ABBREVIATIONS

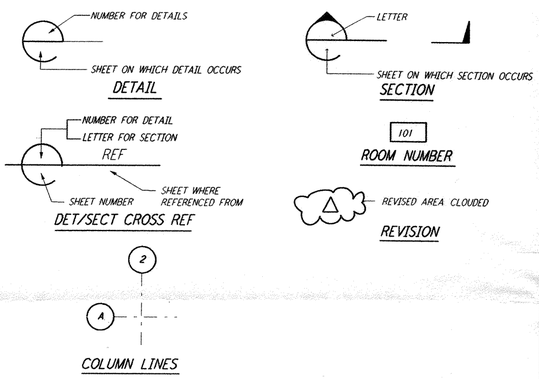
AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B/B	BACK TO BACK
B/P	BASE PLATE
BM	BEAM
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BRCG	BRACING
C	CAMBER
CC OR C/C	CENTER TO CENTER
CG	CENTER OF GRAVITY
CJ	CONSTRUCTION JOINT
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CU	CUBIC
DET	DETAIL
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
DO	DITTO
DWG	DRAWING
DWL	DOWEL
EA	EACH
EF	EACH FACE
EL	ELEVATION
ENCL	ENCLOSURE
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ETCETERA
EW	EACH WAY
EXIST	EXISTING
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FLR	FLOOR
FLSHG	FLASHING
FOC	FACE OF CONCRETE
FRMG	FRAMING
FS	FAR SIDE
FT	FOOT, FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GR	GRADE
HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HANDRAIL
HSB	HIGH STRENGTH BOLT
ID	INSIDE DIAMETER
IN	INCH
INFO	INFORMATION
INSUL	INSULATION
JST	JOIST
JT	JOINT
LB	POUND
LG	LENGTH
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LWC	LIGHT WEIGHT CONCRETE
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MPH	MILES PER HOUR
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OTO	OUT TO OUT
PCF	POUNDS PER CUBIC FOOT
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
R	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REIN. OR BARS	REINFORCING STEEL
REQD.	REQUIRED
REV	REVISE OR REVISION
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SLV	SHORT LEG VERTICAL
SPA	SPACED
ST STL	STAINLESS STEEL
STD	STANDARD
STIF	STIFFENER
SYM	SYMMETRICAL
T&B	TOP AND BOTTOM
THK	THICKNESS
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
W/	WITH
WP	WATER PROOF
WP	WORKING POINT
WS	WELDED STUD
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

MATERIALS LEGEND

STEEL (LARGE SCALE SECTION)
CONCRETE
CONCRETE MASONRY UNIT
MASONRY
FLOOR OPENING
GRATING
SPAN DIRECTION
WELDED WIRE FABRIC
EARTH
STRUCTURAL BACKFILL

SYMBOLS

L	ANGLE
C	CHANNEL
PL	PLATE
℄	CENTER LINE
Ø	DIAMETER or ROUND
✦	WORK POINT OR ELEV BENCH MARK
△	DELTA
⌀	SQUARE FEET
#	NUMBER or POUND
&	AND
@	AT



NOTES

INSPECTIONS AND APPROVALS

GENERAL

1. PROFESSIONAL SOILS ENGINEER REGISTERED IN THE STATE OF FLORIDA SHALL INSPECT AND APPROVE ALL FOOTING EXCAVATIONS PRIOR TO PLACING CONCRETE ACCORDING TO SECTION 02226 OF THE SPECIFICATION.
2. CONTINUOUS INSPECTION BY AN INSPECTOR, APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY SHALL BE PROVIDED FOR THE FOLLOWING FIELD WORK:
   A) PLACEMENT OF CONCRETE
   B) FIELD WELDING
   C) INSTALLATION OF HIGH STRENGTH BOLTS
3. FIELD WELDERS AND WELDING OPERATORS SHALL BE FULLY QUALIFIED IN ACCORDANCE WITH AWS D1.1 AND BE APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY.
4. THE CONSTRUCTION SHALL COMPLY WITH REQUIREMENTS OF THE 1988 EPCOT BUILDING CODE.

GENERAL

1. ALL STRUCTURAL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE JOB SPECIFICATIONS AND STANDARDS.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD PRIOR TO FABRICATION.
3. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED, SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS. NO CUTTING OR BURNING OF STEEL SHALL BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER OF RECORD.
4. PAINTING AND SHOP PRIMING WHERE REQUIRE SHALL BE IN ACCORDANCE WITH SECTION 05120 AND SECTION 09900 OF THE SPECIFICATIONS.
5. FOR TYPICAL DETAILS SEE DRAWINGS S-101 THROUGH S-108.
6. THE TOP FLANGE OF BEAMS SUPPORTING COMPOSITE SLABS WITH WELDED-STUD SHEAR CONNECTORS SHALL NOT BE PRIME COATED.
7. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO MAINTAIN THE ALIGNMENT OF BUILDING AND RETAINING WALLS UNTIL ALL CONNECTIONS ARE COMPLETED AND SLAB AND WALLS CONSTRUCTED.
8. PRIOR TO PLACING FOUNDATIONS, REFER TO UNDERDRAIN SYSTEM DRAWINGS.

NOTES

FOUNDATIONS

1. MAXIMUM ALLOWABLE SOIL BEARING PRESSURE AS PER "FINAL GEOTECHNICAL INVESTIGATION FOR SPLASH MOUNTAIN" BY DAMES & MOORE, DATED APRIL 20, 1990, IS AS FOLLOWS:
   a. 2.5 KSF FOR FOOTINGS 2 FT. BELOW LOWEST FINISHED GRADE.
   b. 4.0 KSF FOR FOOTINGS 4 FT. BELOW LOWEST FINISHED GRADE.
2. MINIMUM DEPTH OF FOOTING SHALL BE 4'-0" BELOW THE LOWEST FINISHED GRADE.

STRUCTURAL STEEL

1. THE DESIGN, FABRICATION AND ERECTION OF ALL STRUCTURAL STEEL SHALL CONFORM TO AISC "MANUAL OF STEEL CONSTRUCTION" AND WITH LATEST AMENDMENTS SECTION 05120 OF THE SPECIFICATIONS. STRUCTURAL STEEL SHAPES & PLATES SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE NOTED ON PLAN.
2. PROVIDE FILLERS AT SPLICES OF PARTS HAVING MORE THAN $\frac{1}{16}$" DIFFERENCE IN THICKNESS.
3. ALL BEARING STIFFENER PLATES SHALL HAVE A CLOSE BEARING AGAINST THE INNER SURFACES OF BOTH FLANGES.
4. DOUBLE ANGLE DIAGONAL BRACING SHALL BE BOLTED TOGETHER WITH A BOLT AND A FILLER PLATE LOCATED AS FOLLOWS:
   a. ROOF BRACING AT THE $\frac{1}{4}$ POINTS OF LENGTH.
   b. WALL BRACING AT THE $\frac{1}{3}$ POINTS OF LENGTH.
   c. KNEE BRACING AT THE CENTER OF LENGTH.
5. PLATE FOR BUILT UP SECTIONS SHALL BE PREPARED BY FLAME CUTTING ONLY. UNIVERSAL ROLLED PLATE WILL NOT BE ACCEPTABLE.

CONNECTIONS

1. PLATE FOR BOLTED SHEAR PLATE CONNECTIONS SHALL BE THE SAME THICKNESS AS THE BEAM WEB WITH A MINIMUM THICKNESS OF $\frac{3}{8}$" UNLESS OTHERWISE NOTED. DIAGONAL GUSSET PLATE CONNECTIONS SHALL HAVE A MINIMUM THICKNESS OF $\frac{1}{2}$" (UNLESS OTHERWISE NOTED) AND THE NET AREA THROUGH THE BOLTS HOLES SHALL DEVELOP THE SHEAR VALUE OF THE BOLTS. ALL CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS. LOAD INDICATOR WASHERS SHALL BE USED WITH ALL ASTM A325F BOLTS.
2. ALL BOLTS SHALL BE $\frac{3}{4}$"Ø ASTM A325F BOLTS, UNLESS OTHERWISE NOTED.
3. ALL STIFFENERS SHALL HAVE A MINIMUM THICKNESS OF $\frac{3}{8}$". UNLESS OTHERWISE NOTED.
4. ALL COLD-FORMED PURLIN AND GIRT CONNECTIONS SHALL HAVE A MINIMUM OF 2-$\frac{5}{8}$"Ø ASTM A307 BOLTS.

WELDING

1. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1-90 STRUCTURAL WELDING CODE AND SECTION 05120 OF THE SPECIFICATION.
2. ALL WELDING PROCEDURE SPECIFICATIONS AND WELDING PROCEDURE QUALITICATIONS, WELDERS, AND WELDING OPERATORS SHALL BE FULLY QUALIFIED IN ACCORDANCE WITH AWS D1.1-90.
3. LENGTHS OF WELDS SHOWN ARE EFFECTIVE LENGTHS AS SPECIFIED IN AISC SPECIFICATIONS. WHERE LENGTH OF WELD IS NOT SHOWN, IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT WELDS SHALL BE FULL PENETRATION WELDS, UNLESS OTHERWISE NOTED.
4. ALL WELDING ELECTRODES SHALL BE E70XX.
5. WITH REFERENCE TO MINIMUM SIZE OF FILLET WELD REQUIREMENTS IN SECTION 1.17 OF AISC SPECIFICATIONS, MINIMUM SIZE OF FILLET WELDS WHEN NOT SPECIFIED ON WELD SYMBOLS SHALL BE AS FOLLOWS:
   $\frac{1}{4}$" WELD FOR MATERIAL THICKNESS UP TO AND INCLUDING $\frac{3}{4}$"
   $\frac{5}{16}$" WELD FOR MATERIAL THICKNESS OVER $\frac{3}{4}$" TO $1\frac{1}{2}$"
6. WELDING PROCEDURES AND SEQUENCES SHALL BE PLANNED TO MINIMIZE WELD SHRINKAGE THAT COULD RESULT IN LAMELLAR TEARING, AND APPROVED BY OWNER'S REPRESENTATIVE.
7. GRIND SMOOTH WELDED JOINTS WHERE FLUSH SURFACE IS REQUIRED.

METAL DECK

1. ALL METAL DECKING SHALL BE IN ACCORDANCE WITH SECTION _____ OF THE SPECIFICATIONS.
2. ROOF DECK SHALL HAVE SINGLE RIBS 3" DEEP AND MADE OUT OF 22 GAGE STEEL WITH MINIMUM I=0.655 IN^4/FOOT OF WIDTH AND MINIMUM S(+)=0.394 IN^3/FOOT WIDTH AND S(-)=0.454 IN^3/FOOT WIDTH. ATTACHMENT OF ROOF DECK TO SUPPORTS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. THE ATTACHMENT SHALL BE CAPABLE OF RESISTING 40 PSF NET UPLIFT AND 300 POUNDS PER LINEAR FOOT OF SHEAR.

PURLINS AND GIRTS

1. COLD-FORMED PURLINS AND GIRTS SHALL CONFORM TO ASTM A607 GRADE 50.

GRATING

1. ALL PLATFORM GRATING SHALL BE PRESSURE WELDED GALVANIZED STEEL GRATING WITH 1"X$\frac{1}{8}$" PLAIN BEARING BARS AT $1\frac{3}{8}$" ON CENTER WITH CROSS BARS AT 4" ON CENTER UNLESS OTHERWISE NOTED.
2. CONNECT GRATING WITH NO. 14 X $1\frac{1}{2}$" SELF TAPPING CADMIUM PLATED SCREWS WITH HEXAGONAL HEADS IN STANDARD GRATING SADDLE CLIPS AT EACH OF 4 CORNERS AND AT 2'-0" ON CENTER AT ALL SUPPORTING MEMBERS.

LIGHT GAGE METAL

1. FOR PHYSICAL PROPERTIES OF LIGHT GAGE SECTIONS SEE SCHEDULE ON DRAWING S-110. ALL MEMBERS SHALL BE "UNIMAST INC." OR EQUAL.

CONCRETE

1. ALL CONCRETE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF DIVISION 3 (CONCRETE) OF THE SPECIFICATIONS. (REGULAR WEIGHT AND LIGHT WEIGHT)
2. STRUCTURAL CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED. ALL CONCRETE SHALL BE REGULAR WEIGHT CONCRETE UNLESS OTHERWISE NOTED.
3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 (UNLESS OTHERWISE NOTED). SPLICES AND HOOKS SHALL CONFORM TO ACI 318-89. SPLICES SHALL BE CLASS B UNLESS OTHERWISE NOTED. MINIMUM LAP SHALL BE 30 DIAMETERS. STIRRUP AND TIE HOOKS SHALL HAVE 135-DEGREE BENDS.
4. LOCATION OF ALL CONSTRUCTION JOINTS OR OTHER TYPES OF JOINTS, OTHER THAN SPECIFIED, SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE BEFORE PLACING.
5. MINIMUM CONCRETE COVER PROVIDED FOR REINFORCEMENT SHALL BE IN ACCORDANCE WITH SECTION 03200 OF THE SPECIFICATION.
6. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
7. EXISTING FACILITIES AND UTILITIES SHALL BE PROTECTED DURING EXCAVATION AND FOUNDATION CONSTRUCTION.
8. EXISTING PAVEMENT SHALL BE SAW CUT AND BROKEN OUT TO CLEAN, STRAIGHT EDGES OF DEMOLITION AREAS.
9. EXPOSED EDGES OF CONCRETE SHALL HAVE A $\frac{3}{4}$" CHAMFER UNLESS OTHERWISE NOTED ON DRAWINGS.
10. EXCAVATING AND BACKFILLING SHALL BE IN ACCORD WITH SECTION 02226 OF THE SPECIFICATIONS.
11. CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED TO $\frac{1}{4}$" AMPLITUDE.
12. THE 5" SLAB ON GRADE SHALL BE REINFORCED WITH #4 BARS AT 12" ON CENTER EACH WAY. IN AREAS INSIDE OF BUILDINGS THE SUBGRADE SHALL BE COVERED WITH 10 MILL POLYETHYLENE SHEETING MOISTURE BARRIER AND THE SHEETING SHALL BE COVERED WITH 2" LAYER OF CLEAN SAND.
13. FOR THICKENED SLAB ON GRADE BELOW FLUME SEE DRAWINGS S-511 AND S-512.
14. ALL LIGHT WEIGHT CONCRETE FLOORS OVER STEEL DECK SHALL BE REINFORCED WITH #4 REBARS AT 16" ON CENTER EACH WAY WITH MINIMUM COVER OF $1\frac{1}{2}$" FROM TOP OF CONCRETE.
15. THE CONCRETE NOTCHES ($1\frac{3}{4}$" DEEP KEYS) SHOWN ON DRAWINGS, MAY BE REPLACED WITH $\frac{3}{4}$" X "T" BEVELED BOARD ACTING AS FORMWORK, WHERE "T" IS ONE INCH LESS THAN THE ADJOINING CONCRETE WALL OR SLAB.
16. SAWCUTS IN CONCRETE SHALL BE MADE 8 TO 12 HOURS AFTER CONCRETE PLACEMENT.

CONCRETE ANCHOR STUDS

1. HEADED CONCRETE ANCHOR STUDS SHALL BE $\frac{3}{4}$"Ø X $5\frac{3}{16}$" LONG BEFORE WELDING, WITH A $1\frac{1}{2}$"Ø HEAD. THE STUDS SHALL CONFORM TO ASTM A108 AND SHALL BE WELDED TO THE BEAMS AS REQUIRED BY THE MANUFACTURER.
2. THE REQUIRED NUMBER OF STUDS PER BEAMS IS SHOWN THUS: ☐ ON THE FRAMING PLANS. THE STUDS SHALL BE EQUALLY SPACED ACROSS THE SPAN OF THE BEAM OR GIRDER. WHERE A GIRDER SHOWS THE REQUIRED NUMBER OF STUDS IN THREE PLACES, THE STUDS SHALL BE EQUALLY SPACED BETWEEN ADJACENT BEAMS SUPPORTED BY THE GIRDER.

ANCHOR BOLTS & EXPANSION ANCHORS

1. FOR ANCHOR BOLT DETAILS SEE DRAWING S-102

MASONRY

1. WALLS SHALL BE REGULAR WEIGHT HOLLOW CONCRETE MASONRY UNITS f'm=1500 PSI WITH ALL CELLS GROUTED SOLID (UON), ACCORDING TO SECTION 04220 OF THE SPECIFICATIONS.
2. THE MORTAR SHALL BE 'S' TYPE (f'm=1800 PSI) CONSISTING OF ONE PART OF CEMENT $\frac{1}{8}$ TO $\frac{1}{2}$ PART OF HYDRATED LIME OR LIME PUTTY AND DAMP LOOSE AGGREGATE $2\frac{1}{4}$ TO 3 TIMES THE SUM OF VOLUMES OF CEMENT AND LIME. THE GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.

FIREPROOFING

THE STEEL MEMBERS CARRYING VERTICAL LOADS SHALL BE FIREPROOFED WITH CEMENTIETIOUS SPRAY-ON FIRE PROOFING ACCORDING TO SECTION 07255 OF THE SPECIFICATIONS.

THE FOLLOWING FIREPROOFING SHALL BE APPLIED TO:

(a) ROOF PURLINS AND GIRDERS - ONE HOUR IF THE ASSEMBLY IS LESS THAN 20 FEET ABOVE FINISHED FLOOR BELOW. NO FIREPROOFING IF IT IS MORE THAN 20 FEET ABOVE FLOOR. NO FIREPROOFING OF UNDERSIDE OF DECKING PER UNDERWRITERS LABORATORY DESIGN NUMBER P920.

(b) FLOOR BEAMS & GIRDERS - ONE HOUR. NO FIREPROOFING OF UNDERSIDE OF DECK IS REQUIRED.

(c) COLUMNS SUPPORTING FLOORS SHALL HAVE 2 HOUR FIREPROOFING. COLUMNS SUPPORTING ONLY THE ROOF REQUIRE ONE HOUR FIREPROOFING.

(d) VERTICAL STEEL BRACING SHALL HAVE THE SAME FIREPROOFING AS COLUMNS.

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