ROADWAY GEOTECHNICAL REPORT
US ROUTE 20 IMPROVEMENTS
WEST OF RANDAL RD TO EAST OF SHALES PKWY
WEST LEG
STATION 142+82.7 TO STATION 187+69.0
IDOT CONTRACT D-91-453-20
KANE COUNTY, ILLINOIS

For

Gannett Fleming, Inc.

180 North Stetson Avenue,

Chicago IL 60601

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Submitted by

Wang Engineering, Inc. a Terracon Company

1145 North Main Street

Lombard, IL 60148

Original Report: March 27, 2023

Revised Report: NA

Technical Report Documentation Page

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11. Abstract

The proposed improvements along US 20 West Leg include widening and reconstruction of the roadway from Station 142+82.7 and 187+69.0. Most of the widening will occur with cutting or filling over roadway's adjacent grass covered land.

At the surface, the borings encountered 3 to 21 inches of topsoil overlying stiff to hard clay loam to silty clay loam fill followed by soft to hard clay loam, silty clay to silty clay loam with isolated pockets of granular soils. Below this layer, loose to very dense silt, sand, sandy loam, sandy gravel to gravelly sand was encountered to the boring termination depths. Groundwater encountered 11 to 27 feet bgs or at elevations 854 to 887 feet.

The proposed subgrade will generally provide a stable working platform for the placement of fill and pavement construction. We recommend subgrade improvement of 12 inches of removal and replacement. We recommend placing geofabric at the base of undercut areas.

For a mechanistic pavement design, the pavement sections should be designed using an SSR of POOR. For an AASHTO pavement design, the pavement sections should be designed using an IBR of 2.

We do not anticipate settlement and slope stability problems for the proposed fill with maximum height of 3.5 feet or slope with cut of 1:3 (V:H).

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ROADWAY GEOTECHNICAL REPORT
US ROUTE 20 IMPROVEMENTS
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KANE COUNTY, ILLINOIS
FOR
GANNETT FLEMING, INC

1.0 INTRODUCTION

This report presents the results of our geotechnical subsurface investigation, laboratory testing, and engineering analysis and evaluations for West Leg of US Route 20 (US 20) from west of Nesler Road to the east of Longcommon Parkway in Kane County, Illinois. A separate Roadway Geotechnical Report (RGR) was issued for East Leg in September, 2022. A *Site Location Map* is presented in Exhibit 1.

This report addresses only the West Leg of the roadway improvements. Based on drawings and information provided by Gannett Fleming, Inc. (GF) and dated March 1, 2023, Wang Engineering, Inc. a Terracon Company (Wang) understands that the West Leg of the GF roadway contract improvements includes roadway widening and reconstruction. Our investigation was conducted along EB and WB of US 20 from Station 142+82.7 and Station 187+69.0. The roadway is proposed to be widened along the eastbound with new pavement, and reconstructed pavement along both bounds. Detail improvement types and locations are show in *Cross Sections* (Appendix D) and *Plan and Profile Drawings* (Appendix E).

The purpose of our investigation was to characterize the subgrade, groundwater condition, perform geotechnical engineering analyses and provide geotechnical recommendations for the design and construction of the roadway improvements.

2.0 GEOLOGICAL SETTING

The project area extends through Elgin Township in Kane County, Illinois. On the USGS *Elgin 7.5 Minute Series Quadrangle* map, the project runs through NW & SE ¼ of Section 17 and NE ¼ of

Section 18, of Tier 41N, Range 8E of the Third Principal Meridian.

The following review of published geologic data, with emphasis on factors that might influence the design and construction of the proposed engineering works, is meant to place the project area within a geological framework and confirm the dependability and consistency of the subsurface investigation results. For the study of the regional geologic framework, Wang considered northeastern Illinois in general and Kane County in particular.

2.1 Physiography

The project area is located within the Wheaton Morainal Country physiographic subsection of the Great Lake Section (Leighton et al. 1948). The surface is hummocky, characterized by glacial morainic topography, represented by a variety of elongated hills, mounds, basins, sag, and valleys. The project area runs along the eastern face of the Gilberts Moraine. Several historical gravel pits were present about 0.75 mile north of the project area along Illinois Route 47. The surface along the project alignment slopes west to east from 885 to 910 feet.

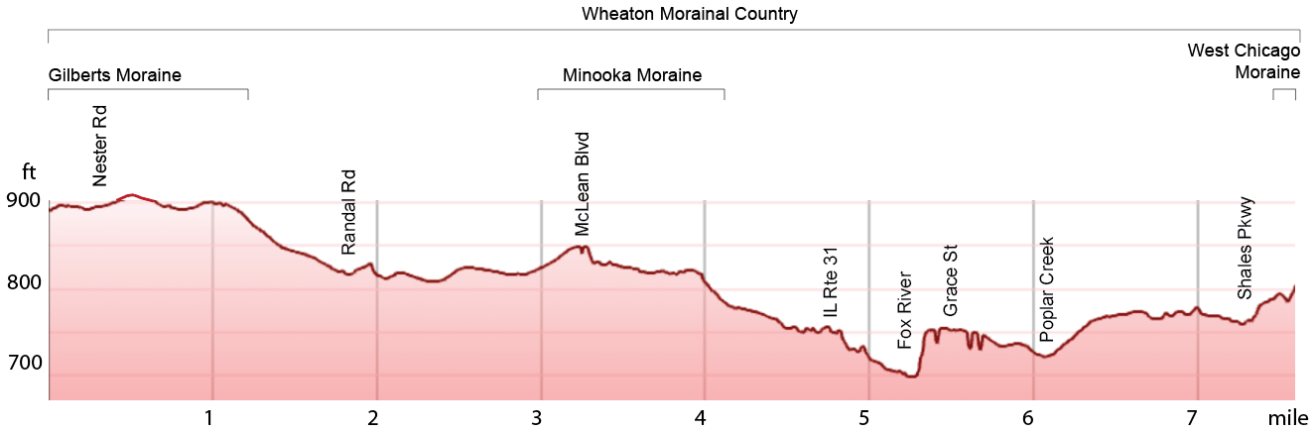

Figure 1: Physiographic features along the project alignment

2.2 Pedological Features

After the Wisconsin glaciation, several types of soils developed through weathering of glacigenic sediments. In Kane County, the soil types were surveyed by the USDA (2021). A summary of the USDA soil types presents within the project area, including their relevant geotechnical index properties and suitability as subgrade and road fill are shown in Exhibits 2-1 and 2-2. The soil information provided by USDA is meant to be used as a general reference in the absence of a site-specific investigation. In this instance, our findings regarding soil features affecting suitability for highway and street construction are in general in agreement with the information presented in the exhibits.

2.3 Surficial Cover

The surficial cover is the result of Wisconsinan-age and Illinois-age glacial activity. The glacigenic deposits were emplaced during pulsating advances and retreats of an ice-sheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains (Hansel and Johnson 1996). Along the project area, the drift thickness varies from about 200 to 300 feet. Sporadic occurrences of silt, clay and fine sand deposits of the Equality Formation occur above, predominant sand and gravel outwash of the Henry Formation. The outwash deposits interfinger with sandy loam to loam diamicton of the Batestown member of the Lemont Formation and clayey loam diamicton of the Tiskilwa Formation (Wisconsin-age), resting over loamy diamicton of the Glasford Formation (Illinois-age) (Curry 2007). Exhibit 3 illustrates the *Site and Regional Geology*.

The Equality Formation, less than 20 feet thick, consists of silt, clay, and fine lacustrine sand deposits (Curry 2007). The Henry Formation consists of stratified sand and gravel outwash with thicknesses of up to 70 feet (Curry 2007). The Batestown Member of the Lemont Formation, up to 65-foot thick, consists of yellowish brown to gray sandy loam to loam diamicton that contains lenses of gravel, sand, silt, and clay (Hansel and Johnson 1996, Curry 2007). The Tiskilwa Formation, up to 160 feet thick, consists of reddish-brown clay loam to loam diamicton with lenses of sand and gravel (Curry 2007). The Glasford Formation, up to 100-foot thick, consisting of pinkish brown loamy diamicton and sorted sand and gravel (Curry 2007) rest on top of the bedrock.

From a geotechnical viewpoint, the Equality Formation is characterized by high plasticity, medium to high moisture content, and moderate to high compresibity. The Henry Formation is characterized by high density and low compressibility; the Lemont Formation is characterized by low to moderate plasticity, high strength, and low to moderate moisture content (Bauer et al. 1991). The Tiskilwa Formation deposits are characterized by low plasticity, medium to low moisture content, with unconfined compressive strength that commonly exceeds 4.5 tsf (Bauer et al. 1991).

2.4 Bedrock

Within the project limits, the surficial cover rests unconformably on top of Silurian-age and Ordovician-age bedrock. The top of the bedrock lies about 200 to 300 feet below the ground surface (bgs) about an elevation of 650 to 725 feet. The Elgin Bedrock Valley runs north-south through the project alignment (Curry, 2007). Within the project area, Silurian dolostone is underlain by Ordovician shales of the Maquoketa Group (Kolata 2005). The dolostone bedrock is slightly weathered. Structurally, the site is

located on the eastern flank of the Wisconsin Arch. No active faults or underground mines are known in the area. A bedrock quarry is present about 3.75 mile south of the project area.

2.5 Climatological Data

To assess the possible effects of precipitation and temperature on water table data and soil moisture, the climatic conditions for the investigation period and three months prior to the start of the investigation are summarized graphically in Figures 1 and 2. The precipitation and temperature data for the investigation period are compared against thirty-year monthly data (1991 to 2020) in box-and-whiskers format to show deviations from "normal" climate conditions during the current investigation. Local climate data were obtained from the O'Hare Station (NCDC 2023).

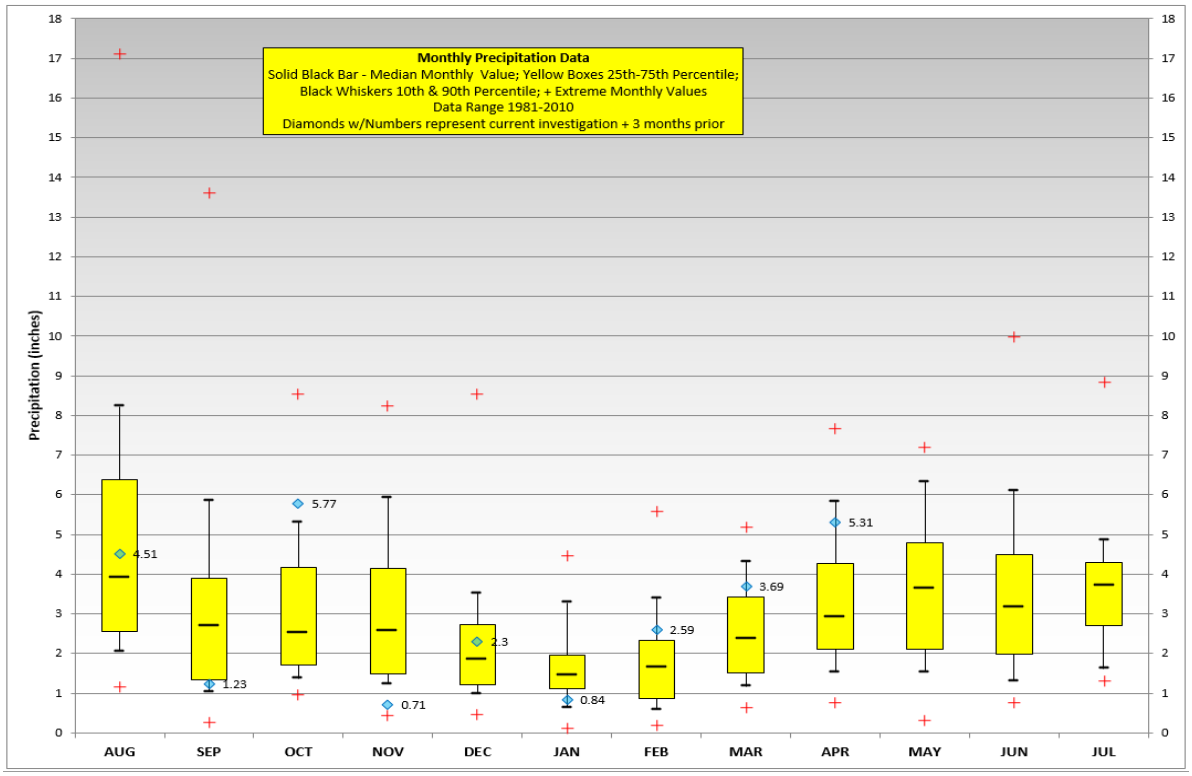

Figure 2: Monthly Precipitation Data from 2021 to 2022

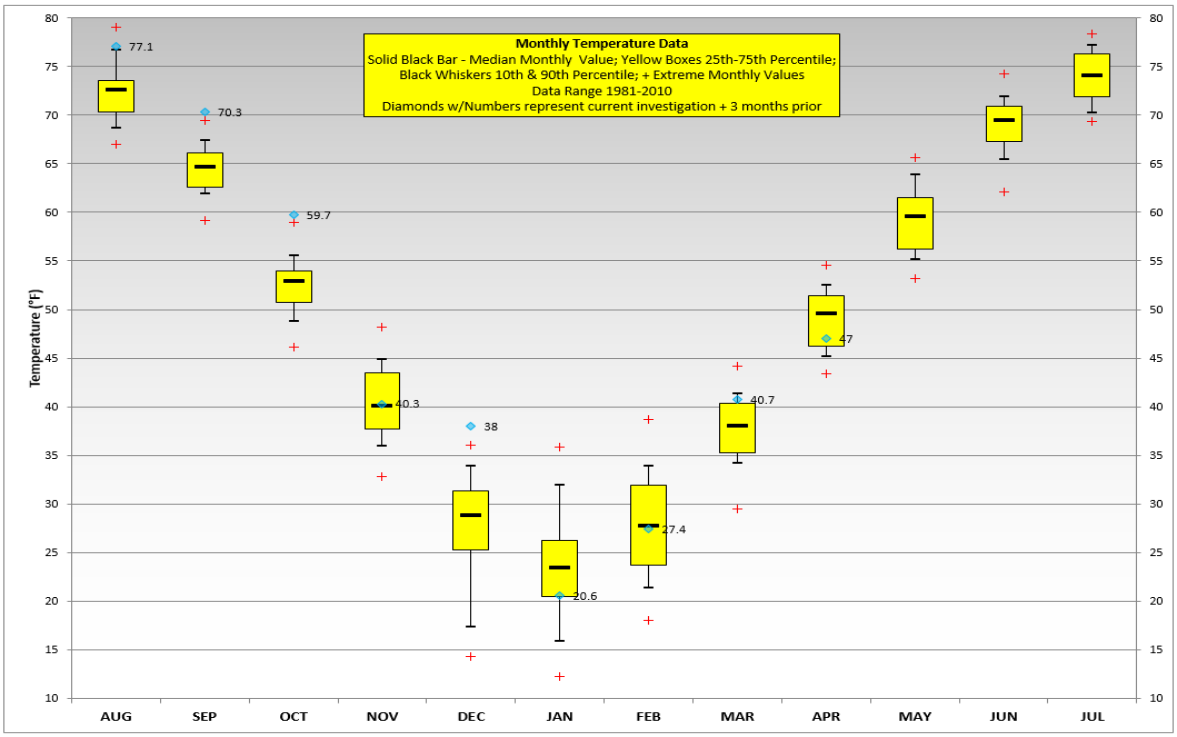

Figure 3: Monthly Temperature Data from 2021 to 2022

The deviations from the historical 30-year climate data show the investigation period was characterized in general by average precipitations with exception of above average precipitation in October 2021 and below average in November 2021. The temperature values were average with the exceptions of record high temperatures in September, October, and December 2021. Observations of perched water within the granular fill may have been influenced by these climate factors.

3.0 METHODS OF INVESTIGATION

The following sections outline the subsurface and laboratory investigations performed by Wang.

3.1 Field Investigation

Our subsurface investigation for the roadway consisted of twenty three subgrade Borings SGB-01 to SGB-13. We also considered nearby noise wall Borings B4-NAW-01 to B4-NAW-05, and B5-NAW-01 to B5-NAW-05 for our analysis. The borings were drilled by Wang between November 2021 and April 2022, from surface elevations of 871.2 to 907.1 feet, to depths of 11 to 30 feet bgs.

The as-drilled northing and easting coordinates (within +/- 6 inches) were surveyed by Wang with a

mapping-grade GPS unit, whereas the stations, offsets, and the elevations were provided by GF. Boring location data are presented in the *Boring Logs* (Appendix A) and the as-drilled locations are shown in the *Plan and Profile Drawings* (Appendix E).

Geoprobe, ATV- and truck-mounted drilling rigs equipped with hollow stem augers were used to advance and maintain open boreholes. Soil sampling was performed according to AASHTO T206, *"Penetration Test and Split Barrel Sampling of Soils."* The borings were sampled 11 to 30 feet bgs. Subgrade borings (SGB) were drilled along eastbound except SGB-02, whereas noise wall structure borings (NWB) were drilled along westbound. Soil samples collected from each sampling interval were placed in sealed jars and transported to the laboratory for further examination and laboratory testing.

Field boring logs, prepared and maintained by Wang field engineers, included lithological descriptions, visual-manual soil classifications, results of Rimac and/or Pocket Penetrometer's unconfined compressive strength tests, and the results of Standard Penetration Tests (SPT) recorded as blows per 6 inches of penetration. The N-values shown in the *Plan and Profile Drawings* (Appendix E) are the sum of the second and third set of blows per 6 inches of penetration.

Groundwater levels were measured while drilling and at the completion of each borings. Each borehole was backfilled upon completion with soil cuttings and bentonite chips.

3.2 Laboratory Testing

The soil samples were tested in the laboratory for moisture content (AASHTO T265). Atterberg limits (AASHTO T89 and T90) and particle size analysis (AASHTO T88) tests were performed on select samples. Field visual descriptions of the soil samples were verified in the laboratory and the soils were classified according to the IDH and AASHTO Soil Classification Systems. The laboratory test results are shown in the *Boring Logs* (Appendix A), *Laboratory Test Results* (Appendix B), and in the *IDOT Forms* (Appendix C).

4.0 INVESTIGATION RESULTS

Detailed description of the soil conditions encountered during the subsurface investigation are presented in the attached *Boring Logs* (Appendix A) and in the *Plan and Profile Drawings* (Appendix E). Please note that the strata contact lines shown on the logs and profiles represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal

and vertical directions.

4.1 Surface Characterization

The proposed improvement will include roadway resurfacing, widening, shoulder, curb and gutter improvements along US 20. Borings were advanced through pavement, topsoil, bare ground, or off shoulders. Topsoil thicknesses are summarized in Table 1.

Table 1: Summary of Topsoil Thickness

Alignment	Borings (Direction)	Number of Measurements	Topsoil Thickness Range (inches)	Average Thickness (inches)
US 20	NWB (WB)	10	3 to 12	8
	SGB (EB)	10	8 to 21	18

Wang recommends using 18 inches as an average topsoil removal thickness based on SGB borings that were drilled to the south of US 20 (EB) and along the improvement areas. The Boring SGB-02 drilled through the roadway pavement encountered 11.5-inch thick asphalt over 6.5-inch thick sandy gravel aggregate base.

4.2 Subgrade Conditions

Beneath the surface, in descending order, the lithologic succession encountered includes: 1) man-made ground (fill); 2) soft to hard clay loam, silty clay to silty clay loam or loose to medium dense loam, sand, gravel to sandy gravel; 3) loose to very dense silt, sand, sandy loam, sandy gravel to gravelly sand.

1) Man-made ground (fill)

Beneath the pavement or topsoil, Borings B4-NAW-05, B5-NAW-01, and SGB-03 encountered 0.3 to 12.7 feet of granular or cohesive fill. Granular fill encountered in Borings B4-NAW-05 and SGB-03 consist of medium dense, brown loam, sand to sandy loam with a SPT-N value of 17 and a moisture content value of 13%. The cohesive fill consists of stiff to hard clay loam to silty clay loam with Unconfined Compressive Strength (Q_u) values of 1 to greater than 4.5 tsf and moisture content values of 9 to 20%.

2) Soft to hard clay loam, silty clay to silty clay loam

At elevations of 885 to 907 feet (surface to 5.5 feet bgs), the borings encountered soft to hard clay loam, silty clay to silty clay loam with Q_u values of 0.25 to 5.17 tsf and moisture content values of 6 to 44%. Laboratory index testing shows liquid limit (L_L) values of 45 to 48% and plastic limit (P_L) values of 15 to 17%.

Isolated pockets of granular soils consist of loose to medium dense, brown loam, sand, gravel to sandy gravel with SPT N-values of 9 to 17 blows-per-foot and moisture content values of 3 to 17%.

3) Loose to very dense silt, sand, sandy loam, sandy gravel to gravelly sand

At elevations of 882 to 901 feet (0.3 to 13 feet bgs), the borings encountered loose to dense brown and gray silt, sand, sandy loam, sandy gravel to gravelly sand with SPT N-values of 4 to 52 blows-per-foot and moisture content values of 2 to 23%.

4.3 Groundwater Conditions

Groundwater was recorded during and upon completion of drilling. Borings B4-NAW-01 to B4-NAW-05, B5-NAW-04, B5-NAW-05, and SGB-01 encountered groundwater at 11 to 27 feet bgs or at elevations 854 to 887 feet. At the end of the drilling, Borings B4-NAW-01 to B4-NAW-05, B5-NAW-05, and SGB-01encoutnered groundwater at 14 to 26 feet bgs or at elevations 854 to 885 feet.

5.0 ANALYSIS AND RECOMMENDATIONS

According to the drawings provided by GF, Wang understands the improvements proposed for the section of the project that is defined as the West Leg includes roadway widening and reconstruction of US 20 between Station 142+82.7 (west of Nesler Road) and Station 187+69.0 (east of Longcommon).

Design and cross-section drawings indicate that the proposed grade along the roadway alignments will not change. The proposed improvements along the US20 will have roadway up to 3.5 feet of embankment fill. In some areas or up to 4 feet of soil cut into side slopes or maintain existing terrain.

From GF plan and profile, we understand the proposed roadway pavement typical design consist of following:

- 10.75″ full depth Hot-Mix Asphalt pavement (HMA) with 12″ Aggregate Subgrade Improvement (ASI)
- 10.75″ HMA shoulder with 12″ ASI
- Combination of concrete curb and gutter
- 2.5″ resurfacing with HMA

Details regarding the improvements are sown in *Cross-Sections* (Appendix D) and *Plan and Profile Drawings* (Appendix E).

5.1 Site Preparation

For the proposed widening reconstruction, it is recommended that topsoil be stripped within the limits of the proposed improvements. For estimating purposes, an average topsoil thickness to be stripped is 18 inches representing the 75th percentile of topsoil thickness. As per IDOT District One, a shrinkage factor of 15% can be used to measure borrowed and furnished excavation quantities.

Wang recommends that stripped topsoil be stockpiled, sorted, and reused for the proposed landscaping improvements. The actual removal depth and the quantity of topsoil removal should be verified in the field.

After stripping, the stability of the exposed subgrade should be observed for the presence of any unsuitable and/or unstable soils to determine if remedial treatment is necessary. The prepared subgrade should be proofrolled to check for rutting and subgrade deformation. Using a static or dynamic cone penetrometer, any unstable and/or unsuitable soils revealed during proofrolling should be tested and evaluated according to the IDOT *Subgrade Stability Manual* (IDOT 2005).

5.2 Subgrade Treatment Recommendations

Based on the results of our investigation, the subgrade will generally consist of medium stiff to hard clay loam, silty clay to silty clay loam or loose to medium dense loam, sand to sandy gravel. The proposed pavement structure will be supported on both existing fill and natural ground.

Soil borings indicate the top five feet of the proposed subgrade generally consist of soils with Q_u values greater than 1.0 tsf, moisture contents of less than 25%, and L_L values below 50%. Overall, the subgrade soils will provide a stable working platform for the construction of the pavement structure and the aggregate base.

However, a few Borings B4-NAW-02, B4-NAW-04, B5-NAW-03 SGB-07, SGB-09, and SGB-10 revealed soil with Q_u values less than 1.0 tsf, moisture content values higher than 25%. The proposed undercuts are below the 12 inches of aggregate subgrade improvement that is included as part of the proposed pavement section. Our subgrade treatment recommendations are summarized in Table 2.

Table 2: Summary of Subgrade Treatment Recommendations

Alignment	Limits	Treatment Width	Treatment Type	Treatment Depth[(1)] (inch)	Reference Boring, Subgrade Concerns
	Station to Station				
US 20	170+41 to 172+83	Eastbound	Removal and Replacement with Aggregate Subgrade Improvement	12	B4-NAW-02 and SGB-07; (Qu=0.5-0.75tsf; MC=19 to 25%)

[(1)] The treatment depths are below 12 inches of aggregate improvement that is included in proposed pavement section.

We recommend placing geotextile fabric at the base of undercut areas to separate the aggregate fill and soft layers. Fabric should meet the requirements of Article 210, Fabric for Ground Stabilization of IDOT *Standard Specifications* (IDOT 2022).

The actual need for removal and replacement with Aggregate Subgrade Improvement should be determined in the field at the time of construction by the geotechnical engineer or soils inspector. All potentially unstable soils should be tested with a cone penetrometer and treated in accordance with guidelines in the IDOT Subgrade Stability Manual.

The subgrade should be proofrolled and tested as outlined in Section 5.1. If low strength and/or high moisture soils are encountered during construction other locations not shown in Table 2, they should be removed and replaced.

The frost depth for pavement design in northern Illinois could be expected to range from 45 to 60 inches (IDOT 2020). Within the frost susceptible depths, most of the samples tested in the laboratory had Plasticity Indices (PI) of 16 to 33%, and groundwater is deep seated. In our opinion, the soils will exhibit high frost susceptibility. Adequate drainage will suffice to alleviate frost heave.

5.3 Pavement Design Recommendations

For Mechanistic Pavement Design (MPD), IDOT rates the subgrade using the Subgrade Support Rating (SSR). Laboratory testing on representative samples of the subgrade soil shows SSR ratings of POOR to FAIR. *Subgrade Support Ratings* are shown in Exhibit 4. Considering the worst subgrade condition, we recommend that an SSR of POOR be used for the purpose of pavement design. Pavement structure conforming to IDOT's MPD requires a minimum of 12 inches of improved subgrade below the design pavement structure to ensure stability during construction and long-term pavement performance (IDOT 2022).

For an AASHTO pavement design, the subgrade soil support is characterized using the Illinois Bearing Ratio (IBR). Based on soil tests and classifications (A-6 and A-7-6), we recommend that the pavement be designed based on an IBR value of 2 (IDOT 2020).

5.4 Embankment and Cut sections

Based on the proposed geometry, the subsurface soil conditions revealed by our investigation, and the proposed subgrade treatment, we estimate there will not be significant ground settlements nor global stability issues related to the proposed roadway improvements.

5.5 Roadway Drainage

The proposed subgrade and pavement should have proper surface grading to prevent the pooling of water. The soils encountered beneath the proposed subgrade will exhibit poor to fair drainage characteristics. The fill material to be placed in support of the widening will likely be cohesive and will exhibit poor drainage characteristics. We recommend installing longitudinal pipe underdrains and transverse pipe underdrains using a spacing of 300-foot, at the low points in the profile, and at the base of any undercuts. The pipe underdrains should be 4 inches in diameter and should be installed per Article 601 in the IDOT *Standard Specifications* (IDOT 2022) and consist of Type 2 underdrains.

Any highly moist soils, if not otherwise unsuitable or unstable, encountered within the exposed roadway subgrade should be disked or tilled, dried, and compacted before placing the new pavement structure.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Excavation, Dewatering, and Utilities

Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby utilities should be considered during construction. Excavations should be sloped at no steeper than 1:2 (V: H) for cohesive soils and 1:2.5 (V:H) for granular soils, or deep cuts should be sustained by temporary walls.

We do not anticipate the need for special dewatering systems. However, during and immediately following the period of heavy precipitations, the excavations may encounter perched groundwater within any granular layers interbedded within the cohesive layers. Therefore, the Contractor should ensure proper surface grading to prevent pooling of water and run-off into open excavations. Any water allowed to enter excavations should immediately be removed via sump-pump.

6.2 Filling and Backfilling

Fill material used for replacement of any poor soils encountered during construction should be pre-approved by the Engineer. The fill material should be free of organic matter and debris and should be placed in lifts compacted in accordance with Section 205, *Embankment* (IDOT 2022). For new fill to be placed on existing slopes, we recommend the existing slopes should be plowed deeply before construction of the embankment is started in accordance with Section 205.03, *Preparation of Existing Ground Surface* (IDOT 2022).

6.3 Reuse of Materials

Soil excavated from the existing subgrade may be reused as embankment fill if testing shows it conforms to the following criteria: a) L_L less than 50%; b) PI value of more than 12%; c) maximum dry density greater than 90 pcf according to AASHTO T99; and d) organic content less than 10%. The excavated soils should be removed, brought to within ±2% of the optimum moisture content and recompacted according to Section 205, *Embankment* (IDOT 2022).

6.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of the exposed subgrade soils. Precautions should be taken by the Contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion.

Earth moving operations should be scheduled to avoid excessive cold or wet weather (early spring, late fall, or winter). Any soil allowed to freeze or soften due to the standing water should be removed. Wet weather can cause problems with subgrade compaction.

It is recommended that an experienced geotechnical engineer be retained to inspect the exposed subgrade, monitor earthwork operations, and provide material inspection services during the construction phase of this project.

7.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon data obtained from the borings drilled at the locations shown on the *Boring Logs* (Appendix A) and in the *Plan and Profile Drawings* (Appendix E). This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that changes in the design and/or location of the proposed improvements are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist Gannett Fleming, Inc., and the Illinois Department of Transportation on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

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Corina T. Farez, P.G., P.E.
QA/QC Reviewer

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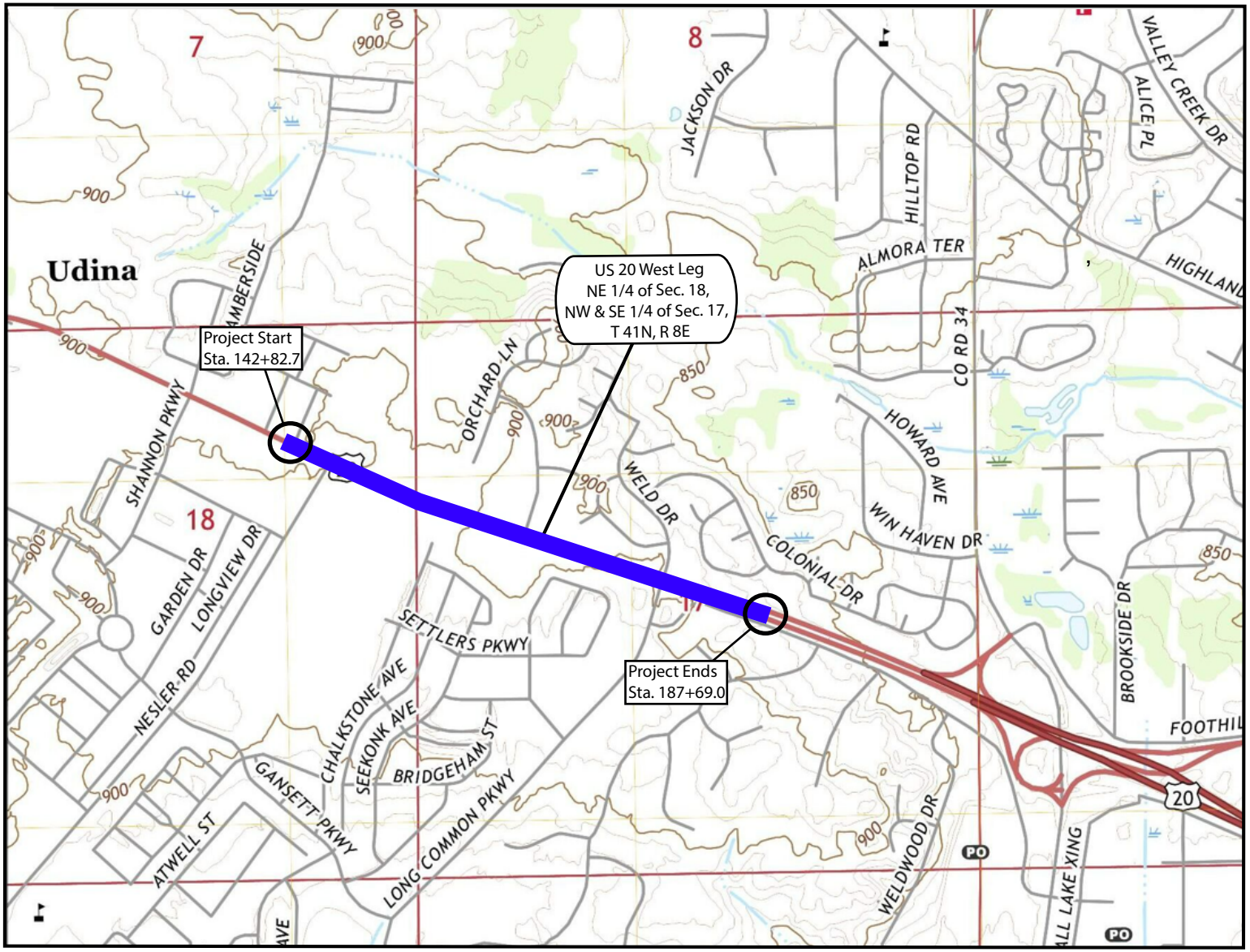
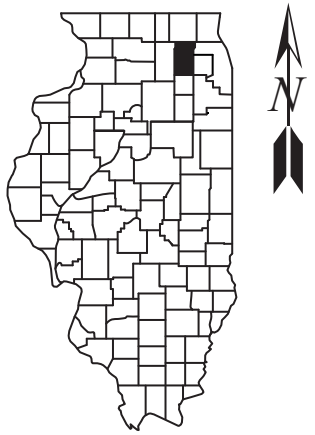
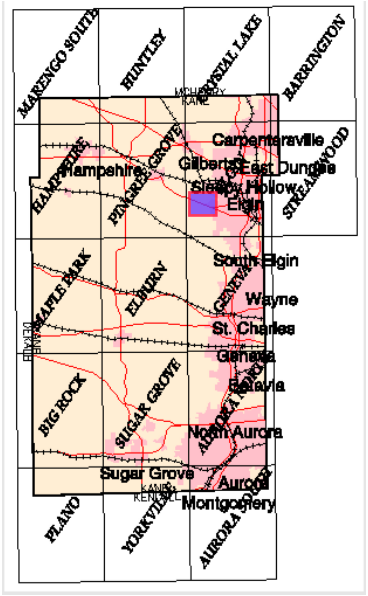
EXHIBITS







Kane County

Scale

0 0.5 1.0 Mile

SITE LOCATION MAP: WEST OF RANDALL ROAD TO EAST OF SHALES PARKWAY, WEST LEG, US 20 IMPROVEMENTS, KANE COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 1	DRAWN BY: RKC CHECKED BY: M. Seyhun

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Lombard, IL 60148
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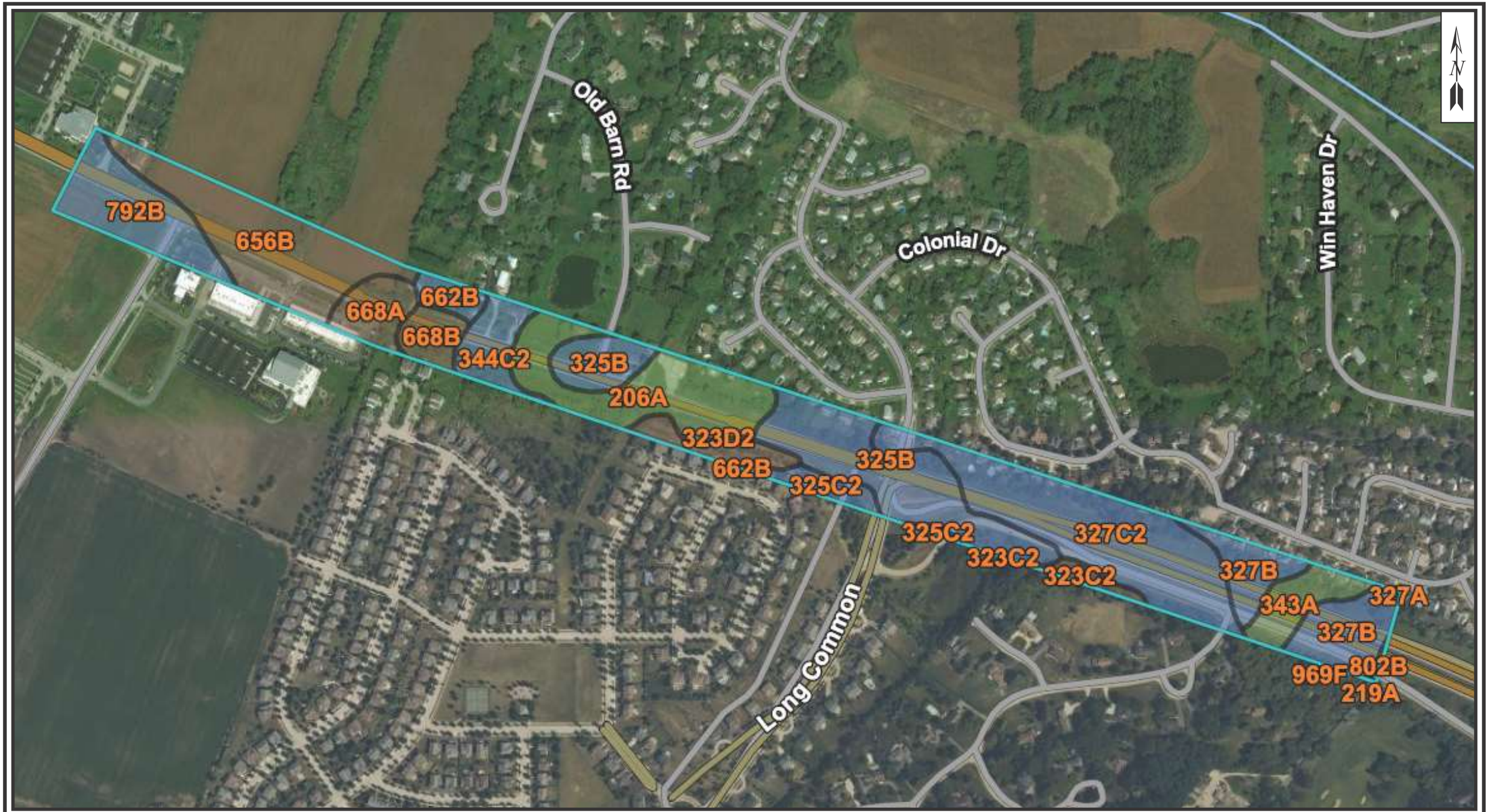
FOR GANNETT FLEMING, INC.

1210301/
KE225009



0 200 400Feet

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
Soil Survey Area: Kane County, Illinois
Survey Area Data: Version 16, Aug 31, 2022

PROJECT PEDOLOGY MAP: WEST OF RANDALL ROAD TO EAST OF SHALES PARKWAY, WEST LEG, US 20 IMPROVEMENTS, KANE COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 2-1	DRAWN BY: D. You CHECKED BY: RKC

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FOR GANNETT FLEMING, INC. | 1210301/ KE225009

Map unit symbol and soil name	Depth	USDA texture	Classification	Fragments		Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Organic matter	Liquid limit	Plasticity index	Erosion factors			Potential as a source of roadfill	Local roads and streets	Shallow excavations
			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
	In			Pct	Pct	Pct	Pct	Pct	g/cc	micro m/sec	Pct	Pct							
206A—Thorp silt loam, 0 to 2 percent slopes																			
Thorp silt loam	0-14	Silt loam	A-6, A-7-5, A-7-6	0- 0- 0	0- 0- 0	0-5-10	63-72-80	20-23-27	1.15-1.25-1.35	4.23-9.17-14.11	4.0-5.0-6.0	39-44-50	13-15-18	0.37	0.37	5	Poor, Wetness, Dusty	Very limited: Ponding, Depth to saturated zone, Frost action, Low strength, Shrink-swell	Very limited: Ponding, Depth to saturated zone, Dusty, Unstable excavation walls
	14-19	Silt loam	A-6	0- 0- 0	0- 0- 0	0-5-10	65-74-82	18-21-25	1.30-1.40-1.50	1.41-2.82-4.23	0.2-0.6-1.0	29-32-37	12-14-17	0.49	0.49				
	19-43	Silt loam, silty clay loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-5-10	55-67-78	22-28-35	1.35-1.45-1.55	0.42-0.92-1.41	0.2-0.6-1.0	32-39-47	15-20-25	0.49	0.49				
	43-50	Sandy clay loam, loam, clay loam	A-2-6, A-6, A-7-6	0- 0- 0	0- 0- 0	20-50-55	15-26-50	18-24-30	1.40-1.50-1.60	4.23-9.17-14.11	0.2-0.3-0.5	28-35-41	12-17-21	0.28	0.28				
	50-79	Stratified loamy sand to loam	A-1-b, A-4, A-6	0- 0- 0	0- 0- 0	48-58-80	1-29-47	5-13-20	1.50-1.60-1.70	4.23-23.29-42.34	0.3-1.1-2.0	16-23-30	2-8-13	0.28	0.28				
219A—Millbrook silt loam, 0 to 2 percent slopes																			
Millbrook silt loam	0-8	Silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-9-15	58-69-82	18-23-27	1.10-1.50-1.60	4.23-9.17-14.11	2.0-3.0-4.0	31-38-45	11-15-18	0.32	0.32	5	Fair, Wetness, Dusty	Very limited: Frost action, Depth to saturated zone, Low strength	Very limited: Depth to saturated zone, Dusty, Unstable excavation walls
	8-12	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-9-15	58-70-85	15-21-27	1.40-1.50-1.60	4.23-9.17-14.11	0.5-0.8-1.0	26-32-39	9-14-19	0.49	0.49				
	12-26	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-9-15	50-61-75	25-30-35	1.45-1.55-1.65	4.23-9.17-14.11	0.0-0.5-1.0	35-41-47	17-21-25	0.43	0.43				
	26-41	Sandy clay loam, clay loam, loam, sandy loam	A-6, A-7-6	0- 0- 0	0- 1- 3	15-40-60	8-35-67	18-25-32	1.45-1.58-1.70	4.23-9.17-14.11	0.0-0.3-0.5	27-34-42	12-17-22	0.32	0.32				
	41-65	Stratified loamy sand to clay loam	A-2-4, A-2-6, A-4, A-6	0- 1- 1	0- 3- 4	20-60-85	0-22-70	10-18-30	1.50-1.63-1.75	4.23-23.29-42.34	0.0-0.3-0.5	20-28-40	6-12-21	0.24	0.24				
323C2—Casco loam, 4 to 6 percent slopes, eroded																			
Casco loam	0-6	Loam	A-4	0- 0- 0	0- 3- 4	25-37-50	24-44-50	12-19-25	1.35-1.45-1.55	4.23-9.17-14.11	1.0-1.5-2.0	20-25-30	3-7-10	0.37	0.37	2	Good	Somewhat limited: Frost action	Somewhat limited: Unstable excavation walls, Dusty
	6-18	Clay loam, sandy clay loam, gravelly loam	A-2-6, A-6, A-7-6	0- 0- 1	0- 3- 3	20-40-60	10-32-50	18-28-35	1.55-1.60-1.65	4.23-9.17-14.11	0.2-0.6-1.0	25-36-46	11-19-26	0.28	0.28				
	18-60	Stratified sand to extremely gravelly coarse sand	A-1-a, A-1-b, A-3	0- 1- 2	0- 8- 20	87-92-98	0-6-13	0-2-5	1.45-1.57-1.70	141.14-423.42-705.00	0.0-0.3-0.5	0-7-14	NP	0.02	0.02				
323D2—Casco loam, 6 to 12 percent slopes, eroded																			
Casco loam	0-5	Loam	A-4	0- 0- 0	0- 0- 0	30-44-52	28-41-57	10-15-20	1.42-1.47-1.51	4.23-9.17-14.11	1.0-2.0-3.0	23-30-37	6-9-13	0.32	0.32	2	Good	Somewhat limited: Frost action, Slope	Somewhat limited: Unstable excavation walls, Slope. Dusty
	5-17	Clay loam, loam	A-6, A-7	0- 1- 1	0- 3- 4	23-35-40	25-38-55	18-27-35	1.51-1.52-1.53	4.23-9.17-14.11	0.0-0.3-0.5	28-37-46	12-19-25	0.32	0.32				
	17-79	Very gravelly coarse sand, extremely gravelly coarse sand, stratified sand to gravel	A-1-a, A-1-b, A-3	0- 1- 2	0- 4- 11	85-93-95	1-4-11	0-3-4	1.37-1.59-1.62	141.10-282.05-423.00	0.0-0.3-0.5	0-0-16	NP-0-1	0.02	0.02				
325B—Dresden silt loam, 2 to 4 percent slopes																			
Dresden silt loam	0-7	Silt loam	A-6, A-7-6	0- 0- 0	0- 0- 1	2-18-30	50-60-78	18-23-27	1.29-1.36-1.42	4.23-9.17-14.11	2.0-3.0-4.0	32-38-45	12-15-18	0.32	0.32	3	Fair, Dusty	Somewhat limited: Frost action, Low strength	Somewhat limited: Dusty, Unstable excavation walls
	7-19	Silty clay loam	A-6	0- 0- 1	0- 1- 4	5-18-20	42-52-65	27-30-38	1.44-1.44-1.45	4.23-9.17-14.11	0.2-0.6-1.0	37-40-49	19-21-27	0.43	0.43				
	19-32	Clay loam, gravelly clay loam, sandy clay loam, very gravelly loam	A-2-6, A-6	0- 1- 1	0- 3- 4	30-48-70	0-23-48	20-29-30	1.50-1.58-1.65	4.23-9.17-14.11	0.0-0.3-0.5	29-39-40	13-20-31	0.24	0.24				
	32-79	Stratified gravelly loamy sand to extremely gravelly coarse sand, very gravelly sand	A-1-a, A-1-b	0- 1- 1	0- 2- 4	80-91-99	0-6-18	1-3-5	1.56-1.60-1.64	141.14-423.42-705.00	0.0-0.3-0.5	0-0-17	NP-0-2	0.02	0.05				
325C2—Dresden silt loam, 4 to 6 percent slopes, eroded																			
Dresden silt loam	0-7	Silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	2-18-30	50-60-78	18-23-27	1.29-1.36-1.42	4.23-9.17-14.11	2.0-3.0-4.0	32-38-45	12-15-18	0.32	0.32	3	Fair, Dusty	Somewhat limited: Frost action, Low strength	Somewhat limited: Dusty, Unstable excavation walls
	7-18	Silty clay loam	A-6	0- 0- 0	0- 0- 0	5-18-20	42-52-65	27-30-38	1.44-1.44-1.45	4.23-9.17-14.11	0.2-0.6-1.0	37-40-49	19-21-27	0.43	0.43				
	18-31	Clay loam, gravelly clay loam, sandy clay loam, very gravelly loam	A-2-6, A-6	0- 0- 0	0- 1- 3	30-48-70	0-23-48	20-29-30	1.50-1.58-1.65	4.23-9.17-14.11	0.0-0.3-0.5	29-39-40	13-20-21	0.24	0.24				
	31-79	Stratified gravelly loamy sand to extremely gravelly coarse sand, very gravelly sand	A-1-a, A-1-b	0- 0- 0	4-23-24	80-91-99	0-6-18	1-3-5	1.56-1.60-1.64	141.14-423.42-705.00	0.0-0.3-0.5	0-0-17	NP-0-2	0.02	0.05				

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			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
	In			Pct	Pct	Pct	Pct	Pct	g/cc	micro m/sec	Pct	Pct							
327A—Fox silt loam, 0 to 2 percent slopes																			
Fox silt loam	0-9	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	25-31-40	50-56-65	10-14-17	1.35-1.37-1.39	4.23-9.17-14.11	1.0-2.0-3.0	23-28-34	6-8-11	0.32	0.32	3	Fair, Dusty	Somewhat limited: Frost action, Low strength	Somewhat limited: Dusty, Unstable excavation walls
	9-21	Silty clay loam, silty loam	A-6, A-7	0- 0- 0	0- 0- 0	1-18-19	46-55-72	18-27-35	1.41-1.46-1.52	4.23-9.17-14.11	0.0-0.3-0.5	28-37-46	12-19-25	0.43	0.43				
	21-31	Gravelly loam, sandy clay loam	A-2, A-6, A-7	0- 0- 0	0- 3- 4	46-56-72	0-18-36	18-27-35	1.60-1.62-1.63	4.02-9.17-14.11	0.0-0.3-0.5	28-37-46	12-18-25	0.2	0.2				
	31-79	Gravelly sand, very gravelly coarse sand, stratified sand to gravel	A-1, A-1-b, A-2, A-3	0- 0- 0	0- 4- 7	85-93-95	1-4-11	0-3-4	1.55-1.59-1.63	42.34-91.74-141.14	0.0-0.3-0.5	0-0-16	NP-0-1	0.02	0.02				
327B—Fox silt loam, 2 to 4 percent slopes																			
Fox silt loam	0-7	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	5-18-30	50-62-80	15-20-25	1.34-1.37-1.40	4.23-9.17-14.11	1.0-2.0-3.0	28-34-41	9-13-17	0.37	0.37	3	Fair, Dusty	Somewhat limited: Frost action	Somewhat limited: Dusty, Unstable excavation walls
	7-11	Silty clay loam, silty loam	A-6, A-7-6	0- 0- 0	0- 1- 1	5-18-30	50-50-77	18-32-35	1.48-1.52-1.57	4.23-9.17-14.11	0.2-0.3-0.5	28-42-46	12-22-25	0.37	0.37				
	11-32	Clay loam, sandy clay loam, gravelly loam	A-7-6	0- 1- 1	0- 1- 4	20-42-75	5-26-50	18-32-35	1.48-1.57-1.66	4.23-9.17-14.11	0.0-0.3-0.5	28-42-46	12-22-25	0.24	0.24				
	32-79	Stratified gravelly sand to very gravelly coarse sand to extremely gravelly coarse sand	A-1-b	1- 1- 2	1- 3- 5	90-92-98	0-7-10	0-1-2	1.55-1.61-1.67	141.14-423.42-705.00	0.0-0.3-0.5	0-0-14	NP	0.02	0.02				
327C2—Fox silt loam, 4 to 6 percent sloeps, eroded																			
Fox silt loam	0-6	Silt loam	A-4, A-7	0- 0- 0	0- 0- 0	5-18-30	50-62-80	15-20-25	1.34-1.37-1.40	4.23-9.17-14.11	1.0-2.0-3.0	28-34-41	9-13-17	0.37	0.37	3	Fair, Dusty	Somewhat limited: Frost action	Somewhat limited: Dusty, Unstable excavation walls
	6-11	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 1- 1	5-18-30	50-50-77	18-32-35	1.48-1.52-1.57	4.23-9.17-14.11	0.2-0.3-0.5	28-42-46	12-22-25	0.37	0.37				
	11-32	Clay loam, sandy clay loam, gravelly loam	A-7-6	0- 1- 1	0- 1- 4	20-42-75	5-26-50	18-32-35	1.48-1.57-1.66	4.23-9.17-14.11	0.0-0.3-0.5	28-42-46	12-22-25	0.24	0.24				
	32-79	Stratified gravelly sand to very gravelly coarse sand to extremely gravelly coarse sand	A-1-b	1- 1- 2	1- 3- 5	90-92-98	0-7-10	0-1-2	1.55-1.61-1.67	141.14-423.42-705.00	0.0-0.3-0.5	0-0-14	NP	0.02	0.02				
343A—Kane silt loam, 0 to 2 percent slopes																			
Kane silt loam	0-5	Silty loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-15-25	50-61-77	18-24-27	1.30-1.40-1.50	4.23-9.17-14.11	3.0-4.0-5.0	33-42-47	11-16-18	0.32	0.32	3	Fair, Wetness, Dusty	Somewhat limited: Depth to saturated zone, Frost action, Low strength, Shrink-swell	Very limited: Depth to saturated zone, Dusty, Unstable excavation walls
	5-12	Silty clay loam	A-7-6	0- 0- 0	0- 0- 0	5-15-20	45-55-68	27-30-35	1.35-1.45-1.55	4.23-9.17-14.11	2.5-3.3-4.0	42-27-53	18-21-25	0.32	0.32				
	12-22	Silty clay loam, clay loam, loam	A-6, A-7-6	0- 0- 0	0- 0- 0	5-18-35	30-52-70	25-30-35	1.35-1.45-1.55	4.23-9.17-14.11	0.5-1.0-1.5	36-42-48	17-21-25	0.37	0.37				
	22-29	Clay loam, sandy loam, loam, sandy clay loam	A-6, A-7-6	0- 1- 1	0-3-4	30-48-60	10-24-50	15-28-30	1.40-1.50-1.60	4.23-9.17-14.11	0.2-0.6-1.0	27-40-43	10-20-21	0.24	0.24				
	29-60	Stratified gravelly loamy sand to extremelly gravelly coarse sand	A-1-a, A-1-b, A-2-4, A-3	0- 1- 1	0-3-6	85-92-99	0-2-14	1-6-10	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-18-23	NP-3-6	0.02	0.02				
344C2—Harvard silt loam, 5 to 10 percent slopes, eroded																			
Harvard silt loam	0-7	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-8-15	58-69-80	20-24-27	1.15-1.25-1.35	4.23-9.17-14.11	2.0-2.5-3.0	30-35-40	8-12-15	0.43	0.43	5	Poor, Low strength, Dusty, Shrink-swell	Very limited: Frost action, Low strength, Shrink-swell	Somewhat limited: Dusty, Unstable excavation walls
	7-32	Silty clay loam, silt loam	A-4, A-6, A-7-6	0- 0- 0	0- 0- 0	0-8-15	20-63-75	25-30-35	1.25-1.40-1.55	4.23-9.17-14.11	0.2-0.6-1.0	35-40-45	10-15-20	0.43	0.43				
	32-40	Clay loam, silt loam, sandy loam	A-4, A-6, A-7-6	0- 0- 0	0- 1- 3	15-43-60	10-30-70	15-28-35	1.30-1.45-1.60	4.23-9.17-14.11	0.0-0.3-0.5	30-38-45	5-13-20	0.32	0.32				
	40-60	Stratified sand to clay loam	A-2-4, A-2-6, A-4. A-6	0- 0- 0	0- 3- 4	30-59-87	0-24-65	5-18-30	1.40-1.55-1.70	4.23-23.29-42.34	0.0-0.3-0.5	20-30-40	NP-10-20	0.2	0.2				
656B—Octagon silt loam, 2 to 4 percent sloeps																			
Octagon silt loam	0-7	Silt loam	A-4	0- 0- 0	0- 0- 0	10-23-35	50-57-75	15-21-27	1.30-1.35-1.40	4.23-9.17-14.11	2.0-3.0-4.0	20-25-30	5-10-15	0.32	0.32	5	Fair, Dusty, Wetness	Somewhat limited: Frost action, Shrink-swell, Low strength	Somewhat limited: Depth to saturated zone, Dense layer, Dusty, Unstable excavation walls
	7-30	Clay loam, loam, silty clay loam	A-6	0- 0- 0	0- 0- 0	10-28-45	21-45-65	22-28-34	1.35-1.43-1.50	4.23-9.17-14.11	0.5-0.8-1.0	30-35-40	10-15-20	0.37	0.37				
	30-60	Loam	A-4	0- 0- 0	0- 1- 2	35-43-50	30-43-50	10-15-20	1.70-1.80-1.90	1.41-2.82-4.23	0.0-0.1-0.2	10-18-25	3-9-15	0.49	0.49				

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			AASHTO	>10 inches	3-10 inches									Kw	Kf	T	Rating class and limiting features	Rating class and limiting features	Rating class and limiting features
	In			Pct	Pct	Pct	Pct	Pct	g/cc	micro m/sec	Pct	Pct							
662B—Barony silt loam, 2 to 5 percent slopes																			
Barony silt loam	0-8	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-8-15	58-72-85	15-21-27	1.15-1.25-1.35	4.23-9.17-14.11	2.0-3.0-4.0	25-30-35	7-12-16	0.37	0.37	5	Fair, Dusty, Shrink-swell, Wetness	Very limited: Frost action, Low strength, Shrink-swell	Somewhat limited: Depth to saturated zone, Dusty, Unstable excavation walls
	8-34	Silty clay loam, silt loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-8-15	50-63-75	25-30-35	1.25-1.40-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-35-45	11-18-25	0.43	0.43				
	34-54	Clay loam, silt loam, sandy loam	A-4, A-6, A-7-6	0- 0- 0	0- 1- 3	15-38-60	10-35-70	15-28-32	1.30-1.45-1.60	4.23-9.17-14.11	0.0-0.3-0.5	20-33-45	5-15-25	0.32	0.32				
	54-85	Stratified sand to clay loam	A-2-4, A-4, A-6	0- 0- 0	0-3-4	20-55-90	0-29-75	5-17-28	1.40-1.55-1.70	4.23-23.29-42.34	0.0-0.3-0.5	15-25-35	NP-10-20	0.37	0.37				
668A—Somonauk silt loam, 0 to 2 percent slopes																			
Somonauk silt loam	0-4	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-5-10	63-75-86	14-21-27	1.25-1.35-1.45	4.23-9.17-14.11	1.0-2.0-3.0	20-28-35	5-10-15	0.37	0.37	5	Fair, Dusty, Shrink-swell, Wetness	Very limited: Frost action, Low strength, Shrink-swell, Ponding, Depth to saturated zone	Somewhat limited: Depth to saturated zone, Dusty, Unstable excavation walls
	4-9	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-5-10	63-75-86	14-21-27	1.30-1.40-1.50	4.23-9.17-14.11	0.5-0.8-1.0	20-28-35	5-10-15	0.49	0.49				
	9-34	Silty clay loam, silt loam	A-6	0- 0- 0	0- 0- 0	0-5-10	55-67-78	22-29-35	1.35-1.45-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-33-40	15-20-25	0.43	0.43				
	34-70	Sandy loam, clay loam, loam	A-2, A-4, A-6	0- 0- 0	0- 1- 3	15-43-70	5-34-70	15-24-32	1.45-1.55-1.65	4.23-9.17-14.11	0.0-0.2-0.5	20-30-40	5-10-15	0.32	0.32				
	70-80	Stratified silt loam to gravelly sand	A-2, A-4	0- 0- 0	0- 2- 4	20-55-90	0-33-75	5-13-20	1.55-1.62-1.70	4.23-23.29-42.34	0.0-0.2-0.5	0-12-25	NP-5-10	0.2	0.32				
668B—Somonauk silt loam, 2 to 5 percent slopes																			
Somonauk silt loam	0-9	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-5-10	63-75-86	14-20-27	1.25-1.35-1.45	4.23-9.17-14.11	1.0-2.0-3.0	20-28-35	5-10-15	0.43	0.43	5	Fair, Dusty, Shrink-swell, Wetness	Very limited: Frost action, Shrink-swell, Low strength	Somewhat limited: Depth to saturated zone, Dusty, Unstable excavation walls
	9-26	Silty clay loam, silt loam	A-6	0- 0- 0	0- 0- 0	0-5-10	55-67-78	22-29-35	1.35-1.45-1.55	4.23-9.17-14.11	0.2-0.6-1.0	25-33-40	15-20-25	0.43	0.43				
	26-55	Sandy loam, clay loam, loam	A-2-4, A-4, A-6	0- 0- 0	0- 1- 3	15-43-70	5-34-70	15-24-32	1.45-1.55-1.65	4.23-9.17-14.11	0.0-0.2-0.5	20-30-40	5-10-15	0.37	0.37				
	55-60	Stratifield silt loam to gravelly sand	A-1-b, A-2-4, A-4	0- 0- 0	0- 3- 4	30-55-90	0-33-65	5-13-20	1.55-1.62-1.70	4.23-23.29-42.34	0.0-0.2-0.5	0-12-25	NP-5-10	0.37	0.37				
792B—Bowes silt loam, 2 to 4 percent slopes																			
Bowes silt loam	0-7	Silt loam	A-4, A-6	0- 0- 0	0- 0- 0	0-6-10	63-72-82	18-22-27	1.30-1.40-1.50	4.23-9.17-14.11	2.0-3.0-4.0	25-30-35	5-13-20	0.32	0.32	4	Poor, Low strength, Dusty, Shrink-swell	Very limited: Frost action, Low strength, Shrink-swell	Somewhat limited: Dusty, Unstable excavation walls
	7-37	Silt loam, silty clay loam	A-6, A-7-6	0- 0- 0	0- 0- 0	0-6-10	55-63-75	25-31-35	1.30-1.40-1.50	4.23-9.17-14.11	0.2-0.6-1.0	35-40-45	15-20-25	0.43	0.43				
	37-43	Gravelly clay loam, gravelly sandy loam, very gravelly loamy sand	A-2-4, A-4, A-6	0- 1- 1	0- 6-13	30-35-85	2-35-50	10-30-32	1.55-1.65-1.75	4.23-23.29-42.34	0.1-0.3-0.5	10-20-30	NP-8-15	0.1	0.24				
	43-60	Stratified sand to extremely gravelly coarse sand	A-1-a, A-1-b	0- 1- 1	4-15-23	75-87-98	0-7-23	2-6-10	1.60-1.70-1.80	141.14-423.42-705.00	0.0-0.3-0.5	0-10-20	NP-2-3	0.02	0.02				
802B—Orthents loamy, 1 to 6 percent slopes																			
Orthents loamy	0-6	Loam	A-6, A-7-6	0- 0- 0	0- 2- 7	23-35-50	28-40-50	22-25-27	1.70-1.73-1.75	1.41-2.82-4.23	0.5-1.3-2.0	32-37-41	13-16-18	0.37	0.37	5	Poor, Low strength, Dusty	Very limited: Slope, Frost action	Somewhat limited: Depth to saturated zone, Dusty, Unstable excavation walls, Too clayey
	6-79	Loam, silt loam, clay loam	A-6, A-7-6	0- 0- 0	0- 2- 7	20-38-50	25-34-58	22-28-30	1.70-1.75-1.80	1.41-2.82-4.23	1.3-2.8-3.4	31-39-41	13-19-21	0.32	0.32				
969F-Casco-Rodman complex, 20 to 30 percent slopes																			
	0-5	Loam	A-4	0- 0- 0	0- 0- 0	30-44-52	28-41-50	10-15-20	1.42-1.47-1.51	4.23-9.17-14.11	1.0-2.0-3.0	23-30-37	6-9-13	0.32	0.32	2	Poor, Slope	Very limited: Low strength, Frost action, Ponding, Depth to saturated zone, Shrink-swell	Very limited: Slope, Unstable excavation walls, Dusty
	5-17	Clay loam, loam	A-6, A-7	0- 1- 1	0- 3- 4	23-35-40	25-38-53	18-27-35	1.51-1.52-1.53	4.23-9.17-14.11	0.0-0.3-0.5	28-37-46	12-19-25	0.32	0.32				
	17-79	Stratifield sand to gravel, very gravelly coarse sand, extremely gravellu coarse sand	A-1-a, A-1-b, A-3	0- 1- 2	0- 4- 11	85-93-95	1-4-11	0-3-4	1.37-1.59-1.62	141.10-282.05-423.00	0.0-0.3-0.5	0-0-16	NP-0-1	0.02	0.02				

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
Soil Survey Area: Kane County, Illinois
Survey Area Data: Version 16, Aug 31, 2022

PROJECT PEDOLOGY DATA: WEST OF RANDALL ROAD TO EAST OF SHALES PARKWAY, WEST LEG, US 20 IMPROVEMENTS, KANE COUNTY, ILLINOIS

SCALE: GRAPHICAL | EXHIBIT 2-4 | DRAWN BY: D. You CHECKED BY: RKC

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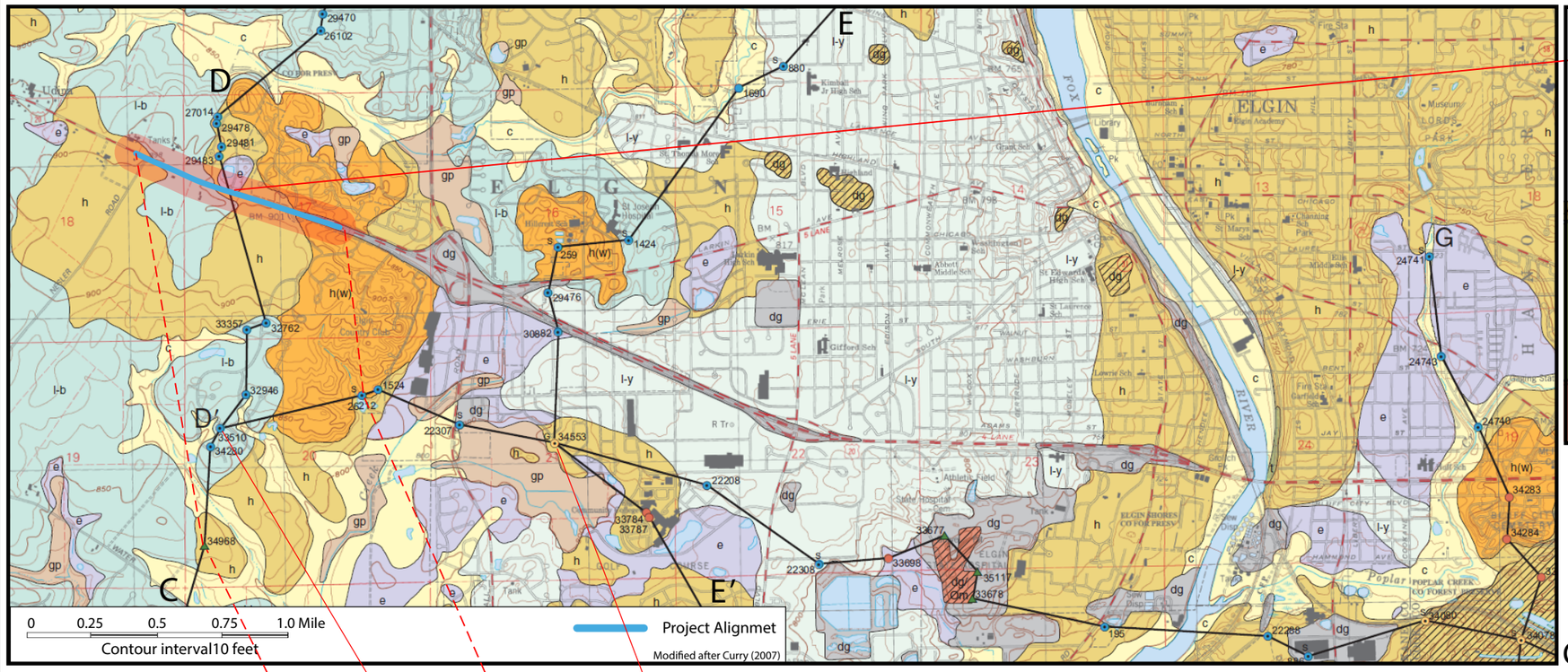

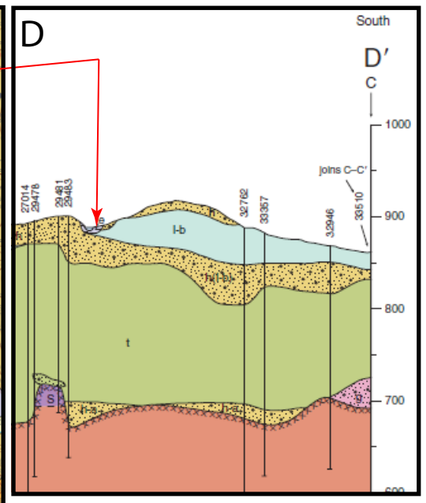

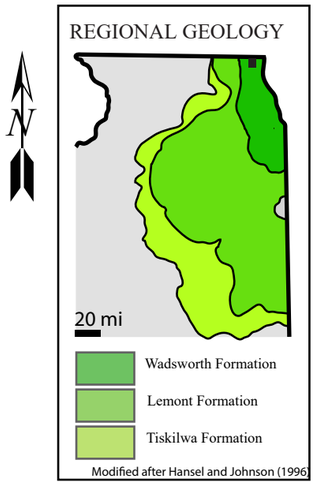

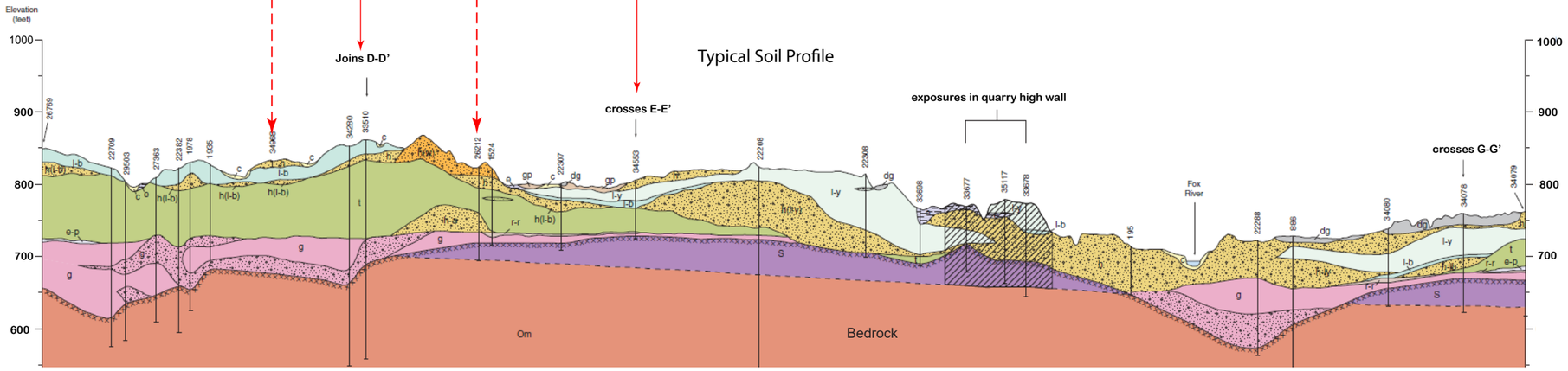

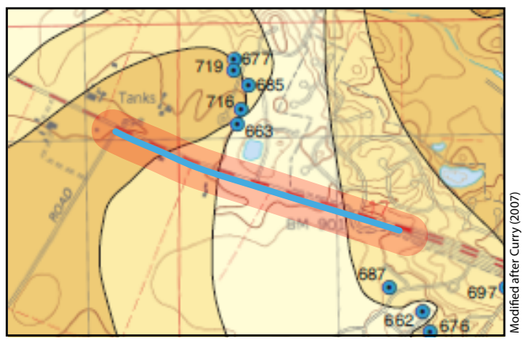

Bedrock Topography

0 0.25 0.5 0.75 1.0 Mile

Contour interval 25 feet

LEGEND

HUDSON EPISODE

- dg — **Disturbed ground:** Fill, compacted land, or other disturbed material;may contain construction and mining debris
- gp — **Grayslake Peat:** organic deposits; decomposing organic rich sediments; peat and muck; may be interbedded with silt, clay and some fine sand: less than 10 feet thick
- c — **Cahokia Formation:** Floodplain alluvium; sand and gravel, well-sorted sand, and lenses of peat grading laterally to organic-rich silt and clay with fossil wood, moss, snails, ostracodes, and rootlets in most places; as much as 30 feet thick.

WISCONSIN EPISODE

- e — **Equality Formation (Hudson and Wisconsin Episodes):** Postglacial and glacial, proglacial lake deposits; Silt, clay, and fine sand; massive to bedded, with fossil wood fragments, moss, gastropod shells, ostracodes; less than 20 feet thick
- h — **Henry Formation:** Proglacial outwash sediments; channel fill, daltas, and alluvial fans; Sand and gravel, or sand; with lenses of silt and clay, or diamicton;
- h (w) — **Henry Formation (Wasco facies):** Kamic (ice-contact) deposits; sand and gravel (silty to clean), and sand with some beds of silt, and loam diamicton; stratified to laminated; contorted and faulted bedding; as much as 85 feet thick
- l-y — **Lemont Formation, Yorkville Member:** Diamicton; silty clay, silty clay loam, and clay; gray, oxidizing to yellowish brown; includes layers of sand and gravel, silt, and silty clay; as much as 65 feet thick
- h (l-y) — **Henry Formation (unnamed tongue) (cross sections only):** proglacial outwash and deltaic deposits sand and gravel with interbeds of silt and clay; gray;stratified to laminated;as much as 65 feet thick
- l-b — **Lemont Formation, Batestown Member:** Diamicton; sandy loam to loam with abundant cobbles; friable; gray to grayish brown, oxidizing to yellowish brown to brown; includes common layers of sand and gravel, and stringers of silt and fine sand; as much as 65 feet thick
- h (l-b) — **Henry Formation (unnamed tongue) (cross sections only):** proglacial outwash and slackwater lake sediment sand and gravel stratified; grayish brown to gray, oxidizing yellowish brown;as much as 70 feet thick;
- t — **Tiskilwa Formation (cross sections only):** Diamicton; clay loam to loam matrix (roughly equal amounts of sand, silt, and clay) with lenses of sand and gravel, or sand; reddish brown; as much as 160 feet thick
- e-p — **Peddicord Tongue, Equality Formation (cross sections only):** FormationProglacial lake deposits; silt and clay; gray to pinkish brown; laminated; with fossils of ostracodes;as much as 50 feet thick

WISCONSIN EPISODE: Athens Subepisode

- r-r — **Robein Member, Roxana Silt (cross sections only):** Accretionary paleosol; A-horizon of Farmdale Geosol; silt and clay; organic-rich, black to brown; leached of carbonate minerals; contains moss and wood fragments; less than 10 feet thick;
- g — **Glasford Formation (cross sections only):**Diamicton and sorted sediment,primarily sand and gravel; is bouldery in places, with abundant lenses, layers, and channel fills of sand and gravel; the diamicton matrix is sandy loam to loam and reddish brown, pinkish brown, or brown. The diamicton is as much as 135 feet thick, and the sand and gravel, 80 feet thick

PALEOZOIC BEDROCK

- S — **Silurian Bedrock (Cross section only):** Dolomite; microcrystalline; cherty and shaly in places; white, gray, and greenish gray; as much as 70 feet thick
- Om — **Ordovician Bedrock (Cross section only):** shale, shaly dolomite; dolomite; brown, gray and greenish gray; the dolomite is vuggy and fossiliferous; about 100 to 210 feet thick

Modified after Curry (2007)

SITE AND REGIONAL GEOLOGY: WEST OF RANDALL ROAD TO EAST OF SHALES PARKWAY, WEST LEG, US 20 IMPROVEMENTS, KANE COUNTY, ILLINOIS

SCALE: GRAPHICAL	EXHIBIT 3	DRAWN BY: C. Marin/R. KC CHECKED BY: M. Seyhun

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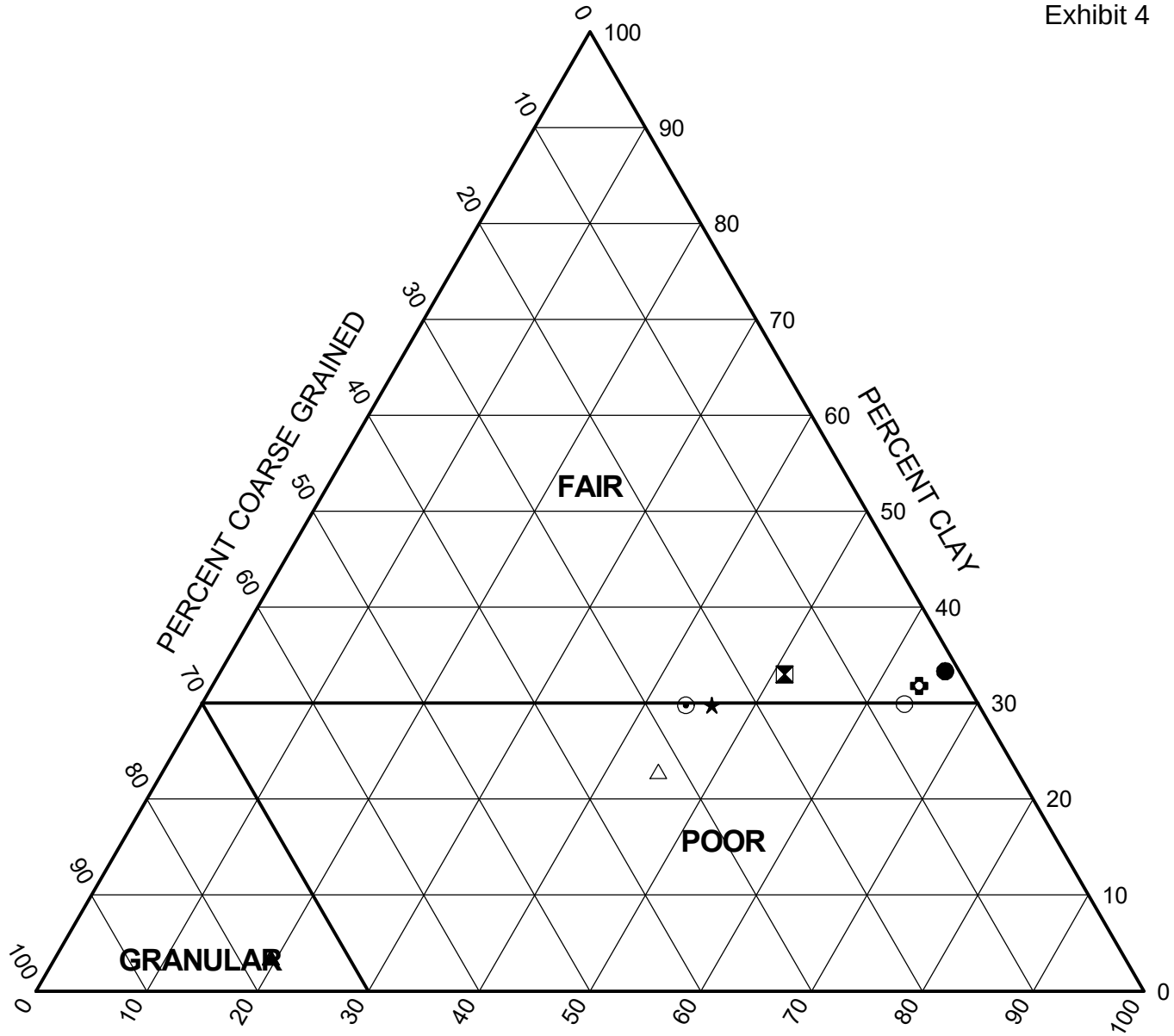
FOR GANNETT FLEMING, INC. | 1210301/ KE225009

Exhibit 4



	Sample	Depth (ft)	Coarse (%)	Silt (%)	Clay (%)	Classification		
						IL DOT	AASHTO	RATING
●	B4-NAW-01#2	3.5	1.3	65.4	33.3	Silty Clay	A-4 (0)	FAIR
⊠	B4-NAW-04#3	6.0	15.9	51.1	33.0	Silty Clay	A-7-6 (23)	FAIR
▲	B5-NAW-03#2	3.5	77.1	19.5	3.5	Gravelly Sandy Loam	A-1-b (0)	GRANULAR
★	SGB-01#2	2.0	24.1	46.1	29.8	Clay	A-7-6 (21)	POOR
⊙	SGB-03#2	2.0	26.5	43.8	29.8	Clay	A-7-6 (23)	POOR
✿	SGB-06#2	2.0	4.4	63.8	31.8	Silty Clay	A-7-6 (32)	FAIR
○	SGB-07#4	6.0	6.7	63.4	29.9	Silty Clay Loam	A-7-6 (25)	POOR
△	SGB-12#2	2.0	32.4	44.7	22.9	Clay Loam	A-6 (7)	POOR

WEI SINCE 1982

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Subgrade Support Rating Chart

Project: US Route 20 From Randall Rd to Shales Parkway

Location: Elgin, Illinois

Number: 121-03-01

APPENDIX A

Wang Engineering

LEGEND FOR BORING LOG

Relative Density of Non-Cohesive Soils

N-Blows/ 12 inches	Relative Density Term
0-3	Very Loose
4-9	Loose
10-29	Medium Dense
30-49	Dense
50-80+	Very Dense

Consistency of Cohesive Soils

Unconfined Compressive Strength Qu, tsf	Consistency Term
<0.25	Very Soft
0.25-0.49	Soft
0.50-0.99	Medium Stiff
1.00-1.99	Stiff
2.00-3.99	Very Stiff
>4.00	Hard

Rock Quality Designation (RQD)

0-25%	Very Poor
25-50%	Poor
50-75%	Fair
75-90%	Good
90-100%	Excelent

SS = Split Spoon
ST = Shelby Tube
SPT = Standard Penetration Test
Q_u = Unconfined Compressive Strength
NP = Non Plastic
P = Pocket Penetrometer
S = Shear failure of sample, Rimac test
B = Bulge failure of sample, Rimac test
SSA = Solid Stem Augers,
HSA = Hollow Stem Augers,

Proportional Terms

		Percent of Dry Weight
Trace	1-9	
Little	10-19	
Some	20-34	
And	35-50	

Gradation Terminology

Boulders	>200mm
Cobbles	200mm to 75mm
Gravel	75mm to 2mm
Sand	2-0mm to 0.074mm
Silt	0.074mm to 0.002mm
Clay	<0.002mm

Relative Moisture Conditions

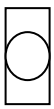
Term	Description
Dry	Dusty, No visible moisture
Damp	Cohesives hard to mold; Granulars do not flow easily
Moist	Cohesives can be molded; Granulars start to stick together
Wet	Cohesives can be very easily molded and sticky; Granulars stick together easily
Saturated	Only granular soils; Water drains freely from sample

Relative Drilling Resistance (RDR)

1	No Chatter - Very Easy Drilling
2	No Chatter - Easy Drilling
3	Some Chatter - Moderate Advancement
4	Frequent Chatter - Slow Advancement
5	Constant Chatter - Very Slow Advanement

Sample Type Symbols


Split Spoon


No Recovery


Geoprobe


Rock Core


Shelby Tube


Auger Cuttings


In-situ Vane Shear Test

SPT = Standard Penetration Test
N Value is the sum of the second and the third numbers

(Rev. 05/23/2018)

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BORING LOG B4-NAW-01

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 890.04 ft
North: 1956136.80 ft
East: 978268.73 ft
Station: 170+25.88
Offset: 40.368 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		12-inch thick black SILTY CLAY --TOPSOIL--						
	889.0							
		Stiff to very stiff, black and gray to gray SILTY CLAY, trace gravel; moist --RDR 2--			1	3 3 2	1.00 P	24
		--%Gravel=0.0-- --%Sand=1.3-- --%Silt=65.4-- --%Clay=33.3-- --A-4-(0)--	5		2	3 5 6	1.80 B	27
	883.7							
		Loose, brown SILT, trace gravel; moist to wet --RDR 2--			3	3 3 2	NP	18
					4	2 1 3	NP	21
			10					
	879.5							
		Loose, brown SANDY LOAM, little gravel; moist --RDR 2--			5	7 5 4	NP	12
	877.3							
		Medium dense, brown medium to coarse SAND, trace gravel; saturated --RDR 2--			6	4 4 6	NP	12
			15					
			20		7	5 7 8	NP	14
					8	4 6 6	NP	13
					9	14 13 15	NP	9
					10	5 8 9	NP	18
	865.0		25					
		Boring terminated at 25.00 ft						
			30					

GENERAL NOTES

Begin Drilling **03-03-2022** Complete Drilling **03-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **13.00 ft**
At Completion of Drilling ▼ **14.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 1210301.GPJ WANGENG.GDT 3/13/23

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BORING LOG B4-NAW-02

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 893.96 ft
North: 1956082.74 ft
East: 978443.38 ft
Station: 172+08.71
Offset: 41.082 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	893.0	12-inch thick black SANDY LOAM --TOPSOIL--						
		Medium stiff, black and brown SILTY CLAY, trace gravel; moist --RDR 2--			1	2 3 4	0.50 P	25
	890.1	Medium dense to dense, brown medium SAND, trace to little gravel; damp --RDR 2--	5		2	6 5 6	0.50 P	19
					3	16 18 19	NP	5
			10		4	11 18 18	NP	4
					5	12 18 22	NP	4
			15		6	17 16 15	NP	3
	878.5	Medium dense, brown medium to coarse SAND, trace to little gravel; saturated --RDR 2--			7	11 8 9	NP	8
			20		8	11 7 8	NP	10
					9	9 12 11	NP	16
	869.0	Boring terminated at 25.00 ft	25		10	16 9 8	NP	20
			30					

GENERAL NOTES

Begin Drilling **03-03-2022** Complete Drilling **03-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **16.00 ft**
At Completion of Drilling ▼ **16.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG B4-NAW-03

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 898.44 ft
North: 1956016.38 ft
East: 978655.19 ft
Station: 174+31.33
Offset: 39.752 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	897.4	12-inch thick black SANDY LOAM --TOPSOIL--						
	897.2	Medium dense, gray GRAVEL; dry			1	4 3 7	1.00 P	16
		Stiff, brown SILTY CLAY CLAY and gravel; moist --RDR 2--						
	894.8	Medium dense to dense, brown medium SAND, little to some gravel; damp --RDR 2--	5		2	5 4 7	NP	6
					3	8 10 12	NP	4
			10		4	6 12 21	NP	8
					5	7 10 10	NP	4
			15		6	11 11 12	NP	3
	880.4	Medium dense to dense, brown Gravelly SAND to SANDY GRAVEL; wet to saturated --RDR 2--	20		7	15 14 12	NP	3
					8	9 17 18	NP	4
					9	12 13 14	NP	9
	875.4	Medium dense, brown medium to coarse SAND, trace gravel; saturated --RDR 2--	25		10	16 9 10	NP	9
					11	12 9 13	NP	11
	868.4	Boring terminated at 30.00 ft	30		12	6 5 7	NP	14

GENERAL NOTES

Begin Drilling **03-03-2022** Complete Drilling **03-03-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **21.00 ft**
At Completion of Drilling ▼ **26.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B4-NAW-04

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 899.05 ft
North: 1955935.36 ft
East: 978880.26 ft
Station: 176+69.79
Offset: 26.398 LT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	12-inch thick SILTY CLAY --TOPSOIL--						
898.1	Medium stiff to stiff, black SILTY CLAY, trace organic matter; moist --RDR 2--			1	3 3 5	1.00 P	44
		5		2	4 3 3	0.57 B	37
893.6	Stiff, brown SILTY CLAY, trace gravel; moist --RDR 2-- --L_L(%)=45, P_L(%)=17-- --%Gravel=0.1-- --%Sand=15.9-- --%Silt=51.1-- --%Clay=33.0-- --A-7-6 (23)--			3	3 3 5	1.31 B	33
890.1	Loose, brown SILT, trace gravel; moist --RDR 2--	10		4	2 2 3	NP	23
888.6	Loose to medium dense, brown SANDY LOAM, trace to little gravel; moist --RDR 2--			5	4 5 4	NP	10
		15		6	6 7 5	NP	7
883.8	Medium dense, brown SANDY GRAVEL; damp --RDR 2--			7	6 6 8	NP	11
881.1	Medium dense, brown SILT, trace gravel; moist to wet --sand seams-- --RDR 2--	20		8	3 5 8	NP	23
878.6	Medium dense, brown fine to coarse SAND, little gravel; damp --RDR 2--			9	10 11 15	NP	8
876.1	Medium dense, brown SANDY GRAVEL; saturated --RDR 2--	25		10	10 11 13	NP	9
873.6	Medium dense, brown medium to coarse SAND, trace to some gravel; saturated --RDR 2--			11	10 10 10	NP	11
869.1	Boring terminated at 30.00 ft	30		12	11 10 11	NP	13

GENERAL NOTES

Begin Drilling **03-02-2022** Complete Drilling **03-02-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **23.50 ft**
At Completion of Drilling ▼ **24.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B4-NAW-05

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 899.65 ft
North: 1955881.55 ft
East: 979096.89 ft
Station: 178+92.63
Offset: 39.32 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	899.4	3-inch thick brown SILTY CLAY LOAM --TOPSOIL--						
		Stiff to hard, brown SILTY CLAY LOAM , trace gravel; damp --FILL-- --RDR 2--			1	3 2 3	1.00 P	20
			5		2	4 4 7	> 4.50 P	19
	894.2	Medium dense, brown LOAM to SANDY LOAM, trace gravel; damp --FILL-- --RDR 2--			3	4 7 10	NP	13
	891.7	Very stiff, brown SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --FILL-- --RDR 2--	10		4	8 12 10	3.00 P	9
					5	8 7 14	2.50 P	15
	886.7	Medium dense, brown Gravelly SAND to SANDY GRAVEL; damp --RDR 2--	15 ▼		6	50/5"	NP	4
		--some rig chatter, 15.0 to 16.0 feet--			7	8 13 13	NP	2
	881.7	Medium dense, brown SANDY LOAM, trace gravel; damp --RDR 2--	20		8	10 10 13	NP	2
	879.2	Medium dense to very dense, brown SANDY GRAVEL to Gravelly SAND; damp --RDR 2--			9	14 22 30	NP	3
			25		10	16 13 12	NP	3
		--saturated--		▽	11	4 6 8	NP	15
					12	3 6 8	NP	21
	869.7	Boring terminated at 30.00 ft	30					

GENERAL NOTES

Begin Drilling **02-28-2022** Complete Drilling **02-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **GEOPROBE**
Driller **AG&CB** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **27.00 ft**
At Completion of Drilling ▼ **15.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B5-NAW-01

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 896.81 ft
North: 1955839.33 ft
East: 979264.39 ft
Station: 180+65.09
Offset: 48.732 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	896.5	4-inch thick brown SILTY CLAY LOAM --TOPSOIL--						
		Very stiff, brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	1 2 3	2.00 P	19
			5		2	3 4 5	2.50 P	15
	891.3	Stiff, brown CLAY LOAM to LOAM, trace gravel; damp --RDR 2--			3	2 4 5	1.00 P	17
	888.8	Very stiff, brown and gray to brown SILTY CLAY LOAM, trace gravel; damp --RDR 2--	10		4	2 3 5	2.50 P	24
					5	4 5 9	3.12 B	16
	883.8	Medium dense, gray and white GRAVEL --RDR 2--	15		6	8 6 10	NP	
	881.3	Medium dense, brown fine to medium SAND, little gravel; moist --RDR 2--			7	6 7 9	NP	6
	878.8	Medium dense, brown medium to coarse SAND, little gravel; moist --RDR 2--			8	8 10 12	NP	7
	876.8	Boring terminated at 20.00 ft	20					
			25					
			30					

GENERAL NOTES

Begin Drilling **02-28-2022** Complete Drilling **02-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **GEOPROBE**
Driller **AG&CB** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B5-NAW-02

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 894.29 ft
North: 1955765.99 ft
East: 979463.45 ft
Station: 182+76.62
Offset: 38.792 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	894.0	4-inch thick black SILTY CLAY LOAM --TOPSOIL--						
		Medium dense, brown Gravelly SAND to SANDY LOAM; damp --RDR 2-- --some rig chatter, 2.0 to 3.0 feet-- --possible cobbles--			1	4 4 6	NP	6
			5		2	6 11 8	NP	
					3	5 8 9	NP	4
			10		4	10 10 11	NP	4
	883.8	--some rig chatter, 10.0 to 11.0 feet-- --possible cobbles--						
		Medium dense, brown fine to medium SAND, trace to little gravel; damp --RDR 3--			5	6 10 11	NP	4
			15		6	6 8 9	NP	5
	878.8	Medium dense, brown LOAM to SANDY LOAM, trace gravel; damp						
	877.6	--RDR 2-- Medium dense, brown SILT, trace gravel; damp to moist --RDR 2--			7	6 7 9	NP	19
					8	6 11 12	NP	18
	874.3	Boring terminated at 20.00 ft	20					
			25					
			30					

GENERAL NOTES

Begin Drilling **02-28-2022** Complete Drilling **02-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **GEOPROBE**
Driller **AG&CB** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B5-NAW-03

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 888.23 ft
North: 1955718.67 ft
East: 979675.08 ft
Station: 184+92.07
Offset: 59.347 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	887.8	5-inch thick brown SILTY CLAY LOAM --TOPSOIL--						
		Very stiff, brown SILTY CLAY, trace gravel; damp --RDR 2--			1	2 3 3	2.46 B	21
	885.2	Loose to medium dense, brown Gravelly SANDY LOAM; damp --RDR 2-- --L_L(%)=NP, P_L(%)=NP-- --%Gravel=32.6-- --%Sand=44.5-- --%Silt=19.5-- --%Clay=3.5-- --A-1-b (0)--	5		2	1 2 3	0.50 P	16
					3	4 5 6	1.50 P	14
	880.2	Medium dense, brown SILT, trace to little gravel; moist --RDR 2--	10		4	2 3 10	NP	13
	877.7	Medium dense to dense, brown Gravelly SAND; moist --RDR 2 to 3--			5	6 7 10	NP	8
			15		6	10 15 15	NP	6

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	872.7	Medium dense, brown fine SAND to SANDY LOAM, trace gravel; damp to moist --RDR 2--			7	8 10 12	NP	5
					8	7 6 8	NP	16
	868.2	Boring terminated at 20.00 ft	20					
			25					
			30					

GENERAL NOTES

Begin Drilling **02-28-2022** Complete Drilling **02-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **GEOPROBE**
Driller **AG&CB** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B5-NAW-04

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 885.48 ft
North: 1955688.63 ft
East: 979879.29 ft
Station: 186+94.58
Offset: 95.789 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
885.0	0	6-inch thick brown SILTY CLAY LOAM					
		--TOPSOIL--					
		Medium dense, brown Gravelly SAND; damp					
		--RDR 2--		1	6 11 14	NP	4
				2	8 10 15	NP	3
880.0	5	--RDR 2 to 3-- --some rig chatter, 5.0 to 6.0 feet--					
		Medium dense, brown SANDY LOAM to LOAM, trace gravel; damp to wet to saturated		3	6 10 11	NP	4
		--RDR 2--		4	8 7 10	NP	3
	10						
				5	8 7 12	NP	4
				6	7 11 14	NP	5
	15						

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
				7	9 10 12	NP	18
		--saturated--		8	10 11 11	NP	20
865.5	20	Boring terminated at 20.00 ft					
	25						
	30						

GENERAL NOTES

Begin Drilling **02-28-2022** Complete Drilling **02-28-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **GEOPROBE**
Driller **AG&CB** Logger **M. Rojo** Checked by **C. Marin**
Drilling Method **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **19.00 ft**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG B5-NAW-05

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 871.23 ft
North: 1955651.98 ft
East: 980082.99 ft
Station: 188+98.17
Offset: 127.512 LT

Depth (ft)	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	870.2	12-inch thick dark brown SILTY CLAY --TOPSOIL--					
		Stiff to very stiff, brown and gray SILTY CLAY to CLAY LOAM, trace gravel; moist --RDR 2--		1	3 3 5	2.21 B	26
5				2	3 4 3	1.72 B	21
	864.7	Medium dense, brown SILT, trace gravel; wet --RDR 2--		3	6 6 4	NP	23
10				4	6 5 5	NP	22
				5	7 7 8	NP	20
15				6	7 7 8	NP	19
	855.7	Medium dense, brown SAND to SANDY LOAM, trace gravel; wet to saturated --RDR 2--		7	8 11 13	NP	21
	852.1	Medium dense, gray SILT to SILTY LOAM, trace gravel; wet to saturated		8	4 6 9	NP	18
20	851.2	--RDR 2-- Boring terminated at 20.00 ft					
25							
30							

GENERAL NOTES

Begin Drilling **03-01-2022** Complete Drilling **03-01-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **21D50A [84%]**
Driller **KS&AP** Logger **A. Scifers** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **17.00 ft**
At Completion of Drilling ▼ **17.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG SGB-01

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 898.00 ft
North: 1957015.28 ft
East: 975676.05 ft
Station: 142+89.63
Offset: 338.827 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp				3		
		--TOPSOIL--			1	4	2.25 P	19
	896.5					6		
		Stiff to very stiff, brown CLAY to CLAY LOAM, trace gravel; damp				5		
		--RDR 2--				4		
		--L_L(%)=45, P_L(%)=15--				6		
		--%Gravel=4.2--			2	3	1.23 B	10
		--%Sand=19.9--				3		
		--%Silt=46.1--						
		--%Clay=29.8--						
		--A-7-6 (21)--				3		
	893.3					3		
		Medium dense, brown Gravelly SAND; damp	5		3	5	2.46 B	21
		--RDR 2--				6		
						7		
					4	10	NP	4
						11		
						12		
						6		
						11		
					5	11	NP	3
						12		
			10					
	887.5							
		Brown, medium to coarse SAND, trace gravel; saturated				4		
		--RDR 2--			6	6	NP	15
	886.1					8		
		Brown SILT, trace gravel; saturated						
		--RDR 2--						
	885.0							
		Loose, brown, fine to coarse SAND, trace gravel; saturated				5		
		--RDR 2--			7	2	NP	16
						3		
	883.0		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-29-2021** Complete Drilling **11-29-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **11.00 ft**
At Completion of Drilling ▼ **15.00 ft**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG SGB-02

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 898.61 ft
North: 1956962.12 ft
East: 975993.11 ft
Station: 146+06.00
Offset: 26.645 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	897.7	11.5-inch thick ASPHALT --PAVEMENT--						
	897.1	Loose, grayish tan SANDY GRAVEL; damp --AGGREGATE BASE--			1	4 3 3 3	NP	6
	896.1	Stiff (1.50P), brown SILTY CLAY; damp --RDR 2--			2	3 4 7 6	NP	6
	894.1	Medium dense, gray and brown Gravelly LOAM; damp --RDR 2--	5		3	6 8 10 8	NP	5
		Medium dense, brown and gray SANDY GRAVEL; damp --RDR 2--	10		4	8 9 13 16	NP	4
	887.6				5	11 8 14 13	NP	3
		Boring terminated at 11.00 ft	15					

GENERAL NOTES

Begin Drilling **04-13-2022** Complete Drilling **04-13-2022**
Drilling Contractor **Wang Testing Services** Drill Rig **20CME55T[81%]**
Driller **RR&JD** Logger **M. Sadowski** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG SGB-03

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 900.97 ft
North: 1956764.75 ft
East: 975943.91 ft
Station: 146+37.36
Offset: 177.303 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	900.6	4-inch thick, brown, fine to coarse SAND; damp						
		--FILL--						
		Stiff to very stiff, black to brown CLAY to CLAY LOAM, trace gravel; damp			1	3 2 5 3	1.75 P	24
		--RDR 2--						
		--L_L(%)=48, P_L(%)=15--				2 2 4 5		
		--%Gravel=6.9--			2		2.95 B	26
		--%Sand=19.5--						
	897.5	--%Silt=43.8--						
		--%Clay=29.8--						
		--A-7-6 (23)--						
		Brown, fine to coarse SAND, little gravel; moist				4 3 6 5		
	896.1	--RDR 2--	5		3		NP	6
		Medium stiff (0.75P), brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp						
	894.8	--RDR 2--				7 10 9 10		
		Medium dense, brown Gravelly SAND; damp			4		NP	6
		--RDR 2--						
						5 8 9 7		
					5		NP	4
			10					
						6 7 6		
					6		NP	6
						6 5 6		
					7		NP	7
	886.0		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-29-2021** Complete Drilling **11-29-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG SGB-04

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 903.40 ft
North: 1956777.11 ft
East: 976229.94 ft
Station: 148+92.45
Offset: 48.336 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, black to brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --TOPSOIL--			1	2 4 4 7	2.79 B	24
	901.7	Stiff (1.25P) to hard, brown SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--			2	3 6 7 9	> 4.50 P	22
	899.0	Medium dense, brown Gravelly SAND; damp --RDR 2-3--	5		3	7 7 9 6	NP	4
					4	7 7 11 10	NP	3
	895.6	Brown, fine to coarse SAND, trace gravel; damp --RDR 2--				7 7 8 10		
	894.7	Medium dense, brown SILT, trace gravel; damp --RDR 2--	10		5		NP	4
	892.9	Medium dense, brown, fine to coarse SAND, trace gravel; damp --RDR 2--			6	11 8 11	NP	3
					7	6 7 10	NP	3
	888.4	Boring terminated at 15.00 ft	15					

GENERAL NOTES

Begin Drilling **11-29-2021** Complete Drilling **11-29-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-05

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 907.11 ft
North: 1956610.37 ft
East: 976542.97 ft
Station: 152+43.70
Offset: 69.923 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			1	2 4 4 3	2.25 P	15
	904.7	Medium dense, tan GRAVEL; damp --RDR 2--			2	8 9 8 5	NP	3
	903.4	Stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	5		3	6 5 7 8	1.00 P	23
	900.7	Medium dense to dense, brown and gray Gravelly SAND to SANDY GRAVEL; damp --RDR 2--			4	8 10 8 10	NP	2
					5	6 11 11 13	NP	3
			10		6	17 23 17	NP	
					7	13 13 14	NP	3
	892.1	Boring terminated at 15.00 ft	15					

GENERAL NOTES

Begin Drilling **11-29-2021** Complete Drilling **11-29-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-06

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 905.56 ft
North: 1956534.55 ft
East: 976809.96 ft
Station: 155+19.59
Offset: 33.965 RT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	Very stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp				2		
	--TOPSOIL--			1	3	2.25 P	21
904.1					5		
	Stiff to very stiff, black and brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp				3		
	--RDR 2--				2		
	--L_L(%)=48, P_L(%)=16--			2	3	1.75 P	22
	--%Gravel=0.2--				2		
	--%Sand=4.2--				2		
	--%Silt=63.8--						
	--%Clay=31.8--				3		
	--A-7-6 (32)--	5			2		
				3	3	2.13 B	25
					3		
899.3							
	Dense, brown and reddish brown Gravelly SAND to GRAVEL; damp				18		
	--RDR 2--			4	21	NP	4
					20		
897.4					20		
	Dense, brown, fine to coarse SAND, little gravel; damp				11		
	--RDR 2--			5	14	NP	3
					19		
		10			28		
895.1							
	Medium dense, brown Gravelly SAND; damp						
	--RDR 2--				20		
				6	14	NP	4
					14		
					11		
				7	13	NP	4
					16		
890.6		15					
	Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-29-2021** Complete Drilling **11-29-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-07

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 892.33 ft
North: 1956037.92 ft
East: 978274.11 ft
Station: 170+62.69
Offset: 55.727 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Stiff, black SILTY CLAY LOAM, trace gravel; damp				3		
		--TOPSOIL--				3		
		Soft, brown SILTY CLAY, trace gravel; moist			1	5	1.50 P	22
	890.6	--RDR 2--				6		
		Soft to stiff, black and brown CLAY to SILTY CLAY, trace gravel; damp				3		
		--RDR 2--			2	2	1.00 P	22
						3		
						3		
	887.8					2		
			5		3	2	0.25 P	25
						1		
						2		
		--L_L(%)=43, P_L(%)=17--				0		
		--%Gravel=0.1--				0		
		--%Sand=6.5--			4	0	0.33 B	29
		--%Silt=63.5--				0		
		--%Clay=29.9--				0		
		--A-7-6 (25)--				0		
						0		
					5	0	0.49 B	28
			10			1		
						2		
						0		
					6	1	0.25 B	28
						1		
						2		
					7	2	0.25 B	26
	877.3		15			2		
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-08

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 895.76 ft
North: 1955945.64 ft
East: 978553.39 ft
Station: 173+56.96
Offset: 59.16 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	894.3	Stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --TOPSOIL--			1	2 3 4 5	1.00 P	22
	890.3	Stiff, black and brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	5		2	3 3 2 2	1.07 B	23
	887.4	Very soft, brown CLAY LOAM, trace to little gravel; moist --RDR 2--			3	2 1 2 1	1.89 B	23
	885.3	Medium dense, brown SANDY GRAVEL; damp --RDR 2-3-- --rig chatter; possible cobbles--	10		4	0 0 1 1	< 0.25 P	21
	884.5	Very soft (<0.25P), brown CLAY LOAM, trace gravel; moist			5	2 6 10 11	NP	3
	880.8	Medium dense, brown SANDY GRAVEL; damp --RDR 2--	15		6	8 11 14	NP	4
		Boring terminated at 15.00 ft			7	7 8 6	NP	4

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

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BORING LOG SGB-09

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 900.14 ft
North: 1955857.17 ft
East: 978828.26 ft
Station: 176+45.12
Offset: 66.243 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Medium stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	2 3 4 4	0.75 P	24
		--TOPSOIL--						
	898.6							
		Medium stiff to stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			2	2 2 3 2	0.75 P	22
		--RDR 2--						
			5		3	2 1 2 2	1.07 B	20
	893.9							
	893.6	Tan GRAVEL; damp						
		Soft, brown SILTY CLAY LOAM, trace gravel; damp			4	3 5 6 7	0.25 P	21
	892.6	--RDR 2--						
		Medium dense, brown Gravelly SAND; damp						
		--RDR 2--			5	5 4 6 7	NP	4
			10					
	889.6							
		Medium dense, brown, fine to coarse SAND, little gravel; damp						
		--RDR 2--			6	6 7 8	NP	7
	887.1							
		Brown Gravelly SAND; damp						
		--RDR 2--				8		
	886.0				7	15	NP	6
		Medium dense, brown SILT, trace gravel; saturated				12		
	885.1		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-10

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 899.43 ft
North: 1955735.47 ft
East: 979198.82 ft
Station: 180+35.31
Offset: 71.887 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, black and brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	2 6 2 3	2.05 B	24
		--TOPSOIL--						
	897.7							
		Soft to very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			2	4 5 6 6	2.38 B	8
		--RDR 3--						
			5		3	4 3 3 3	0.75 P	14
	893.2	--Qu: 0.25P--						
		Loose to medium dense, black to brown Gravelly SAND to SANDY GRAVEL; damp			4	3 3 4 5	NP	7
		--RDR 2-3--						
					5	4 7 9 10	NP	4
			10					
		--rig chatter; possible cobbles--			6	8 12 14	NP	3
					7	18 16 15	NP	3
	884.4		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-11

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 897.08 ft
North: 1955710.88 ft
East: 979361.93 ft
Station: 182+00.20
Offset: 46.676 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Stiff, brown SILTY CLAY LOAM, trace gravel; damp --TOPSOIL--			1	3 6 5 3	1.39 B	10
	895.3							
		Stiff to very stiff, black to brown SILTY CLAY LOAM to CLAY LOAM, trace gravel; damp --RDR 2--			2	2 2 4 4	2.95 B	13
	892.8	--Qu: 1.25P--						
		Medium dense, brown, fine to coarse SAND, trace gravel; damp --RDR 3--	5		3	4 5 8 8	NP	12
	891.6							
		Medium dense, brown Gravelly SAND; damp --RDR 3--			4	8 7 5 6	NP	6
					5	9 6 7 9	NP	4
			10					
	886.6							
		Medium dense, brown, fine to coarse SAND, trace to little gravel; damp --RDR 2--			6	8 7 5	NP	3
					7	8 8 8	NP	5
	882.1		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-12

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 894.20 ft
North: 1955621.54 ft
East: 979651.80 ft
Station: 185+02.11
Offset: 46.421 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	893.5	Very stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp						
		--TOPSOIL--			1	3 2 3 3	3.77 B	15
		Loose, brown SANDY GRAVEL; damp						
	892.0	--RDR 2--						
		--L_L(%)=29, P_L(%)=14--						
		--%Gravel=5.5--						
		--%Sand=26.8--			2	6 6 10 10	1.75 P	12
		--%Silt=44.7--						
		--%Clay=22.9--						
		--A-6-(7)--						
		Stiff to hard, brown SILTY CLAY LOAM, trace gravel; damp						
		--RDR 2--	5		3	10 5 4 7	3.20 B	15
					4	5 5 9 8	4.26 B	15
			10		5	4 4 6 7	3.12 B	15
		--brown and black--						
	882.8	Medium dense, brown Gravelly SAND; damp			6	8 9 10	NP	5
		--RDR 2-3--						
					7	9 10 9	NP	4
	879.2		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG SGB-13

WEI Job No.: 121-03-01

Client **Gannett Fleming**
Project **US Route 20 From Randall Rd to Shales Parkway**
Location **Elgin, Illinois**

Datum: NAVD 88
Elevation: 887.05 ft
North: 1955508.50 ft
East: 979926.05 ft
Station: 187+99.46
Offset: 61.432 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp			1	2 4 3 5	2.62 B	16
		--TOPSOIL--						
	885.3							
		Medium stiff to hard, brown CLAY LOAM to SILTY CLAY LOAM, trace gravel; damp			2	4 5 5 8	5.17 B	13
		--RDR 2--						
		--Qu: 0.75P--				6 8 9 9		
	882.4							
		Medium dense, brown Gravelly SAND; damp	5		3		NP	5
		--RDR 2--						
	881.3							
		Medium dense to dense, brown, fine to coarse SAND, trace gravel; damp			4	5 7 11 11	NP	3
		--RDR 2--						
					5	8 8 11 11	NP	4
			10					
					6	14 8 10	NP	3
		--heaving sand--						
					7	44 16 16	NP	6
	872.1		15					
		Boring terminated at 15.00 ft						

GENERAL NOTES

Begin Drilling **11-30-2021** Complete Drilling **11-30-2021**
Drilling Contractor **Wang Testing Services** Drill Rig **21GeoT[92%]**
Driller **JS&MG** Logger **D. You** Checked by **C. Marin**
Drilling Method **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling ▽ **DRY**
At Completion of Drilling ▼ **DRY**
Time After Drilling **NA**
Depth to Water ▼ **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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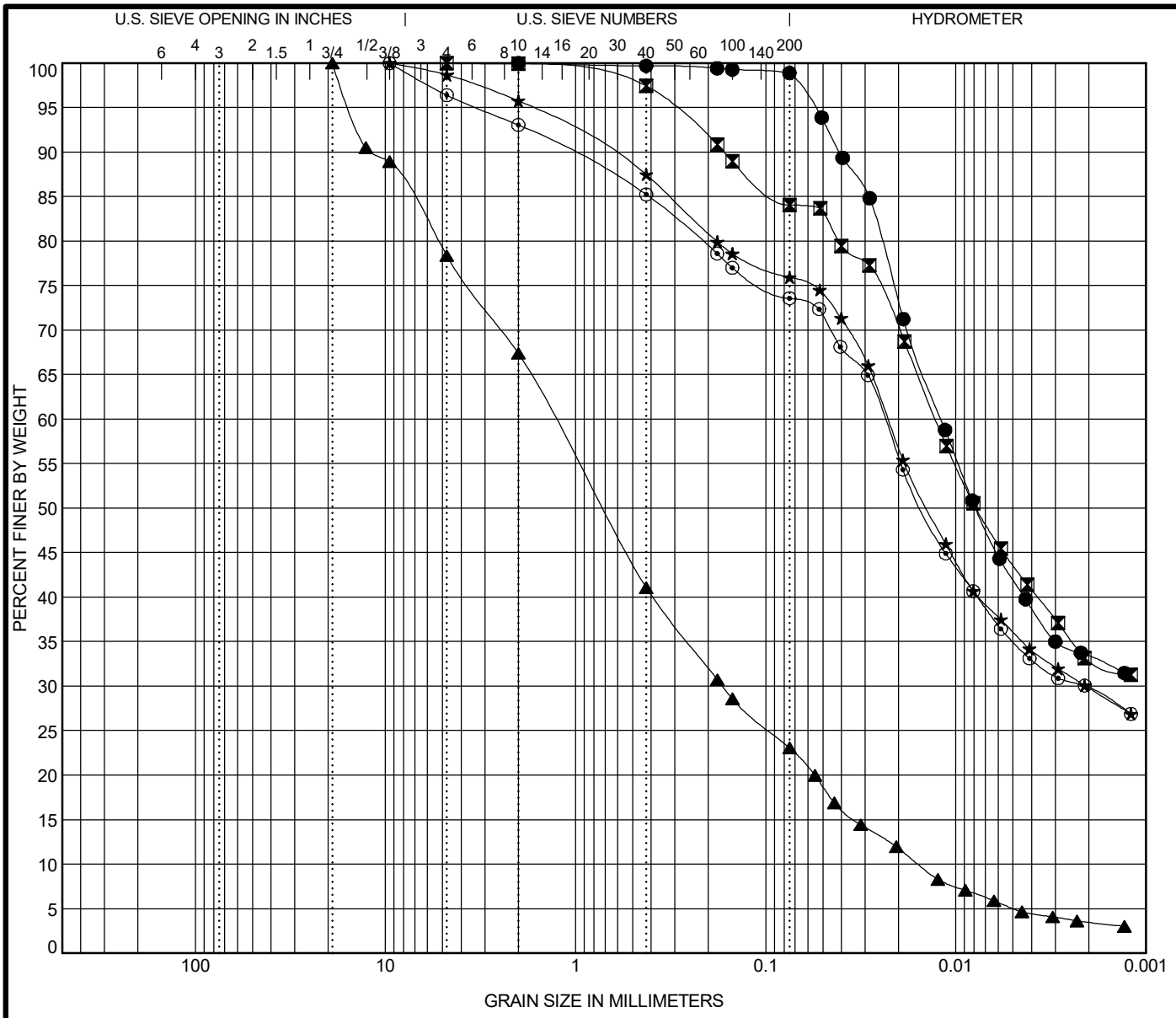
APPENDIX B



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

Specimen Identification			IDH Classification	LL	PL	PI	Cc	Cu
●	B4-NAW-01#2	3.5 ft	**Silty Clay**	**NP**	**NP**	**NP**		
⊠	B4-NAW-04#3	6.0 ft	**Silty Clay**	**45**	**17**	**28**		
▲	B5-NAW-03#2	3.5 ft	**Gravelly Sandy Loam**	**NP**	**NP**	**NP**	**1.41**	**82.26**
★	SGB-01#2	2.0 ft	**Clay**	**45**	**15**	**30**		
⊙	SGB-03#2	2.0 ft	**Clay**	**48**	**15**	**33**		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B4-NAW-01#2	3.5 ft	**2**	**0.012**			**0.0**	**1.1**	**65.4**	**33.3**
⊠	B4-NAW-04#3	6.0 ft	**4.75**	**0.013**			**0.1**	**15.9**	**51.1**	**33.0**
▲	B5-NAW-03#2	3.5 ft	**19**	**1.294**	**0.169**	**0.016**	**32.6**	**44.3**	**19.5**	**3.5**
★	SGB-01#2	2.0 ft	**9.5**	**0.023**	**0.002**		**4.2**	**19.8**	**46.1**	**29.8**
⊙	SGB-03#2	2.0 ft	**9.5**	**0.024**	**0.002**		**6.9**	**19.5**	**43.8**	**29.8**

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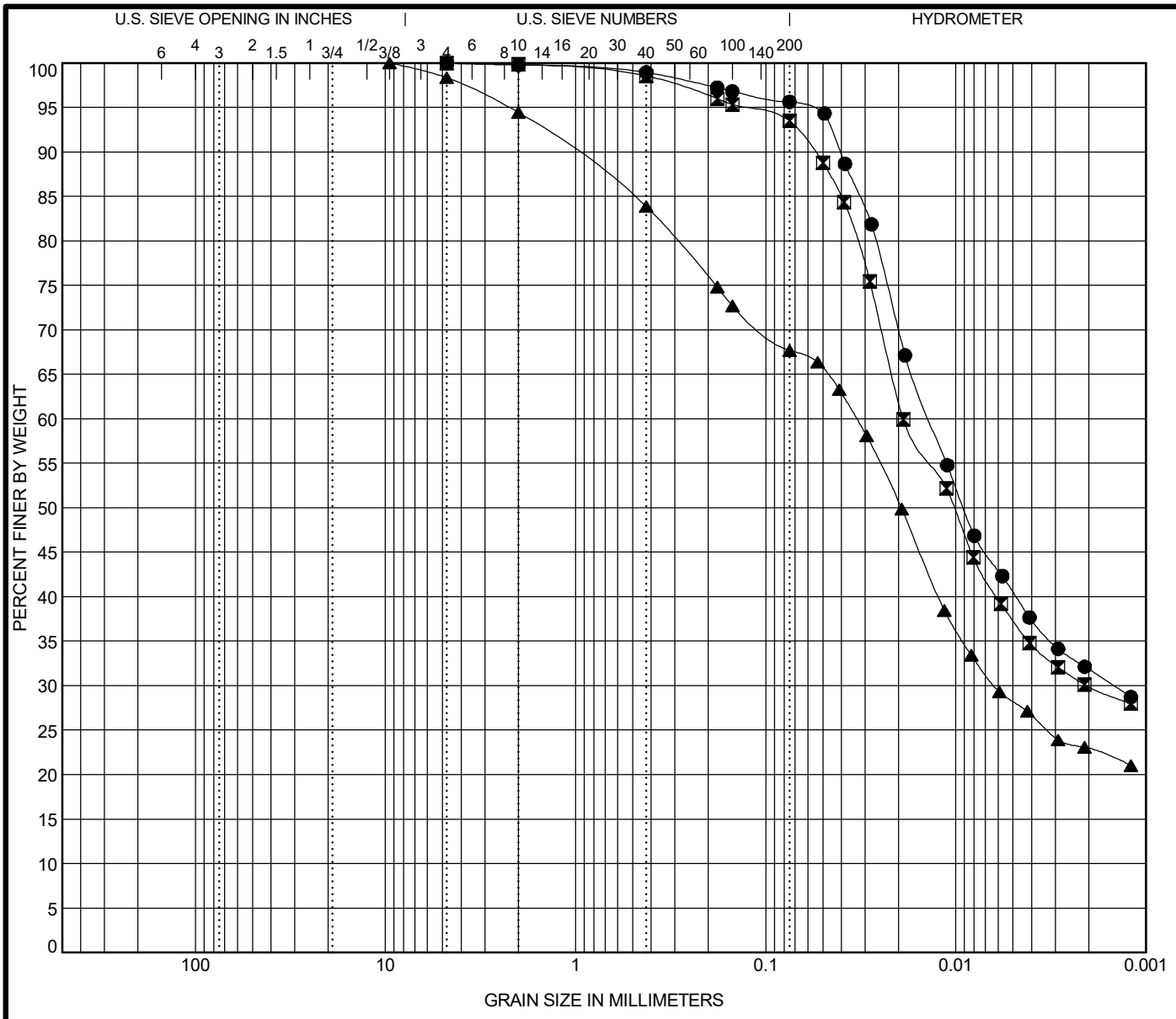
GRAIN SIZE DISTRIBUTION

Project: US Route 20 From Randall Rd to Shales Parkway

Location: Elgin, Illinois

Number: 121-03-01



COBBLES	GRAVEL	SAND		SILT AND CLAY
		coarse	fine	

	Specimen Identification		IDH Classification	LL	PL	PI	Cc	Cu
●	SGB-06#2	2.0 ft	**Silty Clay**	**48**	**16**	**32**		
⊠	SGB-07#4	6.0 ft	**Silty Clay Loam**	**43**	**17**	**26**		
▲	SGB-12#2	2.0 ft	**Clay Loam**	**29**	**14**	**15**		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	SGB-06#2	2.0 ft	**4.75**	**0.014**	**0.001**		**0.2**	**4.1**	**63.8**	**31.8**
⊠	SGB-07#4	6.0 ft	**4.75**	**0.019**	**0.002**		**0.1**	**6.4**	**63.4**	**29.9**
▲	SGB-12#2	2.0 ft	**9.5**	**0.033**	**0.006**		**5.5**	**26.8**	**44.7**	**22.9**

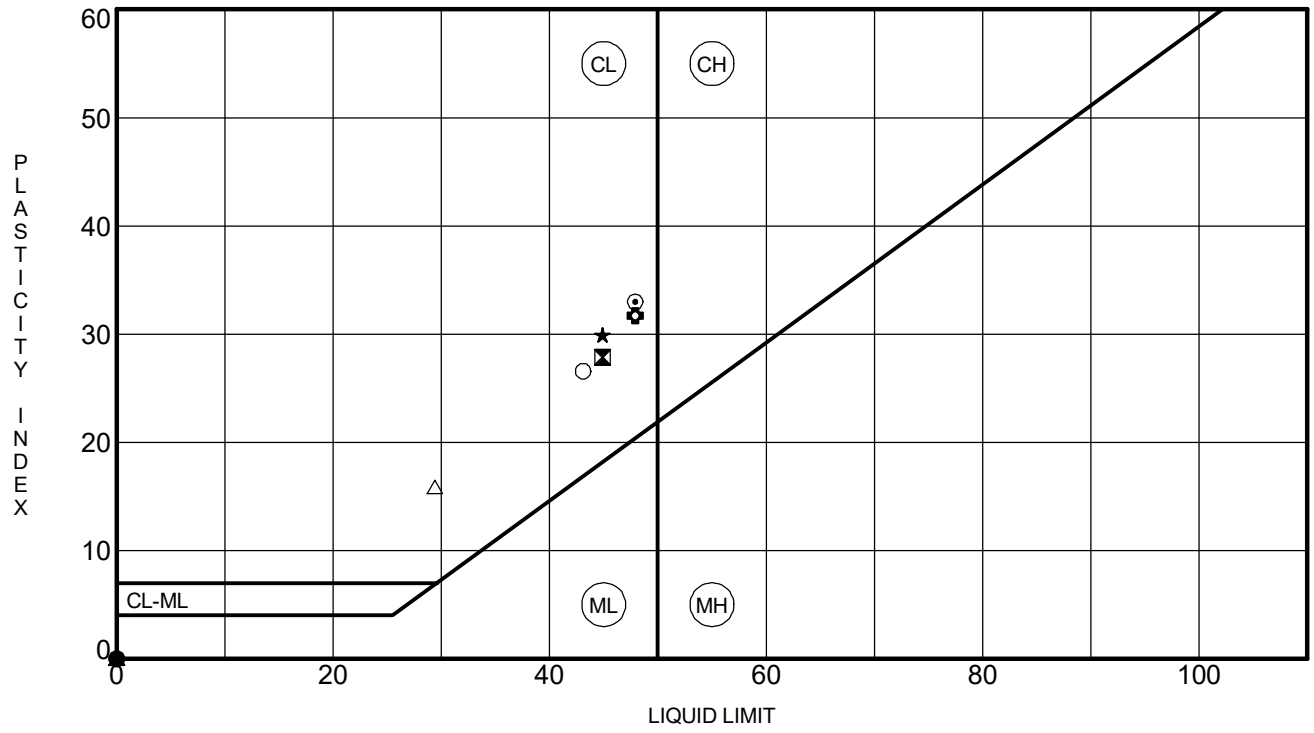
WEI SINCE 1982
Wang Engineering, Inc.
1145 N Main Street
Lombard, IL 60148
Telephone: 63O-953-9928
Fax: 630-953-9928

GRAIN SIZE DISTRIBUTION

Project: US Route 20 From Randall Rd to Shales Parkway

Location: Elgin, Illinois

Number: 121-03-01



	Specimen Identification		LL	PL	PI	Fines	IDH Classification
●	B4-NAW-01#2	3.5 ft	NP	NP	NP	99	Silty Clay
⊠	B4-NAW-04#3	6.0 ft	45	17	28	84	Silty Clay
▲	B5-NAW-03#2	3.5 ft	NP	NP	NP	23	Gravelly Sandy Loam
★	SGB-01#2	2.0 ft	45	15	30	76	Clay
⊙	SGB-03#2	2.0 ft	48	15	33	74	Clay
✿	SGB-06#2	2.0 ft	48	16	32	96	Silty Clay
○	SGB-07#4	6.0 ft	43	17	26	93	Silty Clay Loam
△	SGB-12#2	2.0 ft	29	14	15	68	Clay Loam

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ATTERBERG LIMITS' RESULTS

Project: US Route 20 From Randall Rd to Shales Parkway

Location: Elgin, Illinois

Number: 121-03-01

APPENDIX C

Illinois Department of Transportation

Summary Report on Pavement, Base and Subbase Design

State Job Number: 121-03-01 Project: US 20 Reconstruction Route: US 20 (West Leg)

Section: 2020-146-B-BR&NW City or County: Kane Date: 03/13/2023

ADT: _____ Year: _____ Design Period: _____ Class Highway: _____

Passenger Cars Per Day: _____ Trucks S.U. Per Day: _____ Trucks M.U. Per Day: _____

Pavement Structure: Hot-Mix Asphalt Pavement

Type Surface Course: _____ Thickness: _____

Type Base Course: _____ Thickness: _____

Type Subbase Material: _____ Thickness: _____

Sta. to Sta.	142+83 to 187+69	+ to +	+ to +	+ to +
*Sta. of Test	170+63			
*Drainage Class	Poor			
*Ave. Frost Penetration	45 to 60 in.			
Illinois Textural Classification	Silty Clay Loam			
Classification and Group Index (AASHTO M 145)	A-7-6 (25)			
*Percent Silt (AASHTO T 88)	63.4			
*Illinois Bearing Ratio (%)				
Std. Dry Density (IL Mod. AASHTO T 99)				
Optimum Moisture (IL Mod AASHTO T 99)				

* Indicates worst condition within the above station limits.

Remarks: _____

SOIL TEST DATA

PROJECT
121-03-01 (KE225009)

ROUTE
US 20 Reconstruction (West Leg)

SECTION
US 20 (Sta. 142+82.7 to Sta. 187+69.0)

COUNTY
Kane County

Lab. No.	B4-NAW-01 No.2	B4-NAW-04 No.3	B5-NAW-03 No.2	SGB-01 No.2
Station ft)	170+25.88	176+69.79	184+92.07	142+89.63
Offset (ft)	40.368 LT	26.398 LT	59.347 LT	338.827 RT
Depth (ft)	3.5	6	3.5	2
AASHTO M 145 Classification and Group Index	A-4 (0)	A-7-6 (23)	A-1-b (0)	A-7-6 (21)
Illinois Textural Classification (Illinois Method)	Silty Clay	Silty Clay	Gravelly Sandy Loam	Clay
Gradation--Passing 1" Sieve %				
--"-- 3/4" Sieve %			100	
--"-- 1/2" Sieve %			90.5	
--"-- No.4 Sieve %		100.0	78.4	98.7
--"-- No.10 Sieve %	100.0	99.9	67.4	95.8
--"-- No.40 Sieve %	99.7	97.4	41.1	87.5
--"-- No.100 Sieve %	99.3	89.0	28.6	78.6
--"-- No.200 Sieve %	98.7	84.1	22.9	75.9
Sand % (AASHTO T 88)	1.3	15.9	44.5	19.9
Silt % (AASHTO T 88)	65.4	51.1	19.5	46.1
Clay % (AASHTO T 88)	33.3	33.0	3.5	29.8
Liquid limit % (AASHTO T 89)	0.0	45.0	0.0	45.0
Plasticity index % (AASHTO T 90)	0.0	28.0	0.0	30.0
IBR % (Illinois Method)				
Standard Dry Density % (AASHTO T 99)				
Optimum Moisture % (AASHTO T 99)				
Subgrade Support Rating	FAIR	FAIR	GRANULAR	POOR
Insitu Moisture % (AASHTO T 99)	27	33	16	10

SOIL TEST DATA

ROUTE
US 20 Reconstruction (West Leg)

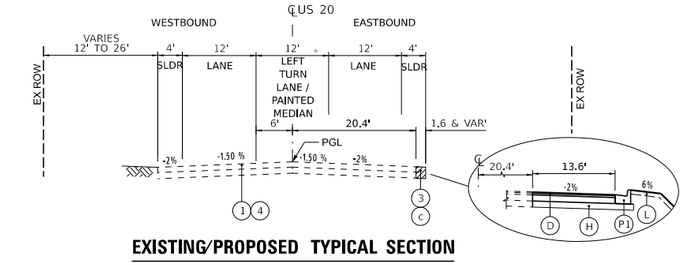
PROJECT
121-03-01 (KE225009)

SECTION
US 20 (Sta. 142+82.7 to Sta. 187+69.0)

COUNTY
Kane County

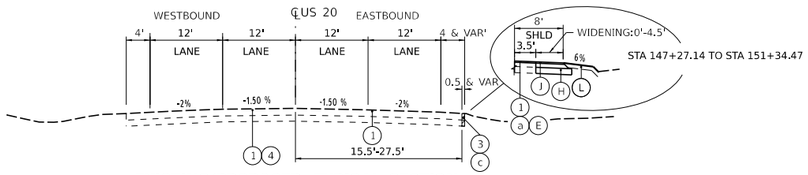
Lab. No.	SGB-03 No.2	SGB-06 No.2	SGB-07 No.4	SGB-12 No.2
Station ft)	146+37.36	155+19.59	170+62.69	185+02.11
Offset (ft)	177.303 RT	33.965 RT	55.727 RT	46.421 RT
Depth (ft)	2	2	6	2
AASHTO M 145 Classification and Group Index	A-7-6 (23)	A-7-6 (32)	A-7-6 (25)	A-6 (7)
Illinois Textural Classification (Illinois Method)	Clay	Silty Clay	Silty Clay Loam	Clay Loam
Gradation--Passing 1" Sieve %				
--"-- 3/4" Sieve %				
--"-- 1/2" Sieve %				
--"-- No.4 Sieve %	96.4	100.0	100.0	98.4
--"-- No.10 Sieve %	93.1	99.8	99.9	94.5
--"-- No.40 Sieve %	85.2	99.0	98.6	83.9
--"-- No.100 Sieve %	77.0	96.8	95.3	72.7
--"-- No.200 Sieve %	73.5	95.6	93.3	67.6
Sand % (AASHTO T 88)	19.5	4.2	6.5	26.8
Silt % (AASHTO T 88)	43.8	63.8	63.4	44.7
Clay % (AASHTO T 88)	29.8	31.8	29.9	22.9
Liquid limit % (AASHTO T 89)	48.0	48.0	43.0	29.0
Plasticity index % (AASHTO T 90)	33.0	32.0	27.0	16.0
IBR % (Illinois Method)				
Standard Dry Density % (AASHTO T 99)				
Optimum Moisture % (AASHTO T 99)				
Subgrade Support Rating	POOR	FAIR	POOR	POOR
Insitu Moisture % (AASHTO T 99)	26	22	29	12

APPENDIX D



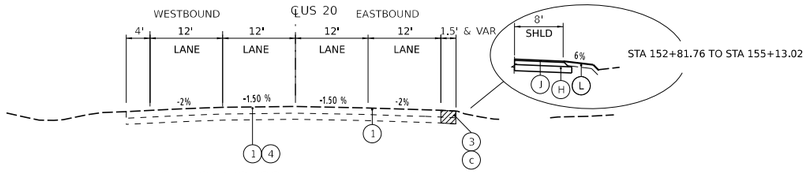
EXISTING/PROPOSED TYPICAL SECTION

STATION: 142+87 TO 146+00



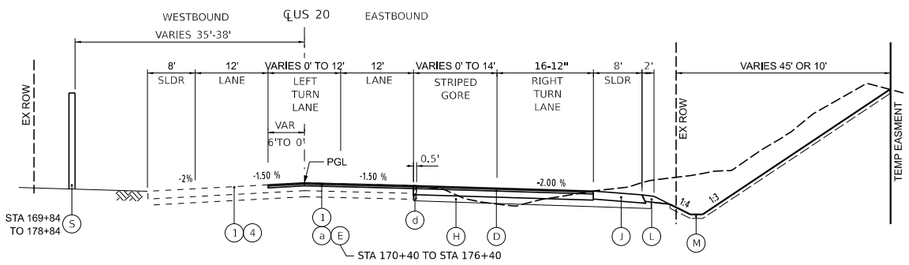
EXISTING/PROPOSED TYPICAL SECTION

STATION: 146+00 TO 152+34.37
NO ROADWAY WORK FROM STA 156+13 TO STA 170+60



EXISTING/PROPOSED TYPICAL SECTION

STATION: 146+00 TO 156+13
NO ROADWAY WORK FROM STA 156+13 TO STA 170+60



PROPOSED TYPICAL SECTION

STATION: 170+60 TO 176+36
US 20 WEST OF LONGCOMMON

NO ROADWAY WORK FROM STA 176+36 TO STA 180+00

EXISTING LEGEND:

1. EXISTING HMA, 3"+/-
2. EXISTING CURB AND GUTTER, TYPE B-6.24
3. EXISTING BITUMINOUS SHOULDER, 8"+/-
4. EXISTING P.C.C. BASE, 8"+/-
5. EXISTING GUARDRAIL
6. EXISTING CONCRETE BARRIER

REMOVALS

- a. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- b. COMBINATION CURB AND GUTTER REMOVAL
- c. PAVED SHOULDER REMOVAL
- d. PAVEMENT REMOVAL
- e. GUARDRAIL REMOVAL
- f. CONCRETE BARRIER REMOVAL

PROPOSED LEGEND:

- A. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"
  - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 2"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
  - HOT-MIX ASPHALT BASE COURSE, 9 1/2"
- B. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 1/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
  - HOT-MIX ASPHALT BASE COURSE, 8 1/4"
- C. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
  - HOT-MIX ASPHALT BASE COURSE, 7 3/4"
- D. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 3/4"
  - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
  - HOT-MIX ASPHALT BASE COURSE, 8 1/4"
- E. - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70, 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- F. - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- G. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
  - HOT-MIX ASPHALT BASE COURSE WIDENING, 7 1/2" OR HOT-MIX ASPHALT BASE COURSE, 7 1/2"
- H. AGGREGATE SUBGRADE IMPROVEMENT 12"
- I. HOT-MIX ASPHALT SHOULDERS, 13 3/4"
- J. HOT-MIX ASPHALT SHOULDERS, 10 3/4"
- K. HOT-MIX ASPHALT SHOULDERS, 10 1/4"
- L. AGGREGATE SHOULDERS B
- M. SEEDING, CLASS 2A
- N. TOP SOIL FURNISH AND PLACE, 6"
- O. GUARDRAIL
- P1. COMBINATION CONCRETE CURB & GUTTER, TYPE M4.24
- P2. TYPE M6.12
- O. CONCRETE BARRIER, DOUBLE FACE, 44 IN HEIGHT
- R. HMA SC IL-9.5FG D N50, 3" AGGREGATE BASE COURSE, TYPE B, 6"
- S. NOISEWALL
- T. BIKE RAILING
- U. CONCRETE BARRIER, SINGLE FACE, 44 IN HEIGHT
- V. CONCRETE BARRIER BASE
- W. RETAINING WALL
- X. MOMENT SLAB

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	DRAWN -	REVISED -	
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PLOT DATE = 3/1/2023	DATE - XX/XX/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US–20 RANDALL RD TO SHALES PKWY
TYPICAL SECTIONS

SCALE: NTS | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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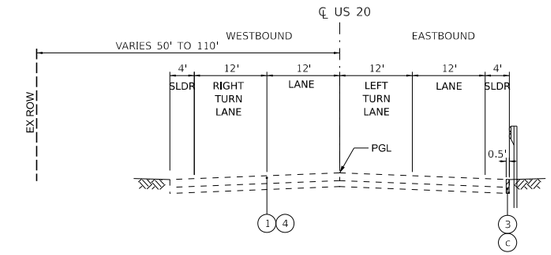
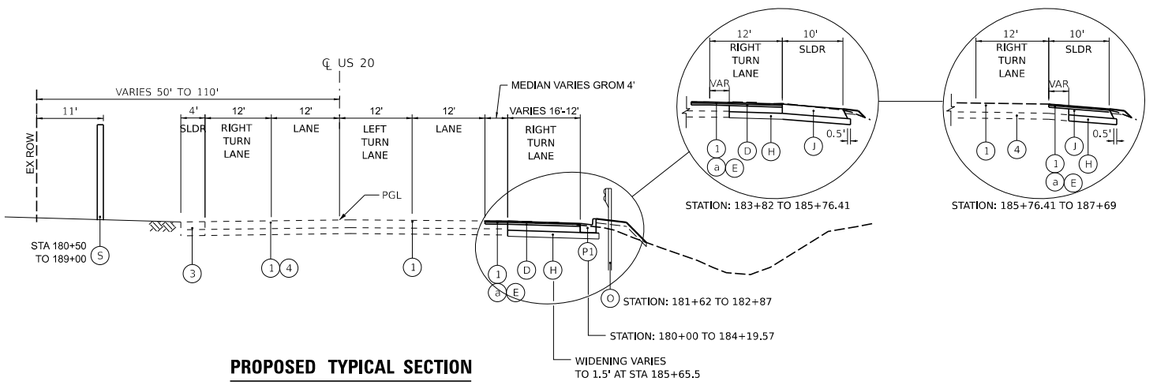
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	



EXISTING TYPICAL SECTION

STATION: 180+00 TO 185+65
US 20, EAST OF WELD/LONGCOMMON



PROPOSED TYPICAL SECTION

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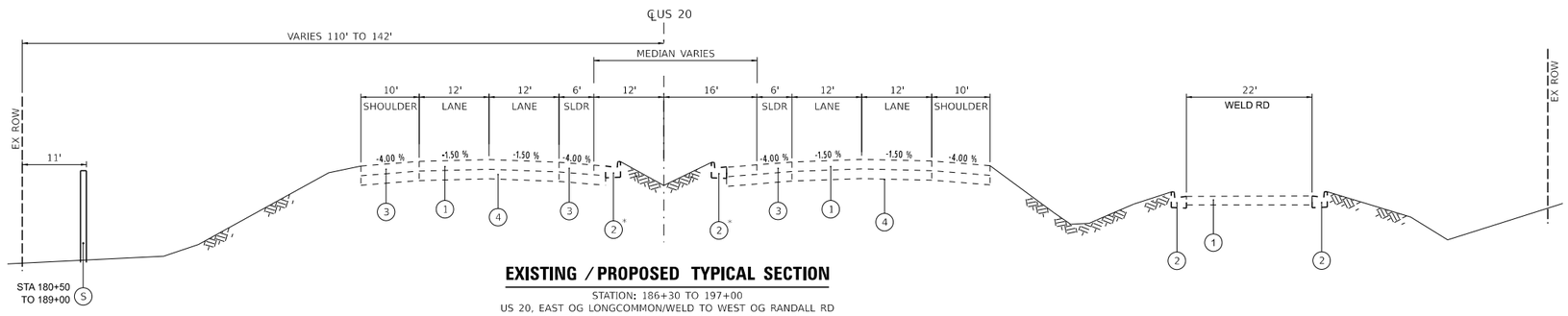
US 20 AT LONGCOMMON



EXISTING / PROPOSED TYPICAL SECTION

STATION: 186+30 TO 197+00
US 20, EAST OG LONGCOMMON/WELD TO WEST OG RANDALL RD
* STATION 186+25 TO 187+50 (CURB AND GUTTER)

*GUARDRAIL: STA. 403+27 TO 408+94, STA. 418+54 TO 423+93
**NO GUARDRAIL: STA. 384+00 TO 386+19, STA. 408+32 TO 413+99
BRIDGE OMISSIONS: STA. 416+99 TO 419+57, STA. 420+35 TO 421+81, STA. 406+57 TO 407+94

STATION: 187+69 TO 376+91.78
NO ROADWAY IMPROVEMENTS

FOR PROPOSE NOISE WALL WORK, SEE NOISE WALL SHEETS

EXISTING LEGEND:

1. EXISTING HMA, 3"+/-
2. EXISTING CURB AND GUTTER, TYPE B-6.24
3. EXISTING BITUMINOUS SHOULDER, 8"+/-
4. EXISTING P.C.C. BASE, 8"+/-
5. EXISTING GUARDRAIL
6. EXISTING CONCRETE BARRIER

REMOVALS

- a. HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- b. COMBINATION CURB AND GUTTER REMOVAL
- c. PAVED SHOULDER REMOVAL
- d. PAVEMENT REMOVAL
- e. GUARDRAIL REMOVAL
- f. CONCRETE BARRIER REMOVAL

PROPOSED LEGEND:

- A. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"
  - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 2"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
  - HOT-MIX ASPHALT BASE COURSE, 9 1/2"
- B. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 1/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
  - HOT-MIX ASPHALT BASE COURSE, 8 1/4"
- C. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
  - HOT-MIX ASPHALT BASE COURSE, 7 3/4"
- D. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 3/4"
  - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
  - HOT-MIX ASPHALT BASE COURSE, 8 1/4"
- E. - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70, 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- F. - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1 3/4"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- G. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
  - HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2"
  - POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
  - HOT-MIX ASPHALT BASE COURSE WIDENING, 7 1/2" OR HOT-MIX ASPHALT BASE COURSE, 7 1/2"
- H. AGGREGATE SUBGRADE IMPROVEMENT 12"
- I. HOT-MIX ASPHALT SHOULDERS, 13 3/4"
- J. HOT-MIX ASPHALT SHOULDERS, 10 3/4"
- K. HOT-MIX ASPHALT SHOULDERS, 10 1/4"
- L. AGGREGATE SHOULDERS B
- M. SEEDING, CLASS 2A
- N. TOP SOIL FURNISH AND PLACE, 6"
- O. GUARDRAIL
- P1. COMBINATION CONCRETE CURB & GUTTER, TYPE M4.24
- P2. TYPE M6.12
- Q. CONCRETE BARRIER, DOUBLE FACE, 44 IN HEIGHT
- R. HMA SC IL-9.5FG D N50, 3" AGGREGATE BASE COURSE, TYPE B, 6"
- S. NOISEWALL
- T. BIKE RAILING
- U. CONCRETE BARRIER, SINGLE FACE, 44 IN HEIGHT
- V. CONCRETE BARRIER BASE
- W. RETAINING WALL
- X. MOMENT SLAB

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GANNETT FLEMING

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	DRAWN -	REVISED -	
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PLOT DATE = 3/1/2023	DATE - XX/XX/2023	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US–20 RANDALL RD TO SHALES PKWY
TYPICAL SECTIONS

SCALE: NTS | SHEET 2 OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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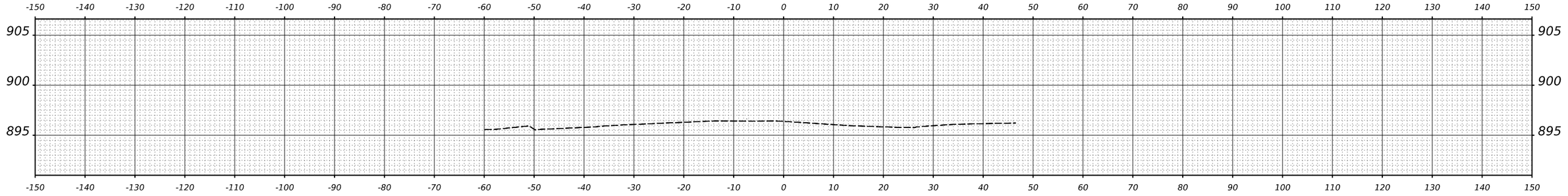
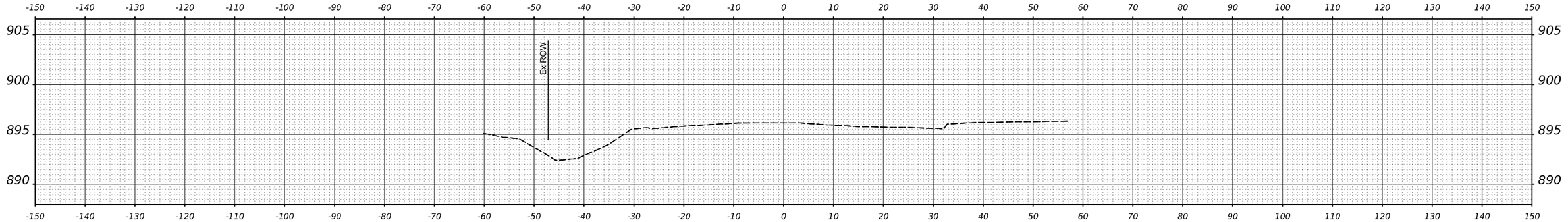
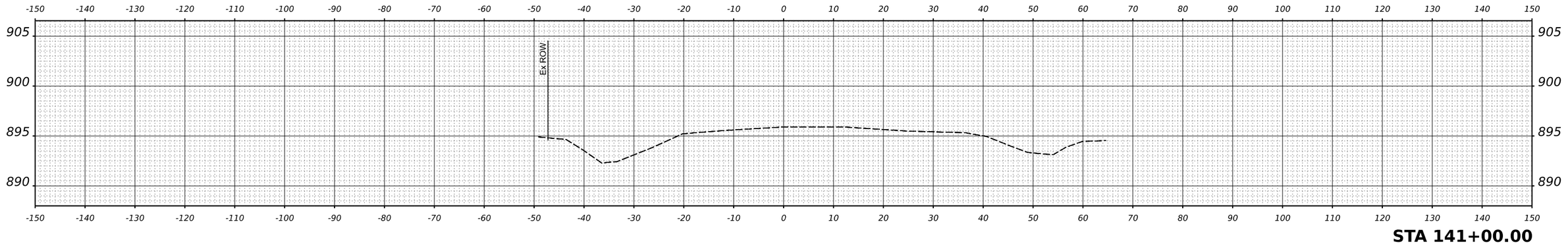
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	



STA 142+00.00



STA 141+50.00



STA 141+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
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PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

DATE
BY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
FINAL SURVEY
NOTE BOOK
NO.

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: E_US20_01 - 141+00.00
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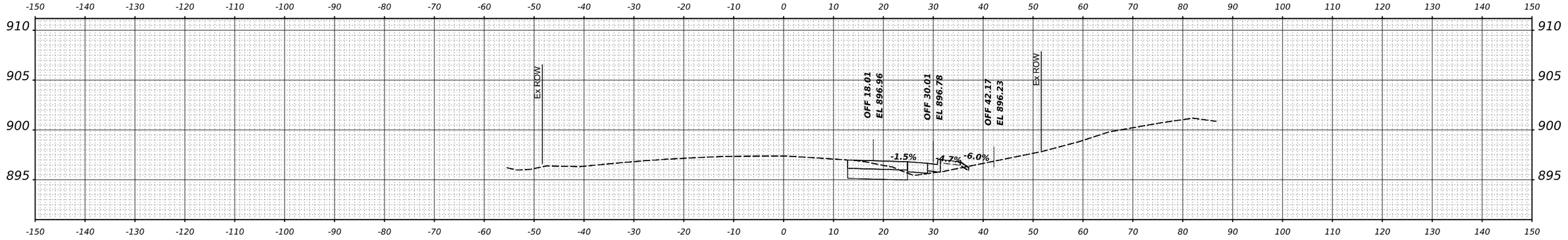
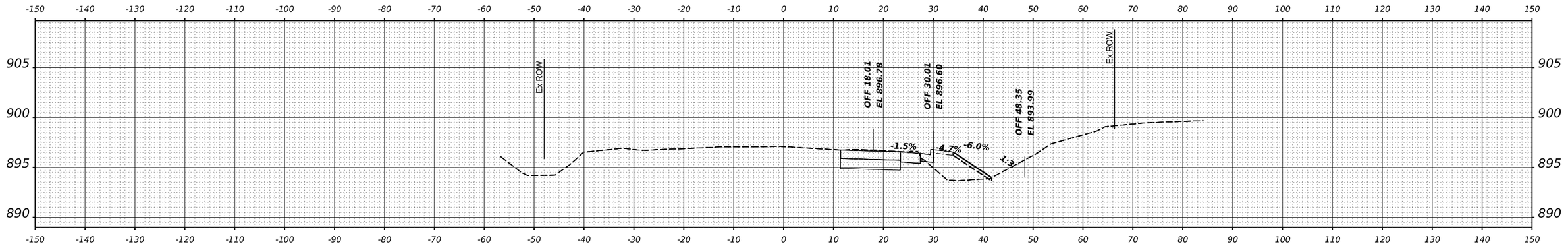
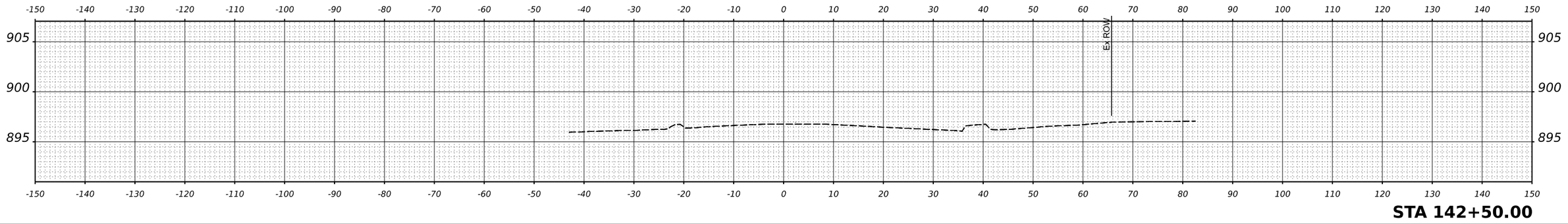


STA 143+50.00



STA 143+00.00



STA 142+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

MODEL: E_US20_01 - 142+50.00
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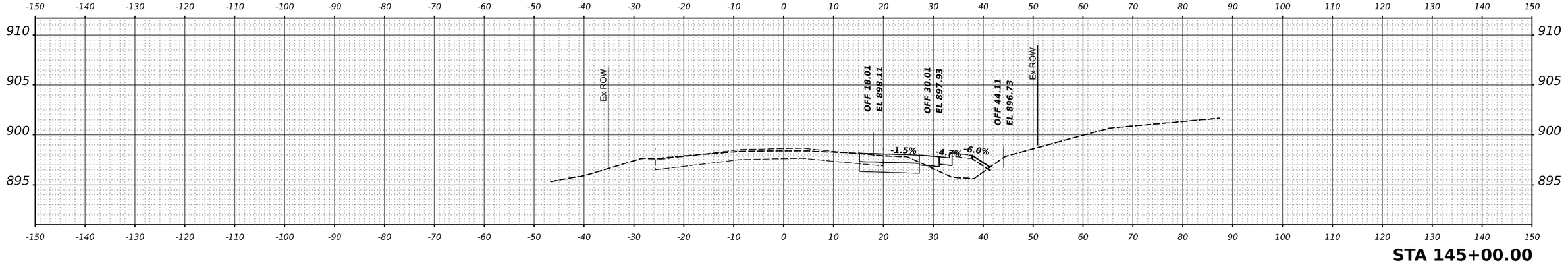
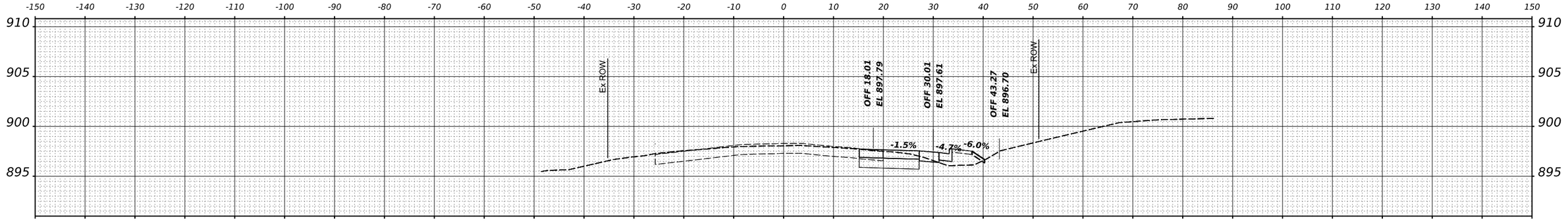
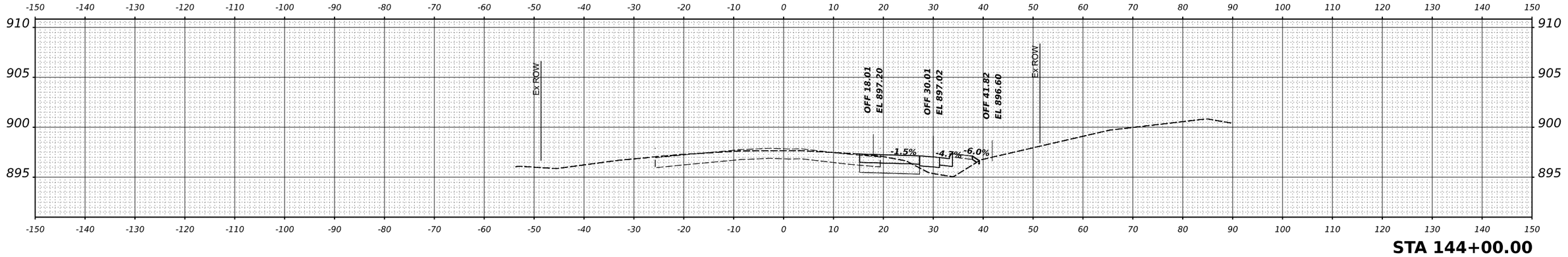


STA 145+00.00



STA 144+50.00



STA 144+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_01 - 144+00.00
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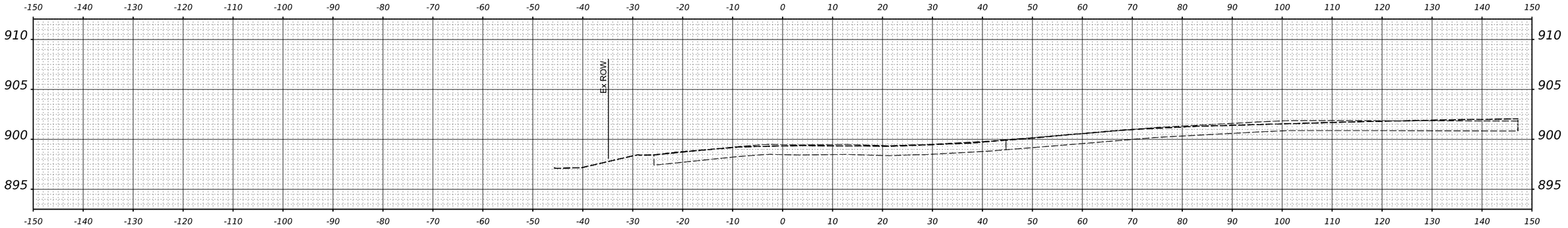
FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



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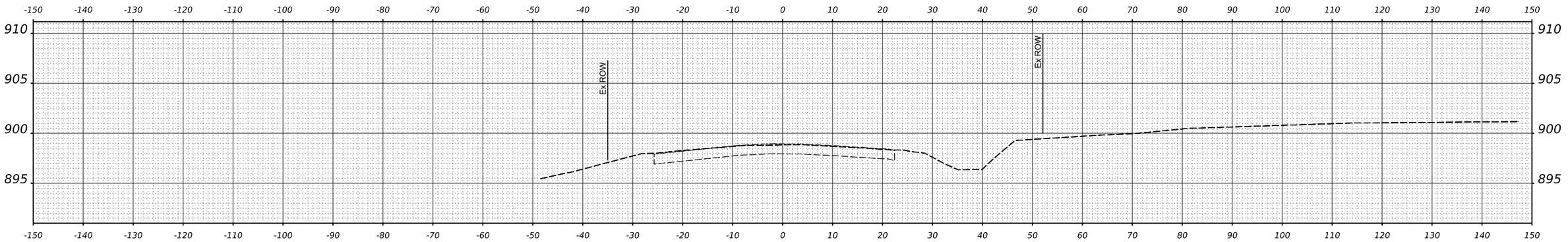

STA 145+50.00

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

MODEL: E_US20_01 - 145+50.00
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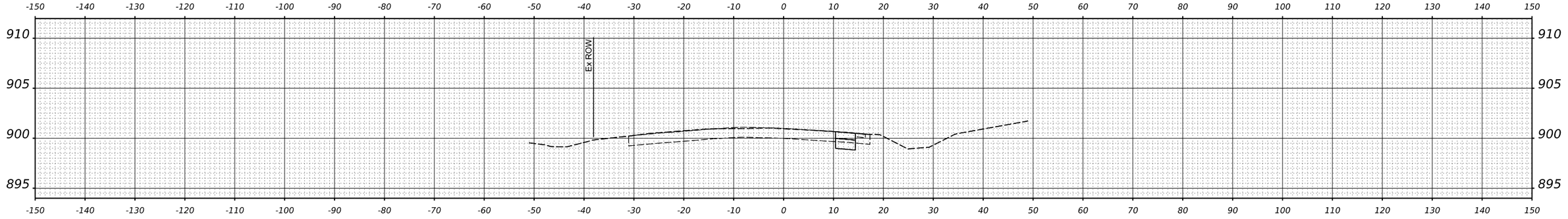
USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

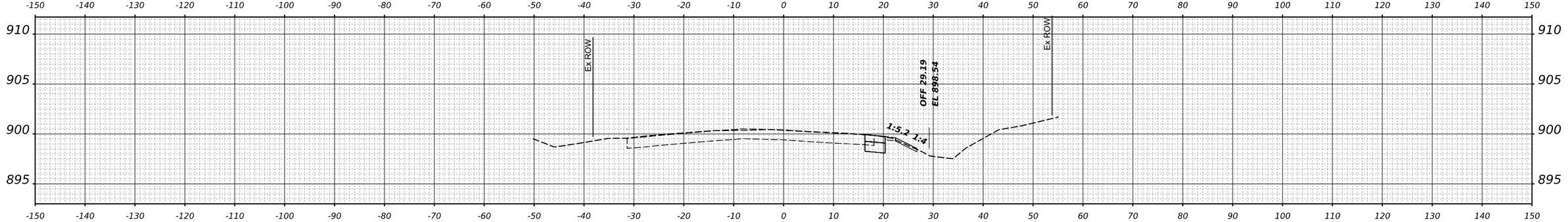
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

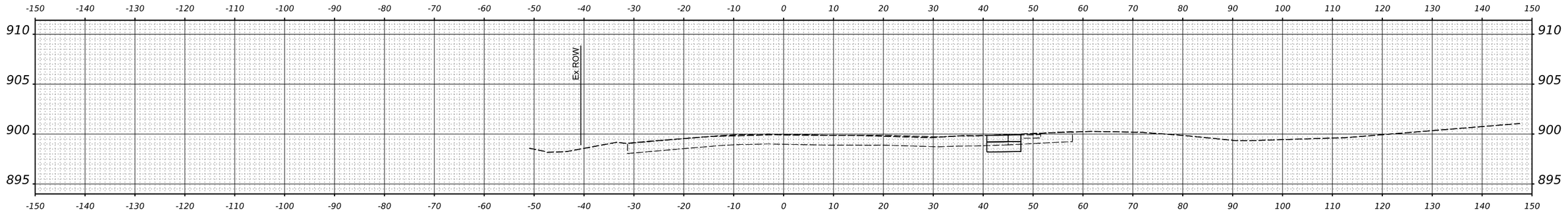
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		



STA 147+50.00



STA 147+00.00



STA 146+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

DATE | BY | ORIGINAL SURVEY / FINAL SURVEY: NOTE BOOK, NO. | SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED

MODEL: E_US20_02 - 146+50.00 [Sheet]
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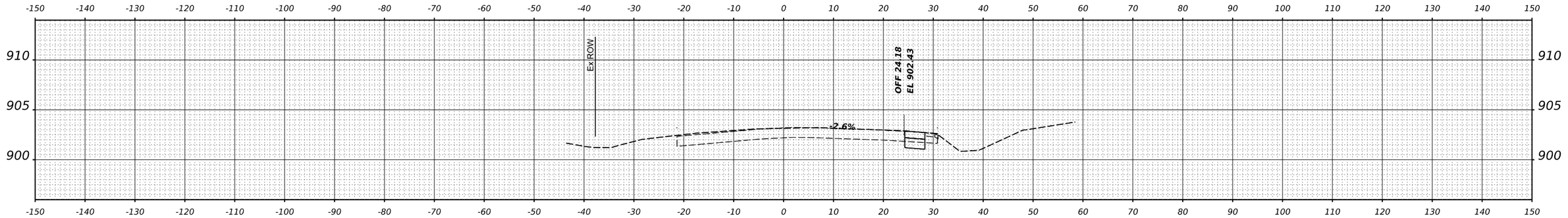

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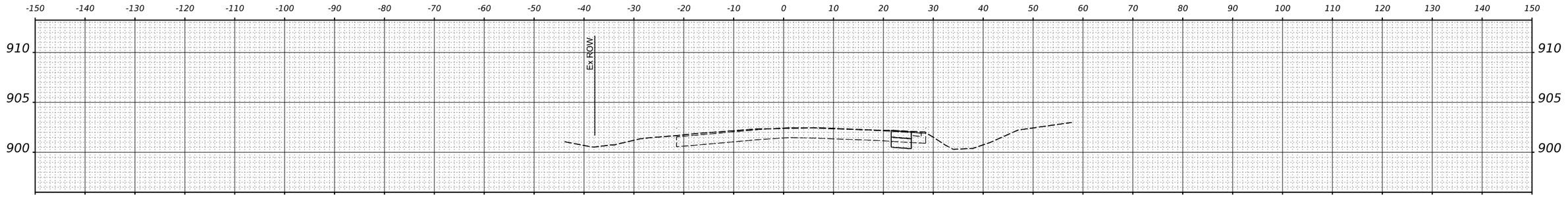
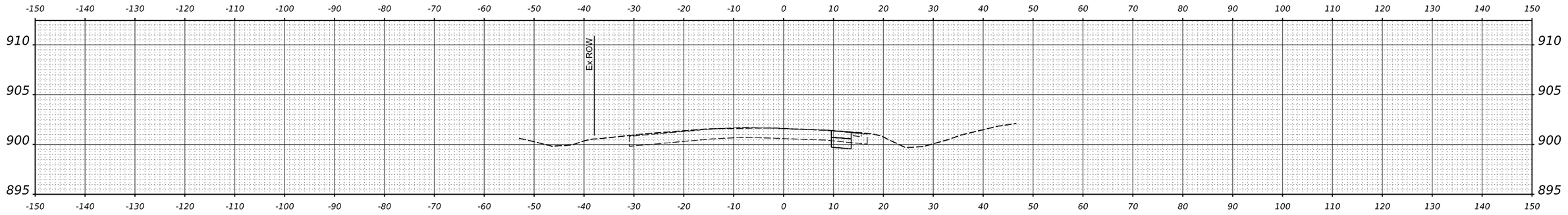


STA 148+50.00



STA 148+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

MODEL: E_US20_02 - 148+00.00 [Sheet]
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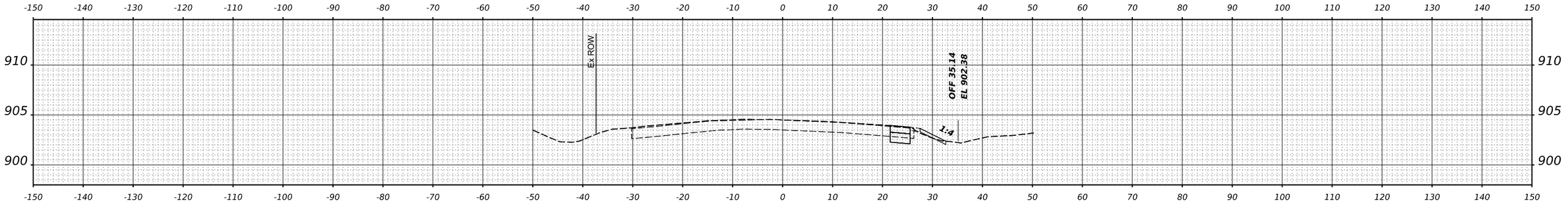

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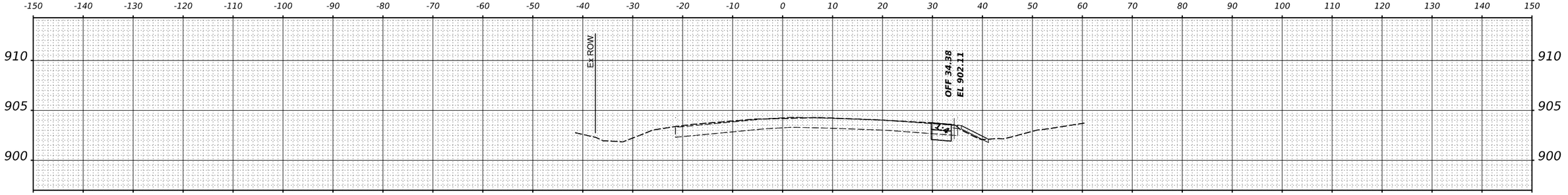

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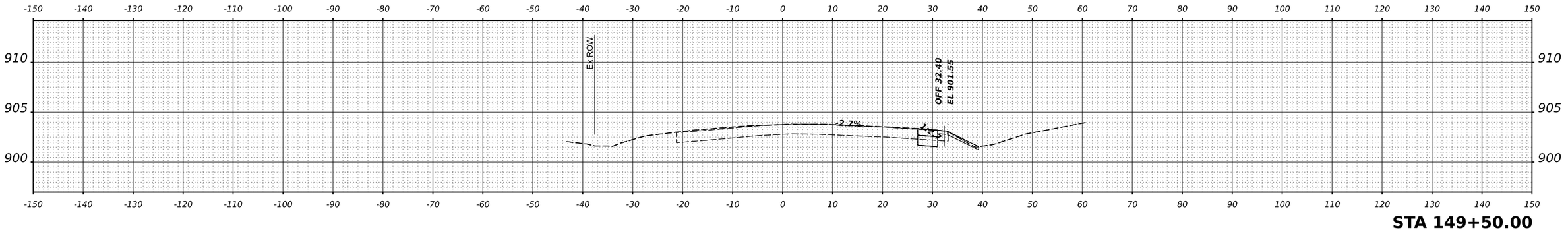

STA 149+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NO. | NOTE BOOK | FINAL SURVEY

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NO. | NOTE BOOK | ORIGINAL SURVEY

MODEL: E_US20_02 - 149+50.00 [Sheet]
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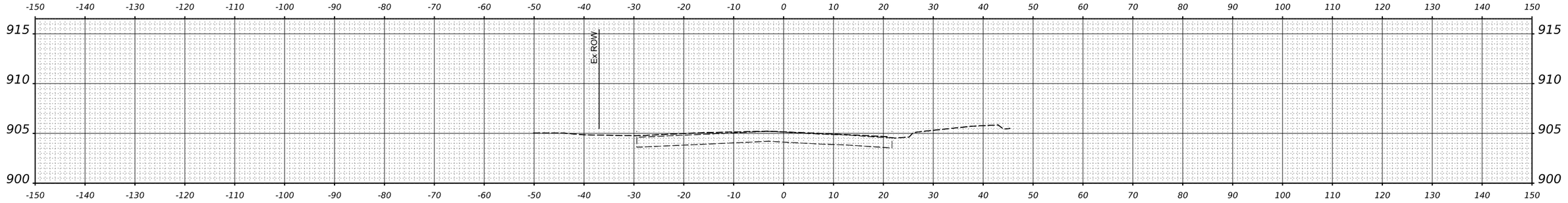
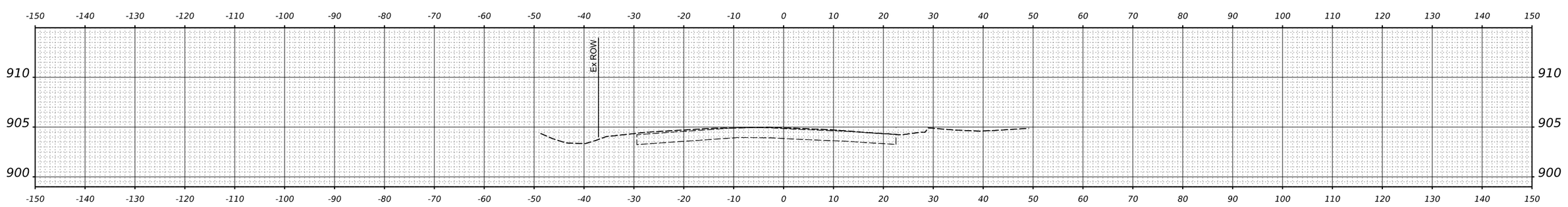
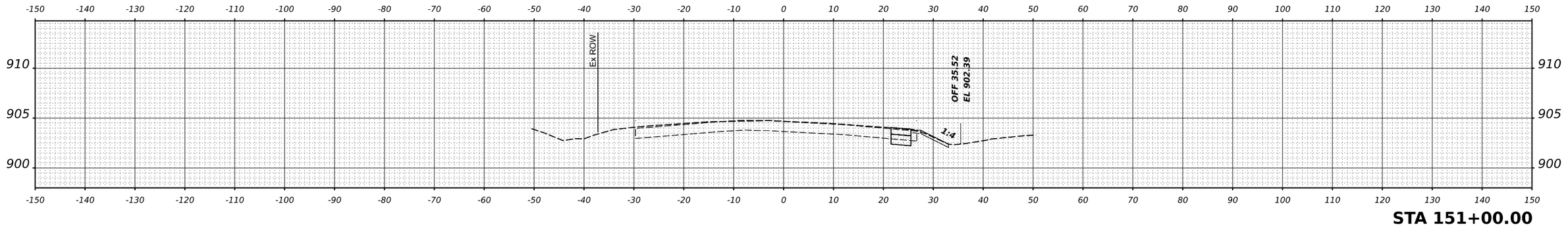


STA 152+00.00



STA 151+50.00



STA 151+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

MODEL: E_US20_02 - 151+00.00 [Sheet]
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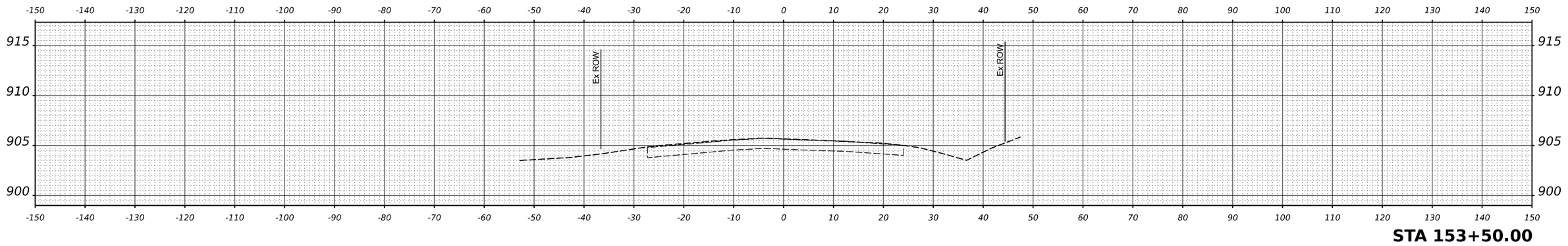

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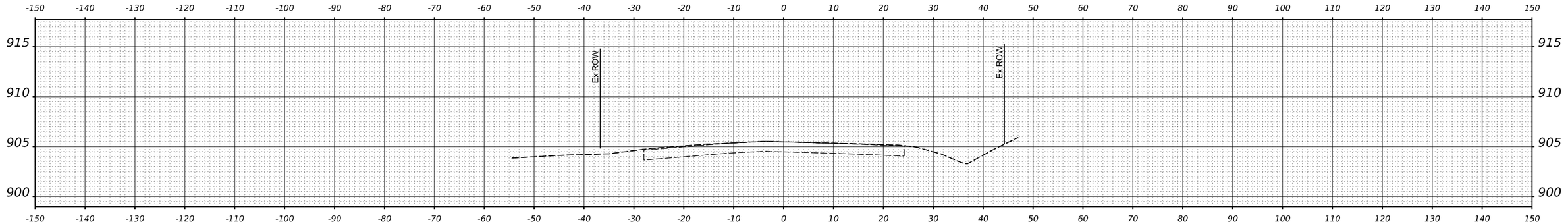

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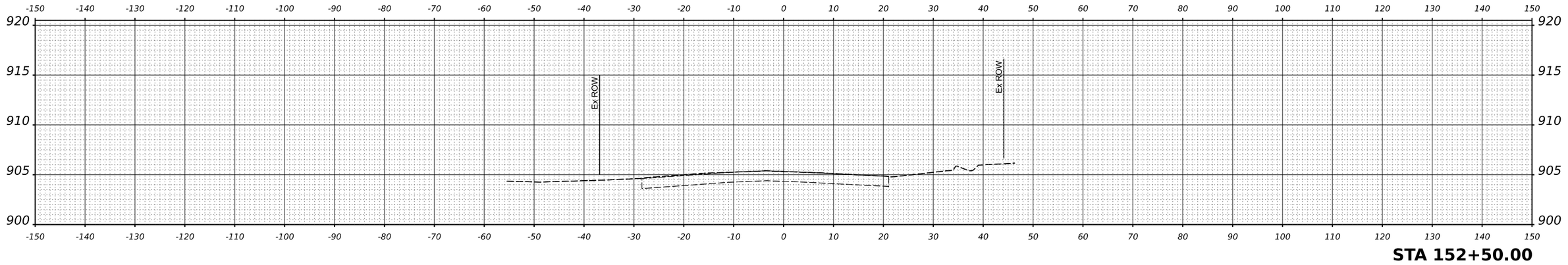

STA 152+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 152+50.00 [Sheet]
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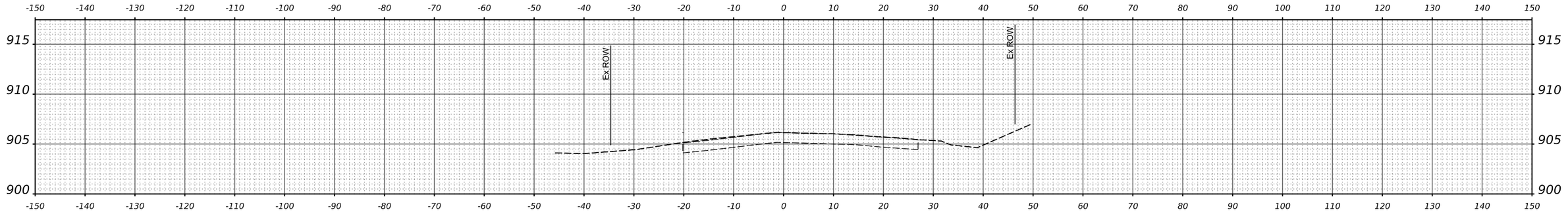
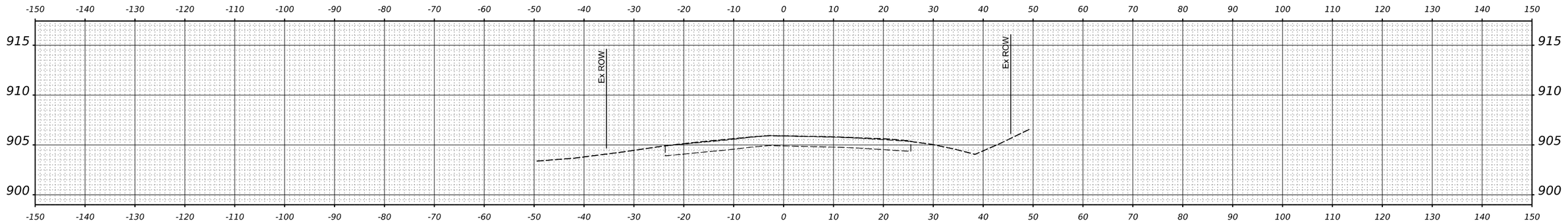


STA 155+00.00



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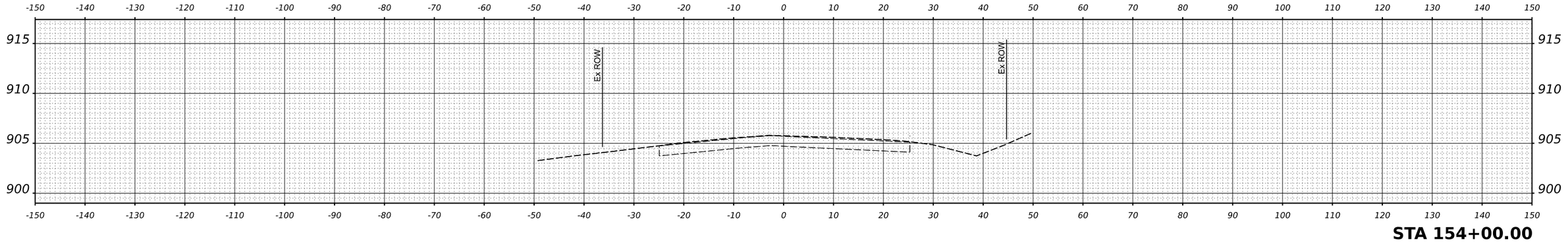


STA 154+00.00

DATE	BY	ORIGINAL SURVEY	FINAL SURVEY
		SURVEYED	
		PLOTTED	
		TEMPLATE	
		AREAS	
		AREAS CHECKED	
		NOTE BOOK	
		NO.	

MODEL: E_US20_02 - 154+00.00
FILE NAME: pw://dfnet-pw.bentley.com:dfnet-pw/Documents/Projects/68996/Project Working/A_CADD/zWorking/jstarzyk/62L34-Ex-XSC.dgn

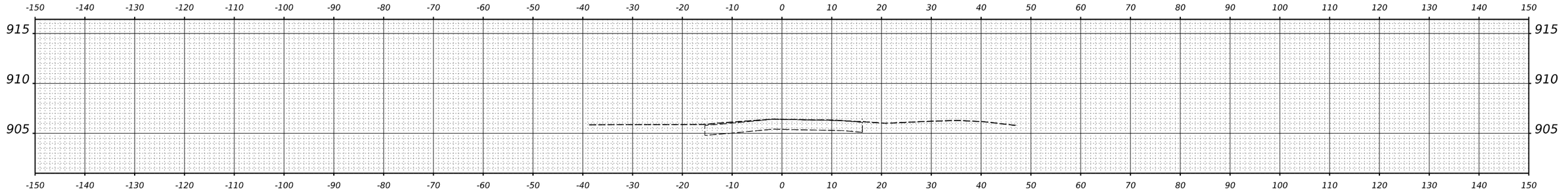
USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

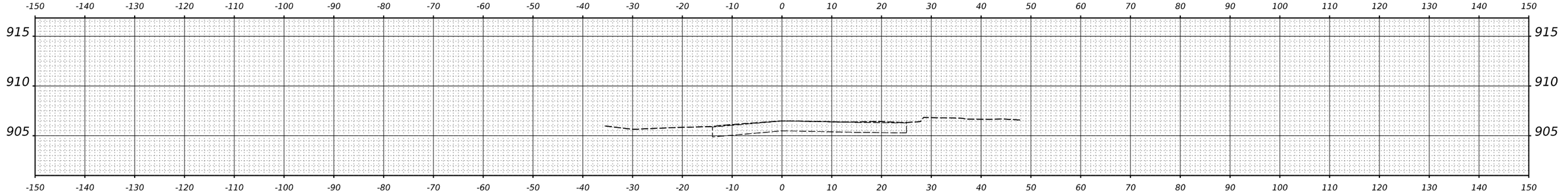
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

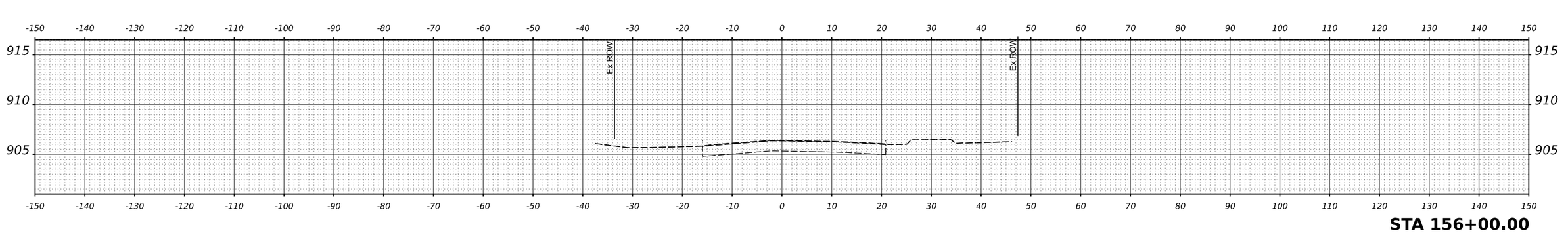
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		



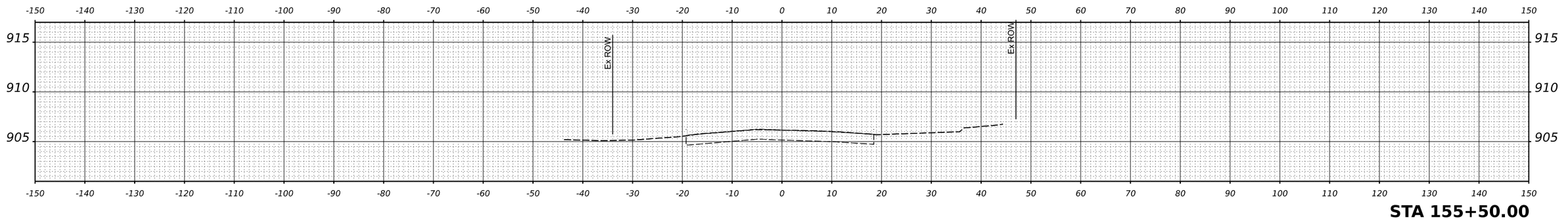
STA 157+00.00



STA 156+50.00



STA 156+00.00



STA 155+50.00

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 155+50.00
FILE NAME: pw://jfnet-pw.bentley.com:jfnet-pw-01/Documents/Projects/68096/Project Working/A_CADD\zWorking\jstarzyk\62L34-Ex-XSC.dgn

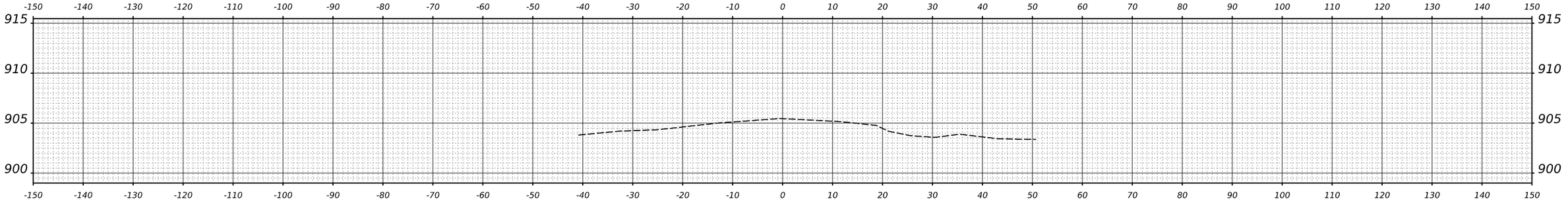
USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

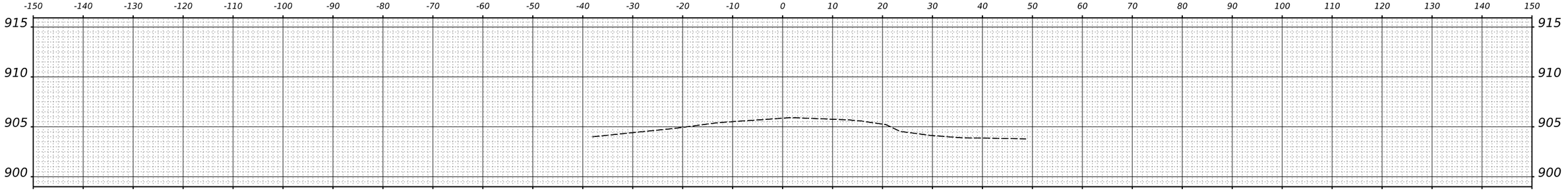
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

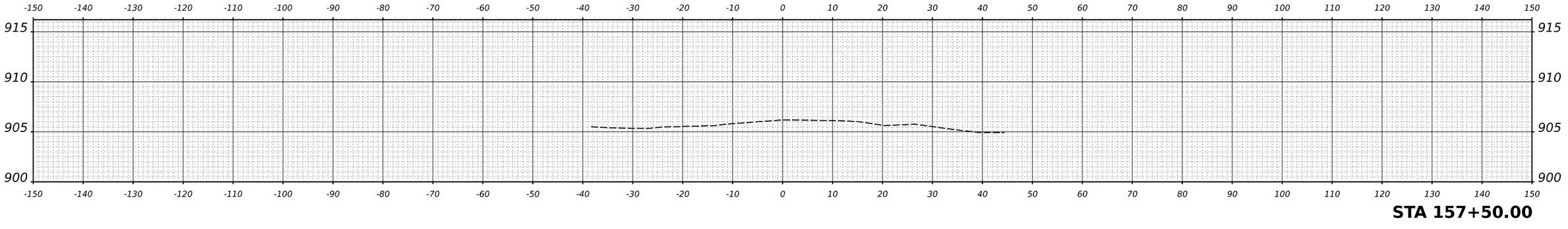
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	



STA 158+50.00



STA 158+00.00



STA 157+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

MODEL: E_US20_02 - 157+50.00
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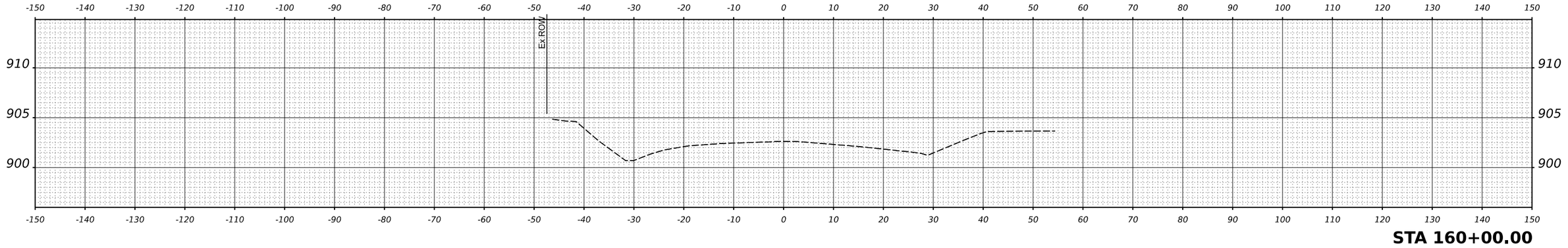

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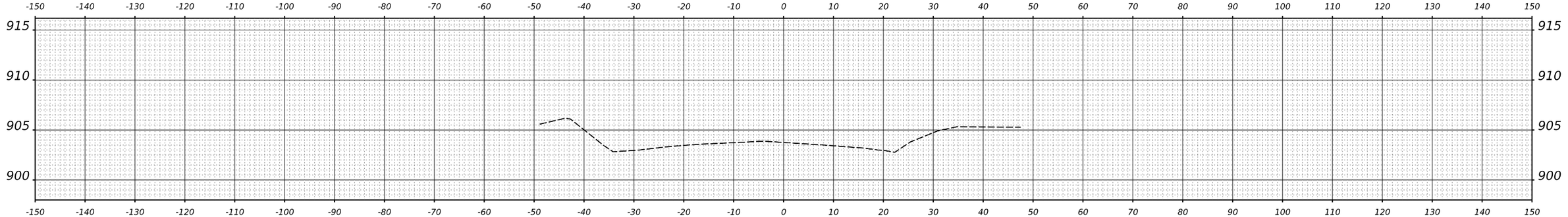

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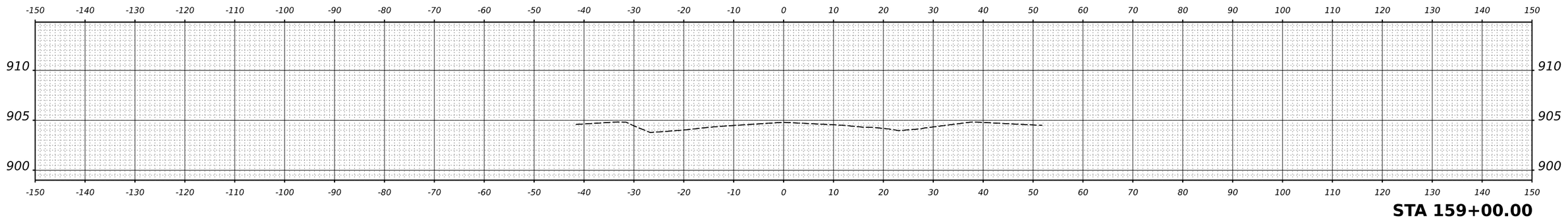

STA 159+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 159+00.00
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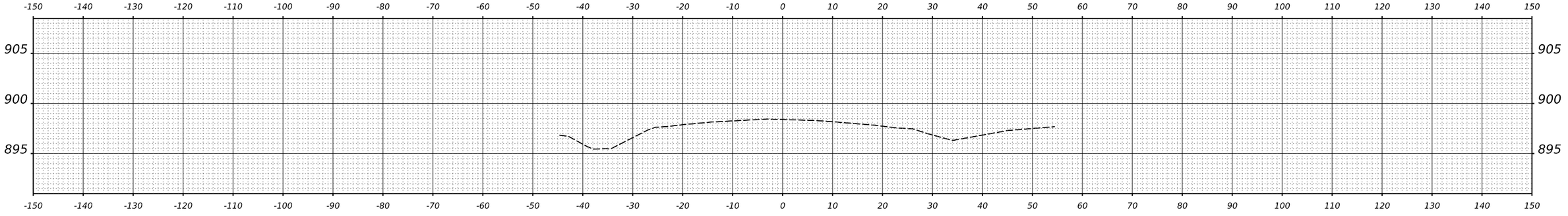

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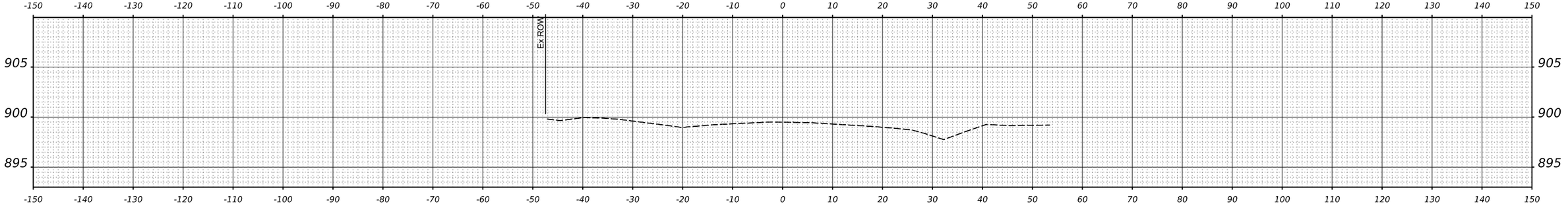

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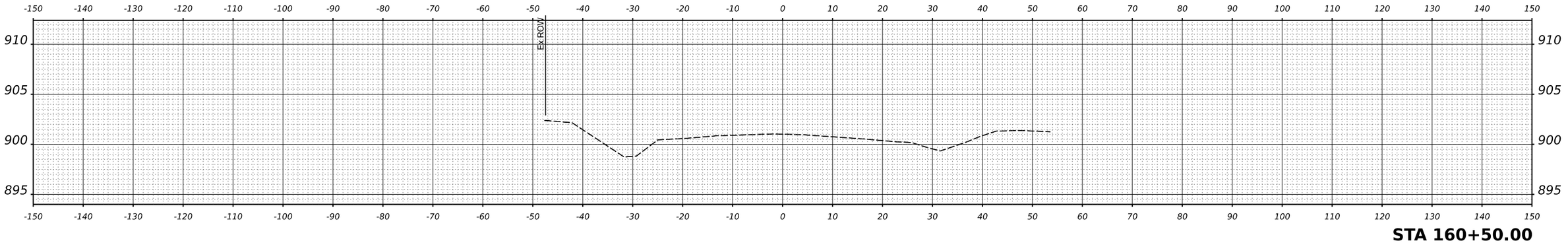

STA 160+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

FINAL SURVEY | NOTE BOOK | NO.

ORIGINAL SURVEY | NOTE BOOK | NO.

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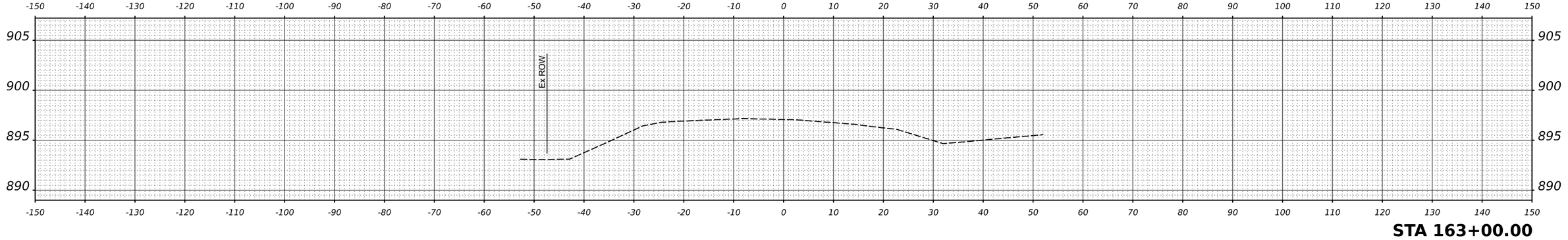

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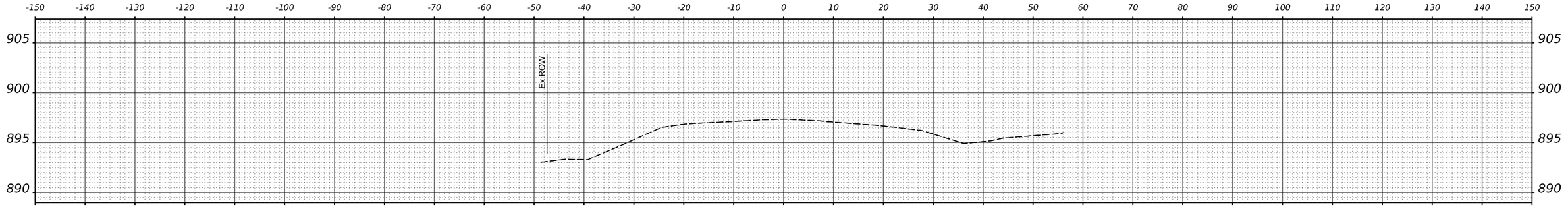

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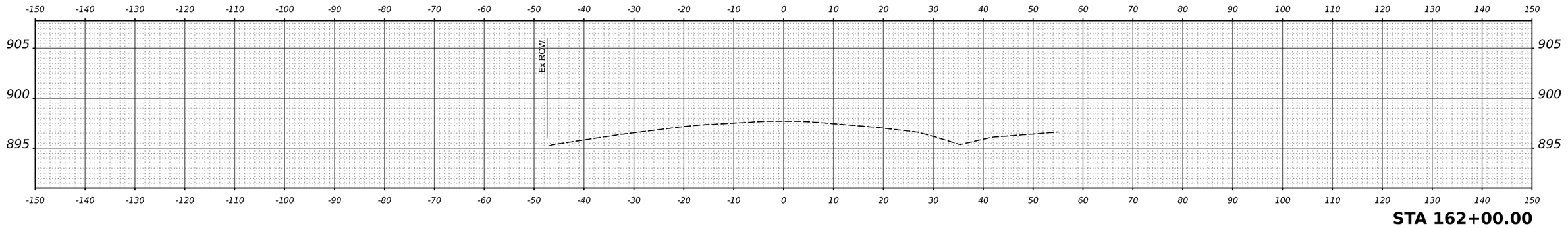

STA 162+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

DATE | BY | ORIGINAL SURVEY | FINAL SURVEY
SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED
NOTE BOOK | NO.

MODEL: E_US20_02 - 162+00.00
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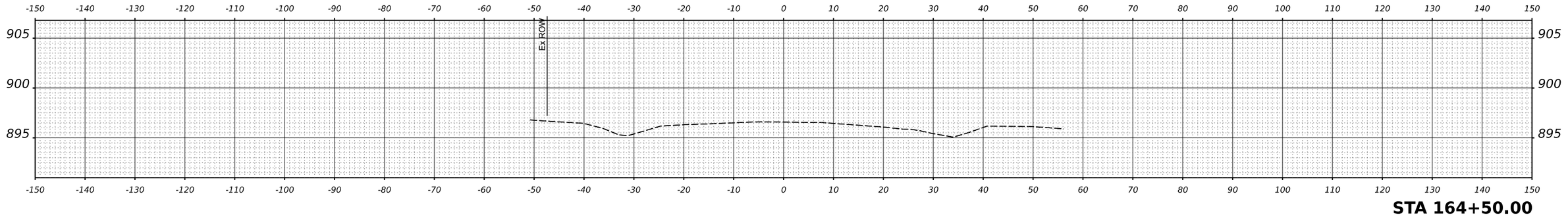

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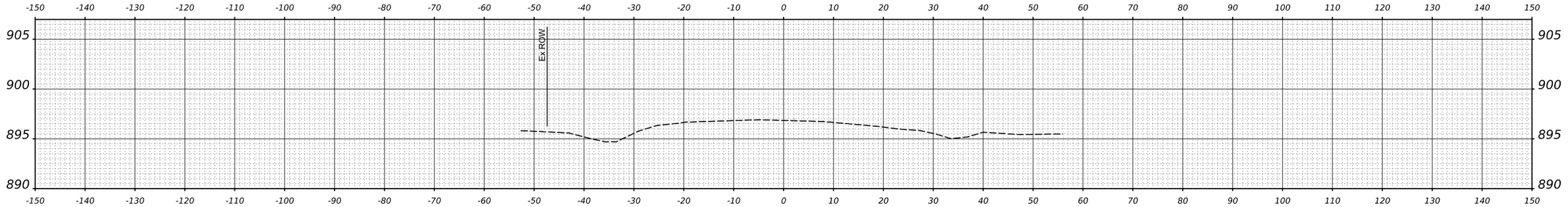

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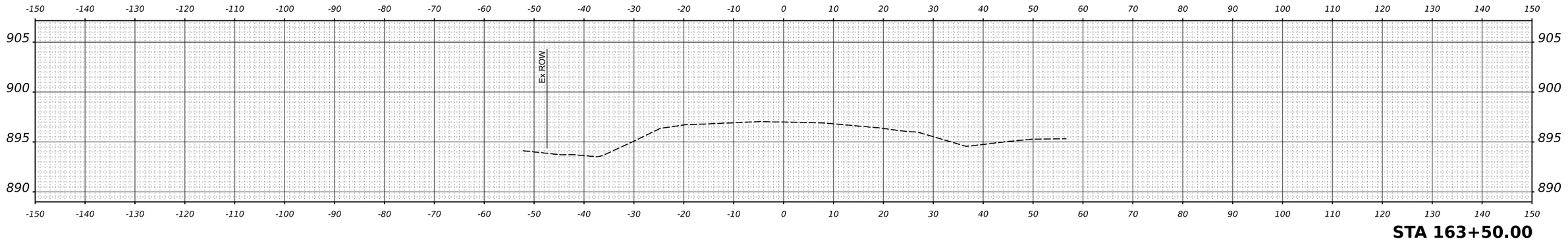

STA 163+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 163+50.00
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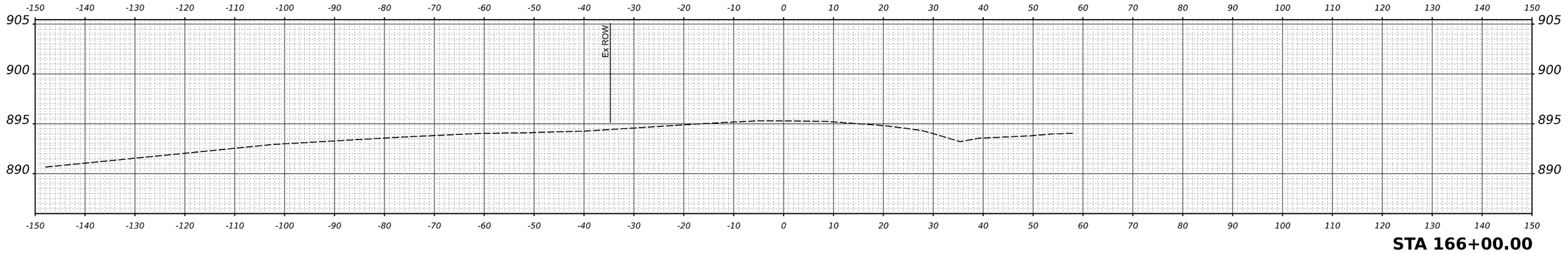

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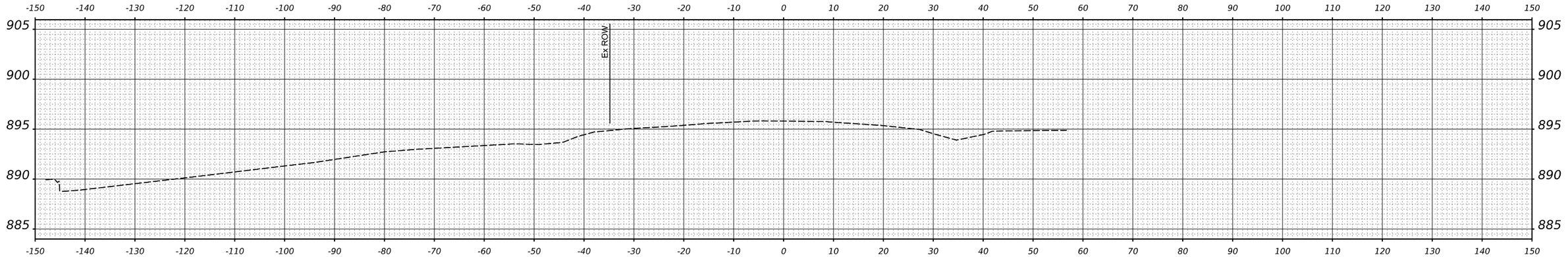

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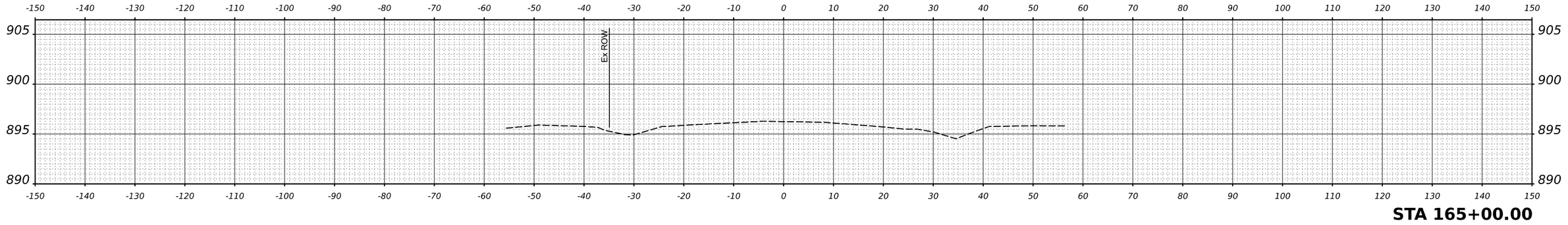

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USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
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US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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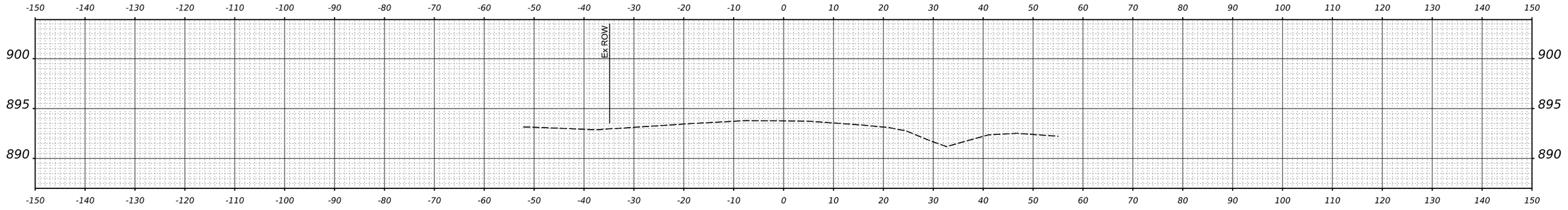

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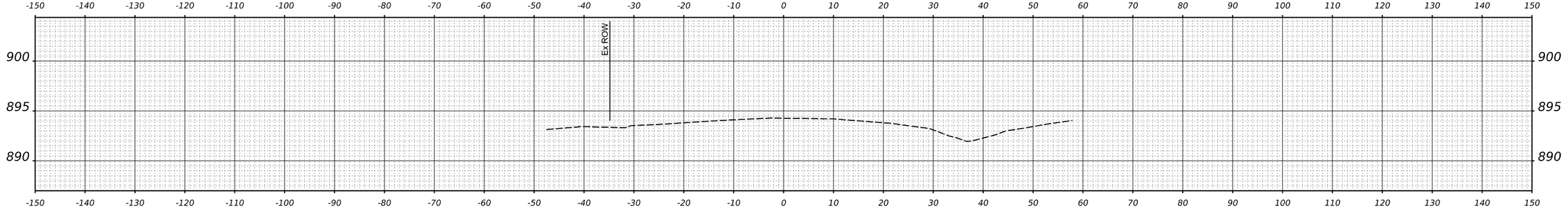

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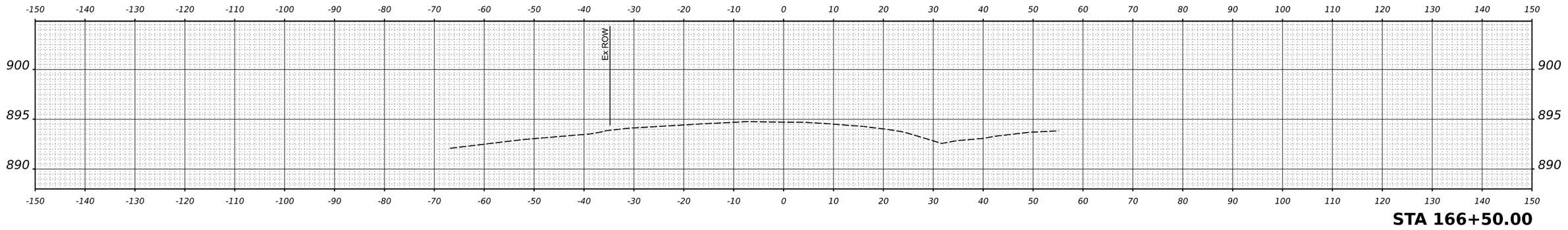

STA 166+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
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PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 166+50.00
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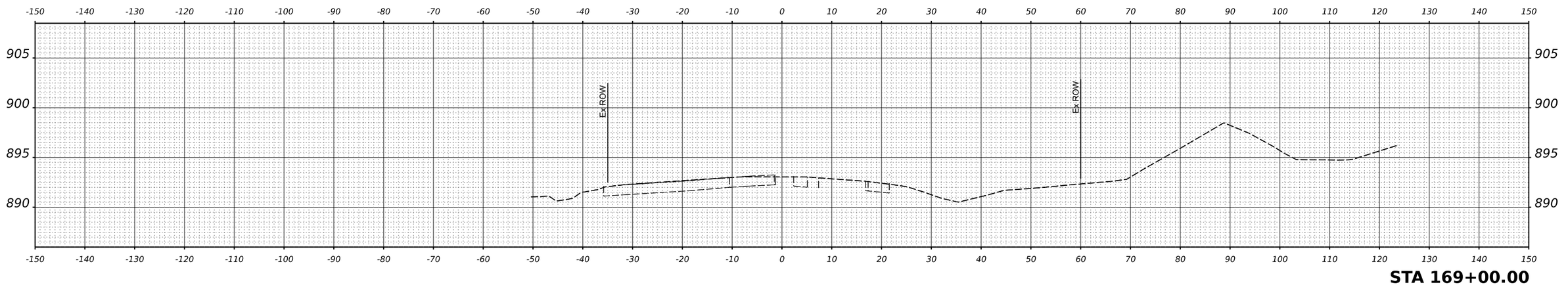

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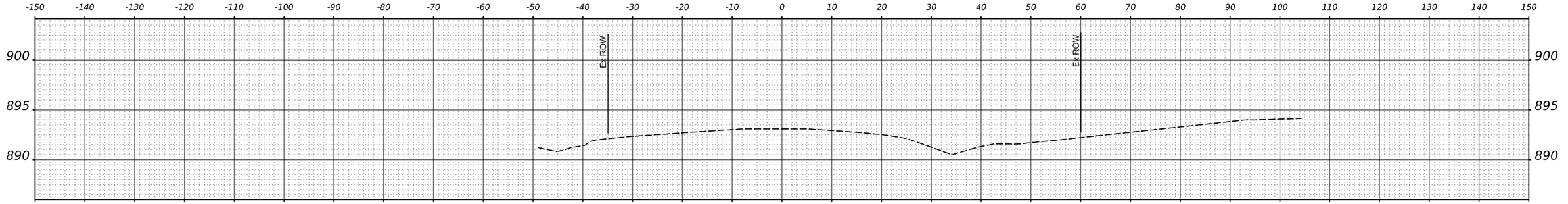

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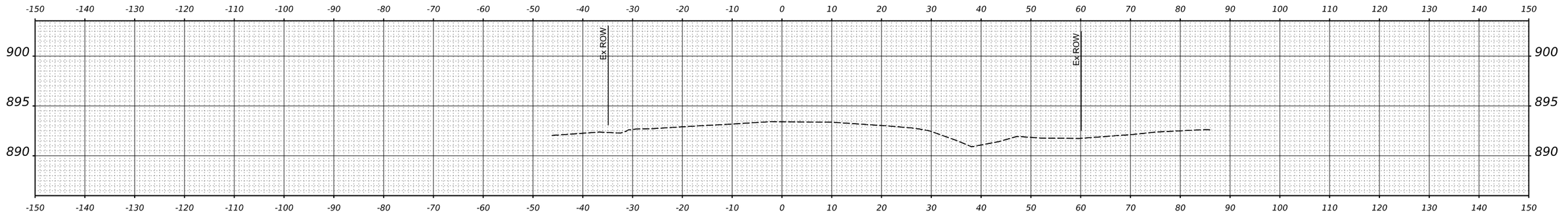

STA 168+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
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PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
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US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | FINAL SURVEY | NOTE BOOK | NO.

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | DATE | BY

MODEL: E_US20_02 - 168+00.00
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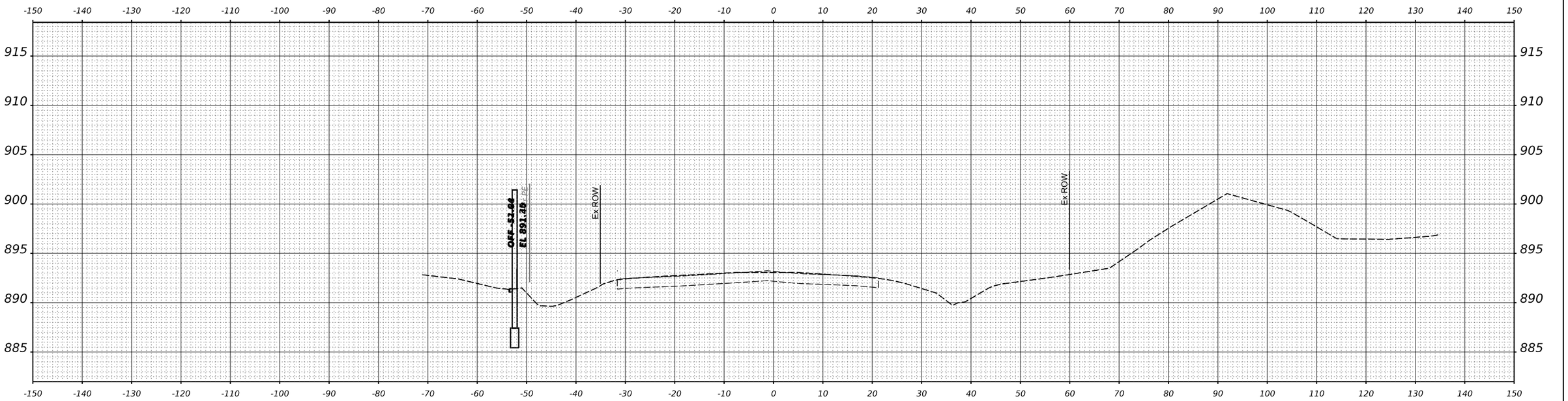

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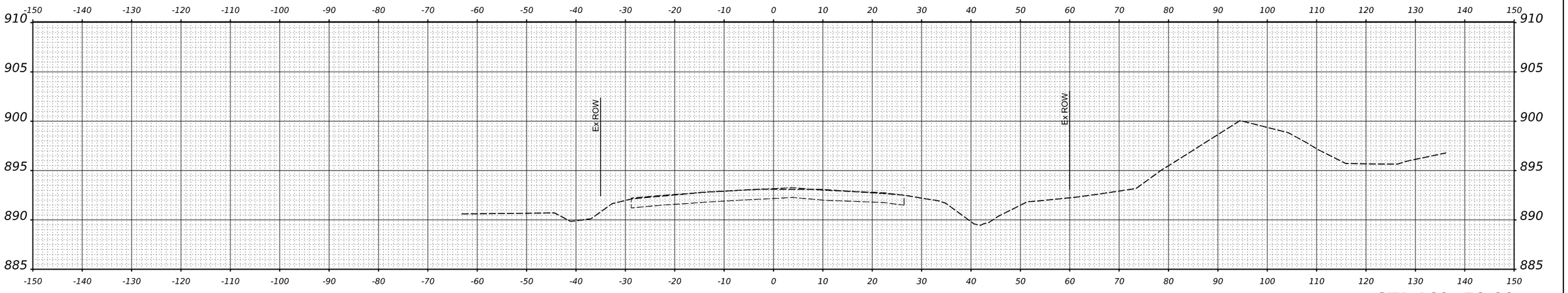

STA 169+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
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PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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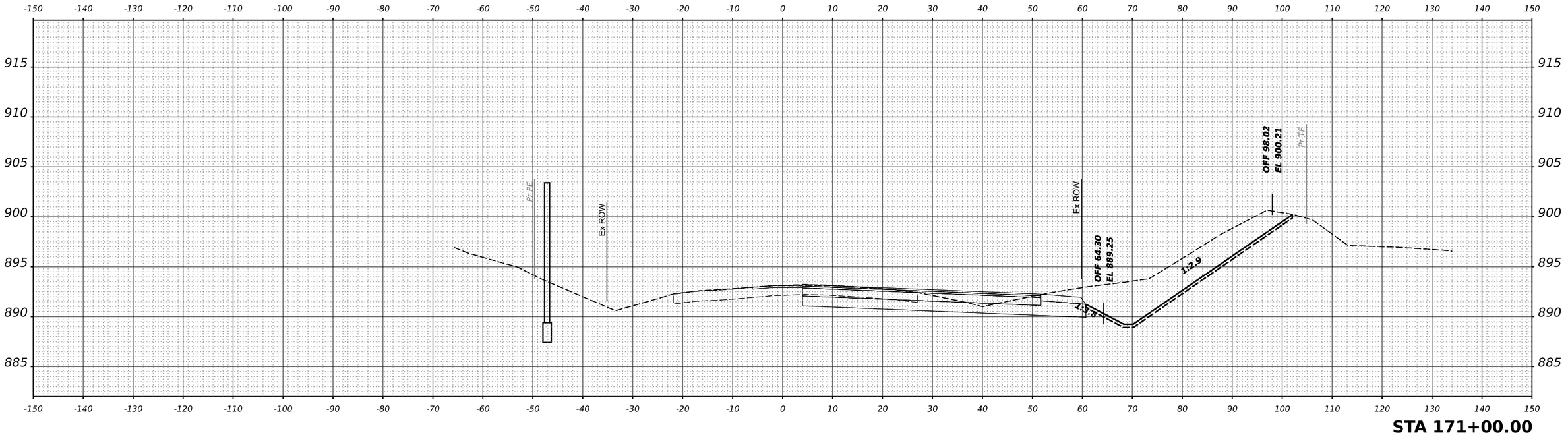

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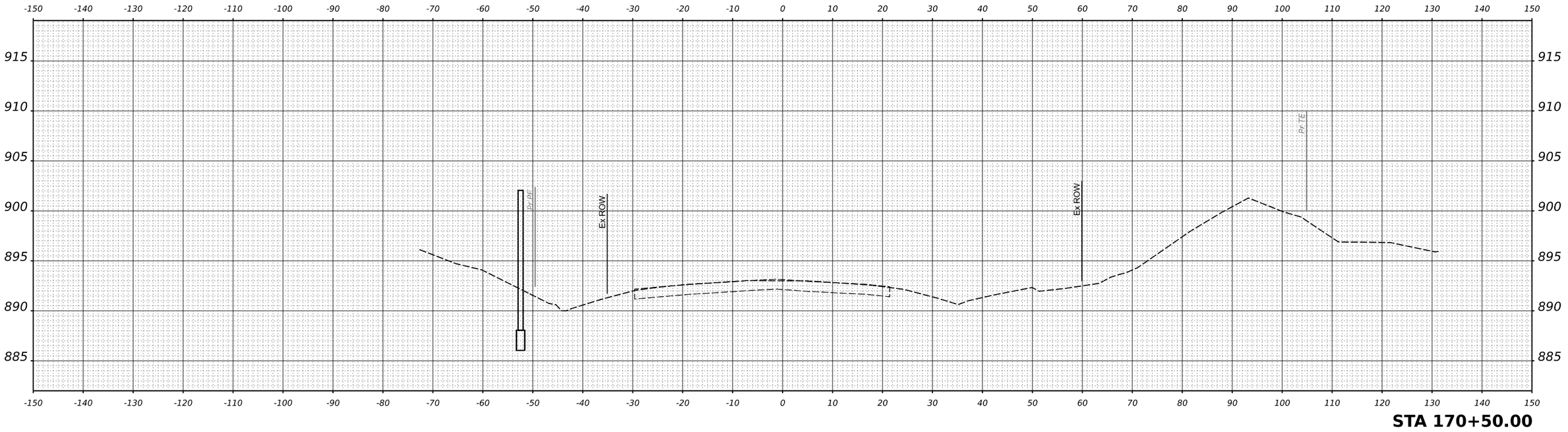

STA 170+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
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PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
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US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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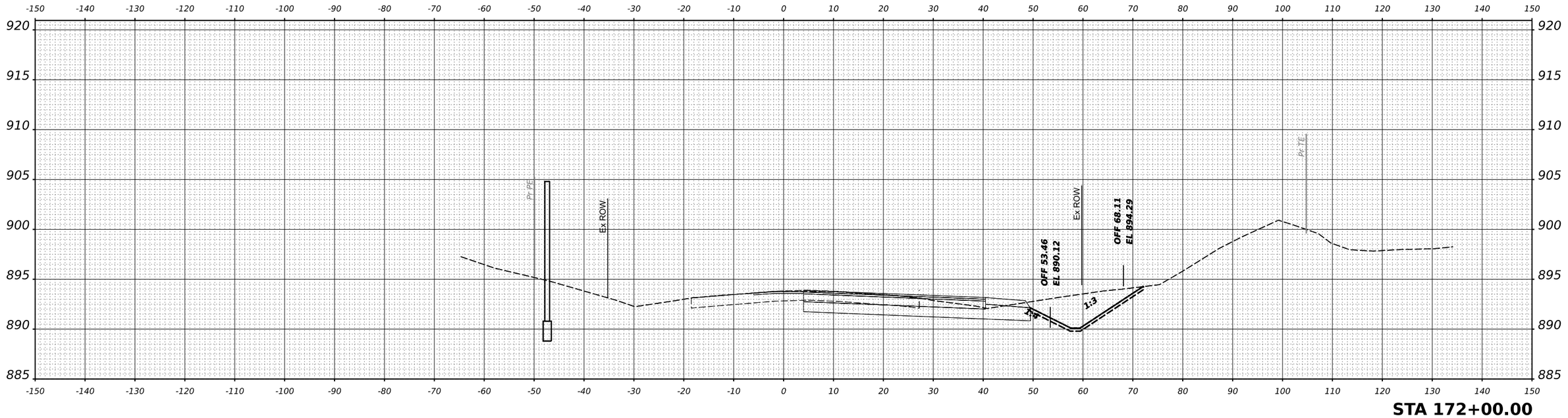

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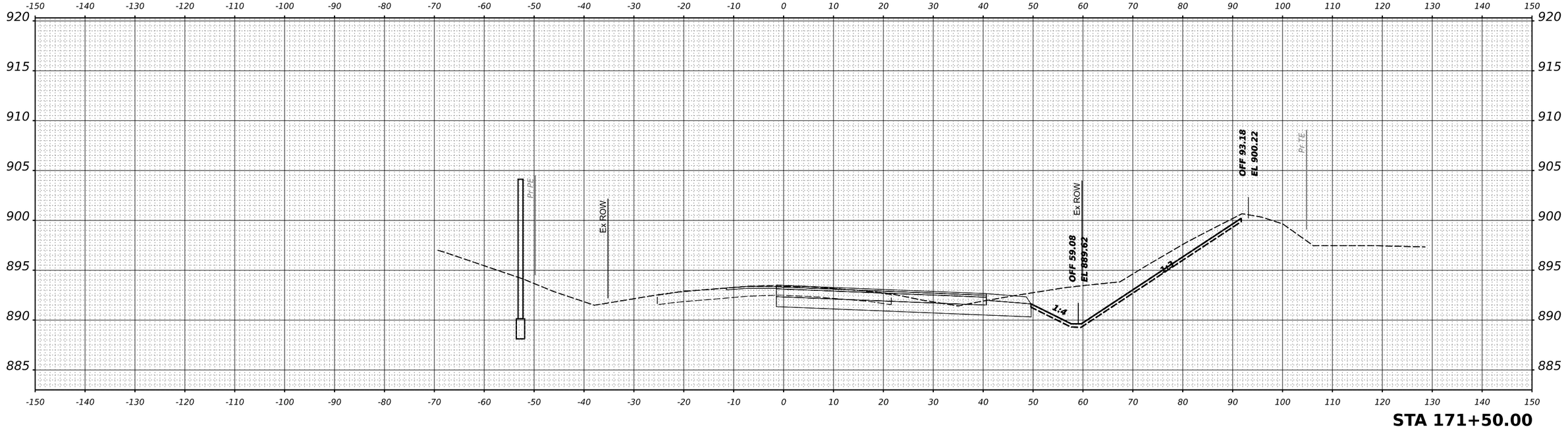

STA 171+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
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PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 171+50.00
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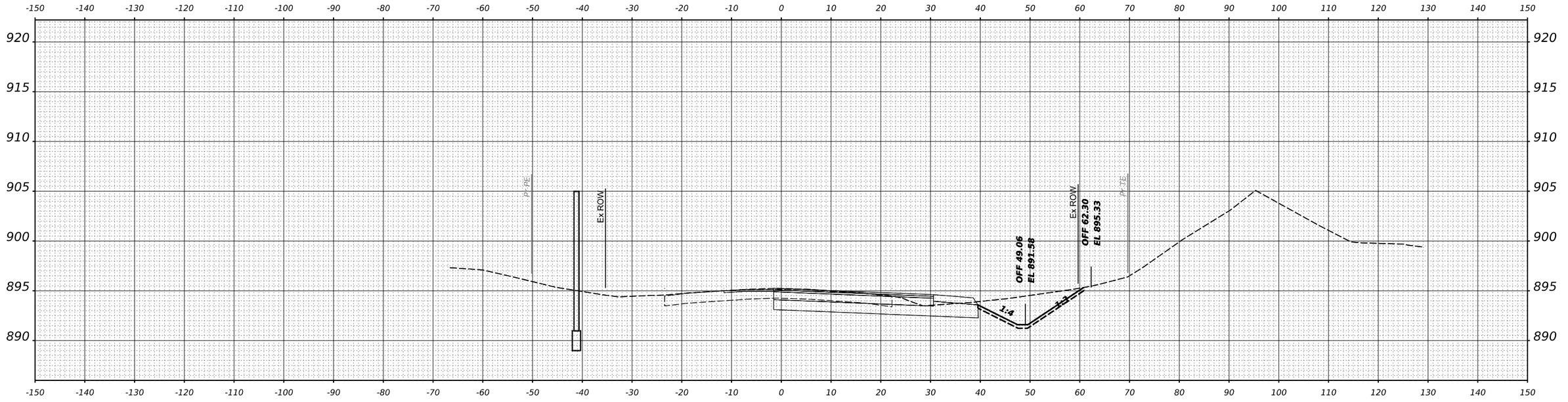
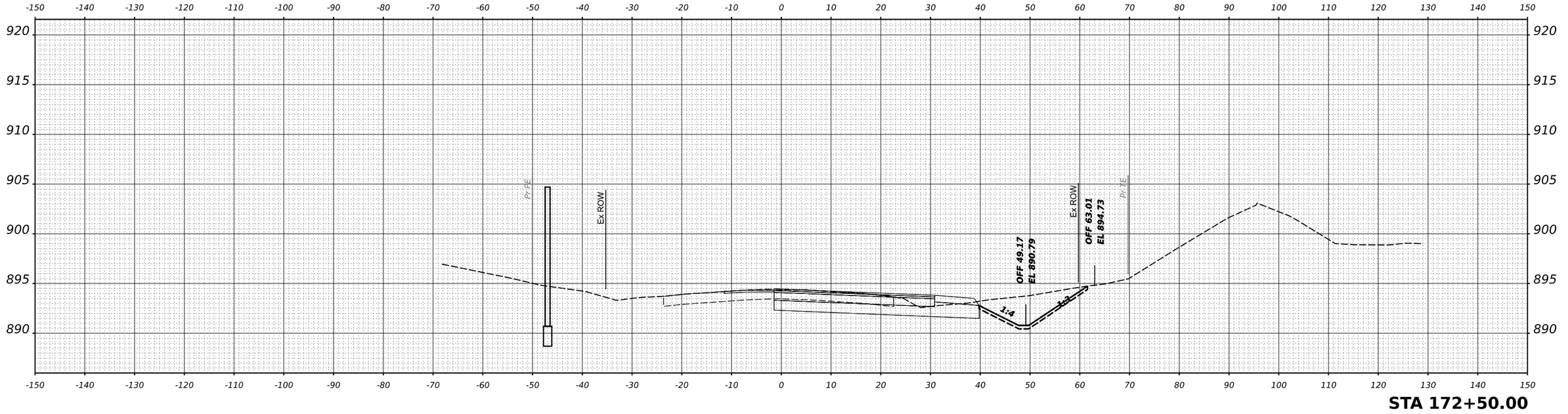


STA 173+00.00



STA 172+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY | NOTE BOOK | NO.
SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED
BY | DATE

FINAL SURVEY | NOTE BOOK | NO.
SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED
BY | DATE

MODEL: E_US20_02 - 172+50.00
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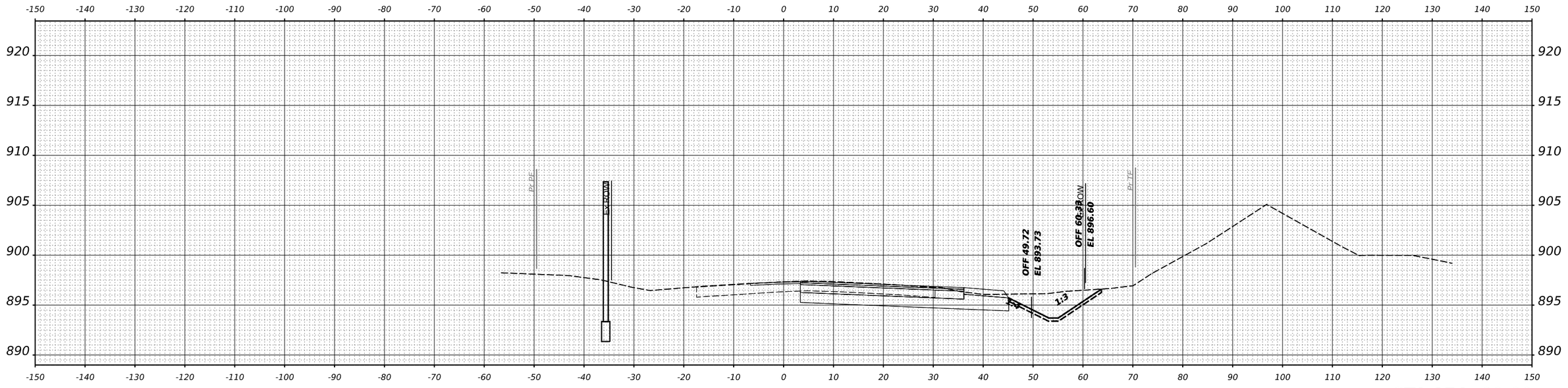
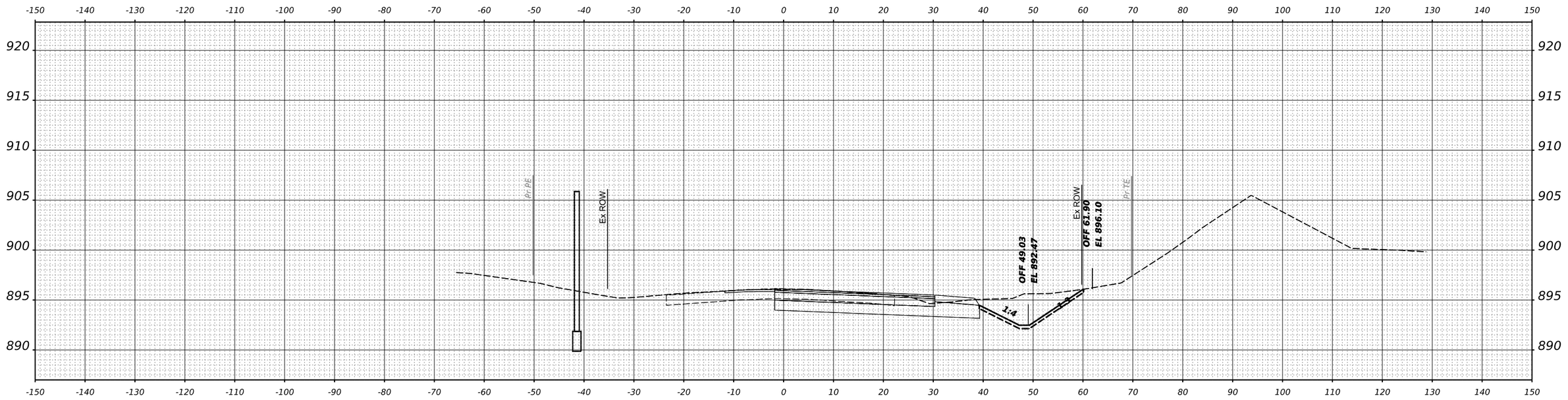


STA 174+00.00



STA 173+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | FINAL SURVEY | NOTE BOOK | NO.

ORIGINAL SURVEY | NOTE BOOK | NO.

MODEL: E_US20_02 - 173+50.00
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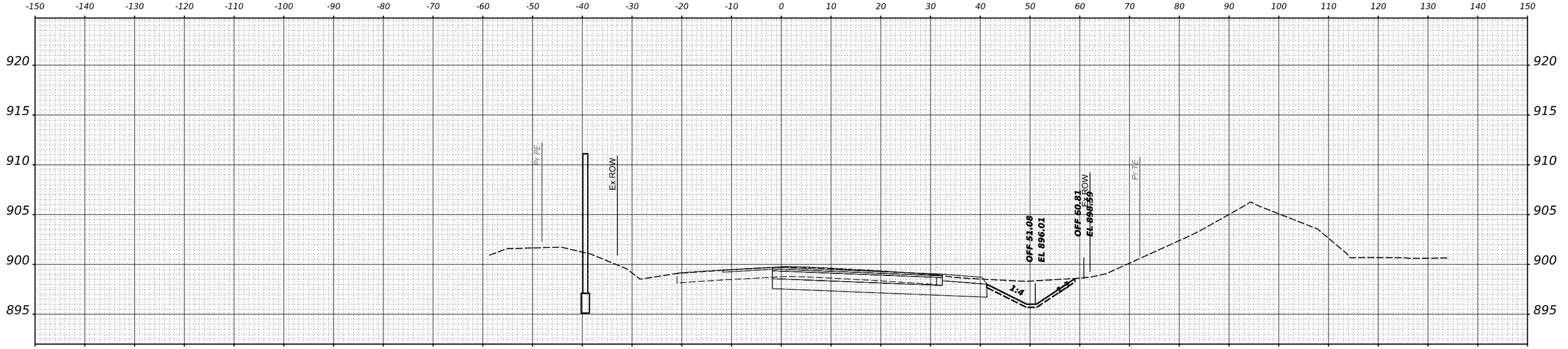
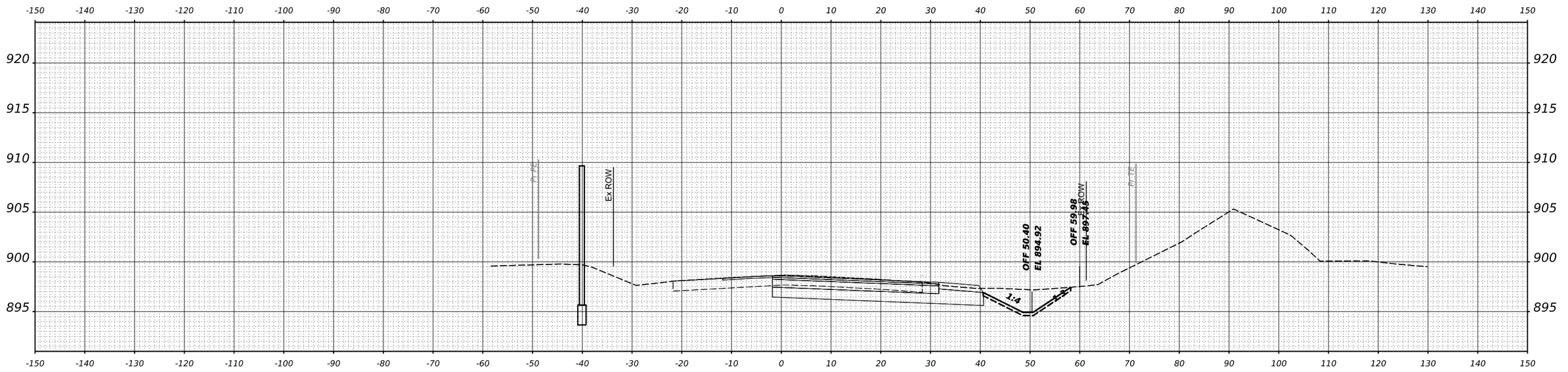


STA 175+00.00



STA 174+50.00

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

MODEL: F_US20_02 - 174+50.00
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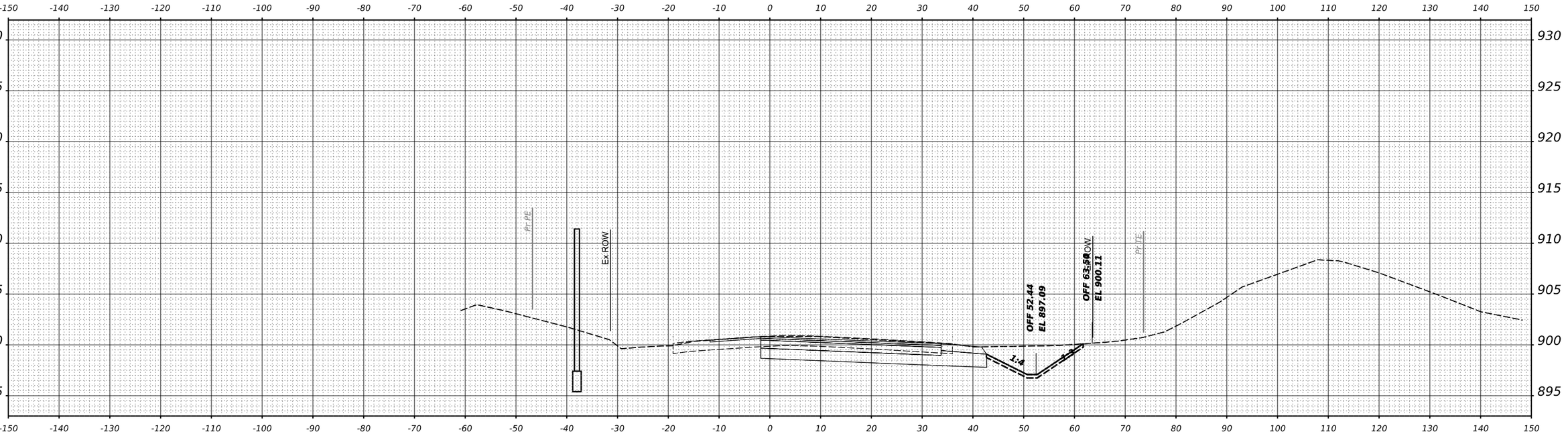
USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

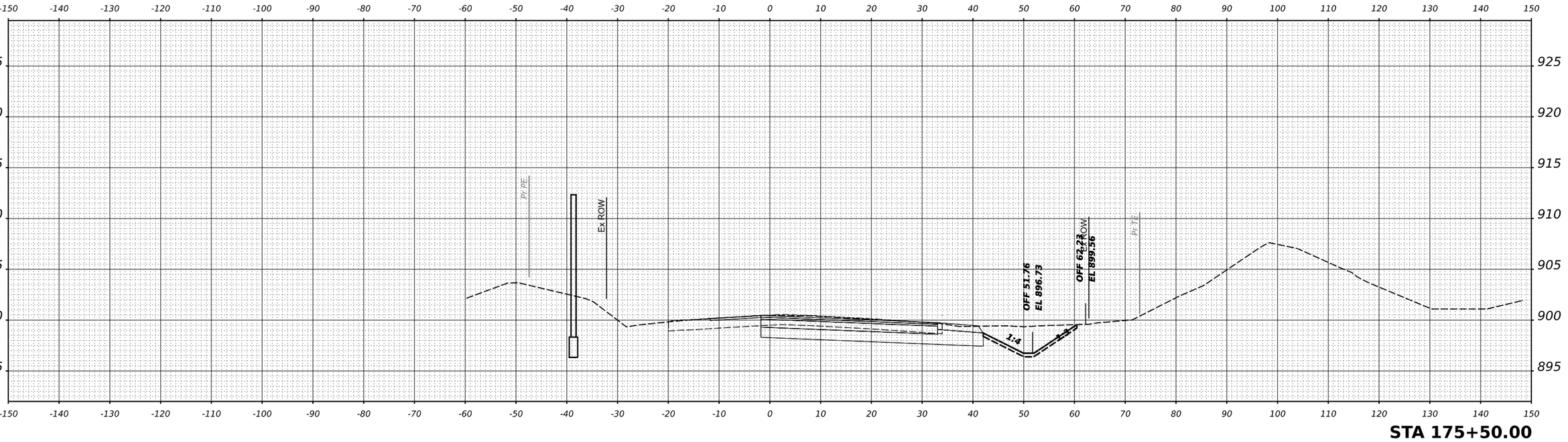
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	





FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO.		

MODEL: E_US20_02 - 175+50.00
FILE NAME: pw://jdnet-pw.bentley.com:jdnet-pw-01/Documents/Projects/68096/Project Working/A_CADD\zWorking\JStarzyk\62L34-Ex-XSC.dgn

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

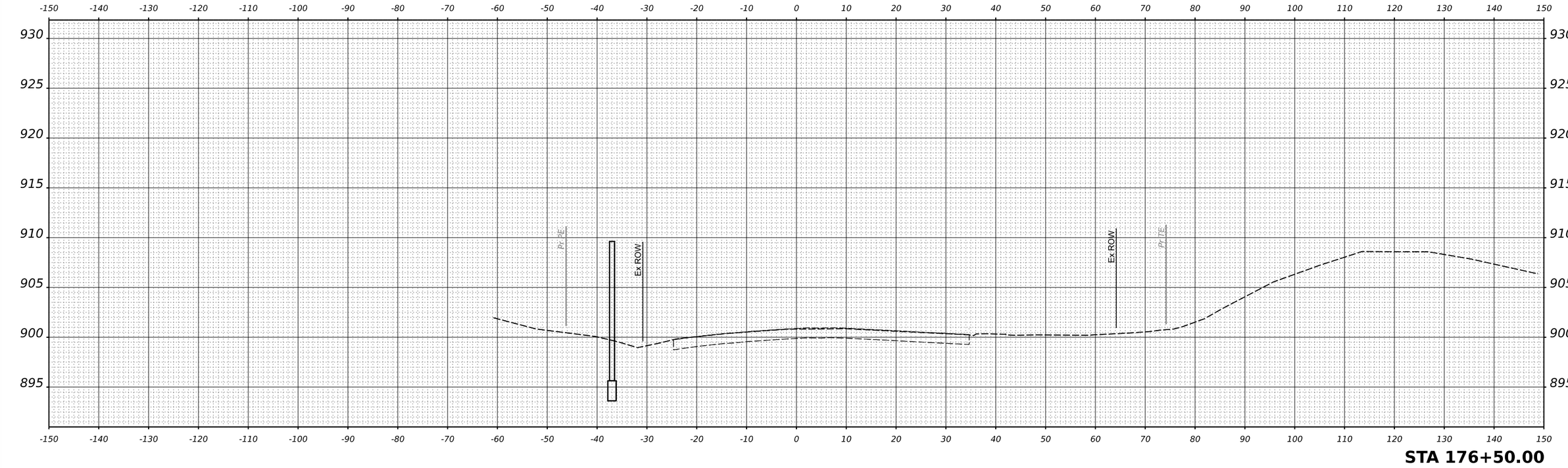
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



STA 176+50.00

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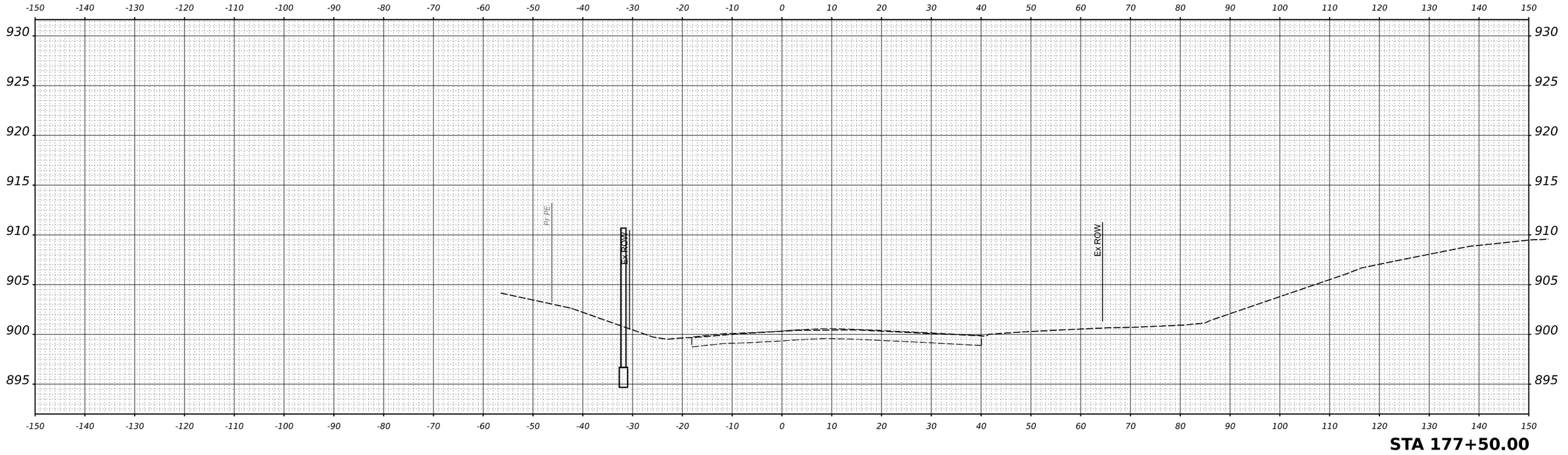
USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

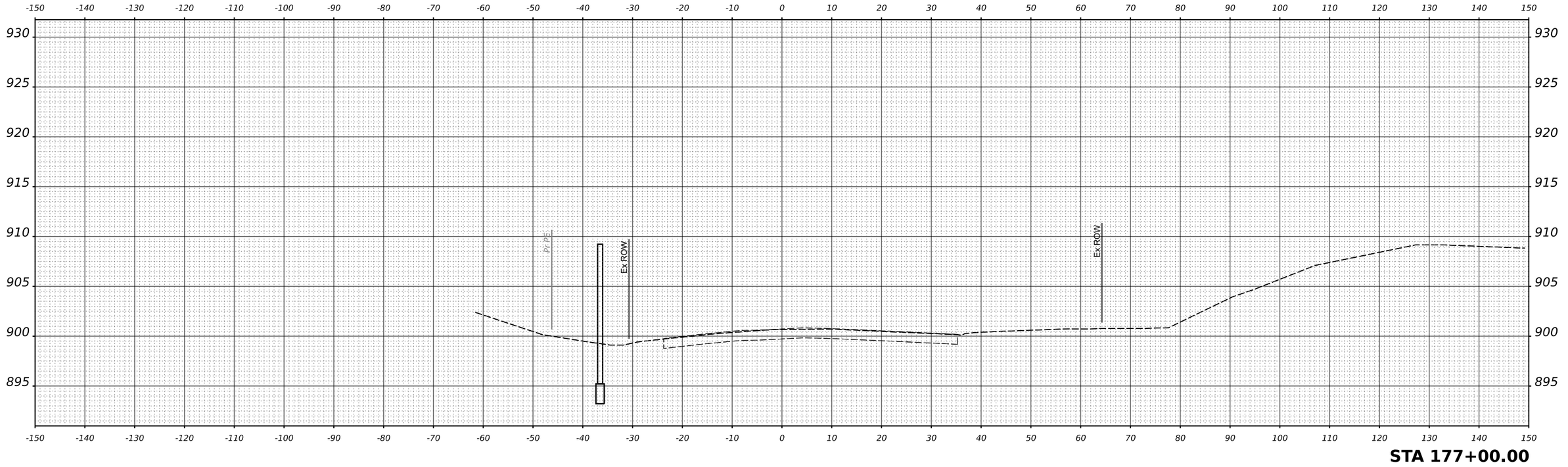
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		



STA 177+50.00



STA 177+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

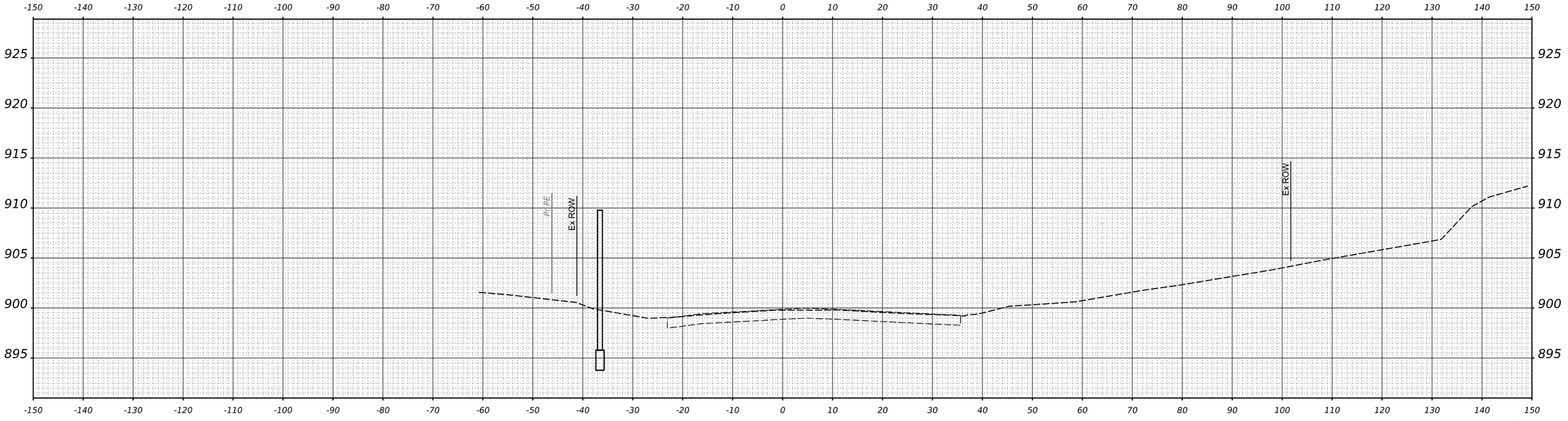
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

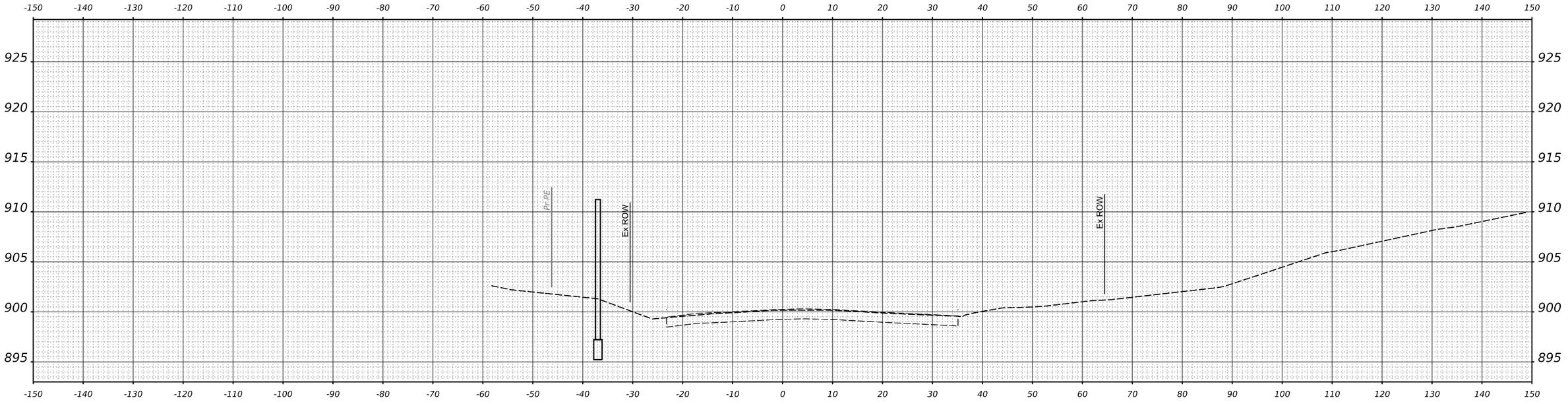
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

ORIGINAL SURVEY | FINAL SURVEY
NOTE BOOK
NO.
BY | DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

MODEL: E_US20_02 - 177+00.00
FILE NAME: pw://jdfnet-pw.bentley.com:jdfnet-pw-01/Documents/Projects/68096/Project Working/A_CADD/zWorking/jStarzyk/62L34-Ex-XSC.dgn



STA 178+50.00



STA 178+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

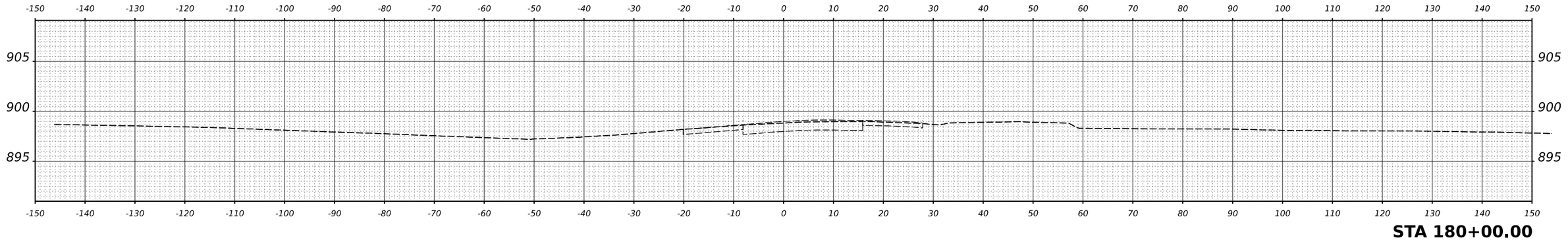
SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

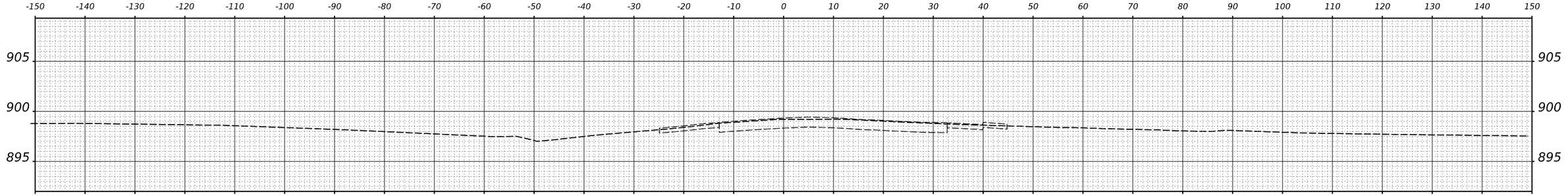
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

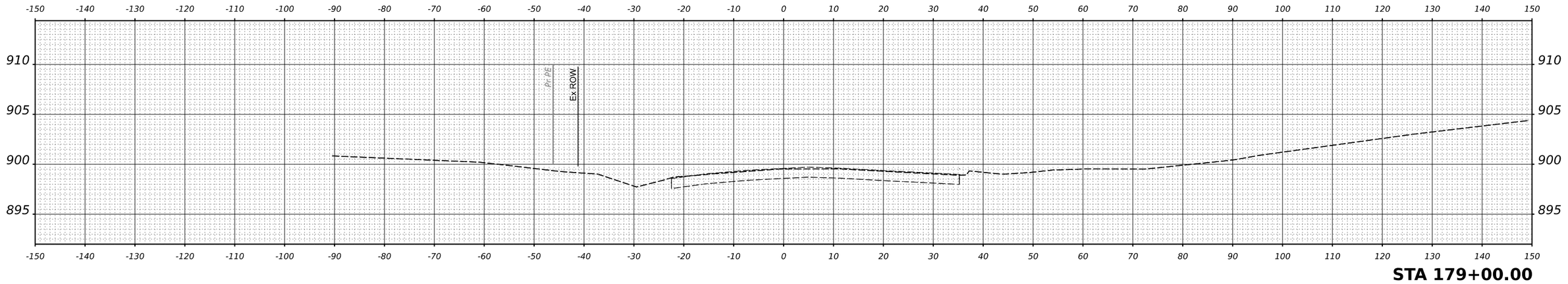
MODEL: E_US20_02 • 178+00.00
FILE NAME: pw://gfnet-pw.bentley.com:gfnet-pw-01/Documents/Projects/68096/Project Workings/A_CADD/zWorkingJStarzyk/62L34+ExXSC.dgn



STA 180+00.00



STA 179+50.00



STA 179+00.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

DATE | BY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED
FINAL SURVEY | NOTE BOOK | NO.

ORIGINAL SURVEY | NOTE BOOK | NO. | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

MODEL: E_US20_02 - 179+00.00
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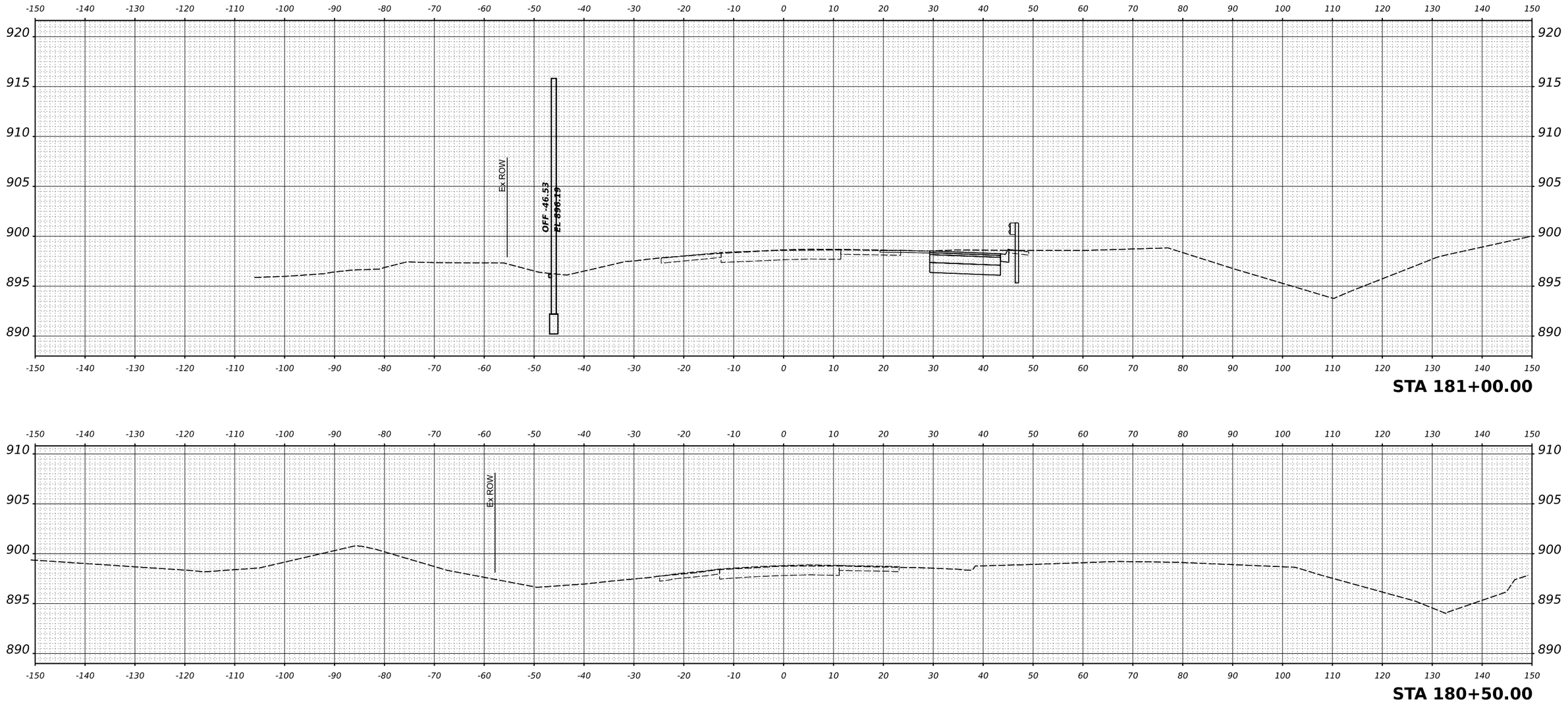

STA 181+00.00

STA 180+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

MODEL: E_US20_02 - 180+50.00
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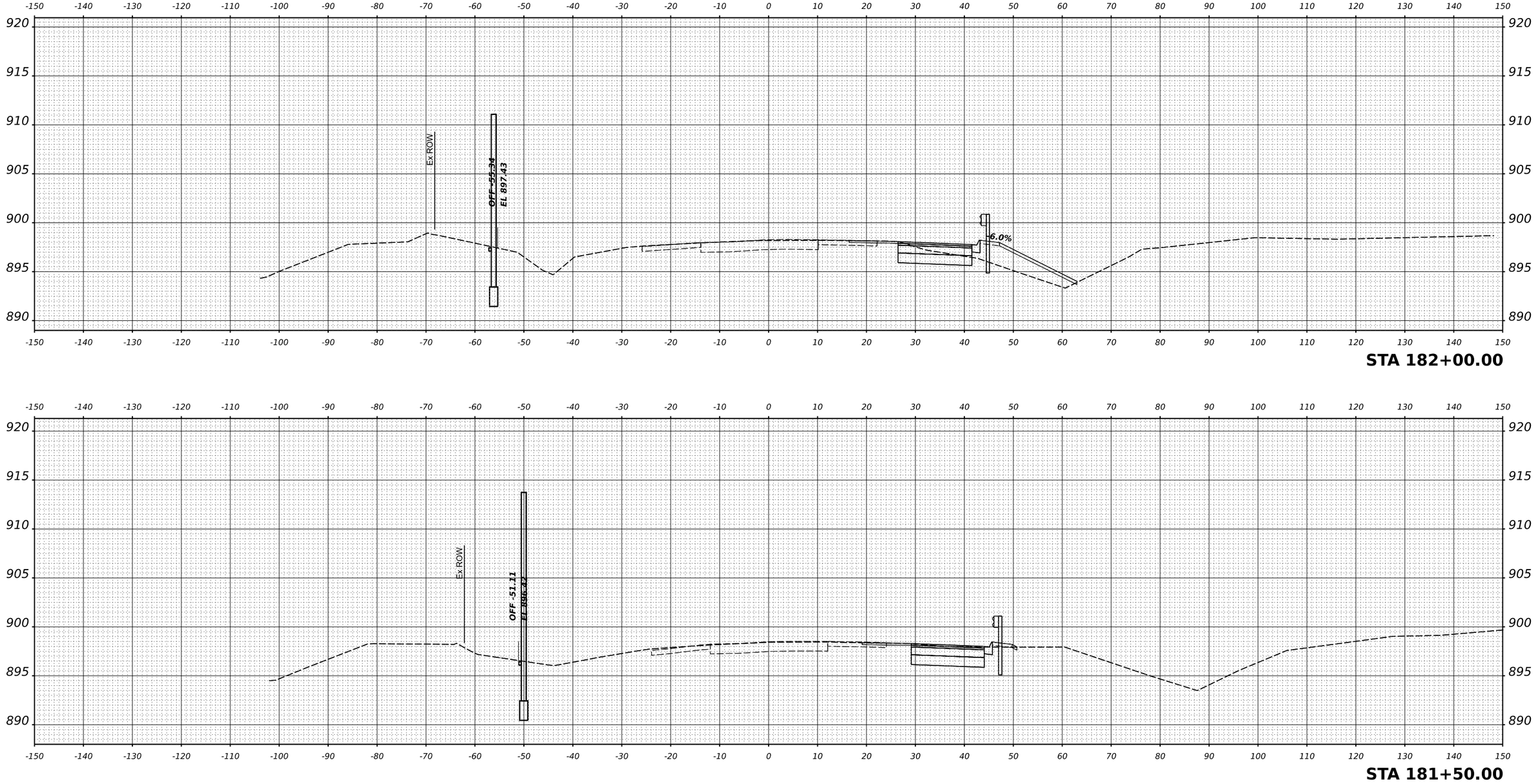

STA 182+00.00

STA 181+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 181+50.00
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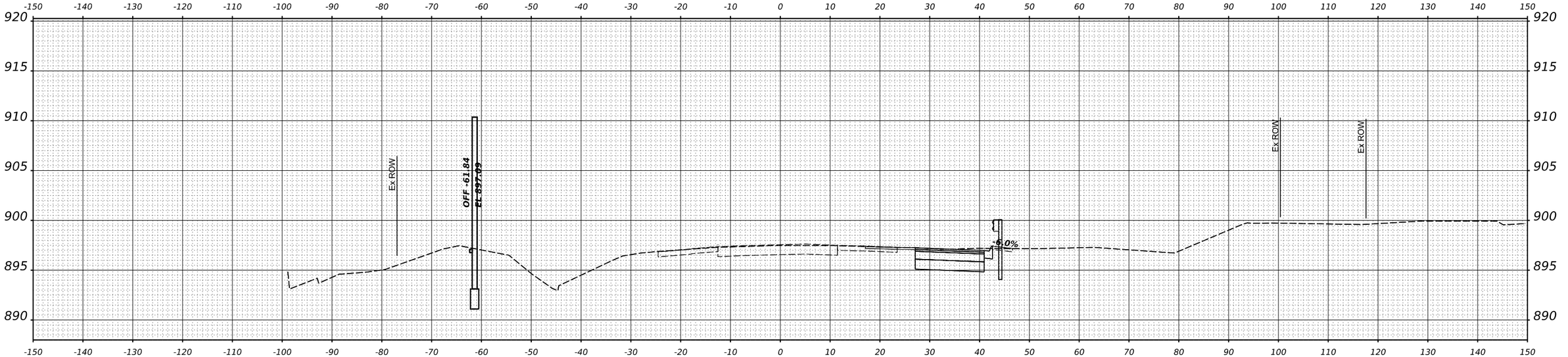
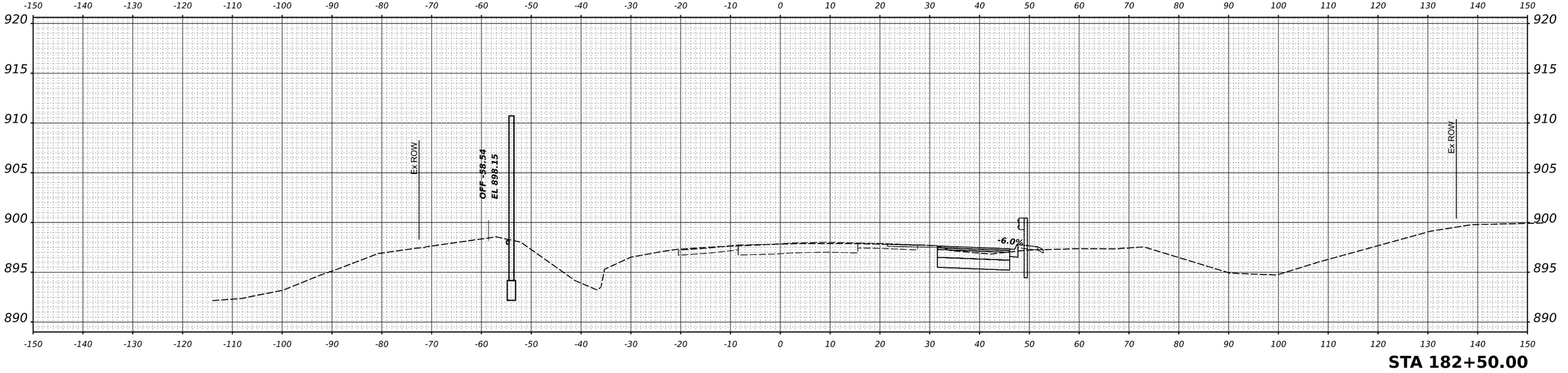


STA 183+00.00



STA 182+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

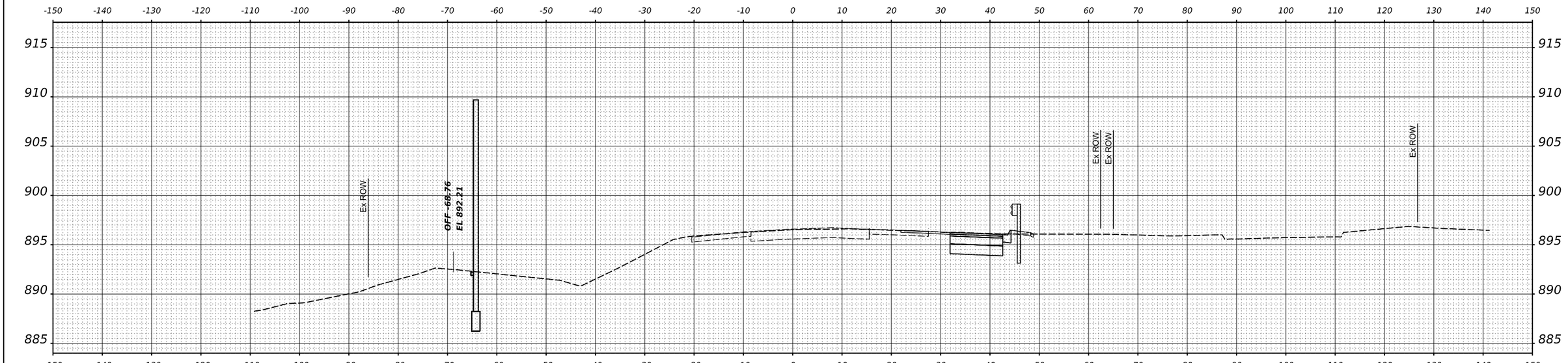
US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

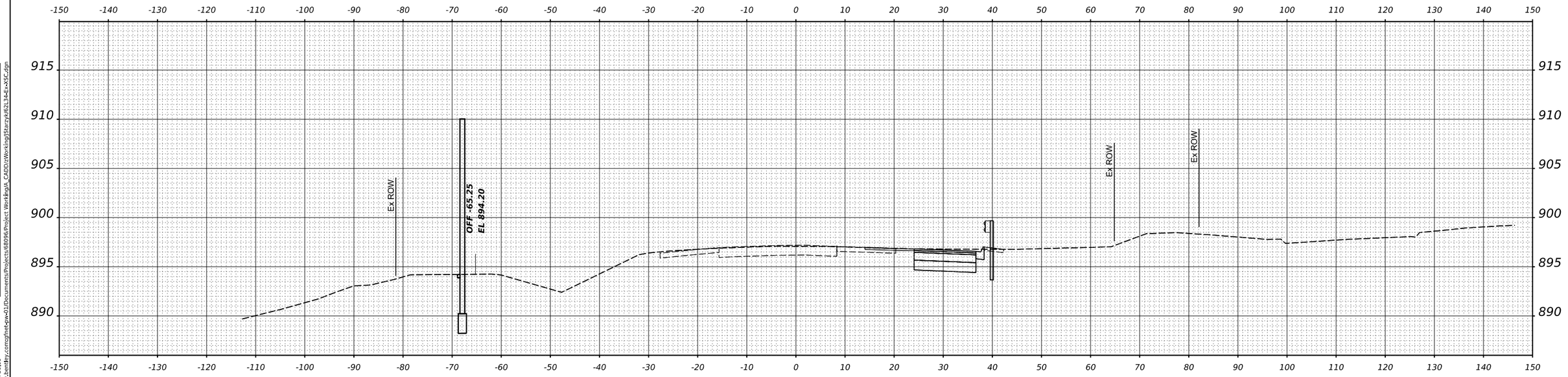
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY / ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: E_US20_02 - 182+50.00
FILE NAME: pw:jghnet-pw.bentley.com:jghnet-pw-01/Documents/Projects/68096/Project Working/A_CADD/zWorking/JStarzyk/62L34-Ex-xXSC.dgn



STA 184+00.00



STA 183+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

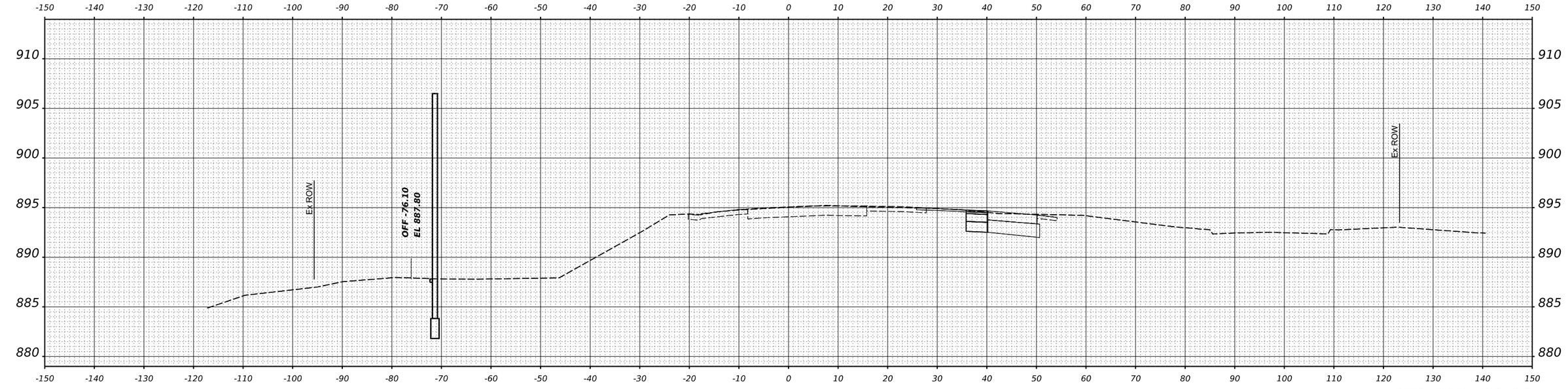
SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

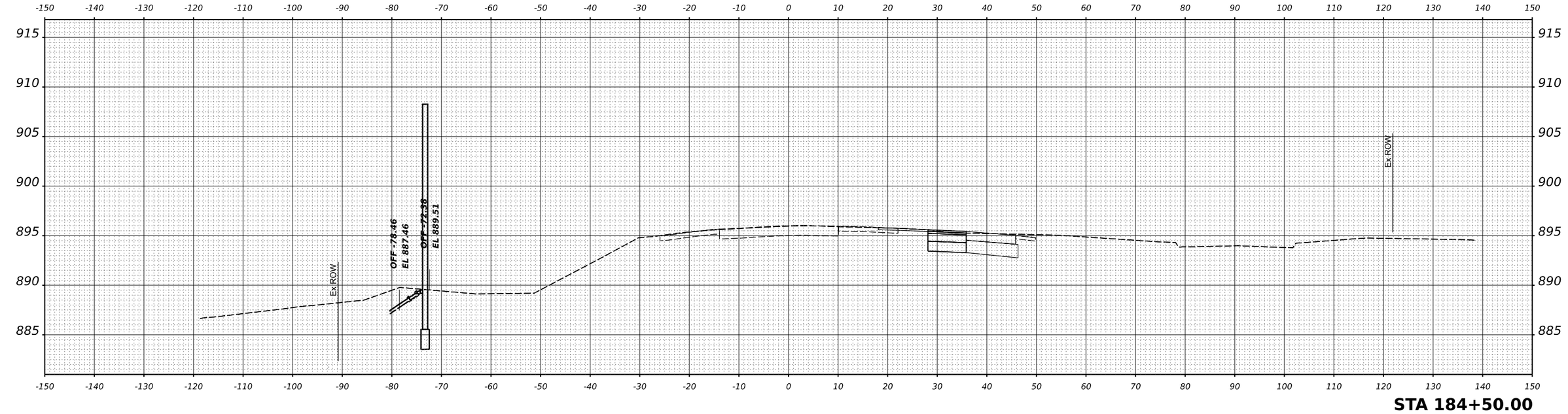
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 183+50.00
FILE NAME: pw://jfhnet-pw.bentley.com:jfhnet-pw-01/Documents/Projects/68096/Project Working/A_CADD/zWorking/JStarzyk/62L34-Ex-XSC.dgn



STA 185+00.00



STA 184+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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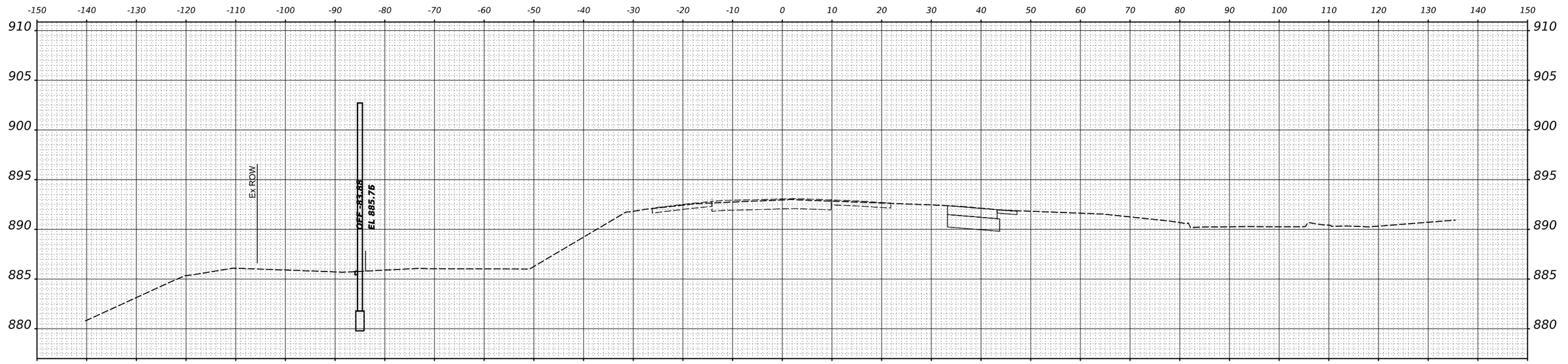

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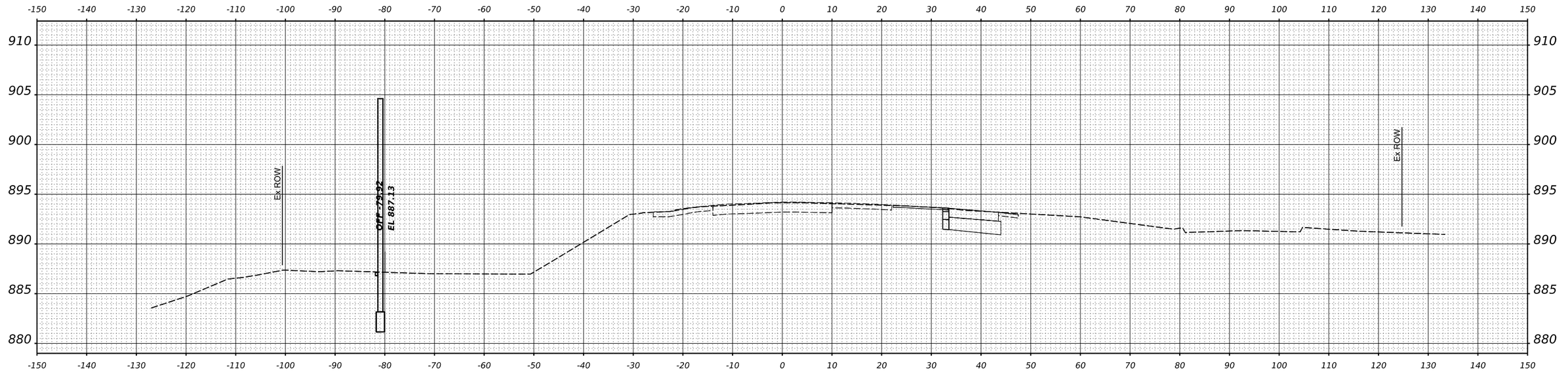

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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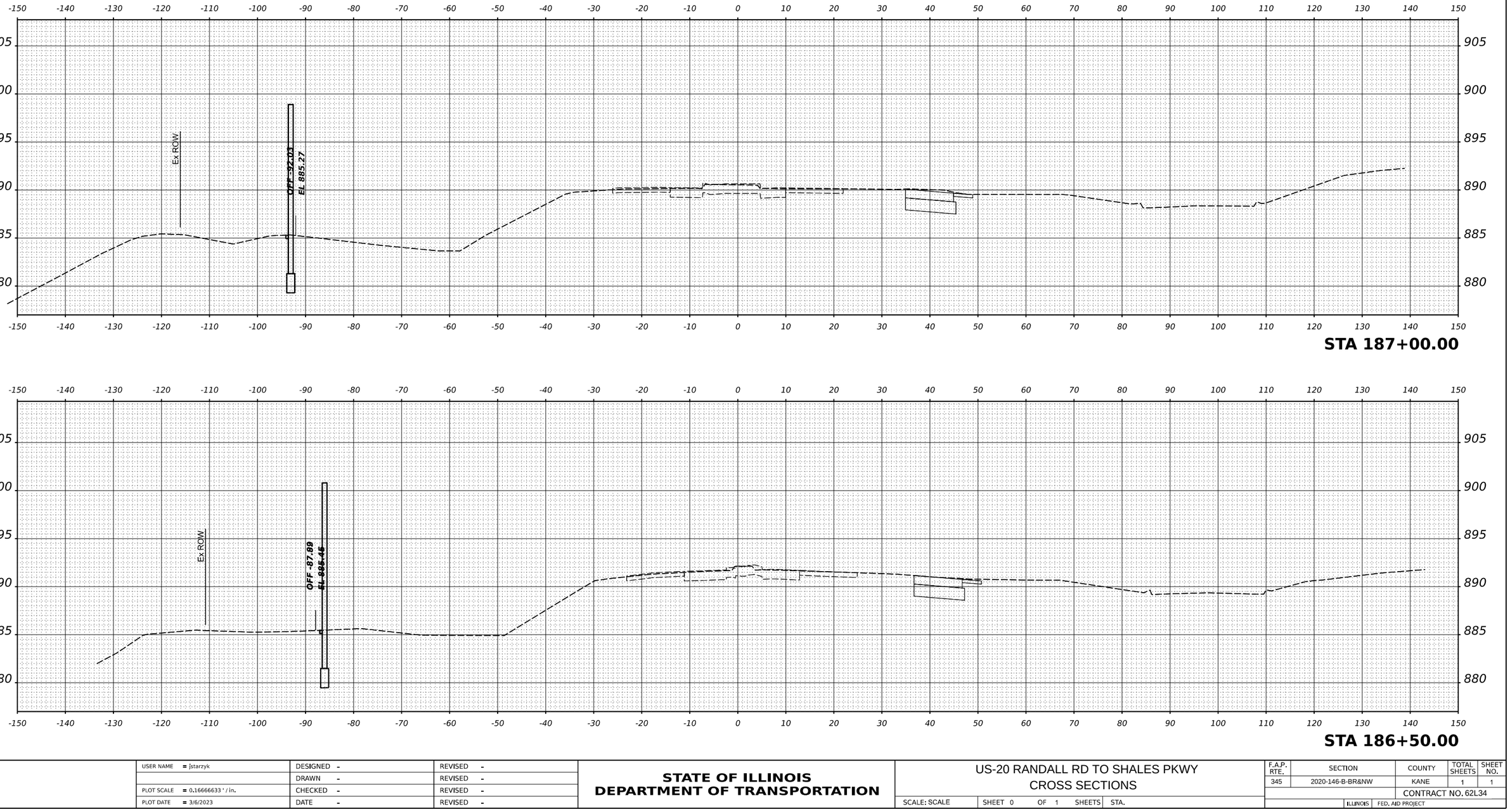

STA 187+00.00

STA 186+50.00

USER NAME = jstarzyk	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/6/2023	DATE -	REVISED -	

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

MODEL: E_US20_02 - 186+50.00
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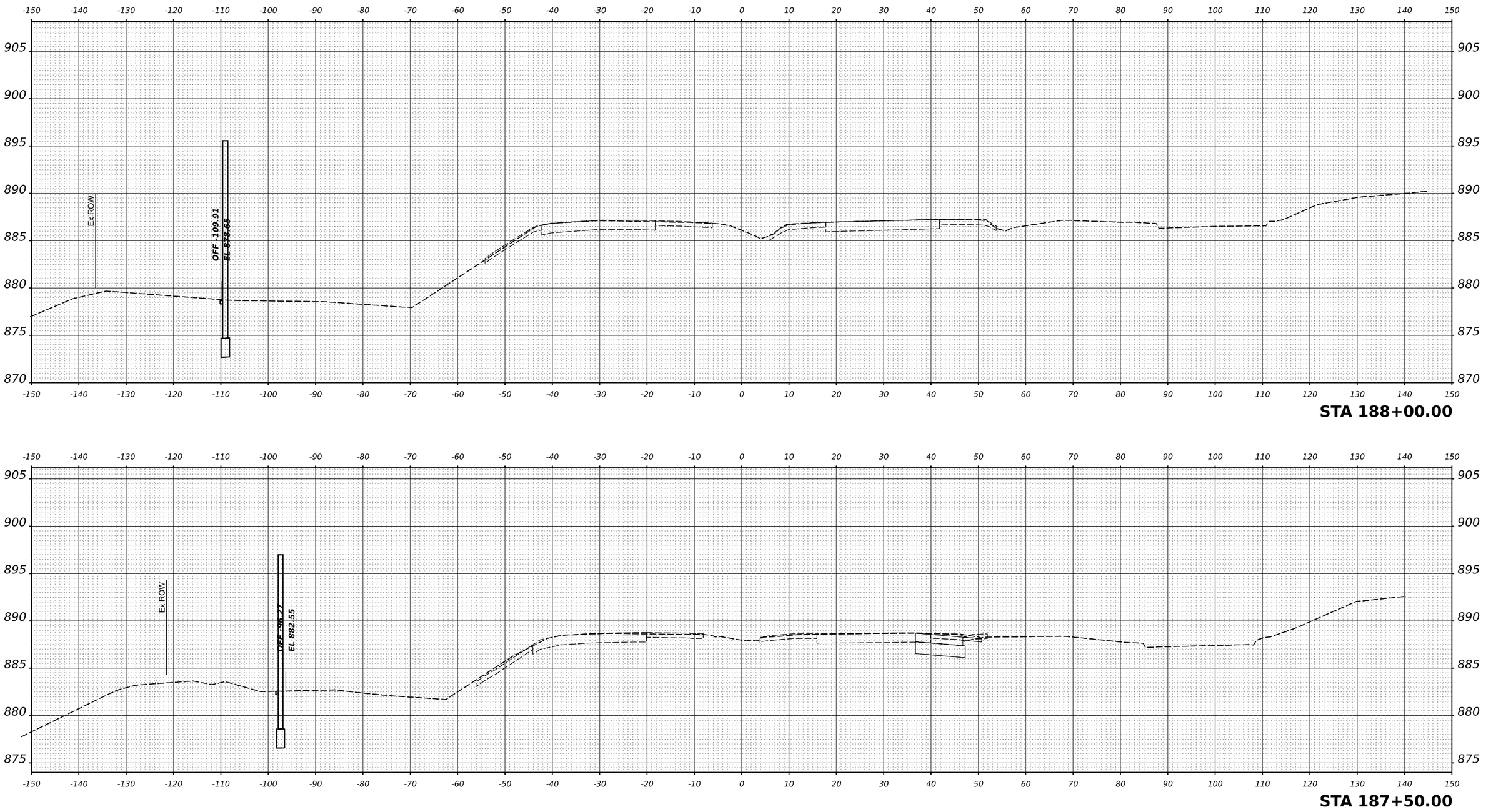

FINAL SURVEY	NOTE BOOK	NO.
ORIGINAL SURVEY	NOTE BOOK	NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

MODEL: E_US20_02 - 187+50.00
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PLOT DATE = 3/6/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
CROSS SECTIONS

SCALE: SCALE | SHEET 0 OF 1 SHEETS | STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	1	1
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	

APPENDIX E

APPENDIX E

SOIL BORING LOCATION PLANS AND PROFILES

ROADWAY GEOTECHNICAL REPORT

US ROUTE 20 IMPROVEMENTS
WEST OF RANDALL RD TO EAST OF SHALES PKWY
WEST LEG
STATION 142+82.7 TO STATION 187+69.0
IDOT CONTRACT D-91-453-20
KANE COUNTY, ILLINOIS

FOR
GANNETT FLEMING, INC.
180 NORTH STETSON AVENUE,
CHICAGO, IL 60601

Prepared by
WANG ENGINEERING, INC. A TERRACON COMPANY
1145 NORTH MAIN STREET
LOMBARD, IL 60148

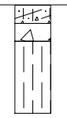
March 16, 2023
WANG PROJECT 121-03-01/KE225009

LEGEND:

Roadway Boring

SGB-01 — Borehole Number
461.97 ft, — Elevation
92+54.28, 68.73 LT _____ — Station, offset

Borehole Lithology _____



N--N-value, (blw/12 in)
Qu--UC Strength, (tsf)
MC--Moisture Content, (%)

Water Level Reading at time of drilling.

Water Level Reading 24-hr after drilling or at end of drilling

Lithology Graphics

- Topsoil
- USCS High Plasticity Organic silt or clay
- IDH Silty Clay, Silty Clay Loam
- IDH Loam
- IDH Silt, Silty Loam
- IDH Clay Loam
- IDH Sand, Sandy Loam
- IDH Clay
- Coarse Sand
- Pavement
- Gravelly sand, sandy gravel
- Crushed stone

LEGEND

(A) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"
- POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 2"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
- HOT-MIX ASPHALT BASE COURSE, 9 1/2"

(B) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 1/4"
- HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
- HOT-MIX ASPHALT BASE COURSE, 8 1/4"

(C) HOT-MIX ASPHALT SHOULDERS, 13 3/4"

(D) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
- HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 2"
- HOT-MIX ASPHALT BASE COURSE, 7 3/4"

(E) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 3/4"
- POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70 1 3/4"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- HOT-MIX ASPHALT BASE COURSE, 8 1/4"

(F) HOT-MIX ASPHALT SHOULDERS, 10 3/4"

(G) 2 1/2" RESURFACING HOT-MIX ASPHALT
- POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70, 1 3/4"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"

(H) 2 1/2" RESURFACING HOT-MIX ASPHALT
- POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80, 1 3/4"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"

(I) HOT-MIX ASPHALT SHOULDERS, 10 1/4"

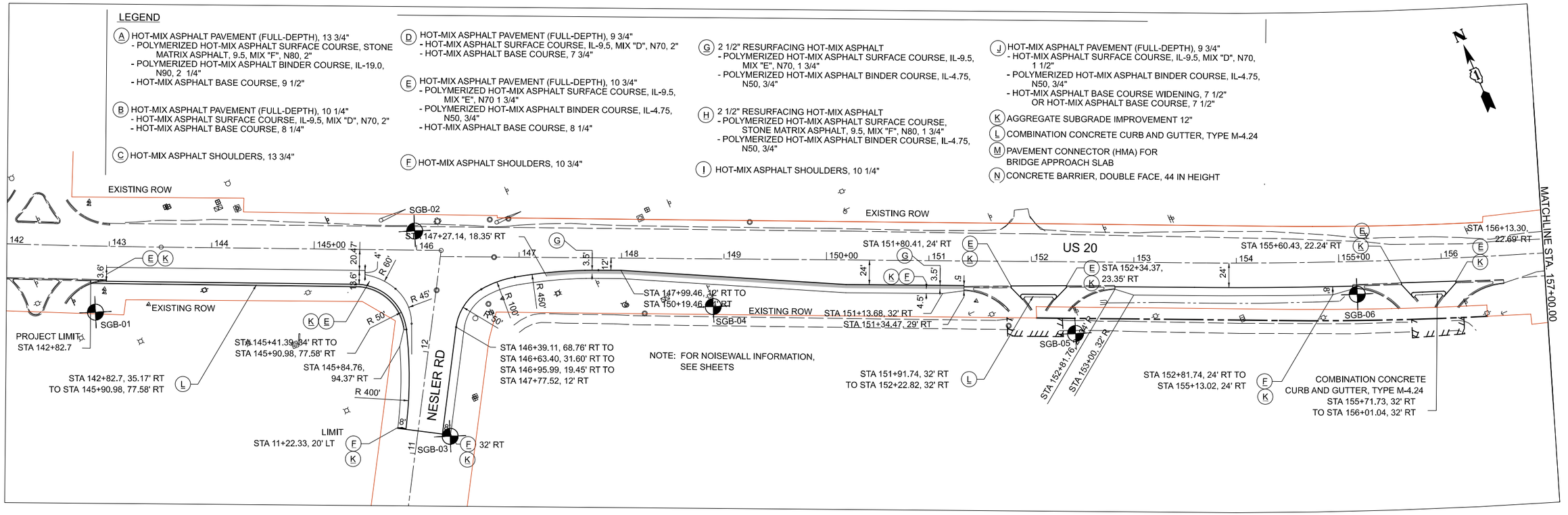
(J) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9 3/4"
- HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70, 1 1/2"
- POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, 3/4"
- HOT-MIX ASPHALT BASE COURSE WIDENING, 7 1/2" OR HOT-MIX ASPHALT BASE COURSE, 7 1/2"

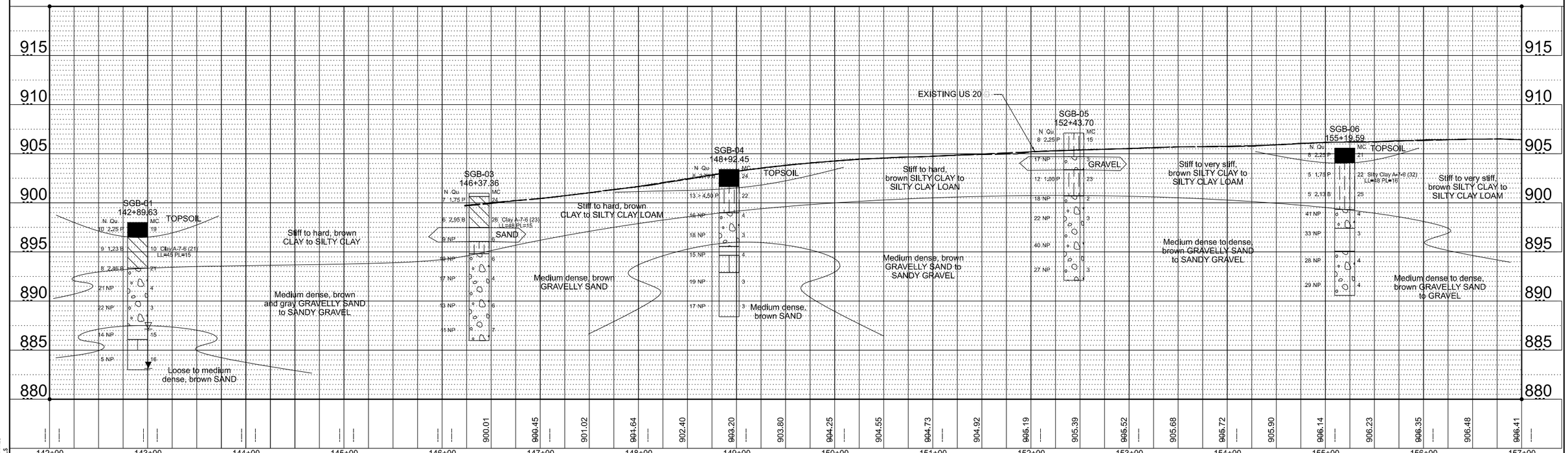
(K) AGGREGATE SUBGRADE IMPROVEMENT 12"

(L) COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24

(M) PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB

(N) CONCRETE BARRIER, DOUBLE FACE, 44 IN HEIGHT





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	DRAWN - ____	REVISED - ____
PLOT SCALE = $SCALE$	CHECKED - ____	REVISED - ____
PLOT DATE = $DATE$	DATE - $DATE	REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
ROADWAY PLAN AND PROFILE

SCALE: H:1"=50' V:1"=5' | SHEET 1 OF __ SHEETS | STA. ____ | TO STA. ____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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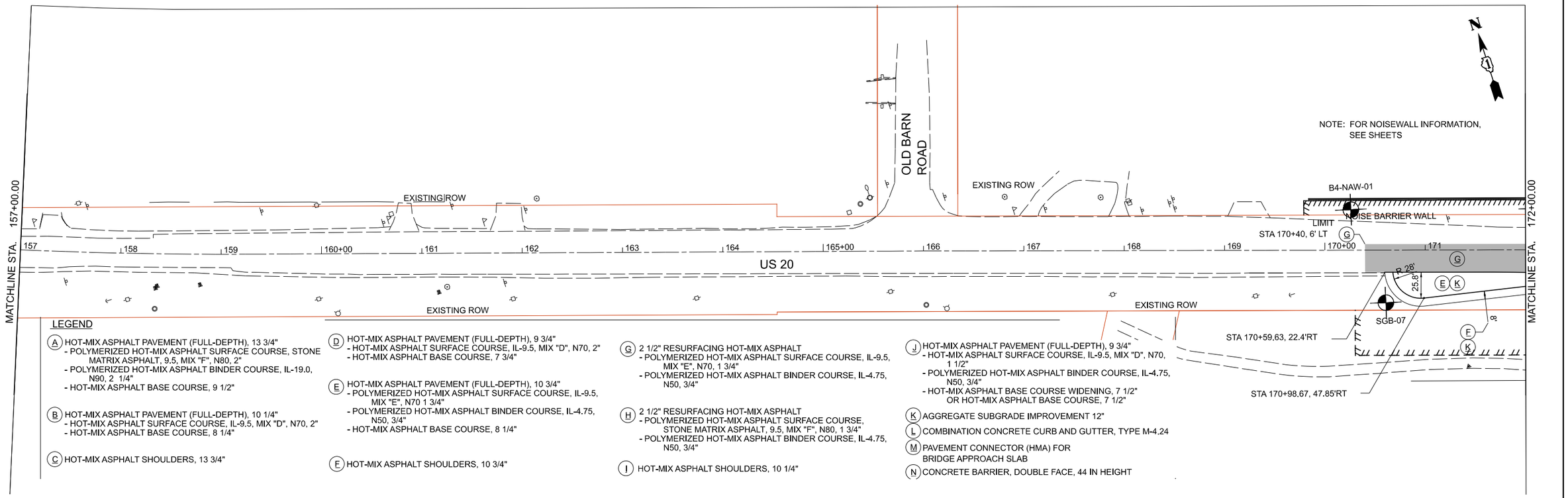
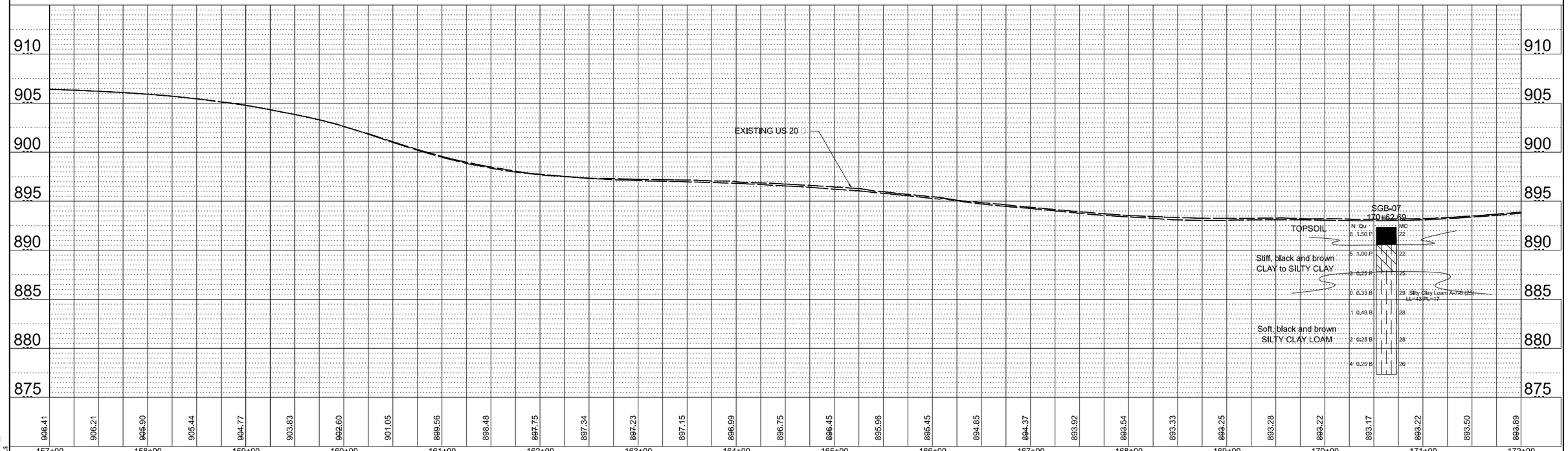
		CONTRACT NO. 62L34		
		ILLINOIS	FED. AID PROJECT	





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GANNETT FLEMING

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	DRAWN - ----	REVISED - ----
PLOT SCALE = $SCALE$	CHECKED - ----	REVISED - ----
PLOT DATE = $DATE$	DATE - $DATE	REVISED - ----

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
ROADWAY PLAN AND PROFILE

SCALE: H:1"=50' V: 1"=5' | SHEET 2 OF __ SHEETS | STA. ____ | TO STA. ____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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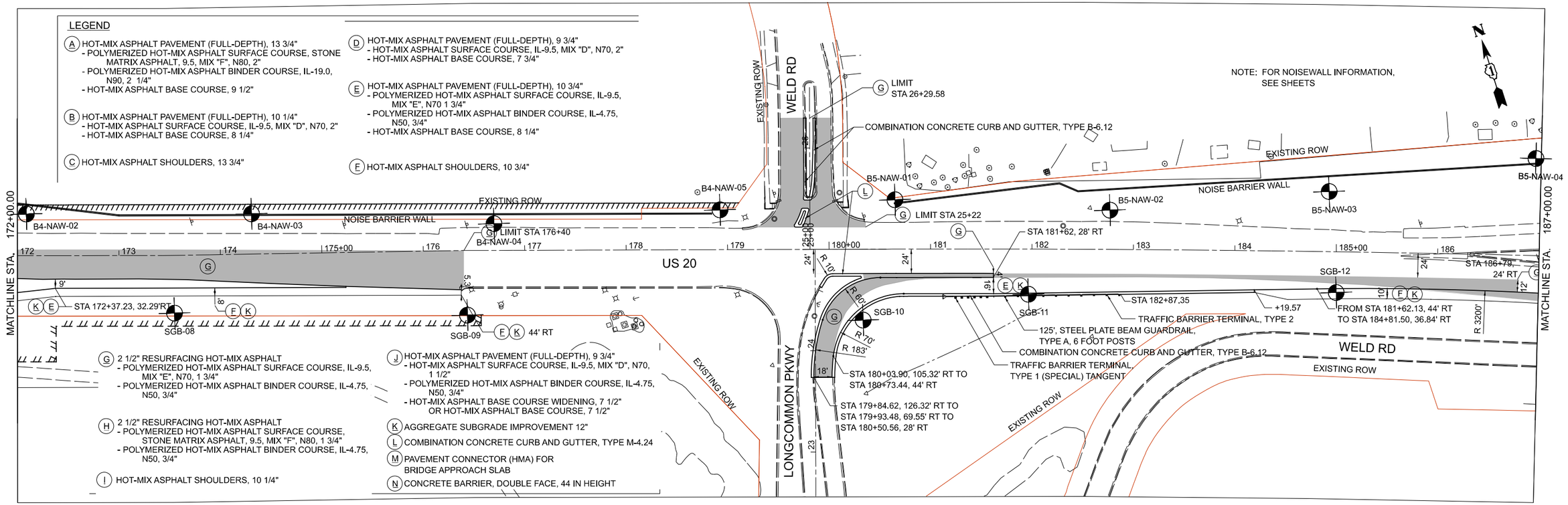
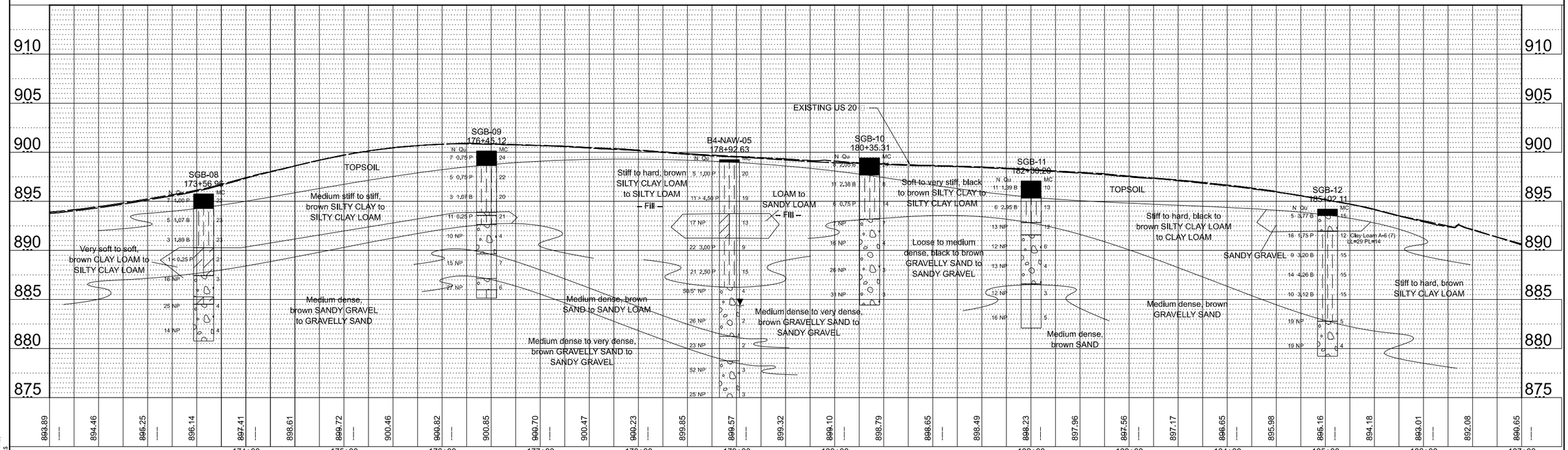
		CONTRACT NO. 62L34		
	ILLINOIS	FED. AID PROJECT		





MODEL: $MODELNAME$
FILE NAME: $FILEL$

GANNETT FLEMING

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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE - $DATE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
ROADWAY PLAN AND PROFILE

SCALE: H:1"=50' V:1"=5' | SHEET 3 OF _ SHEETS | STA. ____ | TO STA. ____

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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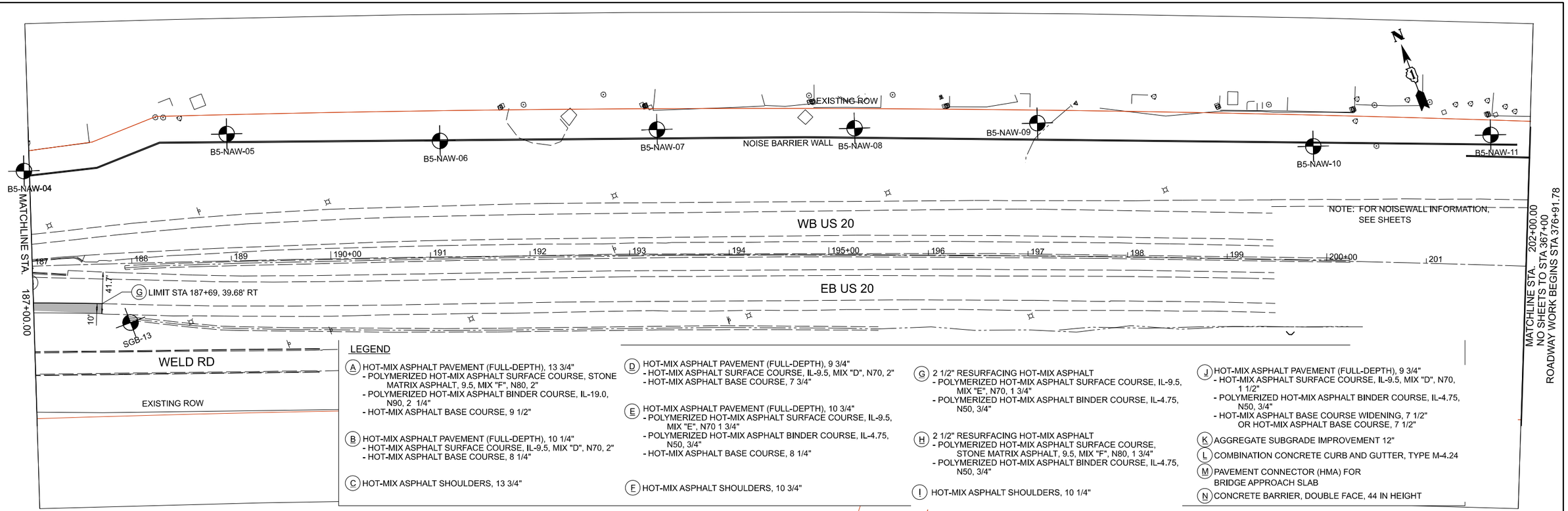
CONTRACT NO. 62L34
ILLINOIS | FED. AID PROJECT



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FILE NAME: $FILE$

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PLOT SCALE = $SCALE$	CHECKED - ____	REVISED - ____
PLOT DATE = $DATE$	DATE - $DATE	REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-20 RANDALL RD TO SHALES PKWY
ROADWAY PLAN AND PROFILE

SCALE: H:1"=50' V:1"=5' | SHEET 4 OF _ SHEETS | STA. ____ | TO STA. ____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2020-146-B-BR&NW	KANE	$TOT	$PP04

CONTRACT NO. 62L34

ILLINOIS | FED. AID PROJECT