Standards and Working Procedures for Designers in the Live Performing Arts Industry in Canada

A Guide for Professional Designers of
Sets, Costumes, Lighting and Sound

Second Edition

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Acknowledgments

Original Edition (1987): The Associated Designers of Canada would like to thank the following members who created the original version of the Standards and whose valuable advice and time made this project possible.

Reginald Bronskill
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Second Edition (2003): The contributors to the second edition of the Standards and Working Procedures wish to acknowledge those Designers listed above who created this document. Their work has remained the major content of this edition with the addition of certain refinements in definition of certain changing theatre technologies. We are all indebted to them for their pioneering efforts and hope that our amendments will prove as considered and complete.

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With assistance from:

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Introduction

The Associated Designers of Canada (ADC) has prepared this guide for Designers of sets, costumes, lighting, and sound working in the live performing arts in Canada. It will be a valuable aid for ADC Member Designers, as well as all technicians, craftspeople, and management, who communicate with Designers during the realization process. ADC believes that it can also provide a basic framework for educating future design talents.

Each discipline will be discussed as follows:

Design Definitions

Design definitions are taken primarily from the Designing Artists Contracts made available by the Associated Designers of Canada to its members.

Communication Standards

Standard is defined as "that which is established by authority, custom, or general consent, as a model or example".[1] The communication standards are derived from common usage and are logically based.

Recommended Working Procedures

Procedures are defined as "a manner or method of proceeding in a process or course of action: or a particular way of proceeding".[2] The recommended working procedures outline each step in the realization process.

Both the Standards and Recommended Working Procedures are structured as simple checklists for the reader's convenience.

Finally, completing this document is a list of information that must be provided by the management in order for Designers to fulfill their contractual obligations and begin to meet the ADC standards.

It is important to stress that ADC is not attempting to impose any particular style of drawing, drafting, or design on its members or on Designers in general, nor restrict aesthetic freedom. We support and encourage individual artistic exploration and expression. Within this philosophy, ADC believes that these standards and recommended working procedures can establish effective and common means for communicating design information clearly and consistently.

ADC acknowledges the wide variety of resources and production values existing within the Canadian theatrical community, and the unique relationship between each Designer and production. We believe this guide can be applied equally to all Canadian producing companies. A sense of responsibility must exist between Designer and management, respecting the spirit and intent of the signed contract.

Finally, ADC believes it must state its commitment to good professional conduct. We encourage our members to maintain a business-like relationship with all producing companies. We stress the importance of utilizing safe materials and building practices. The good working relationships that Designers establish with Theatres, Producers, craftspeople and fellow artists in realizing their Designs, reflect positively on all Designers.

[1, 2] *Definitions taken from Websters New Collegiate Dictionary, 1956, Thomas Allen Ltd., Toronto, Ontario.*

SCENIC DESIGN

DEFINITIONS

"SET" shall include but not be limited to: architectural design of the performance space, together with its surface treatment, masking, properties including hand properties (but not including costume accessories), furniture, set dressing, visible transitions, projected images and special effects related thereto.

> *NOTE: It is understood that the design and execution of special effects, projected media effects, and lighting effects are not assumed to be the exclusive responsibility of the Set Designer until and unless they have been specifically negotiated and agreed to by all parties.*

"PRELIMINARY (SET) DESIGN" is defined as including a floor plan with measurements, preliminary properties and a set dressing list, and at least two (2) of the following:

1. Perspective sketch(es) or front elevation sketch(es)
2. Unpainted scale model(s)
3. Preliminary scale elevations showing proportion and size.

In any case, the following information shall be supplied: options of general construction methods; special materials or surface treatments; mechanical devices or application requirements, if any; a list of special effects; and sufficient other information to enable the Theatre to reasonably estimate costs, on the understanding that the Preliminary Design reflects discussions among the Designer, the Director and the Theatre.

"COMPLETED (SET) DESIGN" is defined as including coloured rendering(s) and/or working scale model(s), accurate scale floor plan(s), section(s) and elevation(s), basic technical drawings detailing all scenic elements including proposed storage, painting elevations or equivalent, lists of all known properties and set dressing, with illustrations indicating colour and dimensions, details of special effects and any additional details pertaining to overall design sufficient for detailed costing and realization.

"APPROVED (SET) DESIGN" is defined as the Completed Design with all modifications and changes made to the satisfaction of the Director, Theatre and the Designer, and which have been initialed and dated by the parties.

COMMUNICATION STANDARDS

All drawings, renderings, plans, and models should display the ADC stamp.

1. Renderings should maintain a consistent proportion to indicate the actor – environment relationship. When applicable, renderings should follow mechanical perspective.

2. Technical drawings should be clear, clean, and inscribed on a standard drafting medium. Drawings created in CADD software should be saved and exchanged in a mutually agreed upon file format.

3. A border should frame each drawing.

4. Each "set" should have its own ground plan.

5. Recommended scales for plans and elevations are 1:25, 1:50 or ¼"=1'-0", ½"=1'-0".

   Scales for moldings and details should be adequate for construction, ranging from 1:20 or 1"=1'-0" to full scale.

   Choice of scale for drawings may be dependent on the scale of the original drawings of the venue provided by the Theatre or Producer.

6. The Title block on all drawings should include the following information:

   a. Production title and date;
   b. Venue;
   c. Producer;
   d. Director;

e. Designers – costumes, lighting and sound;
f. Drawing title;
g. Scale;
h. Drawn by;
i. Date;
j. Drawing Number;
k. Type of Design Submission i.e. Preliminary, Approved, Completed;
l. Date of last revision;
m. CADD file name (if applicable).

The recommended position of the Title block is in the lower right hand corner of the page.

7. Building notes should be indexed on the right hand margin.

8. The drawings should read in a logical sequence from page to page, i.e.:

    a. Ground plan;
    b. Scene changes;
    c. Cross sections of the stage;
    d. Elevations;
    e. Details.

    It is suggested that an index page be included in sets of drawings numbering over twelve pages.

9. All drawings should be numbered in sequence and labeled as of a total, i.e.: 1/10, 2/10, 3/10, etc.

10. The use of drafting symbols is quite universal; ADC recommends that any symbol as prescribed in a standard drafting manual is acceptable. (A list of references can be found in "Sources and Resources" at the end of this document).

11. Any personal symbol that is not standard usage is acceptable, as long as it is keyed to the drawing through the legend. The Legend should be located in the right hand margin.

12. All lettering should be clear and neat.

13. Notation should be made for all practical elements (electrics, pyro, etc.) on the ground plan.

14. Human figures scaled to the drawing or model should always be a part of the presentation. Recommended heights are 6'-0" for men, and 5'-6" for women.

RECOMMENDED WORKING PROCEDURES

PRELIMINARY DESIGN

1. Preliminary Designs, including models or renderings should be presented, discussed and approved prior to working on the final working drawings. Written cost estimates should be provided by the Theatre.

2. It is the responsibility of the scenic Designer to provide sufficient information in the following areas to allow the Theatre to cost the Design:

    a. A preliminary props and set dressing list which includes sketches (not to scale) of any extraordinary items and their proposed positions;
    b. Projection imagery pertaining to conceptual approach, such as slide form and content (if known), projection source(s), projection surface(s), their prospective locations, etc. (where applicable);
    c. Special effects, noting conceptual information, safety, proposed placement, etc. (where applicable).

3. Proposed scenery storage and set masking positions should be indicated.

4. Communication among all design disciplines should be encouraged and maintained.

COMPLETED AND APPROVED DESIGNS

1. Ground plans should indicate proposed masking and storage areas for all scenic elements in multiple scene shows.

2. Technical drawings should be detailed enough to allow building to continue in the Designer's absence.

3. Set Designers should always draw a significant section to show proposed positions for scenic elements, masking, and for locating potential electrics, projectors, speakers or other special rigging or installations. Flown elements should also be shown in their high trim (storage) position.

4. Set models may be scaled in 1:25, 1:50, ¼"=1'-0", or ½"=1'-0".

   Choice of scale for drawings may be dependent on the scale of the original drawings of the venue provided by the Theatre or Producer.

5. Painter's elevations should be drawn to scale. Recommended minimum is 1:25 or ½"=1'-0".

6. Colour swatches should be included with the Completed Designs.

7. Completed properties and set dressing lists should include working drawings or other visual representations of specific items.

8. Projection information should include type of projection equipment and surfaces, their relative positions, and a guide to image content that is as comprehensive as possible (where applicable).

9. All special effects should have a detailed description of the desired effect and the proposed accommodation within the Design (where applicable).

COSTUME DESIGN

DEFINITIONS

"COSTUME" shall include but not be limited to: all clothing worn by all performers, whether designed, found or selected by the Designer; all hair styles, facial hair, wigs, etc.; makeup, and special costume effects; all accessories, headgear, gloves, footwear, etc.; and the functioning of these elements in performance, including quick changes.

> *NOTE: It is understood that from time to time the contracting of a make-up specialist or a hair specialist may necessitate the renegotiation of roles and chain of command. The Theatre and Designer should both understand the chain of command of the specialist – i.e. are they being hired as "Hair Designer" or are they reporting to and executing the Designs of the Costume Designer?*

"PRELIMINARY (COSTUME) DESIGN" is defined as including a full costume plot indicating the number of costumes per character, known quick changes, any special treatment or fabrication requirements not common to standard costume construction, and visual representations to indicate style and shape with sufficient detail so as to enable the Theatre to estimate costs, on the understanding that the Preliminary Designs reflect discussions among the Designer, the Director, and the Theatre.

"COMPLETED (COSTUME) DESIGN" is defined as including full sketches of each and every costume and costume accessory required for the production, colour information, specific working drawings for extraordinary or complex costuming requirements and known quick changes, fabric swatches and/or texture specifications and wig or hair sketches showing profile, front and back views and colour information as required for detailed costing and realization.

"APPROVED (COSTUME) DESIGN" is defined as the Completed Design with all the modifications and changes made to the satisfaction of the Director, Theatre and the Designer, and which have been initialed and dated by the parties.

COMMUNICATION STANDARDS

All Renderings and working drawings should display the ADC Stamp.

1. A costume rendering should have the following information on each page:

    a. Play title;
    b. Act and scene;
    c. Character name;
    d. Actor name;
    e. Costume Number of total number of costumes.

2. All renderings should be complete enough in all detail that costume construction can continue in the Designer's absence. All impressionistic renderings should be accompanied by information that will permit the cutter to interpret the Design.

3. All back views are implied except where additional details are provided.

RECOMMENDED WORKING PROCEDURES

PRELIMINARY DESIGN

The Costume Designer must provide adequate detailed information to allow the Theatre to cost the Designs. The Theatre should, in turn, provide these cost estimates in writing. The Preliminary Design information should include:

1. A full costume plot with indications of any quick changes. It is expected that this will correlate with the scale and scope lines of the contract.

2. A visual representation of costume style, indicating silhouette and period.

3. A general description of fabrics, and any proposed treatments, as painting, dying, beading, appliquéing, etc. Any unusual fabrics should be swatched if possible.

4. A general description of footwear, undergarments, millinery, wigs and hairstyles, jewelry, armour, and any other accessories.

Unusual items and/or techniques relating to any of the above should be noted.

COMPLETED AND APPROVED DESIGNS

1. Fabric swatches and/or fabric description should be included with renderings.

2. A full costume plot, listing/reflecting casting decisions to date, along with a complete list of quick changes should be included.

3. Detailed information which may include visual representation, must be provided in the following areas (where applicable):

    a. Wigs, hairstyles, facial hair and makeup;
    b. Footwear;
    c. Undergarments, including padding;
    d. Millinery;
    e. Jewelry and military decoration;
    f. Armour, weaponry and related accessories. It is understood that the Designer is only choosing the look of the weapon and is not necessarily certified to handle firearms;
    g. Costume properties such as handbags, parasols, gloves, hankies, spectacles, etc.;
    h. Costume painting;
    i. Costume breakdown, its state of repair, age and implied cleanliness.

LIGHTING DESIGN

DEFINITIONS

"LIGHTING" shall include but not be limited to: the selection of the direction, texture, colour and intensity of light to be used in the production, as well as the placement and duration of all light cues and effects to be used in the production.

"PRELIMINARY (LIGHTING) DESIGN" is defined as including a description of the basic lighting approach, a rough inventory of equipment, special rigging, general specifications of any special lighting effects, and sufficient further information which is required to enable the Theatre to reasonably estimate costs, with the understanding that the Preliminary Design reflects the discussions among the Designer(s), the Director and the Theatre.

> *NOTE: It is understood that the design of special effects, and projected media effects are not assumed to be the exclusive responsibility of the Lighting Designer until and unless their design has been specifically negotiated and agreed to by all parties.*

"COMPLETED (LIGHTING) DESIGN" is defined as including all plots, schedules, specifications and working drawings that the Theatre requires for detailed costing and execution of the Design.

"APPROVED (LIGHTING) DESIGN" is defined as the total lighting for the production and all pertinent documentation required for the execution of same, to the satisfaction of the Designer, the Director and the Theatre.

COMMUNICATION STANDARDS

All plans should display the ADC Stamp.

1. The light hanging plot is the primary graphic tool used to convey the precise information needed to execute a Lighting Design.

2. A center line vertical elevation should accompany the light hanging plot when any of the mounting positions or masking are variable with respect to position of vertical trim.

3. Technical drawings should be clean, clear and inscribed on a standard drafting medium. Drawings created in CADD software should be saved and exchanged in a mutually agreed upon format.

4. A border should frame each drawing.

5. Recommended scales for light hanging plots and sections are: 1:25, 1:50, ¼”=1’0”, or ½”=1’-0”.

NOTE: Choice of scale for drawings may be dependent on the scale of the original drawings of the venue provided by the Theatre or Producer.

6. The Title block on all drawings should include the following information:

    a. Production title and date;
    b. Theatre space / Venue;
    c. Producer;
    d. Director;
    e. Designers – sets, costumes, sound;
    f. Drawing title;
    g. Scale;
    h. Drawn by;
    i. Date;
    j. Drawing #;
    k. CADD File name (where applicable).

    The Title Block’s recommended position is in the lower right hand corner of the page.

7. All lettering should be clear, neat and read from one direction regardless of the lamp orientation.

8. The Legend should contain the following information:

a. An example of every type of luminaire used, with identification listing:

    i. Type of luminaire;
    ii. Wattage;
    iii. Fixture count of each type.

b. A typical fixture labeling all symbols and numbers used, as: Channel, Dimmer, Circuit #, Instrument Number, Purpose, Colour, Extra Notes, etc.

c. A colour medium key.

9. There are various international lighting templates currently in use in Canada. The delineation of the specific units, i.e. 6x12, 6x16, etc., is up to the individual Designer, as long as each type is properly indicated in the key. The minimum information that should accompany lamp symbol is:

    a. Instrument number, shown inside the body of the unit;
    b. Accessory symbol, i.e. gobo, iris, etc.;
    c. Two-fering.

OPTIONAL INFORMATION may include:

a. Channel;
b. Colour;
c. Purpose;
d. Dimmer #;
e. Circuit #;
f. Wattage.

10. The sequential numbering of instrument locations and mounting positions should follow the method practiced in the industry. See the following:

    LOCATIONS:

    a. Setting line to upstage;
    b. Setting line to downstage;

c. Reference to Stage Left or Stage Right of the Centre Line for such locations as booms, ladders, floor units, etc.

POSITIONS:

a. Stage Left to Stage Right for horizontal locations, i.e. electrics, bridges, FOH;
b. Top to bottom for vertical locations, i.e. booms, ladders, etc.

A list of references can be found in "Sources and Resources" at the end of this document.

RECOMMENDED WORKING PROCEDURES

PRELIMINARY DESIGN

1. Preliminary Designs should be presented, discussed and approved prior to working on the Completed Designs. Written cost estimates should be provided by the Theatre.

2. It is the responsibility of the Lighting Designer to provide sufficient information in the following areas to allow the Theatre to cost the Design:

    a. Rough inventory of equipment or of additional equipment;
    b. Special rigging or mounting positions;
    c. General specifications for any special lighting effects;
    d. Rough inventory of colour media, gobos, etc.

COMPLETED AND APPROVED DESIGNS

1. The light hanging plot should include these details:

    a. Centre line;
    b. Proscenium or setting line;

c. A Scaled Rule;
d. Lineset Index (if applicable) showing:

    i. Number of line sets available;
    ii. Total listing of all hanging goods;
    iii. Listing of all electrics pipes indicating the number and position name;
    iv. Trim of each pipe.

e. Horizontal mounting positions should be shown as a double continuous line broken by the instrument symbol;
f. Vertical locations should be indicated in their correct placement, in "phantom" view; that is, drawn as a dashed outline or hatched solid of the top unit(s). Detailed instrument positions may be shown by:

    i. Displaced orthographic projection;
    ii. Isometric elevation;
    iii. Fold-out view.

g. A label for each mounting position, giving its name and lineset number (if applicable). Optional information may include:

    i. Trim height;
    ii. Number of circuits required;
    iii. Total of each type of unit required.

h. Deck electrics and practicals may be listed or shown on a separate sheet or on a ground plan;
i. An indication of work lights and house lights (if applicable);
j. Special rigging details, bumpers, trapeze pipes, etc.;
k. A minimum indication of venue architecture or scenery that does not obstruct the unit symbols or information.

2. The center line section should include these recommended details:

a. Permanent architectural details or obstructions;
b. Lineset index (if applicable);
c. Sightline indications for masking;
d. Graphic representation of:

    i. Location of all electric pipes, showing trims and largest instrument type hung on each pipe;
    ii. Locations and size of borders and legs;
    iii. Any other objects that affect rigging or masking.

e. Trim heights, indicated on the flyline index or by use of a scale should be drawn and labeled.

3. The instrument schedule should list all lighting units numerically by hanging position. Columns should be provided listing:

    a. Location;
    b. Instrument number;
    c. Channel;
    d. Dimmer;
    e. Circuit (where applicable);
    f. Type of Instrument;
    g. Wattage;
    h. Purpose;
    i. Colour;
    j. Two-fering;
    k. Accessories: gobo, iris, tophat, barndoor, donut etc.;
    l. Devices: colour scroller, gobo rotator, animation wheel, moving mirror, etc.;
    m. Notes.

4. The Channel schedule should list all units, grouped by channel. Columns should be provided listing:

    a. Channel;
    b. Dimmer;
    c. Circuit # (where applicable);
    d. Position;

e. Instrument #;
f. Type of Instrument;
g. Wattage;
h. Purpose;
i. Colour;
j. Extra Notes.

5. It is the responsibility of the Lighting Designer to provide sufficient information in the following areas to permit the Design to be realized:

    a. A colour media cutting list stating each colour and the number of pieces for each frame size;
    b. An accessory list detailing gobos, tophats, barndoors, donuts, etc.;
    c. An equipment list detailing all required colour scrollers, gobo rotators, animation wheels, moving mirrors etc.;
    d. Any other plans and specifications necessary for the realization of the Lighting Design.

6. An outline of the cueing format, prepared in consultation with the Director should be provided.

SOUND DESIGN

DEFINITIONS

"SOUND" shall include but not be limited to: the selection of the location, orientation, type and quality of electronically reproduced and/or enhanced sound to be used in the Production and the placement and duration of all sound cues and aural effects to be used in the Production, in consultation with the Director and the Composer, if any.

"PRELIMINARY (SOUND) DESIGN" is defined as including a description of the basic approach to the use of sound in the production, a rough inventory of equipment, special rigging, general specifications of any special sound effect devices, preproduction and recording requirements, and sufficient further information which is required as determined by the Theatre to reasonably estimate costs with the understanding that the Preliminary Design Requirements reflect the discussions among the Designer(s), the Director, the Composer (if any) and the Theatre.

"COMPLETED (SOUND) DESIGN" is defined as including all plots, schedules, specifications, working drawings and tracking sheets, spare parts availability and system performance standards, as set out below, that the Theatre requires for detailed costing and execution of the Design.

"APPROVED (SOUND) DESIGN" is defined as the total electronically reproduced and enhanced sound of the Production and all pertinent documentation required for the execution of same, to the satisfaction of the Designer, the Director, the Composer (if any) and the Theatre.

COMMUNICATION STANDARDS

1. The loudspeaker and microphone location plot is the primary graphic tool used to convey the precise information needed to accurately position these transducers in the theatre.

2. A centre line vertical elevation should accompany the location plot when any of the mounting positions are variable with respect to position of vertical trim.

3. The system signal flow block diagram is the primary graphic tool used to convey the precise information needed to electrically interconnect all system components.

4. A patching schedule should accompany the block diagram when patch bays are involved at any point in the signal flow path.

5. Technical drawings and diagrams should be clean, clear and inscribed on a standard drafting medium.

6. A border should frame each drawing and diagram.

7. Recommended scales for loudspeaker and microphone location plots and sections are: 1:25, 1:50, ¼”=1’-0”, or ½”=1’-0”.

8. The legend block on all drawings and diagrams should include the following information:

    a. Production title and date;
    b. Theatre space;
    c. Producer;
    d. Director;
    e. Designers – sets, costume, lighting;
    f. Drawing title;
    g. Scale;
    h. Drawn by;
    i. Date;
    j. Drawing #.

    The recommended position for the legend block is in the lower right hand corner of the page.

9. All lettering should be clear, neat and read from one direction regardless of the orientation of the symbol being identified.

10. The key should contain the following information:

    a. An example of every type of symbol used, with identification listing:

        i. Generic type of device;
        ii. Brand & model number;
        iii. Operating configuration.

    b. A typical device showing labels with all symbols and numbers used, as: channels, audio levels, balancing, connectors, mode, circuits, configuration, remote control, attenuation, crossover settings, etc.;

11. There are various international graphic standards currently in use in Canada. The best authority, entitled "Graphic Symbols for Electrical and Electronics Diagrams," including sound equipment, is ANSI/IEEE 315-1975. The predecessor to this standard has, in the mid 80s, been acknowledged by the Graphic Standards Committee within the Sound Design Commission of the United States Institute for Theatre Technology as the appropriate reference for graphic symbolism to be used in theatrical sound system drawings.

    Also useful are:
    a. ANSI standard Y32.9 "Graphic Symbols for Electrical Wiring and Layout Diagrams used in Architecture and Building Construction";
    b. IEEE standard 200 "Reference Designations for Electrical and Electronics Parts and Equipments";
    c. ANSI/IEEE standard 260.1 "IEEE Standard Letter Symbols for Units of Measurement".

    All of these are updated periodically and may be obtained from: <http://global.ihs.com/>

12. The sound plot is the primary tool used to condense the total of all auditory functions of the Sound Design into a manageable form.

13. Recording tracking sheets are the primary tools used to document the source and type of all component sounds used in the preproduction and recording process.

14. A detailed source identification schedule should accompany all tracking sheets when copyrighted materials are used in the production of prerecorded sound.

15. A detailed session contract should be filed and a copy should accompany all tracking sheets when live musicians are used in the recording process.

16. Cue sheets, either manually- or computer-generated, are the primary tools used to convey the precise information needed to perform every cue or operation during the show.

RECOMMENDED WORKING PROCEDURES

PRELIMINARY DESIGN

1. Preliminary Designs should be presented, discussed and approved prior to working on the Completed Designs. Written cost estimates should be provided by the Theatre.

2. It is the responsibility of the Sound Designer to provide sufficient information in the following areas to allow the Theatre to cost the Design:

    a. Rough inventory of equipment or of additional equipment;
    b. Special rigging or mounting positions;
    c. General specifications for any special sound effects;
    d. Rough inventory of consumables such as tape, disks, scoring pads, track sheets, cue sheets, etc.;
    e. Estimated equipment and studio rental and personnel needs for preproduction and recording.

COMPLETED AND APPROVED DESIGNS

1. The loudspeaker and microphone placement plot should include these details:

    a. Centre Line;
    b. Proscenium or Setting Line;
    c. A Scaled Rule;
    d. Horizontal mounting positions should be shown as a double continuous line broken by the appropriate transducer symbol;
    e. Vertical locations should be indicated in their correct placement, in "phantom" view, that is, drawn as a dashed outline or hatched solid of the top unit(s). Detailed transducer positions may be shown by:

        i. Displaced orthographic projection;
        ii. Isometric elevation;
        iii. Fold-out view.

    f. A label for each mounting location, giving name and number of the location, and flyline number (if applicable). Optional information may include:

        i. Trim height;
        ii. Number of circuits required;
        iii. Total of each type of unit required;
        iv. Attenuator/crossover settings.

    g. Deck practical loudspeakers and fixed microphones may be listed or shown on a separate sheet or on a groundplan;
    h. An indication of intercom, biscuit, headphone, monitor/paging speaker circuits/position (if applicable);
    i. Special rigging details, custom mounting brackets or harnesses, etc.;
    j. A minimum indication of venue architecture or scenery that does not obstruct the transducer symbols or information.

2. The centre line section should include these recommended details:

    a. Permanently installed transducers (including infrared systems);
    b. Flyline index (if applicable);
    c. Sightline indications for masking;
    d. Graphic representation of:

        i. Location of all electric pipes and other show-specific obstructions;
        ii. Location of all permanent architectural features affecting coverage;
        iii. Any other objects that affect rigging or masking.

    e. Mounting heights, scaled accurately should be drawn and labeled.

3. The transducer schedule should list all loudspeakers and microphones numerically by location. Columns should be provided listing (as applicable):

    a. Location/application;
    b. Transducer number;
    c. Amplifier(s);
    d. Circuit(s);
    e. Type of unit(s);
    f. Phase polarity;
    g. Crossover details;
    h. Attenuator setting(s);
    i. Phantom powering;
    j. Capsule type;
    k. Rolloff setting;
    l. Input channel(s);
    m. Splitter circuit(s);
    n. Extras, i.e. specific serial numbers, colour coding, etc.;
    o. Notes.

4. The amplifier schedule should list all units, grouped by amplifier. Columns should be provided listing:

    a. Amplifier #;
    b. Location;
    c. Output channel #(s);
    d. Loudspeaker #(s);
    e. Number and type of loudspeakers;
    f. Loudspeaker circuit(s);
    g. Net load impedance;
    h. Phase polarity;
    i. Amplifier type & power rating;
    j. Input gain setting;
    k. Extra notes, i.e.: bridged/normal mode, balanced/unbalanced input option, etc.

5. It is the responsibility of the Sound Designer to provide sufficient information in the following areas to permit the Design to be realized:

    a. A list stating any special components to be installed into any particular transducer prior to hanging, installation or use;
    b. A very special accessory list detailing windscreens, pop filters, special capsules, new wireless batteries, etc. to be used or installed at special times during the performance;
    c. An equipment list detailing all required equipment such as special parts, spare diaphragms, capsules, or other potential replacement/expendable items and any other plans and specifications necessary for the realization of the Sound Design on an on-going basis over the expected life span of the production.

6. The system signal flow block diagram should include these details, drawn in standard graphic representation:

    a. All active and passive sound devices and components, connected or not;
    b. All inputs and outputs indicating type of connector;

c. All interconnections showing routing, splices, pathways, junctions, etc.;
d. Dashed outlines indicating equipment contained within the same physical space;
e. Adequate labeling to indicate generic and specific types of devices, applications, channels, connection details, circuit labeling, shielding information, cable type, operating modes, switch settings, jumpering, etc.;
f. Indication of all patching options with detail showing patchbay labeling;
g. Any specific equipment information necessary for proper understanding enlarged and shown separately in adequate detail to ensure complete unambiguity.

7. The sound plot should include these details:

    a. A two-dimensional chart showing the sound events of the production;
    b. On the x-axis the show begins on the left at the Intro music/Top of Act I and ends on the right at the Curtain call/audience exit music;
    c. On the y-axis the sound sources begin at the bottom with live microphones and end at the top with effect device returns;
    d. Horizontal bars are drawn to exemplify the use of a specific sound source over a period of time during the show;
    e. Labels are entered inside the bar describing the type of sound, its function, destination, duration and other details as necessary.

8. Recording tracking sheets should include these details:

    a. Tape/disk type;
    b. Speed/sampling rate;
    c. Number of tracks;
    d. Master or slave;
    e. Type of time code;
    f. Name of cue and production;
    g. Composer;

h. Conductor;
i. Take, timing and editing history;
j. Instrumentation on each track;
k. Musician/instrument identification;
l. Doubling/comping history;
m. Noise reduction;
n. Test tones and reference level;
o. Details on any copyrighted material used: composer, publisher, clearance organization.

9. A session contract should include these details:

a. Name of union signatory;
b. Name of contractor;
c. Name of session leader;
d. Names of all musicians and their instruments;
e. Details of any doubling used;
f. Purpose of recording, explanation of end use;
g. Details of remuneration and dues.

10. Cue sheets should include the following details:

a. Name of production and cue number;
b. Cue name or label;
c. Type of cue, i.e. mic, tape, preset, fade, MIDI, etc.;
d. Number of identical follow repeats (loops);
e. Time for execution as an automatic follow;
f. Whether to reset the stopwatch or not when the cue goes;
g. Sound source(s) selected for control by cue;
h. Fade rate(s) (if applicable);
i. Volume levels by source;
j. Effect send levels and assignments (if applicable);
k. Effect return levels and assignments (if applicable);
l. Direct preset assignments by source;
m. Output matrix level/switch settings by row/column (input/output);
n. Master output level settings by output channels.

INFORMATION LIST

Preliminary Information to be provided by the Theatre

The following is a list of information that must be provided by the management in order for Designers to fulfill their contractual obligations and begin to meet the ADC standards.

FOR SET DESIGNERS

1. Scale plan view of the venue, including house sightlines.
2. Scale section view of the venue, including house sightlines, all permanently installed equipment including but not limited to drapes, softgoods, bridges, orchestra or choral acoustic shells, and speaker clusters, etc.
3. The section should indicate the front of house architecture including all lighting positions.
4. The section should indicate all working linesets and their travel limitations.
5. An updated list of rigging information including pipe positions, lengths, line lengths, etc.
6. Any onstage limitations or obstructions, as radiators, heating ducts, etc.
7. Stage floor surface, wall surface, and their conditions.
8. Any trap doors or special openings and their positions.
9. Fire and building codes pertinent to the theatre, and any onstage fire exits.
10. A complete list of all masking stock, both hard and soft.
11. A complete list of other soft goods, including groundcloths, scrims, cycs, projection screens, etc.

FOR COSTUME DESIGNERS

1. Complete Casting list including any and all doubling, understudies etc.
2. Full Length photos of the performers.
3. Bio photographs and measurements of all cast members.
4. A description of costume stock items.
5. A description of costume facilities and equipment.

FOR LIGHTING DESIGNERS

All plans and lists provided to the Set Designer i.e.:

1. Scale plan view of the venue, including house sightlines.
2. Scale section view of the venue, including house sightlines, all permanently installed equipment including but not limited to drapes, softgoods, bridges, orchestra or choral acoustic shells, and speaker clusters, etc.
3. The section should indicate the front of house architecture including all lighting positions.
4. The section should indicate all working linesets and their travel limitations.
5. An updated list of rigging information including pipe positions, lengths, line lengths, etc.
6. Any onstage limitations or obstructions, as radiators, heating ducts, etc.
7. Stage floor surface, wall surface, and their conditions.
8. Any trap doors or special openings and their positions.
9. Fire and building codes pertinent to the theatre, and any onstage fire exits.
10. A complete list of all masking stock, both hard and soft.
11. A complete list of other soft goods, including groundcloths, scrims, cycs, projection screens, etc.

12. A full set of technical drawings of the show.
13. A current and complete inventory of working equipment, including lighting control console, quantity, type and wattage of lumminaires, gel frame sizes, gobo sizes, projection equipment, dimmer capacity, circuits etc.

Plus:

14. A complete inventory of gel, gobos, accessories and devices.
15. Colour swatches of all costumes and accessories in the show upon request.

FOR SOUND DESIGNERS

1. All plans and lists provided to the Set Designer and Lighting Designer.
2. A full set of technical drawings of the show.
3. A complete inventory of pertinent equipment, including quantity, type, power, channels, etc.
4. A complete inventory of accessories and sub-assemblies.
5. A complete inventory of all consumable and replacement parts normally stocked.
6. Accurate and up-to-date scale plan and section of the venue(s).
7. Technical data including locations of all permanently installed sound circuits and transducer mounting positions.
8. Accurate and up-to-date equipment manuals for all sound equipment in the venue(s).
9. Detailed system signal flow or block diagram(s) for all existing systems showing all inputs, outputs and patch points available.

Sources and Resources

Books / Printed Resources

Bay, Howard. Stage Design. New York: Drama Book Specialists, 1974.

CBC design manual.

De Chiara, Joseph, and John Hancock Callender. Time-saver Standards for Building Types. New York; Montreal: McGraw Hill, 1973.

Parker, Oren W. Sceno-Graphic Techniques. 3rd edition. Carbondale: Southern Illinois University Press, 1987. (also available as an ebook. Publisher: netLibrary, Inc. ISBN 0585135576).

Parker, Oren W., R. Craig Wolf, and Dick Block. Scene Design and Stage Lighting. 8th edition. California: Wadsworth, 2003.

Patten, Lawton M., and Ruth G. Rogness. 3rd edition. Architectural Drawing. Kendall/Hunt, 1977.

Pecktal, Lynn. Designing and Painting for the Theatre. New York: Holt, Rinehart and Winston, 1975.

Ramsey, Charles George, Harold Reeve Sleeper, and John Ray Hoke. Architectural Graphic Standards. 10th edition. New York: John Wiley & Sons, 2000.

Warfel, William B. Handbook of Stage and Lighting Graphics. 2nd edition. New York: Drama Book Specialists, 1974.

Warfel, William B. The New Handbook of Stage and Lighting Graphics. Quite Specific Media, 1990.

Electronic Resources (as at time of printing)

Associated Designers of Canada. 1999-2003. 5 June 2003. < www.designers.ca >

Canadian Institute for Theatre Technology. 8 May 2003. 5 June 2003. < www.citt.org >

IHS Global. 2003. Global Engineering Documents: a Division of IHS Engineering. 5 June 2003. < http://global.ihs.com>

The Association of British Theatre Technicians. 2 September 1997. 5 June 2003. < http://www.abtt.org.uk >

United States Institute for Theater Technology, Inc. 14 May 2003. The Association of Design, Production, and Technology Professionals in the Performing Arts and Entertainment Industry. 5 June 2003. < www.usitt.org >

United States Institute for Theater Technology, Inc. 2003. Various Standards Documents. 5 June 2003. < www.usitt.org >