

FILE



U. S. DEPARTMENT OF JUSTICE
Office of Justice Assistance, Research, and Statistics

CATEGORICAL GRANT PROGRESS REPORT

This recordkeeping requirement falls under the authority of P.L. 96-511, Sec. 3507. The information provided will be used by grant monitors to track grant progress. No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing laws and regulations (OMB Circulars A-102 and A-110; Omnibus Crime Control and Safe Streets Act of 1968, as amended; Juvenile Justice and Delinquency Prevention Act of 1974, as amended; and the Justice System Improvement Act of 1979, as amended).

1. GRANTEE American Correctional Association		2. AGENCY GRANT NUMBER 13-1977456 <i>OB-SJ-CL-0003</i>	3. REPORT NO. 7
4. IMPLEMENTING SUBGRANTEE		5. REPORTING PERIOD (Dates) FROM: 5/1/90 TO: 10/31/90	
6. SHORT TITLE OF PROJECT Review and Evaluation of Revised National Standards and Accreditation		7. GRANT AMOUNT \$134,734	8. TYPE OF REPORT <input checked="" type="checkbox"/> REGULAR <input type="checkbox"/> SPECIAL REQUEST <input type="checkbox"/> FINAL REPORT
9. NAME AND TITLE OF PROJECT DIRECTOR Hardy Rauch, Director Standards and Accreditation		10. SIGNATURE OF PROJECT DIRECTOR <i>Hardy Rauch</i>	11. DATE OF REPORT 1-31-91

12. COMMENCE REPORT HERE (Continue on plain paper)

The enclosed material constitutes the final report for Grant 13-1977456 "Review and Evaluation of Revised National Standards and Accreditation."

Enclosed are copies of the first draft and the camera-ready copy of the "Sketchbook--Cost Implications of Third Edition Standards Adult Correctional Institutions." These documents were prepared in cooperation with Rod Miller of the Community Resource Services Inc. Also contained in this packet is a copy of the 3rd Edition ACI standards and a copy of the Cost Conditions of Confinement. All of these documents are interrelated and played important roles in the completion of this project.

The following project goals were completed.

- a) To field test the new 3rd edition manual format
- b) To compare and evaluate the costs and benefits of standards
- c) To identify the need for new standards and evaluate facility policy development
- d) To analyze the cost and benefit of accreditation around the nation
- e) To conduct a survey of correctional facilities
- f) To conduct a series of three public hearings concerning American Correctional Association standards and accreditation, to identify problem areas and positive results; to incorporate appropriate changes and modify procedures

13. CERTIFICATION OF RECEIPT BY GRANTEE CRIMINAL JUSTICE COUNCIL (Official signature)	14. DATE
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National Institute of Justice**

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g) Prepare final report.

The field test of the new third edition manual format was very successful. After mailing the manual out to correctional consultants, wardens of accredited facilities, and directors of corrections, the resulting volley of suggestions and comments helped us improve the final document. Also, in developing the 3rd edition manual the work of the Conditions of Confinement Committee established before the 3rd edition was developed was very instrumental in suggesting new techniques in writing and revising the standards.

The comparing and evaluating of the costs and benefits of the standards was an ongoing process. In developing the draft of the 3rd edition and review the cost implications of the Conditions of Confinement, all findings were interrelated and used to produce a final document. Those costs and benefits are contained in the final report and show that constructing in accordance with the 3rd edition ACI can, in many instances, produce a savings to departments of corrections. Throughout the entire project the need for new standards became very clear and one of the comments received from corrections professionals gave us the opportunity to evaluate some of the policy implications related to the existing standards.

Early in the process we conducted a national survey to analyze the costs and benefits of accreditation to corrections professionals across the country. The survey was mailed out to directors of corrections, both adult and juvenile, wardens and superintendents, and other correctional professionals involved in accreditation. Although there were comments concerning how the process could be improved, the overwhelming results of the survey showed that accreditation had benefitted their facilities and/or programs and they continue to support the development of new standards and the accreditation process.

One aspect of this project which has helped the standards and accreditation process immensely is the idea of conducting public hearings concerning standards. As a result of the first public hearing held at our ACA conference, the public hearing has now become a part of the overall picture of standards. The public hearings are held before the Standards Committee convenes and individuals have the opportunity to address standards or problems they see that may affect their facility or program. The Standards Committee members evaluate the information being shared with them and take it into consideration when deliberating on standards changes and/or developing new standards. The response of individuals wanting to participate in the public hearing has been overwhelming and the information shared from accredited facilities, ACA affiliates and concerned citizens has played an important role in shaping the standards.

This completes the review and evaluation of the national standards and accreditation process. I would like to thank the National Institute of Justice for their support of the Association and their confidence in our staff. Without your support this project would not have been possible. We hope that the resulting document will assist corrections professionals in building facilities which meet the American Correctional Association standards and also are constructed in a way that is cost effective and benefits corrections as a whole. Again I thank you for your support and look forward to working with you in the future.

Memorandum



Subject

Final Narrative Progress Reports
for Reading Room

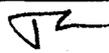
Date

July 31, 1991

To

NCJRS

From


Thomas Albrecht
OCRU

I am herewith forwarding two copies of the final narrative progress reports from grant number 88-SN-CX-0003, entitled "Correctional Standards Review and Evaluation".

Please log them in to your files and make copies available through the Reading Room.

If additional copies are needed, please either make them from these or let me know and I will have them duplicated from our file copies.

Report:

"Correctional Standards Review and Evaluation"

Cost Implications of Third Edition Standards

Adult Correctional Institutions

Prepared for the
American Correctional Association (ACA)

Laurel, Maryland

Prepared by

Community Resource Services, Inc. (CRS)

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Polytechnic University

Stephen A. Carter, AICP

Carter Goble Associates, Inc.

Sponsored by

The National Institute of Justice

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December, 1990

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This document was prepared for the American Correctional Association by CRS, Inc. This research effort was funded through grants from the National Institute of Justice, U.S. Department of Justice. The information in this document, nor the points of view expressed herein, do not necessarily reflect the official position of the American Correctional Association or the U.S. Department of Justice.

PREFACE:

This document examines the cost implications of the *physical plant* standards in the newly-released Standards for Adult Correctional Institutions, Third Edition, issued by the American Correctional Association (ACA) in January, 1990.

A key step in this process was the creation of a Standards Sketchbook that was created to stimulate discussion and to solicit comments from both the corrections and design communities. The contents of that interim document have been **incorporated** into this final report.

The text, tables and illustrations presented in this report not only describe the cost implications, but also:

- * describe the **differences** between the Second and Third Editions of the ACI standards;
- * illustrate the **design implications** of both sets of standards; and
- * portray the **range of practice** that might be possible under the old and new standards.

In addition to the Sketchbook, the NIJ/ACA Conditions of Confinement project has produced an initial research report, Research Findings and Recommendations, Conditions of Confinement: Physical Plant Standards Revision Adult Correctional Institutions (ACA). The NIJ/ACA project continues to contribute to the improvement of professional standards through the application of current research and knowledge.

Acknowledgements.

We wish to acknowledge the special efforts of Tom Albrecht (NIJ), Hardy Rauch and Jeff Washington (ACA) and Scott Higgins of the Federal Bureau of Prisons.

The authors are also grateful for the participation of many corrections and design professionals who have taken the time to review the initial Sketchbook and to offer their insights.

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I. Introduction to Third Edition Standards

The American Correctional Association (ACA) first published manuals of professional standards in the 1940's, but these were not widely adopted by the field. In 1969 a Ford Foundation grant allowed ACA to revisit standards, and by 1974 comprehensive new standards were being drafted.

Standards for Adult Correctional Institutions (ACI) were first promulgated in 1977; the Second Edition was released in 1981. Currently, ACA publishes seventeen manuals of standards.

The American Correctional Association began the revision of the Second Edition ACI Standards in 1986 with funds from the National Institute of Justice (NIJ). Part of the NIJ research initiative was intended to inform decision-making process with regard to the revision of physical plant standards. NIJ research explored several perspectives: environment and behavior; legal issues; construction and operating costs; and design practices.¹ This research was timely because it drew upon over a decade of field experience with professional standards.

The results of the NIJ research effort were used by the ACA Standards Committee to guide the revision of physical plant standards. Significant changes included a shift toward "performance standards" rather than static measures, and a major reorganization of the standards. Also, a series of checklists were developed that provide comprehensive views of conditions of confinement, working conditions and the "totality" of conditions. While not incorporated into the Third Edition standards, these are proving useful in the accreditation process.

Early in 1990, ACA commissioned the authors of this report to conduct a cost analysis of the physical plant standards in new Third Edition standards. This Sketchbook is the first step in that process.

1. Research Findings and Recommendations, Conditions of Confinement: Physical Plant Standards Revision Adult Correctional Institutions (ACI). Stephen Carter, Rod Miller and Richard Wener. National Institute of Justice, Washington, D.C. 1989

II. Approach

There are two distinct types of costs that are identified in this analysis: **capital** and **operating** costs.

Capital costs will address the initial construction costs associated with each standard. Operating costs will identify to long-term (30-year) implications associated with operation, maintenance and staffing.

This approach underscores the need to first analyze the **design implications** of changes in standards, from which corresponding capital and operating costs may be estimated. Therefore, considerable effort was dedicated to a comprehensive initial research exercise, through which design implications were identified.

Changes in Standards. We first compared the new standards with the former standards, identifying specific **changes**. This comparison is provided in detail in **Appendix B**.

Design implications. Next, we examined designs for over 200 facilities and used these as the basis for this analysis. Each design was examined to ascertain the extent to which each **complied with Second and Third Edition** standards. From these, we generated a series of illustrations that attempt to demonstrate specific facets that cause designs to comply--or fail to comply--with standards. These illustrations, which are presented in **Appendix C** of this document:

1. display the differences between the Second and Third Editions of the ACI standards;
2. illustrate the design implications of the Second and Third Editions; and
3. portray (or suggest) the range of practice that might be possible under the each edition.

The American Correctional Association distributed a Standards Sketchbook broadly throughout the corrections and design communities, including:

- * AIA Committee on Architecture for Justice
- * All Architects Whose Work is Presented in the Second Edition of the National Directory of Corrections Construction
- * State Departments of Corrections
- * ACA Standards Committee
- * Federal Bureau of Prisons
- * Accredited Facility Managers

Comments were assembled and collated, and illustrations were revised.

Cost implications were then examined for each category of the standards for which there was a change. Detailed analyses are provided in **Appendix A**, identifying both capital and operation cost implications.

A summary chart of cost implications is provided in this final report.

III. Summary of Changes in Standards

The Third Edition standards represent many significant changes with regard to physical plant issues. These range from overall changes in *format*, to the adoption of *performance standards* in lieu of static measurements.

Appendix B of this report provides a detailed comparison of the old and new standards; the actual text of both sets of standards is provided there.

The following **summary** highlights some of the more significant changes presented in the Third Edition.

Note: *The wording of some standards allowed several possible interpretations; where necessary, the research team was required to interpret standards. The team used responses to the Sketchbook to evaluate its interpretations.*

Facility Size.

New standard allows facilities to be larger than 500 beds, if they are subdivided into units of not more than 500 (old standard allowed only for separate institutions to share the same site).

Unit Size.

New standards provide guidance to establish appropriate unit size, and establish an upper limit of 80 for single-celled living units.

Inmate Housing.

A new approach is provided in the Third Edition standards. The requirement of 60 square feet per cell (or 50 square feet per occupant in minimum security multiple occupancy rooms/cells) is replaced by a performance standard of 35 square feet of unencumbered space per occupant. The new standards allow double-occupancy cells/rooms, but only for minimum security inmates. In multiple-occupancy rooms/cells, partitions are now required if there are more than four occupants.

Dayrooms.

The size of dayrooms may be based on the number of users under the new standards, and "circulation corridors" are no longer excluded from dayspace area calculations. Dayrooms must now be separated from sleeping spaces by a floor-to-ceiling partition/wall, and dayrooms must be immediately adjacent to sleeping areas. A minimum size (100 square feet) is established for any dayroom.

Natural Light.

Cells/Rooms. Two options for providing natural light to sleeping areas are defined. A minimum size for glazing or openings in cells/rooms is established, and inmates must be provided with a view to the outside, although the window to the outside need not be in the cell.

Dayrooms. Dayrooms must now provide natural light with a view to the outside, and a formula for the amount of glazing is established.

Toilets.

Overall, the ratio of toilets to occupants is increased from 1/8 to 1/12 (1/8 for females). Urinals may be substituted for some male toilets.

Wash Basins.

The ratio of wash basins to occupants is increased from 1/6 to 1/12 for some types of housing.

Special Management Housing.

Observation of inmates and the ability to converse with others is more clearly defined.

Exercise and Recreation.

A major restructuring of requirements is accomplished in the Third Edition.

Dining.

A new standard ties the adequacy of dining space to the amount of time allowed for inmate dining.

Staff Areas.

Third Edition standards require new provisions for areas to change clothes and shower, space for meals, privacy from inmates, access to exercise and physical training equipment, and toilets and wash basins.

These, and other changes, are described in detail in Appendix B.

IV. Cost Implications of New Standards

The Standards Sketchbook provided an opportunity to illustrate new and old standards, offering professionals the opportunity to compare their perceptions with those of the authors.

Having achieved an apparent consensus concerning the **design implications** of the new standards, we examined each change to identify its cost implications.

The charts in **Appendix A** provide our analysis in detail for each category of standard.

We have offered cost implication comments for the following categories and sub-categories:

Capital Costs, associated with initial design and construction--

- * **Area/Volume**, the amount of building area
- * **Construction**, the cost of materials and labor, including all built-in equipment and furnishings
- * **Equipment/Furnishings** that are not built-in
- * **Other** initial cost elements, such as site acquisition and development, design costs, fees

Operating Costs, that comprise the annual costs of operating and maintaining the facility--

- * **Utilities**, the costs of heating, cooling, electrical service, etc.
- * **Maintenance**, the cost of keeping the facility in operating condition, including labor and replacement of components
- * **Staffing**, the largest component of both operating costs, and long term "life-cycle" costs
- * **Other** annual cost elements

Summary Chart.

As the chart on the following page suggests, the new standards offer many opportunities to **reduce costs**, and in some instances, **may** result in increased costs.

Putting Capital and Operating Costs into Their "Life Cycle" Context.

The preceding chart suggests that the new ACI standards offer many **opportunities** to reduce both capital and operating costs in future designs.

While initial capital costs are of great concern, an analysis of 30-year "life-cycle costs" for correctional facilities demonstrates that capital costs comprise a very small fraction of the total costs.

The table below illustrates the relationship between capital--or "first" costs--and operating costs.

Analysis of First Costs and Operating Costs²

Illustration: Comparative Impact of Costs or Savings.

Using the life cycle cost analysis findings reported by Farbstein/Williams and Associates, the chart below describes the comparative relationship between first costs, operating costs, and the **impact of a ten percent (10%) change** in each cost element.

COMPARATIVE IMPACT OF COSTS/SAVINGS

Cost Category	Proportion of First Costs (Capital Costs)	Proportion of 30-Year Costs (Life-Cycle)	Impact of 10% Change on Total Costs
Capital Costs			
Fees	7%	0.6%	0.06%
Equipment	9%	0.8%	0.08%
Site Prep.	4%	0.4%	0.08%
Construction	80%	7.3%	0.7 %
Operating Costs			
Staffing	-	63.6%	6.4%
Maint/Oper.	-	18.2%	1.8%
Other	-	9.1%	0.9%

As the chart suggests, cost savings (or additional costs) that are prompted by the new ACI standards have varying impacts on overall costs. While a 10% cost savings in construction would yield only a 0.7% reduction in overall costs, a 10% savings in staffing could produce 6.4% savings.

2. Farbstein/Williams and Associates, Corrections Planning Handbooks, California Board of Corrections, 1981.

V. CONCLUSIONS.

It is impossible to provide a precise answer to the question "What are the cost implications of the new standards?" There are *too many variables* to be considered in attempting to answer such a question with a dollars and cents approach.

To conduct such an analysis, several assumptions would have to be made concerning:

- * **the design approach that would have been taken under the former standards (the range of practice was found to be very broad and was not consistent)**
- * **the design approach that will be taken using the new standards (although the new standards reduce many of the ambiguities, there are still many opportunities for varying practices)**

The chart on the preceding page suggests that actual cost implications will necessarily vary for each new facility, depending on the extent to which designers take advantage of the **new opportunities** offered by the standards, and the manner in which new requirements are handled to reduce additional costs.

Using the chart on page 6, we could suggest the following "best case" and "worst case" scenarios with regard to cost implications.

A "Best Case" Scenario.

If a designer wanted to take full advantage of potential cost savings from the standards, the new design would ensure maximum use of **new opportunities** offered in the following key areas of new standards:

- * facility size
- * inmate housing (space, occupancy)
- * natural light options for cells
- * toilets, wash basins
- * exercise

A "Worst Case" Scenario.

If a designer did not take advantage of potential cost savings, but the facility design triggered most of the potential additional costs, the following key areas of additional cost would be involved:

- * Unit size
- * Large multiple-occupancy cells/rooms
- * Natural light in dayrooms without exercising cell lighting options
- * Exercise areas for segregation units
- * Staff areas

In summary, while it is impossible to quantify with any accuracy the bottom-line costs or savings associated with the new ACI standards, we have demonstrated and highlighted the many opportunities that the new standards offer for reducing both capital and operating costs. The extent to which these savings are realized will depend on the resolve and the creativity of facility designers.

Appendix A: Cost Comparison Charts

TOPIC/SUBTOPIC: Facility Size

Summary of Standards Change: Allows facilities over 500 beds.

See Page: B-3

Additional Costs	Potential Savings
Capital Costs	
Area/Volume	Significant reduction in shared and support spaces
Construction	
Equipment/ Furnishings	Shared areas (e.g. kitchen, recreation, administration, visiting, etc.)
Other	<ul style="list-style-type: none"> * Site Acquisition and Development * Facility Planning, Siting and Design * Fees
Operating Costs	
Utilities	Less volume to be served
Maintenance	Less area to be maintained
Staffing	Significant savings possible, especially with support personnel, perimeter security, maintenance
Other	Administration and oversight costs from central office

Notes:

TOPIC/SUBTOPIC: Unit Size

Summary of Standards Change: Establishes a maximum size of 80 occupants for a unit.

See Page: B-4

	Additional Costs	Potential Savings
Capital Costs		
Area/Volume	More area if larger units were planned.	
Construction		
Equipment/ Furnishings	Could mean more units, therefore more common fixtures, furnishings e.g. nourishment stations)	
Other		
Operating Costs		
Utilities	More cost if more units (more area)	
Maintenance	If more units, more maintenance effort	Possible reduction of wear/tear and vandalism if this results in smaller units, with more control/less tension
Staffing	Could require more staffing if more units	Could be more staff efficient if smaller units are direct supervision and are operated by only one officer
Other		

Notes: Staffing considerations, a major component of life cycle costs, could go either way depending on design and management style.

TOPIC/SUBTOPIC: Inmate Housing: A.1 Single Occupancy

Summary of Standards Change: Shifts to a "unencumbered space" measurement (performance measure).

See Page: B-6 C-2 through C-6

Additional Costs

Potential Savings

Capital Costs

Area/Volume Might mean larger cells if design is not efficient

Can be achieved in same overall space of former standard.
(see drawing on page C-4)

Construction

**Equipment/
Furnishings**

Other

Operating Costs

Utilities

Maintenance

Staffing

Other

Notes: Cost implications will hinge on efficiency of design.

TOPIC/SUBTOPIC: Inmate Housing: A.2 Double Occupancy

Summary of Standards Change: Allows double celling for the first time (minimum security only).

See Page: B-6 C-7 through C-10

Additional Costs	Potential Savings
Capital Costs	
Area/Volume	Doubles allowed in minimum security. Can achieve in 93 square feet (vs. 120 SF for two singles)
Construction	Less cost if fewer cells built.
Equipment/ Furnishings	Less equipment/furnishings if fewer cells (e.g. toilets, desks)
Other	
Operating Costs	
Utilities	Less utility cost if less building area
Maintenance	Less maintenance if less building area and fewer fixtures and furnishings
Staffing	
Other	

Notes:

TOPIC/SUBTOPIC: Inmate Housing: A.3 Three Occupants

Summary of Standards Change: Performance standard (unencumbered space) instead of former static measure.

See Page: B-6 C-11 and C-12

Additional Costs

Potential Savings

Capital Costs

Area/Volume

Can reduce overall area for a triple cells/room

Construction

**Equipment/
Furnishings**

Other

Operating Costs

Utilities

Less utilities if less building area.

Maintenance

Less maintenance if less building area.

Staffing

Other

Notes:

TOPIC/SUBTOPIC: Inmate Housing: A.4 Four Occupants

Summary of Standards Change: Unencumbered space is measured rather than static square foot criteria.

See Page: B-6, B-8 CC-13 through C-15

Additional Costs

Potential Savings

Capital Costs

Area/Volume In certain design configurations more area is required.
(see page C-14)

If design is efficient, a smaller area can be realized
(see page C-15)

Construction

**Equipment/
Furnishings**

Other

Operating Costs

Utilities Possibly more area to heat/cool/light

Possibly less area.

Maintenance Possibly more area to maintain.

Possibly less area to maintain.

Staffing

Other

Notes: Cost implications will hinge on efficiency of design.

TOPIC/SUBTOPIC: Inmate Housing: A.5 Five or More Occupants

Summary of Standards Change: Measures unencumbered space rather than just area, and requires partition.

See Page: B-8 C-16 through C-19

Additional Costs

Potential Savings

Capital Costs

Area/Volume More area required.

Construction Partitions required
(See pages C-18 and C-19)

**Equipment/
Furnishings**

Other

Operating Costs

Utilities More area.

Maintenance More area to maintain, plus partitions.

Staffing

Other

Notes:

TOPIC/SUBTOPIC: Dayrooms: B.1 Separation from Cells/Rooms

Summary of Standards Change: Partition now required between cells/rooms and day space.

See Page: B-10 C-20 through C-22

Additional Costs

Potential Savings

Capital Costs

Area/Volume Partition required (see note below).

**Construction
Equipment/
Furnishings**

Other

Operating Costs

Utilities

Maintenance Partition required.

Staffing

Other

Notes: While new standard requires partition, most designs provide one anyway, therefore minimal impact projected.

TOPIC/SUBTOPIC: Dayrooms: B.2 Adjacent to Cells/Rooms

Summary of Standards Change: Requires dayroom to be immediately adjacent to cells/rooms.

See Page: B-10 C--23 and C-24

Additional Costs

Potential Savings

Capital Costs

Area/Volume

Construction

**Equipment/
Furnishings**

Other

Operating Costs

Utilities

Maintenance

Staffing

Other

Notes: This standard has significant design implications but does not necessarily have cost implications.

TOPIC/SUBTOPIC: Dayrooms: B.3 Size

Summary of Standards Change: (1) Establishes minimum size for dayroom (affects only two- or one-cell housing units).
(2) Now includes circulation in calculation of total space--allowing smaller area.

See Page: B-10 C-25 through 28

Additional Costs		Potential Savings
Capital Costs		
Area/Volume	In housing units of two cells or one cell.... a larger area is required (see note) (See page C-27)	Smaller dayrooms possible because circulation space is now counted toward total area.
Construction		
Equipment/ Furnishings		
Other		
Operating Costs		
Utilities	Larger area in very small housing units.	Smaller dayrooms possible.
Maintenance	Larger area in very small housing units.	Smaller dayrooms possible.
Staffing		
Other		

Notes: Increase area applies only to smallest housing units, which are rare in Adult Correctional Institutions.
Overall, cost savings are more likely.

TOPIC/SUBTOPIC: Cells-Natural Light: C.1 Window with View to Outside

Summary of Standards Change: Establishes minimum glazed area (3 square feet).

See Page: B-19 C-29 and C-30

Additional Costs

Potential Savings

Capital Costs

Area/Volume

Construction More glazing required.

**Equipment/
Furnishings**

Other

Operating Costs

Utilities

Maintenance More glazing to maintain.

Staffing

Other

Notes:

TOPIC/SUBTOPIC: Natural Light-Cells: C.2 Opening to Adjacent Interior Space

Summary of Standards Change: (1) Not allowed in cells in which inmates are confined for 10 or more hours.
(2) New standard clarifies this option, increasing likelihood of use.

See Page: B-19 C-31 through C-33

	Additional Costs	Potential Savings
Capital Costs		
Area/Volume	Now allowed for cells confining inmates for 10 or more hours (therefore more area likely)	Clarifies option, making use more likely, with significant design and area costs possible. *
Construction	Minimum glazing area established.	See note.
Equipment/ Furnishings		
Other		
Operating Costs		
Utilities	If greater than 10 hours, more area possible.	Less area possible (see note.)
Maintenance	More area, more glazing if over 10 hours.	Possibly less area (see note.)
Staffing	If design changes for over 10 hours, more staff possible.	Exercising this option offers potential staff savings (see note).
Other		

Notes: This standard clarifies the previous standard, describing specific ways in which "inboard" cells may be used in compliance with the standards. Previously, designers were apparently very hesitant to use the inboard option. If this is used more, major savings can be realized in overall facility footprint, area, design, layout, circulation and staffing.

TOPIC/SUBTOPIC: Natural Light: D. Dayrooms

Summary of Standards Change: New standards require natural light in dayroom (not required before).

See Page: B-21 C-34 through C-38

	Additional Costs	Potential Savings
Capital Costs		
Area/Volume	New standard may result in larger dayrooms. (see Page C-37 for situation in which area not increased)	See note below.
Construction	Dayroom glazing required.	
Equipment/ Furnishings		
Other		
Operating Costs		
Utilities	Possible additional cost if more area results.	
Maintenance	Possible, if more area results.	
Staffing		
Other		

Notes: As indicated on previous page, new standards may encourage more designs that incorporate "inboard" cells; such designs must incorporate natural light in the dayroom; therefore, there would be no impact of this standard in those cases.

TOPIC/SUBTOPIC: Toilets

Summary of Standards Change: In most instances, fewer toilets are required, and urinals may be substituted for some toilets.

See Page: B-12 C--39

Additional Costs	Potential Savings
<u>Capital Costs</u>	
Area/Volume	Fewer toilets will result in less area in cells.
Construction	Less toilets and substitution of urinals allowed.
Equipment/ Furnishings	
Other	
<u>Operating Costs</u>	
Utilities	Less area to exhaust.
Maintenance	Fewer fixtures to maintain.
Staffing	
Other	

Notes:

TOPIC/SUBTOPIC: Wash Basins: Table B

Summary of Standards Change: Fewer wash basins required.

See Page: B-13 C-40

Additional Costs	Potential Savings
<u>Capital Costs</u>	
Area/Volume	Possibly less area because of fewer fixtures.
Construction	Fewer fixtures.
Equipment/ Furnishings	
Other	
<u>Operating Costs</u>	
Utilities	Possibly less area.
Maintenance	Fewer fixtures to maintain.
Staffing	
Other	

Notes:

TOPIC/SUBTOPIC: Outdoor Exercise: Chart C

Summary of Standards Change: Establishes amount of area based on number of users, with 1500 SF minimum rather than 2 acres.

See Page: B-27 C-40

Additional Costs	Potential Savings
Capital Costs	
Area/Volume	
Construction	Less fencing, perimeter.
Equipment/ Furnishings	Less equipment for smaller areas.
Other	Possible savings in site acquisition and development.
Operating Costs	
Utilities	
Maintenance	Less equipment and less area to maintain.
Staffing	Smaller areas will likely require less staff.
Other	

Notes:

TOPIC/SUBTOPIC: Indoor Exercise: Chart C

- Summary of Standards Change:**
- (1) Allows covered/enclosed space rather than "indoor."
 - (2) Size based on number of users and minimum size reduced from 6,000 SF to as little as 500 SF (depending on facility size).
 - (3) Ceiling height reduced from 22 to 18 feet.

See Page: B-27 C-40

Additional Costs	Potential Savings
Capital Costs	
Area/Volume	Less area required.
Construction	Less area, and covered/enclosed an option.
Equipment/ Furnishings	Smaller areas to equip/furnish.
Other	
Operating Costs	
Utilities	Less area, and covered/enclosed offers option to have quasi-exterior space.
Maintenance	Less area.
Staffing	Smaller areas may require less staff, and smaller areas are more likely to be provided immediately adjacent to housing, offering substantial staffing efficiency.
Other	

TOPIC/SUBTOPIC: Exercise, Segregation: Chart C

Summary of Standards Change: Requires outdoor and covered/enclosed, but size to be based on number of users at one time, and amount of space per user is reduced from 35 SF to 15 SF.

See Page: B-27 C-40

	Additional Costs	Potential Savings
<u>Capital Costs</u>		
Area/Volume	Two types of spaces required.	Spaces could be smaller using new standards.
Construction	Two types of spaces required.	
Equipment/ Furnishings	More spaces to equip/furnish	
Other	Could have site implications because of requirement for outdoor areas.	
<u>Operating Costs</u>		
Utilities	More area to heat/cool.	Possible reduction in area.
Maintenance	More area, and two types of areas.	Possibly less area.
Staffing		
Other		

Notes:

TOPIC/SUBTOPIC: Special Management Housing: Staff Observation and Conversing

Summary of Standards Change: (1) requires ability for occupants to be observed by staff (rather than requiring doors that permit observation;
(2) Requires inmates to be able to converse with staff (rather than other inmates).

See Page: B-59-60

	Additional Costs	Potential Savings
<u>Capital Costs</u>		
Area/Volume		
Construction	Could require more glazing.	Could require less glazing.
Equipment/ Furnishings		
Other		
<u>Operating Costs</u>		
Utilities		
Maintenance	Possibly more glazing.	Possibly more glazing.
Staffing		
Other		

Notes: Cost implications will hinge on efficiency of design.

TOPIC/SUBTOPIC: Dining

Summary of Standards Change: Measures adequacy of dining space in terms of amount of time allowed for inmate meals, where there was no previous standard.

See Page: B-30

Additional Costs

Potential Savings

Capital Costs

Area/Volume Potentially more area involved.

Construction

**Equipment/
Furnishings**

Other

Operating Costs

Utilities

Maintenance

Staffing

Other

Notes: Cost implications will hinge on efficiency of design.

TOPIC/SUBTOPIC: Staff Areas.

Summary of Standards Change: Adds requirements for area to change clothes and shower, space for meals, privacy from inmates, access to exercise/physical training equipment, toilets and wash basins.

See Page: B-36

Additional Costs		Potential Savings
Capital Costs		
Area/Volume	More areas required.	
Construction	More area, built in features.	
Equipment/ Furnishings	More area to equip/furnish and more activities to accomodate.	
Other		
Operating Costs		
Utilities	More area.	
Maintenance	More area and equip/furnishings.	
Staffing		Possible impact on staff turnover?
Other		

Notes: Cost implications will hinge on efficiency of design, and design efficiency.

Appendix B: Detailed Comparison of 2nd and 3rd Edition Standards

<u>Page</u>	<u>Topic(s)</u>
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B-2	Fire Codes
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B-6	Location, Inmate Housing, Inmate Sleeping Areas
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B-10	Dayrooms, Space
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B-29	Visiting
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B-33	Housekeeping, Clothing and Supplies
B-34	Personal Property, Mechanical Equipment, Commissary/Canteen
B-35	Admin. and Staff Areas
B-36	Accessibility of Handicapped, Security, Control Center
B-37	Perimeter Security
B-38	Entrances and Exits, Security Equipment Storage

APPENDIX B: COMPARISON OF SECOND AND THIRD EDITION STANDARDS

The following pages provide a detailed comparison of the new (third edition) and old (second edition) standards. The comparison offers the **new** standard first (starting at the far left margin) followed by the text of corresponding **old** standards (indented). A **summary of changes** follows each comparison.

The text of each standard is presented in **bold print**, while comments are in regular print.

One major change in the new standards is a reorganization that allows each new standard to address one or two specific issues; many of the second edition standards addressed more than 10 issues in one standard. Therefore, in this comparison, we have deleted portions of such standards that do not address the new standard; these instances are designated with a series of periods (...) to denote that text of the old standard has been deleted.

New Standard

Old Standard

Summary of Changes

Section A

Building and Safety Codes

3-4120 (Ref. 2-4153)

The institution conforms to applicable federal, state, and/or local building codes. (Renovation, Addition, New Construction Only)

Comment: Conformance with codes is indicated by licensing or, in cases where a license is not issued, by letters or certificates of compliance. If the agency is not subject to local building codes, appropriate state or national codes must be applied.

2-4153 Renovation, addition, new plant

The institution conforms to applicable federal, state, and local building codes. (Essential)

DISCUSSION: Often a state or local jurisdiction will license an institution; this licensing indicates compliance with all building codes. In those cases in which a license is not issued, letters or certificates of compliance are acceptable. In the event the agency is not subject to local building codes, appropriate state or national codes will be applied to the institution.

Changes: No change.

Fire Codes

3-4121 (Ref. 2-4162) Mandatory

The institution conforms to applicable federal, state, and/or local fire safety codes. Compliance is documented by the authority having jurisdiction. A fire alarm and automatic detection system are required, as approved by the authority having jurisdiction, or there is a plan for addressing these or other deficiencies within a reasonable time period. The authority approves any variances, exceptions, or equivalencies that do not constitute a serious life safety threat to the occupants of the facility.

Comment: The applicable fire safety code(s) must be comprehensive, ensure basic protection of life, and include the use of fire detention and alarm systems in all habitable areas of the facility. The applicable code(s) should be applied to all areas of the facility. Reports of periodic inspections and any actions taken in respect to those inspections must be available.

2-4155 Renovation, addition, new plant.

There is documentation by a qualified source that the interior finishing material in inmate living areas, exit areas, and places of public assembly are in accordance with recognized national fire safety codes.

DISCUSSION: No institutional furnishing, ceilings, partitions, or floors should be constructed of foamed plastics or foamed rubber unless the fire performance characteristics of the material are known and acceptable. (See related standard 2-4166)

Interpretation March 1983 (Mandatory). This standard applies only to renovations, additions, and new plant construction. Definitions of interior finishing materials are contained in the **Life Safety Code** for new correctional occupancies at Section 14-3.3. Class A, B, and C types of interior finish are discussed in Section 6-5 of the **Code**. These criteria apply to new plant construction or to renovations to existing facilities whose plans were approved after January 1, 1982. (See also 2-4166.)

2-4162 Revised January 1984 (Mandatory). There is documentation by an independent authority having jurisdiction that the institution complies with applicable fire safety code(s).....

Changes: Specific reference to interior furnishes is dropped; combined with 2-4162.

Size, Organization, and Location

Staff/Inmate Interaction

3-4122 (Ref. 2-4153-1)

**Physical plant design facilitates personal contact interaction between staff and inmates.
(Renovation, Addition, New Construction Only)**

Comment: Separation of supervising staff from inmates reduces interpersonal relationships and staff awareness of conditions on the housing unit. Staff effectiveness is limited if the only staff available are isolated in control centers as observers or technicians in charge of electronic management systems.

2-4153-1 Added August 1984. Addition, new plant

Physical plant design facilitates personal contact and interaction between staff and inmates.

DISCUSSION: Separation of supervising staff from inmates reduces interpersonal relationships and staff awareness of conditions on the living unit. Staff effectiveness is limited if the only staff available are isolated in control centers as observers or technicians in charge of electronic management systems. Designs incorporating security barriers should be used only for living units that house inmates who have demonstrated an inability to interact positively with staff or inmates. (See related standards 2-4182-2 and 2-4182-4.)

Changes: Last sentence of discussion deleted (security barriers.)

Facility Size

3-4123 (Ref. 2-4127) * See also 3-4124

Institutions of more than 500 inmates are divided into distinct, semi-autonomous management units that encourage positive staff/inmate interactions. Staff within each management unit are delegated the authority to make decisions regarding security classification, services, and programs for inmates within the unit.

Comment: Dividing facilities into distinct management units promotes decision-making and delivery of services and programs on a scale that is responsive to inmates' needs. This enhances the safety of staff and inmates, improves inmate behavior, and increases the effectiveness of programs and services.

2-4127 Existing, renovation, addition

Institutions of more than 500 inmates are subdivided into units of not more than 500 inmates each which are staffed by a unit manager and the number and variety of personnel required to provide the program services and custodial supervision needed for each unit. (Essential)

DISCUSSION: Units of 500 or less inmates permit programs to be conducted on a smaller, more manageable scale and decisions affecting inmates to be made by those personnel who know them best. Such units should be semi-autonomous as related to matters within the unit, counseling services and intra-institution classification, and custodial supervision. (See related standard 2-4160)

2-4160 New plants

The institution is designed to accommodate no more than 500 inmates. (Essential)

DISCUSSION: A correctional institution should be small enough so that it can maintain security without excessive regimentation, surveillance, and control equipment. An inmate population of no more than 500 helps ensure efficient administration and adequate attention to inmates' needs. When two or more institutions are planned for the same site, they may share central services such as power plant, utilities, central purchasing, warehousing, laundry, firehouse, food preparation, etc. (See related standard 2-4127)

Changes: *Deletes reference in discussion to shared central services. Allows sharing of more than just common site. Requires delegation of authority for specific decisions.*

Unit Size

3-4124 (Ref. 2-4127) *See also 3-4123

The maximum size of a single management unit is variable and is based on the characteristics of its inmate population but does not exceed 500 inmates. The exact size of each management unit is determined by (1) the security classification of the inmate occupants (higher security levels require smaller unit size), and (2) the ability of staff to complete regular security checks, maintain visual and auditory contact, maintain personal contact and interaction with inmates, and be aware of unit conditions.

Comment: The scale of the management unit should facilitate and encourage the involvement of all staff in decision-making.

2-4127 Existing, renovation, addition

Institutions of more than 500 inmates are subdivided into units of not more than 500 inmates each which are staffed by a unit manager and the number and variety of personnel required to provide the program services and custodial supervision needed for each unit. (Essential)

DISCUSSION: Units of 500 or less inmates permit programs to be conducted on a smaller, more manageable scale and decisions affecting inmates to be made by those personnel who know them best. Such units should be semi-autonomous as related to matters within the unit, counseling services and intra-institution classification, and custodial supervision. (See related standard 2-4160)

Changes: Provides guidance--as performance objectives (security classification, staff checks and interaction)--to establish size of management unit.

3-4125

Single cell living units shall not exceed 80 inmates. (New Construction Only)

Comment: None

No Second Edition counterpart.

Changes: New standard establishes upper limit for single-cell living units.

Note: Appears to allow non-single housing units to be greater than 80 (e.g. 25, 4-person minimum security rooms could share one dayroom)

Rated Capacity

3-4126 (Ref. 2-4128)

The number of inmates does not exceed the facility's rated bed capacity.

Comment: Rated bed capacity is considered to be the original design capacity, plus or minus capacity changes resulting from building additions, reductions, or revisions.

2-4128 Existing, renovation, addition, new plant

The population assigned to housing units does not exceed the rated bed capacity of the facility. (Essential)

DISCUSSION: The original plan for the facility should be examined to determine its rated bed capacity. If remodeled since original construction, the latest blueprints or plans for inmate housing should be used.

Changes: No substantive change.

Location

3-4127 (Ref. 2-4161)

The institution is located within 50 miles of a civilian population center of at least 10,000 people, or minimally within one hour's driving time of a hospital, fire protection, and public transportation.

(New Construction Only)

Comment: Proximity to a civilian population center is essential in order to augment the services provided directly by the institution, to provide greater recruitment and training opportunities for staff, to accommodate visitors, and to provide educational and employment opportunities for inmates on work or study release.

2-4161 New Plants

The institution is located within 50 miles of a civilian population center of at least 10,000 people, or minimally within one hour driving time of a hospital, fire protection, and public transportation. **(Essential)**

DISCUSSION: Proximity to a civilian population center is essential in order to augment the services provided directly by the institution, to provide greater recruitment and training opportunities for staff, to accommodate visitors, and to provide educational and employment opportunities for inmates on work or study release. Nearby social agencies, schools, colleges, universities, and hospitals are potentially valuable resources for a correctional institution.

Changes: Last line of discussion deleted.

Inmate Housing

Inmate Sleeping Areas

Occupancy and Space Requirements

3-4128 (Ref.2-4129, 2-4131, 2-4152)

Single cells are required for all security levels except minimum. All cells or sleeping areas in which inmates are confined conform with the following requirements:

Number of Occupants

Amount of Unencumbered Space

1

35 S.F.

2-50

(minimum custody status only)

35 S.F. per occupant*

*** Sleeping area partitions required if more than 4 people in one sleeping area.**

When confinement exceeds 10 hours per day there are at least 80 square feet of total floor space per occupant. "Unencumbered space" is usable space that is not encumbered by furnishings or fixtures. At least one dimension of the unencumbered space is no less than 7 feet. In determining unencumbered space, all fixtures must be in operational position and must provide the following minimum areas per person: bed, plumbing fixtures, desk, and locker.

Comment: The standard encourages design flexibility and creativity by relating cell size to the amount of unencumbered, or free, space provided by the design. Unencumbered space is determined by multiplying the length and width of the cell/room and subtracting from that figure the total number of square feet encumbered by bed(s), plumbing fixtures, desk(s), locker(s), and other fixed equipment. Measurements should be made with equipment and furnishings in their normal use position (i.e., to discourage Murphy beds).

2-4129 Revised August 1984. Existing, renovation, addition, new plant
For general population housing, only one inmate occupies a room or cell designed for single occupancy which has a floor area of at least 60 square feet, provided inmates spend no more than 10 hours per day locked in. When confinement exceeds 10 hours per day, there are at least 80 square feet of floor space.

DISCUSSION: The institution should provide for humane care. Single cells or rooms provide privacy and enable inmates to personalize living space. Less personal living space is required for inmates who have programs and activities available to them through the institution.

Interpretation August 1983. Cell space is measured from interior wall to interior wall less the space occupied by plumbing chases and columns. It includes the space occupied by beds, desks, plumbing fixtures, closets, and entrances and exits.

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* A minimum floor area of 50 square feet per occupant in the sleeping area and a clear floor to ceiling height of not less than eight feet....

DISCUSSION: Where multiple occupancy housing cannot be avoided, as in dormitories, or where it is used in minimum security conditions as a preferred living situation, the number of inmates rooming together should be kept as low as possible. All inmates placed in multiple occupancy housing should be carefully screened by the classification committee or other authorized group prior to assignment. (See related standards 2-4152, 2-4401, and 2-4405)

Interpretation August 1983. This standard applies to existing facilities of any security classification. For purposes of renovation, addition, or new plant construction, multiple occupancy can be used only for minimum security conditions as indicated in standard 2-4152. Multiple occupancy or dormitory space is measured from interior wall to interior wall less areas restricted to access and egress and excluding bathrooms or showers. Sleeping space available is determined by dividing total space by the number of inmates assigned to the space. Total space includes the space occupied by beds, desks, closets, and partitions but does not include dayroom space.

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

* A minimum floor area of 60 square feet....

DISCUSSION: Housing units for minimum custody inmates can and should be constructed economically. Individual rooms are preferred to dormitory-type construction.

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

* Single occupancy rooms or cells with a floor area of at least 80 square feet....

DISCUSSION: None. (See related standard 2-4130 and standards in Special Management Inmates.)

2-4152 Renovation, addition, new plant
Planning precludes the use of dormitories for inmate housing in maximum, close, or medium security institutions. (Essential)

DISCUSSION: Although the initial construction costs of single cell institutions may be high, there are several significant long-term advantages to this type construction. Supervision costs are generally lower; single cell housing units are usually safer for both inmates and staff; and single celled institutions are more flexible in their ability to accommodate different types of inmates. (See related standard 2-4131)

- Changes:** * from 50 or 60 square feet per cell, to a new performance objective that measures unencumbered area, and requires a minimum 7 foot dimension
- * allows double occupancy cells in minimum security
 - * requires partitions in multiple occupancy cells with more than 4 occupants
 - * deletes requirement for 8 foot floor-to-ceiling dimension
 - * deletes requirement that inmates in multiple rooms be continuously observed

Furnishings (inmate housing areas)

3-4129 (Ref. 2-4130)

Each inmate confined to a cell/room for 10 or more hours daily is provided a sleeping area with the following: a sleeping surface and mattress at least 12 inches off the floor; a writing surface and proximate area to sit; storage for personal items; and a place to suspend clothes. Each inmate confined to a cell/room for less than 10 hours daily is provided a sleeping area with the following: a sleeping surface and mattress at least 12 inches off of the floor; storage for personal items; and a place to suspend clothes.

Comment: None

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...A bed at above-floor level, desk, hooks or closet space, chair or stool

DISCUSSION: ...The bed should be elevated from the floor and have a clean, covered mattress with blankets provided as needed.

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Access to a locker or private storage space for each occupant
(Important)

DISCUSSION:(See related standards 2-4152, 2-4401, and 2-4405)

2-4132 Revised March 1983. Existing, renovation, addition, new plant
 When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

- * ...A bunk at above-floor level, desk, hooks or closet space, chair or stool

DISCUSSION: Housing units for minimum custody inmates can and should be constructed economically. Individual rooms are preferred to dormitory-type construction.

2-4135 Revised August 1986. Existing, renovation, addition, new plant
 The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...A bunk at above floor level, desk or writing space, and stool

DISCUSSION: None. (See related standard 2-4130 and standards in Special Management Inmates.)

Changes:

- * *each inmate confined for more than 10 hours daily are provided with a place to suspend clothes in addition to other furnishings previously required*
- * *each occupant confined for less than 10 hours daily must also be provided with a place to suspend clothes*
- * *a desk is no longer required in sleeping rooms in which inmates are confined for less than 10 hours*

Dayrooms

Space Requirements

3-4130 (Ref. 2-4137, 2-4158)

Dayrooms with space for varied inmate activities are situated immediately adjacent to the inmate sleeping areas but are separated from them by a floor-to-ceiling wall.

Dayrooms provide a minimum of 35 square feet of space per inmate (exclusive of lavatories, showers, and toilets) for the maximum number of inmates who use the dayroom at one time, and no dayroom encompasses less than 100 square feet of space (exclusive of lavatories, showers, and toilets).

Comments: While the standard establishes a minimum square footage for any dayroom, total square footage is calculated for the maximum number of users at one time rather than the total number of inmates served.

2-4137 Existing, renovation

There is separate day room leisure time space for each general population housing unit.

(Essential)

DISCUSSION: Day rooms equivalent to a minimum of 35 square feet per inmate should be available to all inmates for reading, writing or table games. Tables should be provided which may also be used for dining. Circulation corridors in front of cells/rooms are not to be considered day room/leisure time space. (See related standard 2-4158)

2-4158 Addition, new plant

There is separate dayroom/leisure time space for each general population housing unit containing 35 square feet of floor space per inmate exclusive of circulation corridors in front of cells/rooms. (Essential)

DISCUSSION: Dayrooms should have enough floor space to allow for a variety of activities, such as reading, writing, table games, and television. Circulation corridors in front of cells/rooms should not be included in computing dayroom area. (See related standard 2-4137)

- Changes:**
- * allows size of dayroom to be calculated based on number of users at one time**
 - * drops exclusion of "circulation corridor in front of cells" in calculating dayroom area**
 - * adds requirement that dayrooms be separated from sleeping areas by a floor-to-ceiling partition**
 - * adds requirement that dayrooms be immediately adjacent to sleeping areas**
 - * adds minimum size of 100 square feet for any dayroom**

Furnishings (dayroom)**3-4131 (Ref. 2-4137)**

Dayrooms provide sufficient seating and writing surfaces for every inmate using the dayroom at one time. Dayroom furnishings are consistent with the custody level of the inmates assigned.

Comments: The standard provides managers and designers with flexibility in designing and furnishing dayrooms and takes into consideration the range of activities that may occur (e.g., dayroom activities usually include television viewing, reading, recreation, conversation, and games, and sometimes include eating and work). In lower security settings, the use of "normalized" furnishings should be considered.

2-4137 Existing, renovation

There is a separate day room leisure time space for each general population housing unit.

(Essential)

DISCUSSION: Day rooms equivalent to a minimum of 35 square feet per inmate should be available to all inmates for reading, writing or table games. Tables should be provided which may also be used for dining. Circulation corridors in front of cells/rooms are not to be considered day room/leisure time space. (See related standard 2-4158)

Changes: * *adds requirement for enough seating and writing surfaces for all inmates who will use dayroom at one time*
* *requires furnishings be consistent with level of security*

Toilets

3-4132 (Ref. 2-4130)

Inmates have access to toilets and hand-washing facilities 24 hours per day and are able to use toilet facilities without staff assistance when they are confined in their cells/sleeping areas.

Toilets are provided at a minimum ratio of one for every 12 inmates in male facilities and one for every 8 inmates in female facilities. Urinals may be substituted for up to one-half of the toilets in male facilities. All housing units with three or more inmates have a minimum of two toilets.

Comments: The standard ensures the availability of toilets and requires a measure of privacy and control for users. At the same time the standard provides flexibility for designers and managers, who have increased options for "dry" cells if toilet facilities are accessible by other means (for example, pushbutton locks on cells for use during night hours). Creative design approaches that increase privacy and decrease management problems associated with congregate facilities (for example, creation of a series of "single occupancy" toilet areas) are encouraged.

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * Sanitation facilities including access to a toilet above floor level that is available for use without staff assistance 24 hours a day; and a wash basin with hot and cold running water....

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Toilet and shower facilities at a minimum of one operable toilet and shower for every eight occupants...

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water...

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...Sanitation facilities, including access to above-floor toilet facilities available for use without staff assistance 24 hours per day;
- * Hot and cold running water

Changes: * increase ratio of toilets to occupants from 1/8 to 1/12 for male occupants

* allows urinals to be substituted for some toilets

* requires minimum of two toilets for 3 or more occupants

Wash Basins

3-4133 (Ref. 2-4130)

Inmates have access to operable wash basins with hot and cold running water in the housing units at a minimum ratio of one basin for every 12 occupants.

Comment: Provision must be made for inmate access in cells or sleeping area, dayrooms, and other parts of the facility.

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * Sanitation facilities including access to a toilet above floor level that is available for use without staff assistance 24 hours a day; and a wash basin with hot and cold running water....

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* ...One operable wash basin with hot and cold running water for every six occupants

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water....

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

* ...Hot and cold running water...

Changes: Increases the ratio of wash basins to occupants from 1/6 to 1/12 for some types of housing.

Showers

3-4134 (Ref. 2-4268)

Inmates have access to operable showers with temperature-controlled hot and cold running water at a minimum ratio of one shower for every 8 inmates. Water for showers is thermostatically controlled to temperatures ranging from 100 degrees Fahrenheit to 120 degrees Fahrenheit to ensure the safety of inmates and to promote hygienic practices.

Comment: Offenders can use scalding showers as a weapon against, or punishment for, other inmates. Also, accidental injury could occur when cold water is drawn in other areas, thereby unexpectedly elevating the hot water in showers to scalding temperatures. Water temperatures below 100 degrees Fahrenheit are uncomfortable and may deter an individual from pursuing good hygienic practices. The temperature controls should not preclude the use of water at higher temperatures, if needed, in other areas of the institution, such as kitchens.

2-4268 There are sufficient bathing facilities in the housing areas to permit inmates in the general population to shower at least three times per week. (Essential)

DISCUSSION: Ideally, each inmate should be permitted to shower daily; however, no inmate should be permitted to shower less than three times per week. Inmates in special jobs, such as food service, medical, sanitation or mechanical service, should be encouraged to bathe daily. Hot and cold water shower facilities should be available in the proportion of at least one shower unit to 15 inmates.

2-4269 Water for shower facilities is thermostatically controlled to ensure the safety of the inmates. (Essential)

DISCUSSION: Inmates can use scalding showers as a weapon against or punishment for other inmates. An inmate could be forced under a hot shower or scalded when other inmates turn on all the cold water; therefore, temperature controls are necessary for the safety of inmates. These temperature controls should not preclude the use of water at a higher temperature, if needed, in other areas of the institution, such as the kitchen.

2-4131 Revised August 1984. Existing, renovation, addition, new plant

Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* ...Toilet and shower facilities at a minimum of one operable toilet and shower for every eight occupants...

2-4132 Revised March 1983. Existing, renovation, addition, new plant

When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water....

***Changes:** Maintains the ratio of showers at occupants to 1/8, and defines the temperature range for showers.*

Special Management Housing

3-4135 (Ref. 2-4135, 2-4136)

Segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation cells/rooms permit the inmates assigned to them to converse with and be observed by staff members.

Comment: None

2-4135 Revised August 1986. Existing, renovation, addition, new plant

The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions...

DISCUSSION: None. (See related standard 2-4130 and standards in Special Management Inmates.)

2-4136 Existing, renovation, addition, new plant

The segregation rooms permit inmates assigned to them to converse with others in the same housing unit and have doors which permit observation by staff. (Essential)

DISCUSSION: Although inmates may be physically separated from the general population, they should be allowed to talk to other inmates assigned to the same housing unit or to staff members. Total isolation as punishment for a rule violation is not an acceptable practice. When exceptions occur, they should be justified by clear and substantiated evidence and fully documented.

Changes: * requires the ability to be observed by staff (rather than requiring doors that permit observation)

* requires inmates to be able to converse with staff (not with other inmates)

3-4136 (Ref. 2-4135)

All cells/rooms in segregation provide a minimum of 80 square feet, of which 35 square feet is unencumbered space.

Comment: Segregated inmates are confined in cells/rooms for more extended periods during the day. Therefore the cell/room must provide additional space for in-cell activity.

2-4135 Revised August 1986. Existing, renovation, addition, new plant

The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

*...Single occupancy rooms or cells with a floor area of at least 80 square feet...

DISCUSSION: None. (See related standard 2-4130 and standards in Special Management Inmates.)

Changes: Adds requirement for unencumbered space in cell/room.

Housing for Handicapped

3-4137 (Ref. 2-4145)

Handicapped inmates are housed in a manner that provides for their safety and security. Rooms, cell, or housing units used by the handicapped are designed for their use and provide for integration with the general population. Appropriate institution programs and activities are accessible to handicapped inmates confined in the facility.

Comment: If the institution accepts handicapped individuals, it must provide for their housing and use of facility resources.

2-4145 Existing, renovation, addition, new plant

Handicapped inmates are housed in a manner which provides for their safety and security. Cells or housing units used by them are designed for their use, and provide the maximum possible integration with the general population. Appropriate institution programs and activities are accessible to handicapped inmates confined in the facility. (Essential)

DISCUSSION: Severely physically handicapped inmates may be housed in special facilities. When the institution accepts handicapped individuals, provision must be made for their housing and for their use of facility resources.

Changes: *Deletes reference to "maximum possible integration" and adds reference to rooms.*

Section D

Environmental Conditions

Light levels

General

3-4138 (Ref. 2-4154)

Lighting throughout the facility is determined by the tasks to be performed, interior surface finishes and colors, type and spacing of light sources, outside lighting, and shadows and glare.

Comment: None

2-4154 Renovation, addition, new plant

There is documentation by an independent, qualified source that ventilation is at least 10 cubic feet of outside or recirculated filtered air per minute, per human occupant, for cell blocks and guard stations, and 20 cubic feet per minute for eating halls. Lighting requirements for the facility are determined by the tasks to be performed, interior surface finishes and colors, type and spacing of light sources, outside lighting, and shadows and glare. (Important)

DISCUSSION: Mechanical ventilation may provide for recirculation of outside air except where prohibited by codes. The outdoor air requirements may be reduced to a minimum of 33 percent of the specified ventilation air quantity if adequate temperature control is provided, in addition to filtering equipment, so that the maximum allowable concentration of particles entering the space is reduced to acceptable limits. In no case should the outdoor air quantity be less than five cubic feet per minute per person. Lighting requirements vary based on many factors. In keeping with conservative measures, lighting should not exceed 50 footcandles at work stations, 30 footcandles in work areas, and 10 footcandles in nonwork areas, unless specifically required by the task (e.g., surgery, drafting, food preparation, accounting, or close work.)

Changes: *Deletes discussion.*

Inmate Rooms/Cells

3-4139 (Ref. 2-4130)

Lighting in inmate rooms/cells is at least 20 footcandles at desk level and in personal grooming areas, as documented by an independent qualified source.

Comment: None

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - lighting is at least 20 footcandles at desk level and in the personal grooming area....;

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - lighting is at least 20 footcandles at desk level and in the personal grooming area....;

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

- ...Documentation by an independent, qualified source that
 - lighting is at least 20 footcandles at desk level and in the personal grooming area...;

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - lighting is at least 20 footcandles at desk level and in the personal grooming area...;

Changes: No substantive changes.

Natural Light

Inmate Rooms/Cells

3-4140 (Ref. 2-4130, 2-4135)

All inmate rooms/cells provide access to natural light.
(Existing, Renovation, Addition Only)

Comment: None

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...Natural light...

DISCUSSION: ... Natural lighting should be available either from cell or room windows to the exterior or from a source within 20 feet of the room or cell.

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* ...Natural light...

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

* ...Natural light...

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

* ...Natural light...

Changes: No changes (see next standard)

3-4141 (Ref. 2-4130)

Inmates in general population who are confined in their room/cells for 10 or more hours daily have access to natural light by means of an opening or a window of at least 3 square feet with a view to the outside. Inmates in general population who are confined in their rooms/cells for less than 10 hours daily have access to natural light through an opening or window as described above, or through an opening or a window of at least 3 square feet between their room/cell and an adjacent space. (New Construction Only)

Comment: Natural light should be available from an opening or window that has a view to the outside or from a source within 20 feet of the room/cell.

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

* ...Natural light...

DISCUSSION: ... Natural lighting should be available either from cell or room windows to the exterior or from a source within 20 feet of the room or cell.

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* ...Natural light...

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

* ...Natural light...

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

* ...Natural light...

- Changes:**
- * defines two options for providing natural light
 - * adds requirement for a view to the outside
 - * requires 3 square feet of glazing/opening in cell
 - * requires window with view to outside for occupants confined for more than 10 hours daily

Dayrooms, Natural Light

3-4142

Each dayroom provides a minimum of 12 square feet of transparent glazing with a view to the outside, plus 2 additional square feet of glazing per inmate whose room/cell does not contain an opening or window with a view to the outside.

(New Construction Only)

Comment: Many inmates spend most daylight hours outside of their cells, often in their dayroom, and the standard gives designers increased options for providing natural light.

Changes: New standard; requires natural light in dayroom and establishes minimum amounts of glazing.

Noise Levels

3-4143 (Ref. 2-4130)

Noise levels in inmate housing units do not exceed 70 dBA (A Scale) in daytime and 45 dBA (A Scale) at night.

Comment: None

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - ...noise levels do not exceed 70 decibels in daytime and 45 decibels at night.

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - noise levels that do not exceed 70 decibels in daytime and 45 decibels at night.

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

- noise levels do not exceed 70 decibels in daytime and 45 decibels at night.

2-4135 Revised August 1986. Existing, renovation, addition, new plant

The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

*** ...Documentation by an independent, qualified source that**

- ...noise levels do not exceed 70 decibels in daytime and 45 decibels at night.

Changes: No substantive change

Indoor Air Quality

3-4144 (Ref. 2-4154)

Circulation is at least 15 cubic feet of outside or recirculated filtered air per minute per occupant for cells/rooms, officer stations, and dining areas, as documented by an independent, qualified source.

(Renovation, Addition, New Construction Only)

Comment: Mechanical ventilation may provide for recirculation of outside air except where prohibited by codes. The outside air requirements may be reduced to a minimum of 33 percent of the specified ventilated air quantity if adequate temperature control is provided in addition to filtering equipment so that the maximum concentration of particles entering the space is reduced to acceptable limits. In no case should the outdoor air quantity be less than 5 cubic feet per minute per person.

2-4154 Renovation, addition, new plant

There is documentation by an independent, qualified source that ventilation is at least 10 cubic feet of outside or recirculated filtered air per minute per human occupant, for cell blocks and guard stations, and 20 cubic feet per minute for eating halls. Lighting requirements for the facility are determined by the tasks to be performed, interior surface finishes and colors, type and spacing of light sources, outside lighting, and shadows and glare. (Important)

DISCUSSION: Mechanical ventilation may provide for recirculation of outside air except where prohibited by codes. The outdoor air requirements may be reduced to a minimum of 33 percent of the specified required ventilation air quantity if adequate temperature control is provided, in addition to filtering equipment, so that the maximum allowable concentration of particles entering the space is reduced to acceptable limits. In no case should the outdoor air quantity be less than five cubic feet per minute per person....

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per human occupant;

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per occupant;

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per occupant;

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - circulation is at least 10 cubic feet of fresh or purified air per minute;

Changes: Requirements for eating areas are reduced from 20 to 15; requirements are increased from 10 to 15 in other areas--for renovation, addition and new construction.

3-4145 (Ref. 2-4154)

Circulation is at least 10 cubic feet of fresh or recirculated filtered air per minute per occupant for inmate rooms/cells, officer stations, and dining areas, as documented by an independent, qualified source. (Existing)

Comment: None

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

- * ...Documentation by an independent, qualified source that**
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per human occupant;**

2-4131 Revised August 1984. Existing, renovation, addition, new plant
Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that**
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per occupant;**

2-4132 Revised March 1983. Existing, renovation, addition, new plant
When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that**
 - circulation is at least 10 cubic feet of outside or recirculated filtered air per minute per occupant;**

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that**
 - circulation is at least 10 cubic feet of fresh or purified air per minute;**

Changes: Expands requirement in existing facilities to include officer stations and eating halls.

Heating and Cooling

3-4146 (Ref. 2-4130)

Temperatures in indoor living and work areas are appropriate to the summer and winter comfort zones.

Comment: Temperature and humidity should be capable of being mechanically raised or lowered to an acceptable comfort level.

2-4130 Revised August 1986. In general population housing, each room or cell has, at a minimum, the following facilities and conditions:

* ...Documentation by an independent, qualified source that

- temperatures are appropriate to the summer and winter comfort zones;

DISCUSSION: ...Suggested temperatures are 66 to 80 degrees F in the summer comfort zone, optimally 71 degrees, and 61 to 73 degrees in the winter comfort zone, optimally 70 degrees.

2-4131 Revised August 1984. Existing, renovation, addition, new plant

Where used, multiple occupancy room houses no less than three and no more than 50 inmates each who are screened for suitability to group living prior to admission. Multiple occupancy rooms are continuously monitored and staff are available to inmates at all times. Multiple occupancy rooms provide the following facilities and conditions:

* ...Documentation by an independent, qualified source that

- temperatures are appropriate to the summer and winter comfort zones; and

2-4132 Revised March 1983. Existing, renovation, addition, new plant

When minimum security institutions or minimum security areas within larger institutions provide individual rooms, they provide key control shared by the occupants and staff, or continuous access to toilet and shower facilities and hot and cold running water, including drinking water. Rooms also provide the following facilities and conditions:

* ...Documentation by an independent, qualified source that

- lighting is at least 20 footcandles at desk level and in the personal grooming area;

2-4135 Revised August 1986. Existing, renovation, addition, new plant
The segregation housing units provide living conditions that approximate those of the general inmate population; all exceptions are clearly documented. Segregation housing units provide the following facilities and conditions:

- * ...Documentation by an independent, qualified source that
 - ...temperatures are appropriate to the summer and winter comfort zones; and

Changes: Expands standard to include living areas (not just cells/rooms) and work areas; deletes comments which offered temperature ranges.

Section E

Program and Service Areas

Exercise and Recreation

3-4147 (Ref. 2-4138, 2-4156, 2-4157)

Outdoor and covered/enclosed exercise areas for general population inmates are provided in sufficient number to ensure that each inmate is offered at least one hour of access daily. Use of outdoor areas is preferred, but covered/enclosed areas must be available for use in inclement weather. Covered/enclosed exercise areas can be designed for multiple uses as long as the design and furnishings do not interfere with scheduled exercise activities.

The minimum space requirements for exercise areas are as follows:

Outdoor exercise areas--

15 square feet per inmate for the maximum number of inmates expected to use the space at one time, but not less than 1,500 square feet of unencumbered space;

Covered/enclosed exercise areas in institutions of 100 or more inmates--

15 square feet per inmate for the maximum number of inmates expected to use the space at one time, with a minimum ceiling height of 18 feet, but not less than 1,000 square feet of unencumbered space;

Covered/enclosed exercise areas in institutions of less than 100 inmates--

15 square feet per inmate for the maximum number of inmates expected to use the space at one time, with a minimum ceiling height of 18 feet, but not less than 500 square feet of unencumbered space.

Comment: Exercise/recreation spaces are not the same as dayrooms, although dayrooms can provide additional opportunities for some exercise and recreation activities. The standard establishes performance requirements for exercise spaces, offering design and operational flexibility. It allows institutions in some climates to cover and/or enclose a yard, while others will have to provide indoor space; these spaces do not have to be "indoor" but must be fully functional when the outdoor areas are not feasible for use.

2-4138 Existing, renovation

Space outside the cell or room is provided for inmate exercise. (Essential)

DISCUSSION: Indoor and outdoor exercise areas should be secure and available to all inmates. Exercise space is not a walkway or a "bull pen" area in front of rooms or cells. (See related standards 2-4156, 2-4157, and 2-4232)

2-4156 Renovation, addition, new plant

There is a separate indoor space for vigorous exercise in inclement weather; this space is no less than 60 X 100 feet with a ceiling height of no less than 22 feet. (Important)

DISCUSSION: The indoor recreation space which is provided for indoor exercise and activity should be at least large enough to accommodate inmates who wish to lift weights, play basketball, do calisthenics, etc.

2-4157 Renovation, addition, new plant

There is a minimum of two acres of outdoor recreation space for each inmate unit of up to 500 inmates; additional outdoor recreation space is provided at the rate of 90 square feet per inmate over 500. (Essential)

DISCUSSION: Recreation opportunities provide healthful, relaxing activities for inmates, and create outlets for reducing tension. Recreation areas should contain space and equipment for track, weight lifting, baseball, handball activities, etc., to provide for a variety of interests. (See related standard 2-4458)

Changes: Major restructuring of approach to this issue, acknowledging size of facility and number of users expected at one time. See Chart C on page 44.

3-4148 Ref. 2-4159)

The minimum space requirements for outdoor and covered/enclosed exercise areas for segregation units are as follows:

15 square feet per inmate expected to use the space at one time, with a minimum ceiling height of 18 feet in covered/enclosed areas, but not less than 500 square feet of unencumbered space.

Comment: None

2-4159 Revised August 1986. Administrative segregation housing units have an area outside the room or cell for indoor exercise; this area has a minimum of 350 square feet of floor space and at least 35 square feet of floor space for each inmate who is exercising at any one time. **DISCUSSION:** Inmates in administrative segregation should have ample exercise space outside their cells or rooms since most jurisdictions permit inmates outside of the cell for at least one or two hours. (See related standard 2-4232.)

NOTE: Regarding standards for Safety and Emergency Procedures -- See **Appendix A, Implementation of Fire Safety Standards**

Changes: *Expands standard to include indoor or covered/enclosed spaces, increases the minimum size for an exercise area requiring measurement of unencumbered space, and uses number of inmates to use the space at one time as the measure.*

Visiting

3-4149 (Ref. 2-4140)

Sufficient space is provided for a visiting room or area for contact visiting and, if necessary, noncontact visiting. There is adequately designed space to permit screening and searching of both inmates and visitors. Space is provided for the proper storage of visitors' coats, handbags, and other personal items not allowed into the visiting area.

Comment: None

2-4140 Existing, renovation, addition, new plant

There is a visiting room or area for contact visiting and, if necessary, a visiting area for noncontact visiting, both of which provide a reasonable degree of privacy. (Essential)

DISCUSSION: While security must be observed, some degree of privacy can enhance the value of visits for both the inmate and the visitor. There should be separate restrooms for inmates and visitors, both male and female. There should be adequately designed space to permit screening and searching of both inmates and visitors. Space should be provided for the proper storage of visitors' coats, handbags, and other possessions not allowed into the visiting area. (See related standard 2-4383)

Changes: *Deletes reference to "reasonable degree of privacy" and adds requirement for screening, search and storage areas.*

Classrooms

3-4150 (Ref. 2-4139)

In institutions offering academic and vocational training programs, the classrooms are designed in cooperation with school authorities. (Renovation, addition, new construction)

DISCUSSION: Space requirements that afford safe learning and mobility are necessary in both the educational and vocational areas.

2-4139 Revised August 1984. Renovation, addition, new plant

In institutions offering academic and vocational training programs, the classrooms are designed in cooperation with school authorities.

DISCUSSION: Space requirements that afford safe learning and mobility are necessary in both the educational and vocational areas. (See related standard 2-4423.)

Changes: No change.

Dining

3-4151

Dining space is sufficient to serve all inmates in four or fewer shifts per meal while giving each inmate the opportunity to have at least 20 minutes of dining time for each meal.

Comment: None

No Second Edition counterpart.

Changes: New standard that measures adequacy of dining space in terms of amount of time allowed for inmate meals.

Food Service

Food Preparation Areas

3-4152 (Ref. 2-4143)

The food preparation area includes a space for food preparation based on population size, type of food preparation, and methods of meal service.

Comment: None

2-4143 Existing, renovation, addition, new plant

The food preparation and dining area includes a space for food preparation based on population size. (Important)

DISCUSSION: Excluding the food storage area, kitchen floor space should be the equivalent of 10 square feet per inmate; this may be reduced proportionally for larger facilities. Kitchen equipment and food storage facilities should be sufficient for the quantity of food prepared. (See related standard 2-4249)

Changes: Adds consideration of type of food preparation and method of meal service.

Food Storage

3-4153 (Ref. 2-4247)

There are sanitary, temperature-controlled facilities for the storage of all foods.

Comment: None

2-4247 There are sanitary, temperature-controlled storage facilities for the storage of all foods. (Essential)

DISCUSSION: Suitable storage facilities should be available so that shelf goods can be stored at temperatures of 45 to 80 degrees Fahrenheit, refrigerated foods maintained at 35-40 degrees Fahrenheit, and frozen foods kept at zero degrees Fahrenheit or below.

Changes: Deletes discussion.

Sanitation and Hygiene (food service)

3-4154 (Ref. 2-4245)

Toilet and wash basin facilities are available to food service personnel and inmates in the vicinity of the food preparation area.

Comment: None

2-4245 Toilet and wash basin facilities are available to food service personnel and inmates in the vicinity of the food preparation area. (Essential)

DISCUSSION: Ready access to toilet and wash basin facilities should be available to all persons in the food service and food preparation area in order to ensure that health and safety standards are adhered to.

Changes: Deletes discussion.

Housekeeping

3-4155 (Ref. 2-4147)

Adequate space is provided for janitorial closets accessible to the living and activity areas. The closets are equipped with a sink and cleaning implements.

Comment: None

2-4147 Existing, renovation, addition, new plant

Space is provided for janitor closets, which are equipped with a sink and cleaning implements.
(Essential)

DISCUSSION: Cleaning equipment and supplies should be stored in a supervised area accessible to inmates so that they can clean their living and activity area.

Changes: Adds requirement that closets be accessible to living and activity areas and deletes discussion.

Clothing and Supplies

3-4156 (Ref. 2-4148)

Space is provided in the institution to store and issue clothing, bedding, cleaning supplies, and other items required for daily operations.

Comment: None

2-4148 Existing, renovation, addition, new plant

There is storage rooms in the institution for clothing, bedding, and cleaning supplies.
(Essential)

DISCUSSION: Space should be provided in the institution to store and issue clean clothing, bedding and other supplies required for daily operations.

Changes: Adds requirement for space to issue of items, and deletes discussion.

Personal Property

3-4157 (Ref. 2-4149)

Space is provided for storing the personal property of inmates safely and securely.

Comment: None

2-4149 Existing, renovation, addition, new plant

There is storage space available for the personal property of inmates. (Essential)

DISCUSSION: Safe and secure storage is required to ensure accountability for personal property of inmates.

Changes: Adds requirement for safe and secure storage in standard, deletes discussion.

Mechanical Equipment

3-4158 (Ref. 2-4150)

Separate and adequate space is provided for mechanical and electrical equipment.

Comment: None

2-4150 Existing, renovation, addition, new plant

Separate and adequate space is provided for mechanical equipment. (Essential)

DISCUSSION: Sufficient space should be provided for equipment needed for heating, ventilating, air conditioning, water supply, waste removal, electricity, communications, etc. In smaller facilities, space for this equipment should constitute no more than 12 percent of all floor space. In facilities of up to 100,000 square feet, about eight percent of all floor space should be allocated for this equipment.

Changes: Deletes discussion.

Commissary/Canteen

3-4159 (Ref. 2-4141)

Space is provided for an inmate commissary or canteen, or provisions are made for a commissary service.

Comment: None

2-4141 Existing, renovation, addition, new plant

Space is provided for an inmate commissary or canteen, or provisions are made for a mobile commissary service. (Essential)

DISCUSSION: An area should be provided near inmate housing quarters where inmates can purchase personal items. The size of the canteen should be commensurate with the size of the inmate population. When security considerations dictate, staff members may take movable carts to cell blocks instead. (See related standard 2-4049)

Changes: *Deletes requirement for mobile service, deletes discussion.*

Section F

Admin. and Staff Areas

Administrative Areas

3-4160 (Ref. 2-4144)

Adequate space is provided for administrative, security professional, and clerical staff; this space includes conference rooms, storage room for records, public lobby, and toilet facilities.

Comment: None

2-4144 Existing, renovation, addition, new plant

Space is provided for administrative, custodial, professional and clerical staff; this space includes conference rooms, employee lounge, storage room for records, public lobby and toilet facilities. (Essential)

DISCUSSION: Space should be provided for general administrative functions and for the comfort of staff.

Changes: *Deletes discussion.*

Staff Areas

3-4161 (Ref. 2-4144)

Staff needs are met through providing adequate spaces in locations that are convenient for use. Staff are provided with the following:

- * an area to change clothes and shower
- * an area, room, and/or employee lounge that offers privacy from inmates and provides space for meals
- * access to exercise/physical training facilities and equipment
- * space for training
- * space for shift change briefings
- * toilets and wash basins that are not used by inmates.

Comment: None

2-4144 Existing, renovation, addition, new plant

Space is provided for administrative, custodial, professional and clerical staff; this space includes conference rooms, employee lounge, storage room for records, public lobby and toilet facilities. (Essential)

DISCUSSION: Space should be provided for general administrative functions and for the comfort of staff.

Changes: * adds requirements for--

- area to change clothes and showers
- space for meals
- privacy from inmates
- access to exercise/physical training equipment
- toilets and wash basins

Accessibility to Handicapped

3-4162 (Ref. 2-4146)

All parts of the facility that are accessible to the public are accessible to and useable by handicapped staff and visitors.

Comment: None

2-4146 Existing, renovation, addition, new plants

All parts of the facility which are accessible to the public are accessible to and usable by handicapped staff and visitors. (Important)

DISCUSSION: Section 504 of the Rehabilitation Act of 1973 and the Architectural Barriers Act of 1968, and implementing regulations should be referred to in the implementation of these requirements.

Changes: *Deletes discussion.*

Section G

Security

Control Center

3-4163 (Ref. 2-4181)

Space is provided for a 24-hour control center for monitoring and coordinating the institution's security, safety, and communications systems. The control center provides access to a wash basin and toilet.

Comment: The control center should contain sufficient space for monitoring and coordination of all internal and external security systems, communications systems, safety alarms and detection systems, and other mechanical and electrical systems.

2-4181 The institution maintains a control center to provide order and security. (Essential)
DISCUSSION: A central control is essential for integrating various security and communications functions. The control center should be staffed around the clock, and access to it should be limited. The control center should monitor and take responsibility for inmate counts, key control, and the coordination of the institution's internal and perimeter security network. It should serve also as the communications center for the institution. The control center should monitor the operation of various systems: fire alarm, public address, smoke and thermal detection, radio, teletype, computer terminal, surveillance alarms, walk and perimeter lighting, and other mechanical and electrical systems. (See related standard 2-4164)

Changes: Requires 24-hour center, and access to wash basin and toilet.

Perimeter Security

3-4164 (Ref. 2-4178, 2-4142)

The institution's perimeter is controlled by appropriate means to provide that inmates remain within the perimeter and to prevent access by the general public without proper authorization.

Comment: The means chosen to ensure perimeter security should reflect the facility's needs based on size and the degree of security required. Perimeter surveillance can be maintained through watch towers, mechanical surveillance devices (e.g., electronic, pressure, or sound detection systems), mobile patrols, or some combination of these techniques. All areas adjacent to the perimeter should be visible under all conditions.

2-4178 There is surveillance of all areas adjacent to the perimeter of the institution. (Essential)

DISCUSSION: A surveillance plan helps to ensure greater security for the institution. It should reflect surveillance needs based on institution size and the degree of security required. Operative surveillance can be maintained through the use of watch towers, mechanical surveillance devices, mobile patrols or some combination of these techniques. Some technical systems operate on electronic, pressure, or sound detection basis. Lighting should be sufficient to provide visibility under all conditions; there should be no blind spots.

2-4142 Existing, renovation, addition, new plant

If the institution has watchtowers, they are placed so that they permit an unobstructed view of the grounds and perimeter and are equipped with the weaponry, lighting, sighting, and communications devices necessary for effective execution of their function. (Essential: maximum and medium security facilities only)

DISCUSSION: Security personnel assigned to both watchtowers and mobile patrol units should have and be trained in the use of appropriate equipment to prevent or deal with escapes and disturbances. Each watchtower or mobile patrol unit should have the following, at a minimum: appropriate weapons, searchlights, binoculars, a whistle, pager, or other warning device, and an open channel of communication with other towers, mobile patrol units, and central control. Watchtowers should not be placed more than 500 feet apart, should contain toilet and drinking facilities, and should have adequate heat and ventilation. (See related standards 2-4096 and 2-4186)

Changes: *Combines two standards and broadens language to require a performance standard (controlling perimeter and access).*

Entrances and Exits

3-4165 (Ref. 2-4179)

Pedestrians and vehicles enter and leave at designated points in the perimeter. Safety vestibules and sally ports constitute the only breaches in the perimeter of maximum security institutions.

Comment: None

2-4179 Revised August 1983. Safety vestibules and sally ports constitute the only breaches in the institution's perimeter security. (Maximum security facilities only)

DISCUSSION: All pedestrian and vehicular entrances and exits to the institution should be via sally port arrangements. These should be operated remotely from the watchtower. Where possible, vehicular and pedestrian entrances should be located near each other to reduce the number of ground-level staff needed to check vehicles and visitors and to avoid the dispersal of fence openings.

Changes: *Adds requirement that pedestrian and vehicles enter and leave at designated points.*

Security Equipment Storage

3-4166 (Ref. 2-4189)

Firearms, chemical agents, and related security items are stored in a secure but readily accessible depository outside of inmate housing and activity areas.

Comment: None

2-4189 Firearms, chemical agents and related security equipment are stored in a secure but readily accessible depository outside inmate housing and activity areas and are inventoried at least monthly to determine their condition and expiration dates. (Essential)

DISCUSSION: The institution should maintain an arsenal for the secure storage and maintenance of all its firearms, ammunition, chemical agents, and other security devices. The arsenal should be located outside the inmate housing and activities area. Written policy should specify who has access to the arsenal.

Changes: Deletes requirement for monthly inventory and deletes discussion.

Appendix C: Illustrations of Old vs. New Standards

<u>Page</u>	<u>Topic(s)</u>	(Compliance Codes) (Old/New)
C-1	Introduction, Key	
C-2	A. Cells 1. Single Occup	YY YY
C-3		YY YY
C-4		NN NY
C-5		YN YN
C-6		YN NY
C-7	A. Cells 2. Double Occupancy	NY NY
C-8		NY NY
C-9		NN NN
C-10		NN NN
C-11	A. Cells 3. Three Occupants	YY NN
C-12		YN NY
C-13	A. Cells 4. Four Occupants	YY YY
C-14		NN YN
C-15		NY
C-16	A. Cells 5. 5 or More Occupants	YY
C-17		NN
C-18		YN
C-19		YN
C-20	B. Dayrooms 1. Sep frm Cells/Rms	YY
C-21		YN
C-22		NN
C-23	B. Dayrooms 2. Adj to Cell/Rms	YY
C-24		YN
C-25	B. Dayrooms 3. Size	YY
C-26		NN
C-27		YN
C-28		NY
C-29	C. Cells, Natural Light	
	1. Window w/View to Outside	YY NN
C-30		YN YN
C-31	C. Cells, Natural Light	
	2. Opening to Adjacent Interior Space	YY YY
C-32		NN NN
C-33		YN
C-34	D. Dayrooms, Natural Light	YY
C-35		YN
C-36		YN
C-37		YN
C-38		YN
C-39	V. Tables and Charts Table A: Toilets	
C-40	Table B: Wash Basins, Chart C: Exercise and Recreation	

Appendix C: Illustrations

The following pages present revised drawings that graphically depict several of the key standards issues and changes.

These were initially presented in a working document, the Standards Sketchbook. After broad distribution, review and comment, some changes were made in the initial drawings.

Notes.

Each of the following drawings are derived from operating facilities. In some cases changes were made to highlight an issue.

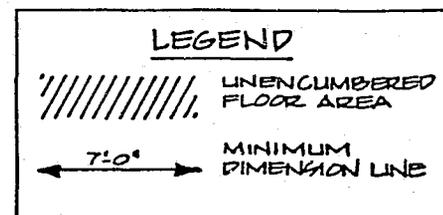
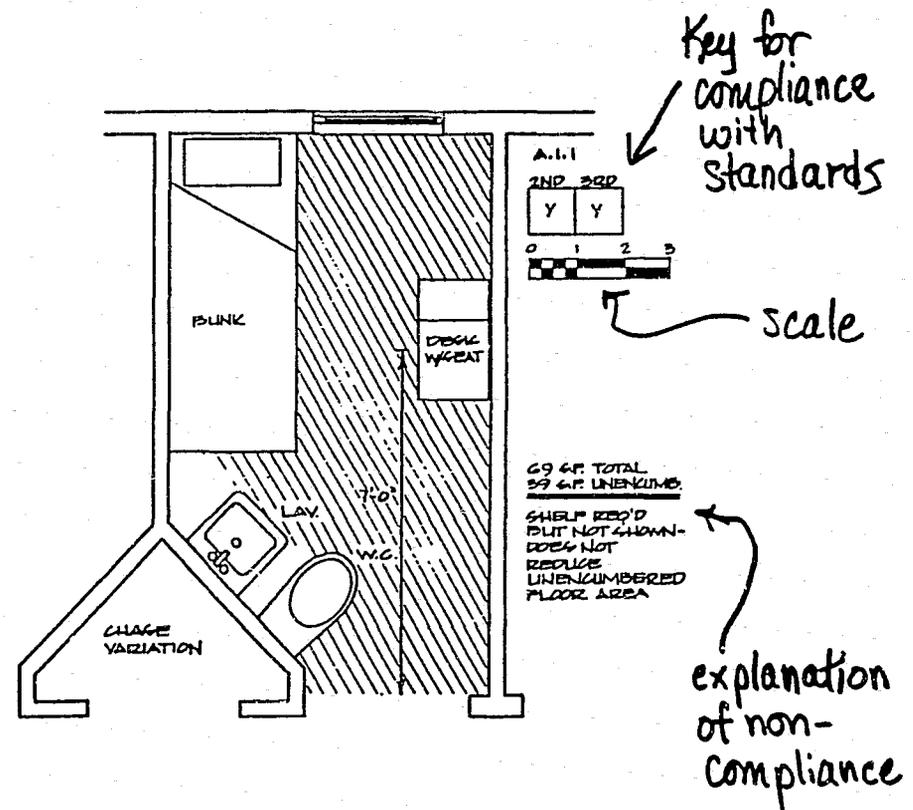
Where the field examples did not provide enough detail concerning furnishings, standard industry furnishings were used for illustrations and calculations. Where lockers or storage for inmates' personal items was required in cells or rooms, we assumed that this would be provided under their bunks and did not subtract this area from floorspace.

As necessary, calculations have been rounded off.

The illustrations do not attempt to judge or evaluate the design approaches that are portrayed; rather, the drawings attempt to suggest the range of practice that is possible under the standards, and to illustrate the implications of the standards.

The annotated drawing on the right provides a key to the format and content of each drawing in this section.

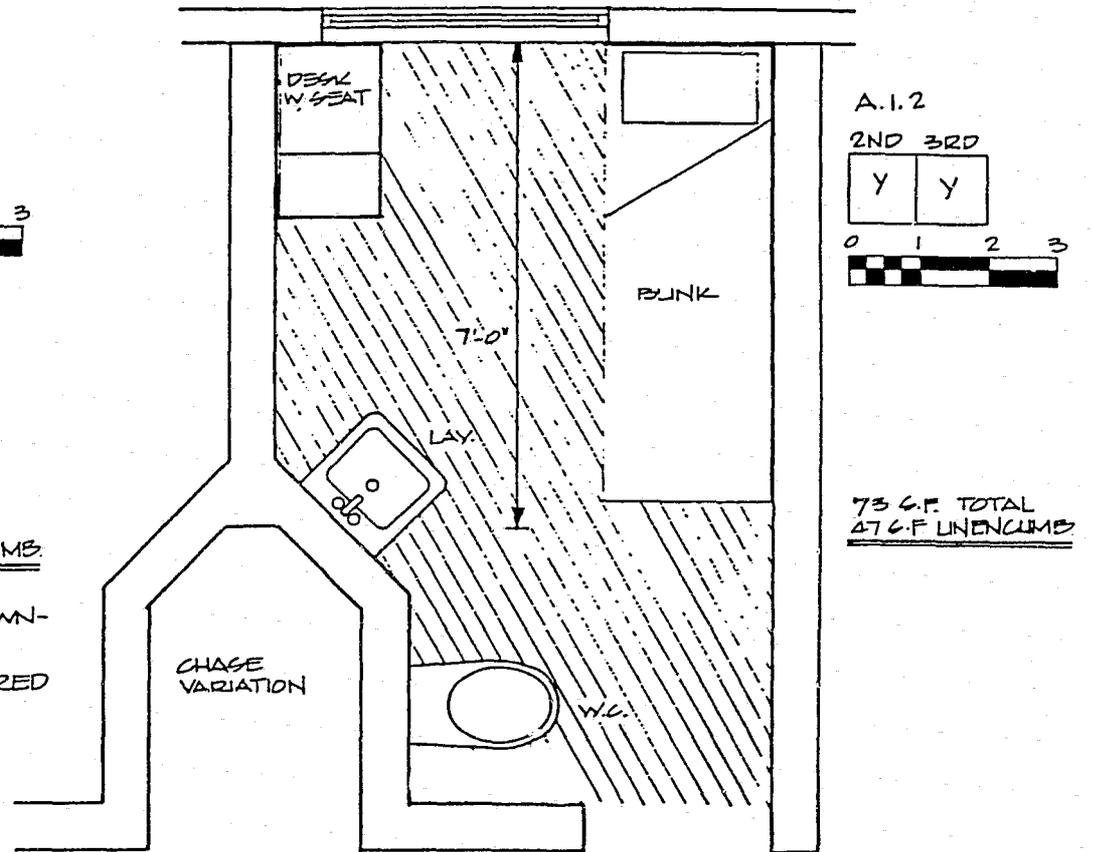
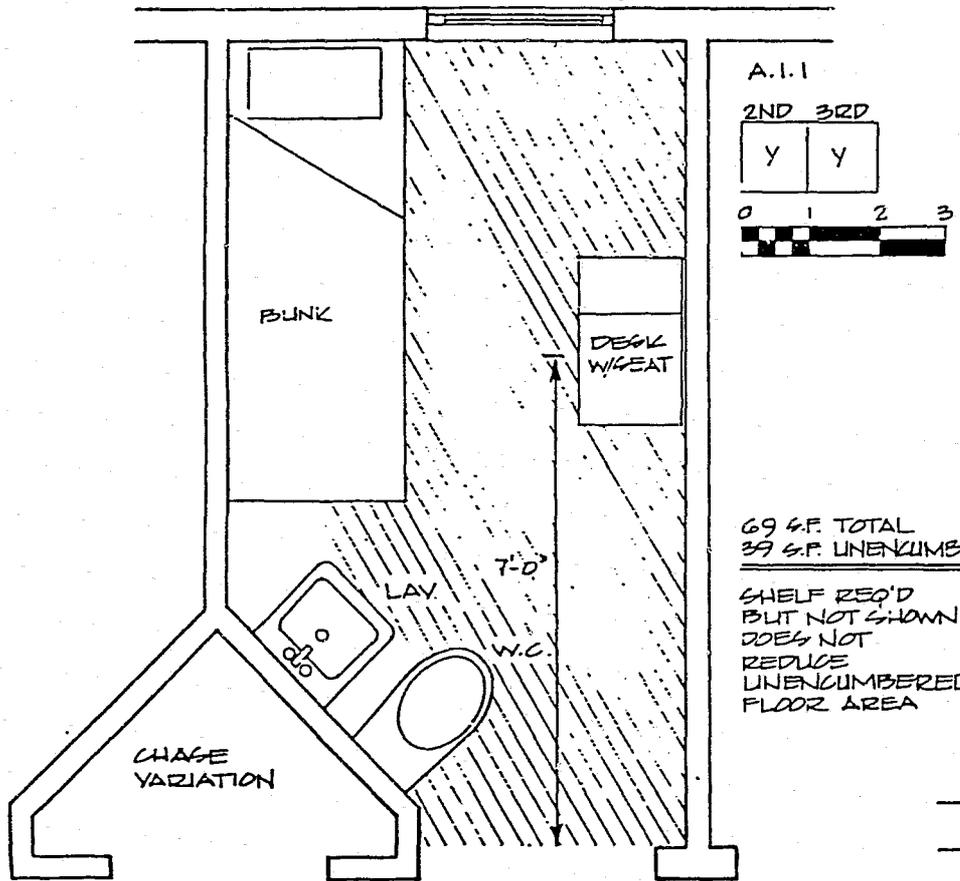
Annotated Sample of Illustration



A. CELLS, area, unencumbered space, occupants, partitions, circulation

1. Single Occupancy

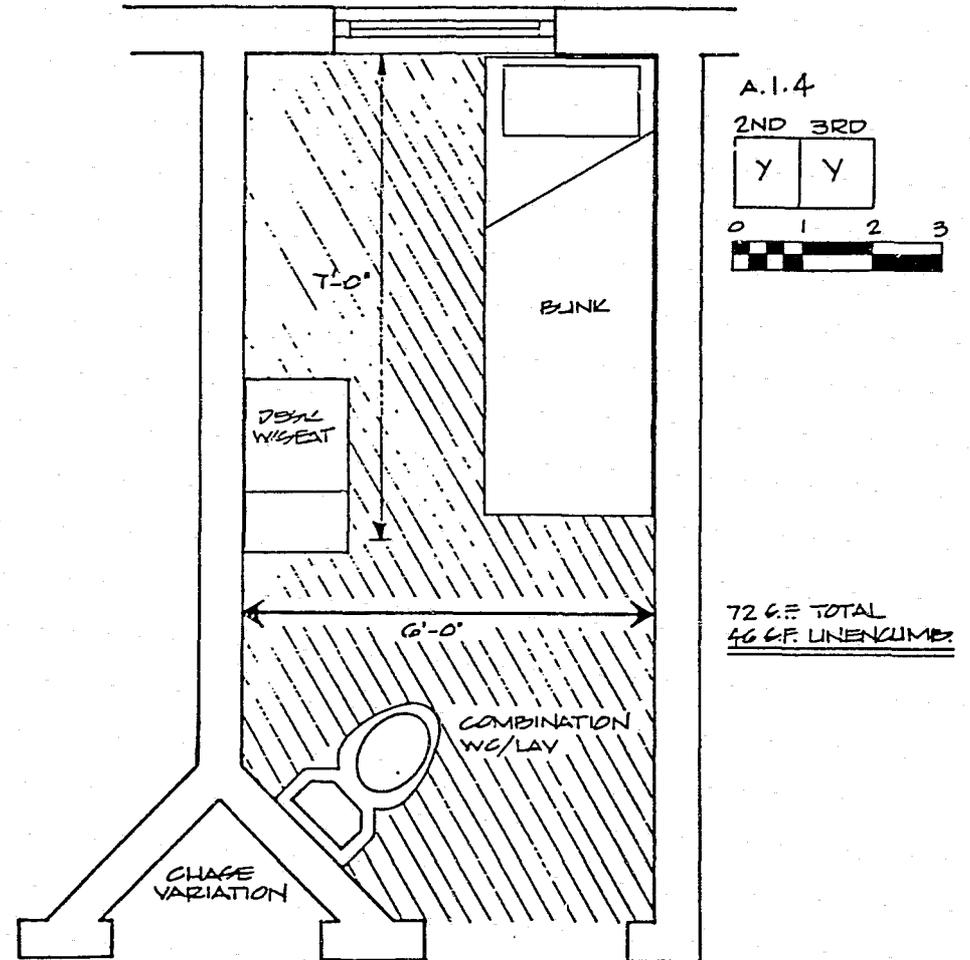
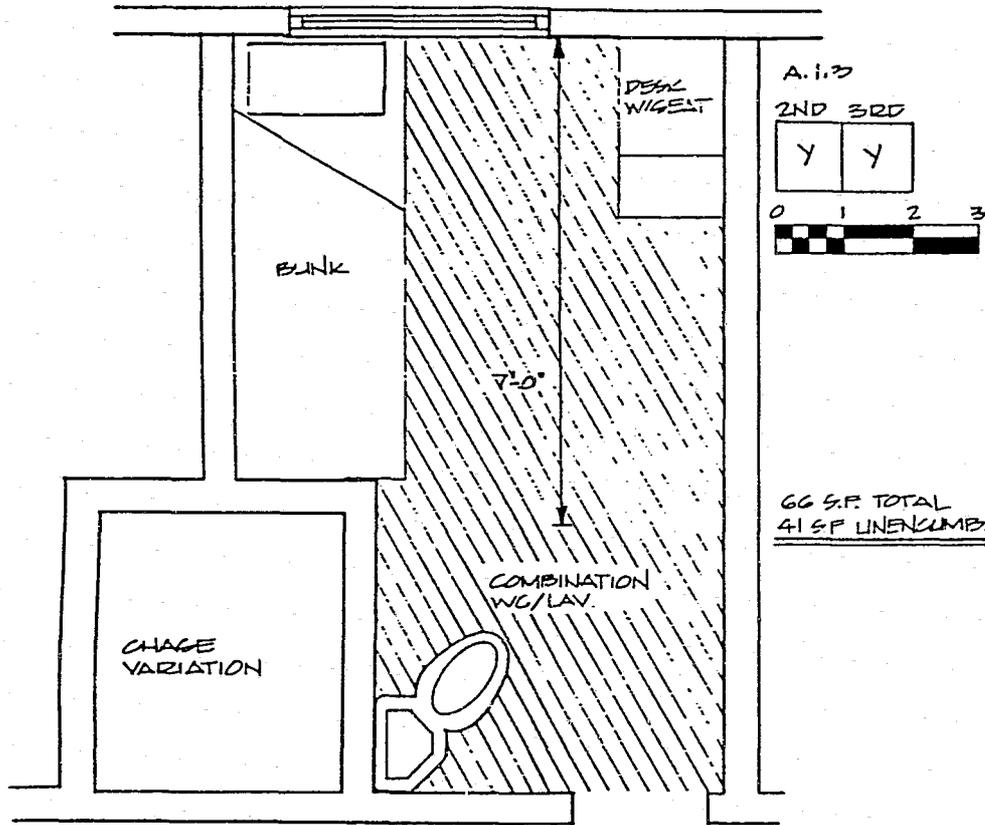
C-2



A. CELLS, area, unencumbered space, occupants, partitions, circulation

1. Single Occupancy

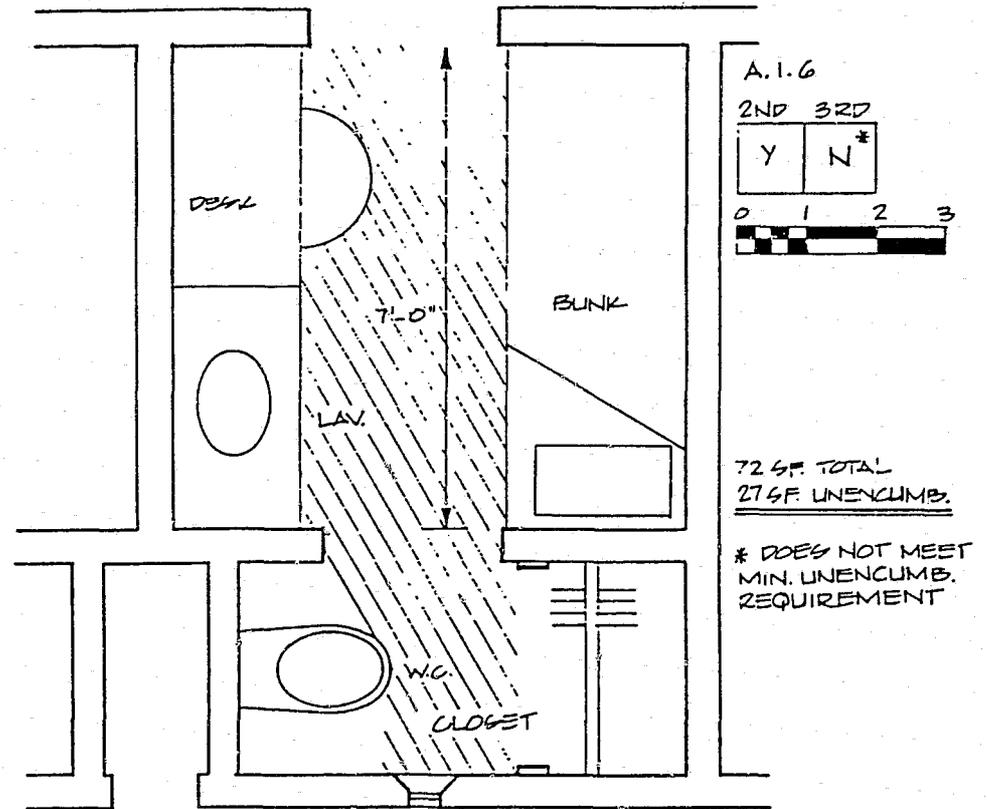
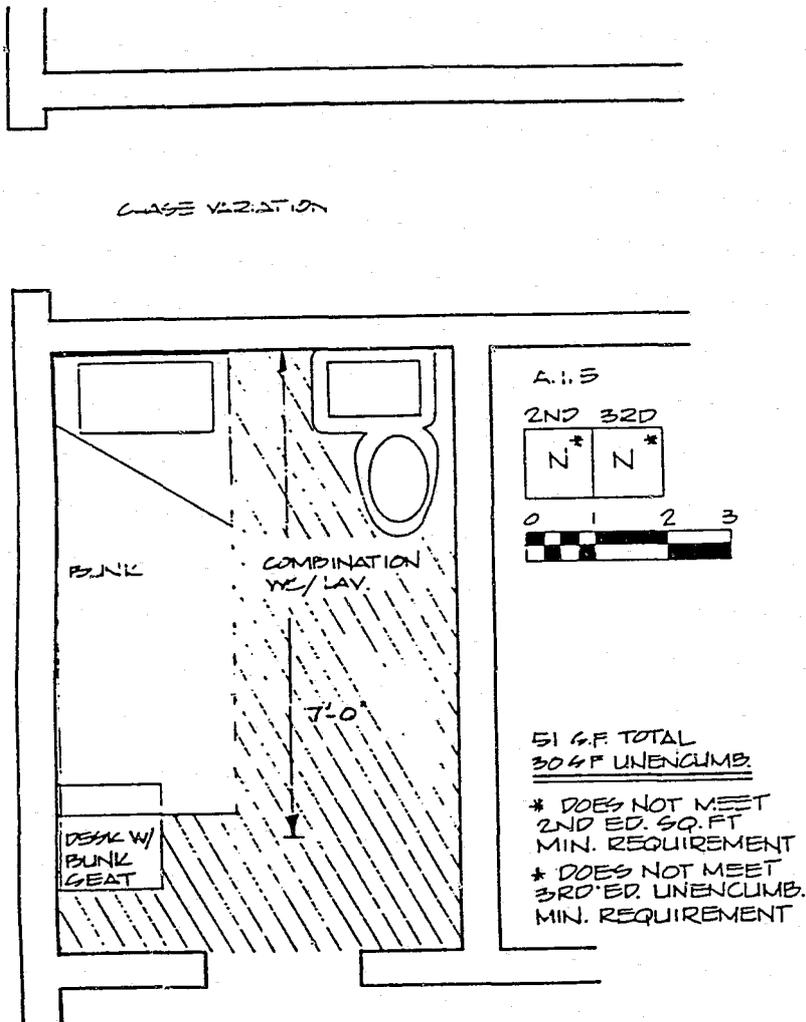
C-3



A. CELLS, area, unencumbered space, occupants, partitions, circulation

1. Single Occupancy

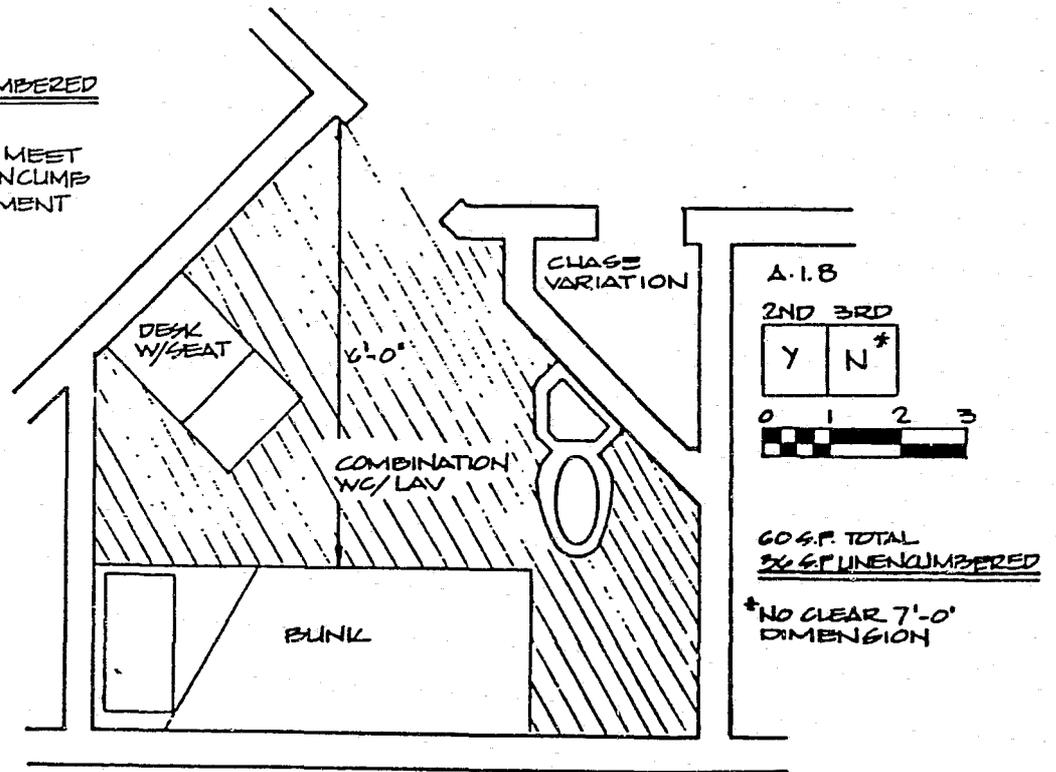
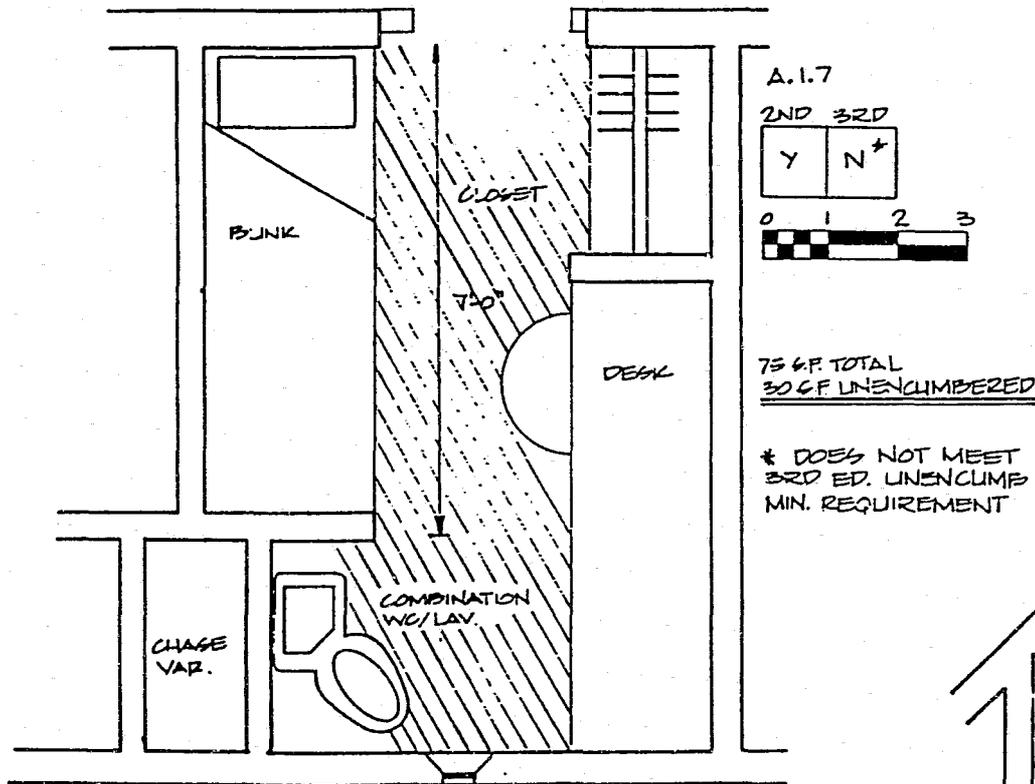
C-4



A. CELLS, area, unencumbered space, occupants, partitions, circulation

1. Single Occupancy

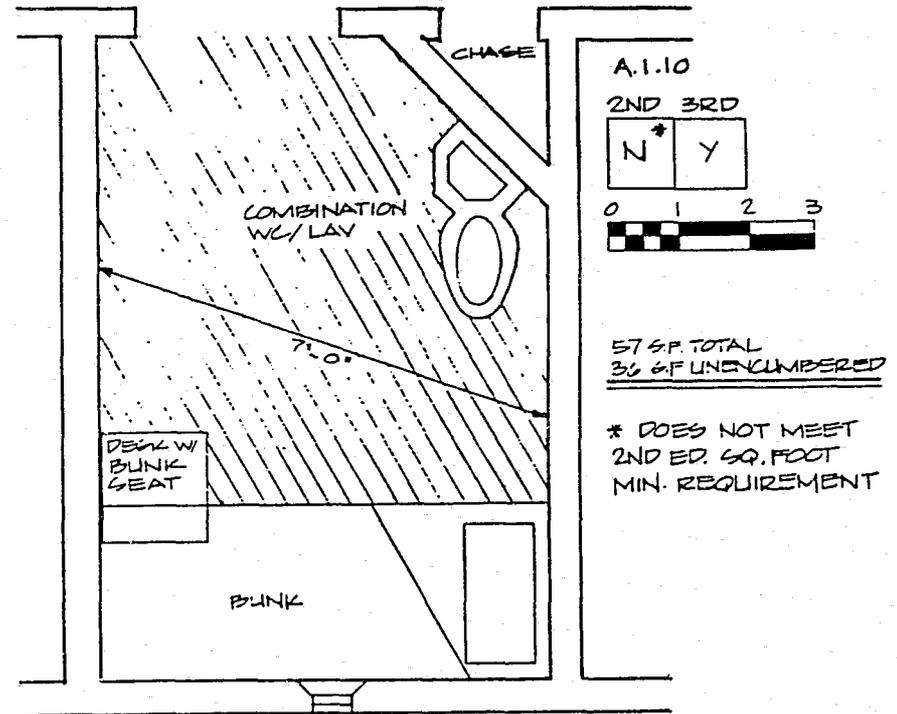
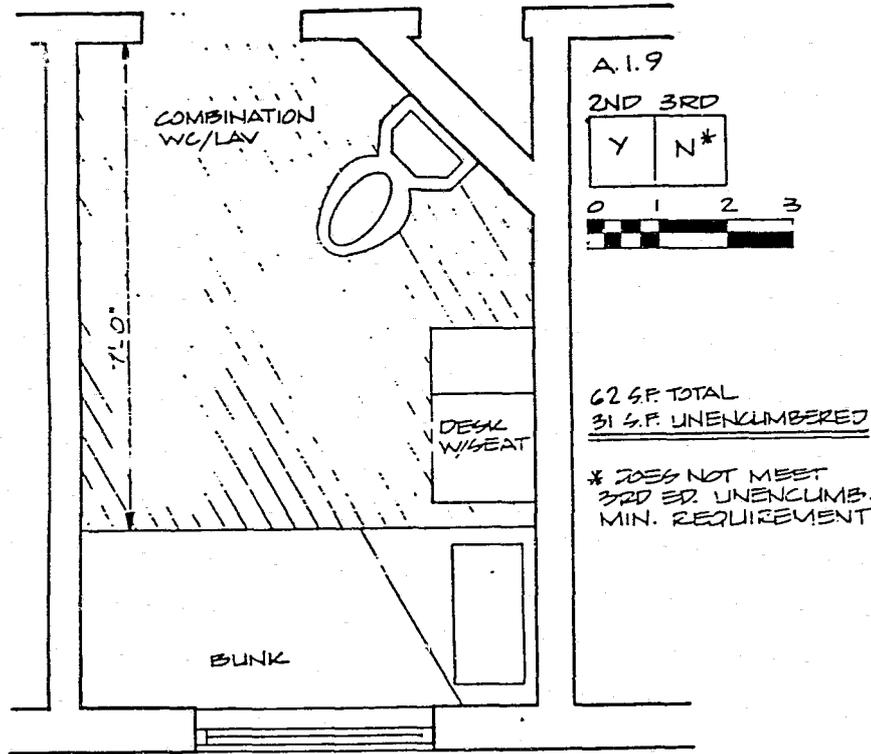
C-5



A. CELLS, area, unencumbered space, occupants, partitions, circulation

1. Single Occupancy

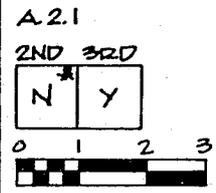
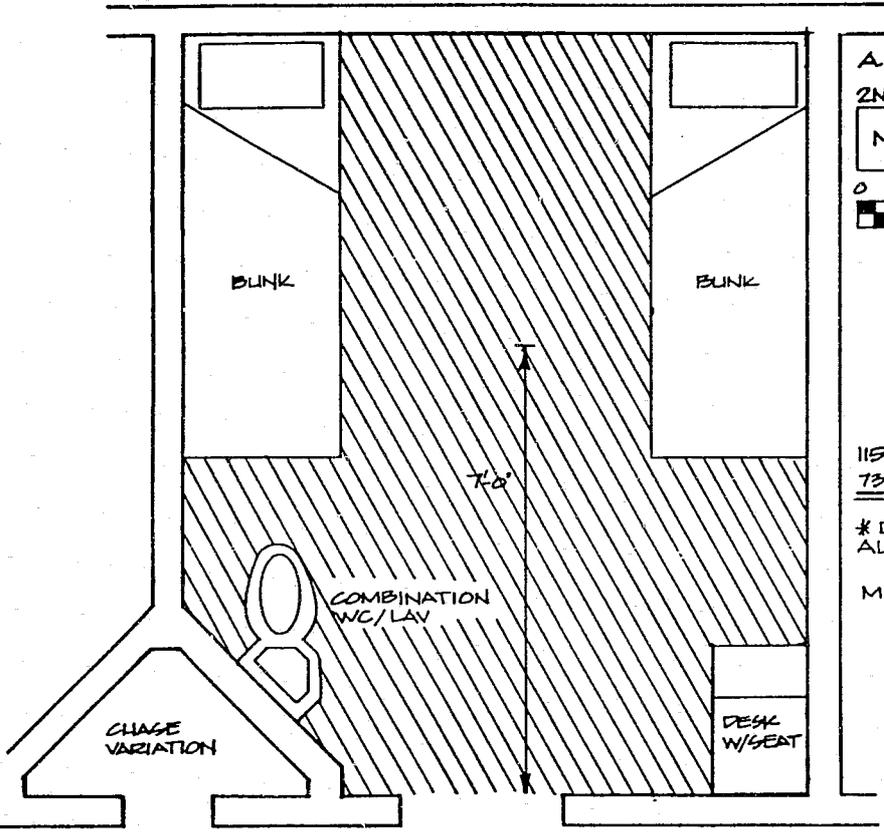
C-6



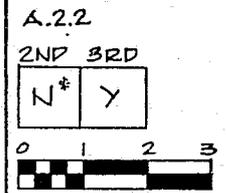
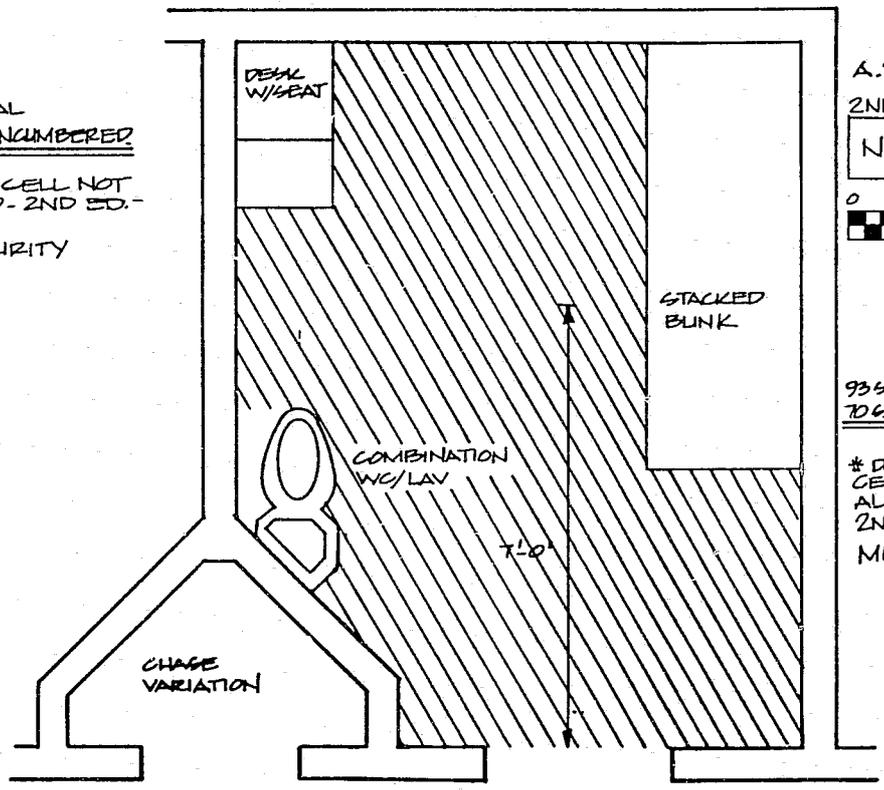
A. CELLS, area, unencumbered space, occupants, partitions, circulation

2. Double Occupancy

C-7



115 S.F. TOTAL
73 S.F. UNENCUMBERED
* DOUBLE CELL NOT ALLOWED - 2ND ED.
MIN. SECURITY

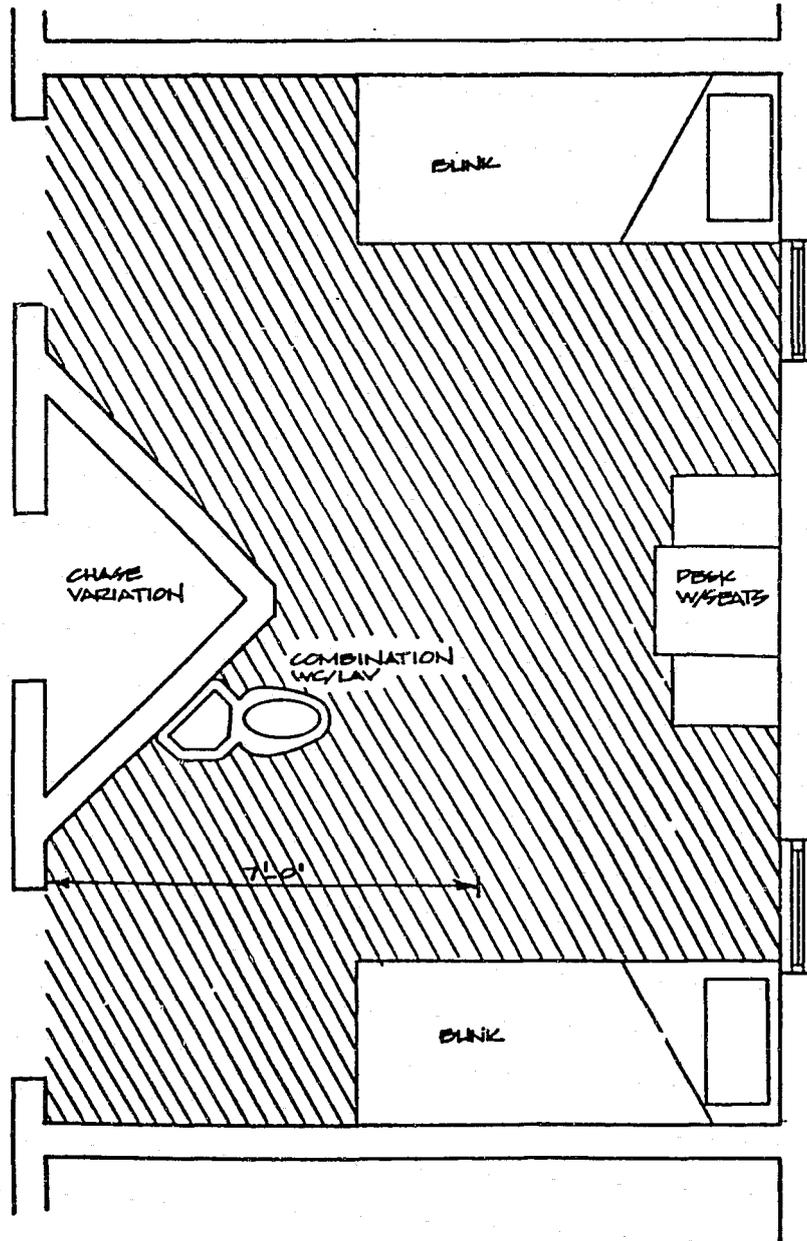


93 S.F. TOTAL
70 S.F. UNENCUMBERED
* DOUBLE CELL NOT ALLOWED - 2ND ED.
MIN. SECURITY

A. CELLS, area, unencumbered space, occupants, partitions, circulation

2. Double Occupancy

C-8

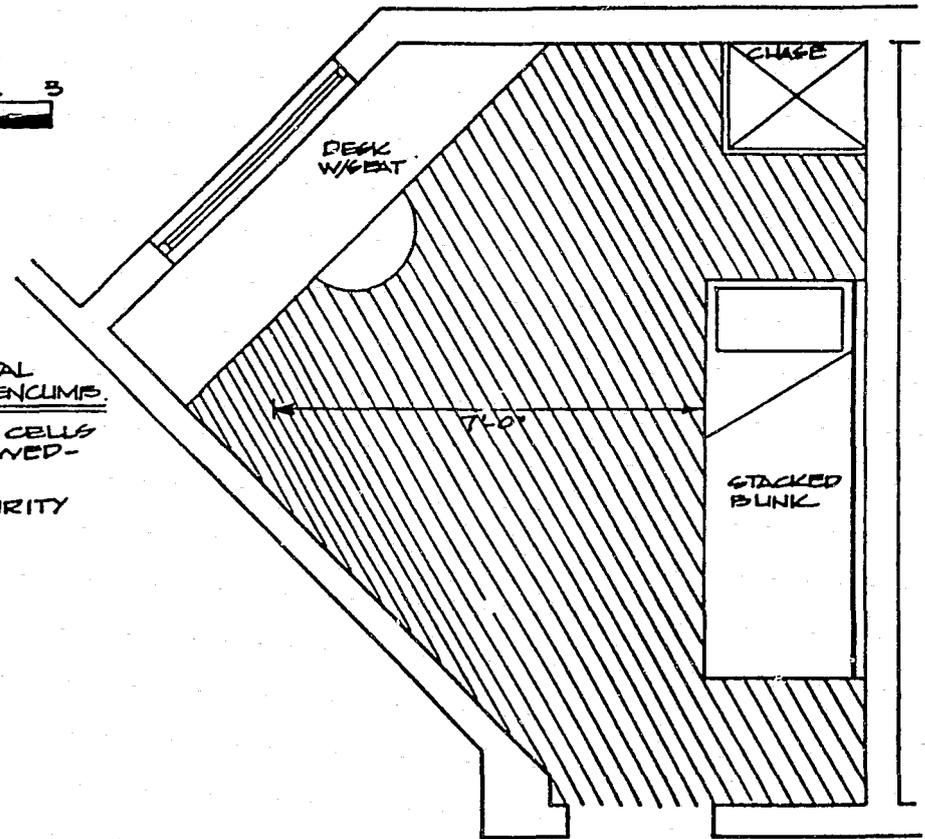


A.2.3
2ND BRD
N* Y
0 1 2 3

187 G.F. TOTAL
140 G.F. UNENCUMBERED
* DOUBLE CELLS NOT ALLOWED - 2ND ED.
MIN. SECURITY

A.2.4
2ND BRD
N* Y
0 1 2 3

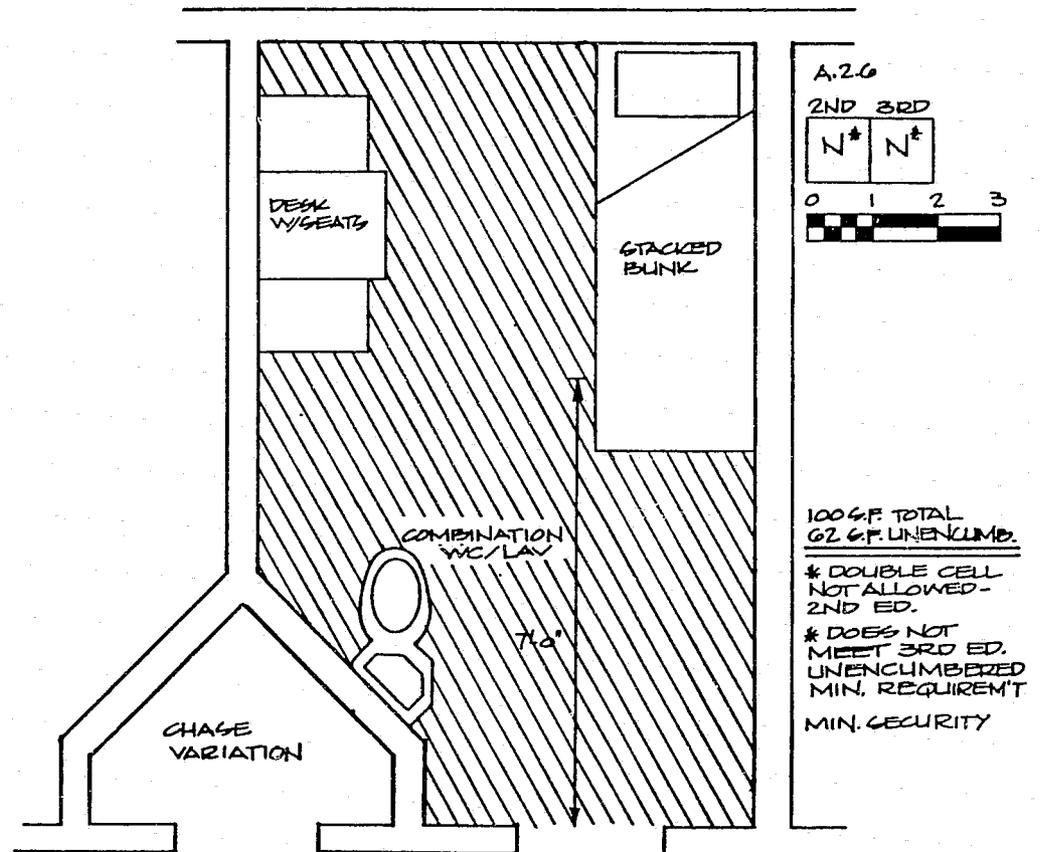
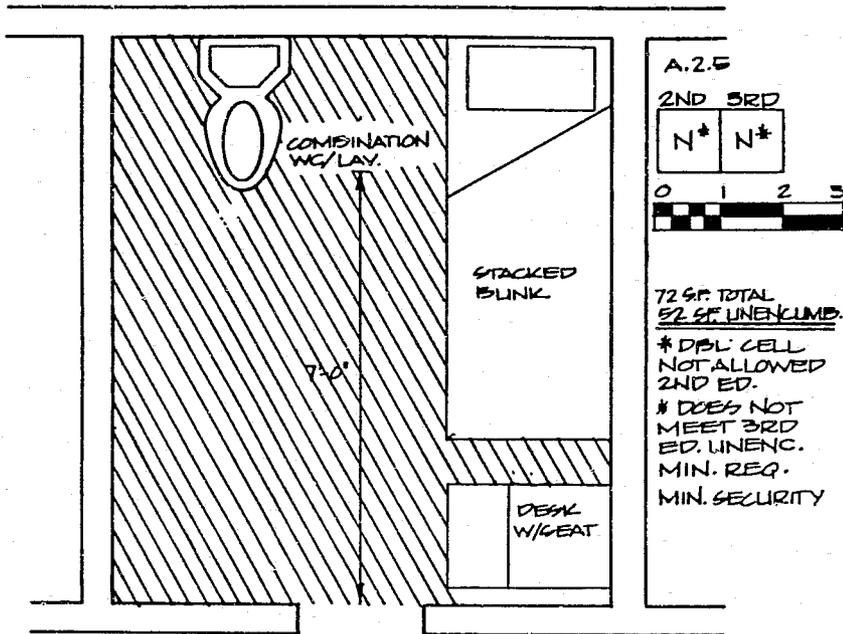
109 G.F. TOTAL
77 G.F. UNENCUMBERED
DRY CELL
MIN. SECURITY
* DOUBLE CELL NOT ALLOWED - 2ND ED.



A. CELLS, area, unencumbered space, occupants, partitions, circulation

2. Double Occupancy

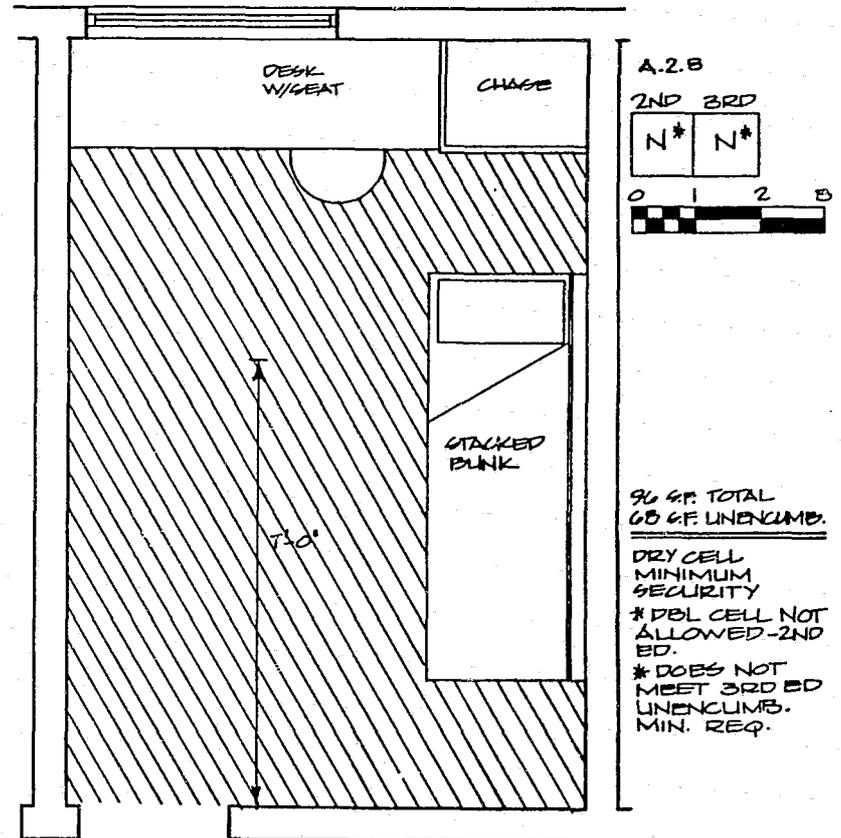
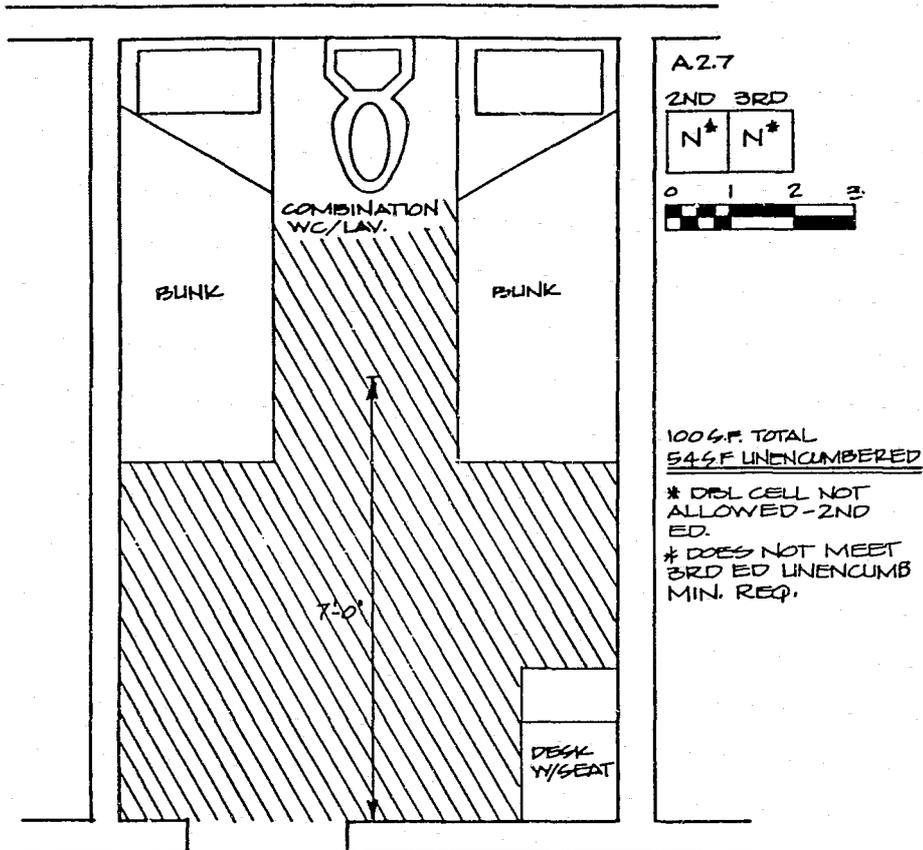
C-9



A. CELLS, area, unencumbered space, occupants, partitions, circulation

2. Double Occupancy

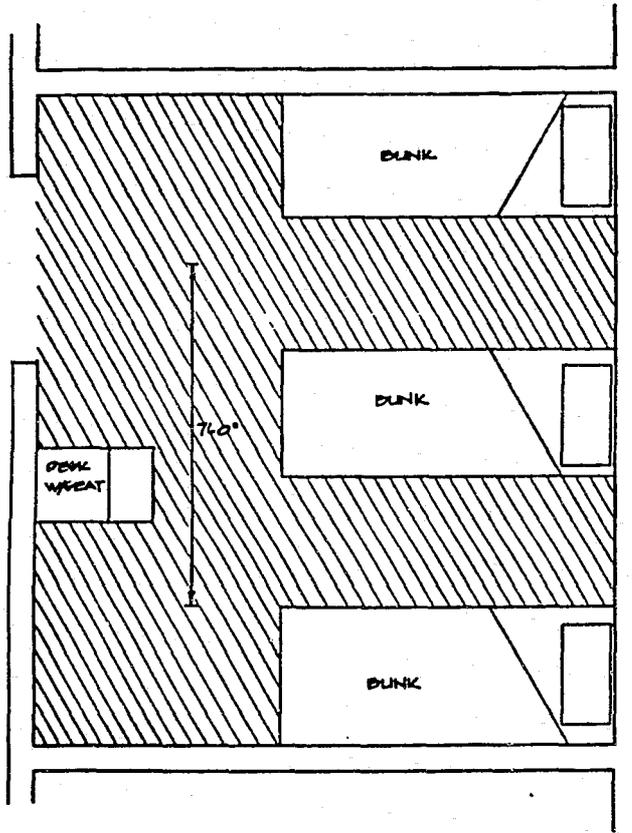
C-10



A. CELLS, area, unencumbered space, occupants, partitions, circulation

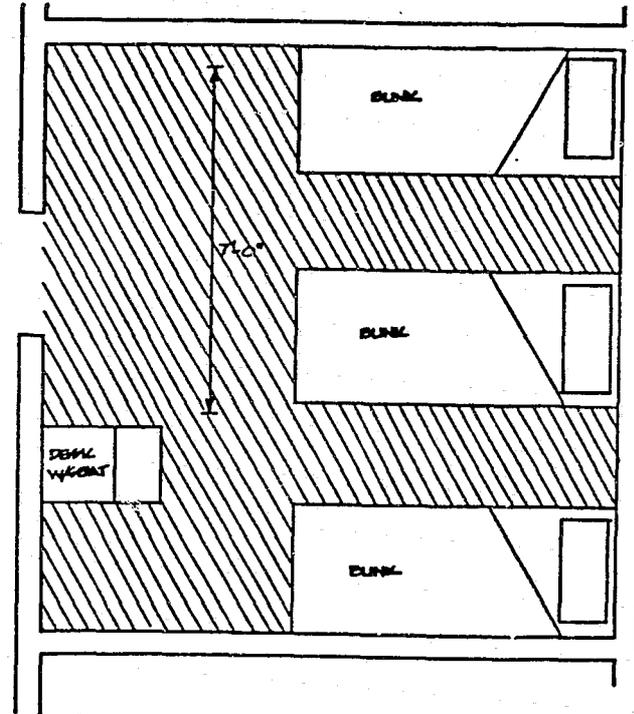
3. Three Occupants

C-11



A.B.1
2ND 3RD
Y Y
0 1 2 3

160 SF TOTAL
105 SF UNENCUMBERED
DRY CELL
MIN. SECURITY



A.B.2
2ND 3RD
N+ N+
0 1 2 3

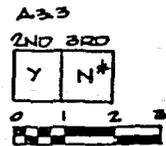
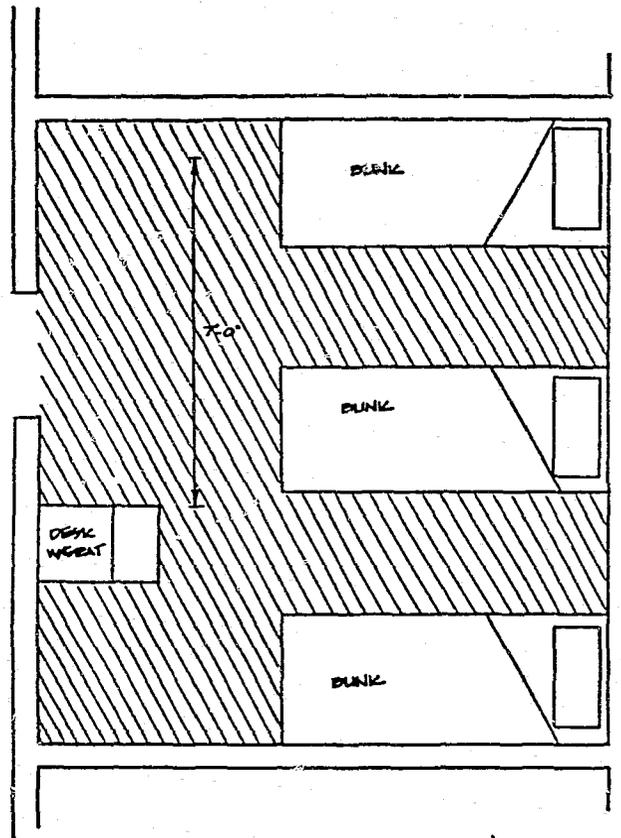
144 SF TOTAL
90 SF UNENCUMBERED
DRY CELL

* DOES NOT MEET
2ND ED SQ. FOOT MIN.
REQUIREMENT
* DOES NOT MEET
3RD ED UNENCUMBERED
MIN. REQ.

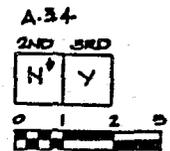
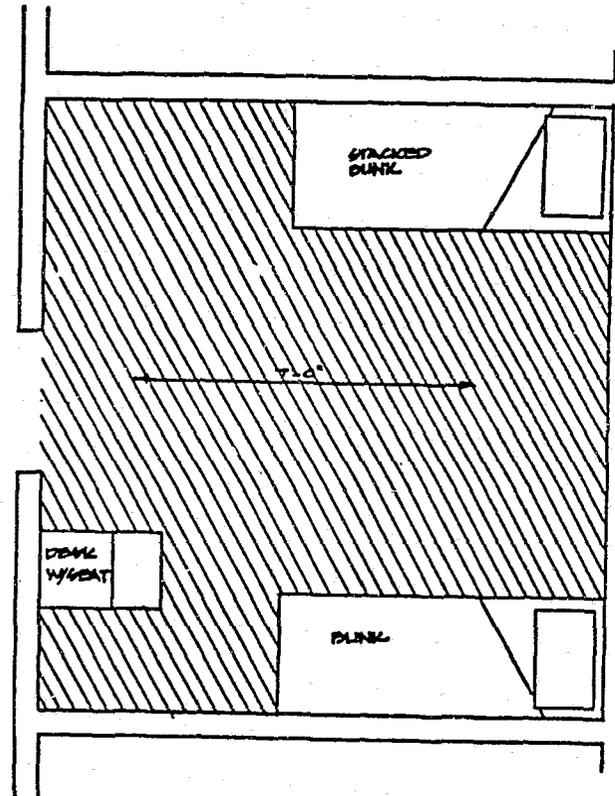
A. CELLS, area, unencumbered space, occupants, partitions, circulation

3. Three Occupants

C-12



150 SF TOTAL
94 SF UNENCUMBERED
DRY CELL
* DOES NOT MEET
2ND ED. LINENCLIMB.
MIN. REQUIREMENT

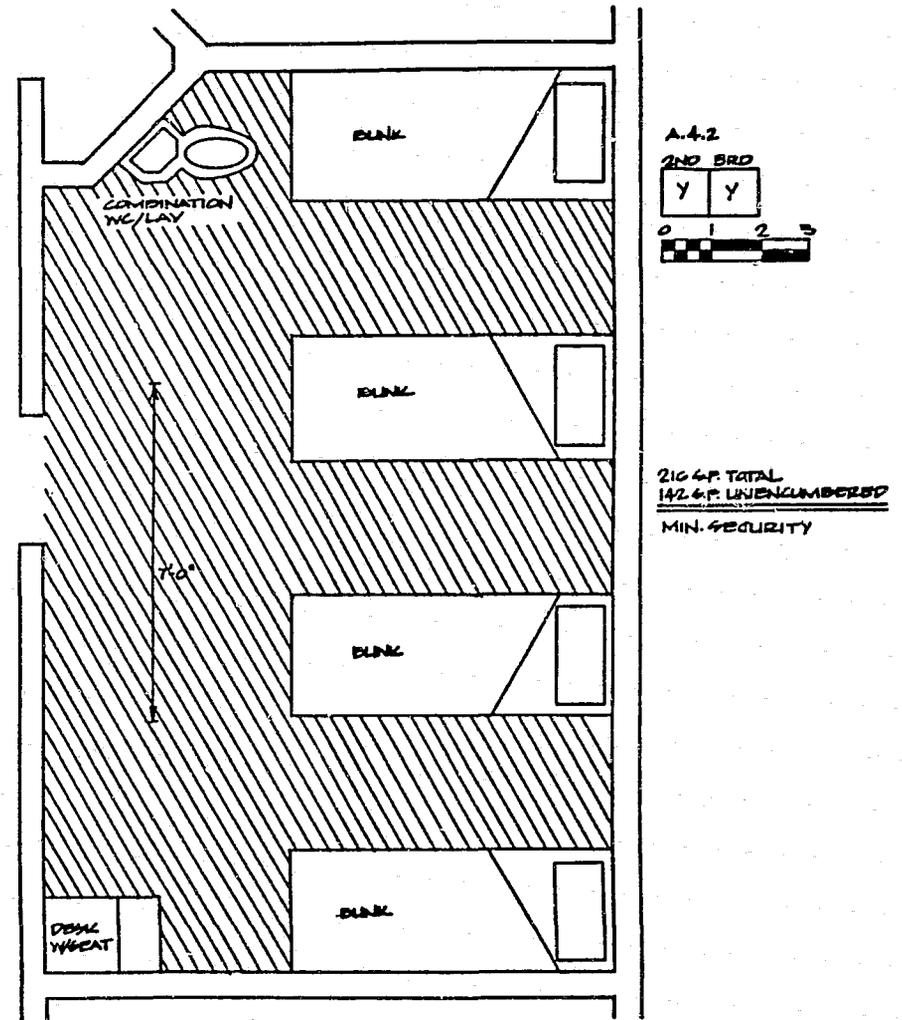
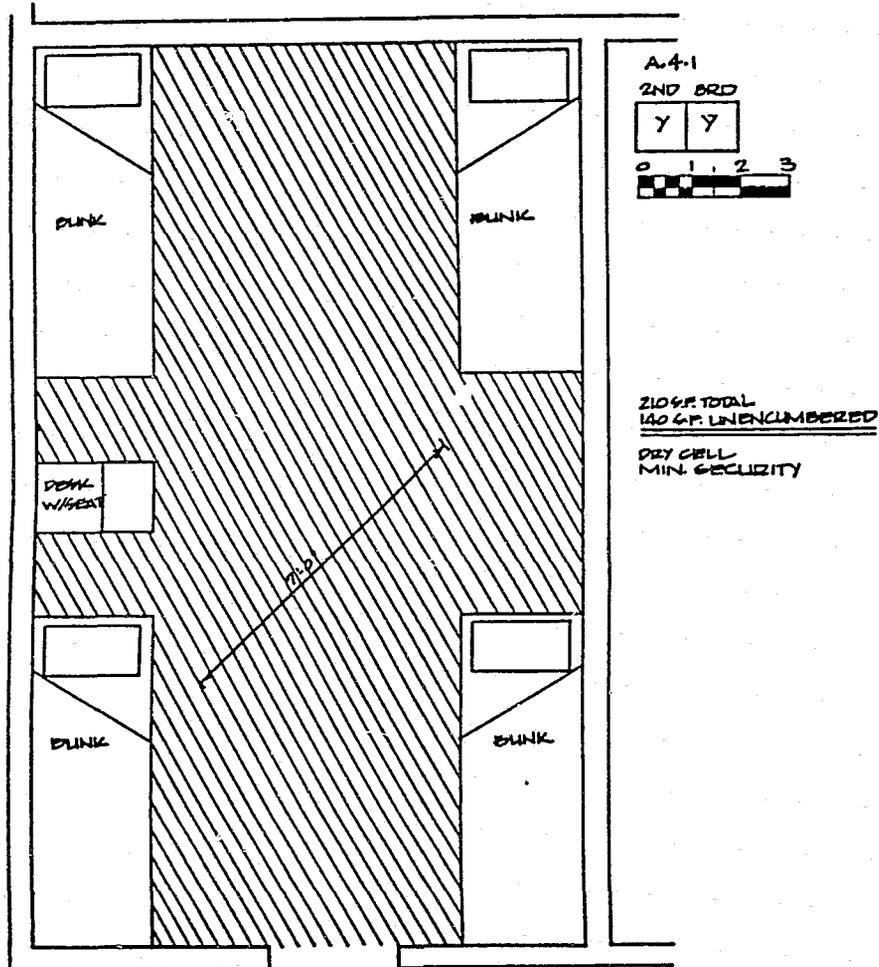


142 SF TOTAL
109 SF UNENCUMBERED
DRY CELL
MINIMUM SECURITY
* DOES NOT MEET
2ND ED. 60 FOOT
MIN. REQUIREMENT

A. CELLS, area, unnumbered space, occupants, partitions, circulation

4. Four Occupants

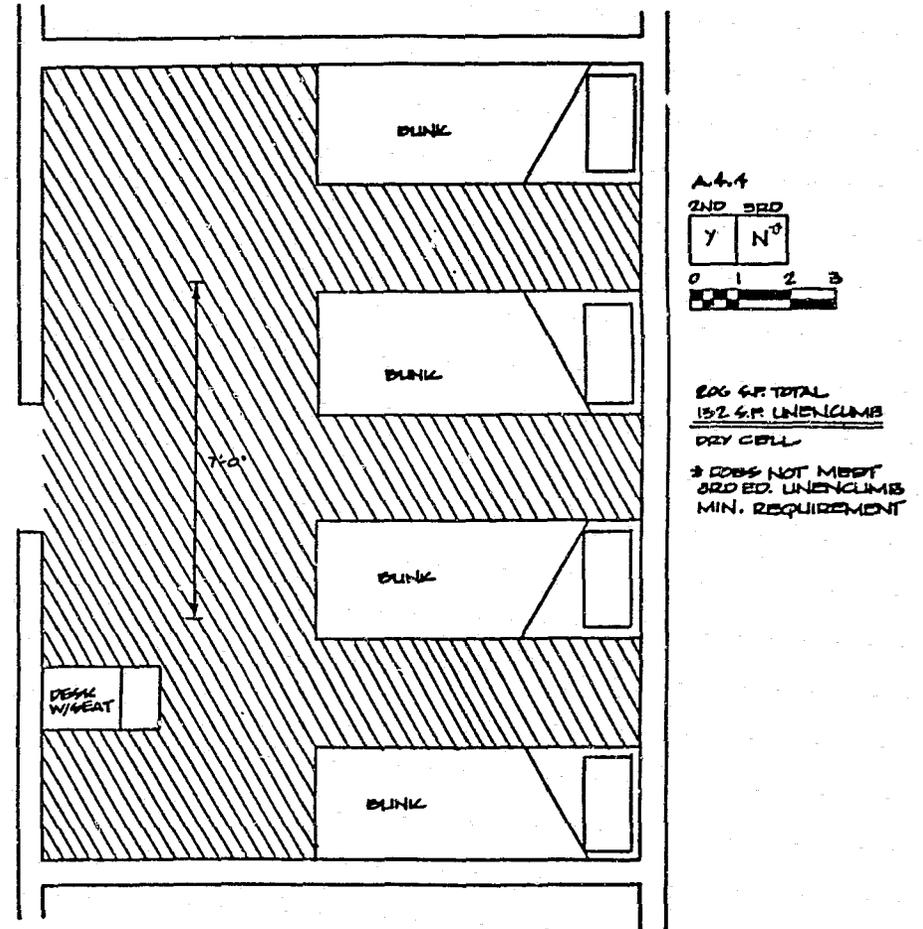
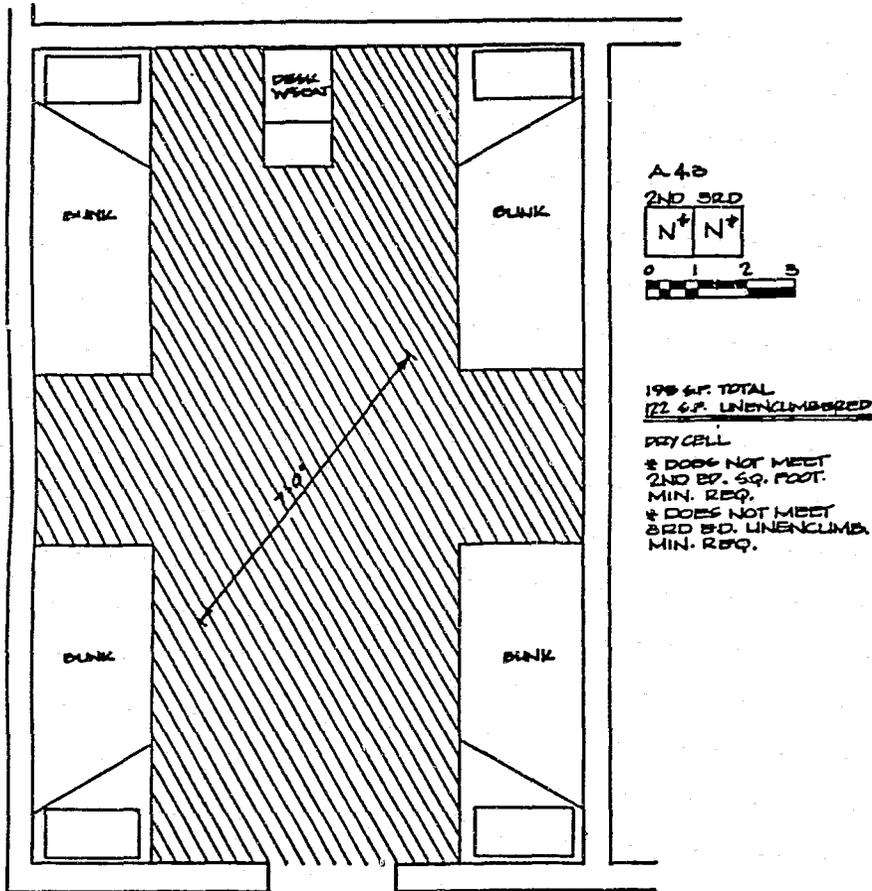
C-13



A. CELLS, area, unencumbered space, occupants, partitions, circulation

4. Four Occupants

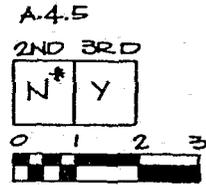
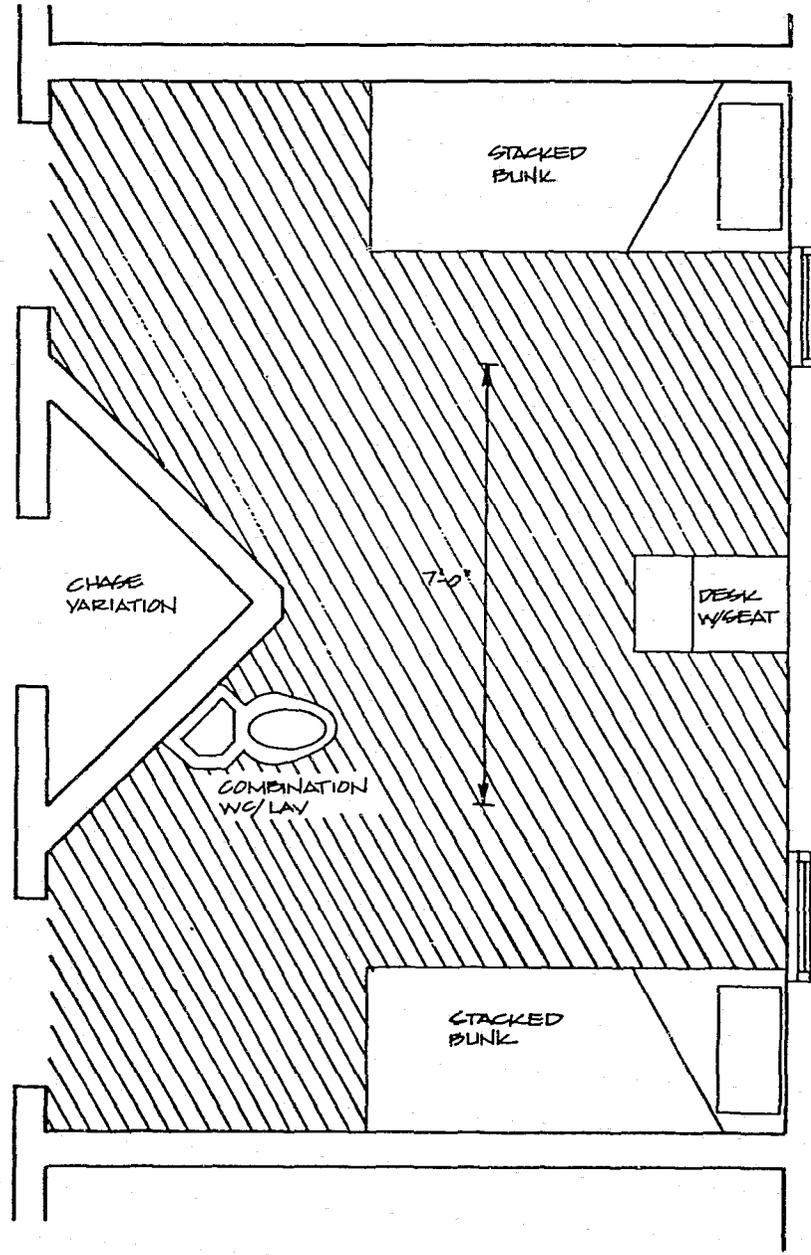
C-14



A. CELLS, area, unencumbered space, occupants, partitions, circulation

4. Four Occupants

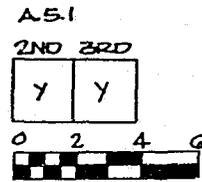
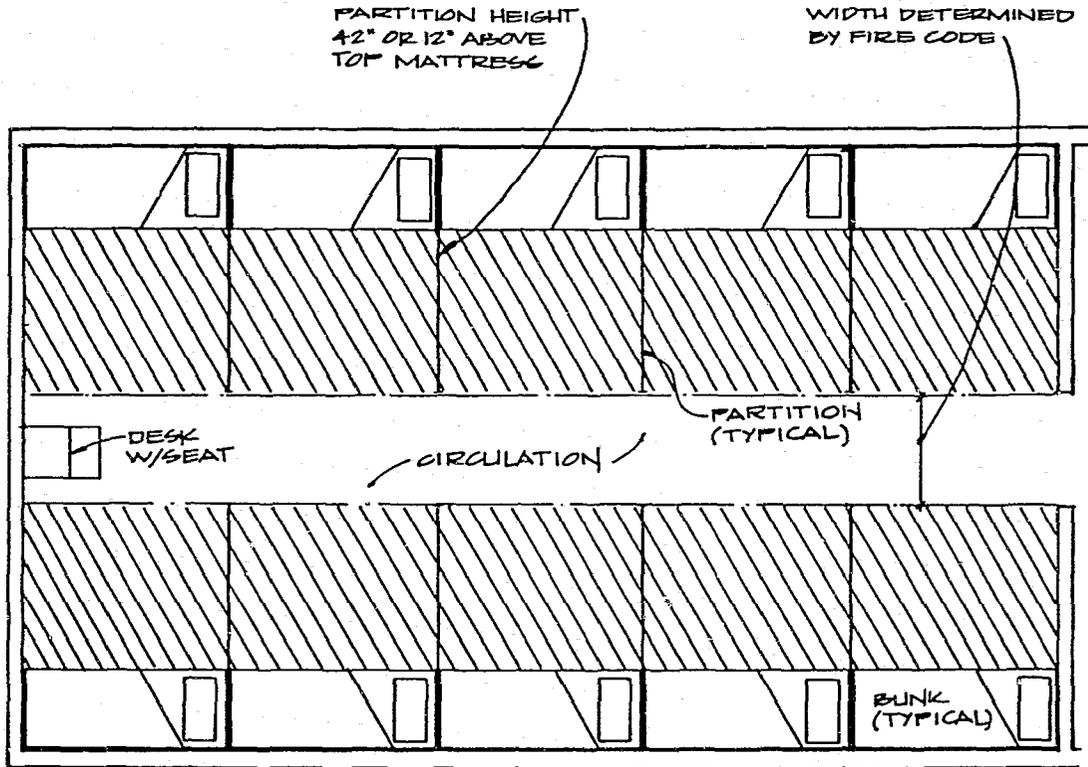
C-15



180 SQ. TOTAL
140 SQ. UNENCUMBERED
MIN. SECURITY
* DOES NOT MEET
2ND ED. SQ. FOOT
MIN. REQ.

A. CELLS, area, unencumbered space, occupants, partitions, circulation

5. Five or More Occupants C-16

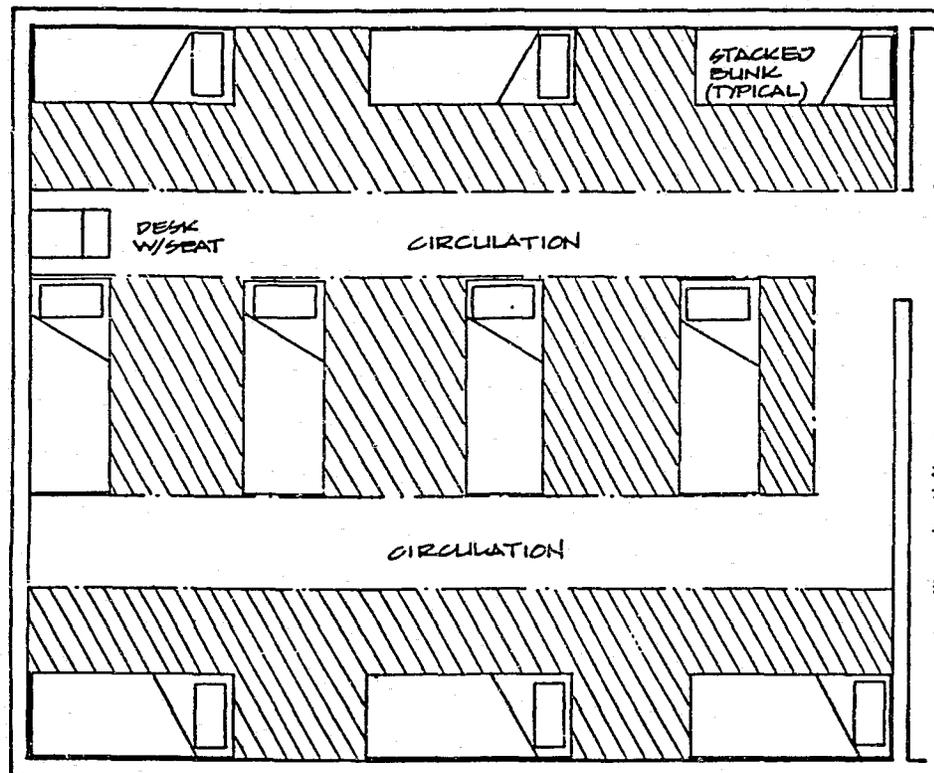


MINIMUM SECURITY - 10 INMATES
 637 S.F. TOTAL - 63.7/BUNK
 350 S.F. UNENCUMB. - 35/BUNK

- NOTES:
1. FOR PURPOSES OF CALCULATING UNENCUMB. SPACE - THE AREA OF (1) DECK HAS BEEN USED TO COMPLY WITH 3RD EDITION STANDARDS
 2. 3RD EDITION STANDARDS REQUIRE PARTITIONS IN DORM SPACE
 3. CIRCULATION IS EXCLUDED FROM UNENCUMBERED FLOOR AREA CALC'S

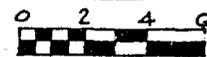
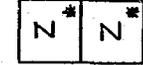
A. CELLS, area, unencumbered space, occupants, partitions, circulation

5. Five or More Occupants C-17



A.5.2

2ND BRD



MINIMUM SECURITY - 20 INMATES

627 SF. TOTAL - 31.35/BUNK

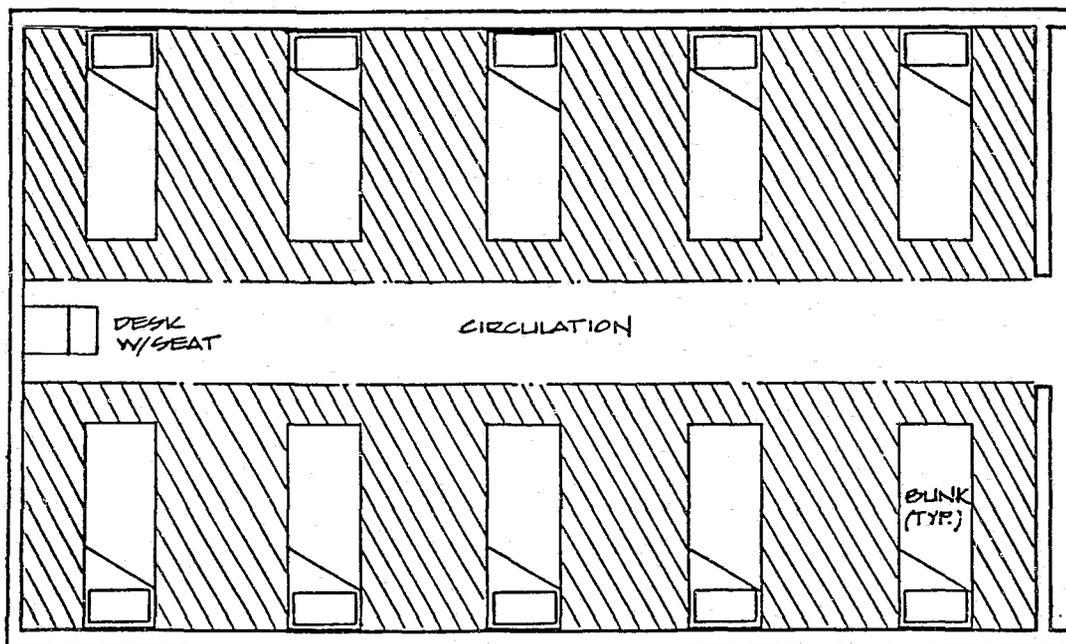
333 SF. UNENCUMBERED - 16.7/BUNK

* DOES NOT MEET 2ND ED. SQ. FOOT MIN. REQUIREMENT

* DOES NOT MEET 3RD ED. UNENCUMBERED MIN. REQUIREMENT

* DOES NOT PROVIDE PARTITIONS

A. CELLS, area, unencumbered space, occupants, partitions, circulation **5. Five or More Occupants C-18**



A.S.S
2ND 3RD

Y	N*
---	----

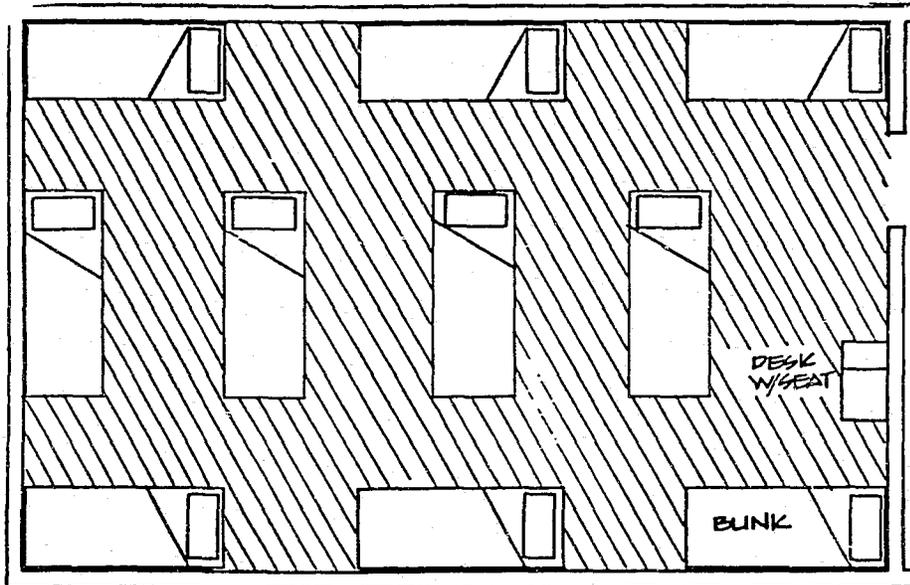
0 2 4 6

MINIMUM SECURITY - 10 INMATES
637 S.F. TOTAL - 637/BUNK
350 S.F. LINENCLMB. - 35/BUNK

* NO PARTITIONS

A. CELLS, area, unencumbered space, occupants, partitions, circulation

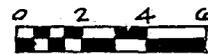
5. Five or More Occupants C-19



A.E.4

2ND 3RD

Y	N*
---	----



MINIMUM SECURITY - 10 INMATES

500 S.F. TOTAL - 50/BUNK

327 S.F. UNENCUMBERED - 32.7/BUNK

* DOES NOT MEET 3RD ED.
UNENCUMB. MIN. REQUIREMENT

* NO PARTITIONS

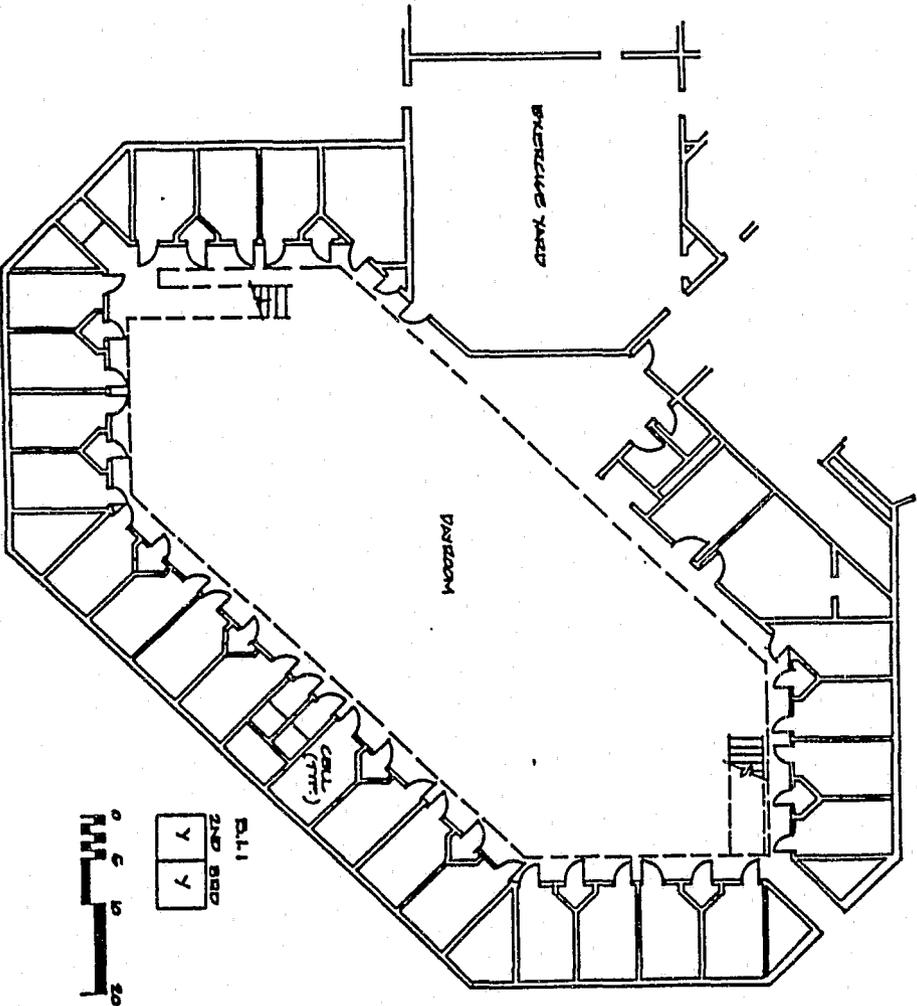
* UNENCUMB. INCLUDES
CIRCULATION

B. DAYROOMS

Separation, Adjacency, Size

1. Separation from Cells/Rooms

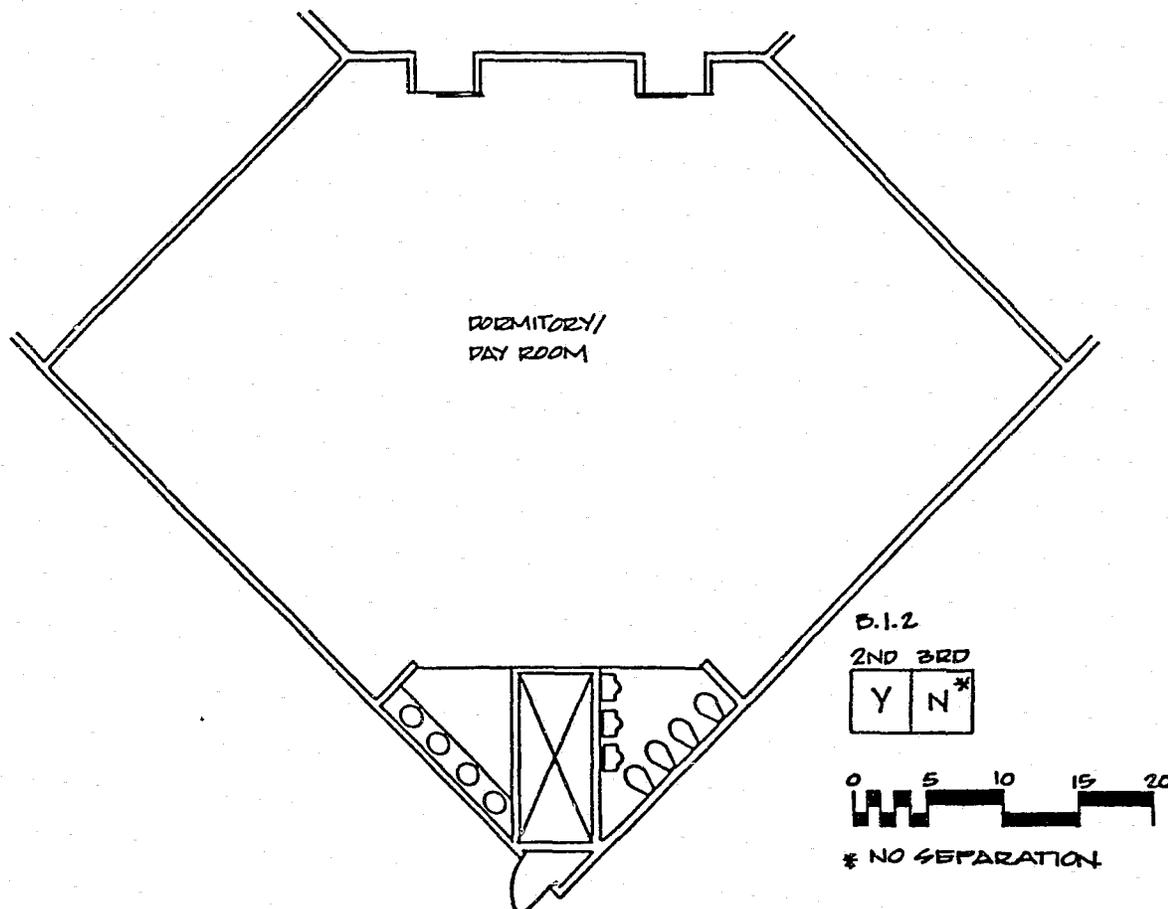
C-20



B. DAYROOMS Separation, Adjacency, Size

1. Separation from Cells/Rooms

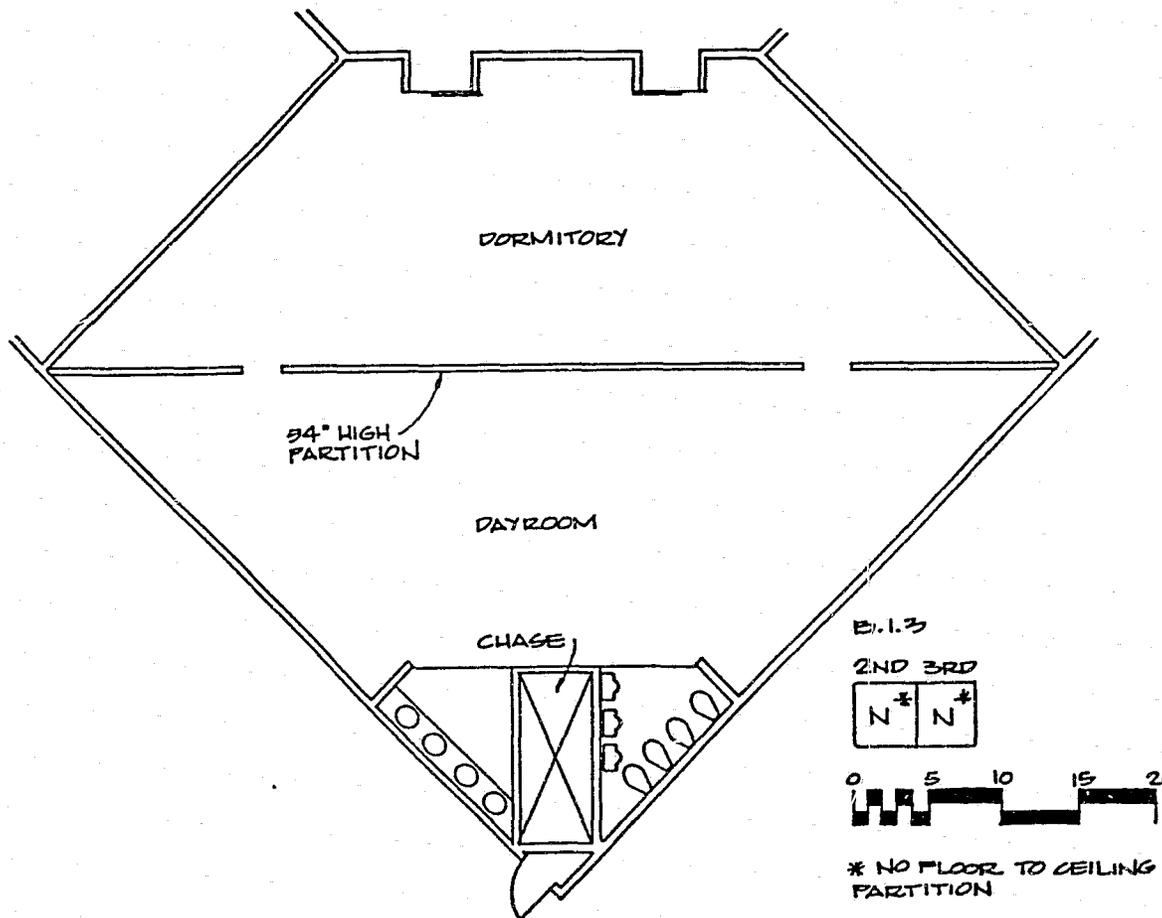
C-21



B. DAYROOMS Separation, Adjacency, Size

1. Separation from Cells/Rooms

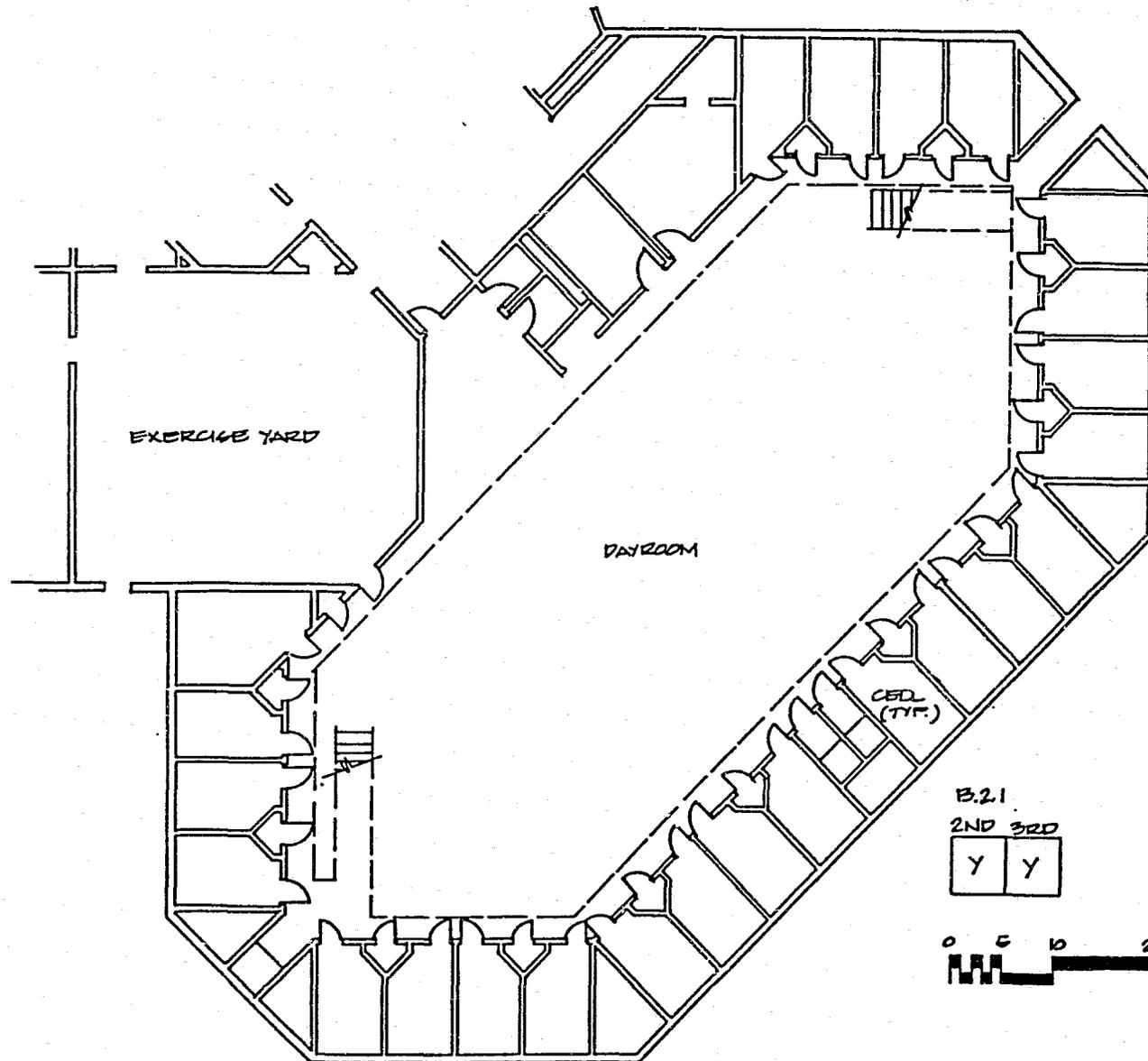
C-22



B. DAYROOMS Separation, Adjacency, Size

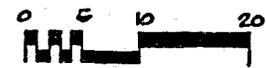
2. Adjacent to Cell/Rooms

C-23



B.2.1
2ND 3RD

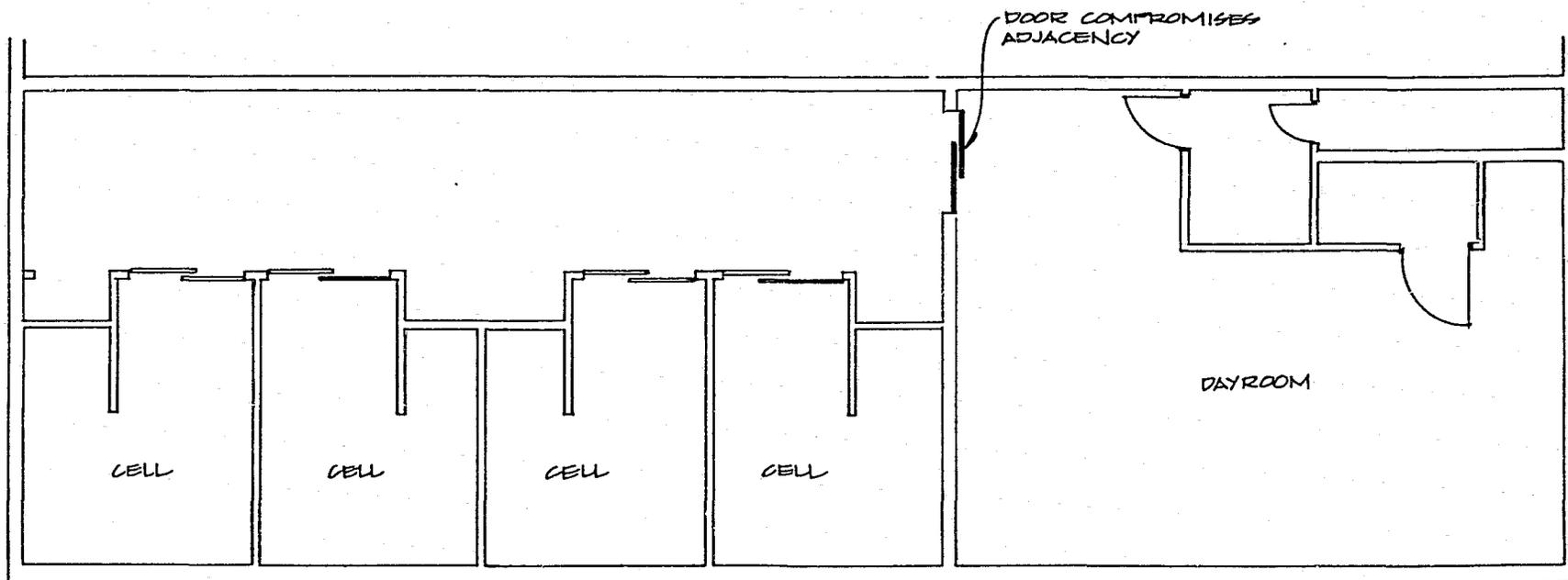
Y	Y
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B. DAYROOMS Separation, Adjacency, Size

2. Adjacent to Cell/Rooms

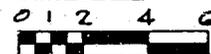
C-24



B.2.2

2ND BRD

Y	N*
---	----



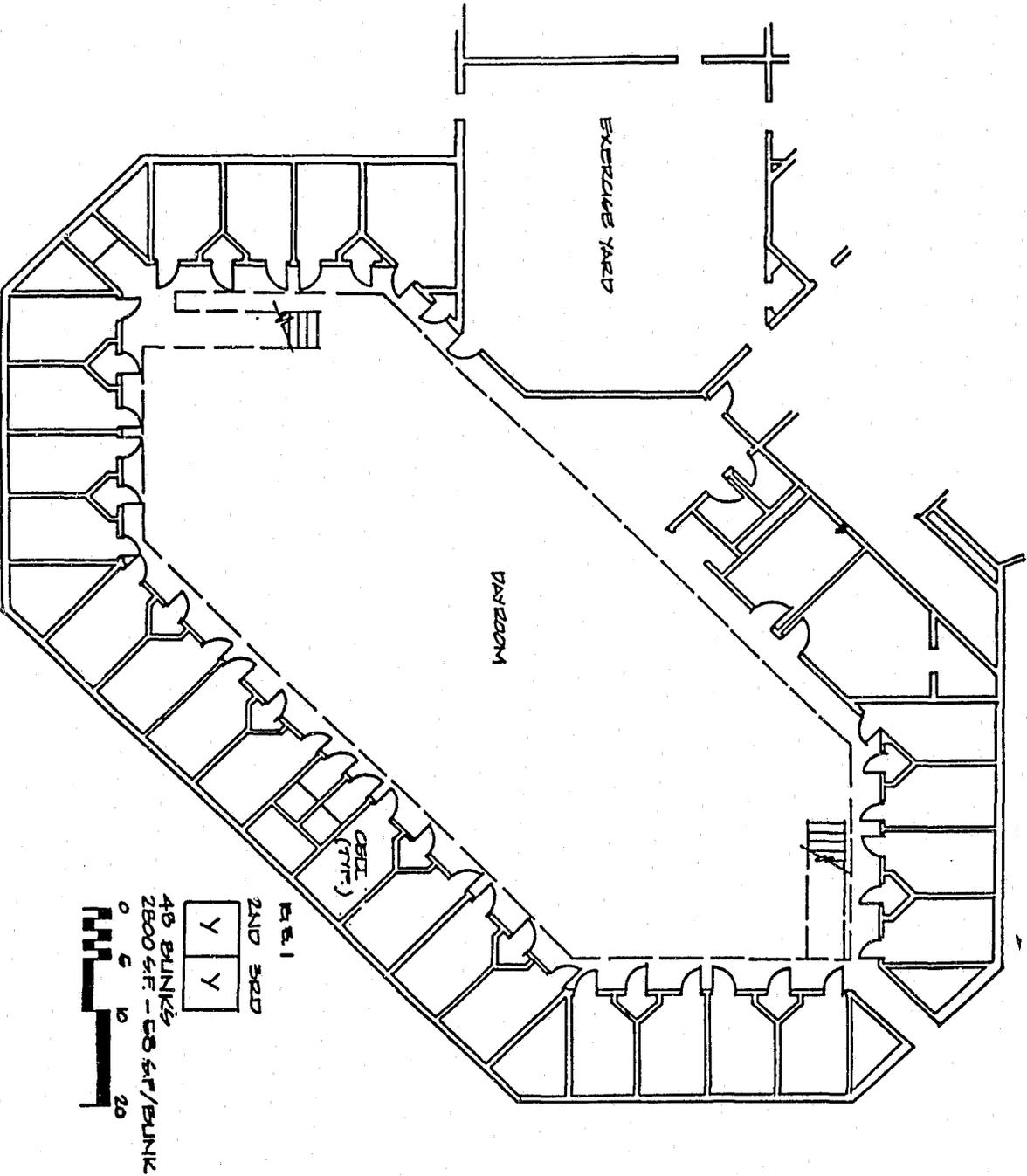
* NOT IMMEDIATELY ADJACENT TO CELLS

B. DAYROOMS

Separation, Adjacency, Size

3. Size

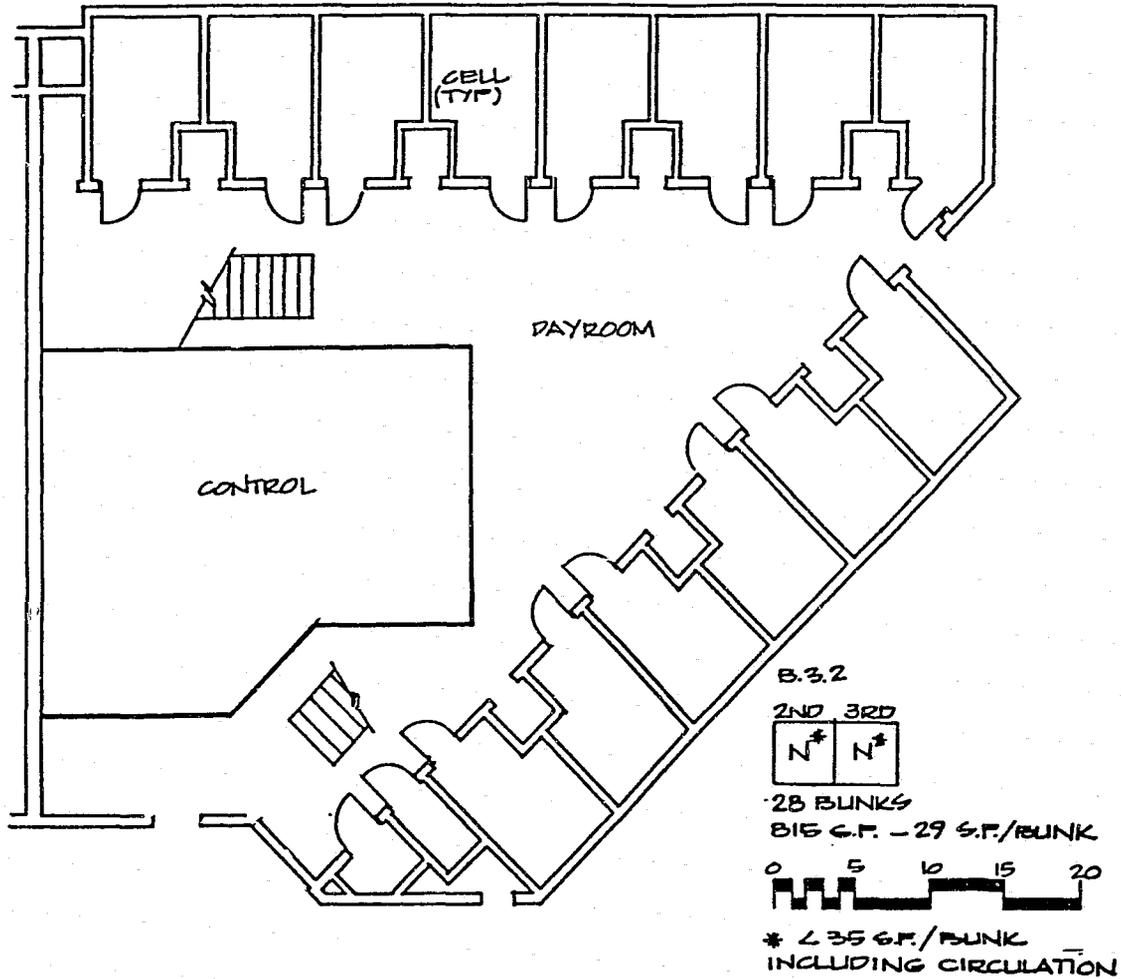
C-25



B. DAYROOMS Separation, Adjacency, Size

3. Size

C-26

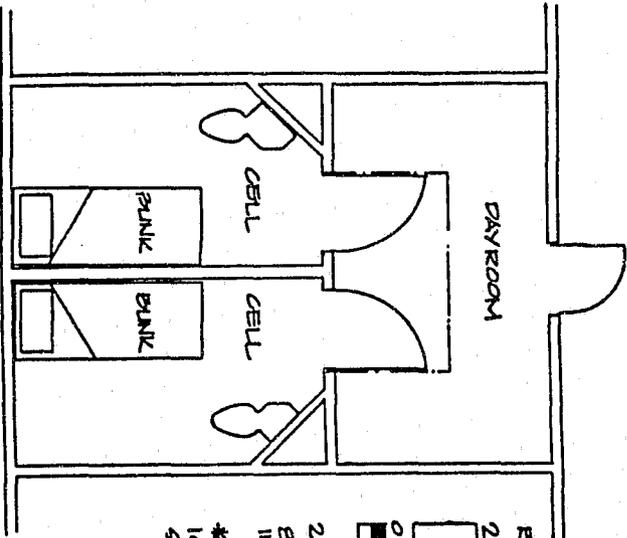


B. DAYROOMS

Separation, Adjacency, Size

3. Size

C-27

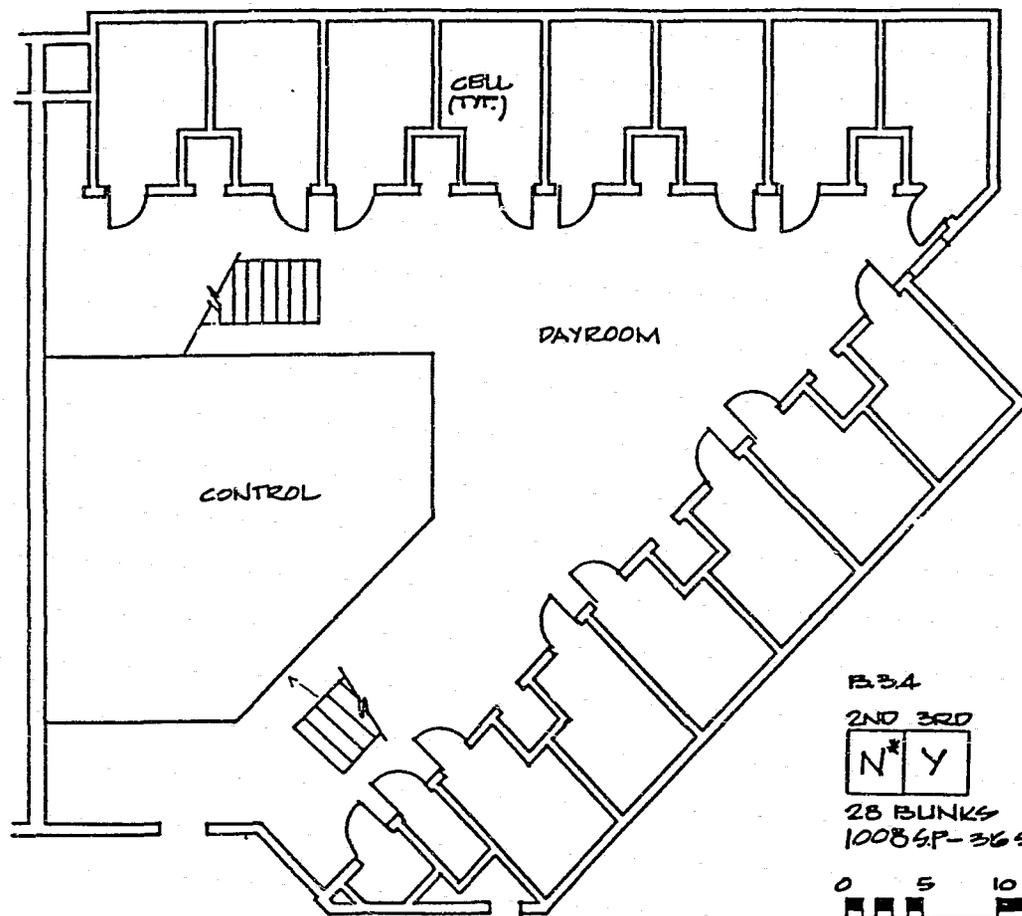


B.B. 3
 2ND 3RD
 Y N*
 0 1 2 4 6
 2 BUNKS
 88 S.F. - 44 S.F./BUNK
 INCLUDING CIRCULATION
 * LESS THAN
 100 S.F. DAYROOM
 SPACE REQUIRED

B. DAYROOMS Separation, Adjacency, Size

3. Size

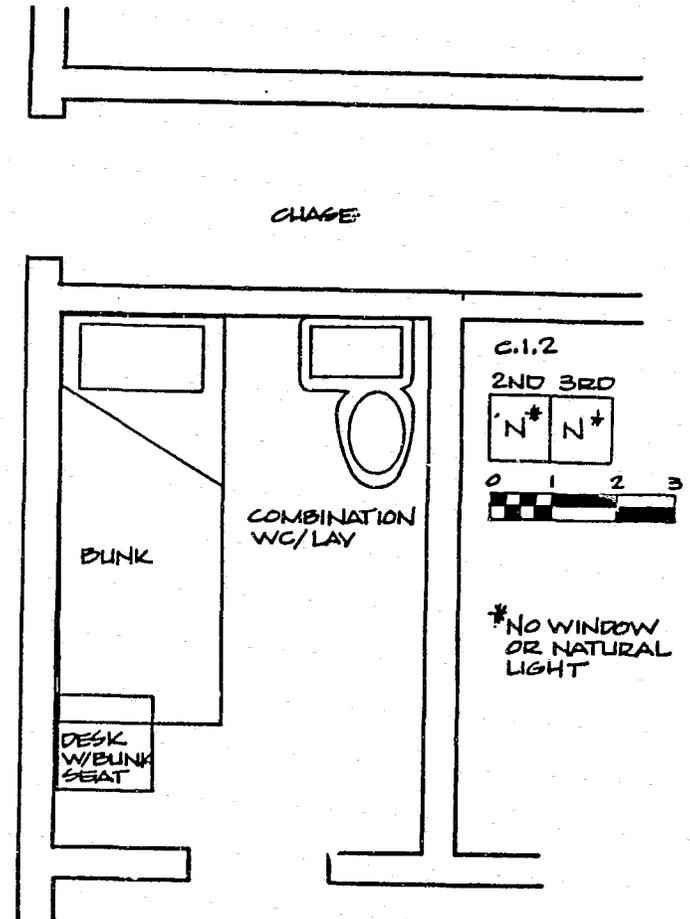
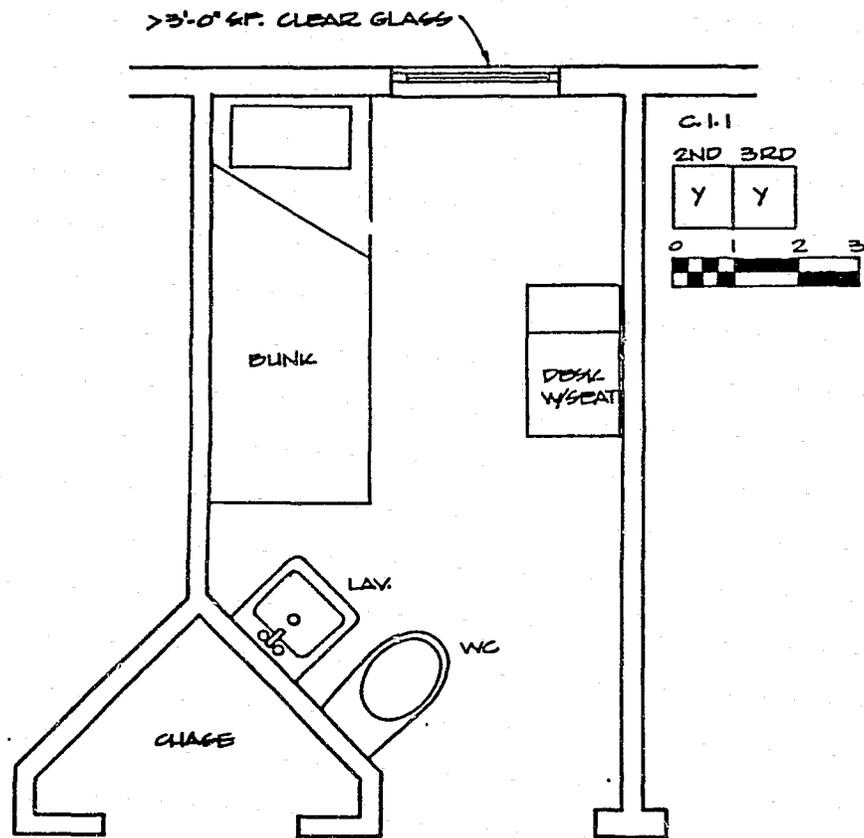
C-28



B34
2ND 3RD
N*Y
28 BUNKS
1008 SF - 36 SF/BUNK
0 5 10 15 20
* 285 SF/BUNK
EXCLUDING CIRCULATION

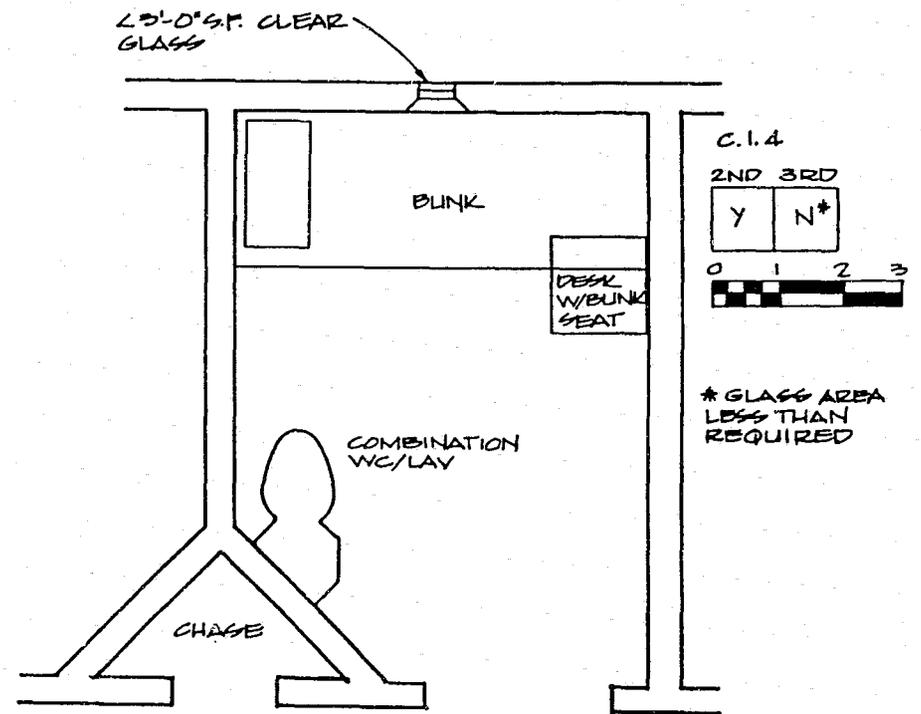
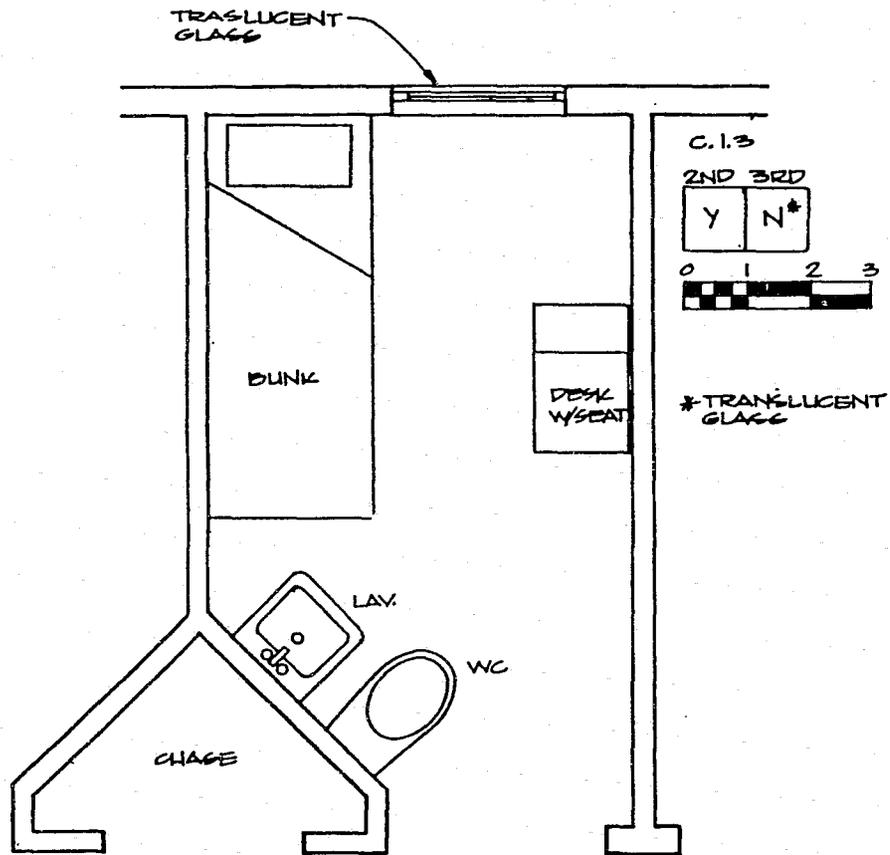
C. CELLS, NATURAL LIGHT 1. Window with View to Outside

C-29

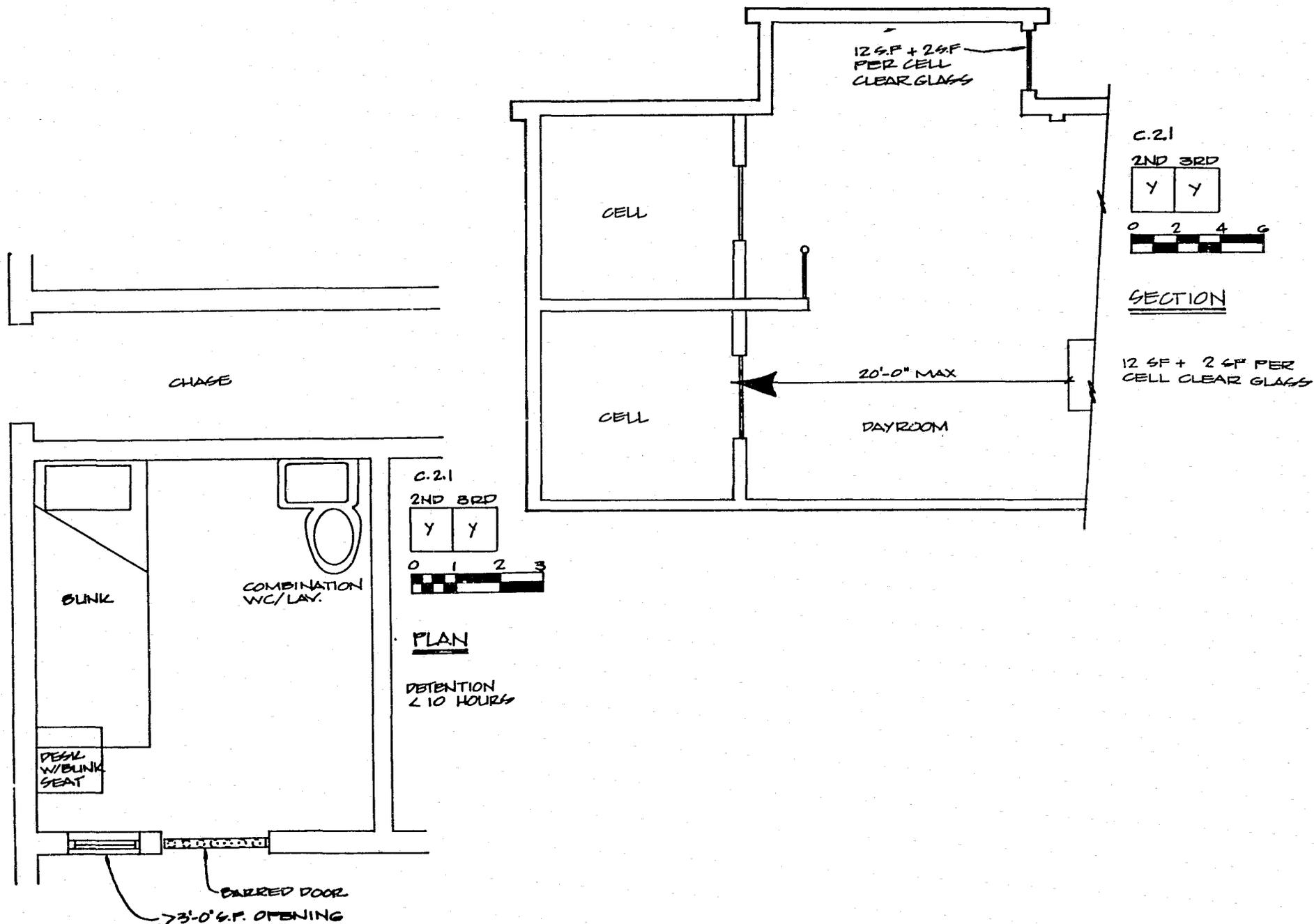


C. CELLS, NATURAL LIGHT 1. Window with View to Outside

C-30



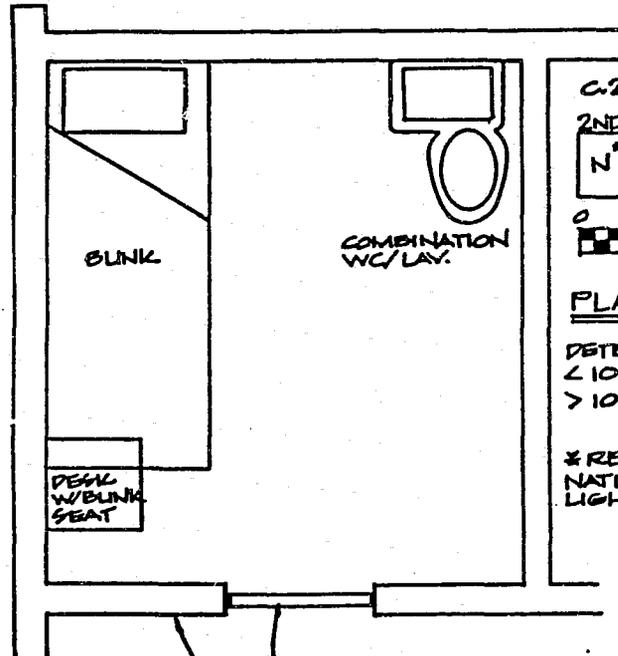
C. CELLS, NATURAL LIGHT 2. Opening to Adjacent Interior Space C-31



C. CELLS, NATURAL LIGHT 2. Opening to Adjacent Interior Space C-32

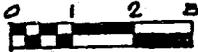
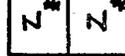


CHAGE



C.2.2

2ND BRD



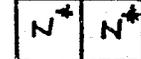
PLAN

DETENTION
< 10 HOURS
> 10 HOURS

* REQUIRES
NATURAL
LIGHT

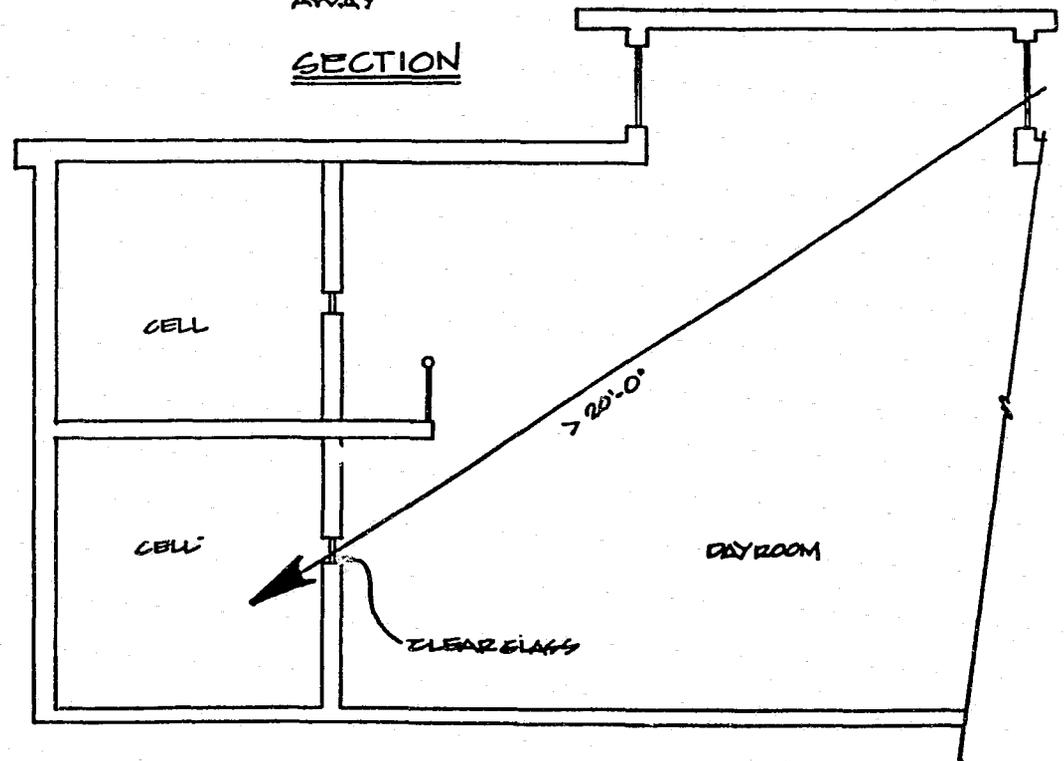
C.2.2

2ND BRD

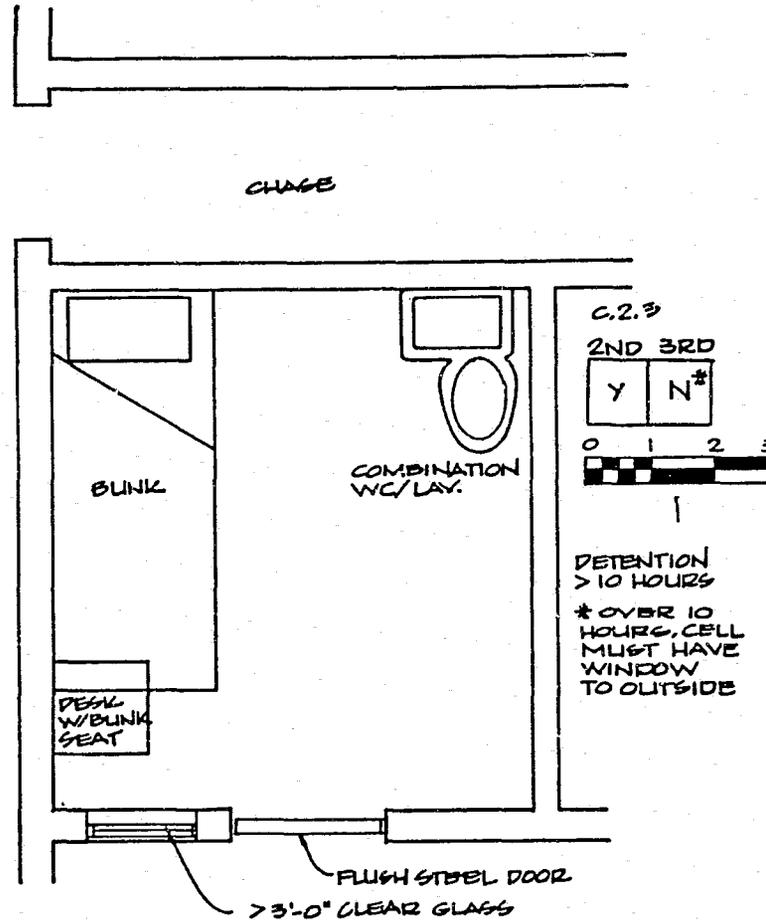


* NATURAL
LIGHT
FURTHER
THAN 20'-0"
AWAY

SECTION

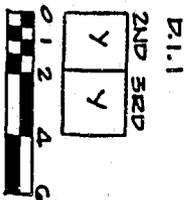
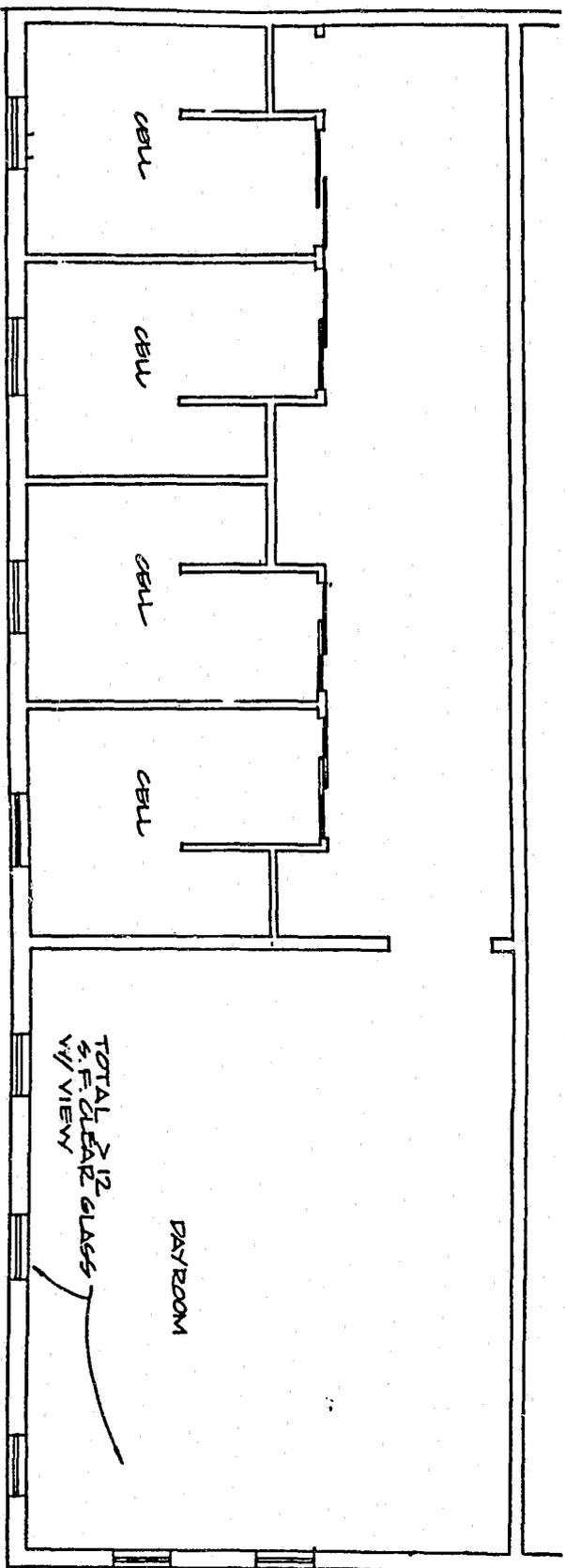


C. CELLS, NATURAL LIGHT 2. Opening to Adjacent Interior Space C-33



D. DAYROOMS, NATURAL LIGHT

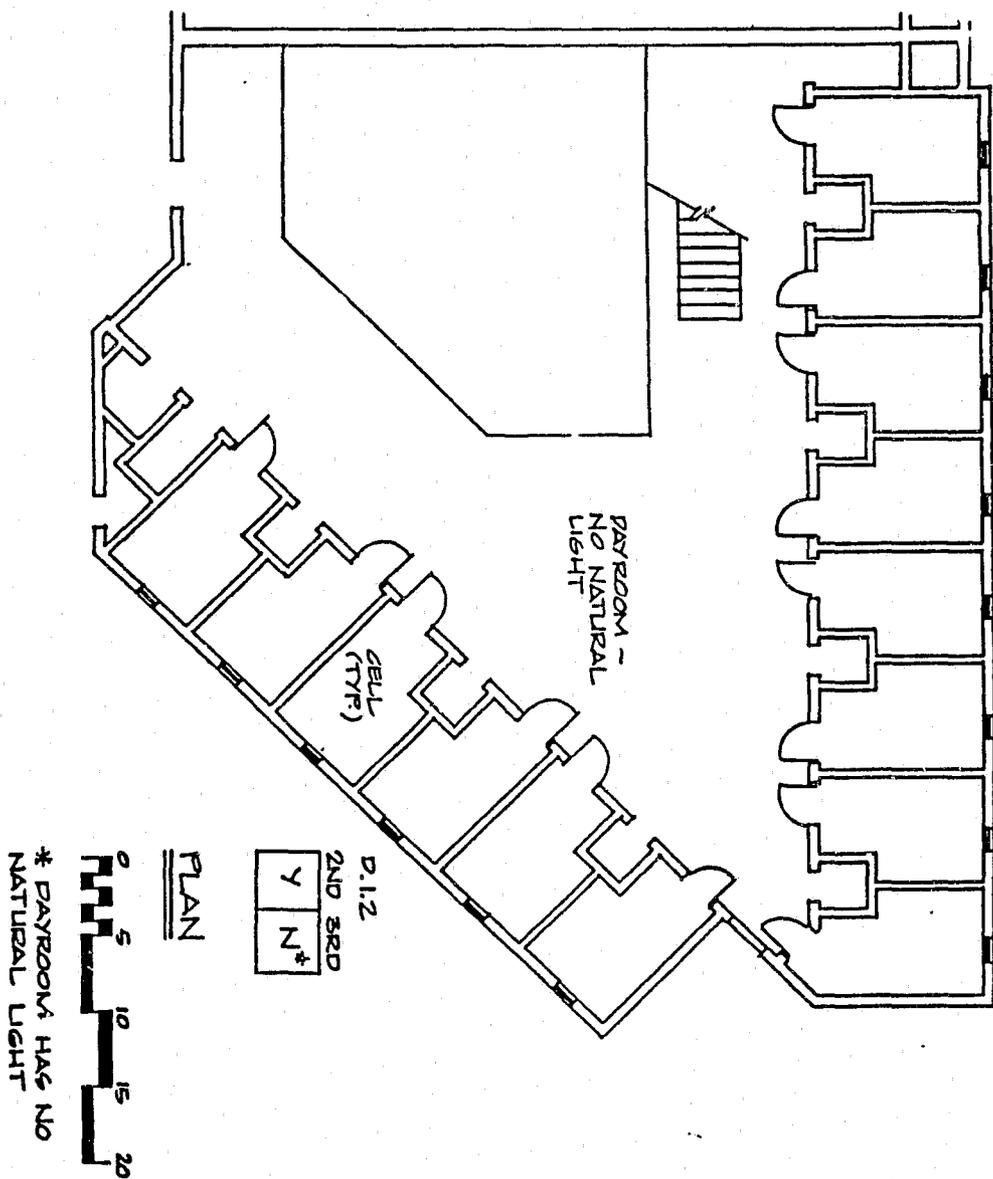
C-34



PLAN

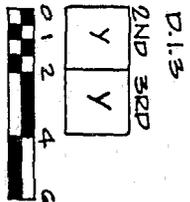
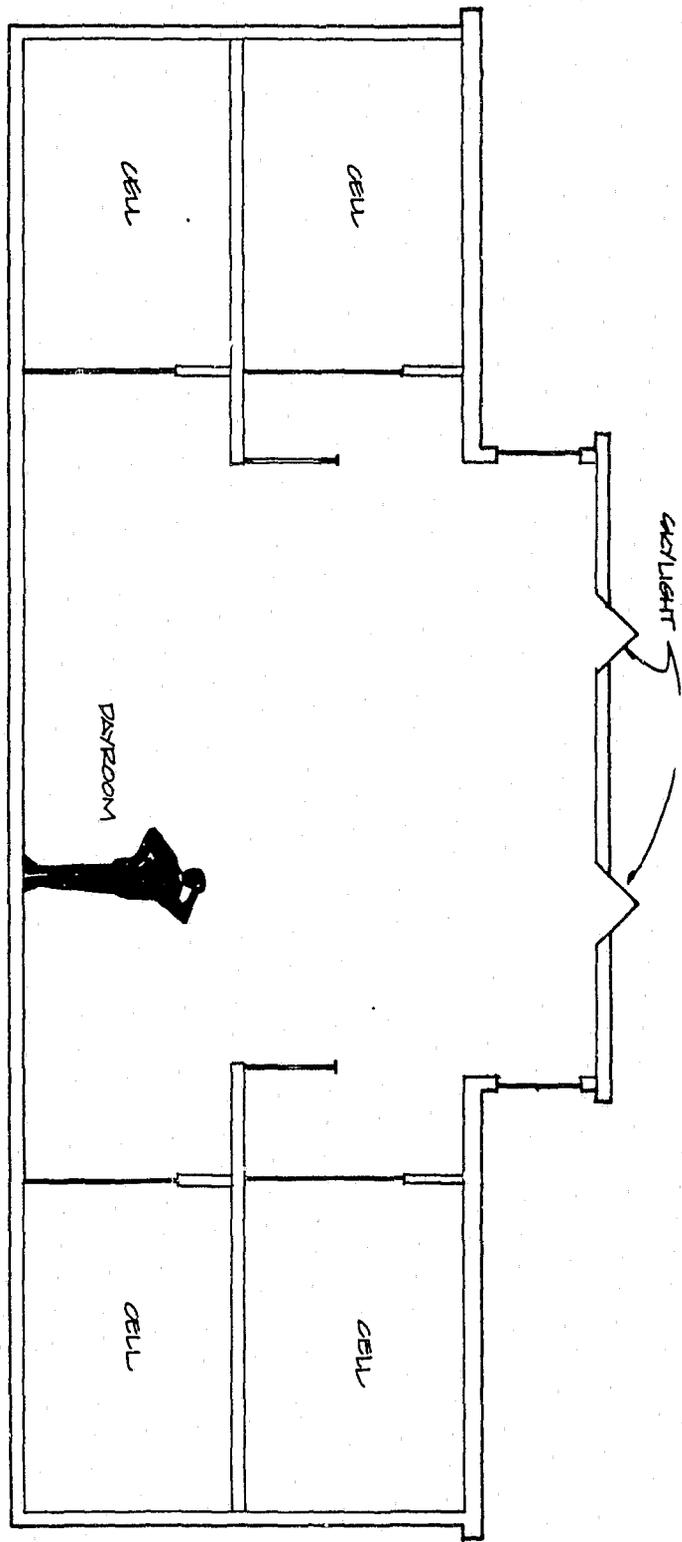
D. DAYROOMS, NATURAL LIGHT

C-35



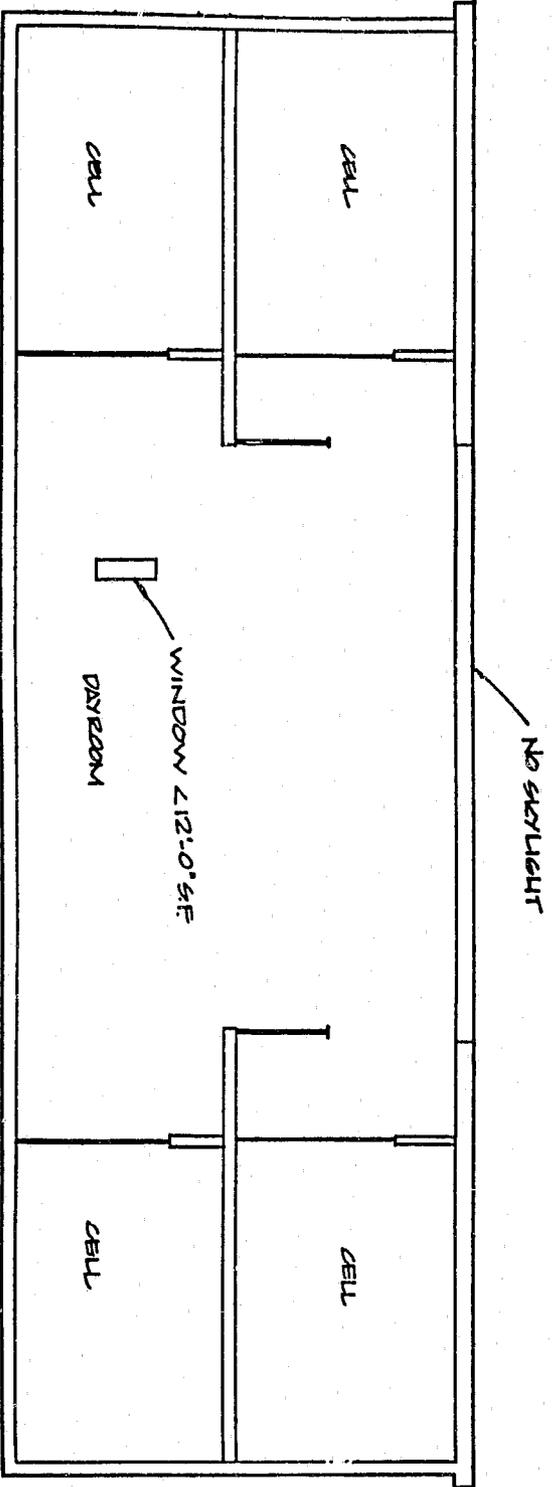
D. DAYROOMS, NATURAL LIGHT

C-36



D. DAYROOMS, NATURAL LIGHT

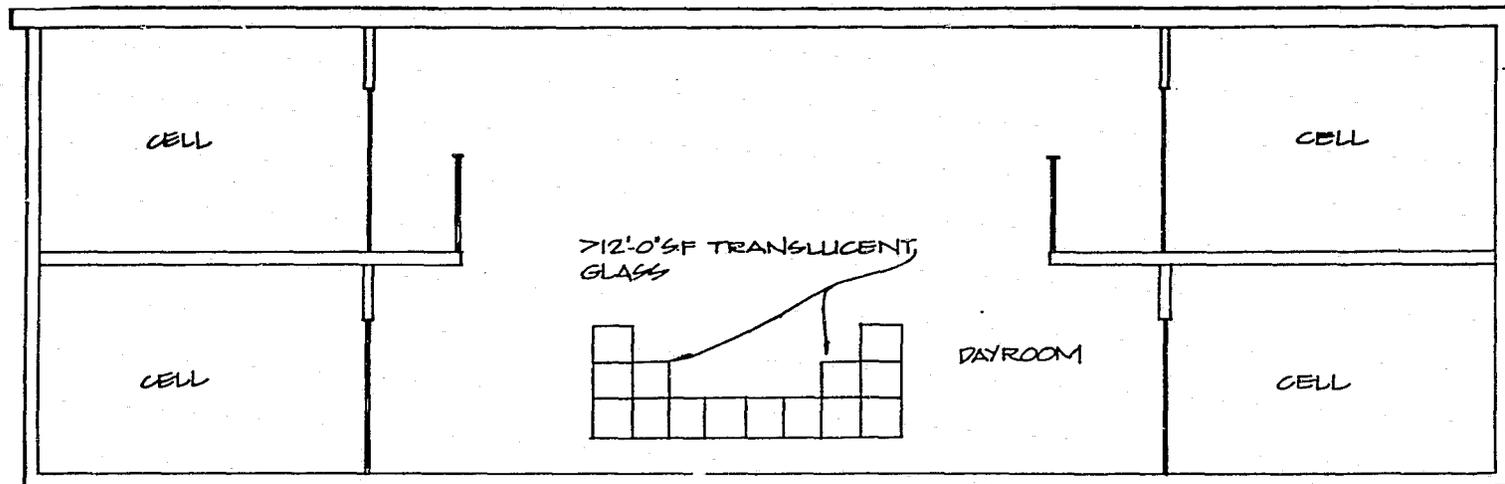
C-37



D.I.4
2ND BRD
Y N *
0 1 2 4 C
* 212 S/F
GLASS AREA
IN DAYROOM
SECTION

D. DAYROOMS, NATURAL LIGHT

C-38



D.I.S
2ND 3RD
Y N*

0	1	2	4	G
---	---	---	---	---

* >12 SF GLASS
AREA BLIT
OPAQUE GLASS

SECTION

Tables and Charts

The preceding illustrations address several of the standards changes and issues that can be portrayed graphically. There are additional issues that are more appropriately described in charts or tables.

Table A: Toilets

Number of Occupants	Required Toilets:	
	Second Edition	Third Edition
1	1	1
2	1	1
3	1	2
4	1	2
5	1	2
6	1	2
7	1	2
8,9,10,11,12	2	2
13,14,15,16	2	2
17 thru 24	3	2 male 3 female
25 thru 32	4	3 male 4 female
33 thru 36	5	3 male 5 female
37 thru 40	5	4 male 5 female
41 thru 48	6	4 male 6 female
49 thru 56	7	5 male 7 female
57 thru 60	8	5 male 8 female
61 thru 64	8	6 male 8 female
65 thru 72	9	6 male 9 female
73 thru 80	10	7 male 10 female

Table B: Wash Basins

Number of Occupants	Required Wash Basins:	
	Second Edition	Third Edition
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	2	1
8,9,10,11,12	2	1
13 thru 18	3	2
19 thru 24	4	2
25 thru 30	5	3
31 thru 36	6	3
37 thru 42	7	4
43 thru 48	8	4
49 thru 54	9	5
55 thru 60	10	5
61 thru 66	11	6
67 thru 72	12	6
73 thru 78	13	7
79, 80	14	7

Chart C: Exercise and Recreation

Second Edition:

Third Edition:

Outdoor Recreation

Minimum of 2 acres for unit up to 500 inmates; 90 s.f. for each inmate over 500

15 s.f. unencumbered per user at one time, with a minimum of 1500 s.f.

Indoor Exercise

Indoor space

Allows covered/enclosed¹

Separate indoor space for vigorous exercise in inclement weather; no less than 60' x 100'

15 s.f. unencumbered per user at one time
Minimum of 500 s.f. for facilities of less than 100; minimum of 1000 s.f. for facilities of 100 or more

Minimum 22 foot ceiling

Minimum 18 foot ceiling

Segregation

Indoor exercise outside room/cell, 35 s.f./inmate; interpretation of minimum s.f.

Outdoor and covered/enclosed¹; 15 s.f. per user at one time; minimum of 500 s.f.

1. covered/enclosed areas are defined in the new standards as spaces that must be fully functional when outdoor areas are not feasible for use.