



**INVITATION FOR BID #13PB030**

**DISTRICT 3 POLICE STATION TARGET HARDENING**

**ADDENDUM #1**

**FEBRUARY 15, 2013**

The following changes/additional information is provided and shall affect this solicitation:

**CHANGES/CLARIFICATIONS**

1. **SCHEDULE OF BID ITEMS – DELETE** existing and **REPLACE** with REVISED Bid Schedule labeled Addendum #1 (attached).
2. **ARCHITECTURAL SPECIFICATIONS**, **DELETE** the following: Cover Page and Table of Contents and **REPLACE** with the revised Cover Page and Table of Contents labeled Addendum No. 1.
3. **ARCHITECTURAL SPECIFICATIONS**, **ADD** Section 04 15 00 Quality Control and labeled Addendum No. 1.
4. **SPECIAL PROVISIONS**, Item 12 Schedule of Values, **ADD** Grant Reimbursement Billing document, labeled Addendum No. 1 (attached).
5. **PLAN DRAWING SPECIFICATION CHANGES**

**DELETE** the following plan sheets in their entirety: SP1.0, SP2.0, SP2.1, SP2.2, A1.1, A6.0, S1.1, S3.1, E1.0, E1.1 and **REPLACE** with the following plans sheets labeled Addendum No. 1: SP1.0, SP2.0, SP2.1, SP2.2, A1.1, A6.0, S1.1, S3.1, E1.0, E1.1.

- Plan Sheet C0.1, General Construction Notes for Capital Projects, Note 15, General Note to the Contractor: The Contractor is advised he is required to provide temporary fencing to protect the construction site. The fencing shall be 8-feet in height and shall include a screen tarp in a color acceptable to the City of Scottsdale. The temporary fencing shall be in accordance with the City's Zoning Ordinance, Article VII, Section 7.700. There shall be no additional payment for this work.
- Plan Sheet SP2.0, labeled Addendum No. 1, General Notes referencing Bid Alternate No. 2, Steel Zinc Dipped, General Note to the Contractor: Paint as specified over zinc coating is acceptable for fence posts. Additional holes are not preferred but maybe required. Contractor shall apply clear silicone caulk sealant at new penetrations to prevent water intrusion.

- Plan Sheet S3.1, labeled Addendum No. 1, Details 103, New Security Wall, and Detail 108, Stepped Wall Footing at Roof Drains, General Note to the Contractor: The Contractor shall anticipate native soils in excess of 1'-6" below finished grade. The Contractor shall construct Detail 103 and Detail 108 in accordance with Detail 106, Footing Recommendations when native soil is greater than 1'-6" below finished grade. All costs associated with complying with this requirement shall be included in the appropriate bid item listed in the bid schedule.
6. Plan Sheet E2.2, Electrical Specifications, **DELETE** Key Note 3.2.2 in its entirety and **REPLACE** with the following: 3.2.2 All wiring shall be stranded. No solid wire of any size is permitted.
  7. Plan Sheet E2.2, Electrical Specifications, **DELETE** Key Note 3.10 in its entirety and **REPLACE** with the following: All wiring shall be stranded with continuous color coded insulation, indicating color by phase. No solid wire of any size is permitted.
  8. It is the intent of the City to have the Contractor provide all submittals and/or shop drawings within five (5) days following award of the contract.
  9. It is the intent of the City to issue the Notice to Proceed for this project ten (10) days following award of the contract.
  10. **Pre Bid Attendance Sheets**

For information purposes only, attached are the attendance sheets' from the Pre Bid held February 12, 2013.

**All other Terms and Conditions remain the same. Acknowledge this addendum in your bid.**

Karie Ingles, CPPB  
Bid & Contract Specialist  
Email: [kingles@scottsdaleaz.gov](mailto:kingles@scottsdaleaz.gov)

**DISTRICT 3 POLICE STATION TARGET HARDENING  
9045 E. VIA LINDA  
PROJECT G1207  
BID NO. 13PB030**

**ADDENDUM NO. 1  
SCHEDULE OF BID ITEMS**

**BASE BID**

Item No.	Item Description	Quantity	Unit	Unit Price	Total
1	Construct Perimeter Wall Complete per the Approved Plans and Specifications	1	LUMP SUM	LUMP SUM	\$
2	Furnish and Install Window Glazing per the Approved Plans and Specifications	1	LUMP SUM	LUMP SUM	\$

**BASE BID TOTAL \$ \_\_\_\_\_**

**BID ALTERNATE 1**

Item No.	Item Description	Quantity	Unit	Unit Price	Total
1	Construct Air Intake Enclosure Complete per the Approved Plans and Specifications	1	LUMP SUM	LUMP SUM	\$

**BID ALTERNATE 1 TOTAL \$ \_\_\_\_\_**

**BID ALTERNATE 2**

Item No.	Item Description	Quantity	Unit	Unit Price	Total
1	Steel Zinc Dipped Fencing per the Approved Plans and Specifications	1	LUMP SUM	LUMP SUM	\$

**BID ALTERNATE 2 TOTAL \$ \_\_\_\_\_**

# Architectural Specifications

City of Scottsdale  
Police District 3 “Hardening”

9045 E. Via Linda  
Scottsdale, Arizona 85258

Project # G1207

Bid # 13PB030

October 23rd, 2012



Larson Associates Architects, Inc.  
3807 N. 24<sup>th</sup> Street  
Suite 100  
Phoenix, Arizona 85016  
602-955-9929 voice  
602-954-4790 fax

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#### DIVISION 01 - GENERAL REQUIREMENTS

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#### DIVISION 02 – EXISTING CONDITIONS

#### DIVISION 03 - CONCRETE

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#### DIVISION 04 - MASONRY

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04 05 23	Masonry Accessories	*
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#### DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

#### DIVISION 07 - THERMAL & MOISTURE PROTECTION

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#### DIVISION 08 – OPENINGS



**DIVISION 09 - FINISHES**

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**DIVISION 26 – ELECTRICAL**

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**DIVISION 32 – EXTERIOR IMPROVEMENTS**

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## SECTION 01 45 00

### QUALITY CONTROL

#### PART 1 GENERAL

##### 1.01 TESTING LABORATORY SERVICES

- A. Special Inspections and Testing: Owner will employ and pay for the services of an independent testing agency to perform Special Inspections and Testing required by Code or authorities having jurisdiction.
- B. Quality Control Testing and Inspections: Owner will employ and pay for the services of an independent testing laboratory to perform specified testing.
- C. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:
  - 1. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
  - 2. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
  - 3. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
  - 4. Security and protection of samples and test equipment at the Project site.
- D. The testing laboratory shall distribute copies of reports as follows:
  - 1. 2 copies to the City of Scottsdale
  - 2. 1 copy to the Structural Engineer
  - 3. 2 copies to the Contractor
  - 4. 1 copy to Code authorities or authorities having jurisdiction.
- E. Costs for retesting required due to Contractor's failure to comply with specified requirements shall be paid for by the Contractor.
- F. The following lists are intended as a guide to the Contractor to aid in the determining testing requirements for the project, however, the requirements specified in the technical sections shall take precedence over these lists and these lists are not to be interpreted as being complete.
  - 1. Special Inspections and Testing:
    - a. Earthwork: Test imported fill materials if required, observation of earthwork by Geotechnical Engineer, density and moisture testing of trench backfill, field density tests of underslab fill and backfill.
    - b. 03 30 00 - Cast-In-Place Concrete: Test cylinders, slump test(s)
    - c. Not Used
    - d. 04 05 15 - Mortar and Masonry Grout: Test of grout mix
    - e. 04 22 00 - Concrete Unit Masonry: Prism testing
    - f. 05 10 00 - Structural Metal Framing: Welded connection tests, inspection of high strength bolts.
    - g. Not Used.
    - h. Not Used.
    - i. Not Used.
  - 2. Quality Control Testing and Inspections:

- a. Not Used.
- b. Not Used.
- c. Not Used.
- d. Not Used.
- e. Not Used.
- f. Not Used.
- g. Not Used.
- h. 07 92 00 - Joint Sealers: Field adhesion testing and stain testing.
- i. Not Used.

#### 1.02 CONTRACTOR'S QUALITY CONTROL

- A. Where Specifications require that a particular product be installed and/or applied by an Applicator approved by the Manufacturer, it is the Contractor's responsibility to ensure that Subcontractor employed for such Work is approved. Such Subcontractor(s) shall provide evidence of being approved when requested by the Architect.
- B. Work shall be executed by mechanics skilled in the Work required. Conform to the methods, standards and accepted practices of the Trade or Trades involved.

END OF SECTION

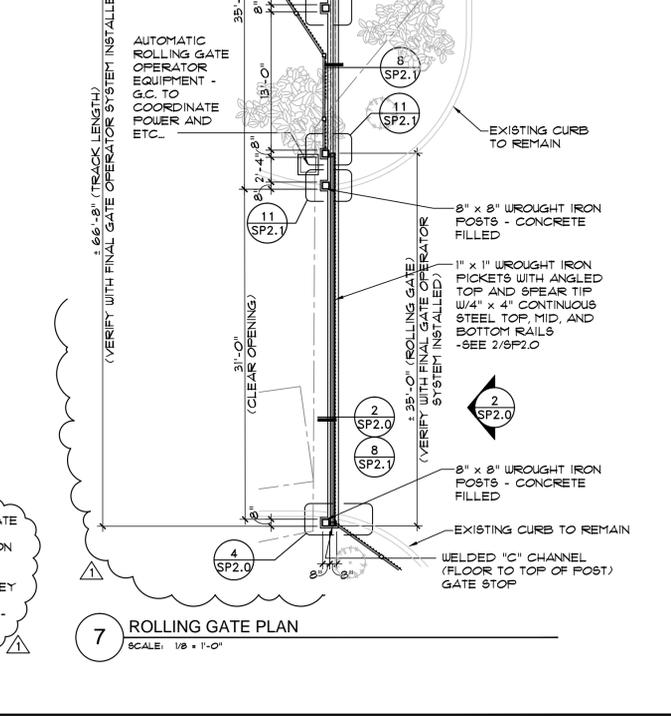
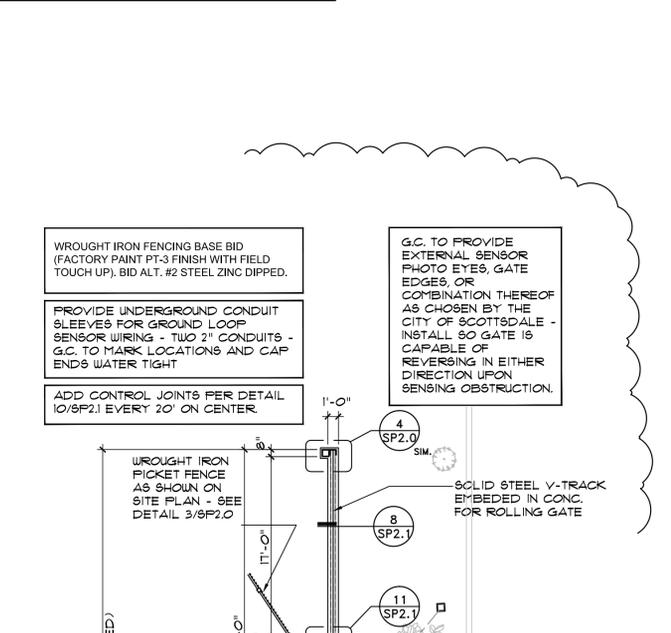
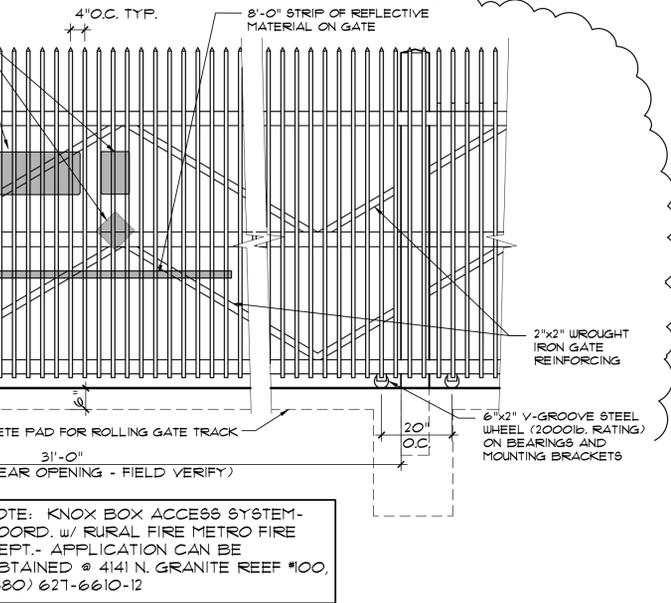
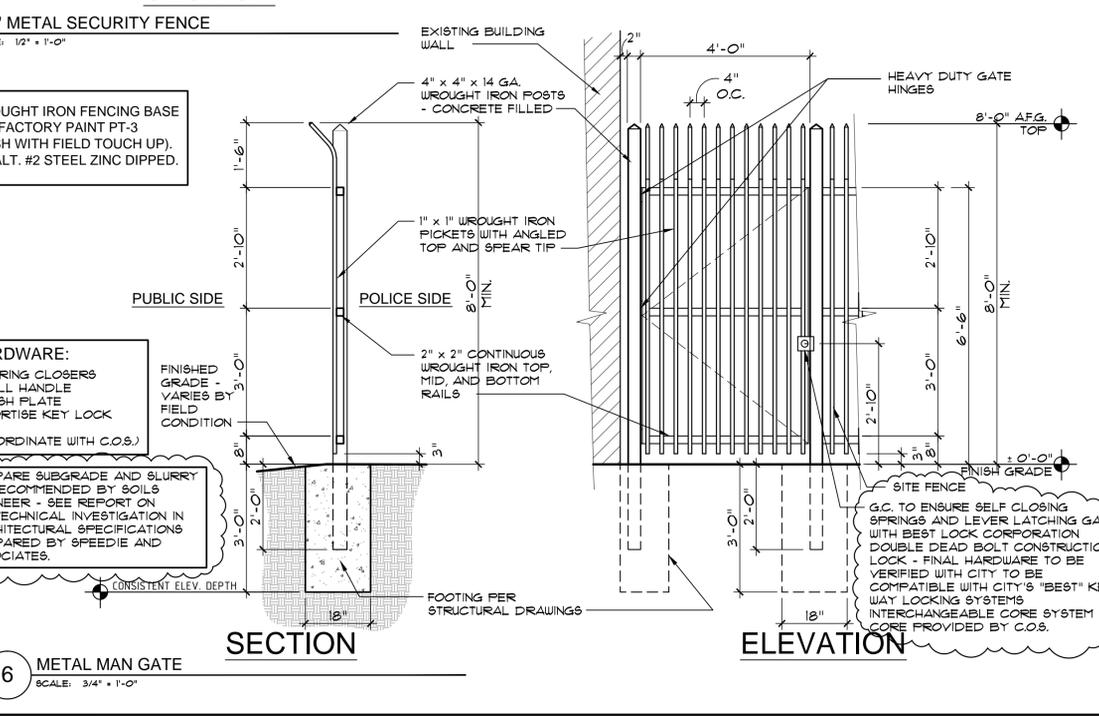
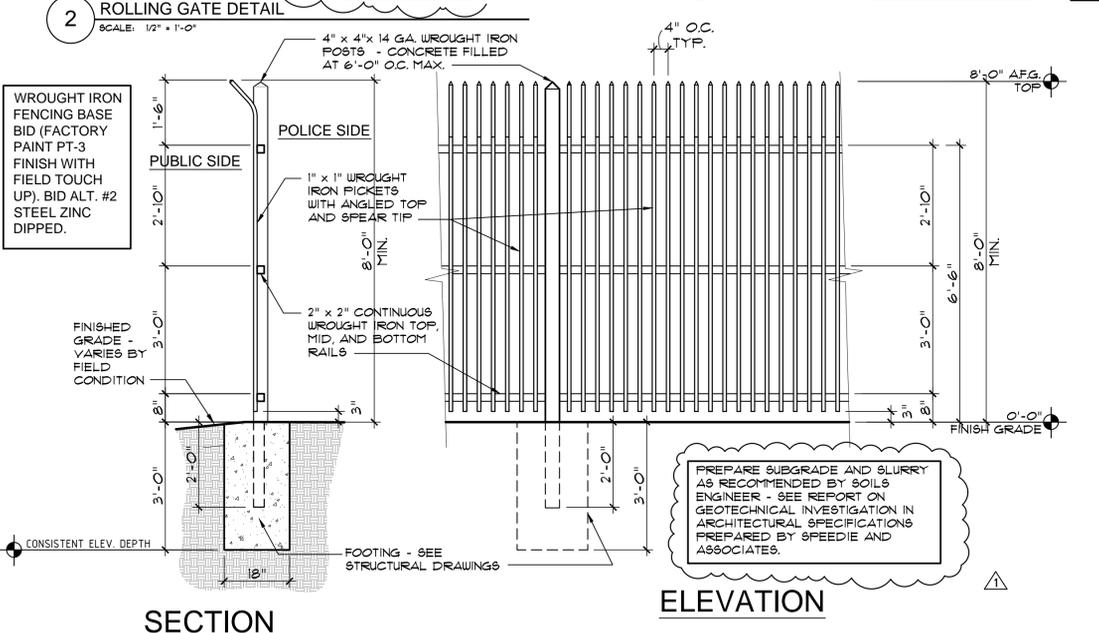
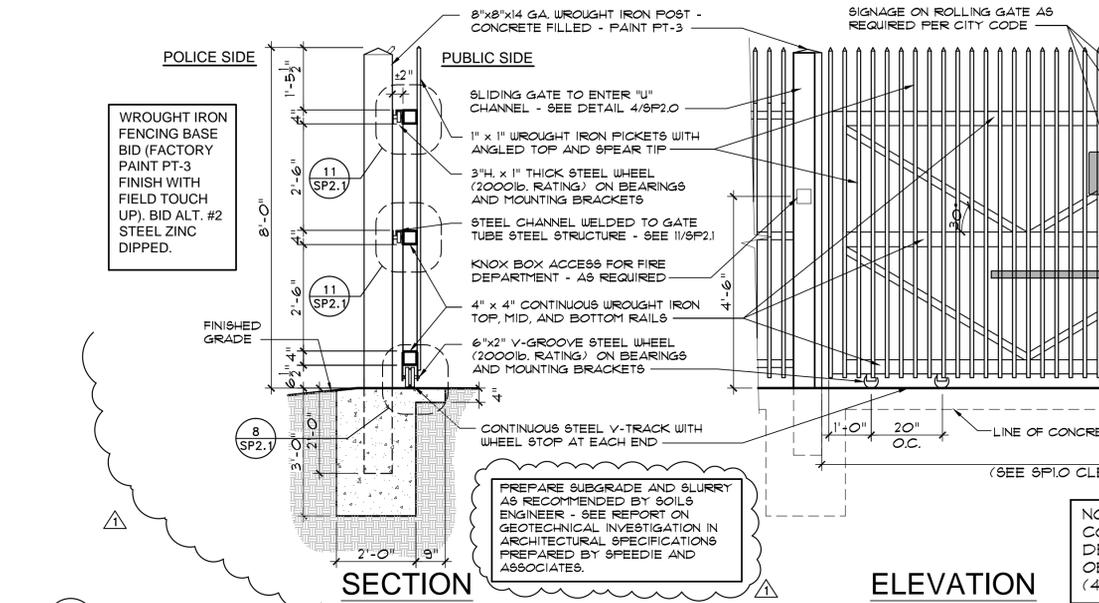
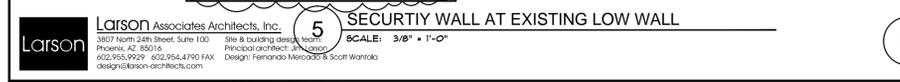
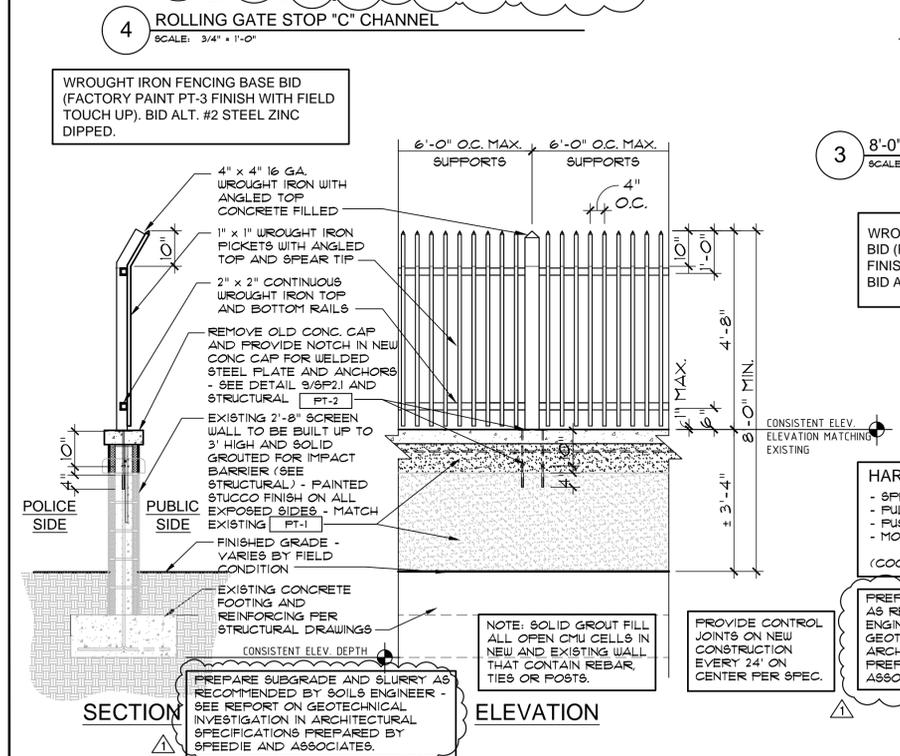
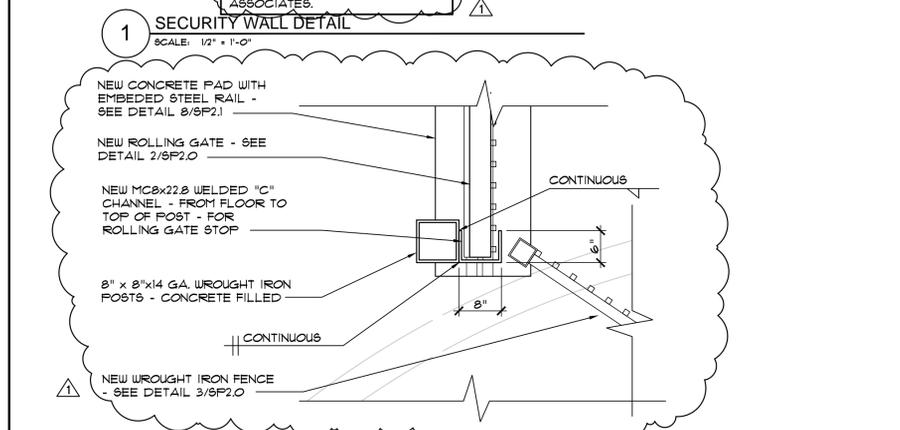
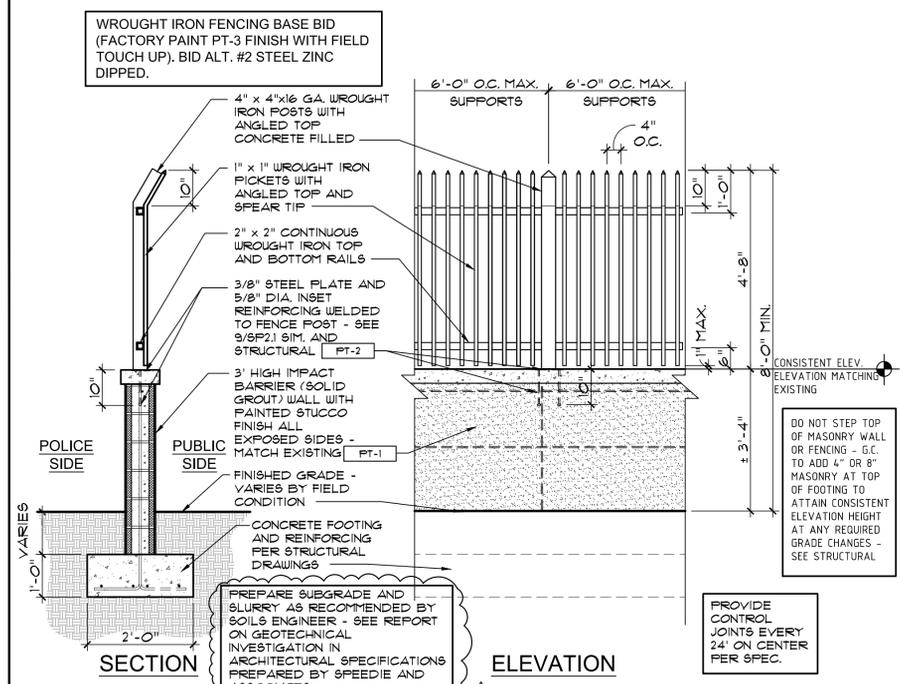
**DISTRICT 3 POLICE STATION TARGET HARDENING  
9045 E. VIA LINDA  
PROJECT G1207  
BID NO. 13PB030**

**ADDENDUM NO. 1  
GRANT REIMBURSEMENT BILLING**

<b>ITEM NO.</b>	<b>ITEM DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
1	Construct combination masonry and metal perimeter wall per the approved plans and specifications including landscaping and irrigation restoration. (AEL 14SW-01-WALL)	1	LUMP SUM	LUMP SUM	\$
2	Extend height of existing perimeter wall with masonry and metal per the approved plans and specifications including landscaping and irrigation restoration. (AEL 14SW-01-WALL)	1	LUMP SUM	LUMP SUM	\$
3	Construct perimeter fencing per the approved plans and specifications including landscaping and irrigation restoration. (AEL 14SW-01-WALL)	1	LUMP SUM	LUMP SUM	\$
4	Construct air intake enclosure per the approved plans and specifications. (AEL 14SW-01-WALL)	1	LUMP SUM	LUMP SUM	\$
5	Furnish and install air intake enclosure door per the approved plans and specifications. (AEL 14SW-01-DOOR)	1	LUMP SUM	LUMP SUM	\$
6	Furnish and install vehicle gates, track, gate motor, station officer button controls and conduit for controller and controls complete per the approved plans and specifications. (AEL 14SW-01-DOOR)	1	LUMP SUM	LUMP SUM	\$
7	Furnish and install pedestrian gate and hardware per the approved plans and specifications. (AEL 14SW-01-DOOR)	1	LUMP SUM	LUMP SUM	\$
8	Furnish and install gate line module and sensor complete. (AEL 14SW-01-SNSR)	1	LUMP SUM	LUMP SUM	\$
9	Furnish and install gate controls pedestal foundation complete per the approved plans and specifications. (AEL 14SW-01-LITE)	1	LUMP SUM	LUMP SUM	\$
10	Furnish and install window glazing per the approved plans and specifications. (AEL 14EX-00-BSIR)	1	LUMP SUM	LUMP SUM	\$

**TOTAL CONSTRUCTION COST \$** \_\_\_\_\_









Submittals	Date	Submittal

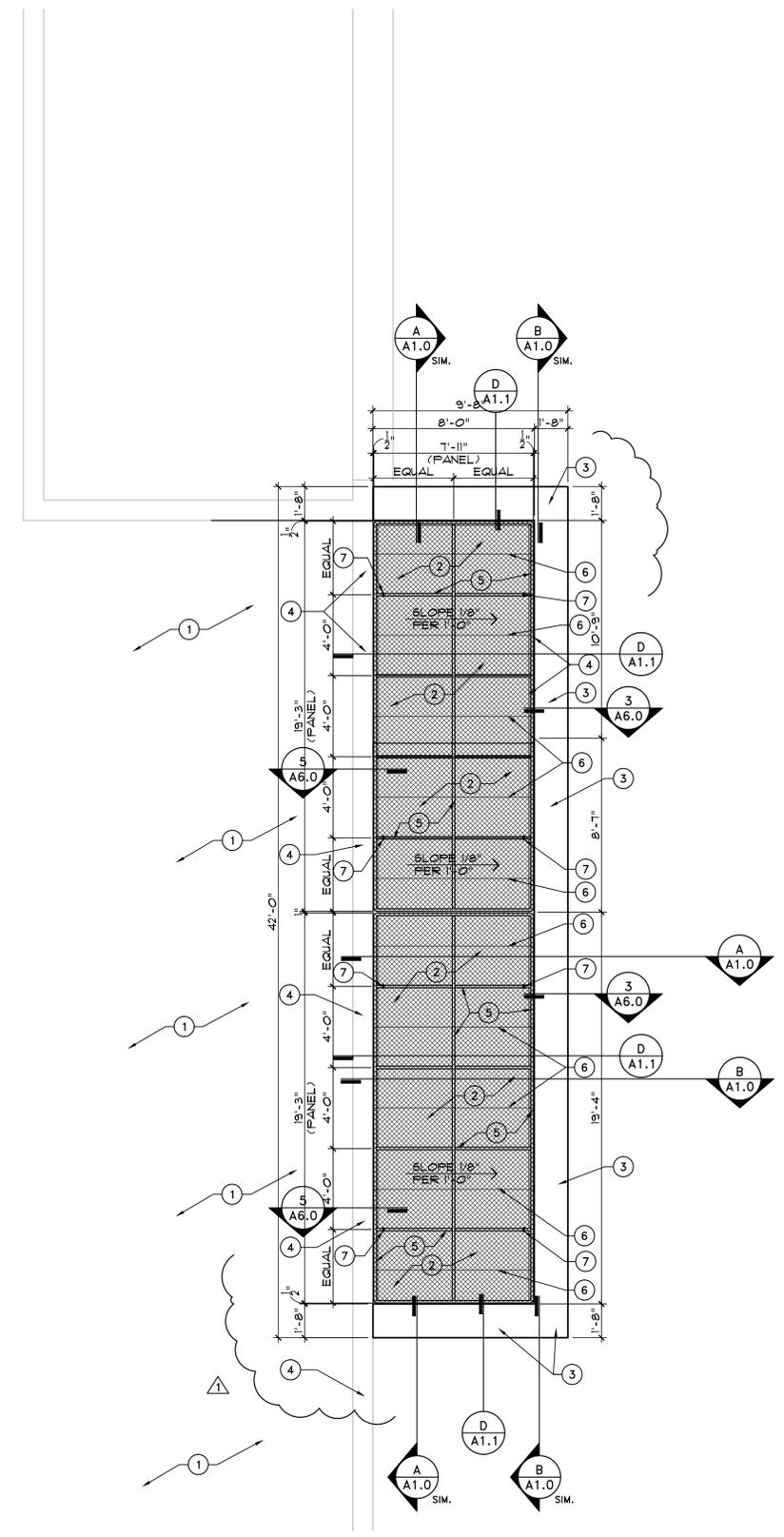
Revisions	Date	Revisions

Sheet Name
PARTIAL UPPER PLAN PARTIAL ROOF PLAN (BID ALTERNATE #1)

Sheet Number
A1.1

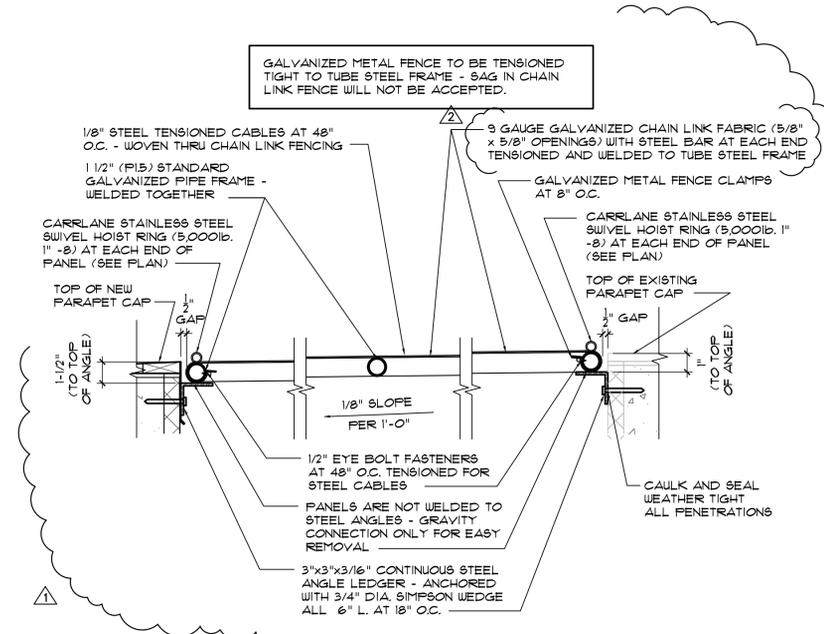
### ROOF/FRAMING PLAN KEYED NOTES:

- 1 EXISTING ROOF CONSTRUCTION TO REMAIN - REPAIR ANY DAMAGE CAUSED DURING CONSTRUCTION TO LIKE NEW CONDITION - TYPICAL
- 2 REMOVABLE PANELS WITH 9 GA. GALVANIZED CHAIN LINK FABRIC (5/8" OPENINGS) SET ON 3"x3"x3/16" CONTINUOUS STEEL ANGLE LEDGER ON WEST AND EAST SIDES. PANELS ARE GRAVITY HELD IN PLACE - RESTING ON STEEL ANGLES
- 3 GALVANIZED METAL FLASHING CAP OVER PARAPET (MATCH EXISTING) - SEE A 4 B/A1.0
- 4 EXISTING PARAPET CAP WITH NEW STEEL LEDGER ANGLE - SEE DETAIL B/A6.0
- 5 1 1/2" P15 STANDARD GALVANIZED PIPE FRAME
- 6 1/8" STEEL TENSIONED CABLES AT 48" O.C. - WOVEN THRU CHAIN LINK FENCING
- 7 1" GALVANIZED HOISTING RING - TYPICAL 4 PER FENCE PANEL (CARRLANE STAINLESS STEEL SUIVEL HOIST RING - 5,000lb. 1" - 8) SEE PLAN (VERIFY SPEC. W/ C.O.S.)



3 PARTIAL ROOF PLAN - BID ALTERNATE #1  
SCALE: 1/4"=1'-0"

NOTE:  
ALL SCREENED ELEMENTS INDICATE  
EXISTING CONSTRUCTION TO REMAIN.



D REMOVABLE FENCE PANEL - BID ALTERNATE #1  
SCALE: 1 1/2"=1'-0"

ALL DIMENSIONS AND CONDITIONS INDICATED IN THIS DESIGN ARE APPROXIMATE AND NOT EXACT. G.C. TO FIELD VERIFY AND COORDINATE BEST POSSIBLE CODE COMPLIANT CONSTRUCTION AND NOTIFY C.O.S. AND ARCHITECT OF ANY DISCREPANCIES THAT WILL ADVERSELY EFFECT CONSTRUCTION AND/OR DESIGN - NO SURVEY WAS AVAILABLE DURING DESIGN NOR PART OF DESIGN CONTRACT.

THE ARCHITECT IS NOT RESPONSIBLE FOR SECURITY RELATED PROBLEMS IF THE G.C. DEVIATES FROM THE CITY APPROVED SET OF DRAWINGS - ANY AND ALL SUBSTITUTIONS RELATED TO SECURITY RELATED ITEMS ARE NOT ALLOWED UNLESS CONFIRMED IN WRITING FROM CITY OF SCOTTSDALE.



# GENERAL STRUCTURAL NOTES

APPLY UNLESS NOTED OTHERWISE

## BUILDING CODE:

2006 EDITION OF THE INTERNATIONAL BUILDING CODE WITH CITY OF SCOTTSDALE AMENDMENTS.

## LOADS:

ROOF LIVE LOAD = 20 PSF (REDUCIBLE).

TOTAL ROOF DEAD LOAD = 10 PSF

V<sub>50</sub> = 40 MPH WIND SPEED, EXPOSURE C.

WIND IMPORTANCE FACTOR, I<sub>w</sub> = 1.15

OCCUPANCY CATEGORY = IV

INTERNAL PRESSURE COEFFICIENT, G<sub>cp</sub> = ± 0.55

METHOD 2 - ANALYTICAL PROCEDURE (SECT. 6.5.12.4 ASCE 7-05).

COMPONENTS AND CLADDING

ZONE 4 = 24.0 psf/26.0 psf

ZONE 5 = 24.0 psf/26.0 psf

SEISMIC CRITERIA

SEISMIC USE GROUP I

SEISMIC DESIGN CATEGORY C

S<sub>s</sub> = 0.206

S<sub>i</sub> = 0.066

SITE CLASS D

S<sub>ds</sub> = 0.214

S<sub>li</sub> = 0.106

C<sub>s</sub> = 0.094

SEISMIC IMPORTANCE FACTOR, I<sub>e</sub> = 1.5

R = 3.5 (BID - ALT #1)

BASIC SEISMIC FORCE RESISTING SYSTEM = A5 - INTERMEDIATE REINFORCED MASONRY SHEAR WALLS (BID - ALT #1)

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE ANALYSIS.

## FOUNDATIONS:

SOIL REPORT BY SPEEDIE & ASSOC., JOB NO. 0807085A. MINOR STRUCTURES (SCREEN WALLS) SPREAD FOOTINGS SHALL BEAR ON FIRM UNDISTURBED NATIVE SOIL. 1'-6" MINIMUM BELOW FINISHED GRADE. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. DESIGN SOIL BEARING VALUE = 1500 PSF FOR CONTINUOUS FOOTINGS. IF FIRM UNDISTURBED NATIVE SOIL IS NOT AT 1'-6" B.Y.G., REFER TO DETAIL 106/151 FOR ADDITIONAL FOOTING INSTRUCTIONS. FOUNDATION EXCAVATIONS SHALL BE TESTED BY SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

MAJOR STRUCTURES (BUILDINGS) NEAT SPREAD FOOTINGS SHALL BEAR ON 2'-0" OF 500 PSI OR 2 SACK SLURRY AT A MINIMUM 1'-6" BELOW FINISHED GRADE. FILL PLACEMENT AND QUALITY IS DEFINED IN THE 'FILL AND BACKFILL' SECTION OF THE 2008 SITE SOILS REPORT. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. DESIGN SOIL BEARING VALUE = 2500 PSF FOR CONTINUOUS FOOTINGS. FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

## CONCRETE:

MINIMUM 28 DAY STRENGTH 5,000 PSI EXCEPT AS FOLLOWS:

SLABS ON GRADE ----- 3,000 PSI

FOUNDATIONS ----- 2,500 PSI

MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND UNDER-FLOOR DUCTS, ETC. MAXIMUM SLUMP 4 1/2" FOR CONCRETE NOT PLASTICIZER. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL. CAST CLOSURE FOUR AROUND COLLARS AFTER COLUMN DEAD LOAD IS APPLIED. UNLESS APPROVED OTHERWISE IN WRITING BY THE ARCHITECT, ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY CONTROL JOINTS (KEYED OR SAW CUT), AS SHOWN ON THE FOUNDATION PLAN, SUCH THAT THE ENCLOSED AREA DOES NOT EXCEED 200 SQUARE FEET. KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING. ALL OTHER JOINTS MAY BE SAW CUT.

REFER TO PROJECT MASTER SPECIFICATIONS SECTION 05 30 00, PART 1.03 FOR CAST-IN-PLACE CONCRETE MIX DESIGN SUBMITTALS.

## MASONRY:

HOLLOW CONCRETE MASONRY UNITS (MEDIUM HEIGHT) SHALL CONFORM TO ASTM C90, GRADE N, TYPE I, F<sub>m</sub> = 1500 PSI, RUNNING BOND, MORTAR TYPE S, 1800 PSI. GROUT 2,000 PSI. MECHANICALLY VIBRATE GROUT IN VERTICAL SPACES IMMEDIATELY AFTER POURING AND AGAIN ABOUT 5 MINUTES LATER. PROVIDE CLEANOUTS IF GROUT LIFT EXCEEDS 4'-0" IN BLOCK WALLS. MAXIMUM GROUT LIFT SHALL BE 6'-0". UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 24'-0". CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 24" OF CONCENTRATED POINTS OF BEARING OR JAMBS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID.

A MINIMUM OF 5/8" MORTAR COVER SHALL BE PROVIDED BETWEEN TIES OF JOINT REINFORCEMENT. ALL REINFORCING BARS, EXCEPT JOINT REINFORCING, SHALL BE COMPLETELY EMBEDDED IN MORTAR OR GROUT AND HAVE A MINIMUM COVER, INCLUDING THE MASONRY UNIT, OF AT LEAST 3/4", 1 1/2" OF COVER WHEN THE MASONRY IS EXPOSED TO WEATHER AND 2" OF COVER WHEN THE MASONRY IS EXPOSED TO SOIL.

THE CLEAR DISTANCE BETWEEN PARALLEL BARS, EXCEPT IN COLUMNS, SHALL NOT BE LESS THAN THE NOMINAL DIAMETER OF THE BARS OR 1 INCH EXCEPT THAT BARS IN A SPLICE MAY BE IN CONTACT. THIS CLEAR DISTANCE REQUIREMENT APPLIES TO THE CLEAR DISTANCE BETWEEN A CONTACT SPLICE AND ADJACENT SPLICES OR BARS.

THE CLEAR DISTANCE BETWEEN THE SURFACE OF A BAR AND ANY SURFACE OF A MASONRY UNIT SHALL NOT BE LESS THAN 1/2 INCH FOR COARSE GROUT. COARSE WEBS OF HOLLOW UNITS MAY BE USED AS SUPPORT FOR HORIZONTAL REINFORCEMENT.

## VERTICAL REINFORCING:

1 #5 IN CENTER OF GROUT AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT INTERVALS NOT TO EXCEED 48" O.C. UNLESS NOTED OTHERWISE. TIE AT 8'-0" VERTICALLY WITH SINGLE WIRE LOOP TIE BY A.A. WIRE PRODUCTS COMPANY. LAP SPLICES SHALL BE 48 BAR DIAMETERS FOR GRADE 60 BARS. LAP SPLICES SHALL BE 1.5 X LAP LENGTH WHEN ADJACENT SPLICES ARE SEPARATED BY 3" OR LESS. DONNEL ALL VERTICAL REINFORCING TO FOUNDATION WITH DONNELS TO MATCH VERTICAL REINFORCING.

## HORIZONTAL REINFORCING:

2 #5 IN MINIMUM 6" DEEP GROUTED CONTINUOUS BOND BEAM AT ROOF LINE. 1 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPET OR TOP OF A FREESTANDING WALL. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. PROVIDE BENT BARS PER TYPICAL DETAILS, TO MATCH HORIZONTAL BOND BEAM REINFORCING, AT CORNERS AND WALL INTERSECTION TO MAINTAIN BOND BEAM CONTINUITY. STAGGER SPLICES A MINIMUM OF 40 BAR DIAMETERS. DO NOT SPLICE WITHIN 8'-0" OF CONTROL JOINTS. STANDARD WEIGHT (NO. 4 GAGE WIRE) DUR-O-WAL OR DUR-O-WIRE (OR EQUIVALENT) LADDER TYPE JOINT REINFORCEMENT AT 16" O.C. IN MASONRY WALLS.

## LAP SPLICES IN MASONRY:

FOR GRADE 60 BARS, LAP SPLICES SHALL BE AS FOLLOWS:  
LAP SPLICE LENGTH SHALL BE L<sub>d</sub> = 0.002 d<sub>b</sub> OR 40 BAR DIAMETERS, WHICHEVER IS GREATER.

## REINFORCING:

ASTM A615 (F<sub>y</sub> = 60 KSI) DEFORMED BARS FOR ALL BARS. ALL GRADE 60 REINFORCING TO BE WELDED SHALL BE ASTM A706, WELDED WIRE FABRIC PER ASTM A185, WIRE PER ASTM A82. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGES AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ----- 3"  
EXPOSED TO EARTH OR WEATHER ----- 2"  
#5 AND SMALLER ----- 1 1/2"  
ALL OTHER PER LATEST EDITION OF ACI 318.

## LAP SPLICES IN CONCRETE:

LAP SPLICES, UNLESS NOTED OTHERWISE, SHALL BE CLASS 'B' TENSION LAP SPLICES PER LATEST EDITION OF ACI 318. STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP MEASURES BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACE OF CROSS WIRES PLUS 2 INCHES. ALL WELDED WIRE FABRIC SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES.

ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CSI SPECIFICATIONS AND HANDBOOK. DONNEL ALL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90 DEGREE HOOKS UNLESS NOTED OTHERWISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

## STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE ASTM A992 (F<sub>y</sub> = 50 KSI). ALL CHANNELS, ANGLES, AND PLATES SHALL BE ASTM A36 (F<sub>y</sub> = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (F<sub>y</sub> = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (F<sub>y</sub> = 35 KSI). ALL TUBE STEEL SHALL BE ASTM A500 (F<sub>y</sub> = 46 KSI). ALL BOLTS SHALL BE ASTM A325, UNLESS NOTED OTHERWISE. ALL CONSTRUCTION PER LATEST AISC HANDBOOK. ALL EXPANSION AND EPOXY BOLTS TO HAVE 1.6 G. RATINGS FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT SLOTTED HOLES IN STEEL SECTIONS. ALL HIGH STRENGTH BOLTING SHALL BE INSPECTED BY AN INDEPENDENT TESTING LABORATORY. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TESTING AGENCY. ALL WELDING DONE BY ETO SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE EPO

SEMI-TENSILE WELDING PER AMERICAN WELDING SOCIETY STANDARDS, EXCEPT STEEL JOISTS SHALL COMPLY WITH SJI STANDARDS. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS. THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW.

## PLYWOOD:

ALL PLYWOOD SHALL BE C-D INTERIOR SHEATHING, STRUCTURAL 2 OR BETTER WITH EXTERIOR GLUE AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY UP PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER JOINTS. ALL WALLING, COMMON WALLS. WHERE SCREWS ARE INDICATED FOR HOOD TO HOOD ATTACHMENTS, USE HOOD SCREWS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATIO AND SHALL BE ATTACHED AS FOLLOWS UNLESS NOTED OTHERWISE:

USE THICKNESS SPAN/INDEX RATIO EDGE ATTACHMENT INTERMEDIATE ATTACHMENT

SHEAR WALL ----- 15/32" ----- 24/0 ----- #8 SCREWS @ 6" O.C. ----- #8 SCREWS @ 12" O.C.

## EXPANSION BOLTS: (ESR-1771)

STUD TYPE EXPANSION ANCHOR WITH A SINGLE PIECE WEDGE.

FOR MINIMUM BOLT EMBEDMENT LENGTH SEE TYPICAL DETAIL. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SIZE AND STRENGTH DATA TO ENGINEER THROUGH ARCHITECT PRIOR TO CONSTRUCTION. INSTALL ALL BOLTS AS OUTLINED IN MANUFACTURER'S SPECIFICATIONS, UTILIZING PROPER SIZE AND TYPE OF DRILL, CLEANING HOLE, DRIVING AND TIGHTENING BOLT. NOTES LISTED ABOVE ARE FOR SIMPSON CARBON STEEL 'STRONG-BOLT' EXPANSION ANCHORS.

## EPOXY ANCHORS: (ESR-1772) (IN MASONRY)

FOR MINIMUM BOLT EMBEDMENT LENGTH SEE TYPICAL DETAIL. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SIZE AND STRENGTH DATA TO ENGINEER THROUGH ARCHITECT PRIOR TO CONSTRUCTION. INSTALL ALL BOLTS AS OUTLINED IN MANUFACTURER'S SPECIFICATIONS, UTILIZING PROPER SIZE AND TYPE OF DRILL, CLEANING HOLE, DRIVING AND TIGHTENING BOLT. NOTES LISTED ABOVE ARE FOR CARBON STEEL SIMPSON SET-EP EPOXY ANCHORS.

## EPOXY ANCHORS: (ESR-2508) (IN CONCRETE)

FOR MINIMUM BOLT EMBEDMENT LENGTH SEE TYPICAL DETAIL. CONTRACTOR SHALL SUBMIT MANUFACTURER'S SIZE AND STRENGTH DATA TO ENGINEER THROUGH ARCHITECT PRIOR TO CONSTRUCTION. INSTALL ALL BOLTS AS OUTLINED IN MANUFACTURER'S SPECIFICATIONS, UTILIZING PROPER SIZE AND TYPE OF DRILL, CLEANING HOLE, DRIVING AND TIGHTENING BOLT. NOTES LISTED ABOVE ARE FOR CARBON STEEL SIMPSON SET-EP EPOXY ANCHORS.

## COLD FORMED STRUCTURAL STEEL FRAMING:

ALL COLD-FORMED STEEL FRAMING SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF 'SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS' BY THE AMERICAN IRON AND STEEL INSTITUTE.

STEEL FOR ALL 18 AND 20 GAGE STUDS AND JOISTS, AND FOR ALL GAGES OF TRACK, ACCESSORIES AND BRIDGING SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. STEEL SHALL BE GALVANIZED AT LOCATIONS EXPOSED TO WEATHER AND WHEREVER NOTED.

ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. UNLESS NOTED OTHERWISE, PROVIDE DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS, BEAM BEARINGS AND JOIST BEARINGS. BRIDGINGS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION WITH THE FOLLOWING MINIMUM REQUIREMENTS.

FOR WALLS WITH NO AXIAL LOAD, PROVIDE BRIDGING AT MID-HEIGHT FOR WALLS LESS THAN OR EQUAL TO 10'-0" HIGH, AND 5'-0" O.C. MAXIMUM FOR WALLS GREATER THAN 10'-0" HIGH. FOR AXIAL LOAD BEARING WALLS, PROVIDE BRIDGING EQUALLY SPACED AT 4'-0" MAXIMUM. IN ADDITION BRIDGING SHALL BE PROVIDED AT ROOF LINES AND ELSEWHERE AS NOTED ON THE DRAWINGS. SOLID BRIDGINGS SHALL BE INSTALLED IN LIEU OF BRIDGINGS WHERE NOTED ON THE DRAWINGS.

## GENERAL:

ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK. DO NOT NOTCH FLANGES OF JOISTS OR STUDS. PROVIDE BLOCKING AT SUPPORTS OF ALL JOISTS, DOUBLE UP STUDS AT JAMBS AND AS REQUIRED UNDER BEAMS IN BEARING WALLS.

## SHOP DRAWINGS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON HIS REVIEW.

VERIFY ALL DIMENSIONS WITH ARCHITECT AND ALL FINISHED GRADE WITH CIVIL DRAWINGS.

ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE CLOUDED BY MANUFACTURER OR FABRICATOR. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY.

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

## GENERAL:

ENTIRE CONTRACT DOCUMENTS SHALL BE USED TO BUILD BUILDINGS. SOME CRITICAL ITEMS REQUIRED BY OTHER DISCIPLINES MAY NOT BE SHOWN ON STRUCTURAL DRAWINGS (I.E. WALL, FLOOR AND ROOF OPENINGS, ARCHITECTURAL, MECHANICAL AND PLUMBING LOADS, SUPPORT PLATES ETC.)

ITEMS SHOWN BY OTHER DISCIPLINES WITH REFERENCE TO STRUCTURAL DRAWING BUT NOT SHOWN ON THESE STRUCTURAL DOCUMENTS SHALL BE CONSIDERED DESIGN BUILD ITEMS. CONTRACTOR SHALL SUBMIT DESIGN BY OTHERS FOR REVIEW.

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF HE CHOOSES AN OPTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES AND SHALL COORDINATE ALL DETAILS.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

ALL DIMENSIONS SHOWN (INCLUDING ELEVATIONS) ON STRUCTURAL DRAWINGS ARE TO ASSIST CONTRACTOR IN VERIFICATION.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL AND FINISHED GRADE WITH CIVIL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.

ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF ARIZONA.

SUPPLIER OF ENGINEERED STRUCTURAL COMPONENTS (I.E. STEEL, JOISTS, STAIRS, PRECAST ITEMS) SHALL BE RESPONSIBLE FOR COMPLETE DESIGN AND SHALL USE ENTIRE CONTRACT DOCUMENTS TO INCLUDE ALL LOADS AND DETAIL REQUIREMENTS FROM ALL DISCIPLINES. SUPPLIER SHALL PROVIDE ADDITIONAL MATERIAL REQUIRED TO MEET ALL THEIR REQUIREMENTS FOR INSTALLATION (I.E. WIDER BEARINGS PLATES, SHIMS, ERECTION BOLTS ETC.).

STRUCTURAL STEEL SUPPLIER SHALL FURNISH BOLTS FOR CONNECTIONS REQUIRED BY OSHA WHERE NECESSARY.

CONTINUOUS FOUNDATION DRAIN PIPES (FRENCH DRAINS) OR PEEP HOLES SHALL BE PROVIDED BEHIND ALL BASEMENT WALLS AND ALL EXTERIOR RETAINING WALLS THAT RETAIN MORE THAN 3'-0" OF SOIL PERP HOLES WHERE USED SHALL BE 2" IN DIAMETER AT 6'-0" O.C. MAXIMUM.

## SPECIAL INSPECTION:

SEE SHEET S1.A.

# INTERPRETATION OF DRAWINGS

## PLAN LEGEND

SYMBOL	DESCRIPTION	REMARKS
DETAIL # LOCATION OF DETAIL	DETAIL CUTS SHOWN ON PLANS	TYPICAL DETAILS ARE TWO DIGIT SERIES NUMBERS FOUNDATION DETAILS ARE 100 SERIES DETAILS FRAMING DETAILS ARE 200 SERIES NUMBERS
	STEEL STUD WALL (BID-ALTERNATE #1) U.O.	SEE 6.5.N, PLANS & SCHED. FOR SIZE AND SPACING
	8' MASONRY (BID - ALT #1)	OTHER SIZES ARE DIMENSIONED ON PLANS
	12' MASONRY (BID - ALT #1)	OTHER SIZES ARE DIMENSIONED ON PLANS
	MECHANICAL EQUIPMENT	SEE PLANS FOR UNIT HEIGHTS
	OPENINGS IN FRAMING	SEE NOTE #4

## NOTES

- FOR MATERIAL STRENGTHS, SEE GENERAL STRUCTURAL NOTES.
- VERIFY ALL DIMENSION WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION - RESOLVE ANY DISCREPANCIES WITH ARCHITECT.
- FOR CLARITY, ALL EXTERIOR SLABS AND SIDEWALKS MAY NOT BE SHOWN, FOR EXACT DIMENSIONS, LOCATIONS, JOINT AND SCORE LINES, SEE ARCHITECTURAL DRAWINGS.
- FOR CLARITY, ALL OPENINGS MAY NOT BE SHOWN ON FRAMING PLANS, FOR EXACT SIZE, NUMBER, AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS, FOR FRAMING AT OPENINGS, SEE TYPICAL STRUCTURAL DETAILS. VERIFY ALL SIZES, HEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL ENGINEER AND MECHANICAL CONTRACTOR THROUGH ARCHITECT.
- DETAILS MARKED 'TYPICAL' MAY NOT BE CUT ON PLANS.
- CONG. C.J. - AS SHOWN ON PLAN INDICATES LOCATION OF EITHER KEYED OR SAW CUT CONTROL JOINT IN SLAB ON GRADE AT CONTRACTOR'S OPTION, SEE GENERAL STRUCTURAL NOTES AND PLANS.
- MAS. C.J. - AS SHOWN ON PLAN INDICATES MASONRY CONTROL JOINT IN MASONRY WALL, SEE 6.5.N, AND TYPICAL DETAIL.
- FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
- CONTRACTOR TO VERIFY, AND BE RESPONSIBLE FOR VARIATIONS IN CONCRETE QUANTITY DUE TO GAMBER, CONSTRUCTION DEAD LOAD DEFLECTIONS AND/OR TOLERANCES OF STRUCTURAL STEEL ELEMENTS (I.E. BEAMS, STEEL DECK, ETC.) AND PRECAST CONCRETE ELEMENTS.
- ALL SCHEDULE MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THE PLANS WHERE THE SCHEDULES OCCUR. SCHEDULES ARE TYPICAL TO THE PROJECT.

## ABBREVIATIONS

A.B.C. --- AGGREGATE BASE COURSE	HORIZ. --- HORIZONTAL
A/C --- AIR CONDITIONER	K/1P --- 1000 POUNDS
A.F.F. --- ABOVE FINISHED FLOOR	L.L. --- LIVE LOAD
ALT. --- ALTERNATE	LES (B) --- POUNDS
A.B. --- ANCHOR BOLT	LLH --- LONG LEG HORIZONTAL
# --- AT (MEASUREMENT)	LLV --- LONG LEG VERTICAL
B.F.F. --- BELOW FINISHED FLOOR	MFR(S) --- MANUFACTURER(S)
B.O.D. --- BOTTOM OF DECK	MAS C.J. --- MASONRY CONTROL JOINT
B.O.F. --- BOTTOM OF FOOTING	MECH. --- MECHANICAL
BRS --- BEARING	N/A --- NOT APPLICABLE
C.I.F. --- CAST IN PLACE	N.T.S. --- NOT TO SCALE
C.L. --- CENTERLINE	O.C. --- ON CENTER
C.L.B. --- CENTERLINE OF BEAM	O.P.F. --- OUTSIDE FACE OF MALL
C.L.C. --- CENTERLINE OF COLUMN	OPP. --- OPPOSITE
C.L.F. --- CENTERLINE OF FOOTING	P.C. --- PRECAST CONCRETE
C.L.M. --- CENTERLINE OF MALL	P.J. --- PANEL JOINT
CLR --- CLEAR	P.L.F. --- POUNDS PER LINEAR FOOT
CONC. --- CONCRETE	PREFAB --- PREFABRICATED
CONG. C.J. --- CONCRETE CONTROL JOINT	PSF --- POUNDS PER SQUARE FOOT
CONG. M.U. --- CONCRETE MASONRY UNIT	PSI --- POUNDS PER SQUARE INCH
CONT --- CONTINUOUS	REIN --- REINFORCING
D.L. --- DEAD LOAD	SLH --- SHORT LEG HORIZONTAL
# OR DIA. --- DIAMETER	S.L.V. --- SHORT LEG VERTICAL
DN --- DOWN	SIM --- SIMILAR
DRW(S) --- DRAWING(S)	STD --- STANDARD
E.O.S. --- EDGE OF SLAB	TL --- TOTAL LOAD
EQ --- EQUAL	T.O.B. --- TOP OF BEAM
EQUIP --- EQUIPMENT	T.O.D. --- TOP OF DECK
EXP. BOLT --- EXPANSION BOLT	T.O.F. --- TOP OF FOOTING
EXP. JT (E.J.) --- EXPANSION JOINT	T.O.L. --- TOP OF LEDGER
E.W. --- EACH WAY	T.O.M. --- TOP OF MASONRY
F.F. --- FINISHED FLOOR	T.O.P. --- TOP OF PLATE
F.O.M. --- FACE OF MASONRY	T.O.S. --- TOP OF STEEL
F.O.S. --- FACE OF STEEL	T.O.W. --- TOP OF WALL
F.O.P. --- FACE OF WALL	TYP --- TYPICAL
GA --- GAGE	U.N.O. --- UNLESS NOTED OTHERWISE
GALV --- GALVANIZED	VERT. --- VERTICAL
G.S.N. --- GENERAL STRUCTURAL NOTES	W.F. --- WELDED WIRE FABRIC
GLB (GLULAM) --- GLUED-LAMINATED BEAM	W/O --- WITHOUT
I.F.X. --- INSIDE FACE OF WALL	

# CPM

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City of Scottsdale  
Public Improvement

## District 3 Police Station TARGET HARDENING

9045 East Via Linda  
SCOTTSDALE, ARIZONA 85258

PROJECT NUMBER: 2008-039

Submittals

Date Submittal

Revisions

Date Revisions

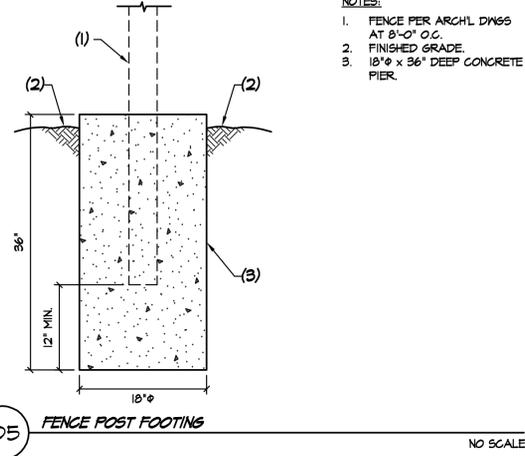
02-05-2013 ADDENDUM #1

Sheet Name

GENERAL STRUCTURAL  
NOTES

**NOTES:**

- EXISTING CMU WALL.
- EXISTING CONCRETE TAPERED RETAINING WALL.
- EXISTING C.I.P. CONCRETE WALL. DRILL 3/4" x 6 3/4" HOLE AND EPOXY W/ SIMPSON SET-XP TYPE EPOXY (ESR-2508) (TYP.).
- FINISHED GRADE.
- #5 CONT. (TOP AND BOTTOM).
- #5 DOWELS TOP AND BOTTOM AT 16" O.C.
- NEW CONTINUOUS CONCRETE SHELF FOR NEW WALL.
- WALL REINFORCING DOWELS AT 32" O.C. TO LAP W/ VERTICAL REINFORCING PER 6.S.N.
- #6 x 42" LONG EPOXY DOWELS AT 32" O.C.
- 12" MASONRY WALL W/ #6 VERTICALS AT 32" O.C. (CENTERED).
- HILTI X-U27 KNURLED FASTENERS AT 16" O.C. - FULL HEIGHT.
- #10 TEK SCREWS AT EACH FLANGE OF EACH STUD.
- 600 S 162-54 METAL INFILL STUDS AT 16" O.C.
- 600 T 150-54 CONT. METAL TRACK W/ 5/8" SIMPSON STRONG-BOLT WEDGE ANCHORS AT 32" O.C. (4 TOTAL) ESR-171.

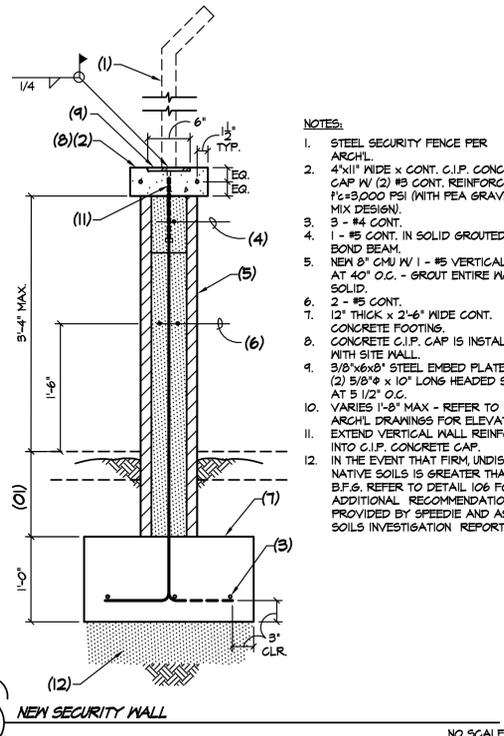


105 FENCE POST FOOTING NO SCALE

**SPEEDIE AND ASSOCIATES SITE SOILS INVESTIGATION REPORT 12/4/195A AND ORIGINAL REPORT 02071835A**

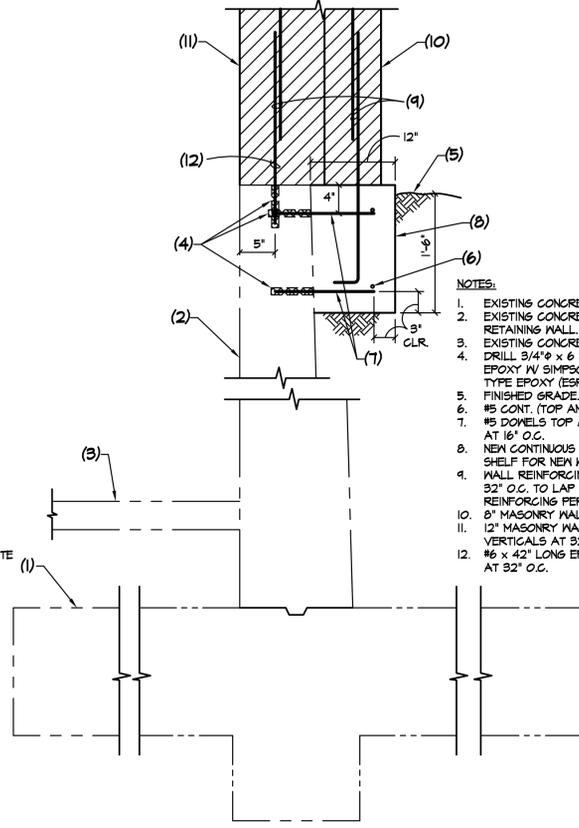
- STATES OVER-EXCAVATION IS NOT RECOMMENDED, ALL NEW FOOTING EXCAVATIONS SHOULD BE EXAMINED BY A REPRESENTATIVE OF SPEEDIE AND ASSOC. TO ENSURE PROPER CLEANING AND FIRM BEARING SOILS. IT IS RECOMMENDED TO COMPACT THE EXPOSED BOTTOM OF ANY WALL FOOTING TO TIGHTEN LOOSE SOILS. IF DEEPER LOOSE SOILS ARE PRESENT, OVER-EXCAVATE THE FOOTINGS TO EXPOSE FIRM UNDISTURBED NATIVE SOILS AND BACKFILL WITH LEAN CONCRETE (250 PSI) GROUT OR STRUCTURAL CONCRETE. DO NOT ALLOW GRANULAR FILL TO BE PLACED UNDER THE FOOTING. BASED ON BORING LOGS, THE DEPTH TO PARTIALLY CEMENTED SOILS SHOULD BE AT A DEPTH ON THE ORDER OF 4 FEET BELOW GRADE.
- FOR ALL OTHER INFORMATION, REFER TO SOILS REPORT.

- NOTES:**
- FENCE PER ARCHL DM655 AT 8'-0" O.C.
  - FINISHED GRADE.
  - 18" x 36" DEEP CONCRETE PIER.



103 NEW SECURITY WALL NO SCALE

- NOTES:**
- STEEL SECURITY FENCE PER ARCHL.
  - 4"x11" WIDE x CONT. C.I.P. CONCRETE CAP W/ (2) #5 CONT. REINFORCING Fc=3,000 PSI (WITH PEA GRAVEL MIX DESIGN).
  - 3 - #4 CONT.
  - 1 - #5 CONT. IN SOLID GROUTED BOND BEAM.
  - NEW 8" CMU W/ 1 - #5 VERTICAL AT 40" O.C. - GROUT ENTIRE WALL SOLID.
  - 2 - #5 CONT.
  - 12" THICK x 2'-6" WIDE CONT. CONCRETE FOOTING.
  - CONCRETE C.I.P. CAP IS INSTALLED WITH SITE WALL.
  - 3/8"x6"x8" STEEL EMBED PLATE W/ (2) 5/8"x9" x 10" LONG HEADED STUDS AT 5 1/2" O.C.
  - VARIES 1'-8" MAX - REFER TO ARCHL DRAWINGS FOR ELEVATIONS.
  - EXTEND VERTICAL WALL REINFORCING INTO C.I.P. CONCRETE CAP.
  - IN THE EVENT THAT FIRM UNDISTURBED NATIVE SOILS IS GREATER THAN 1'-6" B.F.S. REFER TO DETAIL 106 FOR ADDITIONAL RECOMMENDATIONS PROVIDED BY SPEEDIE AND ASSOC. SITE SOILS INVESTIGATION REPORT.

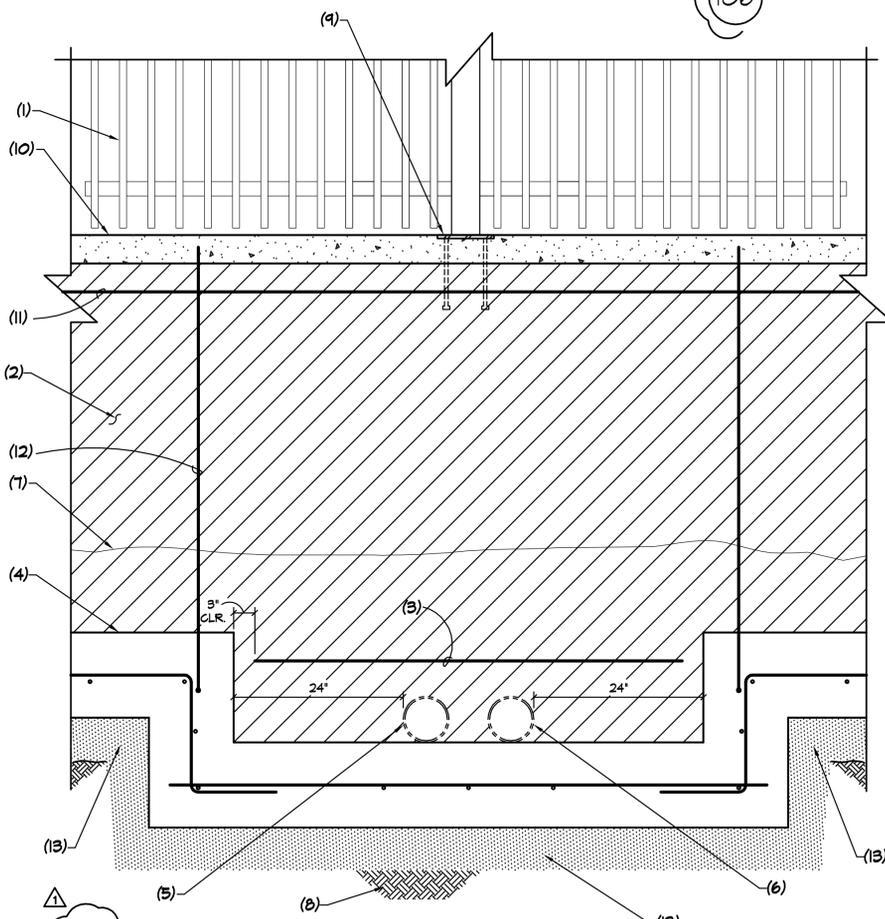


101 DOUBLE MYTHE AT CONCRETE FOOTING (BID - ALT #1) NO SCALE

- NOTES:**
- EXISTING CONCRETE FOOTING.
  - EXISTING CONCRETE TAPERED RETAINING WALL.
  - EXISTING CONCRETE SLAB.
  - DRILL 3/4" x 6 3/4" HOLE AND EPOXY W/ SIMPSON SET-XP TYPE EPOXY (ESR-2508) (TYP.).
  - FINISHED GRADE.
  - #5 CONT. (TOP AND BOTTOM).
  - #5 DOWELS TOP AND BOTTOM AT 16" O.C.
  - NEW CONTINUOUS CONCRETE SHELF FOR NEW WALL.
  - WALL REINFORCING DOWELS AT 32" O.C. TO LAP W/ VERTICAL REINFORCING PER 6.S.N.
  - 8" MASONRY WALL W/ #6 VERTICALS AT 32" O.C. (CENTERED).
  - 12" MASONRY WALL W/ #6 VERTICALS AT 32" O.C. (CENTERED).
  - #6 x 42" LONG EPOXY DOWELS AT 32" O.C.

107 SECTION THRU CHASE AT STEEL STUD WALL NO SCALE

106 FOOTING RECOMMENDATIONS WHEN NATIVE SOIL IS GREATER THAN 1'-6" B.F.S. NO SCALE

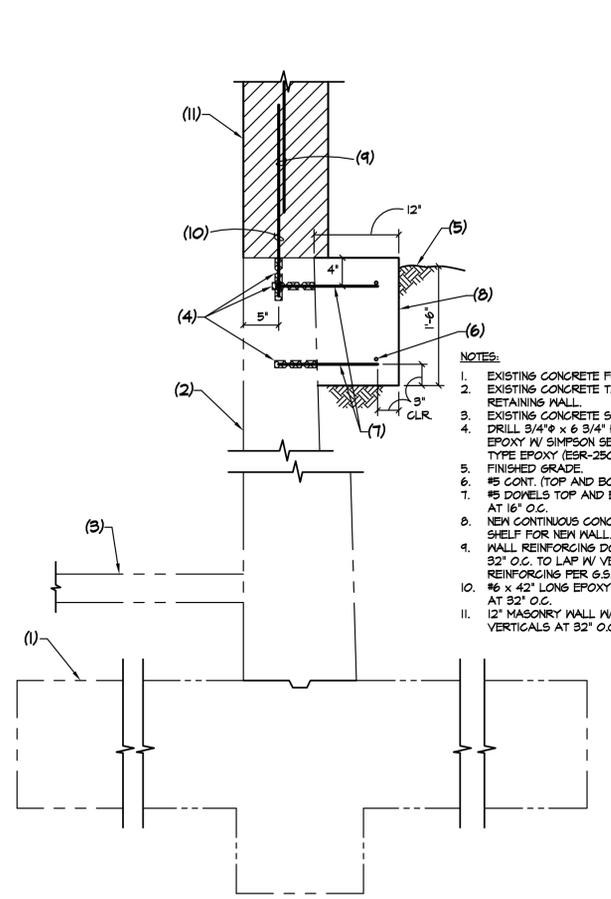


- NOTES:**
- SECURITY FENCE PER DETAIL 103/53.1.
  - MASONRY WALL PER PLAN AND DETAIL 103/53.1.
  - 2 - #4 IN 8" DEEP SOLID GROUTED BOND BEAM.
  - STEP CONCRETE FOOTING AND REINFORCING PER DETAIL 04/51.2.
  - BUILDING ROOF DRAINS - VERIFY DEPTH IN FIELD. REFER TO DETAIL 05/51.2 FOR SLEEVE AT ROOF DRAINS.
  - LINE OF FINISHED GRADE.
  - SOIL SUBGRADE PREPARATIONS - REFER TO 6.S.N. FOR MORE INFO.
  - NOTCH CONCRETE CAP AT SECURITY POST AS NECESSARY.
  - 4" CONT. C.I.P. CONCRETE CAP. REFER TO ARCHL.
  - 1 - #5 CONT. IN 8" BOND BEAM.
  - LOCATE VERTICAL REINFORCING AT FOOTING STEP.
  - IN THE EVENT THAT FIRM UNDISTURBED NATIVE SOILS IS GREATER THAN 1'-6" B.F.S. REFER TO DETAIL 106 FOR ADDITIONAL RECOMMENDATIONS PROVIDED BY SPEEDIE AND ASSOC. SITE SOILS INVESTIGATION REPORT.

**NOTE:**

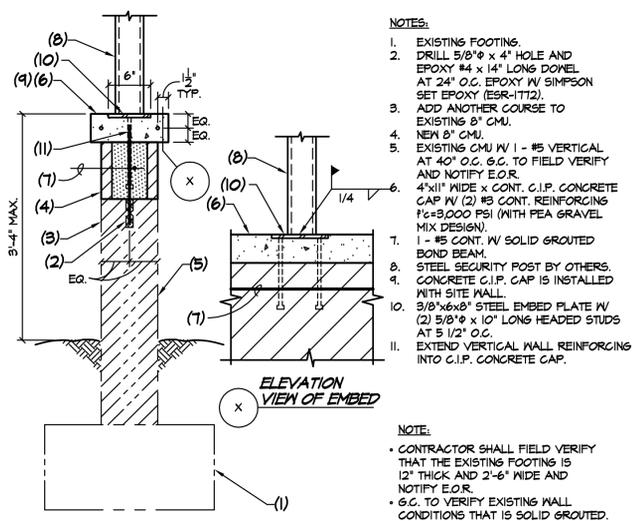
- FOR MORE INFORMATION REFER TO ARCHITECTURAL DRAWINGS.
- VERTICAL WALL REINFORCING NOT SHOWN FOR CLARITY.

108 STEPPED WALL FOOTING AT (E) ROOF DRAINS NO SCALE



104 12" MASONRY WALL AT EXISTING CONCRETE WALL (BID - ALT #1) NO SCALE

- NOTES:**
- EXISTING CONCRETE FOOTING.
  - EXISTING CONCRETE TAPERED RETAINING WALL.
  - EXISTING CONCRETE SLAB.
  - DRILL 3/4" x 6 3/4" HOLE AND EPOXY W/ SIMPSON SET-XP TYPE EPOXY (ESR-2508) (TYP.).
  - FINISHED GRADE.
  - #5 CONT. (TOP AND BOTTOM).
  - #5 DOWELS TOP AND BOTTOM AT 16" O.C.
  - NEW CONTINUOUS CONCRETE SHELF FOR NEW WALL.
  - WALL REINFORCING DOWELS AT 32" O.C. TO LAP W/ VERTICAL REINFORCING PER 6.S.N.
  - #6 x 42" LONG EPOXY DOWELS AT 32" O.C.
  - 12" MASONRY WALL W/ #6 VERTICALS AT 32" O.C. (CENTERED).



102 EXISTING SITE WALL NO SCALE

- NOTES:**
- EXISTING FOOTING.
  - DRILL 5/8" x 4" HOLE AND EPOXY #4 x 14" LONG DOWEL AT 24" O.C. EPOXY W/ SIMPSON SET EPOXY (ESR-1712).
  - ADD ANOTHER COURSE TO EXISTING 8" CMU.
  - NEW 8" CMU.
  - EXISTING CMU W/ 1 - #5 VERTICAL AT 40" O.C. O.C. TO FIELD VERIFY AND NOTIFY E.O.R.
  - 4"x11" WIDE x CONT. C.I.P. CONCRETE CAP W/ (2) #5 CONT. REINFORCING Fc=3,000 PSI (WITH PEA GRAVEL MIX DESIGN).
  - 1 - #5 CONT. W/ SOLID GROUTED BOND BEAM.
  - STEEL SECURITY POST BY OTHERS.
  - CONCRETE C.I.P. CAP IS INSTALLED WITH SITE WALL.
  - 3/8"x6"x8" STEEL EMBED PLATE W/ (2) 5/8"x9" x 10" LONG HEADED STUDS AT 5 1/2" O.C.
  - EXTEND VERTICAL WALL REINFORCING INTO C.I.P. CONCRETE CAP.

**NOTE:**

- CONTRACTOR SHALL FIELD VERIFY THAT THE EXISTING FOOTING IS 12" THICK AND 2'-6" WIDE AND NOTIFY E.O.R.
- O.C. TO VERIFY EXISTING WALL CONDITIONS THAT IS SOLID GROUTED. IF WALL IS NOT SOLID GROUTED, REMOVE AND REPLACE PER DET. 103.



Capital Project Management  
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City of Scottsdale  
Public Improvement

**District 3  
Police Station  
TARGET HARDENING**

9045 East Via Linda  
SCOTTSDALE, ARIZONA 85258

PROJECT NUMBER: 2008-039

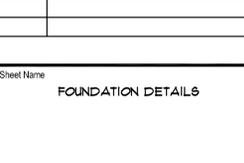
Submittals	
Date	Submittal

Revisions	
Date	Revisions
02-05-2013	ADDENDUM #1

Sheet Name

FOUNDATION DETAILS

Sheet Number



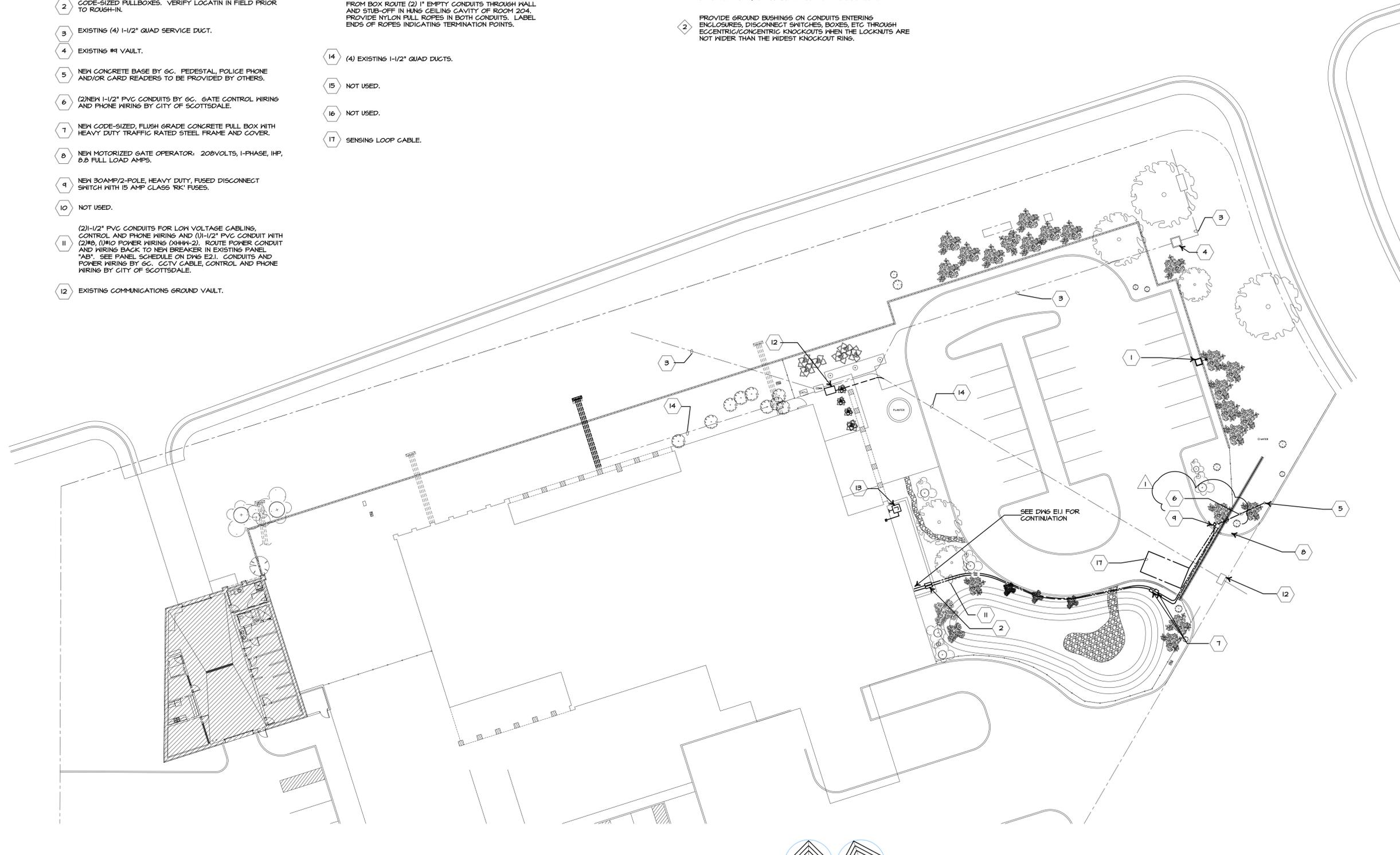
53.1

### KEY NOTES

- 1 EXISTING SITE LIGHTING FIXTURE, POLE AND BASE.
- 2 CODE-SIZED PULLBOXES. VERIFY LOCATIN IN FIELD PRIOR TO ROUGH-IN.
- 3 EXISTING (4) 1-1/2" QUAD SERVICE DUCT.
- 4 EXISTING #4 VAULT.
- 5 NEW CONCRETE BASE BY GC. PEDESTAL, POLICE PHONE AND/OR CARD READERS TO BE PROVIDED BY OTHERS.
- 6 (2)NEW 1-1/2" PVC CONDUITS BY GC. GATE CONTROL WIRING AND PHONE WIRING BY CITY OF SCOTTSDALE.
- 7 NEW CODE-SIZED, FLUSH GRADE CONCRETE PULL BOX WITH HEAVY DUTY TRAFFIC RATED STEEL FRAME AND COVER.
- 8 NEW MOTORIZED GATE OPERATOR. 208VOLTS, 1-PHASE, IHP, 8.8 FULL LOAD AMPS.
- 9 NEW 30AMP/2-POLE, HEAVY DUTY, FUSED DISCONNECT SWITCH WITH 15 AMP CLASS RK1 FUSES.
- 10 NOT USED.
- 11 (2)1-1/2" PVC CONDUITS FOR LOW VOLTAGE CABLING, CONTROL AND PHONE WIRING AND (1)1-1/2" PVC CONDUIT WITH (2)PH, (1)PHO POWER WIRING (2)PH+2). ROUTE POWER CONDUIT AND WIRING BACK TO NEW BREAKER IN EXISTING PANEL "AB". SEE PANEL SCHEDULE ON DWG E2.1. CONDUITS AND POWER WIRING BY GC. CCTV CABLE, CONTROL AND PHONE WIRING BY CITY OF SCOTTSDALE.
- 12 EXISTING COMMUNICATIONS GROUND VAULT.
- 13 PROVIDE CODE-SIZED, WEATHERPROOF PULL BOX ON EXTERIOR OF BUILDING OUTSIDE COMMUNITY ROOM 204. VERIFY EXACT LOCATION IN FIELD PRIOR TO ROUGH-IN. FROM BOX ROUTE (2) 1" EMPTY CONDUITS THROUGH WALL AND STUB-OFF IN HUNG CEILING CAVITY OF ROOM 204. PROVIDE NYLON PULL ROPES IN BOTH CONDUITS. LABEL ENDS OF ROPES INDICATING TERMINATION POINTS.
- 14 (4) EXISTING 1-1/2" QUAD DUCTS.
- 15 NOT USED.
- 16 NOT USED.
- 17 SENSING LOOP CABLE.

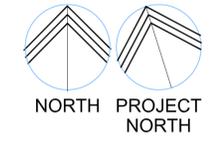
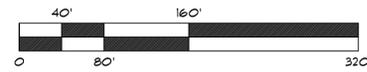
### GENERAL NOTES

- 1 BRANCH CIRCUIT INSULATION FOR CONDUCTORS IN RACENAYS LOCATED IN EXTERIOR LOCATIONS (EXPOSED TO AMBIENT EXTERIOR HEAT) SHALL BE RATED FOR 90 DEGREE C.
- 2 PROVIDE GROUND BUSHINGS ON CONDUITS ENTERING ENCLOSURES, DISCONNECT SWITCHES, BOXES, ETC THROUGH ECCENTRIC/CONCENTRIC KNOCKOUTS WHEN THE LOCKNUTS ARE NOT WIDER THAN THE WIDEST KNOCKOUT RING.



### ELECTRICAL SITE PLAN

1" = 20'-0"



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 Design: Brandon Miller & Scott Whitola

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 Public Improvement  
**Police District #3 HARDENING**  
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Submittals	
Date	Submittal

Revisions	
Date	Revisions
02-05-2013	ADDENDUM NO. 1

Sheet Name  
 ELECTRICAL SITE PLAN  
 Sheet Number  
 E1.0

78-DR-1992#2 (78-DR-1992 AND 22-UP-1990); PLAN REVIEW # TO BE ASSIGNED



District 3 Police Station Target Hardening

Pre-Bid Meeting  
February 12, 2013

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Tony Campanella	Automatic Gate	602-329-7145	KTONYAG@SBC
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District 3 Police Station Target Hardening

Pre-Bid Meeting  
February 12, 2013

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