



**DASNY**

**ANDREW M. CUOMO**  
Governor

**ALFONSO L. CARNEY, JR.**  
Chair

**REUBEN R. MCDANIEL, III**  
President & CEO

# SECTION A

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**ALBANY (HEADQUARTERS):** 515 Broadway, Albany, NY 12207 | 518-257-3000

**NEW YORK CITY:** One Penn Plaza, 52nd Floor, New York, NY 10119 | 212-273-5000

**BUFFALO:** 539 Franklin Street, Buffalo, NY 14202 | 716-566-4400

**ROCHESTER:** 3495 Winton Place, Building C, Suite 1, Rochester, NY 14623 | 585-461-8400

**DORMITORY AUTHORITY STATE OF NEW YORK**

**WE FINANCE, DESIGN & BUILD  
NEW YORK'S FUTURE.**

[www.dasny.org](http://www.dasny.org)



**DASNY**

**BID NO.:** 690

**PROJECT NAME & LOCATION:**

Broome Developmental Center  
249 Glenwood Rd.  
Binghamton, NY

**Description:** Furnish and Deliver Dentsply Sirona Dental Equipment

**Bid Open Location:** DASNY

515 Broadway, Albany, NY 12207

**Bid Open Date:** August 12, 2021

**Contact:** Theresa Graffeo

**Bid Open Time:** 2:30 p.m.

## NOTICE TO BIDDERS

### **MAIL BIDS EARLY**

Sealed bids will be received by DASNY at the above address for the items listed in the attached Bid Breakdown and Schedule. When submitting your bid you must:

1. Prepare your bid on the attached Bid Breakdown and Schedule. Return one signed original of the Bid Breakdown and Schedule
2. If your bid deviates from Specifications, explain such deviations or qualifications on your letterhead, setting forth therein such explanations, and attach them to the Bid Breakdown and Schedule.
3. Submission of a bid constitutes full knowledge and acceptance of all provisions of the Notice to Bidders, all information referenced in the Purchasing General Conditions, Supplemental and Detailed Specifications, the Bid Submission and any Supplemental General Requirements contained herein, as well as any addenda issued in relation to the Invitation for Bids.
4. Each bid shall bear on the outside of the envelope the name of the bidder, address, telephone number and designated as a bid for the following:

DASNY Bid No. 700

Bid Opening Date: 8/12/2021 @ 2:30PM

Return to:

DASNY

Attn: Purchasing Unit

515 Broadway

Albany, NY 12207-2964

Bid No.: 700

When a sealed bid is placed inside another delivery jacket, the bid delivery jacket must be clearly marked on the outside “**BID ENCLOSED**” and “**ATTENTION: PURCHASING UNIT**”. The Dormitory Authority will not be responsible for receipt of bids which do not comply with these instructions.

5. Mail bid responses early in order for them to be received before the time of the bid opening. **Late bids will be automatically rejected.** Individuals submitting bids in person or by private delivery services should allow sufficient time for processing through building security to assure that the bids are received prior to the deadline for submitting bids. All individuals who plan to attend bid openings will be required to present government-issued picture identification to building security officials and obtain a visitor’s pass prior to attending the bid opening.
  
6. In accordance with State Finance Law § 139-j and 139-k, this solicitation includes and imposes certain restrictions on communications between Dormitory Authority personnel and an Offerer during this procurement process. Designated contact for this solicitation is: Theresa Graffeo , at Dormitory Authority – State of New York, 515 Broadway, Albany, NY 12207, 518-257-3583. Contacts made to other Dormitory Authority Personnel regarding this procurement may disqualify the Offerer and affect future procurements with governmental entities in the State of New York. Please refer to the Authority’s website [www.dasny.org](http://www.dasny.org) for Authority policy and procedures regarding this law, or the NYS office of General Services website [www.ogs.ny.gov/BU/PC/](http://www.ogs.ny.gov/BU/PC/) for more information about this law.



Bid No.: 700

**If you are not submitting a bid it is requested that you complete and return the lower portion of this form**

*(Please check all that apply and provide comments in the space provided, if necessary)*

- We are not Submitting a bid.
- We Request removal of our name from the mailing list.
- Location of the job site.
- Commodity is not carried by our company.
- Scope is too large.

Other/Additional Explanation: \_\_\_\_\_  
\_\_\_\_\_

NAME OF BIDDER: \_\_\_\_\_

ADDRESS : \_\_\_\_\_

|                  |      |       |     |
|------------------|------|-------|-----|
| Street Telephone | City | State | Zip |
|------------------|------|-------|-----|

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Official Title

## **CLAUSES PURSUANT TO THE OMNIBUS PROCUREMENT ACT OF 1992**

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and woman-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York subcontractors and supplies is available from:

Empire State Development  
Small Business Division  
30 South Pearl Street, 7<sup>th</sup> Floor  
Albany, NY 12207  
Phone: (800) 782-8369

A directory of minority and woman-owned business enterprises is available from:

Empire State Development  
Division of Minority and Women Business Development  
30 South Pearl Street  
Albany, NY 12207  
Phone: (518) 292-5250

Online Directory: <https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp>

DASNY maintains a directory of minority and women-owned business enterprises:  
<http://www.dasny.org/construc/mwsbereg/index.php>

The contractor acknowledges notice that New York State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

DASNY encourages the use of recycled Materials in the manufacturing process. To that end, the recycled product must meet the same codes, specifications and standards the non-recycled materials do, including requirements for cost, installation, aesthetics, availability and maintenance.

The Omnibus Procurement Act of 1992 and § 2879 of the NYS Public Authorities Law require that by signing this bid, contractors certify that whenever the total bid amount is greater than \$1 million:

1. The contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and Subcontractors on this project, and has retained the documentation of these efforts to be provided upon request to the State. If the contractor determines that NYS business enterprises are not available to participate on the contract as subcontractors or suppliers, the contractor shall provide a statement indicating the method by which such determination was made. If the contractor does not intend to use subcontractors, contractor shall provide a statement verifying such;
2. The contractor has complied with the Federal Equal Opportunity Act of 1972 (PL 92-261), as amended; and
3. The contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The contractor agrees to document these efforts and to provide said documentation to the State upon request.

**DASNY is required by law to notify the NYS Department of Economic Development of any procurement contract for one million dollars or more that is to be awarded to an out-of-state vendor. This notice must be done simultaneous to the notification of award provided to the vendor. A purchase order or contract cannot be issued until fifteen (15) days after such notification is provided.**



# The New York State Contract Reporter

NYS' official source of contracting opportunities  
Bringing business and government together

This document printed  
Wednesday, 07/21/2021

## Contracting Opportunity

\*\*\* This ad has not been published. It has been reviewed and pending publication. \*\*\*

**Title:** Broome DDSO - Furnish & Deliver Dentsply Sirona Dental Equipment  
**Agency:** Dormitory Authority of the State of New York  
**Division:** Procurement  
**Contract Number:** 700  
**Contract Term:** One Time Purchase  
**Date of Issue:** 07/22/2021  
**Due Date/Time:** 08/12/2021 2:30 PM  
**County(ies):** All NYS counties  
**Location:** Broome DDSO  
**Classification:** Medical & Laboratory Equipment - *Commodities*  
**Opportunity Type:** General  
**Entered By:** Christine Donahue  
**Description:** Furnish, and deliver Dentsply Sirona dental equipment.

Firms interested in responding to this solicitation may access the Bid and related documents from DASNY's Website at: <http://www.dasny.org/rfp-bidopportunities-solicitations/purchasingservices/new.aspx>  
All Bid Documents are listed under the Attachments Section. All bidders are responsible for obtaining any addenda issued and posted to [www.dasny.org](http://www.dasny.org) in relation to this Bid. In accordance with State Finance Law § 139-j and § 139-k, this solicitation includes and imposes certain restrictions on communications between Dormitory Authority personnel and an Offeror during the procurement process. Designated staff for this procurement are listed below. Contacts made to Dormitory Authority personnel regarding this procurement may disqualify the Offerer and affect future procurements with governmental entities in the State of New York. Please refer to the Authority's website ([www.dasny.org](http://www.dasny.org)) for Authority policy and procedures regarding this law, or the OGS website ([www.ogs.state.ny.us/aboutogs/regulations/defaultAdvisoryCouncil.html](http://www.ogs.state.ny.us/aboutogs/regulations/defaultAdvisoryCouncil.html)) for more information about this law. 1 of 4 All bidders, domestic and foreign, must be in compliance with New York State business registration requirements. Contact the NYS Dept. of State regarding compliance. Bids must be submitted in the bidder's full legal name, or the bidder's full legal name plus a registered assumed name, if any.

**Service-Disabled Veteran-Owned Set Aside:** No





## Contact Information

**Primary contact:** Dormitory Authority of the State of New York  
Procurement  
Theresa Graffeo  
Purchasing Coordinator  
515 Broadway  
Albany, NY 12207-2964  
United States  
Ph: 518-257-3583  
Fax: 518-257-3468  
tgraffeo@dasny.org

**Secondary contact:** Dormitory Authority of the State of New York  
Procurement  
Christine Donahue  
Assistant Purchasing Coordinator  
515 Broadway  
Albany, NY 12207-2964  
United States  
Ph: 518-918-4106  
Fax: 518-257-3103  
cdonahue@dasny.org

**Submit to contact:** Dormitory Authority of the State of New York  
Procurement  
Theresa Graffeo  
Purchasing Coordinator  
515 Broadway  
Albany, NY 12207-2964  
United States  
Ph: 518-257-3583  
Fax: 518-257-3468  
tgraffeo@dasny.org

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## SUPPLEMENTAL SPECIFICATIONS

**The following items are attached for informational purposes. Referenced documents need not be returned with the proposal.** These documents are only applicable to the successful bidder and the ensuing procurement contract. Documents are only applicable to the successful bidder and the ensuing procurement contract. Documents applicable to the procurement that will result from this Invitation for Bids are designated by a check box (☒). Unless otherwise indicated, the referenced documents are located at the end of this Invitation for Bids.

- Purchasing General Conditions** – The DASNY Purchasing General Conditions contains terms and conditions of purchases made by DASNY. It is recommended that this document be reviewed fully.
- M/WBE Utilization Plan and Request for Waiver** - Minority and Women-Owned Business Enterprise (M/WBE) goals for this project are 0% and 0%, respectively. The successful bidder shall be required to complete a Utilization Plan or Request for Waiver, to be approved by DASNY’s Opportunity Programs Group. Reference Purchasing General Conditions, Article XIX, Affirmative Action for Contracts Mr. Michael Clay, DASNY Opportunity Programs Group at (518) 257-3464, is available to assist all bidders in attaining these goals. *Reference the enclosed “Good Faith Efforts Guidelines”.*
- Supplemental General Requirements** – Attached (if applicable) are the Supplemental General Requirements (SGRs) which provide important logistical information and additional conditions which govern this procurement. Please read these SGRs carefully.
- Form of DASNY Contract** – The procurement resulting from the Invitation for Bids will be executed through a DASNY purchase order and a related contract. The contract executed with the successful bidder will be in the same substantial form as the attached “Form of Contract”. Note that this Invitation for Bids and any response to such will be annexed as binding terms of the purchase agreement.
- Certificate of Insurance** (*sample enclosed*) – The successful bidder will be required to provide a Certificate of Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. The certificate shall name DASNY and other designated parties as additional insureds.

**SUPPLEMENTAL SPECIFICATIONS CONTINUED**

- Worker’s Compensation / Disability Insurance** – The successful proposer will be required to provide specific documentation with respect to Worker’s Compensation and Disability Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. Requirements are detailed in the enclosed “Workers’ Compensation and Disability Benefits Requirements” document.
  
- Prevailing Wage Schedule** – NYS Labor Law requires all wages paid by contractors and subcontractors on public work projects be paid at the prevailing wage rates. Enclosed is the current rate schedule for the appropriate county. Contractors and Subcontractors are responsible for obtaining current rates throughout the course of the project. The NYS Department of Labor (NYS DOL) updates these rates on July 1st of each year. Current rates can be obtained on the NYS DOL website ([www.labor.state.ny.us](http://www.labor.state.ny.us)) or by fax at (518) 485-1870. Note that an executed Contractor and Subcontractor Certification and certified payrolls, which include the hours and days worked by each workman, laborer or mechanic, the occupation at which he worked, the hourly wage rate paid and the supplements paid or provided, must be submitted with each and every payment requisition. **DASNY will not process an invoice without this information.** Forms are available on the DASNY website:  
<http://www.dasny.org/construc/forms2/vendors.php>
  
- Labor and Material Payment Bond** – The successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of the DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.
  
- Performance Bond** – The Successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.
  
- Standard Vendor Responsibility Questionnaire (SVRQ)** – The successful proposer, in accordance with Article XXII of DASNY Purchasing General Conditions, will be required to complete the enclosed SVRQ. The award of a contract will be subject to a review of the information contained in these forms.



**SUPPLEMENTAL SPECIFICATIONS CONTINUED**

- NYS Uniform Contracting Questionnaire (UCQ)** – The successful proposer will be required to complete the enclosed UCQ. The award of a contract will be subject to a review of the information contained in these forms.
  
- DASNY Contractor and Consultant Questionnaire (CCQ)** – The successful proposer will be required to complete the enclosed CCQ. The award of a contract will be subject to a review of the information contained in these



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### Supplemental General Requirements

All questions pertaining to Bid No. 700 – Furnish and Deliver Dentsply Sirona Dental Equipment are due no later than 4:00 p.m. July 30, 2021 to [tgraffeo@dasny.org](mailto:tgraffeo@dasny.org). RFI Responses will be posted via Addenda to DASNY's Website in the Attachments Section of the Bid Opportunity Page for Bid No. 700.

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**NEW YORK CITY:** One Penn Plaza, 52nd Floor, New York, NY 10119 | 212-273-5000  
**BUFFALO:** 539 Franklin Street, Buffalo, NY 14202 | 716-884-9780  
**ROCHESTER:** 3495 Winton Place, Building C, Suite 1, Rochester, NY 14623 | 585-461-8400

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## **Detailed Specifications and Scope of Work**



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**Scope of Work:**

Furnish and deliver Dentsply Sirona Dental equipment items for Broome DDSO as provided in the Detailed Specifications. Provide inside delivery of all equipment items including unpackaging, uncrating and removal of all debris.



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**Detailed Specifications**

| <u>Manufacturer</u> |  |            |
|---------------------|--|------------|
| <u>No.</u>          | <u>Description</u>   | <u>QTY</u> |
| 8800201             | CAVITRON SYS ADEC 66GR<br>W/360: Built in Cavitron Kit for<br>Duo Cart             | 2          |
| 81365               | CAVITRON POTENTIOMETER KIT:<br>Built in Cavitron Potentiometer<br>Kit for Duo Cart | 2          |
| 100007345           | SCHICK 33 SZ2 6' STARTER KIT<br>W/ CABLE&RMT                                       | 1          |
| 100007346           | SCHICK 33 SZ1 6' STARTER KIT<br>W/ CABLE&RMT                                       | 1          |
| 100007347           | SCHICK 33 SZ0 6' STARTER KIT<br>W/ CABLE&RMT                                       | 1          |
| 6281252             | ORTHOPHOS XG 3D READY PAN:   | 1          |
| 740010              | RDH HYG HPC F/DISP ANGL:<br>Hygiene handpieces - 3 Pack                            | 1          |



# Cavitron Built-In (G139) with 66 inch gray cable and Steri-Mate 360 handpiece - A-dec Configuration

SKU: 8800201



## Cavitron Integrated Systems Built-In Ultrasonic Scaler

- Fewer cords and less visible equipment
- Open office environment preserves counter space
- Compatible with Steri-Mate 360 Rotating Handpiece

## Features and Benefits

Cavitron Integrated Systems offer an open environment with the same benefits of traditional Cavitron units.

- Compatible with Steri-Mate 360, a rotating handpiece that allows the clinician to fully rotate an ultrasonic insert without stopping for adjustments
- Detachable and autoclavable handpiece reduces cross contamination for enhanced infection control
- Patented Sustained Performance System, SPS, Technology automatically adjusts power to maintain scaling efficiency, even at low power
- BlueZone extended low power range designed for improved patient comfort

Items included: (1) Cavitron Built-In Ultrasonic Scaler with 66" gray colored handpiece cable, (1) Steri-Mate 360 Detachable, Sterilizable Handpiece, (1) cable assembly with in-line water control and swivel connection, (1) 30K Focused Spray PowerLine 1000 FitGrip Ultrasonic Insert, pressure regulator for water, 2 Year Warranty on unit only, Instruction manual. Dimensions: 1.375" H x 3" W x 2.5" D, Weight: .28 Lbs.

Cavitron.

For dental professionals searching for the streamlined look of integration, **Cavitron® Integrated Systems** gives you the freedom of more open space.

**Cavitron® Integrated Systems**

- Fewer cords and less visible equipment
- Open office environment preserves counter space
- Compatible with Steri-Mate® 360 Rotating Handpiece

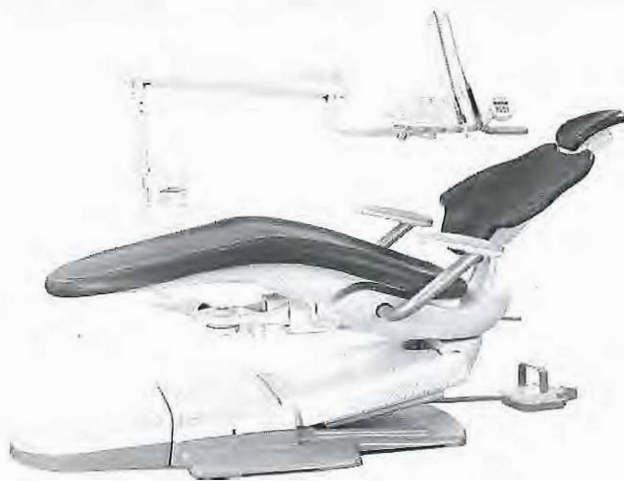


**There's only one Cavitron®.**

**Cavitron.**  
integrated  
systems

## Cavitron® Integrated Systems offer an open environment with the same benefits of traditional Cavitron® units.

- Compatible with **Steri-Mate® 360**, a rotating handpiece that allows the clinician to fully rotate an ultrasonic insert without stopping for adjustments
- Detachable and autoclavable handpiece reduces cross contamination for enhanced infection control
- **Patented Sustained Performance System, SPS™, Technology** automatically adjusts power to maintain scaling efficiency, even at low power
- **BlueZone™** extended low power range designed for improved patient comfort.



## Cavitron Integrated Systems integrate easily with A-dec 500® and A-dec 300® delivery systems.

For dental professionals searching for the streamlined look of integration, you are now able to combine Cavitron Systems with the convenience of integration into the A-dec 500 or A-dec 300 dental units. You can also put more technology at your fingertips with the A-dec deluxe touch pad, which gives you an intuitive display, easy-touch control, and programmable memory for preferred ultrasonic power settings.

| Item  | A-dec Integrated Part # | Description                              | Compatible With:                             |
|---|-------------------------|--|--|
| Cavitron A-dec Built-In Ultrasonic Scaler Kit | 54.0599.00              | Cavitron Steri-Mate 360 Install Kit, 61" | A-dec 532, 533, 542, 332, 333, 334, 335, 336 |
|   | 54.0597.00              | Cavitron Steri-Mate Install Kit, 61"     |  |
|   | 54.0600.00              | Cavitron Steri-Mate 360 Install Kit, 82" | A-dec 541                                    |
|   | 54.0598.00              | Cavitron Steri-Mate Install Kit, 82"     |  |

**For an integrated Cavitron kit contact:**

1.800.547.1883 Within USA  
 1.503.538.7478 Outside USA/Canada  
 a-dec.com



**For a built-in Cavitron kit for field installation contact:**

DENTSPLY Professional  
 1.800.989.8826  
 www.dentsply.com



# Cavitron® Built-In Ultrasonic Scaler Model: G139

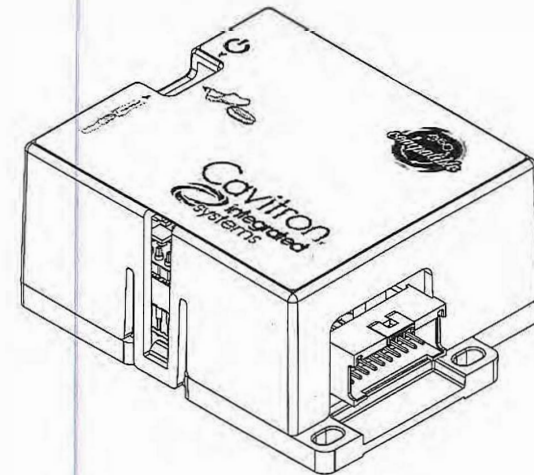
## Installation Instructions

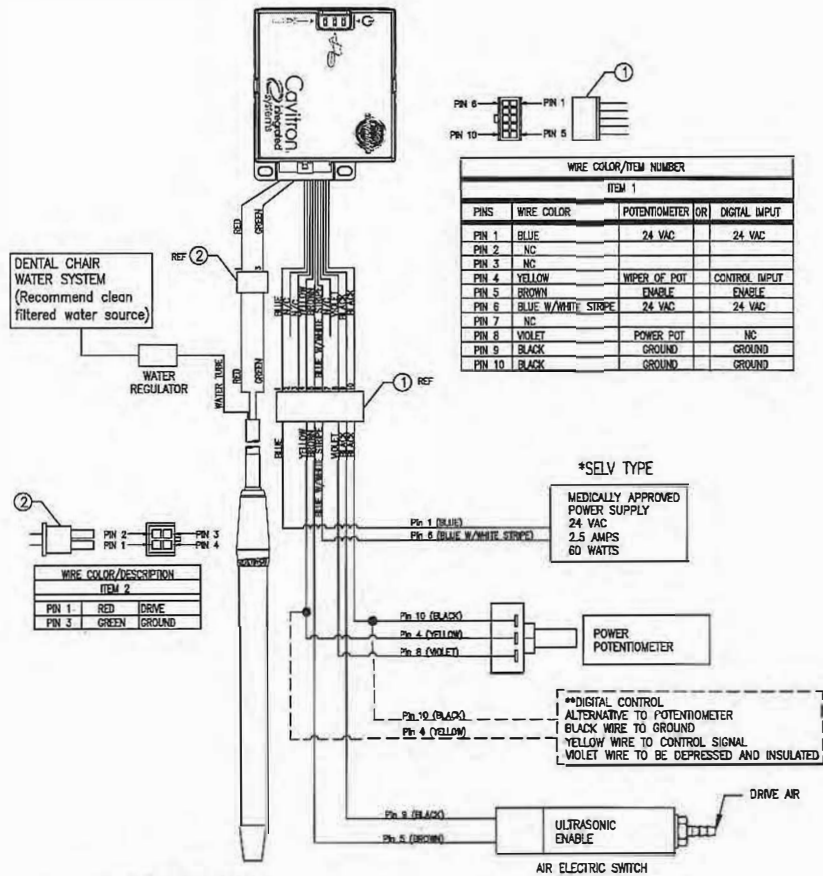
### Installation Verification:

1. Turn on power, air and water to the dental unit.
2. Verify power on LED is illuminated.
3. Lift handpiece cable from holder or pull handpiece cable wand forward.
4. Plug handpiece into handpiece cable.
5. Depress foot control to fill handpiece with water then release foot control.
6. Verify the foot control and handpiece LED is continuously illuminated.
7. Place insert into handpiece.
8. Depress foot control and verify insert oscillation.
9. Verify water flow is adjustable from less than 10mL/min to greater than 60mL/min using water flow control on rear of handpiece.
10. To verify correct operation, adjust the power control knob (clockwise more power, counter clockwise less power).
11. Verify no water leaks.
12. The Cavitron Built-In OEM Module has been successfully installed.

DENTSPLY Professional  
Technical Service and Repair Department:  
Phone: 800-989-8826 or 717-767-8502  
Fax: 717-767-8508  
email: prodserv@dentsply.com

Dentsply Professional  
1301 Smile Way  
York, PA 17404 U.S.A.





WIRE COLOR/ITEM NUMBER

| ITEM 1 |                     |                    |               |
|--------|---------------------|--------------------|---------------|
| PINS   | WIRE COLOR          | POTENTIOMETER (OR) | DIGITAL INPUT |
| PIN 1  | BLUE                | 24 VAC             | 24 VAC        |
| PIN 2  | NC                  |                    |               |
| PIN 4  | NC                  |                    |               |
| PIN 4  | YELLOW              | WIPER OF POT       | CONTROL INPUT |
| PIN 5  | BROWN               | ENABLE             | ENABLE        |
| PIN 6  | BLUE W/WHITE STRIPE | 24 VAC             | 24 VAC        |
| PIN 7  | NC                  |                    |               |
| PIN 8  | VIOLET              | POWER POT          | NC            |
| PIN 9  | BLACK               | GROUND             | GROUND        |
| PIN 10 | BLACK               | GROUND             | GROUND        |

WIRE COLOR/DESCRIPTION




| ITEM 2 |              |
|--------|--------------|
| PIN 1  | DESCRIPTION  |
| PIN 1  | RED DRIVE    |
| PIN 3  | GREEN GROUND |

- \*CUSTOMER SUPPLIED PARTS
- \*\*NOTES: (FOR DIGITAL CONTROL INPUT CONNECTION)
- USE DOTTED LINES FOR CONTROL VOLTAGE CONNECTIONS TO CAVITRON SCALER.
  - DO NOT INSTALL THE POTENTIOMETER TO CAVITRON SCALER.
  - INPUT CONTROL VOLTAGE: 5VDC=MAX HANDPIECE POWER.
  - INPUT CONTROL VOLTAGE: 0VDC=MIN HANDPIECE POWER.

**SPECIFICATIONS:**

|                             |   |  |
|-----------------------------|---|--|
| <b>ELECTRICAL</b>           | INPUT VOLTAGE:<br>INPUT CURRENT:<br>INPUT FREQUENCY:<br>OUTPUT POWER: | 24 VAC ± 10% (SELV)<br>2.5A<br>50/60 Hz<br>30W                 |
| <b>POWER CONTROL RANGE</b>  | RESISTANCE:<br>VOLTAGE RANGE:   | 0-5 KΩ (1/4W)<br>0-5 V   |
| <b>SEPARATING FREQUENCY</b> |   | 30 KHz   |
| <b>WATER</b>                | INPUT PRESSURE:<br>FLOW RATE:<br>INPUT WATER TEMPERATURE:             | 25-60 psi (172-4140Pa)<br>10-60 ml/min<br>41°F-77°F (5°C-25°C) |
| <b>WEIGHT</b>               |   | 200g (6.44oz)  |
| <b>DIMENSIONS (MAX)</b>     | HEIGHT:<br>WIDTH:<br>DEPTH:   | 1.4in (3.5cm)<br>3.1in (7.9cm)<br>2.5in (6.4cm)                |



-  **Power On Icon:** If LED is illuminated, Cavitron Scaler has power. Verify 24VAC is being applied to scaler via the Blue wire and Blue wire with white stripe.
-  **Foot Control Icon:** LED will illuminate when the dental unit foot control is depressed. If the Cavitron Air Electric Switch harness is being used and LED does not illuminate when foot control is depressed, verify at least 20PSI is being delivered to Air Electric Switch.
-  **Handpiece Continuity Icon:** Handpiece Continuity Icon will illuminate when dental unit foot control is depressed and handpiece is attached to the handpiece cable. If LED does not illuminate check the following:
  - Verify Foot Control Icon illuminates when foot control is depressed
  - Verify connections are secure between the Steri-Mate, Handpiece Cable, adaptor harness and unit.
  - Check handpiece cable and Handpiece pins for damage or corrosion.
  - Unplug adaptor harness from unit and measure the resistance across pin 1 (Red Wire) and pin 3 (Green Wire) with handpiece connected and verify 0.4 ohms.

# Cavitron A-dec Potentiometer Kit

SKU: 81365



Required for any A-dec system without a deluxe touchpad.

---

THE DENTAL  
SOLUTIONS  
COMPANY™



# The 3D x-ray family

[dentsplysirona.com](http://dentsplysirona.com)





As versatile as  
practice life.

The Dentsply Sirona 3D x-ray family offers 3 units, Galileos Comfort Plus, Orthophos SL 3D and Orthophos XG 3D, whose visual possibilities cover the entire range of all specializations in dentistry. Which unit is the one for you and your practice? You can find out here!







## The third dimension makes the difference

More precise diagnoses, clearer explanations: 3D imaging has many benefits. Be it overlaid teeth, unexpected nerve channel paths, concealed roots, or temporomandibular joint anomalies, 3D images are of inestimable value in a large number of diagnoses.

- 3D imaging increases your own diagnostic accuracy
- Better inclusion of the patients in planning
- No referral of your patients to specialists
- These units increase your practice services and your success



## Work quickly, precisely and reliably

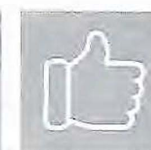
Dentsply Sirona imaging units stand out for their simple operation and positioning, thus providing efficient workflows. The unprecedented image quality allows extremely precise diagnosis and planning. With Dentsply Sirona, you trust a global brand with hundreds of thousands of units in practice distinguished by their Made in Germany quality.



Optimum Workflow



Unparalleled  
image quality

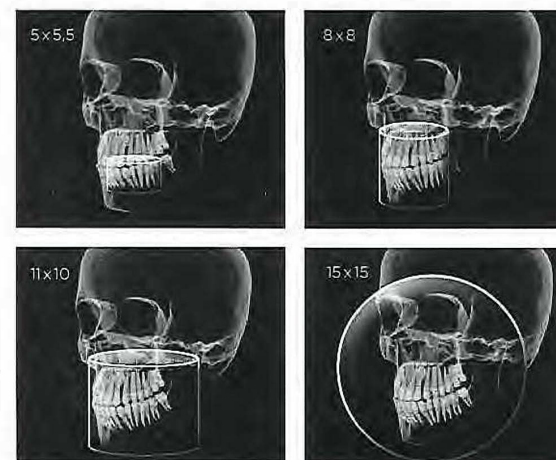


Proven solution

## Flexibility and reliability with a low dose

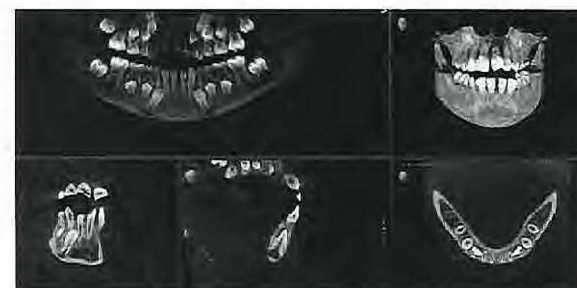
The Dentsply Sirona 3D x-ray family combines high resolution image quality with great flexibility. Simply choose the best volume for your practice – this can be easily adjusted for the individual patient situation and will support your diagnosis with clear, sharp images with the lowest dose.

An overview of the volumes available in the Dentsply Sirona 3D family:



Other available volumes (varies according to the unit): 8 cm x 5.5 cm; 11 cm x 8 cm; 11 cm x 7.5 cm upper jaw; 15 cm x 8.5 cm upper jaw; 15 cm x 8.5 cm lower jaw.

More possibilities for your practice



8 cm x 8 cm Images taken in Low Dose with 15  $\mu$ Sv

The best image quality for all indications: In order for you to be ideally prepared for every case, the Dentsply Sirona 3D x-ray family naturally offers outstanding solutions for both 2D and 3D approaches. You gain additional flexibility in 3D thanks to the Low Dose mode, with which you can generate images at lower radiation dose comparable to the level of 2D x-rays depending on the indication.



## Easy operation, safe positioning

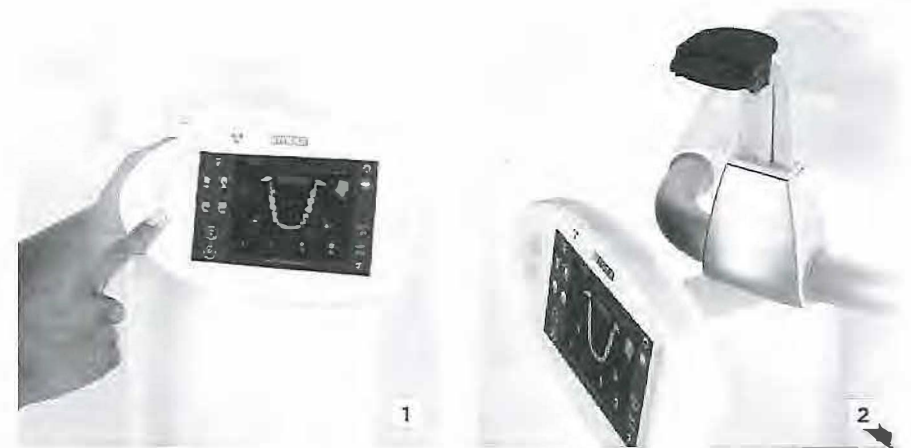
Dentsply Sirona offers unique patented solutions for operating the units and positioning the patients. Optimize your practice workflow with intuitive user interfaces and automatic positioning aids that eliminate unnecessary corrective scans and waiting times.



### The new positioning tools make for good imaging.

"Positioning with the Orthophos SL is very easy for our team. The many aids such as automatic light localizers, illuminated height adjustment buttons and intuitive program selection allow us to work efficiently with very good image quality. In combination with Sidexis 4, we have a comprehensive package that gives us absolute confidence in the findings."

PD Dr. Dr. Lutz Rittler, Oral and Maxillofacial Surgery, Hennef



- 1 Intuitive operation**  
 No matter how your x-ray room is set up - the swiveling and tilting EasyPad makes it highly flexible and the clearly arranged buttons and symbols ensure optimum operation.
- 2 The patented occlusal bite block**  
 Position the patient with the patented occlusal bite block. The unit automatically determines the correct tilt of the head and indicates it using corresponding symbols and colors - all you need to do is press the up and down arrows.
- 3 Stable positioning for high-quality images**  
 Stable patient positioning prevents motion blurring. The motorized 3-point head fixation and stable handles give your patients the necessary support. At the same time, the EVI\* light localizers show you the patient's position in the volume. The integrated temple width measurement ensures an orbit specific to each patient and thereby results in high image sharpness.

\*EVI = Easy Volume Indicator



## Working digitally is this easy

### Sidexis 4 – this is the core of the digital workflow with Dentsply Sirona.

The software with its intuitive user interface has a very simple structure: it follows the clear format of your work processes and provides you at all times with all visual data of your patients seamlessly and at a glance – whether 2D, 3D or intraoral. This integrates your patients optimally and thus results in a high acceptance of your treatment proposal. Sidexis 4 is pure imaging efficiency, giving you a quick overview of the entire history of the patient. This allows you to add a time dimension to your diagnostic options in a very intuitive way. The lightbox is ideal for a comprehensive diagnosis, as it lets you compare 2D and 3D images as well as camera images and facescan data side-by-side.



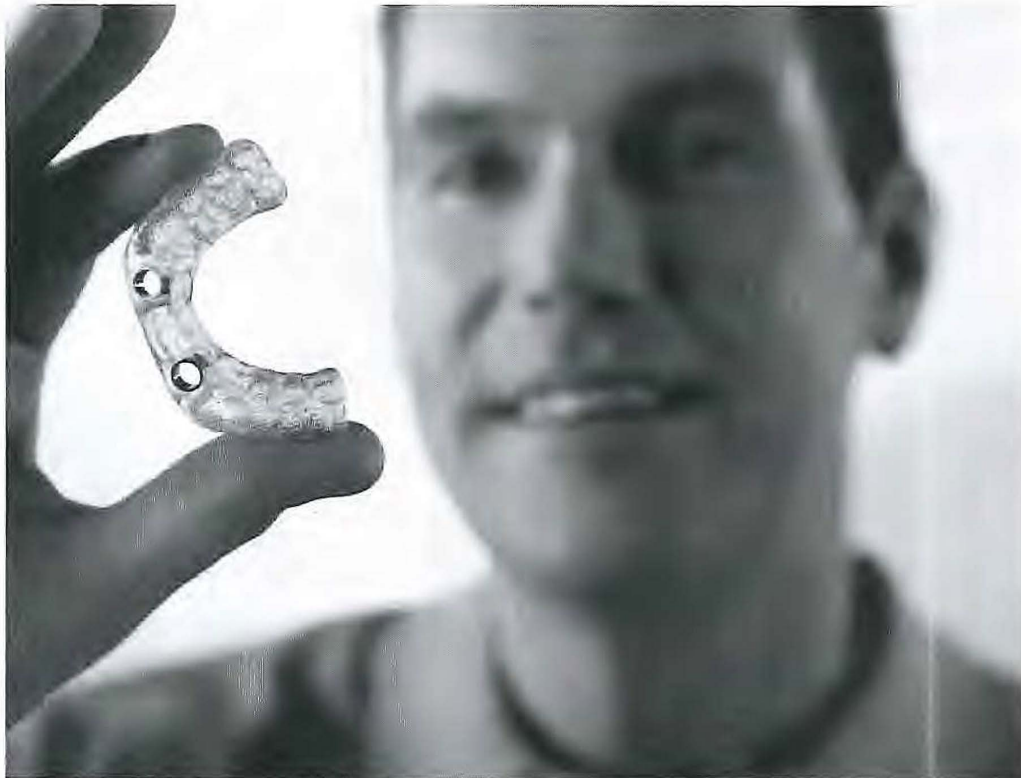
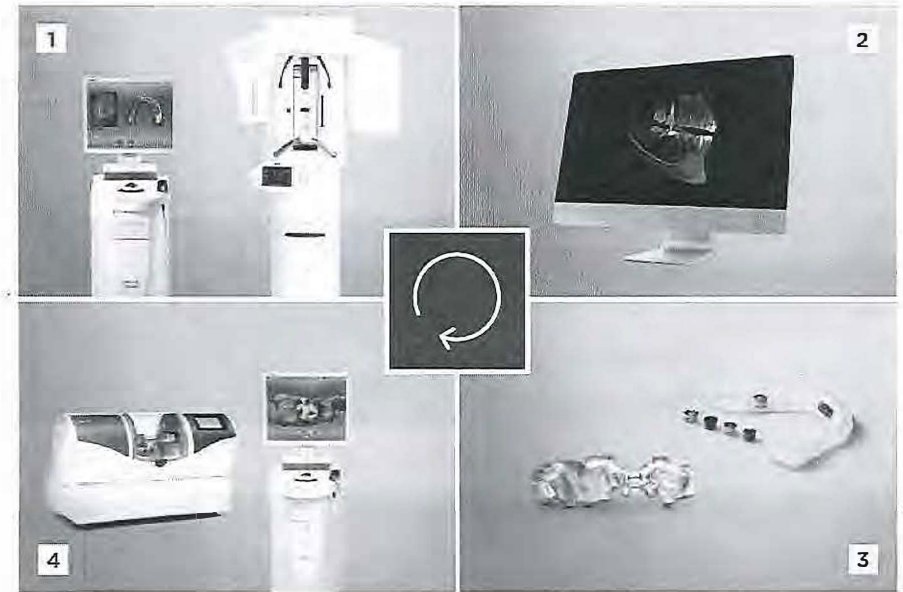
Simple overview of the patient history

## Advantages at a glance

- Modern design
- Software platform for all Dentsply Sirona x-ray units
- Intuitive operation, optimally coordinated workflows
- Simple overview of the patient history thanks to the intuitive timeline
- Easy export of DICOM data sets
- Interface of the integrated solutions from Dentsply Sirona

## The simple way to a completed implant

Software and hardware perfectly coordinated - that is Dentsply Sirona quality in implantation. With the support of the Galileos Implant software, prosthetic suggestions from the CEREC software can be combined with your 3D x-ray data. In this way you can enjoy absolute certainty in an efficient, time-saving workflow. And your patients can look forward to perfect results with fewer treatment sessions.



### 1. Session

**1 Scan:**  
In the first step, all of the necessary images for planning are prepared: Intraoral impressions for the prosthesis - 3D x-ray images for surgical planning.

**2 Plan:**  
The prosthetic suggestion and the x-ray data are combined in the software. On the basis of this combination, implant planning and the completion of the appropriate surgical guide follow.

### 2. Session

**3 Place:**  
Next, the implant is inserted securely and in an uncomplicated fashion using the surgical guide, which allows minimally invasive work. With CEREC Guide 2, Dentsply Sirona has the most convenient and quickest in-house surgical guide in the world. Or order your surgical guide from SICAT directly out of the software.

### 3. Session

**4 Restore:**  
In the final step, you plan the abutment and crown with the CEREC 4.5 software, which you then produce quickly and very precisely in your own practice with CEREC MC X or the MC XL Premium package. The crown is precisely fitted and this is monitored with either Intraoral sensors or a 3D Low dose image.

## Extensive practice offering made easy

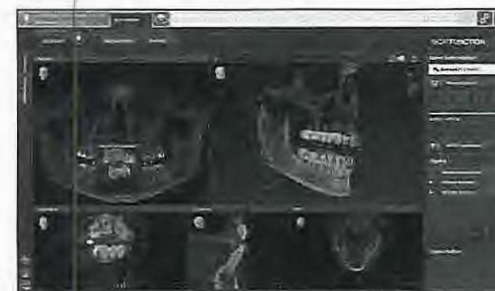
In addition to integrated implantology, Sidexis 4 integrates many other time-saving and convenient software solutions. For example, the SICAT Function offers a simple workflow for functional diagnosis and therapy of temporomandibular joint dysfunction. For the first time, a 3D solution is available that allows analysis of the upper airway and treatment of obstructive sleep apnea in a purely digital workflow thanks to the new SICAT Air software. Doing so, the dose can even be reduced to match that of 2D images.\*



### SICAT Air and SICAT Optisleep

After analysis of the upper airway in 3D, SICAT Air gives a report on the effect of the planned protrusion degree and possible effects on the temporomandibular joint. Ordering an individual patient therapeutic appliance with Optisleep is done purely digitally.

\*Orthophos SL only



SICAT Function

### SICAT Function

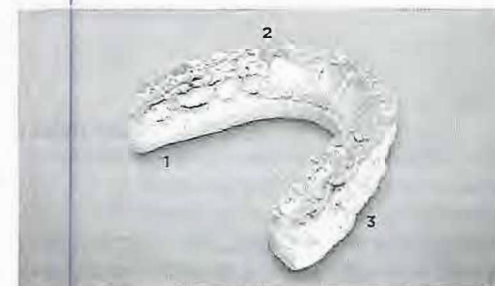
For the first time, SICAT Function gives an anatomically correct view of the movement of the lower jaw of the individual patient in the 3D volume. Movement of the mandibular joint can be visualized for each point in the 3D volume.

### SICAT Function with CEREC

In combination with CEREC, you receive the actual articulation in CAD/CAM. The advantages: functional prosthetics with reduced grinding effort and implementation of new treatments.

### SICAT Optimotion

SICAT Optimotion is the world's first CMD therapeutic appliance that implements both the individual patient movements and the pure condyle-fossa relationship in the therapeutic appliance. Depending on the preference, the SICAT Optimotion is completed purely digitally with SICAT.



1 Freedom in centric 2 canline guidance 3 Michigan principle

# Endodontics in the third dimension

Due to their unparalleled image quality Orthophos units are a great fit for all endodontic requirements. Together with 3D Endo™ they open up new dimensions for your practice. With a small 3D volume of 5 cm x 5.5 cm the Orthophos units are equipped with a perfect field of view for all endodontic cases. In combination with the High Definition (HD) mode you can expect extremely sharp images with an outstanding level of detail of up to 80 µm.

Complex cases? Nothing left to hide?

3D Endo™, the first CBCT based software designed to improve endodontic treatment planning for more predictability. Plan for an optimal cavity access and your final instrument.



Designed to improve  
treatment quality

- Isolate the tooth of interest
- Clearly visualize the tooth anatomy in 3D
- Identify all canals
- Anticipate risky areas

Know what to expect

- Evaluate 3D working length and cavity access depth
- Locate canal orifices without opening the tooth
- Plan for an optimal cavity access and your final instrument
- Simple and consistent methodology for all cases

An intuitive way to analyze  
CBCT scan data

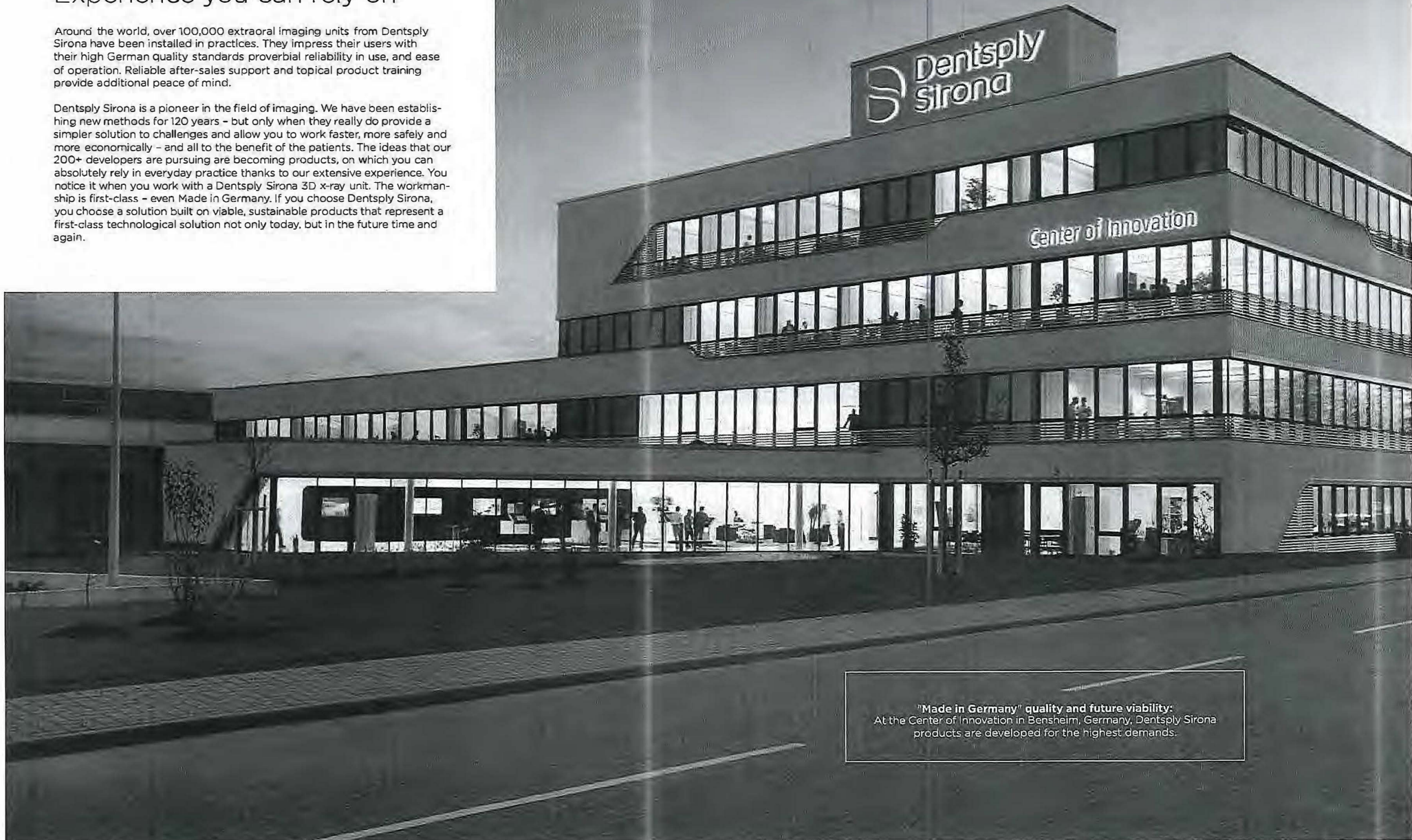
- Simple and consistent methodology for all cases
- Know how to use the software in 30 min
- Quick & Easy to use



## Experience you can rely on

Around the world, over 100,000 extraoral imaging units from Dentsply Sirona have been installed in practices. They impress their users with their high German quality standards proverbial reliability in use, and ease of operation. Reliable after-sales support and topical product training provide additional peace of mind.

Dentsply Sirona is a pioneer in the field of imaging. We have been establishing new methods for 120 years – but only when they really do provide a simpler solution to challenges and allow you to work faster, more safely and more economically – and all to the benefit of the patients. The ideas that our 200+ developers are pursuing are becoming products, on which you can absolutely rely in everyday practice thanks to our extensive experience. You notice it when you work with a Dentsply Sirona 3D x-ray unit. The workmanship is first-class – even Made in Germany. If you choose Dentsply Sirona, you choose a solution built on viable, sustainable products that represent a first-class technological solution not only today, but in the future time and again.



**"Made in Germany" quality and future viability:**  
At the Center of Innovation in Bensheim, Germany, Dentsply Sirona products are developed for the highest demands.



## Which unit is the one for you?

Frequency and type of use, specialization, price, and personal preferences – every dental practice has its own requirements for an x-ray unit. Here is a quick overview of which Dentsply Sirona 3D x-ray unit is right for you.

### Units at a glance

|                                | Orthophos XG 3D | Orthophos SL 3D                    | Galileos Comfort Plus |
|--------------------------------|-----------------|------------------------------------|-----------------------|
| General dentists               | ■               | ■                                  | -                     |
| Orthodontic practice           | ■               | ■                                  | ■                     |
| Implanting dentist             | ■               | ■                                  | -                     |
| Implantology practice          | -               | ■ Orthophos SL 3D<br>11 cm x 10 cm | ■                     |
| Oral and maxillofacial surgery | -               | ■ Orthophos SL 3D<br>11 cm x 10 cm | ■                     |
| Radiology center               | -               | ■ Orthophos SL 3D<br>11 cm x 10 cm | ■                     |
| ENT practice                   | -               | ■ Orthophos SL 3D<br>11 cm x 10 cm | ■                     |
| Functional diagnosis           | -               | -                                  | ■                     |

■ Suitable.

## Low Dose: CBCT in a 2D image dose range

Indication-based diagnosis using CBCT images in the same dose range as 2D X-ray images is now possible with the Low Dose mode. It's optimized pre-filtering preserves dense structures such as bone even at a highly reduced dose, so it can be used easily and efficiently in many specialist fields, for example, orthodontics or implantology.

Your practice will be even more flexible, because depending on the patient case you decide: whether to use your Orthophos SL to obtain high-resolution, focused volumes for the finest of structures (HD), balanced images for general questions (SD), or Low Dose imaging for minimum radiation doses.



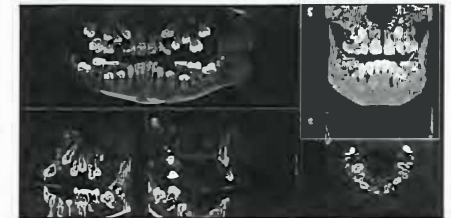
### Low Dose for a wide range of clinical tasks

- Locating displaced canine teeth
- Determining the position of teeth and reviewing courses of treatment in orthodontics
- Postoperative 3D check in implantology and surgery
- Analysis of the airways and paranasal sinuses

### Low dose application examples



Locating displaced canine teeth 5 cm x 5,5 cm at 3  $\mu$ Sv



Determining the position of teeth 8 cm x 8 cm at 8  $\mu$ Sv

"With the new Low Dose mode, I can now optimally check the success of a procedure postoperatively and in 3D without exposing the patient to unnecessary radiation levels"

Dr. med. dent Gerd Fröhsek, Velbert

# Orthophos XG 3D

Optimized for daily tasks in the practice: The world's most popular hybrid unit  
Orthophos XG 3D combines 2D and 3D x-rays.

With a volume of 8 cm x 8 cm, Orthophos XG 3D is perfectly adapted to fit the needs of any practice: One scan is sufficient for capturing the entire jaw. MARS (Metal Artifact Reduction Software) reduces artifacts that might occur from metal fillings,

and thus prevents incorrect diagnoses. If an even smaller volume is sufficient, choose the reduced volume of 5 cm x 5.5 cm. In difficult cases and for endodontics, the HD mode provides extremely detailed images. In all standard cases, the extensive

panoramic and cephalometric programs are guaranteed to deliver the right x-ray image.

## Optional Ceph arm

The traditional cephalometric function of the Orthophos XG 3D provides you with lateral and symmetrical p.a. or a.p. images for diagnosis. In cases of displaced teeth, you can also fall back on the benefits of 3D x-ray to determine their exact location.

## Comparison of standard mode and HD mode

| Mode          | VOL 1 (8 cm Ø x 8 cm height)   | VOL 2 (5 cm Ø x 5,5 cm height)   |
|---------------|--|--|
| Standard mode | <ul style="list-style-type: none"> <li>■ 200 individual Images</li> <li>■ Voxel size 160 µm</li> </ul> | <ul style="list-style-type: none"> <li>■ 200 individual Images</li> <li>■ Voxel size 160 µm</li> </ul> |
| HD mode       | <ul style="list-style-type: none"> <li>■ 500 individual Images</li> <li>■ Voxel size 160 µm</li> </ul> | <ul style="list-style-type: none"> <li>■ 500 individual Images</li> <li>■ Voxel size 100 µm</li> </ul> |



Simply reliable. Every day. Dentists that decided for an Orthophos XG 3D can confirm that. Because since its introduction it vows dental professionals by matching perfectly the daily practice tasks. The option to upgrade to 3D at any time gives it the capability to grow with your practice.

## HD image quality with ASTRA

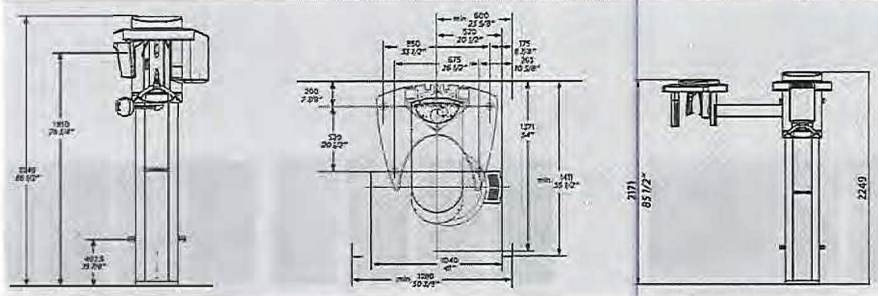
ASTRA provides brilliant, contrast-rich images and thereby creates ideal conditions for a reliable diagnosis.



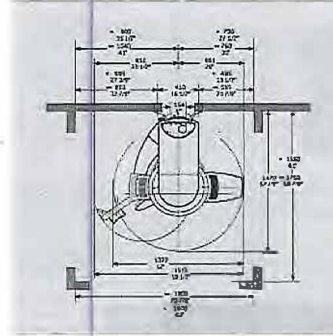
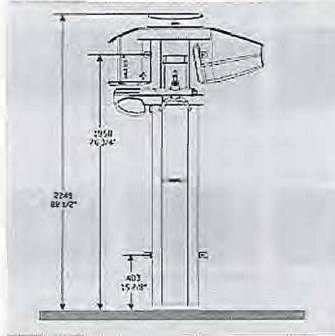
# Space requirements

Orthophos: Space requirements min. 1,280 mm x 1,411 mm

Orthophos: With Ceph arm at least 2,155 mm x 1,411 mm



Galileos Comfort Plus: Space requirement at least 1,600 mm x 2, 250mm



\*Minimum space size.\*Recommended space size.

# Technical properties

| Overview of performance features               | Galileos Comfort Plus  | Orthophos SL 3D  | Orthophos XG 3D   |
|--|--|--|---|
| Imaging volume                                 | 15 cm spherical imaging volume<br>collimated 15 x 8.5 cm<br>(UJ/LJ)              | 11 cm Ø x 10 cm height<br>11 cm Ø x 8 cm height<br>11 cm Ø x 7.5 cm height<br>8 cm Ø x 8 cm height<br>8 cm Ø x 5.5 cm height<br>5 cm Ø x 5.5 cm height             | 8 cm Ø x 8 cm height<br>8 cm Ø x 5.5 cm height<br>5 cm Ø x 5.5 cm height  |
| 3D resolution:<br>Isotropic voxel size         | 0.25/0.125 mm  | 0.16 mm;<br>0.08 mm in HD mode   | 0.16 mm;<br>0.1 mm in HD mode   |
| Scan time/exposure time                        | 14 s/2-5 s   | 2-5 s;<br>14 s in HD mode  | 2-5 s;<br>14 s in HD mode   |
| X-ray generator<br>kV<br>mA                    | 98<br>3-6  | 60-90<br>3-16  | 60-90<br>3-16   |
| Effective dose (Ludlow)                        | 20 µSv-154 µSv   | Low Dose: 3 µSv-20 µSv<br>SD: 23 µSv-145 µSv<br>HD: 57 µSv-273 µSv   | 14 µSv-166 µSv  |
| Minimum space need<br>(depth x width x height) | 1,600 x 1,600 x 2,250 mm   | 1,411 x 1,280 x 2,250 mm   | 1,411 x 1,280 x 2,250 mm  |
| Door size                                      | For setup at least 66 cm   | For setup at least 66 cm   | For setup at least 66 cm  |
| Weight   | X-ray unit<br>approx. 120 kg   | X-ray unit<br>approx. 110 kg   | X-ray unit<br>approx. 110 kg  |
| <b>Technical equipment</b>                     |  |  |   |
| Operation                                      | EasyPad  | EasyPad  | EasyPad   |
| Patient positioning                            | Standing/seated<br>Chin rest/bite block<br>Forehead support and<br>head fixation | Standing/sitting, chin<br>support/bite block, occlusal<br>bite block with automatic<br>patient positioning,<br>universal bite block with<br>colored stop positions | Standing/sitting, chin<br>support/bite block,<br>occlusal bite block<br>with automatic patient<br>positioning for<br>2D panoramic images<br>Universal bite block with<br>colored stop positions |
| Floor stand                                    | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| Wheelchair appropriate                         | <input checked="" type="checkbox"/>  | <input checked="" type="checkbox"/>  | <input checked="" type="checkbox"/>   |
| Remote control                                 | <input type="checkbox"/>   | <input type="checkbox"/>   | <input type="checkbox"/>  |
| Upgrade options                                | Facescanner (optional)   | Cephalometric x-ray<br>(optional), also available as a<br>pure 2D unit with 3D<br>upgrade option   | Cephalometric x-ray<br>(optional), also available<br>as a pure 2D unit with 3D<br>upgrade option  |
|  | <input checked="" type="checkbox"/> Available                                    | <input type="checkbox"/> Optional  | <input type="checkbox"/> Optional   |



Individual patient positioning even for wheelchair patients.



Remote control with display of image parameters (optional).

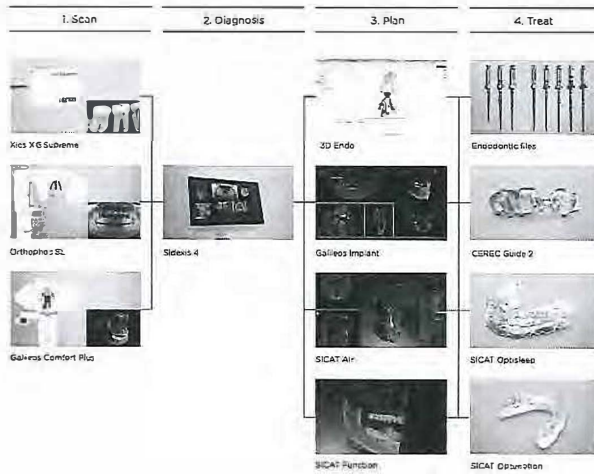


Stable floor stand (optional).

## More than images – real solutions

### More solutions for your practice with x-rays from Sirona.

The Sirona 4\*, with its intuitive user interface and display of all kinds of images on a monitor – whether intraoral, 2D panoramic, or 3D – increases the efficiency of your practice and the accuracy of your diagnoses like no other software. But Sirona does not stop with the diagnosis – our solutions allow you to plan treatment for a number of different conditions and customize treatment for the individual patient. The processes remain in your practice and your patients appreciate your modern, understandable treatment methods. For satisfied patients and reliable work in your practice.



\*Sirona 4 system requirements: [sirona.com/sirona4-system-requirements](http://sirona.com/sirona4-system-requirements)

### Panorama

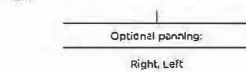


Optional panning:  
U, L, Left, Right, Individual quadrants

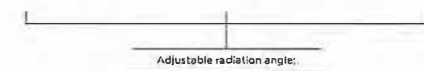


Optional panning:  
U, L, J

### Bite wing



### TMJ



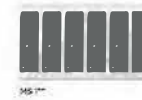
With open and closed occlusion, with a slice position



### Sinus



### Multislice in posterior tooth region



This overview shows all 2D programs and the related images of the ORTHOPHOS XG 3D. Differences from the Orthophos SL 3D are marked accordingly.

\*\* Image not available with the Orthophos SL 3D



Quickshot option for all panorama programs, automatic adaptation of the orbit to the jawsize, automatic positioning with occlusal biteblock.



**Dentsply Sirona**  
Sirona Dental Systems GmbH  
Fabrikstraße 31, 64625 Bensheim, Deutschland  
[dentsplysirona.com](http://dentsplysirona.com)

**Procedural Solutions**

Preventive  
Restorative  
Orthodontics  
Endodontics  
Implants  
Prosthetics

**Enabling Technologies**

CAD/CAM  
Imaging  
Treatment Centers  
Instruments

THE DENTAL  
SOLUTIONS  
COMPANY™

 **Dentsply  
Sirona**

ORTHOPHOS XG 3D Brochure:

<http://www.sirona3d.com/assets/pdf/2017-3D-Family-Brochure.pdf>

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## Product Line Ordering Information

### Midwest® RDH Freedom® Cordless Prophy System

| ITEM #    | ITEM DESCRIPTION                             | CONTENTS   |
|-----------|--|--|
| 90701L01  | Midwest RDH Freedom Basic Kit - Lavender     | 1 Metal Outer Sheath<br>1 Charging Base<br>1 Wireless Foot Pedal<br>1 Handpiece Tray Cradle<br>1 DisposableShield™ Trial Pack<br>1 Power Supply<br>1 Dual Adapter<br>20 NUPRO Freedom DPAs<br>1 Operation Manual |
| 90701PK01 | Midwest RDH Freedom Basic Kit - Pink         |  |
| 90702L03  | Midwest RDH Freedom Premium Kit - Lavender   | Basic Kit Plus:<br>1 Box of NUPRO Freedom Contra DPAs (200 ct)<br>3 Metal Outer Sheaths  |
| 90702PK03 | Midwest RDH Freedom Premium Kit - Pink       |  |
| 9070301   | Metal Outer Sheath w/ Lavender Band          | 1 Metal Outer Sheath   |
| 9070402   | Inner Module, Lavender                       | 1 Inner Module   |
| 9070404   | Inner Module, Pink                           |  |
| 9070502   | Charging Base, Lavender                      | 1 Charging Base  |
| 9070504   | Charging Base, Pink                          |  |
| 9070601   | Wireless Foot Pedal                          | 1 Foot Pedal   |
| 9070701   | Power Supply                                 | 1 Power Supply   |
| 9070801   | Handpiece Cradle                             | 1 Handpiece Cradle   |
| 9070801   | Carrying Case                                | 1 Carrying Case  |
| 9071001   | Color Bands (Lavender, Pink, Purple, & Teal) | 4 Pack   |
| A88016    | DisposableShield for Inner Module            | Case (12 boxes of 50)  |
| 763509    | Dual Power Cable Adapter                     | 1 Adapter  |

### NUPRO Freedom® Disposable Prophy Angles

| LAVENDER ITEM # | PINK ITEM # | ITEM DESCRIPTION                | PACKAGE (QTY)    |
|-----------------|-------------|---------------------------------|------------------|
| 965670          | 965673      | Contra Prophy Angle- Spiral Cup | Box (200)        |
| 965671          | 965674      | Contra Prophy Angle- Spiral Cup | Econo Box (1200) |
| 965750          | 965752      | Soft Cup                        | Box (200)        |
| 965751          | 965753      | Soft Cup                        | Econo Box (1200) |
| 965754          | 965756      | Firm Cup                        | Box (200)        |
| 965755          | 965757      | Firm Cup                        | Econo Box (1200) |
| 965758          | 965760      | Spiral Cup                      | Box (200)        |
| 965759          | 965761      | Spiral Cup                      | Econo Box (1200) |
| 965762          | 965764      | Pedic Cup                       | Box (100)        |
| 965766          | 965767      | Pointed Tip                     | Box (100)        |
| 965768          | 965769      | Tapered Brush                   | Box (100)        |

### NUPRO Freedom® Disposable Prophy Packs

| LAVENDER ITEM # | PINK ITEM # | DESCRIPTION                                | BOX (100) |
|-----------------|-------------|--|-----------|
| 965716MM        | 965717MM    | Soft Cup/Mint Medium                       |           |
| 965716MC        | 965717MC    | Soft Cup/Mint Coarse                       |           |
| 965716RM        | 965717RM    | Soft Cup/Razzberry Medium                  |           |
| 965716RC        | 965717RC    | Soft Cup/Razzberry Coarse                  |           |
| 965716BM        | 965717BM    | Soft Cup/BubbleExtreme Medium              |           |
| 965716BC        | 965717BC    | Soft Cup/BubbleExtreme Coarse              |           |
| 965865MM        | 965866MM    | Contra DPA/Spiral Cup/Mint Medium          |           |
| 965865MC        | 965866MC    | Contra DPA/Spiral Cup/Mint Coarse          |           |
| 965865BM        | 965866BM    | Contra DPA/Spiral Cup/BubbleExtreme Medium |           |
| 965865BC        | 965866BC    | Contra DPA/Spiral Cup/BubbleExtreme Coarse |           |

### Midwest® RDH® Hygienist Handpieces

| ITEM # | ITEM DESCRIPTION   | CONTENTS   |
|--------|--|--|
| 740000 | Midwest RDH Hygienist Handpiece for Disposable Angles    | 1 Handpiece  |
| 740010 | Midwest RDH Hygienist Handpiece for Disposable Angles    | 3 Handpieces   |
| 740020 | Midwest RDH Hygienist Handpiece with Prophy Flight Angle | 1 Handpiece  |
| 740030 | Midwest RDH Hygienist Handpiece with Prophy Flight Angle | 3 Handpieces   |
| 740050 | Midwest RDH Featherweight Package - Grey                 | 1 Handpiece<br>1 Featherweight Hose<br>1 Hose Installation Kit |
| 740080 | Midwest RDH Featherweight Package - Beige                | 1 Handpiece<br>1 Featherweight Hose<br>1 Hose Installation Kit |
| 740055 | Midwest RDH Featherweight Hose - Grey                    | 1 Featherweight Hose<br>1 Hose Installation Kit                |
| 740065 | Midwest RDH Featherweight Hose - Beige                   | 1 Featherweight Hose<br>1 Hose Installation Kit                |

### NUPRO Freedom® Disposable Prophy Angles

| ITEM # | DESCRIPTION   | PACKAGE (QTY)    |
|--------|---------------|------------------|
| 965673 | Contra Spiral | Box (200)        |
| 965674 | Soft          | Econo Box (1200) |
| 965752 | Spiral        | Box (200)        |
| 965753 | Firm          | Econo Box (1200) |
| 965756 | Improved      | Box (200)        |
| 965757 | Improved      | Econo Box (1200) |
| 965760 | Improved      | Box (200)        |
| 965761 | Improved      | Econo Box (1200) |
| 965764 | Pointed Tip   | Box (100)        |
| 965767 | Pointed Tip   | Box (100)        |
| 965769 | Tapered Brush | Box (100)        |

MIDWEST  
RDH

Providing comfort  
for your journey

Midwest® RDH® Hygiene Handpieces  
offer exceptional ergonomics  
and a lightweight design

RANKED  
#1  
BY HYGIENISTS

For comfort in every performance

For more information, call 1.800.989.8826 or visit [www.midwest-rdh.com](http://www.midwest-rdh.com).

DENTSPLY  
PROFESSIONAL

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and BubbleExtreme™ is a trademark of DENTSPLY International and/or its subsidiaries.

90693 Rev 5 (11/14)

# Free to fly

The Midwest® RDH® family of hygiene handpieces elevates performance, providing a superior experience for you and your patient. With 2 options to suit your personal preferences, each Midwest® RDH® handpiece is specifically and carefully designed to:

- Create an overall comfortable procedure designed to reduce wrist strain
- Allow enhanced control with lightweight and balanced design
- Midwest® RDH Freedom® protects both clinician and patient from splatter with smooth, low-pressure start
- Uphold your high standards of infection control with autoclavable parts

*"Ergonomically designed dental instruments may help reduce the prevalence of musculoskeletal disorders (MSDs) among dental practitioners."*

—Dong H, Barr A, Loomer P, et al. The effects of periodontal instrument handle design on hand muscle load and pinch force. *J Am Dent Assoc.* 2006;137:1123-1130.

## MIDWEST RDH Freedom® Cordless Prophy System

Offering the ultimate in ergonomics

- Allows better access to posteriors without cord restriction
- Keeps you moving with all-day battery life and quick charging capabilities
- Maintains neutral hand position with balanced design
- Designed to reduce the wrist fatigue associated with cords



## MIDWEST® RDH® Hygiene Handpiece

Delivering on the tradition of quality

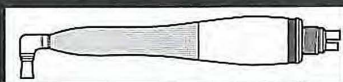
- Improves maneuverability and access with 360° cord swivel
- Increases comfort with lightweight design and non-slip grip
- Neutralizes hand position during procedures with specifically designed contours
- Reduces cord drag with available Midwest® RDH® Featherweight Hose

Designed with patient satisfaction in mind, Midwest® RDH® products work together with NUPRO® prophylaxis paste and NUPRO® disposable prophy angles to maximize efficiency and comfort.

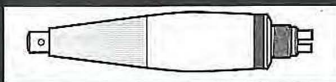


# Midwest<sup>®</sup> RDH<sup>®</sup>

High Speed Handpiece  
with Proprietary Seal



High Speed Handpiece  
with O-ring Seal



## MIDWEST

### Indications For Use

Midwest RDH handpiece is used for low speed procedures performed by dental professionals.

### Contraindications

None Known.

### Warnings

STERILIZE BEFORE USE, SUPPLIED NON-STERILE.

**WARNING:** This product is intended for use by dental professionals only. Before operating handpiece, carefully read and follow these instructions and save them for future reference. Observe all cautions and warnings, including:

- Handpieces should be heat-sterilized between patients to prevent cross-contamination which could result in serious illness or even death from infectious organisms such as HIV (the virus that causes AIDS) or hepatitis B.
- It is the responsibility of the Dental Healthcare Professional to determine the appropriate use of this product and to understand the health of each patient, the dental procedures being undertaken, industry and governmental agency regulations, and recommendations and requirements for safe practice of dentistry.

### Precautions

- Do not operate handpiece unless prophy angle or cup is properly secured. A loose prophy angle could eject from the handpiece and cause personal injury.
- Do not use angle, attachment or accessory that exhausts air within the oral cavity when a soft tissue wound is present. Air pressure may force septic materials into these tissues.

### Adverse Reactions

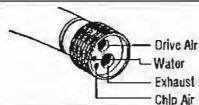
None Known.

### Installation

#### Checking Handpiece Hose

Make sure all tubes supplying the handpiece hose are properly connected within the dental unit. Test hose as follows:

4-Tube Midwest



1. Hold free end of hose over cuspidor or towel while alternately depressing drive air pedal on foot control.

**Note:** The Midwest RDH Handpiece does not use chip air or water spray. When connecting the Midwest RDH Handpiece, the water and chip air hose tubes can be disconnected and their supply connection plugged.

2. Check to be sure that drive air is coming out of the correct tube.

#### Air Requirements

Midwest RDH Handpieces deliver maximum speed and torque when operated with clean, filtered, moisture-free air at the recommended operating pressure of 30-40 p.s.i. Air pressure may be reduced to a minimum of 20 p.s.i. to decrease operating speed.

#### Initial Maintenance

Follow the Maintenance procedure, at top of next column, before using your new Midwest RDH Handpiece.

### Maintenance

**Important:** Use only Midwest<sup>®</sup> products recommended by DENTSPLY to routinely clean and lubricate your Midwest RDH Handpiece.

There are two Maintenance procedures for your RDH handpiece: (1) for maintenance using the Midwest Plus<sup>™</sup> Maintenance Kit; (2) for maintenance using Midwest Plus<sup>™</sup> Aerosol Spray. Follow the appropriate maintenance procedure below before using your new RDH handpiece.

This procedure recommends the steps to follow between patient use to prevent cross-contamination and to ensure continued trouble-free operation of the handpiece:

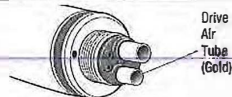
#### 1 Maintenance Using Midwest Plus<sup>™</sup> Maintenance Kit

##### Clean External Surface

1. Remove prophy cup by holding sheath of handpiece and rotating cup in counterclockwise direction.
2. Disconnect handpiece from its supply hose. Spray exterior surface of handpiece with Midwest Plus<sup>™</sup> Handpiece Cleaner.
3. Scrub and rinse external surfaces of handpiece under warm tap water.
4. Thoroughly dry using gauze, paper towel or air syringe.

##### Lubricate and Expel

1. Place three drops of Midwest Plus Handpiece Lubricant into drive air tube (below).



2. Run handpiece on Midwest Handpiece Air Station or other air source until it reaches normal speed. This ensures that the internal working parts of the motor are completely lubricated. Wipe off any excess lubricant on outside of handpiece with dry 2x2 or tissue.

3. Proceed to Sterilization.

#### 2 Maintenance Using Midwest Plus<sup>™</sup> Aerosol Spray

##### Scrub and Rinse

1. Remove prophy cup by holding sheath of handpiece and rotating cup in counterclockwise direction.
2. Disconnect handpiece from its supply hose.
3. Scrub and rinse external surfaces of handpiece under warm tap water. Use sponge to scrub.
4. Dry thoroughly using gauze, paper towel or air syringe.

##### Clean • Lubricate • Expel

1. Clean and lubricate with one quick spray of Midwest Plus<sup>™</sup> Aerosol Spray using the Midwest Backend Attachment nozzle into the drive air tube of the handpiece. The drive air tube is the shorter of the two larger tubes and is gold on many handpieces.
2. Run the handpiece on Midwest Handpiece Air Station or other air source for 30 seconds or until normal speed is reached, and all excess spray is expelled. Dry thoroughly.
3. Proceed to Sterilization.

Continued on back.

## Sterilization

Enclose the handpiece in a sterilization pouch intended for steam sterilization. Place the pouched handpiece into the steam sterilizer per the manufacturer's instructions.

### Gravity Steam Sterilization

Full cycle: 121°C (250°F) for 30 minutes  
Full cycle: 132°C (270°F) for 15 minutes

### Dynamic Air Removal

Full cycle: 132°C (270°F) for 4 minutes  
Full Cycle: 135°C (275°F) for 3 minutes

Keep handpiece in sterilization pouch until ready to use in the operatory. No further lubrication is required before use.

## Other Maintenance

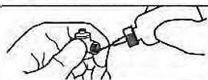
Weekly or as needed: Place two drops of lubricant on swivel junction (as shown). Twist swivel to work lubricant into junction. Wipe handpiece clean.



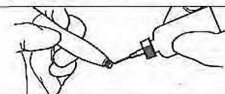
(FOR MIDWEST RDH WITH RIGHT ANGLE ATTACHMENT ONLY—REF 740020 / 740030)

Every 40 prophies, or once a week:

1. Unscrew angle from handpiece.
2. Place angle in beaker of Midwest Plus Handpiece Cleaner and ultrasonically clean for ten minutes.
3. Scrub and rinse under warm tap water.
4. Dry thoroughly.
5. Apply one drop of Midwest Plus Handpiece Lubricant on gears inside head. DO NOT fill head full, as excess lubricant will leak from seal.



6. Apply one drop of Midwest Plus Handpiece Lubricant to gear teeth on handpiece sheath.



7. Reassemble and continue with "Sterilization" in the Maintenance procedure above.

## Operation

To operate the handpiece, simply depress the foot control.

Note: Never operate air motor under the following conditions:

1. At air pressure exceeding 45 p.s.i. (3.1 Atm.).
2. On an alternate hose without adjusting air pressure.

### Automatic Oilers

Since the use of automatic oiling does not eliminate the need for routine maintenance, the oiler should be disconnected. Do not use oil mist lubrication. (Excess oil may hinder performance.)

### Speed Range

The Midwest RDH Handpiece offers exceptional torque at speeds up to 6000 RPM.

### Mounting Disposable Propy Angles

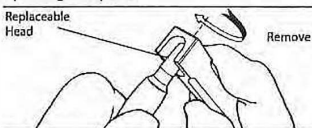
(for Midwest RDH with Right Angle Attachment only—REF 740020/740030)

A plastic head wrench has been provided for mounting or removing the propy head.

To remove head: Place wrench over propy head. Loosen head assembly by turning wrench counterclockwise. Unscrew and remove head with fingertips.

To install or replace head: Screw propy head onto sheath assembly with fingers (clockwise). If the gears do not mesh properly, back head off 1/4 lum; then retighten. Lock head onto sheath by tightening with wrench.

Make sure propy head is tightened securely before operating handpiece.



### Mounting Disposable Propy Angles

(for Midwest RDH with U-Style Attachment only—REF 740000/740010)

To mount disposable angle to handpiece: Push angle all the way into handpiece, making sure locating button on handpiece is seated into notch of angle.

To remove disposable angle from handpiece: Grasp handpiece with one hand and pull angle from handpiece with other hand.

## Mounting Color Bands

To change the color code of the handpiece, remove the color band as shown, and replace it with a new band of the desired color.



## Repair

### Midwest Air Repair™ Service

Should your Midwest RDH Handpiece need repair, call 1-800-800-7202 to schedule a free pick-up.



Send to:  
Dentsply Sirona Midwest  
Attn: Midwest Air Repair  
801 West Oakton Street  
Des Plaines, IL 60018-1884

Provide the following information

for your repair:

- Your complete name and address
- Dealer name and address
- Nature of repair

Air Repair offers:

- Repairs DOOR TO DOOR IN 2 BUSINESS DAYS
- Genuine Midwest Parts and DENTSPLY Quality
- Expert Troubleshooting and Diagnosis
- Repair Service Warranty equal to the new product warranty

## Parts

## REF

The Midwest RDH Hygienist handpiece is compatible with a wide range of disposable propy angles and propy cups/brushes.

Please see our website at [dentsplysirona.com](http://dentsplysirona.com) or contact your local Dentsply Sirona Customer Support Center.

|   |   |                  |
|---|---|------------------|
| Midwest Plus Maintenance Kit                    | 8 oz. Spray Cleaner & 2 oz. Lubricant Dropper | 380145           |
| Midwest Plus Handpiece Cleaner                  | 8 oz. Spray Bottle<br>1 Liter Refill Bottle   | 380140<br>380141 |
| Midwest Plus                                    | 2 oz. Dropper Handpiece Lubricant             | 380130           |
| Midwest Plus Aerosol Spray                      | Cleaner/Lubricant (does not include nozzle)   | 380080           |
| Nozzle for Midwest Plus Aerosol Spray           | Midwest Backend/ Attachment                   | 380086           |
| Midwest Handpiece Air Station                   | Includes box of 12 FREE Spray Guards          | 380800           |
| Midwest Spray Guards                            | Box of 100                                    | 380150           |
| Spray Tips for Midwest Plus 8 oz. Spray Cleaner | pkg. of 6                                     | 380986           |
| Propy Head Wrench                               |   | 230611           |
| Color Bands, set of 6                           | Orange 760011R                                | Red 760012R      |
|   | Yellow 760013R                                | Violet 760014R   |
|   | Blue 760015R                                  | Green 760016R    |
|   |   |                  |

## Warranty

Your Midwest RDH Handpiece is guaranteed to be free of defects in materials and workmanship for a period of two (2) years from its date of purchase — provided that the air motor has been operated and maintained as prescribed in these instructions (at the discretion of DENTSPLY Professional) and has not been subjected to apparent misuse, abuse or accident. All questionable, defective, or loose parts must be returned to the dealer, with air motor and proof of purchase, transportation prepaid.

The enclosed business reply card (warranty registration) must be filled out completely and returned within ten (10) days of purchase for this warranty to apply. DENTSPLY Professional makes no other guarantee, expressed or implied.

**DENTSPLY**  
PROFESSIONAL

Covered by one or more of the following US patents:  
DES 411,728, 6,012,822.  
International patents pending.  
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Dental Inc. Dentsply Sirona 07192-1017

Manufactured by:  
**DENTSPLY Professional**  
1301 Smile Way  
York, PA 17404, USA



**DASNY**

**ANDREW M. CUOMO**  
Governor

**ALFONSO L. CARNEY, JR.**  
Chair

**REUBEN R. MCDANIEL, III**  
President & CEO

**Drawings/Plans**

*See attached*

**NOT IN CONTRACT - FOR REFERENCE ONLY**

| Sheet List   |                                   |
|--------------|-----------------------------------|
| Sheet Number | Sheet Name                        |
| DA001        | GENERAL NOTES                     |
| DA111        | LVL 1 FLOOR PLAN                  |
| DA113        | LVL 1 BACKING PLAN                |
| DA310        | LVL 1 DENTAL ELEVATIONS           |
| DB110        | LVL 1 DENTAL UTILITIES UNDERFLOOR |
| DE110        | LVL 1 ELECTRICAL & LOW VOLTAGE    |
| DP110        | LVL 1 PLUMBING                    |



**THE DENTAL EQUIPMENT PROVIDER:**

**THE DENTAL EQUIPMENT PROVIDER'S RESPONSIBILITIES WILL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:**

1. THE DENTAL EQUIPMENT PROVIDER WILL PROVIDE A SET OF DENTAL SPECIFIC SHOP DRAWINGS TO AID THE CONTRACTOR AND/OR ARCHITECT OF THE OWNER'S CHOOSING IN THE CONSTRUCTION OF THE OWNER'S DENTAL OFFICE. THESE DRAWINGS WILL PROVIDE CRITICAL DENTAL LOCATIONS OF ALL DENTAL EQUIPMENT. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. THE DENTAL EQUIPMENT PROVIDER WILL ASSUME NO RESPONSIBILITY FOR DEVIATIONS FROM THE DENTAL DRAWINGS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN ENDORSEMENT.
3. THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES WILL PROVIDE ASSISTANCE AS NEEDED TO THE CONTRACTOR AND/OR ARCHITECT WITH PROPER ADVANCE NOTICE.
4. A PRE-CONSTRUCTION MEETING BETWEEN THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES AND THE CONTRACTOR, ARCHITECT, AND SUB-CONTRACTORS TO INCLUDE MECHANICAL, PLUMBING, AND ELECTRICAL IS REQUIRED. DENTAL SPECIFIC TEMPLATES AND SPECIFIC CONSTRUCTION REQUIREMENTS WILL BE PROVIDED DURING THIS MEETING.
5. THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES WILL MAKE PERIODIC VISITS TO THE JOB SITE AT CRITICAL POINTS IN THE CONSTRUCTION PROCESS. **THE CONTRACTOR IS REQUIRED TO INFORM THE DENTAL EQUIPMENT PROVIDER WHEN INSPECTIONS OF PLUMBING, WIRING, AND BACKING IN THE WALLS CAN BE PERFORMED PRIOR TO BACKFILLING TRENCHES, POURING OF THE SLAB, SEALING PARTITIONS AND INSTALLING CEILINGS.**
6. THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES WILL COORDINATE WITH THE CONTRACTOR TO INSTALL THE DENTAL EQUIPMENT AS LAID OUT IN THE INSTALLATION GUIDELINES AT A DATE AGREED UPON BY THE CONTRACTOR AND THE DENTAL EQUIPMENT PROVIDER. A FINAL INSPECTION PRIOR TO THE INSTALLATION OF THE DENTAL EQUIPMENT WILL BE PERFORMED TO ENSURE THAT ALL PLUMBING, ELECTRICAL AND MECHANICAL CONSTRUCTION IS COMPLETE. ALL FLOORING, PAINTING AND CEILING WORK MUST BE COMPLETED PRIOR TO EQUIPMENT INSTALLATION.
7. THE CONTRACTOR AND SUB-CONTRACTORS ARE TO PROVIDE FINAL HOOK UP TO ALL DENTAL EQUIPMENT AS SET FORTH THE INSTALLATION GUIDELINES.

**BUILDING CONTRACTOR:**

1. THE BUILDING CONTRACTOR WHO HAS ENTERED INTO A CONSTRUCTION CONTRACT WITH THE OWNER IS RESPONSIBLE FOR ALL WORK DEFINED BY THAT CONTRACT. IF THE PROJECT IS LET UNDER SEPARATE CONTRACTS TO MORE THAN ONE CONTRACTOR, THE RESPONSIBILITIES LISTED BELOW APPLY TO EACH CONTRACTOR.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETION OF THE PROJECT IN THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR IS TO FURNISH ALL MATERIALS AND LABOR REQUIRED TO COMPLETE THE PROJECT, THAT IS NOT SPECIFICALLY PROVIDED BY THE DENTAL EQUIPMENT PROVIDER, WHETHER OR NOT EACH AND EVERY ITEM IS SPECIFICALLY MENTIONED.
3. THE CONTRACTOR SHALL ADVISE THE OWNER OF ANY CONFLICT BETWEEN THESE DRAWINGS AND THE FIELD CONDITIONS BEFORE PROCEEDING WITH THE JOB. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR THE ACCURACY OF FIELD MEASUREMENTS AND CONDITIONS AND SHALL BE RESPONSIBLE FOR THE PROPER MODIFICATIONS TO ANY EXISTING WORK, PREVIOUSLY INSTALLED WORK, AND/OR OTHER TRADES. WRITTEN APPROVAL MUST BE OBTAINED FROM THE DENTAL EQUIPMENT PROVIDER'S EQUIPMENT SPECIALIST ASSIGNED TO THE PROJECT BEFORE ANY CHANGES AND/OR DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS ARE MADE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE EXECUTION OF HIS/HER WORK AND FOR ANY CHANGES AND/OR DEVIATIONS FROM THE DRAWINGS OR SPECIFICATIONS MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER AND/OR THE DENTAL EQUIPMENT PROVIDER'S EQUIPMENT SPECIALIST. ANY COSTS RESULTING FROM CHANGES AND/OR DEVIATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. A COMPLETE SET OF DRAWINGS MUST BE KEPT AT THE JOB SITE AT ALL TIMES AND ANY CHANGES MUST BE NOTED THEREON AND INITIALED AT THE TIME THE CHANGE OR DEVIATION IS PERFORMED.
5. THE GENERAL CONTRACTOR SHALL DO ALL PATCHING TO CONFORM TO MATERIAL, TEXTURE AND SURFACE ALIGNMENT WITH THE ADJOINING SURFACE AND FINAL TOUCH UP/APPEARANCE OF ALL FINISHED SURFACES. THE CONTRACTOR SHALL ENSURE THE PROTECTION OF ALL EQUIPMENT FURNISHED UNDER HIS/HER CONTRACT AND BY OTHERS PRESENT AT THE JOB SITE.
6. THE CONTRACTOR SHALL REMOVE DEBRIS AND MAINTAIN THE PREMISES BROOM CLEAN AT ALL TIMES. DEBRIS IS TO INCLUDE, BUT NOT LIMITED TO SHIPPING CARTONS, BOXES, ETC., RESULTING FROM THE INSTALLATION OF DENTAL AND OTHER EQUIPMENT BY CONTRACTORS CONCURRENTLY ENGAGED.
7. THE CONTRACTOR SHALL PARTICIPATE AT ALL JOB COORDINATION MEETINGS WITH THE DENTAL EQUIPMENT PROVIDER AND ENSURE THE ATTENDANCE OF APPLICABLE TRADES.
8. THE CONTRACTOR IS REQUIRED TO INFORM THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES OF KEY EVENTS IN THE CONSTRUCTION PROCESS WITH REASONABLE ADVANCE NOTICE, TO FACILITATE THE INSPECTION OF SAID EVENTS, I.E. BACKFILLING TRENCHES, CLOSING WALLS, POURING CONCRETE TO BURY PLUMBING AND ELECTRICAL WORK IN FLOORS AND INSTALLING CEILING TILES.
9. THE CONTRACTOR SHALL AFFORD THE OWNER AND SEPARATE CONTRACTORS REASONABLE OPPORTUNITY FOR THE INTRODUCTION AND/OR STORAGE OF THEIR MATERIALS AND EQUIPMENT AND EXECUTION OF THEIR WORK.

**GENERAL NOTES:**

1. THE ITEMS LISTED HERE IN THE GENERAL NOTES ARE INTENDED TO CLARIFY OVERALL GENERAL CONDITIONS FOR A SMOOTH TRANSITION BETWEEN ALL SUB-CONTRACTORS, THE GENERAL CONTRACTOR, EQUIPMENT INSTALLERS, THE DENTAL EQUIPMENT PROVIDER AND THE OWNER FOR FINAL APPROVAL OF ALL WORK PERFORMED BY THE RESPECTIVE TRADES. THROUGHOUT THESE PLANS ARE VARIOUS DETAILS, REQUIREMENTS AND SPECIFICATIONS TO AID IN THIS PROCESS. IT IS THE RESPONSIBILITY OF EACH TRADE, CONTRACTOR AND THE OWNER TO READ ALL NOTES AND ILLUSTRATIONS THAT PERTAIN TO THEIR SPECIFIC TASK IN THE PROCESS.
2. MOST OF THE DENTAL UTILITY AND SPECIFICATION REQUIREMENTS ARE OUTLINED IN THE TEMPLATES AND DOCUMENTATION THAT THE DENTAL EQUIPMENT PROVIDER WILL PROVIDE TO THE CONTRACTOR. QUESTIONS WILL ARISE ON THE JOB SITE AND MOST CAN BE ANSWERED BY TELEPHONE. THE CONTRACTOR WILL BE PROVIDED CONTACT NUMBERS FOR THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVES TO FACILITATE TIMELY ANSWERS TO THOSE QUESTIONS. IN SOME CASES IT WILL BE NECESSARY FOR THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVE TO BE PRESENT AT THE JOB SITE TO ANSWER QUESTIONS OR SPOT LOCATIONS FOR DENTAL SPECIFIC ITEMS. IN THESE CASES AN APPOINTMENT WILL BE REQUIRED WITH REASONABLE ADEQUATE NOTIFICATION.
3. IF A JOB SITE APPOINTMENT IS REQUIRED, ALL TRADES SHOULD BE NOTIFIED OF THE APPOINTMENT SO THE OPTION OF BEING PRESENT WITH ANY QUESTIONS CONCERNING THEIR PORTION OF THE JOB CAN BE ADMINISTERED AT THAT APPOINTMENT. THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVE SHOULD BE INFORMED AS TO THE MAGNITUDE OF THE APPOINTMENT PRIOR TO ARRIVAL ON THE JOB SITE IN ORDER TO ALLOW ENOUGH TIME IN THE APPOINTMENT.
4. THE GENERAL CONTRACTOR MUST SIGN THIS SHEET STIPULATING THAT THEY UNDERSTAND AND WILL COMPLY WITH ALL SPECIFICATIONS BEFORE ANY WORK WILL COMMENCE. A SIGNED COPY OF THE PLANS ARE TO BE RETURNED TO THE DENTAL EQUIPMENT PROVIDER AND A SECOND SIGNED COPY KEPT ON THE JOB SITE AT ALL TIMES.
5. THE DENTAL EQUIPMENT PROVIDER'S REPRESENTATIVE SHALL GIVE INSTRUCTIONS TO THE GENERAL CONTRACTOR ONLY. ALL COMMUNICATIONS AND COORDINATION WITH TRADESMEN SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR UNLESS PREDETERMINED TO BE OTHERWISE.
6. ALL ELECTRICAL, MECHANICAL AND PLUMBING CONNECTIONS TO DENTAL EQUIPMENT WILL BE PERFORMED BY THE APPLICABLE TRADE RESPONSIBLE. INSTALLATION PERMITS, IF REQUIRED, WILL BE OBTAINED BY THE TRADES THAT PROVIDE THAT SERVICE.
7. IF NECESSARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING A MED GAS CERTIFIED PLUMBING SUB-CONTRACTOR FOR ANY LEVEL 3 NITROUS-OXYGEN CONSCIOUS SEDATION SYSTEM DETAILED IN THESE PLANS. ANY NITROUS OXIDE SYSTEM DESIGN SHOWN ON THESE PLANS IS TO BE USED AS AN ILLUSTRATION ONLY FOR THE PURPOSE OF LOCATING END USER OUTLET STATIONS, CYLINDER ROOM MANIFOLD AND ALARM PANEL. THE FINAL TRUNK SYSTEM INSTALLATION SHALL STRICTLY ADHERE TO ONLY MECHANICALLY ENGINEERED DRAWINGS, IF SUPPLIED.
8. THE PLUMBING SUB-CONTRACTOR SHALL PROVIDE MED GAS CERTIFICATION IN ACCORDANCE WITH ANY REQUESTS BY THE OWNER, CONTRACTOR, BUILDING DEPARTMENT OR THE DENTAL EQUIPMENT PROVIDER PRIOR TO COMMENCING WORK ON ANY TYPE OF CUSTOMER INSTALLED NITROUS OXIDE SYSTEM BEING USED IN THE CONSTRUCTION PROJECT.
9. ALL PLUMBING AND ELECTRICAL LINES TO BE CONCEALED UNLESS OTHERWISE SPECIFIED.
10. ALL LABOR AND MATERIALS NECESSARY FOR CHANGES IN EXISTING PLUMBING, CARPENTRY, AND ELECTRICAL WORK MUST BE DONE AND SUPPLIED BY THE CONTRACTOR AND IS NOT INCLUDED IN THE COST OF THE DENTAL EQUIPMENT.
11. THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND DO ALL PATCHING AFTER ROUGHING IN IS COMPLETED.
12. ALL ROUGH IN AND FINISH WORK FOR DENTAL EQUIPMENT IS TO BE ACCORDING TO TEMPLATES FURNISHED BY THE MANUFACTURERS OF THE EQUIPMENT BEING INSTALLED. A REPRESENTATIVE OF THE DENTAL EQUIPMENT PROVIDER WILL POSITION THE TEMPLATES IN THEIR PROPER LOCATIONS, AT WHICH TIME ALL SPECIFICATIONS ON THE PLANS WILL BE EXPLAINED TO THE CONTRACTOR OR SUB-CONTRACTOR(S). ALL SPECIFIED SIZES OF PIPES, TUBING, AND/OR FITTINGS, ETC., MUST BE RIGIDLY FOLLOWED AS WELL AS PROPER HEIGHTS MARKED. ANY INFRACTIONS ON SIZES OR HEIGHTS OF PIPES, TUBING AND/OR FITTINGS WILL HAVE TO BE CORRECTED BEFORE THE EQUIPMENT CAN BE INSTALLED AND SUCH EXTRA EXPENSE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR SUB-CONTRACTOR.
13. THE DOCTOR/OWNER SHALL DESIGNATE RESPONSIBILITY FOR PROVIDING AND INSTALLING CABINETS AND COUNTERTOPS (OTHER THAN THOSE SPECIFIED AND/OR CONTRACTED BY THE DENTAL EQUIPMENT PROVIDER).
14. THE DOCTOR SHALL MAKE ARRANGEMENTS FOR INSTALLATION OF NON-DENTAL SYSTEMS BEFORE WALLS ARE CLOSED.
15. THE DENTAL EQUIPMENT PROVIDER SHALL NOT BE HELD RESPONSIBLE FOR MULTIMEDIA SYSTEMS SUCH AS ENTERTAINMENT TVS, MONITORS, NETWORK COMPUTER SYSTEMS OR ANY ITEMS NOT SHOWN ON THESE PLANS.
16. GC MUST CONFIRM ALL MEASUREMENTS OF SPACE CONDITIONS PRIOR TO STARTING DEMOLITION.
17. GC SHOULD NOTIFY THE DENTAL EQUIPMENT PROVIDER'S SPECIALIST 1(ONE GC MUST CONFIRM ALL MEASUREMENTS OF SPACE CONDITIONS PRIOR TO STARTING DEMOLITION) WEEK PRIOR TO CLOSING OF ALL WALLS, CEILINGS, FLOORS TO ALLOW FINAL INSPECTION OF INSTALLATION.
18. GC IS RESPONSIBLE FOR CONFIRMING ALL UTILITIES FOR EXISTING EQ BEING MOVED FROM EXISTING LOCATION OR EQUIPMENT NOT SUPPLIED BY THE DENTAL EQUIPMENT PROVIDER.
19. GC IS RESPONSIBLE FOR CONFIRMING ALL UTILITIES FOR EXISTING EQ BEING MOVED FROM EXISTING LOCATION OR EQUIPMENT NOT SUPPLIED BY THE DENTAL EQUIPMENT PROVIDER.
20. **RADIATION PROTECTION: THE DOCTOR'S ARCHITECT/GC ARE REQUIRED TO REVIEW ALL LOCAL AND NATIONAL RADIATION AND XRAY SHIELDING REQUIREMENTS AND SUBMIT AN APPLICATION FOR REGISTRATION OF IONIZING RADIATION SOURCES. PLANS MUST BE SUBMITTED TO RADIATION CONTROL PROGRAM, IF APPLICABLE, ALONG WITH OTHER INFORMATION THEY WILL PROVIDE A LETTER OF ACCEPTABLE X-RAY PROTECTION OR ADVISE OTHERWISE. THIS APPLICATION AND PLAN SHOULD BE SUBMITTED PRIOR TO WALLS GOING UP. COPY OF APPROVAL LETTER FROM LOCAL GOVERNING BODY MUST BE PROVIDED TO THE DENTAL EQUIPMENT PROVIDER'S SPECIALIST AND SERVICE TECHNICIAN. NOTE: IF EXISTING X-RAYS TO BE REPLACED WITH NEW AND EXISTING SHIELDING IS TO BE REUSED ARCHITECT/GC MUST VERIFY NEEDS WITH LOCAL CODE OFFICER.**



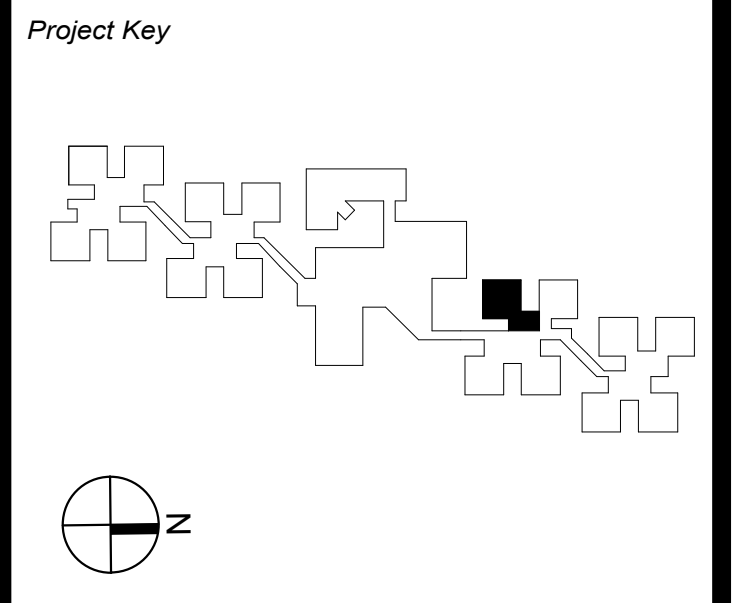
THESE DOCUMENTS CONTAIN POTENTIALLY SENSITIVE INFORMATION AND SHALL BE USED FOR THEIR INTENDED PURPOSE. ONCE THE INTENDED PURPOSE HAS SERVED, THE DOCUMENTS SHALL BE DESTROYED IN A SECURE MANNER.

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**Consultants:**

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505 Franklin Street  
Buffalo, New York 14202  
716-883-5566 716-883-5569 fax

**Vanderweil Engineers**  
1001 6th Avenue  
21st Floor  
New York, NY 10018  
212-921-4142



**REVISIONS**

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**Project Title**

NEW YORK STATE OF OPPORTUNITY | Office for People With Developmental Disabilities

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

**Phase**

BID DOCUMENTS

**DENTAL GENERAL NOTES**

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: **02.12.2021**

Seal & Signature \_\_\_\_\_

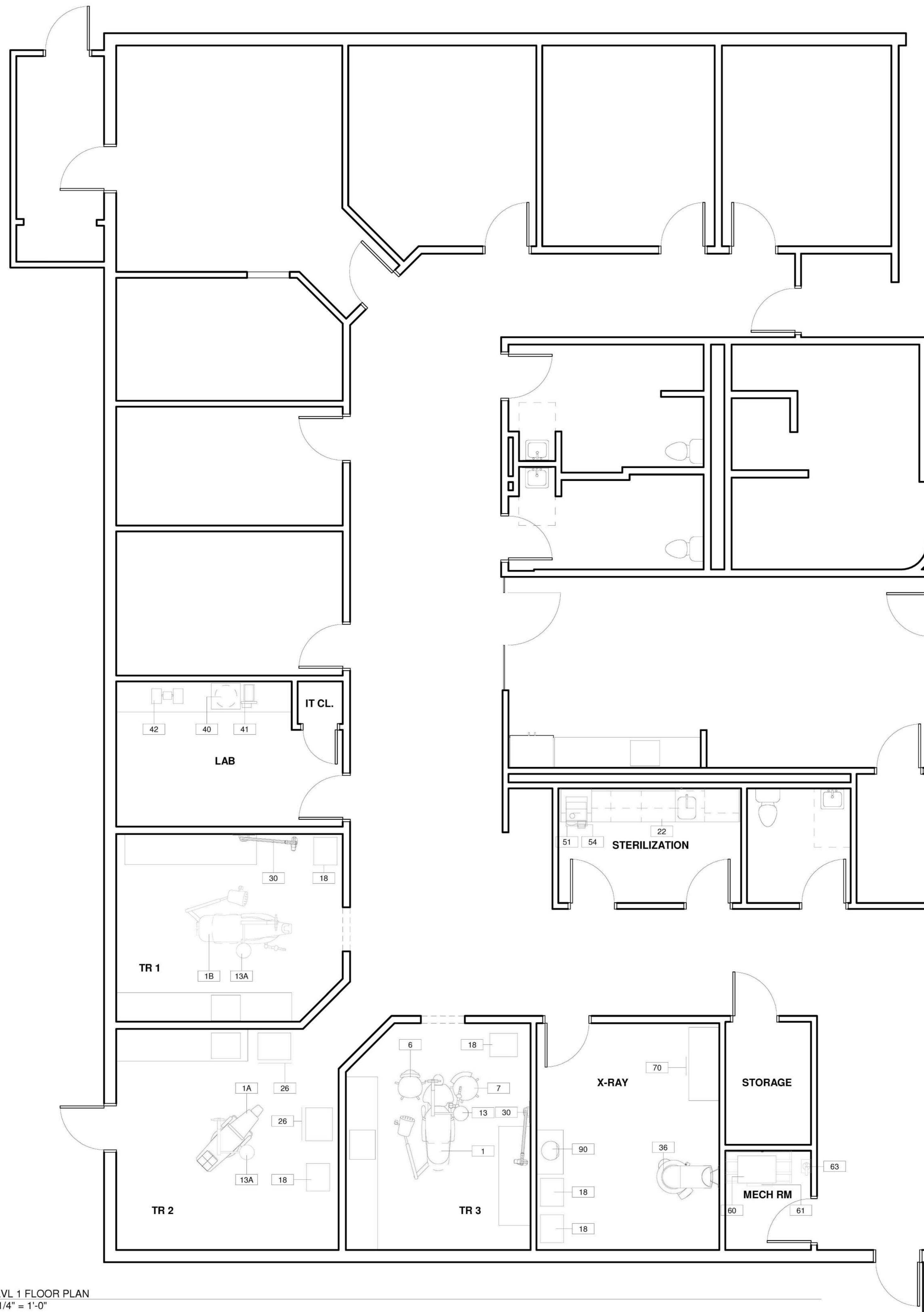
DASNY Project No: **360130**  
Consultant Project No: **600.22**  
Drawing Number **DE-101**

**NOT IN CONTRACT - FOR REFERENCE ONLY**

| EQUIPMENT SCHEDULE   |        |                            |        |                    |                               |                                 |
|----------------------|--------|----------------------------|--------|--------------------|-------------------------------|---------------------------------|
| EQUIPMENT INFO       |        |                            |        |                    |                               |                                 |
| QTY                  | ITEM # | DESCRIPTION                | STATUS | MANUFACTURER       | MODEL                         | EQUIPMENT REMARKS               |
| <b>LAB</b>           |        |                            |        |                    |                               |                                 |
| 1                    | 40     | PLASTER TRAP               | NW     | VFY                | VFY                           |                                 |
| 1                    | 41     | MODEL TRIMMER              | NW     | HANDLER MFG CO     | 31-SV                         |                                 |
| 1                    | 42     | LATHE                      | NW     | VFY                | VFY                           |                                 |
| <b>MECH</b>          |        |                            |        |                    |                               |                                 |
| 1                    | 60     | COMPRESSOR                 | NW     | AIR TECHNIQUES     | AS30                          |                                 |
| 1                    | 61     | VACUUM                     | ER     | RAMVAC             | BULLDOG QT 1                  |                                 |
| 1                    | 63     | AMALGAM SEPARATOR          | ER     | SOLMETEX           | HG5                           |                                 |
| 1                    | 100    | UTILITY STACKING RACK      | ER     | AIR TECHNIQUES     | 56650                         |                                 |
| <b>STERILIZATION</b> |        |                            |        |                    |                               |                                 |
| 1                    | 22     | STERILIZATION CABINET      | NW     | A-DEC              | 5590                          |                                 |
| 1                    | 51     | STERILIZER                 | NW     | MIDMARK            | M11-020                       |                                 |
| 1                    | 54     | STATIM                     | NW     | SCIGAN             | STATIM G4                     |                                 |
| <b>TREATMENT</b>     |        |                            |        |                    |                               |                                 |
| 1                    | 1      | DENTAL CHAIR               | NW     | A-DEC              | A-DEC 411                     |                                 |
| 1                    | 1A     | DENTAL CHAIR               | NW     | ROYAL              | R16                           |                                 |
| 1                    | 1B     | DENTAL CHAIR               | ER     | ADEC               | CASCADE CHAIR                 |                                 |
| 1                    | 6      | STOOL DENTIST              | NW     | A-DEC              | 1601                          |                                 |
| 1                    | 7      | STOOL ASSISTANT            | NW     | A-DEC              | 1622                          |                                 |
| 1                    | 13     | DENTAL CEILING LIGHT (LED) | NW     | A-DEC              | A-DEC LIGHT CEILING MOUNT     |                                 |
| 2                    | 13A    | DENTAL CEILING LIGHT (LED) | ER     | A-DEC              | EXISTING LIGHT W NEW LED HEAD |                                 |
| 3                    | 18     | ALABAMA CART               | NW     | MCC                | ALABAMA (NO UTILITY)          |                                 |
| 2                    | 26     | DELIVERY CART              | NW     | ADEC               | CASCADE 2671- W UNIT          | UTILITIES THRU WALL & UMBILICAL |
| 2                    | 30     | INTRAOURAL X-RAY           | NW     | PROGENY            | P7017G                        |                                 |
| <b>X-RAY</b>         |        |                            |        |                    |                               |                                 |
| 2                    | 18     | ALABAMA CART               | NW     | MCC                | ALABAMA (NO UTILITY)          |                                 |
| 1                    | 36     | PAN 3D                     | NW     | SIRONA DENTAL INC. | XG3                           |                                 |
| 1                    | 70     | IMAGING COMPUTER           | NW     | BY OTHER           | BY OTHER                      |                                 |

**PLAN SYMBOLS**

- DENTAL FURNITURE & EQUIPMENT
- - - DENTAL FURNITURE & EQUIPMENT EXISTING RELOCATED
- - - DENTAL FURNITURE & EQUIPMENT FUTURE
- 12 EQUIPMENT NUMBER TAG (NUMBERS ARE RANDOM)



① LVL 1 FLOOR PLAN  
1/4" = 1'-0"



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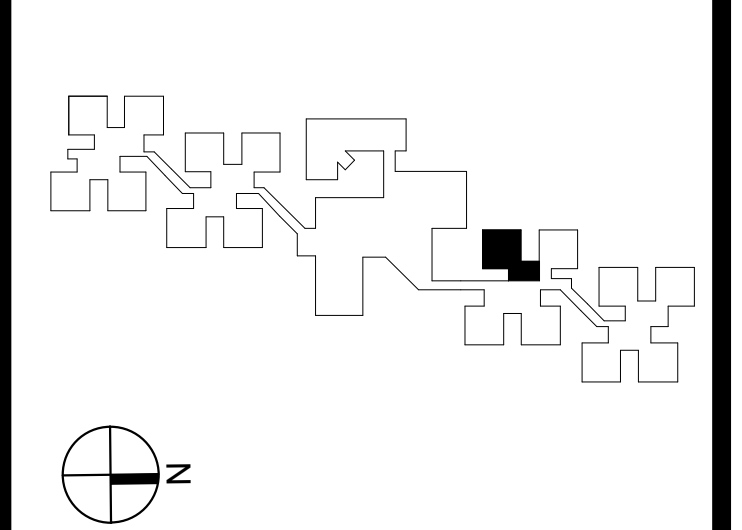
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**Vanderweil Engineers**  
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New York, NY 10018  
212-921-4142

**Project Key**



**REVISIONS**

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**Project Title**

NEW YORK STATE OF OPPORTUNITY. Office for People With Developmental Disabilities

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

**Phase BID DOCUMENTS**

**DENTAL EQUIPMENT PLAN**

Drawn By: Checked By: Date: 02.12.2021

Seal & Signature DASNY Project No: 360130  
Consultant Project No: 600.22  
Drawing Number

**DE-102**

**NOT IN CONTRACT - FOR REFERENCE ONLY**

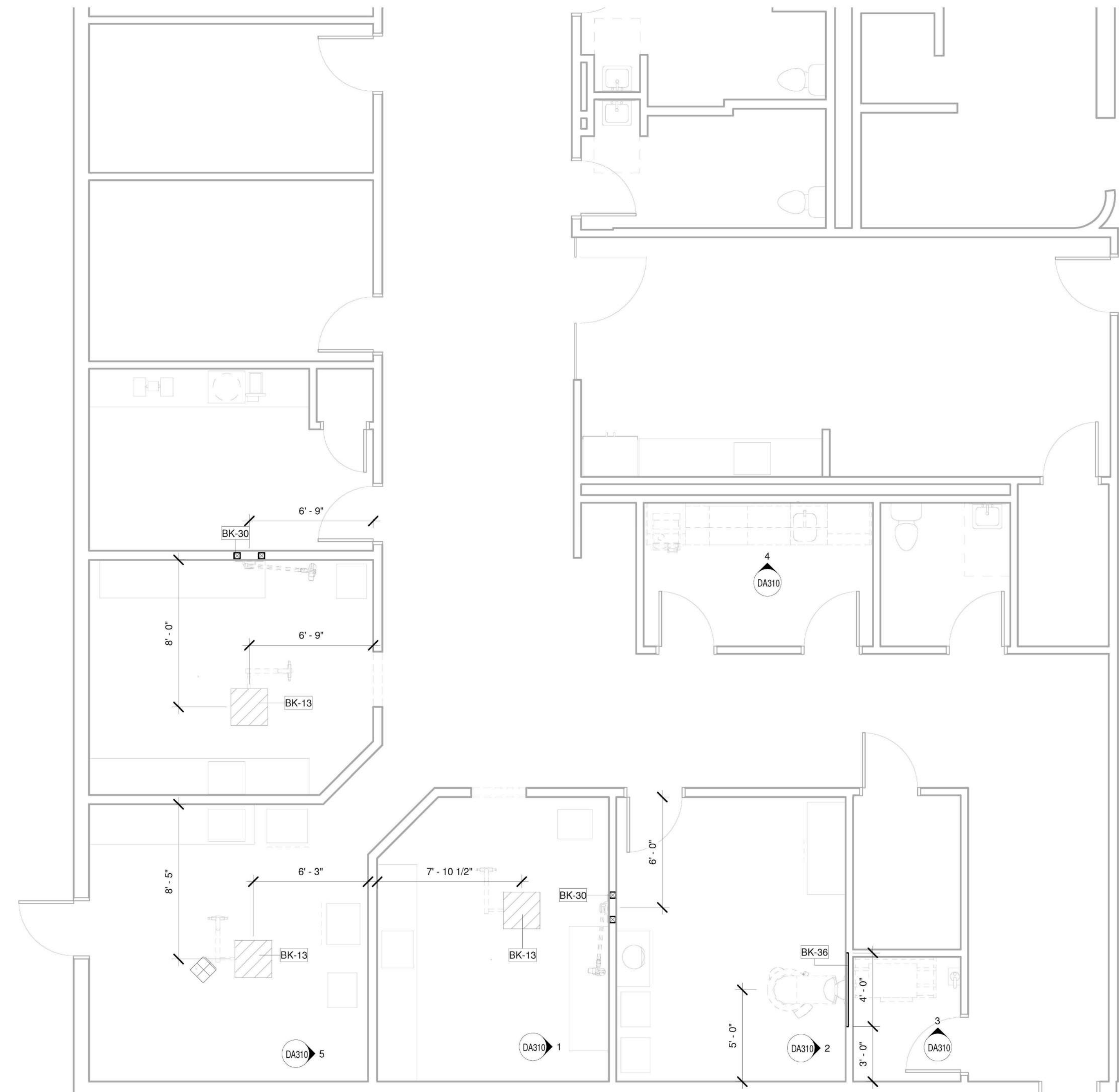
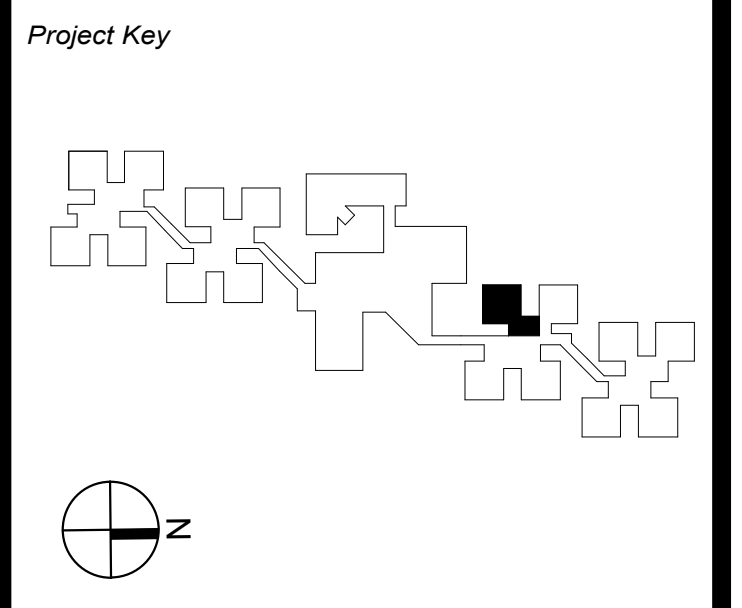
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**VANDERWEIL Vanderweil Engineers**  
1001 6th Avenue  
21st Floor  
New York, NY 10018  
212-921-4142



① LVL 1 BACKING PLAN  
1/4" = 1'-0"

**REVISIONS**

| Description | Date: |
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**Project Title**

NEW YORK STATE OF OPPORTUNITY. **Office for People With Developmental Disabilities**

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

**Phase**

**BID DOCUMENTS**

**DENTAL BACKING PLAN**

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Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: **02.12.2021**

Seal & Signature \_\_\_\_\_ DASNY Project No: **360130**

Consultant Project No: **600.22**

Drawing Number **DE-103**

**EQUIPMENT BACKING SCHEDULE**

NOTE: ALL DBL PLYWOOD BACKING IS TO BE GLUED AND SCREWED

| QTY | ITEM # | EQUIPMENT DESCRIPTION      | BACKING NUMBER | WALL                                 |                                      |                                       |                                     | CEILING           |                                 | OTHER | BACKING REMARKS |
|-----|--------|----------------------------|----------------|--------------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|-------------------|---------------------------------|-------|-----------------|
|     |        |                            |                | SGL 4" X 4" FLOOR TO STRUCTURE ABOVE | DBL 4" X 4" FLOOR TO STRUCTURE ABOVE | DBL 2" X 12" FLOOR TO STRUCTURE ABOVE | DBL .3/4" PLYWOOD (GLUED & SCREWED) | SGL .3/4" PLYWOOD | SGL 2" X 8" TOP OF BASE CABINET |       |                 |
| 1   | 13     | DENTAL CEILING LIGHT (LED) | BK-13          |                                      |                                      |                                       |                                     |                   |                                 |       | 24" x 24"       |
| 2   | 13A    | DENTAL CEILING LIGHT (LED) | BK-13          |                                      |                                      |                                       |                                     |                   |                                 |       | 24" x 24"       |
| 2   | 30     | INTRACORAL X-RAY           | BK-30          |                                      |                                      |                                       |                                     |                   |                                 |       |                 |
| 1   | 36     | PAN 3D                     | BK-36          |                                      |                                      |                                       |                                     |                   |                                 |       |                 |



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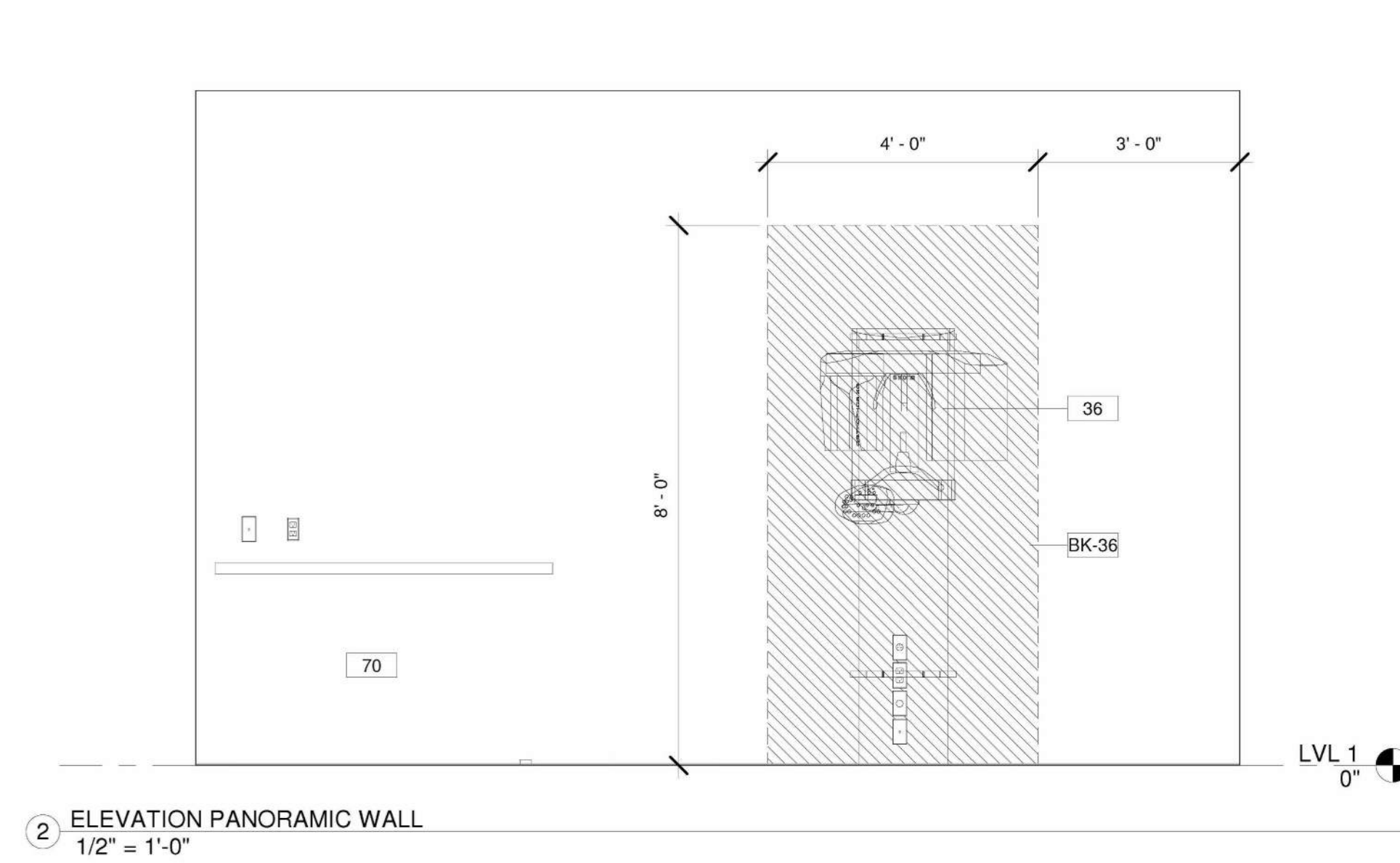
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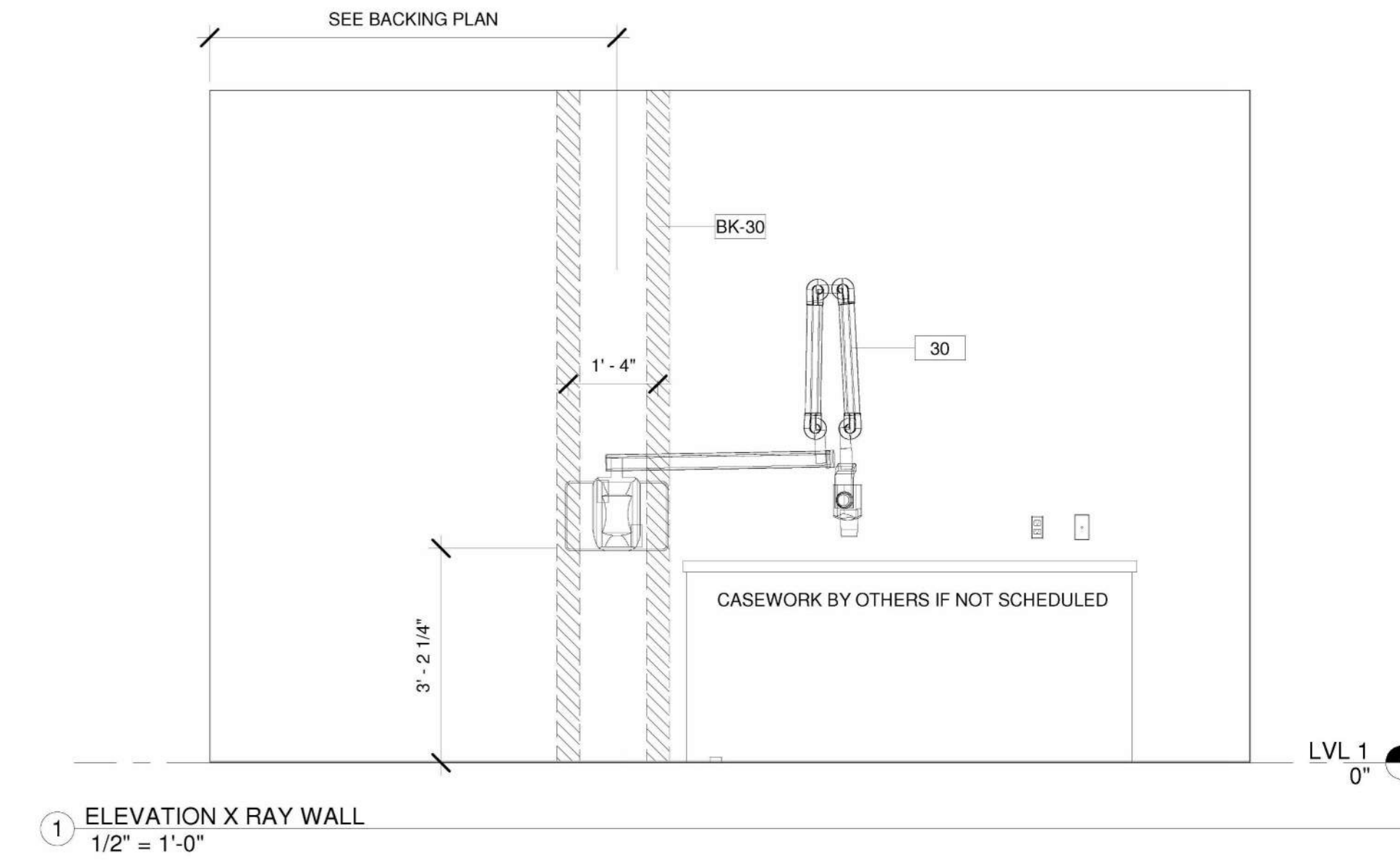
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716-883-5566 716-883-5569 fax

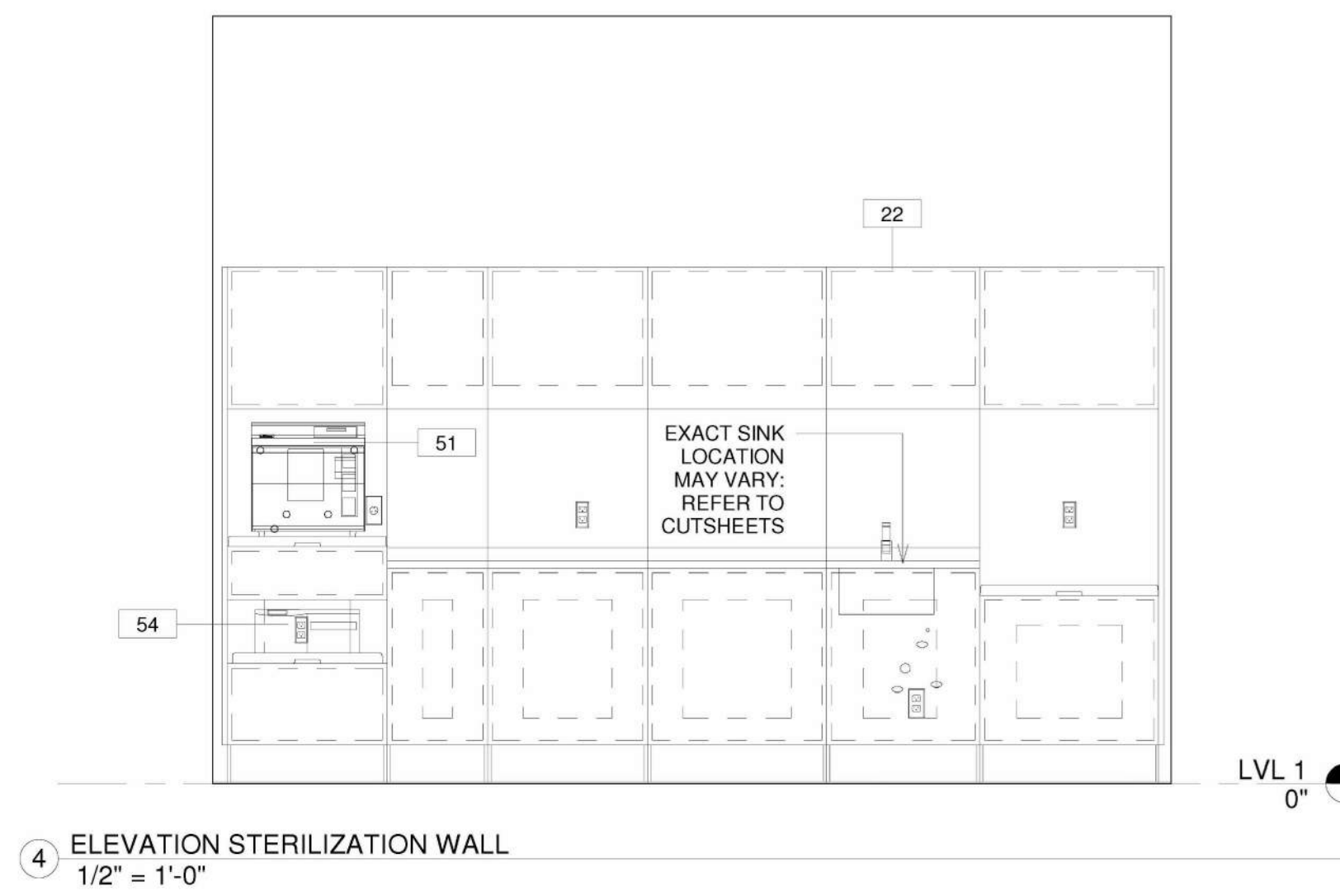
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21st Floor  
New York, NY 10018  
212-921-4142



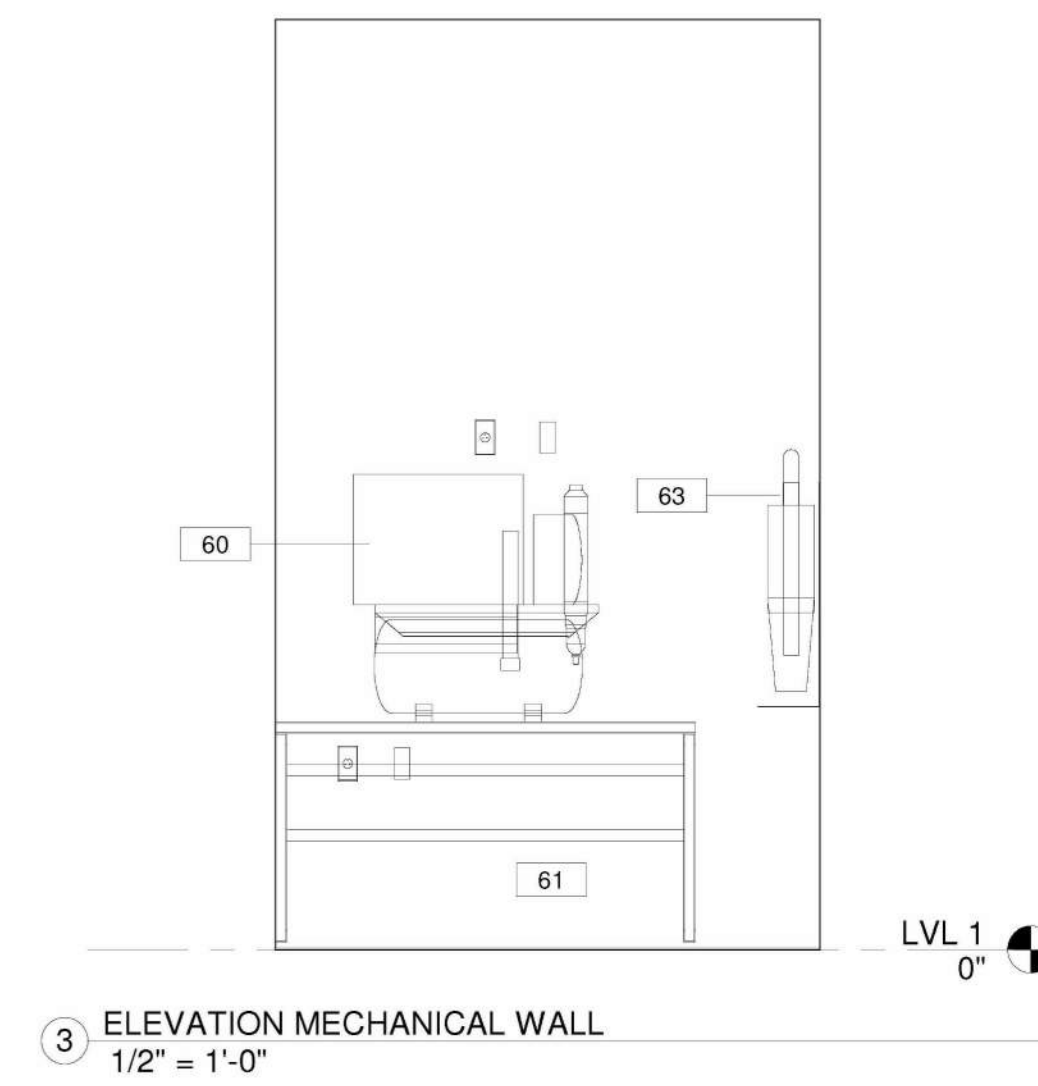
2 ELEVATION PANORAMIC WALL  
1/2" = 1'-0"



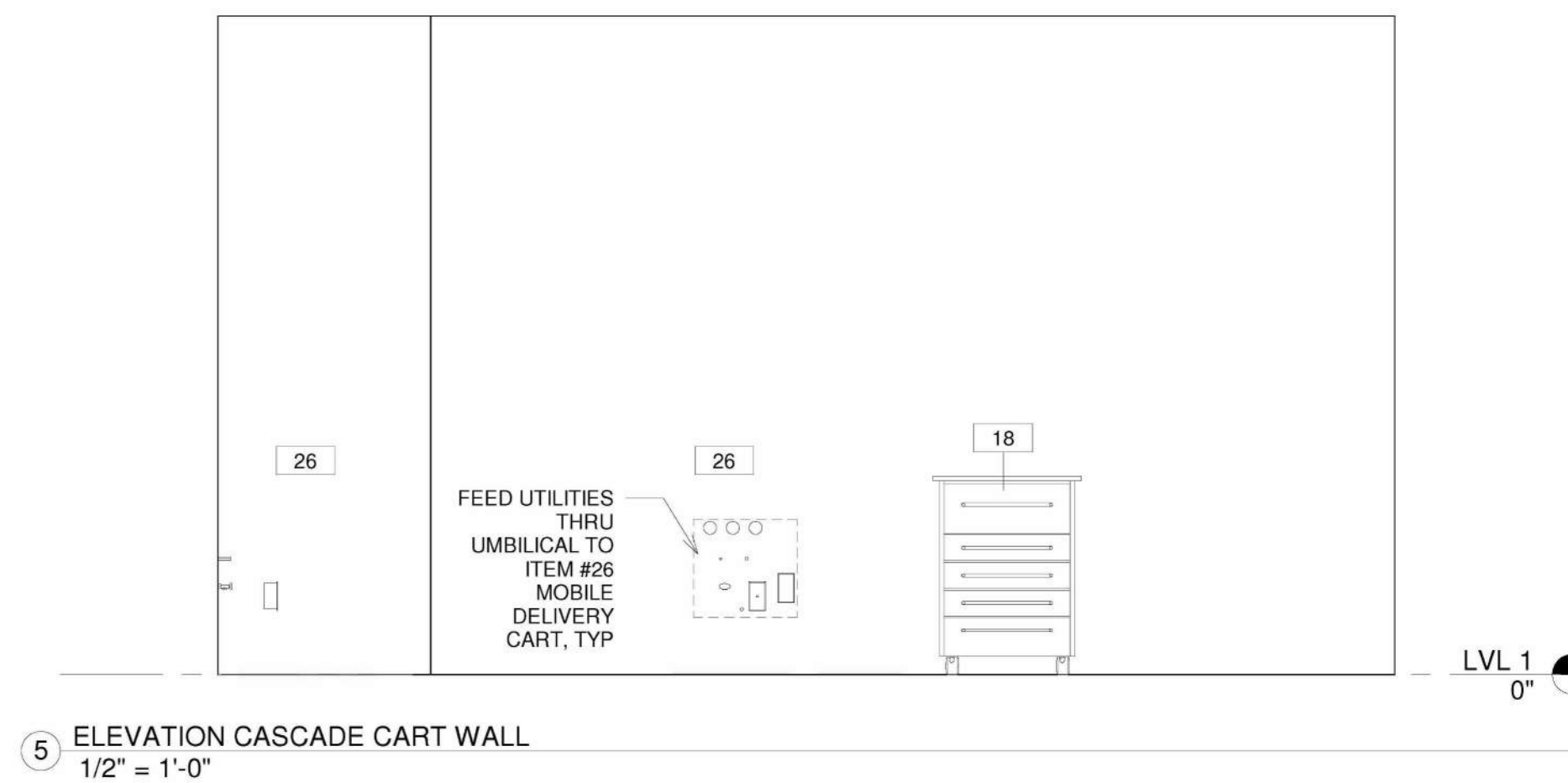
1 ELEVATION X RAY WALL  
1/2" = 1'-0"



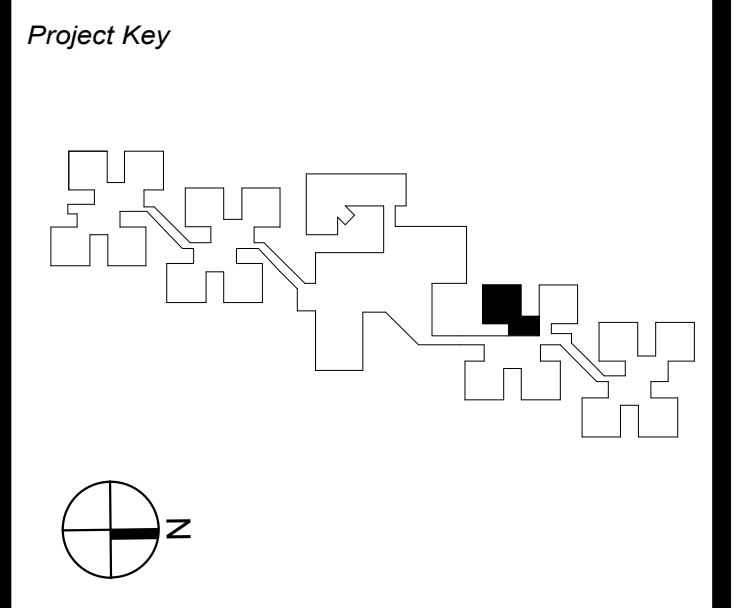
4 ELEVATION STERILIZATION WALL  
1/2" = 1'-0"



3 ELEVATION MECHANICAL WALL  
1/2" = 1'-0"



5 ELEVATION CASCADE CART WALL  
1/2" = 1'-0"



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Project Title

NEW YORK STATE OF OPPORTUNITY. **Office for People With Developmental Disabilities**

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

Phase

**BID DOCUMENTS**

**DENTAL ELEVATIONS**

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: **02.12.2021**

Seal & Signature \_\_\_\_\_ DASNY Project No: **360130**

Consultant Project No: **600.22**

Drawing Number **DE-104**

**NOT IN CONTRACT - FOR REFERENCE ONLY**

**ELECTRICAL LEGEND**

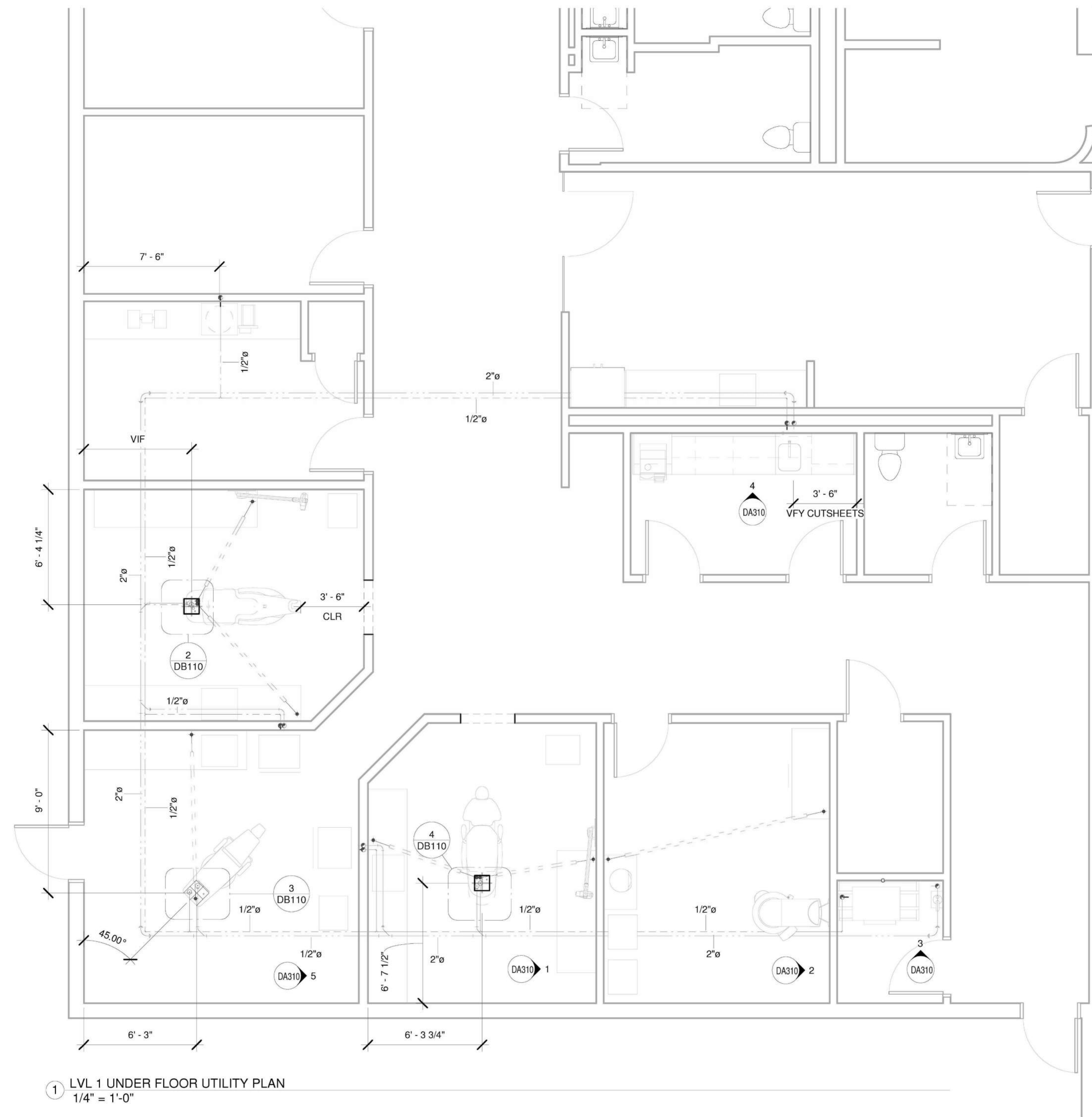
ALL DEVICES SHALL BE INSTALLED PER STATE AND LOCAL CODE.  
ALL LOCATIONS SHOULD BE VERIFIED WITH THE DENTAL EQUIPMENT  
PROVIDER'S REP OR OWNER PRIOR TO PLACEMENT

|       |   |
|-------|---|
| +42"  | INDICATES HEIGHT +/- FINISHED FLOOR, IF TAG IS NOT PRESENT, HEIGHT TO CENTER OF DEVICE UNLESS OTHERWISE NOTED |
| ○     | CONDUIT WALL STUB OUT, IF TAG NOT PRESENT HEIGHT IS 3" A.F.F.   |
| ○     | CONDUIT FLOOR STUB OUT, IF TAG NOT PRESENT HEIGHT IS 1" A.F.F.  |
| ▲     | DATA DEVICE FLOOR, IF TAG IS NOT PRESENT HEIGHT IS 1" A.F.F.  |
| ▲     | DATA DEVICE WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F.   |
| ●     | J-BOX WALL LOW VOLTAGE, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F.   |
| ●     | TV/MONITOR DEVICE WALL, IF TAG NOT PRESENT HEIGHT IS 72" A.F.F.   |
| ●     | REMOTE X-RAY SWITCH IN CABINET, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F.                                       |
| ●     | REMOTE X-RAY SWITCH WALL, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F.   |
| ●     | REMOTE PAN SWITCH IN WALL, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F.  |
| ○     | J-BOX CLG. IF TAG NOT PRESENT HEIGHT IS 6" ABOVE FINISHED CEILING   |
| ○     | J-BOX FLOOR, IF TAG NOT PRESENT HEIGHT IS 1" A.F.F.   |
| ○     | J-BOX WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F.   |
| ○     | 120v DUPLEX OUTLET FLOOR, IF TAG NOT PRESENT HEIGHT IS 1" A.F.F. TO BOTTOM OF DEVICE                          |
| ○     | 120v DUPLEX OUTLET WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F. TO CENTER OF DEVICE                          |
| ○     | 120v DUPLEX DEDICATED OUTLET WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F. TO CENTER OF DEVICE                |
| ○     | 220v SINGLE OUTLET WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F. TO CENTER OF DEVICE                          |
| ○     | 120v QUAD OUTLET FLOOR, MOUNTED ON FLOOR  |
| ○     | 120v QUAD OUTLET WALL, IF TAG NOT PRESENT HEIGHT IS 18" A.F.F. TO CENTER OF DEVICE                            |
| ○     | MASTER SWITCH WALL, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F. TO CENTER   |
| ●     | ELECTRONIC INTERLOCK DOOR SWITCH, LOCATED BETWEEN DOOR PANEL AND FRAME  |
| ○     | DUAL REMOTE X-RAY SWITCH / JBOX IN CABINET, 30" MIN SEPARATION, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F.       |
| ○     | DUAL REMOTE X-RAY SWITCH / JBOX WALL, 30" MIN SEPARATION, IF TAG NOT PRESENT HEIGHT IS 60" A.F.F.             |
| ---   | 18/3 WIRE, CABLE RUN IN WALLS OR ABOVE FINISHED CEILING   |
| ---   | 18/4 WIRE, WIRES RUN IN WALLS OR ABOVE FINISHED CEILING   |
| ---   | CAT5e OR BETTER CABLE, CABLE RUN IN WALLS OR ABOVE FINISHED CEILING   |
| ---   | MANUFACTURER CABLE, CABLE RUN IN WALLS OR ABOVE FINISHED CEILING  |
| ==    | ELECTRICAL CONDUIT UNDER FLOOR, SIZE AS INDICATED ON PLAN   |
| ===== | ELECTRICAL CONDUIT ABOVE CEILING, SIZE AS INDICATED ON PLAN   |

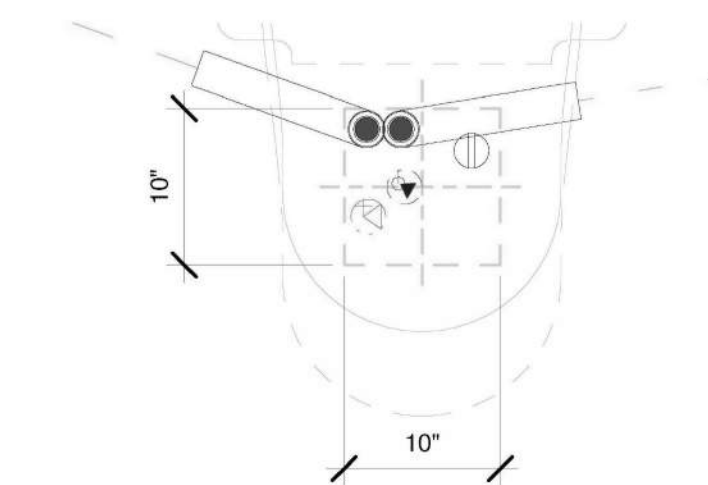
**PLUMBING LEGEND**

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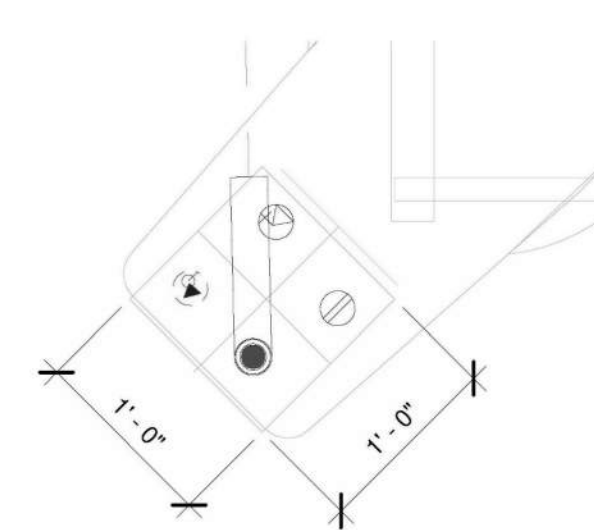
|      |   |
|------|---|
| +42" | INDICATES HEIGHT +/- FINISHED FLOOR, IF TAG IS NOT PRESENT, HEIGHT TO CENTER OF DEVICE UNLESS OTHERWISE NOTED |
| ▼    | 1/2" OD. TO 3/8" OD. SHUT OFF AIR CONNECTION WALL, HEIGHT 3" A.F.F. TO CENTER IF TAG NOT PRESENT              |
| ▼    | 1/2" OD. TO 3/8" OD. SHUT OFF AIR CONNECTION FLOOR HEIGHT 3" A.F.F. TO CENTER UNLESS OTHERWISE NOTED          |
| ⊠    | FLOOR DRAIN FLUSH WITH FLOOR  |
| ⊠    | DIRECT DRAIN FLOOR  |
| ⊠    | HUB DRAIN FLOOR   |
| ●    | DIRECT DRAIN WALL   |
| ○    | VACUUM PIPE CONNECTION FLOOR  |
| ○    | VACUUM PIPE CONNECTION WALL   |
| ○    | FRESH AIR IN MANIFOLD WALL  |
| ○    | SHUT OFF VALVE COLD WATER WALL  |
| ○    | SHUT OFF VALVE COLD WATER FLOOR   |
| ○    | SHUT OFF VALVE HOT WATER WALL   |
| ○    | SHUT OFF VALVE HOT WATER FLOOR  |
| ○    | WATER SHUT OFF  |
| ○    | WATER SHUT OFF W/FILTER   |
| ○    | BACKFLOW PREVENTER  |
| ○    | 1/2" OD. NITROGEN OUTLET WALL, HEIGHT 18" A.F.F. TO CENTER IF NOT OTHERWISE NOTED                             |
| ---  | VACUUM LINE   |
| ---  | DRIVE GAS (AIR)   |
| ---  | FILTERED CW   |
| ---  | NITROGEN  |



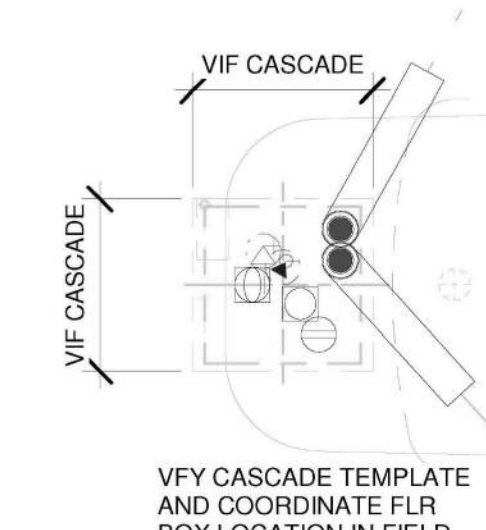
1 LVL 1 UNDER FLOOR UTILITY PLAN  
1/4" = 1'-0"



4 ENLARGED CHAIR UTILITY ITEM #1  
1" = 1'-0"



3 ENLARGED CHAIR UTILITY ITEM #1A  
1" = 1'-0"



2 ENLARGED CHAIR UTILITY ITEM #1B  
1" = 1'-0"

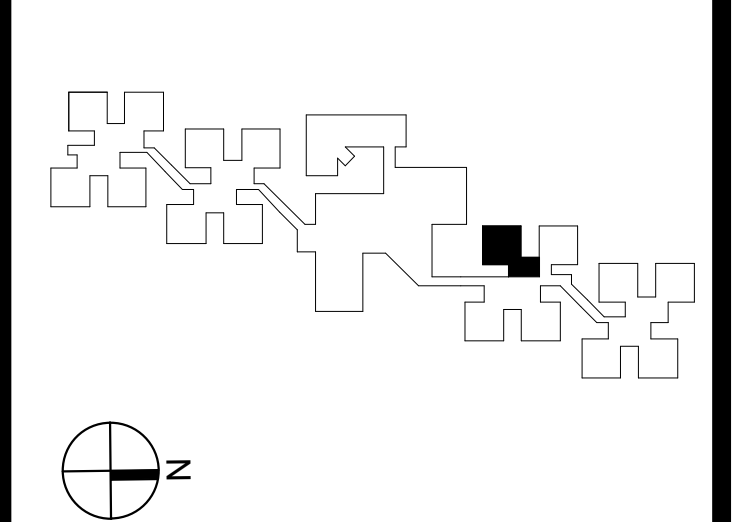
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**Vanderweil Engineers**  
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212-921-4142

**Project Key**



**REVISIONS**

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**Project Title**

NEW YORK STATE OF OPPORTUNITY. **Office for People With Developmental Disabilities**

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

**Phase BID DOCUMENTS**

**DENTAL UTILITY PLAN**

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: **02.12.2021**

Seal & Signature \_\_\_\_\_  
DASNY Project No: **360130**  
Consultant Project No: **600.22**  
Drawing Number

**DE-105**



**NOT IN CONTRACT - FOR REFERENCE ONLY**

**PLUMBING LEGEND**

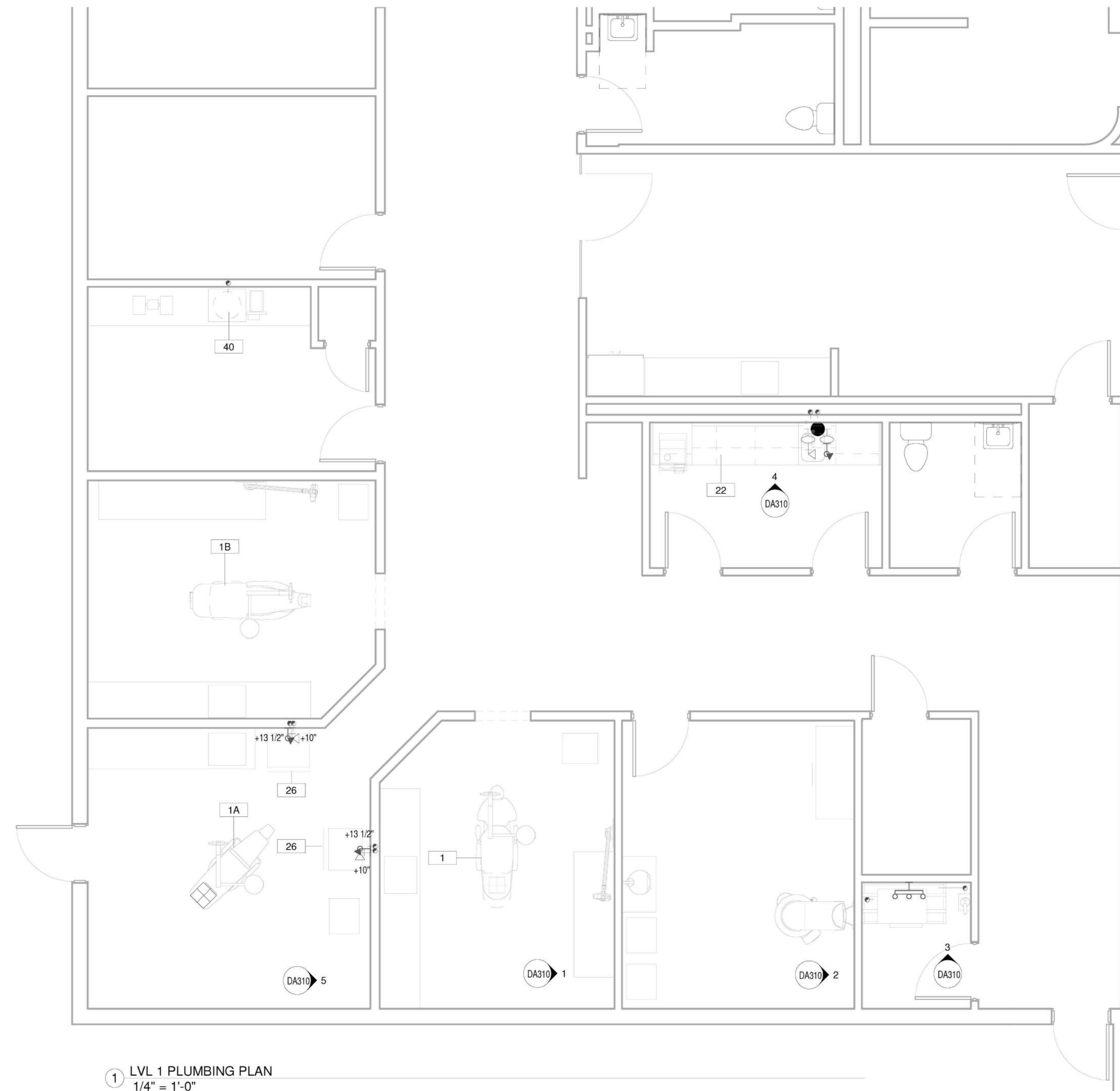
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|      |   |
|------|---|
| +42" | INDICATES HEIGHT +/- FINISHED FLOOR, IF TAG IS NOT PRESENT, HEIGHT TO CENTER OF DEVICE UNLESS OTHERWISE NOTED |
| ▼    | 1/2" OD. TO 3/8" OD. SHUT OFF AIR CONNECTION WALL, HEIGHT 3" A.F.F. TO CENTER IF TAG NOT PRESENT              |
| ▼    | 1/2" OD. TO 3/8" OD. SHUT OFF AIR CONNECTION FLOOR HEIGHT 3" A.F.F. TO CENTER UNLESS OTHERWISE NOTED          |
| ⊕    | FLOOR DRAIN FLUSH WITH FLOOR  |
| □    | DIRECT DRAIN FLOOR  |
| ⊕    | HUB DRAIN FLOOR   |
| ●    | DIRECT DRAIN WALL   |
| ⊕    | VACUUM PIPE CONNECTION FLOOR  |
| ⊕    | VACUUM PIPE CONNECTION WALL   |
| ⊕    | FRESH AIR IN MANIFOLD WALL  |
| ⊕    | SHUT OFF VALVE COLD WATER WALL  |
| ⊕    | SHUT OFF VALVE COLD WATER FLOOR   |
| ⊕    | SHUT OFF VALVE HOT WATER WALL   |
| ⊕    | SHUT OFF VALVE HOT WATER FLOOR  |
| ⊕    | WATER SHUT OFF  |
| ⊕    | WATER SHUT OFF W/FILTER   |
| ⊕    | BACKFLOW PREVENTER  |
| ⊕    | 1/2" OD. NITROGEN OUTLET WALL, HEIGHT 18" A.F.F. TO CENTER IF NOT OTHERWISE NOTED                             |
| ---  | VACUUM LINE   |
| ---  | DRIVE GAS (AIR)   |
| ---  | FILTERED CW   |
| ---  | NITROGEN  |

**EQUIPMENT EXHAUST SCHEDULE**

GENERAL NOTES:  
 ALL ITEMS IDENTIFIED AS "FT" WILL BE INSTALLED AT A FUTURE DATE. ALL UTILITIES NEED TO BE CAP AND CONCEALED FOR FUTURE USE.  
 ALL ITEMS WILL BE INSTALLED PER STATE AND LOCAL CODES.

| QTY | ITEM # | DESCRIPTION | STATUS | VENT EXHAUST REMARKS   |
|-----|--------|-------------|--------|--|
| 1   | 60     | COMPRESSOR  | NW     | REQS FRESH AIR INTAKE FROM OUTSIDE BLDG  |
| 1   | 61     | VACUUM      | ER     | 2" PVC SCHEDULE 80 FRESH AIR VENT REQUIRED TO OUTSIDE. / ROOM TEMP MUST NOT BE BELOW 35° OR ABOVE 100° / SEE DETAIL AN INDICATED ON PLAN |



① LVL 1 PLUMBING PLAN  
1/4" = 1'-0"

**EQUIPMENT PLUMBING-DENTAL COMPRESSED AIR-VAC SCHEDULE**

GENERAL NOTES:  
 ALL ITEMS TO BE INSTALLED PER STATE AND LOCAL CODES.

| QTY | ITEM # | DESCRIPTION           | STATUS | PLUMBING               |                             |                        |                       |                        |                       |                      | PLUMBING INFO      |                              |              |                | VAC INFO         |                      |                      |                      | DENTAL COMPRESSED AIR  |                    |                    |                         |                    |
|-----|--------|-----------------------|--------|------------------------|-----------------------------|------------------------|-----------------------|------------------------|-----------------------|----------------------|--------------------|------------------------------|--------------|----------------|------------------|----------------------|----------------------|----------------------|------------------------|--------------------|--------------------|-------------------------|--------------------|
|     |        |                       |        | PLUMBING CONNECTION BY | 1/4" COLD WATER FLEX TUBING | 1/2" COLD WATER COPPER | 1/2" HOT WATER COPPER | 3/4" COLD WATER COPPER | 3/4" HOT WATER COPPER | 1" COLD WATER COPPER | 3/4" COPPER TYPE M | 1-1/2" PVC WASTE SCHEDULE 40 | DRAIN DIRECT | DRAIN INDIRECT | DRAIN STAND PIPE | 1/2" PVC SCHEDULE 40 | 5/8" PVC SCHEDULE 40 | 3/4" PVC SCHEDULE 40 | 1-1/2" PVC SCHEDULE 40 | 2" PVC SCHEDULE 40 | 3" PVC SCHEDULE 40 | 1/2" COPPER TYPE L OR K | 5/8" COPPER TYPE M |
| 1   | 1      | DENTAL CHAIR          | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 1A     | DENTAL CHAIR          | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 1B     | DENTAL CHAIR          | ER     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 22     | STERILIZATION CABINET | NW     | PC                     |                             | •                      |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 2   | 26     | DELIVERY CART         | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 40     | PLASTER TRAP          | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 41     | MODEL TRIMMER         | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 60     | COMPRESSOR            | NW     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 61     | VACUUM                | ER     | PC                     |                             | •                      |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |
| 1   | 63     | AMALGAM SEPARATOR     | ER     | PC                     |                             |                        |                       |                        |                       |                      |                    |                              |              |                |                  |                      |                      |                      |                        |                    |                    |                         |                    |

**NEW YORK STATE OF OPPORTUNITY** | **DASNY**

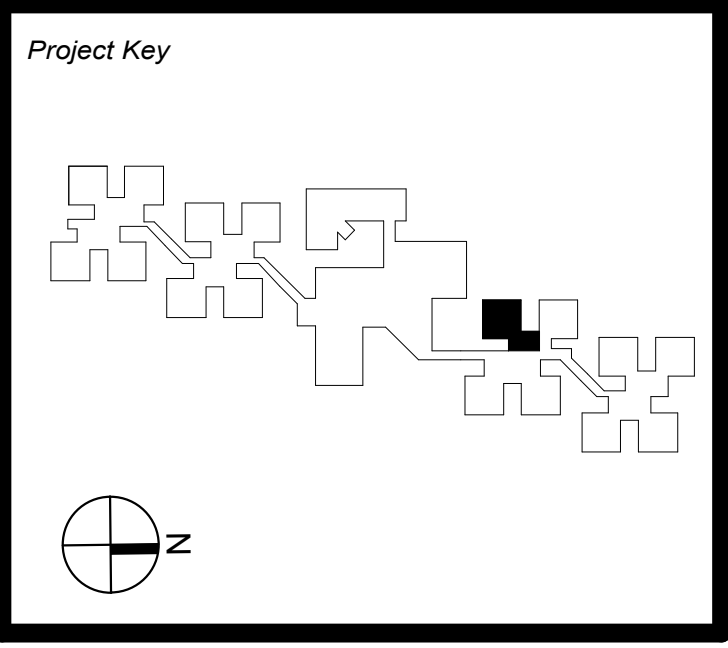
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REVISIONS

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Project Title

**NEW YORK STATE OF OPPORTUNITY** | **Office for People With Developmental Disabilities**

**BROOME DDSO BUILDING 4 DENTAL CLINIC**

249 Glenwood Rd, Binghamton, NY 13905

Phase

**BID DOCUMENTS**

**DENTAL PLUMBING PLAN**

Drawn By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Date: **02.12.2021**

Seal & Signature \_\_\_\_\_

DASNY Project No: **360130**  
 Consultant Project No: **600.22**  
 Drawing Number **DE-107**