CONTRACT PLANS FOR

CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

CITY PROJECT #: 2017-03
FDOT FINANCIAL PROJECT ID: 435092-1-58-01
FDOT EDTF #: 439455-1-54-01
FEDERAL FUNDS

CITY of VENICE ENGINEERING DEPARTMENT 401 WEST VENICE AVENUE Venice, Florida 34285 ph: (941) 486-2626

LANDSCAPE COMPONENT

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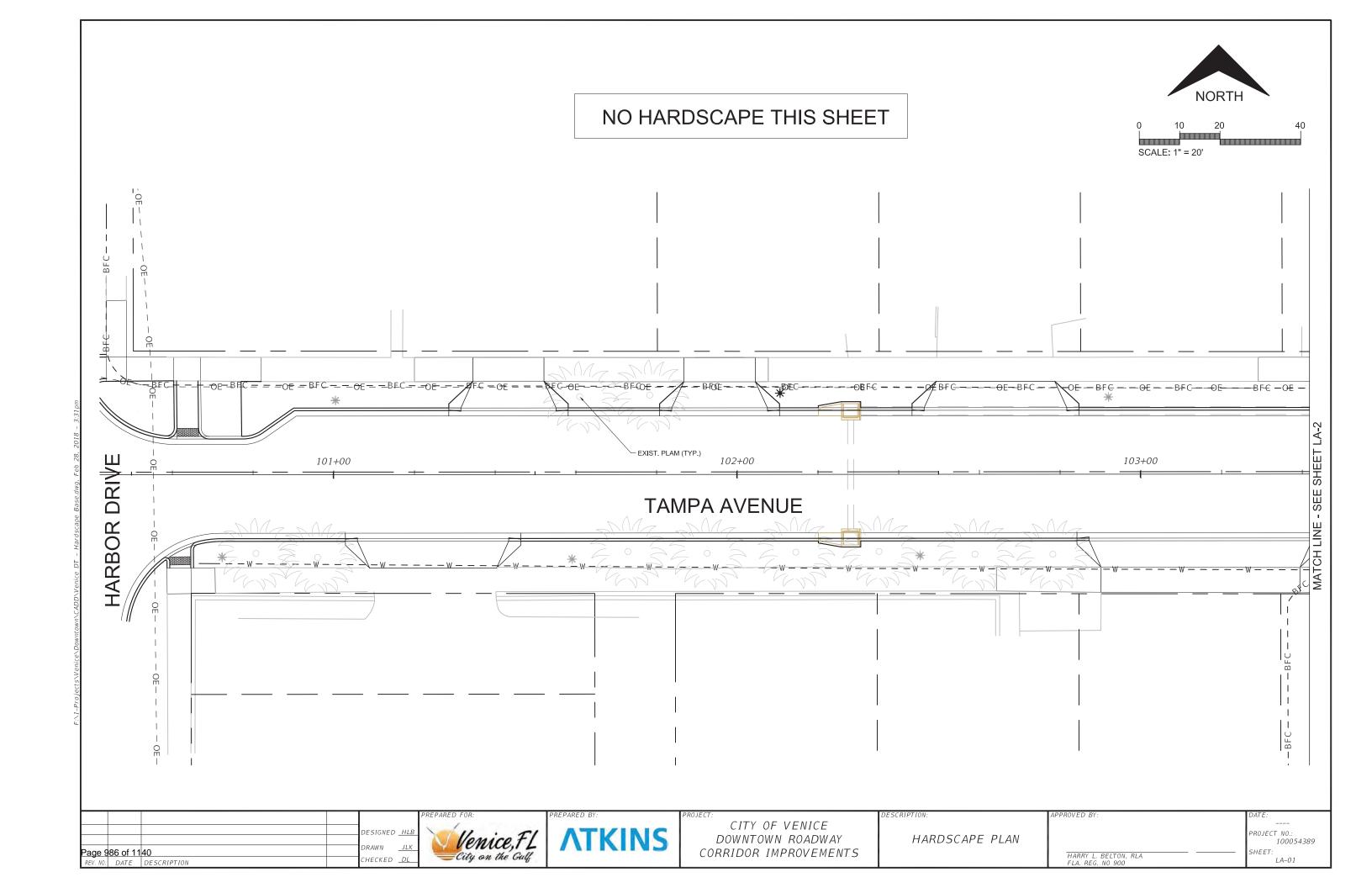
Harry L Belton 2018.03.15 14:00:05 -04'00'

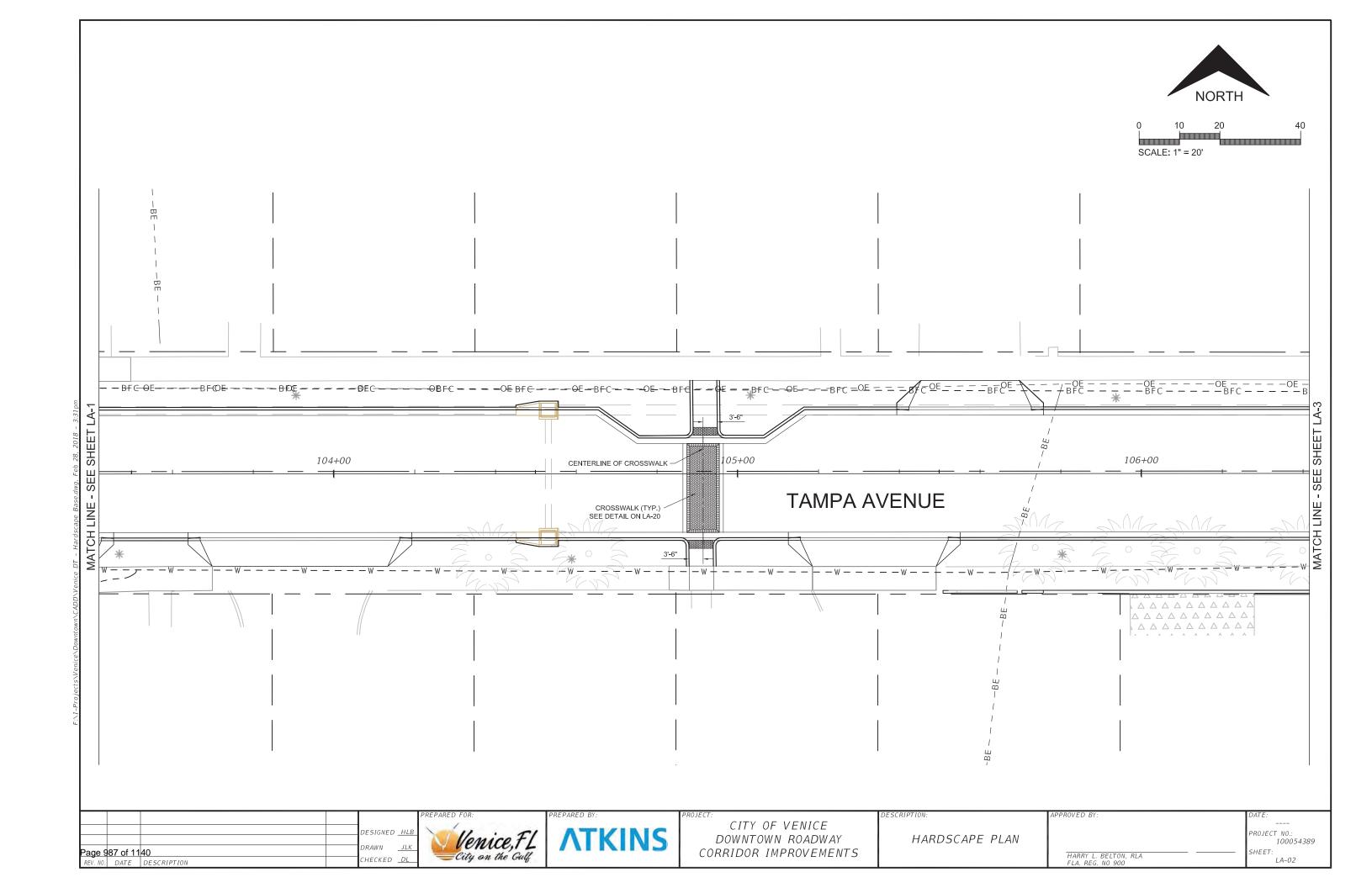
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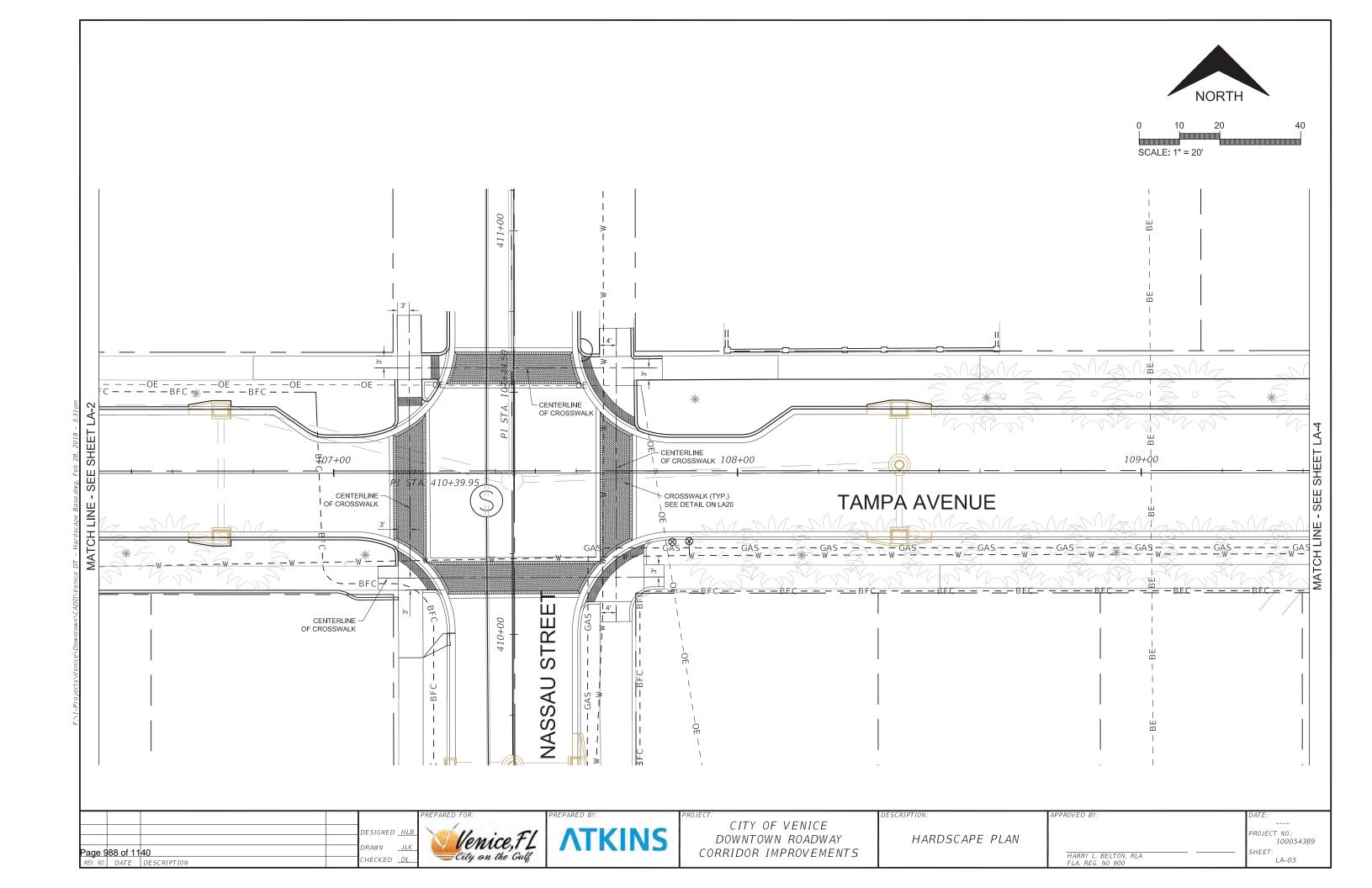


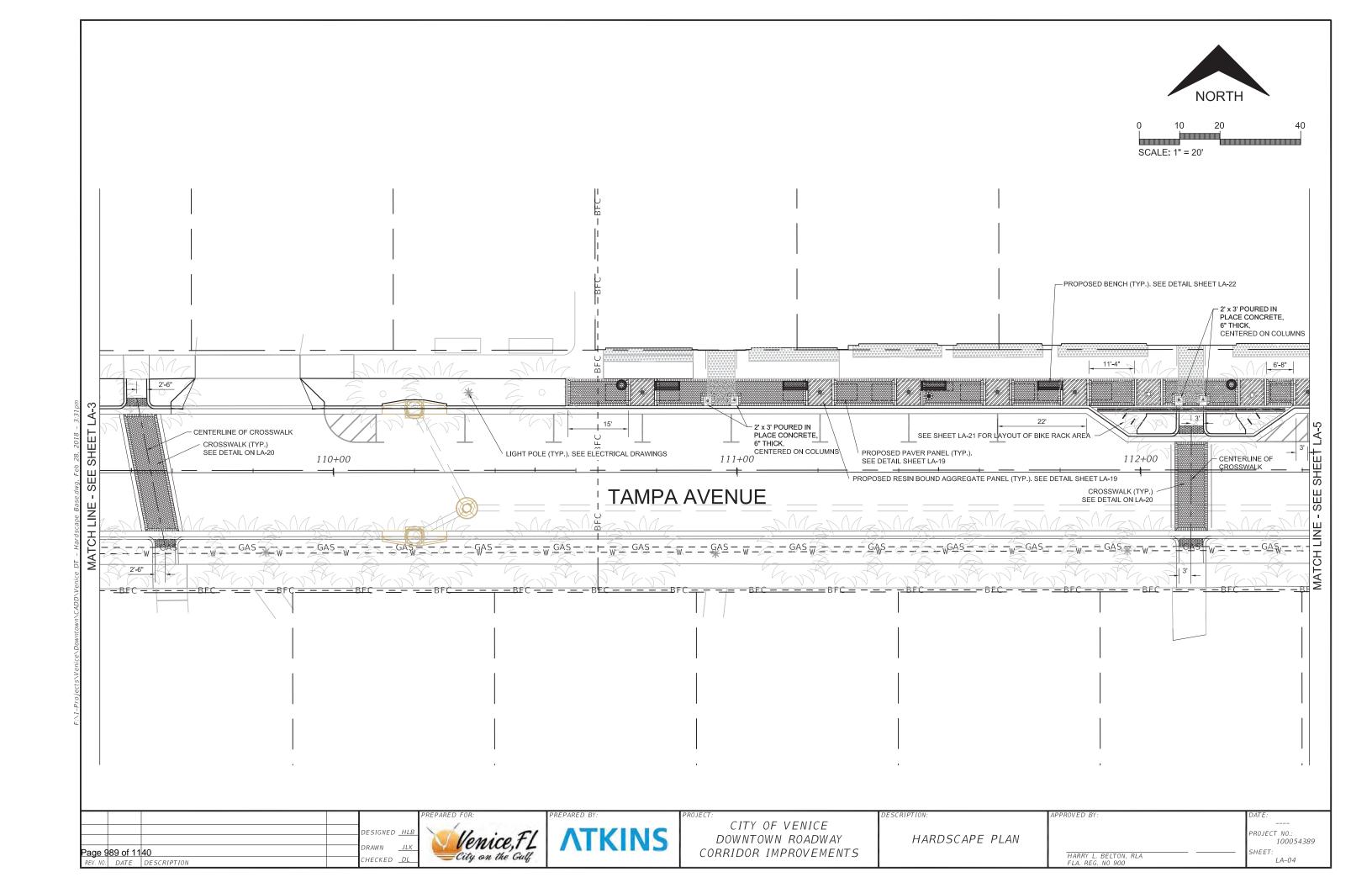
REGISTERED LANDSCAPE ARCHITE HARRY L. BELTON LICENSE # 900 PHONE: 954-23-4381

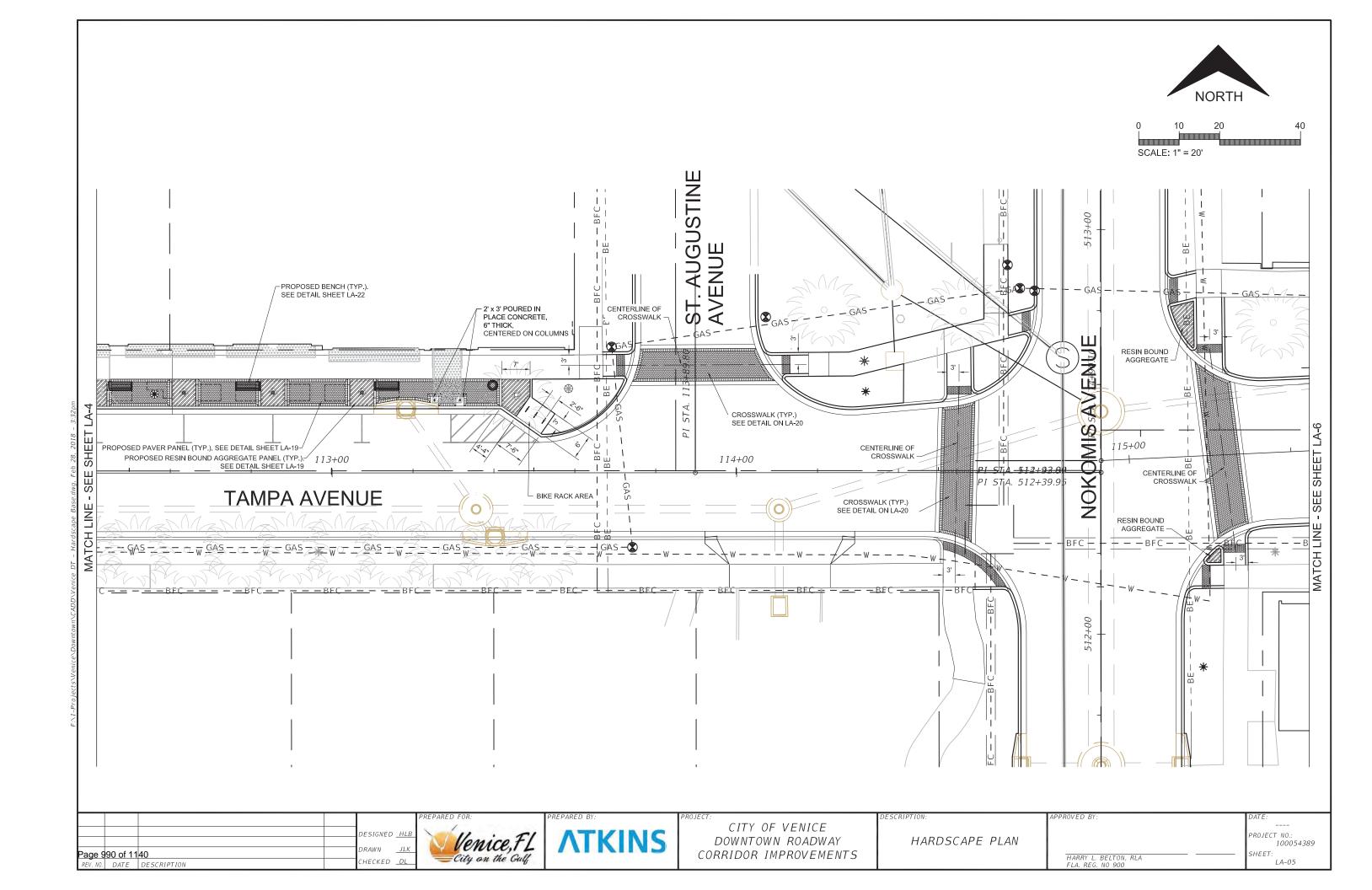
CITY OF VENICE

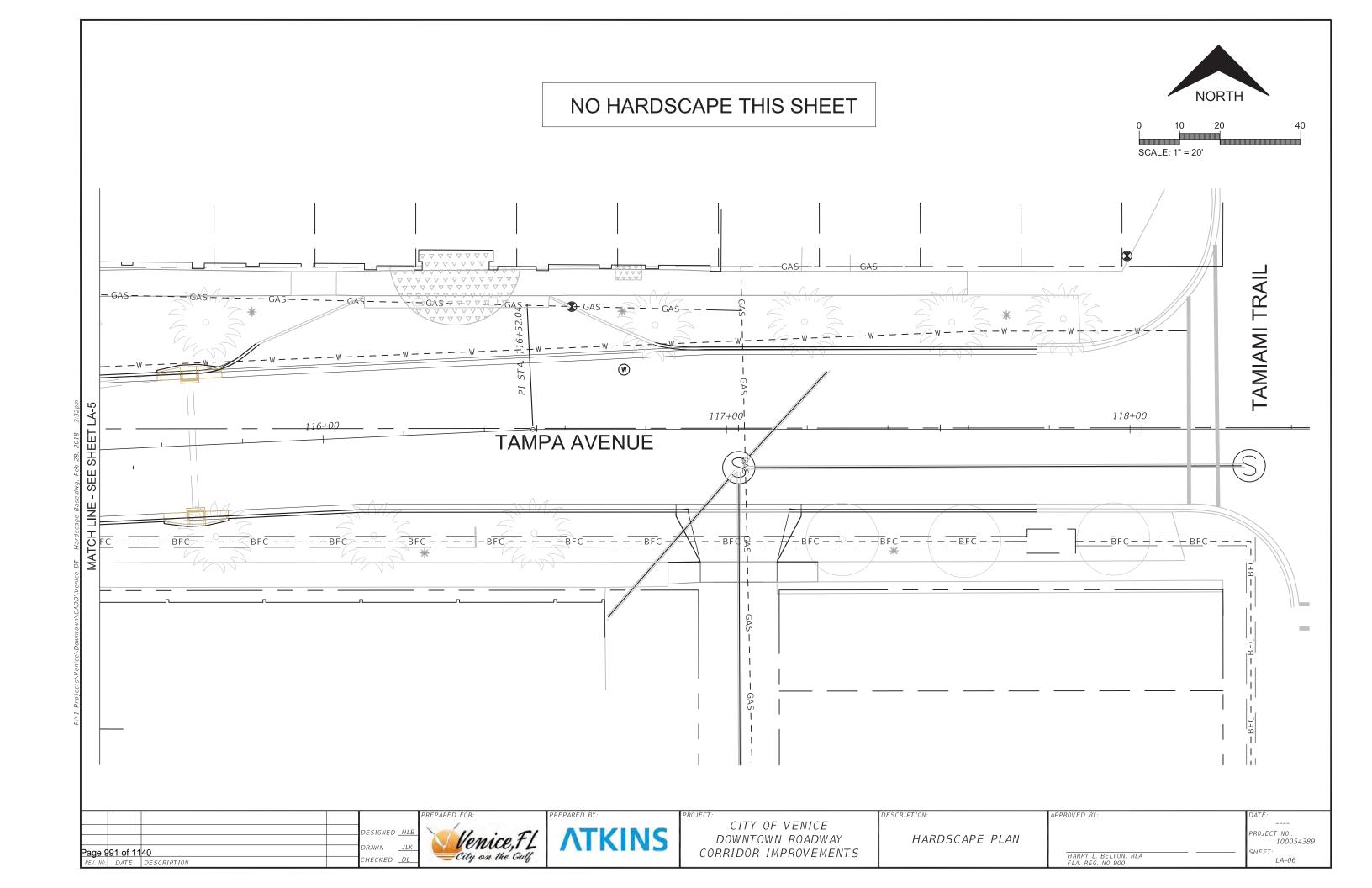


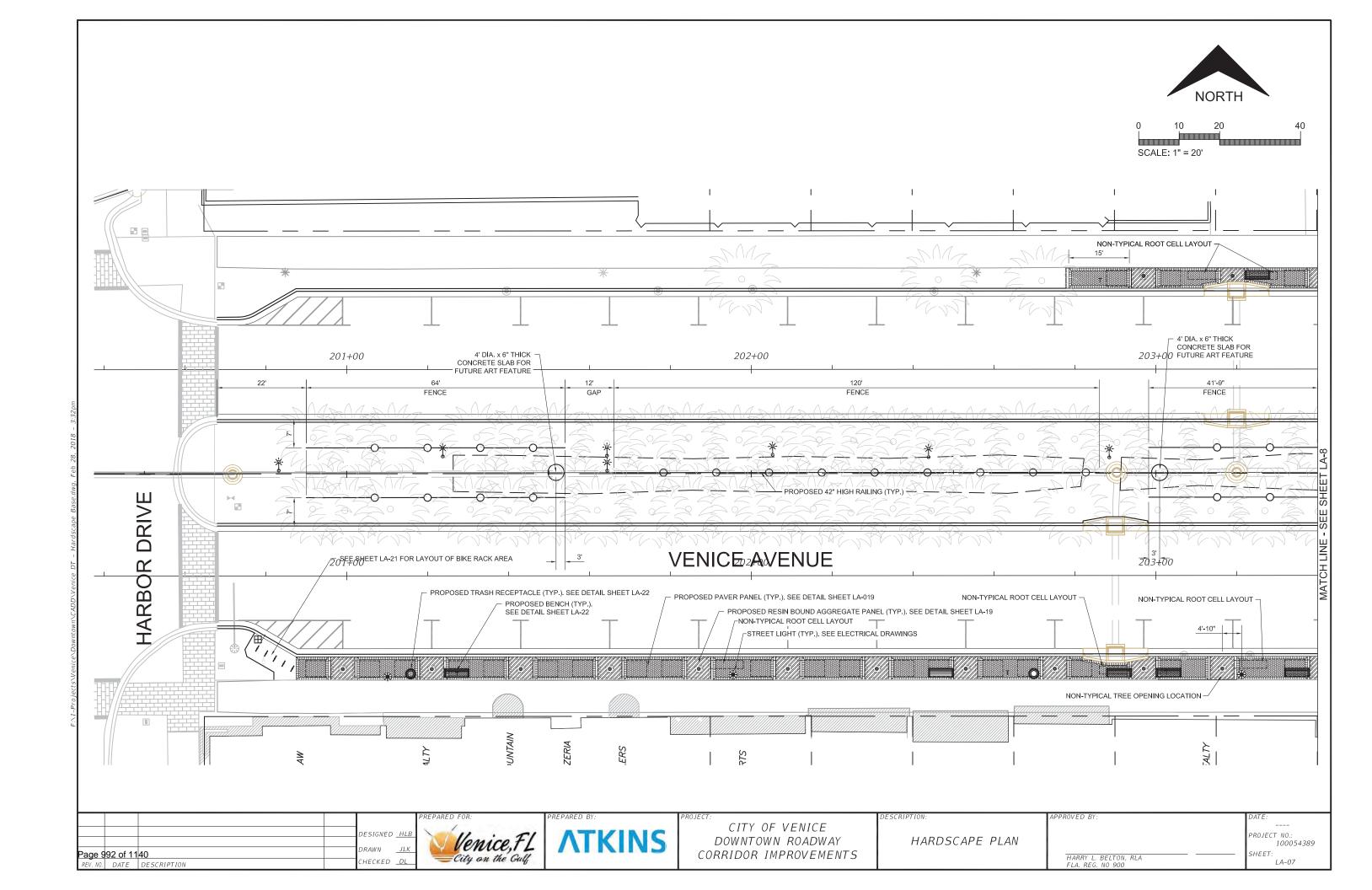




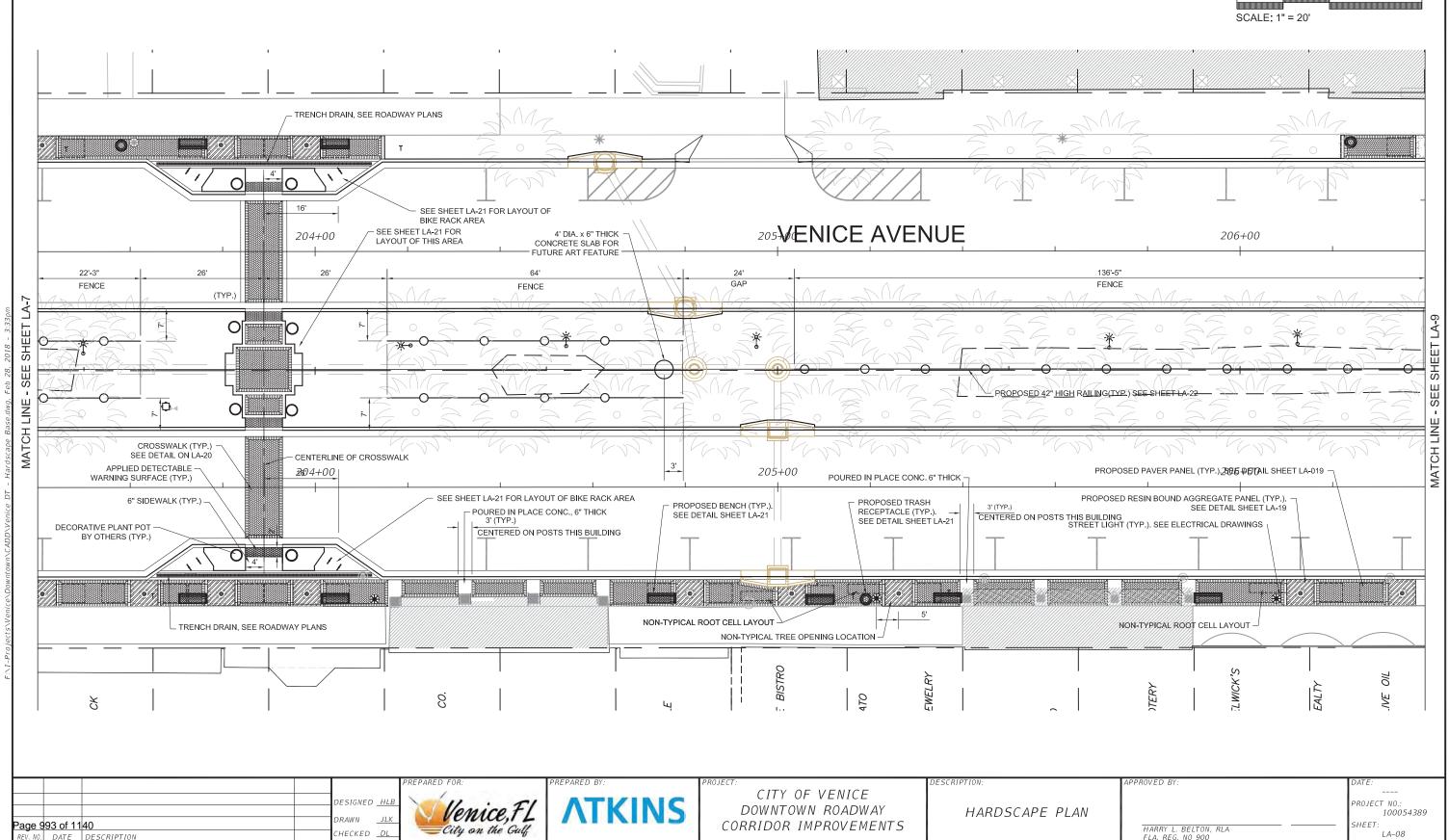


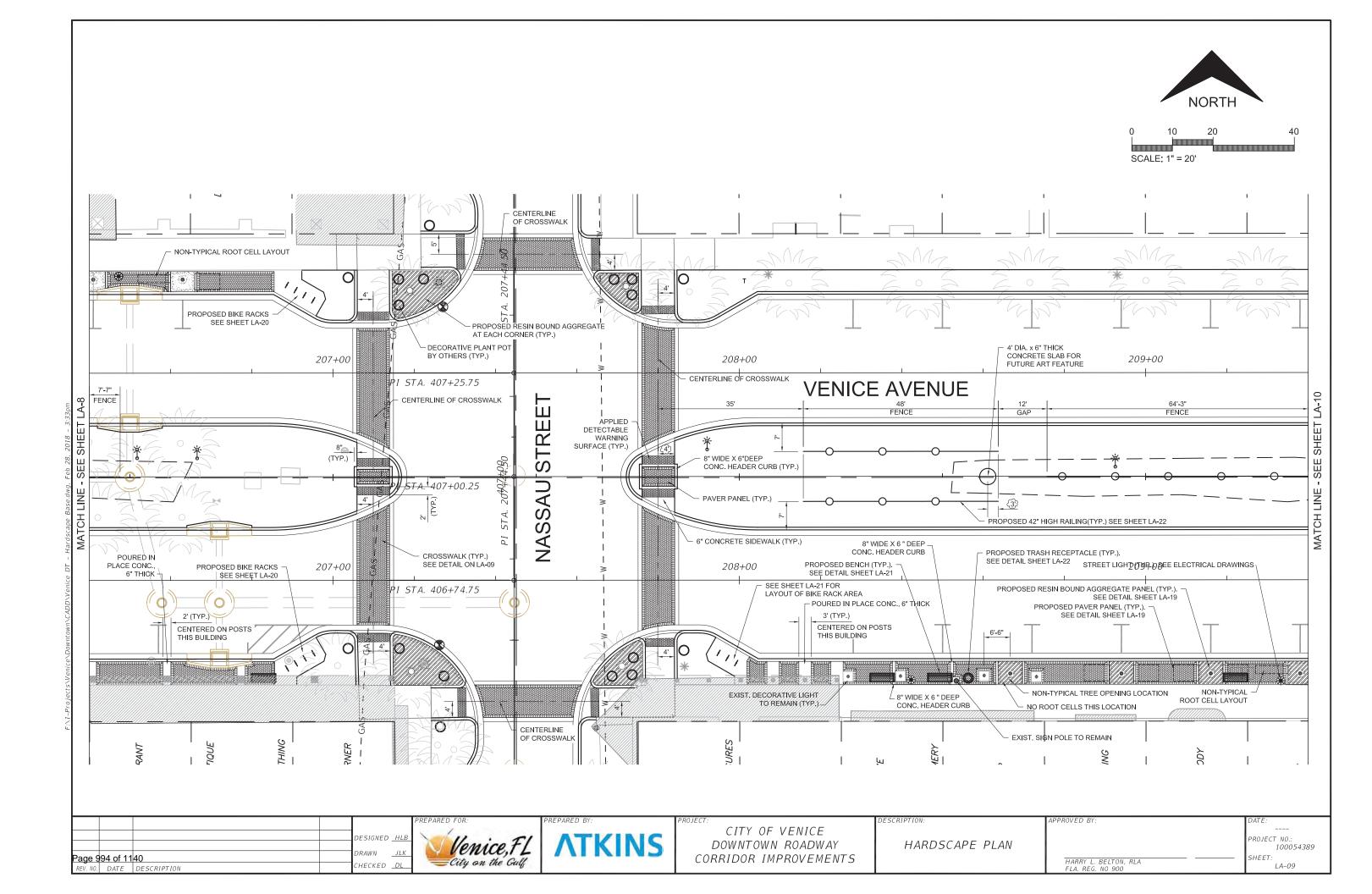


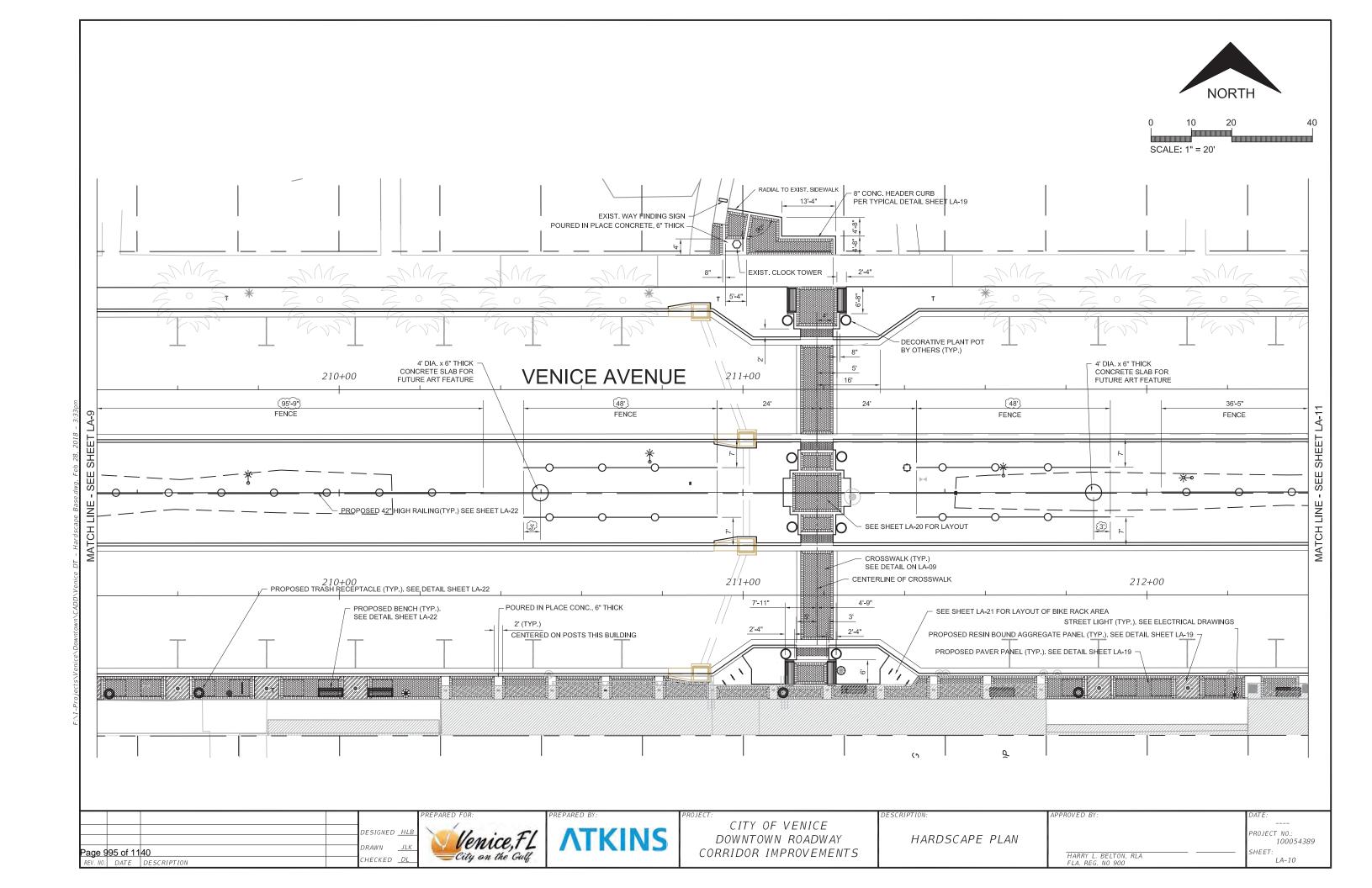


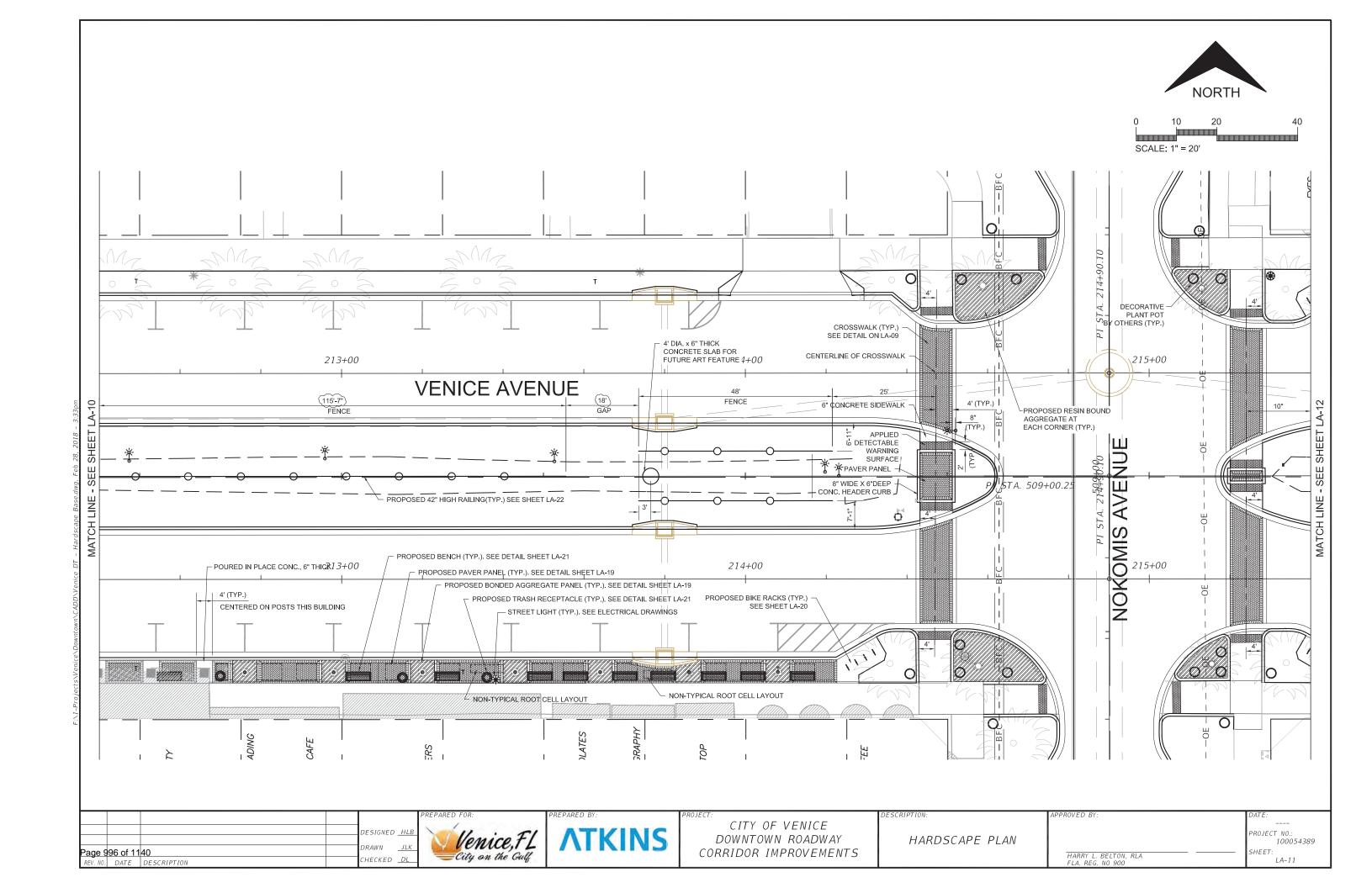


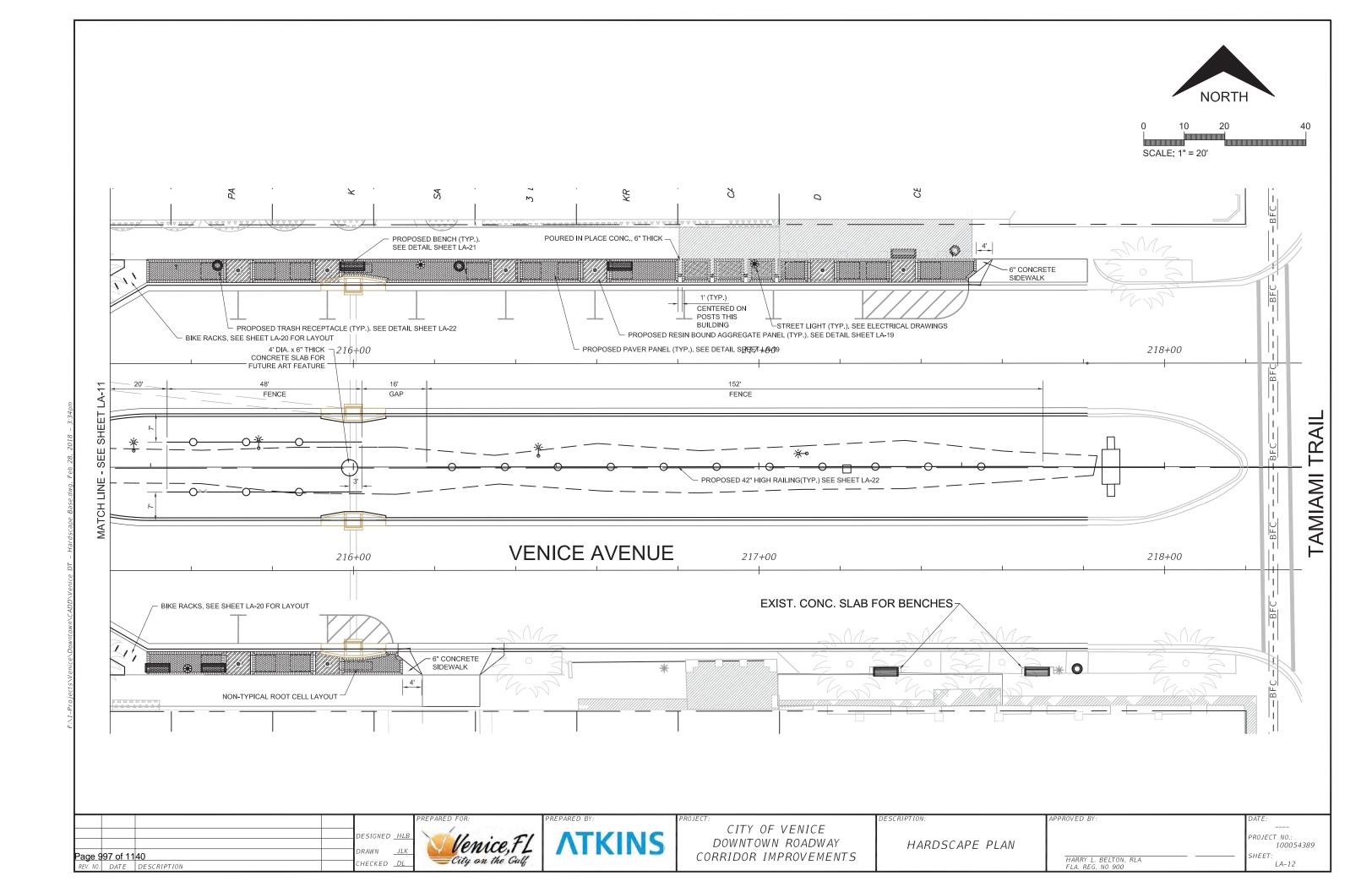


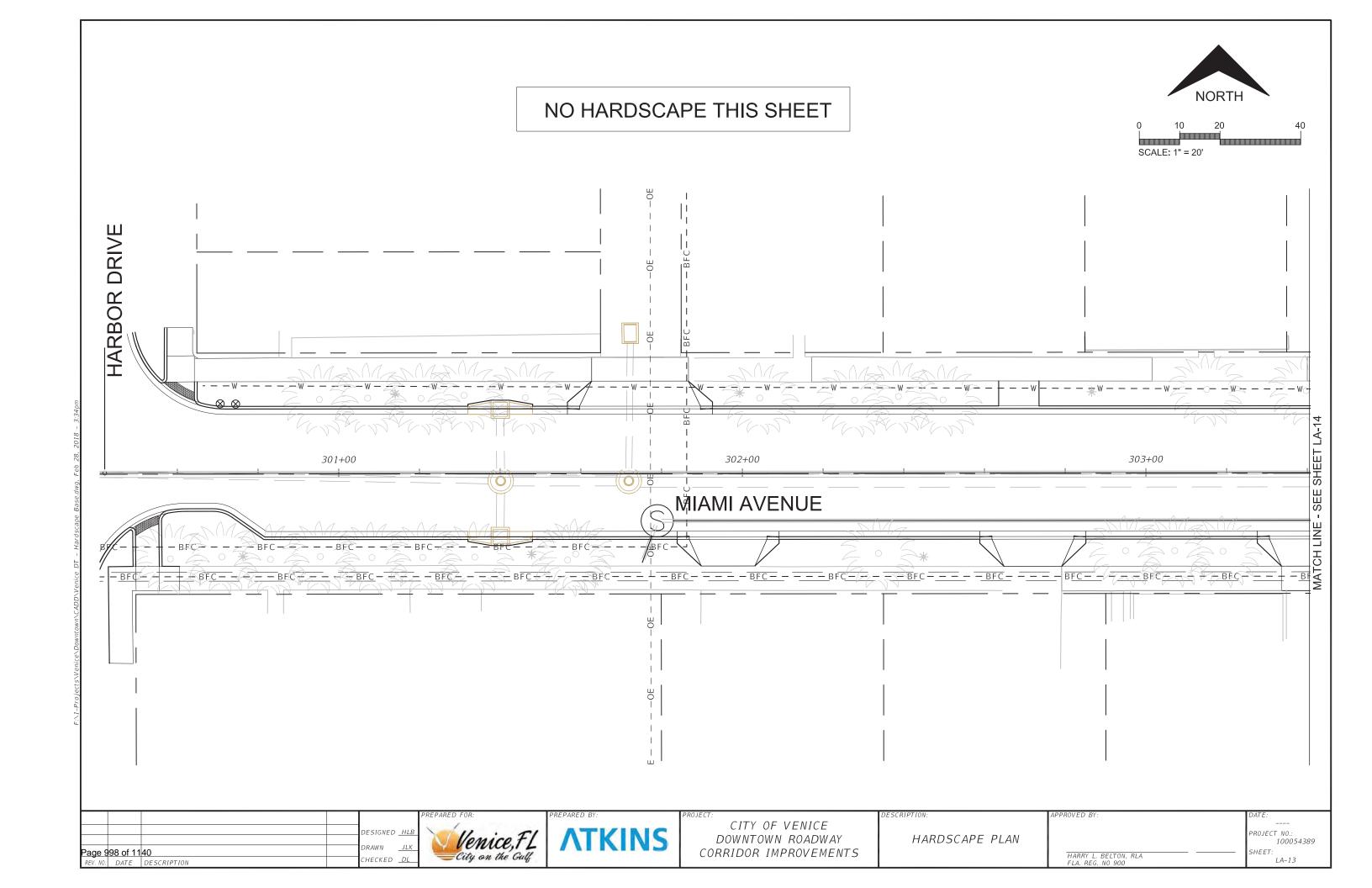


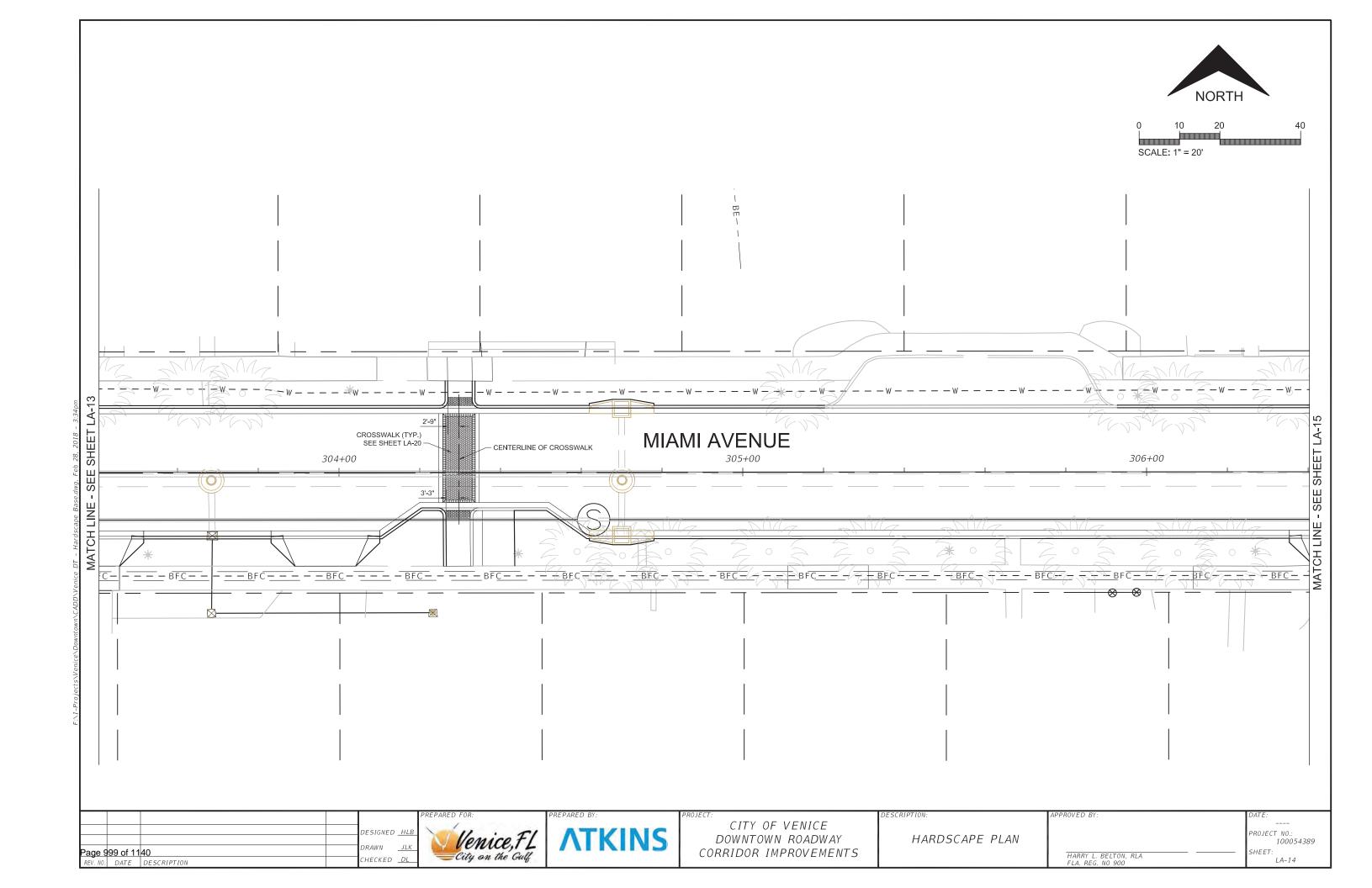


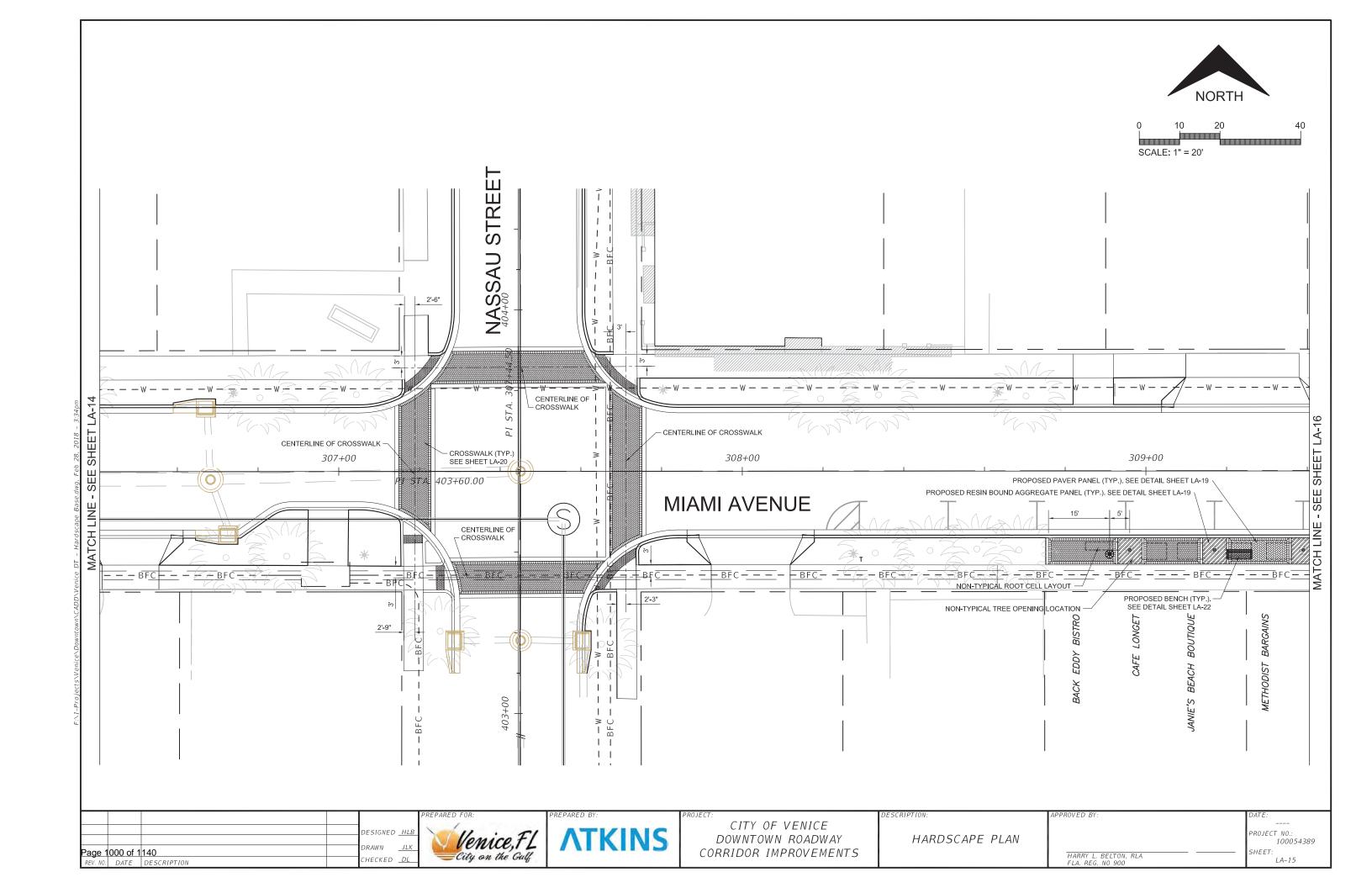


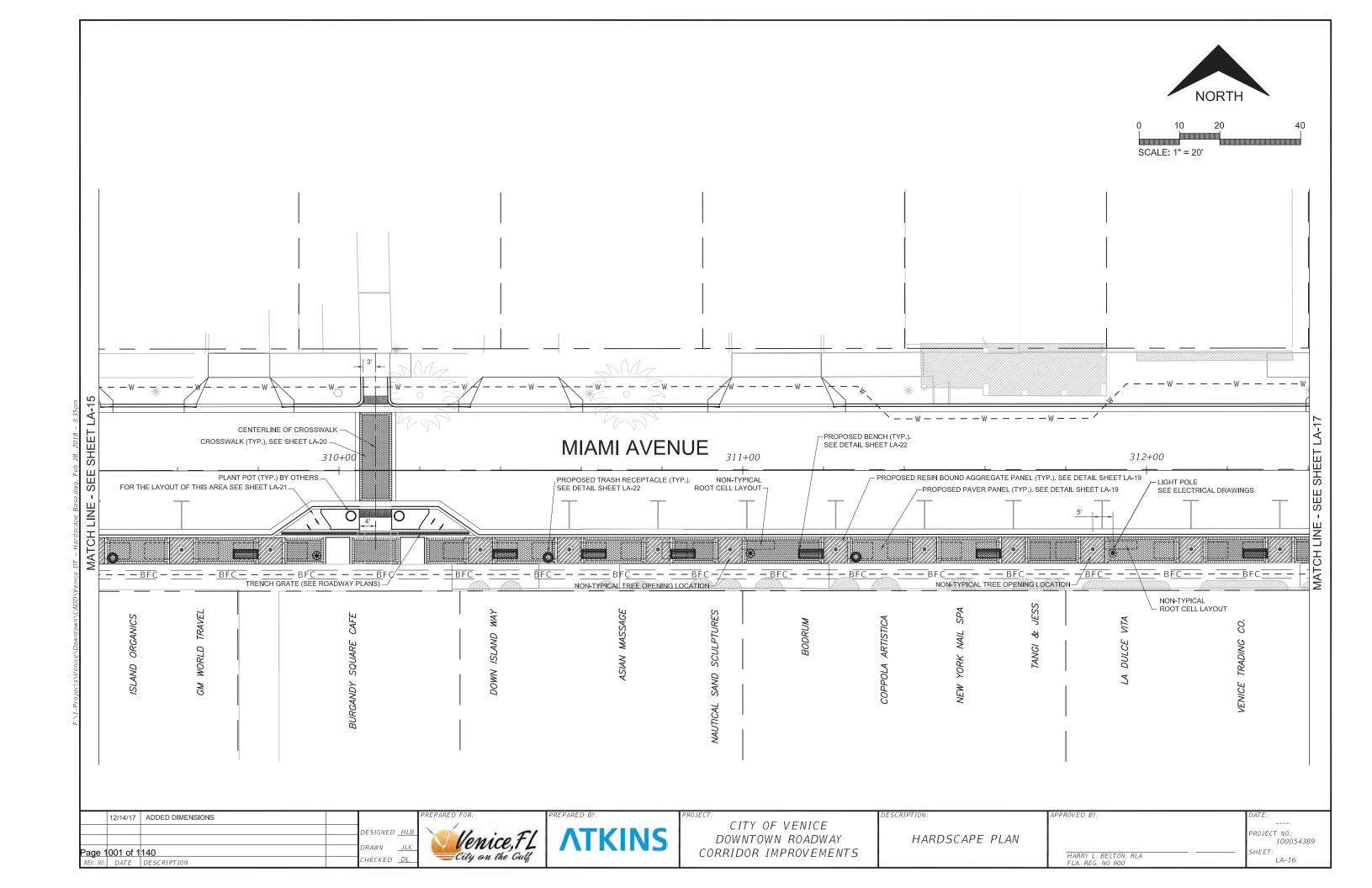


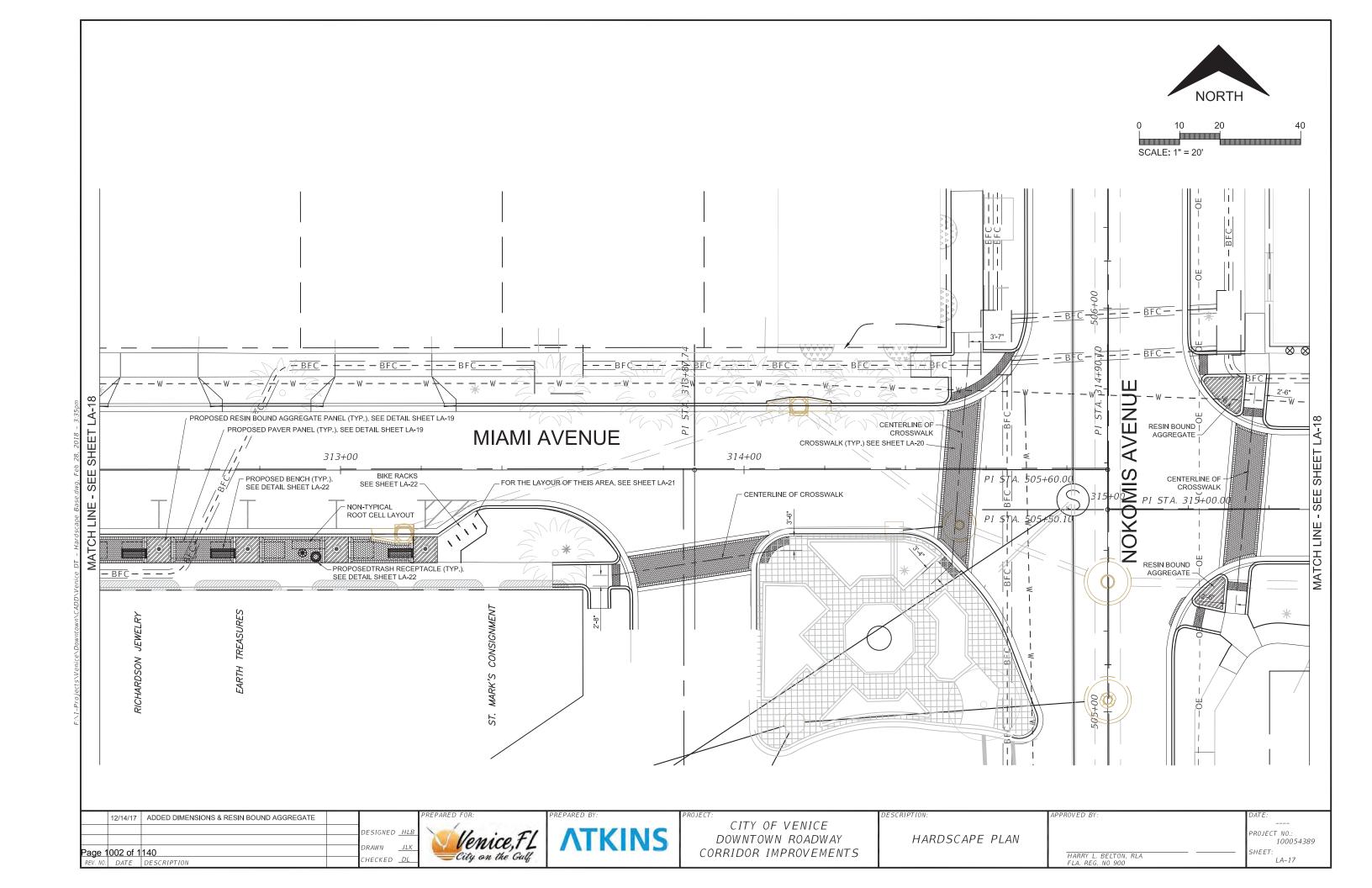


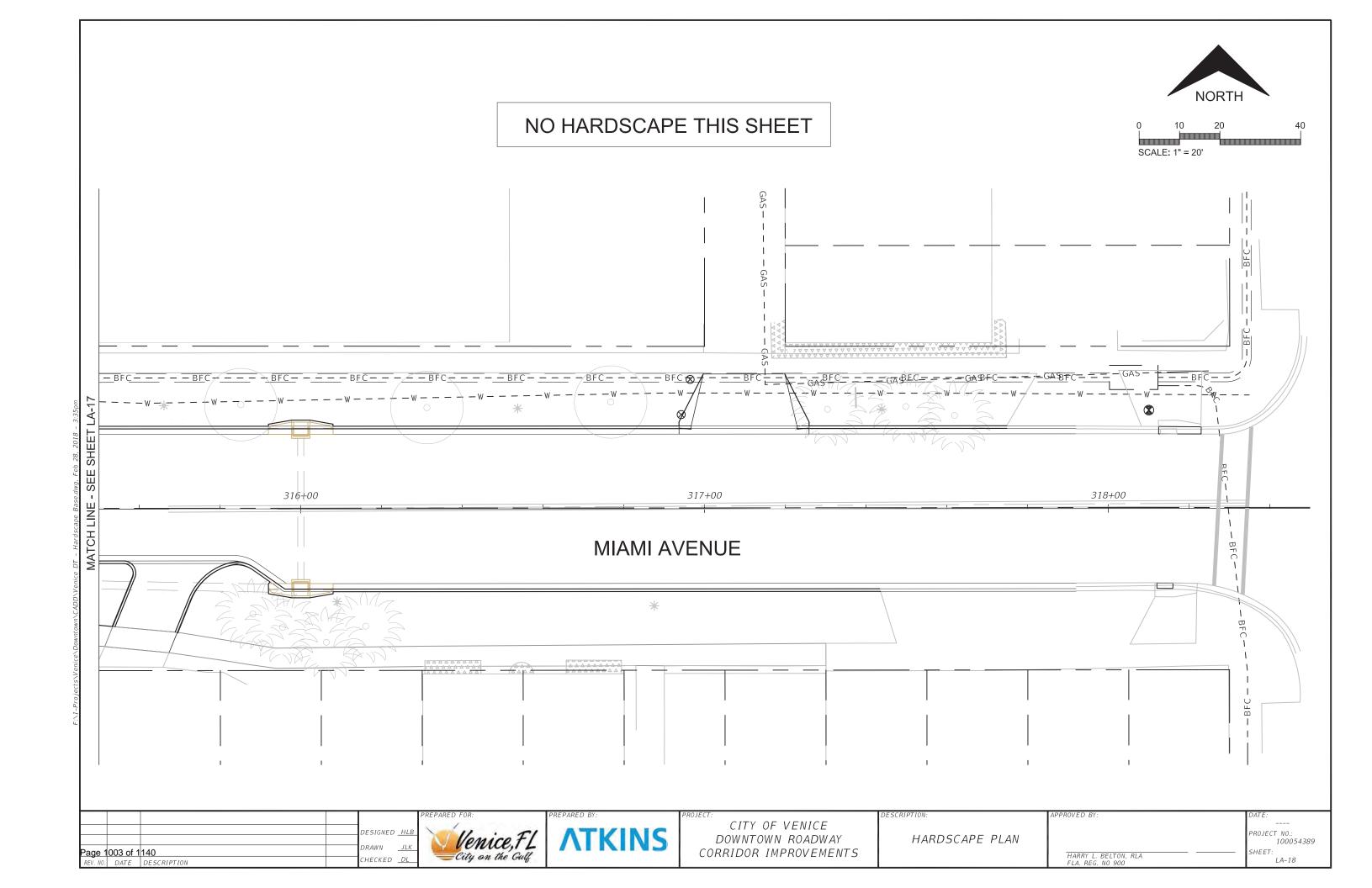


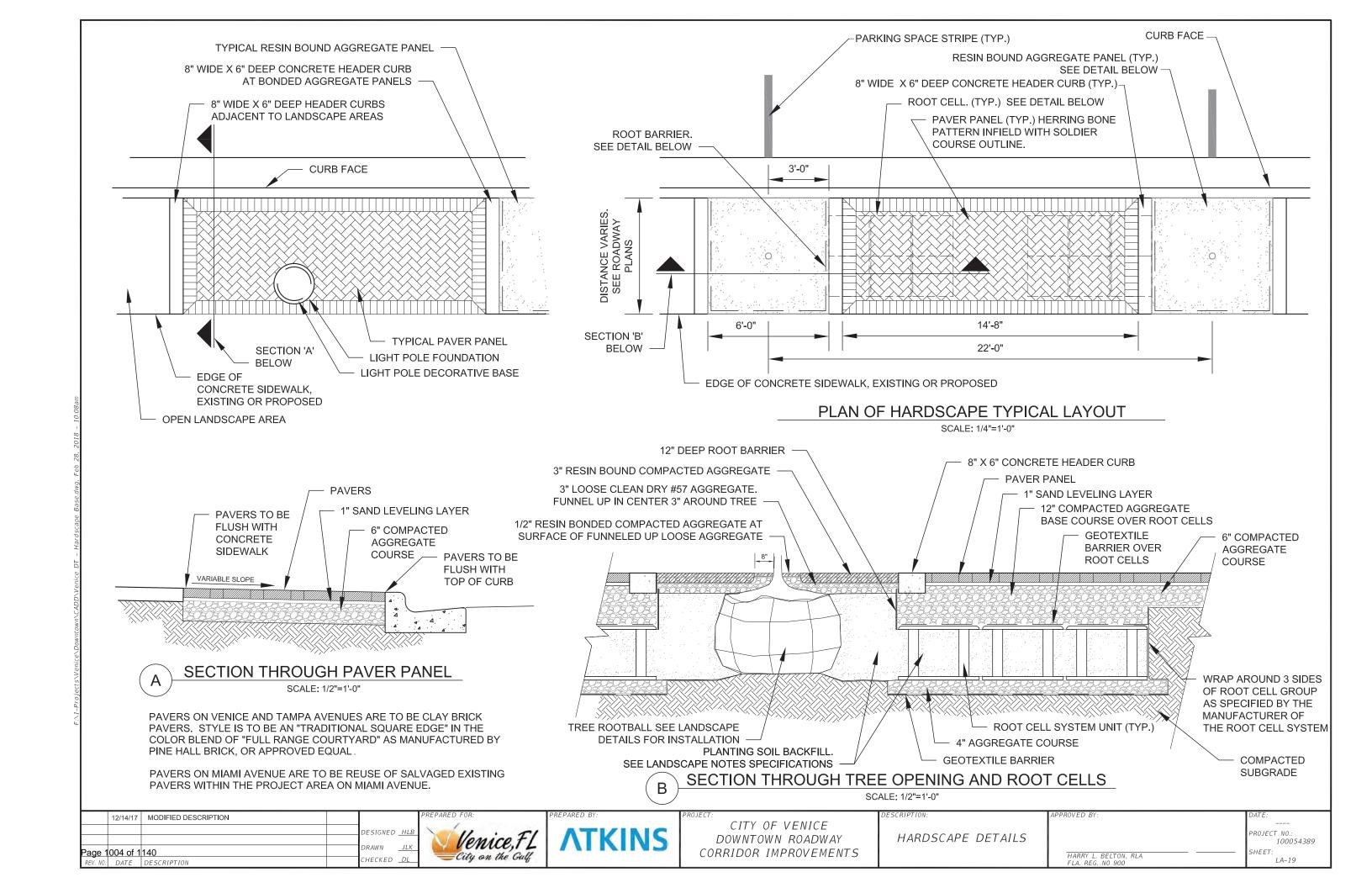


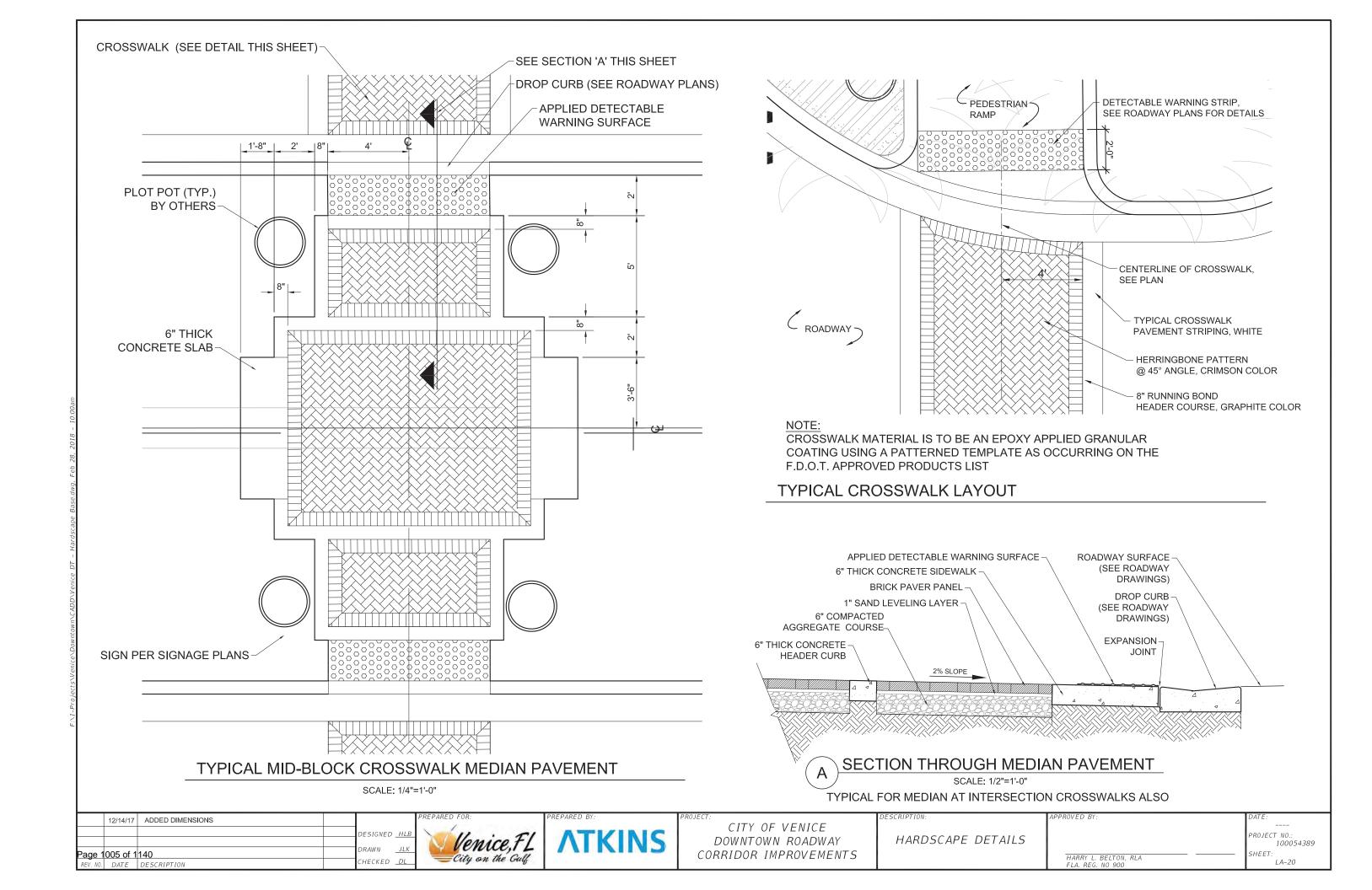






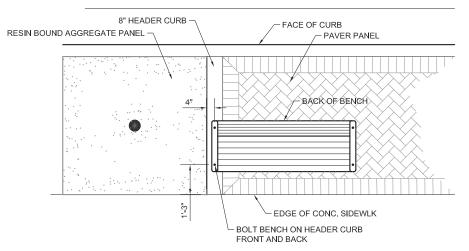






BIKE RACK LAYOUT AT INTERSECTION CROSSWALKS

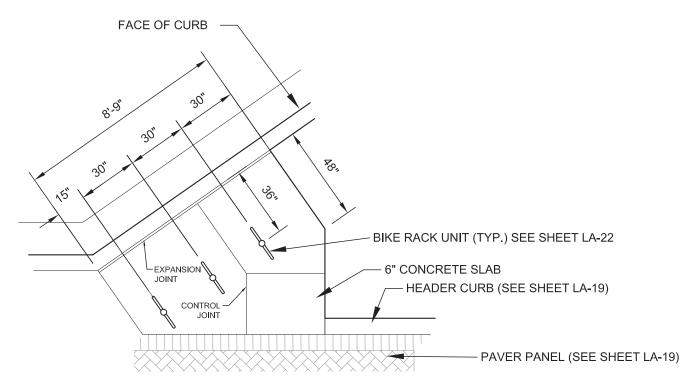
SCALE: 1/4"=1'-0"



TYPICAL BENCH PLACEMENT

SCALE: 1/4"=1'-0"

SCALE: 1/4"=1'-0"



BIKE RACK LAYOUT AT MID-BLOCK CROSSWALKS WITHOUT TRENCH DRAIN

SCALE: 1/4"=1'-0"

			PREPARED FOR:	PREPARED BY:	PROJECT:	DESCRIPTION:	APPROVED BY:	DATE:
Page 1006 c	of 1140 E DESCRIPTION	DESIGNED <u>HLB</u> DRAWN <u>JLK</u> CHECKED <u>DL</u>	Venice, FL	ATKINS	CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS	HARDSCAPE DETAILS	HARRY L. BELTON, RLA FLA. REG. NO 900	 PROJECT NO.: 100054389 SHEET: LA-21



BIKE RACKS ARE TO BE A 36" x 3 IN. OD TUBULAR STEEL POST FLANKED BY A 1-5/16 IN. TUBULAR 18 IN. DIA. STEEL RING. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. SURFACE MOUNT.



RAILING IS TO BE 42" HIGH ALUMINUM PICKET. COLOR IS TO BE BLACK POWDER COATED FINISH WITH PRESS POINTS ON 5/8" SQUARE PICKETS WITH CIRCLE CAPTURE DOUBLE TOP RAIL. 2" SQUARE POSTS AT 8' SPACING. CONTRACTOR TO PROVIDE ENGINEERED SHOP DRAWINGS.



BENCH IS TO BE "PLAINWELL" 72" BENCH BY LANDSCAPE FORMS. WOOD IS TO BE IPE AND METAL IS TO BE BLACK POWDER COAT FINISH. BENCHES ARE TO BE BOLTED TO HEADER CURBS SHOWN ON THE PLANS



TRASH RECEPTACLES ARE TO BE "CHASE PARK LITTER, SIDE OPENING WITH HINGED FLAPPER DOORS", BY LANDSCAPEFORMS. COMPONENTS ARE TO BE BLACK POWDER COATED METAL.

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Page 1	007 of 1	140	DRAWN <u>JLK</u>	
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CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

HARDSCAPE DETAILS

PROJECT NO.: 100054389 SHEET:

BIKE RACKS 751-36-11 7 EΑ 42 8 3 751-37 TRASH RECEPTACLES EΑ 17 4 751-38-19 BENCHES EΑ 44 11

QUANTITIES

TAMPA VENICE MIAMI

215

660

213

316

824

2935

196

39

144

16

160

150

523

54

UNIT

CY

LF

SY

SY

SY

CF

SY

LF

81

15

190

229

95

1099

1592

252

FURNISHINGS QUANTITIES

DESCRIPTION

EXCAVATION

ROOT CELLS

8" HEADER CURB

6" CONCRETE SIDEWALK

ARCHITECTURAL PAVERS

RESIN BOUND AGGREGATE

PATTERN PAVEMENT

ALUMINUM FENCING

PAY ITEM

120-1

520-2

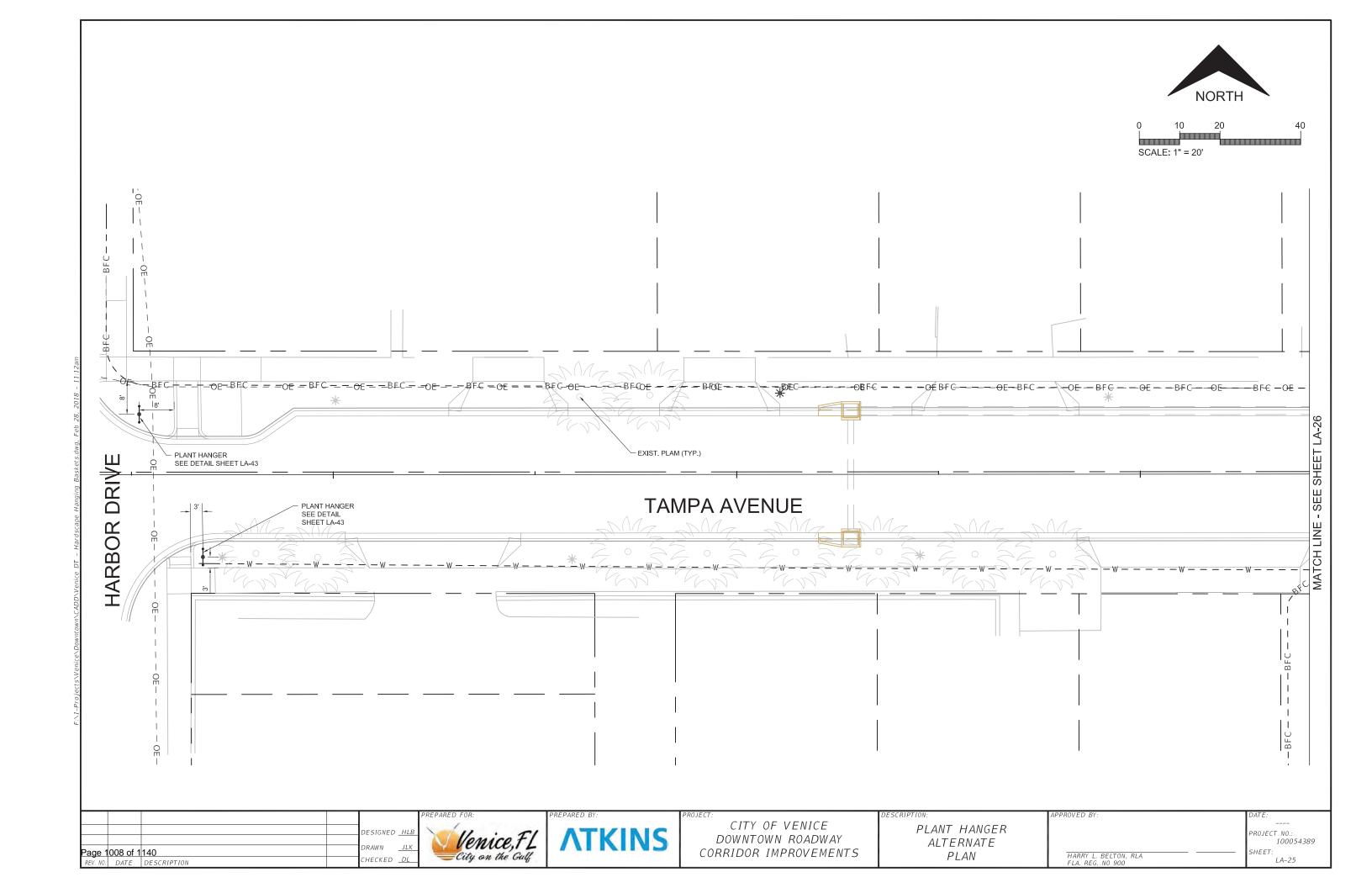
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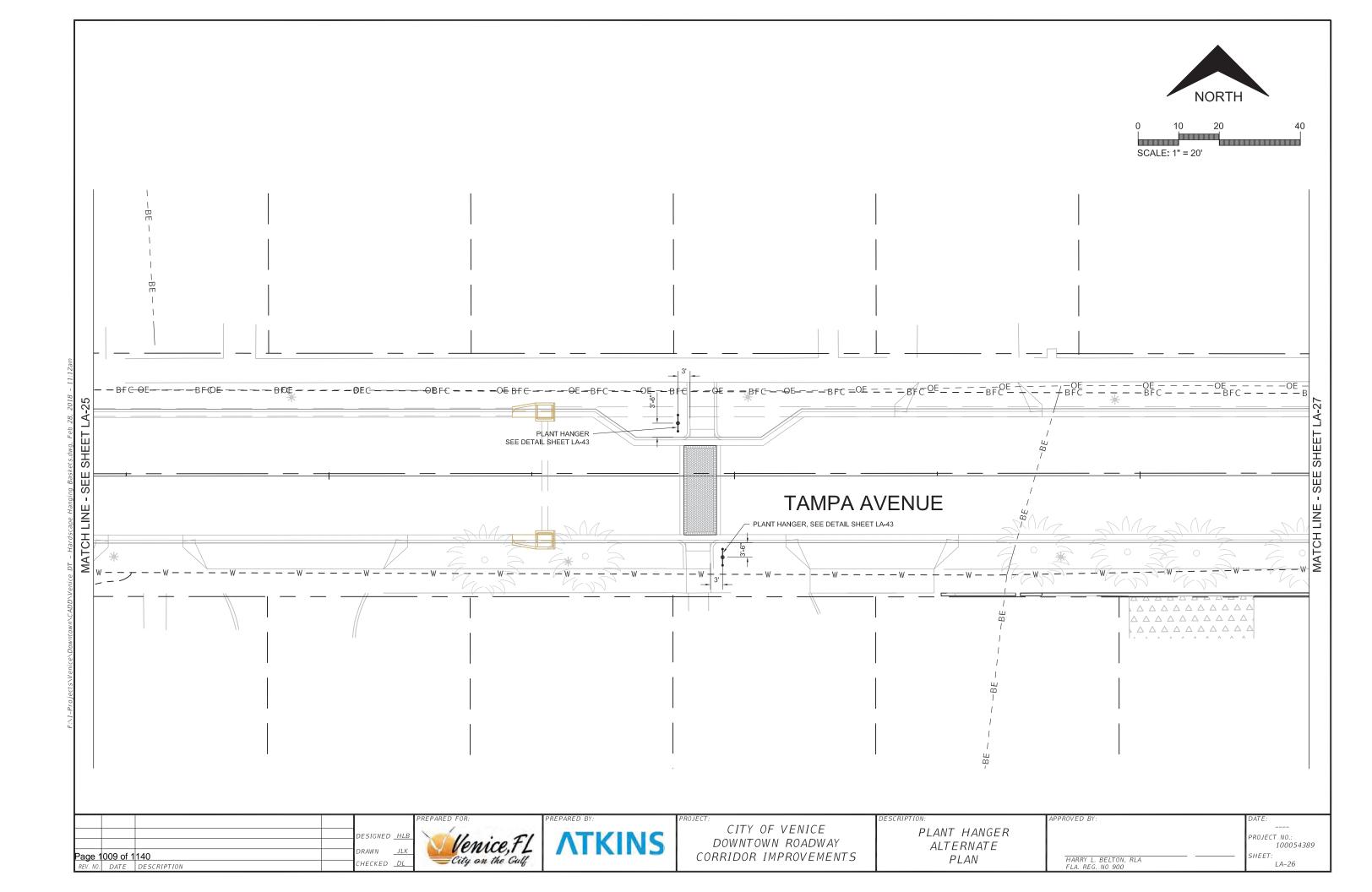
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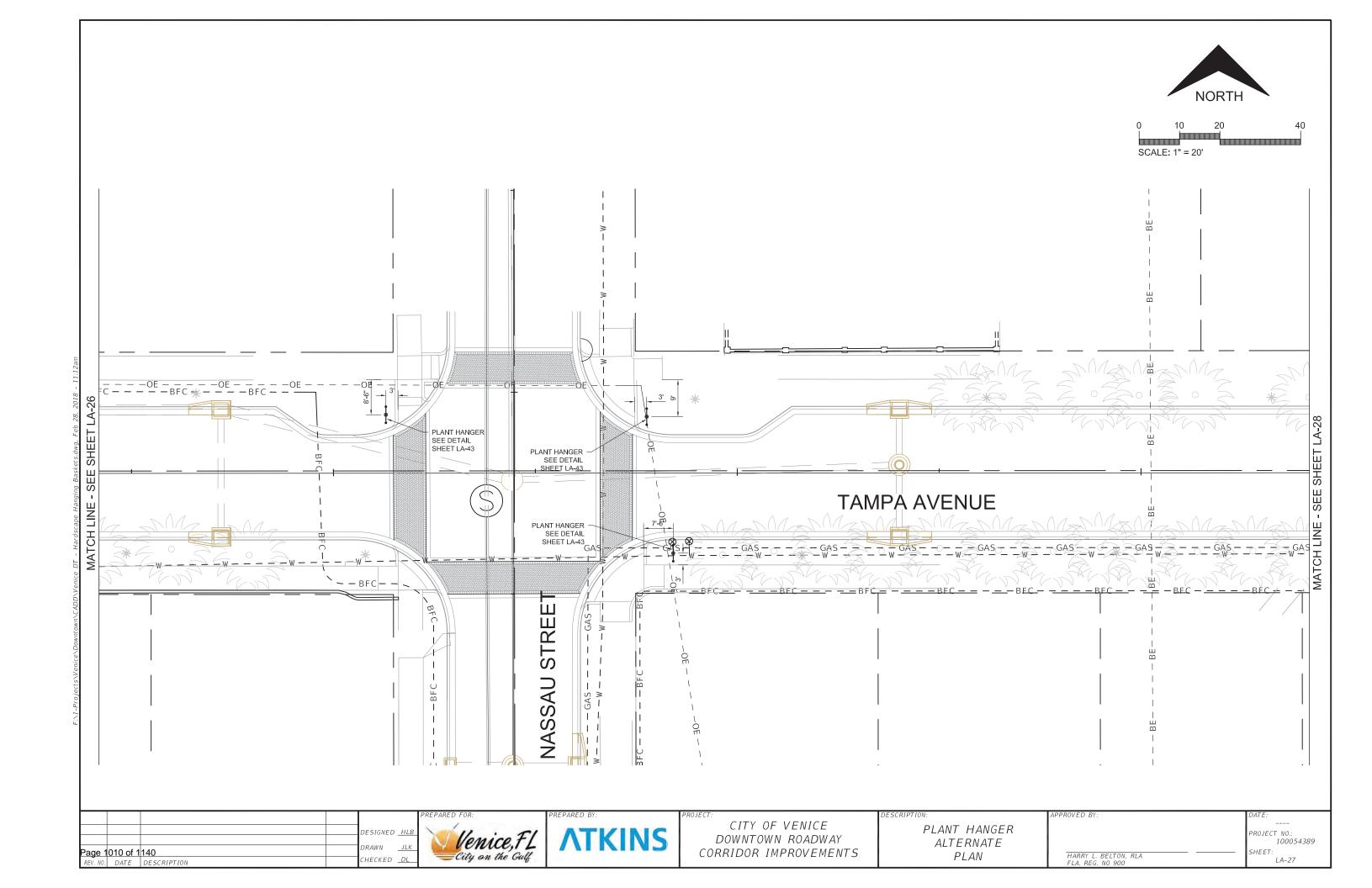
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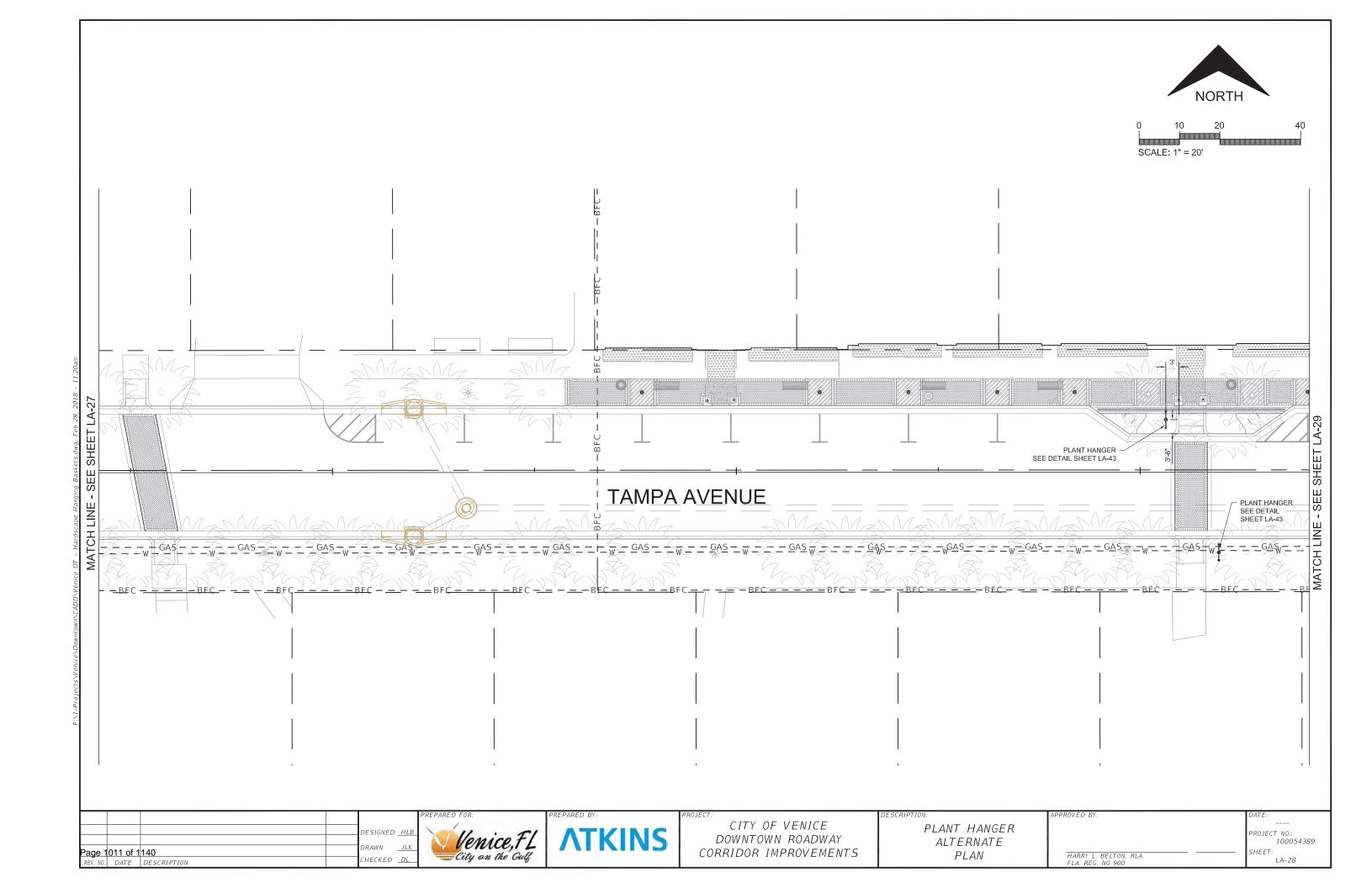
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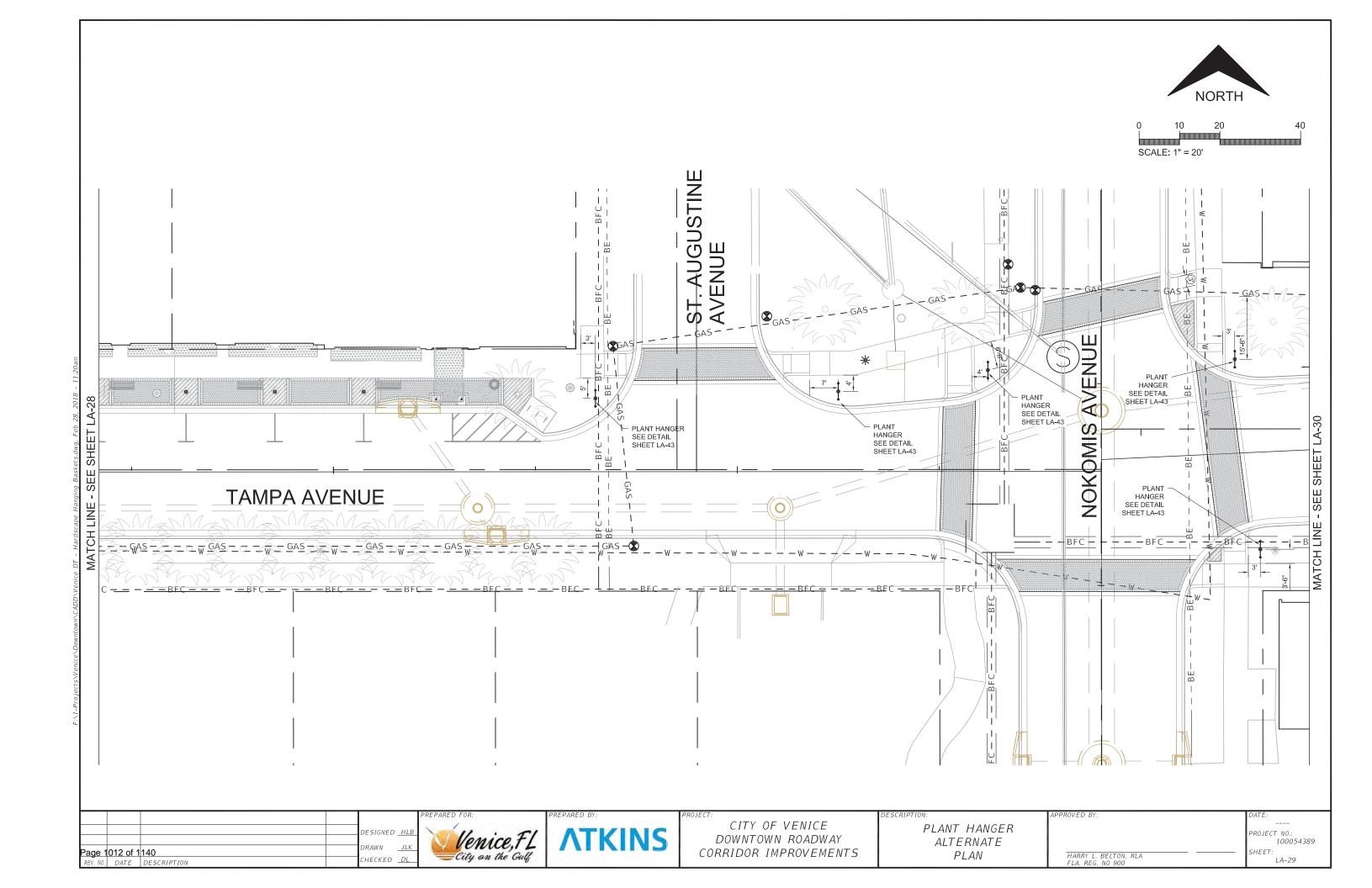
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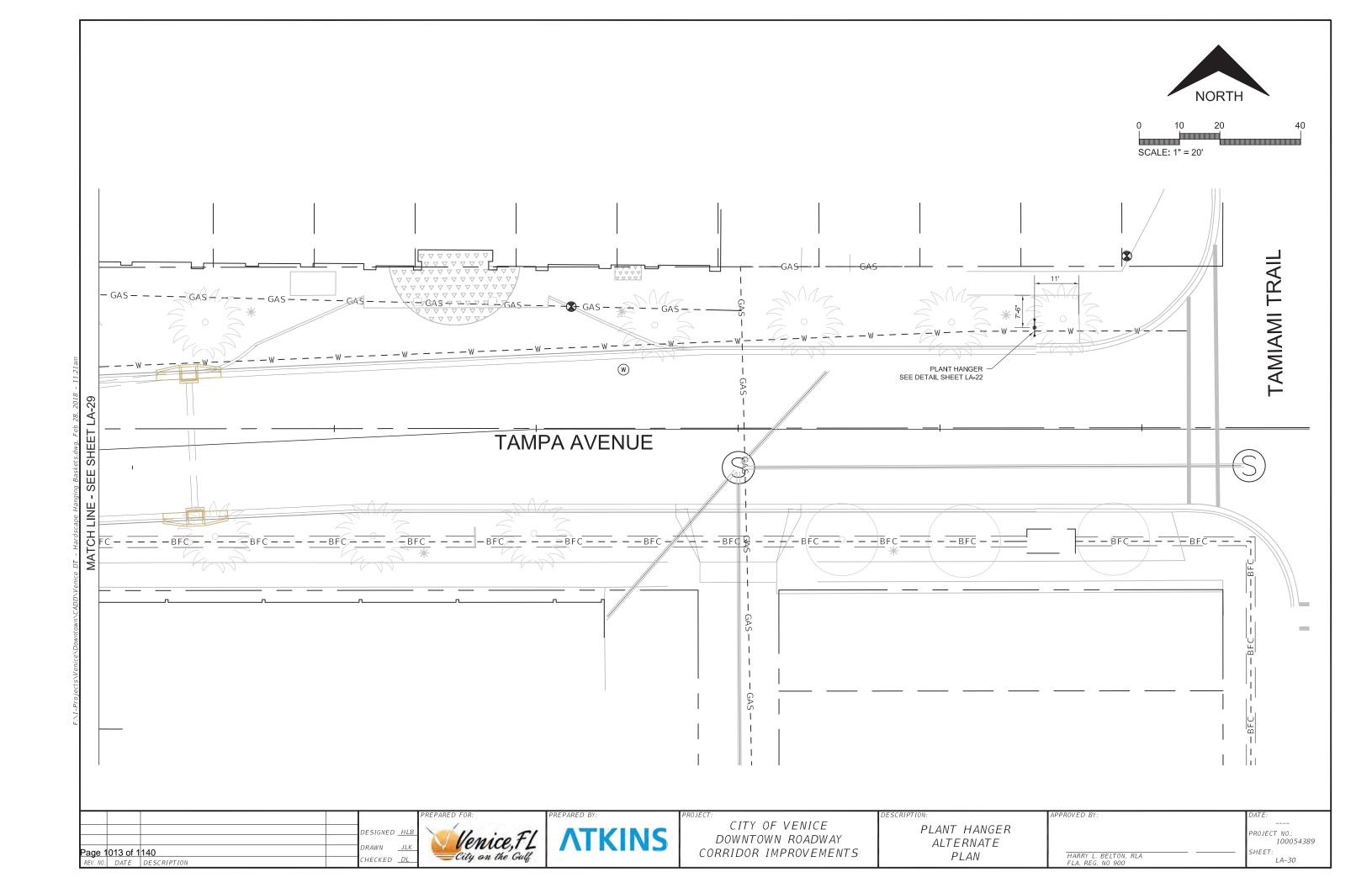


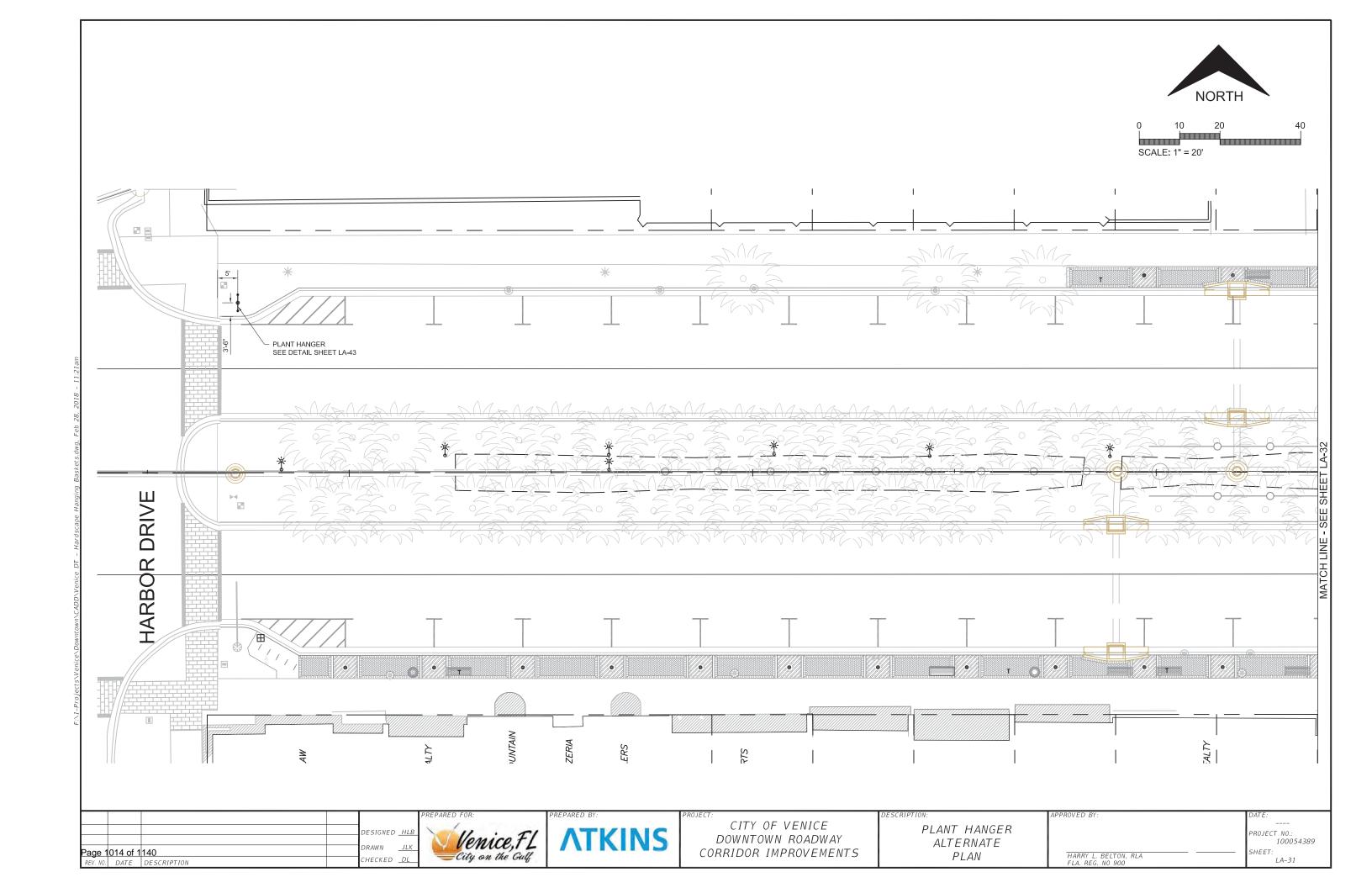






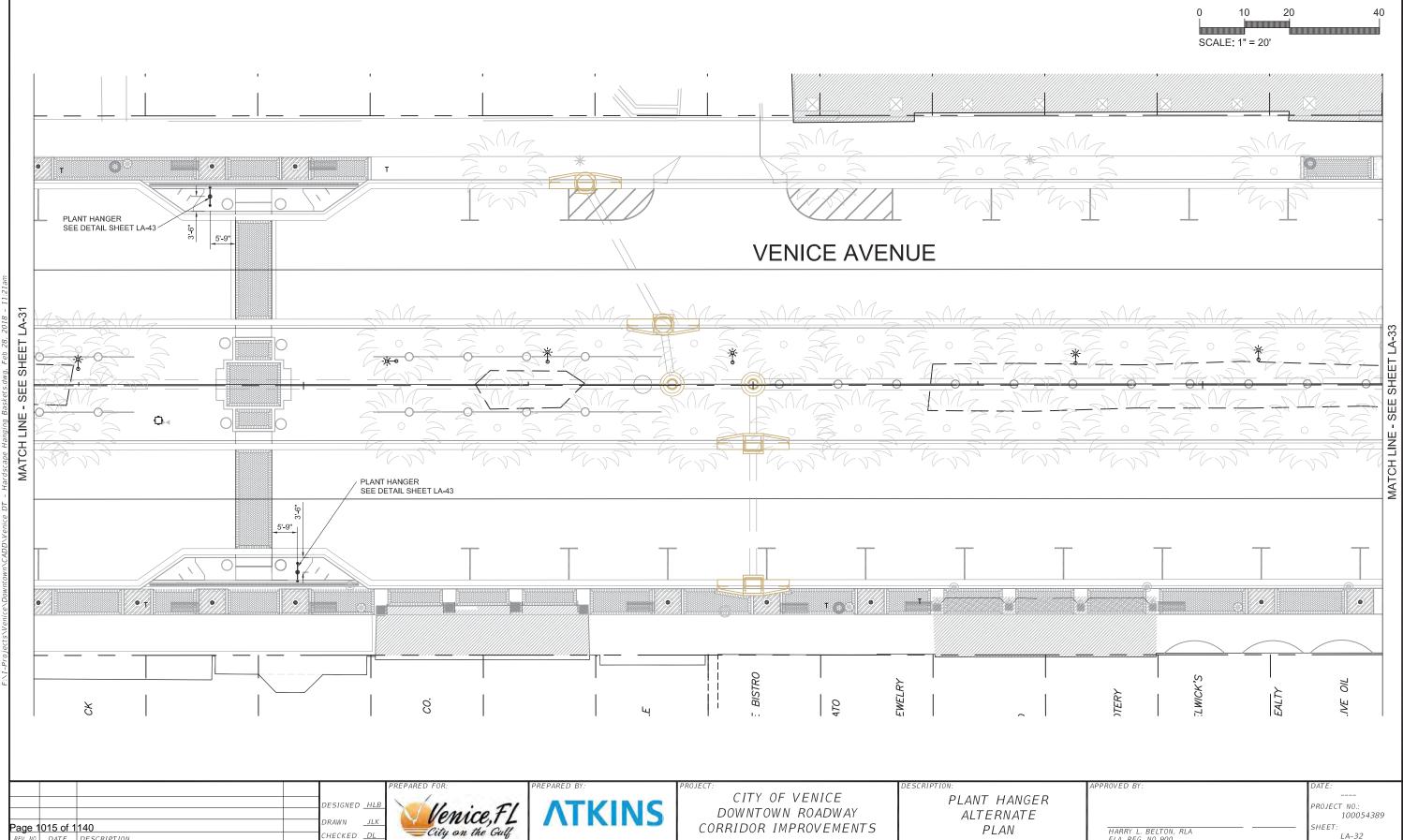








SHEET:



CORRIDOR IMPROVEMENTS

PLAN

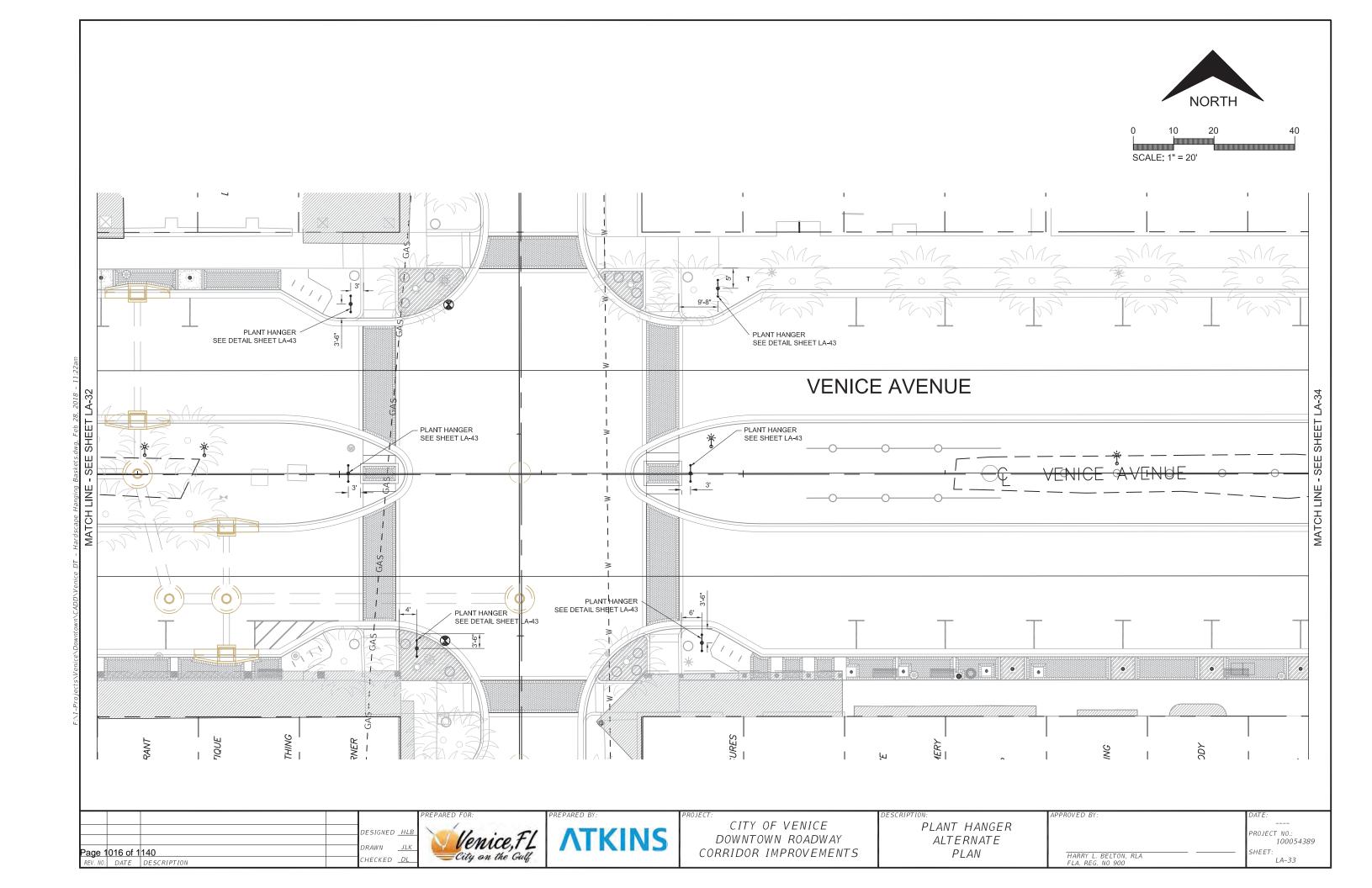
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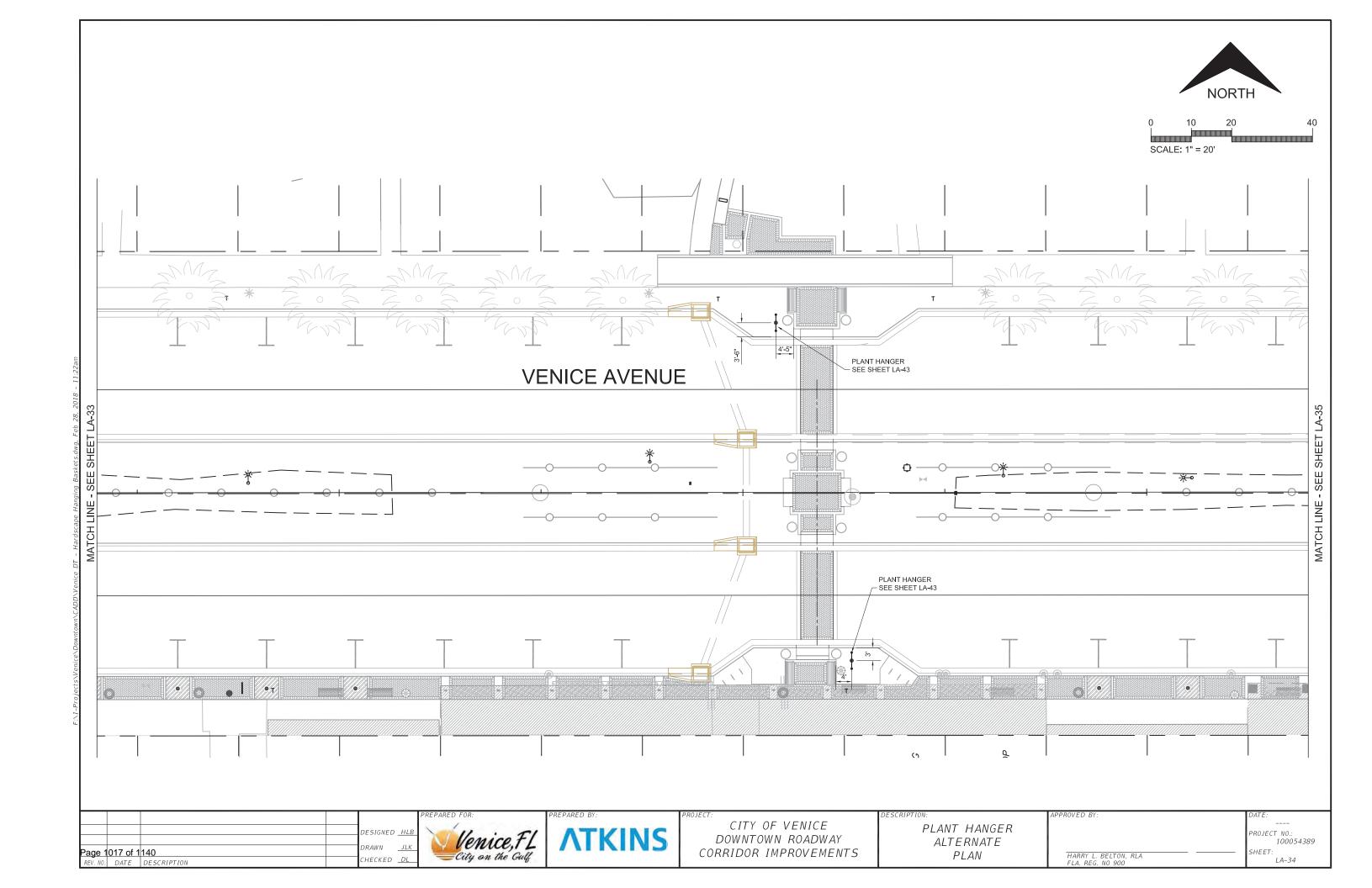
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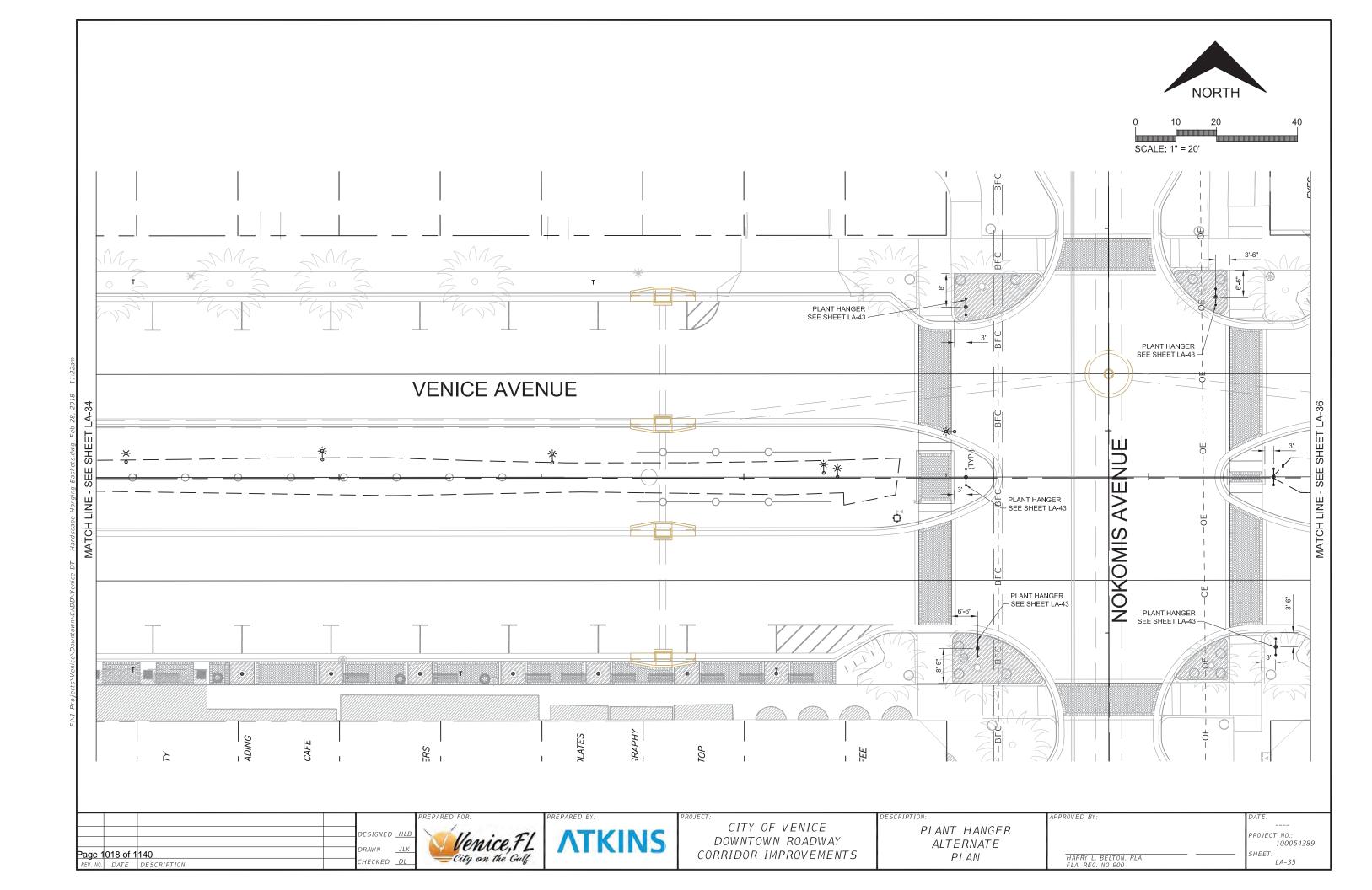
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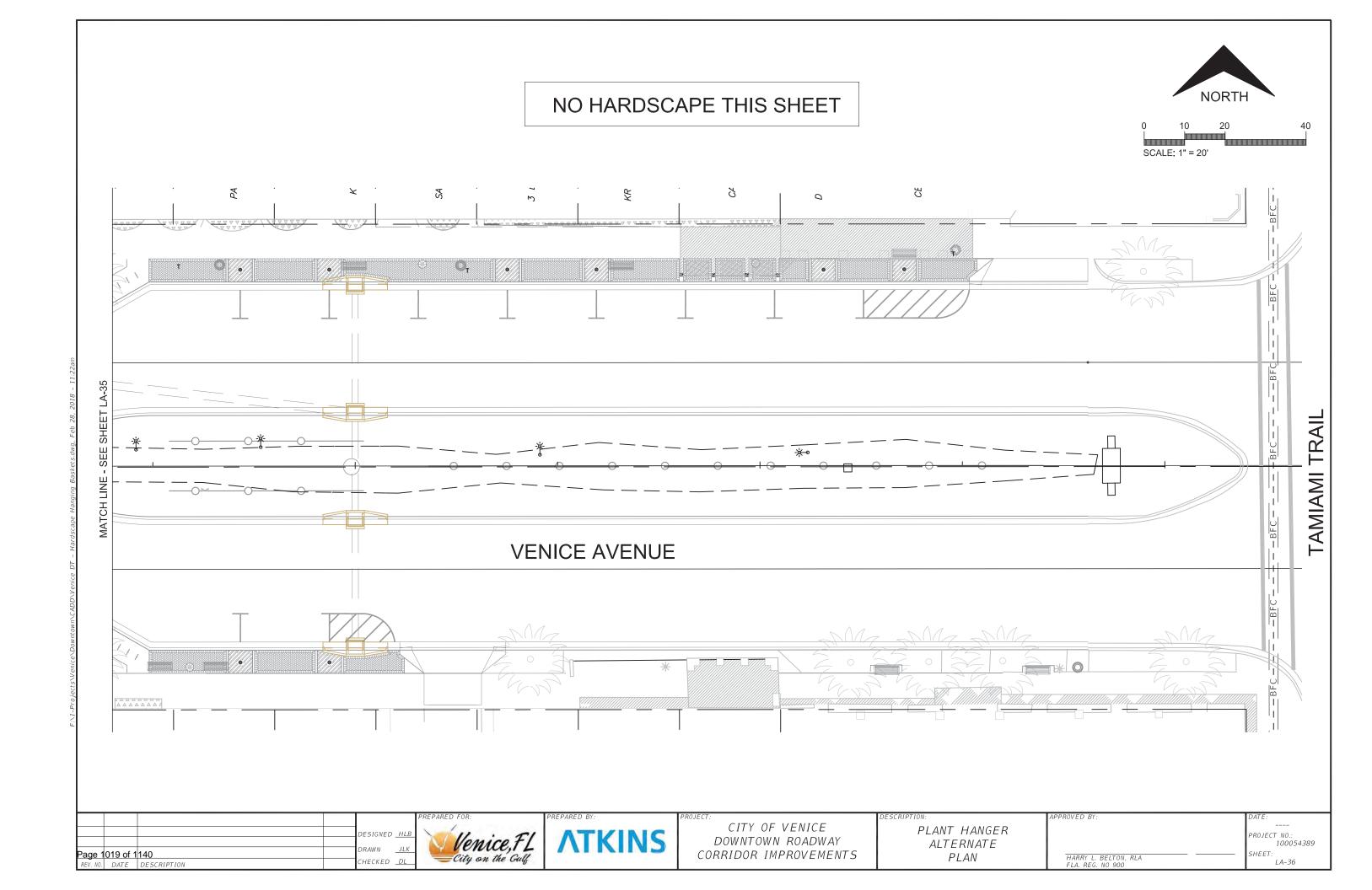
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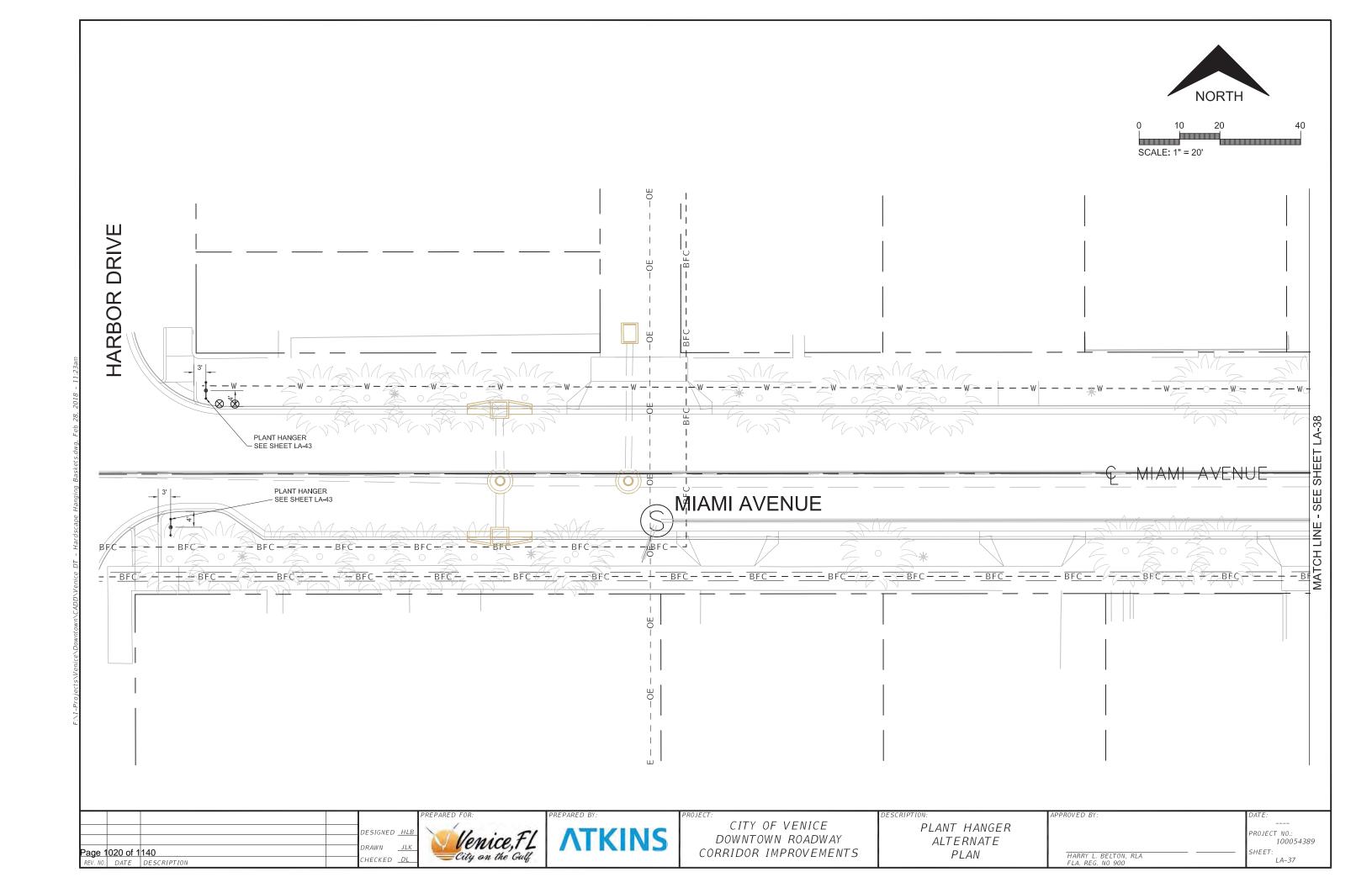
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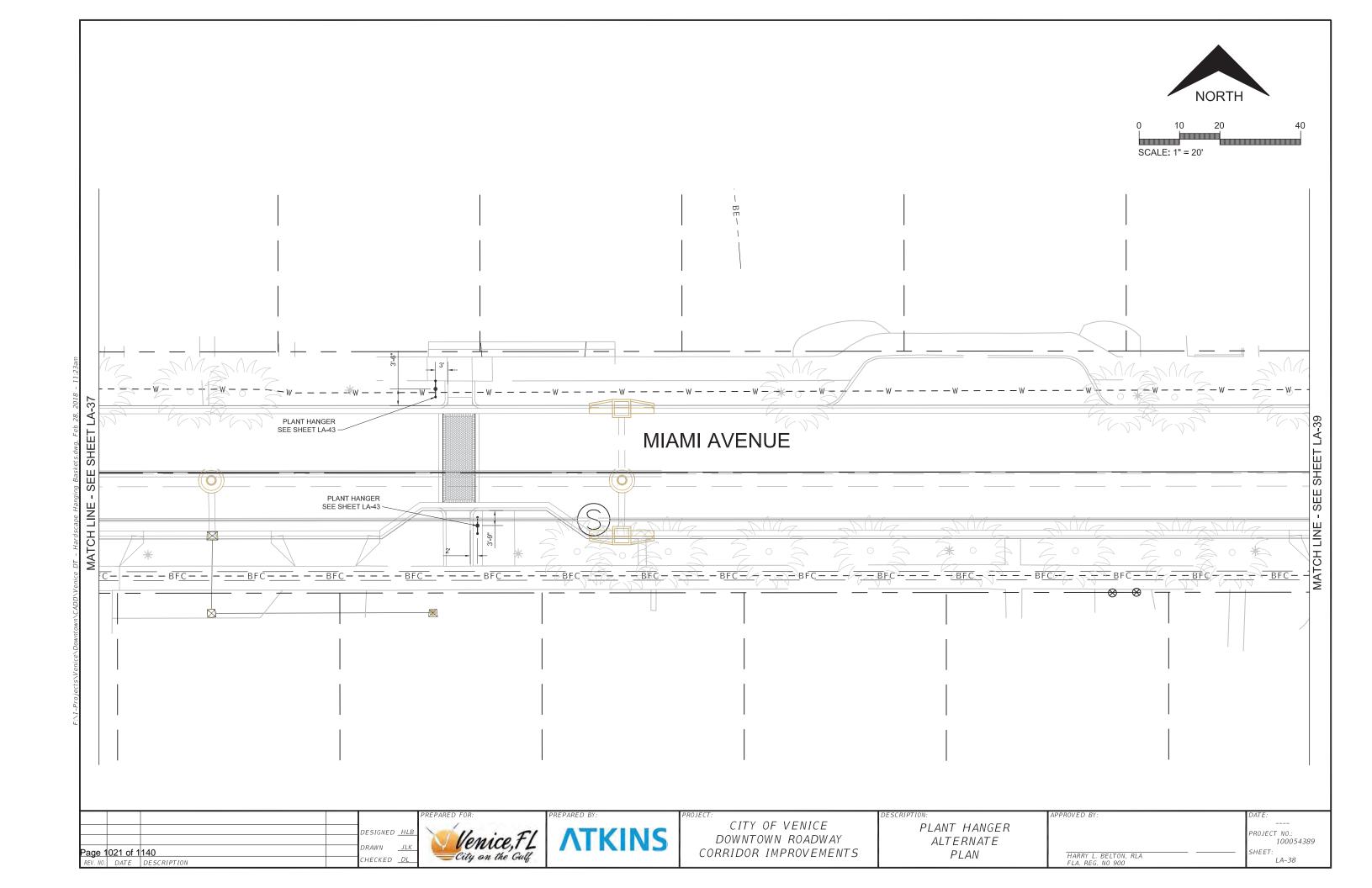


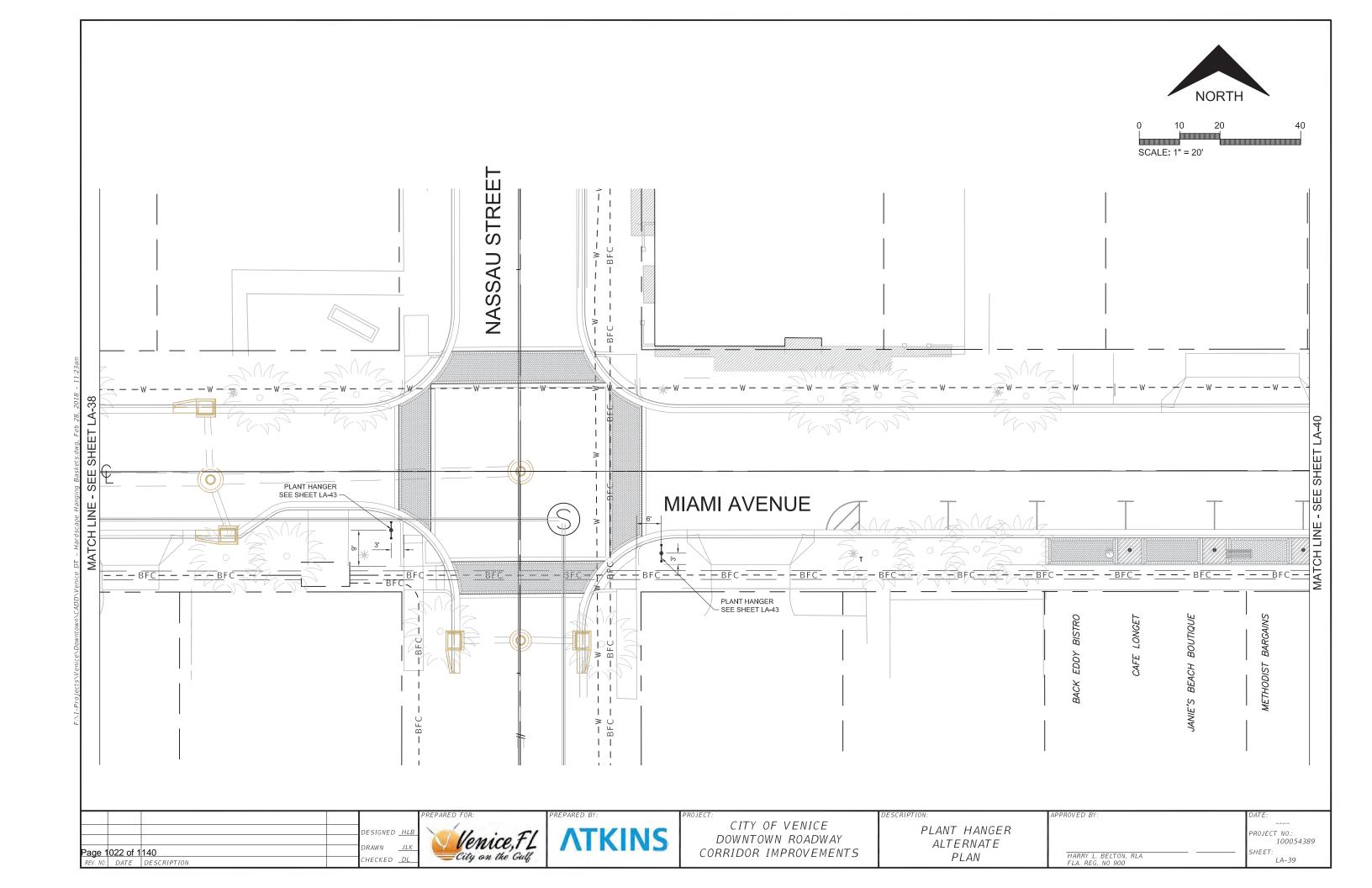


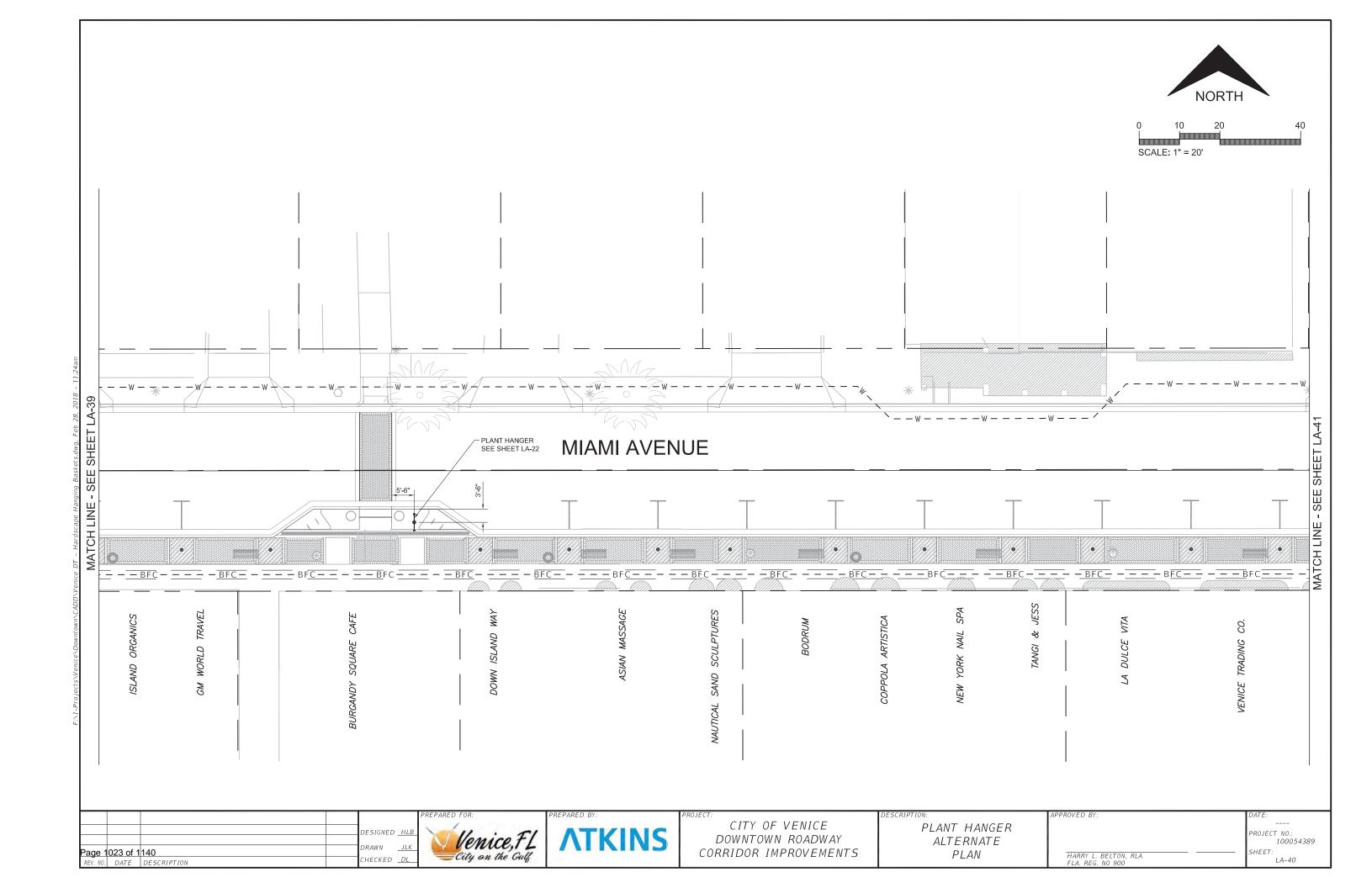


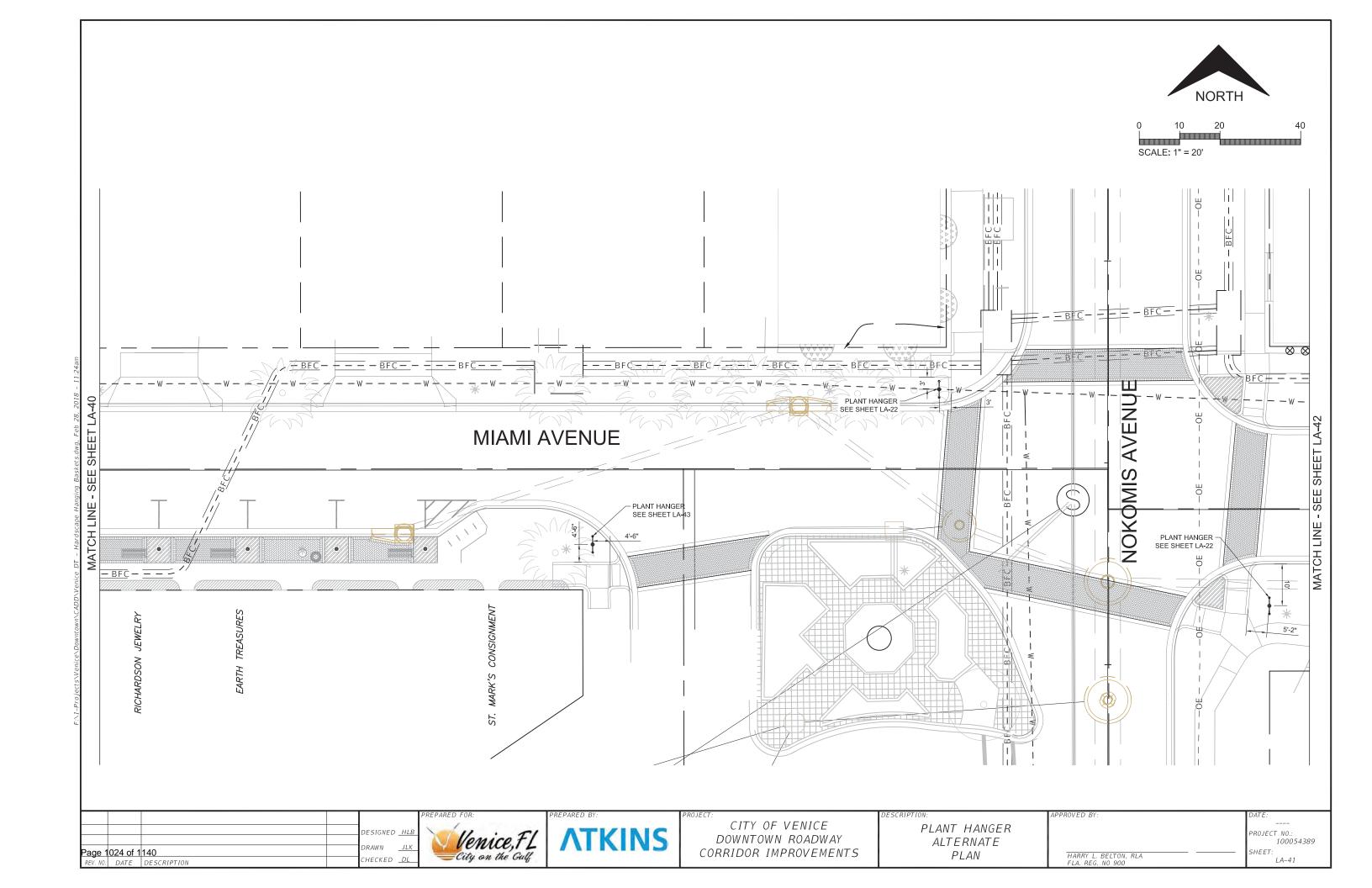


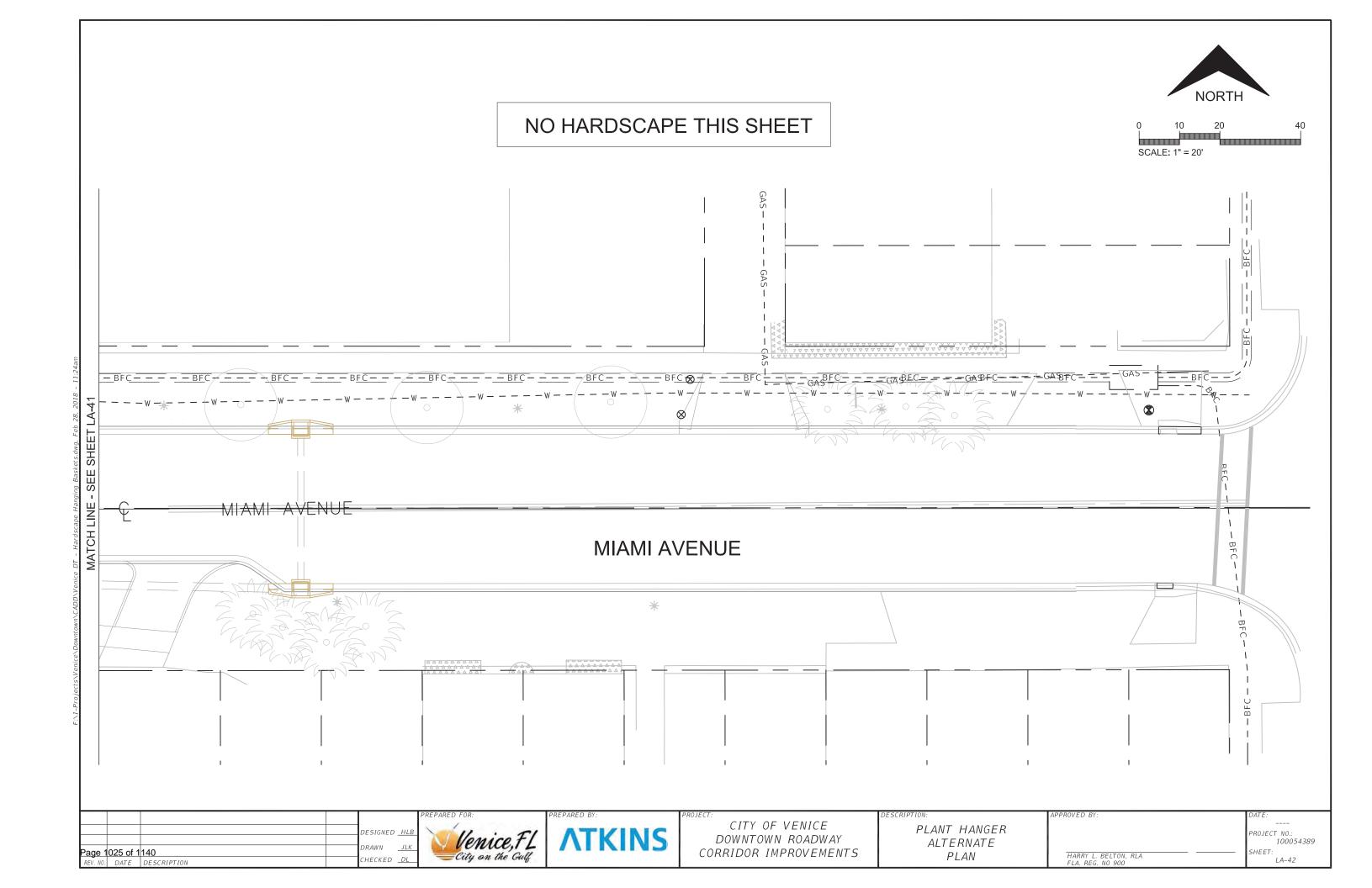




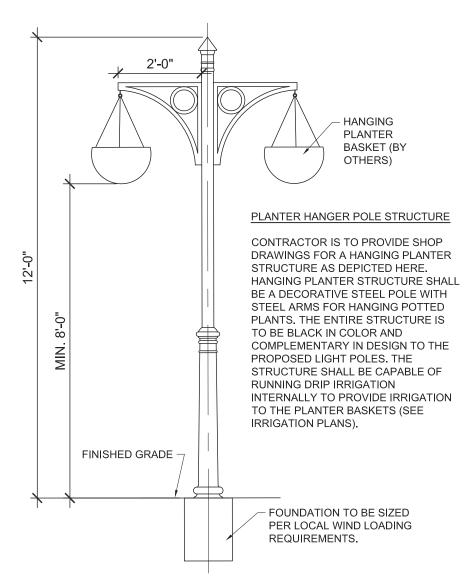








FURNISHINGS QUANTITIES							
PAY ITEM	DESCRIPTION	QUANTITIES UNIT					
		TAMPA	VENICE	MIAMI			
715-518-1	PLANT HANGERS	15	17	10	EA		



	12/14/17	ADDED FENCE INFORMATION, MODIFIED QUANTITIES		PR
			DESIGNED <u>HLB</u>	1
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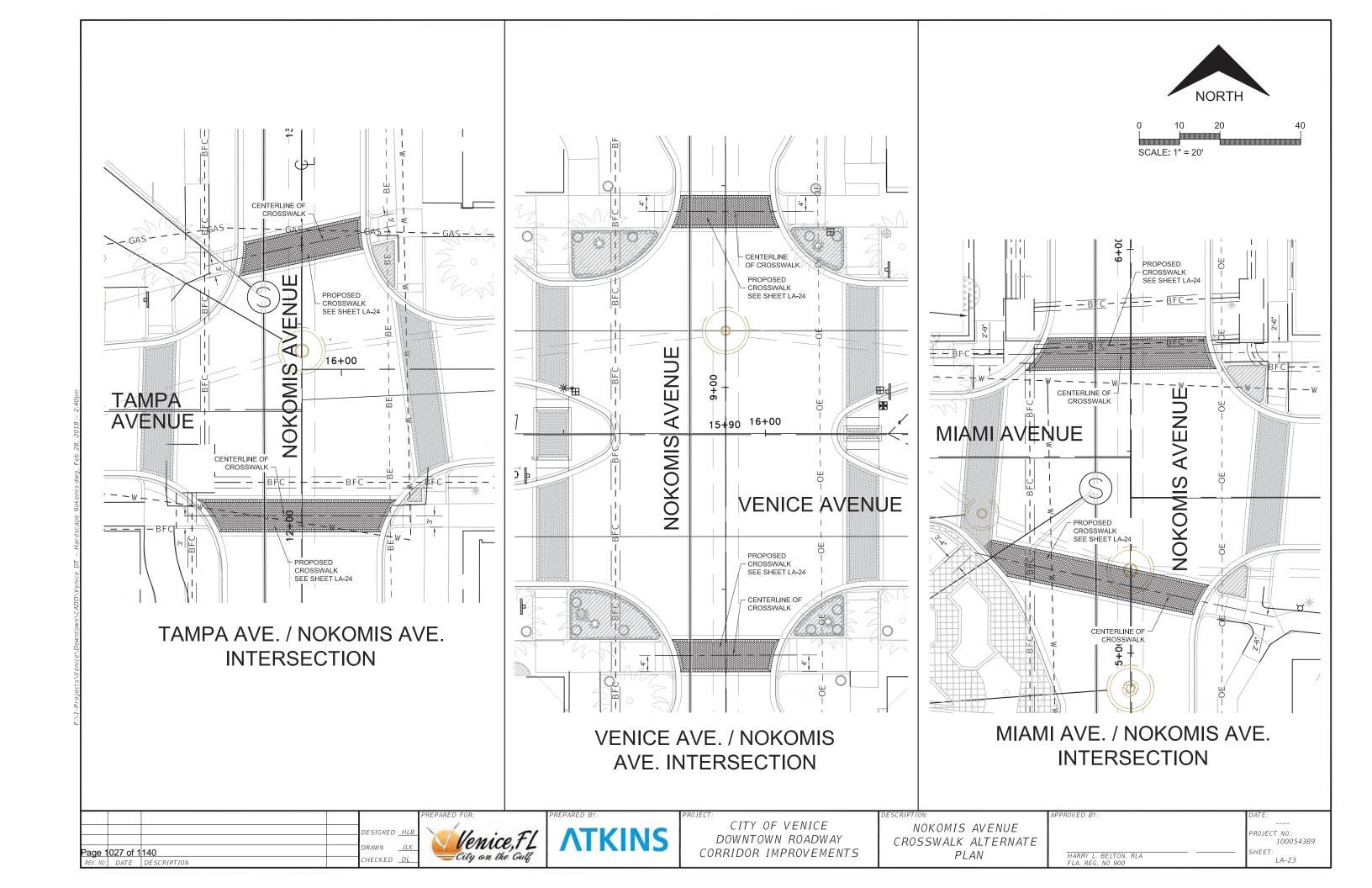


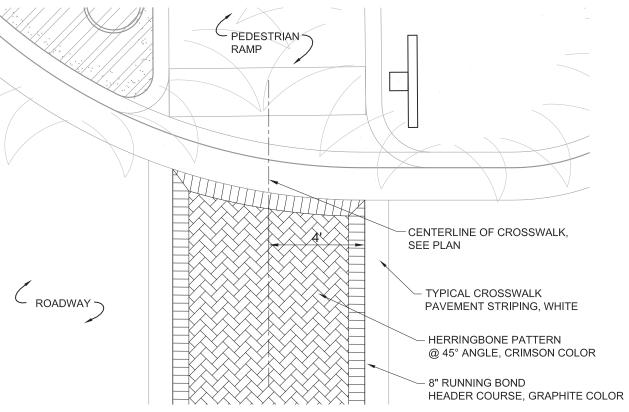
CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS PLANT HANGER
ALTERNATIVE
DETAILS

PROJECT NO.:
100054389

SHEET:

LA-43





NOTE:

CROSSWALK MATERIAL IS TO BE AN EPOXY APPLIED GRANULAR COATING USING A PATTERNED TEMPLATE AS OCCURRING ON THE F.D.O.T. APPROVED PRODUCTS LIST

TYPICAL CROSSWALK LAYOUT

QUANTITIES							
PAY ITEM	DESCRIPTION	Q	UNIT				
		TAMPA	VENICE	MIAMI			
523-1	PATTERN PAVEMENT	67	43	86	SY		

ı						
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				DESIGNED _	HLB	
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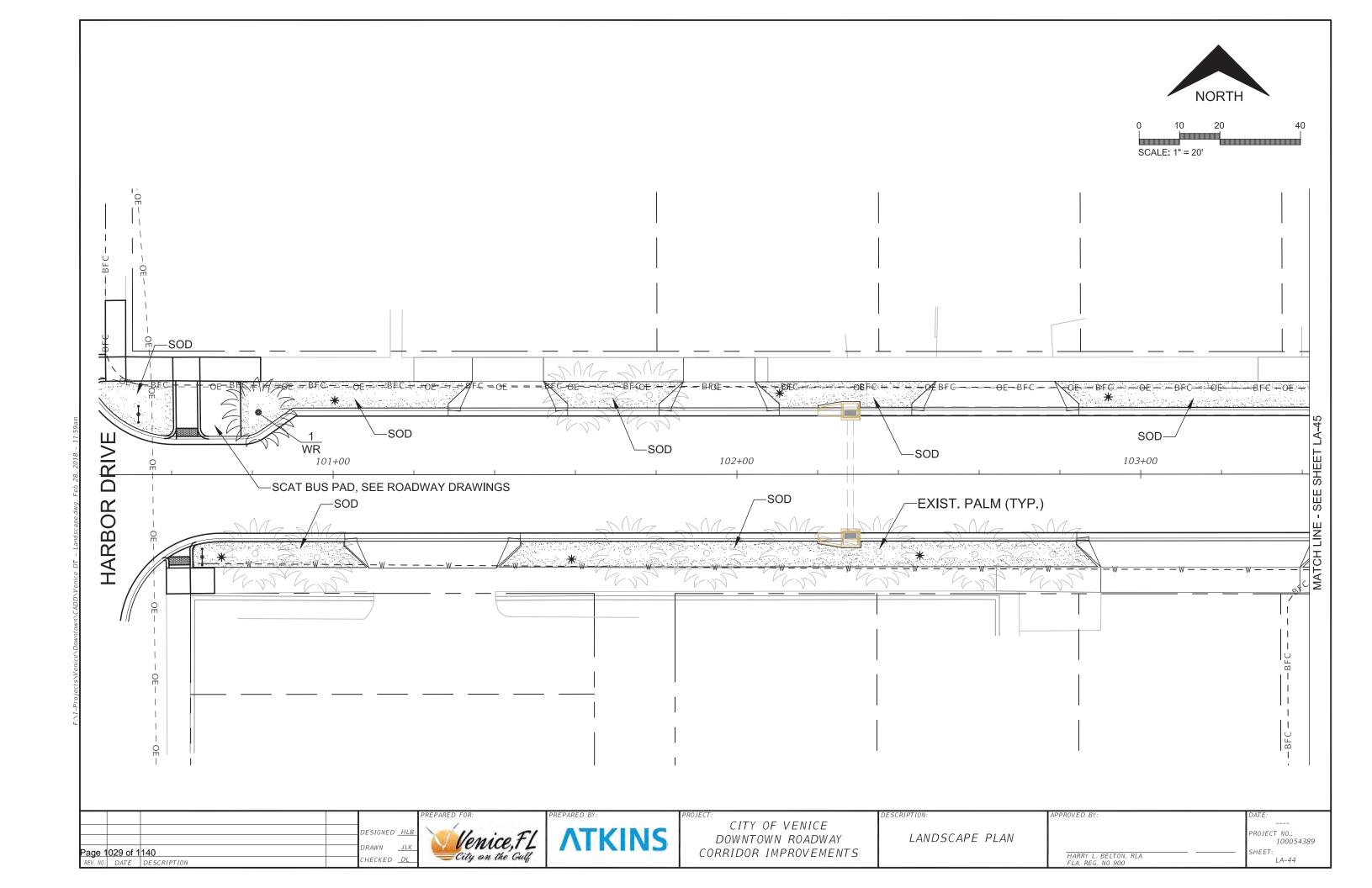


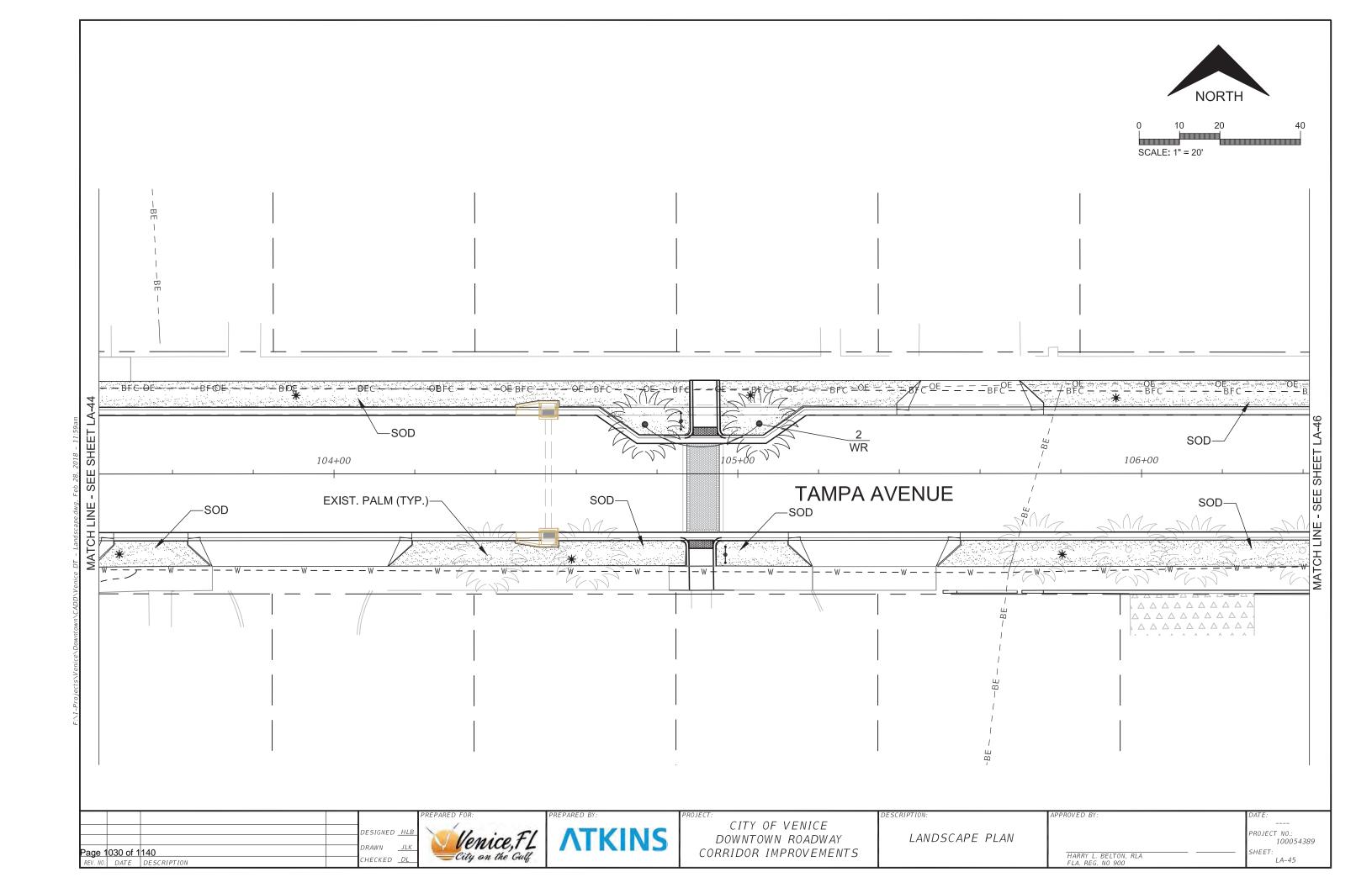


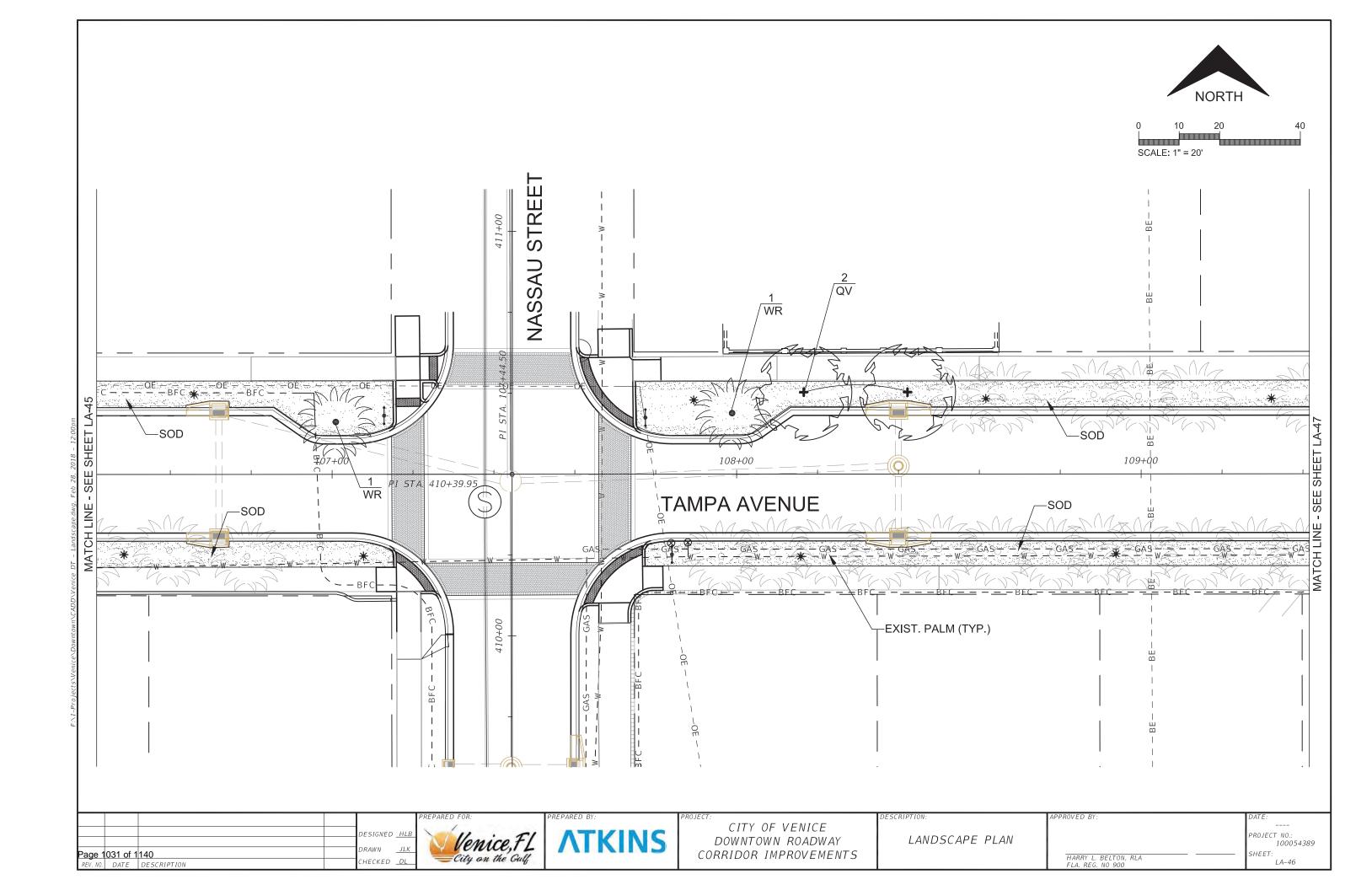
CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS NOKOMIS AVENUE CROSSWALK ALTERNATE DETAILS PROVED BY:

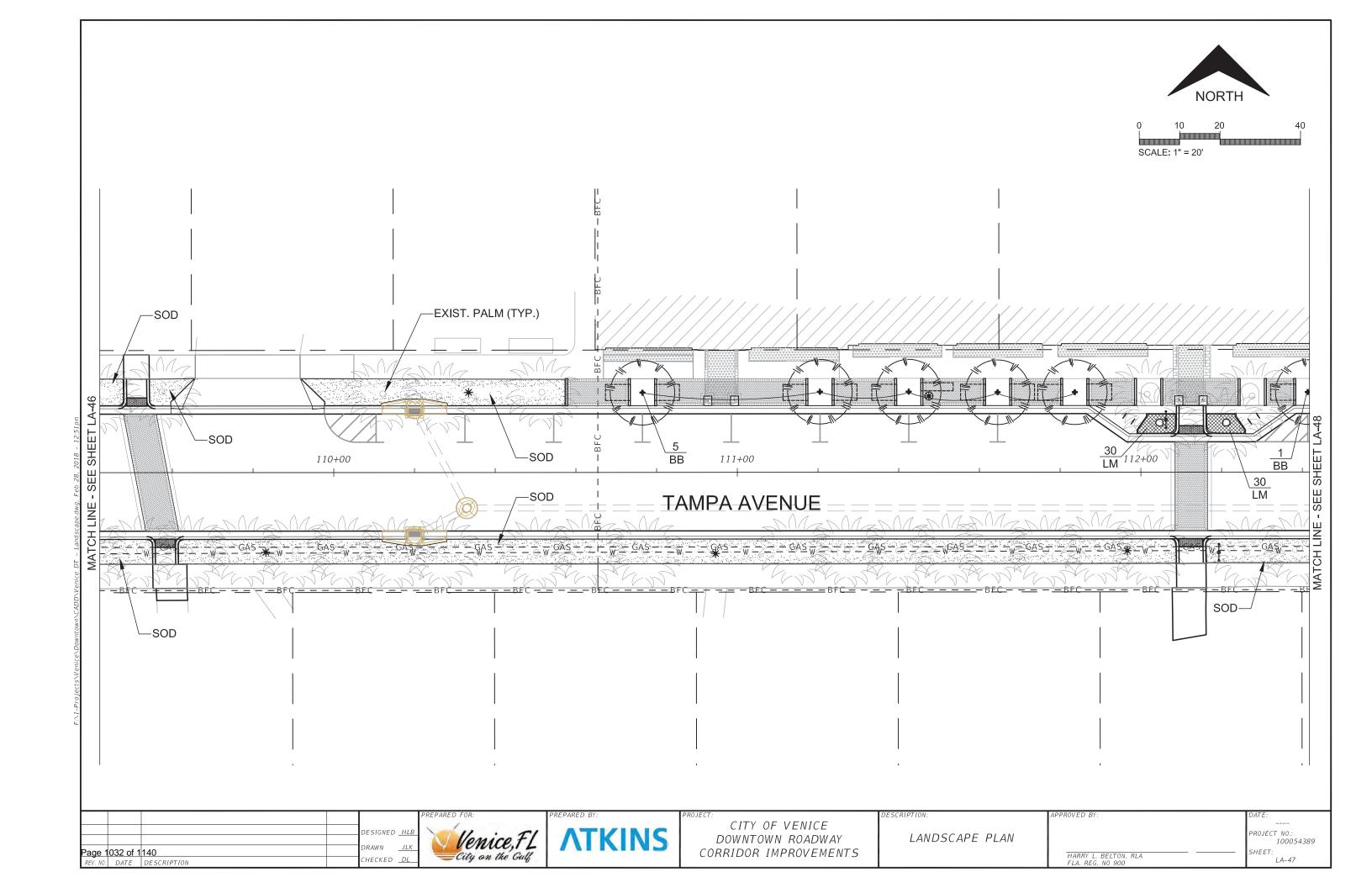
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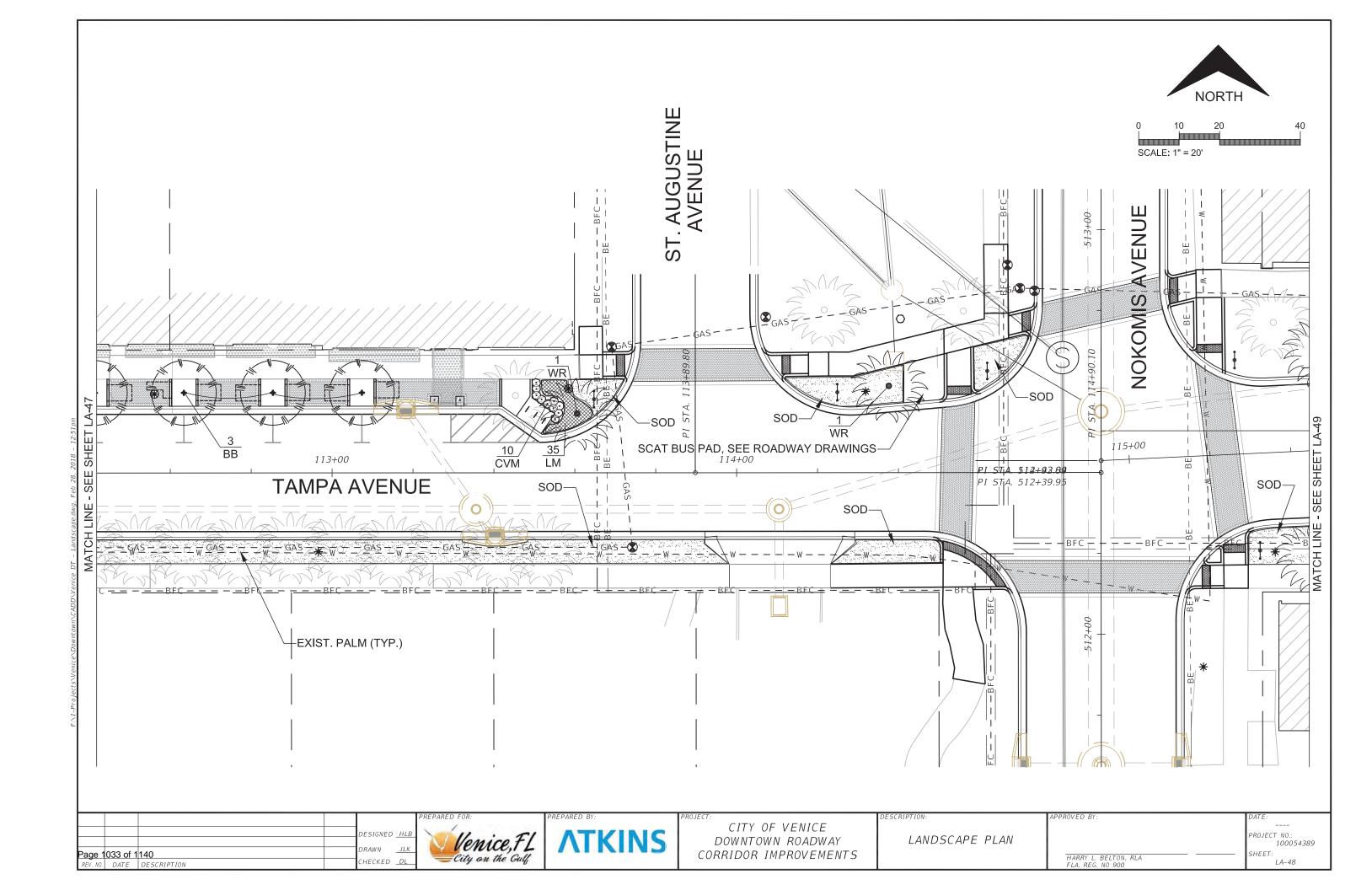
BELTON, RLA SHEET:
NO 900 LA-24

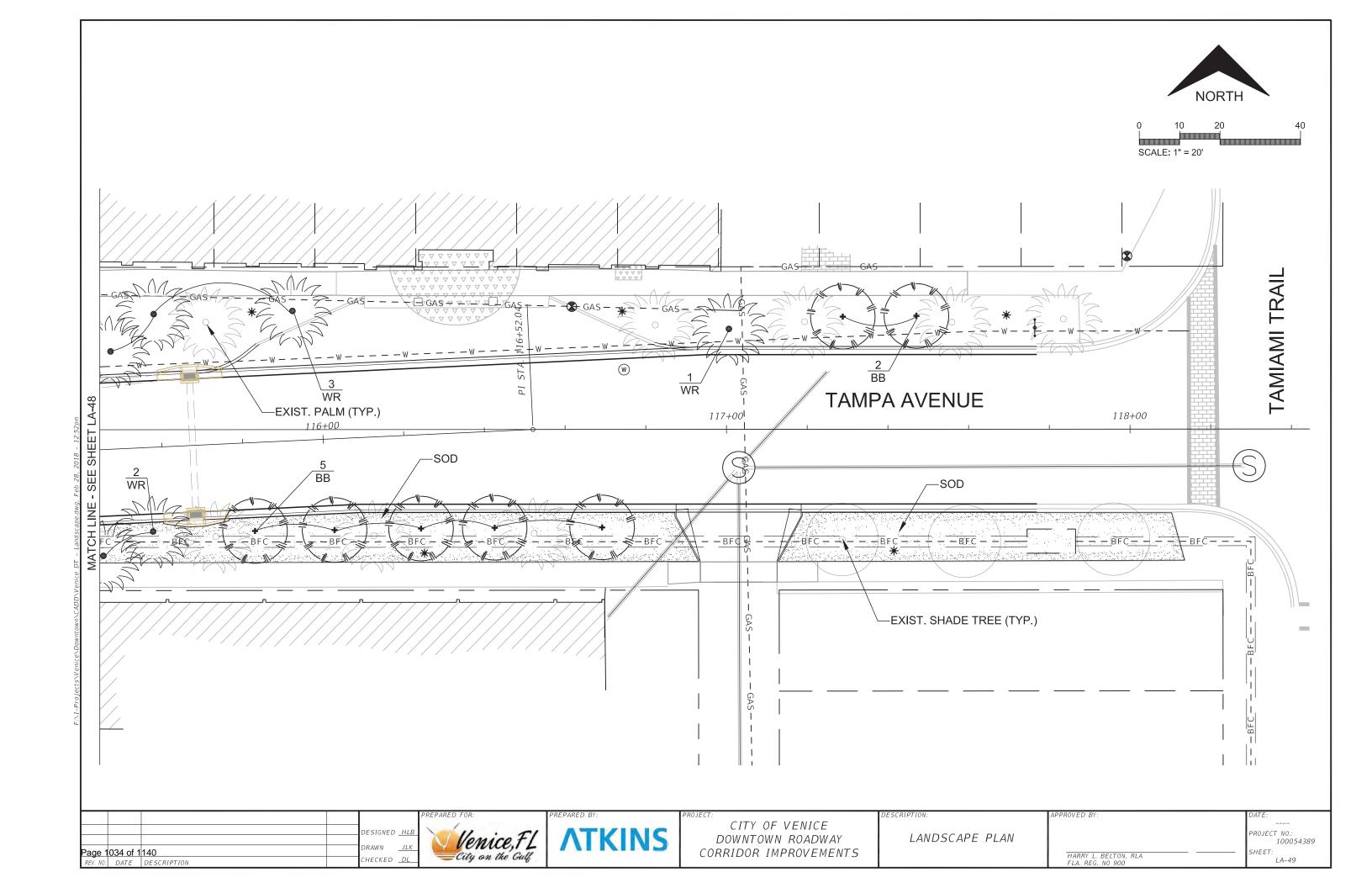


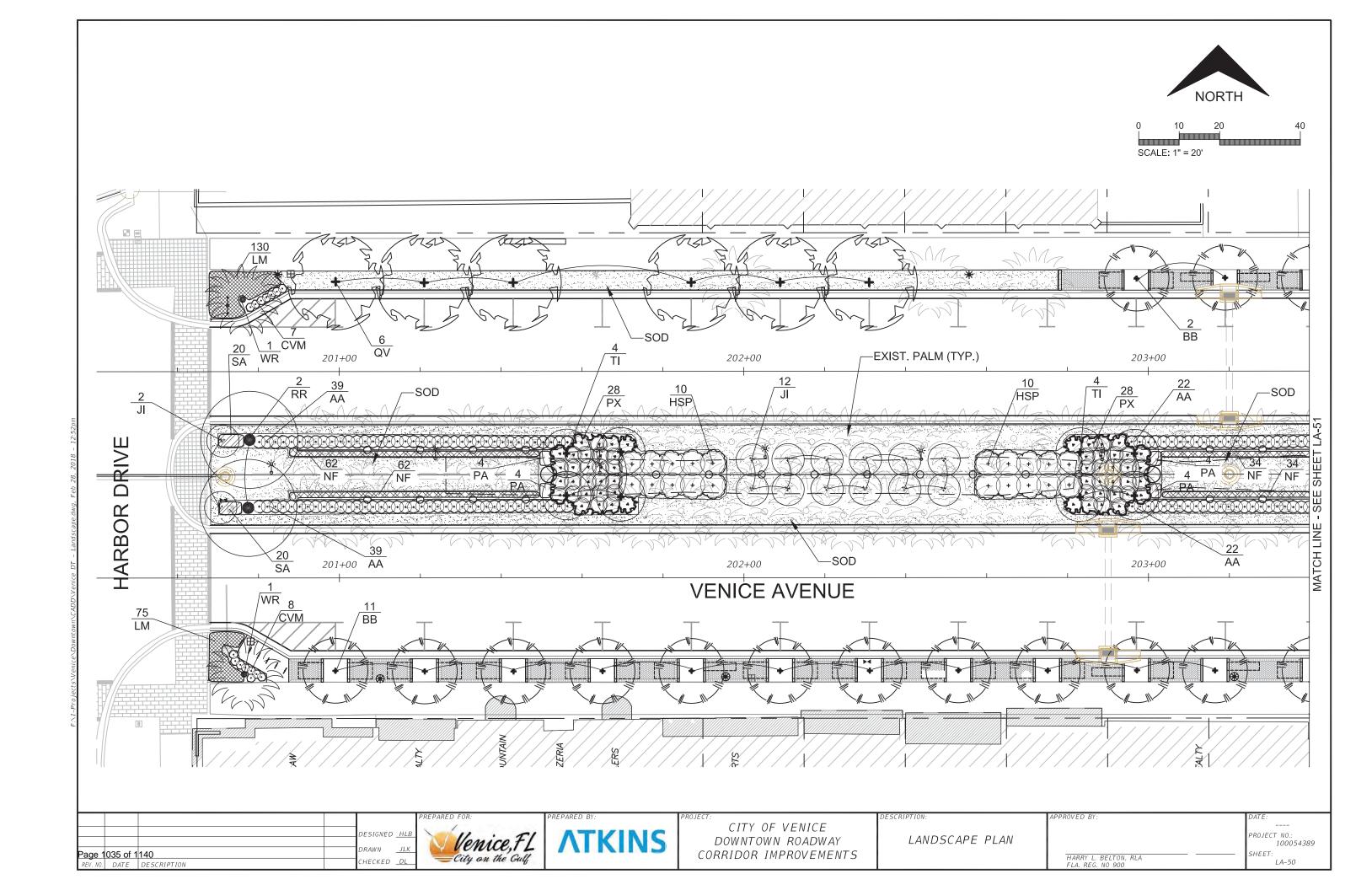


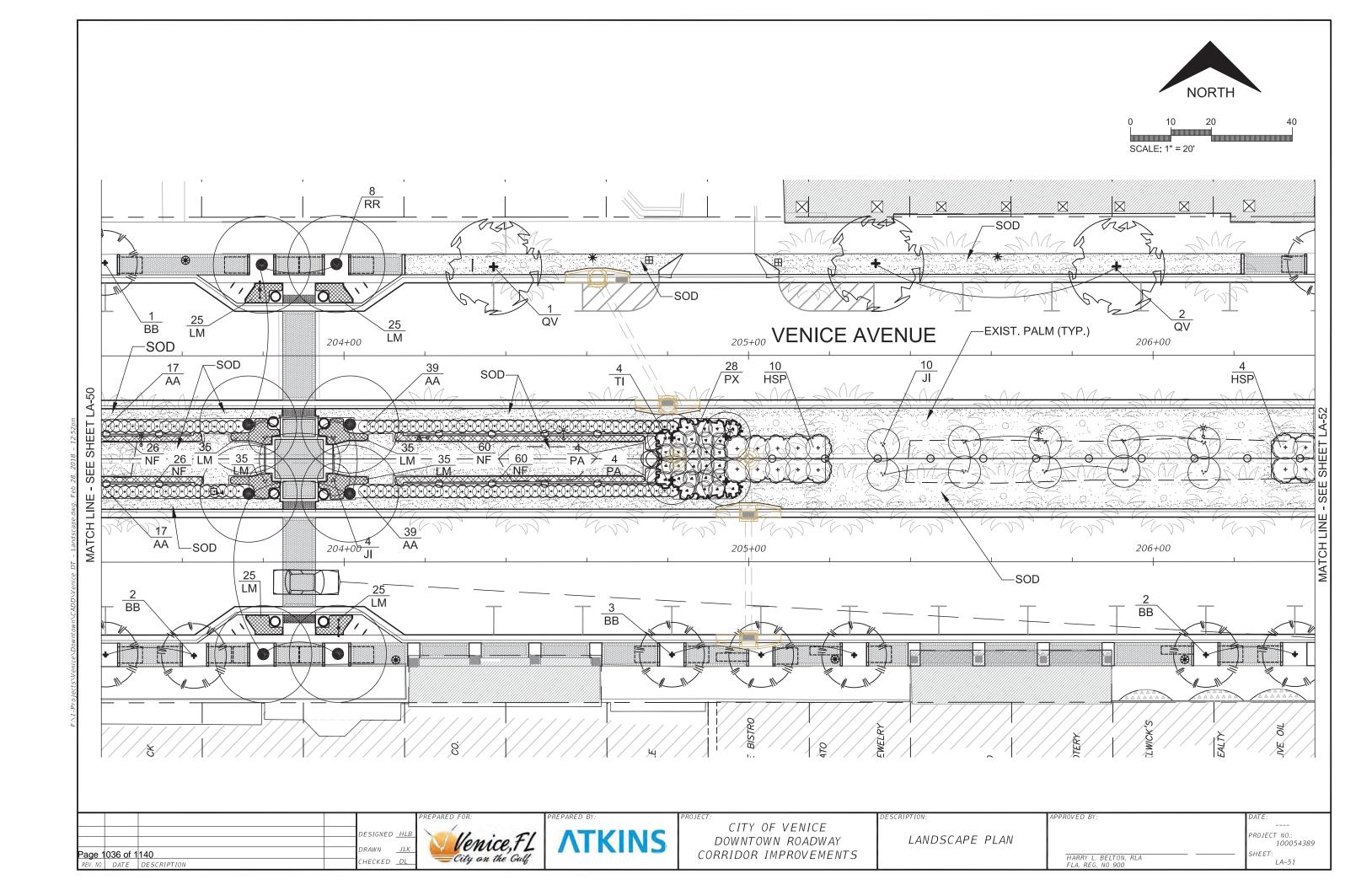


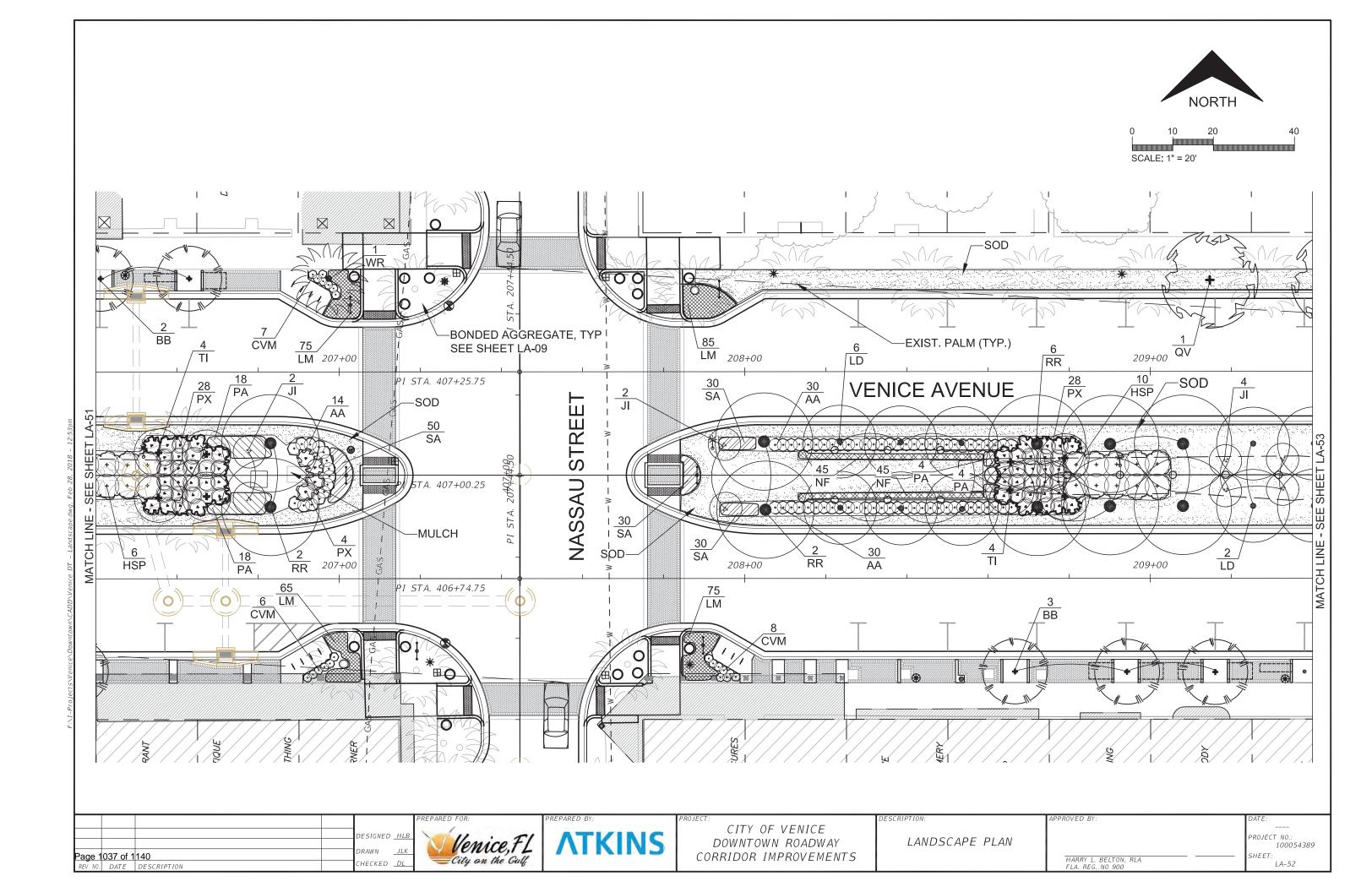


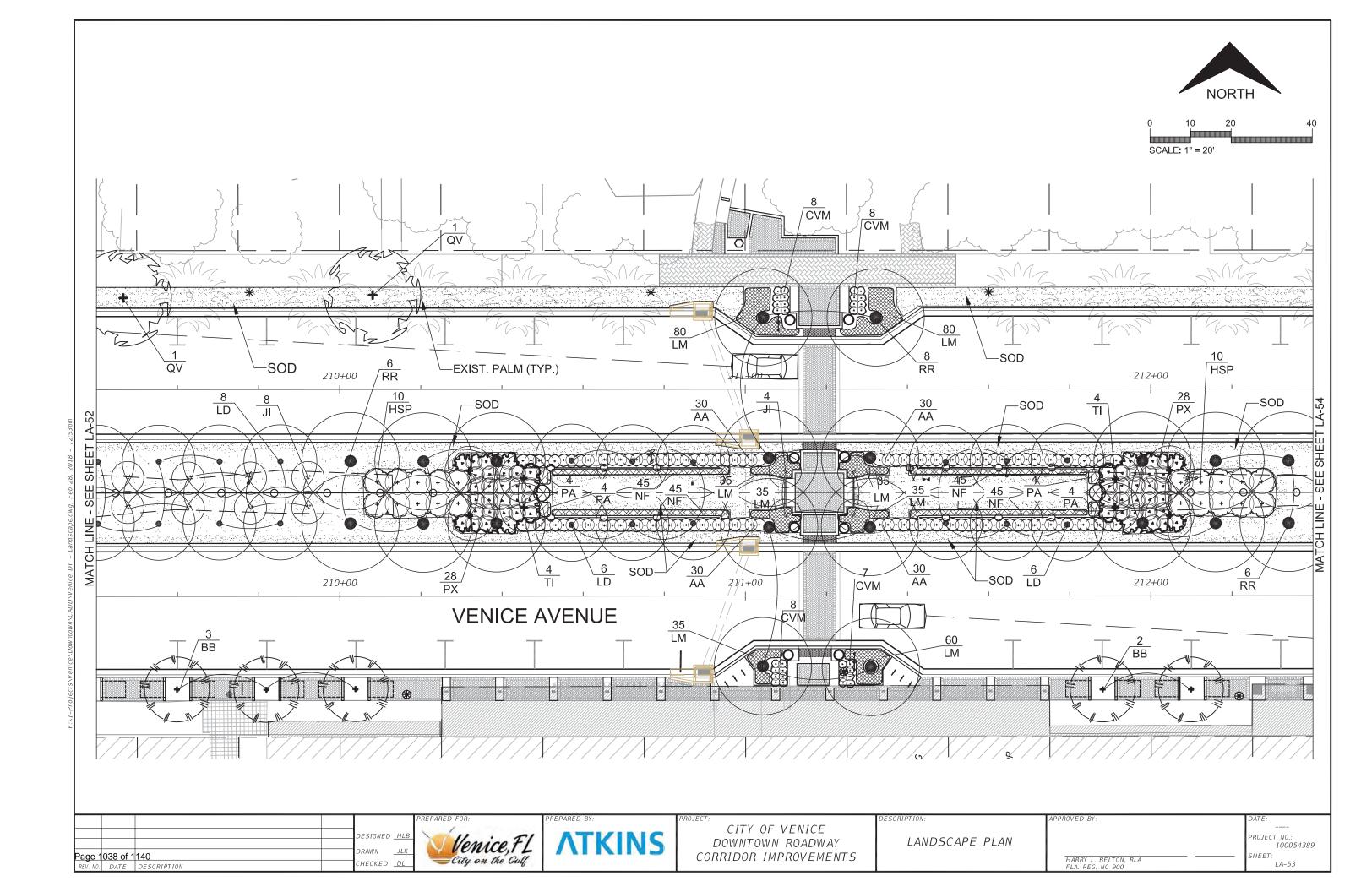


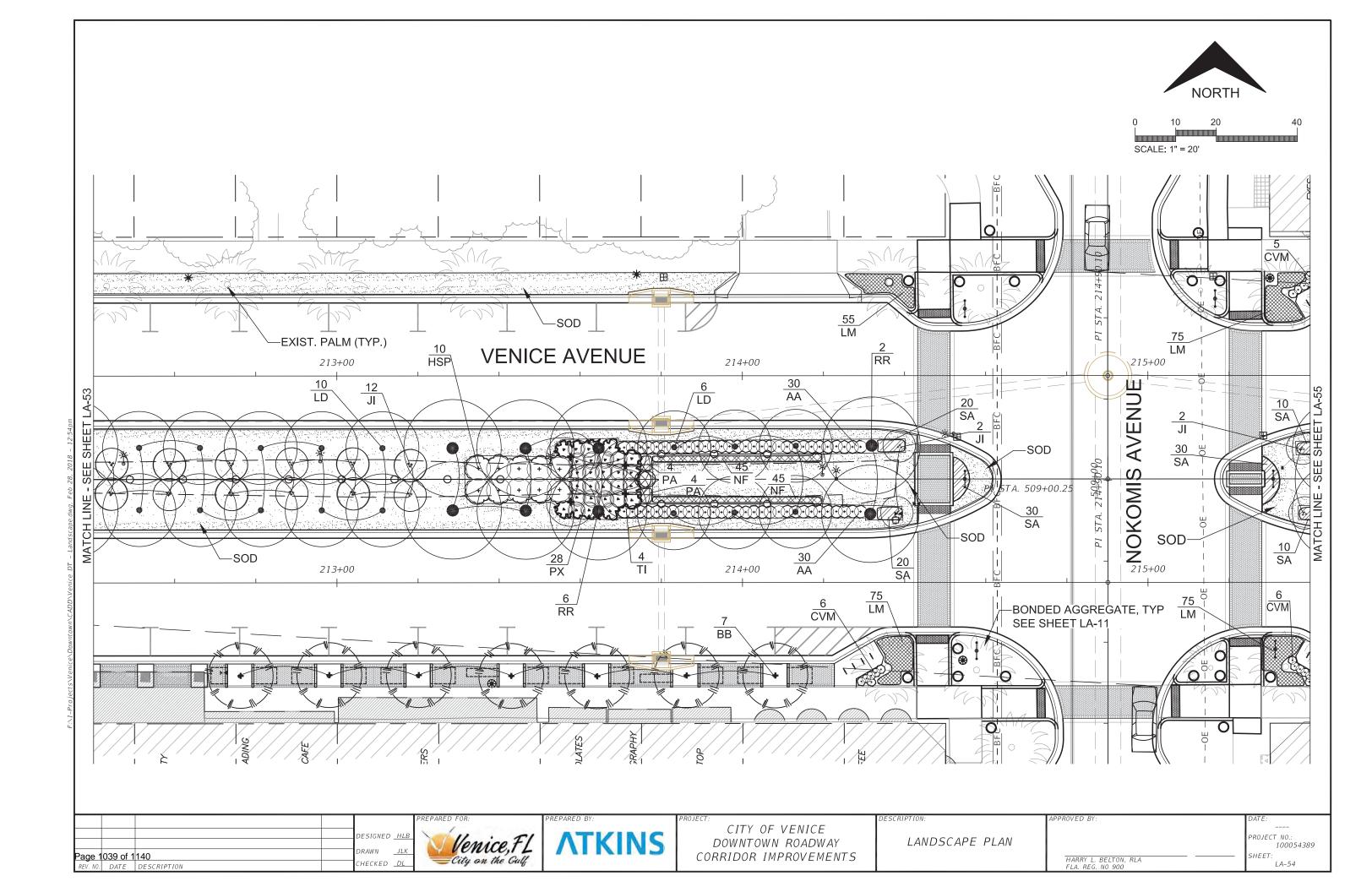


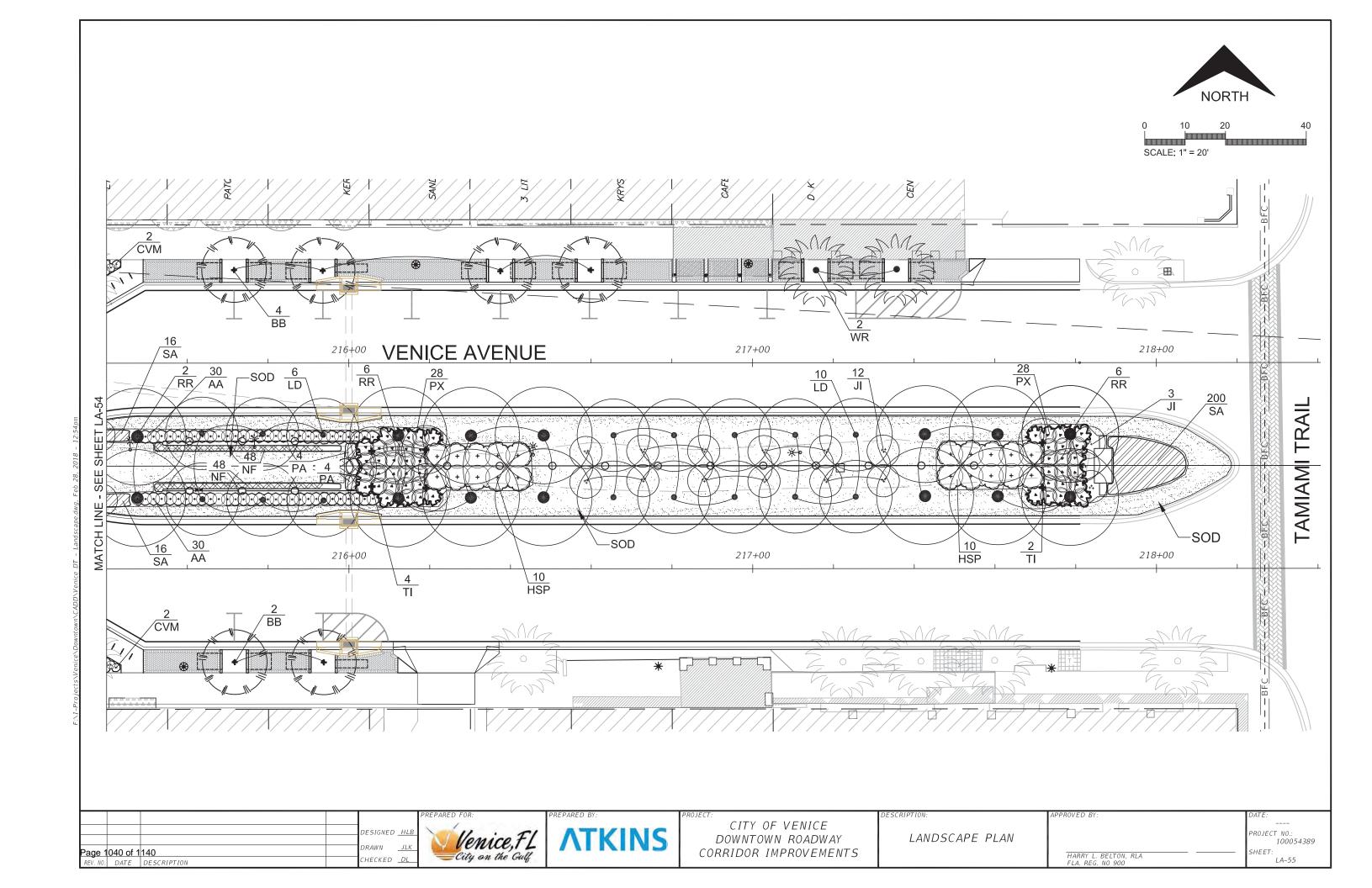


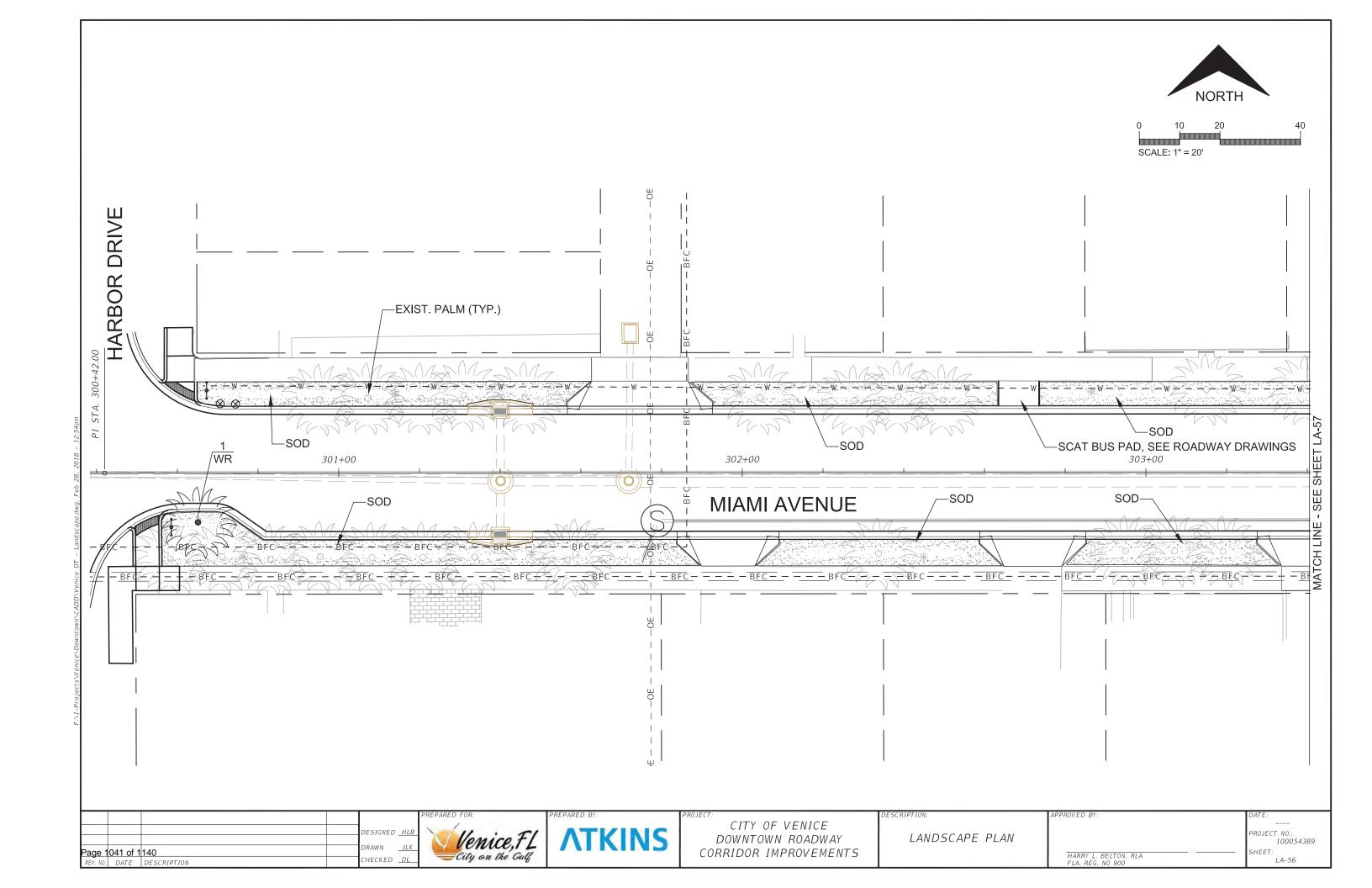


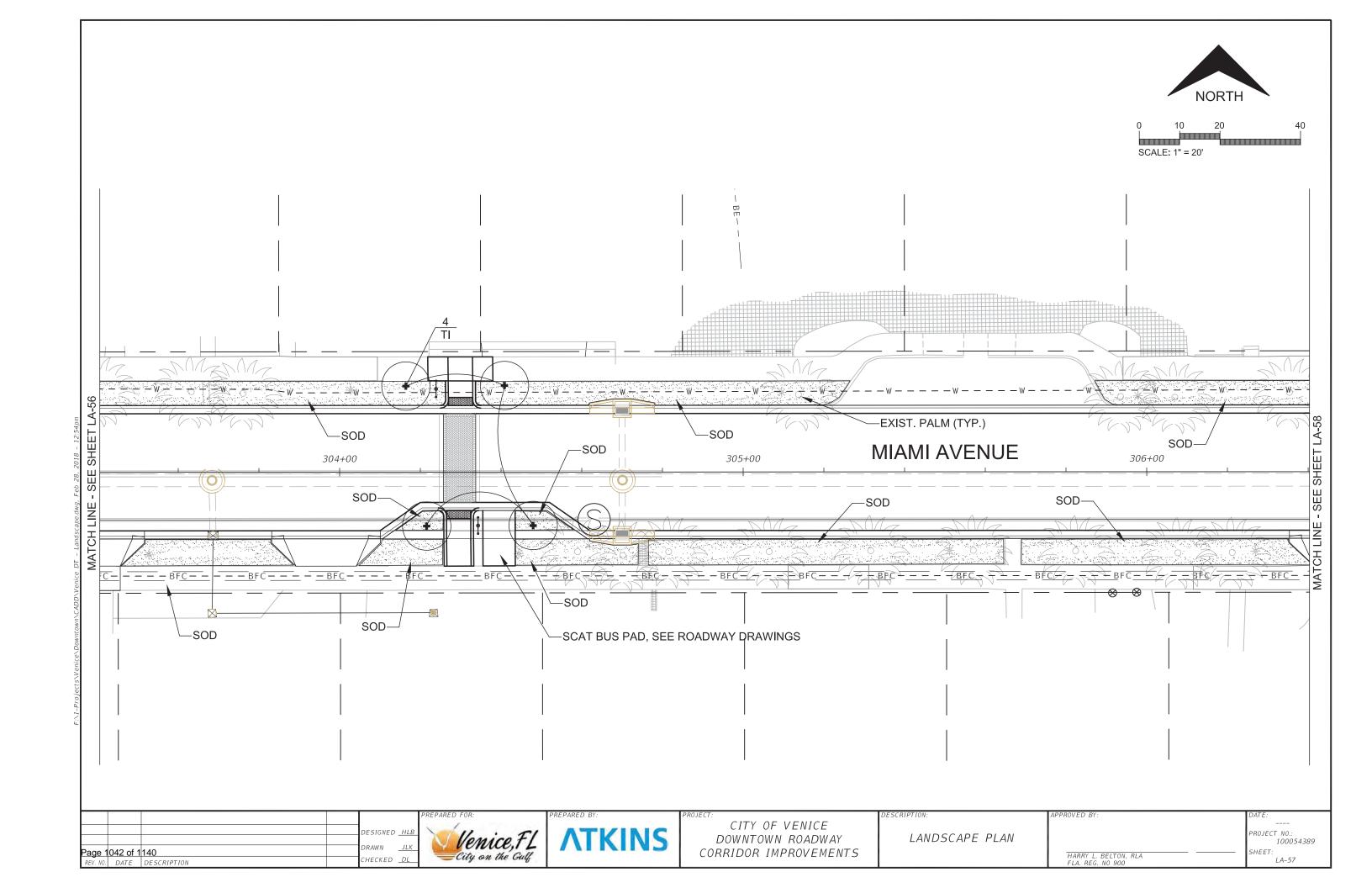


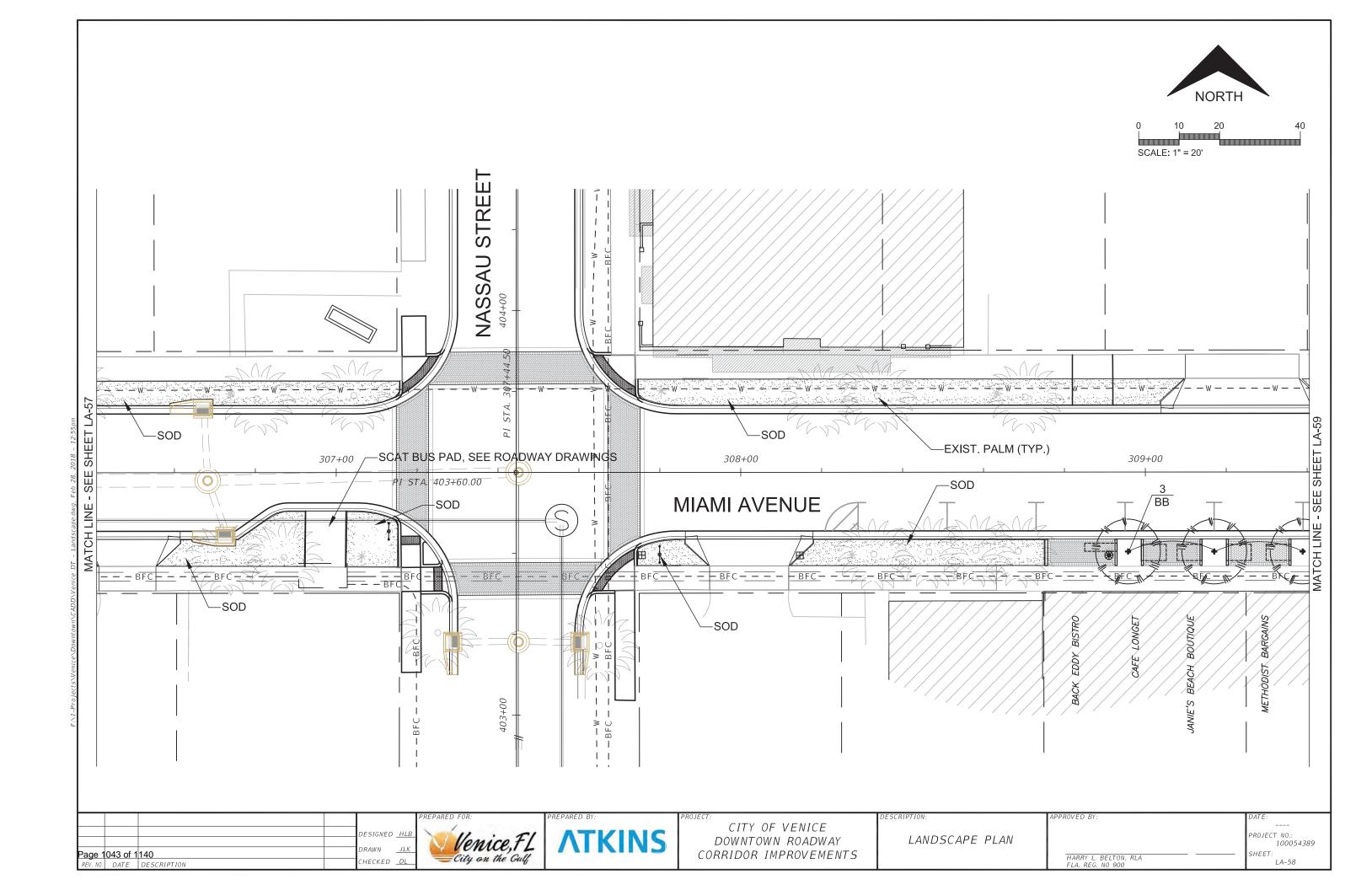


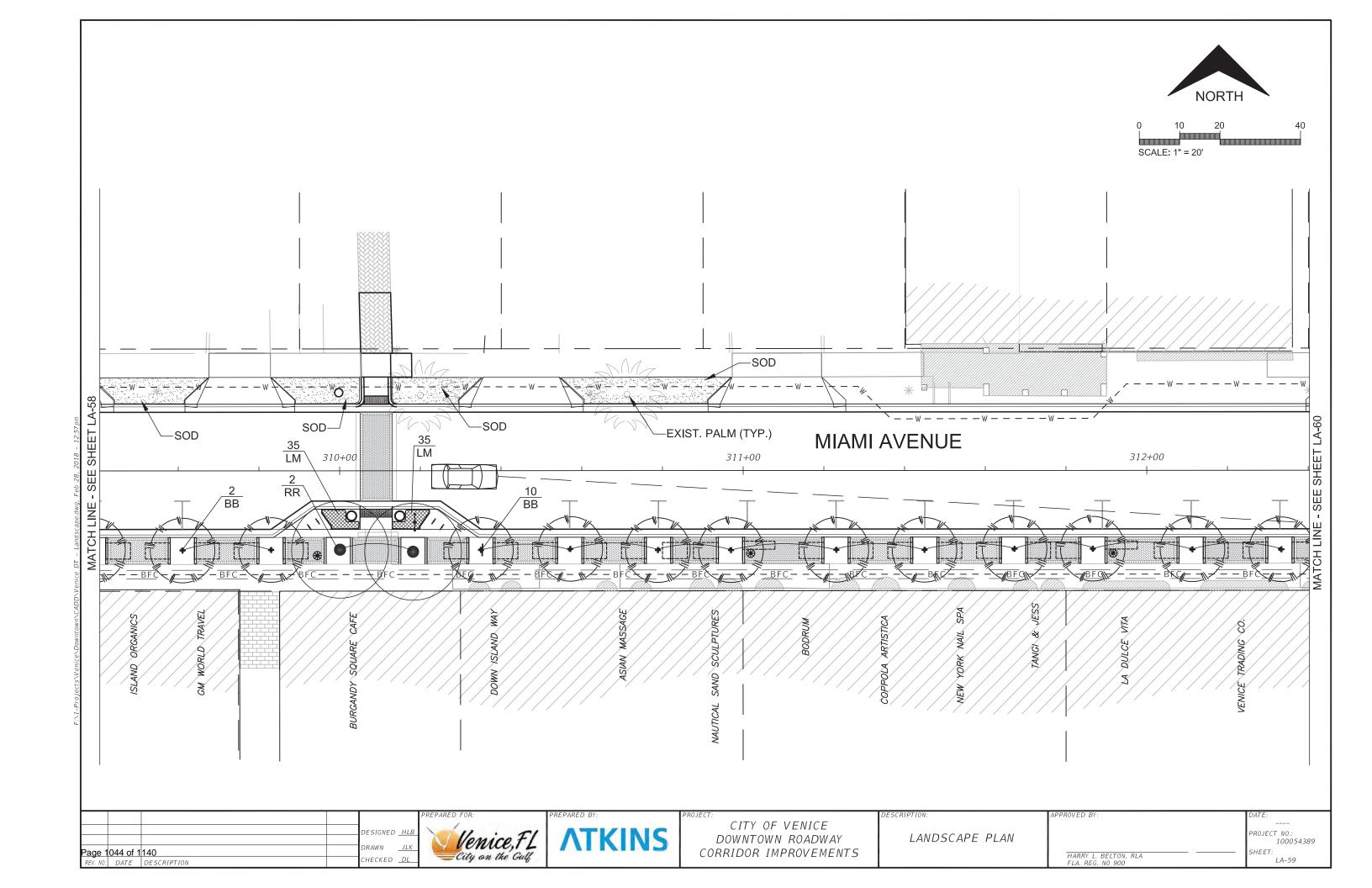


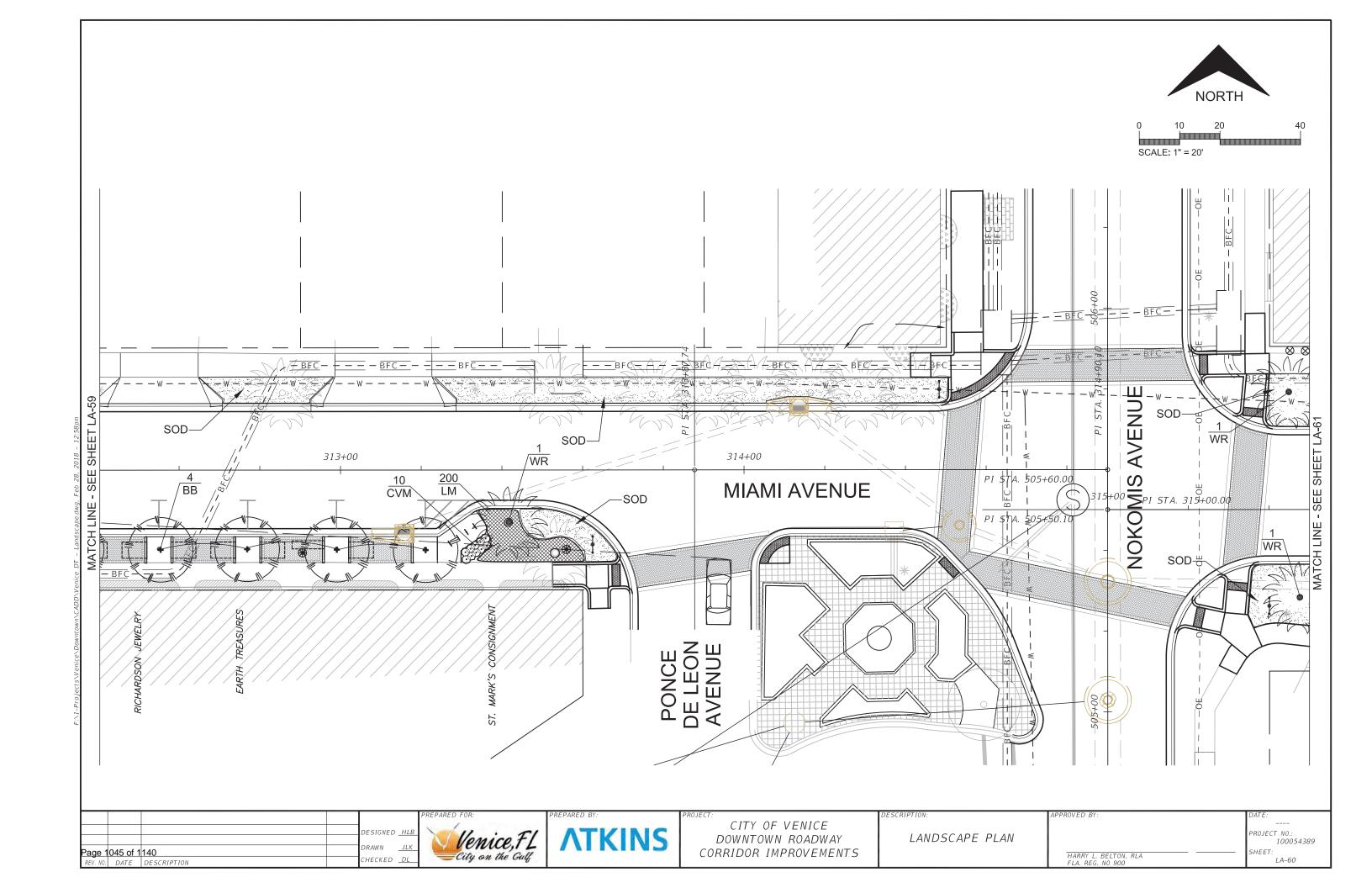


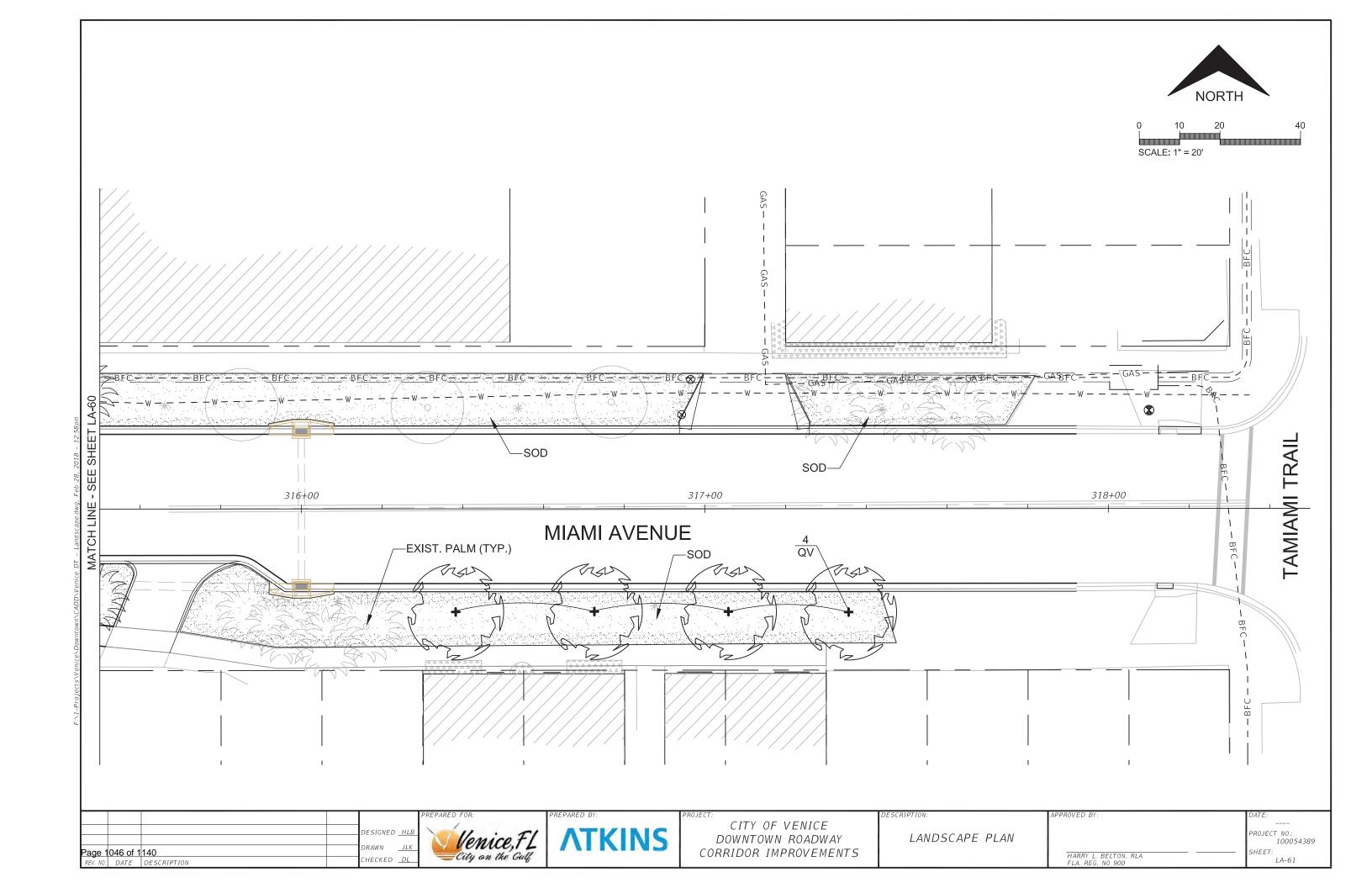












	PLANT SCHEDULE								
KEY	SCIENTIFIC NAME	COMMON NAME	TAMPA AVE	VENICE AVE	MIAMI AVE	SIZE	REMARKS		
LD RR WR	PALMS LIVISTONA DECORA ROYSTONEA REGIA WASHINGTONIA ROBUSTA	RIBBON PALM ROYAL PALM WASHINGTON PALM	- - 13	60 62 5	- 2 4	12' CLEAR TRUNK 18' GREY WOOD 18' CLEAR TRUNK	MATCHED MATCHED		
JI QV TI BB	TREES JATROPHA INTEGERRIMA QUERCUS VIRGINIANA TABEBUIA IPETIGINOSA BUCIDA BUCERAS 'SHADY LADY'	JATROPHA LIVE OAK PURPLE TABEBUIA SHADY LADY BLACK OLIVE	- 2 - 16	79 12 38 44	- 4 4 19	10' HT. x 5' SPR. 14' HT. x 6' SPR. 12' HT. x 6' SPR. 12' HT. x 6' SPR.	TREE TYPE 2 1/2" CALIPER MIN. 2" CALIPER MIN. 2" CALIPER MIN.		
AA CVM HSP PA PX	SHRUBS AGAPANTHUS AFRICANUS CODIAEUM VARIEGATUM 'MAMMEY' HIBISCUS 'SEMINOLE PINK' PLUMBAGO AURICULATA PHILODENDRON X. 'XANADU'	NILE LILY MAMMEY CROTONS SEMINOLE PINK HIBISCUS LEADWORT XANADU PHILODENDRON	- 10 - - -	548 88 100 100 284	- 10 - -	18" HT. x 18" SPR. 16" HT. x 12" SPR. 36" HT. x 18" SPR. 16" HT. x 16" SPR. 24" HT. x 24" SPR.	24" O.C. 18" O.C. 60" O.C. 18" O.C. 36" O.C.		
LM NF SA	GROUND COVERS LIRIOPE MUSCARI NEOREGELIA 'FIREBALL' (VARIES PER SEASON)	LILY TURF FIREBALL BROMELIAD SEASONAL ANNUALS	95 - -	1420 814 532	270 - -	8" SPR., 1 GALLON 8" HT. x 8" SPR. 4" POTS	12" O.C. 12" O.C. 12" O.C.		
	TURF STENOTAPHRUM SECUNDATUM	ST. AUGUSTINE FLORITAM	1,716	3,170	1,669	SQUARE YARDS			
	<u>SOIL</u>	TOP SOIL DAZOMET, OR EQUAL	<u>-</u> -	1,220 415	- -	CUBIC YARDS POUNDS	SOIL STERILIZER TREATMENT		

LANDSCAPE NOTES

- 1. ALL PLANTING TO CONFORM TO ALL APPLICABLE LAWS OF THE CITY OF VENICE.
- 2. ABOVE AND BELOW GRADE UTILITY LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK. IF UTILITY CONFLICTS BECOME EVIDENT, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR ANY NECESSARY ADJUSTMENTS. WHEN WORKING IN AREAS WHERE UTILITIES ARE KNOWN TO EXIST, UTILITY LOCATIONS MAY NEED TO STAKED BY A SURVEYOR OR UTILITY COMPANY. THE CONTRACTOR HAS THE OPTION TO CALL 'SUNSHINE ONE CALL' AT 1-800-432-4770 TO SCHEDULE LOCATION OF UTILITIES THAT SUBSCRIBE TO THEIR SERVICE.
- 3. ALL PLANT MATERIAL SHALL BE IN OPTIMUM CONDITION, FREE OF ALL INSECTS AND DISEASE, AND SHALL BE EQUAL OR SUPERIOR TO FLORIDA #1 PER THE STATE OF FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS.
- 4. PLANTING BACKFILL MIX SHALL BE 4 PARTS NATIVE SOIL FROM EXCAVATION AND 1 PART PEAT OR OTHER APPROVED COMPOST MIX.
- APPLY AN 8-10-10 FERTILIZER WITH MINOR ELEMENTS TO ALL NEW PLANTING AT THE RATE RECOMMENDED BY THE MANUFACTURER. SUBMIT PROPOSED FERTILIZER FOR APPROVAL BEFORE
- 6. IT WILL BE THE SOLE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO INSURE THAT ALL NEW PLANTING RECEIVE ADEQUATE WATER DURING INSTALLATION AND THROUGHOUT THE PLANT WARRANTEE PERIODS. DEEP WATERING OF ALL NEW PLANTS AND ANY SUPPLEMENTARY WATERING THAT MAY BE REQUIRED TO AUGMENT NATURAL RAINFALL OR SITE IRRIGATION IS MANDATORY TO INSURE PROPER PLANT DEVELOPMENT AND SHALL BE PROVIDED AS PART OF THIS CONTRACT.

- 7. IF REQUIRED, PRUNING OF EXISTING TREES AS FIELD DIRECTED BY OWNER'S REPRESENTATIVE SHALL BE CONDUCTED UNDER THE DIRECT SUPERVISION OF A CERTIFIED ARBORIST IN THE FIELD.
- LANDSCAPE CONTRACTOR SHALL REPAIR, RELOCATE AND/OR REPLACE ANY DAMAGED OR REMOVED LANDSCAPE AFFECTED BY CONSTRUCTION NOT DELINEATED ON THE DEMOLITION PLANS. CONTRACTOR SHALL OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO ANY REMEDIATION LANDSCAPE EFFORTS.
- CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OF ANY QUANTITY DISCREPANCIES BETWEEN SCHEDULE AND PLAN PRIOR TO CONSTRUCTION.
- 10. SOD TO INCLUDE ALL DISTURBED AREAS THAT ARE NOT TO RECEIVE LANDSCAPE OR HARDSCAPE. CONTRACTOR SHALL CONFIRM SOD QUANTITY PRIOR TO BID.
- 11. PLANT MATERIAL SHALL MEET OR EXCEED ALL SPECIFICATIONS REGARDING SIZING. IT MAY BE NECESSARY TO EXCEED SOME OF THE SPECIFICATIONS TO MEET THE MINIMUM REQUIREMENTS OF
- 12. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE TOP 24" OF EXISTING TOP SOIL IN THE MEDIAN FROM NASSAU STREET TO NOKOMIS AVENUE ON VENICE AVENUE. PROVIDE NEW TOPSOIL MEETING FDOT SPECIFICATION SECTION 987, "SOIL LAYER MATERIALS". PROVIDE SOIL STERILIZATION TREATMENT WITH DAZOMET, OR APPROVED EQUAL, PER MANUFACTURER RECOMMENDATIONS PRIOR TO INSTALLING NEW SOIL IN THE MEDIAN.

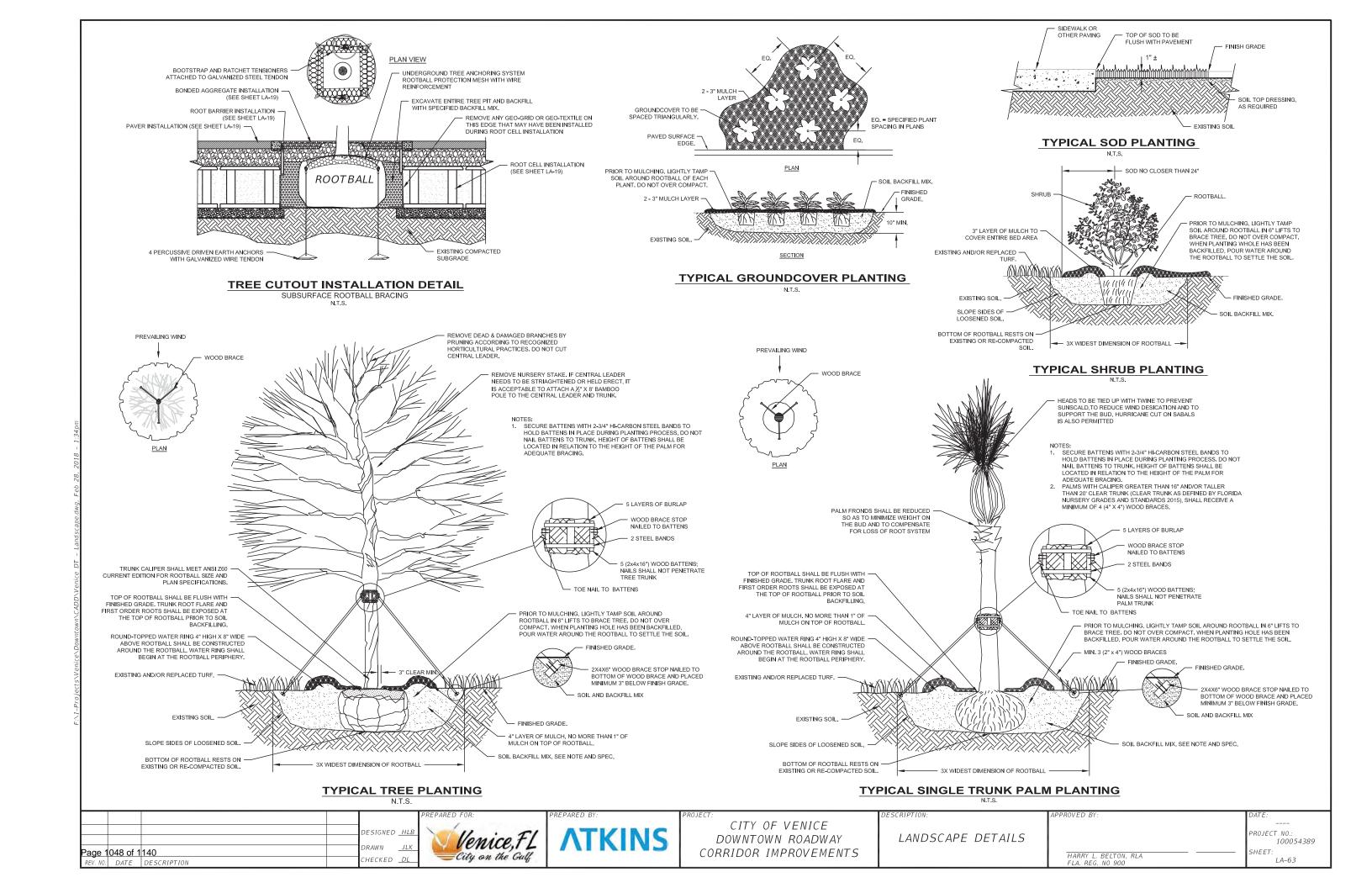
ESIGNED <u>HLB</u> RAWN JLK Page 1047 of 1140 HECKED DL NO. DATE DESCRIPTION

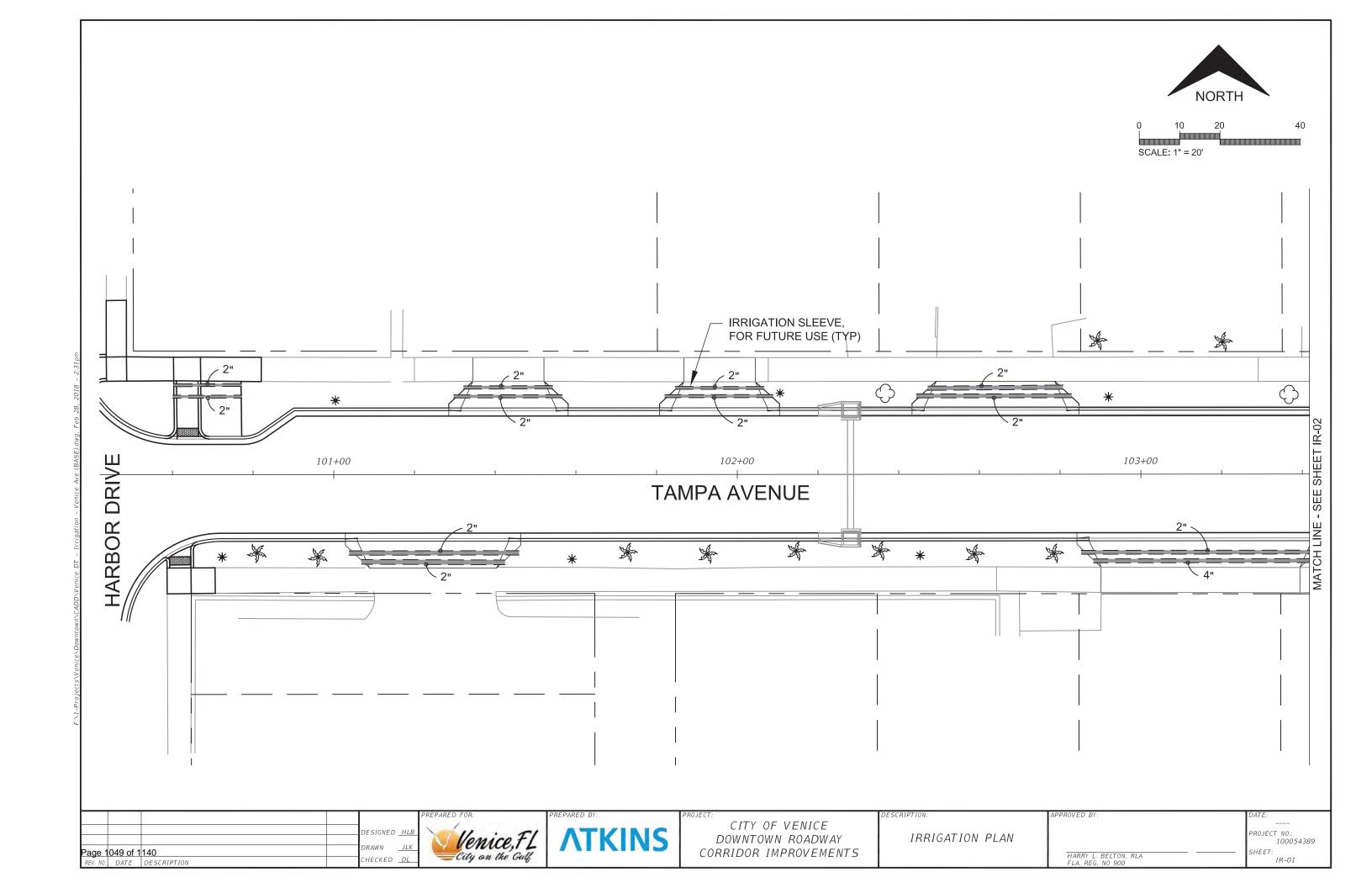
City on the Gulf

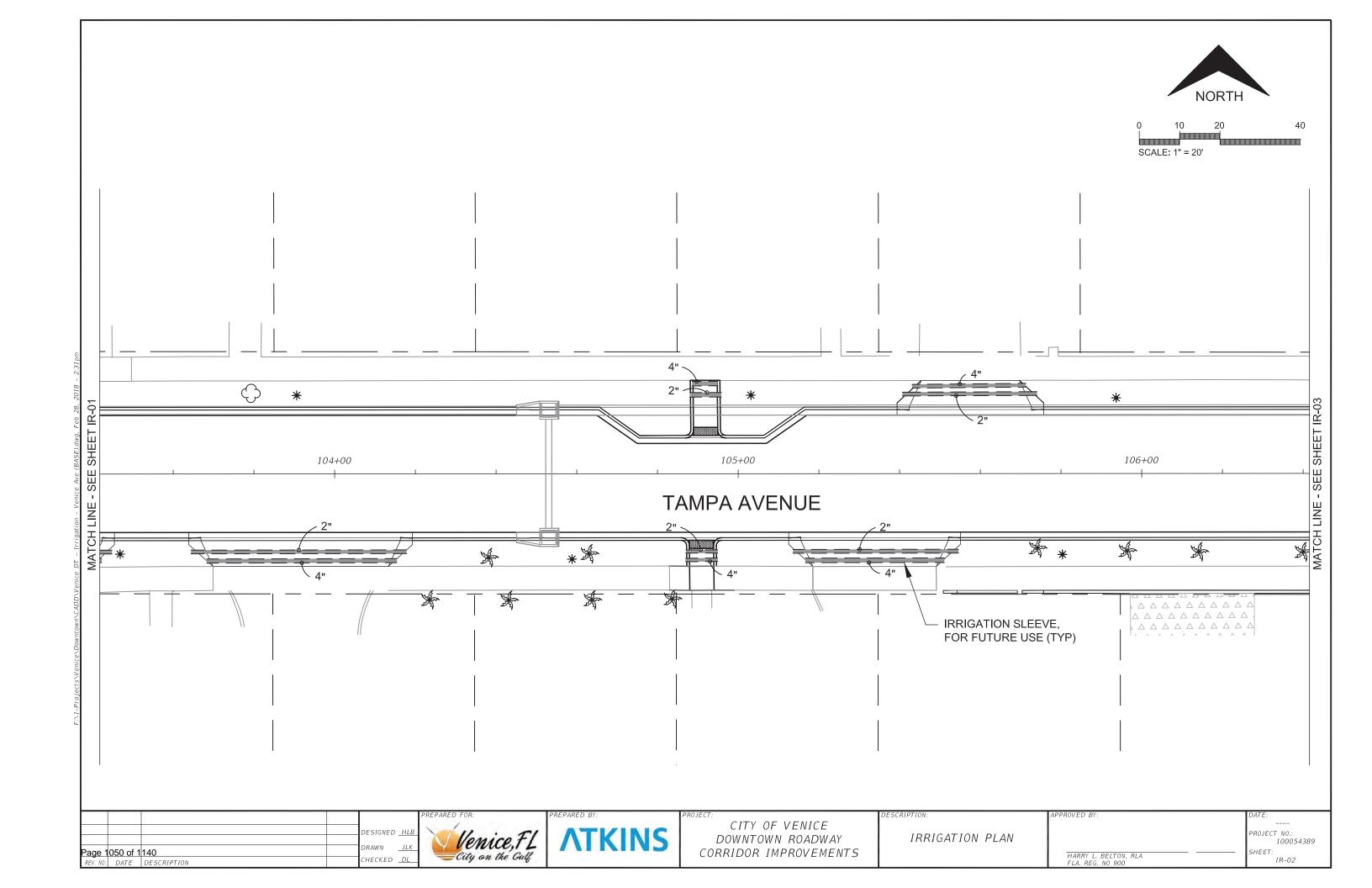
CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

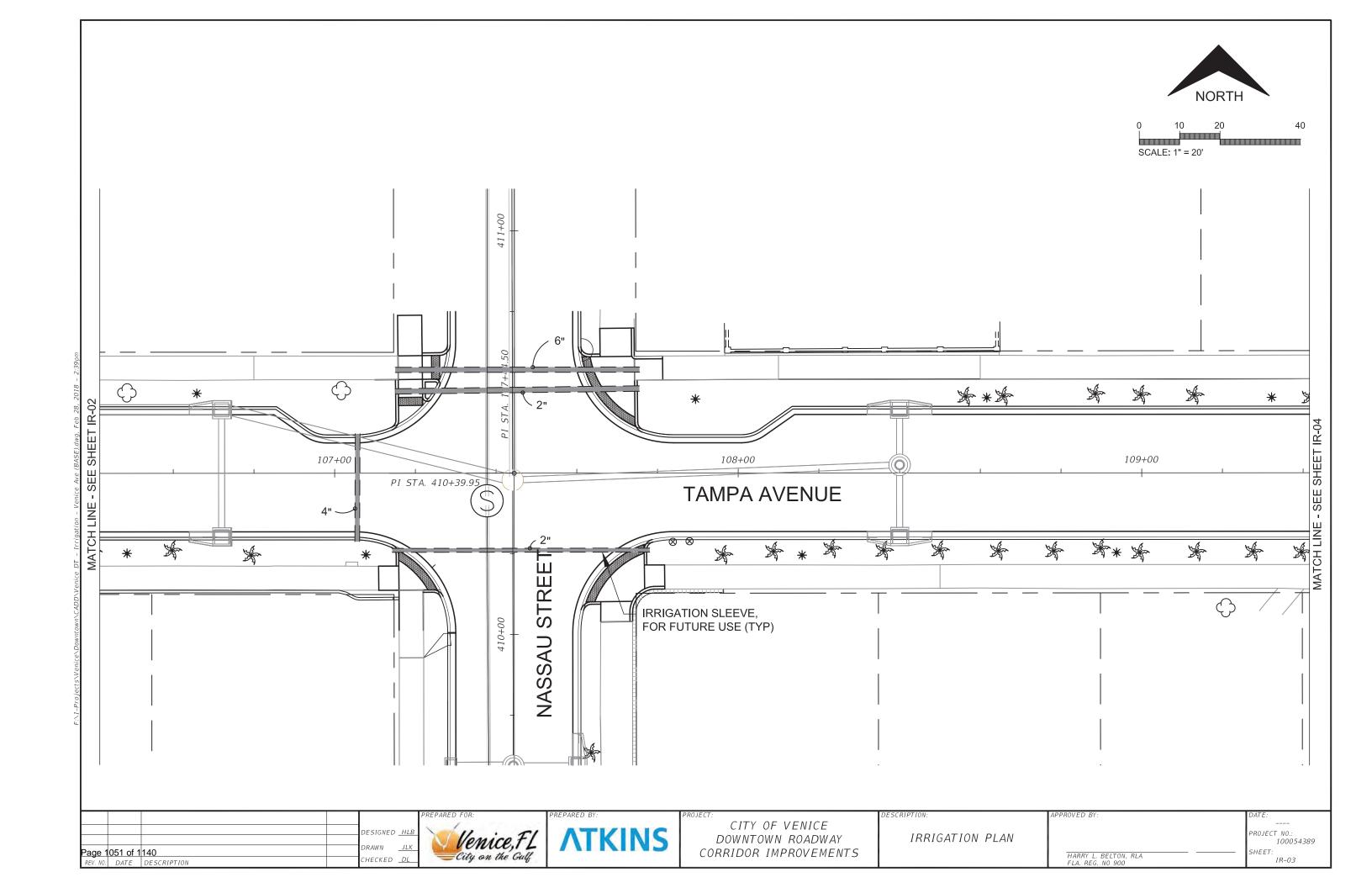
LANDSCAPE SCHEDULE & NOTES

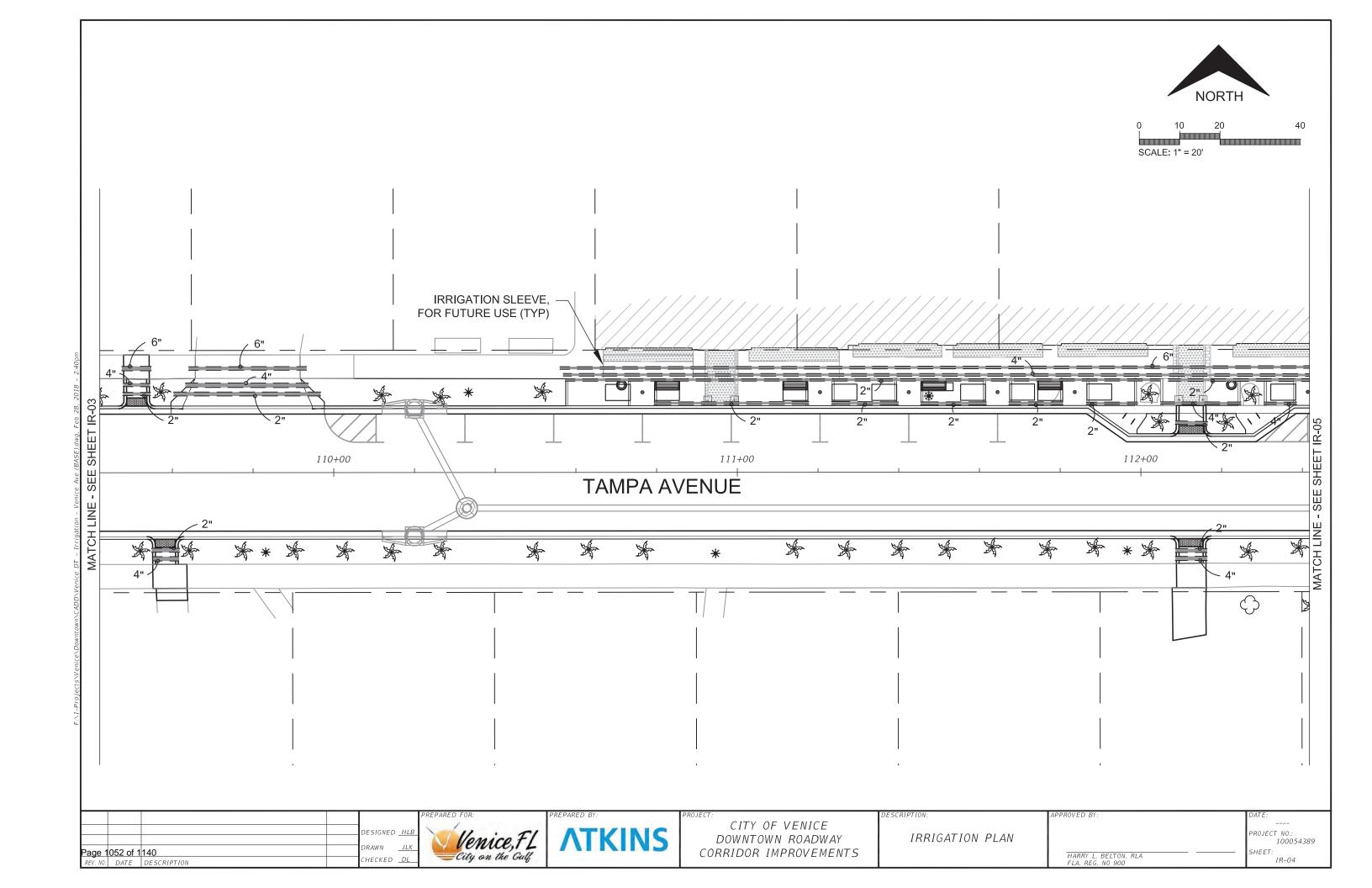
PROJECT NO. 100054389 HEET: 1 A-62

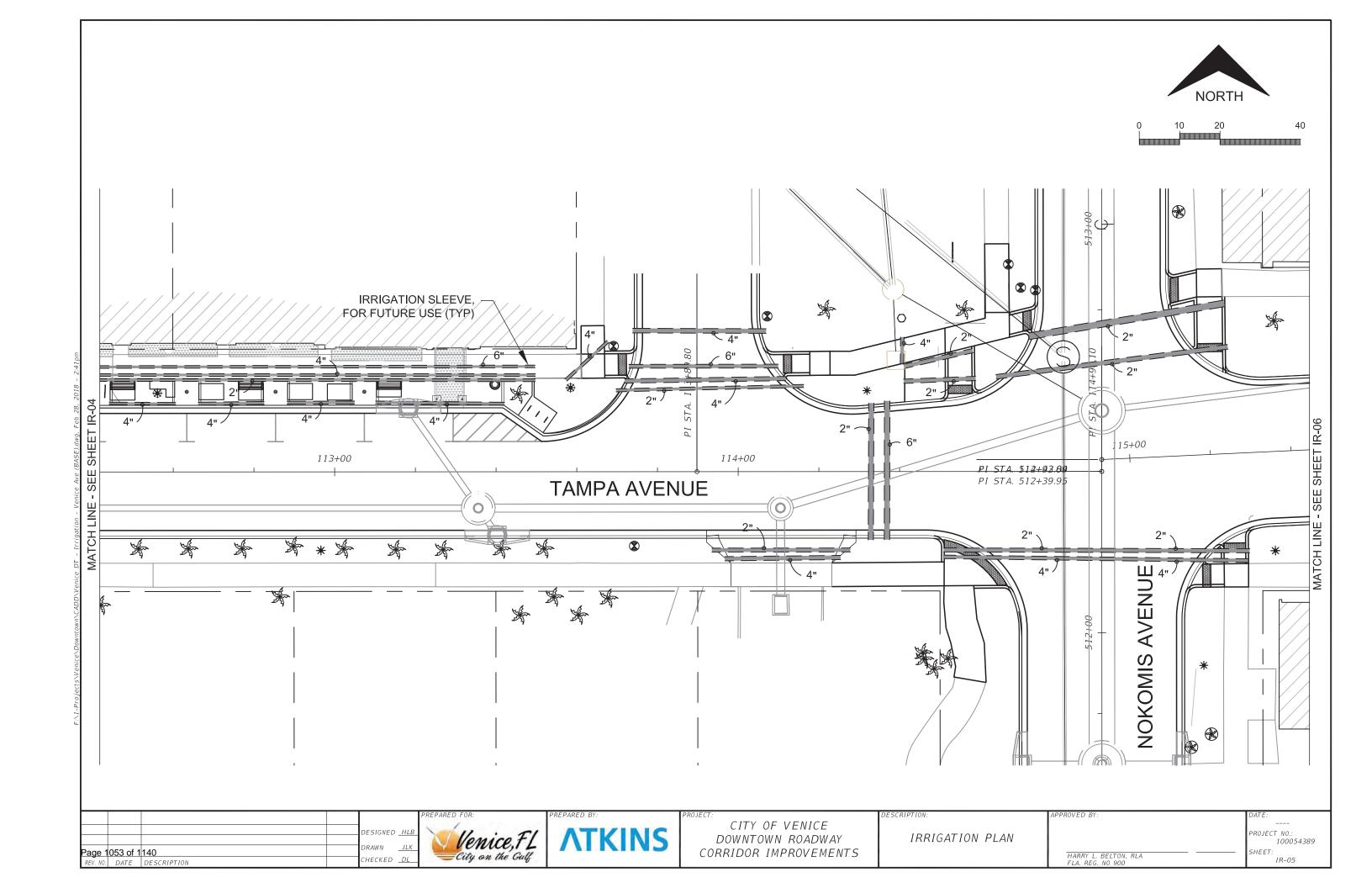


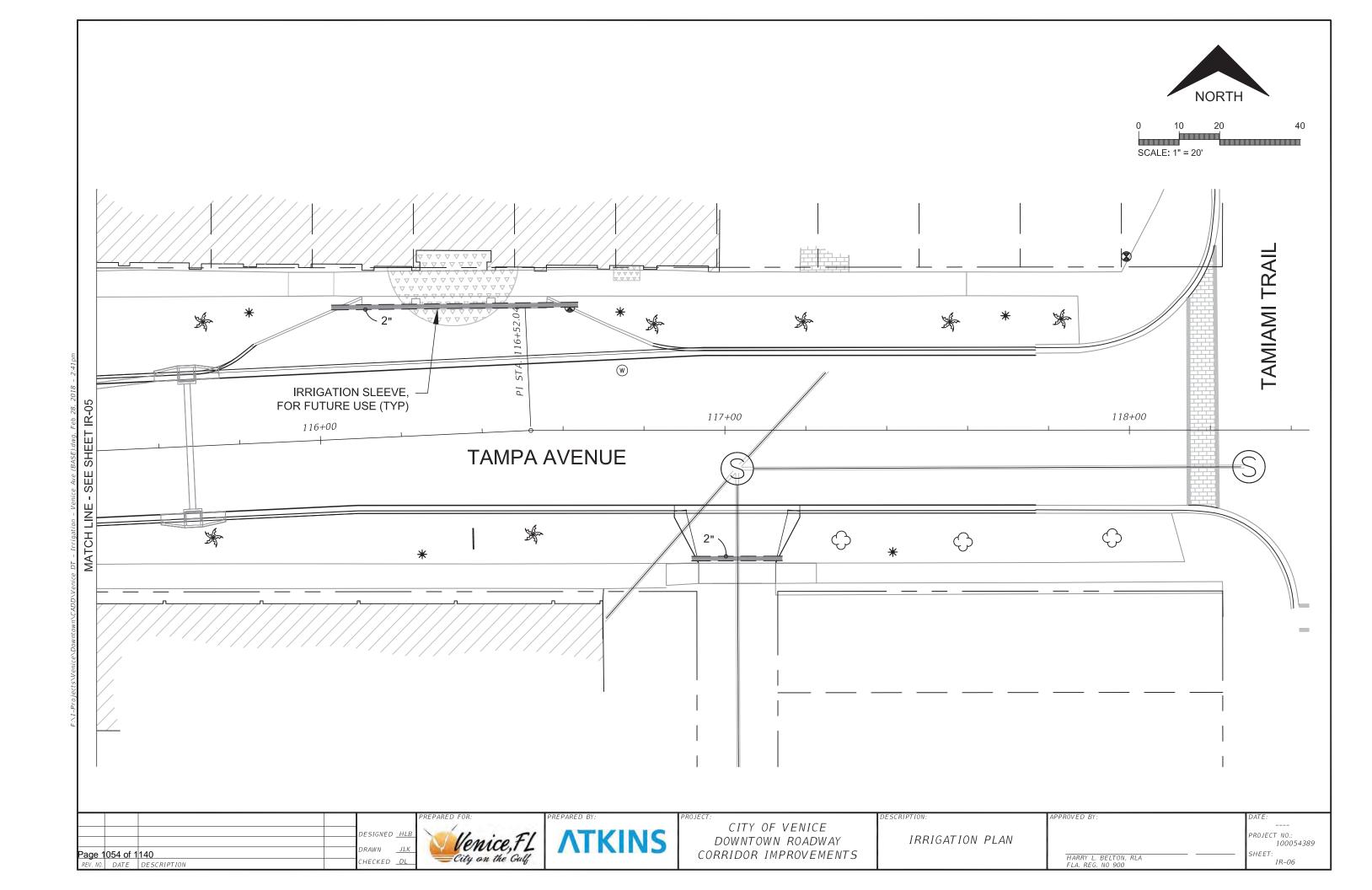


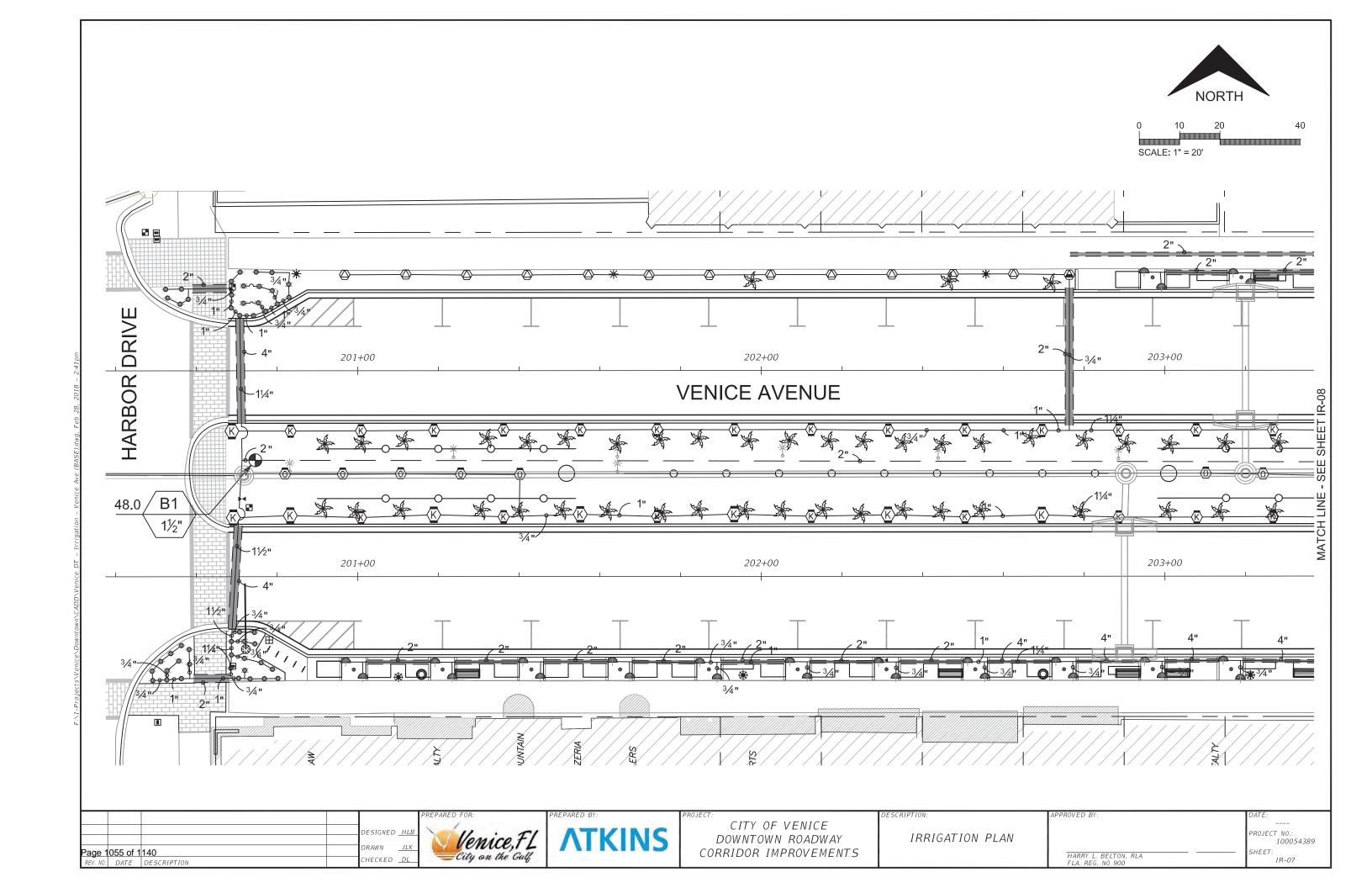


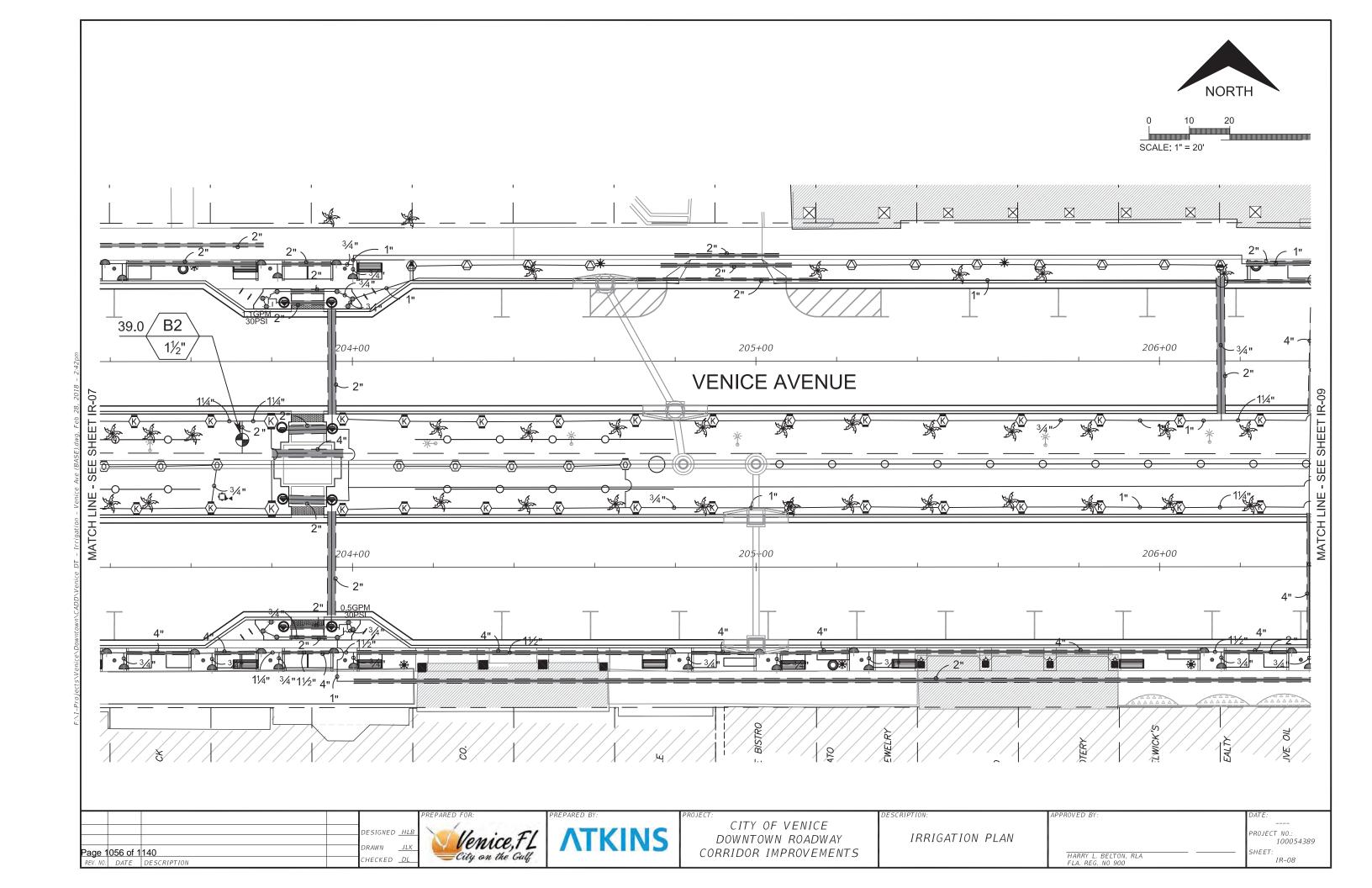


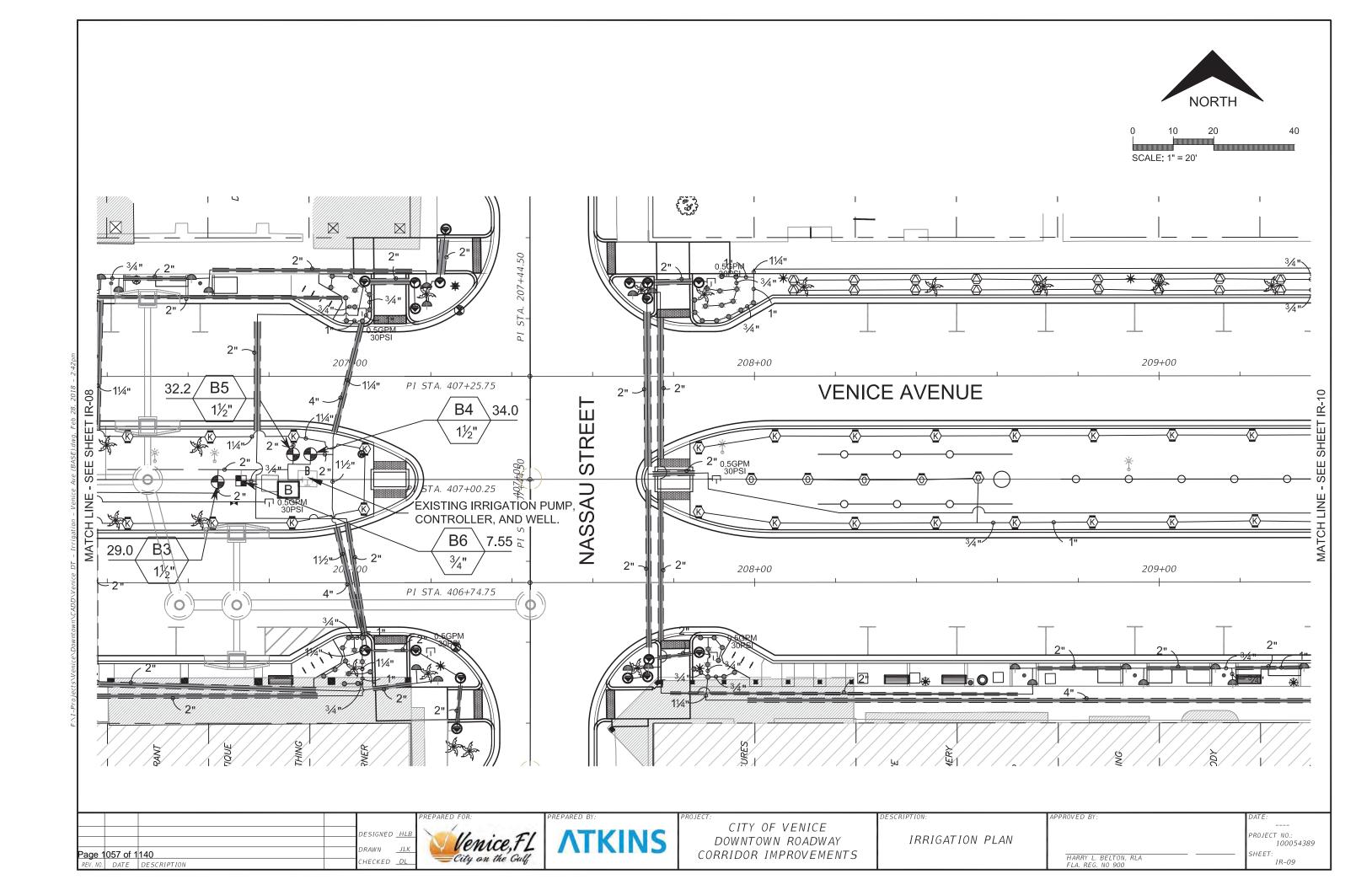


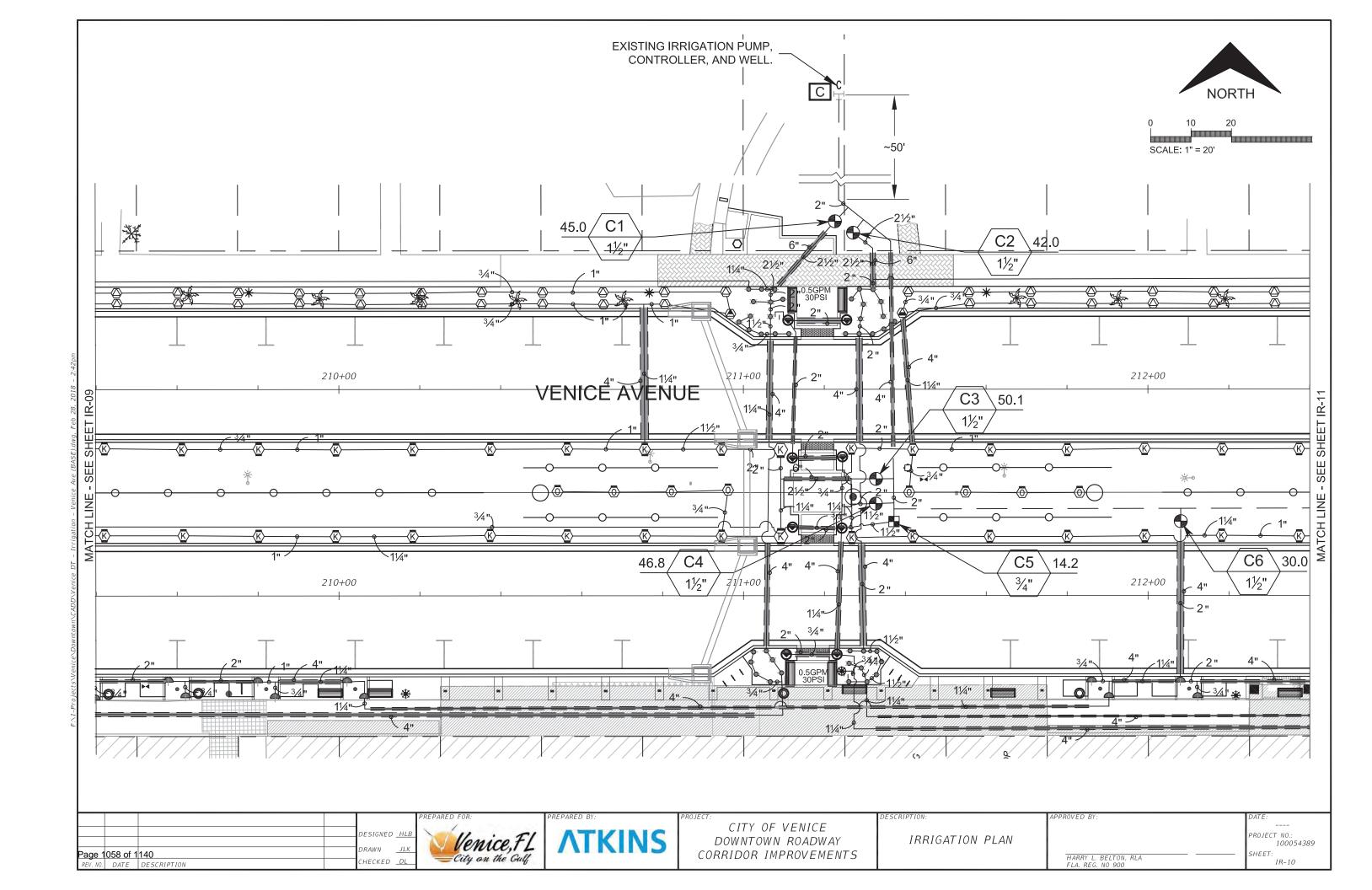


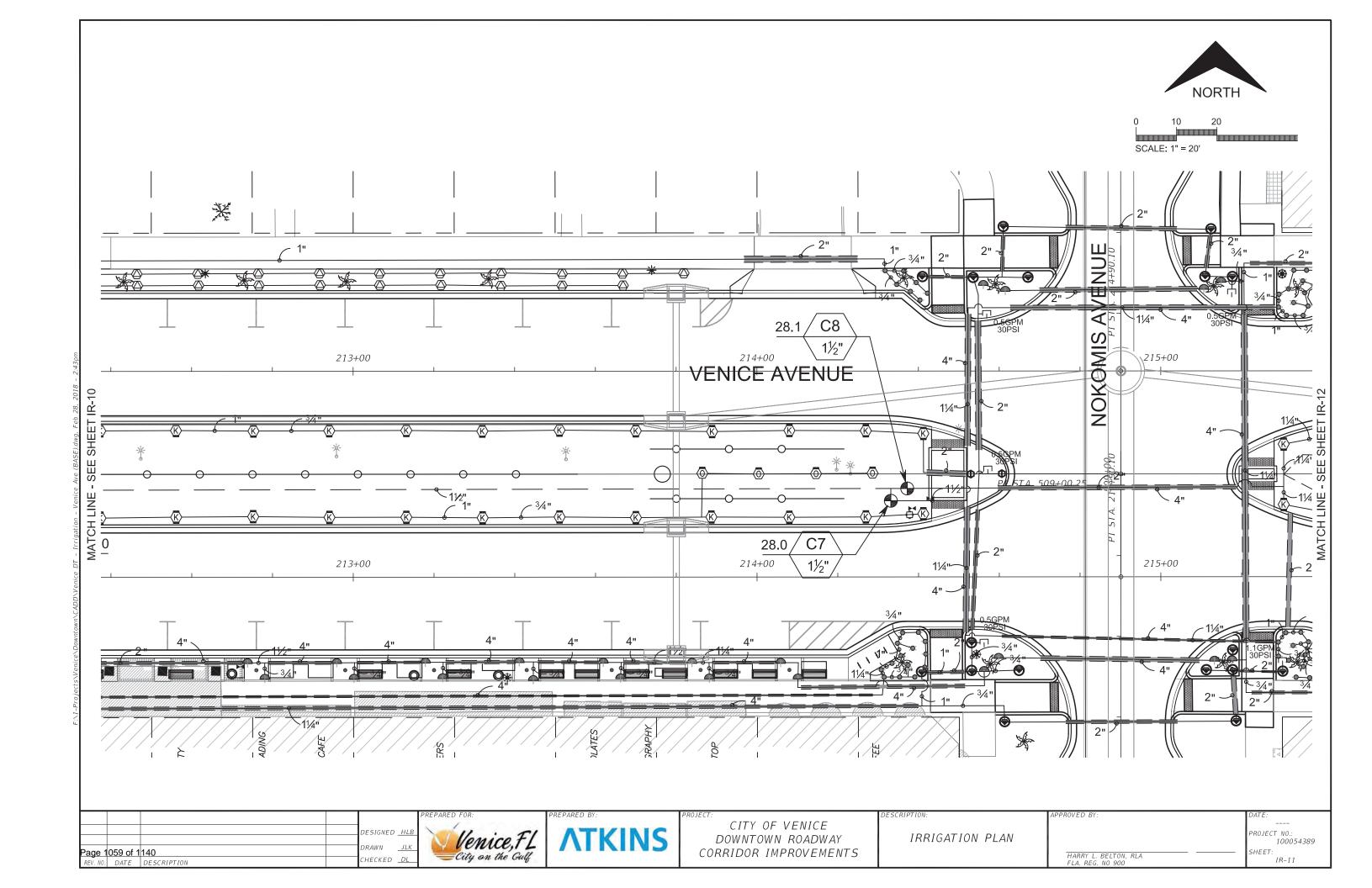


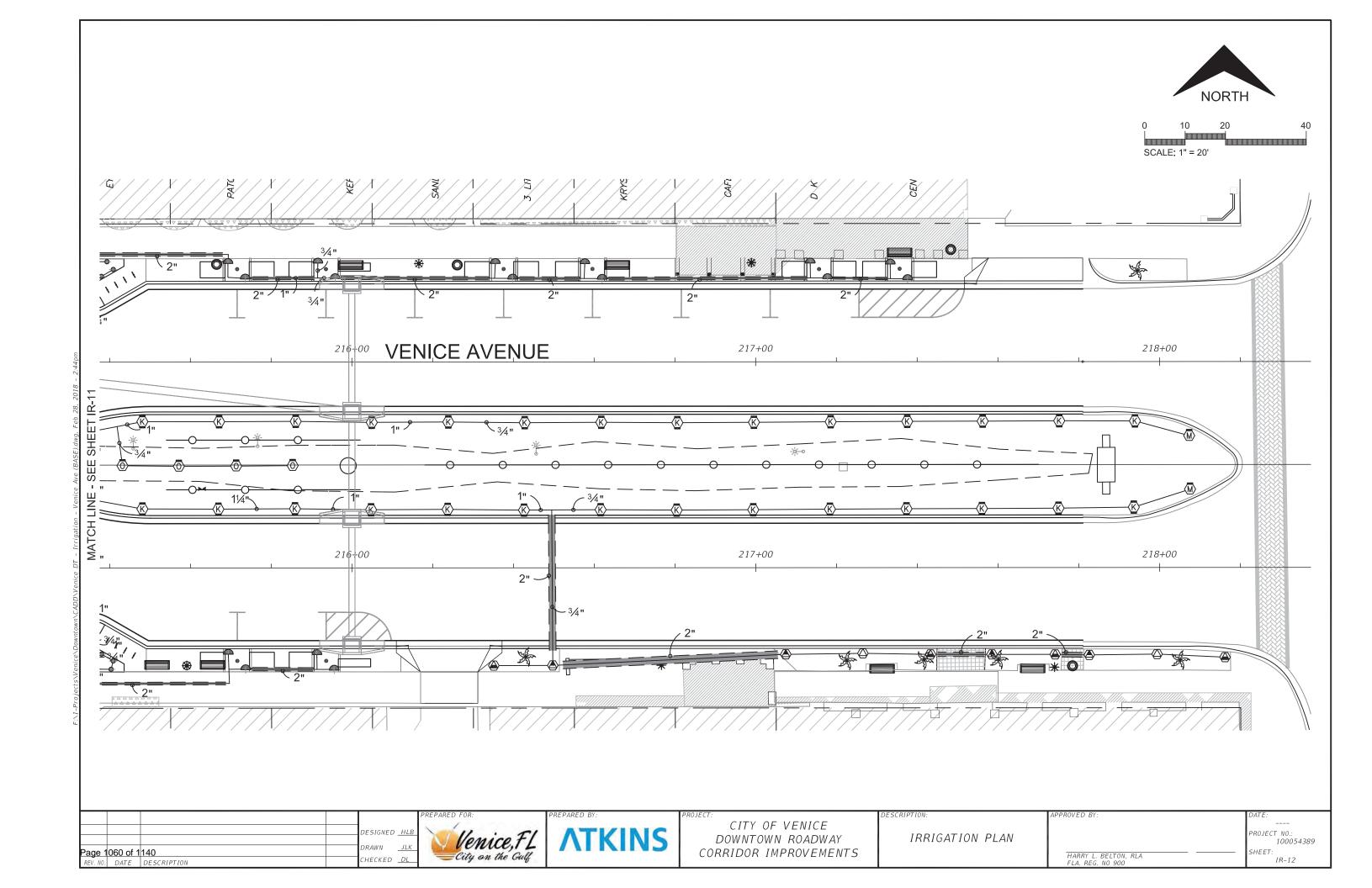


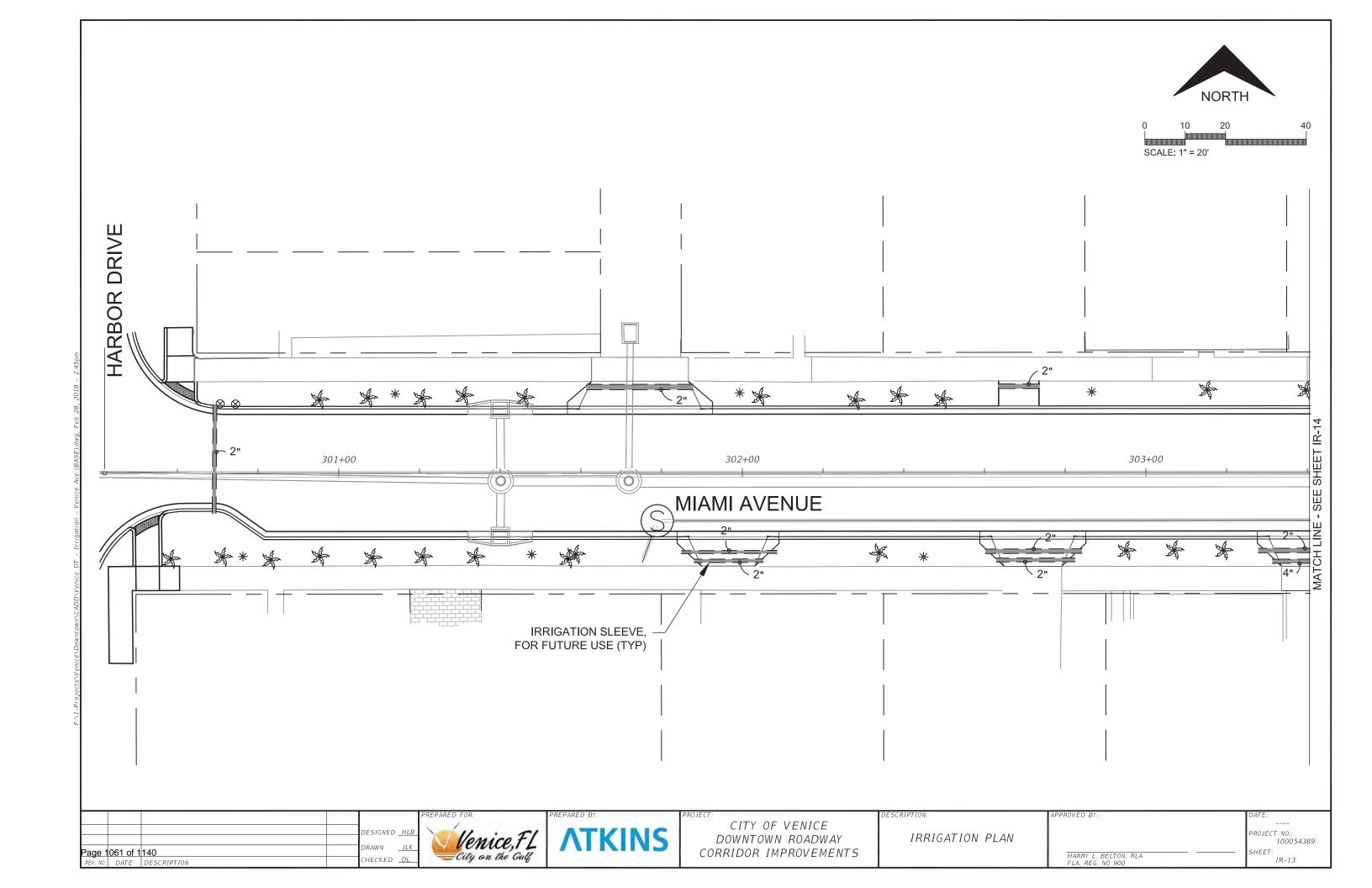


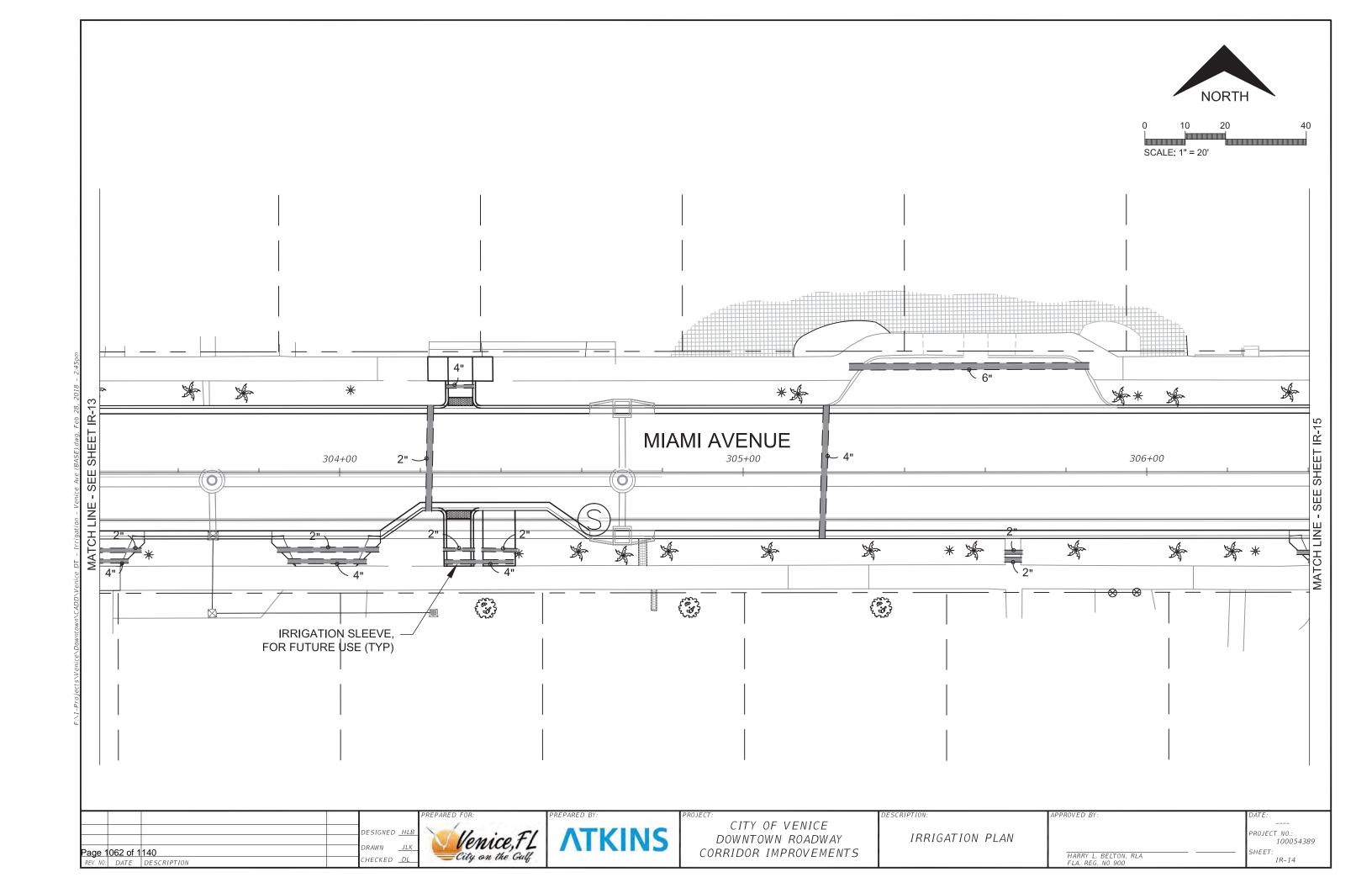


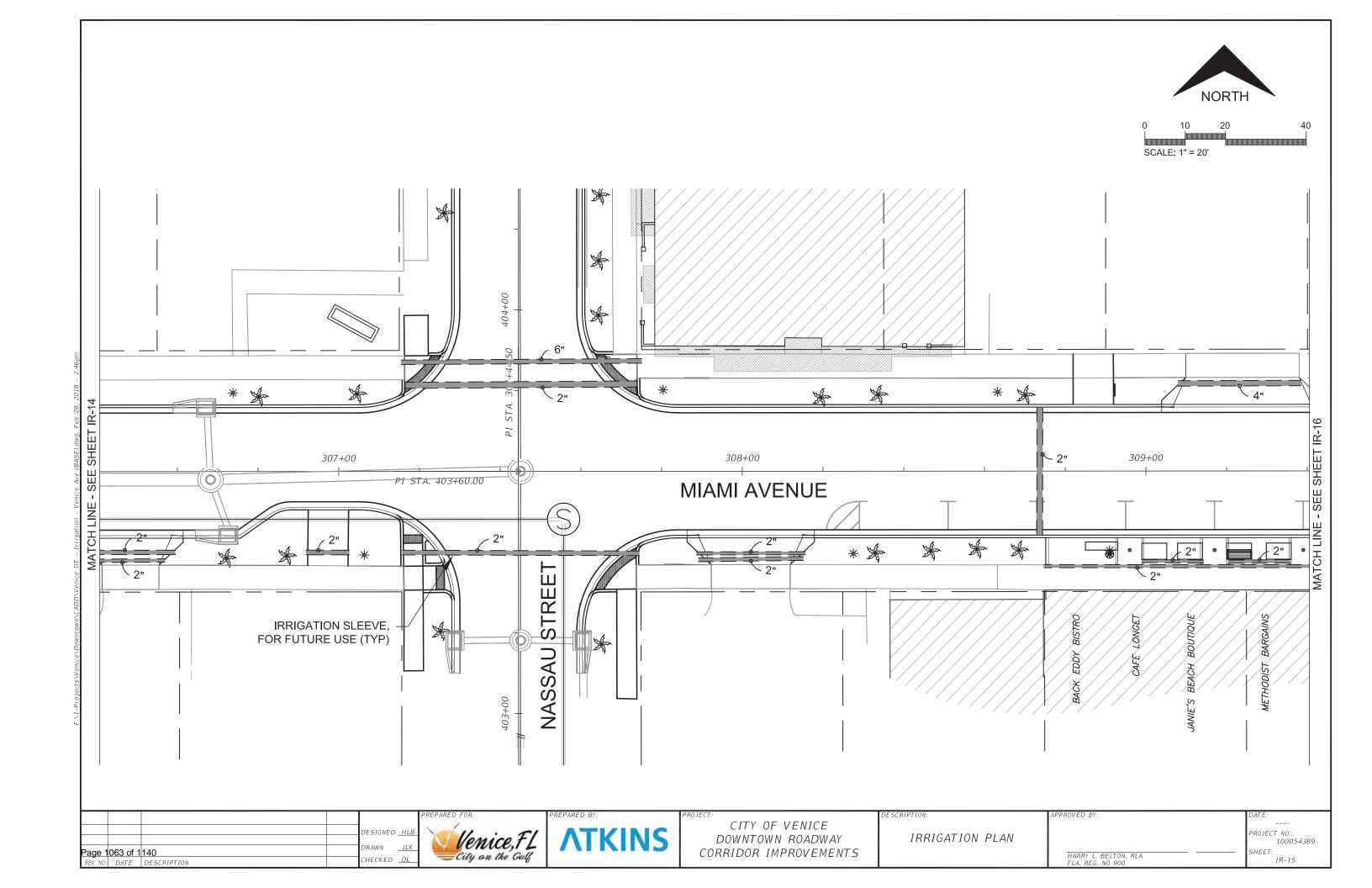


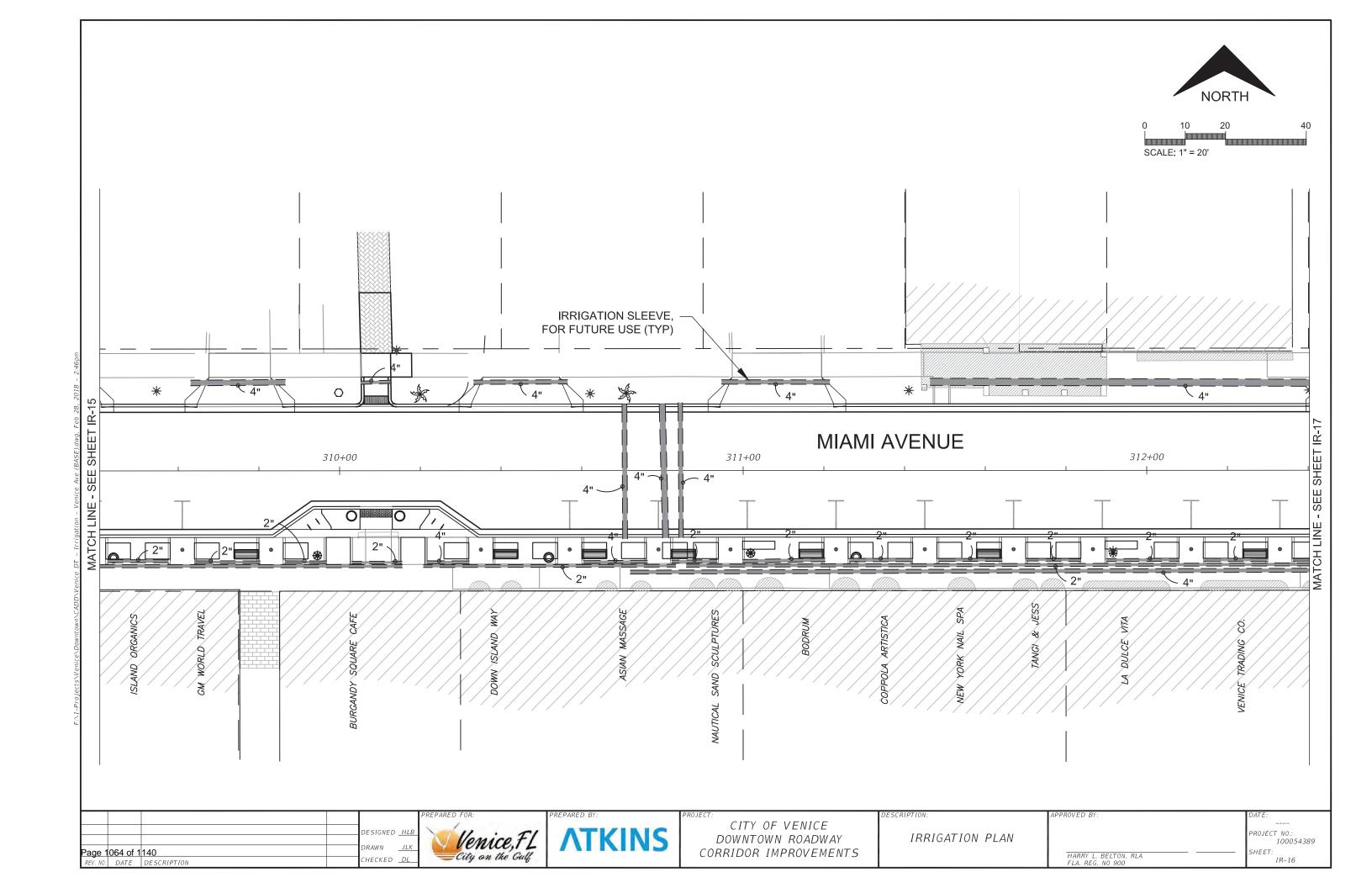


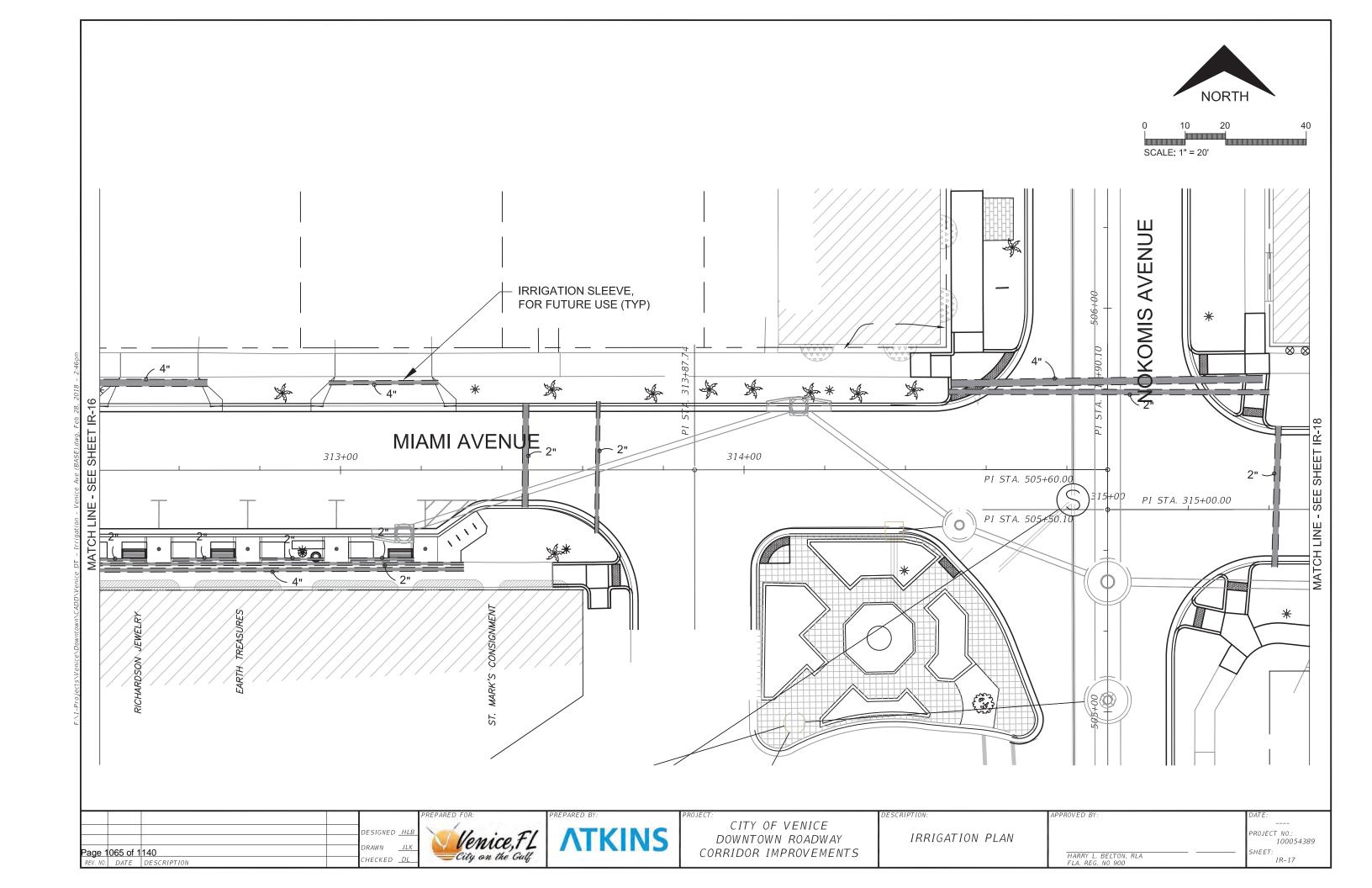


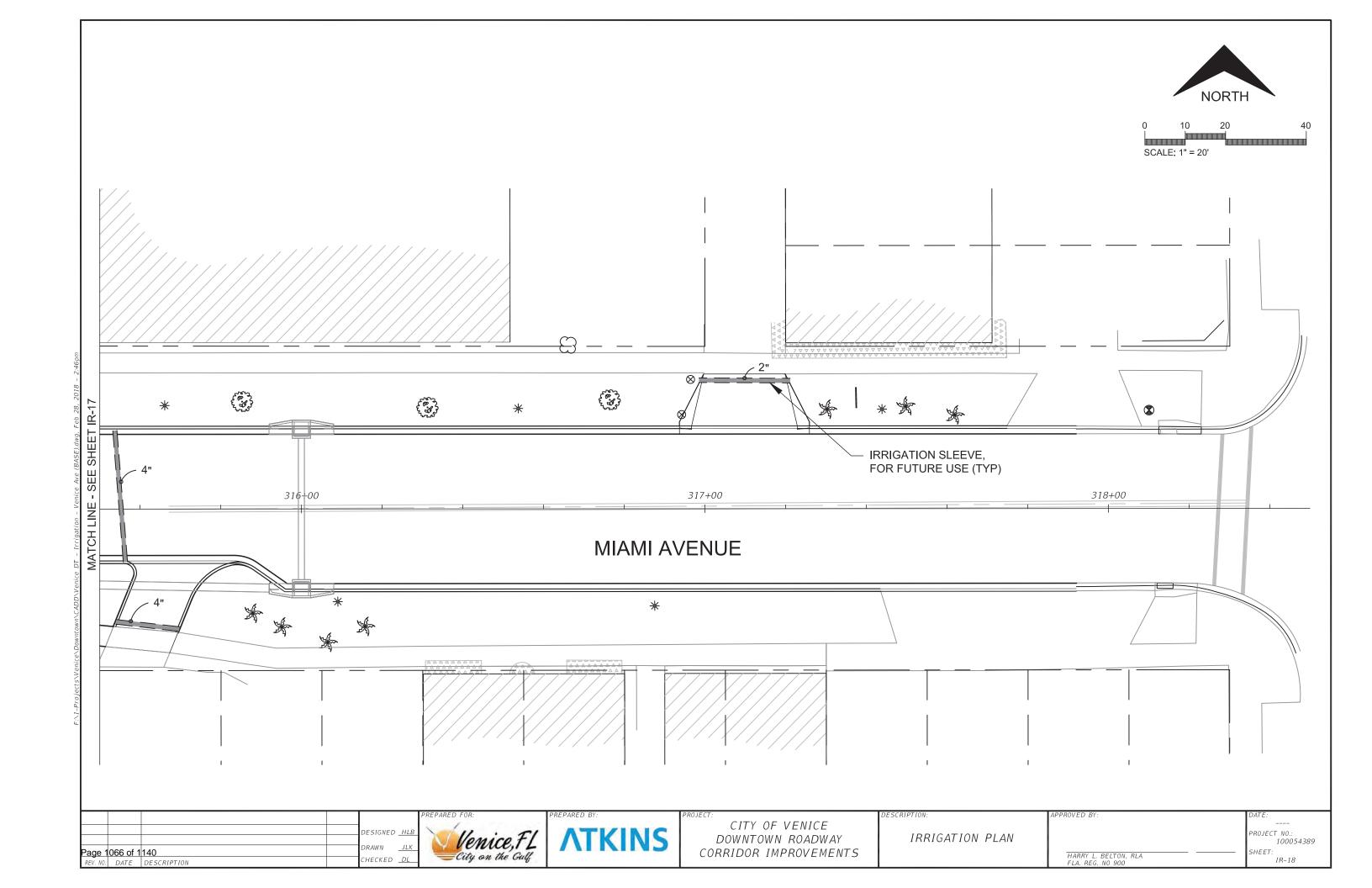












IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	<u>ARC</u>	<u>PSI</u>	<u>GPM</u>	RADIUS	_
₩	Hunter MP1000 PROS-06-PRS40-CV	2	90-210	40		14'	
©	Hunter MP1000 PROS-06-PRS40-CV	36	360	40	0.84	14'	
€	Hunter MP2000 PROS-06-PRS40-CV	172	90-210	40		19'	
Φ	Hunter MP800SR PROS-06-PRS40-CV	2	Adj	40		10'	
	Hunter MP Strip PROS-06-PRS40-CV	7	LCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	6	RCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	94	SST	40	0.44	5'x30'	
XX	Hunter PROS-PRS30-06-CV-MSBN	44	360	30	1.00	3'	
•	Hunter PROS-PRS30-06-CV-MSBN	153	180	30	1.00	3'	
~	Hunter RZWS-SLEEVE-18-CV	118	360	30	0.50	3'	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY					
5	Hunter ACZ-075-25 Drip control kit featuring a 3/4" PGV-ASV valve, with 3/4" HY075 filter system, and 25psi pressure regulated. Flow range: 0.5 GPM to 15 GPM. With 150 mesh stainless steel screen.	2					
•	Hunter SD-B-STK Drip 360 Micro Spray for Residential/Commercial Use. Eight streams of water, with 360 degree spray. 15psi to 30psi. Solo-Drip with Barb and 6" Stake.	50					
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>					DETAIL
•	Hunter ICV-G 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	12					
В	Rain Bird ESP8LXME See existing and/or proposed irrigation pump for Controller.	1					
C × ×	Rain Bird ESP8LXME See existing and/or proposed irrigation pump for Controller.	1					
Π×	Cap for future use Cap at the mainline or lateral line for future use. The pressure and flow provided to that location are indicated next to the cap symbol. This will be	15					
B 1 <u>⊤</u> 1	Venice Ave. Ex. Irrigation Pump - West (ID#6141)	1					
C ⊥	Centennial Park Ex. Irrigation Pump (ID#6488)	1					
	Irrigation Lateral Line: CPVC Schedule 40	13,656 l.f.					
	Irrigation Mainline: CPVC Schedule 40	1,098 l.f.					
Val	Pipe Sleeve: CPVC Schedule 80 ve Callout	9,866 l.f.					
#" #"							

				PF
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age 1	067 of 1	140	DRAWN <u>JLK</u>	1
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CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

IRRIGATION SCHEDULE & NOTES

PROJECT NO 100054389 HEET: IR-19

IRRIGATION NOTES:

1. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED BY THE IRRIGATION ASSOCIATION AND SHALL BE ON SITE TO DIRECT ALL IRRIGATION CONSTRUCTION ACTIVITIES

2. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT ENGINEER. 3. PLANS ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. ALL EQUIPMENT SHALL BE INSTALLED IN PERVIOUS AREA (EXCEPT FOR SLEEVING) AND WITHIN THE

4. ALL IRRIGATION COMPONENTS AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, MANUFACTURER'S

5. THE QUANTITIES ARE SUMMARIZED FOR THE CONVENIENCE OF THE CONTRACTOR AND OF THE ENGINEER. THE IRRIGATION SYSTEM IS A LUMP SUM BID ITEM ALL INCLUSIVE OF LABOR AND MATERIALS REQUIRED FOR A COMPLETED AND TOTALLY FUNCTIONAL, 100% COVERAGE IRRIGATION SYSTEM, INCLUDING WATER AND

6. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

7. NO EXCAVATION SHALL TAKE PLACE UNTIL ALL EXISTING UTILITIES HAVE BEEN LOCATED ON SITE. CONTACT SUNSHINE STATE ONE CALL, TELEPHONE NUMBER 811, AND THE PUBLIC WORKS DEPARTMENT TWO BUSINESS DAYS PRIOR TO EXCAVATION.

8. ZONE LINES ARE DESIGNED TO PERFORM AT 40 PSI AT THE LAST HEAD FOR ROTARY SPRAY AND BUBBLER ZONES AND 30 PSI AT THE LAST HEAD FOR DRIP EMITTERS, APPROPRIATE PRESSURE REGULATING ITEMS SHALL BE INSTALLED AS NOTED IN THE PLANS.

9. ZONE LINE PIPING SHALL BE CLASS 200 PVC PLASTIC PIPE OR APPROVED EQUAL.

10, THE IRRIGATION MAIN LINE SHALL BE SCHEDULE 40 PVC INSTALLED 18" BELOW THE FINISHED GRADE AND 36" BELOW FINISHED GRADE OF ROADWAY, FINISHED GRADE SHALL BE 2" BELOW TOP OF CURB, ADJACENT PAVEMENT, AND/OR SURROUNDING GROUND.

11.IRRIGATION SLEEVE PIPING SHALL BE SCHEDULE 40 PVC FOR TRENCHES AND DR17 (100PSI) HDPE PIPE FOR DIRECTIONAL BORE ACTIVITIES. SLEEVE SHALL BE NO LESS THAN TWICE THE DIAMETER OF THE RECEIVING PIPE.

12, IRRIGATION LINES AND FITTINGS SHALL BE SOLVENT WELDED WITH E-2 WELD BLUE GLUE WITH WELD-ON P70 PURPLE PRIMER, OR APPROVED EQUALS,

13. ALL VALVES, FILTERS, GAUGES, ETC., SHALL BE ENCLOSED IN APPROVED VALVE BOXES OF APPROPRIATE SIZE. THESE ITEMS MUST BE EASILY ACCESSIBLE FOR SERVICING AND MAINTENANCE AFTER INSTALLATION OF THE LANDSCAPING. NO VALVE ENCLOSURES SHALL BE INSTALLED WITHIN A FENCED IN PLAYING SURFACE WITH THE EXCEPTION OF THE QUICK COUPLING VALVES FOR THE BASEBALL FIELDS.

14. INCLUDE INSTALLATION OF 30MIL, 12 AWG TRACER WIRE ALONG THE MAINLINE.

15.IRRIGATION CONTROL WIRE SHALL BE THERMOPLASTIC SOLID COPPER, SINGLE CONDUCTOR, LOW VOLTAGE, #12 IRRIGATION CONTROL WIRE AND #10 WHITE COMMON WIRE SUITABLE FOR DIRECT BURIAL AND CONTINUOUS OPERATION AT RATED VOLTAGES. MAKE ELECTRICAL CONNECTIONS WITH IRRIGATION GRADE, WATERPROOF CONNECTORS. NUMBER WIRES IN ALL VALVE BOXES, JUNCTION BOXES AND AT THE CONTROLLER. PROVIDE TWO EXTRA SPARE WIRES TO THE LAST VALVE IN EACH DIRECTION.

16. CONTRACTOR SHALL INCLUDE THE COST OF DRILLING AND STABILIZING NEW WELLS AS CALLED OUT IN THE PLANS.

17. FLUSH ALL LINES FOR A MINIMUM OF TEN MINUTES.

18. AFTER THE SATISFACTORY COMPLETION OF THE MAIN, AND BEFORE BACKFILLING, THE MAIN SHALL BE FILLED WITH WATER AND TESTED FOR PRESSURE AT THE WORKING PRESSURE WITH GAUGES AT OPPOSITE ENDS OF THE SYSTEM, MONITOR FOR TWO HOURS, THERE CAN BE NO PRESSURE LOSS, ALSO EACH ZONE SHALL BE VISUALLY TESTED FOR LEAKAGE.

19. ALL EXISTING IRRIGATION, INCLUDING ADJACENT SYSTEMS THAT MAY SHARE A WATER SOURCE. SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT NEW IRRIGATION MAIN INSTALLATION DOES NOT DISRUPT EXISTING IRRIGATION ACTIVITIES THROUGHOUT THE PROJECT AREA.

20.IRRIGATION SYSTEM SHALL BE OPERABLE FOR A MINIMUM OF 48 HOURS PRIOR TO THE LAYING OF SOD. GROUND SHALL BE THOROUGHLY SATURATED PRIOR TO

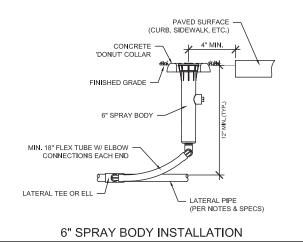
21.IF ANY COMPONENT OF THE IRRIGATION SYSTEM IS BROKEN DURING CONSTRUCTION, THE IRRIGATION CONTRACTOR WILL BE NOTIFIED IMMEDIATELY. THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY MAKE ALL NECESSARY REPAIRS TO THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL BE AWARE OF ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA AND ENSURE THAT NO EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEM SHALL BE FULLY REPAIRED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FULLY COMPENSATED FOR SUCH REPAIRS BY THOSE RESPONSIBLE FOR THE DAMAGE.

22.AT THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE:
- CUT SHEETS OF ALL IRRIGATION EQUIPMENT TO BE PROVIDED

- A UNIT COST BREAKDOWN OF PROPOSED IRRIGATION MATERIALS TO BE INSTALLED - AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE

23.BEFORE THE IRRIGATION IS ACCEPTED THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORGANIZING AN OPERATIONAL TRAINING SESSION WITH TOWN STAFF IN THE FIELD. THIS MEETING WILL INFORM THE TOWN'S MAINTENANCE STAFF OF THE SYSTEM COMPONENTS AND FUNCTIONALITY

24.UPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL, MAINTENANCE SCHEDULES, WARRANTIES, AS-BUILTS, IRRIGATION WELL PERMITS AND CONDITIONS, AND ANY OTHER PERTINENT INFORMATION ABOUT THE SYSTEM.



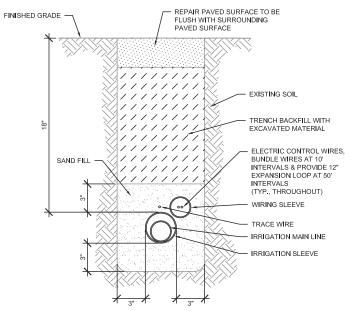
FOR USE WITH ALL NOZZLES (SPRAY, BUBBLER, ROTARY) N.T.S.

SEE HARDSCAPE PLANS FOR TREE PIT -AND ROOT CELL INSTALLATION DETAILS 4" MIN. FINISHED GRADE ROOT ZONE WATER - LATERAL PIPE (PER NOTES & SPECS) **ROOT ZONE WATER SYSTEM**

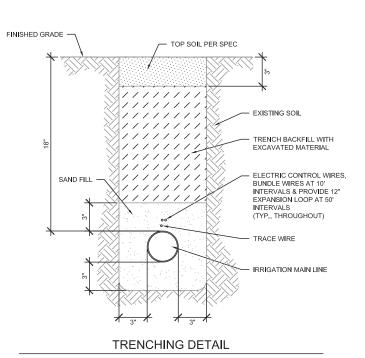
FLOOD BUBBLER NOZZLE -FINISHED GRADE MIN. 18" FLEX TUBE W/ ELBOW CONNECTIONS EACH END LATERAL TEE OR ELL -LATERAL PIPE -(PER NOTES & SPECS) FLOOD BUBBLER INSTALLATION DECORATIVE LANDSCAPE -PLANTER (BY OTHERS) FINISHED GRADE -DRIP TUBING 7 **9** LATERAL PIPE -

DRIP EMITTER

LANDSCAPE PLANTER DRIP IRRIGATION



TRENCHING THROUGH PAVED SURFACE DETAIL

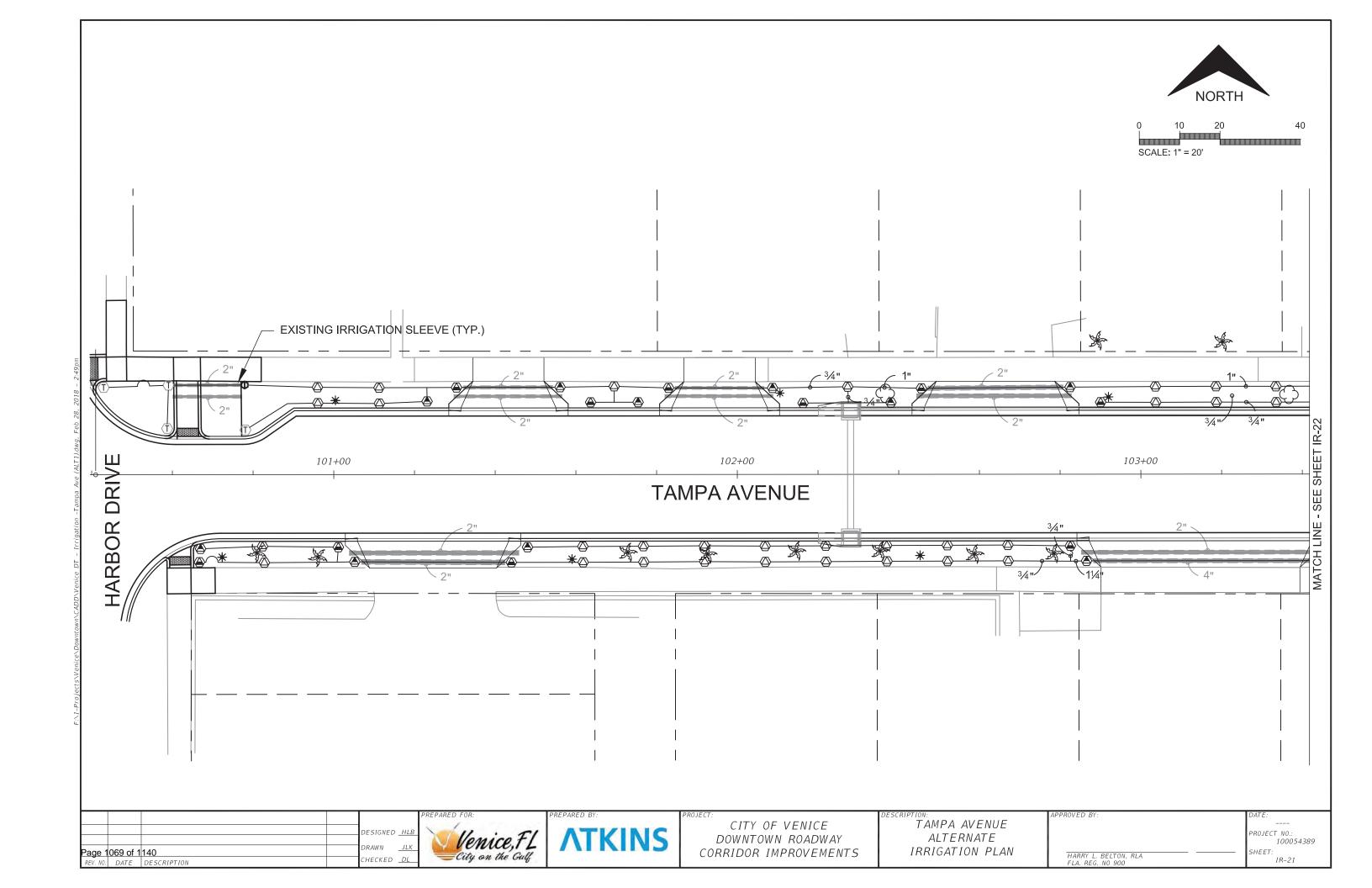


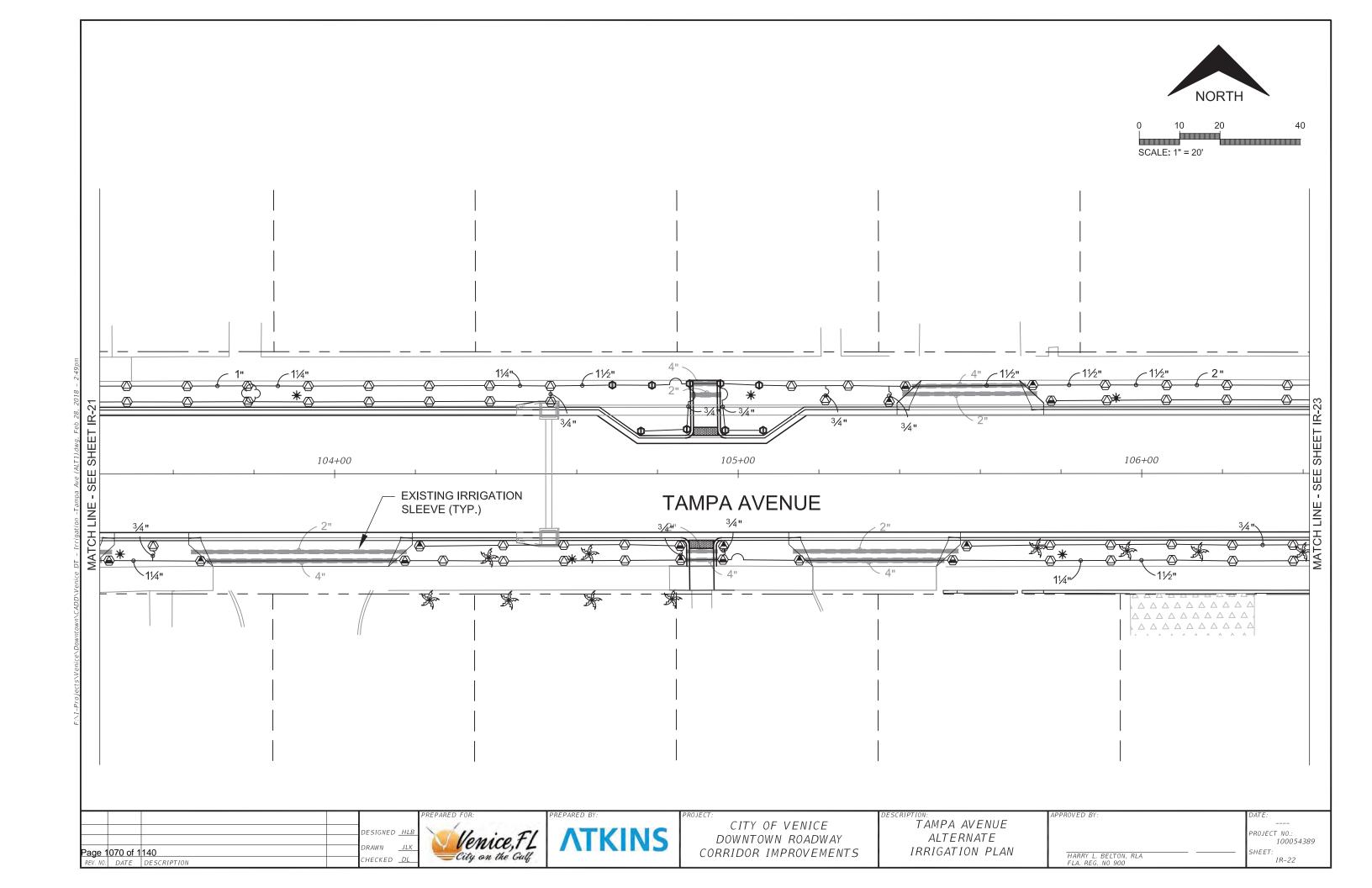
N.T.S.

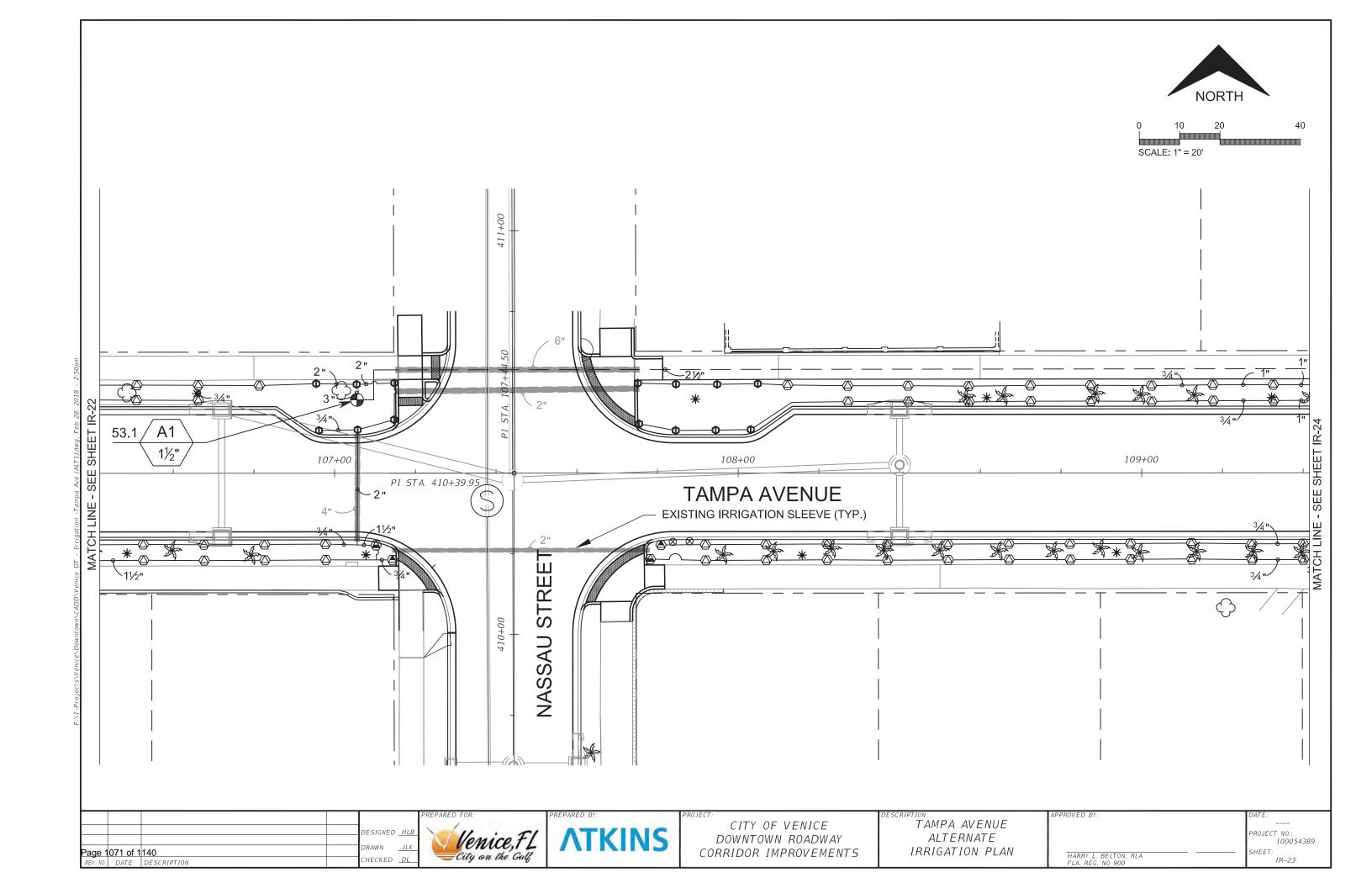
MIN. 18" COILED WIRE, EACH WIRE MOUNT VALVE BOX AS SHOWN; TURF: 1" REVEAL, SHRUBS: 2" REVEAL WATERPROOF CONNECTORS FINISHED GRADE W/ POSITIVE SLOPE AWAY FROM BOX COVER VALVE BOX MARKED "IRRIGATION", MIN. 21" X 16" X 12" DEEP] 7/K/9/K - REMOTE CONTROL VALVE LATERAL PIPE -(PER NOTES & SPECS) TO SPRINKLERS BRICK SUPPORTS (4 PER BOX, ONE PER CORNER) MAIN LINE PIPE (PER NOTES & SPECS) ELECTRIC CONTROL WIRES, BUNDLE WIRES AT 10' INTERVALS & PROVIDE 12" EXPANSION LOOP AT 50' INTERVALS (TYP., THROUGHOUT) 3/4" CRUSHED GRAVEL

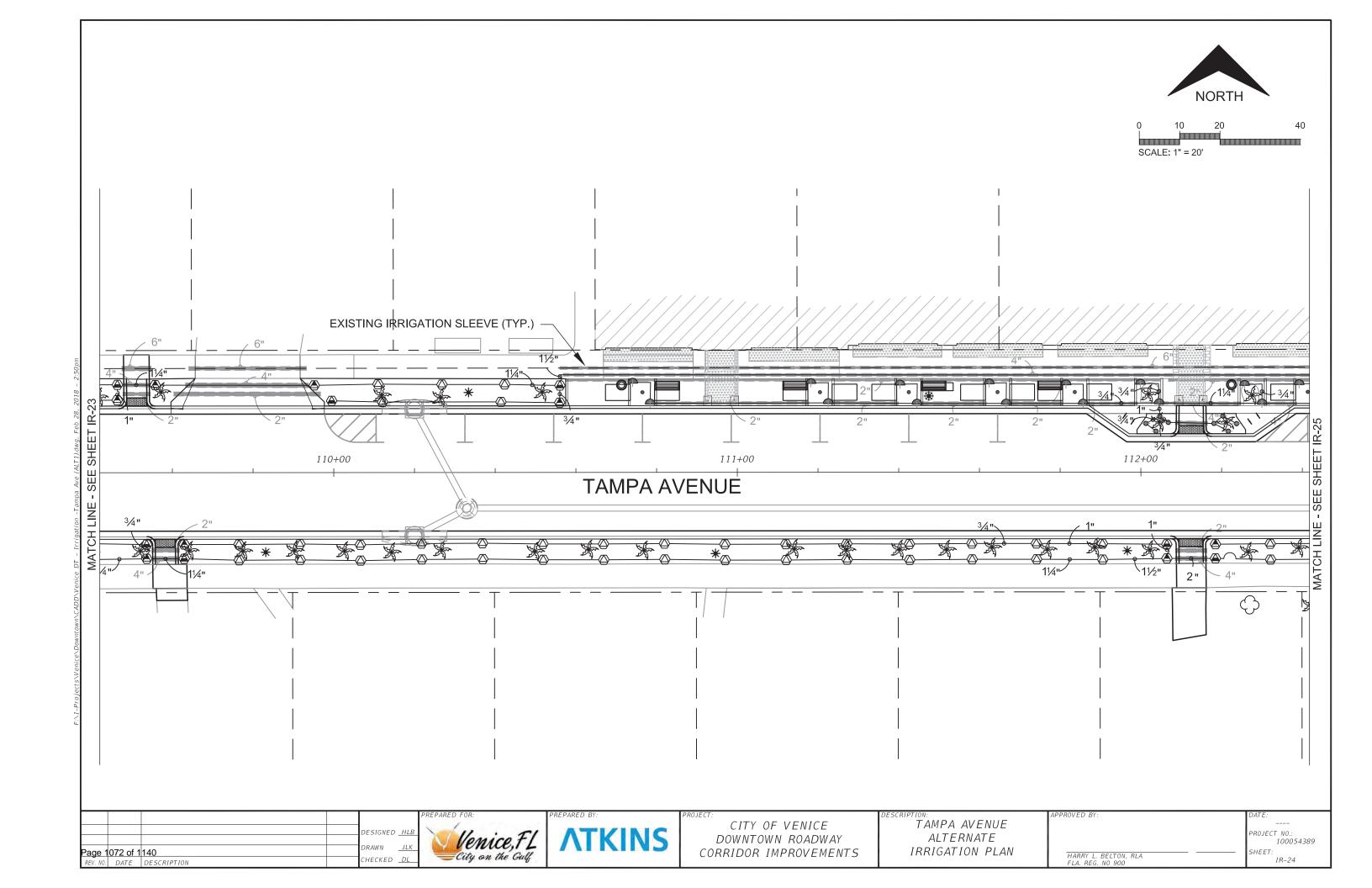
REMOTE CONTROL VALVE INSTALLATION

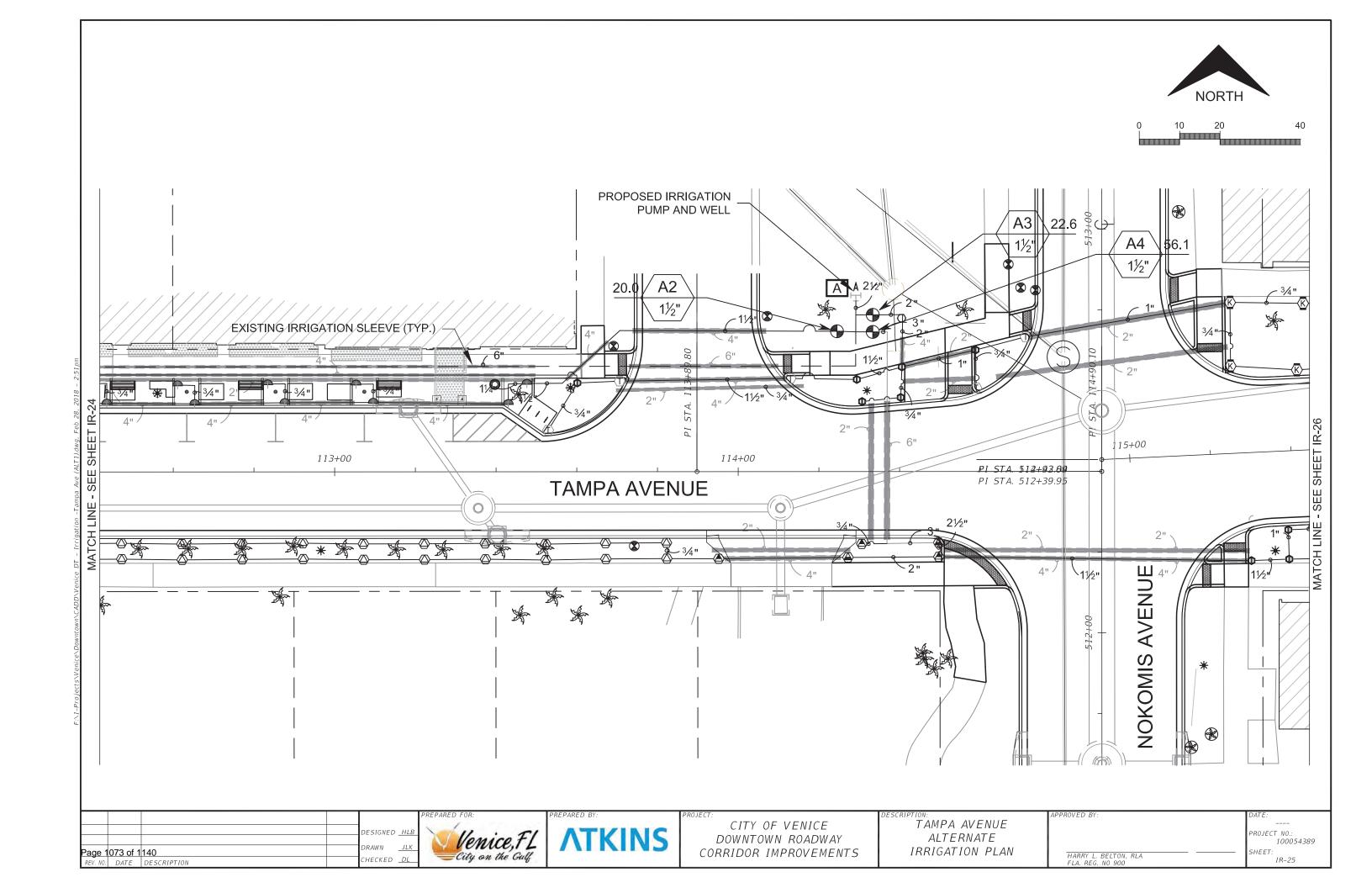
		PREPARED FOR:	PREPARED BY:	PROJECT:	DESCRIPTION:	APPROVED BY:	DATE:
				CITY OF VENICE			
	DESIGNED HLB	11 . 01	ATIVIDIC	•			PROJECT NO:
		Venice,FL		DOWNTOWN ROADWAY	IRRIGATION DETAILS		100054389
	DRAWN JLK	venue, L		•			100034389
Page 1068 of 1140		City on the Gulf		CORRIDOR IMPROVEMENTS		HARRY L. BELTON, RLA	SHEET:
REV. NO. DATE DESCRIPTION	CHECKED <u>DL</u>	- city on the out				FLA. REG. NO 900	IR-20

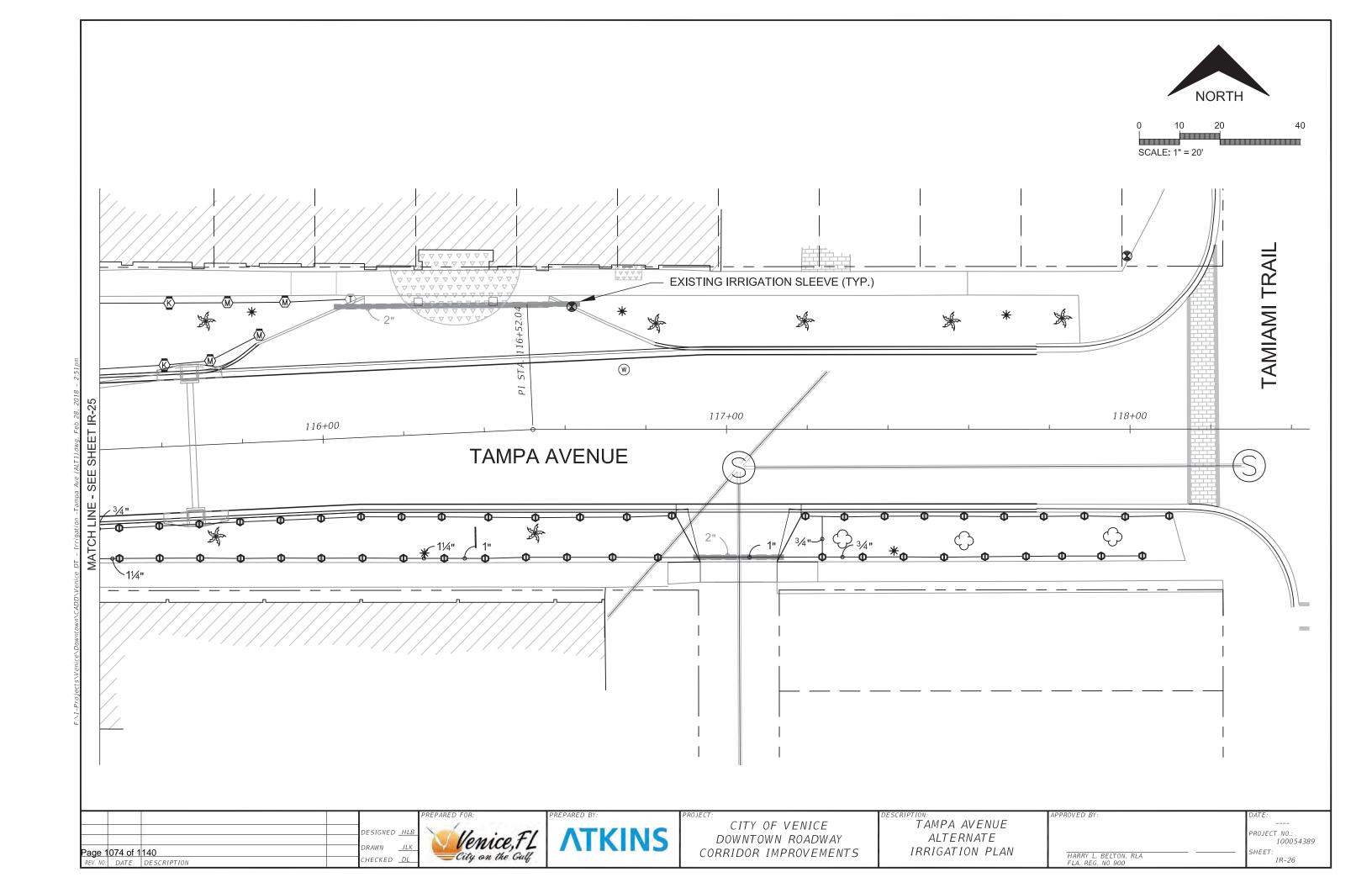












IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	<u>ARC</u>	<u>PSI</u>	<u>GPM</u>	RADIUS	
₩	Hunter MP1000 PROS-06-PRS40-CV	4	90-210	40		14'	
৷	Hunter MP2000 PROS-06-PRS40-CV	6	90-210	40		19'	
Φ	Hunter MP800SR PROS-06-PRS40-CV	80	Adj	40		10'	
$\langle \overline{\mathtt{T}} \rangle$	Hunter MP Corner PROS-06-PRS40-CV	10	Adj	40		13'	
	Hunter MP Strip PROS-06-PRS40-CV	28	LCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	31	RCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	184	SST	40	0.44	5'x30'	
•	Hunter PROS-PRS30-06-CV-MSBN	8	180	30	1.00	3'	
•	Hunter RZWS-SLEEVE-18-CV	24	360	30	0.50	3'	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION Hunter ICV-G	QTY 4					<u>DETAIL</u>
	1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.						
А	Rain Bird ESP8LXME See existing and/or proposed irrigation pump for Controller.	1					
A L	Tampa Ave. Irrigation Pump	1					
	Irrigation Lateral Line: CPVC Schedule 40	5,958 l.f.					
	Irrigation Mainline: CPVC Schedule 40 ve Callout	761.6 l.f.					
# #							
#"	— Valve Size						

				PRI
				1
			DESIGNED <u>HLB</u>	
			DRAWN JLK	ш
⊇age 1	075 of 1	140		1
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CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

TAMPA AVENUE
ALTERNATE
IRRIG SCHEDULE & NOTES

TES APPROVE

ED BY:

PROJECT NO.

HEET:

100054389

IR-27

HARRY L. BELTON, RLA FLA. REG. NO 900

IRRIGATION NOTES:

- 1. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED BY THE IRRIGATION ASSOCIATION AND SHALL BE ON SITE TO DIRECT ALL IRRIGATION CONSTRUCTION ACTIVITIES.
- 2. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT ENGINEER.
- 3. PLANS ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. ALL EQUIPMENT SHALL BE INSTALLED IN PERVIOUS AREA (EXCEPT FOR SLEEVING) AND WITHIN THE RIGHT OF WAY.
- 4. ALL IRRIGATION COMPONENTS AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND CONTRACT SPECIFICATIONS
- 5. THE QUANTITIES ARE SUMMARIZED FOR THE CONVENIENCE OF THE CONTRACTOR AND OF THE ENGINEER. THE IRRIGATION SYSTEM IS A LUMP SUM BID ITEM ALL INCLUSIVE OF LABOR AND MATERIALS REQUIRED FOR A COMPLETED AND TOTALLY FUNCTIONAL, 100% COVERAGE IRRIGATION SYSTEM, INCLUDING WATER AND ELECTRICAL SERVICE CONNECTIONS.
- 6. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.
- 7. NO EXCAVATION SHALL TAKE PLACE UNTIL ALL EXISTING UTILITIES HAVE BEEN LOCATED ON SITE. CONTACT SUNSHINE STATE ONE CALL, TELEPHONE NUMBER 811, AND THE PUBLIC WORKS DEPARTMENT TWO BUSINESS DAYS PRIOR TO EXCAVATION.
- 8. ZONE LINES ARE DESIGNED TO PERFORM AT 40 PSI AT THE LAST HEAD FOR ROTARY SPRAY AND BUBBLER ZONES AND 30 PSI AT THE LAST HEAD FOR DRIP EMITTERS. APPROPRIATE PRESSURE REGULATING ITEMS SHALL BE INSTALLED AS NOTED IN THE PLANS.
- 9. ZONE LINE PIPING SHALL BE CLASS 200 PVC PLASTIC PIPE OR APPROVED EQUAL
- 10. THE IRRIGATION MAIN LINE SHALL BE SCHEDULE 40 PVC INSTALLED 18" BELOW THE FINISHED GRADE AND 36" BELOW FINISHED GRADE OF ROADWAY. FINISHED GRADE SHALL BE 2" BELOW TOP OF CURB, ADJACENT PAVEMENT, AND/OR SURROUNDING GROUND.
- 11, IRRIGATION SLEEVE PIPING SHALL BE SCHEDULE 40 PVC FOR TRENCHES AND DR17 (100PSI) HDPE PIPE FOR DIRECTIONAL BORE ACTIVITIES, SLEEVE SHALL BE NO LESS THAN TWICE THE DIAMETER OF THE RECEIVING PIPE.
- 12.IRRIGATION LINES AND FITTINGS SHALL BE SOLVENT WELDED WITH E-2 WELD BLUE GLUE WITH WELD-ON P70 PURPLE PRIMER. OR APPROVED EQUALS.
- 13. ALL VALVES, FILTERS, GAUGES, ETC., SHALL BE ENCLOSED IN APPROVED VALVE BOXES OF APPROPRIATE SIZE. THESE ITEMS MUST BE EASILY ACCESSIBLE FOR SERVICING AND MAINTENANCE AFFER INSTALLATION OF THE LANDSCAPING. NO VALVE ENCLOSURES SHALL BE INSTALLED WITHIN A FENCED IN PLAYING SURFACE WITH THE EXCEPTION OF THE QUICK COUPLING VALVES FOR THE BASEBALL FIELDS.
- 14.INCLUDE INSTALLATION OF 30MIL, 12 AWG TRACER WIRE ALONG THE MAINLINE.
- 15.IRRIGATION CONTROL WIRE SHALL BE THERMOPLASTIC SOLID COPPER, SINGLE CONDUCTOR, LOW VOLTAGE, #12 IRRIGATION CONTROL WIRE AND #10 WHITE COMMON WIRE SUITABLE FOR DIRECT BURIAL AND CONTINUOUS OPERATION AT RATED VOLTAGES. MAKE ELECTRICAL CONNECTIONS WITH IRRIGATION GRADE, WATERPROOF CONNECTORS. NUMBER WIRES IN ALL VALVE BOXES, JUNCTION BOXES AND AT THE CONTROLLER. PROVIDE TWO EXTRA SPARE WIRES TO THE LAST VALVE IN EACH DIRECTION.
- 16. CONTRACTOR SHALL INCLUDE THE COST OF DRILLING AND STABILIZING NEW WELLS AS CALLED OUT IN THE PLANS.
- 17.FLUSH ALL LINES FOR A MINIMUM OF TEN MINUTES.
- 18. AFTER THE SATISFACTORY COMPLETION OF THE MAIN, AND BEFORE BACKFILLING, THE MAIN SHALL BE FILLED WITH WATER AND TESTED FOR PRESSURE AT THE WORKING PRESSURE WITH GAUGES AT OPPOSITE ENDS OF THE SYSTEM. MONITOR FOR TWO HOURS, THERE CAN BE NO PRESSURE LOSS, ALSO EACH ZONE SHALL BE VISUALLY TESTED FOR LEAKAGE
- 19. ALL EXISTING IRRIGATION, INCLUDING ADJACENT SYSTEMS THAT MAY SHARE A WATER SOURCE, SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
 CONTRACTOR SHALL ENSURE THAT NEW IRRIGATION MAIN INSTALLATION DOES NOT DISRUPT EXISTING IRRIGATION ACTIVITIES THROUGHOUT THE PROJECT AREA.
- 20.IRRIGATION SYSTEM SHALL BE OPERABLE FOR A MINIMUM OF 48 HOURS PRIOR TO THE LAYING OF SOD. GROUND SHALL BE THOROUGHLY SATURATED PRIOR TO THE LAYING OF SOD.
- 21.JF ANY COMPONENT OF THE IRRIGATION SYSTEM IS BROKEN DURING CONSTRUCTION, THE IRRIGATION CONTRACTOR WILL BE NOTIFIED IMMEDIATELY. THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY MAKE ALL NECESSARY REPAIRS TO THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL BE AWARE OF ANY EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEM SHALL BE FULLY REPAIRED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE FULLY COMPENSATED FOR SUCH REPAIRS BY THOSE RESPONSIBLE FOR THE DAMAGE.
- 22.AT THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE:
 - CUT SHEETS OF ALL IRRIGATION EQUIPMENT TO BE PROVIDED
 - A UNIT COST BREAKDOWN OF PROPOSED IRRIGATION MATERIALS TO BE INSTALLED AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE
- AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE
- 23.BEFORE THE IRRIGATION IS ACCEPTED THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORGANIZING AN OPERATIONAL TRAINING SESSION WITH TOWN STAFF IN THE FIELD. THIS MEETING WILL INFORM THE TOWN'S MAINTENANCE STAFF OF THE SYSTEM COMPONENTS AND FUNCTIONALITY.

 24 LIPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL MAINTENANCE SCHEDULES WARRANTIES AS-BUILTS.
- 24.UPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL, MAINTENANCE SCHEDULES, WARRANTIES, AS-BUILTS, IRRIGATION WELL PERMITS AND CONDITIONS, AND ANY OTHER PERTINENT INFORMATION ABOUT THE SYSTEM.

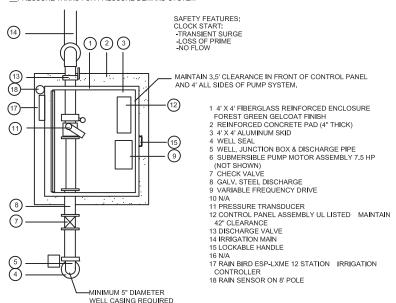
NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROOVE FITTINGS. PUMP DROP PIPE SHALL BE HDPE HEAT FUSED. SET PUMP 60° ON 2" PIPE. INSTALL MOTOR CABLE SPLICE BETWEEN MOTOR AND CONTROL PANEL IN NEMA 4X JUNCTION BOX ADJACENT TO WELL IN ACCORDANCE WITH ELECTRICAL CODES.

WELL DRILLER SHALL NOTIFY THE PUMP SYSTEM MANUFACTURER IN WRITING WITHIN 24 HOURS OF DEVELOPING THE WELL IF THE WELL PUMPING LEVEL IS GREATER THAN 50' BELOW FINISHED GRADE AFTER 8 HOURS OF CONTINUOUS PUMPING AT 150% OF THE

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF PUMP SYSTEM

* OPTIONAL FEATURES ARE INCLUDED IF MARKED WITH AN "X"

 $\rm X$ IRRIGATION CONTROLLER RAIN BIRD ESP-LXME 12 STATIONS, WITH RAIN SENSOR ON 8' POLE __PRESSURE TANKS FOR PRESSURE DEMAND SYSTEM



PLAN VIEW NTS

ELECTRIC SERVICE TO BE. IN ORDER OF PREFERENCE: 460V 3-PHASE. 230V CLOSED-DELTA 3-PHASE, 208 WYE 3-PHASE, 230 1-PHASE, 208V 1-PHASE, 230 OPEN-DELTA 3-PHASE.

PUMP PERFORMANCE 55 GPM @ 195 TDH, 60 PSI DISCHARGE PRESSURE

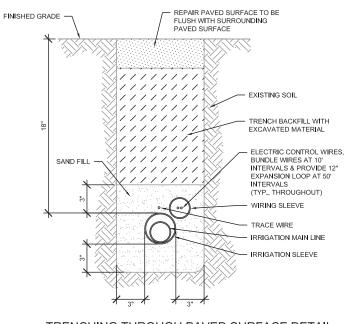
HOOVER PUMPING MODEL: HSF-7.5CSV-230/3-E-12,W,Z

Pompano Beach, Florida, Tel: 954-971-7350

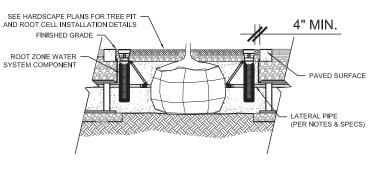
CITY OF VENICE TAMPA AVE PUMP STATION

SUBMERSIBLE PUMP SYSTEM DETAIL FIBERGLASS ENCLOSED SINGLE WELL SUCTION VARIABLE FREQUENCY DRIVE (VFD) CLOCK START HOOVER GREEN

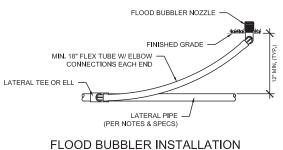


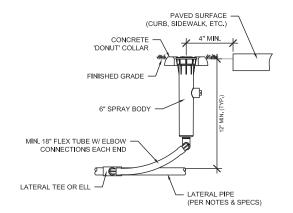






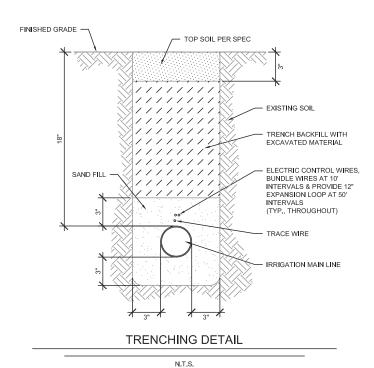
ROOT ZONE WATER SYSTEM

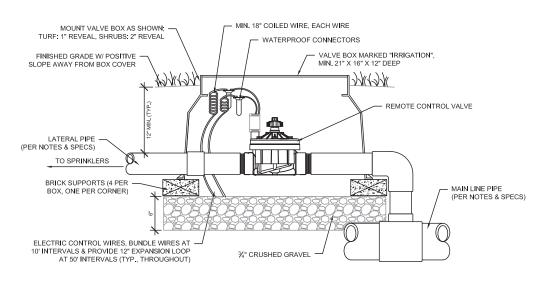




6" SPRAY BODY INSTALLATION

FOR USE WITH ALL NOZZLES (SPRAY, BUBBLER, ROTARY) N.T.S.





REMOTE CONTROL VALVE INSTALLATION

N.T.S.

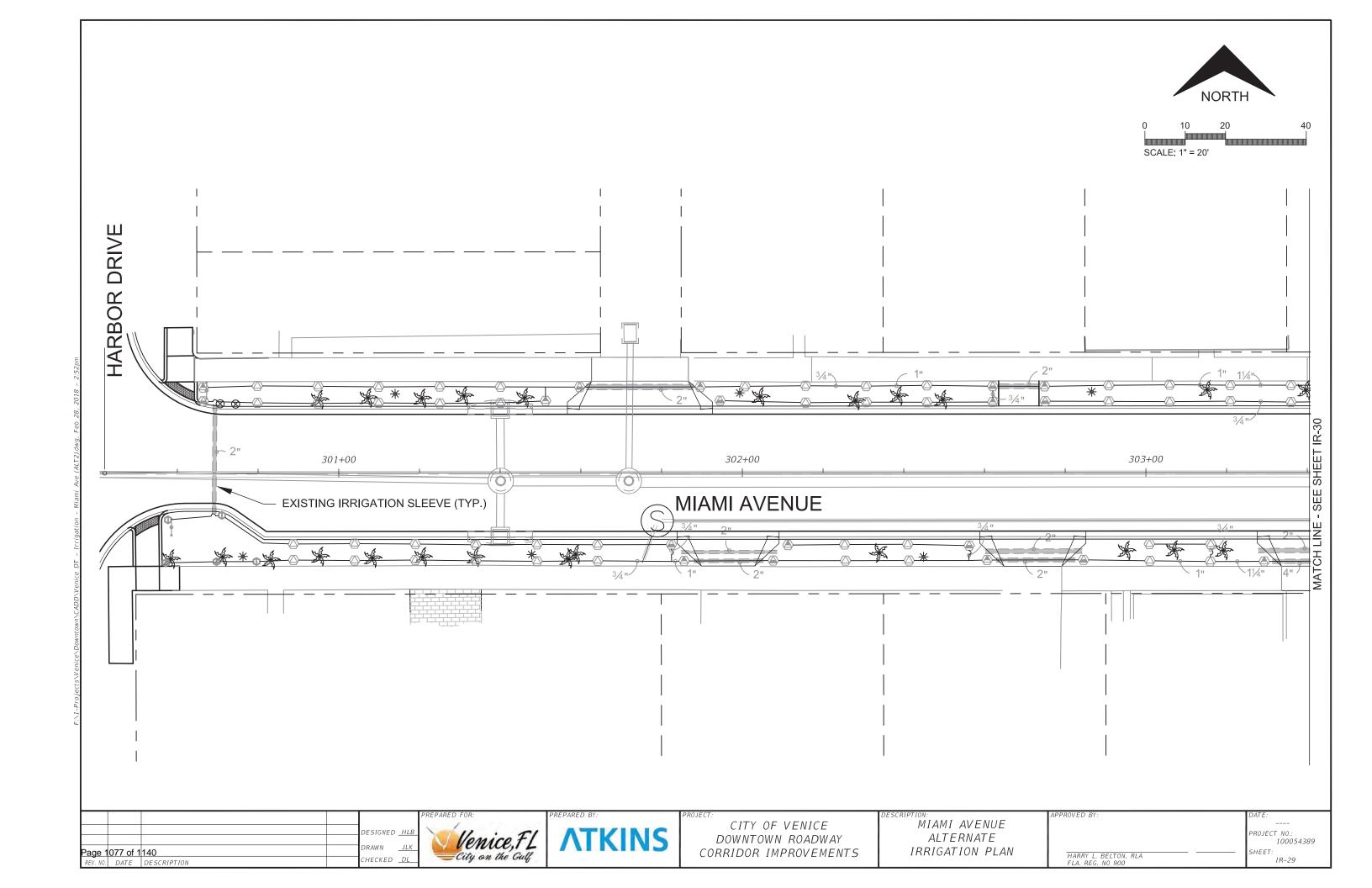
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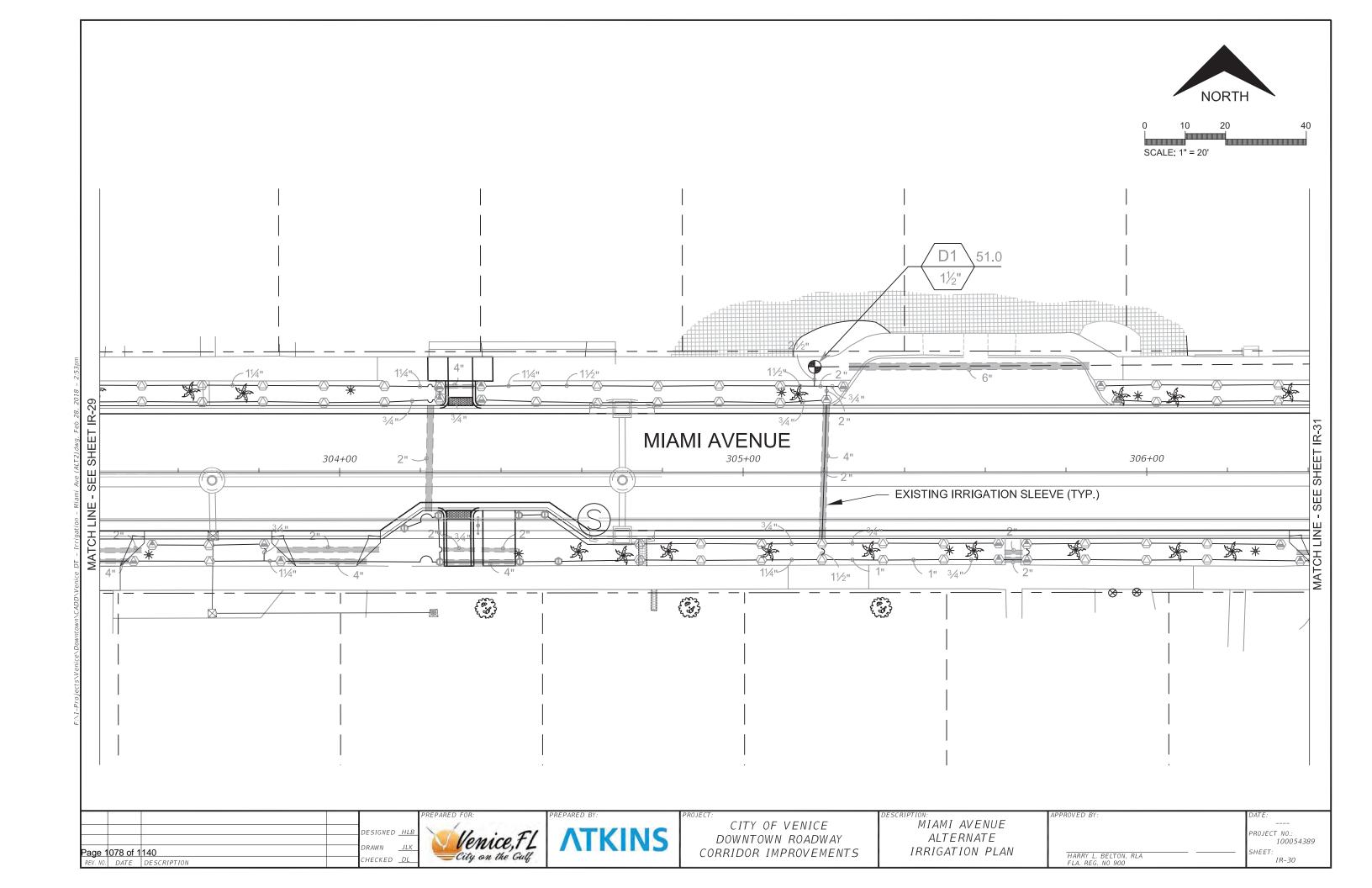
Venice,FL City on the Gulf

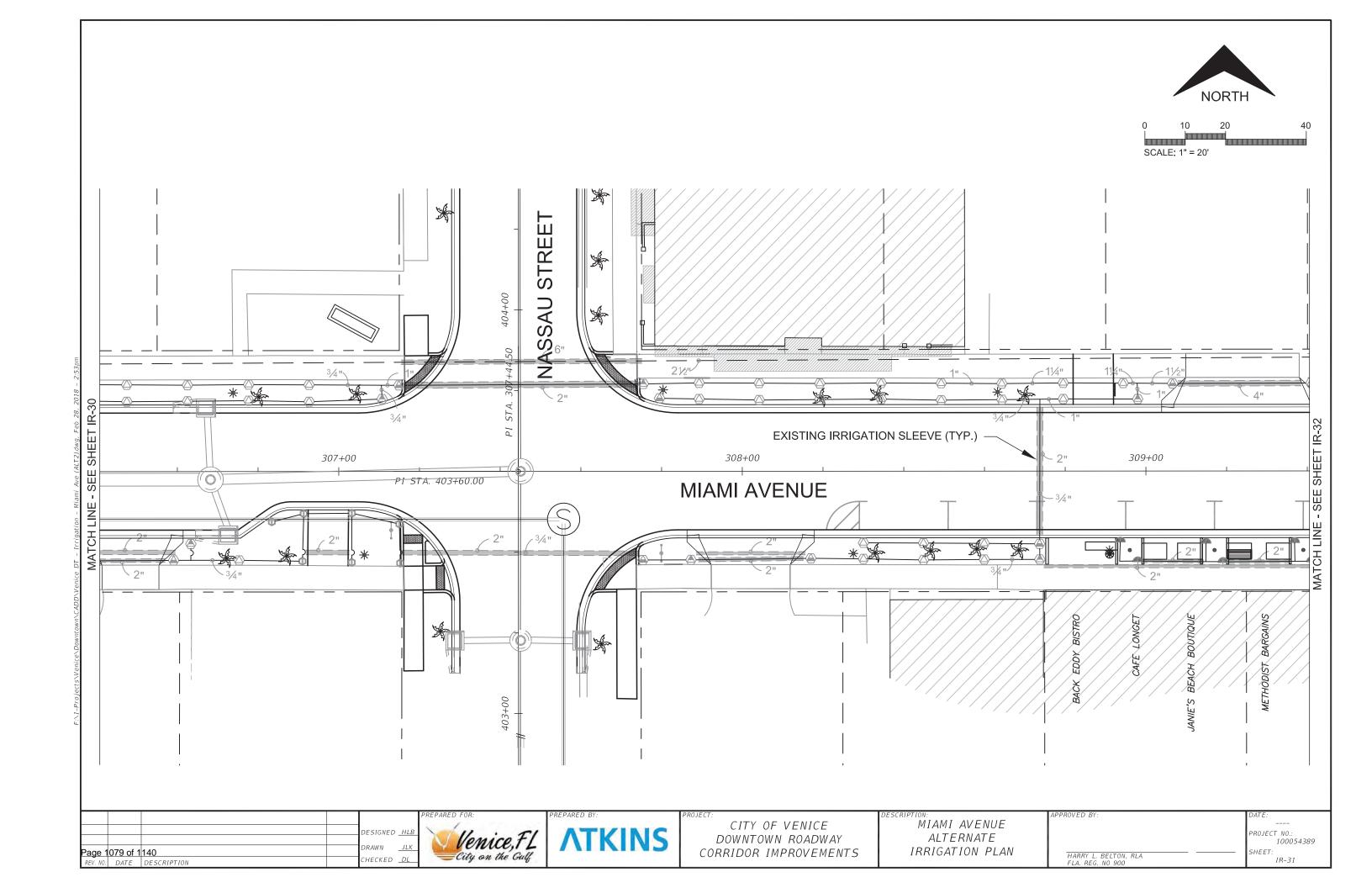
CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

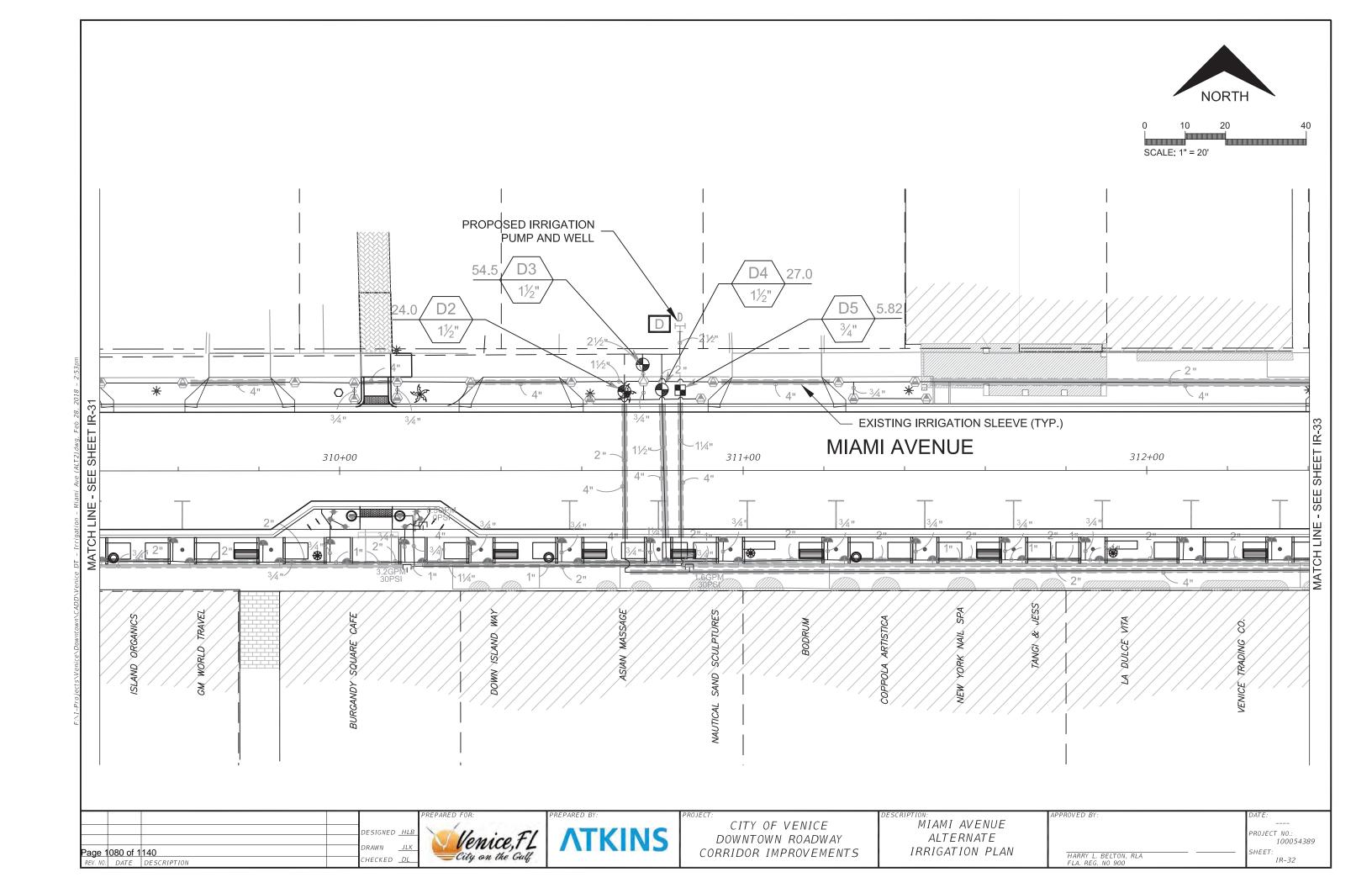
TAMPA AVENUE ALTERNATE IRRIGATION DETAILS

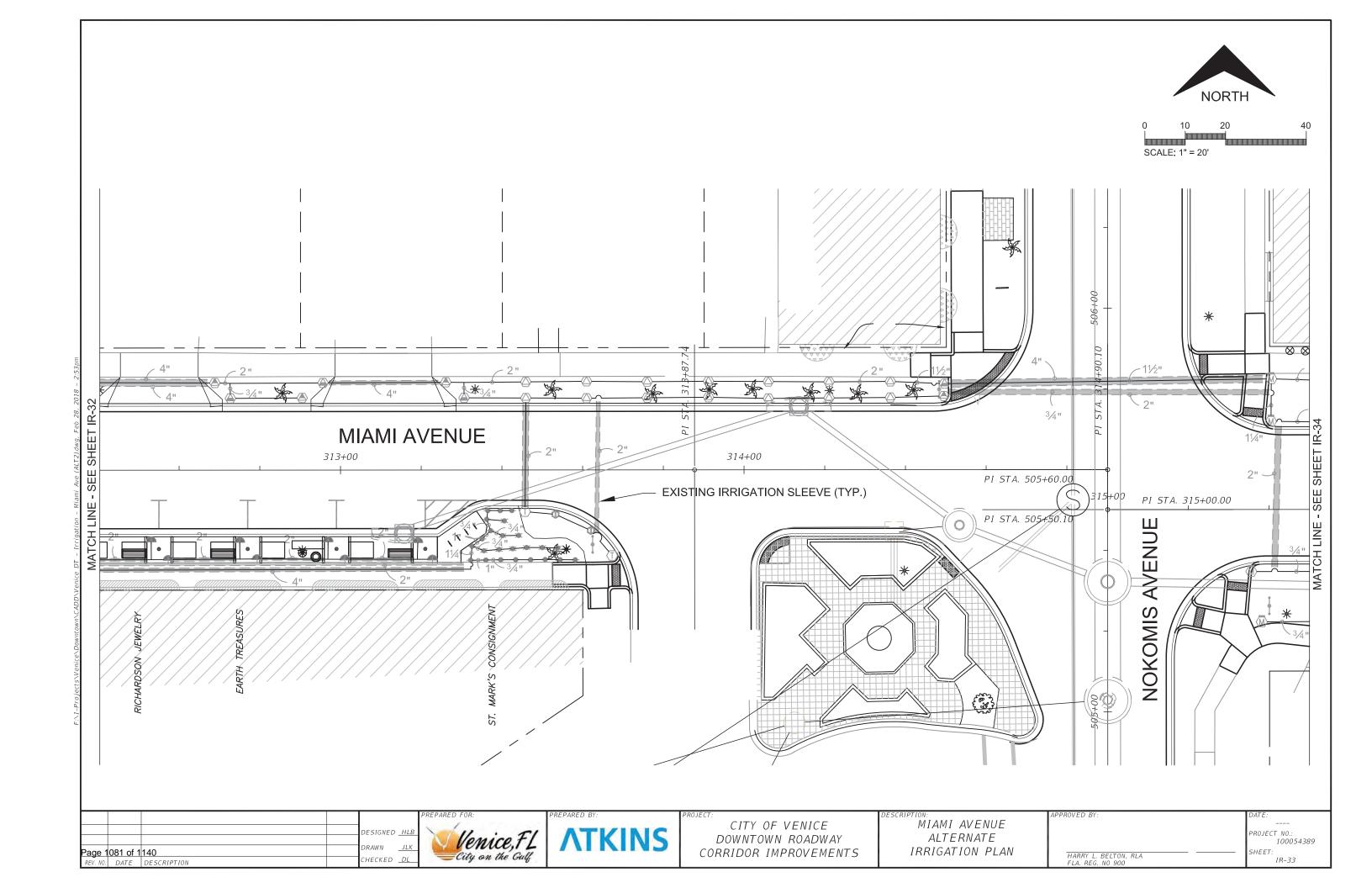
PROJECT NO. 100054389 HEET: HARRY L. BELTON, RLA FLA. REG. NO 900 IR-28

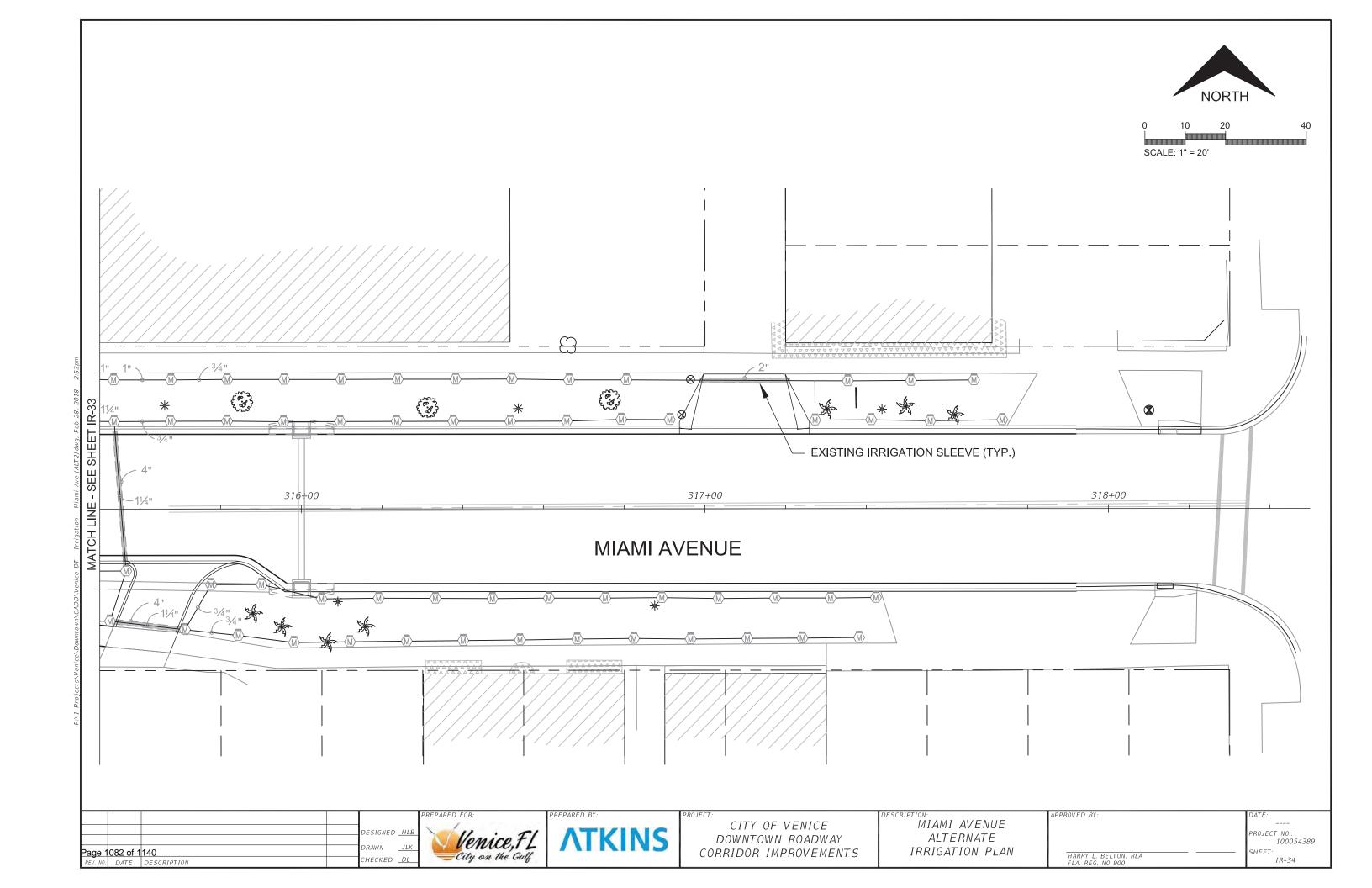












IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	<u>ARC</u>	<u>PSI</u>	<u>GPM</u>	RADIUS	
₩	Hunter MP1000 PROS-06-PRS40-CV	60	90-210	40		14'	
Φ	Hunter MP800SR PROS-06-PRS40-CV	21	Adj	40		10'	
$\langle \overline{\mathtt{T}} \rangle$	Hunter MP Corner PROS-06-PRS40-CV	2	Adj	40		13'	
	Hunter MP Strip PROS-06-PRS40-CV	37	LCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	36	RCS	40	0.22	5'x15'	
	Hunter MP Strip PROS-06-PRS40-CV	136	SST	40	0.44	5'x30'	
X	Hunter PROS-PRS30-06-CV-MSBN	9	360	30	1.00	3'	
•	Hunter PROS-PRS30-06-CV-MSBN	21	180	30	1.00	3'	
~	Hunter RZWS-SLEEVE-18-CV	42	360	30	0.50	3'	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY					
6	Hunter ACZ-075-25 Drip control kit featuring a 3/4" PGV-ASV valve, with 3/4" HY075 filter system, and 25psi pressure regulated. Flow range: 0.5 GPM to 15 GPM. With 150 mesh stainless steel screen.	1					
•	Hunter SD-B-STK Drip 360 Micro Spray for Residential/Commercial Use. Eight streams of water, with 360 degree spray. 15psi to 30psi. Solo-Drip with Barb and 6" Stake.	2					
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY					DETAIL
•	Hunter ICV-G 1", 1-1/2", 2", and 3" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use.	4					
D	Rain Bird ESP8LXME See existing and/or proposed irrigation pump for Controller.	1					
D I	Miami Ave. Irrigation Pump	1					
	Irrigation Lateral Line: CPVC Schedule 40	5,802 l.f.					
# #	Irrigation Mainline: CPVC Schedule 40 ve Callout Valve Number Valve Flow	603.1 I.f.					
#"•/	Valve Size						

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CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

MIAMI AVENUE ALTERNATE *IRRIG SCHEDULE & NOTES*

PROJECT NO. 100054389

HEET:

IR-35

17 FLUSH ALL LINES FOR A MINIMUM OF TEN MINUTES.

IRRIGATION NOTES:

RECOMMENDATIONS AND CONTRACT SPECIFICATIONS.

LESS THAN TWICE THE DIAMETER OF THE RECEIVING PIPE.

6. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

AND THE PUBLIC WORKS DEPARTMENT TWO BUSINESS DAYS PRIOR TO EXCAVATION.

GRADE SHALL BE 2" BELOW TOP OF CURB, ADJACENT PAVEMENT, AND/OR SURROUNDING GROUND.

16.CONTRACTOR SHALL INCLUDE THE COST OF DRILLING AND STABILIZING NEW WELLS AS CALLED OUT IN THE PLANS.

9. ZONE LINE PIPING SHALL BE CLASS 200 PVC PLASTIC PIPE OR APPROVED EQUAL

14.INCLUDE INSTALLATION OF 30MIL, 12 AWG TRACER WIRE ALONG THE MAINLINE.

- 18.AFTER THE SATISFACTORY COMPLETION OF THE MAIN, AND BEFORE BACKFILLING, THE MAIN SHALL BE FILLED WITH WATER AND TESTED FOR PRESSURE AT THE WORKING PRESSURE WITH GAUGES AT OPPOSITE ENDS OF THE SYSTEM. MONITOR FOR TWO HOURS. THERE CAN BE NO PRESSURE LOSS, ALSO EACH ZONE SHALL
- 19. ALL EXISTING IRRIGATION, INCLUDING ADJACENT SYSTEMS THAT MAY SHARE A WATER SOURCE, SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. ONTRACTOR SHALL ENSURE THAT NEW IRRIGATION MAIN INSTALLATION DOES NOT DISRUPT EXISTING IRRIGATION ACTIVITIES THROUGHOUT THE PROJECT AREA.

1. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED BY THE IRRIGATION ASSOCIATION AND SHALL BE ON SITE TO DIRECT ALL IRRIGATION CONSTRUCTION 2. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW. NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT ENGINEER. 3. PLANS ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY, ALL EQUIPMENT SHALL BE INSTALLED IN PERVIOUS AREA (EXCEPT FOR SLEEVING) AND WITHIN THE

4. ALL IRRIGATION COMPONENTS AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, MANUFACTURER'S

5. THE QUANTITIES ARE SUMMARIZED FOR THE CONVENIENCE OF THE CONTRACTOR AND OF THE ENGINEER. THE IRRIGATION SYSTEM IS A LUMP SUM BID ITEM ALL INCLUSIVE OF LABOR AND MATERIALS REQUIRED FOR A COMPLETED AND TOTALLY FUNCTIONAL, 100% COVERAGE IRRIGATION SYSTEM, INCLUDING WATER AND ELECTRICAL SERVICE CONNECTIONS.

7. NO EXCAVATION SHALL TAKE PLACE UNTIL ALL EXISTING UTILITIES HAVE BEEN LOCATED ON SITE. CONTACT SUNSHINE STATE ONE CALL, TELEPHONE NUMBER 811,

8. ZONE LINES ARE DESIGNED TO PERFORM AT 40 PSI AT THE LAST HEAD FOR ROTARY SPRAY AND BUBBLER ZONES AND 30 PSI AT THE LAST HEAD FOR DRIP EMITTERS. APPROPRIATE PRESSURE REGULATING ITEMS SHALL BE INSTALLED AS NOTED IN THE PLANS.

12.IRRIGATION LINES AND FITTINGS SHALL BE SOLVENT WELDED WITH E-2 WELD BLUE GLUE WITH WELD-ON P70 PURPLE PRIMER, OR APPROVED EQUALS.

10.THE IRRIGATION MAIN LINE SHALL BE SCHEDULE 40 PVC INSTALLED 18" BELOW THE FINISHED GRADE AND 36" BELOW FINISHED GRADE OF ROADWAY, FINISHED

11,IRRIGATION SLEEVE PIPING SHALL BE SCHEDULE 40 PVC FOR TRENCHES AND DR17 (100PSI) HDPE PIPE FOR DIRECTIONAL BORE ACTIVITIES, SLEEVE SHALL BE NO

13.ALL VALVES, FILTERS, GAUGES, ETC., SHALL BE ENCLOSED IN APPROVED VALVE BOXES OF APPROPRIATE SIZE. THESE ITEMS MUST BE EASILY ACCESSIBLE FOR SERVICING AND MAINTENANCE AFTER INSTALLATION OF THE LANDSCAPING, NO VALVE ENCLOSURES SHALL BE INSTALLED WITHIN A FENCED IN PLAYING SURFACE WITH THE EXCEPTION OF THE QUICK COUPLING VALVES FOR THE BASEBALL FIELDS.

15.IRRIGATION CONTROL WIRE SHALL BE THERMOPLASTIC SOLID COPPER, SINGLE CONDUCTOR, LOW VOLTAGE, #12 IRRIGATION CONTROL WIRE AND #10 WHITE COMMON WIRE SUITABLE FOR DIRECT BURIAL AND CONTINUOUS OPERATION AT RATED VOLTAGES, MAKE ELECTRICAL CONNECTIONS WITH IRRIGATION GRADE, WATERPROOF CONNECTORS, NUMBER WIRES IN ALL VALVE BOXES, JUNCTION BOXES AND AT THE CONTROLLER, PROVIDE TWO EXTRA SPARE WIRES TO THE LAST

- 20.IRRIGATION SYSTEM SHALL BE OPERABLE FOR A MINIMUM OF 48 HOURS PRIOR TO THE LAYING OF SOD, GROUND SHALL BE THOROUGHLY SATURATED PRIOR TO THE LAYING OF SOD.
- 21.IF ANY COMPONENT OF THE IRRIGATION SYSTEM IS BROKEN DURING CONSTRUCTION, THE IRRIGATION CONTRACTOR WILL BE NOTIFIED IMMEDIATELY. THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY MAKE ALL NECESSARY REPAIRS TO THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL BE AWARE OF ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA AND ENSURE THAT NO EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEMS WILL BE FULLY COMPENSATED FOR SUCH REPAIRS BY THOSE RESPONSIBLE FOR THE DAMAGE.
- 22.AT THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE:
 CUT SHEETS OF ALL IRRIGATION EQUIPMENT TO BE PROVIDED

 - A UNIT COST BREAKDOWN OF PROPOSED IRRIGATION MATERIALS TO BE INSTALLED
 - AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE
- 23.BEFORE THE IRRIGATION IS ACCEPTED THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORGANIZING AN OPERATIONAL TRAINING SESSION WITH TOWN STAFF IN THE FIELD. THIS MEETING WILL INFORM THE TOWN'S MAINTENANCE STAFF OF THE SYSTEM COMPONENTS AND FUNCTIONALITY.
- 24.UPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL, MAINTENANCE SCHEDULES, WARRANTIES, AS-BUILTS, IRRIGATION WELL PERMITS AND CONDITIONS, AND ANY OTHER PERTINENT INFORMATION ABOUT THE SYSTEM.

NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROOVE FITTINGS. PUMP DROP PIPE SHALL BE HDPE HEAT FUSED. SET PUMP 60° ON 2" PIPE. INSTALL MOTOR CABLE SPLICE BETWEEN MOTOR AND CONTROL PANEL IN NEMA 4X JUNCTION BOX ADJACENT TO WELL IN ACCORDANCE WITH ELECTRICAL CODES.

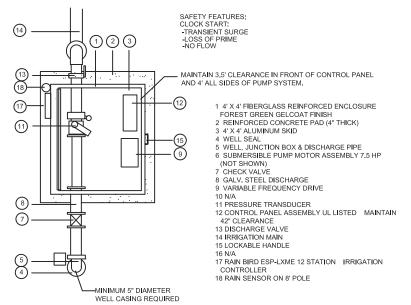
WELL DRILLER SHALL NOTIFY THE PUMP SYSTEM MANUFACTURER IN WRITING WITHIN 24 HOURS OF DEVELOPING THE WELL IF THE WELL PUMPING LEVEL IS GREATER THAN 50' BELOW FINISHED GRADE AFTER 8 HOURS OF CONTINUOUS PUMPING AT 150% OF THE

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF PUMP SYSTEM

* OPTIONAL FEATURES ARE INCLUDED IF MARKED WITH AN "X"

_PRESSURE CONTROL VALVE

 $\rm X$ IRRIGATION CONTROLLER RAIN BIRD ESP-LXME 12 STATIONS, WITH RAIN SENSOR ON 8' POLE __PRESSURE TANKS FOR PRESSURE DEMAND SYSTEM



PLAN VIEW NTS

ELECTRIC SERVICE TO BE. IN ORDER OF PREFERENCE; 460V 3-PHASE, 230V CLOSED-DELTA 3-PHASE, 208 WYE 3-PHASE, 230 1-PHASE, 208V 1-PHASE, 230

PUMP PERFORMANCE 55 GPM @ 195 TDH, 60 PSI DISCHARGE PRESSURE

HOOVER PUMPING MODEL: HSF-7.5CSV-230/3-E-12,W,Z Pompano Beach, Florida, Tel: 954-971-7350

CITY OF VENICE

MIAMI AVE PUMP STATION SUBMERSIBLE PUMP SYSTEM DETAIL

FIBERGLASS ENCLOSED SINGLE WELL SUCTION VARIABLE FREQUENCY DRIVE (VFD) CLOCK START

FILE PN14631.DWG 10/17



FINISHED GRADE

SAND FILL

RRY L. BELTON, RLA A. REG. NO 900

PROJECT NO.

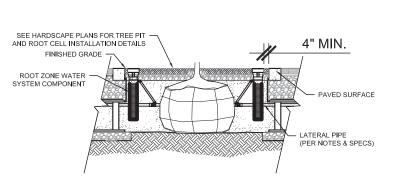
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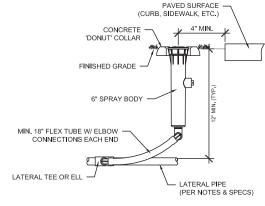
IR-36

FLOOD BUBBLER NOZZLE FINISHED GRADE MIN. 18" FLEX TUBE W/ FLBOW LATERAL TEE OR ELL -LATERAL PIPE (PER NOTES & SPECS)

FLOOD BUBBLER INSTALLATION

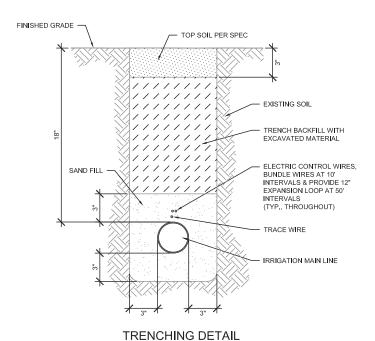


ROOT ZONE WATER SYSTEM



6" SPRAY BODY INSTALLATION

FOR USE WITH ALL NOZZLES (SPRAY, BUBBLER, ROTARY)



TRENCHING THROUGH PAVED SURFACE DETAIL

REPAIR PAVED SURFACE TO BE FLUSH WITH SURROUNDING

EXISTING SOIL

- TRENCH BACKFILL WITH EXCAVATED MATERIAL

ELECTRIC CONTROL WIRES, BUNDLE WIRES AT 10' INTERVALS & PROVIDE 12"

EXPANSION LOOP AT 50'

INTERVALS (TYP., THROUGHOUT)

IRRIGATION MAIN LINE

IRRIGATION SLEEVE

WIRING SLEEVE

TRACE WIRE

PAVED SURFACE

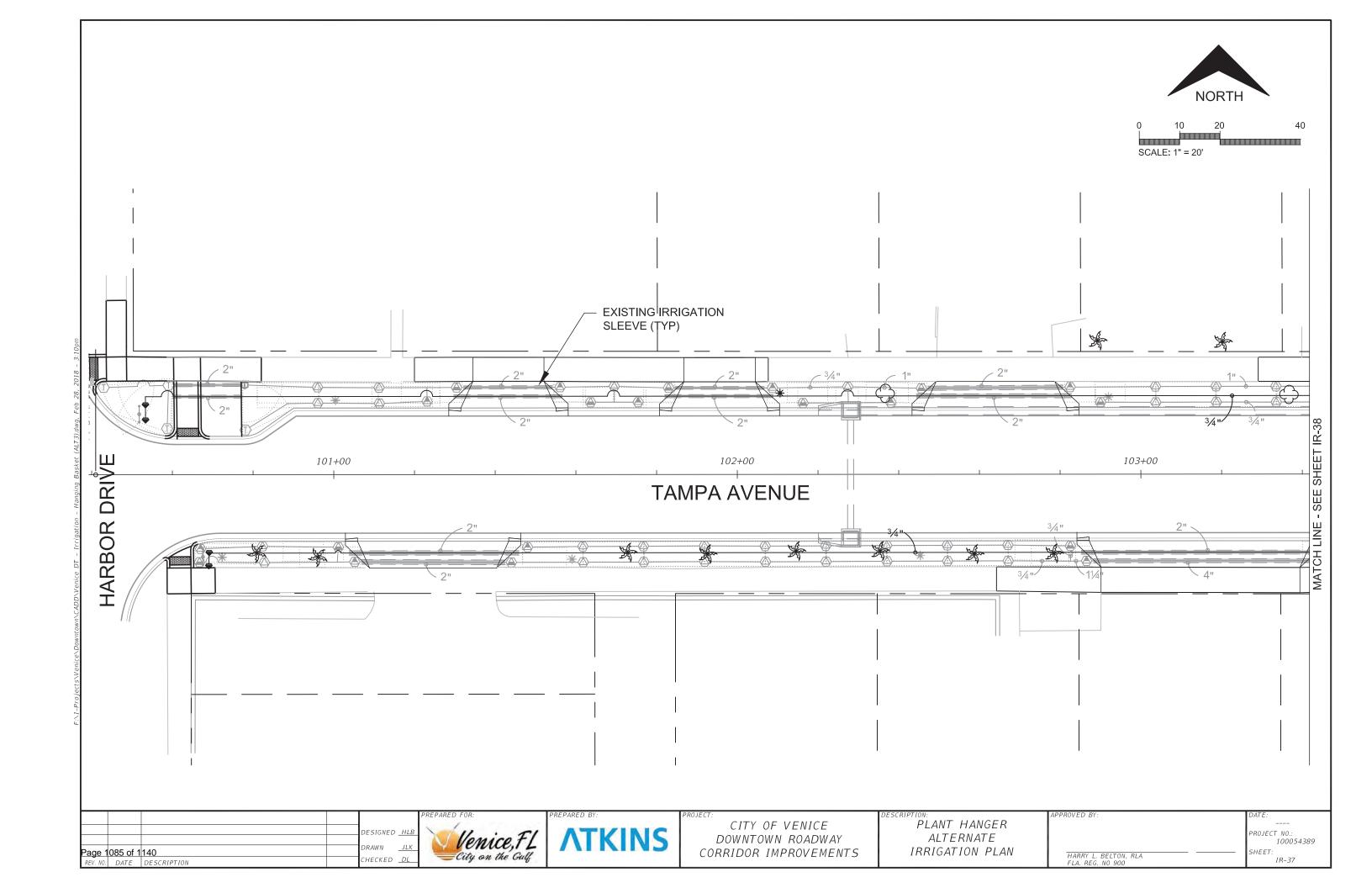
- MIN, 18" COILED WIRE, EACH WIRE MOUNT VALVE BOX AS SHOWN; TURF: 1" REVEAL, SHRUBS: 2" REVEAL WATERPROOF CONNECTORS VALVE BOX MARKED "IRRIGATION", MIN. 21" X 16" X 12" DEEP SLOPE AWAY FROM BOX COVER 3/1/3/1 REMOTE CONTROL VALVE LATERAL PIPE (PER NOTES & SPECS) TO SPRINKLERS - MAIN LINE PIPE (PER NOTES & SPECS) BOX. ONE PER CORNER) ELECTRIC CONTROL WIRES, BUNDLE WIRES AT 10' INTERVALS & PROVIDE 12" EXPANSION LOOP 3/4" CRUSHED GRAVEL AT 50' INTERVALS (TYP., THROUGHOUT)

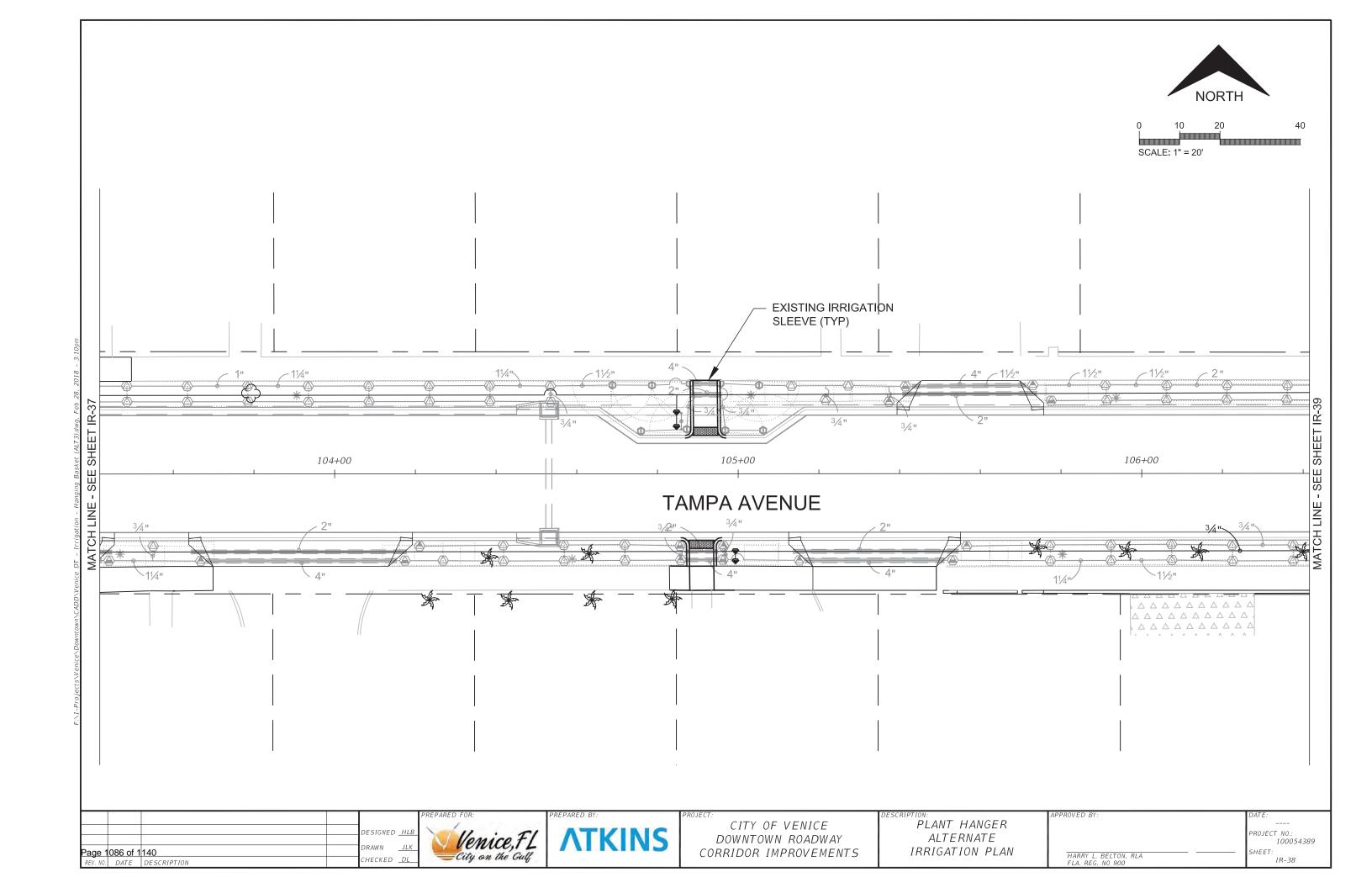
REMOTE CONTROL VALVE INSTALLATION

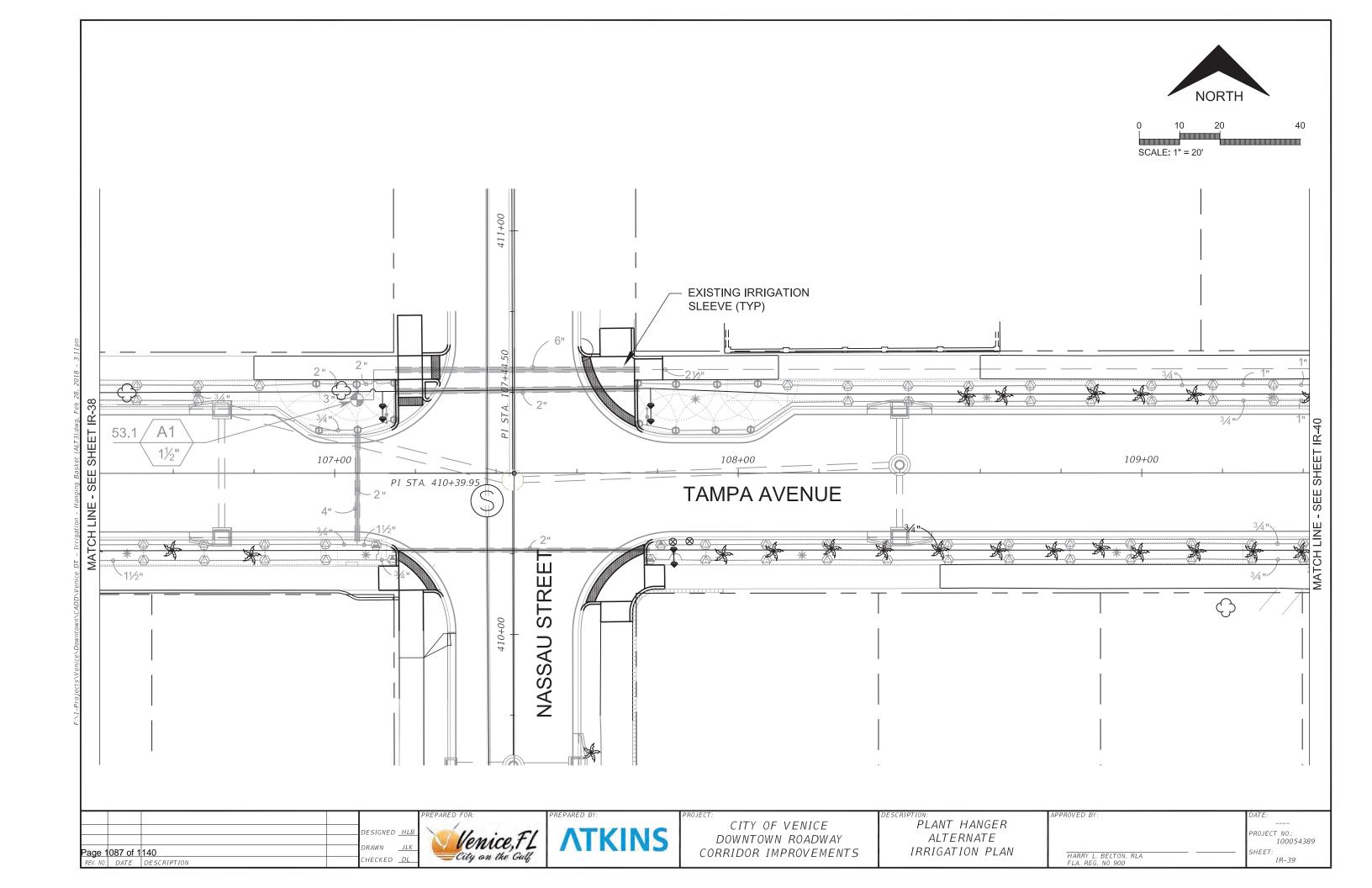
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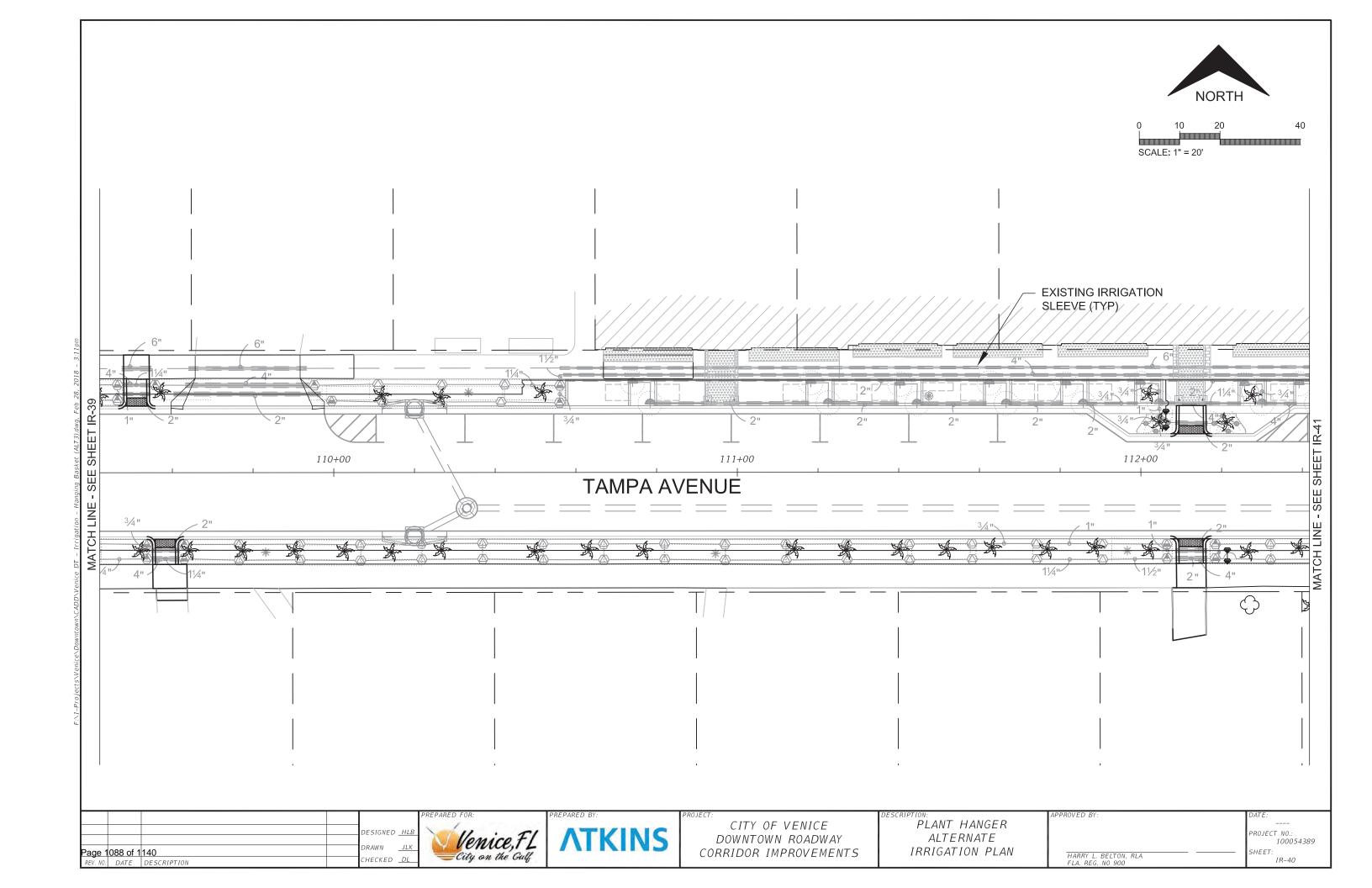
			PREPARED FOR:	PREPARED BY:	PROJECT:	DESCRIPTION:	<i>APPROVED</i>
					CITY OF VENICE	MIAMI AVENUE	1
		DESIGNED HLB	11 . 01		1	•	
		<u> </u>	Venice.7L		DOWNTOWN ROADWAY	ALTERNATE	
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Page 10	084 of 1 140		City on the Gulf		CORRIDOR IMPROVEMENTS	IRRIGATION DETAILS	HARRY
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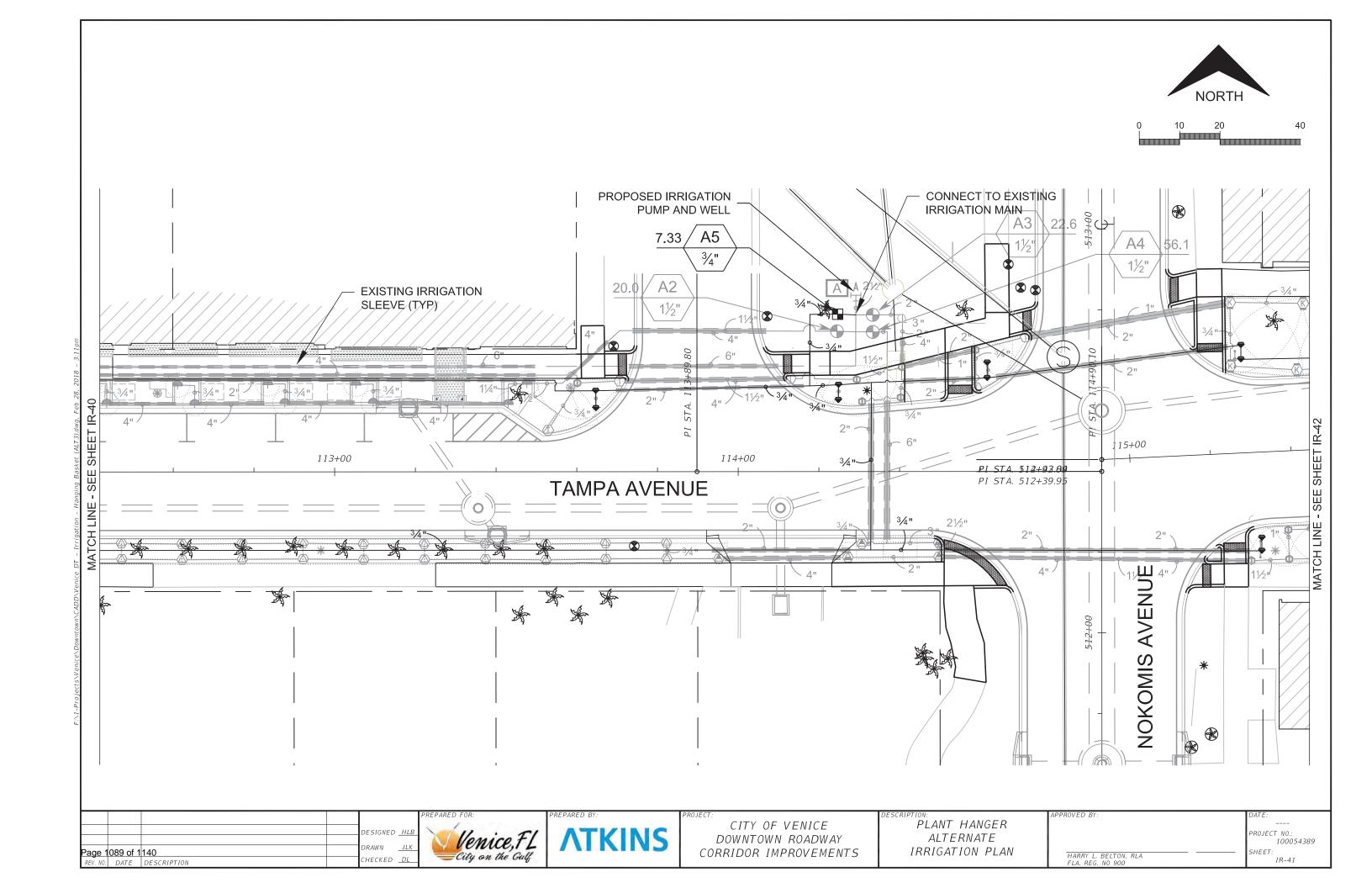
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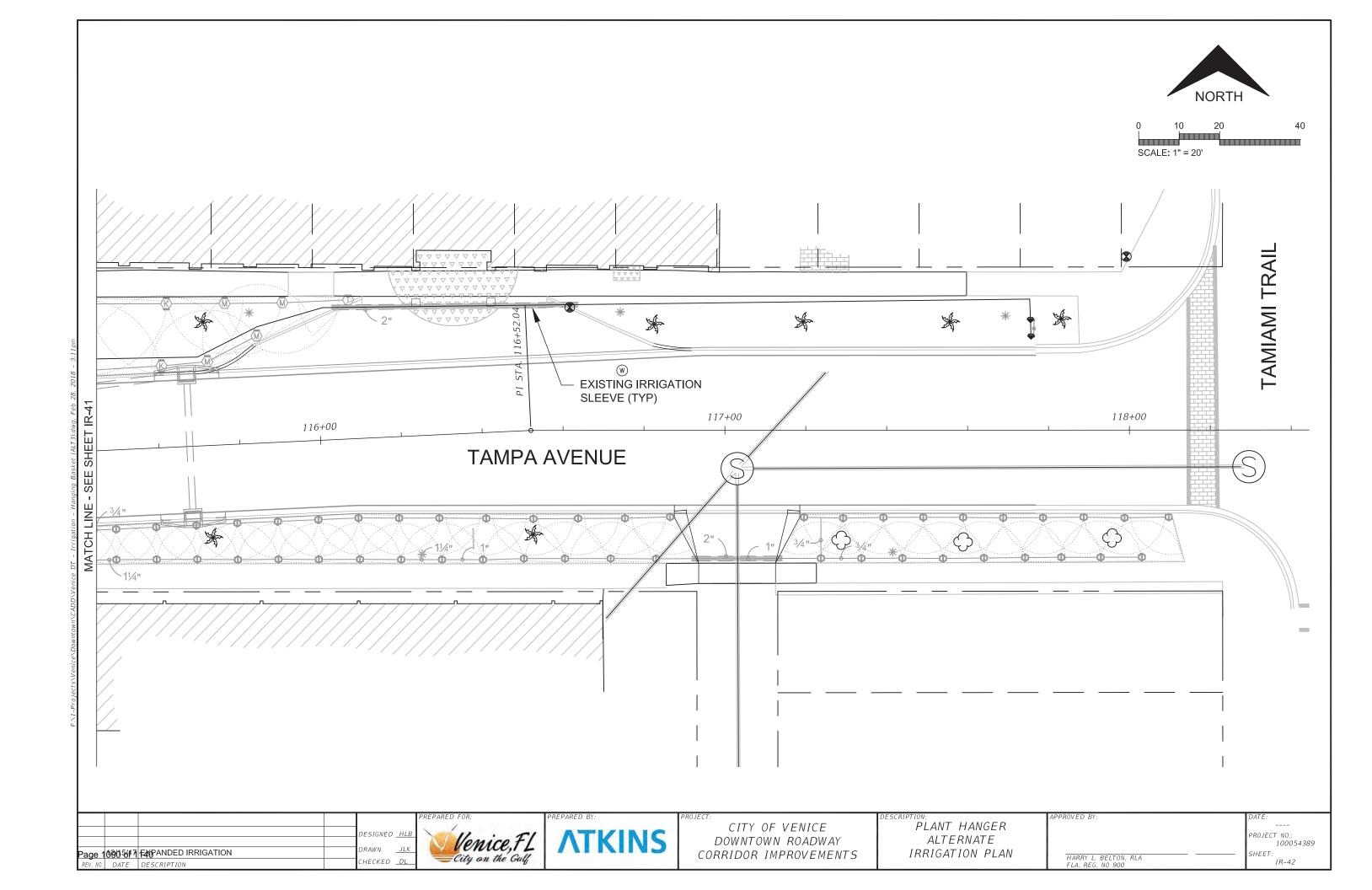


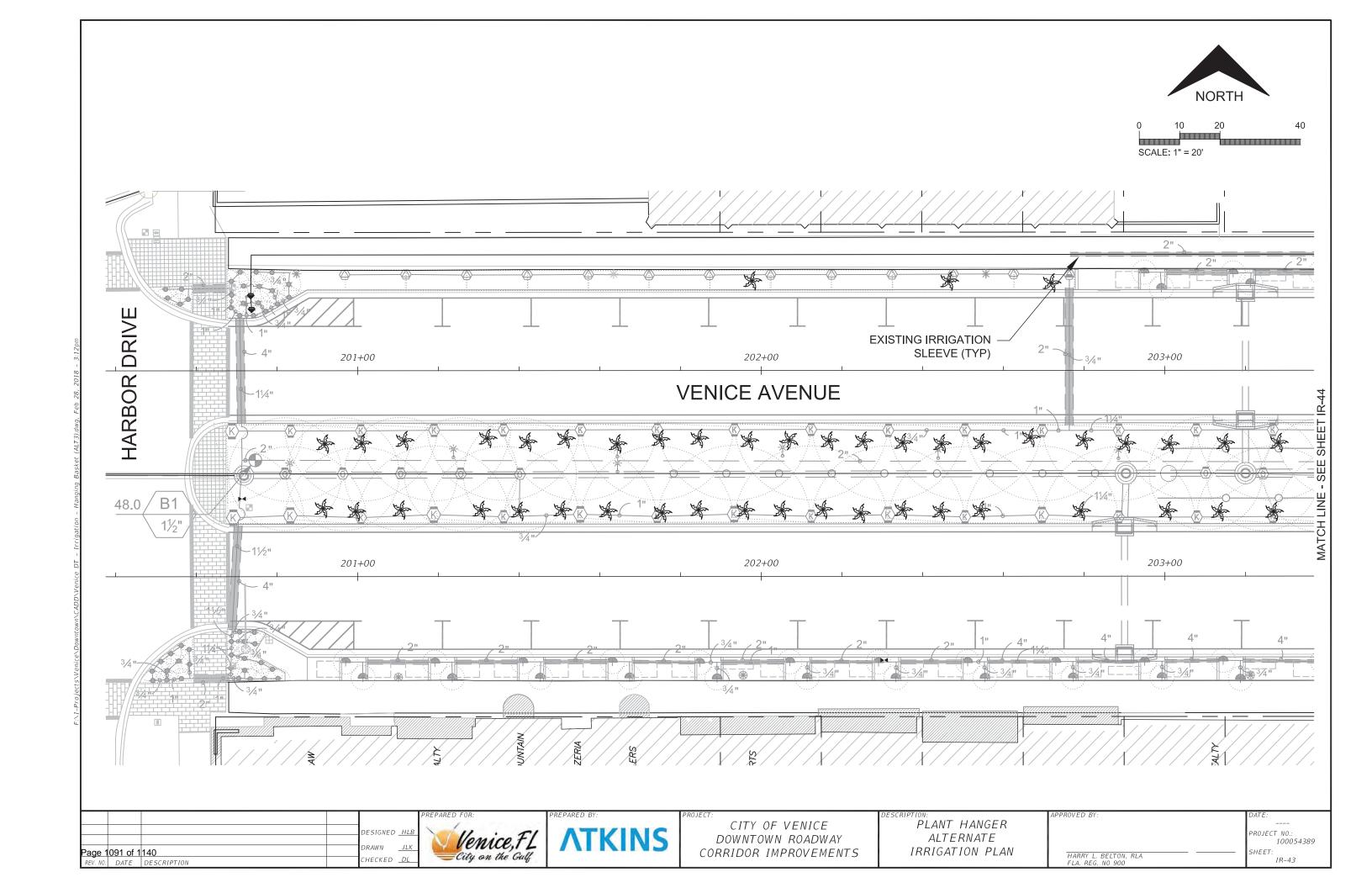


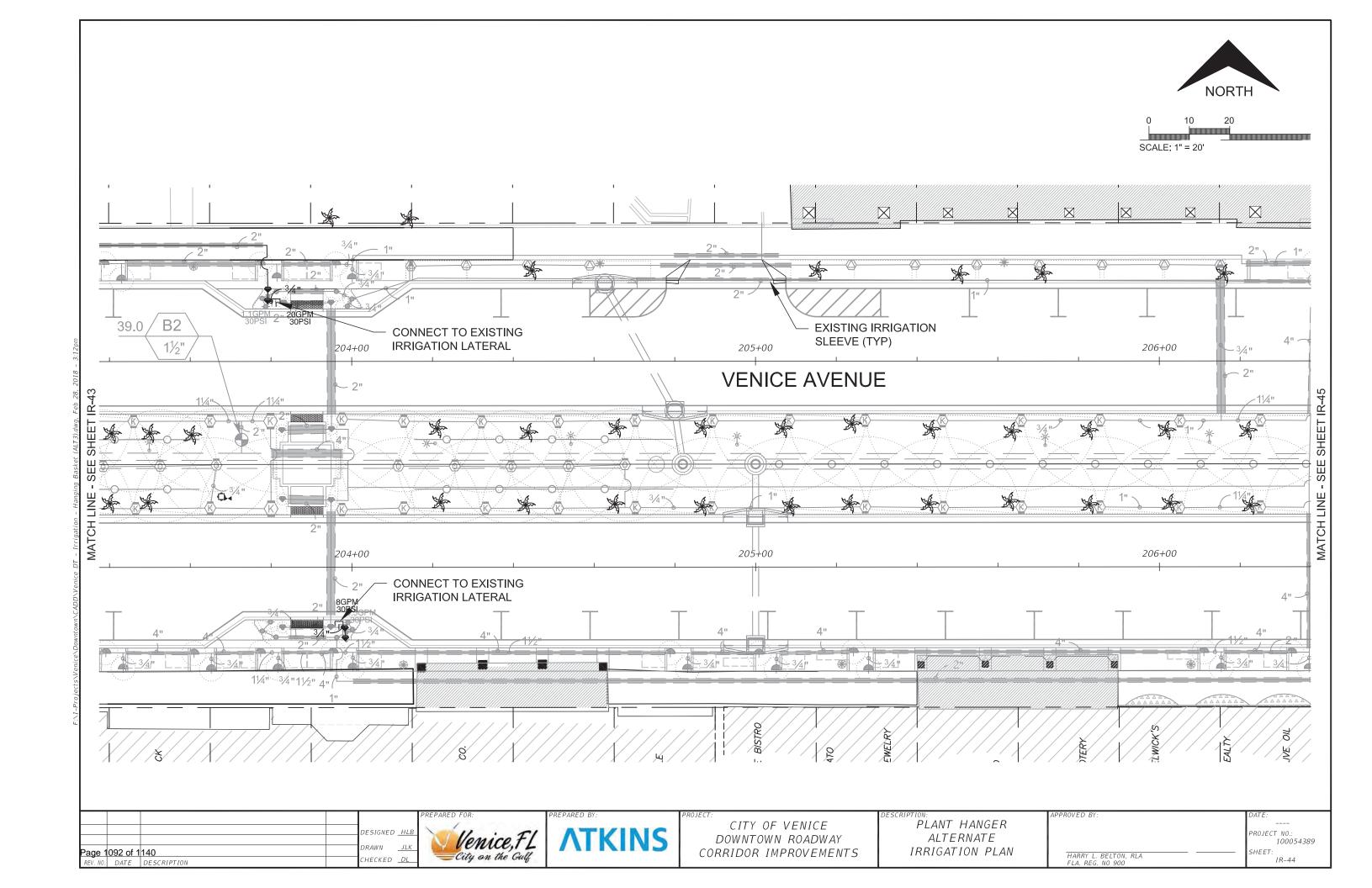


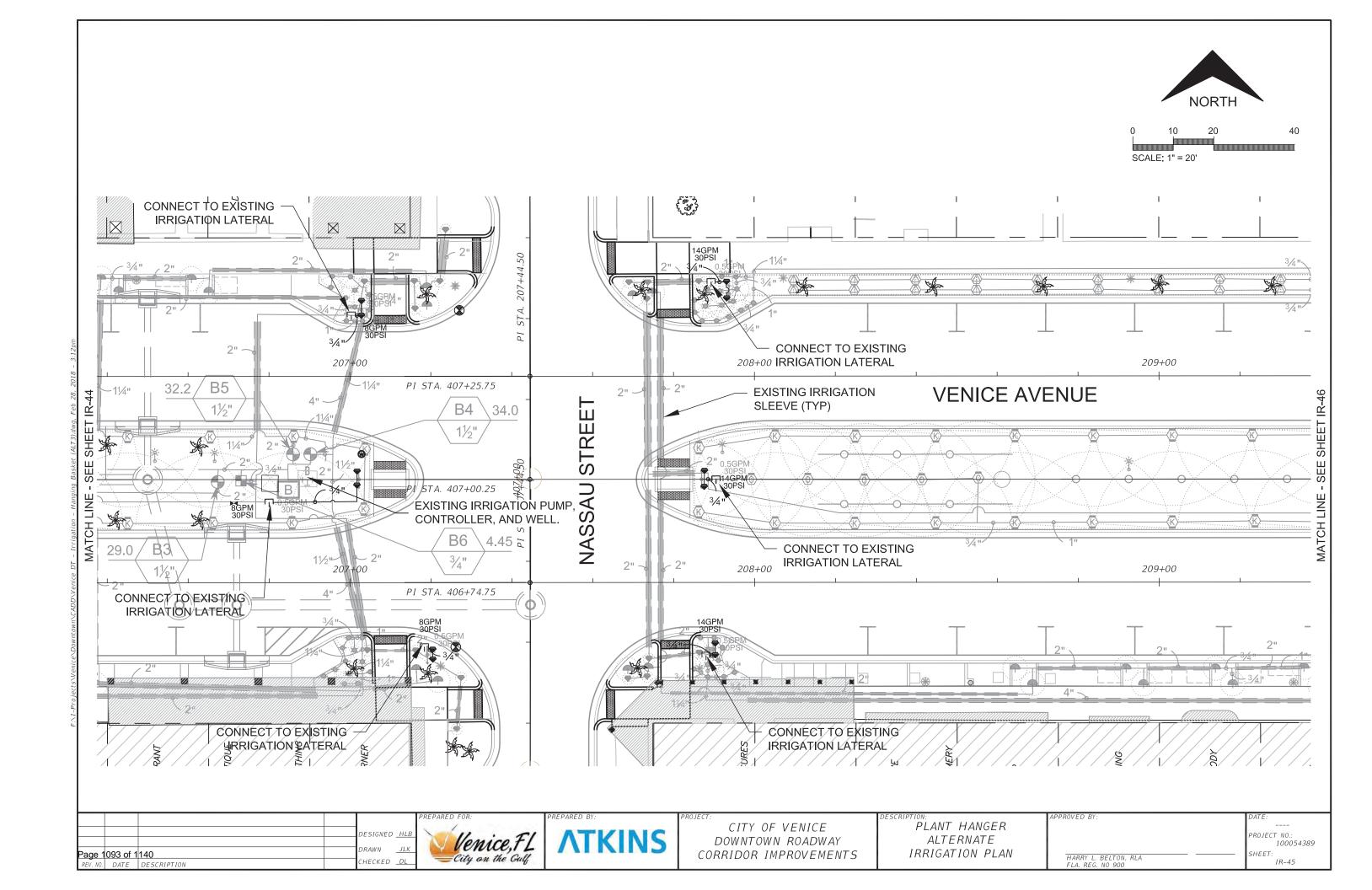


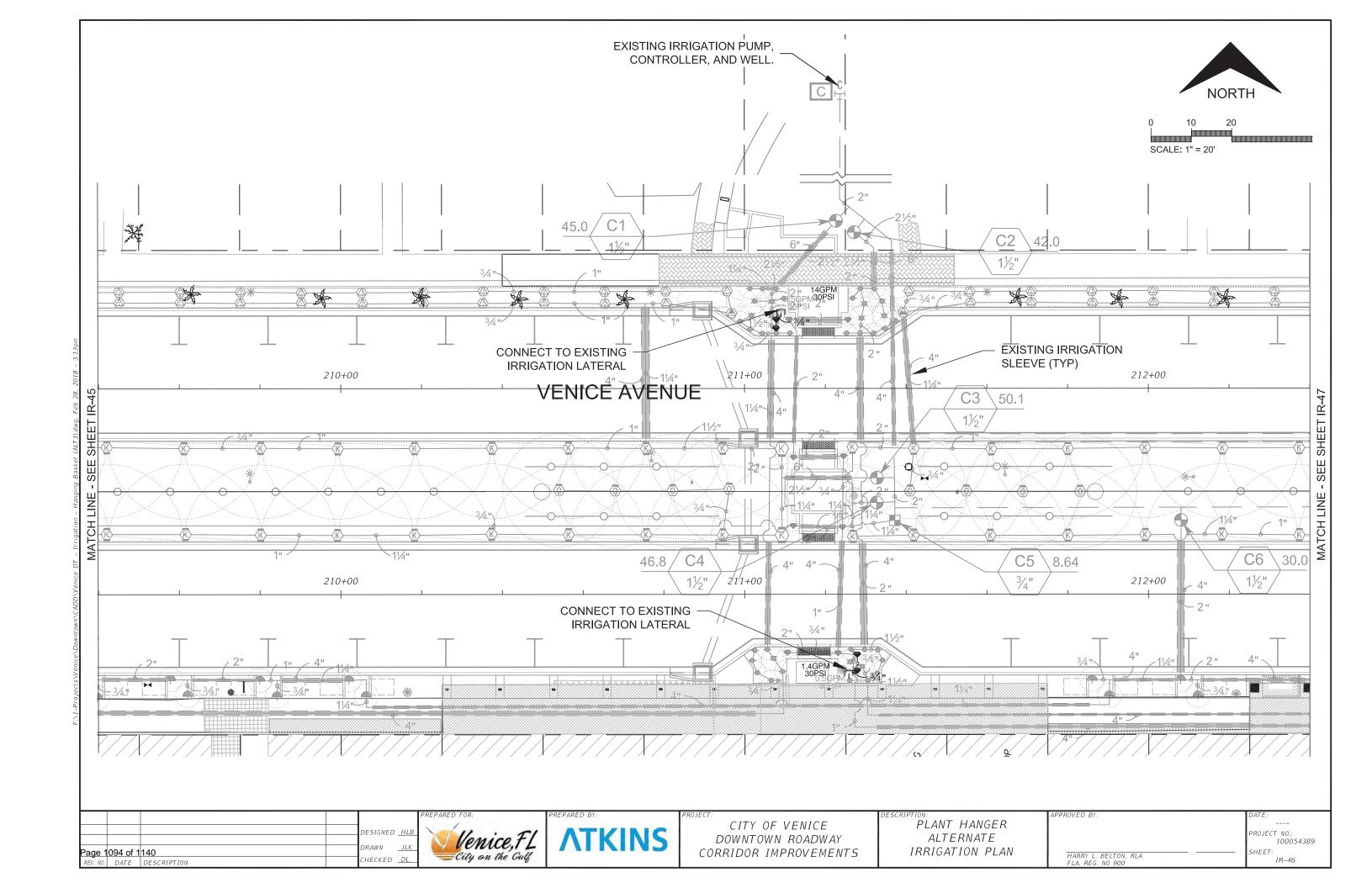


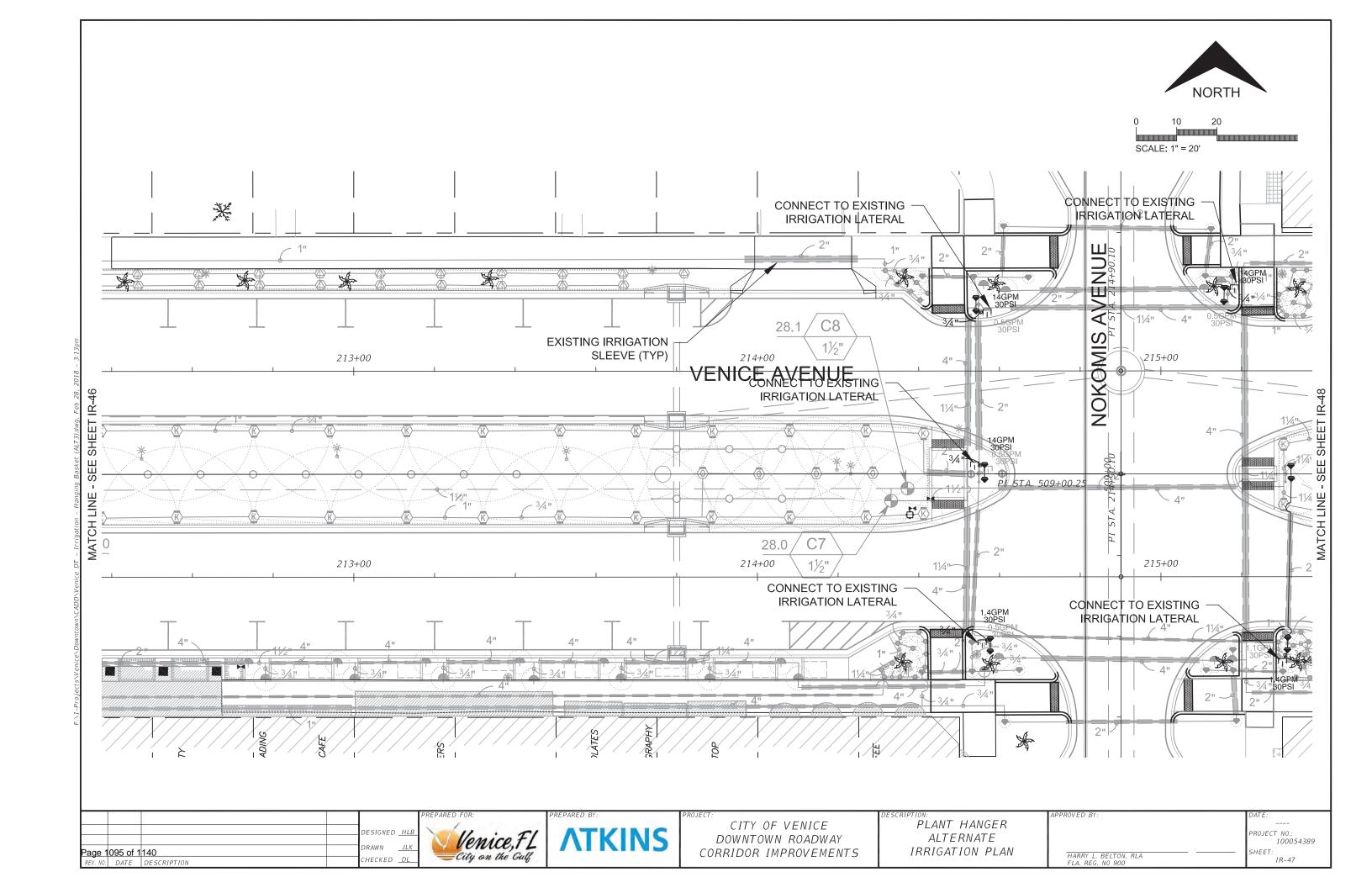


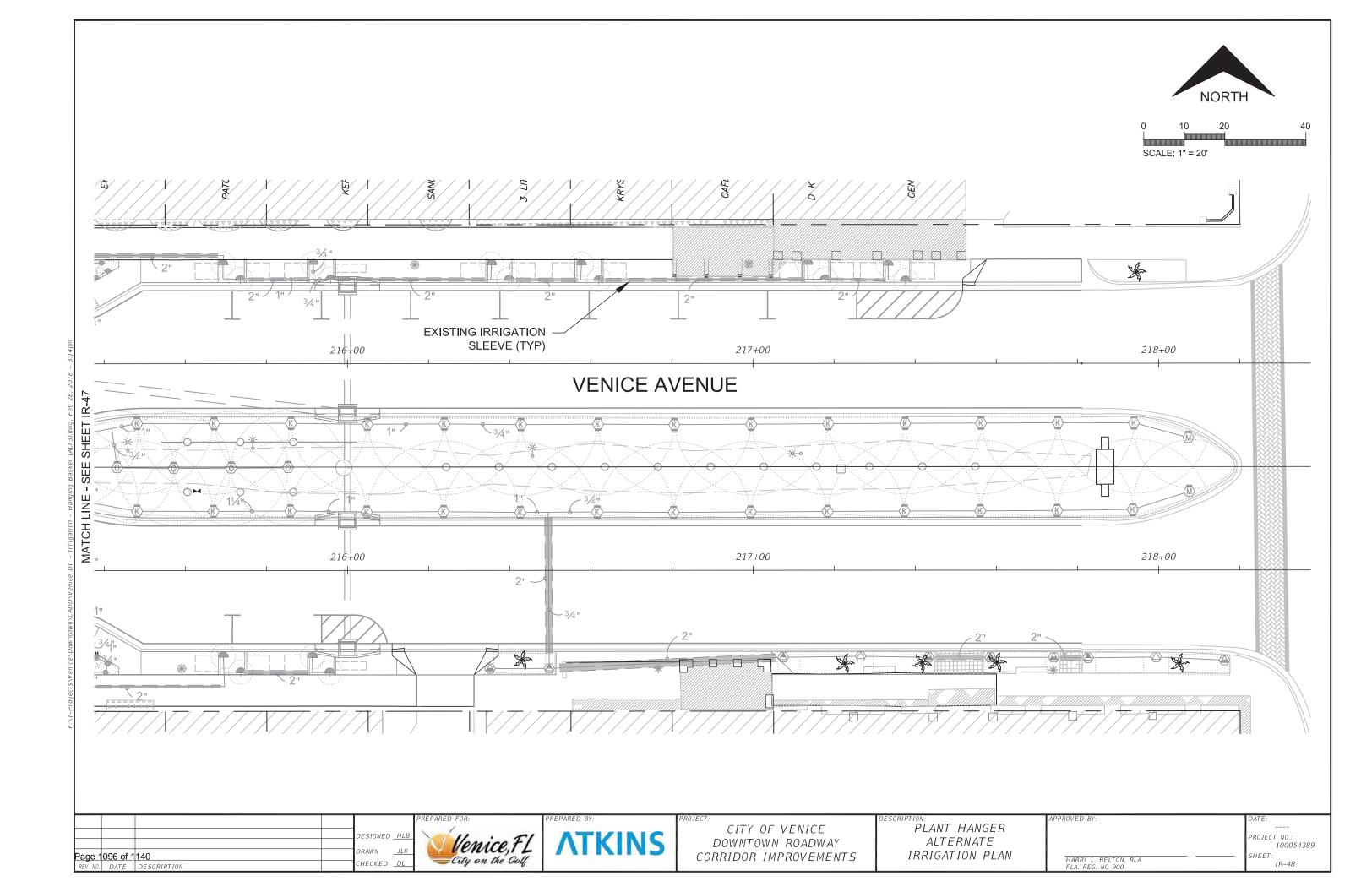


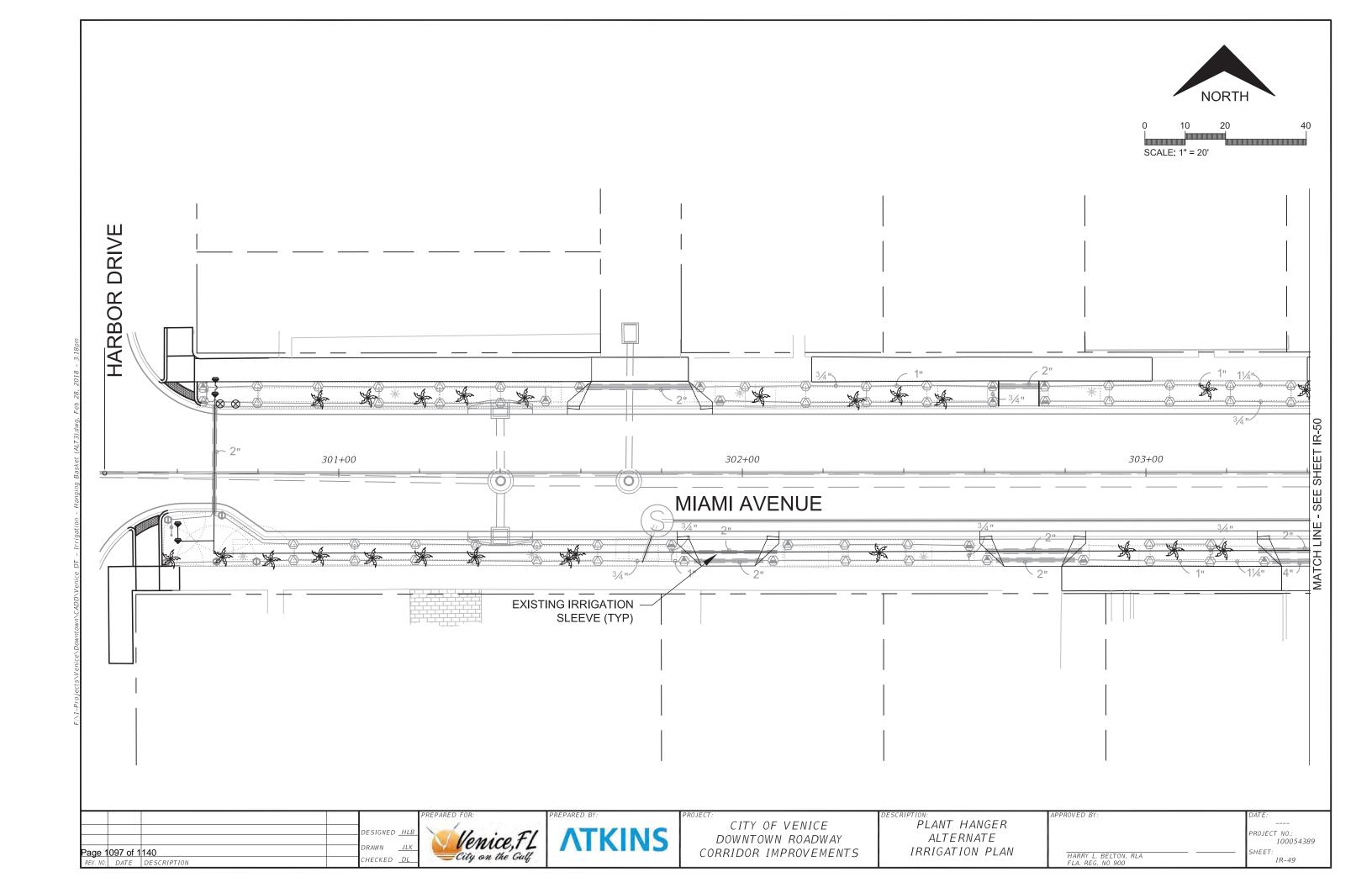


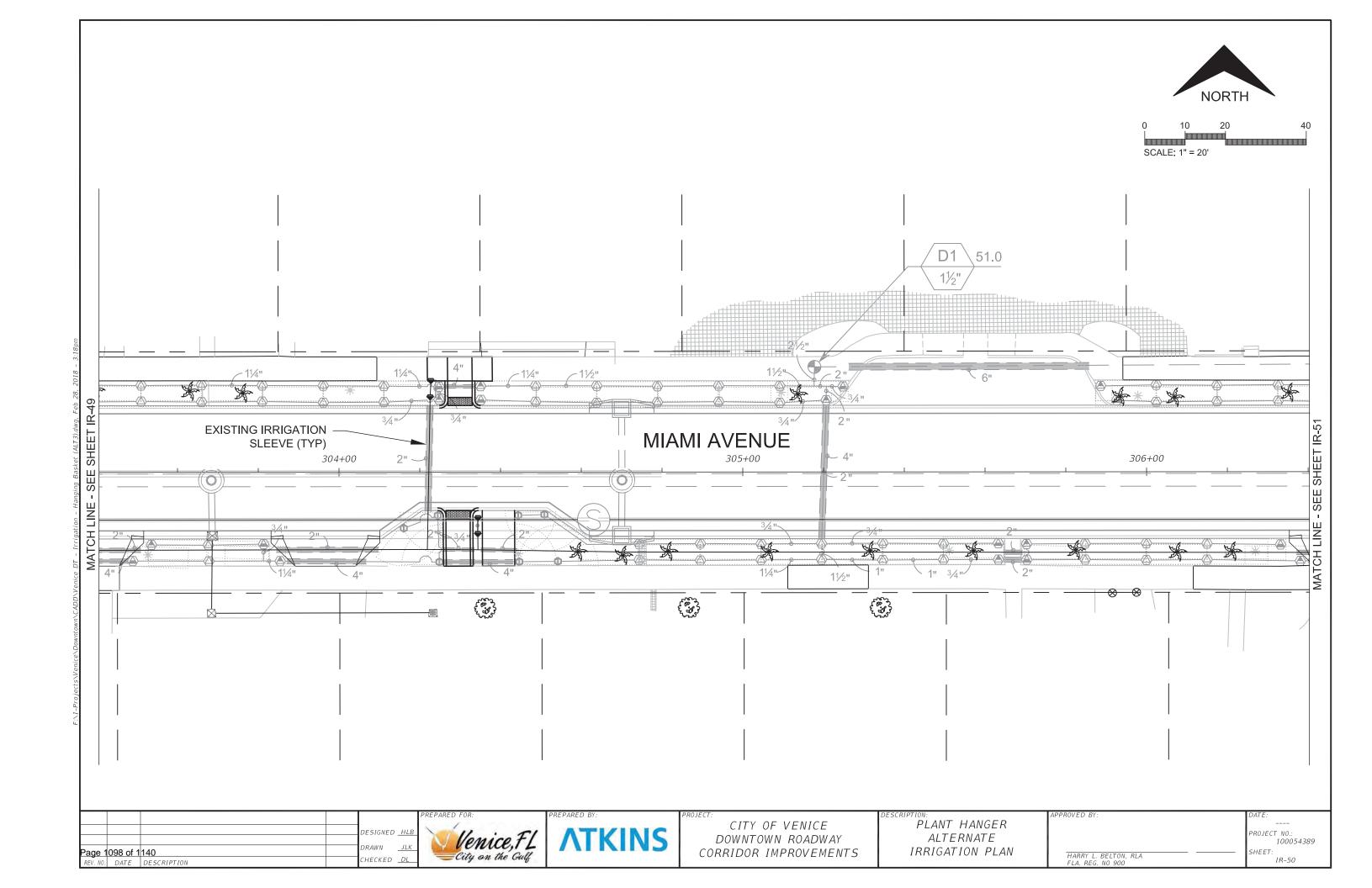


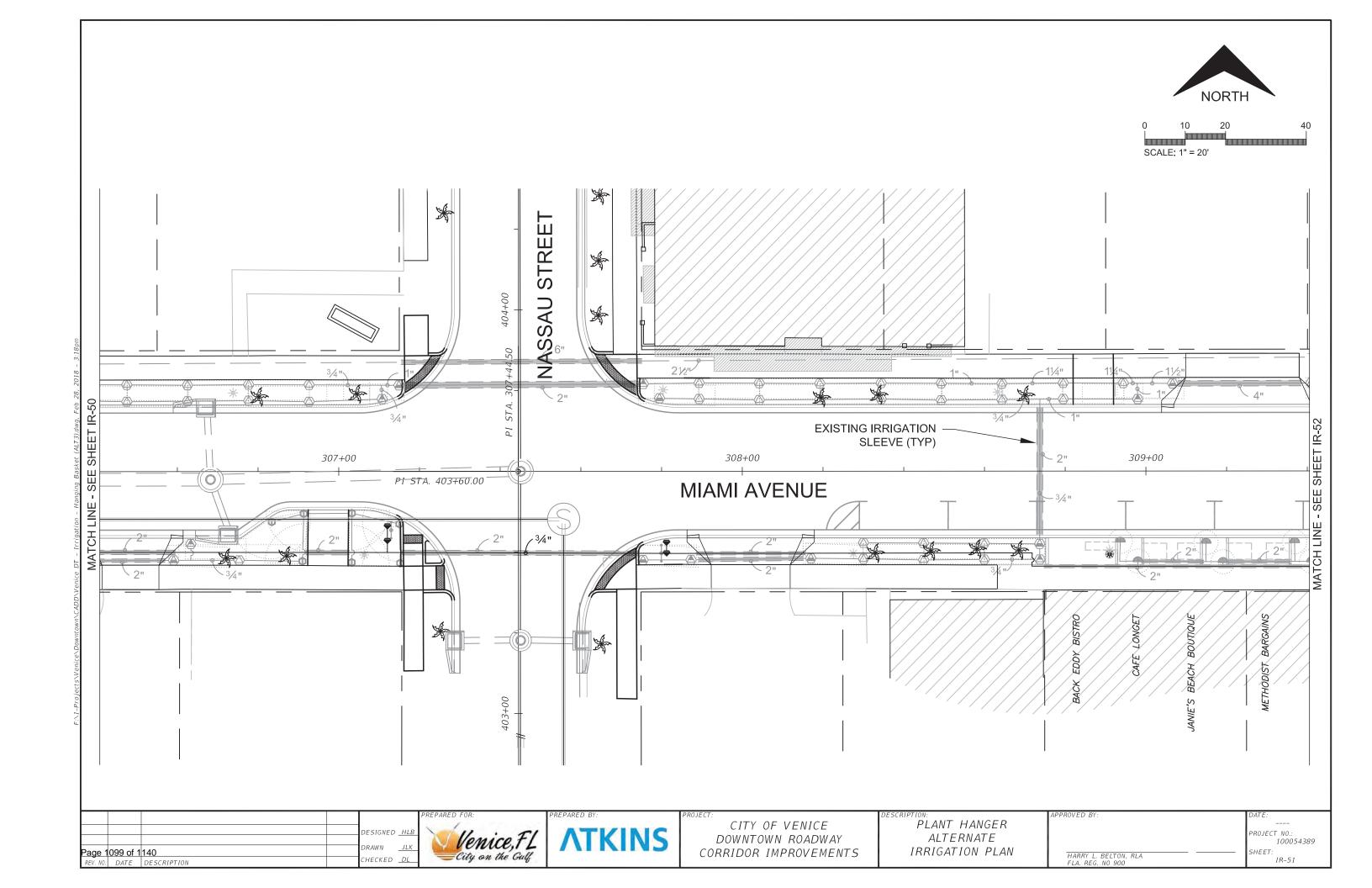


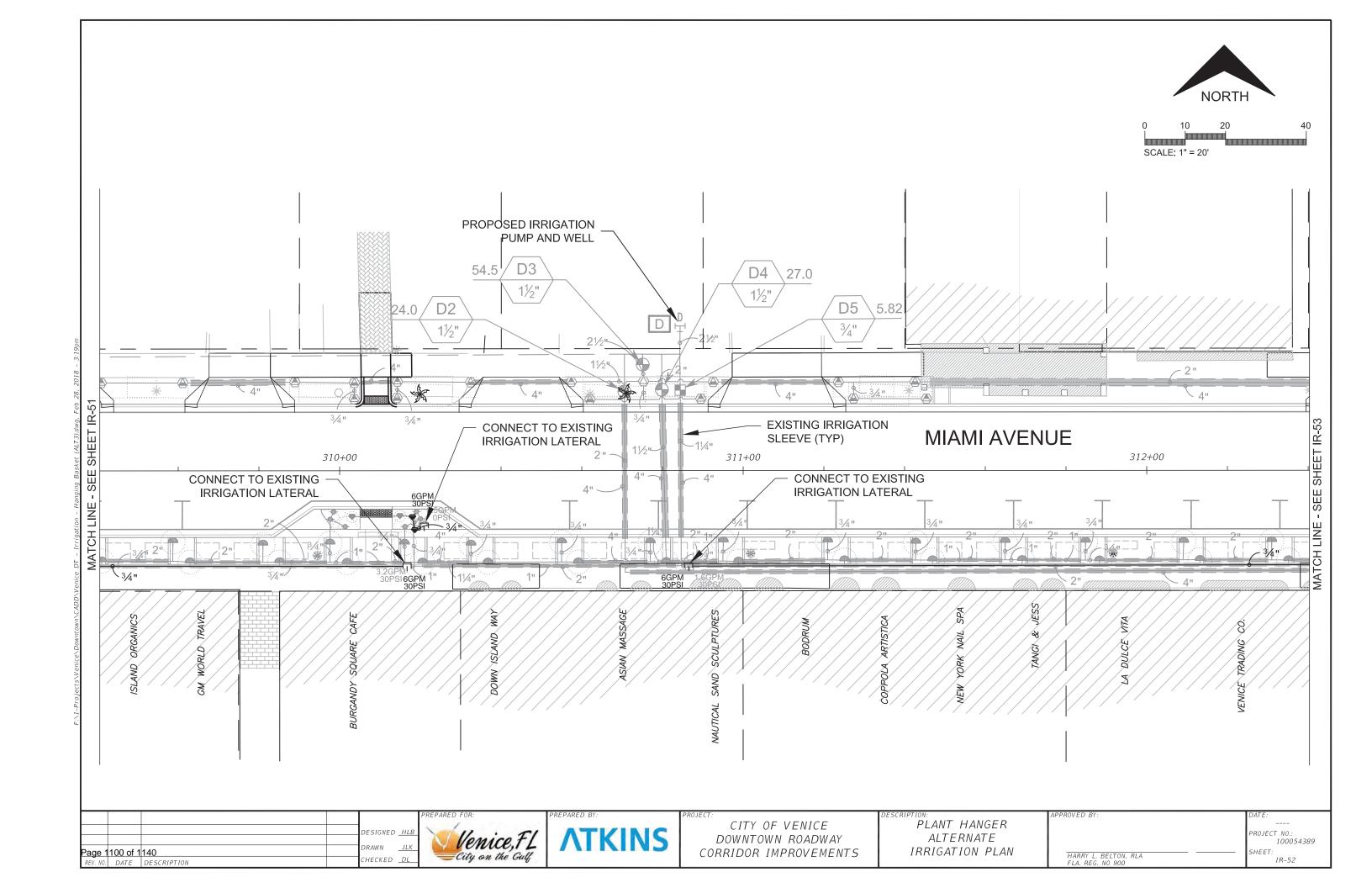


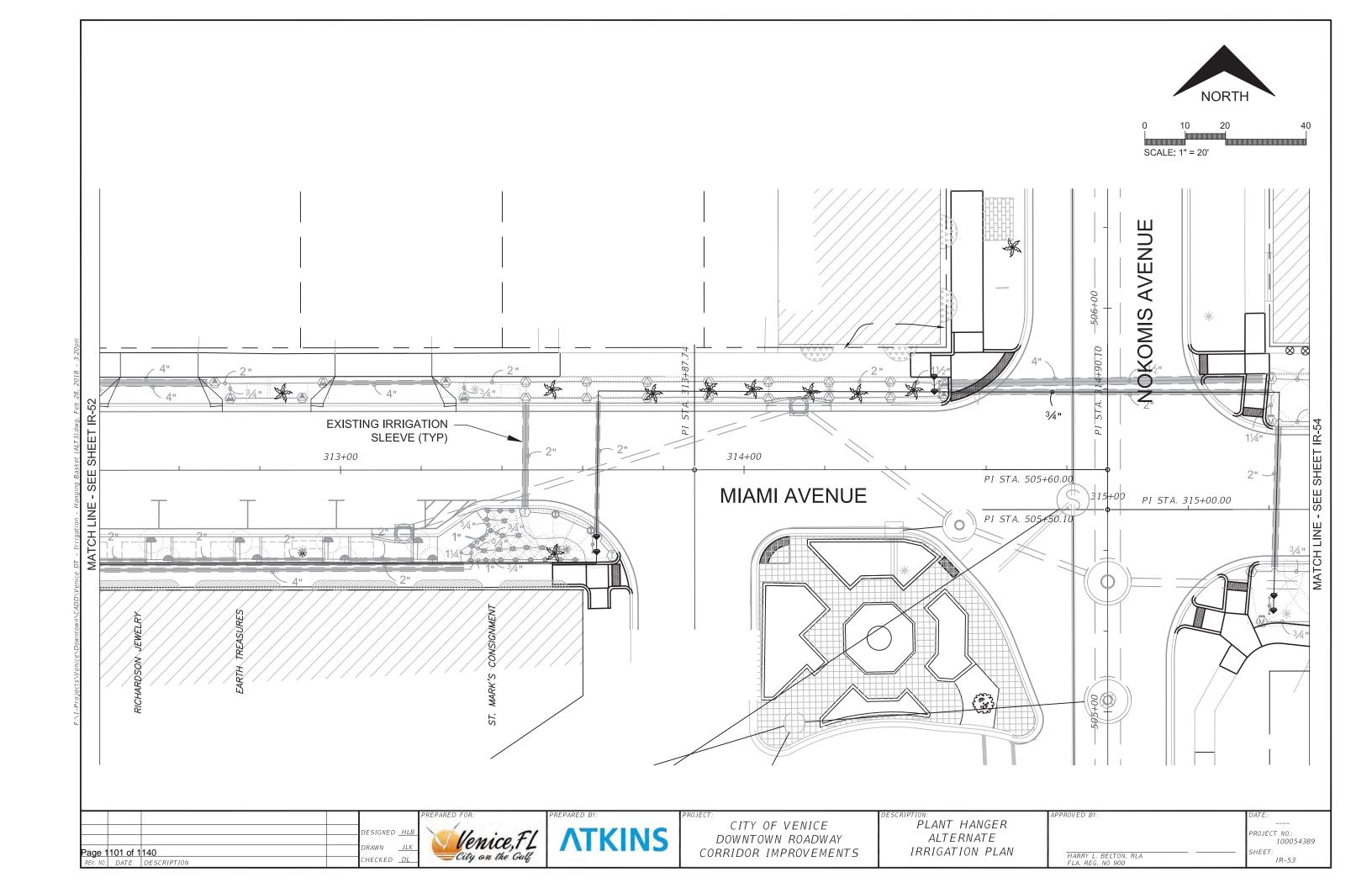


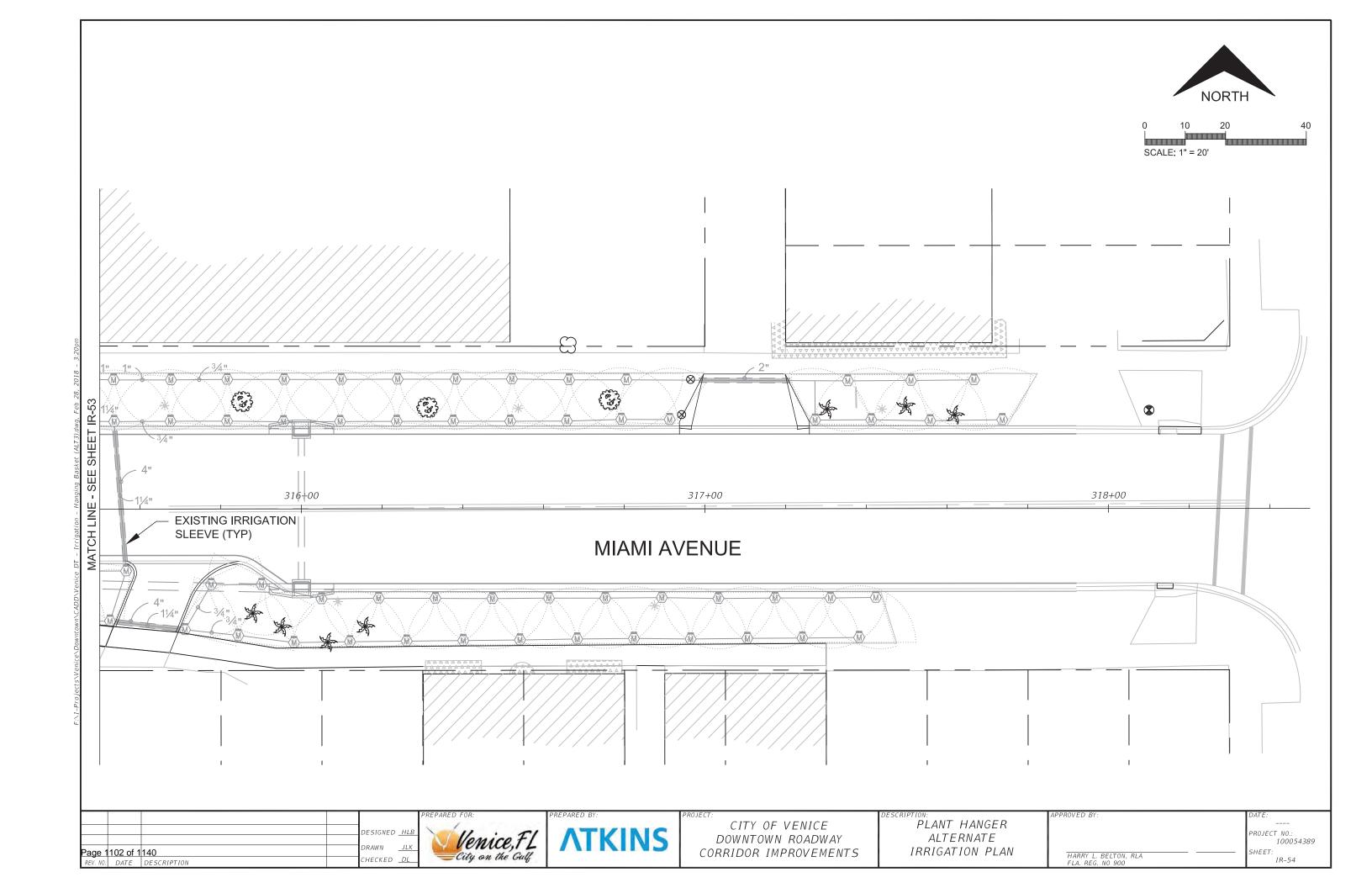












IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
59	Hunter ACZ-075-25 Drip control kit featuring a 3/4" PGV-ASV valve, with 3/4" HY075 filter system, and 25psi pressure regulated. Flow range: 0.5 GPM to 15 GPM. With 150 mesh stainless steel screen.	1	
•	Hunter SD-B-STK Drip 360 Micro Spray for Residential/Commercial Use. Eight streams of water, with 360 degree spray. 15psi to 30psi. Solo-Drip with Barb and 6" Stake.	84	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	DETAIL
	Irrigation Lateral Line: CPVC Schedule 40	5,435 l.f.	
	 Irrigation Mainline: CPVC Schedule 40 Valve Callout 	4.5 l.f.	
	Valve Number		
/ # ₺ \ #	Valve Flow		
#"	Valve Size		

IRRIGATION NOTES:

- 1. THE IRRIGATION CONTRACTOR SHALL BE CERTIFIED BY THE IRRIGATION ASSOCIATION AND SHALL BE ON SITE TO DIRECT ALL IRRIGATION CONSTRUCTION
- 2. ALL MATERIALS FOR THIS PROJECT SHALL BE NEW, NO SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT ENGINEER.
- 3. PLANS ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. ALL EQUIPMENT SHALL BE INSTALLED IN PERVIOUS AREA (EXCEPT FOR SLEEVING) AND WITHIN THE
- 4. ALL IRRIGATION COMPONENTS AND THEIR INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND CONTRACT SPECIFICATIONS.
- 5. THE QUANTITIES ARE SUMMARIZED FOR THE CONVENIENCE OF THE CONTRACTOR AND OF THE ENGINEER, THE IRRIGATION SYSTEM IS A LUMP SUM BID ITEM ALL INCLUSIVE OF LABOR AND MATERIALS REQUIRED FOR A COMPLETED AND TOTALLY FUNCTIONAL, 100% COVERAGE IRRIGATION SYSTEM, INCLUDING WATER AND ELECTRICAL SERVICE CONNECTIONS.
- 6. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.
- 7. NO EXCAVATION SHALL TAKE PLACE UNTIL ALL EXISTING UTILITIES HAVE BEEN LOCATED ON SITE, CONTACT SUNSHINE STATE ONE CALL, TELEPHONE NUMBER 811,
- 8. ZONE LINES ARE DESIGNED TO PERFORM AT 40 PSI AT THE LAST HEAD FOR ROTARY SPRAY AND BUBBLER ZONES AND 30 PSI AT THE LAST HEAD FOR DRIP EMITTERS. APPROPRIATE PRESSURE REGULATING ITEMS SHALL BE INSTALLED AS NOTED IN THE PLANS.
- 9. ZONE LINE PIPING SHALL BE CLASS 200 PVC PLASTIC PIPE OR APPROVED EQUAL.
- 10, THE IRRIGATION MAIN LINE SHALL BE SCHEDULE 40 PVC INSTALLED 18" BELOW THE FINISHED GRADE AND 36" BELOW FINISHED GRADE OF ROADWAY, FINISHED GRADE SHALL BE 2" BELOW TOP OF CURB, ADJACENT PAVEMENT, AND/OR SURROUNDING GROUND.
- 11.IRRIGATION SLEEVE PIPING SHALL BE SCHEDULE 40 PVC FOR TRENCHES AND DR17 (100PSI) HDPE PIPE FOR DIRECTIONAL BORE ACTIVITIES. SLEEVE SHALL BE NO LESS THAN TWICE THE DIAMETER OF THE RECEIVING PIPE.
- 12. IRRIGATION LINES AND FITTINGS SHALL BE SOLVENT WELDED WITH E-2 WELD BLUE GLUE WITH WELD-ON P70 PURPLE PRIMER, OR APPROVED EQUALS.
- 13. ALL VALVES, FILTERS, GAUGES, ETC., SHALL BE ENCLOSED IN APPROVED VALVE BOXES OF APPROPRIATE SIZE. THESE ITEMS MUST BE EASILY ACCESSIBLE FOR SERVICING AND MAINTENANCE AFTER INSTALLATION OF THE LANDSCAPING. NO VALVE ENCLOSURES SHALL BE INSTALLED WITHIN A FENCED IN PLAYING SURFACE WITH THE EXCEPTION OF THE QUICK COUPLING VALVES FOR THE BASEBALL FIELDS.
- 14. INCLUDE INSTALLATION OF 30MIL, 12 AWG TRACER WIRE ALONG THE MAINLINE.
- 15. IRRIGATION CONTROL WIRE SHALL BE THERMOPLASTIC SOLID COPPER, SINGLE CONDUCTOR, LOW VOLTAGE, #12 IRRIGATION CONTROL WIRE AND #10 WHITE COMMON WIRE SUITABLE FOR DIRECT BURIAL AND CONTINUOUS OPERATION AT RATED VOLTAGES, MAKE ELECTRICAL CONNECTIONS WITH IRRIGATION GRADE WATERPROOF CONNECTORS. NUMBER WIRES IN ALL VALVE BOXES, JUNCTION BOXES AND AT THE CONTROLLER, PROVIDE TWO EXTRA SPARE WIRES TO THE LAST
- 16. CONTRACTOR SHALL INCLUDE THE COST OF DRILLING AND STABILIZING NEW WELLS AS CALLED OUT IN THE PLANS.
- 17. FLUSH ALL LINES FOR A MINIMUM OF TEN MINUTES.
- 18. AFTER THE SATISFACTORY COMPLETION OF THE MAIN, AND BEFORE BACKFILLING, THE MAIN SHALL BE FILLED WITH WATER AND TESTED FOR PRESSURE AT THE RKING PRESSURE WITH GAUGES AT OPPOSITE ENDS OF THE SYSTEM. MONITOR FOR TWO HOURS. THERE CAN BE NO PRESSURE LOSS. ALSO EACH ZONE SHALL BE VISUALLY TESTED FOR LEAKAGE
- 19. ALL EXISTING IRRIGATION, INCLUDING ADJACENT SYSTEMS THAT MAY SHARE A WATER SOURCE, SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
 CONTRACTOR SHALL ENSURE THAT NEW IRRIGATION MAIN INSTALLATION DOES NOT DISRUPT EXISTING IRRIGATION ACTIVITIES THROUGHOUT THE PROJECT AREA.
- 20.IRRIGATION SYSTEM SHALL BE OPERABLE FOR A MINIMUM OF 48 HOURS PRIOR TO THE LAYING OF SOD. GROUND SHALL BE THOROUGHLY SATURATED PRIOR TO
- 21.IF ANY COMPONENT OF THE IRRIGATION SYSTEM IS BROKEN DURING CONSTRUCTION. THE IRRIGATION CONTRACTOR WILL BE NOTIFIED IMMEDIATELY, THE IRRIGATION CONTRACTOR SHALL IMMEDIATELY MAKE ALL NECESSARY REPAIRS TO THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL BE AWARE OF ANY EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT AREA AND ENSURE THAT NO EXISTING IRRIGATION SYSTEMS WILL BE DAMAGED. ANY DAMAGE TO AN EXISTING IRRIGATION SYSTEM SHALL BE FULLY REPAIRED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE FULLY COMPENSATED FOR SUCH REPAIRS BY THOSE RESPONSIBLE FOR THE DAMAGE.
- 22.AT THE PRE-CONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE:

 - CUT SHEETS OF ALL IRRIGATION EQUIPMENT TO BE PROVIDED
 A UNIT COST BREAKDOWN OF PROPOSED IRRIGATION MATERIALS TO BE INSTALLED
 AN INSTALLATION SCHEDULE FOR ALL IRRIGATION EQUIPMENT AT EACH AREA OF THE SITE
- 23.BEFORE THE IRRIGATION IS ACCEPTED THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORGANIZING AN OPERATIONAL TRAINING SESSION WITH TOWN STAFF IN THE FIELD. THIS MEETING WILL INFORM THE TOWN'S MAINTENANCE STAFF OF THE SYSTEM COMPONENTS AND FUNCTIONALITY.
- 24.UPON PROJECT ACCEPTANCE THE CONTRACTOR SHALL PROVIDE COPIES OF THE OPERATION MANUAL, MAINTENANCE SCHEDULES, WARRANTIES, AS-BUILTS,

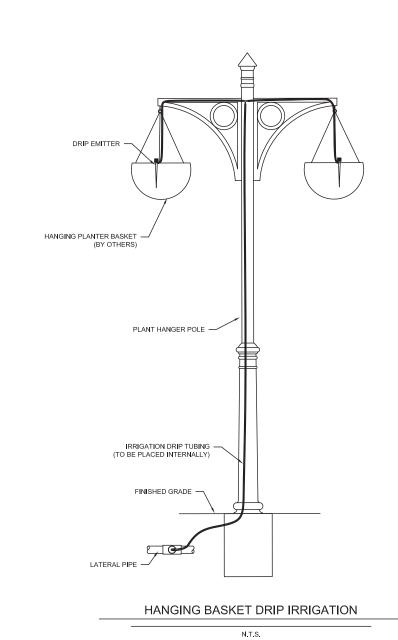
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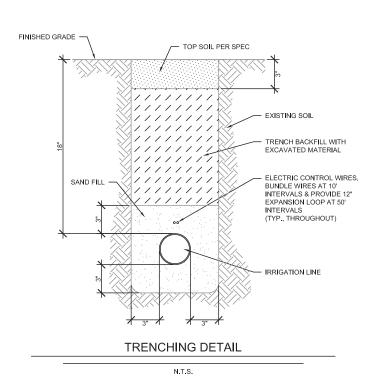
City on the Gulf

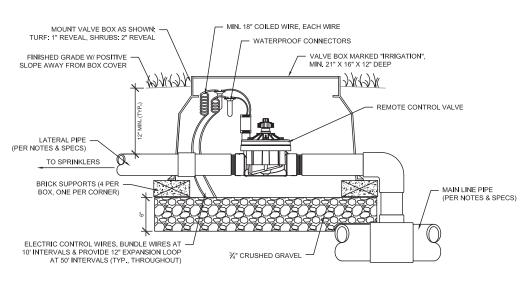
CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS

PLANT HANGER ALTERNATE IRRIG SCHEDULE & NOTES

PROJECT NO.







REMOTE CONTROL VALVE INSTALLATION

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Venice,FL City on the Gulf

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CITY OF VENICE DOWNTOWN ROADWAY CORRIDOR IMPROVEMENTS PLANT HANGER ALTERNATE IRRIGATION DETAILS

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BY: DATE: _____
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