made at the earliest possible time that the concrete will support the weight of saw cutting equipment

- that work have been approved.

IV. STRUCTURAL CONCRETE

- - 3. Shrinkage shall not exceed 0.02% per ASTM C 157 at 28 days.
 - ACI 301 and ACI 302, latest edition(s).
 - b) F'c = 3000 psi (normal weight)
 - (1) all interior slabs-on-ground.
 - c) F'c = 4000 psi (normal weight)
 - d) F'c = 6000 psi non-shrink grout for placement under column base plates
- be used under base plates with shear lugs.
- c) Masonry.....
- f) Slabs (Exposed to weather)...
- C. REINFORCING STEEL
 - 1. Deformed Bars. ..ASTM A615 / Grade 60
 - 3. Placing of reinforcing shall conform with CRSI, latest edition.
 - placing of concrete.
 - where soffits/underside of slab is exposed.
- a) Reinforcing Bars... .48 Bar Diameters b) Welded Wire Fabric...
- D. SLAB-ON-GROUND CRITERIA
 - shall not be added to the mix at the time of placement.
 - 3. Care shall be taken to prevent water intrusion into the subgrade both prior to and
 - and operations. Timing of early entry saw cuts shall vary between 1 hour in hot weather and 4 hours in cold weather. Early entry dry cut saws shall use a skid plate to prevent spalling.



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LTSE Job # 1152

100% SUBMITTAL

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STRUCTURAL OUTLINE SPECIFICATIONS FOR JACONA COLLECTION CENTER, SANTA FE, NEW MEXICO

- b) Early entry dry cut saw should be 1 inch into the depth of the slab. The slab shall be cut to ¼ of the slab depth to deepen the 1 inch nominal early entry saw cut within 24 hours.
- c) A construction or smooth doweled sawcut contraction joint shall be placed at a maximum of 125 ft.
- d) All joints shall be filled to the full joint depth with semi-rigid joint filler in areas exposed to vehicular traffic. Overfill joint and trim joint filler flush with top of joint after hardening.
- 5. Concrete containing air-entraining admixture shall not be steel trowel finished.

CONCRETE PLACEMENT & TESTING

- 1. Unless otherwise indicated, five test cylinders shall be made every fifty cubic yards of concrete or fraction thereof on each day's pour. One cylinder shall be tested at 7 days and three at 28 days. The remaining cylinder shall be held in reserve as a spare. The making and testing of cylinders shall be conducted by an approved testing laboratory; contractor shall bear the cost of testing.
 - a) Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- b) Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
- 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- 4. Maintain ALL reinforcement in position on chairs during concrete placement.

COLD WEATHER CONCRETING

- 1. All cold weather concrete work shall meet the requirements of ACI Committee 306, latest edition for cold weather concreting, if, for 3 consecutive days the average daily temperature drops below 40°F and stays below 50°F for more than one-half of any 24 hour period.
- 2. Do not use frozen materials containing ice or snow.
- 3. Do not place concrete on frozen subgrade or on subgrade containing frozen
- 4. The use of calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators is not permitted; contractor shall utilize a high early strength mix design.

HOT WEATHER CONCRETING

- 1. All hot weather concrete work shall be in accordance with ACI 301. Maintain concrete temperature below 90°F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water.
- 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

EMBEDDED CONDUIT

- 1. Embedded conduits and/or pipes shall not be installed in slabs or columns, unless approved by the structural engineer, prior to construction.
- 2. Conduits and/or pipes shall be protected against rusting. Aluminum conduits and/or pipes shall not be embedded in concrete.

V. STRUCTURAL STEEL

- A. Work shall conform to all applicable codes and specifications and in accordance with the American Institute of Steel Construction Specifications, latest edition, the American Welding Society and ASTM A-36, latest edition.
- B. Structural steel shall conform to the American Institute of Steel Construction Specifications:
 - 1. Hot rolled shapes, must conform to the requirements of ASTM Specifications A-36, A-572 or A-992, with minimum yield of 36 or 50 ksi, respectively.
 - 2. Round HSS, must conform to the requirements of ASTM A-500 Grade B with minimum yield strength of 42 ksi.
 - 3. Rectangular HSS, must conform to the requirements of ASTM A-500 Grade B with a minimum yield strength of 46 ksi.
 - 4. Pipe sections must conform to the requirements of ASTM A53 with a minimum yield strength of 35 ksi.
 - 5. Steel for Cold-Formed sections must conform to the requirements of ASTM A-1011 or A-1039 Grade 55, or ASTM A-653 Grade 55 with minimum yield strength of 55 ksi.
- C. Paint: steel shall be given primer coat of paint and at a rate to provide dry film thickness of not less than 1.5 mils. Field welds, bolts, nuts, abrasions, scrapes, etc., shall be primed after erection.

- Welding electrodes: welding electrodes for manual shielding metal-arc welding shall conform to E60 or E70 series of the "specifications for mild steel arc-welding electrodes, ASTM A233. Bare electrodes and granular flux used in the submerged arc process shall conform to the provisions of the A15C, Section 1.173, or Part5."
- E. Bolts, standard: Shall conform to ASTM A307.
- Bolts, high strength: Shall conform to ASTM A490, or A325 as shown.
- G. Grout for base plates shall be Embeco as manufactured by the Master Builders Company, or approved equal.
- H. Provide 1/2" pre-molded expansion joint material where slab on grade is poured around columns unless otherwise shown.
- Shop drawings shall indicate all structural steel layouts and details showing the type of steel used for each member, sizes of members, connection details, welds, bolts, etc., as required to fabricate and erect all structural steel framing and type of shop paint used conforming to that specified.
- All steel framing shall receive one shop coat of paint.
- K. Responsibility for errors of detailing, fabrication and for the correct fit of all structural steel members in accordance with the contract drawings shall lie entirely with the subcontractor for fabrication.
- Splices not shown on the drawings will not be permitted unless approved by the structural engineer.
- M. Structural steel shall be erected in accordance with the AlsC specifications and in accordance with the AIsC Code of Standard Practice, latest edition.
- Bolted field connections, unless otherwise noted, shall be standard framed beam connections, and made in accordance with specifications for structural joints using ASTM A-490 bolts, or A-325 bolts as shown.
- O. Brace and maintain all steel in alignment until other parts of construction necessary for permanent bracing or support are completed. Install temporary guys and bracing to resist wind loading designated in applicable building code. The contractor is responsible for the stability of the steel frame until such time as all structural elements have been completed and building is enclosed.
- P. The owner shall engage an independent testing and inspection agency to inspect bolted and welded connections. If deemed necessary by the Structural Engineer; radiographic/ultrasonic/magnetic particle testing of structural welds.

VI. COLD-FORMED METAL FRAMING

- A. All cold-formed metal framing shall be designed in accordance with "specifications for the design of cold formed steel structural members" as published by AISI, latest edition, and shall be formed from corrosion- resistant steel corresponding to the requirements of ASTM
- B. All cold-formed metal components are subject to wind load designs in accordance with the International Building Code 2009 - Wind pressure designs and shop drawings shall be signed and sealed by a structural engineer registered in the state of New Mexico and shall be submitted to the Architect for approval.
- C. All welding shall conform to the provisions of AWS D1.1 and ANSI/AWS D1.3.. Where the weld throat is not shown on the drawings, the weld throat shall be at least as large as the thickness of the thinnest sheet joined. All welds shall provide complete fusion of the sheets without "blowouts."
- D. Fabricate steel-framing accessories from steel sheet, ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of same grade and coating weight used for framing
- E. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed metal framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.

VII. STEEL ROOF DECK

A. Submittals

- 1. For each type of decking specified, including dimensions of individual components, profiles, and finishes.
- 2. Shop Drawings showing location of deck units, anchorage details, accessories specified on the contract documents, and other information required for a thorough review.
- 3. Product Certificates (if required) certifying that the supplied products comply with specified requirements
- 4. If mechanical fasteners are used, independent test reports or evaluation reports shall be provided by the fastener manufacturer
- Comply with applicable provisions of the following specifications:
 - 1. AISI S1 00-07 w/S2-1 0, North American Specification for the Design of Cold-Formed Steel Structural Members, Including Supplement 2 (February 201 0)

- 2. AWS 01.3:2008, Structural Welding Code-Sheet Steel ANSI/SOI RD-201 0, Standard for Steel Roof Deck
- 3. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved, and, if applicable, has undergone recertification.

C. Products

1. A manufacturer offering deck products to be incorporated into the work must be a member of the Steel Deck Institute

D. Materials:

- 1. Sheet steel for deck and accessories shall conform to ANSI/SOI RD 20·10, Section 2.1.A, 2.1 .8 , 2.1C, and 2.1.0.
- 2. Steel deck and accessories shall be galvanized to G60 minimum in accordance
- 3. The deck type and thickness shall be as shown on the plans.
- 4. The deck shall be selected to provide the load capacities shown on the drawings and as determined using the ANSI/SOI RD - 2010 construction loading criteria.
- 5. Whenever possible, the deck shall be multi-span
- 6. The deck type provided shall be capable of supporting the superimposed live loads as shown on the plans.
- 7. Ridge and valley plates, flat plates at changes of deck direction, sump pans and side closures shall be the standard type provided by the deck manufacturer unless indicated otherwise on the plans
- 8. End laps shall be installed at all deck ends and shall occur over a joist. At interior positions, panels must be sufficiently overlapped to provide adequate end distances for the connector used. A minimum end distance for fasteners used should be one inch requiring an end lap not less than two inches. Within the system, end laps may be staggered or on a continuous line without particular effect on the diaphragm strength.

Execution

1. Examine support framing and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance of work of this section. All OSHA rules for erection must be followed.

Repairs

1. Before placement of roof insulation and roof covering, the deck shall be inspected for tears, dents or other damage that may prevent the deck from acting as a structural roof base. The need for repair of damaged deck shall be determined by the Architect or Engineer of Record based on structural performance, unless aesthetics have been specifically addressed in the contract documents

Construction Guidelines

- 1. Do not use deck units as a working platform or storage area until units are in position and permanently attached to the structure.
- 2. Construction loads must not exceed load carrying capacity of the deck.

VIII. METAL BUILDING SYSTEMS

DESIGN REQUIREMENTS

- 1. The building manufacturer will use standards, specifications, recommendations. findings and/or interpretations of professionally-recognized groups such as AISC, AISI, AWS, ASTM, CSA, CWB, MBMA, Federal Specifications, and unpublished research by MBMA as the basis for establishing design, drafting, fabrication, and quality criteria, practices, and tolerances. The Manufacturer's design, drafting, fabrication and quality criteria, practices, and tolerances shall govern, unless specifically countermanded by the contract documents.
- 2. Design structural mill sections and built-up plate sections in accordance with:
- a) code-appropriate edition of AISC's "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings", ANSI/AISC 360 ASD
- 3. Cold-Formed steel structural members and panels will generally be designed in accordance with "Specifications for the Design of Cold-Formed Steel Structural Members", 2007 Edition, ANSI/AISI S-100-07 or CAN CSA S136-07.
- 4. Design weldments per the following:
- a) Structural Welding
 - (1) Design per AWS D1.1, "Structural Welding Code Steel", Latest Edition.
- b) Cold-Formed Welding
- (1) Design per AWS D1.3, "Structural Welding Code Sheet Steel", Latest Edition.

SUBMITTALS

- 1. Product Data: Manufacturer's data sheets on each product to be used, including:
- a) Preparation instructions and recommendations.
- b) Storage and handling requirements and recommendations.
- c) Installation methods.

- 2. Shop Drawings: Provide complete erection drawings for the proper identification and assembly of all building components. Drawings will show anchor bolt settings, transverse cross-sections, sidewall, endwall and roof framing, flashing and sheeting, and accessory installation details.
- 3. Certifications: Shop drawings and design analysis shall bear the seal of a registered professional engineer upon request. Design analysis shall be on file and furnished by manufacturer upon request.
- 4. Bill of Materials: Bills of material shall be furnished and shall include item weights.
- 5. Preventative Maintenance Manual.
- 6. Certifications: Certification of installer and welder qualifications shall be furnished as specified by the Project Engineer.

C. QUALITY ASSURANCE

- 1. Manufacturer / Fabricator Qualifications:
- a) All primary products specified in this section will be supplied by a single IAS AC 472 Accredited Manufacturer /Fabricator with a minimum of five (5) years' experience.
- 2. Weldments/Welder/Weld Inspection Qualifications:
- a) Welding inspection and welding inspector qualification for structural steel shall be in accordance with AWS D1.1, "Structural Welding Code - Steel", latest edition. Welding inspection and welding inspector qualification for cold-formed steel shall be in accordance with AWS D1.3, "Structural Welding Code - Sheet Steel", latest edition.
- 3. Erector Qualifications: All products listed in this section are to be installed by a single installer with a minimum of five (5) years demonstrated experience in installing products of the same type and scope as specified.
- 4. Design: Standard drawings and design analysis must bear the seal of a registered professional engineer. Design analysis must be on file and furnished by manufacturer upon request.

D. INSTALLATION

1. There shall be no field modifications to primary structural members except as authorized and specified by manufacturer.

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1 TYPICAL CORNER BAR REINFORCEMENT

EDGE NAILS: #10 TEK SCREWS, SPACING PER PLAN SOLID BLOCKING FOR GYPBOARD PANELS DOUBLE STUD, SEE PLAN FOR STUD SIZE STRAP BLOCKING FOR GYPBOARD PANELS COLD FORMED METAL STUDS @ 16" OC #10 TEK SCREWS @ 12" OC AT INTERMEDIATE SUPPORTS SIMPSON HOLD DOWN ANCHOR, PER PLAN 5/8" DIA ASTM F1554 Gr.36 ANCHORS @ 48" OC, EMBED 7" MIN UON.

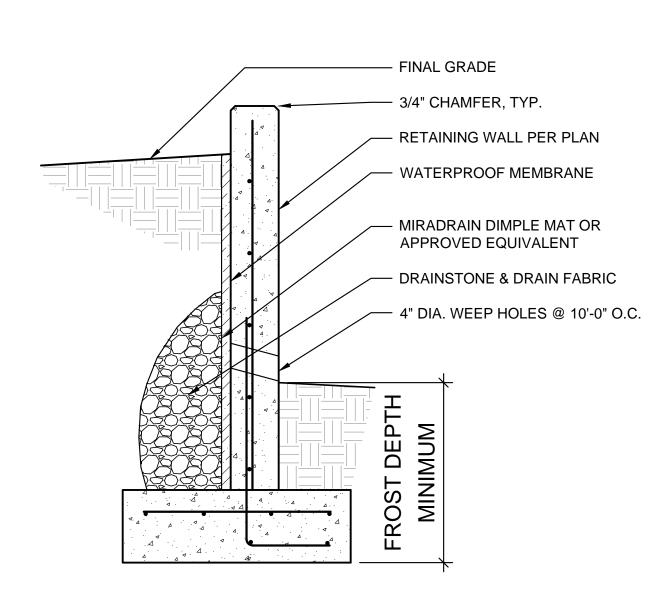
CONC FOOTING PER PLAN

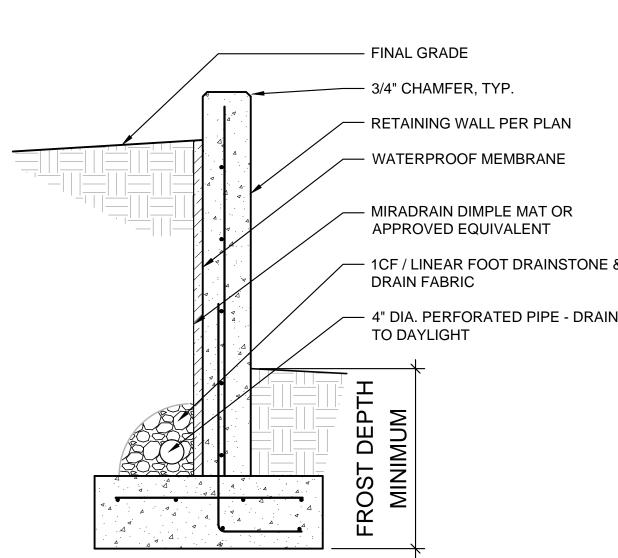
S0.4/3/4" = 1'-0"

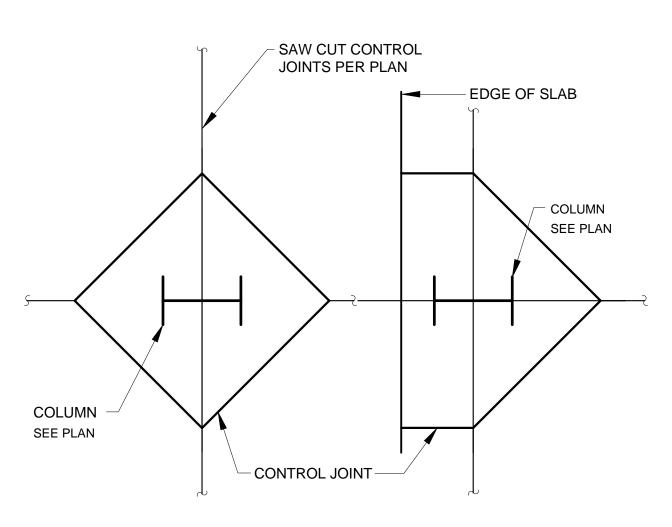
- 1. SHEATHING SHALL BE 7/16" OSB OR 5/8" GYPBOARD PER PLAN
- 2. OSB SHEATHING FACE GRAIN MAY BE HORIZ OR VERT 3. GYPBOARD PANELS TO BE PLACED PERPENDICULAR TO FRAMING
- **MEMBERS**
- 4. GYPBOARD SHEATHED WALLS TO HAVE STRAP BLOCKING BEHIND HORIZ. JOINT AND SOLID BLOCKING BETWEEN FIRST TWO END STUDS. ALL PANELS EDGES TO BE BLOCKED

TYP SHEAR WALL

\$0.4 N.T.S.





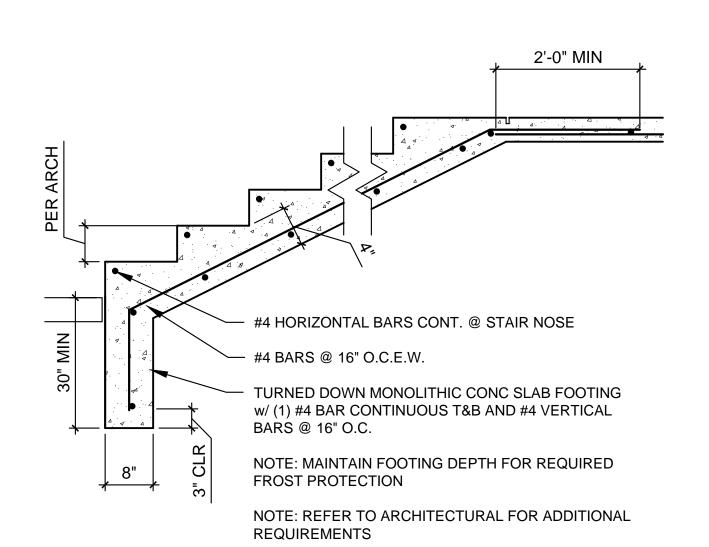


WHERE CONTROL JOINT DOES NOT OCCUR AT CORNER OF COLUMN BOX, PLACE (2) #4 x 3'-0" BARS PERPENDICULAR TO CORNER FOR CRACK WIDTH CONTROL

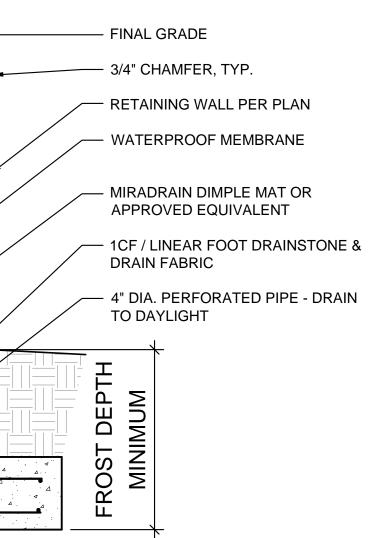
TYPICAL S.O.G. CRACK CONTROL AT COLUMNS

S0.4/3/4" = 1'-0"

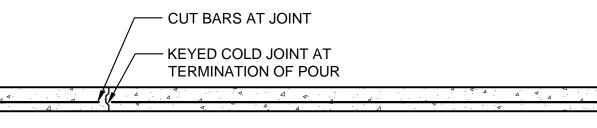
IN FOOTING



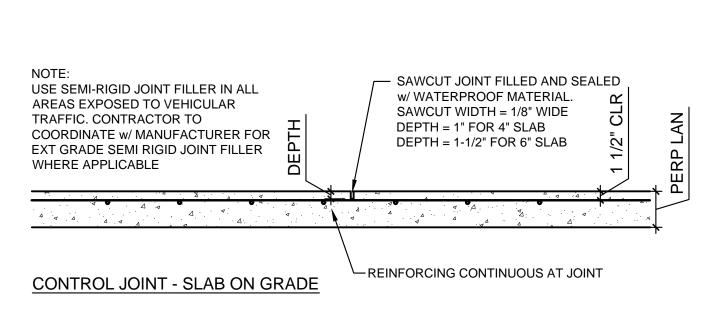
6 TYPICAL MONOLITHIC CONC. STAIRS ON GRADE S0.4/3/4" = 1'-0"



10 TYPICAL SLAB-ON-GROUND DETAIL



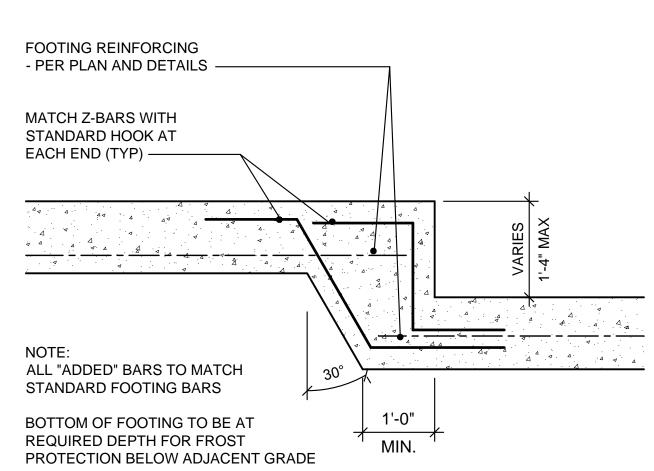
KEYED COLD / CONSTRUCTION / CONTROL JOINT



ALL SLABS SHALL CONTAIN CONTRACTION JOINTS UNDER THE CRITERIA AS DESCRIBED IN THE OUTLINE SPECIFICATIONS OF THE PROJECT. CONTRACTOR SHALL SUBMIT TO THE ARCHITECT THE FINAL LOCATIONS OF CONTRACTION JOINTS FOR APPROVAL, PRIOR TO CONSTRUCTION.

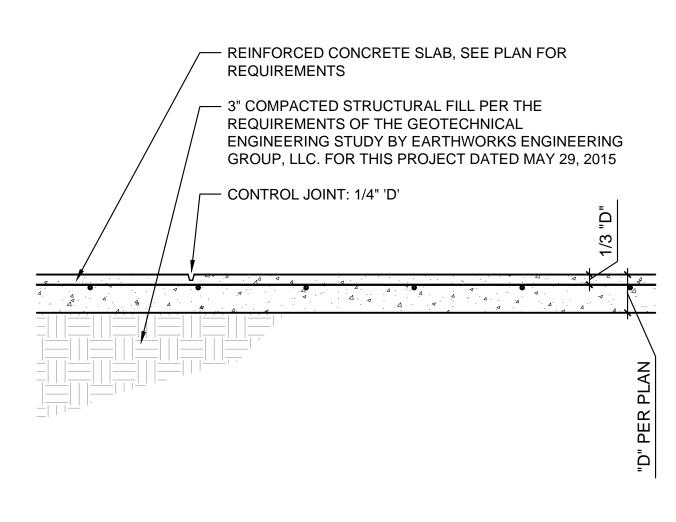
TYPICAL CONTROL CONTRACTION JOINT DETAILS

S0.4/3/4" = 1'-0"

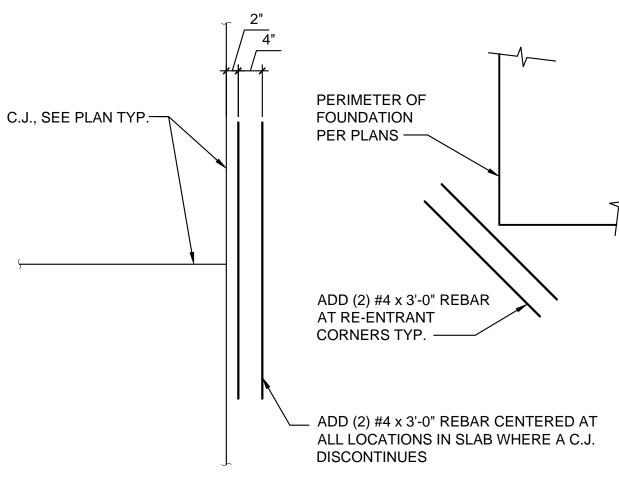


7 TYPICAL STEPPED FOOTING

S0.4 3/4" = 1'-0"

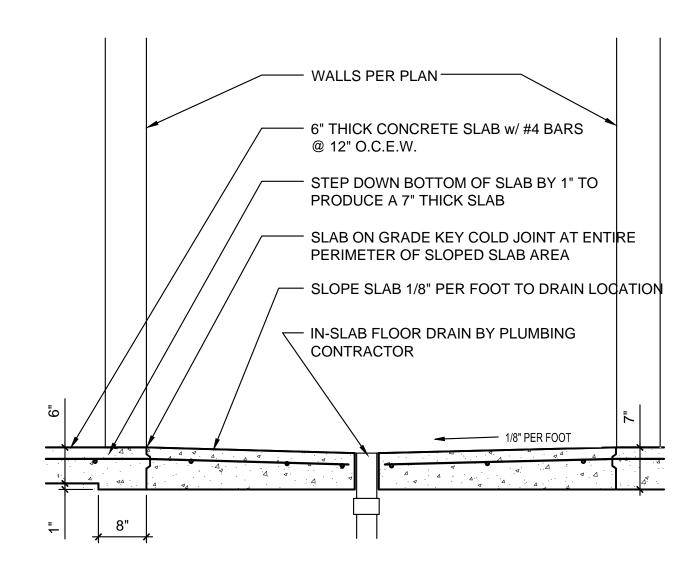


S0.4 3/4" = 1'-0"



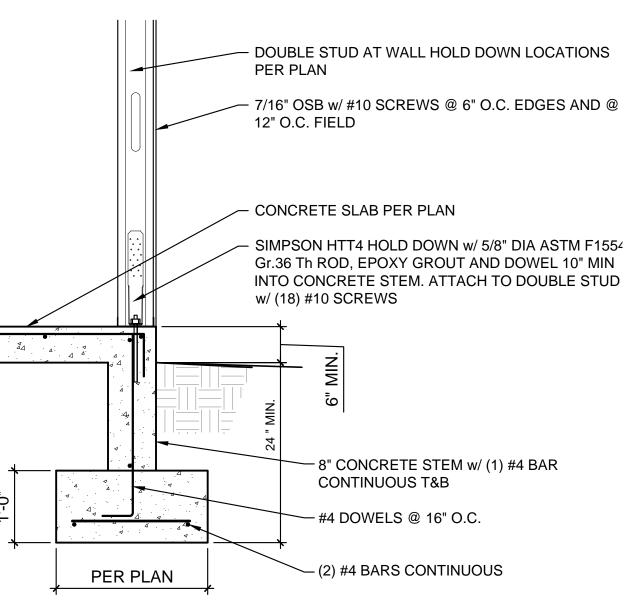
TYPICAL CRACK WIDTH CONTROL REINFORCING

S0.4/3/4" = 1'-0"



8 TYPICAL DROPPED SLAB

S0.4 3/4" = 1'-0" AT SLAB SLOPED TO DRAIN



11 TYP LIGHT GA. WALL HOLD DOWN

S0.4/3/4" = 1'-0"



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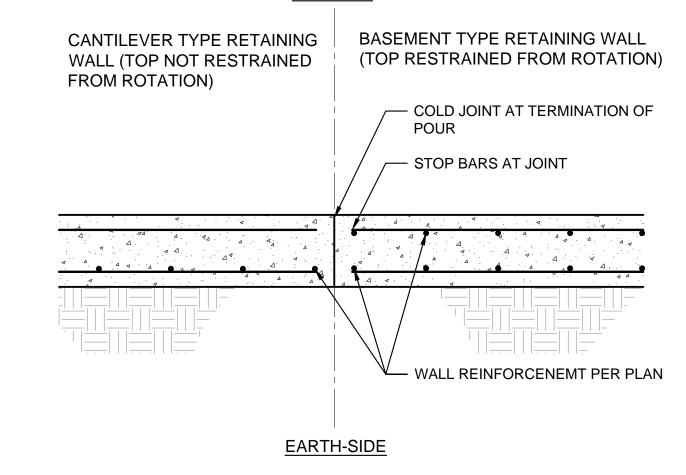
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RETAINING WALL DRAINAGE OPTIONS 50.4/3/4" = 1'-0"

1 TYPICAL CORNER ANGLE AT CONCRETE EDGE

S0.5/3/4" = 1'-0"

OUT-SIDE



WALL CONSTRUCTION JOINT

2 TYP WALL JOINTS

—— TOOL SURFACE TO SMOOTH AND FIRM INTO JOINT

GROOVE SURFACES MUST BE CLEAN, DRY, FREE

OF LAITANCE AND OTHER CONTAMINANTS

_ SEALANT

—SEALANT

ALL WALLS SHALL CONTAIN WEAKENED PLANE CONTROL JOINTS SPACED @ 25'-0" O.C. MAX AND WITHIN 10'-0" OF ALL WALL CORNERS. CONTRACTOR SHALL SUBMIT TO ARCHITECT FINAL LOCATIONS OF

ALL CONTROL JOINTS FOR APPROVAL PRIOR TO CONSTRUCTION

WEAKENED PLANE CONTROL JOINTS

1-1/4" FOR 8" WALL

2-1/4" FOR 16" WALL

REINFORCEMENT PER PLAN

PREFORMED ROUND BACKUP MATERIAL

NOTE: JOINTS SHALL BE INSTALLED WITHIN 10'-0" OF ALL WALL CORNERS

─JOINTS SPACED @ 25'-0" O.C. MAX

S0.5 3/4" = 1'-0"

EARTH-SIDE

OUT-SIDE

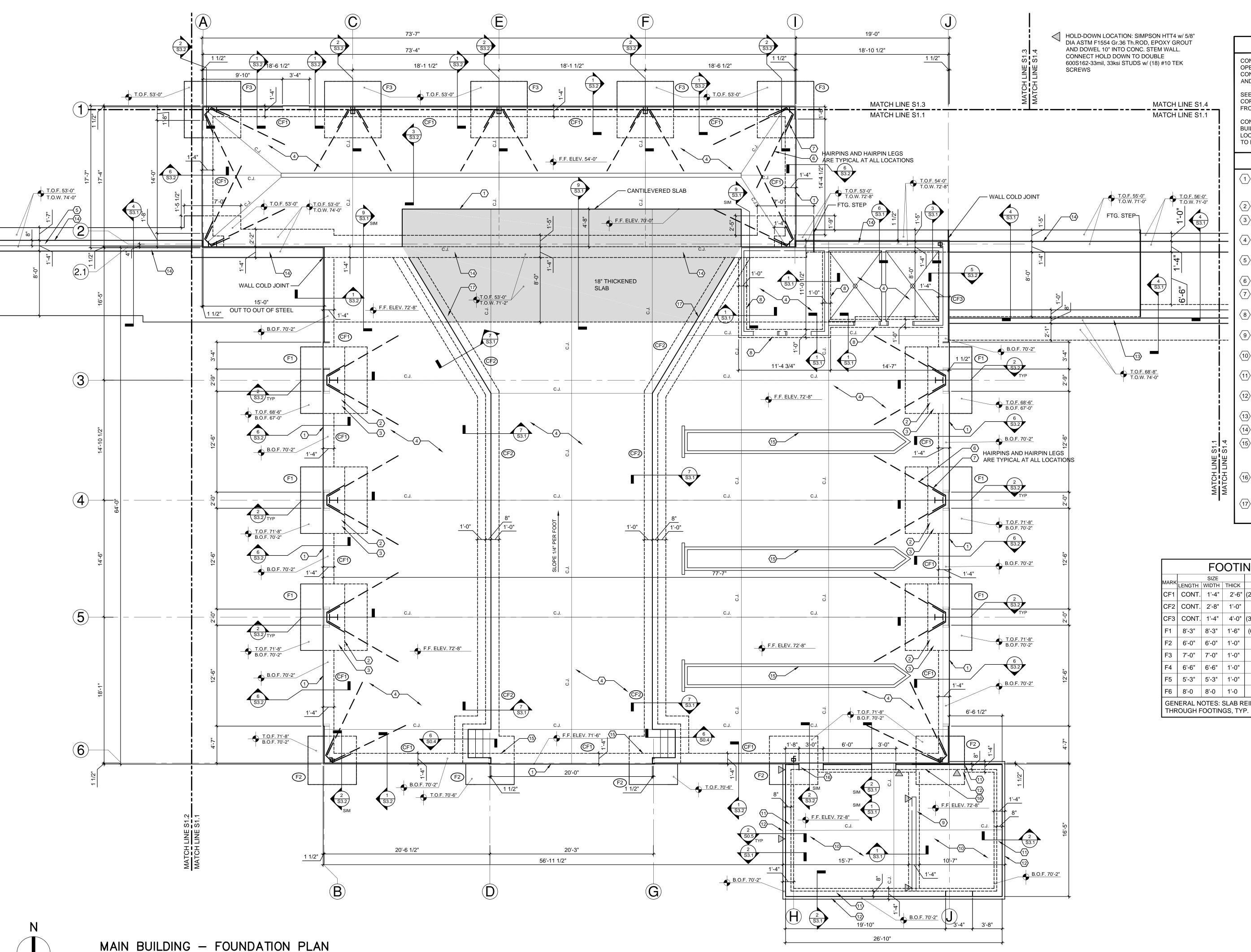
NOTE:

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3/16" = 1'-0"

GENERAL NOTES

CONTRACTOR TO VERIFY AND COORDINATE ALL OPENINGS, SLAB DEPRESSIONS, AND SLOPES IN CONCRETE FOR DRAINAGE WITH ARCHITECTURAL AND PLUMBING PLANS.

SEE ARCHITECTURALS AND CIVIL DRAWINGS FOR CORRECT BASE ELEVATION OF FLOOR SLABS FROM SITE BENCH MARK.

CONTRACTOR TO COORDINATE AND VERIFY METAL BUILDING MANUFACTURER ANCHOR BOLT LOCATIONS AND CENTERLINE OF FOOTINGS PRIOR TO PLACEMENT OF CONCRETE.

KEYED NOTES

- $\langle 1 \rangle$ $\langle 3 \times 3 \times 3/16$ " GALV CONC. CORNER ANGLE w/ 1/2" HEADED STUDS @ 24" O.C., TYP. AT ALL LOCATIONS w/ WHEEL LOADS
- (2) EXTEND TURNDOWN TO TOP OF FOOTING ELEV

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- 3 WIDEN STRIP FOOTING @ COLUMN LOCATIONS ADD (1) #5 CONTINUOUS PER FOOT OF DEPTH
- 6" CONC. SLAB ON GRADE w/ #4 BARS @ 16" O.C.E.W., 4,000 psi STRENGTH CONC. @ 28 DAYS
- $\langle 5 \rangle$ 8" THICK WALL, EXTEND 16" ABOVE RETAINING HEIGHT, SEE DETAIL 8/S3.1
- $\langle 6 \rangle$ #4 x 8'-6" HAIRPIN LEG
- \langle 7 \rangle #4 HAIRPIN, 12" WIDE BASE MINIMUM, LAP w/ HAIRPIN LEGS 24" MINIMUM
- $\langle 8 \rangle$ 12" WIDE THICKENED SLAB w/ (2) #4 BARS CONTINUOUS
- 9 16" WIDE THICKENED SLAB w/ (2) #4 BARS
- CONTINUOUS (10) 4" CONC. SLAB ON GRADE w/ #3 BARS @ 16"
- O.C.E.W., 3,000 psi STRENGTH CONC. @ 28 DAYS (11) 8" CONCRETE STEM WALL w/ (1) #4 BAR
- CONTINUOUS T&B $\langle 12 \rangle$ 16" WIDE CONCRETE FOOTING w/ (2) #4 BARS
- CONTINUOUS $\langle 13 \rangle$ 8" THICK CONC RETAINING WALL, SEE SCHED.
- (14) 16" THICK CONC RETAINING WALL, SEE SCHED.
- \langle 15angle L4 x 4 x 1/2" ANGLES, FASTEN TO FLR w/ 5/8" DIA ANCHOR BOLTS @ 12" O.C. EPOXY GROUT AND

w/ ARCH PLANS

(16) STEM WALL OVER SPOT FOOTING. VERTICAL DOWELS CAST INTO FOOTING AND EXTEND ABOVE FOR PLACEMENT OF STEM

DOWEL 3" INTO SLAB, COORDINATE LOCATION

17 CONTRACTOR SHALL BEND REINFORCING ADJACENT TO STEM WALL TO ENSURE DEVELOPMENT LENGTH FOR CANTILEVER SLAB

FOOTING SCHEDULE REINFORCING
TOP BOTTOM REMARKS LENGTH WIDTH THICK CF1 CONT. 1'-4" 2'-6" (2) #5 CONT. (2) #5 CONT. CF2 | CONT. | 2'-8" | 1'-0" (4) #4 CONT. REFER TO DETAIL 5/S3.2 CF3 CONT. 1'-4" 4'-0" (3) #5 CONT. (3) #5 CONT. F1 | 8'-3" | 8'-3" | 1'-6" | (6) #5 E.W. | (6)#5 E.W. F2 6'-0" 6'-0" 1'-0" (6) #5 E.W. F3 7'-0" 7'-0" 1'-0" (6) #5 E.W. F4 6'-6" 6'-6" 1'-0" (6) #5 E.W. F5 | 5'-3" | 5'-3" | 1'-0" (5) #5 E.W. F6 8'-0 8'-0 1'-0 (7) #5 E.W. GENERAL NOTES: SLAB REINFORCING IS CONTINUOUS

> LUCHINI - TRUJILLO STRUCTURAL ENGINEERS, INC. 1919 FIFTH STREET SUITE N ∘ SANTA FE, NM 87505 6913 SHOSHONE RD. NE ∘ ALBUQUERQUE, NM 87110 (505) 424-3232 ∘ INFO@LTSENG.COM ∘ LTSENG.COM

ENGINEER'S SEAL Eric D. Trujillo, PE New Mexico License Number

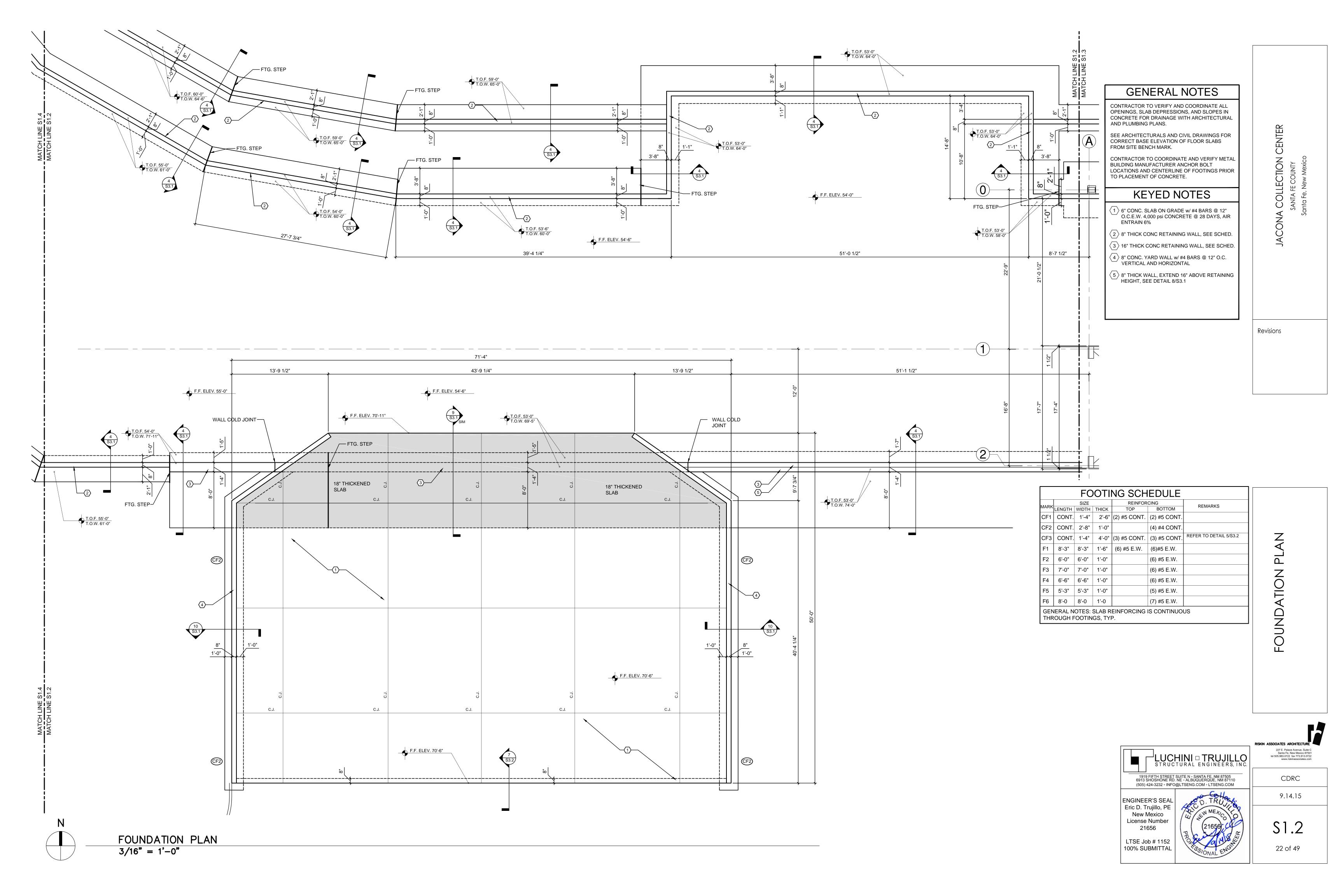
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SEE ARCHITECTURALS AND CIVIL DRAWINGS FOR

BUILDING MANUFACTURER ANCHOR BOLT LOCATIONS AND CENTERLINE OF FOOTINGS PRIOR TO PLACEMENT OF CONCRETE.

KEYED NOTES

- 15 16" WIDE TURNED DOWN SLAB EDGE w/ (2) #5 CONTINUOUS T&B
- $\langle 2 \rangle$ 6" CONC. SLAB ON GRADE w/ #4 BARS @ 12" O.C.E.W. 4,000 psi CONCRETE @ 28 DAYS, AIR **ENTRAIN 6%**
- 3 #4 x 20'-0" HAIRPIN LEG, 12" WIDE BASE MIN.
- $\langle 4 \rangle$ WIDEN STRIP FOOTING @ COLUMN LOCATIONS
- (5) 8" TH CONCRETE RETAINING WALL, SEE SCHED
- $\langle 6 \rangle$ 14" x 14" CONCRETE PIER, SEE DET. 3/S3.2

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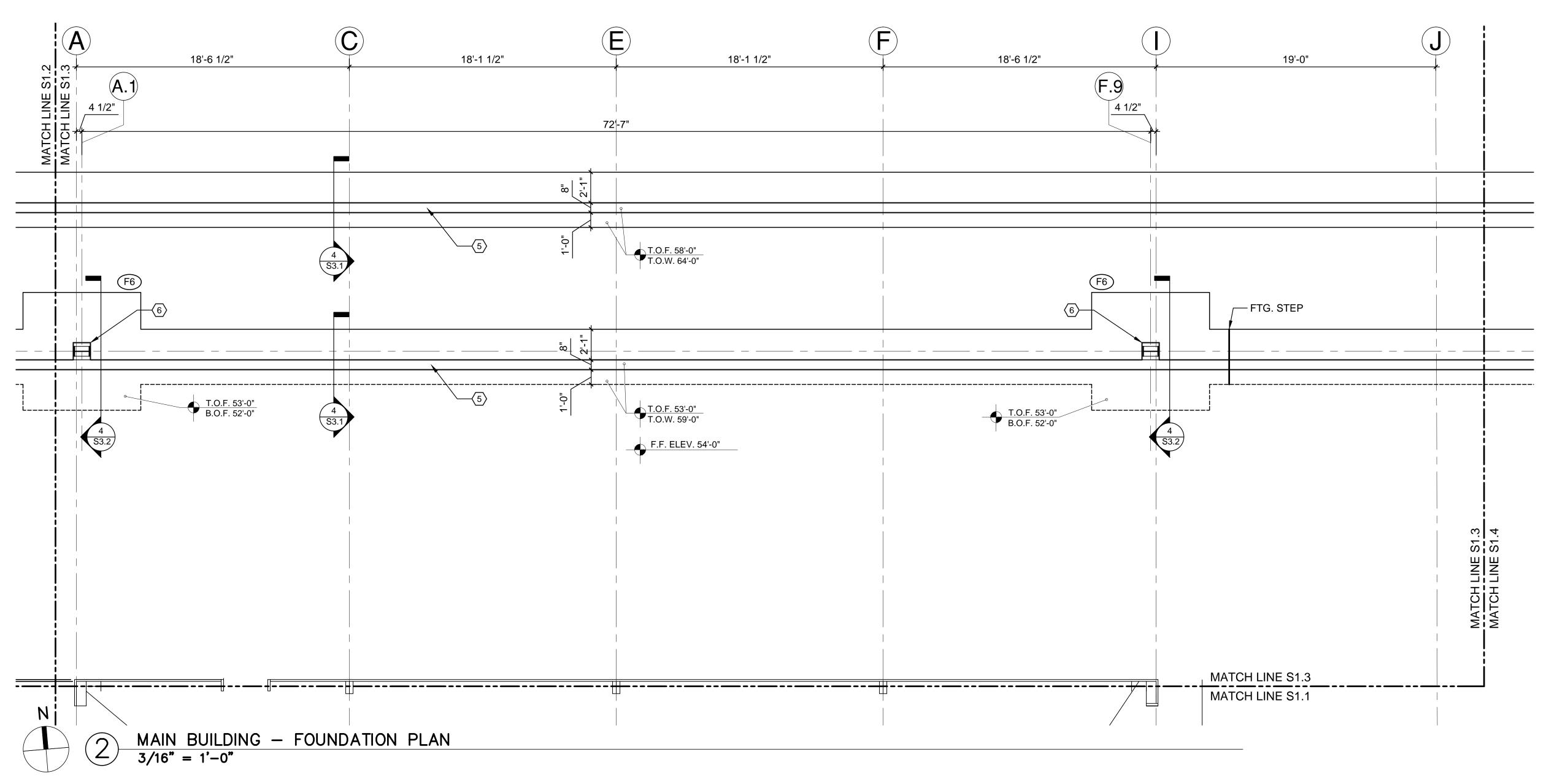
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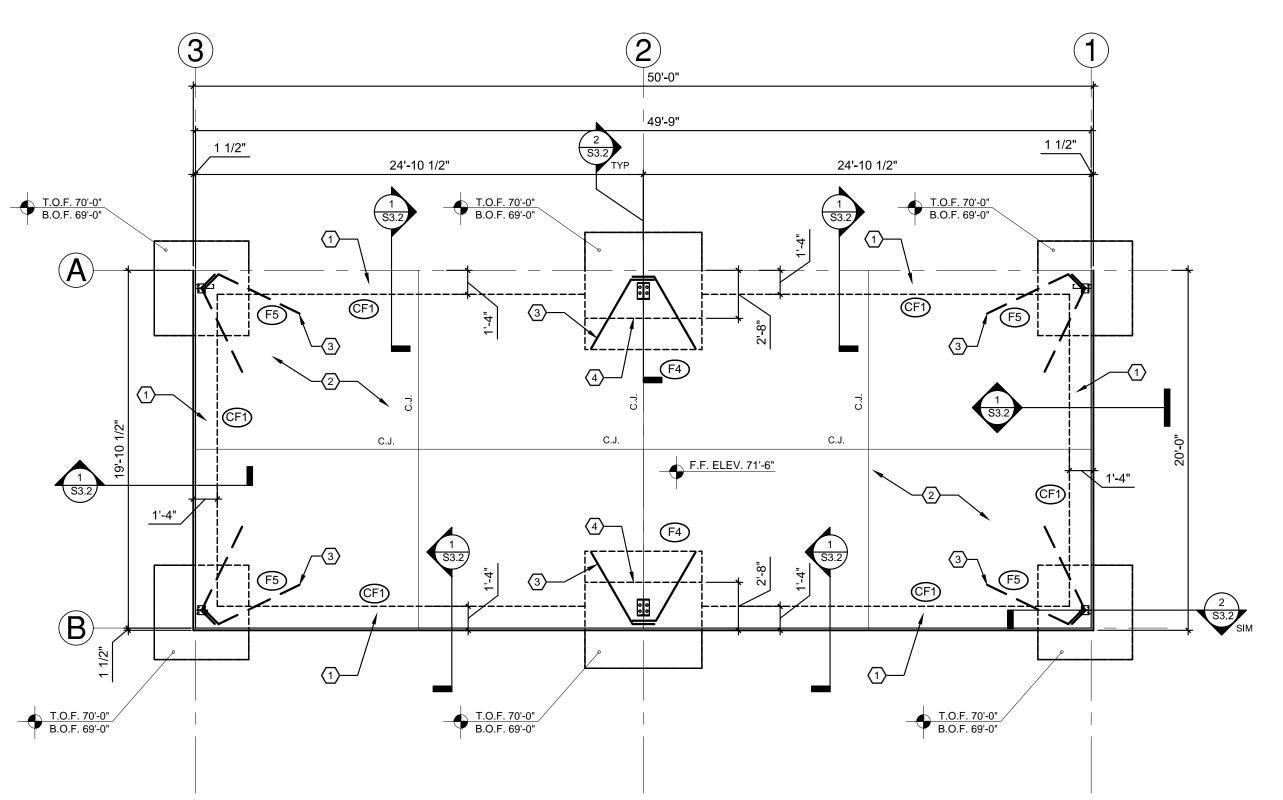
		FC	OTI	NG SCH	EDULE	
MADIC		REMARKS				
WARK	LENGTH	WIDTH	THICK	TOP	воттом	KEWIAKKS
CF1	CONT.	1'-4"	2'-6"	(2) #5 CONT.	(2) #5 CONT.	
CF2	CONT.	2'-8"	1'-0"		(4) #4 CONT.	
CF3	CONT.	1'-4"	4'-0"	(3) #5 CONT.	(3) #5 CONT.	REFER TO DETAIL 5/S
F1	8'-3"	8'-3"	1'-6"	(6) #5 E.W.	(6)#5 E.W.	
F2	6'-0"	6'-0"	1'-0"		(6) #5 E.W.	
F3	7'-0"	7'-0"	1'-0"		(6) #5 E.W.	
F4	6'-6"	6'-6"	1'-0"		(6) #5 E.W.	
F5	5'-3"	5'-3"	1'-0"		(5) #5 E.W.	
F6	8'-0	8'-0	1'-0		(7) #5 E.W.	

THROUGH FOOTINGS, TYP.



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REUSE AREA - FOUNDATION PLAN

GENERAL NOTES

CONTRACTOR TO VERIFY AND COORDINATE ALL OPENINGS, SLAB DEPRESSIONS, AND SLOPES IN CONCRETE FOR DRAINAGE WITH ARCHITECTURAL

SEE ARCHITECTURALS AND CIVIL DRAWINGS FOR CORRECT BASE ELEVATION OF FLOOR SLABS FROM SITE BENCH MARK.

CONTRACTOR TO COORDINATE AND VERIFY METAL BUILDING MANUFACTURER ANCHOR BOLT

LOCATIONS AND CENTERLINE OF FOOTINGS PRIOR TO PLACEMENT OF CONCRETE.

KEYED NOTES

 $\langle 1 \rangle$ 8" THICK CONC RETAINING WALL, SEE SCHED.

 $\langle 2 \rangle$ 16" THICK CONC RETAINING WALL, SEE SCHED.

3 VERSA-LOCK RETAINING WALL, SEE CIVIL

AND PLUMBING PLANS.

FOUNDATION PLAN

RISKIN ASSOCIATES ARCHITECTURE

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(505) 424-3232 ° INFO@LTSENG.COM

ENGINEER'S SEAL

New Mexico License Number

21656

LTSE Job # 1152

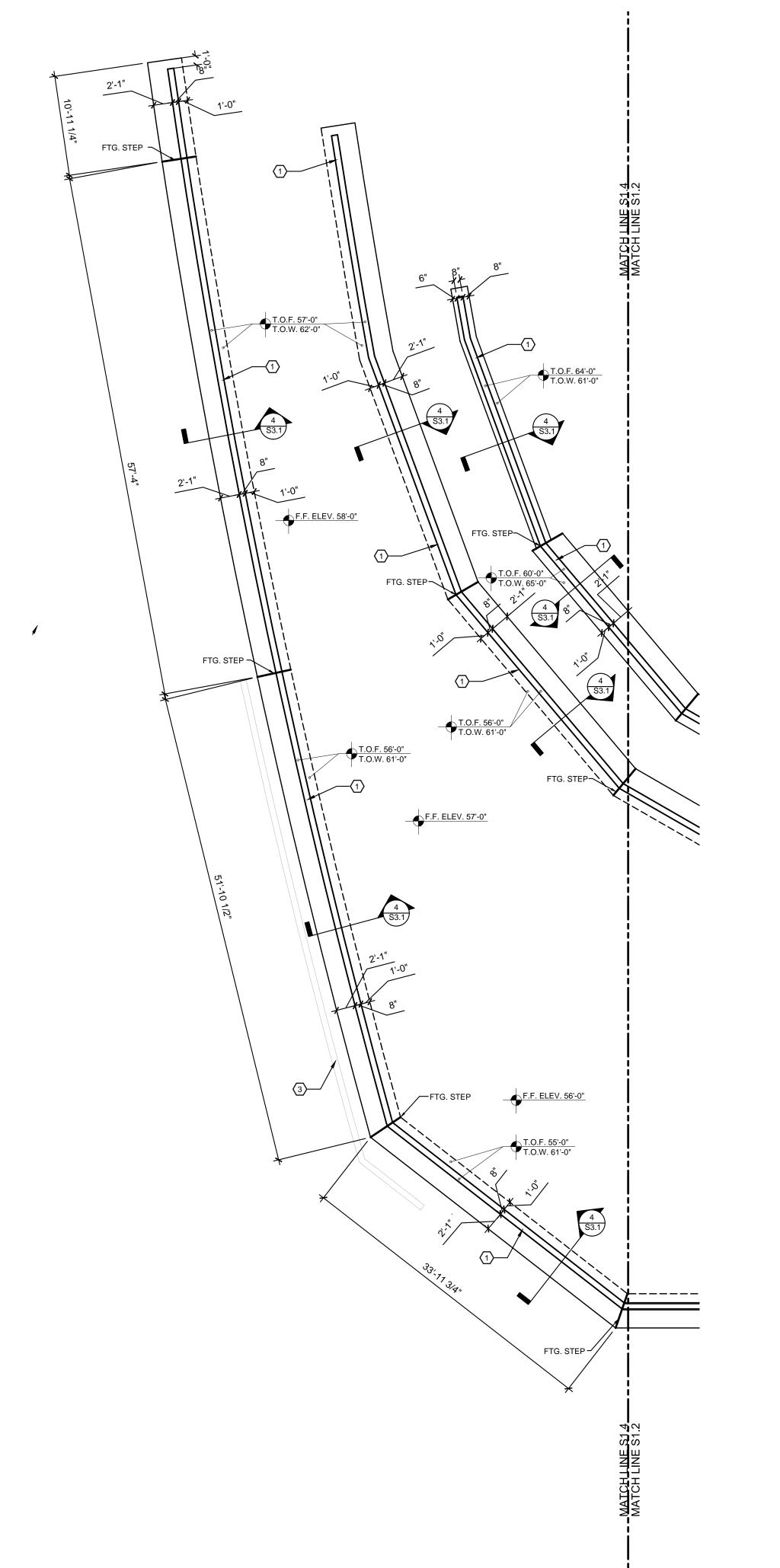
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2 EAST RETAINING WALLS - FOUNDATION PLAN

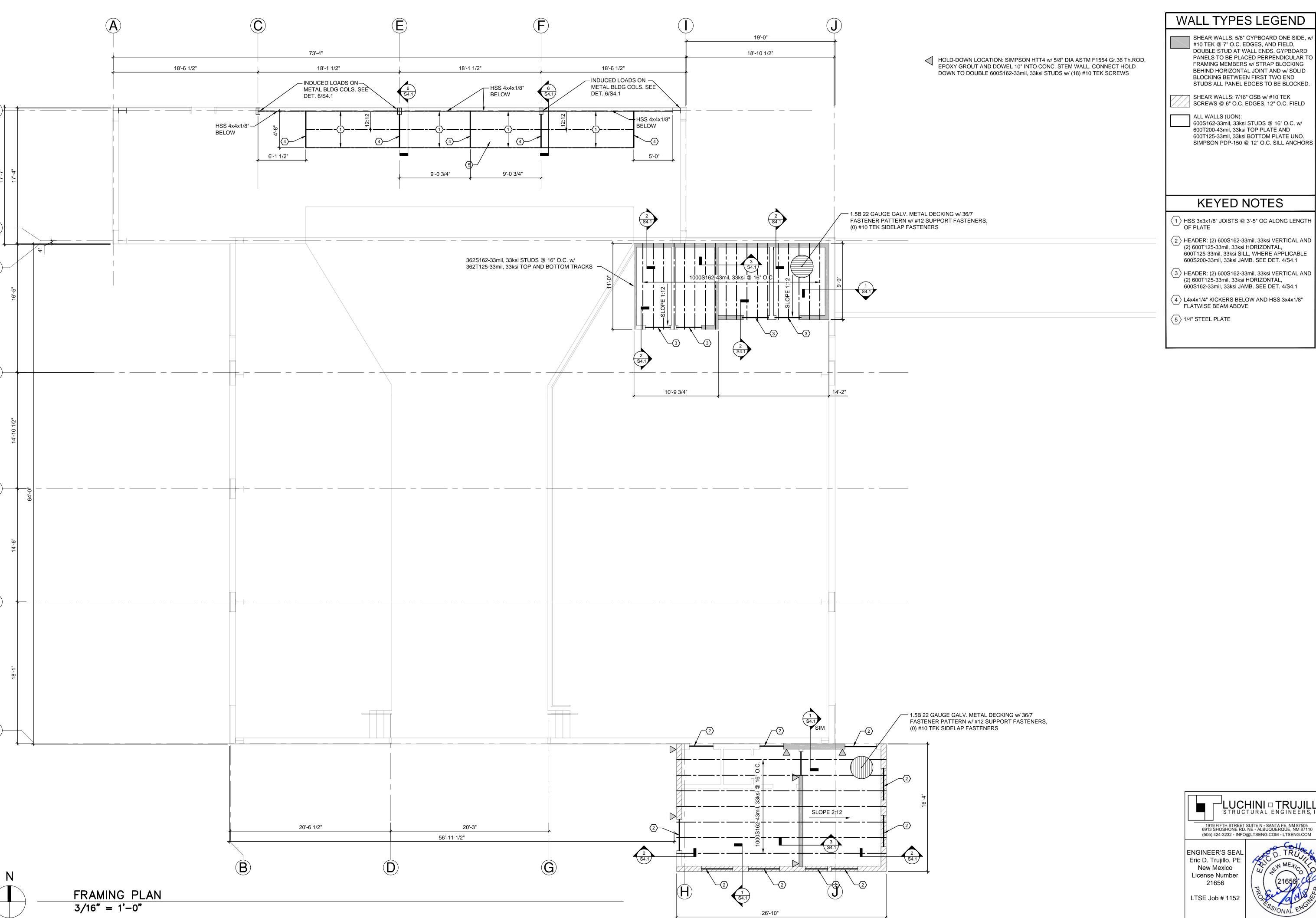
1/8" = 1'-0"



N C

WEST RETAINING WALLS — FOUNDATION PLAN

1/8" = 1'-0"



WALL TYPES LEGEND

SHEAR WALLS: 5/8" GYPBOARD ONE SIDE, w/ #10 TEK @ 7" O.C. EDGES, AND FIELD, DOUBLE STUD AT WALL ENDS. GYPBOARD PANELS TO BE PLACED PERPENDICULAR TO FRAMING MEMBERS w/ STRAP BLOCKING BEHIND HORIZONTAL JOINT AND w/ SOLID BLOCKING BETWEEN FIRST TWO END

SCREWS @ 6" O.C. EDGES, 12" O.C. FIELD

600S162-33mil, 33ksi STUDS @ 16" O.C. w/ 600T200-43mil, 33ksi TOP PLATE AND 600T125-33mil, 33ksi BOTTOM PLATE UNO.

- (2) 600T125-33mil, 33ksi HORIZONTAL, 600T125-33mil, 33ksi SILL, WHERE APPLICABLE 600S200-33mil, 33ksi JAMB. SEE DET. 4/S4.1
- (2) 600T125-33mil, 33ksi HORIZONTAL, 600S162-33mil, 33ksi JAMB. SEE DET. 4/S4.1
- 4 L4x4x1/4" KICKERS BELOW AND HSS 3x4x1/8" FLATWISE BEAM ABOVE

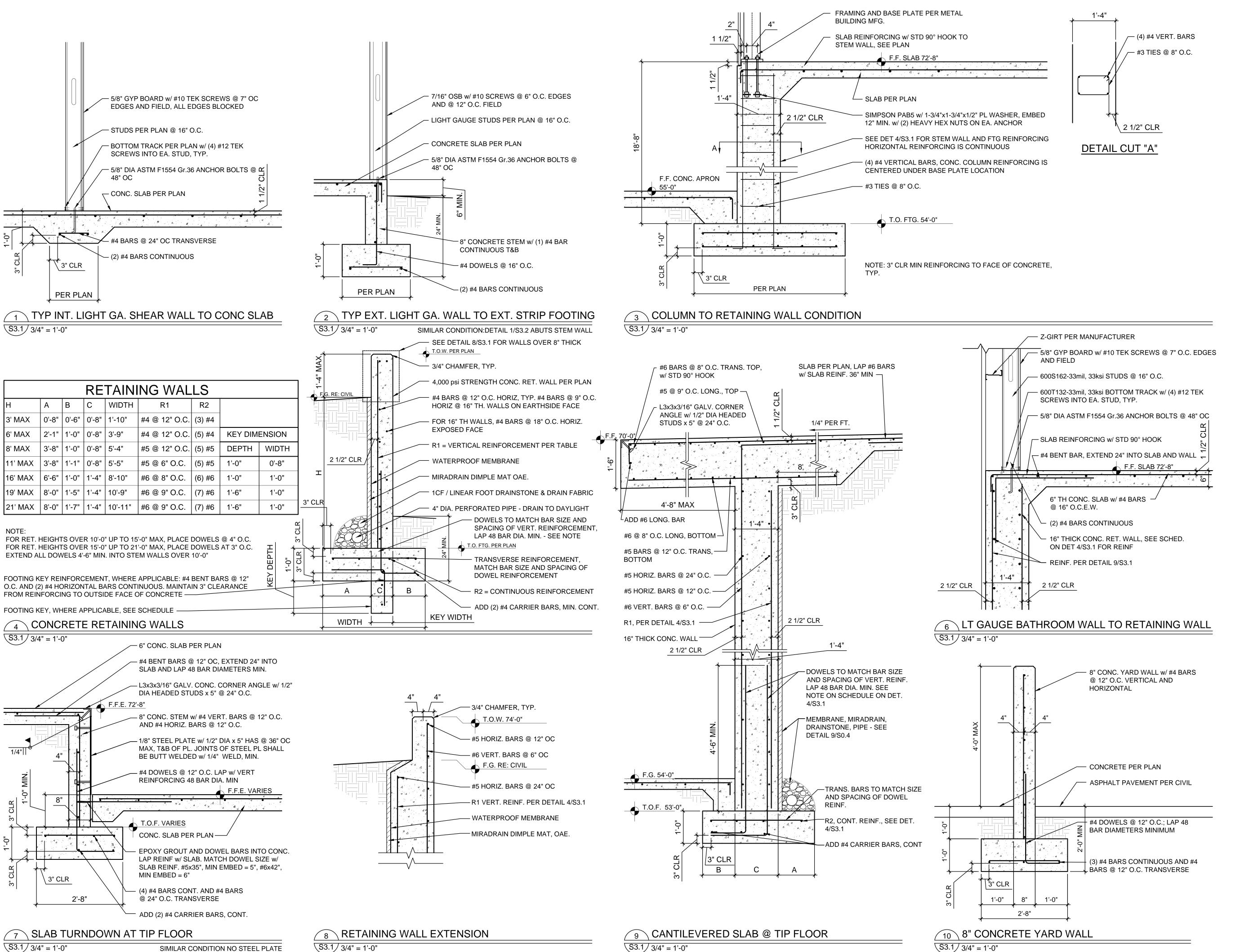
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Santa Fe, New Mexico

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FOUNDATION DETAILS



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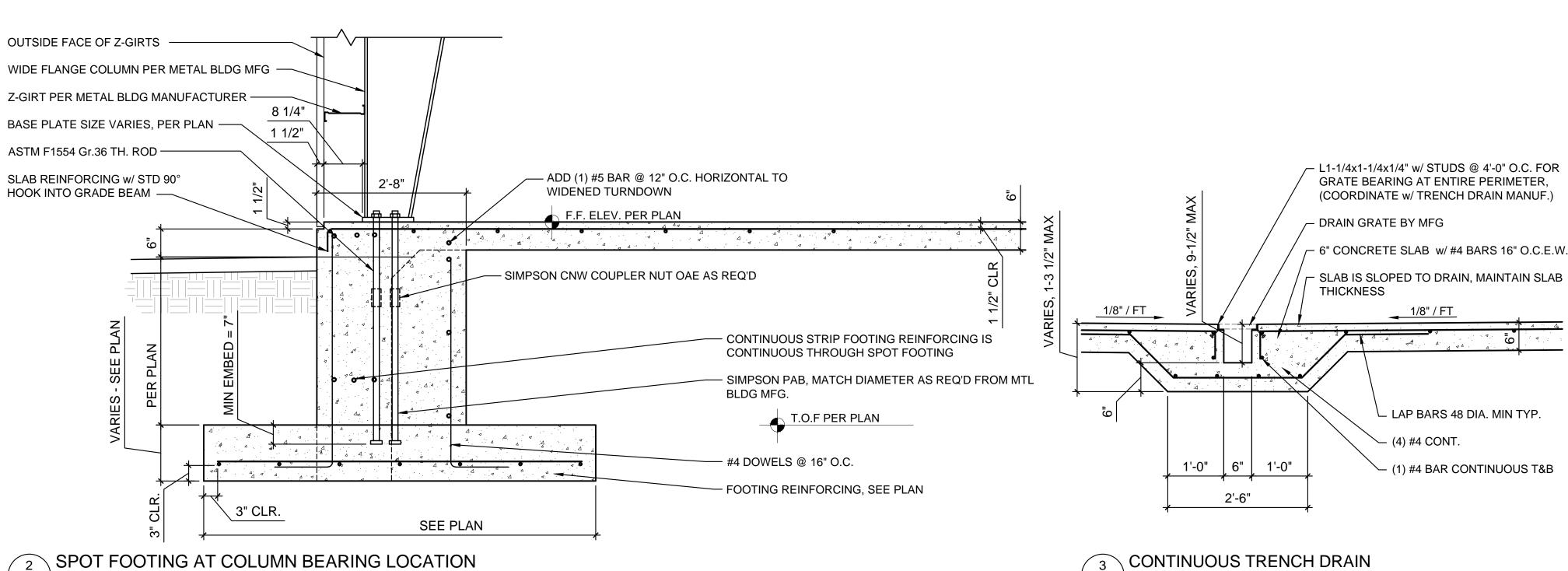


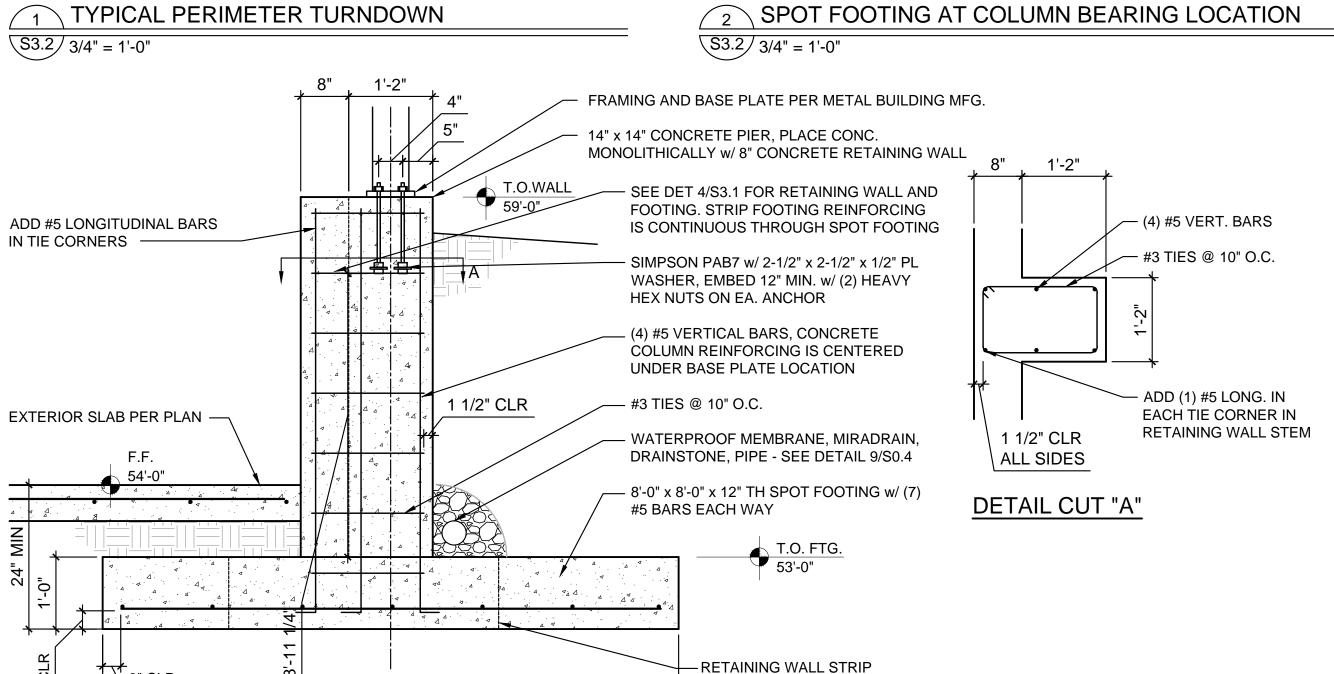
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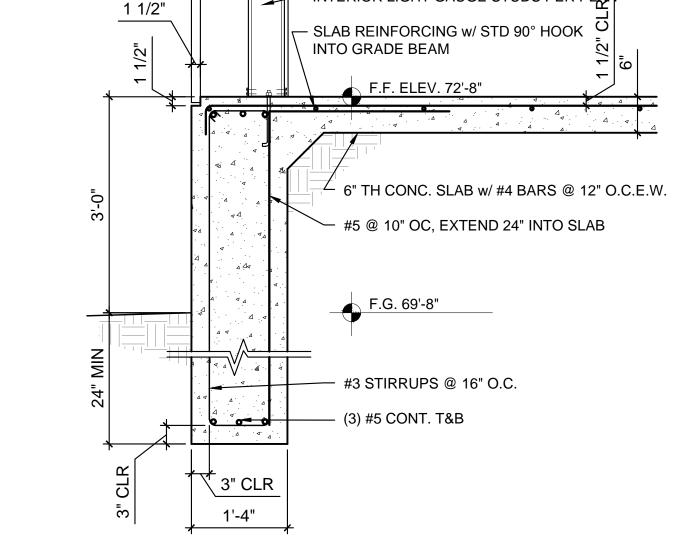








FOOTING BEYOND

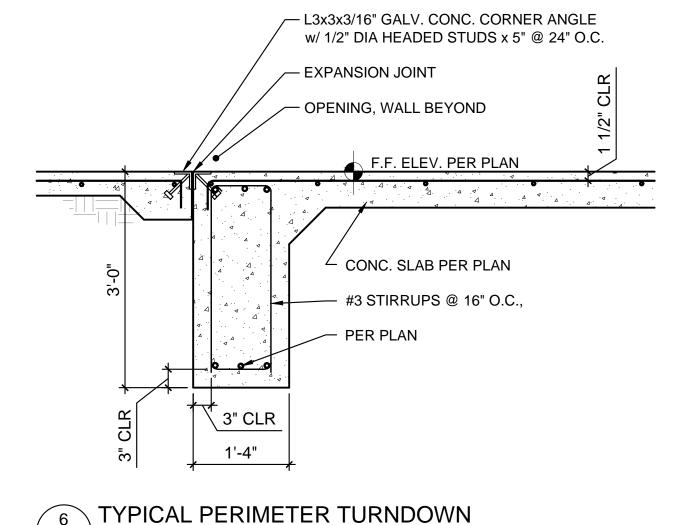


TYP. CONDITION: MOMENT BENT LOCATIONS SIM CONDITION: END WALL COLUMN LOCATIONS

—OUTSIDE FACE OF STEEL GIRTS AND COLUMNS

──INTERIOR LIGHT GAUGE STUDS PER PLAN

Z-GIRT PER MANUFACTURER



DOORWAY LOCATIONS

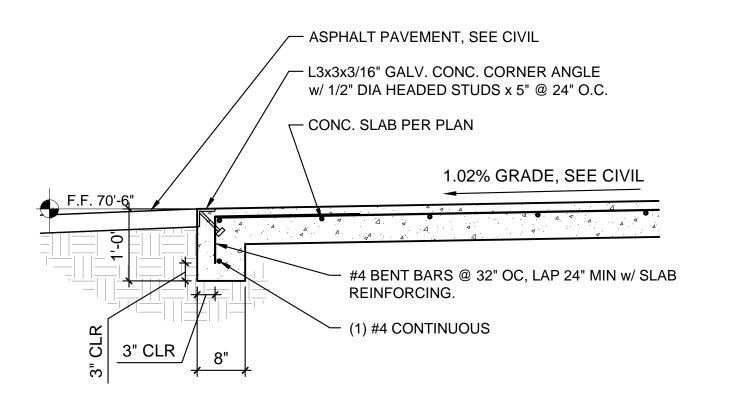
S3.2 3/4" = 1'-0"

S3.2 3/4" = 1'-0"

5 RETAINING TURNDOWN FOOTING

S3.2 3/4" = 1'-0"

4 WIDE FLANGE COLUMN TO CONCRETE PIER ON FOOTING AT RETAINING WALL



8'-0"

- Z-GIRT PER MANUFACTURER

— INTERIOR GYPBOARD PER ARCH

INTO GRADE BEAM

1 1/2"

3" CLR

1'-4"

∖ 3" CLR

S3.2 3/4" = 1'-0"

- SLAB REINFORCING w/ STD 90° HOOK

F.F. SLAB SEE PLAN

- #3 STIRRUPS @ 16" O.C.,

─ PER PLAN

OUTSIDE FACE OF STEEL GIRTS AND COLUMNS

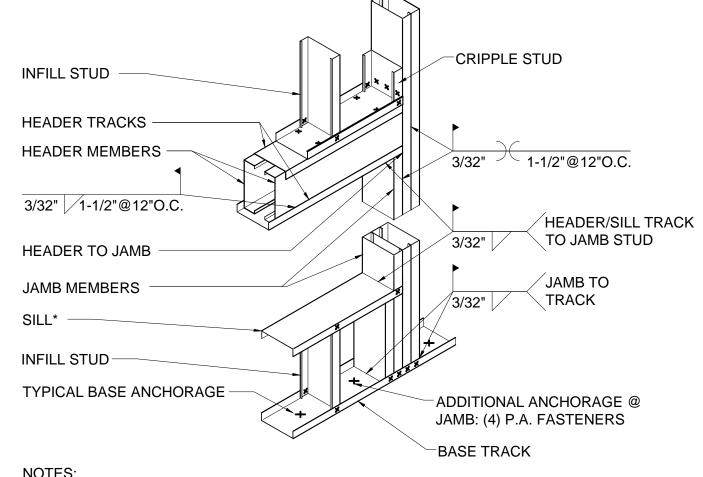
∕- 6" TH CONC. SLAB w/ #4 BARS @ 12" O.C.E.W.

TYPCIAL EXTERIOR SLAB THICKENED EDGE

S3.2 3/4" = 1'-0"



S4.1 3/4" = 1'-0" SIMILAR CONDITION: 1/2" GAP BETWEEN BUILDINGS w/ EXPANSION MATERIAL, REF. ARCH

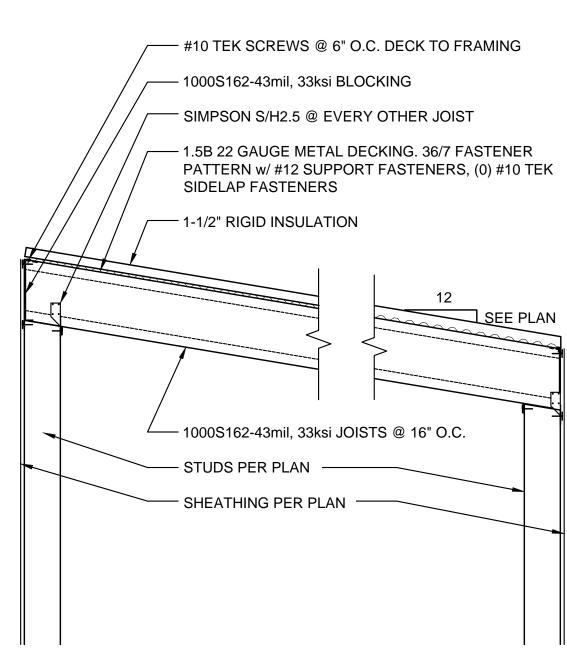


HEADER: (2) 600S162-33mil, 33ksi VERTICAL, (2) 600T125-33mil, 33ksi HORIZONTAL JAMB: SEE PLAN

SILL: (FOR WINDOWS) 600T125-33mil, 33ksi * SILL DETAIL WHERE APPLICABLE

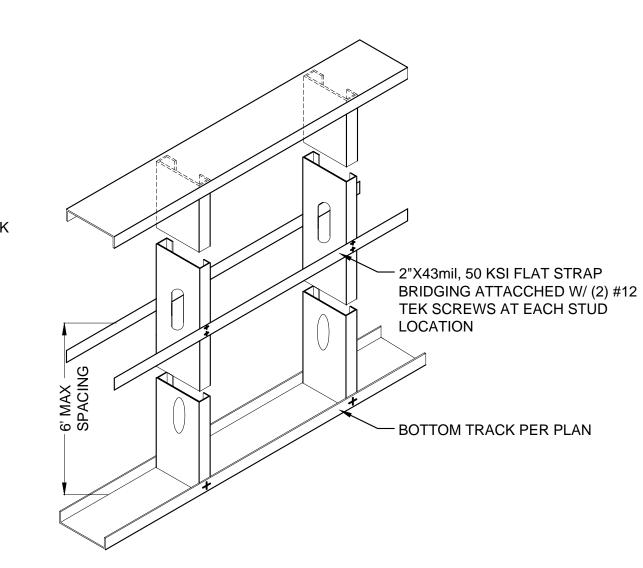
4 TYPICAL LIGHT GAUGE HEADER

S4.1 3/4" = 1'-0"



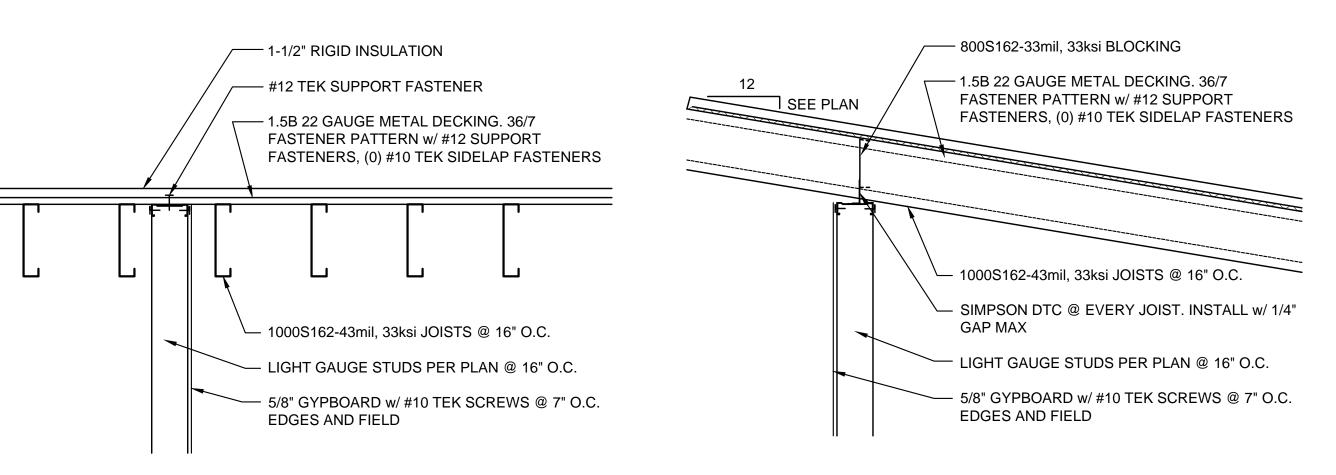
2 JOIST BEARING AT LT GAUGE WALL

S4.1 3/4" = 1'-0"



5 TYPICAL LIGHT GAUGE BRIDGING

S4.1 3/4" = 1'-0"



PARALLEL TO FRAMING

PERPENDICULAR TO FRAMING

3 INTERIOR SHEAR WALL TO DIAPHRAGM S4.1 3/4" = 1'-0"

TWO CONDITIONS

METAL GIRT AND END WALL COLUMN-PER MNFR 1028 LBS 1/4" A36 STEEL PL, 12" HIGH ALONG -74'-9" LENGTH OF GARBAGE CHUTE 3/16" 264.9 LBS 1/4" A36 STEEL PL w/ HSS3x3x1/8" JOISTS — @ 3'-5" OC ALONG LENGTH OF PL HSS 3x4x1/8" FLATWISE BEAM @ EACH — COLUMN LOCATION AND PLATE ENDS UNFACTORED ASD LOADS FROM GARBAGE CHUTE INDUCED ON METAL 3/16" / 1-1/2" @ 24" OC BUILDING COLUMNS L4x4x1/4" ANGLE KICKERS @ -71'-3" EACH COLUMN LOCATION AND AT PLATE ENDS 70'-0" HSS 4x4x1/8", SEE PLAN -3/16" 1308 LBS 68'-6" 3'-6" 4'-8" 763.11 LBS 6 METAL GARBAGE CHUTE

S4.1 3/4" = 1'-0"

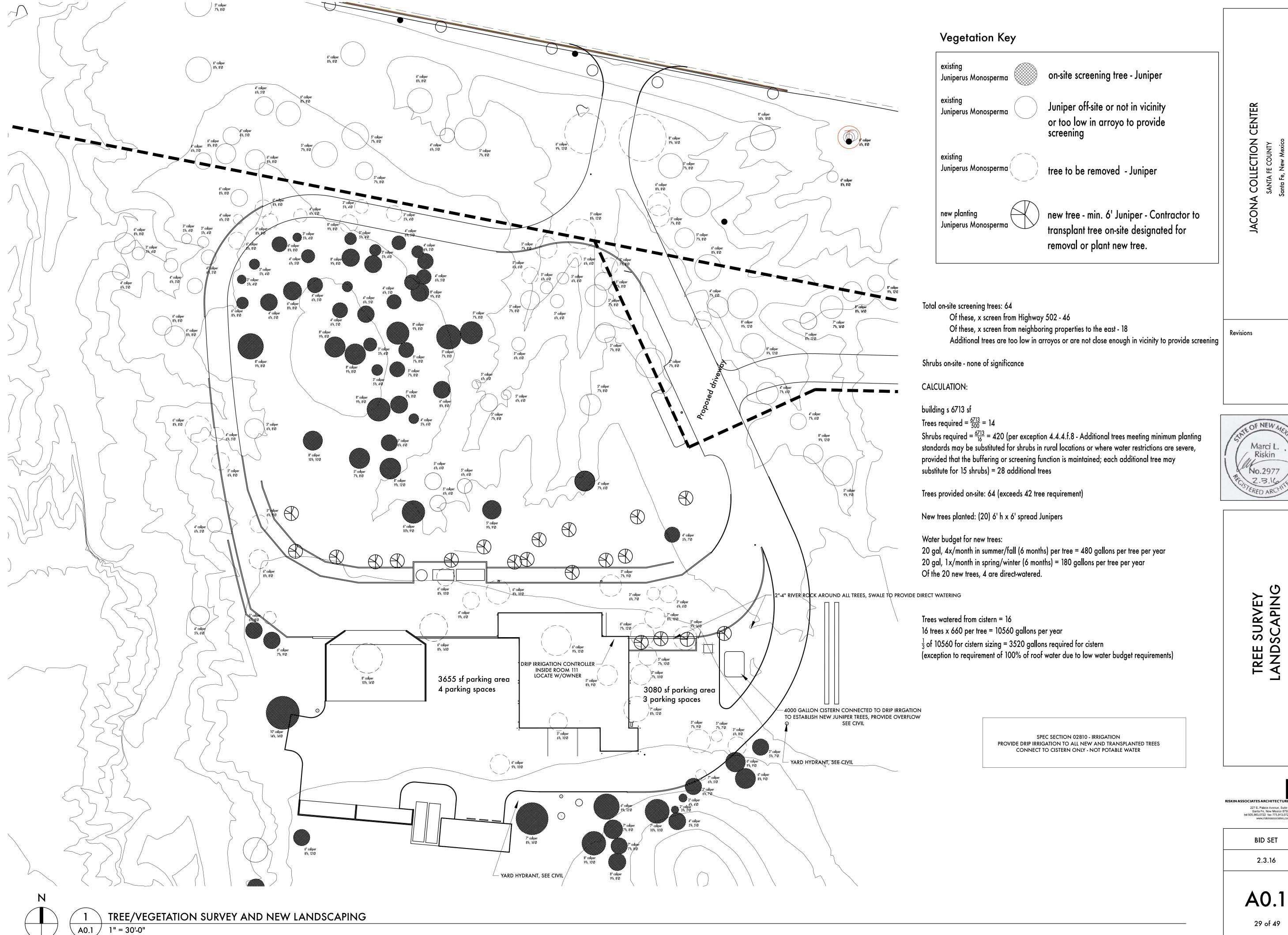


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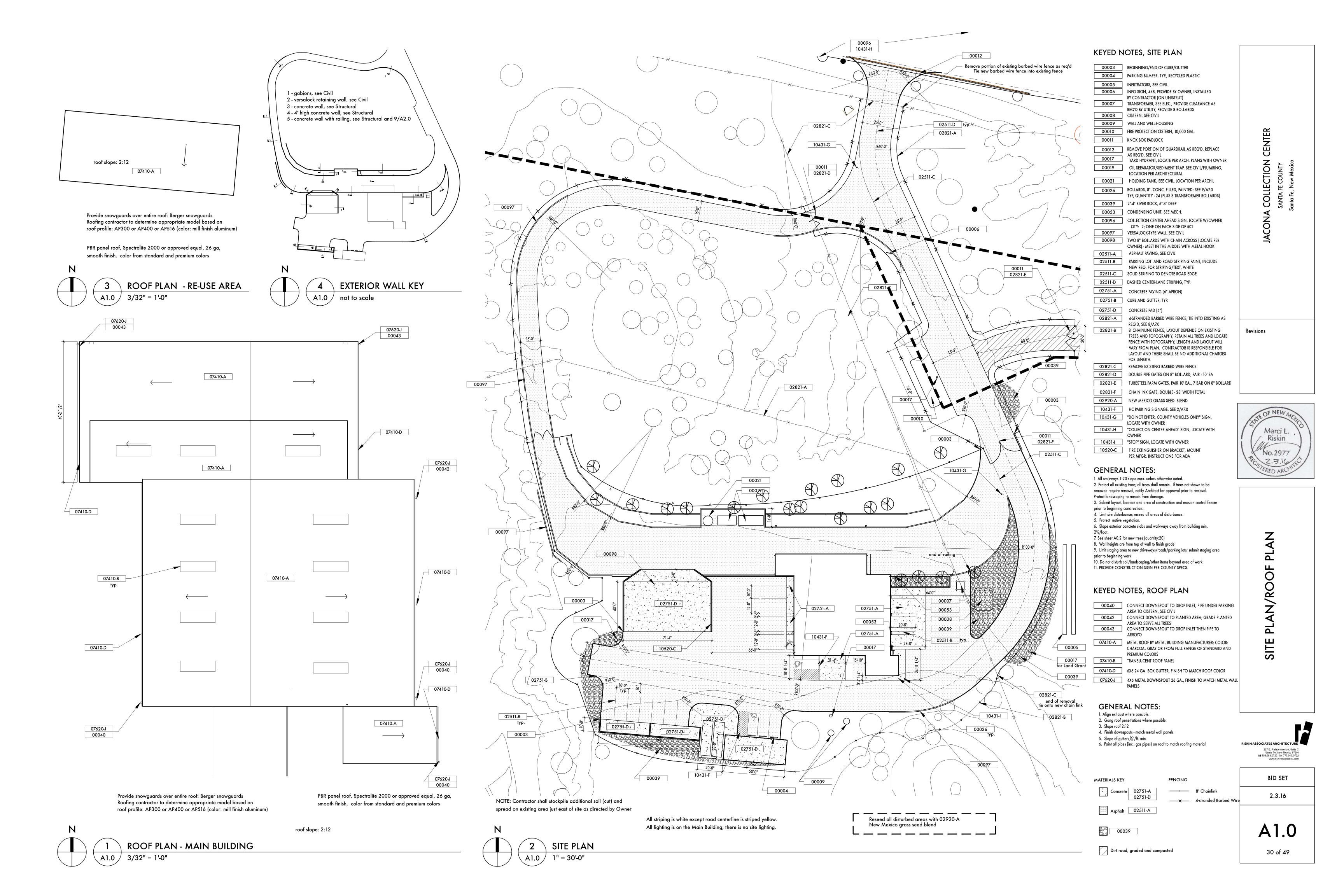
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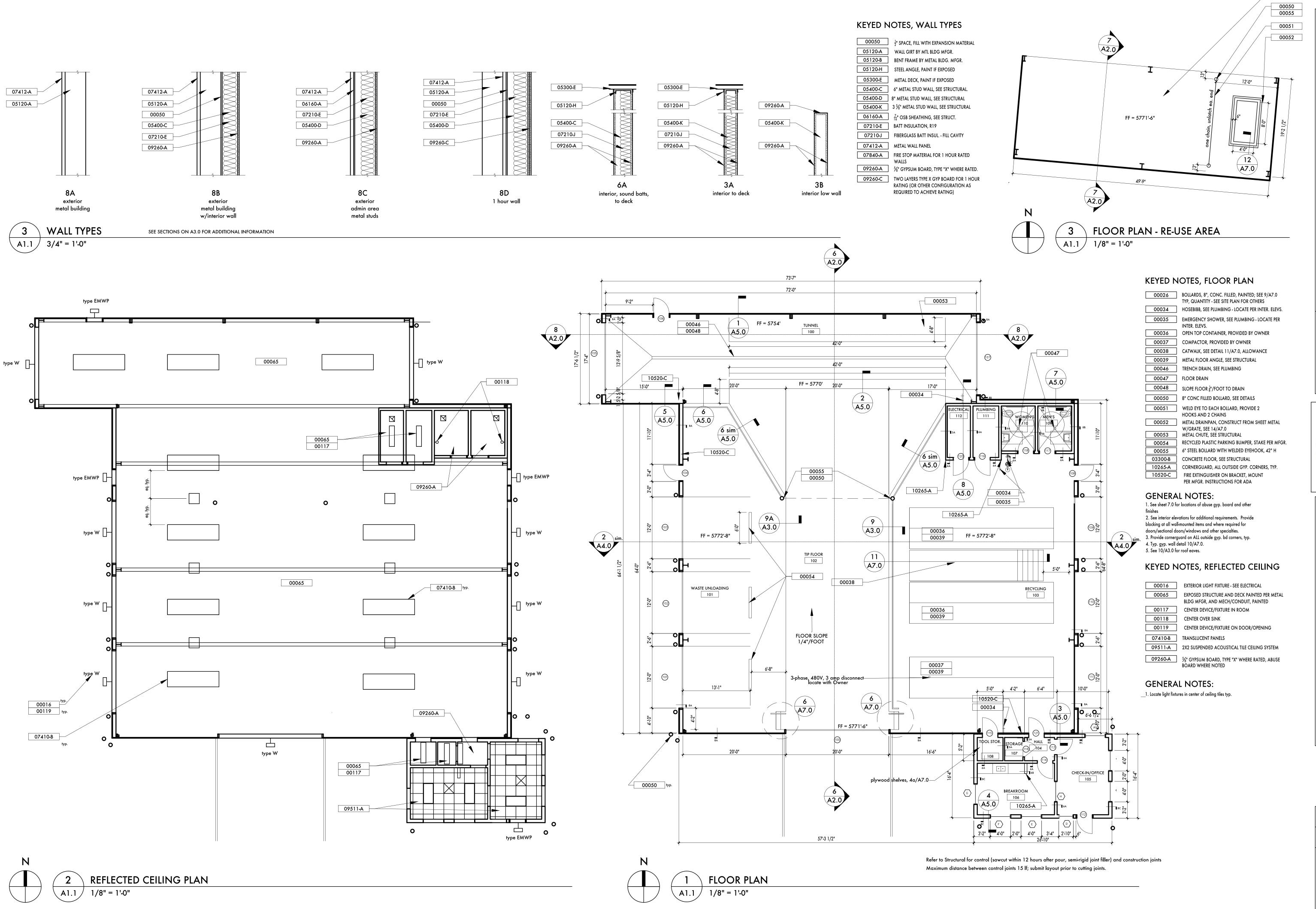


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SANTA FE COUNTY
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Santa Fe, New Mexico

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Marci L.
Riskin
No.2977
P.C. STERED ARCHITEC

PLAN

OOR PLAN O CEILING

FLOC REFLECTED

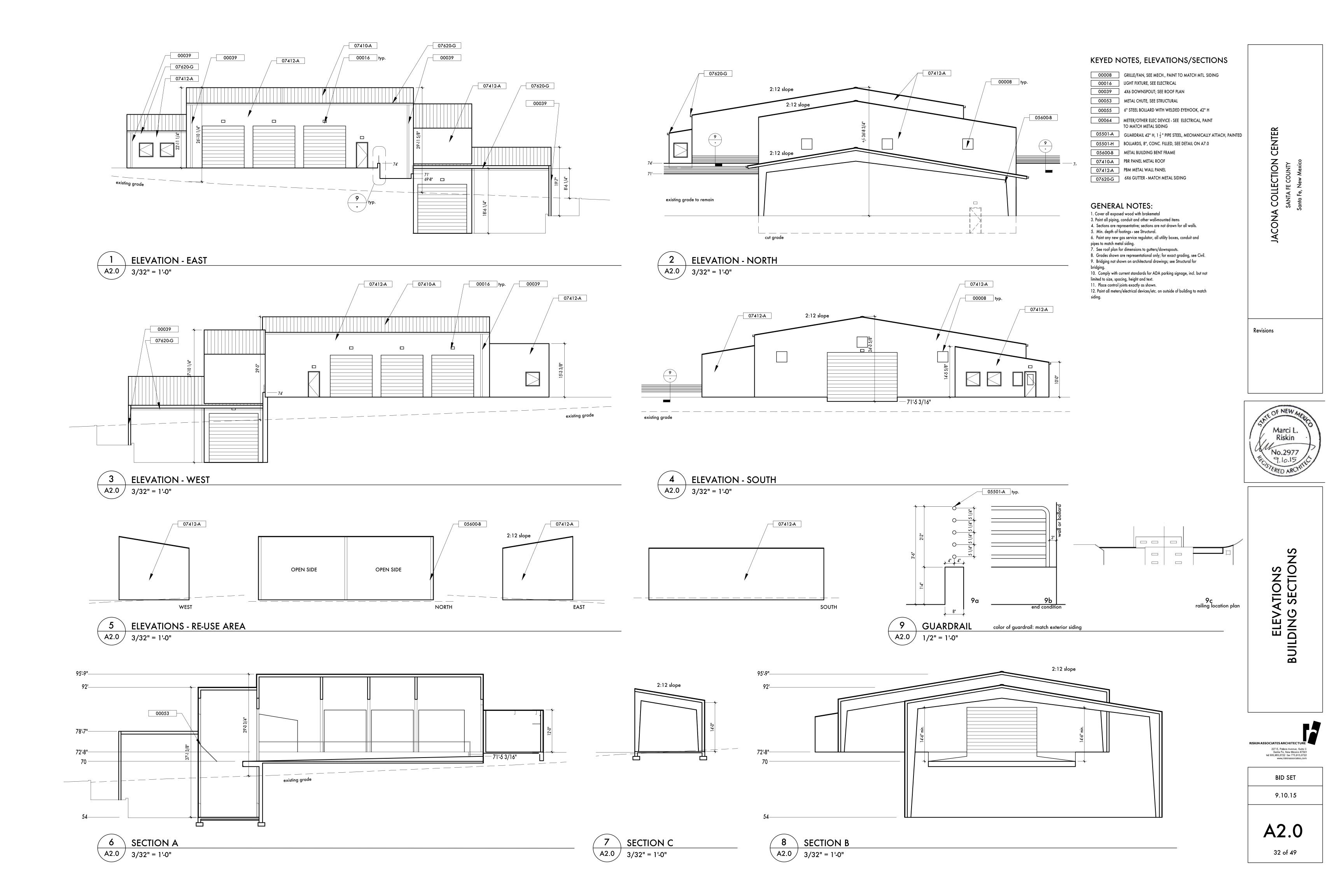
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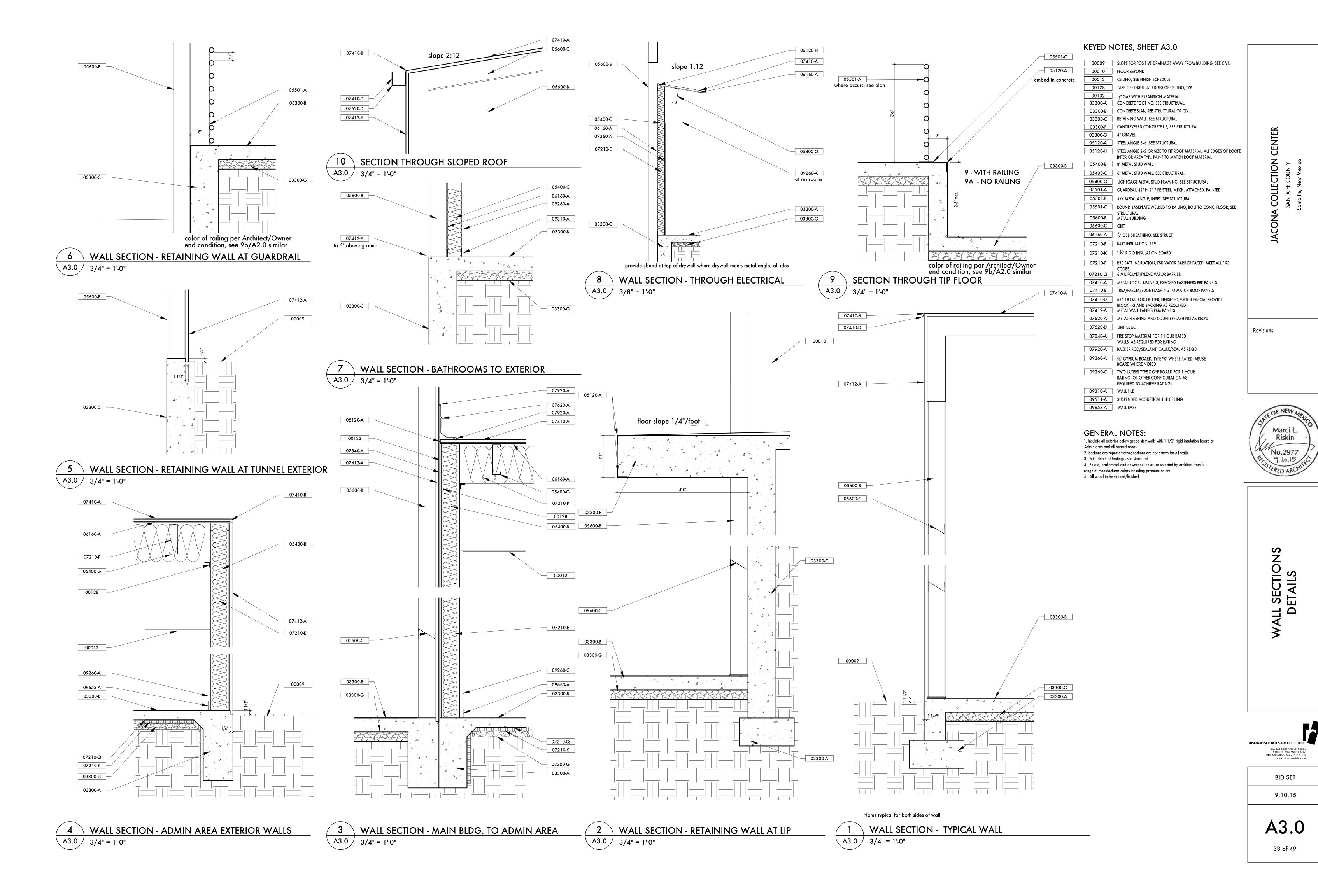
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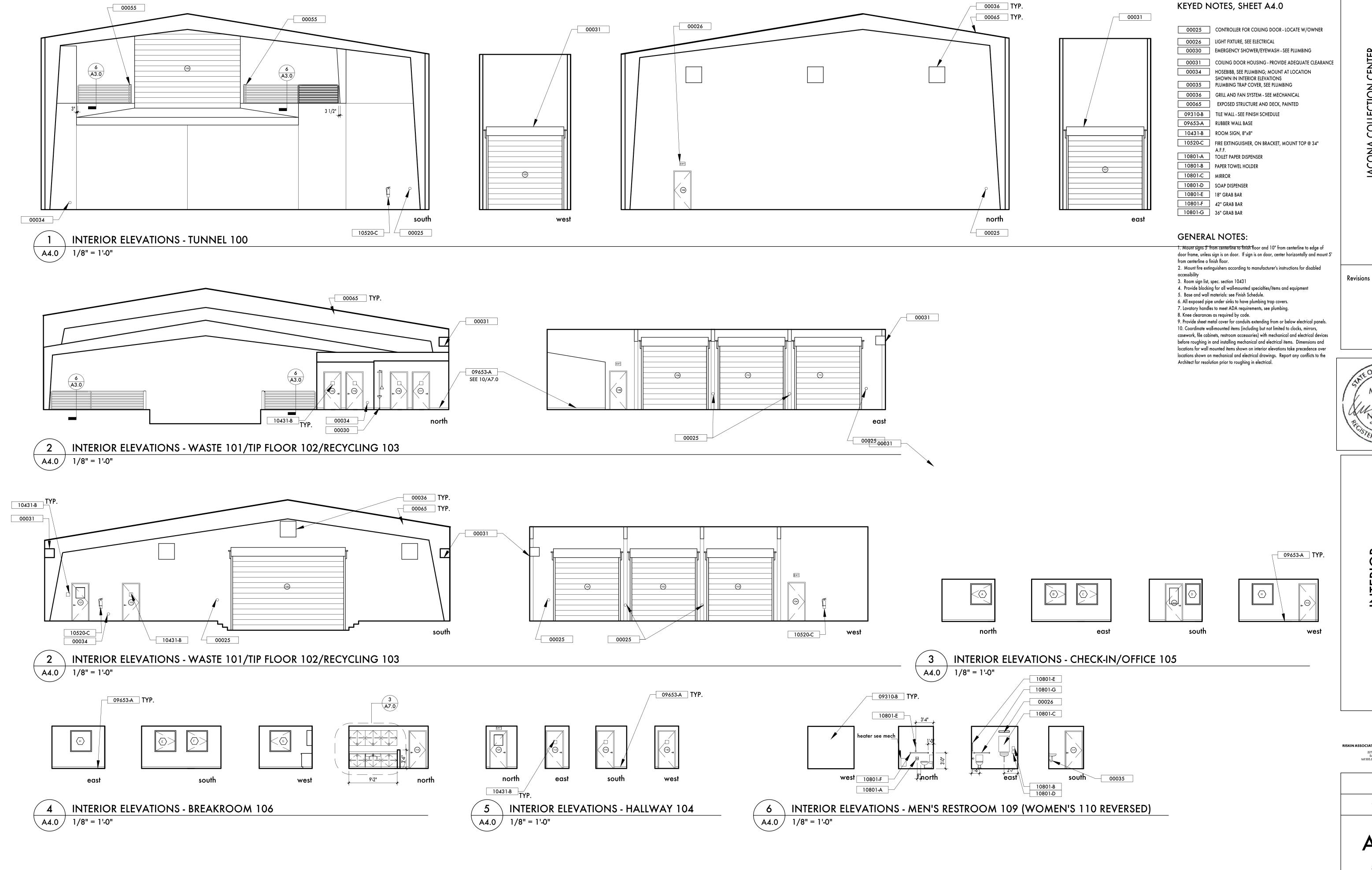
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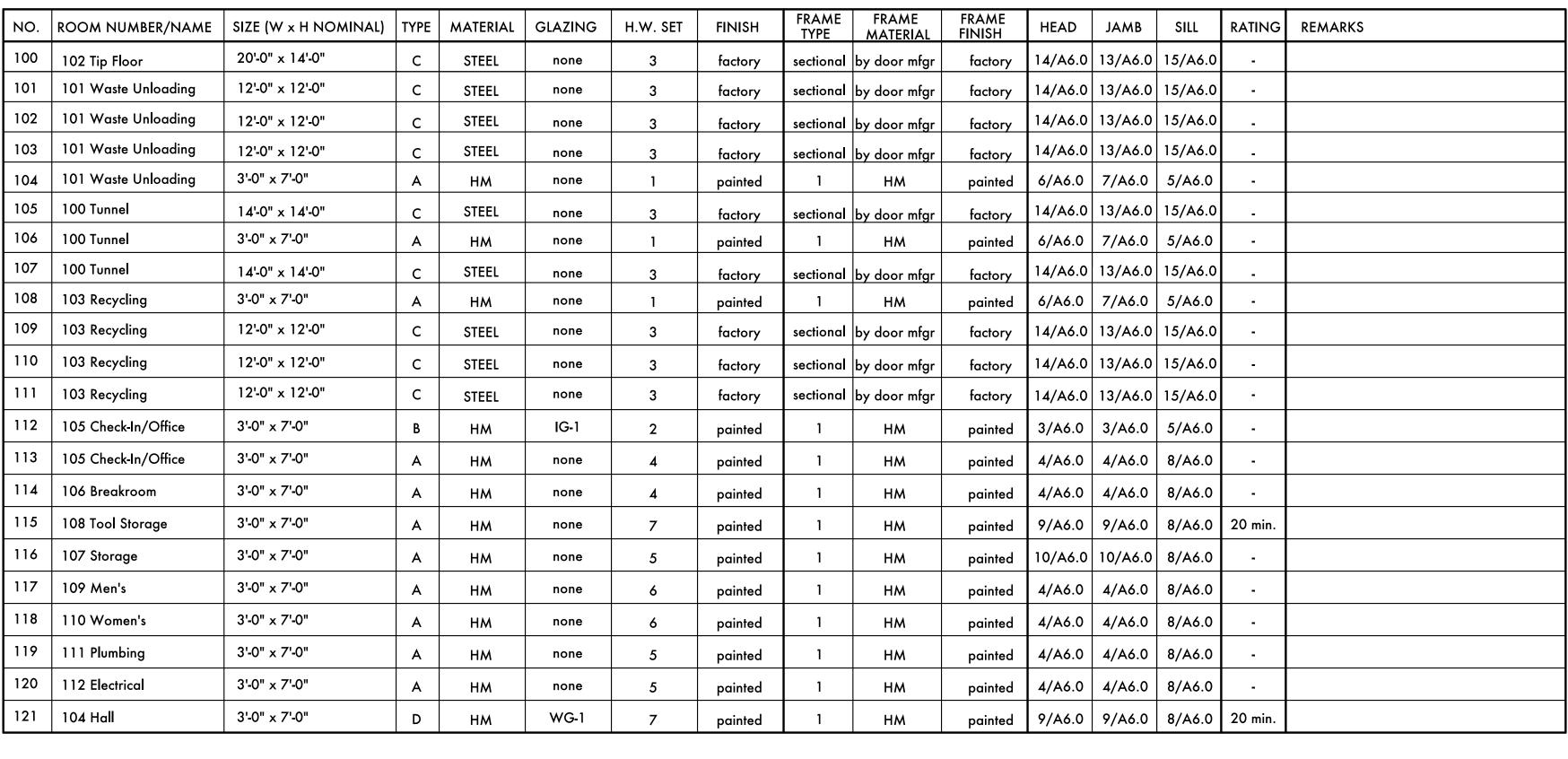


Marci L. Riskin

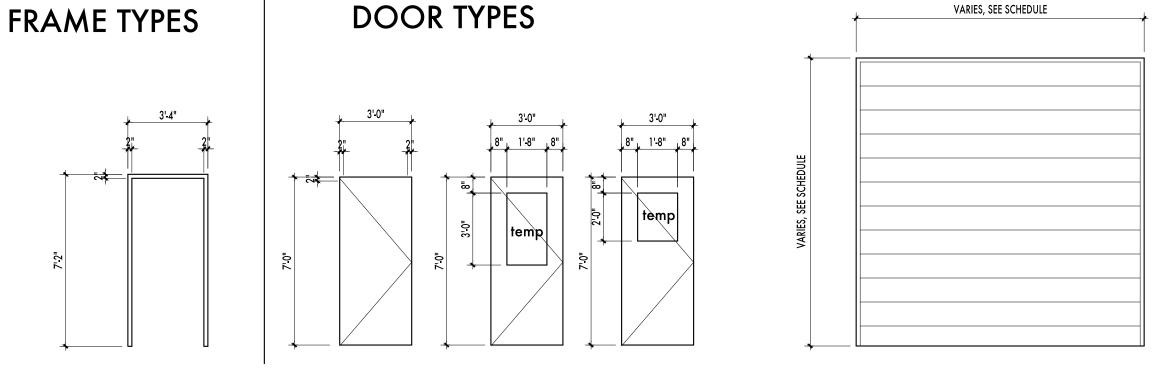
INTERIOR ELEVATIONS

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A4.0



Glazing - clear and tempered



PAINT HM DOORS AND FRAMES TO MATCH BUILDING EXTERIOR METAL PANEL

TYPE A HM TYPE B HM TYPE D HM TYPE 1 HM

TYPE	ALUM
	ALUM

DESCRIPTION					DETAILS			WDW.	RTG.	REMARKS			
MARK	LOCATION	SIZE (W x H NOMINAL)	TYPE	MATERIAL	GLAZING	FINISH	OPERATION	HEAD	JAMB	SILL	TREATM.		
Α	105 Check-In/Office	4'-0" × 4'-0"	WT-1	нм	IG-1	painted	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
В	105 Check-In/Office	4'-0" × 4'-0"	WT-1	НМ	IG-1	factory	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
C	105 Check-In/Office	4'-0" × 4'-0"	WT-1	нм	IG-1	factory	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
D	105 Check-In/Office	2'-10" x 4'-0"	WT-2	нм	IG-1	factory	fixed	1/A6.0	1/A6.0	2/A6.0	none	-	
Е	106 Breakroom	4'-0" × 4'-0"	WT-1	нм	IG-1	factory	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
F	106 Breakroom	4'-0" × 4'-0"	WT-1	нм	IG-1	factory	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
G	106 Breakroom	4'-0" × 4'-0"	WT-1	нм	IG-1	factory	casement	1/A6.0	1/A6.0	2/A6.0	none	-	
Н	106 Breakroom	4'-0" × 4'-0"	WT-3	нм	FG-1	factory	fixed	12/A6.0	12/A6.0	12/A6.0	none	-	interior window

WINDOW TYPES all window glazing tempered as required

	J

WT-1 HM WT-2 HM **WT-3** HM 2" mullions 2" mullions 2" mullions

Glazing - clear Baked enamel finish - as selected by Owner/Archtect



JACONA COLLECTION CENTER
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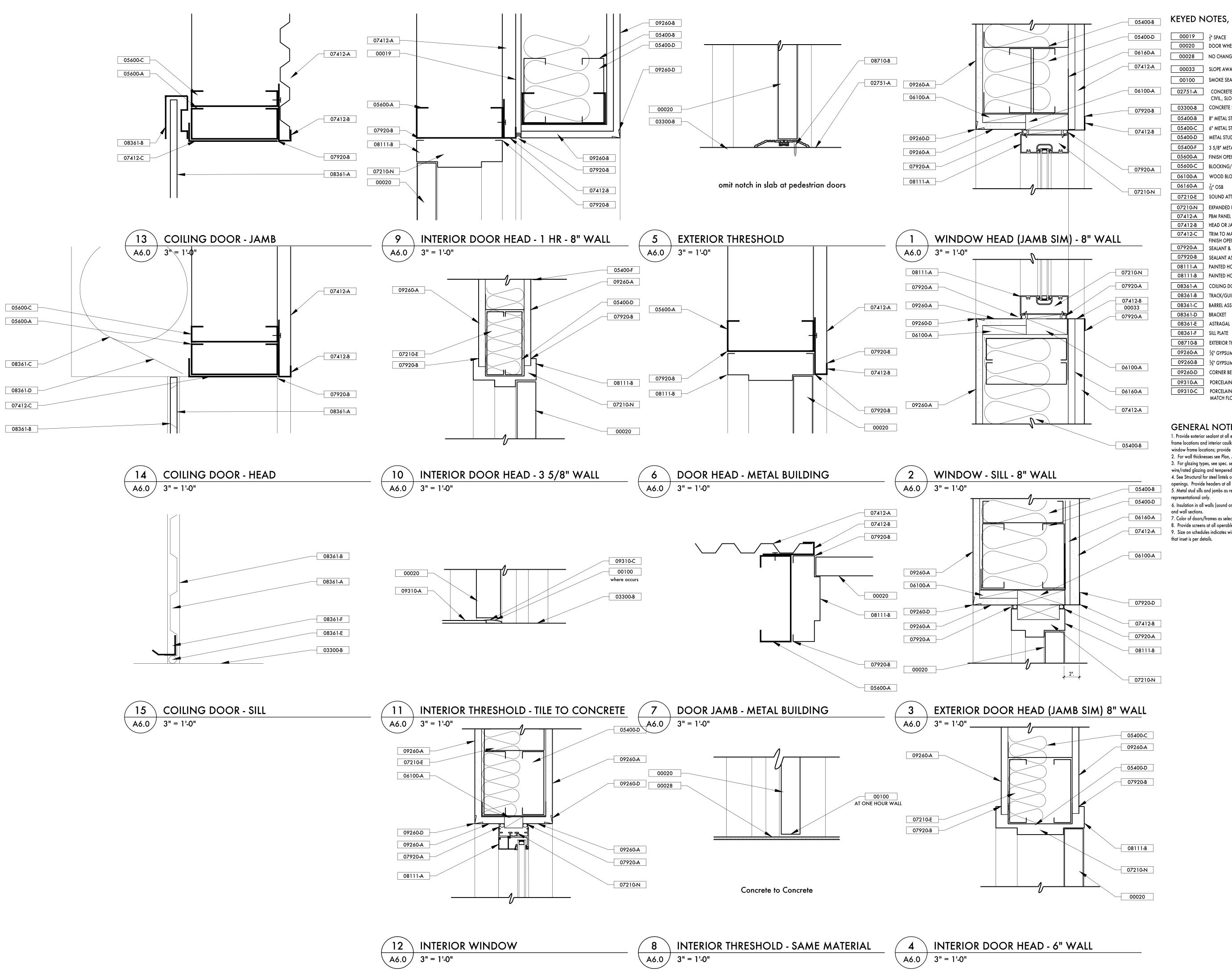
Marci L. Riskin

STERED ARCHIT

DOOR AND WINDOW SCHEDULES, TYPES

BID SET 9.10.15

A5.0



KEYED NOTES, DOOR/WINDOW DETAILS

00020 DOOR WHERE OCCURS, SEE SCHEDULE FOR MATERIAL/TYPE 00028 NO CHANGE IN FLOOR MATERIAL 00033 SLOPE AWAY FROM WINDOW 00100 SMOKE SEAL WHERE OCCURS, SEE HARDWARE SCHED. 02751-A CONCRETE SIDEWALK OR ASPHALT WHERE OCCURS, SEE CIVIL., SLOPE AWAY FROM BLDG. 03300-B CONCRETE SLAB, SEE STRUCTURAL. 05400-B 8" METAL STUD WALL, SEE STRUCTURAL. 05400-C 6" METAL STUD WALL, SEE STRUCTURAL. 05400-D METAL STUD LINTEL, SEE STRUCTURAL.

05400-F 3 5/8" METAL STUD WALL. 05600-A FINISH OPENING TRIM BLOCKING/STRUCTURE AS REQUIRED FOR DOOR ATTACHMENT 06100-A WOOD BLOCKING AS REQUIRED 06160-A 7₁₆" OSB

07210-E SOUND ATTENUATION BLANKETS - FILL THICKNESS OF WALL CAVITY 07210-N EXPANDED INSULATING FOAM PBM PANEL 07412-B HEAD OR JAMB TRIM TO MATCH PBM PANEL BY PANEL MFGR.

TRIM TO MATCH PBM PANEL BY PANEL MFGR. AS REQUIRED TO FINISH OPENING 07920-A SEALANT & BACKER ROD. 07920-B SEALANT AS REQ'D 08111-A PAINTED HOLLOW METAL WINDOW FRAME

08111-B PAINTED HOLLOW METAL DOOR FRAME 08361-A COILING DOOR

08361-B TRACK/GUIDE 08361-C BARREL ASSEMBLY 08361-D BRACKET

08361-F SILL PLATE 08710-B EXTERIOR THRESHOLD

09260-A 5/8" GYPSUM BOARD, TYPE "X" WHERE RATED. 09260-B %" GYPSUM BOARD, TYPE "X" - 2 LAYERS 09260-D CORNER BEAD, TYP. ALL GYP WALLS

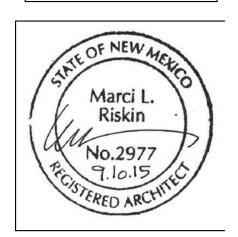
09310-A PORCELAIN STONE TILE 09310-C PORCELAIN STONE TRANSITION STRIP TO MATCH FLOORING

GENERAL NOTES:

1. Provide exterior sealant at all exterior door and window frame locations and interior caulk at all interior door and window frame locations; provide backer rod as required. 2. For wall thicknesses see Plan, A1.1 3. For glazing types, see spec. section 08800; provide wire/rated glazing and tempered glazing as required. 4. See Structural for steel lintels over door and window openings. Provide headers at all openings. 5. Metal stud sills and jambs as required; drawings are representational only.

6. Insulation in all walls (sound or exterior) - window types on A_1^1

and wall sections.
7. Color of doors/frames as selected by Architect/Owner. 8. Provide screens at all operable windows. 9. Size on schedules indicates window size. Provide framing so



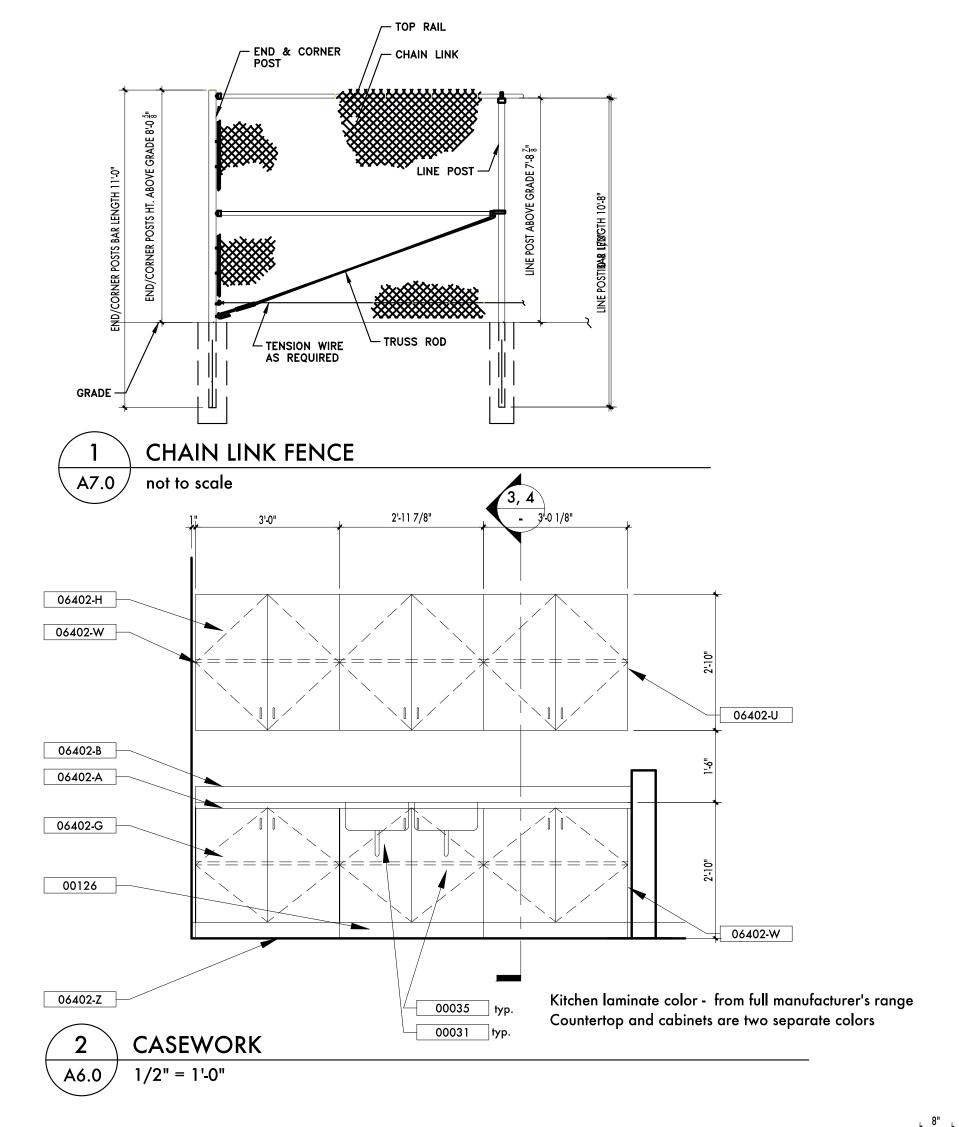
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AND WINDOW
DETAILS OR



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SPAC	CE	FLOOR	BASE	WALLS	CEILING		REMARKS
NO.	NAME					fire rating	
100	Tunnel	SC1	none	M1	С3		
101	Waste Unloading	SC1	none	M1	С3		
102	Tip Floor	SC1	none	M1	С3		
103	Recycling	SC1	where occurs on gyp. walls	M1	С3		
104	Hall	SC1	B1	P1	C1		
105	Check-in/Office	SC1	В1	P1	C1		
106	Breakroom	SC1	В1	P1	C1		
107	Storage	SC1	В1	P1	C4		
108	Tool Storage	SC1	В1	P1	C4		
109	Men's Restroom	SC1	Т1	T3/P2 - tile to clg.	C2		Owner provided tile, installation by Contracto
110	Women's Restroom	SC1	Т1	T3/P2 - tile to clg.	C2		Owner provided tile, installation by Contracto
111	Plumbing/Fire Protection	SC1	В1	P1	C4 - caulk w/fire caulk		
112	Electrical	SC1	B1	P1	C4 - caulk w/fire caulk		

FLOOR:

SC1 Std. grey conc. w/sealer Concrete - Spec. Section 03300 and 03311 Sealer, see spec section 09912

BASE:

- Rubber base, spec section 09653: Johnsonite rubber 4" coved base, color: from full manufacturer's range
- Ceramic Tile base continue Owner-provided tile to floor

WALLS:

Paint - Spec. Section 09912 (color is white, DEW 383 Cool December, unless designated otherwise)

- Eggshell o/ gyp. bd. Semi-Gloss paint over abuse board
- Owner-provided ceramic tile (installed by Contractor o/abuse board)
- M1 Metal building

05501-A

05120-Y 03300-D

03300-В

05120-Z

see structural

CEILING:

Susp acoustical tile - 2X2 - WHITE - Fine Fissured 1734 (spec sec 09511)

05501-H

00010

02751-J

NOTE: Paint pipe, color by Owner

- Gyp. Board painted
- Exposed structure, ducts and deck, by metal building manufacturer
- Exposed structure, ducts and deck, painted

BOLLARDS

A7.0 / 1/2" = 1'-0"

1. Paint all exposed metal 2. Blocking as required for all wall mounted items/cabinets Filler panels as required

4. Abbreviation P.B.O/I.B.C. is Provided by Owner/Installed by

KEYED NOTES, SHEET A7.0

00031 SINK & FAUCET, SEE PLUMBING

00035 PLUMBING TRAP COVER, SEE PLUMBING

00123 MOUNT SIGNS ON HEAVY-DUTY UNISTRUT 00126 CONSTRUCT SO THAT KICK IS PART OF CABINET

DOOR FOR ADA

03300-B CONCRETE SLAB, SEE STRUCTURAL. 03300-C CONCRETE STAIRS, SEE STRUCTURAL 03300-D EXPANSION JT., SEE STRUCTURAL.

05400-C 6" METAL STUD WALL, SEE STRUCTURAL.

EXPANDED METAL STEPS

 $4X4X_4^{\frac{1}{4}}$ " ANGLE IRON

EXPANDED METAL GRATING

 $\frac{1}{4}$ METAL PLATE, WELD CONTINUOUS SIDE TO BOTTOM AND ALL

06402-F CABINET DOOR (LAMINATE W/MELAMINE INTERIOR, SEE SCHED.)

06402-H UPPER CABINET (LAMINATE W/MELAMINE INTERIOR, SEE SCHED.)

FINISHED END PANEL (PLASTIC LAMINATE)

BASE CABINET (LAMINATE W/MELAMINE INTERIOR, SEE SCHED.)

05501-A GUARDRAIL 42" H, 2" PIPE STEEL

 $05501-M 4X4X_4^{-1} ANGLE IRON LEGS$ 05501-N 1 $\frac{1}{2}$ " DIAM. PIPE ALL AROUND

06402-A PLASTIC LAMINATE COUNTERTOP 06402-B 4" H PLASTIC LAMINATE BACKSPLASH 06402-D CABINENT CARCASS (MELAMINE)

06402-E ADJUSTABLE SHELF (MELAMINE)

06402-Q $\frac{3}{4}$ " THICK PLYWOOD SHELF, PAINTED WHITE

06402-W FILLER PANEL (PLASTIC LAMINATE) 06402-X MARINE GRADE PLYWOOD

06402-Y METAL SHELF BRACKET, TYP.

06402-Z PLASTIC LAMINATE TOE KICK

09653-A WALL BASE

GENERAL NOTES:

BOARD WHERE NOTED

CAST-IN, NON-SLIP STAIR NOSING

06402-T METAL SHELF STANDARD, KV TYPE, INSET IN WALL

09260-A 5/8" GYPSUM BOARD, TYPE "X" WHERE RATED, ABUSE

10431-B DISABLED PARKING SIGN, R7-8A WITH VAN-ACCESSIBLE SIGN

05501-H 8" DIAM. STEEL PIPE, CONC. FILLED

00010 SLOPE TO DRAIN $\frac{1}{8}$ "/FT. TYP.

00060 CROWNED TOP

02751-J CONCRETE FOOTING

05120-Y #4 REBAR AT EA. STEP 05120-Z #4 REBAR @ 12" OC

05501-J

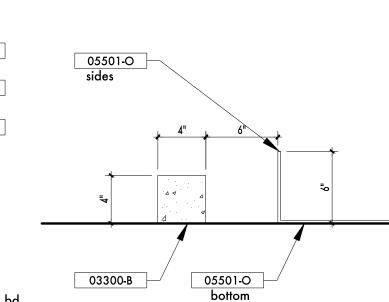
05501-K

05501-L

06402-U

5. Provide side splashes with backsplashes unless noted

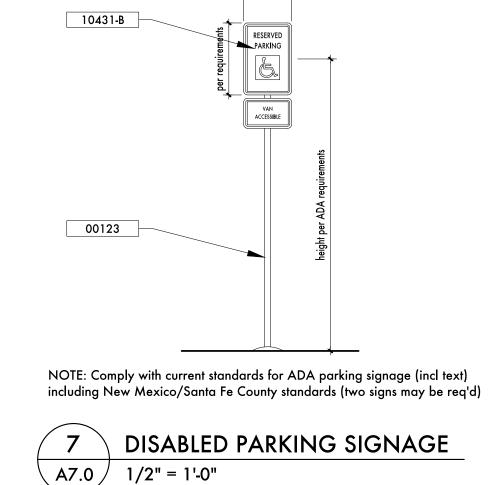
6. Verify all dimensions in field prior to fabricating casework. 7. Cabinets do not have locks unless noted on drawings.

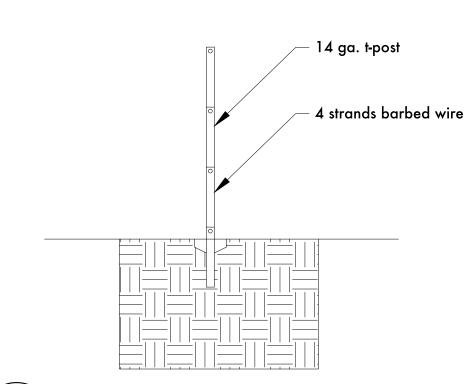


Gap provided so that water on floor does not wick nto gyp. bd.

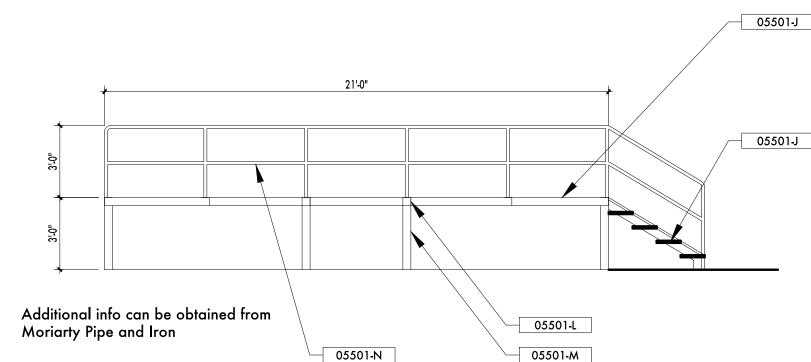
OIL PAN A7.0 / 3/4" = 1'-0"

WALL DETAIL - GYP. WALLS





BARBED WIRE FENCE A7.0 1/2" = 1'-0"



A7.0 / 3" = 1'-0"

CATWALK - ALLOWANCE (SEE SPEC SECTION 01210) $A7.0 \int 1/4" = 1'-0"$

FINISH SCHEDULE DETAILS

A COLLECTION (SANTA FE COUNTY Santa Fe, New Mexico

Revisions

Marci L.

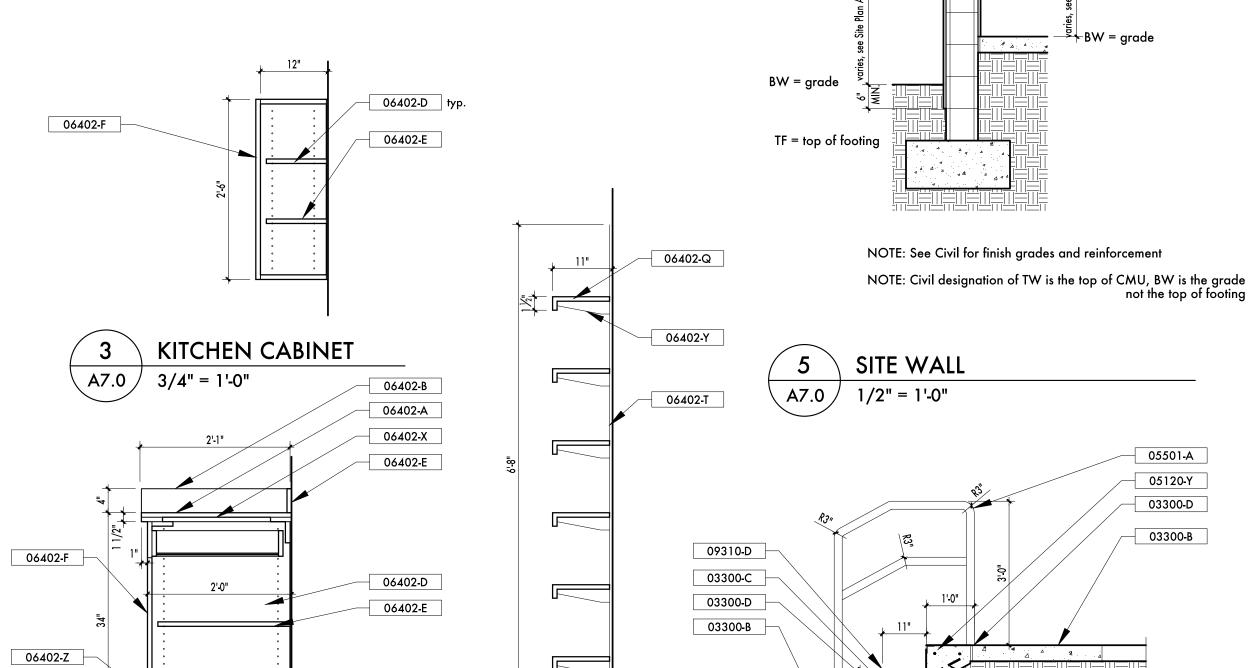
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BID SET 9.10.15 A7.0

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KITCHEN CABINET

A7.0 3/4" = 1'-0"

PROVIDE QTY. 6 SHELVES

SHELVES

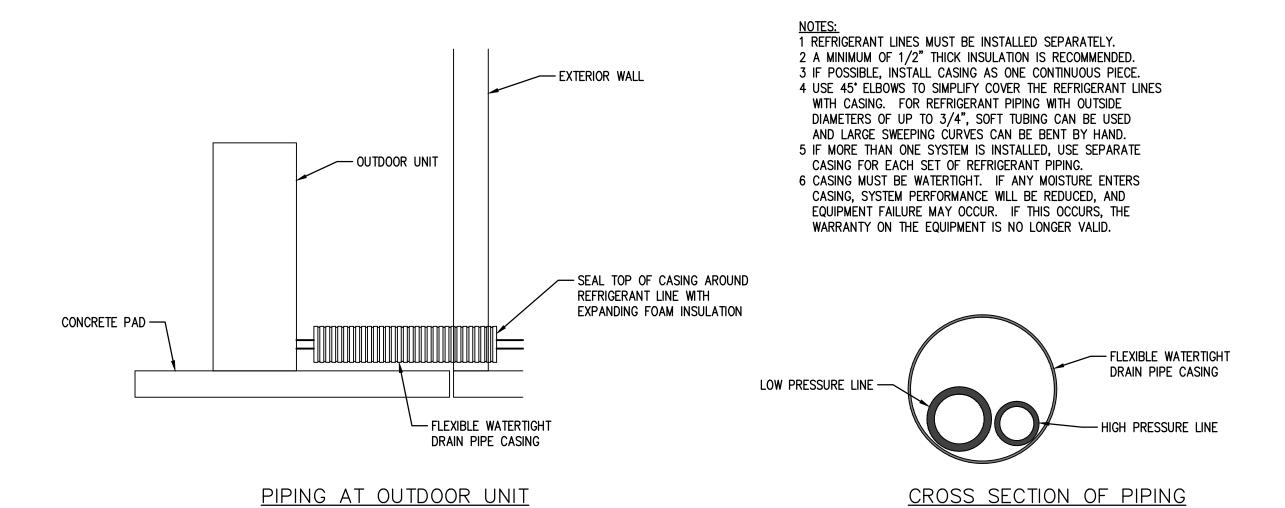
A7.0 / 3/4" = 1'-0"

4a `

1'-0"

STAIR

1/2" = 1'-0"



INSTALLATION OF REFRIGERANT PIPING DETAIL NOT TO SCALE

EQUIPMENT SCHEDULE

FAN UNIT: MITSUBISHI CEILING RECESSED INDOOR UNITS WITH COMPACT DESIGN CONTAINING EVAPORATOR COIL, DIRECT DRIVE MULTI-SPEED FAN, MICROPROCESSOR CONTROLS WITH SELF DIAGNOSTICS. WIDE AIRFLOW CONTROL FOR OPTIMAL AIR DISTRIBUTION, CLEANABLE FILTER, AND DESIGNED FOR LOW OPERATING SOUND LEVELS. PROVIDE WITH MA WIRED REMOTE CONTROLLER THERMOSTAT AND BUILT-IN CONDENSATE PUMP.

HEAT PUMP: MITSUBISH M-SERIES HYPER-HEATING INVERTER COOLING AND HEATING OUTDOOR HEAT PUMP CONDENSING UNIT UTILIZING R410A REFRIGERANT WITH INVERTER DRIVEN SCROLL COMPRESSOR. VARIABLE SPEED OUTDOOR FAN, MULTI-CIRCUITED CONDENSER COILS, AND LOW OPERATING SOUND LEVELS. UNIT TO PROVIDE 100% OF RATED HEATING CAPACITY AT 5°F AND 80% AT MINUS 13°F OUTDOOR AMBIENT TEMPERATURES.

① UNIT FOR FAN UNITS FU-1 AND 2.

EXHAUST FAN: GREENHECK PREMIUM CEILING EXHAUST FAN. PROVIDE WITH DECORATIVE GRILLE, VERTICAL DISCHARGE, BACKDRAFT DAMPER, AND WALL CAP.

① PROVIDE WITH IN-LINE THERMOSTAT.

EWH-# ELECTRIC WALL HEATER: QMARK MODEL GFR FAN-FORCED WALL HEATER WITH BUILT-IN THERMOSTAT.

ELECTRIC UTILITY HEATER: QMARK UTILITY WELL HOUSE HEATER, EPOXY COATED CORROSION PROTECTED ENCLOSURE, INTEGRAL THERMOSTAT, AND FOR 120V OR 240/208V SINGLE PHASE POWER SUPPLY.

VF-# VENTILATION FAN: GREENHECK BELT DRIVE PROPELLER FAN. PROVIDE WITH WALL COLLAR, BACKDRAFT DAMPER,

LV-1,2,3 LOUVER: GREENHECK MODEL ESJ-401 HIGH FREE AREA/LOW AIRFLOW RESISTANCE COMBUSTION AIR/OUTSIDE AIR LOUVER COMPLETE WITH BIRDSCREEN. PROVIDE WITH GREENHECK VCD-23 CONTROL DAMPER AND 120V ELECTRIC, SPRING RETURN, POWER OPEN, TWO POSITION INTERNAL ACTUATOR. SIZE AS SHOWN ON DRAWINGS.

VENTILATION SYSTEM SEQUENCE OF OPERATION BUILDING VENTILATION SYSTEM IS MANUALLY ACTIVATED BY SWITCH. WHEN SWITCH IS MADE, VENTILATION

FANS VF-1, 2 AND 3 ARE ENABLED AND ASSOCIATED LOUVERS LV-1, 2 AND 3 ARE OPENED.

EXHAUST AIR (E.A.) CALCULATION

HVAC VENTILATION REQUIREMENTS PER 2009 UMC CHAPTER 4 (ASHRAE 62.1)

SPACE NAME BREAK ROOM CHECK-IN/OFFICE

- ① MINIMUM OPENABLE AREA TO THE OUTDOORS SHALL BE 4 PERCENT OF THE AREA BEING VENTILATED PER 2006 IBC CHAPTER 12.
- \bigcirc 3 WINDOWS = 11.5 SQ. FT.
- 3 1 ENTRY DOOR = 20.0 SQ. FT.

KEYED NOTES \bigcirc

1 MOUNT FAN UNIT IN CEILING GRID. ROUTE REFRIGERANT LINES TO OUTDOOR UNIT AND CONDENSATE LINE TO ??.

- 2 MOUNT EXHAUST FAN IN CEILING. ROUTE 6"Ø DUCT TO WALL CAP.
- 3 MOUNT HEATER IN WALL.
- 4 LOCATE HEAT PUMP WITH CLEARANCES TO BUILDING AS RECOMMENDED BY
- 5 ROUTE REFRIGERANT PIPING BETWEEN HEAT PUMP AND ASSOCIATED INDOOR FAN UNITS, SEE THIS SHEET DETAIL 2.
- 6 ROUTE REFRIGERANT PIPING ABOVE CEILING TO ASSOCIATED INDOOR FAN
- 7 MOUNT HEATER CENTERED ABOVE DOOR.
- 8 MOUNT VENTILATION FAN IN WALL. LOCATE AND COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 9 MOUNT LOUVER IN WALL. LOCATE AND COORDINATE WITH ARCHITECTURAL
- 10 MOUNT EXHAUST FAN IN CEILING. ROUTE 7" DUCT TO WALL CAP.

COLLECTION
ANTA FE COUNTY
anta Fe, New Mexico JACONA

CENTE

Revisions

DETAIL SCHEDI /AC PLAN,

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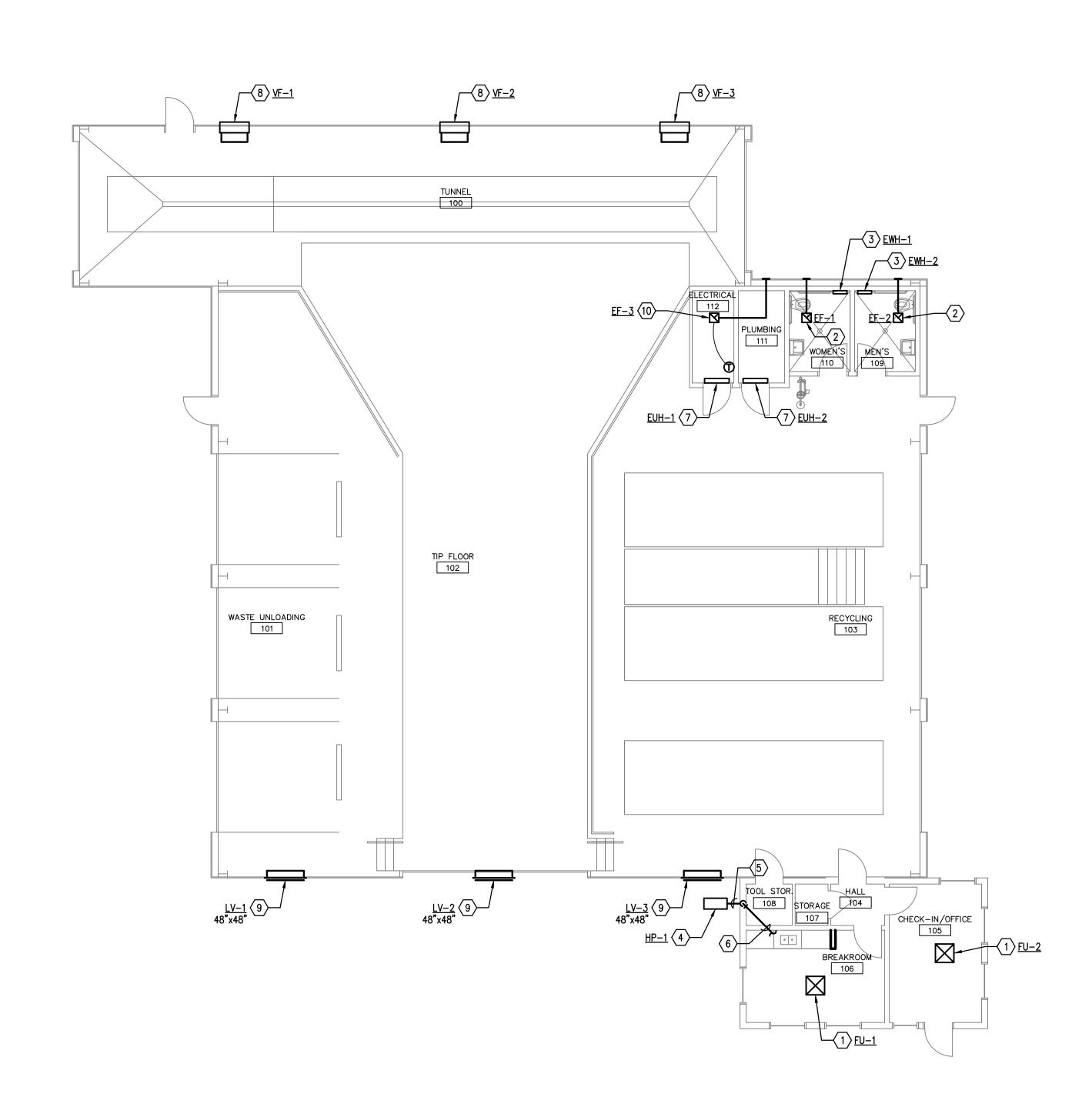
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RISKIN ASSOCIATES ARCHITECTURE

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GENERAL NOTES

A FOR SYMBOL LEGEND, SEE SHEET P2.1.

B FOR FIXTURE SCHEDULE, SEE SHEET P2.1,

C FOR WASTE AND VENT PIPING SIZES, SEE SHEET P2.1 DETAIL 1.

Revisions

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GENERAL NOTES

A FOR SYMBOL LEGEND, SEE SHEET P2.1.

B FOR FIXTURE SCHEDULE, SEE SHEET P2.1.

KEYED NOTES

1 FROM WELL, SEE CIVIL.

5 3/4" WATER PIPE UP TO FIXTURE.

6 1/2" WATER PIPE UP TO FIXTURE.

7 1-1/4" WATER PIPE UP TO FIXTURE.

2 INSTALL MAIN SHUT-OFF VALVE IN WALL BELOW COUNTER. PROVIDE ACCESS DOOR FOR SERVICE.

3 ROUTE 1/2" WATER PIPE UP TO INSTANTANEOUS WATER HEATER AND SINK, SEE SHEET P2.1 DETAIL 2.

4 ROUTE 3/4" WATER PIPE ON SURFACE OF WALL UP TO HOSE BIBB.

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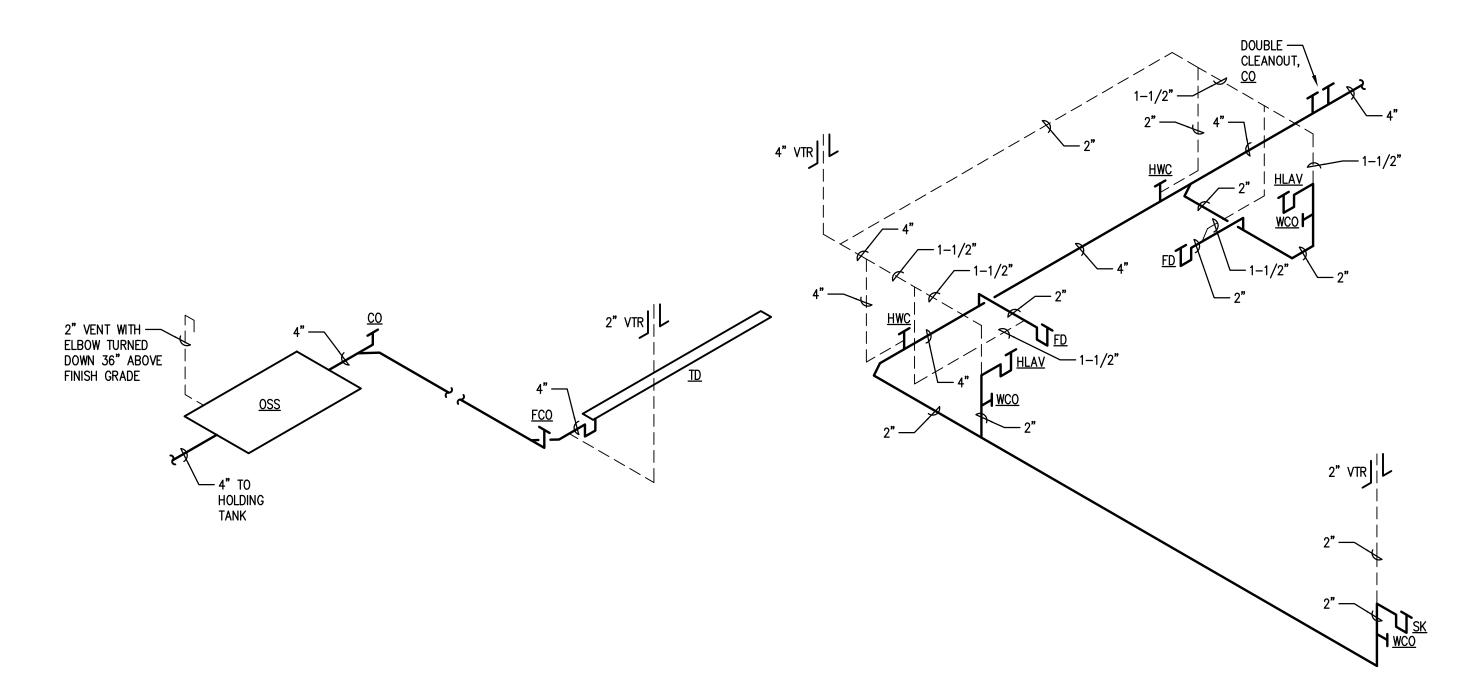
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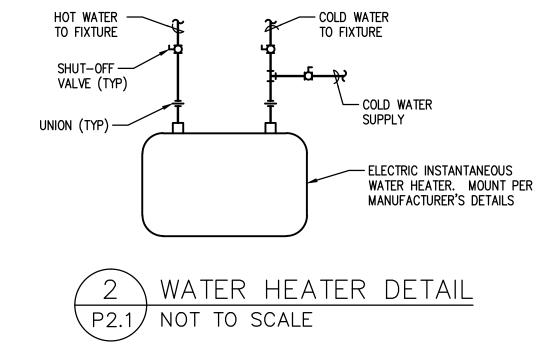
BREAKROOM 106

8 3/4" WATER DOWN TO FIXTURE. TUNNEL 100 1-1/4" —— TIP FLOOR WASTE UNLOADING



WASTE AND VENT RISER

P2.1 NOT TO SCALE



SYMBOL LEGEND

---cw--- underground domestic cold water piping (CW)

— – — DOMESTIC COLD WATER PIPING (CW)

---- VENT PIPING

ង BALL VALVE

---FP--- FIRE PROTECTION PIPING

HOSE BIBB

UNION

VALVE IN PIPE RISE/DROP

JACONA COLLECTION SANTA FE COUNTY Santa Fe, New Mexico

Revisions

FIXTURE SCHEDULE (OR EQ

HWC WATER CLOSET (HANDICAPPED): AMERICAN STANDARD "CADET 3" MODEL 2386.012 VITREOUS CHINA TANK TYPE TOILET, CLOSE—COUPLED TANK, 16—1/2" HIGH ELONGATED SIPHON JET FLUSH ACTION BOWL, 1.6 GPF, FULLY GLAZED TRAPWAY, AND 3" FLUSH VALVE WITH CHEMICAL RESISTANT FLAPPER. SUPPLIED WITH CHURCH 383SS WHITE CLOSED FRONT ELONGATED SEAT WITH COVER AND STAINLESS STEEL HINGES, MCGUIRE H166 STOP AND SUPPLY.

HLAV

LAVATORY: AMERICAN STANDARD "LUCERNE" MODEL 0356.015 VITREOUS
CHINA 20"x18" WALL HUNG LAVATORY, SELF-DRAINING DECK AREA WITH BACK
AND SIDE SPLASH SHIELDS, FAUCET LEDGE ON 8" C-C, DRILLED FOR
CONCEALED ARM SUPPORT. SUPPLIED WITH KOHLER MODEL K-15182-F SINGLE
LEVER FAUCET WITH CERAMIC DISC VALVE, ADA COMPLIANT HANDLE,
HIGH-TEMPERATURE LIMIT SETTING (CSA B125.3 COMPLIANT), 1.5 GPM, SMITH
700 CONCEALED ARM CARRIER, MCGUIRE 8872 P-TRAP, 167 STOPS AND
SUPPLIES. INSULATE DRAINLINE AND WATER SUPPLIES WITH TRUEBRO 102E-Z
INSULATION KIT. NOTE: INSTALL FRONT RIM OF LAVATORY 34" ABOVE
FINISHED FLOOR.

SK SINK: ELKAY LRAD-3321 DOUBLE COMPARTMENT ADA COMPLIANT 18 GAUGE. STAINLESS STEEL SINK WITH 3 FAUCET HOLES. SUPPLIED WITH LK-232-S-BH5 UNDERMOUNT FAUCET WITH HEAVY DUTY GOOSENECK SPOUT, 5" WRIST HANDLES, LK-35 DUO STRAINERS, LK-53 DRAIN FITTING, MCGUIRE P-TRAP, MCGUIRE STOPS AND SUPPLIES.

IWH INSTANTANEOUS WATER HEATER: CHRONOMITE MODEL SR-15L/120, 120V, 1,800 WATTS, 31 DEGREE RISE AT 0.4 GPM FLOW.

ES EMERGENCY SHOWER/EYEWASH: GUARDIAN MODEL GFR1902—FC20 FREEZE RESISTANT COMBINATION EYEWASH AND SHOWER SAFETY STATION WITH 10" DIAMETER ORANGE ABS PLASTIC SHOWER HEAD, 1—1/2" IPS FREEZE RESISTANT SHOWER VALVE WITH PUSH PLATE, TWO EYEWAS SPRAY HEADS WITH FLIP TOP DUST COVERS, 11—1/2" DIAMETER STAINLESS STEEL EYEWASH BOWL, 3/4" IPS FREEZE RESISTANT EYEWASH VALVE WITH PUSH PLATE, FURNISHED WITH ANSI—COMPLIANT IDENTIFICATION SIGN AND 20 GPM FLOW REGULATOR.

HB HOSE BIBB: PRIER MODEL C-634 FREEZELESS CAST BRASS WALL HYDRANT WITH SATIN NICKEL PLATED BODY, ANIT-SIPHON VACUUM BREAKER, AUTOMATIC DRAINING, SOLID NON-FERROUS OPERATING ROD, TRIPLE SEAL POSITIVE SHUT-OFF SYSTEM, LOOSE TEE KEY, PRIER MODEL C-624BX1 SATIN NICKEL PLATED BOX WITH CYLINDER LOCKING DOOR.

FD FLOOR DRAIN: ZURN MODEL Z-415-S FLOOR DRAIN, CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP, ADJUSTABLE COLLAR WITH SEEPAGE SLOTS, TYPE "S" POLISHED NICKEL BRONZE SQUARE HEEL-PROOF LIGHT DUTY STRAINER. PROVIDE WITH TRAP GUARD MODEL TG22 TRAP SEAL.

CO CLEANOUT: ZURN MODEL Z-1400-HD ADJUSTABLE CLEANOUT,
DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE PLUG,
AND ROUND SCORIATED SECURED HEAVY DUTY TOP, ADJUSTABLE TO FINISHED

FCO FLOOR CLEANOUT: ZURN MODEL Z-1400 ADJUSTABLE CLEANOUT, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE PLUG, AND ROUND SCORIATED SECURED TOP, ADJUSTABLE TO FINISHED FLOOR.

WCO WALL CLEANOUT: ZURN MODEL Z-1441 WALL CLEANOUT, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT BRONZE PLUG, AND ROUND, SMOOTH STAINLESS STEEL ACCESS COVER WITH SECURING SCREW.

TD TRENCH DRAIN: J.R. SMITH ENVIRO—FLO TRENCH DRAIN SYSTEM, 9931 SERIES. CHANNEL SLOPE DRAINAGE SYSTEM COMPLETE WITH CHANNEL (METER & 1/2 METER SECTIONS), OUTLET/INLET CAPS, CLOSING CAPS, HEAVY DUTY DUCTILE IRON SLOTTED GRATING MODEL 9870—461—M.

OSS
OIL SAND SEPARATOR: STRIEM MODEL OS-100-4M, SEAMLESS
ROTATIONALLY-MOLDED HIGH DENSITY POLTETHYLENE BODY WITH LIFETIME
GUARANTEE. PROVIDED WITH FIELD ADJUSTABLE RISER SYSTEM, BUILT-IN FLOW
CONTROL, BUILT-IN TEST CAPS, 4" MALE THREADED INLET AND OUTLET, AND
COVERS WITH LIQUID AND GAS TIGHT SEAL. INTERCEPTOR FLOW RATED AT
100 GPM, 275 GALLON LIQUID CAPACITY, 147.5 GALLON OIL CAPACITY, 105
GALLON SAN CAPACITY. PROVIDE WITH TELEGLIDE RISER TO MATCH FINISH
GRADE.

'MBOL LEGEND, DET ND FIXTURE SCHEDI



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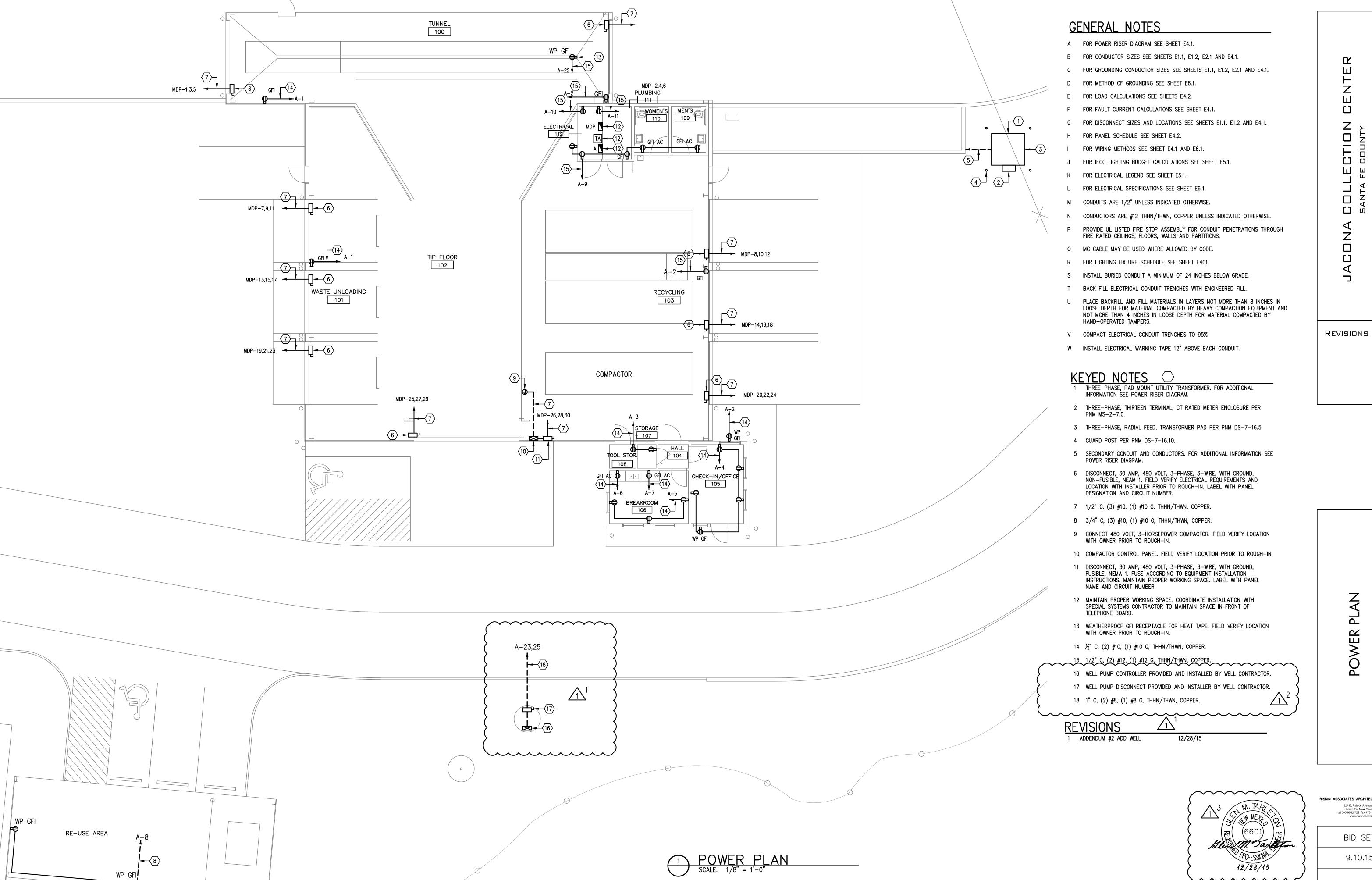
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COUNTY LEW MEXICO

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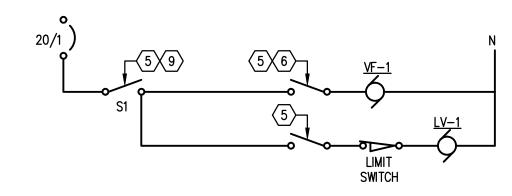
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TYPICAL VENTILATIN FAN INTERLOCK

VENTILATION SYSTEM SEQUENCE OF OPERATION BUILDING VENTILATION SYSTEM IS MANUALLY ACTIVATED BY SWITCH. WHEN SWITCH IS MADE, VENTILATION FANS VF-1, 2 AND 3 ARE ENABLED AND ASSOCIATED LOUVERS LV-1, 2 AND 3 ARE OPENED.

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
- F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.
- G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.
- H FOR PANEL SCHEDULE SEE SHEET E4.2.
- I FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.
- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1.
- M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- P PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.
- W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

1 DISCONNECT, 60 AMP, 208 VOLT, SINGLE PHASE, 2-WIRE, WITH GROUND, FUSIBLE NEMA 3R. FUSE ACCORDING TO EQUIPMENT INSTALLATION INSTRUCTIONS. MAINTAIN PROPER WORKING SPACE. LABEL WITH PANEL NAME AND CIRCUIT NUMBER.

- 2 3/4" C, (2) #6, (1) #10 G, THHN/THWN, COPPER.
- 3 3/4" CONDUIT WITH PULL-STRING. FIELD VERIFY CONDUCTOR REQUIREMENTS WITH INSTALLER PRIOR TO ROUGH-IN.
- 4 1/2" C, (2) #10, (1) #10 G, THHN/THWN, COPPER.
- 5 MOTOR RATED SWITCH, 20 AMP, 120 VOLT, SINGLE POLE, WITH GROUND, NEMA 1 ENCLOSURE.
- 6 INTERLOCK WITH LOUVER LV-1.
- 7 INTERLOCK WITH LOUVER LV-2.
- 8 INTERLOCK WITH LOUVER LV-3.
- 9 LABEL "VENTILATION FAN VF-1".
- 10 LABEL "VENTILATION FAN VF-2".
- 11 LABEL "VENTILATION FAN VF-3".
- 12 1/2"C, (2) #12, (1) #12 G, THHN/THWN, COPPER.

EQUIPMENT SCHEDULE

FAN UNIT: MITSUBISHI CEILING RECESSED INDOOR UNITS WITH COMPACT DESIGN CONTAINING EVAPORATOR COIL, DIRECT DRIVE MULTI-SPEED FAN, MICROPROCESSOR CONTROLS WITH SELF DIAGNOSTICS, WIDE WHEREHOW INCOMETROL FOR OPTIMAL AIR DISTRIBUTION, CLEANABLE FILTER, AND DESIGNED FOR LOW OPERATING SOUND LEVELS Z-RRADIO DESIGNED FOR LOW DESIGNED FO WITH MA WIRED REMOTE CONTROLLER THERMOSTAT AND BUILT-IN CONDENSATE PUMP.

SYMBOL	CFM	INCHES S.P.	TOTAL COOL. BTUH	TOTAL HEAT. BTUH	SOUND dBA	VOLTAGE/ PHASE	MCA	FLA
FU-1,2	280/350	-	8,400	10,900	29-38	208/230/1	1.0	0.23

HEAT PUMP: MITSUBISH M-SERIES HYPER-HEATING INVERTER COOLING AND HEATING OUTDOOR HEAT PUMP CONDENSING UNIT UTILIZING R410A REFRIGERANT WITH INVERTER DRIVEN SCROLL COMPRESSOR, VARMABLE SPEED OUTDOOR FAN, MULTI-CIRCUITED CONDENSER COILS, AND LOW OPERATING SOUND LEVELS. UNIT TO PROVIDE TO CONDENSER COILS, AND LOW OPERATING SOUND LEVELS. OF RATED HEATING CAPACITY AT 5'F AND 80% AT MINUS 13'F OUTDOOR AMBIENT TEMPERATURES.

> TOTAL COOLING TOTAL HEATING REF. SOUND VOLTAGE/ © 115°F BTUH © 12°F BTUH LBS. dBA PHASE MCA MOCP WEIGHT 18,000 22,000 - 54 208/230/1 29 40 187

① UNIT FOR FAN UNITS FU-1 AND 2.

EXHAUST FAN: GREENHECK PREMIUM CEILING EXHAUST FAN. PROVIDE WITH DECORATIVE GRILLE, VERTICAL DISCHARGE, BACKDRAFT DAMPER, AND WALL CAP.

VOLTAGE/ INCHES
 CFM
 S.P.
 WATTS
 PHASE
 RPM
 SONES
 MODEL

 75
 0.25
 49
 120/1
 950
 1.6
 SP-A110
 EF-3 120 0.25 113 120/1 1400 3.2 SP-A190

EWH-# ELECTRIC WALL HEATER: QMARK MODEL GFR FAN-FORCED WALL HEATER WITH BUILT-IN THERMOSTAT.

ELECTRIC UTILITY HEATER: QMARK UTILITY WELL HOUSE HEATER, EPOXY COATED CORROSION PROTECTED ENCLOSURE, INTEGRAL THERMOSTAT, AND FOR 120V OR 240/208V SINGLE PHASE POWER SUPPLY.

VOLTAGE/
 SYMBOL
 WATTS
 PHASE
 AMPS
 MODEL

 EUH-1,2
 500/375
 120/208/240
 4.2/1.8/2.1
 WHT500

VENTILATION FAN: GREENHECK BELT DRIVE PROPELLER FAN. PROVIDE WITH WALL COLLAR, BACKDRAFT DAMPER, AND MOTOR SIDE GUARD.

VOLTAGE/

LV-1,2,3 LOUVER: GREENHECK MODEL ESJ-401 HIGH FREE AREA/LOW AIRFLOW RESISTANCE COMBUSTION AIR/OUTSIDE AIR LOUVER COMPLETE WITH BIRDSCREEN. PROVIDE WITH GREENHECK VCD-23 CONTROL DAMPER AND 120V ELECTRIC, SPRING RETURN, POWER OPEN, TWO POSITION INTERNAL ACTUATOR. SIZE AS SHOWN ON DRAWINGS.



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REVISIONS

MECHANICAL EQUIPMENT POWER PLAN

RISKIN ASSOCIATES ARCHITECTURE

BID SET

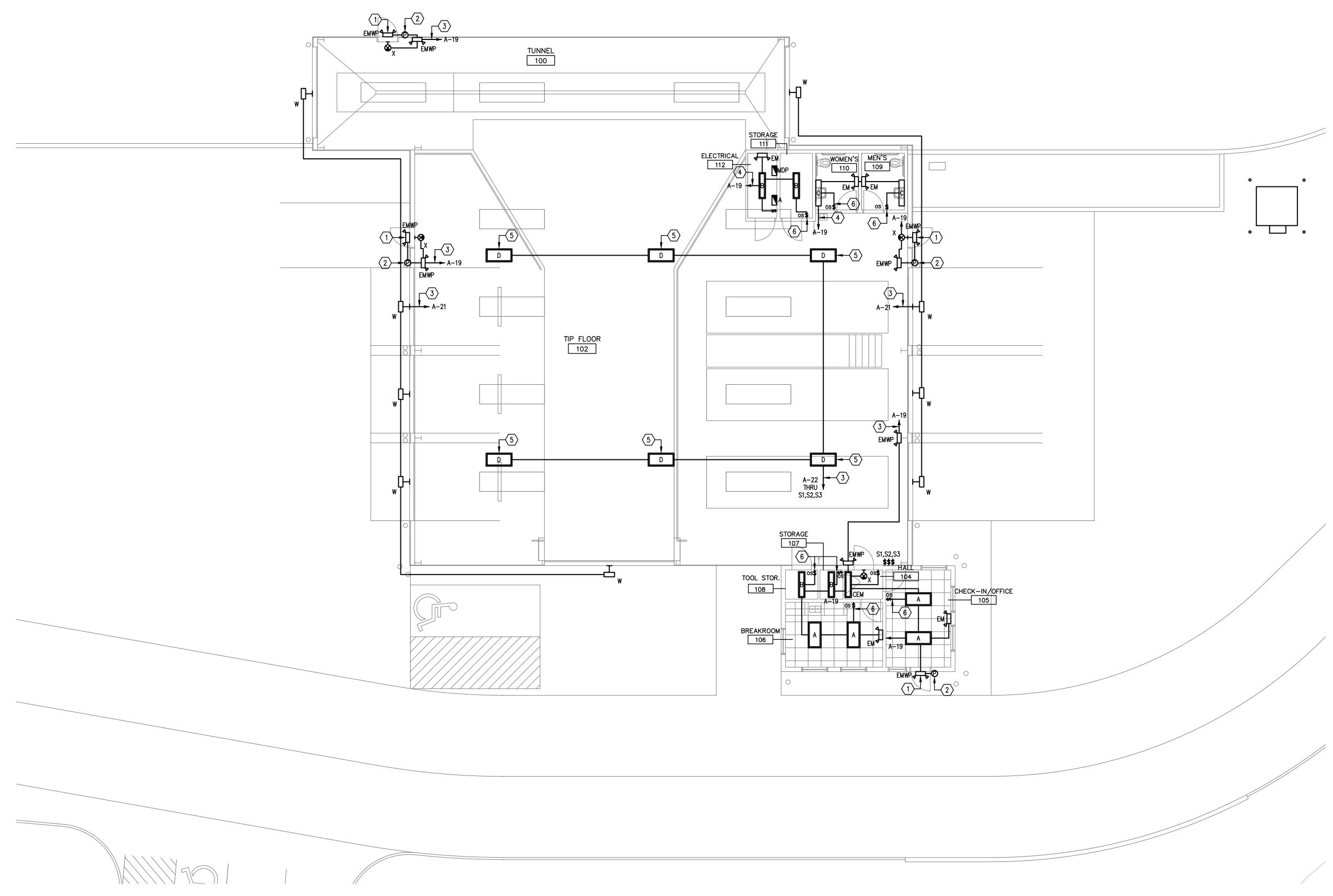
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BID SET 9.10.15

E2.1

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

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
- F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.
- G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.
- H FOR PANEL SCHEDULE SEE SHEET E4.2.
- I FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.
- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1.
- M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- P PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.
- W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

KEYED NOTES \bigcirc

1 COMBINATION EMERGENCY LIGHT AND NIGHT LIGHT. CONNECT ALWAYS ON CIRCUIT TO PHOTOCELL. CONNECT EMERGENCY CIRCUIT TO UN-SWITCHED LEG OF LIGHTING CIRCUIT. FOR ADDITIONAL INFORMATION SEE INSTALLATION

- 2 PHOTOCELL, 120 VOLT, SINGLE POLE.
- 3 1/2" C, (2) #10, (1) #10 G, THHN/THWN, COPPER.
- 4 1/2" C, (2) #12, (1) #12 G, THHN/THWN, COPPER.
- 5 LIGHT FIXTURE WITH (3) LED DRIVERS, CONNECT FOR 3-LEVEL SWITCHING.
- 6 OCCUPANCY SENSOR, LINE VOLTAGE, SINGLE POLE, WALL MOUNT, DUAL TECHNOLOGY.

9.10.15

E3.1

38 of 42

GENERAL NOTES

A FOR POWER RISER DIAGRAM SEE SHEET E4.1.

B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.

C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.

D FOR METHOD OF GROUNDING SEE SHEET E6.1.

E FOR LOAD CALCULATIONS SEE SHEETS E4.2.

F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.

G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.

H FOR PANEL SCHEDULE SEE SHEET E4.2.

FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.

J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.

K FOR ELECTRICAL LEGEND SEE SHEET E5.1.

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Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.

R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.

S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.

T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.

U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.

W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

KEYED NOTES

1 5" CONDUIT WITH PULL STRING TO PROVIDER POINT OF PRESENCE.

TELEPHONE BOARD, 4' X 8' X 3/4" PLYWOOD, SANDED, PRIMED AND PAINTED WITH (2) COATS OF WHITE FIRE RESISTANT PAINT.

3 COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR TO MAINTAIN WORKING SPACE IN FRONT OF TELEPHONE BOARD AND PROPER WORKING SPACE FOR PANELBOARDS.

4 (2) 3/4" CONDUITS WITH (1) CAT 6 CABLE (EACH).

<u>LEGEND</u>

TELEPHONE/DATA OUTLET;
(1) 4—SQUARE BOX

(1) 4-SQUARE TO SINGLE GANG PLASTER RING

(2) RJ45 JACK

V

(2) 3/4" C TO TELEPHONE BOARD
(2) CAT 6 CABLE TO TELEPHONE BOARD



A 🚺

BOARD

CHECK-IN/OFFICE

TOOL STORAGE HALL
108 107 104

BREAKROOM 106

TUNNEL 100

TIP FLOOR



Tarleton Engineering Inc.

910 RIO VISTA CIR. SW ALBUQUERQUE, NEW MEXICO 87105 Tel: (505) 263-6704

charling@tarenginc.com

POWER RISER DIAGRAM

SCALE: NTS

KEYED NOTES

- 1 UTILITY TRANSFORMER, 3-PHASE, PAD-MOUNT, 480/277 VOLT SECONDARY.
- 2 METER ENCLOSURE, 3-PHASE, 13-TERMINAL, CT RATED, PER NM MS-2.7.0.
- 3 TRANSFORMER PAD PER PNM DS-7-16.5.
- 4 GUARD POST PER PNM DS-7-16.10.
- 5 2-1/2" C, (4) 3/0, THHN/THWN, COPPER.
- 6 PANEL "MDP". FOR ADDITIONAL INFORMATION SEE PANEL SCHEDULE.
- 7 3/4" C, (3) #6, (1) #6 G, THHN/THWN, COPPER.
- 8 DRY TYPE TRANSFORMER "TRA", 45 KVA, 480–208/120V, 3-PHASE, 4-WIRE. WITH 6 TAPS, (2) 2-1/2% ABOVE AND (4) 2-1/2% BELOW.
- 9 CONCRETE HOUSE KEEPING PAD.
- 10 2" C, (4) #1, (1) #6 G, THHN/THWN, COPPER.
- 11 PANEL A. FOR ADDITIONAL INFORMATION SEE PANEL SCHEDULE.

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
- F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.
- G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.
- H FOR PANEL SCHEDULE SEE SHEET E4.2.
- FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.
- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1.
- M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- P PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.
- W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

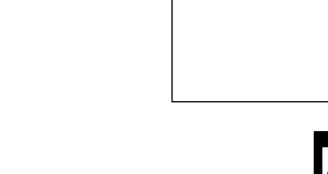
MAIN SERVICE A B DEVICE PER NEC 250 MOTOR	MAM	$A \rightarrow B \rightarrow A$	
	SYSTEM C 20' min. G G G G G G G G G G G G G	PHASE NEUTRA GROUND IS (WHERE APPLICABLE)	TYPICAL CONTINUOUS GROUND CONDUCTOR WITHOUT SPLICE BUS CONDUCTOR SIZED PER NEC 250 BUS TYPICAL UNISULATED GROUND BAR GROUNDING ENCLOSURE TYPICAL INSULATED NEUTRAL BAR TYPICAL BRANCH CIRCUIT, GROUND WHERE REQUIRED. SIZED ON OVERCURRENT

GROUNDING SYSTEM GENERAL NOTES

- 1 THE GROUNDING ELECTRODE SYSTEM SHALL CONSIST OF ITEMS A, B, C, D, E, F AND G WHERE APPLICABLE.
- 2 ITEMS H, I AND J MUST BE BONDED TOGETHER AND TO THE GROUNDING ELECTRODE SYSTEM WHEN THEY ARE PRESENT.
- ITEM D ,CONCRETE ENCASED ELECTRODE (UFER) SHALL HAVE UFER SUPPORT CONSISTING OF 5/8" x 10' COPPER GROUND ROD CUT INTO 2' SECTIONS AND DRIVEN FOR SUPPORT OF UFER CONDUCTOR. ONLY COPPER TO COPPER CONNECTIONS ARE ACCEPTABLE. DO NOT USE RE—BAR FOR UFER SUPPORT. (THIS IS TO AVOID THE HARMFUL EFFECTS OF DISSIMILAR METALS IN CONTACT.) A U.L. LISTED COPPER TO RE—BAR CLAMP (SUCH AS GRAVES "JONES BOND" SYSTEM) IS AN APPROVED ALTERNATIVE.
- 4 THIS DETAIL IS PROVIDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, ARTICLE 250, PERTAINING TO THE "GROUNDING ELECTRODE SYSTEM".
- 5 ALL SPLICING SHALL BE ACCOMPLISHED VIA EXOTHERMIC WELD (CAD-WELD) ONLY.
- 6 ALL CONDUCTOR SIZING INDICATED ON THE GROUNDING SCHEDULE ARE FOR COPPER CONDUCTORS. ALUMINUM IS NOT PERMITTED.
- 7 ANY VARIANCES FROM THIS DIAGRAM AND ASSOCIATED SCHEDULE AND NOTES MUST BE REQUESTED AND APPROVED IN WRITING PRIOR TO INSTALLATION.
- 8 ALL INSTALLATIONS SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF N.E.C. ARTICLE 250 (ALL SUBPARAGRAPHS) AND ALL STATE AND LOCAL REQUIREMENTS.
- 9 THE GROUNDING SYSTEM SHALL PROVIDE LESS THAN (4) FOUR OHMS RESISTANCE TO GROUND AT THE SERVICE CONNECTION. THE RESULTS SHALL BE VERIFIED BY AN INDEPENDENT TESTING AGENCY VIA GROUND TEST (FALL—OF—POTENTIAL) AND SUBMITTED TO ELECTRICAL ENGINEER UPON COMPLETION OF PROJECT.

		GI	70	NDII	VG 5	CHE		.E			
	(A)	⟨B⟩	(C)	(D)	(E)	F	G	(H)	$\langle 1 \rangle$	⟨Ĵ⟩	⟨ K ⟩
	FACTORY INSTALLED GROUND BUS BAR	INTEGRATED BUS BAR MAIN BOND JUMPER	INTEGRATED BUS BAR CASE BOND JUMPER	CONCRETE ENCASED ELECTRODE (UFER)	GROUNDING ELECTRODE CONDUCTOR TO ROD, PIPE OR PLATE	CU or CU-CLAD STEEL GROUND ROD	COPPER GROUND RING CONDUCTOR	METALLIC PIPING BONDING CONDUCTOR	BUILDING STEEL BONDING CONDUCTOR	MULTIPLE SERVICE BONDING CONDUCTOR	TELEPHONE SYSTEM GROUNDING CONDUCTOR
AMPACITY CE		N.E.C. 250.102	N.E.C. 250.102	N.E.C. 250.50(c) 250.66(b)	N.E.C. 250.52(c) 250.52(d) 250.66(a)	N.E.C. 250.52(c)(2)	N.E.C. 250.50(d) 250.66(c)	N.E.C. 250.50(a) 250.66	N.E.C. 250.50(b) 250.66	N.E.C. 250.66	
200 AMP		#4	#4	#4	#6	5/8"x8'	#2	#4	#4	#4	#6
225 AMP	T - G S	#2	#2	#4	#6	5/8"x8'	#2	#2	#2	#2	#6
400 AMP	CATION AL	#1/0	#1/0	#4	#6	5/8"x8'	#1/0	# 1 /0	#1/0	#1/0	#6
600 AMP	MODA IICATE REFI	#2/0	#2/0	#4	#6	5/8"x8'	#2/0	#2/0	#2/0	#2/0	#6
800 AMP	ACCOMMODATE ALL S AS INDICATED ON AND/OR REFERENCED S OR SPECIFICATIONS	#3/0	#3/0	#4	#6	5/8"x8'	#2/0	#2/0	#2/0	#2/0	#6
1000 AMP	GS A M AN ANS (#3/0	#3/0	#4	# 6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6
1200 AMP	SIZED TO ACCO WIRE LUGS AS II DIAGRAM AND/C	250kcMIL	250kcMIL	#4	#6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6
1600 AMP	BE SI;	350kcMIL	350kcMIL	#4	# 6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6
2000 AMP	SHALL BE GROUND V GROUNDING I ELSEWHERE	400kcMIL	400kcMIL	#4	#6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6
2500 AMP	SE GRO	500kcMIL	500kcMIL	#4	#6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6
3000 AMP		500kcMIL	500kcMIL	#4	#6	5/8"x8'	#3/0	#3/0	#3/0	#3/0	#6





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9.10.15

	PANEL M	/IDP		480	0/277 VOI	LT	3-PI	HASE, 4-V	VIRE		200 AMF	PS BREAKER	22K A			ACE INT	BOTTOM FEED NEMA 1			
	CKT#	BKR	DESCRIPTION	LTG	K/EQ	REC	HVAC	OTHER	Α	В	С	OTHER	HVAC	REC	K/EQ	LTG	DESCRIPTION	BKR	CKT#	ŧ
	1		OVERHEAD DOOR					480	480 480			480					OVERHEAD DOOR		2	
_	3	30/3	TUNNEL					480		480 480		480					TUNNEL	30/3	4	_
	5		WEST					480			480 480	480					EAST		6	
	7		OVERHEAD DOOR					480	480 480			480					OVERHEAD DOOR		8	
-	9	30/3	TIP FLOOR					480		480 480		480					TIP FLOOR	30/3	10	_
	11		NORTH WEST					480			480 480	480					NORHT EAST		12	
	13		OVERHEAD DOOR					480	480 480			480					OVERHEAD DOOR		14	
-	15	30/3	TIP FLOOR					480		480 480		480					TIP FLOOR	30/3	16	
	17		WEST					480			480 480	480		-			EAST		18	
	19		OVERHEAD DOOR					480	480 480			480					OVERHEAD DOOR		20	
-	21	30/3	TIP FLOOR					480		480 480		480					TIP FLOOR	30/3	22	
	23		SOUTH WEST					480			480 480	480					SOUTHEAST		24	
	25		OVERHEAD DOOR					480	480 6228			6228							26	
-	27	30/3	TIP FLOOR					480		480 6228		6228					COMPACTOR	30/3	28	
	29		SOUTH					480			480 6228	6228							30	
	31	20/1	SPARE						0								SPARE	20/1	32	
	33	20/1	SPARE							0							SPARE	20/1	34	
	35	20/1	SPARE								0						SPARE	20/1	36	
	37		TRANSFORMER A	715	0	1440	6192	1320	9667 0								SPARE	20/1	38	
	39	60/3	AND	1932	0	2340	2100	0		6372 0							SPARE	20/1	40	
	41		PANEL A	0	0	900	4699	1320			6919 0						SPARE	20/1	42	
	TOTAL			2647	0	4680	12991	9840	20215	16920	17467	24444	0	0	0	0				
				LTG	КІТСН	REC	HVAC	OTHER				CONNE	ECTED L	OAD	54602	VA				
Ī		PH	HASE A	715	0	1440	6192	11868	20215				ECTED L			AMPS				
ŀ			HASE B	1932	0	2340	2100	10548	_3_10	16920			LATED		55264		LD=LOCKING DEVICE			
			HASE C	0	0	900	4699	11868			17467		LATED			AMPS				=

	PANEL A	4		2	208/120V		3-PI	HASE, 4-V	VIRE	MAIN C	125 AM	IP BREAKER	22K	AIC	SURF/ MOU	ACE INT	TOP FEED NEMA 1	-	
	CKT#	BKR	DESCRIPTION	LTG	K/EQ	REC	HVAC	OTHER	Α	В	С	OTHER	HVAC	REC	K/EQ	LTG	DESCRIPTION	BKR	CK
	1	20/1	REC WEST			360			360 540					540			REC EAST	20/1	2
	3	20/1	REC TOOL STORAGE			540				540 900				900			REC OFFICE	20/1	4
	5	20/1	REC BREAKROOM			540					540 180			180			REC BREAKROOM COUNTER	20/1	(
	7	20/1	REC BREAKROOM COUNTER			180			180 360					360			REC RE-USE AREA	20/1	
	9	20/1	REC RESTROOMS			720				720 180				180			REC TELEPHONE BOARD	20/1	1
	11	20/1	REC TELEPHONE BOARD			180					180 211		211				EF-1, EF-2 AND EF-3	20/1	1
	13	20/1	VF-1 AND LV-1				1356		1356 1356				1356				VF-2 AND LV-1	20/1	
	15	20/1	VF-3 AND LV-3				1356			1356 744			744				EWH-1 AND EWH-2	20/1	1
	17	20/1	EUH-1 AND EUH-2				1008				1008 3480		3480				HP-1	60/2	2
	19	20/1	LTG INTERIOR	715					715 3480				3480						:
\sim	21	20/1	LTG EXTERIOR	90	~~	~~				90 1842						1842	LTG HIGH BAY	20/1	1
∧ 1	23	20/2	WELL					1320	}		1320 0						SPARE	20/1	:
1	25		PUMP					1320	1320								SPARE	20/1	9
<u> </u>	2/	20/1	SPARE SPARE						,	0							SPARE	20/1	1
	29	20/1	SPARE								0						SPARE	20/1	
	31	20/1	SPARE						0								SPARE	20/1	:
	33	20/1	SPARE							0							SPARE	20/1	:
	35	20/1	SPARE								0						SPARE	20/1	1
	37	20/1	SPARE						0								SPARE	20/1	1
	39	20/1	SPARE							0							SPARE	20/1	4
	41	20/1	SPARE								0						SPARE	20/1	
	TOTAL			805	0	2520	3720	2640	9667	6372	6919	0	9271	2160	0	1842			\perp
				LTG	KITCH	REC	HVAC	OTHER					CTED L		22958	VA			1
			PHASE A	715	0	1440	6192	1320	9667	1000000			ECTED L			AMPS			1
			PHASE B PHASE C	1932 0	0	2340 900	2100 4699	1320	 	6372	6919	And the second section in the second section in the second section in	LATED L LATED L		23620 66	AMPS	LD=LOCKING DEVICE		+

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
- F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.
- G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.
- H FOR PANEL SCHEDULE SEE SHEET E4.2.
- I FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.
- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1.
- M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- P PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

12/28/15

- V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.
- W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.





ORDERING.

COLLECTION
SANTA FE COUNTY
SANTA FE, NEW MEXICO

REVISIONS

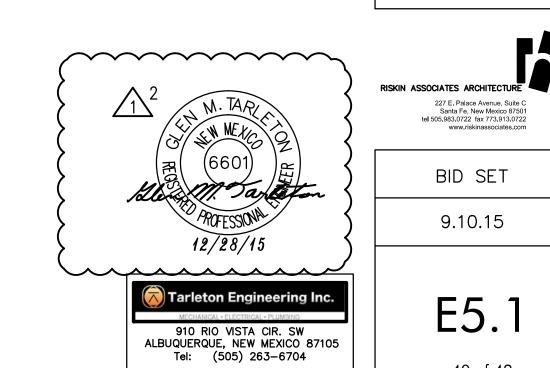
PANEL SCHEDULES AND LOAD CALCULATIONS

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E5.1

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charling@tarenginc.com

2009 IECC

Section 1: Project Information

Project Type: New Construction Project Title: JACONA TRANSFER STATION

Construction Site: Owner/Agent: Designer/Contractor: SANTA FE, NM

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area	C Allowed	D Allowed Watts
OFFICE AREA (Office)	(ft2) 712	Watts / ft2	(B x C) 712
HIGH BAY AREA (Warehouse)	4725	0.8	3780
	To	otal Allowed Watts =	4492

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D)
OFFICE AREA (Office 712 sq.ft.)				
Linear Fluorescent 1: A: 2X4 LAY-IN: 48" T8 32W: Electronic:	2	4	58	232
Linear Fluorescent 2: B: 1X4 LAY-IN: 48" T8 32W: Electronic:	2	4	58	232
Linear Fluorescent 3: C: WALL MOUNT: 48" T8 32W: Electronic:	2	2	58	116
LED 1: X: EXIT: Other: Exemption:Exit Signs, Safety or Emergency Lighting	5	6	3.4	Exempt
LED 2: EM: EMERGENCY: Other: Exemption:Exit Signs, Safety or Emergency Lighting	2	2	2.2	Exempt
LED 3: EMWP: EMERGENCY COLD AREA: Other: Exemption:Exit Signs, Safety or Emergency Lighting	2	4	2.2	Exempt
Linear Fluorescent 4: CEM: WALL MOUNT WITH EM: 48" T8 32W: Electronic:	2	1	58	58
HIGH BAY AREA (Warehouse 4725 sq.ft.)				
LED 4: D: HIGH BAY: Other:	3	6	307	1842
LED 5: EMWP: EMERGENCY: Other: Exemption:Exit Signs, Safety or Emergency Lighting	2	5	2.2	Exempt
LED 6: X: EXIT: Other: Exemption:Exit Signs, Safety or Emergency Lighting	5	3	2.2	Exempt
	Tot	al Propose	ed Watts =	2480

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 45% better than code. Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts Proposed Watts Complies YES

Controls, Switching, and Wiring:

Project Title: JACONA TRANSFER STATION Report date: 07/20/15 Data filename: L:\PROJECTS\RISKIN\022-010 (RISKIN JACONA TRANSFER STATION)\dwg\elec\COM CHECK Page 1 of 4 JACONA.cck

- ☐ 2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to
- ☐ 3. Daylight zones have individual lighting controls independent from that of the general area lighting.

- ☐ Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device. Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a
- separate switch for general area lighting. 4. Independent controls for each space (switch/occupancy sensor).

Exceptions:

☐ Areas designated as security or emergency areas that must be continuously illuminated.

- ☐ Lighting in stairways or corridors that are elements of the means of egress.
- ☐ 5. Master switch at entry to hotel/motel guest room. ☐ 6. Individual dwelling units separately metered.
- 7. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control
- ☐ 8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.

Only one luminaire in space.

An occupant-sensing device controls the area.

☐ The area is a corridor, storeroom, restroom, public lobby or sleeping unit.

Areas that use less than 0.6 Watts/sq.ft. 9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

☐ Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security. ☐ 10.Photocell/astronomical time switch on exterior lights.

Lighting intended for 24 hour use.

☐ 11.Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

CHRIS HARLING Name - Title

JACONA.cck

Page 2 of 4

Project Title: JACONA TRANSFER STATION Report date: 07/20/15 Data filename: L:\PROJECTS\RISKIN\022-010 (RISKIN JACONA TRANSFER STATION)\dwg\elec\COM CHECK

Project Title: JACONA TRANSFER STATION Data filename: L:\PROJECTS\RISKIN\022-010 (RISKIN JACONA TRANSFER STATION)\dwg\elec\COM CHECK JACONA.cck Page 4 of 4



Exterior Lighting Compliance

Designer/Contractor:

2009 IECC

Section 1: Project Information

Project Type: New Construction Project Title: JACONA TRANSFER STATION Exterior Lighting Zone: 1 (Developed rural area)

Construction Site: SANTA FE, NM

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
MAIN ENTRY (Main entry)	3 ft of door width	20	Yes	60	2
OTHER DOORS (Other door (not main entry))	120 ft of door width	20	Yes	2400	96
		Total Trac	lable Watts* =	2460	99
		Total All	owed Watts =	2460	

** A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Total Allowed Supplemental Watts** = 500 * Wattage tradeoffs are only allowed between tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D)	
MAIN ENTRY (Main entry 3 ft of door width): Tradable Wattage					
LED 1: EMWP: EMERGENCY/NIGHT LIGHT: Other:	2	1	2.2	2.2	
OTHER DOORS (Other door (not main entry) 120 ft of door width): Tradable Wattage)				
LED 2: EMWP: EMERGENC /NIGHT LIGHT: Other:	2	3	2.2	6.6	
LED 3: W: WALL MOUNT: Other:	1	9	10	90	
	Total Tradab	ole Propose			

Section 4: Requirements Checklist

1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts. Compliance: Passes.

Controls, Switching, and Wiring:

- 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
- 3. Lighting not designated for dusk-to-dawn operation is controlled by either a a photosensor (with time switch), or an astronomical time
- 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
- ☐ 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Project Title: JACONA TRANSFER STATION Data filename: L:\PROJECTS\RISKIN\022-010 (RISKIN JACONA TRANSFER STATION)\dwg\elec\COM CHECK

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Exterior Lighting Efficacy:

6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.

- ☐ Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
- ☐ Lighting that is specifically designated as required by a health or life safety statue, ordinance, or regulation.
- Emergency lighting that is automatically off during normal building operation.
- Lighting that is controlled by motion sensor.

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

CHRIS HARLING	Chris Harling	9/10/15
Name - Title	Signature	Date

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
- F FOR FAULT CURRENT CALCULATIONS SEE SHEET E4.1.
- G FOR DISCONNECT SIZES AND LOCATIONS SEE SHEETS E1.1, E1.2 AND E4.1.
- H FOR PANEL SCHEDULE SEE SHEET E4.2.
- FOR WIRING METHODS SEE SHEET E4.1 AND E6.1.
- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1.
- M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- V COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.
- W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

				L	AMPS	FIXTURE	INPUT
TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	NUMBER	TYPE	VOLTAGE	WATTS
Α	METALUX	2AC-232-UNV-EB81-U	2X4 LAY-IN	2	32 WATT T8	120	58
В	METALUX	AC-232-UNV-EB81-U-DF-14-W	1X4 LAY-IN	1	32 WATT T8	120	58
			WITH DRYWALL FRAME KIT				
С	METALUX	BAU-232A-UNV-EB81-U	WALL BRACKER	1	32 WATT T8	120	58
CEM	METALUX	BAU-232A-UNV-EB81-U-EL	WALL BRACKER	1	32 WATT T8	120	58
			WITH 90 MINUTE BATTERY BACK-UP				
D	METALUX	HBLED-LD4-36-W-WG-UNV-L840-ED3-U-HBAYC-CHAIN/SET/U	HIGH BAY	3	300 WATT	120	307
			WITH WIRE GUARD		LED DRVERS		
W	LUMARK	XTOR1A-PC1	EXTERIOR WALL MOUNT	1	10 WATT LED	120	10
			WITH 120 VOLT PHOTOCONTROL				
X	SURE-LITES	UX7-0-00-R-BK	EXIT SIGN COLD WET LOCATION	10	.34 WATT LED	120	3.4
			WITH 90 MINUTE BATTERY BACK-UP				
EM	SURE-LITES	AEL2-46-BK-SD	EMERGENCY	2	1.1 WATT LED	120	2.2
			WITH 90 MINUTE BATTERY BACK-UP				
EMWP	SURE-LITES	AEL2-46-BK-SD	EMERGENCY WET AND COLD LOCAITON	2	1.1 WATT LED	120	2.2
			WITH 90 MINUTE BATTERY BACK-UP				

LEGEND	
SYMBOLS	DESCRIPTION
□ LP	208/120V 3-PHASE 4-WIRE PANELBOARD.
⇒	DUPLEX RECEPTACLE. WALL MOUNTED. AC=ABOVE COUNTER GFI=GROUND FAULT INTERRUPTER WP=WEATHERPROOF
=⊕	DOUBLE DUPLEX RECEPTACLE, WALL MOUNTED.
\$	SWITCH SINGLE POLE 3 = 3-WAY 4 = 4 WAY os = OCCUPANCY SENSOR WALL MOUNT DUAL TECHNOLOGY
A	FLUORESCENT FIXTURE. RECESSED CEILING MOUNT. LETTER INDICATES TYPE (SEE FIXTURE SCHEDULE).
1	EMERGENCY LIGHT MOUNT. LETTER INDICATES TYPE (SEE FIXTURE SCHEDULE).
₩	EXIT LIGHT FIXTURE AND/OR COMBINATION FIXTURE
	DISCONNECT SWITCH (SEE SCHEDULE FOR DESCRIPTION).
3	JUNCTION BOX.
LPA_2	CONDUIT TO PANELBOARD WITH CIRCUIT NUMBER.
•	DATA OUTLET; (1) 4-SQUARE BOX (1) 4-SQUARE TO SINGLE GANG PLASTER RING (1) RJ45 JACK (1) 3/4" C TO ABOVE CEILING (1) CAT 6 CABLE TO SERVER ROOM





REVISIONS

BID SET 9.10.15

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PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Service Entrance Equipment
- B. Conduit
- C. Wire and Cable D. Boxes
- E. Wiring Devices
- F. Enclosures
- G. Grounding and Bonding
- H. Disconnect Switches Panelboards
- J. Motor Control Equipment K. Light Fixtures

- 1.2 REFERENCES A. General
 - ANSI/NFPA 70 National Electrical Code.
- 2. ANSI C2 National Electrical Safety Code.
- 3. Underwriters Laboratories, Inc. (UL) B. Service Entrance Equipment
- 1. Public Service Company of New Mexico

1.3 SUBMITTALS

- A. Provide technical data for the following items. Data shall substantiate compliance with the requirements of the Specifications and Drawings and shall include, but not be limited to, ratings, material type, construction, listings and/or certifications, and color. Catalog data or "cut-sheets" which contain information on several products/items should be marked to clearly indicate the specific product or material proposed for this project.
 - 1. Service entrance equipment. 2. Disconnect switches including fuses.
 - 3. Panelboards.
- 3. Light fixtures including ballasts and lamps.

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code for the City of Santa Fe.
- B. Conform to ANSI/NFPA 70.
- C. Obtain permits and request inspections from authority having jurisdiction.
- D. Conform to applicable UL requirements for each product indicated.

PART 2 - PRODUCTS

2.1 SERVICE ENTRANCE EQUIPMENT

A. Secondary Metering Enclosure

- 1. Description: In accordance with electric metering requirements of the Public Service Company of New Mexico.
- 2. Listing: UL listed.
- B. Service Disconnect Switch and Overcurrent Protection
- 1. Description: As noted on Drawings.
- 2. Listing: UL listed Service Entrance Equipment.

2.2 WIRE AND CABLE

- A. Building Wire and Cable
 - 1. Description: Single conductor insulated wire. 2. Conductor: Copper.
 - 3. Insulation:
 - a. Voltage Rating: 600 volt.
 - b. Type: NEMA WC 5, Type THHN/THWN.

 - (1) #10 AWG and Smaller: Solid color compound throughout conductor
 - (2) #8 AWG and Larger: 3M Scotch "35 Vinyl Plastic" electrical color coding tape, 3/4" wide, extended a minimum of 2 inches along conductor
 - d. Size:
 - (1) Power and Lighting Circuits: #12 AWG, minimum. (2) Control: #14 AWG, minimum, unless otherwise noted.
 - e. Listing: UL listed..

2.4 BOXES

- A. Sheet Metal Boxes: ANSI/NEMA OS 1, galvanized steel; rated for weight of equipment supported; include 1/2 inch male fixture studs where required; grounding terminal.
- B. Cast Boxes: ANSI/NEMA FB 1, Type "FD" cast feralloy, threaded hubs, grounding

terminal, gasketed cover.

2.5 WIRING DEVICES

- A. Wall Switches
 - 1. Type: NEMA WD 1, FS W-S-896E, specification grade toggle switch; ivory
 - 2. Rating: 20 Amperes at 120-277 Volts AC.
- B. Receptacles
 - 1. Type: NEMA WD 1, FS W-C-596, specification grade self-grounding receptacle
 - with grounding terminal on body; ivory face. 2. Configuration: NEMA WD 6, Type 5-20R.

C. Device Cover Plates

- 1. Dry Interior Locations: Type 302 specification grade smooth stainless steel, jumbo
- 2. Exterior or Wet Interior Locations: Gasketed cast metal with hinged gasketed device cover.

2.6 ENCLOSURES

- A. NEMA Type 1 Hinged Cover Enclosure
- 1. Construction: NEMA 250, Type 1, steel, minimum 16 gauge.
- 2. Finish: Polyester powder coating over phosphatized surface. Cover: Door with continuous steel hinge, held closed by flush latch operable with

2.7 GROUNDING AND BONDING

A. Rod Electrode (Ground Rod)

screwdriver.

- Material: Copper.
- Diameter: 3/4 inch.
- 3. Length: 10 feet. B. Raceway Conductor
- Description:
- a. #10 AWG and Smaller: Single conductor insulated wire.
- b. #8 AWG and Larger: Single conductor bare wire; stranded.
- 2. Conductor: Copper.
- 3. #10 AWG and Smaller Conductor Insulation:
- a. Voltage Rating: 600 volt. b. Type: NEMA WC 5, Type THHN/THWN.
- c. Color: Green solid color compound throughout conductor length.
- d. Listing: UL listed.

2.8 DISCONNECT SWITCHES

- A. Switch Assemblies: NEMA KS 1, Type HD, FS W-S-865, heavy duty, quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in OFF position.
- B. Fuse clips: FS W-F-870. Designed to accommodate Class R fuses.
- C. Fuses: ANSI/UL 198E, Class RK1, dual-element, current limiting, time delay.
- D. Enclosures: NEMA KS 1, Type 1 for dry interior locations; Type 3R for exterior or wet interior locations. Provide with factory or field installed equipment grounding kit.

E. Listing: UL listed.

2.9 PANELBOARDS

- A. Type: NEMA PB 1, circuit breaker type. FS W-P-115, Type I, Class 1.
- B. Enclosure: NEMA PB 1, Type 1 for dry interior locations, Type 3R for exterior or wet interior locations, unless otherwise noted.
- C. Bus: Copper.
- D. Circuit Breakers: NEMA AB 1, FS W-C-375, molded case, thermal magnetic trip, bolton type, full-size, common internal trip for multi-pole breakers, SWD rated for lighting circuits, HID rated for 120/208 volt HID lighting circuits. Tandem breakers are not acceptable.

2.10 MOTOR CONTROL EQUIPMENT

- A. Fractional Horsepower Manual Motor Starter: NEMA ICS 2, AC general purpose Class A manually operated, 2 pole, full-voltage controller for fractional horsepower induction motors, with thermal overload unit, red pilot light, and toggle operator with lock-off provisions. Enclosure: NEMA ICS 6, Type 1 for dry interior locations, Type 4 for exterior or wet interior locations.
- B. Fractional Horsepower Manual Motor Starting Switch: Same as Fractional Horsepower Manual Motor Starter without thermal overload unit.

2.11 LIGHT FIXTURES

- A. Light Fixtures: As scheduled on Drawings.
- B. Ballasts:
- 1. Fluorescent: ANSI C82.1, UL listed, CBM certified, Class P, electronic.

PART 3 - EXECUTION

3.1 GENERAL

- A. Perform Work in accordance with ANSI/NFPA 70.
- B. Install equipment and products in accordance with manufacturers instructions.

3.2 SERVICE ENTRANCE EQUIPMENT

A. Install meter enclosure in accordance with electric metering requirements of the Public Service Company of New Mexico.

3.3 CONDUIT

- A. Schedule
- Above Grade Conduit Installations:
- a. Dry Interior Locations:
 - (1) Size: 1/2 inch minimum.
 - (2) Type: (a) 1/2 inch through 2 inch: Electrical metallic tubing (EMT).
- (b) Larger than 2 inch: Metal conduit (RGS). (3) Exterior or Wet Interior Locations:

(a) Size: 1/2 inch minimum.

- (b) Type: Metal conduit (RGS).
- 2. Flexible Metal Conduit: Use for connection to recessed and pendant mounted light
- fixtures. Restrict maximum length to 72 inches.
- 3. Liquidtight Flexible Metal Conduit: Use for connection to dry-type transformers, mechanical equipment, instruments, and devices which produce vibration. Restrict maximum length to 24 inches.

B. Installation

- 1. General
 - Install conduit in accordance with NECA "Standard of Installation."
 - b. Install no more than the equivalent of four 90 degree bends between conduit terminations for 1/2 inch through 1 inch conduit size, three bends for 1-1/4 inch through 2 inch conduit, and two bends for conduit 2-1/2 inch and larger. Provide pull boxes, if necessary to meet these requirements.
 - Maintain minimum 6 inch clearance between conduit and piping.
 - d. Maintain minimum 12 inch clearance between conduit and surfaces with temperature exceeding 104 degrees F (40 degrees C).
 - e. Support conduit at a maximum of 4 feet on center and within one foot of
 - elbow, bend, change of direction, and box. f. Use grounding bushings on metallic conduit terminations.
- Use conduit hubs to fasten metal conduit (RGS) to sheet metal enclosures.
- h. Install fittings to accommodate expansion where conduit crosses building control and expansion joints. i. Use suitable conduit caps to protect installed conduit against entrance of dirt
- and moisture.
- Provide pull string in each empty conduit.
- Above Grade Conduit a. Route conduit parallel and perpendicular to walls.
- b. Route conduit to maintain headroom and present neat appearance.
- c. Route conduit through roof using flashing and sealants.

3.4 BRANCH CIRCUIT CONDUIT

A. Run wiring for receptacle and lighting circuits in conduit sized in accordance with the National Electrical Code, unless otherwise indicated.

3.5 WIRE AND CABLE

- A. Run wiring in raceways, unless otherwise indicated on Drawings.
- B. Pull all conductors into raceway at same time.
- C. Use suitable wiring pulling lubricant for building wire #4 AWG and larger. D. Install pull string in empty conduits.
- E Communication Cables: Route cable in conduit as shown on the Drawings.
 - 2. Cable shall be continuous from outlet jack to connecting blocks in closet.
- 3. No splicing shall be permitted. 4. Terminate cable at outlet jacks and connecting blocks.

3.6 BRANCH CIRCUIT WIRING

- A. Provide number of phase and neutral conductors required to implement circuiting shown on Drawings, unless otherwise noted.
- B. Size neutral conductor same size as phase conductors, unless otherwise noted.
- C. Provide a separate equipment ground conductor in each raceway. Size equipment ground conductor same size as phase conductors, unless otherwise noted.
- D. Place an equal number of conductors for each phase of a circuit in same raceway. E. Two or three branch circuits of different phases may not share a common neutral, except
- as otherwise indicated. F. Use #12 AWG conductor for 20 Amp branch circuits which have not been identified on the Drawings.

3.7 BOXES

- A. Schedule:
- Interior Dry Locations: Sheet Metal Boxes.
- 2. Exterior of Wet Interior Locations: Cast Boxes.

3.8 WIRING DEVICES

- A. Install wall switches 4'-0" inches above finished floor to bottom of box, "OFF" position down, unless otherwise noted.
- B. Install receptacles 1'-6" inches above finished floor to bottom of box, grounding pole on top, unless otherwise noted.
- C. Install telephone/data outlets in accordance with manufacturer's instructions. Install telephone jack at the bottom of outlet and data jack at the top of outlet.

3.9 GROUNDING AND BONDING

- A. Provide separate insulated ground conductor in each raceway. Bond each end of conductor to conduit grounding bushing and extend to box or equipment grounding lug
- B. Use grounding bushings on metallic conduit terminations.

3.10 DISCONNECT SWITCHES

A. Install 5'-0" above finished floor to centerline of disconnect handles in the "ON" position, unless otherwise noted.

3.11 PANELBOARDS

- A. Install in accordance with NEMA PB 1.1 and manufacturer's instructions.
- B. Install 6'-6" above finished floor to top of panelboard.
- C. Provide typed circuit directory.

3.12 MOTOR CONTROL EQUIPMENT

END OF SECTION 16005

A. Magnetic Motor Starters: Install 5'-0" above finished floor to centerline of enclosure.

GENERAL NOTES

- A FOR POWER RISER DIAGRAM SEE SHEET E4.1.
- B FOR CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- C FOR GROUNDING CONDUCTOR SIZES SEE SHEETS E1.1, E1.2, E2.1 AND E4.1.
- D FOR METHOD OF GROUNDING SEE SHEET E6.1.
- E FOR LOAD CALCULATIONS SEE SHEETS E4.2.
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- J FOR IECC LIGHTING BUDGET CALCULATIONS SEE SHEET E5.1.
- K FOR ELECTRICAL LEGEND SEE SHEET E5.1.
- L FOR ELECTRICAL SPECIFICATIONS SEE SHEET E6.1. M CONDUITS ARE 1/2" UNLESS INDICATED OTHERWISE.
- N CONDUCTORS ARE #12 THHN/THWN, COPPER UNLESS INDICATED OTHERWISE.
- PROVIDE UL LISTED FIRE STOP ASSEMBLY FOR CONDUIT PENETRATIONS THROUGH FIRE RATED CEILINGS, FLOORS, WALLS AND PARTITIONS.
- Q MC CABLE MAY BE USED WHERE ALLOWED BY CODE.
- R FOR LIGHTING FIXTURE SCHEDULE SEE SHEET E401.
- S INSTALL BURIED CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
- U PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY

T BACK FILL ELECTRICAL CONDUIT TRENCHES WITH ENGINEERED FILL

COMPACT ELECTRICAL CONDUIT TRENCHES TO 95%.

HAND-OPERATED TAMPERS.

W INSTALL ELECTRICAL WARNING TAPE 12" ABOVE EACH CONDUIT.

ECTRICAL





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