

AMERICAN RED CROSS
EXCAVATION AND FOUNDATION PLANS
FOR THE NEW OFFICE BUILDING
2025 E Street, NW

Report to the American Red Cross

April 8, 1999

Abstract

The American Red Cross (ARC) has submitted excavation and foundation plans for the new office building to be located at 2025 E Street, NW. The excavation and foundation plans are consistent with the building plans that received preliminary approval at the Commission's March 6, 1997 meeting. ARC anticipates submitting final site and building plans for Commission approval in August 1999, but would like to excavate the site and build the foundation before that time. The three issues that the Commission identified for further study, which include the design of the south facade of the building, the noise impact of truck activities on adjacent residential buildings, and the transportation management plan, will all be considered when final site and building plans are reviewed. The resolution of these three issues is not expected to affect either the extent of site excavation or the location of the building foundation. Even so, upon reviewing final plans, the Commission could request modifications that would necessitate changes to the site excavation and building foundation. ARC understands this risk and still wishes to proceed with site work prior to the Commission's final approval.

Authority

P.L. 100-637 authorizes ARC to construct a building on this site and requires that the National Capital Planning Commission shall first approve the plans.

Commission Action

The Commission:

- **Takes responsibility** for the scope and content of the Environmental Assessment Supplement, dated January 1999, for the proposed new office building at 2025 E Street, NW.
- **Approves** the excavation and foundation plans for the new office building, as shown on NCPC Map File No. 1.35(38.00)-40614.

* * *

BACKGROUND AND STAFF EVALUATION

DESCRIPTION OF PROPOSAL

The American Red Cross (ARC) has submitted excavation and foundation plans for a new office building on the site of their District of Columbia Chapter offices, at 2025 E Street, NW. Public Law 100-637 authorizes ARC to construct such a building on this site and requires that the plans shall first be approved by the Commission of Fine Arts and the National Capital Planning Commission. ARC is currently preparing final site and building plans and expects to submit them for Commission approval in August 1999. However, ARC would like to begin site preparation before August and therefore seeks Commission approval for excavation and foundation plans.

The Site

- The site at 2025 E Street is the southern half of the square bounded by E, F, 20th, and 21st Streets NW, including the full-block frontage of approximately 400 feet along E Street. The site is owned by the U.S. Government and is under the jurisdiction of the General Services Administration.
- The northern half of the square is occupied by several apartment buildings from the early and mid-20th century.
- The site contains the existing ARC District Chapter Building, which is four stories tall and was constructed in the early 1950s. The building is a local historic landmark, and was determined eligible for listing, as part of a theoretical Historic District, in the National Register of Historic Places. This building will be demolished (although part of it will be dismantled, relocated on the site, and partially reconstructed) to make room for the new office building. The demolition of this historic resource will be mitigated, to the extent possible, pursuant to the Memorandum of Agreement (MOA) signed by NCPC on February 26, 1999.

Excavation and Foundation Plans

- The excavation and foundation plans are consistent with the preliminary site and building plans that were approved by the Commission on March 6, 1997.
- Site excavation will extend approximately 44 feet below the existing grade of the site, to provide for three below-grade levels of parking and one level with office space and the loading dock.
- Following the excavation and sheeting and shoring, the building's foundation, made of poured-in-place concrete spread footings, will be constructed.

PREVIOUS COMMISSION ACTION

- Beginning in 1929, and continuing throughout the 1930s and 1940s, the Commission took a leading role in planning for the development of the Northwest Rectangle, including designation of building sites, realignment of streets, and acquisition of land. The Commission's plans identified the site of the ARC Building as a critical location in the axial relationships planned for the area. Despite the extensive initial plans encompassing a wide area, this was the only site along the north side of E Street that was actually acquired by the federal government for development during this period.
- At its meeting of December 10, 1948, the Commission approved the plans for the current building (as shown on NCPC Map File No. 23.00(08.50)-20309), which was constructed shortly thereafter and dedicated in 1953.
- In the fall of 1988, Commission staff provided comments to the Office of Management and Budget on the proposed legislation that became P.L. 100-637. The comments were supportive of the legislation but noted that the provision for the U.S. "to cooperate with the Red Cross Chapter with respect to any zoning" was unclear because federal property, including the Red Cross site, is considered unzoned.
- At its meeting on January 9, 1997, the Commission deferred action on the proposed new building and instructed the Commission staff to meet with the interested parties and the applicant to work toward a resolution of outstanding differences.
- On January 24, 1997, pursuant to the Commission's direction, the Commission staff and the applicant met with the interested parties, and listened to requests for specific revisions to the proposal. In response, ARC submitted revised site and building plans for the Commission's consideration on March 6, 1997.
- At its meeting of March 6, 1997, the Commission:
 1. Took responsibility for the scope and content of the Environmental Assessment dated May 1996, for the proposed new office building;
 2. Commended ARC for the incorporation of portions of the existing building's facades and interior into the new development, and appreciated ARC's responsiveness in redesigning the north facade;
 3. Approved the preliminary site and building plans for the new office building, as shown on NCPC Map File No. 23.00(38.00)-40348;
 4. Requested that, in the preparation of final site and building plans, ARC:
 - a. Strengthen the design concept of combining a curved upper portion of the building with a rectangular mass below, so that the two volumes are distinct and relate appropriately to ground-level features; and
 - b. reduce the impact of truck activity on adjacent residential buildings by scheduling deliveries during workday hours, and considering appropriate noise attenuation design; and
 5. Commended ARC for its intention to avoid reliance on automobile trips, as reflected in the modest amount of parking proposed, and urged ARC to insure the success of this effort by

identifying and implementing transportation management strategies, such as a transit ridership subsidy program and preferential parking for carpools and vanpools.

PUBLIC COMMENT

At the time of preliminary review, public comments were received both in writing and in testimony at the public hearings. The Commission held two public hearings, on January 9, 1997 and March 6, 1997.

In between, on January 24, 1997, the Commission staff held a public meeting with interested parties to discuss the community's opinions regarding key design aspects of the proposed new office building. Concerns expressed by the community in these public forums and in correspondence to the Commission included:

- Inconsistency with the zoning provisions of adjacent property in height, density and use.
- Greater floor area than anticipated when Congress considered the authorizing legislation.
- Insufficient study of alternatives.
- Blockage of sunlight to, and views from, adjacent apartments.
- NCPC's compliance with the National Environmental Policy Act (NEPA), and the desire for an Environmental Impact Statement (EIS) rather than an Environmental Assessment (EA).
- Insufficient parking, road capacity, and supporting retail for the additional worker population.
- Demolition of the existing historic building.
- Concerns for pedestrian safety given the increased traffic.
- Potential effects of electromagnetic radiation on nearby residents from the proposed antennas and the communications center.
- Noise from trucks using the loading dock.

Following the January 24th meeting, ARC revised the site and building plans, taking into account the opinions expressed by the community representatives. The Commission granted approval of the revised preliminary plans. After approval of the preliminary plans, an Environmental Assessment Supplement (EAS) that covered additional alternatives was prepared and released for public comment. In response to this public comment period, and public notice of the Commission's Consideration of the excavation and foundation plans, additional correspondence has been received.

(Copies are attached to this report.) These letters address the issues listed above that were considered at the time of preliminary approval, and new issues including:

- Requests to extend the public comment period for the EAS.
- Requests for a separate Commission meeting for public comment on the EAS and requests for a separate Commission meeting exclusively for the excavation and foundation plans.
- Effect, on the neighborhood, of noise during construction.

EVALUATION

Staff recommends approval of the excavation and foundation plans for the new American Red Cross Office Building at 2025 E Street, NW.

The Excavation and Foundation Plans

- The excavation and foundation plans are consistent with the preliminary site and building plans approved by the Commission on March 6, 1997.
- The three issues that the Commission identified as needing further study prior to final approval are still under consideration by ARC and their consultants and will be reviewed in detail when the Commission reviews the final site and building plans. The resolution of these issues is not expected to affect either the extent of site excavation or the location of the building foundation.
- The Commission has approved site work for other projects before final approval of the site and building plans. Some examples are excavation and foundation plans for the Washington Convention Center, excavation and partial foundation plans for the Ronald Reagan Building, and excavation plans for the Food and Drug Administration's Center for Veterinary Medicine.

Consideration of the Issues Raised in Public Comment

- The American Red Cross proposal for a new office building was revised in many ways in response to public comment *before* the Commission granted preliminary approval. The building height was reduced, the north façade was terraced to allow more space for light and air between the proposed building and the apartment buildings to the north, and the communications center planned for the top floor was removed from the program. The loading dock was enclosed within the building to reduce noise to adjacent properties. Publicly accessible retail space was added to the building, and ARC agreed that the cafeteria would be open to the public. Responding to a request from the Commission of Fine Arts, ARC also agreed to renovate and maintain the adjacent D.C. public park on E Street.
- The existing historic building will be demolished, although a portion of the building will be dismantled, relocated on the site, and partially reconstructed using the original exterior

materials. The historic preservation process (Section 106 review) was concluded with the signing of the MOA.

- Potential effects of the electromagnetic radiation from proposed antennas will be reviewed either along with the final site and building plans, or as a separate submission pursuant to the Commission's antenna guidelines.
- Noise attenuation design can help to reduce the noise generated at the loading dock. This issue will be considered when the Commission reviews final site and building plans.
- The 30-day public comment period for the EAS was extended 15 days to end on March 12, 1999.
- Staff determined that the opportunity for public testimony on the EAS when the Commission considered its next action on this project would be sufficient. In this case, that action is a request by the ARC for approval of excavation and foundation plans. And although significant public testimony is expected regarding both the EAS and the excavation and foundation plans, staff did not anticipate it to be of the magnitude that would require a separate Commission meeting.
- The EAS indicated that noise during construction was expected to exceed local noise regulations. Therefore, construction noise will be monitored, and construction activity will be changed as needed to keep noise within regulated standards.

NATIONAL HISTORIC PRESERVATION ACT

GSA, as the agency with jurisdiction over the land, served as the lead federal agency for the Section 106 review. The review culminated in the execution of a Memorandum of Agreement (MOA), since demolition of the existing building would be an *adverse* effect on the building itself. The MOA includes stipulated actions required of ARC. The MOA is based on the site and building plans given preliminary approval by NCPC and by the Commission of Fine Arts. GSA held several public meetings and circulated the draft MOA for public comment. NCPC participated in the MOA consultation since it has specific congressional authority to review and approve the ARC project at this site. NCPC signed the MOA on February 26, 1999. GSA has concluded its responsibilities under the National Historic Preservation Act. (A copy of the MOA is attached.)

The D.C. Chapter House of the American Red Cross, built between 1950-52, is a late work in the classical style associated with institutional and governmental Washington. The firm of Eggers and Higgins, the successor firm to John Russell Pope, designed the building. Constructed of limestone with bronze trim, the building features sculptural bas-reliefs by Edmond Amateis.

The building occupies the southern half of its square and is generously set back from E Street, as well as from 20th and 21st Streets. Its siting is a significant feature of the building. The building is

an element in what is known as the Northwest Rectangle, a partially realized plan to provide additional offices for the federal government in a complex similar to the Federal Triangle of a generation earlier. NCPC and its chairman, Ulysses S. Grant III, were driving forces behind this planned complex after the Second World War.

The building was designated a District of Columbia landmark in October 1996. For purposes of Section 106 review, GSA determined it eligible for listing in the National Register of Historic Places as a contributing structure in a theoretical historic district encompassing the Northwest Rectangle. This historic district designation does not exist, but the documentation to prepare and submit a National Register nomination for the district has been gathered by ARC and forwarded to the D.C. State Historic Preservation Office for its use during the Section 106 review and any future National Register consideration of a historic district in that part of the city.

NATIONAL ENVIRONMENTAL POLICY ACT

Pursuant to NEPA, an EAS was prepared in January 1999, which has been reviewed and adopted by the Commission. Off-site construction, leasing, and construction of two separate structures at Red Cross Square were alternatives presented in the EAS. Additional updated information on the design of the preferred option, the DC Chapter site, is also included. The EAS evaluation determined an EIS is not required for the proposed project as revised. NCPC subsequently completed a Finding of No Significant Impact on March 19, 1999.

The proposed project will not significantly affect natural features because the site and its surroundings constitute a built, urban environment. Neither topography nor hydrology would constrain site development. The project would not noticeably affect air quality. Other issues investigated in the EAS include:

Potential Noise Impacts

With regard to noise impacts, the EAS identifies that the construction contractor would comply with District of Columbia Noise Control Regulations and demonstrates how construction noise, including noise generated by construction equipment, can be controlled within regulated standards. In addition, the ARC will require the construction contractor to post a public notice along the perimeter of the construction area that, at a minimum, provides the hours of construction and the name and telephone number of the local agency in charge of enforcing the District of Columbia Noise Control Regulations.

The loading dock operations will involve measures to be taken in the building design and specifications to reduce noise and provide sound attenuation measures for built-in components of

the loading dock. ARC will also train loading dock operators to monitor and reduce noise-generating activities to the maximum extent possible. Although the frequency of loading and

unloading activities at the loading dock of the proposed headquarters building may increase, maximum single-event noise levels would be similar to those currently generated at the existing facility. The District of Columbia currently regulates daytime and nighttime noise levels based on the maximum permissible sound levels of 60 dB(A) and 55 dB(A), respectively. Based on the noise modeling conducted, long-term operational activities could potentially exceed the District of Columbia daytime noise standard of 60 dB(A). In order to mitigate this adverse impact, the EAS recommends measures that would provide additional noise control and reduce operational noise levels at nearby residences to below the District of Columbia noise standard. Noise impacts will be mitigated through specific project design elements such as a loading area enclosure, sound baffles, and a noise barrier. Staff, during the building design submission, will review these design measures. In addition, ARC would continue to limit loading and unloading activities, except in emergency situations, to daytime hours of operation (i.e., 9:00 AM to 4:30 PM); therefore, no increase in nighttime ambient noise levels would result from the proposed project.

Although the steel rolldown doors would generate noise, it is not expected that they would generate noise levels in excess of the maximum "worst-case" noise levels used in the analysis. The newly manufactured doors, especially electric doors, are quieter than older models, and in some cases include acoustical treatment. An acoustical engineer would determine the type of door necessary to reduce noise levels at noise-sensitive receptors.

Potential Building Shadow Effects

The shadows cast by the preferred alternative (revised building design scheme) on the adjacent residential buildings have been addressed in the EAS. The analysis conducted involved a computer-generated model and detailed building design information. For purposes of comparison, the document included a qualitative analysis of the potential shadowing effects of the proposed building at Red Cross Square and the 375,000-square-foot building at the D.C. Chapter site in the Alternative C1 scenario. A computer-generated model was not used in the analysis because Alternative C1 was defined in conceptual terms rather than detailed design drawings. The analysis assumed that, although the overall massing of Alternative C1's building at the D.C. Chapter site would be smaller than the preferred alternative, the height and design would be similar for both alternatives. Reducing the height of the structure will mitigate shadowing effects, but nevertheless there are periods of the year when building shadows will affect adjacent properties not unlike any urban area where tall structures are present. The evaluation of the potential impact determined that the revised design does allow additional light during the spring, summer, and fall compared to the originally proposed structure configuration.

Potential Effects of Electromagnetic Radiation from Antennas

The issue of electromagnetic effects from communication antennas situated on the roof of the proposed building is fully analyzed pertaining to its site-specific setting. Calculations included in the EAS on Electromagnetic Fields (EMF) produced by the proposed transmitting antennas indicate they will not generate adverse impacts to the general public and will meet all Federal Communication Commission (FCC) requirements. The calculated exposure levels are 3.59 percent or less of FCC-established Maximum Permissible Exposure (MPE) levels.

It is unlikely that other antennas located in the area would cause ARC antennas to exceed regulated levels. As an example, even if there were a one-million watt transmitter located within 1,000 feet of the site (although it is unlikely that any transmitter approaching this size is located within the District of Columbia), it would still not produce a power density exceeding the MPE for uncontrolled exposure according to ARC's communications consultant who has over 26 of years experience in telecommunications and information technology systems design and engineering. Even a 1,000-watt transmitter would have to be less than 40 feet from the site to produce a power density exceeding the MPE. These estimates are based on information provided in FCC Bulletin 65 (Figure 2, p. 25 and Figure 1, p. 68, MPE for uncontrolled exposure of 0.2 mW/cm²). All FCC licensees, even those categorically excluded or below radiated power and height criteria, are expected to be in compliance with the FCC's exposure limits. It is the responsibility of all the licensees with transmitters to ensure that contributions of each transmitter do not cumulatively exceed the Commission's limits in an accessible area. Exposure to RF levels below these levels is considered to have no detrimental biological effect by expert standards bodies such the Institute of Electrical and Electronics Engineers, Inc. (IEEE) or the National Council on Radiation Protection and Measurements (NCRP).

Potential Historic and Visual Effects

The mitigation of historic and visual effects are provided for in the Section 106 Memorandum of Agreement (MOA) identified in the EAS that seeks to meet preservation, archeological, and community concerns. The offered mitigation meets generally accepted cultural resource standards and helps ARC fulfill the congressional intent for this site.

- Preservation. The ARC's commitment to prepare historic and photographic documentation of the D.C. Chapter building to the standards of the Historic American Buildings Survey is a typical and generally accepted form of mitigation in projects involving undertakings to historic buildings such as this. Although not a formal exhibit, the individual building documentation and the Northwest Rectangle historic district documentation will be available to the public. They will be located at the D.C Historic Preservation Division and at the Washingtoniana Division of the District of Columbia Public Library. In addition, the dismantling and reconstruction of the building will be fully documented through both written narrative and photographs.
- Archeology. An archeological survey of the property meeting the standards of the Federal and District Governments will be conducted.

- Contributions to the Community. ARC will clean, landscape, and maintain the District-owned public space immediately south of its property across E Street in accordance with plans to be approved by NCPC and the Commission of Fine Arts. If able to obtain the necessary approvals, ARC will also landscape and maintain the public park at the southwest corner of 21st and E Streets, NW, and improve the lighting and streetscape surrounding 2025 E Street. In addition, ARC will directly serve community residents by allowing residents access to its cafeteria and its shuttle bus to Metrorail stations. Upon request, community groups will be permitted to use ARC facilities for meetings.

Potential Traffic Impacts

The EAS information responds to several traffic-related issues raised by staff. The document evaluated trip distribution patterns at additional intersections. Results indicated that the intersections would operate at acceptable levels-of-service and that studied intersections would operate (Year 2001) at acceptable levels ranging from "A" to "C" during the AM and PM peak periods. The intersections included Constitution Avenue at 17th, 18th, and 19th Streets, and Virginia Avenue at 19th and 20th Streets. The EAS states that traffic associated with the ARC project and the International Monetary Fund expansion will not generate significant adverse impacts on the local road network. The report included analysis of the residential neighborhood immediately to the north and west of the subject property. Based on the current regional distribution of ARC employees by residence, the majority of employees at the subject building initially will be from Northern Virginia and the Maryland suburbs (primarily Montgomery County). Accordingly, peak period vehicular traffic can reasonably be expected to utilize primary routes, such as I-395, I-66, and U.S. Route 50. Within the area of the site, the most heavily used roadways would be Constitution Avenue, E Street and the E Street Expressway, 20th Street and 19th Street, NW. The configuration of the area roadway network to the north and west, and the traffic control devices and adjacent land uses along those roadways, would present no travel time advantage (i.e., would not reduce the amount of time it takes to get from the point of origin to the destination), which is typically the strongest mitigating factor against through-traffic intrusion into residential neighborhoods. Staff notes the analysis uses a 2-percent annual growth factor to account for the general growth of the area, based on past trends, and this appears sufficient to assess the general scope of traffic impacts.

Operational truck deliveries could occur on a 24-hour basis, given the emergency functions that ARC undertakes. However, most routine deliveries would occur during business hours. ARC envisions that larger-sized trucks would be scheduled generally during off-peak hours.

The EAS identified that contractors would use adjacent curb lanes, if necessary, during off-peak periods to minimize construction traffic impact.

In the EAS, the ARC program has identified that approximately 300 to 400 parking spaces will be provided. The Comprehensive Plan suggests a maximum of one space per five employees in this area,

giving a maximum of 367 spaces for the proposed building. Up to 400 spaces is acceptably close to this limit. ARC should make a strong effort through its Transportation Management Program to discourage reliance on private automobiles. Staff recommends addressing parking requirements through demand management strategies, since accommodating more vehicles would further contribute to congestion on the streets.

Considering the location of the site, there are no major pedestrian thoroughfares within the immediate area of the building. The EAS information indicated there are no commercial areas or other uses to which a large amount of pedestrian traffic is specifically drawn along a defined corridor (or corridors) in the vicinity of the project site. The only point of vehicle-pedestrian conflict would be at the garage entrance on 20th Street. Considering the size of the garage, the situation would be considerably less severe than occurs at numerous larger garages which are accessed off streets within the downtown area of the city.

Adequacy of the Environmental Assessment

An additional public comment issue has been the suitability of an Environmental Assessment evaluation of the project versus preparation of an Environmental Impact Statement.

An environmental assessment is a concise public document that has three defined functions. (1) It briefly provides sufficient evidence and analysis for determining whether to prepare an EIS; (2) it aids an agency's compliance with NEPA when no EIS is necessary, i.e., it helps to identify better alternatives and mitigation measures; and (3) it facilitates preparation of an EIS when one is necessary as specified at Section 1508.9(a) of the regulations.

The staff's evaluation of the project when initially submitted was that the potential environmental issues did not automatically qualify the project for preparation of an environmental impact statement. Consequently, the proper analysis in conformance with the Council of Environmental Quality's (CEQ) regulations was to prepare the environmental study to review the project with the primary objective of (1) and/or (2) above. Upon completion of the initial environmental assessment and the subsequent EAS, it was evident to staff that the level of environmental effects from this project were not significant as defined by the CEQ regulations. "Significant" as used in the regulations requires considerations of both context and intensity:

- **Context.** This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.
- **Intensity.** This refers to the severity of impact. Agencies are aware that more than one agency may make decisions about partial aspects of an action.

CEQ's regulations encourage public input into the environmental assessment process. The original EAS comment period provided by the Commission was January 25, 1999 to February 25, 1999. This period was then extended by an additional time period of 15 days based on public comments requesting an extension.

While the staff understands that some interested persons desired additional time for comments, it must also manage the NEPA review process in an orderly manner with respect for all of the interests involved, including the community desire for a timely decision. Based on the comments received (see attachments), staff found no additional or extraordinary issues or circumstances to evaluate beyond those already described and analyzed in the EAS.

COORDINATION

Coordinating Committee

The Coordinating Committee reviewed this item at its meeting on March 10, 1999, and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies present. The participating agencies were NCPC; the District of Columbia Office of Planning; the Fire Department; the Department of Housing and Community Development; the General Services Administration; the National Park Service; and the Washington Metropolitan Area Transit Authority.

Commission of Fine Arts

- Pursuant to P.L. 100-637, approval by the Commission of Fine Arts (CFA) is required for the project. CFA reviewed the project at its meeting on July 25, 1996 and approved the concept, requesting a future submission from ARC as the design is developed.
- CFA will review final site and building plans, but has declined the opportunity to review the excavation and foundation plans.

CONFORMANCE WITH THE COMPREHENSIVE PLAN

The existing building is deemed to have historic merit and a portion of it will be reconstructed in a new location on the site. The proposed modified structure would continue to front on E Street, NW, which is a designated Special Street. The proposed plans are consistent with applicable polices in the Preservation and Historic Features Element of the Comprehensive Plan relating to the preservation of historic properties and the protection and enhancement of Special Streets.

AMERICAN RED CROSS
2025 E STREET, NW
WASHINGTON, DC

**SHEETING, SHORING, EXCAVATION
AND FOUNDATION SUBMITTAL**

MARCH 1, 1999

ABBREVIATIONS

1	1/4" = 1'-0" SCALE
2	1/8" = 1'-0" SCALE
3	1/2" = 1'-0" SCALE
4	3/4" = 1'-0" SCALE
5	1" = 1'-0" SCALE
6	1 1/4" = 1'-0" SCALE
7	1 1/2" = 1'-0" SCALE
8	1 3/4" = 1'-0" SCALE
9	2" = 1'-0" SCALE
10	2 1/4" = 1'-0" SCALE
11	2 1/2" = 1'-0" SCALE
12	2 3/4" = 1'-0" SCALE
13	3" = 1'-0" SCALE
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93	23" = 1'-0" SCALE
94	23 1/4" = 1'-0" SCALE
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97	24" = 1'-0" SCALE
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116	28 3/4" = 1'-0" SCALE
117	29" = 1'-0" SCALE
118	29 1/4" = 1'-0" SCALE
119	29 1/2" = 1'-0" SCALE
120	29 3/4" = 1'-0" SCALE
121	30" = 1'-0" SCALE
122	30 1/4" = 1'-0" SCALE
123	30 1/2" = 1'-0" SCALE
124	30 3/4" = 1'-0" SCALE
125	31" = 1'-0" SCALE
126	31 1/4" = 1'-0" SCALE
127	31 1/2" = 1'-0" SCALE
128	31 3/4" = 1'-0" SCALE
129	32" = 1'-0" SCALE
130	32 1/4" = 1'-0" SCALE
131	32 1/2" = 1'-0" SCALE
132	32 3/4" = 1'-0" SCALE
133	33" = 1'-0" SCALE
134	33 1/4" = 1'-0" SCALE
135	33 1/2" = 1'-0" SCALE
136	33 3/4" = 1'-0" SCALE
137	34" = 1'-0" SCALE
138	34 1/4" = 1'-0" SCALE
139	34 1/2" = 1'-0" SCALE
140	34 3/4" = 1'-0" SCALE
141	35" = 1'-0" SCALE
142	35 1/4" = 1'-0" SCALE
143	35 1/2" = 1'-0" SCALE
144	35 3/4" = 1'-0" SCALE
145	36" = 1'-0" SCALE
146	36 1/4" = 1'-0" SCALE
147	36 1/2" = 1'-0" SCALE
148	36 3/4" = 1'-0" SCALE
149	37" = 1'-0" SCALE
150	37 1/4" = 1'-0" SCALE
151	37 1/2" = 1'-0" SCALE
152	37 3/4" = 1'-0" SCALE
153	38" = 1'-0" SCALE
154	38 1/4" = 1'-0" SCALE
155	38 1/2" = 1'-0" SCALE
156	38 3/4" = 1'-0" SCALE
157	39" = 1'-0" SCALE
158	39 1/4" = 1'-0" SCALE
159	39 1/2" = 1'-0" SCALE
160	39 3/4" = 1'-0" SCALE
161	40" = 1'-0" SCALE
162	40 1/4" = 1'-0" SCALE
163	40 1/2" = 1'-0" SCALE
164	40 3/4" = 1'-0" SCALE
165	41" = 1'-0" SCALE
166	41 1/4" = 1'-0" SCALE
167	41 1/2" = 1'-0" SCALE
168	41 3/4" = 1'-0" SCALE
169	42" = 1'-0" SCALE
170	42 1/4" = 1'-0" SCALE
171	42 1/2" = 1'-0" SCALE
172	42 3/4" = 1'-0" SCALE
173	43" = 1'-0" SCALE
174	43 1/4" = 1'-0" SCALE
175	43 1/2" = 1'-0" SCALE
176	43 3/4" = 1'-0" SCALE
177	44" = 1'-0" SCALE
178	44 1/4" = 1'-0" SCALE
179	44 1/2" = 1'-0" SCALE
180	44 3/4" = 1'-0" SCALE
181	45" = 1'-0" SCALE
182	45 1/4" = 1'-0" SCALE
183	45 1/2" = 1'-0" SCALE
184	45 3/4" = 1'-0" SCALE
185	46" = 1'-0" SCALE
186	46 1/4" = 1'-0" SCALE
187	46 1/2" = 1'-0" SCALE
188	46 3/4" = 1'-0" SCALE
189	47" = 1'-0" SCALE
190	47 1/4" = 1'-0" SCALE
191	47 1/2" = 1'-0" SCALE
192	47 3/4" = 1'-0" SCALE
193	48" = 1'-0" SCALE
194	48 1/4" = 1'-0" SCALE
195	48 1/2" = 1'-0" SCALE
196	48 3/4" = 1'-0" SCALE
197	49" = 1'-0" SCALE
198	49 1/4" = 1'-0" SCALE
199	49 1/2" = 1'-0" SCALE
200	49 3/4" = 1'-0" SCALE
201	50" = 1'-0" SCALE
202	50 1/4" = 1'-0" SCALE
203	50 1/2" = 1'-0" SCALE
204	50 3/4" = 1'-0" SCALE
205	51" = 1'-0" SCALE
206	51 1/4" = 1'-0" SCALE
207	51 1/2" = 1'-0" SCALE
208	51 3/4" = 1'-0" SCALE
209	52" = 1'-0" SCALE
210	52 1/4" = 1'-0" SCALE
211	52 1/2" = 1'-0" SCALE
212	52 3/4" = 1'-0" SCALE
213	53" = 1'-0" SCALE
214	53 1/4" = 1'-0" SCALE
215	53 1/2" = 1'-0" SCALE
216	53 3/4" = 1'-0" SCALE
217	54" = 1'-0" SCALE
218	54 1/4" = 1'-0" SCALE
219	54 1/2" = 1'-0" SCALE
220	54 3/4" = 1'-0" SCALE
221	55" = 1'-0" SCALE
222	55 1/4" = 1'-0" SCALE
223	55 1/2" = 1'-0" SCALE
224	55 3/4" = 1'-0" SCALE
225	56" = 1'-0" SCALE
226	56 1/4" = 1'-0" SCALE
227	56 1/2" = 1'-0" SCALE
228	56 3/4" = 1'-0" SCALE
229	57" = 1'-0" SCALE
230	57 1/4" = 1'-0" SCALE
231	57 1/2" = 1'-0" SCALE
232	57 3/4" = 1'-0" SCALE
233	58" = 1'-0" SCALE
234	58 1/4" = 1'-0" SCALE
235	58 1/2" = 1'-0" SCALE
236	58 3/4" = 1'-0" SCALE
237	59" = 1'-0" SCALE
238	59 1/4" = 1'-0" SCALE
239	59 1/2" = 1'-0" SCALE
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241	60" = 1'-0" SCALE
242	60 1/4" = 1'-0" SCALE
243	60 1/2" = 1'-0" SCALE
244	60 3/4" = 1'-0" SCALE
245	61" = 1'-0" SCALE
246	61 1/4" = 1'-0" SCALE
247	61 1/2" = 1'-0" SCALE
248	61 3/4" = 1'-0" SCALE
249	62" = 1'-0" SCALE
250	62 1/4" = 1'-0" SCALE
251	62 1/2" = 1'-0" SCALE
252	62 3/4" = 1'-0" SCALE
253	63" = 1'-0" SCALE
254	63 1/4" = 1'-0" SCALE
255	63 1/2" = 1'-0" SCALE
256	63 3/4" = 1'-0" SCALE
257	64" = 1'-0" SCALE
258	64 1/4" = 1'-0" SCALE
259	64 1/2" = 1'-0" SCALE
260	64 3/4" = 1'-0" SCALE
261	65" = 1'-0" SCALE
262	65 1/4" = 1'-0" SCALE
263	65 1/2" = 1'-0" SCALE
264	65 3/4" = 1'-0" SCALE
265	66" = 1'-0" SCALE
266	66 1/4" = 1'-0" SCALE
267	66 1/2" = 1'-0" SCALE
268	66 3/4" = 1'-0" SCALE
269	67" = 1'-0" SCALE
270	67 1/4" = 1'-0" SCALE
271	67 1/2" = 1'-0" SCALE
272	67 3/4" = 1'-0" SCALE
273	68" = 1'-0" SCALE
274	68 1/4" = 1'-0" SCALE
275	68 1/2" = 1'-0" SCALE
276	68 3/4" = 1'-0" SCALE
277	69" = 1'-0" SCALE
278	69 1/4" = 1'-0" SCALE
279	69 1/2" = 1'-0" SCALE
280	69 3/4" = 1'-0" SCALE
281	70" = 1'-0" SCALE
282	70 1/4" = 1'-0" SCALE
283	70 1/2" = 1'-0" SCALE
284	70 3/4" = 1'-0" SCALE
285	71" = 1'-0" SCALE
286	71 1/4" = 1'-0" SCALE
287	71 1/2" = 1'-0" SCALE
288	71 3/4" = 1'-0" SCALE
289	72" = 1'-0" SCALE
290	72 1/4" = 1'-0" SCALE
291	72 1/2" = 1'-0" SCALE
292	72 3/4" = 1'-0" SCALE
293	73" = 1'-0" SCALE
294	73 1/4" = 1'-0" SCALE
295	73 1/2" = 1'-0" SCALE
296	73 3/4" = 1'-0" SCALE
297	74" = 1'-0" SCALE
298	74 1/4" = 1'-0" SCALE
299	74 1/2" = 1'-0" SCALE
300	74 3/4" = 1'-0" SCALE
301	75" = 1'-0" SCALE
302	75 1/4" = 1'-0" SCALE
303	75 1/2" = 1'-0" SCALE
304	75 3/4" = 1'-0" SCALE
305	76" = 1'-0" SCALE
306	76 1/4" = 1'-0" SCALE
307	76 1/2" = 1'-0" SCALE
308	76 3/4" = 1'-0" SCALE
309	77" = 1'-0" SCALE
310	77 1/4" = 1'-0" SCALE
311	77 1/2" = 1'-0" SCALE
312	77 3/4" = 1'-0" SCALE
313	78" = 1'-0" SCALE
314	78 1/4" = 1'-0" SCALE
315	78 1/2" = 1'-0" SCALE
316	78 3/4" = 1'-0" SCALE
317	79" = 1'-0" SCALE
318	79 1/4" = 1'-0" SCALE
319	79 1/2" = 1'-0" SCALE
320	79 3/4" = 1'-0" SCALE
321	80" = 1'-0" SCALE
322	80 1/4" = 1'-0" SCALE
323	80 1/2" = 1'-0" SCALE
324	80 3/4" = 1'-0" SCALE
325	81" = 1'-0" SCALE
326	81 1/4" = 1'-0" SCALE
327	81 1/2" = 1'-0" SCALE
328	81 3/4" = 1'-0" SCALE
329	82" = 1'-0" SCALE
330	82 1/4" = 1'-0" SCALE
331	82 1/2" = 1'-0" SCALE
332	82 3/4" = 1'-0" SCALE
333	83" = 1'-0" SCALE
334	83 1/4" = 1'-0" SCALE
335	83 1/2" = 1'-0" SCALE
336	83 3/4" = 1'-0" SCALE
337	84" = 1'-0" SCALE
338	84 1/4" = 1'-0" SCALE
339	84 1/2" = 1'-0" SCALE
340	84 3/4" = 1'-0" SCALE
341	85" = 1'-0" SCALE
342	85 1/4" = 1'-0" SCALE
343	85 1/2" = 1'-0" SCALE
344	85 3/4" = 1'-0" SCALE
345	86" = 1'-0" SCALE
346	86 1/4" = 1'-0" SCALE
347	86 1/2" = 1'-0" SCALE
348	86 3/4" = 1'-0" SCALE
349	87" = 1'-0" SCALE
350	87 1/4" = 1'-0" SCALE
351	87 1/2" = 1'-0" SCALE
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353	88" = 1'-0" SCALE
354	88 1/4" = 1'-0" SCALE
355	88 1/2" = 1'-0" SCALE
356	88 3/4" = 1'-0" SCALE
357	89" = 1'-0" SCALE
358	89 1/4" = 1'-0" SCALE
359	89 1/2" = 1'-0" SCALE
360	89 3/4" = 1'-0" SCALE
361	90" = 1'-0" SCALE
362	90 1/4" = 1'-0" SCALE
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369	92" = 1'-0" SCALE
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373	93" = 1'-0" SCALE
374	93 1/4" = 1'-0" SCALE
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376	93 3/4" = 1'-0" SCALE
377	94" = 1'-0" SCALE
378	94 1/4" = 1'-0" SCALE
379	94 1/2" = 1'-0" SCALE
380	94 3/4" = 1'-0" SCALE
381	95" = 1'-0" SCALE
382	95 1/4" = 1'-0" SCALE
383	95 1/2" = 1'-0" SCALE
384	95 3/4" = 1'-0" SCALE
385	96" = 1'-0" SCALE
386	96 1/4" = 1'-0" SCALE
387	96 1/2" = 1'-0" SCALE
388	96 3/4" = 1'-0" SCALE
389	97" = 1'-0" SCALE
390	97 1/4" = 1'-0" SCALE
391	97 1/2" = 1'-0" SCALE
392	97 3/4" = 1'-0" SCALE
393	98" = 1'-0" SCALE
394	98 1/4" = 1'-0" SCALE
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