CONTRACTOR QUALIFICATIONS

- CONTRACTOR MUST BE A LICENSED LANDSCAPE CONTRACTOR.
- 2. CONTRACTOR MUST HAVE A MINIMUM OF 10 YEARS OF PROVEN EXPERIENCE RELOCATING LARGE SPECIMEN TREES AND PALMS IN SOUTH FLORIDA.
- 3. CONTRACTOR MUST HAVE PROVEN EXPERIENCE RELOCATING TREES AND PALMS OF THE SAME SPECIES AND SIZE AS THOSE TO BE RELOCATED FOR THE CURRENT PROJECT.
- 4. CONTRACTOR MUST HAVE A CERTIFIED ARBORIST ON STAFF

CONTRACTOR REQUIREMENTS

- 1. CONTRACTOR MUST VISIT THE JOBSITE AND INSPECT ALL TREES AND PALMS TO BE RELOCATED AS WELL AS EXISTING SITE CONDITIONS AND RESTRICTIONS PRIOR TO PREPARING BID.
- 2. CONTRACTOR MUST VERIFY AND ENSURE THAT ALL TREES AND PALMS IDENTIFIED ON THE PLANS AND THOSE TAGGED ON THE JOBSITE CORRESPOND AS TO NUMBER AND DESCRIPTION. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY, PRIOR TO PREPARING BID.
- 3. CONTRACTOR MUST CONDUCT ALL WORK ASSOCIATED WITH RELOCATION AND MAINTENANCE OF TREES AND PALMS TO BE RELOCATED. NO WORK IS TO BE SUBCONTRACTED WITHOUT PRIOR WRITTEN CONSENT OF THE OWNER AND/OR LANDSCAPE ARCHITECT.
- 4. CONTRACTOR MUST DESIGNATE A COMPETENT, ENGLISH-SPEAKING SUPERVISOR OR FOREMAN OVERSEE AND DIRECT ALL RELOCATION AND MAINTENANCE ACTIVITIES AS OUTLINED IN THESE SPECIFICATIONS.
- CONTRACTOR MUST SCHEDULE ROOT PRUNING TO PROVIDE THE MAXIMUM POSSIBLE TIME FOR NEW ROOT GROWTH. EVEN TREES AND PALMS THAT TYPICALLY DO NOT REQUIRE LONG (OR ANY) ROOT PRUNING WILL BENEFIT FROM MORE ROOT PRUNING TIME; THEREFORE, ALL TREES AND PALMS TO BE RELOCATED MUST BE ROOT PRUNED. CONTRACTOR MUST PROVIDE A ROOT PRUNE SCHEDULE FOR EACH TREE OR PALM TO BE RELOCATED AS AN ATTACHMENT TO THE BID.
- 6. CONTRACTOR MUST CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED UNDER OR IN THE VICINITY OF THE CURRENT OF FUTURE LOCATIONS OF ALL TREES AND PALMS TO BE RELOCATED PRIOR TO WORK COMMENCING.
- 7. CONTRACTOR MUST VERIFY WITH THE GENERAL CONTRACTOR THE ABSENCE OF ANY UNDERGROUND CONSTRUCTION OR OBSTRUCTIONS (E.G., BULKHEADS, SEPTIC SYSTEMS, ETC.) IN THE CURRENT AND FUTURE LOCATIONS OF ALL TREES AND PALMS TO BE RELOCATED
- 8. CONTRACTOR MUST ALERT THE LANDSCAPE ARCHITECT OF ANY TREES OR PALMS THAT WILL NOT SUCCESSFULLY RELOCATE DUE TO POOR HEALTH PRIOR TO BEGINNING ROOT PRUNING.
- 9. CONTRACTOR MUST FLAG ALL PROPOSED TRANSPLANT LOCATION FOR THE LANDSCAPE ARCHITECT'S APPROVAL A MINIMUM OF 15 DAYS PRIOR TO RELOCATION.
- 10. CONTRACTOR MUST ENSURE THAT ALL TREES AND PALMS TO BE RELOCATED ARE INSTALLED AT THE CORRECT GRADE OR ELEVATION, ACCORDING TO THE GRADING PLAN.
- 11. CONTRACTOR MUST BE ENSURE THAT ALL ROOT FLARES ARE EXPOSED AFTER **RELOCATION.**
- 12. CONTRACTOR MUST REMOVE ALL RESIDUAL ROOTS, STUMPS, AND PORTIONS THEREOF AND BACKFILL PITS FROM WHICH RELOCATED TREES AND PALMS WERE REMOVED WITH CLEAN FILL FLUSH WITH THE SURROUNDING GRADE.
- 13. CONTRACTOR MUST BE REPAIR ANY DAMAGE TO OTHER PLANTS, LAWN, HARDSCAPES, OR NEW CONSTRUCTION WITHIN THE RELOCATION AREA AT CONTRACTOR'S EXPENSE. HARDSCAPES INCLUDE BUT ARE NOT LIMITED TO CURBS, WALKS, ROADS, FENCES, SITE FURNISHINGS, ETC.
- 14. CONTRACTOR MUST PHOTOGRAPHICALLY DOCUMENT NEW ROOT GROWTH FOLLOWING EACH ROOT PRUNE AND SUBMIT THIS DOCUMENTATION TO THE LANDSCAPE ARCHITECT. THE PURPOSE OF THIS REQUIREMENT IS TO ENSURE THAT SUFFICIENT ROOT GROWTH HAS OCCURRED PRIOR TO THE SECOND AND SUBSEQUENT ROOT PRUNES AND FOLLOWING THE FINAL ROOT PRUNE PRIOR TO RELOCATION.
- 15. CONTRACTOR MUST INSTALL AND MAINTAIN PROTECTION FENCING AROUND EACH TREE AND PALM TO BE RELOCATED BOTH DURING ROOT PRUNING AND AFTER RELOCATION. PROTECTION FENCING MUST CONSIST OF GALVANIZED WELDED WIRE FABRIC OR PLASTIC MESH ATTACHED TO 4'' X 4'' POSTS INSERTED AROUND THE PERIMETER OF THE DRIPLINE OF THE TREE OR PALM. PROTECTION FENCING MUST BE PLUMB, TAUT, AND STURDY AT ALL TIMES AND MUST REMAIN IN PLACE THROUGHOUT THE ROOT PRUNING AND WARRANTY PERIODS, OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- 16. CONTRACTOR MUST OBTAIN ALL NECESSARY OR REQUIRED PERMITS FOR THE RELOCATION AND TRANSPORTATION OF THE TREES AND PALMS TO BE RELOCATED.
- 17. CONTRACTOR MUST REPLACE ANY TREES OR PALMS SCARRED OR DAMAGE DURING RELOCATION, AT THE CONTRACTOR'S EXPENSE, WITH THE SAME OR SIMILAR SPECIES, SIZE, AND QUALITY. REPLACEMENT TREES OR PALMS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT, PREPARATION, AND/OR INSTALLATION. REPLACEMENT TREES AND PALMS MUST BE INSTALLED WITHIN 60 DAYS OF NOTICE.
- 18. CONTRACTOR MUST GUARANTEE ALL RELOCATED TREES AND PALMS FOR ONE YEAR FROM THE DATE OF RELOCATION TO THE FINAL LOCATION. GUARANTEE MUST INCLUDE TREE HEALTH AND SETTLING.
- 19. CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY TO PERFORM THE WORK COVERED HEREIN, INCLUDING BUT NOT LIMITED TO BACKFILL MATERIAL, PROTECTION FENCING, FLAGGING, ADDITIVES AND SUPPLEMENTS, TEMPORARY IRRIGATION, BURLAP, WIRE, SHRINK WRAP, AND ALL NECESSARY TOOLS AND EQUIPMENT

MITIGATION NOTES

- 1. THERE IS A TOTAL 976 SQUARE FEET OF CANOPY AREA PROPOSED FOR REMOVAL.
- 2. AS A RESULT, FOUR TREES ARE TO BE PLANTED ON-SITE TO MEET CITY OF MIAMI BEACH MITIGATION REQUIREMENTS.
- 2.1. THE FOUR TREES ARE TO BE **CATEGORY 1 TREES (12 FEET IN HEIGHT OF GREATER)** 2.2. **TWO** DIFFERENT SPECIES ARE TO BE USED FOR THE MITIGATION PLANTINGS. FIFTY PERCENT OF THE TREES ARE TO BE NATIVE TO MIAMI-DADE COUNTY. AS A 2.3. RESULT, A MINIMUM OF TWO NATIVE TREES ARE TO BE PLANTED.

- OF SEALANT.
- RECOMMENDATIONS.

- THE ROOTS.
- SOUTH FLORIDA.

CALIPER	
<u>(inches)</u>	
1-4	
4-5	
6-7	
8-9	
10-11	

- INSPECTION.

- BLACK OLIVE (BUCIDA BUCERAS)

- MAGO (MANGIFERA INDICA)
- VERAWOOD (BULNESIA ARBOREA)

TREE ROOT PRUNING SPECIFICATIONS

ALL TREES AND PALMS TO BE RELOCATED MUST BE WATERED DAILY FOR AT LEAST 2-3 DAYS PRIOR TO ANY ROOTS BEING CUT TO ENSURE THAT THEY ARE FULLY HYDRATED. EACH WATERING MUST THOROUGHLY SATURATE THE ROOTBALL TO ITS FULL DEPTH.

2. EACH TREE AND PALMS MUST THEN BE WATERED EVERY OTHER DAY, NOT RELYING ON RAIN, DURING THE ENTIRE ROOT PRUNING PROCESS EITHER BY A TEMPORARY IRRIGATION SYSTEM OR BY HAND. EACH WATERING MUST THOROUGHLY SATURATE THE ROOTBALL TO ITS FULL DEPTH.

3. TREE AND PALM RELOCATION ACTIVITIES MUST BE SCHEDULED SO THAT REMOVAL AND REPLANTING TAKE PLACE IN THE SAME 24-HOUR PERIOD. NO TREES OR PALMS MAY BE "STOCKPILED" ONSITE OR OFFSITE FOR ANY PERIOD OF TIME WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. WHEN ALLOWED, APPROVAL FOR THE METHOD OF "STOCKPILING" MUST BE OBTAINED FROM THE LANDSCAPE ARCHITECT.

ALL DIGGING IN THE ROOT ZONE DURING THE ROOT PRUNE PROCESS MUST BE DONE BY HAND: NO MACHINERY WILL BE ALLOWED. PRUNING OF ROOTS MUST BE DONE BY HAND WITH CLEAN, SHARP TOOLS. DO NOT PAINT CUT ROOTS WITH TREE PAINT OR ANY KIND

5. MYCORRHIZA (ROOTS® TRANSPLANT OR EQUIVALENT) MUST BE INCORPORATED INTO THE BACKFILL SOIL PRIOR TO BACKFILLING AS PER MANUFACTURER'S

6. AFTER EACH ROOT PRUNE, EACH SECTION OF ROOTBALL THAT IS PRUNED MUST BE WRAPPED WITH BLACK PLASTIC AND THE TRENCH BACKFILLED WITH ORIGINAL EXCAVATED SOIL. A TREE RING WITH A MINIMUM HEIGHT OF 6'' MUST BE CONSTRUCTED 6-12" OUTSIDE THE OUTERMOST EDGE OF THE ROOTBALL AND AROUND THE ENTIRE PERIMETER OF THE ROOTBALL TO DIRECT IRRIGATION WATER AND ANY ADDED SUPPLEMENTS DOWN INTO THE ROOTBALL DURING ROOT REGENERATION.

7. ONCE THE TREE RING IS CONSTRUCTED AFTER EACH ROOT PRUNE, A HIGH-PHOSPHORUS ROOT STIMULANT MUST BE LIBERALLY APPLIED TO THE SURFACE OF THE ROOTBALL AND THOROUGHLY WATERED IN TO ENCOURAGE NEW ROOT GROWTH.

PRIOR TO ANY ROOTS BEING CUT, ALL MAJOR ROOTS MUST BE IDENTIFIED TO DETERMINE THE ROOTBALL DIAMETER BASED ON THE RELATIVE LOCATION AND SIZE OF

MANY TREE RELOCATION SPECIFICATIONS USE "GENERAL RULES" TO CALCULATE MINIMUM ROOTBALL DIAMETER, SUCH AS MULTIPLYING THE DIAMETER AT BREAST HEIGHT (DBH) OF THE TREE BY A FACTOR OF 10 OR ALLOWING A MINIMUM OF 9"-12" OF ROOTBALL FOR EVERY 1" OF TREE CALIPER. OTHERS LIST UNREALISTIC MINIMUM SIZES FOR THE ROOTBALLS OF VARIOUS TREE CALIPERS OR OTHERS LIST UNREALISTIC MINIMUM SIZES FOR THE ROOTBALLS OF VARIOUS TREE CALIPERS OR HEIGHTS. IN MANY CASES, SUCH APPROACHES RESULT IN ROOTBALLS THAT ARE EITHER TOO LARGE OR TOO SMALL FOR A GIVEN TREE. THE FOLLOWING TABLE LIST MINIMUM ROOTBALL DIAMETERS BASED ON REAL-WORLD EXPERIENCE OF TREE RELOCATION SPECIALISTS IN

MIN. ROOTBALL	CALIPER	MIN. ROOTBALL
DIA. (feet)	<u>(inches)</u>	DIA. (feet)
3	12-14	8
4	15-17	10
5	18-24	12-15
6	25-30	15-25
7	30+	as needed

WHENEVER POSSIBLE, ROOTBALLS MUST BE CIRCULAR IN SHAPE WITH AN EQUAL DISTANCE FROM THE TRUNK TO THE EDGE OF ROOTBALL ALL AROUND.

MINIMUM ROOTBALL DEPTH MUST BE 24"-36" FOR ALL TREES TO BE RELOCATED, WITH THE ACTUAL DEPTH TO BE DETERMINED ONLY AFTER A THOROUGH EXAMINATION OF ALL ROOTS DURING THE INITIAL ROOT INSPECTION AND BASED ON THE ABSENCE OF MAJOR ROOTS AT THE BOTTOM OF THE ROOTBALL, ROOTBALLS DEEPER THAN 36" MAY BE REQUIRED FOR LARGE SPECIMEN TREES, DEPENDING ON THE RELATIVE LOCATIONS AND DEPTHS OF THE MAJOR ROOTS AS OBSERVED DURING THE INITIAL ROOT

AS A GENERAL RULE, MINIMUM ROOT PRUNE TIME FOR TREES WITH A DBH OF LESS THAN 10" IS 12 WEEKS. THE FIRST ROOT PRUNE MUST BE ON TWO OPPOSING SIDES OF THE ROOTBALL, WITH THE SECOND ROOT PRUNE ON ONE OF THE OTHER TWO SIDES DONE A MINIMUM OF 6 WEEKS LATER, AND A THIRD ROOT PRUNE ON THE LAST SIDE DONE A MINIMUM OF 3 WEEKS AFTER THAT. THE SECOND AND THIRD ROOT PRUNES MAY ONLY BE DONE WHEN HEALTHY NEW ROOT GROWTH FROM EARLIER ROOT PRUNES IS EVIDENT (SEE SECTION 2.14 ABOVE FOR SPECIFICATIONS ON PHOTOGRAPHICALLY DOCUMENTING NEW ROOT GROWTH DURING THE ROOT PRUNE PROCESS). MORE TIME MAY BE NEEDED DURING THE COOLER MONTHS OF THE YEAR.

AS A GENERAL RULE, MINIMUM ROOT PRUNE TIME FOR TREES WITH A DBH OF 10'' OR GREATER IS 24 WEEKS, THE FIRST ROOT PRUNE MUST BE ON TWO OPPOSING SIDES OF THE ROOTBALL, WITH THE SECOND ROOT PRUNE ON ONE OF THE OTHER TWO SIDES DONE A MINIMUM OF 12 WEEKS LATER, AND A THIRD ROOT PRUNE ON THE LAST SIDE DONE A MINIMUM OF 6 WEEKS AFTER THAT. THE SECOND AND THIRD ROOT PRUNES MAY ONLY BE DONE WHEN HEALTHY NEW ROOT GROWTH FROM EARLIER ROOT PRUNES IS EVIDENT (SEE SECTION 2.14 ABOVE FOR SPECIFICATIONS ON PHOTOGRAPHICALLY DOCUMENTING NEW ROOT GROWTH DURING THE ROOT PRUNE PROCESS). MORE TIME MAY BE NEEDED DURING THE COOLER MONTHS OF THE YEAR.

CERTAIN HARDWOOD TREES AND GYMNOSPERMS REQUIRE LONGER ROOT PRUNING TIMES. THESE INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

AVOCADO (PERSEA AMERICANA)

BRIDALVEIL (CAESALPINIA GRANADILLO)

 CASSIAS (ALL SPECIES OF CASSIA) LIGNUM VITAE (GUA/ACUM SANCTUM & G. OFFICINALE)

• PODOCARPUS (PODOCARPUS SP.)

LIVE OAK (QUERCUS VIRGINIANA)

MAHOGANY (SWIETENIA MAHAGONI)

PIGEON PLUM (COCCOLOBA DIVERSIFOLIA)

SWEET ACACIA (ACACIA FARNESIANA)

WILD TAMARIND (LYSILOMA LATISILIQUUM & L. SABICU)

PALM ROOT PRUNING SPECIFICATIONS

THE FOLLOWING TABLE LISTS MINIMUM ROOTBALL DIAMETERS FOR VARIOUS SPECIES OF PALMS BASED ON REAL-WORLD EXPERIENCE OF RELOCATION SPECIALISTS IN SOUTH FLORIDA

PALM SPECIES	ROOT
SABAL/CABBAGE PALM	
QUEEN & FOXTAIL PALMS	12''fro
ROYAL & COCONUT PALMS	18-24'' f
CANARY DATE PALM	24'' fro
SLOW-GROWING PALMS	24'' fro

- 2. PALM ROOTBALL MUST BE A MINIMUM OF 24¹¹ DEEP, WHENEVER POSSIBLE, ROOTBALLS MUST BE CIRCULAR IN SHAPE WITH AN EQUAL DISTANCE FROM THE TRUNK TO THE EDGE OF THE ROOTBALL ALL AROUND.
- AS A GENERAL RULE, MINIMUM ROOT PRUNE TIME FOR PALMS IS 6-8 WEEKS. THE FIRST ROOT PRUNE MUST BE ON TWO OPPOSING SIDES OF THE ROOTBALL, WITH THE SECOND ROOT PRUNE ON ONE OF THE OTHER TWO SIDES DONE A MINIMUN OF 3-4 WEEKS LATER. AND A THIRD ROOT PRUNE ON THE LAST SIDE DONE A MINIMUM OF 4.5-6 WEEKS AFTER THAT. THE SECOND AND THIRD ROOT PRUNES MAY ONLY BE DONE WHEN HEALTHY NEW ROOT GROWTH FROM EARLIER ROOT PRUNES IS EVIDENT (SEE SECTION 2.14 ABOVE FOR SPECIFICATIONS ON PHOTOGRAPHICALLY DOCUMENTING NEW ROOT GROWTH DURING THE ROOT PRUNE PROCESS). MORE TIME MAY BE NEEDED DURING THE COOLER MONTHS OF THE YEAR.
- CERTAIN PALMS, IN PARTICULAR THOSE THAT ARE SLOW GROWING, REQUIRE LONGER ROOT PRUNING TIME. THESE INCLUDE. BUT ARE NOT LIMITED TO. THE FOLLOWING.
- ALL SPECIES OF ARCHONTOPHOENIX
- ALL SPECIES OF CORYPHA AMERICAN OIL PALMS (ALL SPECIES OF ATTALEA)
- BISMARCK PALM (BISMARCKIA NOBILIS)
- CUBAN & CARIBBEAN COPERNICIA CUBAN BELLY PALM (GASTROCOCOS CRISPA)
- GINGERBREAD/DOUM PALMS (ALL SPECIES OF HYPHAENE)
- PALMYRA PALMS (ALL SPECIES OF BORASSUS) SATAKE PALM (SATAKENTIA LIUKIUENSIS)
- SAW PALMETTO (SERENOA REPENS)
- SILVER PALM (COCCOTHRINAX ARGENTATA) • ZOMBIE PALM (ZOMBIA ANTILLARUM)

FOR THESE PALMS, THE MINIMUM ROOT PRUNING TIME IS 4-6 MONTHS OR GREATER. ONLY WHEN SUFFICIENT NEW ROOT GROWTH HAS TAKEN PLACE FOLLOWING AN EARLIER ROOT PRUNE CAN THE NEXT ROOT PRUNE BE DONE, AND ONLY WHEN SUFFICIENT NEW ROOT GROWTH HAS TAKEN PLACE FOLLOWING THE FINAL ROOT PRUNE MAY THE TREE BE RELOCATED (SEE SECTION 2.14 ABOVE FOR SPECIFICATIONS ON PHOTOGRAPHICALLY DOCUMENTING NEW ROOT GROWTH DURING THE ROOT PRUNE PROCESS).

TREE CANOPY PRUNING SPECIFICATIONS

- PRIOR TO RELOCATION, THE CANOPY OF EACH TREE TO BE RELOCATED MUST BE SELECTIVELY PRUNED TO REMOVE CROSSING DEAD, DISEASED, BROKEN, AND LOW HANGING BRANCHES THAT MAY INTERFERE WITH CONSTRUCTION ACTIVITIES, OR THAT MAY INTERFERE OR RESTRICT STRAPPING OR LIFTING THE TREE DURING RELOCATION.
- FOR TREES BEING RELOCATED ONSITE, THE CANOPY MAY BE SELECTIVELY THINNED AND REDUCED BY NO MORE THAN 1/3 OF THE OVERALL CANOPY MASS. AT THE DIRECTION OF THE LANDSCAPE ARCHITECT; HOWEVER, THE BASIC SHAPE, FORM, AND CHARACTER OF THE TREES MUST BE PRESERVED.
- FOR TREES BEING RELOCATED OFFSITE, THE CANOPY MUST BE PRUNED, AT THE DIRECTIONS OF THE LANDSCAPE ARCHITECT, TO FIT ON THE TRAILER FOR TRANSPORT EVERY EFFORT MUST BE MADE TO RETAIN AS MANY BRANCHES AS POSSIBLE. TO THE WIDEST LOAD WIDTH ALLOWABLE BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. CONTRACTOR MUST OBTAIN ALL NECESSARY PERMITS AND ESCORTS TO TRANSPORT WIDE LOADS, PER FLORIDA LAW.
- 4. ALL CANOPY PRUNING MUST BE CONDUCTED FOLLOWING ANSI A-300 TREE PRUNING STANDARDS AND BEST MANAGEMENT PRACTICES.
- ALL DEBRIS GENERATED DURING CANOPY PRUNING MUST BE REMOVED OFFSITE AND DISPOSED

PALM CANOPY PRUNING SPECIFICATIONS

- 1. IT IS WELL KNOW THAT SOME PALMS SURVIVE RELOCATION BETTER WHEN ALL OF THE LEAVES ARE REMOVED (E.G., CABBAGE PALM, SABAL PALMETTO), AND THAT OTHER PALMS BENEFIT FROM HAVING THEIR LEAVES CUT IN HALF DURING RELOCATION (E.G., COCONUT PALM. COCOS NUCIFERA). BOTH OF THESE HORTICULTURAL PRACTICES. WHILE TRUE, ARE ONLY APPLICABLE WHEN PALMS ARE NOT ROOT PRUNED. LEAVES DO NOT NEED TO BE CUT IN HALF OR REMOVED FROM PALMS THAT ARE ADEQUATELY ROOT PRUNED. ON OCCASION WHEN SUFFICIENT ROOT PRUNING TIME IS NOT AVAILABLE, PALMS TO BE RELOCATED MAY HAVE THEIR LEAVES CUT IN HALF OR REMOVED ENTIRELY AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
- PALMS LEAVES MUST BE TIED UP WITH 2-PLY BIODEGRADABLE TWINE PRIOR TO RELOCATION TO PREVENT MECHANICAL DAMAGE DURING THE RELOCATION PROCESS.
- 3. PALM TRUNKS SHALL ONLY BE 'CLEANED UP' ACCORDING TO THE LANDSCAPE ARCHITECT'S SPECIFICATIONS SPECIFIC TO EACH PALM.

TREE DISPOSITION SCHEDULE

#	BOTANICAL NAME	COMMON NAME	DBH.	HT.	SPREAD	ACTION	NOTES
1	ROYSTONEA REGIA	ROYAL PALM	24"	30'	16'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
2	ROYSTONEA REGIA	ROYAL PALM	24"	30'	16'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
3	ROYSTONEA REGIA	ROYAL PALM	24"	30'	16'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
4	ROYSTONEA REGIA	ROYAL PALM	24"	30'	16'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
5	COCCOLOBA DIVERSIFOLIA	PIGEON PLUM	4"	12'	5'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
6	COCCOLOBA DIVERSIFOLIA	PIGEON PLUM	4"	12'	5'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
7	COCCOLOBA DIVERSIFOLIA	PIGEON PLUM	4"	12'	5'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
8	CONOCARPUS ERECTUS 'S'	SILVER BUTTONWOOD	6"	12'	6'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
9	CONOCARPUS ERECTUS 'S'	SILVER BUTTONWOOD	6"	12'	6'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
10	CONOCARPUS ERECTUS 'S'	SILVER BUTTONWOOD	6"	12'	6'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE
11	CONOCARPUS ERECTUS 'S'	SILVER BUTTONWOOD	6"	12'	6'	REMOVE	PLANT CONFLICTS WITH CONSTRUCTION ENVELOPE

- BALL SPECIFICATIONS 36" diameter rom trunk in all directions from trunk in all direction
- rom trunk in all directions rom trunk in all directions

RELOCATION SPECIFICATIONS

- 1. LANDSCAPE CONTRACTOR TO FLAG ALL PROPOSED PLANT LOCATIONS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION. NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 15 DAYS PRIOR TO REVIEW.
- ALL TREES AND PALMS TO BE RELOCATED MUST BE WATERED DAILY FOR AT LEAST 5 2. DAYS PRIOR TO ANY RELOCATION TO ENSURE THAT THEY ARE FULLY HYDRATED. EACH WATERING MUST THOROUGHLY SATURATE THE ROOTBALL TO ITS FULL DEPTH.
- 3. ALL ROOTBALLS MUST BE WRAPPED IN BURLAP AND THE TIGHTLY WIRE-WRAPPED (USING REDLINE HORSE WIRE OR EQUIVALENT) TO KEEP THE ENTIRE ROOTBALL INTACT DURING RELOCATION. TREES AND PALMS GROWING IN LIMESTONE MUST BE DUG AND RELOCATED WITH THE ROOT ATTACHED TO A SECTION OF ROCK AS PART OF THE ROOTBALL SUCH THAT THE ROOTS REMAIN INTACT, ROOTBALLS COMING FROM SAND OR SANDY SOIL MAY ALSO NEED TO BE BOXED PRIOR TO RELOCATION, AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.
- TREES AND PALMS BEING RELOCATED OFFSITE MUST HAVE THEIR ENTIRE ROOTBALLS THOROUGHLY AND TIGHTLY WRAPPED WITH PLASTIC SHRINK WRAP ON THE OUTSIDE OF THE WIRE WRAP, AND THE ENTIRE TREE OR PALM (INCLUDING CANOPY, TRUNK, AND ROOTBALL) MUST BE COVERED WITH A BREATHABLE TARP (E.G., SHADE CLOTH) DURING TRANSPORT.
- NEW PLANTING PITS FOR RELOCATED TREES AND PALMS MUST BE PREPARED PRIOR TO LIFTING THE PALM OR TREE FROM ITS CURRENT LOCATION AND MUST BE AT LEAST 3-4 FEET WIDER THAN THE ROOTBALL AND THE SAME DEPTH AS THE ROOTBALL, SUCH THAT THE FINAL ELEVATION OF THE TOP OF THE ROOTBALL IS AT OR SLIGHTLY ABOVE (NO MORE THAN 2" HIGHER0 FINAL GRADE.
- TREES AND PALMS TO BE RELOCATED MUST BE LIFTED BY THE ROOTBALL ONLY, USING APPROPRIATELY SIZED (LENGTH AND STRENGTH) LIFTING STRAPS OR CHAINS. DURING LIFTING, THE TREE OR PALM MUST BE BALANCED IN A MORE-OR-LESS UPRIGHT POSITION, WITH THE STRAP THE TRUNK USED ONLY FOR BALANCING AND MANEUVERING THE TREE OR PALM INTO A POSITION. NO CHAINS MAY BE USED AROUND OR AGAINST THE TRUNK AT ANY TIME. AT NO TIME SHALL 100% OF THE WEIGHT OF THE TREE OR PALM BE ON THE STRAP ATTACHED TO THE TRUNK. TRUNKS MUST BE HEAVILY PADDED WITH 30-60 LAYERS (DEPENDING ON SIZE AND WEIGHT) OF BURLAP BENEATH THE BALANCING STRAP.
- TREES AND PALMS MUST BE LIFTED WITH A CRANE OR BACKHOE APPROPRIATELY 7 SIZED FOR THE SIZE AND WEIGHT OF THE TREE OR PALM AND LIFTED OR CARRIED DIRECTLY TO THE FINAL INSTALL LOCATION OR TRANSPORT TRAILER.
- ONCE LIFTING BEINGS. ANY UNCUT ROOTS UNDER OR AROUND THE ROOTBALL THAT MAY YET REMAIN MUST BE IMMEDIATELY SEVERED WITH HAND PRUNING TOOLS TO MINIMIZE TEARING AND ROOT DAMAGE.
- AGRIFORM PLANTING TABLETS (OR APPROVED EQUIVALENT) MUST BE EVENLY DISTRIBUTED AROUND THE PERIMETER OF THE PLANTING PIT AT THE RATE OF 2 TABLETS PER 1" TRUNK CALIPER PRIOR TO BACKFILLING.
- 10. MYCORRHIZA (ROOTS® TRANSPLANT OR EQUIVALENT) MUST BE INCORPORATED INTO THE BACKFILL SOIL PRIOR TO BACKFILLING.
- 11. RELOCATED TREES AND PALMS MUST BE CENTERED IN THE PLANTING PIT, AND THE PIT BACKFILLED USING A 1:1 MIXTURE OF EXISTING SOIL AND 80:20 (DOT SAND:MUCK) SOIL MIX THOROUGHLY BLENDED TOGETHER. DO NOT USE MUDDY SOIL AS BACKFILL
- 12. SMALL TREES AND PALMS MUST BE FIRMLY BRACED USING A MINIMUM OF FOUR 4''X 4'' WOODEN BRACES ATTACHED TO 2" X 4" WOODEN BATTENS HELD IN PLACE WITH TWO STEEL BANDS. LARGER TREES MAY REQUIRE 6''X 6'' WOODEN POSTS OR EVEN TELEPHONE POLES TO PROVIDE SUFFICIENT BRACING STRENGTH TO PREVENT TOPPLING DURING WIND EVENTS. A SUFFICIENT NUMBER OF BATTENS MUST BE STRATEGICALLY PLACED AROUND THE TRUNK SUCH THAT THE STEEL BANDS NEVER CONTACT THE TRUNK. NO BURLAP IS TO REMAIN UNDER THE WOODEN BATTENS ON TREES DURING BRACING, BUT SEVERAL LAYERS OF BURLAP SHOULD BE LEFT UNDER THE WOODEN BATTENS WHEN BRACING PALMS. NAILS SHALL NEVER BE DRIVEN DIRECTLY INTO THE TRUNK DURING BRACING. BRACING MUST REMAIN IN PLACE FOR A MINIMUM OF ONE YEAR.
- 13. A TREE RING WITH A MINIMUM HEIGHT OF 6" MUST BE CONSTRUCTED 6-12" OUTSIDE THE OUTERMOST EDGE OF THE ROOTBALL AND AROUND THE ENTIRE PERIMETER OF THE ROOTBALL TO DIRECT IRRIGATION WATER AND ANY SUPPLEMENTS THAT ARE ADDED DOWN INTO THE ROOTBALL DURING ROOT REGENERATION.
- 14. ONCE THE TREE RING IS CONSTRUCTED, A HIGH-PHOSPHORUS ROOT STIMULANT MUST BE LIBERALLY APPLIED TO THE SURFACE AND THOROUGHLY WATERED IN.
- 15. ROOTBALLS MUST BE A THOROUGHLY WATERED IN USING A HOSE AND JOHNSON BAR INSERTED TO THE VERY BOTTOM OF THE ROOTBALL AND SWUNG BACK AND FORTH TO PREVENT FORMATION OF AIR POCKETS. THE JOHNSON BAR TECHNIQUE MUST BE REPEATED AT LEAST ONCE MORE WITHIN 6" OF THE TRUNK. MULCH MUST NOT BE APPLIED OR ALLOWED TO ACCUMULATE DIRECTLY AGAINST THE TRUNK.
- 16. ORGANIC MULCH (MELALEUCA IS PREFERRED) MUST BE APPLIED WITHIN 48 HOURS OF RELOCATION AT A DEPTH OF 3-4" OVER THE ENTIRE TOP OF THE ROOTBALL FROM THE TREE RING TO WITHIN 6" OF THE TRUNK. MULCH MUST NOT BE APPLIED OR ALLOWED TO ACCUMULATE DIRECTLY AGAINST THE TRUNK.
- 17. PITS FROM WHICH THE RELOCATED TREES AND PALMS WERE REMOVED MUST BE CLEANED OFF ALL RESIDUAL ROOTS, STUMPS, AND PORTIONS THEREOF AND BACKFILLED WITH CLEAN FILL FLUSH WITH THE SURROUNDING GRADE.
- 18. RESTORE THE SURFACE WITH MATERIAL TO MATCH ADJACENT AREAS, MATERIAL TO BE APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR TO PROVIDE A MINIMUM OF ONE YEAR WARRANTY ON SETTLING AND PLANT MATERIAL FROM THE SUBSTANTIAL COMPLETION.
- 19. MULTI-TRUNK TREES AND PALMS MUST BE RELOCATED AS ONE UNIT WITH A SINGLE ROOTBALL.
- 20. PLANTING PITS FOR EDIBLE DATE PALMS (PHOENIX DACTYLIFERA) MUST BE BACKFILLED WITH PURE DOT SILICA SAND.





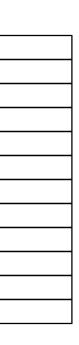
S. TYLER NIELSEN - LA6667067



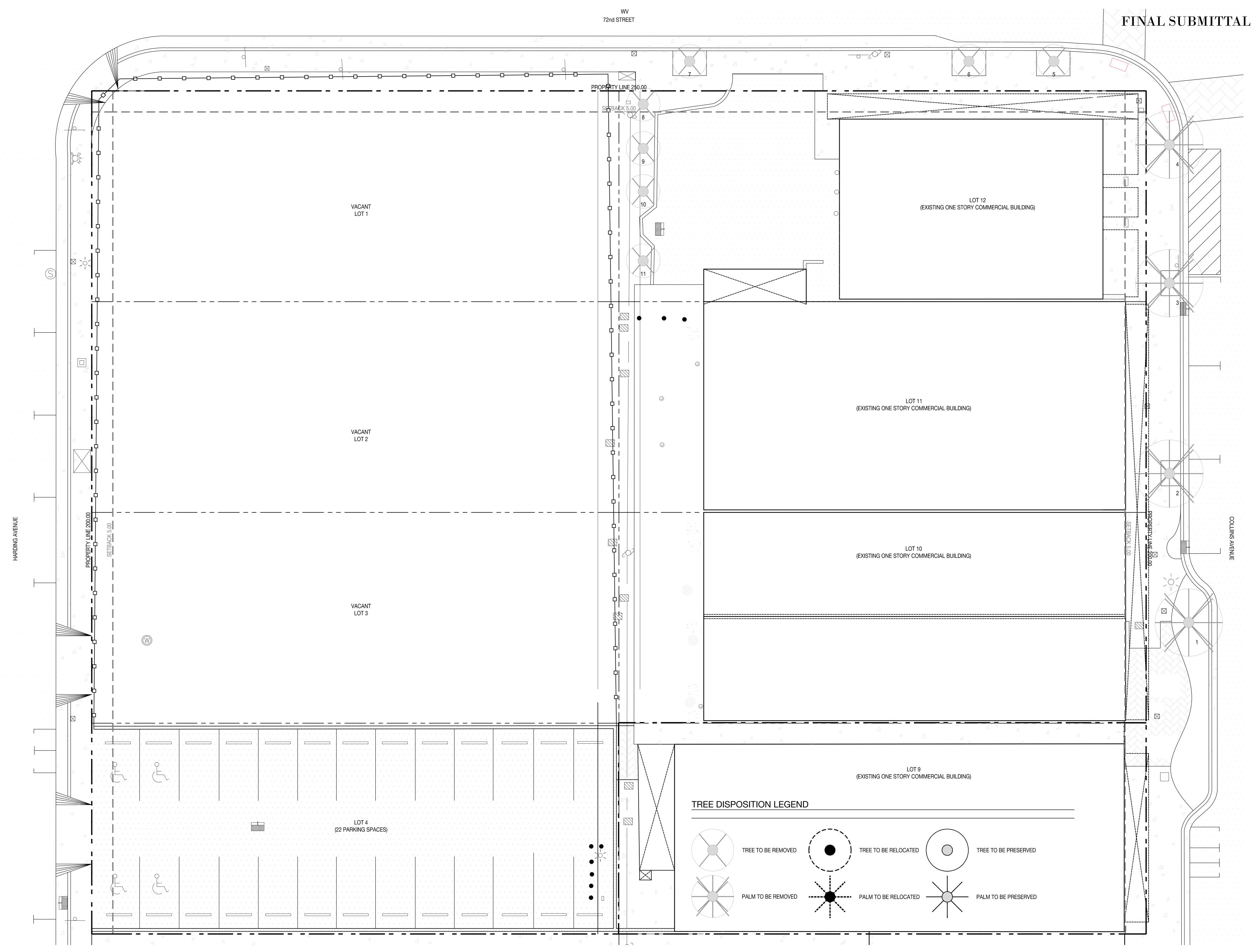
TREE DISPOSITION NOTES

DATE

10.17.2016	PLANNING BOARD
10.28.2016	M. BEACH DRB
11.02.2016	M. BEACH REVIEW
11.27.2016	50% SCHEMATIC
12.21.2016	100% SCHEMATIC
06.22.2017	80% D.DEVELOPMENT
07.20.2017	100% D.DEVELOPMENT
09.01.2017	30% CD
12.21.2017	PERMIT DRAWINGS
03.23.2018	MB PLANNING FINAL
04.06.2018	DRB FINAL SUBMITTAL

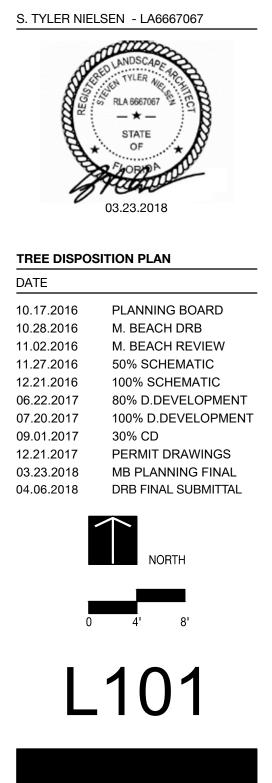












MATERIALS NOTES

- 1. CONTRACTOR TO VERIFY ALL QUANTITIES. IN CASE OF ANY DISCREPANCIES, GRAPHICALLY SHOWN MATERIAL QUANTITIES SHALL TAKE PRECEDENCE.
- 2. ALL CONSTRUCTION AND MATERIALS NOT SPECIFICALLY ADDRESSED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL JURISDICTIONS AND GOVERNING BODIES/AGENCIES STANDARDS.
- 3. THE CONTRACTOR SHALL PROVIDE A FULL-SCALE MOCKUP AND RECEIVE APPROVAL FROM THE LANDSCAPE ARCHITECT FOR ALL SYSTEMS BEFORE BEGINNING CONSTRUCTION OF PAVEMENT.
- EXPANSION JOINTS SHALL BE PROVIDED WHERE FLATWORK MEETS VERTICAL STRUCTURES, SUCH AS WALLS, CURBS, STEPS, AND OTHER HARDSCAPE ELEMENTS. EXPANSION JOINTS SHALL ALSO BE PROVIDED AT MATERIAL CHANGES. EXPANSION JOINT MATERIALS/METHODS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- CONTROL JOINTS SHOULD BE SPACED NO GREATER THAN TEN (10) LINEAR FEET MAXIMUM, UNLESS OTHERWISE SPECIFIED. EXPANSION JOINTS SHOULD BE SPACED NO GREATER THAN FORTY (40) LINEAR FEET MAXIMUM, UNLESS OTHERWISE SPECIFIED. CONTRACTOR SHALL ADVISE ON OTHER JOINTS AS NEEDED TO MINIMIZE CRACKING. THIS INFORMATION SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
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- 7. ALL STEPS SHALL HAVE TWELVE (12) INCH TREADS AND SIX (6) INCH RISERS, UNLESS OTHERWISE SPECIFIED.
- 8. HOLD TOP OF WALLS AND FENCES LEVEL, UNLESS OTHERWISE SPECIFIED.
- 9. CONTRACTOR SHALL NOT INSTALL WORK LOCATED ON TOP OF ARCHITECTURAL STRUCTURES WITHOUT FIRST REVIEWING ARCHITECTURAL DRAWINGS.
- 10. SAMPLES OF SPECIFIED MATERIALS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO ORDERING FOR JOB.



CONCRETE

COLOR: FINISH: DIMENSIONS: NA SOURCE:

MB PINK BRUSH W/ TOOL JT. TBD



PEDRA PORTUGUESA

COLOR: FINISH: DIMENSIONS: NA SOURCE:

ROSE SNAPPED SUTTON BRICK & STONE



PEDRA PORTUGUESA

COLOR: INISH: DIMENSIONS: NA SOURCE:

WHITE SNAPPED SUTTON BRICK & STONE



PLANK PAVERS

GREY
TBD
6 IN. X 18 IN.
HANOVER PAVERS



RIVER ROCK

COLOR: WHITE FINISH: NA DIMENSIONS: NA SOURCE: YARDCO



WESTERN RED CEDAR

COLOR:	NA
FINISH:	ROUG
DIMENSIONS:	TBD
SOURCE:	TBD



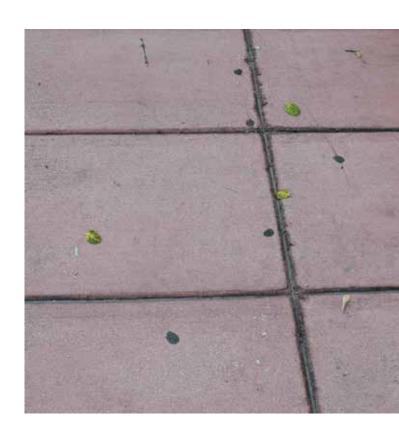
GLASS TILE MOSAIC

COLOR:	TBD
FINISH:	TBD
DIMENSIONS:	TBD
SOURCE:	TBD



MATERIALS NOTES

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COLOR: FINISH: DIMENSIONS: NA SOURCE:

COLOR: FINISH: SOURCE:



APPLIC COLOR FINISH DIMEN SOURC



APPL COLO FINIS DIME SOUR





FINAL SUBMITTAL

COLORED CONCRETE

APPLICATION: PUBLIC SIDEWALKS MIAMI BEACH STANDARD TOOLED JOINTS / W BRUSH FINISH TBD



STUCCO PLANTER WALLS APPLICATION: PLANTER WALLS COLOR: TBD FINISH:

TBD DIMENSIONS: RE: LAYOUT PLAN SOURCE: TBD

CONCRETE

APPLICATION: PEDESTRIAN PLAZA GREY CONCRETE SAND BLAST & ROCK SALT DIMENSIONS: RE: LAYOUT PLAN TBD



RIVER ROCK

APPLICATION: WATER FEATURE BASIN COLOR: WHITE MATTE FINISH: DIMENSIONS: 2 IN. - 6 IN. YARDCO SOURCE:

HANOVER GUARDIAN PAVER

CATION:	AMENITY & ROOF DECK
R:	LIMESTONE GREY
H:	TUDOR FINISH
NSIONS:	24 IN. X 24 IN.
CE:	TREMRON

GREEN SCREEN

COLOR: FINISH: SOURCE:

APPLICATION: GROUND LEVEL GREEN SCREENS GRAY POWDER COAT DIMENSIONS: REFER TO PLANS **GREEN SCREEN**

GLASS TILE MOSAIC

ICATION:	POOL WATER LINE & STEP EDGE
OR:	TBD
SH:	TBD
ENSIONS:	TBD
RCE:	TBD

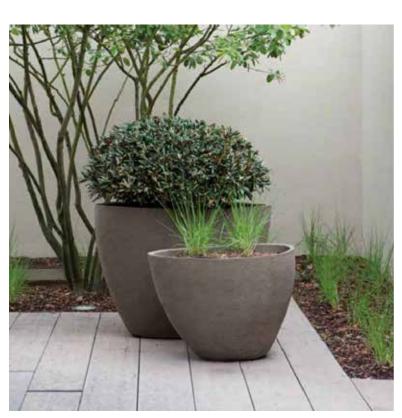


HK40 PLANTER

APPLICATION: AMENITY LEVEL COLOR: GREY FINISH: STANDARD DIMENSIONS: 24 IN. x 12 IN. ATELIER VIERKANT SOURCE:

PEBBLETEC

CATION:	POOL FINISH
R:	TBD
H:	TBD
NSIONS:	TBD
CE:	TBD

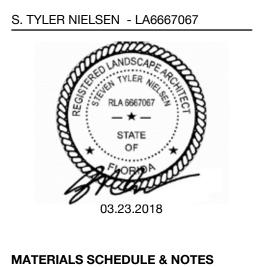


HK60 PLANTER

APPLICATION: AMENITY LEVEL GREY COLOR: STANDARD FINISH: DIMENSIONS: 36 IN. x 24 IN. ATELIER VIERKANT SOURCE:

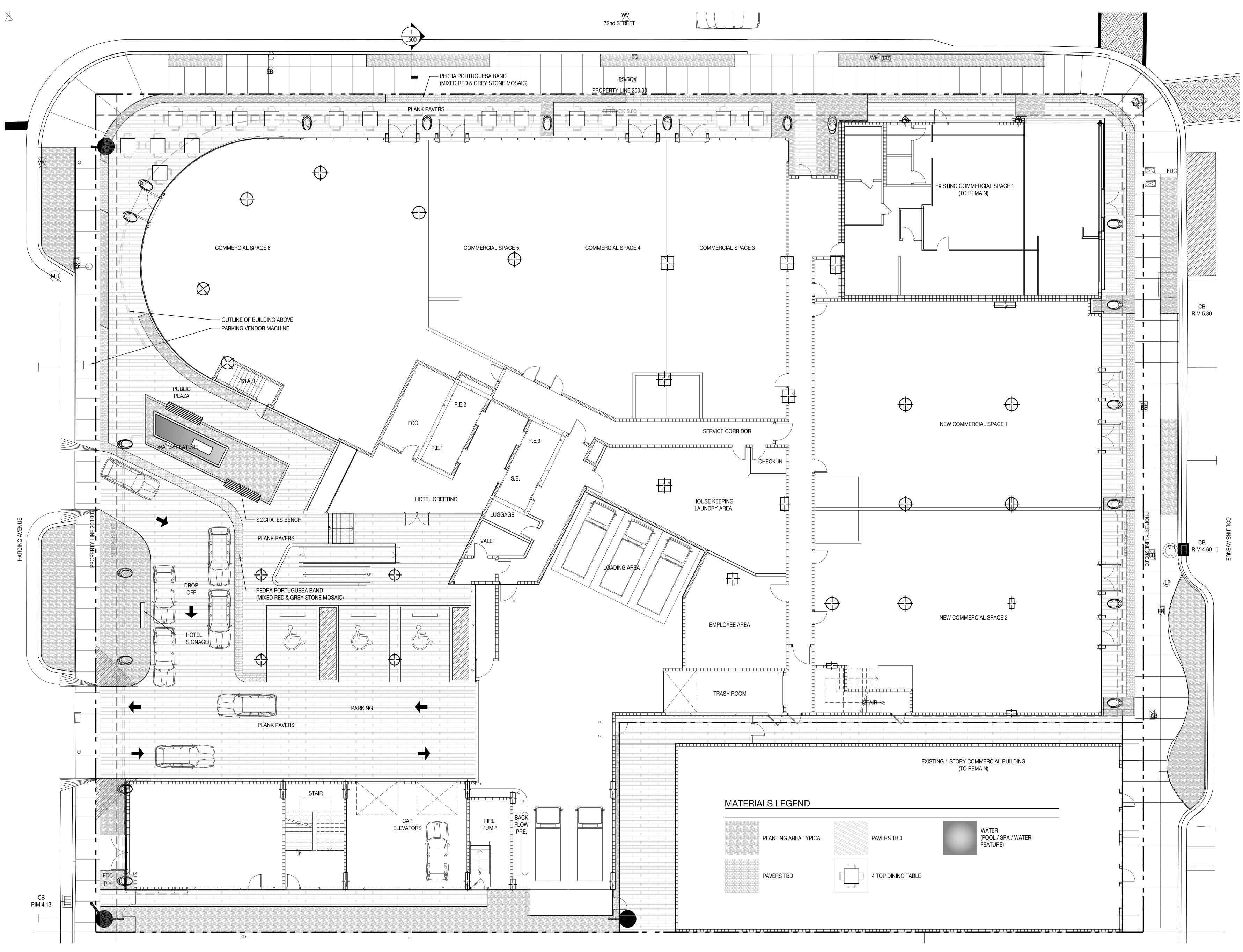




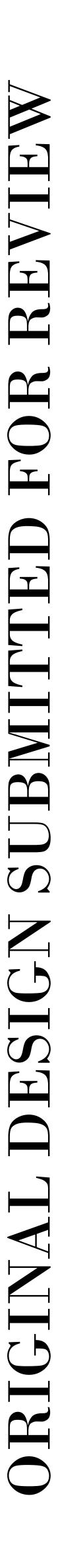


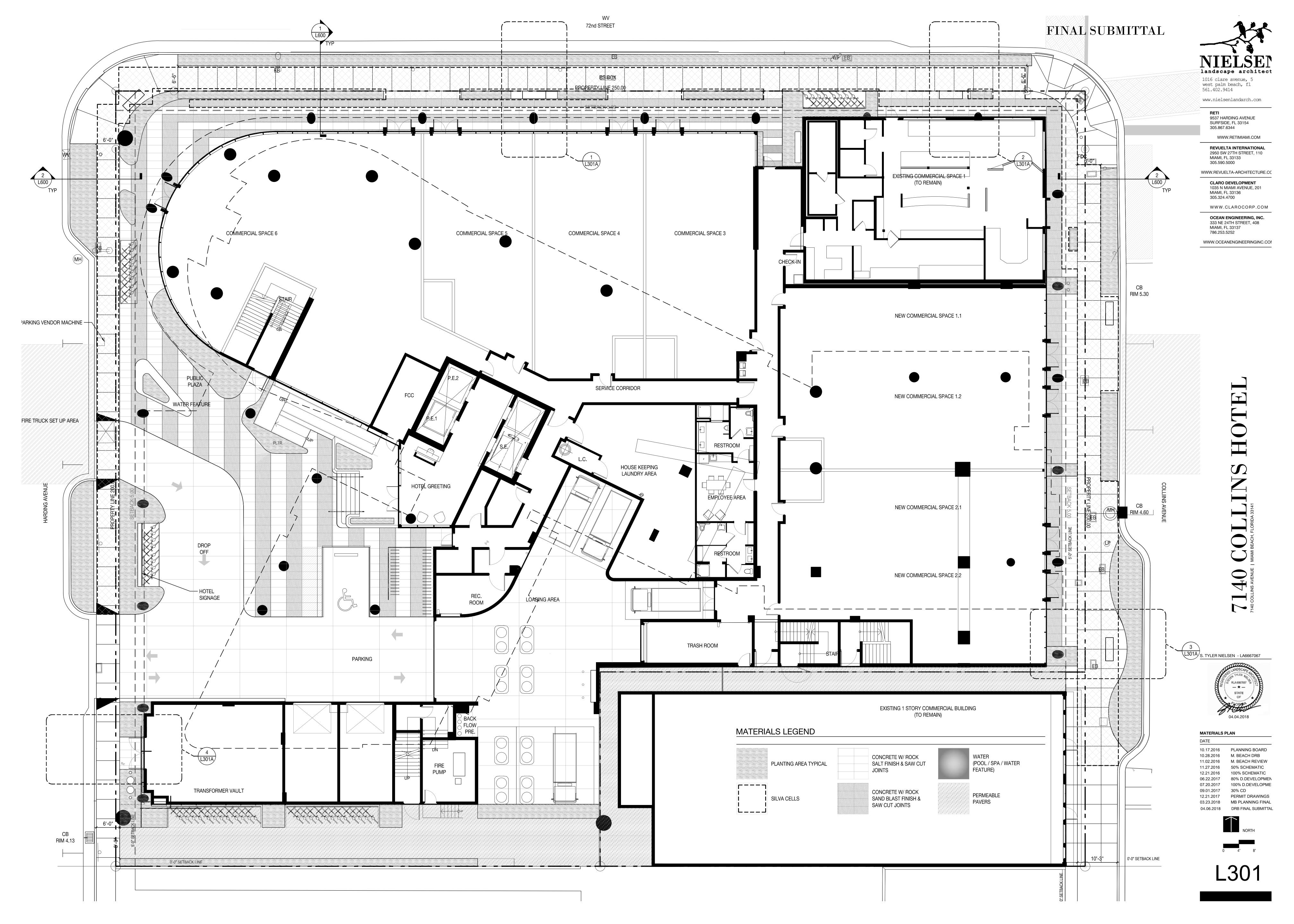
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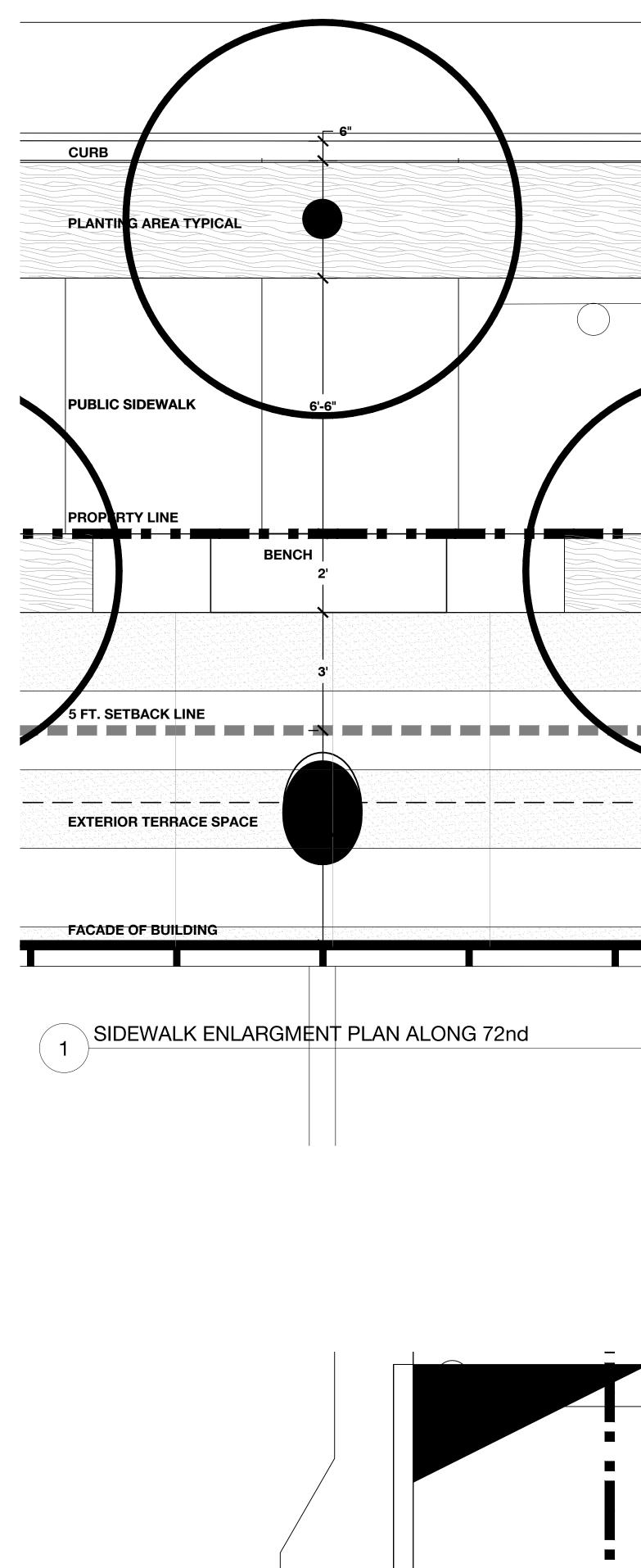


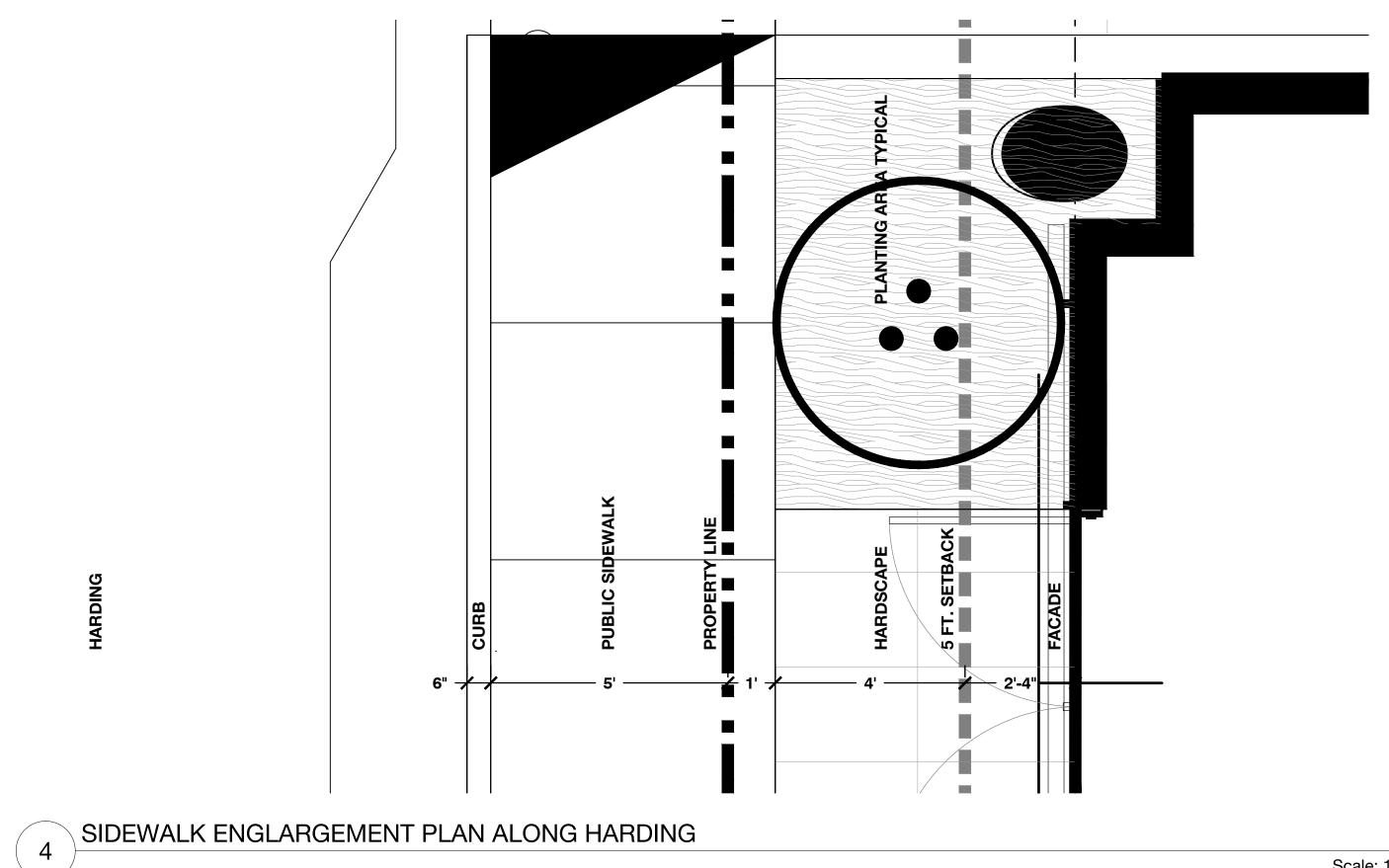




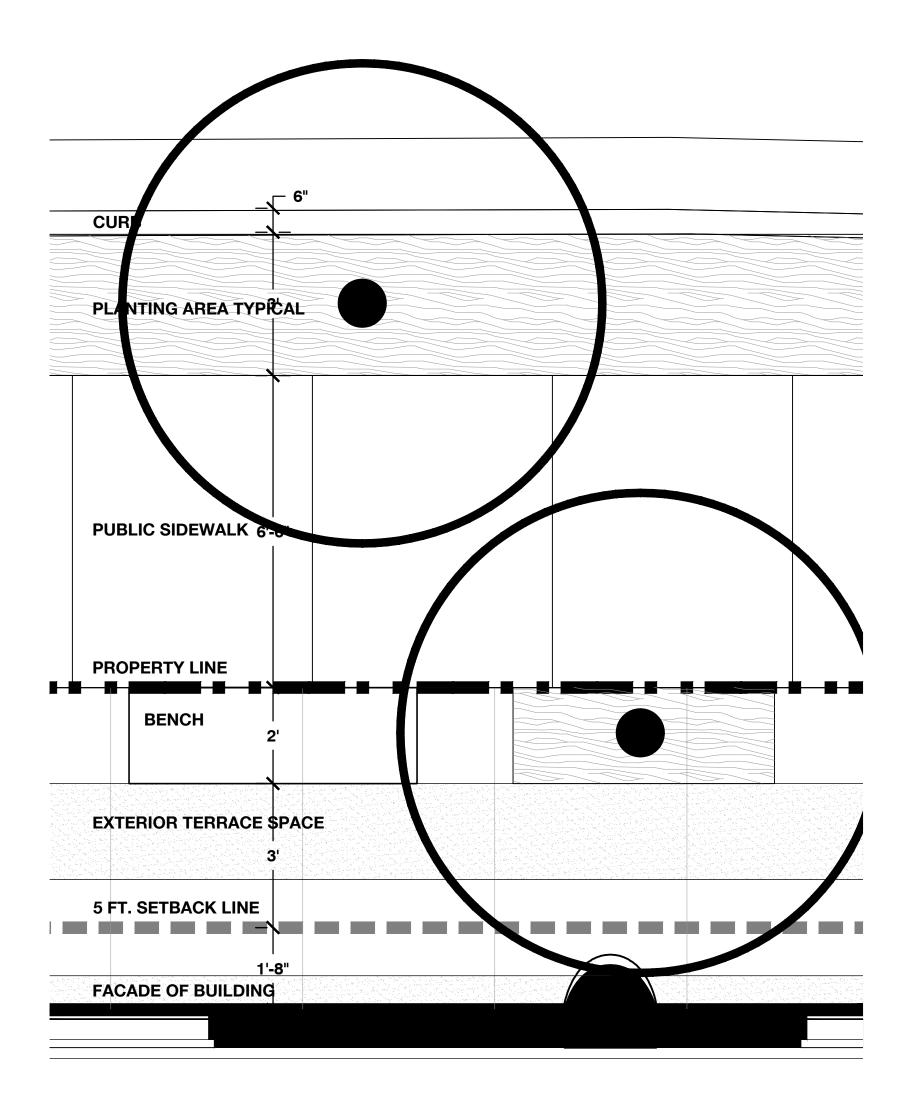




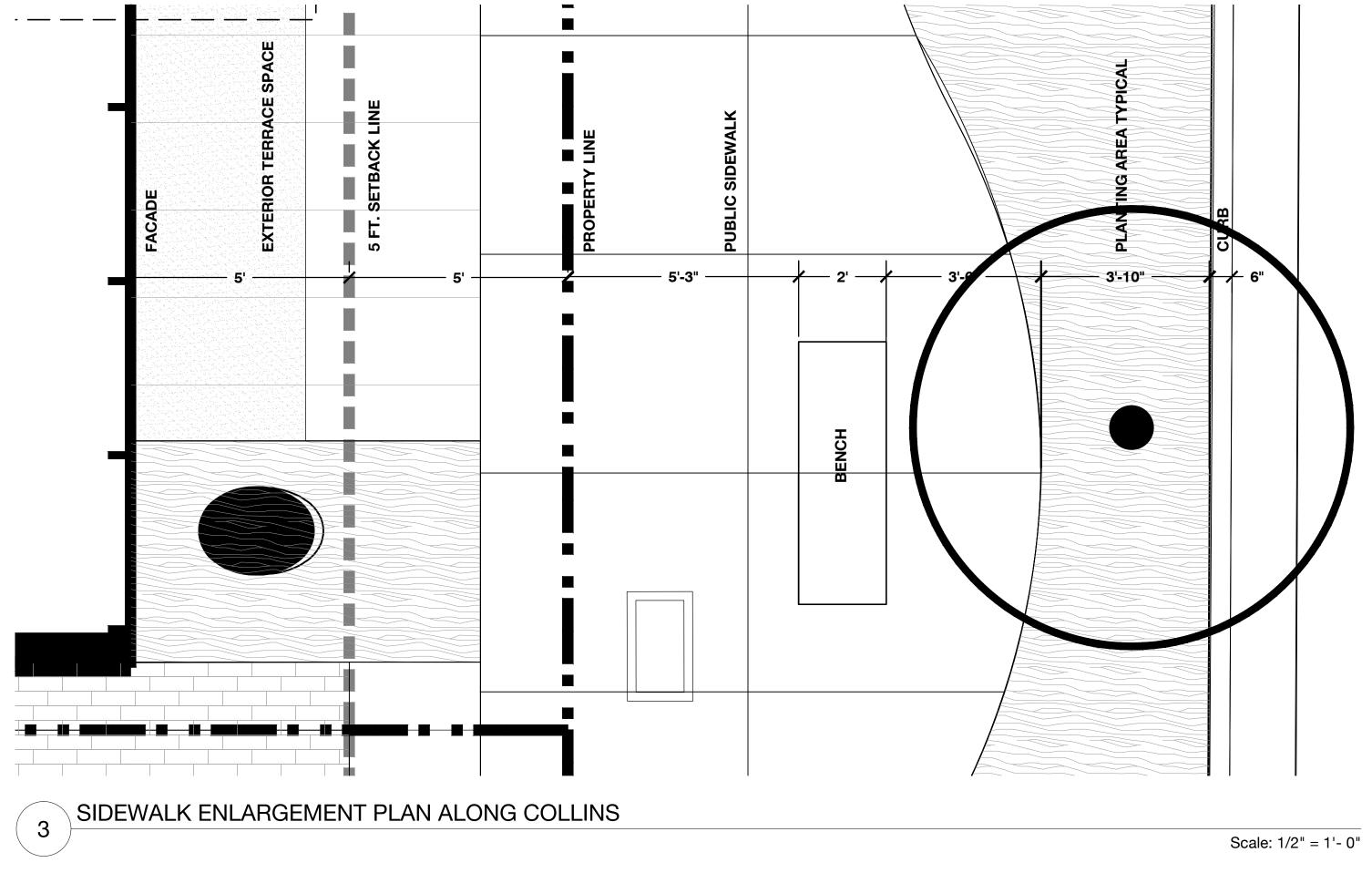




72ND STREET



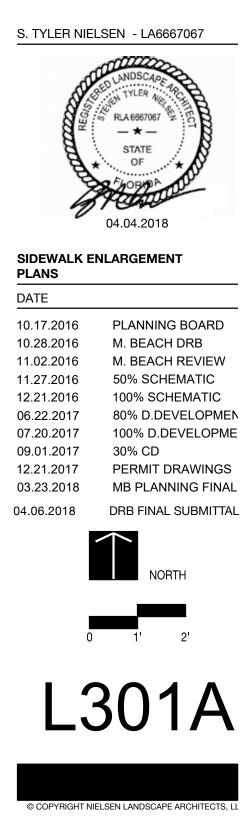


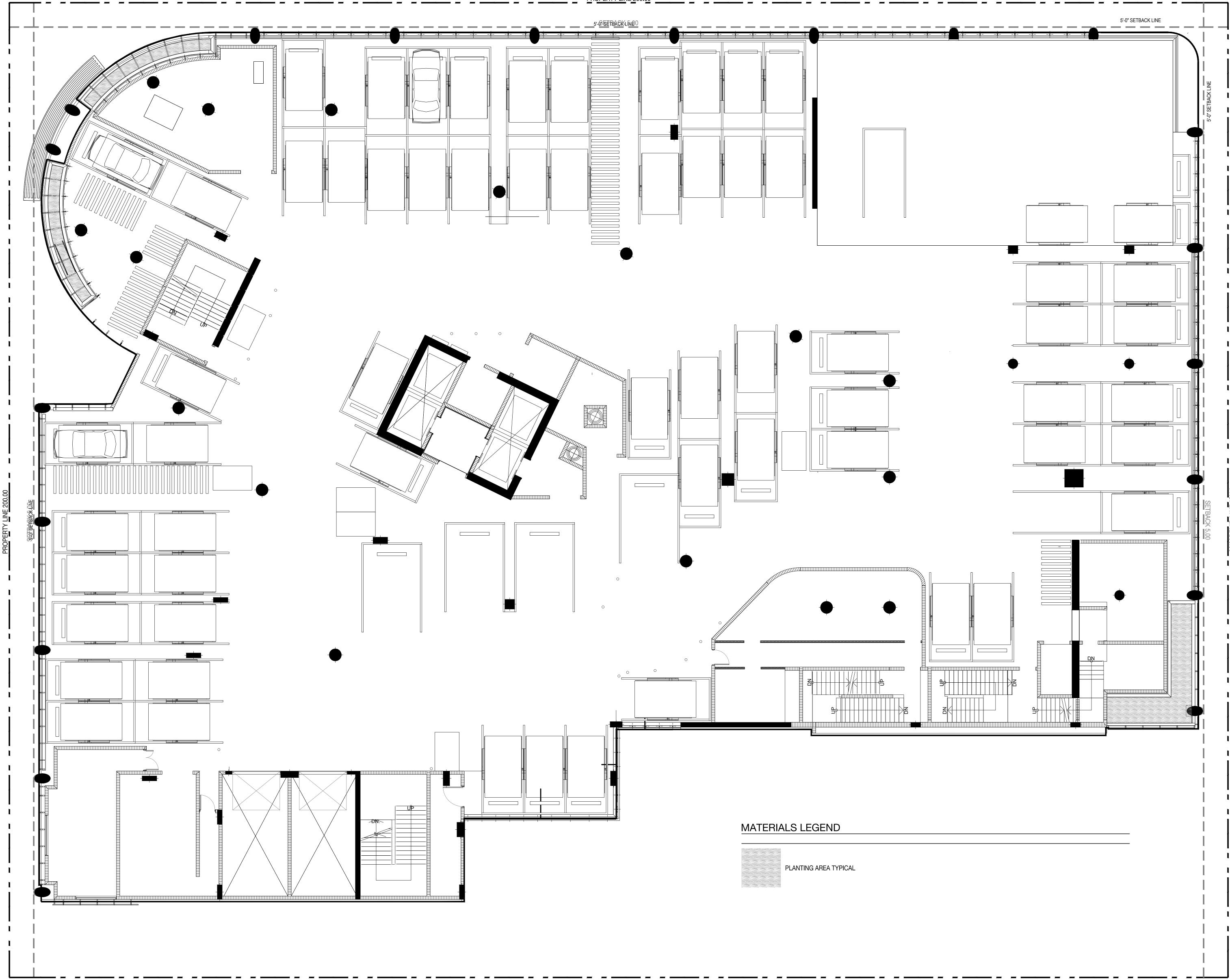


Scale: 1/2" = 1'- 0"



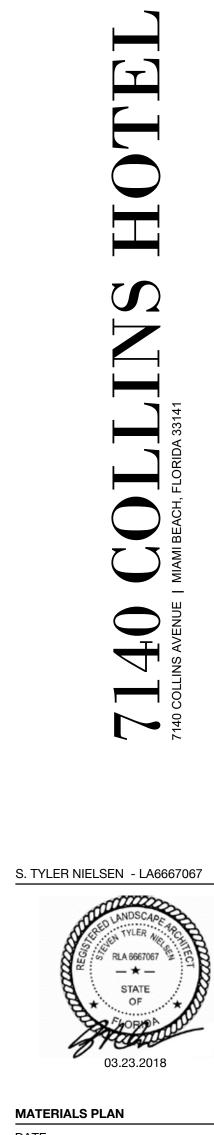






PROPERTY LINE 250.00





MATERIALS PLAN DATE 10.17.2016 PLANNING BOARD 10.28.2016 M. BEACH DRB 11.02.2016 M. BEACH REVIEW 11.27.2016 50% SCHEMATIC 12.21.2016 100% SCHEMATIC 06.22.2017 80% D.DEVELOPMENT 07.20.2017 100% D.DEVELOPMENT 09.01.2017 30% CD 12.21.2017 PERMIT DRAWINGS 03.23.2018 MB PLANNING FINAL 04.06.2018 DRB FINAL SUBMITTAL NORTH 0 4' 8' L302

