

NOTICE TO BIDDERS

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

Notice is hereby given that Tulare City School District (hereinafter referred to as "Owner") will receive sealed bids prior to the date and time stated for the Bid Opening for the award of the Contract to construct:

PURCHASING & INSTALLING NEEDLEPOINT BIPOLAR IONIZATION IN ALL HVAC SYSTEMS THROUGHOUT SCHOOL SITES & DISTRICT OFFICE

As per drawings and specifications which may now be obtained electronically from the Owner website: <http://www.tcsdk8.org>. The lowest bid shall be determined on the amount of the base bid. This Contract is not subject to prequalification pursuant to Public Contract Code section 20111.6.

Public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations. For all projects over Twenty-Five Thousand Dollars (\$25,000), a contractor or subcontractor shall not be qualified to submit a bid or to be listed in a bid proposal subject to the requirements of Public Contract Code section 4104 unless currently registered and qualified under Labor Code section 1725.5 to perform public work as defined by Division 2, Part 7, Chapter 1 (§§ 1720 et seq.) of the Labor Code. For all projects over Twenty-Five Thousand Dollars (\$25,000), a contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§ 1720 et seq.) of the Labor Code) unless currently registered and qualified under Labor Code section 1725.5 to perform public work.

Bids must be sealed and filed in the District Office of the Owner at Tulare City School District Office, 600 North Cherry St., Tulare, CA 93274 by October 5, 2020, before 11:00 a.m. on the clock designated by the Owner, after which time bids will be opened. No bid will be accepted by Owner after this time. Facsimile (FAX) copies of the bid will not be accepted.

A **mandatory** pre-bid job walk will be held on Wednesday, September 2, 2020 at 9:00 a.m. at Tulare City School District, 600 N. Cherry Street, Tulare. Bidders not attending the entire job walk will result in the bid being rejected & disqualified.

Bids must be accompanied by a bidder's bond, cashier's check, or certified check for at least ten percent (10%) of the amount of the base bid and made payable to the Owner. Pursuant to the Contract Documents, the successful bidder will be required to furnish a Payment (Labor and Material) Bond in the amount of one hundred percent (100%) of the Contract Sum, and a Faithful Performance Bond in the amount of one hundred percent (100%) of the Contract Sum, as set forth in the Contract Documents.

The successful bidder will be allowed to substitute securities or establish an escrow in lieu of retainage, pursuant to Public Contract Code Section 22300, and as described in the Agreement between Owner and Contractor.

The Owner will not consider or accept any bids from contractors who are not licensed to do business in the State of California, in accordance with the California Public Contract Code, providing for the licensing of contractors. In accordance with Section 3300 of said Code, the bidder shall have a Class "C-38" or "C-20" license and shall maintain that license in good standing through Contract completion and all applicable warranty periods. For all projects over Twenty-five Thousand Dollars (\$25,000), bidder shall state the public works contractor registration number on the Designation of Subcontractors form for each subcontractor performing more than one-half of one percent (0.5%) of the bidder's total bid.

The Director of Industrial Relations of the State of California, in the manner provided by law, has ascertained the general prevailing rate of per diem wages and rate for legal holidays and overtime works. The Contractor must pay for any labor therein described or classified in an amount not less than the rates specified. These rates may be obtained at <http://www.dir.ca.gov//dlsr>.

August 11, 2020

By order of the Board of Trustees
Of Tulare City School District

By: Joey King
Assistant Supt. of Business Services

Advertise: Friday, August 21, 2020
Friday, August 28, 2020

INSTRUCTIONS TO BIDDERS

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

PURCHASING & INSTALLING NEEDLEPOINT BIPOLAR IONIZATION IN ALL HVAC SYSTEMS THROUGHOUT SCHOOL SITES & DISTRICT OFFICE

SECURING DOCUMENTS: Drawings and Specifications are available electronically from the Owners website: <http://www.tcsdk8.org>.

This Contract is not subject to prequalification.

RETENTION: The Owner will withhold retention of 5% from all progress payments.

REGISTRATION: For all projects over Twenty-Five Thousand Dollars (\$25,000), the Owner shall not accept any bid or enter into any contract without proof of the bidder's current registration to perform public work under Labor Code section 1725.5.

For all projects over Twenty-five Thousand Dollars (\$25,000), the bidder shall not accept any sub-bid or enter into any subcontract without proof of the subcontractor's current registration to perform public work under Labor Code section 1725.5.

PRE-BID WALK THROUGH: A mandatory pre-bid walk through will be held on Wednesday, September 2, 2020, at 9:00 a.m. at Tulare City School District Office, 600 N Cherry Street, Tulare. Bidders not attending the mandatory pre-bid walk through will be disqualified.

BIDS: Bids to receive consideration shall be made in accordance with the following instructions:

1. Bids shall be made on a form therefor, obtained from the Owner. Bids not made on the proper form shall be disregarded. Numbers must be stated in words and figures, and the signatures of all individuals must be in longhand.
2. No bid will be considered which makes exceptions, changes, or in any manner makes reservations to the terms of the drawings or specifications. If prequalification is required for this Contract, no bid will be accepted from a contractor that has not been prequalified.
3. Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately to the Owner who will send written instructions clarifying such questions to each bidder. Oral responses will not be binding on the Owner or any Construction Manager.

4. Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

5. Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California, which are hereby incorporated and made a part hereof and these Instructions to Bidders, every bidder shall set forth in its bid (using the Owner's form for Designation of Subcontractors:
 - A. The name and location of the place of business, the California contractor license number, and for all projects over Twenty-Five Thousand Dollars (\$25,000), the public works contractor registration number, of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half ($\frac{1}{2}$) of one percent (1%) of the bidder's total bid. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

 - B. The portion of the Work which will be done by each such subcontractor. If the bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half ($\frac{1}{2}$) of one percent (1%) of the bidder's total bid, the bidder agrees to perform that portion itself. The successful bidder shall not, without the consent of the Owner:
 - 1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid.

- 2) Permit any subcontract to be assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the bid.
 - 3) Sublet or subcontract any portion of the Work in excess of one-half (½) of one percent (1%) of the total bid as to which the original bid did not designate a subcontractor.
6. The Director of Industrial Relations of the State of California, in the manner provided by law, has ascertained the general prevailing rate of per diem wages and the rate for legal holidays and overtime works. The Contractor must pay for any labor therein described or classified in an amount not less than the rates specified. These rates may be obtained online at <http://www.dir.ca.gov//dlsr>.
7. All bids must be accompanied by a completed Non-Collusion Declaration and Sufficient Funds Declaration (Labor Code § 2810). All bids must be accompanied by an executed Fingerprinting Notice and Acknowledgment; Iran Contracting Act Certification, if required by law (see form); Workers' Compensation certification; Contractor Questionnaire, if required (see paragraph 13; and DVBE Certification of Participation and Good Faith Worksheet, if DVBE is required (see paragraph 10).
8. Bids must be accompanied by a certified check, cashier's check, or bidder's bond, for an amount not less than ten percent (10%) of the amount of the base bid, made payable to the order of the Owner. If a bidder's bond accompanies the bid, said bond shall be secured by an Admitted Surety (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurer must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurer selected by Contractor and to require Contractor to obtain a bond from a surety insurer satisfactory to the Owner. Said check or bond shall be given as a guarantee that the bidder will enter into the Contract if awarded the Work, and in case of refusal or failure to enter into said Contract, the check or bond, as the case may be, shall be payable to the Owner and retained as liquidated damages.
9. Bids shall be sealed and filed as indicated in the Notice to Bidders. Irrespective of how a bidder chooses to deliver the bid and other documents to the Owner, the bidder is responsible for ensuring that the bid and other documents are actually received at the location designated in the Contract Documents for receipt of the bid and other documents prior to the time for the bid opening. Bids and other documents for any reason not actually received at the designated location prior to the time for the bid opening shall not be opened or considered.
10. **THIS CONTRACT IS NOT SUBJECT TO THE DVBE REQUIREMENTS OF EDUCATION CODE SECTION 17076.11.**
11. Contractor shall maintain its license in good standing through Completion of the Work and all applicable warranty periods. Owner reserves the right to reject any bid as

nonresponsive if bidder or any subcontractor is not licensed in good standing from the time the bid is submitted to Owner up to award of the Contract, whether or not the bidder listed the subcontractor inadvertently, or if a listed subcontractor's license is suspended or expires prior to award of the Contract. Owner also reserves the right to reject any bid as nonresponsive if a listed subcontractor's license is not in good standing to perform the work for which it is listed from the time of submission of the bidder's bid to award of the Contract.

12. The Owner reserves the right to waive any irregularity and to reject any or all bids.
13. No Contractor Questionnaire is required to be submitted with a bid on this Contract.
14. To summarize, each bid for the Contract must include the following documents:
 - a. Bid form
 - b. Bid security
 - c. Designation of Subcontractors
 - d. Non-Collusion Declaration
 - e. Sufficient Funds Declaration
 - f. Fingerprinting Notice and Acknowledgement
 - g. Workers' Compensation Certification
 - h. Dir Registration

WITHDRAWAL OF BIDS: Bids may be withdrawn by bidders prior to the time fixed for the submittal of bids or any authorized postponement thereof. A successful bidder shall not be relieved of the bid unless by consent of the Owner or bidder's recourse to Public Contract Code §5100 et seq.

Unless otherwise required by law, no bidder may withdraw its bid for a period of sixty (60) days after the date set for the opening thereof or any extension thereof. The owner reserves the right to take more than sixty (60) days to make a decision regarding rejection of the bid or award of the Contract.

OPENING OF BIDS: Opening of bids shall be as soon after the hour set as will be possible; opening and declaration to be as set forth in the Notice to Bidders. Any and all bidders will be permitted to attend.

EXAMINATION OF CONTRACT DOCUMENTS AND SITE: Before submitting a bid, bidders shall examine the drawings, read the specifications, the form of Agreement between Contractor and Owner, and the other Contract Documents. Bidders shall visit the site of the proposed Work, examine the building, or buildings, if any, and any work that may have been done thereon. Bidders shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Pursuant to Public Contract Code section 1104: 1) bidders shall not be required to assume responsibility for the completeness and accuracy of architectural or engineering plans and specifications, except on clearly designated design build projects; 2) however, bidders shall be

required to review architectural or engineering plans and specifications prior to submission of their bids and to report any errors and omissions to the Owner; and 3) the review shall be confined to the bidder's capacity as a bidder and not as a licensed design professional.

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR: The form of Agreement between Owner and Contractor which the successful bidder will be required to execute, if awarded the Work, is a part of this Bid Package.

ADDENDA OR BULLETINS: Any addenda or bulletins, issued during the time of bidding, shall form a part of the drawings and specifications loaned to the bidder for the preparation of its bid, shall be covered in the bid, and shall be made a part of the Contract Documents. All addenda or bulletins shall be signed by the Owner and approved by the Division of State Architect.

EVIDENCE OF RESPONSIBILITY: Upon the request of Owner, a bidder shall submit promptly to the Owner or its designee satisfactory evidence showing the bidder's financial resources, the bidder's experience in the type of work required by the Owner, the bidder's organization available for the performance of the Contract, and any other required evidence of the bidder's or its subcontractor's qualifications to perform the proposed Contract. The Owner may consider such evidence before making its decision awarding the proposed Contract. Failure to submit evidence of the bidder's or its subcontractors' responsibility to perform the proposed Contract may result in rejection of the bid.

AWARD OF CONTRACT: Rejection of any or all bids, to contract work with whomever and in whatever manner, to abandon work entirely, and/or to waive any informality in receiving of bids is reserved as the right of the Owner. Before the Contract is awarded, the Owner may at its sole discretion, require from the proposed Contractor on the Project further evidence of the reasonable qualifications of such contractor to faithfully, capably, and reasonably perform such proposed Contract and may consider such evidence before making its decision on the award of such proposed Contract.

The Contract shall be awarded to the lowest responsible and responsive bidder as interpreted by the Owner under California law and as specified herein and shall be entered into by the successful bidder within ten (10) days after mailing, faxing or delivery of the Notice of Award of Contract. Owner reserves the right, without any liability, to cancel the award of any bid for any reason at any time before the full execution of the Agreement between Owner and Contractor.

EXECUTION OF AGREEMENT BETWEEN OWNER AND CONTRACTOR: The Agreement between Owner and Contractor shall be signed by the successful bidder in as many originals as the Owner deems necessary and returned, together with the required Contract bonds, insurance certificates, additional insured endorsement, declarations page, a Public Contract Code section 3006 Drug-Free Workplace Certification, and Independent Contractor Student Contact Form, within ten (10) days after receipt of the notice of award of the Contract. If the ten (10) day period would expire after the date for commencement of the Work, Contractor must submit the documents before the date of commencement of the Work. If the successful bidder does not

comply with this paragraph, Owner may revoke and/or cancel the award to the successful bidder and award the Contract to the next lowest bidder, or may otherwise proceed as allowed by law.

CONTRACT BONDS: As required by the Contract Documents, two bonds, as itemized below and in the forms presented in these Contract Documents, shall be furnished by the successful bidder on the Project at the time of entering into the Contract and filed with the Owner before the successful bidder commences any Work. They shall be in the form of surety bonds issued by Admitted Surety insurers (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by Contractor and to require Contractor to obtain bonds from surety insurers satisfactory to the Owner.

Performance Bond in the amount of one hundred percent (100%) of the Contract Sum to insure Owner during construction, and for one year after Completion and during any warranty or guaranty period, against faulty or improper materials or workmanship and to assure Owner of full and prompt performance of the Contract.

Payment Bond (Labor and Material) in the amount of one hundred percent (100%) of the Contract Sum in accordance with the laws of the State of California to secure payment of any and all claims for labor and materials used or consumed in performance of this Contract.

SUBSTITUTION OF MATERIALS: The Contractor must ensure that the proposed substitutions by the Contractor or its subcontractors are submitted to the Owner a minimum of seven days (7) calendar days prior to the bid opening for review and possible approval of any equipment or materials thought to be equal to or better than those specified in the drawings or specifications. An addendum may be issued prior to bid opening, including all equipment and materials deemed equivalent to those specified and approved by the Owner.

PAYMENTS: Payments to the Contractor on account of the Contract shall be made in accordance with the terms of the Contract Documents.

TAXES: The Owner is generally exempt from payment of Federal Excise Tax on materials. The Owner will furnish exemption certificates to the Contractor to be used to obtain materials ordinarily subject to Federal Excise Tax without payment of the tax. Bidder shall deduct Federal Excise Taxes from their bid prices before submitting bids, so that such taxes will not be included in the Contract Sum.

EARLY TERMINATION: Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the Owner fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, the Owner may upon thirty (30) days' notice, order Work on the Project to cease. The Owner will remain obligated to pay for the Work already performed but shall not be obligated to pay the

balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the Work has not been done.

TIME OF COMPLETION AND LIQUIDATED DAMAGES: Liquidated damages for delay in Completion of the Work within the Contract Time will accrue and may be assessed as provided in the Contract Documents, including Article III of the Agreement and Article 8 of the General Conditions.

BID PROPOSAL FORM

TO: Board of Trustees
Tulare City School District School District
600 N Cherry Street
Tulare, Ca. 93274

The undersigned, doing business under the firm name of _____, having carefully examined the Notice to Bidders, the Instructions to Bidders, the Agreement, the Specifications, and the entire contract documents for the proposed **PURCHASING & INSTALLING NEEDLEPOINT BIPOLAR IONIZATION IN ALL HVAC SYSTEMS THROUGHOUT SCHOOL SITES & DISTRICT OFFICE** project, proposes to perform the contract including all of its component parts, and to furnish all materials and labor called for by them for the entire order, including all taxes as follows:

AMOUNT BID: _____ DOLLARS (\$ _____)

SUBMITTED BY: _____

COMPANY: _____

ADDRESS: _____

CONTRACTOR'S LICENSE NUMBER: _____

EXP. DATE: _____ CLASS: _____

BY: _____
(Please Print or Type)

SIGNATURE: _____

TITLE: _____

DATE: _____

PHONE: _____

Contractors are required by law to be licensed and regulated by the Contractors State License Board which has jurisdiction to investigate complaints against contractors. Any questions concerning a contractor may be referred to the Contractors State License Board, 9821 Business Park Drive, Sacramento, California 95827. Their telephone number is: (800) 321-2752

DESIGNATION OF SUBCONTRACTORS

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

Each bidder shall set forth below the name and the location of the place of business of each subcontractor and the California contractor license number, and public works contractor registration number (for all projects over Twenty-five Thousand Dollars (\$25,000)), of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the Work or improvement, or to a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent (0.5%) of the bidder's total bid, and the portion of the Work which will be done by each subcontractor. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor. If the Contractor fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half of 1 percent (0.5%) of the Contractor's total bid, the Contractor shall be deemed to have agreed to perform such portion itself, and shall not be permitted to subcontract that portion of the Work except under the conditions hereinafter set forth.

Subletting or subcontracting of any portion of the Work as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the legislative body of the Owner.

For all projects over Twenty-five Thousand Dollars (\$25,000): for any bid proposal submitted and for any contract for public work entered into, an inadvertent error in listing a subcontractor who is not registered under Labor Code section 1725.5 shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that either: the subcontractor is registered prior to the bid opening; or the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5(a)(2)(E), if applicable, within 24 hours after the bid opening; or the subcontractor is replaced by another registered subcontractor under Public Contract Code section 4107. Failure of a listed subcontractor to be registered shall be grounds under Public Contract Code section 4107 for the Contractor, with the Owner's consent, to substitute a registered subcontractor for the unregistered subcontractor.

Failure to provide this information in a legible manner may result in the rejection of an otherwise acceptable bid.

NONCOLLUSION DECLARATION

TULARE CITY SCHOOL DISTRICT

District Office

600 North Cherry St.

Tulare, CA 93274

*Note: **This document must be executed and submitted with the bid.***

Owner: Tulare City School District

Contract for: Purchasing & Installing NeedlePoint Bipolar Ionization in all HVAC Systems throughout school sites & District Office Project.

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____, 2020, at _____ [city], _____ [state].

Signature

Print Name

WORKERS' COMPENSATION CERTIFICATE

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

Labor Code Section 3700, in relevant part, provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers. Said certificate may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees, ... "

I am aware of the provisions of the Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract. I shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive thirty (30) days' notice of cancellation.

Name of Contractor

Signature

Print Name

Date

(In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under the contract.)

SUFFICIENT FUNDS DECLARATION

(Labor Code section 2810)

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

Note: This document must be executed and submitted with the bid.

Owner: **Tulare City School District**

Contract for: **Purchasing & Installing NeedlePoint Bipolar Ionization in all HVAC Systems throughout school sites and District Office Project**

I, _____, declare that I am the _____ of _____, the entity making and submitting the bid for the above Project that accompanies this Declaration, and that such bid includes sufficient funds to permit _____ [insert name of entity] to comply with all local, state or federal labor laws or regulations during the performance of the Contract for the Project, including payment of prevailing wage, and that _____ [the entity] will comply with the provisions of Labor Code section 2810(d) if awarded the Contract.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and executed on _____ 2020, at _____ [city], _____ [state].

Date: _____

Signature: _____

Print Name: _____

Print Title: _____

**CERTIFICATION OF CONTRACTOR AND SUBCONTRACTOR DIVISION OF INDUSTRIAL REALTIONS
REGISTRATION**

Pursuant to Labor Code Section 1725.5, a contractor or subcontractor must be registered with the Department of Industrial Relations in order to bid on, to be listed in a bid proposal or to engage in the performance of any defined public work contract.

_____, _____ certify that
(Name) (Title)

_____ is currently registered as a contractor with the Department of In
(Contractor Name)

Industrial relations (DIR):

Contractor's DIR Registration Number _____

Expiration date June 30, 20__

Contract further acknowledges:

1. Contractor shall maintain DIR registration status for the duration of the project without gap in registration.
2. Contractor shall note in its invitation to bid the DIR registration requirement for all subcontractor and their subcontractors.
3. Contractor shall ensure that all subcontractors are registered at time of bid opening and maintain registered status for the duration of the project.
4. Contractor is to furnish DIR Registration Number for all subcontractors on the project within 24 hours of the bid opening.
5. Contractor shall substitute any subcontractor with a DIR registered contractor if listed subcontractor is unable to perform the work.

Failure to comply with any of the above may result in determination of non-responsiveness.

I declare under penalty of perjury under California law that the foregoing is true and correct.

Signature

Date

FINGERPRINTING NOTICE AND ACKNOWLEDGMENT

(Education Code Section 45125.2(a))

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

*Note: **This document must be executed and submitted with the bid.***

Business entities entering into contracts with the Owner for the construction, reconstruction, rehabilitation or repair of a facility must comply with Education Code sections 45125.1 and 45125.2. Such entities are responsible for ensuring full compliance with the law and should therefore review all applicable statutes and regulations. The following information is provided simply to assist such entities with compliance with the law.

1. If the Owner determines your employee(s) or you as a sole proprietorship will have more than limited contact with students, then you must take one or more of the following steps:
 - a. Install a physical barrier at the worksite to limit contact with pupils.
 - b. Have an employee (if not a sole proprietorship), who the Department of Justice has ascertained has not been convicted of a violent or serious felony, continually monitor and supervise employees. The entity shall verify in the Independent Contractor Student Contact Form to the Owner that the employee charged with monitoring and supervising its employees has no such convictions. (See attached.)
 - c. Arrange, with Owner's approval, for surveillance by Owner's personnel.

If one or more of these steps is taken, you are not required to comply with Education Code section 45125.1.

2. If you are providing the services in an emergency or exceptional situation, you are not required to comply with Education Code section 45125.2. An "emergency or exceptional" situation is one in which pupil health or safety is endangered or when repairs are needed to make a facility safe and habitable. Owner shall determine whether an emergency or exceptional situation exists.

[Signature Page Follows]

I have read the foregoing and agree to comply with the requirements of Education Code §§ 45125.1 and 45125.2 as applicable.

Dated: _____

Signature: _____

Name: _____

Title: _____

ATTACHMENT

TULARE CITY SCHOOL DISTRICT
District Office
600 North Cherry St.
Tulare, CA 93274

Under Education Code section 45125.1, no employee of a contractor or subcontractor, and no sole proprietor, who has been convicted of or has criminal proceedings pending for a violent or serious felony may come into contact with any student. A violent felony is any felony listed in subdivision (c) of Section 667.5 of the Penal Code. Those felonies are presently defined as:

- (1) Murder or voluntary manslaughter.
- (2) Mayhem.
- (3) Rape as defined in paragraph (2) or (6) of subdivision (a) of Section 261 or paragraph (1) or (4) of subdivision (a) of Section 262.
- (4) Sodomy as defined in subdivision (c) or (d) of Section 286.
- (5) Oral copulation as defined in subdivision (c) or (d) of Section 288a.
- (6) Lewd or lascivious act as defined in subdivision (a) or (b) of Section 288.
- (7) Any felony punishable by death or imprisonment in the state prison for life.
- (8) Any felony in which the defendant inflicts great bodily injury on any person other than an accomplice which has been charged and proved as provided for in Section 12022.7, 12022.8, or 12022.9 on or after July 1, 1977, or as specified prior to July 1, 1977, in Sections 213, 264, and 461, or any felony in which the defendant uses a firearm which use has been charged and proved as provided in subdivision (a) of Section 12022.3, or Section 12022.5 or 12022.55.
- (9) Any robbery.
- (10) Arson, in violation of subdivision (a) or (b) of Section 451.
- (11) Sexual penetration as defined in subdivision (a) or (j) of Section 289.
- (12) Attempted murder.
- (13) A violation of Section 18745, 18750, or 18755.
- (14) Kidnapping.

- (15) Assault with the intent to commit a specified felony, in violation of Section 220.
- (16) Continuous sexual abuse of a child, in violation of Section 288.5.
- (17) Carjacking, as defined in subdivision (a) of Section 215.
- (18) Rape, spousal rape, or sexual penetration, in concert, in violation of Section 264.1.
- (19) Extortion, as defined in Section 518, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (20) Threats to victims or witnesses, as defined in Section 136.1, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (21) Any burglary of the first degree, as defined in subdivision (a) of Section 460, wherein it is charged and proved that another person, other than an accomplice, was present in the residence during the commission of the burglary.
- (22) Any violation of Section 12022.53.
- (23) A violation of subdivision (b) or (c) of Section 11418.

A serious felony is any felony listed in subdivision (c) Section 1192.7 of the Penal Code. Those felonies are presently defined as:

- (1) Murder or voluntary manslaughter; (2) Mayhem; (3) Rape; (4) Sodomy by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (5) Oral copulation by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (6) Lewd or lascivious act on a child under the age of 14 years; (7) Any felony punishable by death or imprisonment in the state prison for life; (8) Any felony in which the defendant personally inflicts great bodily injury on any person, other than an accomplice, or any felony in which the defendant personally uses a firearm; (9) Attempted murder; (10) Assault with intent to commit rape, or robbery; (11) Assault with a deadly weapon or instrument on a peace officer; (12) Assault by a life prisoner on a non-inmate; (13) Assault with a deadly weapon by an inmate; (14) Arson; (15) Exploding a destructive device or any explosive with intent to injure; (16) Exploding a destructive device or any explosive causing bodily injury, great bodily injury, or mayhem; (17) Exploding a destructive device or any explosive with intent to murder; (18) Any burglary of the first degree; (19) Robbery or bank robbery; (20) Kidnapping; (21) Holding of a hostage by a person confined in a state

prison; (22) Attempt to commit a felony punishable by death or imprisonment in the state prison for life; (23) Any felony in which the defendant personally used a dangerous or deadly weapon; (24) Selling, furnishing, administering, giving, or offering to sell, furnish, administer, or give to a minor any heroin, cocaine, phencyclidine (PCP), or any methamphetamine-related drug, as described in paragraph (2) of subdivision (d) of Section 11055 of the Health and Safety Code, or any of the precursors of methamphetamines, as described in subparagraph (A) of paragraph (1) of subdivision (f) of Section 11055 or subdivision (a) of Section 11100 of the Health and Safety Code; (25) Any violation of subdivision (a) of Section 289 where the act is accomplished against the victim's will by force, violence, duress, menace, or fear of immediate and unlawful bodily injury on the victim or another person; (26) Grand theft involving a firearm; (27) carjacking; (28) any felony offense, which would also constitute a felony violation of Section 186.22; (29) assault with the intent to commit mayhem, rape, sodomy, or oral copulation, in violation of Section 220; (30) throwing acid or flammable substances, in violation of Section 244; (31) assault with a deadly weapon, firearm, machine gun, assault weapon, or semiautomatic firearm or assault on a peace officer or firefighter, in violation of Section 245; (32) assault with a deadly weapon against a public transit employee, custodial officer, or school employee, in violation of Sections 245.2, 245.3, or 245.5; (33) discharge of a firearm at an inhabited dwelling, vehicle, or aircraft, in violation of Section 246; (34) commission of rape or sexual penetration in concert with another person, in violation of Section 264.1; (35) continuous sexual abuse of a child, in violation of Section 288.5; (36) shooting from a vehicle, in violation of subdivision (c) or (d) of Section 26100; (37) intimidation of victims or witnesses, in violation of Section 136.1; (38) criminal threats, in violation of Section 422; (39) any attempt to commit a crime listed in this subdivision other than an assault; (40) any violation of Section 12022.53; (41) a violation of subdivision (b) or (c) of Section 11418; and (42) any conspiracy to commit an offense described in this subdivision.

BID BOND

TULARE CITY SCHOOL DISTRICT

District Office
600 North Cherry St.
Tulare, CA 93274

KNOW ALL MEN BY THESE PRESENTS that we the undersigned _____ as Principal and _____ as Surety, are hereby held and firmly bound unto the TULARE CITY SCHOOL DISTRICT "Owner" in the sum of _____ Dollars (\$ _____) for payment of which sum, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of _____ in strict accordance with Contract Documents.

NOW, THEREFORE,

a. If said bid shall be rejected, or, in the alternative;

b. If said bid shall be accepted and the Principal shall execute and deliver a contract in the form of agreement attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto (all properly completed in accordance with said bid), and shall in all other respects perform the agreement created by the acceptance of said bid;

Then this obligation shall be void, otherwise the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract on the call for bids, or to the Work to be performed hereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the Work, or to the specifications.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under several seals this ____ day of _____, _____, the name and corporate party being hereto affixed and these presents duly signed by its

undersigned representative, pursuant to authority of its governing body. In the presence of:

(Notary Seal)

(Principal)

(Business Address)

(Corporate Surety)

Business Address)

By: _____

The rate or premium of this bond is _____ per thousand, the total amount of premium charged, \$_____.

(The above must be filled in by Corporate Surety).

**TULARE CITY SCHOOL DISTRICT
PURCHASING & INSTALLING NEEDLEPOINT BIPOLAR IONIZATION IN ALL HVAC SYSTEMS
THROUGHOUT SCHOOL SITES AND DISTRICT OFFICE**

SCOPE OF WORK:

Install Air Purification Equipment

This is a performance based project. Install sufficient NPBI equipment to result in a minimum continuous 1500-2000 ions/cc when measured at the working surface of all classrooms, common areas and offices.

Furnish and install Needlepoint Bi-polar Ionization (NPBI) air purification equipment on all HVAC equipment in all schools and District Office.

HVAC system shall include (but it not limited to) the following:

Rooftop HVAC Units	H&V Units
Split-type AC systems (Ducted)	Classroom Unit Ventilators
Ductless Split-type AC Units	

Connect to power source as per manufacturer's guidelines.

Verify operation of equipment.

This project includes labor and materials for all line and low voltage wiring as required to result in a complete turn-key project.

SPECIFICATIONS

OVERVIEW

The successful contractor must provide skilled technicians with expertise involving all aspects of HVAC. Refrigeration, Pneumatic & Direct Digital Electronic Temperature Control Systems and to perform the necessary requirements needed to perform the main project as well as the optional project.

PRODUCTS

- A. The air purification system(s) shall be of the size, type, arrangement and capacity indicated and required by the unit furnished and shall be of the manufacturer specified.
- B. Basic of Design: Global Plasma Solutions/ or I-Wave Nu-Calgon.

BI-POLAR IONIZATION DESIGN & PERFORMANCE CRITERIA

- A. Each piece of air handling equipment, so designated on the specifications shall contain a Plasma Generator with BI-polar ionization output as described here within.
- B. The Bi-polar Ionization system shall be capable of:

1. Effectively killing microorganisms downstream of the bi-polar ionization equipment (mold, bacteria, virus, etc.)
 2. Controlling gas phase contaminants generated from human occupants, building structure and furnishings.
 3. Capable of reducing static space charges.
 4. Increasing the interior ion levels both positive and negative, to a minimum of 800 ions/cm³ measured 5 feet from the floor.
 5. Self-cleaning requiring no maintenance or replacement parts.
 6. Producing a minimum of 160M ions/cc.
- C. The bi-polar ionization system shall operate in a manner such that equal amounts of positive and negative ions are produced.
1. Air exchange rates may vary through the full operating range of a constant volume or VAV system. The quantity of air exchange shall not be increased due to requirements of the air purification system.
 2. Velocity Profile: The air purification device shall not have maximum velocity profile
- D. Equipment Requirements:
1. Electrode Specifications (Bi-polar Ionization):
 - a. Each Plasma Generator with Bi-Polar Ionization output shall include the required number of electrodes and power generator sized to the air handling equipment capacity. Bi-polar ionization tubes manufactured of glass and steel mesh shall not be acceptable due to replacement requirements, maintenance, and performance output reduction over time, ozone production and corrosion.
 - b. Electrodes shall be energized when the main unit disconnect is turned on and the fan is operating. Internal circuitry shall be provided to sense air flow across the electrode output. Ionization systems requiring the use of a mechanical air pressure switch to cycle the electrodes only when the fan is operating shall not be acceptable due to high failure rates and pressure sensitivity.
 - c. Electrode pair shall provide a minimum of 160 million ions per cubic centimeter as measured at 2 inches, both positive and negative ions, in equal quantities. Devices providing less than 160 million ions/cc per electrode pair shall not be acceptable.
 - d. Each Plasma Generator shall be provided with a self-cleaning system that is field programmable to change the number of days between the cleaning cycles. Systems without a no-maintenance, self –cleaning system shall not be acceptable.

The Contractor shall be responsible for maintaining all air systems until the owner accepts the building (Owner Acceptance) All equipment shall be assembled and installed in a workman like manner to the satisfaction of the owner. Any material damaged by handling, water or moisture shall be replaced by the contractor at no cost to the owner. All equipment shall be protected from dust and damage on a daily basis throughout this project.

iWave

AIR PURIFIERS



PATHOGEN TEST RESULTS

All tests were run using proprietary NPBI™ technology.

SARS-CoV-2 (Covid-19)

**TIME IN
CHAMBER**

30 MINUTES

**RATE OF
REDUCTION**

99.4%

INNOVATIVE
BIoANALYSIS

This test was run using the iWave-C (GPS-DM48-AC) in a test designed to mimic ionization conditions like that of a commercial aircraft's fuselage.

Based on viral titrations, it was determined that at 10 minutes, 84.2% of the virus was inactivated. At 15 minutes, 92.6% of the virus was inactivated, and at 30 minutes, 99.4% of the virus was inactivated.

Human Coronavirus 229E

**TIME IN
CHAMBER**

60 MINUTES

**RATE OF
REDUCTION**

90%

ALG
ANALYTICAL
LAB GROUP

This test was run in a test chamber in a lab setting with the Nu-Calgon iWave-R Air Purifier P/N 4900-20.

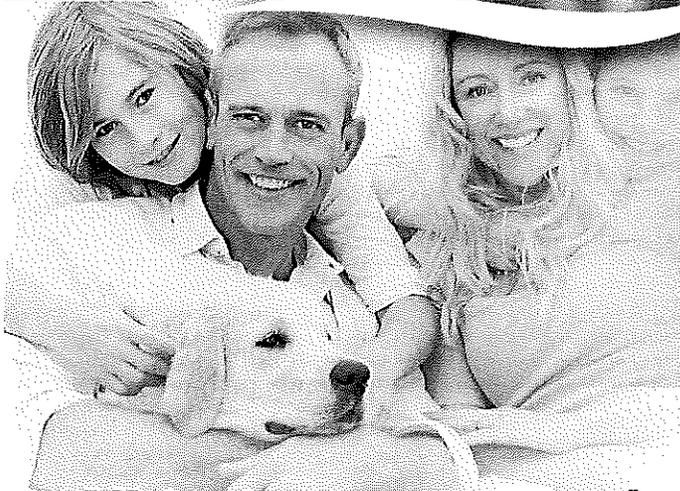
A petri dish containing a pathogen is placed underneath a laboratory hood, then monitored to assess the pathogen's reactivity to Needle Point Bi-polar Ionization (NPBI) over time. This controlled environment allows for comparison across different types of pathogens.

iWave's Needle Point Bi-polar Ionization (NPBI) technology is used in a wide range of applications across diverse environmental conditions. Since locations will vary, clients should evaluate their individual application and environmental conditions when making an assessment regarding the technology's potential benefits.

 **Nu-Calgon**

iWave

AIR PURIFIERS



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 Nu-Calgon

NO MAINTENANCE AIR PURIFIER FOR RESIDENTIAL/COMMERCIAL A/C SYSTEMS

- World's first patented self-cleaning design
- Needle point ionization actively treats air in homes and buildings
- Duct-mount install for systems up to 12 tons (4800 CFM) - multiple units can be installed on larger systems
- Includes waterproof housing for installation indoors or outdoors
- Patented universal voltage input -24VAC-240VAC
- Kills mold, bacteria and viruses
- Reduces allergens, odors, smoke, static electricity and other airborne particles
- Keeps coil cleaner
- Programmable cleaning cycle with digital display
- Integral alarm contact for remote monitoring
- UL and cUL approved
- Three-year limited warranty*

Description

iWave-C is a self-cleaning, bi-polar ionization generator for actively treating a building's air quality that does not require replacement parts in a year or two like competing UV lights or other ionizer technologies. In addition, the iWave-C produces and maintains unparalleled ionization output and capabilities. As the air flows past the iWave-C, the device emits positive and negative ions, creating a plasma region that actively purifies the supply air, killing mold, bacteria and viruses in the coil and living space. The ionization process also reduces allergens, smoke and static electricity, as well as controlling odors (cooking, pet, VOCs) and other particles (no more sunbeams) in the air without creating ozone or any harmful byproducts.

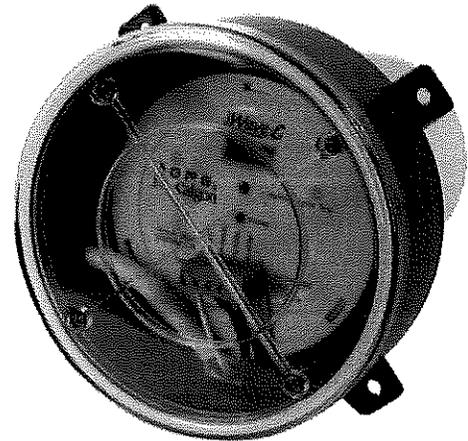
Application

Although suitable for residential applications, the original iWave-C is specially designed for light commercial systems up to 12 tons (4800 CFM) with no maintenance or replacement parts needed. iWave-C can be easily duct-mounted indoors or outdoors, depending on the application. iWave-C always works at peak performance, producing over 200 millions ions/cc per polarity (400 million total ions/cc), making it superior to other market approaches. Special features include a programmable self-cleaning cycle, waterproof housing, digital display (for on-site visual monitoring) and integral alarm contact (for remote monitoring). In the event the ion emitters become damaged, they can be replaced on the iWave-C model.

Indoor Air Quality

iWave®-C

Commercial Air Cleaner



Packaging

1 each 4900-10

Specifications

Input Voltage:	24VAC to 240VAC
Power (VA):	12 VA
Frequency:	50/60 HZ
System Size:	Up to 12 tons (4800 CFM)*
Ion Output:	200 millions ions/cc per polarity (400 million total ions/cc)
Dimensions:	4" W x 7" H x 7" L
Weight:	3 lbs.
Electrical Approvals:	UL and cUL approved
Service Temp. Range:	-40°F to 160°F
Waterproof Rating	NEMA 4X

*For systems beyond 12 tons, multiple iWave-Cs can be used. Install a minimum of two feet apart for maximum ion output.

iWave-C Installation Instructions

1. Turn power off to the unit.
2. Install in the duct, preferably the prefilter and cooling coil so as to treat the coil and living space. However, the iWave-C can be installed farther down on the supply air duct. The weatherproof housing allows to be mounted indoor or outdoor. For commercial systems beyond 12 tons, multiple iWave-C units can be used; but install a minimum of two feet apart for maximum performance.

Continued on back.



iWave-C Installation Instructions (Continued)

- When the install location is found, cut or drill a 4 inch (100 mm) round hole in duct. Insert the iWave-C into the hole and secure with four tapping screws that are provided. Note: if the iWave-C is being mounted to duct board, the included spring load wing nuts and bolts will be required.
- Follow all electric, mechanical and building codes when installing and wiring. The iWave-C can be powered with 24VAC voltage circuit or 110-240VAC high voltage circuit. The face panel of the unit is labeled showing which terminals are 24VAC, 110-240VAC input and neutral and come prewired from the factory with six feet of liquid-tight flex conduit to reach a junction box for wiring – never connect with an extension cord.
- Use only one voltage source at a time and never connect low and high voltage simultaneously! Whichever voltage is not used, use a wire nut to protect the unused wire. The wires are color coded as follows:
 - Black wire = 24-240VAC input
 - White wire = Neutral
 - Green wire = Ground
 - Purple wires = Alarm Dry Contact

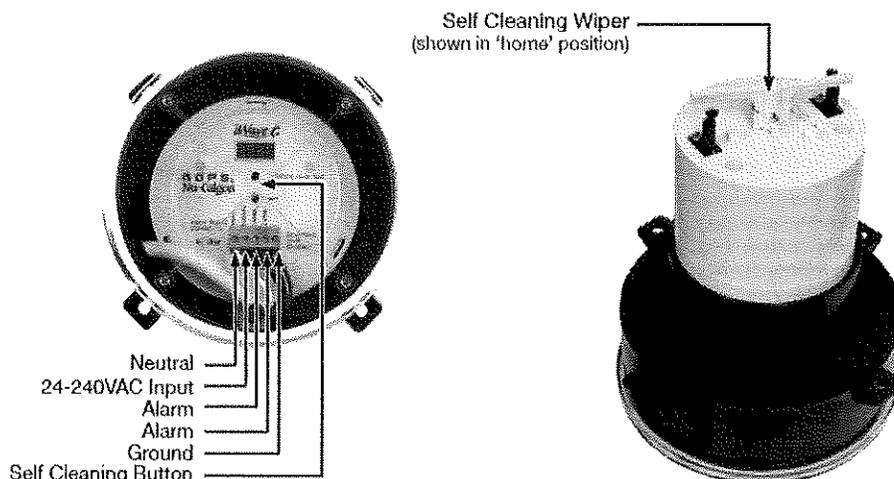
The iWave-C is provided with alarm contact for use with a building management system. When the unit is powered and there are no faults, the alarm contact will be closed, providing continuity. The contacts are rated up to 250VAC at 1A.

CAUTION! Never touch brushes while operating; shock may occur.

- Once powered, the iWave-C initiates an internal check of all systems. After initializing, the display will blink between "ON", "GPS" and the number of days the unit has been powered. If there is a fault, the unit display will show "FALT".

Cleaning Cycle - The iWave-C comes with a preset cleaning cycle designed to clean the brushes every 5 days. At any time, the cleaning cycle test button on the front panel may be pushed and the unit will initiate a cleaning cycle. While the cleaning cycle is engaged, the display will change to "CLEA". To change the cycle frequency, hold the cleaning cycle button in for 5 seconds once the display shows "CLEA" and then press it until you see the number of days you want it to wait between cycles: 1, 5, 10 or 20 days. Most applications will not need reprogramming from the factory default 5 day cleaning cycle.

When installed in applications where the iWave-C will be exposed to heavy concentrations of smoke, it is advised to gently clean the emitters with alcohol wipes 2-3 times annually. For more maintenance and troubleshooting tips, consult the instruction bulletin insert for the iWave-C (4-410) which can be obtained at www.nucalgon.com.



Three-Year Limited Warranty - The iWave-C offers a limited warranty for three years that covers any defects in material or workmanship under normal use. If you make a claim during the warranty period, you must provide proof of purchase and proof of proper installation by a licensed contractor for the warranty to be valid. The iWave warranty does not cover labor, return shipping charges, damage from improper installation or improper voltage usage. The iWave warranty begins on the date that the unit was purchased. Installation of your iWave by any person other than a licensed contractor will void the warranty. Contact your local Nu-Calgon account manager or info@nucalgon.com with further questions.



NO MAINTENANCE AIR PURIFIER FOR RESIDENTIAL AIR CONDITIONING SYSTEMS

- Patented self-cleaning design ensures ongoing peak performance
- Needle point ionization actively treats air in the living space
- For duct systems up to 6 tons (2400 CFM)
- Easily installs in minutes in A/C system
- Patented universal voltage input – 24VAC to 240VAC!
- Universal mounting with magnets
- Flexible design with *no replacement parts*
- Kills mold, bacteria and viruses
- Reduces allergens, odors, smoke, static electricity and other airborne particles
- Keeps coil cleaner
- Programmable cleaning cycle
- Alarm contact option for secondary notification
- UL and cUL approved
- Three-year warranty

Description

With technology installed in over 200,000 applications, iWave-R is the world's first self-cleaning, no maintenance needlepoint bi-polar ionization generator designed specifically for treating air in residential duct A/C systems. As the air flows past the iWave-R, positive and negative ions actively purify the supply air, killing mold, bacteria and viruses in the coil and living space. The ionization process also reduces allergens, smoke and static electricity, as well as controlling odors (cooking, pet, VOCs) and other particles (no more sunbeams) in the air without creating ozone or any harmful byproducts.

Application

iWave-R treats the air in any brand of residential duct air conditioning systems up to 6 tons (2400 CFM) in size with no maintenance and no replacement parts. Designed for universal mounting, the iWave-R can be installed inside or outside of duct, or attached magnetically near the indoor fan in the air handler. Simply connect to power using its patented voltage input capability. Install between air filter and cooling coil to treat the indoor coil; as an alternative, the iWave-R can be installed in the supply air. iWave-R always works at peak performance, producing over 160 million ions/cc per polarity (320 million total ions/cc), more than any other ionizer product on the market. Its patented self-cleaning design includes a programmable cleaning cycle that can clean the emitter brushes every 1, 3, 5 or 10 days. The iWave-R is factory set to clean every third day which is adequate for a typical installation. iWave-R does not create "black walls" as negative-only ionizer products will do.



Indoor Air Quality

iWave®-R Residential Air Cleaner



Packaging

1 each **4900-20**

Specifications

Input Voltage:	24VAC to 240VAC
Power (VA):	10 VA
Frequency:	50/60 HZ
System Size:	6 tons (2400 CFM)
Ion Output:	160 million ions/cc per polarity (320 million total ions/cc)
Dimensions:	6" L x 4.8" W x 2" D
Weight:	1 lb.
Electrical Approvals:	UL and cUL approved
Service Temp. Range:	-40°F to 160°F

iWave-R Installation Instructions

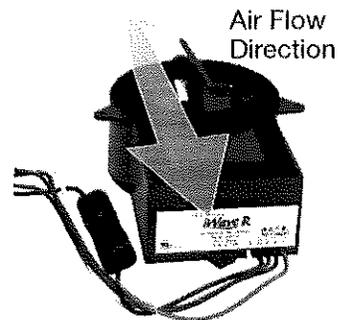
1. Disconnect air handler power before installing.
2. Mount the iWave-R after the particle filter and before the indoor coil. This ensures pathogens (i.e., mold) and odors are controlled throughout the entire depth of the coil in addition to the breathing space.
3. The iWave-R is designed with universal mounting- either attach with screws or affix to the system with integral magnets. Mount near the fan inlet (shaft side) on a metal surface in the air handler, internal wall duct or external wall duct depending on what is best for the installation. For external duct mount, a three inch diameter hole will need to be cut/drilled out of the duct. **IMPORTANT:** If mounting on the fan housing, ensure the iWave-R is secured from fan vibration - use short length self-tapping screws so as not to impair operation of fan.

Continued on back.

iWave-R Installation Instructions Continued

CRITICAL: Make sure air flows across both brushes at the same time, like a football through a field goal post.

CRITICAL: The iWave-R is designed for flush, external duct mount installations as an optional install. Ensure in all installations that other metal surfaces/wires are kept a minimum of two inches away from the tip ends of the high voltage emitters to prevent grounding, leading to premature failure.



4. The iWave-R has universal voltage capability, connect 24VAC to 240VAC voltage input, whatever is most convenient for quick installation. Although the device only pulls 10 watts, sometimes a dedicated 24VAC power supply may be necessary depending on the current load on the transformer for other system accessories.
5. Unit may be powered 24/7 or may be interlocked with indoor fan – unit only purifies when air is flowing. If unit is wired with the fan, the quickest air purification to address an air concern is to let the fan/iWave-R run continually for 72 hours. Leaving the fan continually in the 'on' position will provide the best ongoing air purification in the house.
6. **Wiring:** The iWave-R has a patented universal voltage 24VAC to 240VAC input capability. The black wire (marked 'AC' on label) is for 24VAC to 240VAC voltage input. The white wire (marked 'N' on the label) is the neutral leg for 24VAC or 120VAC; or the other hot leg for 208/240VAC. The green striped wire is ground, marked 'G' on the label. The brown wires (marked 'A' on the label) are leads to a normally closed alarm contact – see step 7.
7. The iWave-R is equipped with an alarm contact option to provide a visual indicator outside of the air conditioning system to let the homeowner know that it is in normal operation or if there is a fault. The alarm contact, a normally closed contact, rated at 240 VAC/1A, will require a power source and visual indicator, such as a LED. In normal mode, the LED will stay illuminated. If the device goes into default mode, the LED will not light. If a homeowner wants a remote indication of iWave-R status, it is recommended that the 24VAC light (bought separately) be powered through the alarm contacts and sent to a remote wall.
8. When powered up, a green LED on the iWave-R will illuminate; the ionizer is working and the stepper motor for the cleaning feature is in the home position. If the light is not illuminated, check voltage to the iWave-R.
9. **Self-Cleaning/Program Feature:** The patented iWave-R has a self-cleaning feature to ensure it is always operating at peak performance over its design life. The functions for the button include:
 - a. While in normal operation mode, press the button once, the LED light will flash and the stepper motor starts an on-demand cleaning cycle.
 - b. While in cleaning cycle (after step 'a' above), press the button and hold for 3 seconds, it goes into the mode of setting the cleaning cycle intervals. The iWave-R is designed to be programmed for 1, 3, 5, or 10 day cleaning cycle intervals. **The iWave-R is factory preset for cleaning the emitters every third day; this is adequate for most applications and will not need to be reprogrammed in the field.**

While in the cleaning mode (with LED flashing and cleaning feature working):

- a. Press the button and hold for 3 seconds, the LED will flash once every second and the motor works once every day.
- b. Press the button twice (the first press hold for three seconds), the LED will flash twice every second and the motor works once every 3 days. This is the factory preset program.
- c. Press the button three times (the first press hold for three seconds), the LED will flash five times every second and the motor works once every 5 days.
- d. Press the button four times (the first press hold for three seconds), the LED will flash ten times every second and the motor works once every 10 days.

The iWave-R remembers the programmed cleaning cycle days. After the power source is removed and applied again, the iWave-R will automatically operate and go back to the previous days.

Note: The iWave-R is designed to be a long term IAQ investment, not requiring ongoing maintenance of replacing expensive parts every year or two like other market approaches. The ion emitters (fiber brushes) used in the iWave-R are designed to where they could easily be replaced after many years in service; in the unlikely event they ever needed to be replaced. Replacement requires a Phillips screwdriver and a few minutes; contact Nu-Calgon for further questions.



FLEXIBLE AIR PURIFIER FOR DUCTLESS AND OTHER HVAC SYSTEMS

- Special ion needles routed in a flexible bar circuit
- Compact design applicable for HVAC cooling coils up to 48" wide
- Can flex easily in the field to accommodate virtually any application - ideal for ductless systems
- Chemical and temperature resistant, durable for long service life
- No replacement parts
- Flexible voltage input - 110VAC to 240VAC
- Kills mold, bacteria and viruses
- Reduces allergens, odors, smoke, static electricity and airborne particles
- Keeps coil cleaner
- UL and cUL approved
- Three-year warranty

Description

iWave-F is a flexible ion-generating bar that can treat IAQ in nearly any HVAC application. The air purifier provides the highest level of ionization energy in the most compact size available in the market, producing 240 million ions/cc per linear feet. The highly versatile iWave-F is low maintenance with no replacement parts. As the air flows past the iWave-F, the device emits positive and negative ions, creating a plasma region that purifies the air, killing mold, bacteria and viruses in the coil and living space. The ionization process also reduces allergens, smoke and static electricity, as well as controlling odors (cooking, pet, VOCs) and other particles (no more sunbeams) in the air without creating ozone or any harmful byproducts.

Application

iWave-F's revolutionary circuit bar with special integrated ion-generating needles fits any HVAC cooling coil up to 48" wide. The circuit bar is chemical resistant and highly durable for long service life. Plus, it can be folded to length in the field to any size and uses hook and loop for the flexible bar and power pack for easy installation. It is perfect for ductless HVAC systems - specifically mini-splits, commercial VRF coils, PTAC systems - plus residential and commercial duct systems, packaged systems, transport cooling coils or even in ice machines. The iWave-F is the most versatile and novel product on the market to address air quality for any HVAC system, in particular to solve mold issues common in hard-to-clean ductless systems.

Packaging

1 each 4900-30

2611 Schuetz Rd. • St. Louis, MO 63043 • 800-554-5499 • www.nucalgon.com
Calgon is a licensed trade name • (618) 4-20

Indoor Air Quality

iWave®-F

Flexible Air Cleaner



Specifications

Input Voltage:	110VAC to 240VAC
Power (VA):	5 Watts
Frequency:	50/60 HZ
Output Voltage:	5 KV
Power Supply Dimensions:	2.0" W x 1.0" H x 3.0" L
Flexible Bar Dimensions:	1.25" W x 0.05" H x 36" L
Power Supply Weight:	0.5 lb.
Electrical Approvals:	UL and cUL approved
Service Temp. Range:	-40°F to 140°F

iWave-F Installation Instructions

The iWave-F is a highly versatile ion generating device that is designed to be typically installed at the base of the cooling coil for ductless and duct air conditioning systems; but the device can be installed in supply air as well. The iWave-F is an ideal, no replacement part device that can be integrated into wall or ceiling cassette indoor coils of mini-splits, PTAC units or commercial systems where there may not be enough room to install the iWave-C between the filter and coil or to inhibit mold in ice machine applications. The 36 inch ion generating bar can be used for coils up to 48 inches wide. For coils beyond the 36 inch ionizer length, simply center the ionizer bar on the coil to make sure the ionization best covers the coil width. For coils shorter than 36 inches, see the section on iWave-F modification directions on the back page. Simply use the hook and loop backing on the power pack and ionization bar and stick it across the width of the coil, near its base so the iWave-F treats the coil as well as the breathing zone. Connect the appropriate leads of the iWave-F to 110VAC to 240VAC power and reassemble the equipment and turn on power to the unit.

More Instructions on Back.

Mini-Split Instructions:

1. Turn power off to mini-split.
2. Open front cover of indoor unit.
3. Remove filter screens.
4. Measure the length of coil and affix ionizer bar to solid surface (often plastic) on top of the coil. The width of the plastic region will easily accommodate the iWave-F ionizer bar so it can treat the coil, barrel blower and breathing zone of the room. For coils between 36-48 inches, center the ionizer bar on top of the coil and affix. For coils less than 36 inches, refer to the iWave-F modification directions below.
5. Depending on mini-split model, the area available to mount power pack will vary. Either affix with hook and loop backing to back cabinet wall or side of coil.
6. Run wires to the electrical compartment to hook up to 110VAC to 240VAC power source to where iWave-F will power on with the indoor fan. For 110/120VAC and 208/240VAC input, connect black wire (hot) and white wire (Neutral or Other AC Phase) to applicable electrical terminal block.
7. Trim wires to length hook up to appropriate terminal connections and connect. Harness/secure wires within the equipment as necessary.
8. Reassemble filter screens, close the front cover and turn on power to mini-split.

iWave-F Modification Directions:

When the iWave-F is too long for the coil which it's being applied, perform the following steps:

1. Measure how much past the end of the coil the iWave-F lays.
2. Bend the iWave-F back on top of itself (DO NOT bend under with hook and loop backing facing each other) so the brush pairs on the top will lay next to the brush pairs on the bottom, shown in Figure 1.
3. Using the provided hook and loop strip attach the iWave-F to the cooling coil starting at the power entry side of the iWave-M. DO NOT press down on the end of the iWave-F that will need folded to shorten the length. See Figure 2.
4. Fold the iWave-F back to achieve the length required, lining up the bottom and top layer brush pairs as shown in Figure 2, and place a piece of electrical tape across the joint. See Figure 3.
5. Continue to use electrical tape down the iWave-F towards the end, making sure that the tape joints are between the brush pairs. DO NOT allow the tape to cover the brush pairs. See Figure 3.
6. DO NOT crease the end of the iWave-F flat. As a guide, use a #2 Phillips screwdriver inside the fold joint to ensure the proper bend is achieved. See Figure 4.
7. Once the iWave-F has been folded and taped to the length required, push it down on the coil.
8. A successful fold procedure will create "pockets" for the carbon fiber brushes to emit the ions.

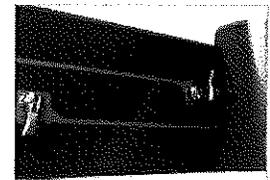


Figure 1

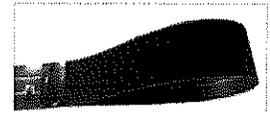


Figure 2



Figure 3

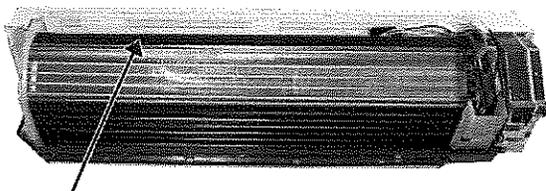


Figure 4

Typical Location Install on Ductless Wall System:

Figure 5

Affix iWave-F power pack to back of cabinet.



Affix iWave-F to the top of coil on plastic strip (or top of fins) to treat coil, blower and living space.

Cleaning: If required, use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush, like toothbrush, can also be used to clean debris from ion emitters. Do not expose the iWave-F to corrosive cleaners. Contact Nu-Calgon for further guidance with coil cleaner options.

FLEXIBLE AIR PURIFIER FOR DUCTLESS AND OTHER HVAC SYSTEMS

- Special ion needles routed in a flexible bar circuit
- Compact design applicable for HVAC cooling coils up to 36" wide
- Can flex easily in the field to accommodate virtually any application - ideal for ductless systems
- Chemical and temperature resistant, durable for long service life
- No replacement parts
- Flexible voltage input - 110VAC to 240VAC
- Kills mold, bacteria and viruses
- Reduces allergens, odors, smoke, static electricity and airborne particles
- Keeps coil cleaner
- UL and cUL approved
- Three-year warranty

Description

iWave-M is a flexible ion-generating bar that can treat IAQ in nearly any HVAC application. The air purifier provides the highest level of ionization energy in the most compact size available in the market, producing 240 million ions/cc per linear feet. The highly versatile iWave-M is low maintenance with no replacement parts. As the air flows past the iWave-M, the device emits positive and negative ions, creating a plasma region that purifies the air, killing mold, bacteria and viruses in the coil and living space. The ionization process also reduces allergens, smoke and static electricity, as well as controlling odors (cooking, pet, VOCs) and other particles (no more sunbeams) in the air without creating ozone or any harmful byproducts.

Application

iWave-M's revolutionary circuit bar with special integrated ion-generating needles fits any HVAC cooling coil up to 36" wide. The circuit bar is chemical resistant and highly durable for long service life. Plus, it can be folded to length in the field to any size and uses hook and loop for the flexible bar and power pack for easy installation. It is perfect for ductless HVAC systems – specifically mini-splits, commercial VRF coils, PTAC systems – plus some residential and commercial duct systems, packaged systems, transport cooling coils or even in ice machines. The iWave-M is the most versatile and novel product on the market to address air quality for any HVAC system, in particular to solve mold issues common in hard-to-clean ductless systems.

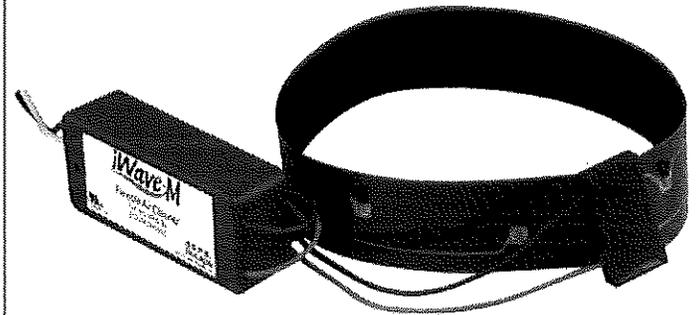
Packaging

1 each 4900-35

Indoor Air Quality

iWave®-M

Mini Flexible Air Cleaner



Specifications

Input Voltage:	110VAC to 240VAC
Power (VA):	5 Watts
Frequency:	50/60 HZ
Output Voltage:	5 KV
Power Supply Dimensions:	2.0" W x 1.0" H x 3.0" L
Flexible Bar Dimensions:	1.25" W x 0.05" H x 18" L
Power Supply Weight:	0.5 lb.
Electrical Approvals:	UL and cUL approved
Service Temp. Range:	-40°F to 140°F

iWave-M Installation Instructions

The iWave-M is a highly versatile ion generating device that is designed to be typically installed at the base of the cooling coil for ductless and duct air conditioning systems; but the device can be installed in supply air as well. The iWave-M is an ideal, no replacement part device that can be integrated into wall or ceiling cassette indoor coils of mini-splits to inhibit mold in ice machine applications. The 18 inch ion generating bar can be used for coils up to 36 inches wide. For coils beyond the 18 inch ionizer length, simply center the ionizer bar on the coil to make sure the ionization best covers the coil width. For coils shorter than 18 inches, see the section on iWave-M modification directions on the back page. Simply use the hook and loop backing on the power pack and ionization bar and stick it across the width of the coil, near its base so the iWave-M treats the coil as well as the breathing zone. Connect the appropriate leads of the iWave-M to 110VAC to 240VAC power and reassemble the equipment and turn on power to the unit.

More Instructions on Back.



Mini-Split Instructions:

1. Turn power off to mini-split.
2. Open front cover of indoor unit.
3. Remove filter screens.
4. Measure the length of coil and affix ionizer bar to solid surface (often plastic) on top of the coil. The width of the plastic region will easily accommodate the iWave-M ionizer bar so it can treat the coil, barrel blower and breathing zone of the room. For coils between 18-36 inches, center the ionizer bar on top of the coil and affix. For coils less than 18 inches, refer to the iWave-M modification directions below.
5. Depending on mini-split model, the area available to mount power pack will vary. Either affix with hook and loop backing to back cabinet wall or side of coil.
6. Run wires to the electrical compartment to hook up to 110VAC to 240VAC power source to where iWave-M will power on with the indoor fan. For 110/120VAC and 208/240VAC input, connect black wire (hot) and white wire (Neutral or Other AC Phase) to applicable electrical terminal block.
7. Trim wires to length hook up to appropriate terminal connections and connect. Harness/secure wires within the equipment as necessary.
8. Reassemble filter screens, close the front cover and turn on power to mini-split.

iWave-M Modification Directions:

When the iWave-M is too long for the coil which it's being applied, perform the following steps:

1. Measure how much past the end of the coil the iWave-M lays.
2. Bend the iWave-M back on top of itself (DO NOT bend under with hook and loop backing facing each other) so the brush pairs on the top will lay next to the brush pairs on the bottom, shown in Figure 1.
3. Using the provided hook and loop strip attach the iWave-M to the cooling coil starting at the power entry side of the iWave-M. DO NOT press down on the end of the iWave-M that will need folded to shorten the length. See Figure 2.
4. Fold the iWave-M back to achieve the length required, lining up the bottom and top layer brush pairs as shown in Figure 2, and place a piece of electrical tape across the joint. See Figure 3.
5. Continue to use electrical tape down the iWave-M towards the end, making sure that the tape joints are between the brush pairs. DO NOT allow the tape to cover the brush pairs. See Figure 3.
6. DO NOT crease the end of the iWave-M flat. As a guide, use a #2 Phillips screwdriver inside the fold joint to ensure the proper bend is achieved. See Figure 4.
7. Once the iWave-M has been folded and taped to the length required, push it down on the coil.
8. A successful fold procedure will create "pockets" for the carbon fiber brushes to emit the ions.

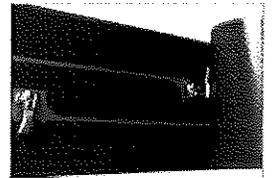


Figure 1

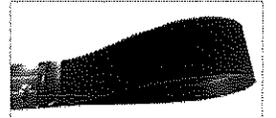


Figure 2



Figure 3

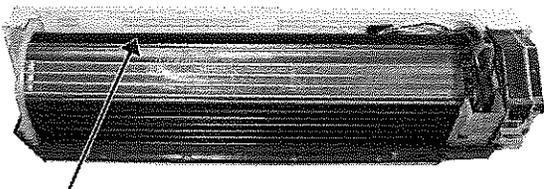


Figure 4

Typical Location Install on Ductless Wall System:

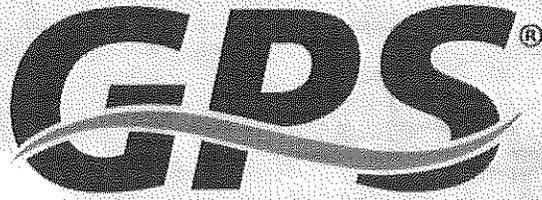
Figure 5

Affix iWave-M power pack to back of cabinet.

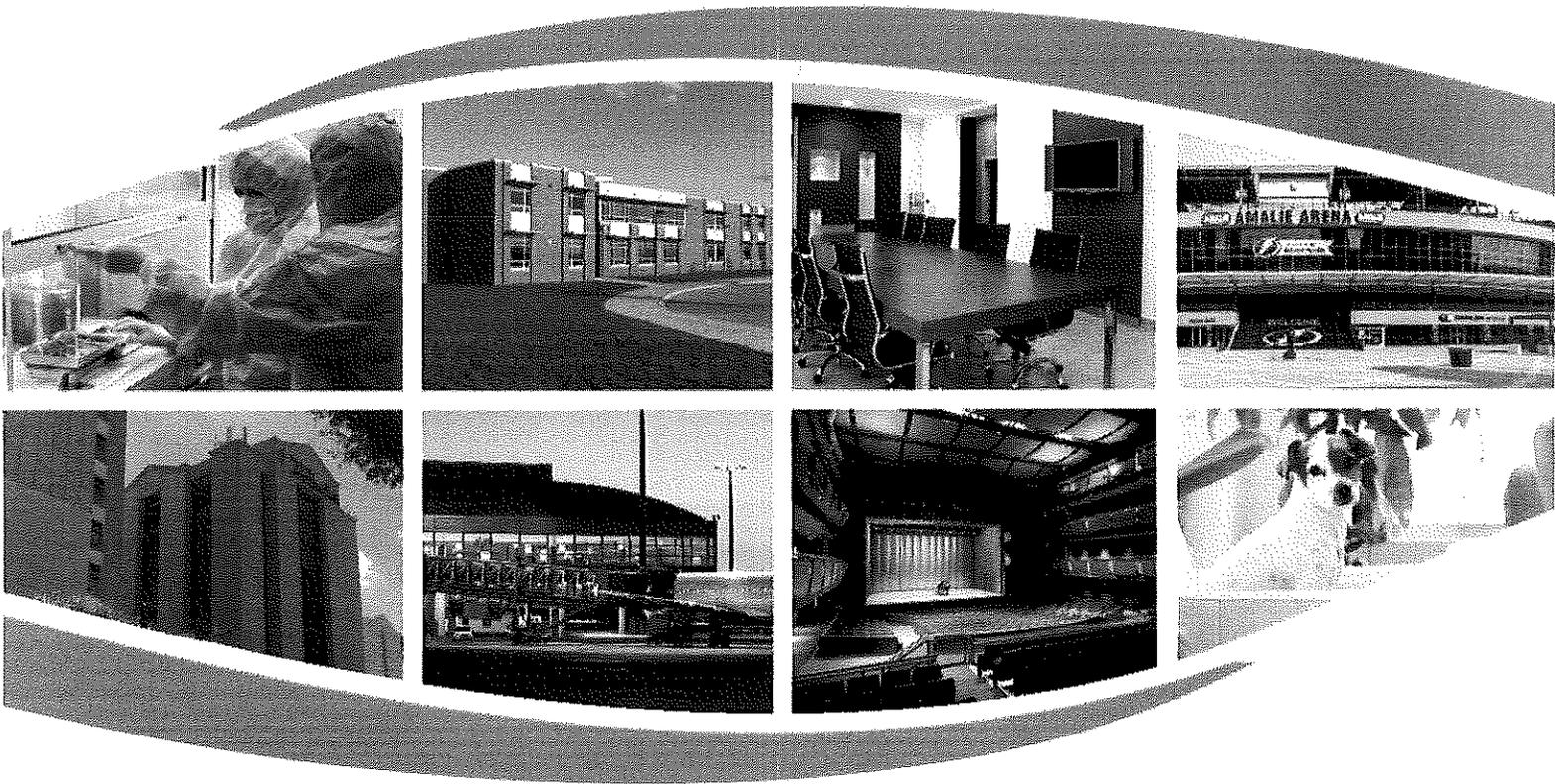


Affix iWave-M to the top of coil on plastic strip (or top of fins) to treat coil, blower and living space.

Cleaning: If required, use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush, like toothbrush, can also be used to clean debris from ion emitters. Do not expose the iWave-M to corrosive cleaners. Contact Nu-Calgon for further guidance with coil cleaner options.



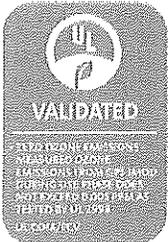
GLOBAL PLASMA
SOLUTIONS



Engineering Air for a Cleaner World™



With over 30 patents and more than 150,000 installations worldwide using our NEEDLEPOINT BIPOLAR IONIZATION technology, also known as NPBI, GPS is truly the Indoor Air Quality (IAQ) revolutionizer.



Our proven technology delivers clean indoor air that is safe and healthy – producing neither ozone nor other harmful by-products. All our NPBI products are UL and CE approved. Through NPBI, our products purify the air by eliminating airborne Particulates, Odors and Pathogens. All this while saving you 30% on Energy consumption and lowering your carbon footprint by reducing outdoor air intake by up to 75%.

Engineering Air for a Cleaner World™



GPS FACT: GPS can be installed in any system in any building...

- Agriculture
- Airports
- Animal Care
- Arenas & Stadiums
- Banks
- Casinos
- Child Care
- Convention Centers
- Fitness
- Food Service
- Healthcare
- Hospitality
- Hospitals
- Institutional
- Manufacturing
- Office Building
- Retail
- Schools & Universities
- Senior Care
- Transportation
- Theatres
- Worship

Truly a revolutionIZER
A pioneer with many innovations:

1st

- ... with universal power supply
- ... with auto-cleaning
- ... duct-mounted design
- ... to use carbon fiber brush needlepoint emitters
- ... with ionization bar
- ... with flexible ionization strip
- ... modular ionization bar
- ... to achieve UL 867 Ozone Standard
- ... AND ONLY to pass the RCTA DO-160 standard for aircraft
- ... to be installed on a commercial jet
- ... to be certified by FAA
- ... to be installed in commercial hand driers
- ... AND ONLY to receive UL 2998 Ozone Free Certification
- ... to receive OSPHD seismic (OSP) certification

GPS DELIVERS P.O.P.E.



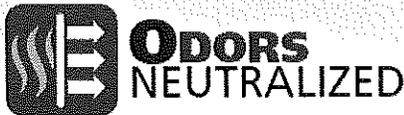
Particle Reduction

The GPS NPBI technology reduces airborne particles (i.e., dust, pet dander, pollen) through agglomeration. The ions attach to the airborne particles. The particles are subsequently attracted to one another, effectively increasing their mass and size. The air filtration system easily captures the larger particles, increasing the capture efficiency of your HVAC system.



Pathogen Reduction

During the GPS cleaning process the NPBI technology attacks and kills viruses, mold spores and bacteria. The ions steal away hydrogen from the pathogens, leaving them to die, and leaving you with clean and healthy indoor air.



Odor Reduction

During the GPS cleaning process chemical, pet, cooking, and other odors are broken down into basic harmless compounds, leaving the indoor air fresh smelling and free of odor causing VOCs.



Energy Saving

GPS' environmentally friendly cleaning process allows commercial buildings to significantly reduce the amount of outdoor air required to operate. This equates to a safer, more comfortable environment that requires up to 30% less energy to condition.

THE GPS ADVANTAGE

	GPS NPBI	OTHER BPI	CORONA DISCHARGE	HEPA FILTERS	CARBON FILTERS	ULTRAVIOLET (UV)	UV-PCO
Produces Harmful Byproducts	None	Yes	Yes	No	No	Yes	Yes
Reduces Airborn Particles	✓	Yes	Yes	Yes	No	No	No
Destroys VOCs	✓	Yes	Yes	No	Captures	No	Yes
Kills Pathogens	✓	Yes	Yes	No	Captures	Yes	Yes
Reduces Energy Cost	30%	Yes	Yes	No	No	No	No
UL 2998 No-Ozone Certified	✓	No	No	N/A	N/A	N/A	N/A
Treats In-Room Air	✓	Yes	Yes	No	No	No	No
No Replacement Parts	✓	No	No	No	No	No	No
Auto Self-Cleaning	✓	No	No	No	No	No	No
Simple to Install	✓	No	No	No	No	No	No
Low Total Cost	✓	Yes	No	No	No	No	No

AUTO-CLEANING NPBI

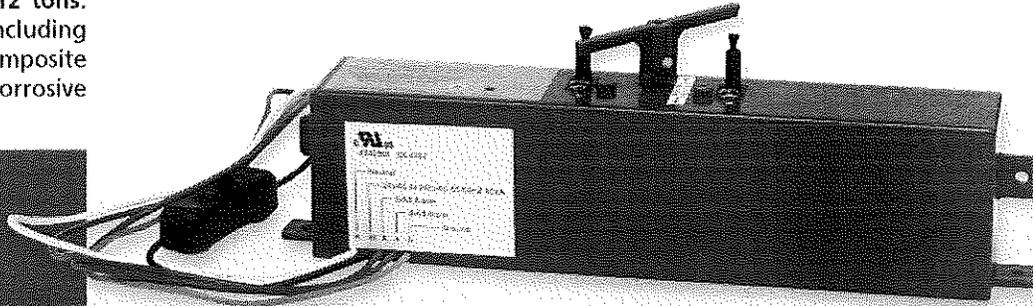
GPS-FC48-AC™

An automatic self-cleaning, lightweight NPBI system that handles up to 4,800 CFM or 12 tons. Designed for multiple mounting options including fan inlet, interior duct walls or floors. The composite construction allows for mounting in corrosive environments.

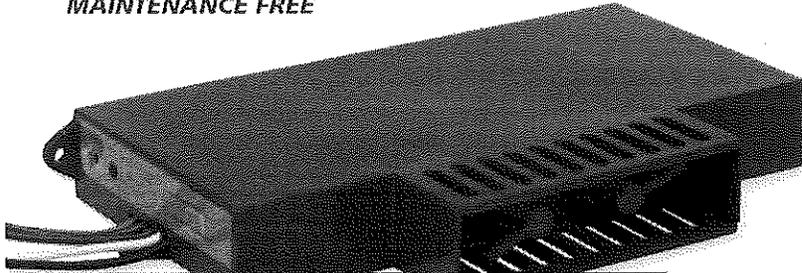
UNIVERSAL VOLTAGE

Features

- > 400 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts

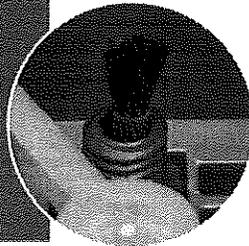


MAINTENANCE FREE



Features

- > 300 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts



CARBON FIBER EMITTERS

GPS-FC24-AC™

An automatic self-cleaning, lightweight NPBI system that handles up to 2,400 CFM or 6 tons. Designed for multiple mounting options including fan inlet, interior duct walls or floors. The composite construction allows for mounting in corrosive environments.

APPLICATIONS

- | | |
|----------------------|--------------------------|
| • Agriculture | • Hospitality |
| • Airports | • Hospitals |
| • Animal Care | • Institutional |
| • Arenas & Stadiums | • Manufacturing |
| • Banks | • Office Building |
| • Casinos | • Retail |
| • Child Care | • Schools & Universities |
| • Convention Centers | • Senior Care |
| • Fitness | • Transportation |
| • Food Service | • Theaters |
| • Healthcare | • Worship |

GPS-DM48-AC™

The world's first automatic self-cleaning, duct mounted, lightweight NPBI electronic air cleaner. The maintenance free unit is designed for indoor or outdoor duct mounting and can handle up to 4,800 CFM or 12 tons.

SELF-CLEANING

Features

- > 400 Million + and – Ions Per cc/sec
- Universal Voltage Input (24 – 240 VAC)
- Programmable Auto-Cleaning Cycle
- Carbon Fiber Brush Emitters
- Alarm Contacts
- 3/4 Quick-Turn Duct Adapter



2016 IAQ GOLD AWARD WINNER



BARS & STRIPS



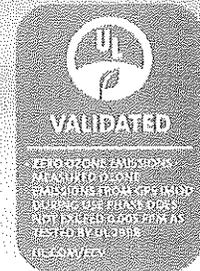
GPS-iMOD®

The GPS-iMOD is a modular NPBI system that is field assembled to any length up to 240 inches in 6-inch increments. The fiberglass composite and carbon fiber GPS-iMOD can be mounted in corrosive environments. It can treat 50 – 250 CFM per inch of bar, depending on the application.

OSH PD

Features

- > 140 Million + and - Ions Per Inch/cc/sec
- Universal Voltage Selector Switch
- Six HV Output Ports
- Alarm Contacts
- Illuminated On/Off Switch
- Plasma on Indication Light
- UL 2998 Ozone Free



GPS-iRIB® 18/36

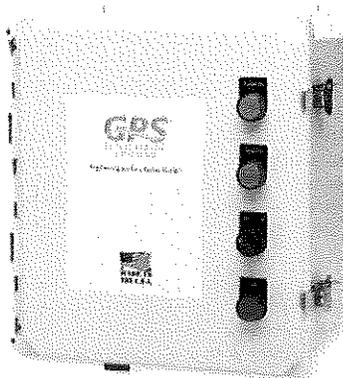
The GPS-iRIB is available in 18" and 36" lengths. They are made from a flexible chemical, heat and cold resistant Kapton® material containing a circuit with special carbon fiber ion emitters soldered into the circuit traces. This mechanism is engineered to deliver the highest level of ionization with the least amount of energy in the most compact size. Designed for 3200 CFM or 8 tons.

Features

- > 35 Million + and - Ions Per Foot/cc/sec
- Fold-To-Length Circuit
- Local LED Power Indication
- Integral Control Relay for BAS Interface
- Velcro® for Easy Installation
- Voltage Input 110VAC to 240VAC

Perfect For

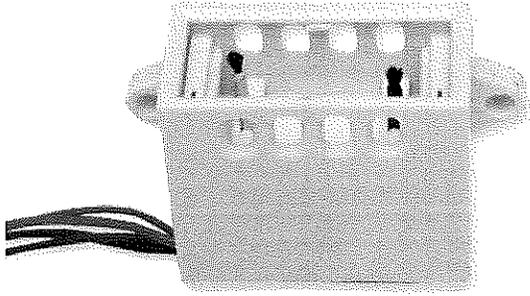
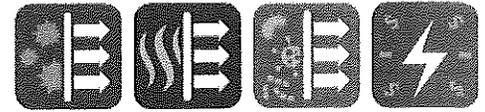
- Traditional Split Systems
- Ductless Mini Splits
- Heat Pump PTACs
- Ducted Modules
- Fan Coils



GPS-NEMA4-OE

The GPS-NEMA4-OE is a NEMA 4X-rated fiberglass enclosure designed to house one GPS-iMOD power supply. The panel adds a superior finished look to any project while providing the required protection against foreign substances, such as water and dust, when power supplies are mounted in non-NEMA 1 rated environment.

COMPACT NPBI

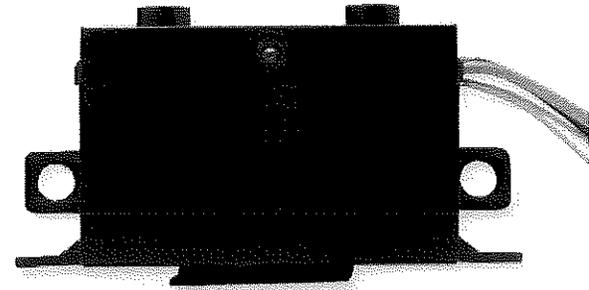


GPS-FC-1™ / GPS-FC-2™

The GPS-FC series is designed to be mounted inside fan coils, heat pumps, PTACs, ductless mini-splits and air handlers up to 1,200 CFM or 3 tons. Their compact size allows them to be mounted almost anywhere in just a few minutes.

Features

- > 25 Million + and – Ions Per cc/sec
- GPS-FC-1 Powered by 110 - 120 Volts AC
- GPS-FC-2 Powered by 208 – 240 Volts AC
- Carbon Fiber Brushes
- LED Operation Status
- Carbon Fiber Brush Emitters



GPS-FC-3-BAS™

The GPS-FC-3-BAS unit is designed to be mounted inside fan coils, heat pumps, PTACs, ductless mini-splits, and air handlers up to 3,200 CFM or 8 tons. Its compact size and simple mounting requirements allow it to be quickly mounted almost anywhere.

Features

- > 170 Million + and – Ions Per cc/sec
- Powered by 24 Volts AC
- Carbon Fiber Brush Emitters
- BAS Alarm Contacts
- LED Operation Status

SENSORS & MEASUREMENTS

GPS-IMEASURE™

The GPS-IMEASURE is the first commercially available ion detector that can be permanently mounted in the space to measure ion levels in real time and report back to a BAS.



MONITOR IONIZATION LEVELS REMOTELY

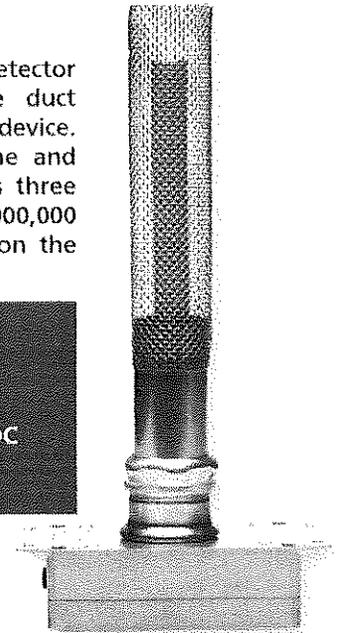
- Auto Calibration/Auto Zero
- 0 – 1,000,000 Ions/cc

GPS-IMEASURE-D™

The GPS-IMEASURE-D ion detector is permanently mounted in the duct downstream of any GPS ionization device. It measures ion levels in real time and reports back to a BAS. It includes three sensitivity levels: 20,000/200,000/2,000,000 ions/cc/sec that can be set based on the application and in-duct location.

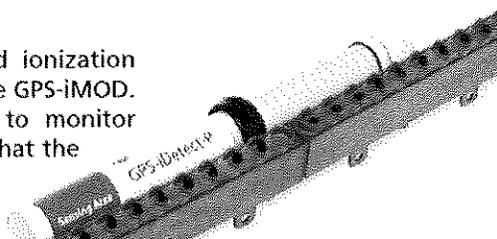
MONITOR IN-DUCT IONIZATION LEVELS

- 20,000 to 2M Ions/cc
- Input Voltage 12 to 24V AC or DC
- LED Operation Status



GPS-IDETECT-P™

The GPS-IDETECT-P is a plenum-mounted ionization detector that confirms the output from the GPS-iMOD. The GPS-IDETECT-P provides the ability to monitor ionization status in a plenum to confirm that the ionization equipment is working properly.

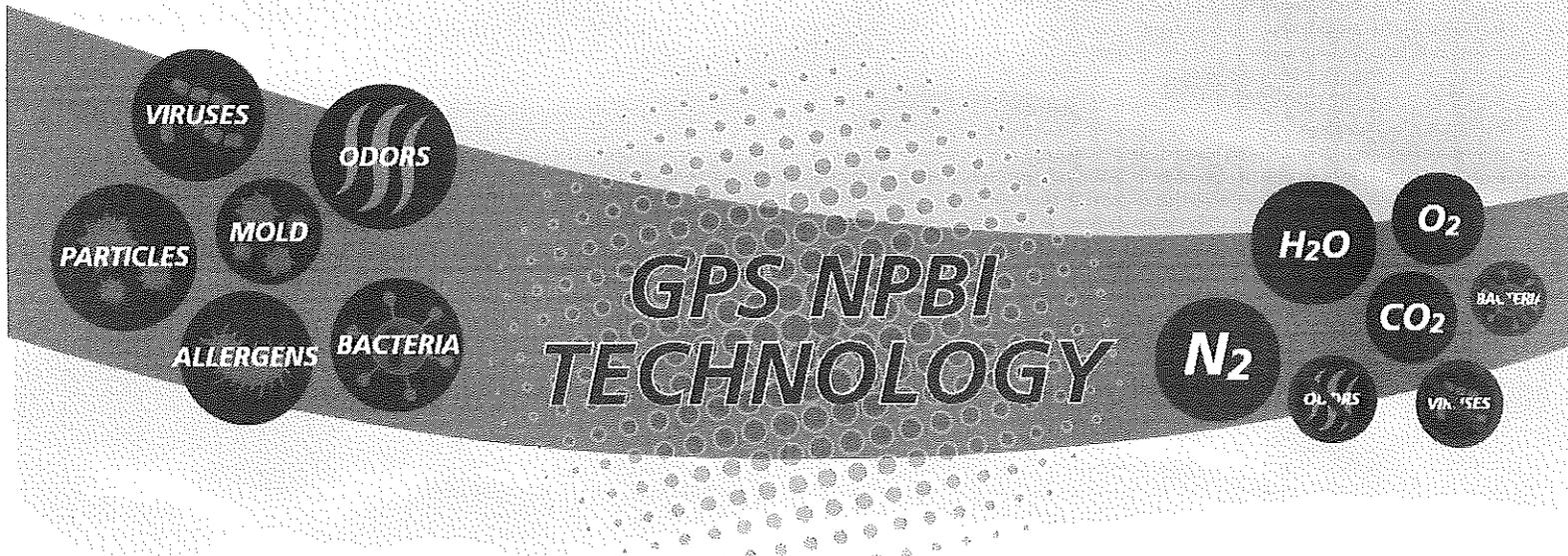


Features

- Universal Voltage Input
- 1,000 – 200,000,000 Ions/cc (+ or -)
- 0-100% Humidity

How Ionization Works

GPS' NPBI technology works to safely clean the air inside industrial, commercial and residential buildings. The patented technology uses an electronic charge to create a plasma field filled with a high concentration of + and - ions. As these ions travel with the air stream they attach to particles, pathogens and gas molecules. The ions help to agglomerate fine sub-micron particles, making them filterable. The ions kill pathogens by robbing them of life-sustaining hydrogen. The ions breakdown harmful VOCs with an Electron Volt Potential under twelve (eV<12) into harmless compounds like O₂, CO₂, N₂, and H₂O. The ions produced travel within the air stream into the occupied spaces, cleaning the air everywhere the ions travel, even in spaces unseen.



What is an Ion you may ask?

An ion is a molecule or atom that is positively or negatively charged, meaning that it has electrons to give or needs electrons to become uncharged, thus becoming stable.

Mother Nature's Way of Cleaning

GPS' technology generates the same ions as Mother Nature creates with lightning, waterfalls, and ocean waves. Mother Nature uses energy to break apart molecules. It is nature's way of cleansing the air naturally and creating a healthy environment. The only difference is that GPS' technology does it without forming ozone or other harmful byproducts.

GPS' NPBI technology has been certified by UL 867 and UL 2998 to be ozone free.



3rd Party Testing Summary

Pathogen	Time in Chamber	Kill Rate	Test Agency
Tuberculosis	60 minutes	69.09%	EMSL
Clostridium Difficile	30 minutes	86.87%	EMSL
Norovirus	30 minutes	93.50%	ATS Labs
MRSA	30 minutes	96.24%	EMSL
Staphylococcus	30 minutes	96.24%	EMSL
Mold Spores	24 hours	99.50%	GCA
E.coli	15 minutes	99.68%	EMSL
Legionella	30 minutes	99.71%	EMSL

**Airborne Mold Spores
Reduced by 95%**



ATS LABS
EXCELLENCE IN ANTIMICROBIAL TESTING

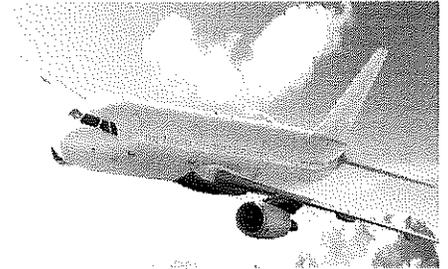
Owned by Accuratus Lab Services

GPS PRODUCT CHART

AUTO-CLEANING LINE	VOLTAGE	CFM RATING	IONS/cc/sec
GPS-FC24-AC	24-240 VAC	2,400	> 300 million
GPS-FC48-AC	24-240 VAC	4,800	> 400 million
GPS-DM48-AC	24-240 VAC	4,800	> 400 million
COMPACT LINE	VOLTAGE	CFM RATING	IONS/cc/sec
GPS-FC-1	110-120 VAC	1,200	> 25 million
GPS-FC-2	208-240 VAC	1,200	> 25 million
GPS-FC-3-BAS	24 VAC	3,200	> 170 million
BAR & STRIPS LINE	VOLTAGE	CFM RATING	IONS/cc/sec
GPS-IMOD	24-240 VAC	50-250 CFM/inch	> 140 million/in
GPS-IRIB-18	110-240 VAC	3,200	> 35 million/ft
GPS-IRIB-36	110-240 VAC	3,200	> 35 million/ft

GPS FACT: Aviation Application

GPS' technology is the only active air purification system that has been designed and approved to operate in commercial and private aircraft. Aviation applications require passing the stringent RTCA DO-160 test proving the technology does not generate EMF, line noise or interfere with the avionics in any way. This is important to note because GPS' technology is used in many healthcare applications and will not cause interference with the imaging equipment.



RTCA
DO-160

GPS®

GLOBAL PLASMA
SOLUTIONS

Engineering Air for a Cleaner World™

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All technical information and advice given here are based on GPS previous experiences and/or test results. GPS gives this information to the best of its knowledge but assumes no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. The above information is subject to change.

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DISTRICT ADMINISTRATION

600 N. Cherry St.

A/C UNITS

ADMIN.

3 = Mini Split (Wall Mount) 1 tons

6 = 3 Tons

4 = 4 Tons

1 = 6 Tons

IT DEPT.

2 = 3 1/2 tons (Wall hung HP)

TRANSPORATION

5 = Mini Split (Wall Mount) 1 Tons

Kitchen

2 = 3 Tons

1 = 3 1/2 Ton

MAINT. SHOP

1 = 3 ton

1 = 3 1/2 ton

1 = Mini Split (WallMount)

Equipment Total...

8 = Mini Splits (Wall Mount) 1 Tons

9 = 3 Tons

2 = 3 1/2 Tons

2 = 3 1/2 Tons (Wall Hung HP)

4 = 4 Tons

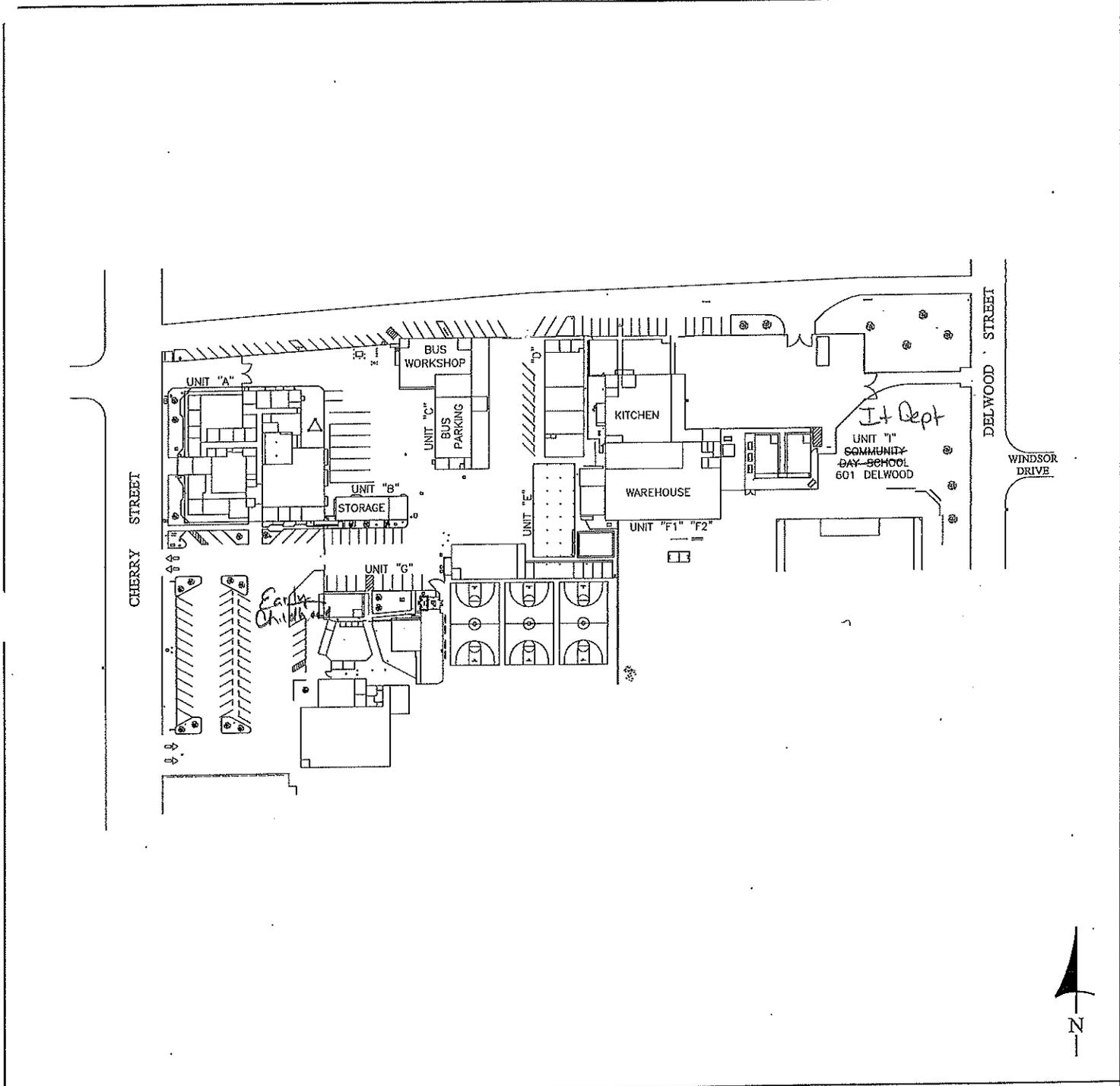
Total = **27 Units**

Tulare City Elementary School District
 District Administration, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



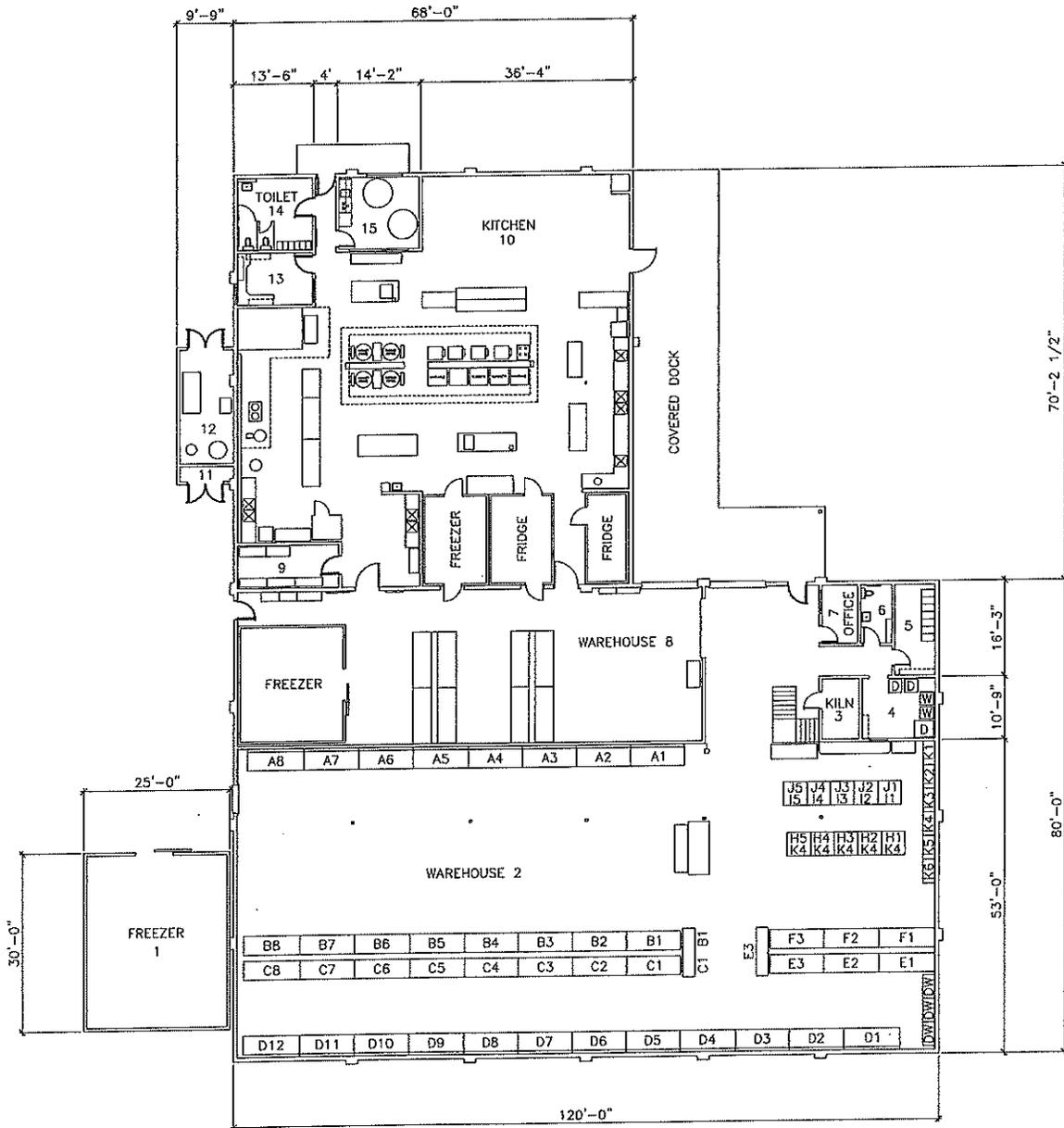
Siteplan
 District Administration
 600 North Cherry Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7200 FAX (559) 685-7248

The above is measured in accordance with the laws and regulations governing the State School Building Lease-Purchase Program.
cadxservices@yahoo.com

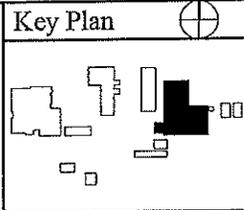
July 1, 2009
 Scale: 1"=150'-0"
 D.S.A.# 000000
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Tulare City Elementary School District
 District Administration, Tulare County
 New Construction
 Modernization/Reconstruction

Diagram of Building Area
 Existing 1-A
 Proposed 2-A
 Final 3-A



Building "F1" First Floor Plan
 District Administration
 600 North Cherry Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7200 FAX (559) 685-7248



The above is measured in accordance with the laws and regulations governing the State School Building Lease-Purchase Program.
cadxservices@yahoo.com

July 1, 2009
 Scale: 1"=30'-0"
 D.S.A.# 000000
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ALPINE VISTA SCHOOL

2975 E. Alpine Ave.

A/C UNITS

100 Wing

4 = 4 Tons
1 = 2 Ton
6 = 5 Tons

200 Wing

12 = 4 Tons
1 = 2 Ton

300 Wing

12 = 4 Tons
1 = 2 Ton

400 Wing

2 = 2 Tons
10 = 4 Tons
2 = 5 Tons

500 Wing

12 = 4 Tons
3 = 2 Tons

700 Wing

1 = Mini Split (Wall Mount) 2 Ton
2 = 6 Tons
1 = 8 1/2 Ton
1 = 3 Ton
1 = 2 Ton
1 = 1 1/2 Ton

800 Wing

1 = Mini Split (Cassette) 2 Ton
1 = Mini Split (Wall Mount) 2 Tons
3 = 17 1/2 Tons
2 = 10 Tons
1 = 5 Ton
1 = 4 Ton
1 = 2 1/2 Ton

900 Wing

2 = 4 Tons

Equipment Total...

1 = 1 1/2 Ton
9 = 2 Tons
1 = 2 1/2 Ton
1 = 3 Ton

53 = 4 Tons
9 = 5 Tons
2 = 6 Tons
1 = 8 1/2 Tons

2 = 10 Tons
3 = 17 1/2 Tons
3 = 2 Tons (Mini Splits)

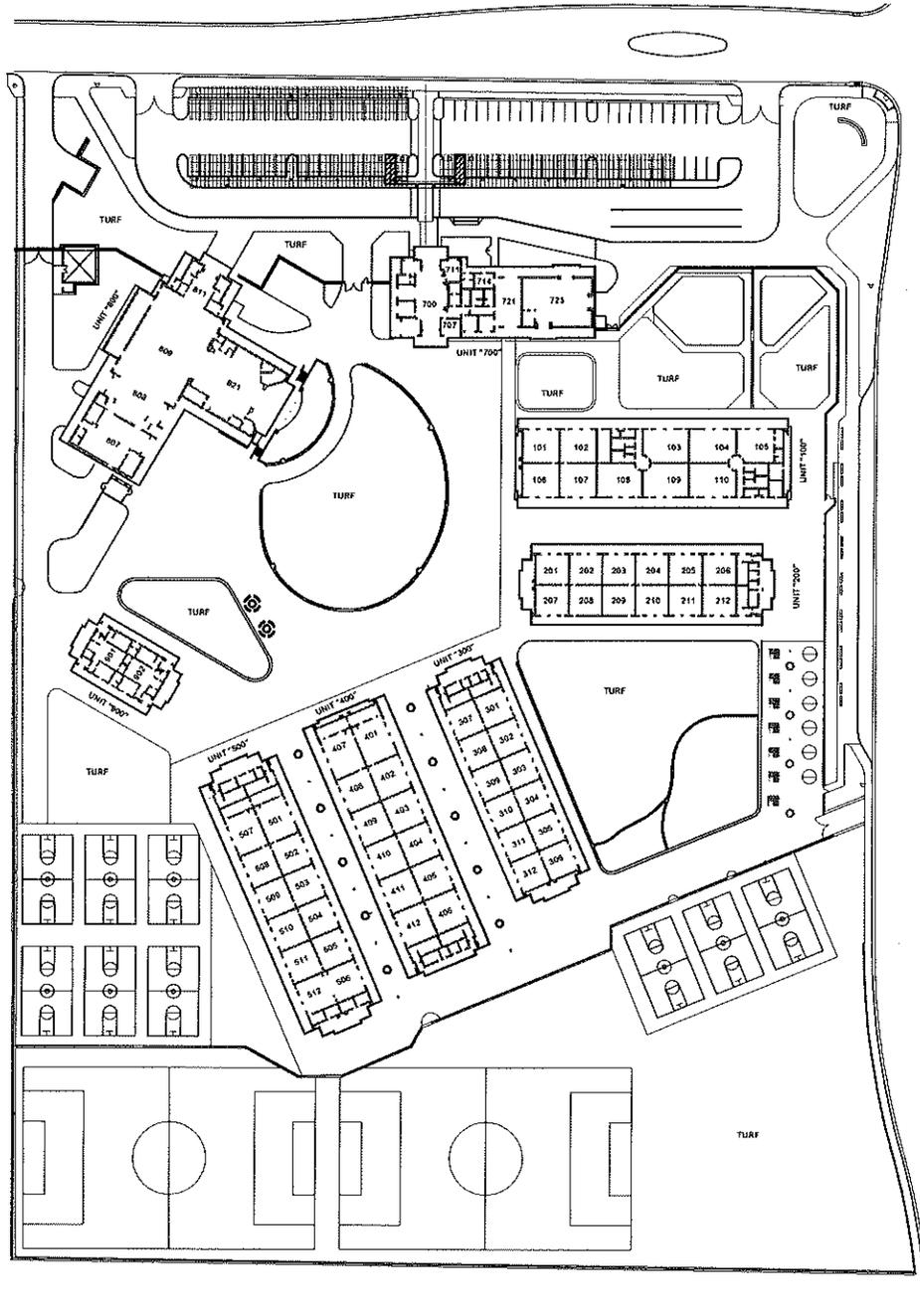
Total = **85 Units**

Tulare City Elementary School District
 Alpine Vista School, Tulare County

Diagram of Building Area

- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
ALPINE VISTA SCHOOL
 2975 East Alpine Ave. - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7396, FAX (559) 685-7392

Mar 26, 2019
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CYPRESS SCHOOL

1870 South Laspina

A/C UNITS

100 Wing

6 = 3 1/2 Tons

200 Wing

6 = 3 1/2 Tons

300 Wing

4 = 4 Tons

400 Wing

6 = 3 1/2 Tons

500 Wing

3 = 4 Tons

KITCHEN

1 = 3 Ton

MULTI-PURPOSE

1 = 18 Ton

LIBRARY WING

4 = 4 Tons

ADMIN WING

4 = 3 Tons

Equipment Total...

5 = 3 Tons

18 = 3 1/2 Tons

11 = 4 Tons

1 = 18 Ton

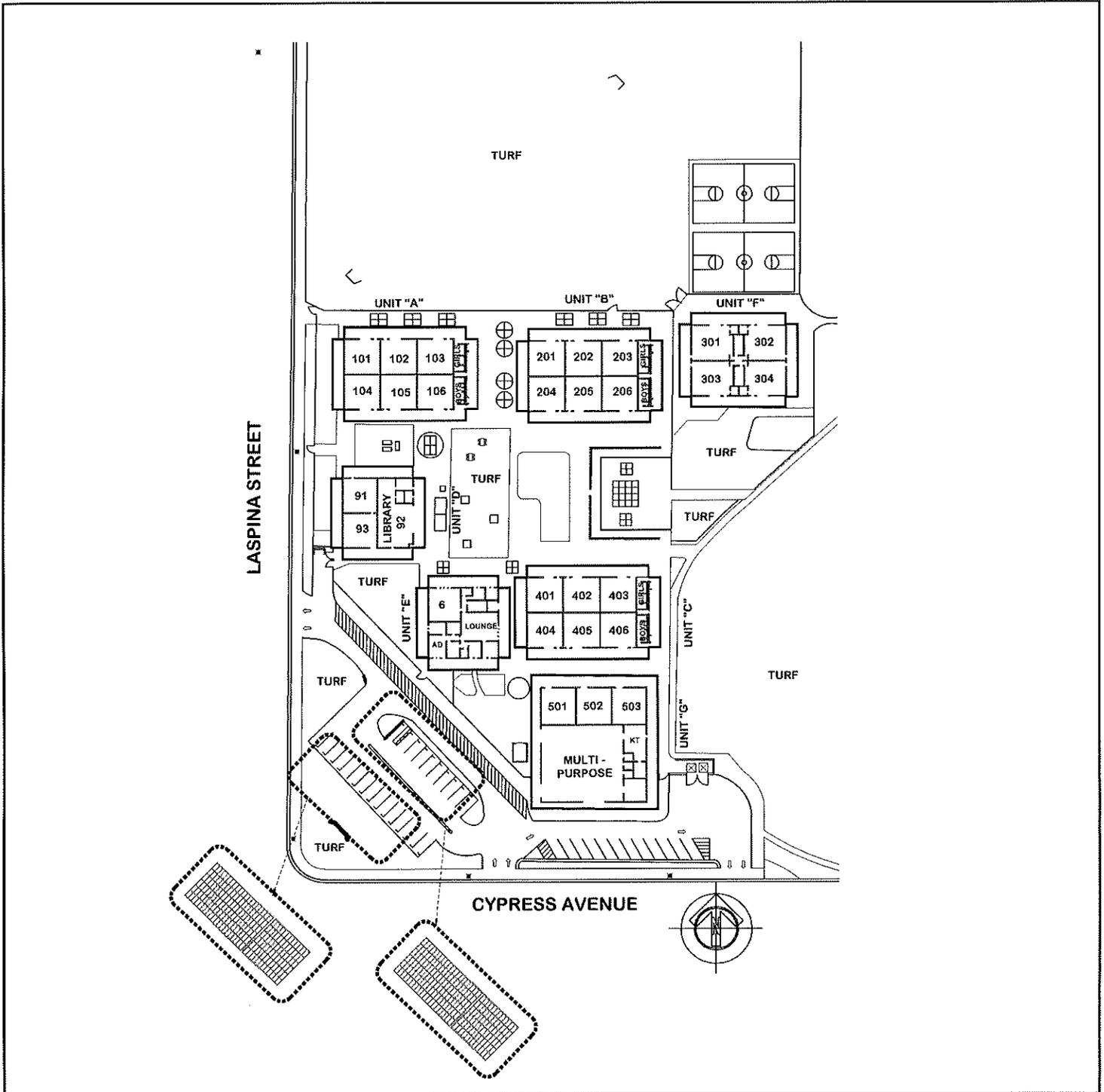
Total = 35 Units

Tulare City Elementary School District
 Cypress Elementary School, Tulare County

Diagram of Building Area

- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
CYPRESS ELEMENTARY SCHOOL
 1870 South Laspina Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7290 FAX (559) 685-7299

April 25, 2019
 D.S.A.# 45873
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FRANK KOHN

500 S. Laspina

A/C UNITS

100 Wing

6 = 3 1/2Tons (Wall Mount HP)

2 = 5 Tons

200 Wing

8 = 5 Tons

300 Wing

2 = 2 Tons

8 = 5 Tons

400 Wing

7 = 5 Tons

500 Wing

3 = 4 Tons (Wall Mount HP)

1 = 6 Ton

ADMIN.

2 = 3 Tons

1 = 4 Ton

MULTI-PURPOSE

2 = 10 tons

Equipment Total...

2 = Tons

6 = 3 1/2Tons (Wall Mount HP)

3 = 4 Tons (Wall Mount HP)

1 = 4 Ton

25 = 5 Tons

1 = 6 Ton

2 = 10 Tons

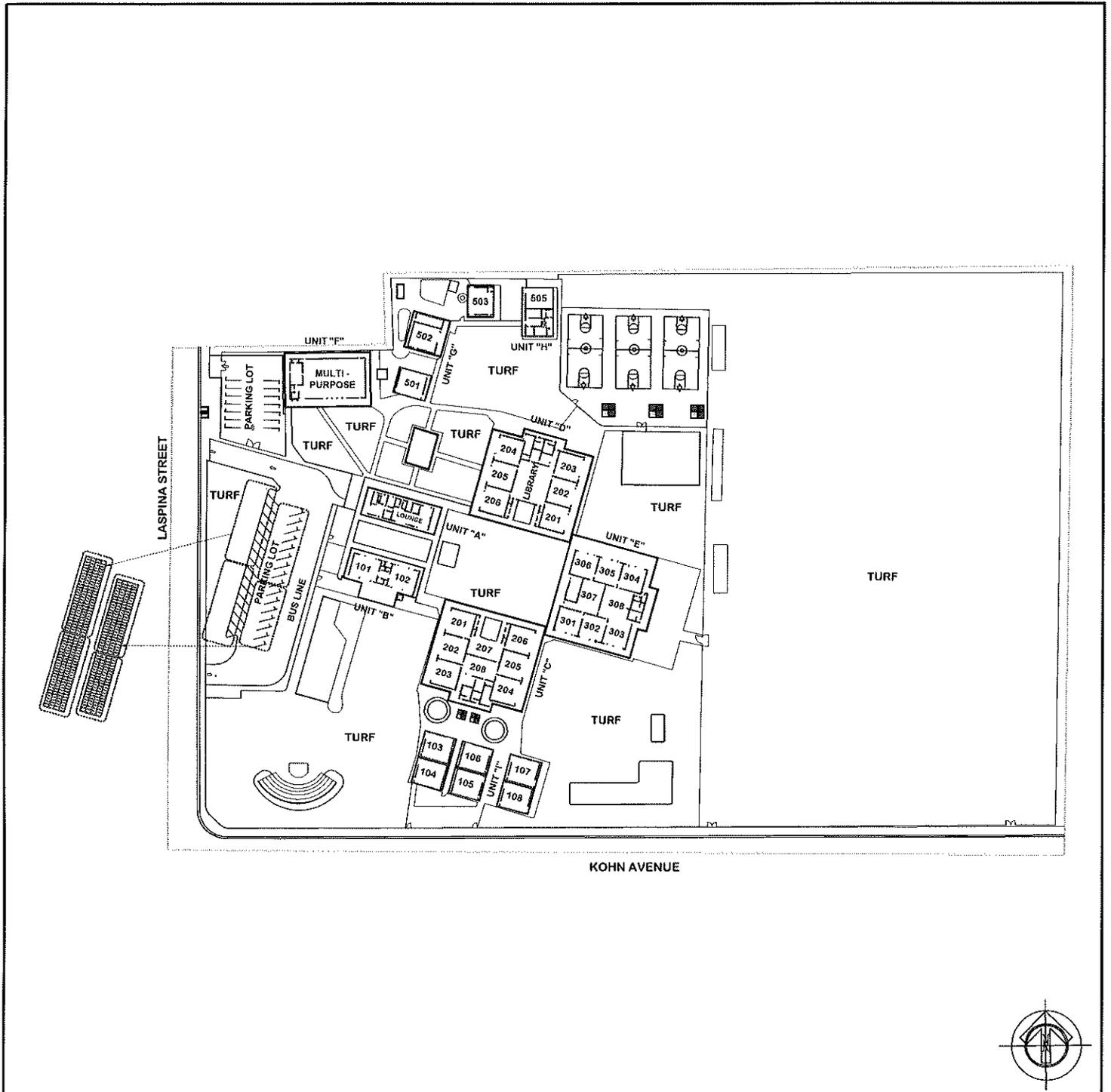
Total = **42 Units**

Tulare City Elementary School District
 Frank Kohn Elementary School, Tulare County

Diagram of Building Area

- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
FRANK KOHN ELEMENTARY SCHOOL
 500 South Laspina Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7240, FAX (559) 685-7343

April 23, 2019
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LIVE OAK

980 N. Laspina St.

A/C UNITS

100 Wing

6 = 3 1/2 Tons

200 Wing

8 = 3 1/2 Tons

300 Wing

8 = 3 1/2 Tons

600 Wing

2 = 3 1/2 Tons

2 = 5 Tons

1 = 7 1/2 Ton

MULTI-USE

2 = 5 Tons

4 = 10 Tons

Admin.

3 = Mini-Splits

2 = 3 1/2 Tons

1 = 5 Ton

Equipment Total...

3 = Mini-Splits

26 = 3 1/2 Tons

5 = 5 Tons

1 = 7 1/2 Ton

4 = 10 Tons

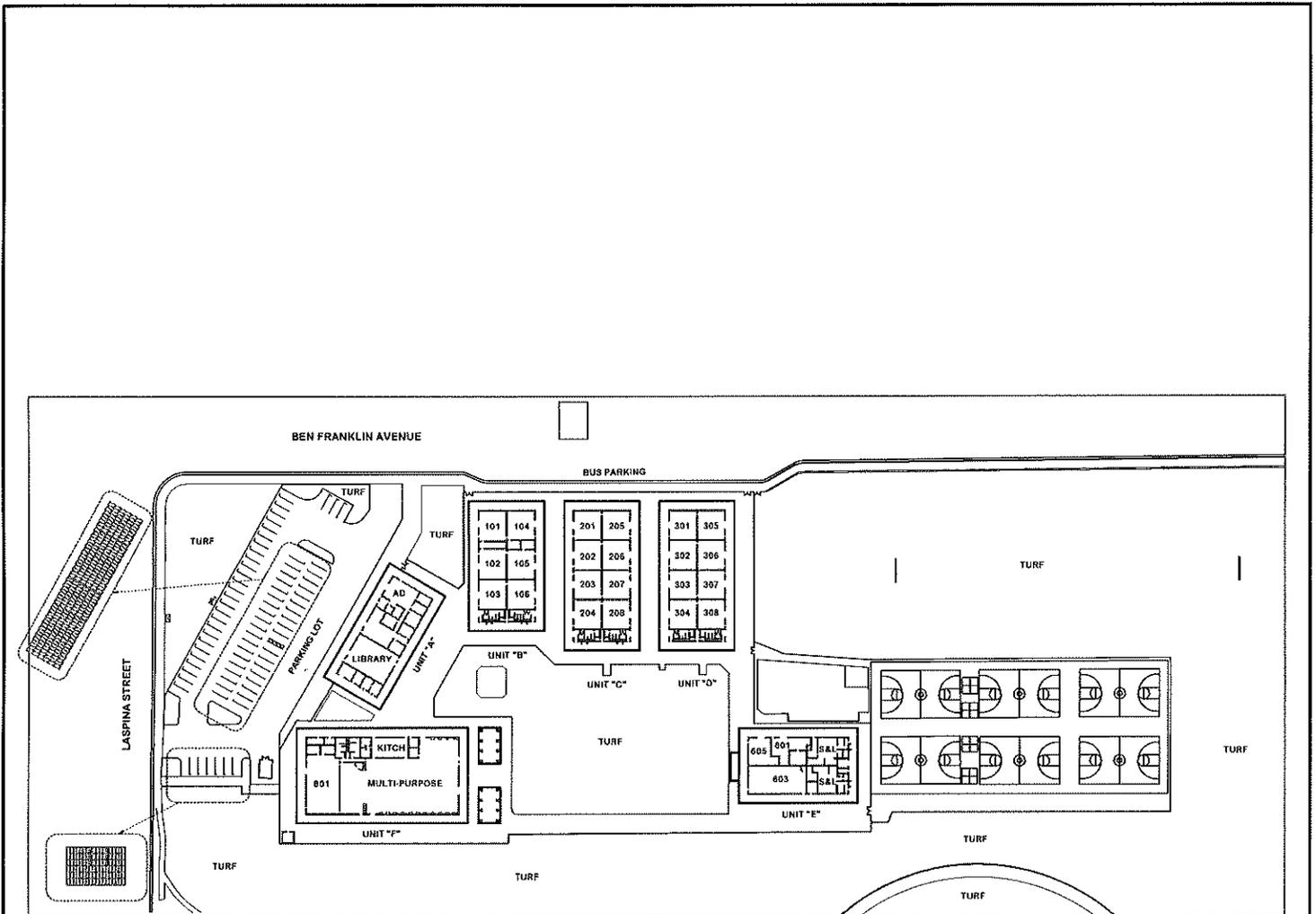
Total = 39 Units

Tulare City Elementary School District
 Live Oak Middle School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
LIVE OAK MIDDLE SCHOOL
 980 North Laspina Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7310, FAX (559) 685-7313

April 22, 2019
 D.S.A.# 50404
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MISSION VALLEY

1695 Bella Oaks Drive

A/C UNITS

100 Wing

2 = 4 Tons (Split System)

6 = 5 Tons (Split System)

200 Wing

3 = Mini-Split (Wall Hung) 2 Tons

8 = 5 Tons (Split System)

300 Wing

3 = Mini-Split (Wall Hung) 2 Tons

8 = 5 Tons (Split System)

400 Wing

3 = Mini-Split (Wall Hung) 2 Tons

8 = 5 Tons (Split System)

500 Wing

3 = Mini-Split (Wall Hung) 2 Tons

8 = 5 Tons (Split System)

Admin.

1 = Mini-Split (Wall Hung) 2 Tons

2 = 4 Tons (Split System)

2 = 5 Tons (Split System)

MULTI-USE

1 = 6 Ton

2 = 20 Tons

LIBRARY

2 = 5 Tons (Split System)

Equipment Total...

13 = Mini-Split (Wall Hung) 2 Tons

4 = 4 Tons (Split System)

42 = 5 Tons (Split System)

1 = 6 Ton

2 = 20 Tons

Total = 62 Units

Tulare City Elementary School District
 Mission Valley Elementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
MISSION VALLEY ELEMENTARY SCHOOL
 1695 Bella Oaks Drive - Tulare, CA 93277
 Web Site - www.tcsdk8.org
 Phone (559) 685-7396, FAX (559) 685-7392

April 23, 2019
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LINCOLN

900 E. Cedar Ave.

A/C UNITS

100 Wing

5 = 5 Tons

1 = 6 Ton

200 Wing

4 = 2 Tons

3 = 4 Tons

300 Wing

3 = 3 1/2 Tons

3 = 3 1/2 Tons (Wall Hung HP)

400 Wing

2 = 3 1/2 Tons

500 Wing

1 = 3 1/2 Ton

600 Wing

2 = Mini-Split (Wall Mount) 1 Tons

2 = 3 Tons

3 = 5 Tons

700 Wing

2 = 4 Ton (Wall Hung HP)

MULTI-USE

2 = 6 Tons

Admin.

1 = Mini-Split (Cassette) 1 1/2 Ton

1 = 4 Ton

1 = 5 Ton

Equipment Total...

2 = Mini-Split (Wall Mount) 1 Tons

1 = Mini-Split (Cassette) 1 1/2 Ton

4 = 2 Tons

6 = 3 1/2 Tons

3 = 3 1/2 Tons (Wall Hung HP)

2 = 4 Ton (Wall Hung HP)

4 = 4 Tons

9 = 5 Tons

3 = 6 Tons

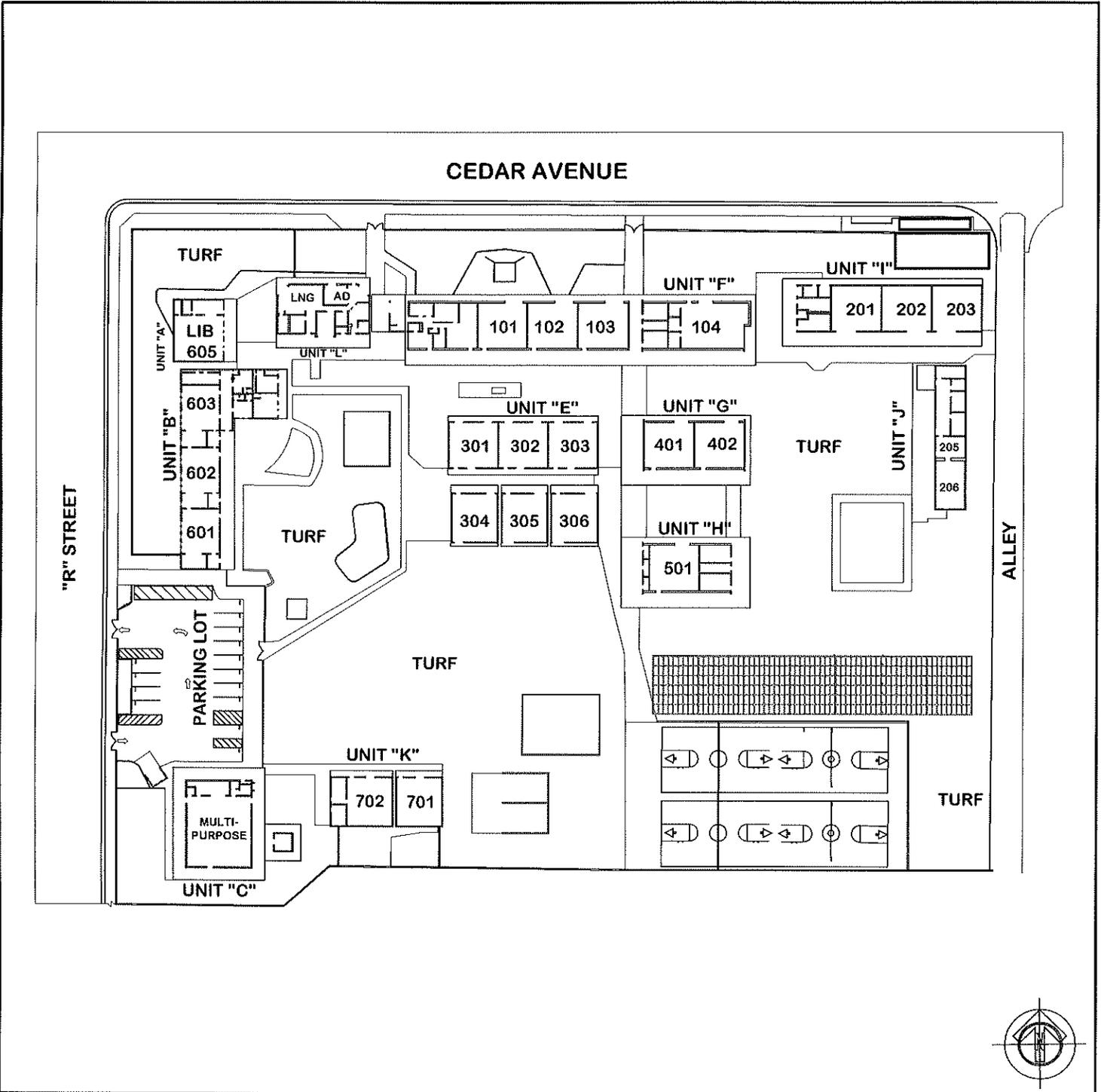
Total = 34 Units

Tulare City Elementary School District
 Lincoln Elementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
LINCOLN ELEMENTARY SCHOOL
 900 East Cedar Avenue - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7350, FAX (559) 685-7355

April 25, 2019
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WILSON

955 E. Tulare Ave.

A/C UNITS

100 Wing

2 = 4 Tons

6 = 5 Tons

200 Wing

2 = 3 1/2 Tons

300 Wing

1 = 2 Ton

7 = 3 1/2 Tons (Wall Mount HP)

3 = 5 Tons

400 Wing

3 = 4 Tons

MULTI-USE

1 = 5 Ton

1 = 18 Ton

Admin.

1 = 2 Ton

1 = 5 Ton

Library

1 = 5 Ton

PRE-SCHOOL

1 = 5 Ton (Wall Mount HP)

Equipment Total...

2 = 2 Ton

7 = 3 1/2 Tons (Wall Mount HP)

2 = 3 1/2 Tons

5 = 4 Tons

12 = 5 Tons

1 = 5 Ton (Wall Mount HP)

1 = 18 Ton

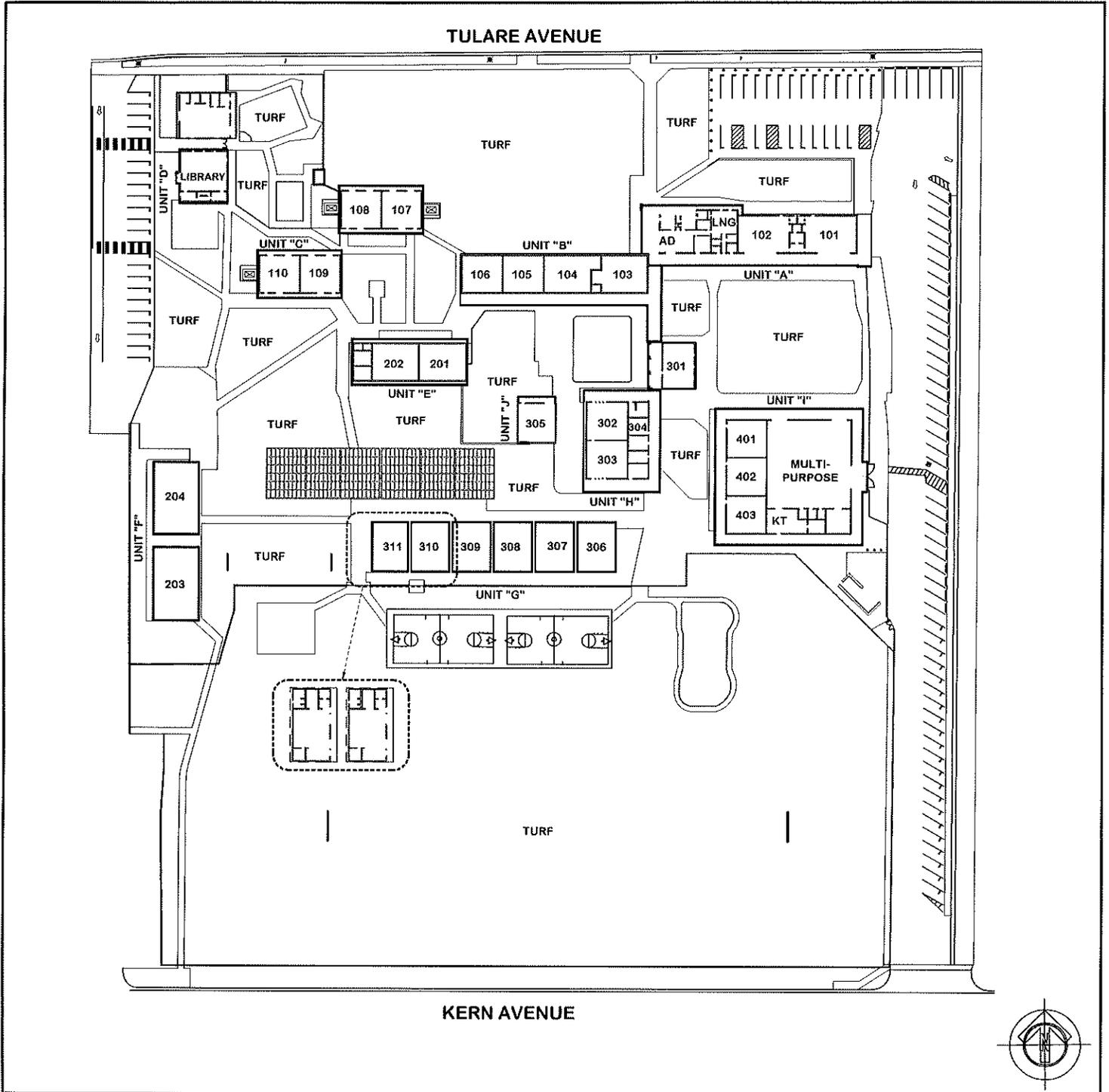
Total = 30 Units

Tulare City Elementary School District
 Wilson Elementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
WILSON ELEMENTARY SCHOOL
 955 East Tulare Avenue - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7260, FAX (559) 687-6414

April 15, 2019
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CHERRY AVE SCHOOL

540 North Cherry St

A/C UNITS

100 Wing

- 5 = Mini Splits (Wall Mount) 1 Tons
- 1 = Mini Split (Wall Mount) 1 1/2 Ton
- 1 = 2 Ton
- 1 = 3 1/2 Ton
- 3 = 4 Tons
- 2 = 5 Tons
- 3 = 7 Tons

200 Wing

- 1 = Mini Split (Wall Mount) 1 Ton
- 16 = 4 Tons

300 Wing

- 8 = 4 Tons

LIBRARY

- 1 = 4 Ton

WOOD SHOP

- 2 = 3 Tons

LOCKER ROOM

- 3 = Mini Splits(Casest) 1 1/2 Tons
- 4 = (Split Systems) 4 Tons

PRESCHOOL ADMIN.

- 2 = 4 Tons

Equipment Total...

- 1 = 2 Ton
- 2 = 3 Tons
- 1 = 3 1/2 Ton
- 30 = 4 Tons
- 2 = 5 Tons

- 3 = 7 Tons
- 6 = Mini Splits (1 Tons)
- 4 = Mini Splits (1 1/2 Tons)
- 4 = Split Systems (4 Tons)

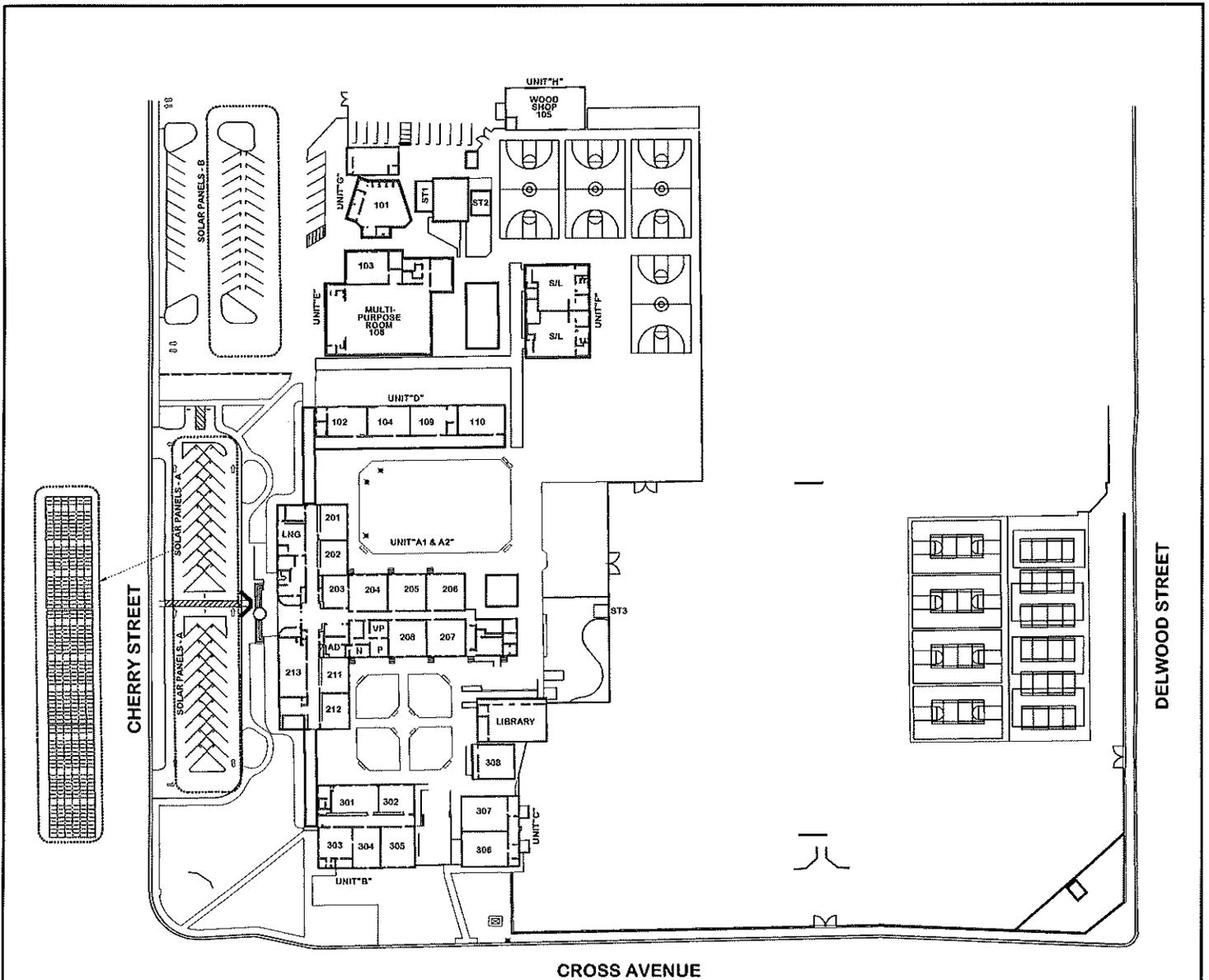
Total = 53 Units

Tulare City Elementary School District
 District Administration, Tulare County

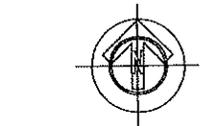
- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
CHERRY AVENUE MIDDLE SCHOOL
 540 North Cherry Street - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7200, FAX (559) 685-7248



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GARDEN SCHOOL

640 E. Pleasant Ave

A/C UNITS

100 Wing

- 1 = 2 Ton
- 2 = 3 1/2 Tons (Wall Hung HP)
- 6 = 4 Tons
- 4 = 5 Tons

200 Wing

- 4 = 5 Tons

300 Wing

- 4 = 5 Tons

400 Wing

- 4 = 5 Tons

500 Wing

- 4 = 3 1/2 Tons

600 Wing

- 4 = 3 1/2 Tons (Wall Hung HP)

700 Wing

- 2 = 3 Tons
- 3 = 3 1/2 Tons (Wall Hung HP)

LIBRARY

- 2 = 4 Tons

PRESCHOOL

- 1 = 5 Ton (Wall Hung HP)

MULTI-USE

- 1 = 3 Ton
- 1 = 20 Ton

Equipment Total...

- | | |
|----------------------------------|---------------------------|
| 1 = 2 Ton | 8 = 4 Tons |
| 3 = 3 Tons | 16 = 5 Tons |
| 9 = 3 1/2 Tons (Wall Mounts HP) | 1 = 20 Ton |
| 4 = 3 1/2 Tons | 1 = 5 Ton (Wall Mount HP) |

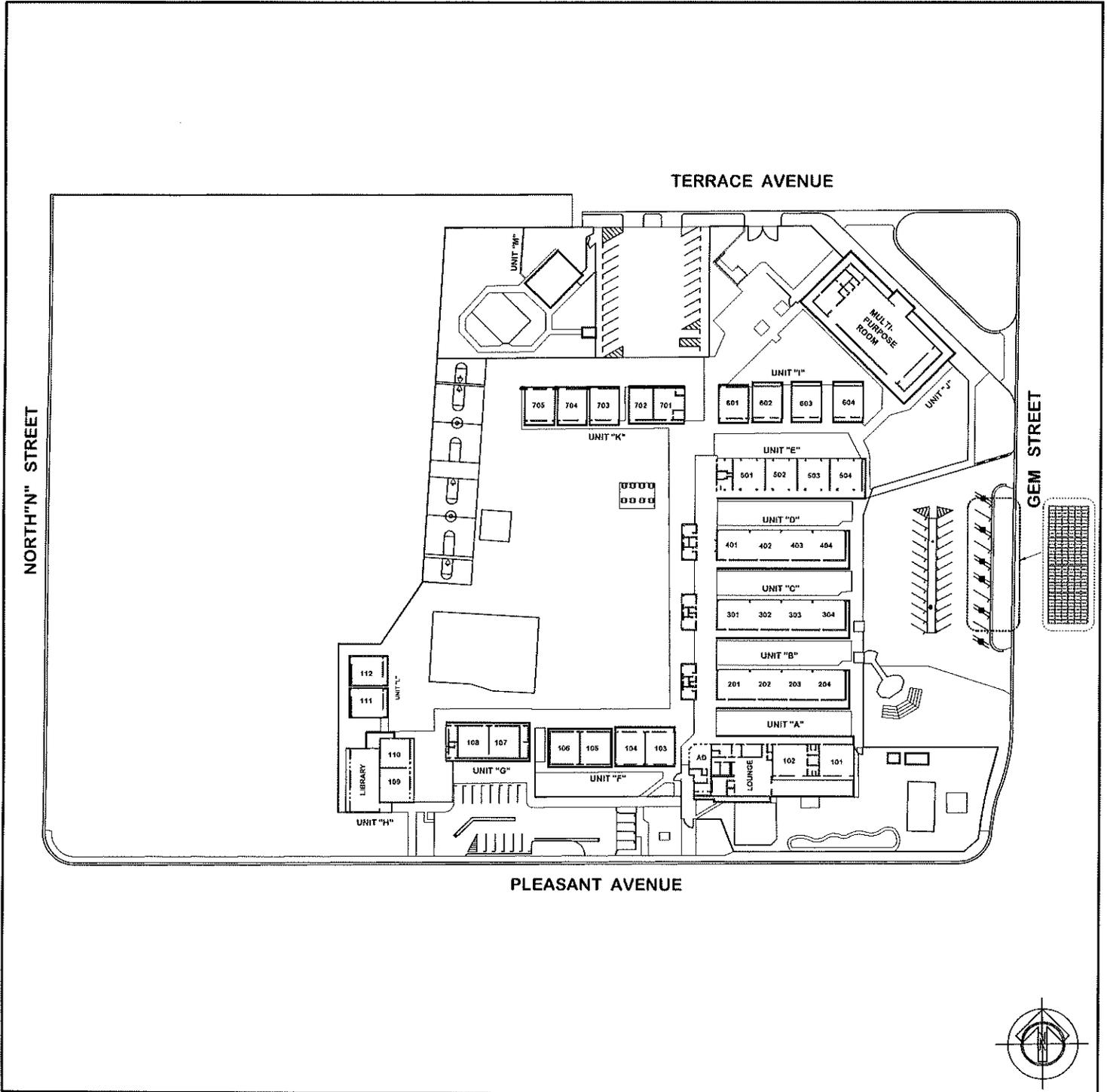
Total = 43 Units

Tulare City Elementary School District
 Garden Eementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
GARDEN ELEMENTARY SCHOOL
 640 East pleasant Avenue. - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7330, FAX (559) 685-7331

April 24, 2019
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MAPLE

640 W. Cross Ave

A/C UNITS

Admin.

1 = 3 Ton

1 = 5 Ton

100 Wing

4 = 3 Tons

5 = 3 1/2 Tons (Wall Mount HP)

200 Wing

4 = 4 Tons

2 = 5 Tons

300 Wing

4 = 4 Tons

400 Wing

3 = 3 1/2 Tons (Wall Mount HP)

500 Wing

4 = 3 1/2 Tons

700 Wing

2 = 3 Ton

1 = 4 Ton

1 = 5 Ton

MULTI-USE

1 = 4 Ton

1 = 18 Ton

PRE-SCHOOL ("E" St.)

2 = 3 1/2 Tons (Wall Mount HP)

PRE-SCHOOL ("B" St.)

1 = 3 1/2 Ton (Wall Mount HP)

1 = 4 Ton

PROFESSIONAL DEV. CENTER

11 = 5 Tons

Equipment Total...

6 = 3 Tons

5 = 3 1/2 Tons

12 = 3 1/2 Tons (Wall Mount HP)

11 = 4 Tons

15 = 5 Tons

1 = 18 Ton

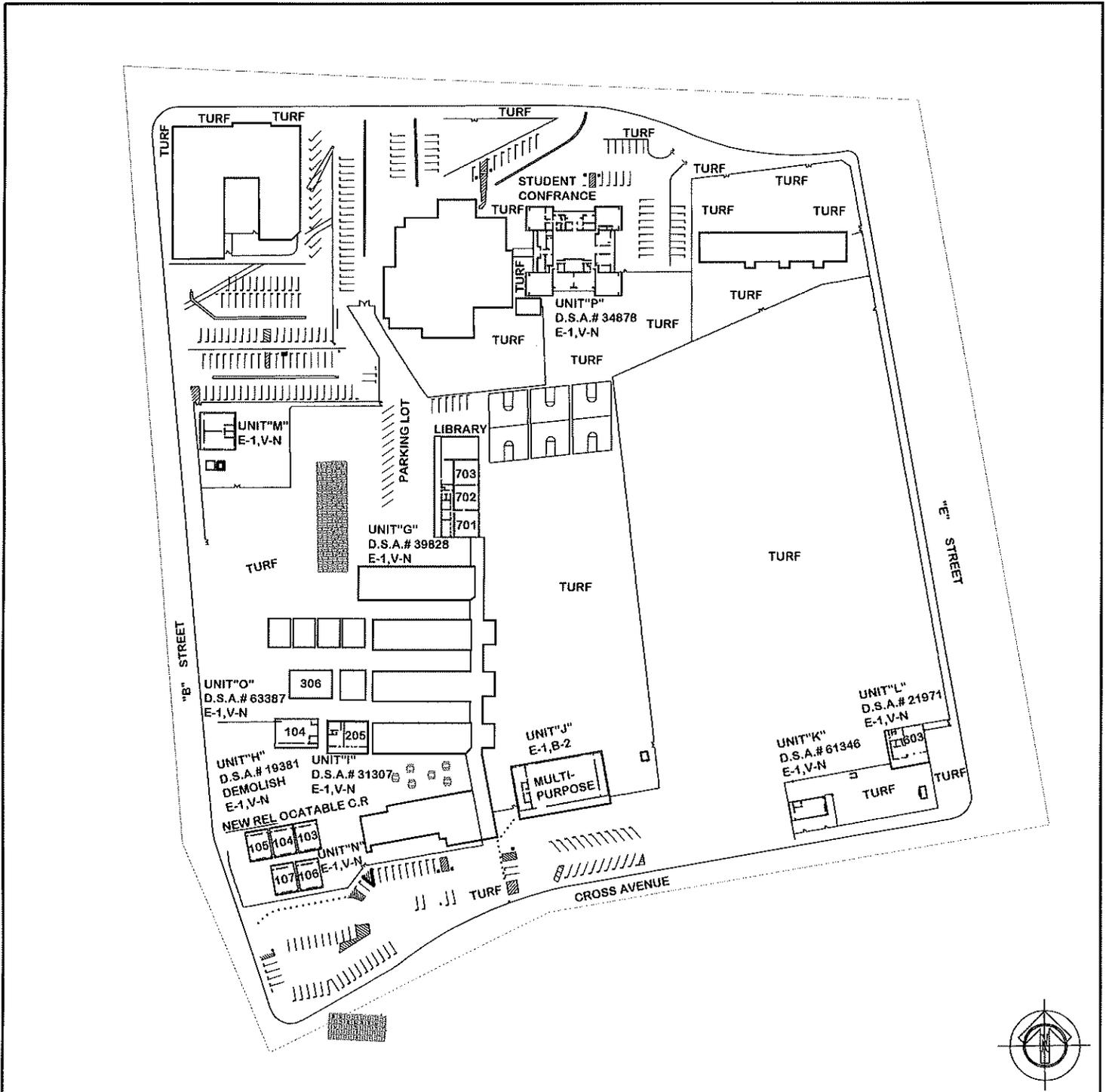
Total = 50 Units

Tulare City Elementary School District
 Maple Elementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN - MISC. BUILDINGS
MAPLE ELEMENTARY SCHOOL
 640 West Cross Avenue - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7270, FAX (559) 685-7272

April 26, 2019
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LOS TULES

801 W. Gail Ave.

A/C UNITS

ADMIN.

1 = 2 Ton

1 = 3 Ton

1 = 5 Ton

1 = 6 Ton

100 Wing

3 = 4 Tons

3 = 5 Tons

200 Wing

8 = 4 Tons

400 Wing

4 = 3 1/2 Tons (Wall Hung HP)

500 Wing

8 = 4 Tons

800 Wing

3 = 5 Tons

1 = 7 1/2 Ton

4 = 12 1/2 Tons

LOCKER ROOM

2 = 15 Tons

Equipment Total...

1 = 2 Ton

1 = 3 Ton

4 = 3 1/2 Tons (Wall Hung HP)

19 = 4 Tons

7 = 5 Tons

1 = 6 Ton

1 = 7 1/2 Ton

4 = 12 1/2 Tons

2 = 15 Tons

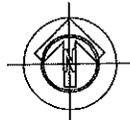
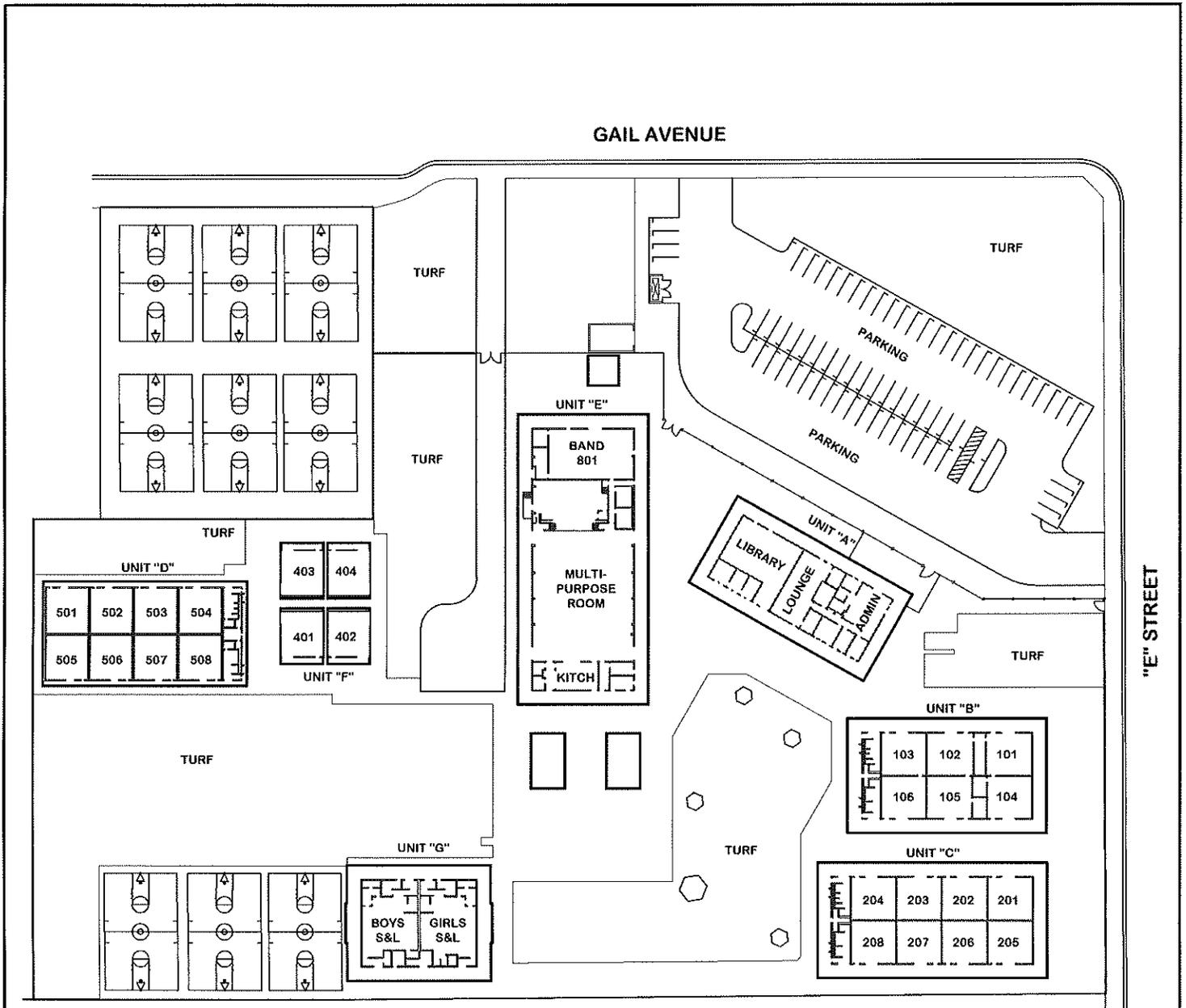
Total = 40 Units

Tulare City Elementary School District
 Los Tules Middle School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
LOS TULES MIDDLE SCHOOL
 801 West Gail Avenue - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 687-3156, FAX (559) 685-7374

April 24, 2019
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HERITAGE SCHOOL

895 West Gail Ave.

A/C UNITS

ADMIN.

1 = 3 Ton

2 = 4 Tons

1 = 6 Ton

100 Wing

1 = Mini-Split (Wall Mount) 2 Ton

2 = 2 Tons

6 = 5 Tons

200 Wing

2 = Mini-Split (Cassette) 2 Tons

1 = 2 Ton

8 = 5 Tons

300 Wing

2 = Mini-Split (Cassette) 2 Tons

1 = 2 Ton

8 = 5 Tons

400 Wing

2 = Mini-Split (Cassette) 2 Tons

1 = 2 Ton

8 = 5 Tons

MULTI-PURPOSE

1 = 3 Ton

2 = 25 Tons

Equipment Total...

5 = 2 Ton

1 = Mini-Split (Wall Mount) 2 Ton

6 = Mini-Split (Cassette) 2 Tons

2 = 3 Tons

2 = 4 Tons

30 = 5 Tons

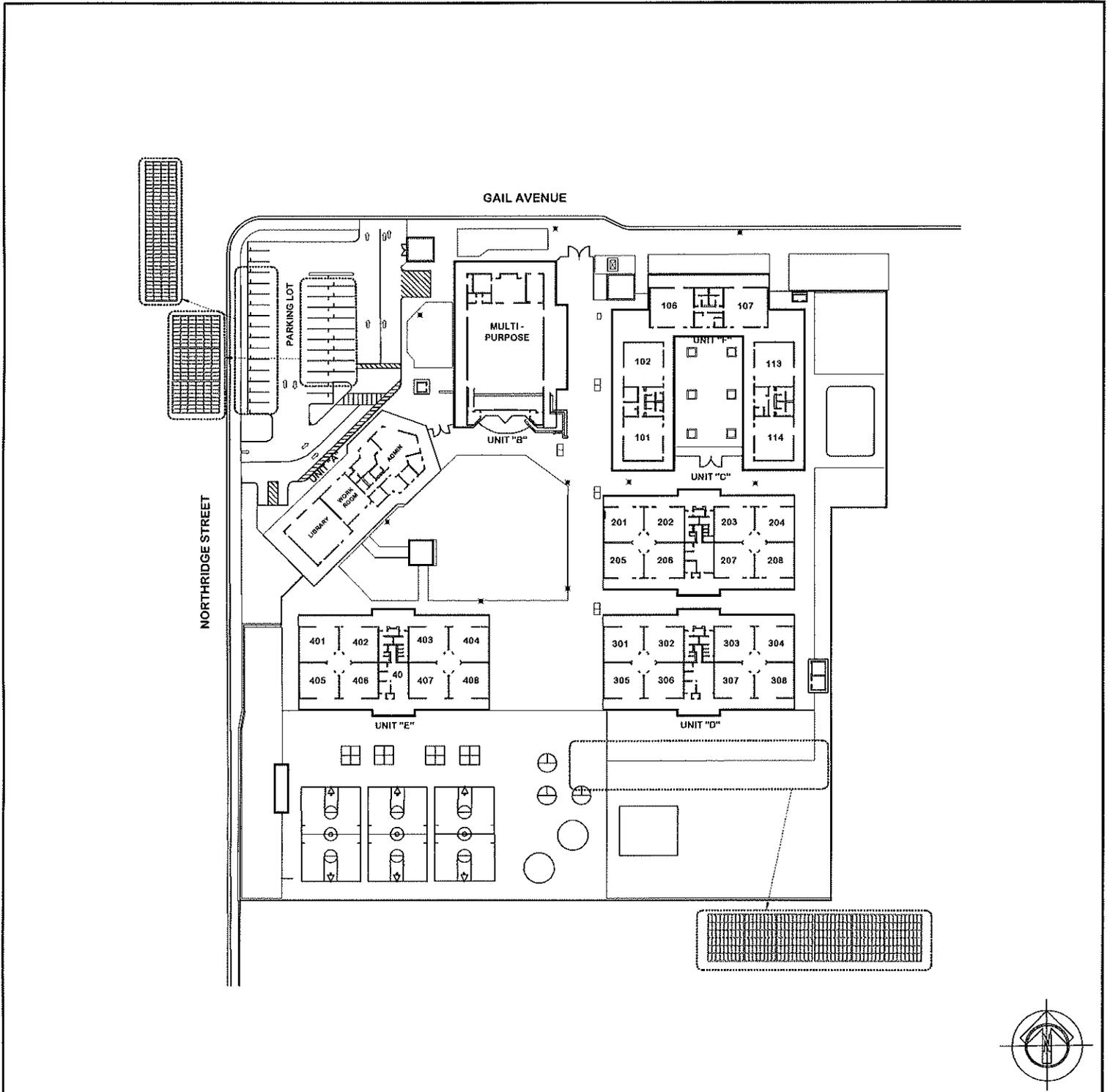
1 = 6 Ton

2 = 25 Tons

Total = 49 Units

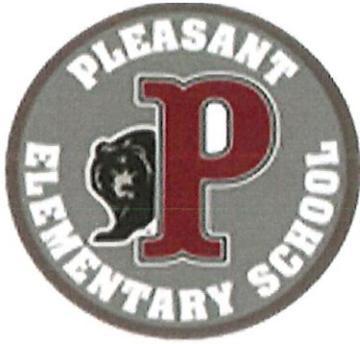
- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
HERITAGE ELEMENTARY SCHOOL
 895 West Gail Avenue. - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7360, FAX (559) 685-7369

April 24, 2019
 D.S.A.# 103174
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PLEASANT

1855 W. Pleasant Ave

A/C UNITS

100 Wing

8 = 3 Tons

200 Wing

8 = 3 1/2 Tons

300 Wing

6 = 3 1/2 Tons

400 Wing

6 = 3 1/2 Tons

500 Wing

4 = 4 Tons

MULTI-USE

1 = 4 Ton

1 = 20 Ton

Admin.

1 = 3 Ton

2 = 3 1/2 Tons

Equipment Total...

9 = 3 Tons

22 = 3 1/2 Tons

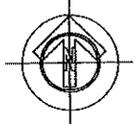
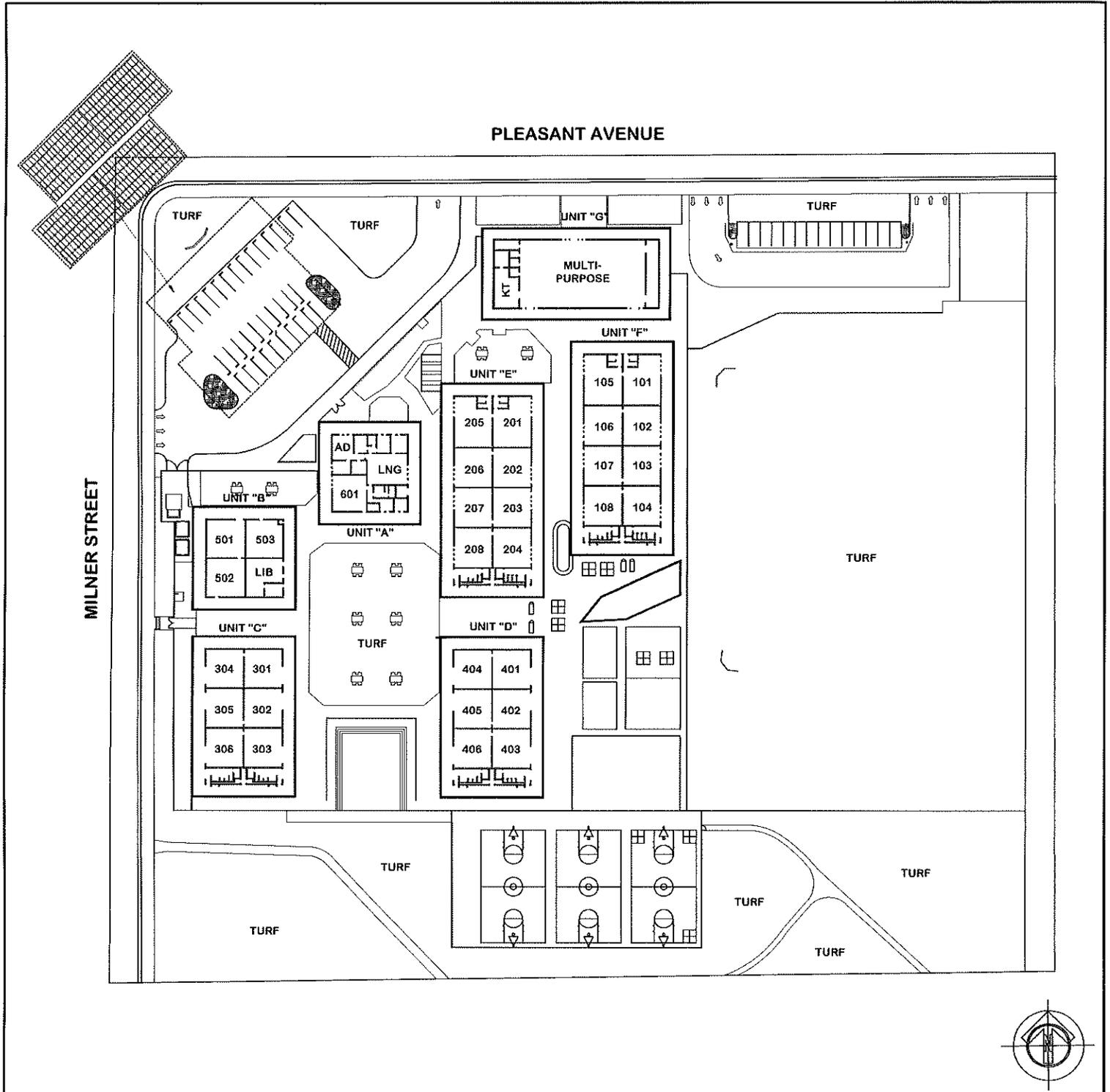
5 = 4 Ton

1 = 20 Ton

Total = 37 Units

- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
PLEASANT ELEMENTARY SCHOOL
 1855 West Pleasant Avenue. - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7300, FAX (559) 685-7304

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ROOSEVELT

1046 W. Sonora Ave.

A/C UNITS

100 Wing

2 = 4 Tons

200 Wing

4 = 4 Tons

300 Wing

4 = 4 Tons

400 Wing

4 = 4 Tons

500 Wing

4 = 4 Tons

600 Wing

2 = 3 Tons

2 = 3 1/2 Tons

700 Wing

2 = 4 Tons

MULTI-USE

1 = 2 Ton

3 = 5 Tons

Admin.

1 = 3 Ton

1 = 4 Ton

1 = 5 Ton

Equipment Total...

1 = 2 Ton

3 = 3 Tons

2 = 3 1/2 Tons

21 = 4 Tons

4 = 5 Tons

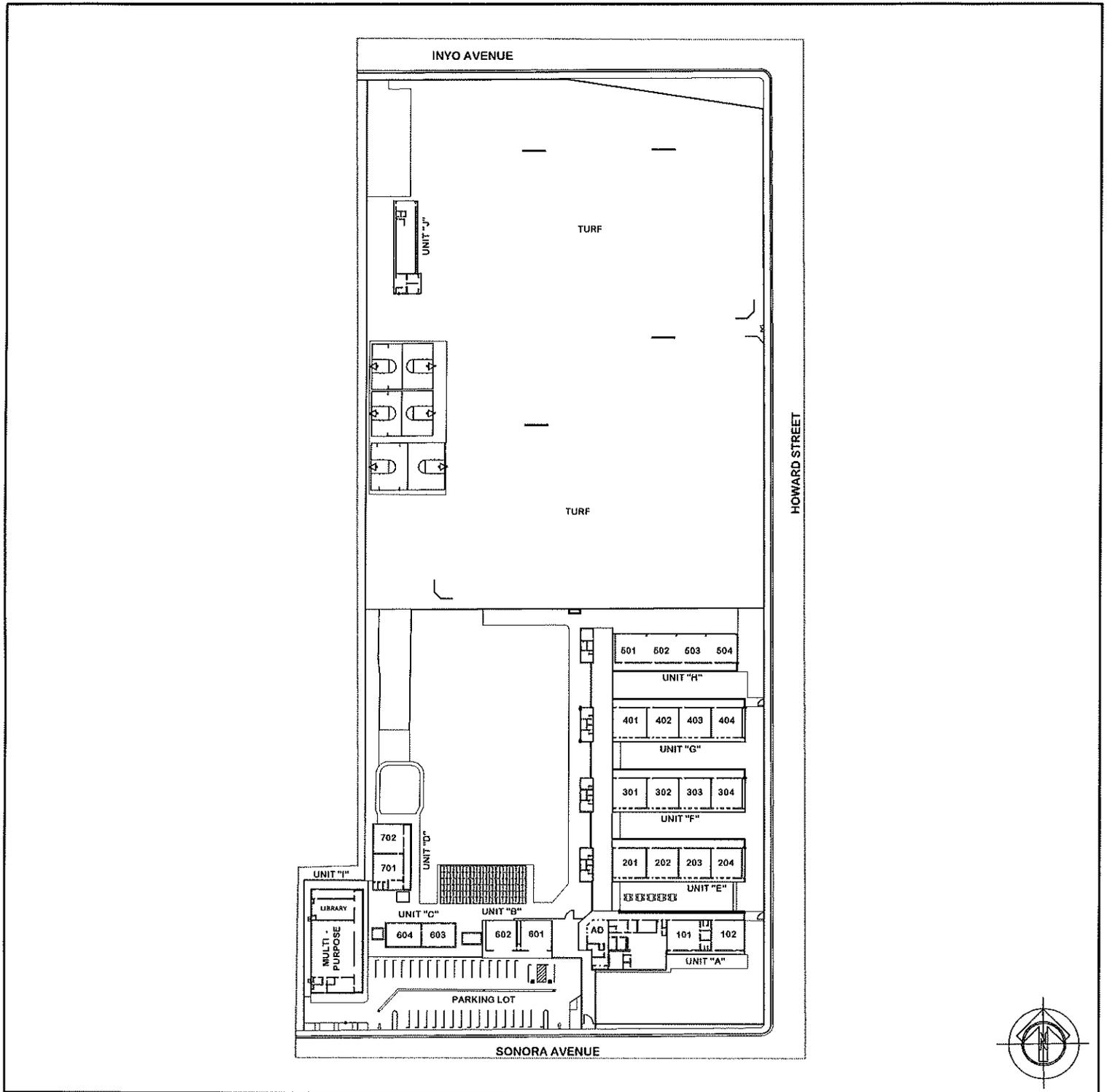
Total = 31 Units

Tulare City Elementary School District
 Roosevelt Elementary School, Tulare County

- New Construction
- Modernization/Reconstruction

Diagram of Building Area

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
ROOSEVELT ELEMENTARY SCHOOL
 1046 West Sonora Avenue. - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7280, FAX (559) 685-7386

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ALICE G. MULCAHY

1001 W. Sonora Ave.

A/C UNITS

100 Wing

6 = 3 1/2 Tons

200 Wing

6 = 3 1/2 Tons

1 = Mini-Split (Cassette) 1 1/2 Ton

1 = Mini-Split (Wall Hung) 1 1/2 Ton

300 Wing

8 = 3 1/2 Tons

400 Wing

8 = 4 Tons

500 Wing

2 = 3 1/2 Tons

2 = 4 Tons

700 Wing

1 = 4 Ton

MULTI-USE

1 = 3 Ton

7 = 6 Tons

Admin.

1 = 4 Ton

1 = 5 Ton

Library

1 = 6 Ton

BAND

1 = 5 Ton

CLINITE

4 = Mini-Split (Cassette) 1 Tons

11 = Mini-Split (Cassette) 3 Tons

Equipment Total...

4 = Mini-Split (Cassette) 1 Tons

1 = Mini-Split (Cassette) 1 1/2 Ton

1 = Mini-Split (Wall Hung) 1 1/2 Ton

11 = Mini-Split (Cassette) 3 Tons

1 = 3 Ton

22 = 3 1/2 Tons

12 = 4 Tons

2 = 5 Ton

8 = 6 Ton

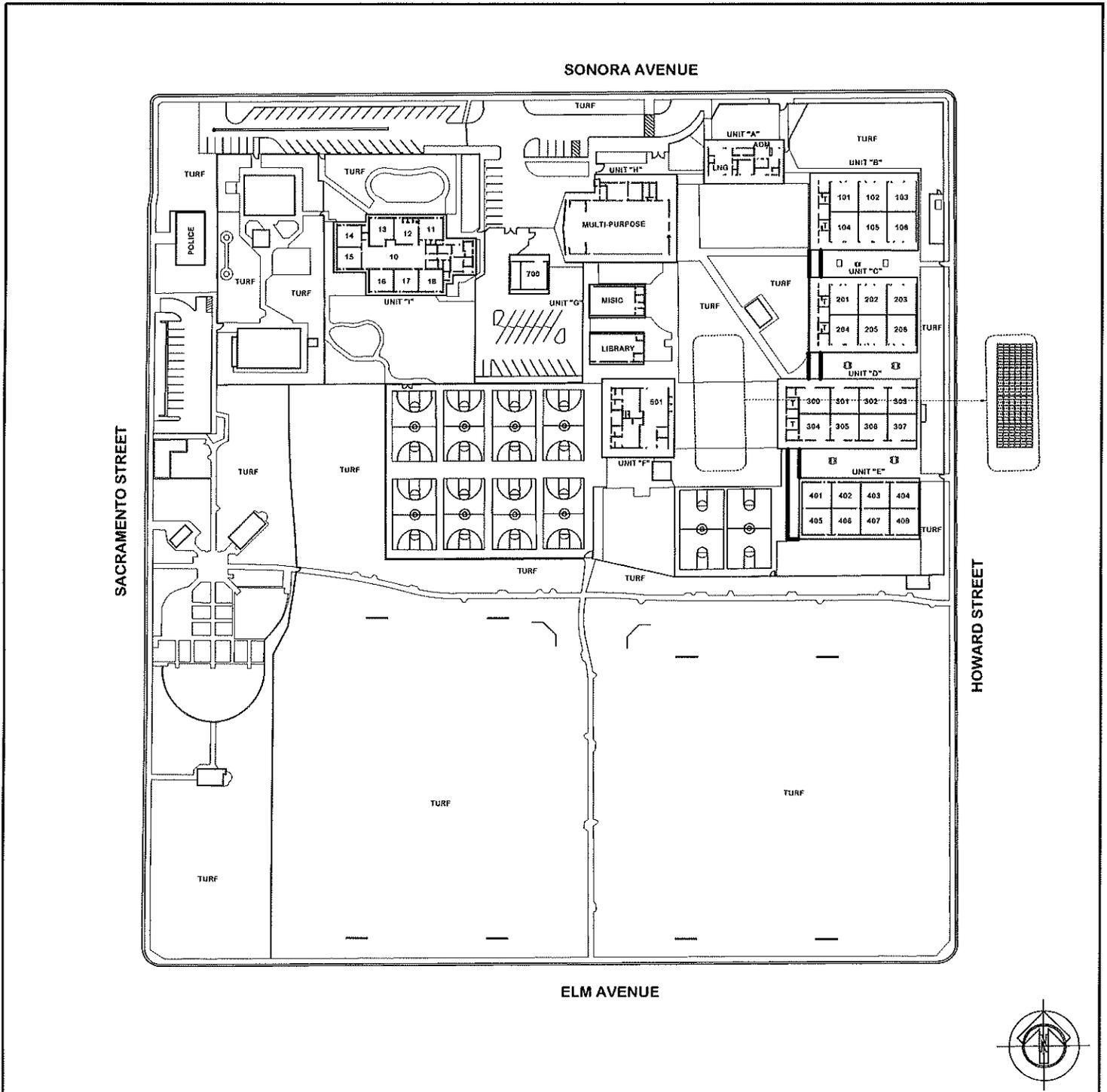
Total = 62 Units

Tulare City Elementary School District
 Alice G. Mulcahy Middle School, Tulare County

Diagram of Building Area

- New Construction
- Modernization/Reconstruction

- Existing 1-A
- Proposed 2-A
- Final 3-A



SITE PLAN
ALICE G. MULCAHY MIDDLE SCHOOL
 1001 West, Sonora Avenue - Tulare, CA 93274
 Web Site - www.tcsdk8.org
 Phone (559) 685-7250, FAX (559) 685-7252

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