

ADDENDUM TO THE CONTRACT DOCUMENTS

	ADDENDUM NO. 001
	Project: Solano Community College District Fairfield Campus Early Learning Center Project Project Number: 23-003
	Date: September 9, 2022

Addendum No. 001 – The following clarifications are provided and must be added/considered when completing your bid: Acknowledgement of receipt of this **Addendum No. 001**, is required on the Bid Form. Please clearly note the addendum date and number.

ITEM NO. 1 – GENERAL INFORMATION

- 1.1. Specification Section: 00 01 20 – List of Schedules
 - Replacement of previously issued Specification Section 00 01 20 List of Schedules in its entirety with the attached revised Specification Section 00 01 20 List of Schedules.

- 1.2. Specification Section: 01 32 13 – Scheduling of Work
 - Replacement of previously issued Specification Section 01 32 13 Scheduling of Work in its entirety with the attached revised Specification Section 01 32 13 Scheduling of Work.

- 1.3. Reference Document - Schedule
 - Replacement of previously issued Reference Schedule in its entirety with the attached revised Reference Schedule.

- 1.4. Small, Local, Diverse Business Enterprises Program (SLDBE) – District’s Master List
 - Solano Community College’s Master SLDBE List is provided as a supplement to the Bidder’s outreach efforts as noted in Specification Section 00 45 20.

- 1.5. American Modular Systems (AMS) – Point of Connection (POC)
 - American Modular Systems (AMS) Point-of-Connection (POC) drawing is provided as reference document to bidders.

- 1.6. Provide an intrusion system as Add Alternate 1.
Contractor shall provide an Intrusion Alarm System and install in new Early Learning Center building. The system shall be Bosch. See attached Intrusion Alarm Devices PDF

for specific equipment. Contractor shall coordinate with the Solano Community College IT Department for exact location of system panel and keypad. Provide door contacts on all exterior doors, motion detectors in Offices 108, 119, Staff Room 105 and Classrooms 101, 102 & 103. The Intrusion Alarm system shall be connected to the IDF for monitoring over the ethernet system on campus. Contractor shall provide an equipment submittal with shop drawings, the required software, and coordination with the Solano Community College IT Department for monitoring software installation. Contractor shall coordinate with Solano Community College departments as required for a complete and operational Intrusion Alarm System.

- 1.7. The lockers in the Staff Room shall be double tier lockers instead of single tier
- 1.8. An acceptable locker substitute is the Duralife Lockers by Scranton Products.

ITEM NO. 2 – DRAWINGS

- 2.1. The project shall be divided into two construction phases. Work in Phase 1 shall be completed before work in Phase 2 begins. See sheet AS1.
- 2.2. The tree and turf/plant selections have been revised. See revised planting plans on sheets L1.1 and L2.1.

ITEM NO. 3 – RESPONSES TO QUESTIONS SUBMITTED

- 3.1. **Question No. 01**
Question: Is there a PLA or CWA in place on the Fairfield Campus Early Learning Center 23-003 Project?
Response: *No*
- 3.2. **Question No. 02**
Question: Is there a form that we need to submit with the RFI's?
Response: *No. List questions in an email.*
- 3.3. **Question No. 03**
Question: Can you post the sign in sheet for everyone who attended the meeting.
Response: *Sign-in sheet and presentation are posted on the District Website.*
<http://www.solano.edu/measureq/vendor.php>

List of Attachments:

- 00 01 20 List of Schedules – Addendum 001
- 01 32 13 Scheduling of Work – Addendum 001
- Reference Schedule – Addendum 001
- SLDBE Master List – Addendum 001
- AMS – POC – Addendum 001
- Sheets AS1, L1.1, L2.1, Intrusion System Cutsheets

END OF DOCUMENT

DOCUMENT 00 01 20

LIST OF SCHEDULES

BID PHASE SCHEDULE

- Mandatory Pre-Bid Conference (web-based meeting via Microsoft Teams): Thursday, September 1st, 2022, 11:00 am.
 - **Interested Parties need to register through the following link.**
[REGISTER HERE](#)
- Optional Site Walk: Friday, September 2nd, 2022, 12:00 pm – 2:00 pm.
- Last date to submit questions to Noe.Ramos@Solano.edu : By Wednesday, August 14th, 2022, 2:00 pm.
- Last addendum will be issued: By Wednesday, September 21st, 2022, 2:00 pm.
- **Bids Due: By Wednesday, September 28th, 2022, 2:00 pm.**
- Mandatory Post Bid Interview: Thursday, September 29th, 2022, Time TBD.
- Solano Community College Board of Trustees Approval: Wednesday, October 19th, 2022
- Notice of Award: Anticipated by Thursday, October 20th, 2022.
- Notice to Proceed: Anticipated by Monday, November 7th, 2022.

CONSTRUCTION SCHEDULE

- Overall Project Duration: November 7th, 2022 – July 28th, 2023
 - Phase 1: November 7th, 2022 – June 9th, 2023
 - Owner Move-In: June 19th, 2023 – June 23rd, 2023 (Needs to happen during Summer Break 2023)
 - Phase 2: June 26th, 2023 – July 28th, 2023
- Building Delivery (American Modular Systems): February 15th, 2023 – February 16th, 2023
 - Full Modular Milestones shown in Reference Project Schedule.
- Project Schedule is provided as a reference document in order to show possible sequence of work / coordination needed between the modular building manufacturer (American Modular Systems) and the General Contractor. The General Contractor is still responsible for producing an actual construction schedule and all coordination with the Modular Building Manufacturer (American Modular Systems).

SOLANO COMMUNITY COLLEGE BREAKS

- Winter Break: December 17th, 2022 – January 11th, 2023
- Spring Break: April 10th, 2023 – April 16th, 2023
- Summer Break: May 26th, 2023 – August 9th, 2023

END OF DOCUMENT

DOCUMENT 01 32 13

SCHEDULING OF WORK

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Summary of Work; and
- D. Submittals.

1.02 SECTION INCLUDES

- A. Scheduling of Work under this Contract shall be performed by Contractor in accordance with requirements of this Section.
 - (1) Development of schedule, cost and resource loading of the schedule, monthly payment requests, and project status reporting requirements of the Contract shall employ computerized Critical Path Method ("CPM") scheduling ("CPM Schedule").
 - (2) CPM Schedule shall be cost loaded based on Schedule of Values as approved by District.
 - (3) Submit schedules and reports as specified in the General Conditions.
- B. Upon Award of Contract, Contractor shall immediately commence development of Initial and Original CPM Schedules to ensure compliance with CPM Schedule submittal requirements.

1.03 CONSTRUCTION SCHEDULE

- A. Within ten (10) days of issuance of the Notice to Proceed, and before request for first progress payment, the Contractor shall prepare and submit to the Project Manager a construction progress schedule conforming to the Milestone Schedule below.
- B. The Construction Schedule shall be continuously updated, and an updated schedule shall be submitted with each application for progress payment. Each revised schedule shall indicate the work actually accomplished during the previous period and the schedule for completion of the remaining work.

C. Milestone Schedule:

ACTIVITY DESCRIPTION	REQUIRED COMPLETION
• CONSTRUCTION STARTS	NOVEMBER 7th, 2022
• PHASE 1 COMPLETE	JUNE 9th, 2023
• OWNER MOVE-IN	JUNE 19th, 2023 – JUNE 23rd, 2023
• PHASE 2 COMPLETE	JUNE 28th, 2023
• FINAL PROJECT COMPLETION	JULY 28th, 2023

1.04 QUALIFICATIONS

- A. Contractor shall employ experienced scheduling personnel qualified to use the latest version of [i.e., Primavera Project Planner]. Experience level required is set forth below. Contractor may employ such personnel directly or may employ a consultant for this purpose.
- (1) The written statement shall identify the individual who will perform CPM scheduling.
 - (2) Capability and experience shall be verified by description of construction projects on which individual has successfully applied computerized CPM.
 - (3) Required level of experience shall include at least two (2) projects of similar nature and scope with value not less than three fourths ($\frac{3}{4}$) of the Total Bid Price of this Project. The written statement shall provide contact persons for referenced projects with current telephone and address information.
- B. District reserves the right to approve or reject Contractor's scheduler or consultant at any time. District reserves the right to refuse replacing of Contractor's scheduler or consultant, if District believes replacement will negatively affect the scheduling of Work under this Contract.

1.05 GENERAL

- A. Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in the Contract, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. Any such agreement shall be formalized by a Change Order.
- (1) District is not required to accept an early completion schedule, i.e., one that shows an earlier completion date than the Contract Time.

- (2) Contractor shall not be entitled to extra compensation in event agreement is reached on an earlier completion schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in its early completion schedule but within the Contract Time.
 - (3) A schedule showing the work completed in less than the Contract Time, and that has been accepted by District, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the work and the Completion Date. Project Float is a resource available to both District and the Contractor.
- C. Ownership Project Float: Neither the District nor Contractor owns Project Float. The Project owns the Project Float. As such, liability for delay of the Completion Date rests with the party whose actions, last in time, actually cause delay to the Completion Date.
- (1) For example, if Party A uses some, but not all of the Project Float and Party B later uses remainder of the Project Float as well as additional time beyond the Project Float, Party B shall be liable for the time that represents a delay to the Completion Date.
 - (2) Party A would not be responsible for the time since it did not consume the entire Project Float and additional Project Float remained; therefore, the Completion Date was unaffected by Party A.
- D. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract CPM Schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.
- E. Failure of Progress Schedule to include any element of the Work, or any inaccuracy in Progress Schedule, will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for means and methods of construction.
- F. Software: Contractor to use a scheduling software approved by the District / Construction Manager. Such software shall be compatible with Windows operating system. Contractor shall transmit contract file to District on compact disk at times requested by District.
- G. Transmit each item under the form approved by District.
- (1) Identify Project with District Contract number and name of Contractor.
 - (2) Provide space for Contractor's approval stamp and District's review stamps.

- (3) Submittals received from sources other than Contractor will be returned to the Contractor without District's review.

1.06 INITIAL CPM SCHEDULE

- A. Initial CPM Schedule submitted for review at the pre-construction conference shall serve as Contractor's schedule for up to ninety (90) calendar days after the Notice to Proceed.
- B. Indicate detailed plan for the Work to be completed in first ninety (90) days of the Contract; details of planned mobilization of plant and equipment; sequence of early operations; procurement of materials and equipment. Show Work beyond ninety (90) calendar days in summary form.
- C. Initial CPM Schedule shall be time scaled.
- D. Initial CPM Schedule shall be cost and resource loaded. Accepted cost and resource loaded schedule will be used as basis for monthly progress payments until acceptance of the Original CPM Schedule. Use of Initial CPM Schedule for progress payments shall not exceed ninety (90) calendar days.
- E. District and Contractor shall meet to review and discuss the Initial CPM Schedule within seven (7) calendar days after it has been submitted to District.
 - (1) District's review and comment on the schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).
 - (2) Contractor shall make corrections to schedule necessary to comply with Contract requirements and shall adjust schedule to incorporate any missing information requested by District. Contractor shall resubmit Initial CPM Schedule if requested by District.
- F. If, during the first ninety (90) days after Notice to Proceed, the Contractor is of the opinion that any of the Work included on its Initial CPM Schedule has been impacted, the Contractor shall submit to District a written Time Impact Evaluation ("TIE") in accordance with Article 1.12 of this Section. The TIE shall be based on the most current update of the Initial CPM Schedule.

1.07 ORIGINAL CPM SCHEDULE

- A. Submit a detailed proposed Original CPM Schedule presenting an orderly and realistic plan for completion of the Work in conformance with requirements as specified herein.
- B. Progress Schedule shall include or comply with following requirements:
 - (1) Time scaled, cost and resource (labor and major equipment) loaded CPM schedule.

- (2) No activity on schedule shall have duration longer than fifteen (15) work days, with exception of submittal, approval, fabrication and procurement activities, unless otherwise approved by District.
 - (a) Activity durations shall be total number of actual work days required to perform that activity.
- (3) The start and completion dates of all items of Work, their major components, and milestone completion dates, if any.
- (4) District furnished materials and equipment, if any, identified as separate activities.
- (5) Activities for maintaining Project Record Documents.
- (6) Dependencies (or relationships) between activities.
- (7) Processing/approval of submittals and shop drawings for all material and equipment required per the Contract. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates.
 - (a) Include time for submittals, re-submittals and reviews by District. Coordinate with accepted schedule for submission of Shop Drawings, samples, and other submittals.
 - (b) Contractor shall be responsible for all impacts resulting from re-submittal of Shop Drawings and submittals.
- (8) Procurement of major equipment, through receipt and inspection at jobsite, identified as separate activity.
 - (a) Include time for fabrication and delivery of manufactured products for the Work.
 - (b) Show dependencies between procurement and construction.
- (9) Activity description; what Work is to be accomplished and where.
- (10) The total cost of performing each activity shall be total of labor, material, and equipment, excluding overhead and profit of Contractor. Overhead and profit of the General Contractor shall be shown as a separate activity in the schedule. Sum of cost for all activities shall equal total Contract value.
- (11) Resources required (labor and major equipment) to perform each activity.
- (12) Responsibility code for each activity corresponding to Contractor or Subcontractor responsible for performing the Work.

- (13) Identify the activities which constitute the controlling operations or critical path. No more than twenty-five (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to (10) days.
 - (14) Twenty (20) workdays for developing punch list(s), completion of punch-list items, and final clean-up for the Work or any designated portion thereof. No other activities shall be scheduled during this period.
 - (15) Interface with the work of other contractors, District, and agencies such as, but not limited to, utility companies.
 - (16) Show detailed Subcontractor Work activities. In addition, furnish copies of Subcontractor schedules upon which CPM was built.
 - (a) Also furnish for each Subcontractor, as determined by District, submitted on Subcontractor letterhead, a statement certifying that Subcontractor concurs with Contractor's Original CPM Schedule and that Subcontractor's related schedules have been incorporated, including activity duration, cost and resource loading.
 - (b) Subcontractor schedules shall be independently derived and not a copy of Contractor's schedule.
 - (c) In addition to Contractor's schedule and resource loading, obtain from electrical, mechanical, and plumbing Subcontractors, and other Subcontractors as required by District, productivity calculations common to their trades, such as units per person day, feet of pipe per day per person, feet of wiring per day per person, and similar information.
 - (d) Furnish schedule for Contractor/Subcontractor CPM schedule meetings which shall be held prior to submission of Original CPM schedule to District. District shall be permitted to attend scheduled meetings as an observer.
 - (17) Activity durations shall be in Work days.
 - (18) Submit with the schedule a list of anticipated non-Work days, such as weekends and holidays. The Progress Schedule shall exclude in its Work day calendar all non-Work days on which Contractor anticipates critical Work will not be performed.
- C. Original CPM Schedule Review Meeting: Contractor shall, within sixty (60) days from the Notice to Proceed date, meet with District to review the Original CPM Schedule submittal.
- (1) Contractor shall have its Project Manager, Project Superintendent, Project Scheduler, and key Subcontractor representatives, as required

by District, in attendance. The meeting will take place over a continuous one (1) day period.

- (2) District's review will be limited to submittal's conformance to Contract requirements including, but not limited to, coordination requirements. However, review may also include:
 - (a) Clarifications of Contract Requirements.
 - (b) Directions to include activities and information missing from submittal.
 - (c) Requests to Contractor to clarify its schedule.
- (3) Within five (5) days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District at the Meeting.

1.08 ADJUSTMENTS TO CPM SCHEDULE

- A. Adjustments to Original CPM Schedule: Contractor shall have adjusted the Original CPM Schedule submittal to address all review comments from original CPM Schedule review meeting and resubmit network diagrams and reports for District's review.
 - (1) District, within ten (10) days from date that Contractor submitted the revised schedule, will either:
 - (a) Accept schedule and cost and resource loaded activities as submitted, or
 - (b) Advise Contractor in writing to review any part or parts of schedule which either do not meet Contract requirements or are unsatisfactory for District to monitor Project's progress, resources, and status or evaluate monthly payment request by Contractor.
 - (2) District may accept schedule with conditions that the first monthly CPM Schedule update be revised to correct deficiencies identified.
 - (3) When schedule is accepted, it shall be considered the "Original CPM Schedule" which will then be immediately updated to reflect the current status of the work.
 - (4) District reserves right to require Contractor to adjust, add to, or clarify any portion of schedule which may later be discovered to be insufficient for monitoring of Work or approval of partial payment requests. No additional compensation will be provided for such adjustments, additions, or clarifications.
- B. Acceptance of Contractor's schedule by District will be based solely upon schedule's compliance with Contract requirements.

- (1) By way of Contractor assigning activity durations and proposing sequence of Work, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with the schedule.
 - (2) Upon submittal of schedule update, updated schedule shall be considered "current" CPM Schedule.
 - (3) Submission of Contractor's schedule to District shall not relieve Contractor of total responsibility for scheduling, sequencing, and pursuing Work to comply with requirements of Contract Documents, including adverse effects such as delays resulting from ill-timed Work.
- C. Submittal of Original CPM Schedule, and subsequent schedule updates, shall be understood to be Contractor's representation that the Schedule meets requirements of Contract Documents and that Work shall be executed in sequence indicated on the schedule.
- D. Contractor shall distribute Original CPM Schedule to Subcontractors for review and written acceptance, which shall be noted on Subcontractors' letterheads to Contractor and transmitted to District for the record.

1.09 MONTHLY CPM SCHEDULE UPDATE SUBMITTALS

- A. Following acceptance of Contractor's Original CPM Schedule, Contractor shall monitor progress of Work and adjust schedule each month to reflect actual progress and any anticipated changes to planned activities.
- (1) Each schedule update submitted shall be complete, including all information requested for the Original CPM Schedule submittal.
 - (2) Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed.
- B. A meeting will be held on approximately the twenty-fifth (25th) of each month to review the schedule update submittal and progress payment application.
- (1) At this meeting, at a minimum, the following items will be reviewed: Percent (%) complete of each activity; Time Impact Evaluations for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.
 - (2) These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. At a minimum, these meetings shall be attended by Contractor's General Superintendent and Scheduler.

- (3) Contractor shall plan on the meeting taking no less than four (4) hours.
- C. Within five (5) working days after monthly schedule update meeting, Contractor shall submit the updated CPM Schedule update.
- D. Within five (5) work days of receipt of above noted revised submittals, District will either accept or reject monthly schedule update submittal.
 - (1) If accepted, percent (%) complete shown in monthly update will be basis for Application for Payment by the Contractor. The schedule update shall be submitted as part of the Contractor's Application for Payment.
 - (2) If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.
- E. Neither updating, changing or revising of any report, curve, schedule, or narrative submitted to District by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending or modifying in any way the Completion Date or milestone dates or of modifying or limiting in any way Contractor's obligations under this Contract.

1.10 SCHEDULE REVISIONS

- A. Updating the Schedule to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, revisions to activity durations and sequences are expected on a monthly basis.
- B. To reflect revisions to the Schedule, the Contractor shall provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram which compares the original sequence to the revised sequence of work. The Contractor shall provide the written narrative and schedule diagram for revisions two (2) working days in advance of the monthly schedule update meeting.
- C. Schedule revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District. District may request further information and justification for schedule revisions and Contractor shall, within three (3) days, provide District with a complete written narrative response to District's request.
- D. If the Contractor's revision is still not accepted by District, and the Contractor disagrees with District's position, the Contractor has seven (7) calendar days from receipt of District's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. The Contractor's failure to respond in writing within seven (7) calendar days of District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and the Contractor waives its rights to subsequently dispute or file a claim regarding District's position.

- E. At District's discretion, the Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

1.11 RECOVERY SCHEDULE

- A. If the Schedule Update shows a completion date twenty-one (21) calendar days beyond the Contract Completion Date, or individual milestone completion dates, the Contractor shall submit to District the proposed revisions to recover the lost time within seven (7) calendar days. As part of this submittal, the Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.
- B. The revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District.
- C. If the Contractor's revisions are not accepted by District, District and the Contractor shall follow the procedures in paragraph 1.09.C, 1.09.D and 1.09.E above.
- D. At District's discretion, the Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

1.12 TIME IMPACT EVALUATION ("TIE") FOR CHANGE ORDERS, AND OTHER DELAYS

- A. When Contractor is directed to proceed with changed Work, the Contractor shall prepare and submit within fourteen (14) calendar days from the Notice to Proceed a TIE which includes both a written narrative and a schedule diagram depicting how the changed Work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed Work in the schedule and how it impacts the current schedule-update critical path. The Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable District to evaluate the impact of changed Work to the scheduled critical path.
- B. Contractor shall be required to comply with the requirements of Paragraph 1.09.A for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Contractor shall be responsible for all costs associated with the preparation of TIEs, and the process of incorporating them into the current schedule update. The Contractor shall provide District with four (4) copies of each TIE.
- D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and the Contractor may submit a claim for additional time claimed by contractor.

1.13 TIME EXTENSIONS

- A. The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accord with the General Conditions.
- B. Where an event for which District is responsible impacts the projected Completion Date, the Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment, and material the Contractor would expend to mitigate District-caused time impact. The Contractor shall submit its mitigation plan to District within fourteen (14) calendar days from the date of discovery of the impact. The Contractor is responsible for the cost to prepare the mitigation plan.
- C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.
- D. No time will be granted under this Contract for cumulative effect of changes.
- E. District will not be obligated to consider any time extension request unless the Contractor complies with the requirements of Contract Documents.
- F. Failure of the Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.
- G. If the Contractor does not submit a TIE within the required fourteen (14) calendar days for any issue, it is mutually agreed that the Contractor does not require a time extension for said issue.

1.14 SCHEDULE REPORTS

- A. Submit four (4) copies of the following reports with the Initial CPM Schedule, the Original CPM Schedule, and each monthly update.
- B. Required Reports:
 - (1) Two activity listing reports: one sorted by activity number and one by total Project Float. These reports shall also include each activity's early/late and actual start and finish dates, original and remaining duration, Project Float, responsibility code, and the logic relationship of activities.
 - (2) Cost report sorted by activity number including each activity's associated cost, percentage of Work accomplished, earned value- to date, previous payments, and amount earned for current update period.

- (3) Schedule plots presenting time-scaled network diagram showing activities and their relationships with the controlling operations or critical path clearly highlighted.
- (4) Cash flow report calculated by early start, late start, and indicating actual progress. Provide an exhibit depicting this information in graphic form.
- (5) Planned versus actual resource (i.e., labor) histogram calculated by early start and late start.

C. Other Reports:

In addition to above reports, District may request, from month to month, any two of the following reports. Submit four (4) copies of all reports.

- (1) Activities by early start.
- (2) Activities by late start.
- (3) Activities grouped by Subcontractors or selected trades.
- (4) Activities with scheduled early start dates in a given time frame, such as fifteen (15) or thirty (30) day outlook.

D. Furnish District with report files on compact disks containing all schedule files for each report generated.

1.15 PROJECT STATUS REPORTING

- A. In addition to submittal requirements for CPM scheduling identified in this Section, Contractor shall provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each CPM Schedule as specified herein. Status reporting shall be in form specified below.
- B. Contractor shall prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:
 - (1) Status of major Project components (percent (%) complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
 - (2) Progress made on critical activities indicated on CPM Schedule.
 - (3) Explanations for any lack of work on critical path activities planned to be performed during last month.
 - (4) Explanations for any schedule changes, including changes to logic or to activity durations.
 - (5) List of critical activities scheduled to be performed next month.

- (6) Status of major material and equipment procurement.
- (7) Any delays encountered during reporting period.
- (8) Contractor shall provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.
 - (a) Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in computer-generated monthly and weekly printed reports.
 - (b) Contractor shall explain all variances and mitigation measures.
- (9) Contractor may include any other information pertinent to status of Project. Contractor shall include additional status information requested by District at no additional cost.
- (10) Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.

1.16 WEEKLY SCHEDULE REPORT

At the Weekly Progress Meeting, the Contractor shall provide and present a time-scaled three (3) week look-ahead schedule that is based and correlated by activity number to the current schedule (i.e., Initial, Original CPM, or Schedule Update).

1.17 DAILY CONSTRUCTION REPORTS

On a daily basis, Contractor shall submit a daily activity report to District for each workday, including weekends and holidays when worked. Contractor shall develop the daily construction reports on a computer-generated database capable of sorting daily Work, manpower, and man-hours by Contractor, Subcontractor, area, sub-area, and Change Order Work. Upon request of District, furnish computer disk of this data base. Obtain District's written approval of daily construction report data base format prior to implementation. Include in report:

- A. Project name and Project number.
- B. Contractor's name and address.
- C. Weather, temperature, and any unusual site conditions.
- D. Brief description and location of the day's scheduled activities and any special problems and accidents, including Work of Subcontractors. Descriptions shall be referenced to CPM scheduled activities.
- E. Worker quantities for its own Work force and for Subcontractors of any tier.
- F. Equipment, other than hand tools, utilized by Contractor and Subcontractors.

1.18 PERIODIC VERIFIED REPORTS

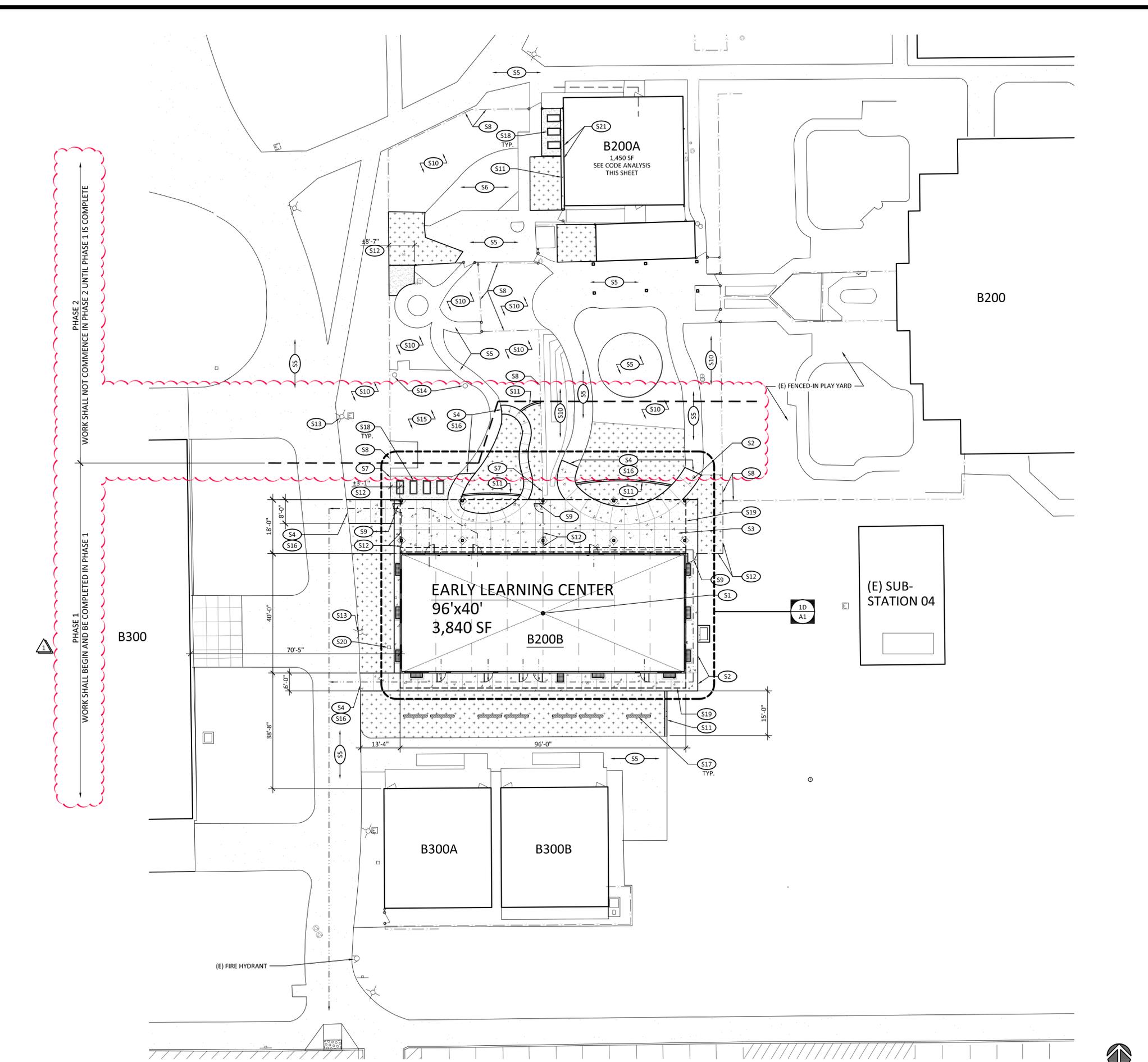
Contractor shall complete and verify construction reports on a form prescribed by the Division of the State Architect and file reports on the first day of February, May, August, and November during the preceding quarter year; at the completion of the Contract; at the completion of the Work; at the suspension of Work for a period of more than one (1) month; whenever the services of Contractor or any of Contractor's Subcontractors are terminated for any reason; and at any time a special verified report is required by the Division of the State Architect. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

09/09/22 10:48 AM MARISSA E:\SOLANO CC\21052 EARLY LEARNING CENTER BUILDING & SITE IMPROVEMENTS\SCD_CAS1 SITE PLAN.DWG



10 AS1 ENLARGED SITE PLAN



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

SITE PLAN KEYNOTES

- (S1) AMS MODULAR BUILDING ON CONCRETE FOUNDATION. SEE ATTACHED PC DRAWINGS 02-118326
- (S2) CONCRETE PAVING. SEE L-SHEETS AND C-SHEETS
- (S3) CONCRETE PAVING AT SHADE STRUCTURE. SEE S-SHEETS
- (S4) FLUSH TRANSITION
- (S5) (E) CONCRETE PAVING TO REMAIN
- (S6) (E) RUBBER ATTENUATION TO REMAIN
- (S7) MODIFY (E) CHAINLINK FENCING AS REQUIRED FOR NEW BLDG. AND SHADE STRUCTURE. ADD END FENCE POST PER DETAIL.
- (S8) (E) CHAINLINK FENCING TO REMAIN
- (S9) 3'-0" WIDE CHAINLINK GATE. SEE (S5) (S9) (A5)
- (S10) (E) LANDSCAPE. SEE L-SHEETS
- (S11) CONCRETE MOW STRIP. SEE L-SHEETS AND C-SHEETS
- (S12) CHAINLINK FENCE TO MATCH (E). ADD END POST PER (S3) (S12) (A5) (S4) (S12) (A5)
- (S13) (E) LIGHT POLE
- (S14) (E) STL POLE TO REMAIN
- (S15) (E) PLAY STRUCTURE AND RUBBER ATTENUATION TO REMAIN
- (S16) MATCH (E) GRADE
- (S17) SCREEN ELEMENT. SEE L-SHEETS
- (S18) PLANTER BOXES. SEE L-SHEETS
- (S19) ROOF ABOVE SHOWN DASHED
- (S20) (E) ELECTRICAL AND COMMUNICATIONS BOX TO REMAIN. SEE E-SHEETS
- (S21) SECURE (E) DOOR IN CLOSED POSITION. REMOVE LATCHING HARDWARE AND PROVIDE A COVER PLATE.

GENERAL NOTES

1. NO DEMOLITION SHALL BEGIN UNTIL PLANS INCLUDING DEMOLITION WORK HAVE BEEN APPROVED BY DSA.
2. SAWCUT CONCRETE WALKS FOR UNDERGROUND LOW VOLTAGE CABLE. REPLACE CONCRETE WALK TO MATCH (E). COMPACT BASE TO 95% DOWEL NEW TO (E) PER C-SHEETS.

LEGEND

	DECOMPOSED GRANITE. SEE L-SHEETS		LANDSCAPE. SEE L-SHEETS.
	CONCRETE PAVING. SEE L-SHEETS AND C-SHEETS		(E) LIGHT POLE TO REMAIN
	(E) CONCRETE PAVING TO REMAIN		(E) FENCE TO REMAIN
			CHAIN LINK FENCE TO MATCH (E) ADJACENT
			PATH OF EGRESS FROM BUILDING EXITS TO PUBLIC WAY

BLDG B200A: AREA / OCCUPANT LOAD ANALYSIS

PER DSA IR A-26 SECTION 1.1, STORAGE AREAS SHALL HAVE AN OCCUPANT LOAD FACTOR OF 300.

AREA/USE	S.F. (NET)	LOAD FACTOR	OCC LOAD TOTAL
B200A	1,450	1/300	5

BLDG. B200A: EXITING

PER CBC 2019 1006.2.1, MINIMUM EXITS REQUIRED = 1
MIN. DOOR WIDTH REQUIRED = 32" CLEAR

EXITS PROVIDED = 2	
TOTAL EXITING WIDTH REQUIRED	= OCCUPANT LOAD MULTIPLIED BY 0.2 = 5 x 0.2 = 1" REQUIRED
TOTAL EXITING WIDTH PROVIDED	= 2 EXITS @ 3'-0" TOTAL = 72" CLEAR = 72" > 1" = OK



DSA #02-120119
FILE #48-C1
EARLY LEARNING CENTER

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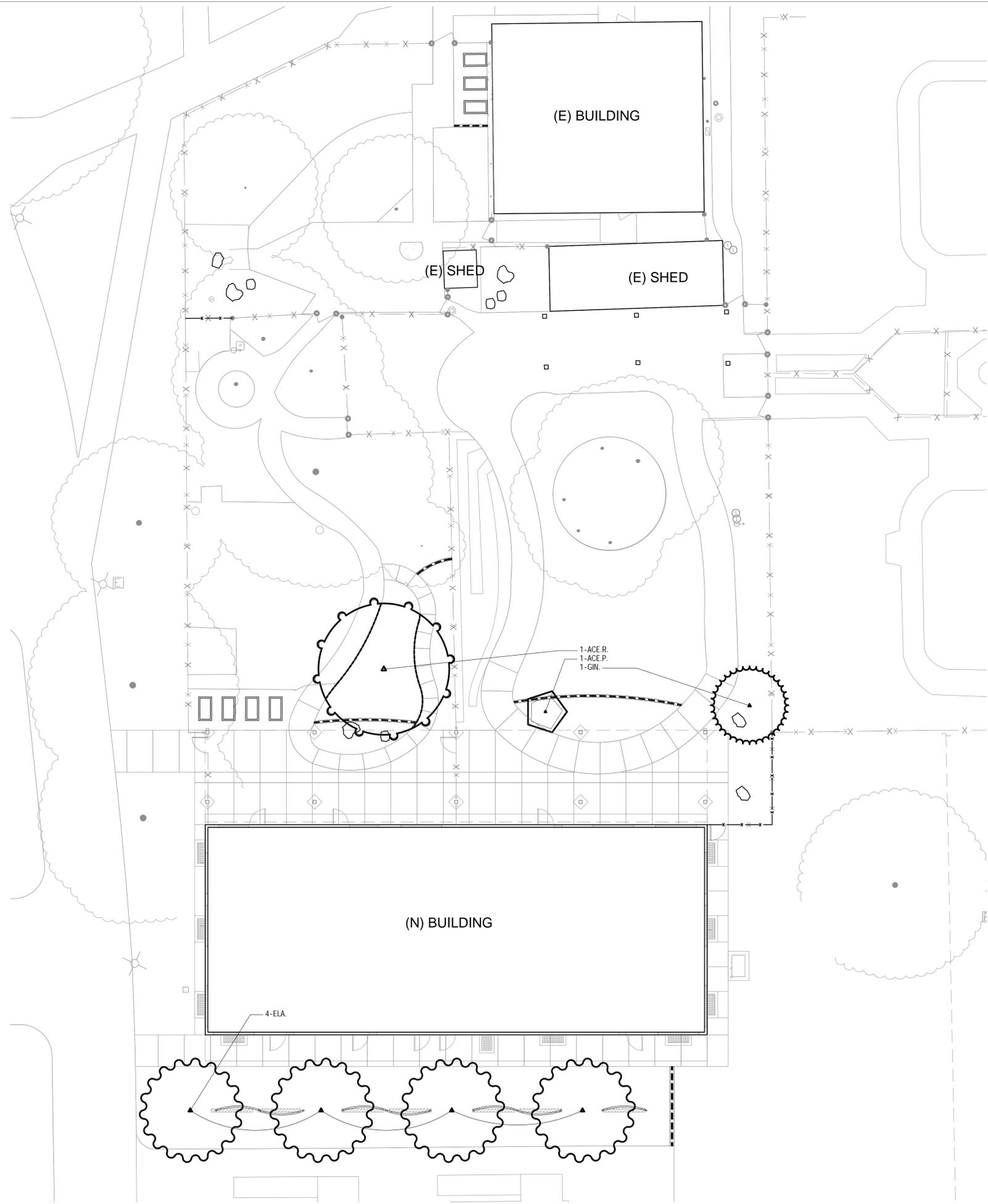
NO.	DESCRIPTION	DATE
1	ADDENDUM 01	9/12/22

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ENLARGED SITE PLAN

MAY 17, 2022
DRAWN BY: MO
CHECKED BY: KJ
JOB NO: 21052
AS1

9/9/2022 10:13 AM STEPHANIEZ0
 I:_MTW_SHARED_PROJECTS\ACTIVE AUTOCAD FILES\22001HMR_SOLANO ELCY1_DESIGN\DRAWING\2_CD\ADD #01_090922.DWG



KEY	LANDSCAPE LEGEND
	TREES - NOT ALL SYMBOLS SHOWN
	CONCRETE MOWSTRIP
	ROOT BARRIER, INSTALL WHERE SHOWN ON PLANS
	PLANT QUANTITY
	PLANT KEY
	EXISTING TREES TO REMAIN

TREE MATERIAL LIST

SIZE	QTY.	KEY	BOTANICAL NAME ... COMMON NAME	WATER USE
TREES:				
24" BOX	1	ACE.P.	ACER PALMATUM 'SANGO KAKU' ... CORAL BARK JAPANESE MAPLE	MEDIUM
24" BOX	1	ACE.R.	ACER RUBRUM 'NEW WORLD' ... NEW WORLD RED MAPLE	MEDIUM
24" BOX	4	ELA.	ELAEOCARPUS DECIPENS ... JAPANESE BLUEBERRY	MEDIUM
24" BOX	1	GIN.	GINKGO BILOBA 'AUTUMN GOLD' ... AUTUMN GOLD MAIDENHAIR TREE	MEDIUM

GENERAL LANDSCAPE REQUIREMENTS/NOTES

- NO PLANTING SHALL BE STARTED UNTIL SPRINKLER IRRIGATION SYSTEM HAS BEEN TESTED BY CONTRACTOR IN PRESENCE OF OWNER'S REPRESENTATIVE AND NOTED DEFICIENCIES CORRECTED.
- NO PLANTING SHALL BE STARTED UNTIL SOIL PREPARATION AND FINISH GRADING OPERATIONS HAVE BEEN COMPLETED AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- QUANTITIES SHOWN ON PLANT MATERIAL LIST ARE APPROXIMATE. PROVIDE QUANTITIES INDICATED ON LANDSCAPE PLAN.
- PLANT MATERIAL IS SUBJECT TO APPROVAL OF OWNER'S REPRESENTATIVE.
- SEE SHEET L4.1 FOR PLANTING INSTALLATION DETAILS.

ENVIRONMENTAL REQUIREMENTS:
 GENERAL: PROCEED WITH WORK IN ORDERLY AND TIMELY MANNER TO COMPLETE INSTALLATION OF LANDSCAPING WITHIN CONTRACT LIMITS.

PROTECTION:
 EXISTING CONSTRUCTION: EXECUTE WORK IN AN ORDERLY AND CAREFUL MANNER TO PROTECT NEW CONCRETE WALKS, WORK OF OTHER TRADES, AND OTHER IMPROVEMENTS.

EXISTING UTILITIES: DETERMINE LOCATION OF UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED, TO MINIMIZE POSSIBILITY OF DAMAGE TO UNDERGROUND UTILITIES. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY ALL PARTIES CONCERNED. BE RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES WITHIN CONSTRUCTION AREA; REPAIR DAMAGE TO UTILITIES THAT OCCUR AS A RESULT OF OPERATIONS OF THIS WORK.

LANDSCAPING: PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS. OPERATIONS BY OTHER CONTRACTORS AND TRADES AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED AT NO ADDITIONAL COST TO CONTRACT.

ADVERSE CONDITIONS: WHEN CONDITIONS DETRIMENTAL TO SOIL OR PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY OWNER'S REPRESENTATIVE BEFORE STARTING WORK.

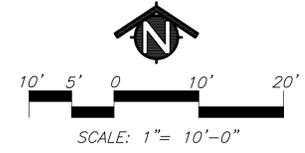
PLANTING AND TURF INSTALLATION SEASONS AND CONDITIONS
 NO WORK SHALL BE DONE WHEN GROUND IS FROZEN, SNOW COVERED, TOO WET OR IN AN OTHERWISE UNSUITABLE CONDITION FOR AMENDING SOIL, FINISH GRADING OR PLANTING.

SOIL TESTING/SOIL IMPROVEMENT:
 SEE SPECIFICATIONS 32 90 00, SECTION 3.02 SOIL TESTING AND SECTION 3.03 PREPARATION.

SOIL PERCOLATION
 EXCAVATE 10 PLANTING PITS IN RANDOM AREAS OF SITE. FILL EXCAVATED PLANTING PITS WITH WATER TO 1/2 DEPTH OF PIT. PITS SHOULD DRAIN WITHIN 4 HOURS. IF PLANTING PITS DO NOT DRAIN, NOTIFY INSPECTOR IMMEDIATELY. PLANTING SHALL NOT BE STARTED UNTIL OWNER'S REPRESENTATIVE HAS RESOLVED A METHOD TO REMEDY DRAINAGE ISSUE.

PLANT MATERIAL STANDARDS
 PLANTS SHALL BE IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ANSI Z60.1- AMERICAN STANDARD FOR NURSERY STOCK, EXCEPT AS OTHERWISE STATED IN SPECIFICATIONS OR SHOWN ON DRAWINGS. WHERE DRAWINGS OR SPECIFICATIONS ARE IN CONFLICT WITH ANSI Z60.1, DRAWINGS AND SPECIFICATIONS SHALL PREVAIL. PRUNE, THIN OUT AND SHAPE TREES IN ACCORDANCE WITH ANSI STANDARD HORTICULTURAL PRACTICE. PRUNE TREES TO RETAIN REQUIRED HEIGHT AND SPREAD, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. DO NOT CUT TREE LEADERS, AND REMOVE ONLY INJURED OR DEAD BRANCHES FROM FLOWERING TREES.

EXISTING LANDSCAPE AND SPRINKLER IRRIGATION SYSTEM
 WORK LIMITS OF THIS PROJECT EXTEND INTO AREAS THAT WERE PREVIOUSLY DEVELOPED UNDER OTHER CONTRACTS. PRIOR TO START OF WORK, CONTRACTOR SHALL MEET WITH OWNER'S REPRESENTATIVE TO LOCATE ALL CONNECTIONS CALLED FOR ON DRAWINGS. WORK LIMITS/FENCING SHALL BE LAID OUT BY CONTRACTOR AND VERIFIED BY OWNER'S REPRESENTATIVE. FENCE TO BE INSTALLED AND IRRIGATION SYSTEM SHALL BE TESTED WITH CONTRACTOR, INSPECTOR AND OWNER'S REPRESENTATIVE PRESENT. DEFICIENCIES SHALL BE NOTED AT THIS TIME AND ARE THE RESPONSIBILITY OF OWNER. AT COMPLETION OF WORK, SYSTEM WILL AGAIN BE TESTED. DEFICIENCIES NOTED AT THIS TIME THAT WERE NOT NOTED PREVIOUSLY WILL BE RESPONSIBILITY OF CONTRACTOR. EXISTING LANDSCAPE THAT HAS BEEN DAMAGED DUE TO CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER. PRIOR TO MAKING ANY CONNECTION TO MAIN LINE, CONTRACTOR SHALL NOTIFY OWNER 1 WEEK IN ADVANCE SO ADJUSTMENTS TO EXISTING WATERING PROGRAMS CAN BE MADE.



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22-01

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 FILE #48-C1
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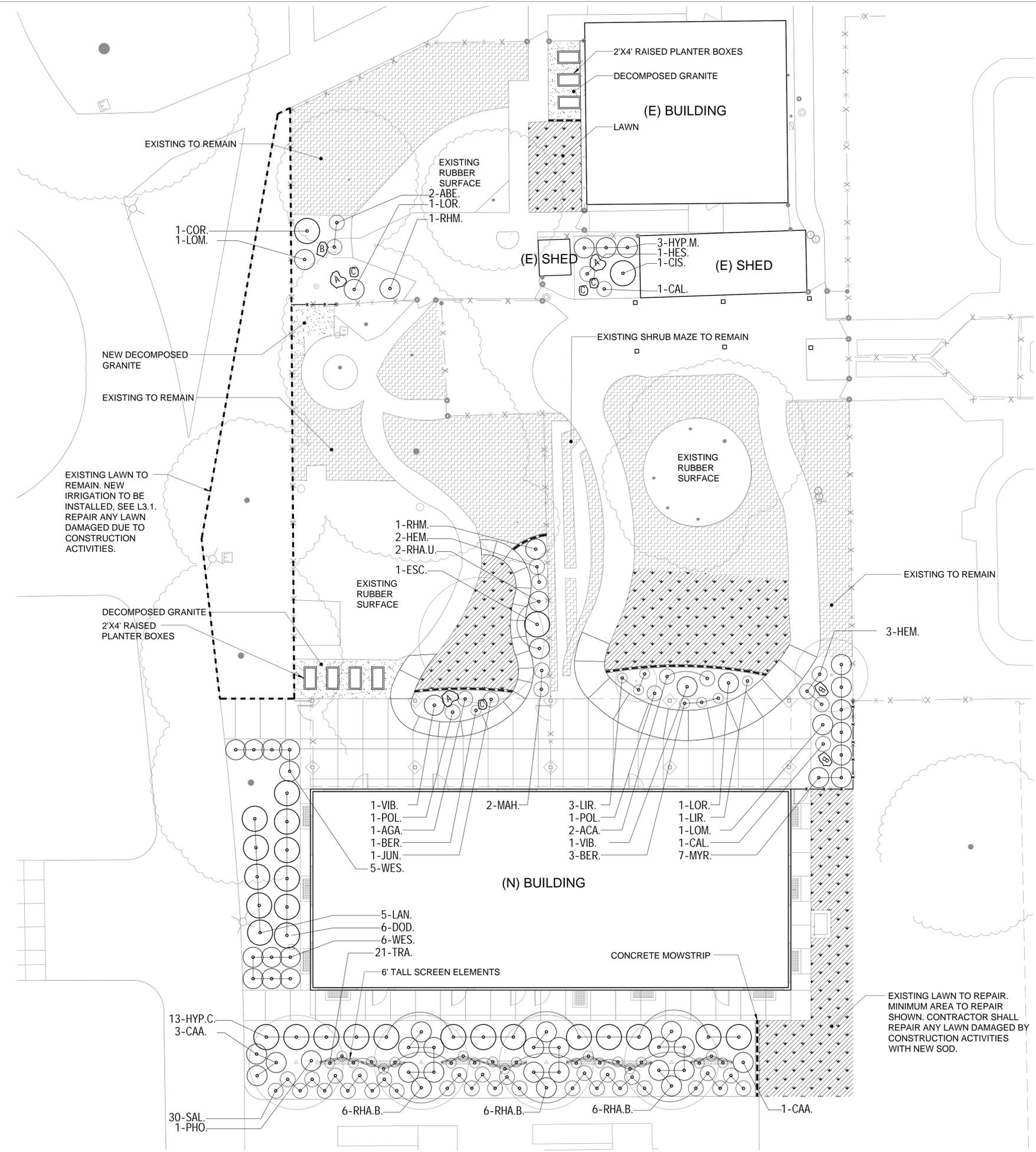
TREE PLANTING PLAN

SEPTEMBER 12, 2022

DRAWN BY:	SL
CHECKED BY:	RL
JOB NO:	21052

L1.1

9/9/2022 10:13 AM STEPHANIEZ0
 I:_MTV SHARED PROJECTS\ACTIVE AUTOCAD FILES\22001HMR_SOLANO ELCY1_DESIGN\DRAWING2_CD\ADD #01_090922.DWG



KEY

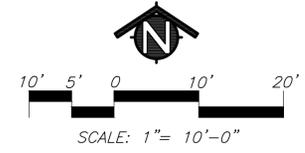
LANDSCAPE LEGEND

- TREE OUTLINE FOR REFERENCE
- SHRUBS
- LAWN (SOD)
- DECOMPOSED GRANITE
- EXISTING LANDSCAPE AND SPRINKLER AREAS TO REMAIN
 CONTRACTOR SHALL REPAIR ANY EXISTING LANDSCAPE DAMAGED DUE TO CONSTRUCTION ACTIVITIES.
- 2'X4' WOOD PLANTER BOX
- 6' TALL SCREENING ELEMENT
 MANUFACTURER: GREENSCREEN
 PRODUCT: FREESTANDING CURVED SCREEN
 COLOR: TERRA
- CONCRETE MOWSTRIP
- LANDSCAPE BOULDERS
- PLANT QUANTITY
- PLANT KEY
- EXISTING TREES TO REMAIN

PLANT MATERIAL LIST

WATER USE	SIZE	QUANTITY	KEY	BOTANICAL NAME ... COMMON NAME
SHRUBS:				
MEDIUM	LOW	2	ABE.	ABELIA 'KALEIDOSCOPE' ... KALEIDOSCOPE ABELIA
MEDIUM	LOW	2	ACA.	ACACIA COGNATA 'COUSIN ITT' ... COUSIN ITT ACACIA
MEDIUM	LOW	1	AGA.	AGAPANTHUS ORIENTALIS ... LILY-OF-THE-NILE
LOW	LOW	4	BER.	BERGENIA CRASSIFOLIA ... WINTER BLOOMING BERGENIA
LOW	LOW	4	CAA.	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' ... KARL FOERSTER
LOW	LOW	2	CAL.	CALISTEMON 'LITTLE JOHN' ... LITTLE JOHN BOTTLE BRUSH
MEDIUM	LOW	0	CEA.	CEANOTHUS 'JOYCE KUILTER' ... CEANOTHUS
LOW	LOW	0	CIS.	CISTUS X PULVERULENTUS 'SUNSET' ... SUNSET ROCKROSE
MEDIUM	LOW	1	COP.	COPROSMA REPENS 'MARBLE QUEEN' ... MARBLE QUEEN MIRROR PLANT
LOW	LOW	1	COR.	CORREA PULCHELLA 'MISSION BELLS' ... MISSION BELLS AUSTRALIAN FUCHSIA
LOW	LOW	6	DOD.	DODONAEA VISCOSA 'PURPUREA' ... HOPSEED BUSH
MEDIUM	LOW	1	ESC.	ESCALLONIA EXONIENSIS 'TRADESII' ... PINK PRINCESS ESCALLONIA
MEDIUM	LOW	5	HEM.	HEMERICALLIS SP. ... YELLOW DAVILLY (EVERGREEN)
LOW	LOW	1	HES.	HESPERALOE PARVIFOLIA ... RED YUCCA
MEDIUM	LOW	13	HYP.C.	HYPERICUM CALYCIUM ... ST. JOHN'S WART
MEDIUM	LOW	3	HYP.M.	HYPERICUM MOSERANUM ... GOLD FLOWER
MEDIUM	LOW	1	JUN.	JUNCUS EFFUSUS ... SOFT RUSH
LOW	LOW	5	LAN.	LANTANA SELLOWIANA 'WHITE' ... WHITE TRAILING LANTANA
MEDIUM	LOW	4	LIR.	LIRIOPE MUSCARI 'MAJESTIC' ... LILY TURF
LOW	LOW	2	LOM.	LOMANDRA LONGIFOLIA ... MAT RUSH
MEDIUM	LOW	2	LOR.	LOROPETALUM 'PURPLE DIAMOND' ... SEMI-DWARF FRINGE FLOWER
MEDIUM	LOW	2	MAH.	MAHONIA EURYBRACTEATA 'SOFT CARESS' ... SOFT CARESS MAHONIA
LOW	LOW	7	MYR.	MYRTUS COMMUNIS 'COMPACT VARIEGATA' ... MYRTLE
LOW	LOW	1	PHO.	PHORRHIUM 'TANAK' 'RUBRUM' ... RED NEW ZEALAND FLAX
MEDIUM	LOW	2	POL.	POLYSTICHUM MUNITUM ... WESTERN SWORD FERN
MEDIUM	LOW	18	RHA.B.	RHAPHIOLEPIS INDICA 'BALLERINA' ... DWARF INDIA HAWTHORN
LOW	LOW	2	RHA.U.	RHAPHIOLEPIS UMBELLATA 'MINOR' ... DWARF YEDDO HAWTHORN
LOW	LOW	2	RHM.	RHAMNUS CALIFORNICA 'SEAVIEW' ... DWARF COFFEEBERRY
LOW	LOW	30	SAL.	SALVIA GREGGII 'WILD THING' ... PINK AUTUMN SAGE
MEDIUM	LOW	2	VIB.	VIBURNUM DAVIDI ... INDIAN HAWTHORN
LOW	LOW	11	WES.	WESTRINGIA FRUTICOSA 'MORNING LIGHT' ... COAST ROSEMARY
VINE:				
MEDIUM	1 G.C.	21	TRA.	TRACHELOSPERMUM JASMINOIDES ... STAR JASMINE

NOTE: SEE SHEET L1.1 FOR GENERAL LANDSCAPE REQUIREMENTS/NOTES.



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TURF/SHRUB PLANTING PLAN

SEPTEMBER 12, 2022

DRAWN BY: SL
 CHECKED BY: RL
 JOB NO: 21052

L2.1

B8512G Control Panels

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Fully integrated intrusion, fire, and access control allows users to interface with one system instead of three
- ▶ Provides up to 99 points using a combination of hardwired or wireless devices for installation flexibility, and up to 8 areas and 8 doors for up to 500 users
- ▶ On-board Ethernet port for Conetix IP alarm communication and remote programming, compatible with modern IP networks including IPv6/IPv4, Auto-IP, and Universal Plug and Play
- ▶ Installer-friendly features for simple installation and communications, including plug-in PSTN and cellular communication modules
- ▶ Remote Security Control app which allows users to control their security systems - and view system cameras - remotely from mobile devices such as phones and tablets

The B9512G Control Panel and the B8512G Control Panel are the new premier commercial control panels from Bosch. B8512G control panels integrate intrusion, fire, and access control providing one simple user interface for all systems.

With the ability to adapt to large and small applications, the B8512G provides up to 99 individually identified points that can be split into 8 areas.

The control panel can communicate through its built-in Ethernet port (not applicable to “E” control panels), or through compatible plug-in modules that can send events over the public switched telephone network (PSTN) or over cellular network communications.

For users, programmable keypad shortcuts, situation sensitive on-screen help, and a bilingual user interface make system operation simple and easy.

With the B8512G, you can:

- Monitor alarm points for intruder, gas, or fire alarms.
- Program all system functions local or remote using Remote Programming Software (RPS) or by using basic programming through the keypad.
- Add up to 8 doors of access control using the optional B901 Access Control Module or D9210C Access Control Interface Module.

The B8512G is a direct replacement for previous control panel models D7412GV4, D7412GV3, D7412GV2, and D7412G.

Functions

Programmable outputs

- Four alarm-output patterns
- Programmable bell test

Point response

- Selectable point response time
- Selectable EOL values and configuration

- Cross point capability
- Fire alarm verification
- Dangerous gas indicator includes carbon monoxide (NFPA 720)
- Watch mode
- Selectable point response time

User interface

- Supervision of up to 32 keypads
- Custom keypad text is fully programmable through RPS or the Installer Services Portal programming tool (available in Europe, Middle East, Africa, and China)
- Full function menu including customizable shortcuts
- Authority by area and 32 character name for each user
- 14 custom authority levels to restrict system features that each user can access
- Programmable primary and secondary language by user and keypad
- 9 available languages

User interface languages

The following table shows the available languages per keypad type.

	B915/ B915I	B920	B921C	B930	B942/ B942 W
English	✓	✓	✓	✓	✓
Chinese	✓				✓
French	✓	✓	✓	✓	✓
Greek	✓				✓
Hungarian	✓	✓	✓	✓	✓
Italian	✓	✓	✓	✓	✓
Polish	✓				✓
Portuguese	✓	✓	✓	✓	✓
Spanish	✓	✓	✓	✓	✓

Area configurations

Link multiple areas to a shared area such as a lobby or common entryway. The shared area then automatically turns On (arms) when all associate areas are armed and turns Off (disarms) when any one associate area is disarmed. For higher security applications, the Area Re-Arm feature guarantees that areas are always rearmed, and are disarmed for no longer than a specific, configurable, amount of time (for example, service time).

Custom functions

For added convenience, the installer can program custom functions that allow customers to complete complex tasks with one simple action. For example, a custom function can bypass a group of points and arm the system, allowing the user to perform these functions with one easy command. Users can activate custom functions with a keypad, keyfob, token, or

card, or the control panel can activate a function in reaction to a faulted point, or automatically through a scheduled event (SKED).

Passcode security

- Two-man rule. Requires two people with two unique passcodes to be present at the time of opening.
- Early ambush. Allows users to verify that the facility is safe by requiring two passcodes. The control panel sends a duress event if the user does not enter the passcode a second time after inspecting the premises.
- Dual authentication. Requires two forms of identification before processing certain system commands, including turning off the system and opening doors. A standard system user must have a passcode, a credential (token or card), and appropriate command authority permissions.

Door control

Using the B901 Access Control Module or D9210C Access Control Interface Module, the control panel provides a fully supervised access control solution. The solution offers 14 programmable levels of access authority. Authority for door access is controlled by the user level, the group of the user, the time of day, the door state, and the area armed (On/Off) state.

Easy exit control

The control panel changes from one On (armed) state to another without turning off (disarming) the system. For example, if you change the state from Part On (Perimeter Arm) to All On (Master Arm), the control panel complies and reports the change. Easy exit control reduces the number of keystrokes, simplifying system operation.

Programmable passcode-controlled menu list

Passcode-controlled shortcuts provide users only with the options and information pertinent to them, simplifying system operation.

Flexible control

The system provides the flexibility to choose added convenience or high security. For example, you can restrict to a keypad's immediate local area turning on (arming) and turning off (disarming) the system with a passcode, even if the user has access to other areas. This is particularly useful for high security areas, where a user may have access to the area, but would prefer to only turn off (disarm) the area individually rather than with the rest of the system.

Monitor Delay/Delayed Response

Create a special point profile that delays the reaction of a point for a specified time (up to 1 hour in minutes and seconds). This delay provides time for the specified condition to reset before activating any annunciation. The system can annunciate locally and send a report, if desired. When the system is armed, the point can respond like a normal point - providing dual functionality. Use this feature to ensure that

perimeter doors have not been propped open, or to monitor critical areas such as computer rooms and safes, for example.

System users

The system supports up to 500 users. Each user can have a personalized passcode, a wireless keyfob, and an access credential to control the system. You can assign passcodes to one of 14 customized authority levels in each area that can be restricted to operate only during certain times. You can program a primary and secondary language for each user and by keypad (select from English, Chinese, French, Greek, Hungarian, Italian, Polish, Portuguese, and Spanish). The keypad changes to the user's programmed language when the user enters his passcode or holds the Help key.

Communication formats

The control panel prioritizes and sends reports to four route groups. Network and phone communications can use either Modem4 or Contact ID communication format. Each group has a programmable primary and backup destination.

The control panel provides flexible communications for most central stations with reporting capabilities such as:

- Individual point numbers
- Opening or closing reports by user and area number
- Remote programming attempts
- Diagnostic reports

IP communication

The control panel can use IP to communicate with a Conettix D6600 or a Conettix D6100IPv6 Communications Receiver/Gateway. Use one of the following for IP:

- The on-board Ethernet connection (not applicable to "E" control panels)
- Ethernet Communication Module: B426
- Plug-in cellular communicator: B442/B443/B444

Conettix IP communication provides a secure path that includes anti-replay/anti-substitution features, and enhanced security with up to AES 256-bit encryption (using Cipher Block Chaining (CBC)).

The control panel supports Domain Name System (DNS) for both remote programming and central station communication. DNS provides ease of use, eliminating the need to use static IP addresses as your reporting destination, and accommodates a simple solution for central station disaster recovery. The control panel supports both IPv6 and IPv4 networks.

Communication paths

The control panel accommodates up to four separate phone and four separate network paths to the central station receiver. When resetting alarms or turning a system on and off, the user is identified by name and number.

Personal notification

The control panel can send text messages and emails for personal notification over Ethernet or using a cellular communicator. You can configure up to 32 destinations using a combination of cellular phone numbers and email addresses. The control panel sends notifications in the user's programmed primary language.

Bosch Remote Connect (Cloud)

Remote Connect simplifies connections from RPS, and the Remote Security Control app, using Bosch Cloud services. This service creates a secure connection to the control panel without specific router settings or the need for a static IP address or DNS.



Notice

The Bosch Remote Connect service is not available in Europe, the Middle East, or Africa.

Firmware updates

Remote firmware updates are available.

A wide variety of input options

Each point:

- Single 1 k Ω , single 2 k Ω , dual 1 k Ω (1 k Ω + 1 k Ω), and No EOL (end-of-line) (EOL) resistor options (for on-board and B208 inputs)
- Programmable for Fire, Intrusion, Access, Gas, and Supervisory devices
- Supports hardwired and wireless devices
- Supports IP cameras by Bosch as point and output devices

IP camera support

The control panel can integrate directly with Bosch IP cameras, using them as fully supervised points and outputs.

Integration of cameras allows the camera's video motion detection to activate points on the control panel. The control panel's virtual outputs can be configured to trigger camera actions, including sending video snapshots via email.

Security and fire detection

The control panel provides eight on-board points, and up to 91 additional off-board points (depending on model and expansion interfaces). You can program individual points to monitor some types of burglar alarms, fire alarms, and supervision devices.

Event log

The event log stores up to 2048 local and reported events. The event log includes time, date, event, area, point, and user. View the event log from a keypad or use RPS or the Installer Services Portal programming tool (available in Europe, Middle East, Africa, and China) to remotely retrieve event information. When the event log reaches a programmed threshold of stored events, it can send an optional report to a receiver.

Scheduled events (SKEDs)

The internal clock and calendar start individually scheduled events (SKEDs). SKEDs perform several functions such as turn on or off, relay control, or point bypassing.

The control panel offers:

- 40 scheduled events with up to 31 different functions
- 8 opening windows and 8 closing windows
- 8 user group windows
- Day-of-week, date-of-month, or holiday only schedules
- 4 holiday schedules of 366 days (leap year)

Dual bus and SDI keypad retrofits

The dual SDI2 device bus design provides greater installation flexibility, such as bus isolation for Intrusion and Fire. To use popular SDI keypads (for example D1255 and D1260), program one of the two SDI2 buses for SDI operation.

ZONEX and POPEX retrofits

To retrofit legacy Bosch control panels that use ZONEX and POPEX devices, the control panel is compatible with the B600 Retrofit (ZONEX) Module. The B600 adds two ZONEX buses to the control panel which can connect to existing legacy point bus (POPEX) devices (for example, the D8125).

Programming

Installers can perform limited programming on-site with a keypad (critical parameters; such as account IDs, central station and RPS IP addresses and phone numbers, reporting formats, and more). They can also do full programming on-site or remotely (attended or unattended) with RPS. A programmable system passcode prevents unauthorized remote programming. Full programming is also possible with the web-based Installer Services Portal programming tool. The Installer Services Portal programming tool is available for panel firmware version 3.06 or higher.

Notice

The Installer Services Portal programming tool is available in Europe, Middle East, Africa, and China.

The following table shows the available languages for RPS and Installer Services Portal programming tool.

	Installer Services Portal programming tool	RPS programming	RPS custom text*
English	✓	✓	✓
Chinese	✓		
French	✓		✓
Greek	✓		
Hungarian	✓		✓
Italian	✓		✓

	Installer Services Portal programming tool	RPS programming	RPS custom text*
Polish	✓		
Portuguese	✓		✓
Spanish	✓		✓

* RPS custom text is text, that can be entered in RPS and which will then be displayed on keypads and on the Remote Security Control app.

Diagnostics

Keypads, RPS and the Installer Services Portal programming tool (available in Europe, Middle East, Africa, and China) offer diagnostic help for monitoring and troubleshooting. The diagnostics features allow you to view the status of the wired and wireless devices. The features provide the status of the control panel and its connected devices, such as firmware version, power, and missing conditions. View the status of each area.

Remote Security Control app

The Remote Security Control app allows users to control their security systems remotely from their devices. Users can:

- Turn their security system On or Off
- Turn specific areas On or Off
- Control outputs for applications such as lighting control
- View live video from Bosch IP cameras
- Grant access remotely by unlocking and locking doors

The app requires the installing dealer to create a Remote Access Profile for users, and to install the profile on their devices.

Bosch Video Management System integration

With Bosch Video Management System (Bosch VMS) and an intrusion system, the VMS operator has a single user interface to monitor and control the intrusion system combined with video surveillance. With Bosch VMS and a control panel, the operator can, for example:

- View videos triggered by intrusion events, including all relevant information such as areas, point, and user show in the display with the event.
- View areas, points, outputs, and doors - with their statuses - on the Bosch VMS map, providing the exact location in the system.
- Turn on (arm) and turn off (disarm) areas.
- Bypass and unbypass points.
- Lock and unlock doors (Bosch VMS 6.0 and higher).

Requirements to integrate Bosch VMS with a control panel:

- A licensed Bosch VMS system using Professional Editions v5.5 or higher or Bosch VMS Enterprise Edition v5.5 or higher.
- Expansion license to integrate the intrusion control panel. One license needed per control panel. Order number MBX-XINT-xx for the expansion license added

to a Bosch VMS base license. Refer to the Bosch Video Management Software product page on the Bosch website, www.boschsecurity.com.

- Access to the control panel account and Remote Programming Software (RPS) and the Installer Services Portal programming tool (available in Europe, Middle East, Africa, and China).

Certifications and approvals

Region	Regulatory compliance/quality marks	
USA	ANSI-SIA	CP-01-2010-Control Panel Standard - Features for False Alarm Reduction
Australia	RCM	[B9512G]
	RCM	[B8512G]
	RCM	ACMA
Europe	CE	EMC, LVD, RoHS [B9512G, B9512G-E, B8512G, B8512G-E]
USA	UL	[B9512G, B9512G-E, B8512G, B8512G-E, B299, B600, B901, B925F, B926F]
	UL	UL 294 - Standard for Access Control Units and Systems
	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems
	UL	UL 985 - Household Fire Warning System Units
	UL	UL 1023 - Household Burglar Alarm System Units
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL	UL 1610 - Central Station Burglar Alarm Units
	UL	UL 1635 - Standard for Digital Alarm Communicator System Units
	FM	Central Station
	FM	Local Protective Signaling
	FM	Remote Station
	CSFM	California State Fire Marshal (see our website)
	FCC	Part 15 Class B
		FDNY-CoA
Canada	ULC	[B9512G, B9512G-E, B8512G, B8512G-E, B299, B600, B901, B925F, B926F]

Region	Regulatory compliance/quality marks	
	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC	CAN/ULC S545 - Residential Fire Warning System Control Units
	ULC	CAN/ULC S559 - Fire Signal Receiving Centres and Systems
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	IC	ICES-003 - Information Technology Equipment (ITE)
Brazil	ANATEL	04450-16-01855 [B9512G, B8512G when used with B430 or B442]

Installation/configuration notes



Notice

Not all products and features are available in all regions. Consult your local Bosch representative for availability details.

Compatible products

Keypads

B942/B942W Touch Screen Keypad (SDI2)
 B930 ATM Style Alphanumeric Keypad (SDI2)
 B926F Fire Keypad (SDI2)
 B925F Fire Keypad (SDI2)
 B921C Two-line Capacitive Keypad (SDI2)
 B920 Two-line Alphanumeric Keypad (SDI2)
 B915/B915I Basic Keypad (SDI2)
 D1255 Series Keypads
 D1260 Series Keypads
 D1256RB Fire Keypad
 D1257RB Remote Fire Alarm Annunciator

Power

D1640 16.5 VAC 40 VA Transformer
 DE-45-18 Transformer
 D126 Standby Battery (12 V, 7 Ah)
 D1218 Battery (12 V, 18 Ah)
 D122 Dual Battery Harness
 D122L Dual Battery Harness with Long Leads

Enclosures

B8103 Universal Enclosure (White)
 D8103 Universal Enclosure (Gray)
 D8108A Attack Resistant Enclosure
 D8108A-CE Attack Resistant Enclosure with Built-in Transformer
 D8109 Fire Enclosure

Accessories

B56 Keypad Surface Mount Box
 B96 Keypad Trim Bezel
 B99 USB Direct Connect Cable
 B501-10 Interconnect wiring cables (pack of 10)
 D161 Dual Modular Telephone Cord (7 f)
 D162 Modular Telephone Cord (2 ft)
 D166 Telephone Jack (RJ31X)

Detectors

D7050 Series Addressable Photoelectric Smoke and Smoke Heat Detector Heads
 F220-B6PM/S 12/24 VDC Addressable Detector Bases with POPITs
 F220-B6 12/24 VDC Two-wire Base
 F220-B6R Standard 12/24 VDC Four-wire Base)
 F220-P Photoelectric Smoke Detector
 F220-PTH Photoelectric Smoke Detector with +135°F (+57°C) Heat Sensor
 F220-PTH Photoelectric Smoke Detector with +135°F (+57°C) Heat Sensor and Carbon Monoxide Sensors
 F220-B6C 12/24 VDC Four-wire Base with Auxiliary Form C Relay
 FCC-380 Carbon Monoxide Detector
 FCH-T320 Heat Detector
 FCP-OT320 Multisensor Detector Optical/Thermal
 FCP-O320 Optical Smoke Detector
 MX775i Addressable PIR Detector
 MX794i Long Range Multiplex PIR Detector
 MX934i Addressable PIR Detector
 MX938i Addressable PIR Detector
 ZX776Z PIR Detector
 ZX794Z Long Range PIR Detector
 ZX835 TriTech Microwave/PIR Detector
 ZX935Z PIR Detector
 ZX938Z PIR Detector

ZX970 PIR/Microwave Detector

Bosch conventional detectors, including Professional Series, Blue Line Gen2, Blue Line, Classic Line, Commercial Line, and Ceiling Mount motion detectors, as well as glass break, seismic, request-to-exit, photoelectric, heat, and smoke detectors.

Modules

B208 Octo-input Module
 B299 POPEX Module
 B308 Octo-output Module
 B426 Conettix Ethernet Communication Module
 B430 Plug-in Telephone Communicator
 B442 Conettix Plug-in Cellular Communicator (using GPRS)
 B443 Conettix Plug-in Cellular Communicator (using HSPA+)
 B444 Conettix Plug-in Cellular Communicator
 B450 Conettix Plug-in Communicator Interface
 B520 Auxiliary Power Supply Module
 B600 Retrofit (ZONEX) Module
 B810 wireless receiver (RADION)
 B820 SDI2 Inovonics Interface Module
 B901 Access Control Module
 D113 Battery Lead Supervision Module
 D125B Dual Class B Initiating Module
 D126 Standby Battery (12 V, 7 Ah)
 D129 Class A Initiating Module
 D130 Auxiliary Relay Module
 D132A Smoke Detector Reversing Relay Module
 D133 Single Relay Module
 D134 Dual Relay Module
 D185 Reverse Polarity Signaling Module
 D192G Class "B", Style Y Bell Circuit Supervision
 D1218 Battery (12 V, 18 Ah)
 D8125 Addressable Expansion Module
 D8125MUX Multiplex Bus Interface
 D8128D OctoPOPIT Eight-point Expander
 D8129 Octo-relay Module
 D8130 Door Release Module
 D9127U/T POPIT Module
 DS7461i Single-zone Input Module
 DS7465i Input-output Module

D9210C Access Control Interface Module

ICP-EZTS Cover and Wall Tamper Switch

ICP-SDI-9114 SDI Splitter

Applications

Remote Programming Software (RPS or RPS-LITE) v6.03 and higher

Installer Services Portal programming tool

Bosch Video Management System v5.5 and higher

Remote Security Control

Conettix receivers

(Managed and configured with Conettix D6200 Programming/ Administration Software v2.10)

Conettix D6600 Communications Receiver/Gateway (with only D6641 line cards installed) with CPU version 01.10.00

Conettix D6100IPv6 Communications Receiver/Gateway with CPU version 61.10.00

Conettix D6100i Communications Receiver/Gateway with CPU version 61.10.00

RADION wireless from Bosch

B810 wireless receiver (RADION)

RFBT-A/RFBT bill trap

RFDL-11-A/RFDL-11 TriTech motion detector

RFDW-RM-A/RFDW-RM recessed mount door/window contact

RFDW-SM-A/RFDW-SM surface mount door/window contact

RFGB-A/RFGB glass break detector

RFKF-A/RFKF two-button keyfob

RFKF-FBS-A/RFKF-FBS four-button keyfob

RFKF-TBS-A/RFKF-TBS two-button keyfob

RFPB-SB-A/ RFPB-SB single-button panic

RFPB-TB-A/RFPB-TB two-button panic

RFRP-A/RFRP repeater

RFSM-A/RFSM smoke detector

RFPR-12-A/RFPR-12 PIR motion detector

RFPR-C12-A/RFPR-C12 PIR curtain motion detector

RFUN-A/RFUN universal transmitter

Inovonics Wireless

B820 SDI2 Inovonics Interface Module

ENKIT-SDI2 SDI2 Inovonics Interface and Receiver Kit. Includes B820 and EN4200

EN1210 Universal Transmitter (Single-input)

EN1210EOL Universal Transmitter with EOL Resistor

EN1210W Door-Window Transmitter with Reed Switch

EN1215EOL Universal Transmitter with Wall Tamper, Reed Switch, and EOL Resistor

EN1223D Water-resistant Pendant Transmitter (Double-button)

EN1223S Water-resistant Pendant Transmitter (Single-button)

EN1224-ON Multiple-Condition Pendant Transmitter

EN1233D Necklace Pendant Transmitter (Double-button)

EN1233S Necklace Pendant Transmitter (Single-button)

EN1235D Beltclip Pendant Transmitter (Double-button)

EN1235DF Fixed-location Transmitter (Double-button)

EN1235S Beltclip Pendant Transmitter (Single-button)

EN1235SF Fixed-location Transmitter (Single-button)

EN1247 Glass-break Detector Transmitter

EN1249 Bill Trap Transmitter

EN1242 Smoke Detector Transmitter

EN1260 Wall Mount Motion Detector

EN1261HT High Traffic Motion Detector

EN1262 Motion Detector with Pet Immunity

EN1265 360° Ceiling Mount Motion Detector

EN4200 Serial Receiver

EN5040-T High Power Repeater with Transformer

Technical specifications

Properties

Dimensions	10.625 in x 7.75in x 1.875 in (26.99 x 19.69 x 4.76 cm)
Weight	1.95 lbs (0.88 kg)

Communications

Ethernet	10/100 full duplex (N/A for "E" control panels)
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Environmental considerations

Relative humidity	5% to 93% at +32°C (+90°F)
Temperature (operating)	0°C to +49°C (+32°F to +120°F)

Power requirements

Current (maximum)	Standby: 180 mA Alarm: 260 mA
Output (alarm)	2 A at 12 VDC

Output (auxiliary, continuous power, and switched auxiliary combined)	1.4 A at 12 VDC nominal
Voltage (operating)	12 VDC nominal
Voltage (AC)	16.5 - 18 VAC

Wiring

Terminal wire size	12 AWG to 22 AWG (2.0 mm to 0.65 mm)
SDI2 wiring	Maximum distance – Wire size (unshielded wire only): 7,500 ft (2,286 m) - 22 AWG (0.65 mm)

Number of...

Areas	8
Custom functions	8
Events	Up to 2048
Passcode users	500, plus 1 installer passcode
Points	99 (8 on-board, up to 91 off-board and virtual)
Programmable outputs	99 (3 on-board, up to 96 off-board and virtual)
RF points	91
IP cameras	8
SKEDs	40

Ordering information**B8512G IP control panel, 8 areas, 99 points**

Supports up to 99 points, 3 on-board outputs, and 8 areas for intrusion, commercial fire. On-board Ethernet.

Order number **B8512G**

B8512G-E Control panel, 8 areas, 99 points, no IP

The B8512G-E is available only in kits.

Order number **B8512G-E**

B901 Door Controller

Fully supervised, addressable SDI2/SDI bus device that allows access control integration for Bosch G and B Series Control Panels.

Order number **B901**

Accessories**B520 Auxiliary power supply module, 2A 12V**

Provides auxiliary power to 12 VDC devices or to SDI2 modules.

Order number **B520**

B208 SDI2 8-Input Expansion Module

Provides 8 programmable inputs.

Order number **B208**

B308 SDI2 8-Output Expansion Module

Provides 8 programmable relays.

Order number **B308**

B810 Wireless SDI2 bus interface

Receives RF signals from RADION transmitters, repeaters, and glassbreaks. Operates at 433.42 MHz. For use with compatible SDI2 bus control panels.

Order number **B810**

D122 Dual battery harness, 17" 18AWG

Harness with circuit breaker. Connects two batteries (in parallel) to a compatible control panel.

Order number **D122**

D122L Dual battery harness, 35", 12V

Harness with circuit breaker and leads measuring 35 in. (89 cm). Connects two batteries (in parallel) to a compatible control panel in a separate enclosure.

Order number **D122L**

D126 Battery, 12V 7Ah

A rechargeable sealed lead-acid power supply used as a secondary power supply or in auxiliary or ancillary functions.

Order number **D126**

D1218 Battery, 12V 18Ah

The D1218 is a 12 V 18 Ah sealed lead-acid battery with two bolt-fastened terminals. It is used for standby and auxiliary power. It connects to a compatible control panel using a D122 or D122L Dual battery harness.

Order number **D1218**

D137 Accessory mounting bracket for enclosure

Used to mount accessory modules in B8103, D8108A, and D8109 enclosures.

Order number **D137**

D1640 Transformer plug-in, 16V 40VA

System transformer rated at 16.5 VAC, 40 VA.

Order number **D1640**

D1640-CA 16VAC 40VA xfmr Canada

For use in Canada. System transformer rated at 16.5 VAC, 40 VA.

Order number **D1640-CA**

D9002-5 Mounting plate, 6 location 3-hole, 5 pcs

5 pack of mounting skirts for B8103, D8103, D8108A, and D8109 enclosures. Each skirt can hold up to six standard 3-hole mounting modules.

Order number **D9002-5**

D101 Enclosure lock and key set

Short-body lock set with one key supplied. Uses the D102 (#1358) replacement key.

Order number **D101**

D110 TAMPER SWITCH 2/PKG

Screw-on tamper switch that fits all enclosures.
Shipped in packages of two.
Order number **D110**

ICP-EZTS TAMPER SWITCH-DUAL

Combination tamper switch with a wire loop for additional tamper outputs.
Order number **ICP-EZTS**

B8103 Universal enclosure, white

White steel enclosure measuring 41 cm x 41 cm x 9 cm (16 in. x 16 in. x 3.5 in.).
Order number **B8103**

D8108A Attack resistant enclosure, large, grey

Grey steel enclosure measuring 41.5 cm x 41.5 cm x 9 cm (16 in. x 16 in. x 3.5 in.).
UL Listed. Includes a lock and key set.
Order number **D8108A**

D8109 Fire enclosure, 16x16x3.5", red

Red enclosure measuring 16 in. x 16 in. x 3.5 in. (41 cm x 41 cm x 9 cm). Made from 16 gauge (1.5 mm) cold-rolled steel with a full-length hinge. Includes a lock and key set. UL Listed for commercial fire/burglary alarm applications.
Order number **D8109**

D8004 Transformer enclosure kit, grey

For applications that might require a remote transformer in an enclosure. Can be used with B Series control panels and D9412GV4/D7412GV4 control panels.
Order number **D8004**

BATB-40 Battery box/enclosure, 22x20.75x7.25"

22 x 20.75 x 7.25" (56 x 53 x 18.5 cm). Holds two dry or wet cell batteries. Optional BATB-SHELF battery shelf increases number of batteries. Suitable for residential/commercial fire or burglary applications.
Order number **BATB-40**

BATB-80 Battery box/enclosure, 14x20.75x7.25"

14 x 20.75 x 7.25" (36 x 53 x 18.5 cm). Battery box/enclosure with shelf holds up to four dry or wet cell batteries. Suitable for residential/commercial fire or burglary applications.
Order number **BATB-80**

B99 USB direct connect cable

Male A to Male A USB cable for local programming of control panels with on-board USB ports.
Order number **B99**

B915 Basic Keypad

Two-line alphanumeric basic keypad with language function keys.

Available languages: English, Chinese, French, Greek, Italian, Hungarian, Polish, Portuguese, Spanish.
Order number **B915**

B915I LCD keypad, icon keys, SDI2

Two-line alphanumeric basic keypad with icon function keys.

Available languages: English, Chinese, French, Greek, Italian, Hungarian, Polish, Portuguese, Spanish.
Order number **B915I**

B920 2 Line Alpha Numeric Keypad (SDI2)

Two-line alphanumeric keypad

Available languages: English, French, Hungarian, Italian, Portuguese, Spanish.
Order number **B920**

B921C Two-line Keypad w/Touch keys, Inputs

Two-line alphanumeric keypad with inputs and capacitive touch keys in black.

Available languages: English, French, Hungarian, Italian, Portuguese, Spanish.
Order number **B921C**

B930 ATM Style-Alpha Numeric Keypad (SD12)

Five-line ATM style alphanumeric keypad

Available languages: English, French, Hungarian, Italian, Portuguese, Spanish.
Order number **B930**

B942 Touch Screen KP Prox/Input/Output, black

Black SDI2 touch screen keypad with inputs and one output.

Available languages: English, Chinese, French, Greek, Italian, Hungarian, Polish, Portuguese, Spanish.
Order number **B942**

B942W Touch screen KP, prox/input/output,white

White SDI2 touch screen keypad with inputs and one output.

Available languages: English, Chinese, French, Greek, Italian, Hungarian, Polish, Portuguese, Spanish.
Order number **B942W**

B925F Fire and intrusion keypad, SDI2

Two-line alphanumeric fire and intrusion keypad.
Order number **B925F**

B926F Fire keypad, SDI2

Two-line alphanumeric fire keypad
Order number **B926F**

Software Options**D5500C-USB Kit with DVD and USB security dongle**

Remote Programming Software (RPS) with USB security key (dongle).

Order number **D5500C-USB**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
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130 Perinton Parkway
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www.boschsecurity.us

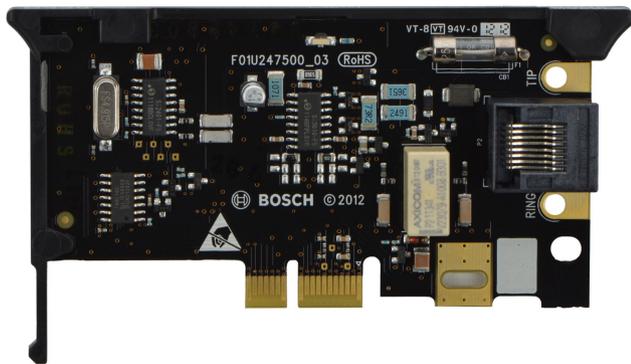
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11 Bishan Street 21
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apr.securitysystems@bosch.com
www.boschsecurity.asia

B430 Plug-in Communicator, Telephone

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Provides a single telephone line with RJ-45 connection for central station reporting and remote programming
- ▶ Easily configured for communications from Remote Programming Software (RPS) or a keypad, eliminating the need for separate configuration
- ▶ Easy two-step plug-in installation, troubleshooting, and maintenance

The B430 provides communication over the PSTN (Public Switched Telephone Network) by connecting the PSTN to the control panel. The module provides a single telephone jack, and easily installs into the control panel on-board plug-in module connector.

Functions

Central station reporting

The B430 supports reporting to a central station receiver through the telephone lines.

Remote programming of Bosch control panels

The B430 supports secure RPS programming of compatible Bosch control panels.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Australia	RCM	ACMA
Europe	CE	EMC, RoHS [B915, B920, B930, B430, B208, B308, B901]
USA	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems

Region	Regulatory compliance/quality marks	
	UL	UL 985 - Household Fire Warning System Units
	UL	UL 1023 - Household Burglar Alarm System Units
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL	UL 1610 - Central Station Burglar Alarm Units
	CSFM	see www.boschsecurity.com (the Bosch website)
	FCC	Part 15 Class B
	FCC	Part 68
	FDNY-CoA	6286 D7412GV4 D9412GV4 NYC COA 6286 2018-2021
Canada	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC	CAN/ULC S545 - Residential Fire Warning System Control Units
	ULC	CAN/ULC S559 - Fire Signal Receiving Centres and Systems

Region	Regulatory compliance/quality marks	
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	ULC	S1871-20121210
	IC	ICES-003 - Information Technology Equipment (ITE)
Brazil	ANATEL	0139-18 [B430]

Installation/configuration notes

Mounting considerations

Connect the B430 Plug-in Telephone Communicator to any compatible control panel or interface module, which can then be mounted in a variety of enclosures for optimal situations.

Wiring considerations

The B430 connects to the control panel or interface modules without tools or physical wiring for power. It has an RJ-45 jack for plugging in the phone line (PSTN).

Communication speed

The module communicates at 2400 baud maximum.

Compatibility

Control panels	B9512G/B9512G-E B6512 B8512G/B8512G-E B5512/B5512E B4512/B4512E B3512/B3512E
Phone cords	D161 Dual Modular Telephone Cord

	D162 Modular Telephone Cord
Phone jack	D166 Telephone Jack

Parts included

Quantity	Component
1	B430 Plug-in Telephone Communicator
1	Literature pack

Technical specifications

Electrical

Current (maximum)	Standby: 24 mA Alarm: 24 mA
Voltage (operating)	12 VDC nominal

Mechanical

Dimensions	50 mm x 93.5 mm x 15.25 mm (2 in. x 3.68 in. x 0.60 in.)
Weight	0.6 kg (1.3 lb)

Environmental

Relative humidity	5% to 93% at +32°C (+90°F)
Temperature (operating)	0°C to +49°C (+32°F to +120°F)
FCC details	FCC registration number: ESVAL00BB430 Ringer Eq: 0.0B

Ordering information

B430 Plug-in Communicator, Telephone

Plug-in PSTN communication module for control panel to central station receiver communication.

Order number **B430**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

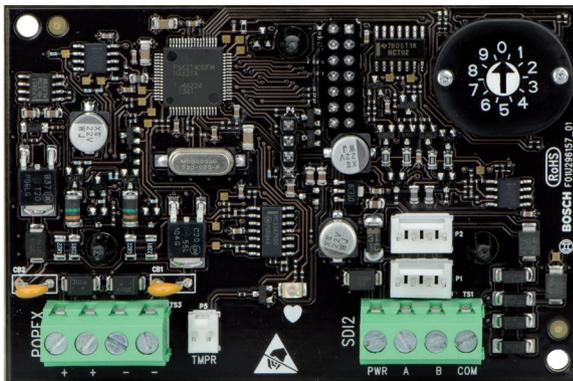
Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

B299 Expansion module, SDI2

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Provides point identification for up to 100 connected addressable initiating devices using POPITs
- ▶ Supervises wiring to devices for circuit integrity
- ▶ Expands the number of points in the system
- ▶ Compact size
- ▶ Interconnect wiring connectors for easy installation

The B299 POPEX Module is an SDI2 compatible device. The module communicates to the control panel over the SDI2 bus, and provides support for up to 100 POPIT (Point Of Protection Input Transponder) devices. This occurs over a single expansion loop using two pairs of terminals.

System overview

Each module installs in the control panel enclosure or in an adjacent approved enclosure. Future system expansion is very economical as the module supports zone expansion through supporting D9127U/T POPIT modules and POPIT'ed detectors. The POPIT modules can be placed anywhere along the two-wire data expansion loop from the module.

Certifications and approvals

Region	Regulatory compliance/quality marks	
USA	ANSI-SIA	CP-01-2010-Control Panel Standard - Features for False Alarm Reduction
	UL	[B9512G, B9512G-E, B8512G, B8512G-E, B299, B600, B901, B925F, B926F]
	UL	UL 1023 - Household Burglar Alarm System Units

Region	Regulatory compliance/quality marks	
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL	UL 1610 - Central Station Burglar Alarm Units
	UL	UL 1635 - Standard for Digital Alarm Communicator System Units
	UL	UL 294 - Standard for Access Control Units and Systems
	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems
	UL	UL 985 - Household Fire Warning System Units
	FM	Central Station
	FM	Local Protective Signaling
	FM	Remote Station
	CSFM	California Office of The State Fire Marshall

Region	Regulatory compliance/quality marks	
	FCC	Part 15 Class B
Canada	ULC	[B9512G, B9512G-E, B8512G, B8512G-E, B299, B600, B901, B925F, B926F]
	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC	CAN/ULC S545 - Residential Fire Warning System Control Units
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	IC	ICES-003 - Information Technology Equipment (ITE)

Installation/configuration notes

Mounting

Mount the module into the enclosure's 3-hole mounting pattern using the mounting screws and mounting bracket.

Wiring

Use the control panel SDI2 terminals labeled R, Y, G, B (PWR, A, B, COM) when wiring to the module.

Connect the control panel terminals to the module terminals labeled R, Y, G, B (PWR, A, B, COM). You can also use the SDI2 interconnect cable.

Compatibility

Control panels	B9512G/B9512G-E (6 total B299 modules) B8512G/B8512G-E (1 B299 module)
POPIT devices	D9127U/T POPIT module ZX776Z/ZX794Z PIR motion detector ZX835 TriTech motion detector ZX935Z/ZX938Z PIR motion detector ZX970 TriTech motion detector D278S 12V smoke base D298S 24V smoke base F220-B6PM POPIT smoke (master) F220-B6PS POPIT smoke base

Parts included

Quantity	Component
1	Module
1	Hardware pack
1	Interconnect cable
1	Installation manual

Technical specifications

Properties

Dimensions	2.9 in x 5.0 in x 0.6 in (73.5 mm x 127 mm x 15.25 mm)
Weight	11.2 oz (0.30 kg)

Environmental considerations

Relative humidity	5% to 93% at +32°C (+90°F)
Temperature (operating)	0°C to +49°C (+32°F to +120°F)

Power requirements

Current	Standby: 35 mA + total device current Alarm: 35 mA + total device current
Voltage (input)	12 VDC

Wiring

Terminal wire size	12 AWG to 22 AWG (2.0 mm to 0.65 mm)
SDI2 wiring	Maximum distance – Wire size (unshielded wire only): 200 ft (60 m) - 22 AWG (0.65 mm), 500 ft (152 m) - 18 AWG (1.02 mm)
POPIT loop wiring	Maximum wire length: 1800 ft (548 m) - 22 AWG (0.65 mm), 4497 ft (1370 m) - 18 AWG (1.02 mm)

Ordering information

B299 Expansion module, SDI2

Provides system expansion support for up to 100 POPIT devices

Order number **B299**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
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North America:
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Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
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Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
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Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

B920 2 Line Alpha Numeric Keypad (SDI2)

www.boschsecurity.com



BOSCH
Invented for life



- ▶ 2-line LCD display with up to 32 character point, user, and area names
- ▶ Simple menu-style user interface with dedicated function buttons for common commands, including status indication
- ▶ Situation sensitive on-screen help makes system operation simple and easy
- ▶ Highly visible on (arm)/alarm, ready to turn on (arm), power and gas alarm indicators
- ▶ Simple installation with self-locking base and chassis design, plus built-in bubble level

- Audible tones from the keypad sounder alert personnel to fire events and assist fire fighters in locating the keypad.

The B920 Two-line Alphanumeric Keypad (SDI2) is a SDI2 bus compatible device. Each keypad has user adjustable options such as volume and display brightness. The B920 shows two-line system messages for all areas.

Keypad languages

Available languages: English, Dutch, French, German, Hungarian, Italian, Portuguese, Spanish, Swedish.

System overview

- For commercial use, install the keypad in building entrances and areas with unrestricted access. Mounting a keypad near exterior doors in hotel or business lobbies allows people to identify the type and location of the emergency.
- For residential use, install the keypad near the front and rear entrances to the home. Install additional keypads in a kitchen or in a bedroom.
- Use multiple keypads in a large building with many separate areas of security. Program multiple keypads to control multiple areas.

Functions

LCD display

The keypad uses words, numbers, and symbols to show the status of the security system. When several events occur, the keypad shows each event in order of priority.

Keys

Each keypad has 10 number keys, 7 function keys, and 6 navigation keys. When pressed, keys turn on keypad backlighting and emit the keypress tone (short beep). The function keys include programmable function keys and keys to initiate arming and bypassing with one keypress.

Audible tones

The keypad has a built-in speaker that produces several distinct warning tones. The tones are differentiated so that the user can recognize an event

simply by hearing its associated tone. The keypad backlight illuminates when it emits an audible tone. Users can use a passcode to silence the tone.

Status indicators

The status indicators on the keypad provide a quick visual reference for system status.

✓	The indicator lights when the system is ready to turn on (arm).
🔒	The indicator lights when the system is on (armed).
⚠	The indicator lights when there is a trouble condition.
🚒	The indicator lights when dangerous gases are present including carbon monoxide (NFPA 720).
⚡	The indicator lights when the system has power.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Australia	RCM	ACMA
Europe	CE	EMC, RoHS [B915, B920, B930, B430, B208, B308, B901]
USA	UL	
	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 985 - Household Fire Warning System Units
	UL	UL 1023 - Household Burglar Alarm System Units
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
Canada	UL	UL 1610 - Central Station Burglar Alarm Units
	CSFM	see www.boschsecurity.com (the Bosch website)
	FCC	Part 15 Class B
	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC	CAN/ULC S545 - Residential Fire Warning System Control Units
	ULC	CAN/ULC S559 - Fire Signal Receiving Centres and Systems
USA	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems

Region	Regulatory compliance/quality marks	
	ULC	S1871-20121210
	IC	ICES-003 - Information Technology Equipment (ITE)

Installation/configuration notes

Mounting considerations

Mount in indoor, dry locations.

Power supply

A compatible control panel supplies the power and data requirements to the keypad through a four-wire connection.

Enclosure and wiring

The sliding self-locking enclosure has an integrated bubble level and custom gap-free, lift-gate style terminal blocks to make installation easier.

Compatible control panels

B9512G/B9512G-E

B8512G/B8512G-E

B6512

B5512/B5512E firmware v2.02 and higher

B4512/B4512E firmware v2.02 and higher

B3512/B3512E firmware v2.02 and higher

D9412GV4/D7412GV4 firmware v2.02 and higher

Parts included

Quantity	Component
1	Keypad
1	Hardware pack
1	Set of ABC key labels
1	Installation Guide
1	User's Quick Reference Guide

Technical specifications

Properties

Dimensions	158 mm x 120 mm x 26 mm (6.2 in x 4.7 in x 1 in)
Weight	11.3 oz (0.32 kg)
Material	Acrylonitrile butadiene styrene (ABS) Poly(methyl methacrylate) (PMMA)
Display window	2 line display 18 characters per line
Indicators	Illuminated keys Status indicators Warning and indicating tones

Environmental considerations

Relative humidity	5% to 93% at +32°C (+90°F) non-condensing
Temperature (operating)	0°C to +50°C (+32°F to +122°F)

Power requirements

Current	Standby: 35 mA Alarm: 70 mA
Voltage (input)	12 VDC nominal

Wiring

Terminal wire size	12 AWG to 22 AWG (2.0 mm to 0.65 mm)
SDI2 wiring	Maximum distance - wire size (unshielded wire only): 305 m (1000 ft) - 22 AWG (0.65 mm)

Ordering information**B920 2 Line Alpha Numeric Keypad (SDI2)**

Two-line alphanumeric keypad
Available languages: English, Dutch, French, German, Hungarian, Italian, Portuguese, Spanish, Swedish.
Order number **B920**

Accessories**B56 Keypad surface mount box**

Surface mount box for mounting a keypad to concrete or block.
Order number **B56**

B96 Trim plate for keypad

Cover the wall footprint of previous keypads when replacing them with the new, slim design of B Series keypads. The white trim bezel is 8.6 in x 6.3 in x 0.12 in (22 mm x 16 mm x 3 mm).
Order number **B96**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
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onlinehelp@us.bosch.com
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Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
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Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

180 Series 3/4" and 1" Steel Door Recessed Switch Sets



180-12



184-12

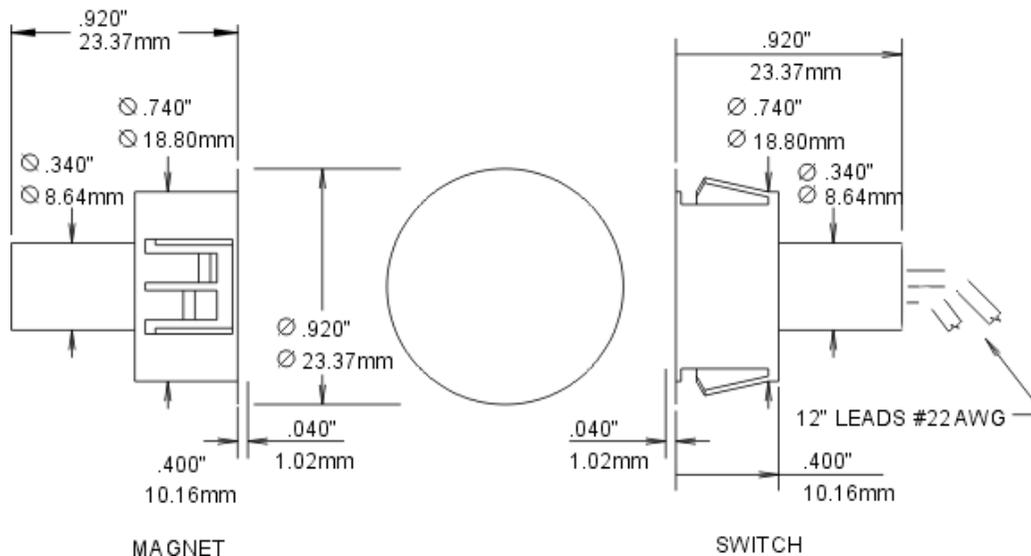


8080-T

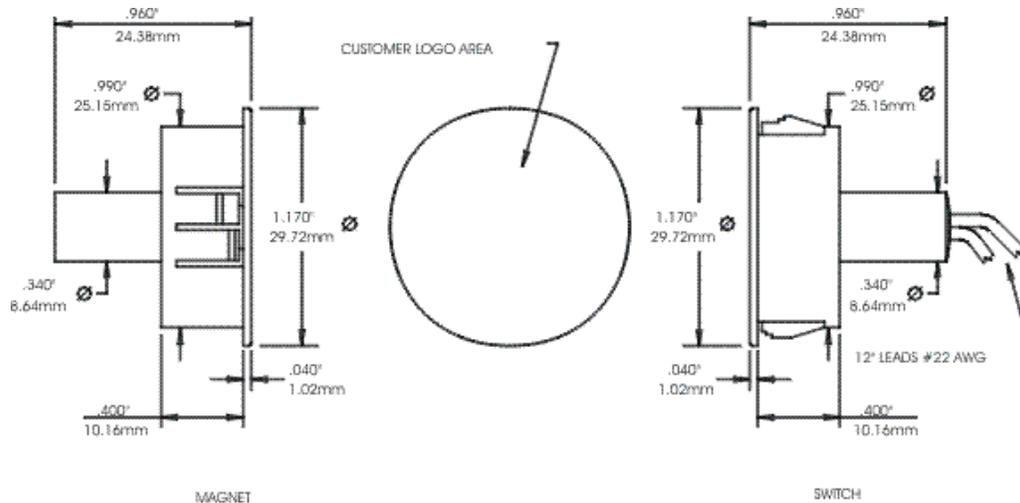
- Lifetime Warranty
- Colors: White, Brown, Grey or Black
- UL and ULC Approved
- 180-12 & 184-12 UL 10C Fire Rated
- Available in Closed Loop, Open Loop and SPDT
- 3/4" and 1" Diameter Mounting
- Standard 12" Leads or Terminals
- Self-Locking
- Solid, One Piece Design
- 7/8" Diameter also Available - Call Factory
- Switches or Magnets are Available Separately
- Standard 1/2"+ Gap on Steel
- Wide Gap 1"+ Gap on Steel
- Supervisory Loops Available

The GRI 180 Series is the industry standard 3/4" diameter recessed steel door switch set with 12" leads. The 184 Series is a 1" diameter switch set.

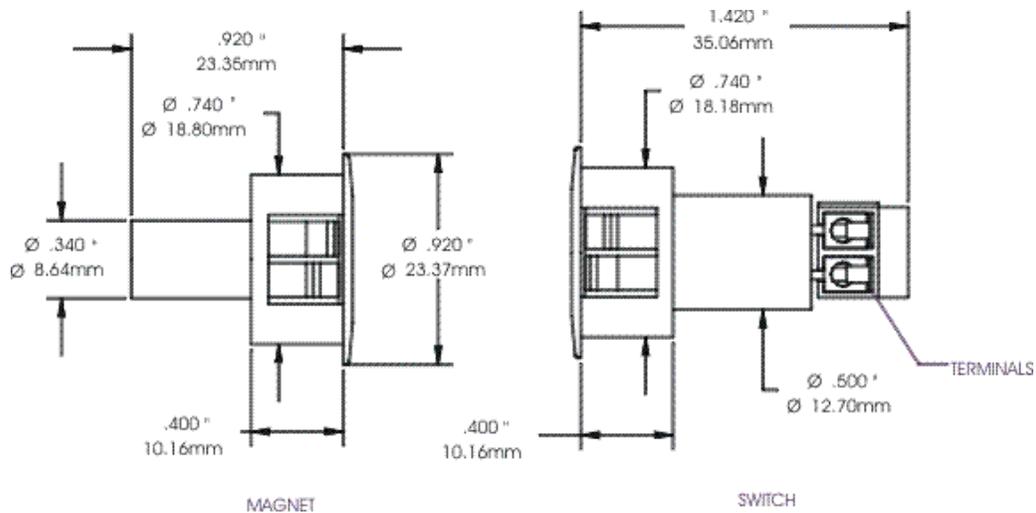
The innovative GRI 8080-T Series is a 3/4" diameter recessed switch set designed for residential, commercial and industrial steel doors and frames. The shorter length and the introduction of PC board type terminals makes the installation of the set quick and simple with no soldering, B connectors or tape to catch during installation or removal, reducing the cost of installation and creating greater profitability.



180-12 Series Recessed Steel Door Switch Set



184-12 Series Recessed Steel Door Switch Set



8080-T Series Recessed Steel Door Switch Set

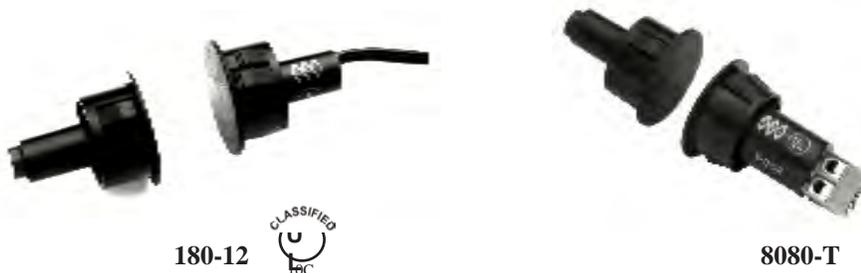
RECESSED 3/4" & 1" STEEL DOOR SWITCH SET



180/184/8080-T SERIES



- ◆ Recessed Magnetic Contact
- ◆ 12" #22AWG Leads or Screw Terminals
- ◆ Longer Leads, Zip Cord or Jacketed Cable Upon Request
- ◆ Built-in E.O.L. Resistors and Diodes Upon Request
 - ◆ Supervisory Loops Upon Request
- ◆ Switches and Magnets Available Separately
 - ◆ Colors: White, Brown, Gray, Black
- ◆  Indicates U.L. 10C Fire Rated



180-12



8080-T

PART NUMBERS:

		Closed Loop	Open Loop	SPDT	DPDT
Standard Gap Up To 1/2" On Steel*	3/4" Dia.	180-12 	185-12	190-12	195-12
	1" Dia.	184-12 	189-12	194-12	199-12
	3/4" Dia.	8080-T	8585-T		
	1" Dia.	8484-T	8989-T		
Wide Gap 3/4" + On Steel*	3/4" Dia.	180-12WG 	185-12WG	190-12WG	195-12WG
	1" Dia.	184-12WG 	189-12WG	194-12WG	199-12WG
	3/4" Dia.	8080-TWG	8585-TWG		
	1" Dia.	8484-TWG	8989-TWG		

*Gaps will increase substantially for installations other than steel

*Gaps up to one inch on steel when paired with MC-180 Door Channel Magnet

7/8" Diameter Also Available. P/N 81-12 and 81-12WG. White or Black only. Please call factory.

WARRANTY:

Lifetime warranty against workmanship, material and factory defects.

GEORGE RISK INDUSTRIES, INC.
G.R.I. PLAZA
KIMBALL, NE 69145



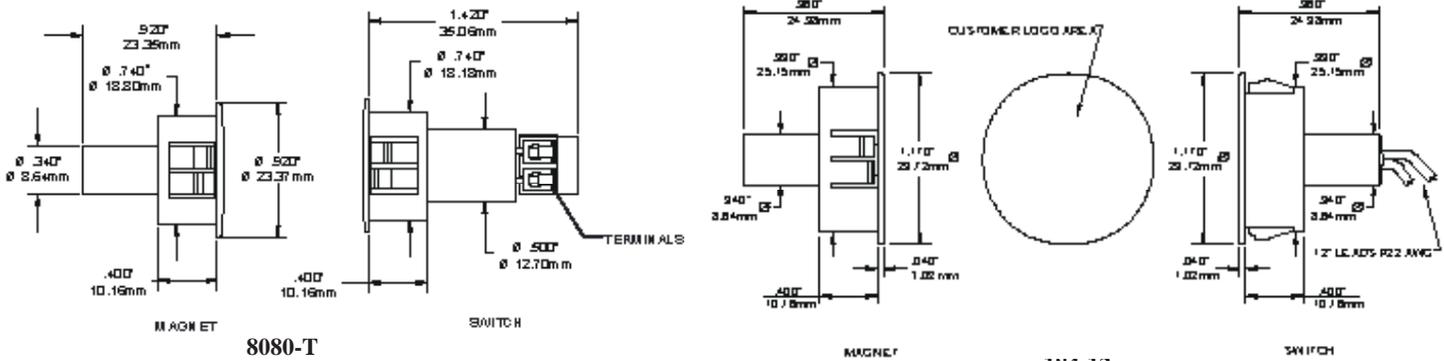
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TOLL-FREE 1-800-445-5218
TOLL-FREE 1-800-523-1227
(308) 235-4645
FAX (308) 235-3561
E-MAIL: sales@grisk.com
WEB SITE: www.grisk.com



RECESSED 3/4" & 1" STEEL DOOR SWITCH SET

INSTALLATION APPLICATIONS: The G.R.I. 180-12 is the industry standard 3/4" diameter recessed steel door switch set with 12" leads. The innovative G.R.I. 8080-T series is a 3/4" diameter recessed switch set designed for residential, commercial and industrial steel doors and frames. The shorter length terminals makes the installation of the set quick and simple.



GRI products meet or exceed these minimum general specifications:

PART NUMBER	LOOP TYPE	ELECTRICAL CONFIG.	REED FORM	MAXIMUM INITIAL CONTACT RESISTANCE (Ω)	MAXIMUM CONTACT RATING (W)	MAXIMUM SWITCHING VOLTAGE (VDC)	MAXIMUM SWITCHING CURRENT (A)
180-12	Closed	N/O	A	.150	10	200	.400
180-12WG	Closed	N/O	A	.150	10	200	.400
184-12	Closed	N/O	A	.150	10	200	.400
184-12WG	Closed	N/O	A	.150	10	200	.400
8080-T	Closed	N/O	A	.150	10	160	.400
8080-TWG	Closed	N/O	A	.150	10	160	.400
8484-T	Closed	N/O	A	.150	10	160	.400
8484-TWG	Closed	N/O	A	.150	10	160	.400
185-12	Open	N/C	B	.140	5	175VDC	.250
185-12WG	Open	N/C	B	.140	5	175VDC	.250
189-12	Open	N/C	B	.140	5	175VDC	.250
189-12WG	Open	N/C	B	.140	5	175VDC	.250
8585-T	Open	N/C	B	.140	5	175VDC	.250
8585-TWG	Open	N/C	B	.140	5	175VDC	.250
8989-T	Open	N/C	B	.140	5	175VDC	.250
8989-TWG	Open	N/C	B	.140	5	175VDC	.250
190-12	Open/Closed	SPDT	C	.140	5	175VDC	.250
190-12WG	Open/Closed	SPDT	C	.140	5	175VDC	.250
194-12	Open/Closed	SPDT	C	.140	5	175VDC	.250
194-12WG	Open/Closed	SPDT	C	.140	5	175VDC	.250
195-12		DPDT	C X 2	.140	5	175VDC	.250
195-12WG		DPDT	C X 2	.140	5	175VDC	.250
199-12		DPDT	C X 2	.140	5	175VDC	.250
199-12WG		DPDT	C X 2	.140	5	175VDC	.250

CONTACT YOUR G.R.I. DISTRIBUTOR OR CALL:

GEORGE RISK INDUSTRIES, INC.
G.R.I. PLAZA
KIMBALL, NE 69145



MADE IN U.S.A.

TOLL-FREE 1-800-445-5218
TOLL-FREE 1-800-523-1227
(308) 235-4645
FAX (308) 235-3561
E-MAIL: sales@grisk.com
WEB SITE: www.grisk.com

D9127 Series POPIT Modules

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Provides point identification of initiating devices
- ▶ Supervises wiring to devices for circuit integrity
- ▶ Expands the number of points in the system
- ▶ Compact size
- ▶ Terminal connections for reliability

The D9127 Series POPIT Modules includes the D9127T (with magnetic tamper switch) and the D9127U (without tamper). They are used with a D8125 Addressable Expansion Module when there is a need to expand a compatible control panel beyond its standard number of on-board initiating zones or points. Future system expansion is very economical as D9127 Series POPITs can be added anywhere along the two-wire data expansion loop from the D8125 module.

Both modules include proven technology that combines zone and point supervision with individual device addressing on one pair of wires. Screw terminals provide reliable connections for the data expansion loop and supervised sensor loop wiring. Install a 33 kΩ end-of-line resistor at the farthest point on the loop for proper supervision. The units are small and easily installed in standard outlet boxes, above false ceilings, closets, or other accessible locations.

Certifications and approvals

Region	Certification
USA	UL
	UL 365 - Police Station Connected Burglar Alarm Units
	UL 464 - Standard for Audible Signal Appliances
	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems
	UL 985 - Household Fire Warning System Units
	UL 1023 - Household Burglar Alarm System Units
	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL 1610 - Central Station Burglar Alarm Units
	UL 1635 - Standard for Digital Alarm Communicator System Units
	FM

Region	Certification	
	CSFM	see our website
	FDNY-CoA	6059 [D9412GV3 & D7412GV3]
	FDNY-CoA	6174
	FDNY-CoA	6196
Australia	CTICK	C-Tick
Canada	ULC	AMCX7.S1871 - Central Station Alarm Units Certified for Canada
	ULC	AOTX7.S1871 Local Alarm Units Certified for Canada
	ULC	APAW7.S1871 Police-station-connected Alarm Units Certified for Canada
	ULC	APOU7.S1871 Proprietary Alarm Units Certified for Canada
	ULC	NBSX7.S1871 Household Burglar Alarm System Units Certified for Canada

Installation/configuration notes

Compatibility Information

Control Panels All G Series control panels, D9412, D7412, D7212, D7212B1, D9112, D9112B1, D8112G1, D8112G2, and D9124

Module D8125

The D8125 Multiplex Zone Expander is required. The D9127 modules are wired in parallel on the D8125 data loop.

Number of POPIT Modules per Control Panel

D7212G, D7212GV2, D7212GV3	32 D9127 POPITs
D7212B1	40 D9127 POPITs
D7212, D7412, D7412G, D7412GV2, D7412GV3	67 D9127 POPITs
D9124	119 D9127 POPITs
D9112B1	126 D9127 POPITs
D9112, D9412, D9412G, D9412GV2, D9412GV3	238 D9127 POPITs

Wiring Considerations

Wire Size	Maximum Length of all Data Expansion Loops Combined
0.8 mm (22 AWG)	549 m (1800 ft)
1.0 mm (20 AWG)	881 m (2890 ft)
1.2 mm (18 AWG)	1402 m (4600 ft)
1.5 mm (16 AWG)	2231 m (7320 ft)
1.8 mm (14 AWG)	3551 m (11650 ft)

D8125 to POPIT Loops

Use one two-wire data expansion loop, or distribute the POPITs on up to three loops. The maximum lengths shown in the following table are for all data expansion loops combined connected to the same D8125 module. Setting DIP switches on the POPIT modules assigns them to point numbers. The switch setting on each POPIT assigns it a point number, regardless of its physical location.

POPIT to Sensor Loops

The number of detection devices each sensor loop can supervise is limited only by the resistance on the loop. Resistance on each sensor loop must be less than 100 Ω not including the end-of-line (EOL) resistor. Certain UL and National Fire Protection Association (NFPA) applications can limit the number of detection devices. Consult the appropriate UL or NFPA standards.

Terminate each POPIT sensor loop with the 33 k Ω EOL resistor included with each POPIT.

Use a twisted-pair wire (six twists per foot) in all POPIT installations for both the data expansion loop wiring and the POPIT sensor loops. Run wires away from AC sources to prevent AC induction.

Parts included

Quantity	Component
1	POPIT module
1	33 k Ω EOL resistor
1	Magnet (D9127T only)
1	Hardware pack
1	Literature pack

Technical specifications

Environmental Considerations

Relative humidity	Up to 93% non-condensing
Temperature (operating)	0°C to +50°C (+32°F to +122°F)

Properties

Color	Off white
Dimensions	8.1 cm x 3.8 cm x 2.4 cm (3.2 in. x 1.5 in. x 0.9 in.)
Material	UL Listed fire-resistant

Power Requirements

Current draw	0.8 mA maximum
Resistance	Maximum increase in resistance on the POPIT loop is 1000 Ω . Maximum resistance between the D8125 module and each POPIT is 90 Ω .
Voltage (operating)	12 VDC nominal

Sensor Loop

Resistance	Maximum resistance on the sensor loop is 100 Ω .
Response time	1 sec approximately

Ordering information**D9127T POPIT Module**

Includes a magnetic tamper switch.

Order number **D9127T**

D9127U POPIT Module

No tamper switch.

Order number **D9127U**

Represented by:**Americas:**

Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
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Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:

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11 Bishan Street 21
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Phone: +65 6571 2808
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apr.securitysystems@bosch.com
www.boschsecurity.asia

China:

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Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com



ZX776Z PIR Intrusion Detector



The ZX776Z PIR Intrusion Detector uses Motion Analyzer II signal processing to reduce false alarms. The detector's internally pointable mirrors and three coverage patterns provide installation flexibility. The ZX776Z includes an internal POPIT for addressable alarm and trouble signaling while communicating on the Zonex bus.

Functions

Motion Analyzer II Processing

Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration, and polarity of signals to make an alarm decision. It tolerates extreme levels of heat and light disturbances caused by heaters, air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights.

Motion Monitor Supervision

Confirms the detector has a clear view of the detection area. The Zonex Bus indicates a trouble condition and the LED pulses if the detector has not alarmed at least once during a selected time period.

Insect and Draft Immunity

The sealed optical chamber provides immunity to drafts and insects.

- ▶ **Internal POPIT**
- ▶ **Motion Analyzer II processing**
- ▶ **Motion Monitor supervision**
- ▶ **Insect and draft immunity**
- ▶ **PIR supervision**
- ▶ **Test pins**
- ▶ **Three sensitivity settings**

PIR Supervision

PIR operation is checked electronically approximately every 12 hours. If the circuit fails, the LED pulses four times and the trouble output is indicated through the Zonex bus.

Test Pins

Internal noise voltage test pins provide precise pattern location and background disturbance evaluation using a standard analog meter.

Three Sensitivity Settings

- **Standard Sensitivity:** Recommended setting for maximum false alarm immunity. Tolerates environment extremes on this setting. Not recommended for barrier or long range coverage patterns.
- **Intermediate Sensitivity:** Recommended setting for any location where an intruder is expected to cover only a small portion of the protected area. Tolerates normal environments on this setting.
- **High Sensitivity:** Fast response to intruder signals. For use in quiet environments where fluctuations in heat or light are not anticipated.

Certifications and Approvals

Region	Certification
USA	UL ANSR: Intrusion Detection Units (UL639)

Installation/Configuration Notes

Compatibility Considerations

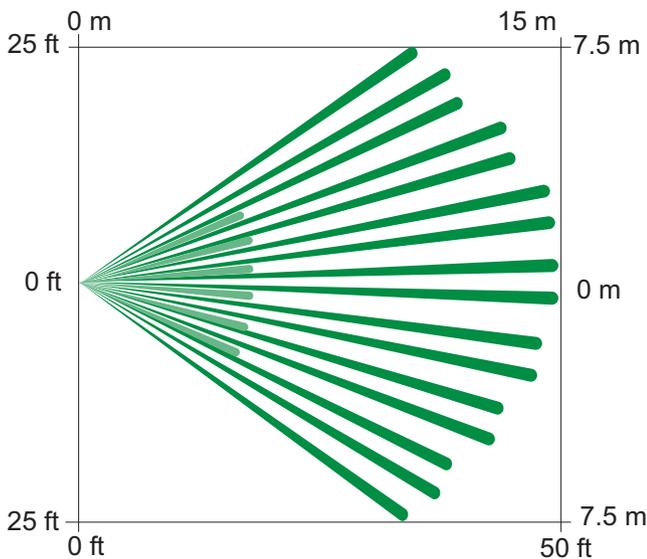
Model	Compatible Control Panels
ZX776Z	<ul style="list-style-type: none"> • GV2 and G Series • 9000 Series • D9112B1 • D7212B1

Note The ZX776Z connects to control panels on a Zonex bus.

Mounting Considerations

Select a location that is most likely to intercept an intruder moving across the coverage pattern. Ensure the mounting surface is solid and vibration free. Avoid hot and cold drafts, direct sunlight, heat sources, windows, air conditioning, and small animals. The ZX776Z does not detect through glass.

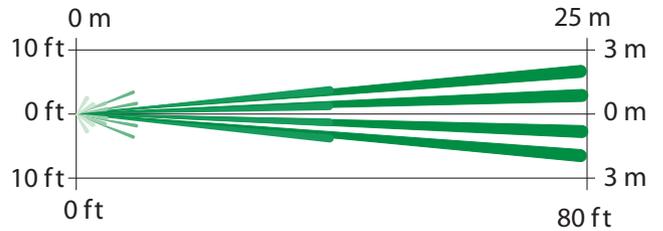
Note Misaligning the detector in an optional mounting bracket can reduce its range.



Top View
Broad: 15 m x 15 m (50 ft x 50 ft)



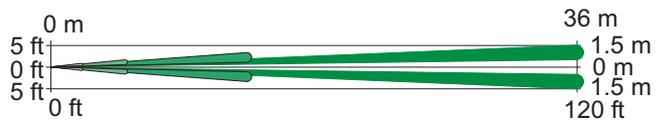
Side View
Broad: 15 m x 15 m (50 ft x 50 ft)



Top View
Barrier (OMB77): 25 m x 5 m (80 ft x 16 ft)



Side View
Barrier (OMB77): 25 m x 5 m (80 ft x 16 ft)



Top View
Long Range (OMLR77): 36 m x 3 m (120 ft x 10 ft)



Side View
Long Range (OMLR77): 36 m x 3 m (120 ft x 10 ft)

Technical Specifications

Enclosure Design

Dimensions: 14.6 cm x 9.5 cm x 6.4 cm (5.75 in. x 3.75 in. x 2.5 in.)

Environmental Considerations

Temperature (Operating): -29°C to +49°C (-20°F to +120°F)
For UL Listed Applications, 0°C to +49°C (+32°F to +120°F)

Radio Frequency Interference: No alarm or setup on critical frequencies in the range from 26 MHz to 950 MHz at 50 V/m.
(RFI) Immunity:

Mounting

Height (recommended):	2 m to 2.6 m (6.5 ft to 8.5 ft)
Location:	Surface or corner mount.
Internal Pointability:	Coverage is adjustable ±10° horizontally, +2° to -18° vertically.

Power Requirements

Alarm Supervision:	Signals through Zonex bus.
Current Draw:	Less than 1.7 mA during alarm condition
Input (Voltage):	Power comes from the control panel's two-wire Zonex bus
Standby Power:	There is no internal standby battery.

Ordering Information

ZX776Z PIR Intrusion Detector Provides 15 m x 15 m (50 ft x 50 ft) coverage, Motion Analyzer II signal processing, movable mirrors, three coverage patterns, and an internal POPIT.	ZX776Z
Accessories	
B328 Gimbal-mount Bracket Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.	B328
Swiveling B335-3 low-profile mount Swiveling, low-profile, plastic mount for wall mounting. The vertical swivel range is +10° to -20°, while the horizontal swivel range is ±25°. Available in triple packs.	B335-3
OMB77-3 Barrier Mirror Provides barrier coverage with a 25 m x 5 m (80 ft x 16 ft) pattern. Shipped in packages of three.	OMB77-3
OMLR77-3 Long-range Mirror Provides long-range coverage with a 40 m x 3 m (120 ft x 10 ft) pattern. Shipped in packages of three.	OMLR77-3
TC6000 Test Cord Test cord for connecting a compatible detector's test pins to a voltmeter. It is 4.6 m (15 ft) long.	TC6000

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by

B328 Gimbal-mount Bracket

www.boschsecurity.com



BOSCH

Invented for life



Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.

Ordering information

B328 Gimbal-mount Bracket

Mounts on a single-gang box and allows rotation of a detector. Wires are hidden inside.

Order number **B328**



245

16/4 Unshielded CMR
Audio, Control, and Low Voltage Power

Construction & Dimensions

CONSTRUCTION & DIMENSIONS	
CONDUCTOR PARAMETER	
• Number of Conductors	4
• AWG Size	16
• Conductor Stranding	19x29
• Conductor Type	Bare copper
• Nominal DCR	4.2 Ohm/1000ft
• Cabling Lay Length	3.5 in
• Twists/Foot	3.4 twist/ft
INSULATION PARAMETER	
• Insulation Type	Polypropylene - PP
• Insulation Thickness	0.008 in
• Insulation Color Code	1.Black,2.Red,3.White,4.Green
SHIELDING PARAMETER	
• Shield Type	None
ELECTRICAL CHARACTERISTICS	

Overall Construction

OVERALL CONSTRUCTION PARAMETERS	
Jacket Type	PVC
Jacket Thickness	0.017 in
Nominal Cable O.D.	0.217 in
Plenum	No
NEC UL Rating	CMR, CMG
RoHS Compliant	Yes
Pull Tension	117 lbs
Bend Radius	1.953 in
Cable Weight	48 lbs

Overall Electrical & Optical Characteristics

OVERALL ELECTRICAL/OPTICAL CHARACTERISTICS	
UL Flammability	UL1666 Vertical Shaft
CSA Flammability	FT4
Operating Range	-20 to 60 Deg C
UL Voltage Rating	300

Detailed Specification & Technical Data



245

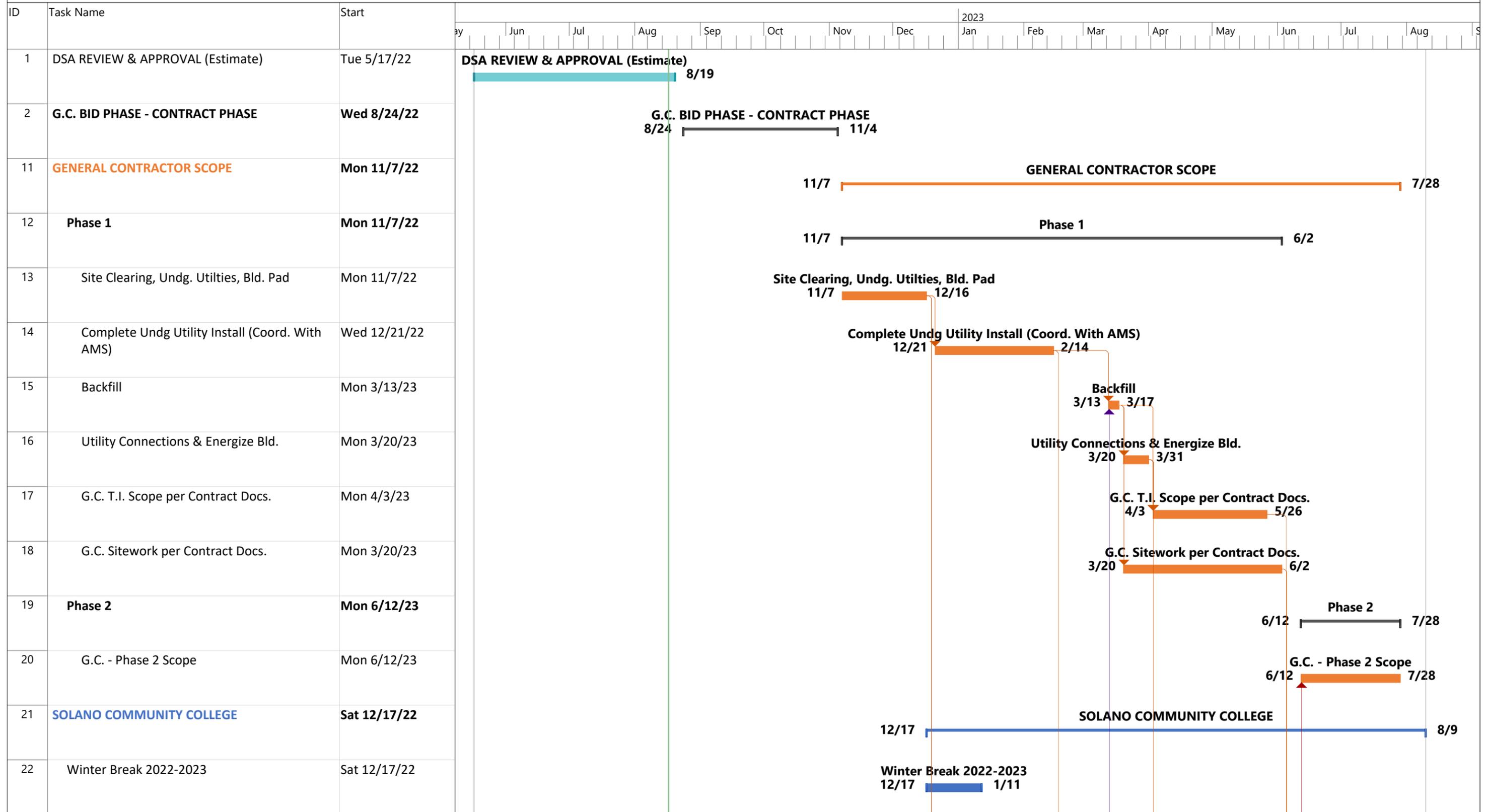
16/4 UTP CMR

Audio, Control, and Low Voltage Power

Related Products

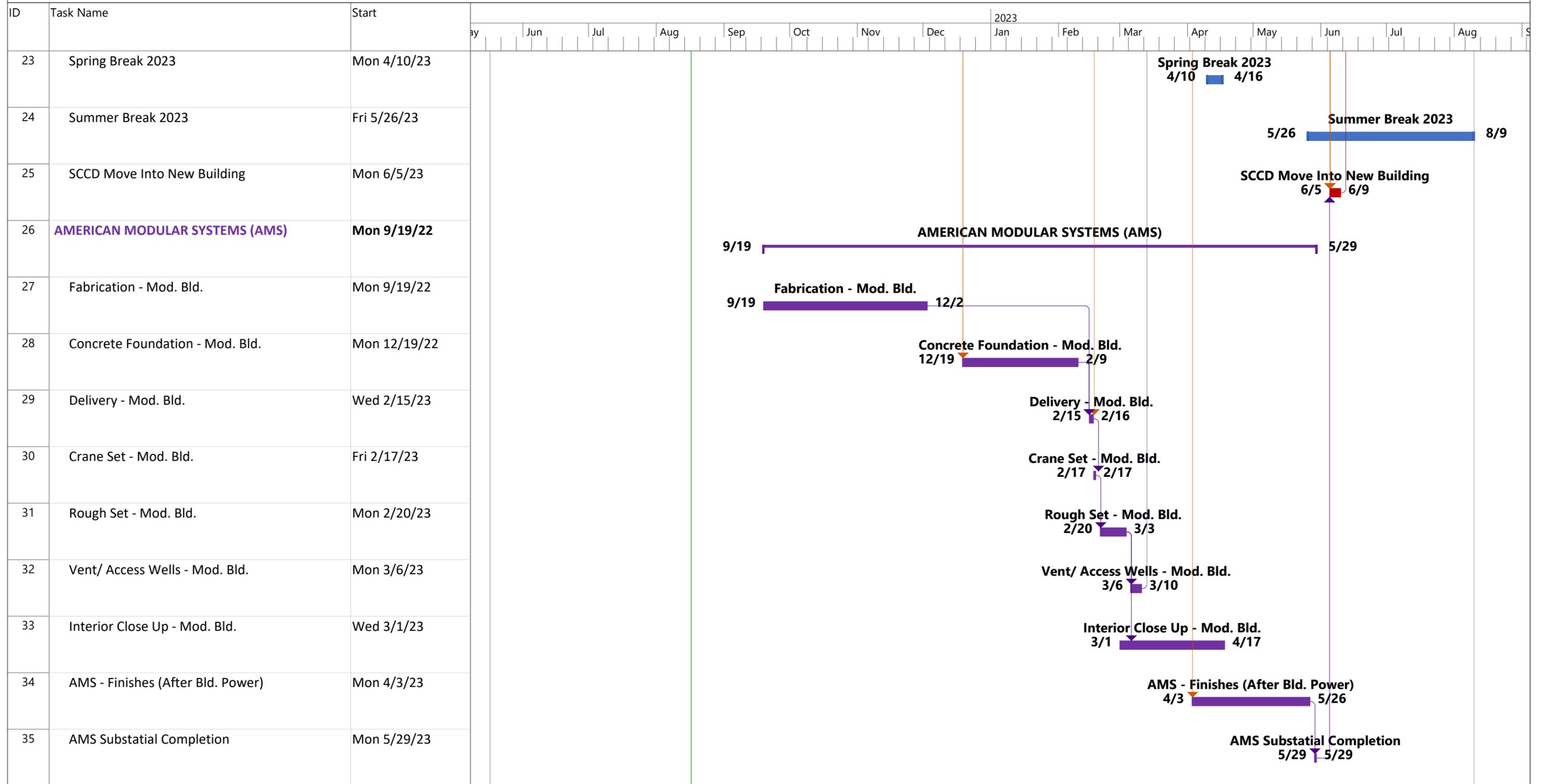
RELATED PRODUCTS	
Plenum Number	25245B
Aquaseal Direct Burial Number	AQ245
4 Pole SpeakOn	CN-NL4FC
SpeakOn Panel Mount	CN-NL4MP

SOLANO COMMUNITY COLLEGE DISTRICT
EARLY LEARNING CENTER



REFERENCE DOCUMENT

SOLANO COMMUNITY COLLEGE DISTRICT
EARLY LEARNING CENTER

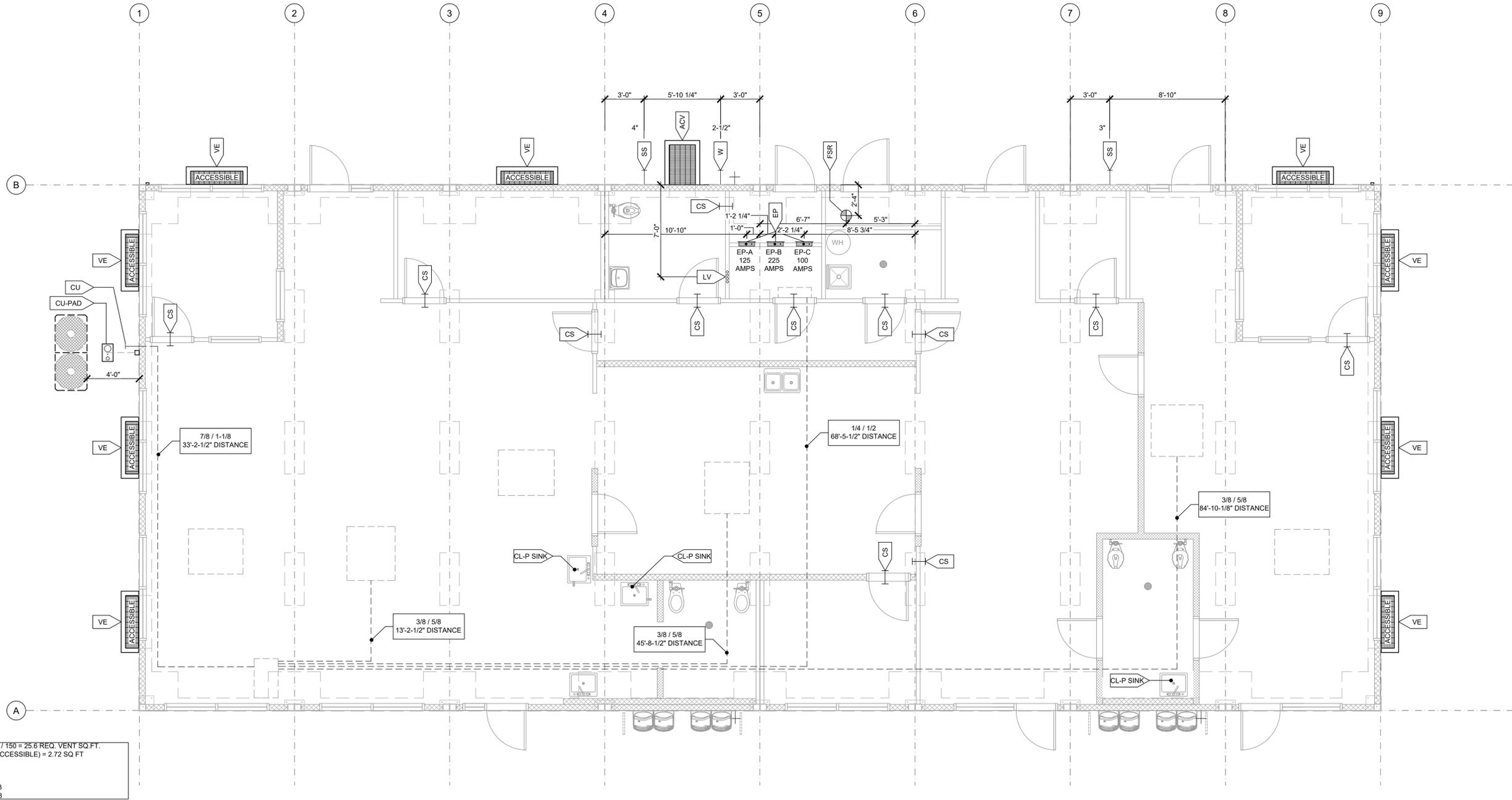


REFERENCE DOCUMENT

Schedule is provided as a reference document in order to show possible sequence of work / coordination needed between Modular Building Manufacturer (AMS) and General Contractor. General Contractor is responsible for producing actual schedule and coordinating with Modular Building Manufacturer (AMS).

SOLANO COMMUNITY COLLEGE DISTRICT
CHILD DEVELOPMENT CENTER
(1) 96'x40' BUILDING

CUSTOMER:



96'x40' = 3840 SQ. FT. / 150 = 25.6 REQ. VENT SQ. FT.
4'x12" VENT X .68 (ACCESSIBLE) = 2.72 SQ FT
ACV = 3 SQ FT
(1) ACV = 3 SQ. FT.
(9) VENTS (A) = 24.48
TOTAL SQ FT = 27.48

CONCRETE FOUNDATION POC PLAN

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

- EP** BELOW FLOOR ELECTRICAL POC:
SEE PLAN FOR AMPERAGE, 120/208 VOLT, THREE PHASE, NEMA 1 PANEL AMS TO PROVIDE PANELS
A, B, & C. PANELS A & C TO BE FED TO PANELS B. PANEL B STUBBED DOWN BELOW FF (CONNECTION
BY OTHERS)
- LV** BELOW FLOOR LOW VOLTAGE POC:
(4) 2" CONDUITS FROM ATTIC STUBBED DOWN BELOW FF (CONNECTION BY OTHERS)
- W** BELOW FLOOR WATER POC:
SEE PLAN FOR SIZE, AMS TO STUB DOWN BELOW FF 6" BEYOND FOUNDATION (CONNECTION BY
OTHERS)
- SS** BELOW FLOOR WASTE POC:
SEE PLAN FOR SIZE, AMS TO STUB DOWN BELOW FF 6" BEYOND FOUNDATION (CONNECTION BY
OTHERS)
- CL-P SINK** PRIMARY CONDENSATE POC TO SINK
AMS TO CONNECT TO P-TRAP (NO SITE CONNECTION REQ'D)
- CU-PAD** CONDENSER PAD SLEEVES - SEE DETAILS 19 FOR SIZES. AMS TO RUN LOW VOLTAGE & LINE SETS.
SITE CONTRACTOR TO PROVIDE TRENCHING, PAD, POWER (INCLUDING DISCONNECT AND
CONNECTION TO UNIT)
- CU** BELOW FLOOR SLEEVES FOR CONDENSER UNIT.
SEE DETAIL 19 FOR SIZES. AMS TO INSTALL LOW VOLTAGE & LINE SETS. SITE CONTRACTOR TO
PROVIDE RENCHING.

- FSR** INTERIOR FIRE RISER POC:
LOCATION OF FIRE RISER POC, SITE CONTRACTOR TO INSTALL ALL COMPONENTS AND CONNECT
TO FLANGE @ 12" AFF
- ACV** 24" X 36" ACCESS VENT
- VE** 12"x48" FOUNDATION VENT
- DS** DOWNSPOUT P.O.C. - LOCATION OF 2" X 3" DOWNSPOUT
STRAIGHT AT BTM FOR CONNECTION TO SITE DRAINAGE (CONNECTION BY OTHERS)
- CS** (2) 2" CONDUIT SLEEVE @ FULL HEIGHT WALLS - IN WALL ABOVE CEILING

NOTE: *DIMENSIONS MAY VARY ± 6"

IF FOUNDATION BY AMS; AMS TO PROVIDE CONCRETE FOUNDATION VENT WELLS AT GRATES. AMS
TO EXCAVATE FOR FOOTINGS ONLY. PAD PREPARATION, COMPACTION AND AREA DRAIN BY
OTHERS

ELECTRICAL PANELS PLACED OVER FOOTINGS MAY REQUIRE STEM WALL NOTCHING. COORDINATE
WITH AMS PRIOR TO FOUNDATION INSTALLATION. REFER TO DSA APPROVED PLANS FOR DETAILS.

SITE CONTRACTOR TO COORDINATE/INSTALL ALL NECESSARY SLEEVES

CONDUITS 3" OR GREATER WILL REQUIRE ROUTING BELOW BUILDING FOUNDATION TO ENTER
CRAWLSPACE DUE TO SIZE OF SWEEP. AOR TO COORDINATE ROUTING AND POINT OF CONNECTION TO
BUILDING WITH AMS.

3284.5762 SF ACTUAL CRAWL SPACE
(MINUS INTERIOR FOOTINGS)

ALL DETAILS ARE DIAGRAMMATIC AND ARE INTENDED TO CLARIFY SCOPE AS WELL AS TO PROVIDE A
GENERAL UNDERSTANDING OF EACH POC.

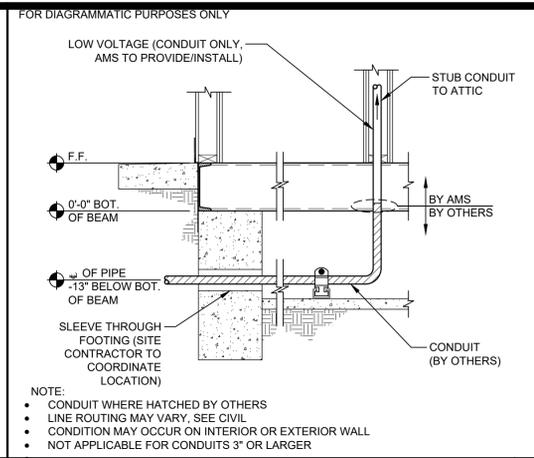
THE INFORMATION ATTACHED IS PROVIDED FOR PURPOSES OF COORDINATION AND TO SIMPLIFY THE POINT OF
CONNECTION INFORMATION FOR ELECTRICAL AND PLUMBING UNDERGROUND AS WELL AS FOUNDATION SLEEVES
(AS REQUIRED) TO AN AGREED UPON CONNECTION POINT. THE POINT OF CONNECTION INFORMATION CONVEYED
ON THIS SHEET SUPERSEDES ANY PREVIOUS DRAWINGS AND OR COMMUNICATIONS REGARDING POINTS OF
CONNECTION. THE LOCATIONS AND SIZING REFLECTED ON THIS SHEET ARE THE RESPONSIBILITY OF THE
ARCHITECT OF RECORD TO PROVIDE TO THE APPROPRIATE ON-SITE CONTRACTORS FOR COORDINATION AND
EXECUTION. SEE FOUNDATION STRUCTURAL DRAWINGS FOR SLEEVE DETAILS THROUGH STEM WALL AND/OR
FOOTINGS.

THIS SHEET IS NOT A FOUNDATION PLAN, CONTRACTOR TO REFER TO APPROVED DRAWINGS FOR
NECESSARY CONSTRUCTION INFORMATION

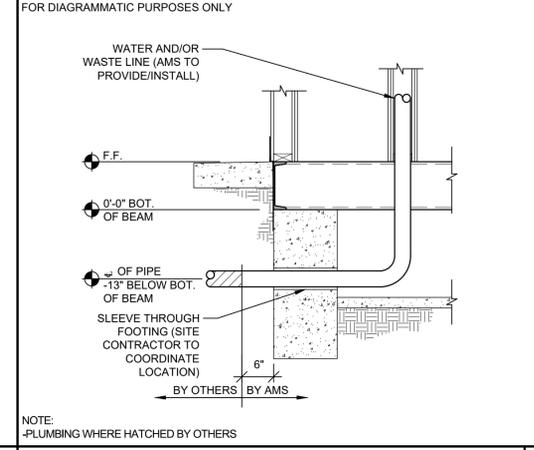
EPM:	AB
DRAWN BY:	KA
SCALE:	AS NOTED
DATE:	07/25/22
PROJECT No.:	1665-21
DRAWING TITLE:	

POINT OF
CONNECTION
PLAN

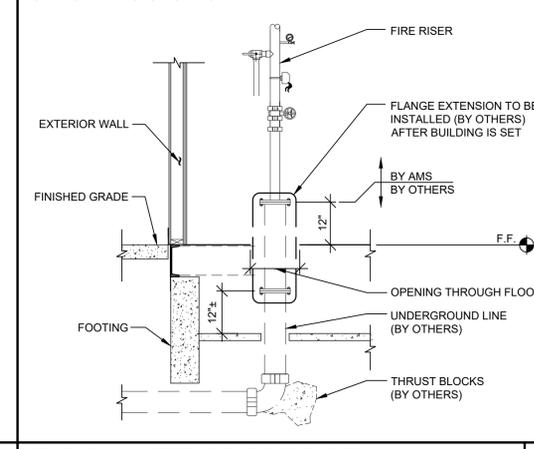
SHEET NUMBER:
POC-1



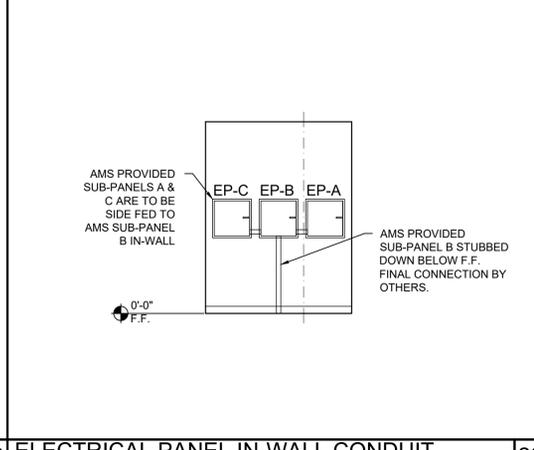
4 BELOW FLOOR LOW VOLTAGE POC NTS 5



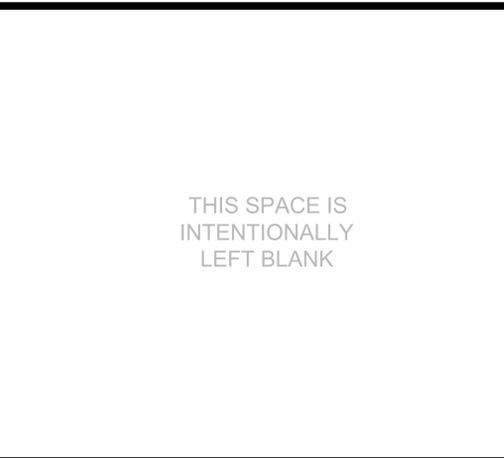
8 BELOW FLOOR PLUMBING POC NTS 9



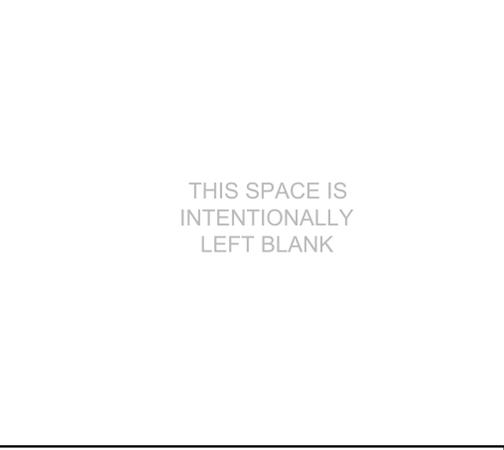
13 TYPICAL INTERIOR FIRE RISER NTS 14



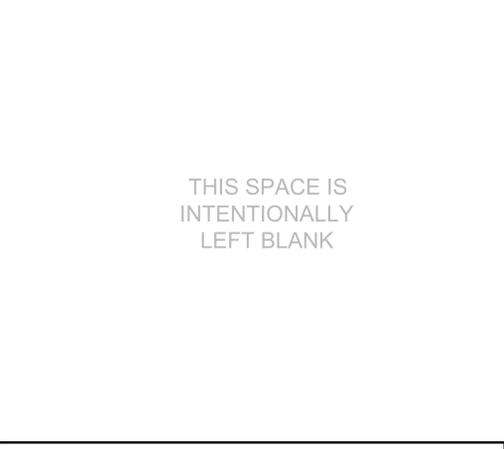
19 ELECTRICAL PANEL IN-WALL CONDUIT SCALE: 1/4" = 1'-0" NTS 20



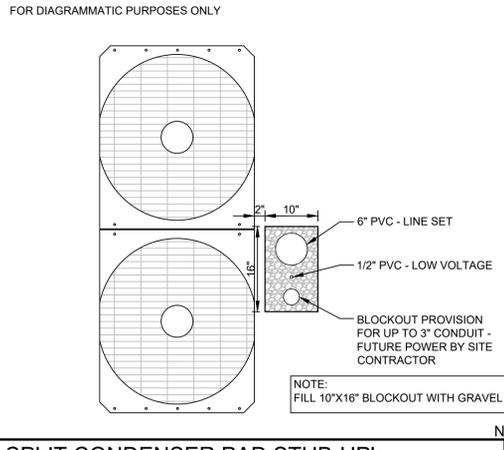
1 BELOW FLOOR ELECTRICAL POC NTS 2



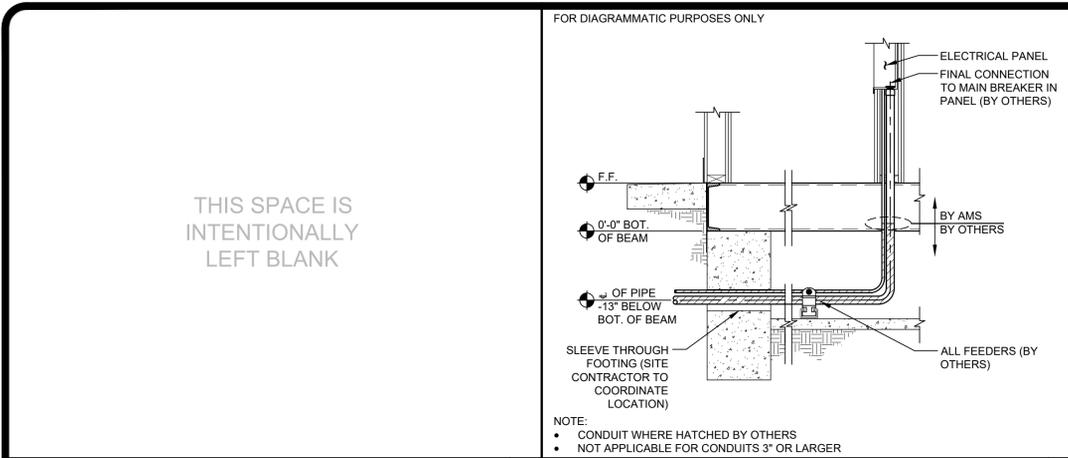
16 BELOW FLOOR CONDENSER POC NTS 17



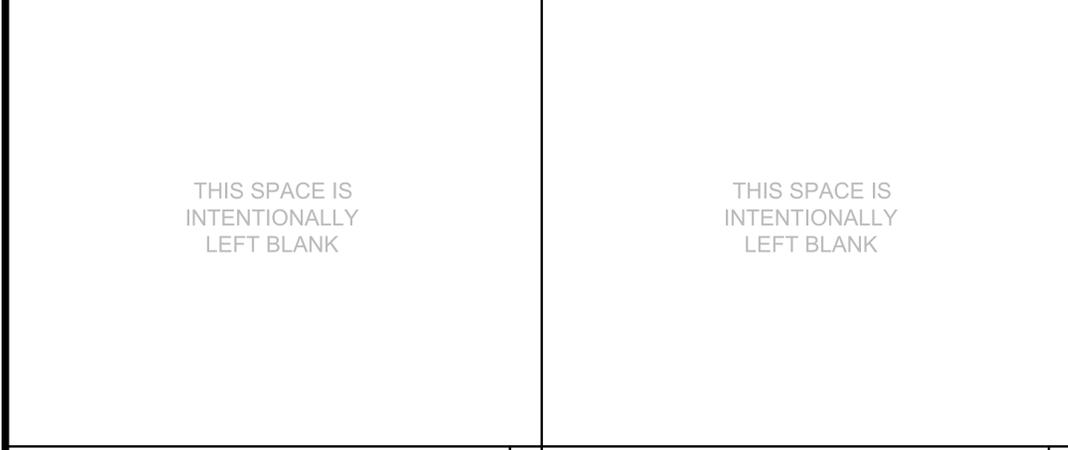
17 SPLIT CONDENSER PAD STUB-UP'S NTS 18



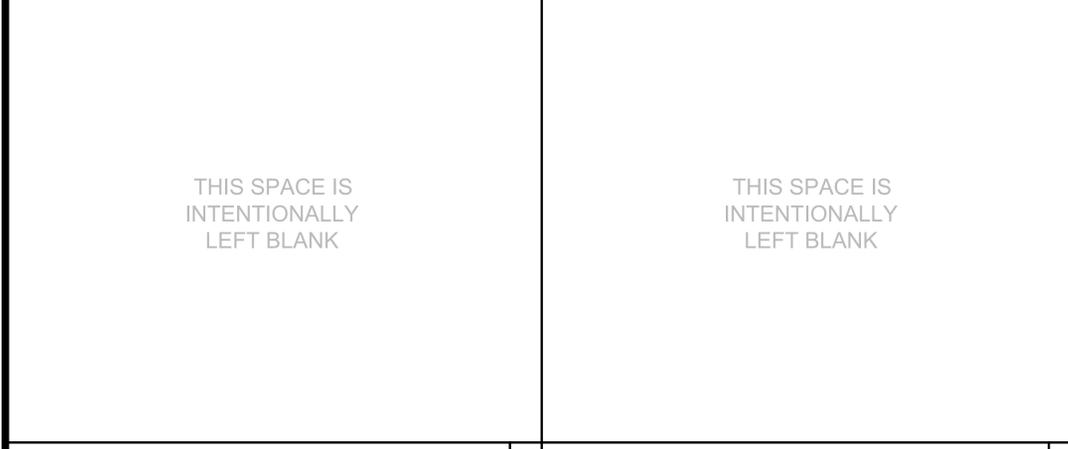
18 TYP. MINI-SPLIT COND. FND SLEEVE SIZES NTS 19



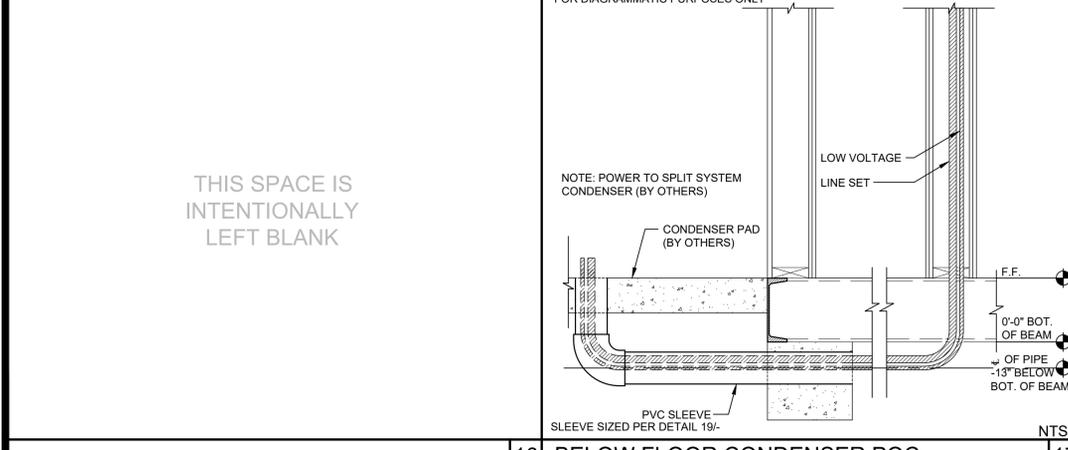
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6 THIS SPACE IS INTENTIONALLY LEFT BLANK



11 THIS SPACE IS INTENTIONALLY LEFT BLANK



16 BELOW FLOOR CONDENSER POC NTS 17

P:\PROJECTS\1665-1665-1665-1665-21 SOLANO CCD - CHILD DEVELOPMENT CENTER\PRODUCTION\DWG\POC - STD DTL.DWG, PLOT DATE: 7/25/2022 10:11:51 AM



**Measure Q - District Small, Local, Diverse Business Program (SLDB Outreach)
Solano County Certified Firms - Master List**

FIRM NAME	CERT TYPE	ADDRESS	CITY	STATE	ZIP	CONTACT NAME	EMAIL	PHONE	FAX	DATE REC'D FORM
Schotka Construction, Inc.	DBE	5555 Napa Vallejo Hwy	American Can	CA	94503	Diane Schotka	dschotka@aol.com	707-265-6977	707-265-6856	
Concrete Landscape Services	DBE	4862 E. 2nd Street	Benicia	CA	94510	Ronald A. Davis	clsconcrete@pacbell.net	916-688-1500	916-682-1884	
Gearbox Partners LLC	DBE	250 West M Street	Benicia	CA	94510	Sarah Wallace	sarah@gearboxpartners.com			
Johnny Tough's Truck & Pull	DBE	237 Dundee Way	Benicia	CA	94510	Daniel Vidrio	johnnytoughs@yahoo.com	707-310-5048	707-751-0841	
Quality Erectors & Construction, Inc.	DBE	3130 Bayshore Road	Benicia	CA	94510	Ethan Law	info@qec-inc.com	707-746-1233	707-751-3962	10/10/2018
Digital Knox LLC	DVBE	510 East H Street	Benicia	CA	94510		thilde@digitalknox.com	925-356-1481		
Edge Inspection Group, Inc.	MBE	4576 E. 2nd St., Suite C	Benicia	CA	94510	Joe Arvizu	joe.arvizu@edgeinspgroup.com	707-747-4760	707-747-4787	
Bay Area Carpet and Maintenance Services DBA CLS	MBE; DBE	4862 E. 2nd Street	Benicia	CA	94510	Ronald A Davis	rondavis@clsconcrete.com	707-280-5545	916-682-1884	
JBM Real Estate Consultation	MBE; DBE	2127 Goldenhill Way	Benicia	CA	94510	William M. Martinez	bill@jbmconsultants.com	707-297-6549	707-297-6549	
Antone Consulting & Training	WBE	1300 Drolette Way	Benicia	CA	94510	Helen Suzanne Antone	antoneact@aol.com	707-235-5341		
California Environmental Services, Inc	WBE	401 Channel Street	Benicia	CA		Debra Fisher	info@aesdirt.com	415-699-6207		
Leann Taagepera Environmental Planning	WBE	271 W G St.	Benicia	CA	94510	Leann Taagepera	leanntaagepera@sbcglobal.net	707-853-9307		
Marketing A La Carte, Inc.	WBE	125 Mountain View Terrace	Benicia	CA	94510	Vicki Garcia	john@mktgalacarte.com	707-746-1905	707-746-1724	
Matrix Point, Inc.	WBE	476 Gallagher Drive	Benicia	CA	94510	Sharon Maher	sharon.maher@matrixpointinc.com	707-332-5000	707-748-4244	
SH Enterprises	WBE	P.O. Box 344	Benicia	CA	94510	Sharon Halper	shenterprises@comcast.net	707-342-9519	707-864-1659	
American Compliance Services LLC	WBE; DBE	554 Morning Glory Drive	Benicia	CA	94510	Wendy Plank	wendy@acs-llc.us	707-745-1137	707-745-4462	
ESE Consulting Engineers Inc.	WBE; DBE	1060 Grant Street, Suite 3D	Benicia	CA	94510	Hadih Elias	hadih.elias@eseweb.com	707-747-1755	707-747-6538	
Kathy Krebs-Dean & Associates	WBE; MBE	101 Chelsea Hills Drive	Benicia	CA	94510	Kathy Krebs-Dean	kathykrebs@comcast.net	707-334-5667	707-297-6906	
Kendall Concepts	WBE; MBE	582 East L Street	Benicia	CA	94510	Janet Kendall	janetk@kendallconcepts.com	707-745-6440	707-638-7209	
Chavez Trucking	DBE	955A Vaughn Road	Dixon	CA	95620	Teresa Chavez	teresa@chaveztrucking.com	707-678-0514	707-678-5154	
QUIMU Contracting, Inc.	DBE	695 Priddy Drive	Dixon	CA	95620	Miguel Quiroz	quimu@sbcglobal.net	707-693-0289	707-678-8384	
Tully Consulting Group	DBE	1650 N. Lincoln Street, Suite A	Dixon	CA	95620	Katelyn Anderson	estimating@tullygroup.com	707-693-1926	707-471-0318	10/10/2018
Chamblee Calvet Consulting	DVBE	1060 Heritage Ct	Dixon	CA	95620		chambster@yahoo.com	707-816-2625		
SEC Auto Solutions	DVBE	P.O. Box 815	Dixon	CA	95620	Stephen St. Andre	support@secautosolutions.com	707-310-9890	707-678-3617	
Trotter's Green Ways	DVBE	815 Griffith Court	Dixon	CA	95620	Anderson Trotter	ranjani@rmollc.com	707-480-9507		
Veteran Technologies LLC	DVBE	1135 Kent Court	Dixon	CA	95620		vet.tech.ca@gmail.com	916-426-8387		
BCN, Inc.	MBE	1150 Business Park Drive, Suite 101	Dixon	CA	95620	Anthony Romero	bcn_paint@sbcglobal.net	707-678-7202	707-678-4522	
Chavez Auto Body	MBE	1301-A Business Park Drive	Dixon	CA	95620	Guillermo Chavez	chavezautobody@sbcglobal.net	707-678-2524	707-678-4453	
Allied Materials, Inc.	WBE; DBE	1850 Regency Pkwy	Dixon	CA	95620	Tammi J. Swafford	tswofford70@sbcglobal.net	707-678-0491	707-678-0491	
Tremaine & Associates, Inc.	WBE; DBE	1220 Smith Court	Dixon	CA	95620	Kim Tremaine	ktremaine@tremaine.us	916-637-9717	916-376-0676	
East Bay Medical Supplies	DBE	4251 Hazeltine Way	Fairfield	CA	94533	Hui-Fang Hu	ebmed@comcast.net	707-421-9688	707-422-7365	
Pinguelo Construction, Inc.	DBE	4171 Suisun Valley Road, Suite G	Fairfield	CA	94534	Francisco Nunes Pinguelo	pinguelo@castles.com	707-864-3003	707-864-1661	
Willis Rebar	DBE	2333 Courage Drive, Suite H, Room #9	Fairfield	CA	94533	Raymond Willis III	willisrebar@gmail.com	707-419-5949	707-759-3483	
Burgess Innovation Management	DVBE	956 Stone Pine Court	Fairfield	CA	94533	Robert Burgess	burgess.robert@outlook.com	707-803-8738	707-264-6555	
First Vanguard Rentals & Sales, Inc.	DVBE	408 Union Avenue, Suite A	Fairfield	CA	94533		rbmerwin@gmail.com	707-389-0135	707-402-6502	
ICON-STRUCT.COM	DVBE	4396 Solano Road	Fairfield	CA	94533		sstrem@icon-struct.com	707-399-8224	707-399-8229	
JL Skye, Inc.	DVBE	1022 Westchester Court	Fairfield	CA	94533		jadepaul@jlskye.com	707-631-3292	707-402-6492	
Speedy Wash Lavanderia	DVBE	1917 Fairfield Ave.	Fairfield	CA	94533		james.brentlinger@yahoo.com	707-631-9286	877-468-7183	
Steven Arciaga Inspection Services	DVBE	4488 Avondale Circle	Fairfield	CA	94533		ior.steve@yahoo.com	951-453-0459		
Veteran Tire and Rubber, Inc.	DVBE	1070 Horizon Drive unit L	Fairfield	CA	94533		jon@veterantire.com	707-421-2981		
Keith Curry Industries DBA Coach Air	DVBE; DBE	2426 White Drive P.O. Box 3176	Fairfield	CA	94533	Keith Curry	keith.curry2@comcast.net	707-628-3083	707-398-6152	
Exsolarent Energy Group, Inc.	MBE	1745 Enterprise Drive, Ste K, RM VIII	Fairfield	CA	94533		dsowels@yahoo.com	707-424-6030	707-421-1103	
Ford Global Enterprises	MBE	2401 Waterman Blvd., Ste. A4-319	Fairfield	CA	94534	Matthew S Ford	bwf@fordglobalent.com	707-290-7336		
Front2Back Designs	MBE	1076 Horizon Drive, Ste 13	Fairfield	CA	94533	Dionne McCullar	dionne@front2backdesigns.com	707-421-1831	707-398-8265	
Creegan + D'Angelo Engineers	MBE; DBE	2420 Martin Road, Suite 380	Fairfield	CA	94534	Robert S. Jones	rsjones@cdengineers.com	707-429-5300	707-429-2086	

FIRM NAME	CERT TYPE	ADDRESS	CITY	STATE	ZIP	CONTACT NAME	EMAIL	PHONE	FAX	DATE REC'D FORM
USA Trucking, Inc.	MBE; DBE	5185 W B Goodman Lane	Fairfield	CA	94533	Gurtej Singh	usatrucking@yahoo.com	707-580-0263	707-437-4050	
Confio Group, LLC	WBE	2136 Fieldcrest Ave	Fairfield	CA	94534	Angela Patch	angela@confiogroup.com	888-562-4473		
Luer Corporation	WBE	5044 Peabody Road	Fairfield	CA	94533		jean281@aol.com	707-631-3128	707-437-0138	
R.B. Mobile Diesel Testing, Inc.	WBE	3336 N. Texas St., Suite J # 197	Fairfield	CA	94533	Ronna Brown	rbrownaw@pacbell.net	800-896-0356	707-447-5943	
Western Industrial X-ray, Inc.	WBE	1707 Enterprise Dr., Unit J	Fairfield	CA	94533	Rose Finkenbinder	rose@wixinc.net	707-425-4673	707-425-4592	
MRO Integrated Solutions, LLC	WBE; MBE	2700 Maxwell Way, Suite 200	Fairfield	CA	94534	Tracy Tomkovicz	tracyt@mrois.com	707-373-9487	925-228-3668	
MT2 Telecom LP	MBE	1015B Airport Rd	Rio Vista	CA	94571	Jon G Moreno	jon@morenotrenching.com	707-374-5075	707-374-6194	
Woodward Drilling Company, Inc.	WMBE; DBE	550 River Road	Rio Vista	CA	94571	Concing E. (Connie) Woodward	connie@woodwarddrilling.com	707-374-4300	707-374-5677	
Jara Trucking	DBE	1425 Monitor Avenue	Suisun City	CA	94585	Valarie Baker	valariebaker2010@gmail.com	707-310-1031		
Ramirez Towing, Inc.	DBE	1502 Humphrey Drive	Suisun City	CA	94585	Kathleen Ramirez	kathy@ramireztow.com	707-422-0974	707-422-0698	
SUULUTAAQ, Inc. - Alaska Native Corp	DBE	110 Railroad Avenue, Suite A	Suisun City	CA	94585	Winona Beesing	winona.beesing@suulutaaq.com	707-427-3209	707-419-4851	
Teams by Design, Inc.	DBE	1001 Park Lane	Suisun City	CA	94585	Concepcion Tualla	teamsbydesign3@comcast.net	707-427-3595	707-427-3595	
MDR CAD Services, Inc.	MBE	1405 Trainor Court	Suisun City	CA	94585	Michael Robinson	robinsonm@mdrcadservices.com	510-839-1552	510-839-1552	10/17/2018
C & J Shredding Co. LLC	DVBE	P.O. Box 1888	Travis AFB	CA	94535	James Harris	harrisjamesr@aol.com	707-437-8644	707-437-6650	
EHI Enterprises	DVBE	P.O. Box 1811	Travis AFB	CA	94535		hutch0711@att.net	707-372-0711	707-501-4296	
Black Diamond Asphalt, Inc.	DBE	118 Main Street	Vacaville	CA	95688	Allison Patricia Ragan	aragan@blackdiamondasphalt.com	707-448-9402	707-448-9407	
Cole Pro Media, LLC	DBE	261 Cherry Street	Vacaville	CA	95688	Laura Marie-Cole Deason	lcole@colepromedia.com	707-724-8089		
ECM Geotechnical	DBE	607 Elmira Road, Suite 102	Vacaville	CA	95687	Ed Mak	ecmgeotechnical@yahoo.com	707-678-6688		
Minaret Masonry	DBE	33A Commerce Place	Vacaville	CA	95687	Robert Morales	bobmorales@minaretmasonry.com	707-446-9100	707-447-7422	
TLW Public Relations	DBE	140 Olympic Circle	Vacaville	CA	95687	Deloris Roach	info@tlwpublicrelations.com	707-208-9479	800-859-0879	
Albers Sales & Consulting, Inc	DVBE	319 Turnbridge Street	Vacaville	CA	95687	Greg Albers	gealbers@gmail.com	925-858-6088		
Brian L. Platt	DVBE	5093 Ellsworth Road	Vacaville	CA	95688		gloria@idigbackhoe.com	707-451-2757	707-451-2797	
CBL Professional Services	DVBE	479 Mason Street, Suite 301	Vacaville	CA	95688		charles@cblprofessional.com	925-250-2072	925-685-4838	
Dependable Petroleum Products, Inc.	DVBE	312 Essex Place	Vacaville	CA	95687		dppinc@comcast.net	707-321-5524	707-451-9665	
Jose L. Ortiz Consulting	DVBE	754 Pintail Court	Vacaville	CA	95688		jose91946@sbcglobal.net	707-330-3542	707-452-0944	
Nobility Security and Maritime Solutions	DVBE	PO Box 2252	Vacaville	CA	95696		nsmsolutions@sbcglobal.net	707-761-4914		
SEM Incorporated	DVBE	561 Arlene Drive	Vacaville	CA	95688		smurphyed@gmail.com	707-446-7571	707-469-9574	
Shred Solution	DVBE	P.O. Box 6414	Vacaville	CA	95696	Sara Hostetter	sarahostetter@yahoo.com	707-359-4726	707-359-4726	
Site Safe Traffic Safety and Signs	DVBE	113 Mulrany Court	Vacaville	CA	95688		sitesafetrafficsafety@gmail.com	844-464-7233		
Turner Orthotic and Prosthetics	DVBE	413 Melissa Ct	Vacaville	CA	95687		markgturner.co@gmail.com	707-301-8989	707-447-7080	
Echelon-CES Management & Consulting	DVBE; DBE	1018 Swan River Court	Vacaville	CA	95687	Angel Santiago Jr.	echelon-ces@comcast.net	707-344-4518	707-447-4225	
CAL INC	MBE	2040 Peabody Road	Vacaville	CA	95687	Tina Vargas	tvargas@cal-inc.com	707-446-7996	707-446-4906	10/10/2018
World Wide Solutions	MBE	1068 Woodcrest Ct	Vacaville	CA	95688	John Esparza	john.esparza@att.net	707-695-0598		
YNR Construction Inc.	MBE	136 Peabody Rd	Vacaville	CA	95687	Jason Yen	elaine@ynrconstruction.com	925-200-0988	925-822-3128	
Misti Bruceri & Associates, LLC	WBE	190 S. Orchard St., Ste B-117	Vacaville	CA	95688	Wendy Donaldson	wendy@mbaenergy.com	707-320-2500		
Summit Crane, Inc.	WBE	892 Aldridge Road	Vacaville	CA	95688		summitcrane@comcast.net	877-448-6740	707-448-3420	
Ka Wai Ola dba Maaco Collision Repair & Auto Painting	WBE; MBE	777 Elmira Road	Vacaville	CA	95687	Kelly Ku'u'lei Auwae Mcallister	maaco.vacaville@yahoo.com	707-451-6140	707-451-6145	
Pacific Professional Solutions.	WBE; MBE	326 Limerick Way, None	Vacaville	CA	95688	Liza Sweet	lsweet@pacific-professional.com	707-280-4304	707-676-4306	
Phillips & Associates Inc.	WBE; MBE	177-B Butcher Road	Vacaville	CA	95687	Rosa M Phillips	rp4express@aol.com	707-422-3325	707-421-0913	
Excavators, Inc.	WBE; SBE	336 Glen Eagle Court	Vacaville	CA	95688	Debra A. Lister		707-718-0929	707-685-9676	
A-1-KUH-Muter Services, LLC	DBE	224 Cimarron Drive	Vallejo	CA	94589	Ericia Artis	a1kuhmuter@gmail.com	510-859-5364		
Hercules Electric	DBE	573 Cedar Street	Vallejo	CA	94591	Roberto Salcido	hercelec@yahoo.com	510-914-8622	707-642-4948	
KSH Trading LLC	DBE	6607 Deerfield Drive	Vallejo	CA	94591	Ken Hay	ken@k-rail.com	415-939-3961	888-350-2609	
Priscilla J. Silvey, PH.D.	DBE	1310 Wildwing Lane	Vallejo	CA	94591	Priscilla Silvey	pjsilvey@aol.com	707-643-0985	707-643-2394	
Three C Construction, Inc.	DBE	24 California Street	Vallejo	CA	94590	Romeo Espinosa	threecconstruction@sbcglobal.net	707-556-3400	707-556-3330	10/9/2018
Egret, Inc.	DBE; WBE	30 El Camino Real	Vallejo	CA	94590	Joan M. Lynn	joanlynn@egretinc.com	707-556-9500	707-556-9500	
JEFFCO Painting & Coating, Inc.	DVBE	P.O. Box 1888	Vallejo	CA	94590		geneglockner@jeffcoptg.com	707-562-1900		
KTEK Products & Systems, Inc.	DVBE	P O Box 5909	Vallejo	CA	94591		ktek437@sbcglobal.net	800-775-6889	707-643-4878	
Pinnacle Power Services, Inc.	DVBE	1172 Railroad Ave	Vallejo	CA	94592		james@pinnaclepowersvcs.com	707-656-6358		
Preferred Coast Realty	DVBE	101 C Street	Vallejo	CA	94590	Tim Hiemstra	timpcr@comcast.net	707-980-9267	707-736-8375	
Presidio Electric, Inc.	DVBE	100 Scenic Way	Vallejo	CA	94950		tshields@presidioelectric.com	415-490-8826		
Ocampo-Esta Corp.	MBE	1419 Tennessee Street	Vallejo	CA	94590	Oscar S L Ocampo	oec@ocampo-esta.com	707-643-8072	707-552-6047	
Monarch Engineering & Developments, Inc.	MBE; DBE	301 Georgia Street, Suite 355A	Vallejo	CA	94590	Roberto Cortez	rc@monarchengineers.com	707-648-9571	888-388-0526	

FIRM NAME	CERT TYPE	ADDRESS	CITY	STATE	ZIP	CONTACT NAME	EMAIL	PHONE	FAX	DATE REC'D FORM
Roby Trucking	MBE; DBE	100 Countryview Court	Vallejo	CA	94591	Parmod Kumar	robbytrucking@aol.com robbytrucking707@gmail.com	707-333-8706	707-534-1807	
Applied Pest Management, Inc.	WBE	2425 Sonoma Blvd.	Vallejo	CA	94590	Carolyn Fore	apm@appliedpestmgt.com	707-554-0110	707-554-0191	
Holy Nation Creations (Creations by LOFY)	WBE; MBE	1333 N Camino Alto, Unit 207	Vallejo	CA	94589	Fukekila Merrida	lofy.fm@gmail.com	707-267-3462		
Important Details Inc.	WBE; MBE	1467 Legend Circle	Vallejo	CA	94591	Elease Minor	eminor@idetailsinc.com	707-529-8139		
Stellar California	WBE; MBE	4291 Melody Lane	Vallejo	CA	94591	Josephine Cusi	stellarcalfornia@yahoo.com	800-491-0409	888-843-6018	
Brandgov (123 Target Marketing)	WMBE; DBE	123 Humphrey Lane	Vallejo	CA	94591	Patrice Williams	patrice@brandgov.com	707-557-7007	707-560-1115 707-312-8144	
KDJA Services LLC	WMBE; DBE	223 Cynthia Avenue	Vallejo	CA	94589	Karen Adams	karenadams2289@att.net	888-551-0227	888-551-0686	
De La Torre Trucking LLC	DBE	8338 Tubbs Road	Winters	CA	95694	Javier De La Torre	delatorrerocks2@gmail.com	530-795-3651	530-795-3657	
Double M Trucking	DBE	710 Dutton Street	Winters	CA	95694	John Martin	penny@doublemtrucking.com	530-795-4181	530-795-3914	
Vintage Paving Co Inc	MBE; DBE	119 Main Street	Winters	CA	95694	Edward Carbahal	edc@vintagepavingco.com	530-795-0132	530-795-5734	
Construction Eye	WBE	4087 Tallman Lane	Winters	CA	95694	Maury MacKenzie Hensley	msmaury@aol.com	530-219-2827		
Kathryn Kelly dba Kelly Group	WBE	PO Box 868	Winters	CA	95694	Kathryn Kelly	kate@kgconsulting.net	530-902-1615		