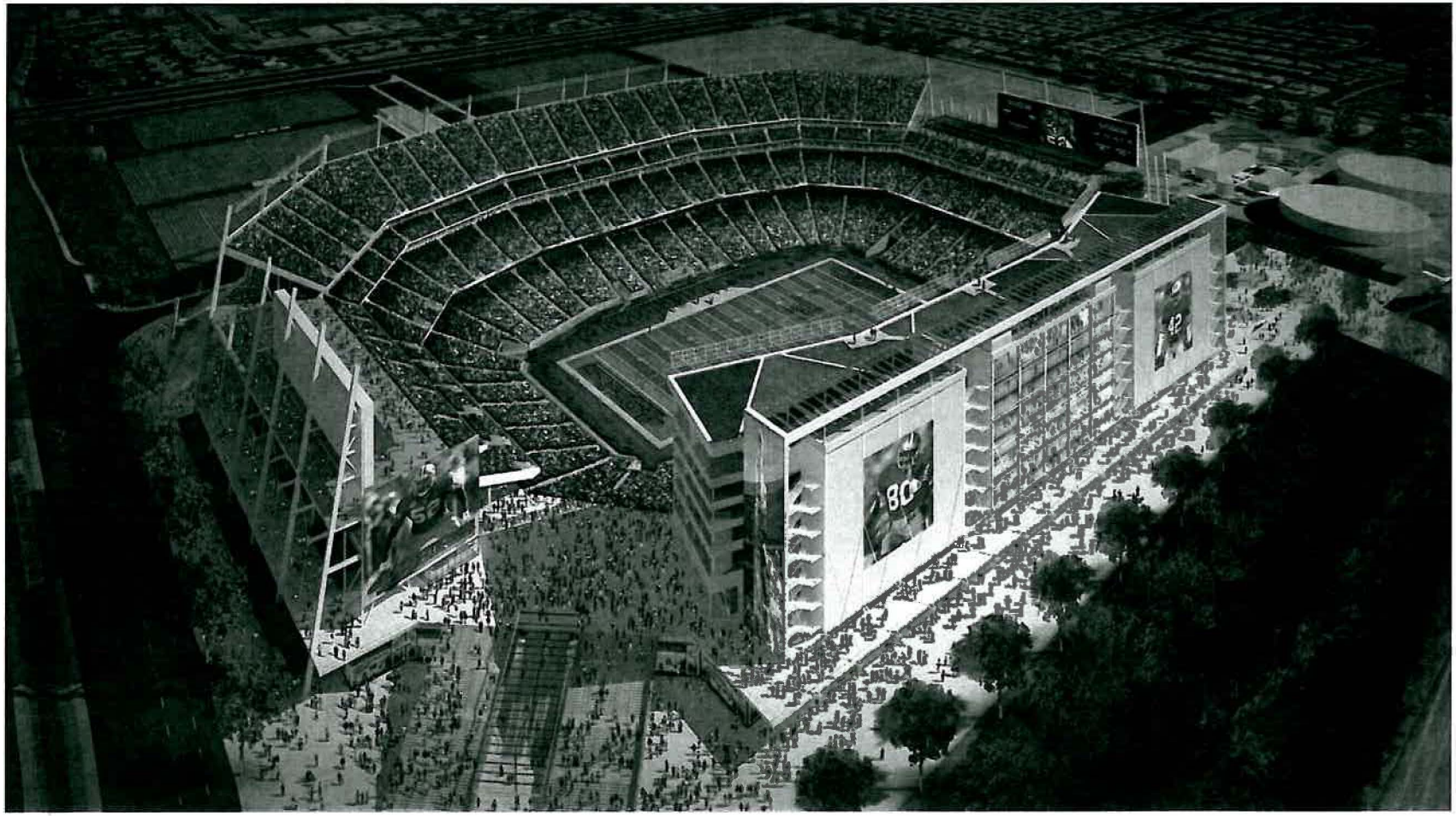
49ERS STADIUM

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-001	ZONING PLAN
A-002	ZONING PLAN 2
A-003	ZONING PLAN 3 & 4
A-004	GENERAL NOTES
A-100	AERIAL PLAN
A-101	EXISTING SITE PLAN
A-102	PROPOSED SITE PLAN
A-103	SIGNAGE DRAWINGS
A-104	SIGNAGE DRAWINGS
A-105	PODIUM LEVEL PLAN (EL=19'-6")
A-106	PLAZA LEVEL (EL=28'-0")
A-107	MAIN CONCOURSE LEVEL (EL=47'-0")
A-108	CLUB MEZZANINE LEVEL (EL=57'-0")
A-109	SUITE LEVEL 1 (PREMIUM AMENITIES LEVEL) (EL=67'-0")
A-110	SUITE LEVEL 2 (EL=77'-0")
A-111	SUITE LEVEL 3 (EL=87'-0") / UPPER CONCOURSE (EL= [illegible])

SHEET INDEX (CITY PLANNING SUBMITTAL)

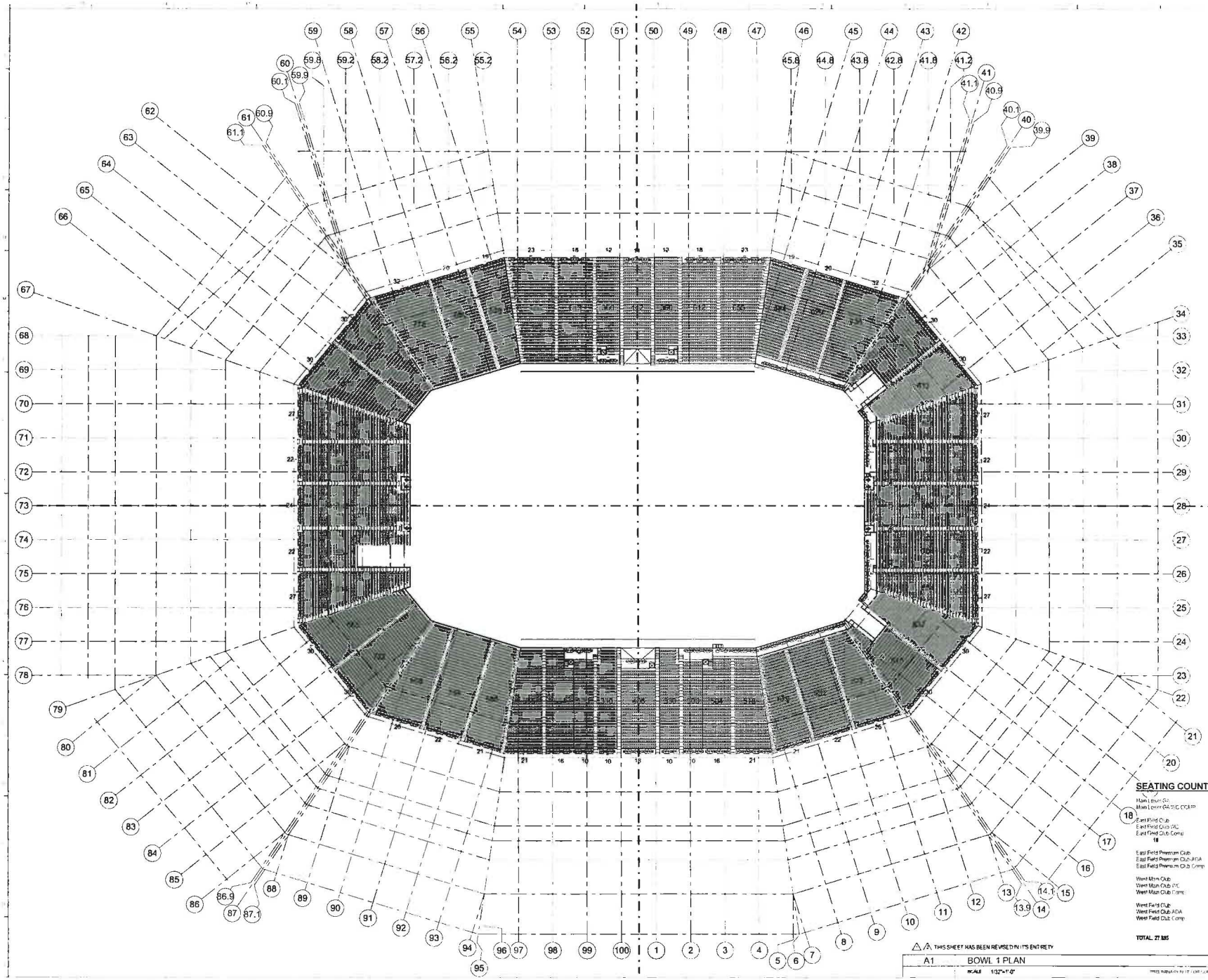
SHEET NUMBER	SHEET NAME
A-112	ROOF LEVEL (EL=102'-0")
A-113	ROOF PLAN (EL=117'-0")
A-201	OVERALL BUILDING SECTIONS
A-202	AREE CLUB PLAN SECTIONS
A-203	BUILDING SECTION - EAST - LOOKING NORTH
A-204	BUILDING SECTION - WEST - LOOKING NORTH
A-205	BUILDING SECTION - SOUTH - LOOKING WEST
A-206	BUILDING SECTION - NORTH - LOOKING WEST
CIVIL	
CG-101	EXISTING SITE TO REMAIN
CG-102	DEMOLITION AND PROPOSED PROPERTY LINES
CG-103	PRELIMINARY GRADING AND DRAINAGE
CG-104	PRELIMINARY GRADING AND DRAINAGE SECTIONS
CG-105	STORMWATER MANAGEMENT PLAN
CG-106	CONTAMINATED SOIL PLAN
CG-107	TRUCK ROUTE PLAN
CG-108	OVERALL SITE PLAN
CG-109	PROPOSED SITE PARK PLAN

SHEET INDEX (CITY PLANNING SUBMITTAL)

SHEET NUMBER	SHEET NAME
CG-110	TRUCK TURN PLAN (1 OF 2)
CG-111	TRUCK TURN PLAN (2 OF 2)
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-100	SITE LIGHTING & FIXTURE THEIR CALC (EL=47'-0")
LANDSCAPE	
L-100	PRELIMINARY LANDSCAPE PLAN
L-101	LANDSCAPE PLAN (NEAR EXTERIOR)
L-200	LANDSCAPE SECTIONS
L-201	LANDSCAPE INDEX & CONTROL
L-10	LANDSCAPE DETAILS
L-101	IRRIGATION NOTES AND DETAILS
L-102	IRRIGATION PLAN

HNTB

One Bunker Hill
601 West Fifth Street, Suite 1010
Los Angeles, California 90071
(213) 403-1000 / fax (213) 403-1001



HNTB

Magnusson Pheneuf Associates - Structural Engineers

Flack + Kurtz - MEP Engineers

Wiegler & Kelly - Civil Engineers

The Fire Cross Ranks - Life Safety / Code Consultants

DVV Associates - Curtain Wall

The Gazzarrini Partnership, Inc. - Landscape

Persidio Hahn - Vertical Transportation

Bucey / J.J. Indelkins, Inc. - Food Service Cons. Ranks

Wrightson, Johnson, Haddon & Williams, Inc. - A/V

Debra Micaela Design - Signage & Graphics

Lloyd Engineering - Fuel Consultant

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

SEATING COUNTS

Main Lower GA	21,573
Main Lower GA WC COMP	369+369
East Field Club	1,260
East Field Club WC	18
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	3,254
West Main Club WC	37
West Main Club Comp	37
West Field Club	442
West Field Club ADA	6
West Field Club Comp	6

TOTAL: 27,885

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 BOWL 1 PLAN

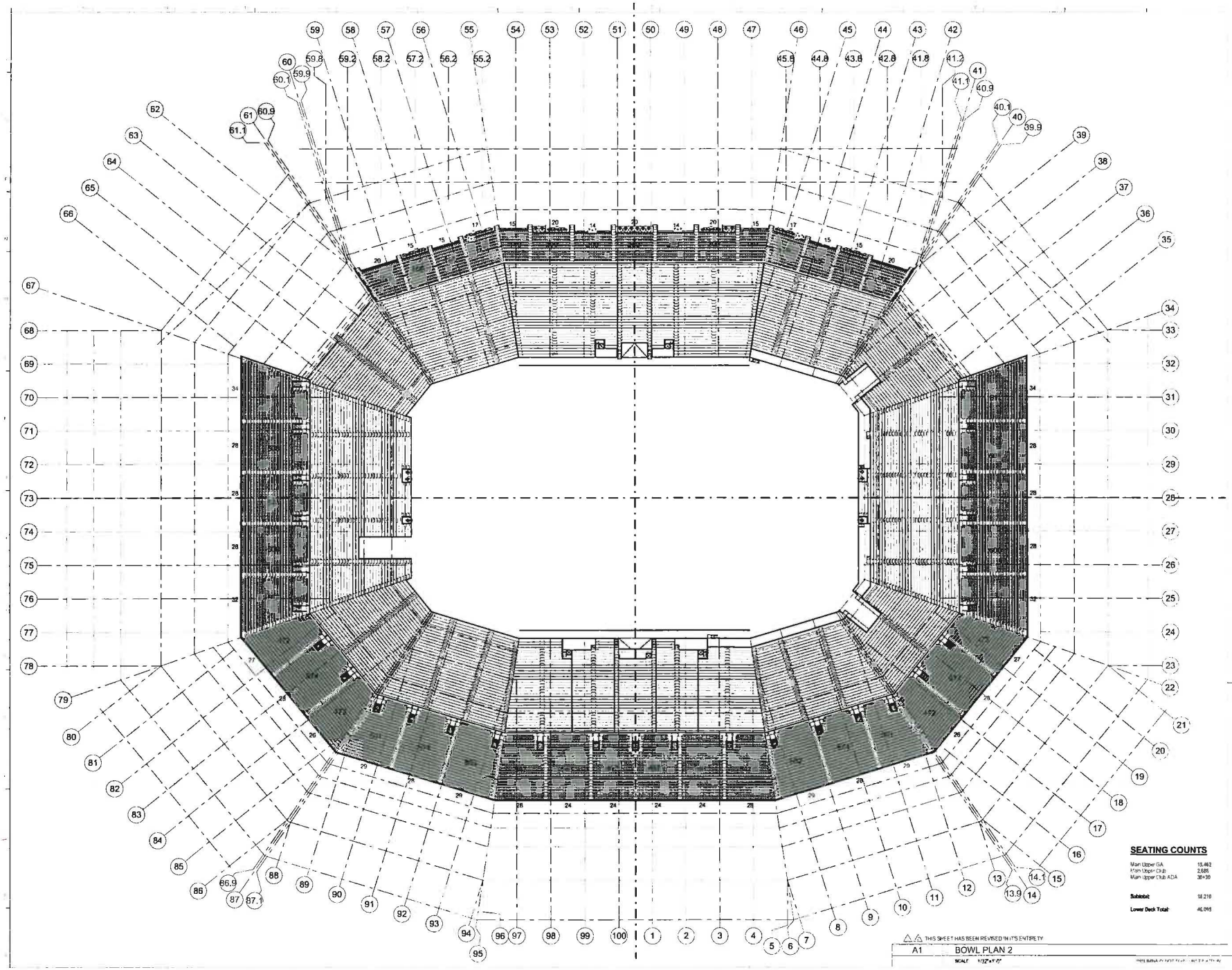
SCALE 1/32"=1'-0"

SHEET TITLE & NUMBER

BOWL PLAN 1

A-002

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH

TRUE NORTH

SEATING COUNTS

Main Upper GA	15,462
Main Upper Club	2,686
Main Upper Club ADA	30+30
Subtotal:	18,210
Lower Deck Total:	46,095

THIS SHEET HAS BEEN REVISED IN IT'S ENTIRETY

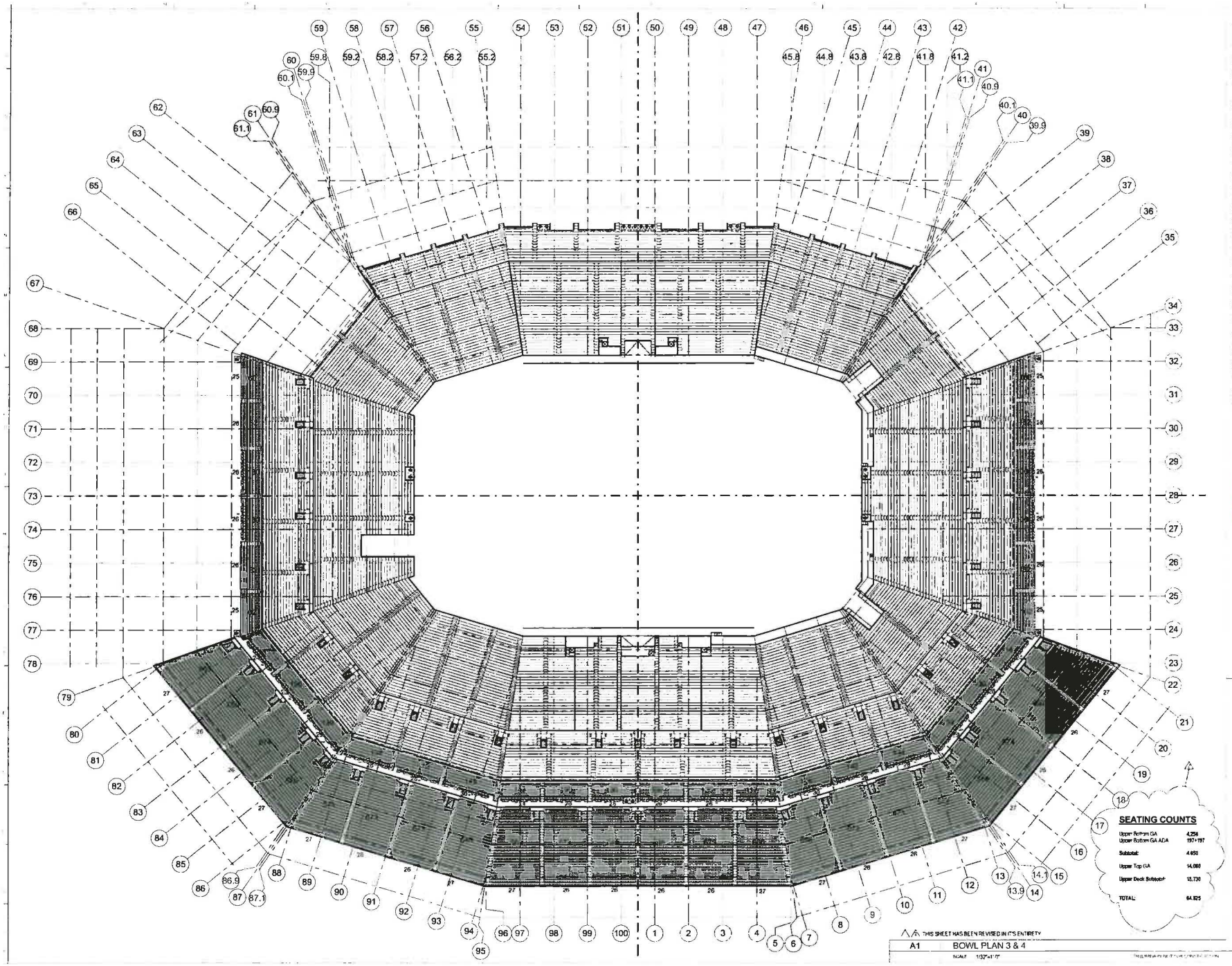
A1 BOWL PLAN 2

SCALE 1/32"=1'-0"

SHEET TITLE & NUMBER
BOWL PLAN 2

A-003

06/30/2010 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

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 BOWL PLAN 3 & 4

SCALE 1/32"=1'-0"

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BOWL PLAN 3 & 4

A-004

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

A	AB	ANCHOR BOLT	HB	HOSE BIBB	SJB
	AD	AREA DRAIN	HDO	HARDBOARD	SAN
	AFA	AUTOMATIC FIRE SPRINKLER	HC	HOLLOW COPPER/ANODIZED	SAN
	AHU	AIR HANDLING UNIT	HD	HEAVY DUTY	SAN
	AIC	AIR CONDITIONING	HDW	HEADER	SC
	ACC	ACCESS	HDWD	HARDWOOD	SCHED
	ACC DR	ACCESS DOOR	HDWR	HARDWARE	SDW
	ACC FL	ACCESS FLOOR	HK	HOOK	SECUP
	ACC P	ACCESS PANEL	HM	HOLLOW METAL	SLC
	ACC SE	ACCESSORIES	HRMS	HORIZONTAL	SLCT
	ACOUS	ACOUSTICAL	HT	HEIGHT	SLP
	ACOUS INSUL	ACOUSTICAL INSULATION	HW	HOLLOW WALL/HOUR	SQ
	ADJ	ADJACENT	HR	HOUR	SSL
	ADJT	SQUIRTABLE	HVAC	HEATING VENTILATING AIR CONDITIONING	SHEL
	ADMIN	ADMINISTRATION/ADMINISTRATION			SHT
	AFF	ALONG FINISH FLOOR	HWH	HOT WATER	SHTG
	AGG	AGGREGATE			SHWH
	ALT	ALTERNATE	IC	INSULATING GLAZING	SIM
	ALUM	ALUMINUM	IN	INCH	SK
	ANCHO	ANCHORED	INCL	INCLUDED	SM
	APPD	APPROVED	INFO	INFORMATION	SMT
	APPROX	APPROXIMATE	INSUL	INSULATION	SNLC
	ASSEM	ASSEMBLY	INT	INTERIOR	SPK
	AUTO	AUTOMATIC	INTM	INTERMEDIATE	SQ
					SS
B	BACK	JAN	JANITOR		SSK
	BLW	BELOW	JST	JOIST	STAG
	BITUM	BITUMINOUS	JT	JOINT	STD
	BLDG	BUILDING			STEP
	BLK	BLOCK	KO	KNOCKOUT	STL
	BLKG	BLOCKING	KP	KICK PLATE	STN
	BKKG	BACKING			STRUCT
	BD	BOARD	L	LENGTH	SUSP
	BFGS	BIRDSONG	LAD	LADDER	SYM
	BKG	BEARING	LAM	LAMINATE	
	BRK	BRICK	LAV	LAVATORY	
	BS	BOTH SIDES	LB	LAG BOLT	
	BSMT	BASEMENT	LED	LEDGE	TAB
	BTW	BETWEEN	LH	LEFT HAND	TBG
	BW	BOTH WAYS	LKW	LOOKER	TCOR
			LP	LOW POINT	TEL
C	CLM	CLAMP	LRD	LIQUID FOAM SPRINKLER	TERM
	CC	CONCRETE CLEANOUT	LT	LIGHT	TGW
	C FLASH	COUNTER FLASHING	LVR	LOUVER	THERM
	CAB	CABINET			THR
	CC	CONCRETE CLEANOUT	MACH	MACHINE	TIM
	CHAM	CHAMFER	MANH	MANHOLE	TL
	CHAN	CHANNEL	MAS	MASONRY	TR BD
	CI	CAST IRON	MAR	MARBLE	TOP
	CIP	CAST IN PLACE	MB	MACHINE BOLT	TOW
	CJH	CHASE	MC	MASONRY CONTROL JOINT	TOW
	CL	CONSTRUCTION JOINT	MCH	MECHANICAL	TOS
	CL	CENTERLINE	MCWR	MECHANICAL WRAPPER	TOW
	CLG	CEILING	MFR	MANUFACTURER	TV
	CLKG	CALKING	MH	MANHOLE	TWD
	CLR	CLEAR	MIN	MINIMUM	TS
	CMU	CONCRETE MASONRY UNIT	MIRR	MIRROR	TV
	CNTM	COUNTER	MISC	MISCELLANEOUS	TYP
	CO	CLEANOUT	ML	MATCH LINE	
	COL	COLUMN	MLWD	METAL WOOD	
	CONC	CONCRETE	MN	MANHOLE COVER	UC
	CONST	CONSTRUCTION	MTW	MONTAGE	UNF
	CONT	CONTINUOUS	MKD	METAL KICK PLATE	UON
	CONTR	CONTRACTOR/CONTRACT	MR	MACHINE REARW	UR
	CPET	CARPET	MT	METAL TIRE STAND	UL
	CONN	CONNECTION/CONNECTION	MTL FLR	METAL FLOORING		
	CTR	CENTER	MTG	MOUNTING	VAR
	CU	CLEAN COPPER	MTL	METAL	VB
			MULL	MULLION	VCT
D	DBL	DOUBLE	MULT	MULTIPLE	VLNT
	DEMO	DEMOLISH/DEMOLITION	MWK	MILLWORK	VLW
	DF	DRINKING FOUNTAIN			VP
	DH	DOUBLE HUNG	NG	NEW	V
	DIA	DIAMETER	NAT	NATURAL	VNR
	DIAG	DIAGONAL	NIC	NOT IN CONTRACT	VTL
	DW	DIAL WINDOW	NT	NOTE	VTR
	DIST	DISPLACEMENT	NOM	NOMINAL		
	DIV	DIVISION	NON-COM	NON-COMBUSTIBLE	W GL
	DN	DOWN	NS	NON SUBJECTION	W
	DR	DOOR	NSC	NON SUBJECTION COUPLING	WITH
	DT	DOWN	NTS	NOT TO SCALE	WD B
	DB	DOWN BOUT			WOW
	DTL	DETAIL	OA	OVERALL	WTR
	DWG	DRAWING	OC	ON CENTER	WTR
	DWR	DRAWER	OD	OUTSIDE DIAMETER	WI
			OF	OVERFLOW	WM
E	(E)	EXISTING	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	WS
	EA	EACH	OFCI	OWNER FURNISHED OWNER INSTALLED	WSCT
	EJ	EXPANSION JOINT			WH
	EL	ELEVATION	OH	OVERHEAD	WTW
	ELEC	ELECTRICAL/ELECTRICAL	OJ	OPENING JOINT	WW
	ELEV	ELEVATOR	OPH	OPPOSITE HAND	
	ENCL	ENCLOSURE	OPS	OPPOSITE SURFACE	
	ENG	ENGINEER	OPNG	OPENING	
	EQ	EQUAL	OPW	OPPOSITE	
	EQUIP	EQUIPMENT	OZ	OUNCE	
	EST	ESTIMATE			
	EWC	ELECTRIC WATER COOLER	PB	PARGE BAR	
	EWH	ELECTRIC WATER HEATER	PBD	PARTICLE BOARD	
	EXH	EXHAUST	PCEMPL	PORTLAND CEMENT PLASTER	
	EXP	EXPANSION	PG	PLATE GLASS	
	EXPD	EXPANDED	PL	PANEL WITH PLY	
	EXT	EXTERIOR	PLAM	PLASTIC LAMINATE	
			PCC	PRECAST CONCRETE	
F	(F)	FUTURE	PCF	POUNDS PER CUBIC FOOT	
	FAB	FABRICATE	PLRM	PLUMBING	
	FBD	FIBERBOARD	PLWD	PLYWOOD	
	FD	FLOOR DRAIN	PRB	PRE FABRICATE	
	FE	FIRE EXTINGUISHER	PSF	PER SQUARE FOOT	
	FEC	FIRE EXTINGUISHER CABINET	PL	PLATE	
	FF	FINISHED FLOOR/FINISH FACE	PLAS	PLASTER	
	FFE	FINISHED FLOOR ELEVATION	PLBG	PLUMBING	
	FG	FINISHED GRADE	PLWD	PLYWOOD	
	FHC	FIRE HOSE CABINET	PNL	PANEL	
	FIN	FINISH	PNT	PAINT	
	FIXT	FIXTURE	POL	POLISHED	
	FLASH	FLASHING	PW	PAINT	
	FLR	FLOOR/FLOORING	PWLP	PRE PARATED	
	FLUOR	FLUORESCENT	PWD	PREFINISHED	
	FND	FOUNDATION	PRCT	PREFINISHED CARPET TILE	
	FO	FINISH OPENING	PRC	HOLLOW PLR SQUARE FOOT	
	FOB	FACE OF BLOCK	PSI	POUNDS PER SQUARE INCH	
	FOC	FACE OF CONCRETE	PT	POINT	
	FOM	FACE OF MASONRY	PTC	PRESTRESSED CONCRETE	
	FOP	FACE OF PANEL	PTN	PARTITION	
	FOR	FACE OF STUD	PV	PAVING	
	FOW	FACE OF WALL	PVC	POLYVINYL CHLORIDE	
	FR	FRAME	PVMT	PAVEMENT	
	FRG	FURRING			
	FT	FOOT/FEET	QT	QUARTER TILE	
	FTG	FOOTING	QTY	QUANTITY	
G	GUTTER	R	RADIUS/RISER		
	GA	GAUGE	RA	RETURN AIR	
	GALV	GALVANIZED	RAG	RETURN AIR GRILLE	
	GB	GYPSUM BOARD	RB	RUBBER BASE	
	GI	GALVANIZED IRON	RCP	REFLECTED CEILING PLAN	
	GL	GLASS	RD	ROOF DRAIN	
	GND	GROUND	REF	REFERENCE	
	GR	GRADE	RECEM	RECEPTACLE	
	GRF	GROUND BOUNDARY FELT	RFT	REFRIGERATOR	
	GT	GROUT	RFTL	REFLECTED	
	GYPBD	GYPSUM WALL BOARD	RFTR	REFRIGERATOR	
			RLN	REINFORCING/REINFORCING	
			RLM	REMOVAL	
			RLOD	RELOCATED	
			RLSL	RESILIENT	
			RLT	RETURN	
			RLV	REVISION	
			RLVD	REVISED	
			RFH	ROOF HATCH	
			RHD	ROOFING	
			RH	RIGHT HAND	
			RHWS	RETAINING AND WOOD BORDER	
			RND	ROUND	
			RO	ROUGH OPENING/ROUGH	
			ROW	RIGHT OF WAY	

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	37,000		147,603	90,826				27,500		75,400	478,329
CONCOURSE/CIRCULATION	95,300	7,000	288,289	1,800	67,300	12,300	12,300	109,180	5,700	9,000	617,949
TOILET FACILITIES	4,000		42,619	3,200	8,500	1,600	1,600	23,400	1,500	1,000	84,419
CONCESSIONS & FOOD SERVICES	32,300		76,870	3,200	19,500	5,700	5,700	12,300	1,500		199,870
SUITES					47,300	16,124	16,124				79,548
CLUBS	5,300		31,622	33,935	33,000						152,399
STADIUM ADMINISTRATION	2,000	14,500									16,500
STADIUM OPERATIONS	96,600	33,500							5,600		135,700
TEAM FACILITIES	73,500										73,500
RETAIL SPACE	13,000	11,600									24,700
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	845,322	134,564	169,500	36,524	38,524	173,619	34,300	85,100	1,560,333

* INDICATES AREA OF VOID SPACE BELOW LOWER DECK

AREA OF CONDITIONED SPACE

(INDICATED AS NON SHADED CELLS IN TABLE ABOVE)

=912,658 S.F.

AREA OF SUITE TOWER

=362,000 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

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

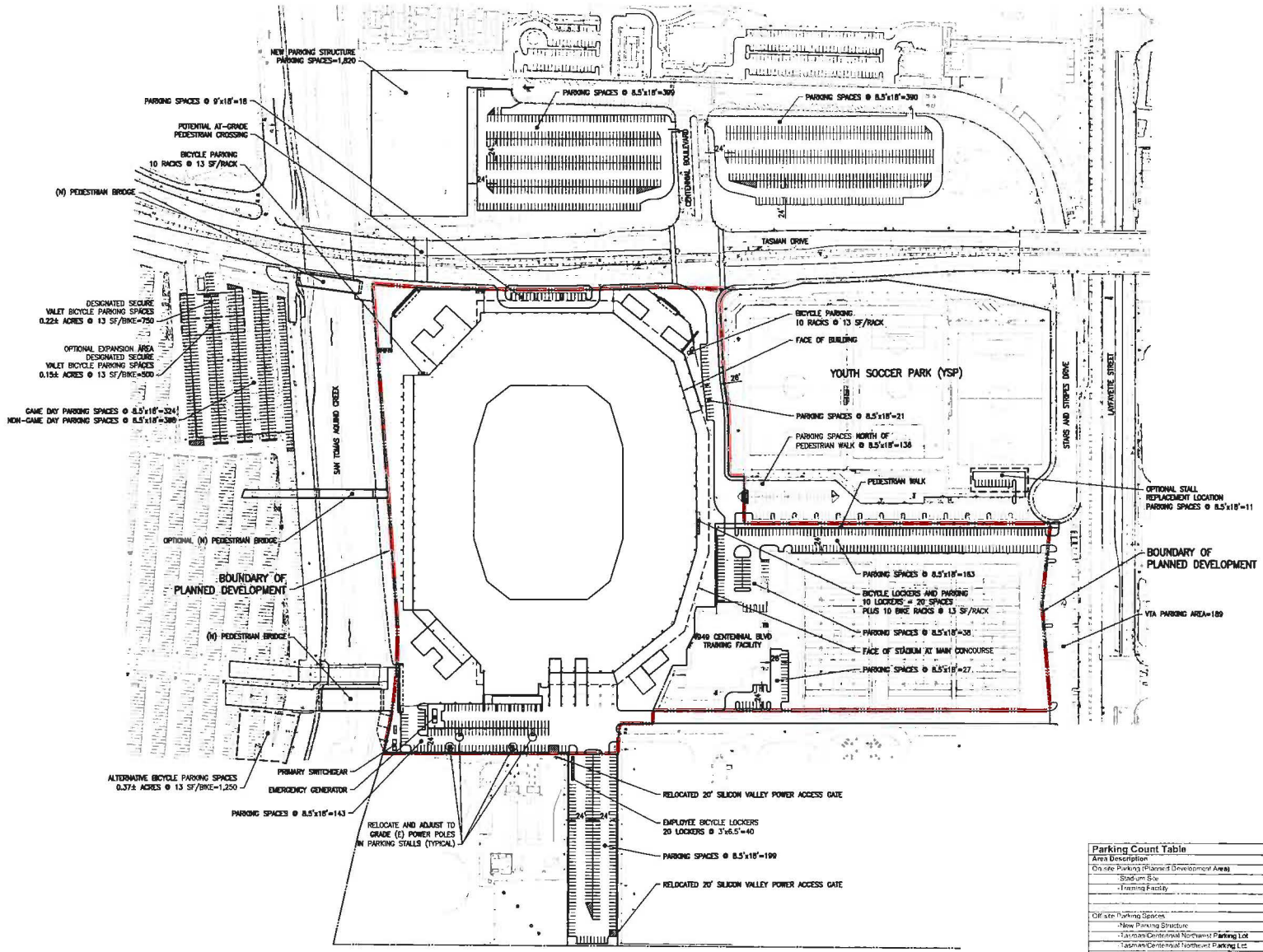
SHEET TITLE & NUMBER

GENERAL NOTES

A-006

A1

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	162
-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	324/396[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[3]
-Valley Transportation Authority (VTA) Parking Area	179/199[4]
-Off-site Employee Game Day Parking Spaces (location TBD)	1,740

[1] Estimates based upon current project plans
[2] During times when a bike valet is utilized only 324 spaces will be available
[3] Eleven spaces will be lost as a result of the proposed project, but there is an on-site replacement option
[4] Fifteen Parking Spaces may be lost due to truck 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

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
EXISTING SITE PLAN

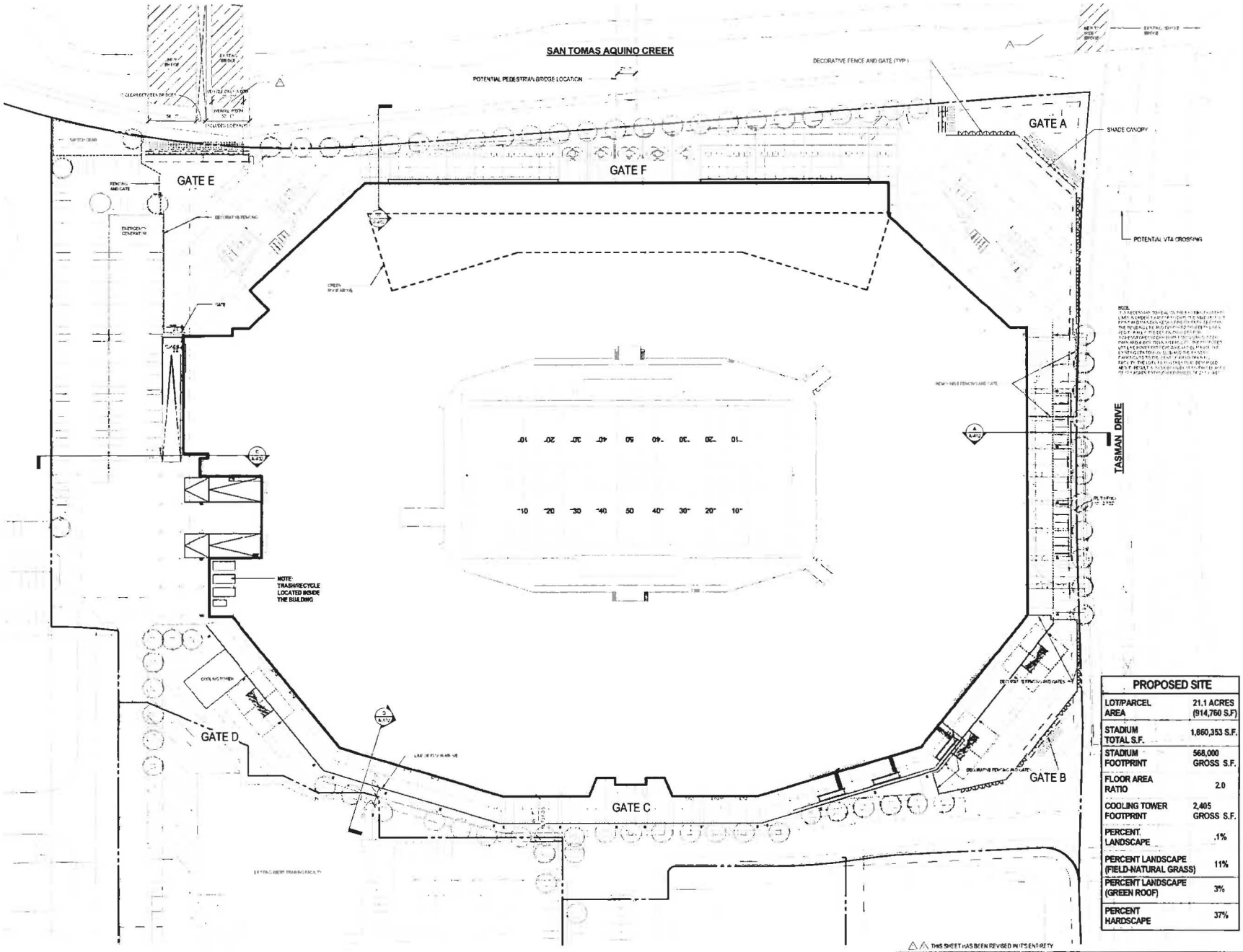
A-100.1

06/30/2010

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A2 EXISTING SITE PLAN

SCALE



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

SHEET TITLE & NUMBER
PROPOSED SITE PLAN

A-100.2

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

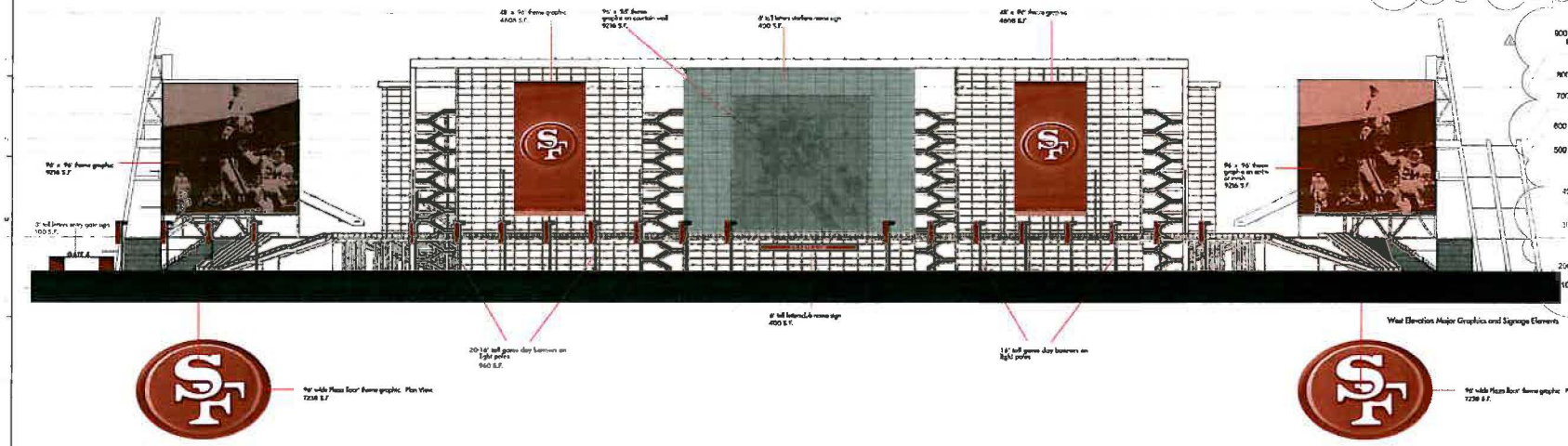
A1

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

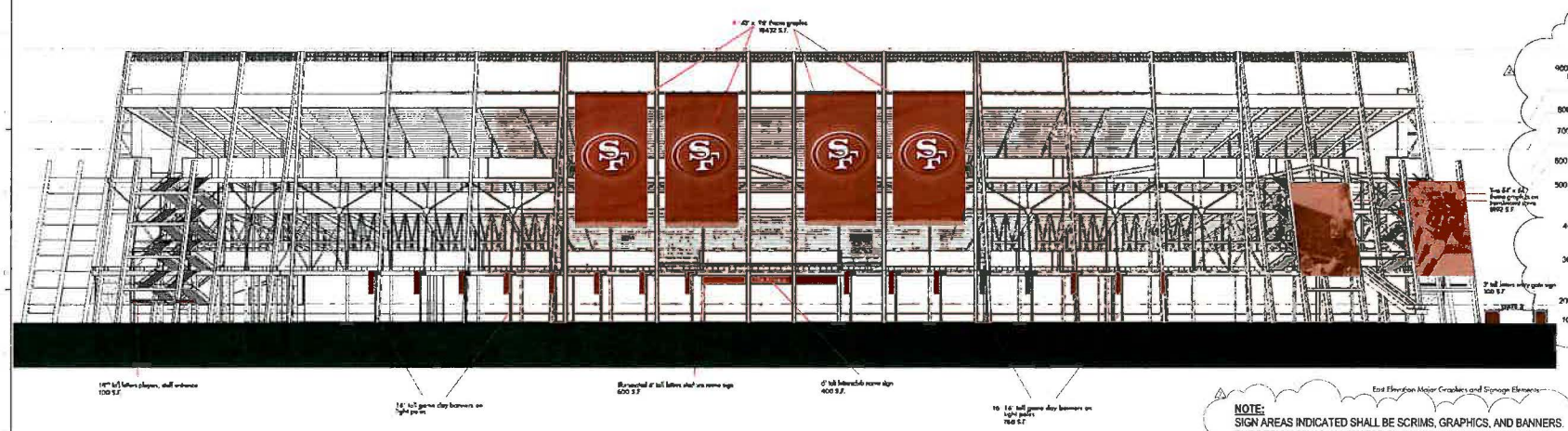
HNTB

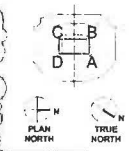


A2 WEST ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS

NOT TO SCALE

49ERS SAN FRANCISCO 49ERS NEW STADIUM





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

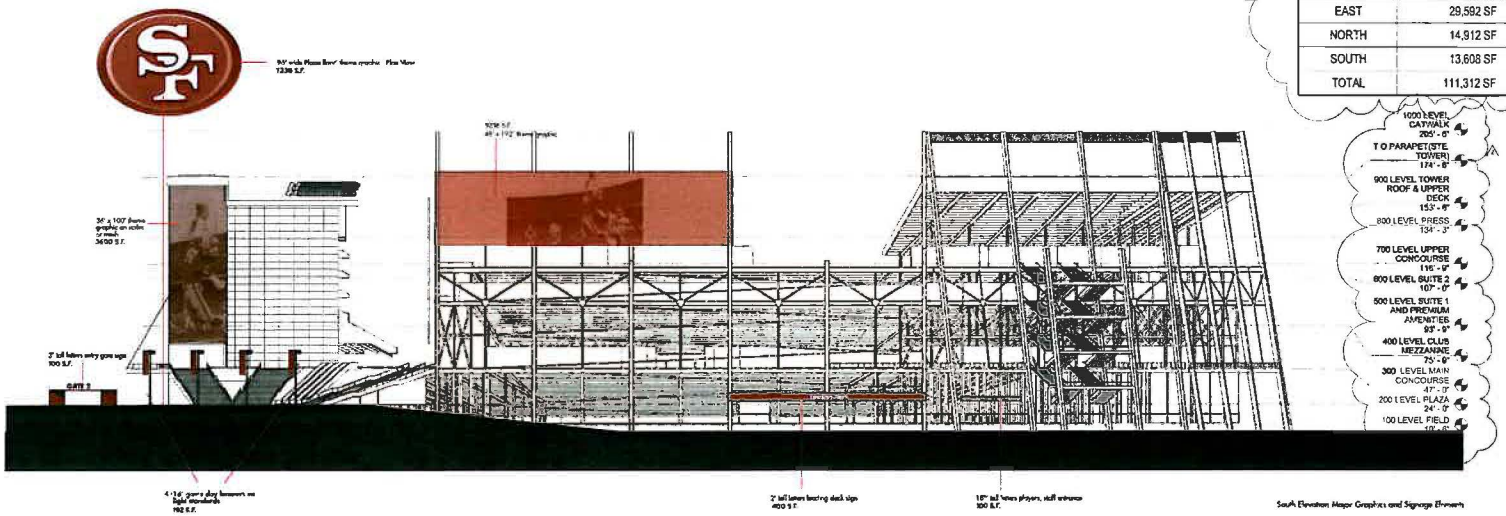
SHEET TITLE & NUMBER

SIGNAGE DRAWINGS

A-100.3

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

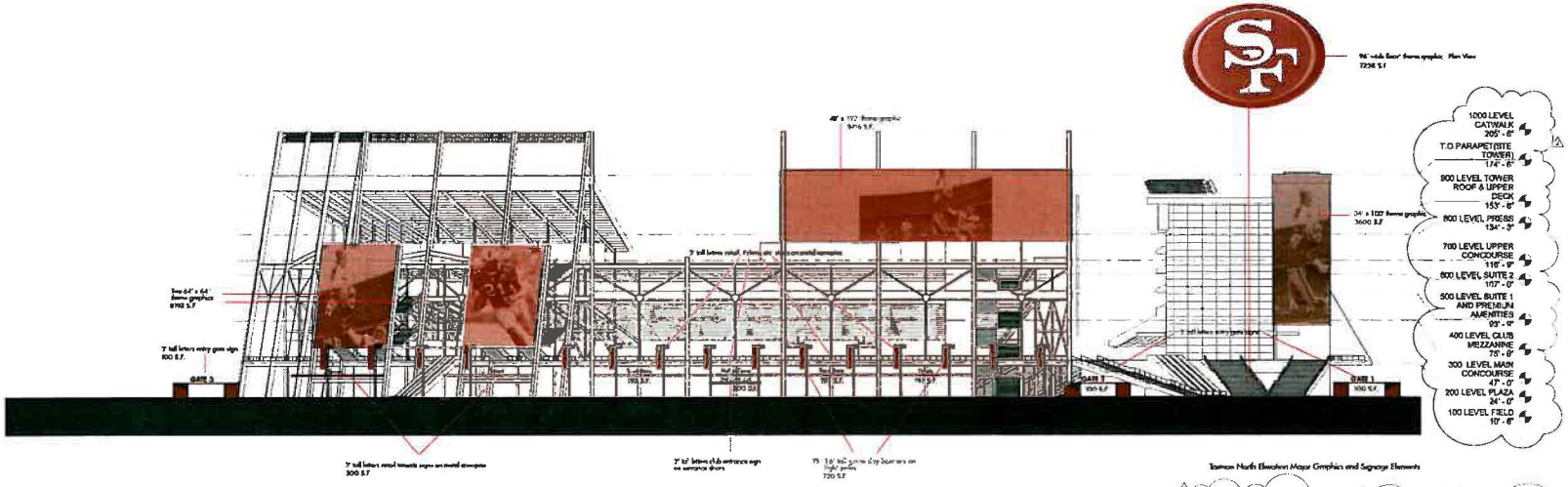
ELEVATION	SIGN AREA
WEST	53,200 SF
EAST	29,592 SF
NORTH	14,912 SF
SOUTH	13,608 SF
TOTAL	111,312 SF



South Elevation Major Graphics and Signage Elements

A2 SOUTH ELEVATION MAJOR GRAPHICS AND SIGNAGE ELEMENTS

NOT TO SCALE



Tasman North Elevation Major Graphics and Signage Elements

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

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

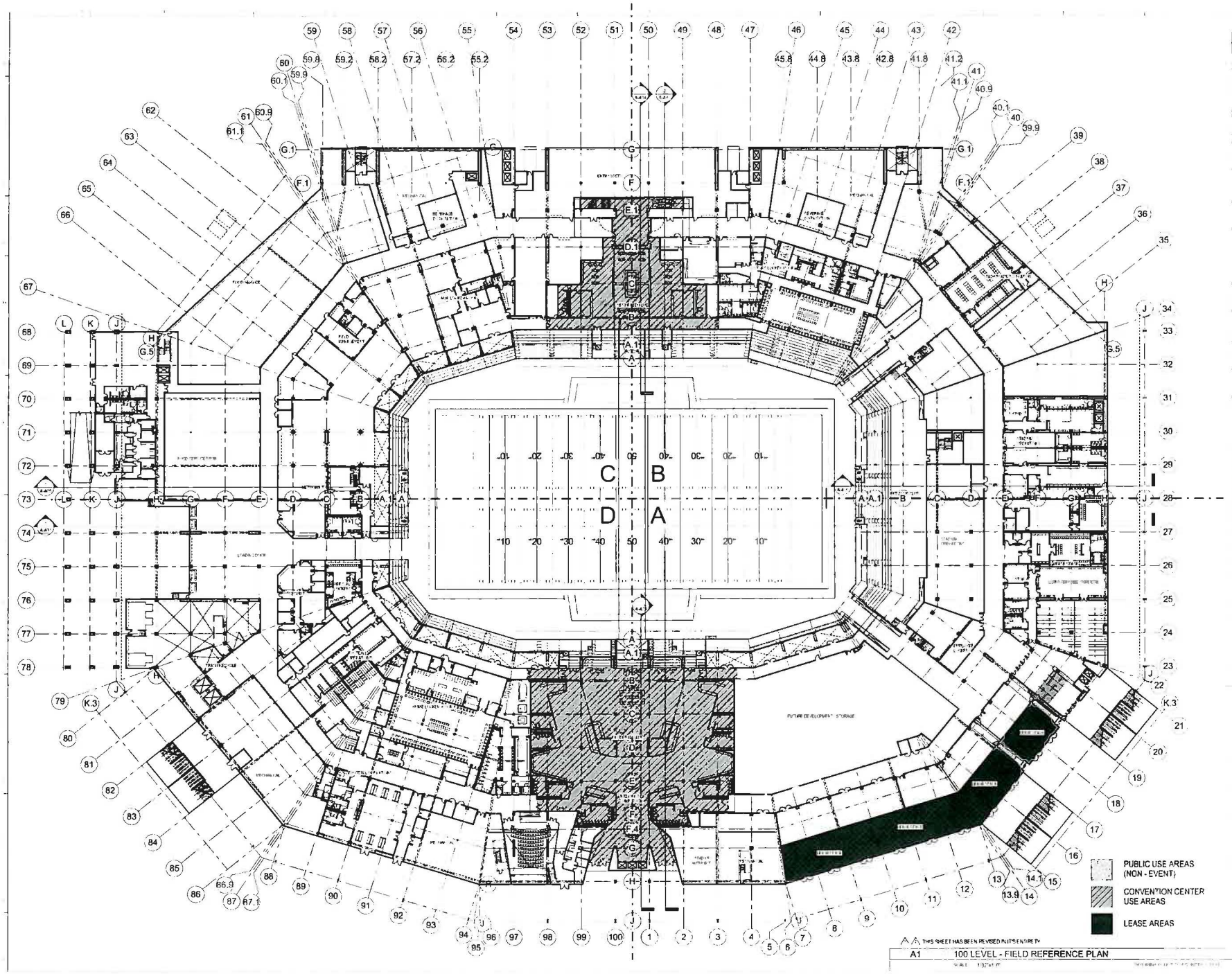
TRUE NORTH

SHEET TITLE & NUMBER

SIGNAGE DRAWINGS

A-100.4

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

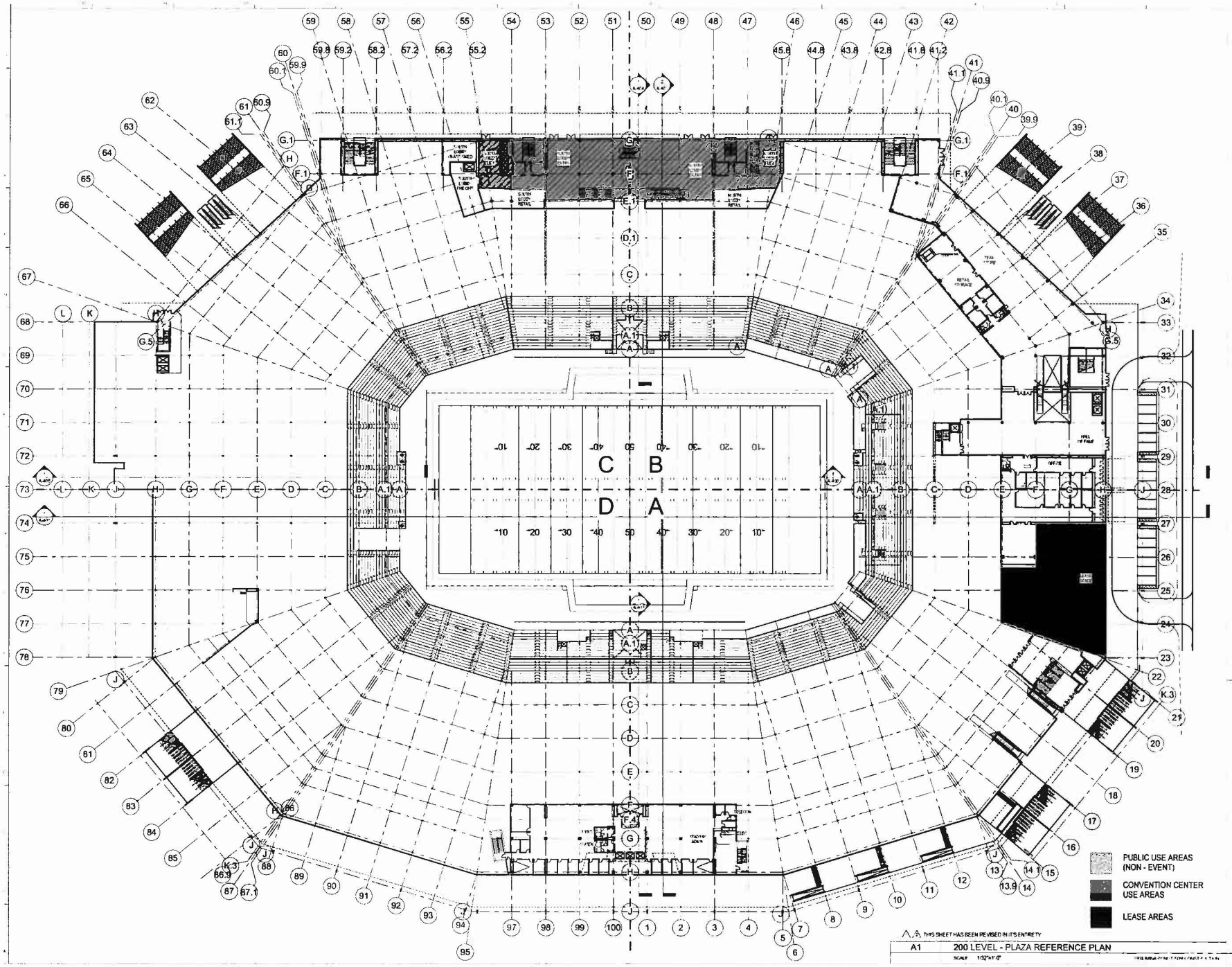
SAN FRANCISCO
49ERS NEW STADIUM

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

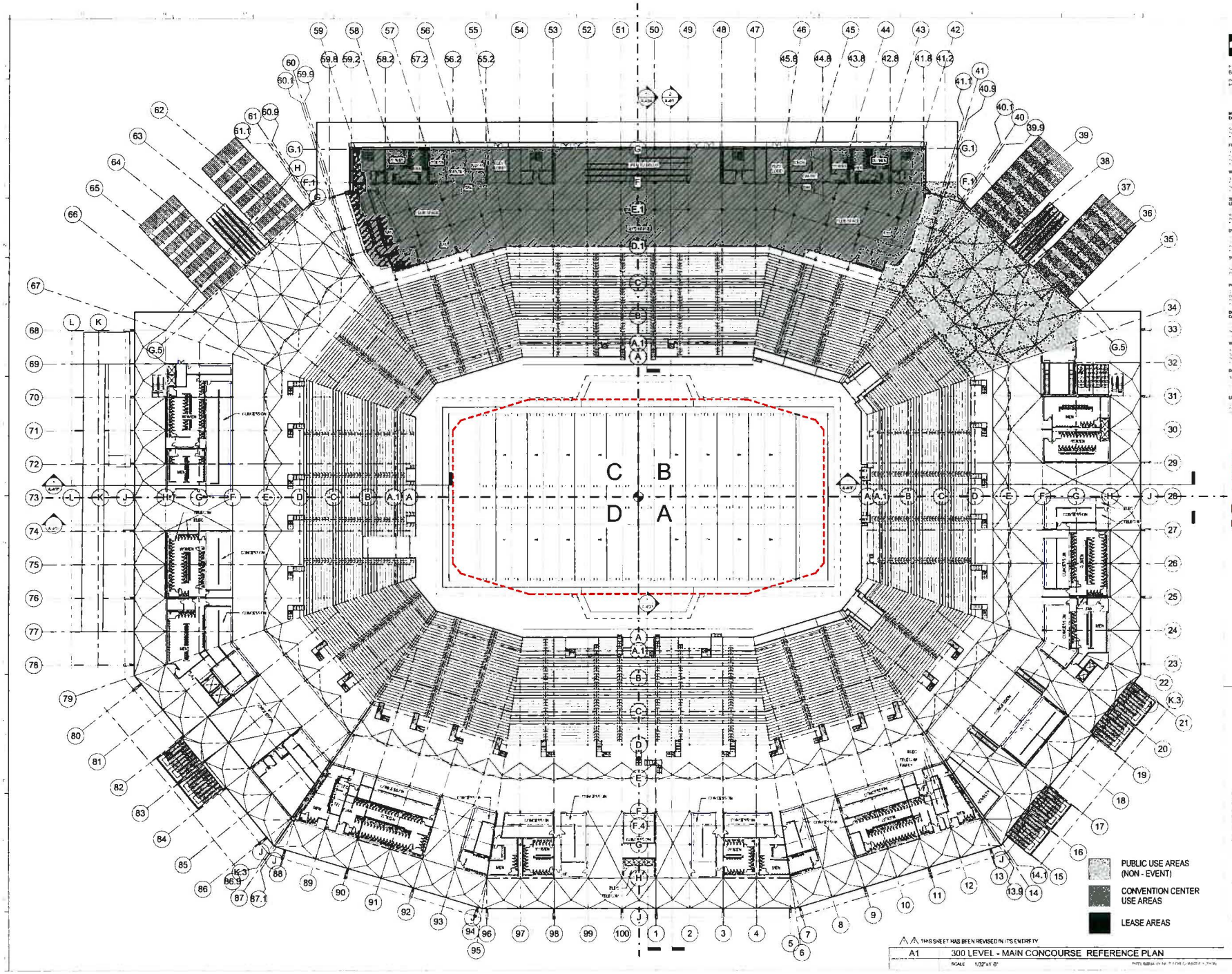
TRUE NORTH

SHEET TITLE & NUMBER

PLAZA LEVEL (EL=24'-0")

A-102

06/30/2010



HNTB

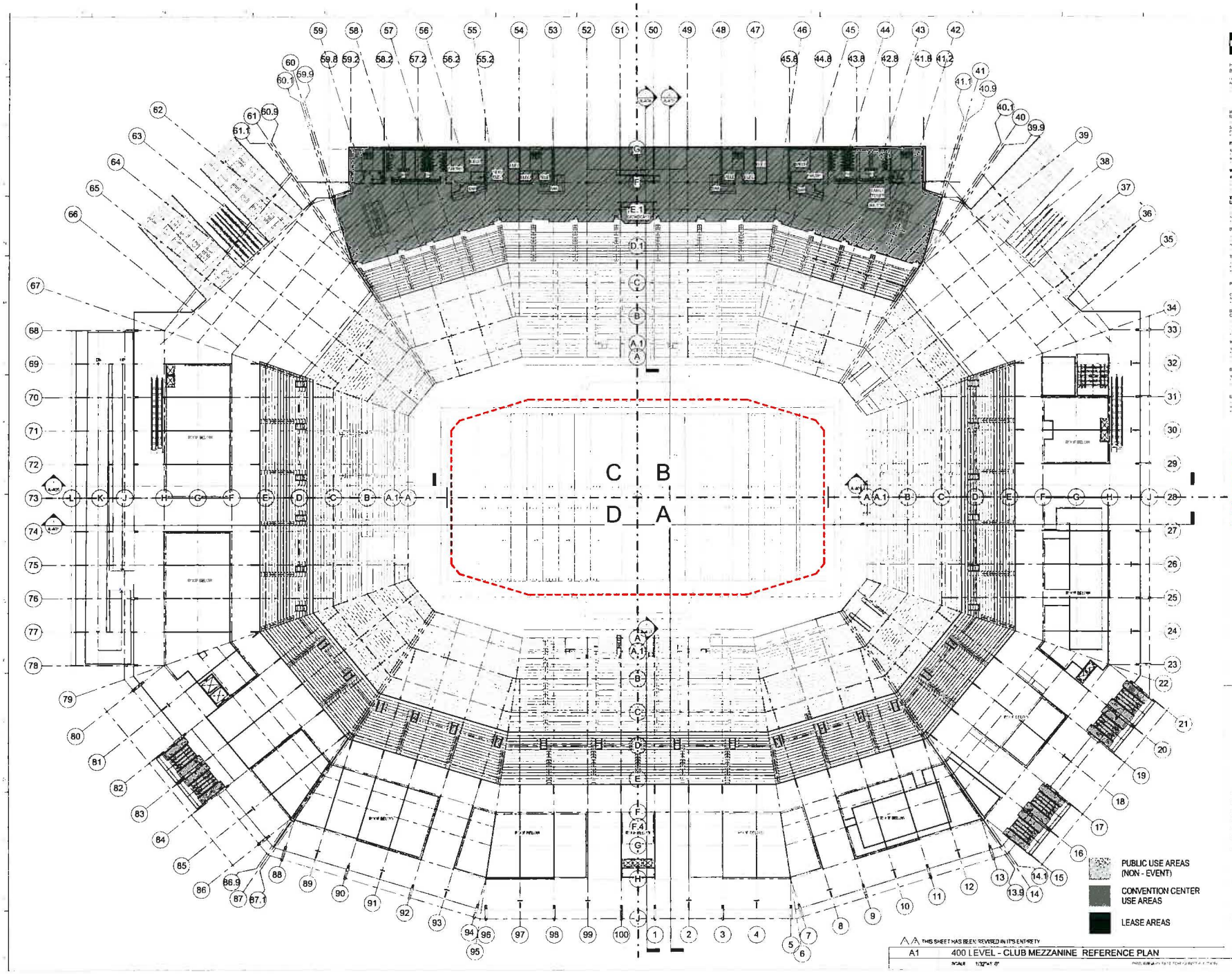
SAN FRANCISCO
49ERS NEW STADIUM

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

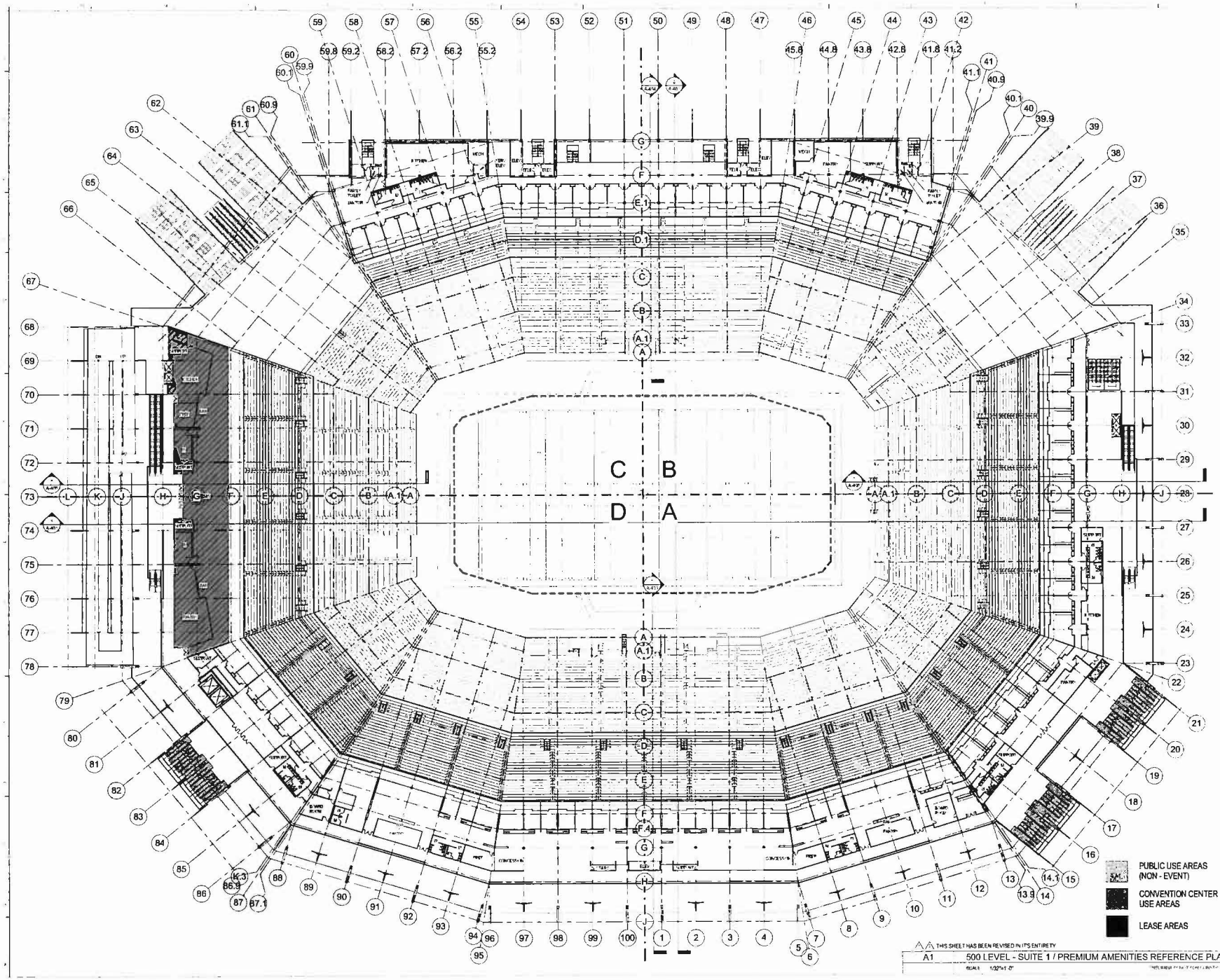
PLAN NORTH

TRUE NORTH

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

A-104

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 500 LEVEL - SUITE 1 / PREMIUM AMENITIES REFERENCE PLAN

SCALE 1/32"=1'-0"

HNTB

SAN FRANCISCO 49ERS NEW STADIUM

PLAN NORTH

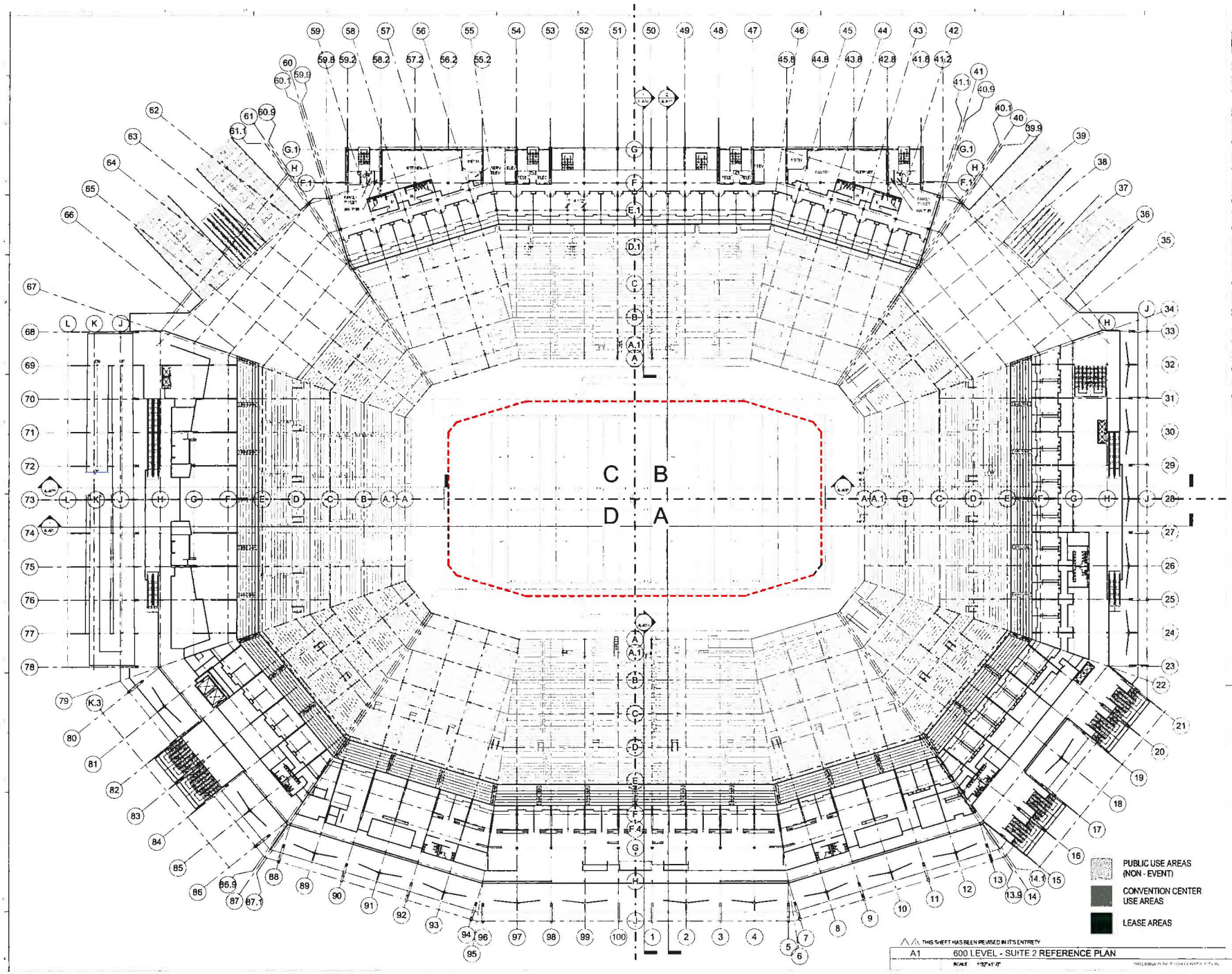
TRUE NORTH

SHEET TITLE & NUMBER

SUITE LEVEL 1 / PREMIUM AMENITIES LEVEL (EL=93'-9")

A-105

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

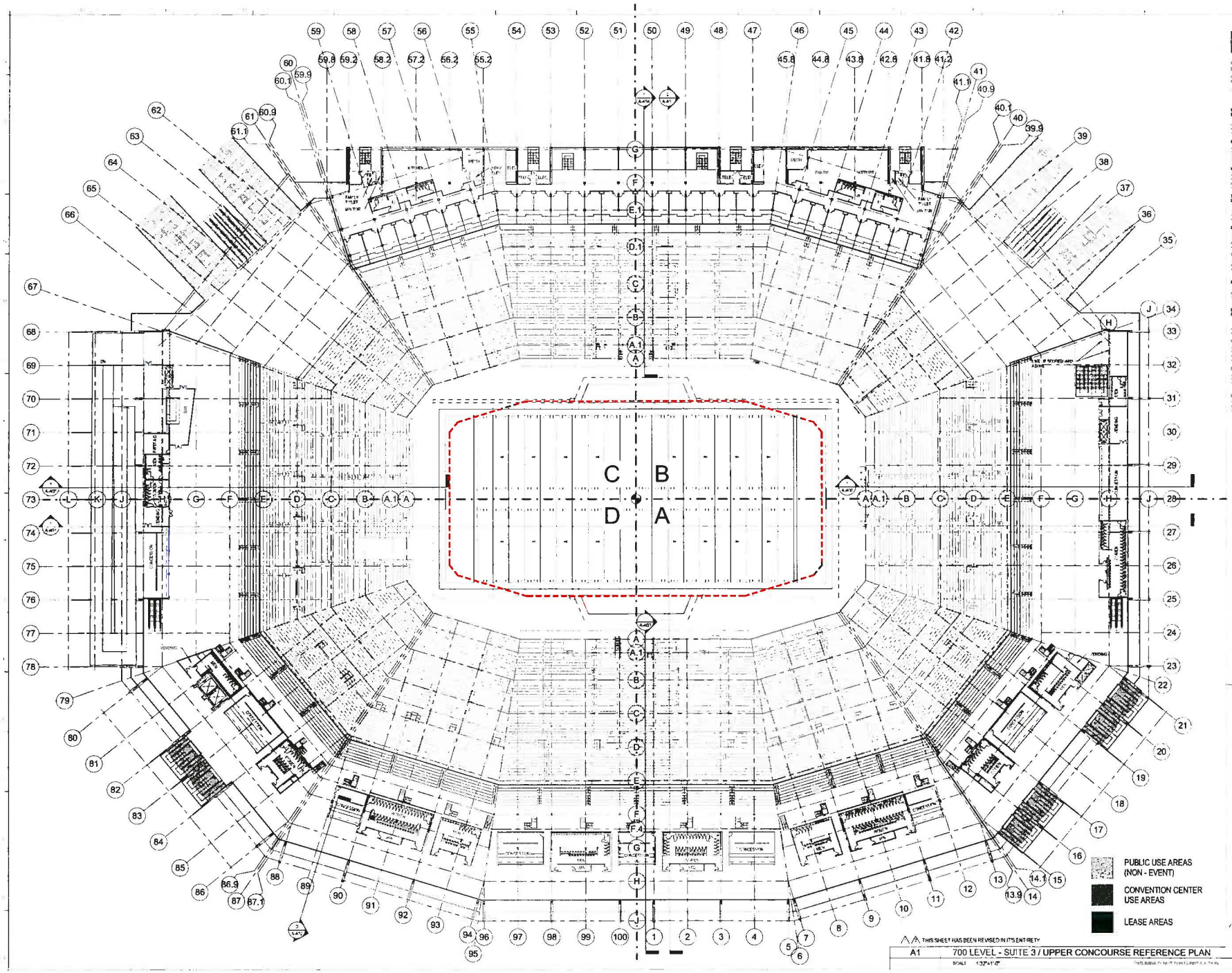
49ERS
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

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

A-106

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

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

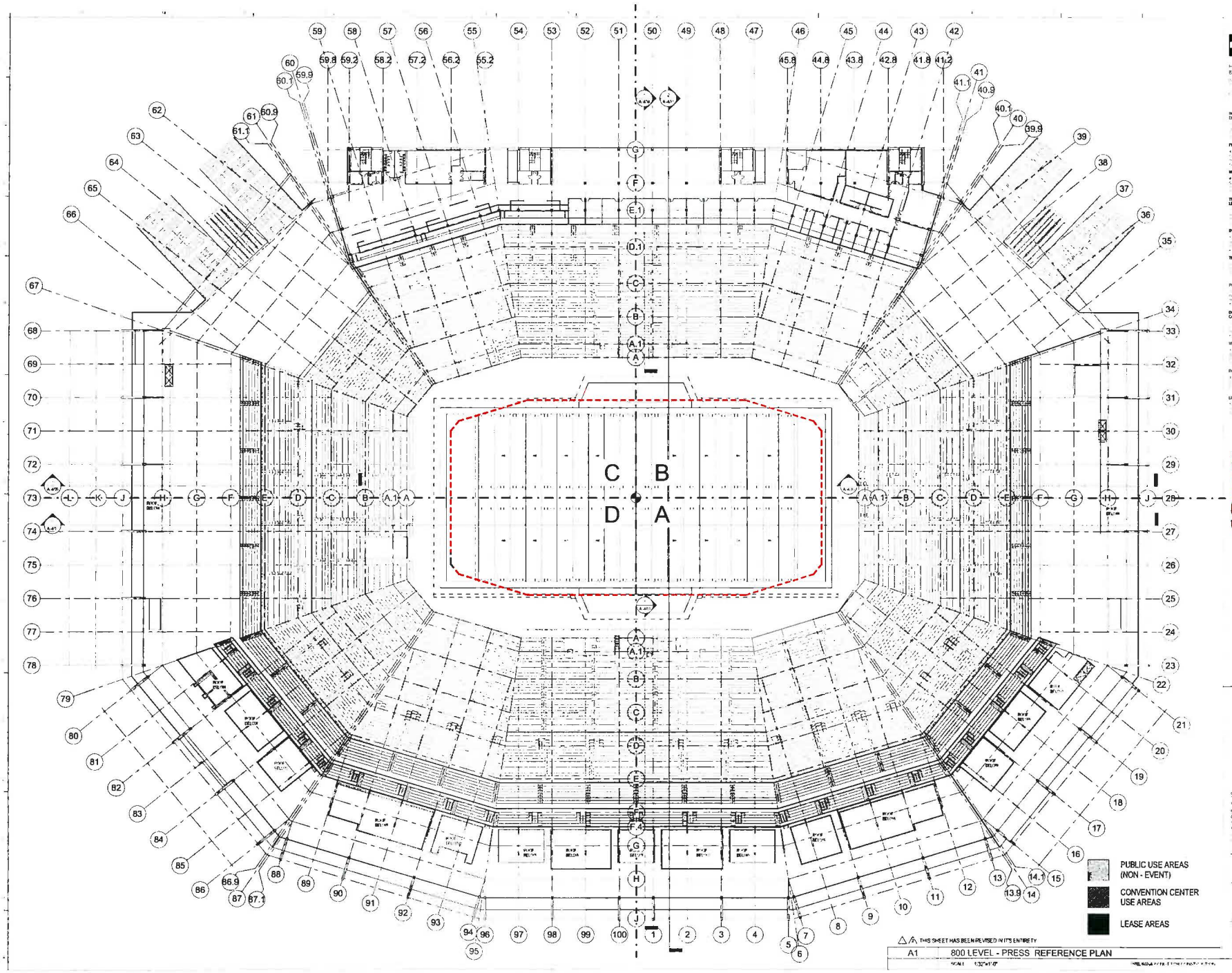
SCALE 1/32"=1'-0"

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

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

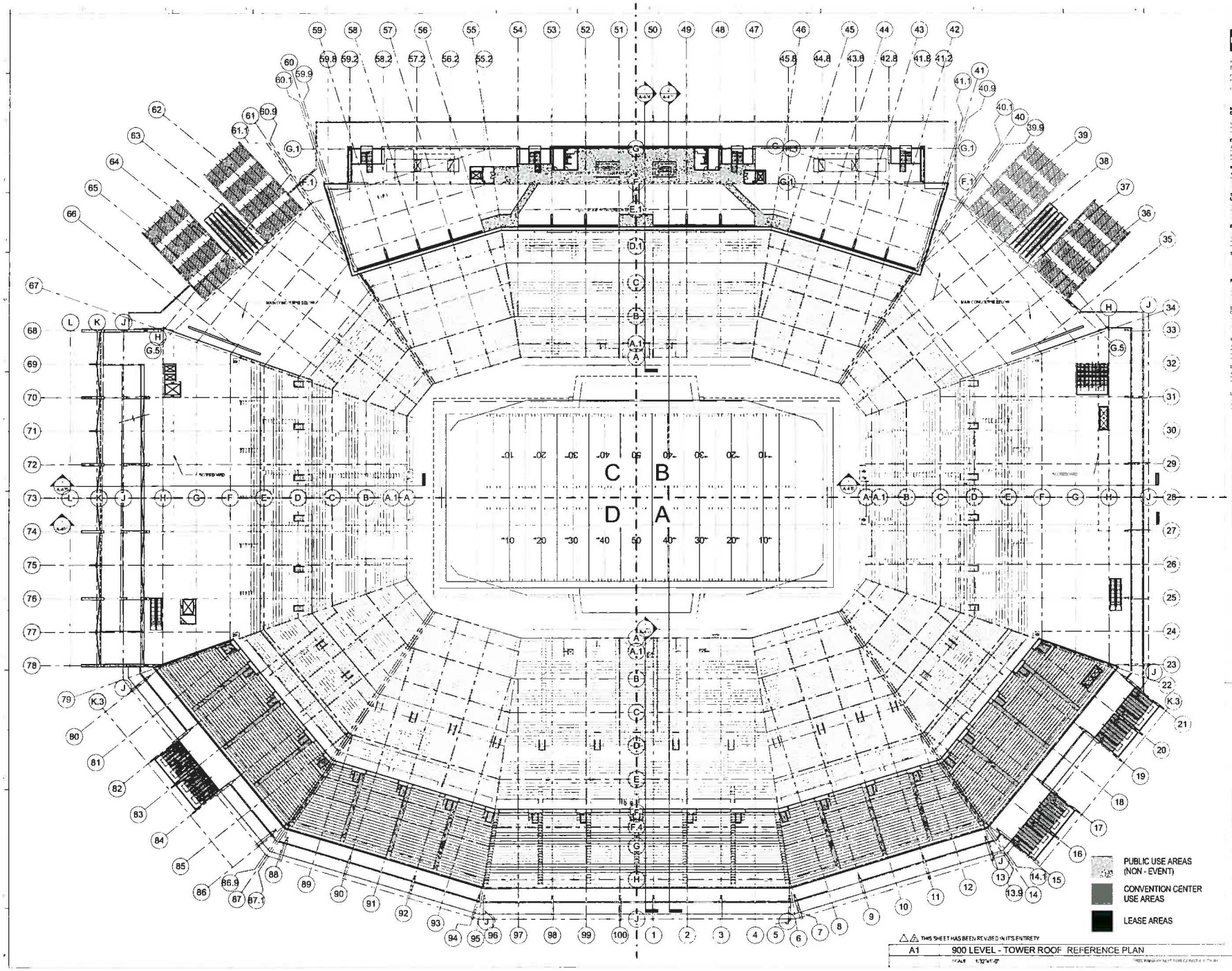
PLAN NORTH

TRUE NORTH

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

A-108

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



HNTB

SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

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

A-109

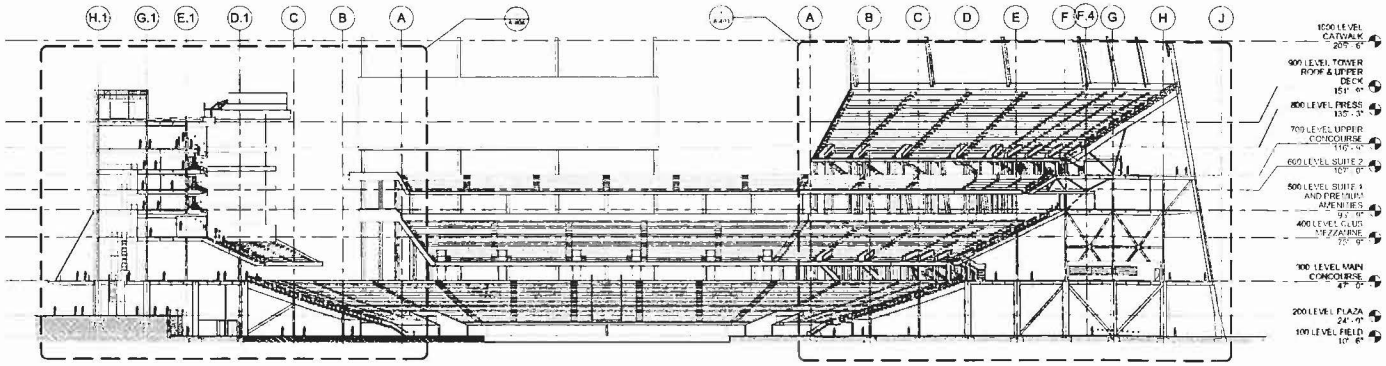
THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 900 LEVEL - TOWER ROOF REFERENCE PLAN

SCALE 1/32"=1'-0"

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

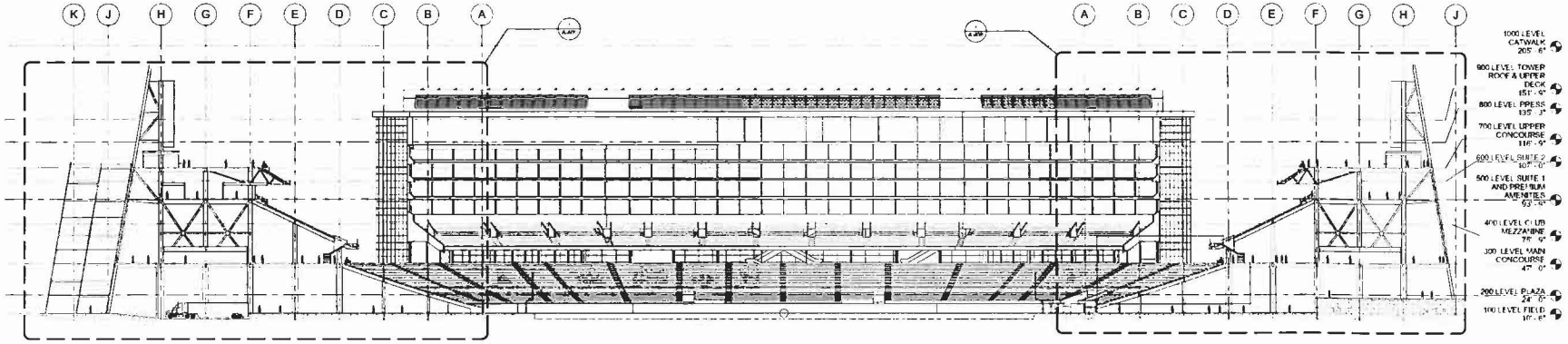
HNTB

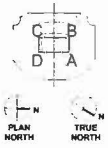


A1 LONGITUDINAL SECTION - LOOKING WEST

SCALE 1/32"=1'-0"

SAN FRANCISCO 49ERS NEW STADIUM





SHEET TITLE & NUMBER

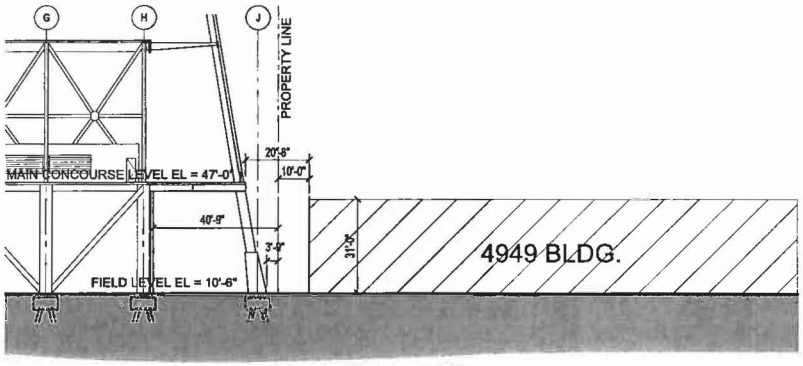
OVERALL BUILDING SECTIONS

A-401

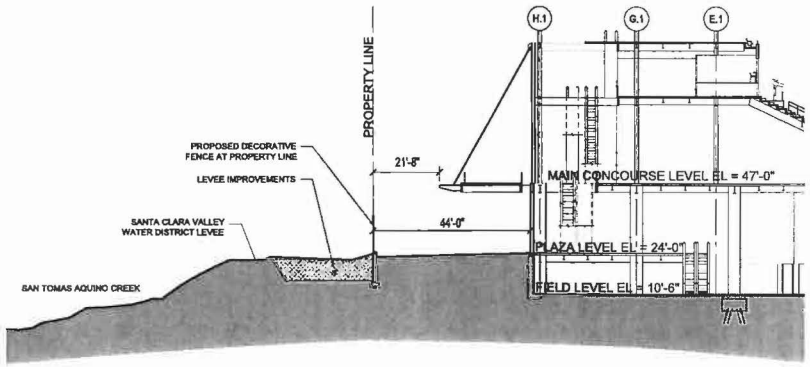
A1 LONGITUDIAL SECTION - LOOKING WEST

SCALE 1/32"=1'-0"

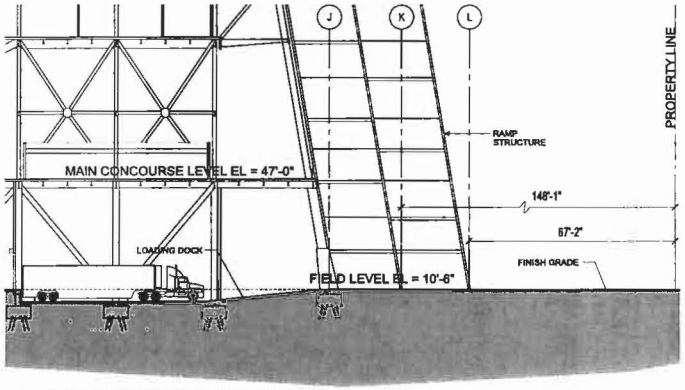
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



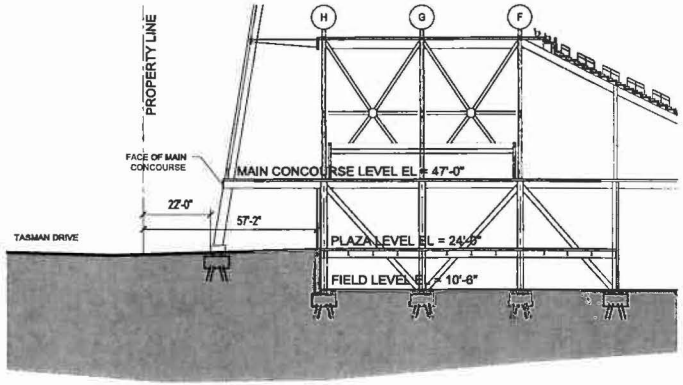
D EAST SECTION @ COL. LINE 90
1/16" = 1'-0"



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

PLAN NORTH
TRUE NORTH

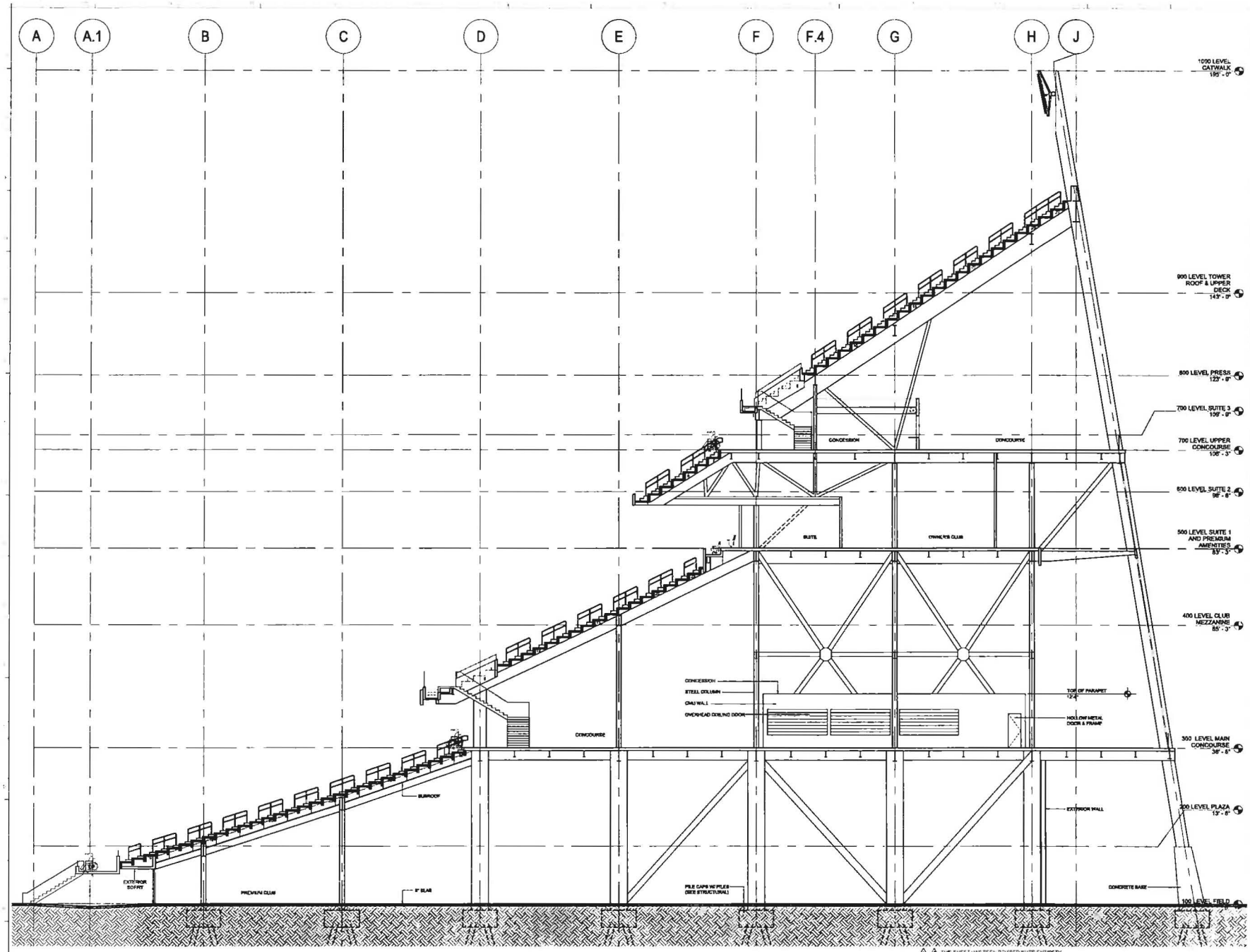
SHEET TITLE & NUMBER
SITE CONTROL SECTIONS

A-402

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 SITE CONTROL SECTIONS



△△ 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

C B
D A

PLAN NORTH

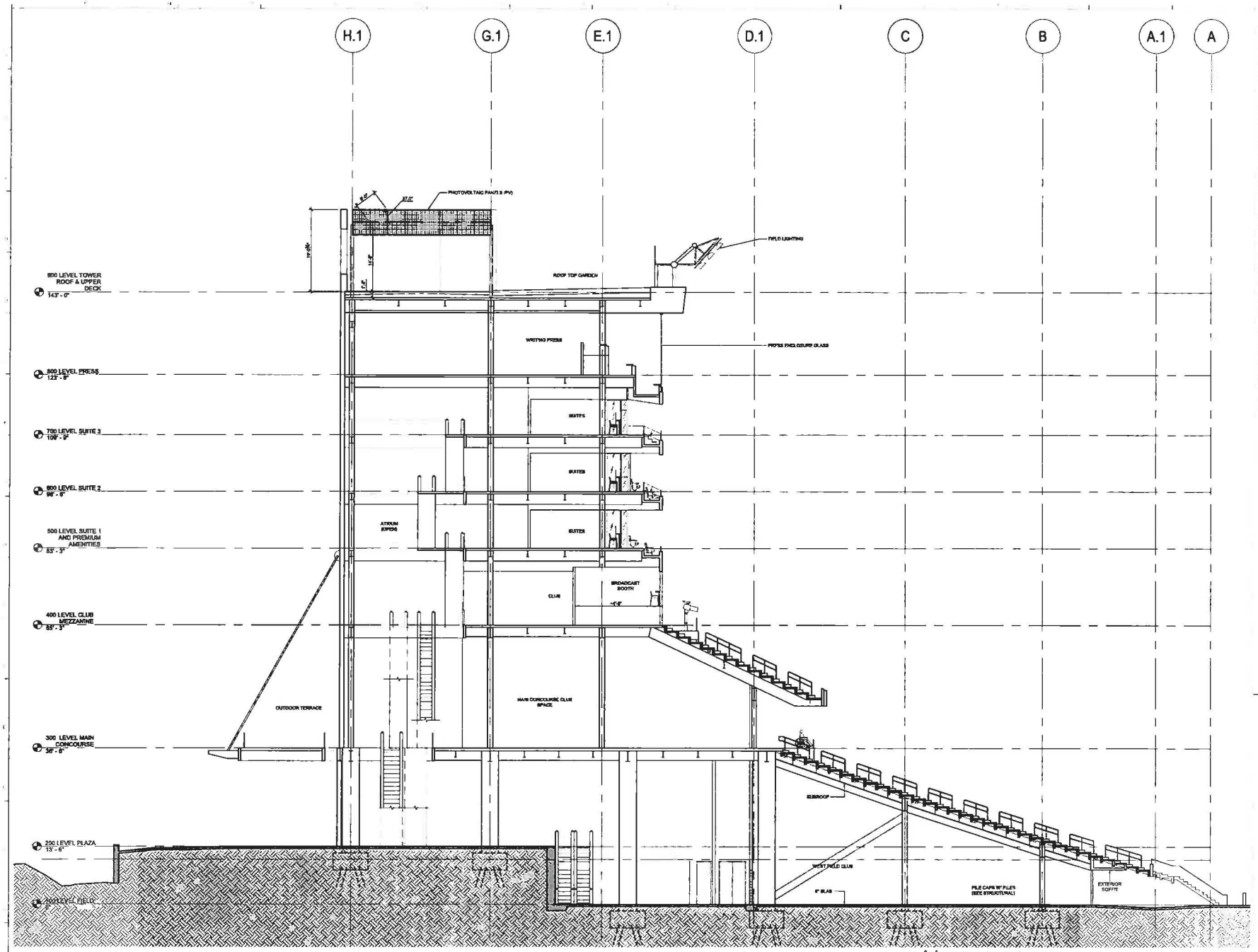
TRUE NORTH

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

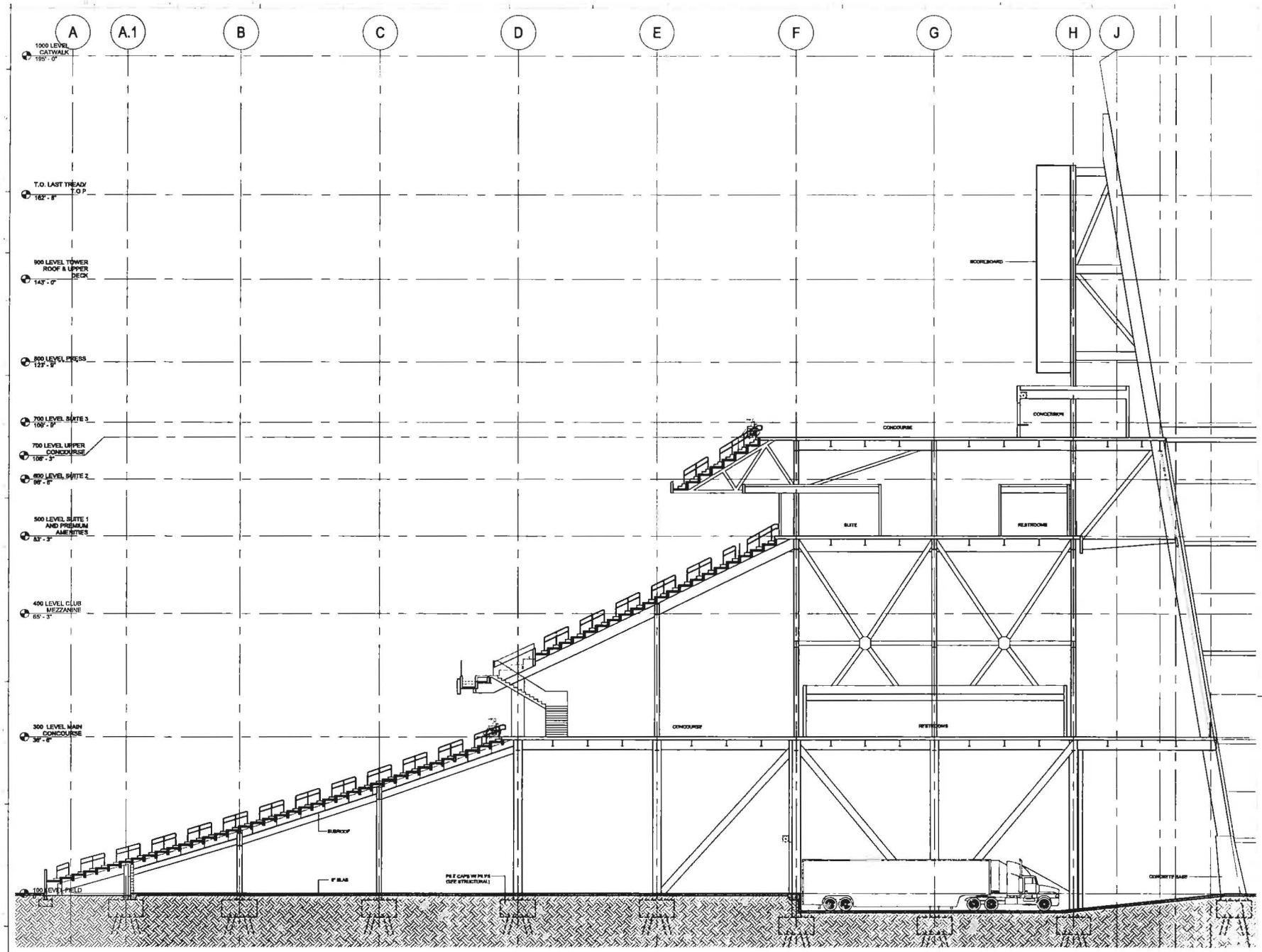
A-404

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

C B
D A

PLAN NORTH

TRUE NORTH

SHEET TITLE & NUMBER
BUILDING SECTION - SOUTH - LOOKING WEST

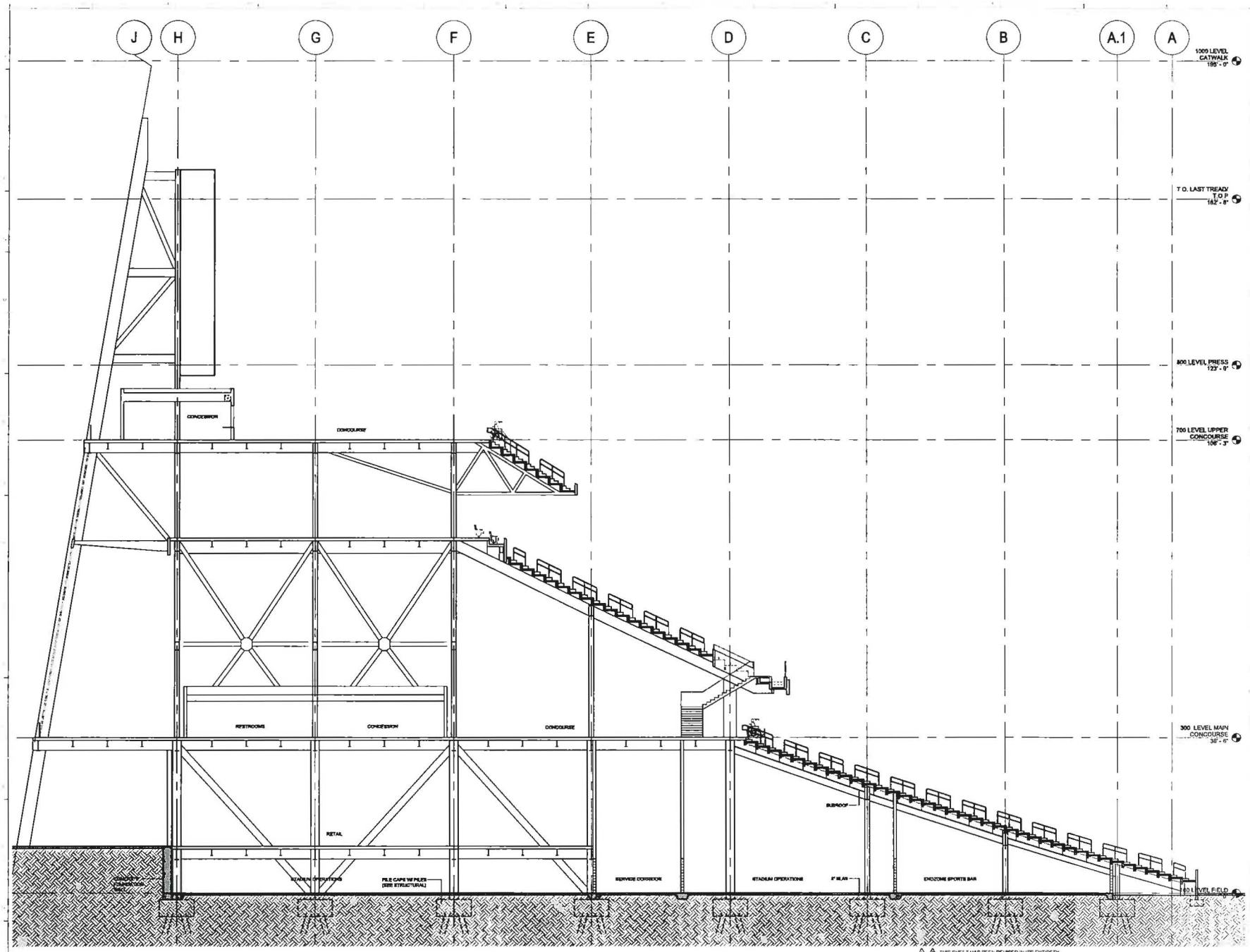
A-405

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE

THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

SOUTH STADIUM SECTION LOOKING EAST

SCALE 1/8"=1' 0"



△1 △1 THIS SHEET HAS BEEN REVISED IN ITS ENTIRETY

A1 SOUTH SECTION - LOOKING WEST

SCALE 1/8"=1'-0"

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

C B
D A

PLAN NORTH

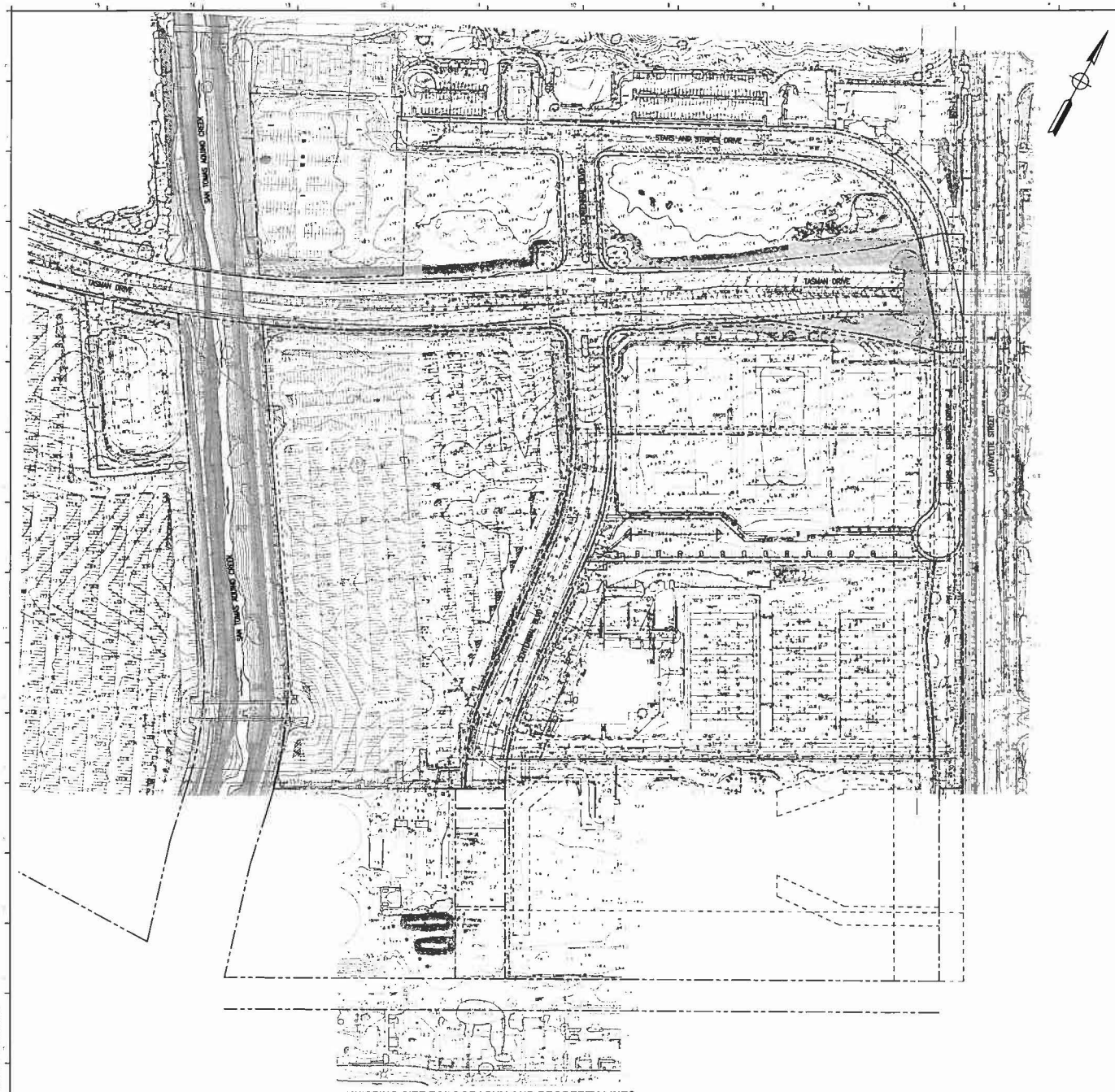
TRUE NORTH

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, 1987 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 SCWID 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

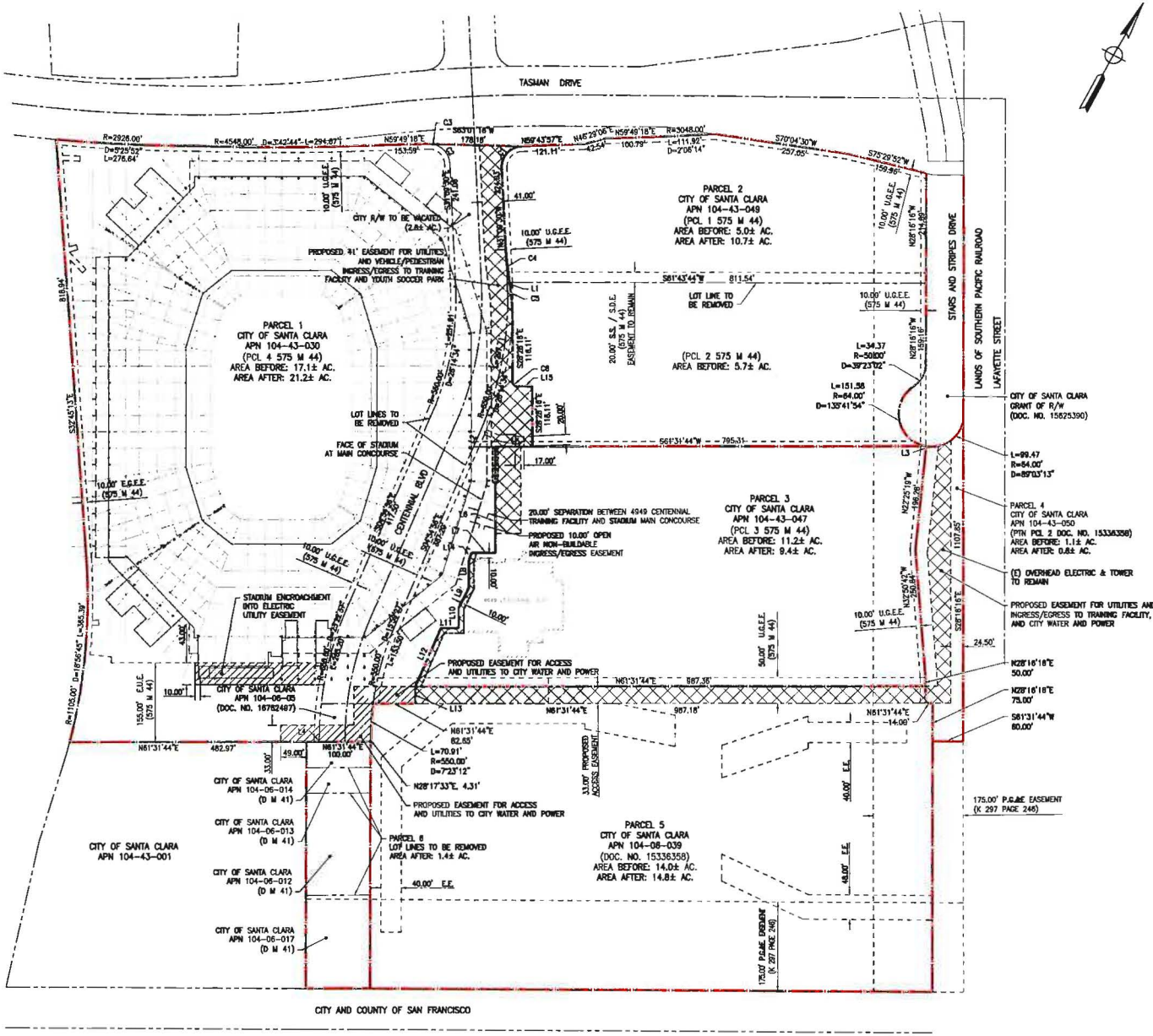
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

EXISTING SITE TOPOGRAPHY

CS-100

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



EXISTING AND PROPOSED PROPERTY LINES

1"=80'

LINE TABLE:		
LINE	BEARING	DISTANCE
L1	S31°09'30"E	3.94'
L2	S04°54'58"E	30.30'
L3	N28°16'16"W	7.03'
L4	S28°17'33"E	4.82'
L5	S81°31'44"W	71.43'
L6	S28°28'16"E	208.18'
L7	S81°31'44"E	196.70'
L8	S28°28'16"E	52.11'
L9	S01°58'32"E	43.87'
L10	S28°28'16"E	40.05'
L11	N81°31'44"E	34.80'
L12	S04°55'36"E	105.94'
L13	N28°28'16"E	33.00'
L14	S11°52'42"E	18.27'
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

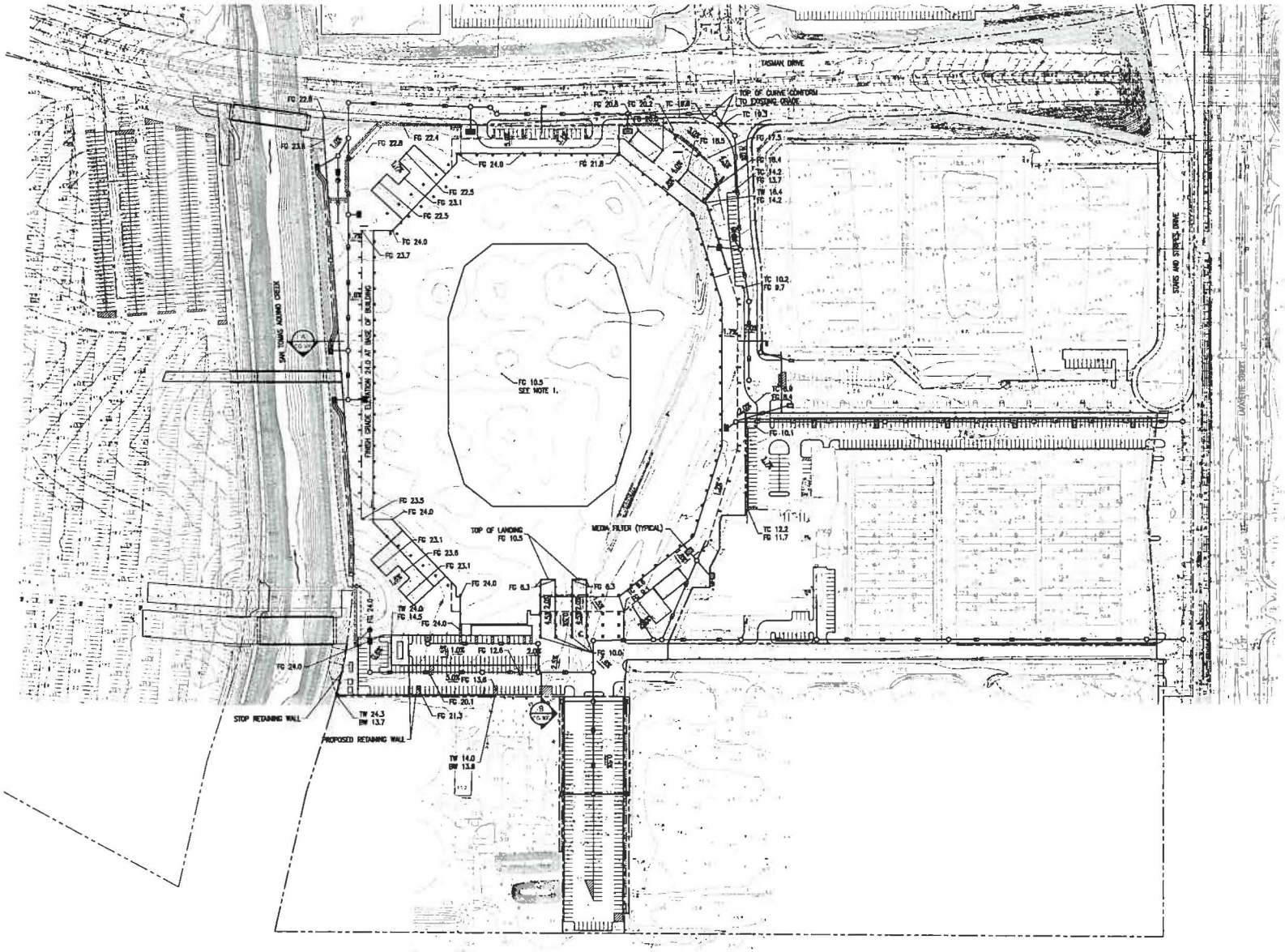
49ERS
SAN FRANCISCO
49ERS NEW STADIUM

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.

HNTB

SAN FRANCISCO 49ERS NEW STADIUM

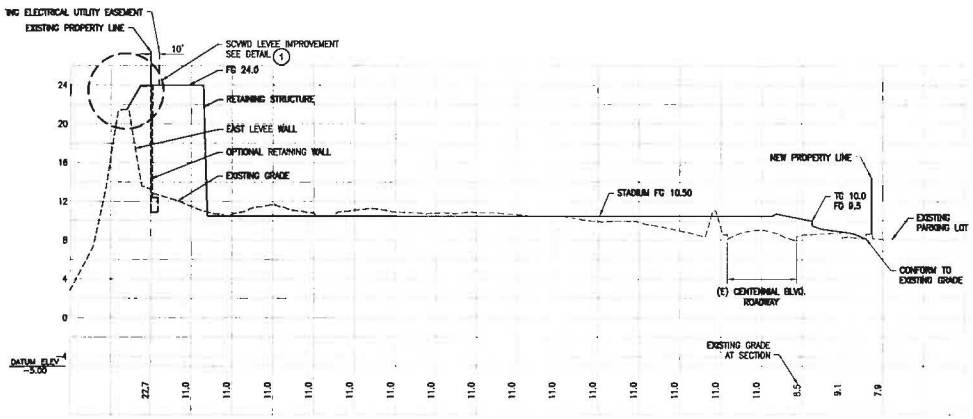
PLAN NORTH

TRUE NORTH

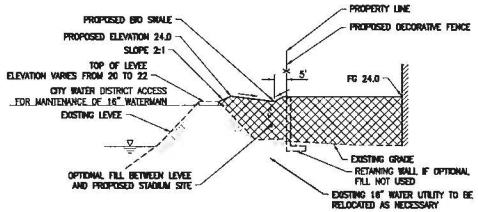
PRELIMINARY GRADING AND DRAINAGE PLAN

CG-100

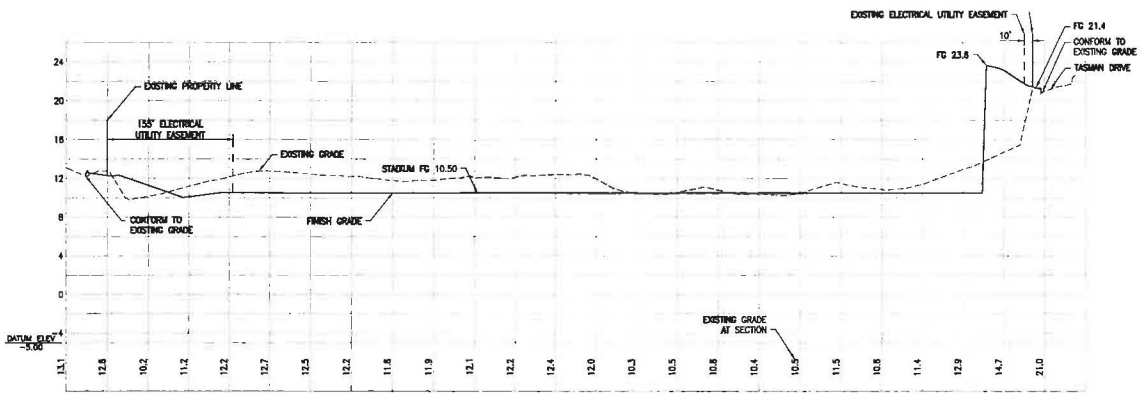
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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



1 TYPICAL SECTION - SCVWD LEVEE IMPROVEMENT
SCALE: NOT TO SCALE



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

HNTB

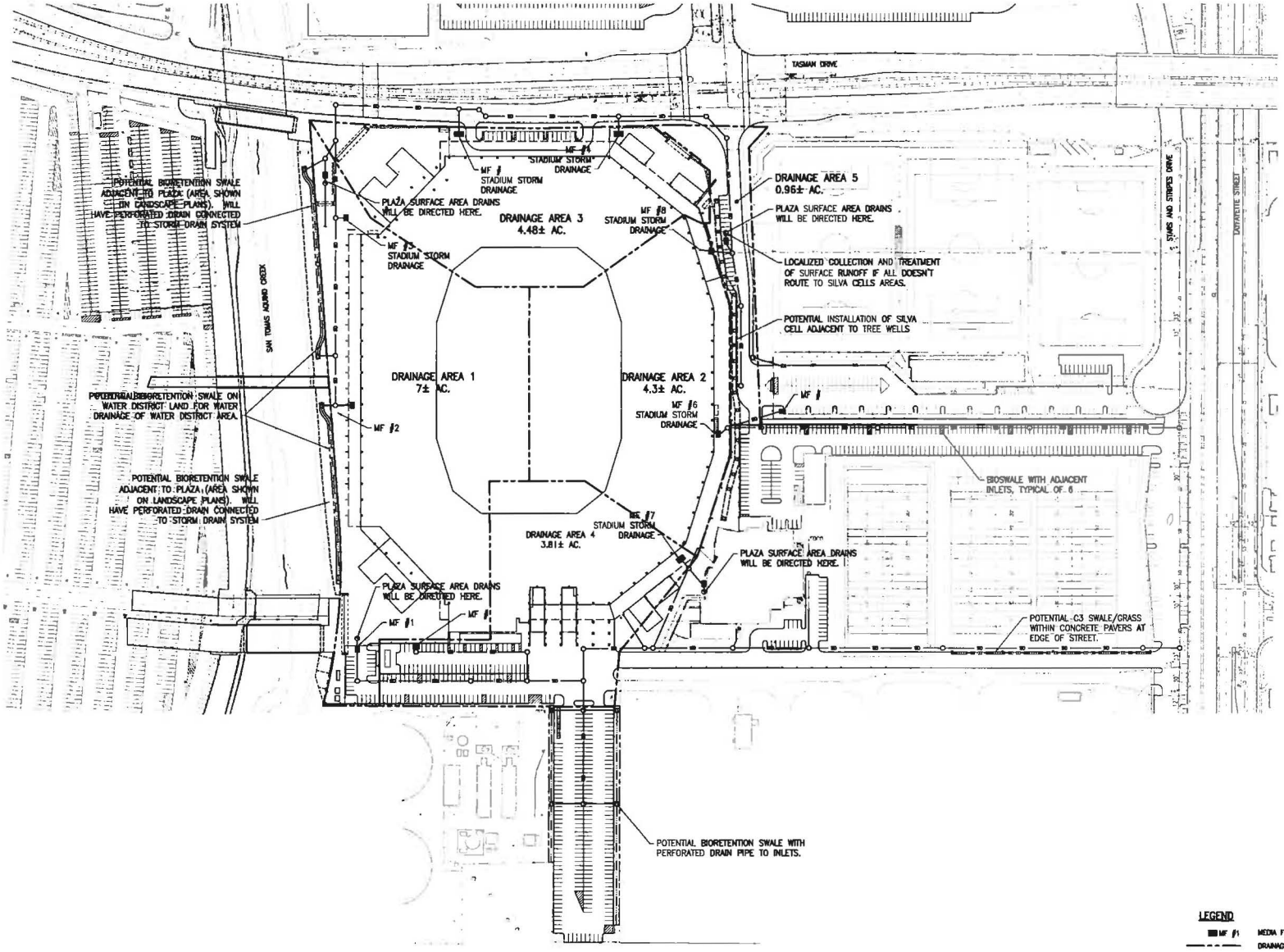
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

PRELIMINARY GRADING AND DRAINAGE SECTION

CG-300

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



STORM WATER MANAGEMENT PLAN

SCALE: 1"=80'

0' 80' 160'

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

LEGEND

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

FILTER TYPES

#1–3 DIMS=8'Wx12'L, WITH 9 CARTRIDGES
#4 DIMS=10'Wx18'L, WITH 16 CARTRIDGES
#5–6 DIMS=8'Wx12'L, WITH 9 CARTRIDGES
#7 DIMS=10'Wx16'L, WITH 14 CARTRIDGES
#8 DIMS=4'Wx11'L, WITH 4 CARTRIDGES

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

HNTB

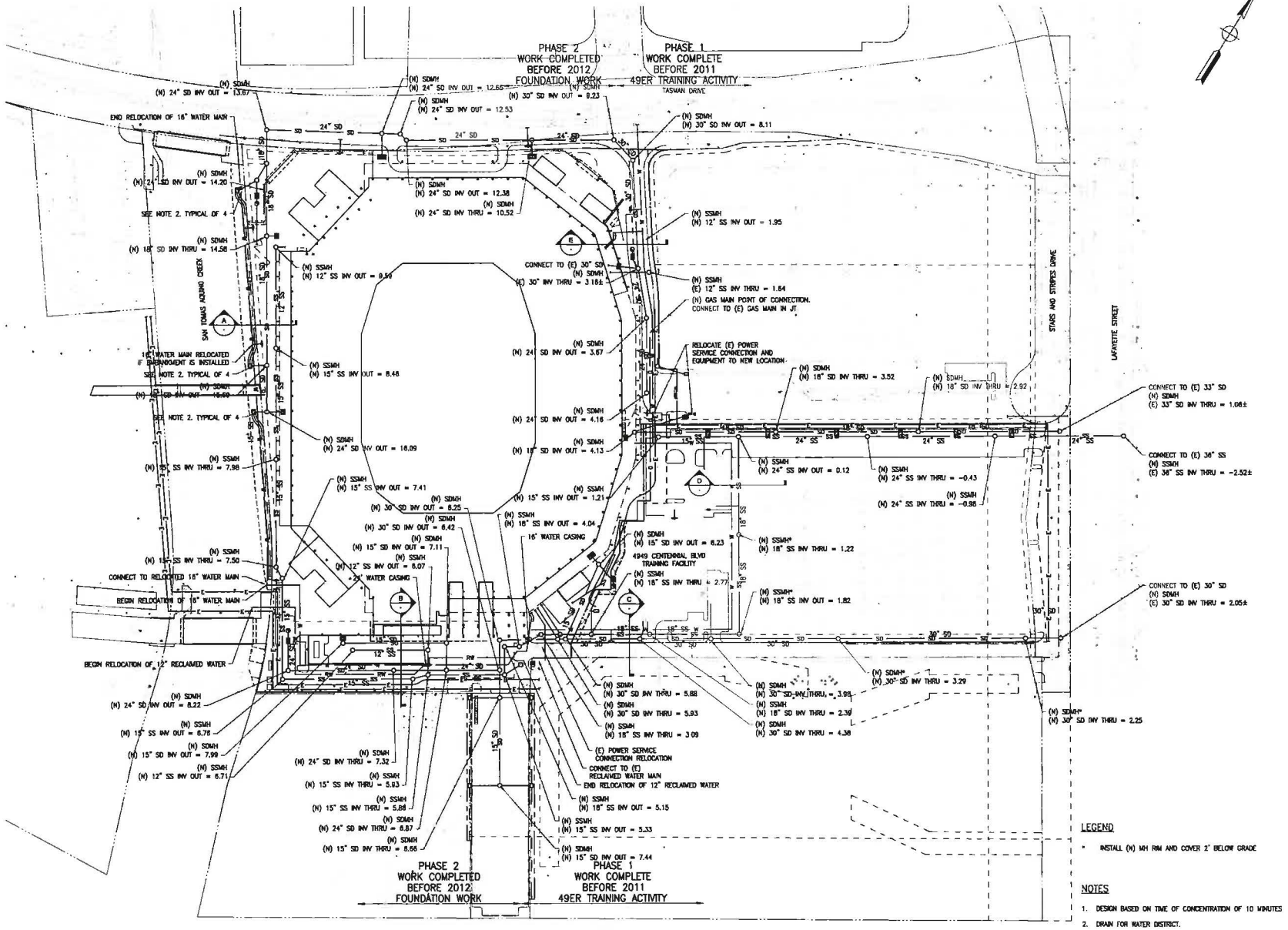
SAN FRANCISCO
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

STORM WATER MANAGEMENT PLAN

CG-400

05/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



COMPOSITE UTILITY PLAN

SCALE 1"=80'

0' 80' 160'

PRELIMINARY NOT FOR CONSTRUCTION

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.

HNTB

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

SAN FRANCISCO 49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054-1229

DATE 06/30/2010
DRAWN BY
FOR DEVELOPMENT
PROJECT NO. 34916
DRAWN BY AVTS
CHECKED BY KM
APPROVED BY MK

#	DATE	DESCRIPTION
1	06/30/2010	REVISED FOR FINAL PLANNED DEVELOPMENT
2	10/15/2010	FINAL PLANNED DEVELOPMENT

COMPOSITE UTILITY PLAN

CU-100

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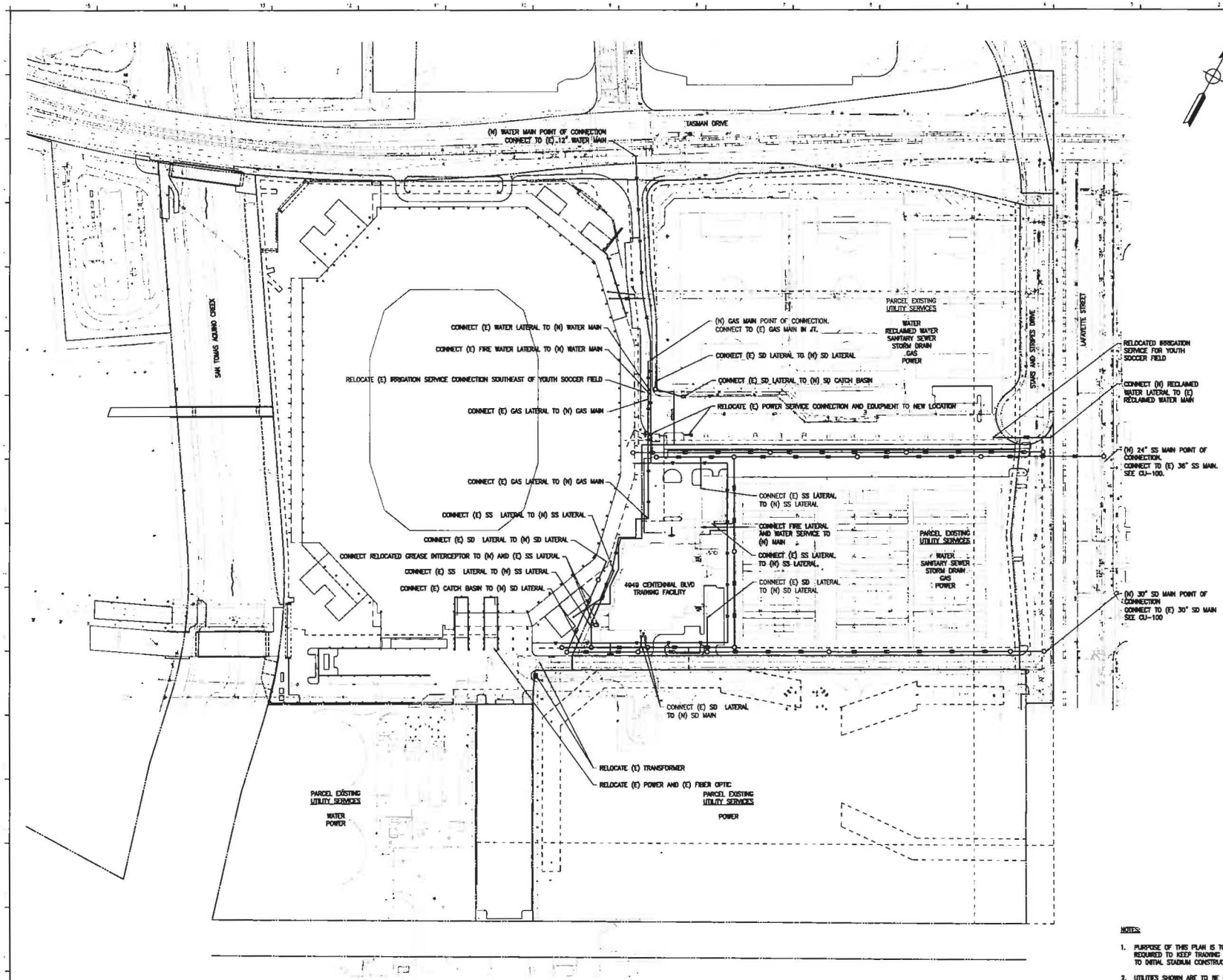
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



PHASE 1 UTILITY PLAN

SCALE 1"=80'

0' 80' 160'

NOTES:

1. PURPOSE OF THIS PLAN IS TO IDENTIFY THE UTILITIES REQUIRED TO KEEP TRADING 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.

HNTB

49ERS

SAN FRANCISCO
49ERS NEW STADIUM

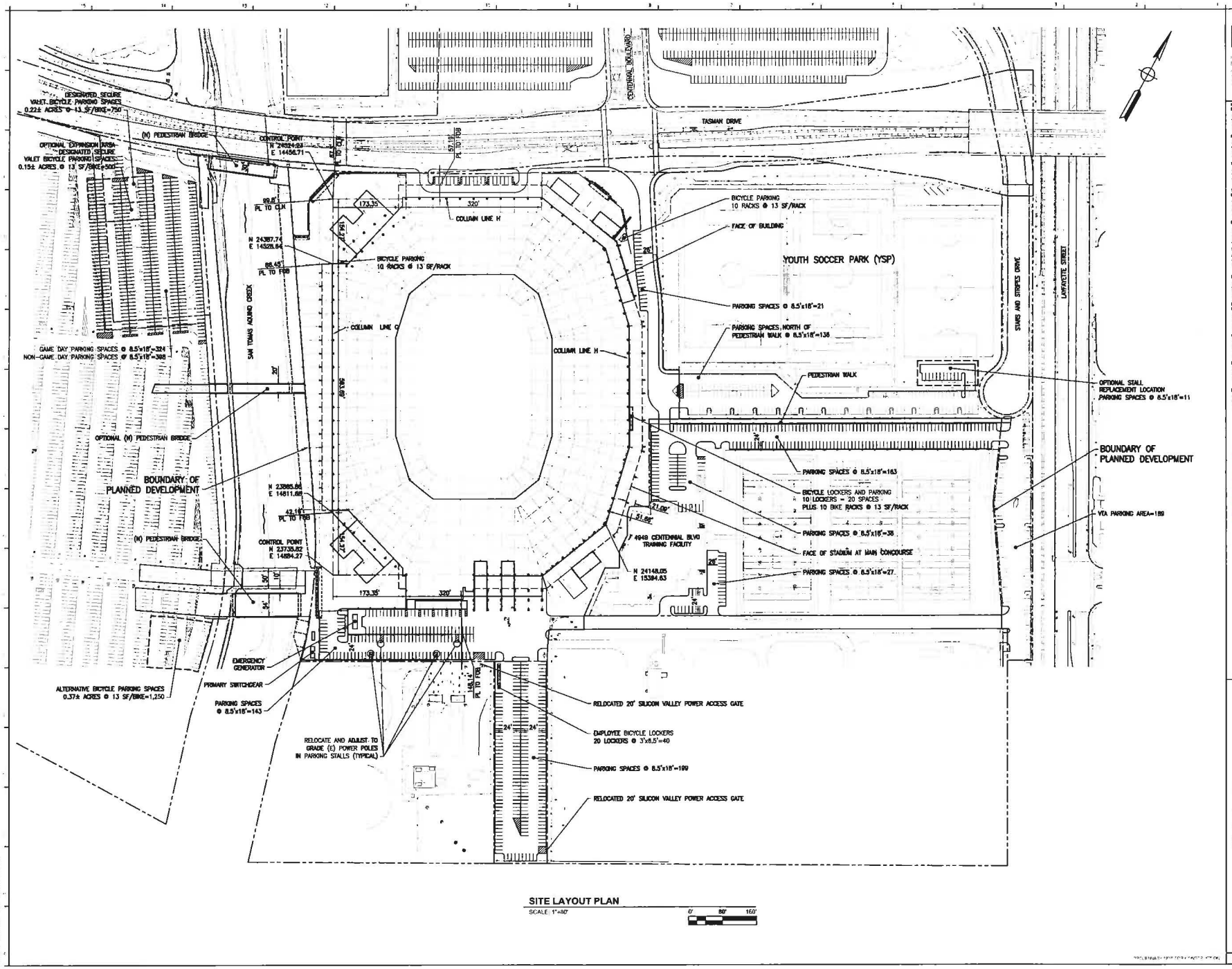
PLAN NORTH

TRUE NORTH

PHASE 1 UTILITY PLAN

CU-101

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



SITE LAYOUT PLAN

SCALE: 1"=80'

0' 80' 160'

HNTB

SAN FRANCISCO 49ERS NEW STADIUM

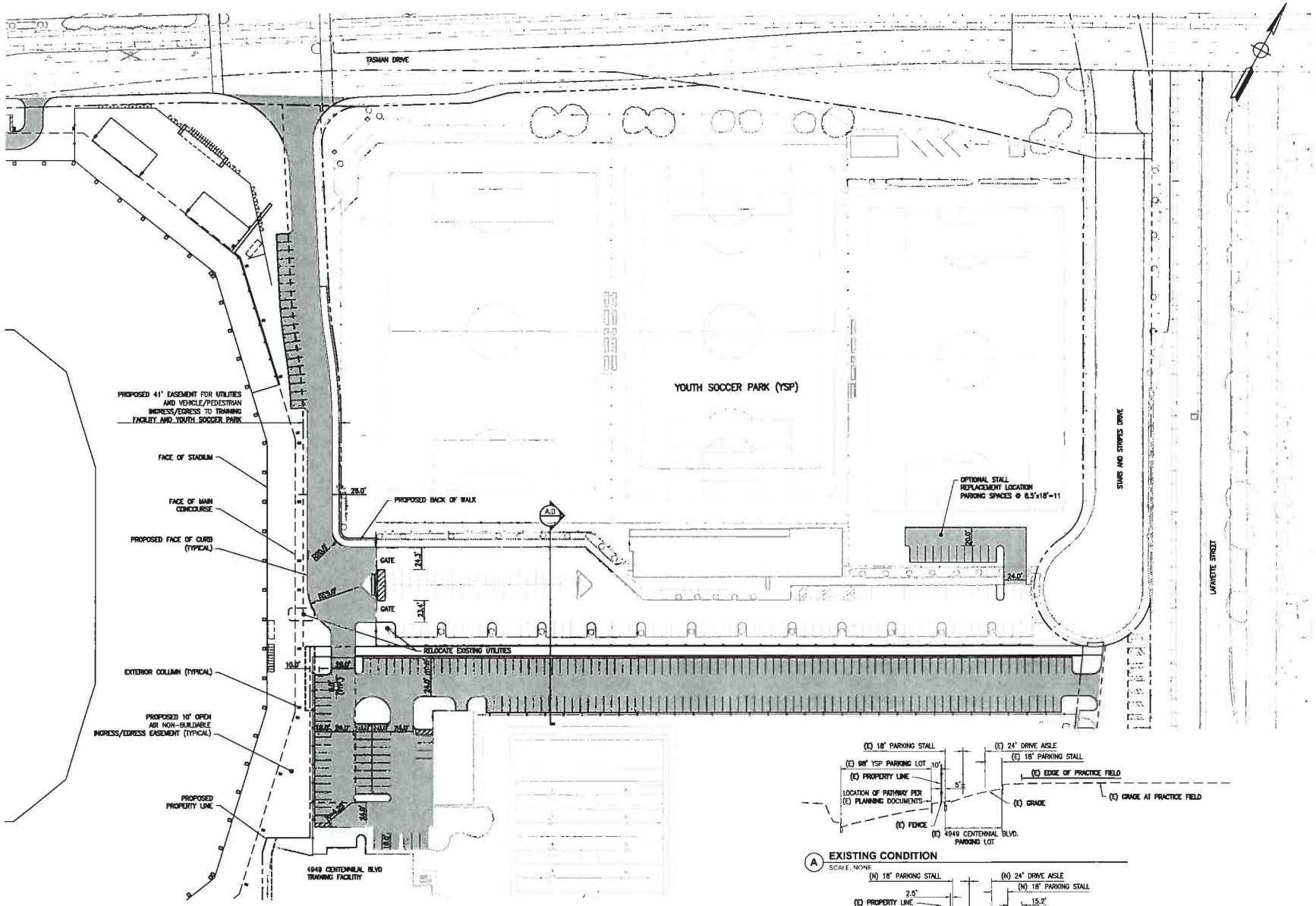
PLAN NORTH

TRUE NORTH

SITE LAYOUT PLAN

CI-100

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



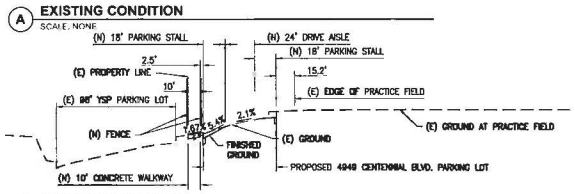
YOUTH SOCCER PARK ENTRY

SCALE 1"=40'

0' 40' 80'

A EXISTING CONDITION

SCALE: NONE



B PROPOSED SECTION

SCALE: NONE

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49ERS NEW STADIUM

PLAN NORTH

TRUE NORTH

YOUTH SOCCER PARK ENTRY

CI-101

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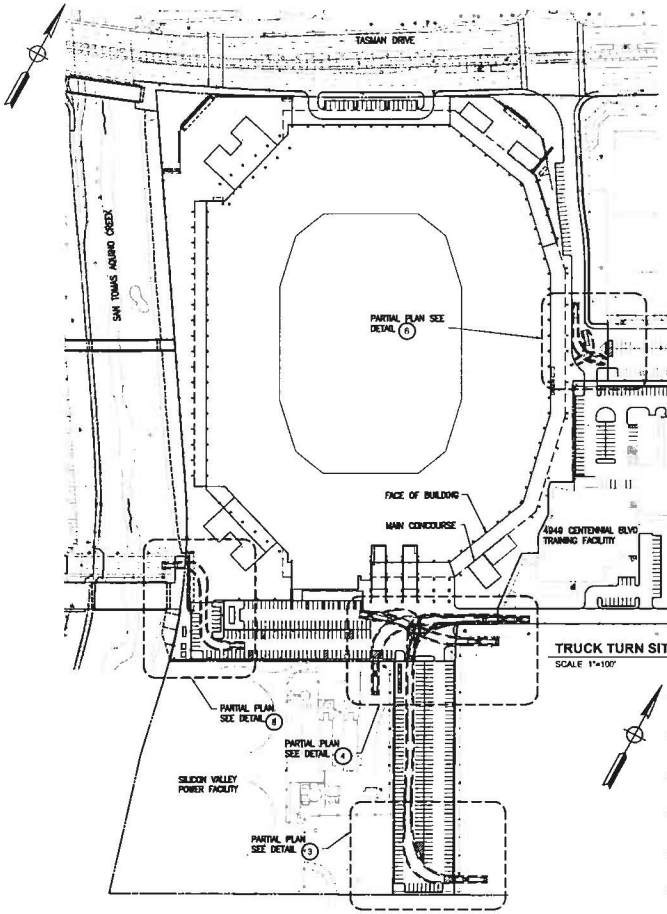
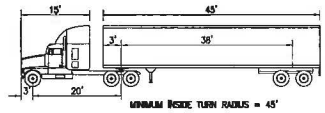
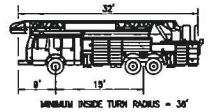


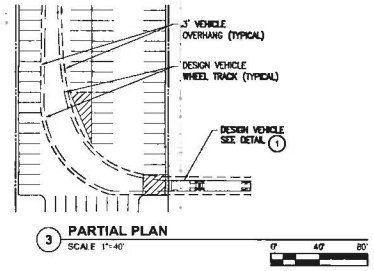
TRUCK TURN SITE PLAN
SCALE 1"=100'



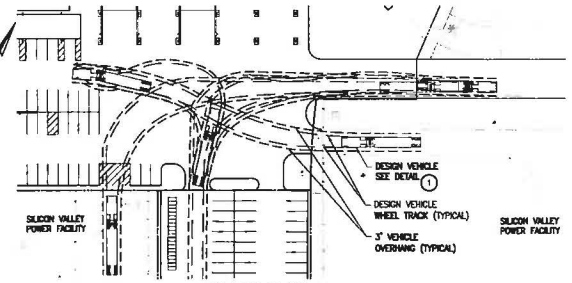
1 TRACTOR-TRAILER
SCALE: NOT TO SCALE



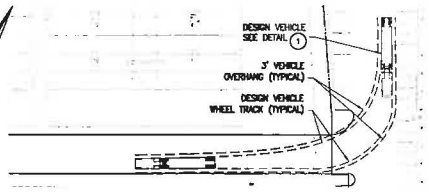
2 FIRE ENGINE
SCALE: NOT TO SCALE



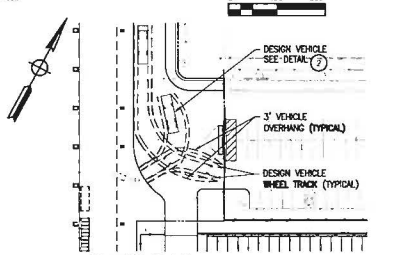
3 PARTIAL PLAN
SCALE 1"=40'



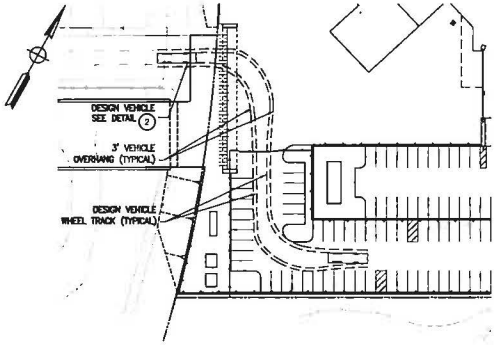
4 PARTIAL PLAN
SCALE: 1"=40'



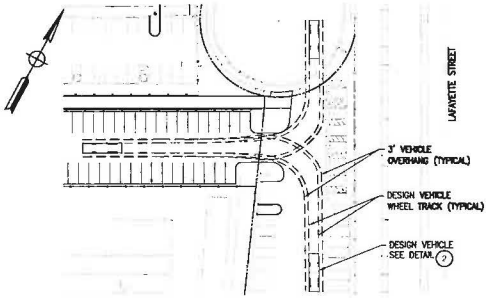
5 PARTIAL PLAN
SCALE: 1"=40'



6 PARTIAL PLAN
SCALE: 1"=40'



8 PARTIAL PLAN
SCALE: 1"=40'



7 PARTIAL PLAN
SCALE: 1"=40'

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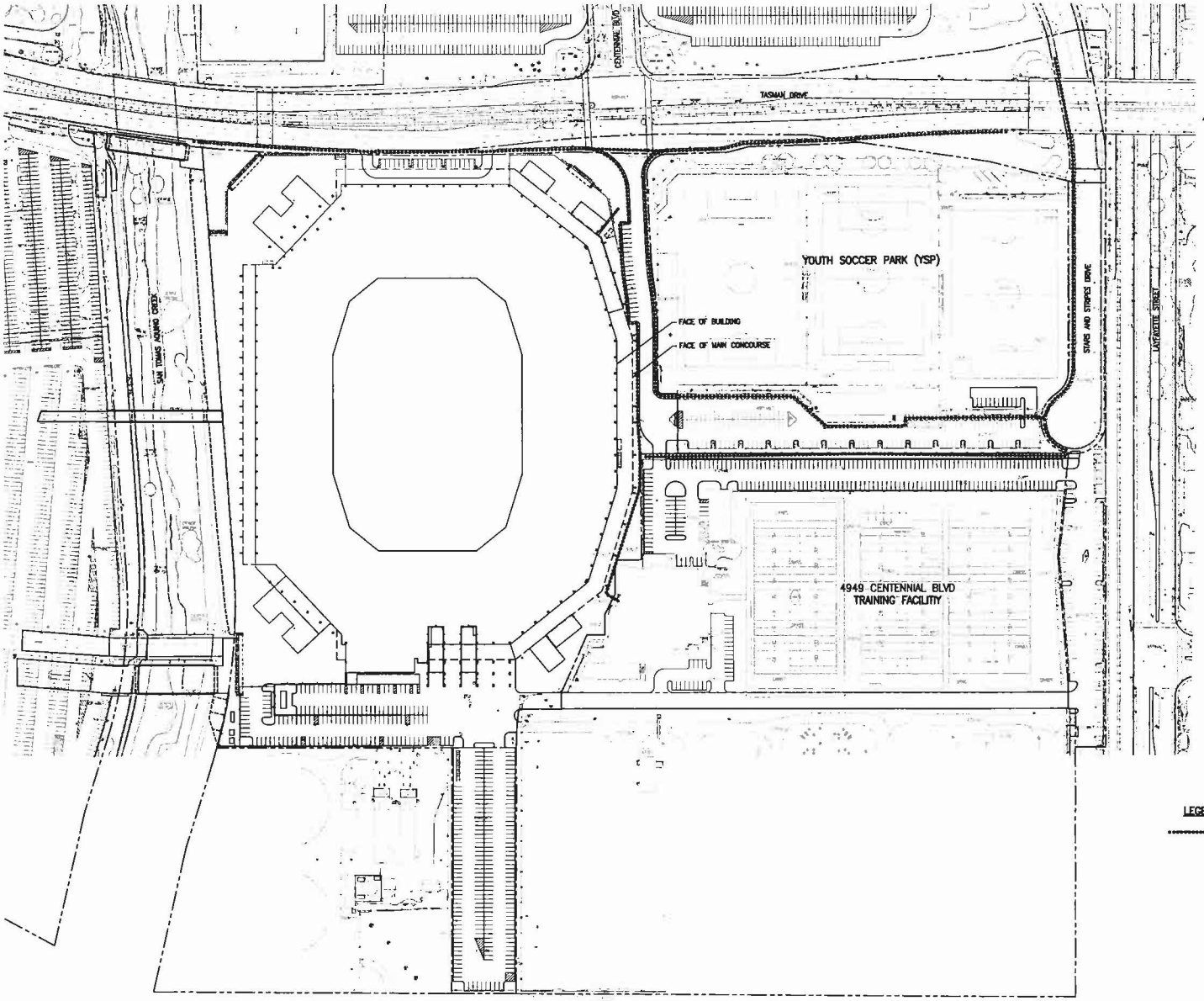
49ERS NEW STADIUM

PLAN NORTH
TRUE NORTH

TRUCK TURN ANALYSIS

CI-400

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



LEGEND

PATH OF TRAVEL

ADA PATH OF TRAVEL

SCALE: 1"=80'

0' 80' 160'

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054

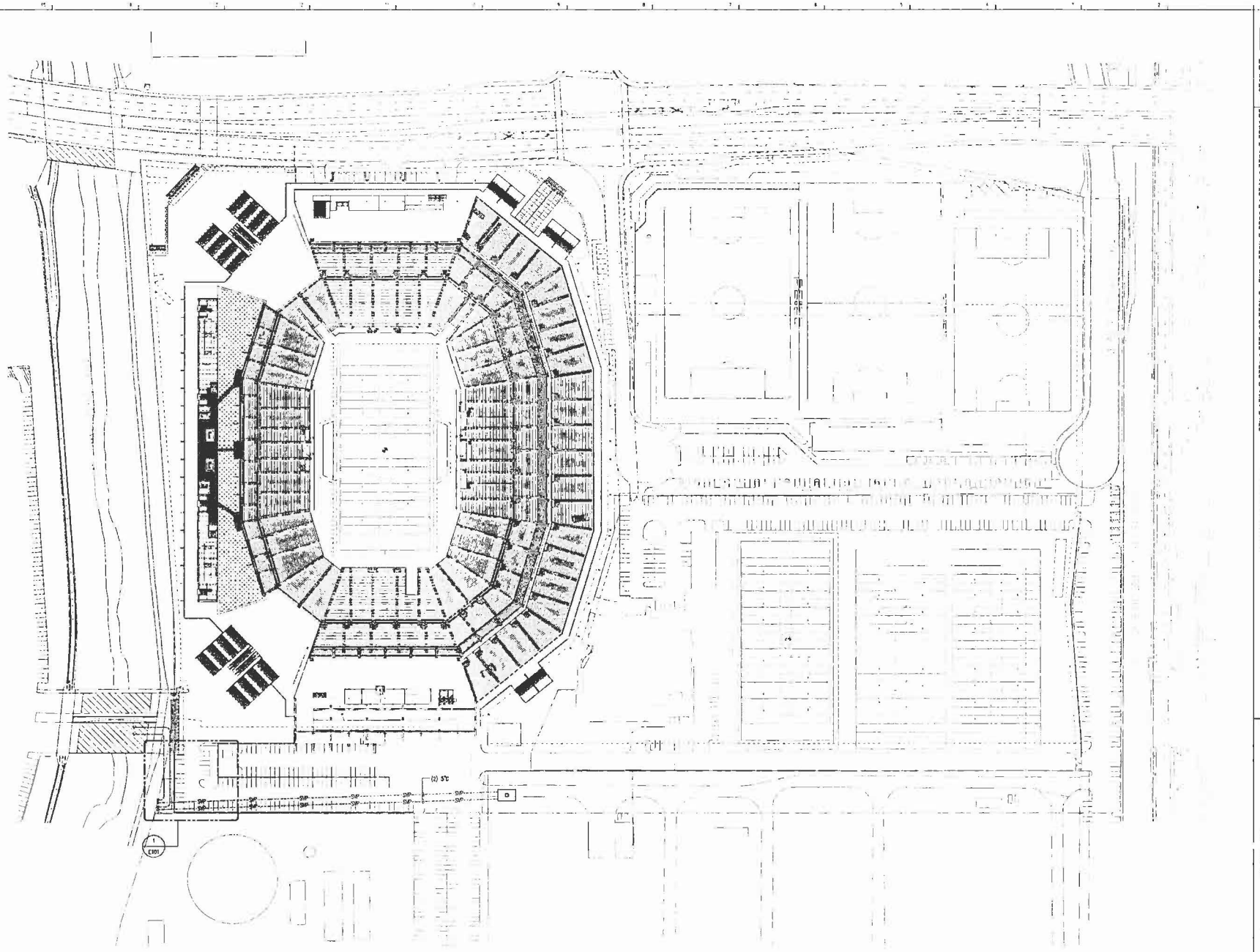
PLAN NORTH

TRUE NORTH

ADA PATH OF TRAVEL

CI-401

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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

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Fax: (415) - 292 - 1301

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Fax: (925) - 970 - 8863

DAV Associates - Fortnie Hall
3002 West Crestmoor Drive
Nashville Village, CA 91302
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Fax: (805) - 776 - 0804

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Orange Beach, AL 94171
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13970 West Dunlap Avenue, Suite 800
Littleton, CO 80127
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Fax: (303) - 791 - 3001

Wilgrove, Johnson, Hudson & Williams, Inc. - AV
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Phoenix, AZ 85012
Ph: (602) - 468 - 1536

SAN FRANCISCO
49ERS NEW STADIUM
4949 Centennial
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PLAN NORTH
TRUE NORTH

DATE 06/30/2010
SCALE 1/64" = 1'-0"
PROJECT NO. 510 17380 00
DRAWN BY
CHECKED BY
APPROVED BY

SHEET TITLE & NUMBER
ELECTRICAL SITE PLAN

E100

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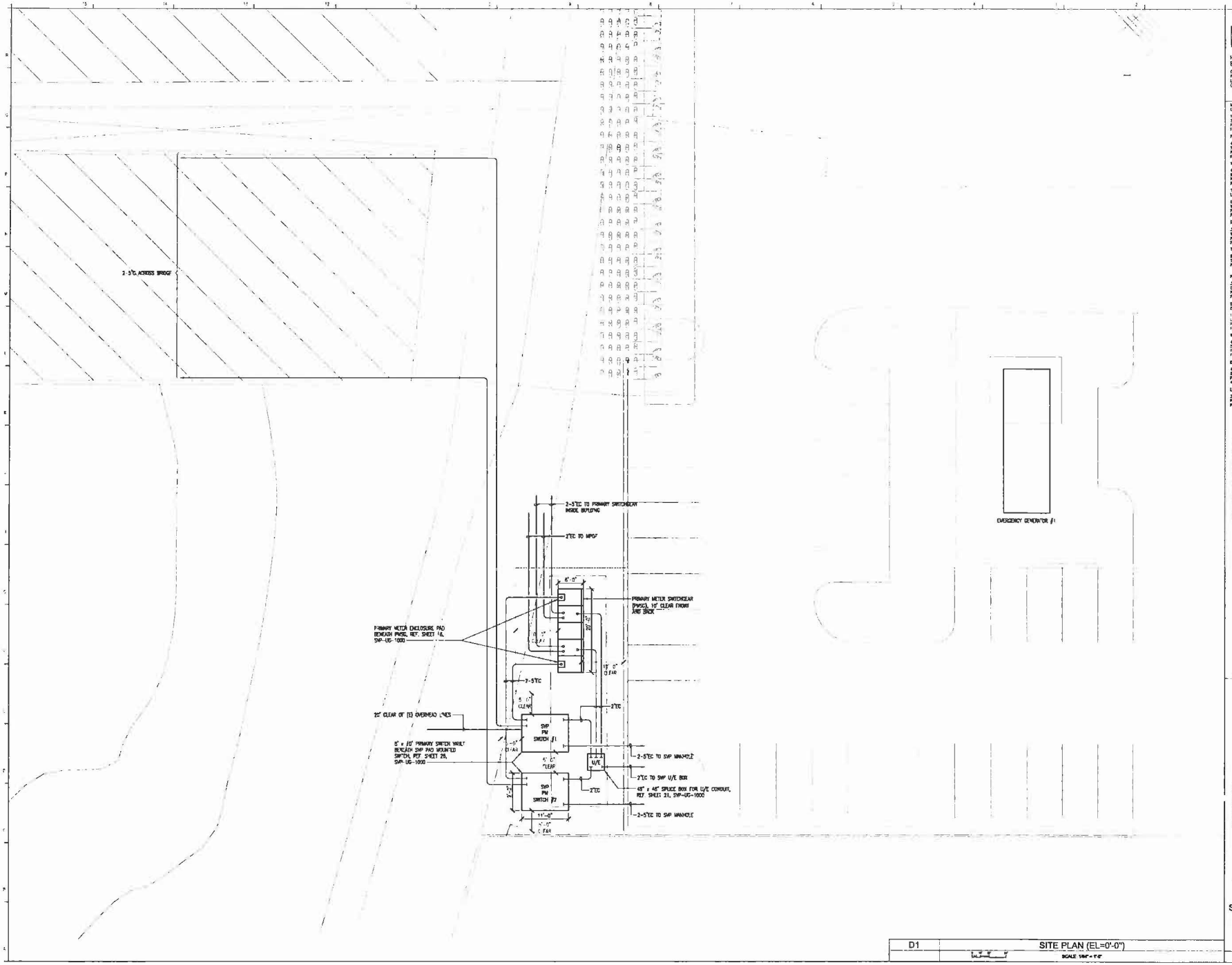

D1 SITE PLAN (EL=0'-0")

SCALE 1/16" = 1'-0"

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One Tower of
801 South Grand Street, Suite 1010
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Fax: (925) - 979 - 0843

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Mapleton Utah 84302
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SAN FRANCISCO 49ERS NEW STADIUM

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Santa Clara, CA 95054-1229

PLAN NORTH

TRUE NORTH

DATE 06/30/2010

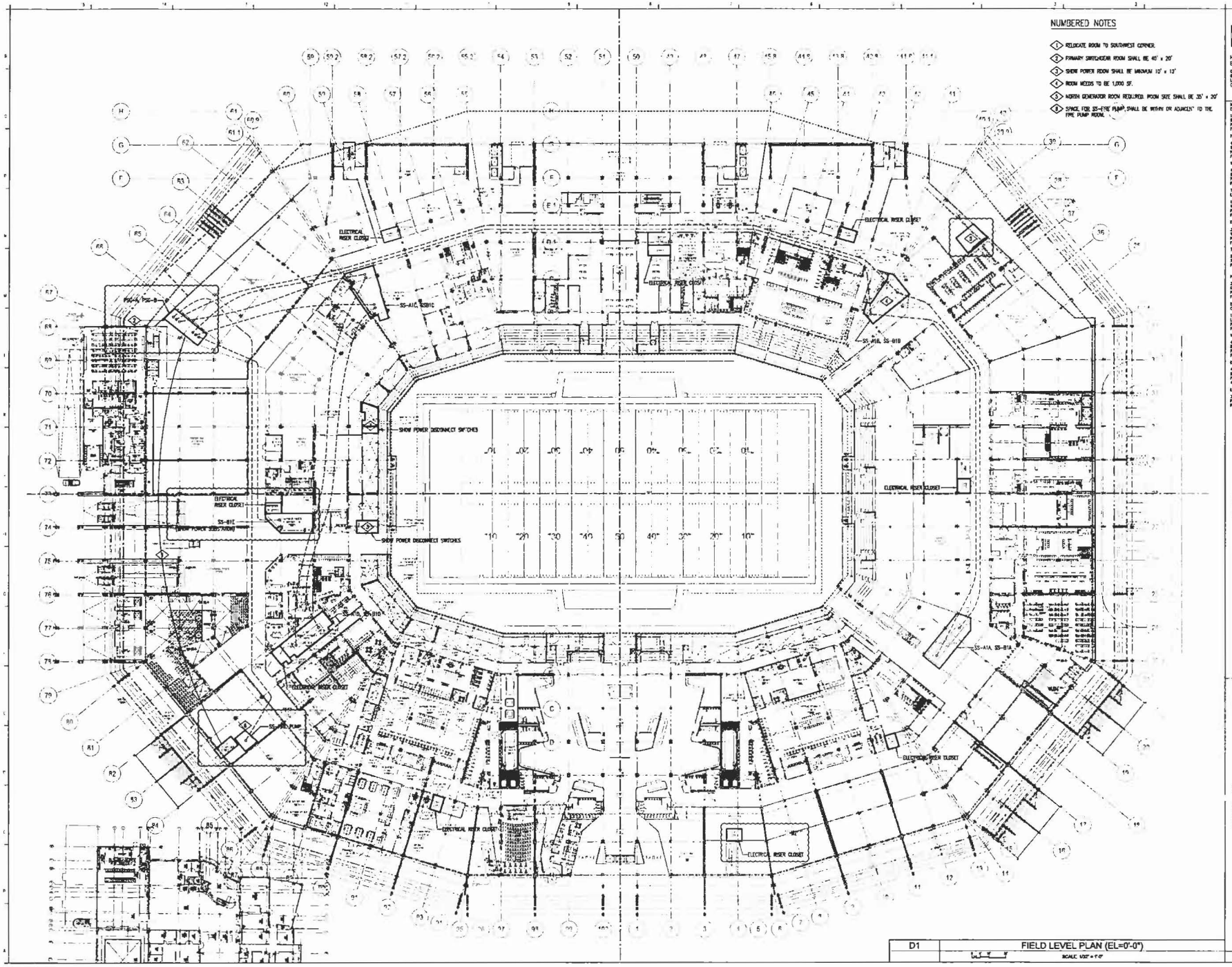
910.17380.00

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 12' 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.

D1	FIELD LEVEL PLAN (EL=0'-0")
	SCALE: 1/32" = 1'-0"

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PLAN NORTH

TRUE NORTH

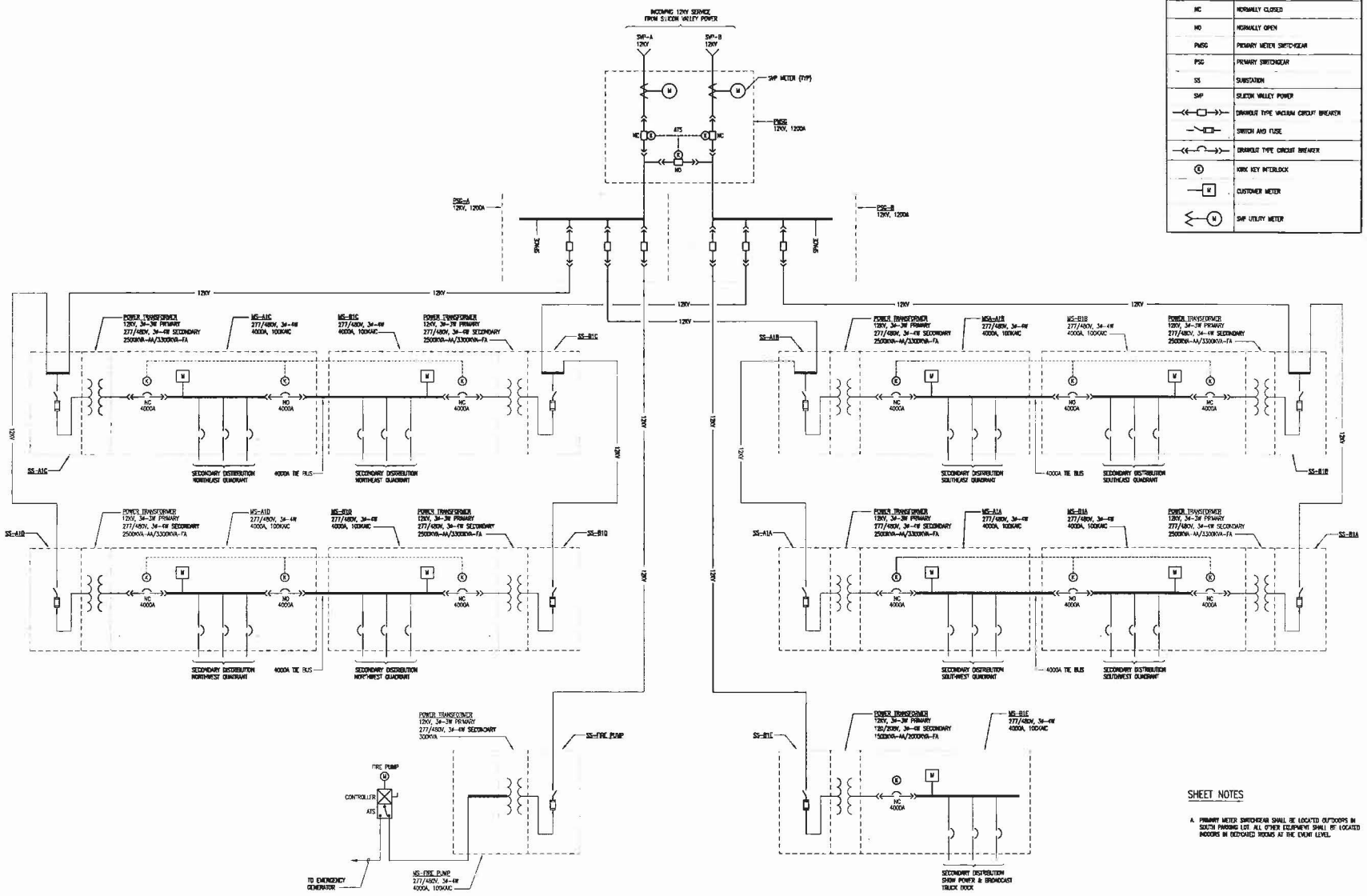
DATE 06/30/2010

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
M	CUSTOMER METER
M	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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SAN FRANCISCO 49ERS NEW STADIUM

4949 Centennial Santa Clara, CA 95054-1229

PLAN NORTH

TRUE NORTH

DATE: 06/30/2010

PROJECT NO: 510.17380.00

DRAWN BY:

CHECKED BY:

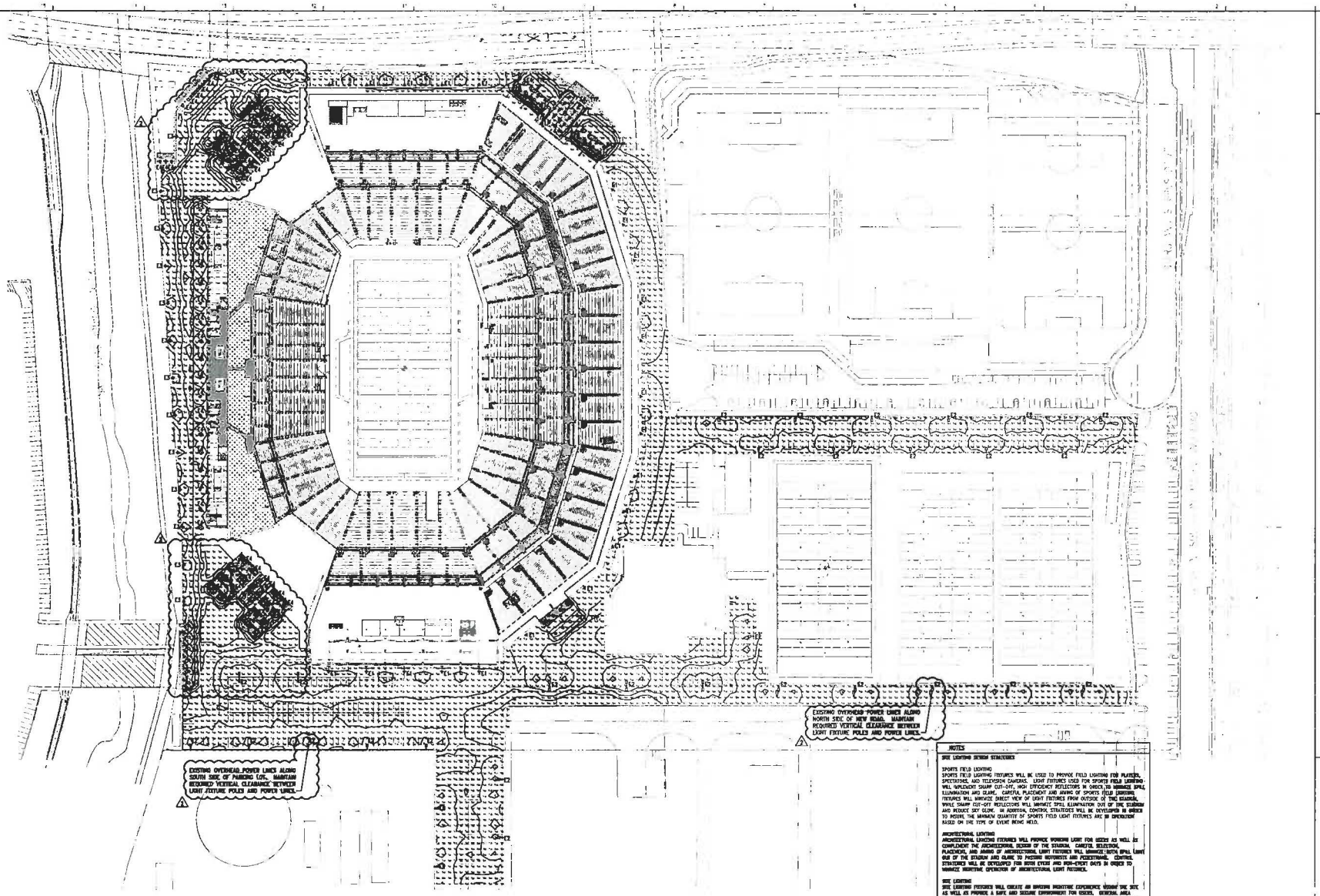
APPROVED BY:

SHEET TITLE & NUMBER

PRIMARY ELECTRIC SERVICE DIAGRAM

E401

06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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 SUFFICIENT LIGHT FOR SAFETY 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 SOME EVENT AND NON-EVENT DAYS IN ORDER TO MINIMIZE NIGHTTIME OPERATION OF ARCHITECTURAL LIGHT FIXTURES.

SITE LIGHTING
SITE LIGHTING FIXTURES WILL CREATE AN ENHANCED NIGHTTIME EXPERIENCE WITHIN THE SITE AS WELL AS PROVIDE A SAFE AND SECURE ENVIRONMENT FOR VISITORS. 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 HOUSE SIDE SHIELDS TO MINIMIZE PROJECTION OF LIGHT BEYOND THE 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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Wheeler & Gray - Civil Engineers
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PPP Associates - Exhibit Hall
3000 West Cornelison Drive
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Fax: (303) - 791 - 8001

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

PLAN NORTH
TRUE NORTH

DATE: 06/30/2010
SHEET ITEM:
PROJECT #: 310.17380.00
PROJECT:
DRAWN BY:
APPROVED BY:

		SCALE: AS NOTED	

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

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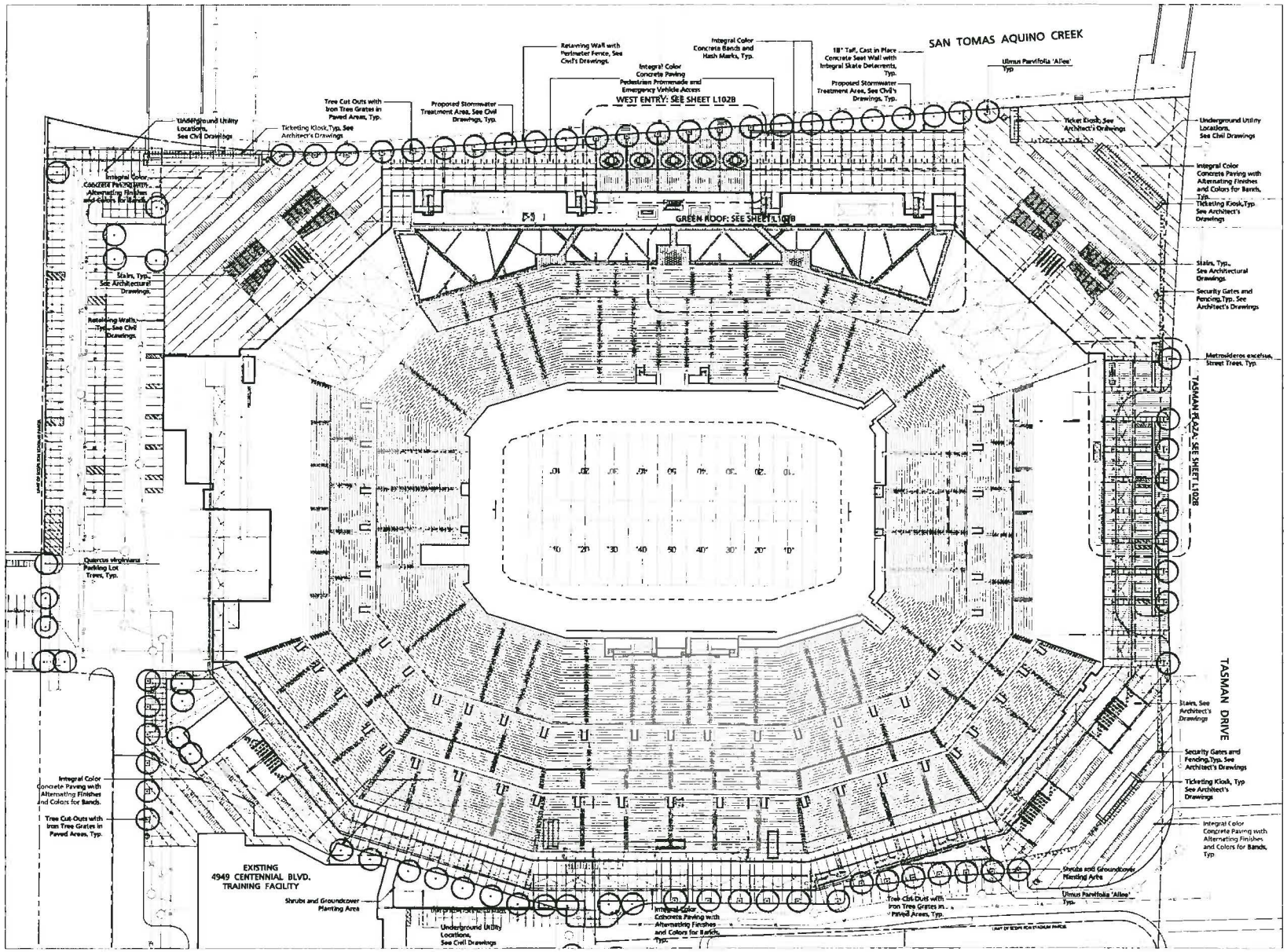
06/30/2010 FINAL PLANNED DEVELOPMENT RESUBMITTAL PACKAGE



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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.	31953
DRAWN BY	
CHECKED BY	

APPROVED BY			
1	04/16		Revised Zoning Plans, HNTB
2	01/27/2010		Revised Zoning Plans, HNTB
3	06/30/2010		Revised Zoning Plans, HNTB

SHEET TITLE & NUMBER

PRELIMINARY LANDSCAPE PLAN

L100

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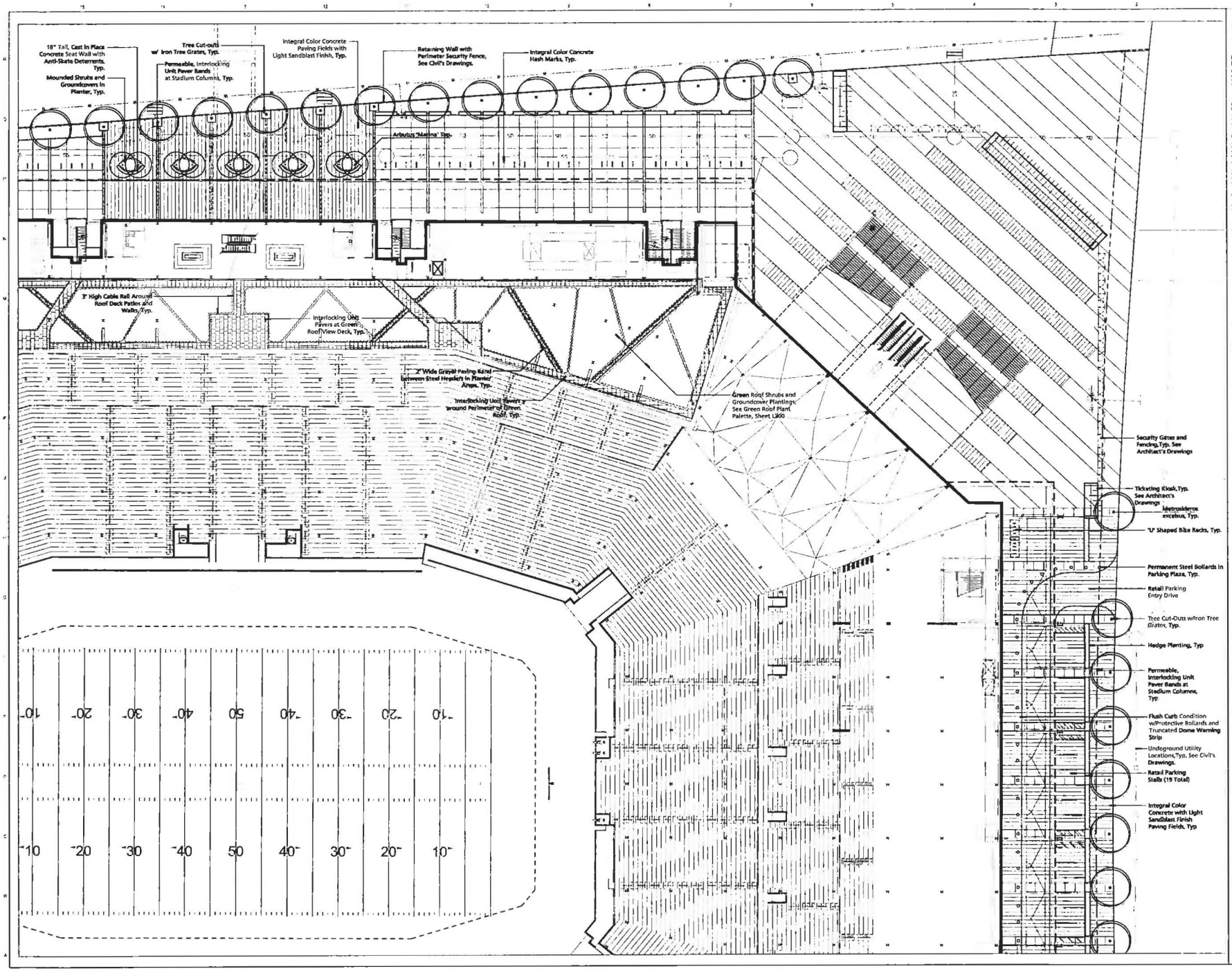
06/30/2010 Final Planned Development Resubmittal



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49ERS

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49ERS NEW STADIUM

4949 Centennial Blvd.
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C B
D A

PLAN NORTH
TRUE NORTH

Scale 1" = 20'

DATE 8/20/2010
SELECTOR Final Planned Development Resubmittal
PROJECT NO. 54856
DRAWN BY
CHECKED BY
APPROVED BY

#	DATE	DESCRIPTION
1	08/27/2010	Planned Zoning Resubmittal
2	10/29/2010	Planned Zoning Resubmittal

SHEET TITLE & NUMBER

LANDSCAPE PLAN ENLARGEMENT

L102B

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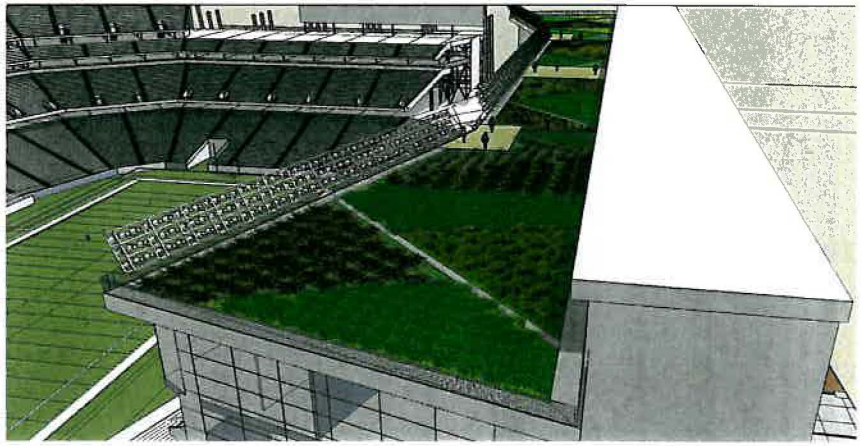
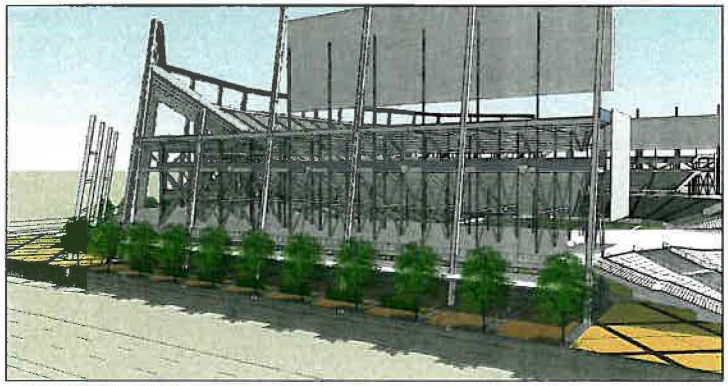
Final Planned Development Resubmittal

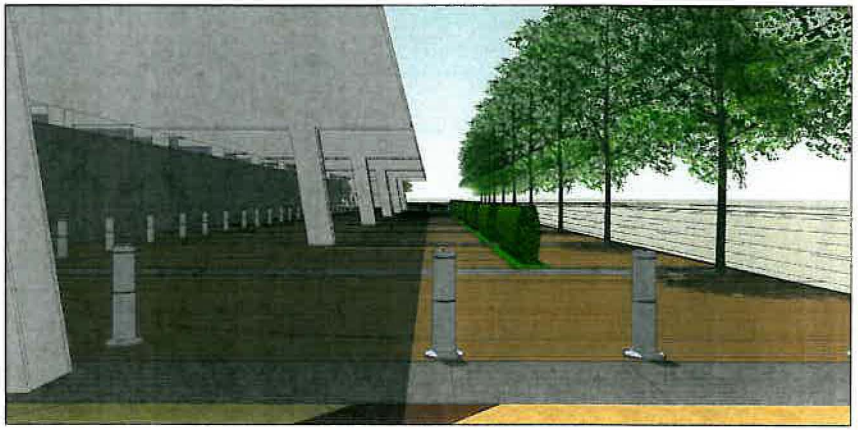
West Stadium Entrance looking West



Green Roof looking Southwest



Tasman Plaza Streetscape



Tasman Plaza looking North

HNTB

SAN FRANCISCO
49ERS NEW STADIUM

SHEET TITLE & NUMBER
LANDSCAPE
PERSPECTIVES

L200

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 6 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.

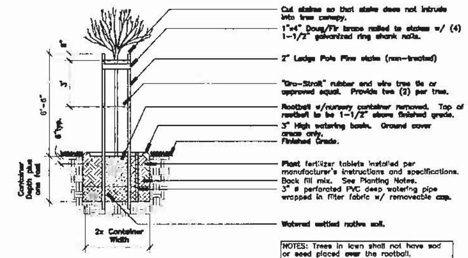
TREE PROTECTION/PRUNING NOTES

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 fifteen 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:

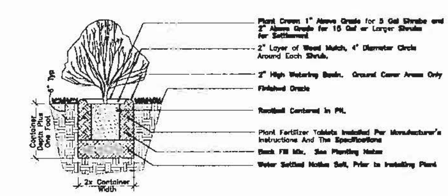
   A. All specifications for working on protected trees shall be written and administered by a qualified arborist.

   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					

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING**/COMMENTS	QUANTITY
SHRUBS					
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 as 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 'Monrovia 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					

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING**/COMMENTS	QUANTITY
GREEN ROOF SHRUBS, PERENNIALS, and GRASSES					
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	90
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					

KEY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING/COMMENTS	QUANTITY
GROUNDCOVERS					
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

KEY	SIZE	BOTANICAL NAME	COMMON NAME	COMMENTS	QUANTITY
VINES					
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

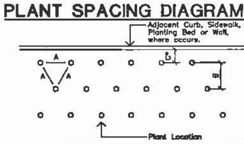


Diagram for use when plants are spaced equidistant from each other as in all ground cover plantings and massed shrub plantings

PLANT CALLOUT SYMBOL

Quantity (or See Spacing Comments)
Plant Key (See Plant List)

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

BVY Associates - Curtain Wall

The Guzzardo Partnership, Inc. Landscape

Lloyd Engineering Turf Consultant

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

ISSUED FOR: Final Planned Development Resubmittal

SHEET TITLE & NUMBER
LANDSCAPE NOTES AND DETAILS
L300

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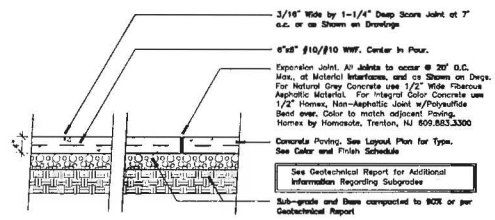
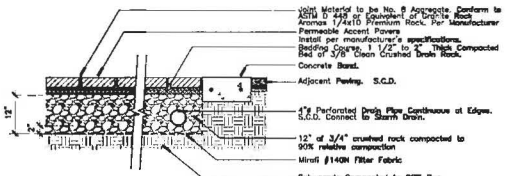


Pedestrian Concrete Paving

Scale: 1"=1'-0"



Permeable Accent Paving

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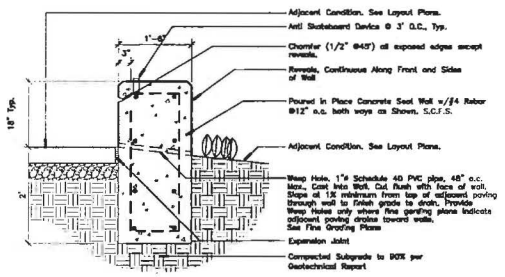
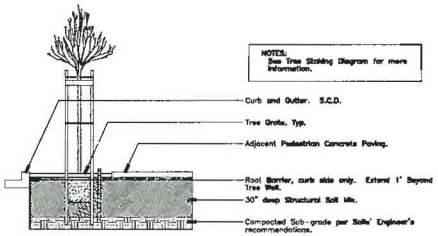


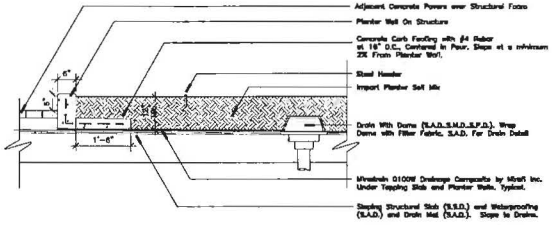
Seatwall

Scale: 1"=1'-0"



Street Tree w/ Structural Soil

not to scale



Green Roof Planter Wall

Scale: 3/4" = 1'

HNTB

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49ERS

SAN FRANCISCO
49ERS NEW STADIUM

4949 Centennial Blvd
Santa Clara, CA 95054-1229

DATE [illegible]
ISSUED FOR: Final Planned Development Resubmittal
PROJECT NO. [illegible]
DRAWN BY
CHECKED BY
APPROVED BY

2	DATE	APPROVED ON
1	[illegible]	Revised Dwg Resubmittal
0	[illegible]	Revised Dwg Resubmittal

SHEET TITLE & NUMBER

LANDSCAPE DETAILS

L301

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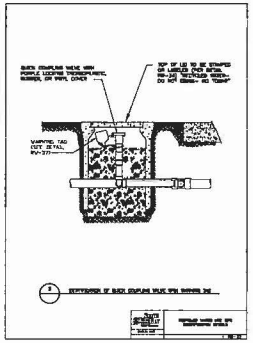
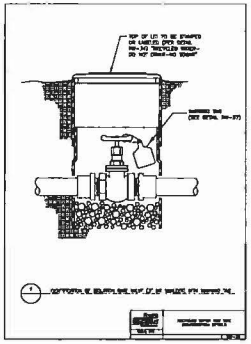
06/30/2010 Final Planned Development Resubmittal



1 SUPERVISOR OF BURY STANDARD VALVE WITH WARNING TAG



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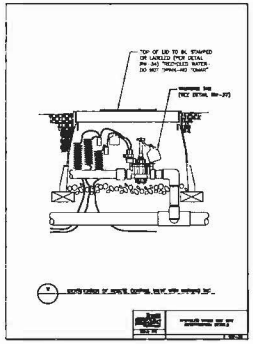

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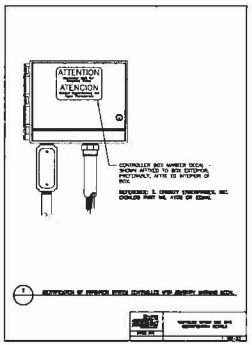
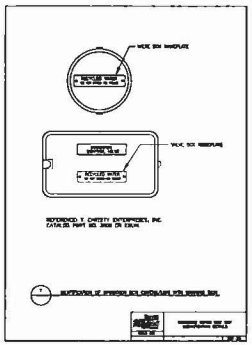
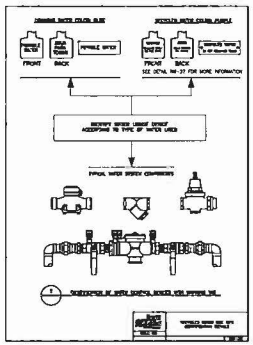


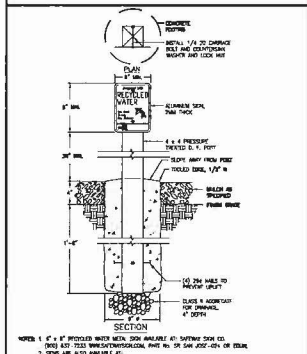
1 SUPERVISOR OF IRRIGATION SYSTEM CONTROLLER WITH WARNING WARNING DECAL



1 SUPERVISOR OF IRRIGATION BOX CONTROLLER WITH WARNING BOX

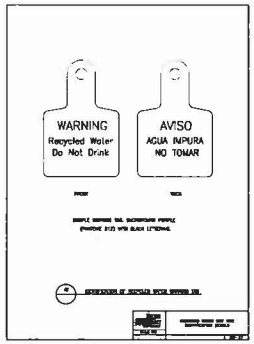


1 CONFIGURATION OF WATER SUPPLY BOXES WITH WARNING TAG



NOTES: 1. 6" x 8" RECYCLED WATER METAL SIGN AVAILABLE AT: SATEWAY SIGN CO. (800) 637-7233 WWW.SATEWAYSIGNS.COM, PART No. SR SAN JOSE-CON OR EQUAL
2. SIGNS ARE ALSO AVAILABLE AT: CITY OF SAN JOSE MUNICIPAL WATER SYSTEM, CUSTOMER SERVICE OFFICE 3025 TUERS RD. SAN JOSE, (408)243-4742, 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



SAMPLE WARNING TAG, BACKGROUND PURPLE (PANTONE 2120) WITH BLACK LETTERING

1 REFERENCE OF RECYCLED WATER WARNING TAG

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 POTABLE WELL BE CONNECTED 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 FIRE 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 ON SITE WATER SUPERINTENDENT MUST ALSO COMPLETE A SITE SUPERVISOR TRAINING CLASS OFFERED BY SBWR IN ORDER TO RECEIVE A PERMANENT PERMIT TO TAP WITHIN BETWEEN CONNECTION AND REMAINS THE SBWR ON OWNER WILL RECEIVE A TEMPORARY RECYCLED WATER PERMIT.

   CONTACT SBWR AT (408) 277-3671 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) 277-3671.

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, BEDDING);
   C. INSTALLATION OF SIGNS, TAGS, AND CONTROLLER DECALS.
   D. REQUIRED TEMPORARY CONNECTION TO POTABLE WATER SOURCE, 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 3 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 METHODS 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 CDOR 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 LINES 3 INCHES AND LARGER — 24 INCHES
   B. PRESSURIZED LINES 2 1/2 INCHES AND SMALLER — 18 INCHES
   C. INTERMITTENT-PRESSURE LINES — 12 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 REMOTE 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 BOTH 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 LABELED 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 SYE 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 RECEIVED AUTHORIZATION FROM SBWR TO SET RECYCLED WATER METERS.

22. NO OVERSPRAY OR RUNOFF OF RECYCLED WATER IS ALLOWED ON ANY NON-APPROVED USE AREA. POOLING 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 COMPLIANCE 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)]	745,689	Gallons
	99,665	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
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Lake Arrowhead, California 92352
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Ph: (602) 490-0535

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

DATE	8/10/2010
ISSUED FOR:	Final Planned Development Resubmittal
PROJECT NO.	54888
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

#	DATE	DESCRIPTION
1	03/31/2010	Planned Zoning Resubmittal
2	06/30/2010	Planned Zoning Resubmittal

SHEET TITLE & NUMBER
IRRIGATION NOTES AND DETAILS
L400

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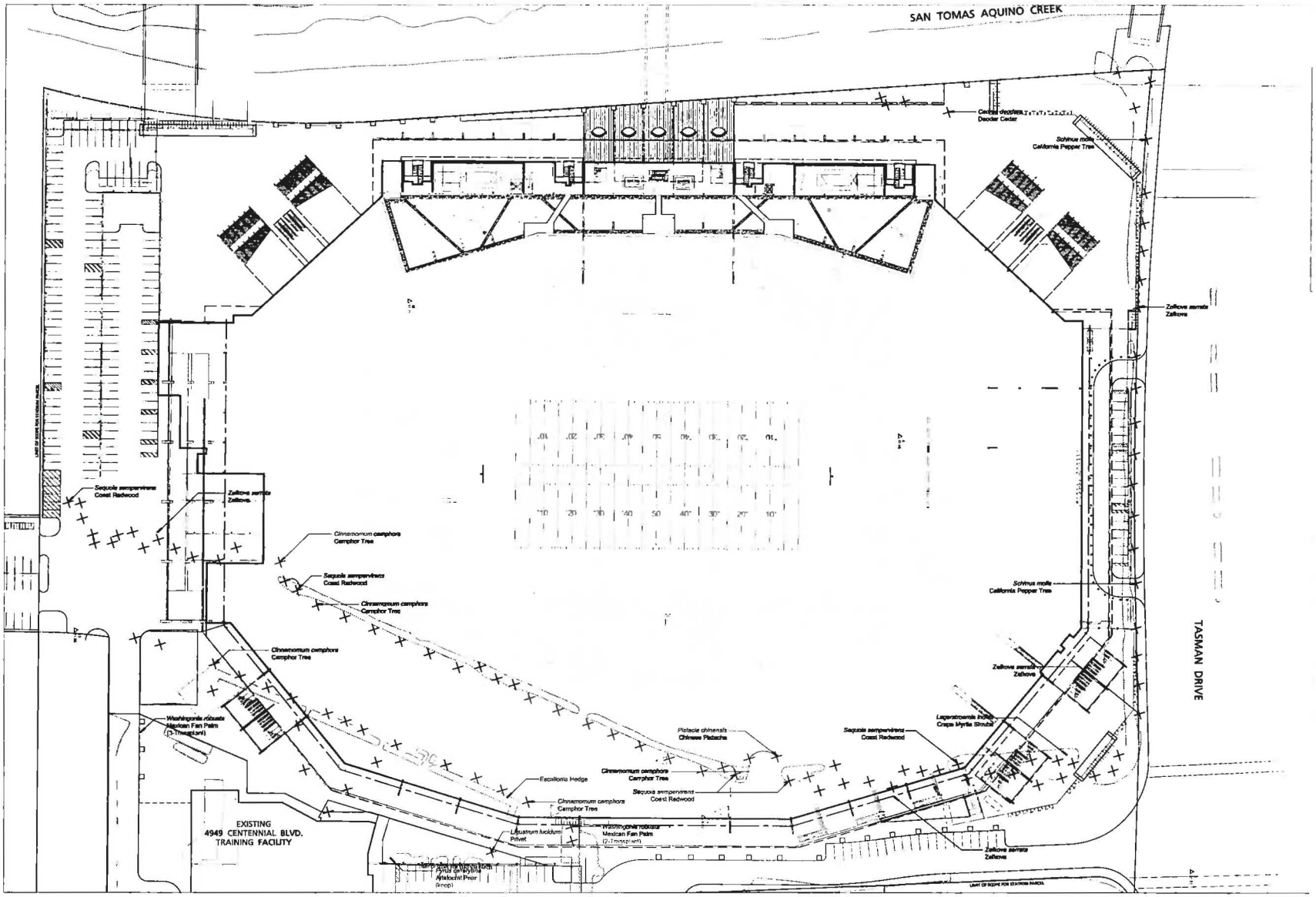
06/30/2010 Final Planned Development Resubmittal



TREE DISPOSITION LEGEND

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

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. 34993
DRAWN BY
CHECKED BY
APPROVED BY

#	DATE	DESCRIPTION
1	11/30/2010	Revised Zoning Resubmittal
2	2/11/2010	Revised Zoning Resubmittal

SHEET TITLE & NUMBER

TREE DISPOSITION PLAN

L500

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06/30/2010 Final Planned Development Resubmittal