



Call before you dig. It's the Law!

PLAN	IT LEGEND						
Code	Botanical name	Common name	Height	Canopy	Nat.	Quantity	Specific.
TRE	ES						
AEL	Amyris Elemifera	Torch wood tree	12' min.	5' min.	Y	5	
EFO	Eugenia Foetida	Spanish Stopper	12' min.	4'-5'	Y	5	4' c.t. / Tree ty
EFO	Eugenia Foetida (STREET TREES)	Spanish Stopper	12' min.	4'-5'	Y	2	4' c.t. / Tree ty
LAR	GE SHRUBS/ SMAL	L TREES					
CER	Conocarpus erectus	Green Buttonwood	7'-8'	7'-8'	Y	8	3' c.t.
MF1	Myrcianthes fragrans	Simpson's stopper	7'-8'	3'-4'	Y	2	slender tree ty
PRA	Pimenta racemosa	Bay-rum	7'-8'	7'-8'	N	12	Full to bottom
CCY	Capparis Cynophallophora	Jamaican Caper	7'-8'	3'	Y	5	48" o.c.
SHR	RUBS				•		
CIC	Chrysobalanus Icaco	Cocoplum	24"	18"	Y	101	18" o.c.
MFR	Myrcianthes fragrans	Simpson's stopper	24"	18"	Y	36	18" o.c.
PMA	Podocarpus Macrophyllus	Yew Pine	5'-6'	2'-3'	N	51	30" o.c./full to
PMP	Podocarpus Mac. Pringles	Dwarf Podocarpus	12"	12"	N	42	14" o.c.
FMA	Ficus Microcarpa 'Green Island'	Green Island Ficus	12"	12"	N	50	18" o.c.
GRC	DUND COVERS						
CEB	Carissa macrocarpa	Carissa Emerald Blanket	14"	14"	N	24	24" o.c.
TAS	Trachelospermum Jasm. Minima	Dwarf Confederate Jasm.	8"	8"	N	306	12" o.c.
TAV	Trachelospermum jasm. 'Variegatum	Variegated Confederate Jasmine	8"	8"	N	250	
GSY	Gloxinia sylvatica	Bolivian Sunset gloxinia	12"	12"	N	11	14" o.c.
BLA	Begonia 'Lana'	Angel wing Begonia	12"	12"	N	3	14" o.c.
NOB	Neoregelia 'Olens Brazil'	Neoregelia 'Olens Brazil'	12"	12"	N	4	14" o.c.
GRA	Gardenia radicans	Dwarf Gardenia	16"	16"	N	9	24" o.c.
OJA	Ophiopogon Japonicus	Mondo Grass	6"	6"	Ν	12	8" o.c.

INFORMATION REQUIRE	D TO BE PERI	MANENTLY AFFIXED 1	O PLANS		25
Zoning District	RS-4	Lot Area:	11,030	Acres:	.25
OPEN SPACE					REQUIR ALLOW
A. Square feet of required Front Yard area Side Yard area	l Open Space	e, as indicated on sit	e plan:		92 56
Rear Yard area (inc	luding 50%	of pool)			1,41
B. Square feet of parking	lot open spa	ce required by Artic	le 9, as indicated o	n site plan:	
Number of parking	spaces <u>N</u>	/A X 10 s.f. per p	arking space =	N/A	N,
C. Total square feet of lar	ndscaped op	en space required: A	∧+B=		2,89
LAWN AREA CALCULATI	ON				
A. Square feet of landscap	oed open sp	ace required:			2,89
B. Maximum lawn area (so	od) permitte	d = 60 % x 2	,896.45 s.f.		1,13
TREES					
A. Number of trees requir Plus 1 tree per remaining	red per lot = 1,000 sq. 1	5 for the first 6000 ft. = 5,030= 6) sq.ft		<u>11</u>
Existing trees that count t	oward tree	requirement			
B. % Palms allowed: Numb	er of trees p	provided x 30% =			3
C. % Low maintenance / dr Number of trees provid	rought and sa ed x 50%=	alt tolerant required:			6
D. Street Trees (maximum	average spac	ing of 20' o.c.)			5
98 linear feet a	along street	divided by 20'=			
E.Street tree species allowed	ed directly be	eneath power lines:			
(maximum average spaci	ng of 20' o.c.):			6
linear feet a	along street	divided by 20'=			
STREET TREES NOTE: DUE TO EXISTING STREE REQUIREMENT.	et trees ai	ND FPL POLE AND /	ANCHORS THERE	IS NOT ENOUGH	SPACE TO SATI
SHRUBS					
A.Number of shrubs requir	ed: Sum of lo	ot and street trees red	quired x 12=		264
B.% Native shrubs required	l: Number of	shrubs provided x 50	%=		132
LARGE SHRUBS OR SMALL	TREES				
A Number of large shrubs	or small trees	s required: Number o	f required shrubs v 1	10%=	27
	cmall trace	auirod: Number of L		troop provided y F	14



LAN	DSC	APE	NO	TES
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01.Non Cypress variety mulch shall extend under all trees, shrubs and ground cover beds to the closest hard edge or sod border, in a minimum of 3" depth. Red or any other colored mulch will not be acceptable.

02. All plants shall meet the minimum standard of "Fancy" as specified in Grade and Standards for Nursery Plants as published by the Division of Plant Industry, Florida Department of Agriculture, latest edition. If in doubt, a private professional shall be appointed by Landscape Architect to provide a final and conclusive grading of the plant material. 03. All shrubs to be planted a minimum of 24", and ground covers a minimum of 12" from the edge of any hardscape (walks,

building walls, pond's edge, etc...) Shrubs such as Ixora, Raphiolepsis and other species which grow larger than 48" spread, shall be planted at 1/2 the estimated adult's spread diameter from the edges of any hardscape. 04. All trees and palms over 8' in height shall be braced to prevent lateral movement for a period of six months from the date of

planting. Either wood braces as shown in the planting detail, or the wire and turnbuckle method shall be used. No nails, screws, metal straps or wires are to be used directly against the trees or palms trunks. 05. All palms except for species such as Cocos, Acoelorraphe, Raphis, and other multi-trunk palms, shall have straight trunks.No curbed or arched trunks will be acceptable. All palms trunks shall be free of scars, decay or any damage caused by digging,

transport or planting handling of the same. 06. All work by the Landscape Contractor shall be performed in a professional and sound manner in accordance with established

standards of landscape installation practices and workmanship. 07. Landscape Contractor is responsible for verifying & counting all plant quantities prior to bidding. Individual quantities by areas shall prevail over the quantities shown in Legend. Plant Legend is shown mainly to identify the different species and quantities are shown as an aid, not a ceritfied count. Therefore it shall be Landscape Contractor's responsibility to supply the required quantity of plant material specified for each area, regardless of the quantity shown in the Legend. Quantities shown in the plans may vary due to actual site scale, job conditions etc... Landscape Architect assumes no responsibility for the actual plant count necessary for the successful completion of the work. Any excess quantity of plant material specified which does not fit into the area for which it was called for should be credited to the Owner.

08. Landscape Contractor and his subcontractors shall be licensed and insured as required by the municipality, county, state or any other governmental agency requiring a license or insurance in order for the Landscape Contractor to perform his work. 09. All work shall conform to the City of Miami Beach landscape ordinances and any other landscape ordinance in effect at the project's location.

10. Landscape Contractor is required to procure and obtain any necessary permits applicable for the successful completion of this project, if applicable. 11. Landscape material shall not be allowed to grow in such a manner as to impede street front triangle of visibility to property

owner or neighbors, so as to materially impede vision between a height of 2.5 feet and 8 feet. 12. Landscape contractor shall call Sunshine State One Call Center of Florida at 1-800-432-4770 (Toll Free) 48 hours before digging.

13. Landscape Contractor is responsible for inspecting the site and physically observing all the site conditions prior to entering into Agreement or Contract with Owner. Landscape Contractor shall coordinate his work with the General Contractor or Construction Manager in such a manner as to allow for a speedy and orderly completion of all work on the site, and special attention to location of all underground wires, pipes, footings, etc... 14. Any excess soil, landscape materials and debris from the Landscape Contractors' work shall be removed from the site

immediately upon completion of his works. 15. Should Landscape Contractor find any discrepancies, unavailability of material or any question regarding the adherence to this plan, no decision shall be taken without specific consultation with the Landscape Architect, including substitutions when required. Landscape contractor shall not make any unauthorized substitutions of either specie, quality or size of any plant material without Landscape Architect's authorization.

16. All areas not planted with shrubs or ground covers or specified to be another landscape material such as mulch, bark, stones, etc... is to be covered with sod, inclusive of areas in the Right of way between edge of city or community pavement or curb and property line and/or sidewalks.

17. Any Railroad tie, stone or other type of specified retaining walls, are to be placed by Landscape Contractor according to space allowed and slope requirements with prior on site consultation with Landscape Architect. They are to be placed taking into consideration existing site conditions and plant root balls requirements. Landscape Contractor shall spray mark the location of proposed walls and obtain Landscape Architect approval of proposed locations prior to digging trenches for retaining walls.

18. Landscape Contractor shall coordinate all of his planting in raised planters or any planting areas requiring water proofing or any other special applications, as well as any and all hardscape and paving specifications and construction details with the General Contractor. These specifications and details are not part of the Landscape Architect's scope of work.

19. Landscape Contractor shall coordinate digging, planting and bracing of all plant material within the Project with the General Contractor and the Owner, particularly those in which a conflict with pedestrian or vehicular traffic may arise as a result of placement of equipments and specially temporary braces on trees. Landscape Contractor shall coordinate the planting and bracing of any of the large plant material ahead of time to allow for removal of braces at time of certificate of completion or openning of Project, as per "Owner's" instructions and deadlines.

20. Trees to be planted within existing hedges are to be planted without disturbing the appearance of the existing hedges. Lanscape Contractor shall inspect the health condition of all existing plant material to remain prior to bidding and prior to commencement of works to verify they are in good healthy conditions. If not in adequate conditions to remain, Owner shall be informed immediately for proper instructions on how to proceed. 21. Any existing plant material destroyed or damaged during construction shall be replaced with the same species, and Owner be

informed of the reason, specie and quantity of the replacement for proper reimbursement, if any. 22. Contractor shall prior to planting, provide photos of all plant material marked with a "P" in the Plant Legend's comun shown as Note 22, or described as a specimen plant material for landscape architect approval. Regardless of photo approval and specification in plan or legend, Landscape Architect has the right to refuse any plant material not considered Florida Fancy. If in doubt of grading quality, refer to Note 2 of this notes.

23. Where arrows are shown next to palms such as e.g. coconuts (CNU) they show the curvature direction, if no arrow is shown then a straight trunk is desired. Under no circumstance shall the trunk of a palm or tree interfere with vehicular or pedestrian traffic. This note applies to projects where palms are specified.

24. Unless a different height number is shown next to trunk in the plan, palms specified at a given trunk height (e.g. 16' c.t. (clear trunk)) are to be considered specified at the height size specified in the plan and prevail over the plant legend. 25. Landscape Contractor shall request written specifications from Landscape Architect prior to entering in to contract with owner and attach a copy to contract. Non compliance of this note does not relieve Landscape Contractor of all requirements included in the written specifications.

26. By accepting this plan, and submitting it to the municipal authorities or any other building and zoning authority, Owner releases and Holds Landscape Architect Harmless from any legal responsibility as a consequence of any legal actions arising from the selection, installation, maintenance, natural plant material growth habit, such as falling fronds, seeds, branches, etc..of the landscape and planting materials specified in this plan.

27. If Landscape Contractor finds availability difficulties with any specific plant material, he shall propose one (or several) as alternate to Landscape Architect, and obtain final decision from Landscape Architect as to specie to be used. 28. This plan and the written specifications together are the landscape construction documents to be used for bidding and construction purposes.

29.Landscape contractor shall verify, if due to architectural revisions or site conditions, if the dimensions of any hardscape has changed and how this affects the area for a specified plant material. One example is Medjool Date Palms need to be planted in no less than a clear 60 inch by 60 opening, preferably more. It shall be the Landscape contractor's responsibility to verify this before bringing the plant(s) to the site. Another example is the minimum five feet width dimensions in parking lot islands, exclusive of concrete curbs. Landscape contractor shall inform Owner and Landscape Architect if this is not the site condition.

30. In absence of landscape contractor or a designated supervisor of the landscape contractor at the work site, landscape architect shall have the right to provide instructions to landscape contractor's or his subcontractor's employees regarding the installation of the works specified in this plan if in his opinion work is not being performed as specified. 31. Street trees are placed inside of property as allowed by code. If Roystonia Regia specified is not available at clear trunk

specified, Owner may without additional City revision substitute such palms for another palms such as Thrinax radiata, Coccothrinax miraguama, Phoenix sylvestris or other available palms. 32 All vines require a structure for them to grow into which shall be supplied by landscape contractor and included as part of the

work whenever a vine is specified in this plan. Landscape contractor shall obtain details of structure from landscape architet. 33. landscape contractor shall coordinate this plan with, notes, details and specifications in this sheet, grading plan, irrigation plan and lighting plan. All landscape sheets are part of the construction documents for this project. It shall be the general contractor and/or landscape contractor's responsibility to read and understand all the information contained in this

sheetincluding plan, details, legend and notes in all the sheets of the landscape plan set. 34. All plant material shall be guaranteed for a minimum period of one year from date of installation.



ABBREVIATIONS: G.T.=Grav Trunk C.T.=Clear Trunk O.C.=On Center. B&B=Balled and Burlaped O.A.=Overall Height. SPD=Spread. NAT.=Native specie g.w.=Gray Wood min.=minimum





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LANDSCAPE MAINTENANCE GUIDES FOR PLANTING TREES AND SHRUBS:

Trees and shrubs shall be provided with regular irrigation after transplanting within site, planting from a field grown nursery or planting from a container to fully establish the development of the root system in the landscape soil. Trees shall be Irrigated through the entire establishment period.

Irrigation during the establishment period. Following the initial few months of frequent irrigation, provide weekly irrigation until plants are fully established. At each irrigation, apply about 2 to 3 gallons of water per inch of trunk diameter (e.g. 4–6 gallons for a 2–inch tree) over the root ball.

C. Irrigation Scheduling for Recently Planted Trees: Based on University of Florida, Institute of Food and Agricultural Sciences data by Dr. Edward F. Gilman. Ideal irrigation

schedule for quickly establishing trees in well-drained sites: Daily for 2 months, then 3 times a week for 3 months, then weekly until established. Based on this and other specific Florida Standards data, we specify the following irrigation schedule: C.1. 2 inch caliper trees:

Daily for 2 weeks; every other day for 3 months; three times weekly for six months. Twice weekly once fully established and landscape installation has been completed.

C.2. 2-4 inch caliper trees: Daily for 1 month; every other day for 3 months; twice weekly for six months. Twice weekly once fully established and landscape installation has been completed.

C.3. 4 or more inch caliper trees:

Daily for 6 weeks; every other day for 6 months; twice weekly for nine months. Twice weekly once fully established and landscape installation has been completed.

D. Trees Fertilization

A complete fertilizer with a salt index of less than 50. shall be applied on top of the root ball and backfill soil at planting. Fertilizer shall be applied according to manufacturer's directions. It shall have a ratio of approximately 3:1:2 or 3:1:3 (i.e. 15-5-10 or 15-5-15) of nitrogen, phosphorous pentoxide (P2O5), and potassium oxide (K2O). Fertilizers that are "slow-release," "controlled release," sulfur coated, or with nitrogen as IBDU or

ureaformaldehyde have extended release periods compared to fertilizers that are readily water soluble. Thirty to fifty percent of the nitrogen should be water insoluble or slow-release. Fertilizer shall be applied to establishing

trees every three months until landscape installation of the project has been completed or one year from planting. Established trees which have been planted one year or more and growing in landscaped areas where turf and shrubs are fertilized do not need additional fertilizer. Their root systems will extend throughout the landscape past the edge of the tree canopy and receive nutrients when these

areas are fertilized. Supplemental applications may be needed for some trees because of nutrient deficiencies. After landscape installations have been completed, steps to resolve these deficiencies with appropriate treatment,

shall be performed when observed by maintenance personnel.

E. Shrubs Fertilization A complete fertilizer slow release fertilizer as described above for trees, such as 15-5-10 to shrubs and ground cover beds at a rate of 3-5 pounds N/1000 square feet/year or

as per manufacturer's recommendations. F. Palms Fertilization

Palms should be fertilized with an 8-2-12-4 Mg plus micronutrient, with 100% of N,K and Mg in controlled release form, such as Atlantic Palm Special, following manufacturer's instructions Do not use turf fertilizer with high N and water soluble K within 50 feet of any palm.

G. Turf Fertilization Fertilization guidelines for established turfgrass lawns in South Florida, applied in two applications generally in February and October, as follow:

	Nitrogen recommendations
, Species	(lbs. N/1000 sq. ft/ year)
iagrass	2-4
mudagrass	5-7
ntipedegrass	2-3
Augustinegrass	4-6
rsiagrass	4-6

H. Additional Fertilization Guides

Fertilization Guides is a complex issue within the landscape. In addition to the basic guidelines shown ain this sheet, landscape contractor and/or landscape maintenance

contractor, as well as licensed pest control and fertilizing companies shall, prior to any fertilization application, read the Florida Nursery and Growers Association, and University

of Florida, Florida Cooperative Extension Service, Fertilization recommendations and guidelines on fertilization.

I. General Tree Establishment Guides Based on University of Florida, Institute of Food and Agricultural Sciences by Dr. Edward F. Gilman. Ideal irrigation schedule for quickly establishing trees in well-drained sites: Daily for 2 months, then 3 times a week for 3 months, then weekly until established. Research indicates that establishment time for container-grown trees can be 1 to 2 months

per inch of trunk diameter.

Average length of tree establishment period in South Florida as per University of Florida (IFAS)

Under 2" diameter trunk: 2-4 months 2" to 4" diameter trunk: 5–9 months

over 4" diameter trunk: 10+ months

These guidelines have been reserached in documents provided by , Institute of Food and Agricultural Sciences, EDIS which were based on the following research: Beeson and Gilman 1992; Gilman et al. 1994; Gilman and Beeson 1996; Gilman et al. 1996; Gilman 2001; Gilman et al. 2002; Gilman et al. 2010; Harris and Gilman 1993; Watson and Himelick 1982. As well as to Miami-Dade County's publication Guide to Tree Planting and Maintenance.





SPRINKLER HEADS LEGEND										
SYMBOL	BRAND	MODEL BODY	RISER	NOZZLE	SPRAY A	ARC OR PATTERN	DESC.	DESIGN PRESSURE	FLOW G.P.M	PRECIPIT. RATE
	TORO	570ZXF	6"-12"	MPR Plus	5' X 18'		4-EST	40. PSI	.53	1.13
	TORO	570ZXF	6"-12"	MPR Plus	4' X 19'		4S-SST	40. PSI	.63	1.60
	TORO	570ZXF	6"-12"	MPR Plus	2' X 7'		2-SST	40. PSI	.10	1.38
	TORO	570ZXF	6"-12"	MPR Plus	9' X 20'		9-SST	40. PSI	1.38	1.48
۲	TORO	MINI 8	4"	.75-3.0	20-34' Al	DJUSTABLE	-	40. PSI	0.9-3.0	.3848
۲	TORO	MINI 8	4"	.75-3.0	20-34' Al	OJUSTABLE	-	40. PSI	0.9-2.6	.3848
۲	TORO	MINI 8	4"	.75-3.0	20-34' Al	OJUSTABLE	-	40. PSI	0.9-2.6	.3848
۲	TORO	MINI 8	4"	.75-3.0	20-34' Al	OJUSTABLE	-	40. PSI	0.9-2.6	.3848
٢	TORO	570ZXF	6"-12"	MPR Plus	5'r-15'r	90°	5Q-15Q	40. PSI	0.12-1.04	1.54-1.57
igodot	TORO	570ZXF	6"-12"	MPR Plus	5'r-15'r	180°	5H-15H	40. PSI	0.23-2.02	1.70-1.77
•	TORO	570ZXF	6"-12"	MPR Plus	5'r-15'r	270°	5TQ-15TQ	40. PSI	0.34-3.00	1.78-1.86
	TORO	570ZXF	6"-12"	MPR Plus	5'r-15'r	360°	5F-15F	40. PSI	0.45-4.20	1.66-1.84
•	TORO	FB-25-PC	6"-12"	MPR Plus	BUBBLER	_	-	40. PSI	.25	
NUMBER N	NUMBER NEXT TO SYMBOL DENOTES SPRINKLER RADIUS									
EQUIPMENT 1. EQUIPME	EQUIPMENT NOTES: 1. EQUIPMENT MOUNTING:								STATIONS	FLOW RATE 20.86
THE EOUIP	IRRIGATION EQUIPMENT ARE TO BE LOCATED NEXT TO WATER SUPPLY AS SHOWN IN PLAN. THE FOUIPMENT SHOWN IN PLAN AND TYPICAL ELECTRICAL SCHEMATIC DIAGRAM SHALL RE								2	12.12

MOUNTED ON THE BUILDING WALL OR ON A UNISTRUT FRAME SET INTO A 16" X 10" DEEP 3 12.10 CONCRETE FOOTING X 6" LONGER THAN BOTH ENDS OF THE UNISTRUT STRUCTURE'S LENGTH 2. WORK PERFORMANCE:

ALL ELECTRICAL WORK TO BE PERFORMED BY A LICENSED AND INSURED ELECTRICAL CONTRACTOR, IN STRICT COMPLIANCE WITH ALL SECTIONS OF ARTICLE 680 OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION. 3. EQUIPMENT BUFFER.

PLACE EQUIPMENT IN A LOCATION WHICH CAN BE BUFFERED WITH PLANT MATERIAL.

IRRIGA	TION EC	QUIPMENT LEGEND	
Code	Brand	Description	Size
С	TORO	TMC-212-OD Controller	As Required.
S	TORO	Rain Sensor Model TRS	N/A
#	TORO	Series 252 Electric Valves	As required.
W		Well	
V	TORRO	Backflow Preventer	As required.
R		Pump Relay	N/A
Ρ	_	Self-Priming, Single Phase Electric Pump	55 G.P.M
	_	Schedule 40 PVC Pipe – Main Line	As shown
	_	Class 200 PVC Pipe – Lateral Lines	As shown
=======	_	Schedule 40 PVC Pipe – Sleeves	As required



Note: Irrigation Contractor may substitute the brand name specified for another brand, however, the same performance is required for each substitution. Irrigation Contractor shall verify the G.P.M. discharge requirements for the irrigation pump, it shall meet the individual stations flow requirements, considering friction losses.

NUMBER NEXT TO SYMBOL DENOTES SPRINKLER RADIUS



IRRI	GATION SPECIFICATIONS	1.18.	All spra
1. 1 1	GENERAL The project limits for the irrigation system is the area shown in the sheets, or all		pop-up
1.1.	the sheets provided in the irrigation plans.		need to
1.2.	Unless specified otherwise these specifications intend to include everything		or grou plant sp
	system, whether each item is included graphically or in text form herein or not.	1 10	sprinkle
1.3.	All work to be installed according to and meet all local and county codes and	1.19.	within t
14	ordinances and follow approved irrigation plans.		shown i
1.4.	plan are in fact the same as existing in the property and their size is the same, as	_	way, Ov
	well as the pressure at the water meter. Verification shall also be carried out by	2. 2.1.	MANUF Irrigatio
1.5.	irrigation contractor if using an existing well. Flectrical devices shall carry Underwriter's Laboratory labels.		by appr
1.6.	References:		or RZP a
1.6.1	ASTMD2241 – Polyvinyl chloride plastic pipe.	2.2.	sensors Irrigatio
1.7.	All materials, quantities, sizes, sprinkler locations and types, valves locations and		General
	types, and any other irrigation system component and/or information contained in		contract
	into contract with the Owner or General Contractor. This plan is diagramatical and	2.3.	Contract the wor
	therefore site condition, scale of the plan and changes during construction, may		CUDMIT
18	affect the location of the irrigation system components.	3. 3.1.	Irrigatio
1.0.	to comply with full coverage and design intent. By coverage it is meant the area of		specific
1.0	landscape watered by a sprinkler or grouping of sprinklers.		paper p
1.9.	manufacturer from year to year, therefore irrigation contractor shall verify prior to	3.2.	structu Irrigati
	bidding and entering into contract with Owner or General Contractor, that all	33	irrigatio
	equipment, sizes, and dimentions including sprinkler heads, pump if required, mainlines, valves and lateral piping will provide the full coverage required. Should	5.5.	time ea
	the contractor find a discrepancy, error or omission he shall contact the Landscape		of time
1 10	Architect immediately to make the necessary revision to the plan.	4.	IRRIGA
1.10.	Contractor accepts that the Landscape Architect has the right as Owner's authorized	4.1.	existin
	representative to at any stage of the works, inspect, accept or reject any and all	4.2	Genera It shal
	work and materials which, in his opinion, do not meet the requirements of the design intent.		sidewa
1.11.	Irrigation contractor is responsible for keeping the work premisses clean of debris,		damag of any
	and for removing all debris caused by his work from the site everyday and at the	4 7	by irrig
1.12.	Piping in islands or narrow beds shall run to one side of the island or bed to allow	+.3.	licensu
	for planting. This includes mainlines and electrical wires. Piping and wiring should	4.4.	Irrigati and/or
1.13	be installed after all the large plant material has been installed. All sprinkler heads shall meet the performance called for in this plan, and shall all	4.5.	In all a
	be from one single manufacturer. Although all shrub heads are specified with a		Jack to
	radius, contractor shall according to site conditions and space requirements, use	5. 5.1	MATER Backfle
	graphically as one pattern, use adjustable part-circle as required. Spacing shall		Backflo
	also be adjusted so as not to overthrow water into impervious areas.		head. I Vacuur
1.14.	All valves shall be installed inside a plastic valve box of a size proper to the valve(s) size. Valve boxes shall be installed over 3" of gravel for drainage and the	5.2	are at g
	top level with finished grade.	5.2.	include
1.15.	All wire to/from controller to the electric valves shall be #14, direct burial		connec include
	connectors and splices. All wire shall be placed bellow the PVC mainlines or lateral	5.3.	Contr
	lines pipes for protection of the wire, and shall be placed loosely to allow for	5.5.1	plastic
1.16.	Contraction. Thurst blocks shall be placed at all changes in direction of the main line		flow a
	That's blocks shall be placed at all changes in direction of the main line.		
5.3.2.	Trenching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage.	6.8.	A minir lines st
1.17. 5.3.2. 5.4.	Trenching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC. SDR 26, solvent-weld pipe	6.8. 6.9.	A minir lines sh All slee Contrad
1.17. 5.3.2. 5.4.	Trenching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21.	6.8. 6.9.	A minir lines sh All slee Contrac shown
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1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.5.1. 5.7.2. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.4. 5.7.5. 5.7.4. 5.7.5.	 Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21. Sleeves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongside (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1785) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e., "irrigation sleeves". Stakes shall be protected. PVC pipe fittings shall be Toro's 5702-Pro Series or similar, with Matched precipitation rate (MPR) nozzles and Toro's pressure-compensating insert disc. The head shall feature a 6" pop-up (except groundcover and flower-bed areas where 12" high-pops shall be used, with botton inlets), and shall have the X-Flow shutout device installed in the riser to prevent excessive water loss in case a nozzle is removed intentionally, or by accident. The spray head nozzles shall be Toro PSN nozzles or similar with no more than 1" per hour precipitation rate. They shall come in standard are settings and no te adjustable other than radius reduction. The dorpile bubber nozzles shall be Toro PSN nozzles or similar, with no more than 1" per hour precipitation rate. They shall come in standard are settings and no be adjustable other than radius reduction. The spray head nozzles shall be Toro PSN	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5.	A minir lines sk All slee Contrac shown Typic 00–06 07–10 11–16 27–35 36–55 56–80 Pipe m be solv of the p shall be Make a threads Use on Thorou accorda testing heads f Install of After co perform GUARA The Irri work by free fro be pror Irrigati during Irrigati improv employ DEFINI Riser, usually Spray underg Sprink water t Swing, pipe an than as grade v Zone, A
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7. 5.7.2. 5.7.3. 5.7.3. 5.7.4. 5.7.5. 5.7.5. 5.7.5. 5.7.5. 6.7.5. 6. 6.1. 6.2.	 Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21. Sleeves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongside (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1785) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be takes with appropriate annotation, i.e., "irrigation sleeves". States shall be protected. PVC pipe fittings shall be solvent weld Schedule 40 standard weight. Attachment shall be made with both a primer and solvent cement, as approved by the manufacturer. Sprinkler Heads. The spray heads shall be Toro'S 5702-Pro Series or similar, with Matched precipitation rate (MPR) nozzles and Toro's pressure-compensating insert disc. The head shall feature a 6" pop-up (except groundcover and flower-bed areas where 12" high-pops shall be used, with bottom rate. They shall come in standard arc settings and not be adjustable other than radius reduction. The spray head nozzles shall be Toro #FR-25-PC (pressure-compensating) on 2" 5702 bodies or similar. Sprinkler Risers. Sprinkler heads are to be connected to the laterals by 'Blue Stripe SwingPipe' or flexible cu-of friesrs. Drip Irrigation. Continuously self-flushing, pressure-compensating dripline by Toro or similar. The dripline shall consist of nominal sized one-half inch low density, linear folyethylene t	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5.	A minir lines sk All slee Contrac shown Typic 00–06 07–10 11–16 17–26 27–35 36–55 56–80 Pipe m be solv of the p shall be Make a threads Use onl Thorou accorda testing heads f Install of After co perform GUARA The Irri work be free fro be pror Irrigati during Irrigati during Irrigati during Irrigati during Sprink water t Swing, pipe an than as grade v Zone, J
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1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.5. 5.7.5. 5.7.4. 5.7.5. 5.7.5. 6.7.5. 6.1. 6.2. 6.3.	Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21. Sleeves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongide (or dowe) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1785) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e. "irrigation sleeves". Stakes shall be protected. Sprinkler Heads. The spray heads shall be Toro's 5702-Pro Series or similar, with Matched precipitation rate (MPR) nozeles and Toro's pressure-compensating insert disc. The head shall feature a 6" pop-up (except groundcover and flower-bed areas where 12" high-pops shall be used, with bottom inlets), and shall have the X-Flow shutout device installed in the riser to prevent excessive water 10s in case a nozel is removed untentionally, or by accident. The spray head nozzles shall be Toro PSN nozzles or similar with no more than 1" per hour precipitation rate. They shall come in standard arc settings and not be adjustable other than radius resure compensating they by Blue Stripe SwingPipe' or flexible cut-off risers. Drinkler Risers. Sprinkler heads are to be connected to the laterals by 'Blue Stripe SwingPipe' or flexible cut-off risers. Drinkler Risers and nove stall consist of nominal sized one-half inch low density, linear polyethylene tubing housing inter	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1.	A minir lines sk All slee Contrac shown Typic 00–06 07–10 11–16 17–26 27–35 36–55 56–80 Pipe m be solv of the p shall be Make al threads Use onl Thorou accorda testing, heads f Install of After co perform GUARA The Irrig work by free fro be pror Irrigatii during Irrigatii improve employ DEFINIT Riser, usually Spray underof Sprinkl water th Swing a pipe an than as grade v Zontrol differer
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7.1. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.4. 5.7.5. 5.8. 5.8. 5.9. 6. 6.1. 6.2. 6.3.	Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21. Sleeves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongside (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1785) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e. "irrigation sleeves". Stakes shall be protected. (ASTM D-1785) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Crass 200 PVC ips fitting shall be solvent weld Schedule 40 standard weight. Attachment shall be mary leads. The spray heads shall be Toro's 5702-Pro Series or similar, with Matched precipitation rate (MPR) nozzles and Toro's pressure-compensating insert disc. The head shall be target by previp (except groundcover and flower-bed areas where 12" high-pops shall be used, with bottom inlets), and shall have the X-Flow shutout device installed in the riser to prevent excessive water loss in case a nozzle is removed intentionally, or by accident. The spray head nozzles shall be Toro PSN nozzles or similar with no more than 1" per hour precipitation rate. They shall come in standard arc settings and not be adjustable other than radius resure compensating dripline by Toro or similar. The dripline shall consist of nominal sized one-half inch low density, linear ploythylere tubing ho	6.8. 6.9. 6.10. a) b) c) d) e) f.) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1.	A minir lines sh All slee Contrad shown Typic 00–06 07–10 17–26 27–35 36–55 56–80 Pipe m be solv of the p shall be Make a threads Use onl Thorou accorda testing heads f Install of After co perform GUARA The Irri work by free fro be pror Irrigati during Irrigati improv employ DEFINI Riser. usually Spray under Sprink water t Swing. pipe an than as grade v Zone. 2
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7.1. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.4. 5.7.5. 5.8. 5.8. 5.9. 6.1. 6.2. 6.3.	Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PVC) solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or laterais shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21, Solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 20, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 20, solvent-weld pipe accept 1" pipe, which may be Class 200 PVC, SDR 20, solvent-weld anongide (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1785) for sleeves 4" diameter and smaller. Silveves 5" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e., "irrigation sleeves". Stakes shall be procteted. PVC pipe fittings shall be solvent weld Schedule 40 standard weight. Attachment shall be trace thors's 5702-Pro Series or similar, with Matched precipitation rate (MPR) nozzles and Tors's pressure-compensating insert disc. The head shall feature a 6" pop-up (except groundcover and flower-bed areas where 12" high-pops shall be used, with bott on intets), and shall have the X-flow shutout device installed in the riser to prevent excessive water loss in case a nozzle is removed intentionally, or by accident. The spray head nozzles shall be Toro #FR-25-PC (pressure-compensating) on 2" 5702 bodies or similar. Sprinkler Heads sall be Toro #Re-25-PC (pressure-compensating or gringher for thexibe cut-off risers. Drip Irrigation. Continuously self-flushing, pressure-compensating dripine by Toro or similar. Kith red stripes. The emitter shall provide 'RootCuard' protection using the pre-emergent Treflan, which is non-c	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1. 9.2.	A minir lines sk All slee Contrad shown Typic 00–06 07–10 11–16 27–35 36–55 56–80 Pipe m be solv of the p shall be Make a threads Use on Thorou accorda testing heads f Install of After co perforr GUARA The Irri work b free fro be prop Irrigati during Irrigati synak spray under Sprink water t Swing, pipe ar than as grade v Zone, a control differed
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7.1. 5.7.2. 5.7.3. 5.7.3. 5.7.4. 5.7.5. 5.7.5. 5.8. 5.9. 6.1. 6.2. 6.3. 6.4. 6.3.	Tranching backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Dispectifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 25, obvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 25, obvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21. Sleeves shall be wrice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongside (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1783) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e., "irrigation sleeves", Stakes shall be protected. PVC pipe fittings shall be solvent weld Schedule 40 standard weight. Attachment shall feature a 6" pop-up (except groundcover and flower-bed areas where 12" high-pops shall be used with both a primer and solvent cement, as a pproved by the manufacturer. Sprinkler Heads. The spray head nozzles shall be Toro #FR-25-PC (pressure-compensating) on 2" 570Z bodies or similar. The photo shuttot device installed in the riser to prevent excessive water loss in case a nozzle is removed intentionally, or by accident. The spray head nozzles shall be Toro #FR-25-PC (pressure-compensating) on 2" 570Z bodies or similar. The toting shall be toro #FR-25-PC (pressure-compensating) on 2" 570Z bodies or similar. The shall comis to nominal size of one-half inch low density, linear polytethree tubing housing internal pressure compensating, continuously self-flushing, pressure-compensating dripile by 10°C or similar. The shall be	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1. 9.2. 9.3.	A minir lines sk All slee Contra- shown Typic 00–06 07–10 17–26 27–35 36–55 56–80 Pipe m be solv of the p shall be Make a threads Use onl Thorou accorda testing heads f Install g After co perforn GUARA The Irri work be free fro be pror Irrigati during Irrigati Sone. 7 Control
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.5.1. 5.7.2. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.5. 5.8. 5.9. 6.1. 6.2. 6.3. 6.4. 6.3.	Tranship backfill shall be free of rocks, stones, or any other debris which may damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be schedule 40 (PCC) Solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC, SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21, Sleves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleves for control wire only shall be 2" diameter, placed alongside (or above) each sleve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-1783) for sleves 4" diameter and smaller. Sleves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleve locations with above grade stakes with appropriate annotation, i.e., "Irrigation sleves". Stakes shall be protected. PVC pipe fittings shall be 50vent weld Schedule 40 standard weight. Attachment shall be made with both a primer and solvent cement, as approved by the manufacturer. Sprinkler Heads. The spray head nozzles shall be Toro 'S Nozzles or similar, with Matched precipitation rate (MPR) nozzles and Toro's pressure-compensating insert disc. The head shall in the riser to preven excessive water loss in case a nozzle is removed intentionally, or by accident. The spray head nozzles shall be Toro PSN nozzles or similar with no more than 1' per hour precipitation rate. They shall come in standard arc settings and no be adjustable orber than radius reduction. The fourthubber nozzles shall be Toro PSN nozzles or similar, onthio word systeff flushing, pressure-compensating dripline by Toro or similar. The dripline shall consist of nominal sized one-half inch how density, linear polychtylnet tubing nousing internal pressure conclocation, continuously self-flushing, corticulou sin	6.8. 6.9. 6.10. a) b) c) d) e) f.) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1. 9.2. 9.3.	A minin lines sh All slee Contrac shown Typic 00-06 07-10 11-16 17-26 27-35 36-55 56-80 Pipe m be solve of the p shall be Make al threade Use onl Thoroug accorda testing, heads f Install <u>c</u> After cc perforn GUARA The Irrig work by free fro be pron Irrigatia during of Irrigatia improve employ DEFINIT Riser. usually Sprinkl water th Swing J pipe an than as grade w Zont- A control differen
1.17. 5.3.2. 5.4. 5.5. 5.5.1. 5.6. 5.7.1. 5.7.2. 5.7.3. 5.7.4. 5.7.5. 5.7.4. 5.7.5. 6.6.1. 6.2. 6.3. 6.4. 6.3.	Tranching backfill shall be free of rocks, stones, or any other main inter- tranching backfill shall be free of rocks, stones, or any other main inter- many damage the pipes and wires. Valve Enclosure boxes are to be filled with a minimum of 3" of washed gravel below pipe level to ensure adequate drainage. Pipe. Main line piping shall be Schedule 40 (PCC) Solvent-weld pipe. Pipe shall carry the N.S.F. seal of approval and meet the following specifications: ASTM D-2241, SDR 21 or latest revisions. Laterals shall be Class 160 PVC. SDR 26, solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21, Solvent-weld pipe except 1" pipe, which may be Class 200 PVC, SDR 21, Sleeves shall be twice the nominal size of the pipe to be carried within, unless noted differently. Sleeves for control wire only shall be 2" diameter, placed alongside (or above) each sleeve for the mainline. Under walks, paving and where indicated on drawings, install Schedule 40 PVC (ASTM D-128) for sleeves 4" diameter and smaller. Sleeves 6" and larger shall be Class 200 PVC. Tape ends of sleeves and mark sleeve locations with above grade stakes with appropriate annotation, i.e., "irrigation sleeves". Stakes shall be protected. PVC pipe fittings shall be solvent weld Schedule 40 standard weight. Attachment shall be made with both a primer and solvent cement, as approved by the manufacturer. Sprinkler Heads. The spray head nozzles and Toro's pressure-compensating insert disc. The head shall in the riser to prevent excessive water loss in case a nozzle is removed intentionally, or by accidet. The spray head nozzles shall be Toro PSN nozzles or similar, with Matched precipitation rate (MPR) nozzles and Toro's pressure-compensating dirpline by Toro or similar. The dripline shall consist of nominal sized one-half inch low density, linear polyethyten turp recipitation rate. They shall come in standard arc settings and not be adjustable orber than radius reduction. The spray head nozzles shall be Toro PSN nozzles or sim	6.8. 6.9. 6.10. a) b) c) d) 6.11 6.12. 6.13. 6.14. 6.15. 6.16. 7. 7.1. 7.2. 7.3. 8. 8.1. 8.2. 8.3. 8.4. 8.5. 9. 9.1. 9.2. 9.3.	A minim lines sh All sleev Contrac shown i Typica 00-06 07-10 11-16 17-26 27-35 36-55 56-80 Pipe ma be solve of the p shall be Make al threade Use only Thoroug accorda testing, heads fo Install g After co perform GUARA The Irrig work by free from be pron Irrigatio improve employe DEFINIT Riser. usually Spray l underg Sprinkle water th Swing J pipe and than as grade w Zone. A control differen



nay be assembled and welded on the surface. Plastic pipe and fittings shall vent welded using solvents and methods as recommended by manufacturer pipe, except where screwed connections are required. Pipe and fittings be thoroughly cleaned of dirt, dust and moisture before applying solvent. all connections between plastic pipe and metal valves or steel pipe with

nly Teflon tape for sealing heads and riser assemblies when required. ughly flush out water lines and before installing heads and valves. Test in lance with industry standards and pipe ratings. Upon completion of the g, the Irrigation Contractor shall complete assembly and adjust sprinkler for proper distribution.

grounding per pump specifications if a well/pump is being used. completion of grading, landscaping and sodding, Irrigation Contractor shall m any final adjustments to the system which might be deemed necessary.

ANTEE

by him/her in installing the irrigation system is warranted for one year, shall be om defects and faulty workmanship and that any defective material or work shall omptly repaired or replaced without additional cost to the Owner. tion contractor shall repair any settling of backfilled trenches which may occur

tion contractor shall restore any and all damaged planting, paving, or any other vement which has been damaged by his work, including equipment, vehicles or yees, during the warranty period.

ITIONS

ly affixed to a lateral or submain to support a sprinkler or anti-siphon valve. y head. A spray head is a type of fixed spray sprinkler that pops up from rground and waters a set pattern, usually from 5 to 15 feet in range. kler. A sprinkler is a hydraulically operated mechanical device which discharges

Joint. A swing joint is a threaded connection of pipe and fittings between the nd sprinkler which allows movement to be taken up in the threads rather s a sheer force on the pipe. Also used to raise or lower sprinklers to a final

A zone or station is a section of an irrigation system served by a single ol valve. Zones are comprised of similar sprinkler types. No sprinkler heads of ent precipitation heads shall be used in any one single zone (station).

actor shall consult with General Contractor and any other entity regarding the on of any and all existing above ground and underground utilities as well as sed work requiring excavation in areas where irrigation system will take place. ion Contractor shall notify General Contractor and Owner (both) if a conflict is ed which will affect installation of irrigation system and/or equipment. ion contractor shall call 811, 48 hours prior to digging to avoid damaging vital

ons under which work is to be performed. After starting work and therefore ance of such conditions, the Irrigation Contractor shall at his expense, be sible for correcting all un-satisfactory and defective work resulting from such factory conditions.

STORM WATER CALCULATION TABLE	GRADING LEGEND
TOTAL SITE AREA 11.030 Sq. Ft25 Acres (A)	PROPOSED CONTOUR LINES
TOTAL IMPERVIOUS AREA6,927 Sq. Ft16 Acres (B)TOTAL PERVIOUS AREA4,103 Sq. Ft09 Acres (C)	PROPOSED SPOT ELEVATIONS
	EXISTING SPOT ELEVATIONS
Compute 1" of rainfall over entire site area. Total site x 1" rainfall = (11,030) x .083'= 916 Cu. Ft.	GRADE SLOPE FOR WATER RUNOFF SLOPE
Cwt= $\frac{(.16)(.6) + (.09)(.2)}{.22} = (.52)$	ABBREVIATION LEGEND
Provide on-site retention for (D)	T.O.W. TOP OF WALL
(.52)	T.O.C. TOP OF COPING
$\frac{1}{12}$ (11,030) = 478 Cu. Ft. Retention for 1" of rain fall.	T.O.S. TOP OF STEP
	T.O.B. TOP OF BENCH It's the Law!
RETENTION AREA REQUIRED IN CU. FT.	T.O.L. TOP OF LANDING
	B.O.S. BOTTOM OF STEP
SWALE (A) = 3.751 SQ. FT. X 83 LINEAL FT = 311.3 CU. FT.	I.O.D. TOP OF DRAIN
SWALE (B) = 2.256 SQ. FT. X 13 LINEAL FT = 29.3 CU. FT.	H.P. HIGH POINT
SWALE (C) = 1.576 SO, ET X OF LINEAL ET = 140.7 CU, ET	
SWALE (C) = 1.376 SQ. FI. X 95 LINEAL FI = 149.7 CO. FI.	
SWALE (D) = 1.457 SQ. FT. X 16 LINEAL FT = 23.3 CU. FT.	
SWALE (E) = 1.453 SQ. FT. X 8 LINEAL FT = 11.6 CU. FT.	EXISTING EXISTING GRADE
	SLP SLOPE
	EST INTERPOLATION
REQUIED RETENTION 478 CU. FT.	
PROVIDED RETENTION 525.2 CU. FT.	



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UTILITY POST-

. 6 A.40' EXISTING A A A.38' EXISTING A A A.38' A 4 · **Δ**Δ 2' HT. CMU WALL WITH 4' HT. CMU WALL TOP OF WALL (6.38') NGVD TOP OF WALL (8.38') NGVD 2' HT. RAILING ON TOP OF CMU WALL TOP OF RAILING (8.38') NGVD 2 PANEL ALUM. METAL PEDESTRIAN GATES REFER TO ARCHITECTURE. APPROACH MERIDIAN AVE 16' NORTH **GRADING PLAN**

SCALE: 1/8 " = 1'-0"

SLOPE

1 H





- fixtures", "fixture" and "luminaire" may be used interchangeably.

02. DIRECT BURIAL CABLE.

provide a minimum of 10.5 volts and a maximum of 11.5 volts to all lighting fixtures. Refer to manufacturer's guidelines included with the transformer. Minimum underground direct burial will be accepted. Black-taped connections will be rejected.

mounting surface. All junction boxes and other equipment shall be UL approved for wet location. Paint any necessary junction boxes or conduit to match the surface on which they are mounted. Install transformers according to manufacturer's specifications and local codes. All exposed metal parts including transformers shall be permanently meets same specification.

directed by Landscape Architect to match the surface on which it is mounted.

accessories in the landscape lighting plan.

Contractor is to coordinate a convenient time in the evening to test and aim equipment to the satisfaction of the Landscape Architect and Client (Owner).

Owner and be done on site when possible.



TRANSFORMERS LEGEND AND SPECS.									
Symbol	Brand	Model	Transformer	Tab	Input	Output			
1	Dabmar Lighting	LVT300-A-SS	300 KVA	T-1.1	75W	300 W			
				T-1.2	14W	300 W			
				T-1.3	84W				
2	Dabmar Lighting	LVT300-A-SS	300 KVA	T-2.1	35W	300 W			
				T-2.2	31W	300 W			
3	Dabmar Lighting	LVT300-A-SS	300 KVA	T-3.1	35W	300 W			
				T-3.2	94W	300 W			
				T-3.3	52W	300 W			

LIGHTING FIXTURES LEGEND & SPECS.										
Symbol	Brand	Model	Lamp	Use	Watts					
A	Dauer lampen	490007 ASTOR	LED/ MR16	Uplight	7W					
B	Dauer lampen	490066 SOLARA	LED/ MR16	WELL	7W					
C	Dauer lampen	489901 SAVANNAH	LED/ MR16	PATH	6W					
D	Dauer lampen	489927 BREAKERS	INTEGRATED	STEP	2.5					
LIGHT	LIGHTING FIXTURES NOTES									
	1			00007 "F						



ORDERING CODE: 490037 SPECIFICATIONS HOUSING: FINISH: Weathered brass. Custom powder coated colors available. WARRANTY: Lifetime.

