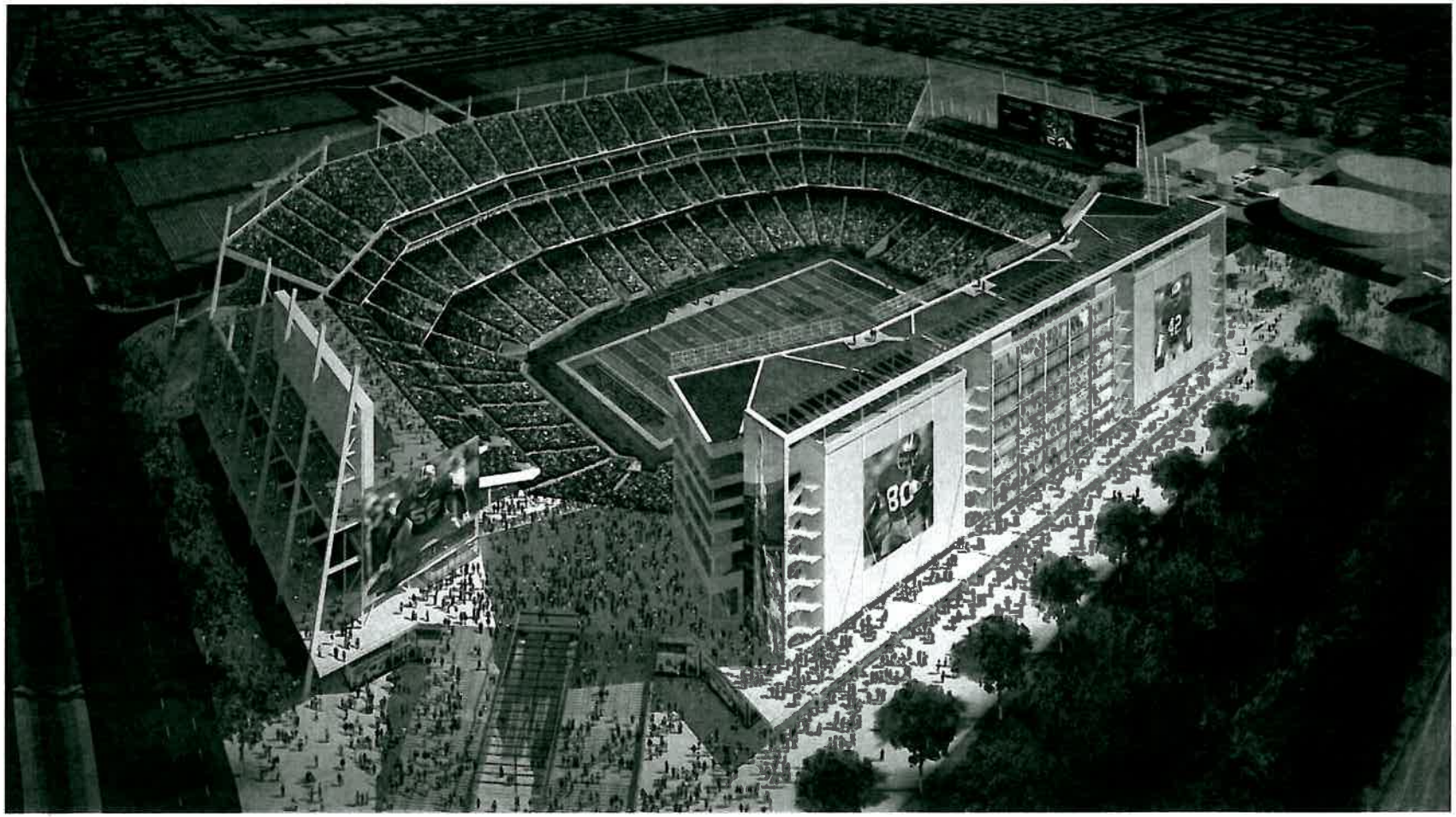
49ERS STADIUM

SANTA CLARA, CA



FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

06. 30. 2010

SHEET INDEX (CITY PLANNING SUBMITTAL)

SHEET NUMBER	SHEET NAME
ARCHITECTURAL	
A-000	COVER SHEET
A-101	ROOM PLAN 1
A-102	ROOM PLAN 2
A-103	ROOM PLAN 3 & 4
A-104	GENERAL NOTES
A-110	AERIAL PLAN
A-111	EXISTING SITE PLAN
A-112	PROPOSED SITE PLAN
A-113	REFERENCE DRAWINGS
A-114	REFERENCE DRAWINGS
A-115	PLAZA LEVEL PLAN (ELEV 17'-0")
A-116	PLAZA LEVEL (ELEV 17'-0")
A-117	MAIN GRANDSTAND LEVEL (ELEV 27'-0")
A-118	CLUB MEZZANINE LEVEL (ELEV 37'-0")
A-119	SUITE LEVEL 1 (MAXIMUM AMPITHEATRE LEVEL (ELEV 51'-0")
A-120	SUITE LEVEL 2 (ELEV 77'-0")
A-121	SUITE LEVEL 3 (ELEV 97'-0") / UPPER CONCOURSE (ELEV 98'-0")

SHEET INDEX (CITY PLANNING SUBMITTAL)

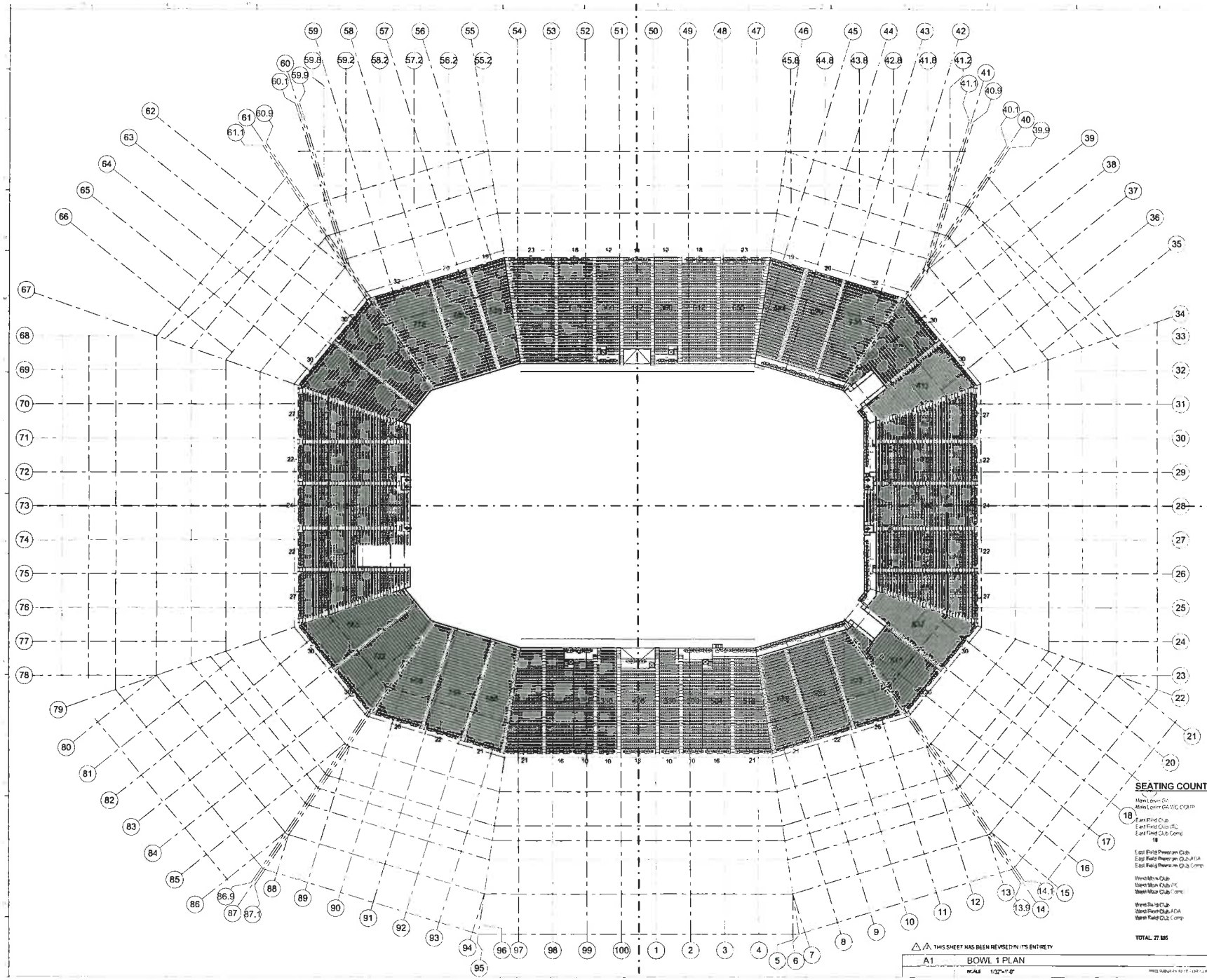
SHEET NUMBER	SHEET NAME
A-122	PRESS LEVEL (ELEV 105'-0")
A-201	ROOF PLAN (ELEV 117'-0")
A-401	OVERALL BUILDING SECTIONS
A-402	AREA SECTIONS
A-403	BUILDING SECTION - EAST - LOOKING NORTH
A-404	BUILDING SECTION - WEST - LOOKING NORTH
A-405	BUILDING SECTION - SOUTH - LOOKING WEST
A-406	BUILDING SECTION - NORTH - LOOKING WEST
CIVIL	
CS-101	EXISTING SITE TO MOBILIZE
CS-401	ORIGINAL AND PROPOSED PROPERTY LINES
CG-101	PRELIMINARY GRADING AND DRAINAGE
CG-102	PRELIMINARY GRADING AND DRAINAGE SECTIONS
CU-101	STORMWATER MANAGEMENT PLAN
CU-102	SUPPLIMENTAL UTILITY PLAN
CU-201	OVERALL SITE UTILITY PLAN
CU-301	OVERALL SITE PLAN
CU-401	PRELIMINARY PROFILES

SHEET INDEX (CITY PLANNING SUBMITTAL)

SHEET NUMBER	SHEET NAME
CU-402	PROFILES PLAN
CU-501	ADMINISTRATIVE PLAN
ELECTRICAL	
E-100	ELECTRICAL SITE PLAN
E-101	ELECTRICAL SERVICE YARD AREA
E-201	ELECTRICAL FIELD LEVEL PLAN
E-401	PRIMARY ELECTRIC SERVICE DIAGRAM
LT-101	SITE LIGHTING PHOTOMETRIC CALC (ELEV 0")
LANDSCAPE	
L-100	PRELIMINARY LANDSCAPE PLAN
L-101	LANDSCAPE PLANTING PLAN
L-201	LANDSCAPE TREE PLAN
L-301	LANDSCAPE PATHS & PATTERNS
L-401	LANDSCAPE DETAILS
L-501	IRRIGATION NOTES AND DETAILS
L-601	IRRIGATION PLAN

HNTB

One Bunker Hill
601 West Fifth Street, Suite 1010
Los Angeles, California 90071
(213) 403 1009 / Fax (213) 403 1011



SEATING COUNTS

Main Lower Club	21,573
Main Lower Club ADA/ADC Comp	365+365
East Field Club	1,260
East Field Club PC	*8
East Field Club Comp	
18	
East Field Premium Club	488
East Field Premium Club ADA	6
East Field Premium Club Comp	6
West Main Club	1,254
West Main Club PC	37
West Main Club Comp	37
West Field Club	442
West Field Club ADA	6
West Field Club Comp	6
TOTAL: 27,185	

△A THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 BOWL 1 PLAN

SCALE 1/32"=1'-0"

HNTB

Magnusson Klemencic Associates - Structural Engineers

Flack + Kurtz - MEP Engineers

Wagner & Kelly - Civil Engineers

The Cor Cons Cons - Life Safety / Code Consultants

DVV AcousTalks - Curtain Wall

The Guzzardo Partnership, Inc. - Landscape

Persinko Hahn - Vertical Transportation

Duray / JJT Enterprises, Inc. - Field Service Consultants

Wrightman, Johnson, Haddon & Williams, Inc. - AV

Debra Mikesell Design - Signage & Graphics

Lloyd Engineering - Turf Consultant

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

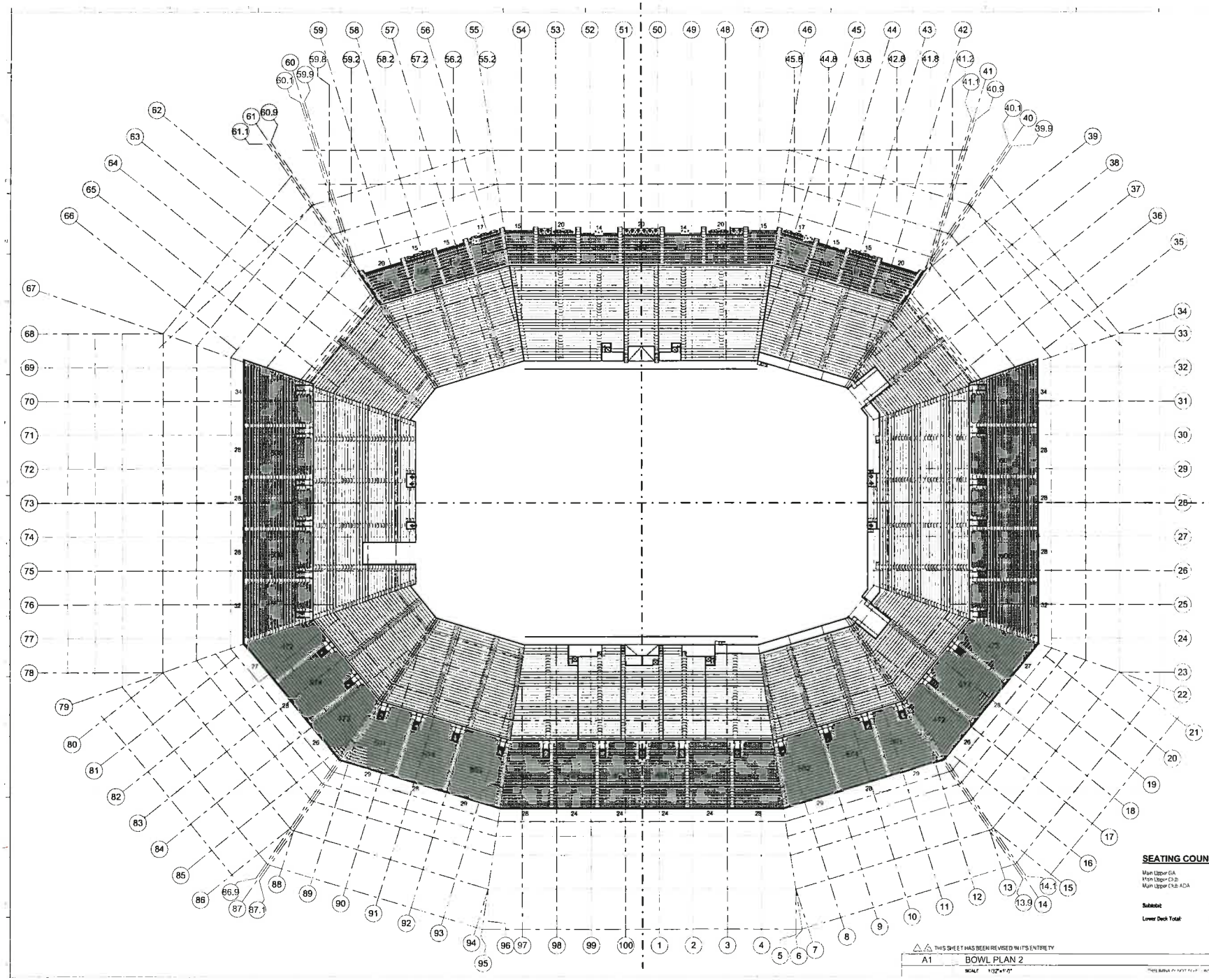
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BOWL PLAN 1

A-002

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SEATING COUNTS

Main Upper GA	15,462
Main Upper Club	2,688
Main Upper Club ADA	30+30
Subtotal:	18,210
Lower Deck Total:	46,095

SHEET TITLE & NUMBER
BOWL PLAN 2

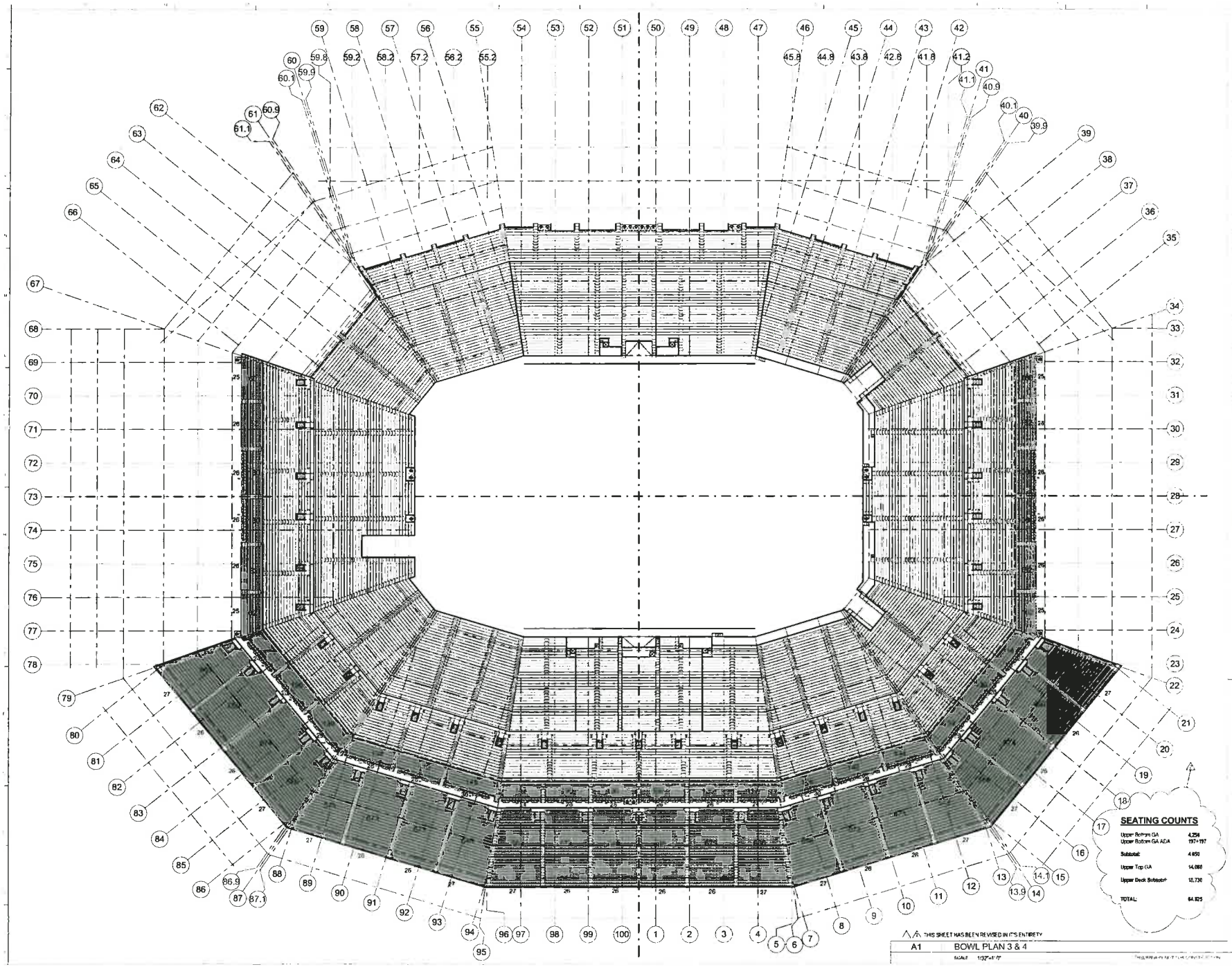
A-003

THIS SHEET HAS BEEN REVISED IN IT'S ENTIRETY

A1 BOWL PLAN 2

SCALE 1/32"=1'-0"

05/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



SEATING COUNTS

Upper Bottom GA	4,256
Upper Bottom GA ADA	197+197
Subtotal:	4,650
Upper Top GA	14,080
Upper Deck Subtotal:	18,730
TOTAL:	64,825

HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BOWL PLAN 3 & 4

A-004

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 BOWL PLAN 3 & 4

SCALE 1/32"=1'-0"

A	AB	ANCHOR BOLT
	AD	AREA DRAIN
	AFS	AUTOMATIC FIRE SPRINKLER
	AHU	AIR HANDLING UNIT
	AC	AIR CONDITIONING
	ACC	ACCESS
	ACC DR	ACCESS DOOR
	ACC FL	ACCESS FLOOR
	ACC P	ACCESS PANEL
	ACCESS	ACCESSORIES
	ACOUS	ACOUSTICAL
	ACOUS INSUL	ACOUSTICAL INSULATION
	ADJ	ADJACENT
	ADJT	ADJUSTABLE
	ADMIN	ADMINISTRATOR/ADMINISTRATION
	AFF	ABOVE FINISHED FLOOR
	AGG	AGGREGATE
	ALT	ALTERNATE
	ALUM	ALUMINUM
	ANOD	ANODIZED
	APPD	APPROVED
	APPROX	APPROXIMATE
	ASSEM	ASSEMBLY
	AUTO	AUTOMATIC
B	B	BACK
	BEV	BEVELED
	BITUM	BITUMINOUS
	BLDG	BUILDING
	BLK	BLOCK
	BLKG	BLOCKING
	BRCG	BRACING
	BRD	BOARD
	BRDG	BRIDGING
	BRG	BEARING
	BRK	BRICK
	BS	BOTH SIDES
	BSMT	BASEMENT
	BTW	BETWEEN
	BW	BOTH WAYS
C	CEM	CEMENT
	CG	CORNER GUARD
	C FLASH	COUNTER FLASHING
	CAB	CABINET
	CC	CENTER TO CENTER
	CHAM	CHAMFER
	CHAN	CHANNEL
	CI	CAST IRON
	CIP	CAST IN PLACE
	CIR	CIRCLE
	CJ	CONSTRUCTION JOINT
	CL	CENTER LINE
	CLG	CEILING
	CLKG	CALKING
	CLR	CLEAR
	CMU	CONCRETE MASONRY UNIT
	CNTR	COUNTER
	CO	CLEANOUT
	COL	COLUMN
	CONC	CONCRETE
	CONST	CONSTRUCTION
	CONT	CONTINUOUS
	CONTR	CONTRACTOR/CONTRACT
	CSMT	CASEMENT
	CONN	CONNECTION/CONNECTOR
	CTR	CENTER
	CU	CUBIC/COPPER
D	DBL	DOUBLE
	DEMO	DEMOLISH/DEMOLITION
	DF	DRINKING FOUNTAIN
	DH	DOUBLE HUNG
	DIA	DIAMETER
	DIAG	DIAGONAL
	DIM	DIMENSION
	DISP	DISPENSER
	DIV	DIVISION
	DN	DOWN
	DR	DOOR
	DS	DOWN SPOUT
	DTL	DETAIL
	DWG	DRAWING
	DWR	DRAWER
E	(E)	EXISTING
	EA	EACH
	EJ	EXPANSION JOINT
	EL	ELEVATION
	ELEC	ELECTRICAL/ELECTRICAL
	ELEV	ELEVATOR
	EMER	EMERGENCY
	ENCL	ENCLOSURE
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EST	ESTIMATE
	EWC	ELECTRIC WATER COOLER
	EWH	ELECTRIC WATER HEATER
	EXH	EXHAUST
	EXP	EXPANSION
	EXPO	EXPOSED
	EXT	EXTERIOR
F	(F)	FUTURE
	FAB	FABRICATE
	FBD	FIBERBOARD
	FD	FLOOR DRAIN
	FE	FIRE EXTINGUISHER
	FEC	FIRE EXTINGUISHER CABINET
	FF	FINISHED FLOOR/FINISH FACE
	FFE	FINISHED FLOOR ELEVATION
	FG	FINISHED GRADE
	FHC	FIRE HOSE CABINET
	FIN	FINISH
	FIXT	FIXTURE
	FLASH	FLASHING
	FLR	FLOOR/FLOORING
	FLUOR	FLUORESCENT
	FND	FOUNDATION
	FO	FINISH OPENING
	FOB	FACE OF BRICK
	FOC	FACE OF CONCRETE
	FOM	FACE OF MASONRY
	FOP	FACE OF PANEL
	FOS	FACE OF STUD
	FOW	FACE OF WALL
	FR	FRAME
	FRG	FURRING
	FT	FEET/FOOT
	FTG	FOOTING
G	G	GUTTER
	GA	GAUGE
	GALV	GALVANIZED
	GB	GRAB BAR
	GI	GALVANIZED IRON
	GL	GLASS
	GND	GROUND
	GR	GRADE
	GRF	GROSS SQUARE FEET
	GT	GROUT
	GYPB	GYPSUM WALL BOARD

H	HB	HOSE BIBB
	HBD	HARDBOARD
	HC	HOLLOW CORE/HANDICAP
	HD	HEAVY/HEAVY DUTY
	HDR	HEADER
	HDWD	HARDWOOD
	HDWR	HARDWARE
	HK	HOOK
	HM	HOLLOW METAL
	HORIZ	HORIZONTAL
	HP	HIGH POINT
	HR	HOSE RACK/HOUR
	HT	HEIGHT
	HVAC	HEATING/VENTILATING/AIR CONDITIONING
	HW	HOT WATER
I	ID	INSIDE DIAMETER
	IN	INCH
	INCL	INCLUDED
	INFO	INFORMATION
	INSUL	INSULATION
	INT	INTERIOR
	INTM	INTERMEDIATE
J	JAN	JANITOR
	JST	JOIST
	JT	JOINT
K	KO	KNOCKOUT
	KP	KICK PLATE
L	L	LENGTH
	LAD	LADDER
	LAM	LAMINATE
	LAV	LAVATORY
	LB	LAG BOLT
	LBL	LABEL
	LH	LEFT HAND
	LKR	LOCKER
	LP	LOW POINT
	LSD	LIQUID SOAP DISPENSER
	LT	LIGHT
	LVR	LOUVER
M	MACH	MACHINE
	MAINT	MAINTENANCE
	MAS	MASONRY
	MAX	MAXIMUM
	MB	MACHINE BOLT
	MCJ	MASONRY CONTROL JOINT
	MECH	MECHANICAL
	MEMB	MEMBRANE
	MFR	MANUFACTURER
	MH	MANHOLE
	MIN	MINIMUM
	MIR	MIRROR
	MISC	MISCELLANEOUS
	ML	MATCHLINE
	MLDG	MOULDING
	MO	MASONRY OPENING
	MOV	MOVABLE
	MRD	METAL ROOF DECK
	MS	MACHINE SCREW
	MT	METAL THRESHOLD
	MT FLR	METAL FLOORING
	MTG	MOUNTING
	MTL	METAL
	MULL	MULLION
	MULTI	MULTIPLE
	MWK	MILLWORK
N	(N)	NEW
	NAT	NATURAL
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NOM	NOMINAL
	NON-COM	NON-COMBUSTIBLE
	NR	NOISE REDUCTION
	NRC	NOISE REDUCTION COEFFICIENT
	NTS	NOT TO SCALE
O	OA	OVERALL
	OC	ON CENTER
	OD	OUTSIDE DIAMETER
	OF	OVERFLOW
	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
	OFOI	OWNER FURNISHED OWNER INSTALLED
	OH	OVERHEAD
	OJ	OPEN WEB JOIST
	OPH	OPPOSITE HAND
	OPS	OPPOSITE SURFACE
	OPNG	OPENING
	OPP	OPPOSITE
	OZ	OUNCE
P	PB	PANIC BAR
	PBD	PARTICLE BOARD
	P CEM PL	PORTLAND CEMENT PLASTER
	PG	PLATE GLASS
	PL	PROPERTY LINE
	PLAM	PLASTIC LAMINATE
	PCC	PRECAST CONCRETE
	PCF	POUNDS PER CUBIC FOOT
	PERIM	PERIMETER
	PERP	PERPENDICULAR
	PFB	PREFABRICATE
	PFN	PREFINISHED
	PL	PLATE
	PLAS	PLASTER
	PLBG	PLUMBING
	PLWD	PLYWOOD
	PNL	PANEL
	PNT	PAINT
	POL	POLISHED
	PR	PAIR
	PREP	PREPARATION
	PRF	PREFORMED
	PROT	PROTECTED/PROTECTION
	PSC	PRE-STRESSED CONCRETE
	PSF	POUNDS PER SQUARE FOOT
	PSI	POUNDS PER SQUARE INCH
	PT	POINT
	PTC	POST TENSIONED CONCRETE
	PTN	PARTITION
	PV	PAVING
	PVC	POLYVINYL CHLORIDE
	PVMT	PAVEMENT
Q	QT	QUARRY TILE
	QTY	QUANTITY
R	R	RADIUS/RISER
	RA	RETURN AIR
	RAG	RETURN AIR GRILLE
	RB	RUBBER BASE
	RCP	REFLECTED CEILING PLAN
	RD	ROOF DRAIN
	REC	RECESSED
	RECEP	RECEPTACLE
	REF	REFERENCE
	REFL	REFLECTED
	REFR	REFRIGERATOR
	REIN	REINFORCE/REINFORCING
	REM	REMOVE
	REQD	REQUIRED
	RESIL	RESILIENT
	RET	RETURN
	REV	REVISION
	REVD	REVISED
	RH	ROOF HATCH
	RFG	ROOFING
	RH	RIGHT HAND
	RHWS	ROUND HEAD WOOD SCREWS
	RND	ROUND
	RO	ROUGH OPENING/ROUGH
	ROW	RIGHT OF WAY

S	S2S	SURFACED TWO SIDES
	S4S	SURFACED FOUR SIDES
	SA	SUPPLY AIR
	SAN	SANITARY
	SC	SOLID CORE/SCALE
	SCHED	SCHEDULED
	SCR	SCREEN
	SCUP	SCUPPER
	SEC	SECURITY
	SECT	SECTION
	SEP	SEPARATION
	SF	SQUARE FEET
	SGL	SECURITY GLASS
	SHELV	SHELF/SHELVES
	SHT	SHEET
	SHTG	SHEATHING
	SHWR	SHOWER
	SIM	SIMILAR
	SK	SINK
	SM	SHEET METAL
	SMS	SHEET METAL SCREW
	SPEC	SPECIFICATIONS
	SPL	SPECIAL
	SQ	SQUARE
	SS	STAINLESS STEEL
	SSK	SERVICE SINK
	STAG	STAGGERED
	STD	STANDARD
	STIFF	STIFFENER
	STL	STEEL
	STN	STATION
	STRUCT	STRUCTURAL
	SUSP	SUSPENDED
	SYM	SYMMETRICAL
T	T&B	TOP AND BOTTOM
	T&G	TONGUE AND GROOVE
	T(24)	TITLE (T-24) OF THE CCR
	TEL	TELEPHONE
	TEMP	TEMPERED
	TER	TERRAZZO
	THERM	THERMAL
	THK	THICK
	THR	THRESHOLD
	TJ	TOOLED JOINT
	TB BD	TACK BOARD
	TOC	TOP OF CONCRETE CURB
	TOP	TOP OF PAVING
	TOR	TOP OF RAIL
	TOS	TOP OF STEEL
	TOW	TOP OF WALL
	TR	TRANSOM
	TRD	TREAD
	TS	TUBE STEEL
	TV	TELEVISION
	TYP	TYPICAL
U	UC	UNDERCUT
	UNF	UNIFORM
	UON	UNLESS OTHERWISE NOTED
	UR	URINAL
	UT	UTILITY
V	VAR	VARIES
	VB	VINYL BASE
	VCT	VINYL COMPOSITION TILE
	VENT	VENTILATOR/VENTILATION
	VERT	VERTICAL
	VIF	VERIFY IN FIELD
	VJ	V-JOINT
	VNR	VENEER
	VOL	VOLUME
	VTR	VENT THROUGH ROOF
W	W GL	WIRE GLASS
	W/	WITH
	W/O	WITHOUT
	WD B	WOOD BASE
	WC	WATER CLOSET
	WDW	WINDOW
	WH	WATER HEATER
	WHB	WHEEL BUMPER
	WI	WROUGHT IRON
	WR	WATER RESISTANT
	WS	WATER STOPS
	WSCT	WAINSCOT
	WT	WEIGHT
	WTW	WALL TO WALL
	WWM	WELDED WIRE MESH

AREA CALCULATIONS

	100 LVL FIELD	200 LVL PLAZA	300 LVL MAIN CONCOURSE	400 LVL CLUB MEZZ	500 LVL SUITES & AMENITIES LEVEL	600 LVL SUITES	700 LVL SUITES	700 LVL UPPER CONCOURSE	800 LVL PRESS	900 LVL TOWER ROOF & UPPER DECK	TOTAL BUILDING
SEATING AREA	32,000		142,683	90,626				27,500		75,400	365,200
CONCOURSE/CIRCULATION	95,300	17,000	288,269	1,800	62,000	12,300	12,300	109,180	5,700	9,000	612,840
TOILET FACILITIES	4,000		42,639	3,202	5,500	1,600	1,600	23,400	1,500	1,000	84,441
CONCESSIONS & FOOD SERVICES	32,300		39,870	3,200	19,500	5,700	5,700	12,300	1,500		119,670
SUITES					47,300	16,124	16,124				79,548
CLUBS	53,500		31,622	33,935	33,000						152,059
STADIUM ADMINISTRATION	2,000	14,500									16,500
STADIUM OPERATIONS	96,500	33,500							5,600		135,600
TEAM FACILITIES	73,500										73,500
RETAIL SPACE	13,000	11,600									24,600
PLAYING FIELD	106,000										106,000
MEDIA/PRESS	7,200			1,000					19,200		27,400
STORAGE	17,500										17,500
STADIUM INFRASTRUCTURE	35,000		1,239	800	1,800	800	800	1,239	800		42,478
TOTAL	568,000	76,600	545,322	*134,564	169,500	36,524	36,524	173,619	34,300	85,400	1,660,333

* INDICATES AREA OF VOID SPACE BELOW LOWER DECK

AREA OF CONDITIONED SPACE

(INDICATED AS NON SHADED CELLS IN TABLE ABOVE)

±912,656 S.F.

AREA OF SUITE TOWER

±382,000 S.F.

DRAWING BLOCK TITLE

SECTION BUBBLE ADT STANDARD

DETAIL BUBBLE ADT STANDARD

DETAIL SYMBOL (FOR SMALL CONDITIONS) ADT STANDARD

NORTH ARROW

ELEVATION SYMBOL EXTERIOR ADT STANDARD

ELEVATION SYMBOL SINGLE INTERIOR

ELEVATION SYMBOL MULTIPLE

WINDOW TYPE SYMBOL

DOOR TYPE SYMBOL

LOUVER TYPE SYMBOL

COLUMN GRID SYMBOL

MATCHLINE SYMBOL

IDENTIFICATION DEVICE SYMBOL

REVISION SYMBOL

WALL TYPE SYMBOL

FURNITURE TYPE SYMBOL

KEY NOTES SYMBOLS

ROOM IDENTIFIER

HNTB

Macintosh Kneeshaw Associates - Structural Engineers

Flack + Kurtz - MEP Engineers

Wheeler & Kelly - Civil Engineers

The Fire Consultants - Life Safety / Code Consultants

DVV Associates - Curtain Wall

The Guzzardo Partnership, Inc. - Landscape

Persohn Hahn - Vertical Transportation

Duany / J.F. Industries, Inc. - Food Service Consultants

Waldron, Johnson, Hadden & Williams, Inc. - AV

Debra Nichols Design - Signage & Graphics

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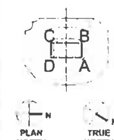
SAN FRANCISCO 49ERS NEW STADIUM



SHEET TITLE & NUMBER

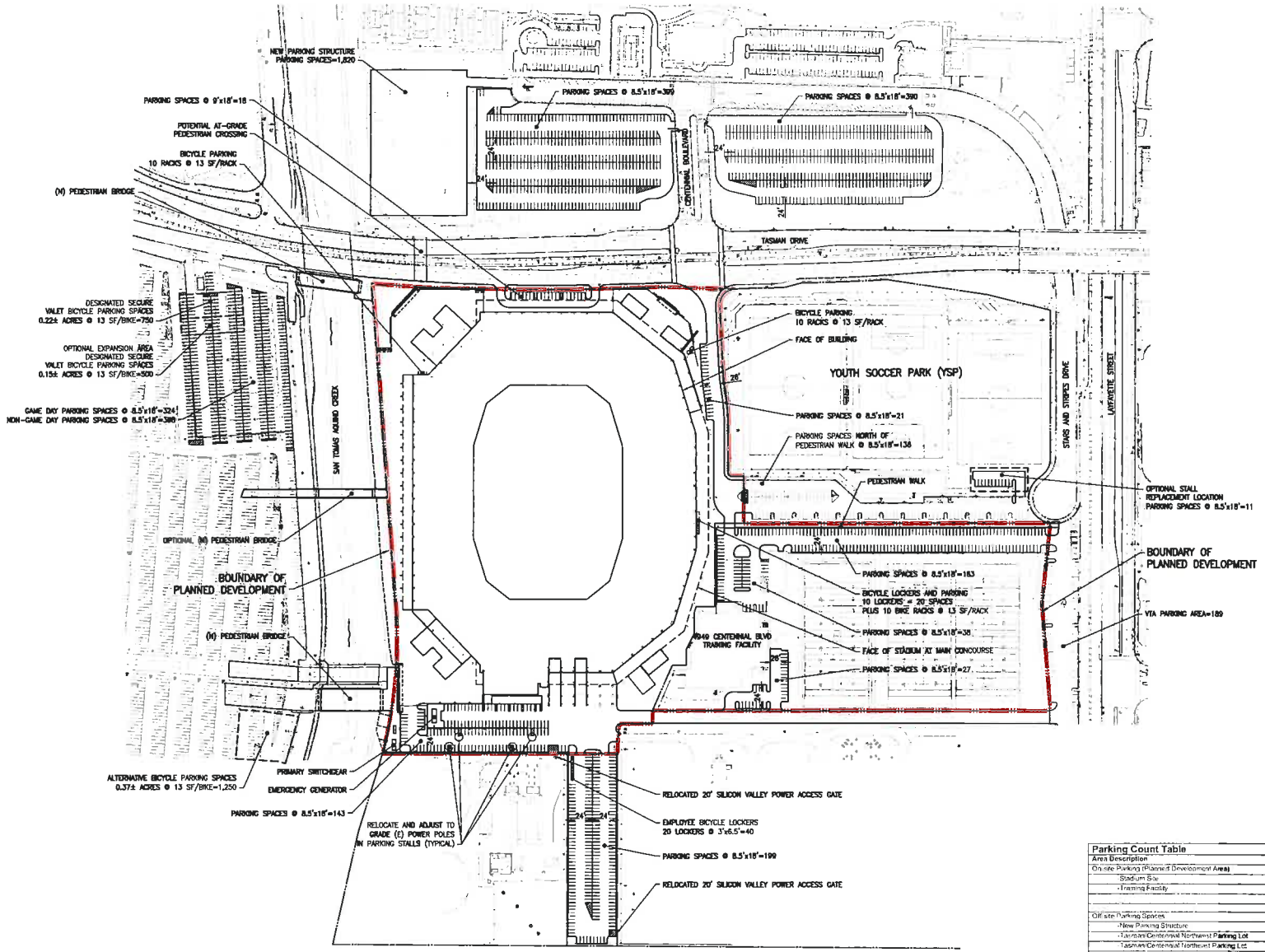
GENERAL NOTES

A1

SCALE

A-006

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



OVERALL SITE PLAN

SCALE 1"=100'

0' 100' 200'

Parking Count Table	
Area Description	**Quantity**
On-site Parking (Planned Development Area)	
-Stadium Site	182
-Training Facility	228
Total On-site	**410**
Off-site Parking Spaces	
-New Parking Structure	1,820
-Tasman/Centennial Northwest Parking Lot	399
-Tasman/Centennial Northeast Parking Lot	390
-Parking Lot on Site Previously Utilized for Tasman Substation	324/398[2]
-Parking lot south of PD area	199
-Off-site parking spaces to be identified consistent with mitigation measures in the EIR for the project	17,624 to 17,698
Total Off-Site	**20,740**
Other Potential Sources of Off-Site Parking	
-Youth Soccer Facility Parking	136/147[1]
-Valley Transportation Authority (VTA) Parking Area	179/199[3]
-Off-site Employee Game Day Parking Spaces (location TBD)	1,740

[1] Estimated based upon permitted people capacity
During times when a bike valet is utilized only 324 spaces will be available
[3] Employee area will be tested to determine if the proposed project will permit on-site replacement option
[4] Fewer Parking Spaces may be constructed to avoid turning movements, but could potentially be replaced with parking lot restriping

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

OVERALL SITE PLAN

A-100

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

EXISTING SITE DATA	
LOT/PARCEL AREA	17.1 ACRES (744,876 S.F)
PERCENT LANDSCAPE	4.9%
PERCENT HARDSCAPE	95.1%
PARKING SPACES	1,823

HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH

TRUE NORTH

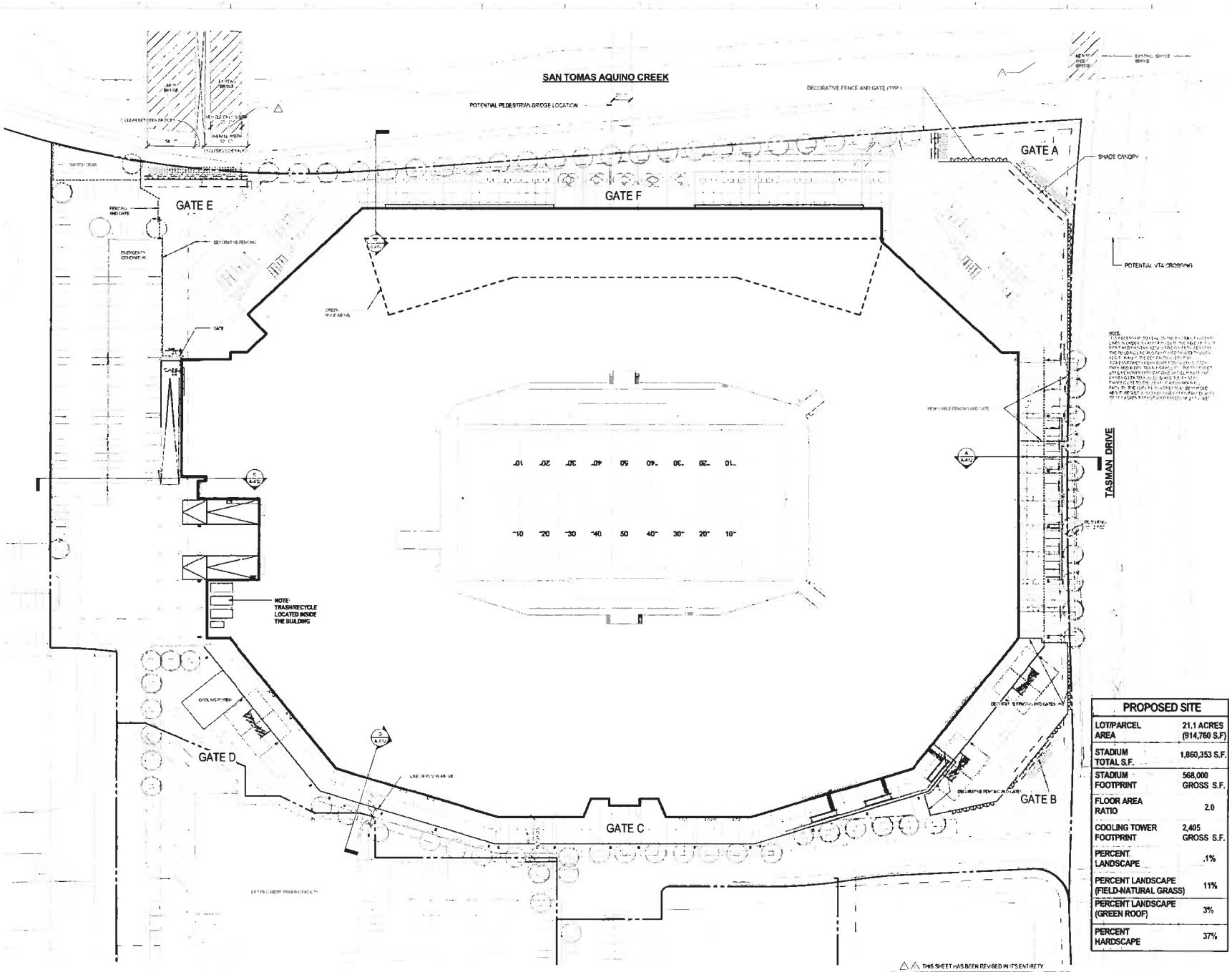
SHEET TITLE & NUMBER
EXISTING SITE PLAN

A-100.1

06/30/2010

△△ THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A2 EXISTING SITE PLAN



PROPOSED SITE	
LOT/PARCEL AREA	21.1 ACRES (914,760 S.F)
STADIUM TOTAL S.F.	1,860,353 S.F.
STADIUM FOOTPRINT	568,000 GROSS S.F.
FLOOR AREA RATIO	2.0
COOLING TOWER FOOTPRINT	2,405 GROSS S.F.
PERCENT LANDSCAPE	.1%
PERCENT LANDSCAPE (FIELD-NATURAL GRASS)	11%
PERCENT LANDSCAPE (GREEN ROOF)	3%
PERCENT HARDSCAPE	37%

HNTB

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
PROPOSED SITE PLAN

A-100.2

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

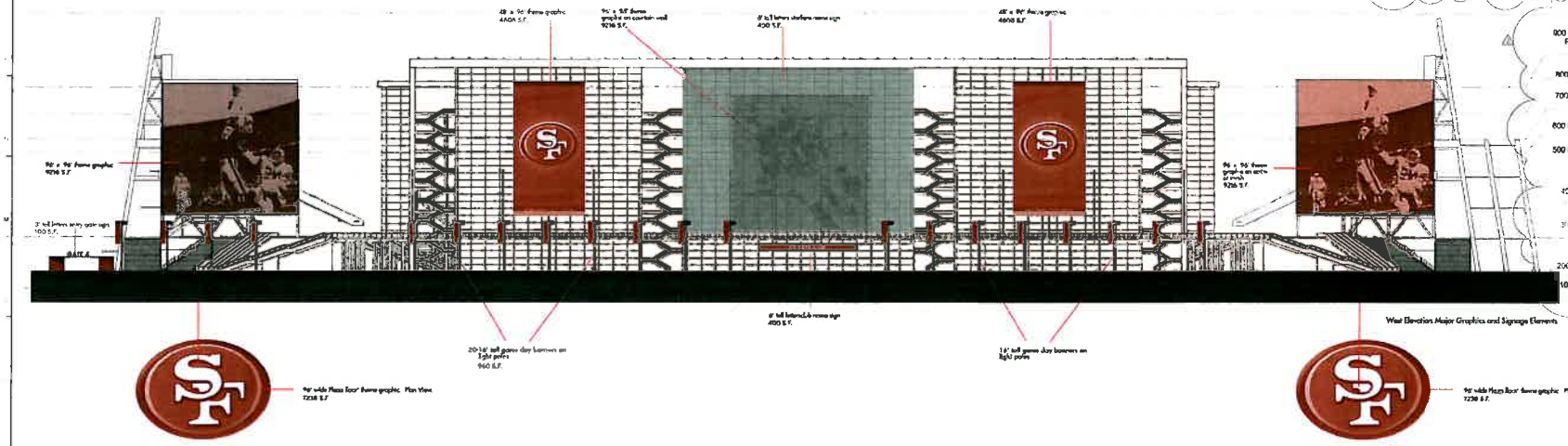
A1

SCALE 1" = 40'

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

ELEVATION	SIGN AREA
WEST	53,200 SF
EAST	29,592 SF
NORTH	14,912 SF
SOUTH	13,608 SF
TOTAL	111,312 SF

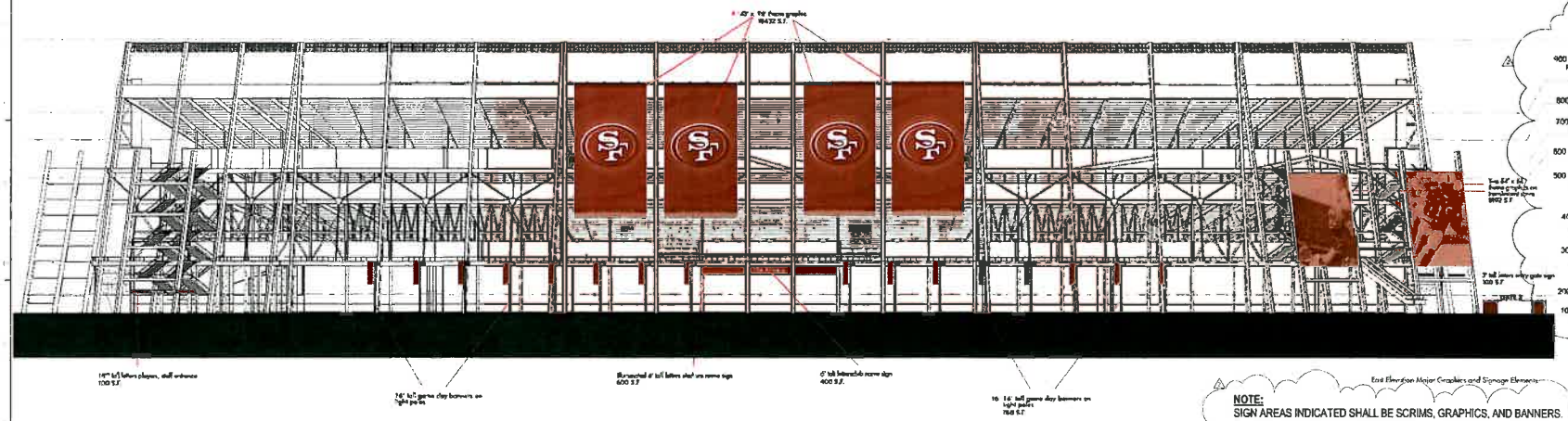
HNTB



1000 LEVEL CATWALK 205' - 6"
900 LEVEL TOWER ROOF & UPPER DECK 153' - 6"
800 LEVEL PRESS 134' - 3"
700 LEVEL UPPER CONCOURSE 116' - 9"
600 LEVEL SUITE 2 107' - 0"
500 LEVEL SUITE I AND PREMIUM AMENITIES 93' - 9"
400 LEVEL CLUB MEZZANINE 75' - 9"
300 LEVEL MAIN CONCOURSE 47' - 0"
200 LEVEL PLAZA 24' - 0"
100 LEVEL FIELD 10' - 6"

A2	WEST ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS
	NOT TO SCALE

49ERS SAN FRANCISCO 49ERS NEW STADIUM



1000 LEVEL CATWALK 205' - 6"
900 LEVEL TOWER ROOF & UPPER DECK 153' - 6"
800 LEVEL PRESS 134' - 3"
700 LEVEL UPPER CONCOURSE 116' - 9"
600 LEVEL SUITE 2 107' - 0"
500 LEVEL SUITE I AND PREMIUM AMENITIES 93' - 9"
400 LEVEL CLUB MEZZANINE 75' - 9"
300 LEVEL MAIN CONCOURSE 47' - 0"
200 LEVEL PLAZA 24' - 0"
100 LEVEL FIELD 10' - 6"

C B D A

PLAN NORTH — TRUE NORTH

NOTE:
SIGN AREAS INDICATED SHALL BE SCRIMS, GRAPHICS, AND BANNERS. THE DESIGN SHALL ALLOW FOR FUTURE INCORPORATION OF SOME ELECTRONIC SIGNAGE. ALL NON-ELECTRONIC SIGNS SHALL INCLUDE UPLIGHTING FOR ILLUMINATION.

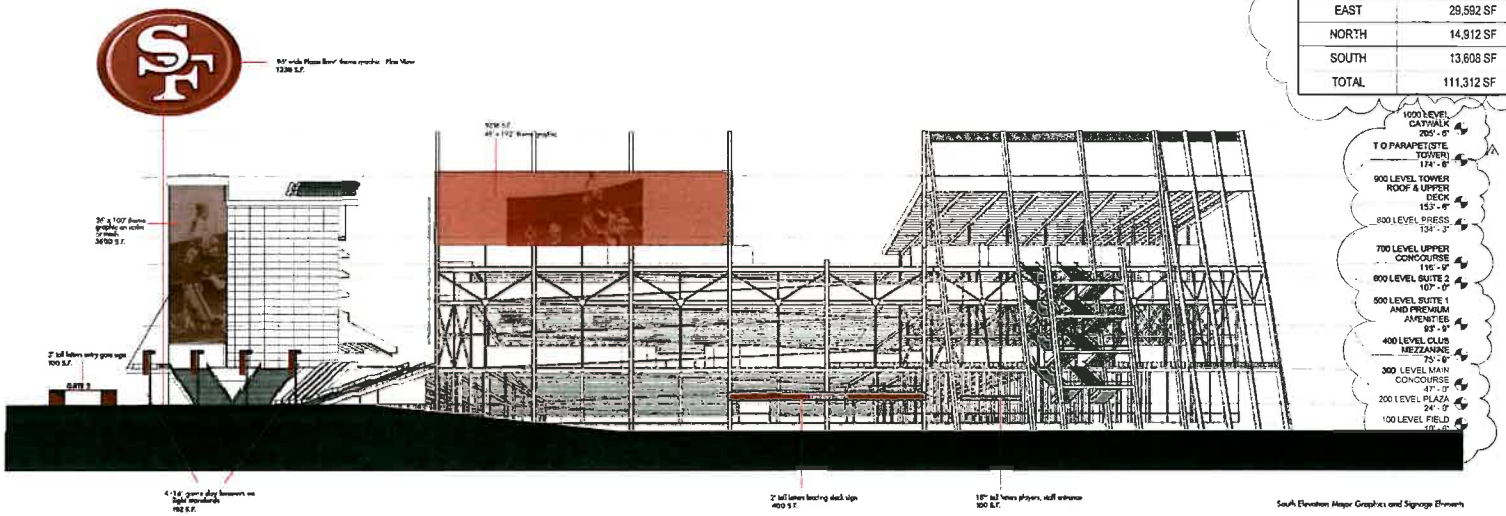
A1	EAST ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS
	NOT TO SCALE

SHEET TITLE & NUMBER
SIGNAGE DRAWINGS

A-100.3

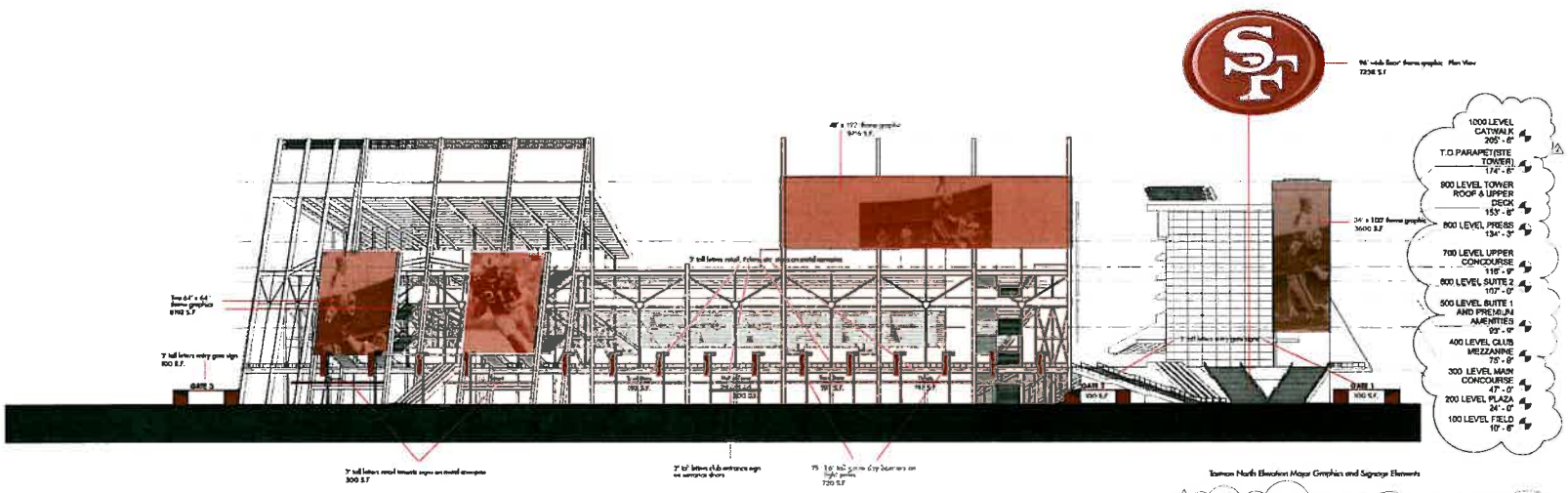
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

ELEVATION	SIGN AREA
WEST	53,200 SF
EAST	29,592 SF
NORTH	14,912 SF
SOUTH	13,608 SF
TOTAL	111,312 SF



A2 SOUTH ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS

NOT TO SCALE



NOTE:
SIGN AREAS INDICATED SHALL BE SCRIMS, GRAPHICS, AND BANNERS. THE DESIGN SHALL ALLOW FOR FUTURE INCORPORATION OF SOME ELECTRONIC SIGNAGE. ALL NON-ELECTRONIC SIGNS SHALL INCLUDE UPLIGHTING FOR ILLUMINATION.

A1 NORTH ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS

NOT TO SCALE

HNTB

49ERS SAN FRANCISCO 49ERS NEW STADIUM

C B D A

PLAN NORTH

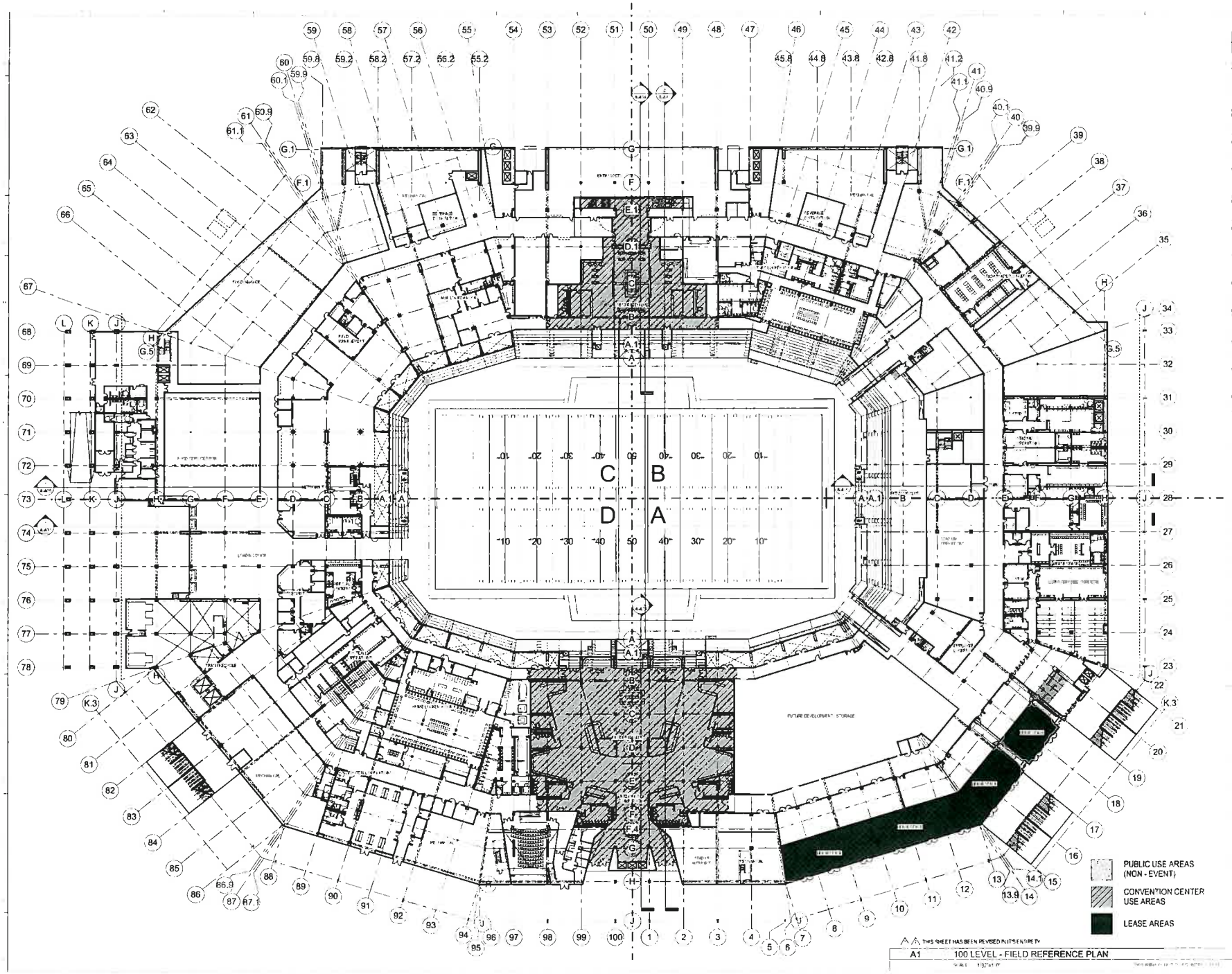
TRUE NORTH

SHEET TITLE & NUMBER

SIGNAGE DRAWINGS

A-100.4

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

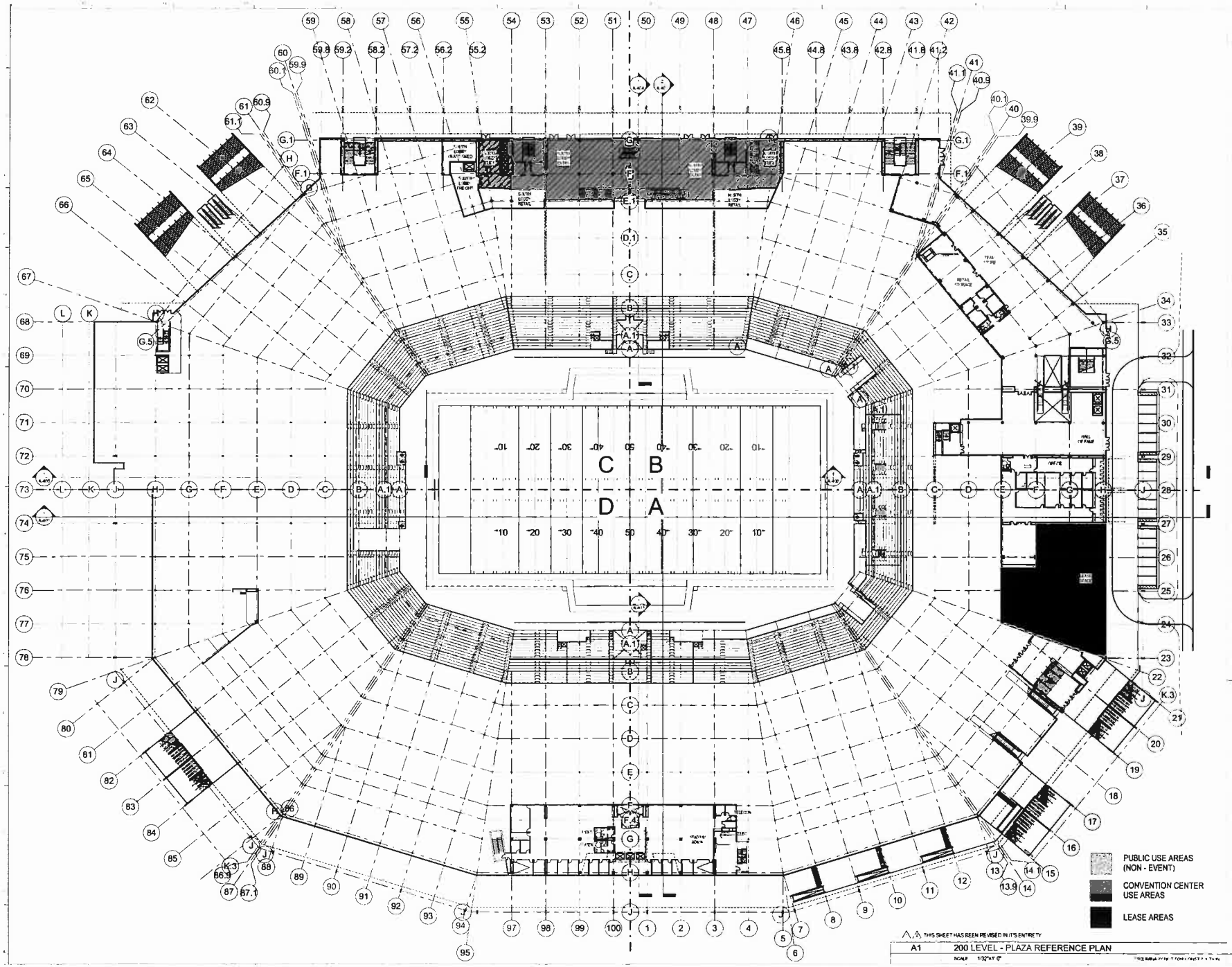
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
FIELD LEVEL PLAN
(EL=10'-6")

A-101

06/30/2010



HNTB

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER

PLAZA LEVEL (EL=24'-0")

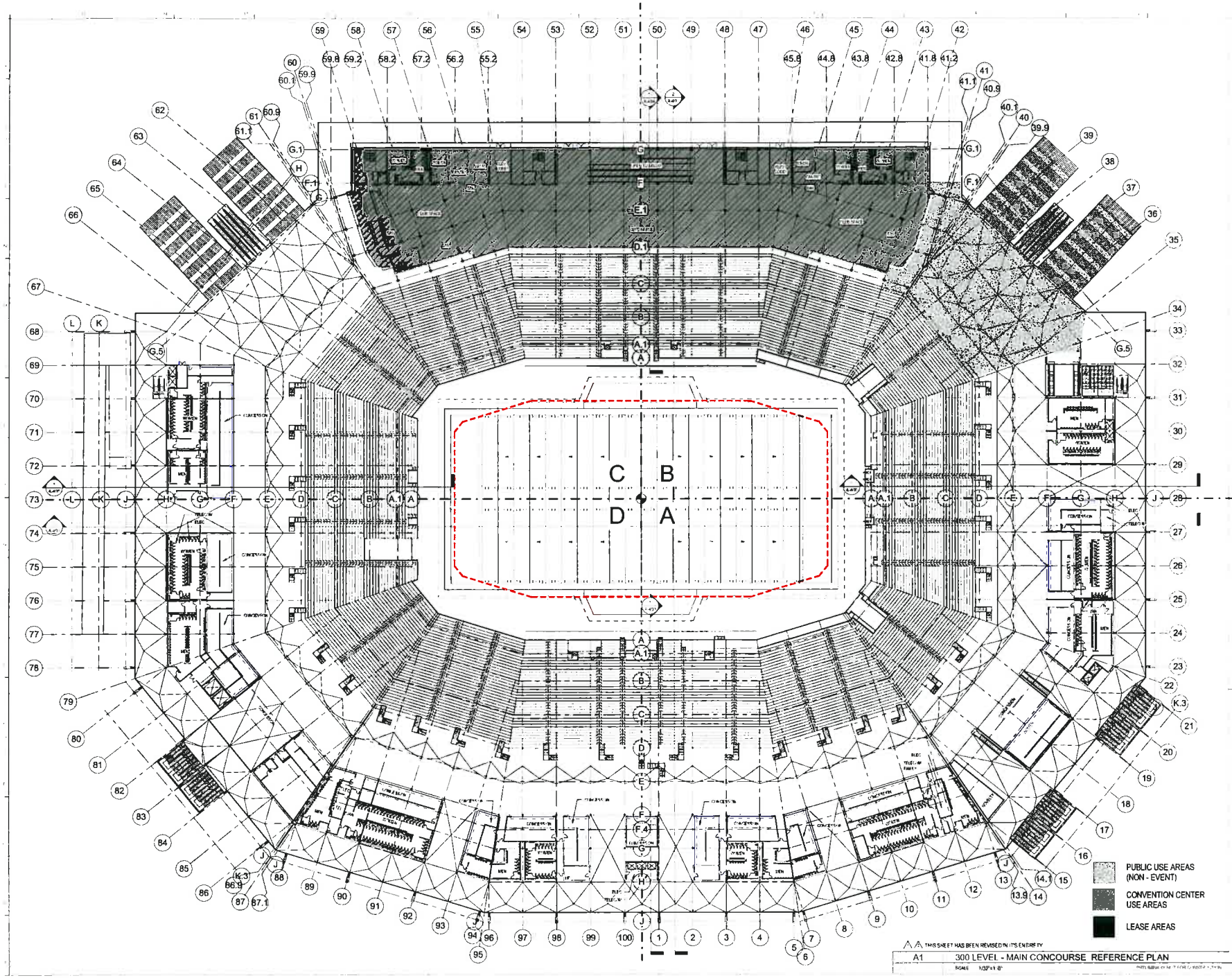
A-102

06/30/2010

A.A THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 200 LEVEL - PLAZA REFERENCE PLAN

SCALE 1/32"=1'-0"



THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 300 LEVEL - MAIN CONCOURSE REFERENCE PLAN

SCALE 1/32"=1'-0"

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

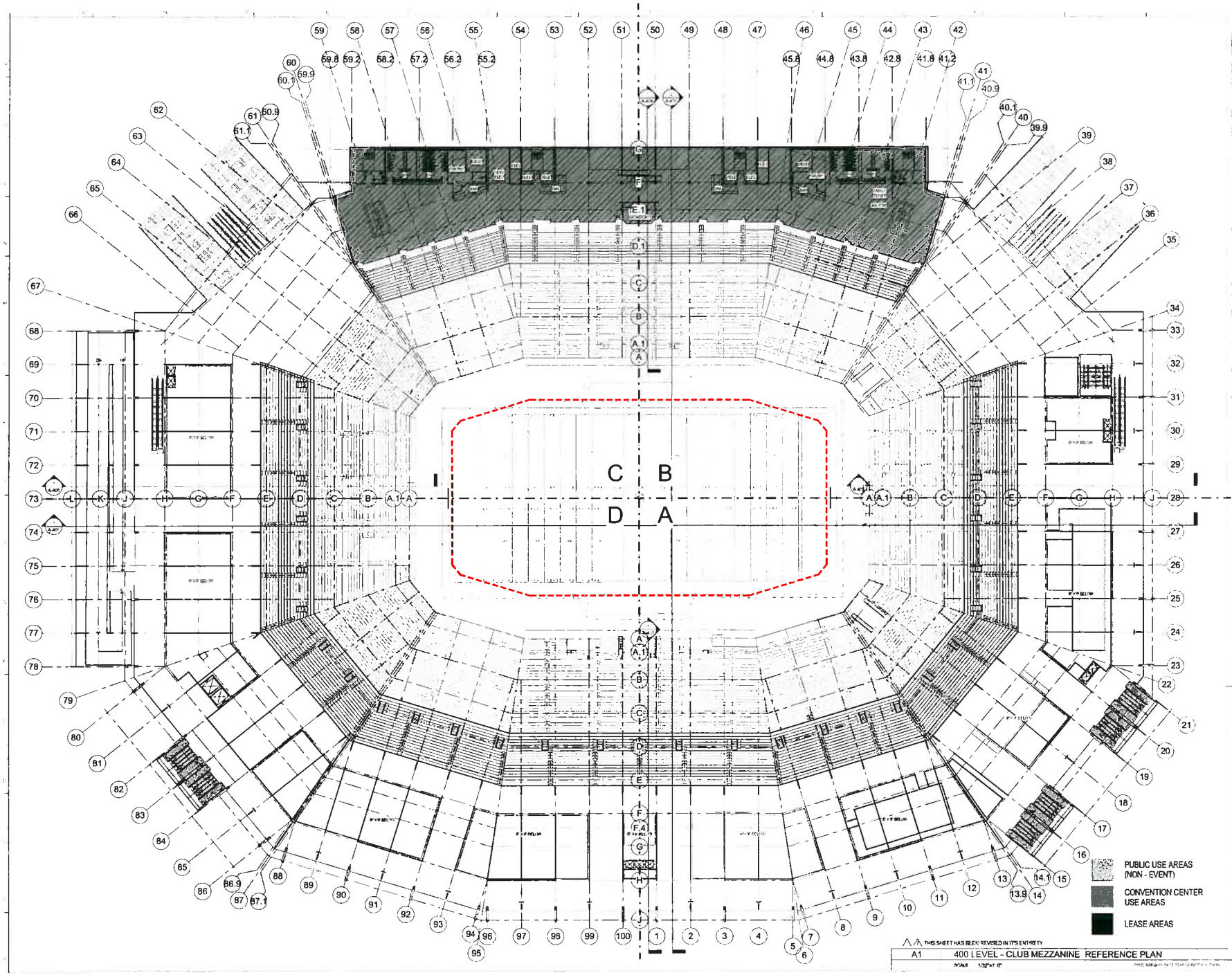
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
MAIN CONCOURSE LEVEL (EL=47'-0")

A-103

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

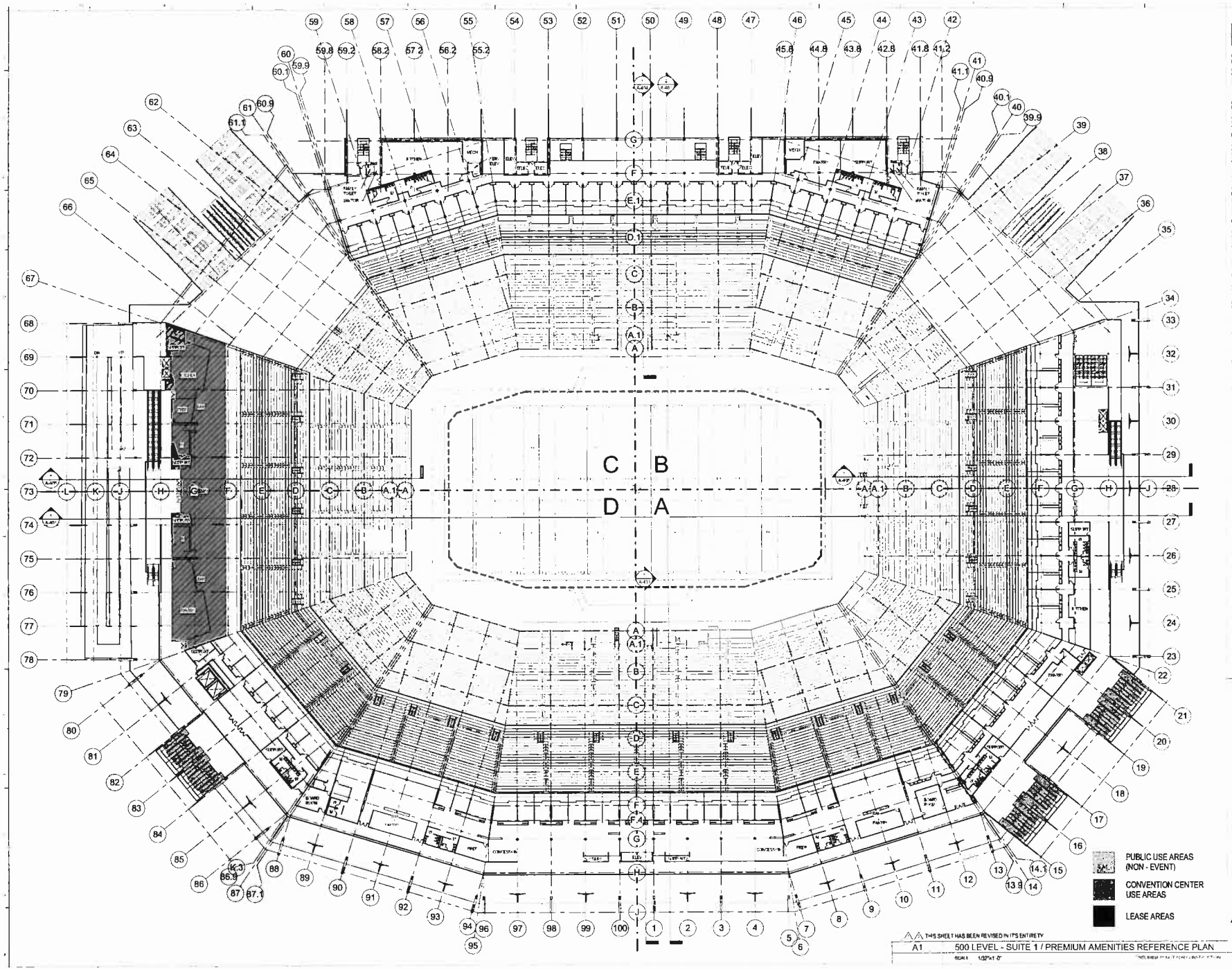
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
CLUB MEZZANINE LEVEL (EL=75'-9")

A-104

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

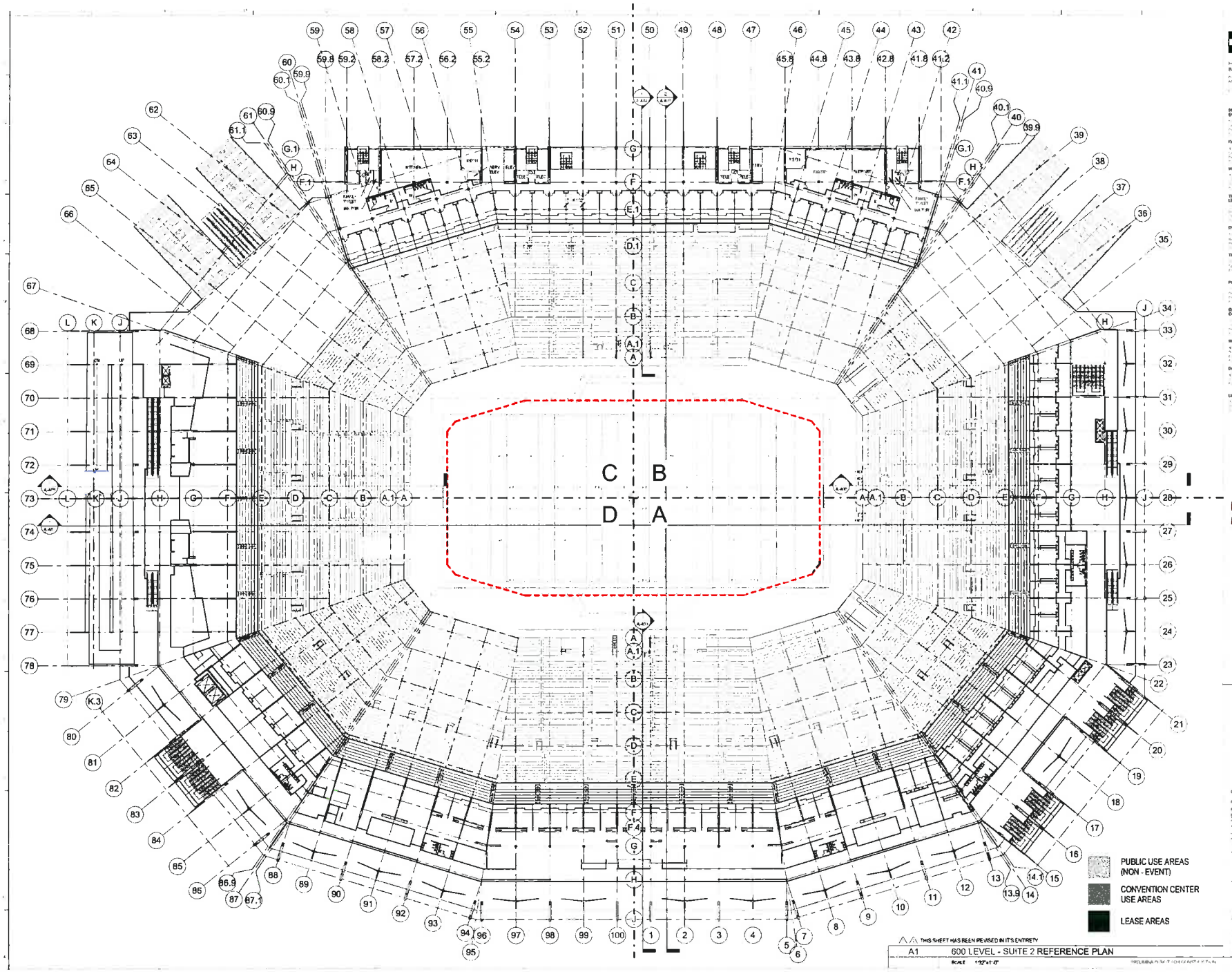
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
SUITE LEVEL 1 / PREMIUM AMENITIES LEVEL (EL=93'-9")

A-105

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
SUITE LEVEL 2
(EL=107'-0")

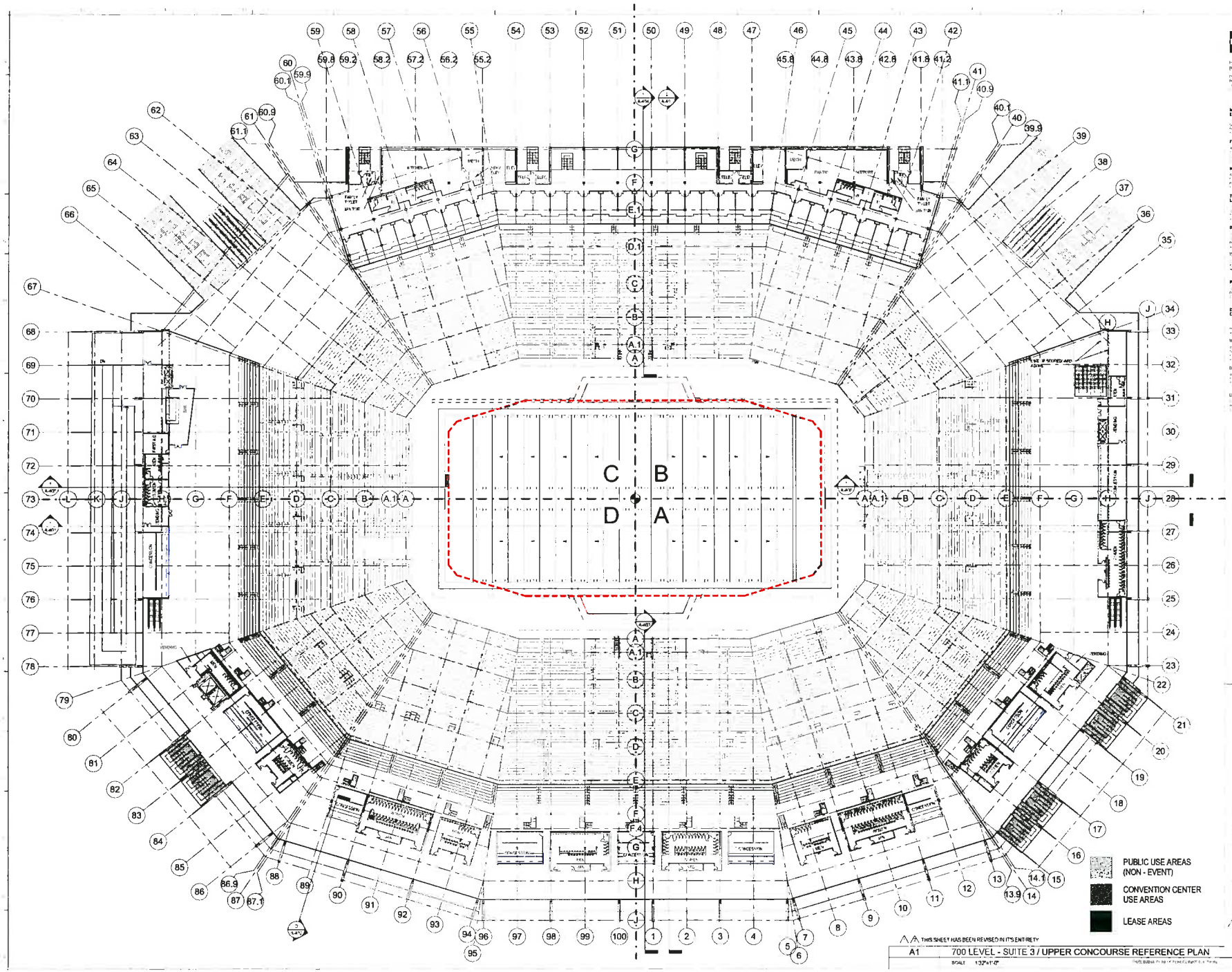
A-106

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 600 LEVEL - SUITE 2 REFERENCE PLAN

SCALE 1/32"=1'-0"

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

49ERS
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

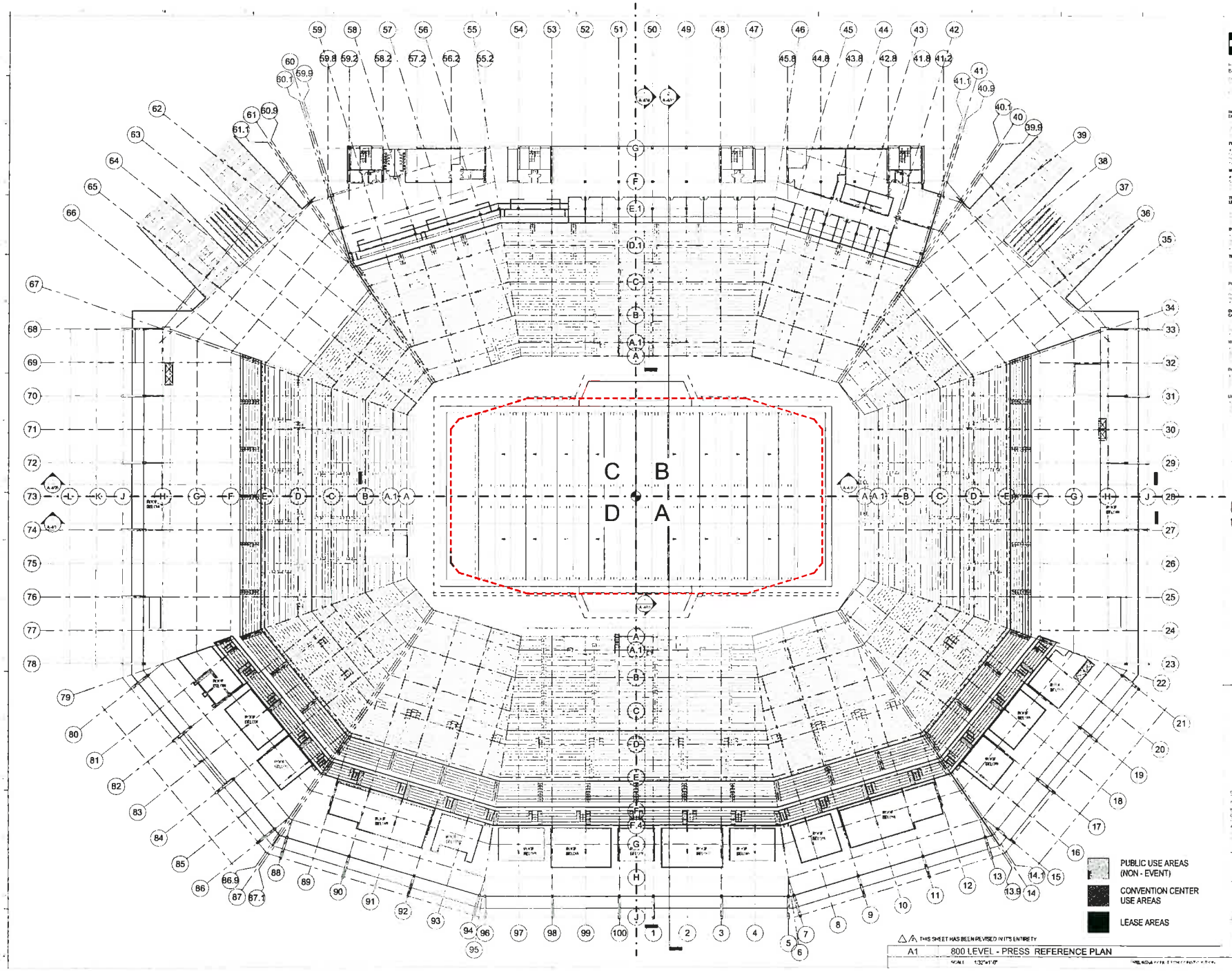
A1 700 LEVEL - SUITE 3 / UPPER CONCOURSE REFERENCE PLAN

SCALE 1/32"=1'-0"

SHEET TITLE & NUMBER
SUITE LEVEL 3
(EL=120'-3") / UPPER CONCOURSE
(EL=116'-9")

A-107

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

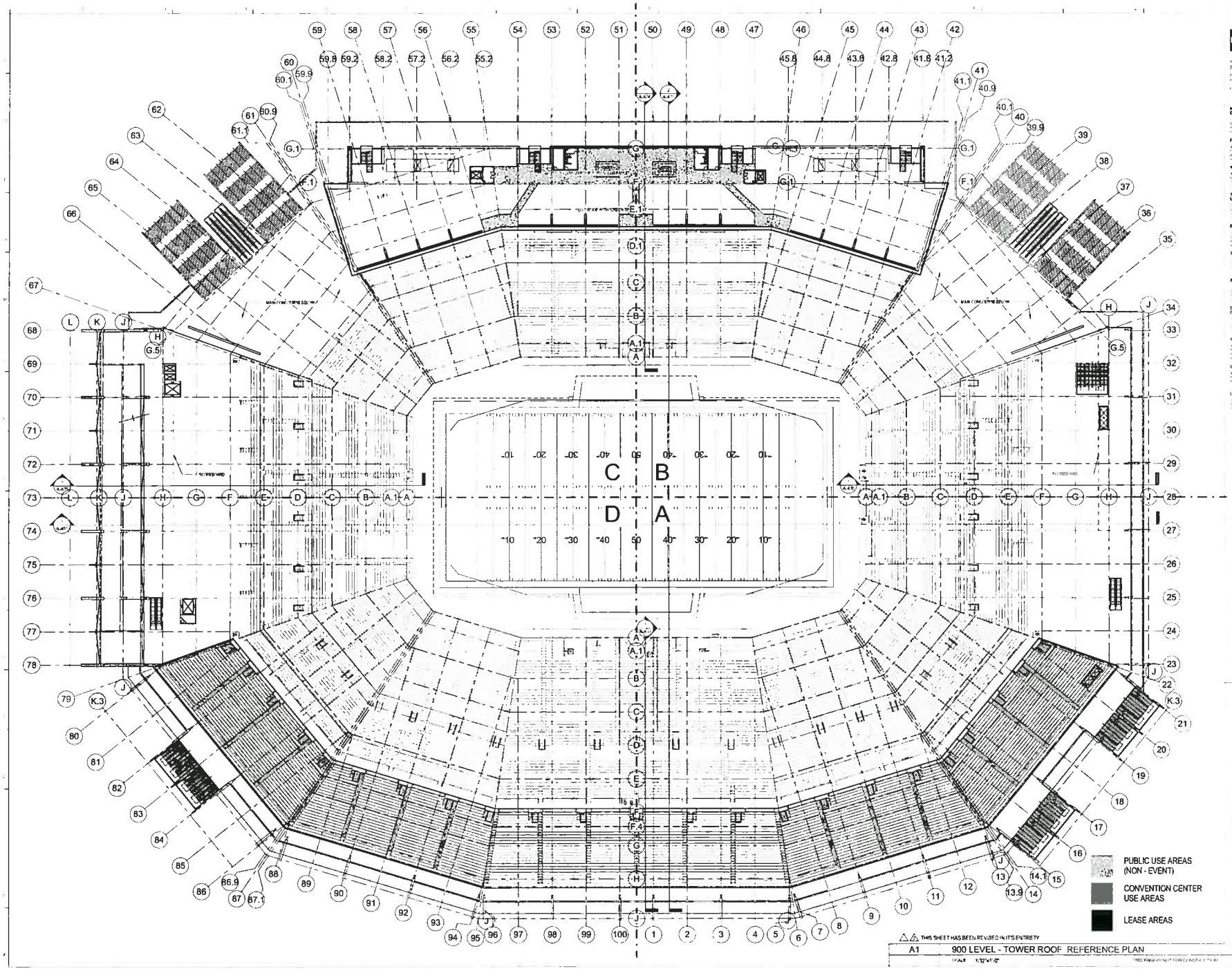
PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
PRESS LEVEL
(EL=135'-3")

A-108

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

49ERS
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

SHEET TITLE & NUMBER
TOWER ROOF PLAN
(EL=151'-9")

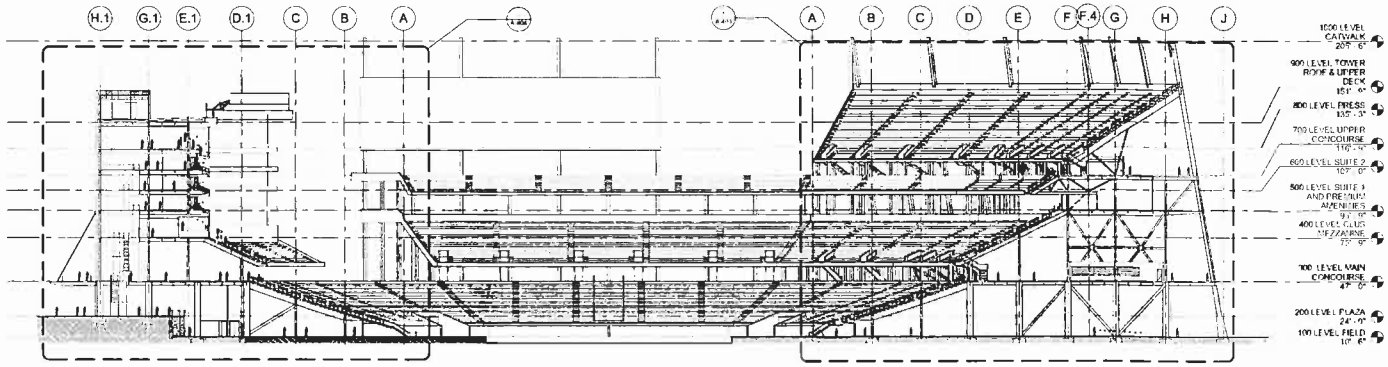
A-109

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

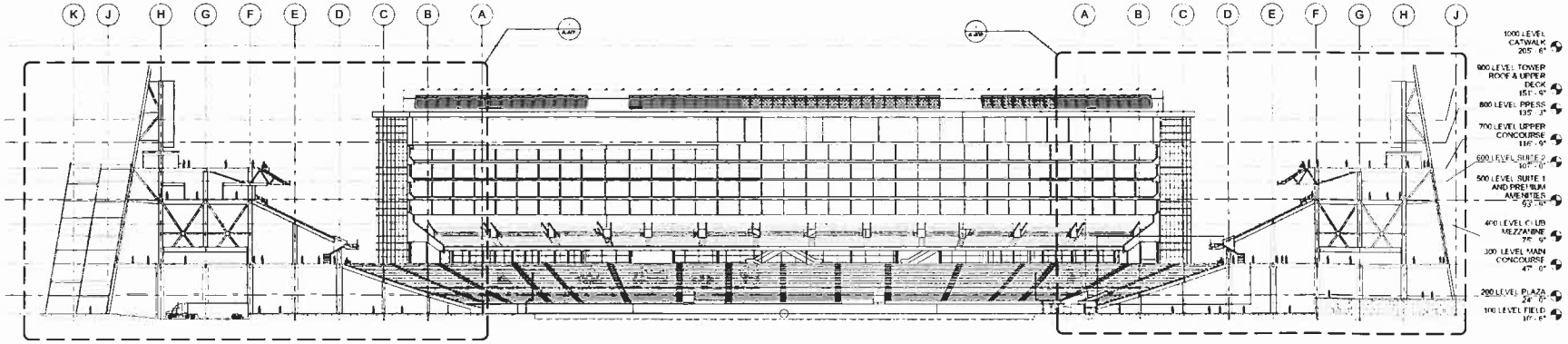
A1 900 LEVEL - TOWER ROOF REFERENCE PLAN

SCALE 1/32"=1'-0"

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



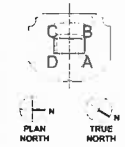
A1 LONGITUDINAL SECTION - LOOKING WEST



A1 LONGITUDIAL SECTION - LOOKING WEST

HNTB

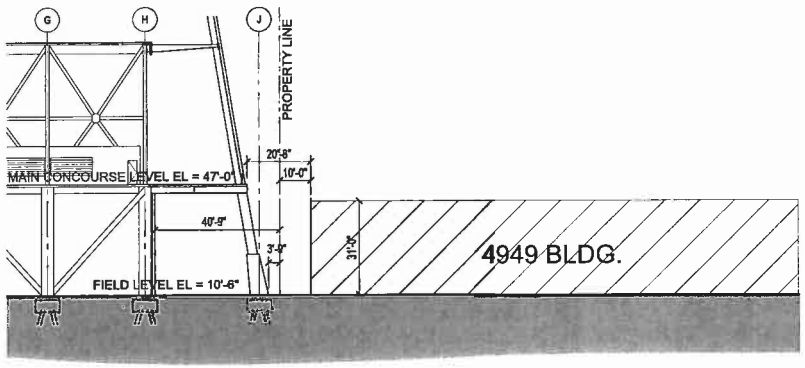
SAN FRANCISCO
49ERS NEW STADIUM



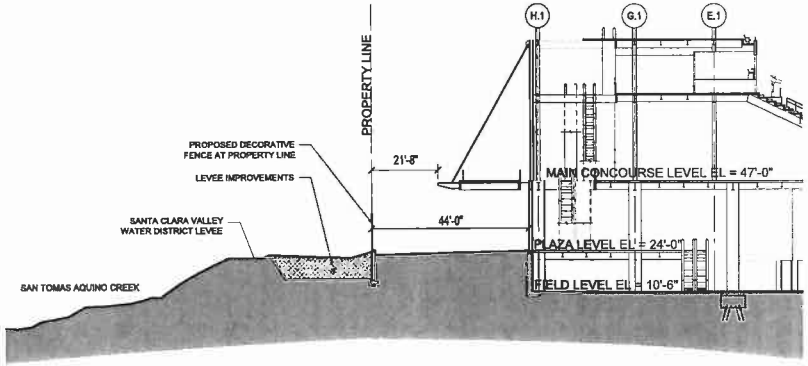
SHEET TITLE & NUMBER
OVERALL BUILDING SECTIONS

A-401

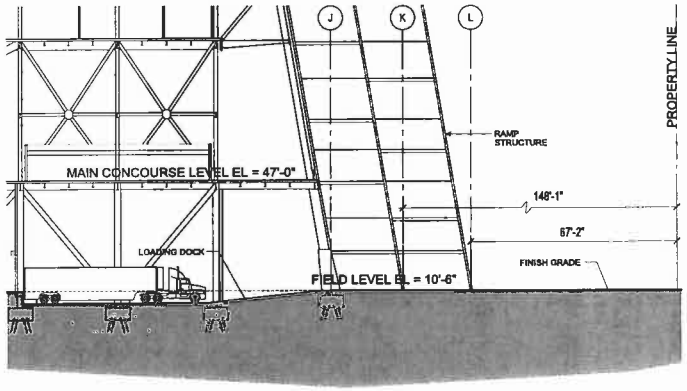
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



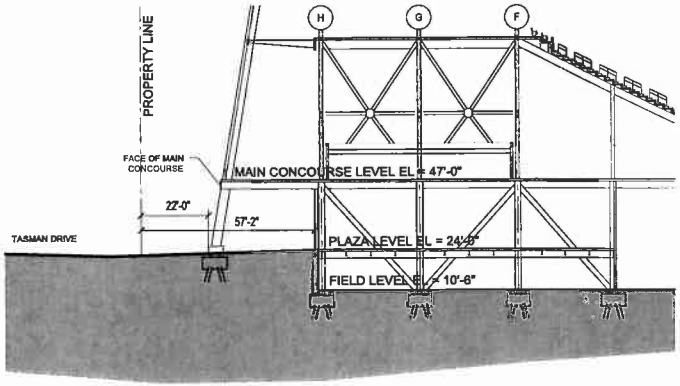
D EAST SECTION @ COL. LINE 90
1/16" = 1'-0"



B WEST SECTION @ COL. LINE 59.9
1/16" = 1'-0"



C SOUTH SECTION @ COL. LINE 73
1/16" = 1'-0"



A NORTH SECTION @ COL. LINE 29
1/16" = 1'-0"

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH
TRUE NORTH

SHEET TITLE & NUMBER
SITE CONTROL SECTIONS

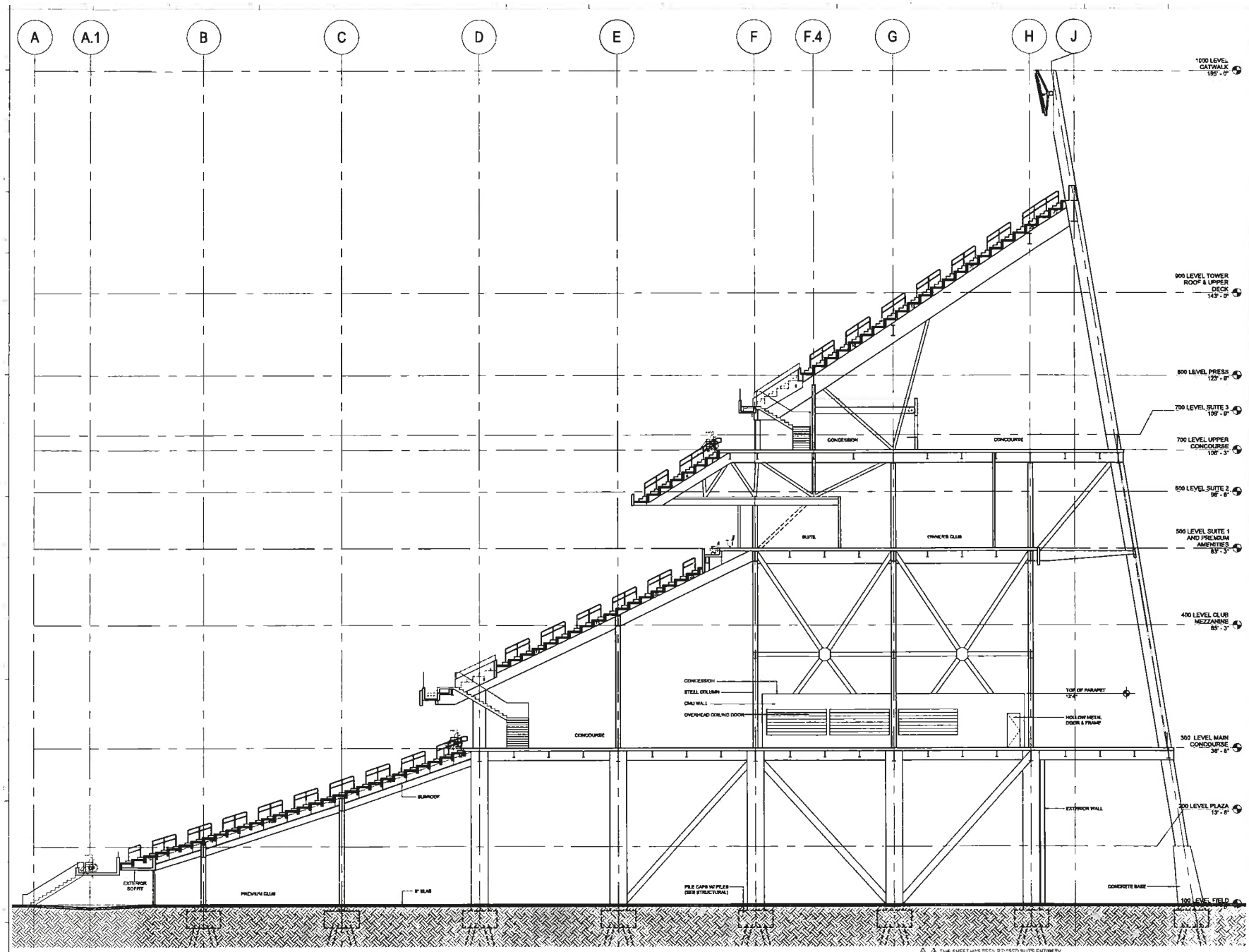
A-402

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

△△ THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 SITE CONTROL SECTIONS

SCALE 1/16"=1'-0"



△△ THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 EAST SECTION - LOOKING NORTH

SCALE 1/8"=1'-0"

HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

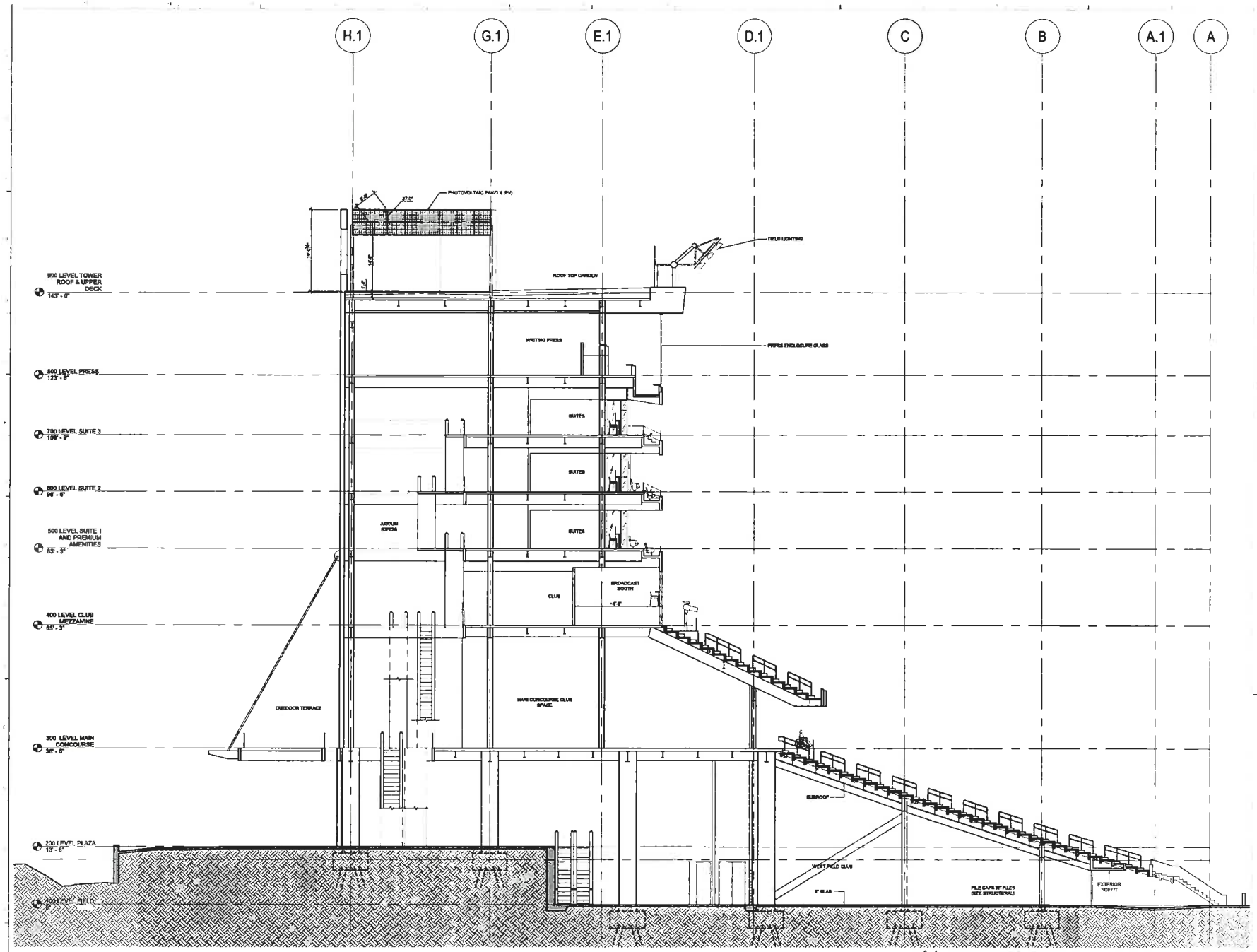
TRUE NORTH

SHEET TITLE & NUMBER

BUILDING SECTION - EAST - LOOKING NORTH

A-403

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BUILDING SECTION - WEST - LOOKING NORTH

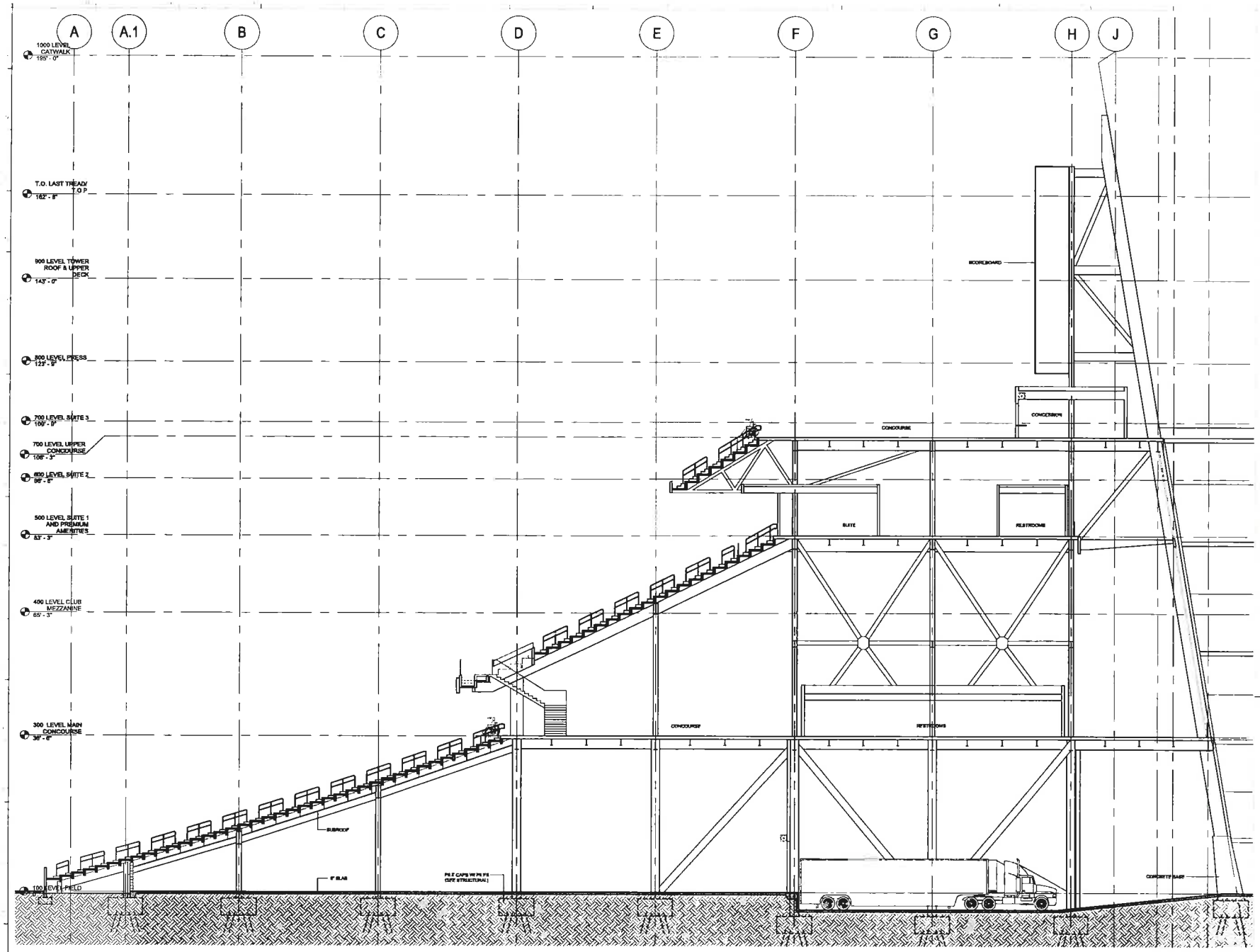
A-404

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 WEST SECTION - LOOKING NORTH

SCALE 1/8"=1'-0"



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BUILDING SECTION - SOUTH - LOOKING WEST

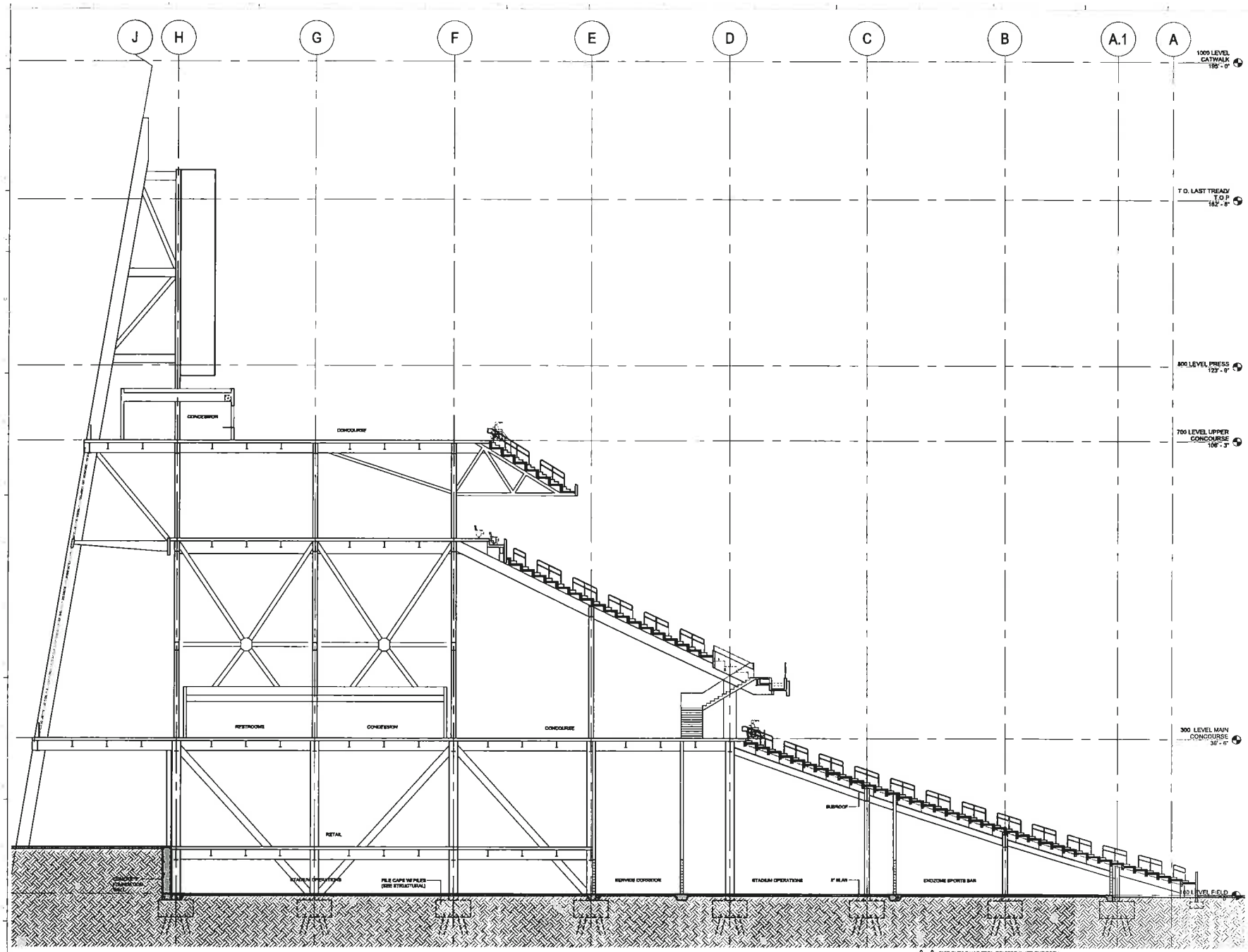
A-405

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

THIS SHEET HAS BEEN REVISED IN IT'S ENTIRETY

SOUTH STADIUM SECTION LOOKING EAST

SCALE 1/8"=1'-0"



THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 SOUTH SECTION - LOOKING WEST

SCALE 1/8"=1'-0"

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

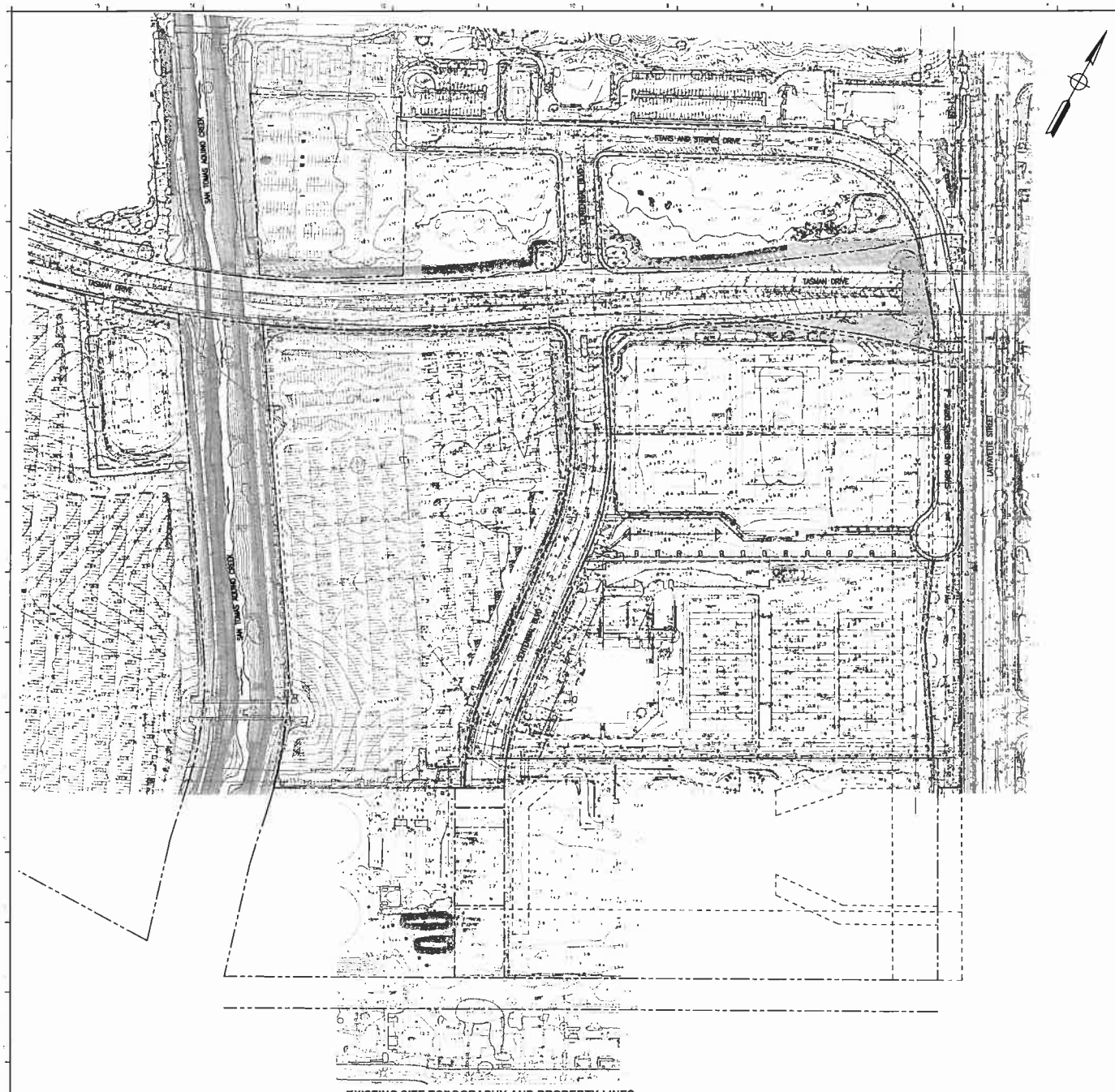
TRUE NORTH

SHEET TITLE & NUMBER

BUILDING SECTION - NORTH - LOOKING WEST

A-406

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



EXISTING SITE TOPOGRAPHY AND PROPERTY LINES

SCALE: 1"=80'

0 100' 200'

SURVEY NOTES:

1. BASIS OF BEARINGS: THE BEARING OF SOUTH 04°54'56" EAST TAKEN ON THE CENTERLINE OF CENTENNIAL BOULEVARD AS SHOWN ON THAT CERTAIN PARCEL MAP FILED FOR RECORD ON JULY 13, 1967 IN BOOK 575 OF MAPS AT PAGE 44, SANTA CLARA COUNTY RECORDS WAS TAKEN AS THE BASIS OF ALL BEARINGS SHOWN HEREON.
2. BENCHMARK: CITY OF SANTA CLARA B-10A; TOP OF SCVWD BRASS DISK STAMPED "BM 27" AT THE BACK OF WALK OF THE SOUTHWEST CORNER THE BRIDGE DECK FOR GUADALUPE RIVER ON TASMAN DRIVE. ELEVATION: 25.07, (DATUM) NGVD 1929.
3. THIS MAP WAS PREPARED USING COMPUTER ASSISTED, PHOTOGRAMMETRIC METHODS BY HJW GEOSPATIAL, INC., IN OAKLAND CALIFORNIA, IN AREAS OF DENSE VEGETATION, ACCURACY OF CONTOURS MAY DEVIATE FROM ACCEPTED ACCURACY STANDARDS. THE DATE OF PHOTOGRAPHY WAS NOVEMBER 2, 2007 AS JOB NO. 07-038 AND APRIL 26, 2010 AS JOB NO. 10-051.
4. THIS MAP CONFORMS TO THE ACCURACY CODE C2 AS STATED IN FAA FLIGHT STANDARDS INFORMATION MANAGEMENT SYSTEM APPENDIX 3.

LEGEND:

PROPERTY LINE
CENTERLINE
EASEMENT
BUILDING LINE
FOUND MONUMENT AS NOTED
ELECTROLIER
TRAFFIC SIGNAL ARM / POST
FIRE HYDRANT
STORM DRAIN MANHOLE
MANHOLE
CLEAN OUT
GAS METER
UTILITY POLE
VALVE
CATCH BASIN
WATER METER
SIGN
BOLLARD
AERIAL SPOT ELEVATION
CONTOUR
INDEX CONTOUR
CURB
CURB & GUTTER
CONCRETE
FENCE
RETAINING WALL
EDGE OF PAVEMENT
SINGLE TREE
TREES AND BRUSH
UNDERGROUND TELEPHONE
UNDERGROUND JOINT TRENCH
UNDERGROUND NATURAL GAS
UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC
UNDERGROUND RECLAIMED WATER
UNDERGROUND SANITARY SEWER
UNDERGROUND STORM DRAIN
WATER

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

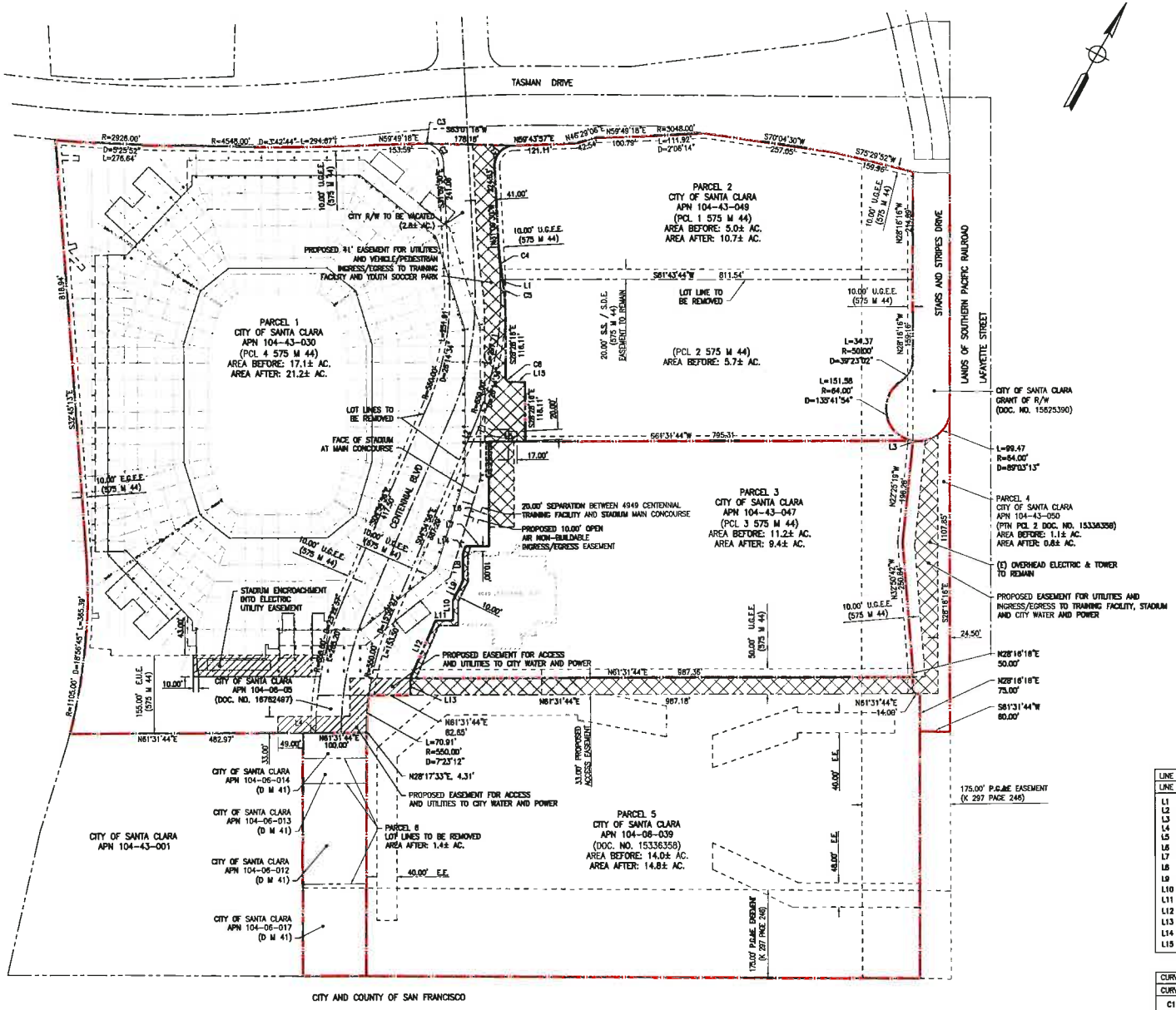
N PLAN NORTH

N TRUE NORTH

EXISTING SITE TOPOGRAPHY

CS-100

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



EXISTING AND PROPOSED PROPERTY LINES

1"=80'

0' 80' 160'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S31°09'30"E	3.94'
L2	S04°54'36"E	30.30'
L3	N28°18'16"W	7.03'
L4	S28°17'33"E	4.62'
L5	S81°31'44"W	71.43'
L6	S28°28'16"E	208.18'
L7	S61°31'44"E	196.70'
L8	S28°28'16"E	52.11'
L9	S01°59'32"E	43.87'
L10	S28°28'16"E	40.05'
L11	N61°31'44"E	34.80'
L12	S04°58'36"E	105.94'
L13	N28°28'16"E	33.00'
L14	S11°52'42"E	16.27'
L15	S81°31'44"W	30.00'

CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	40.00'	90°53'27"	63.45'
C2	40.00'	89°01'12"	62.15'
C3	40.00'	03°11'58"	2.23'
C4	540.00'	08°29'46"	81.22'
C5	560.00'	09°11'00"	89.78'
C6	8.00'	90°00'00"	12.57'

HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

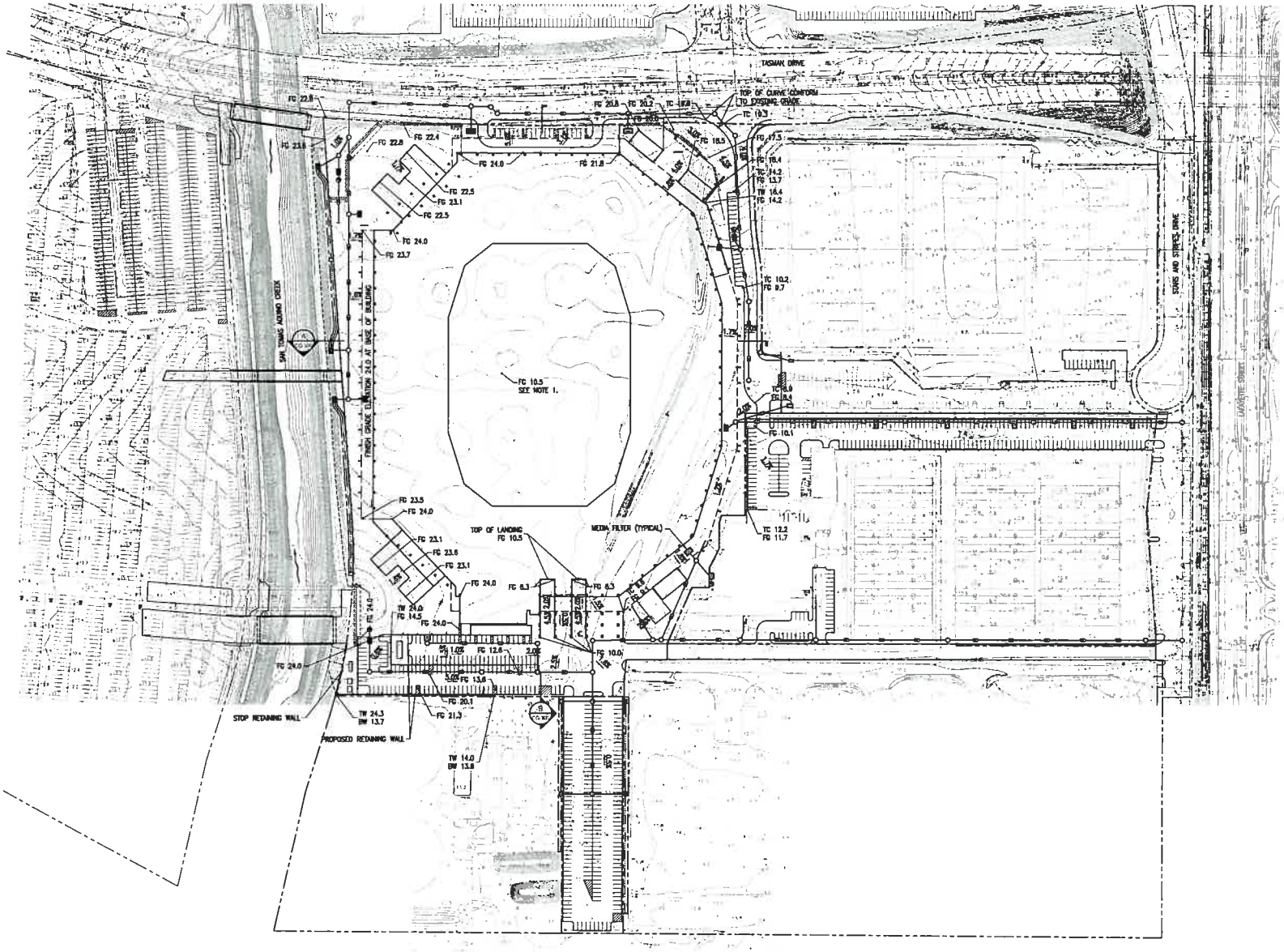
PLAN NORTH

TRUE NORTH

EXISTING AND PROPOSED PROPERTY LINES

CS-400

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



PRELIMINARY GRADING AND DRAINAGE PLAN

SCALE: 1"=80'

0' 80' 160

NOTE:

1. LOWEST ELEVATION OF STADIUM IS ELEVATION 10.5 PER CITY DATUM. FEMA 100-YEAR FLOOD ELEVATION FOR PROJECT SITE IS 9.2 PER CITY DATUM. SITE IS 1.3-FEET ABOVE 100-YEAR FLOOD ELEVATION.

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49ERS

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

PRELIMINARY GRADING AND DRAINAGE PLAN

CG-100

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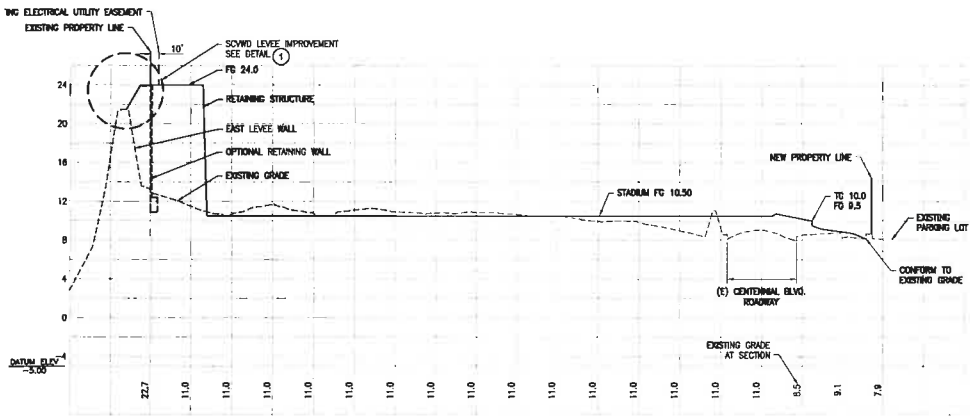
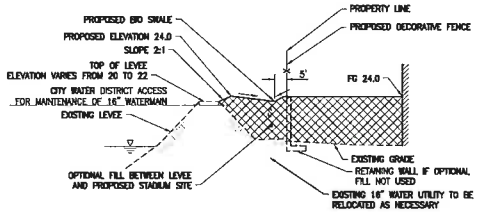


A EXISTING AND PROPOSED GRADE SECTION
SCALE: H:1"=60' V:1"=5'



1 TYPICAL SECTION - SCVWD LEVEE IMPROVEMENT
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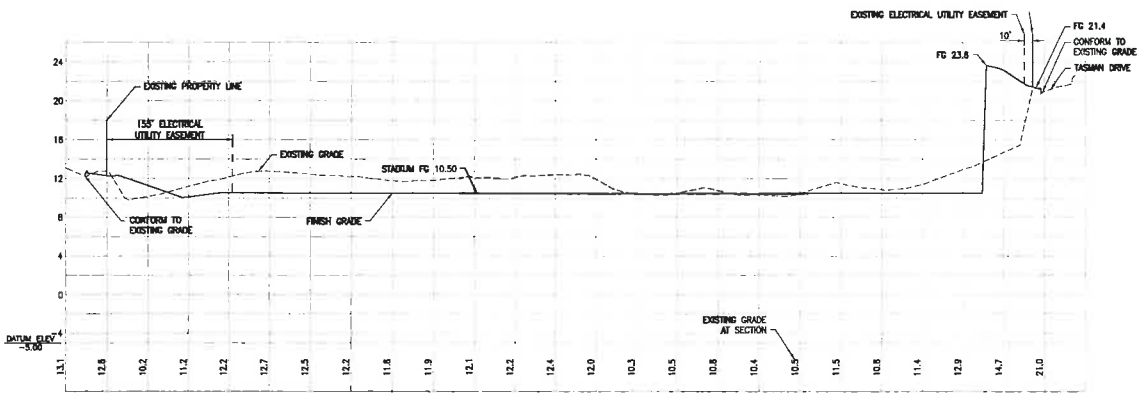

B SECTION B-EXISTING AND PROPOSED GRADE
SCALE: H:1"=60' V:1"=5'

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PRELIMINARY GRADING AND DRAINAGE SECTION

CG-300

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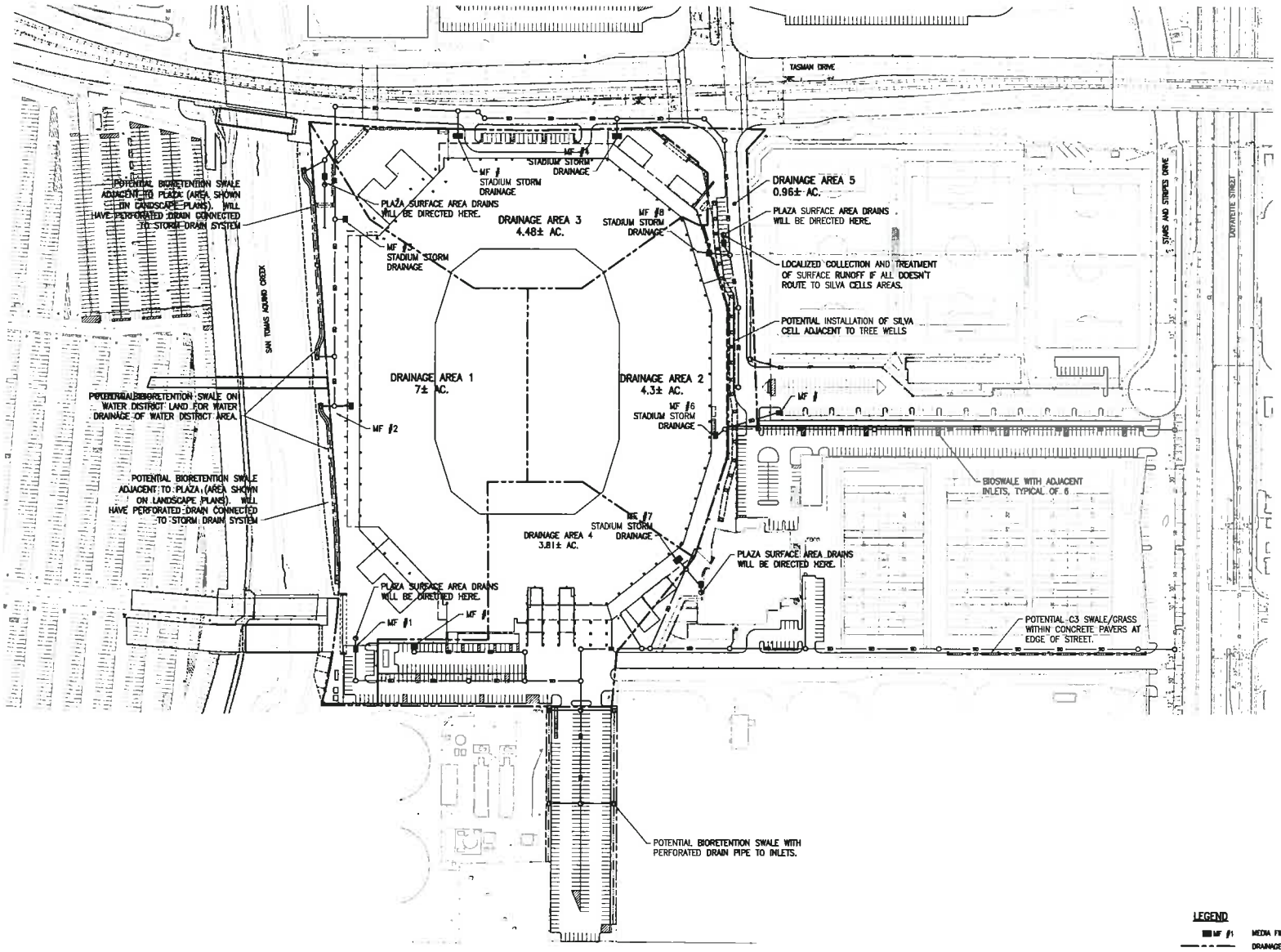

STORM WATER MANAGEMENT PLAN

SCALE 1"=80'

0' 80' 160'

LEGEND

- MF #1 — MEDIA FILTER
- DRAINAGE AREA BOUNDARY
- HYDRODYNAMIC SEPARATER

FILTER TYPES

#1–3 DMS=8'Wx12'L WITH 9 CARTRIDGES
#4 DMS=10'Wx16'L WITH 16 CARTRIDGES
#5–6 DMS=8'Wx12'L WITH 9 CARTRIDGES
#7 DMS=10'Wx16'L WITH 14 CARTRIDGES
#8 DMS=4'Wx11'L WITH 4 CARTRIDGES

UN-NUMBERED MEDIA FILTER TO BE SIZED AS DESIGN CONTINUES.

NOTES:
1. POSITION OF STADIUM STORM DRAINAGE LATERALS IS APPROXIMATE AND WILL BE COORDINATED WITH THE STADIUM PLUMBING DESIGN AS THE DESIGN PROGRESSES.

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PLAN NORTH
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STORM WATER MANAGEMENT PLAN

CG-400

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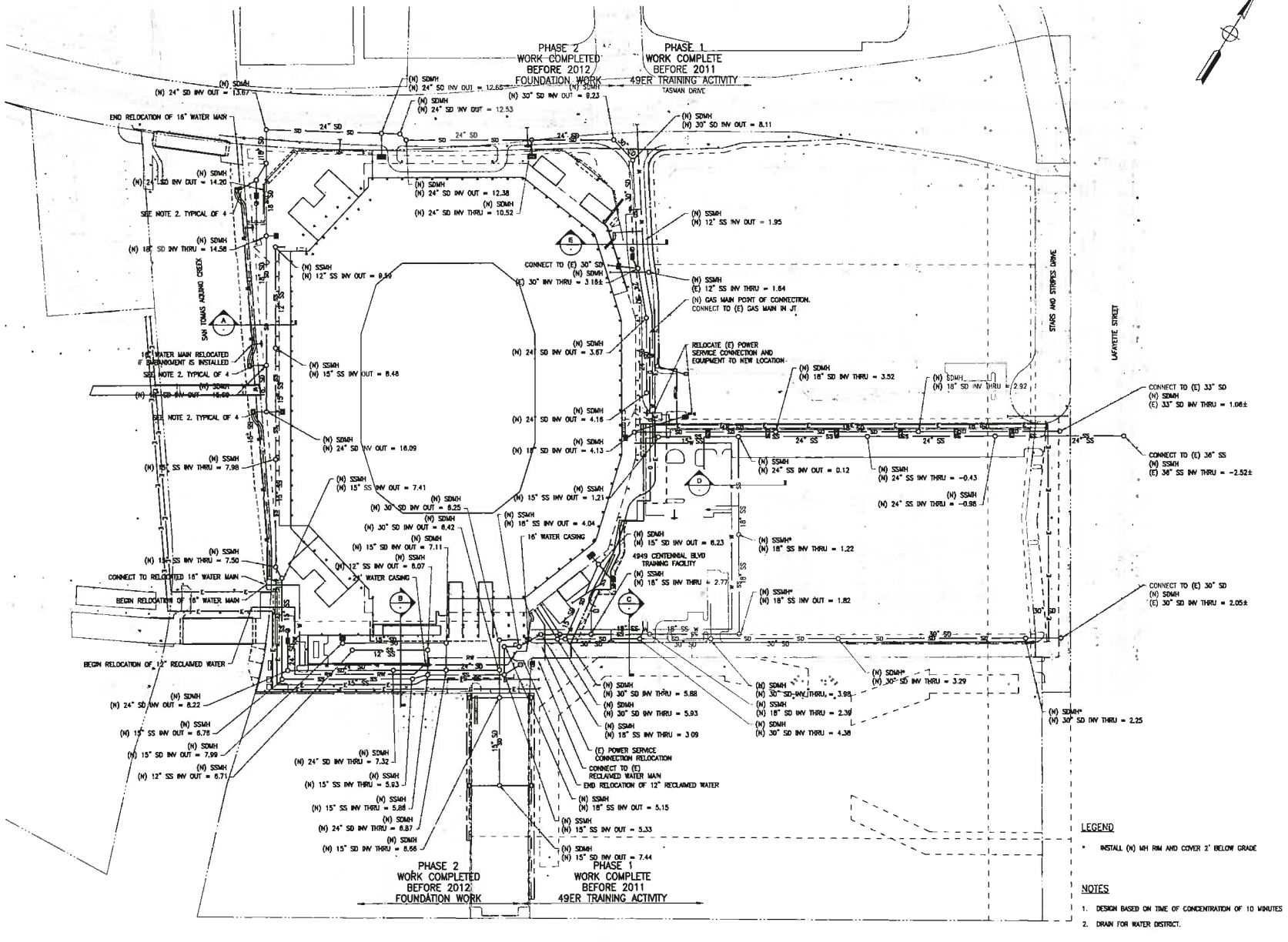

COMPOSITE UTILITY PLAN

SCALE 1"=80'

0' 80' 160'

LEGEND

* INSTALL (N) MH RIM AND COVER 2' BELOW GRADE

NOTES

1. DESIGN BASED ON TIME OF CONCENTRATION OF 10 MINUTES
2. DRAIN FOR WATER DISTRICT.

PRELIMINARY NOT FOR CONSTRUCTION

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DATE 06/30/2010
DRAWN FOR FINAL PLANNED DEVELOPMENT
PROJECT NO 34916
DRAWN BY JN/PS
CHECKED BY KM
APPROVED BY MS

#	DATE	DESCRIPTION
1	07/27/2009	REVISED TO FINAL PLANNED DEVELOPMENT
2	11/13/2009	FINAL PLANNED DEVELOPMENT

COMPOSITE UTILITY PLAN

CU-100

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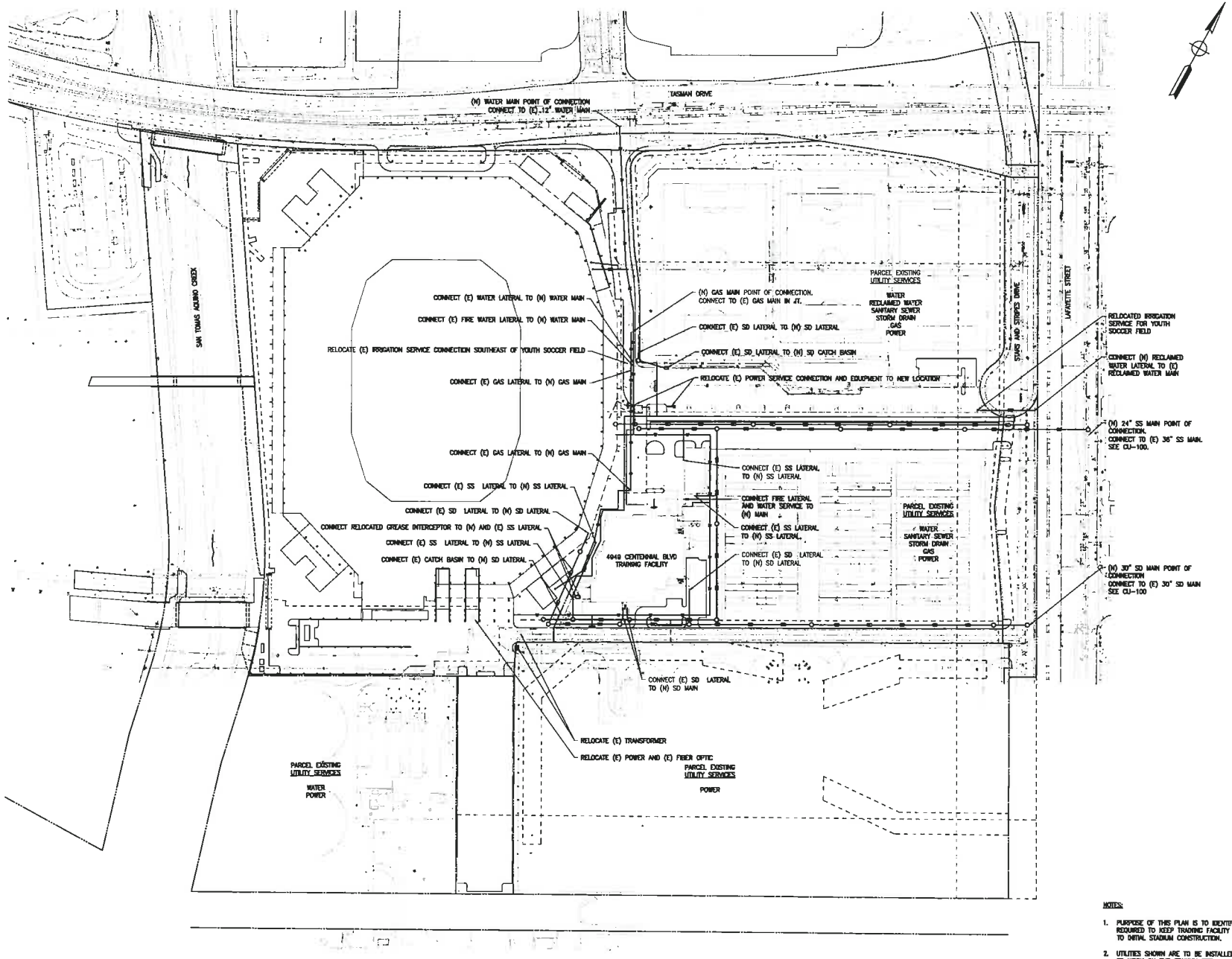
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



PHASE 1 UTILITY PLAN

SCALE 1"=80'

0' 80' 160'

NOTES:

1. PURPOSE OF THIS PLAN IS TO IDENTIFY THE UTILITIES REQUIRED TO KEEP TRAINING FACILITY OPERATIONAL PRIOR TO INITIAL STADIUM CONSTRUCTION.
2. UTILITIES SHOWN ARE TO BE INSTALLED/RELOCATED PRIOR TO WORK ON THE STADIUM SITE.
3. SEQUENCING OF WORK TO BE MODIFIED AS MORE DETAILED ANALYSIS OF UTILITY SERVICES ARE COMPLETED.

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PLAN NORTH

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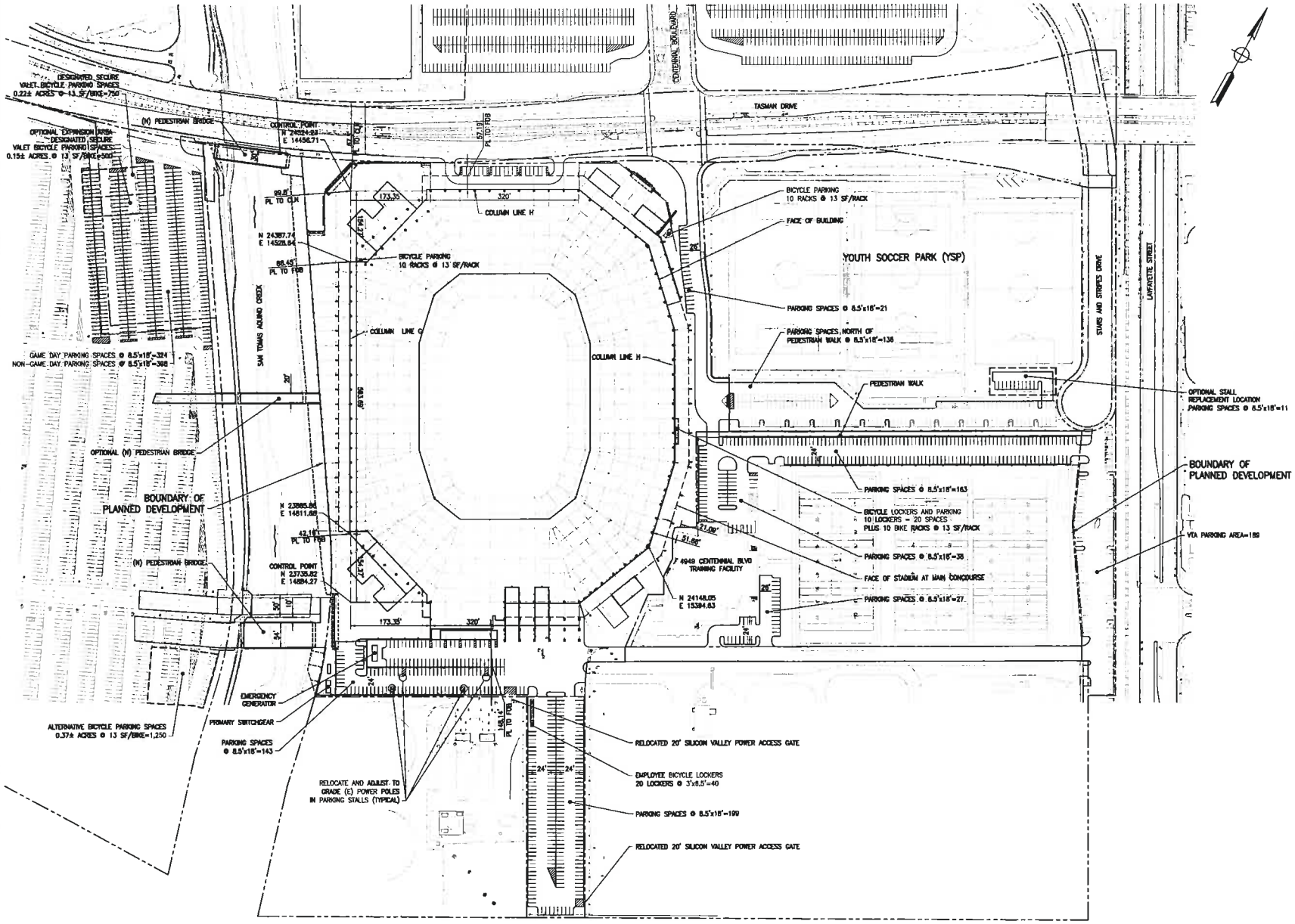
PHASE 1 UTILITY PLAN

CU-101

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



SITE LAYOUT PLAN

SCALE: 1"=80'

0' 80' 160'

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PLAN NORTH

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SITE LAYOUT PLAN

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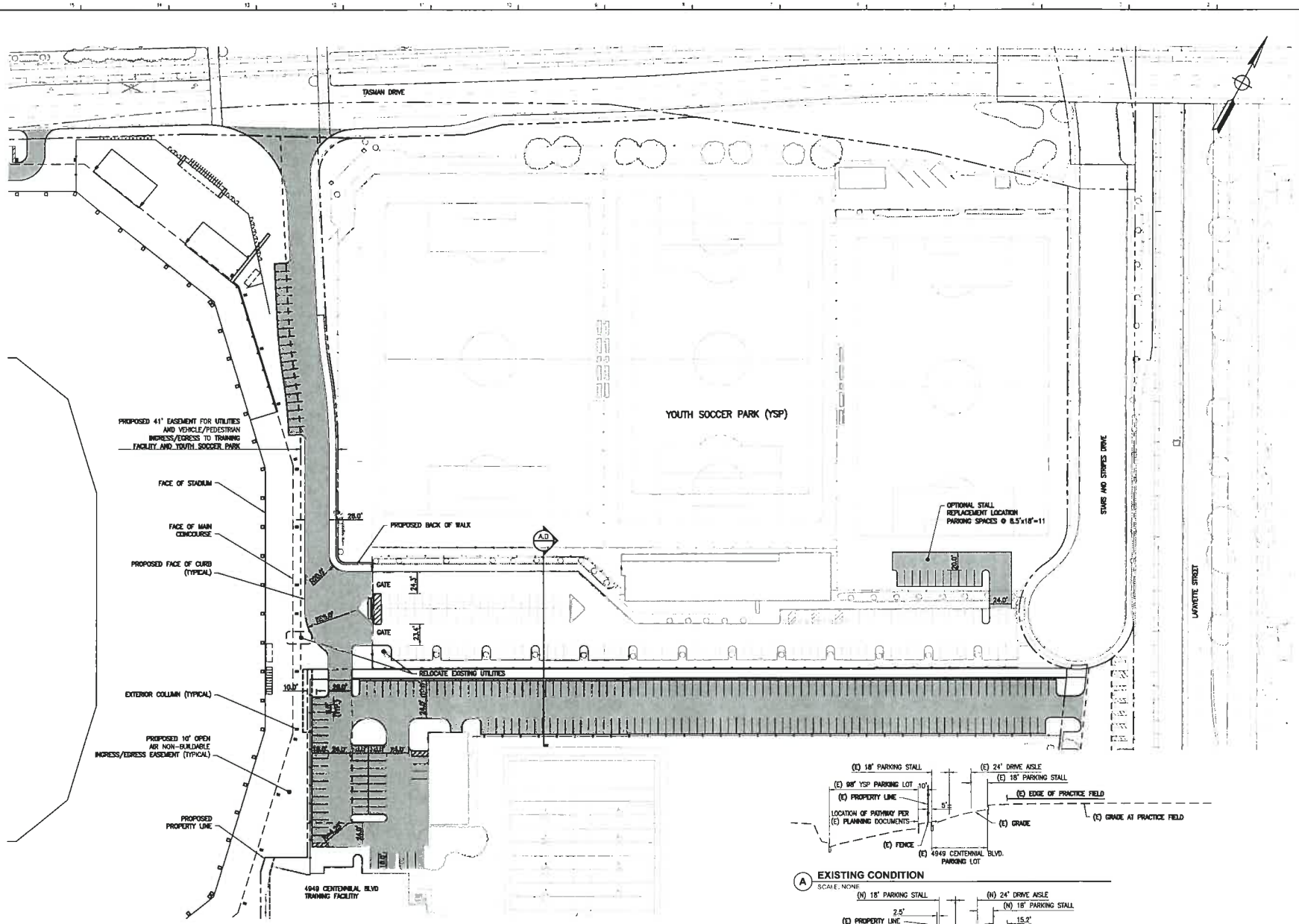
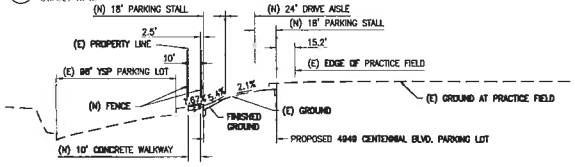
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



A EXISTING CONDITION
SCALE: NONE



B PROPOSED SECTION
SCALE: NONE

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YOUTH SOCCER PARK ENTRY

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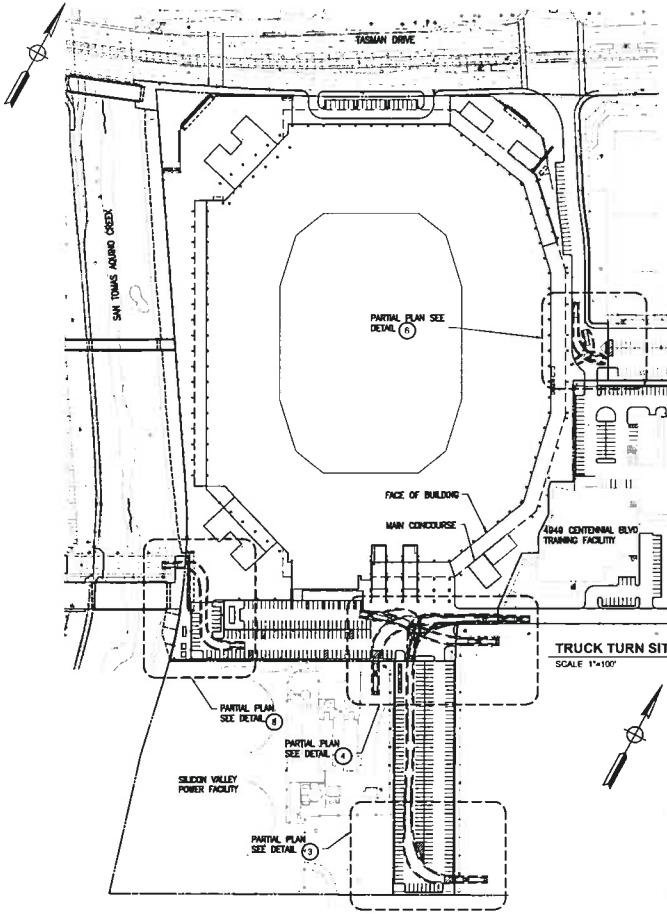
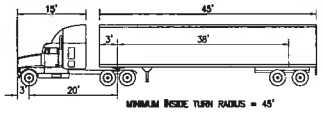
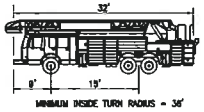


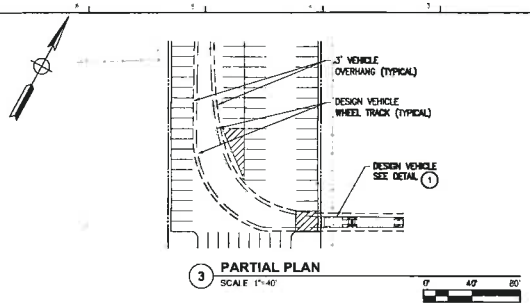
TRUCK TURN SITE PLAN
SCALE 1"=100'



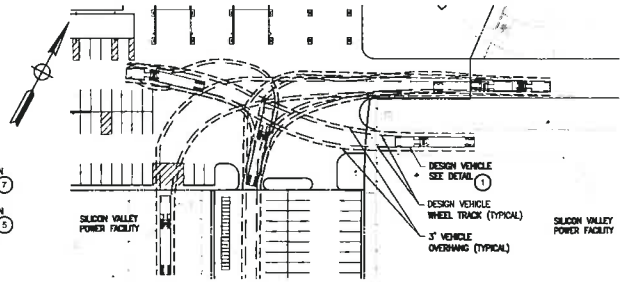
1 TRACTOR-TRAILER
SCALE: NOT TO SCALE



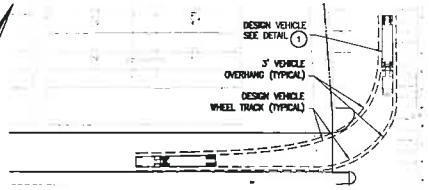
2 FIRE ENGINE
SCALE: NOT TO SCALE



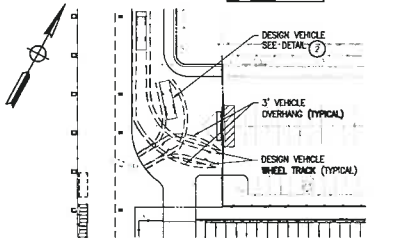
3 PARTIAL PLAN
SCALE 1"=40'



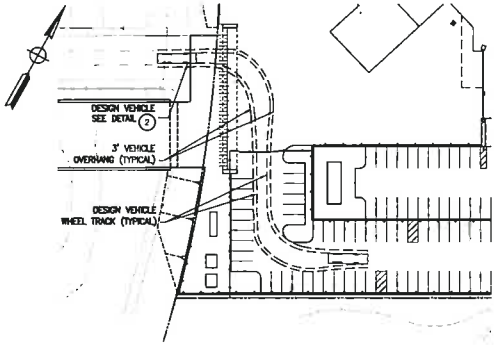
4 PARTIAL PLAN
SCALE: 1"=40'



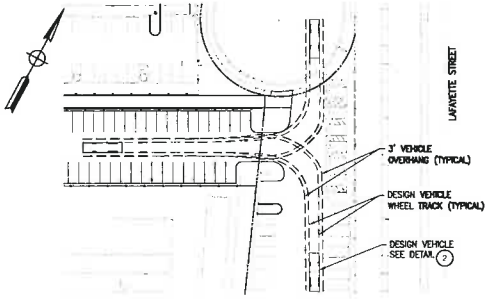
5 PARTIAL PLAN
SCALE: 1"=40'



6 PARTIAL PLAN
SCALE: 1"=40'



8 PARTIAL PLAN
SCALE: 1"=40'



7 PARTIAL PLAN
SCALE: 1"=40'

0' 40' 80'

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PLAN NORTH
TRUE NORTH

TRUCK TURN ANALYSIS

CI-400

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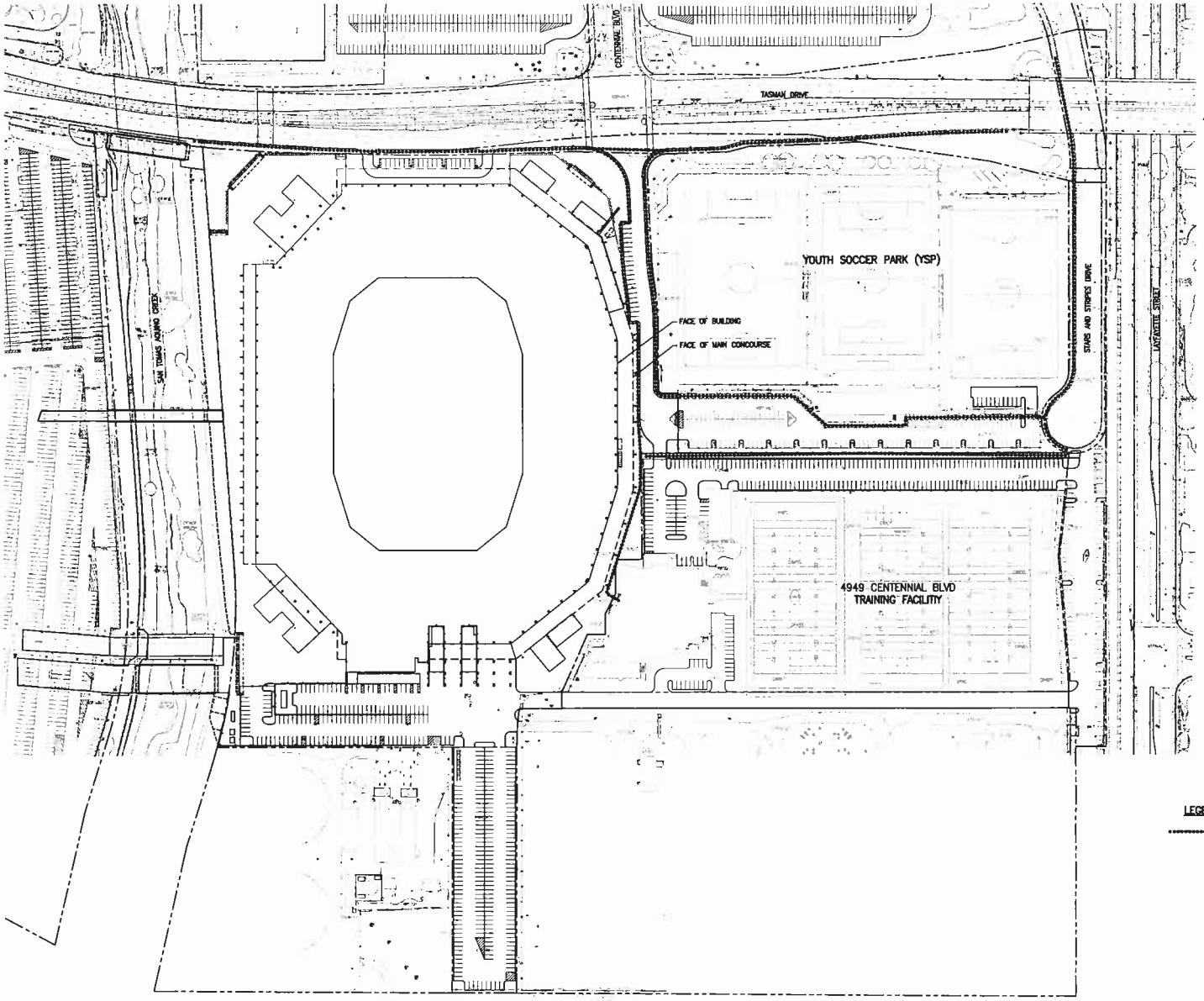

LEGEND

PATH OF TRAVEL

ADA PATH OF TRAVEL

SCALE: 1"=80'

0' 80' 160'

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49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

ADA PATH OF TRAVEL

CI-401

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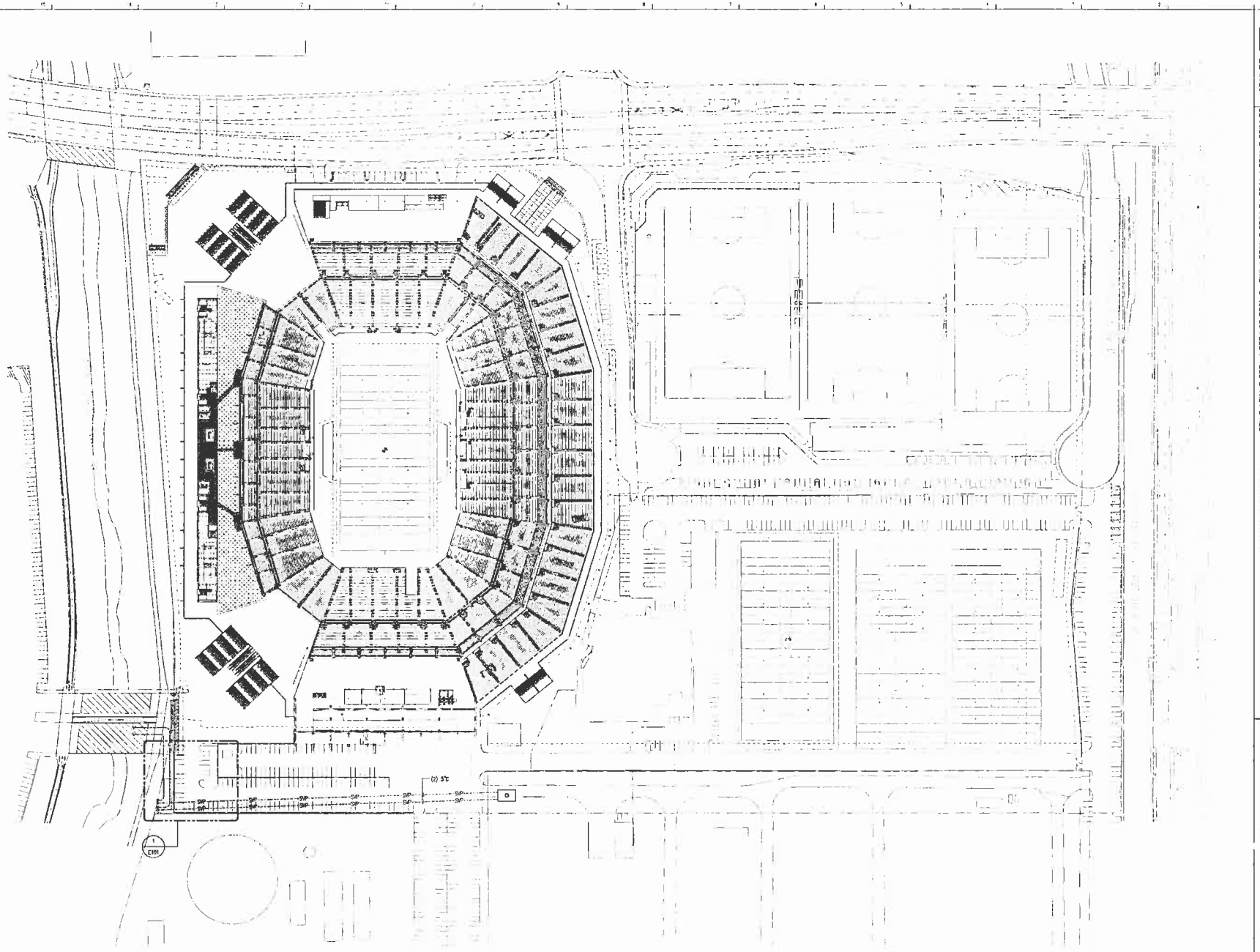

D1	SITE PLAN (EL=0'-0")
	SCALE: 1/64" = 1'-0"

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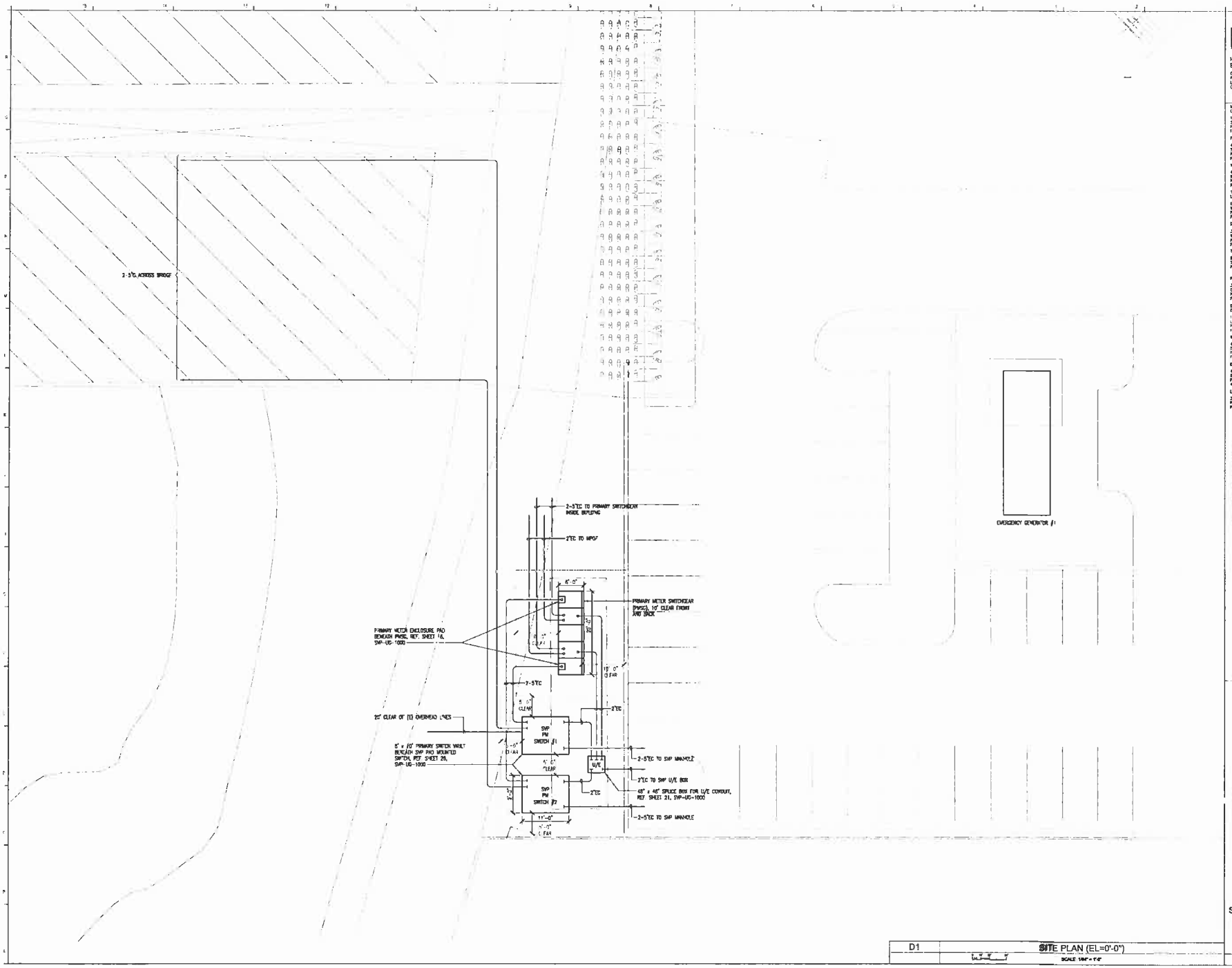
DATE: 06/30/2010
SET TO PRINT:

PROJECT NO. 510 17380 00
DRAWN BY:
CHECKED BY:
APPROVED BY:

SHEET TITLE & NUMBER
ELECTRICAL SITE PLAN
E100

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



D1 SITE PLAN (EL=0'-0")

SCALE 1/16" = 1'-0"

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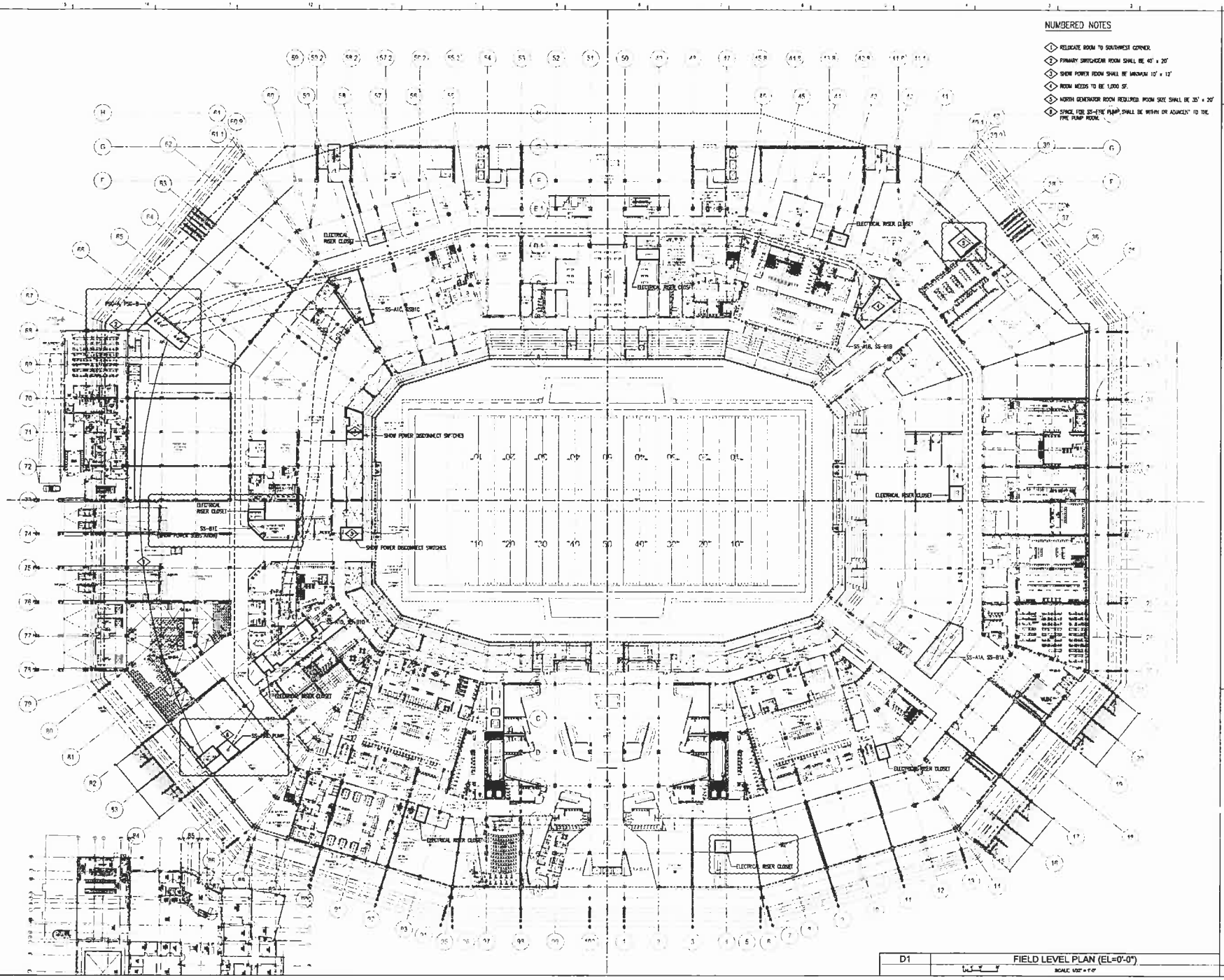
DATE 06/30/2010

SHEET TITLE & NUMBER

ELECTRICAL SERVICE YARD AREA

E101

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



NUMBERED NOTES

1. RELOCATE ROOM TO SOUTHWEST CORNER.
2. PRIMARY SWITCHGEAR ROOM SHALL BE 40' x 20'
3. SHOW POWER ROOM SHALL BE MINIMUM 10' x 12'
4. ROOM NEEDS TO BE 1,000 SF.
5. NORTH GENERATOR ROOM REQUIRED. ROOM SIZE SHALL BE 35' x 20'
6. SPACE FOR SS-FIRE PUMP SHALL BE WITHIN OR ADJACENT TO THE FIRE PUMP ROOM.

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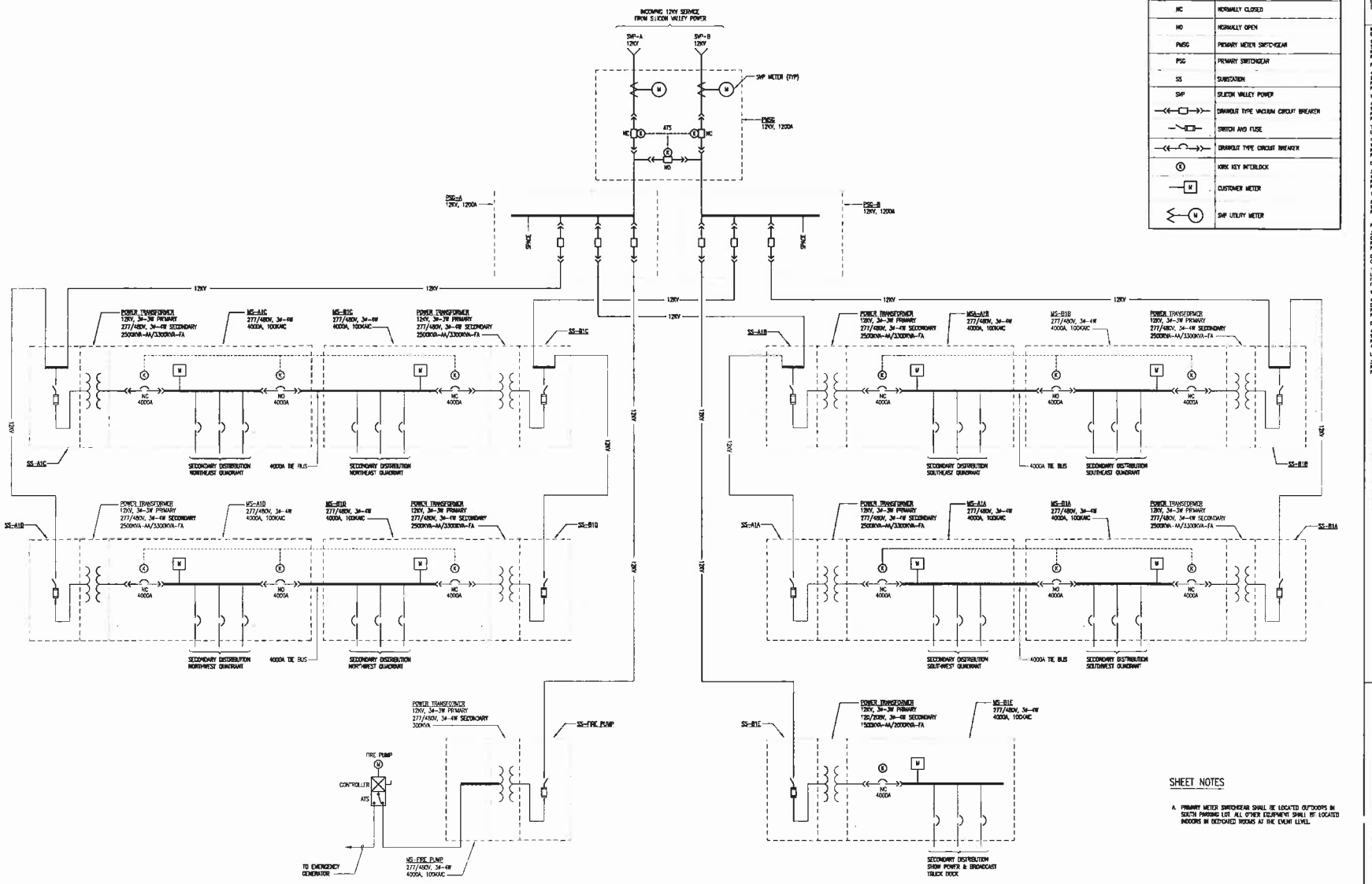
DATE 06/30/2010

SHEET TITLE & NUMBER

ELECTRICAL FIELD LEVEL PLAN

E201

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



LEGEND AND ABBREVIATIONS

AIC	AMPS INTERRUPTING CAPACITY
MS	MAIN SWITCHBOARD
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
PMSG	PRIMARY METER SWITCHGEAR
PSG	PRIMARY SWITCHGEAR
SS	SUBSTATION
SMP	SILICON VALLEY POWER
	DRAWOUT TYPE VACUUM CIRCUIT BREAKER
	SWITCH AND FUSE
	DRAWOUT TYPE CIRCUIT BREAKER
	KIRK KEY INTERLOCK
	CUSTOMER METER
	SMP UTILITY METER

SHEET NOTES

A. PRIMARY METER SWITCHGEAR SHALL BE LOCATED OUTDOORS IN SOUTH PARKING LOT. ALL OTHER EQUIPMENT SHALL BE LOCATED INDOORS IN DEDICATED ROOMS AT THE EVENT LEVEL.

1	PRIMARY ELECTRIC SERVICE DIAGRAM
	SCALE: NTS

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DATE 06/30/2010

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SHEET TITLE & NUMBER

PRIMARY ELECTRIC SERVICE DIAGRAM

E401

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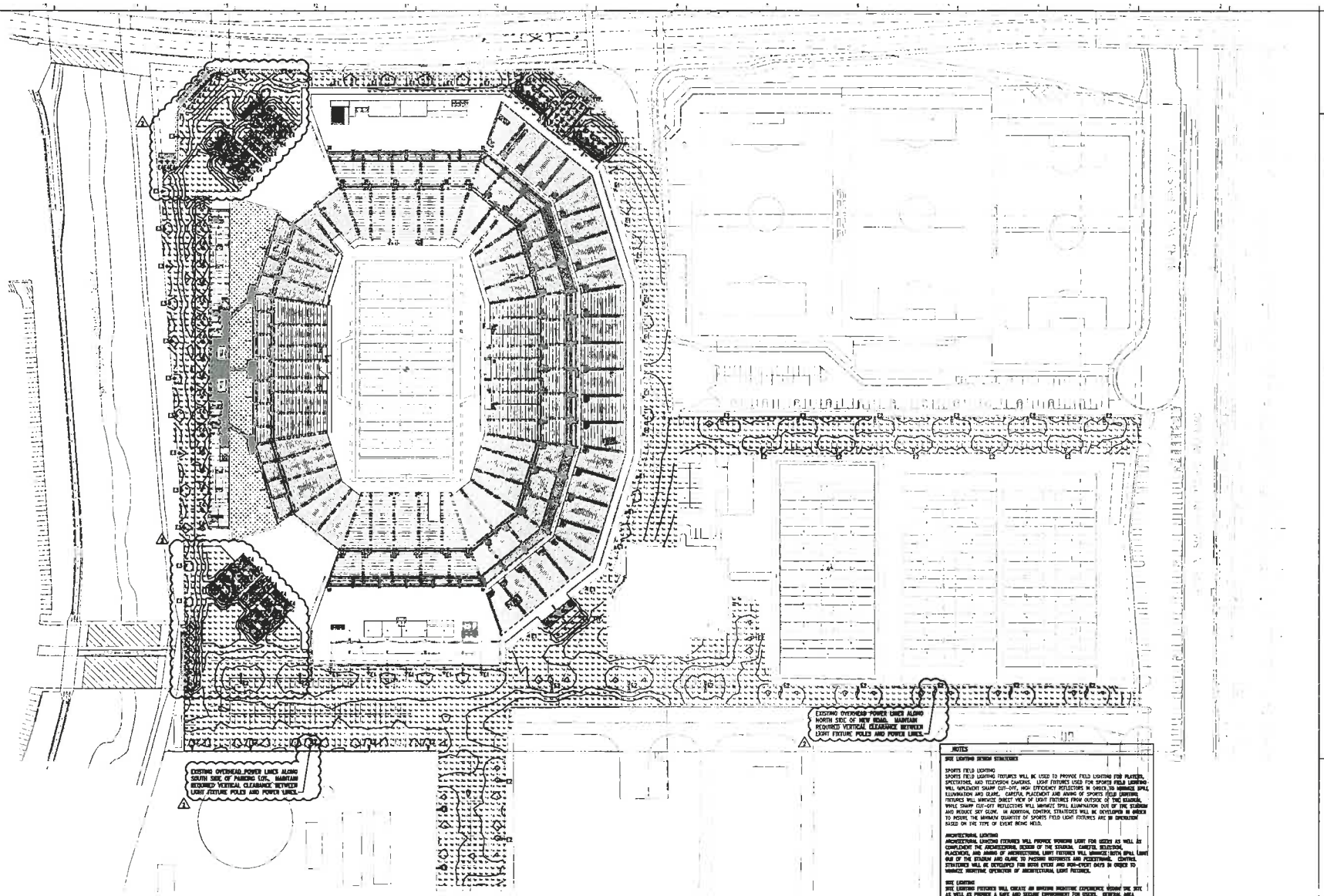

NOTES

SITE LIGHTING DESIGN STRATEGIES

SPORTS FIELD LIGHTING
SPORTS FIELD LIGHTING FIXTURES WILL BE USED TO PROVIDE FIELD LIGHTING FOR PLAYERS, SPECTATORS, AND TELEVISION CAMERAS. LIGHT FIXTURES USED FOR SPORTS FIELD LIGHTING WILL INCLUDE SHARP CUT-OFF, HIGH EFFICIENCY REFLECTORS IN ORDER TO MINIMIZE SPILL ILLUMINATION AND GLARE. CAREFUL PLACEMENT AND AIMING OF SPORTS FIELD LIGHTING FIXTURES WILL MINIMIZE DIRECT VIEW OF LIGHT FIXTURES FROM OUTSIDE OF THE STADIUM. WHILE SHARP CUT-OFF REFLECTORS WILL MINIMIZE SPILL ILLUMINATION OUT OF THE STADIUM AND REDUCE SKY GLOW, AN ADDITIONAL CONTROL STRATEGY WILL BE DEVELOPED IN ORDER TO INSURE THE MINIMUM QUANTITY OF SPORTS FIELD LIGHT FIXTURES ARE IN OPERATION BASED ON THE TYPE OF EVENT BEING HELD.

ARCHITECTURAL LIGHTING
ARCHITECTURAL LIGHTING FIXTURES WILL PROVIDE WORKING LIGHT FOR GUESTS AS WELL AS COMPLEMENT THE ARCHITECTURAL DESIGN OF THE STADIUM. CAREFUL SELECTION, PLACEMENT, AND AIMING OF ARCHITECTURAL LIGHT FIXTURES WILL MINIMIZE SPILL LIGHT OUT OF THE STADIUM AND GLARE TO PASSING MOTORISTS AND PEDESTRIANS. CONTROL STRATEGIES WILL BE DEVELOPED FOR DAYTIME EVENT AND NON-EVENT DAYS IN ORDER TO MINIMIZE NIGHTTIME OPERATION OF ARCHITECTURAL LIGHT FIXTURES.

SITE LIGHTING
SITE LIGHTING FIXTURES WILL CREATE AN INVITING NIGHTTIME EXPERIENCE AROUND THE SITE AS WELL AS PROVIDE A SAFE AND SECURE ENVIRONMENT FOR GUESTS. GENERAL AREA LIGHTING FIXTURES (POLE LIGHTS, BOLLARDS, STEPLIGHTS) WILL EMPLOY CUTOFF OPTICS TO REDUCE SPILL LIGHT INTO THE SKY AND GLARE. ADDITIONALLY, LIGHTING FIXTURES LOCATED AT THE SITE PERIMETER WILL EMPLOY HOODS AND SHIELDS TO MINIMIZE PROJECTION OF LIGHT BEYOND SITE PROPERTY LINES.

FIXTURE SCHEDULE

E1 - 250W STRUCTURE MOUNTED METAL HALIDE AREA LIGHT, FULL CUT-OFF

E2 - 400W METAL HALIDE POLE LIGHT, FULL CUT-OFF, HOUSE SIDE SHIELD

E3 - 150W METAL HALIDE PEDESTRIAN SCALE POLE LIGHT, FULL CUT-OFF

E3A - DOUBLE HEADED VERSION OF E3

E4 - 70W STRUCTURE MOUNTED DOWNLIGHT

L1 SITE PLAN (EL=0'-0")
SCALE: 1/64" = 1'-0"

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Seattle, WA 98101
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Flack + Kurtz - MEP Engineers
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[illegible]

Lloyd Engineering - Turf Consultant
2950 N. Central Ave. Suite 1550
Phoenix, AZ 85012
Ph: (602) - 492 - [illegible]

49ers
SAN FRANCISCO 49ERS NEW STADIUM
4949 Centennial
Santa Clara, CA 95054-1229

PLAN NORTH
TRUE NORTH

DATE 08/30/2010
SELECT FOR

PROJECT NO. 310.17380.00
DRAWN BY
CHECKED BY
APPROVED BY

SHEET TITLE & NUMBER
SITE LIGHTING PHOTOMETRIC CALC (EL=0'-0")
LT100

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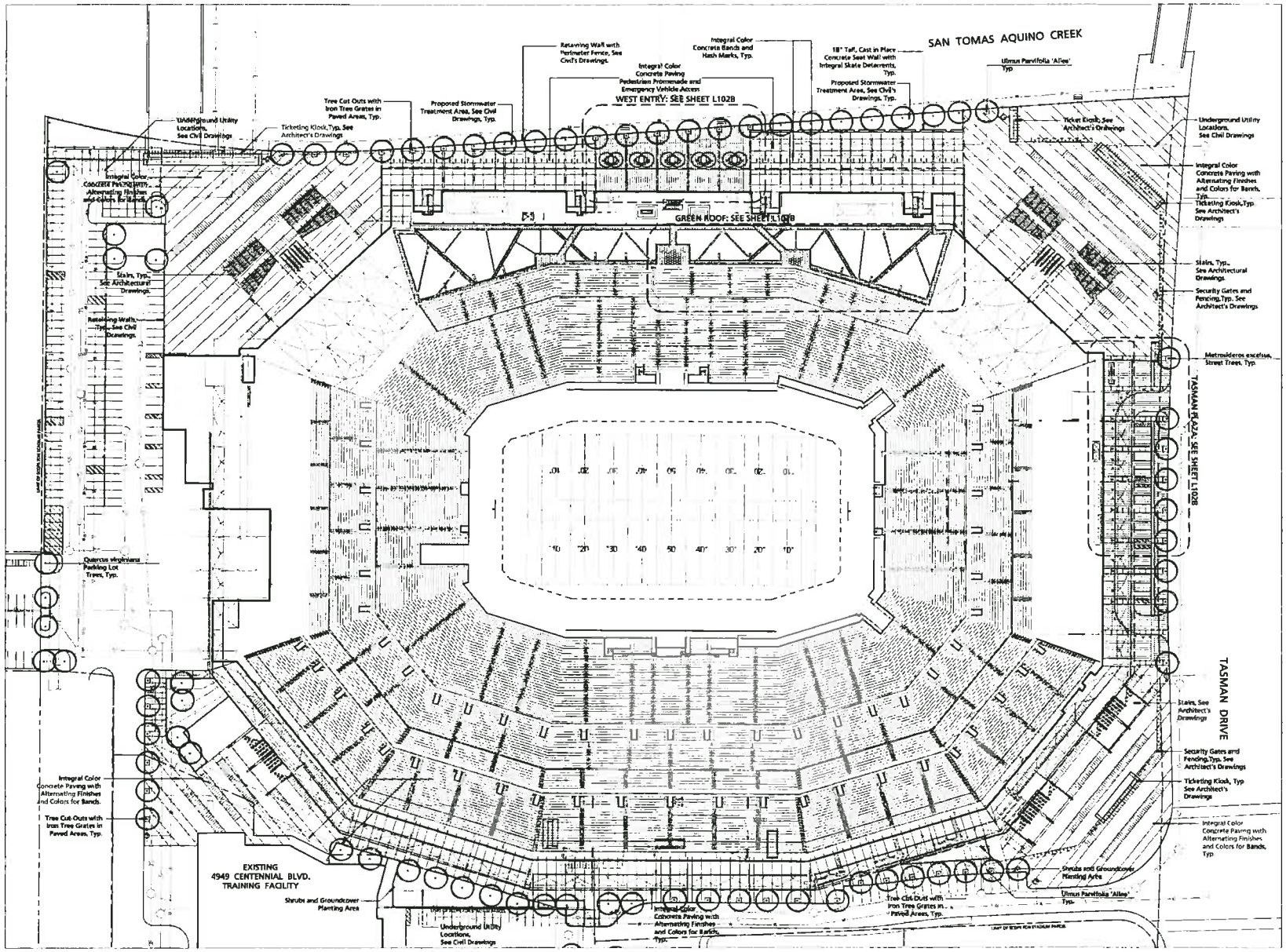
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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49ERS

SAN FRANCISCO
49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054-1229

C B
D A

PLAN NORTH

TRUE NORTH

Scale: 1" = 40'

DATE	6/30/2010
SHEET NOM	Final Planned Development Resubmittal
PROJECT NO.	34962
DRAWN BY	
CHECKED BY	
APPROVED BY	

	DATE	REVISIONS
1	01/07/2010	Planned Zoning Plans, HNTB
2	04/09/2010	Planned Zoning Development

SHEET TITLE & NUMBER

PRELIMINARY LANDSCAPE PLAN

L100

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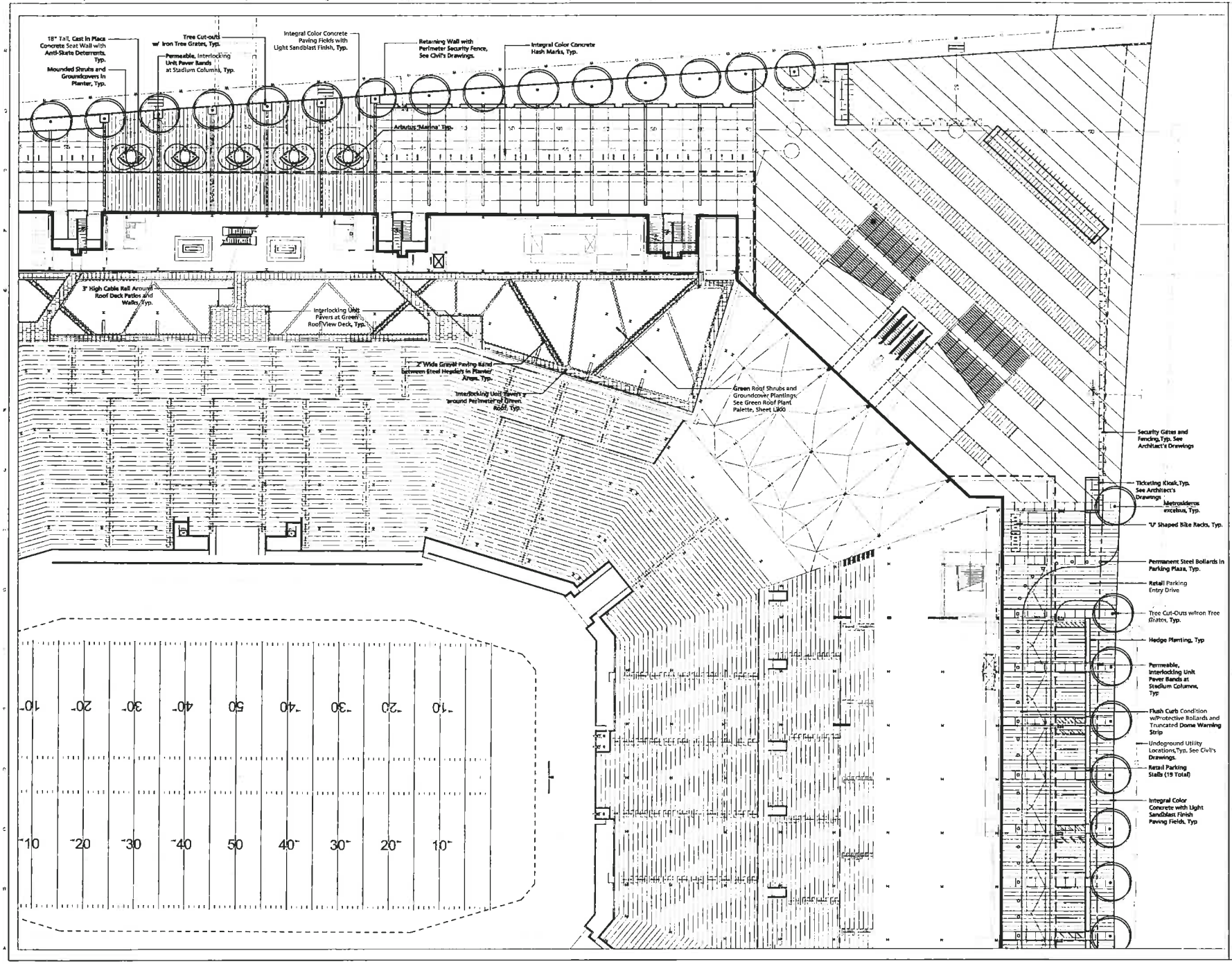
06/30/2010 Final Planned Development Resubmittal



HNTB

Howard, Needles, Tammen & Bergendoff California Architects, P.C.

49ERS

SAN FRANCISCO 49ERS NEW STADIUM

4949 Centennial Blvd.
Santa Clara, CA 95054-1229

C B D A

PLAN NORTH

TRUE NORTH

Scale 1" = 20'

0 10 20 40

DATE	
ISSUE STATUS	Final Planned Development Resubmittal
PROJECT NO.	54574
DRAWN BY	
CHECKED BY	

REVISIONS NO.	DATE	DESCRIPTION
0	04-15	
1	10/17/2008	Planned Zoning Resubmittal
2	10/30/2008	Planned Zoning Resubmittal

SHEET TITLE & NUMBER

LANDSCAPE PLAN ENLARGEMENT

L102B

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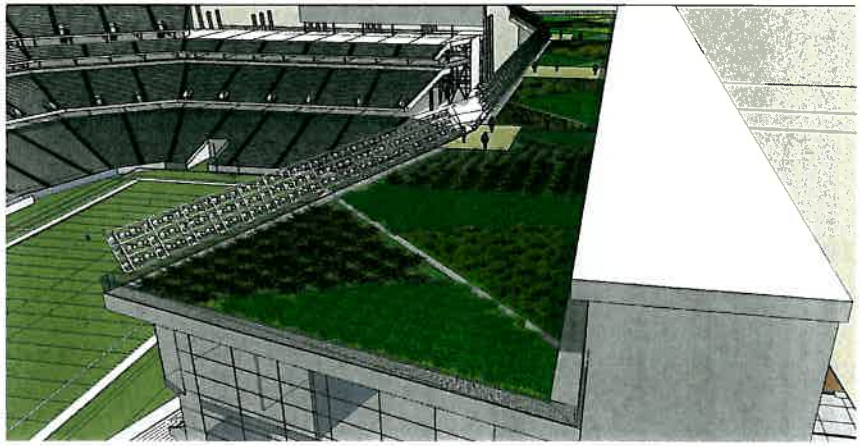
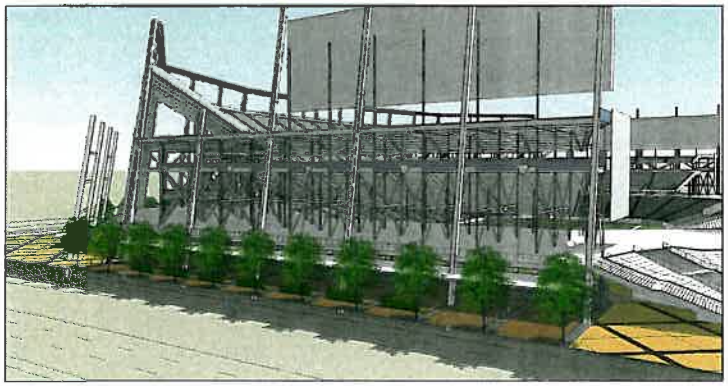
Final Planned Development Resubmittal

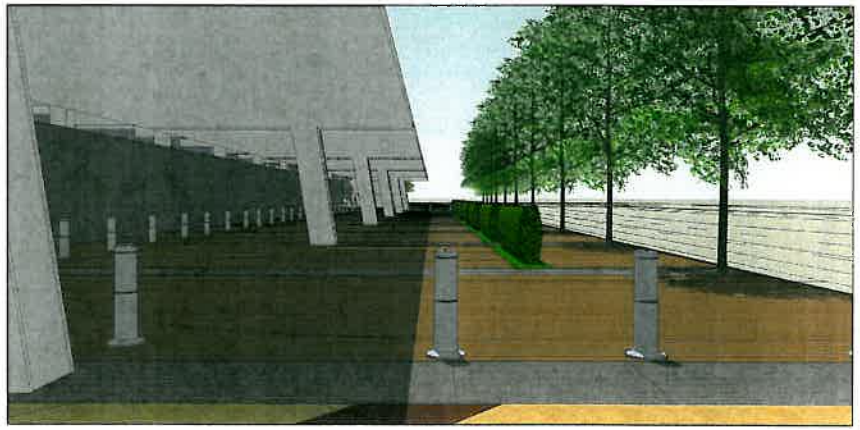
West Stadium Entrance looking West



Green Roof looking Southwest



Tasman Plaza Streetscape



Tasman Plaza looking North

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054-1229

DATE 6/30/2010
ISSUED FOR Final Planned Development Resubmittal
REVIEWED BY JMPM
DRAWN BY
CHECKED BY
APPROVED BY

	DATE	DESCRIPTION
1	06/11/2010	Revision Per Resubmittal
2	06/30/2010	Revised Per Final Submittal

SHEET TITLE & NUMBER
LANDSCAPE PERSPECTIVES

L200

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06/30/2010 Final Planned Development Resubmittal

PLANTING NOTES

THE FOLLOWING SIX (6) NOTES ARE FOR BIDDING PURPOSES ONLY

1. The contractor is required to submit plant quantities and unit prices for all plant materials as a part of the bid.
2. Assume 15 gallon plant for any unlabelled or un-sized tree; 5 gallon plant for any unlabelled or un-sized shrub; and 4" pots @ 12" o.c. (not flats) for any unlabelled ground cover. All planting beds, except for lawns, are to receive ground cover plant installation in addition to the shrubs and trees shown on the plans.
3. The planting areas shall be ripped to a depth of 8" to reduce compaction. The native subgrade soil shall be treated with 100 lbs of gypsum/1000 sf and leached to improve drainage and reduce the soil interface barrier. Contractor shall coordinate this work with other trades. This is subject to the final recommendations of the soils test (see below) and review by the Landscape Architect and the Owner.
4. All planting areas are to receive Super Humus Compost by BFI (408.945.2844; www.bfi.com) at the rate of 8 cubic yards/1000 square feet, evenly tilled 6" deep into the soil to finish grade. All planting areas shall have 6-20-20 Commercial Fertilizer at 25lbs/1000 square feet evenly distributed into the soil. This is subject to the final recommendations and review of the soils test (see below) by the Landscape Architect and the Owner.
5. Planting pits are to be backfilled with a mixture of 50% native soil and 50% amended native soil.
6. The General Contractor is to provide an agricultural suitabilities analysis for on-site rough graded soil and any imported topsoil. Recommendations for amendments contained in this analysis are to be carried out before planting occurs. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary. See specifications for testing procedure.
7. All work shall be performed by persons familiar with planting work and under supervisions of a qualified planting foreman.
8. Plant material locations shown are diagrammatic and may be subject to change in the field by the Landscape Architect before the maintenance period begins.
9. All trees are to be staked as shown in the staking diagrams.
10. All tree stakes shall be cut 6" above tree ties after stakes have been installed to the depth indicated in the staking diagrams. Single stake all conifers per tree staking diagram.
11. Plant locations are to be adjusted in the field as necessary to screen utilities but not to block windows nor impede access. The Landscape Architect reserves the right to make minor adjustments in tree locations after planting at no cost to the Owner. All planting located adjacent to signs shall be field adjusted so as not to interfere with visibility of the signs.
12. The Landscape Architect reserves the right to make substitutions, additions, and deletions in the planting scheme as felt necessary while work is in progress. Such changes are to be accompanied by equitable adjustments in the contract price if/when necessary and subject to the Owner's approval.
13. The contractor is to secure all vines to walls and columns with approved fasteners, allowing for two (2) years growth. Submit sample of fastener to Landscape Architect for review prior to ordering.
14. All planting areas, including pots but not lawns areas, shall be top-dressed with a 3" layer of Pro-Chip Decorative Mulch by BFI Organics, 408.945.2844. Submit sample to Landscape Architect for review prior to ordering. Hold all mulch six (6) inches from tree trunks where mulch is applied over the rootball of tree.
15. All street trees to be installed in accordance with the standards and specifications of the City of Santa Clara, CA.
16. Trees shall be planted to anticipate settlement.
17. Plant material requiring iron supplements shall have chelated iron foliar feeding applications per manufacturer's specifications. See specifications for materials.
18. All trees noted with 'deep root' and those planted within 5'-0" of concrete paving, curbs, and walls shall have deep root barriers installed per manufacturer's specifications. See specifications for materials.
19. Ground cover shall be planted as shown on the plan, including under shrubs and in tree watering basins.
20. The Landscape Contractor shall arrange with a nursery to secure plant material noted on the drawings and have those plants available for review by the Owner and Landscape Architect within thirty (30) days of award of contract. The Contractor shall purchase the material and have it segregated and grown for the job upon approval of the plant material. The deposit necessary for such contract growing is to be born by the Contractor.
21. The project has been designed to make efficient use of water through the use of drought tolerant plant materials. Deep rooting shall be encouraged by deep watering plant material as a part of normal landscape maintenance. The irrigation for all planting shall be limited to the amount required to maintain adequate plant health and growth. Water usage should be decreased as plants mature and become established. The irrigation controllers shall be adjusted as necessary to reflect changes in weather and plant requirements.
22. The Landscape Contractor shall verify the location of underground utilities and bring any conflicts with plant material locations to the attention of the Landscape Architect for a decision before proceding with the work. Any utilities shown on the Landscape drawings are for reference and coordination purposes only. See Civil Drawings.

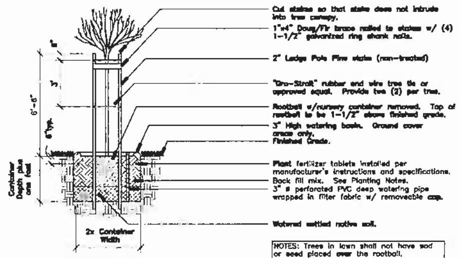
TREE PROTECTION/PRUNING NOTES

1. All trees designated to be preserved shall be verified by the Project Superintendent. This shall occur prior to the removal of any trees on-site.
2. Neighboring trees overhanging the site should be protected from site construction impacts in the same manner as existing on-site trees to be preserved.
3. Tree drip zone areas shall be protected with a 5' high chain link fence enclosure mounted on 2 inch diameter galvanized iron posts driven into the ground to a depth of at least 2 feet at no more than 10 foot spacing. The fence shall enclose the entire area under the dripline. Spray paint the top of the fence with bright orange paint before unrolling the fabric to ensure visibility of the barrier. In no case shall any vehicles or equipment be permitted to be stored within this enclosed area. Fence shall be erected before construction begins and remain in place until time for relocation.
4. No materials or topsoil shall be stored within the tree enclosure area.
5. No trenching within enclosure shall be permitted. Any tree roots encountered outside of the enclosure smaller than 2" shall be cut clean with the approved tree pruning tools and sealed with an approved fungicidal tree sealant. Tree roots 2" or larger shall not be cut. Route pipes into alternate location to avoid conflict. Any damaged or torn roots are to be root pruned and sealed with orange shellac.
6. No grading or trenching shall be permitted within the fenced zone or under the dripline except as specifically noted on the plans.
7. No soil sterilants shall be applied under pavement near existing trees.
8. Fertilizer and water soil injections must be done during April-May of the year of construction as well as the year after. These shall consist of Miller Nutrileaf 20-20-20 or equal at 5.5 pounds per 100 gallons of water or equivalent, or as recommended by the Arborist. This shall be applied to a depth of at least 18" and at a 20 degree angle toward the tree trunk at a rate of 10 gallons per inch of tree caliper.
9. Above ground surface runoff shall not be directed into the tree canopy area from adjacent areas.
10. A supplemental irrigation program is recommended at regular intervals (every three to four weeks) during the period in May 1 through Oct. 31. Irrigation is to be applied at or above the 'dripline' in an amount sufficient to supply approximately firteen gallons of water for each inch in trunk diameter.
11. Irrigation can be provide by means of a soil needle, 'soaker' or permeable hose. When using 'soaker' or permeable hose, water is to be run at low pressure, avoiding runoff/puddling, allowing the needed moisture to penetrate the soil to feeder root depths.
12. Periodic inspections by a qualified Arborist are recommended during construction activities, particularly as trees are impacted by trenching/grading operations. Any recommendations by the Arborist for maintaining the health of trees are to be implemented.
13. Tree Pruning Notes. All trees shall be pruned in compliance with the following industry standards:

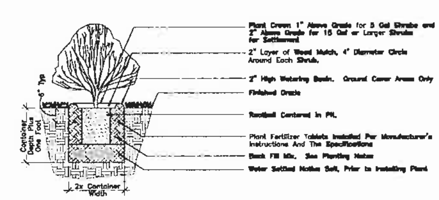
    A. All specifications for working on protected trees shall be written and administered by a qualified arborist.

    B. All work on protected trees shall be in accordance with the Industry Standard Practices for Tree Care Operations outlined in the ANSI A300-1995 and ANSI33-1994.

    C. All Specified tree work shall be designed to promote practices which encourage the preservation of tree structure and health, in accordance with the current Tree Pruning Guidelines (International Society of Arboriculture). An I.S.A. Certified Arborist or Tree Worker must be present at all times during pruning operations.



Tree Staking Diagram
Not to Scale



Shrub Planting Detail
Not to Scale

PLANT PALETTE

KEY	SIZE*	BOTANICAL NAME	COMMON NAME	COMMENTS	QUANTITY
TREES					
ARB MAR		Arbutus 'Marina'	Strawberry Tree	Low Water Use	10
MET EXC		Metrosideros excelsus	New Zealand Christmas Tree	Low Water Use	11
CAL CIT		Callistemon citrinus	Lemon Bottlebrush	Low Water Use	
LAG TUS		Lagerstroemia i. 'Tuscarora'	Crape Myrtle	Low Water Use	
LYO FLO		Lyonothamnus floribundus	Catalina Ironwood	Native/Low Water Use	
PYR CHA		Pyrus c. 'Chanticleer'	Flowering Pear		16
QUE AGR		Quercus agrifolia	Coast Live Oak	Native/Low Water Use	10
ULM PAR		Ulmus parvifolia 'Allee'	Upright Evergreen Elm	Low Water Use	54
* 24" Box minimum unless otherwise noted on plans					
SHRUBS					
KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING**/COMMENTS	QUANTITY
AH	5 Gal	Alyogyne huegelii	Blue Hibiscus	42" O.C. Low Water Use	24
AU	5 Gal	Arbutus unedo 'Compacta'	Strawberry Tree	36" O.C. Low Water Use	53
AM	5 Gal	Arctostaphylos 'Howard McMinn'	Manzanita	48" O.C. Native/Low Water Use	51
CE	5 Gal	Carpenteria californica 'Elizabeth'	Elizabeth Bush Anemone	36" O.C. Native/Low Water Use	81
CK	5 Gal	Ceanothus 'Skylark'	Skylark California Lilac	42" O.C. Native/Low Water Use	18
DL	5 Gal	Dietes 'Lemon Drops'	Fortnight Lily	30" O.C. Low Water Use	80
EC	5 Gal	Echium candicans	Pride of Madeira	60" O.C. Low Water Use	48
EW	5 Gal	Euphorbia characias wulfenii	Euphorbia	30" O.C. Low Water Use	45
HH	1 Gal	Hemerocallis hybrids	Evergreen Daylily	18" o.c. color noted on plans	71
IV	5 Gal	Ilex vomitoria 'Nana'	Dwarf Yaupon Holly	36" O.C. Low Water Use	45
JE	5 Gal	Juncus patens 'Elk Blue'	California Gray Rush	24" O.C. Native	80
LX	5 Gal	Lavandula x intermedia 'Grosso'	Lavender	30" O.C. Low Water Use	50
LA	5 Gal	Lavatera assurgentiflora	Tree Mallow	60" O.C. Low Water Use	21
LH	5 Gal	Loropetalum chinense	Fringe Flower	36" O.C. Low Water Use	25
MU	1 Gal	Muhlenbergia 'Regal Mist'	Purple Deer Grass	24" O.C. Native/Low Water Use	72
PS	5 Gal	Phormium 'Sea Jade'	New Zealand Flax	30" O.C. Low Water Use	20
PM	5 Gal	Phormium 'Maori Red'	New Zealand Flax	36" O.C. Low Water Use	29
RC	5 Gal	Rhamnus c. 'Mound San Bruno'	Mound San Bruno Coffeeberry	42" O.C. Native/Low Water Use	22
RI	5 Gal	Rhus integrifolia	Lemonade Berry	60" O.C. Native/Low Water Use	43
RV	5 Gal	Ribes viburnifolium	Catalina Perfume	60" O.C. Native/Low Water Use	18
RO	1 Gal	Rosa californica	California Rose	48" O.C. Native/Low Water Use	46
**if used as or noted on plans as groundcover					
GREEN ROOF SHRUBS, PERENNIALS, and GRASSES					
KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING**/COMMENTS	QUANTITY
ARC	1 Gal	Arctostaphylos 'Pacific Mist'	Bearberry	30" O.C. Native/Low Water Use	212
AC	1 Gal	Artemesia c. 'Montara'	Montara Sagebush	36" O.C. Native/Low Water Use	55
BP	1 Gal	Baccharis pilularis	Coyote Brush	36" O.C. Native/Low Water Use	162
CA	2 Gal	Calamagrostis acutiflora 'Stricta'	Feather Reed Grass	36" O.C. Low Water Use	32
CP	2 Gal	Cistus purpureus	Orchid Rock Rose	36" O.C. Low Water Use	80
DC	1 Gal	Deschampsia c. holciformis	Pacific Hair Grass	24" O.C. Low Water Use	48
EA	1 Gal	Elymus arenarius 'Glaucus'	Blue Lyme Grass	24" O.C. Low Water Use	21
ERI	1 Gal	Erigeron glaucus	Beach Aster	18" O.C. Native/Low Water Use	272
HS	2 Gal	Helicotrichon sempervirens	Blue Oat Grass	24" O.C. Low Water Use	68
LC	1 Gal	Limonium californicum	Sea Lavender	24" O.C. Native/Low Water Use	95
NP	1 Gal	Nassella pulchra	Purple Needlegrass	30" O.C. Native/Low Water Use	50
PH	1 Gal	Penstemon heterophyllus	Foothill Penstemon	24" O.C. Native/Low Water Use	110
PF	1 Gal	Phlomis fruticosa	Jerusalem Sage	36" O.C. Low Water Use	82
RK	1 Gal	Rosmarinus o. 'Ken Taylor'	Rosemary	36" O.C. Low Water Use	63
SL	2 Gal	Salvia clevelandii	Cleveland Sage	30" O.C. Native/Low Water Use	48
SB	1 Gal	Sisyrinchium bellum	Blue-eyed Grass	18" O.C. Native/Low Water Use	78
ZAU	1 Gal	Zauschneria c. 'Everett's Choice'	California Fuchsia	24" O.C. Native/Low Water Use	201
**if used as or noted on plans as groundcover					
GROUNDCOVERS					
KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING/COMMENTS	QUANTITY
CEA	1 Gal	Ceanothus gloriosus 'Emily Brown'	Point Reyes Ceanothus	36" O.C. Native/Low Water Use	96
OST	1 Gal	Osteospermum fruticosum	Freeway Daisy	18" O.C. Low Water Use	201
ROS	1 Gal	Rosmarinus officinalis 'Irene'	Rosemary	24" O.C. Low Water Use	135
RUM	1 Gal	Rumohra adiantiformis	Leatherleaf Fern	24" O.C.	111
TRA	1 Gal	Trachelospermum jasminoides	Star Jasmine	24" O.C.	105
VINES					
KEY	SIZE	BOTANICAL NAME	COMMON NAME	COMMENTS	QUANTITY
CL	5 Gal	Clematis lasiantha	Chaparral Clematis	Native/Low Water Use	8
CM	5 Gal	Calystegia macrostegia	California Morning Glory	Native	8
DB	5 Gal	Distictis buccinatoria	Blood-Red Trumpet Vine		13

PLANT SPACING DIAGRAM

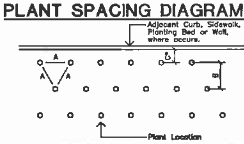
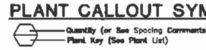


Diagram for use when plants are spaced equidistant from each other as in all ground cover plantings and massed shrub plantings

PLANT CALLOUT SYMBOL



PLANT QUANTITY DIAGRAM

SPACING 'A'	SPACING 'B'	SPACING 'C'	NO. OF PLANTS/SQUARE FOOT
6" O.C.	5.20"	2.60"	4.60
8" O.C.	6.93"	3.47"	2.60
9" O.C.	7.79"	3.90"	1.78
10" O.C.	8.66"	4.33"	1.66
12" O.C.	10.40"	5.20"	1.15
15" O.C.	13.00"	6.50"	0.74
18" O.C.	15.60"	7.80"	0.51
24" O.C.	20.80"	10.40"	0.29
30" O.C.	26.00"	13.00"	0.18
36" O.C.	30.00"	15.00"	0.12
48" O.C.	40.00"	20.00"	0.07
72" O.C.	62.35"	31.18"	0.04

See Plant Spacing Diagram for maximum triangular spacing 'A'. This chart is to be used to determine number of ground cover required in a given area and spacing between shrub massings. Where shrub massings are shown, calculate shrub mass areas before utilizing spacing chart to determine plant quantities.

* Where curb, sidewalk, adjacent planting bed or wall condition occurs, utilize spacing 'C' to determine plant distance from wall, sidewalk, adjacent planting bed or back of curb, where C=1/2 B.

HNTB

Howard, Needles, Tammen & Bergendoff California Architects, P.C.

Magnusson Klemencic Associates Structural Engineers

Flack + Kurtz MEP Engineers

Winzler & Kelly Civil Engineers

The Fire Consultants Life Safety / Code Consultants

The Guzzardo Partnership, Inc. Landscape

Lloyd Engineering Turf Consultant

49ERS
SAN FRANCISCO 49ERS NEW STADIUM
4949 Centennial Blvd
Santa Clara, CA 95054-1229

Final Planned Development Resubmittal
06/30/2010

SHEET TITLE & NUMBER
LANDSCAPE NOTES AND DETAILS
L300

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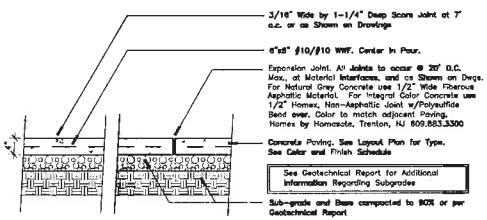

Pedestrian Concrete Paving

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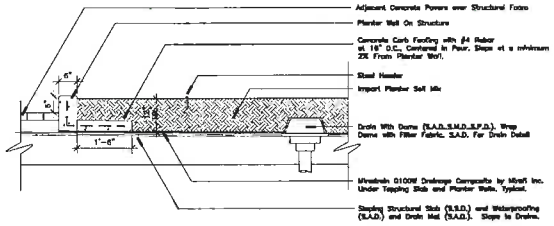
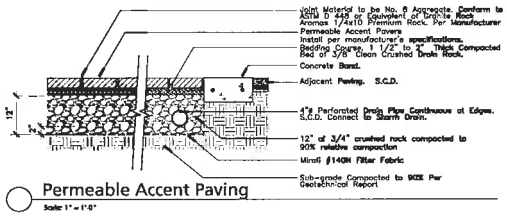


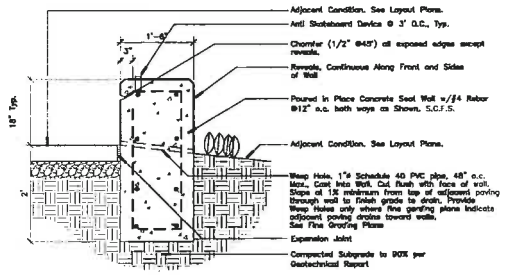
Green Roof Planter Wall

Scale: 3/4" = 1'



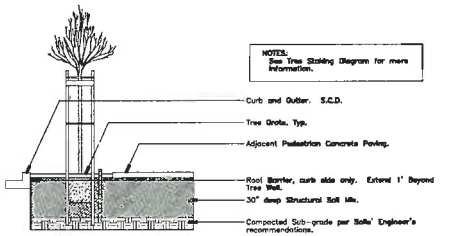
Permeable Accent Paving

Scale 1" = 1'-0"



Seatwall

Scale: 1"=1'-0"



Street Tree w/ Structural Soil

not to scale

HNTB

Howard, Needles, Tammen & Bergendoff Callfornia Architects, P.C.

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Landscape Architect
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Orange County, CA 92651
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Fax: (714) 560 2681

Traffic Consultant
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Rancho Bernardo, CA 92127
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Fax: (858) 487 3496

Structural Engineer
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49ERS
SAN FRANCISCO
49ERS NEW STADIUM
4949 Centennial Blvd
Santa Clara, CA 95054-1229

DATE	8/22/2010
STATUS PER	Final Planned Development Resubmittal
PROJECT NO.	54000
DRAWN BY	
CHECKED BY	
APPROVED BY	

4	08/09		Revised Planning Resubmittal
3	03/09/2010		Revised Planning Resubmittal
2	06/26/2009		Revised Zoning Resubmittal

SHEET TITLE & NUMBER
LANDSCAPE DETAILS

L301

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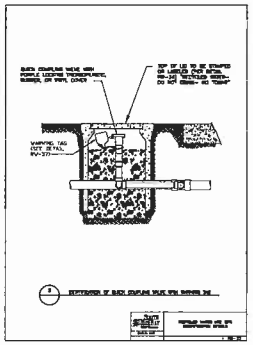
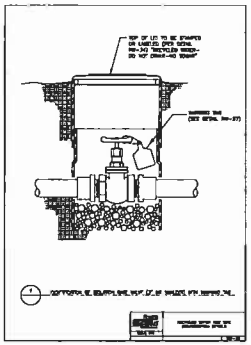
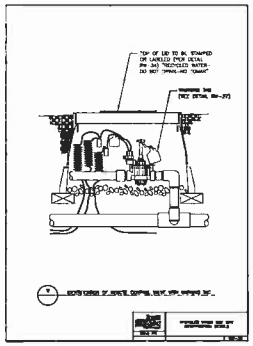
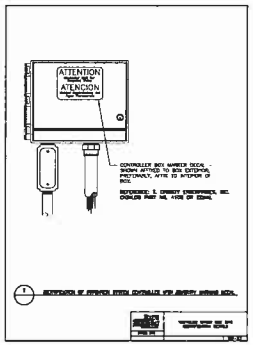
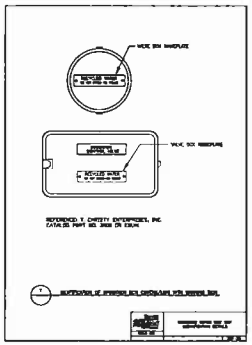
06-30-2010 Final Planned Development Resubmittal

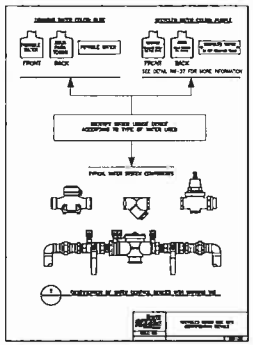


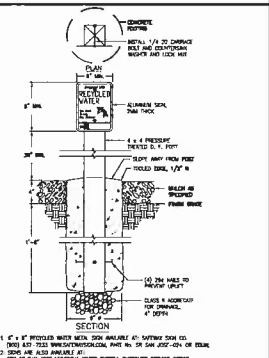






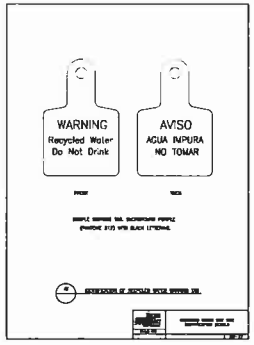






NOTES: 1. 6" x 9" RECYCLED WATER METAL SIGN AVAILABLE AT: SAFTRAX SIGN CO. (800) 637-7233 WWW.SAFTRAXSIGN.COM, PART No. SR SAN JOSE-02H OR EQUAL
2. SIGNS ARE ALSO AVAILABLE AT:
CITY OF SAN JOSE MUNICIPAL WATER SYSTEM, CUSTOMER SERVICE OFFICE
3025 TUERS RD. SAN JOSE, CA(95121-2720, HOURS: MON-FRI, 8AM TO 5PM
3. INSTALL IN LOCATIONS NOTED ON PLANS.
4. INSTALL SIGN 36" MINIMUM ABOVE GRADE UNLESS OTHERWISE DIRECTED BY SBWR.

AA RECYCLED WATER ADVISORY SIGN



SOUTH BAY WATER RECYCLING (SBWR) STANDARD NOTES FOR ON-SITE RECYCLED WATER IRRIGATION SYSTEMS

1. PRIOR TO RECEIVING RECYCLED WATER, THE SITE MUST BE INSPECTED BY SOUTH BAY WATER RECYCLING (SBWR) A PERMIT WILL BE GRANTED AFTER:
   A. INSPECTION BY SBWR HAS BEEN COMPLETED SHOWING COMPLIANCE WITH SBWR RULES AND REGULATIONS;
   B. A FINAL ON-SITE INSPECTION HAS BEEN CONDUCTED TO CONFIRM THAT ALL REQUIREMENTS HAVE BEEN MET.
   C. THE CUSTOMER HAS PROVIDED THE SBWR INSPECTOR WITH THE MOST CURRENT BACKFLOW PREVENTION DEVICE TEST REPORTS FOR ALL OF THE SITE'S POTABLE WATER AND RAW SERVICE CONNECTIONS (AND ANY AUXILIARY WATER SOURCES).
   D. SITE HAS PASSED REQUIRED CROSS-CONNECTION TEST PERFORMED BY A CERTIFIED AWWA CROSS-CONNECTION SPECIALIST.

   THE OWNER'S OR OWNER'S REPRESENTATIVE MUST ALSO COMPLETE A SITE FLOW/PRESSURE TEST(S) CLOSE OFFICE BY SBWR IN ORDER TO RECEIVE A PERMANENT PERMIT IN THE INTERIM BETWEEN CONNECTION AND TRAINING THE OWNER OR OWNER WILL RECEIVE A TEMPORARY RECYCLED WATER PERMIT.

   CONTACT SBWR AT (408) 377-3671 FOR FURTHER INFORMATION.
2. ALL WORK SHALL CONFORM TO EXISTING REGULATIONS INCLUDING BUT NOT LIMITED TO:
   A. SOUTH BAY WATER RECYCLING (SBWR) RULES AND REGULATIONS
   B. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH REGULATIONS
3. CHANGES MADE TO THE APPROVED IRRIGATION PLANS SHALL BE SUBMITTED TO SBWR FOR REVIEW AND APPROVAL AT LEAST 2 WEEKS PRIOR TO START OF CONSTRUCTION.
4. AT LEAST TWO DAYS PRIOR TO START OF CONSTRUCTION, CONTRACTOR AND SBWR INSPECTOR SHALL HOLD A PRE-CONSTRUCTION MEETING. TO SCHEDULE MEETING, CONTACT SBWR AT (408) 377-3671.
5. NOTIFY SBWR INSPECTOR A MINIMUM OF AT LEAST 24 HRS BEFORE WORK BEGINS. SBWR INSPECTOR MUST INSPECT AND/OR VERIFY:
   A. PRESENCE OF PROPER BACKFLOW PREVENTION AT ALL POTABLE POINTS OF CONNECTION;
   B. NEW UNDERGROUND PIPING (LABELING, CLEARANCES, BURIAL DEPTH, SLEEVING);
   C. INSTALLATION OF SIGNS, TAGS, AND CONTROLLER DECALS.
   D. REQUESTED TEMPORARY CONNECTION TO POTABLE WATER SERVICE. IN MOST CASES, THE SITE'S IRRIGATION SYSTEM MUST BE CONNECTED TO A TEMPORARY SOURCE OF POTABLE WATER IN ORDER TO CONDUCT REQUIRED CROSS-CONNECTION TEST.
   E. SITE PASSED REQUIRED CROSS-CONNECTION TEST PERFORMED BY A CERTIFIED AWWA CROSS-CONNECTION SPECIALIST.
   F. NEW METER INSTALLATION – PRIOR TO RECEIVING RECYCLED WATER, SBWR INSPECTOR MUST INSPECT THE DISCONNECTION OF THE SITE'S IRRIGATION SYSTEM FROM THE TEMPORARY POTABLE WATER SUPPLY, AND THEN INSPECT THE CONNECTION OF THE SYSTEM TO THE RECYCLED WATER METER.
6. NO CROSS-CONNECTIONS BETWEEN THE POTABLE AND RECYCLED WATER SYSTEMS ARE PERMITTED.
7. ALL ON-SITE BURIED RECYCLED WATER PIPING SHALL BE IDENTIFIED BY ONE OF THE FOLLOWING METHODS:
   A. USING PURPLE-COLORED PVC PIPE WITH CONTINUOUS WARNING "CAUTION – RECYCLED WATER" PRINTED ON OPPOSITE SIDES OF THE PIPE. PIPE SHALL BE LAID WITH WARNING FACING UPWARDS;
   B. WARNING TAPE WITH A MINIMUM WIDTH OF 3 INCHES READING "CAUTION – RECYCLED WATER" (IN BLACK OR WHITE LETTERING ON PURPLE BACKGROUND) SHALL RUN CONTINUOUSLY ON TOP OF PIPING AND SHALL BE ATTACHED TO PIPING WITH PLASTIC TAPE BANDED AROUND THE WARNING TAPE AND THE PIPE, EVERY 5 FEET ON CENTER;
   C. BLUE-COLORED PVC PIPE SHALL NOT BE USED UNLESS THE BLUE COLOR IS COMPLETELY OBSCURED BY ENCLOSURE OF THE PIPE WITH PURPLE POLYETHYLENE WRAP OR OTHER METHOD APPROVED BY SBWR.
8. PVC PIPE, CONSTANT-PRESSURE MAINLINE PIPING: 1 1/2 INCHES AND SMALLER SHALL BE SCHEDULE 40, CONSTANT-PRESSURE MAINLINE PIPING 2 INCHES AND LARGER SHALL BE CLASS 315 OR CDOH CLASS 200 OR 14 INTERMITTENT-PRESSURE LATERAL PIPING SHALL BE SCHEDULE 40 OR CLASS 315. COPPER PIPE SHALL BE TYPE K.
9. ALL ON-SITE RECYCLED WATER PIPING SHALL BE BURIED TO A MINIMUM DEPTH FROM FINISHED GRADE TO TOP OF PIPE (MINIMUM COVER) OF:

A. PRESSURIZED UNITS 3 INCHES AND LARGER	24 INCHES
B. PRESSURIZED UNITS 2 1/2 INCHES AND SMALLER	18 INCHES
C. INTERMITTENT-PRESSURE LINES	13 INCHES

10. ALL RECYCLED WATER PIPING OTHER THAN PVC PIPING WITH SOLVENT WELDED JOINTS SHALL BE PROTECTED AGAINST MOVEMENT WITH THRUST BLOCKS OR RESTRAINED JOINTS OR OTHER APPROVED METHOD PER SBWR DETAILS.
11. MAINTAIN A 10-FOOT HORIZONTAL SEPARATION BETWEEN BURIED PRESSURIZED RECYCLED WATER IRRIGATION PIPING AND BURIED POTABLE WATER PIPING UNLESS OTHERWISE NOTED. AT PIPE CROSSINGS, BURIED PRESSURIZED RECYCLED WATER IRRIGATION PIPING MUST BE 12 INCHES BELOW POTABLE WATER LINES. PRESSURIZED RECYCLED WATER PIPELINES ARE ALLOWED OVER POTABLE WATER PIPELINES WITH A MINIMUM OF 12 INCHES VERTICAL SEPARATION IF A FULL STANDARD PIPE LENGTH IS CENTERED OVER THE CROSSING, OR THE RECYCLED WATER PIPELINE IS INSTALLED IN A PIPE SLEEVE WHICH EXTENDS A MINIMUM OF 10 FEET ON EITHER SIDE OF THE POTABLE WATER PIPING. INTERMITTENTLY PRESSURIZED IRRIGATION LATERALS MAY BE LOCATED A MINIMUM OF 12 INCHES ABOVE POTABLE WATER PIPELINES WITHOUT SLEEVING.
12. ALL RECYCLED WATER SYSTEM REMOVE CONTROL VALVES, ISOLATION VALVES, QUICK COUPLING VALVES, STRAINERS, AND PRESSURE REDUCING VALVES SHALL BE INSTALLED BELOW GRADE IN VALVE BOXES. GREEN, BLACK, OR PURPLE-COLORED BOXES AND LIDS ARE ACCEPTABLE. VALVE BOXES SHALL HAVE A WARNING LABEL OR NAMEPLATE PERMANENTLY MOLDED INTO OR ATTACHED OVER THE LID WITH RIVETS, SCREWS, OR BOLTS. WARNING LABELS SHALL BE PER SBWR STANDARD DETAILS.
13. QUICK COUPLING VALVES SHALL HAVE PURPLE COVERS AND SHALL BE PER SBWR STANDARD DETAILS.
14. NO HOSE BIBS ARE ALLOWED ON THE RECYCLED WATER IRRIGATION SYSTEM. ANY EXTERIOR HOSE BIBS SERVED WITH POTABLE WATER MUST BE LABELED PER SBWR STANDARD DETAILS.
15. ALL RECYCLED WATER METERS, DEVICES, AND VALVES – E.G. ISOLATION VALVES, IRRIGATION CONTROLLERS, REMOTE CONTROL VALVES, PRESSURE REDUCING VALVES, QUICK COUPLING VALVES, FLOW SENSORS, ETC. – SHALL BE TAGGED PER SBWR STANDARD DETAILS.
16. LABEL ALL POTABLE WATER METERS AND ABOVE GROUND POTABLE WATER PIPES/ DEVICES (BACKFLOW PREVENTERS, HOSE BIBS, ETC.) WITH TAGS OR LABELS READING "POTABLE WATER" IN BLACK LETTERS ON BLUE BACKGROUND, PER SBWR DETAILS.
17. ALL RECYCLED WATER IRRIGATION SYSTEMS SHALL HAVE THE FOLLOWING:
   A. A SITE STRAINER (WITH A 20-MESH OR FINER SCREEN) INSTALLED AS CLOSE AS PRACTICABLE TO THE RECYCLED WATER METER BOX.
   B. A PRESSURE REDUCING VALVE INSTALLED IMMEDIATELY DOWNSTREAM OF THE STRAINER (UNLESS OTHERWISE DIRECTED BY SBWR).
   C. THESE COMPONENTS SHALL BE INSTALLED WITH ISOLATION VALVES TO FACILITATE MAINTENANCE.
18. RECYCLED WATER ADVISORY SIGNS SHALL BE PER SBWR STANDARD DETAILS AND SHALL BE POSTED PER LOCATIONS SHOWN ON IRRIGATION PLANS.
19. INSTALLATION OF DIRECT INJECTION SYSTEMS ON THE RECYCLED WATER IRRIGATION SYSTEM IS NOT PERMITTED.
20. NO DRINKING FOUNTAINS OR EATING AREAS ARE ALLOWED IN THE APPROVED RECYCLED WATER USE AREA UNLESS ADEQUATELY PROTECTED FROM OVERSPRAY.
21. ALL RECYCLED WATER METERS WILL BE SET BY THE LOCAL WATER UTILITY AFTER:
   A. THE SITE'S OWNER, DEVELOPER, OR CONTRACTOR HAS APPLIED FOR RECYCLED WATER SERVICE WITH THE LOCAL WATER UTILITY. THE WATER SERVICE AGREEMENT HAS BEEN APPROVED, AND ALL APPLICABLE FEES HAVE BEEN PAID.
   B. THE WATER UTILITY HAS PROVIDED AUTHORIZATION FROM SBWR TO SET RECYCLED WATER METERS.
22. NO OVERSPRAY OR RUNOFF OF RECYCLED WATER IS ALLOWED ON ANY NON-APPROVED USE AREA. PONDING OF RECYCLED WATER DUE TO IRRIGATION IS NOT ALLOWED IN ANY AREA. UPON RECEIVING RECYCLED WATER, THE ON-SITE RECYCLED WATER IRRIGATION SYSTEM MUST PASS A COVERAGE TEST PERFORMED BY SBWR INSPECTOR.
23. CONTRACTOR SHALL SUBMIT AS-BUILT IRRIGATION PLANS TO SBWR.

Maximum Applied Water Allowance Calculations for New and Rehabilitated Landscapes		
	San Jose	Name of City
ETo of City from Appendix A	45.30	ETo (inches/year)
Enter total landscape including SLA	41,000	LA (ft2)
Enter Special Landscape Area	0.00	SLA (ft2)
Results:		
MAWA = (ETo) x (0.62) x [(0.7 x LA)+(0.3 x SLA)]	808,193	Gallons
	107,771	Cubic Feet
	1,078	HCF
	2.47	Acre-feet
	0.81	Millions of Gallons

MAWA calculation incorporating Effective Precipitation (Optional)		
ETo of City from Appendix A	45.30	ETo (inches/year)
Landscape Area	41,000	LA (ft2)
Special Landscape Area	0.00	SLA (ft2)
Enter Effective Precipitation	3.40	Eppt (in/yr)
Results:		
MAWA=(ETo - Eppt) x (0.62) x [(0.7 x LA)+(0.3 x SLA)]	745,669	Gallons
	99,668	Cubic Feet
	997	HCF
	2.29	Acre-feet
	0.75	Millions of Gallons

California Department of Public Health — Date

South Bay Water Recycling — Date

HNTB

Howard, Needles, Tammen & Bergendoff California Architects, P.C.

Civil Engineer
607 Ward Drive Suite 5, Santa Barbara
Los Angeles, California 90071
(213) 430-2300 / Fax (213) 430-1199

Magnusson Klemencic Associates - Structural Engineers
1301 Fifth Avenue, Suite 3200
Seattle, WA 98101
Ph: (206) 292-1200
Fax (425) 292-1274

Flack + Kurtz - MEP Engineers
475 Howard Street, Suite 500
San Francisco, CA 94105
Ph: (415) 398-7833
Fax: (415) 433-5312

Wilson & Kelley - Civil Engineers
407 Montgomery Street, Suite 600
San Francisco, CA 94104
Ph: (415) 391-4974
Fax: (415) 391-4981

The Film Consultants
Film Safety / Color Consultant
1276 Drake's
Walnut Creek, CA 94598
Ph: (925) 939-5450
Fax: (925) 979-9901

DMV Associates - Certified Mail
4156 Dublin Blvd
Dublin, CA 94568
Ph: (925) 829-7600

The Ducasse Partnership, Inc. - Landscape
575 Montgomery Street
San Francisco, CA 94111
Ph: (415) 421-2472

Parsons Brinckerhoff - Transportation
2344 Sandalfoot Drive
Orange Beach, AL 36561
Ph: (251) 962-2440
Fax: (251) 980-2981

Burns / J.E. Pitner Inc. Food Service Consultants
10700 West Boulder Avenue, Suite 175
Littleton, CO 80127
Ph: (303) 798-7700
Fax: (303) 798-1798

Wolchansky, Jennings, Hopkins & Williams, Inc. - AV
4900 Spring Valley Road, Suite 1
Dallas, TX 75244
Ph: (972) 934-3700
Fax: (972) 934-3727

Centre Models Design - Stamper & Ceramics
466 Jackson Street
San Francisco, CA 94111
Ph: (415) 249-4857

Lloyd Engineering - Turf Consultant
3900 N. Central Ave, Suite 2
Phoenix, AZ 85012
Ph: (602) 490-1936

49ERS
SAN FRANCISCO
49ERS NEW STADIUM
4949 Centennial Blvd
Santa Clara, CA 95054-1229

DATE	8/30/2010
ISSUED FOR:	Final Planned Development Resubmittal
PROJECT NO.	54888
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

#	DATE	DR	CK	APP	DESCRIPTION
1	08/27/10				Planned Dev Resubmittal
0	06/04/10				Planned Dev Resubmittal

SHEET TITLE & NUMBER
IRRIGATION NOTES AND DETAILS
L400

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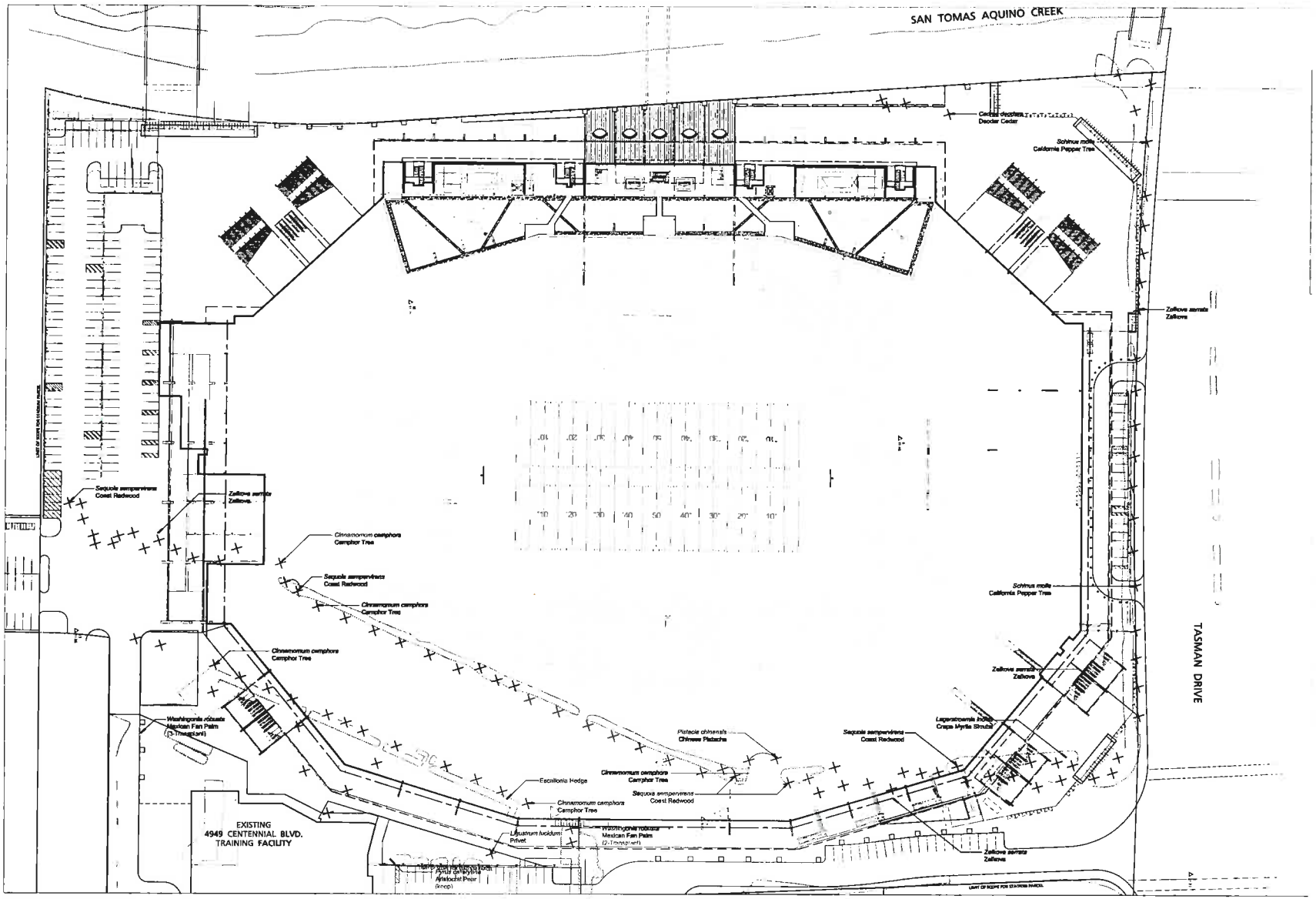
06/30/2010 Final Planned Development Resubmittal



TREE DISPOSITION LEGEND

Based upon information from the Topographic Survey provided by the Civil Engineer.

(X) Existing Tree proposed to be removed

HNTB

Howard Needles, Tammen & Bergendoff California Architects, P.C.

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054-1229

C B
D A

PLAN NORTH — TRUE NORTH

Scale 1" = 40'

DATE	6/30/2010
ISSUED FOR	Final Planned Development Resubmittal
PROJECT NO.	34868
DRAWN BY	
CHECKED BY	
APPROVED BY	

#	DATE	DESCRIPTION
1	11-13-2009	Revised Zoning Resubmittal
2	12-11-2009	Revised Zoning Resubmittal

SHEET TITLE & NUMBER

TREE DISPOSITION PLAN

L500

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06/30/2010 Final Planned Development Resubmittal