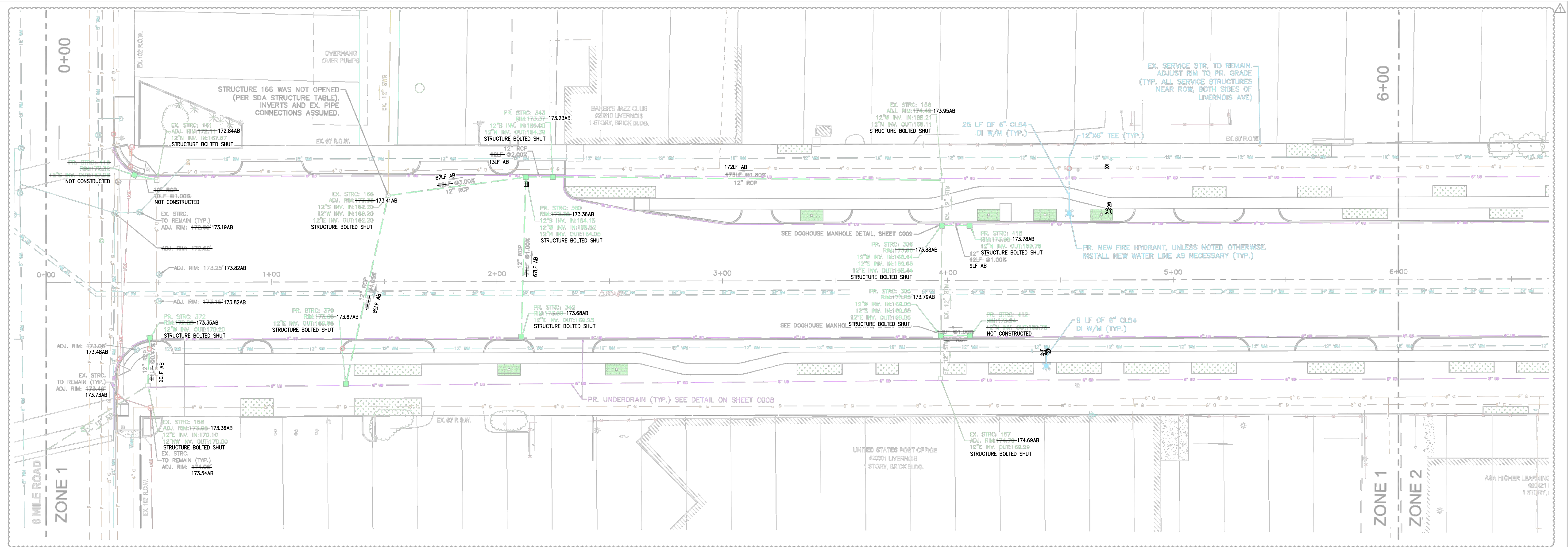




LEGEND

	EXISTING STORM SEWER CATCH BASIN
	EXISTING STORM SEWER MANHOLE
	EXISTING UNDERGROUND PHONE MANHOLE
	EXISTING GATE WELL & VALVE
	EXISTING WATER MANHOLE
	EXISTING ELECTRICAL MANHOLE
	EXISTING ELECTRICAL HANDHOLE
	PROPOSED STORM SEWER CATCH BASIN
	PROPOSED STORM SEWER MANHOLE
	PROPOSED NEW FIRE HYDRANT
	PROPOSED RELOCATED FIRE HYDRANT
	PROPOSED LIGHT POLE (SEE LIGHTING PLANS)
	EXISTING GAS LINE
	EXISTING UNDERGROUND PHONE LINE
	EXISTING STORM SEWER PIPE
	EXISTING COMBINED SEWER
	EXISTING WATERMAIN
	PROPOSED STORM SEWER PIPE
	PROPOSED UNDERDRAIN
	PROPOSED WATERMAIN
	POTENTIAL UTILITY CONFLICT

NOTES:

- LOCATION OF UTILITIES OR OTHER STRUCTURES SHOWN ON PLANS ARE TAKEN FROM SURVEY OF RECORD. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OMISSIONS OR VARIATIONS. THE CONTRACTOR SHALL CONTACT MISS DIG A MINIMUM OF THREE WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION IN THE AREA OF WORK AND SHALL VERIFY ALL UNDERGROUND UTILITIES ON-SITE, PRIOR TO CONSTRUCTION.
- FOR ALL UTILITY DETAILS, SEE SHEETS C008-C012.
- DETROIT WATER AND SEWERAGE DEPARTMENT (DWSD) PROHIBITS THE USE OF HEAVY CONSTRUCTION EQUIPMENT AND/OR STORAGE OF BUILDING MATERIAL DIRECTLY OVER OR NEAR THE MAIN/SEWER. DWSD ALSO PROHIBITS THE USE OF CRANES AND BALLS OR HYDRAULIC RAMS FOR PAVEMENT REMOVAL WHERE THE DWSD FACILITIES ARE INVOLVED. IF THE WATER MAIN OR SEWER FACILITIES ARE BROKEN OR DAMAGED AS A RESULT OF ANY ACTION ON THE PART OF THE CONTRACTOR, THEN THE CONTRACTOR SHALL BE LIABLE FOR ALL COSTS INCIDENTAL TO THE REPAIR OF SUCH BROKEN OR DAMAGED WATER MAIN/SEWER FACILITIES AND APPURTENANCES. THE CONTRACTOR SHALL WAIVE ALL CLAIMS FOR DAMAGES UNDER SUCH CIRCUMSTANCES.
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- ALL RIM ELEVATIONS FOR PROPOSED AND EXISTING STRUCTURES THAT ARE TO REMAIN WITHIN PAVEMENT AND/OR PROPOSED SIDEWALK MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION. THE CONTRACTOR SHALL ADJUST ALL RIM ELEVATIONS AS NEEDED SUCH THAT CASTINGS ARE FLUSH WITH NEW PAVEMENT AND/OR SIDEWALK GRADES. OWNER SHALL NOT BE RESPONSIBLE FOR MAKING ADJUSTMENTS TO EXISTING STRUCTURES IMPACTED BY THE PROPOSED IMPROVEMENTS.
- CONTRACTOR TO CONFIRM UTILITY STRUCTURE FRAME AND GRATE PRIOR TO INSTALLATION.
- CUT AND CAP EXISTING UTILITY LEADS PER DWSD STANDARDS
- IRRIGATION NETWORK**
 - IRRIGATION NETWORK WITHIN MEDIAN IS TO BE ENTIRELY REMOVED ALONG WITH MEDIAN REMOVAL.
 - REMOVE IRRIGATION LINE AND TAP UP TO CONNECTION TO DWSD WATER MAIN. IF TAP, REPLACE WITH WATER MAIN PIPE. IF TEE, CAP TEE PER DWSD STANDARDS. SEE SHEET C305 FOR MORE INFORMATION.
- STORM SEWER**
 - ALL PROPOSED STORM SEWER PIPES ARE TO BE CLASS IV REINFORCED CONCRETE PIPE UNLESS NOTED OTHERWISE.
 - ALL EXISTING STORM SEWER GRATES IN PROPOSED SIDEWALK TO BE REPLACED WITH PEDESTRIAN-STYLE ADA CATCH BASIN GRATE. SEE CITY OF DETROIT DPW DETAIL 108 ON SHEET C011. ALL PROPOSED CATCH BASINS SHALL HAVE FILTER FABRIC INSTALLED PER DETAIL ON SHEET C008 UNTIL CONSTRUCTION IS COMPLETED.
 - ALL PROPOSED STORM WATER OVERFLOW STRUCTURES IN BIOSWALES TO BE BEEHIVE CATCH BASINS (EAST JORDAN IRON WORKS 6508 BEEHIVE DITCH GRATE, NEENAH R-4340-A, OR EQUIVALENT, WITH DWSD LOGO).
- UNDERDRAINS**
 - UNDERDRAIN SHOWN OFFSET FROM STORM SEWER AND CATCH BASINS FOR CLARITY ONLY. REFER TO DETAIL SHEETS FOR LOCATION.
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- WATER MAIN**
 - ALL PROPOSED WATER MAIN AND SEWER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DWSD STANDARDS AND SPECIFICATIONS.
 - CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL WATER MAIN BENDS AND TEES PER DWSD STANDARD DETAILS. SEE UTILITY DETAIL SHEETS.
- FIRE HYDRANTS**
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- COMBINED SEWER**
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 - WHERE PROPOSED UNDERDRAIN CONFLICTS, ROUTE UNDERDRAIN AROUND OBSTRUCTION. MAINTAIN 2' COVER.
 - WHERE WATER MAIN CONFLICTS, ROUTE WATER MAIN AROUND OBSTRUCTION PER DWSD STANDARD DETAILS AND DETAIL SHOWN ON C008. MAINTAIN 5' COVER ABOVE WATER MAIN.
 - WHERE PROPOSED STORM DRAIN CONFLICTS, CONSULT WITH OWNER/ENGINEER. MAINTAIN MINIMUM 3' COVER.
- EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH TAPPING SLEEVE, REMOVE SLEEVE AND REPLACE WITH PROPOSED 12"x6" TEE. SEE SHEET C011 FOR DETAIL.**
- EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH A TEE, AND TEE IS IN GOOD CONDITION, EXTEND LEAD FROM EXISTING TEE. REPLACE TEE IF NECESSARY.**
- IF PROPOSED FIRE HYDRANT LEAD LINE IS IN A DIFFERENT LOCATION THAN EXISTING LEAD CONNECTION:**
 - IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH TAPPING SLEEVE, REMOVE SLEEVE AND REPLACE WITH PIPE. INSTALL PROPOSED TEE IN PROPOSED LOCATION ON EXISTING WATER MAIN.
 - IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH A TEE, CUT AND CAP TEE PER DWSD STANDARDS. INSTALL NEW TEE IN PROPOSED LOCATION ON EXISTING WATER MAIN.

PRIME CONSULTANT

**spackman
mossop
michaels**

440 Burroughs Street
Suite 696
Detroit | MI | 48202
T: 313.720.1055

PROJECT

LIVERNOIS STREETSCAPE

LIVERNOIS AVENUE, DETROIT

REVISION

NO.	DESCRIPTION	DATE
1	AS1 #1	5/13/2019

Sheet Title

**UTILITY PLAN - STA. 0+00
TO 6+00**

Sheet No:

C401

SMM PROJECT No:
17081

STATUS:
100% Design

DATE:
28 March 2019

STATE OF MICHIGAN
DAVID R. LUTZ
ENGINEER
No. 5746
LICENSED PROFESSIONAL ENGINEER

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171

ALTERNATE NUMBER (810) MISS-DIG
For the location of public utility lines.

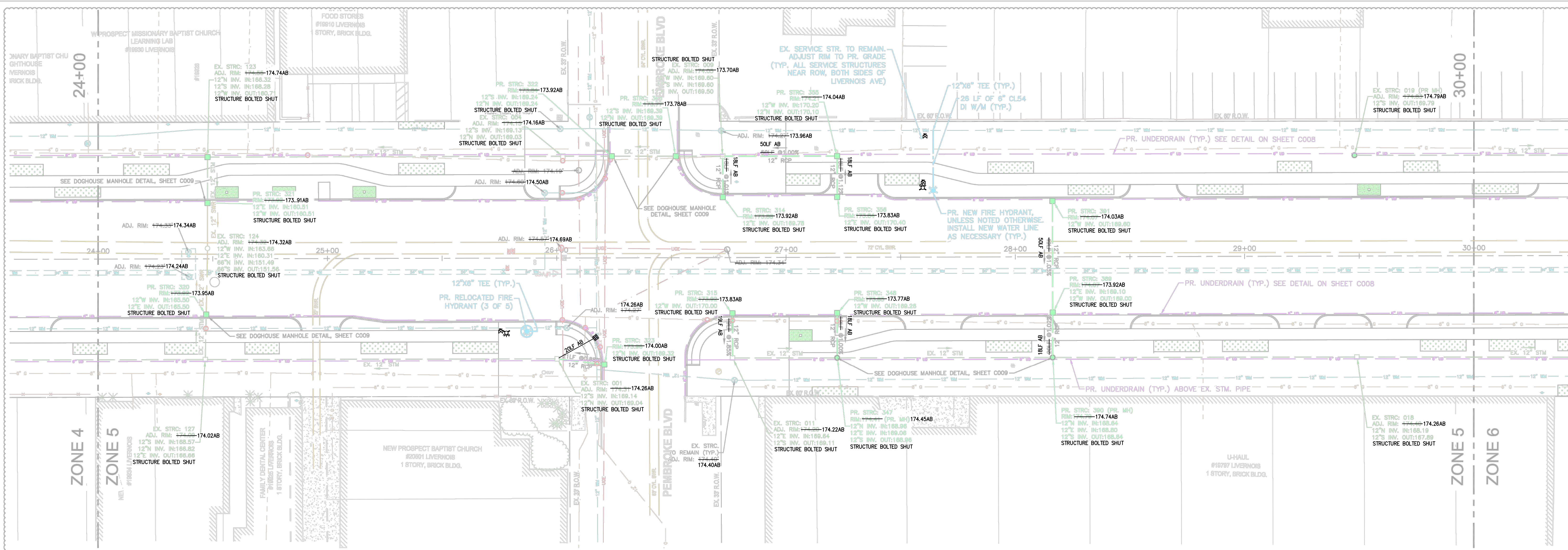
Yellow: GAS
Orange: PHONE & CABLE
Red: ELECTRIC
Blue: WATER
Green: STORM DRAIN
Brown: SEWER
Pink: SURVEYING

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES... CALL MISS DIG

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022

A:\2017\61170118\livernois\dwg\utility\livernois.dwg Plot Date: 5/13/2019 10:54 PM by: bblanck





LEGEND

	EXISTING STORM SEWER CATCH BASIN
	EXISTING STORM SEWER MANHOLE
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3 WORKING DAYS
**BEFORE YOU DIG
CALL MISS DIG®**
1-800-482-7171

For the location of public utility lines.

ALTERNATE NUMBER (810) MISS-DIG
COLOR CODES FOR UTILITY LOCATIONS:

Yellow	Oil & Gas	Blue	Water
Orange	Phone & Cable	Green	Storm Drain
Red	Electric	Brown	Sewer
		Pink	Surveying

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022

PRIME CONSULTANT

**spackman
mossop
michaels**

440 Burroughs Street
Suite 696
Detroit | MI | 48202
T: 313.720.1055

NTH

NTH Consultants
41780 Six Mile Road
Suite 200
Northville | MI | 48168
T: 248.662.0000
NTH Project No.
61-170118

PROJECT

LIVERNOIS STREETSCAPE

LIVERNOIS AVENUE, DETROIT

SMM PROJECT No:
17081

STATUS:
100% Design

DATE:
28 March 2019

REVISION		DATE
NO.	DESCRIPTION	
1	AS1 #1	5/13/2019

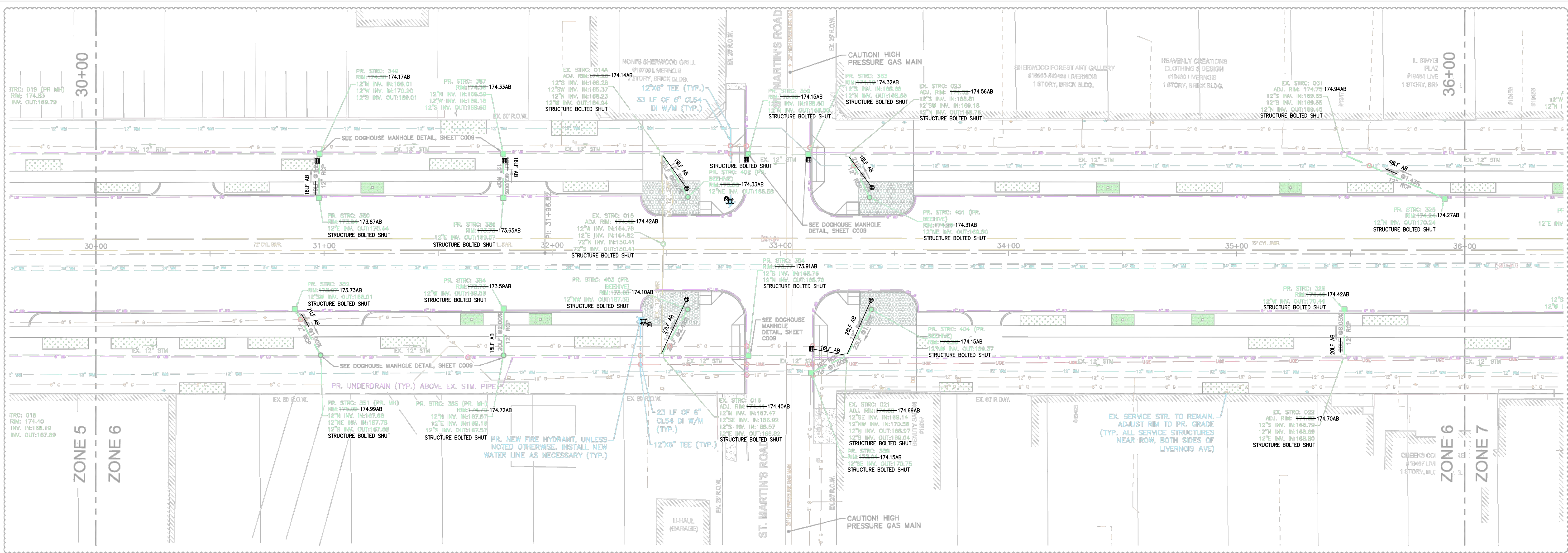
Sheet Title

**UTILITY PLAN - STA.
24+00 TO 30+00**

Sheet No:

C405

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LEGEND

- EXISTING STORM SEWER CATCH BASIN
- EXISTING STORM SEWER MANHOLE
- EXISTING UNDERGROUND PHONE MANHOLE
- EXISTING GATE WELL & VALVE
- EXISTING WATER MANHOLE
- EXISTING ELECTRICAL MANHOLE
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- EXISTING COMBINED SEWER
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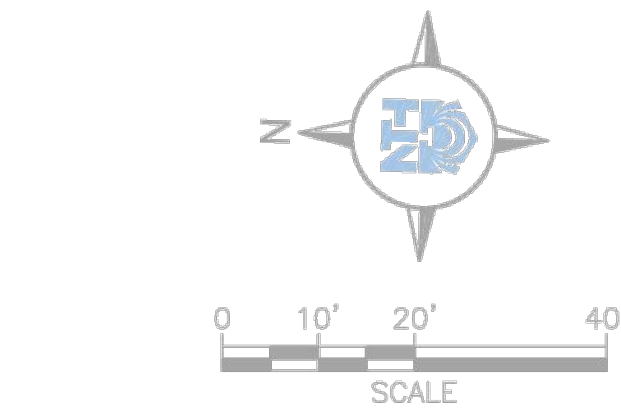
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AS-BUILT SURVEY PERFORMED BY CORE LAND CONSULTING ON MARCH 21, 2022

PRIME CONSULTANT

spackman
mossop
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PROJECT

LIVERNOIS STREETSCAPE

LIVERNOIS AVENUE, DETROIT



SMM PROJECT No:
17081

STATUS:
100% Design

DATE:
28 March 2019

REVISION		DATE
NO. DESCRIPTION		
1 ASI #1		5/13/2019

Sheet Title

UTILITY PLAN - STA.
30+00 TO 36+00

Sheet No:

C406

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3. DETROIT WATER AND SEWERAGE DEPARTMENT (DWSO) PROHIBITS THE USE OF HEAVY CONSTRUCTION EQUIPMENT AND/OR STORAGE OF BUILDING MATERIAL DIRECTLY OVER OR NEAR THE MAIN/SEWER. DWSO ALSO PROHIBITS THE USE OF CRANES AND BALLS OR HYDRAULIC RAMS FOR PAVEMENT REMOVAL WHERE THE DWSO FACILITIES ARE INVOLVED. IF THE WATER MAIN OR SEWER FACILITIES ARE BROKEN OR DAMAGED AS A RESULT OF ANY ACTION ON THE PART OF THE CONTRACTOR, THEN THE CONTRACTOR SHALL BE LIABLE FOR ALL COSTS INCIDENTAL TO THE REPAIR OF SUCH BROKEN OR DAMAGED WATER MAIN/SEWER FACILITIES AND APPURTENANCES. THE CONTRACTOR SHALL WAIVE ALL CLAIMS FOR DAMAGES UNDER SUCH CIRCUMSTANCES.
4. DWSO PERMIT AND INSPECTION IS REQUIRED FOR ALL WORK INVOLVING DWSO UTILITIES AND STRUCTURES.
5. ALL RIM ELEVATIONS FOR PROPOSED AND EXISTING STRUCTURES THAT ARE TO REMAIN WITHIN PAVEMENT AND/OR PROPOSED SIDEWALK MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION. THE CONTRACTOR SHALL ADJUST ALL RIM ELEVATIONS AS NEEDED SUCH THAT CASTINGS ARE FLUSH WITH NEW PAVEMENT AND/OR SIDEWALK GRADES. OWNER SHALL NOT BE RESPONSIBLE FOR MAKING ADJUSTMENTS TO EXISTING STRUCTURES IMPACTED BY THE PROPOSED IMPROVEMENTS.
6. CONTRACTOR TO CONFIRM UTILITY STRUCTURE FRAME AND GRATE PRIOR TO INSTALLATION.
7. CUT AND CAP EXISTING UTILITY LEADS PER DWSO STANDARDS
8. IRRIGATION NETWORK
 - 8.1. IRRIGATION NETWORK WITHIN MEDIAN IS TO BE ENTIRELY REMOVED ALONG WITH MEDIAN REMOVAL.
 - 8.2. REMOVE IRRIGATION LINE AND TAP UP TO CONNECTION TO DWSO WATER MAIN. IF TAP, REPLACE WITH WATER MAIN PIPE. IF TEE, CAP TEE PER DWSO STANDARDS. SEE SHEET C305 FOR MORE INFORMATION.

- 9.1. ALL PROPOSED STORM SEWER PIPES ARE TO BE CLASS IV REINFORCED CONCRETE PIPE UNLESS NOTED OTHERWISE.
- 9.2. ALL EXISTING STORM SEWER GRATES IN PROPOSED SIDEWALK TO BE REPLACED WITH PEDESTRIAN-STYLE ADA CATCH BASIN GRATE. SEE CITY OF DETROIT DPW DETAIL 108 ON SHEET C011. ALL PROPOSED CATCH BASINS SHALL HAVE FILTER FABRIC INSTALLED PER DETAIL ON SHEET C008 UNTIL CONSTRUCTION IS COMPLETED.
- 9.3. ALL PROPOSED STORM WATER OVERFLOW STRUCTURES IN BIOSWALES TO BE BEEHIVE CATCH BASINS (EAST JORDAN IRON WORKS 6508 BEEHIVE DITCH GRATE, NEENAH R-4340-A, OR EQUIVALENT, WITH DWSO LOGO).
10. UNDERDRAINS
 - 10.1. UNDERDRAIN SHOWN OFFSET FROM STORM SEWER AND CATCH BASINS FOR CLARITY ONLY. REFER TO DETAIL SHEETS FOR LOCATION.
 - 10.2. PROPOSED UNDERDRAIN PIPE IS TO RUN NORTH-SOUTH BETWEEN EXISTING AND PROPOSED CATCH BASINS ALONG LOW LINE IN SIDEWALK AND EDGE OF PROPOSED CURB LINE. SEE SHEETS C002 AND C008 FOR DETAIL.
8. WATER MAIN
 - 8.4. ALL PROPOSED WATER MAIN AND SEWER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DWSO STANDARDS AND SPECIFICATIONS.
 - 8.5. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL WATER MAIN BENDS AND TEES PER DWSO STANDARD DETAILS. SEE UTILITY DETAIL SHEETS.
9. FIRE HYDRANTS
 - 9.1. CONTRACTOR TO INSTALL DWSO-PROVIDED FIRE HYDRANTS AND SERVICE GATES, OR RELOCATED EXISTING HYDRANTS WHERE SPECIFIED. CONTRACTOR TO PURCHURE AND INSTALL REQUISITE PIPING, VALVE BOXES, TEES, AND MISCELLANEOUS FITTINGS NECESSARY TO COMPLETE THE INSTALLATION. PROPOSED FIRE HYDRANTS SHALL BE CONSTRUCTED PER DWSO STANDARDS AND SPECIFICATIONS. SEE UTILITY DETAIL SHEETS.
 - 9.2. FIRE HYDRANTS TO BE INSTALLED A MINIMUM OF 3' BEHIND CURB. ALL FIRE HYDRANTS TO BE INSTALLED WITH A 6" LEAD LINE AND STANDARD DWSO 6" GATE VALVE AND BOX.
 - 9.3. IF PROPOSED FIRE HYDRANT LEAD LINE IS IN THE SAME LOCATION AS EXISTING LEAD CONNECTION:

REMOVE SLEEVE AND REPLACE WITH PROPOSED 12"x6" TEE. SEE SHEET C011 FOR DETAIL.

9.3.2. IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH A TEE, AND TEE IS IN GOOD CONDITION, EXTEND LEAD FROM EXISTING TEE. REPLACE TEE IF NECESSARY.

9.4. IF PROPOSED FIRE HYDRANT LEAD LINE IS IN A DIFFERENT LOCATION THAN EXISTING LEAD CONNECTION:

9.4.1. IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH TAPPING SLEEVE, REMOVE SLEEVE AND REPLACE WITH PIPE. INSTALL PROPOSED TEE IN PROPOSED LOCATION ON EXISTING WATER MAIN.

9.4.2. IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH A TEE, CUT AND CAP TEE PER DWSO STANDARDS. INSTALL NEW TEE IN PROPOSED LOCATION ON EXISTING WATER MAIN.

10. COMBINED SEWER

10.1. COMBINED SEWER IS DEPICTED ACCORDING TO UTILITY RECORDS AND DWSO MAPS, AND HAS NOT BEEN FIELD-VERIFIED. LOCATION IS APPROXIMATE AND TIE-IN MANHOLES MUST BE FIELD-VERIFIED PRIOR TO CONSTRUCTION.

11. POTENTIAL UTILITY CONFLICTS

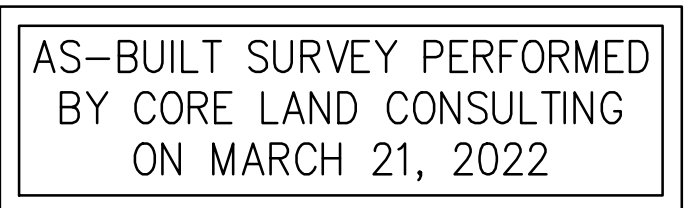
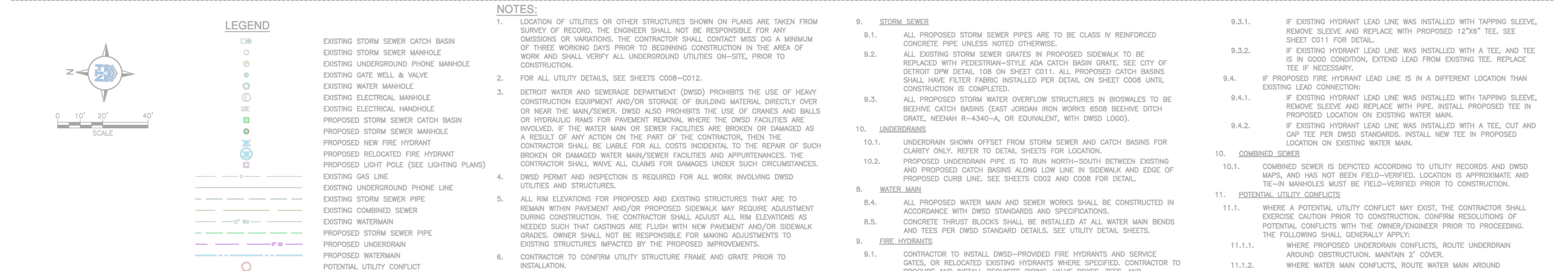
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11.1.1. WHERE PROPOSED UNDERDRAIN CONFLICTS, ROUTE UNDERDRAIN AROUND OBSTRUCTION. MAINTAIN 2' COVER.

11.1.2. WHERE WATER MAIN CONFLICTS, ROUTE WATER MAIN AROUND OBSTRUCTION PER DWSO STANDARD DETAILS AND DETAIL SHOWN ON C008. MAINTAIN 5' COVER ABOVE WATER MAIN.

11.1.3. WHERE PROPOSED STORM DRAIN CONFLICTS, CONSULT WITH OWNER/ENGINEER. MAINTAIN MINIMUM 3' COVER.

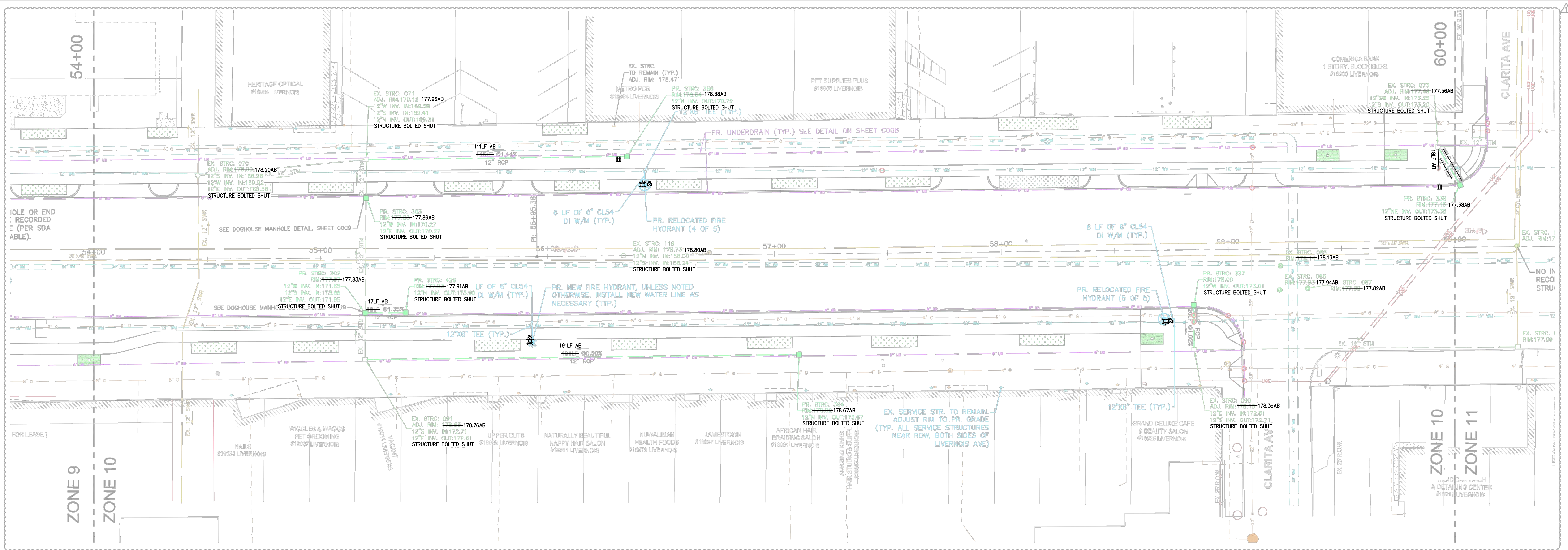
C408



1. LOCATION OF UTILITIES OR OTHER STRUCTURES SHOWN ON PLANS ARE TAKEN FROM SURVEY OF RECORD. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OMISSIONS OR VARIATIONS. THE CONTRACTOR SHALL CONTACT MISS DIG A MINIMUM OF THREE WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION IN THE AREA OF WORK AND SHALL VERIFY ALL UNDERGROUND UTILITIES ON-SITE, PRIOR TO CONSTRUCTION.
2. FOR ALL UTILITY DETAILS, SEE SHEETS C008-C012.
3. DETROIT WATER AND SEWERAGE DEPARTMENT (DWSO) PROHIBITS THE USE OF HEAVY CONSTRUCTION EQUIPMENT AND/OR STORAGE OF BUILDING MATERIAL DIRECTLY OVER OR NEAR THE MAIN/SEWER. DWSO ALSO PROHIBITS THE USE OF CRANES AND BALLS OR HYDRAULIC RAMS FOR PAVEMENT REMOVAL WHERE THE DWSO FACILITIES ARE INVOLVED. IF THE WATER MAIN OR SEWER FACILITIES ARE BROKEN OR DAMAGED AS A RESULT OF ANY ACTION ON THE PART OF THE CONTRACTOR, THEN THE CONTRACTOR SHALL BE LIABLE FOR ALL COSTS INCIDENTAL TO THE REPAIR OF SUCH BROKEN OR DAMAGED WATER MAIN/SEWER FACILITIES AND APPURTENANCES. THE CONTRACTOR SHALL WAIVE ALL CLAIMS FOR DAMAGES UNDER SUCH CIRCUMSTANCES.
4. DWSO PERMIT AND INSPECTION IS REQUIRED FOR ALL WORK INVOLVING DWSO UTILITIES AND STRUCTURES.
5. ALL RIM ELEVATIONS FOR PROPOSED AND EXISTING STRUCTURES THAT ARE TO REMAIN WITHIN PAVEMENT AND/OR PROPOSED SIDEWALK MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION. THE CONTRACTOR SHALL ADJUST ALL RIM ELEVATIONS AS NEEDED SUCH THAT CASTINGS ARE FLUSH WITH NEW PAVEMENT AND/OR SIDEWALK GRADES. OWNER SHALL NOT BE RESPONSIBLE FOR MAKING ADJUSTMENTS TO EXISTING STRUCTURES IMPACTED BY THE PROPOSED IMPROVEMENTS.
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 - 8.2. REMOVE IRRIGATION LINE AND TAP UP TO CONNECTION TO DWSO WATER MAIN. IF TAP, REPLACE WITH WATER MAIN PIPE. IF TEE, CAP TEE PER DWSO STANDARDS. SEE SHEET C305 FOR MORE INFORMATION.

- 9.1. ALL PROPOSED STORM SEWER PIPES ARE TO BE CLASS IV REINFORCED CONCRETE PIPE UNLESS NOTED OTHERWISE.
- 9.2. ALL EXISTING STORM SEWER GRATES IN PROPOSED SIDEWALK TO BE REPLACED WITH PEDESTRIAN--STYLE ADA CATCH BASIN GRATE. SEE CITY OF DETROIT DPW DETAIL 108 ON SHEET C011. ALL PROPOSED CATCH BASINS SHALL HAVE FILTER FABRIC INSTALLED PER DETAIL ON SHEET C008 UNTIL CONSTRUCTION IS COMPLETED.
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10. UNDERDRAINS
 - 10.1. UNDERDRAIN SHOWN OFFSET FROM STORM SEWER AND CATCH BASINS FOR CLARITY ONLY. REFER TO DETAIL SHEETS FOR LOCATION.
 - 10.2. PROPOSED UNDERDRAIN PIPE IS TO RUN NORTH--SOUTH BETWEEN EXISTING AND PROPOSED CATCH BASINS ALONG LOW LINE IN SIDEWALK AND EDGE OF PROPOSED CURB LINE. SEE SHEETS C002 AND C008 FOR DETAIL.
8. WATER MAIN
 - 8.4. ALL PROPOSED WATER MAIN AND SEWER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DWSD STANDARDS AND SPECIFICATIONS.
 - 8.5. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL WATER MAIN BENDS AND TEES PER DWSD STANDARD DETAILS. SEE UTILITY DETAIL SHEETS.
9. FIRE HYDRANTS
 - 9.1. CONTRACTOR TO INSTALL DWSD--PROVIDED FIRE HYDRANTS AND SERVICE GATES, OR RELOCATED EXISTING HYDRANTS WHERE SPECIFIED. CONTRACTOR TO PURCHURE AND INSTALL REQUISITE PIPING, VALVE BOXES, TEES, AND MISCELLANEOUS FITTINGS NECESSARY TO COMPLETE THE INSTALLATION. PROPOSED FIRE HYDRANTS SHALL BE CONSTRUCTED PER DWSD STANDARDS AND SPECIFICATIONS. SEE UTILITY DETAIL SHEETS.
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 - 9.3. IF PROPOSED FIRE HYDRANT LEAD LINE IS IN THE SAME LOCATION AS EXISTING LEAD CONNECTION:

- 9.3.1. IF EXISTING HYDRANT LEAD LINE WAS INSTALLED WITH TAPPING SLEEVE, REMOVE SLEEVE AND REPLACE WITH PROPOSED 12"x6" TEE. SEE SHEET C011 FOR DETAIL.
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- POTENTIAL UTILITY CONFLICTS
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- 11.1.3. WHERE PROPOSED STORM DRAIN CONFLICTS, CONSULT WITH OWNER/ENGINEER. MAINTAIN MINIMUM 3' COVER.



LEGEND

- EXISTING STORM SEWER CATCH BASIN
- EXISTING STORM SEWER MANHOLE
- EXISTING UNDERGROUND PHONE MANHOLE
- EXISTING GATE WELL & VALVE
- EXISTING WATER MANHOLE
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRICAL HANDHOLE
- PROPOSED STORM SEWER CATCH BASIN
- PROPOSED STORM SEWER MANHOLE
- PROPOSED NEW FIRE HYDRANT
- PROPOSED RELOCATED FIRE HYDRANT
- PROPOSED LIGHT POLE (SEE LIGHTING PLANS)
- EXISTING GAS LINE
- EXISTING UNDERGROUND PHONE LINE
- EXISTING STORM SEWER PIPE
- EXISTING COMBINED SEWER
- EXISTING WATERMAIN
- PROPOSED STORM SEWER PIPE
- PROPOSED UNDERDRAIN
- PROPOSED WATERMAIN
- POTENTIAL UTILITY CONFLICT

NOTES:

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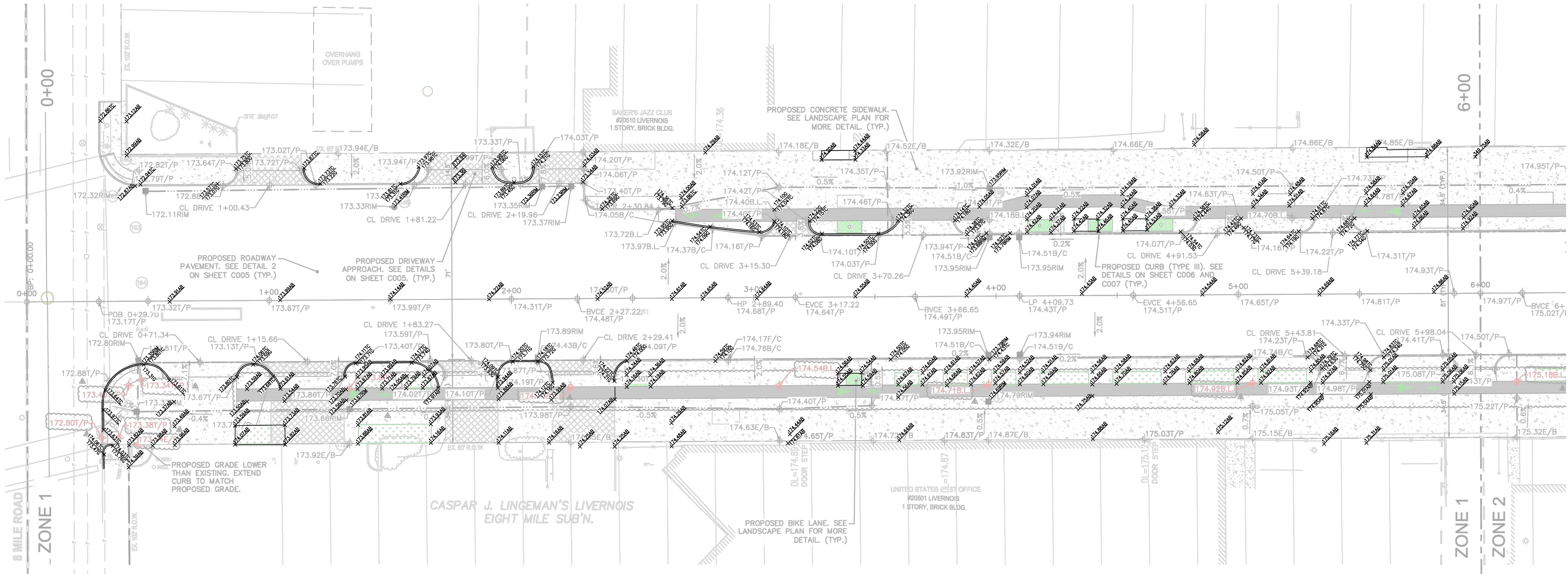
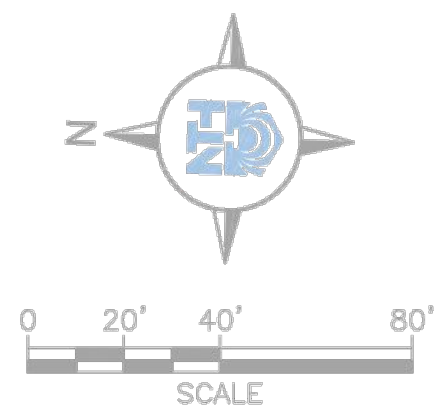
3 WORKING DAYS
**BEFORE YOU DIG
CALL MISS DIG.
1-800-482-7171**
For free location of public utility lines.
ALTERNATE NUMBER (810) MISS-DIG
COLOR CODES FOR UTILITY LOCATIONS:
Yellow OIL & GAS
Orange PHONE & CABLE
Red ELECTRIC
Blue WATER
Green STORM DRAIN
Brown SEWER
Pink SURVEYING
IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022

PRIME CONSULTANT spackman mossop michaels 440 Burroughs Street Suite 696 Detroit MI 48202 T: 313.720.1055	PROJECT LIVERNOIS STREETSCAPE LIVERNOIS AVENUE, DETROIT	STATE OF MICHIGAN DAVID R. LUTZ ENGINEER No. 5748 LICENSED PROFESSIONAL ENGINEER	SMM PROJECT No: 17081 STATUS: 100% Design DATE: 28 March 2019	REVISION <table><thead><tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th></tr></thead><tbody><tr><td>1</td><td>AS1 #1</td><td>5/13/2019</td></tr></tbody></table>	NO.	DESCRIPTION	DATE	1	AS1 #1	5/13/2019	Sheet Title UTILITY PLAN - STA. 54+00 TO 60+00 Sheet No: C410
NO.	DESCRIPTION	DATE									
1	AS1 #1	5/13/2019									

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AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 0+00 TO STA. 6+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



PRIME CONSULTANT

spackman
mossop
michaels

440 Burroughs Street
Suite 696
Detroit | MI | 48202
T: 313.720.1055



NTH Consultants
41780 Six Mile Road
Suite 200
Northville | MI | 48168
T: 248.662.0000
NTH Project No.
61-170118

PROJECT

LIVERNOIS STREETSCAPE
LIVERNOIS AVENUE, DETROIT



SMM PROJECT No:
17081

STATUS:
100% Design

DATE:
28 March 2019

REVISION

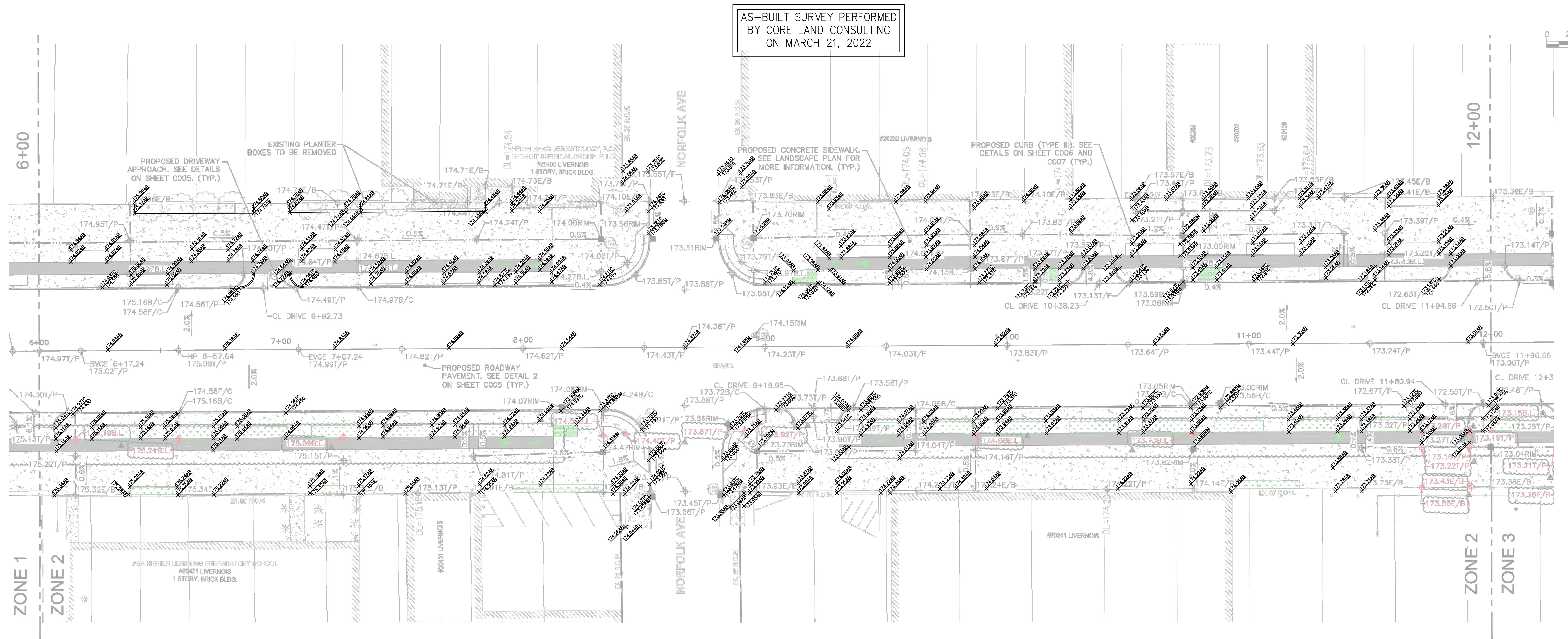
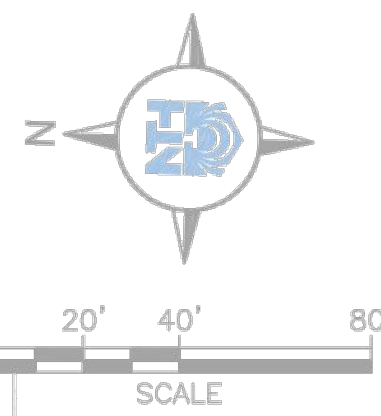
NO.	DESCRIPTION	DATE
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2	ASI #2	5/21/2019
3	ASI #3	6/5/2019
4	ASI #4	8/30/2019
5	ASI #6	2/21/2020

Sheet Title

CONSTRUCTION
PLAN SHEET - 0+00
TO 6+00

Sheet No:

C501



CONSTRUCTION PLAN: STA. 6+00 TO STA. 12+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

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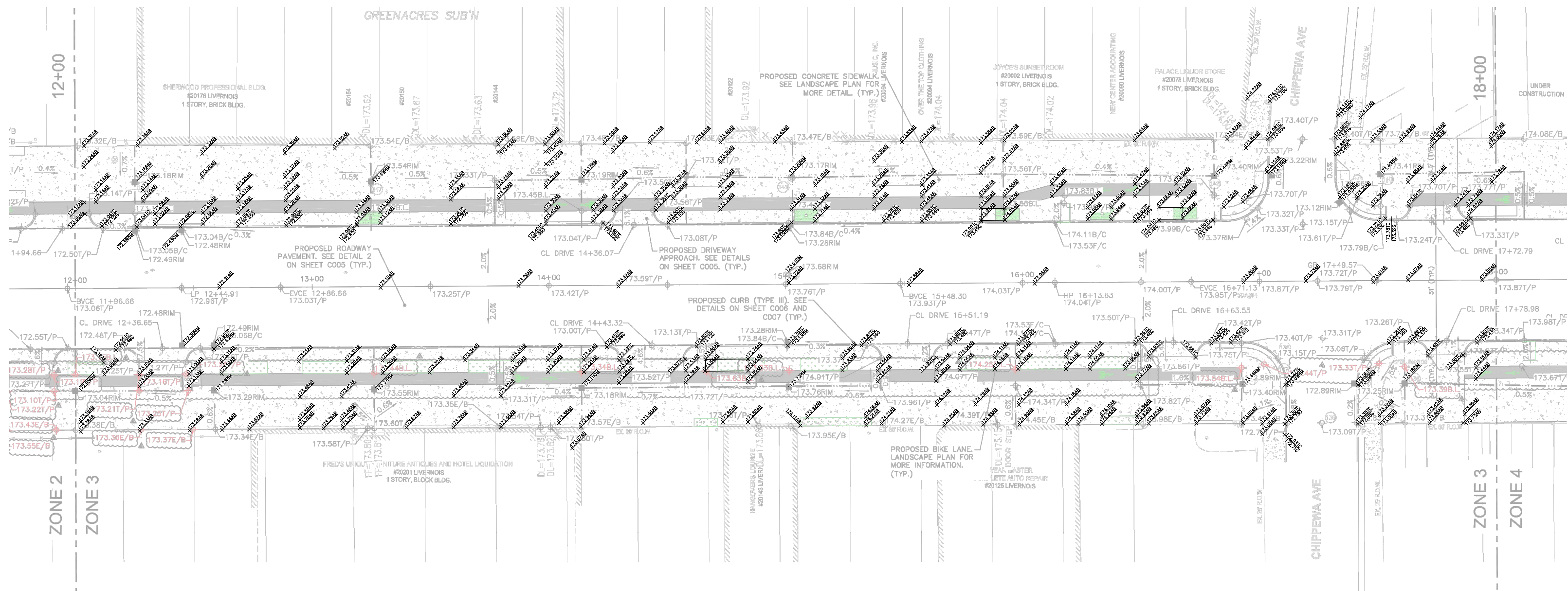
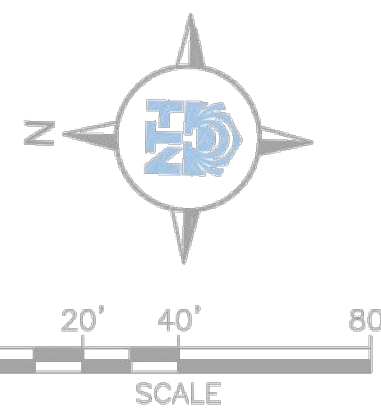
LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



PRIME CONSULTANT spackman mossop michaels 440 Burroughs Street Suite 696 Detroit MI 48202 T: 313.720.1055	NTH Consultants 41780 Six Mile Road Suite 200 Northville MI 48168 T: 248.662.0000 NTH Project No. 61-170118	PROJECT LIVERNOS STREETScape LIVERNOS AVENUE, DETROIT	 	SMM PROJECT No: 17081 STATUS: 100% Design DATE: 28 March 2019	<table><tr><th>REVISION</th><th>DATE</th></tr><tr><td>NO. DESCRIPTION</td><td></td></tr><tr><td>ASI #1</td><td>5/13/2019</td></tr><tr><td>ASI #2</td><td>5/21/2019</td></tr><tr><td>ASI #3</td><td>6/5/2019</td></tr><tr><td>ASI #4</td><td>8/30/2019</td></tr><tr><td>ASI #6</td><td>2/21/2020</td></tr></table>	REVISION	DATE	NO. DESCRIPTION		ASI #1	5/13/2019	ASI #2	5/21/2019	ASI #3	6/5/2019	ASI #4	8/30/2019	ASI #6	2/21/2020	Sheet Title CONSTRUCTION PLAN SHEET - 6+00 TO 12+00 Sheet No: C502
REVISION	DATE																			
NO. DESCRIPTION																				
ASI #1	5/13/2019																			
ASI #2	5/21/2019																			
ASI #3	6/5/2019																			
ASI #4	8/30/2019																			
ASI #6	2/21/2020																			

AS-BUILT SURVEY PERFORMED
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ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 12+00 TO STA. 18+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK

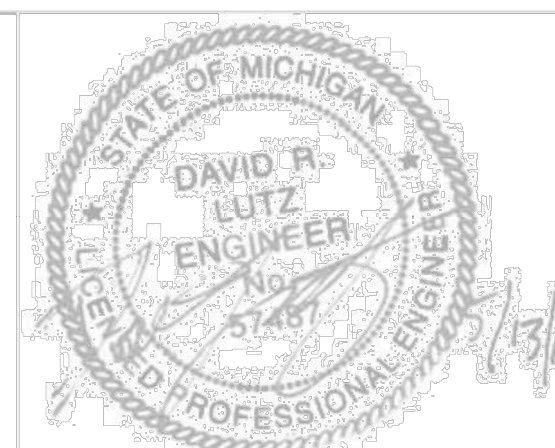


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LIVERNOS AVENUE, DETROIT



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	▲	ASI #1	
	▲	ASI #2	
	▲	ASI #3	
STATUS: 100% Design	▲	ASI #4	5/13/2019
	▲	ASI #5	5/21/2019
	▲	ASI #6	6/5/2019
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	▲	ASI #8	2/21/2020
DATE: 28 March 2019			

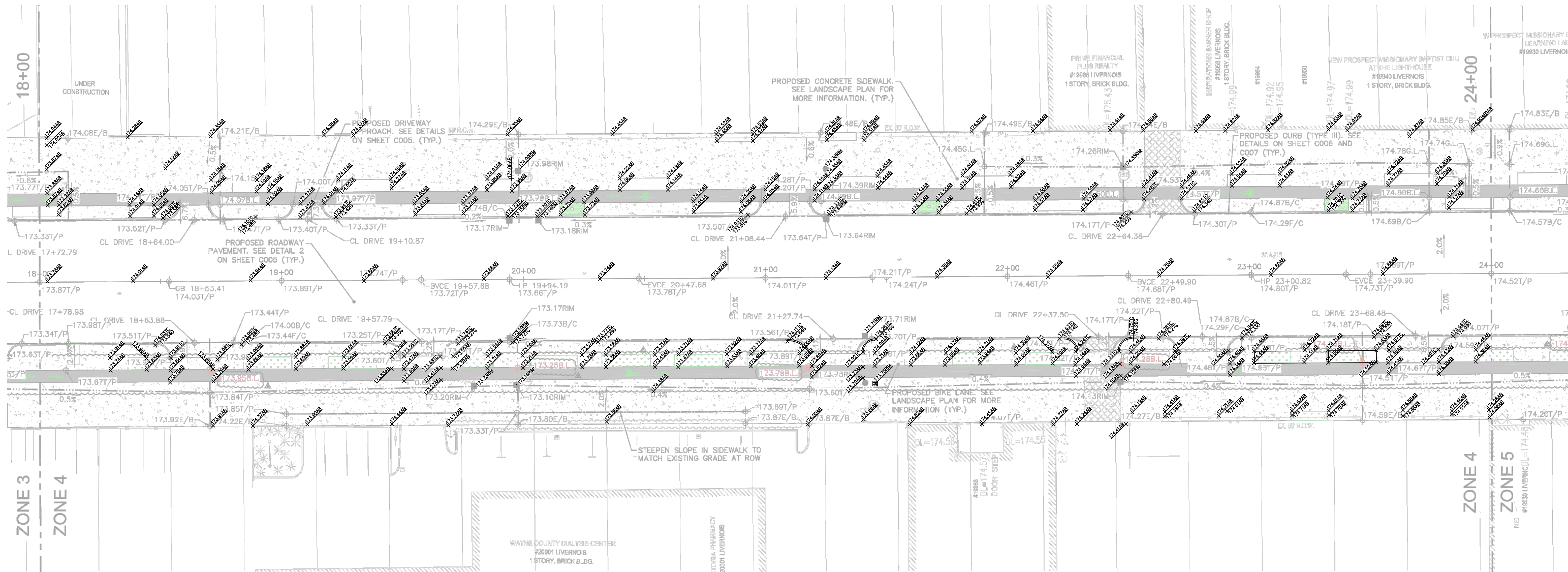
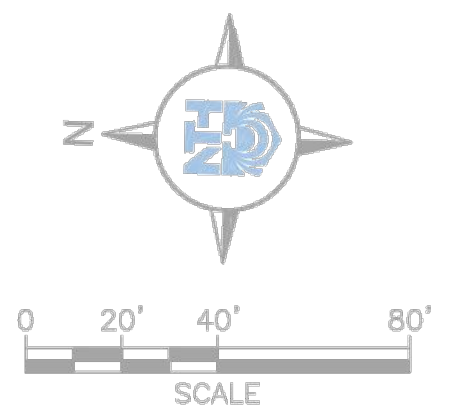
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CONSTRUCTION
PLAN SHEET -
12+00 TO 18+00

Sheet No:

C503

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 18+00 TO STA. 24+00

SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



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PROJECT

LIVERNOIS STREETSCAPE

LIVERNOIS AVENUE, DETROIT



SMM PROJECT No:
17081

STATUS:
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DATE:
28 March 2019

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NO.	DESCRIPTION	DATE
1	ASI #1	5/13/2019
2	ASI #2	5/21/2019
3	ASI #3	6/5/2019
4	ASI #4	8/30/2019
5	ASI #6	2/21/2020

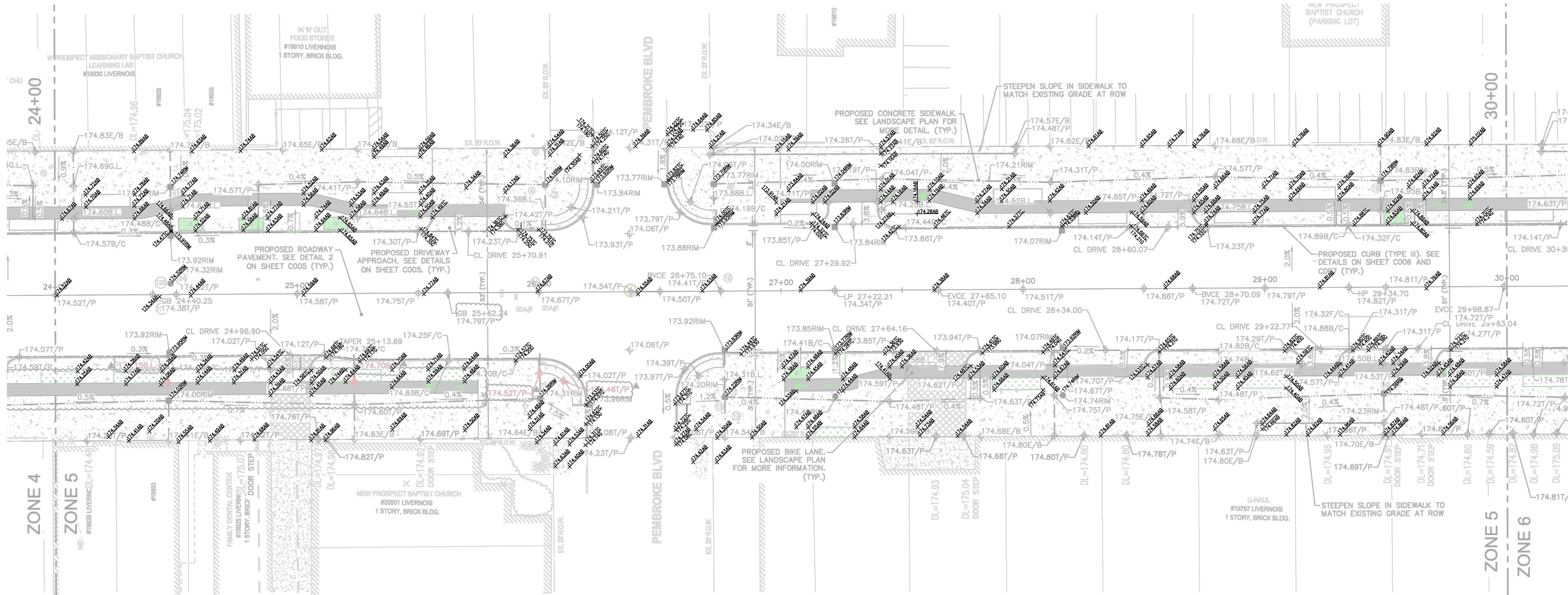
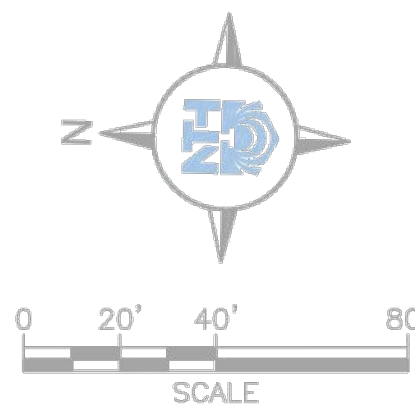
Sheet Title

CONSTRUCTION
PLAN SHEET -
18+00 TO 24+00

Sheet No:

C504

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
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CONSTRUCTION PLAN: STA. 24+00 TO STA. 30+00

SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

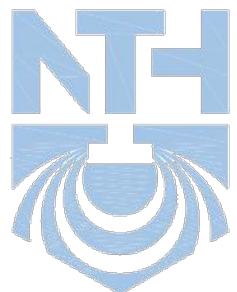
- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



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PROJECT

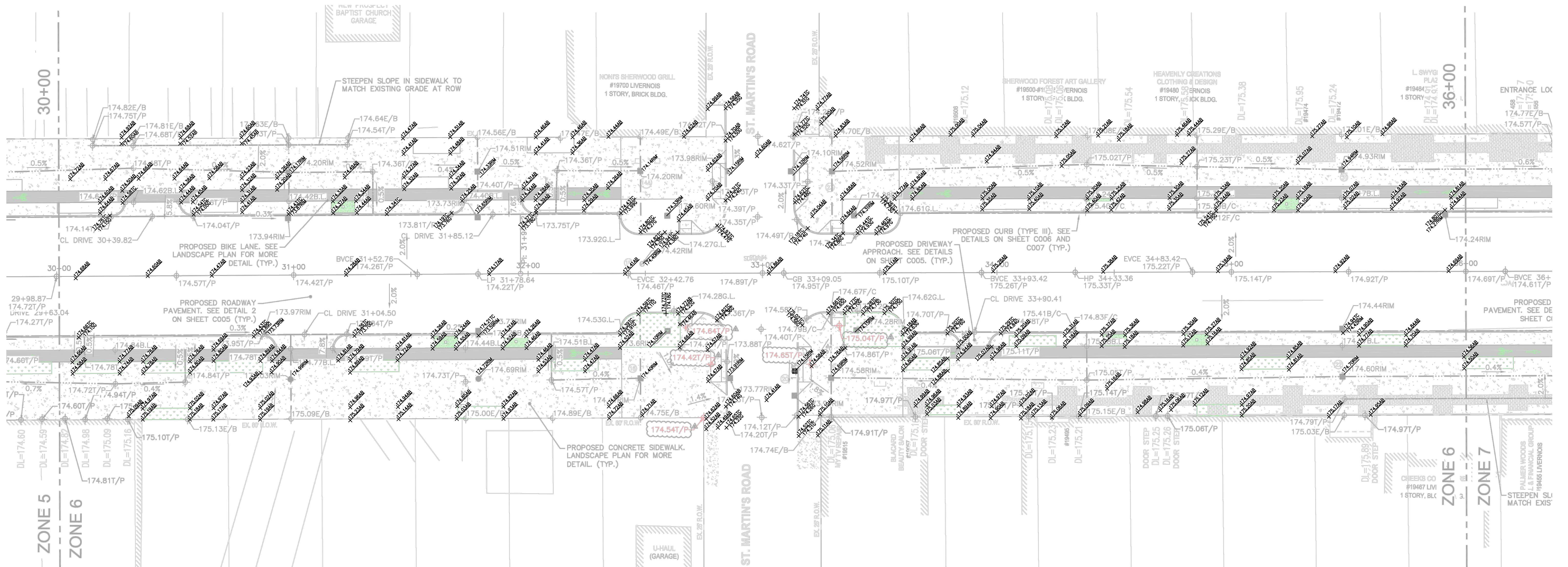
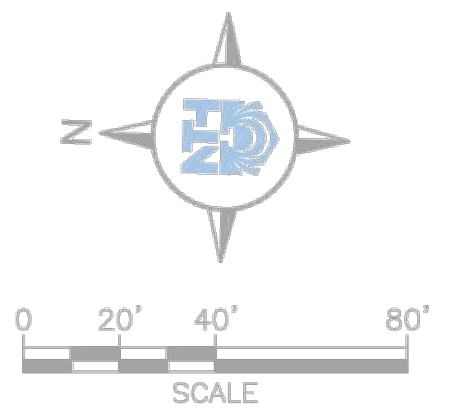
LIVERNOS STREETScape

LIVERNOS AVENUE, DETROIT



SMM PROJECT No: 17081		REVISION		DATE		Sheet Title	
		NO. DESCRIPTION				CONSTRUCTION PLAN SHEET - 24+00 TO 30+00	
		⚠ ASI #1		5/13/2019			
		⚠ ASI #2		5/21/2019			
		⚠ ASI #3		6/5/2019			
		⚠ ASI #4		8/30/2019			
STATUS: 100% Design		⚠ ASI #6		2/21/2020		Sheet No: C505	
DATE: 28 March 2019							

AS-BUILT SURVEY PERFORMED
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ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 30+00 TO STA. 36+00

SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



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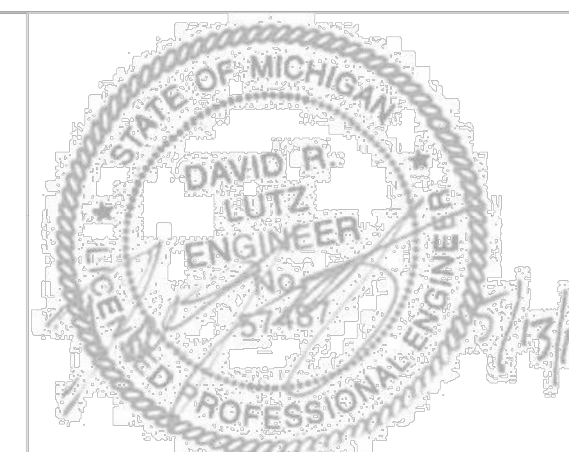


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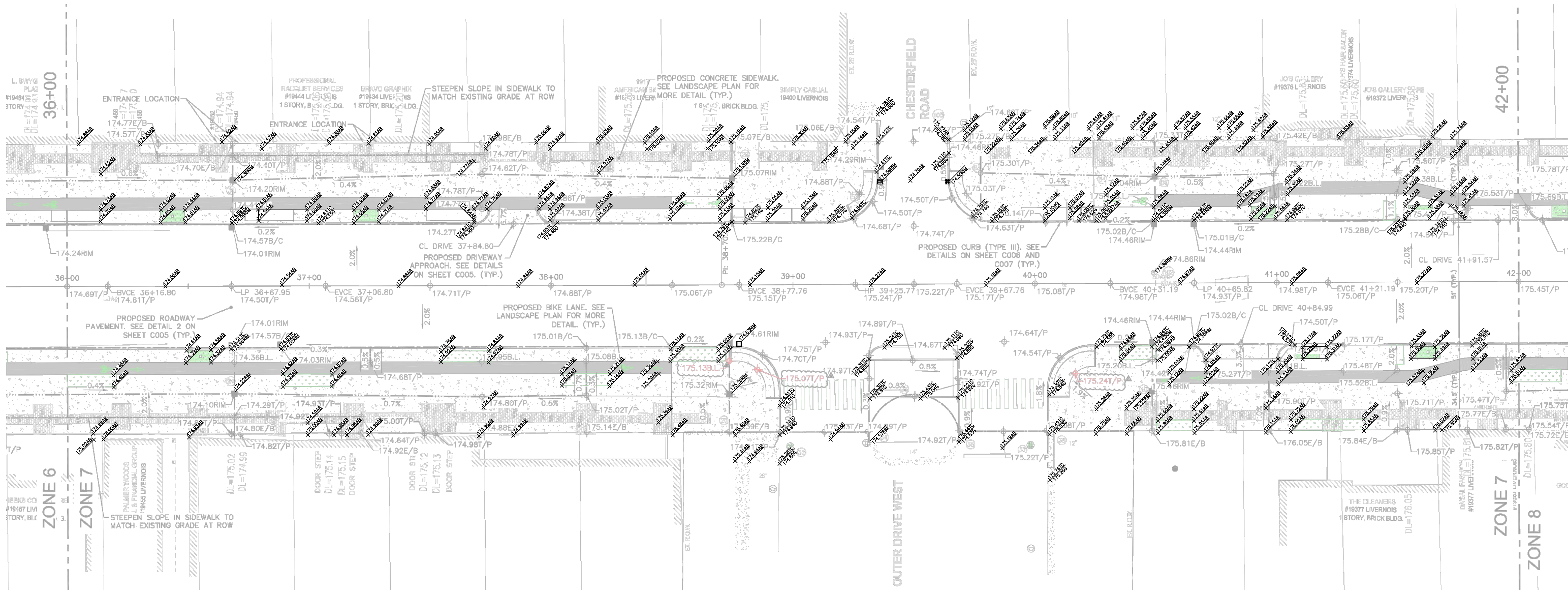
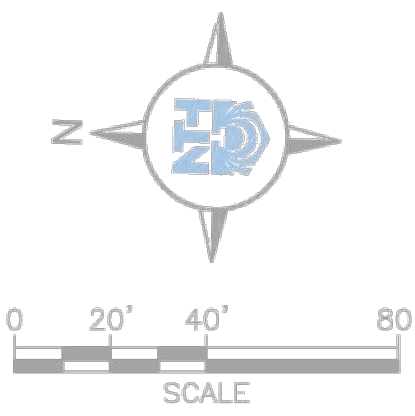
LIVERNOIS STREETSCAPE

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SMM PROJECT No:	REVISION		DATE	Sheet Title
	NO.	DESCRIPTION		
17081	1	ASI #1	5/13/2019	CONSTRUCTION PLAN SHEET - 30+00 TO 36+00
	2	ASI #2	5/21/2019	
	3	ASI #3	6/5/2019	
	4	ASI #4	9/30/2019	
STATUS:	100% Design		2/21/2020	Sheet No:
DATE:	28 March 2019			C506

AS-BUILT SURVEY PERFORMED
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ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 36+00 TO STA. 42+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK

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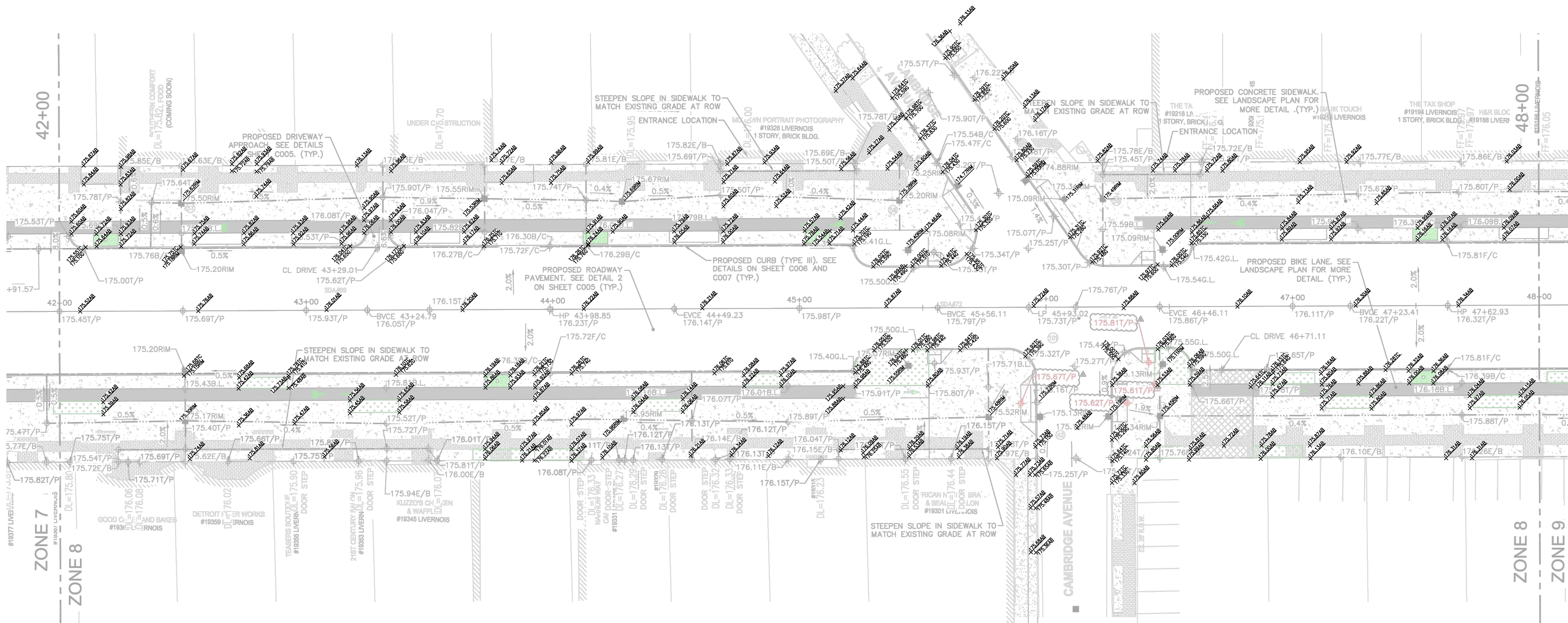
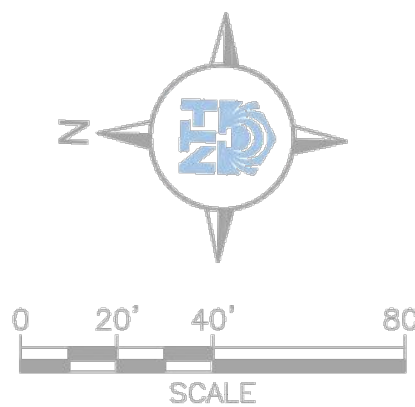
LIVERNOIS STREETSCAPE

LIVERNOIS AVENUE, DETROIT

STATE OF MICHIGAN
DAVID R. LUTZ
ENGINEER
No. 67487
LICENSED PROFESSIONAL ENGINEER

SMM PROJECT No: 17081	REVISION	DATE	Sheet Title CONSTRUCTION PLAN SHEET - 36+00 TO 42+00
	NO. DESCRIPTION	DATE	
STATUS: 100% Design	ASI #1	5/13/2019	Sheet No:
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	ASI #4	8/30/2019	
	ASI #6	2/21/2020	

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 42+00 TO STA. 48+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

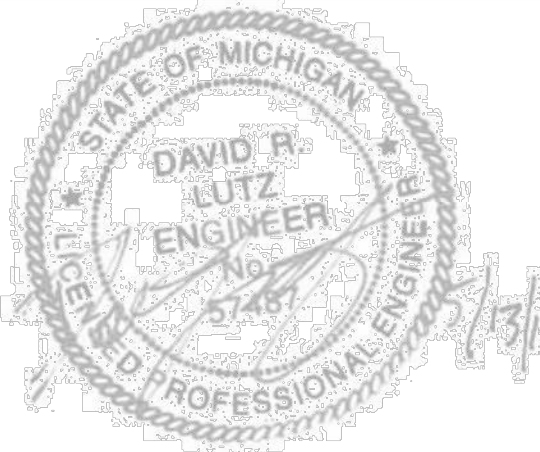
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- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
- 9.00RIM CATCH BASIN RIM ELEVATION
- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



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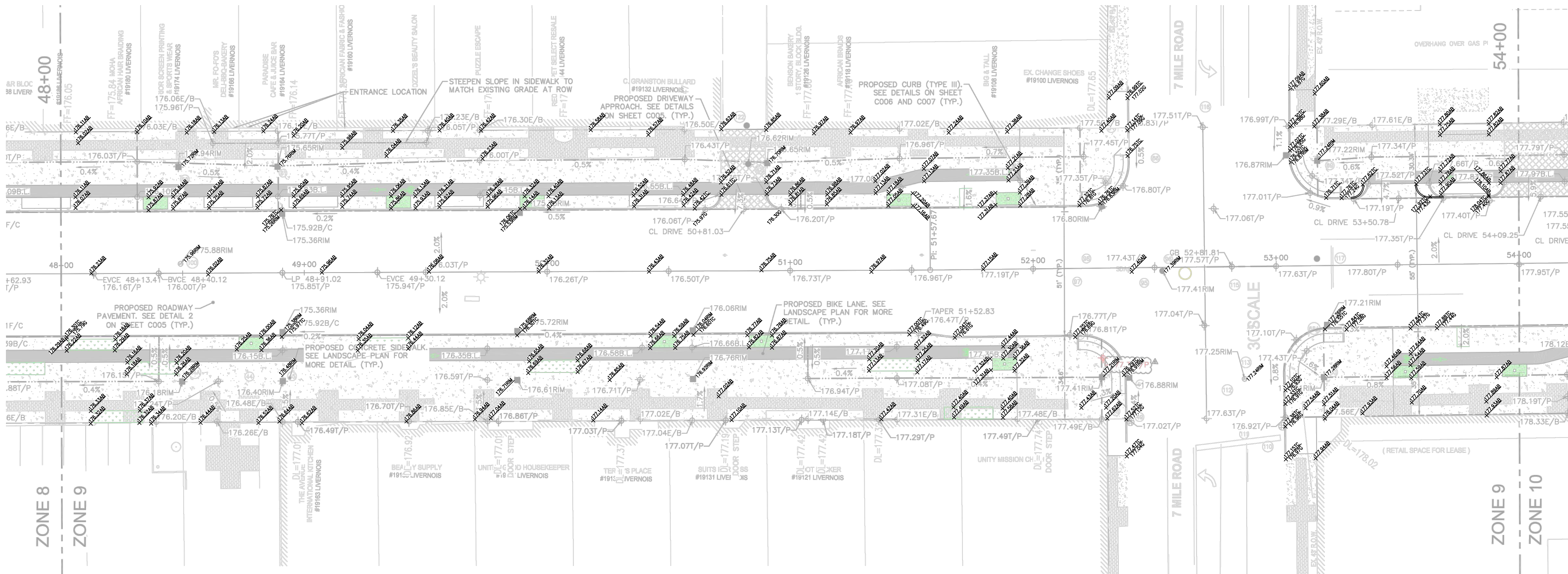
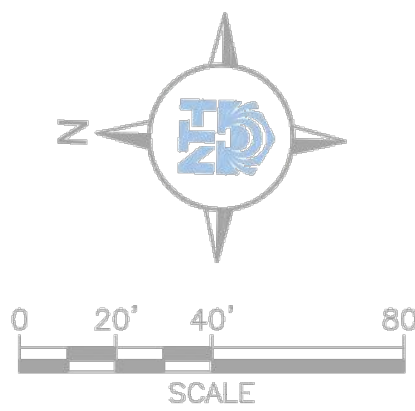
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LIVERNOIS STREETSCAPE
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SMM PROJECT No: 17081	REVISION		DATE	Sheet Title CONSTRUCTION PLAN SHEET - 42+00 TO 48+00
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	ASI #2		5/21/2019	
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	ASI #4		8/30/2019	
	ASI #6		2/21/2020	

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 48+00 TO STA. 54+00
SCALE: 1" = 40'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

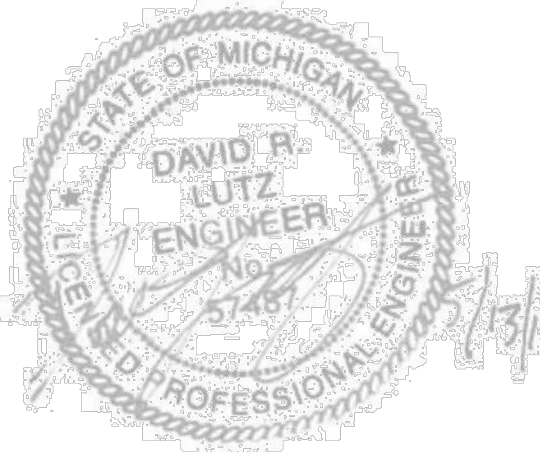
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- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
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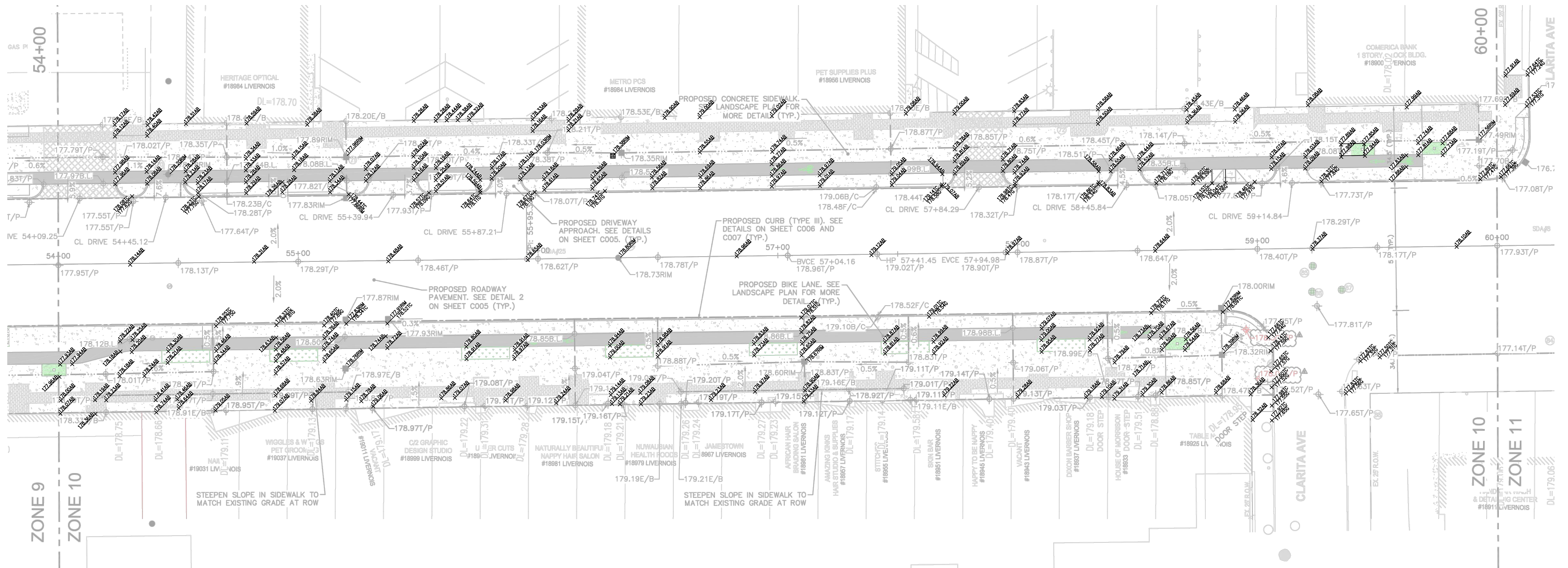
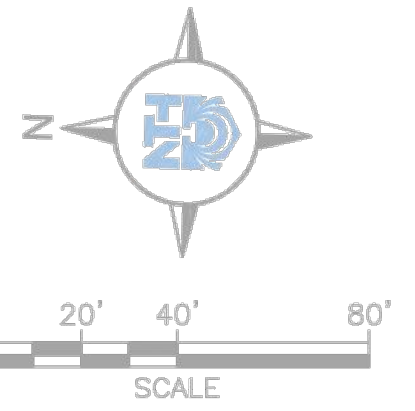
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	NO.	DESCRIPTION		
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	AS1 #2		5/21/2019	
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	AS1 #4		8/30/2019	
	AS1 #6		2/21/2020	

AS-BUILT SURVEY PERFORMED
BY CORE LAND CONSULTING
ON MARCH 21, 2022



CONSTRUCTION PLAN: STA. 54+00 TO STA. 60+00
SCALE: 1" = 20'

LEGEND

- PROPOSED COLORED CONCRETE PAVEMENT (BIKE LANE)
- PROPOSED HEAVY-DUTY DRIVEWAY
- PROPOSED CONCRETE PAVEMENT (SIDEWALK)

NOTES:

- FOR MORE INFORMATION ON PROPOSED SIGNS AND PAVEMENT MARKINGS, SEE SHEET C601 TO C604.
- FOR PAVEMENT AND JOINT DETAILS, SEE SHEET C005 TO C007 AND C551 TO C561.

LABEL LEGEND

- 9.00T/P TOP OF PAVEMENT ELEVATION
- 9.00B/C BACK OF CURB ELEVATION
- 9.00F/C FACE OF CURB ELEVATION
- 9.00E/B EDGE OF BUILDING ELEVATION
- 9.00B.L BIKE LANE ELEVATION
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- LOW LINE
- HIGH POINT
- LOW POINT
- GRADE BREAK



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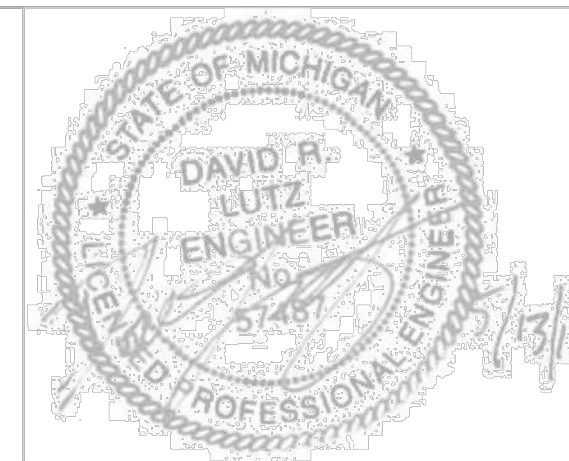
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LIVERNOS AVENUE, DETROIT



SMM PROJECT No:
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ASI #3	6/5/2019
ASI #4	8/30/2019
ASI #6	2/21/2020

Sheet Title

CONSTRUCTION
PLAN SHEET -
54+00 TO 60+00

Sheet No:

C510