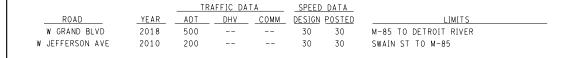
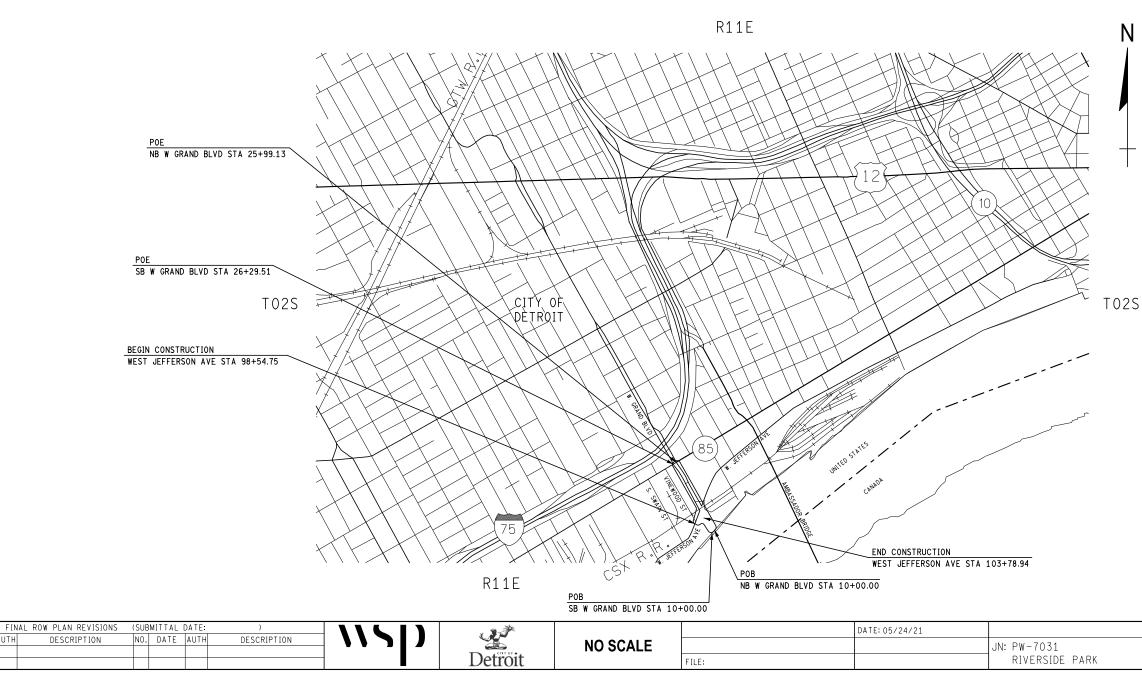
THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERING DIVISION STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION (MARCH 2009)

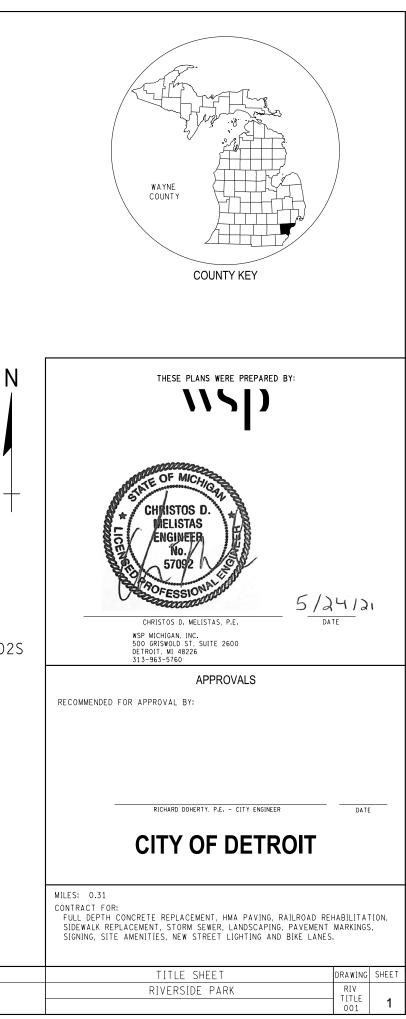
. DATE AUTH

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS



RIVERSIDE PARK WEST GRAND BOULEVARD FROM M-85 TO THE DETROIT RIVER





PUBLIC UTILITIES

The existing utilities listed below and shown on these plans represent the best information available as obtained on our surveys. This information does not relieve the contractor of the responsibility to be satisfied as to it's accuracy and the location of existing utilities.

AT&T

Name Of Owner Type Of Utility Telephone 17651 Michigan Ave For Adjusting Dearborn, MI 48126 Frames & Covers Peter Wlotkowski Phone: (734) 516-3278 pw1678@att.com Derek Bulkley (Utility Relocation) db3451@att.com City of Detroit KNOX Boxes & Detroit Fire Department Fire Hydrants 1301 3rd Street Detroit, MI 48226 General: (313) 596-2900 Fax: (313) 224-4128 communityrelations@detroitmi.gov City of Detroit Police Call Boxes Detroit Police Department 1301 3rd Street Detroit, MI 48226 General: (313) 596-2200 Fax: (313)596-1450 publicinfo@detroitmi.gov Water Mains & City of Detroit Detroit Water & Sewerage Department Contract Services Facility Sewers 6425 Huber Detroit, MI 48211 General: (313) 267-4863 /1\ Fax: (313) 842-6480 \dots Street Lighting

City of Detroit Street Ligh Public Lighting Authority 400 Monroe Street, Suite 485 Detroit, MI 48226 (212) 204 9204	Signs
ζ (313) 324-8291	Signs
City of DetroitPavementTraffic Engineering, D.P.W.Markings, 32633 Michigan Avenue& Traffic SiDetroit, MI 48207General: (313) 224-1610Fax: (313)224-1304Prasad Nannapaneni (313) 628-5603prasadn@detroitmi.govSunny Jacob (313) 628-5604sunjac@detroitmi.gov	,
Comcast Cable Sheila Schuch Phone: (248) 977-8996 sheila_schuch2@comcast.com	
Crown Castle Fiber (Light Tower) Telecom Rick Sputa Phone: (585) 626-2330 Rick.sputa@crowncastle.com	
Detroit Public Lighting (URG) Street Ligh Jesse Qualls & Traffic Si jqualls@urgllc.net ************************************	

PUBLIC UTILITIES (CONT.)

PUBLIC UTILITIES (CONT.)

Name Of Owner	Type Of Utility
Detroit Thermal LLC 3575 E Palmer St Detroit, MI 48201 Ed LaRosa (313) 921-1922 Fax: (313) 921-1972	Steam Lines
DTE Southeast Planning & Design – Downtown Detroit One Energy Plaza Room 570 SB Detroit, MI 48226 Phone: (313) 235-4400 SEPD@dteenergy.com	Electric
DTE One Energy Plaza Detroit, MI 48226 Jeremy Childers Phone: (313) 971-1319	Gas
Extenet 3030 Warrenville Rd Lisle, IL 60532 William (Bill) Vorce Sr. Construction Manager Detroit/Pittsburgh Market Phone: (248) 882-4360 bvorce@extenetsystems.com Joseph Bzorek Project Engineering Manager Phone (724) 355-4208 jbzorek@extenetsystems.com noc@extenetsystems.com	Telecom
Great Lakes Water Authority North Administration Building 1 st Floor CSF – Room One 6425 Huber Street Detroit, MI 48211 Anupam Kumar Phone: (313) 267-3698 anupam.kumar@glwater.org	Water
ITC 27175 Energy Way Novi, MI 48377 Chanelle Thomas (Underground Lines) Phone: (248) 946-3498 cjones01@itctransco.com Erin Keeler (Overhead Lines) Phone: (248) 946-3298 ekeeler@itctransco.com	Transmission
Lumen 19675 West 10 Mile Road Southfield, MI 48075 Dave Huckfeldt Phone: (517) 812-2592 dave.huckfeldt@lumen.com	Telecom
MCI/Verizon Business Mike Bruning Phone: (248) 794-7906 michael.bruning@verizonwireless.com	Telecom
Sign Shop 2425 Fenkell Detroit, MI 48238 Willie Riley (313) 628-2923 Fax: (313) 628-4966	Sign Removals & Installations

Name Of Owner	Type Of Utility
Sprint/Nextel Gerry A. Crain Phone: (847) 445-1869 gerry.a.crain@sprint.com	Telecom
Windstream Communications 4074 S. Linden Road Flint, MI 48507 David H. Beggs Phone: (810) 249-4009 david.beggs@windstream.com	Telecom

	FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	\\S D	\\S D	\\S D	\\S D				DATE: 05/24/21	
1	NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION					עריי			NO SCALE	
	1 6/4/21 LIGHTING CONTACT UPDATE		Detroit		FILE:		RIVERSIDE PARK			

Fax: (313) 628-4966

SHEET INDEX

Title	1
Project Information	2-3
Legend	4-6
Vicinity	7
Note	8-9
Miscellaneous Quantities	10
Typical Cross Sections	11-18
Miscellaneous Details	19-21
Survey Information	22
Alignment	23
Removal, Construction, Drainage & Profile	24-59
Railroad	60
Maintaining Traffic/Construction Staging Plans	61-79
Detail Grades	80-93
Landscape	94-101
Permanent Signing	102-107
Pavement Marking	108-112
Lighting	113-142
Soil Boring Log Sheets	143-147
Special Details	148-151

FUNDING CATEGORIES

Project Description Category 0001 = 100% City of Detroit

PROJECT INFORMATION SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV PROJ	0
	001	2

NOTES APPLYING TO STANDARD PLANS

Where the following items are called for on plans, they are to be constructed according to the standard plan given below opposite each item unless otherwise indicated.

Title	Plan No.
CITY OF DETROIT STANDARDS	
TYPICAL JOINT LAYOUT FOR NON-REINFORCED CONCRETE	C-4379
PAVEMENT STANDARD CURB DETAILS	C-4380
DETAIL OF ALLEY RETURN AND DRIVE APPROACH	C-4384
RECONSTRUCTION OF EXISTING SUMP MANHOLES AND NEW	C-4390
CATCH BASIN INSTALLATIONS	
FLAT TYPE GRATE AND FRAME	C-4392
SIDEWALK JOINTING STANDARD	C-4462
	C-4552
BARRICADES AND LIGHTED ARROWS	C-4730
CATCH BASINS "A" AND "B" AND FLAT GRATE AND FRAME SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	C-5028
(R-28-I WITH CITY OF DETROIT THICKNESS AMENDMENT)	
CURB, CONC, DETAIL CD, MODIFIED	
HMA APPROACH, MODIFIED	
DWSD MANHOLE ERGO ASSEMBLY	
DWSD MANHOLE 5000 FRAME	
CATCH BASIN 5000 M4 GRATE	
CATCH BASIN 5000Z4 5000M4 ASSEMBLY	
CATCH BASIN 5000 ASSEMBLY	
A.D.A. CATCH BASIN 5000M5 GRATE	
A.D.A. CATCH BASIN 5000Z4 5000M5 ASSEMBLY	
DWSD MANHOLE ERGO COVER	
DWSD MANHOLE FRAME	
FIELD MARKING STANDARDS (STD-01 TO STD-09)	
DWSD STANDARDS	
INLET PROTECTION FABRIC DROP	
SOIL EROSION SEDIMENTATION CONTROL, TEMPORARY FACILITIES	
SOIL EROSION AND SEDIMENTATION CONTROL, MAINTENANCE FACILITIES	
SOIL EROSION AND SEDIMENTATION CONTROL, GENERAL NOTES	
SOIL EROSION AND SEDIMENTATION CONTROL, SERVICE NOTES	
(FROM 1-33)	
STANDARD MANHOLE PRECAST	
MANHOLE FRAME AND COVER WITH LOGO - SEWER	
MANHOLE WATER CUSHION	
MANHOLE, ASSEMBLY	
MANHOLE, EXTERIOR DROP	
MANHOLE, OVER EXISTING SEWER	
THRUST BLOCK, HORIZONTAL BEND (TRADITIONAL DWSD SIZING)	
THRUST BLOCK, TEES (TRADITIONAL DWSD SIZING)	
THRUST BLOCK, PLUGS AND CAPS (TRADITIONAL DWSD SIZING)	
THRUST BLOCK, VERTICAL BEND (TRADITIONAL DWSD SIZING)	
HYDRANT, 6 INCH INSTALLATION OFFSET	
HYDRANT, 6 INCH INSTALLATION STRAIGHT AWAY	
CLEANOUT	
FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	

SEWER PIPE JOINT DETAIL	
SEWER PIPE CONNECTION WITH MANHOLE	
MICHIGAN DEPARTMENT OF TRANSPORATION (MDOT) STAN	DARDS
ROAD	
DRAINAGE STRUCTURES	R-1-G
COVER J	R-14-D
CURB RAMP AND DETECTABLE WARNING DETAILS	R-28-J*
DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALK	R-29-I
CONCRETE CURB AND CONCRETE CURB & GUTTER	R-30-G
ISOLATION JOINT DETAILS	R-37-B
TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)	R-39-K
LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS	R-40-H
LONGITUDINAL PAVEMENT JOINTS	R-41-H
TYPICAL JOINT LAYOUTS FOR CONCRETE PAVEMENT	R-42-F
LOCATION OF TRANSVERSE JOINTS IN PLAIN CONCRETE PAVEMENT	R-43-I
GRANULAR BLANKET, UNDERDRAINS, OUTLET ENDINGS FOR UNDERDRAINS, AND SEWER BULKHEADS	R-80-E
UTILITY TRENCHES	R-83-C
TRACK CROSSINGS	R-121-B
RAILROAD CROSSING SIGNALS	R-122-C
SIGNING	
STANDARD SIGN INSTALLATIONS	SIGN-100-G
RAILROAD CROSSING SIGN	SIGN-130-B
PLACEMENT OF D3-1 SIGNS ABOVE R1-1	SIGN-140-A
SIGN SUPPORT SELECTION CHARTS	SIGN-150-D
STEEL POSTS	SIGN-200-E
MISCELLANEOUS SIGN CONNECTION DETAILS	SIGN-740-B
PAVEMENT MARKINGS	
RAILROAD GRADE CROSSING PAVEMENT MARKINGS	PAVE-965-D
WORK ZONE DEVICES	
GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS	WZD-100-A *
TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-E *

* Denotes Special Detail

	FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:))	11611	18.3			DATE: 05/24/21		
N	D. DATE	AUTH	DESCRIPTION	NO. DATE	AUTH	DESCRIPTION			NO SCALE			JN: PW-7031
•	6/4/21		LIGHTING CONTACT UPDATE					Detroit		FILE:		RIVERSIDE PARK

 PRO IF(ON SHEFT	DRAWING	SHEI

SURVEY

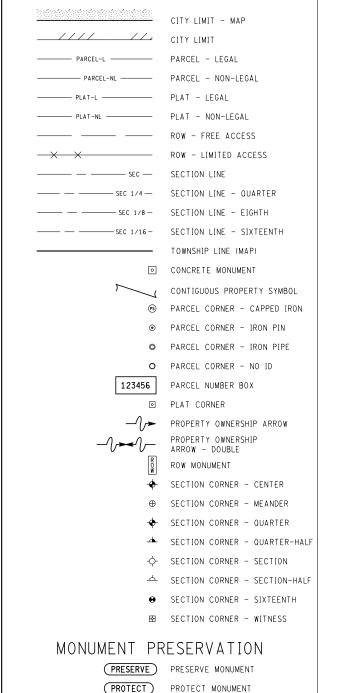
GENERAL

- △ ALIGNMENT POINT MONUMENT
- ☺ MONUMENT BOX

CONTROL

- △CP CONTROL POINT
- BM BENCHMARK
- ▲ REFERENCE GPS
- △ REFERENCE NGS
- ➡ REFERENCE USGS

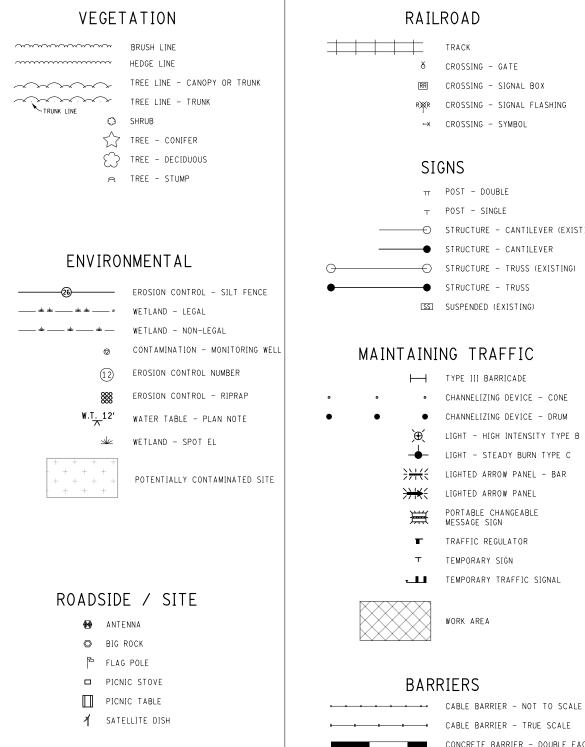
BOUNDARY



VE	LABELING	GENERAL
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	RAL	GENE
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	LEFT TURN ARROW	
	TRAFFIC FLOW ARROW	→
	VAL	REMO
	ABANDON	A
	BULKHEAD	B
	CLEARING	C
	REMOVE	R
	SALVAGE	SALV
ENV	SAVE	S
	JCTION	CONSTRU
¥ ¥ s	ADJUST	ADJ
	ADJUST - STRUC COVER WITH TYPE	(ADJ-B)
	ADJUST - BY OTHERS	(ADJ-B/0)
w.T.	CONSTRUCTION	REMOVAL AND (
7	RELOCATE - WITH CASE NUMBER	(REL-1)
+ + +	RELOCATE - BY OTHERS	(REL-B/0)
	TION LIMITS	CONSTRUC
	- SSL SLOPE STAKE LINE	SSL
ROAD		
•		
\bigcirc	NAC	
۲ ۲	INGS	ROK
	BORING	⊗ BH#
ш 1		

STRUCTURES

- O BEAM UNDERCLEARANCE
- ⊙ REFERENCE POINT
- S01 OF 12345 STRUCTURE NO. + CONTROL SEC. LABEL



NOTE:

EXISTING ITEMS ARE REPRESENTED BY THIN LINE WEIGHTS. PROPOSED ITEMS ARE REPRESENTED BY HEAVIER LINE WEIGHTS.

٥	FENCE POST
123	GUARDRAIL RUN
	IMPACT ATTENU
Ļ	POST - MAILBO
0	POST - NO ID

NOISE BARRIER

FENCE

EINAL ROW PLAN REVISIONS (SUBMITTA	DATE:)		- ¥		DATE 05 (24/21			
DATE AUTH DESCRIPTION NO. DAT	AUTH	DESCRIPTION				DATE: 05/24/21			
			╡╺╺╸┚╏┛		NO SCALE		_JN: PW-7031	RIVERSIDE PARK	
			- ∎	Detroit		FILE:	RIVERSIDE PARK		001 4
					DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION	DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION NO. SCALE	DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPT	DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPT	DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPT

CROSSING - SIGNAL BOX CROSSING - SIGNAL FLASHING

→ STRUCTURE - CANTILEVER (EXISTING) STRUCTURE - TRUSS (EXISTING)

- CHANNELIZING DEVICE CONE CHANNELIZING DEVICE - DRUM LIGHT - HIGH INTENSITY TYPE B LIGHT - STEADY BURN TYPE C LIGHTED ARROW PANEL - BAR PORTABLE CHANGEABLE
- TEMPORARY TRAFFIC SIGNAL

CABLE BARRIER - TRUE SCALE CONCRETE BARRIER - DOUBLE FACE CONCRETE BARRIER - SINGLE FACE

GUARDRAIL - NOT TO SCALE GUARDRAIL - TRUE SCALE

> NUMBER UATOR

) X (

SURFACING

REMOVAL



CONCRETE RUBBLIZING HMA CRUSH & SHAPE

HMA COLDMILLING

HMA SURFACE REMOVAL AND / OR PAVEMENT REMOVAL

PROPOSED



AGGREGATE APPROACH

BRIDGE APPROACH

HMA APPROACH

MISCELLANEOUS CONCRETE

SIDEWALK



SIDEWALK - REMOVAL

SIDEWALK - CONCRETE RAMP

::::: SIDEWALK - DETECT. WARNING SURF.

SIDEWALK - LANDING

(SWR-F) SIDEWALK - RAMP LABEL

TYPICAL SECTION

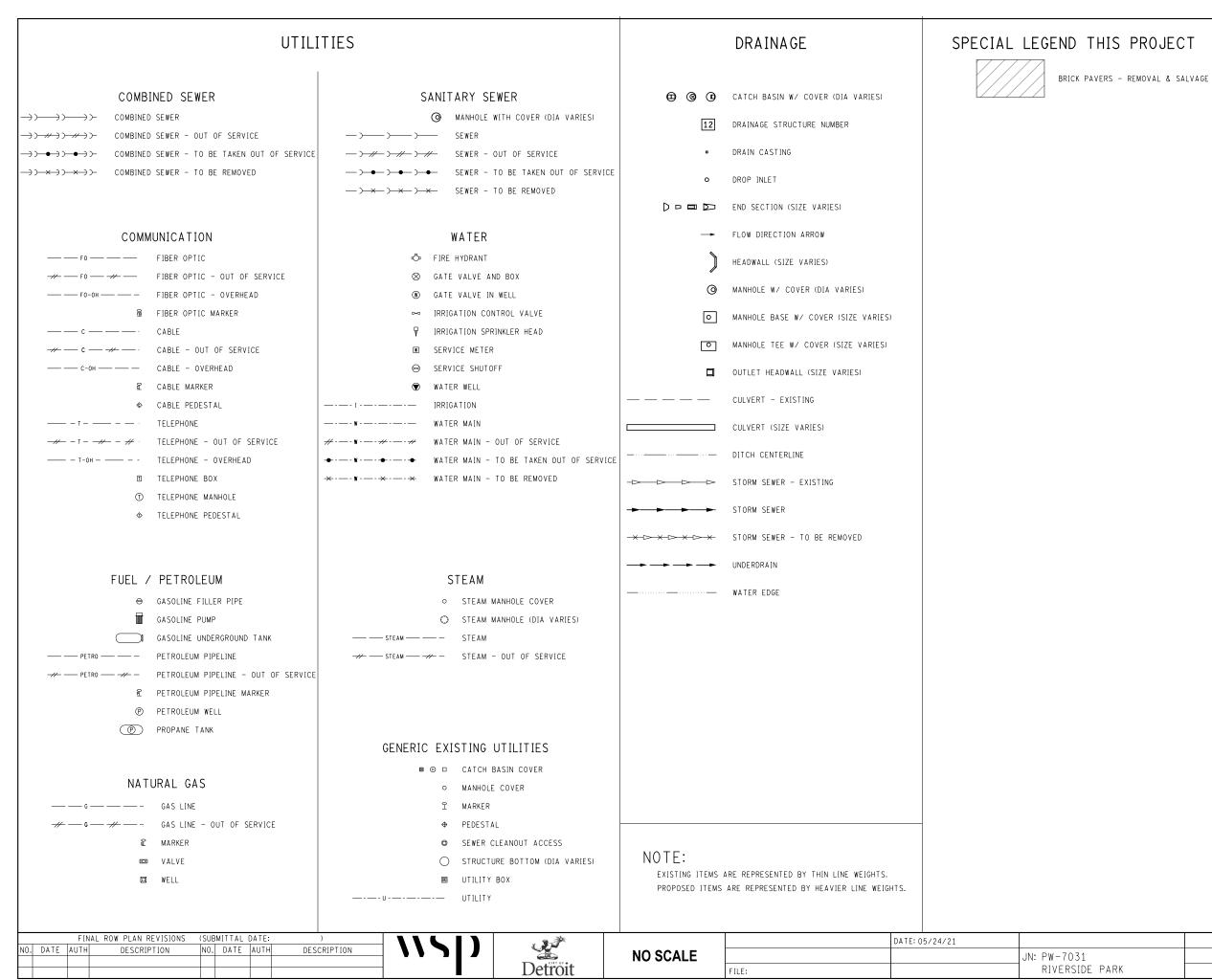


CONCRETE - PROPOSED

HMA - PROPOSED

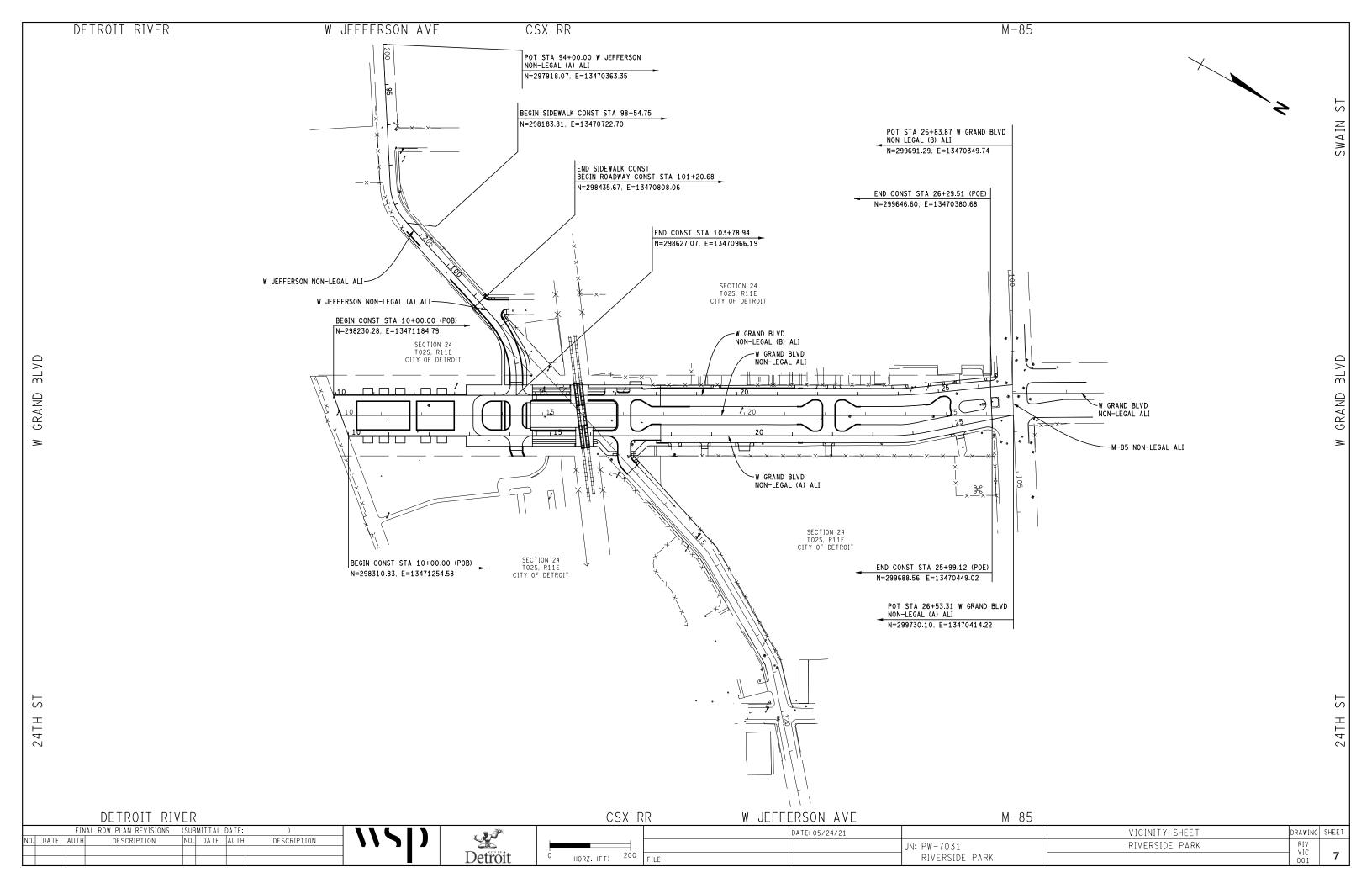
CURB & GUTTER

 $\times \times \times \times \times \times \times$ CURB & GUTTER REMOVAL



LEGEND SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV LEGEND	_
	002	5

ELECTRICAL	ARCHITECTURAL	ITS / S	SIGNALS	CABLING / WIRING DIAGRAM
CONTROLLER CABINET - PAD MOUNTED MANDADE MANDADE POLE UTILITY - EXISTING POLE UTILITY TRANSFORMER - PAD MOUNTED CABLE UTRANSFORMER - POLE MOUNTED CABLE OVERHEAD CABLE OVERHEAD CABLE IN COMDUIT - TO BE REMOVED CABLE IN COMDUIT - DIRECTIONAL BORE CABLE IN COMDUIT - DIRECTIONAL BORE	EXIT SIGN WITH EMERGENCY LIGHT Note:: Note::	DYNAMIC MESSAGE SIGN - EXISTING DYNAMIC MESSAGE SIGN PROVINCIAL SENSOR STATION SITE FIBER OPTIC SPLICE CABINET HANDHOLE, ROUND, 3 FOOT DIAMETER HANDHOLE, ROUND, COMMUNICATIONS HANDHOLE, ROUND, COMMUNICATIONS HANDHOLE, ROUND, ELECTRIC HANDHOLE, ROUND, ELECTRIC HANDHOLE, TYPE D TIS CABINET COMMONAVE VEHICLE DETECTION SYSTEM - EXISTING COMMONAVE VEHICLE DETECTION SYSTEM MICROWAVE VEHICLE DETECTION SYSTEM MICROWAVE VEHICLE DETECTION SYSTEM MICROWAVE VEHICLE DETECTION SYSTEM SURVEILLANCE SYSTEM - EXISTING SURVEILLANCE SYSTEM SURVEILLANCE SYSTEM WIRELESS LINK - EXISTING MICROWAVE TOLE - EXISTING COMMUNICATIONS CABLE IN CONDUIT TO BE REMOVED HIS	 ANTENNA CASE SIGN (1-WAY OR 2-WAY) CASE SIGN (4-WAY) DEDICATED SHORT RANGE COMMUNICATIONS CONTROLLER CABINET - POLE MOUNTED CONTROL ERREGENCY PREMENTION OPTICOM DILEMAA ZONE DETECTION GLOBAL POSITIONING SYSTEM MODULE CUY ANCHOR PEDESTRIAN PEDESTAL PEDESTRIAN PEDESTAL PEDESTRIAN PEDESTAL POLE MAST ARM (LENGTH VARIES) - EXISTING POLE MAST ARM (LENGTH VARIES) - EXISTING POLE MAST ARM (LENGTH VARIES) POLE MAST ARM (LENGTH VARIES) POLE MAST ARM (LENGTH VARIES) POLE STRAIN ROAD SIGN W/ FLASHING SIGN OPTICAL (1-WAY) SIGNAL HANDHOLE - 2 FOOT ROUND SIGNAL HANDHOLE - 4 FOOT SOUARE SIGNAL HANDHOLE - 4 FOOT SOUARE SIGNAL HEAD PEDESTRIAN - EXISTING SIGNAL HEAD VEHICLE 1-WAY - EXISTING SIGNAL HEAD VEHICLE 1-WAY - EXISTING SIGNAL HEAD VEHICLE 2-WAY - EXISTING SIGNAL HEAD VEHICLE 1-WAY - EXISTING SIGNAL HEAD VEHICLE 2-WAY SIGNAL HEAD VEHICLE 1-WAY SIGNAL HEAD VEHICLE 1-WAY SIGNAL HEAD VEHICLE 1-WAY SIGNAL HEAD VEHICLE 1-WAY SIGNAL HEAD VEHICLE 2-WAY SIGNAL HEAD VEHICLE 1-WAY WIRELESS VEHICLE DETECTION CAMERA VEHICLE D	Image: CIRCUIT BREAKER Image: COLED WIRE Image: FUSE SWITCH <
NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION		NO SCALE	JN: PW-7031 RIVERSIDE PARK	RIVERSIDE PARK RIV 003 6



GENERAL NOTES

UTILITIES

MISS DIG/UNDERGROUND UTILITY NOTIFICATION

For the protection of underground utilities and in conformance with MCL 460.171 et seq, the Contractor shall contact MISS DIG System, Inc. by phone at 811 or 800-482-7171 or via the web at either elocate.missdig.org for single address or rte.missdig.org, a minimum of 3 work days prior to excavating, excluding weekends and holidays.

MDOT's Roadway Lighting, Traffic Signals, ITS and other miscellaneous electrical systems are not a part of Miss Dig. ITS system includes traffic cameras, changeable message signs, detection equipment, fiber optic cable, other sensors and related communication cables and equipment in, over, or along the roadway. Contractors shall contact the following at least 5 work days in advance for staking requests, excluding weekends and holidays. Submit MDOT Form 5300 (https://mdotjboss.state.mi.us/webforms/GetDocument.htm?fileName=53 00.pdf) to respective region email address(es) on the form. Note that these are not emergency contacts for damage to utilities.

LIGHTING AND TRAFFIC SIGNAL CABLE (within the City of Detroit): Public Lighting Authority: (313) 324-8291 (Street Lighting) Traffic Engineering Division: (313) 224-1610 (Traffic Signals)

MDOT ELECTRICAL SYSTEMS

Contractors shall contact the maintenance representative at the MDOT Region / TSC Office to have MDOT electrical systems staked.

ROW / REAL ESTATE

PROPERTY OWNERS

The names of property owners shown on the plans are for information only, and their accuracy is not guaranteed.

MARKETABLE TIMBER

Marketable timber shall be handled in accordance with Section 201.03 of the 2012 Standard Specifications for Construction.

LAWN SPRINKLER SYSTEMS AND LANDSCAPING

Owners of existing lawn sprinkler systems and/or landscaping shall be notified (in writing with a copy sent to the Engineer) by the Contractor two weeks in advance of any work to be done that will affect those systems and/or landscaping. If the property owner fails to relocate the lawn sprinkler system prior to the Contractor beginning work, and if the Contractor cuts the system during the construction, the Contractor shall cap the system pipe and witness the location of the cap with a wooden stake for the property owner's use. The Contractor shall place the salvaged sprinkler heads on the property owner's property. If the property owner fails to relocate the landscaping prior to the Contractor beginning work, the Contractor shall carefully salvage the landscaping items and stockpile them on the property owner's property for the property owner. Any other modification to the lawn sprinkler systems and/or landscaping is the responsibility of the owner and is not part of this contract. This work is included in other items of the project.

SURVEY

ADJUSTING MONUMENT BOXES

All government corners on this project shall be preserved, whether shown or not. It may be necessary to place or adjust monument boxes, as required.

DETAILED GRADES

SIDEWALK AND SIDEWALK RAMP GRADES

All sidewalk and sidewalk ramp grades shall be staked according to Standard Plan R-28 series and as shown on the plans. Prior to constructing the sidewalk and sidewalk ramps, the Engineer will verify the grades and authorize the construction of the sidewalk and sidewalk ramps.

EARTHWORK

EARTHWORK

Earthwork quantities are computed by the average end area method based upon ground survey information.

EARTH DISTURBANCE LIMITS

The earth disturbance limit for this project will be limited to 10' beyond the slope stake line or to the ROW line whichever is less for all areas except for wetland areas. For areas adjacent to wetlands, the earth disturbance limit will be limited to the slope stake line. Restoration measures have been included in this set of plans for the approved areas of disturbance. The Contractor shall submit an earth change plan for any work beyond the approved limits to the Engineer to review for approval prior to the disturbance. All costs for obtaining and executing an approved earth change plan, including restoration, shall be at the Contractor's expense.

SOIL EROSION MEASURES

Appropriate soil erosion and sedimentation control measures shall be in place prior to earth-disturbing activities. Place turf establishment items as soon as possible on potential erodable slopes as directed by the Engineer. Critical ditch grades shall be protected with either sod or seed/mulch or mulch blanket as directed by the Engineer.

BASES

AGGREGATE BASE

Aggregate bases shall use aggregate 21AA, unless otherwise specified.

DRAINAGE

ILLICIT CONNECTIONS TO STORM WATER SYSTEM

Connections to existing storm conveyance systems not shown on the plans must be reconnected with minimal interruption in service. Size, type and location by station and offset and any suspect illicit discharge observed shall be reported to the Engineer prior to reconnecting. Contractor shall proceed as directed by the Engineer.

TEMPORARY BULKHEADS

Temporary bulkheads may be required for the part width construction of the culverts and sewers. All cost associated with the temporary bulkheads are included in the item of the pipe.

PAVEMENT

PAVEMENT AND HMA SURFACE REMOVAL QUANTITIES

Pavement and HMA Surface removal as shown on the plans will be at the discretion of the Engineer. If in his/her judgment, areas of pavement may be left in place, or additional areas added to provide the proper cross-section and base. Changes will be made in the quantities.

SOIL BORINGS AND/OR PAVEMENT CORES

The soil boring logs and/or pavement cores represent point information. No inference should be made that subsurface or pavement conditions are the same at other locations.

CONCRETE HAND FINISHING

Hand finishing of concrete pours to be struck off and consolidated by hand methods will be permitted on variable width lanes and lanes formed by flexible forms for short radius curves, as directed by the Engineer.

LANDSCAPING

Existing vegetation shall not be damaged during construction operations, per the 2012 Standard Specifications for Construction.

All equipment to be used must be approved by the Engineer prior to beginning work.

Storage of equipment and materials will be restricted to areas designated by the Engineer. No equipment is permitted within the drip line of existing trees to remain.

Branches of all trees to be saved shall not be removed or damaged by construction equipment. If removal of lower branches is necessary, contact the City of Detroit for proper methods.

Do not trench within the drip line of existing trees to remain unless specifically approved by the Engineer.

Contractor shall promptly restore any property damage at no expense to the City of Detroit.

All excavated material will become the property of the Contactor. Any excavated material not used on the project will be removed from the site and disposed of in accordance with section 205.03.P. of the 2012 Standard Specification for Construction and any applicable state and/or local ordinances.

No cereal rye seeding shall be used on this project.

Protect existing sidewalks from damage.

Plant material, soil, fertilizer and mulch will be inspected/approved by the Engineer or the Landscape Architect prior to installation. Plant inspection may occur at the nursery source or when plants arrive on site.

Remove unacceptable plants that fail inspection. Remove entire plant (including root ball) and dispose of offsite. Restore planting hole to existing conditions according to Sections 107.7 and 816 of the 2012 Standard Specifications for Construction.

Final staking may be adjusted to avoid conflicts with utilities.

<u>SIGNS</u>

GENERAL

All signs shall be installed, removed and/or salvaged according to the current edition of "Michigan Manual on Uniform Traffic Control Devices" and the current edition of Michigan Department of Transportation (MDOT) "Standard Specifications for Construction."

All signs on the plans or in the log that do not have a recommendation are to be retained.

EXISTING SIGN RELOCATION

Any permanent signs requiring relocation due to Contractor operations shall be salvaged and reset by the Contractor at locations designated by the Engineer. Signs and posts damaged during the removal and storage operations shall be replaced with new signs and posts. The cost of this work shall be borne by the Contractor.

PLAN SCALE

The final plans submitted with the proposal are not to scale. Where proposed on plan sheets, the signs and structures shall be fabricated in accordance to Typical Plans, Standards, and/or Details at locations described.

SIGN LAYOUT

Sign layouts shall be according to the current English edition of "Standard Highway Signs" manual or as detailed in plans. Legend length shall be determined using the "SignCAD" software.

	FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:))		× 3 Å			DATE: 05/24/21				
	IO. DATE	AUTH	DESCRIPTION	NC	DATE	AUTH	ł	DESCRIPTION			NO SCALE			JN: PW-7031
Γ	1 6/4/21		LIGHTING CONTACT UPDATE							Detroit		FILE:		RIVERSIDE PARK

SHEETING

Handling and installation of all signs shall conform to the sheeting manufacturer's specifications and guidelines.

Splice sheeting used for Type I signs with a 3" overlap.

Signs that have wrinkled or twisted sheeting may be rejected.

SIGN INSTALLATION

When attaching signs to supports, tighten the nut, not the bolt head.

Nylon washers shall be placed between the steel washer and the sign face sheeting. The nylon washers are to be considered part of the attaching devices and hardware. Nylon washers shall have a 3/8-inch inner diameter, a 7/8-inch outer diameter and a 1/16-inch thickness.

The Contractor shall attach a date sticker to the back of all signs installed on the contract.

SIGNALS

MAINTAINING AGENCY CONTACT INFORMATION

- MDOT: Statewide Signal Shop (517-322-3360)
- Wayne County Department of Public Services: (734-955-2346)
- City of Detroit: Traffic Engineering Division: (313-224-1610)

FACILITIES NOT ON PLANS

Existing O.H. & T.S. facilities are not necessarily shown on plans.

POLE BAND CLAMP ACCEPTANCE

The current basis of acceptance for this material is now part of the QPL (Qualified Product List). This can be found in the materials Acceptance Requirements Table, published in the MQAP and repeated for convenience in the Materials Source Guide.

PROJECT SPECIFIC NOTES

TYPICAL SECTIONS

Existing typical sections are based on soil borings and represent point information. No inference should be made that subsurface or pavement conditions are the same at other locations.

AUDIO-VISUAL FILMING

An audio-visual filming of the project conditions as described in the unique special provision must be completed before and after construction.

RAILROAD

Refer to the CSX Transportation Public Project Information Manual (https://www.csx.com/index.cfm/library/files/about-us/property/public-

project-manual/) for additional requirements needed for working on/above/adjacent to CSX Transportation Inc. (CSXT). Specific sections that pertain to this project are: Special Provisions for Construction near CSXT Property, Construction Submission Criteria, and Insurance Requirements for Public Projects.

Contractor access will be limited to the immediate project area only. The CSXT right-of-way outside the project area may not be used for Contractor access to the project site.

The Contractor may not use CSXT right-of-way for storage of materials or equipment during construction without prior CSXT approval. The CSXT right-of-way must remain clear for railroad use at all times. Equipment may not be positioned to block the railroad access road, track area or any part of the CSXT right-of-way without prior CSXT approval.

The Contractor will provide documentation to the Engineer detailing that all railroad coordination requirements have been satisfied. The Contractor will provide to the Engineer copies of the fully executed CSXT Right of Entry Permit and supplemental certificates of insurance complying with Coordination Clause for Work on CSX Railroad Property

NOTE SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV NOTE	0
	001	8

and Special Provision for Railroad Insurance Requirements. Periodically, throughout the project duration, the Contractor will be required to meet, discuss and, if necessary, take immediate action at the discretion of CSXT personnel and/or their authorized Representative, to comply with provisions of the CSXT Right of Entry Permit and these specifications.

The Contractor must not allow NB traffic across the CSX W Grand Blvd grade crossing surface during construction unless directed by the Engineer and approved by CSXT. The Contractor will provide to the Engineer, copies of the written approval provided by CSXT allowing movement of NB traffic across the CSX W Grand Blvd grade crossing surface during construction.

FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)				133			DATE: 05/24/21						
NC	D. DATE	AUTH	DESCRIPTION	NO. E	DATE	AUTH	DESCRIPTION			NO SCALE			JN: PW-7031
1	6/4/21		LIGHTING CONTACT UPDATE						Detroit		FILE:		RIVERSIDE PARK

NOTE SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV NOTE 002	9

MISCELLANEOUS QUANTITIES

The following items of work shall be done as they apply throughout the project. These items are not detailed or included on the plan and profile sheets.

MISCELLANEOUS ITEMS FOR CONSTRUCTION

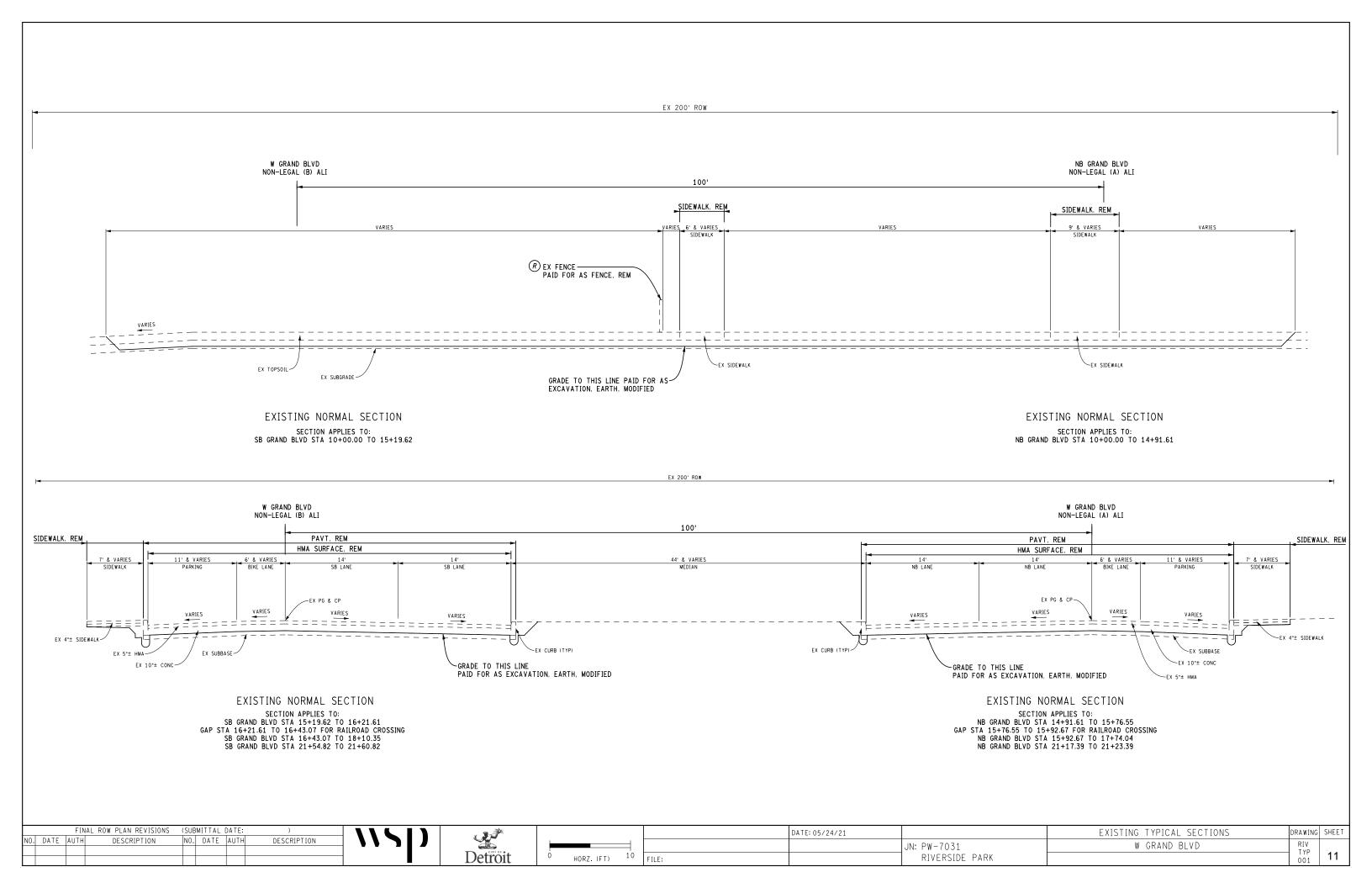
1	LS	Audio-Visual Filming
1	LS	Monitoring Vibrations
1	LS	Mobilization, Max
100	Cyd	Subgrade Undercutting, Type II
100	Cyd	Non Haz Contaminated Material Handling and Disposal, LM
300	Ft	Exploratory Investigation, Vertical
167	Syd	Sidewalk, Rem
19	Cyd	Excavation, Earth, Modified
1500	Sft	Sidewalk, Conc, 4 inch, Modified
300	Ft	Curb, Conc, Detail CD, Modified
167	Syd	Aggregate Base, 4 inch
200	Syd	Slope Restoration, Type A
100	Ft	Conduit, Encased, 2, 3 inch, Modified
100	Ft	Cable, Sec, Triplex, 1, 3/C#4
200	Ft	Cable, Equipment Grounding Wire, 1/C#6, Modified
200	Ft	Cable, Sec, 600V, 3, 1/C#6, Modified
2	Ea	Hh, Polymer Conc, Modified
15000	Dlr	Critical Path Method Schedule
54000	Dlr	Railroad Inspection and Flagging
25000	DIr	Railroad Protection, at Grade Crossing
		,

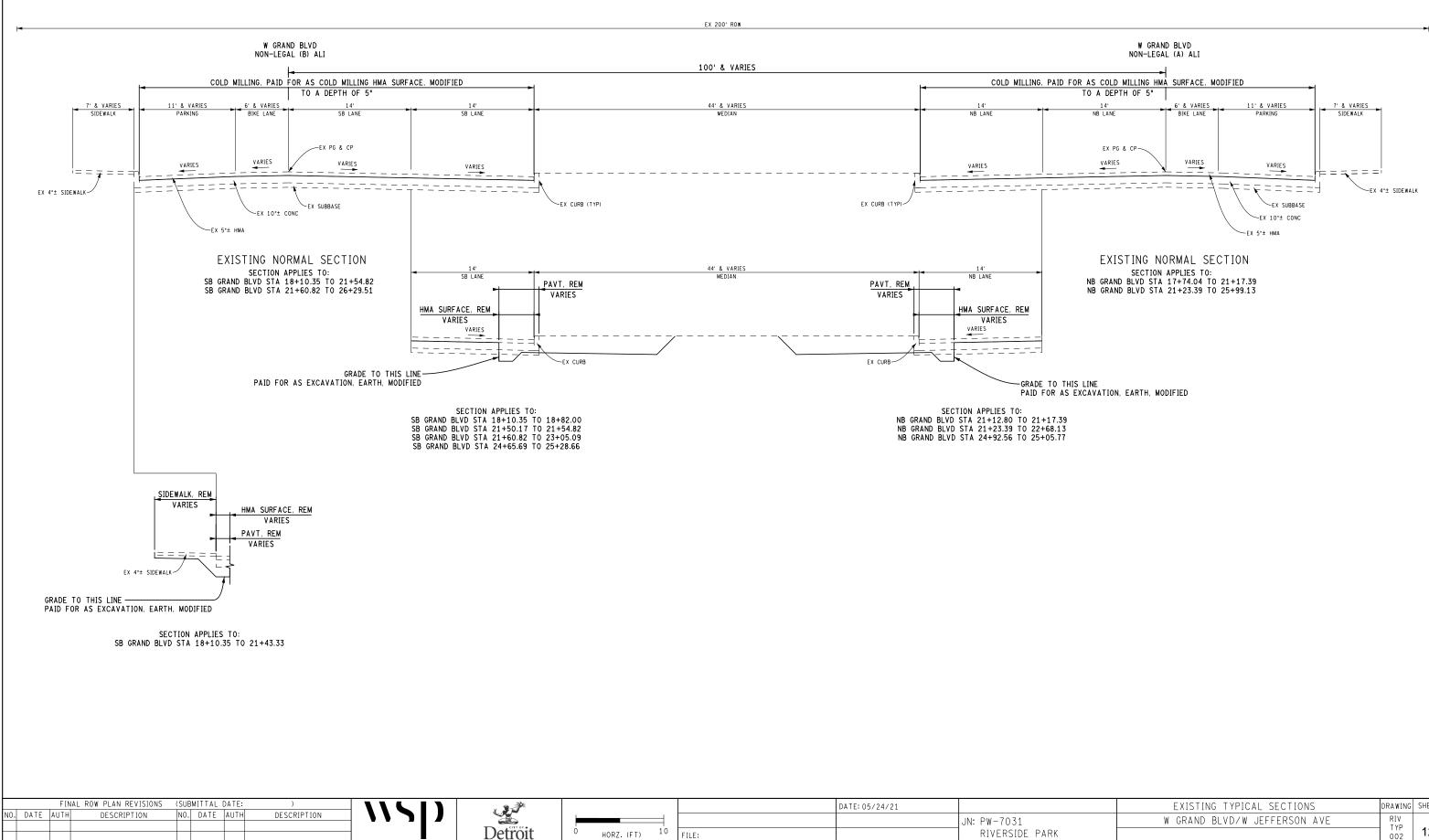
MAINTENANCE OF TRAFFIC QUANTITIES

1	LS	Minor Traf Devices
1	Ea	Mobile Attenuator
1	LS	Traf Regulator Control
40	Ea	Barricade, Type III, High Intensity, Lighted, Furn
40	Ea	Barricade, Type III, High Intensity, Lighted, Oper
20	Ea	Pedestrian Type II Barricade, Temp
40	Ft	Pedestrian Type II Channelizer, Temp
100	Ea	Channelizing Device, 42 inch, Furn
100	Ea	Channelizing Device, 42 inch, Oper
1	Ea	Lighted Arrow, Type C, Furn
1	Ea	Lighted Arrow, Type C, Oper
3000	Ft	Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, White, Temp
1600	Ft	Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, Yellow, Temp
2000	Ft	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp
2000	Ft	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp
100	Ea	Plastic Drum, High Intensity, Furn
100	Ea	Plastic Drum, High Intensity, Oper
6	Ea	Sign Cover
2	Ea	Sign, Portable Changeable Message, NTCIP-Compliant, Furn
2	Ea	Sign, Portable Changeable Message, NTCIP-Compliant, Oper
500	Sft	Sign, Type B, Temp, Prismatic, Furn
500	Sft	Sign, Type B, Temp, Prismatic, Oper
202	Sft	Sign, Type B, Temp, Prismatic, Special, Furn
202	Sft	Sign, Type B, Temp, Prismatic, Special, Oper
200	Ft	Fence, Protective

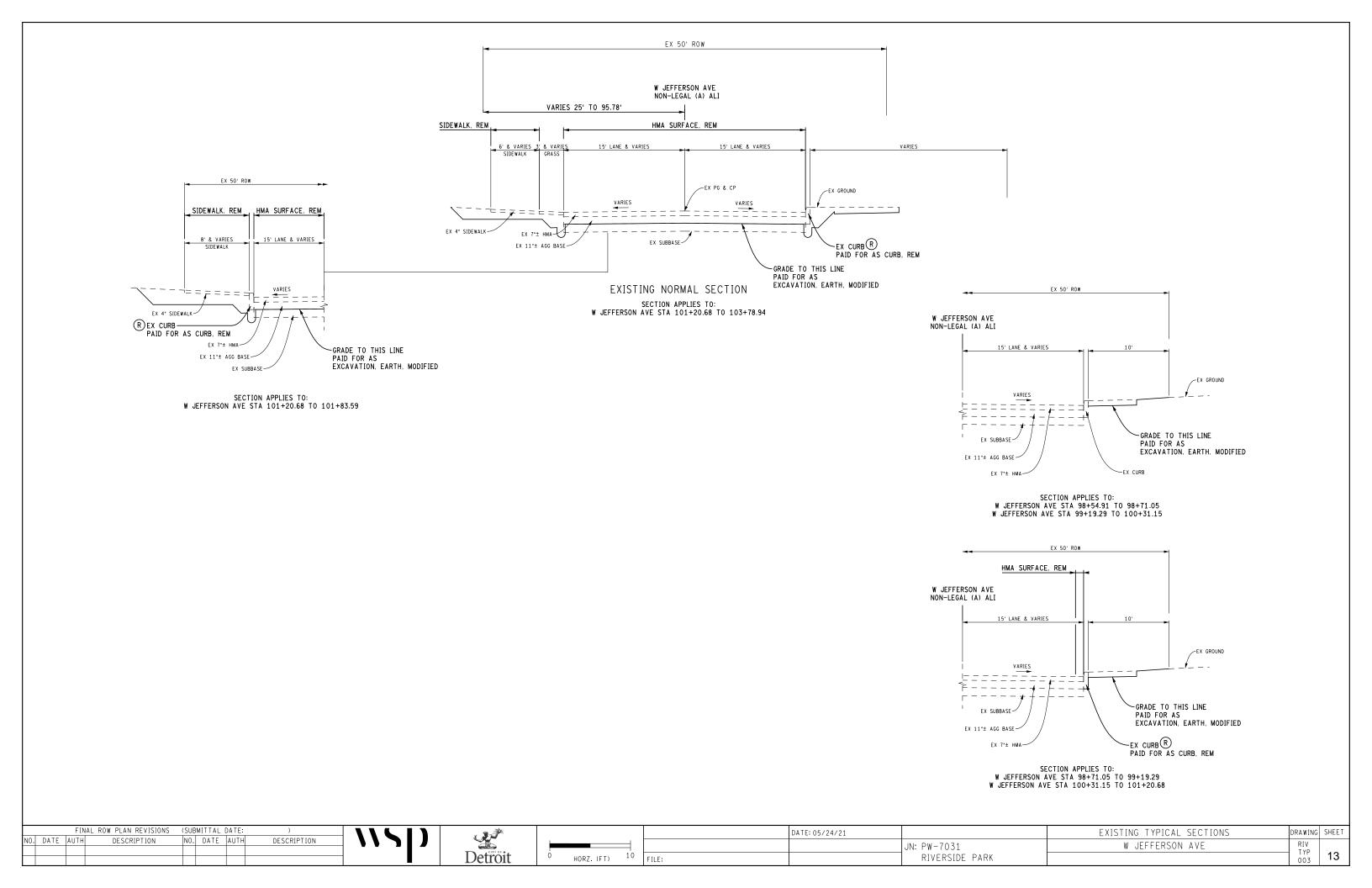
	AS-LET PLAN REVISIONS	11611	18.3			DATE: 05/24/21	
NO. DATE AUTH	DESCRIPTION NO. DATE AUTH DESCRIPTION	יוריי		NO SCALE			JN: PW-7031
] Ⅰ	Detroit		FILE:		RIVERSIDE PARK

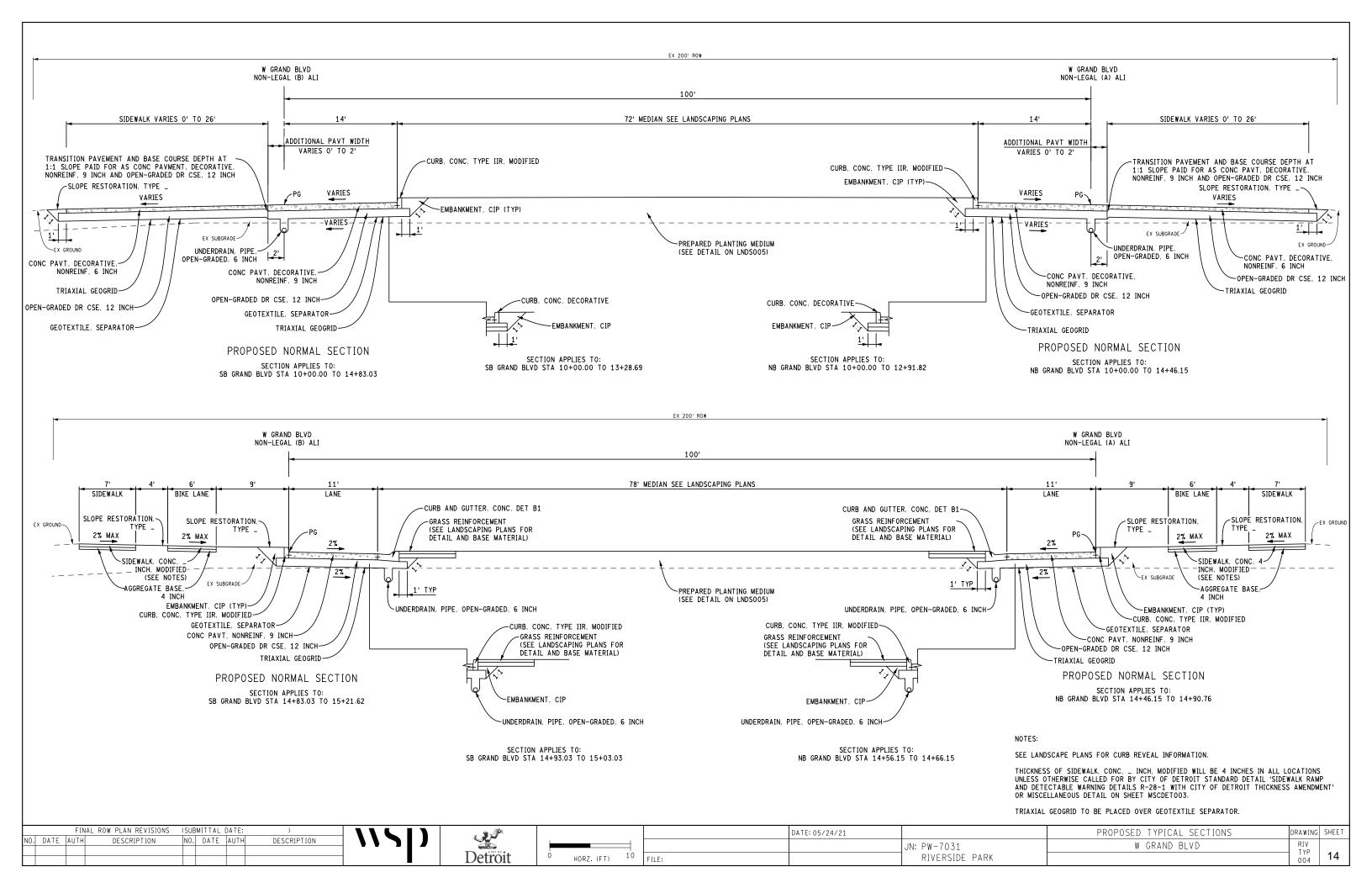
	TES & ESTIMATE	DRAWING	SHEE

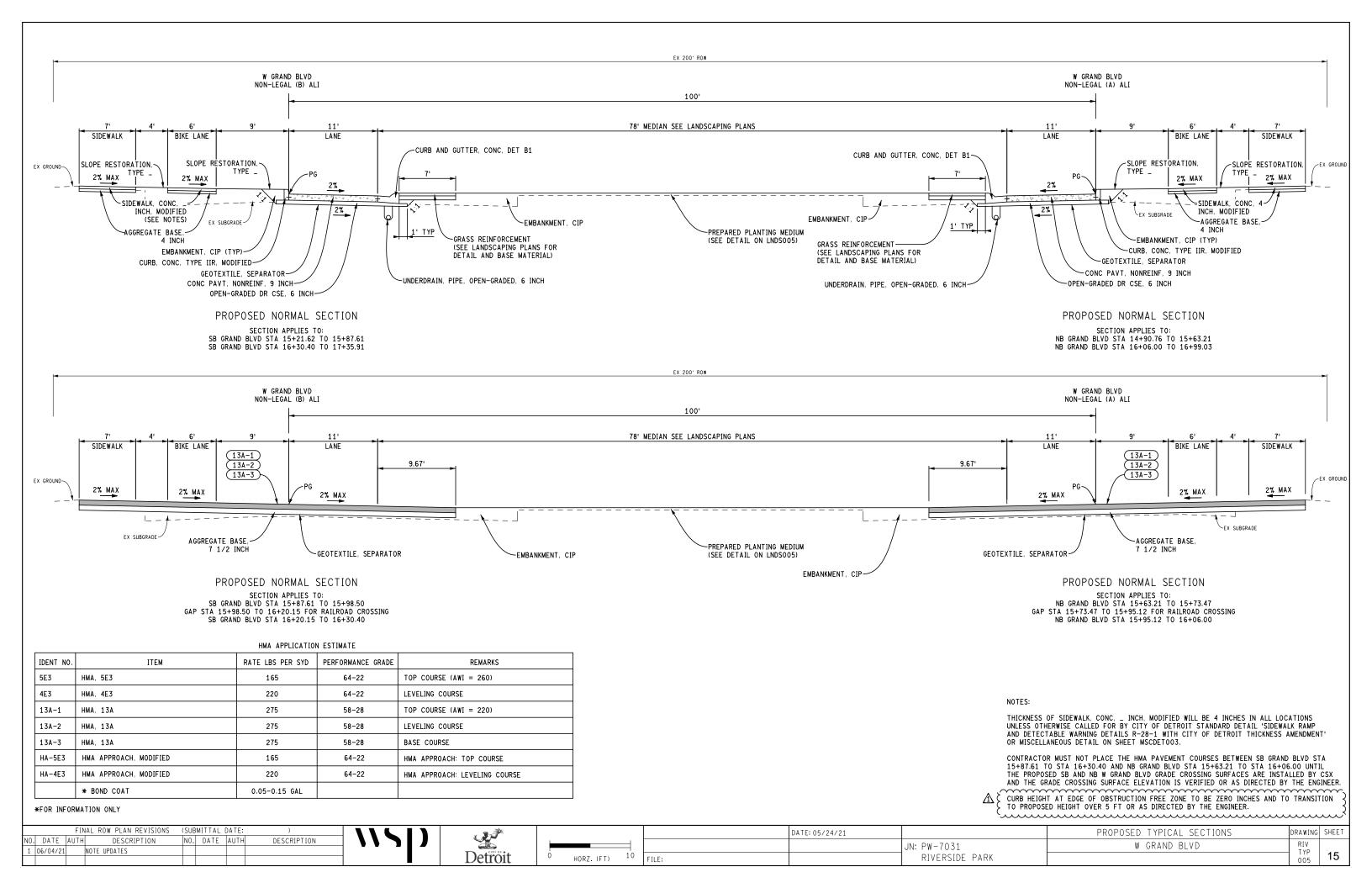


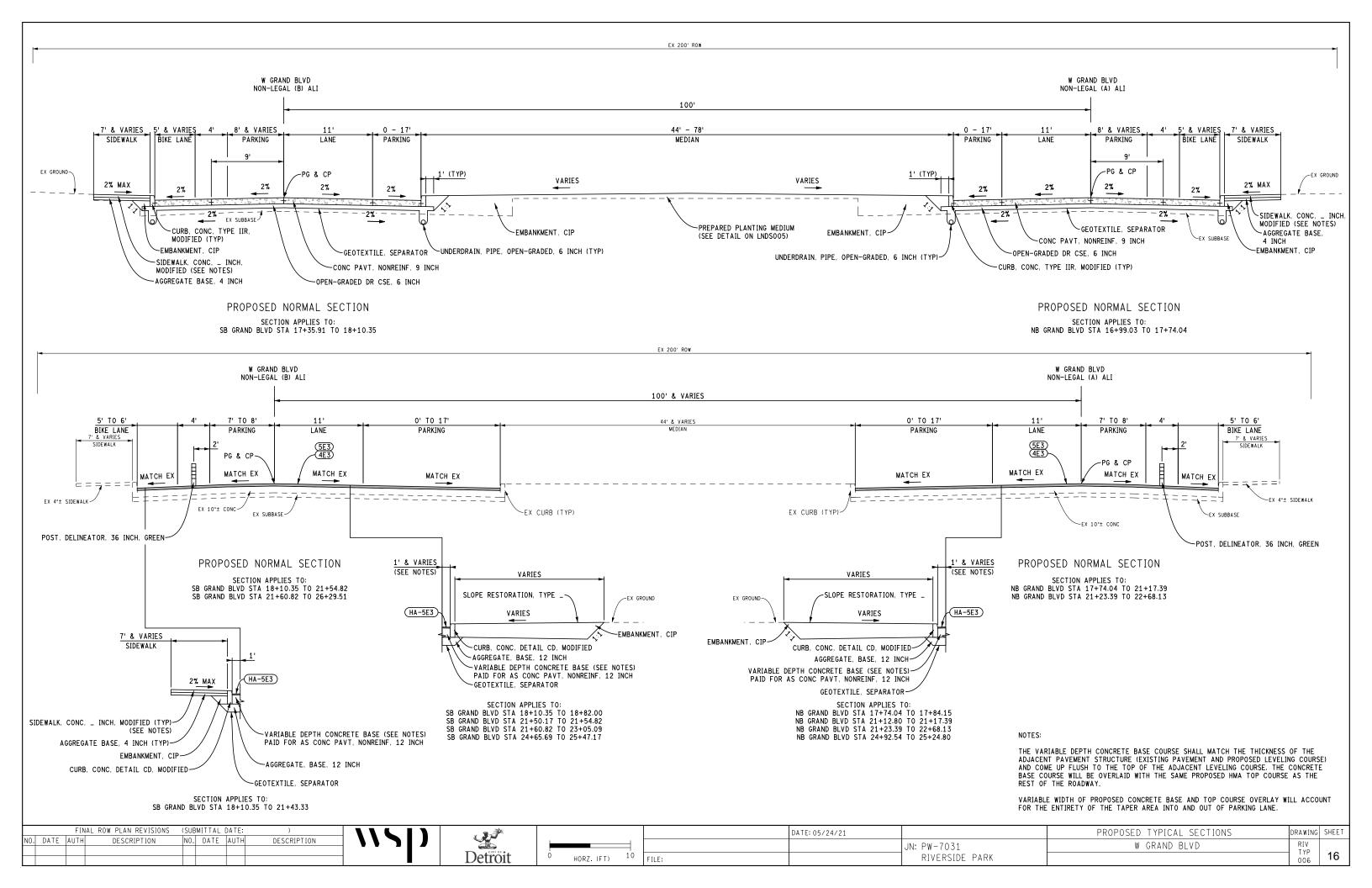


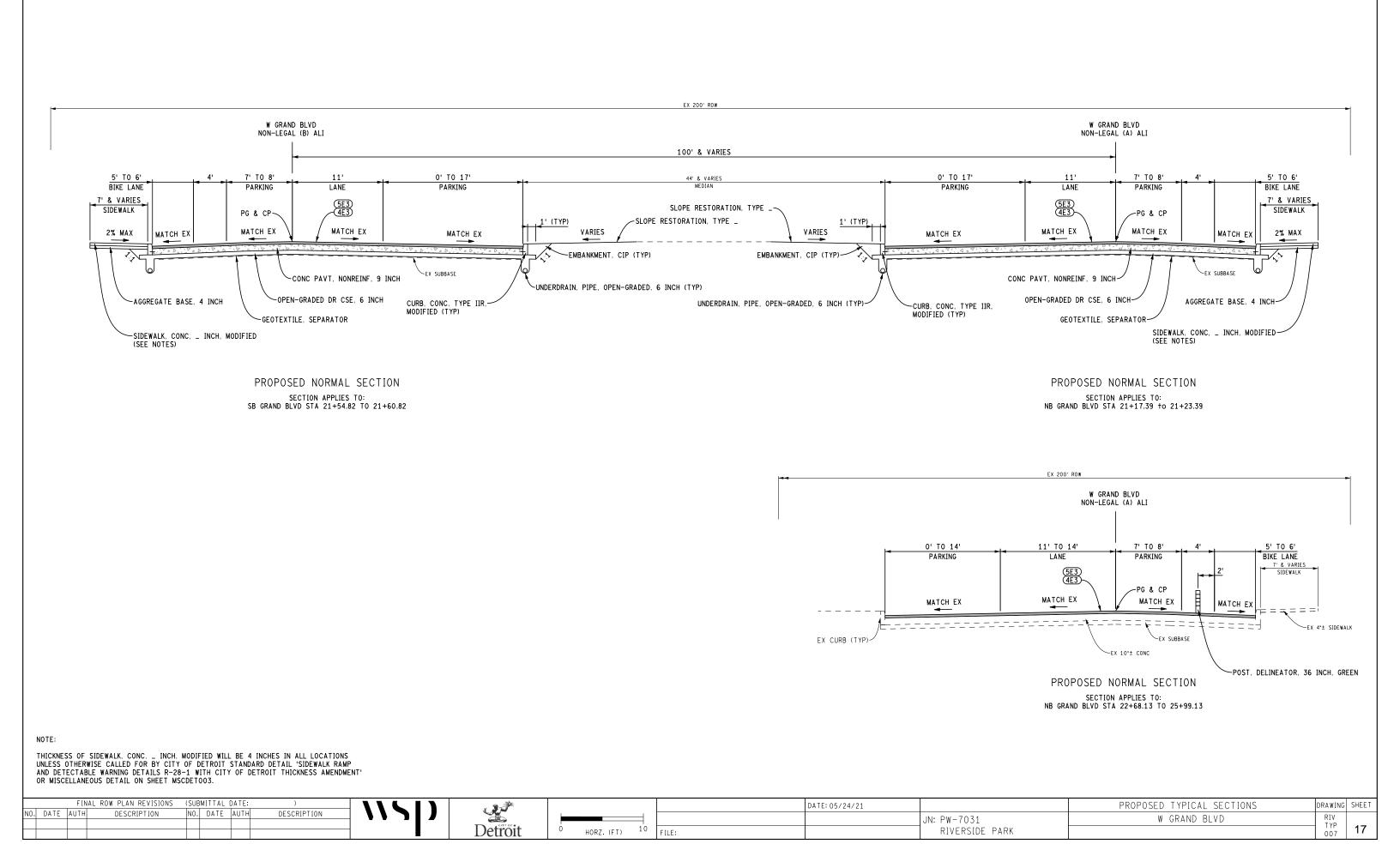
EXISTING TYPICAL SECTIONS	DRAWING	SHEET
W GRAND BLVD/W JEFFERSON AVE	RIV	
	002	12

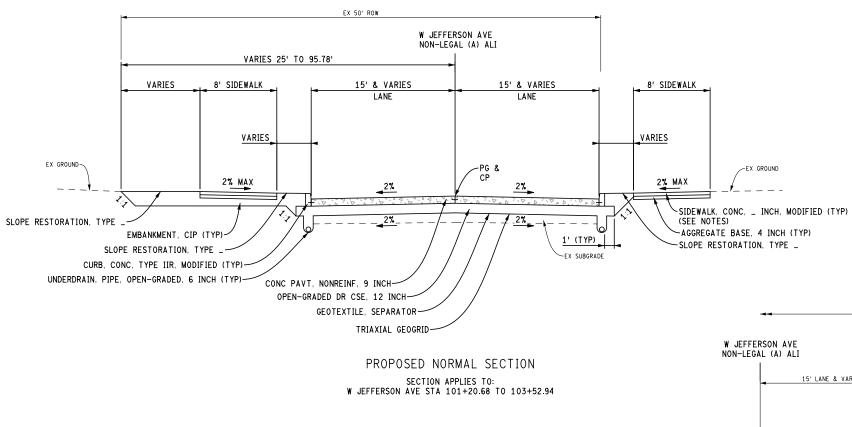












W JEFFERSON AVE NON-LEGAL (A) ALI

_ _ _ _ **+**

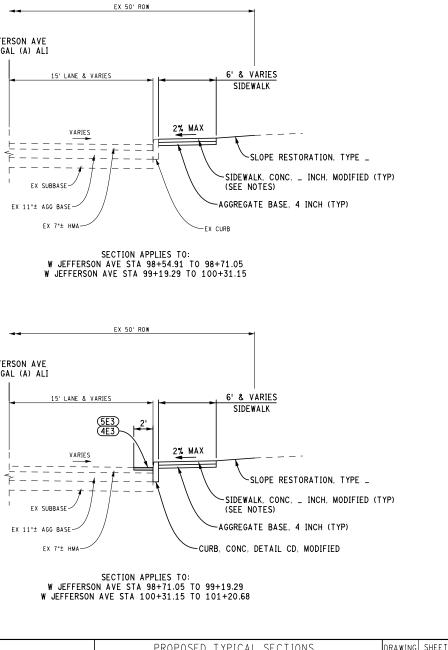
EX 11"± AGG BASE-

NOTES:

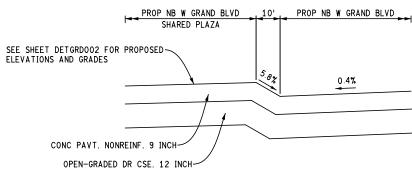
THICKNESS OF SIDEWALK, CONC, _ INCH, MODIFIED WILL BE 4 INCHES IN ALL LOCATIONS UNLESS CALLED FOR OTHERWISE BY CITY OF DETROIT STANDARD DETAIL 'SIDEWALK RAMP AND DETECTABLE WARNING DETAILS R-28-1 WITH CITY OF DETROIT THICKNESS AMENDMENT' OR MISCELLANEOUS DETAIL ON SHEET MSCDET003.

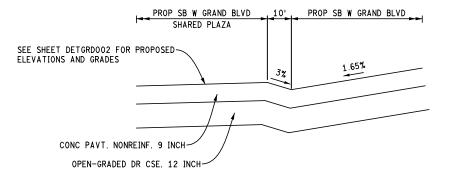
TRIAXIAL GEOGRID TO BE PLACED OVER GEOTEXTILE SEPARATOR.

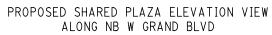
	FI	NAL ROW PLAN REVISIONS	(SUBMITTAL	DATE:)					DATE: 05/24/21	
N0.	DATE AUTH	H DESCRIPTION	NO. DATE	AUTH	DESCRIPTION						IN. DW 7074
						-					JN: PW-7031
							Detroit	HORZ. (FT)	FILE:		RIVERSIDE PARK



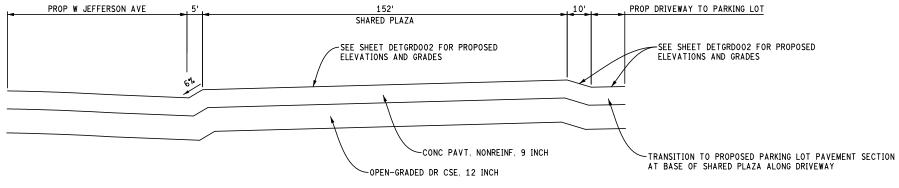
PROPOSED TYPICAL SECTIONS	DRAWING	SHEET
W JEFFERSON AVE	RIV TYP 008	18







PROPOSED SHARED PLAZA ELEVATION VIEW ALONG SB W GRAND BLVD



PROPOSED SHARED PLAZA ELEVATION VIEW ALONG W JEFFERSON AVE

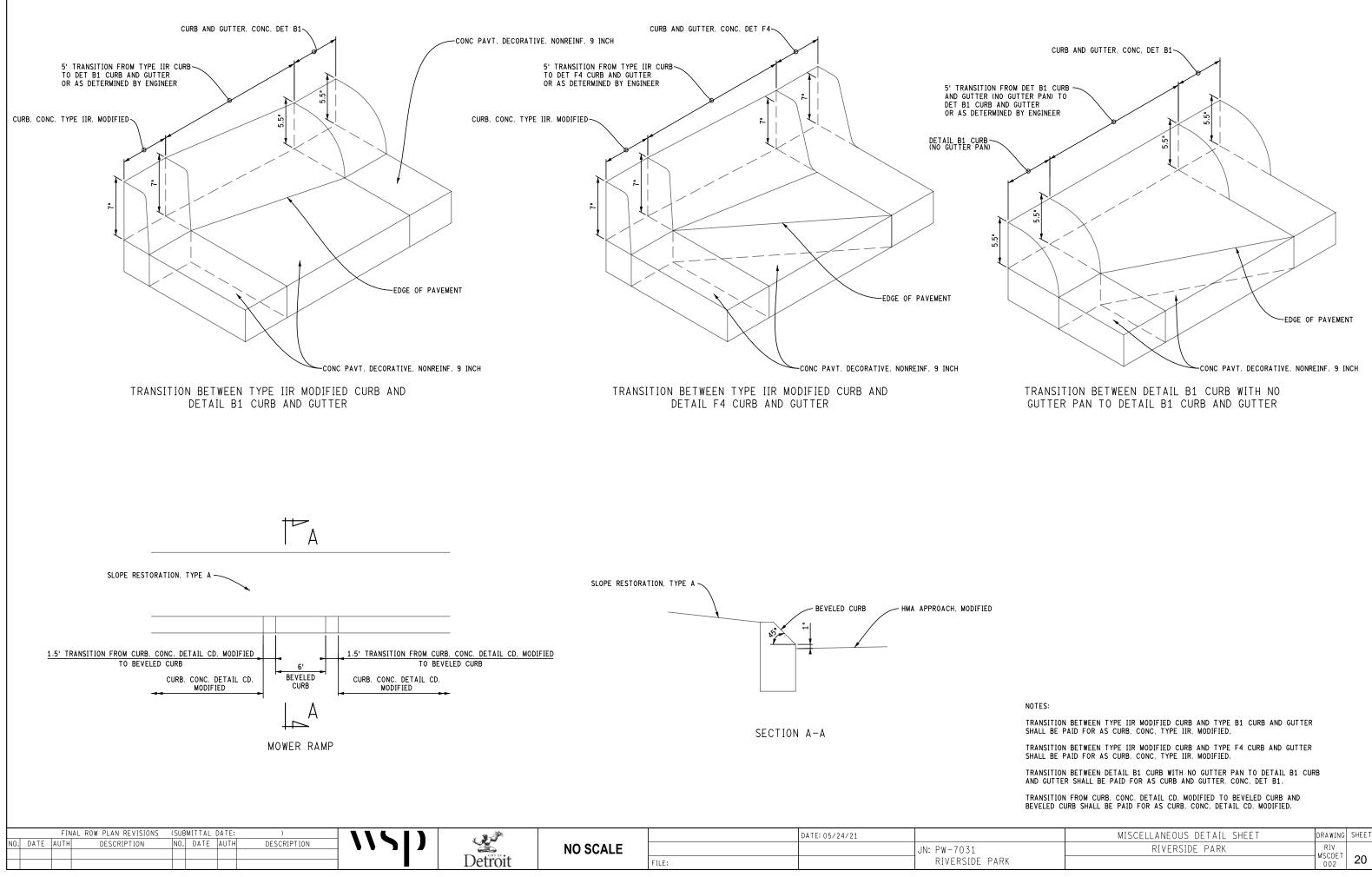
		FIN	AL ROW PLAN REVISIONS	(SUBMITTAL DATE	.)		O VERT. (FT) ₄		DATE: 05/24/21	
NO	DATE	AUTH	DESCRIPTION	NO. DATE AUT	H DESCRIPTION					JN: PW-7031
-						Detroit	Нокz. (ft) 40	FILE:		RIVERSIDE PARK

0.4%

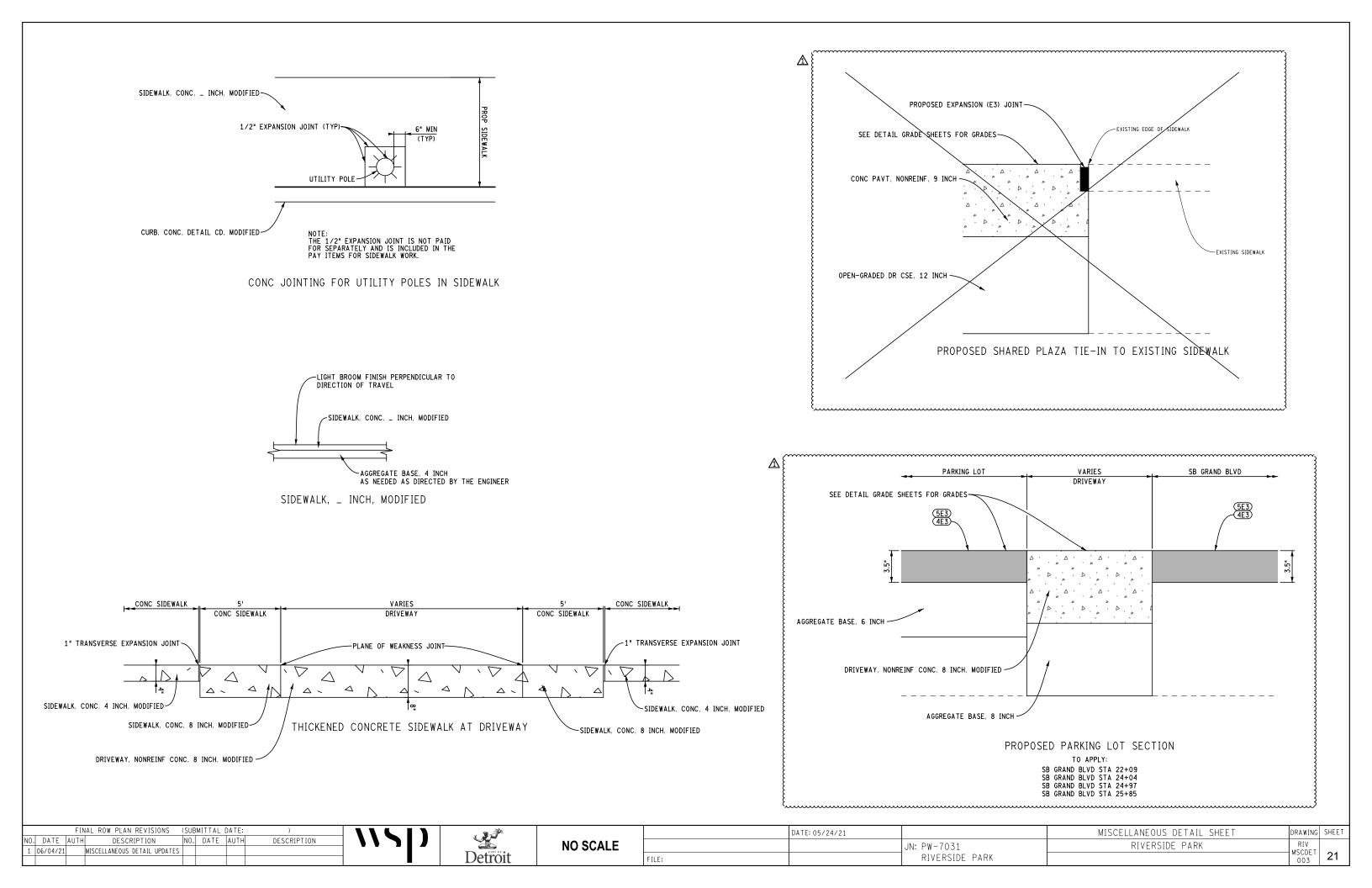
NOTES:

SHARED PLAZA LIMITS EXTEND FROM NB W GRAND BLVD STA 10+00.00 TO STA 14+56.15, SB W GRAND BLVD STA 10+00.00 TO STA 14+93.03 AND FROM JEFFERSON STA 103+52.94 TO 152' EAST OF JEFFERSON STA 103+52.94.

MISCELLANEOUS DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV MSCDET	
	001	19



MISCELLANEOUS DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV MSCDET	
	002	20



<u>NOTES</u>

COORDINATE SYSTEM:STATE PLANE GRIDZONE:MICHIGAN SOUTH 2113ELLIPSOID:GRS 80HORIZONTAL DATUM:NAD 83 (2011)VERTICAL DATUM:NAVD 88GEOID:GEOID 12BUNITS:INTERNATIONAL FEET

SURVEY CONTROL

CONTROL PT#: 100 DESCRIPTION: SET MAG NAIL AT INTERSECTION OF W. JEFFERSON AND S. SWAIN ST. IN NORTHEAST QUADRANT.

COORDINATES: N= 298099.216 E= 13470581.84 EL= 580.67 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 101 DESCRIPTION: SET IRON WITH WT CAP AT INTERSECTION OF W. JEFFERSON AND VINEWOOD ST. IN NORTHWEST QUADRANT.

COORDINATES: N=298446.118 E=13470780.85 EL= 580.04 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 102 DESCRIPTION: SET IRON WITH WT CAPON SOUTH SIDE OF W. JEFFERSON, W. SIDE OF GRAND BLVD. LOCATED 5 FEET+/- SW OF R.R. SIGNAL.

COORDINATES: N=298678.241 E= 13470914.74 EL= 580.88 SDN= 0.01 SDE= 0.01 SDZ= 0.01

CONTROL PT#: 103 DESCRIPTION: SET IRON WITH WT CAP SOUTH OF EAST/WEST DRIVE TO IN PARK, 50 FEET +/- EAST OF SOUTHEASTERLY R.R.SIGNAL.

COORDINATES: N= 298821.085 E= 13471137.55 EL= 582.79 SDN= 0.01 SDE= 0.01 SDZ= 0.01

CONTROL PT#: 104 DESCRIPTION: SET IRON WITH WT CAP IN SE QUADRANT OF JEFFERSON AVE AND GRAND BLVD.

COORDINATES: N= 298942.190 E= 13471010.57 EL= 581.50 SDN= 0.01 SDE= 0.01 SDZ= 0.01

CONTROL PT#: 105 DESCRIPTION: SET IRON WITH WT CAP ON SOUTH SIDE OF JEFFERSON AVE., NORTH OF DOG PARK.

COORDINATES: N= 299180.087 E= 13471088.36 EL= 582.30 SDN= 0.01 SDE= 0.01 SDZ= 0.01

CONTROL PT#: 106 DESCRIPTION: SET IRON WITH WT CAP AT FENCE LINE TO PARK, 150 FEET+/- SOUTH OF JEFFERSON AVE.

COORDINATES: N= 298484.743 E= 13471011.02 EL= 579.44 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 107 DESCRIPTION: SET IRON WITH WT CAP 5 FEET +/- NORTH OF WALK ALONG RIVER IN SOUTHEASTERLY PART OF PARK

COORDINATES: N= 298231.647 E= 13471177.16 EL= 580.51 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 108 DESCRIPTION: SET IRON WITH WT CAP 20 FEET+/- NORTH OF RIVER IN SOUTHEASTERLY PART OF PARK.

COORDINATES: N= 298491.193 E= 13471374.09 EL= 581.47 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 109 DESCRIPTION: SET IRON WITH WT CAP ON WEST SIDE OF SB GRAND BLVD. 50 FEET+/- NORTH OF R.R. TRACKS.

COORDINATES: N= 298854.671 E= 13470819.26 EL= 582.55 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 110 DESCRIPTION: SET IRON WITH WT CAP ON EAST SIDE OF SB GRAND BLVD. 200 FEET+/- NORTH OF R.R. TRACKS.

COORDINATES: N= 299133.531 E= 13470722.94 EL= 588.30 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 111 DESCRIPTION: SET IRON WITH WT CAP IN MEDIAN OF GRAND BLVD AT TURN AROUND.

COORDINATES: N= 299316.349 E= 13470642.78 EL= 591.01 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 112 DESCRIPTION: SET MAG NAIL IN WALK ON WEST SIDE OF SB GRAND BLVD. 100 FEET+/- SOUTH OF M-85 (FORT ST).

COORDINATES: N= 299510.378 E= 13470451.83 EL= 591.91 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 113 DESCRIPTION: SET IRON ROD AND CAP ON NORTWEST SIDE OF JEFFERSON AVE 190 FEET +/- SOUTHWEST OF CENTERLINE OF 24^{TH} STREET

COORDINATES: N= 299461.19 E= 13471198.50 EL= 585.88 SDN=0.01 SDE=0.01 SDZ= 0.01

CONTROL PT#: 114

DESCRIPTION: SET IRON ROD AND CAP ON SOUTHERLY QUADRANT OF JEFFERSON AVE AND 24^{TH} STREET 27 FEET +/-SOUTHEAST OF CENTERLINE OF JEFFERSON AND 28 FEET +/-SOUTHWEST OF 24^{TH} STREET

COORDINATES: N= 299541.33 E= 13471331.16 EL= 587.15 SDN=0.01 SDE=0.01 SDZ= 0.01

BENCHMARK#: BM 200 DESCRIPTION: PAINTED BLUE BOLT ON HYDRANT LOCATED IN NORTHEAST QUADRANT OF W. JEFFERSON AND S. SWAIN ST. ELEV – 581.82 SDN: 0.005

BENCHMARK#: BM 201 DESCRIPTION: PAINTED BLUE BOLT ON HYDRANT LOCATED ON NORTH SIDE OF W. JEFFERSON, 75 FEET+/- WEST OF GRAND BLVD. ELEV – 583.76 SDN: 0.005

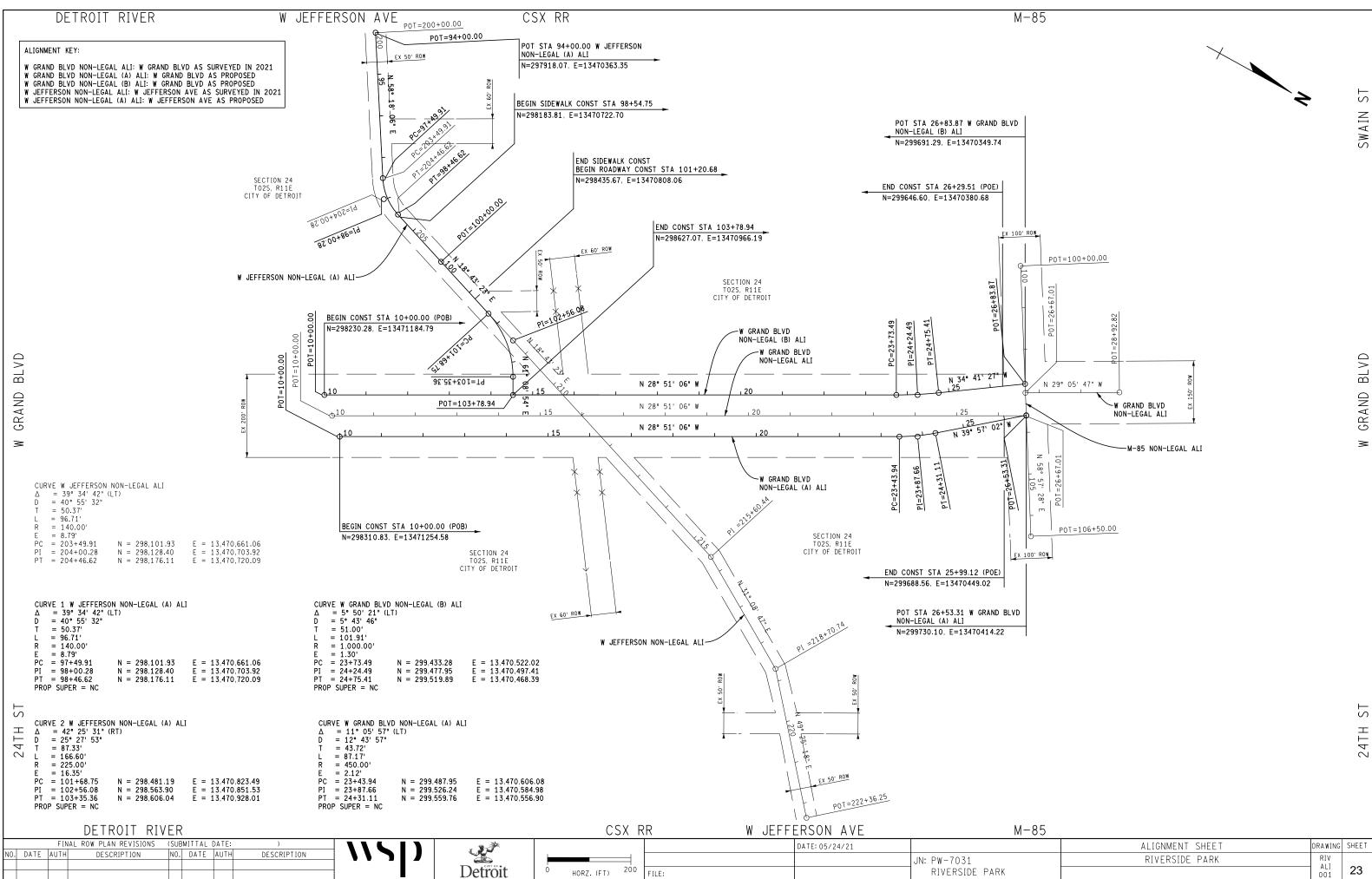
BENCHMARK#: BM 202 DESCRIPTION: PAINTED "SQUARE" ON NORTH SIDE OF WALK ALONG RIVER ON SOUTH SIDE OF PARK. LOCATED NEAR CP 107. ELEV – 580.65 SDZ: 0.005

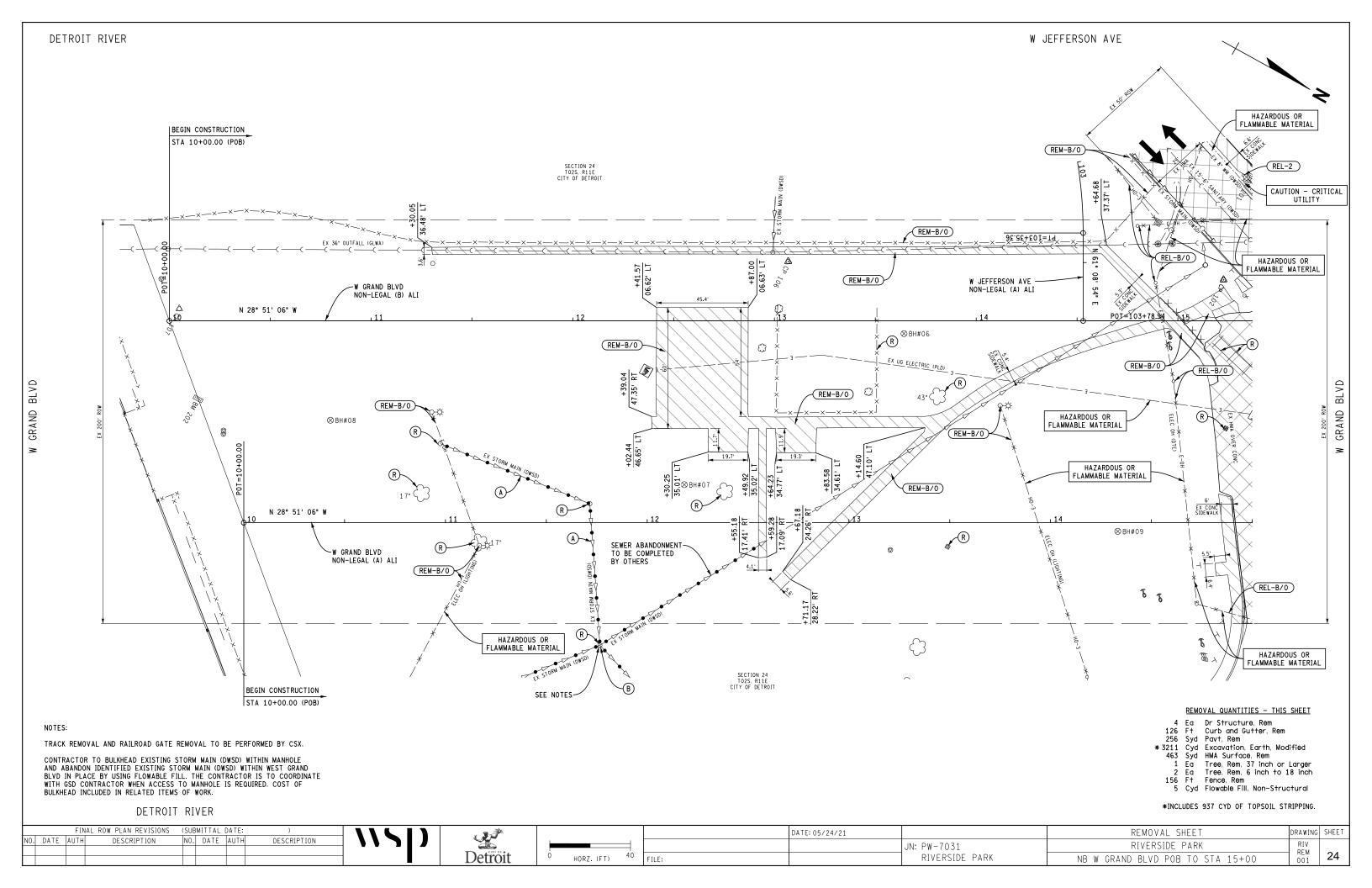
BENCHMARK#: BM 203 DESCRIPTION: PAINTED BLUE BOLT ON HYDRANT LOCATED ON NORTH SIDE OF W. JEFFERSON AVE, 300 FEET+/- EAST OF GRAND BLVD. ELEV – 584.20 SDZ: 0.005

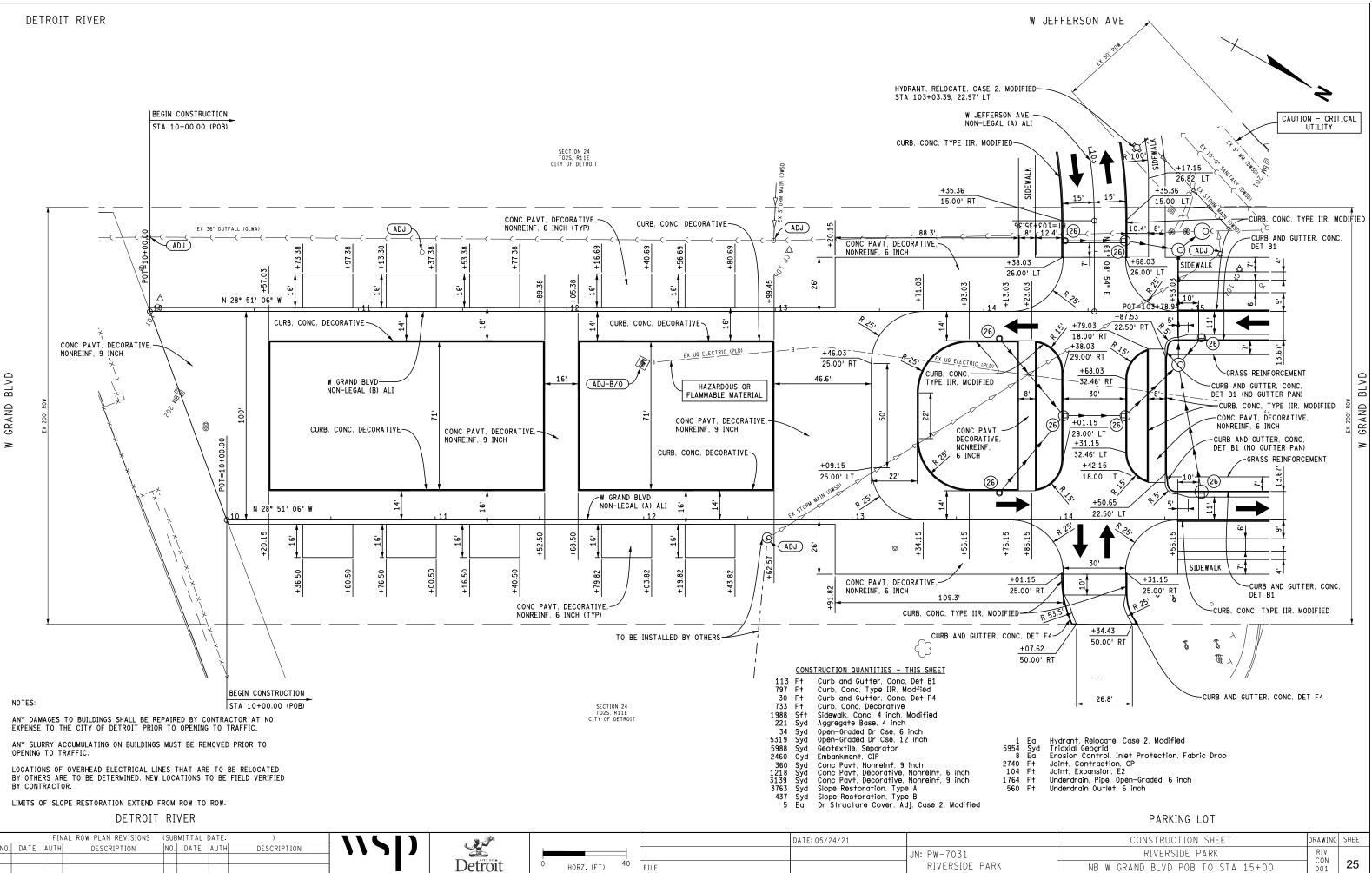
BENCHMARK#: BM 204 DESCRIPTION: BENCH TIE LOCATED IN POWER POLE ON WEST SIDE OF SB GRAND BLVD. NEAR HOTEL LOCATED 150 FEET+/-SOUTH OF M-85 (FORT ST.) ELEV – 592.49 SDZ: 0.005

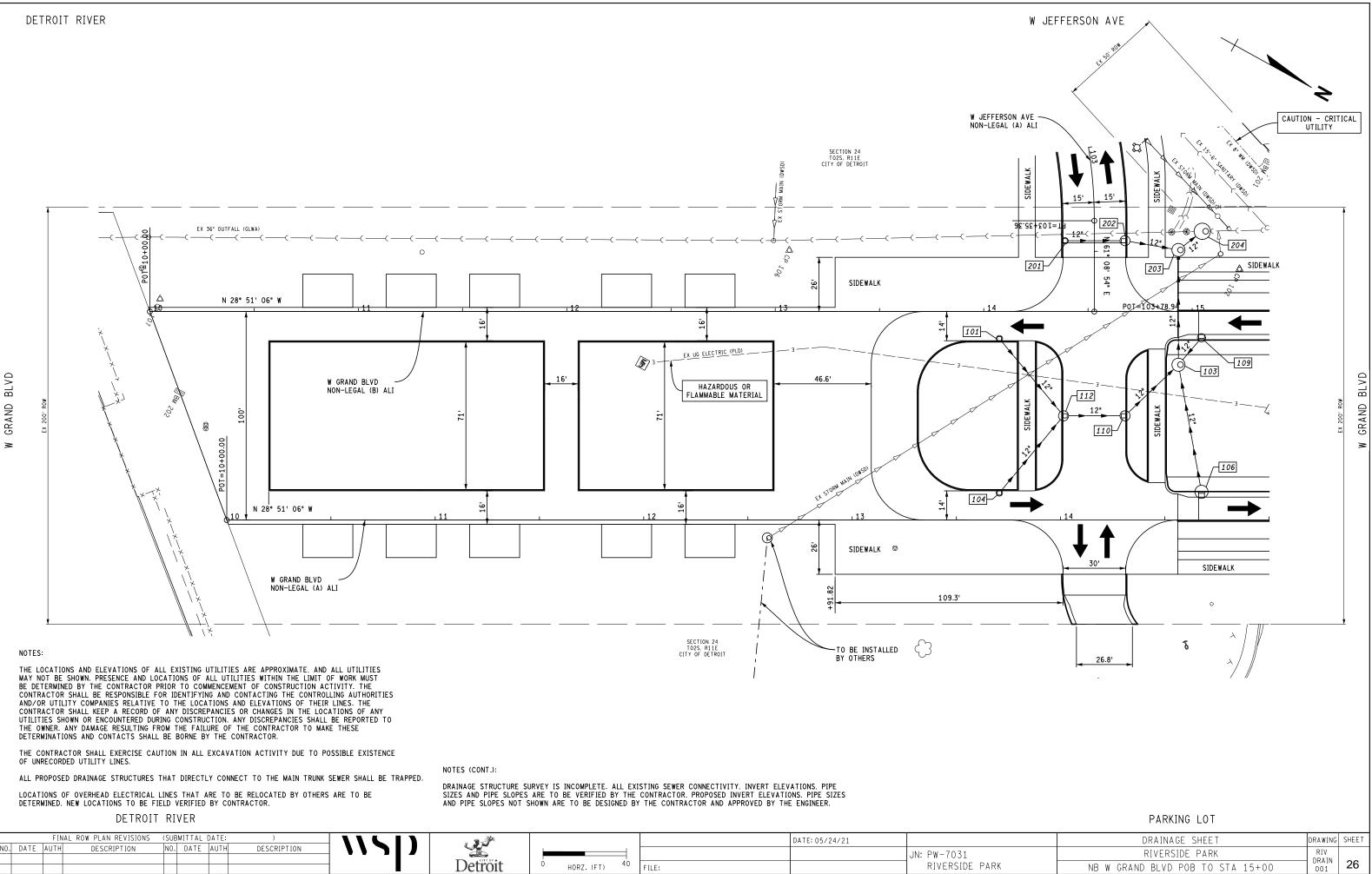
BENCHMARK #: BM 205 DESCRIPTION: PAINTED BLUE BOLT ON HYDRANT LOCATED IN SOUTHWEST QUADRANT OF W. JEFFERSON AVE AND 24TH STREET. ELEV – 587.68 SDN: 0.005

REVISIONS		1 3 7		DATE: 05/24/21	
NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION	WADE TRIM		NO SCALE	DESIGN UNIT:	JN: PW-7031
	Flint, Michigan	Detroit		TSC:	RIVERSIDE PARK









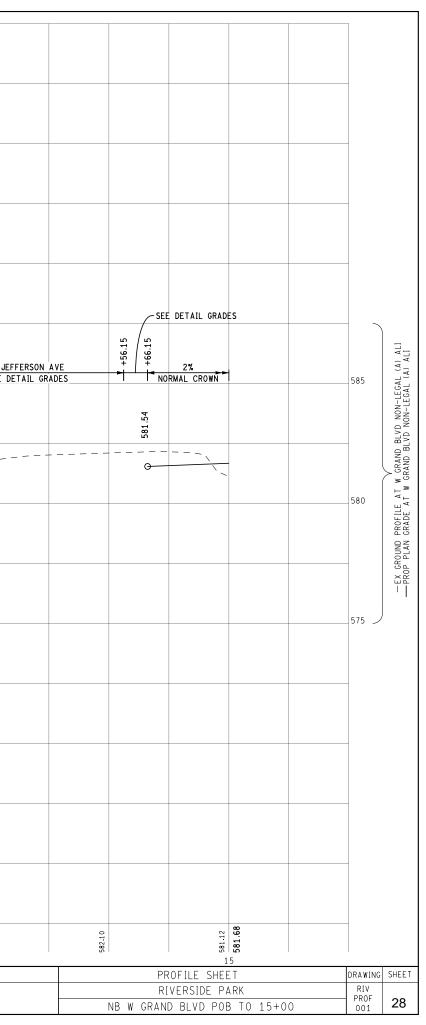
STRUCT NO.	STATION	OFFSET*	RIM ** Elev	Dr Structure, _ inch dia.	Dr Structure, _ inch dia.	Dr Structure, _ inch dia.	Dr Structure Cover, Type CB,	Cover	Sewer, Cl A, _ inch, Tr Det A	Sewer, Cl A, _ inch, Tr Det C	Sewer, Cl A, _ inch, Tr Det A	Sewer Tap, _ inch	
				24	48	60	Modified	Modified	12	12	36	36	
				Ea	Ea	Ea	Ea	Ea	F†	F†	F†	Εα	
101	14+07.49 SB GRAND	13.00' RT	580.70	1			1			49			
103	14+93.38 SB GRAND	25.50' RT	582.04		1			1		55			
104	13+70.61 NB GRAND	13.00' LT	581.24	1			1			49			
201	103+44.94 JEFFERSON	14.00' RT	579.93	1			1			29			
106	14+67.57 NB GRAND	13.54' LT	581.33		1		1		62				Г
202	103+44.94 JEFFERSON	14.75' LT	579.93		1		1			26			Γ
203	103+49.39 JEFFERSON	40.36' LT	580.81		1			1	15				Γ
204	103+40.42 JEFFERSON	51.80' LT	580.93			1		1			10	1	
109	15+04.45 SB GRAND	12.57' RT	580.57	1			1			17			Γ
110	14+30.15 NB GRAND	50.00' LT	580.23		1		1			36			
112	14+01.40 NB GRAND	50.00' LT	580.23		1		1			30			
TOTAL				4	6	1	8	3	77	291	10	1	

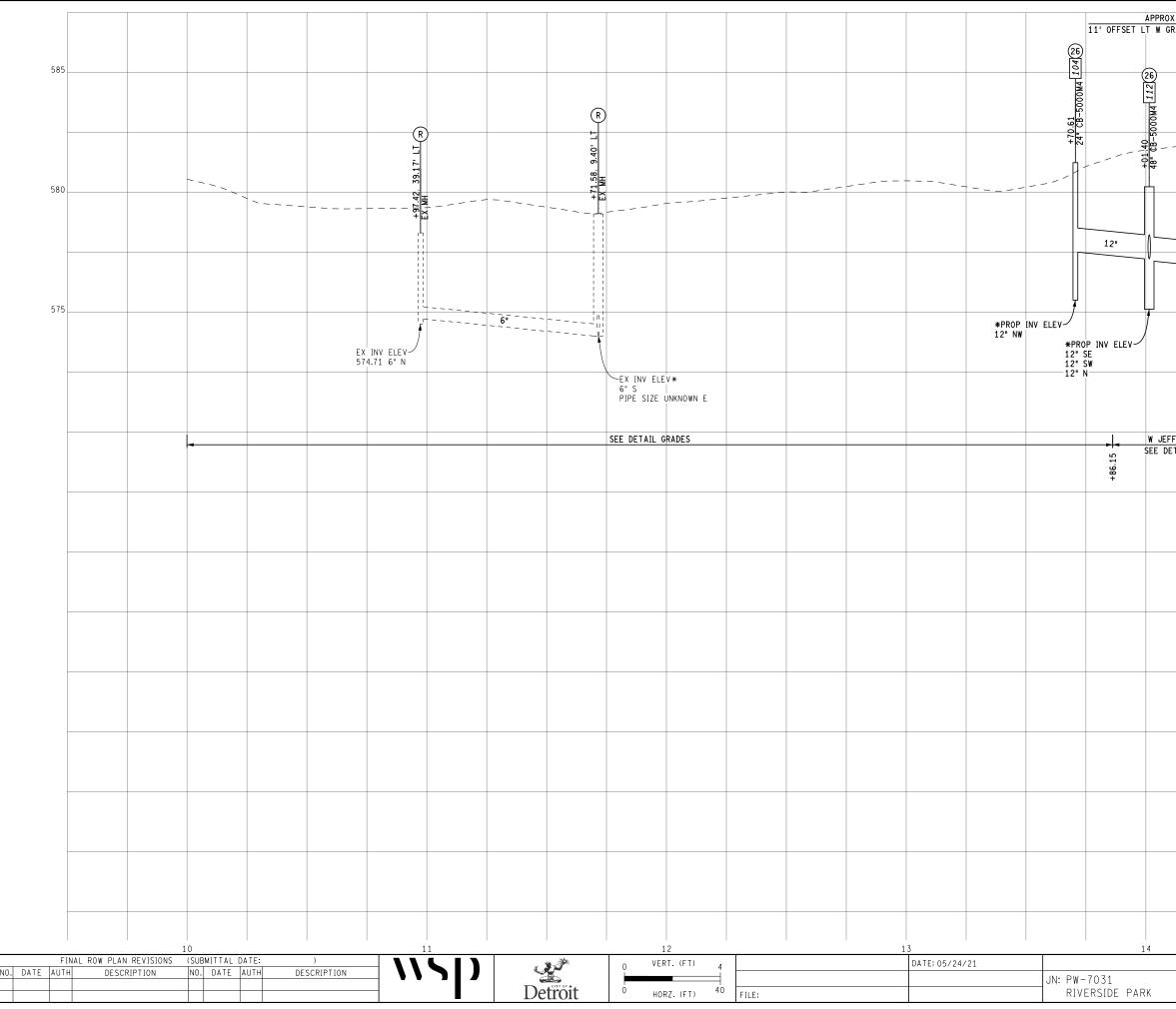
* OFFSETS ARE MEASURED TO CENTER OF STRUCTURE ** RIM ELEV SHOWN IS AT EDGE OF PAVEMENT FOR CATCH BASINS AND AT CENTER OF COVER FOR MANHOLES

FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	DATE: 05/24/21	DRAINAGE QUANTITY SHEET	DRAWING SHEET
NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION VV 717 Common NO SCALE	JN: P	PW-7031 RIVERSIDE PARK	RIV DRNQTY 27
Detroit	FILE: R	RIVERSIDE PARK NB W GRAND BLVD POB TO STA 15+00	001 27

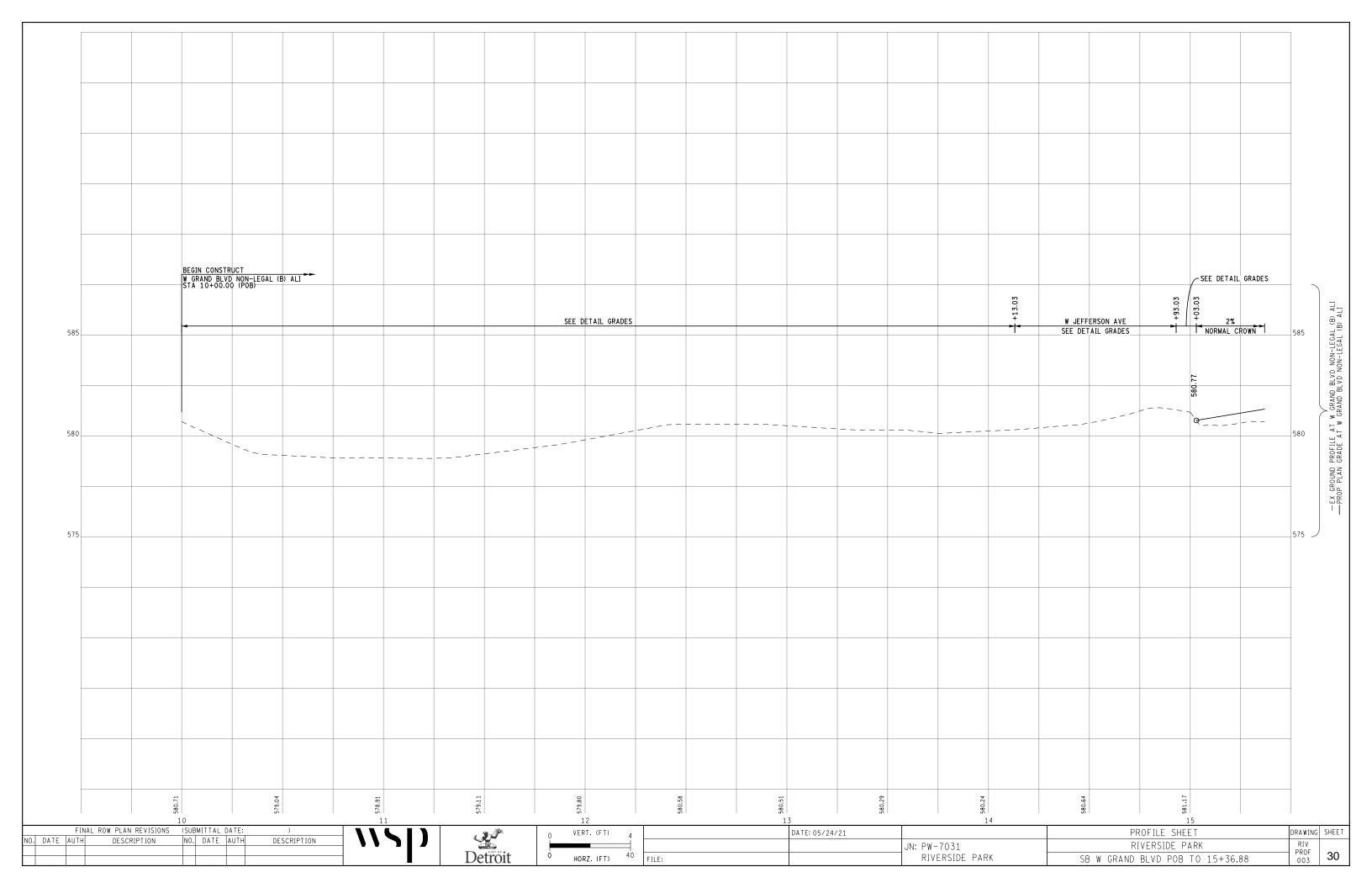
Þ,	Dr Structure Lead, Cleaning, Modified
	F†
	10
	10

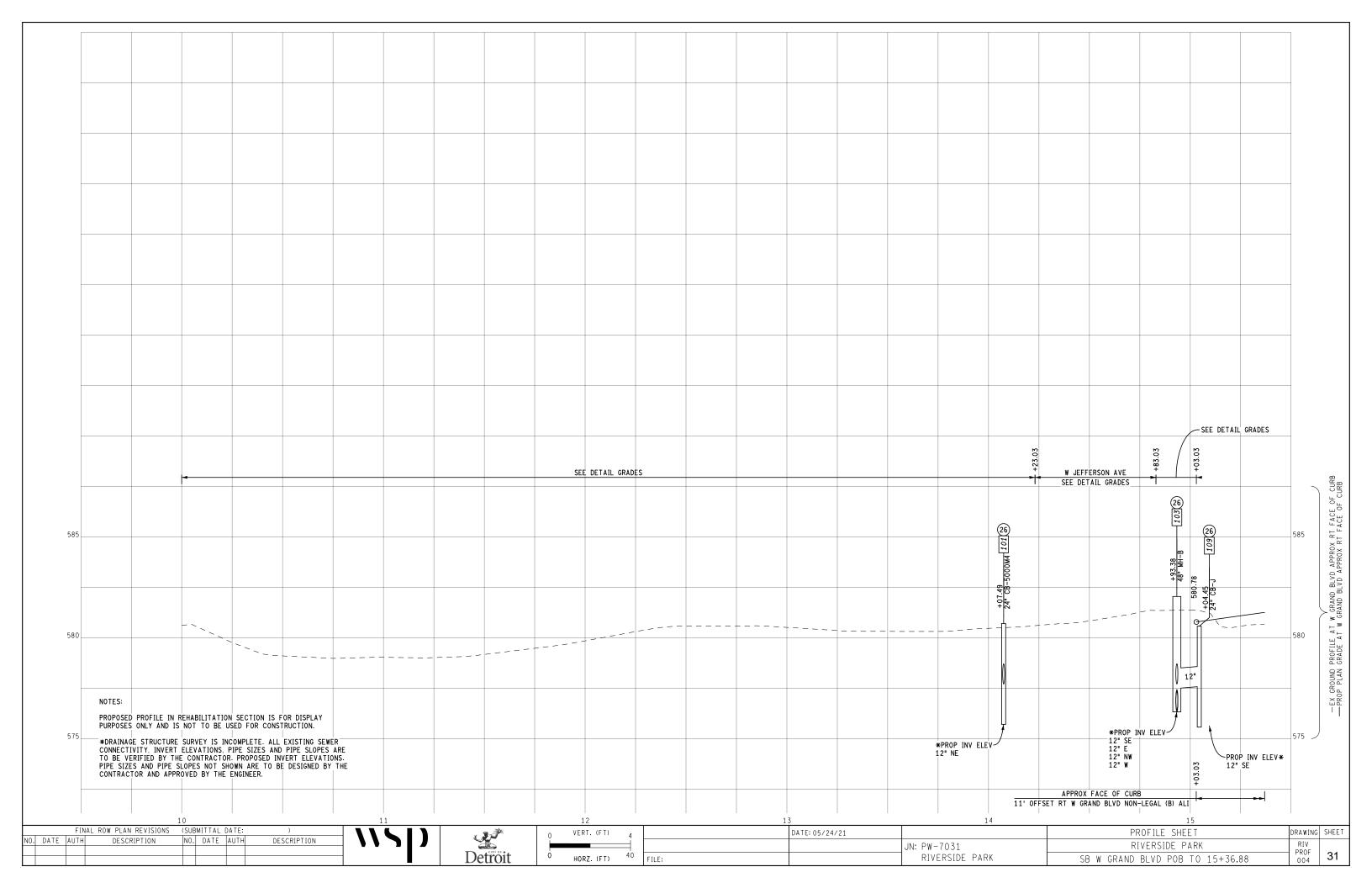
		BEGIN CONSTR W GRAND BLVD STA 10+00.00	UCT NON-LEGAL (, (POB)	A) ALI													
		51/1 10 00100													+76.15		
585		4						SE	E DETAIL GRA	DES							W JE See
282																	·
		_														,	
580			· · ·									 					
575																	
	290.67 1	0	579.41		1 579.41	1	579.65		L 579.73	2	19.97	580.46 1	3	18.613		281-79 1	л
F DATE AUT	INAL ROW PLAN REVISIONS	U (SUBMITTAL DA NO. DATE A	TE: UTH DE) ESCRIPTION		<u> </u>	L.	2		2 :T. (FT) 4		1	3 DATE: 05/24/	/21			
							De	troit	0 HOF	RZ. (FT) 40	FILE:	 				7031 RSIDE PAR	K

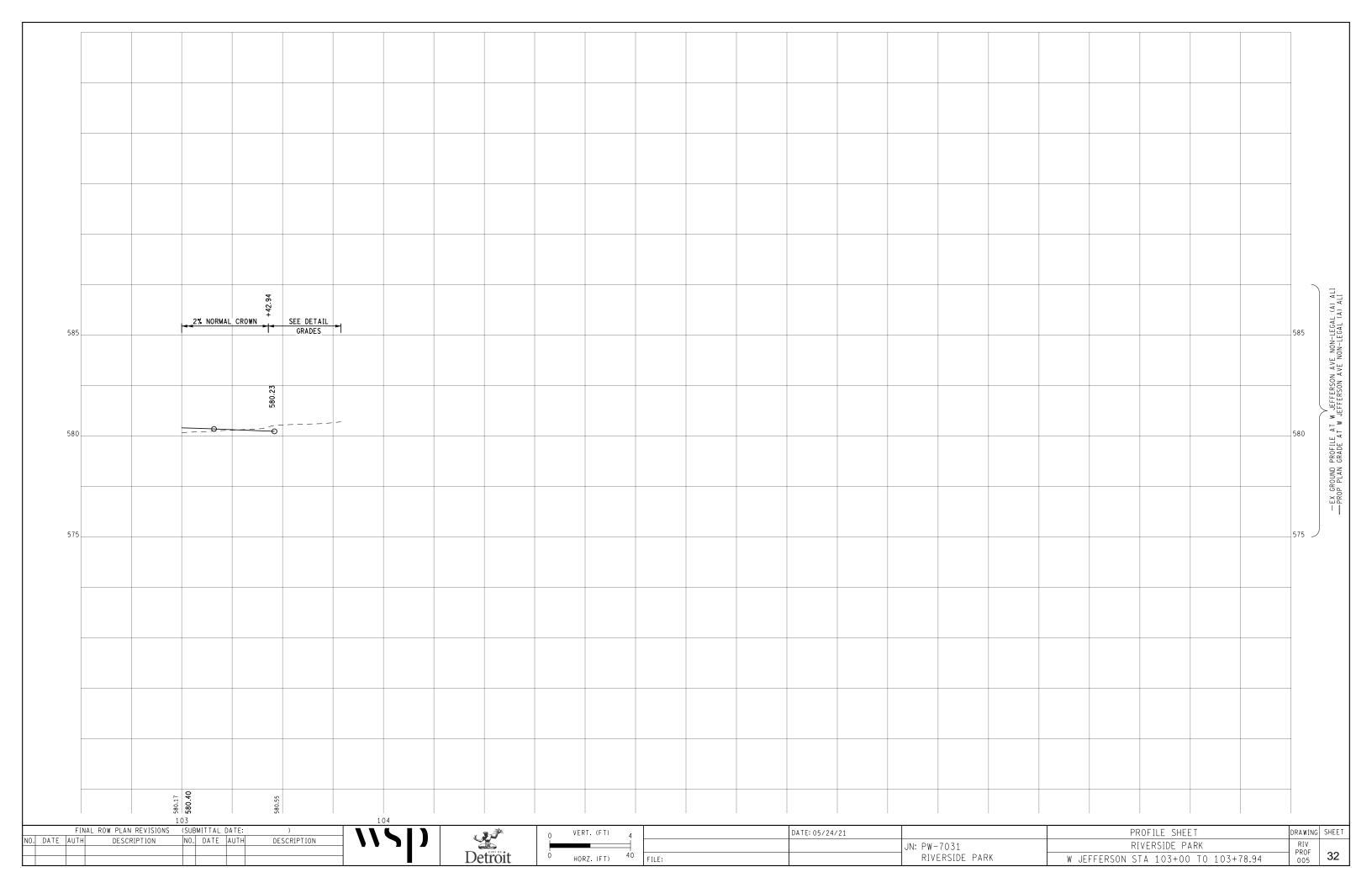


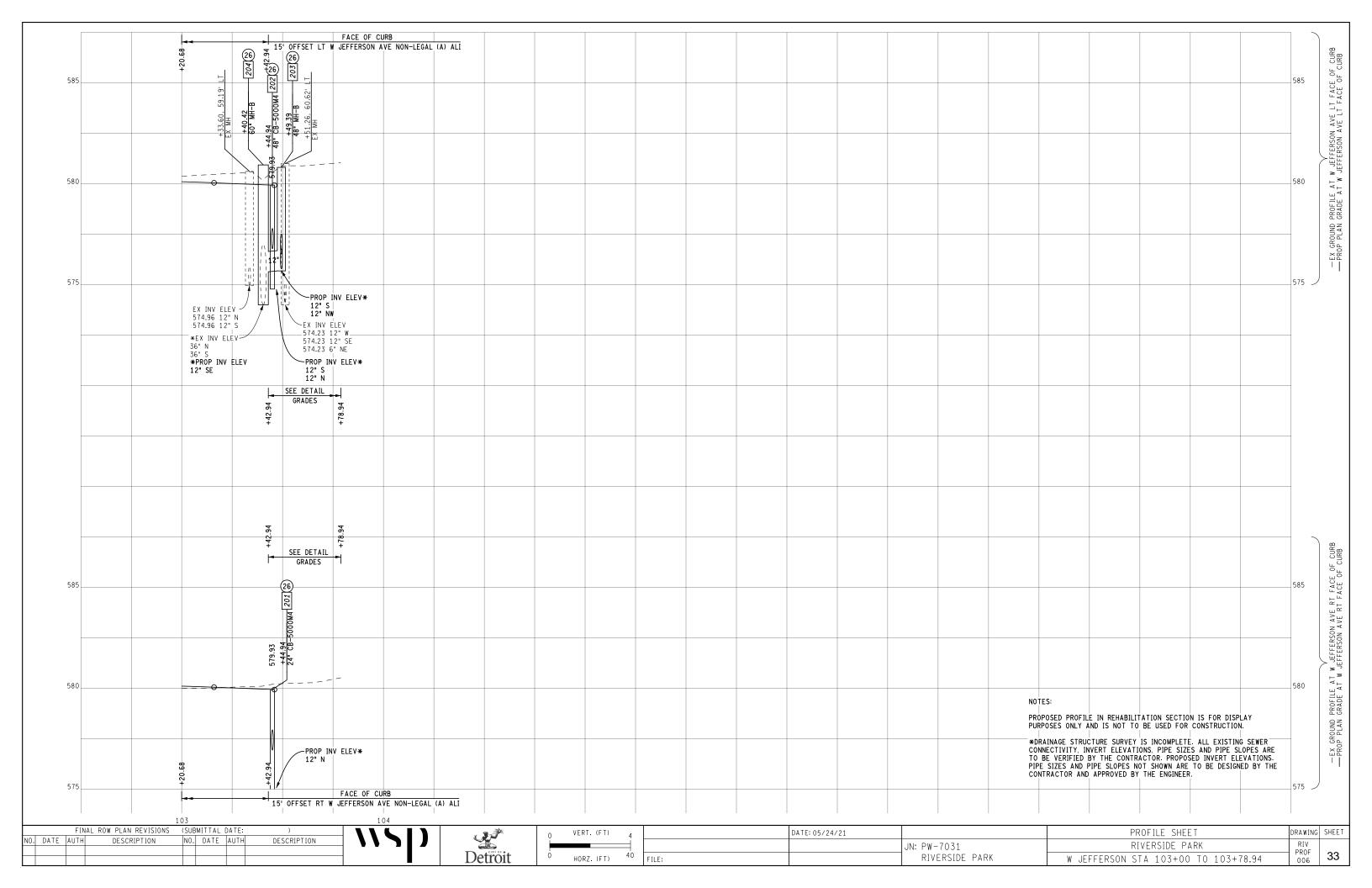


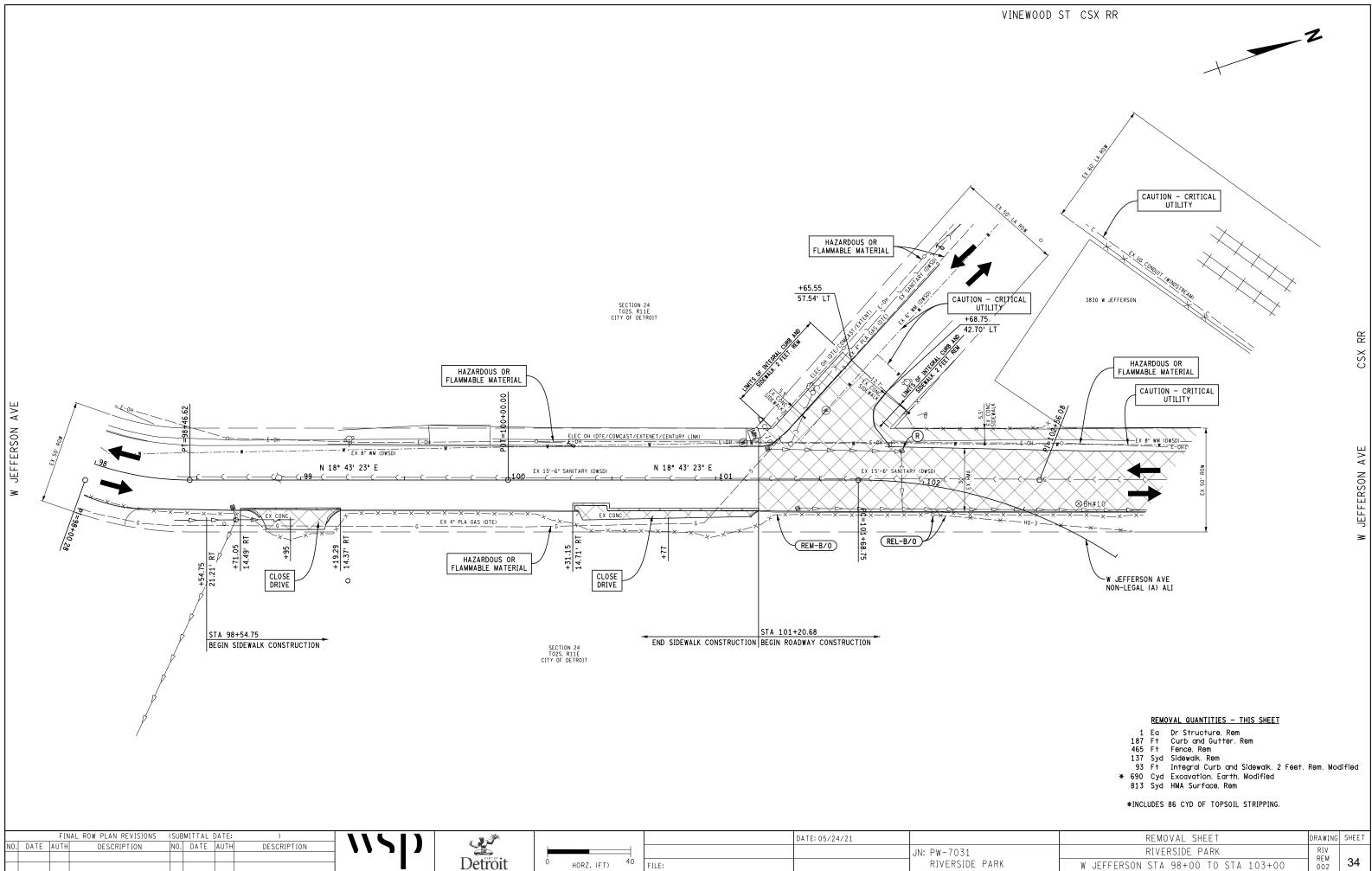
[48° C85 5000M4 110 (3) +67 57 +66.15	585	- EX GROUND PROFILE AT W GRAND BLVD APPROX LT FACE OF CURB
12"		575)	
PURP *DRA CONN TO B	OSED PROFILE IN REHABILITATION SECTION IS FOR DISPLAY OSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION. INAGE STRUCTURE SURVEY IS INCOMPLETE. ALL EXISTING SEWER ECTIVITY, INVERT ELEVATIONS. PIPE SIZES AND PIPE SLOPES ARE E VERIFIED BY THE CONTRACTOR. PROPOSED INVERT ELEVATIONS.		
PIPE	SIZES AND PIPE SLOPES NOT SHOWN ARE TO BE DESIGNED BY THE RACTOR AND APPROVED BY THE ENGINEER.	DRAWING	SHEET
	RIVERSIDE PARK	RIV PROF	29



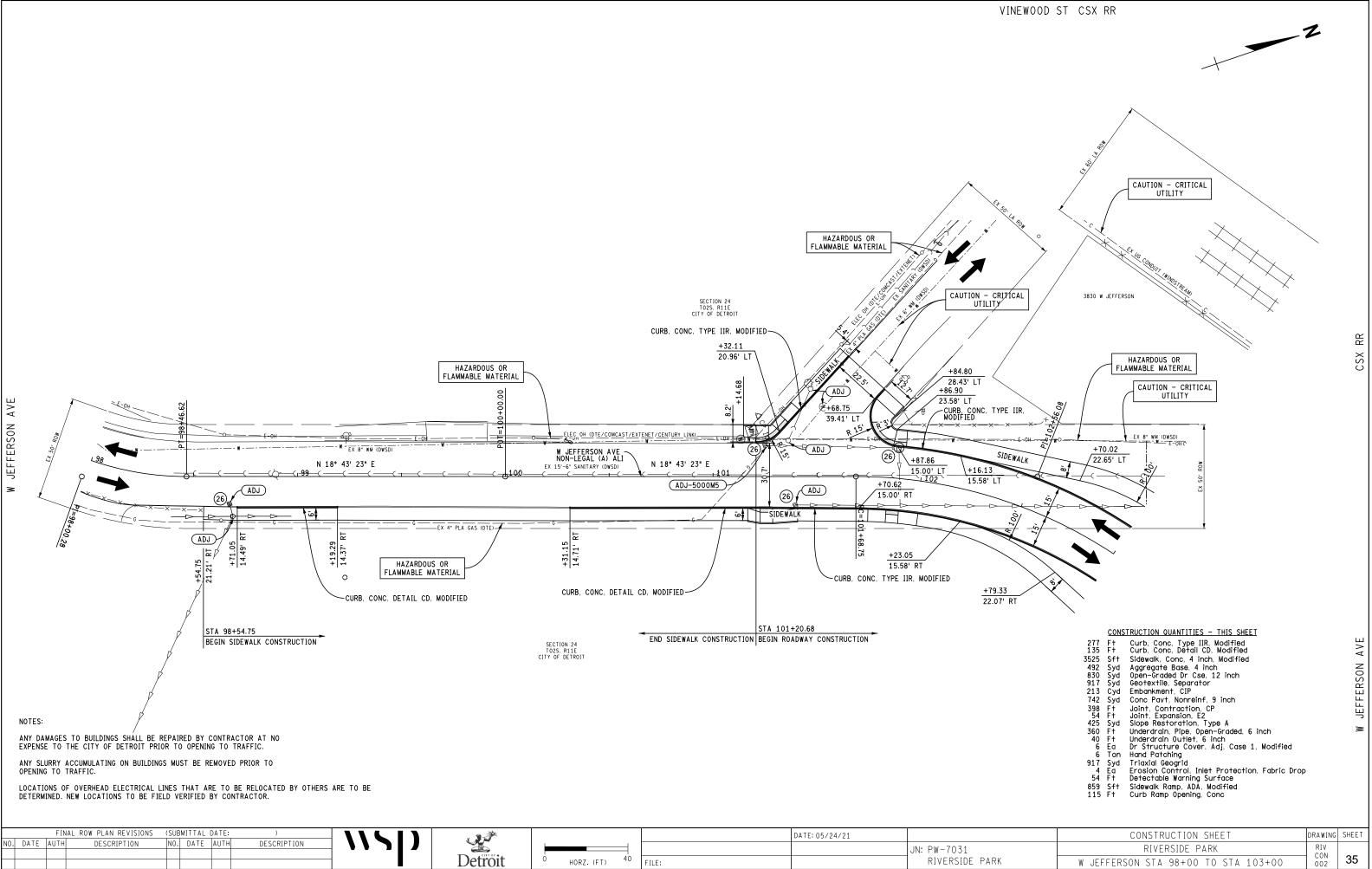








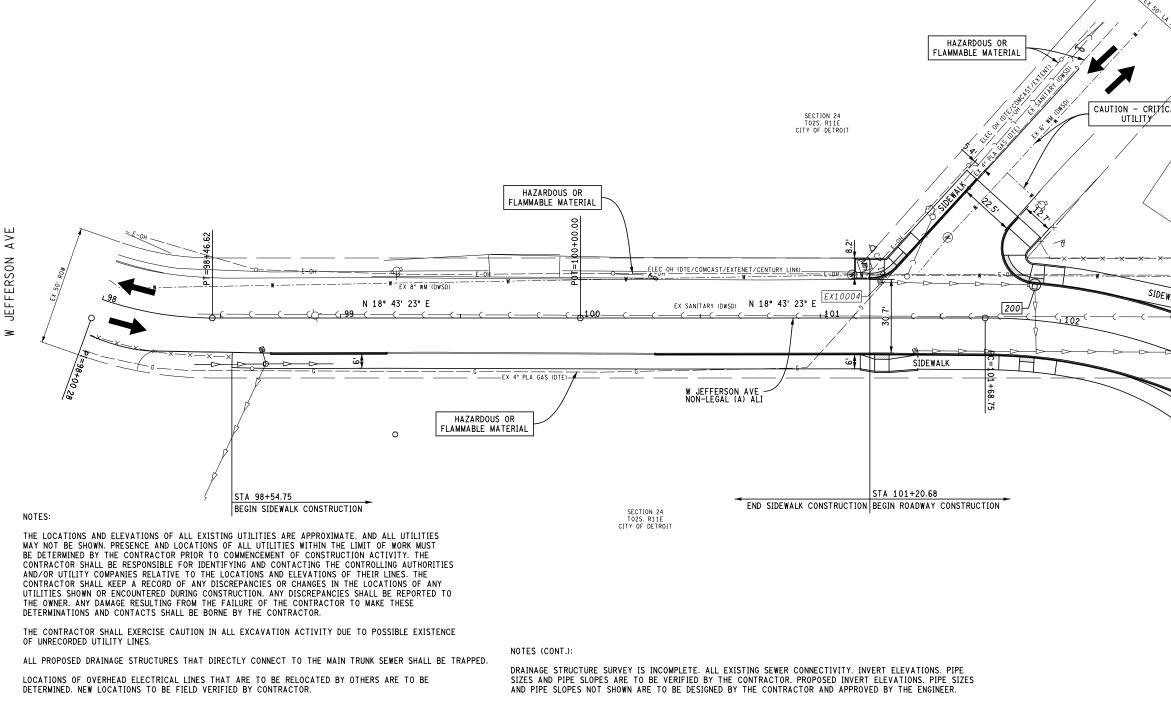
REMOVAL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV REM	
W JEFFERSON STA 98+00 TO STA 103+00	002	34



CONSTRUCTION SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV CON	
W JEFFERSON STA 98+00 TO STA 103+00	002	35

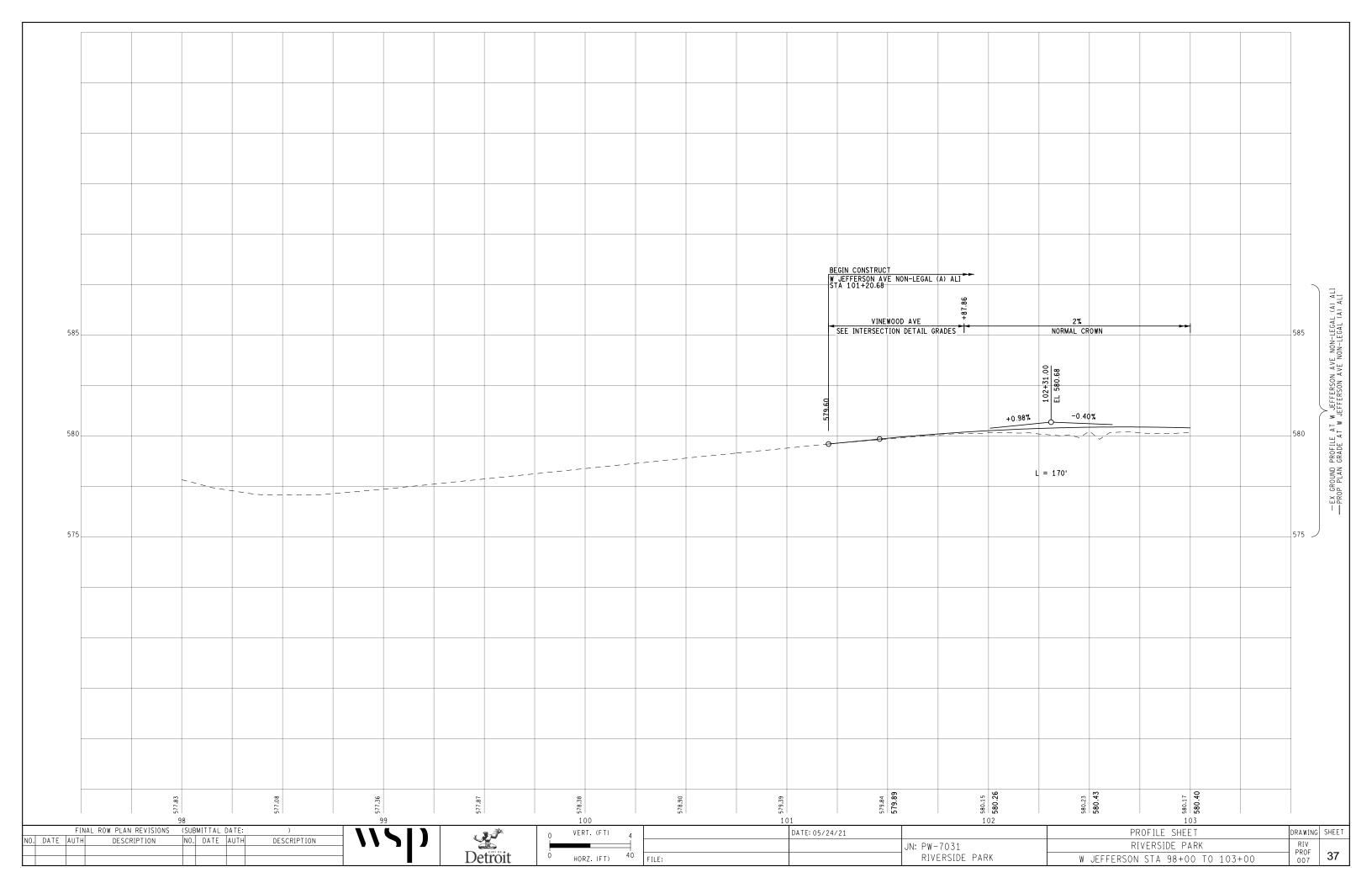
STRUCT NO.	STATION	OFFSET*	RIM ** Elev	Dr Structure, _ inch dia.	Dr Structure Cover, Type ADA CB,	Sewer, CI A, _ inch, Tr Det C	Dr Structure Lead, Cleaning, Modified
				48	Modified	12	
				Ea	Ea	F†	F†
200	101+88.19 JEFFERSON	14.75' LT	579.91	1	1	10	10
EX10004	101+25.06 JEFFERSON	14.96' LT	579.30		1		
TOTAL				1	2	10	10

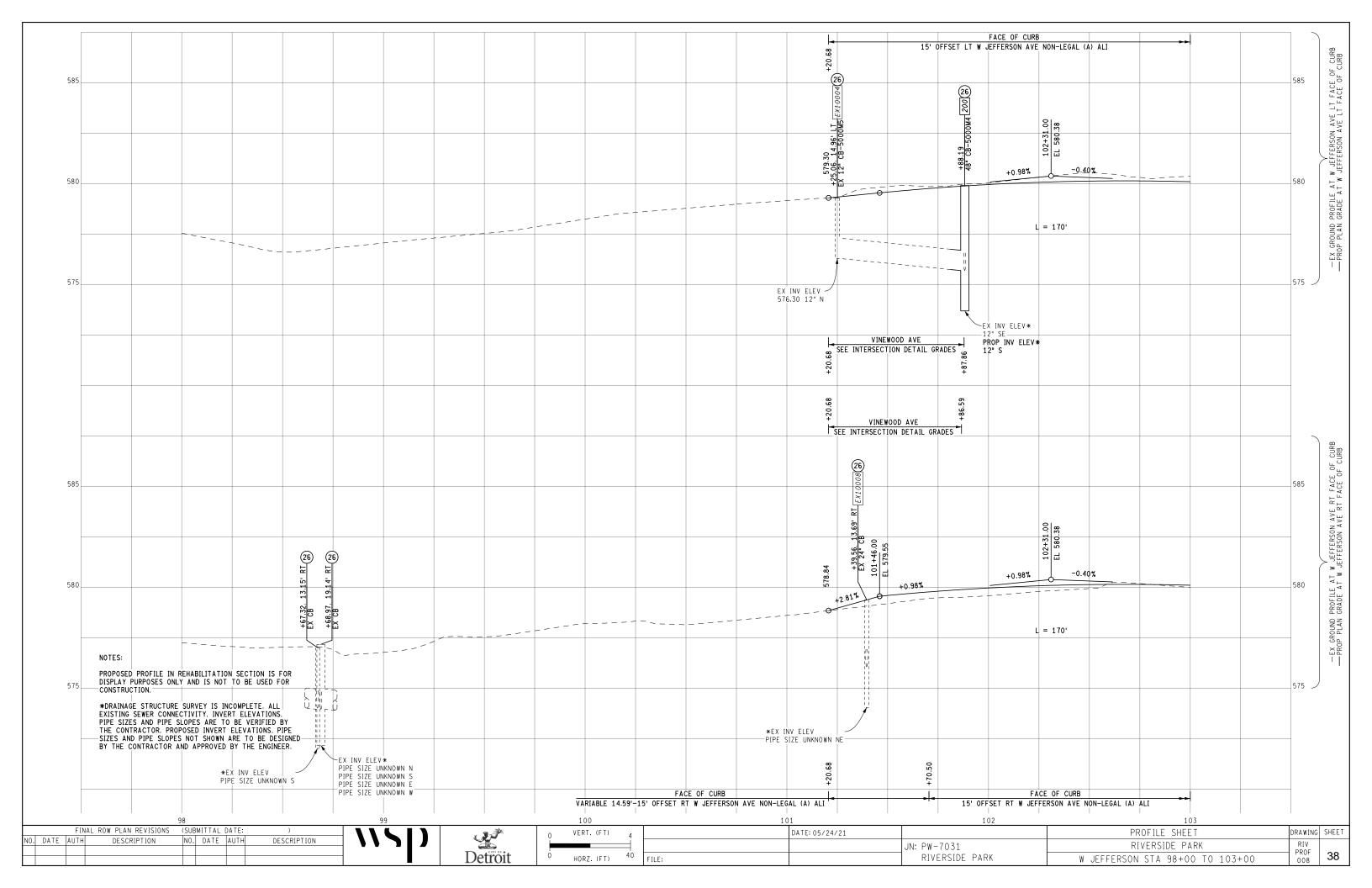
★ OFFSETS ARE MEASURED TO CENTER OF STRUCTURE ★★ RIM ELEV SHOWN IS AT EDGE OF PAVEMENT FOR CATCH BASINS AND AT CENTER OF COVER FOR MANHOLES



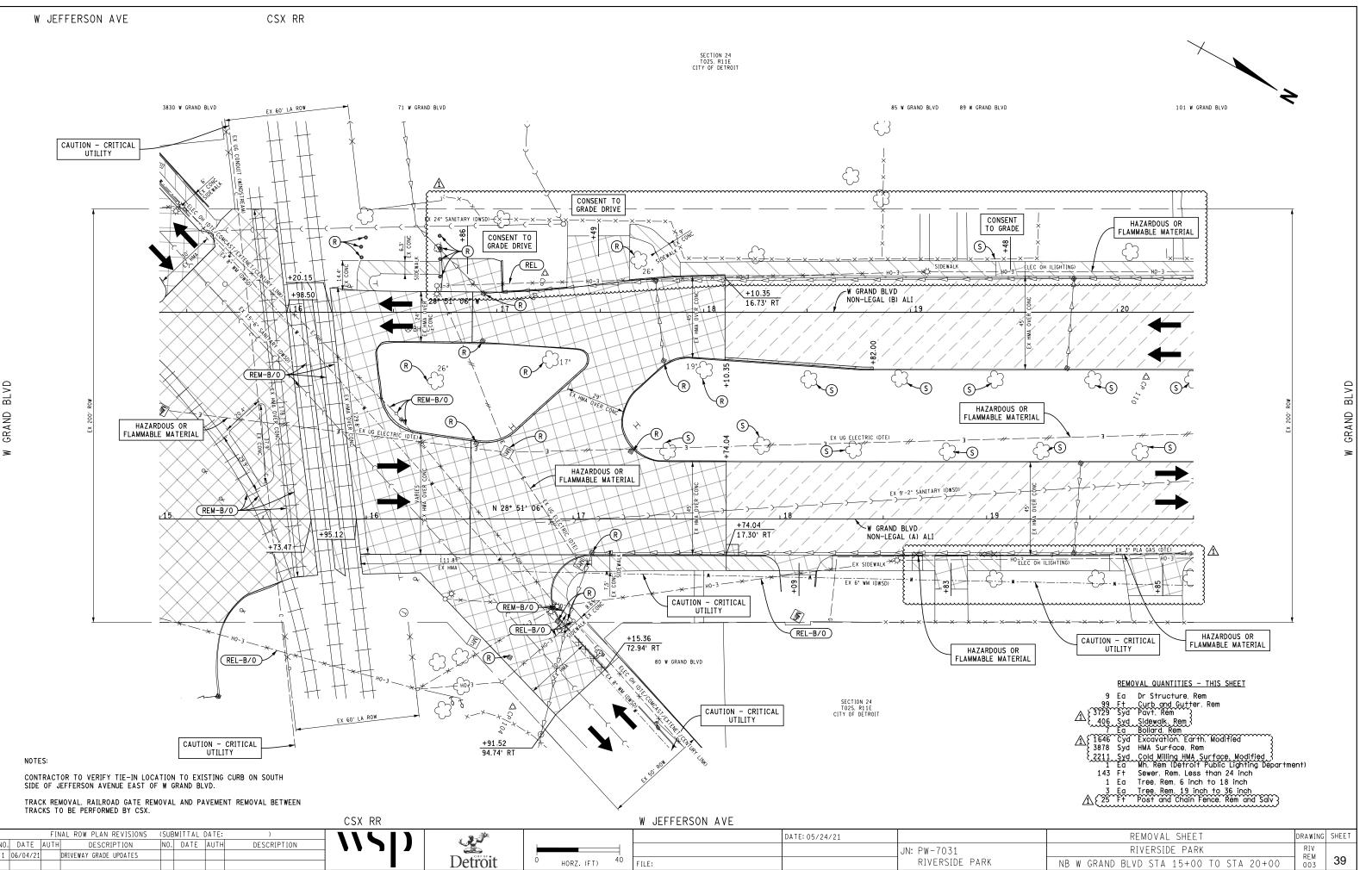
FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:				DATE: 05/24/21	1
O. DATE AUTH DESCRIPTION NO. DATE AUTH D	ESCRIPTION				IN DW 2024
					JN: PW-7031
		Detroit	FILE:		RIVERSIDE PARK
	-	Dettoit			

VINEWOOD S	ST CSX RR	
	_2	
	A	
	/ CAUTION - CRITICAL	
54.50, 14 Rom 0	UTILITY	
,		
· • • • •		
\rightarrow		
	3830 W JEFFERSON	
CRIFICAL ITY	3830 W JEFFERSON	
/		
		RR
	HAZARDOUS OR	CSX F
	FLAMMABLE MATERIAL	S
	CAUTION - CRITICAL	
	3/ / UTILITY	
×××+-+++		
Е-0H#/#С	D EX 8" WM (DWSD)	
SIDEWALK	_	
	20- HOW	
	E x 20	
i		
Ó		
	\backslash	
		Ц К
		A N
		SON
		FER
		W JEFFERSON AVE
		×
Г		SHEET
	DRAINAGE SHEET DRAWING RIVERSIDE PARK RIV	SHEEL
∧RK	RIVERSIDE PARK W JEFFERSON STA 98+00 TO STA 103+00 002	36



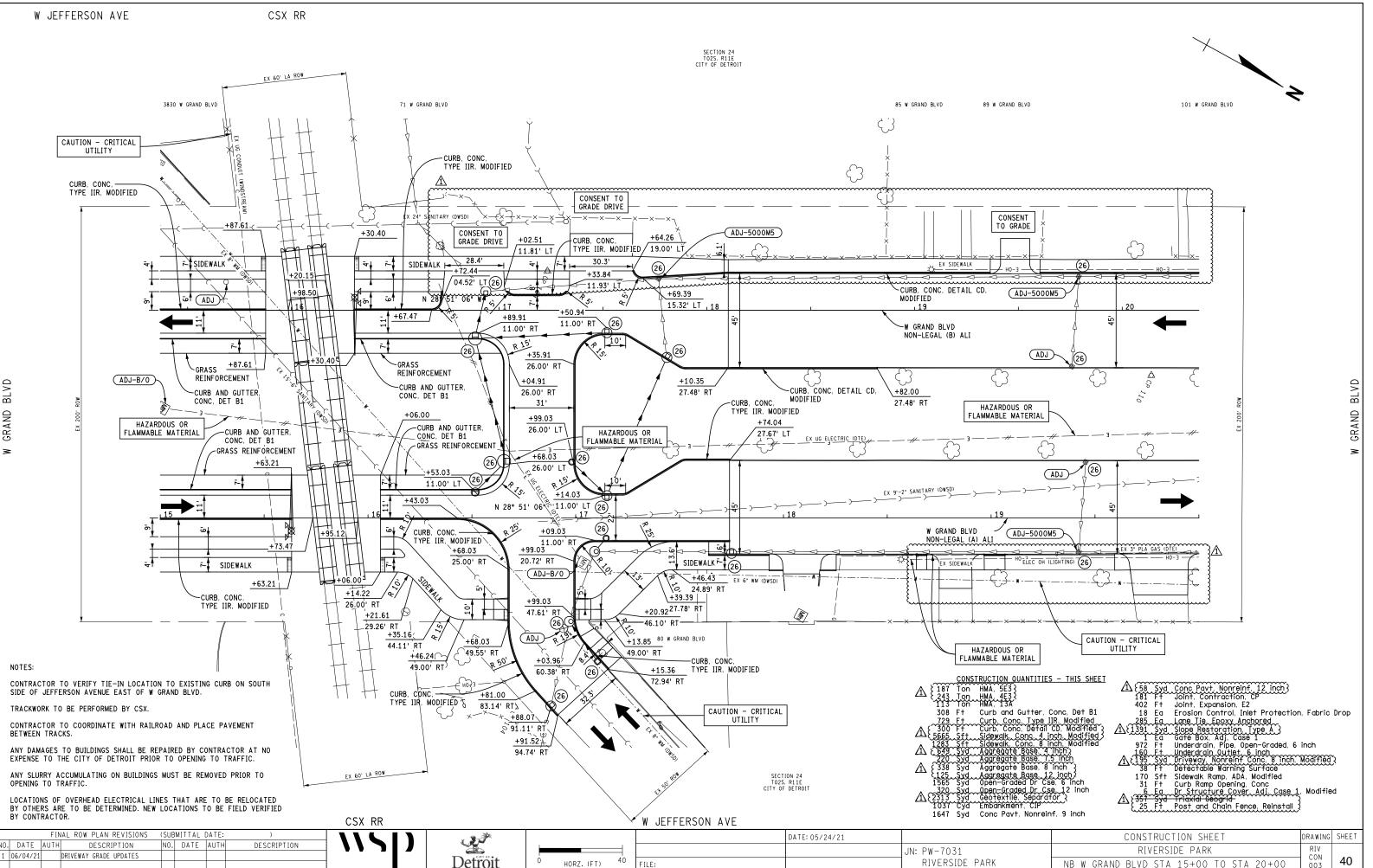






BLVD GRAND ×



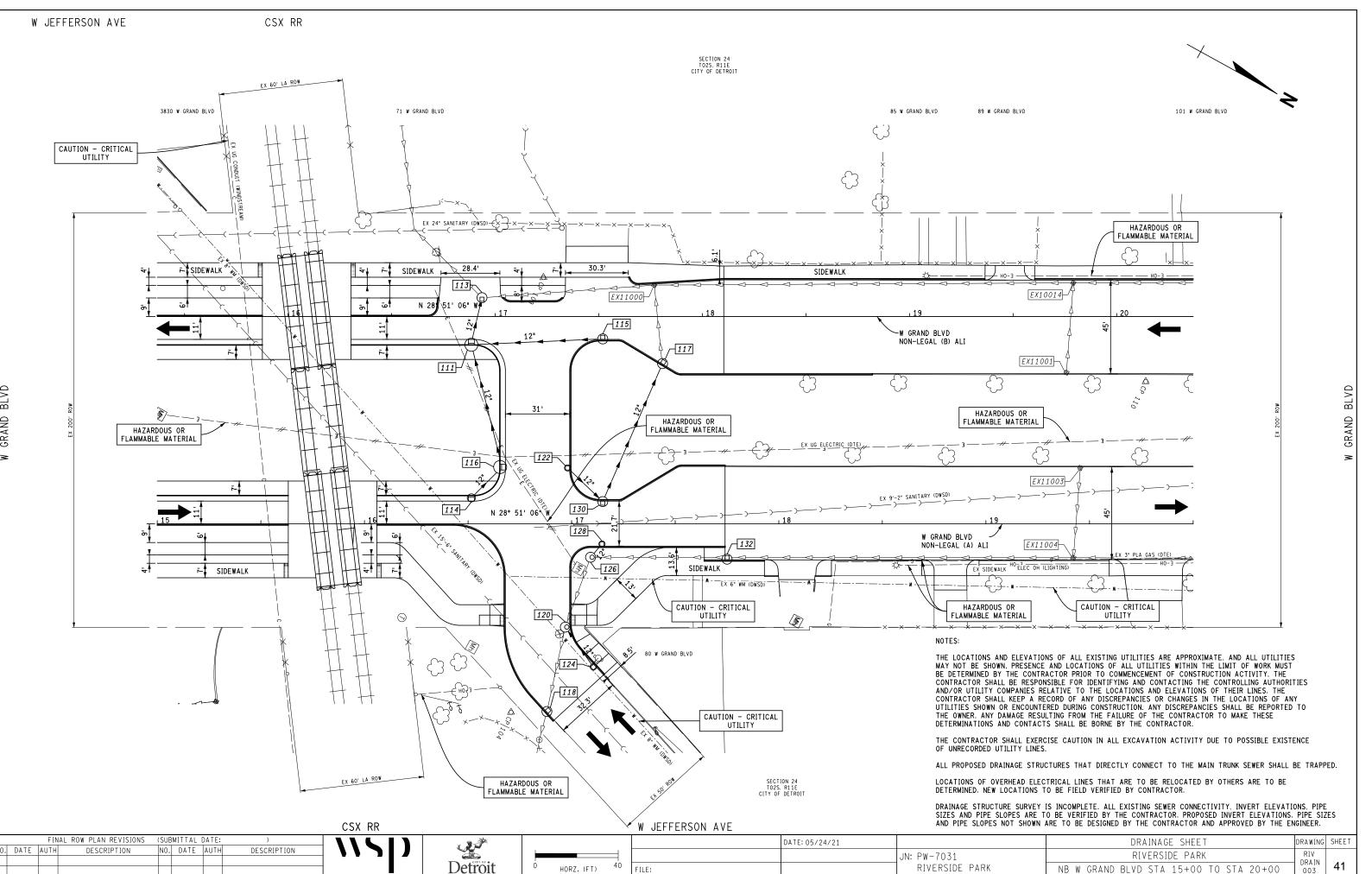




BLVD

GRAND

 \geq



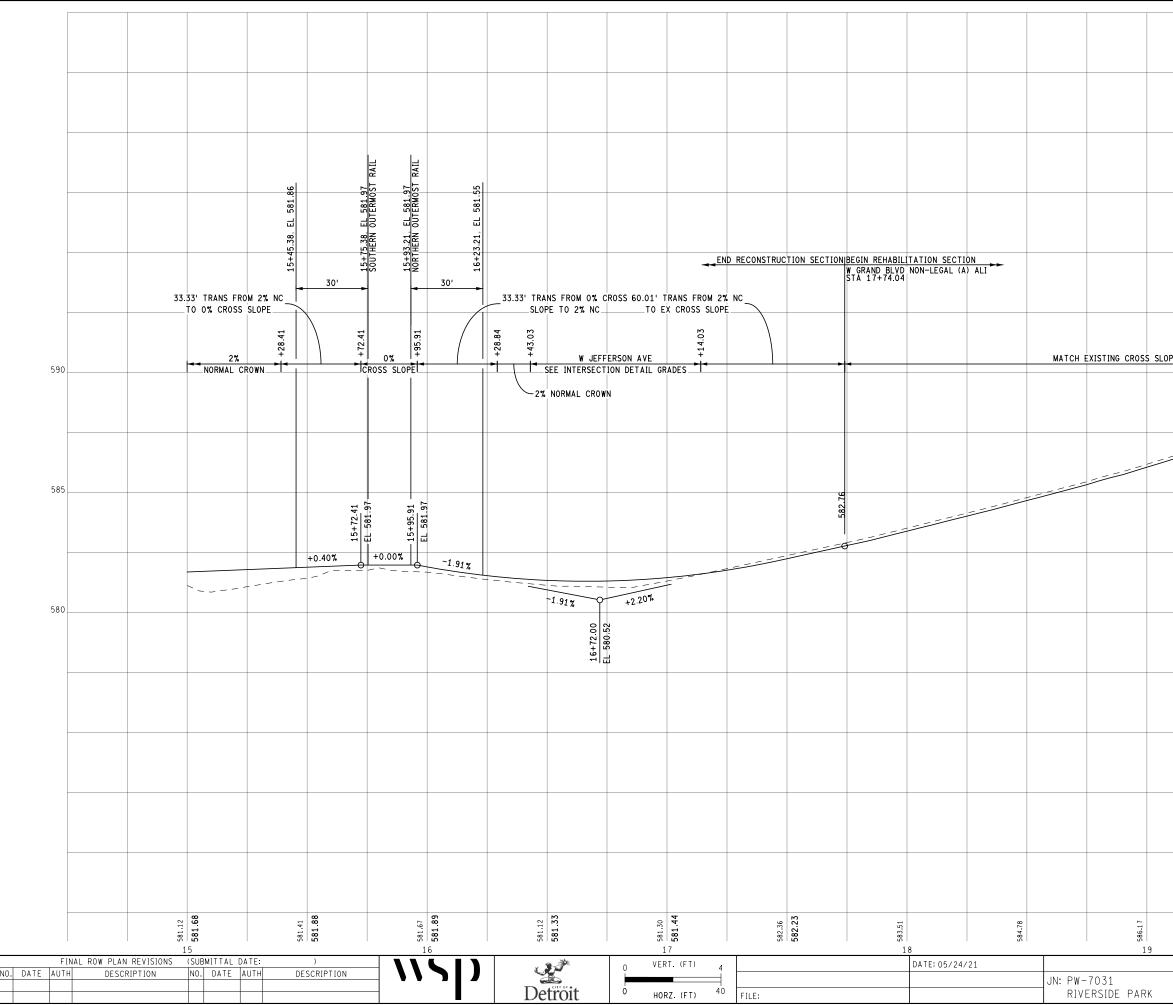
DRAINAGE SHEET	DRAWING	SHEET					
RIVERSIDE PARK							
NB W GRAND BLVD STA 15+00 TO STA 20+00	DRAIN 003	41					

STRUCT NO.	STATION	OFFSET*	RIM ** ELEV	Dr Structure, _ inch dia. 24 Ea	Dr Structure, _ inch dia. 48 Ea	Dr Structure Cover, Type CB, Modified Ea	Dr Structure Cover, Type ADA CB, Modified Ea	Dr Structure Cover, Type MH, Modified Ea	Sewer, CIA, _	Sewer, CL A, _ inch, Tr Det C 12 Ft	Sewer Tap, _ inch 12 Eg	Dr Structure Lead, Cleaning, Modified Ft	
111	16+88.49 SB GRAND	13.54' RT	581.81		1	1				23			F
113	16+93.61 SB GRAND		581.89		1		1			10		10	F
114	16+51.61 NB GRAND	12.57' LT		1		1				21			Γ
115	17+51.91 SB GRAND	10.75' RT	581.94		1	1				64			Γ
116	16+65.49 NB GRAND	27.42' LT	580.91		1	1			61				Г
117	17+80.78 SB GRAND	22.63' RT	581.79		1	1				5		5	Γ
118	16+88.07 NB GRAND	90.56' RT	580.61		1	1			5	5	1	10	Γ
120	16+96.93 NB GRAND	49.82' RT	581.39		1			1		10		10	
122	16+98.03 NB GRAND	27.00' LT	580.91	1		1			24				
124	17+10.51 NB GRANE	69.10' RT	580.84	1		1				24			
126	17+09.14 NB GRANE	16.12' RT	581.90		1			1	10			10	
128	17+14.66 NB GRAND	9.72' RT	581.35	1		1				9			
130	17+15.03 NB GRANE	10.75' LT	581.33		1	1			73				
132	17+75.04 NB GRANE				1		1			10	1	10	
EX11000	17+76.78 SB GRAND						1					15	
EX11001	19+75.74 SB GRAND		586.69									5	
EX11003	19+45.54 NB GRAND	27.55' LT	586.97									5	
EX10014	19+79.05 SB GRAND	16.30' LT	586.71				1					15	
TOTAL				4	10	10	4	2	173	181	2	95	

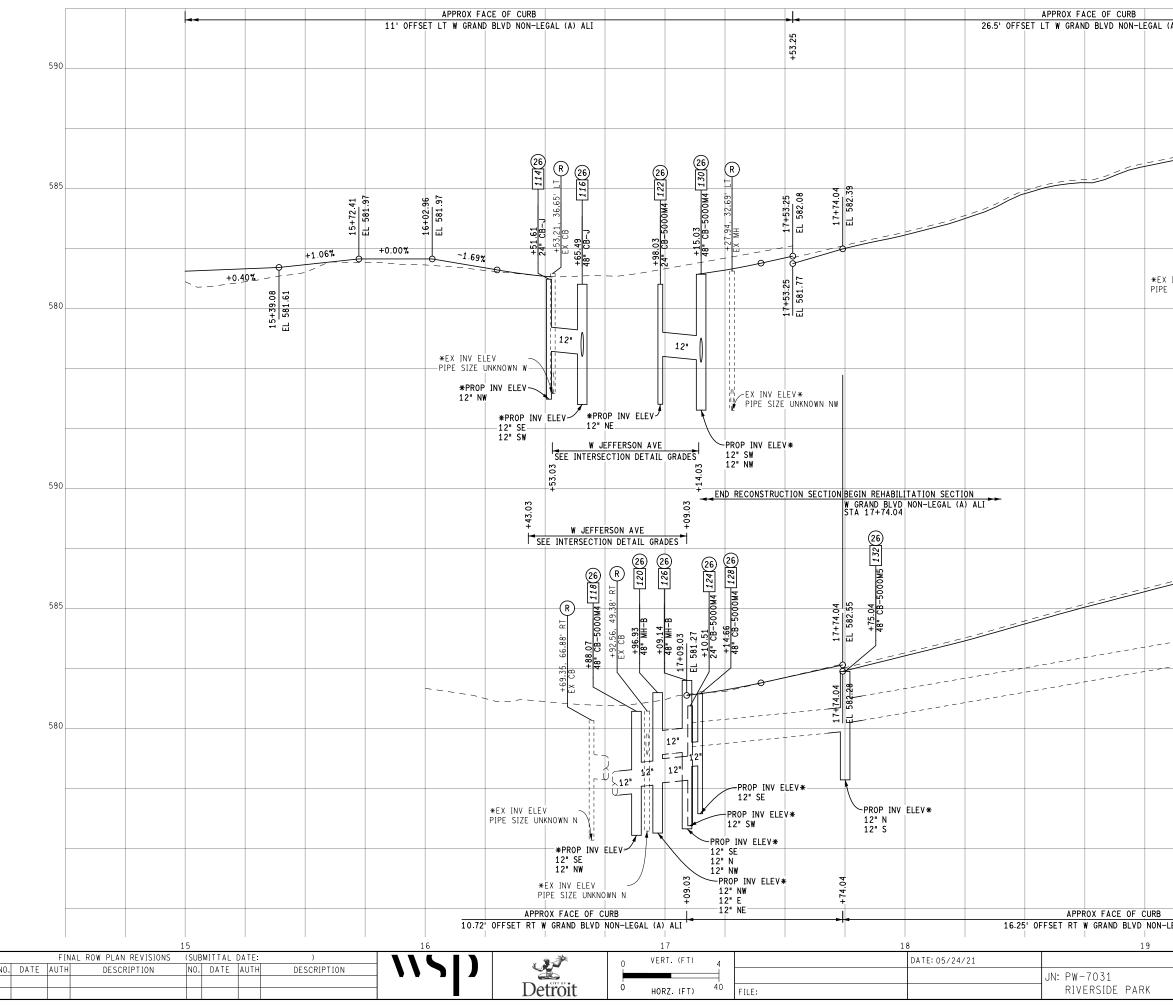
* OFFSETS ARE MEASURED TO CENTER OF STRUCTURE ** RIM ELEV SHOWN IS AT EDGE OF PAVEMENT FOR CATCH BASINS AND AT CENTER OF COVER FOR MANHOLES

	FINAL ROW PLAN REVISIONS (SL)		12			DATE: 05/24/21		DRAINAGE QUANTITY SHEET	DRAWING	; SHEET
NO. DATE AU	UTH DESCRIPTION NO	D. DATE AUTH	DESCRIPTION	\\ \]					JN: PW-7031	RIVERSIDE PARK	RIV	,
					Detroit	⁰ нокz.(ft) ⁴⁰	FILE:		RIVERSIDE PARK	NB W GRAND BLVD STA 15+00 TO STA 20+00	DRNQTY 002	42

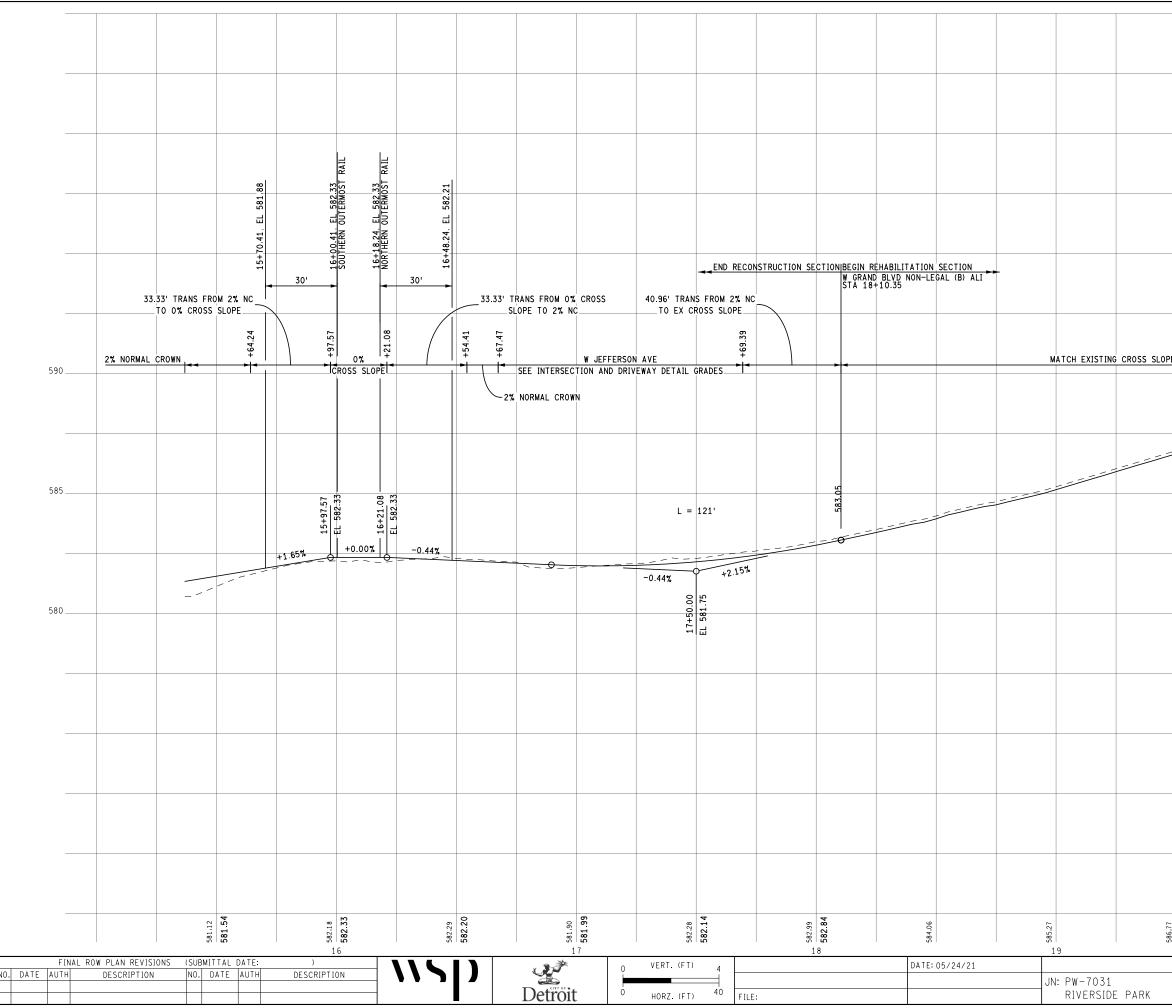
,	Dr Structure Cleaning, Modified
	Ea
	1
	1
	1
	1
	4



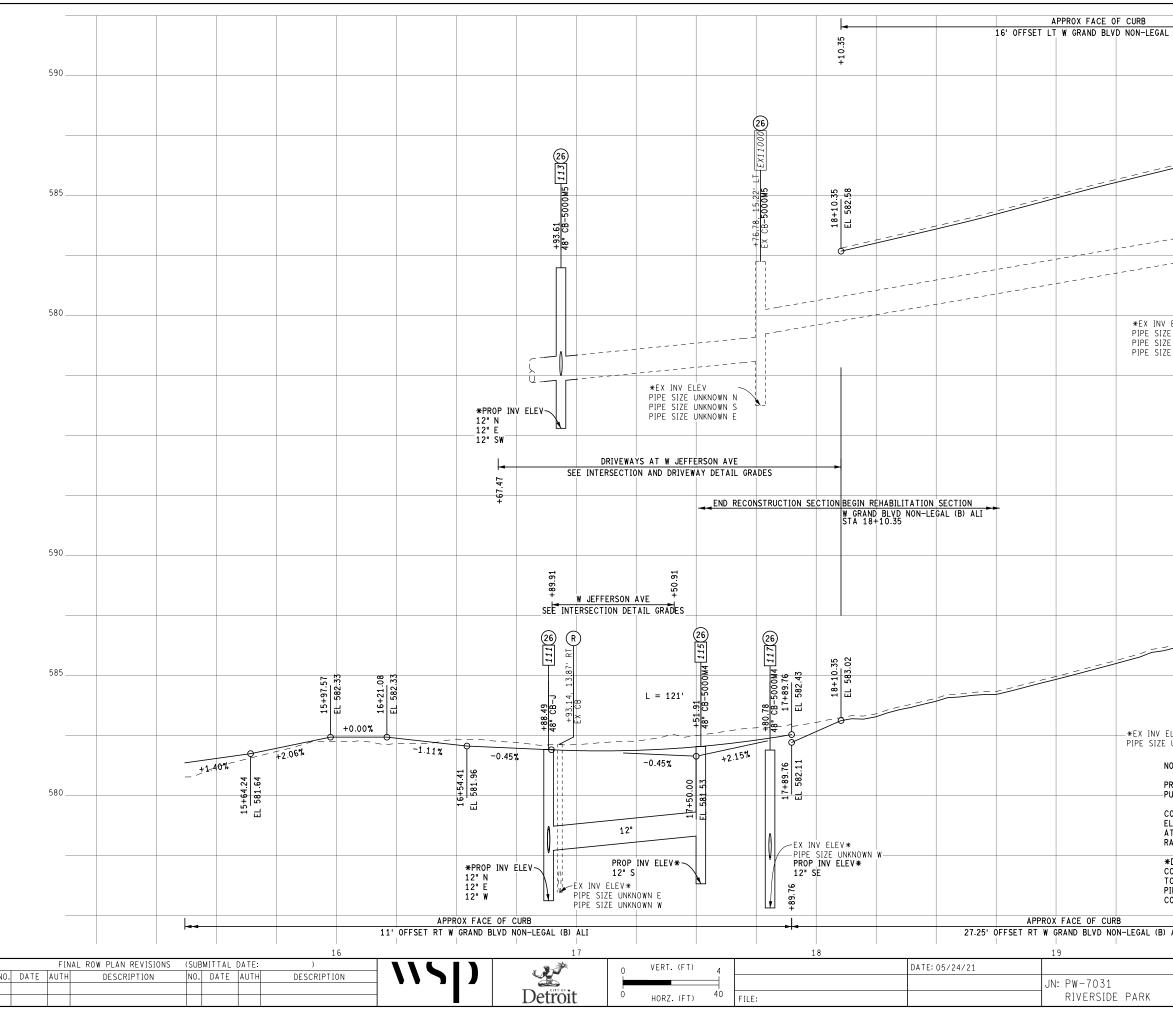
						1	
						-	
						-	
						_	
]	
							ALI
PE							-EX GROUND PROFILE AT W GRAND BLVD NON-LEGAL (A) ALI -PROP PLAN GRADE AT W GRAND BLVD NON-LEGAL (A) ALI
						590	GAL
							N-LE N-LE
							ON ON
							BLVD
							D BL
							CRA SRAN
							× N N
						585	-E A A T
							ROF II RADE
							N CE
							PLA
							ROP
							ΪĪ
						580 /	
						-	
						-	
	NOTES: PROPOSED PRO		NUTATION CEO	TION IS EOD P			
		FILE IN REHAB Y AND IS NOT					
	CONTRACTOR SURFACE ELEV	TO VERIFY CS) ATION ON NB THE EDGES O ACH RAIL.	K INSTALLED GI	ADE CROSSING	ADWAY		
	ALIGNMENT AT AND TOP OF E	ACH RAIL.	F THE GRADE (CRUSSING SURF	ACE		
	m		ڡ			-	
	587.53		588.36				
			2				CUEET
			OFILE SHEE			DRAWING RIV	SHEET
	NID 1	RI N GRAND BL	VERSIDE PA		0+00	PROF	43
	I IND I	N UNANU DL	.vu sta 13	יז ער עטיי	0100	009	



		1	
A) ALI	EX1100		
		590	RB
	27.5		CE OF CURB E OF CURB
	EX CB 445.54		CE O
	+ = = = = = = = = = = = = = = = = = = =		T FA
			, LT X0
			APPR(
		585	√ M GRAND BLVD APPROX GRAND BLVD APPROX LT
			ND BI
		(CRA SRAND
		-	AT W W C
			ILE /
INV ELEV SIZE UNK	NOWN W		EX GROUND PROF
		580	PLAN
			C GRO
			E B B B B B B B B B B B B B B B B B B B
		J	
		_	
		590	
	0W2 		
	+		
		585 _	BBB
			OF CURB F CURB
			T FACE FACE
	EX INV ELEV*		0X RT X RT
	PIPE SIZE UNKNOWN W PIPE SIZE UNKNOWN N PIPE SIZE UNKNOWN S		APPR PPR0
	[N] PIPE SIZE UNKNOWN S	500	ILVD
		580	ND E
NOT	ES:		V W GRAND BLVD APPROX GRAND BLVD APPROX R
	POSED PROFILE IN REHABILITATION SECTION IS FOR DISPLAY POSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.		AT W
	TRACTOR TO VERIFY CSX INSTALLED GRADE CROSSING SURFACE		
ELE	VATION ON NB W GRAND BLVD ALONG THE ROADWAY ALIGNMENT THE EDGES OF THE GRADE CROSSING SURFACE AND TOP OF EACH		PROFILE GRADE
RAI			EX GROUND - PROP PLAN
CON	AINAGE STRUCTURE SURVEY IS INCOMPLETE. ALL EXISTING SEWER		X GR ROP
PIPI	BE VERIFIED BY THE CONTRACTOR. PROPOSED INVERT ELEVATIONS. SIZES AND PIPE SLOPES NOT SHOWN ARE TO BE DESIGNED BY THE		ш Ш Ц
CON	TRACTOR AND APPROVED BY THE ENGINEER.		
5041			
EGAL (A)			
	20 PROFILE SHEET	DRAWING	SHEET
	RIVERSIDE PARK	RIV	
	NB W GRAND BLVD STA 15+00 TO 20+00	PROF 010	44

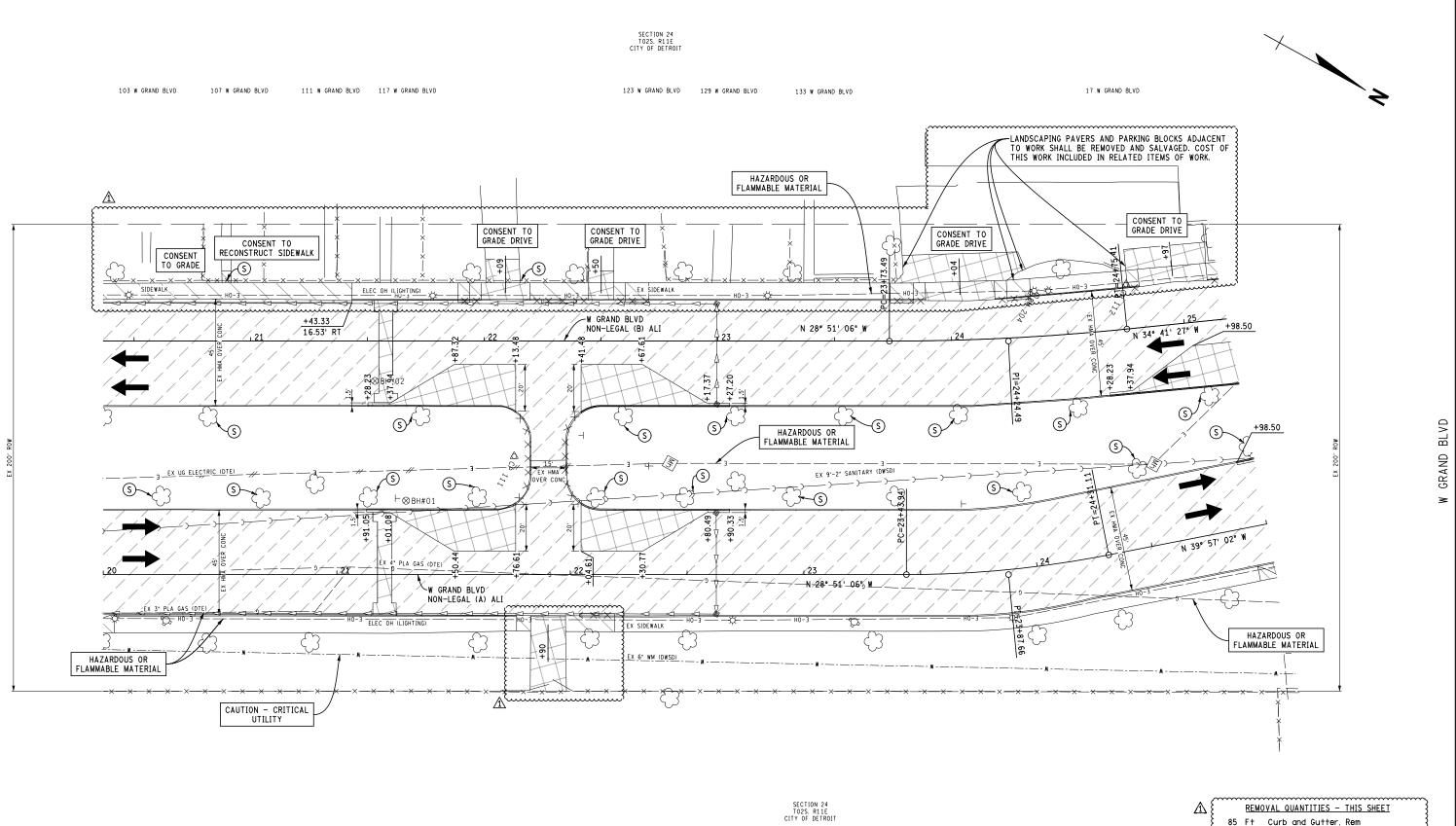


								-	
								-	
								-	
								-	
								-	
									3) ALI ALI
PE								590	-ex ground profile at w grand blvd non-legal (B) all
									VD NON-LE
								-	SRAND BL
								_ 585	AT W GR
									PROFILE GRADE
								-	GROUND OP PLAN
									 Pr
								580)	
								-	
								-	
								-	
)TES:			ON SECTION 10				
				REHABILITATIO IS NOT TO BE IFY CSX INSTAI ON SB W GRAND OGES OF THE O IL.				-	
	ÁL Al	IGNMÉ ND TO	NT AT THE EL P OF EACH RA	OGES OF THE C IL	GRADE CROSSIN	G SURFACE			
586.77			587.77					-	
			2	0 PROFILE	SHEET			DRAWING	SHEET
					DE PARK	TO CO		RIV PROF	45
		SE	3 W GRAND	BLVD STA	15+36.88	TO 20+36.8	38	011	40



	(26)	_		-		_	
(B) ALI	EX10014						
	EXIC						
	0. LT					590	B B
	5000M5						of cu
	79.05, < CB-5						LT FACE OF CURB FACE OF CURB
						-	
							W GRAND BLVD APPROX GRAND BLVD APPROX L
						_ 585	AP D APPF
						_ 303	D BLV BLVD
	V						
						_	w GF
							ILE A E A T
							PROFILE GRADE AT
ELEV.						_ 580	OUND
ELEV E UNKNOWN E UNKNOWN							-EX GROUND -PROP PLAN
UNKNOWN							ΪÌ
						-	
						_ 590 _	CURB RB
	27.57					,	ACE OF CURB E OF CURB
	CB						
	+ 75.					-	k rt f, rt fac
							PPR0:
							VD A D APF
						_ 585	ND BL VD BL
							W GRAND BLVD APPROX GRAND BLVD APPROX R
							AT F W
UNKNOWN W						-	PROFILE GRADE A
OTES:							D PR(N CR⊉
	ROFILE IN REHABILI					_ 580	-EX GROUND -PROP PLAN
	TO VERIFY CSX I						- EX (
	ON SB W GRAND BL' ES OF THE GRADE						'
	STRUCTURE SURVEY	' IS INCOMPLETE	. ALL EXISTIN	G SEWER			
ONNECTIVIT O BE VERIF	Y, INVERT ELEVAT	IONS, PIPE SIZE RACTOR. PROPOS	S AND PIPE SL SED INVERT ELI	LOPES ARE EVATIONS.			
	AND PIPE SLOPES N AND APPROVED B			ED BY THE			
						-	
ALI		20					
		PROFILE				DRAWING	SHEET
			DE PARK	TO 20170	00	RIV PROF	46
	SB W GRAND) BLVD STA	7.7 AC 4.7	10 20+30.	00	012	

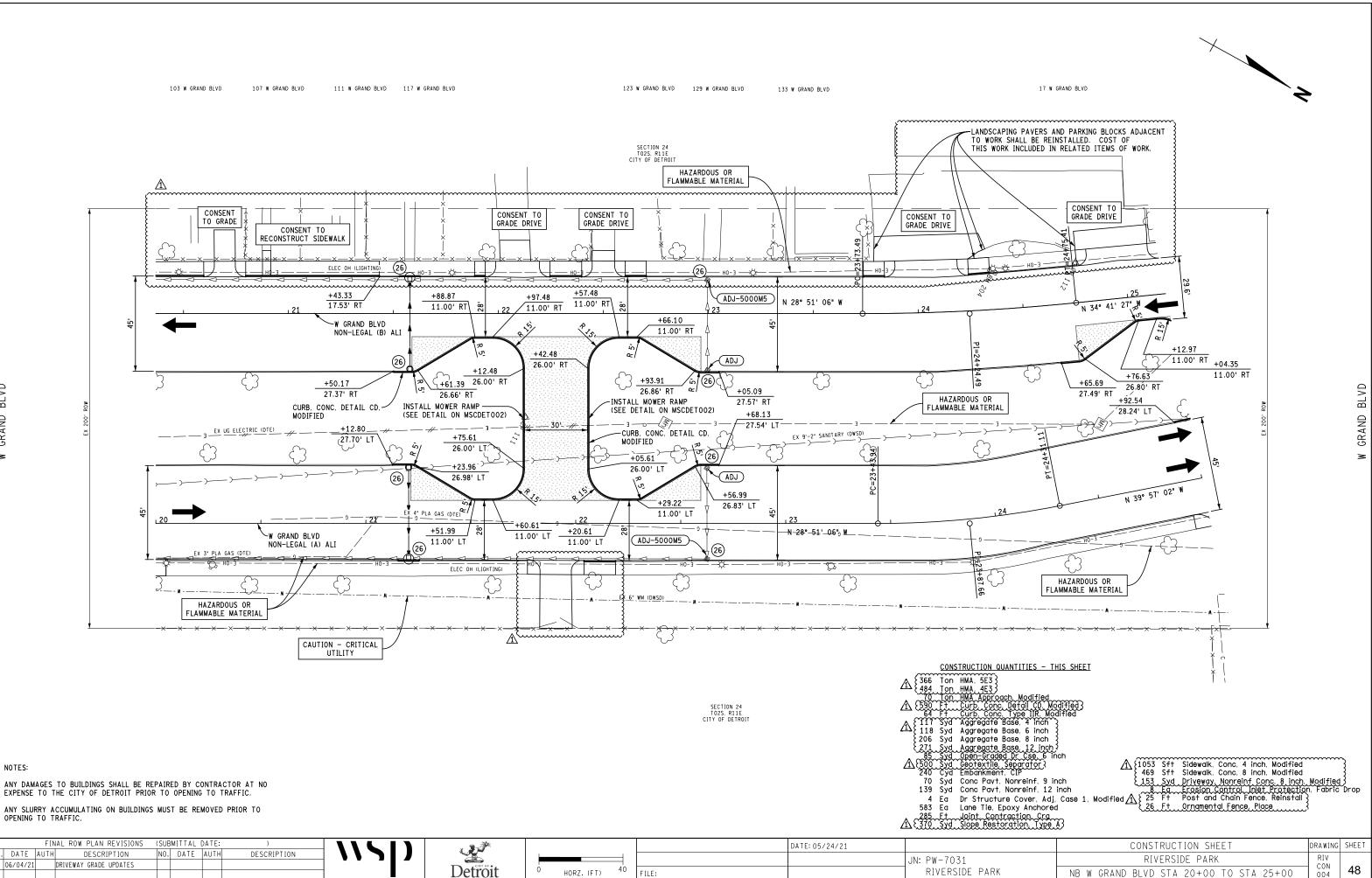




FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	DATE: 05,	05/24/21	REMOVAL SHEET	DRAWING SHEET
NU. DATE AUTH DESCRIPTION NU. DATE AUTH DESCRIPTION		JN: PW-7031	RIVERSIDE PARK	RIV REM
1 06/04/21 DRIVEWAY GRADE UPDATES DETROIT	O HORZ. (FT) 40 FILE:	RIVERSIDE PARK	NB W GRAND BLVD STA 20+00 TO STA 25+00	004 47

BLVD GRAND ×

	, $,$ $,$ $,$ $,$ $,$ $,$ $,$ $,$ $,$												
\mathbb{A}	È	REMC	VAL QUANTITIES - THIS SHEET }										
	85	F†	Curb and Gutter, Rem										
	642	Syd	Pavt, Rem 3										
	184	Syd	Sidewalk, Rem }										
	268	Cyd	Excavation, Earth, Modified }										
1	599	Syd	HMA Surface, Rem }										
	4527	Syd	Cold Milling HMA Surface, Modified }										
	25	F†	Post and Chain Fence, Rem and Salv \$										
	26	Ft	Ornamental Fence, Salvage										
	hum	·····	······································										

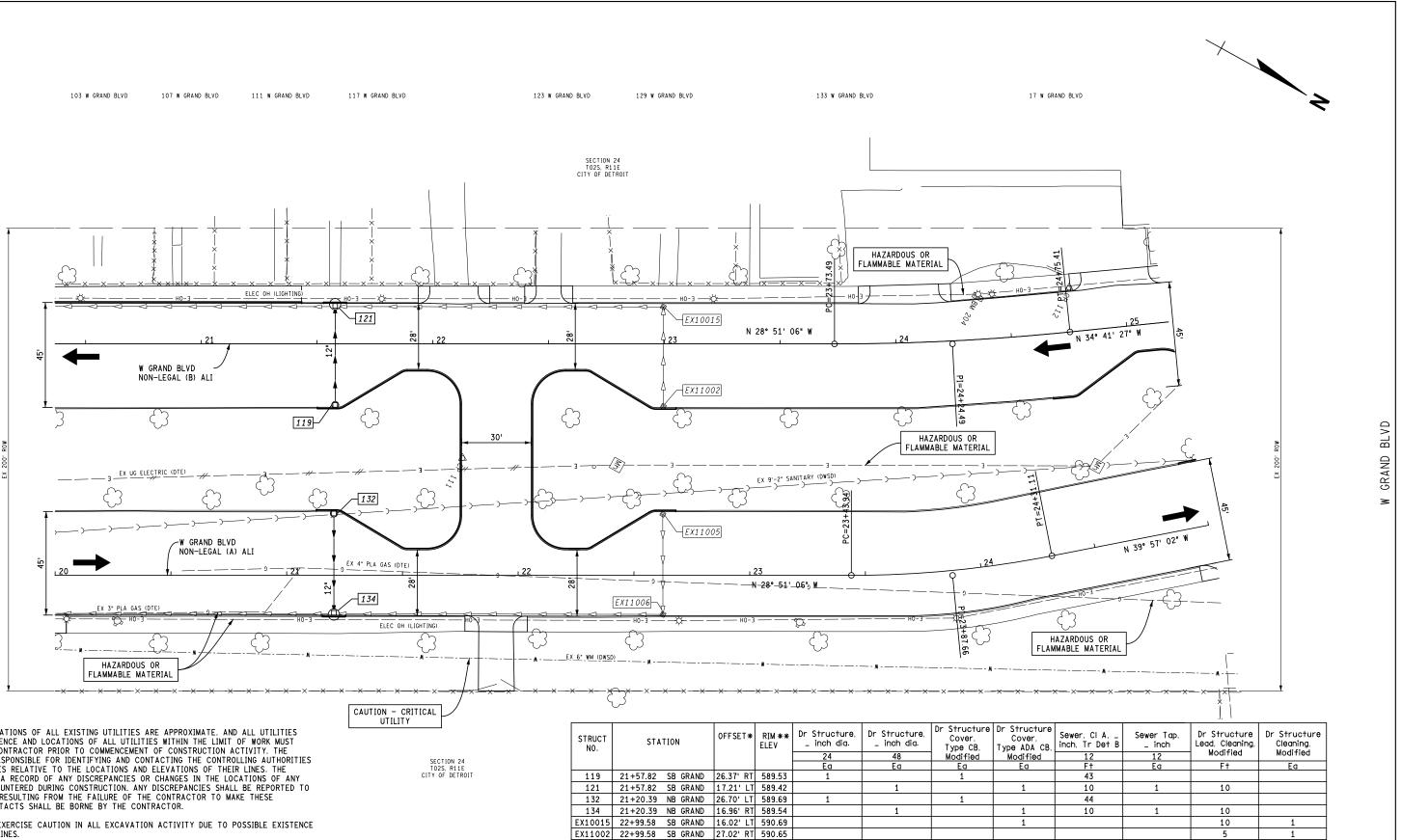


NOTES:

). DATE AUTH

1 06/04/21





NOTES:

THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE, AND ALL UTILITIES MAY NOT BE SHOWN. PRESENCE AND LOCATIONS OF ALL UTILITIES WITHIN THE LIMIT OF WORK MUST BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND CONTACTING THE CONTROLLING AUTHORITIES AND/OR UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER. ANY DAMAGE RESULTING FROM THE FAILURE OF THE CONTRACTOR TO MAKE THESE DETERMINATIONS AND CONTACTS SHALL BE BORNE BY THE CONTRACTOR.

THE CONTRACTOR SHALL EXERCISE CAUTION IN ALL EXCAVATION ACTIVITY DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.

ALL PROPOSED DRAINAGE STRUCTURES THAT DIRECTLY CONNECT TO THE MAIN TRUNK SEWER SHALL BE TRAPPED.

DRAINAGE STRUCTURE SURVEY IS INCOMPLETE. ALL EXISTING SEWER CONNECTIVITY, INVERT ELEVATIONS, PIPE SIZES AND PIPE SLOPES ARE TO BE VERIFIED BY THE CONTRACTOR. PROPOSED INVERT ELEVATIONS. PIPE SIZES AND PIPE SLOPES NOT SHOWN ARE TO BE DESIGNED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

STRUCT NO.	STA	TION	OFFSET*	RIM ** Elev	Dr Structure, _ inch dia. 24	Dr Structure, _ inch dia. 48	Dr Structure Cover, Type CB, Modified	Dr Typ
					24 Ea	40 Ea	Ea	
119	21+57.82	SB GRAND	26.37' RT	589.53	1		1	
121	21+57.82	SB GRAND	17.21' LT	589.42		1		
132	21+20.39	NB GRAND	26.70' LT	589.69	1		1	
134	21+20.39	NB GRAND	16.96' RT	589.54		1		
EX10015	22+99.58	SB GRAND	16.02' LT	590.69				
EX11002	22+99.58	SB GRAND	27.02' RT	590.65				
EX11005	22+62.47	NB GRAND	26.44' LT	590.73				
EX11006	22+62.52	NB GRAND	16.88' RT	590.70				
TOTAL					2	2	2	

* OFFSETS ARE MEASURED TO CENTER OF STRUCTURE ** RIM ELEV SHOWN IS AT EDGE OF PAVEMENT FOR CATCH BASINS AND AT CENTER OF COVER FOR MANHOLES

		FINAL ROW PLAN REVISIONS		JBMITTAL D	DATE)						DATE: 05/24/21	
N0.	DATE	AUTH DESCRIPTION	NC	D. DATE	AUTH	DESCRIPTION							JN: PW-7031
								Detitoit		40			
								Detroit	0	HORZ.(FT) 40	FILE:		RIVERSIDE PARK

1

4

107

DRAINAGE SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV DRAIN	
NB W GRAND BLVD STA 20+00 TO STA 25+00	004	49

2

5

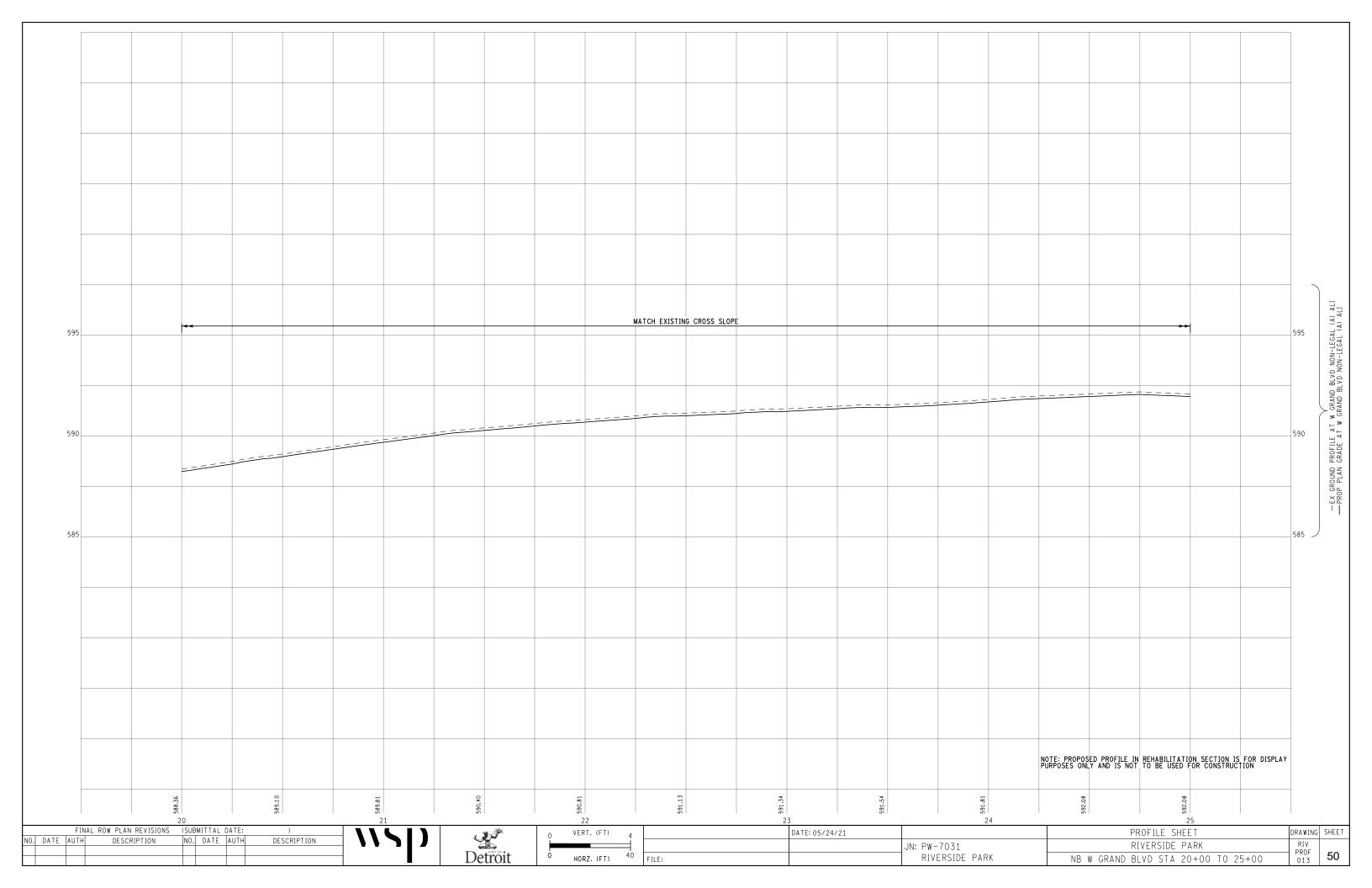
10

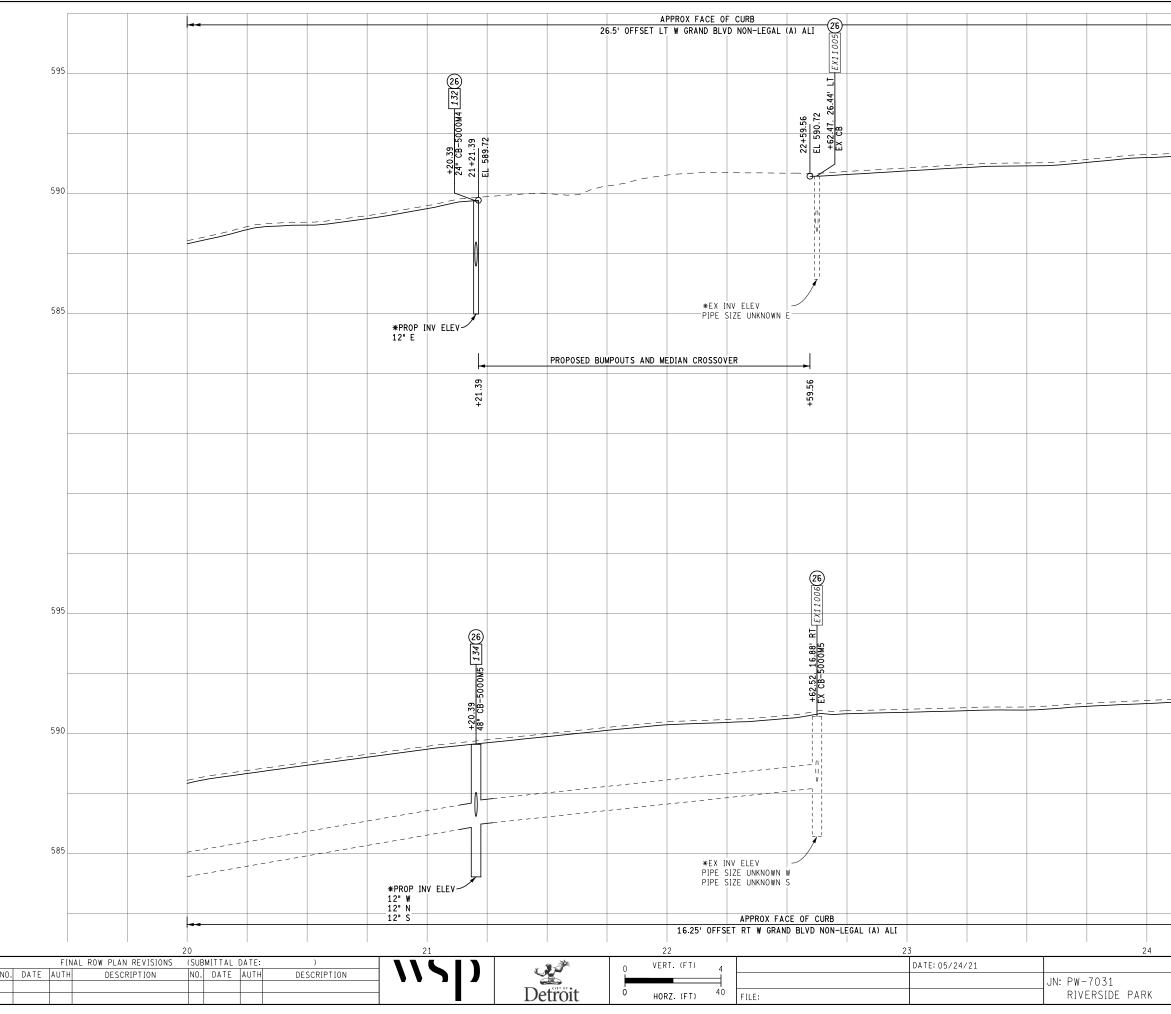
50

1

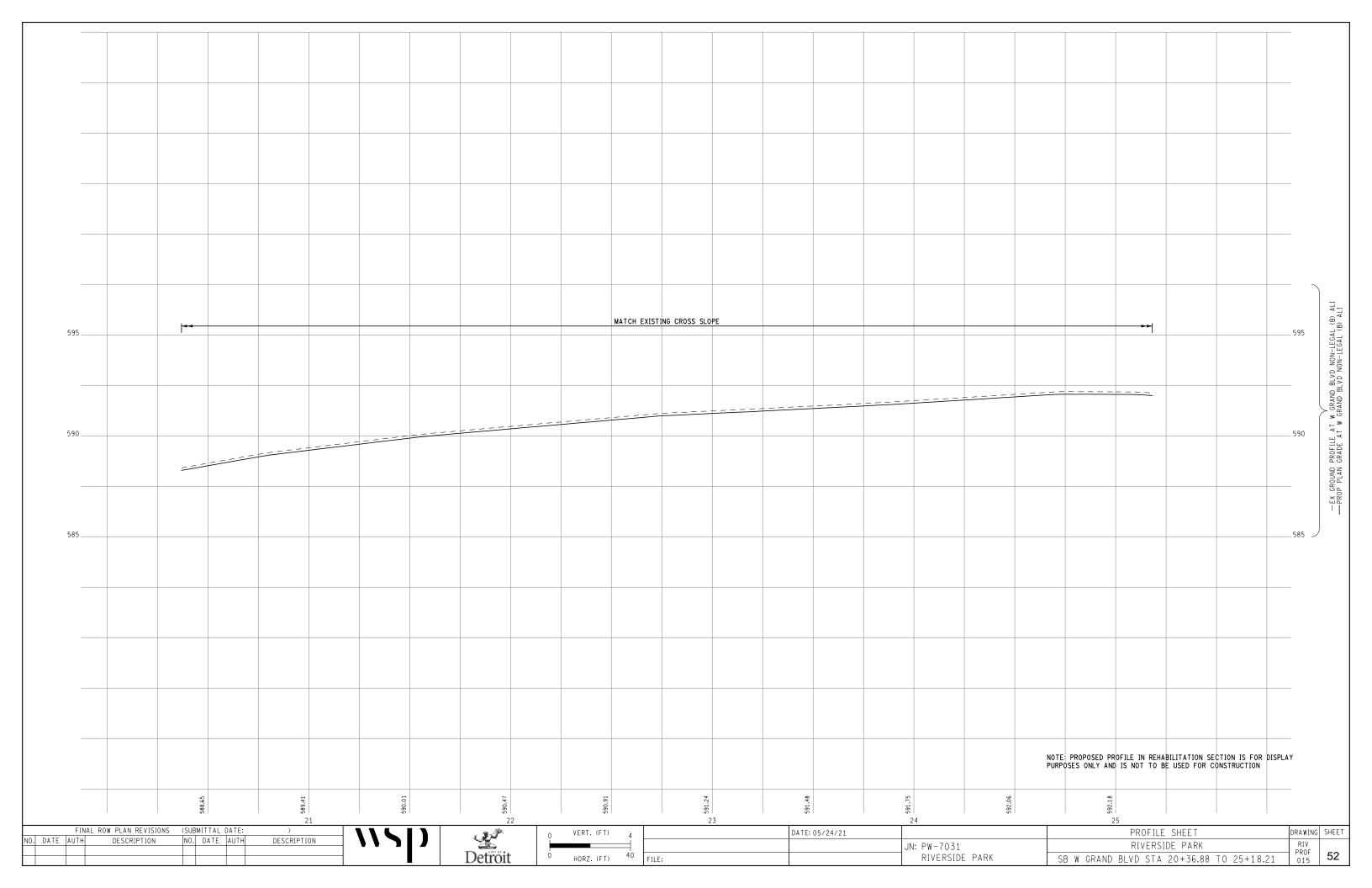
1

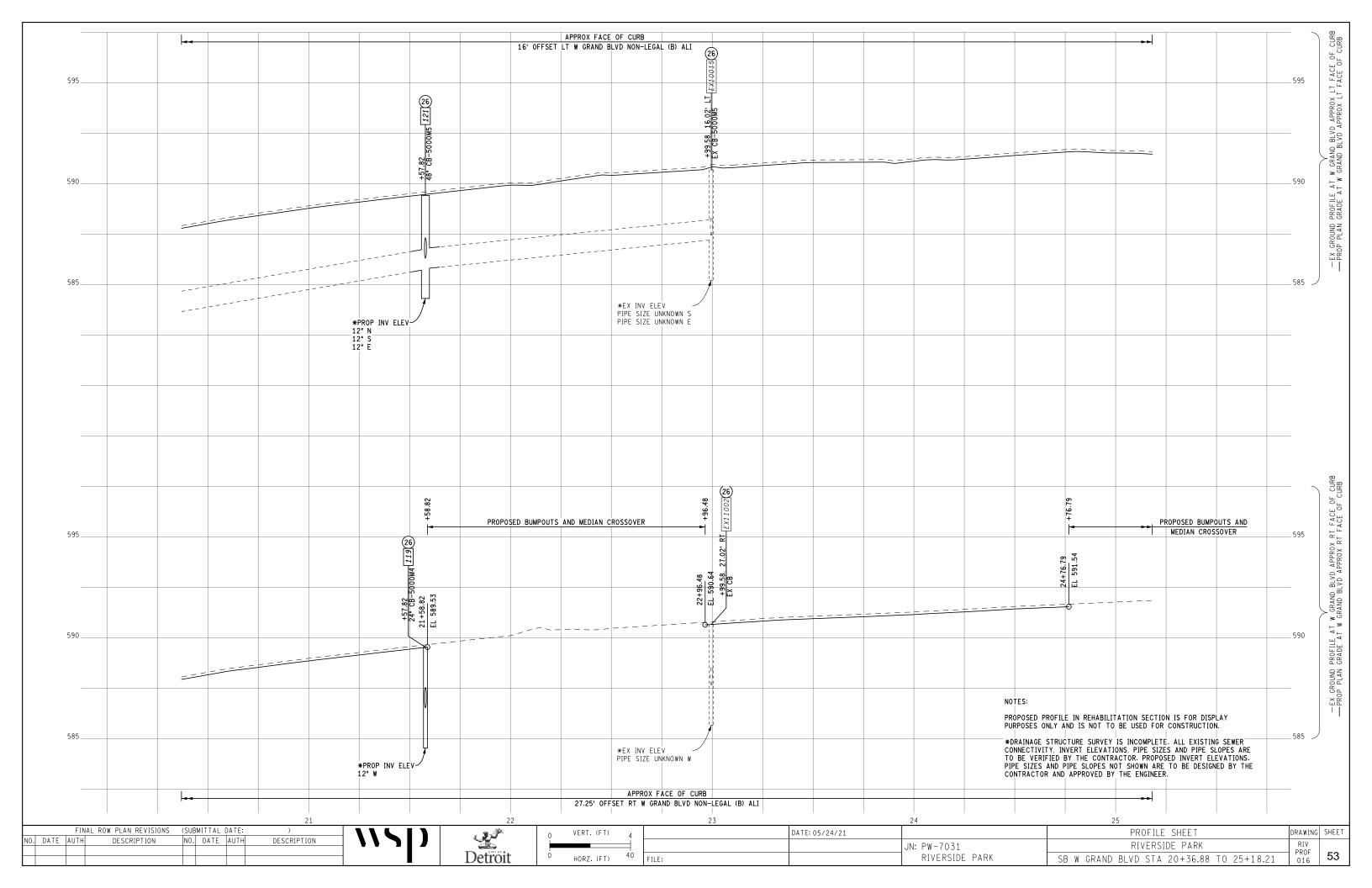
4

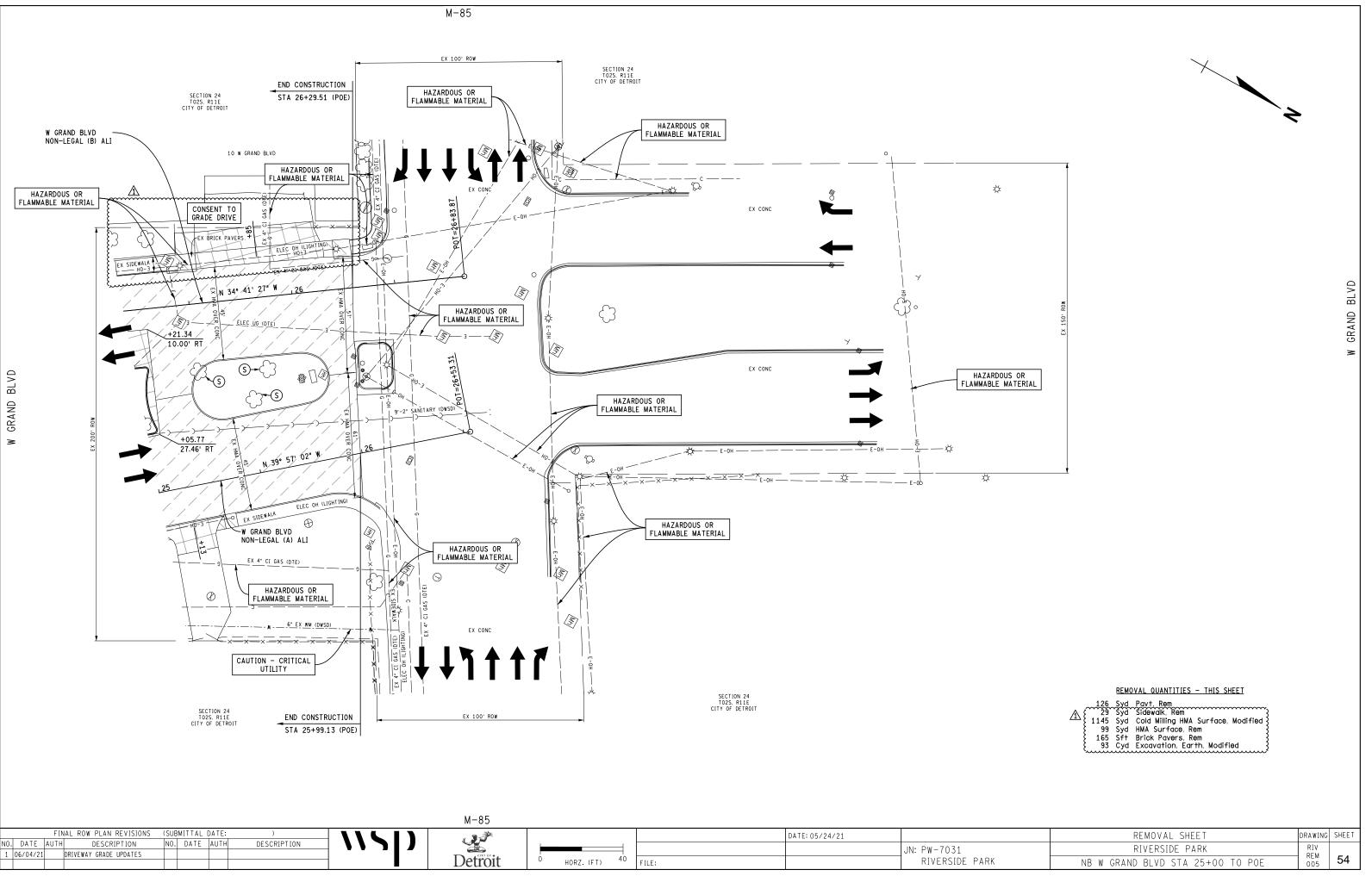




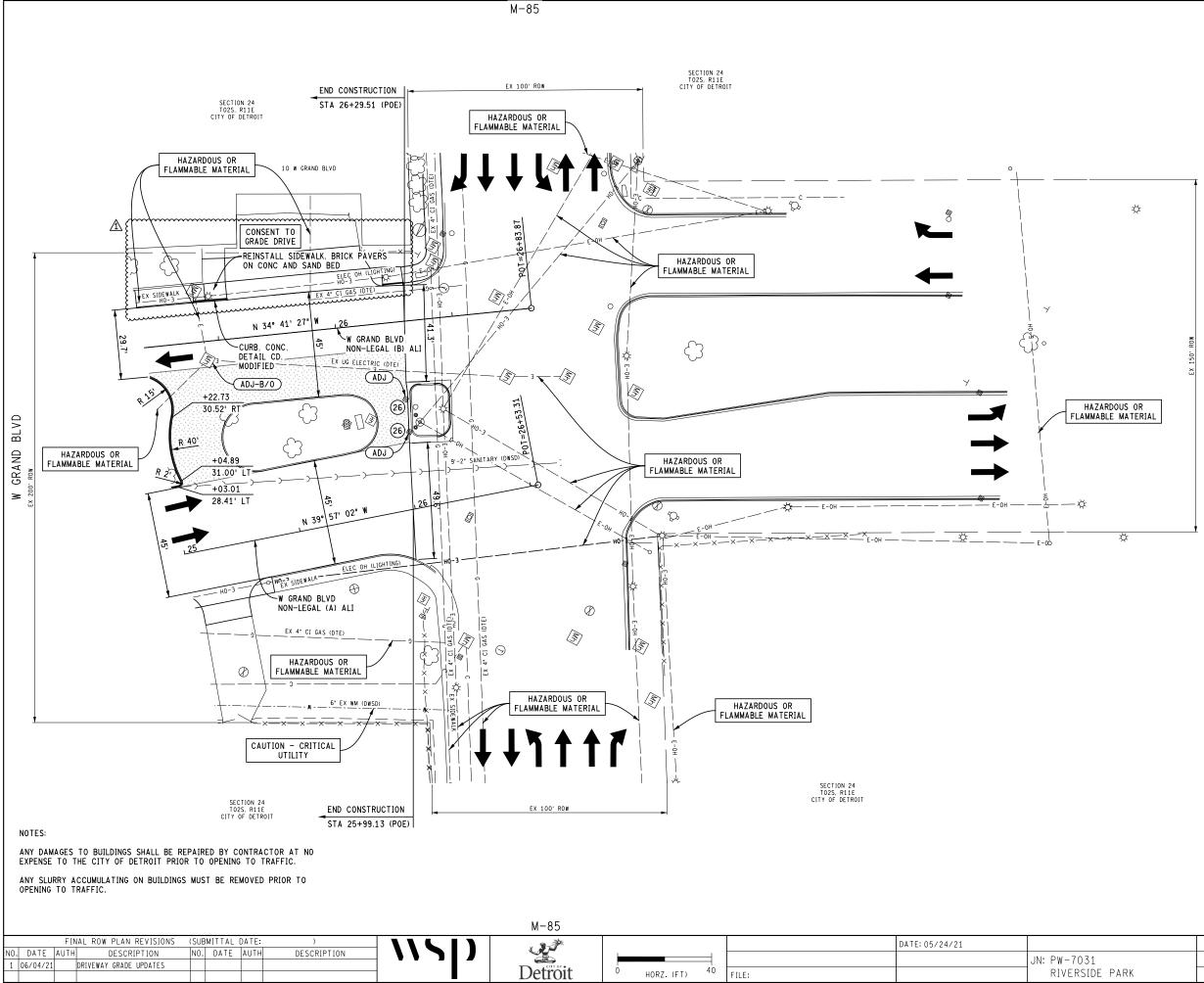
							B B
			**	1			CUR
							10 I O
						595	FAC
						555	-EX GROUND PROFILE AT W GRAND BLVD APPROX LT FACE OF CURB
							X0X
							APPR
							VD AF
) BL
							GRA GRA
						590	T M T
							E A.
							ROF
							₽2 QZ
						_	PLZ
							ROP
							шд
						585	1
						_	
						-	
							88
							FACE OF CURB ACE OF CURB
							P C
							ACE CE 0
						595	RT F T FA(
						1992	RT R
							PRC
							APP APP
							BLVI
							D BL
							W GRAND BLVD APPROX GRAND BLVD APPROX R1
							2
						590	PROFILE AT GRADE AT 1
							2FILI
							PR(GR/
							UND LAN
						-	
NO	TES:						- EX - PR(
		E IN REHABILIT					ĪĪ
		ND IS NOT TO				585	
*D	RAINAGE STRUC	TURE SURVEY	IS INCOMPLETE	ALL EXISTIN	G SEWER		
ΤO	BE VERIFIED I	IVERT ELEVATI BY THE CONTRA	ACTOR. PROPOS	SED INVERT EL	EVATIONS.		
PIP	E SIZES AND F	PIPE SLOPES NO APPROVED BY	DT SHOWN ARE THE ENGINEER	TO BE DESIGN	ED BY THE		
00							
				5 			0
			OFILE SHEE			DRAWING	SHEET
			VERSIDE PA		<u> </u>	RIV PROF	51
	NB N	N GRAND BL	.VD STA 20)+00 TO 2	5+00	014	51







REMOVAL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV REM	
NB W GRAND BLVD STA 25+00 TO POE	005	54

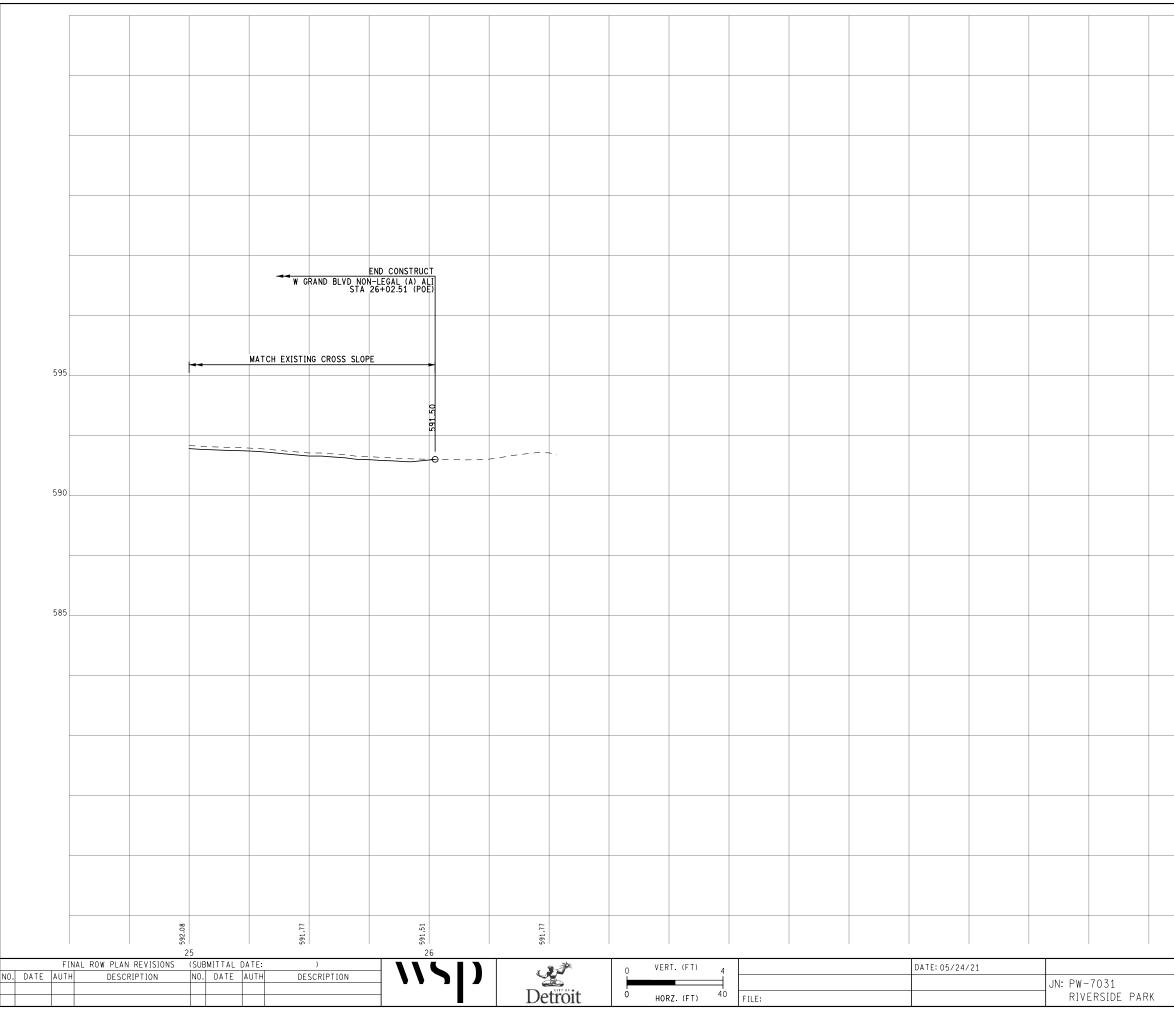




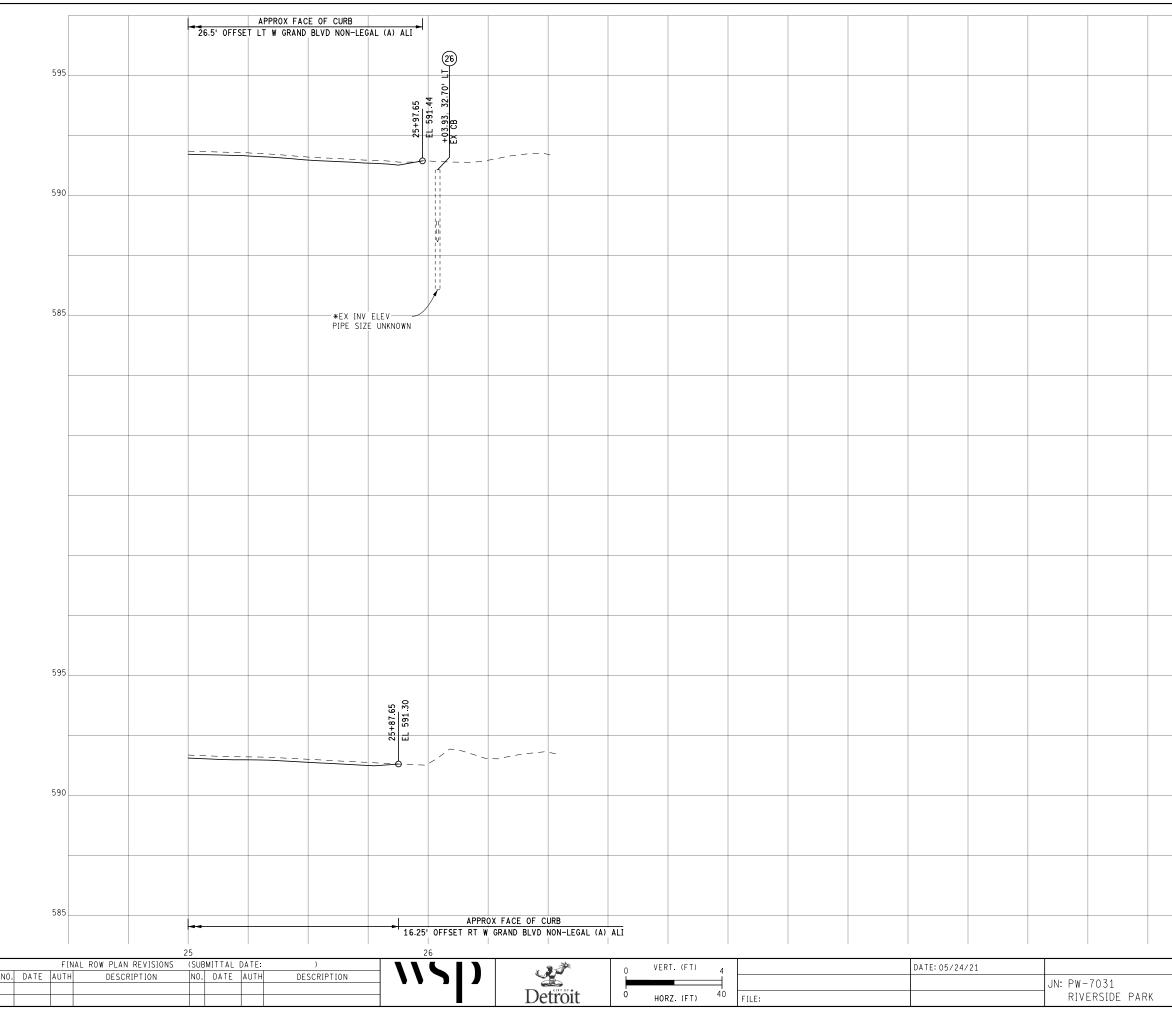
W GRAND BLVD

	CONS	STRUCTION QUANTITIES - THIS SHEET
A (76	Ton	HMA, 5E3 }
ZI {100	Top.	HMA, 4E3
62	Ton	HMA Approach, Modified
9	Syd	Conc Pavt, Nonreinf, 12 inch
A { 11	Śyd	Aggrégate Base, 4 inch }
<u>∠+</u>	Syd	Aggregate Base, 6 inch 🕅
101	Syd	Aggregate Base, 8 inch
{28_	rsyar	Aggregate Base, 12 inch
/] { 28	Syd	Geotextile, Separator {
<u>{</u> 83	F†	Curb, Conc, Detail CD, Modified 🕻
£ 96.	Şft.	Sidewalk, Conc. 4 inch, Modified
~99^	ŜŦŦ	Sidewalk, Conc, 8 inch, Modified
20	Cyd	Embankment, CIP
£109	rsyan	Slope Restoration, Type A
<u>/1\</u> { 90	Syd	Driveway, Nonreinf Conc, 8 inch, Modified
٤ <u>165</u> .	Sft.	Reinstall, Sidewalk, Brick, Pavers, on, Conc. and Sand, Bed ?
2	Ea	Erosion Control, Inlet Protection, Fabric Drop
2	Εa	Dr Structure Cover, Adj, Case 1, Modified
70	Εa	Lane Tie, Epoxy Anchored
70	Εa	Lane Tie, Epoxy Anchored

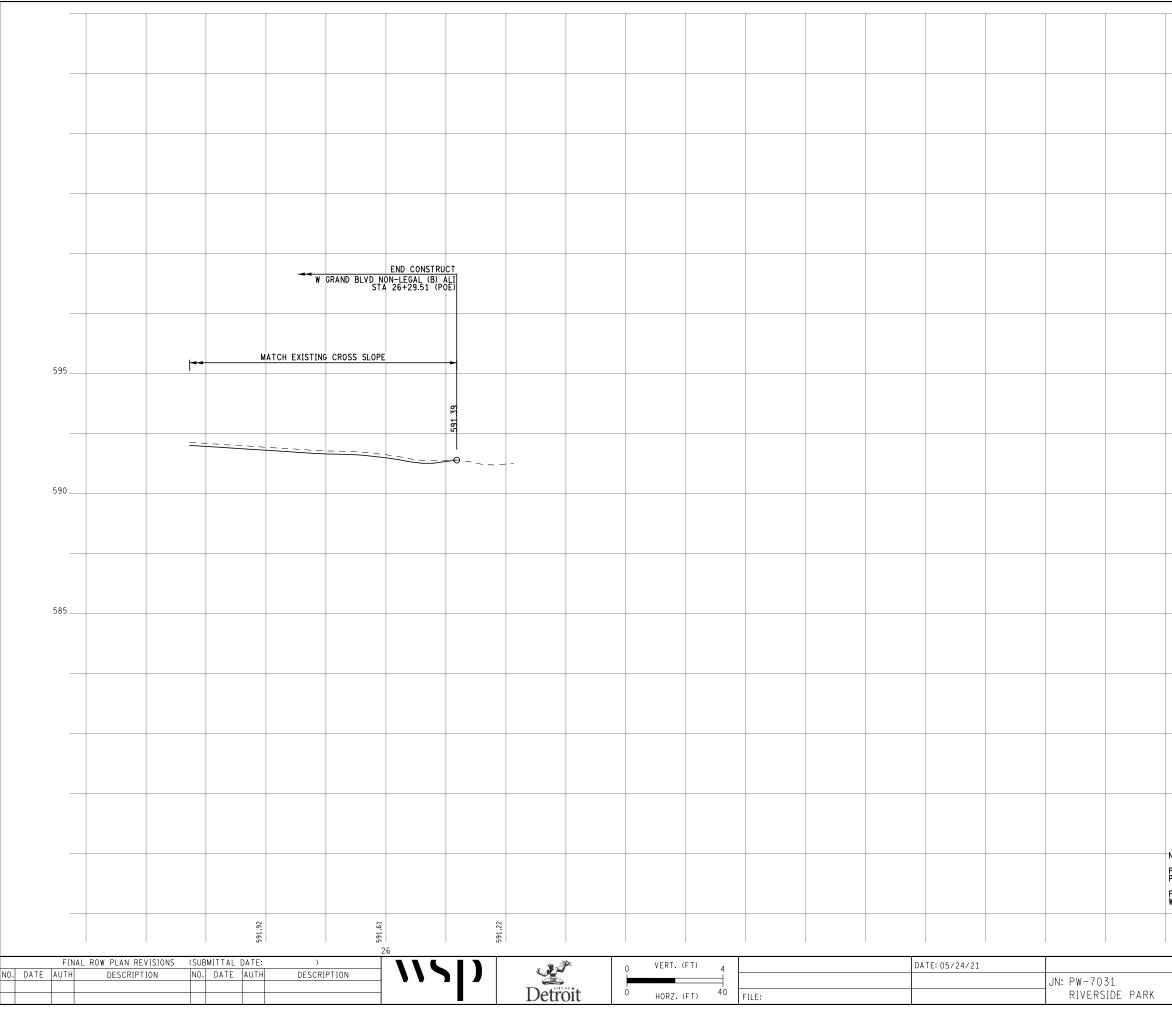
CONSTRUCTION SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV CON	
NB W GRAND BLVD STA 25+00 TO POE	005	55



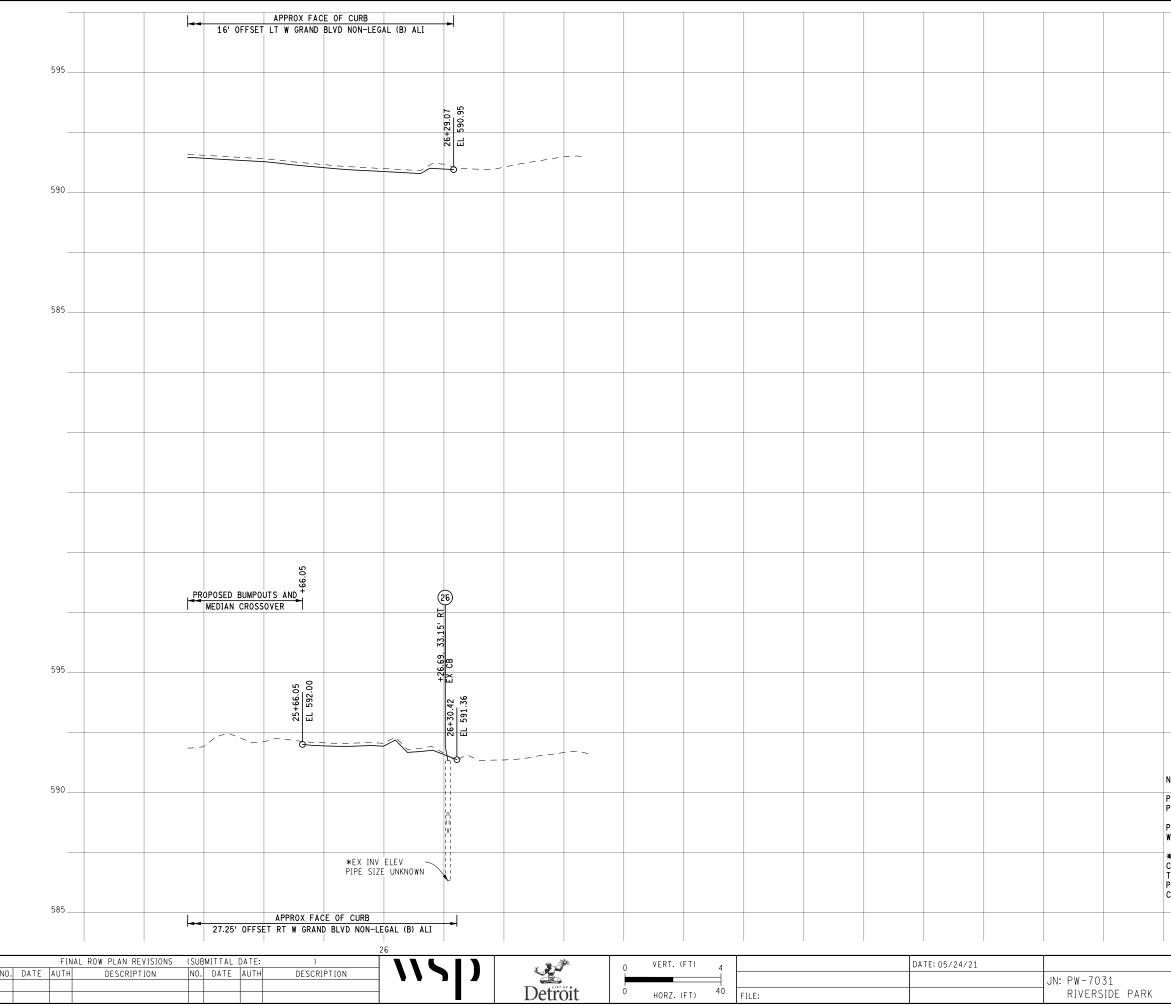
					595	
P				TION IS FOR D OR CONSTRUC RETURN FROM	-	
	NB	RI	OFILE SHEE VERSIDE PA BLVD STA 2		RIV	HEET 56



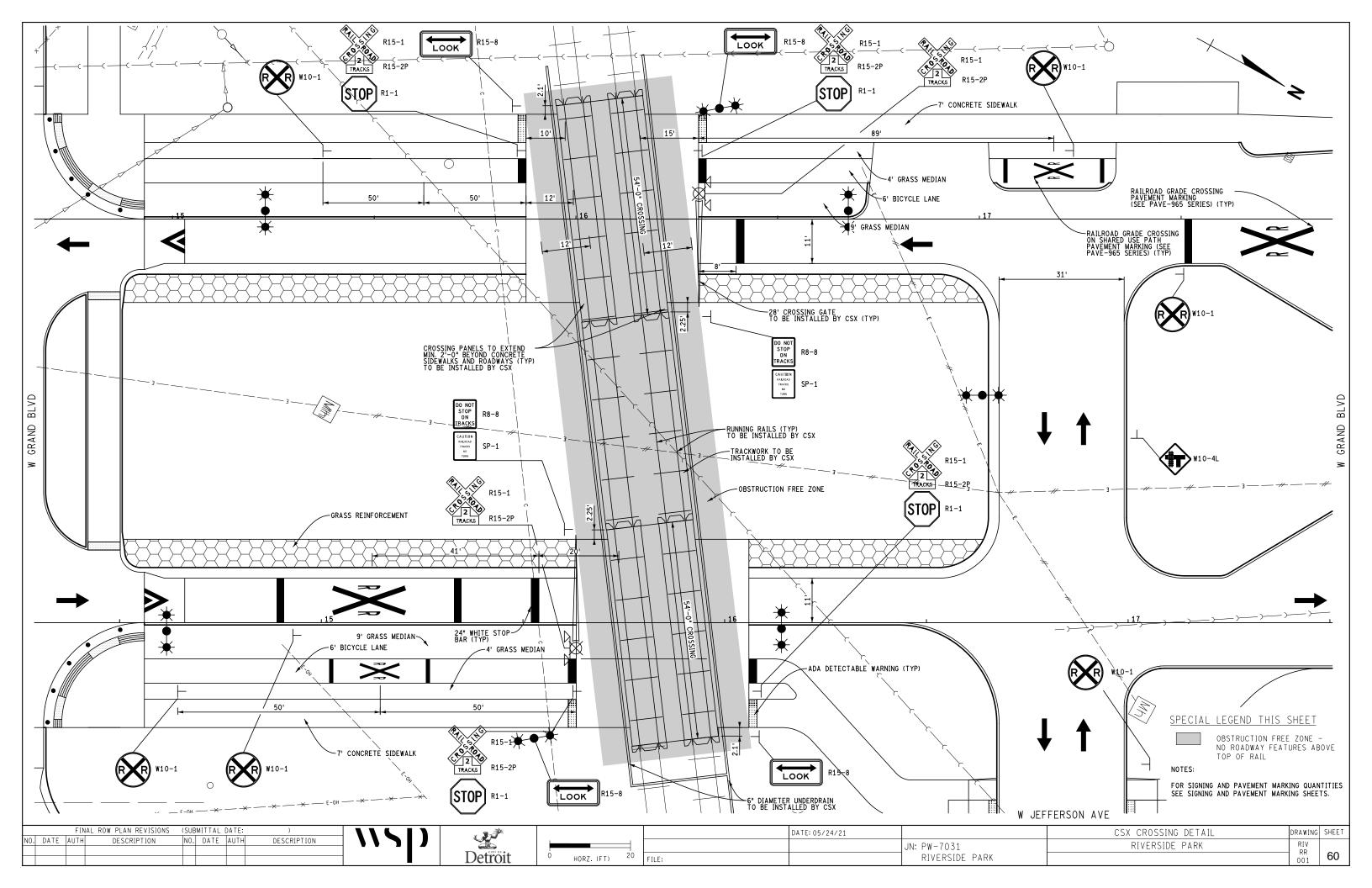
							E OF CURB OF CURB
						595	PROFILE AT W GRAND BLVD APPROX LT FACE OF CURB GRADE AT W GRAND BLVD APPROX LT FACE OF CURB
						-) BLVD APPF BLVD APPRO
						590	AT W GRAND T W GRAND
							JND PROFILE AN GRADE A
						585 /	
						-	
						-	
						-	
							ш
							ACE OF CURB CE OF CURB
						595	PPROX RT F PROX RT FA(
						-	W GRAND BLVD APPROX RT FACE OF GRAND BLVD APPROX RT FACE OF CI
							~
	POSED PROFIL	E IN REHABILIT ND IS NOT TO				590	EX GROUND PROFILE AT PROP PLAN GRADE AT V
	VIDE POSITIVE RAND BLVD TO	E DRAINAGE AR D FORT ST.	OUND CURB RE	TURN FROM NB			ROUND
CON TO PIPI	INECTIVITY, IN BE VERIFIED I E SIZES AND F	CTURE SURVEY VERT ELEVATIO BY THE CONTRA PIPE SLOPES NO APPROVED BY	ONS, PIPE SIZE ACTOR. PROPOS DT SHOWN ARE	S AND PIPE SL ED INVERT ELF TO BE DESIGN	OPES ARE		-EX GR PROP
						585 /	
			OFILE SHEE			DRAWING	SHEET
			VERSIDE PA			RIV PROF	57
	NB	W GRAND E	BLVD STA 2	25+00 TO	PUE	018	57

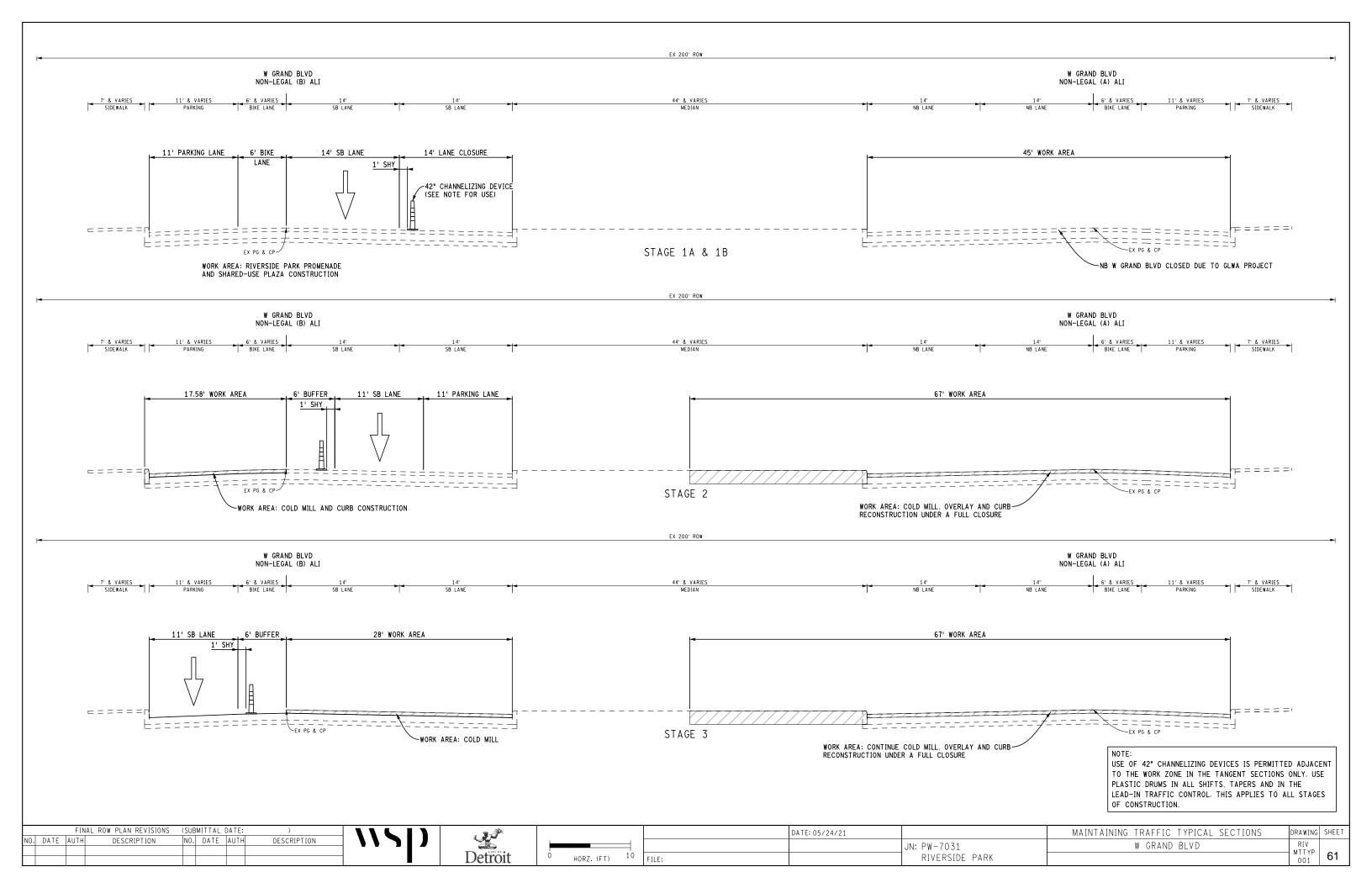


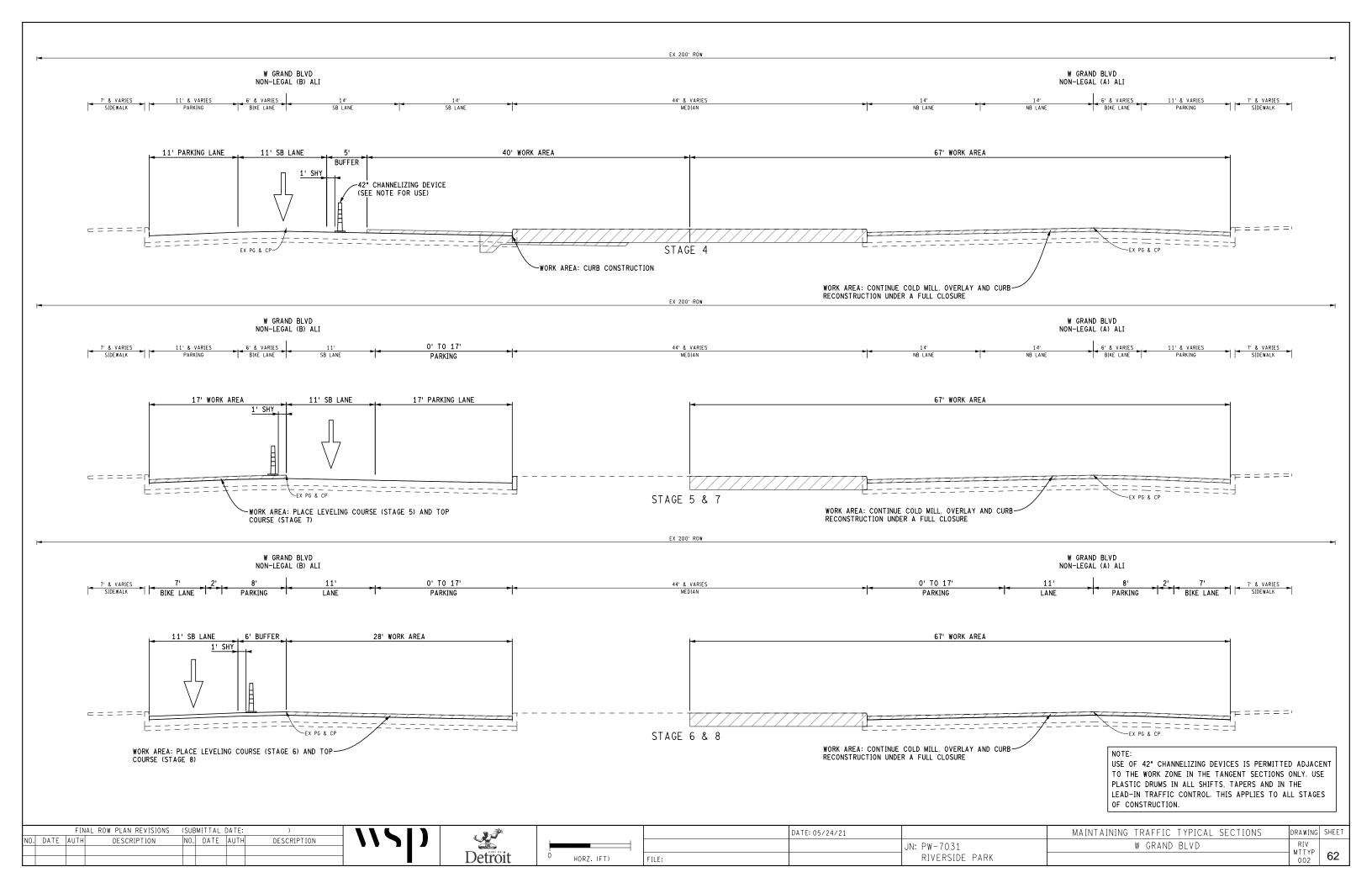
					-	
					-	
					-	
					-	
					-	
					-	
						=
						B) A ALI
					595	AL ((B)
						-ex ground profile at w grand blvd non-legal (B) all -prop plan grade at w grand blvd non-legal (B) all
						-NON
						'D N(
					-	ND B BL/
					l	
					(≤ ≤ ≤
					590	E A.
						ROFIL
						N CH
						ROUN
					_	ROP
						ΪÌ
					_585 ノ	
					-	
					_	
					-	
NOTES:					-	
	OFILE IN REHAB	ILITATION SEC	TION IS FOR D			
W GRAND BLV	ITIVE DRAINAGE D TO FORT ST.				_	
		PROFI	ILE SHEET		DRAWING	SHEET
			RSIDE PARK	 	RIV	
ŀ	SB W GF	RAND BLVD		E	PROF 019	58

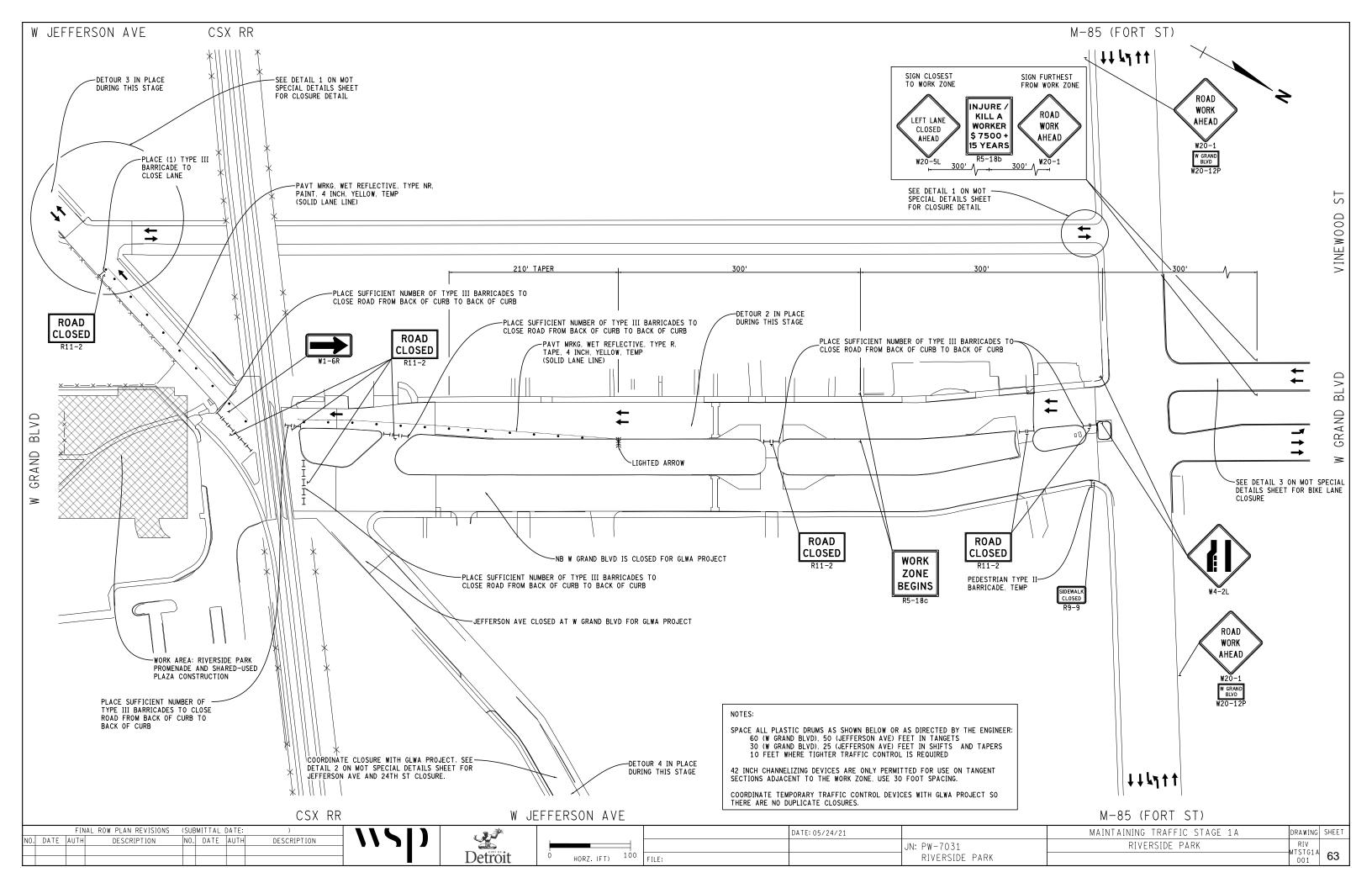


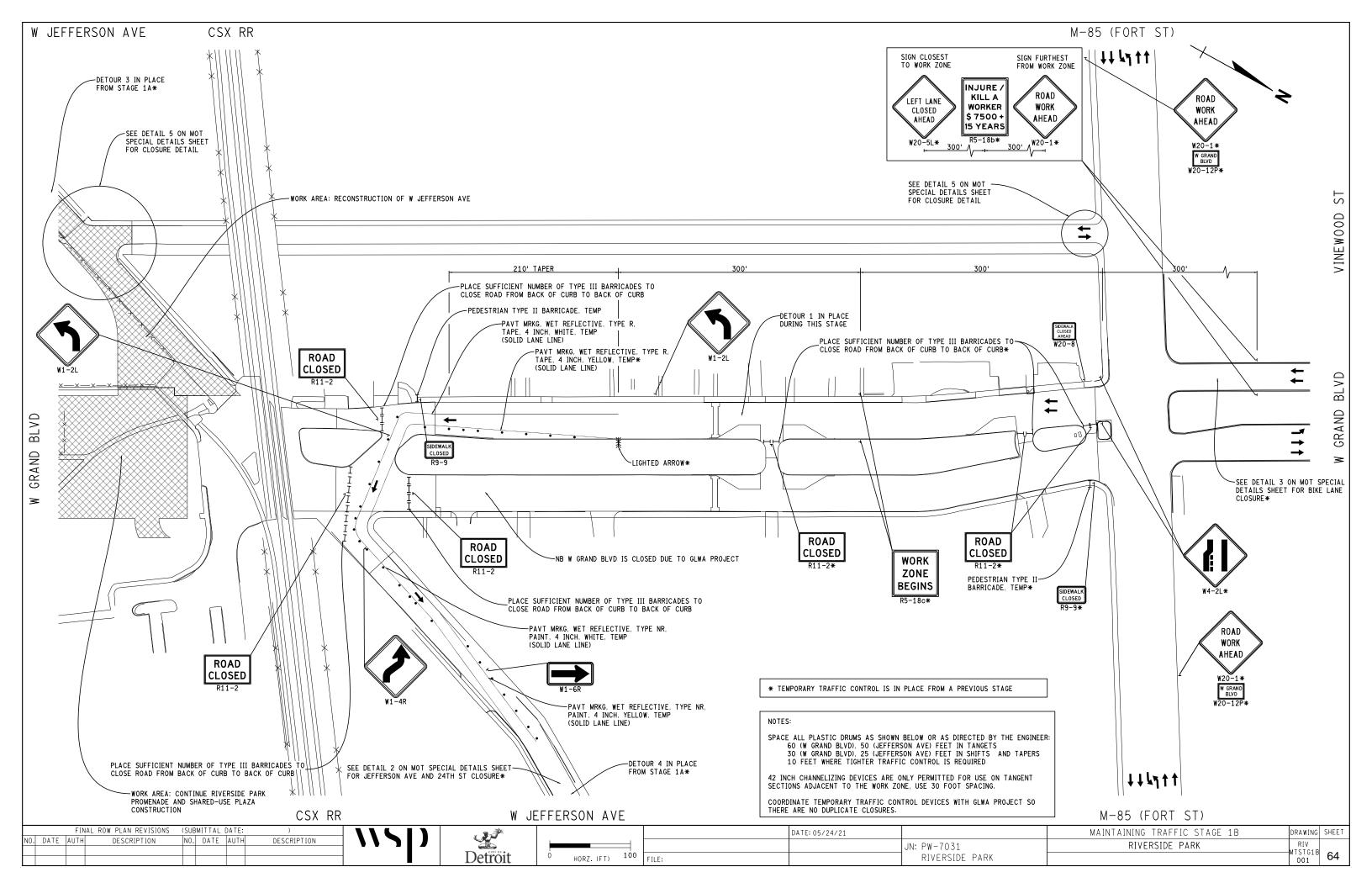
						-	CURB URB
							LT FACE OF T FACE OF C
						_ 595	FA(FACE
							X LT LT F
							PR0.
							D AF APPI
						-	LVD LVD
						l	ND B
						ĺ	W GF GRAI
						_590	T M T
							FILE DE A
							PROI
						_	UND
							EX GROUND PROFILE AT W GRAND BLVD APPROX I PROP PLAN GRADE AT W GRAND BLVD APPROX LT
							- EX - PR(
						FOF	'
						_585 ノ	
						-	
						_	
						-	
						-	
						-	
							B B
							OF CURB CURB
							0 <u>6</u>
							T FACE FACE
						_ 595	Ξ.
							PRO. ROX
							D AF APPI
						-	BLV BLV
							W GRAND BLVD APPROX GRAND BLVD APPROX R
						1	
IOTES:						_ 590	ATW
ROPOSED PI	ROFILE IN REHAB	BILITATION SEC	TION IS FOR D			0.0	
							PROFILE CRADE
	SITIVE DRAINAGE /D_TO_FORT_ST.		KEIUKN FRUM	DN			UND
	STRUCTURE SURV					-	-EX GROUND 1 -PROP PLAN
O BE VERIF	Y, INVERT ELEV	NTRACTOR. PRO	POSED INVERT	ELEVATIONS.			– EX PR(
IPE SIZES	AND PIPE SLOPES AND APPROVED	S NOT SHOWN /	ARE TO BE DES				'
						585	
							CUEET
		PROF	ILE SHEEI		1	DRAWING	SHEET
			ILE SHEET RSIDE PARK			DRAWING RIV PROF	59

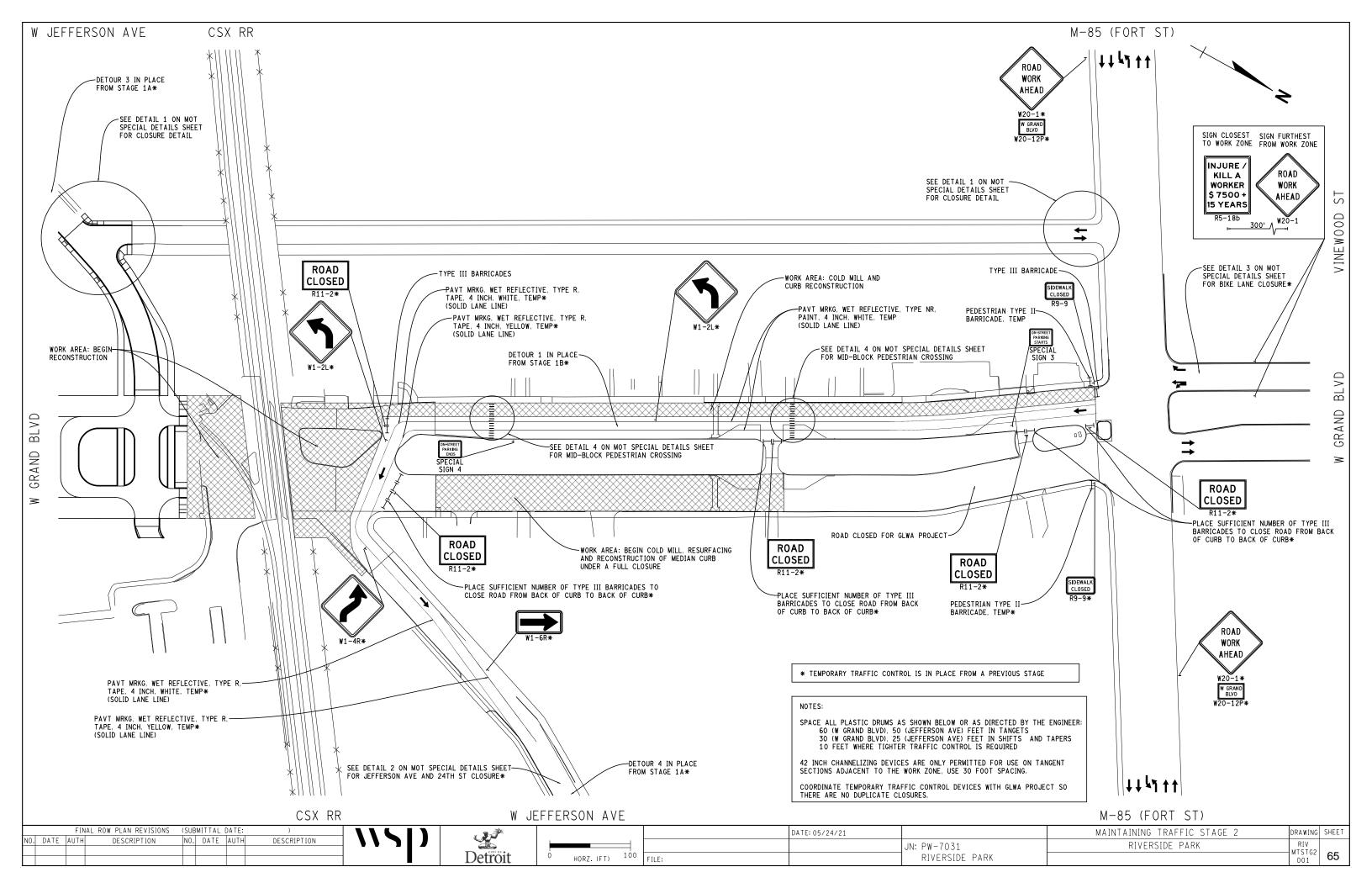


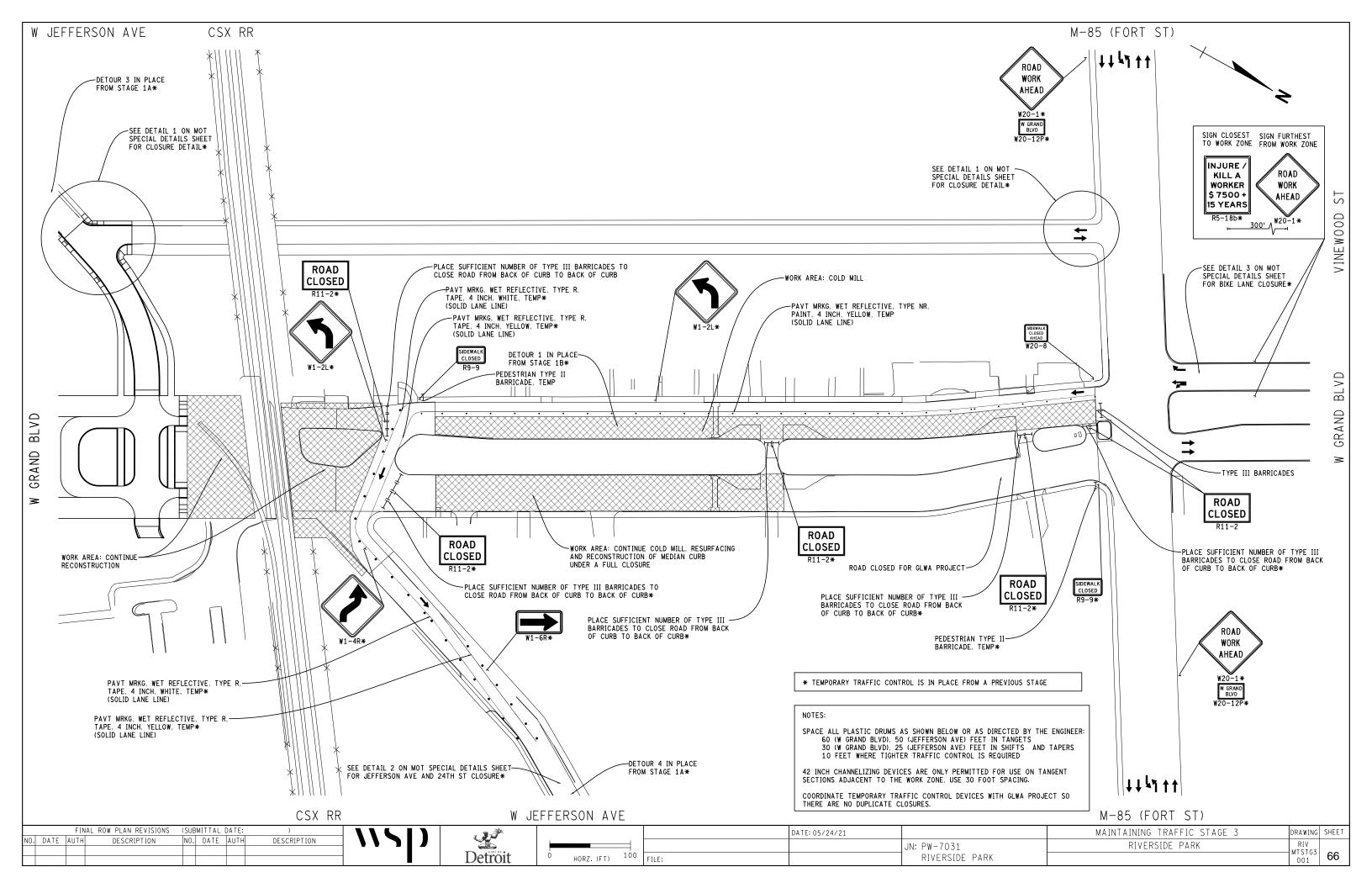


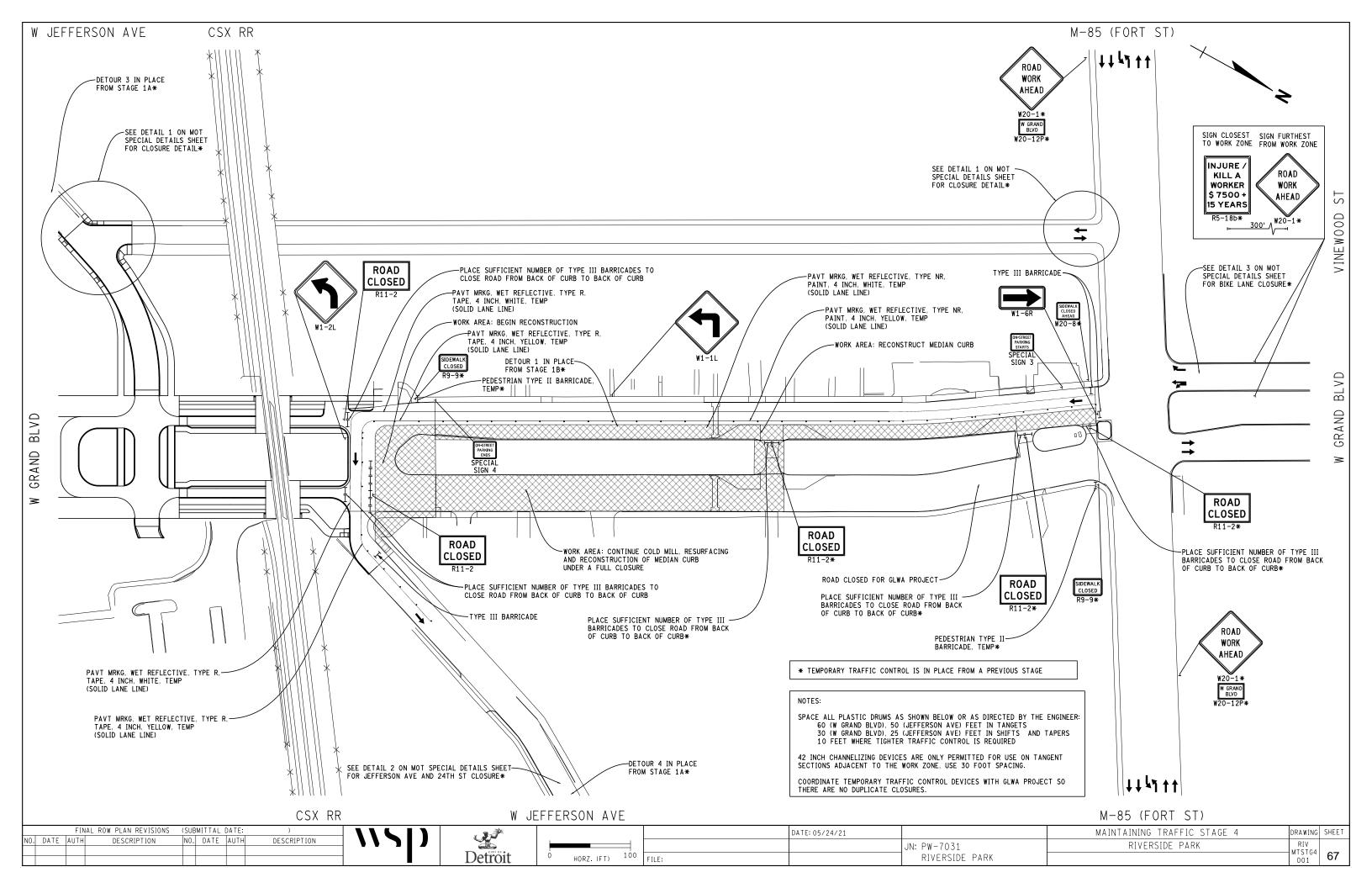


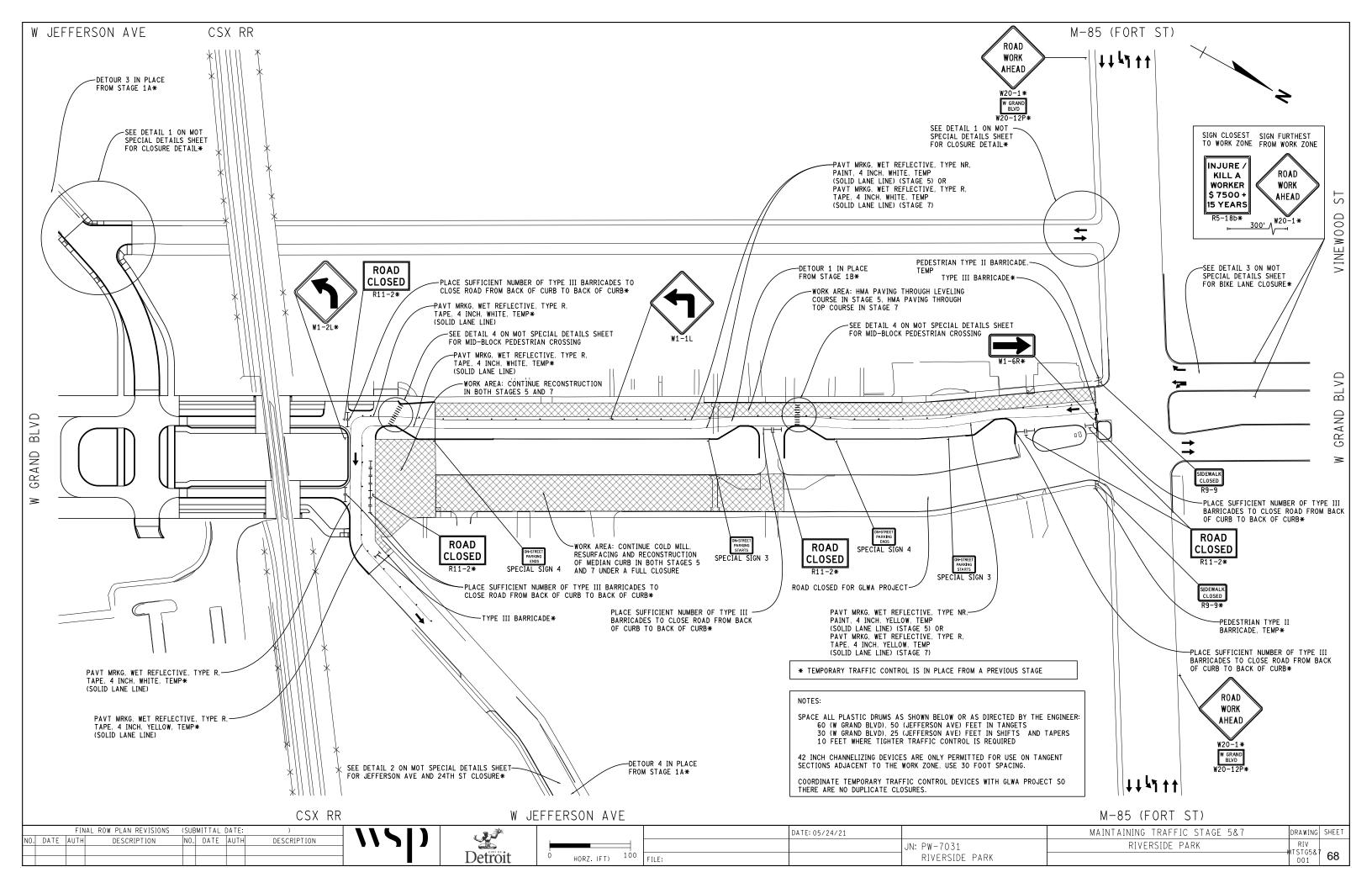


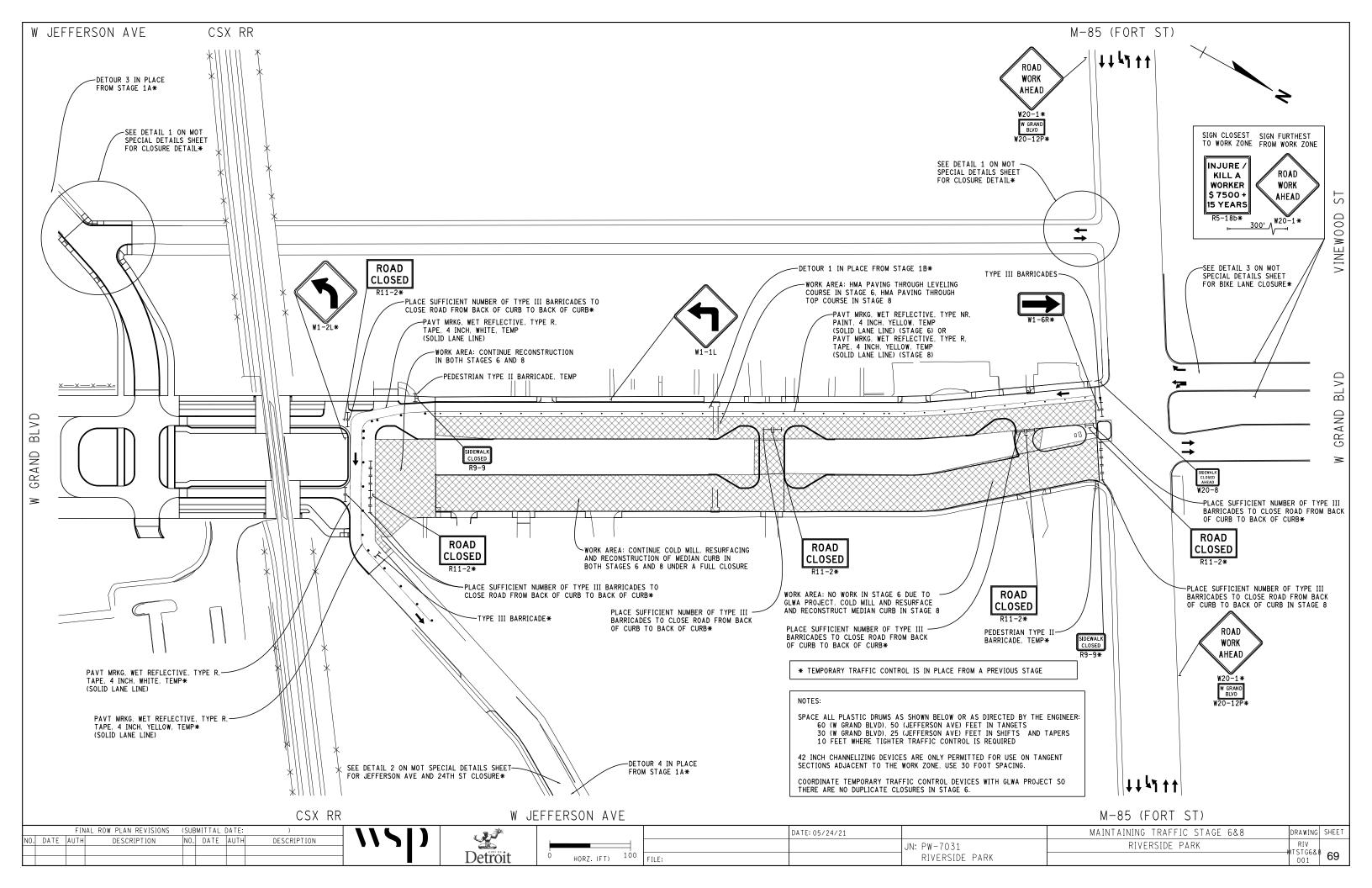


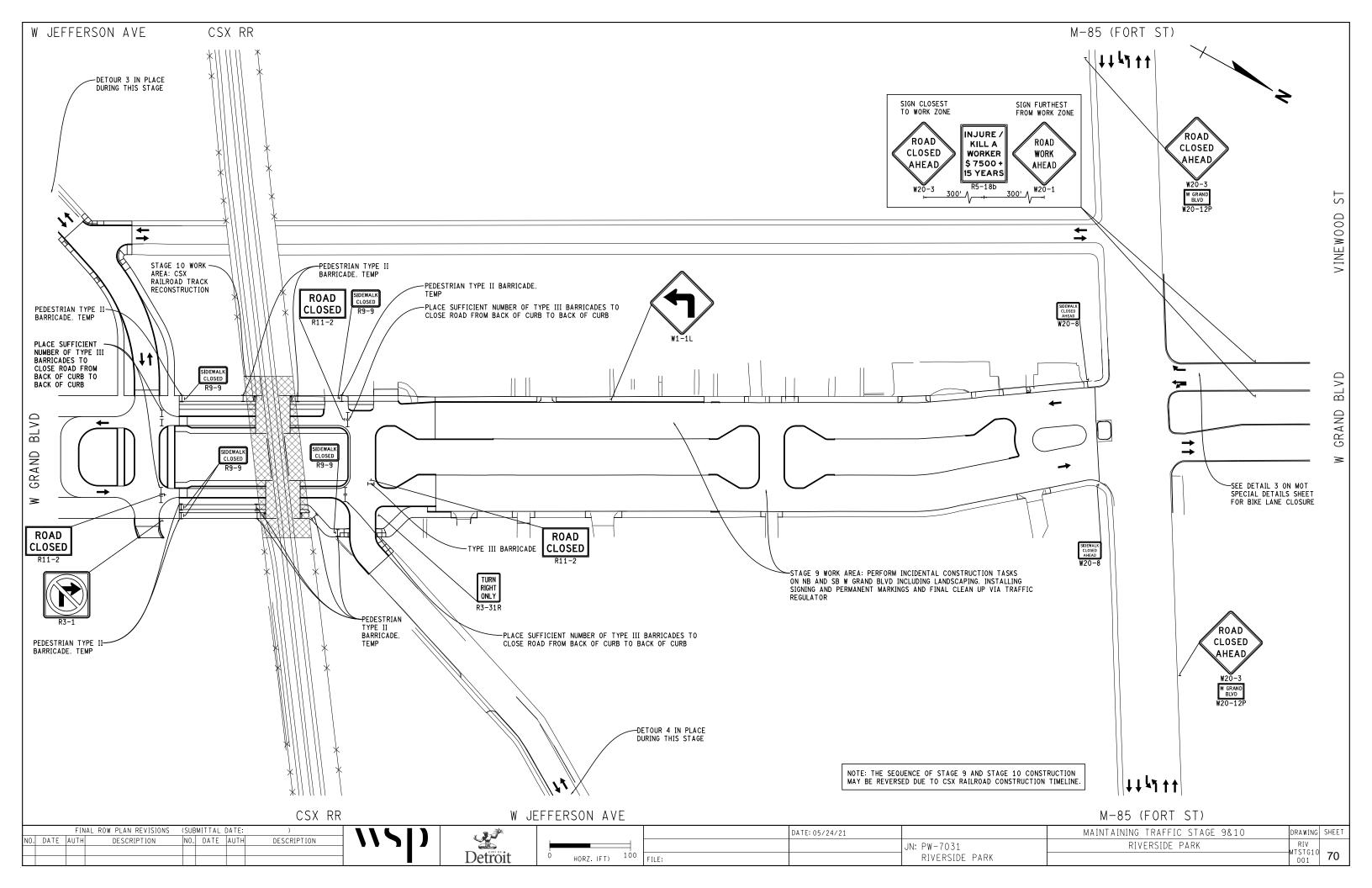


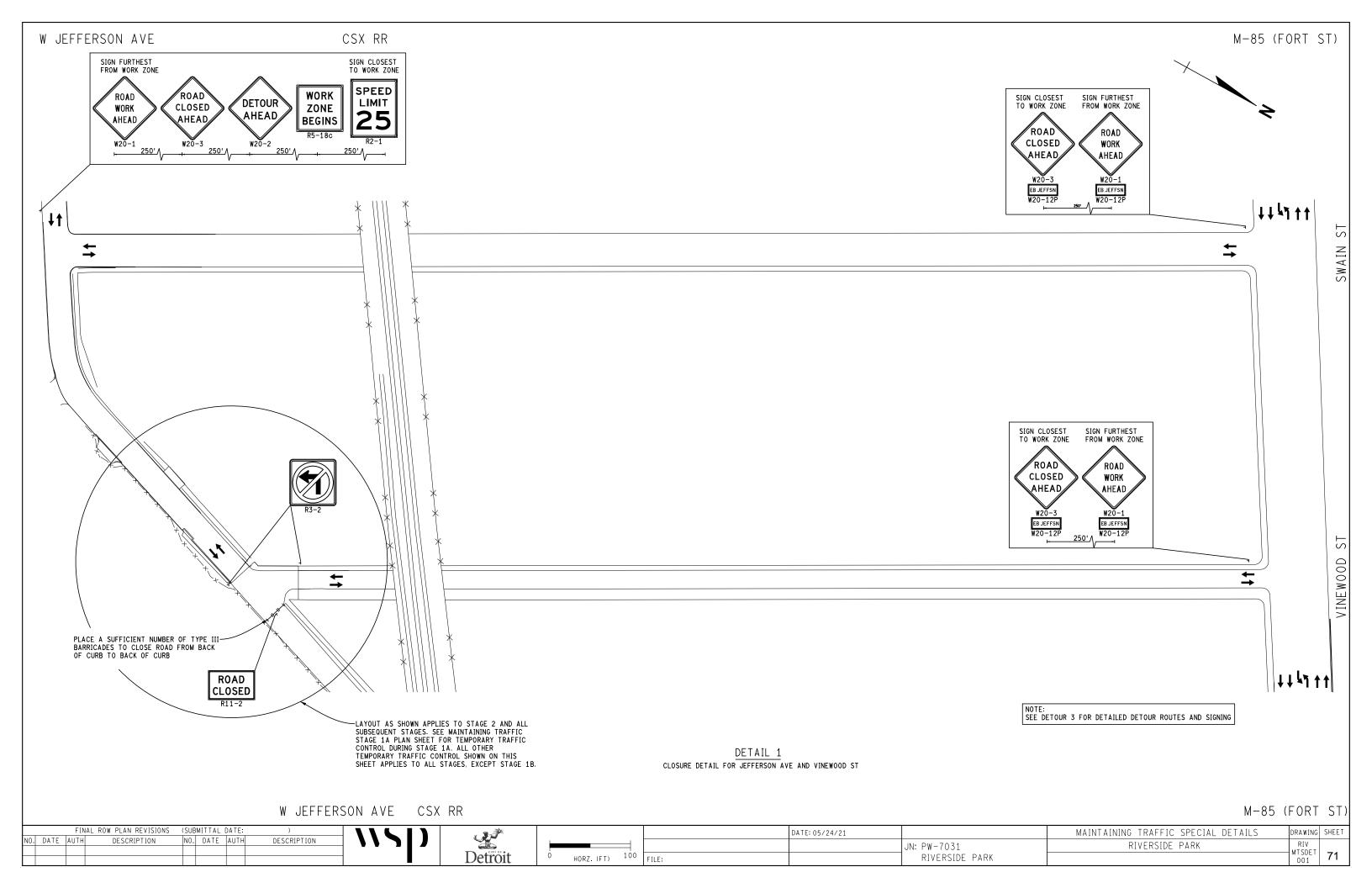


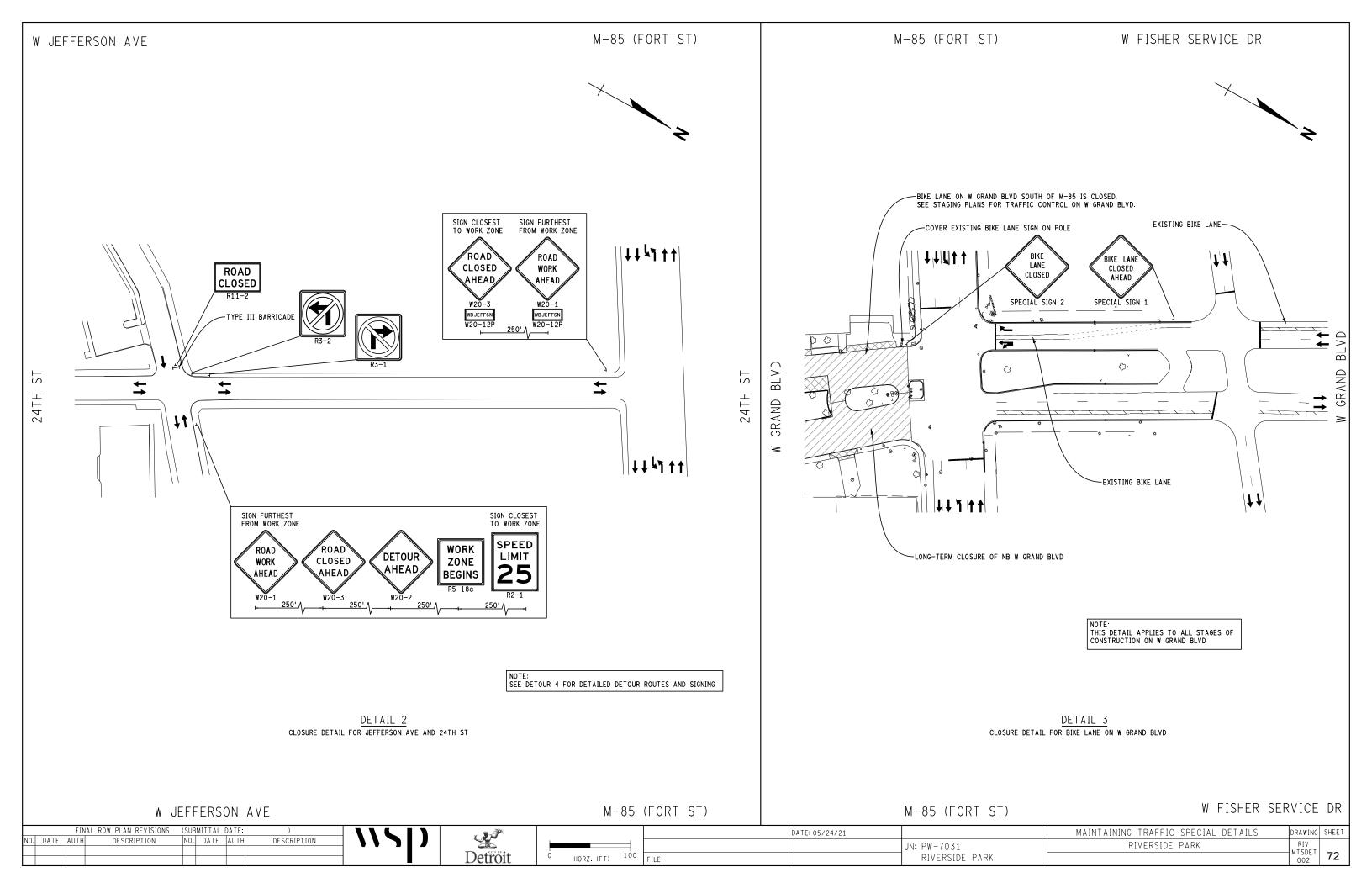


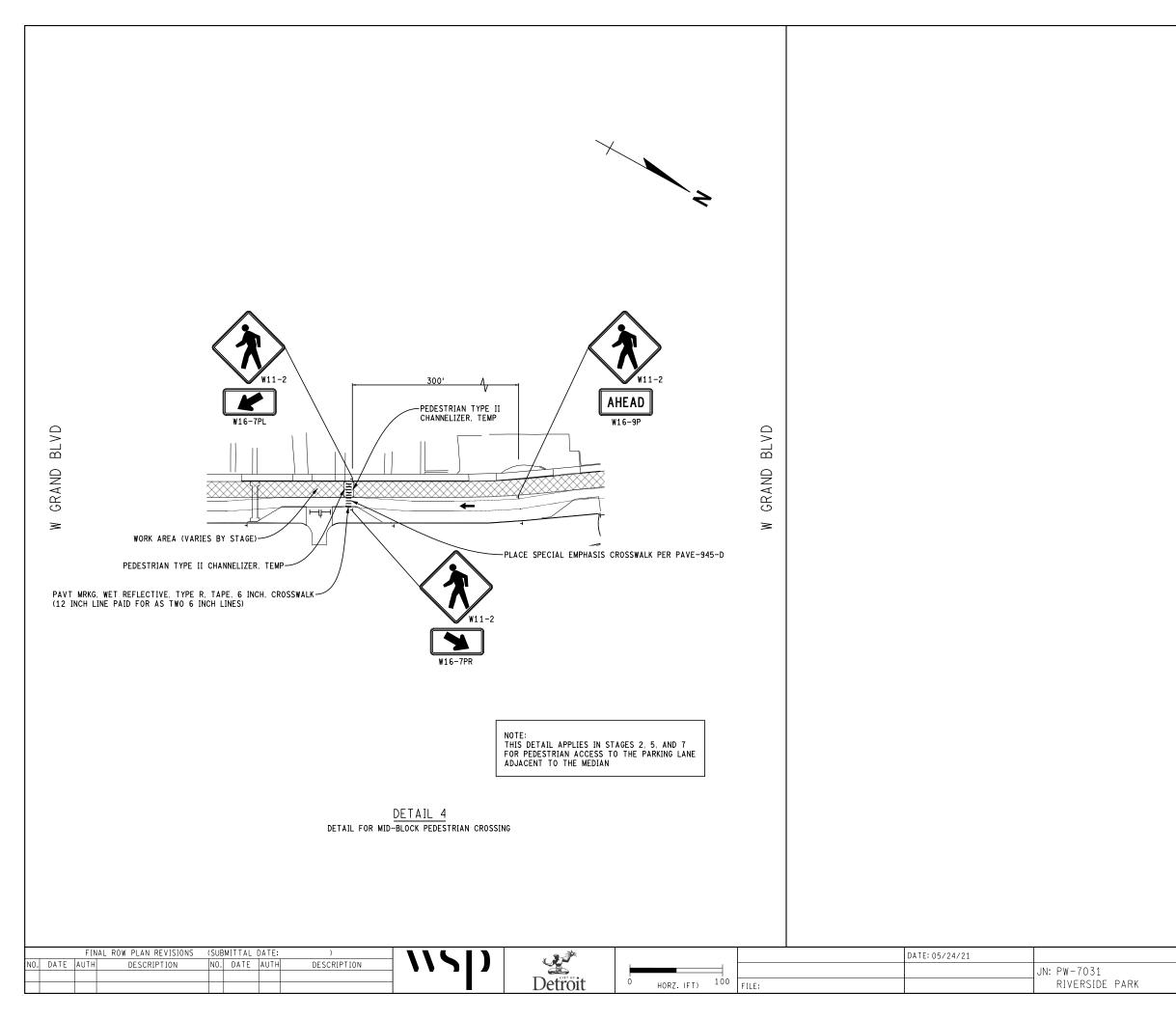




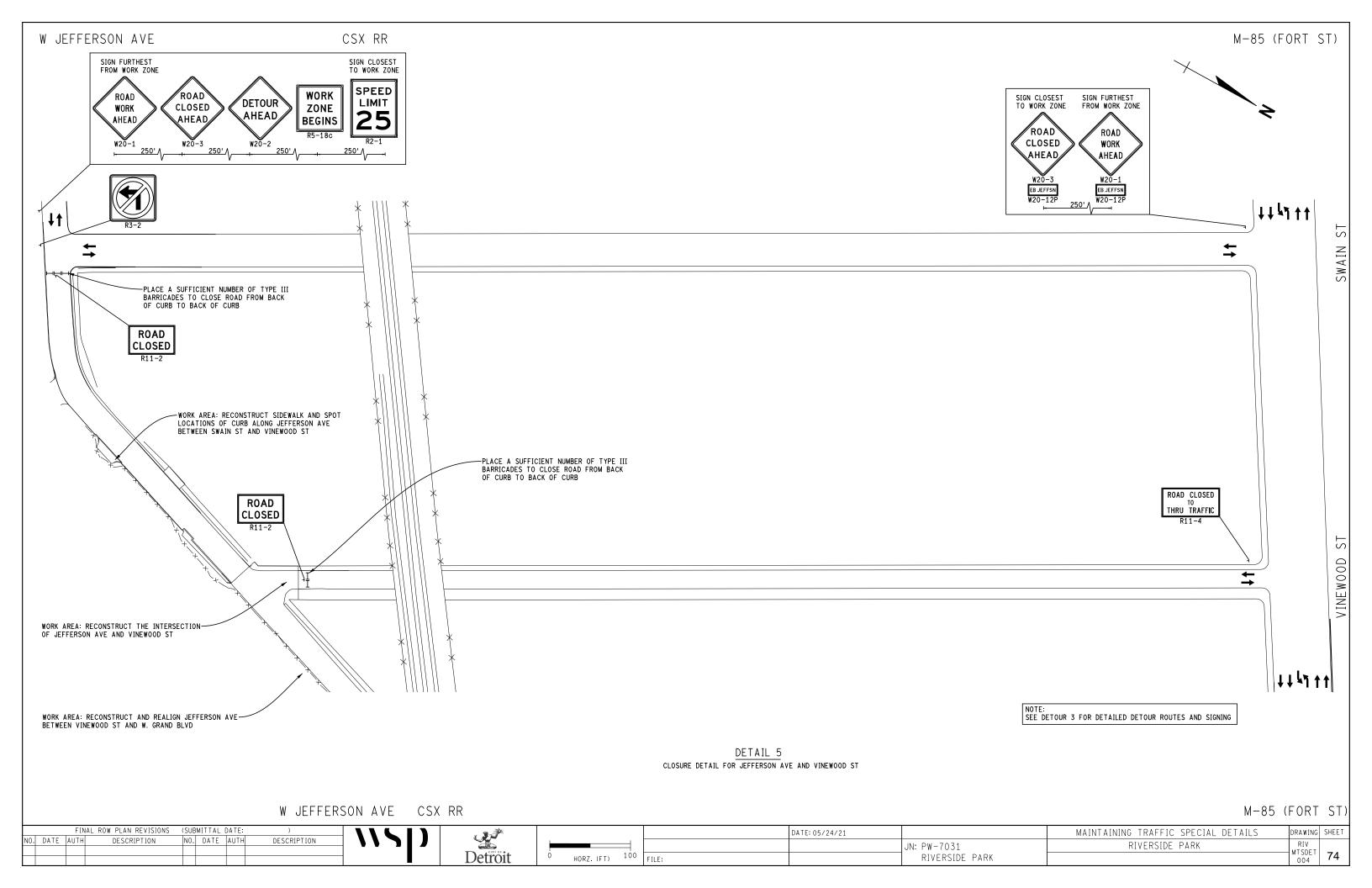


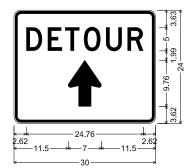






MAINTAINING TRAFFIC SPECIAL DETAILS	DRAWING	SHEET
RIVERSIDE PARK	RIV MTSDET 003	



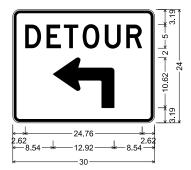


M4-9 (MOD);

1.50" Radius, 0.50" Border, 0.25" Indent, Black on, Orange; "DETOUR", D, Standard Arrow Custom 9.75" X 7.00" 90'; Table of distances between letter and object lefts
 D
 E
 T
 O
 U
 R

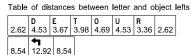
 2.62
 4.53
 3.67
 3.98
 4.69
 4.53
 3.36
 2.62

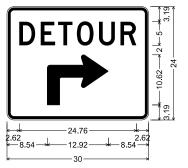
↑ 11.50 7.00 11.50



M4-9 (MOD);

1.50" Radius, 0.50" Border, 0.25" Indent, Black on, Orange, "DETOUR", D;





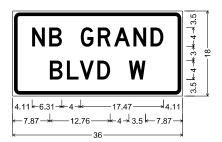
M4-9 (MOD);

1.50" Radius, 0.50" Border, 0.25" Indent, Black on, Orange; "DETOUR", D;

Table of distances between letter and object lefts
 D
 E
 T
 O
 U
 R

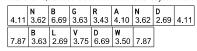
 2.62
 4.53
 3.67
 3.98
 4.69
 4.53
 3.36
 2.62

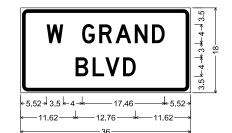




W20-12P

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange; "NB GRAND", D, "BLVD W", D, Table of distances between letter and object lefts





W20-12P

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange; "W GRAND", D; "BLVD", D; Table of distances between letter and object lefts

 W
 G
 R
 A
 N
 D

 5.52
 7.50
 3.62
 3.44
 4.09
 3.63
 2.68
 5.52
 B L V D 11.62 3.63 2.69 3.75 2.69 11.62

EB J	IEFFS	N	
3.41 W20-12P	——————————————————————————————————————	3.41	

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange, "EB JEFFSN", D; Table of distances between letter and object lefts

E B 3.41 3.18

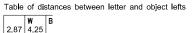
 J
 E
 F
 S
 N

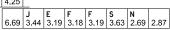
 6.69
 3.44
 3.19
 3.18
 3.19
 3.63
 2.68
 3.41



W20-12P

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Orange, "WB JEFFSN", D;







4.15 ⊨	21.7	→4.15
€ 6.55 -	16.9	
←7.68→		↓ 7.68

SPECIAL SIGN 3

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Fluorescent orange; "ON-STREET", D; "PARKING", D; "STARTS", D;

Table of distances between letter and object lefts										
4.45	0	N 0.70	-	S	T	R	E	E	T	4.15
4.15	2.81	2.12	2.06	2.58	2.39	2.72	2.39	2.20	1.83	4.15
	P	A	R	K	1	Ν	G			
6.55	2.58	3.07	2.72	2.62	1.17	2.72	2.02	6.55		
	S	T	A	R	Т	S				
7.68	2.57	2.02	3.07	R 2.58	2.39	2.01	7.68			



←6.55→	-16.9-	
← 10.15 - ★	-9.7-	↓ 10.15→
<u> </u>	—30—	

SPECIAL SIGN 4

1.50" Radius, 0.63" Border, 0.38" Indent, Black on, Fluorescent orange; "ON-STREET", D; "PARKING", D; "ENDS". D:

Table of distances between letter and object lefts

 0
 N
 S
 T
 R
 E
 E
 T

 4.15
 2.81
 2.72
 2.06
 2.58
 2.39
 2.72
 2.39
 2.20
 1.83
 4.15

 P
 A
 R
 K
 I
 N
 G

 6.55
 2.58
 3.07
 2.72
 2.62
 1.17
 2.72
 2.02
 6.55
 E N D S 10.15 2.39 2.72 2.58 2.01 10.15

SPECIAL SIGN DETAILS SPECIAL SIGN DETAILS FOR TEMPORARY SIGNS

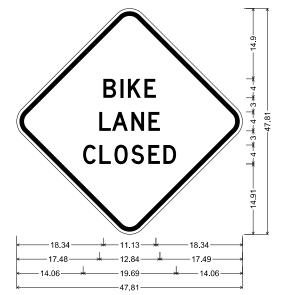
			SUBMITTAL)						DATE: 05/24/21	
NO	. DATE AUTH	DESCRIPTION	NO. DATE	AUTH	DESCRIPTION	ן ריי						JN: PW-7031
						1 ∎	Detroit	0	HORZ.(FT) 100	FILE:		RIVERSIDE PARK



SPECIAL SIGN 1

36.00" across sides 3.75" Radius, 0.88" Border, 0.63" Indent, Black on, Fluorescent orange; "BIKE LANE", D, "CLOSED", D, "AHEAD", D, Table of distances between letter and object lefts

Table	UT UIS								
9.92	В	-	К	Е	L	Α	Ν	Е	
9.92	3.62	1.57	3.50	6.43	2.69	4.09	3.63	2.44	9.92
	С	L	0	S	E	D			
14.06	3.44	3.18	3.57	3.62	2 3.19	2.69	9 14.0	06	
	Α	H	E	A	D				
15.18	4.10	3.62	2 2.94	4 4.09	9 2.69	9 15.1	19		

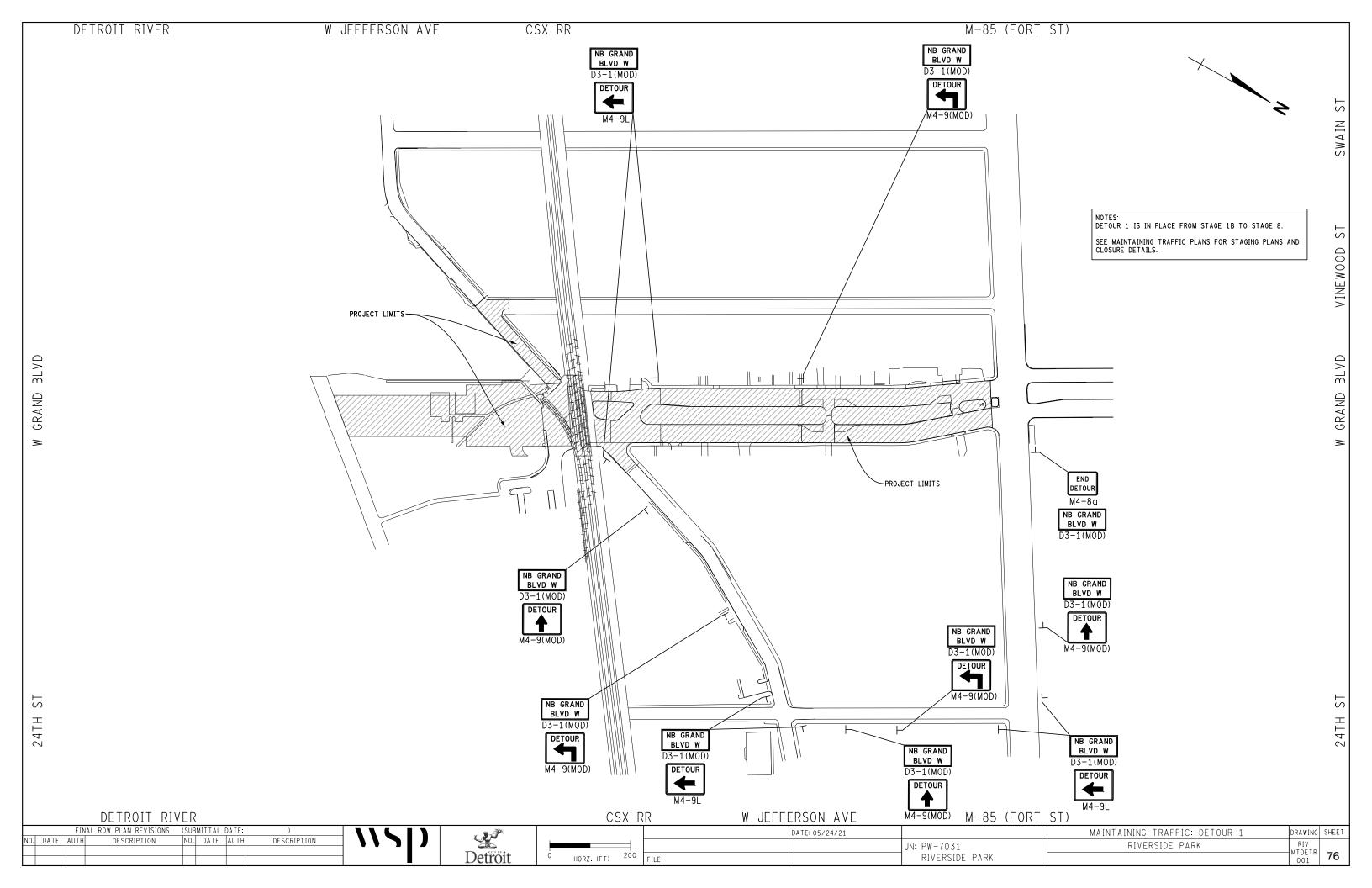


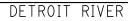
SPECIAL SIGN 2

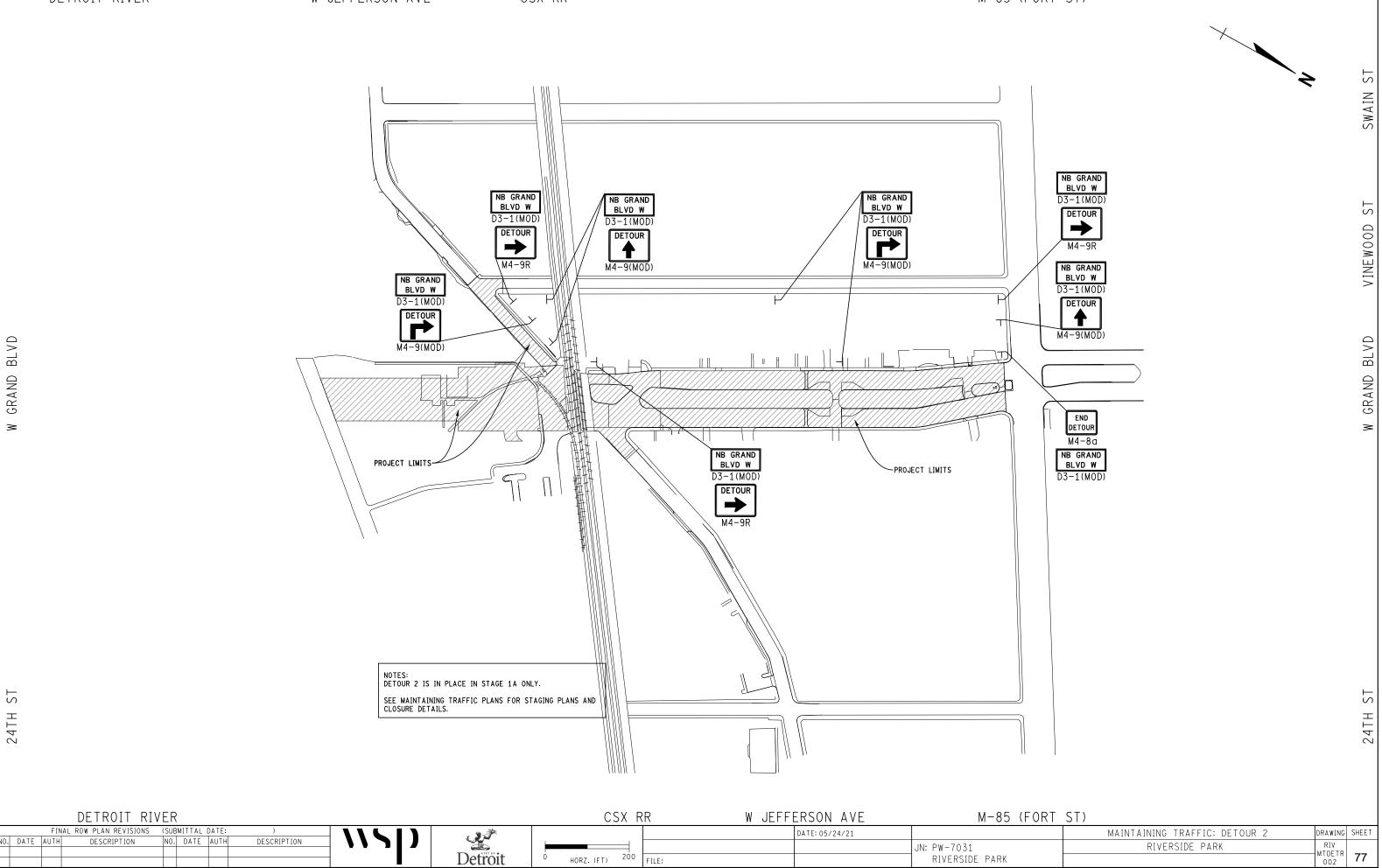
36.00" across sides 3.75" Radius, 0.88" Border, 0.63" Indent, Black on, Fluorescent orange; "BIKE", D; "LANE", D; "CLOSED", D; Table of distances between letter and object lefts

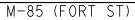
B I K E 18.34 3.63 1.56 3.50 2.	
10.04 0.00 1.00 0.00 2.	44 18.34
LANE	
L A N E 17.48 2.69 4.09 3.63 2.	43 17.49
C L O S	E D
C L O S 14.06 3.44 3.18 3.57 3	62 3 19 2 69 14 06

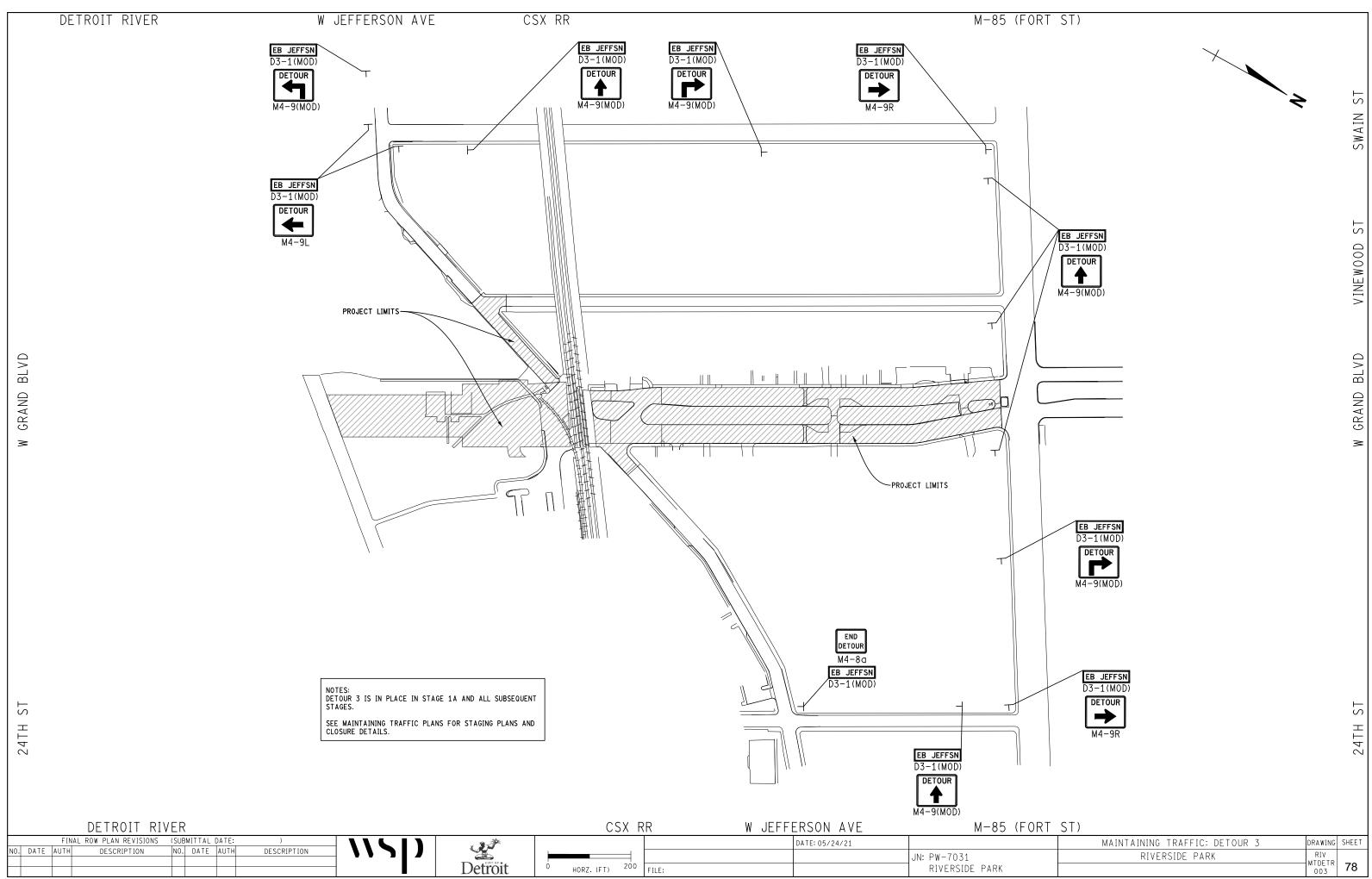
MAINTAINING TRAFFIC SPECIAL DETAILS	DRAWING	SHEET
RIVERSIDE PARK	RIV MTSDET	
	005	75



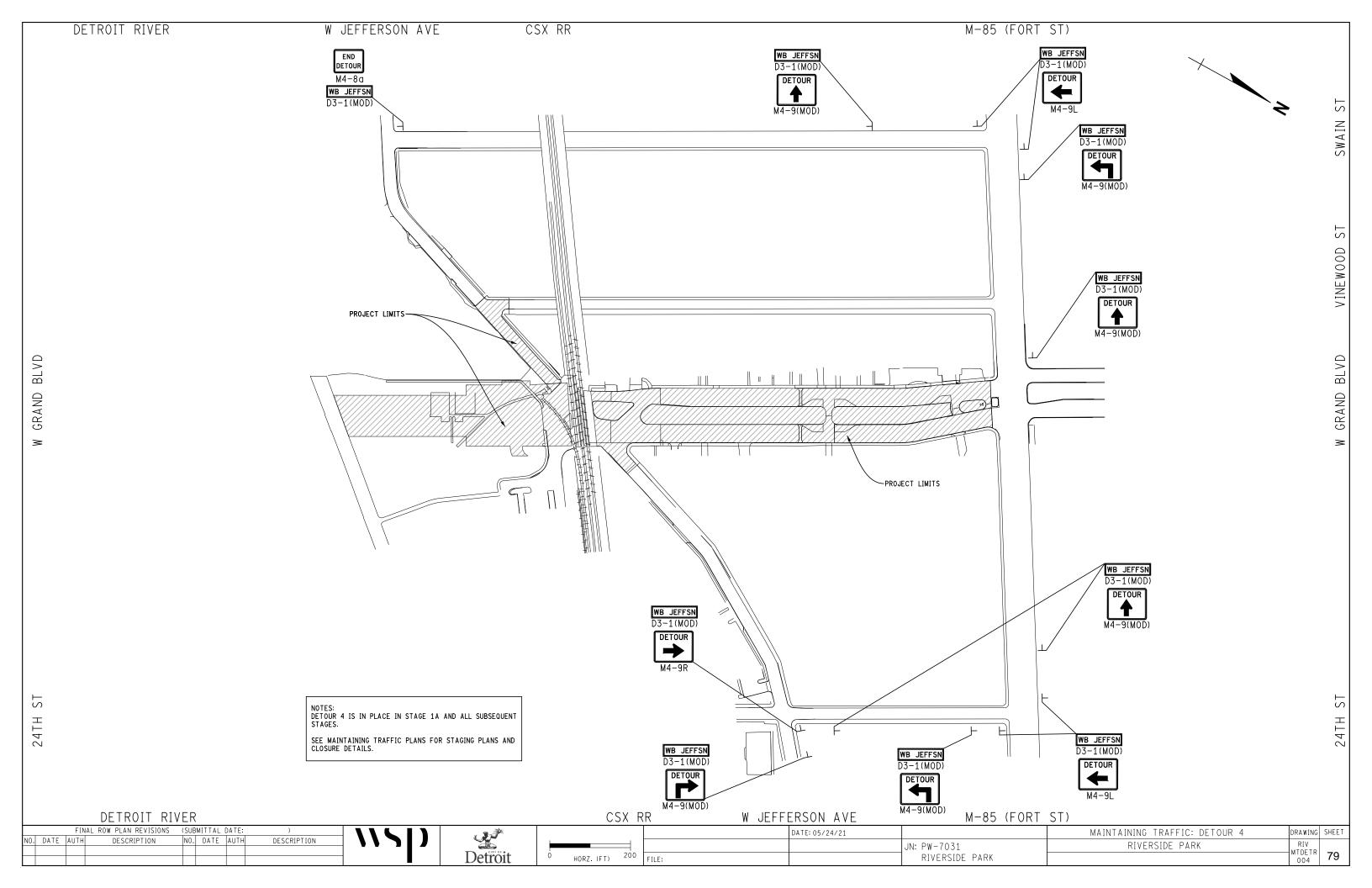


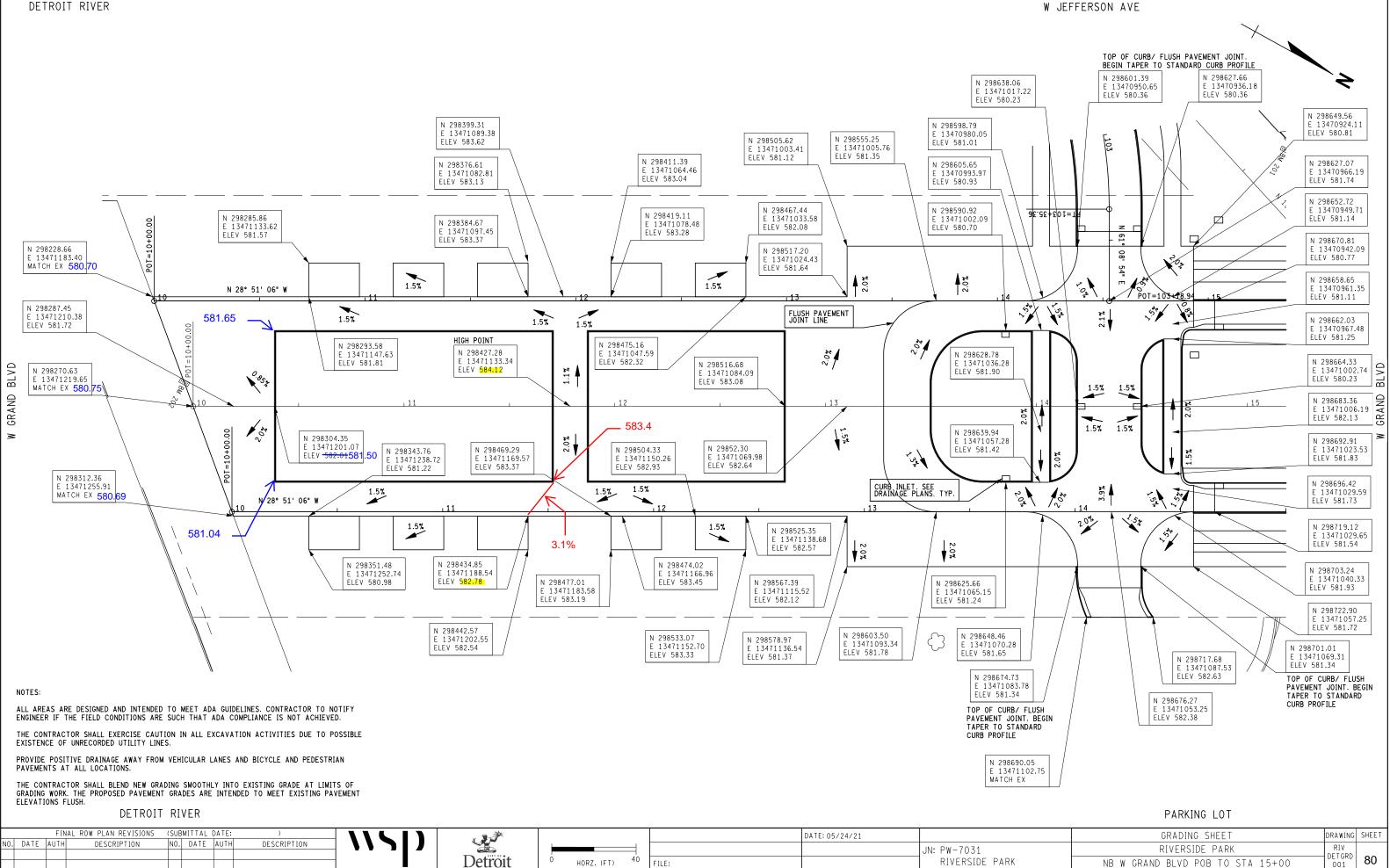






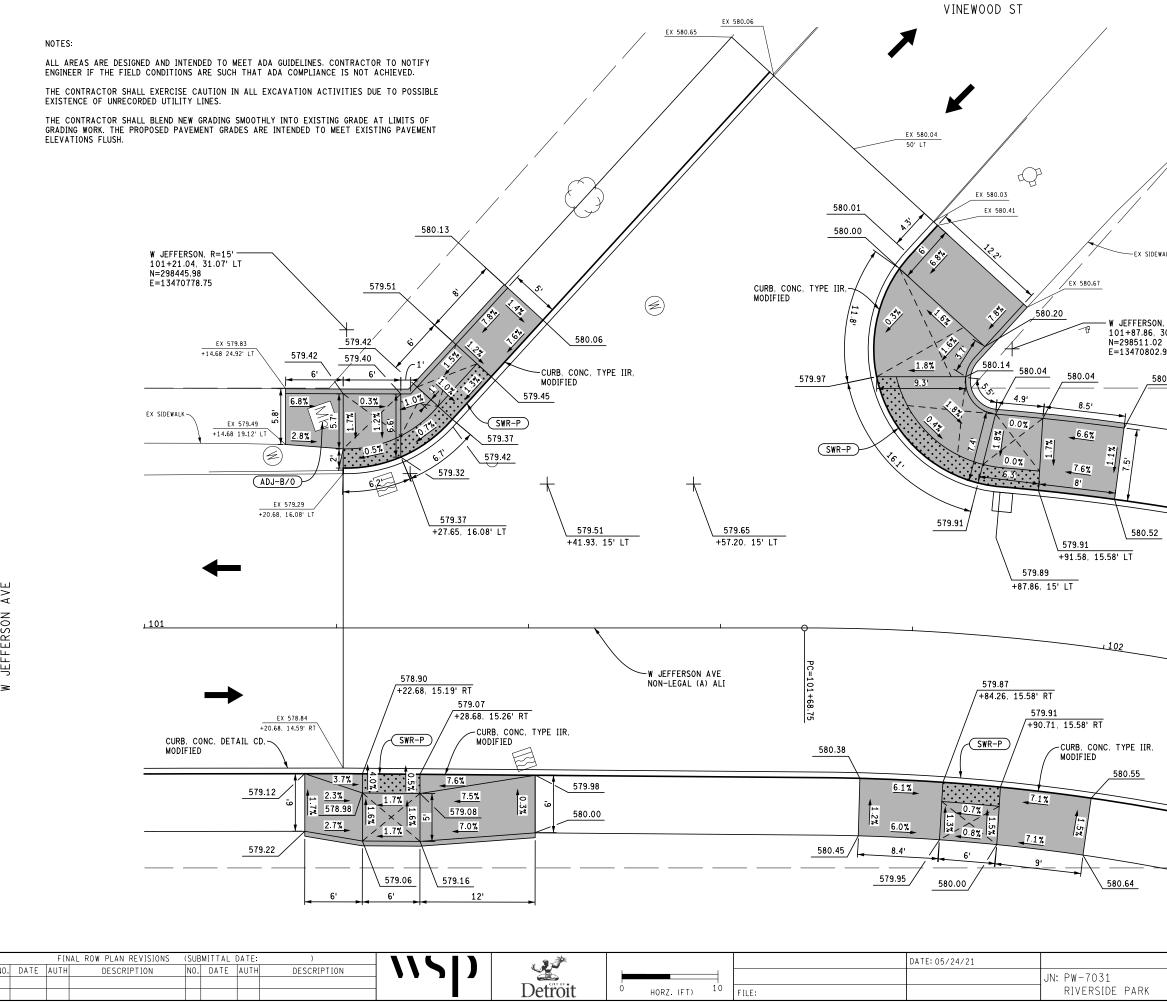
RIVERSIDE PARK RIV	
	SHEET





W JEFFERSON AVE

001

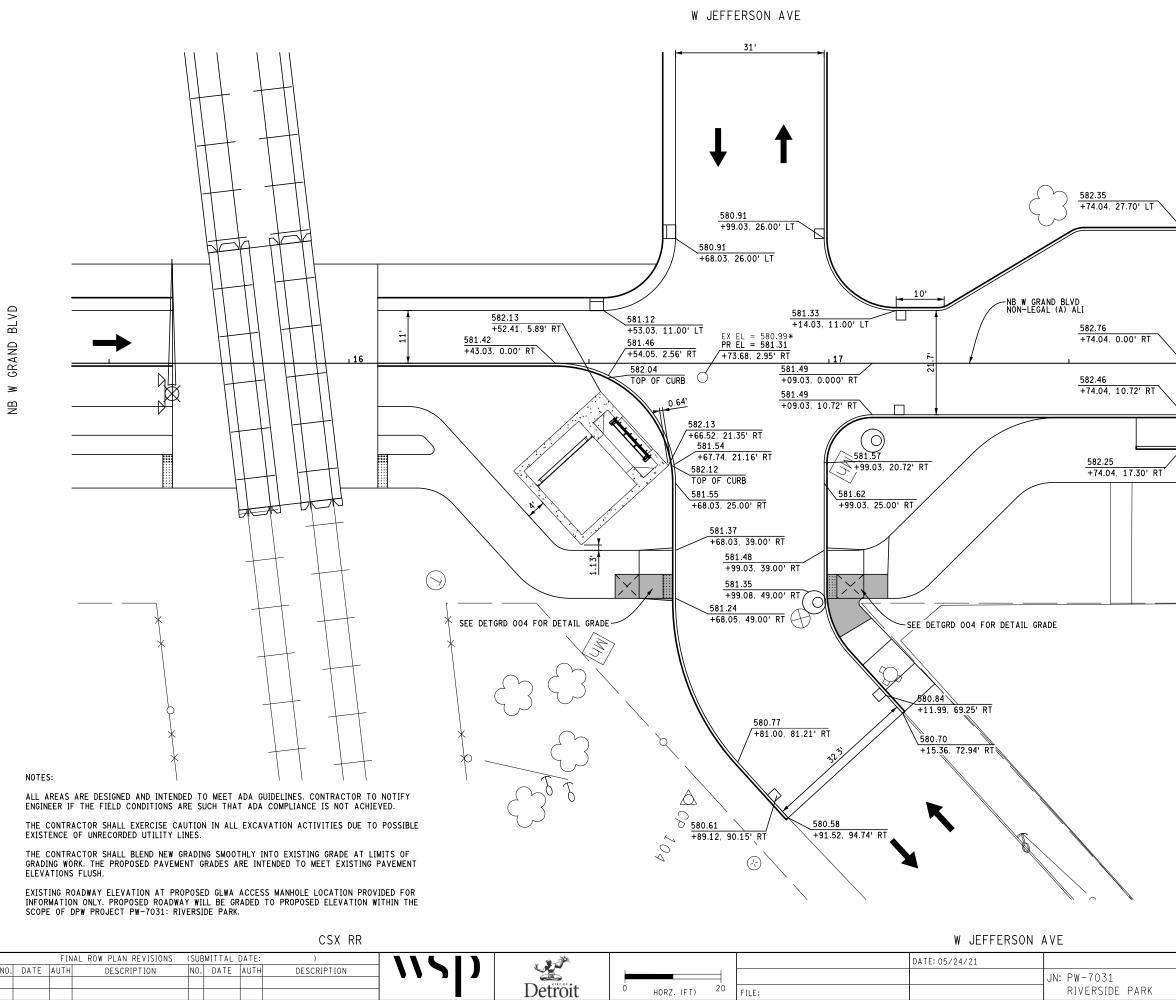


AVE

JEFFERSON

N

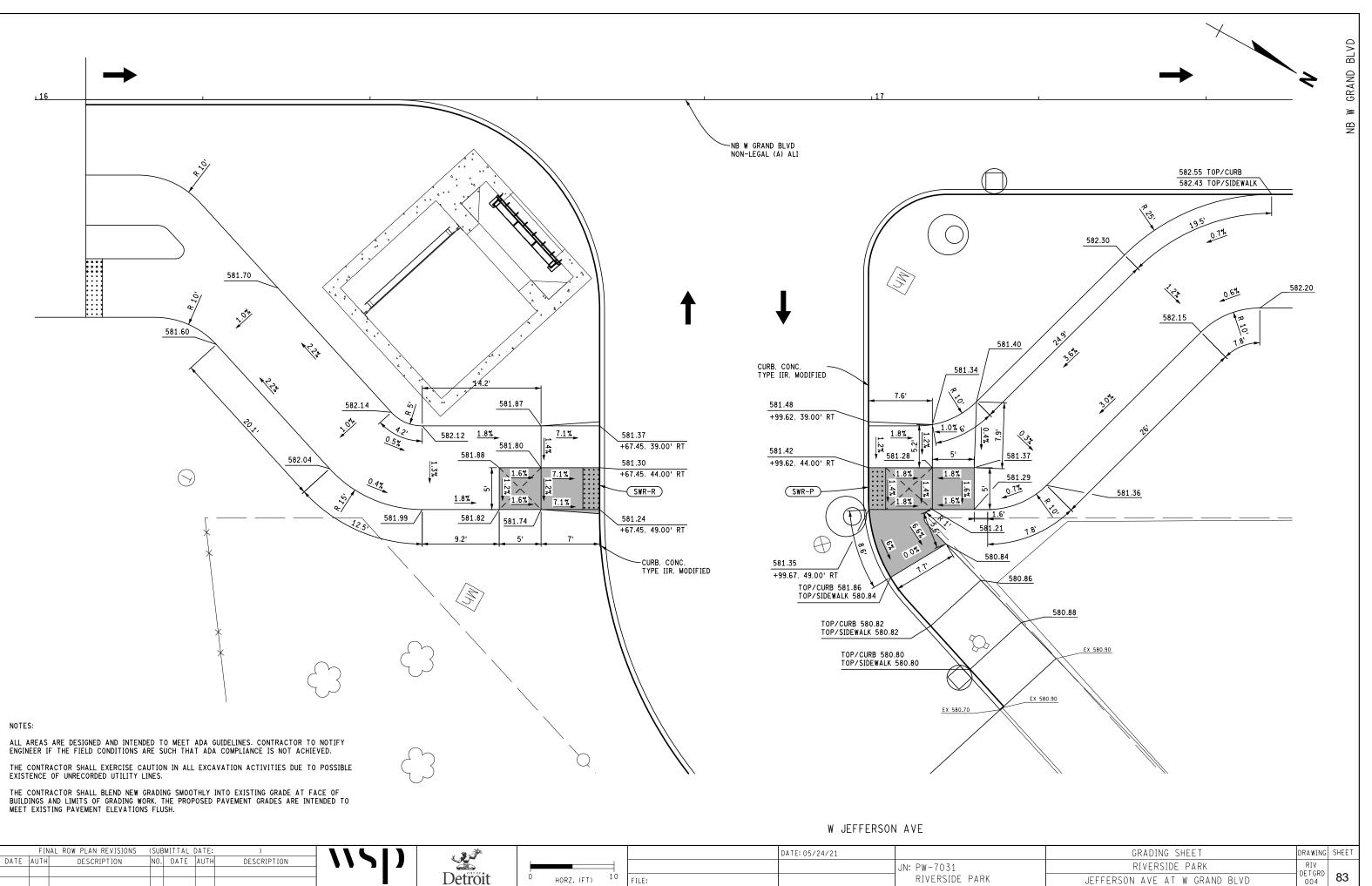
	Z	
VALK		
N. R=15' 30' LT		
90		
		ш
		ΑV
		NO
		ERS
F		
		W JEFFERSON AVE
		~
GRADING SHEET	DRAWING	SHEET
RIVERSIDE PARK VINEWOOD ST AT W JEFFERSON AVE	RIV DETGRD 002	81
VINEWOOD SI AI W JEFFERSUN AVE	002	J .



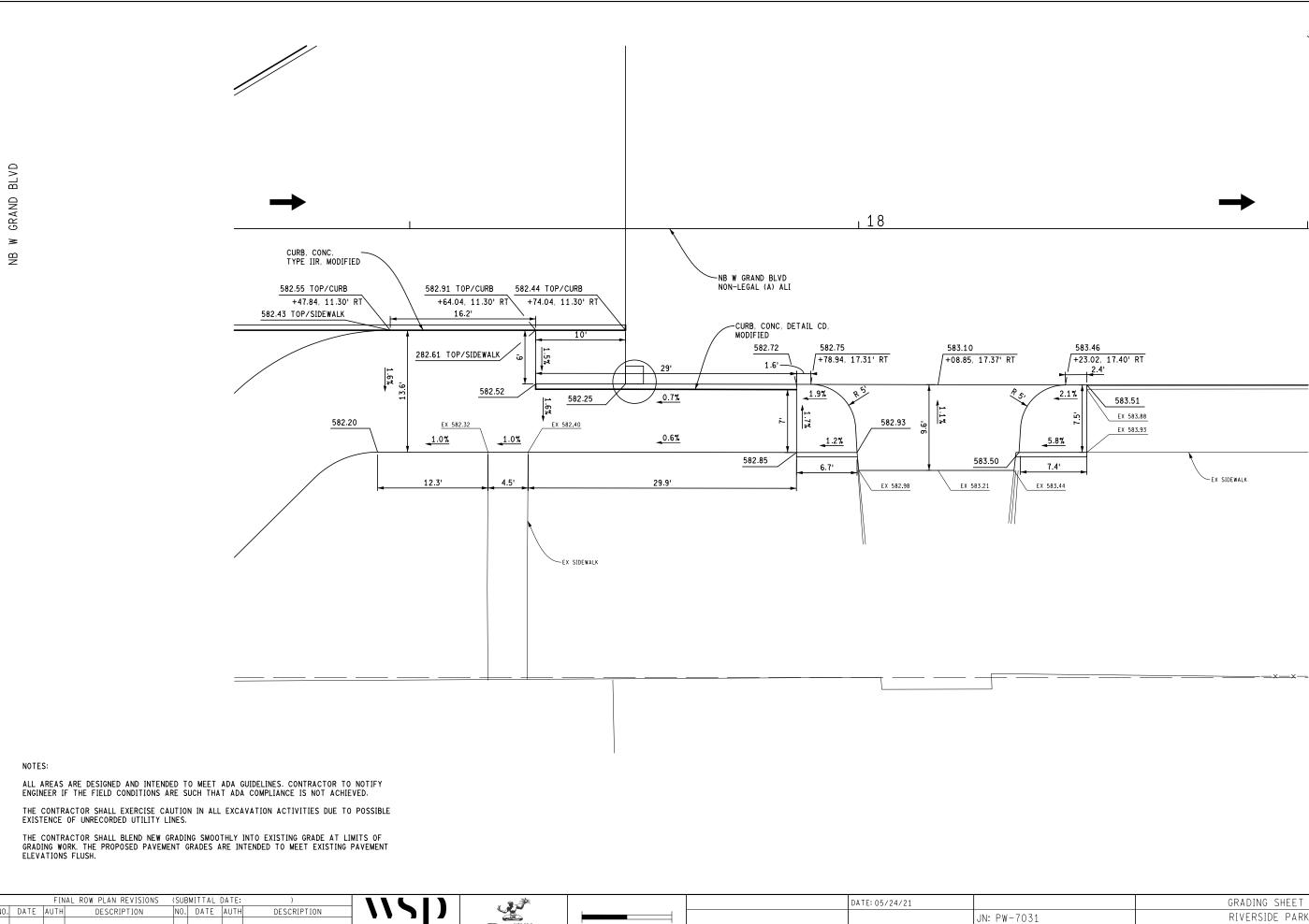
GRAND ×

	~ *
45'	LIS CRAND BLVD
	erection of the second
	GRADING SHEET DRAWING SHEET
	RIVERSIDE PARK RIV NB W GRAND BLVD STA 15+50 TO STA 18+50 003 82





		FINAL ROW PLAN REVISIONS	(SUE	3MITTA	-				× 3				DATE: 05/24/21	
NO. C	DATE	AUTH DESCRIPTION	N0.	DATE	E AUT	H DESCRIPTION								JN: PW-7031
] · · -	-						
									Detroit	0	HORZ.(FT)	FILE:		RIVERSIDE PARK



10

FILE:

HORZ.(FT)

Detroit

0

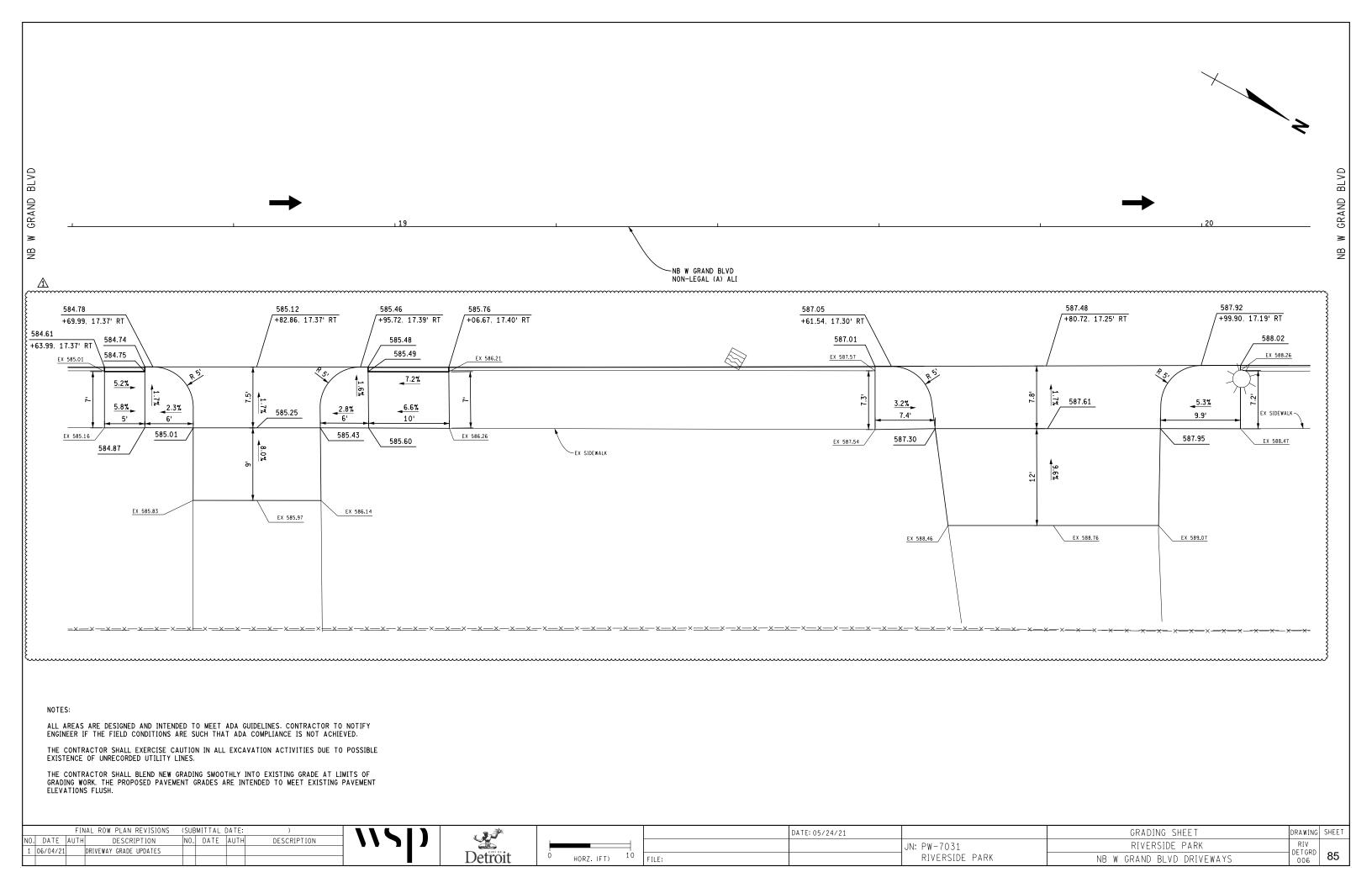


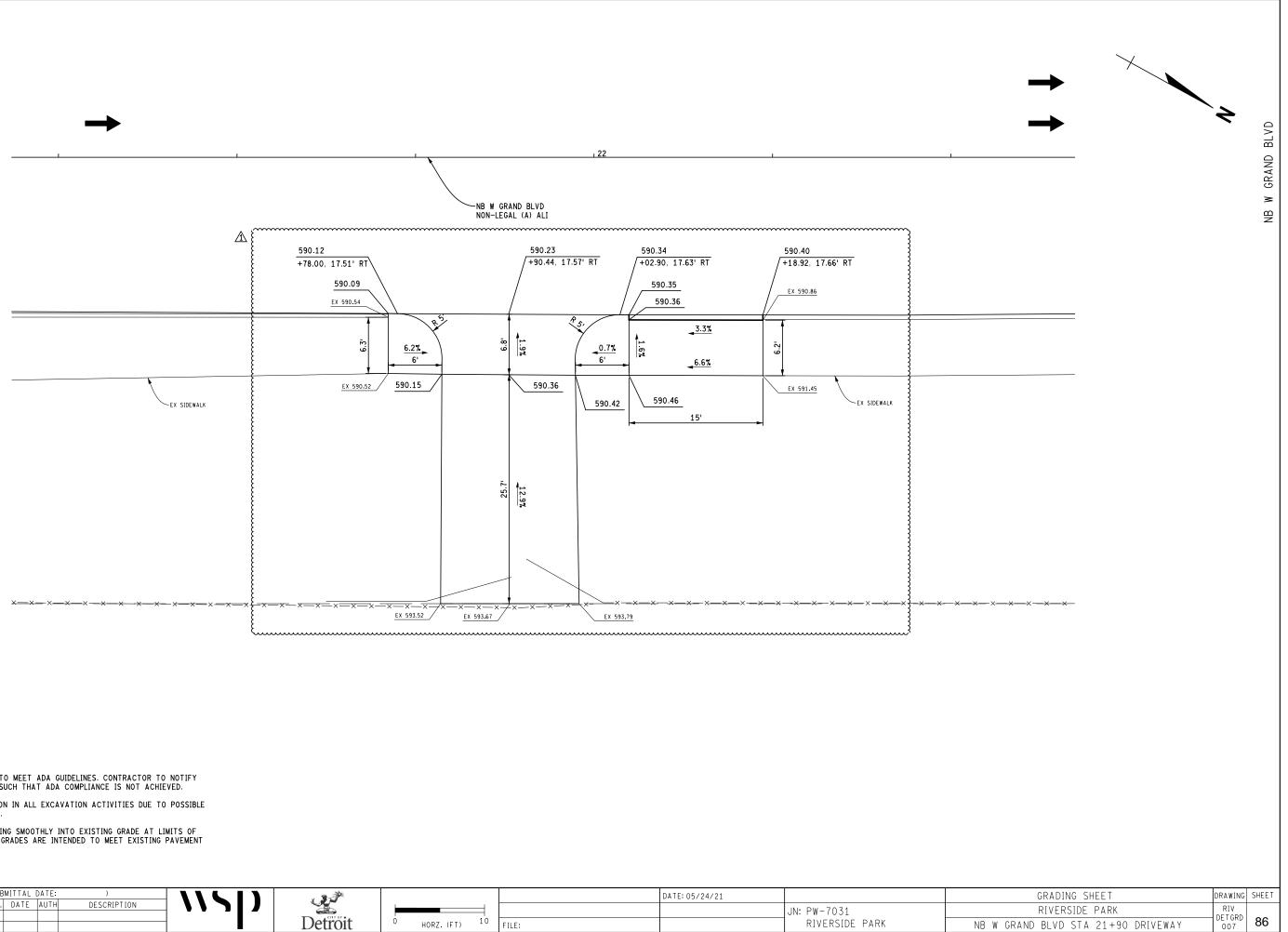
BLVD GRAND Μ NB

GRADING SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV DETGRD	
NB W GRAND BLVD STA 18+08 DRIVEWAY	005	84

JN: PW-7031

RIVERSIDE PARK





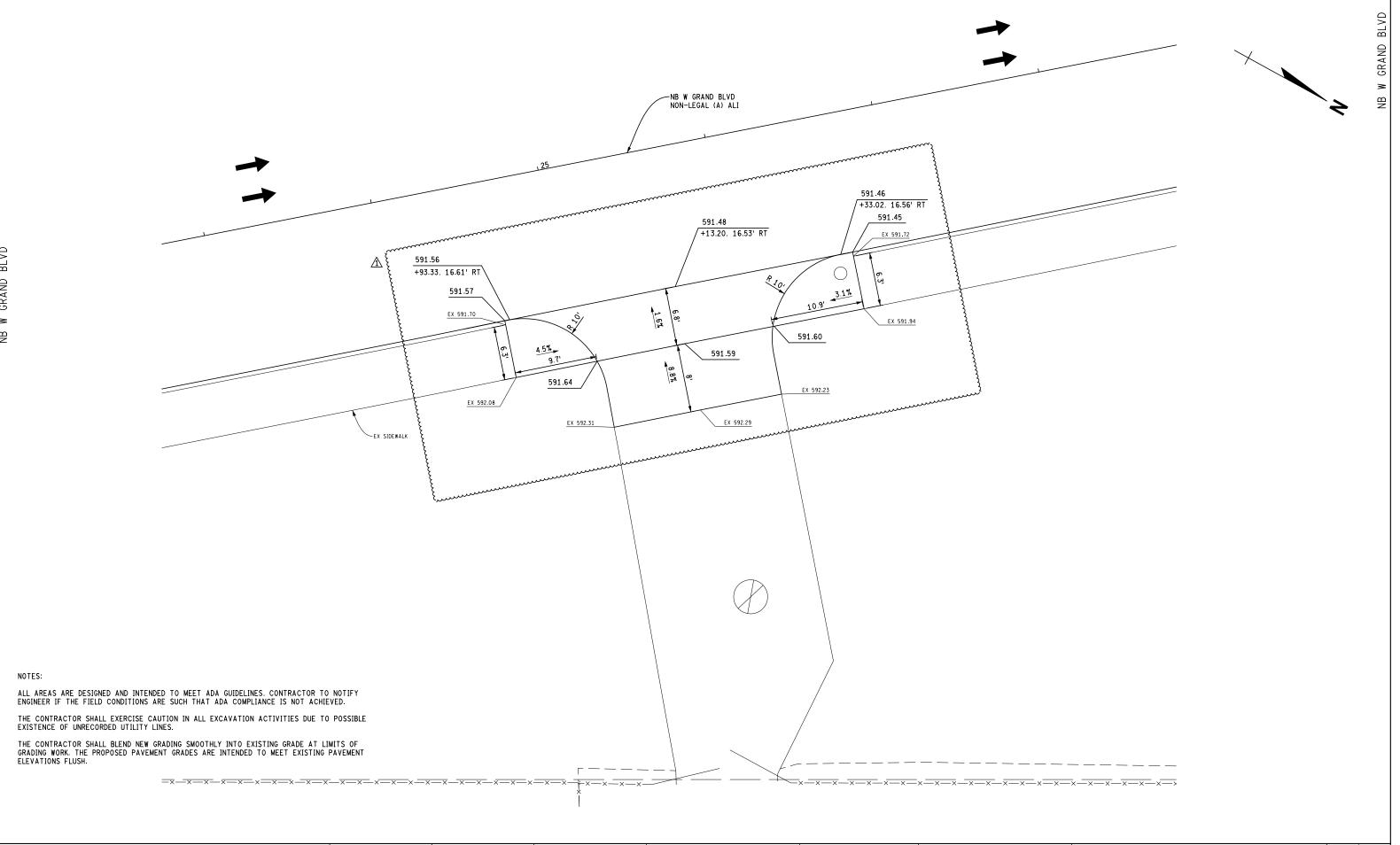
NOTES:

ALL AREAS ARE DESIGNED AND INTENDED TO MEET ADA GUIDELINES. CONTRACTOR TO NOTIFY ENGINEER IF THE FIELD CONDITIONS ARE SUCH THAT ADA COMPLIANCE IS NOT ACHIEVED.

THE CONTRACTOR SHALL EXERCISE CAUTION IN ALL EXCAVATION ACTIVITIES DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.

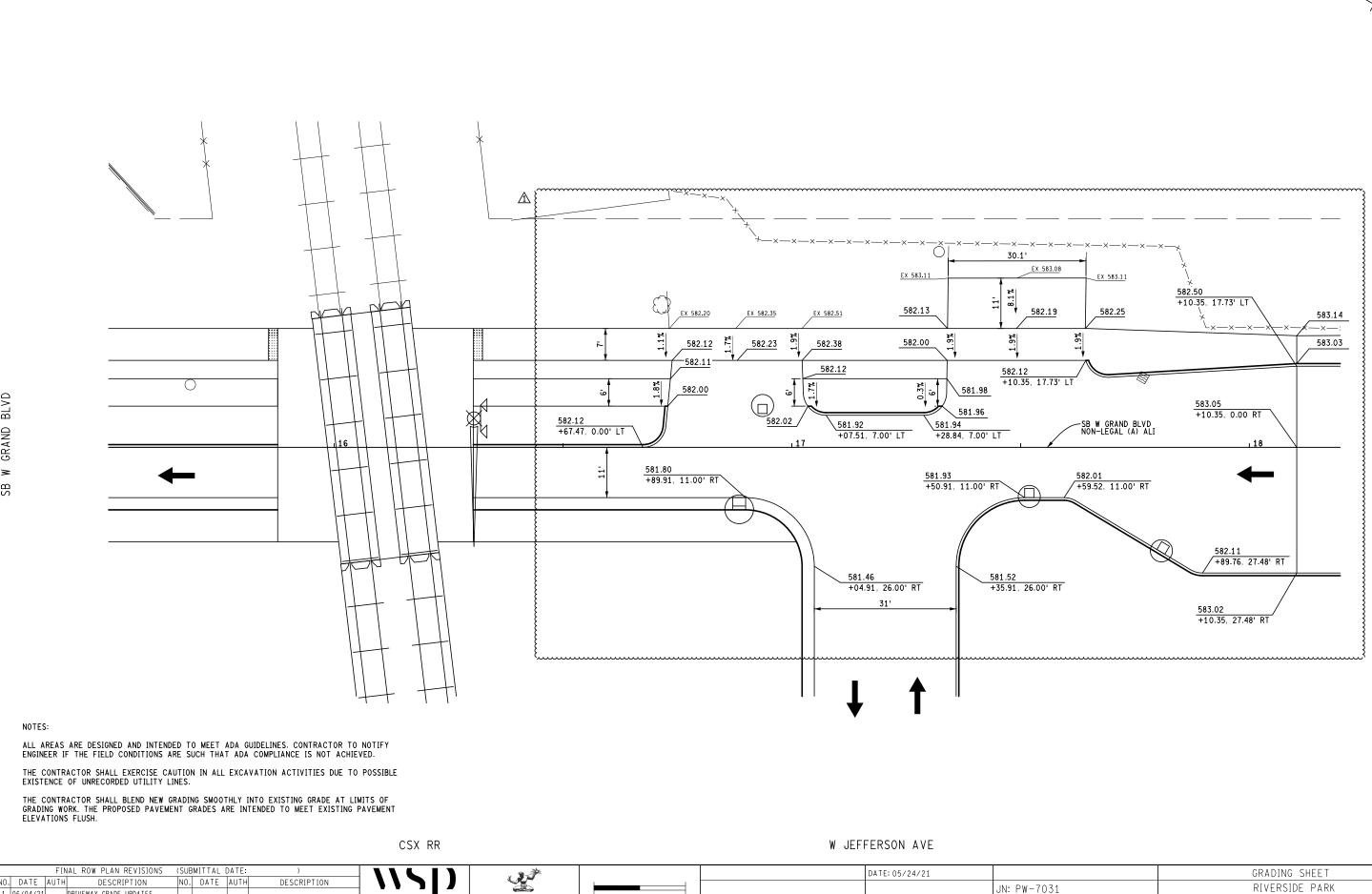
THE CONTRACTOR SHALL BLEND NEW GRADING SMOOTHLY INTO EXISTING GRADE AT LIMITS OF GRADING WORK. THE PROPOSED PAVEMENT GRADES ARE INTENDED TO MEET EXISTING PAVEMENT ELEVATIONS FLUSH.

		FIN	NAL ROW PLAN REVISIONS	(SUBMITTAL DATE)		. · · · · · · · · · · · · · · · · · · ·			DATE: 05/24/21	
Ν	D. DATE	AUTH	DESCRIPTION	NO. DATE AUTH	DESCRIPTION			L			JN: PW-7031
	06/04/21	1	DRIVEWAY GRADE UPDATES				Detitorit	10			
						■	Detroit	HORZ. (FT)	FILE:		RIVERSIDE PARK



		NAL ROW PLAN REVISIONS	(SUBMITTAL DATE)		, 1				DATE: 05/24/21	
N0.	DATE AUTH	DESCRIPTION	NO. DATE AUTH	DESCRIPTION				_		,	
1	06/04/21	DRIVEWAY GRADE UPDATES			 -					Į/	JN: PW-7031
						Detroit	HORZ. (FT)	10	FILE:	1	RIVERSIDE PARK

GRADING SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV DETGRD	
NB W GRAND BLVD STA 25+13 DRIVEWAY	008	87



20

FILE:

HORZ.(FT)

Detroit

0

CSX RR

1 06/04/21

DRIVEWAY GRADE UPDATES



BLVD

GRAND

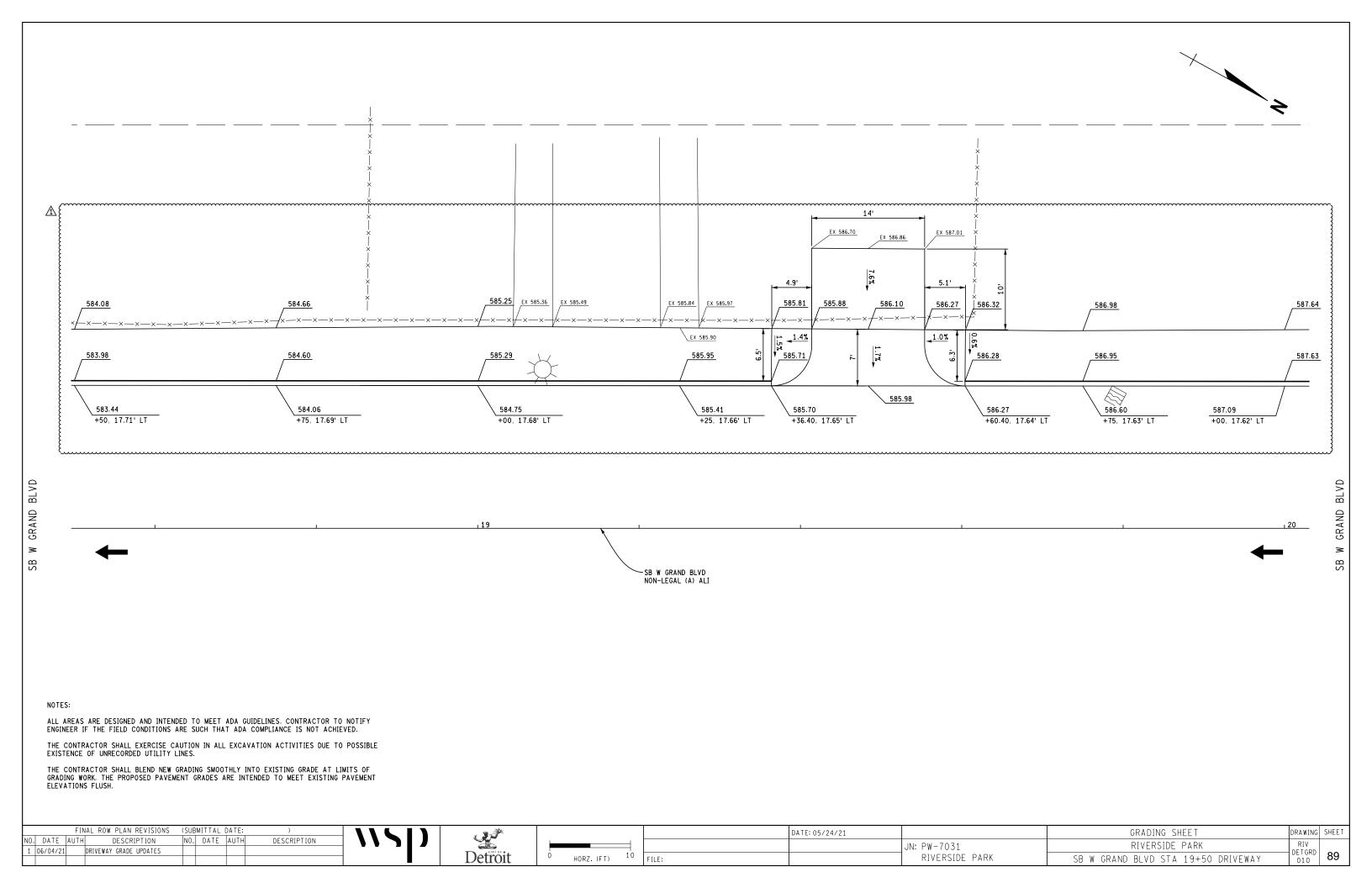
×

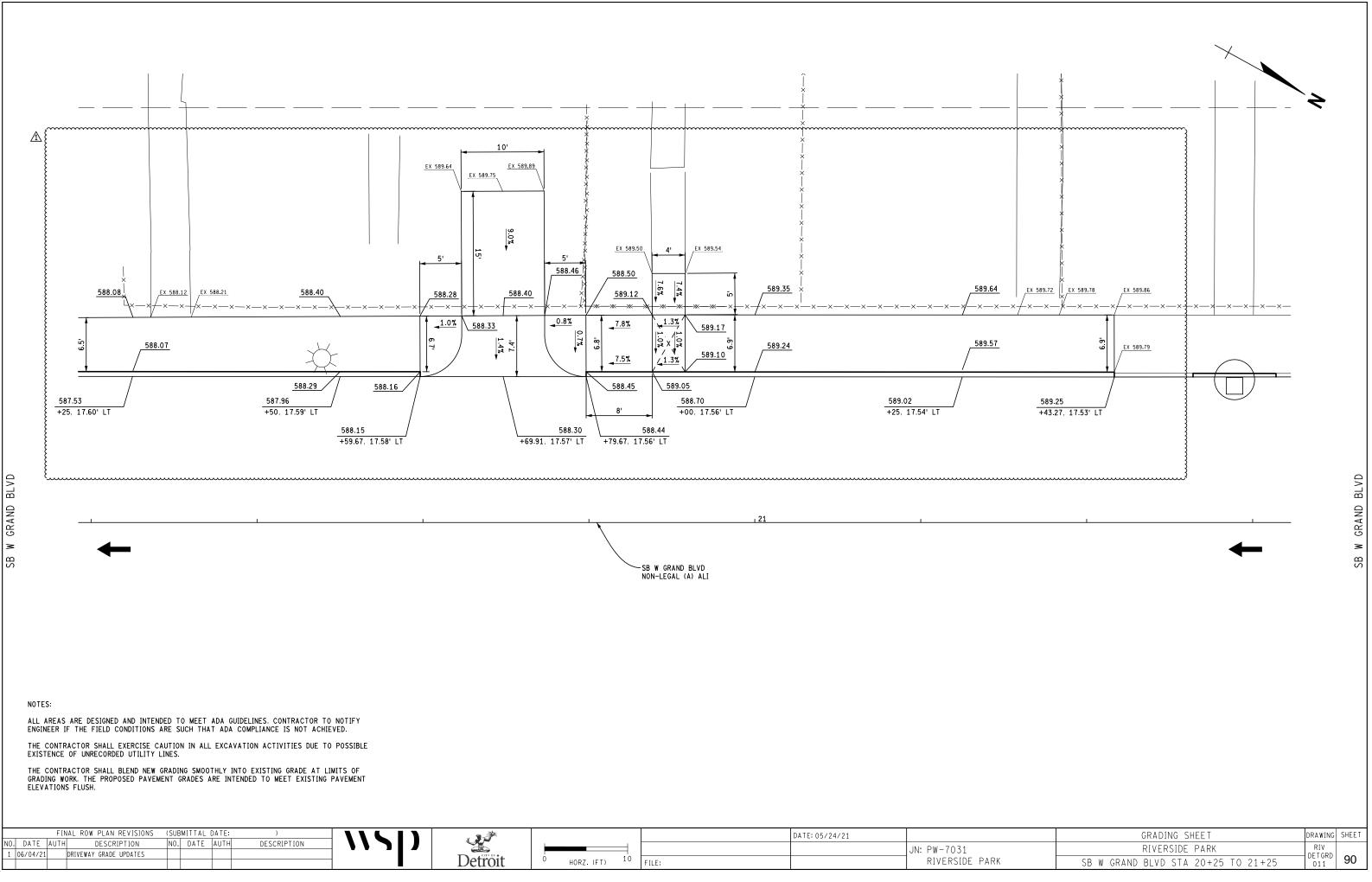
SB

GRADING SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV DETGRD	
SB W GRAND BLVD STA 15+50 TO STA 18+25	009	88

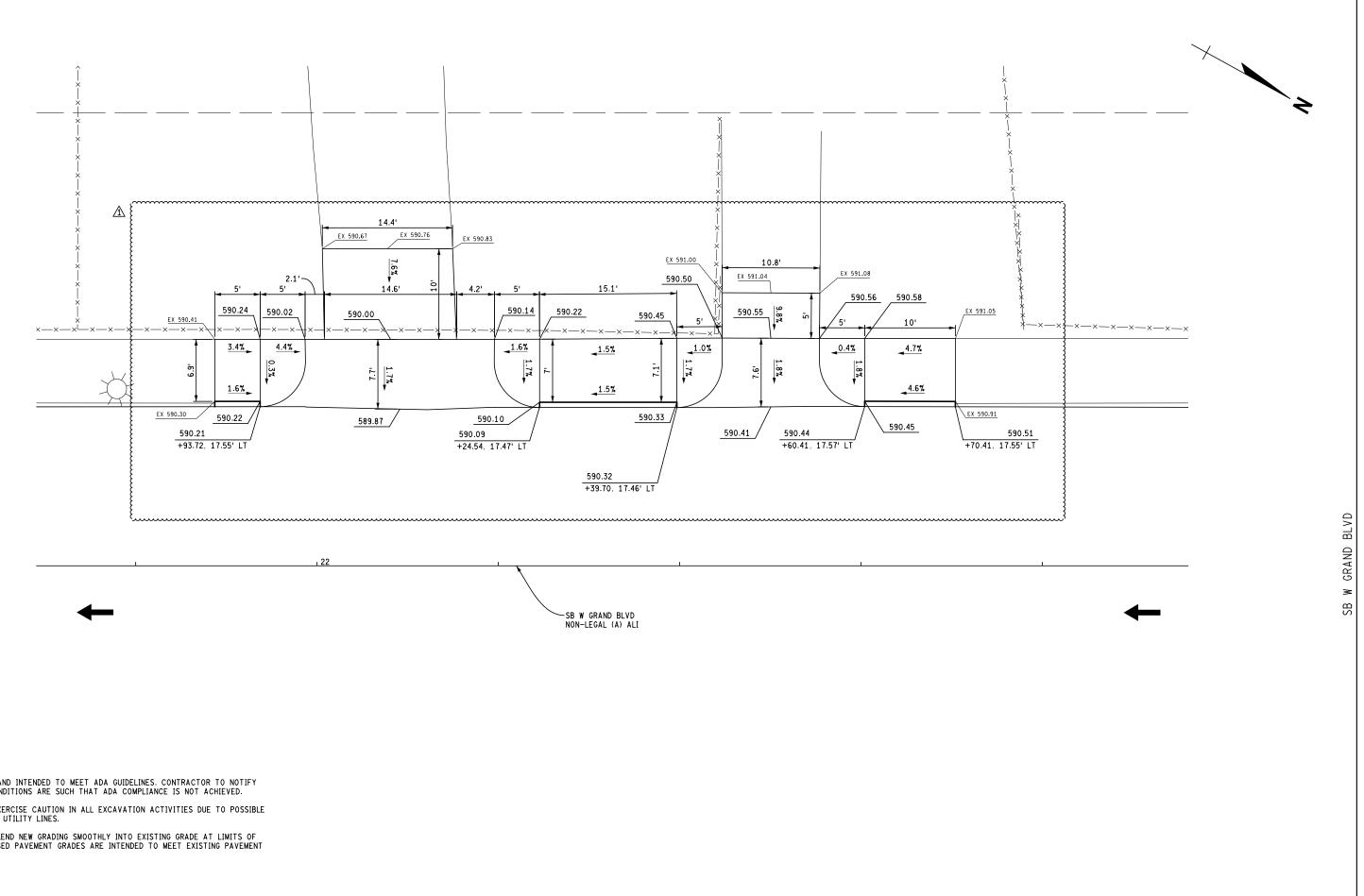
JN: PW-7031

RIVERSIDE PARK





	VAL ROW PLAN REVISIONS	(SUBMITTAL DATE:)	x 3 F			DATE: 05/24/21	
NO. DATE AUTH 1 06/04/21	DESCRIPTION DRIVEWAY GRADE UPDATES	NO. DATE AUTH	DESCRIPTION					JN: PW-7031
1 00/04/21	DRIVEWAT ORADE OFDATES			Detroit	0 HORZ.(FT) 10	FILE:		RIVERSIDE PARK



GRAND ≥ R

BLVD

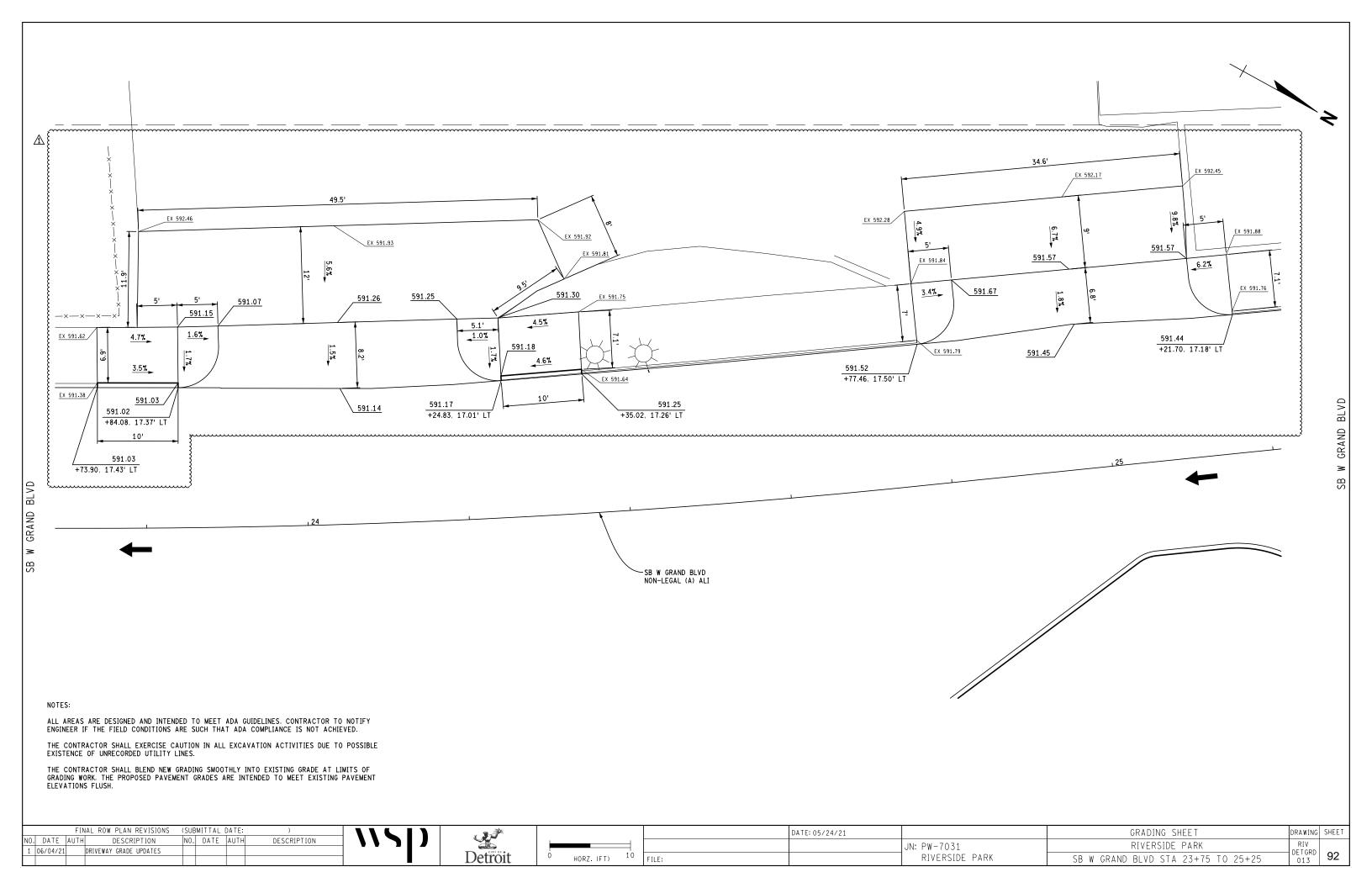
NOTES:

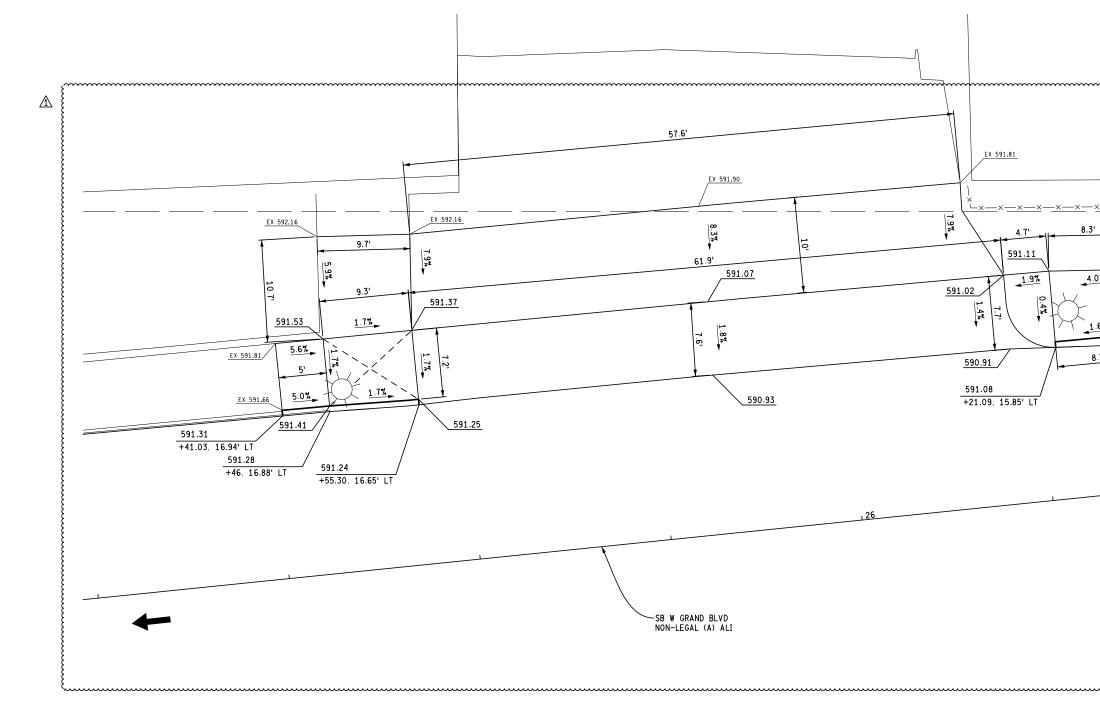
ALL AREAS ARE DESIGNED AND INTENDED TO MEET ADA GUIDELINES. CONTRACTOR TO NOTIFY ENGINEER IF THE FIELD CONDITIONS ARE SUCH THAT ADA COMPLIANCE IS NOT ACHIEVED.

THE CONTRACTOR SHALL EXERCISE CAUTION IN ALL EXCAVATION ACTIVITIES DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.

THE CONTRACTOR SHALL BLEND NEW GRADING SMOOTHLY INTO EXISTING GRADE AT LIMITS OF GRADING WORK. THE PROPOSED PAVEMENT GRADES ARE INTENDED TO MEET EXISTING PAVEMENT ELEVATIONS FLUSH.

FINAL RC		AL DATE:)	- \\\\	13. P	DATE: 05/24/21		GRADING SHEET	DRAWING SHEET
1 06/04/21 DRIVEW	DESCRIPTION NO. DAT	TE AUTH DESCRIPTION	\\\)			JN: PW-7031	RIVERSIDE PARK	RIV
				Detroit O HORZ. (FT) 10	FILE:	RIVERSIDE PARK	SB W GRAND BLVD STA 21+75 TO 22+75	DETGRD 012 91





ALL AREAS ARE DESIGNED AND INTENDED TO MEET ADA GUIDELINES. CONTRACTOR TO NOTIFY ENGINEER IF THE FIELD CONDITIONS ARE SUCH THAT ADA COMPLIANCE IS NOT ACHIEVED.

BLVD

GRAND

SB W

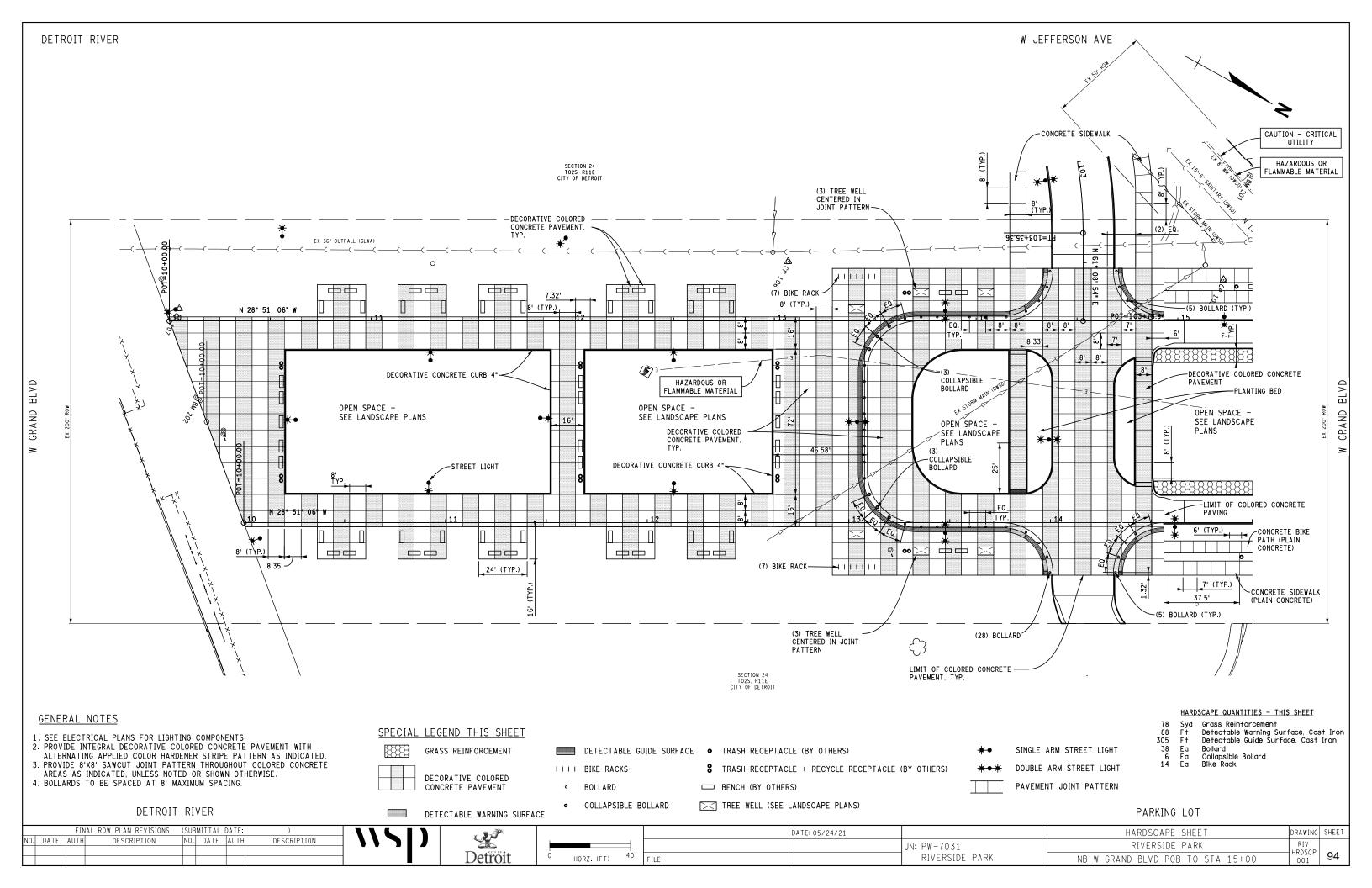
NOTES:

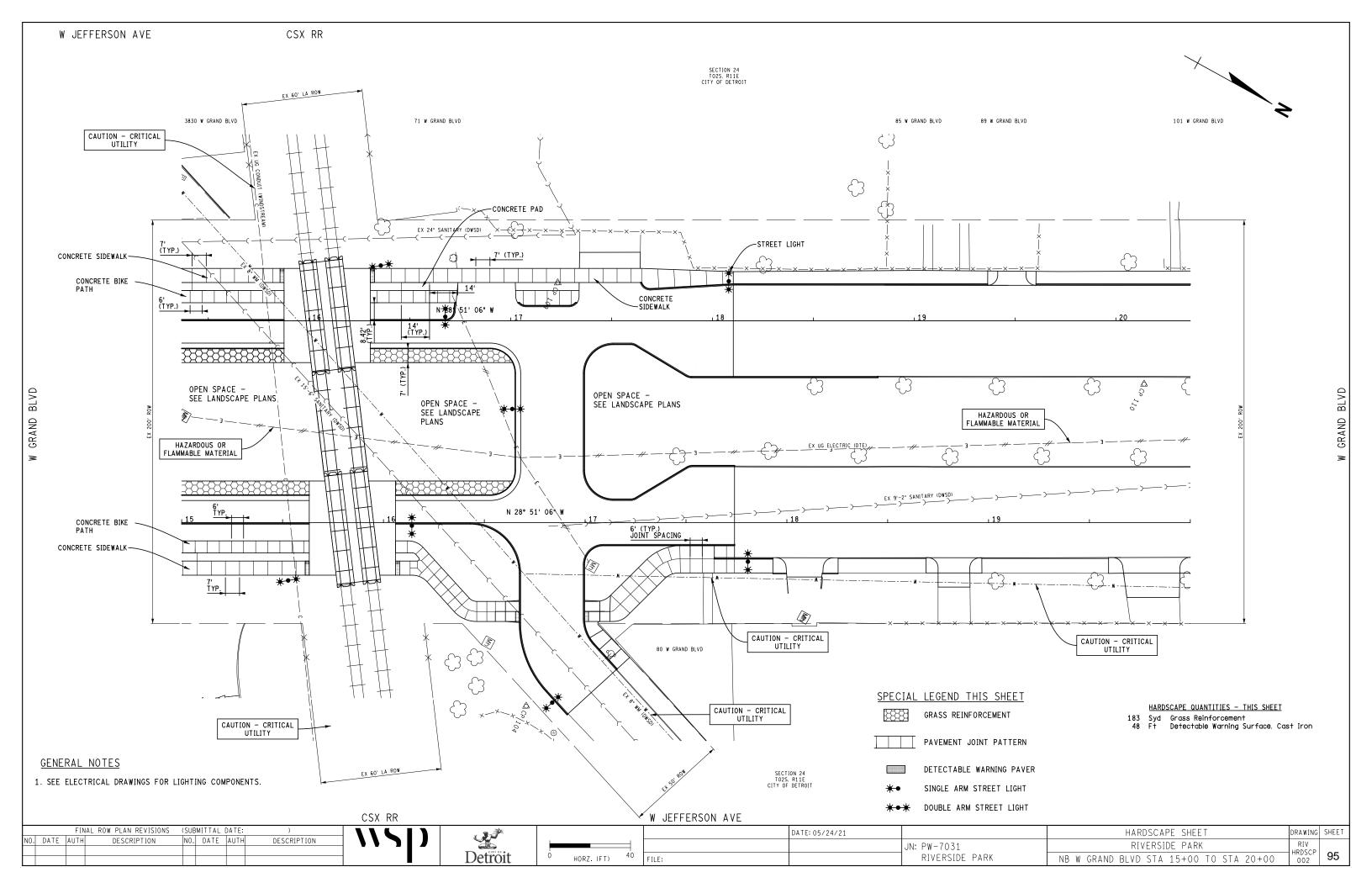
THE CONTRACTOR SHALL EXERCISE CAUTION IN ALL EXCAVATION ACTIVITIES DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.

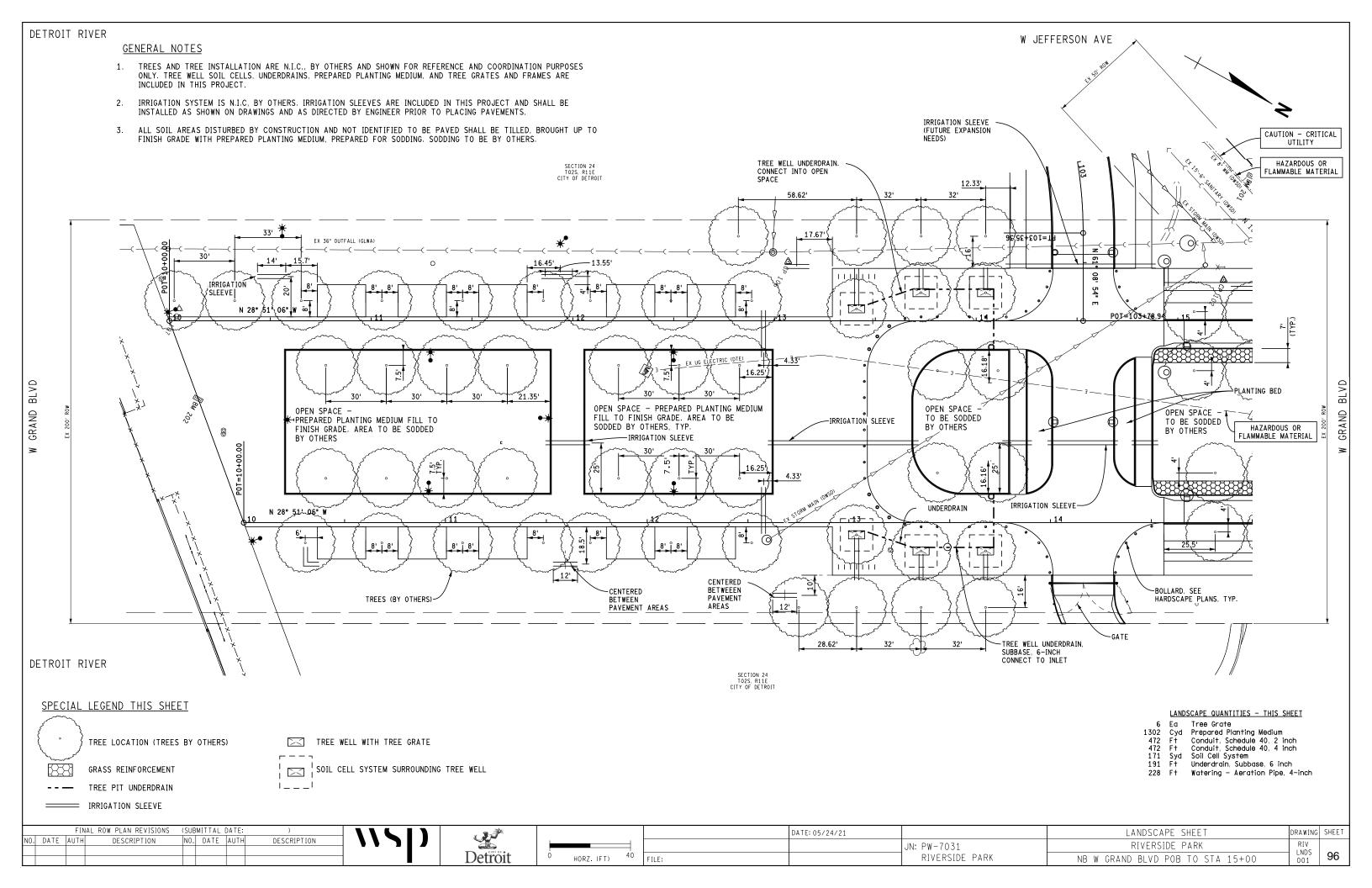
THE CONTRACTOR SHALL BLEND NEW GRADING SMOOTHLY INTO EXISTING GRADE AT LIMITS OF GRADING WORK. THE PROPOSED PAVEMENT GRADES ARE INTENDED TO MEET EXISTING PAVEMENT ELEVATIONS FLUSH.

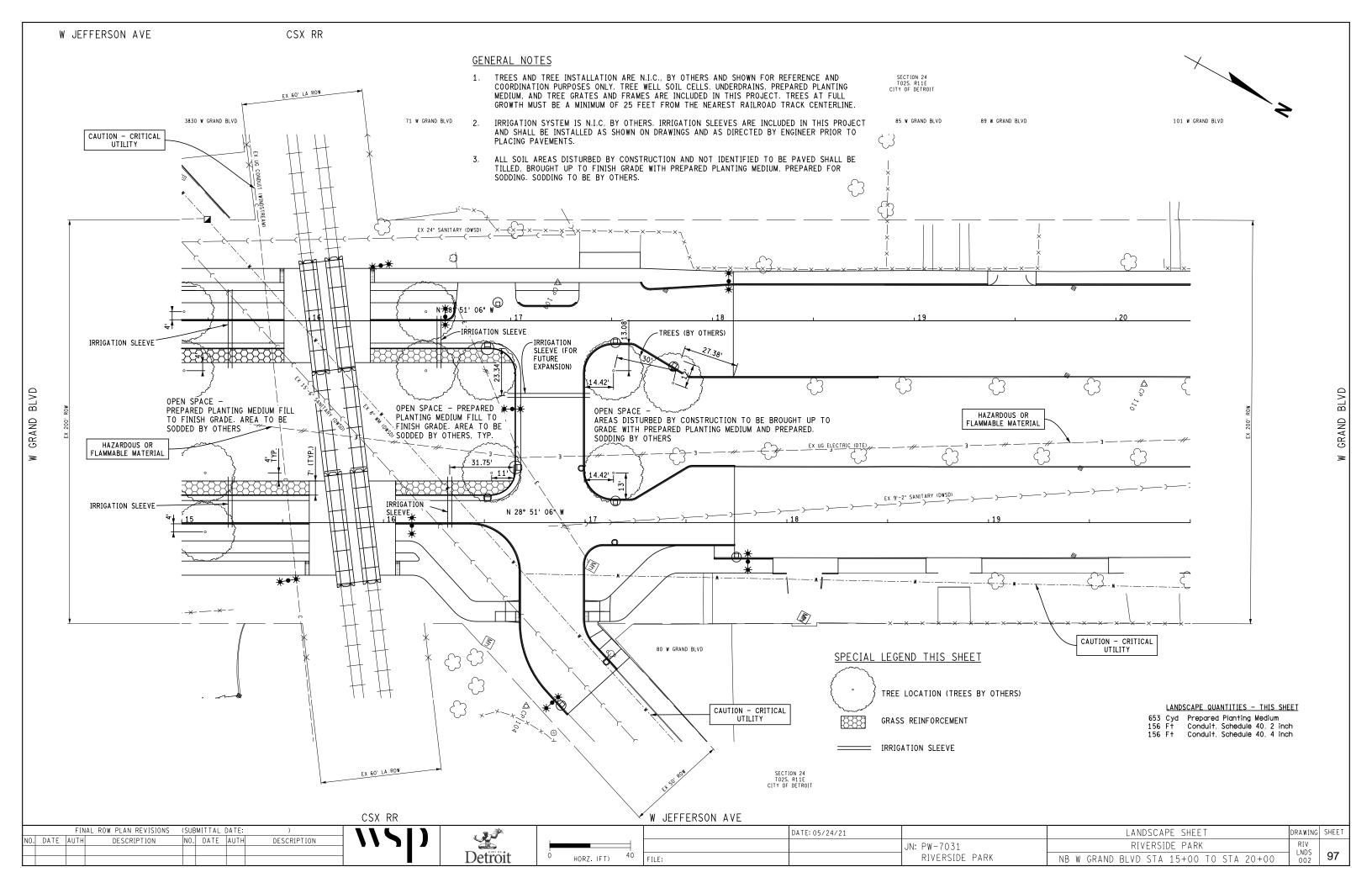
		FINAL ROW PLAN REVISIONS)		· • *			DATE: 05/24/21	
N	O. DATE	AUTH DESCRIPTION	NO. DATE	AUTH	DESCRIPTION						INI = DW = 7031
	l 06/04/21	1 DRIVEWAY GRADE UPDATES					Detroit	0 10			JN: PW-7031
						■	Detroit	HORZ. (FT)	FILE:		RIVERSIDE PARK

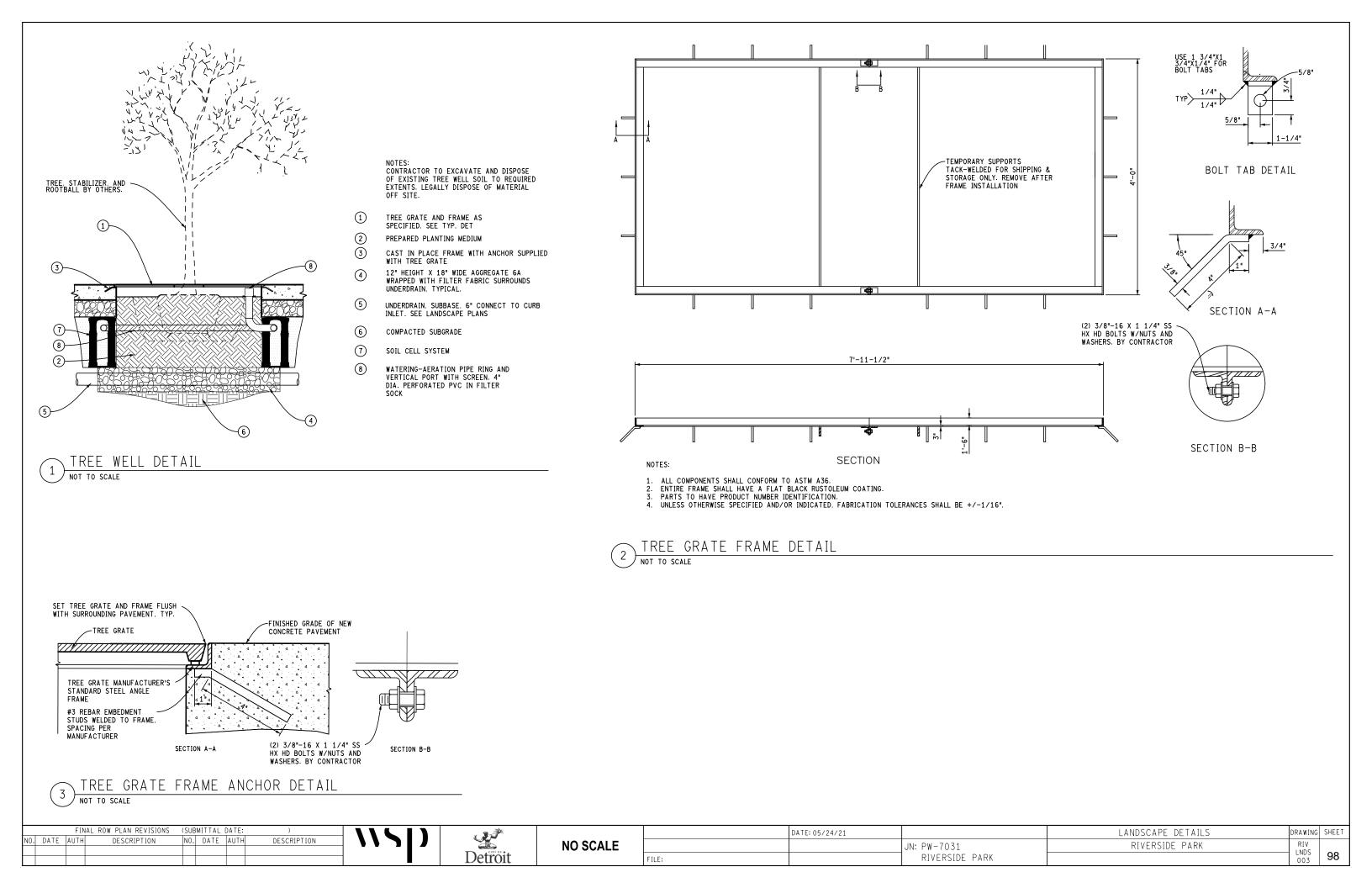
591.39 +29.51.00.00" LT		SB W GRAND BLVD
GRADING SHEET	DRAWING	SHEET
RIVERSIDE PARK SB W GRAND BLVD STA 25+25 TO 26+50	RIV DETGRD 014	93
SD W GRAND BLVD STA 25+25 TU 26+50	014	

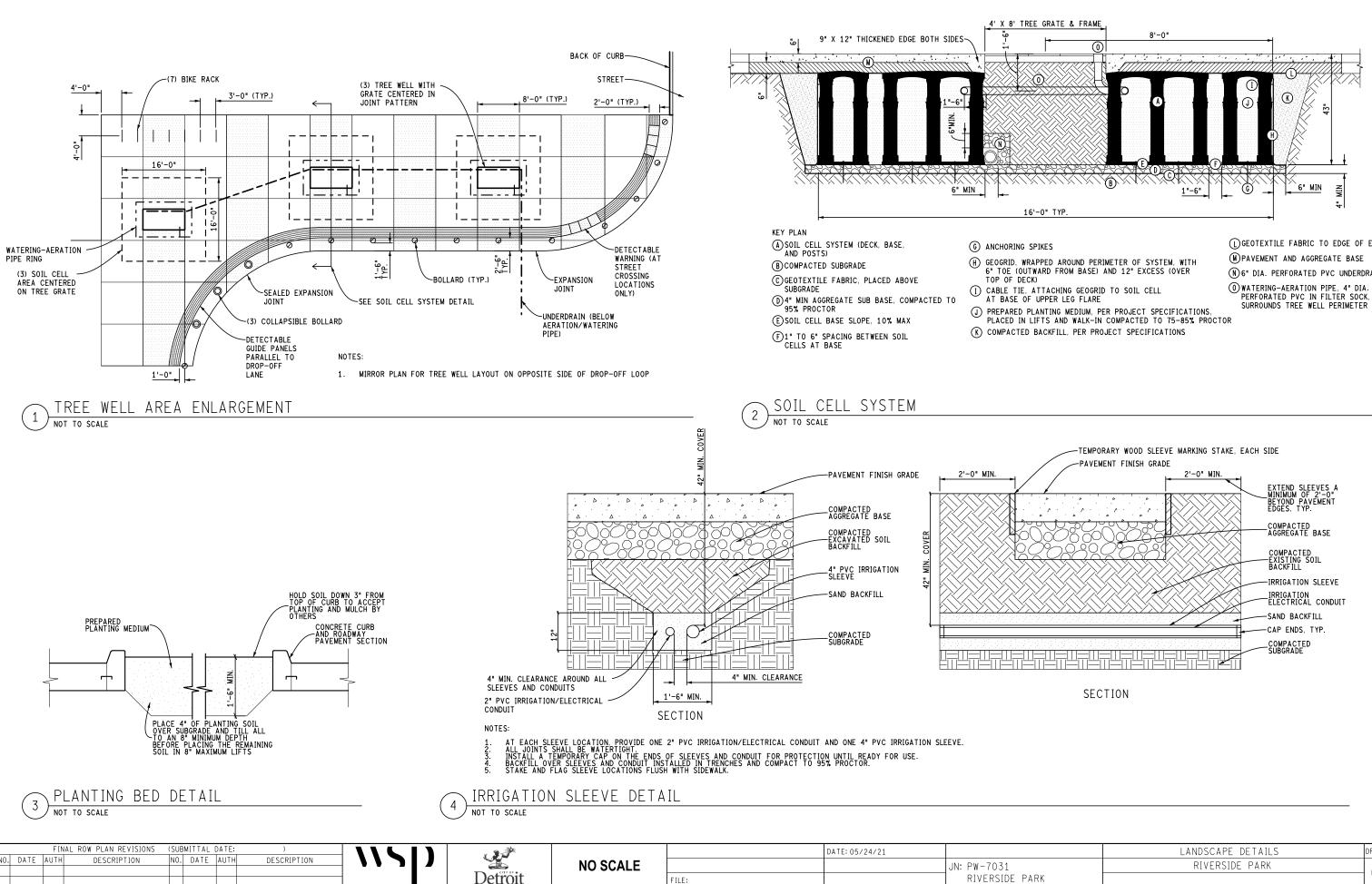






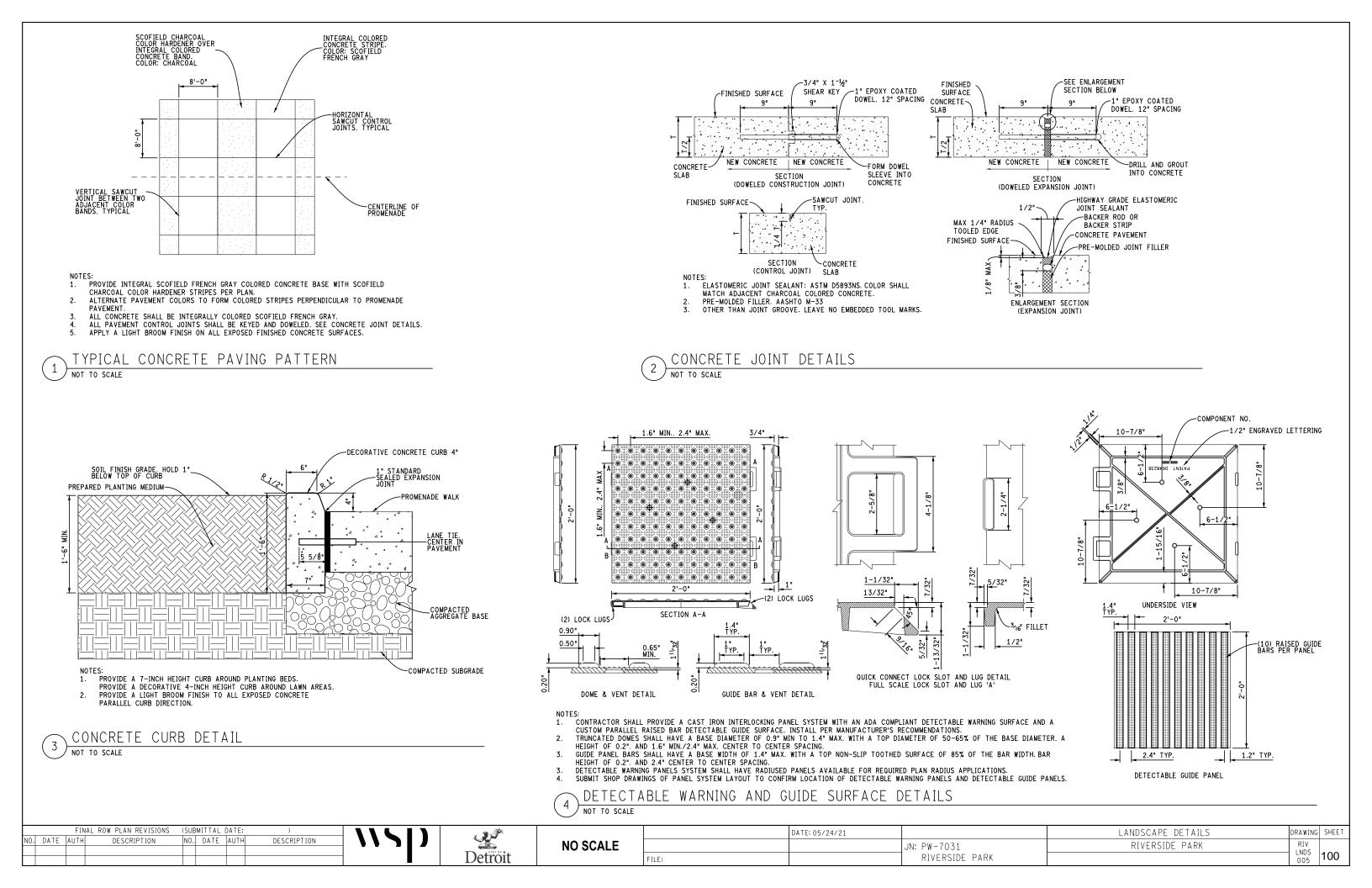


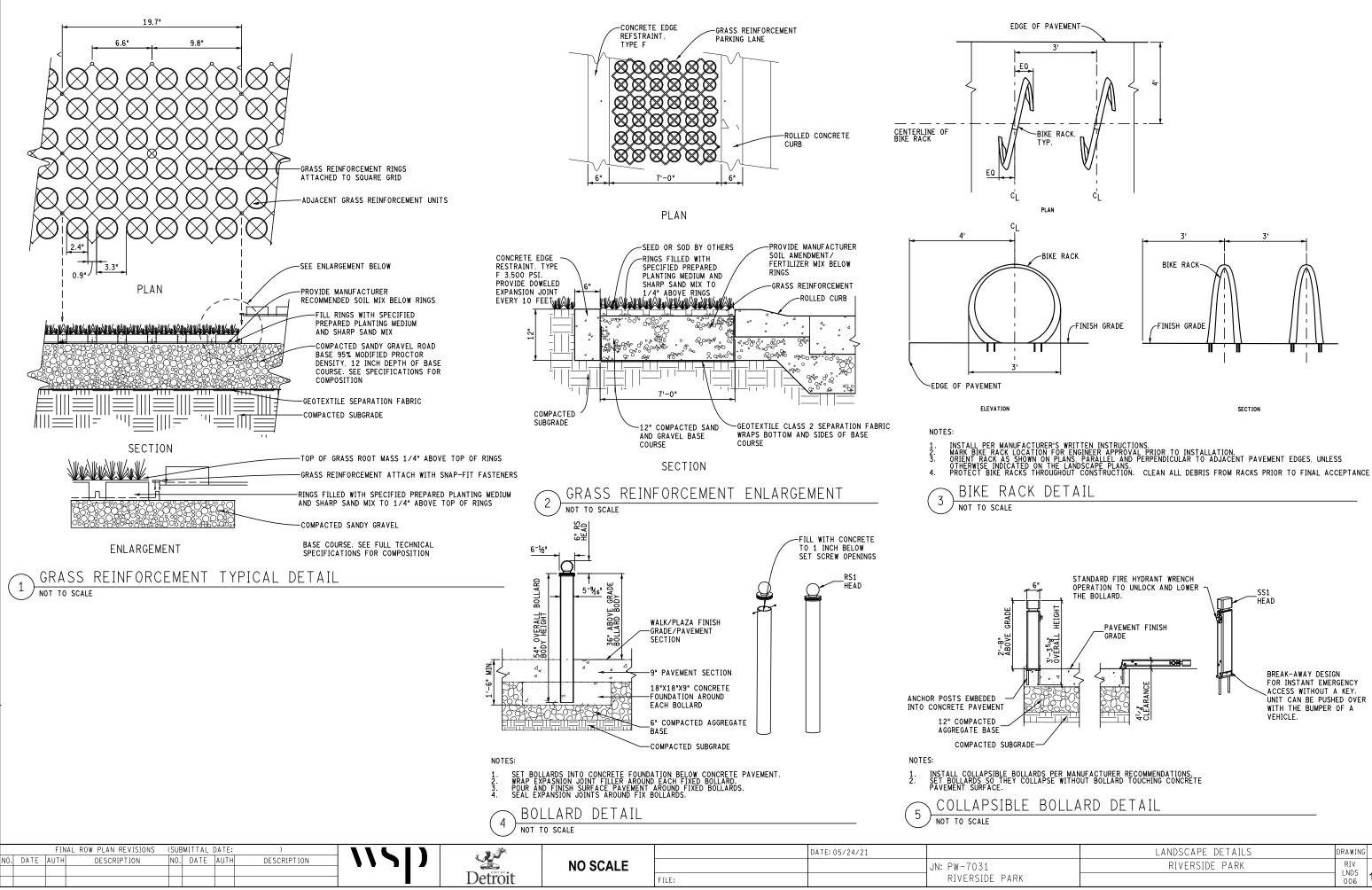




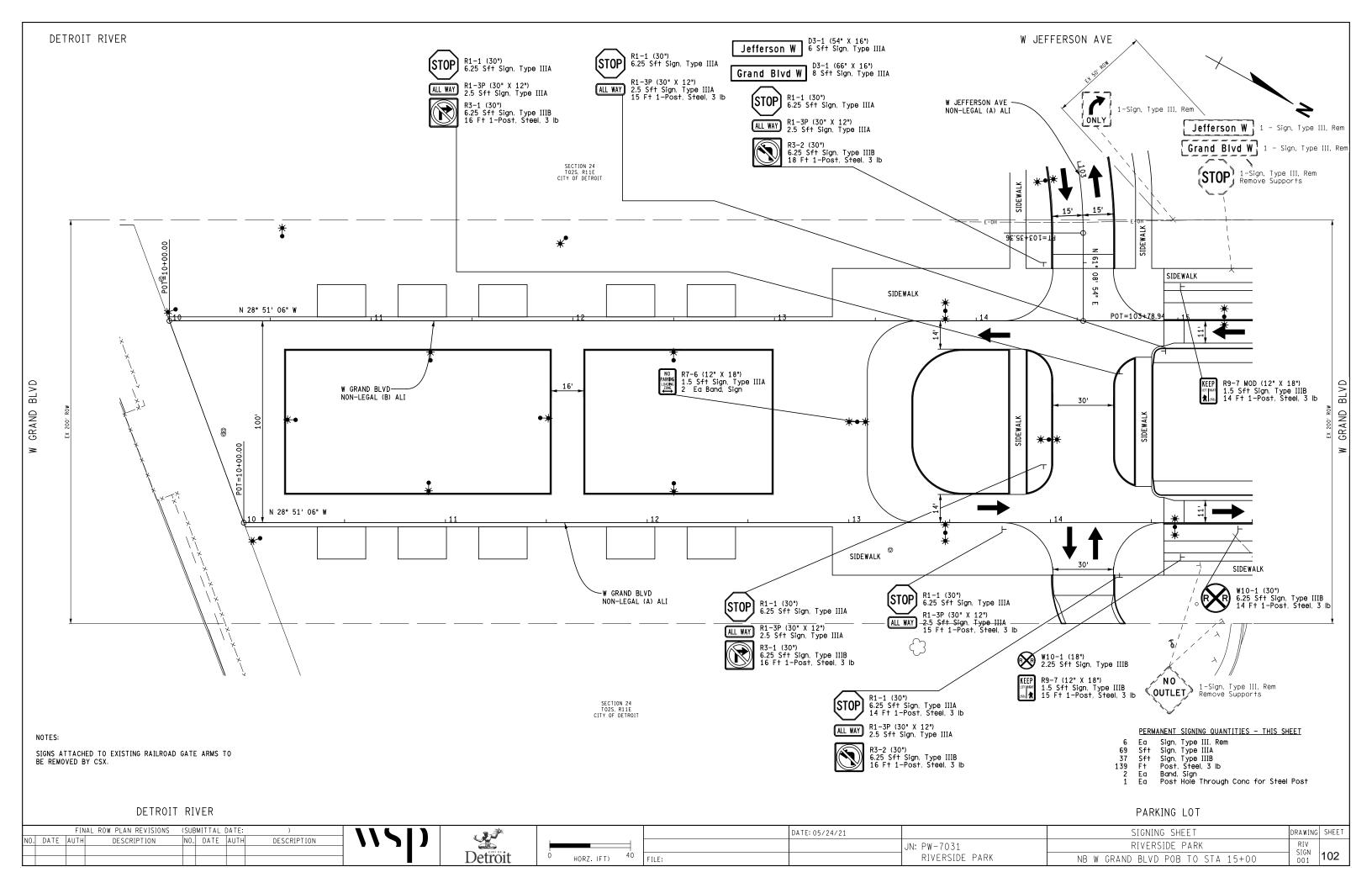
- (L) GEOTEXTILE FABRIC TO EDGE OF EXCAVATION
- (N)6" DIA. PERFORATED PVC UNDERDRAIN PIPE

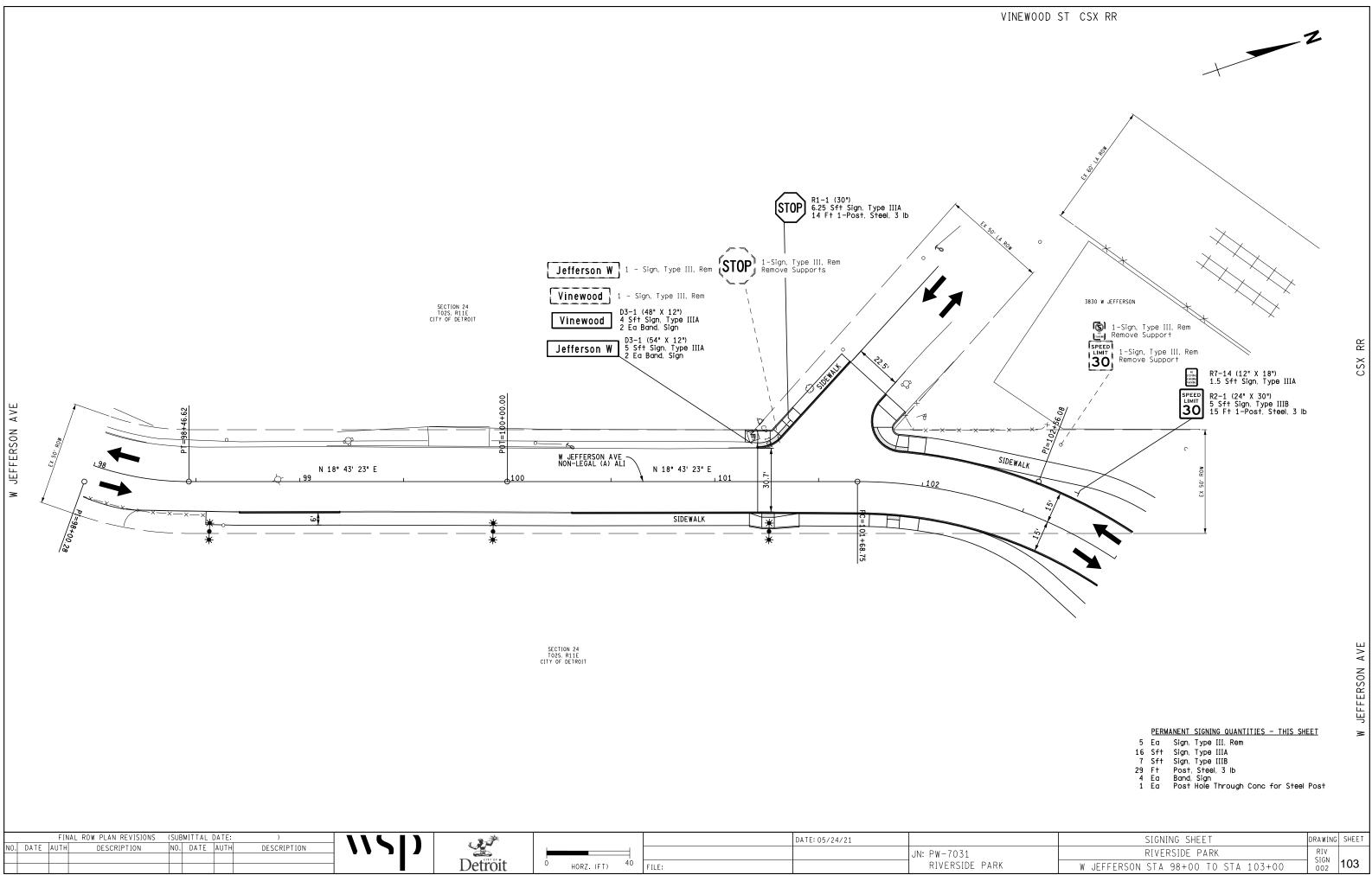
LANDSCAPE DETAILS	DRAWING	SHEET
RIVERSIDE PARK	RIV LNDS	
	004	99



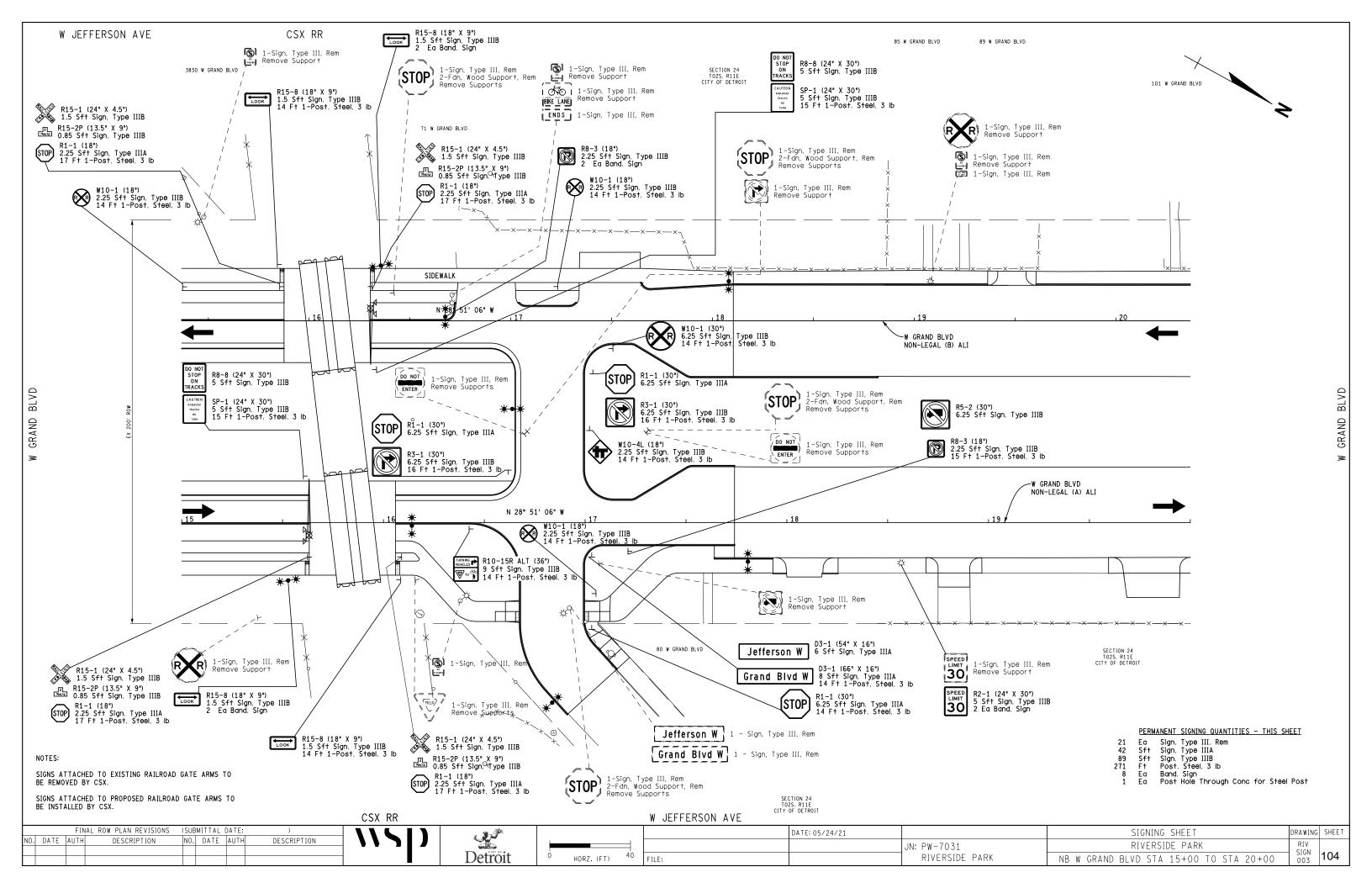


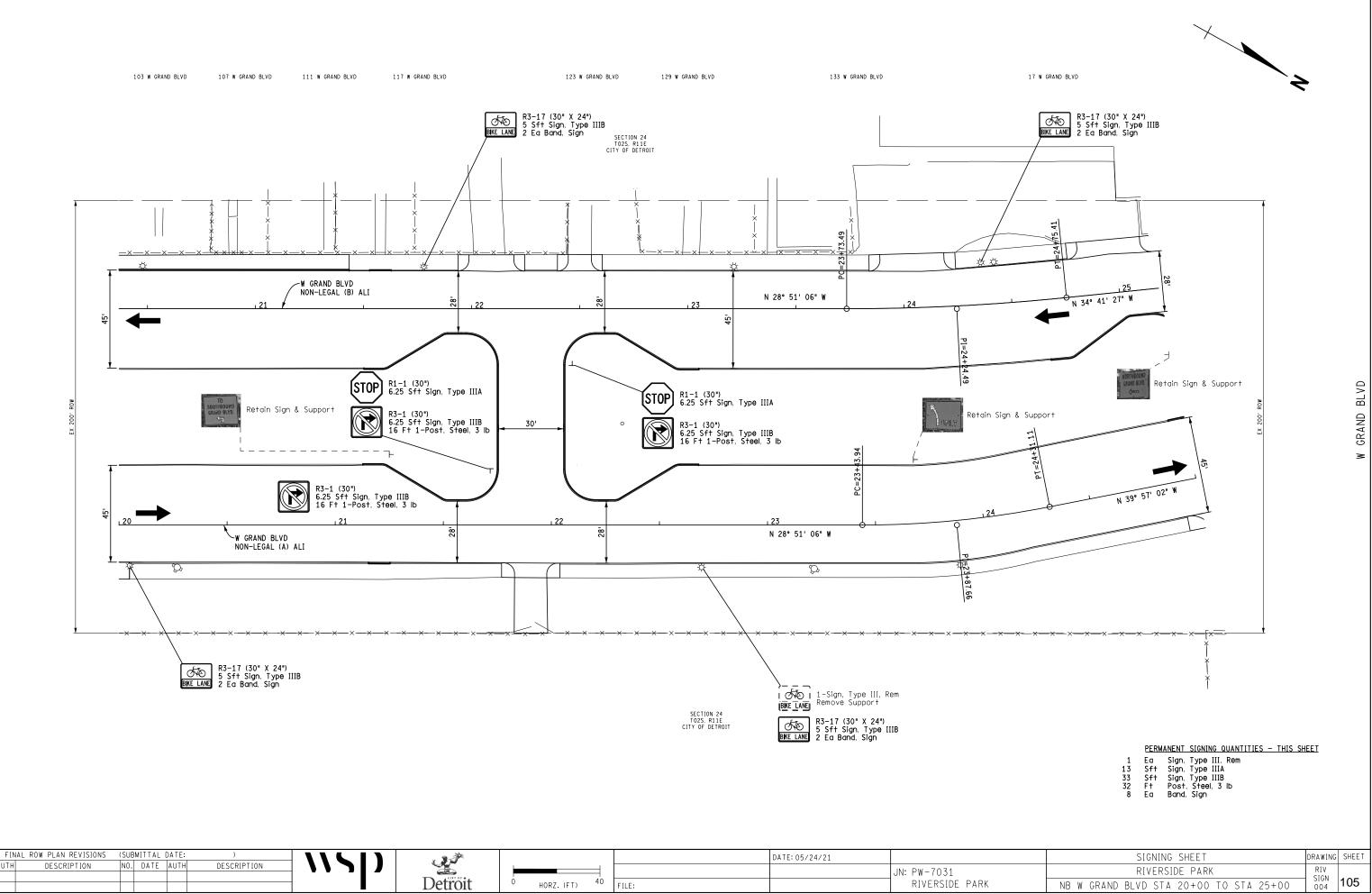
LANDSCAPE DETAILS	DRAWING	SHEET
RIVERSIDE PARK	RIV LNDS 006	101





SIGNING SHEET	DRAWING	SHEET			
RIVERSIDE PARK					
W JEFFERSON STA 98+00 TO STA 103+00	SIGN 002	103			





ò

40

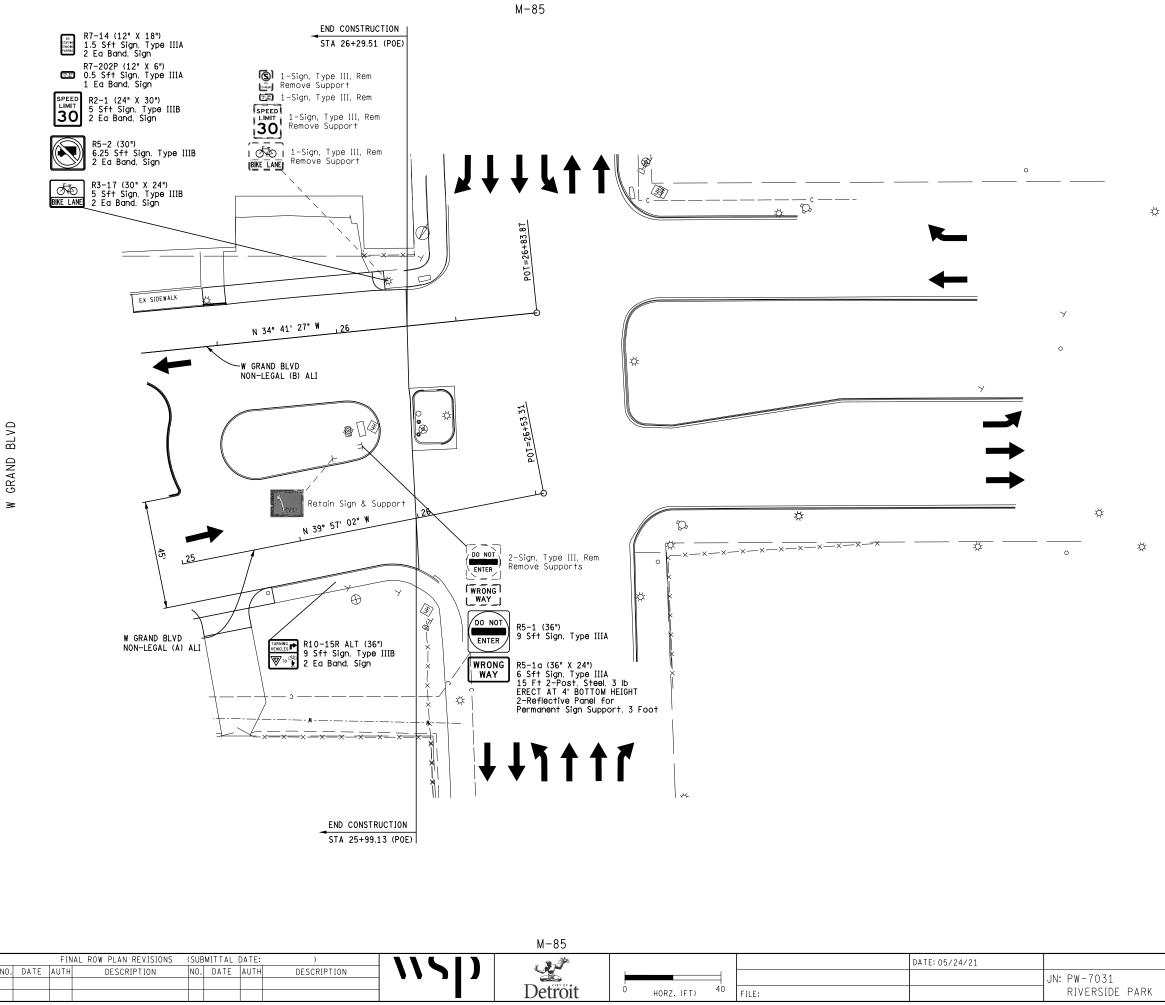
FILE:

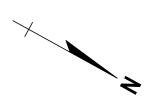
HORZ.(FT)

NO. DATE AUTH

SIGNING SHEET C	DRAWING	SHEET
RIVERSIDE PARK	RIV SIGN	
NB W GRAND BLVD STA 20+00 TO STA 25+00	004	105

RIVERSIDE PARK





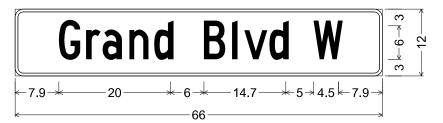
GRAND BLVD ×

PERMANENT SIGNING QUANTITIES - THIS SHEET

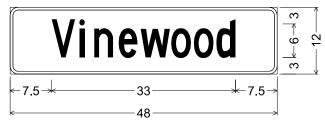
- 6 18 27 30 11 2

Ea Sign, Type III, Rem Sft Sign, Type IIIA Sft Sign, Type IIIB Ft Post, Steel, 3 Ib Ea Band, Sign Ea Reflective Panel for Permanent Sign Support, 3 foot

SIGNING SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV	
NB W GRAND BLVD STA 25+00 TO POE	SIGN 005	106



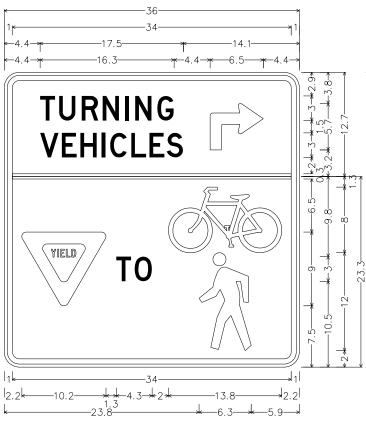
Identifier: D3-1 (12 inch); 1.5" Radius, 0.5" Border, White on, Green; "Grand Blvd", C; "W", C;



Identifier: D3-1 (12 inch); 1.5" Radius, 0.5" Border, White on, Green; "Vinewood", C;

J	efferson	W	$3 \leftarrow 6 \rightarrow 3$	← 12 →
€5.5₩	33.5	5→4.5 ≤5.5>		
k	54	>		

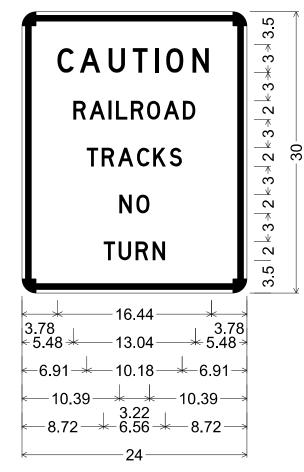
Identifier: D3-1 (12 inch); 1.5" Radius, 0.5" Border, White on, Green; "Jefferson", C; "W", C;



Identifier: R10-15R ALT;

1.9" Radius, 0.6" Border, 0.4" Indent, Black on Yellow; [TURNING] D 2K specified length;

[VEHICLES] D 2K specified length; 90 Deg Advance Turn Arrow Custom 6.5" X 5.7"; 1.9" Radius, 0.6" Border, 0.4" Indent, Black on White; [TO] D 2K specified length; Bicycle Symbol White;



Identifier: SP-1 "CAUTION", D; "RAILROAD", D; "TURN", D;

3.78	C 2.4
5.48	R 1.7
6.91	T 1.6
10.39	N 9 1.
8.72	T 1.5

INF DW 7071
JN: PW-1031
RIVERSIDE PARK
JN:

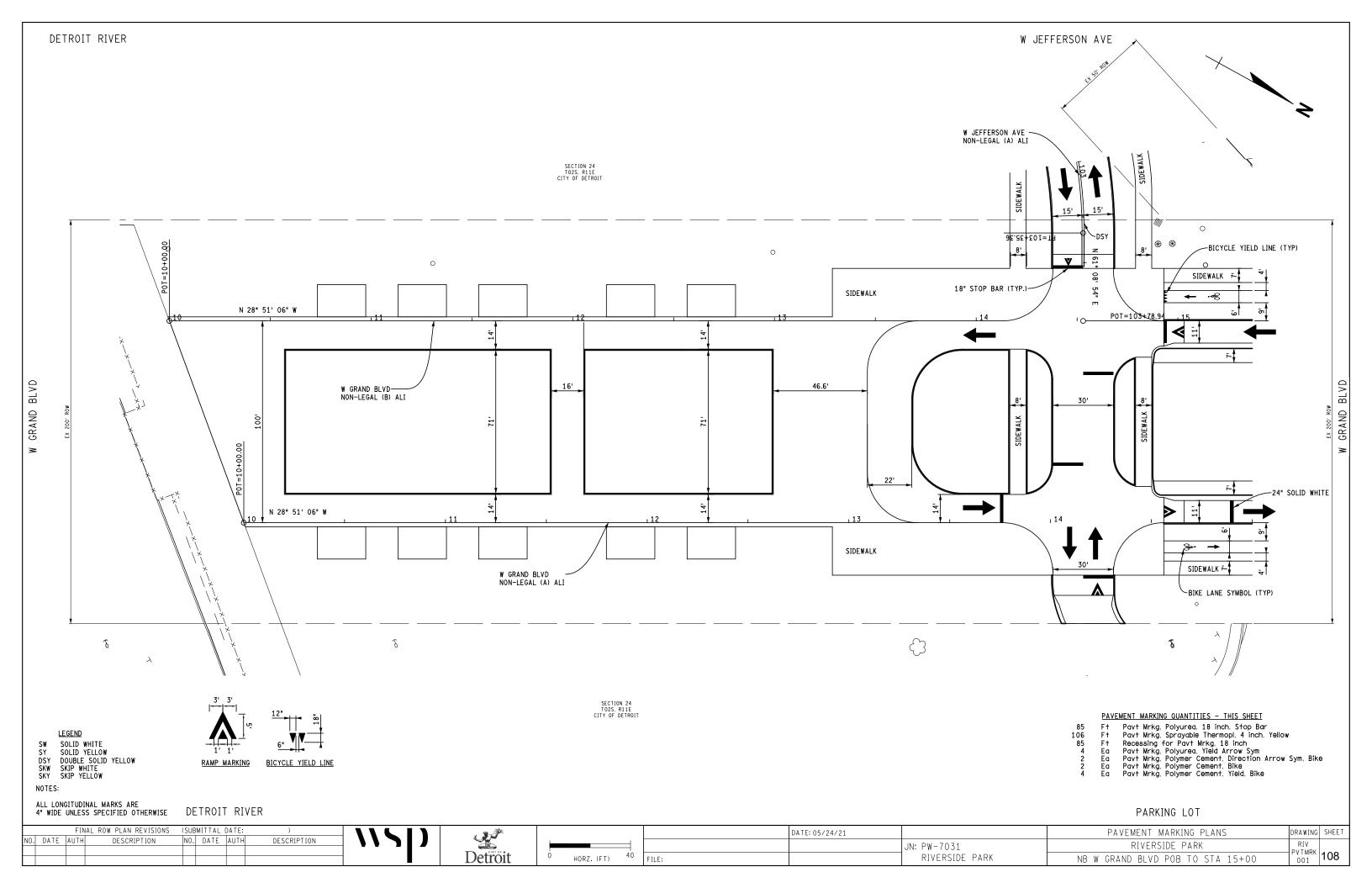
1.50" Radius, 0.63" Border, 0.38" Indent, Black on, White;

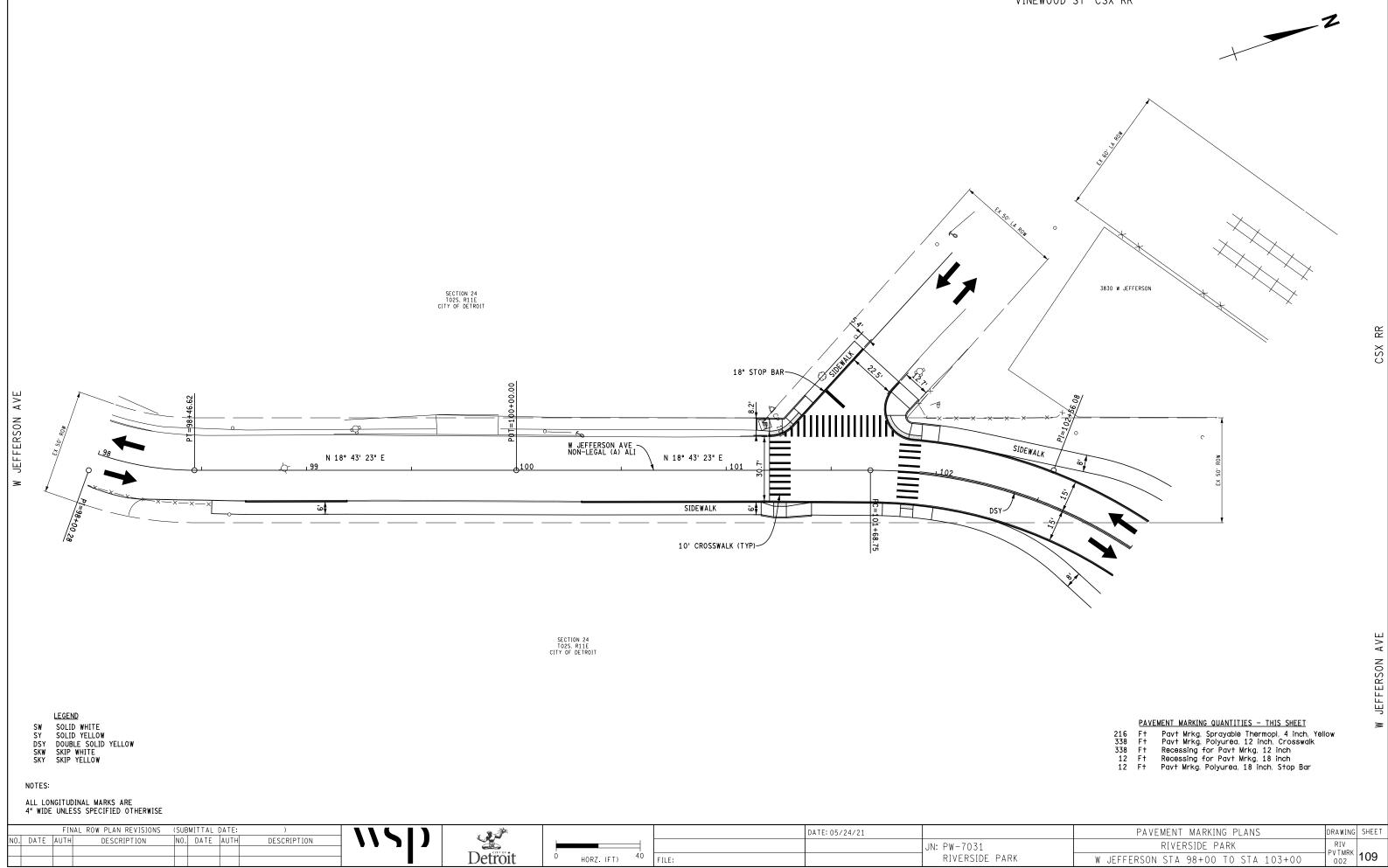
"TRACKS", D, "NO", D,

Table of distances between letter and object lefts

					-			
-0	A 3.07	U 2.57	T 2.39	 1.18	O 2.81	N 2.02	3.78	
2	A 2.05	l 0.78	L 1.60	R 1.71	O 1.79	A 2.04	D 1.35	5.48
0	R 1.72	A 2.04	C 1.72	K 1.75	S 1.35	6.91		
.81	0 1 1.41	10.3	9					
59	U 1.81	R 1.82	N 1.34	8.72				

	SIGNING DETAILS	DRAWING	SHEET
		RIV SIGN	407
		006	107





Ò

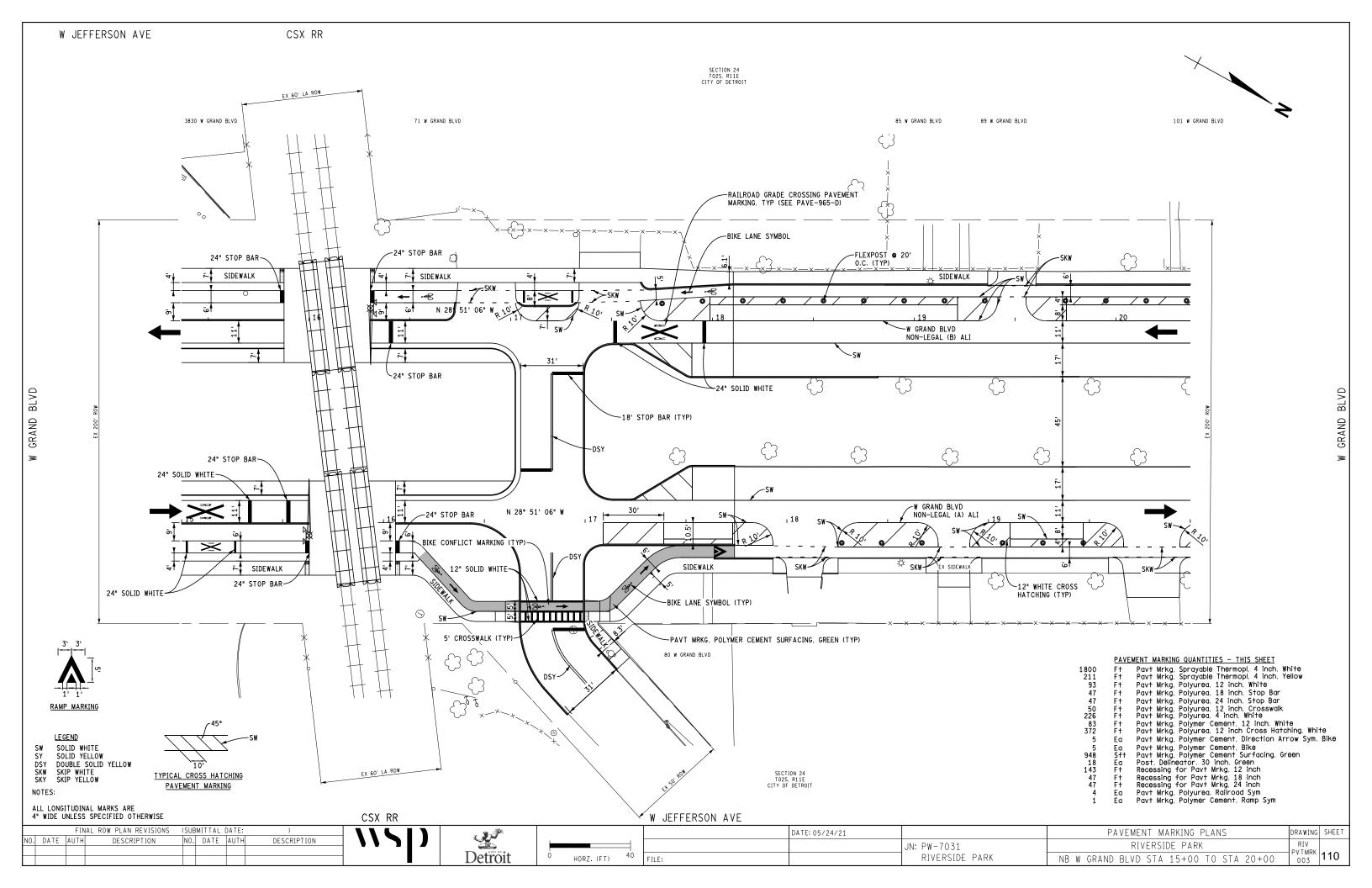
40

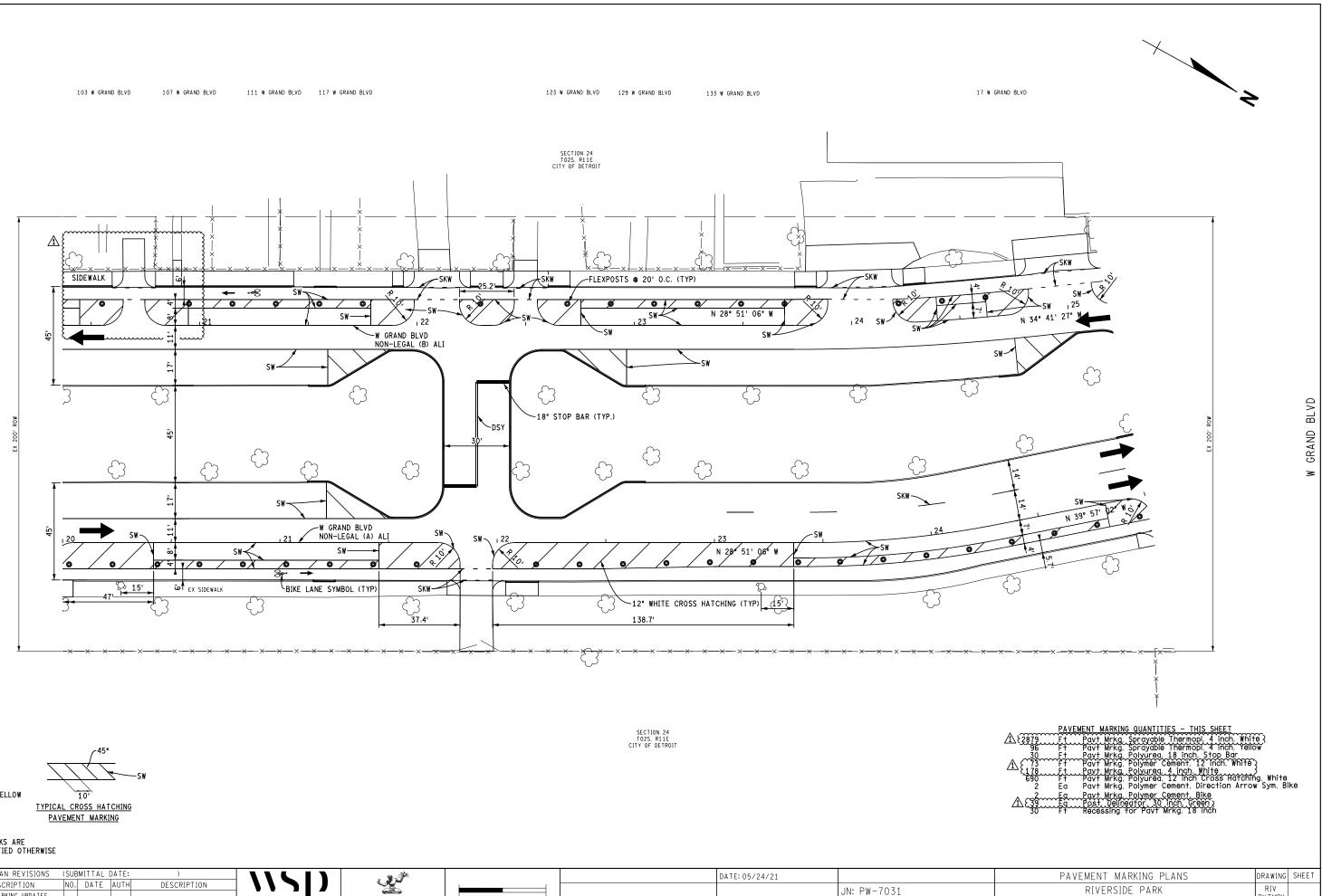
FILE:

HORZ. (FT)

	PAVE	<u>EMENT MARKING QUANTITIES - THIS SHEET</u>
216	F†	Pavt Mrka, Sprayable Thermopl, 4 inch, Yellow
338	F†	Pavt Mrkg, Polyurea, 12 inch, Crosswalk
338	F†	Recessing for Pavt Mrkg, 12 inch
12	F†	Recessing for Pavt Mrkg, 18 inch
12	F†	Pavt Mrkg, Polyurea, 18 inch, Stop Bar

PAVEMENT MARKING PLANS	DRAWING	SHEET		
RIVERSIDE PARK				
W JEFFERSON STA 98+00 TO STA 103+00	002	109		





PVTMRK 004 111

NB W GRAND BLVD STA 20+00 TO STA 25+00

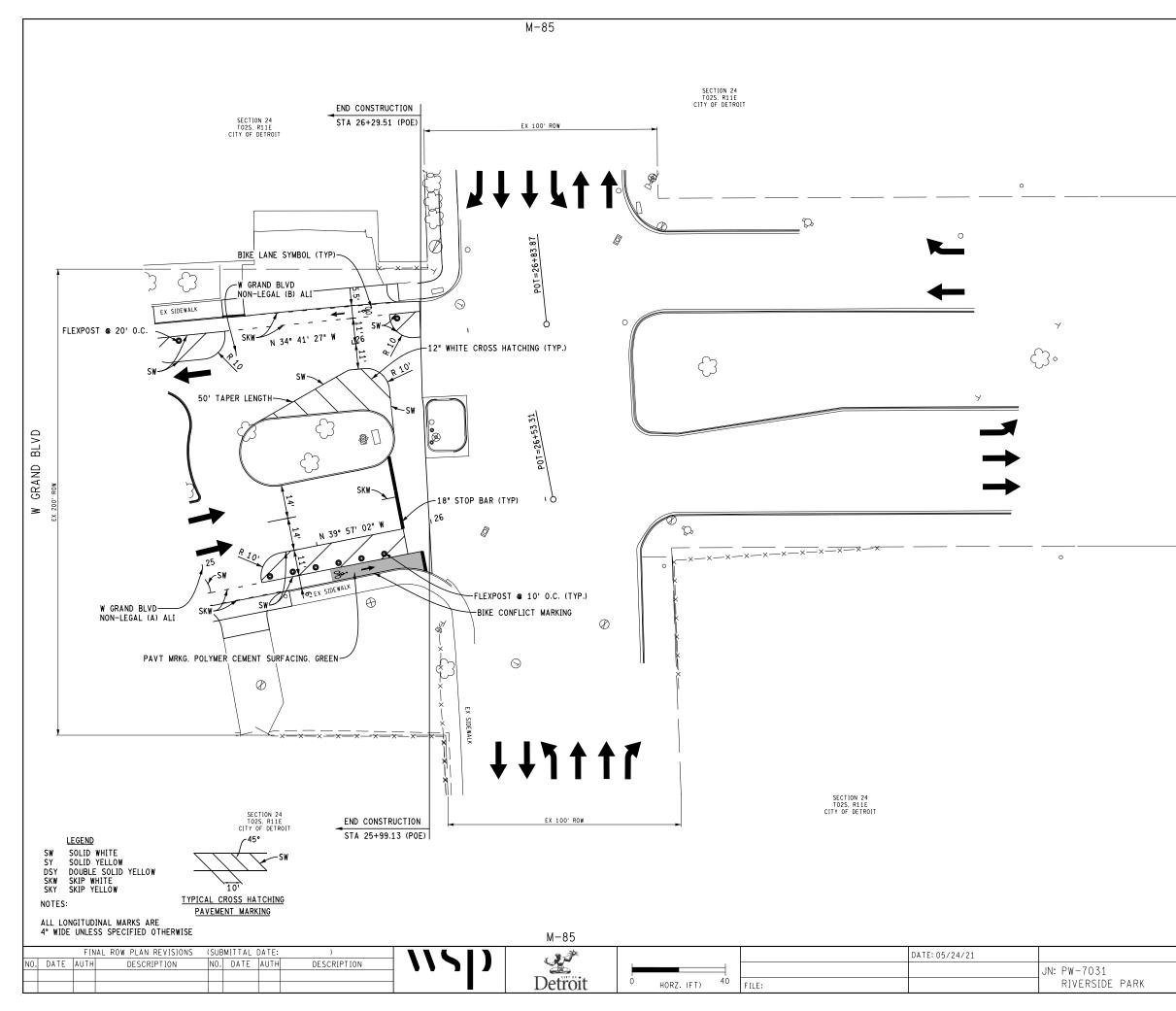


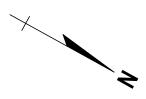
NOTES:

	(^{45°}
YELLOW	10'
	TYPICAL CROSS HATCHING
	PAVEMENT MARKING

ALL LONGITUDINAL MARKS ARE 4" WIDE UNLESS SPECIFIED OTHERWISE

_ L							
	FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	. 🔊			DATE: 05/24/21	
	NO. DATE AUTH DESCRIPTION NO. DATE AUTH	DESCRIPTION					
	1 06/04/21 PAVEMENT MARKING UPDATES						JN: PW-7031
- 1			Detroit	U HORZ. (FT) 40	FILE:		RIVERSIDE PARK





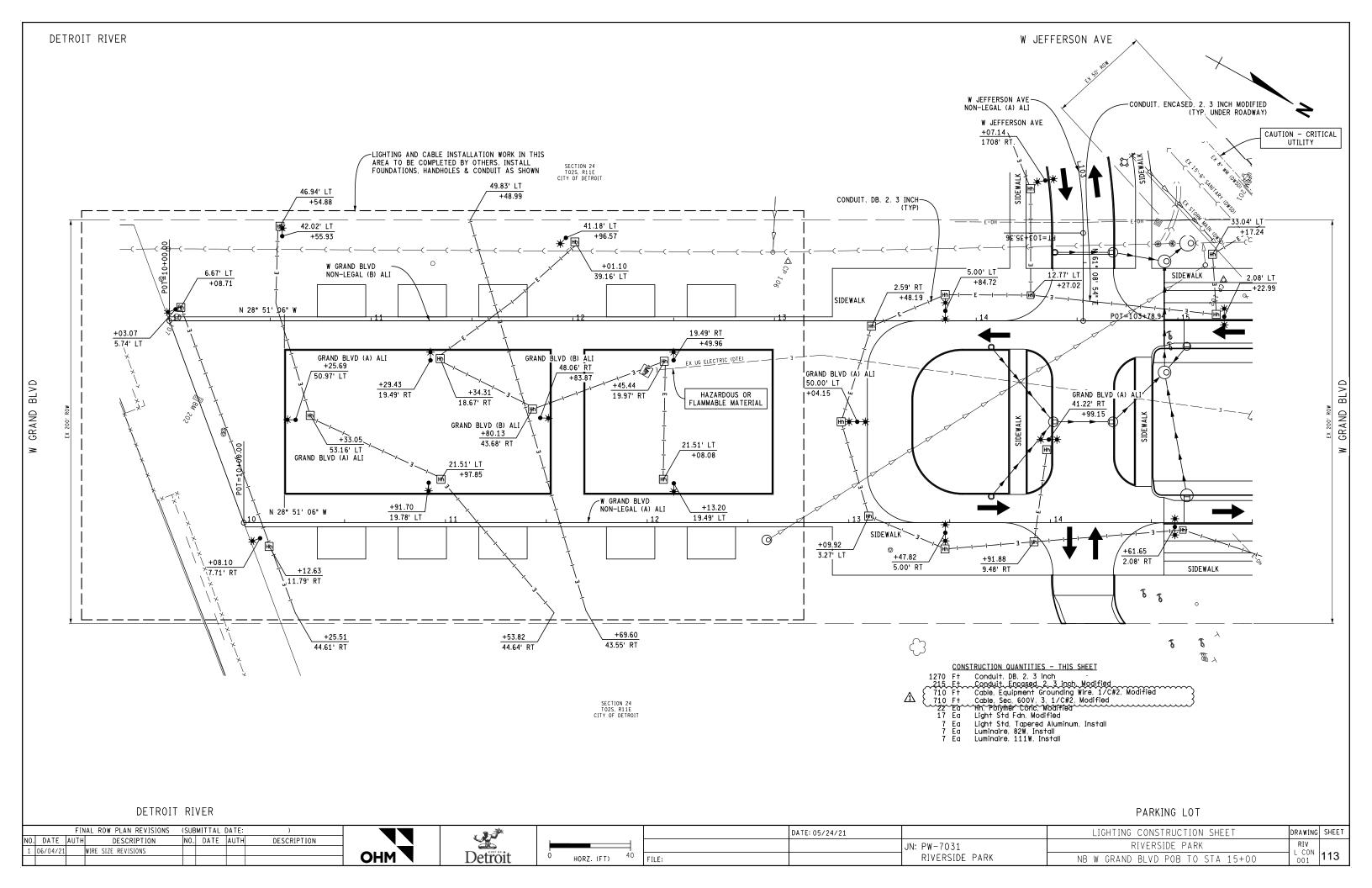
GRAND BLVD

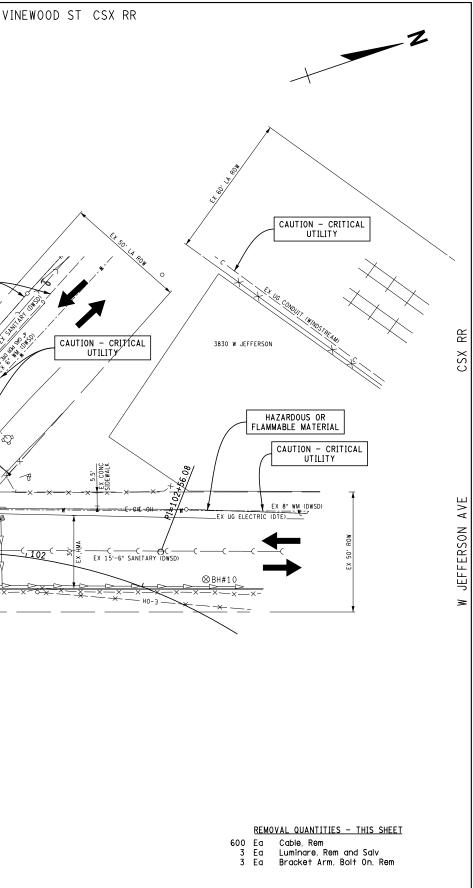
М

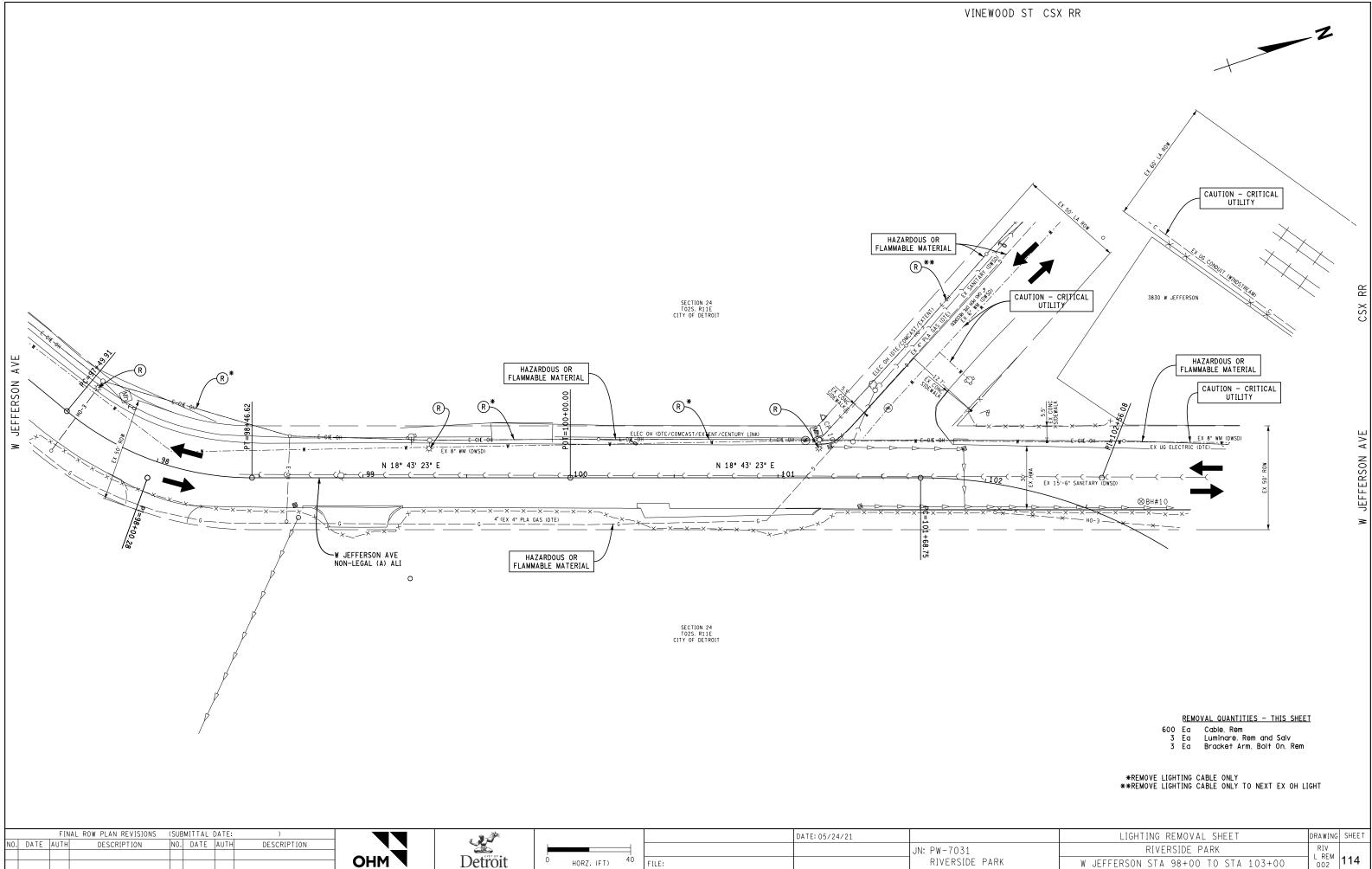
EX 150' ROW

	PAVE	<u>MENT MARKING QUANTITIES - THIS SHEET</u>
352	F†	Pavt Mrkg, Sprayable Thermopl, 4 inch, White
41	F†	Pavt Mrkg, Polyurea, 18 inch, Stop Bar
175	F†	Pavt Mrkg, Polyurea, 12 inch Cross Hatching, White
2	Εa	Pavt Mrkg, Polymer Cement, Direction Arrow Sym, Bike
2	Εa	Pavt Mrkg, Polymer Cement, Bike
219	Sft	Pavt Mrkg, Polymer Cement Surfacing, Green
8	Εa	Post, Delineator, 30 inch, Green
41	F†	Recessing for Pavt Mrkg, 18 inch
61	F†	Pavt Mrkg, Polymer Cement, 12 inch, White

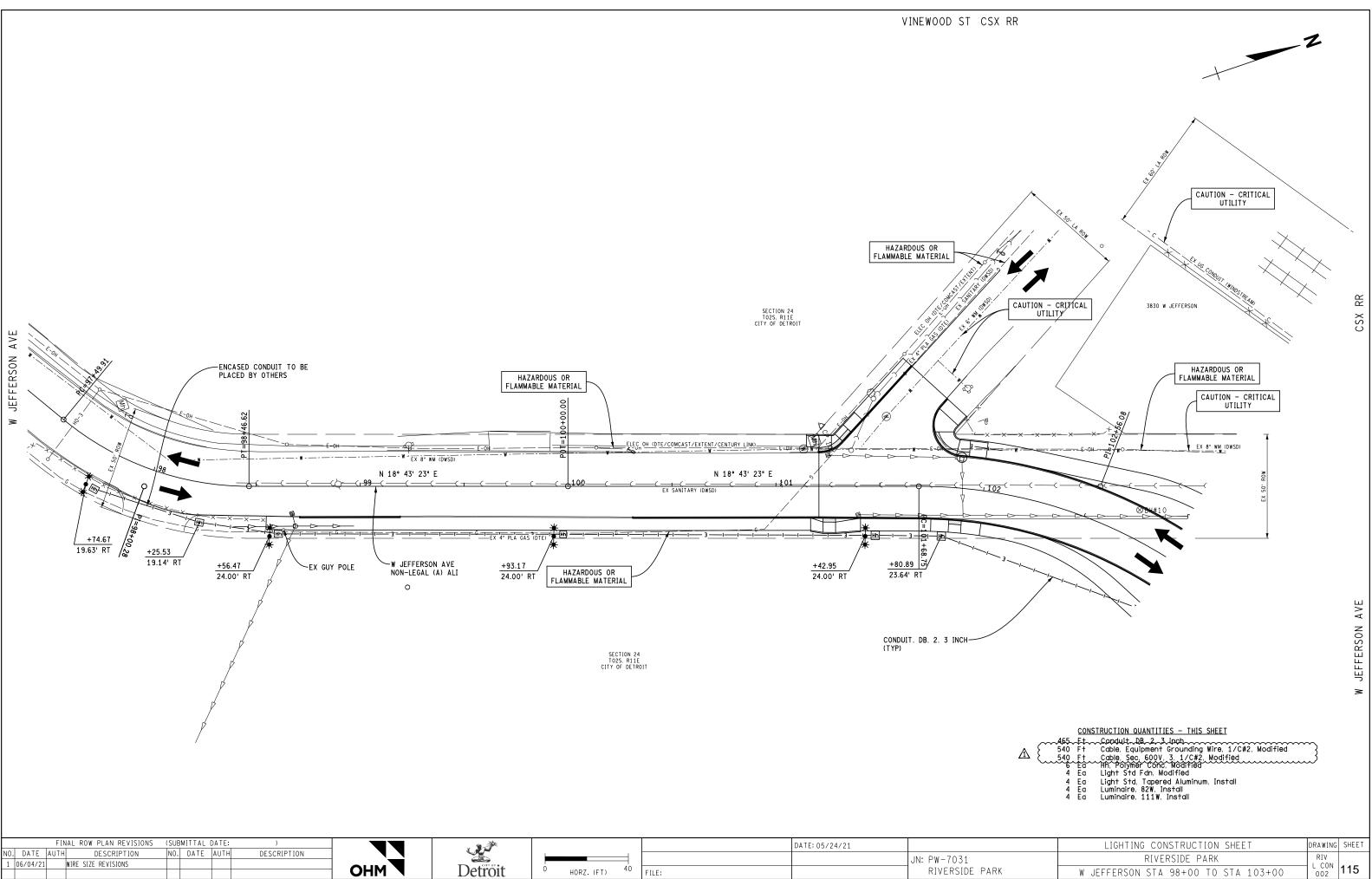
PAVEMENT MARKING PLANS	DRAWING	SHEET		
RIVERSIDE PARK				
NB W GRAND BLVD STA 25+00 TO POE	005	112		







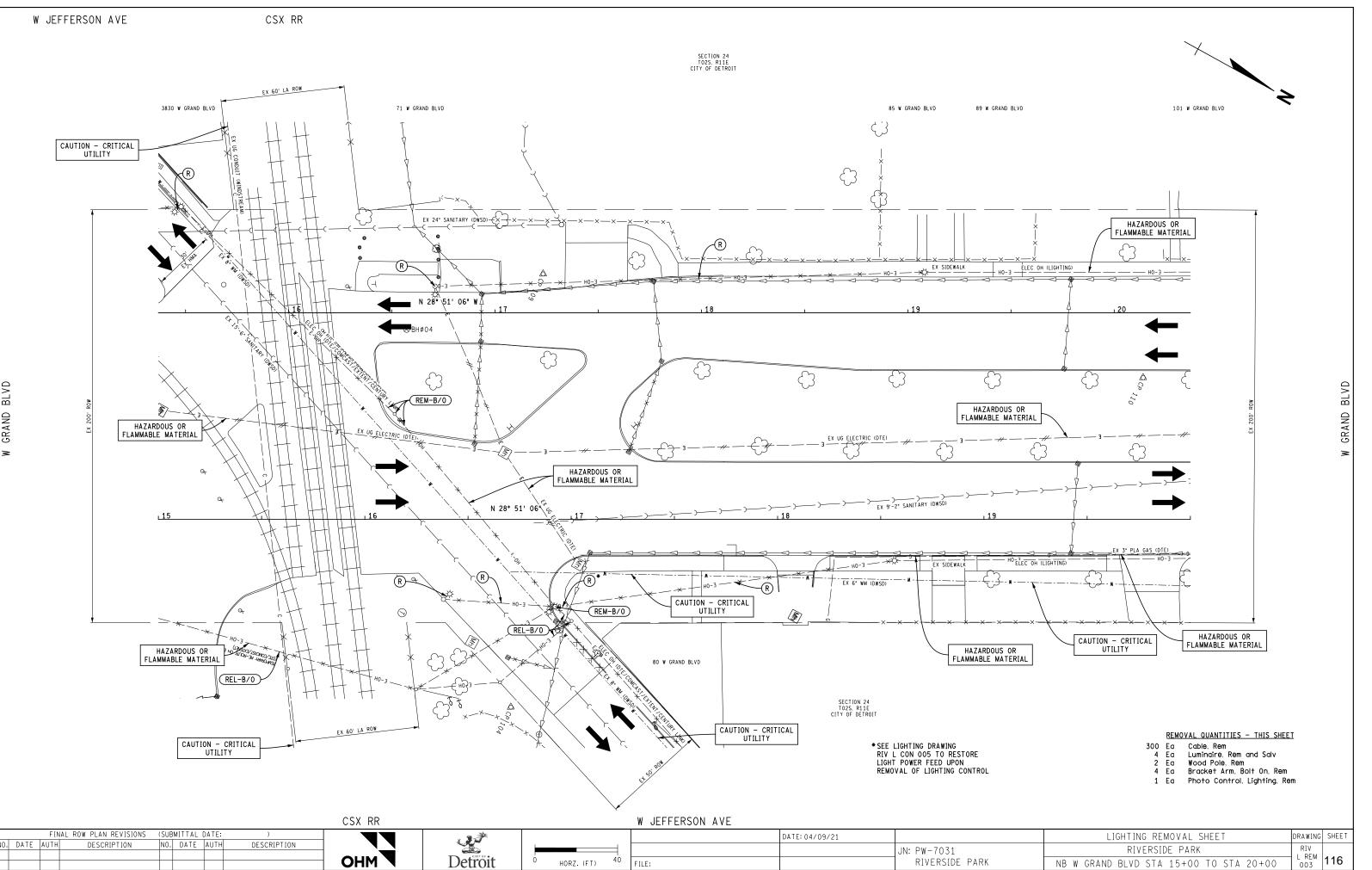
LIGHTING REMOVAL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L REM 2	
W JEFFERSON STA 98+00 TO STA 103+00	002	114

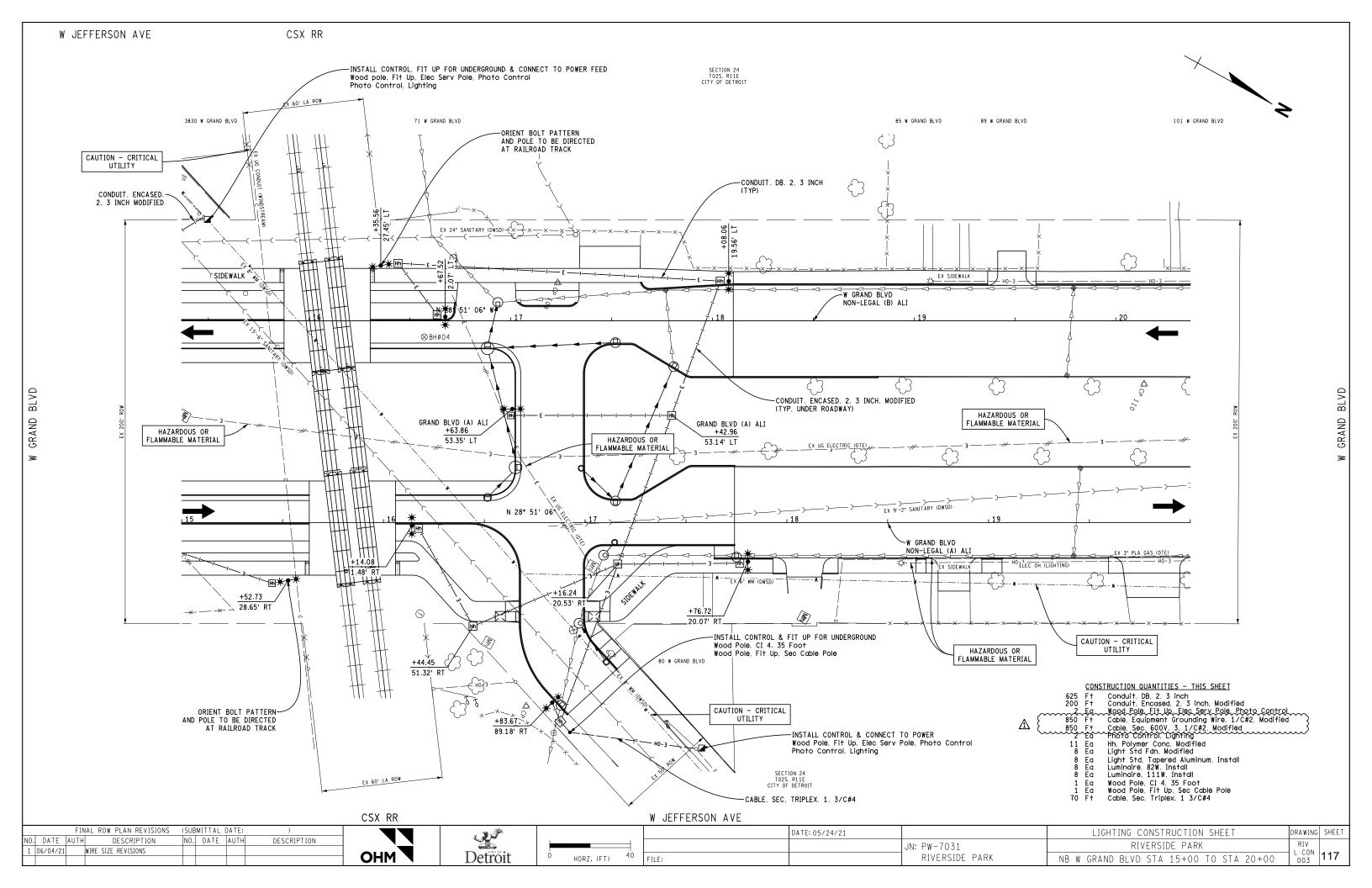


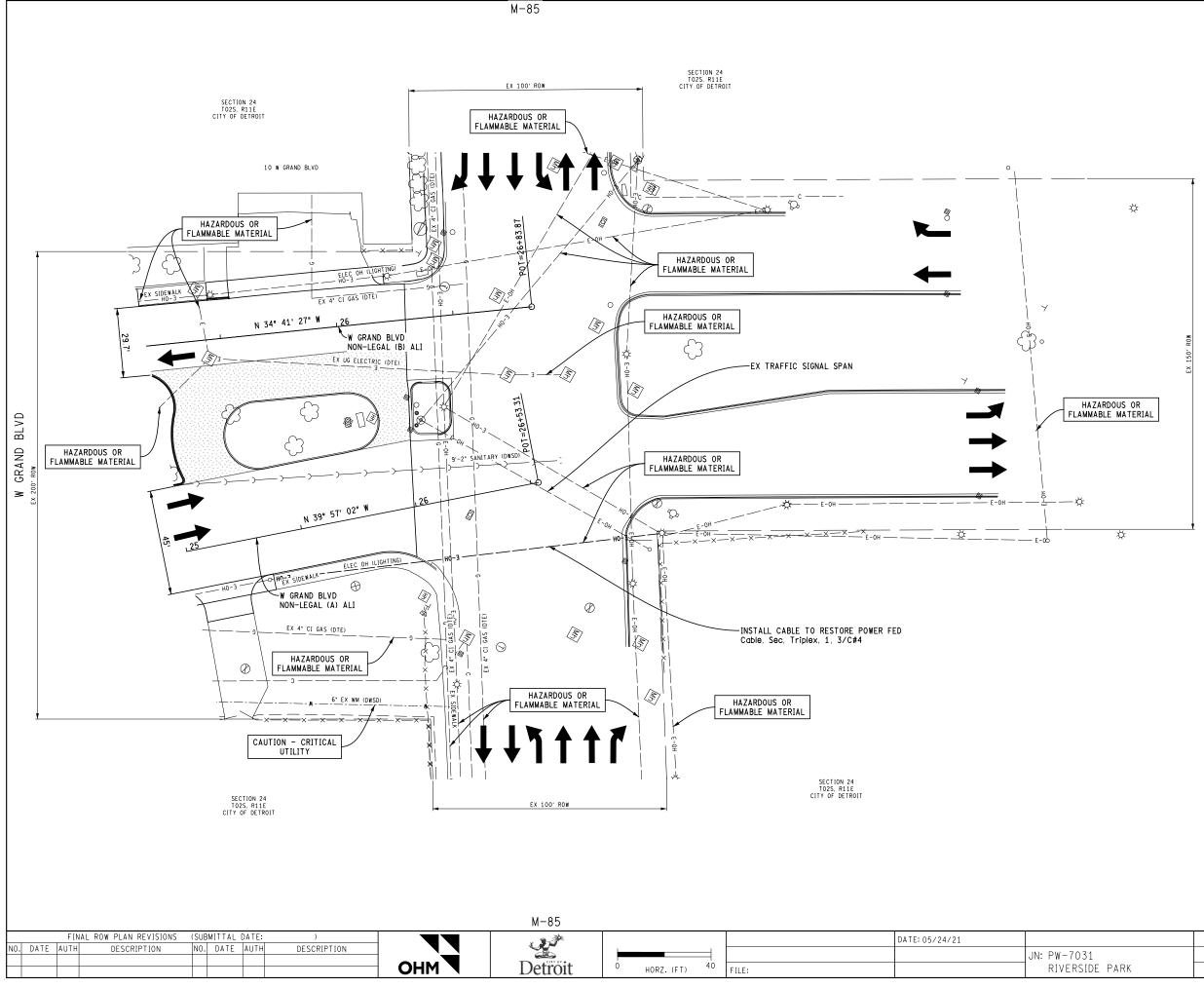
BLVD

GRAND

≥







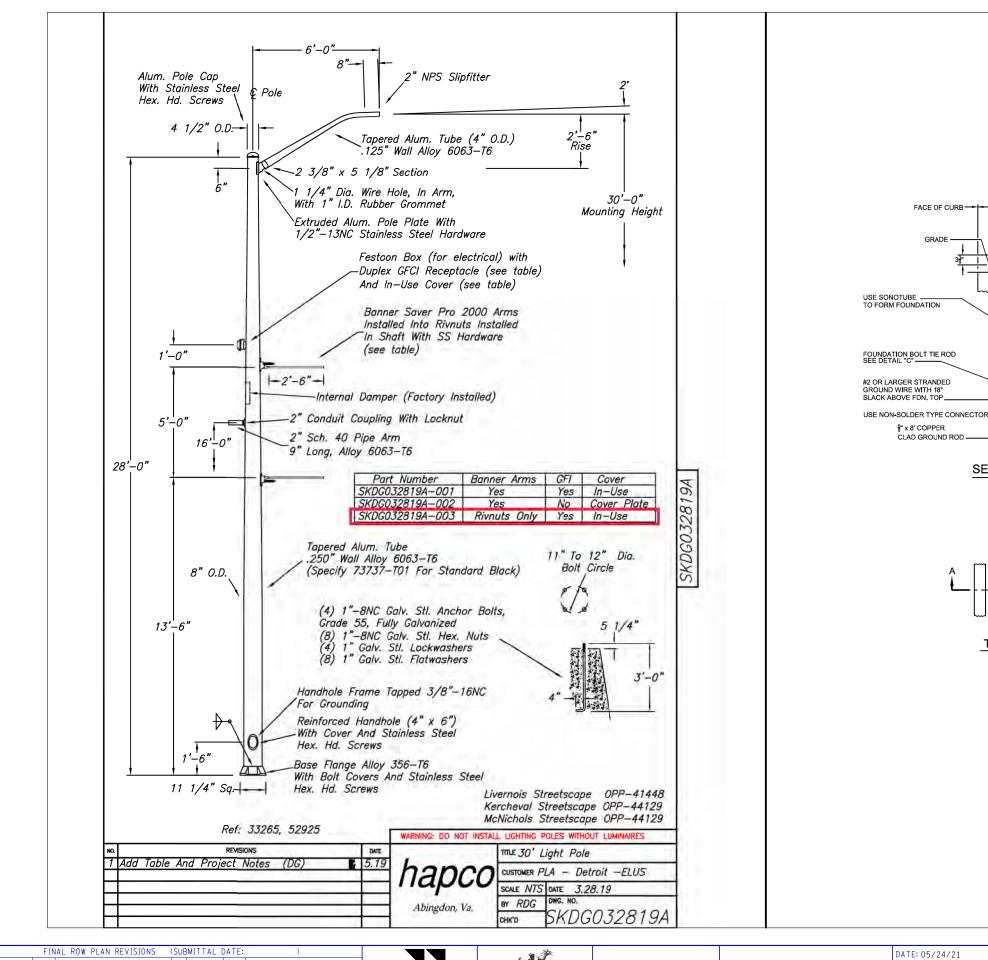


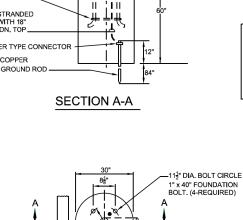
GRAND BLVD

Μ

CONSTRUCTION QUANTITIES - THIS SHEET 175 F† Cable, Sec, Triplex, 1, 3/C#4

LIGHTING CONSTRUCTION SHEET	DRAWING	SHEET				
RIVERSIDE PARK						
NB W GRAND BLVD STA 25+00 TO POE	L CON 005	118				





AS PER PLANS

11 1 1 1 1

11111

11 1 11

ii liii

11 11

ii liii

-FOUNDATION CAP

FDN.

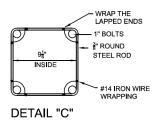
3" ABOVE GRADE

TOP VIEW

	FINAL ROW PLAN REVISIONS	(SUBMITTAL DATE:)	, 8			DATE: 05/24/21	
NC	D. DATE AUTH DESCRIPTION	NO. DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031
				Detroit	NO SCALL			
				Detroit		FILE:		RIVERSIDE PARK

ANCHOR BASE FOUNDATION PLAN NOT TO SCALE



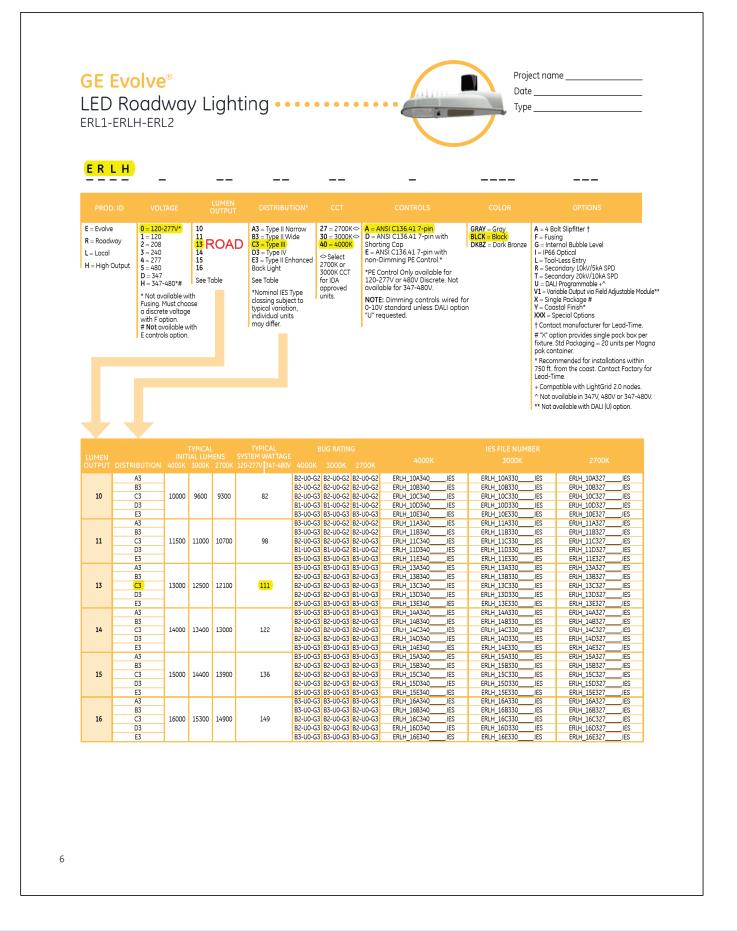


24" RADIUS PLASTIC BEND NO. & SIZE OF CONDUIT AS SHOWN ON PLANS

ANCHOR BOLT TIE ROD

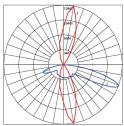
ALL FOUNDATION CAPS SHALL HAVE A SMOOTH FINISH WITH BEVELED EDGES & SHALL BE SHAPED TO ALLOW COMPLETE DRAINAGE OF WATER. ANCHOR BOLT PROJECTIONS ABOVE CAP SHALL BE CLEANED OF ALL CONCRETE & FULLY USABLE THEIR FULL LENGTH.

LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET	
	001	119

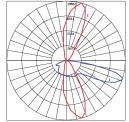


Photometrics: Evolve[®] LED Streetlight (ERLH) 1.1 ERLH Type II Narrow .5 (13A340) 13.000 Lumens 4000K ERLH 13A340 .IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type II Wide 5 (13B340) 13,000 Lumens 4000K ERLH_13B340__.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type III (13C340)13,000 Lumens 4000K ERLH_13C340__.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type IV 13D340 13,000 Lumens 4000K ERLH_13D340__.IES Grid Distance in Units of Mounting Height at 30' — Vertical plane through horizontal angle of Max. Cd at 55° Initial Footcandle Values at Grade ERLH Type II Enhanced Back Light 13E340 13,000 Lumens 4000K ERLH_13E340___.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

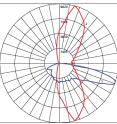
		FIN	IAL ROW PLAN REVISIONS	(SUE	BMITTAL DATE:)				DATE: 05/24/21	
N0.	DATE	AUTH	DESCRIPTION	N0.	. DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031
							Detroit	NO JUALL	FILE		RIVERSIDE PARK
							Denon		1100.		



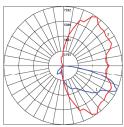
- Vertical plane through horizontal angle of Max. Cd at 80° - Horizontal cone through vertical angle of Max. Cd at 69°



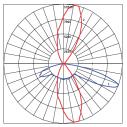
- Vertical plane through horizontal angle of Max. Cd at 75° - Horizontal cone through vertical angle of Max. Cd at 72°



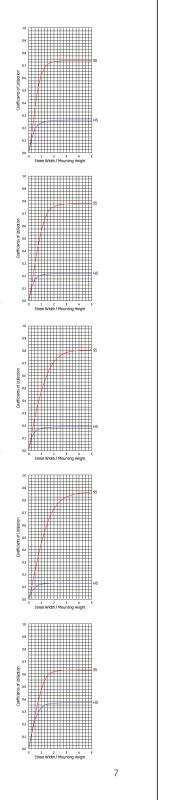
- Vertical plane through horizontal angle of Max. Cd at 75° - Horizontal cone through vertical angle of Max. Cd at 71°



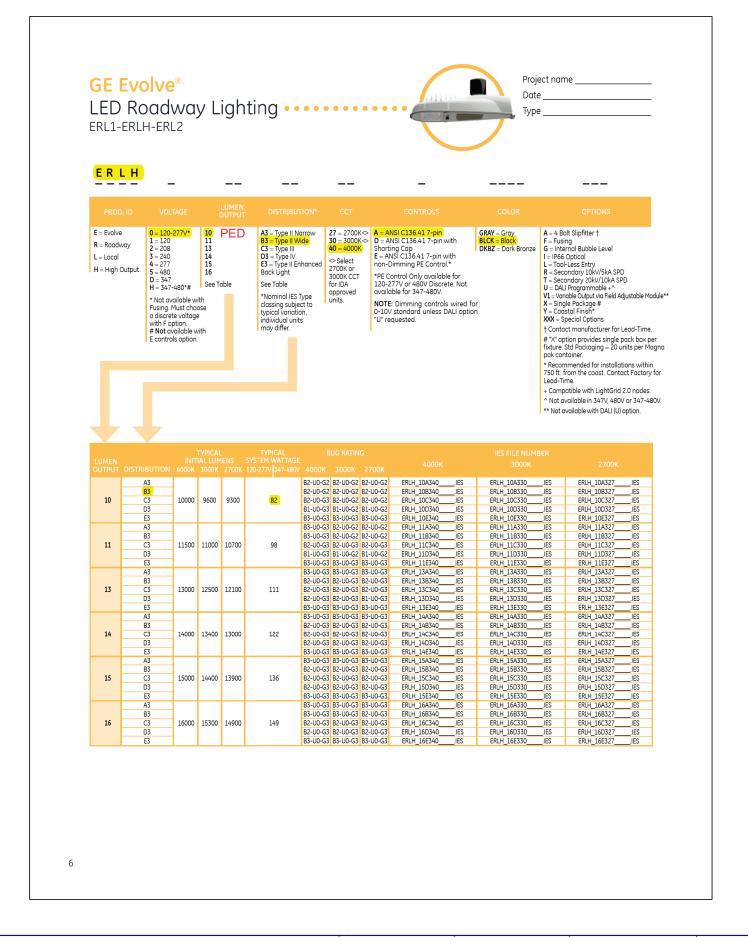
Horizontal cone through vertical angle of Max. Cd at 65°



- Vertical plane through horizontal angle of Max. Cd at 75° - Horizontal cone through vertical angle of Max. Cd at 69°

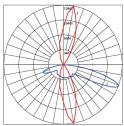


LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET	
	002	120

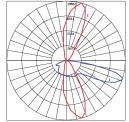


Photometrics: Evolve[®] LED Streetlight (ERLH) 1 ERLH Type II Narrow .5 (13A340) 13.000 Lumens 4000K ERLH 13A340 .IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type II Wide 5 (13B340) 13,000 Lumens 4000K ERLH_13B340__.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type III (13C340)13,000 Lumens 4000K ERLH_13C340__.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade ERLH Type IV 13D340 13,000 Lumens 4000K ERLH_13D340__.IES Initial Footcandle Values at Grade ERLH Type II Enhanced Back Light 13E340 13,000 Lumens 4000K ERLH_13E340___.IES Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

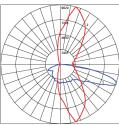
	FI	NAL ROW PLAN REVISIONS	(SUB	BMITTAL DATE:)					DATE: 05/24/21	
0.	DATE AUTH	DESCRIPTION	N0.	DATE AUTH	DESCRIPTION			NO SCALE			INP = 7031
								NU SCALE			
						ОНМ 🥄	Detroit		FILE:		RIVERSIDE PARK



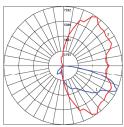
Vertical plane through horizontal angle of Max. Cd at 80°
 Horizontal cone through vertical angle of Max. Cd at 69°



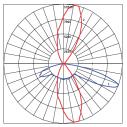
Vertical plane through horizontal angle of Max. Cd at 75°
 Horizontal cone through vertical angle of Max. Cd at 72°



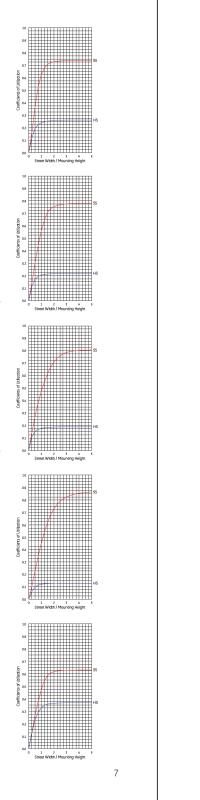
Vertical plane through horizontal angle of Max. Cd at 75°
 Horizontal cone through vertical angle of Max. Cd at 71°



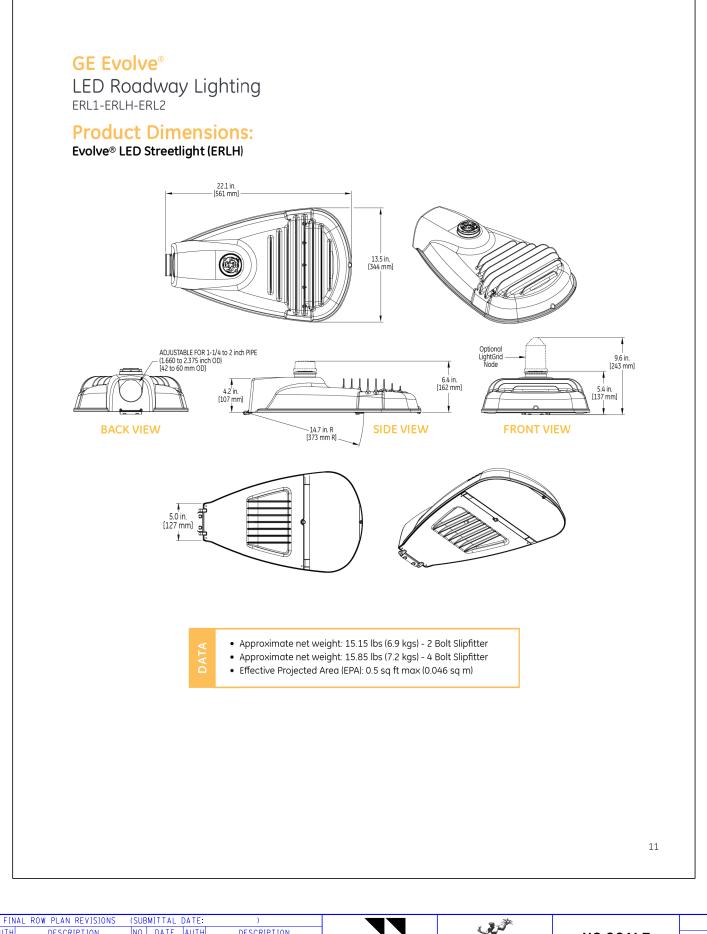
Grid Distance in Units of Mounting Height at 30' – Vertical plane through horizontal angle of Max. Cd at 55° Initial Footcandle Values at Grade – Horizontal cone through vertical angle of Max. Cd at 65°



Vertical plane through horizontal angle of Max. Cd at 75°
 Horizontal cone through vertical angle of Max. Cd at 69°



LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET	
	003	121



NO. DATE

	FINAL	. ROW PLAN REVISIONS	(SUE	BMITTAL	DATE:)					DATE: 05/24/21	
ΓE	AUTH	DESCRIPTION	N0.	DATE	AUTH	DESCRIPTION			NO SCALE			JN: PW-7031
							ОНМ	Detroit	NO SCALL			RIVERSIDE PARK
								Detroit		FILE:		NIVENSIDE LANK

LIGHTING DETAIL SHEET DRAWING	SHEET
RIVERSIDE PARK RIV L DET 004	122

SIM*pull* THHN® Aluminum THHN (III) Wire & Cable with Alumaflex® Brand **Conductors**

600 Volt Alumaflex[®] Brand Aluminum Alloy (AA-8176) Conductor. Thermoplastic Insulation/SIM Nylon Sheath, Heat, Moisture, Gasoline and Oil Sunlight Resistant. Also Rated THWN-2. SIM Technology[®] for Easier Pulling

APPLICATIONS

Southwire SIMpull THHN® Aluminum THHN Wire & Cable with Alumaflex® Brand conductors are primarily used in conduit and cable trays for services, feeders and branch circuits in commercial or industrial applications as specified in the 2011 National Electrical Code. When used as Type THHN or T90 Nylon conductor is suitable for use in dry locations at temperatures not to exceed 90 °C. When used as Type THWN-2 or TWN75, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90 °C or not to exceed 75 °C when exposed to oil or coolant. Voltage for all applications is 600 volts. This cable should be installed without application of pulling lubricant.

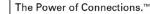
STANDARDS & REFERENCES

Southwire Aluminum SIMpull THHN® conductors comply with the following:

- ASTM B-800 and B-801
- UL Standard 83
- CSA
- Federal Specification A-A-59544
- VW-1 Sizes 4 through 1 AWG
- CT Sizes 1/0 AWG and larger Sizes Rated for CT use
- FT1 Sizes 4 AWG through 750 kcmil
- T90 Nylon Sizes 4 AWG through 750 kcmil
- TWN 75 Sizes 8 AWG through 750 kcmil
- National Electrical Code, NFPA 70, 2011 Edition
- NEMA WC-70 Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire SIMpull THHN® conductors are AlumaFlex® Brand AA-8000 series aluminum alloy, compact stranded. Insulated with a tough heat and moisture-resistant polyvinyl chloride (PVC), over which a SIM (SLIKQWIK® Infused Membrane) nylon (polyamide) or UL-listed equal jacket is applied. Conductor sizes 1/0 AWG and larger are listed and marked sunlight resistant in colors. Available in black, white, red, blue,



©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30119, USA



	ctor	Insulation Thickness	Jacket Thickness	Nominal	Net Wt. Per	Allov	wable Ampa	icities+	Standard
NG or kcm	No. of strands	(mils)	(mils)	O.D. (mils)	1000' (lbs.)	60 <i>°</i> C	75 ℃	90 <i>°</i> C	Package
8	7	30	5	204	27	35	40	45	B
6	7	30	5	239	38	40	50	60	С
4	7	40	6	305	62	55	65	75	BCD
2	7	40	6	360	91	75	90	100	BC
1	18	50	7	413	117	85	100	115	BC
/0	18	50	7	450	141	100	120	135	BCD
/0	18	50	7	490	172	115	135	150	BCD
/0	18	50	7	537	210	130	155	175	BCD
/0	18	50	7	589	257	150	180	205	BCD
50	22	60	8	656	311	170	205	230	ABC
00	35	60	8	706	365	190	230	255	BC
50	35	60	8	752	418	210	250	280	BC
00	35	60	8	795	471	225	270	305	BC
00	35	60	8	872	576	260	310	350	BC
00	58	70	9	971	700	285	340	385	BC
00	58	70	9	1035	804	310	375	420	C
50	58	70	9	1066	856	320	385	435	ABC
00	58	70	9	1139	1013	355	425	480	N/A
000	58	70	9	1218	1117	375	445	500	N/A
): 60℃ - Wh minated to ea	nen terminated to equipment for circuits	quipment for c a rated over 10	0 amperes or	00 amperes or marked for con	ess marked ductors large	er than 1 AW	h 1 AWG con G. 90°C - THH	ductors. 75℃ -	A-500' B-2,500' C-1,000'
): 60℃ - Wh ninated to ed urple, gre	en terminated to equipment for circuits and THWN wet or o en, yellow, ora	quipment for c s rated over 10 dry locations fr unge, brown	0 amperes or or ampacity a	00 amperes or marked for con djustment purpo	ess marked ductors large oses using N	for 14 throug er than 1 AW IEC section 3	h 1 AWG con G. 90℃ - THH 810.15.	ductors. 75ºC - IN dry locations	B-2,500' C-1,000' D-5,000'
: 60°C - Whinated to ea urple, gre ubject to a conductors : ode. Sizes (loy, insulate	en terminated to equipment for circuits and THWN wet or c	quipment for c s rated over 10 dry locations for mge, brown r quantity. PECIFICATIO Type THIN shall be rated and moisture	0 amperes or or ampacity ad n, and gray Ns: and THWN-2 VW-1, larger resistant PVC	00 amperes or l marked for con djustment purpo Also avail , suitable for c sizes shall be , jacketed with	ess marked ductors large uses using N able in str able in str able of of C n abrasion, i	for 14 throug r than 1 AW EC section 3 riped confi 600 volts, a T Use. Cond	h 1 AWG con G. 90°C - THH 110.15. igurations. s specified in uctors shall b	ductors. 75°C - IN dry locations Some color Some color the National E e AlumaFlex al	B-2,500' C-1,000' D-5,000' s are Electrical luminum

FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	₩			DATE: 05/24/21		LIGHTING DETAIL SHEET	DRAWING SHEET
NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION		NO SCALE			JN: PW-7031	RIVERSIDE PARK	RIV
	OHM Detroit		FILE:		RIVERSIDE PARK		^{L DET} 123

	ctor	Insulation Thickness	Jacket Thickness	Nominal	Net Wt. Per	Allov	vable Ampa	icities+	Standard
Size (AWG or kcm	No. of strands	(mils)	(mils)	O.D. (mils)	1000' (lbs.)	60 <i>°</i> C	75 ℃	90℃	Package
8	7	30	5	204	27	35	40	45	B
6	7	30	5	239	38	40	50	60	С
4	7	40	6	305	62	55	65	75	BCD
2	7	40	6	360	91	75	90	100	BC
1	18	50	7	413	117	85	100	115	BC
1/0	18	50	7	450	141	100	120	135	BCD
2/0	18	50	7	490	172	115	135	150	BCD
3/0	18	50	7	537	210	130	155	175	BCD
4/0	18	50	7	589	257	150	180	205	BCD
250	22	60	8	656	311	170	205	230	ABC
300	35	60	8	706	365	190	230	255	BC
350	35	60	8	752	418	210	250	280	BC
400	35	60	8	795	471	225	270	305	BC
500	35	60	8	872	576	260	310	350	BC
600	58	70	9	971	700	285	340	385	BC
700	58	70	9	1035	804	310	375	420	С
750	58	70	9	1066	856	320	385	435	ABC
900	58	70	9	1139	1013	355	425	480	N/A
1000	58	70	9	1218	1117	375	445	500	N/A
	and THWN wet or	dry locations f	or ampacity ad	djustment purpo	oses using N	EC section 3	10.15.		C-1,000' D-5,000'
subject to e	economic orde	r quantity.							
Conductors Code. Sizes alloy, insulate	DED SAMPLE SF shall be UL-listed 3 through 1 AWG and ad with high-heat a ent as manufactur	Type THHN shall be rated and moisture	and THWN-2 VW-1, larger resistant PVC	sizes shall be , jacketed with	rated for C abrasion, i	T Use. Cond	uctors shall b	e AlumaFlex a	luminum

Size (AWG	No. of strands	Stock Numbers
or komil)		
8	7	Stock #: N/A
6	7	Stock #: BK:563768, RD:573834, BE:573835, WE:578332, GN:566358
4	7	Stock #: BK:563769, RD:573544, BE:573833, WE:577628, GN:562211
		Stock #: BK:563770, RD:573541, BE:573542, WE:563493,
2	7	BN:587026, OE:587027, YW:587028, GY:578329, GN:562745
		Stock #: BK:563771, RD:583155, BE:583156, WE:578328,
1	18	BN:587023, OE:587024, YW:587025, GY:578327, GN:562746
		Stock #: BK:562747, RD:562748, BE:562749, WE:562750,
1/0	18	BN:562753, OE:562754, YW:562752, GY:562755, GN:562756, PE:573380
- /-		Stock #: BK:562212, RD:562214, BE:562621, WE:562213,
2/0	18	BN:562758, OE:562759, YW:562757, GY:562760, GN:562761, PE:573370
- /-		Stock #: BK:562663, RD:562665, BE:562666, WE:562664,
3/0	18	BN:562763, OE:562764, YW:562762, GY:562765, GN:562766, PE:573371
		Stock #: BK:562671, RD:562673, BE:562674, WE:562672,
4/0	18	BN:561805, OE:561806, YW:561807, GY:562767, GN:562768, PE:573372
		Stock #: BK:560444, RD:562626, BE:562627, WE:562625,
250	22	BN:561863, OE:561864, YW:561865, GY:561866, GN:561867, PE:573373
		Stock #: BK:562667, RD:562669, BE:562670, WE:562668,
300	35	BN:562771, OE:562772, YW:562770, GY:562773, GN:562774, PE:573374
050	0.5	Stock #: BK:560443, RD:562623, BE:562624, WE:562622,
350	35	BN:561858, OE:561859, YW:561861, GY:561862, GN:562775, PE:573375
400	05	Stock #: BK:562677, RD:562776, BE:562778, WE:562779,
400	35	BN:562781, OE:562782, YW:562780, GY:562783, GN:562699, PE:573376
500	05	Stock #: BK:560442, RD:562696, BE:562697, WE:562698,
500	35	BN:561853, OE:561854, YW:561855, GY:561856, GN:561857, PE:573377
600	FO	Stock #: BK:560441, RD:562630, BE:562631, WE:562628,
600	58	BN:561847, OE:561848, YW:561849, GY:561850, GN:561851, PE:573379 Stock #: BK:562689, RD:562690, BE:562691,
700	58	
700	56	WE:562692, BN:561843, OE:561844, YW:561846, GY:562693 Stock #: BK:562632, RD:562634, BE:562635, WE:562633,
750	58	
750	50	BN:561838, OE:561839, YW:561840, GY:561841, GN:561842, PE:573481 Stock #: BK:562679, RD:562681, BE:562682, WE:562683, BN:561782, OE:56178
900	58	YW:561785, GY:561786, GN:562684
1000	58	Stock #: BK:562680, BN:564280, OE:564281, YW:564282, GY:564283
1000	50	
	BK-Black	Color Abbreviations RD-Red BE-Blue WE-White BN-Brown OE-Orange YW-Yellow GY-Grey GN-Green



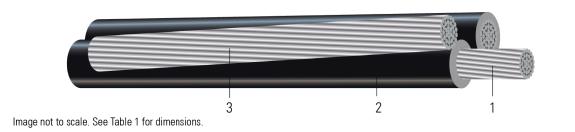
	FIN	AL ROW PLAN REVISIONS	(SUE			18.3			DATE: 05/24/21	
NO. DATE	AUTH	DESCRIPTION	N0.	. DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031
						Detroit		FILE:		RIVERSIDE PARK

LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV	124

Stock # : 104729

SPEC 83227

Triplex XLPE Service Drop. AAC Neutral - Messenger Aluminum Conductors With Crosslinked Polyethylene Insulation.



CONSTRUCTION:

- 1. Conductor: Conductors are stranded, compressed 1350-H19 aluminum
- 2. Insulation: Cross Linked Polyethylene (XLPE)
- 3. Messenger: AAC Neutral

APPLICATIONS AND FEATURES:

Used to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures 90°C for crosslinked polyethylene (XLP) insulated conductors.

SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B901 Standard Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction. (The number of strands for both phase and neutral may differ)
- ICEA S-76-474 Standard for Neutral-Supported Power Cable Assemblies with Weather-Resistant Extruded Insulation Rated 600V



Table 1 – Weights and Measurements

Stock # : 104729

Stock Number	Code Word	Phase Cond. Size	Phase Strand	Dia. Over Phase Conductor	Phase Insul. Thickness	Dia. Over Phase Insulation	Neutral Cond. Size	Approx. OD	Approx. Weight
		AWG/Kcmil	No.	inch	mil	inch	AWG/Kcmil	inch	lb/1000ft
104729	Oyster	4	7	0.225	45	0.315	4	0.68	154

All dimensions are nominal and subject to normal manufacturing tolerances

1. The actual number of strands may differ for single input wire per ASTM B901

Table 2 – Electrical and Engineering Data

Stock Number	Code Word	Phase Cond. Size	Neutral Rated Breaking Strength	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	GMR	Allowable Ampacity In Air 90°C
		AWG/Kcmil	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft	Amp
104729	Oyster	4	881	0.4183	0.5363	0.031	0.0068	115

Notes:

1. DC resistances include a 1% length factor for plexing. 2. Inductive reactance assumes the neutral is carrying current.

3. Phase conductors assumed to be reverse lay stranded, compressed construction.

4. Phase spacing assumes cables are touching.

5. Resistances shown are for the phase conductor only.

\$	6. Sizes of AAAC neutrals are not the AAAC size, but are 7. Ampacity based on conductor temperature of 90°; amb Neutral Code Word		d in sun.	\sum
>	Size-Strands	Code Word	OD (inches)	
	#6-7	Peachbell	0.184	$\langle $
(<mark>#4-7</mark>	Rose	<mark>(0232</mark>))
	\sim \wedge \wedge \wedge \wedge \wedge \wedge \wedge		\land \land \land \land \land \land \land \land	\nearrow
)))) 1/0-7))))))))))))))))))))))))))))))))))))))		
	2/0-7	Aster	0.414	
	3/0-19	Primrose	0.470	
	4/0-19	Sunflower	0.528	
	336.4-19	Tulip	0.665	



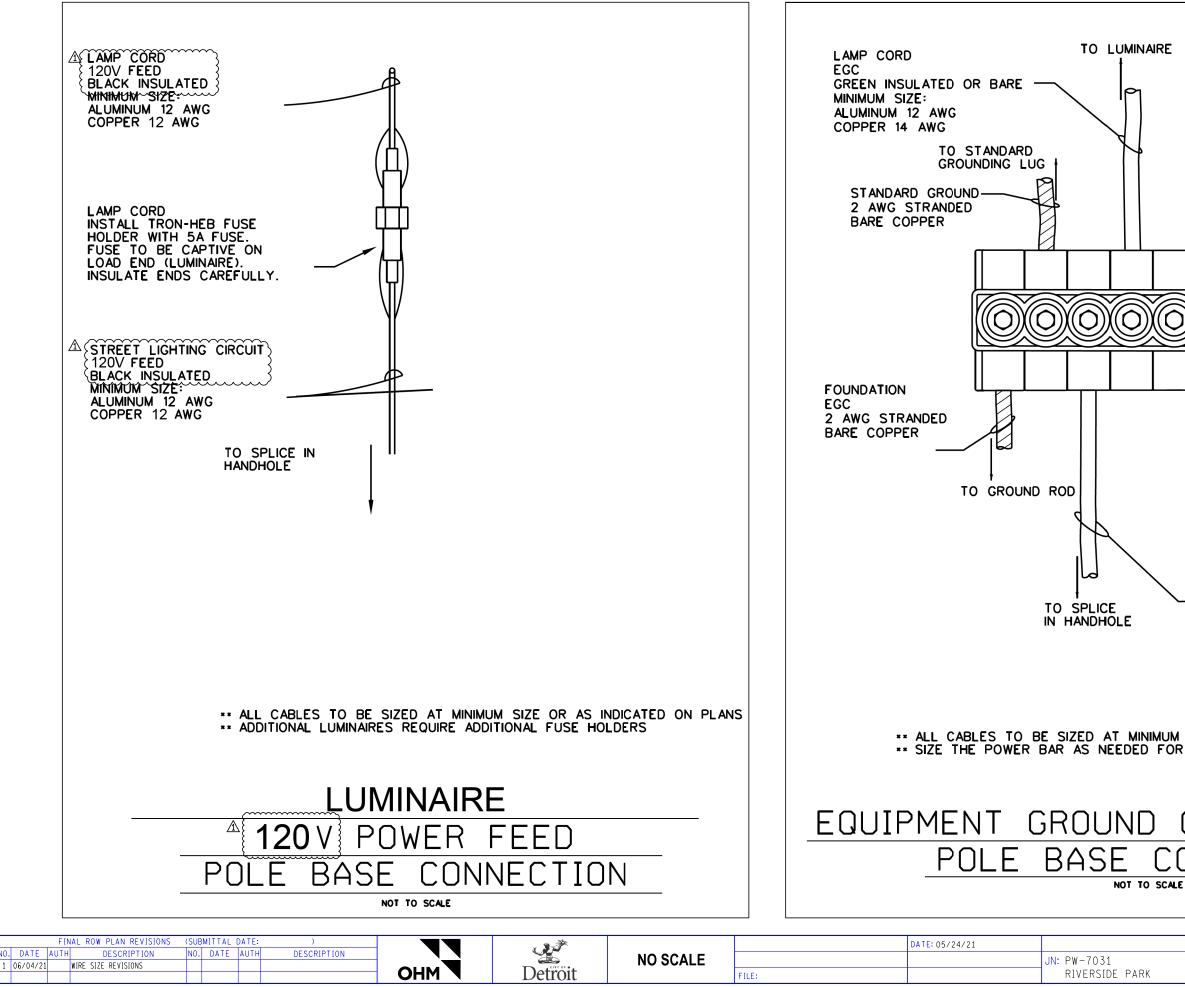
Copyright © 2021 Southwire Company, LLC. All Rights Reserved

	FINAL ROW PLAN REVISIONS	(SUBMITTAL DATE:)	133			DATE: 05/24/21		LIGHTING DETAIL SHEET	DRAWING SHEET
10.	DATE AUTH DESCRIPTION	NU. DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031	RIVERSIDE PARK	
-				Detroit		FILE:		RIVERSIDE PARK		¹²⁵

SPEC 83227



SPEC 83227 DATE: 02/06/2021 19:06 UTC Rev:



E	
PENN-UNION IPB-NA4-xD OR APPROVED EQUIVALEI x - NUMBER OF POSITION IPB-NA4-6D SHOWN	
STREET LIGHTING CIRCUIT EGC GREEN INSULATED OR BARE MINIMUM SIZE: ALUMINUM 2 AWG COPPER 4 AWG	
JM SIZE OR AS INDICATED ON PLANS OR LUMINAIRES AND RECEPTACLE	
CONDUCTOR (EGC) CONNECTION	
LIGHTING DETAIL SHEET RIVERSIDE PARK	DRAWING SHEET RIV L DET 008 126

SIMpull XHHW-2® **Aluminum XHHW Wire & Cable**

1000 Volts / 600 Volts Alumaflex® Brand Aluminum Alloy (AA-8176) Conductor. Cross-linked Polyethylene (XLPE) Insulation. Moisture Resistant High Heat.

APPLICATIONS

Southwire® SIMpull XHHW-2® aluminum conductors are primarily used in conduit or recognized raceways for service and feeder wiring as specified in the National Electrical Code. XHHW-2 conductors may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating for XHHW-2 conductors is 1000 volts. Suitable for use in Health Care Facilities per section 517.160 of the NEC where a dielectric constant of 3.5 or less may be specified. This product is designed to be installed without the application of pulling lubricant.

STANDARDS & REFERENCES

Southwire SIMpull® Aluminum Type XHHW-2 conductors comply with the following:

- ASTM B800 and either B801 or B836 (SIW)
- Listed per UL Standard 44
- NOM-ANCE 90° C
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70
- NEMA WC-70 (ICEA S-95-658) Construction Requirements
- CT Rated Sizes 1/0 AWG and larger
- FT4 Rated Sizes 1/0 AWG and larger
- Gas & Oil Resistant II All Sizes
- Sunlight Resistant Sizes 6 AWG and larger
- RoHS/Reach Compliant

CONSTRUCTION

Southwire Type XHHW-2 aluminum conductors are Alumaflex® brand AA-8000 series aluminum alloy, compact stranded. The insulation is an abrasion, moisture and heat resistant SIMpull® thermoset crosslinked polyethylene. Conductor sizes 6 AWG and larger are listed and marked sunlight resistant in all colors. Available in black, white, red, blue, brown, orange, yellow, purple, gray, and green. Some colors are subject to economic order quantity.

Revised 12/3/2019

The Power of Connections.™



©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and TMTrademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30119, USA

		Insulation	Nominal	Approx. Net Wt.	Allow	able Ampa	cities+	
Size (AWG or kcmil) No	lo. of strands	Thickness (mils)	O.D. (mils)	Per 1000' (lbs.)	60°C	75°C	90°C	Standard Package
8	7	45	227	30	35	40	45	BCD
<mark>6</mark>	7	<mark>45</mark>	<mark>259</mark>	<mark>39</mark>	<mark>40</mark>	<mark>50</mark>	<mark>55</mark>	BCD
4	7	45	303	57	55	65	75	BCD
2	6	45	358	85	75	90	100	BCD
1	8	55	413	108	85	100	115	BC
1/0	10	80	450	180	115	135	150	ABC
2/0	12	55	490	161	115	135	150	ABCD
3/0	16	55	537	198	130	155	175	BCD
4/0	19	55	589	243	150	180	205	ABCD
250	22	55	650	293	170	205	230	BCD
300	35	65	700	346	195	230	260	BC
350	35	65	746	398	210	250	280	BCD
400	35	65	789	449	225	270	305	CD
500	35	65	866	552	260	310	350	ABCDE
600	58	80	973	675	285	340	385	ABD
700	58	80	1037	777	315	375	425	N/A
750	58	80	1068	829	320	385	435	ABCE
900	58	80	1162	979	355	425	480	N/A
1000	58	80	1220	1085	375	445	500	С

RECOMMENDED SAMPLE SPECIFICATIONS:

Conductors shall be UL-listed Type XHHW-2, suitable for operation at 1000 volts or less in wet or dry locations at temperatures not to exceed 90 ºC. Conductors shall be annealed Alumaflex® brand aluminum alloy as manufactured by Southwire Company or approved equal

Revised 12/3/2019

The Power of Connections."

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30119, USA

	FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	× 3 Å		DATE: 05/24/21	LIGHTING DETAIL SHEET	DRAWING SHEET	
N	O. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION		NO SCALE	JN: PW-7031	RIVERSIDE PARK	RIV L DET 407	
Ŀ		Detroit		1	FILE: RIVERSIDE PARK		¹²⁷



Co	nductor	
Size (AWG or kcmil)	No. of strands	Stock Numbers
8	7	Stock #: N/A
<mark>6</mark>	<mark>7</mark>	Stock #: BK:112706, BN:591209, OE:591210, YW:591211, GN:585321
4	7	Stock #: BK:112714, RD:591114, BE:591115, WE:591116, BN:591201, OE:591202, YW:591203, GN:585320
2	7	Stock #: BK:112722, BN:591213, OE:591214, YW:591215, GN:585319
1	18	Stock #: BK:112730, RD:591204, BE:591205, WE:591206, BN:591207, OE:591208, YW:591216, GN:585318, GY:596497
1/0	18	Stock #: BK:112748, RD:591284, BE:591285, WE:591286, BN:585291, OE:585292, YW:585293, GY:585294, GN:585290, PE:596423
2/0	18	Stock #: BK:112755, RD:591288, BE:591289, WE:591290, BN:585296, OE:585297, YW:585298, GY:585300, GN:585295, PE:596422
3/0	18	Stock #: BK:112763, RD:585302, BE:585303, WE:585304, BN:585305, OE:585306, YW:585308, GY:585309, GN:585301, PE:596421
4/0	18	Stock #: BK:112771, RD:585317, BE:585316, WE:585314, BN:585313, OE:585312, YW:585311, GY:585310, GN:567439, PE:592563
250	22	Stock #: BK:278341, RD:576390, BE:576391, WE:576392, BN:576385, OE:576386, YW:576387, GY:576388, GN:567440, PE:592468
300	35	Stock #: BK:278358, RD:576382, BE:576383, WE:576384, BN:576133, OE:576134, YW:576135, GY:576136, GN:576361, PE:593380
350	35	Stock #: BK:278366, RD:576378, BE:576379, WE:576380, BN:576374, OE:576375, YW:576376, GY:576377, GN:567437, PE:592562
400	35	Stock #: BK:278374, RD:576370, BE:576372, WE:576373, BN:576127, OE:576129, YW:576130, GY:576131, GN:567384, PE:593379
500	35	Stock #: BK:278382, RD:576367, BE:576368, WE:576369, BN:576362, OE:576364, YW:576365, GY:576366, GN:576394, PE:589196
600	58	Stock #: BK:278390, RD:576350, BE:576351, WE:576352, BN:576345, OE:576346, YW:576347, GY:576349, GN:567375, PE:589197
700	58	Stock #: BK:278408, RD:591293, BE:591294, WE:591295, BN:576341, OE:576342, YW:576343, GY:576344, GN:591296
750	58	Stock #: BK:278416, RD:592233, BE:592234, WE:592235, BN:567432, OE:567433, YW:567434, GY:567435, GN:567436, PE:592469
900	58	Stock #: BK:554059, BN:560445, OE:560446, YW:560447, GY:560448, PE:596424
1000	58	Stock #: BK:278424



The Power of Connections.™

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30119, USA

			E IN	IAL RUW PLAN REVISIONS	(SUB	SMITTAL	DATE:)	. s 🗩
1	٧0.	DATE	AUTH	DESCRIPTION	N0.	DATE	AUTH	DESCRIPTION	
									Detroit

FILE:

DATE: 05/24/21

JN:	PW-7031		
	RIVERSIDE	PARK	



LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET	
	010	128

SIMpull THHN® **Copper THHN Wire & Cable**



600 Volts. Copper Conductor. Thermoplastic Insulation/Nylon Sheath, Heat, Moisture, Gasoline and Oil Resistant II. All Sizes Rated Both THHN and either THWN (sizes 14, 12, and 10 AWG) or THWN-2 (sizes 8 AWG and larger). Also Rated MTW and AWM (See Below). SIMpull® Technology for Easier Pulling.

APPLICATIONS

Southwire® SIMpull THHN® copper conductors are primarily used in conduit and cable trays for services, feeders and branch circuits in commercial or industrial applications as specified in the National Electrical Code. Voltage for all applications is 600 volts. SIMpull THHN® copper conductors are designed to be installed without application of a pulling lubricant.

These conductors have multiple ratings. Depending upon the product application, allowable temperatures are as follows:

- THHN or T90 Nylon- Dry locations not to exceed 90 ° C
- THWN-2- Wet or dry locations not to exceed 90° C or locations not to exceed 75° C when exposed to oil
- THWN- Wet locations not to exceed 75°C or dry locations not to exceed 90°C or locations not to exceed 75°C when exposed to oil
- TWN75- Wet locations not to exceed 75° C
- MTW- Wet locations or when exposed to oil at temperatures not to exceed 60°C or dry locations
- not to exceed 90 °C (with ampacity limited to that for 75 °C conductor temperature per NFPA 79)
- AWM- Dry locations not to exceed 105 °C only when rated and used as appliance wiring material

STANDARDS & REFERENCES

Southwire® SIMpull THHN® copper conductors comply with the following:

- ASTM B3, B8, and B787 (19 Wire Combination Unilay-Stranded)
- UL Standards 83, 758, 1063, and 1581
- CSA C22.2 No. 75, T90 Nylon/TWN75 Sizes through 1000 kcmil
- NOM-ANCE 90 ° C
- Federal Specification A-A-59544
- NEMA WC-70 (ICEA S-95-658) Construction Requirements
- National Electrical Code, NFPA 70
- CT Rated in Sizes 1/0 AWG and larger
- VW-1 Sizes 14 through 1 AWG
- FT1 All Sizes
- Sunlight Resistant Sizes 2 AWG and larger •
- AWM Sizes 14 through 6 AWG
- MTW Stranded Constructions Only
- **RoHS/REACH** Compliant

CONSTRUCTION

Southwire® SIMpull THHN® copper conductors are made with soft drawn copper. Sizes 14 through 4/0 AWG use a combination-unilay stranding while 250 kcmil and larger sizes use a compressed copper stranding. The wire is covered with a tough heat and moisture resistant PVC insulation with an overall nylon jacket utilizing SIMpul/® Technology. Available in black, white, red, blue, purple, green, yellow, orange, brown, and gray. Also available in striped configurations. Some colors are subject to economic order quantity. Marked as THHN in all sizes. Also marked as THWN-2 in sizes 8 AWG and larger or marked as THWN in sizes 14, 12, and 10 AWG. Marked sunlight resistant in sizes 2 AWG and larger. Sizes 14, 12, and 10 AWG are available with SIMpull® Technology only in SIMpull BARREL[™] cable drum or SIMpull® CoilPAK[™] configurations.

l	The	Power	of	Connections.	
---	-----	-------	----	--------------	--

©2015 Southwire Company, LLC. All rights reserved. ®Registered Trademark and ™Trademark of Southwire Company, LLC. One Southwire Drive, Carrollton, GA 30119, USA



$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
12^* 1 15 4 119 23 10^* 1 20 4 150 36 14^* 19 15 4 109 16 12^* 19 15 4 128 24 10^* 19 20 4 161 38 8 19 30 5 213 63 6 19 30 5 249 95 4 19 40 6 318 152 3 19 40 6 378 234 1 19 50 7 435 299 $1/0$ 19 50 7 518 462 $3/0$ 19 50 7 568 575 $4/0$ 19 50 7 568 575 $4/0$ 19 50 7 624 718 250 37 60 8 694 851 300 37 60 8 797 1174 400 37 60 8 842 1334	Size (AWG		Thickness	Thickness	O.D.	Per 1000'	
10^* 1 20 4 150 36 14^* 1915410916 12^* 19154128 24 10^* 1920416138819305 213 63619305 249 95419406318152319406378 234 1195074352991/0195075184623/0195075685754/0195076685754/01950762471825037608694851300376087971174400376088421334	14*	1	15	4	102	15	
14^* 1915410916 12^* 1915412824 10^* 192041613881930521363619305249954194063181523194063461892194063782341195074352991/0195075184623/0195075685754/0195076685754/01950762471825037608694851300376087971174400376088421334	12*	1	15	4	119	23	
12^* 1915412824 10^* 192041613881930521363619305249954194063181523194063461892194063782341195074352991/0195075184623/0195075685754/0195076685754/019507604851300376087971174400376088421334	10*	1	20	4	150	36	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14*	19	15	4	109	16	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12*	19	15	4	128	24	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10*	19	20	4	161	38	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	19	30	5	213	63	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	19	30	5	249	95	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	19	40	6	318	152	
1195074352991/0195074743722/0195075184623/0195075685754/0195076685754/01950762471825037608694851300376087471012350376087971174400376088421334	3	19	40	6	346	189	
1/0195074743722/0195075184623/0195075685754/01950762471825037608694851300376087471012350376087971174400376088421334	2	19	40	-	378	234	
2/0195075184623/0195075685754/01950762471825037608694851300376087471012350376087971174400376088421334	1	19	50	7	435	299	
3/0195075685754/01950762471825037608694851300376087471012350376087971174400376088421334	1/0	19	50	7	474	372	
4/01950762471825037608694851300376087471012350376087971174400376088421334	2/0	19	50	7	518	462	
25037608694851300376087471012350376087971174400376088421334	3/0	19	50		568	575	
300 37 60 8 747 1012 350 37 60 8 797 1174 400 37 60 8 842 1334	4/0	19	50	7	624	718	
350 37 60 8 797 1174 400 37 60 8 842 1334	250		60	8	694	851	
400 37 60 8 842 1334	300	37	60	8	747	1012	
	350	37	60	8	797	1174	
	400	37	60	8	842	1334	
500 37 60 8 926 1655	500	37	60	8	926	1655	
600 61 70 9 1024 1987	600	61	70	9	1024	1987	
750 61 70 9 1126 2464	750	61	70	9	1126	2464	

70 * Sizes 14, 12, and 10 AWG are available with SIMpull® Technology only in SIMpu

vary from the ones shown on this chart for stand +Allowable ampacities shown are for general use as specified by the 2014 Edition 240.4(D).

9

1275 3257

Unless the equipment is marked for use at higher temperatures the conductor 60° C - When terminated to equipment for circuits rated 100 amperes 75° C - When terminated to equipment for circuits rated over 100 ampere 90° C - THHN dry locations and THWN-2 wet or dry locations for ampacity

	-		•			
The	Power	ot	Connectio	ons.	IM	

1000

61

©2015 Southwire Company, LLC. All rights reserved. @Registered Trademark and TMTrademark of Southwire Company, LLC One Southwire Drive, Carrollton, GA 30119, USA

FINAL ROW PLAN REVISIONS (SUB	MITTAL DATE:)	A.			DATE: 05/24/21		LIGHTING DETAIL SHEET	DRAWING SHEET
NO. DATE AUTH DESCRIPTION NO.	DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031	RIVERSIDE PARK	RIV
			Detroit		FILE:		RIVERSIDE PARK		011 129



	owable Ampaciti		Standard
60 <i>°</i> C	75 <i>°</i> C	90 °C	Package
15	15	15	AC
20	20	20	AC
30	30	30	AC
15	15	15	AC
20	20	20	AC
30	30	30	AC
40	50	55	ABCD
55	65	75	ABCD
70	85	100	ABCD
85	100	115	ABCD
95	115	130	ABCD
110	130	145	ABCD
125	150	170	ABCD
145	175	195	ABCD
165	200	225	ABCD
195	230	260	ABCD
215	255	290	ABCD
240	285	320	ABC
260	310	350	ABC
280	335	380	ABC
320	380	430	ABCD
350	420	475	ABC
400	475	535	BC
455	545	615	C
rd 14-10 AWG T n of the National shall be limited t r less or marked s or marked for c	PAK® configurations HHN. Electrical Code Sec to the following per N for 14 - 1 AWG cond onductors larger that oses using NEC sec	tions 310.15 and IEC 110.14(C): ductors. n 1 AWG.	Package Codes: A - 2500' Reel B - 1000' Reel C - 500' Spool D - 5000' Reel



Co	onductor							
Size								
AWG or cmil)	No. of strands	Stock Numbers						
14*	1	SIM <i>pull</i> THHN® CU Stock #: BK:580285, WE:580294, WE/RD:580622, RD:580293, BE:580287, GN:580291, YW:580295, OE:580292, BN:580288, PE:580286, GY:580289						
		Standard THHN CU Stock #: BK:115790, WE:115808, RD:115816, BE:115824, GN:115832, YW:115840, OE:115857, BN:115865, PE:211243, GY:214668, TN:302539, PK:255331						
4.0*		SIMpull THHN® CU Stock #: BK:580265, WE:580275, WE/BK:580280, WE/BE:580281, WE/RD:580283 RD:580273, GN:580271, GN/YW:584566, BE:580267, PE:580264, YW:580276, OE:580272, BN:580268, GY:580269, GY/BN:580277 GY/OE:580278, GY/PE:580263, GY/YW:580279, PK:581931						
<mark>12*</mark>	1	Standard THHN CU Stock #: BK:115873, WE:115881, WE/BK:565284, WE/BE:611410,						
		WE/RD:565285, Red:115899, GN:115915, GN/YW:401000, BE:115907, PE:212043, YW:115923						
		OE:115931, BN:115949, GY:228700, GY/BN:575303, GY/OE:575304 GY/YW:575305,						
		PK:256479, TN:320127						
		SIMpull THHN® CU Stock #: BK:580203, WE:580215, WE/BK:580216, WE/BE:580218,						
		WE/RD:580219, RD:580214, GN:580211, Gn/YW:580212, BE:580204, PE:580202, YW:580220,						
		OE:580213, BN:580205, GY:580206, GY/BN:580226, GY/OE:580208, GY/PE:580201,						
	0	AY/YW:580210						
10*	1	Standard THHN CU Stock #: BK:115956 WE:115964, WE/BK:551545, WE/BE:551547,						
		WE/RD:551546, RD:115972, GN:115998, GN/YW:611757, BE:115980, YW:116004, OE:116012,						
		BN:116020, GY:229823, GY/BN:575300, GY/OE:575301, GY/YW:575302, PK:258384,						
		PE:253336						
		SIM <i>pull</i> THHN® CU Stock #: BK:585485, WE:580180, WE/BK:585484, WE/BE:581899,						
		RD:585494, BE:585486, BE/WE:592686, GN:585490, YW:580181, OE:580177, BN:580172,						
14*	19	BN/RD:592685, PE:580178, GY:580173, PK:581933						
	10	Standard THHN CU Stock #: BK:229559 WE:229567, RD:229575, RD/BK:662817, BE:229583						
		GN:229591, YW:229609, OE:229617, BN:229625, PE:239566, GY:229633, PK:244863, TN:320150						
		SIMpull THHN® CU Stock #: BK:580182, WE:580199, WE/BK:580192, WE/BE:580193,						
		WE/RD:580194, RD:580198, BE:580184, GN:580195, GN/YW:583863, YW:580200, OE:580196,						
		BN:585461, PE:580197, GY:580250, GY/BN:580207, GY/OE:580189, GY/PE:580188,						
10*	10	GY/YW:580190, PK:581932						
12*	19	Standard THHN CU Stock #: BK:229641 WE:229658, WE/BK:311514, WE/BE:566441,						
		WE/RD:566440, RD:229666, BE:229674, BE/WE:662981, GN:229682, GN/YW:663013,						
		YW:229690, OE:229708, BN:229716, PE:232124, GY:229724, GY/BN:575307, GY/OE:575309,						
		GY/YW:575310, TN:320168, PK:242503						
		SIMpul/ THHN® CU Stock #: BK:580221 WE:580255, WE/BK:580260, WE/BE:580261,						
		WE/RD:580262, RD:580254, BE:580222, GN:585464, GN/YW:584567, YW:585470, OE:585465,						
		BN:580223, PE:580253, GY:580250, GY/BN:580207, GY/OE:580257, GY/PE:580227,						
		GY/YW:580259, PK:581930						
10*	19	Standard THHN CU Stock #: BK:229732, WE:229740, WE/BK:610028, WE/BE:556199,						
		WE/RD:556198, RD:229757, RD/WE:663039, BE:229765, GN:229773, GN/YW:663112,						
		PE:256594, YW:229781, OE:229799, BN:229807, GY:229765, GN:229773, GN:7W:665172,						
	1	GY/YW:575299, PK:260539, TN:320176						
	5.7.5	Color Abbreviations						
	BK-Blac							
	OE-Or	ange BN-Brown GY-Grey PK-Pink PE-Purple TN-Tan						



NO. DATE

	FIN	AL ROW PLAN REVISIONS	(SUB	MITTAL	DATE:)				DATE: 05/24/21
ΓE	AUTH	DESCRIPTION	N0.	DATE	AUTH	DESCRIPTION		NO SCALE		
							Detroit		FILE:	

		OUEET
 LIGHTING DETAIL SHEET RIVERSIDE PARK	DRAWING RIV L DET 012	SHEET
	012	130

JN: PW-7031

RIVERSIDE PARK

COOPER **Bussmann**[®]

TRON[®] In-Line Fuse Holders

HEB Series Single-Pole Breakaway & Non-Breakway for ¹%² x 1 ¹/₂ Fuses

	Conductor Terminals	Conductor I	Data			Catalog
	Terminal Type	Size	No. Per Terminal	Solid	Stranded	Symbol Load & Line (2) & (3)
Ion-Breakaway Fuse Holders	Copper Crimp	#12 to #8	1	•	•	A
ee page 2 for breakaway holders		#12 #10	2	•	•	
Catalog Symbol: HEB		#6	1	•	•	. В
Description:	-	#8	2	٠	•	c
Vater resistant, single-pole non-breakaway in-line fuse holders		#4 #6	1	•	•	
or $1/2^{\prime\prime}$ x 1 $1/2^{\prime\prime}$ midget fuses. Typical fuse types: BAF, DCM,		#0	1	-	•	- D
NM, FNQ and KTK.		#4	2	•	•	E
latings:		#20 to #18	1	•	•	Z
olts: 600V (or less)	Copper Setscrew					
mps: Up to 30A*						
		#12 to #3	1	•	•	J
gency Information:		<i>"</i>				
)UL Recognized, Guide IZLT2, File E14853	Ţ					
CSA Certified, Class 6225-01, File 47235		#12 to #3	2	•	•	к
))CE						
coupling Nut Torque: 10-20lb-in.						
Part Number Explanation	Solid Copper Terminal Aluminum Wire Conne					
xample: HEB-AK		#8 to #12	1	•	_	
• HEB = Holder series	_	<u> </u>				S
 A = Loadside terminal (copper crimp for #12 copper wire) 		#10 to #4	1	—	•	
• K = Lineside terminal (copper setscrew for two #6 copper		"0				
wires)	Aluminum Crimp	#8 #6	1	•	•	- N
Part Number Selection		#6	1	_	•	- P
rom the table on page three, select the combination of		#4	1	•	_	· P
lesired loadside and lineside terminals for the application		#3, #4 #2	1	•	•	Q
define terminal type, wire size, number of wires per terminal		#2 #1, #2	1	_	•	R
nd whether the terminal accepts solid and/or stranded		#1/0	1	_	•	T
onductors). Then in the right hand two columns, select either						
ne non-breakaway or breakaway holder part number to order.	Aluminum Setscrew					
vailable Part Numbers						
HEB-AA ⁽¹⁾ (2) (3), HEB-AB ⁽²⁾ , HEB-AC ⁽²⁾ ,		#12 to #2	1	•	•	L
		则				
IEB-AD ⁽²⁾ , HEB-AE ⁽²⁾ , HEB-AJ, HEB-AK, HEB-AL, HEB-AR,		-				
IEB-AY, HEB-BA ⁽²⁾ , HEB-BB ⁽²⁾ , HEB-BC ⁽²⁾ , HEB-BD ⁽²⁾ ,		#12 to #3	2	•	•	Y
IEB-CC ⁽²⁾ , HEB-DD ⁽²⁾ , HEB-JJ, HEB-JK, HEB-JL, HEB-JY,						
IEB-LL, HEB-NN, HEB-PP ⁽²⁾ , HEB-QQ ⁽²⁾ , HEB-RR ⁽²⁾ ,		/				
IEB-SS, HEB-TT ⁽²⁾ , HEB-ZA.						
nsulating Boots						
or insulating boots, see page 2. Insulating boots are not included	1					
vith non-breakaway holders and must be ordered						
eparately. They come standard with the breakaway holders.						
Vhen insulating boots are utilized, extra heat retention requires						
nat fuses are sized at a minimum of 200% of the RMS load						
urrent.						
Amp rating limited by conductor size.						
					_	

Breakaway Fuse Holders Catalog Symbol: HEB

Description: Single-pole breakaway in-line fuse holders for 13/2" x 1 1/2" midget fuses. Typical fuse types: BAF, DCM, FNM, FNQ AND KTK.

Ratings:

Volts: 600V (or less) Amps: Up to 30A*

Agency Information:

⁽¹⁾UL Recognized, Guide IZLT2, File E14853 ⁽²⁾CSA Certified, Class 6225-01, File 47235 ⁽³⁾CE

Coupling Nut Torque: 10-20lb-in.

Part Number Explanation

- Example: HEB-AW-RYC
- HEB = Holder series
- AW = Loadside terminal (copper crimp for #12 copper wire) • RYC = Lineside terminal (copper setscrew for two #6
- copper wires)

Part Number Selection

From the table on page three, select the combination of desired loadside and lineside terminals for the application (define terminal type, wire size, number of wires per terminal and whether the terminal accepts solid and/or stranded conductors). Then in the right hand two columns, select either the non-breakaway or breakaway holder part number to order.

Available Part Numbers

Breakaway Units:

(Includes fuse holder, breakaway part and insulating boots): HEB-AW-RLA, HEB-AW-RLC-A⁽¹⁾ ⁽²⁾ ⁽³⁾, HEB-AW-RLC-B,

HEB-AW-RLC-C, HEB-AW-RLC-J, HEB-AW-RYA, HEB-AW-RYC, HEB-BW-RLC-A, HEB-BW-RLC-B, HEB-BW-RYC, HEB-JW-RLC-J, HEB-JW-RYC, HEB-KW-RLC-J, HEB-KW-RYC, HEB-LW-RLA,

HEB-LW-RLC-J, HEB-LW-RYA Fuse Holder Only: HEB-AW⁽²⁾, HEB-BW⁽²⁾, HEB-DW⁽²⁾,

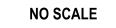
HEB-JW, HEB-LW Breakaway Part: RLC-A, RLC-B, RLC-C, RLC-J,

RYC, RLA, RYA

*Amp rating limited by conductor size.

BU-SB08489 0908

		FINA	L ROW PLAN REVISIONS	(SUE	BMITTAL	DATE:)			
N0.	DATE	AUTH	DESCRIPTION	N0.	DATE	AUTH	DESCRIPTION			NO SC
								ОНМ	Detroit	10 30
									Denon	



FILE:

DATE: 05/24/21

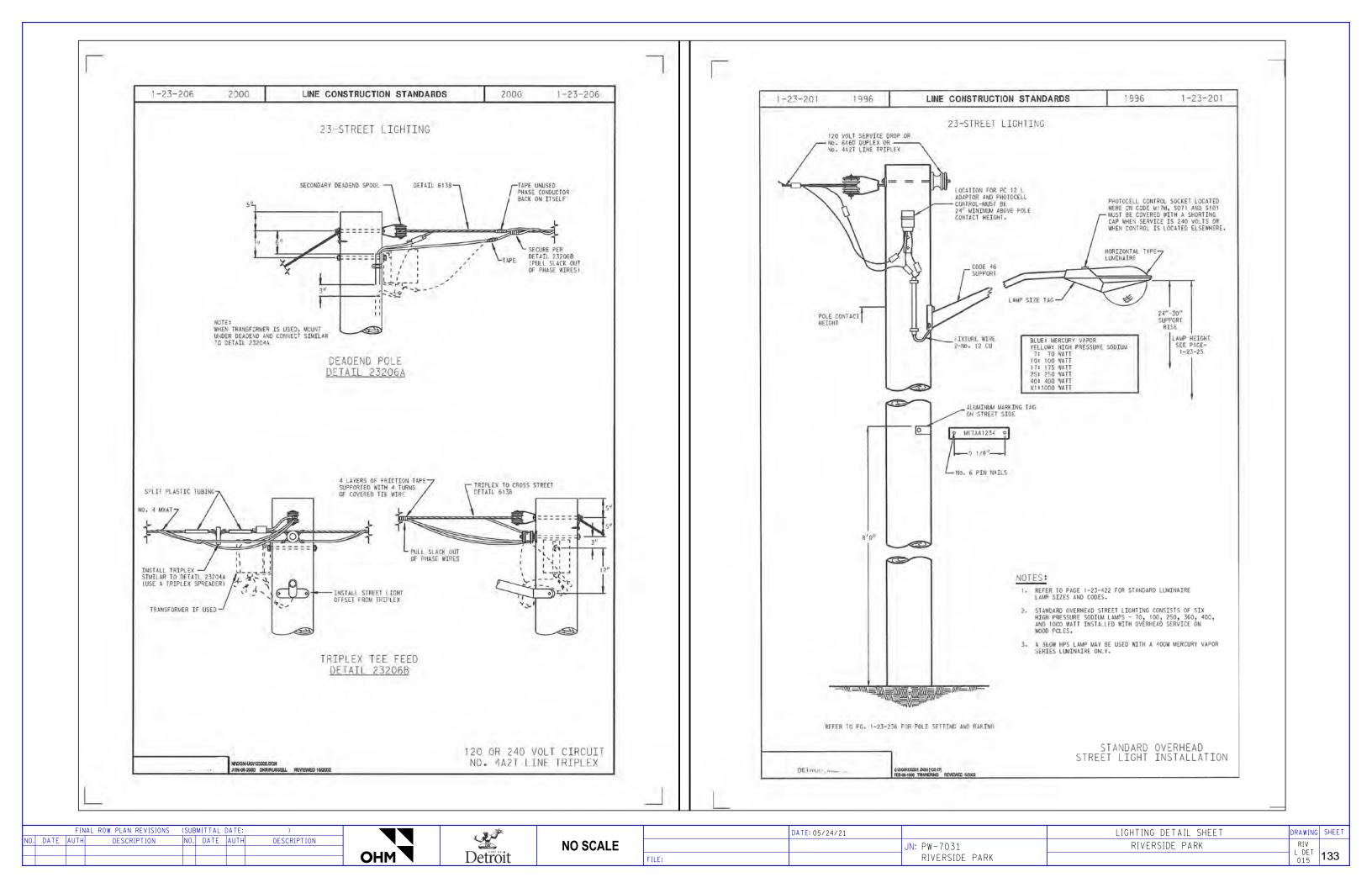
JN:	PW-7031	
	RIVERSIDE	PARK

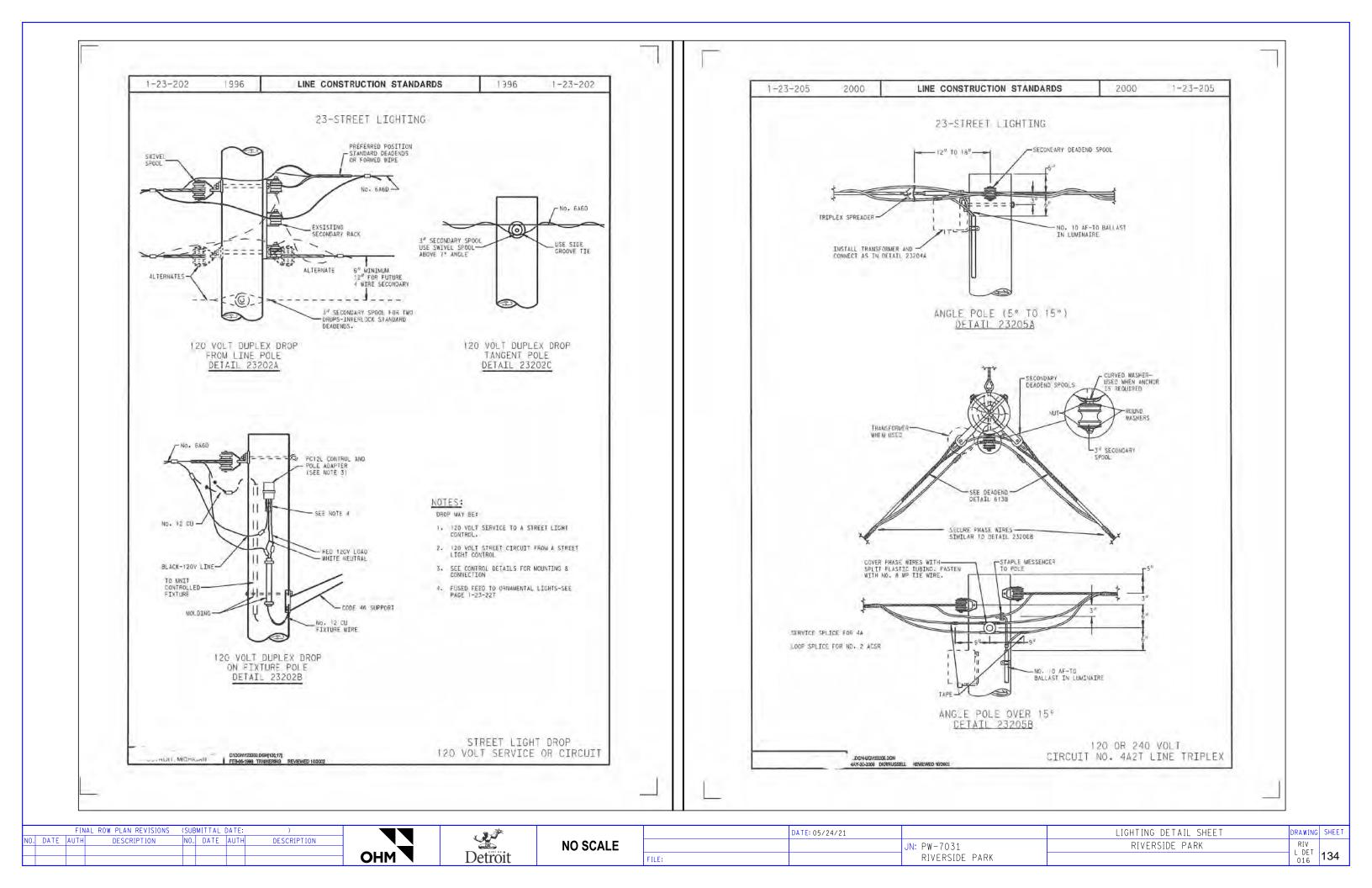
erminal Type		Conducto	r Data			Catalog	
		Conducto Size	No. Per Terminal	Solid	Stranded	Catalog Symbol	
opper Crimp		#12 to #8	Ž₽ 1	ŏ •	•	-RLC-A	
		#6	1	•	•	-RLC-B	
		#4	1	٠	•	-RLC-C	
opper Setscrew	0						
		#12 to #2	1	•	•	-RLC-J	
H	8	#12 to #3	2	•	•	-RYC	
uminum Setscrew		#12 to #2	1	•	•	-RLA	
e e	8	#12 to #3	2	•	•	-RYA	
olid Breakaway		(Required Breakawa Receptacl	у			W	
		2A0660 2A0661			-	e conductor	
Two insulating boots co	C-A). Th	e insulatir	ng bo	ots a	are n		
ncluded with the non-b he individual pieces of HEB-AW, RCL-A). Two each holder when orde poots are utilized, extra	the brea insulatin ring ther heat rei	akaway ho g boots r n separat cention re	olders must l cely. W quires	exa) (exa (be o /hen tha	ampl rdere 1 insu 1 fus	e: ed for ılating	
ncluded with the non-b he individual pieces of HEB-AW, RCL-A). Two each holder when orde poots are utilized, extra	the brea insulatin ring ther heat rei	kaway ho g boots r n separat ention re- the RMS	olders nust I lely. W quires load	(exa pe o /hen tha curr	ampl rdere i insu t fus rent.	e: ad for Ilating es are	
ncluded with the non-b he individual pieces of IEB-AW, RCL-A). Two sach holder when orde boots are utilized, extra ized at a minimum of 2	the brea insulatin ring ther heat rei	kaway ho g boots r n separat ention re- the RMS	olders nust I lely. W quires load	(exa pe o /hen tha curr	ampl rdere i insu t fus rent.	e: ed for Ilating	
example: HEB-AW-RL ncluded with the non-b the individual pieces of HEB-AW, RCL-A). Two each holder when orde boots are utilized, extra sized at a minimum of 2 Page 2 of 3	the breat insulatin ring ther heat rei 200% of 200% of	kaway ho g boots r n separat ention re- the RMS	olders nust I ely. W quires load	(exa be o /hen tha curr	ampl rdere i insu t fus rent.	e: ed for llating es are	

	Loadsid					Lineside					kaway or non-breakaway style	
	Luausiu	No. of				Linesiue	No. of			Available P/N's Non-Breakaway Breakaway		
Terminal Type	Wire Size	Wires per Terminal	Solid Wire	Stranded Wire	Terminal Type	Wire Size	Wires per Terminal	Solid Wire	Stranded Wire	P/N (Boots not included)	P/N (Boots included)	
Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	HEB-AA ⁽¹⁾⁽²⁾ (3)	HEB-AW-RLC-A ⁽¹⁾⁽²⁾ (3)	
Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	Copper Crimp	#6 #10	1 2	Y Y	Y Y	HEB-AB ⁽²⁾	HEB-AW-RLC-B	
Copper	#12 to #8	1	Y	Y	Conner	#4	1	Ν	Y	HEB-AC ⁽²⁾	HEB-AW-RLC-C ⁽⁴⁾	
Crimp Copper	#12 #12 to #8	2	Y Y	Y Y	Crimp (4) Copper	#8 #2	2	Y N	Y Y	HEB-AD ⁽²⁾	N/A	
Crimp Copper	#12 #12 to #8	2	Y Y	Y Y	Crimp Copper	#6	2	<u>Y</u> N	Y Y			
Crimp Copper	#12 #12 to #8	2	Y	Y	Crimp Copper	#3	2	N	Y	HEB-AE ⁽²⁾	N/A	
Crimp	#12	2	Ŷ	Y	Setscrew	#12 to #3	1	Y	Y	HEB-AJ	HEB-AW-RLC-J	
Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	Copper Setscrew	#12 to #3	2	Υ	Y	HEB-AK	HEB-AW-RYC	
Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	Aluminum Setscrew	#12 to #2	1	Y	Y	HEB-AL	HEB-AW-RLA	
Copper Crimp	#12 to #8 #12	1 2	Y Y	Y Y	Aluminum Setscrew	#12 to #2	2	Y	Y	HEB-AY	HEB-AW-RYA	
Copper	#12 to #8	1	Y	Y	Aluminum	#1, #2	1	N	Y	HEB-AR	N/A	
Crimp Copper	#12 #6	2	Y Y	Y Y	Crimp Copper	#12 to #8	1	Y	Y	HEB-BA ⁽²⁾	HEB-BW-BLC-A	
Crimp Copper	#10 #6	2	Y	Y	Crimp Copper	#12 #6	2	Y	Y Y			
Crimp	#10 #6	2	Y	Y Y	Crimp	#10	2	Ŷ	Y	HEB-BB ⁽²⁾	HEB-BW-RLC-B	
Copper Crimp	#10	2	Y Y	Y	Copper Crimp	#4 #8	1 2	N Y	Y Y	HEB-BC ⁽²⁾	N/A	
Copper Crimp	#6 #10	1 2	Y Y	Y Y	Copper Crimp	#2 #6	1 2	N Y	Y Y	HEB-BD ⁽²⁾	N/A	
Copper Crimp	#4 #8	1 2	N Y	Y Y	Copper	#4	1	Ν	Y Y	HEB-CC ⁽²⁾	N/A	
Copper	#2	1	Ν	Y	Crimp Copper	#8 #2	<u>2</u> 1	Y N	Y	HEB-DD ⁽²⁾	N/A	
Crimp Copper	#6	2	Y Y	Y Y	Crimp Copper	#6 #12 to #8	2	Y Y	Y Y			
Crimp Copper	#20, #18			-	Crimp Copper	#12	2	Y	Y	HEB-ZA	N/A	
Setscrew	#12 to #3	1	Y	Y	Setscrew	#12 to #3	1	Y	Y	HEB-JJ	HEB-JW-RLC-J	
Copper Setscrew	#12 to #3	1	Y	Y	Copper Setscrew	#12 to #3	2	Y	Y	HEB-JK	HEB-JW-RYC	
Copper Setscrew	#12 to #3	1	Υ	Y	Aluminum Setscrew	#12 to #2	1	Y	Y	HEB-JL	N/A	
Copper Setscrew	#12 to #3	1	Υ	Y	Aluminum Setscrew	#12 to #2	2	Y	Y	HEB-JY	N/A	
Aluminum Setscrew	#12 to #2	1	Y	Y	Aluminum Setscrew	#12 to #2	1	Y	Y	HEB-LL	HEB-LW-RLA	
Aluminum	#8	1	N	Y	Aluminum	#8	1	N	Y	HEB-NN	N/A	
<u>Crimp</u> Aluminum	#6 #6	1	Y N	N Y	Crimp Aluminum	#6 #6	<u>1</u> 1	Y N	N Y	HEB-PP ⁽²⁾	N/A	
Crimp Aluminum	#4 #3, #4	1	Y N	N Y	Crimp Aluminum	#4 #3, #4	1	Y N	N Y	HEB-QQ ⁽²⁾		
Crimp	#2	1	Y	N	Crimp	#2	1	Y	N		N/A	
Aluminum Crimp	#1, #2	1	Ν	Y	Aluminum Crimp	#1, #2	1	Ν	Y	HEB-RR ⁽²⁾	N/A	
Aluminum Crimp	1/0	1	Ν	Υ	Aluminum Crimp	1/0	1	Ν	Y	HEB-TT ⁽²⁾	N/A	
SolidTerminal or aluminum		1	Y	N	SolidTermina for aluminum	#8 to #12	1	Y	Ν	HEB-SS	N/A	
	#10 to #14		N	Y	connector	#10 to #14	1	N	Y			
(4) HEB-AW-F The only cor by definition design appli- any products been selecte © 2008 C	uncontrolled. cations. Coop s. Cooper Bus ed, it should b ooper Buss) #4 strande of this Data S This bulletii er Bussman ssmann also e tested by smann	ed wire Sheet is n is inte in reser reserve	the electro ended to cle ves the right es the right	not listed. nic read-only v arly present co t, without notic	version located omprehensive ce, to change update, without	I on the Coo product data design or co	per Bus a and p instruct	ssmann Net provide tech ion of any p	work Drive. All other nical information that roducts and to disco	ssible terminations copies of this document will help the end user thinue or limit distributio julletin. Once a product	
636-39	is, MO 631 4-2877 ooperbussm											

		ROW PLAN REVISIONS	(SUBMITTAL	DATE:)	13.3			DATE: 05/24/21	
N	O. DATE AUTH	DESCRIPTION	NO. DATE	AUTH	DESCRIPTION		NO SCALE			JN: PW-7031
E						Detroit		FILE:		RIVERSIDE PARK

HEET
32
3





IDENTIFICATION TAG TEXT LEGEND

LIGHTING CONTROLLER (LC) ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR LIGHTING CONTROLLER ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

LCVVWXX

THE SECTIONS SEPARATED FOR CLARITY ARE LC-VV-W-XX. THE LC STAND FOR LIGHTING CONTROLLER. THE V, W AND X ARE AS FOLLOWS:

VV LAST TWO DIGITS OF THE ZIP CODE WHERE THE LIGHTING CONTROLLER IS LOCATED

- W ID ASSIGNED TO THE FIRM DESIGNING THE CIRCUIT. EXAMPLES INCLUDE:
 - Μ METRO ENGINEERING SOLUTIONS
 - **TETRA TECH** т
 - W C.E.A. AND WADE TRIM JOINT VENTURE
- XX ID ASSIGNED TO THE LIGHTING CONTROLLER (LC)

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LIGHTING CONTROLLER ID TAG IS:

LC16W30 AN LC INSTALLED IN THE 48230 ZIP THAT WAS LAID OUT BY THE C.E.A AND WADE TRIM JOINT VENTURE AND HAS BEEN ASSIGNED AN ID OF 30 IN THAT ZIP CODE.

CABLE ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR CABLE TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

UUUVVWXXYZ

THE SECTIONS SEPARATED FOR CLARITY ARE UUU-VV-W-XX-Y-Z. THE VV-W-XX COMES FROM THE ASSIGNED LIGHTING CONTROLLER ID. THE VARIOUS VALUES STAND FOR:

UUU	PLA REC	FOR STREET LIGHTING CIRCUITS FOR RECEPTACLE CIRCUITS
VVWXX	THE ASSIG	SNED LC ID. SEE THE LC NAMING CONVENT
Y	THE CIRCU	JIT BRANCH ID (1, 2, 3, 4, ETC.)
Z	THE CON	DUCTOR CLASSIFICATION
	CLA A	SSIFICATIONS ARE: A PHASE CONDUCTOR

- В **B PHASE CONDUCTOR**
- NEUTRAL CONDUCTOR Ν
- G EQUIPMENT GROUND CONDUCTOR (EGC)

THE TAG SHALL HAVE THE LETTERS MOUNTED AND THE HOLDER MOUNTED HORIZONTALLY.

NOTE: CABLE TAG LABELS ARE GENERATED FOR THE CABLE(S) BEING TAGGED DEPENDING ON WHAT IS INCLUDED UNDER THE TAG. FOR INSTANCE, AN ENTIRE BRANCH CIRCUIT 4 CABLE BUNDLE INCLUDING 2 POWER LEGS, 1 NEUTRAL AND 1 EGC COULD BE TAGGED WITH A SINGLE UUU-VV-W-XXY TAG AS LONG AS THE CABLES ARE ALL PHYSICALLY TIED TOGETHER. WHEN AN ENTIRE BRANCH CIRCUIT IS BUNDLED AND TAGGED TOGETHER WITH A CIRCUIT IDENTIFIER OF UUU-VV-W-XX-Y THEN THE INDIVIDUAL CABLES IN THAT BUNDLE CAN BE TAGGED WITH JUST AN "A", "B", "N"OR "G".

NOTE:AN EQUIPMENT GROUND CONDUCTOR (EGC) CAN BE SHARED BETWEEN BRANCH CIRCUITS OR EVEN LIGHTING CONTROLLER CIRCUITS IF ALL THE CABLES SHARE THE SAME CONDUIT WHICH CREATES A UNIQUE TAGGING CONVENTION. THE EGC, IF TAGGED SEPARATELY, IS TAGGED TO INDICATE WHAT LEVEL OF SHARING IS USING THE EGC. THE LEVELS OF EGC TAGGING ARE:

UUUVVWXXY	G AN EGC FOR A BRANCH CIRCUIT OR IND
UUUVVWXXG	AN EGC SHARED BETWEEN MULTIPLE B
EGC	AN EGC SHARED BETWEEN DIFFERENT TYPES (

NOTE: THERE EXISTS DECORATIVE LIGHTING WITHIN THE DETROIT LIGHTING AREA UTILIZING STRAND LIGHTING. THOSE CIRCUITS ARE BUNDLED TOGETHER AND GET A UNIQUE TAG OF "STRAND".

JN: PW-7031

RIVERSIDE PARK

EXAMPLE CABLES TAGS ARE:

PLA26W5A1A	PLA STREET LIGHTING BRANCH CIRCUIT I
PLA26W5A1AA	PLA STREET LIGHTING BRANCH CIRCUIT I
REC26W5A1A	RECEPTACLE BRANCH CIRCUIT BUNDLE
STRAND	STRAND LIGHTING FEED CABLE BUNDLE

DATE: 05/24/21

		E IN	IAL ROW PLAN REVISIONS	(SUF	SMILLAL I	JAIE:)
N0.	DATE	AUTH	DESCRIPTION	N0.	DATE	AUTH	DESCRIPTION



St.

Detroit





ΓΙΟΝ

DIVIDUAL PHASE BUNDLE **BRANCH CIRCUITS** OF CIRCUITS OR LCS

BUNDLE LAMP LOOP

LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV	
	L DET 017	135

IDENTIFICATION TAG TEXT LEGEND - CONTINUED

LUMINAIRE ID TAG NAMING CONVENTION LEGEND

THE FORMAT FOR LUMINAIRE ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

WXXXYYYZZZ

THE SECTIONS SEPARATED FOR CLARITY ARE W-XXX-YYY-ZZZ. THE W, X, Y AND Z ARE AS FOLLOWS:

- W THE LUMINAIRE TYPE. SOME LUMINAIRE TYPES ARE:
 - LIGHT EMITTING DIODE (LED) FIXTURE L
 - SODIUM VAPOR FIXTURE S
- XXX THE LUMINAIRE WATTAGE. SOME EXAMPLES ARE:
 - 118 118W LUMINAIRE
 - 152 152W LUMINAIRE

THESE WATTAGES ARE REGARDLESS OF THE LUMINAIRE TYPE.

- YYY THE ALPHA PORTION OF THE PLA ASSIGNED LUMINAIRE ID.
- ZZZ THE NUMERIC PORTION OF THE PLA ASSIGNED LUMINAIRE ID.

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LUMINAIRE ID TAG IS:

L118AFK941 A 118W LED LUMINAIRE WITH THE PLA ID OF AFK941.

MATERIALS

CABLE CIRCUIT IDENTIFICATION TAGS

THE IDENTIFICATION TAGS FOR CABLE CIRCUITS SHALL USE TECH PRODUCTS, INC. FASTTAGS MINIATURE MARKERS. THE TAGS SHALL HAVE BLACK RAISED LETTERING ON A YELLOW BACKGROUND. THE LETTERING SHALL BE ORIENTATED HORIZONTALLY AND IN A SINGLE LINE.

LIGHTING CONTROLLER IDENTIFICATION TAGS

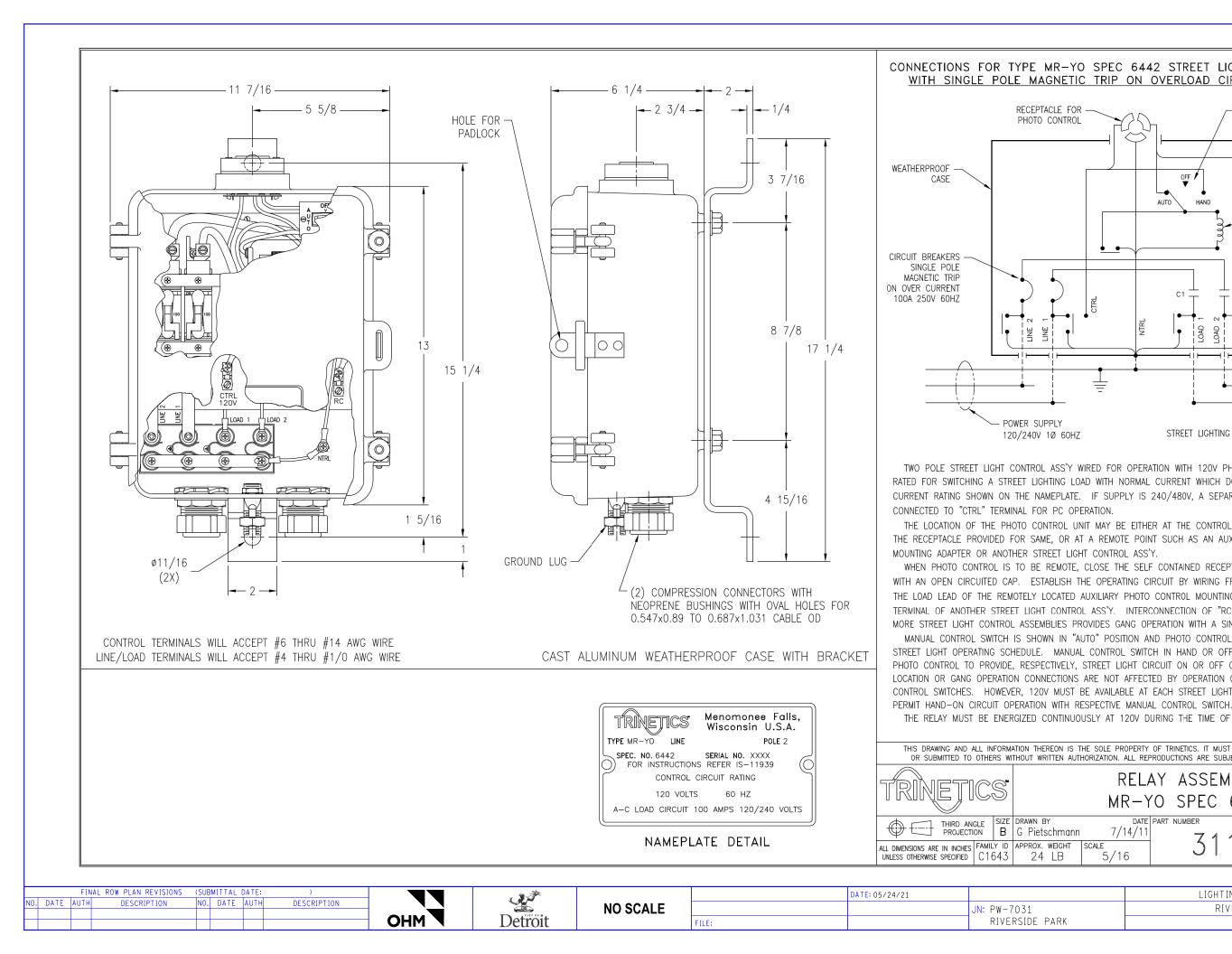
THE IDENTIFICATION TAGS FOR LIGHTING CONTROLLERS SHALL USE TECH PRODUCTS, INC. EVERLAST 1" VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70"TALL WHEN MOUNTED. THE TAG SHALL BE MOUNTED ON THE POLE'S STREETSIDE.

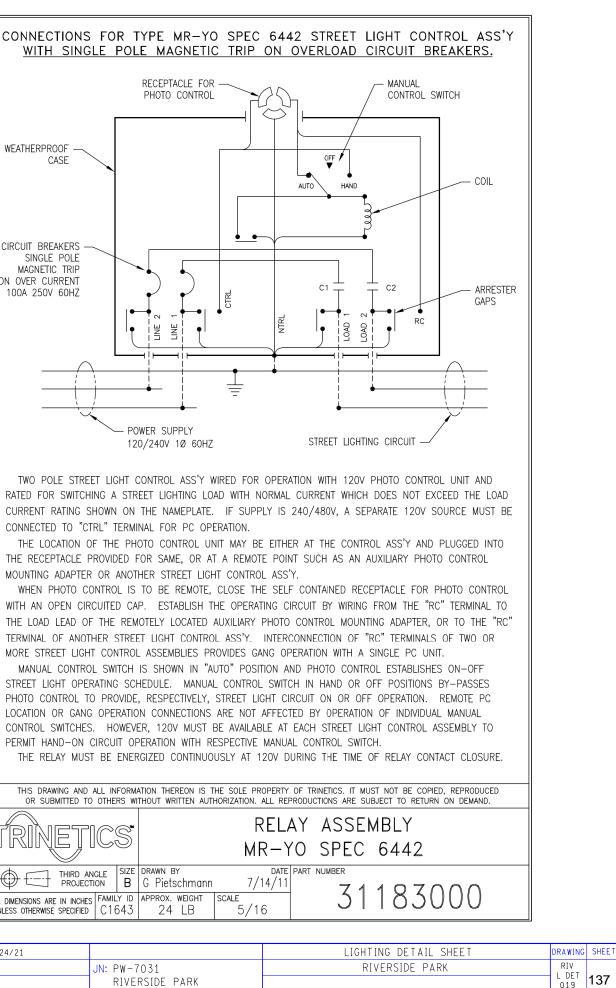
LUMINAIRE IDENTIFICATION TAGS

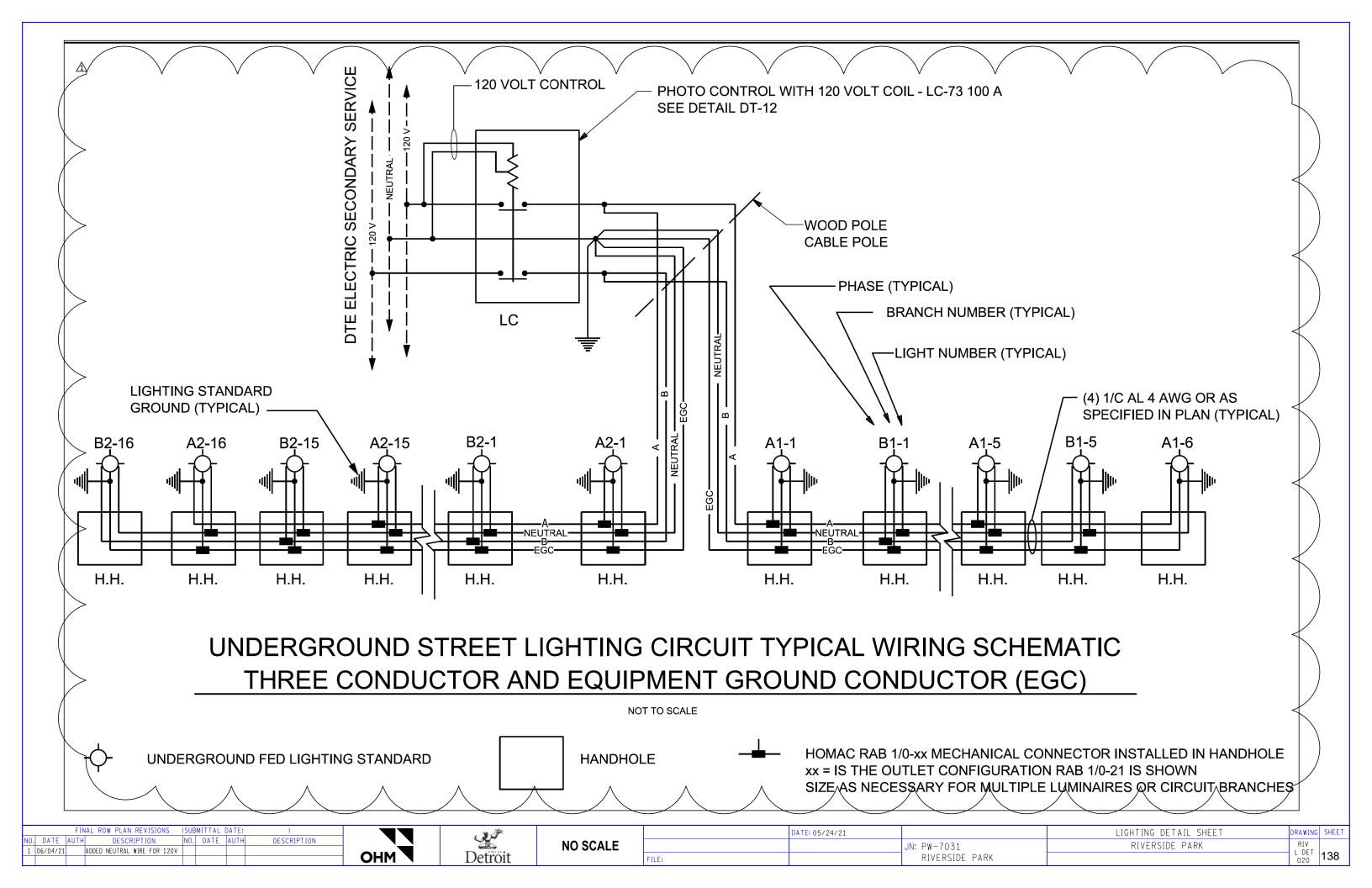
THE IDENTIFICATION TAGS FOR LUMINAIRES SHALL USE TECH PRODUCTS, INC. EVERLAST 1"VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70"TALL WHEN MOUNTED. A TAG IS MOUNTED ON THE POLE FOR EACH INDIVIDUAL LUMINAIRE ON THE POLE. THE TAG(S) SHALL BE MOUNTED ON THE POLE'S STREETSIDE.

		FINAL		(SUE	SMITTAL DATE:		· 3.#			DATE: 05/24/21	
N0	DATE	AUTH	DESCRIPTION	N0.	DATE AUTH	DESCRIPTION		NO SCALE			JN: PW-7031
								NO JUALL			
							Detroit		FILE:		RIVERSIDE PARK

LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET 018	136







CABLES IN HANDHOLES AND MANHOLES:

STREET LIGHTING AND RECEPTACLE CABLES IN HANDHOLES AND MANHOLES SHALL BE PULLED STRAIGHT THROUGH THE STRUCTURE UNLESS THERE IS A TAP REQUIRED TO SERVICE A STREET LIGHT, RECEPTACLE OR CIRCUIT BRANCH LOCATION.

LOCATIONS REQUIRING A SERVICE TAP WILL HAVE THE SERVICE PHASE TAPPED WITH THE APPROPRIATE HOMAC RAB CONNECTOR AND THE NON-SERVICE PHASE PULLED STRAIGHT THROUGH.

LOCATIONS REQUIRING CIRCUIT TAPS FOR CIRCUIT BRANCHES WILL BE INDENTIFIED ON THE PLANS WITH THE REQUIRED TAP SIZE AND PHASE PROVIDED.

EXAMPLE 1 - LAMP LOOP:

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND CONTINUING ALONG TO FEED ADDITIONAL STREET LIGHT LOCATIONS. THE HANDHOLE ALSO FEEDS A STREET LIGHTING STANDARD THAT HAS 2 LUMINAIRES THAT ARE TO BE CONNECTED TO THE B PHASE CABLE AND NO RECEPTACLE. THE B PHASE CABLE WILL HAVE A 4-WAY HOMAC **RAB CONNECTOR INSTALLED. THE NEUTRAL WILL HAVE A 4-WAY** HOMAC RAB CONNECTOR INSTALLED. THE EGC WILL HAVE A 3-WAY HOMAC RAB CONNECTOR INSTALLED. THE A PHASE CABLE WILL BE PULLED STRAIGHT THROUGH.

EXAMPLE 2 - CIRCUIT BRANCH:

FINAL ROW PLAN REVISIONS

DESCRIPTION

DATE AUTH

(SUBM)

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND FEEDING TWO DIFFERENT DIRECTIONS GOING OUT WITHOUT A STREET LIGHT LOCATION DIRECTLY CONNECTED TO THE HANDHOLE. THIS EXAMPLE REQUIRES CABLE 3-WAYS (ALSO CALLED A T-TAP OR BRANCH) TO BE INSTALLED TO FEED THE TWO DIFFERENT DIRECTIONS. A 3-WAY HOMAC RAB WILL BE INSTALLED ONTO EACH OF THE A PHASE, B PHASE, NEUTRAL AND EGC CABLES.

UNDERGROUND PHASE IDENTIFICATION **RED/RED STRIPE GREEN/BARE** EGC B PHASE **RED/RED STRIPE GREEN/BARE B PHASE** LIGHTING DETAIL SHEET DRAWING SHEET RIVERSIDE PARK RIV

CURRENT UNDERGROUND CONSTRUCTION WIRING STANDARD OBSOLETE UNDERGROUND CONSTRUCTION WIRING STANDARD *** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS. THE CHANGES SHOULD BE MADE *** THE CURRENT UNDERGROUND CONSTRUCTION AND THE OBSOLETE UNDEGROUND CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER. *** THERE ARE INSTALLATIONS WHERE NEITHER COLOR-CODED, EITHER COLORED INSULATION OR PHASE MARKED, CONDUCTORS ARE USED SO THAT ALL THE CONDUCTORS ARE THE SAME COLOR, TYPICALLY BLACK. PHASING MUST BE FIELD VERIFIED PRIOR TO CONNECTING ANY *** PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING, CARE IS TO BE TAKEN BY VERIFYING THE EXISTING CIRCUIT CABLING PHASING TO ENSURE THAT PROPER ELECTRICAL CONNECTIONS ARE MADE. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW *** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE

CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE
PHASE	A PHASE	NEUTRAL

CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE	
PHASE	A PHASE	NEUTRAL	

WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

COLOR-CODED CONDUCTORS TO NON-CODED CONDUCTORS.

CABLING.

EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.

MITTAL DATE:)		S.F.			DATE: 05/24/21	
DATE AUTH	DESCRIPTION	ОНМ		NO SCALE			JN: PW-7031
			Detroit		FILE:		RIVERSIDE PARK

OVERHEAD PHASE IDENTIFICATION

CURRENT OVERHEAD CONSTRUCTION WIRING STANDARD

CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSE
QUADRUPLEX	A PHASE	NEUTRAL	B PHASE	EG
TRIPLEX	A PHASE	NEUTRAL		EG
DUPLEX				

OBSOLETE OVERHEAD CONSTRUCTION WIRING STANDARD

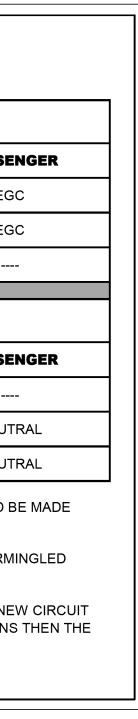
CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSE
QUADRUPLEX				
TRIPLEX	A PHASE	B PHASE		NEUT
DUPLEX	A PHASE			NEUT

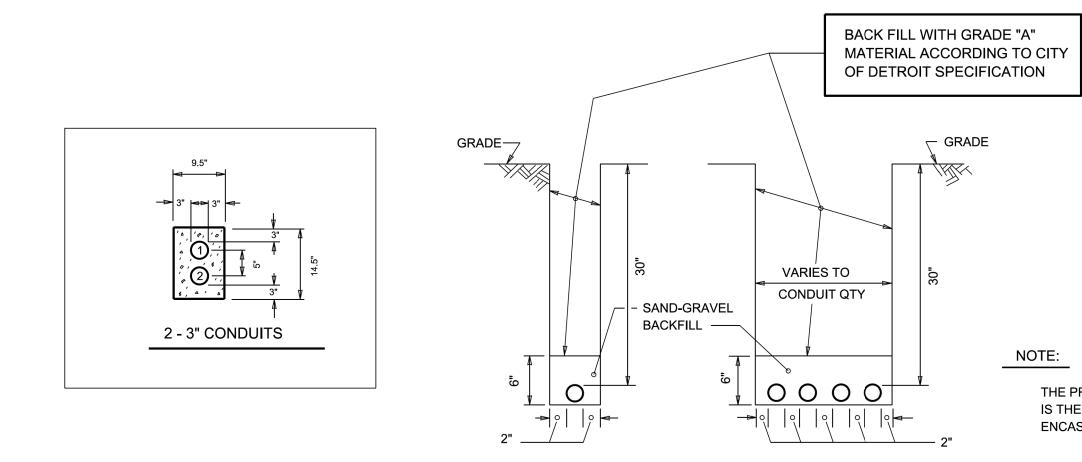
*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

*** THE CURRENT OVERHEAD CONSTRUCTION AND THE OBSOLETE OVERHEAD CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER.

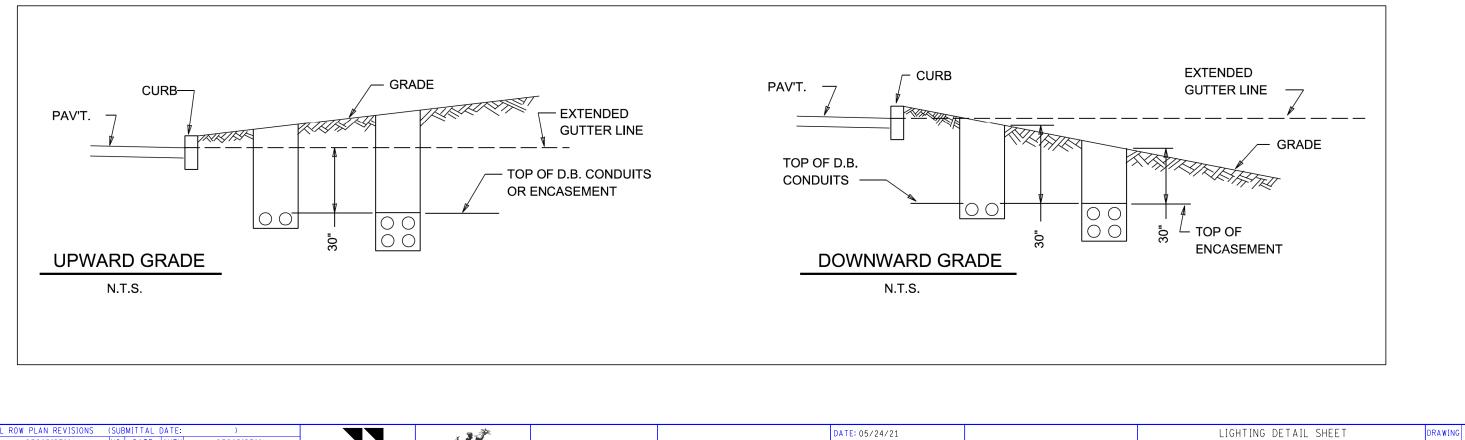
*** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.

FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)	₩	DATE: 05/24/21		LIGHTING DETAIL SHEET	DRAWING SHEET
NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION	NO SCAL		JN: PW-7031	RIVERSIDE PARK	RIV
	OHM Detroit	FILE:	RIVERSIDE PARK		022 140





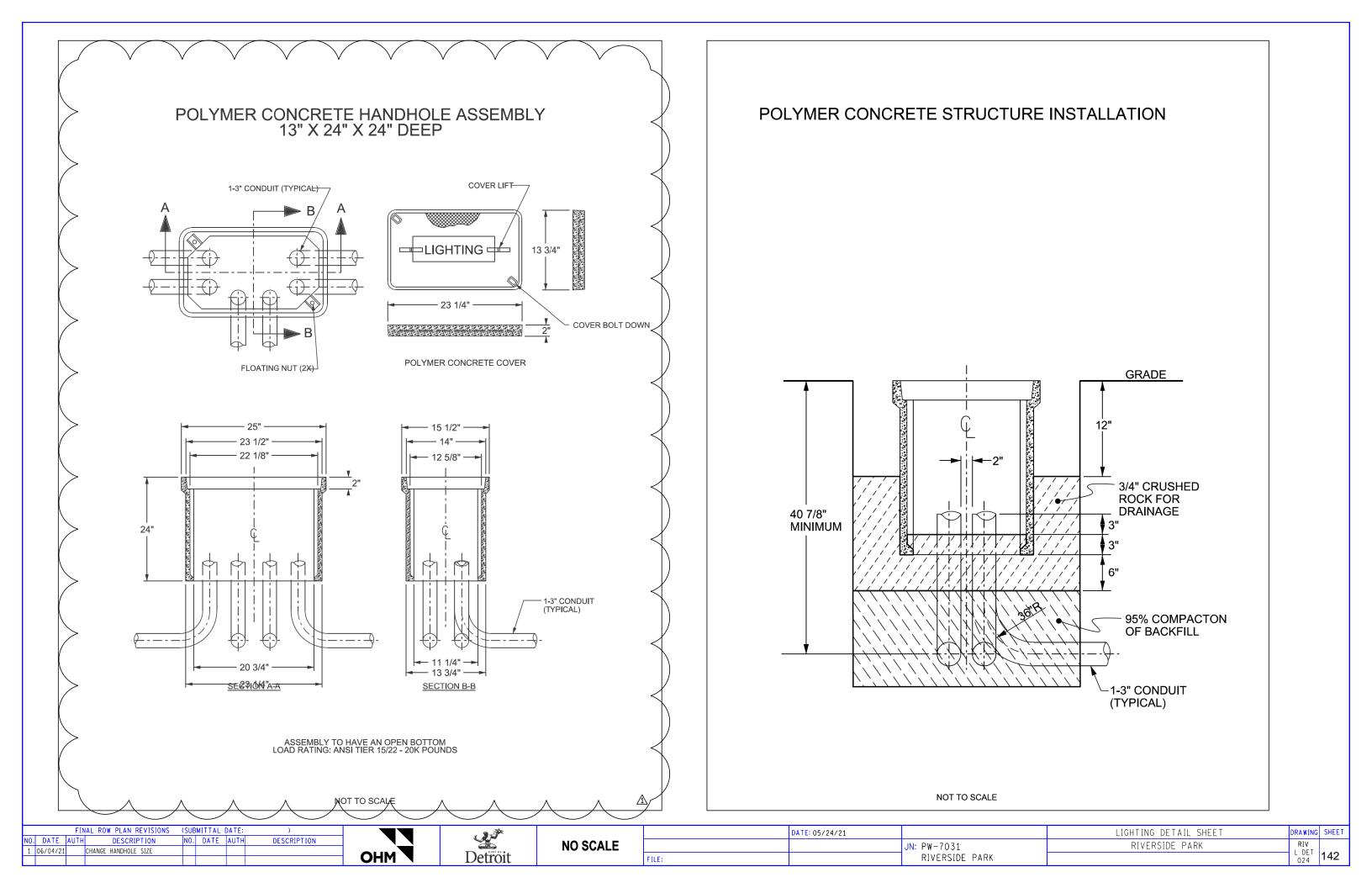
DIRECT BURIAL CONDUIT(S)

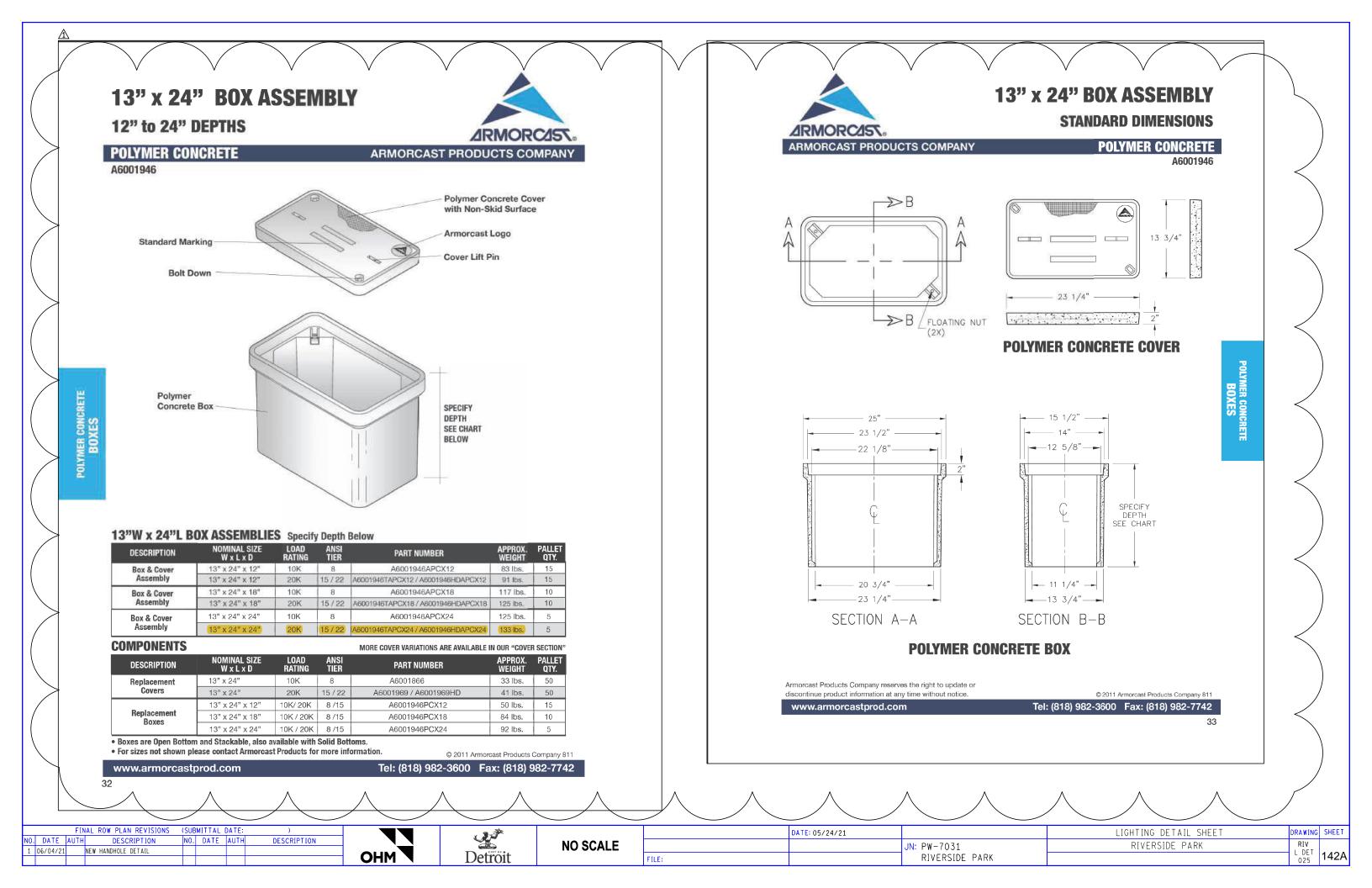


	F IN.	AL ROW PLAN REVISIONS	(SUBMITTAL DATE:)				DATE: 05/24/21	
NC	. DATE AUTH	DESCRIPTION	NO. DATE AUTH	DESCRIPTION		NO SCALE			IN: DW 7071
						NU SCALE			JN: PW-7031
					Detroit		FILE:		RIVERSIDE PARK

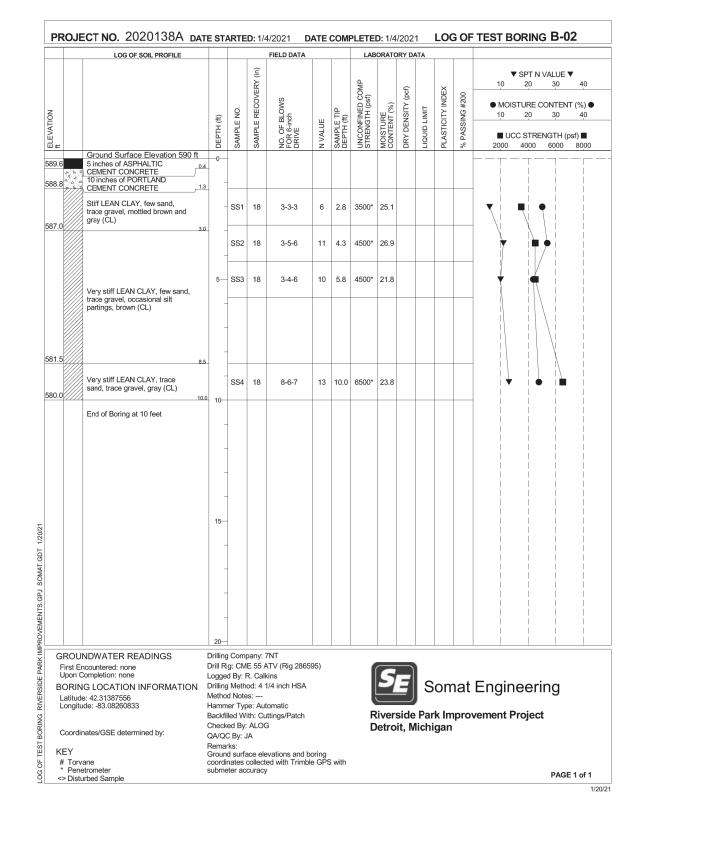
THE PREFERRED TRENCH WIDTH "W" IS THE WIDTH OF "D" OF CONDUIT ENCASEMENT.

LIGHTING DETAIL SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV L DET	
	023	141





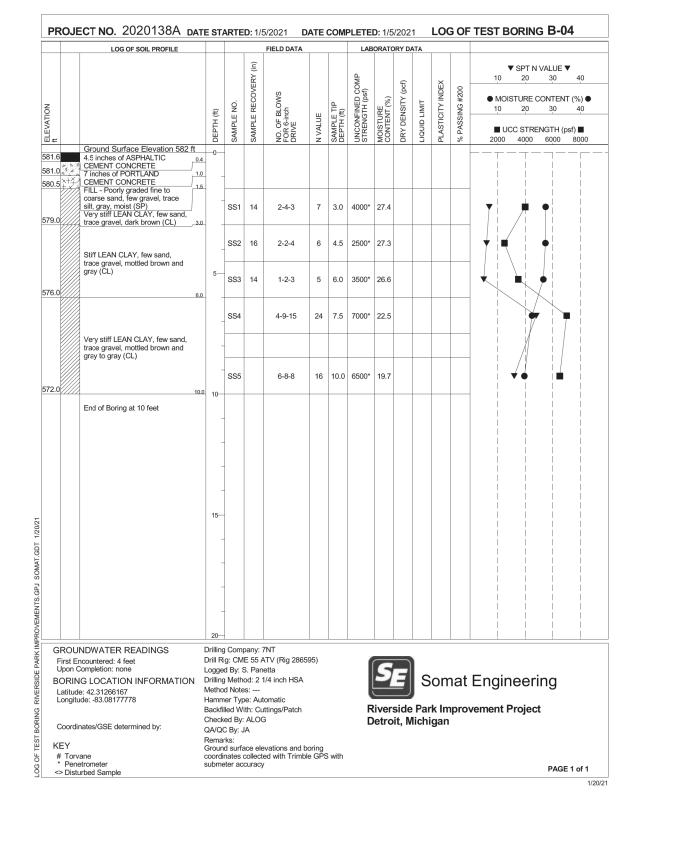
		LOG OF SOIL PROFILE				FIELD DATA			LAB	ORAT	DRY DA	ATA			
ft			DEPTH (ft)	SAMPLE NO.	SAMPLE RECOVERY (in)	NO. OF BLOWS FOR 6-inch DRIVE	N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	ΓΙQUID LIMIT	PLASTICITY INDEX	% PASSING #200	
⊔ ∉ 89.9	+×+ +×+ ××-	Ground Surface Elevation 590 ft 1 inch of sandy TOPSOIL, trace roots, trace gravel, black FILL - Stiff lean clay with sand, few topsoil, trace roots, trace	0	SS1	14	1-2-3	5	1.5	2000*	18.4				o`	
37.5	×+×+ +×+ +× *	gravel, brown and black (CL)	.5	SS2	16	6-7-6	13	3.0	9000*	17.5					
36.0		sand, trace gravel, occasional silt partings above 3 ft., brown (CL)	<u>.0</u>	- SS3	24	2-2-4-5	6	5.0	3000*	22.3					
		Stiff to very stiff LEAN CLAY, few sand, trace gravel, brown (CL)	-	SS4	18	4-6-8	14	7.5	7000*	22.2					
81.0 80.0		Very stiff LEAN CLAY, few sand,	.0 0.010	SS5	18	4-6-6	12	10.0	6000*	23.9					↓ ↓ ↓
			- - - - - - - - - - - - - - - - 	-											
Fi B ⁱ L L K I K	Coordin EY Pon C ORIN atitude ongitu Coordin EY Torv Pene	NDWATER READINGS roountered: none completion: none G LOCATION INFORMATION : 42.31397389 ide: -83.08246389 hates/GSE determined by: ane strometer trometer trometer trometer trode Sample	Logge Drilling Metho Hamn Backfi Check QA/Q Rema Cave- Grour	ig: CM d By: 3 g Meth d Note her Typ lled W ced By: C By: C rks: in repo d surfa nates	E 55 S. Par od: 2 es: be: Au ith: Co ith: Co ALO JA orted a ace el collec	ATV (Rig 2865 hetta 1/4 inch HSA itomatic uttings G at 8 ft. evvations and b ted with Trimbl	oring	S with			Side	Par	k Im		Engineering rement Project



		FIN	AL ROW PLAN REVISIONS	(SU	BMITTAL	DATE:)					DATE: 05/24/21	
	NO. DATE	AUTH	DESCRIPTION	N0.	. DATE	AUTH	DESCRIPTION	Somat Engineering,		NO SCALE			JN: PW-7031
ŀ				_					Detroit		FILE:		RIVERSIDE PARK

SOIL BORING LOG SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV BORING	
	001	143

		LOG OF SOIL PROFILE					FIELD DATA			LAB	ORATO	DRY DA	ATA	1			
ft				DEPTH (ft)	SAMPLE NO.	SAMPLE RECOVERY (in)	NO. OF BLOWS FOR 6-inch DRIVE	N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	SPT N VA 10 20 MOISTURE COI 10 20 UCC STRENC 2000 4000 6	30 40 NTENT (%) ● 30 40
	44	Ground Surface Elevation 581	ft	-0													
80.2		10 inches of PORTLAND CEMENT CONCRETE	0.8														1
	×+×+ +×+ ×+×+ ×+×+ ×+×+	FILL - Loose silty sand, trace organics, few gravel, trace clay, trace slag aggregates, black, moist (SM)		_	SS1	18	3-6-3	9	2.5						28		
77.5	+× ++ ×+× >	LOI test at depth of 2 ft. had organic content of 2.2%	3.5	-	SS2	18	3-4-3	7	4.0	2000*	40.7						
76.5		Stiff LEAN CLAY with sand, trace gravel, gray (CL)	4.5	5	SS3	24	2-4-7-7	11	6.0	2000* 6500*	16.7 23.7						
75.0		sand, trace gravel, brown (CL)	6.0	_	SS4	18	5-6-8	14	7.5	8500*	20.3						
		Hard to very stiff LEAN CLAY, few sand, trace gravel, brown to gray (CL)		_		10	3-0-0	14	7.5	8500	20.5						
71.0			10.0	- 10-	SS5	18	4-6-6	12	10.0	6000*	21.1						
				- - 15													
				-													
F U B(L	irst Er pon C DRIN atitude ongitu	NDWATER READINGS countered: none ompletion: none G LOCATION INFORMATION e: 42.31352083 de: -83.08107222 hates/GSE determined by:	Dr Dr Lc N Dr Ha Ba Ch Q	rill Ri ogge rilling etho amm ackfil heck	d By: I Meth d Note ler Typ lled W ed By: C By: C	E 55 / R. Cal od: 2 is: be: Au ith: Ci ALO	ATV (Rig 2865 kins 1/4 inch HSA tomatic uttings/Patch	95)	<u> </u>		Sivers		Par	k Im	prov	Engineerin vement Project	g
*	Torva Pene	ane trometer rbed Sample	Gi	roun	d surfa	collect	evations and be ted with Trimble /		S with								PAGE 1 of 1



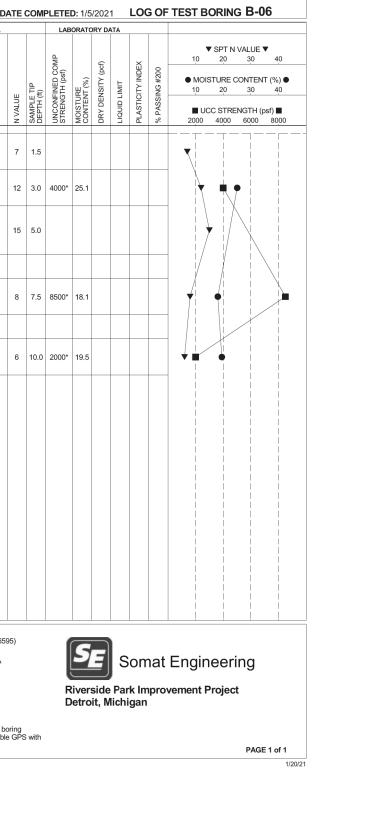
		FIN	AL ROW PLAN REVISIONS	(SUBMITTAL DATE)					DATE: 05/24/21	
N	DATE	AUTH	DESCRIPTION	NO. DATE AUTH	DESCRIPTION	Somat Engineering,		NO SCALE			JN: PW-7031
							Detroit		FILE:		RIVERSIDE PARK

SOIL BORING LOG SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV BORING	
	002	144

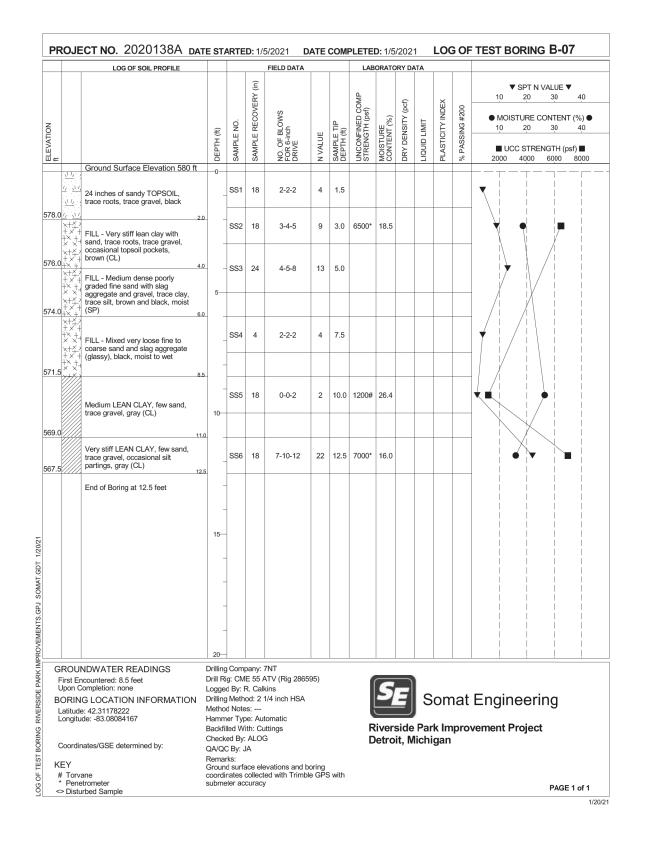
		LOG OF SOIL PROFILE				FIELD DATA	LABORATORY DATA									
			DEPTH (ft)	SAMPLE NO.	SAMPLE RECOVERY (in)	NO. OF BLOWS FOR 6-inch DRIVE	N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	PASSING #200	▼ SPT N VALUE ▼ 10 20 30 40 ● MOISTURE CONTENT (%) ● 10 20 30 40 ■ UCC STRENGTH (psf) ■	
¦≞		One and Conferent Flouretier F04.4	DEI	SAI	SAI	N OL N	ž	SAN	STE	80	DR	Γα	PLA	% F	2000 4000 6000 8000	
30.3 30.0 79.5	x+× x+× +×+ +×+ +×+ +×+ +× +	FILL - Mixed fine to coarse sand and slag, black (Base Material) FILL - Stiff sandy lean clay, trace gravel, trace brick debris, black and brown (CL)	0 .0 .5	BS1 SS1	13	4-6-6	12	<u>1.0</u> 2.5	2500*	21.0						
77.5	x+x + x + + x + + x +	FILL - Stiff sandy lean clay, few	.5	SS2	11	2-4-6	10	4.0	2500*	23.0						
76.0	+× +_ × × <u>×+×</u> ; + × +	sand, occasional black fine sand partings, alternating layers of black and brown (CL)	i.05	SS3	14	2-3-2	5	5.5								
	+× + +× + +× + +× + +× +			SS4	18	0-2-2	4	7.5								
	++×+× ++×+×++× ++×+×+×	FILL - Very loose to loose clayey fine sand, few gravel, occasional clay layers between 6-7.5 ft., layer of brick debris at 10 ft,. black, wet (SC)		-	40	0.05		40.5								
	+^ +- ×+×+ +×+ +×+ ×+×+		10-	SS5	18	2-3-5	8	10.0								
69.5		1	1.5.	SS6	18	7-2-5	7	12.5	5000*	18.9						
		Very stiff LEAN CLAY, trace sand, trace gravel, gray (CL)		SS7	18	5-6-7	13	15.0	6500*	24.2						
56.C		End of Boring at 15 feet	5.0 15 -	-												
			- 20-													
F L L	First Ei Jpon C ORIN Latitud Longitu	NDWATER READINGS noountered: 4.5 feet completion: 6 feet G LOCATION INFORMATION e: 42.31262 de: -83.08099167 nates/GSE determined by:	Drill R Logge Drillin Metho Hamn Backf Check	Drilling Company: 7NT Drill Rig: CME 55 ATV (Rig 286595) Logged By: R. Calkins Drilling Method: 4 1/4 inch HSA Method Notes: Hammer Type: Automatic Backfilled With: Cuttings/Patch Checked By: ALOG							Somat Engineerin Riverside Park Improvement Project Detroit, Michigan					
K ,	EY # Torv * Pene		QA/QC By: JA Remarks: Ground surface elevations and boring coordinates collected with Trimble GPS with submeter accuracy PAGE 1									PAGE 1 of 1				

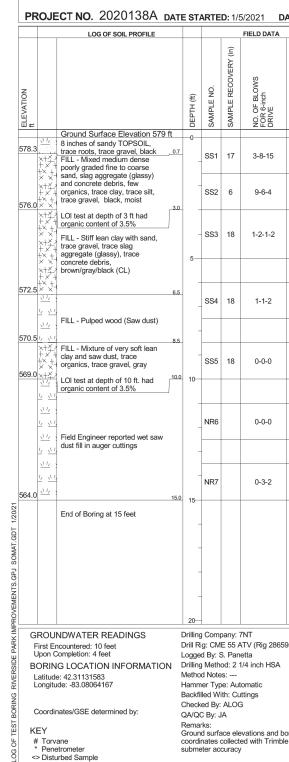
	100 05 001 05 5					
	LOG OF SOIL PROFIL	E				FIELD DATA
ELEVATION ft			DEPTH (ft)	SAMPLE NO.	SAMPLE RECOVERY (in)	NO. OF BLOWS FOR 6-inch DRIVE
· Fz	Ground Surface Elevation		-0			
579.0 578.5 ׆	12 inches of sandy TOPSO trace roots, trace gravel, black FILL - Poorly graded fine sar	k <u>1.0</u> Id, <u>1.6</u>	_	SS1	18	2-3-4
577.0 ×+	trace clay, trace silt, trace gr trace slag, black, moist (SP) FILL - Very stiff lean clay wit sand, trace organics, trace	i avei,	-	SS2	18	4-5-7
xt +: x +: x +: x +: x +: x +: x	Zervel, occasional pockets o slag aggregate (glassy), brow with layers of dark brown (Cl LOI test at depth of 3 ft. had organic content of 3.3% FILL - Medium dense poorly	vn		SS3	24	4-5-10-10
574.0+	graded fine sand with slag aggregate (glassy), trace cla	y,				
574.0+	trace silt, trace gravel, brown/gray/black, moist (CL) Hard LEAN CLAY, few sand		-	SS4	18	3-4-4
	trace gravel, mottled brown a gray (CL)					
571.5		8.5				
570.0	Stiff LEAN CLAY, few sand, trace gravel, gray (CL)	10.0	- 10-	SS5	18	2-3-3
	End of Boring at 10 feet		-			
			15—			
			-			
			_			
			_			
			20—			
Firs Upo BOF	UNDWATER READINGS Encountered: none Completion: none NG LOCATION INFORMA ide: 42.31194972	L TION	Drilling Drill Ri Ogge Drilling	d By: F	E 55 / R. Call od: 2	ATV (Rig 2865
	itude: -83.081275	E	Backfil	lled W	ith: Cu	
	dinates/GSE determined by:	C F	QA/Q0 Remar		A	
* P	rvane netrometer sturbed Sample	0	Groun oordii	d surfa	collect	evations and b ed with Trimb /

		FINAL ROW PL	N REVISIONS	(SUBMITTAL DATE)					DATE: 05/24/21	
NO.	DATE A	UTH DES	CRIPTION	NO. DATE AUT	H DESCRIPTION			NO SCALE			$N_{\rm PW} = 7031$
						Sonnat Engineering,		NU SCALE			JUN. FW-1031
						-	Detroit		FILE:		RIVERSIDE PARK



SOIL BORING LOG SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV BORING	1 1 5
	003	145



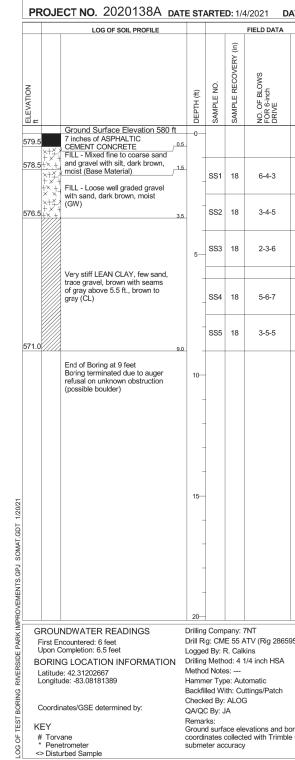


NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION Somat Engineering, Somat Engineering, JN:			۲I	AL ROW PLAN REVISIONS	(SUBMIT	TAL DATE)					DATE: 05/24/21	
	N0.	DATE	AUTH	DESCRIPTION	NO. DA	ATE AUTH	DESCRIPTION	53 Somat Engineering		NO SCALE			INI: PW = 7031
Detroit File:								INCORPORATED ST	Detroit	NO JUALL	EILE		RIVERSIDE PARK

Riverside Park Improvement Project Detroit, Michigan	ATE COMPLETED: 1/5/2021 LOG OF TEST BORING B-08									
in all (i) all			LAB	ORATO	RY DA	ATA				
10 3.0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	10 20 30 40 ● MOISTURE CONTENT (%) ● 10 20 30 40 ■ UCC STRENGTH (psf) ■	
a 5.0 2000' 24.9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	23	1.5								
a 75 a a a a a a a a a a a a a a a a a a	10	3.0								
o 10.0 400# 28.9 o 12.5 0 o 12.5 o 12.5 s 15.0 s <	3	5.0	2000*	24.9						
0 12.5 0 12.5 1 <td>3</td> <td>7.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	3	7.5								
15 15.0 5 15.	0	10.0	400#	28.9						
15 15.0 5 15.										
25) 26) 26) 27) 27) 27) 27) 27) 27) 27) 27	0	12.5						•		
25) Fiverside Park Improvement Project Detroit, Michigan PAGE 1 of 1	5	15.0								
25) Fiverside Park Improvement Project Detroit, Michigan PAGE 1 of 1										
25) Fiverside Park Improvement Project Detroit, Michigan PAGE 1 of 1										
Riverside Park Improvement Project Detroit, Michigan										
Riverside Park Improvement Project Detroit, Michigan	95)		ſ	6			<u> </u>			
oring 9 GPS with PAGE 1 of 1						Par	k Im			
PAGE 1 of 1	oring e GP\$	6 with	D	etro	it, N	lichi	gan			
1/20/21										

SOIL BORING LOG SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV BORING	
	004	146

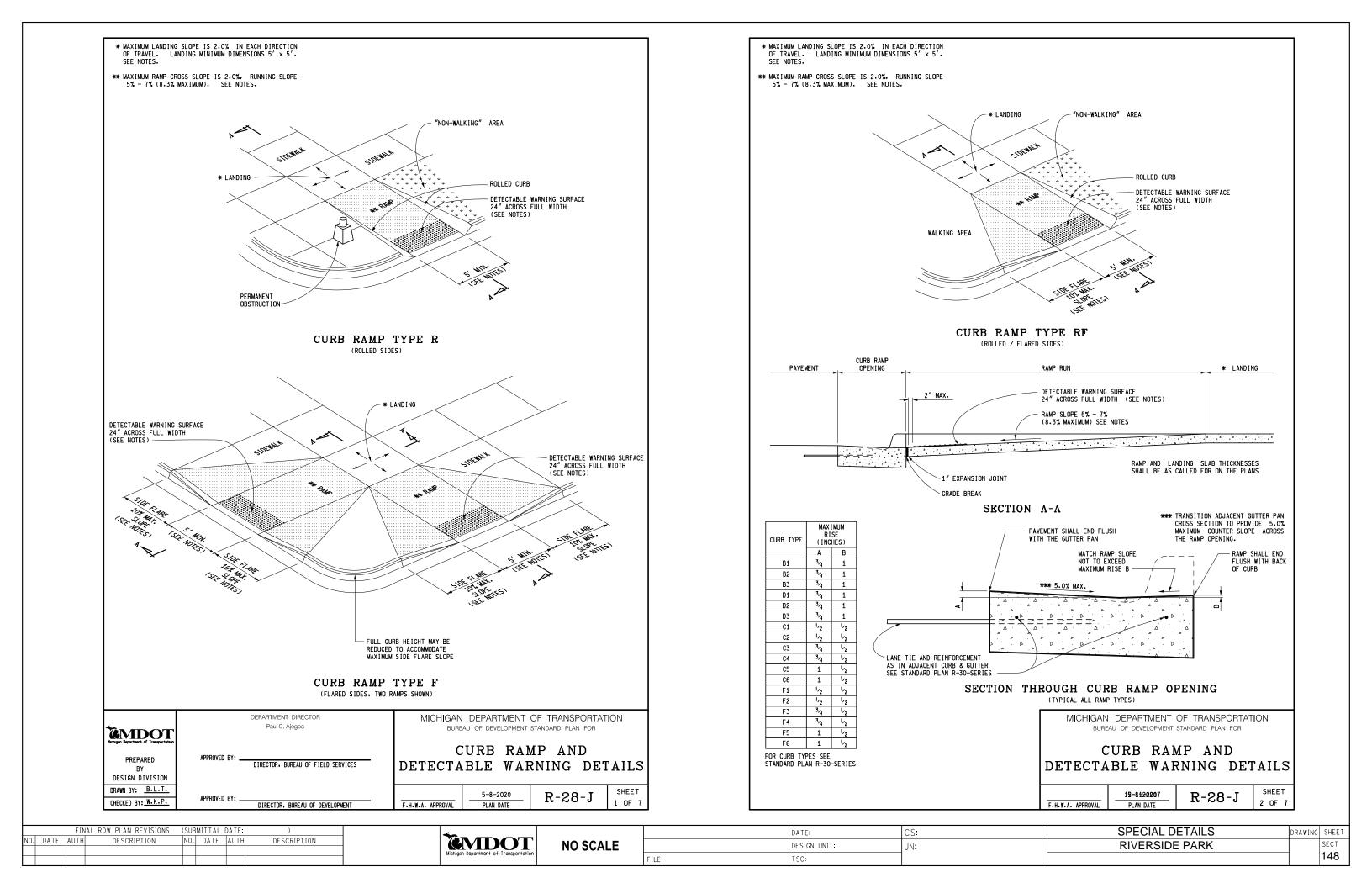
		LOG OF SOIL PROFILE	_	FIELD DATA LAB						LABORATORY DATA							
ft			DEPTH (ft)	SAMPLE NO.	SAMPLE RECOVERY (in)	NO. OF BLOWS FOR 6-inch DRIVE	N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	▼ SPT N V 10 20 ● MOISTURE CC 10 20 ■ UCC STREN 2000 4000	30 40 DNTENT (%) ● 30 40	
	Str. S	Ground Surface Elevation 583 ft	-0-	0)	0)	2110	2	0.0		20		_	ш.	0			
32.0	<u>1/ 1/</u> ×+ <u>×</u> >	12 inches of sandy TOPSOIL, trace roots, trace gravel, black	.م.	SS1	18	2-3-4	7	1.5							T		
	+ × + +× + × +× +× + +× +	FILL - Loose to medium dense sitly sand, trace gravel, trace clay, trace slag aggregate, trace brick debris, black, moist (SM)		SS2	18	3-3-7	10	3.0						38			
78.5	×+× +×+ +×+ × ×		.5	SS3	24	4-3-4-4	7	5.0									
77.0	×+4 +×+ +×+ ×+4 ×+4	FILL - Very stiff lean clay with sand, trace gravel, trace brick debris, brown with pockets of dark brown (CL)	.0 .						4500*	21.9							
75.5	×+× +×+ *×+ ×+×	FILL - Loose poorly graded fine sand, black, moist (SP)	.5	SS4	18	4-3-2	5	7.5							↓ /		
73.0		Stiff LEAN CLAY, few sand, trace gravel, gray (CL)		SS5	18	3-2-3	5	10.0	2500*	21.9							
		End of Boring at 10 feet															
			15	_													
			-														
			20-	g Com	nanur.	7NIT											
F L B(First Er Jpon C ORIN .atitude	NDWATER READINGS iccountered: 10 feet iompletion: 4 feet G LOCATION INFORMATION : 42.31233278 de: -83.08113889	Drill R Logge Drillin Metho Hamn Backf	tig: CM ed By: g Meth od Note ner Typ illed W	IE 55 S. Par od: 2 es: be: Au ith: C	ATV (Rig 2865 netta 1/4 inch HSA tomatic uttings	95)					Par	k Im		Engineerir vement Project	ıg	
KI	EY † Torv	nates/GSE determined by: ane trometer	Checked By: ALOG Detroit, Michigan QA/QC By: JA Remarks: Ground surface elevations and boring coordinates collected with Trimble GPS with submeter accuracy														
		etrometer Irbed Sample	subm	elei, ac	curac	у										PAGE 1 of 1	

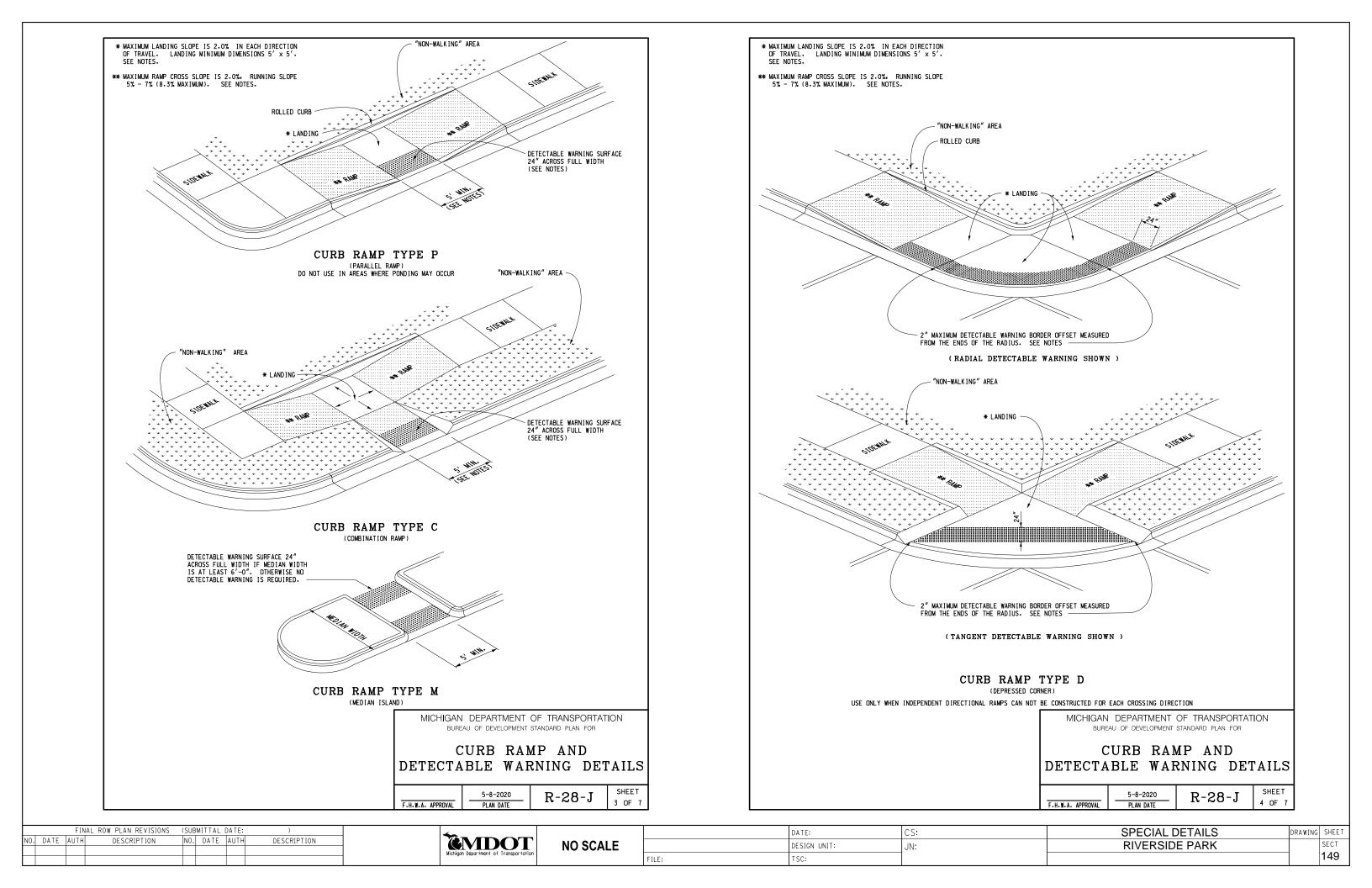


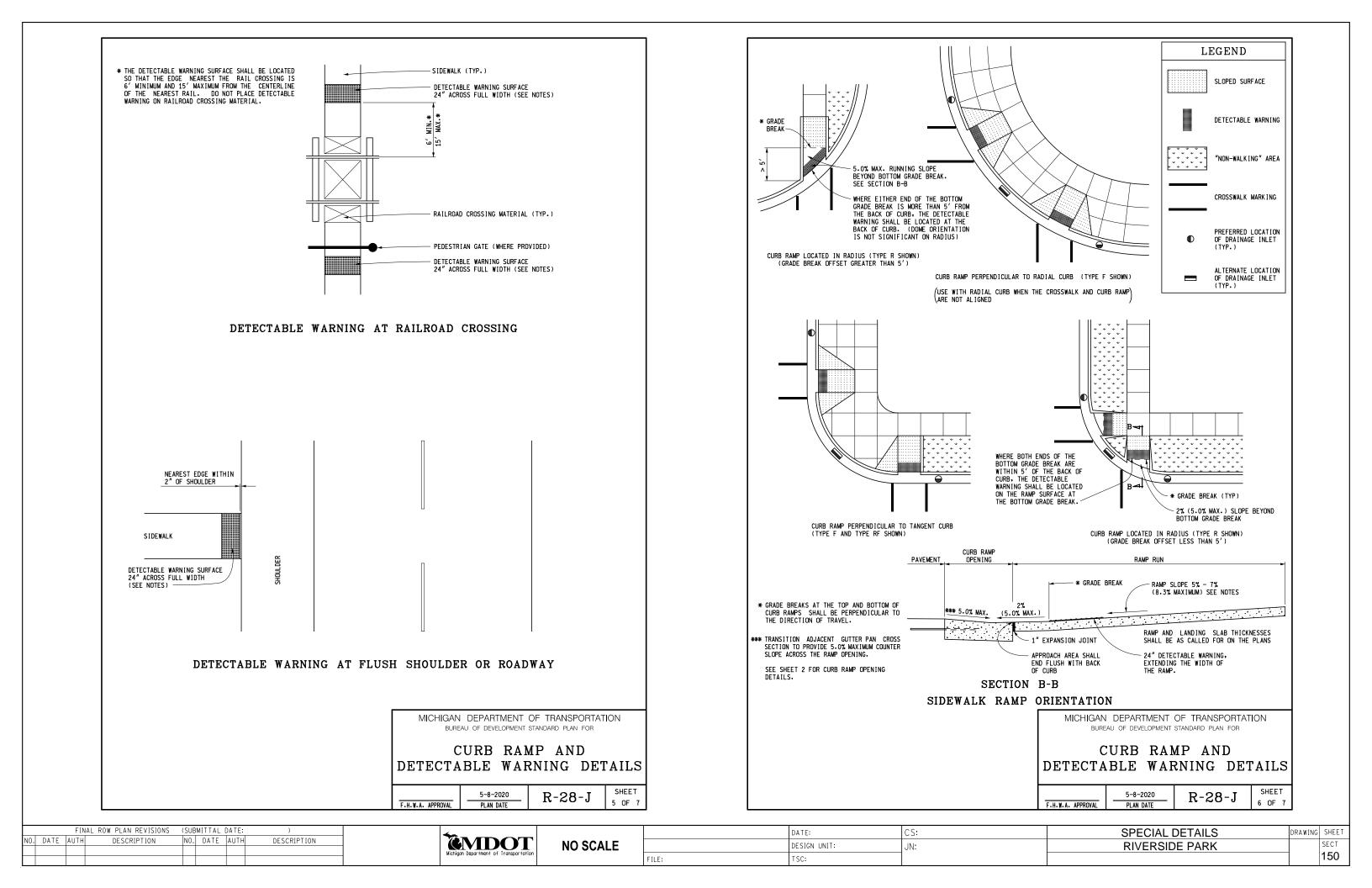
		ROW PLAN REVISIONS				. * *			DATE: 05/24/21	
N	O. DATE AUTH	DESCRIPTION	NO. DATE AUTH	DESCRIPTION	G Compt Engineering		NO SCALE			INI- DW 7074
					Somat Engineering,		NU SUALE			JN: PW-7031
						Detroit		FILE:		RIVERSIDE PARK

LOG OF TEST BORING B-10									
		LAB	ORATO	DRY DA	ATA				
N VALUE	SAMPLE TIP DEPTH (ft)	UNCONFINED COMP STRENGTH (psf)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	▼ SPT N VALUE ▼ 10 20 30 40 ● MOISTURE CONTENT (%) ● 10 20 30 40 ■ UCC STRENGTH (psf) ■ 2000 4000 6000 8000	
7	2.5						4		
9	4.0	6000*	24.2						
9	5.5	4500*	25.0						
13	7.5	6000*	27.6						
10	9.0	6500*	19.3						
95)			Sivers		Par	k Im	pro	Engineering vement Project	
oring e GPS	6 with							PAGE 1 of 1	
								1/20/21	

SOIL BORING LOG SHEET	DRAWING	SHEET
RIVERSIDE PARK	RIV BORING	
	005	147







		50% TD 65% OF BASE 0.9" TO 1.4" DOME SECTION 0.9"
		DETECTABLE
	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR	NOTES: DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION. RECONSTRUCTION. OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY. CURB RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENSINEER. RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS. SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE. SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP. WHERE CONDITIONS PERMIT. IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BIOTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY. WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE. RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'. CURB RAMPS WITH A RUNNING SLOPE 35% DO NOT REQUIRE AT OP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTION THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE NOT GRAFT THAN 2' PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL. DETECTABLE WARNING SURFACE COVERAGE IS 24' MINIMUM IN THE RAMP PATH OPENING SURFACE COVERAGE IS 24' MINIMUM IN THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET INTO GREATER THAN 2' MEASURED ALOWAGE THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.
FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:) NO. DATE AUTH DESCRIPTION NO. DATE AUTH DESCRIPTION	F.H.W.A. APPROVAL PLAN DATE	DATE: CS:
	VICTIGAT DEPARTMENT of Transportation NO SCALE	DESIGN UNIT: JN:

FILE:

TSC:

