GRANDE Vita

a BioCity Enterprise

A Khangura Development

LIST OF CONSULTANTS

ARCHITECTURAL

Kevin B Howard Architects, Inc.
8339 N Oracle Rd — Office: (520) 322-6800
Oro Valley, Az 85704 — Fax: (520) 322-6812

Robinette Architects, Inc.
1670 East River Road, Suite 112 — Office: (520) 323-3979
Tucson, Arizona 85718 — Fax: (520) 888-5518

CIVIL ENGINEERING

Coronado Engineering & Development Inc.
4007 E. Paradise Falls Dr. Suite 125 — Office: (520) 622-6041
Tucson, Arizona, 85712 — Fax: (520) 722-5394

PLANNING

The Planning Center
1270 E. Broadway Rd. Suite 203 — Office: (480) 750-7300
Tempe, AZ 85282 — Fax: (520) 622-1950

INTERIORS

Lori Carroll & Associates, LLC.
2496 East River Road, Suite 100 — Office: (520) 886-3443
Tucson, Arizona 85718 — Fax: (520) 886-1768

PARKING ENGINEERING

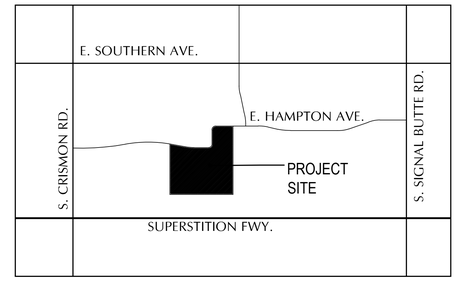
Southwest Traffic Engineering, LLC
3838 N. Central Ave., STE 1810 — Office: (602)266-7983
Phoenix, AZ 85012

10243 E. Hampton Ave., Mesa, AZ

LOTS 2 & 3 OF THE PROPERTY DESCRIBED
IN BOOK 967 PG 14, MARICOPA COUNTY, ARIZONA

A PORTION OF THE NORTHWEST 1/4 OF SECTION 35,
TOWNSHIP 1 NORTH, RANGE 7 EAST, GILA AND SALT
RIVER BASE AND MERIDIAN

SHEET INDEX



LOCATION MAP

SCALE: N.T.S.

REGISTERED ARCHITECT 26556 KEVIN B. HOWARD ARIZONA U.S.A.
EXP 09/30/2019

Kevin B Howard ARCHITECTS Incorporated AIA
8339 N Oracle Rd Suite 110
Tucson Arizona 85704
Phone 520.322.6800
Fax 520.322.6812
www.kbharchitect.com

GRANDE Vita a BioCity Enterprise A Khangura Development
10243 E. Hampton Ave, Mesa, Arizona, 85209

DEVELOPMENT SUBMITTAL

Job: 2017-12
Date: 11.01.2018
REVISIONS:

Drawn By:
J. E. Brown
H.S. Walker
Checked By:
J. E. Brown

G1.0

CONSTRUCTION KEYNOTES

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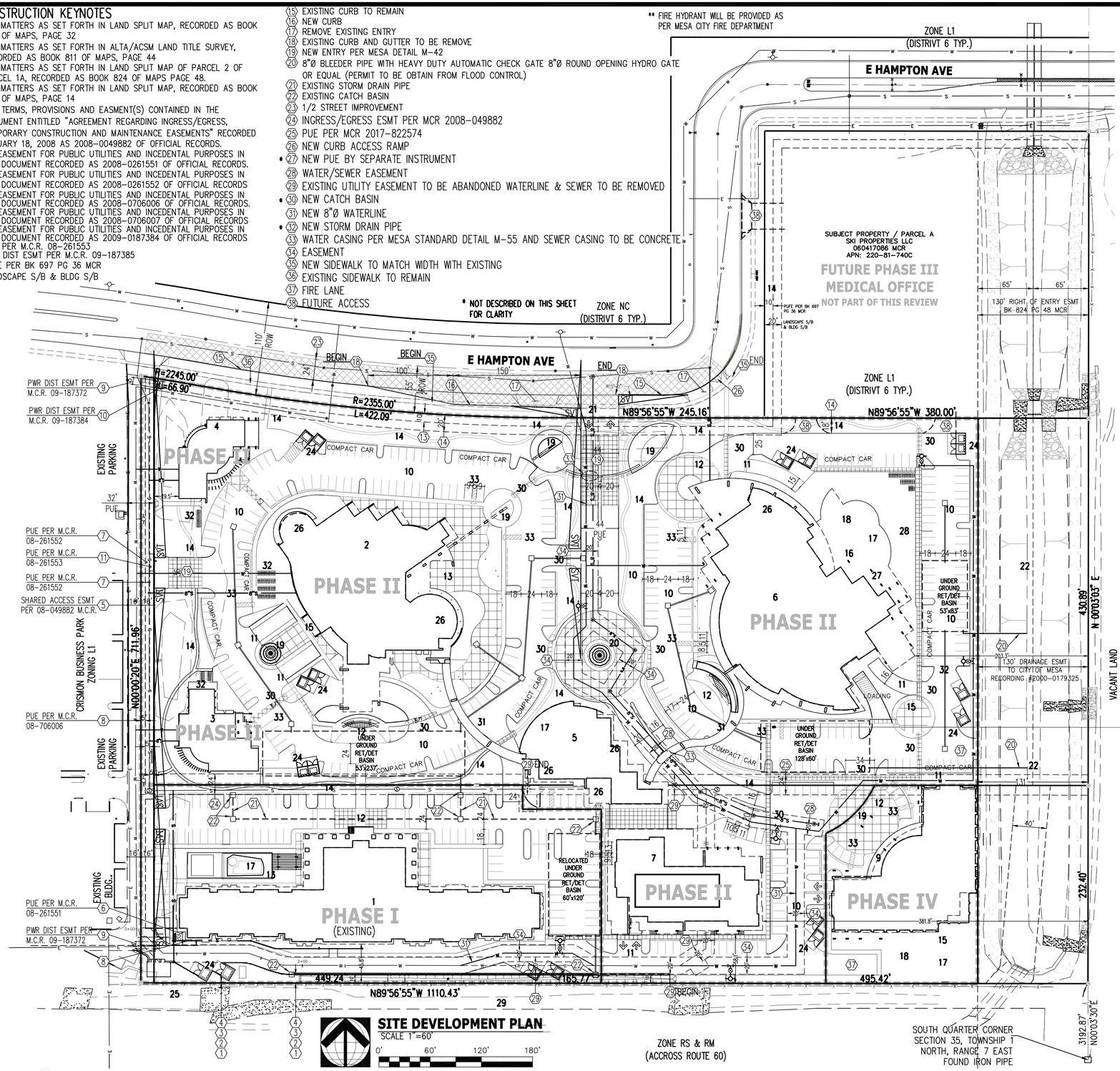
37. FIRE LANE
38. FUTURE ACCESS

* NOT DESCRIBED ON THIS SHEET FOR CLARITY

** FIRE HYDRANT WILL BE PROVIDED AS PER MESA CITY FIRE DEPARTMENT



SITE DEVELOPMENT PLAN

SCALE 1"=60'

0' 60' 120' 180'

SITE DATA

10243 E. HAMPTON RD.
(EXISTING TO PHASE VI);
NET =±15.27 ACRES
GROSS =±17.1 ACRES

ZONING - CITY OF MESA

EXISTING ZONING - LI BIZ
PROPOSED REZONING: LC-CUP-PAD & SUP

EAST OF SITE	= LC
NORTH	= NC/L1
WEST	= L1
SOUTH	= RS & RM

DISTRICT 6

ZONE LC USES ALLOWED:

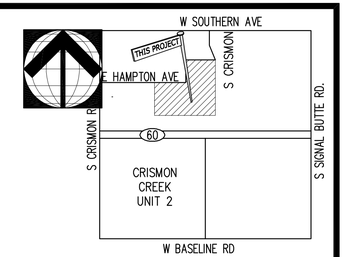
1. HOTEL	PERMITTED
2. MEDICAL OFFICE	PERMITTED
3. RESTAURANT	PERMITTED
4. CAFE	PERMITTED
5. VISITOR CTRL.	PERMITTED
6. SENIOR LIVING	CUP & SUP REQUIRED
7. NURSING SCHOOL	PERMITTED
8. FUTURE HOTEL	PERMITTED
9. MEDICAL OFFICE #2	PERMITTED
10. PARKING FACILITIES	SUP FOR REDUCTION

ZONE LC

MINIMUM LOT AREA	=1.0 ACRE
MINIMUM LOT WIDTH	=100'
MINIMUM LOT DEPTH	=100'
MAX HEIGHT	=PER PAD

MINIMUM SETBACKS:

FRONT & STREET FACING SIDE	= 20'-0"
INTERIOR SIDE & REAR	= PER PAD 45'-0" (ADJACENT TO NON-RESIDENTIAL)



VICINITY MAP

SECTION 35, T1N, R7E, G&SRB & M

KEYNOTES

PHASE I EXISTING

1. MARRIOTT RESIDENCE INN -CONFERENCE CENTER — 4 STORY/116,120 SF.

PHASE II

2. MEDICAL OFFICE — 5 STORY/75,514 SF.
   - -MEDICAL OFFICES
   - -WHOLE CARE CENTER
   - -PUBLIC HEALTH EDUCATION
   - -NUTRITION CENTER
   - -FITNESS CENTER
   - -OUTPATIENT SURGERY CENTER
   - -URGENT CARE
3. FUTURE MEDICAL OFFICE — 2 STORY/10,000 SF.
4. FUTURE CAFE/RESTAURANT — 1 STORY/4,600 SF
5. VISITOR CENTER
   - -SALES OFFICE
   - -ACTIVITY CENTER
   - -BUSINESS CENTER
6. RESIDENTIAL SENIOR INDEPENDENT LIVING 12 STORY/277,200 SQFT (168 UNITS)
   - -LUXURY CONDOS
   - -FITNESS CENTER
   - -THEATER
   - -RESTAURANT / FOOD COURT
   - -PROFESSIONAL CENTER
   - -CONCIERGE SERVICES
   - -PET BOARDING/HOTEL
7. NURSING SCHOOL/REHAB 5 STORY/84,000 SF.
   - -MEDICAL OFFICES 2ND FLOOR (10,000 SF)

PHASE III (NOT PART OF THIS REVIEW)

8. MEDICAL OFFICES 2 STORY/20,000 SF.

PHASE IV

9. FUTURE HOTEL 7 STORY/117,150 SF.
10. PARKING (TYPICAL STALL SIZE 9'x18' UNO)
11. UNDERGROUND PARKING ACCESS RAMP
12. SHUTTLE STOP
13. PLAZA W/ DECORATIVE PAVERS (MATERIAL PER DRB)
14. WALKING PATH (4' WIDE MIN.)
15. BREAKOUT SPACE
16. PARK
17. SWIMMING POOL
18. SPA
19. WATER FEATURE
20. SCULPTURE MONUMENT
21. ENTRY AVENUE
22. DRY WASH (EXISTING)
23. EMERGENCY VEHICLES (PER FPD 503.2.4)
24. SOLID WASTE CONTAINERS (PER DTL M-62.02.1, 8 C.Y. WASTE & RECYCLE EA. LOC.,10 TOTAL)
25. PERIMETER FENCE (SEE LANDSCAPE PLANS)
26. ROOF GARDEN
27. SPORTS COURTS
28. DOG PARK
29. DRAINAGE R.O.W. (SEE ENGINEERING PLANS)
30. PEDESTRIAN CROSS WALK 5' MIN. WIDE (DECORATIVE PAVERS MATERIAL PER DRB)
31. CONNECTION BRIDGES (MIN 15' CLEARANCE BELOW)
32. BIKE RACKS (PER COM CODE 11-32-8)
33. HC PARKING PER ADA 2010 STANDARDS (208.2)

SPECIAL CODE NOTES:

1. STREET LIGHT PHOTO-METRICS ON HAMPTON TO BE PROVIDED AT CONSTRUCTION PLAN SUBMITTAL PER TRANSPORTATION REVIEW
2. INCREASE WEEKLY WASTE PICKUP SERVICE AS PROJECT REACHES MAXIMUM DENSITY. MINIMUM WEEKLY PICK UP TWICE PER WEEK IF FOOD WASTE IS PLACED IN CONTAINERS
3. ALL REQUIRED TESTING AND ENGINEERING TO BE PROVIDED AT TIME OF CONSTRUCTION PLAN SUBMITTAL FOR EXISTING WATER PRESSURE.

FIRE CODE NOTES:

REQUIRED FIRE APPARATUS ACCESS ROAD DURING CONSTRUCTION OR DEMOLITION. THE ACCESS ROAD SHALL BE A MINIMUM OF 20 FEET WIDE AND SHALL BE AN ALL-WEATHER DRIVING SURFACE, GRADED TO DRAIN STANDING WATER AND ENGINEERED TO BEAR THE IMPOSED LOADS OF FIRE APPARATUS (74,000 LBS/24,000LBS PER AXLE) WHEN ROADS ARE WET. FOR EXAMPLE, A MINIMUM OF SIX (6) INCHES OF ABC COMPACTED TO 90% OVER AN APPROVED BASE WOULD MEET THE REQUIREMENT.

THE ACCESS ROAD SHALL BE EXTENDED TO WITHIN 200 FEET OF ANY COMBUSTIBLE MATERIALS AND/OR ANY LOCATION ON THE JOBSITE WHERE ANY PERSON(S) SHALL BE WORKING FOR A MINIMUM OF FOUR (4) CONTINUOUS HOURS IN ANY DAY. A CLEARLY VISIBLE SIGN MARKED "FIRE DEPARTMENT ACCESS", IN RED LETTERS, SHALL BE PROVIDED AT THE ENTRY TO THE ACCESS ROAD.

ALL OPEN TRENCHES SHALL HAVE STEEL PLATES CAPABLE OF MAINTAINING THE INTEGRITY OF THE ACCESS ROAD DESIGN WHEN THESE TRENCHES CROSS AN ACCESS ROAD. THESE ACCESS ROADS MAY BE TEMPORARY OR PERMANENT. THIS POLICY APPLIES ONLY DURING CONSTRUCTION AND/OR DEMOLITION. PERMANENT ACCESS PER THE MESA FIRE CODE SHALL BE IN PLACE PRIOR TO ANY FINAL INSPECTION OR CERTIFICATE OF OCCUPANCY. IFC CHAPTER 14."

"WATER SUPPLY FOR FIRE PROTECTION. AN APPROVED WATER SUPPLY FOR CONSTRUCTION SITE SHALL MEET THE REQUIREMENTS OF APPENDIX CHAPTERS B AND C. THE MINIMUM FIRE FLOW REQUIREMENT WHEN CONTRACTOR OR DEVELOPER BRINGS COMBUSTIBLE MATERIALS ON SITE IS 1,500 GPM AT 25 PSI. AT LEAST ONE FIRE HYDRANT SHALL BE WITHIN 500 FEET OF ANY COMBUSTIBLE MATERIAL AND CAPABLE OF DELIVERING THE MINIMUM FIRE FLOW REQUIREMENT. THIS HYDRANT OR HYDRANTS MAY BE EITHER TEMPORARY OR PERMANENT AS THE PROJECT SCHEDULE PERMITS.

IN ADDITION, THERE ARE TIMES WHEN HYDRANTS AND VALVES MUST BE CLOSED TEMPORARILY FOR REPAIR WORK OR CONSTRUCTION OF THE WATER SYSTEM. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE WATER SUPPLY IS AVAILABLE AT ALL TIMES. WHEN THE WORK IS COMPLETE, DEVELOPER/CONTRACTOR SHALL MAKE SURE THAT THE FIRE HYDRANTS ARE ACTIVE AND THE VALVES ARE OPEN. IFC CHAPTER 14"

Coronado Engineering & Development, Inc
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Phone: (520)622-6041

PROJECT
GRANDE VITA
A BIOCITY ENTERPRISE
10309 E. HAMPTON AVE.
MESA, ARIZONA, 85209

SHEET TITLE
DEVELOPMENT PLAN

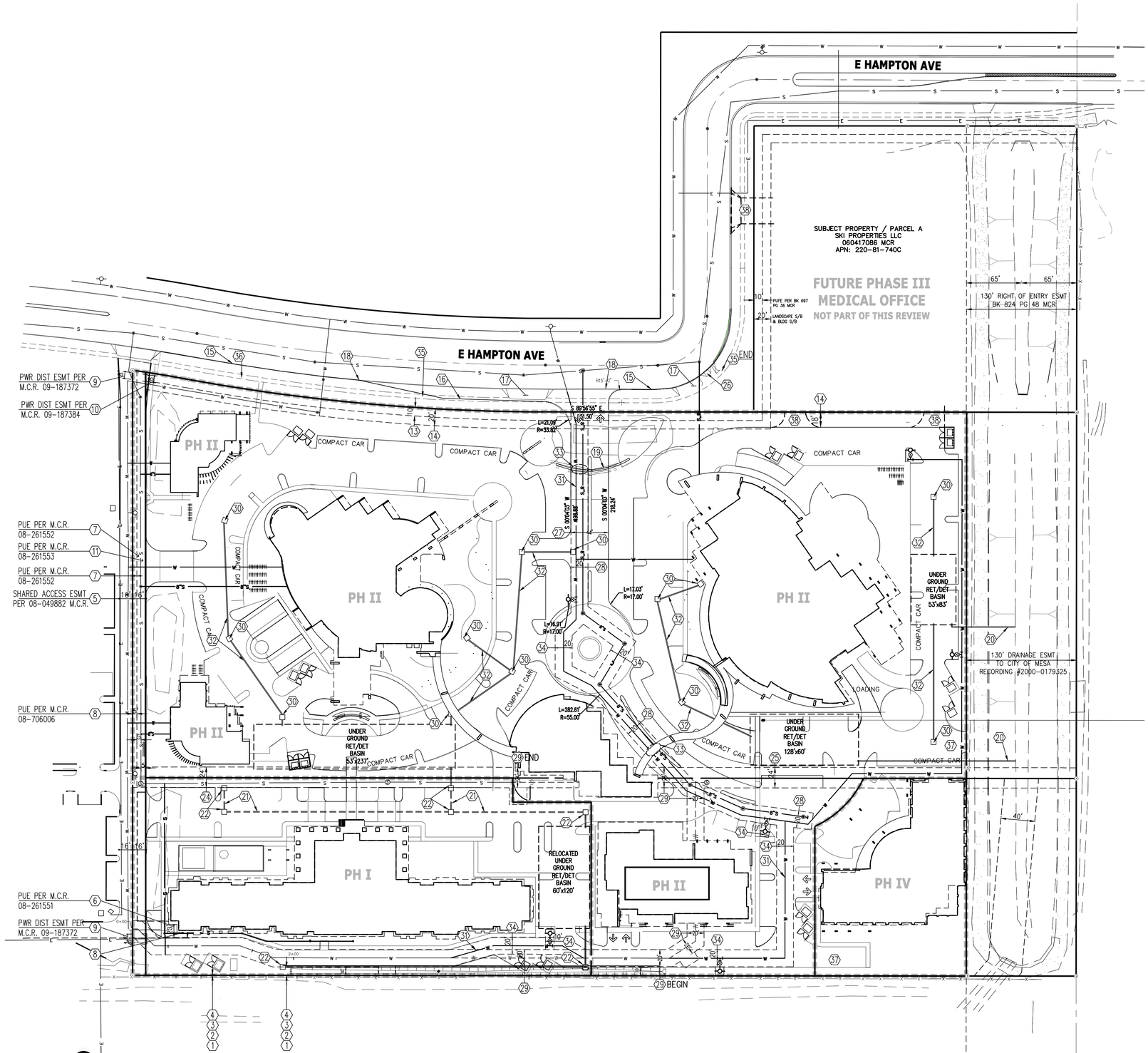
REVISIONS

Revision No.	Date	Description	Drawn By:	Approved by:

Registered Professional Engineer (Civil) CERTIFICATE NO. 33446 PAUL KILONZO NZOMO Date Signed 11/16/18 ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	1"=60'
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN
JOB NO.	CED-18068
REFERENCE NOS.	

1 OF 7



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LEGEND:

	EXISTING	PROPOSED
WATER	w	w
SEWER	s	8"s
SMH	◉	◉
FIRE HYDRANT		

NOTE:

1. DIFFERED SUBMITTALS OF REQUIRED REPORTS UNTIL CONSTRUCT DOCUMENT PHASE.
2. DOCUMENTED APPROVAL TO DISCHARGE IN THE CHANNEL FROM FCDMC. IT IS REQUIRED PRIOR TO CONSTRUCTION DOCUMENTS.
3. ALL ELECTRICAL AND COMMUNICATION LINES WILL BE UNDERGROUND.

** FIRE HYDRANT WILL BE PROVIDED AS PER MESA CITY FIRE DEPARTMENT

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MESA, ARIZONA, 85209

SHEET TITLE
UTILITY PLAN

REVISIONS

Revision No.	Date	Description	Drawn By:	Approved by:

Registered Professional Engineer (Civil)
CERTIFICATE NO.
33446
PAUL KILONZO
NZOMO
Date Signed 11/16/18
ARIZONA, U.S.A.
EXP. 03/31/20

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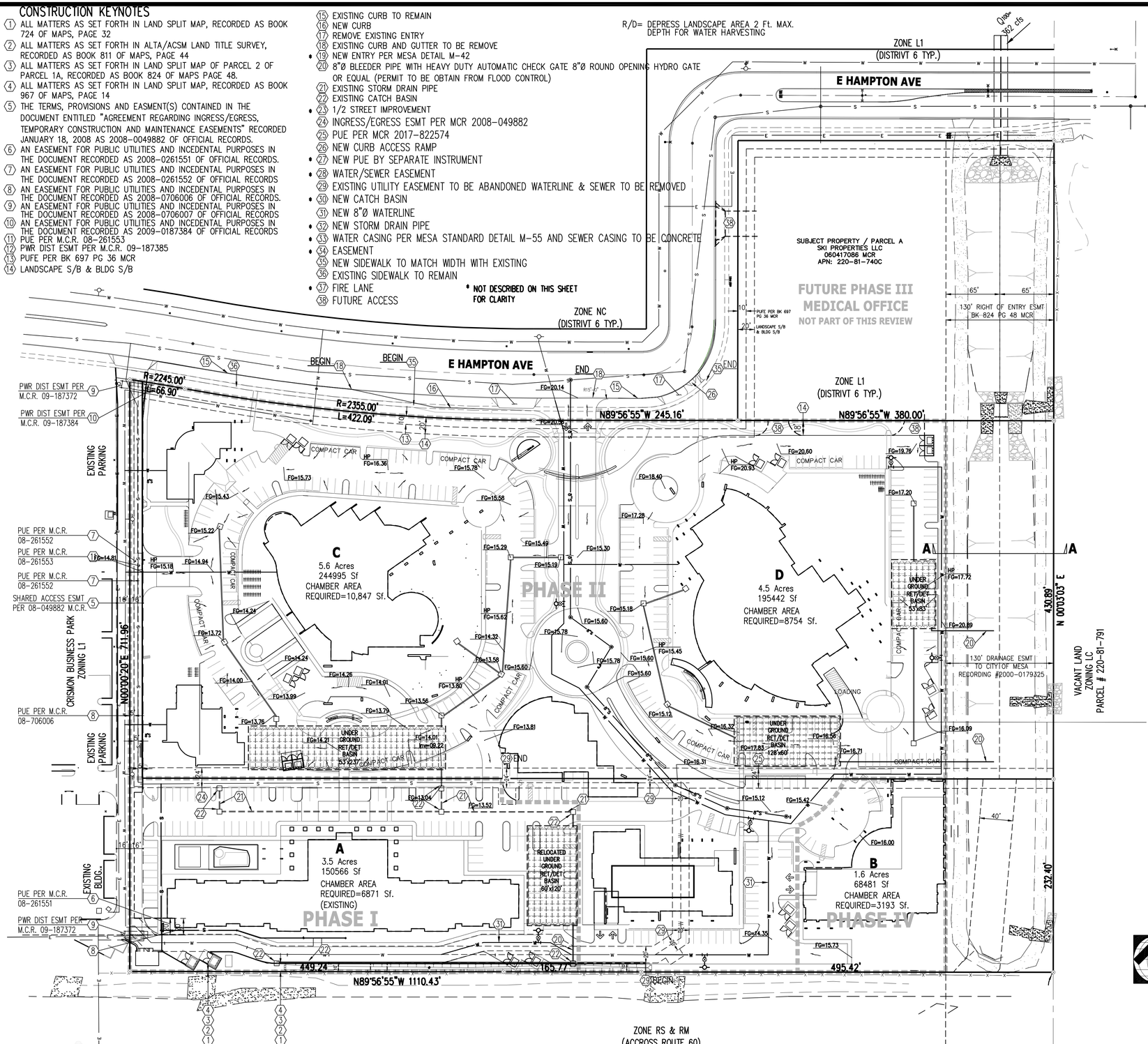
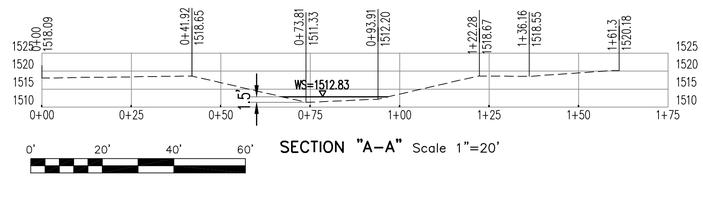


STORMTECH DESIGN INFO (MC-3500)				
DRAINAGE AREA	**A**	**B**	**C**	**D**
REQUIRED STORAGE VOLUME (Cf.)	24792	10439	36538	29361
STONE POROSITY (%)	40	40	40	40
STONE ABOVE CHAMBER (In.)	12	12	12	12
STONE FOUNDATION DEPTH (In.)	9	9	9	9
AVERAGE COVER OVER CHAMBER (In.)	24	24	24	24
DESIGN CONSTRIANT DIMENSION (Ft.)	50	50	50	50
SYSTEM VOLUME & BED SIZE				
INSTALLED STORAGE VOLUME (Cf.)	24835	10497	36703	29526
STORAGE VOLUME PER CHAMBER (Cf.)	178.90	178.90	178.90	178.9
STORAGE VOLUME PER END CAP (Cf.)	46.90	46.90	46.9	46.9
NUMBER OF END CAP REQUIRED (Ea.)	129	51	193	154
NUMBER OF CHAMBER REQUIRED (Ea.)	12	12	12	12
ROWS / CHAMBERS	3 Row(s) of 22 Chamber (s)	3 Row(s) of 9 Chamber (s)	1 Row(s) of 33 Chamber (s)	4 Row(s) of 26 Chamber (s)
LEFTOVER ROWS/CHAMBERS	3 Row(s) of 21 Chamber (s)	3 Row(s) of 8 Chamber (s)	5 Row(s) of 32 Chamber (s)	2 Row(s) of 25 Chamber (s)
MAXIMUM LENGTH (Ft.)	167.25	74.08	246.36	196.19
MAXIMUM WIDTH (Ft.)	44.85	44.85	44.85	44.85
APPROX BED SIZE REQUIRED (Sf)	7372	3193	10847	8754
SYSTEM COMPONENT				
AMT OF STONE REQUIRED (Cy.)	970	436	1417	1150
VOL. OF EXC. (EXCLUDING FILL) (Cy.)	1502	650	2210	1783
NON-WOVEN FILTER FABRIC REQUIRED (Sy.)	1900	857	2768	2242
LENGTH OF ISOLATOR ROW (Ft.)	161.37	68.20	240.2	190.03
WOVEN ISOLATOR ROW FABRIC (Sy.)	311	140	455	364



SECTION "A-A" Scale 1"=20'

PHASE	UNCOVERED AREA (SF)	COVERED/ PAVED AREA (SF)	PHASE AREA (SF)	C
I	6,351	112,886	119,237	0.95
II	68,693	420,699	489,392	0.86

Coronado Engineering & Development, Inc
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Phone: (520)622-6041

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MESA, ARIZONA, 85209

SHEET TITLE
HYDROLOGY-DRAINAGE PLAN

Revision No.	Date	Description	Drawn By:	Approved by:

Registered Professional Engineer (Civil) CERTIFICATE NO. 33446 PAUL KILONZO NZOMO Date Signed 11/16/18 ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	1"=60'
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN
JOB NO.	CED-18068
REFERENCE NOS.	

3 OF 7

E:\Civil\CED18068-Bio City Mesa\DP-4.dwg Plotted: Nov 16, 2018

ADVANCED DRAINAGE SYSTEMS, INC.

STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-3500.
2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
5. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
   a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
   b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
   c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

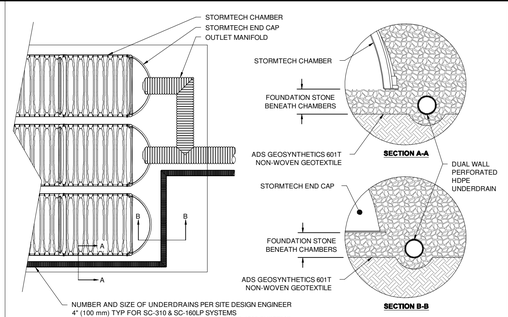
1. STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

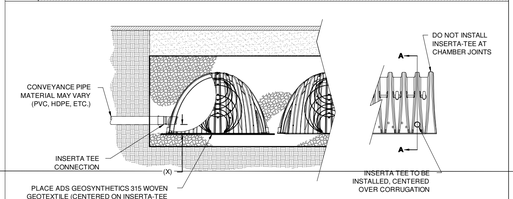
1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



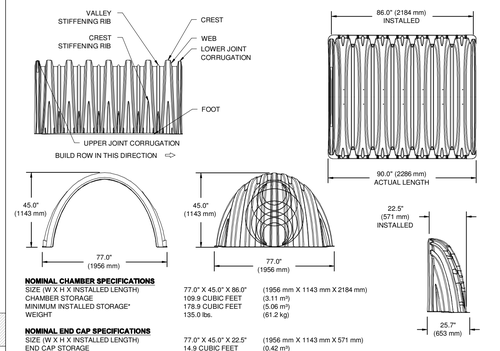
5 UNDERDRAIN DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	178.9 CUBIC FEET	(5.06 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

NOMINAL END CAP SPECIFICATIONS

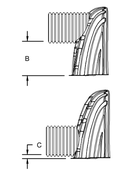
SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	46.0 CUBIC FEET	(1.30 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

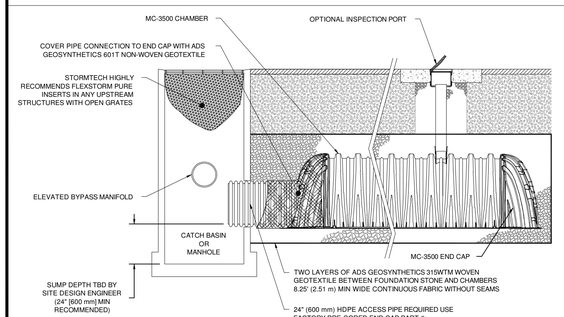
PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-3500 TECHNICAL SPECIFICATIONS



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

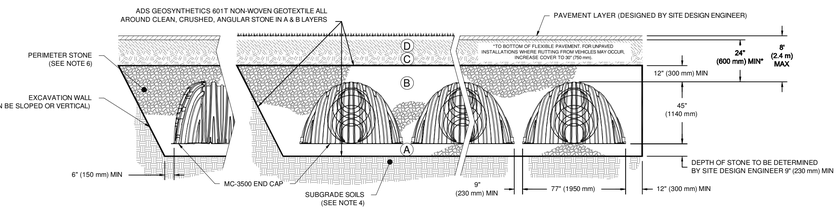
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-3500 ISOLATOR ROW DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 [1] A-1, A-2-4, A-3 OR AASHTO M43 [1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 [1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 [1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2,3]

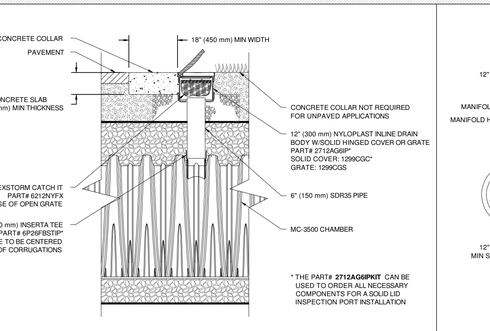
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



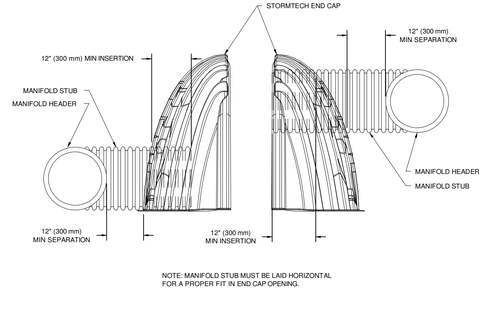
NOTES:

1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

1 MC-3500 CROSS SECTION DETAIL



4 MC-3500 6" (150 mm) INSPECTION PORT DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

DRAWN: | DATE:
REVIEWED: | PROJECT NO:
REV: | NOT TO SCALE

StormTech
75 BEAVER BROOK, SUITE 3 | RIDGY HILL, CT | 06457
860-529-8188 | 888-892-2694 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

ADVANCED DRAINAGE SYSTEMS, INC.

SHEET

E:\Civil\CED18068-Rio City Mesa\VIP\VIP-4.dwg Plotted: Nov 16, 2018

Coronado Engineering & Development, Inc
1870 W. Prince Rd. Drive, Suite 33, Tucson, AZ 85705
Phone: (520)622-6041

PROJECT
GRANDE VITA
A BIOCITY ENTERPRISE
10309 E. HAMPTON AVE.
MESA, ARIZONA, 85209

SHEET TITLE
HYDROLOGY-(STORMTECH DETAILS)
UNDERGROUND DETENTION SYSTEM

REVISIONS

Revision No.	Date	Description	Drawn By:	Approved by:

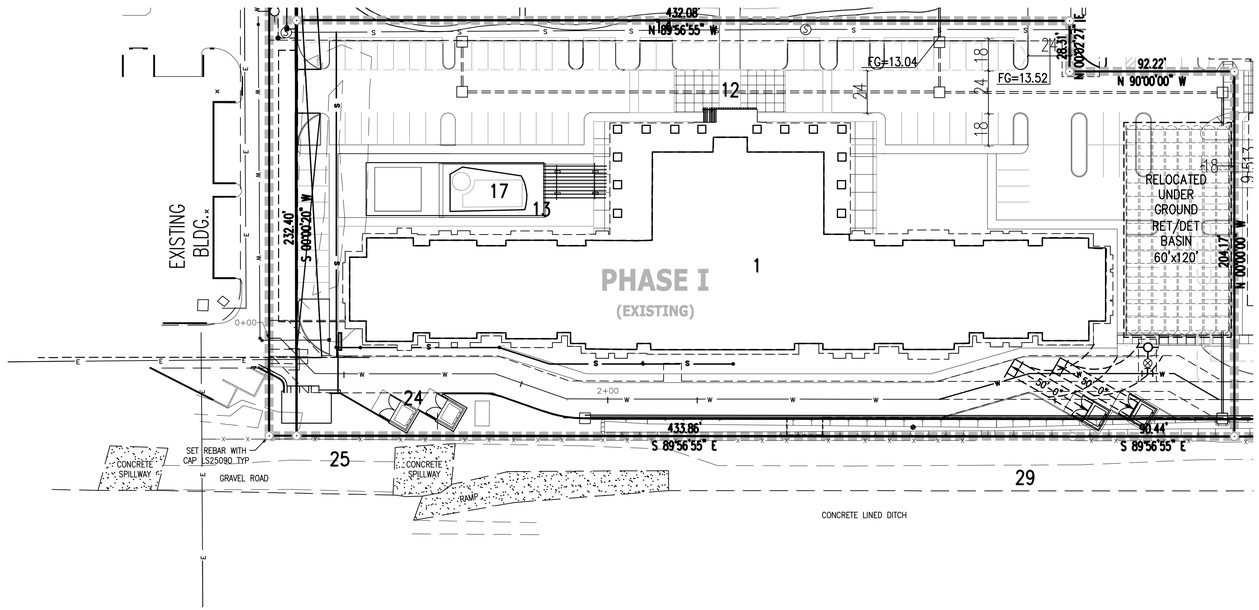
Registered Professional Engineer — Certificate No. 33446 — PAUL KILONZO NZOMO — Date Signed 11/16/18 — ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	NTS
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN

JOB NO. CED-18068

4 OF 7

REFERENCE NOS.



SITE DEVELOPMENT PLAN

SCALE 1"=40'

0' 40' 80' 120'

Coronado Engineering & Development, Inc
1870 W. Prince Rd. Drive, Suite 33, Tucson, AZ 85705
Phone: (520)622-6041

PROJECT
MESA GATEWAY
A BIOCITY DEVELOPMENT
10309 E. HAMPTON AVE.
MESA, ARIZONA, 85209

SHEET TITLE
SITE DEVELOPMENT PLAN
PHASE I

REVISIONS

Revision No.	Date	Description	Drawn By:	Approved by:

Registered Professional Engineer (Civil)
CERTIFICATE NO.
33446
PAUL KILONZO NZOMO
Date Signed 11/16/18
ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	1"=40'
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN

JOB NO. CED-18068
REFERENCE NOS.

E HAMPTON AVE

PHASE II

SITE DEVELOPMENT PLAN
SCALE 1"=40'
0' 40' 80' 120'

Coronado Engineering & Development, Inc
1870 W. Prince Rd. Drive, Suite 33, Tucson, AZ 85705
Phone: (520)622-6041

PROJECT
MESA GATEWAY
A BIOCITY DEVELOPMENT
10309 E. HAMPTON AVE.
MESA, ARIZONA, 85209

SHEET TITLE
SITE DEVELOPMENT PLAN
PHASE II

REVISIONS

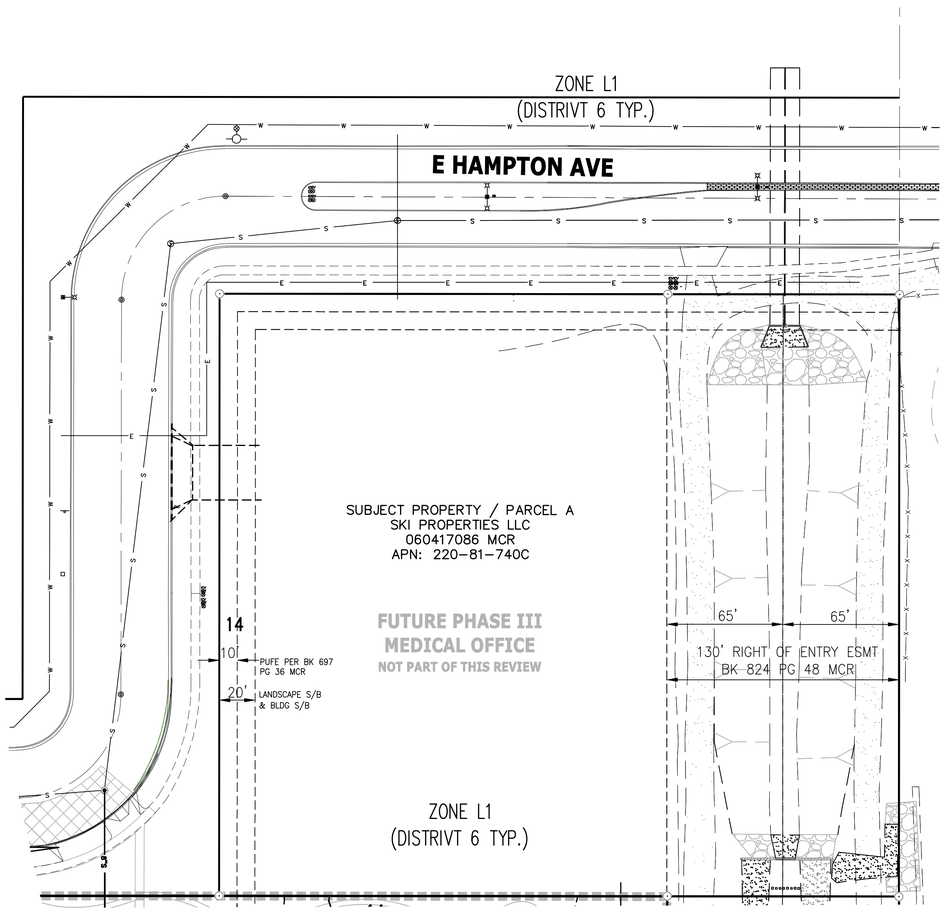
Revision No.	Date	Description	Drawn By:	Approved by:

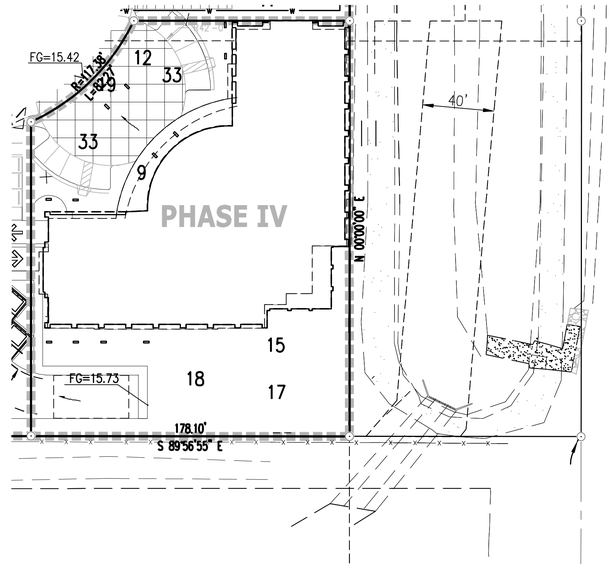
Registered Professional Engineer (Civil) CERTIFICATE NO. 33446 PAUL KILONZO NZOMO Date Signed 11/16/18 ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	1"=40'
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN

JOB NO. CED-18068
REFERENCE NOS.

6 OF 7





SITE DEVELOPMENT PLAN
SCALE 1"=40'
0' 40' 80' 120'

Coronado Engineering & Development, Inc
1870 W. Prince Rd. Drive, Suite 33, Tucson, AZ 85705
Phone: (520)622-6041

PROJECT
MESA GATEWAY
A BIOCITY DEVELOPMENT
10309 E. HAMPTON AVE.
MESA, ARIZONA, 85209

SHEET TITLE
SITE DEVELOPMENT PLAN
PHASE III & IV

REVISIONS

Revision No.	Date	Description	Drawn By:	Approved by:

Registered Professional Engineer (Civil)
CERTIFICATE NO.
33446
PAUL KILONZO NZOMO
Date Signed 11/16/18
ARIZONA, U.S.A.
EXP. 03/31/20

SCALE	1"=40'
DATE	11/16/18
DRAWN BY:	BI
CHECKED BY:	PKN

JOB NO. CED-18068
REFERENCE NOS.

7 OF 7

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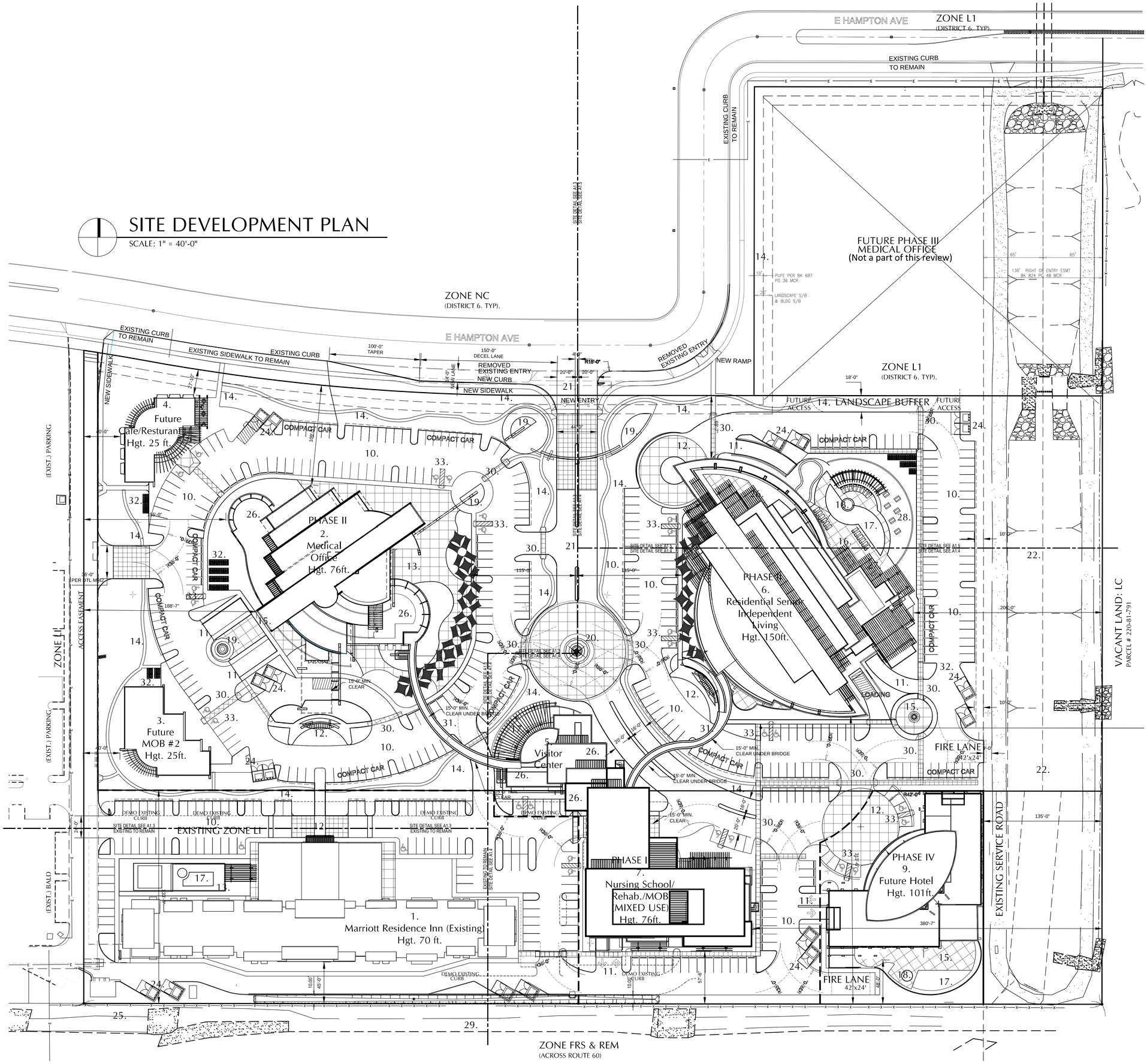
SITE DEVELOPMENT PLAN

SCALE: 1" = 40'-0"



Site Data

10243 E. Hampton AVE, Mesa, Az

(Existing to Phase VI):

Net:	= ±15.27 Acres
Gross	= ±17.1 Acres

Zoning - City of Mesa

Existing Zoning - LI BIZ

Proposed REZONING: LC-CUP-PAD & SUP

East of Site	= LC
North	= NC / L1
West	= L1
South	= RS & RM
District 6	

Zone LC uses allowed:

1. Hotel	Permitted
2. Medical Office	Permitted
3. Restaurant	Permitted
4. Cafe	Permitted
5. Visitor Ctrl.	Permitted
6. Senior Living	CUP & SUP REQUIRED
7.Nursing School	Permitted
8.Future Hotel	Permitted
9. Medical Office #2	Permitted
10. Parking Facilities	SUP FOR REDUCTION

Zone LC

Minimum Lot Area	= 1.0 Acres
Minimum Lot Width	= 100'
Minimum Lot Depth	= 100'
Max Height	= PER PAD

Minimum Setbacks:

Front & and Street Facing Side	= 20'-0"
Interior Side and Rear:	= Per PAD 45'-0" (Adjacent to Non-residential)

Keynotes

PHASE I **EXISTING**

1.	*Marriott Residence Inn* -Conference Center	4 Story/ 116,120 SQFT

PHASE II

2.	*Medical Office* -Medical Offices -Whole Care Center -Public Health Education -Nutrition Center -Fitness Center -Outpatient Surgery Center -Urgent Care	5 Story / 75,514 SQFT
3.	*Future* Medical Office	2 Story / 10,000 SQFT
4.	*Future Cafe/Resturant*	1 Story / 4,600 SQFT
5.	*Visitor Center* -Sales office -Activity Center -Business Center	
6.	*Residential Senior Independent Living* -Luxury Condos -Fitness Center -Theater -Restaurant / Food Court -Professional Center -Concierge Services -Pet Boarding/Hotel	12 Story/ 277,200 SQFT (168 units)
7.	*Nursing School/Rehab* -Medical Offices	5 Story / 84,000 SQFT **2nd floor (10,000 SF)**

PHASE III (not part of this review)

8.	*Medical Offices*	2 Story / 20,000 SQFT

PHASE IV

9.	*Future Hotel*	7 Story / 117,150 SQFT

10. Parking (TYPICAL STALL SIZE 9'X18' UNO)
11. Underground Parking Access Ramp
12. Shuttle Stop
13. Plaza W/ Decorative Pavers (Material Per DRB)
14. Pedestrian Walking Path (4' WIDE Min.)
15. Breakout Space
16. Park
17. Swimming Pool
18. Spa
19. Water Feature
20. Sculpture Monument
21. Entry Avenue
22. Dry Wash (EXISTING)
23. Emergency Vehicles (PER FPD 503.2.4)
24. Solid Waste Containers (PER DTL M-62.02.1, 8 cubic yard Waste & Recycle EA. LOC.,10 total)
25. Perimeter Fence (SEE LANDSCAPE PLANS)
26. Roof Garden
27. Sports Courts
28. Dog Park
29. Drainage R.O.W. (SEE ENGINEERING PLANS)
30. Pedestrian Cross Walk 5' Min. Wide (Decorative Pavers Material Per DRB)
31. Connections Bridges (MIN 15' CLEARANCE BELOW)
32. Bike Racks (PER COM CODE 11-32-8)
33. HC Parking Per ADA 2010 Standards (208.2)

Special Note:

1. Street Light Photo-Metrics on Hampton to be provided at Construction Plan Submittal per Transportation Review

2. Increase weekly waste pickup service as project reaches maximum density. Minimum weekly pick up twice per week if food waste is placed in containers.

3. All required testing and engineering to be provided at time of Construction Plan Submittal for existing water pressure.

REGISTERED ARCHITECT
KEVIN B HOWARD
26556
EXP 09/30/2019

Kevin B Howard ARCHITECTS Incorporated AIA
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Tucson Arizona 85704
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www.kbharchitect.com

GRANDE Vita
a BloCity Enterprise
A Khangura Development
10243 E. Hampton Ave, Mesa, Arizona, 85209

Site Development Plan

Job: 2017-12

Date: 11.01.2018

REVISIONS:

Drawn By:
J. E. Brown
H.S. Walker

Checked By:
J. E. Brown

A1.0

Mesa Gateway - A BioCity Development

Applicable Codes

City of Mesa Zoning Ordinance - Title 11 of the Mesa City Code including updates through July, 2018
2006 International Building Code (IBC 2006) w/ City of Mesa Amendments
2006 International Fire Code (IFC 2006)
2006 International Plumbing Code (IPC 2006) w/ City of Mesa Amendments
2005 National Electric Code (NEC 2005) w/ City of Mesa Amendments
2006 International Mechanical Code (IMC 2006) w/ City of Mesa Amendments
2009 International Energy Conservation Code (IECC 2009) w/ City of Mesa Amendments
ADA 2003 ICC A117.1 / 2010 ADAAG

Phase II

Building 2 - MEDICAL OFFICE BUILDING

GSF	75,089	
NSF**	55,619	approx.
STORIES	5	
HEIGHT	75'	
SPRINKLER REQ	NO	IBC 903
SPRINKLERED	YES	

Allowable Construction Types: IA, IB, IIA, IIB, IIIA, IIIB (Based on height and area with applied increases) IBC Table 503

Primary Occupancy Group B, Business Group: Outpatient Clinic, Outpatient Surgery, Non Primary or Secondary Education Occupancies, Data Processing, Laboratories - Testing and Research, Professional Services including Physicians, Training and Skill Development. IBC 304.1

Secondary Occupancy Group A-2: Assembly use for food or drink consumption. IBC 303.1

1004.8 Outdoor Areas: Yards, patios, courts and similar out-door areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	B	II-B	23,000	1	30	0.75	2	86,250	25,171	5	6	55	75		See Calc	352
2nd Floor	A-2*	II-B	9,500	1	30	0.75	2	35,625	17,200	2	3	55	75		See Calc	295
3rd Floor	B	II-B	23,000	1	30	0.75	2	86,250	15,525	5	6	55	75		See Calc	115
4th Floor	B	II-B	23,000	1	30	0.75	2	86,250	12,618	5	6	55	75		See Calc	93
5th Floor	B	II-B	23,000	1	30	0.75	2	86,250	5,000	5	6	55	75		See Calc	37
BUILDING TOTAL		II-B							**75,514**					**5 / 75'**		**892**

*A-2 IS the Most Restrictive Occupancy Group making up more than 10% of the 2nd Floor. 2nd floor is primarily B Occupancy Group. See egress calculations for breakdown of occupancy type / floor area.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	IB	IIA	**IIB**	IIIA	IIIB
Struct. Frame	3	2	1	**0**	1	0
Bearing Wall Ext.	3	2	1	**0**	2	2
Bearing Wall Int.	3	2	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	0	0	0	**0**	0	0
Floor Construction	2	2	1	**0**	1	0
Roof Construction	1.5	1	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Dining	1700	15 net	113
	Vocational Learning	4000	50 net	80
	Exercise Area	3300	50 gross	66
	Outpatient Treatment	4500	100 gross	45
	Pharmacy	800	200 gross	4
	Business	4345	100 gross	43
	TOTAL	**18645**		**352**
2	Dining	3000	15 net	200
	Commercial Kitchen	500	200 gross	3
	Business	9240	100 gross	92
	TOTAL	**12740**		**295**
3	Business	11500	100 gross	115
4	Business	9346	100 gross	93
5	Business	3703	100 gross	37
	TOTAL **	**55934**		**892**

** Grossing factor of 1.35 applied to entire building prior to area calcs.

Mesa Gateway - A BioCity Development

Phase II Cont.

Building 3 - Restaurant
Building 4 - Café

GSF	4,800	
NSF**	4,363	approx.
STORIES	1	
HEIGHT	25'	
SPRINKLER REQ	NO	IBC 903
SPRINKLERED	YES	

Allowable Construction Types: ALL (TYPE V-B would require applied increases) IBC Table 503

Primary Occupancy Group A-2: Assembly use for food or drink consumption. IBC 303.1

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	A-2*	II-B	9,500	1	30	0.75	2	35,625	5,000	2	3	55	75	**2' / 25'**	See Calc	228
BUILDING TOTAL		II-B						**5,000**						**1 / 25'**		**228**

1004.8 Outdoor Areas: Yards, patios, courts and similar out-door areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	IB	IIA	**IIB**	IIIA	IIIB
Struct. Frame	3	2	1	**0**	1	0
Bearing Wall Ext.	3	2	1	**0**	2	2
Bearing Wall Int.	3	2	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	0	0	0	**0**	0	0
Floor Construction	2	2	1	**0**	1	0
Roof Construction	1.5	1	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Dining	3300	15 net	220
	Commercial Kitchen	1500	200 gross	8
	TOTAL **	**4800**		**228**

** Grossing factor of 1.1 applied to entire building prior to area calcs.

Mesa Gateway - A BioCity Development

Phase III

Building 6 - Residential Senior Independent Living

GSF	277,200	
NSF**	256,000	approx.
STORIES	12	
HEIGHT	148'	
SPRINKLER REQ	YES	IBC 903
SPRINKLERED	YES	

Primary Occupancy Group: Group I-1.
This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides personal care and/or supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: Residential board and care facilities, Assisted living centers...Group homes...Congregate care facilities...Convalescent facilities IBC 308.2

Allowable Construction Types: IA, IB, IIA, IIB for first floor. IA for I-1 Occupancy floors above. IBC Table 503
1004.8 Outdoor Areas: Yards, patios, courts and similar out-door areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	A-2*	II-B	9,500	1	30	0.75	2	35,625	31,500	2	3	55	75		See Calc	911
2nd Floor	I-1	1-A	UL					UL	24,700						See Calc	266
3rd Floor	I-1	1-A	UL					UL	24,600						See Calc	115
4th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
5th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
6th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
7th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
8th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
9th Floor	I-1	1-A	UL					UL	24,600						See Calc	115
10th Floor	I-1	1-A	UL					UL	21,400						See Calc	103
11th Floor	I-1	1-A	UL					UL	17,200						See Calc	83
12th Floor	I-1	1-A	UL					UL	10,200						See Calc	45
BUILDING TOTAL								**277,200**						**12 /148'**		**2,212**

*A-2 IS the Most Restrictive Occupancy Group making up more than 10% of the 2nd Floor. 2nd floor is primarily B Occupancy Group. See egress calculations for breakdown of occupancy type / floor area.

** Grossing factor of 1.1 applied to building prior to area calculations.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	IB	IIA	**IIB**	IIIA	IIIB
Struct. Frame	**3**	2	1	**0**	1	0
Bearing Wall Ext.	**3**	2	1	**0**	2	2
Bearing Wall Int.	**3**	2	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	**0**	0	0	**0**	0	0
Floor Construction	**2**	2	1	**0**	1	0
Roof Construction	**1.5**	1	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Dining	7400	15 net	493
	Commercial Kitchen	2000	200 gross	10
	Mercantile	4500	30 gross	150
	Business	8500	100 net	85
	Exercise	2500	50 gross	50
	Theater	1300	Fixed Seats	32
	Gaming	1000	11 gross	91
	1st FLOOR TOTAL	27200		911
2	Chapel	750	7 net	107
	Business	2000	100 net	20
	Café Dining	700	15 net	47
	Café Kitchen	150	200 gross	1
	Residential	18200	200 gross	91
	2nd FLOOR TOTAL	21800		266
3	Residential	23000	200 gross	115
	3rd FLOOR TOTAL			115
4	Residential	23000	200 gross	115
	4th FLOOR TOTAL			115
5	Residential	23000	200 gross	115
	5th FLOOR TOTAL			115
6	Residential	23000	200 gross	115
	6th FLOOR TOTAL			115
7	Residential	23000	200 gross	115
	7th FLOOR TOTAL			115
8	Residential	23000	200 gross	115
	8th FLOOR TOTAL			115
9	Residential	23000	200 gross	115
	9th FLOOR TOTAL			115
10	Residential	20500	200 gross	103
	10th FLOOR TOTAL			103
11	Residential	16500	200 gross	83
	11th FLOOR TOTAL			83
12	Residential	9000	200 gross	45
	12th FLOOR TOTAL			45
	TOTAL **	**256000**		**2212**

Mesa Gateway - A BioCity Development

Phase IV

Building 7 Skilled Nursing and Rehab Facility

GSF	65,800	
NSF**	49,800	approx.
STORIES	5	
HEIGHT	76'	
SPRINKLER REQ	YES	IBC 903
SPRINKLERED	YES	

Allowable Construction Types: IA, IB, IIA, IIB, IIIA, IIIB Allowable for 1st and 4th floor. IA or IB allowable for 2nd and 3rd floor with I-2 occupancy.

Primary Occupancy Group I-2: Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following: Nursing Homes, Skilled Nursing Facilities, Hospitals, Metal Hospitals IBC 308.3

Secondary Occupancy Group B, Business Group: Outpatient Clinic, Outpatient Surgery, Non Primary or Secondary Education Occupancies, Data Processing, Laboratories - Testing and Research, Professional Services including Physicians, Training and Skill Development. IBC 304.1

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	B	II-B	#####	1	30	0.75	2	86,250	12,370	5	6	55	75		See Calc	118
2nd Floor	B	II-B	#####	1	30	0.75	2	86,250	7,630	5	6	55	75		See Calc	60
BUILDING TOTAL		II-B							**20,000**					**2 / 32'**		**178**

*A-2 IS the Most Restrictive Occupancy Group making up more than 10% of the 2nd Floor. 2nd floor is primarily B Occupancy Group. See egress calculations for breakdown of occupancy type / floor area.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	IB	IIA	**IIB**	IIIA	IIIB
Struct. Frame	3	**2**	1	**0**	1	0
Bearing Wall Ext.	3	**2**	1	**0**	2	2
Bearing Wall Int.	3	**2**	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	0	**0**	0	**0**	0	0
Floor Construction	2	**2**	1	**0**	1	0
Roof Construction	1.5	**1**	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Outpatient Treatment	5800	100 gross	58
	Business	6000	100 gross	60
	TOTAL	**11800**		**118**
2	Business	6000	100 gross	60
	TOTAL	**17800**		**60**

** Grossing factor of 1.35 applied to entire building prior to area calcs.

Mesa Gateway - A BioCity Development

Phase V

Building 8 - MEDICAL OFFICE BUILDING

GSF	75,089	
NSF**	55,619	approx.
STORIES	5	
HEIGHT	75'	
SPRINKLER REQ	NO	IBC 903
SPRINKLERED	YES	

Allowable Construction Types: IA, IB, IIA, IIB, IIIA, IIIB (Based on height and area with applied increases) IBC Table 503

Primary Occupancy Group B, Business Group: Outpatient Clinic, Outpatient Surgery, Non Primary or Secondary Education Occupancies, Data Processing, Laboratories - Testing and Research, Professional Services including Physicians, Training and Skill Development. IBC 304.1

Secondary Occupancy Group A-2: Assembly use for food or drink consumption. IBC 303.1

1004.8 Outdoor Areas: Yards, patios, courts and similar out-door areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	B	II-B	23,000	1	30	0.75	2	86,250	12,022	4	5	55	75		See Calc	203
1st Floor	A-2*	II-B	9,500	1	30	0.75	2	35,625	5,000	2	3	55	75		See Calc	414
2nd Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
3rd Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
4th Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
5th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
6th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
7th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
BUILDING TOTAL									**117,180**					**7 / 95'**		**1,036**

* A-2 IS the Most Restrictive Occupancy Group making up more than 10% of the 2nd Floor. 1st floor is primarily B Occupancy Group. See egress calculations for breakdown of occupancy type / floor area.

[1] Per IBC 504.2 for TYPE R OCCUPANCIES No height increase allowed to be applied above 60' or 4 stories.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	IB	IIA	**IIB**	IIIA	IIIB
Struct. Frame	3	2	1	**0**	1	0
Bearing Wall Ext.	3	2	1	**0**	2	2
Bearing Wall Int.	3	2	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	0	0	0	**0**	0	0
Floor Construction	2	2	1	**0**	1	0
Roof Construction	1.5	1	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Dining	3300	15 net	220
	Commercial Kitchen	1500	200 gross	8
	TOTAL **	**4800**		**228**

** Grossing factor of 1.1 applied to entire building prior to area calcs.

Grande Vita - A BioCity Development

Phase VI

Building 9 - HOTEL

GSF	117,180	
NSF**	96,920	approx.
STORIES	7	
HEIGHT	95'	
SPRINKLER REQ	YES	IBC 903
SPRINKLERED	YES	

Allowable Construction Types: IA or IB above 5th floor. All types allowable below. Limiting factor is allowable stories above grade level for residential occupancy group. Lower floors can be other constrcution types if appropriate fire barrier is in place between construction types. IBC Table 503

Primary Occupancy Group R-1, Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including: Boarding houses, Hotels and Motels IBC 310.1

Secondary Occupancy Group A-2: Assembly use for food or drink consumption. IBC 303.1

Secondary Occupancy Group B: Includes the use of a building or structure or portion thereof for office, professional or service type transactions. IBC 304.1

TABLE OF IBC GENERAL CODE REQUIREMENTS

SPACE	OCCUPANCY GROUP IBC CHAPTER 3	CONSTRUCTION TYPE IBC CHAPTER 6	AREA: ALLOWABLE AREA INCREASE CALCULATION: Aa = {At + (At * Lf) + (At * Ls)} Lf = (F / P - .25) W / 30 — BASE ALLOWABLE AREA PER STORY IN SF (At) IBC TABLE 503	BUILDING FRONTAGE RATIO (F/P) IBC 506.2	FRONTAGE DISTANCE (20 MIN 30 MAX) (W) IBC 506.2.1	INCREASE FACTOR DUE TO FRONTAGE (Lf) IBC 506.2	INCREASE FACTOR DUE TO FIRE SPRINKLER (Ls) IBC 506.3	TOTAL ALLOWABLE AREA PER STORY IN SF (Aa) IBC 506.1	ACTUAL AREA IN SF	HEIGHT: BASE ALLOWABLE HEIGHT IN STORIES FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE STORIES DUE TO FIRE SPRINKLER INCREASE IBC 504.2	BASE ALLOWABLE HEIGHT IN FEET FROM GRADE IBC TABLE 503	TOTAL ALLOWABLE HEIGHT IN FEET DUE TO SPRINKLER INCREASE IBC 504.2	ACTUAL HIGHT IN STORIES / FEET FROM GRADE	EGRESS: OCCUPANT LOAD FACTOR IBC TABLE 1004.1.1	NUMBER OF OCCUPANTS
1st Floor	B	II-B	23,000	1	30	0.75	2	86,250	12,022	4	5	55	75		See Calc	203
1st Floor	A-2*	II-B	9,500	1	30	0.75	2	35,625	5,000	2	3	55	75		See Calc	414
2nd Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
3rd Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
4th Floor	R-1	I-B	UL	1	30	0.75	2	UL	17,052	11	NA[1]	160	NA[1]		See Calc	70
5th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
6th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
7th Floor	R-1	I-B	UL	1	30	0.75	2	UL	16,334	11	NA[1]	160	NA[1]		See Calc	70
BUILDING TOTAL									**117,180**					**7 / 95'**		**1,036**

* A-2 IS the Most Restrictive Occupancy Group making up more than 10% of the 2nd Floor. 1st floor is primarily B Occupancy Group. See egress calculations for breakdown of occupancy type / floor area.

[1] Per IBC 504.2 for TYPE R OCCUPANCIES No height increase allowed to be applied above 60' or 4 stories.

FIRE RESISTANT RATING PER BUILDING TYPE IBC 601

ELEMENT	IA	**IB**	IIA	**IIB**	IIIA	IIIB
Struct. Frame	3	**2**	1	**0**	1	0
Bearing Wall Ext.	3	**2**	1	**0**	2	2
Bearing Wall Int.	3	**2**	1	**0**	1	0
Non Bearing Exterior	DETERMINED BY SEPARATION DISTANCE IBC 602					
Non Bearing Interior	0	**0**	0	**0**	0	0
Floor Construction	2	**2**	1	**0**	1	0
Roof Construction	1.5	**1**	1	**0**	1	0

OCCUPANCY FOR EGRESS CALCULATIONS

IBC Table 1004.1.1

Floor	Function	Approx. SF**	Area / Occupant	# of Occupants
1	Lobby Bar and Dining	3000	15 net	200
	Commercial Kitchen	500	200 gross	3
	Exercise Area	1200	50 gross	24
	Business	3000	100 net	30
	Open Conference	5400	15 net	360
	TOTAL	**13100**		**617**
2	Residential	13970	200 gross	70
3	Residential	13970	200 gross	70
4	Residential	13970	200 gross	70
5	Residential	13970	200 gross	70
6	Residential	13970	200 gross	70
7	Residential	13970	200 gross	70
	TOTAL **	**96920**		**1036**

**Grossing factor applied to account for common circulation and auxiliary occupancies

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GRANDE Vita
a BioCity Enterprise
A Khangura Development
10243 E. Hampton Ave, Mesa, Arizona, 85209

Building Code Review

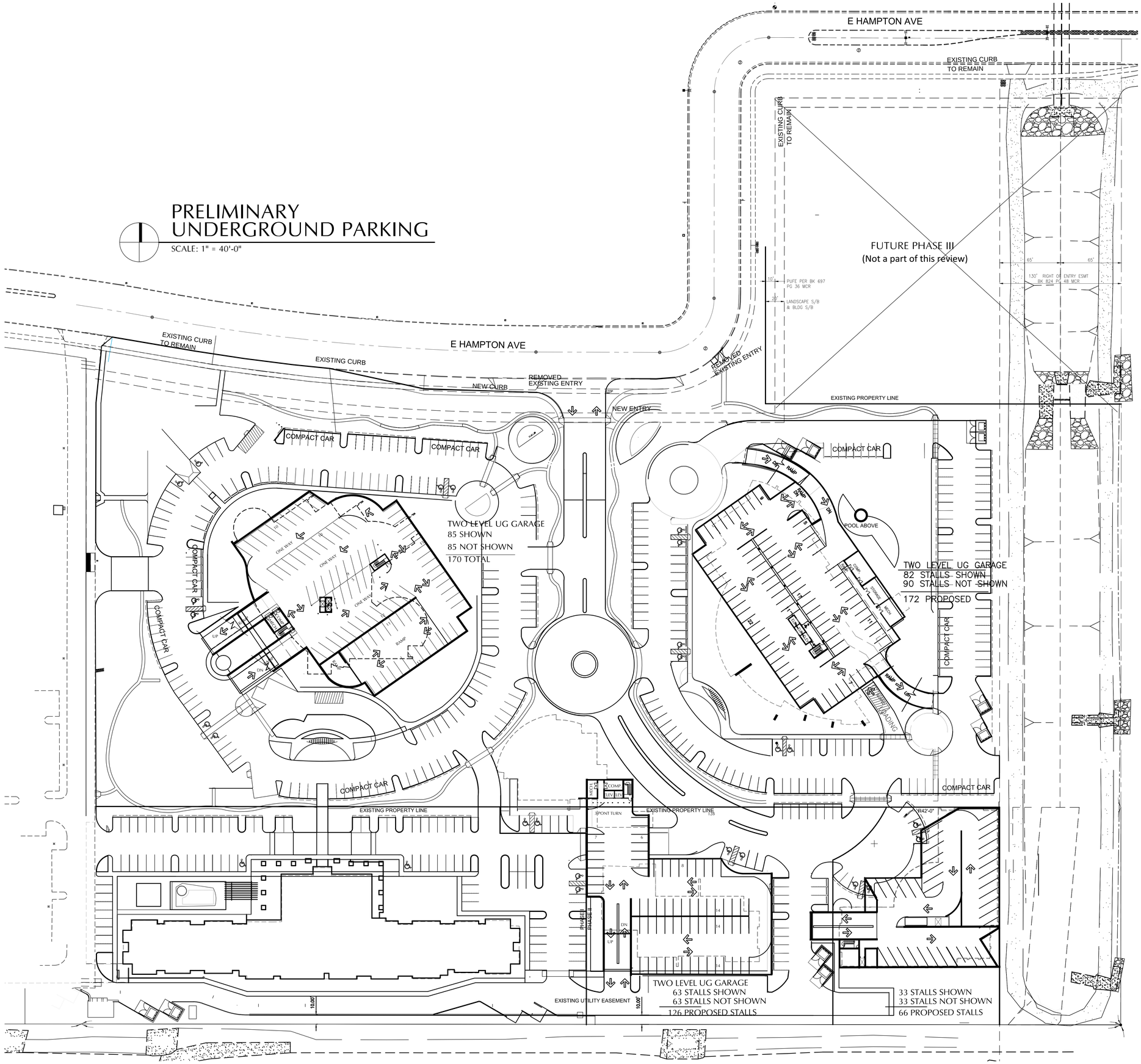
Job: 2017-12
Date: 11.01.2018
REVISIONS:

Drawn By:
J. E. Brown
H.S. Walker
Checked By:
J. E. Brown

A1.1

PRELIMINARY
UNDERGROUND PARKING

SCALE: 1" = 40'-0"



Building	Land Use	Total Size	Parking Ratio	Minimum Parking Spaces	Reduced Parking Spaces (15%)
1. Marriott Residence Inn	Hotels	127 rooms	1 space/room	127	108
2. Medical Office Building	Medical Offices	64,114 sq. ft.	1 space/200sf	321	272
	Medical Clinic	8,000 sq. ft.	1 space/200sf	40	34
	Fitness (Gym)	3,400 sq. ft.	1 space/100sf	34	29
3. Medical Office Building #2	Medical Offices	10,000 sq. ft.	1 space/200sf	50	43
4. Café/Restaurant	Eating and Drinking Establishment	4,275 sq. ft indoor 400 sq. ft. outdoor	1 space/75sf indoor + 1 space/200sf outdoor	59	50
5. Visitor Center	Guest Services	8,000 sq. ft.	1 space/375sf	21	18
6. Assisted Living	Assisted Living	168 rooms	1.2 space/room	202	171
7. Nursing School/Rehab & Medical Offices	Nursing School	10,000 sq. ft.	1 space/200sf	50	43
	Rehab Center	56,000 sq. ft.	1 space/400sf	140	119
	Medical Offices	10,000 sq. ft.	1 space/200sf	50	43
9. Future Hotel	Hotels	120 rooms	1 space/room	120	102
			Total	**1,214**	**1,032**

* SEE Special Use Permit for additional time of use and demand reductions

440 SURFACE PARKING
534 UG PARKING
974 PARKING PROPOSED

*58 SPACE REDUCTION FOR TIME OF USE DEMAND

See Parking report		Total:	974
	Surface Parking shown:		440
	Underground (covered) parking :		534
ADA required parking	20 plus 1 for each 100 over 1000		30
ADA required Van Spaces	1 out 6 ADA Req spaces must be Vans		5
Bicycle storage on site	50 spaces + 1/20 PS after frist 500		74

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PRELIMINARY
UNDERGROUND
PARKING

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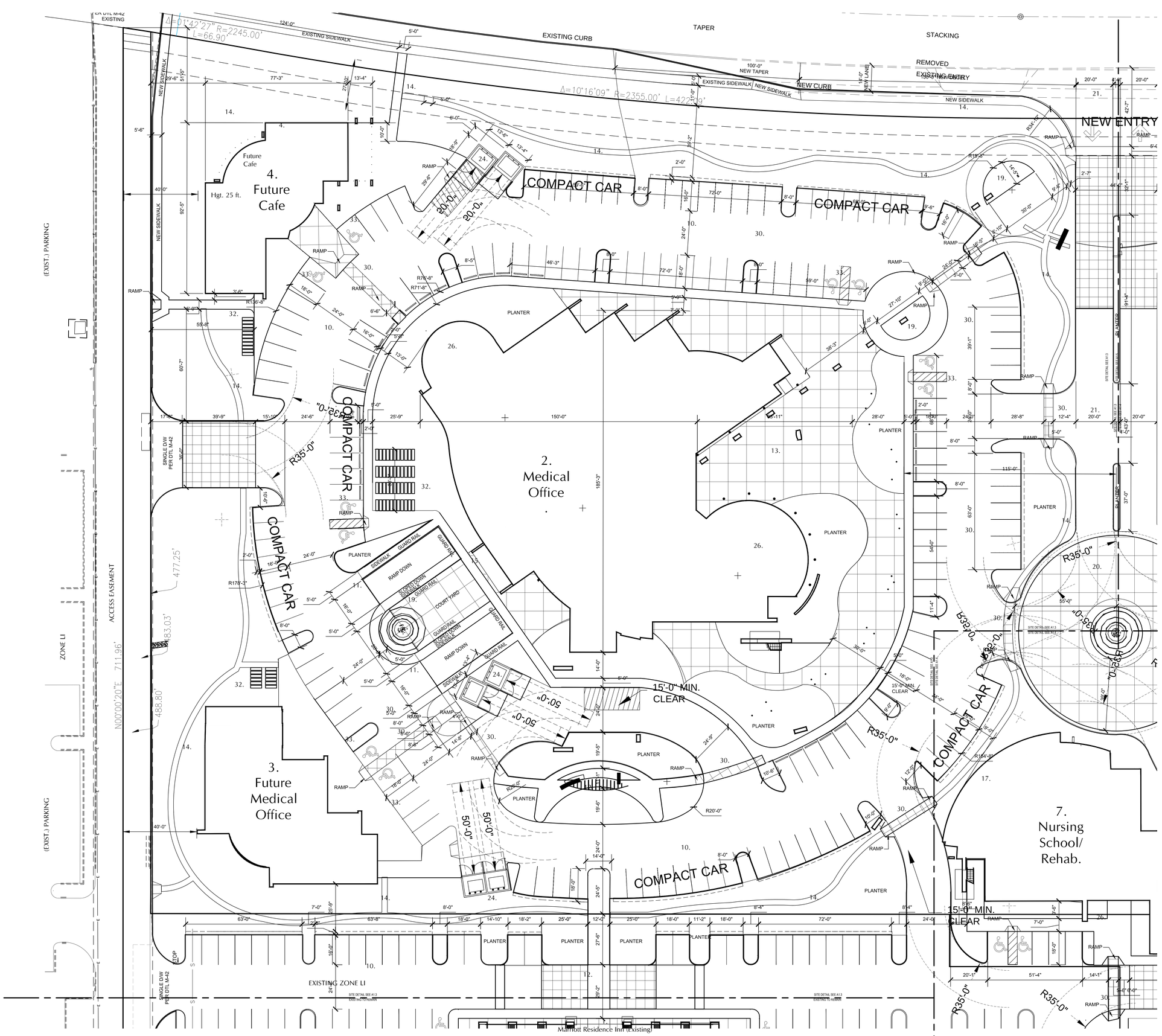
Drawn By:
J. E. Brown
H.S. Walker
Checked By:
J. E. Brown

A1.2



SITE PLAN DETAIL

SCALE: 1" = 20'-0"

Keynotes

PHASE I **EXISTING**

1. *Marriott Residence Inn* -Conference Center — 4 Story/ 116,120 SQFT

PHASE II

2. *Medical Office* — 5 Story / 75,514 SQFT
   - -Medical Offices
   - -Whole Care Center
   - -Public Health Education
   - -Nutrition Center
   - -Fitness Center
   - -Outpatient Surgery Center
   - -Urgent Care
3. *Future* Medical Office — 2 Story / 10,000 SQFT
4. *Future Cafe/Resturant* — 1 Story / 4,600 SQFT
5. *Visitor Center*
   - -Sales office
   - -Activity Center
   - -Business Center
6. *Residential Senior Independent Living* — 12 Story/ 277,200 SQFT (168 units)
   - -Luxury Condos
   - -Fitness Center
   - -Theater
   - -Restaurant / Food Court
   - -Professional Center
   - -Concierge Services
   - -Pet Boarding/Hotel
7. *Nursing School/Rehab* — 5 Story / 84,000 SQFT
   - -Medical Offices — **2nd floor (10,000 SF)**

PHASE III (not part of this review)

8. *Medical Offices* — 2 Story / 20,000 SQFT

PHASE IV

9. *Future Hotel* — 7 Story / 117,150 SQFT

10. Parking (TYPICAL STALL SIZE 9'X18' UNO)
11. Underground Parking Access Ramp
12. Shuttle Stop
13. Plaza W/ Decorative Pavers (Material Per DRB)
14. Pedestrian Walking Path (4' WIDE Min.)
15. Breakout Space
16. Park
17. Swimming Pool
18. Spa
19. Water Feature
20. Sculpture Monument
21. Entry Avenue
22. Dry Wash (EXISTING)
23. Emergency Vehicles (PER FPD 503.2.4)
24. Solid Waste Containers (PER DTL M-62.02.1, 8 cubic yard Waste & Recycle EA. LOC.,10 total)
25. Perimeter Fence (SEE LANDSCAPE PLANS)
26. Roof Garden
27. Sports Courts
28. Dog Park
29. Drainage R.O.W. (SEE ENGINEERING PLANS)
30. Pedestrian Cross Walk 5' Min. Wide (Decorative Pavers Material Per DRB)
31. Connections Bridges (MIN 15' CLEARANCE BELOW)
32. Bike Racks (PER COM CODE 11-32-8)
33. HC Parking Per ADA 2010 Standards (208.2)

Special Note:

1. Street Light Photo-Metrics on Hampton to be provided at Construction Plan Submittal per Transportation Review

2. Increase weekly waste pickup service as project reaches maximum density. Minimum weekly pick up twice per week if food waste is placed in containers.

3. All required testing and engineering to be provided at time of Construction Plan Submittal for existing water pressure.

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Checked By:
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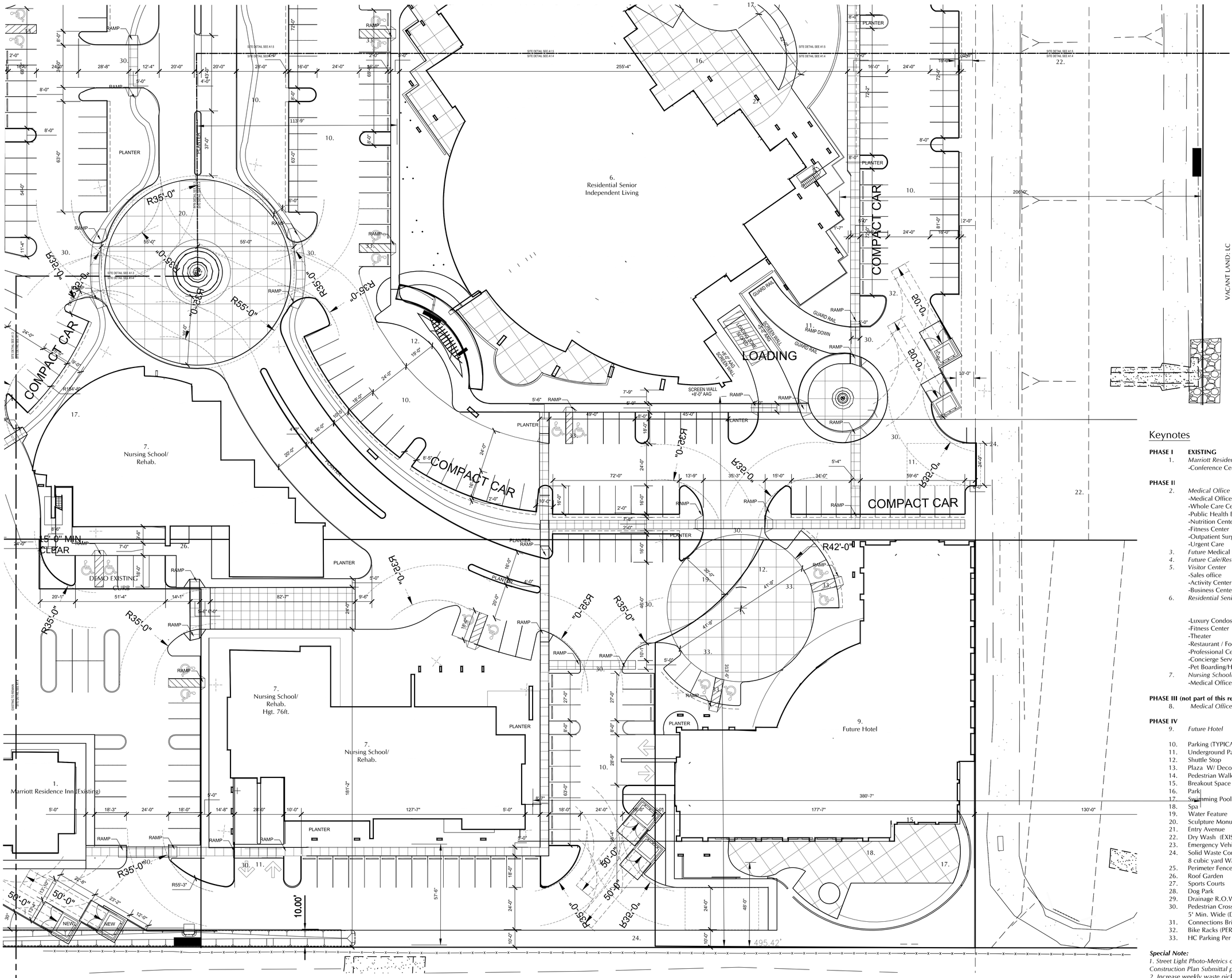
A1.3



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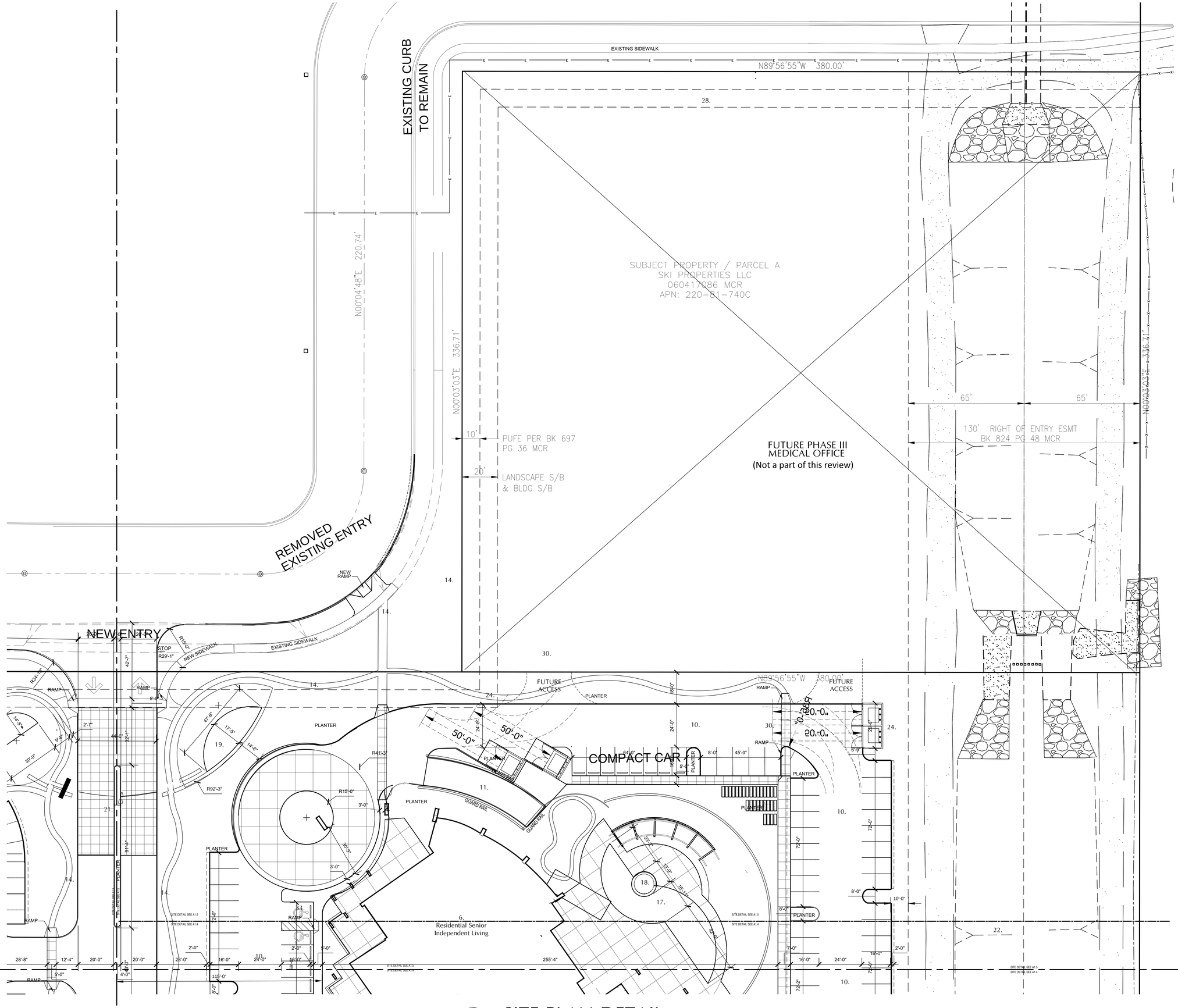
A1.4



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Drawn By:
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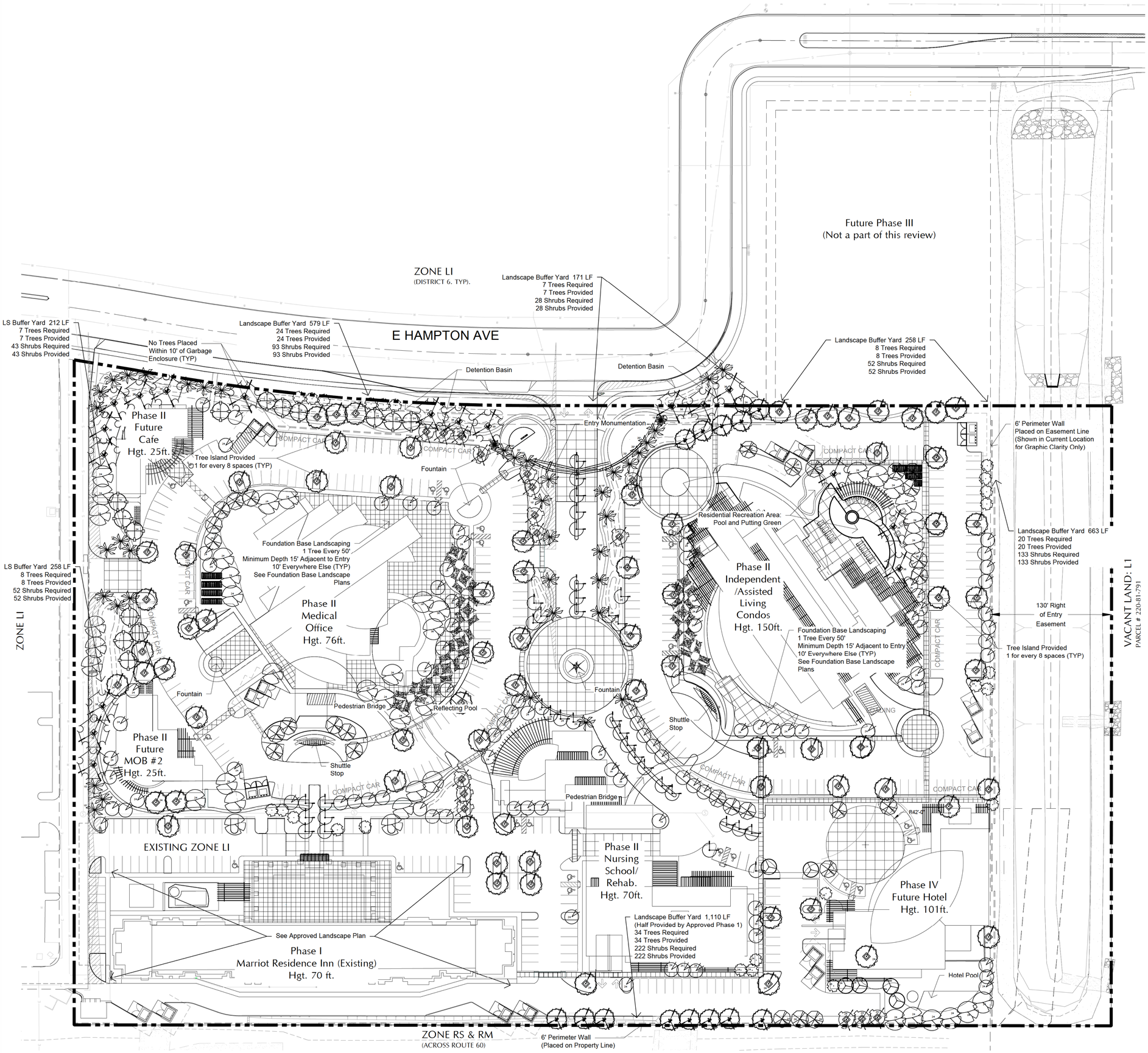
A1.5



NOTE:
No shrub or accent plant ending in a terminus spike or containing thorns will be located within eighteen inches of any pedestrian sidewalk, plaza, or amenity consisting of impervious surfaces

PLANT LEGEND

	TREES	
	Acacia willardiana	Palo Blanco
	Bauhinia lunarioides	Anacacho Orchid
	Brahea armata	Mexican Blue Palm
	Caesalpinia cacalaco	Cascalote
	Cercidium praecox	Palo Brea
	Cercidium thornless hybrid 'azt'	Azt Thornless Palo Verde
	Chamaerops humilis	Mediterranean Fan Palm
	Chilopsis linearis	Desert Willow
	Dalbergia sissoo	Indian Rosewood
	Pistacia chinensis	Chinese Pistache
	Prosopis glandulosa	Thornless Honey Mesquite
	Prosopis seedless hybrid 'azt'	Azt Seedless Hybrid Mesquite
	Sophora secundifolia	Texas Mountain Laurel
	Ulmus parvifolia	Arizona Elm
36	Tree Size - 36" Box	
24	Tree Size - 24" Box	
15	Tree Size - 15 Gallon	
20'	Palm Size - 20' Height	
15'	Palm Size - 15' Height	
If No Size or Ht. Indicated	Size of 15 Gallons, Height of 15'	
	ACCENTS	
	Agave Americana	Century Plant
	Agave desmettiana	Smooth Agave
	Agave weberii	Weber's Agave
	Bulbine frutescens 'tiny tangerine'	Dwarf Orange Bulbine
	Dasylirion wheeleri	Desert Spoon
	Hesperaloe funifera	Giant Hesperaloe
	Hesperaloe parviflora 'brake lights'	Brake Lights Red Yucca
	Hesperaloe parviflora	Red Yucca
	Muhlenbergia capilaris 'regal mist'	Regal Mist Pink Mulhy
	Muhlenbergia rigida 'nashville'	Purple Muhly
	Muhlenbergia rigens	Deer Grass
	Nassella tenuissima	Mexican Feather Grass
	Nolina microcarpa	Bear Grass
	Pedilanthus macrocarpus 'chilly willy'	Chilly Willy Lady Slipper
	Yucca rupicola	Twisted Leaf Yucca
	SHRUBS	
	Caesalpinia pulcherrima	Red Bird of Paradise
	Dodonea viscosa 'purpurea'	Purple Hop Bush
	Eremophila maculata 'valentine'	Valentine Bush
	Gossipium harknessii	San Marcos Hibiscus
	Justicia spicigera	Mexican Honeysuckle
	Leucophyllum langmaniae	Lynns Legacy Texas Sage
	Phlomis fruticose	Jerusalem Sage
	Reuellia brittoniana	Mexican Petunia
	Salvia clevelandii	Cleveland Sage
	Salvia greggii	Autumn Sage
	Simmondsia chinensis	Jojoba
	Tecoma stans x 'sparky'	Sparky Trumpet Flower
	GROUNDCOVER	
	Calylophus berlandieri 'tucson sun'	Tucson Sun Sundrops
	Dyssodia pentachaeta	Golden Dyssodia
	Lantana x 'new gold'	Yellow Lantana
	Lantana montevidensis	Trailing Purple Lantana
	Myoporum parvifolium	Trailing Myoporum
	Setcreasa pallida 'purpurea'	Purple Heart
	Tetraneuris acaulis	Angelita Daisy
	Verbena rigida	Sandpaper Verbena

SCALE: 1"= 40'-0"
0' 20' 40' 80'
NORTH

THE PLANNING CENTER
A Division of The Group Inc.
2 East Congress, Suite 900, Tucson, AZ 85701
520.623.6816 ag@planningcenter.com

PROJECT: KBH-01
DATE: 11/15/18
DRAWN BY: CJL-FW
CHECKED BY: FW

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18
4	REMOVE MED. OFFICE	10.30.18

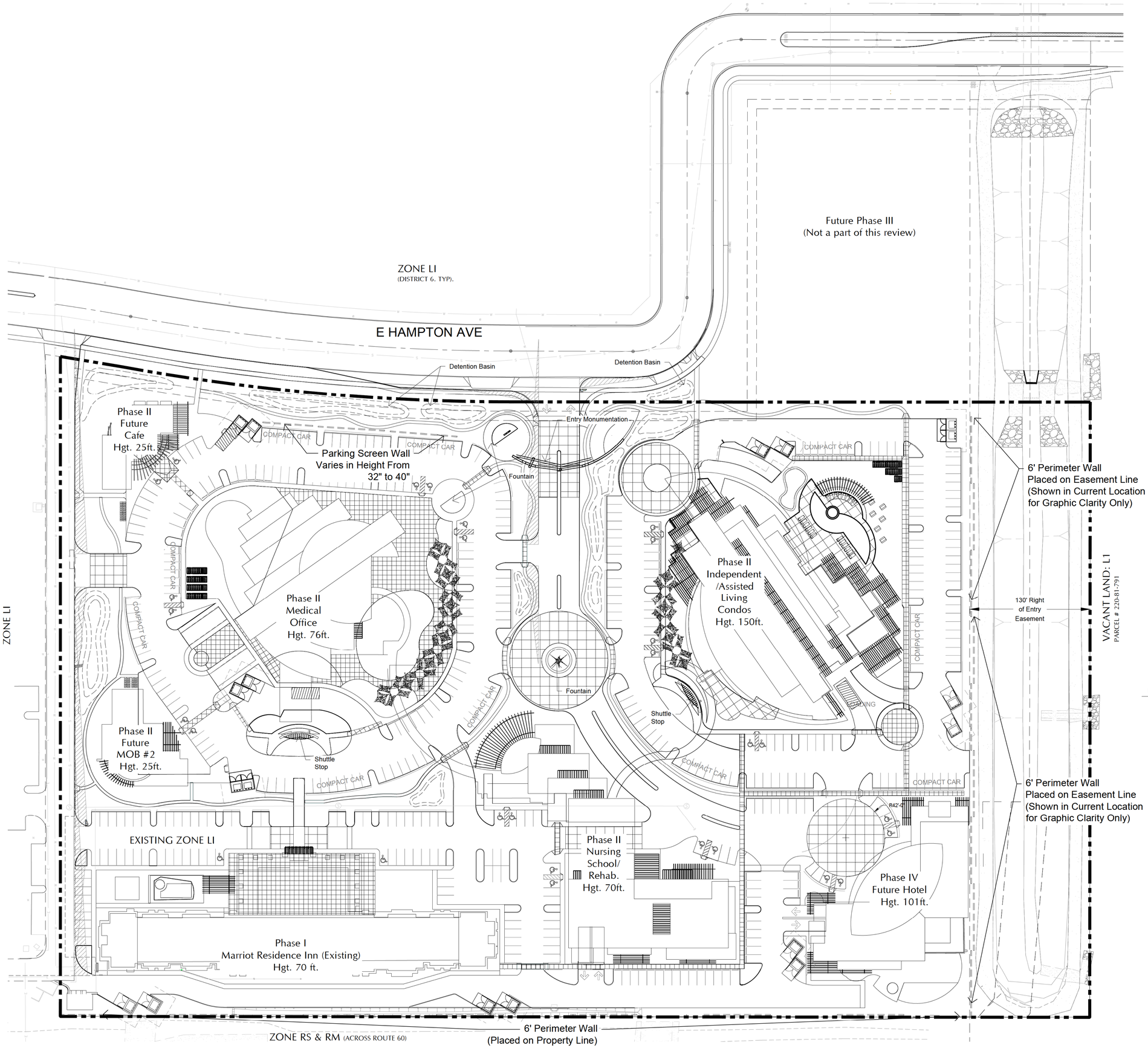
GRANDE Vita
a Biolcity Enterprise
10243 E Hampton Ave, Mesa Arizona 85209

Landscape Plan

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

L1.1
1 OF 3



LEGEND

Screen Wall or Perimeter Wall: Height Varies, See Plan.

SCALE: 1"= 40'-0"

NORTH

THE PLANNING CENTER
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2 East Congress, Suite 900
Tucson, AZ 85701
520.623.6146 wp@planningcenter.com

PROJECT: KBH-01
DATE: 11/15/18
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GRANDE Vita
a BioCity Enterprise

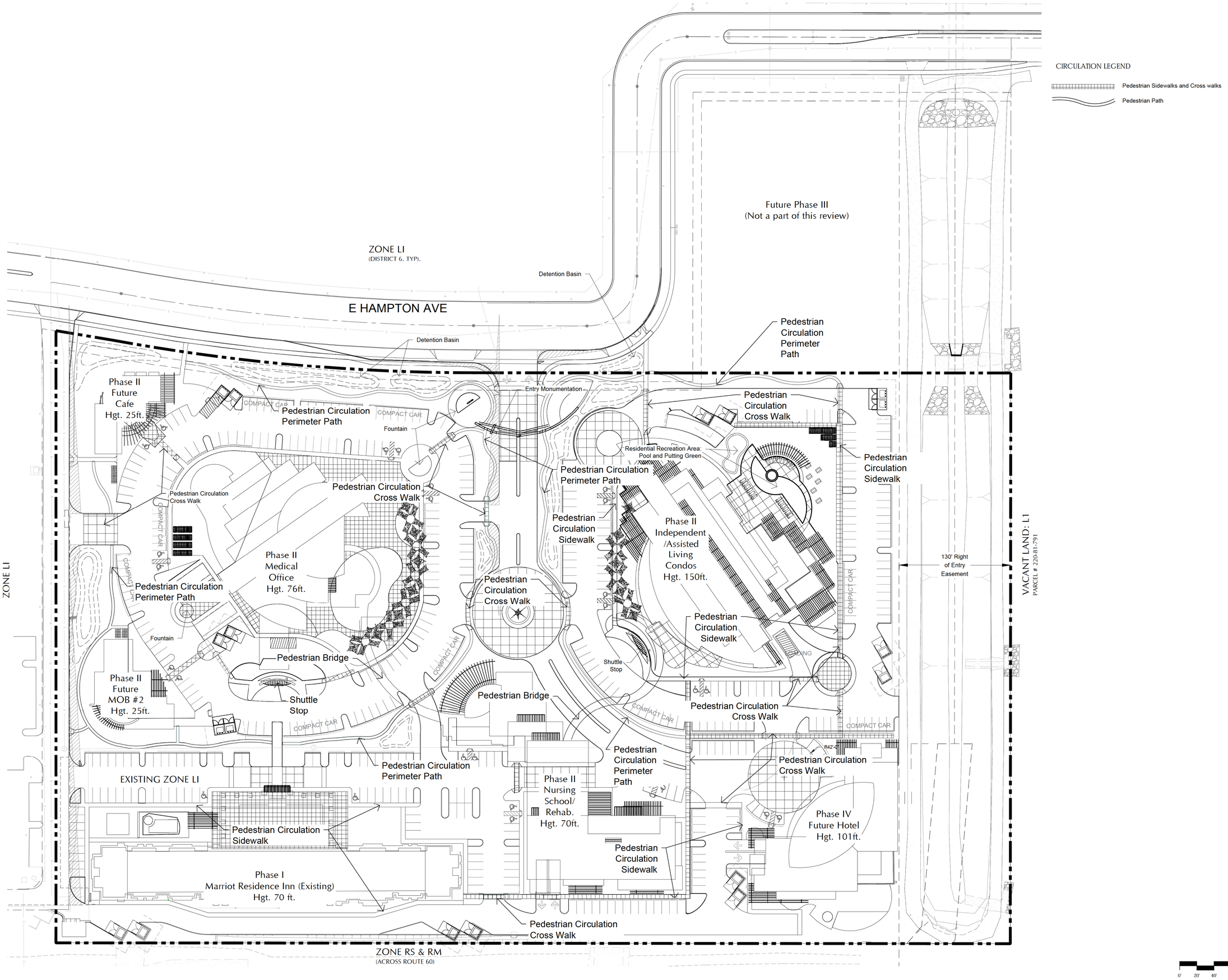
10243 E Hampton Ave, Mesa Arizona 85209

Wall Plan

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

L1.2
2 OF 3



THE PLANNING CENTER
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2 E. Jefferson St. Suite 1105
Phoenix, AZ 85004
520.623.6146 ray@planningcenter.com

PROJECT: KBH-01
DATE: 11/15/18
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GRANDE Vita
a Biocity Enterprise

10243 E Hampton Ave, Mesa Arizona 85209

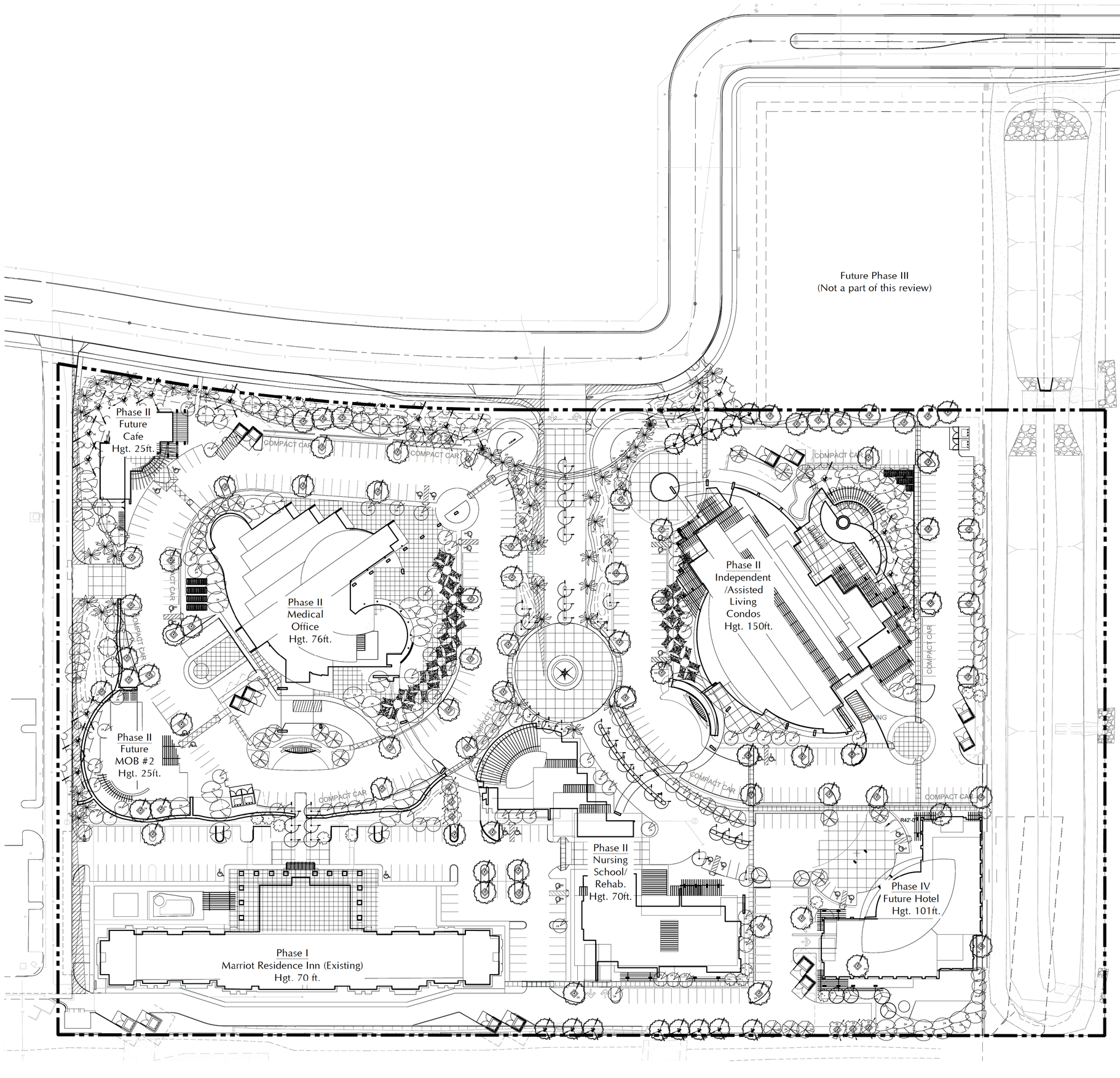
Circulation Plan

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

L1.3
3 OF 3

SCALE: 1"= 40'-0"
0' 20' 40' 80'
NORTH



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520.625.8148 ray@planningcenter.com

PROJECT: KBH-01
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CHECKED BY: FW

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18
4	REMOVE MED. OFFICE	10.30.18

GRANDE Vita
a Brickyard Enterprise

10243 E Hampton Ave, Mesa Arizona 85209

Foundation Plan
Overall

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

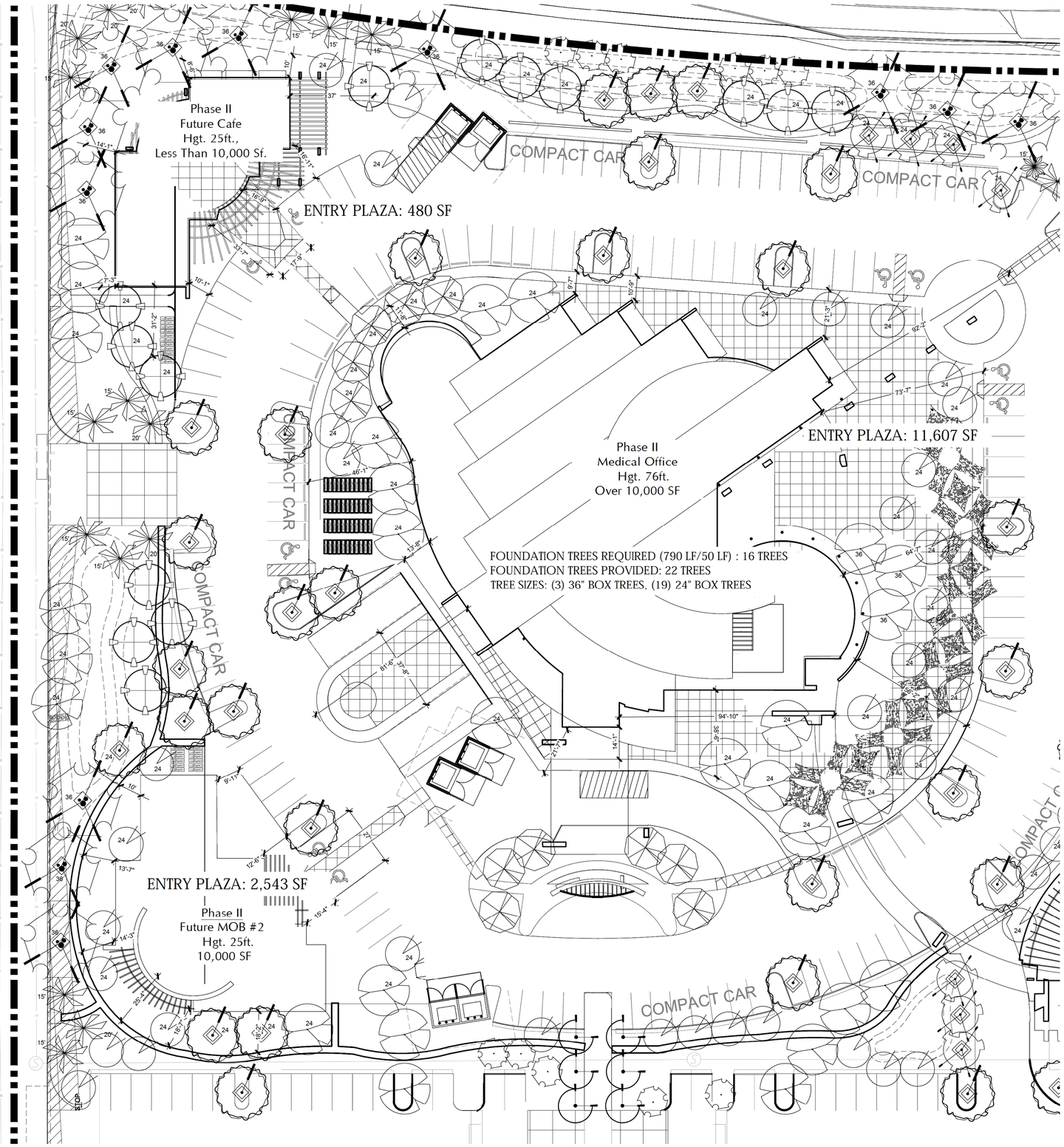
LF1.1
1 OF 5

0' 20' 40' 80'
SCALE: 1"= 40'-0"

NORTH

FOUNDATION TREES REQUIRED (320 LF/50 LF) : 7 TREES
FOUNDATION TREES PROVIDED: 11 TREES
TREE SIZES: (5) 36" BOX TREES, (6) 24" BOX TREES

FOUNDATION TREES REQUIRED (370 LF/50 LF) : 8 TREES
FOUNDATION TREES PROVIDED: 10 TREES
TREE SIZES: (3) 36" BOX TREES, (7) 24" BOX TREES



MEDICAL OFFICE BUILDING - FOUNDATION BASE

NOTE: ALL DIMENSIONS ARE TO THE BUILDING WALLS/FOUNDATION FOR THE 1ST FLOOR. THE BUILDING CONTAINS OVERHANGS AND ROOF LINES ON UPPER FLOORS THAT EXTEND OUT BEYOND THE WALLS/FOUNDATION OF THE 1ST FLOOR.

SEE LANDSCAPE PLAN FOR TREE/PLANTING PLAN INFORMATION.

SCALE: 1"= 20'-0"

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CALL TWO WORKING DAYS BEFORE YOU DIG
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(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18

GRANDE Vita
a Bluelity Enterprise

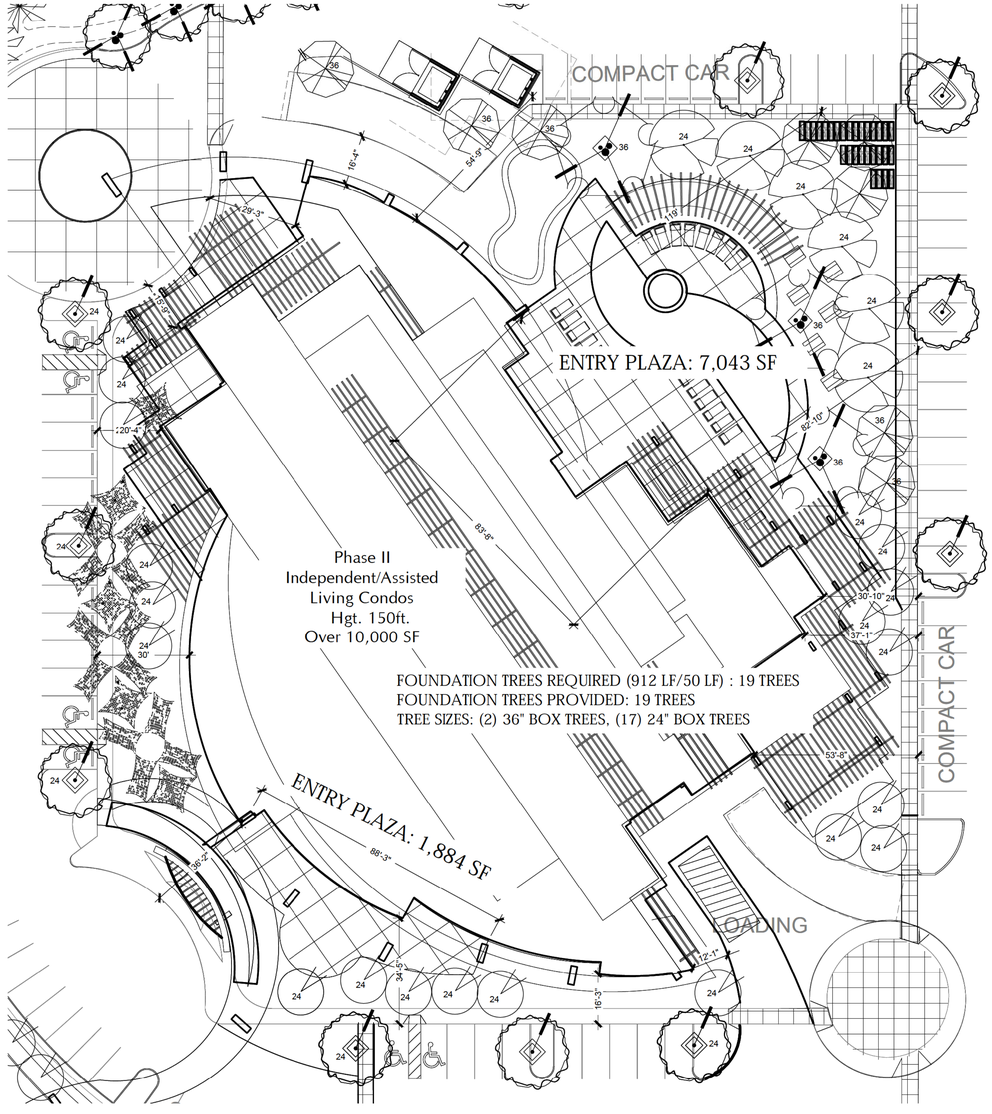
10243 E Hampton Ave, Mesa Arizona 85209

Foundation Plan
Medical Office

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

LF1.2
2 OF 5



INDEPENDENT/ASSISTED LIVING CONDOS - FOUNDATION BASE

NOTE: ALL DIMENSIONS ARE TO THE BUILDING WALLS/FOUNDATION FOR THE 1ST FLOOR. THE BUILDING CONTAINS OVERHANGS AND ROOF LINES ON UPPER FLOORS THAT EXTEND OUT BEYOND THE WALLS/FOUNDATION OF THE 1ST FLOOR.

SEE LANDSCAPE PLAN FOR TREE/PLANTING PLAN INFORMATION.

SCALE: 1"= 20'-0"

NORTH

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(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18

GRANDE Vita
a Bulley Enterprise

10243 E Hampton Ave, Mesa Arizona 85209

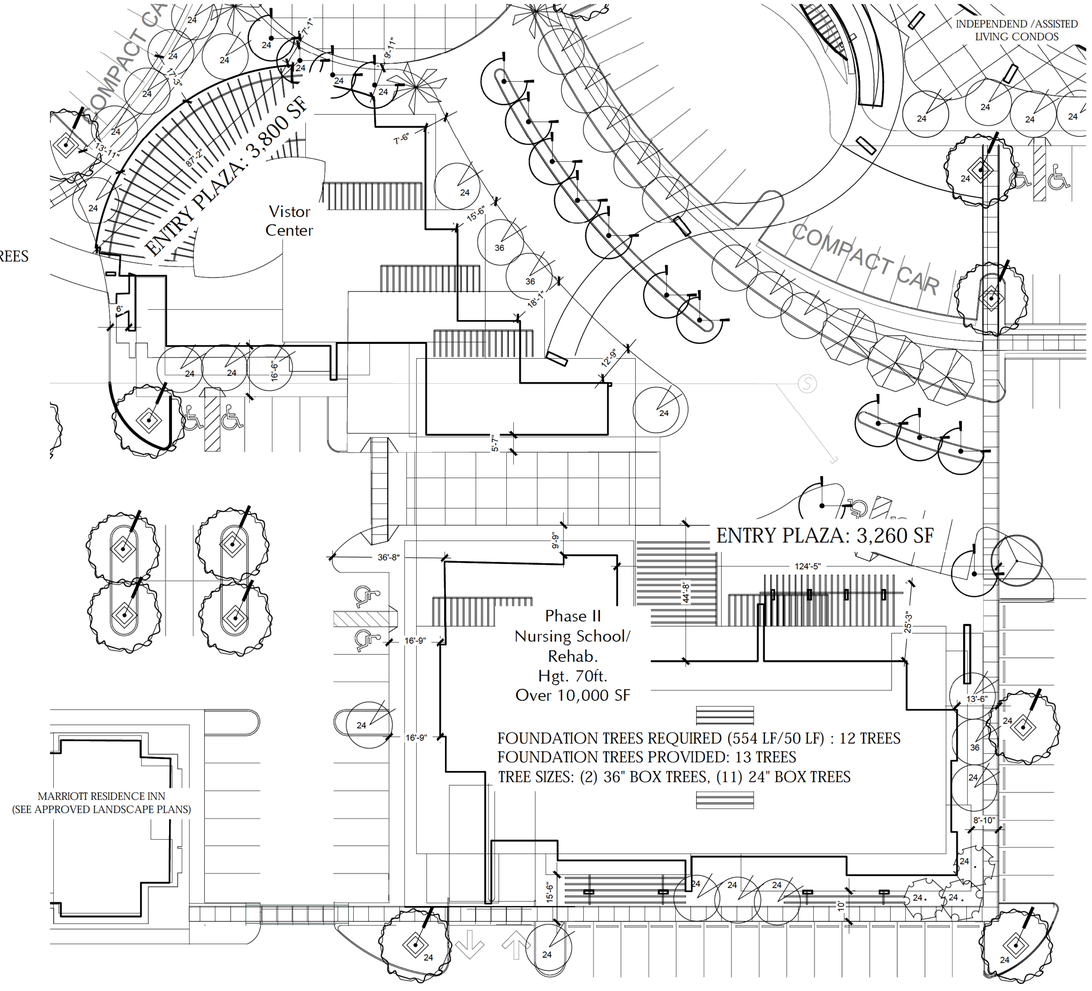
Foundation Plan
Condos

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

LF1.3
3 OF 5

FOUNDATION TREES REQUIRED (525 LF/50 LF) : 11 TREES
FOUNDATION TREES PROVIDED: 17 TREES
TREE SIZES: (2) 36" BOX TREES, (15) 24" BOX TREES



FOUNDATION TREES REQUIRED (554 LF/50 LF) : 12 TREES
FOUNDATION TREES PROVIDED: 13 TREES
TREE SIZES: (2) 36" BOX TREES, (11) 24" BOX TREES

VISITOR CENTER & NURSING SCHOOL/REHAB. - FOUNDATION BASE

NOTE: ALL DIMENSIONS ARE TO THE BUILDING WALLS/FOUNDATION FOR THE 1ST FLOOR. THE BUILDING CONTAINS OVERHANGS AND ROOF LINES ON UPPER FLOORS THAT EXTEND OUT BEYOND THE WALLS/FOUNDATION OF THE 1ST FLOOR.

SEE LANDSCAPE PLAN FOR TREE/PLANTING PLAN INFORMATION.

SCALE: 1"= 20'-0"

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(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18

GRANDE Vita
a Bixby Enterprise

10243 E Hampton Ave, Mesa Arizona 85209

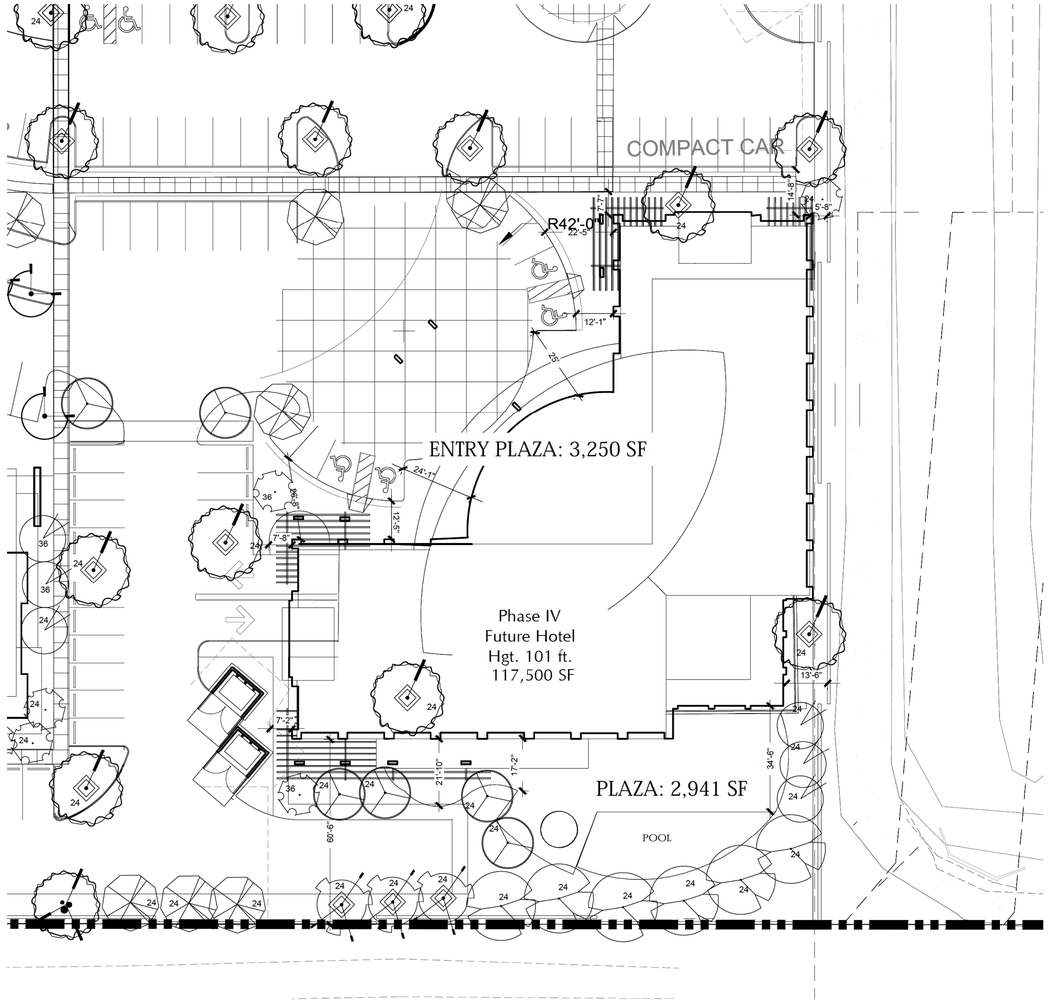
Foundation Plan
Nursing School

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

LF1.4
4 OF 5

FOUNDATION TREES REQUIRED (660 LF/50 LF) : 14 TREES
FOUNDATION TREES PROVIDED: 15 TREES
TREE SIZES: (2) 36" BOX TREES, (13) 24" BOX TREES



FUTURE HOTEL - FOUNDATION BASE

NOTE: ALL DIMENSIONS ARE TO THE BUILDING WALLS/FOUNDATION FOR THE 1ST FLOOR. THE BUILDING CONTAINS OVERHANGS AND ROOF LINES ON UPPER FLOORS THAT EXTEND OUT BEYOND THE WALLS/FOUNDATION OF THE 1ST FLOOR.

SEE LANDSCAPE PLAN FOR TREE/PLANTING PLAN INFORMATION.

SCALE: 1"= 20'-0" 0' 10' 20' 40' NORTH

THE PLANNING CENTER
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4745 N. 7th Street, Suite 211, Phoenix, AZ 85014
520.625.8748 ray@theplancenter.com

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(OUTSIDE MARICOPA COUNTY)

#	REVISIONS/SUBMITTALS	DATE
1	COMMENTS	8.16.18
2	COMMENTS	9.13.18
3	COMMENTS	9.27.18
4	REMOVE MED. OFFICE	10.30.18

GRANDE Vita
a Bluelity Enterprise

10243 E Hampton Ave, Mesa Arizona 85209

Foundation Plan
Future Hotel

CASE NO:
ZON18-00592

REFERENCE:
PRS18-00460

LF1.4
5 OF 5