



# CITY OF HILLIARD NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS (CIP T-133)

2018  
P-919

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**BENCH MARKS  
(BASED ON 1988 DATUM)**

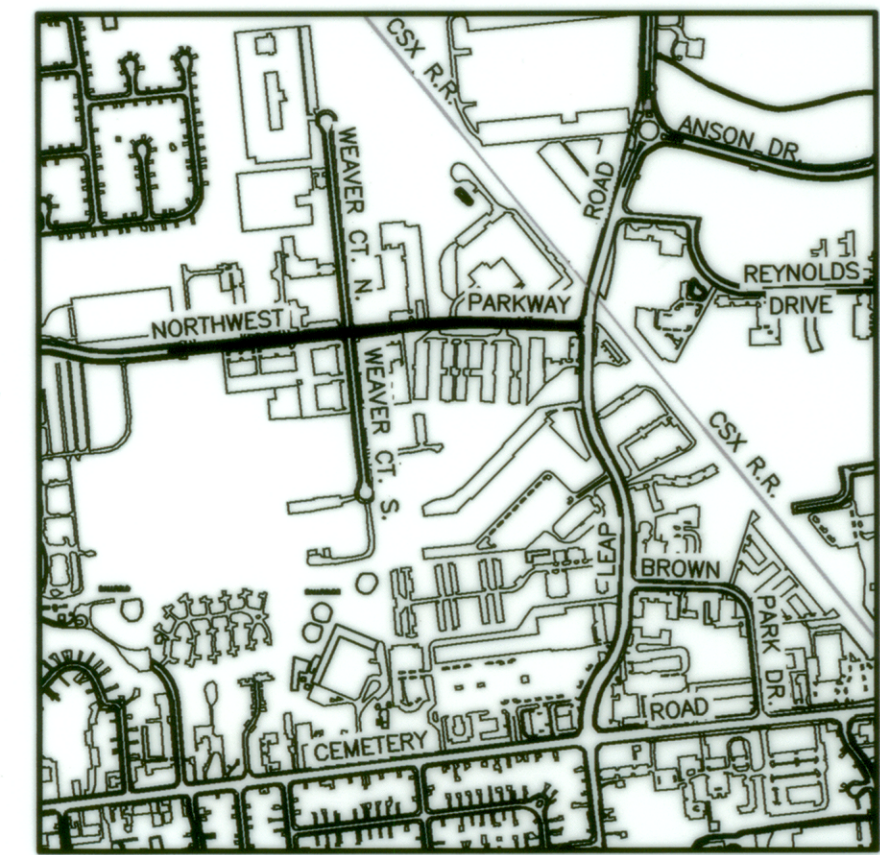
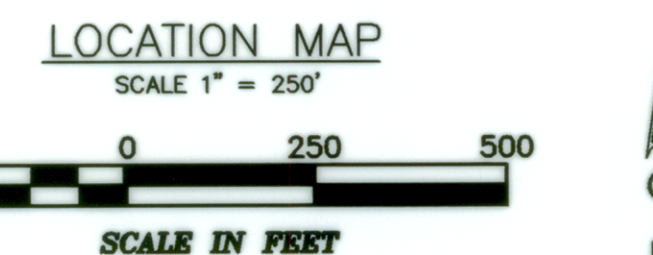
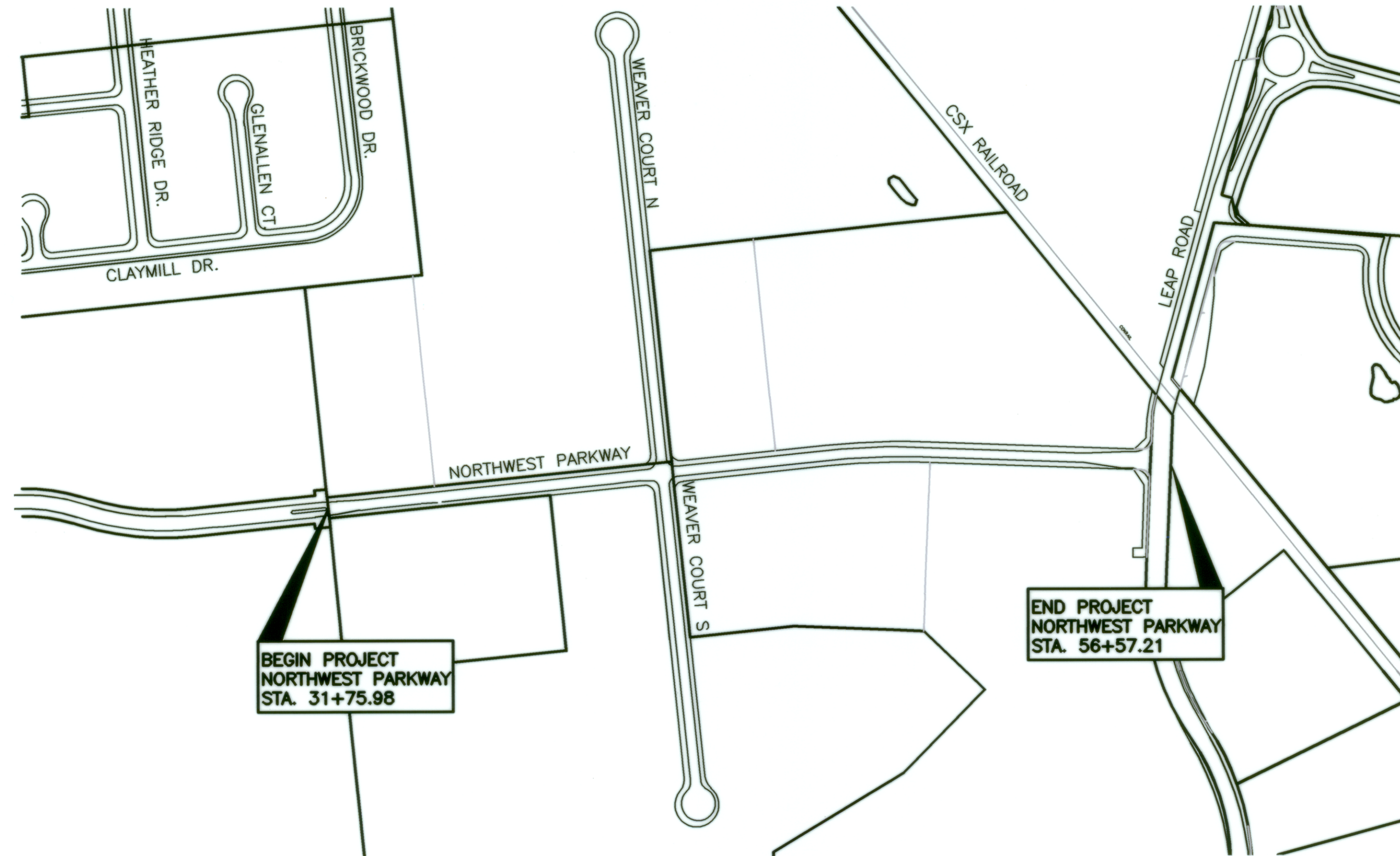
ALL BENCH MARKS SHOWN ARE BASED ON THE STATE PLANE, OHIO SOUTH (SPOS ZONE 3402) COORDINATE SYSTEM, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) WITH THE NSRS 2007 ADJUSTMENT. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

**SOURCE BENCHMARK**

FCGS 0007 RESET ALUMINUM CAP IN PVC ENCASED CONCRETE MONUMENT, AT AN ANGLE POINT IN THE CENTERLINE OF RIGHT-OF-WAY ON LEAP ROAD, 0.52 MILES SOUTH OF DAVIDSON ROAD, ACCESS THROUGH FRANKLIN COUNTY ROAD MONUMENT BOX. ORIGINAL MONUMENT FCGS 0007 REPLACED A FOUND RAILROAD SPIKE 4 INCHES DEEP. ELEV. = 902.955

**PROJECT BENCHMARKS**

- TBM #1 NORTHEAST BOLT ON EXISTING FIRE HYDRANT AT ARROW. 4700 NORTHWEST PARKWAY. APPROXIMATE STA. 45+64.31, 17.89' LT.  
N 743,132.13  
E 1,788,228.06  
ELEV. = 910.10
- TBM #2 WEST BOLT ON EXISTING FIRE HYDRANT. 4601 NORTHWEST PARKWAY. APPROXIMATE STA. 51+62.03, 17.97' LT.  
N 743,142.96  
E 1,788,827.29  
ELEV. = 907.94
- TBM #3 SOUTHWEST CORNER OF EXISTING CONCRETE BASE FOR LIGHT POLE AT NORTHWEST CORNER OF LEAP ROAD AND NORTHWEST PARKWAY. APPROXIMATE STA. 55+43.20, 27.46' LT.  
N 743,137.74  
E 1,789,208.54  
ELEV. = 906.65



**VICINITY MAP**  
SCALE: 1" = 1000'  
PORTIONS TO BE IMPROVED

**PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF ADDING MULTI-USE PATHS ON THE NORTH AND SOUTH SIDES OF NORTHWEST PARKWAY, AS WELL AS INSTALLATION OF STREET LIGHTING AND COMMUNICATION DUCT BANK ON THE NORTH SIDE OF THE STREET, BETWEEN THE FRANKLIN COUNTY FAIRGROUNDS AND LEAP ROAD. PRIVATE DRIVEWAY RECONSTRUCTION AND CURB RAMPS ARE INCLUDED AS PART OF THIS PLAN. MAINTENANCE WORK, INCLUDING STREET RESURFACING AND CURB REPAIR, WILL BE CONSTRUCTED CONCURRENTLY BUT IS NOT INCLUDED AS PART OF THIS PLAN.

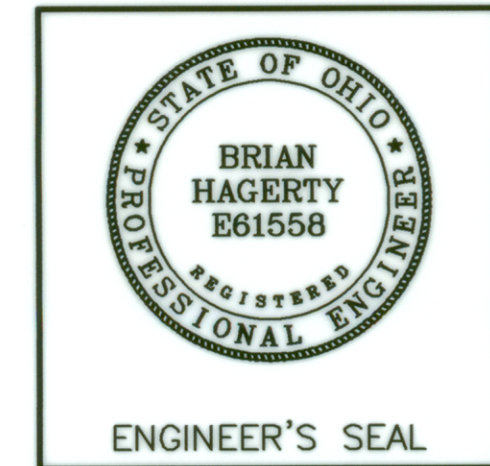
**EARTH DISTURBED AREA**

PROJECT EARTH DISTURBED AREA: 2.13 AC.  
PRE-CONSTRUCTION IMPERVIOUS AREA: 0.29 AC.  
POST-CONSTRUCTION IMPERVIOUS AREA: 1.07 AC.

**INDEX OF SHEETS**

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PREPARED BY:



*Brian M. Hagerty*  
REGISTERED ENGINEER      4-12-18  
DATE

REVISIONS					
REV NO.	DATE OF REV.	SHEETS REVISED	DESCRIPTION OF REVISION	APPROVED BY	DATE OF APPROVAL

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECS.	
ODOT	ODOT	CITY OF COLUMBUS	CITY OF HILLIARD	CITY OF COLUMBUS	
			BP-1 7-29-16		
	MT-97.10 7-18-14	1441 12-1-14		1000 11-1-17	
	MT-97.11 1-20-17		CG-1 -	1604 2-2-18	
	MT-105.10 7-19-13		CR-1 3-6-15		
	MT-110.10 7-19-13		DD-1 -		
	TC-41.20 10-18-13		MHA-1 -		
			SL-1 9-1-15		
			SL-2 9-7-09		
			SL-3 9-1-15		
			SL-4 9-1-15		
			SL-5 9-1-15		
			SL-6 9-1-15		
			SL-10 9-1-15		
			SL-11 9-1-15		
			SL-17 9-1-15		

SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE AND GENERAL LOCATION OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS.

REVIEWED BY:

*Alger R. Seider* 4/30/18  
DIRECTOR OF PUBLIC SERVICE, CITY OF HILLIARD      DATE

*Clark A. Rausch* 4/30/2018  
CITY ENGINEER, CITY OF HILLIARD      DATE

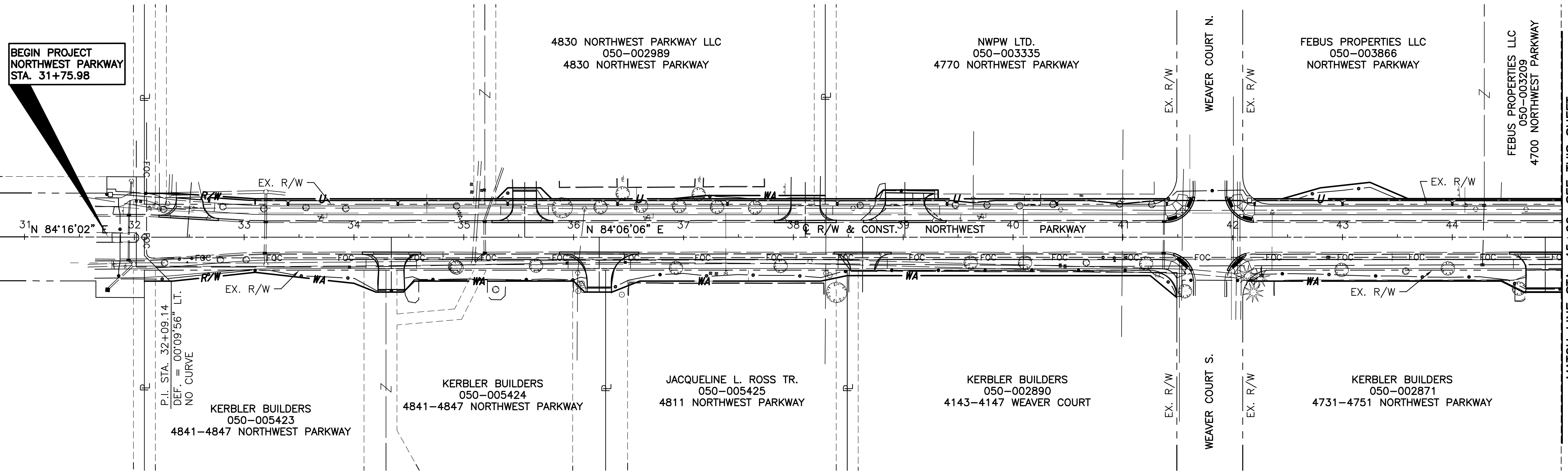
*C. J. McManis* 4/30/2018  
FIRE CHIEF, NORWICH TOWNSHIP      DATE

FEDERAL PROJECT NO.      CONSTRUCTION PROJECT NO.      RAILROAD INVOLVEMENT      NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS      1/44      P-919

SHKOLNIK, TODD U:\17360874\Task 15 - Northwest Parkway MUP Study\design\plan\_set\17360874NW\_101.dwg TITLE SHEET Last Saved: Apr. 12, 2018 11:55 AM



SHKOLNIK\_TODD\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874\NW\_schematic\_plan\Last\_Saved: Mar. 20, 2018, 4:45 PM Plotted: May 03, 2018, 4:43 PM



**BEGIN PROJECT  
NORTHWEST PARKWAY  
STA. 31+75.98**

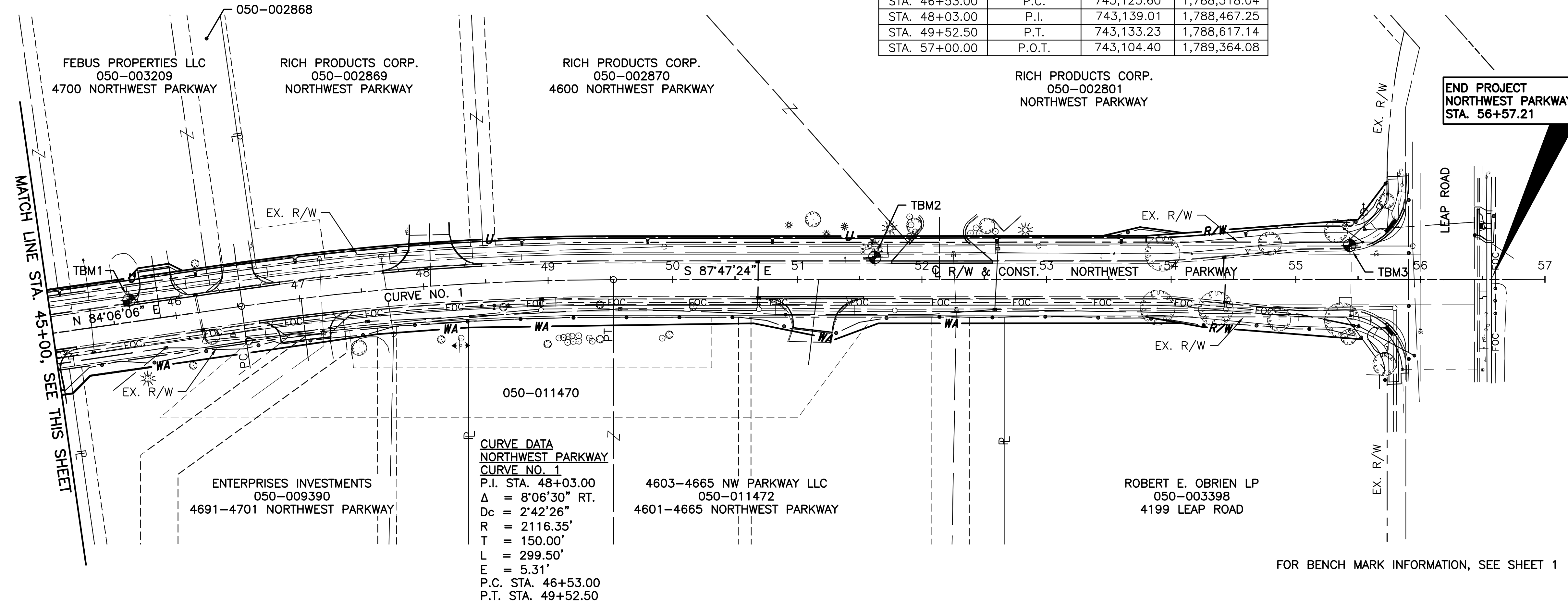
MATCH LINE STA. 45+00, SEE THIS SHEET



THE HORIZONTAL COORDINATES EXPRESSED HEREIN ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NORTH AMERICAN DATUM 1983 (2007). VERTICAL ELEVATIONS ARE FROM THE NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 1988)

**REFERENCE POINTS**

STATION	DESCRIPTION	NORTHING	EASTING
NORTHWEST PKWY			
STA. 31+00.00	P.O.T.	742,964.32	1,786,773.23
STA. 32+09.14	P.I.	742,975.22	1,786,881.83
STA. 41+50.00	P.O.T.	743,071.91	1,787,817.71
STA. 46+53.00	P.C.	743,123.60	1,788,318.04
STA. 48+03.00	P.I.	743,139.01	1,788,467.25
STA. 49+52.50	P.T.	743,133.23	1,788,617.14
STA. 57+00.00	P.O.T.	743,104.40	1,789,364.08



MATCH LINE STA. 45+00, SEE THIS SHEET

**END PROJECT  
NORTHWEST PARKWAY  
STA. 56+57.21**



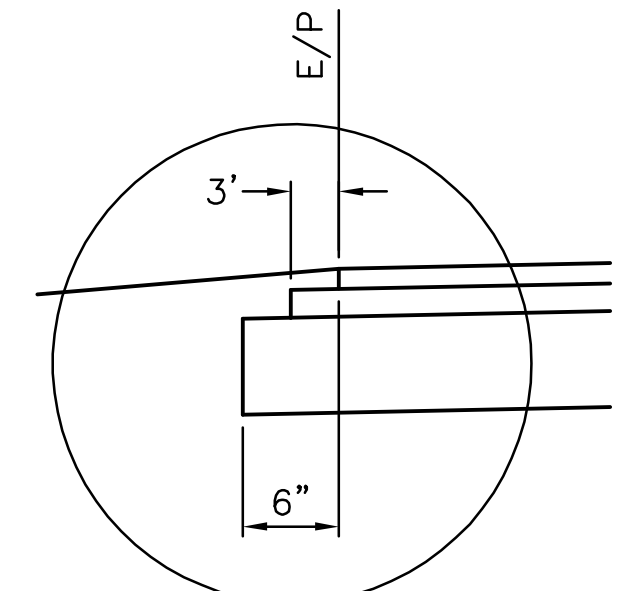
**CURVE DATA  
NORTHWEST PARKWAY  
CURVE NO. 1**  
 P.I. STA. 48+03.00  
 $\Delta = 8^{\circ}06'30''$  RT.  
 $D_c = 2^{\circ}42'26''$   
 $R = 2116.35'$   
 $T = 150.00'$   
 $L = 299.50'$   
 $E = 5.31'$   
 P.C. STA. 46+53.00  
 P.T. STA. 49+52.50

FOR BENCH MARK INFORMATION, SEE SHEET 1

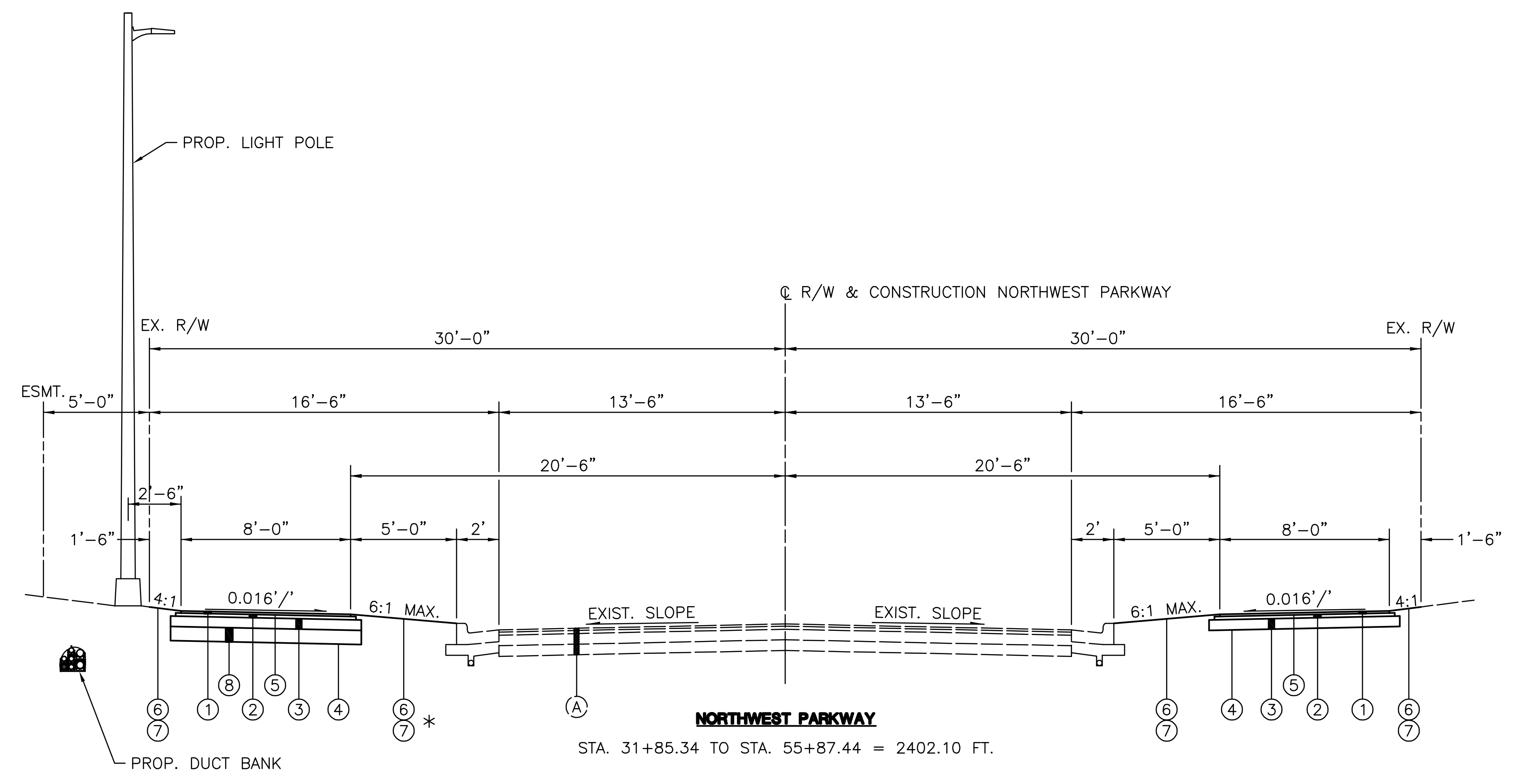
SCHEMATIC PLAN

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

SHKOLNIK\_TODD I:\17369874\Task 15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874\NW\_1601.dwg TYPICAL SECTIONS Last Saved: Apr 12, 2018 11:36 AM Plotted: May 03, 2018 4:43 PM



**TYPICAL STEP OUT DETAIL  
(CITY OF HILLIARD BP-1)**



**LEGEND**

- ① ITEM 448 - 1 1/2" ASPHALT CONCRETE, SURFACE COURSE TYPE 1, PG64-22, MEDIUM TRAFFIC
- ② ITEM 448 - 2 1/2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22, MEDIUM TRAFFIC
- ③ ITEM 304 - 6" AGGREGATE BASE
- ④ ITEM 204 - SUBGRADE COMPACTION
- ⑤ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.06 GAL/SY)
- ⑥ ITEM 659 - SEEDING AND MULCHING, AS PER PLAN
- ⑦ ITEM 653 - 4" TOPSOIL FURNISHED AND PLACED, AS PER PLAN
- ⑧ ITEM SPECIAL - 4" AGGREGATE BASE (#57 STONE) TO MATCH LIMITS OF AMENDED SOIL FILTRATION STRIP
- (A) EXISTING PAVEMENT - STREET RESURFACING/REHABILITATION & CURB REPAIR AS PER CONTRACT DOCUMENTS. SEE BID SCHEDULE AND CONTRACT DOCUMENTS FOR SPECIFICATIONS, PAY ITEMS AND ESTIMATED QUANTITIES.

\* - REPLACE WITH AMENDED SOIL FILTRATION STRIP WITHIN THE FOLLOWING LIMITS:  
 STA. 42+18.10 TO STA. 45+70.77  
 STA. 46+69.81 TO STA. 47+81.97  
 STA. 48+33.27 TO STA. 51+80.49  
 STA. 52+50.78 TO STA. 55+71.88

SHKOLNIK, TODD D:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874\NW\_gp.dwg GENERAL NOTES Last Saved: Apr 12, 2018 11:39 AM Plotted: May 03, 2018 4:43 PM

GENERAL NOTES

- THE REGULATIONS AND CONSTRUCTION STANDARDS OF THE CITY OF HILLIARD, TOGETHER WITH THE 2012 CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) OF THE CITY OF COLUMBUS (COLS) AND THE 2016 C&MS OF THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT), INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED.
- THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE WILL MAKE INSPECTION OF THE WORK. THE CITY ENGINEER WILL REQUIRE AT LEAST 48 HOURS WRITTEN NOTICE BEFORE ANY WORK TAKES PLACE. FAILURE TO REQUEST THE NECESSARY INSPECTION MAY RESULT IN THE REJECTION OF THE WORK AND THE PROJECT.
- IT IS THE INTENTION OF THE PLANS TO PROVIDE AND REQUIRE A COMPLETED PROJECT READY FOR OPERATION. ANY WORK ITEMS OMITTED FROM THE PLANS, WHICH ARE CLEARLY NECESSARY FOR COMPLETION OF THE WORK, AND ITS APPURTENANCES SHALL BE CONSIDERED A PART OF SUCH WORK, THOUGH NOT DIRECTLY SPECIFIED OR CALLED FOR IN THE PLANS. THIS INCLUDES, BUT IS NOT LIMITED TO SUCH INCIDENTAL ITEMS AS RELOCATION OF MAILBOXES, SAW CUTTING, AND REMOVAL AND/OR RELOCATION OF SIGNS, SPRINKLERS, OR OTHER MISCELLANEOUS ITEMS.
- ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR WITH THE COST TO BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.
- THE CONTRACTOR OR DEVELOPER SHALL DEPOSIT THE TOTAL ESTIMATED COST FOR INSPECTIONS, AS DETERMINED BY THE CITY ENGINEER, WITH THE CITY OF HILLIARD PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE THE CITY OF HILLIARD, A SURETY, ACCEPTABLE TO THE CITY OF HILLIARD, EQUAL TO 100% OF CONSTRUCTION COSTS. THE SURETY SHALL GUARANTEE THE WORK FOR ONE YEAR AFTER ACCEPTANCE BY THE CITY.
- THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR MEANS, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION THAT ARE NOT SPECIFIED HEREIN. THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR SAFETY ON THE WORK SITE, OR THE FAILURE BY THE CONTRACTOR TO PERFORM WORK ACCORDING TO PLANS.
- APPROVAL OF THESE PLANS IS CONTINGENT UPON ALL EASEMENTS REQUIRED FOR CONSTRUCTION OF THE WORK BEING SECURED AND SUBMITTED TO THE CITY OF HILLIARD FOR RECORDING PRIOR TO COMMENCEMENT OF WORK. NO WORK, WHICH REQUIRES AN EASEMENT, WILL BE ALLOWED TO PROCEED UNTIL THIS IS DONE.
- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTION AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.
- THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS.
- THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE, EXISTING RIGHT-OF-WAYS, TEMPORARY AND PERMANENT EASEMENTS, AND SHALL NOT ENTER UPON OTHER PROPERTIES WITHOUT WRITTEN PERMISSION OF THE OWNER. IF THE PROPOSED WORK REQUIRES ENTERING EASEMENTS UPON OTHER PROPERTIES, THE CONTRACTOR SHALL NOTIFY THE OWNER(S) IN WRITING NO LESS THAN 72 HOURS IN ADVANCE OF THE COMMENCEMENT OF THE WORK, AND COPY THE CITY ON ALL CORRESPONDENCE. FAILURE TO NOTIFY AFFECTED PROPERTY OWNERS MAY SUBJECT THE CONTRACTOR TO THE PENALTIES ASSOCIATED WITH THE VIOLATION OF HILLIARD CITY CODE, SECTION 541.05, CRIMINAL TRESPASS.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASES OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE. RESETTING THE MARKERS SHALL BE PERFORMED BY AN OHIO PROFESSIONAL SURVEYOR AS APPROVED BY THE CITY ENGINEER AT THE CONTRACTOR'S EXPENSE.
- PROPERTY BOUNDARIES, INCLUDING PROPERTY LINES AND ROAD RIGHT-OF-WAY, ARE SHOWN FROM THE BEST INFORMATION AVAILABLE AND ARE NOT NECESSARILY COMPLETE OR CORRECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE FINISHED WORK CONFORM TO THE LINES, GRADES, ELEVATIONS AND DIMENSIONS CALLED FOR ON THE DRAWINGS AND TYPICAL SECTIONS.
- ANY DEVICE SHALL NOT BE OPERATED AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. PURSUANT TO HILLIARD CITY CODE, SECTION 509.08, CONSTRUCTION ACTIVITY IS ONLY PERMITTED BETWEEN THE HOURS OF 7:30 A.M. AND 7:00 P.M. ANY CONSTRUCTION ACTIVITY BEYOND THESE HOURS REQUIRES A WRITTEN REQUEST TO THE DIRECTOR OF PUBLIC SERVICE MEETING THE REQUIREMENTS OF HILLIARD CITY CODE, SECTION 509.08(B).
- PAVEMENTS SHALL BE CUT IN NEAT, STRAIGHT LINES THE FULL DEPTH OF THE EXISTING PAVEMENT, OR AS REQUIRED BY THE CITY ENGINEER.
- ALL SOIL SUBGRADE SHALL BE PREPARED AND COMPACTED IN ACCORDANCE WITH ITEM 204 TO A DEPTH OF 12 INCHES BELOW THE SUBGRADE SURFACE. SUBGRADE SHALL BE SCARIFIED AND CONTAIN SUFFICIENT MOISTURE TO MEET ITEM 203 COMPACTION REQUIREMENTS.

- THE CONTRACTOR IS NOT PERMITTED TO USE ANY RECLAIMED MATERIALS IN ITEM 304.
- NON-RUBBER TIRED VEHICLES SHALL NOT BE MOVED ON OR ACROSS PUBLIC STREETS OR HIGHWAYS WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER.
- TRACKING OR SPILLING MUD, DIRT, OR DEBRIS UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS OR BIKE PATHS IS PROHIBITED PER HILLIARD CITY CODE, SECTION 905.12 AND ANY SUCH OCCURRENCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. IF THE CONTRACTOR FAILS TO REMOVE SAID MUD, DIRT, DEBRIS, OR SPILLAGE, THE CITY OF HILLIARD RESERVES THE RIGHT TO REMOVE THESE MATERIALS AND CLEAN AFFECTED AREAS, THE COST OF WHICH SHALL BE PAID BY THE CONTRACTOR/DEVELOPER PER HILLIARD CITY CODE, SECTION 905.13.
- DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES FOR PROTECTION OF ALL ADJACENT ROADS AND LANDS, PER COLS ITEM 207.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION.
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN AT ALL TIMES SEWER, DRAIN, AND DITCH FLOWS THROUGH EXISTING FACILITIES TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PUT INTO SERVICE. THE CONTRACTOR, TO A CONDITION SATISFACTORY TO THE CITY ENGINEER, SHALL RESTORE THE FLOW OF ALL SEWERS, DRAINS, AND OTHER WATERCOURSES DISTURBED DURING THE PROSECUTION OF THE WORK.
- ANY MODIFICATION OF THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE HILLIARD CITY ENGINEER.
- THE CONTRACTOR SHALL CALL TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 SEVENTY-TWO (72) HOURS IN ADVANCE OF THE ANTICIPATED START OF CONSTRUCTION, AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTH-EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR LINES.  
 AMERICAN ELECTRIC POWER  
 (CITY PROJECTS/DISTRIBUTION)  
 ROD SLONEKER  
 850 TECH CENTER DRIVE  
 GAHANNA, OHIO 43230  
 OFFICE: 614-883-6817  
 CELL: 614-301-4977  
 FAX: 614-883-6868  
 AEP SOLUTION CENTER: 800-277-2177  
 RISLONEKER@AEP.COM  
  
 AT&T  
 DWIGHT THOMASON  
 111 NORTH 4TH STREET  
 COLUMBUS, OHIO 43215  
 OFFICE: 614-223-5316  
 CELL: 614-477-8073  
 FAX: 614-223-5579  
 AT&T REPAIR SERVICE: 888-611-4466  
 DAMAGE PREVENTION: 937-296-3929  
 DT2985@ATT.COM  
  
 COLUMBIA GAS OF OHIO  
 ROB CALDWELL  
 3350 JOHNNY APPLESEED COURT  
 COLUMBUS, OHIO 43231  
 OFFICE: 614-818-2104  
 CELL: 614-370-1906  
 DAMAGE PREVENTION: 1-866-632-6243  
 CUSTOMER SERVICE: 1-800-344-4077  
 COLUMBIAGAS\_COLUMBUSENG@NISOURCE.COM  
 RCALDWELL@NISOURCE.COM  
  
 CITY OF COLUMBUS  
 JASON SANSON  
 DIVISION OF SEWERAGE & DRAINAGE  
 1250 FAIRWOOD AVENUE  
 COLUMBUS, OHIO 43206  
 614-645-3702  
 JTSANSON@COLUMBUS.GOV
- EXISTING UTILITIES SHOWN ON THE PLAN ARE FROM THE BEST AVAILABLE RECORDS AND FIELD INVESTIGATION AND ARE NOT NECESSARILY COMPLETE OR CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN OR NOT.
- THE CONTRACTOR SHALL EXPOSE AND VERIFY THE LOCATION AND ELEVATION OF ANY UTILITIES WITHIN THE LIMITS OF THE PROPOSED CONDUIT PATH, PRIOR TO STARTING ANY EXCAVATION. IN CASE OF CONFLICT, ADJUSTMENTS IN LOCATION AND ELEVATION OF THE PROPOSED UTILITIES MAY BE MADE IF APPROVED PER GENERAL NOTE #24, OR ARRANGEMENTS SHALL BE MADE TO MOVE THE EXISTING UTILITY TO PROVIDE ADEQUATE CLEARANCE.
- EXISTING DRAIN TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED OR CONNECTED TO THE STORM SEWER SYSTEM BY THE CONTRACTOR, AS APPROVED BY THE CITY ENGINEER. THE COST OF SAID WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS RELATED ITEMS.

COLUMBUS FIBERNET  
 BILL VERHOFF  
 1600 WALCUTT ROAD  
 COLUMBUS, OHIO 43228  
 OFFICE: 614-351-6265  
 CELL: 614-602-4947  
 FAX: 614-274-6795  
 BAVERHOFF@COLUMBUSFIBER.NET

LIGHTOWER FIBER NETWORKS  
 JON TARNOWSKI  
 470 - B SCHROCK ROAD  
 COLUMBUS, OHIO 43229  
 OFFICE: 585-445-5813  
 CELL: 585-465-1261  
 JTARNOWSKI@LIGHTOWER.COM

CHARTER COMMUNICATIONS  
 SAMUEL LUTZ  
 3760 INTERCHANGE ROAD  
 COLUMBUS, OHIO 43204  
 OFFICE: 614-481-5262  
 CELL: 614-348-2979  
 SAMUEL.LUTZ@CHARTER.COM

WOW  
 MARK FREY  
 3675 CORPORATE DRIVE  
 COLUMBUS, OHIO 43231  
 OFFICE: 614-948-4616  
 CELL: 614-668-8079  
 FAX: 614-948-4620  
 MARK.FREY@WOWINC.COM

- ALL TRENCHES WITHIN PAVEMENT, BERM, AND SHOULDER LIMITS SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS.
- ACCESS TO ALL ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. PROPERTIES WITH A SINGLE ACCESS WILL REQUIRE STAGED CONSTRUCTION; SHORT-TERM FULL CLOSURE OF A SINGLE ACCESS WILL BE PERMITTED WITH THE PROPERTY OWNER AND/OR TENANT'S AGREEMENT. SUCH FULL CLOSURES SHALL BE SCHEDULED AND COORDINATED WITH THE PROPERTY OWNER/TENANT.
- COMPACTED GRANULAR MATERIAL, COLS ITEM 912 SHALL CONSIST OF NATURAL, BROKEN OR CRUSHED STONE, CRUSHED GRAVEL, OR CRUSHED SLAG. SYNTHETIC OR MAN-MADE MATERIALS ARE UNACCEPTABLE.
- THE CONTRACTOR SHALL INSTALL STREET LIGHTS AT THE LOCATIONS SHOWN ON THE PLANS, INCLUDING ALL WIRING AND DISCONNECTS AND PROVIDE A COMPLETE OPERATING LIGHTING SYSTEM THAT COMPLIES WITH THE CITY OF HILLIARD SPECIFICATIONS.
- ALL AREAS FOR UNDERGROUND ELECTRIC AND STREET LIGHTING ELECTRIC, TELEPHONE, AND CABLE TV INSTALLATIONS SHALL BE BROUGHT TO FINISHED GRADE PRIOR TO THEIR BEING INSTALLED. ALL FILL REQUIRED SHALL BE COMPACTED IN ACCORDANCE WITH COLS ITEM 203.12, CONDITION 1. THIS WORK SHALL BE PERFORMED AS PART OF THIS PLAN AND THE COST SHALL BE INCLUDED UNDER ITEM 203.
- ALL SEEDING SHALL BE APPLIED AT THE RATE OF 8 POUNDS (LB.) PER 1,000 SQUARE FEET (SF) AND SHALL USE THE FOLLOWING SEED MIXTURE:  
 40% TITIAN TALL FESCUE  
 40% TARHEEL TALL FESCUE  
 10% DENIM KENTUCKY BLUEGRASS  
 10% RENAISSANCE PERENNIAL RYE GRASS
- COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST AND SLOW RELEASE NITROGEN, 50% DERIVED FROM NATURAL ORGANIC SOURCES OF UREA-FORM, PHOSPHOROUS, AND POTASSIUM AND WITH THE FOLLOWING COMPOSITION SHALL BE APPLIED:  
 COMPOSITION: 13% NITROGEN, 26% PHOSPHOROUS, AND 12% POTASSIUM BY WEIGHT.  
 FERTILIZER SHOULD BE APPLIED AT THE RATE OF 6 POUNDS (LB.) PER 1,000 SQUARE FEET (SF).
- ALL SIGNS, LANDSCAPING, STRUCTURES OR OTHER APPURTENANCES DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL PAY FOR THE COST OF THIS WORK.

THE FOLLOWING NOTES HAVE BEEN DELETED: 28, 32, 34 AND 35.

GENERAL NOTES FOR TRAFFIC CONTROL

- ALL TRAFFIC CONTROL SHALL BE REVIEWED BY THE OFFICE OF THE CITY ENGINEER AT LEAST TEN (10) DAYS PRIOR TO START OF WORK ON THIS PROJECT.
- ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED & ERECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (OMUTCD) CURRENT EDITION, COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 1980 WEST BROAD STREET, COLUMBUS, OHIO, 43223.
- ALL SIGN SUPPORTS SHALL BE 2-INCH SQUARE GALVANIZED POSTS WITH DIE CUT KNOCKOUTS (TELESPAR QWIK-PUNCH SIGNPOSTS OR APPROVED EQUAL) AND A SINGLE BREAKAWAY ANCHOR.
- ANCHORS SHALL BE 2 1/4-INCH SQUARE, 42-INCH LONG, AND EMBEDDED SUCH THAT 2 INCHES OF ANCHOR REMAINS ABOVE GROUND LEVEL. THE OVERLAP OF THE POST WITHIN THE ANCHOR SLEEVE SHALL BE 8 INCHES. SEE ODOT STANDARD CONSTRUCTION DRAWING, TC-41.20.
- ALL SIGNS SHALL BE ERECTED WITH A 7-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF PAVEMENT AND THE BOTTOM OF SIGN FOR BOTH CURB AND DITCH SECTIONS. HORIZONTAL CLEARANCES FOR BOTH CURB AND DITCH SECTIONS SHALL BE AS PER OMUTCD/ODOT STANDARDS. SEE OMUTCD FIGURE 2A-1.
- STREET SIGNS SHALL MEET THE CURRENT REQUIREMENTS OF THE CITY OF HILLIARD, DIVISION OF ENGINEERING. CONTACT THE TRAFFIC ENGINEER AT 876-7361 FOR CURRENT INFORMATION.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

STREET RESURFACING AND CURB REPAIR

SPECIFICATIONS & QUANTITIES FOR STREET RESURFACING/REHABILITATION AND CURB REPAIR ARE INCLUDED IN THE CONTRACT DOCUMENTS AND BID SCHEDULE.

CALCULATED	CNK	CHECKED	TJS
GENERAL NOTES			
NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS			
4 44			



GENERAL NOTES FOR EROSION CONTROL

SITE DATA

OWNER/DEVELOPER: CITY OF HILLIARD
3800 MUNICIPAL WAY
HILLIARD, OHIO 43026
614-876-7361
LETTY SCHAMP, PE
PLAN DESIGNER: STANTEC CONSULTING SERVICES INC.
1500 LAKE SHORE DRIVE, SUITE 100
COLUMBUS OHIO 43204
614-486-4383
BRIAN HAGERTY, PE
DEVELOPMENT TYPE: PEDESTRIAN & LIGHTING IMPROVEMENTS
SITE ACREAGE: 3.60 AC.
DISTURBED ACREAGE: 2.13 AC.
SITE VEGETATION: GRASS, STREET TREES
ADJACENT AREAS: INDUSTRIAL
RECEIVING WATERS: HAYDEN RUN
STORM WATER MANAGEMENT: BIORETENTION FACILITY
STORM WATER QUALITY: BIORETENTION FACILITY

A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3), THE NPDES PERMIT & THE OHIO EPA NOI MUST BE KEPT ON SITE AND CLEARLY DISPLAYED AT ALL TIMES.

SEQUENCE OF CONSTRUCTION:

- 1. PLACE INLET PROTECTION/FILTER FABRIC FENCE ON CURB INLETS AND CATCH BASINS AS NOTED IN THE PLANS
2. CONSTRUCT MULTI-USE PATH, INCLUDING ALL APPURTENANCES
3. TEMPORARILY/PERMANENTLY STABILIZE DISTURBED AREAS.
4. REMOVE INLET PROTECTION/FILTER FABRIC FENCE ONCE GRASS IS ESTABLISHED AND STABILIZED.

MAINTENANCE NOTES

THE OWNER'S REPRESENTATIVE WILL INSPECT ALL EROSION AND SEDIMENTATION CONTROL MEASURES WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL EVENT TO ASSURE THAT THE MEASURES ARE FUNCTIONING PROPERLY. THE OWNER/CONTRACTOR SHALL KEEP INSPECTION REPORTS, COPIES OF WHICH WILL BE PROVIDED TO THE CITY OF HILLIARD OR OHIO EPA UPON REQUEST.

THE OWNER/DEVELOPER MUST MAINTAIN A DOCUMENT SIGNED BY ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED IN THE SWP3 IMPLEMENTATION. THE DOCUMENT MUST CERTIFY THAT THE CONTRACTOR(S) HAS READ AND UNDERSTANDS THE SWP3. THE OWNER/DEVELOPER IS TO PROVIDE THE CITY OF HILLIARD WITH A COPY OF THIS DOCUMENT.

FILTER FABRIC FENCE:

FILTER FABRIC FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEDIMENT THAT IS COLLECTED WILL BE DISTRIBUTED ON THE PROTECTED PORTION OF THE SITE AND STABILIZED. ALL STOCKPILES OF EARTH AND TOPSOIL WILL BE PROTECTED WITH TEMPORARY SEEDING OR OTHER MEANS TO PREVENT EROSION.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF (1/2) THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

INLET PROTECTION:

ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS (INLET PROTECTION), WHICH WILL BE MAINTAINED AND MODIFIED AS REQUIRED AS CONSTRUCTION PROGRESSES.

THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAINFALL AND REPAIRS MADE AS NEEDED.

SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF (1/2) THE DESIGN OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.

ANY SEDIMENT BLOCKING DRAINAGE AT INLETS THAT CREATES STANDING WATER ON ROADWAYS AND/OR DRIVEWAYS SHALL BE REMOVED IMMEDIATELY.

INLET PROTECTION STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

GENERAL LAND CONSERVATION NOTES

ALL STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING FOR ALL SITES.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED ACCORDING TO THE FOLLOWING OHIO EPA CRITERIA:

PERMANENT STABILIZATION

AREAS THAT WILL BE DORMANT FOR MORE THAN A YEAR. WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE.

AREAS WITHIN 50 FT OF A STREAM AND AT FINAL GRADE. WITHIN 2 DAYS OF REACHING FINAL GRADE.

ANY OTHER AREAS AT FINAL GRADE. WITHIN 2 DAYS OF REACHING FINAL GRADE.

TEMPORARY STABILIZATION

AREAS WITHIN 50 FT OF A STREAM AND NOT AT FINAL GRADE. WITHIN 2 DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 21 DAYS.

ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 21 DAYS BUT LESS THAN 1 YEAR, AND NOT WITHIN 50 FT OF A STREAM. WITHIN 7 DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.

DISTURBED AREAS THAT WILL BE IDLE OVER WINTER SHALL BE STABILIZED PRIOR TO THE ONSET OF WINTER WEATHER.

PERMANENT SEEDING SHALL BE APPLIED AT THE RATE OF 8 POUNDS (LB.) PER 1,000 SQUARE FEET (SF) AND CONSIST OF THE FOLLOWING SEED MIXTURE:

- 40% TITIAN TALL FESCUE
40% TARHEEL TALL FESCUE
10% DENIM KENTUCKY BLUEGRASS
10% RENAISSANCE PERENNIAL RYE GRASS

FERTILIZER FOR PERMANENT SEEDING SHALL BE A COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST, AND SLOW RELEASE NITROGEN, 50% DERIVED FROM NATURAL ORGANIC SOURCES OF UREA-FORM, PHOSPHOROUS, AND POTASSIUM AND SHALL MEET THE FOLLOWING COMPOSITION:

13% NITROGEN, 26% PHOSPHOROUS, AND 12% POTASSIUM BY WEIGHT

FERTILIZER SHALL BE APPLIED AT THE RATE OF 6 POUNDS (LB.) PER 1,000 SQUARE FEET (SF).

ALL STORM SEWER, SANITARY SEWER, WATER MAIN AND SERVICE TRENCHES SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL IF INSTALLATION IS THROUGH STABILIZED AREAS. NO MORE THAN 250 FEET OF TRENCH WILL BE OPEN AT ANY ONE TIME.

ELECTRICAL POWER, TELEPHONE, CABLE TELEVISION AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL IF INSTALLATION IS THROUGH STABILIZED AREAS.

ANY DISTURBED AREA NOT STABILIZED WITH SEEDING, SODDING, PAVING OR BUILT UPON BY NOVEMBER 1ST, OR AREAS DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HYDRO MULCH AT THE RATE OF ONE (1) TON PER ACRE AND OVER-SEEDED BY APRIL 15TH.

AT THE COMPLETION OF CONSTRUCTION, ALL DENUDED AREAS SHALL BE STABILIZED AND TEMPORARY SEDIMENTATION & EROSION CONTROLS SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED.

GENERAL NOTES FOR STORM SEWERS

- 1. ANY MODIFICATION OF THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE HILLIARD CITY ENGINEER.
3. BEFORE THE CONTRACTOR STARTS ANY WORK ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE OF ANY WORK, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS THAT ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. THE CITY SHALL KEEP RECORDS OF THE INSPECTION IN WRITING.
4. ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR, TO THE SATISFACTION OF THE CITY ENGINEER, SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS.
5. PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT CONTRACT ITEMS.
9. ROADWAY UNDERDRAINS SHALL BE DISCHARGED INTO THE NEAREST STORM STRUCTURE AVAILABLE ALONG THE LINE OF FLOW UNLESS SHOWN OTHERWISE ON THE PLANS.
10. THE CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED CASTINGS TO MATCH THE SURROUNDING FINISHED GRADE. THE COST OF ALL CASTING ADJUSTMENTS SHALL BE INCLUDED IN THE VARIOUS SEWER ITEMS.

THE FOLLOWING NOTES FOR HAVE BEEN DELETED: 2, 6, 7, 8, 11, 12, 13, 14, 15, AND 16.

ITEM 608 - DETECTABLE WARNING, TYPE E, AS PER PLAN

ALL PRODUCTS SHALL RECEIVE PRIOR APPROVAL BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.

BRICK RED IS THE APPROVED COLOR, BUT A SUBSTITUTED COLOR MAY BE USED IF PRIOR APPROVAL IS GRANTED BY THE CITY ENGINEER OR HIS REPRESENTATIVE. SUBSTITUTION REQUESTS MUST BE SUBMITTED IN WRITING TO:

HILLIARD ADA COORDINATOR
3800 MUNICIPAL WAY
HILLIARD, OHIO 43026

TYPE "E" PRE-MANUFACTURED WET-SET PRODUCTS - THIS PRODUCT IS APPROVED FOR USE ON NEW CONSTRUCTION INSTALLATIONS ONLY. THESE PRODUCTS MUST BE 24" X 48" X 1/2" ONE-PIECE PANELS. ALL PRODUCTS MUST BE APPLIED TO THE MANUFACTURER'S SPECIFICATIONS AND GUIDELINES.

THE FOLLOWING PRODUCTS ARE PRE-APPROVED FOR USE IN TYPE "E" APPLICATIONS:

- ENGINEERED PLASTICS, INC. - ARMOR-TILE CAST IN PLACE SYSTEMS;
ADA SOLUTIONS, INC. - COMPOSITE (WET SET) REPLACEABLE TWS UNIT;
ARMORCAST PRODUCTS COMPANY - CAST IN PLACE WARNING PANELS

PRODUCTS NOT LISTED ABOVE MAY BE SUBMITTED TO THE CITY'S ADA COORDINATOR FOR REVIEW AND POSSIBLE USE AS AN APPROVED EQUAL.

DETECTABLE WARNING STRIPS MUST COMPLY WITH ADA SPECIFICATIONS FOR RAMP AREA, INCLUDING RUNNING SLOPE, FLATNESS AND SMOOTHNESS CRITERIA, AS WELL AS FLUSH TRANSITIONS BETWEEN THE CONCRETE RAMP AND THE DETECTABLE WARNING SURFACE.

DETECTABLE WARNINGS PLACED ON A MULTI-USE PATH SHOULD BE OFFSET APPROXIMATELY 1 FOOT FROM EACH EDGE OF THE PAVEMENT TO PROVIDE A SMOOTH SURFACE FOR SMALL-WHEELED PATH USERS.

THE PER SQUARE FOOT UNIT PRICE SHALL ENCOMPASS ONE COMPLETE DETECTABLE WARNING INSTALLATION REGARDLESS OF THE NUMBER OF INDIVIDUAL PANELS REQUIRED TO EXTEND THE FULL WIDTH OF THE PATH.

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN

IMMEDIATELY AFTER PLACING THE TOPSOIL AND ESTABLISHMENT OF FINAL GRADE, THE TOPSOIL AREA SHALL BE RAKED TO REMOVE ALL LUMPS AND STONES ONE INCH AND LARGER, TO A DEPTH OF AT LEAST ONE INCH, THEN ROLLED WITH A LIGHT ROLLER TO SECURE SMOOTHNESS TO THE LINES AND GRADES SHOWN IN THE CONTRACT DOCUMENTS. ALL TOPSOIL SHALL BE OF THE HIGHEST QUALITY AND FREE OF ALL STONES, WEEDS, TRASH, AND OTHER DELETERIOUS MATERIALS GREATER THAN 1/4". FAILURE TO PROVIDE HIGH QUALITY TOPSOIL, FREE OF WEEDS, WILL RESULT IN REJECTION OF THE TOPSOIL AREAS. ORGANIC CONTENT SHALL BE TESTED BY AN APPROVED LAB AND CERTIFIED TO BETWEEN 10-20% BY WEIGHT, AND ALL TOPSOIL SHALL BE SATURATED WITH WATER AND ALLOWED TO SETTLE BEFORE SEEDING. ANY TOPSOIL DISTURBANCE, SETTLEMENT OR EROSION WHICH MAY OCCUR BEFORE THE COMPLETION OF THE CONTRACT SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

THE SEED MIXTURE SHALL BE FREE OF WEEDS. FAILURE TO USE HIGH QUALITY SEED MIXTURE WILL RESULT IN REJECTION OF THE SEEDED AREAS. FAILURE TO PERFORM NECESSARY WEED CONTROL OR FERTILIZATION BEFORE TURF IS ESTABLISHED WILL RESULT IN REJECTION OF THE SEEDED AREAS.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL WITHIN THE CONSTRUCTION LIMITS AND AREAS COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

Table with 2 columns: Item Description and Quantity. Includes ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN (569 CU. YD.), ITEM 659 - COMMERCIAL FERTILIZER, AS PER PLAN (0.70 TON), and ITEM 659 - WATER (28 M GAL).

CLEARING AND GRUBBING, AS PER PLAN

IN ADDITION TO THE WORK SPECIFIED IN COLS ITEM 201, THE FOLLOWING WORK SHALL BE INCLUDED:

ONE WEEK PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL MARK THE FOLLOWING ITEMS:

- ALL PLANT MATERIAL INDICATED FOR REMOVAL AS PART OF THESE PLANS; AND
ALL PLANT MATERIAL THAT NEEDS TRIMMED OR LIMBED UP IN ORDER TO CONSTRUCT THE IMPROVEMENTS.

THE ABOVE TWO MARKED ITEMS SHALL BE DIFFERENTIATED IN SOME MANNER. UPON COMPLETION OF THE MARKING, THE CONTRACTOR SHALL CONTACT THE CITY CHIEF CONSTRUCTION INSPECTOR AT (614) 334-2455 TO REVIEW ALL PLANT MATERIAL TO BE REMOVED OR MODIFIED.

IT IS THE INTENT OF THIS PROJECT TO MINIMIZE THE AMOUNT OF PLANT MATERIAL TO BE REMOVED.

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**ITEM 653 – TOPSOIL FURNISHED AND PLACED, AS PER PLAN**

A MINIMUM 4 INCHES OF TOPSOIL SHALL BE PLACED IN ALL AREAS TO BE SEEDED. PRIOR TO PLACING TOPSOIL IN CUT AREAS, THE EARTH SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO PLACE 4 INCHES OF TOPSOIL. THE COST OF EXCAVATION AND DISPOSAL OF SURPLUS MATERIALS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE VARIOUS CONTRACT ITEMS.

TOPSOIL SHALL BE REMOVED AND WASTED OR UTILIZED IN NON-LOAD BEARING FILLS IN ACCORDANCE WITH THE SPECIFICATIONS. NO EXTRA COMPENSATION SHALL BE PAID FOR THE REMOVAL OF EXCESS TOPSOIL AS REQUIRED TO OBTAIN A SUITABLE SUBGRADE. PAYMENT FOR TOPSOIL REMOVAL IS INCLUDED IN ITEM 203, EXCAVATION.

ALL TOPSOIL MATERIALS AND FINAL AREA OF SUBGRADE PREPARATION SHALL BE FREE FROM ROCK AND OTHER FOREIGN MATERIAL 1/2" OR GREATER IN ANY DIMENSION.

**EXISTING GAS LINES**

ANY CONFLICTS ENCOUNTERED DURING CONSTRUCTION BETWEEN PROPOSED WORK AND EXISTING GAS MAINS AND SERVICES SHALL BE COORDINATED AND RESOLVED BY THE CONTRACTOR IN COORDINATION WITH THE UTILITY OWNER(S). PAYMENT TO BE INCLUDED IN THE PRICE BID FOR VARIOUS RELATED ITEMS.

ANY EXISTING GAS VALVES OR SERVICE BOXES LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO GRADE OR RELOCATED, IF NECESSARY. CONTRACTOR SHALL COORDINATE THIS WORK WITH THE UTILITY OWNER(S). ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – GAS SERVICE BOX ADJUSTED TO GRADE.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN ADDED TO THE GENERAL SUMMARY FOR USE "AS DIRECTED BY THE ENGINEER":

ITEM SPECIAL – GAS SERVICE BOX ADJUSTED TO GRADE 5 EACH

**NOTES FOR THE DIVISION OF WATER**

FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT 614-645-7788.

THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE AT 614-645-7330. THE CONTRACTOR SHALL ADHERE TO ALL RULES AND REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

ALL WATER LINE VALVE BOXES, SERVICE BOXES, TEST STATIONS, PITOMETER TAP STRUCTURES, METER PIT COVERS, AND OTHER SURFACE UTILITY STRUCTURES WITHIN THE DISTURBED AREA SHALL BE ADJUSTED TO GRADE. ANY OF THESE STRUCTURES LOCATED WITHIN PAVEMENT, DRIVEWAYS, OR OTHER TRAVELED AREAS, WHETHER EXISTING OR PROPOSED, SHALL BE EQUIPPED WITH A TRAFFIC RATED, HEAVY DUTY VALVE BOX AND/OR COVER IN ACCORDANCE WITH THE STANDARD DRAWINGS. EXISTING WATER SERVICE BOXES TO REMAIN THAT ARE ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT, CENTERED OVER THE CURB STOP, AND ADJUSTED TO THE PROPOSED GRADE.

WHERE NEW CONDUIT IS PROPOSED TO CROSS AN EXISTING OR PROPOSED WATER MAIN OR WATER SERVICE, A MINIMUM OF 12 INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE CONDUIT AND THE WATER MAIN OR SERVICE. A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) IS REQUIRED AT LOCATIONS WHERE THE CONDUIT IS PARALLEL TO THE WATER MAIN AND AT LOCATIONS OF WATER LINE THRUST BLOCKS.

A MINIMUM OF 3 FEET OF HORIZONTAL CLEARANCE (OUT TO OUT) SHALL BE MAINTAINED BETWEEN ALL EXISTING WATER MAINS AND FOUNDATIONS FOR POLES, PULL BOXES, PUSH BUTTON PEDESTALS, AND ANY OTHER MISCELLANEOUS ELECTRICAL STRUCTURE.

ANY EXISTING WATER VALVES OR SERVICE BOXES LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE ADJUSTED TO GRADE TO THE SATISFACTION OF THE UTILITY OWNER. CONTRACTOR SHALL COORDINATE THIS WORK WITH THE OWNER OF THE UTILITY. ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 807 – SERVICE BOXES ADJUSTED TO GRADE OR ITEM 807 – VALVE BOXES ADJUSTED TO GRADE.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN ADDED TO THE GENERAL SUMMARY FOR USE "AS DIRECTED BY THE ENGINEER":

ITEM 807 – SERVICE BOXES ADJUSTED TO GRADE 5 EACH  
 ITEM 807 – VALVE BOXES ADJUSTED TO GRADE 5 EACH

**ITEM SPECIAL – AMENDED SOIL FILTRATION STRIP**

THE AMENDED SOIL FILTRATION STRIPS, AS SHOWN IN THE DETAIL BELOW, SHALL BE PLACED BETWEEN THE EXISTING BACK OF CURB AND FACE OF PROPOSED PATH AT THE LOCATIONS SHOWN IN THIS PLAN.

THE PLANTING SOIL FOR THE AMENDED SOIL FILTRATION STRIP SHALL CONSIST OF A MIXTURE OF SAND, TOPSOIL AND COMPOST PER CITY OF COLUMBUS SUPPLEMENTAL SPECIFICATION 1604 (BIORETENTION SOILS FOR GREEN INFRASTRUCTURE).

PAYMENT FOR THE AMENDED SOIL FILTRATION STRIPS SHALL INCLUDE EXCAVATION, AMENDED SOIL, #57 STONE, #8 OR #78 STONE, CONCRETE SAND, GEOTEXTILE FABRIC, AND ALL EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

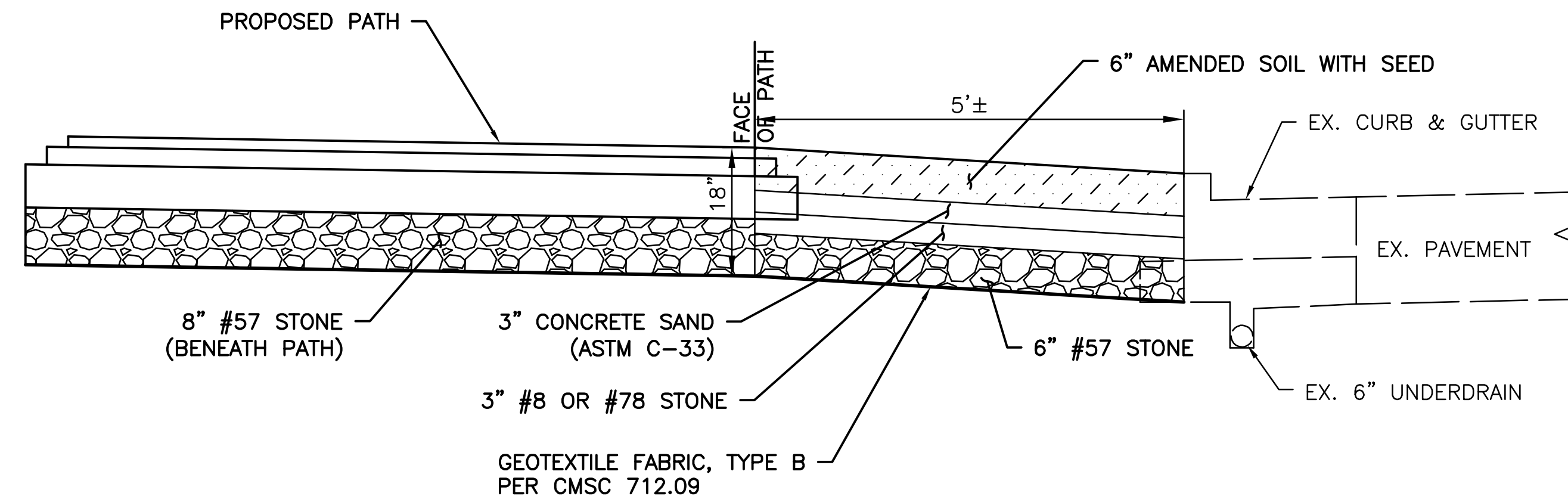
ITEM SPECIAL – BIORETENTION FACILITY 320 CU. YD.

THE #57 STONE BENEATH THE PATH, AND THE EXCAVATION REQUIRED TO PLACE THE STONE SHALL BE PAID FOR SEPARATELY.

**AMENDED SOIL FILTRATION STRIP MAINTENANCE SCHEDULE**

VEGETATION	FREQUENCY
1. GRASS HEIGHT NOT GREATER THAN 6 INCHES	AS NEEDED
2. NO EVIDENCE OF EROSION	

LEGEND					
Mag Nail Set	●MN #XX	Electric Manhole	⊕	Guy wire anchor	⌒
Iron Pin Set	●IP #XX	Electric Pull Box	⊞	Power Pole	⌒
Benchmark	⊕	Transformer, pad mounted	⊞	Power Pole with Telephone	⌒
Survey Monument in Concrete	▲	Telephone Handhole	⊞	Power Pole with Telephone and Light	⌒
Water Valve	⊗	Telephone Pedestal	⊞	Traffic Signal Strain Pole	⌒
Water Valve(proposed)	⊗	Telephone Manhole	⊞	Street Light (unspecified type)	⌒
Fire Hydrant(existing)	⌒	Fiber Optic Manhole	⊞	Power Pole with Light	⌒
Fire Hydrant(proposed)	⌒	Push Button on Post	⌒	Telephone Pole	⌒
Water Well	⊞	Mailbox	⌒	Telephone Pole with Light	⌒
Water Service Valve-Found	⊞	Post	⌒	Lamp Post	⌒
Water Service Valve-(Proposed)	⊞	Bollard	⌒	Pavement Reflector	⌒
Water Service Valve-Not Found	⊞	Parking Meter	⌒	Mile Post	⌒
Gas Gate Valve	⌒	Irrigation Sprinkler	⌒	Sign	⌒
Gas Service Valve	⌒	Ex. Concrete	⌒	Bush (leaves)	⌒
Gas Meter	⌒	Ex. Electric	— E —	Shrub (needles)	⌒
Combined Sewer Manhole	⊞	Ex. Overhead Electric	— OE —	Tree w/ leaves	⌒
Sanitary Sewer Cleanout	⊞	Ex. Water	— — —	Tree w/ needles	⌒
Sanitary Sewer Manhole	⊞	Ex. Traffic	— TR —	Rock	⌒
Curb Inlet	⌒	Ex. Gas	— G —	Temp Contr. Esmt.	— TMP —
Curb Inlet	⌒	Ex. Telephone	— T —	Prop. R/W	— R/W —
Circle Catch Basin	⊞	Ex. Fiber Optic Cable	— FOC —	Perm. Utility Esmt.	— U —
Square Catch Basin	⊞	Ex. Storm	— STM —	Temp. Work Agreement Esmt.	— WA —
Storm Drain Manhole	⊞	Ex. Sanitary	— SAN —	Channel Esmt.	— CH —
		Ex. R/W	— R/W —		
		Constr. Limits	— — —		
		Prop. Walk	— — —		
		Ex. Curb	— — —		
		Ex. E/P	— — —		



**AMENDED SOIL FILTRATION STRIP DETAIL**

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**GENERAL NOTES FOR MAINTENANCE OF TRAFFIC**

IN ADDITION TO THE REQUIREMENTS OF ITEM 614 MAINTAINING TRAFFIC, THE FOLLOWING SHALL APPLY:

1. ALL TRAFFIC CONTROL DEVICES USED FOR MAINTENANCE OF TRAFFIC SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS" (OMUTCD) (CURRENT EDITION), COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 1980 WEST BROAD STREET, COLUMBUS, OHIO, 43223.
2. TRAFFIC CONTROL FOR ANY WORK THAT RESTRICTS TRAFFIC SHALL BE ERECTED IN ADVANCE AND SHALL BE REVIEWED BY THE OFFICE OF THE CITY ENGINEER AT LEAST 10 DAYS PRIOR TO THE START OF WORK. THE OFFICE OF THE CITY ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE ROAD CLOSURE AND IMPLEMENTATION OF THE MAINTENANCE OF TRAFFIC PLAN. ALL MAINTENANCE OF TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FROM VIEW OF TRAFFIC WHEN THEY ARE NOT APPLICABLE, AS DETERMINED BY THE ENGINEER.
3. NO LANE CLOSURE SHALL BE IMPLEMENTED DURING THE HOURS OF 7:00 A.M. TO 8:30 A.M. OR 3:00 P.M. TO 6:00 P.M. ALL OTHER HOURS, THE CONTRACTOR SHALL MAINTAIN TRAFFIC ACCORDING TO APPLICABLE GUIDELINES ESTABLISHED IN THE ODOT STANDARD CONSTRUCTION DRAWINGS AND IN THE OMUTCD. IN SITUATIONS WHERE ONE-LANE, TWO-WAY OPERATIONS MUST BE MAINTAINED, THE MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH MT-97.10 AND MT-97.11 OF THE ODOT STANDARD CONSTRUCTION DRAWINGS AND FIGURE 6H-10 OF THE OMUTCD.
6. TWO-WAY, ONE-LANE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, IN ACCORDANCE WITH FIGURE 6H-10 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ON NORTHWEST PARKWAY.
10. TYPE "C" FLASHING LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT. CONES ARE NOT APPROVED FOR USE AT NIGHT.
11. THE ROADWAY SHALL NOT BE OPENED TO TRAFFIC UNTIL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS, APPROVED BY THE CITY ENGINEER, ARE INSTALLED. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.
12. THE CONTRACTOR SHALL MAINTAIN ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS THROUGHOUT THIS PROJECT. CONFLICTING PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY COVERED OR RELOCATED, AS APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL ASSUME LIABILITY FOR MISSING, DAMAGED AND IMPROPERLY PLACED SIGNS.
13. IT IS THE POLICY OF THE HILLIARD POLICE DEPARTMENT (HPD - 614-876-7321) TO PROVIDE SPECIAL DUTY OFFICERS FOR ALL PROJECTS IN THE CITY OF HILLIARD, WHEN REQUIRED OR REQUESTED. HOWEVER, TO COMPLY WITH THIS POLICY AND ALLOW APPROPRIATE TIME FOR SCHEDULING, THEY REQUIRE A FORTY-EIGHT (48) HOUR ADVANCE NOTIFICATION. IF THEY ARE UNABLE TO FILL THE REQUEST, THEY WILL GIVE THE APPROPRIATE CONTRACTOR TWENTY-FOUR (24) HOURS NOTICE, SO THEY MAY MAKE ALTERNATE ARRANGEMENTS. IN THE EVENT OF CANCELLATION, THEY REQUIRE AT LEAST TWO (2) HOURS NOTIFICATION, OTHERWISE THE CONTRACTOR WILL BE OBLIGATED TO PAY THREE (3) HOURS SHOW-UP TIME AT THE SPECIAL DUTY RATE. A POLICE OFFICER CAN BE FURNISHED AT NO CHARGE FOR SHORT DURATIONS OF FIFTEEN (15) MINUTES OR LESS WITH A TWO (2) HOUR PRIOR NOTICE TO THE HPD AND THE ENGINEER.
14. IF, IN THE OPINION OF THE CITY ENGINEER OR POLICE, THE CONTRACTOR IS NOT PROVIDING PROPER MAINTENANCE OF TRAFFIC, THE CITY ENGINEER WILL INSTALL THE APPROPRIATE TRAFFIC CONTROL DEVICES, AND OFF DUTY POLICE OFFICERS WILL BE ASSIGNED TO THE PROJECT, ALL AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING NOTES HAVE BEEN DELETED: 4,5,7,8 AND 9.

**ALTERNATE METHODS**

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL WRITTEN APPROVAL HAS BEEN GRANTED, BY THE CITY ENGINEER.

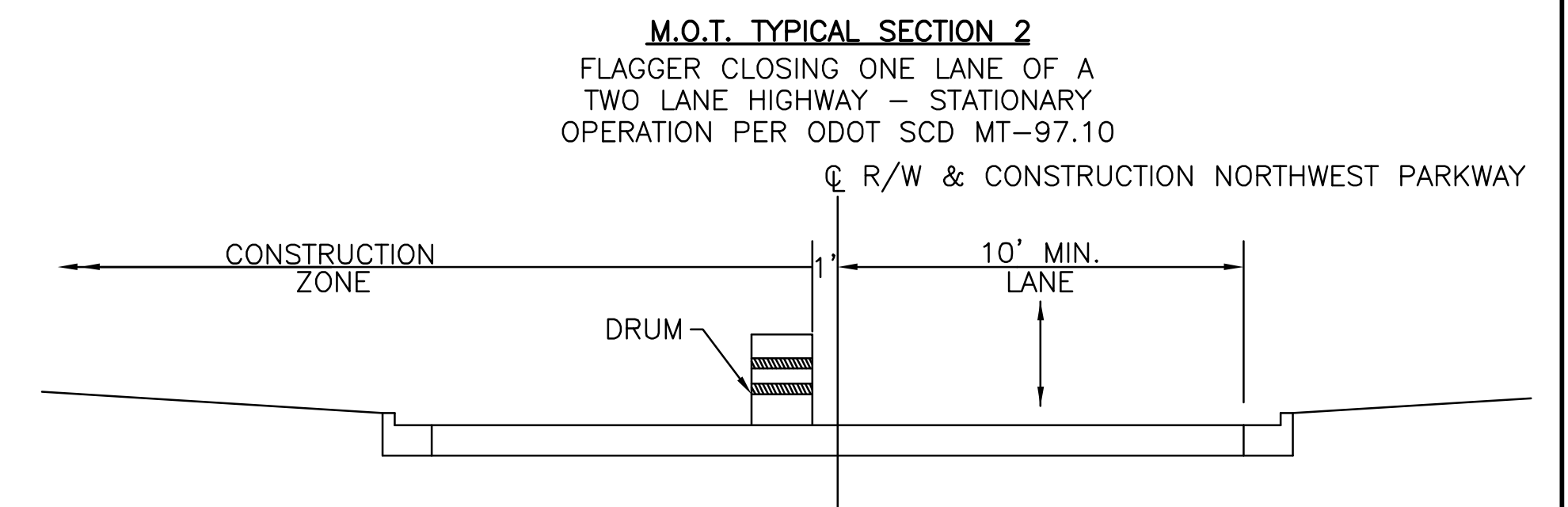
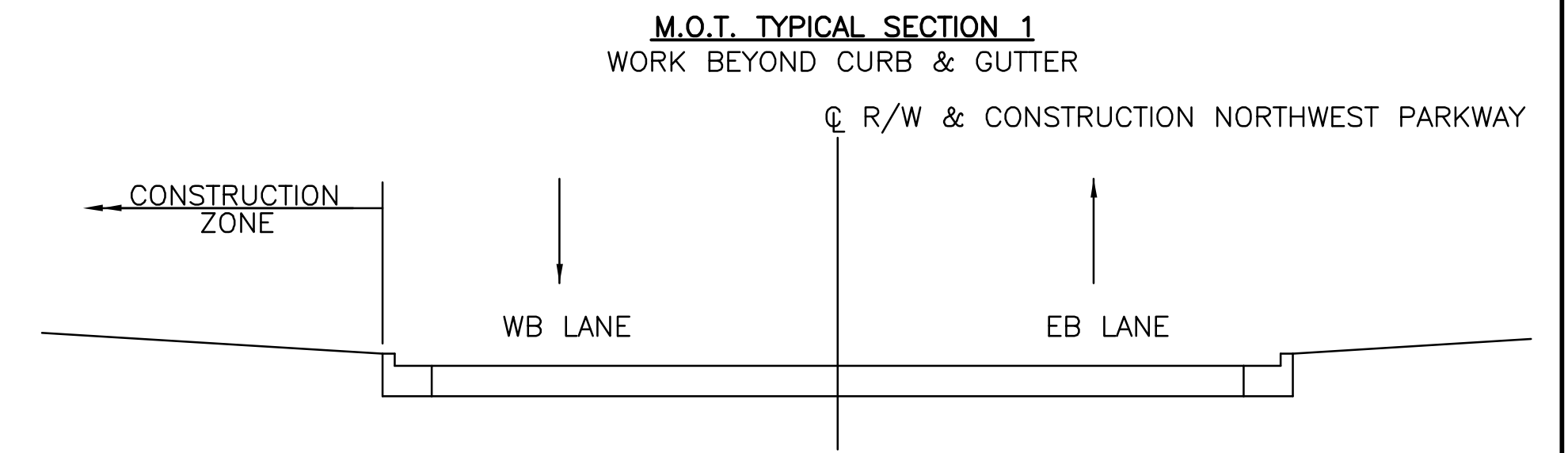
**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 - WATER 3 M GAL.

**INGRESS AND EGRESS**

INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



SHKOLNIK, TODD I:\17369874\Task 15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874\NW\_gp.dwg MAINTENANCE OF TRAFFIC Last Saved: Apr 12, 2018 11:39 AM Plotted: May 03, 2018 4:53 PM

CALCULATED  
MRD  
CHECKED  
TJS

MAINTENANCE OF TRAFFIC

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS



SHKQIWK\_T00D\_U\17360874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_sst\17360874\NW\_gd01.dwg GENERAL SUMMARY\_Last Saved: Apr. 12, 2018 11:29 AM Plotted: May 03, 2018 4:44 PM

ITEM	QUANTITY	UNIT	DESCRIPTION	SEE SHEET NO.	ITEM	QUANTITY	UNIT	DESCRIPTION	SEE SHEET NO.	ITEM	QUANTITY	UNIT	DESCRIPTION	SEE SHEET NO.
<b>ROADWAY</b>					<b>SANITARY SEWER</b>					<b>LIGHTING</b>				
201	1	LUMP	CLEARING & GRUBBING, AS PER PLAN	6	604	13	EA	MANHOLE ADJUSTED TO GRADE						
201	17	EACH	TREE REMOVED, 18"											
201	4	EACH	TREE REMOVED, 30"											
202	1,024	SQ.YD.	PAVEMENT REMOVED		625	48	EA	CONNECTION, FUSED PULL APART (725.15B)						
202	76	SQ.FT.	WALK REMOVED		625	24	EA	CONNECTION, UNFUSED PULL APART (725.15C)						
					625	9	EA	CONNECTION, UNFUSED PERMANENT (725.15E)						
202	593	SQ.FT.	WALK REMOVED, ASPHALT		625	24	EA	LIGHT POLE, THOROUGHFARE, AT0.9B30, AS PER PLAN (HILLIARD SCD SL-3)	40					
202	116	FT.	CURB REMOVED		625	24	EA	LIGHT POLE FOUNDATION, 24"x7' DEEP, AS PER PLAN (HILLIARD SCD SL-1)	40					
202	1,137	FT.	CURB AND GUTTER REMOVED											
203	1,247	CU.YD.	EXCAVATION		625	8,076	FT	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE (HILLIARD SCD SL-17)						
203	105	CU.YD.	EMBANKMENT		625	1,488	FT	NO. 12 AWG POLE AND BRACKET CABLE						
					625	268	FT	CONDUIT, 725.051, 2"						
204	6,601	SQ.YD.	SUBGRADE COMPACTION		625	76	FT	CONDUIT CLEANED AND CABLES REMOVED						
608	1,390	SQ.FT.	4" CONCRETE WALK		625	25	EA	LUMINAIRE, MISC.: GE LIGHTING CATALOGUE # EAN-B-5-D3-7-40-1-B-DKBZ (HILLIARD SCD SL-4)						
608	685	SQ.FT.	8" CONCRETE WALK											
608	11	EACH	CURB RAMP		625	307	FT	TRENCH, AS PER PLAN (HILLIARD SCD SL-6)	40					
608	11	EACH	DETECTABLE WARNING, TYPE E, AS PER PLAN	6	625	307	FT	PLASTIC CAUTION TAPE						
					625	2	EA	PULL BOX, AS PER PLAN (HILLIARD SCD SL-11)	40					
653	572	CU.YD.	TOPSOIL, FURNISHED AND PLACED, AS PER PLAN	5	625	24	EA	GROUND ROD						
SPEC	8	EACH	GAS SERVICE BOXES ADJUSTED TO GRADE	6	625	3	EA	LIGHT POLE, THOROUGHFARE, AT0.9B30, AS PER PLAN (HILLIARD SCD SL-3) (MATERIAL ONLY SPARE)	40					
<b>EROSION CONTROL</b>					<b>DUCT BANK</b>					<b>MAINTENANCE OF TRAFFIC</b>				
207	4,031	FT.	PERIMETER FILTER FABRIC FENCE		625	3	EA	PULL BOX, 725.06, 4'x4', AS PER PLAN	41					
207	1	EACH	INLET PROTECTION (CATCH BASIN)		SPEC	271	FT	2-4"/4-2" DUCT BANK WITH TRACER WIRE	40-41					
207	15	EACH	INLET PROTECTION (CURB WITH GRATE)		SPEC	2,117	FT	2-4"/5-2" DUCT BANK WITH TRACER WIRE	40-41					
207	1	EACH	CONCRETE WASHOUT											
659	5,147	SQ.YD.	SEEDING AND MULCHING, AS PER PLAN	5										
659	0.70	TON	COMMERCIAL FERTILIZER, AS PER PLAN	5	616	3	M GAL.	WATER						
659	28	M GAL.	WATER		614	1	LUMP	MAINTAINING TRAFFIC						
SPEC	320	CU.YD.	AMENDED SOIL INFILTRATION STRIP	6	623	1	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING						
					624	1	LUMP	MOBILIZATION						
<b>DRAINAGE</b>														
604	10	EACH	MANHOLE ADJUSTED TO GRADE		<b>ALL PAY ITEMS REFERENCE 2012 CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.</b>									
605	1,137	FT.	6" PIPE UNDERDRAINS, 707.31											
<b>PAVEMENT</b>														
259	7	CU.YD.	PERMANENT PAVEMENT, TYPE I											
304	637	CU.YD.	AGGREGATE BASE (PATH)											
304	88	CU.YD.	AGGREGATE BASE (DRIVEWAY)											
407	217	GAL.	TACK COAT FOR INTERMEDIATE COURSE (PATH)											
407	17	GAL.	TACK COAT FOR INTERMEDIATE COURSE (DRIVEWAY)											
448	10	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG64-22, (DRIVEWAY)											
448	142	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG64-22, (PATH)											
448	14	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22, (DRIVEWAY)											
448	251	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22, (PATH)											
451	1,074	SQ.YD.	8" PORTLAND CEMENT CONCRETE PAVEMENT "CLASS C" WITH MESH											
452	156	SQ.YD.	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1											
609	132	FT.	CURB, STRAIGHT 18"											
609	1,137	FT.	COMBINATION CURB & GUTTER, TYPE SPECIAL 8" (CG-2)											
SPEC	153	CU.YD.	AGGREGATE BASE (#57 STONE)	3,6,34										
<b>WATER WORK</b>														
807	11	EA	SERVICE BOXES ADJUSTED TO GRADE											
807	18	EA	VALVE BOXES ADJUSTED TO GRADE											

GENERAL SUMMARY

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS





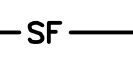


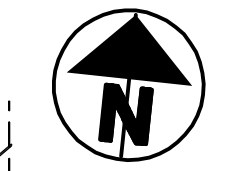
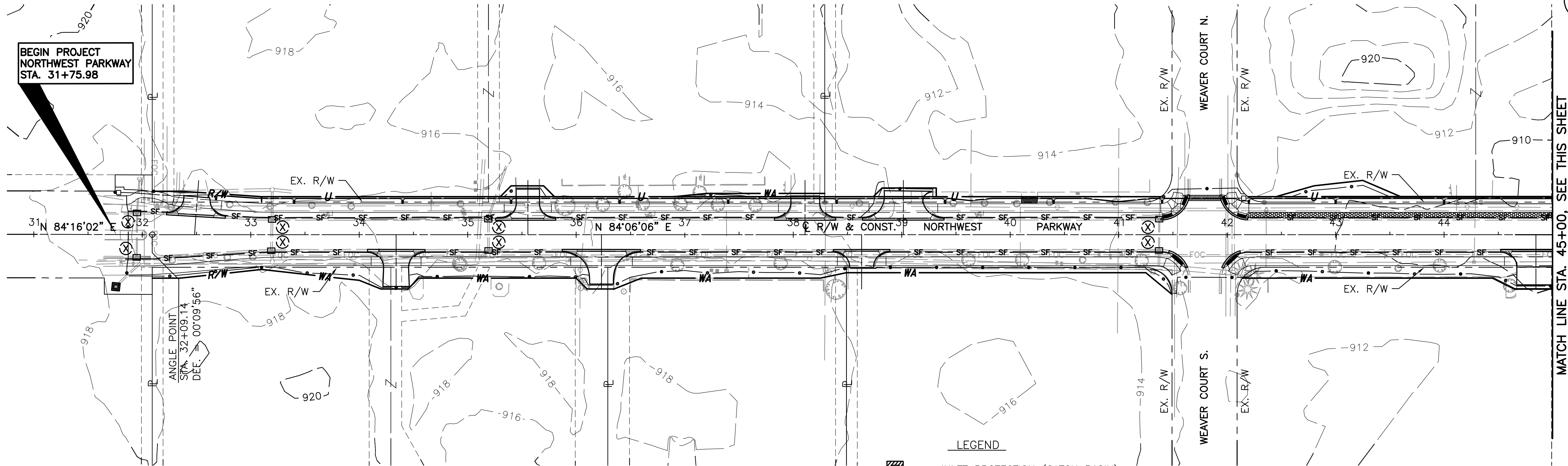
SHKOLNIK\_TODD\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874NW\_sp01.dwg - STORM WATER POLLUTION PREVENTION PLAN Lot. Saved: Apr 09, 2018, 3:26 PM Plotted: May 03, 2018, 4:44 PM

**BEGIN PROJECT  
NORTHWEST PARKWAY  
STA. 31+75.98**

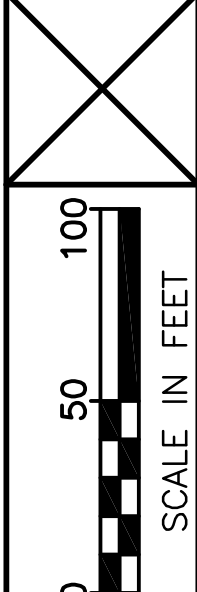
ANGLE POINT  
STA. 32+09.14  
DEF. = 00'09"56"

SEDIMENT AND EROSION CONTROL QUANTITIES (THIS SHEET)				
ITEM	QUANTITY	UNIT	DESCRIPTION	
207	1	EACH	INLET PROTECTION (CATCH BASIN)	
207	15	EACH	INLET PROTECTION (CURB WITH GRATE)	
207	4031	FT	PERIMETER FILTER FABRIC FENCE	
207	1	EACH	CONCRETE WASHOUT	

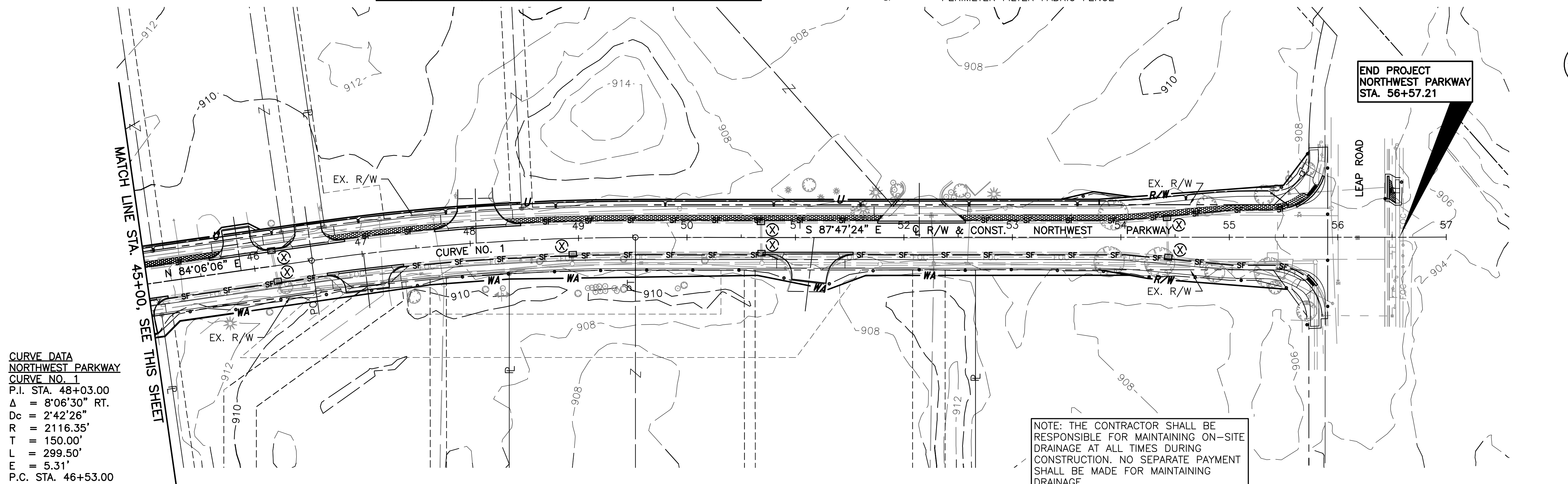
- LEGEND**
-  INLET PROTECTION (CATCH BASIN)
  -  EXISTING STRUCTURE WITH INLET
  -  PROTECTION (CURB WITH GRATE)
  -  AMENDED SOIL INFILTRATION STRIP
  -  PERIMETER FILTER FABRIC FENCE



CALCULATED  
CNK  
CHECKED  
TJS



MATCH LINE STA. 45+00, SEE THIS SHEET



**END PROJECT  
NORTHWEST PARKWAY  
STA. 56+57.21**

**CURVE DATA  
NORTHWEST PARKWAY  
CURVE NO. 1**  
P.I. STA. 48+03.00  
Δ = 8°06'30" RT.  
Dc = 2'42"26"  
R = 2116.35'  
T = 150.00'  
L = 299.50'  
E = 5.31'  
P.C. STA. 46+53.00  
P.T. STA. 49+52.50

NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ON-SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTAINING DRAINAGE.

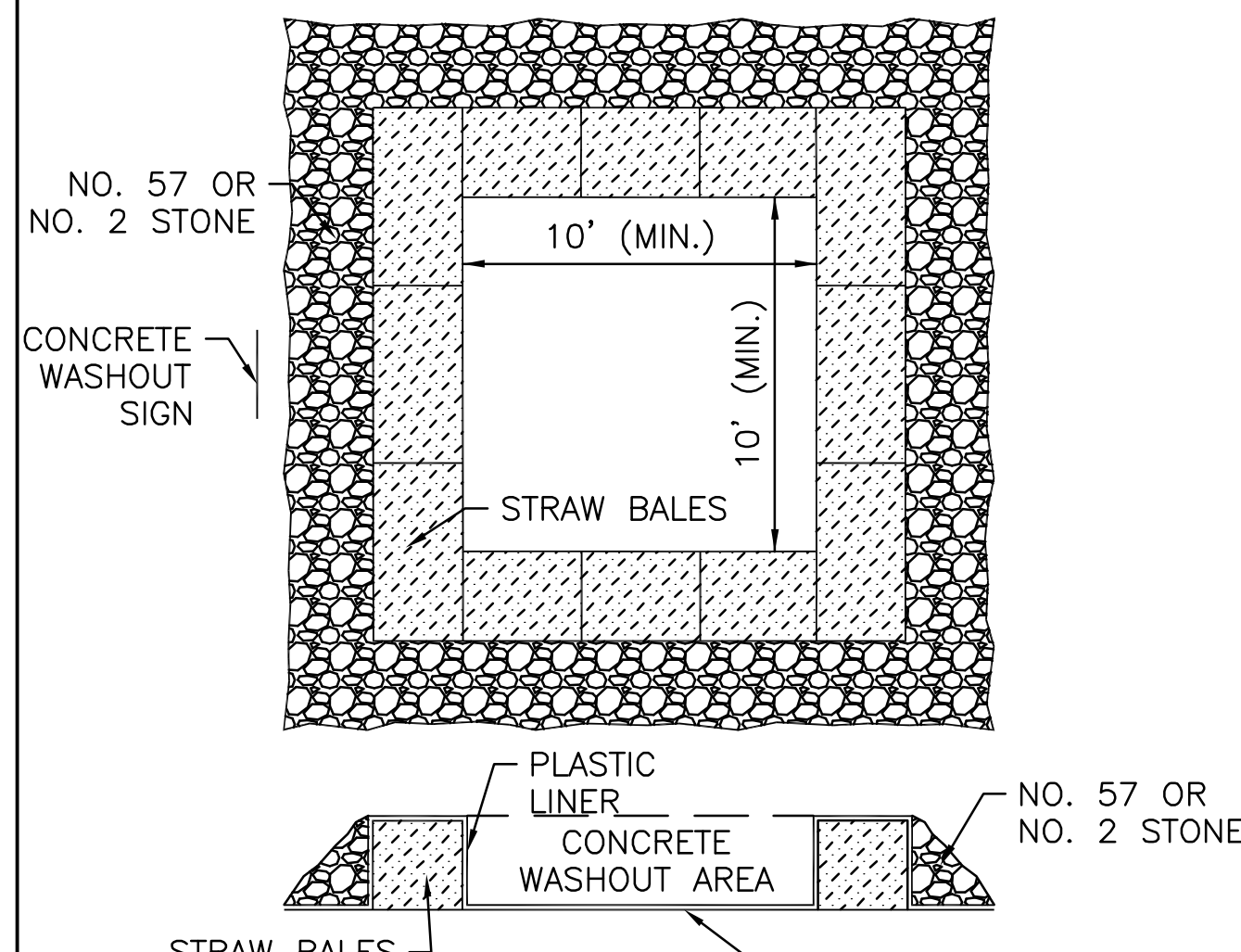
STORM WATER POLLUTION PREVENTION PLAN

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS



SHKOLNIK, TODD U:\17369874\Task 15 - Northwest Parkway\_MUP\_Study\design\plan\_set\17369874\NWP\SWPPP01.dwg STORM WATER POLLUTION PREVENTION PLAN Last Saved: Mar 20, 2018 11:53 AM Plotted: May 03, 2018 4:45 PM

**CONCRETE WASHOUT**



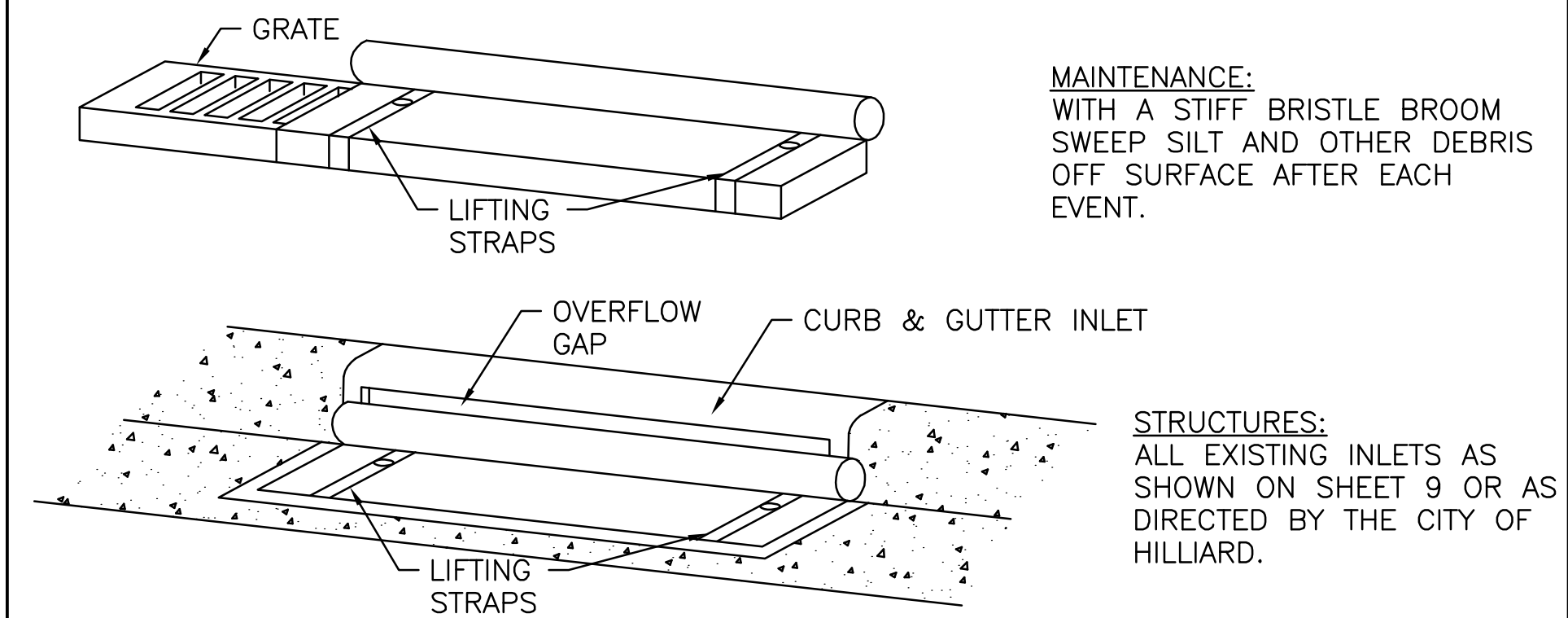
CONCRETE TRUCKS SHALL UTILIZE AREAS TO WASHOUT TRUCKS. ACCUMULATED CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

AS AN ALTERNATIVE, THE CONTRACTOR SHALL USE A ROLL OFF BOX WITH LINER.

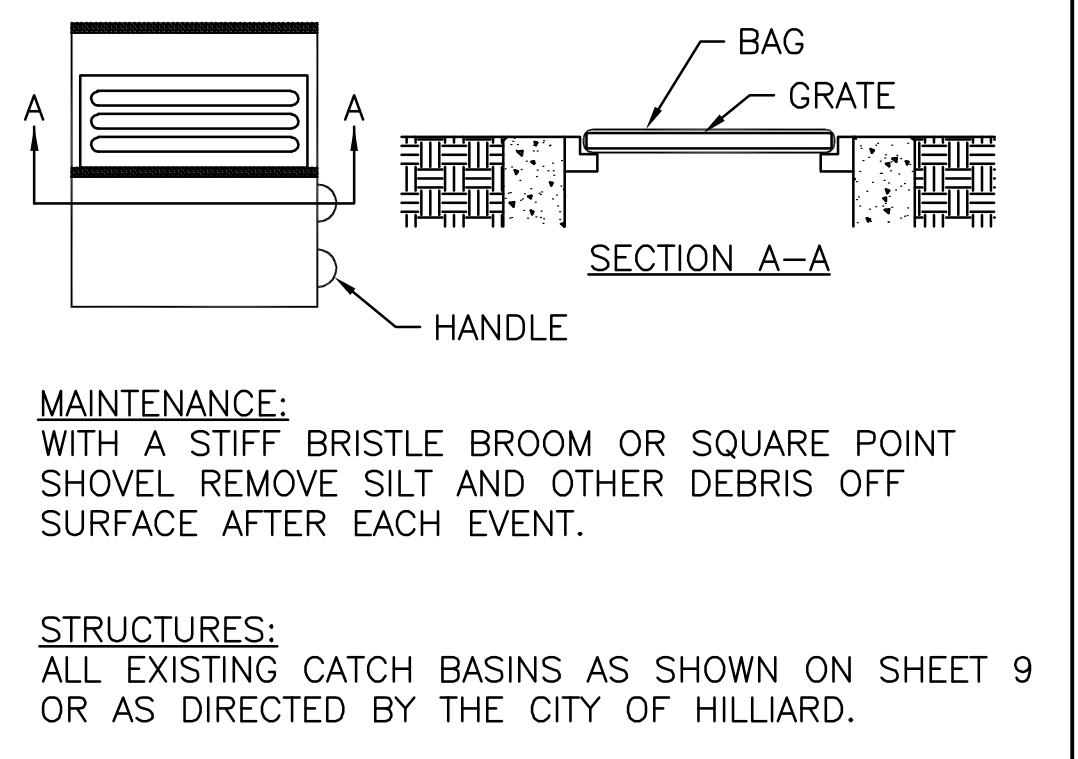
THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF HILLIARD.

LOCATION TO BE DETERMINED IN THE FIELD.

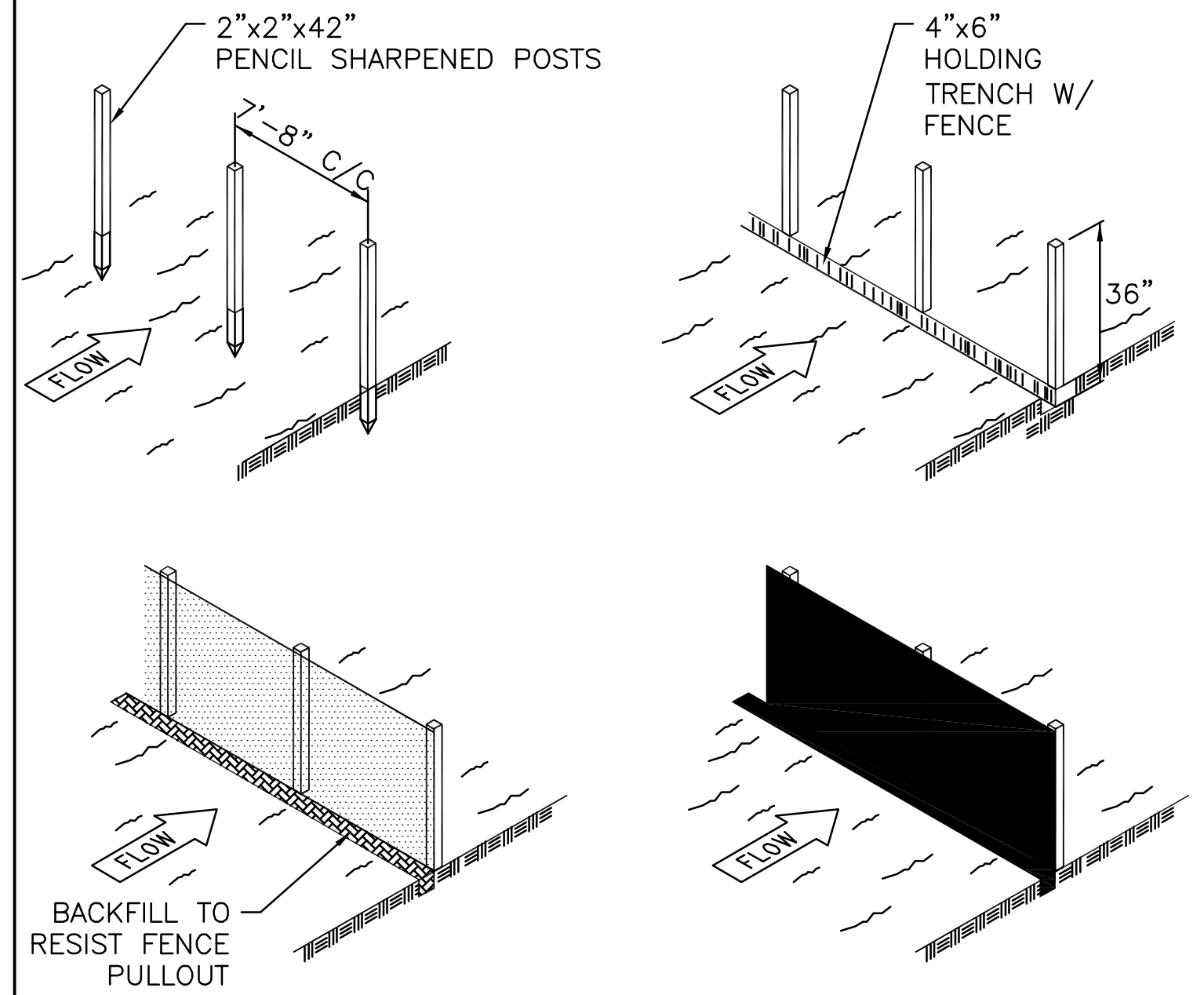
**INLET PROTECTION - CURB INLET WITH GRATE**



**INLET PROTECTION - CATCH BASIN**



**PERIMETER FILTER FABRIC FENCE**

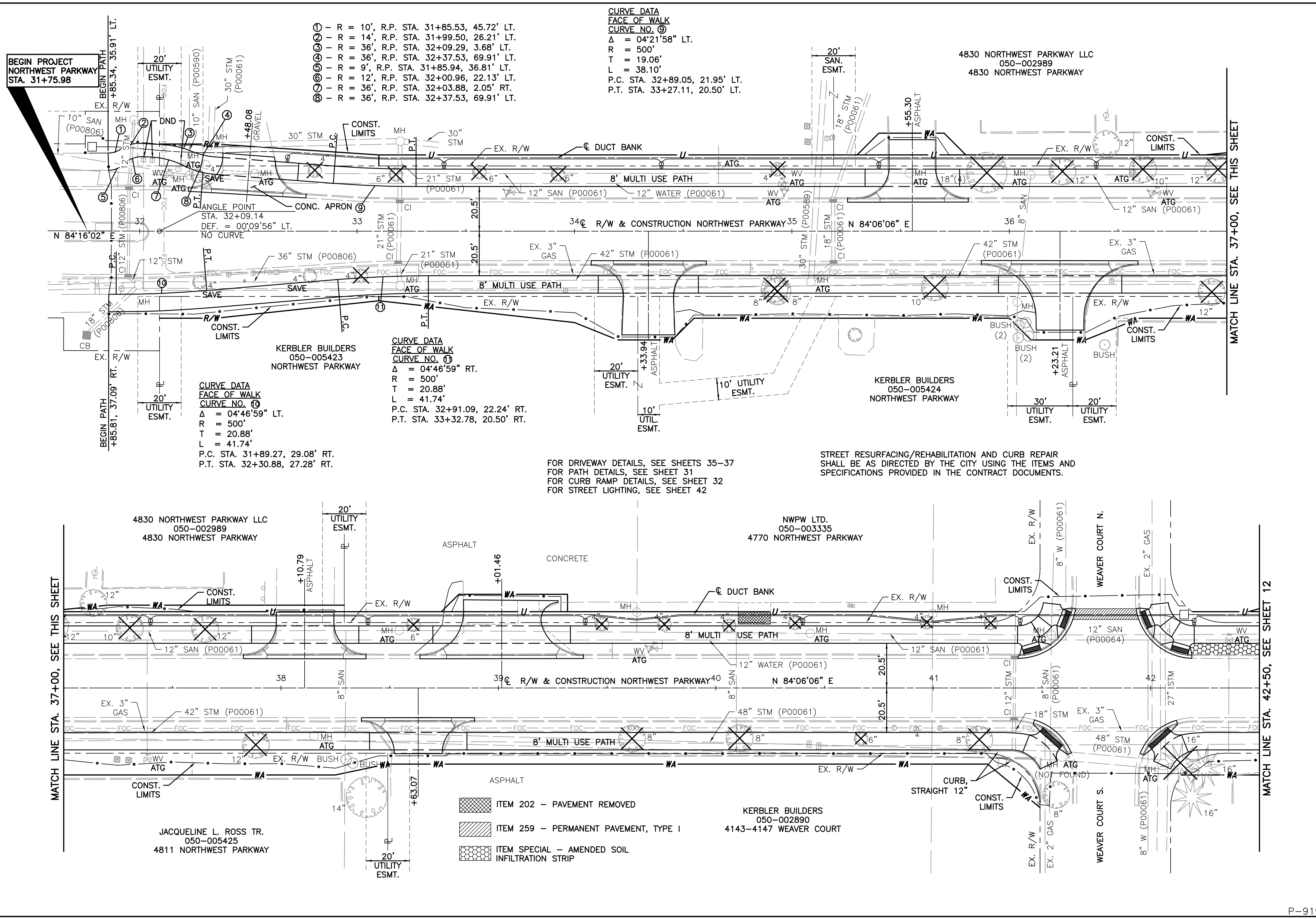


**ALTERNATIVE:**  
THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE ESC BMP, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE IN LINEAR INSTALLATIONS.

**ADDITIONALLY:**  
THE USE OF COMPOST FILTER SOCKS AND COMPOST BLANKETS ARE GAINING WIDER ACCEPTANCE NATIONWIDE. THEY ARE NOW APPROVED FOR USE ON ALL HILLIARD SWP3 PLANS AND CONSTRUCTION SITES.



SHKOLNIK\_TODD\_U:\17369874\Task\_15 - Northwest Parkway\_MUP\_Study\design\plan\_set\plan\_pco\17369874NW\_pp01.dwg PLAN - NORTHWEST PARKWAY Loc: Saved: Apr. 12, 2018, 11:33 AM Plotted: May 03, 2018, 4:45 PM



**BEGIN PROJECT  
NORTHWEST PARKWAY  
STA. 31+75.98**

- ① - R = 10', R.P. STA. 31+85.53, 45.72' LT.
- ② - R = 14', R.P. STA. 31+99.50, 26.21' LT.
- ③ - R = 36', R.P. STA. 32+09.29, 3.68' LT.
- ④ - R = 36', R.P. STA. 32+37.53, 69.91' LT.
- ⑤ - R = 9', R.P. STA. 31+85.94, 36.81' LT.
- ⑥ - R = 12', R.P. STA. 32+00.96, 22.13' LT.
- ⑦ - R = 36', R.P. STA. 32+03.88, 2.05' RT.
- ⑧ - R = 36', R.P. STA. 32+37.53, 69.91' LT.

**CURVE DATA  
FACE OF WALK  
CURVE NO. ⑨**  
 $\Delta = 04'21'58''$  LT.  
 R = 500'  
 T = 19.06'  
 L = 38.10'  
 P.C. STA. 32+89.05, 21.95' LT.  
 P.T. STA. 33+27.11, 20.50' LT.

4830 NORTHWEST PARKWAY LLC  
050-002989  
4830 NORTHWEST PARKWAY

**CURVE DATA  
FACE OF WALK  
CURVE NO. ⑩**  
 $\Delta = 04'46'59''$  LT.  
 R = 500'  
 T = 20.88'  
 L = 41.74'  
 P.C. STA. 31+89.27, 29.08' RT.  
 P.T. STA. 32+30.88, 27.28' RT.

**CURVE DATA  
FACE OF WALK  
CURVE NO. ⑪**  
 $\Delta = 04'46'59''$  RT.  
 R = 500'  
 T = 20.88'  
 L = 41.74'  
 P.C. STA. 32+91.09, 22.24' RT.  
 P.T. STA. 33+32.78, 20.50' RT.

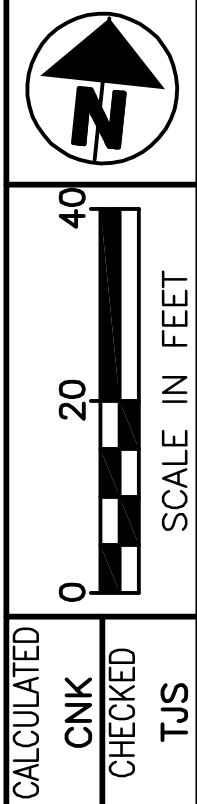
FOR DRIVEWAY DETAILS, SEE SHEETS 35-37  
 FOR PATH DETAILS, SEE SHEET 31  
 FOR CURB RAMP DETAILS, SEE SHEET 32  
 FOR STREET LIGHTING, SEE SHEET 42

STREET RESURFACING/REHABILITATION AND CURB REPAIR  
 SHALL BE AS DIRECTED BY THE CITY USING THE ITEMS AND  
 SPECIFICATIONS PROVIDED IN THE CONTRACT DOCUMENTS.

- ITEM 202 - PAVEMENT REMOVED
- ITEM 259 - PERMANENT PAVEMENT, TYPE I
- ITEM SPECIAL - AMENDED SOIL INFILTRATION STRIP

MATCH LINE STA. 37+00, SEE THIS SHEET

MATCH LINE STA. 42+50, SEE SHEET 12

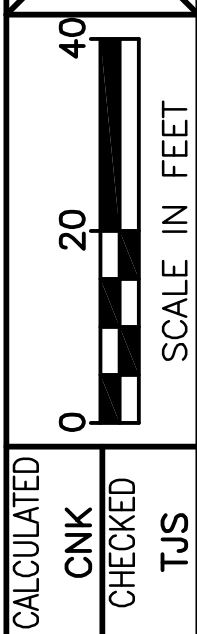
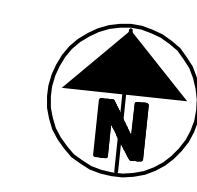
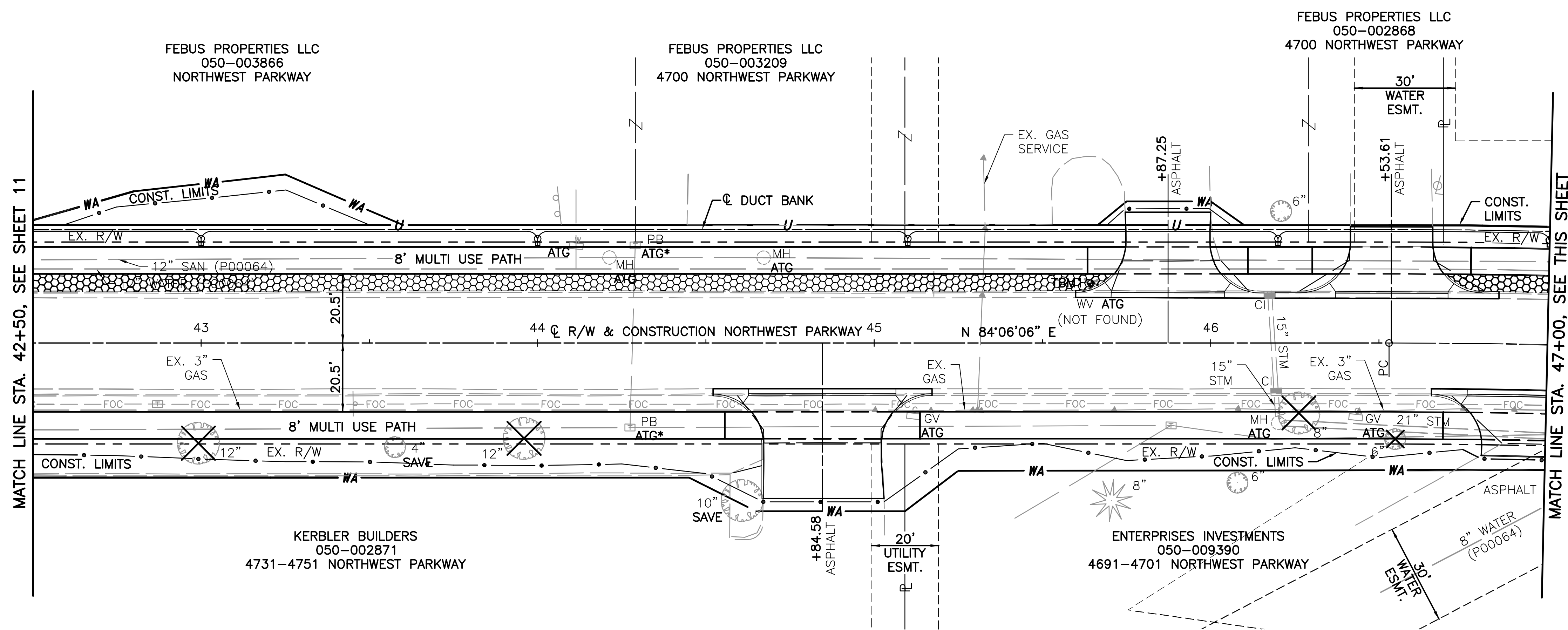


PLAN - NORTHWEST PARKWAY  
 STA. 31+67.59 TO STA. 42+50

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS



SHKOLNIK\_T00D\_U:\173608874\Task\_15 - Northwest Parkway\_MUP\_Study\design\plan\_set\plan\_p00173608874NW\_pp02.dwg PLAN - NORTHWEST PARKWAY Loc1 Saved: Apr. 12, 2018, 11:34 AM Plotted: May, 03, 2018, 4:45 PM



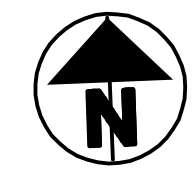
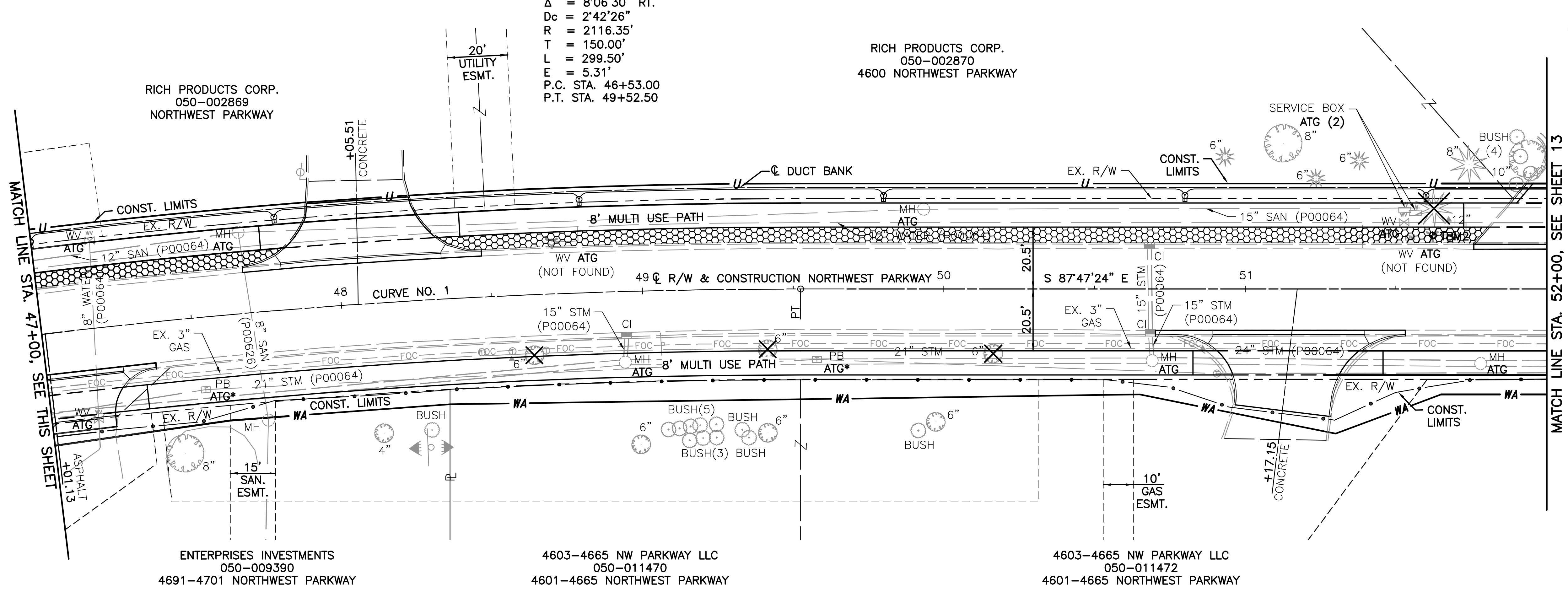
STREET RESURFACING/REHABILITATION AND CURB REPAIR SHALL BE AS DIRECTED BY THE CITY USING THE ITEMS AND SPECIFICATIONS PROVIDED IN THE CONTRACT DOCUMENTS.

**CURVE DATA**  
**NORTHWEST PARKWAY**  
**CURVE NO. 1**  
P.I. STA. 48+03.00  
 $\Delta = 8^{\circ}06'30''$  RT.  
 $D_c = 2'42'26''$   
 $R = 2116.35'$   
 $T = 150.00'$   
 $L = 299.50'$   
 $E = 5.31'$   
P.C. STA. 46+53.00  
P.T. STA. 49+52.50

\* - PULL BOX ADJUSTED TO GRADE BY OTHERS

FOR DRIVEWAY DETAILS, SEE SHEETS 37-39  
FOR CURB RAMP DETAILS, SEE SHEET 32  
FOR STREET LIGHTING, SEE SHEET 43

 ITEM SPECIAL - AMENDED SOIL  
 INFILTRATION STRIP



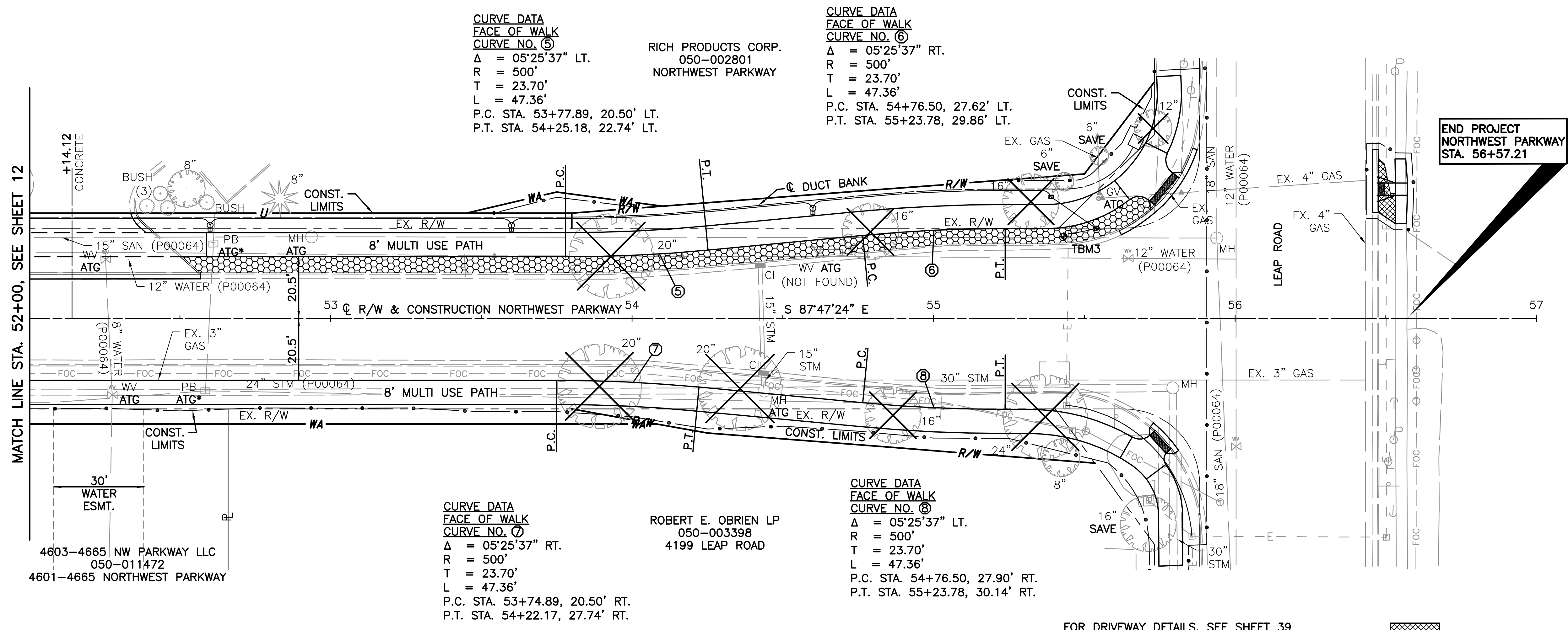
PLAN - NORTHWEST PARKWAY  
STA. 42+50 TO STA. 52+00

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

12  
44



SHKOLNIK\_TODD\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\plan\_pro\17369874NW\_pp03.dwg PLAN - NORTHWEST PARKWAY Last Saved: Apr. 12, 2018, 11:34 AM Plotted: May 03, 2018, 4:45 PM



**CURVE DATA**  
**FACE OF WALK**  
**CURVE NO. ⑤**  
 $\Delta = 05'25'37''$  LT.  
 $R = 500'$   
 $T = 23.70'$   
 $L = 47.36'$   
 P.C. STA. 53+77.89, 20.50' LT.  
 P.T. STA. 54+25.18, 22.74' LT.

RICH PRODUCTS CORP.  
 050-002801  
 NORTHWEST PARKWAY

**CURVE DATA**  
**FACE OF WALK**  
**CURVE NO. ⑥**  
 $\Delta = 05'25'37''$  RT.  
 $R = 500'$   
 $T = 23.70'$   
 $L = 47.36'$   
 P.C. STA. 54+76.50, 27.62' LT.  
 P.T. STA. 55+23.78, 29.86' LT.

**CURVE DATA**  
**FACE OF WALK**  
**CURVE NO. ⑦**  
 $\Delta = 05'25'37''$  RT.  
 $R = 500'$   
 $T = 23.70'$   
 $L = 47.36'$   
 P.C. STA. 53+74.89, 20.50' RT.  
 P.T. STA. 54+22.17, 27.74' RT.

ROBERT E. OBRIEN LP  
 050-003398  
 4199 LEAP ROAD

**CURVE DATA**  
**FACE OF WALK**  
**CURVE NO. ⑧**  
 $\Delta = 05'25'37''$  LT.  
 $R = 500'$   
 $T = 23.70'$   
 $L = 47.36'$   
 P.C. STA. 54+76.50, 27.90' RT.  
 P.T. STA. 55+23.78, 30.14' RT.

MATCH LINE STA. 52+00, SEE SHEET 12

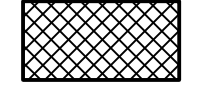
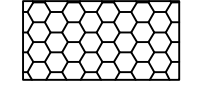
4603-4665 NW PARKWAY LLC  
 050-011472  
 4601-4665 NORTHWEST PARKWAY

END PROJECT  
 NORTHWEST PARKWAY  
 STA. 56+57.21



STREET RESURFACING/REHABILITATION AND CURB REPAIR SHALL BE AS DIRECTED BY THE CITY USING THE ITEMS AND SPECIFICATIONS PROVIDED IN THE CONTRACT DOCUMENTS.

\* - PULL BOX ADJUSTED TO GRADE BY OTHERS

FOR DRIVEWAY DETAILS, SEE SHEET 39  
 FOR CURB RAMP DETAILS, SEE SHEET 33  
 FOR STREET LIGHTING, SEE SHEET 44

-  ITEM 202 - PAVEMENT REMOVED
-  ITEM SPECIAL - AMENDED SOIL INFILTRATION STRIP

CALCULATED  
 CNK  
 CHECKED  
 TJS

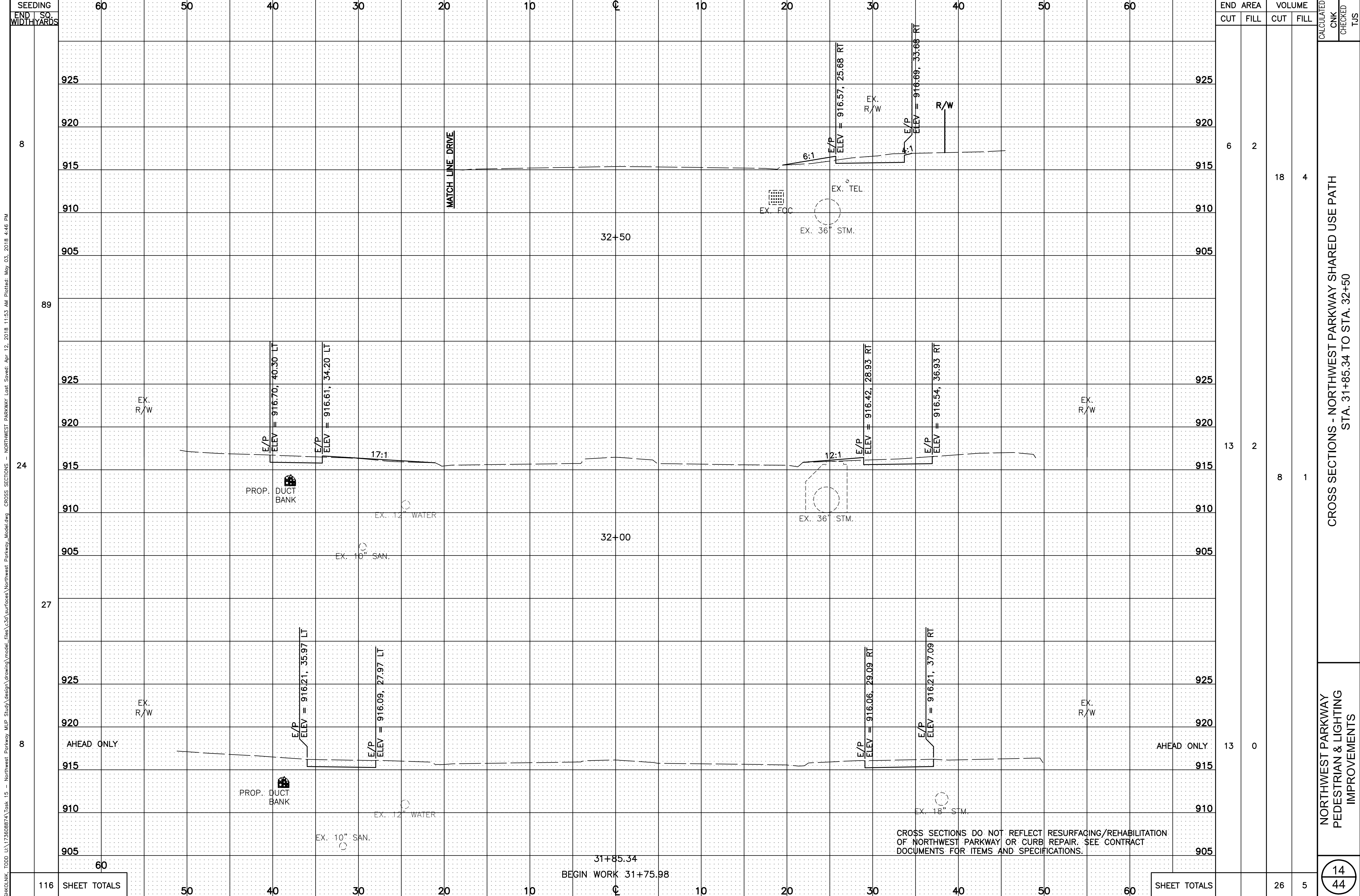



SCALE IN FEET

PLAN - NORTHWEST PARKWAY  
 STA. 52+00 TO STA. 56+57.21

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS





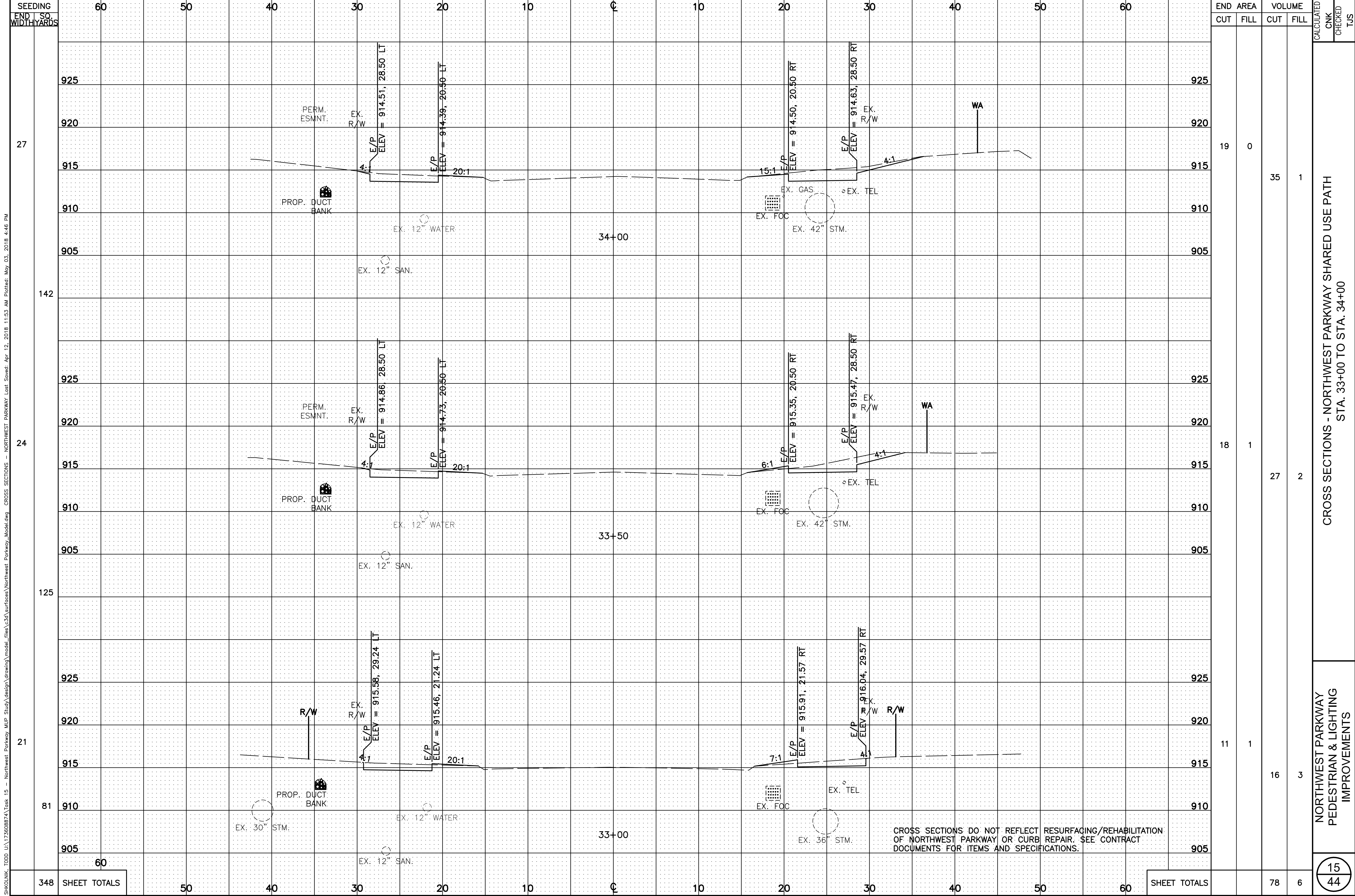
SHOUKNIK\_T00D\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM

END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
6	2	18	4		
13	2	8	1		
13	0				
		26	5		

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
 CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 31+85.34 TO STA. 32+50

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.





SEEDING END SO. WIDTH YARDS

60 50 40 30 20 10 0 10 20 30 40 50 60

925 920 915 910 905 925 920 915 910 905 925 920 915 910 905 925 920 915 910 905

27 142 24 125 21 81

348 SHEET TOTALS 50 40 30 20 10 0 10 20 30 40 50 60 SHEET TOTALS

END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
19	0	35	1		
18	1	27	2		
11	1	16	3		
		78	6		

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 33+00 TO STA. 34+00

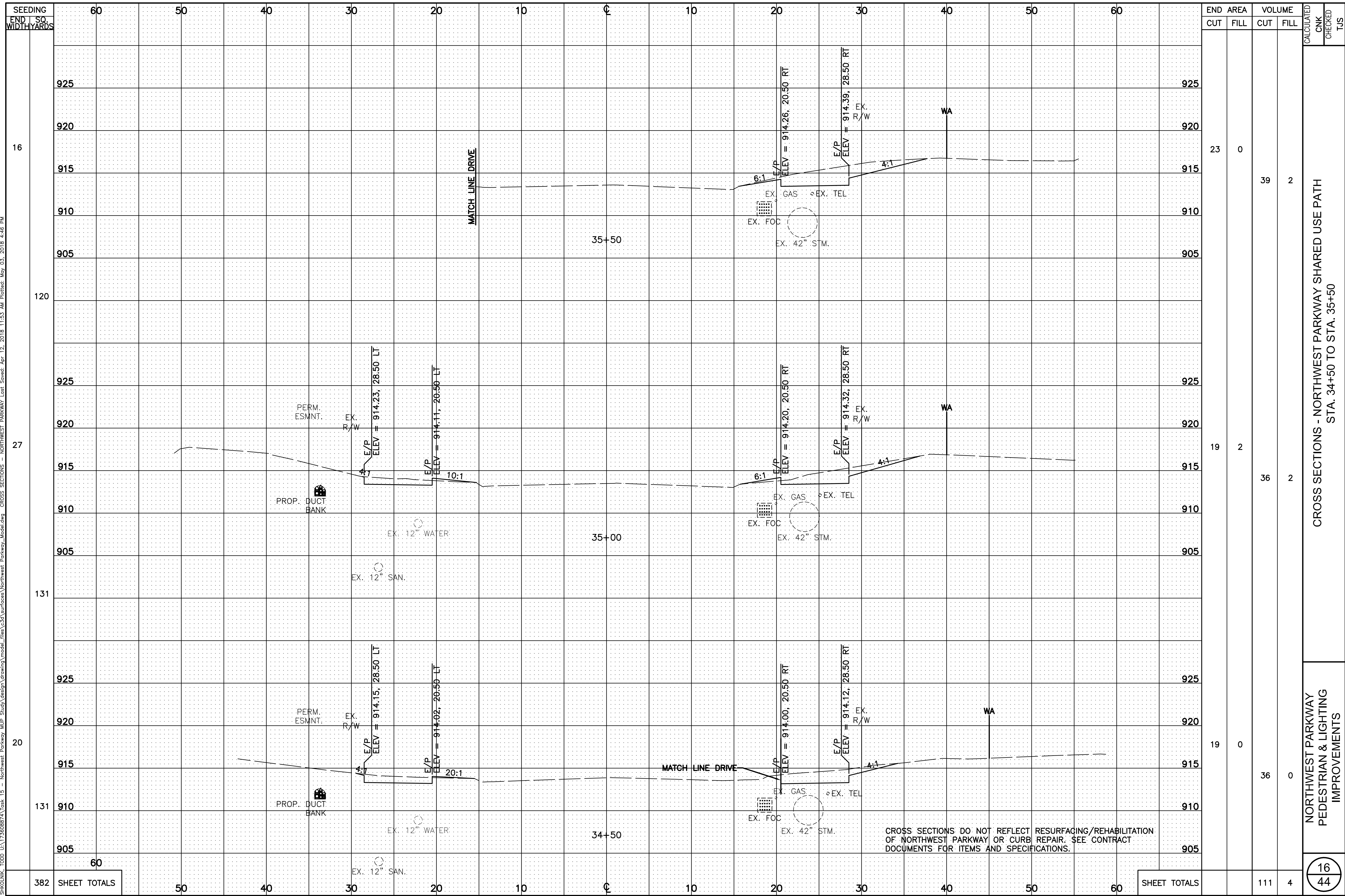
NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

SHOULINK\_T00D\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Shared Use Path.dwg Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM



SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM



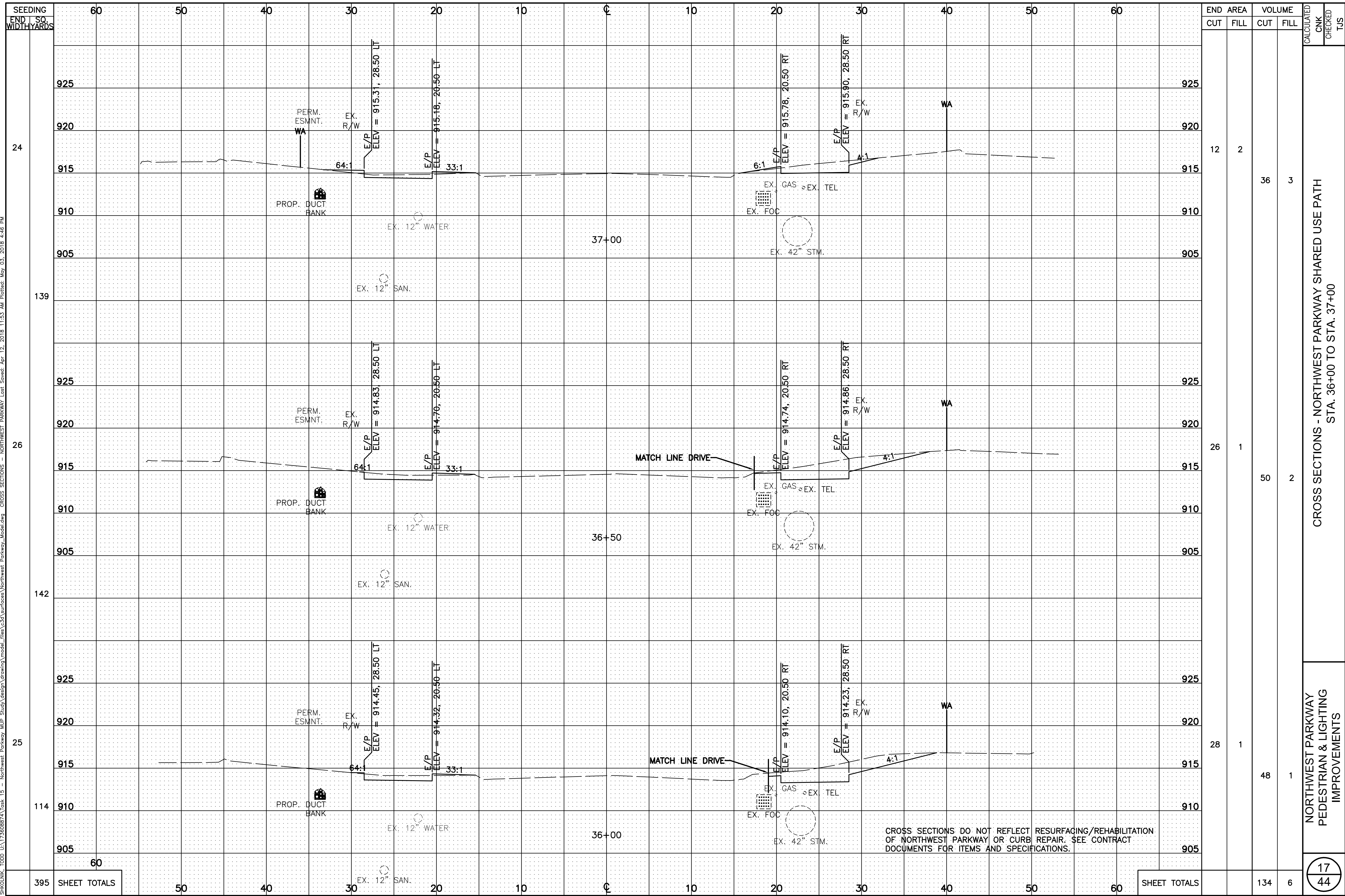
END STA.	AREA		VOLUME		CALCULATED	CNK	CHECKED	TUS
	CUT	FILL	CUT	FILL				
925								
920								
915	23	0						
910								
905			39	2				
925								
920								
915	19	2						
910								
905			36	2				
925								
920								
915	19	0						
910								
905			36	0				
<b>SHEET TOTALS</b>			<b>111</b>	<b>4</b>				

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
 CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 34+50 TO STA. 35+50



SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM

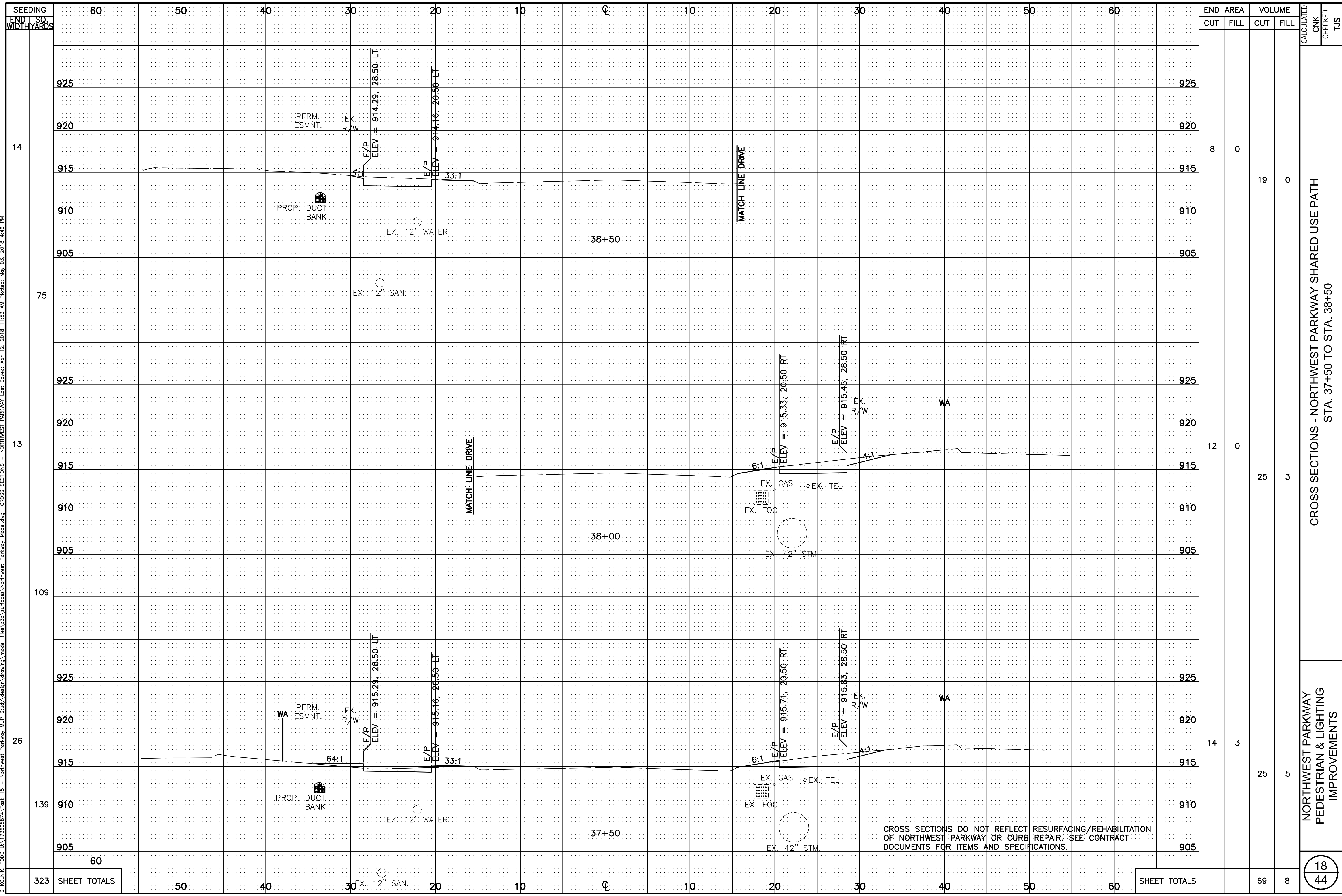


CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 36+00 TO STA. 37+00

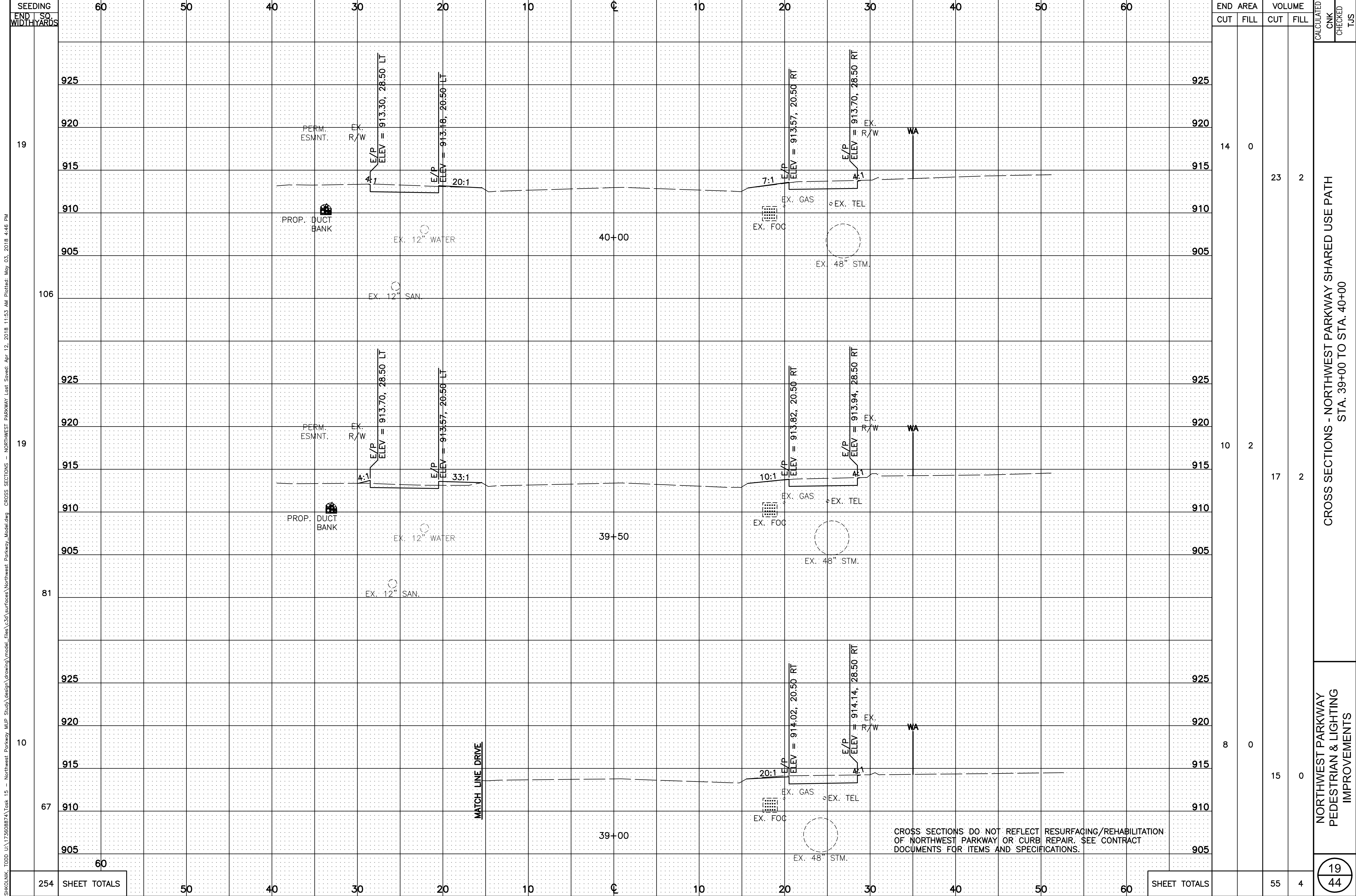


SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM



END STA.	AREA	VOLUME		CALCULATED	CNK	CHECKED	TUS
		CUT	FILL				
925							
920							
915	8	0					
910			19	0			
905							
925							
920							
915	12	0					
910			25	3			
905							
925							
920							
915	14	3					
910			25	5			
905							
60							
323	SHEET TOTALS		69	8			

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
 CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 37+50 TO STA. 38+50



SEEDING END SO. WIDTH YARDS

19

106

81

10

67

254

STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
925				
920				
915	14	0	23	2
910				
905				
925				
920				
915	10	2	17	2
910				
905				
925				
920				
915	8	0	15	0
910				
905				
60				
SHEET TOTALS			55	4

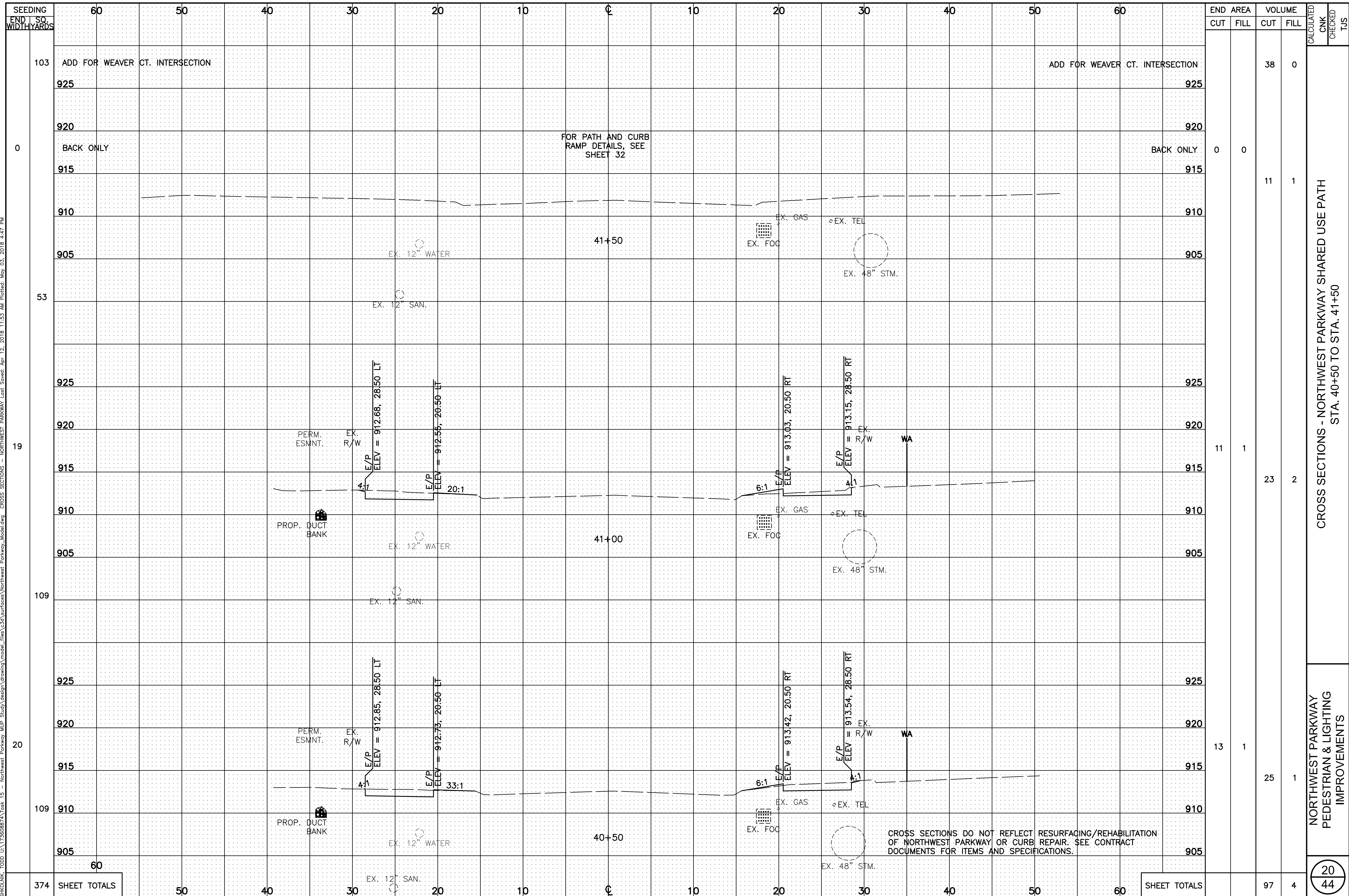
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 39+00 TO STA. 40+00

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

SHOULINK\_T00D\_U:\17369874\Task\_15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:46 PM



SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:47 PM

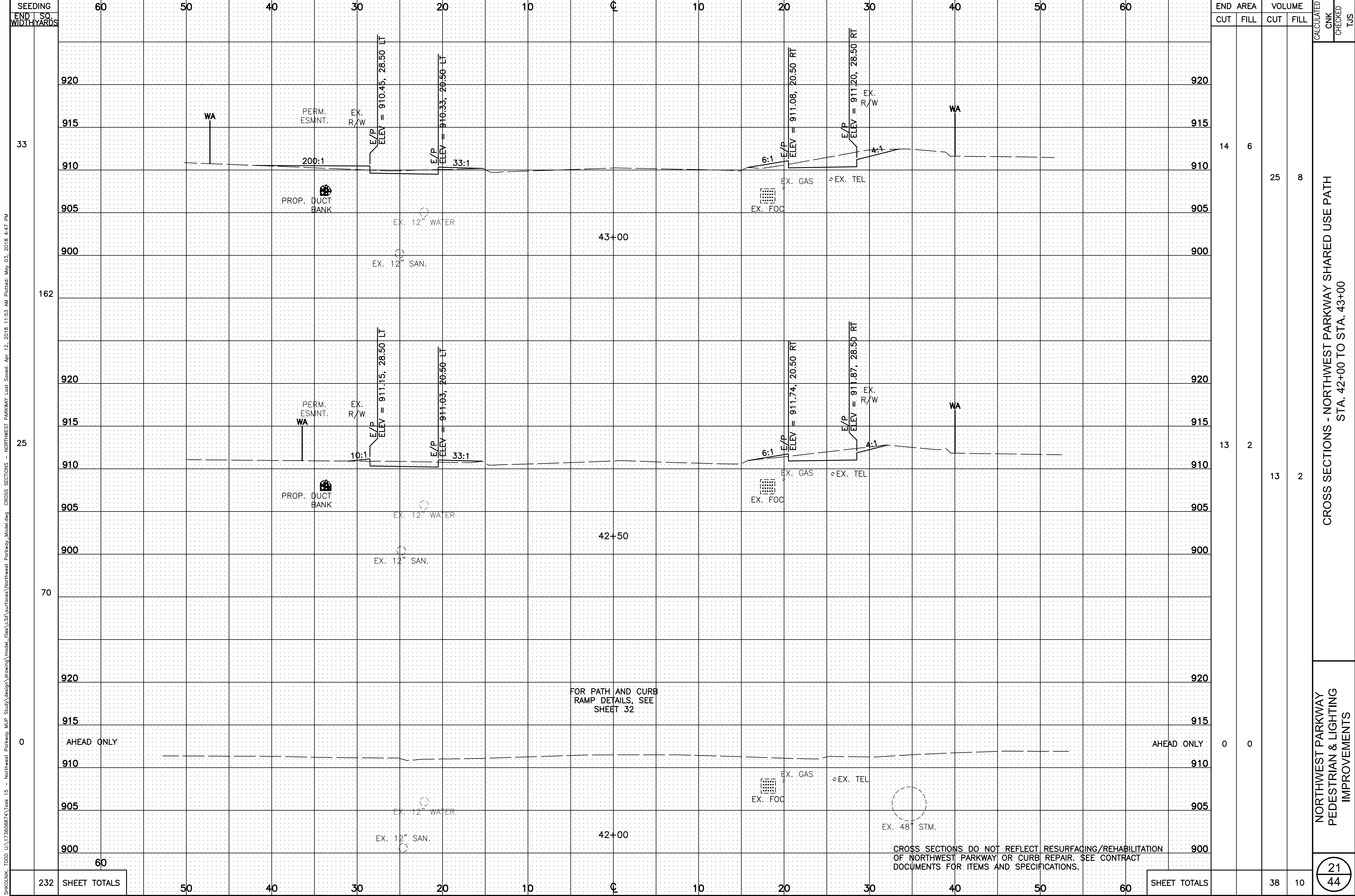


SEEDING END SO. WIDTH YARDS	END AREA		VOLUME		CALCULATED CNK	CHECKED TUS
	CUT	FILL	CUT	FILL		
103						
925			38	0		
920						
0	0	0				
915						
910			11	1		
905						
53						
925						
920						
19	11	1				
915			23	2		
910						
905						
109						
925						
920						
20	13	1				
915			25	1		
910						
905						
109						
925						
920						
60						
374			97	4		

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS  
 CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 40+50 TO STA. 41+50

20  
44

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

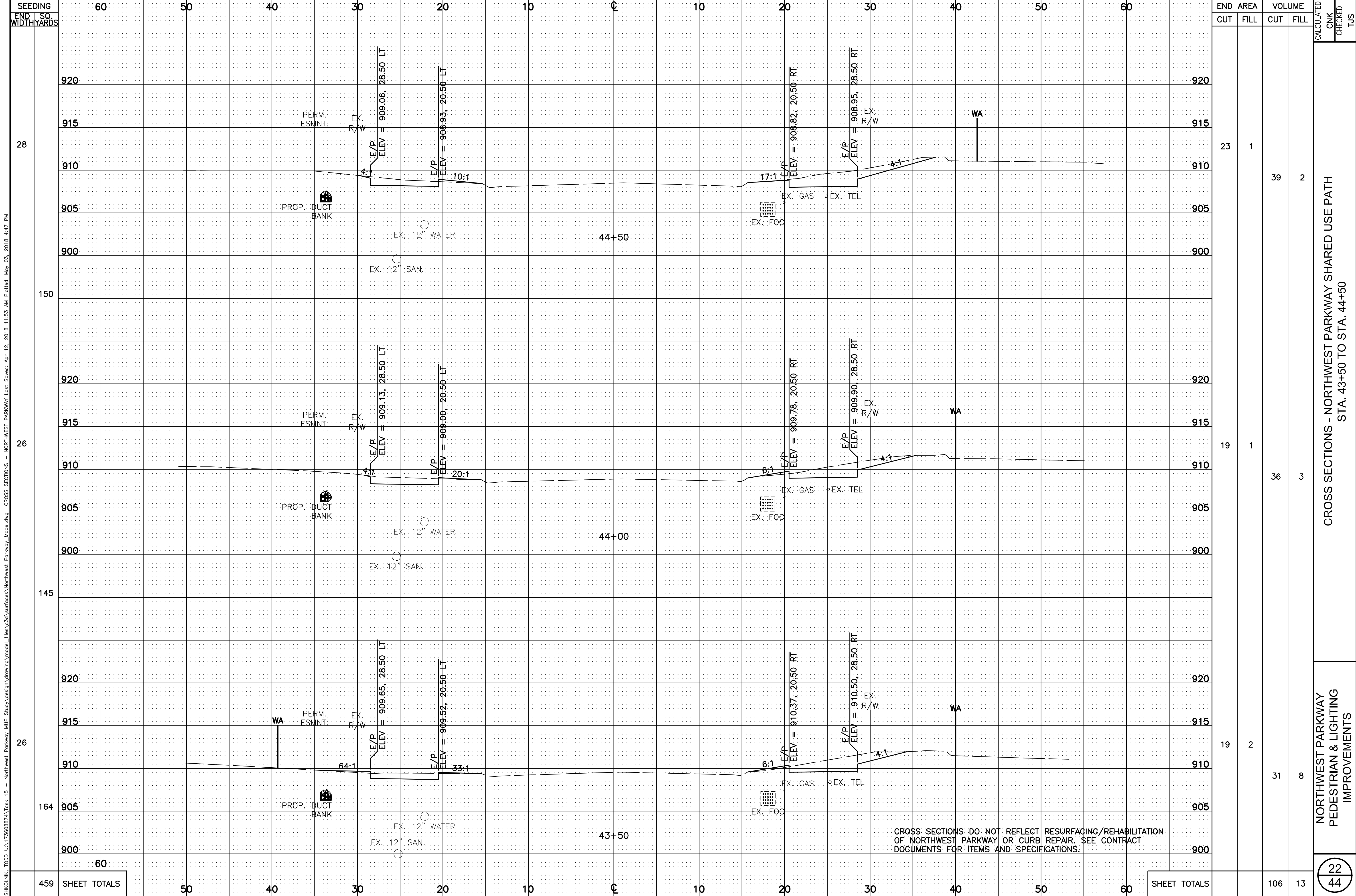


SHCOLINK\_T00D\_UA\17369874\Task\_15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Shared Use Path STA. 42+00 TO STA. 43+00

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
 CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 42+00 TO STA. 43+00

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION  
 OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT  
 DOCUMENTS FOR ITEMS AND SPECIFICATIONS.





SEEDING END SO. WIDTH YARDS

60 50 40 30 20 10 C 10 20 30 40 50 60

28 150 26 145 26 164

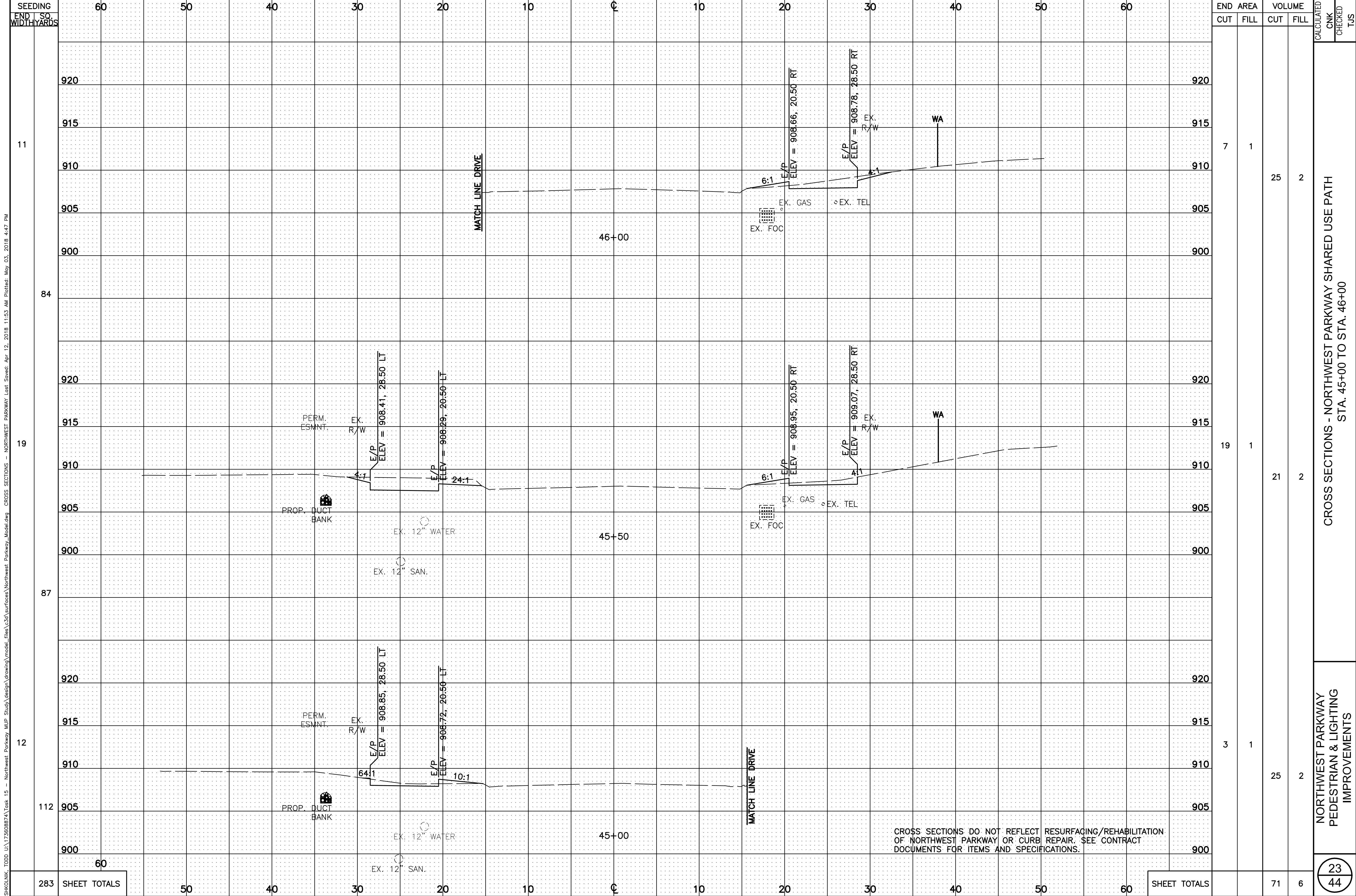
459 SHEET TOTALS

END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
23	1	39	2		
19	1	36	3		
19	2	31	8		
		106	13		

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 43+50 TO STA. 44+50

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.



SEEDING END SO. WIDTH YARDS

11

84

19

87

12

112

283 SHEET TOTALS

STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
920				
915				
910	7	1	25	2
905				
900				
920				
915	19	1	21	2
910				
905				
900				
920				
915				
910	3	1	25	2
905				
900				
60				
SHEET TOTALS			71	6

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 45+00 TO STA. 46+00

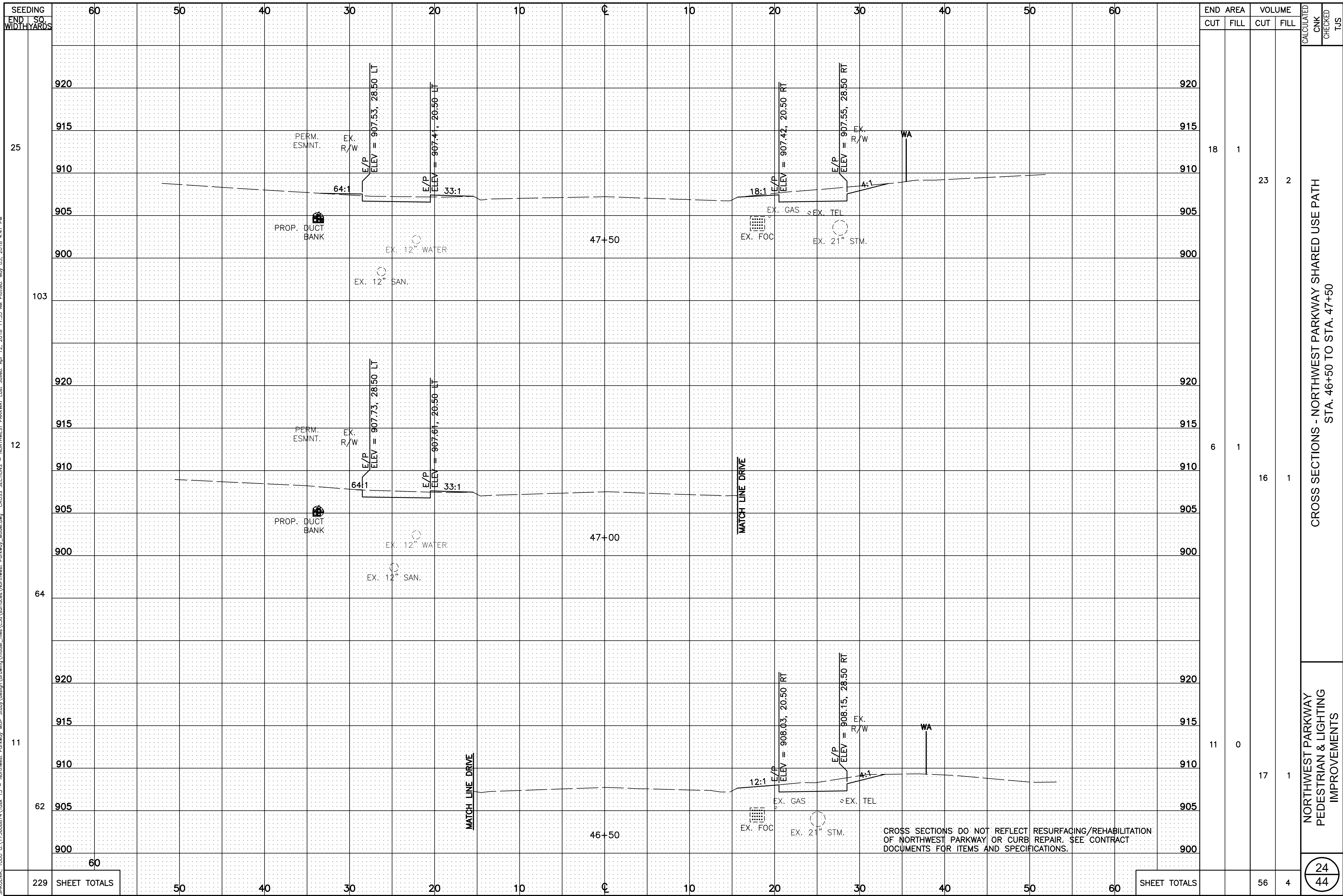
NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

23  
44

SHOULINK\_T00D\_UA17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:47 PM



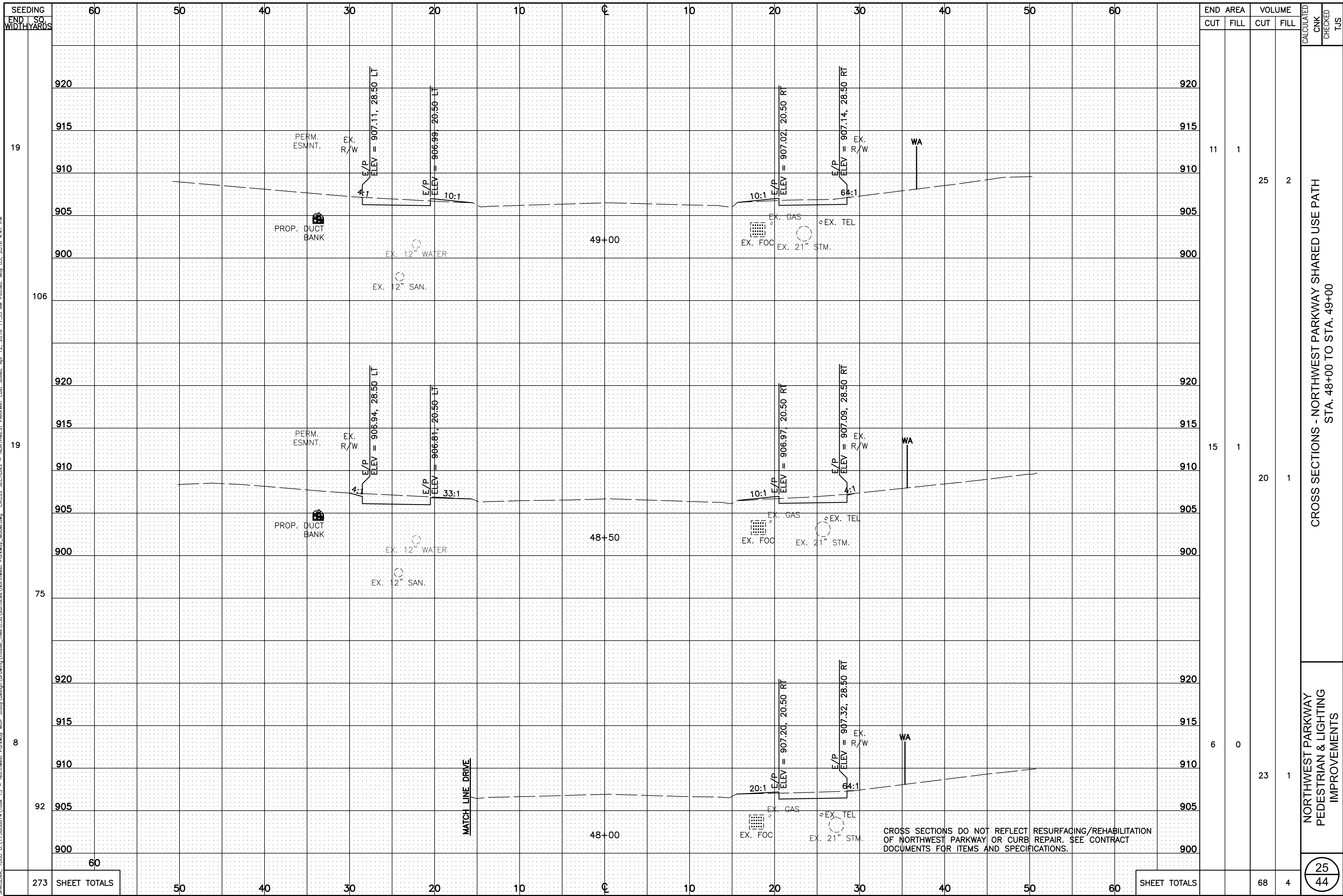
SHOINKI\_T00D\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:47 PM



END SO. WIDTH YARDS	AREA		VOLUME		CALCULATED CNK	CHECKED TUS
	CUT	FILL	CUT	FILL		
920						
915						
910	18	1				
905			23	2		
900						
920						
915						
910	6	1				
905			16	1		
900						
920						
915						
910	11	0				
905			17	1		
900						
60						
229 SHEET TOTALS			56	4		

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 46+50 TO STA. 47+50

SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:47 PM

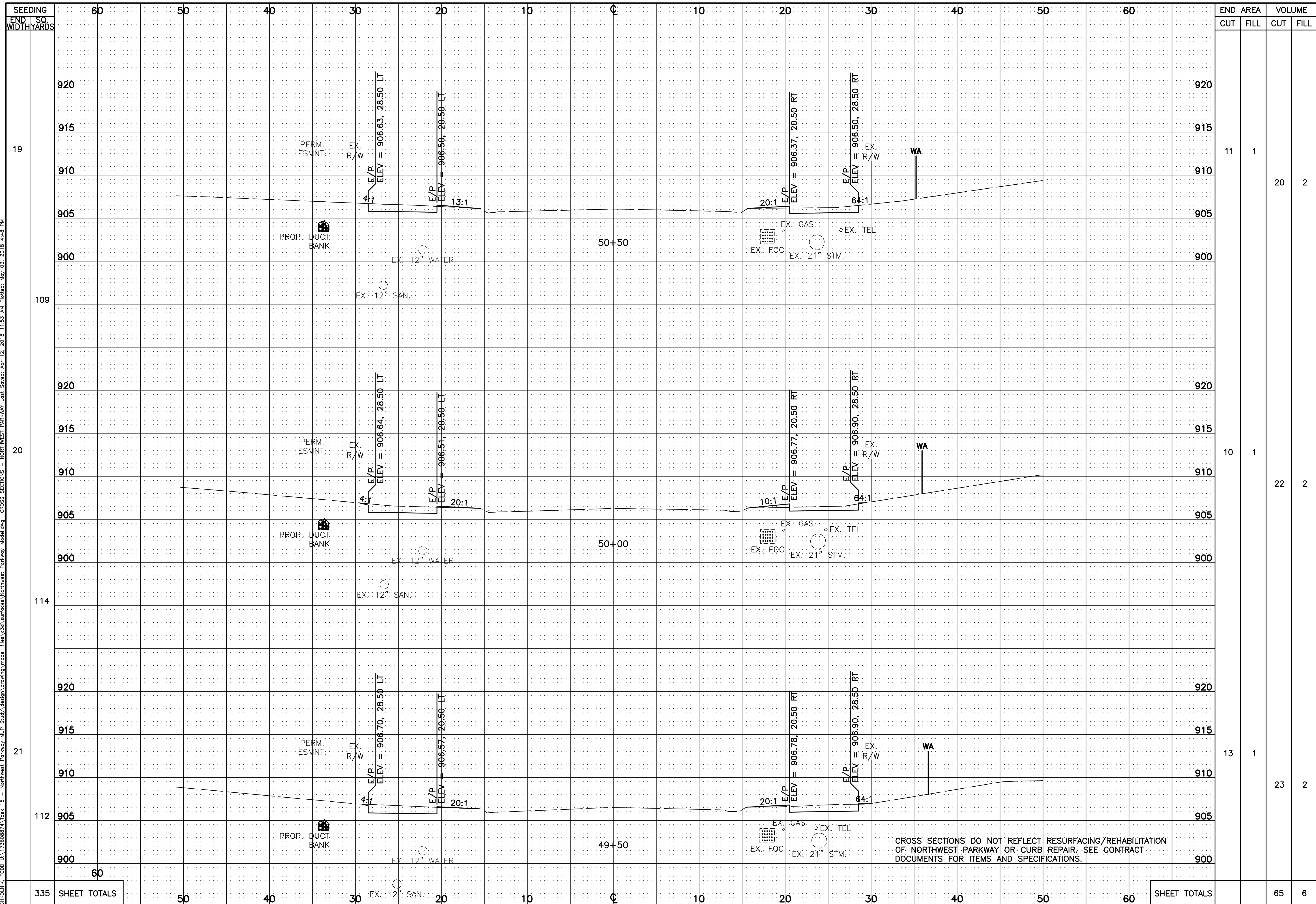


END SO. WIDTH YARDS	END AREA		VOLUME		CALCULATED CNK	CHECKED TUS
	CUT	FILL	CUT	FILL		
920						
915						
910	11	1				
905			25	2		
900						
920						
915						
910	15	1				
905			20	1		
900						
920						
915						
910						
905	6	0	23	1		
900						
60						
273	SHEET TOTALS		68	4		

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 48+00 TO STA. 49+00



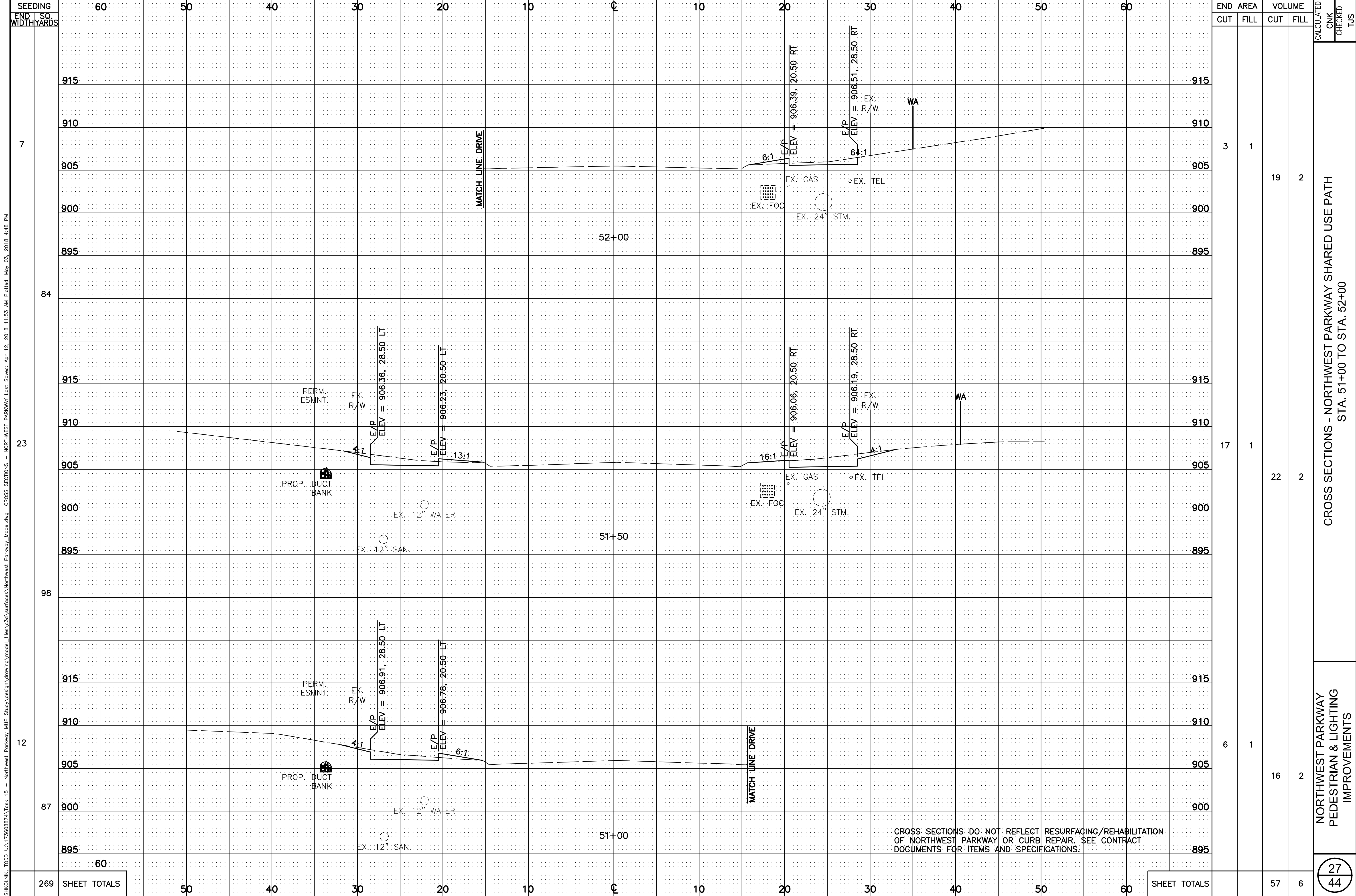
SHOULDR TOOD U:\17369874\Task\_15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:48 PM



SEEDING END SO. WIDTH YARDS	END AREA		VOLUME		CALCULATED CNK	CHECKED TUS
	CUT	FILL	CUT	FILL		
19	11	1	20	2		
20	10	1	22	2		
21	13	1	23	2		
335 SHEET TOTALS			65	6		

NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS  
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 49+50 TO STA. 50+50

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.



SEEDING END SO. WIDTH YARDS

60 50 40 30 20 10 C 10 20 30 40 50 60

7

84

23

98

12

87

269 SHEET TOTALS

END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
3	1	19	2		
17	1	22	2		
6	1	16	2		
		57	6		

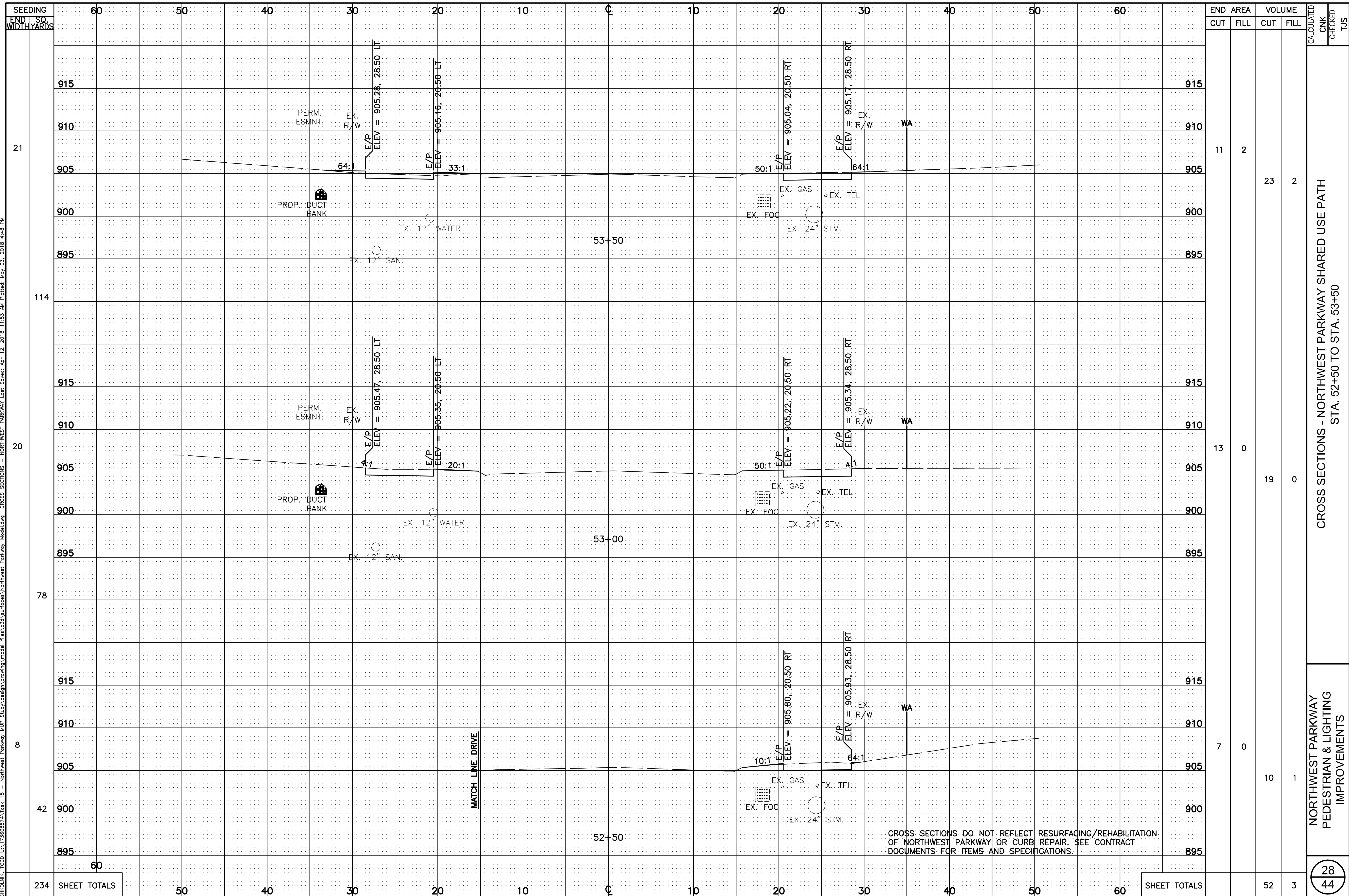
CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 51+00 TO STA. 52+00

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.



SHOULDR TOOD U:\17369874\Task 15 - Northwest Parkway\_MIP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lot Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:48 PM

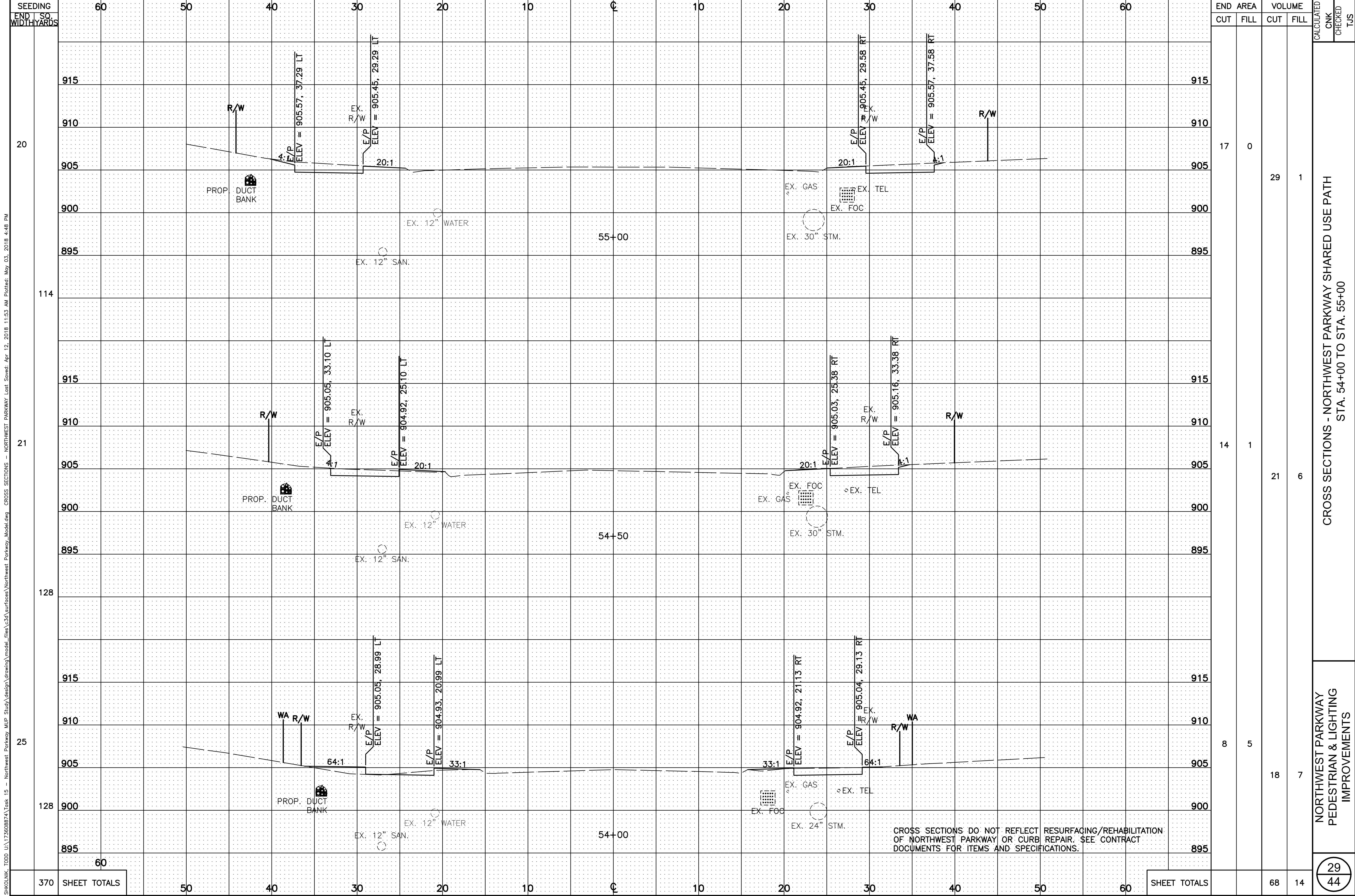


END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
11	2				
		23	2		
13	0				
		19	0		
7	0				
		10	1		
SHEET TOTALS		52	3		

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 52+50 TO STA. 53+50

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.



SEEDING END SO. WIDTH YARDS

60 50 40 30 20 10 C 10 20 30 40 50 60

20

114

21

128

25

128

370 SHEET TOTALS

END CUT	AREA FILL	VOLUME		CALCULATED CNK	CHECKED TUS
		CUT	FILL		
17	0	29	1		
14	1	21	6		
8	5	18	7		
		68	14		

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
STA. 54+00 TO STA. 55+00

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

SHOULINK\_T00D\_UA17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Lat. Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:48 PM



SHOULDR TOOD U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\drawing\model\_files\c:\3d\surfaces\Northwest\_Parkway\_Model.dwg CROSS SECTIONS - NORTHWEST PARKWAY Last Saved: Apr 12, 2018 11:53 AM Plotted: May 03, 2018 4:48 PM

SEEDING END SO. WIDTH YARDS	60 50 40 30 20 10 C 10 20 30 40 50 60														END AREA		VOLUME		CALCULATED CNK	CHECKED TUS
															CUT	FILL	CUT	FILL		
25	END WORK 56+57.21																			
146	ADD FOR LEAP RD. INTERSECTION																			
915																				
910	BACK ONLY																			
905	PROP. DUCT BANK																			
900	EX. 12" WATER																			
895	EX. 12" SAN.																			
271	SHEET TOTALS																			

ITEM 203 EXCAVATION 1,247 CU. YD.  
 ITEM 203 EMBANKMENT 105 CU. YD.  
 ITEM 659 SEEDING & MULCHING, AS PER PLAN 5,147 SQ. YD.

ADD FOR #57 STONE UNDER PATH  
 (PLACED WITH AMENDED SOIL FILTRATION STRIP)

ADD FOR LEAP RD. INTERSECTION

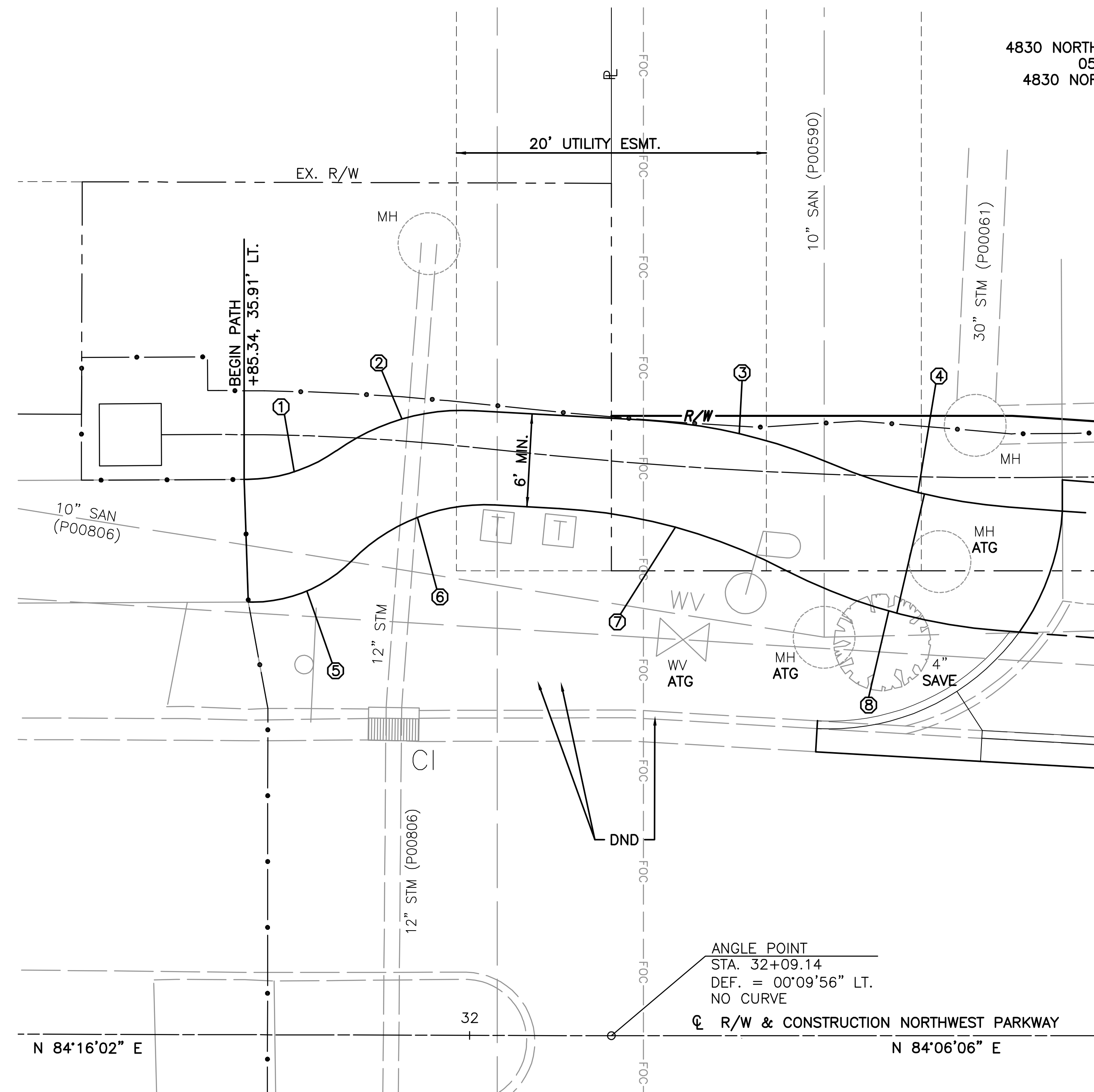
CROSS SECTIONS DO NOT REFLECT RESURFACING/REHABILITATION  
 OF NORTHWEST PARKWAY OR CURB REPAIR. SEE CONTRACT  
 DOCUMENTS FOR ITEMS AND SPECIFICATIONS.

CROSS SECTIONS - NORTHWEST PARKWAY SHARED USE PATH  
 STA. 55+50 TO STA. 56+57.21

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS

30  
44

SHKOLNIK\_TODD I:\17360874\Task 15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\17360874NW\_p001.dwg PATH DETAILS Last Saved: Mar 22, 2018 3:44 PM Plotted: Mar 03, 2018 4:49 PM



- ① - R = 10', R.P. STA. 31+85.53, 45.72' LT.
- ② - R = 14', R.P. STA. 31+99.50, 26.21' LT.
- ③ - R = 36', R.P. STA. 32+09.29, 3.68' LT.
- ④ - R = 36', R.P. STA. 32+37.53, 69.91' LT.
- ⑤ - R = 9', R.P. STA. 31+85.94, 36.81' LT.
- ⑥ - R = 12', R.P. STA. 32+00.96, 22.13' LT.
- ⑦ - R = 36', R.P. STA. 32+03.88, 2.05' RT.
- ⑧ - R = 36', R.P. STA. 32+37.53, 69.91' LT.

ANGLE POINT  
 STA. 32+09.14  
 DEF. = 00°09'56" LT.  
 NO CURVE

R/W & CONSTRUCTION NORTHWEST PARKWAY

4830 NORTHWEST PARKWAY LLC  
 050-002989  
 4830 NORTHWEST PARKWAY

CALCULATED TJS CHECKED BMH

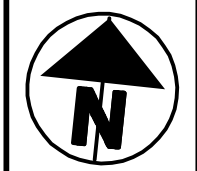
SCALE IN FEET

PATH DETAILS

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS

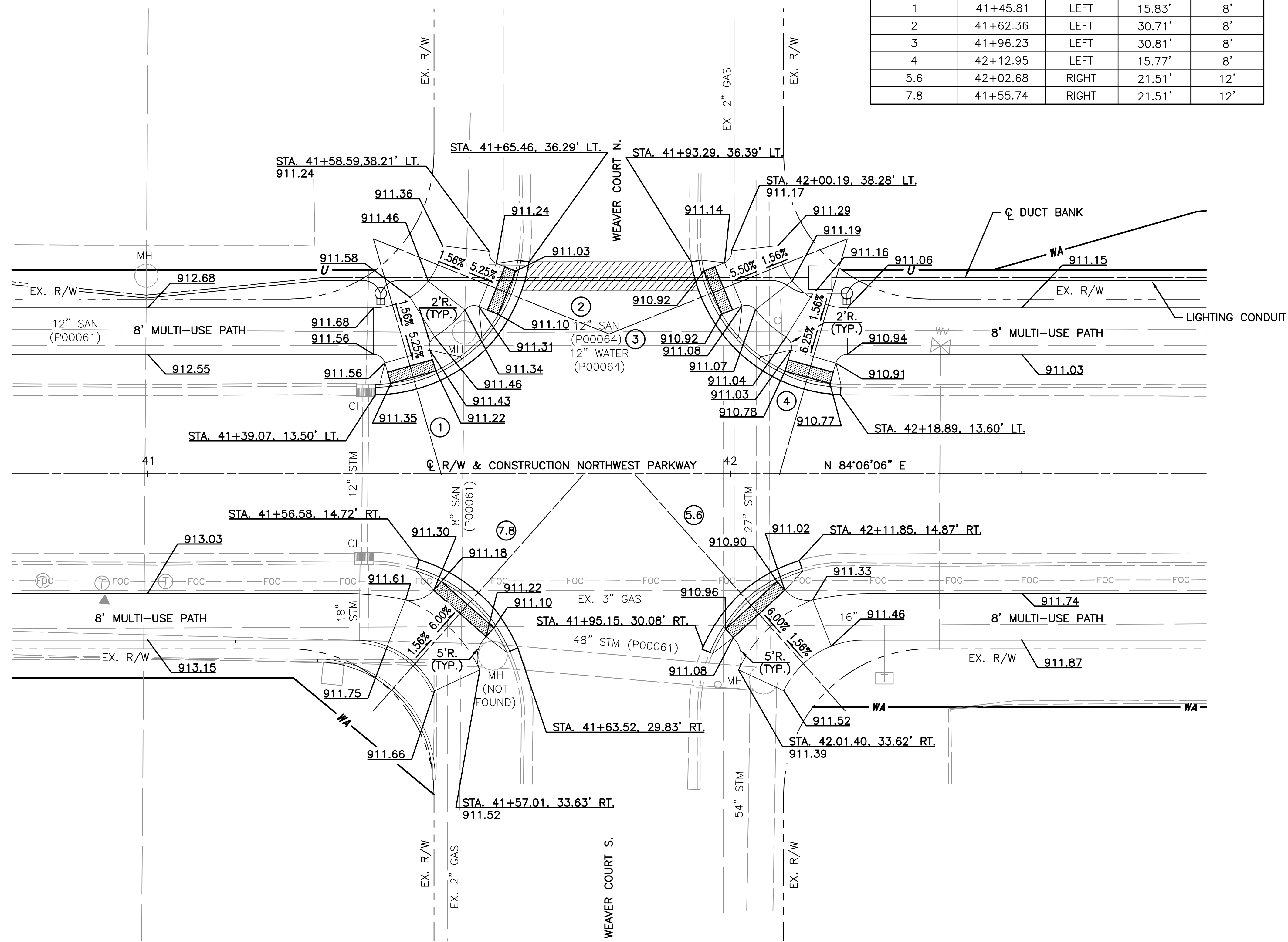


SHKOLNIK\_TODD\_U:\173608874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\173608874NW\_c001.dwg CURB RAMP DETAILS Last Saved: Mar 21, 2018 3:30 PM Plotted: May 03, 2018 4:49 PM



CALCULATED  
CNK  
CHECKED  
MRD

RAMP NO.	STATION	SIDE	OFFSET	WIDTH
1	41+45.81	LEFT	15.83'	8'
2	41+62.36	LEFT	30.71'	8'
3	41+96.23	LEFT	30.81'	8'
4	42+12.95	LEFT	15.77'	8'
5.6	42+02.68	RIGHT	21.51'	12'
7.8	41+55.74	RIGHT	21.51'	12'

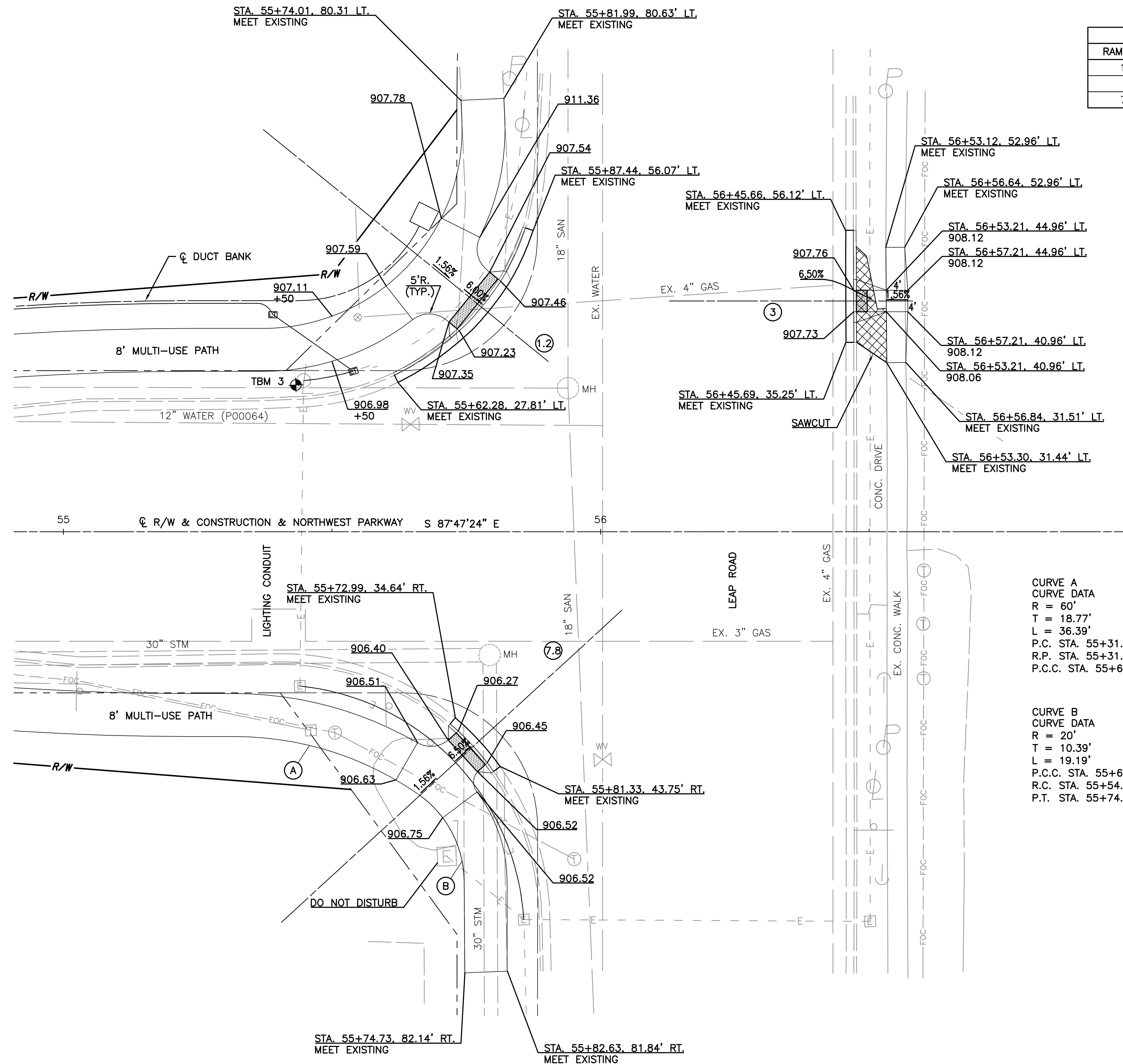


ITEM 259 - PERMANENT PAVEMENT, TYPE I

CURB RAMP DETAILS

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

SHKOLNIK\_TODD\_U:\17360874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\17360874NW\_crd02.dwg\_CURB RAMP DETAILS.dwg Saved: Mar 21, 2018, 3:30 PM Plotted: May 03, 2018, 4:49 PM



RAMP NO.	STATION	SIDE	OFFSET	WIDTH
1.2	55+77.88	LEFT	41.83'	12'
3	56+47.13	LEFT	42.96'	4'
7.8	55+76.34	RIGHT	39.95'	8'

**CURVE A  
CURVE DATA**  
 R = 60'  
 T = 18.77'  
 L = 36.39'  
 P.C. STA. 55+31.83, 38.14' RT.  
 R.P. STA. 55+31.83, 98.14' RT.  
 P.C.C. STA. 55+66.03, 48.84' RT.

**CURVE B  
CURVE DATA**  
 R = 20'  
 T = 10.39'  
 L = 19.19'  
 P.C.C. STA. 55+66.03, 48.84' RT.  
 R.C. STA. 55+54.63, 65.28' RT.  
 P.T. STA. 55+74.63, 65.15' RT.

ITEM 202 - PAVEMENT REMOVED

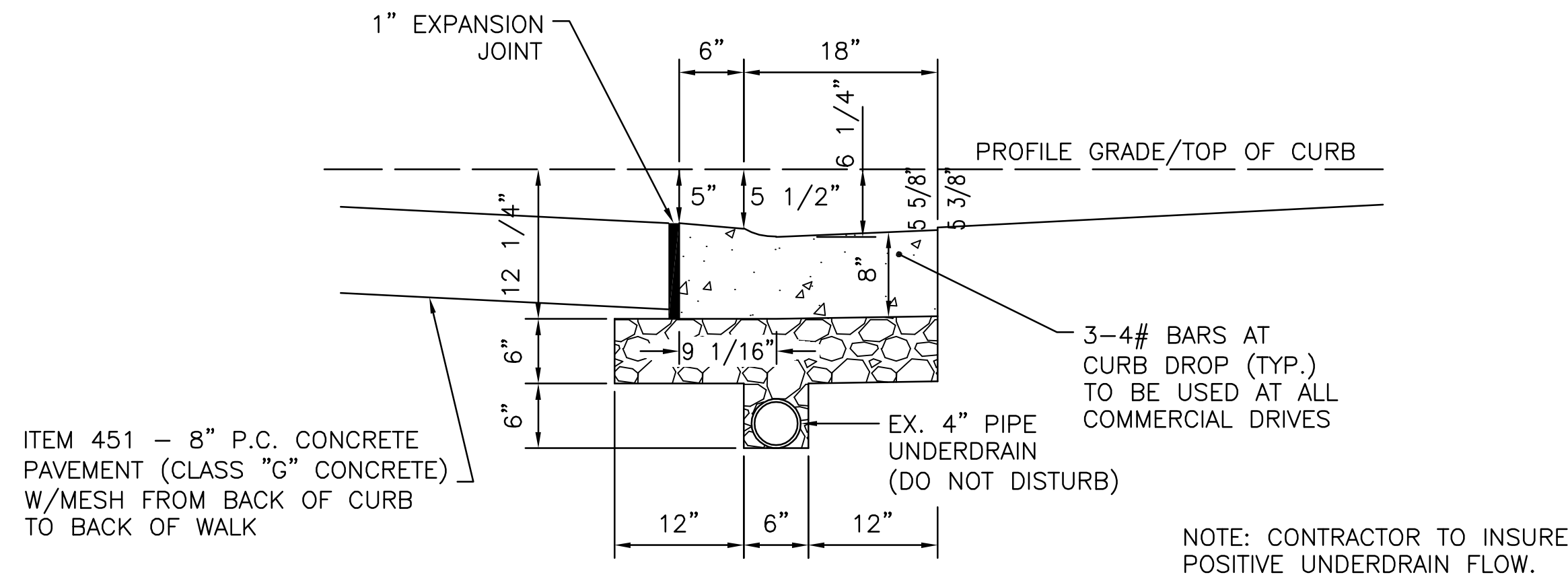


CALCULATED  
 CNK  
 CHECKED  
 MRD

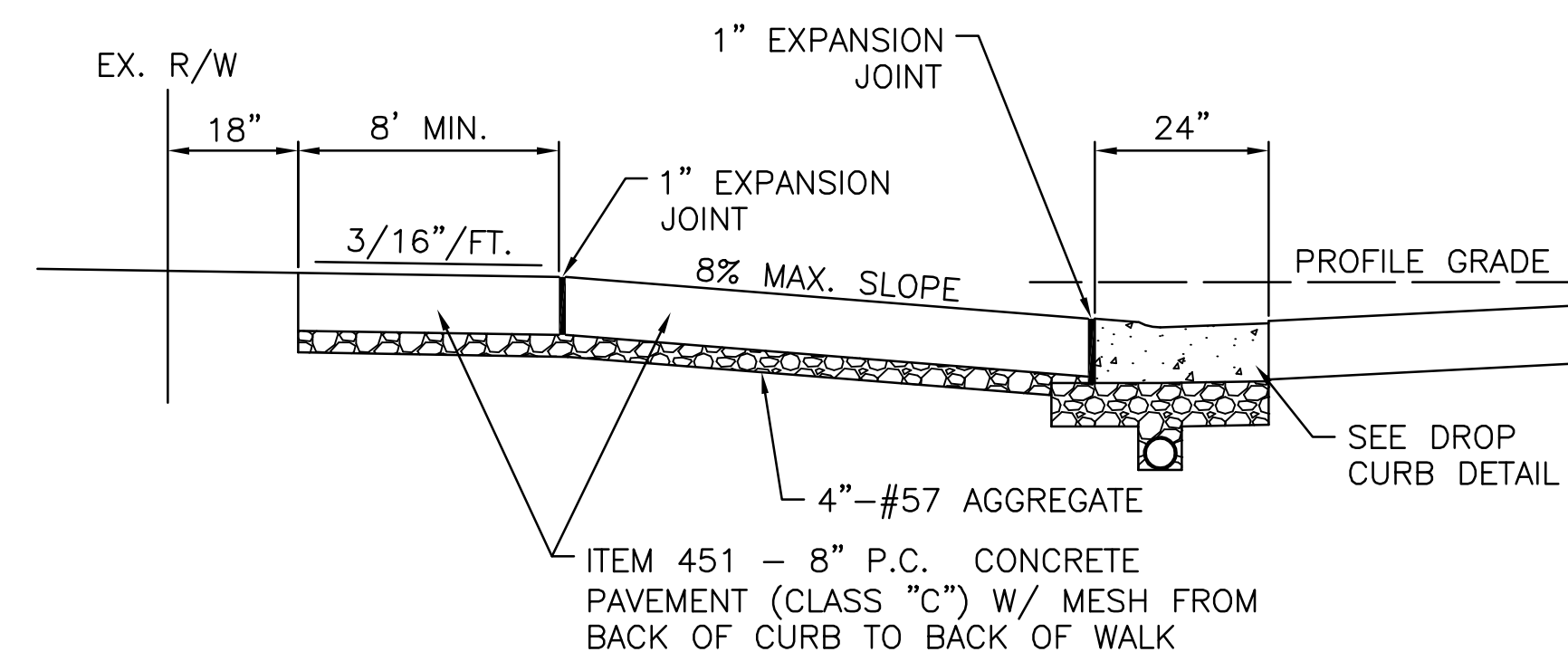
CURB RAMP DETAILS

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS





**CURB & GUTTER DETAIL**

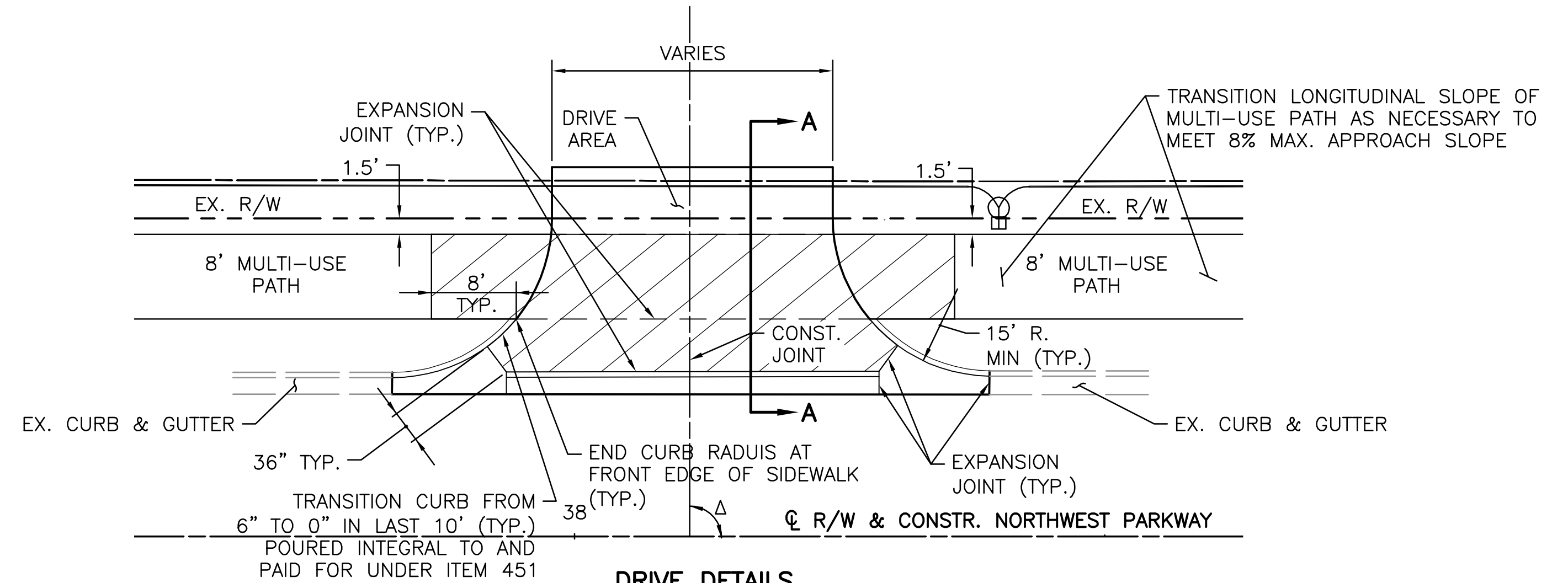


**SECTION A-A**

LIMITS FOR ITEM 451

**TYPICAL DRIVEWAY PAVEMENT COMPOSITION (BEYOND APPROACH)**

- COMMERCIAL - ASPHALT**  
 ITEM 448 - 1.25" ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG64-22  
 ITEM 448 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22  
 ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.06 GAL/SY)  
 ITEM 304 - 8" AGGREGATE BASE
- COMMERCIAL - CONCRETE/GRAVEL**  
 ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT  
 ITEM 304 - 6" AGGREGATE BASE



**DRIVE DETAILS**

SHKOLNIK\_T00D\_U:\17360874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\17360874\_NW\_Pkwy\_drive\_details06.dwg DRIVEWAY DETAILS - Last Saved: Mar 23, 2018 1:18 PM Plotted: May 03, 2018 4:49 PM

STATION	TYPE	SIDE	Δ	APPROACH AREA	DRIVE AREA	CURB & GUTTER REMOVED	CURB REMOVED	PAVEMENT REMOVED	SUBGRADE COMPACTION	AGGREGATE BASE (DRIVEWAY)	TACK COAT FOR INTERMEDIATE COURSE (DRIVEWAY)	448 ASPHALT CONCRETE SURFACE COURSE, (MEDIUM TRAFFIC), PG64-22 (DRIVEWAY)	448 ASPHALT CONCRETE INTERMEDIATE COURSE, (MEDIUM TRAFFIC), PG64-22 (DRIVEWAY)	451 8" PORTLAND CEMENT CONCRETE PAVEMENT (CLASS "C") W/MESH	452 8" NON-REINFORCED CONCRETE PAVEMENT	605 6" PIPE UNDERDRAINS	609 CURB, STRAIGHT 18"	609 COMBINATION CURB AND GUTTER, AS PER PLAN	SPECIAL 4" AGGREGATE BASE (#57 STONE)
				S.F.	S.F.	FT.	FT.	S.Y.	S.Y.	C.Y.	GAL.	C.Y.	C.Y.	S.Y.	S.Y.	FT.	FT.	FT.	C.Y.
32+48.08	COMM/GRAVEL	LT.	85°38'02"	589.77	48.00	54		31.24	82.89	0.89				65.53	5.33	54		54	7.28
34+33.94	COMM/ASPHALT	RT.	90°	551.90	404.26	53		40.46	118.54	9.98	2.70	1.56	2.18	61.32		53		53	6.81
35+55.30	COMM/ASPHALT	LT.	90°	531.02	284.79	56	27	40.91	104.47	7.03	1.90	1.10	1.54	59.00		56	27	56	6.56
36+23.21	COMM/ASPHALT	RT.	90°	711.15	394.61	72	17	55.25	138.85	9.74	2.63	1.52	2.13	79.02		72	18	72	8.78
38+10.79	COMM/ASPHALT	LT.	90°	599.48	168.21	56		46.23	98.77	4.15	1.12	0.65	0.91	66.61		56		56	7.40
38+63.07	COMM/CONCRETE	RT.	90°	541.58	37.38	52		51.09	75.18	0.69				60.18	4.15	52		52	6.69
39+01.46	COMM/CONCRETE	LT.	90°	794.18	443.37	75		86.25	154.17	8.21				88.24	49.26	75		75	9.80
44+84.58	COMM/ASPHALT	RT.	90°	709.33	624.88	65	18	62.77	163.74	15.43	4.17	2.41	3.38	78.81		65	18	65	8.76
45+87.25	COMM/ASPHALT	LT.	90°	583.70	258.97	56		34.67	106.17	6.39	1.73	1.00	1.40	64.86		56		56	7.21
46+53.61	COMM/ASPHALT	LT.	90° TAN	582.91	146.86	67		51.96	96.19	3.63	0.98	0.57	0.79	64.77		67		67	7.20
47+01.13	COMM/ASPHALT	RT.	90° TAN	774.11	192.31	71		80.94	123.05	4.75	1.28	0.74	1.04	86.01		71		71	9.56
48+05.51	COMM/CONCRETE	LT.	90° TAN	821.47	210.46	80	13	95.82	134.04	3.90				91.27	23.38	80	13	80	10.14
51+17.15	COMM/CONCRETE	RT.	96°59'43"	783.60	384.18	83		123.38	149.00	7.11				87.07	42.69	83	24	83	14.42
52+14.12	COMM/CONCRETE	LT.	90°	1088.57	278.73	97		128.45	174.19	5.16				120.95	30.97	97		97	13.44
TOTALS						937	75	929.42	1719.24	87.06	16.50	9.55	13.37	1073.64	155.79	937	100	937	124.04
CARRIED TO GENERAL SUMMARY						937	75	930	1720	88	17	10	14	1074	156	937	100	937	125

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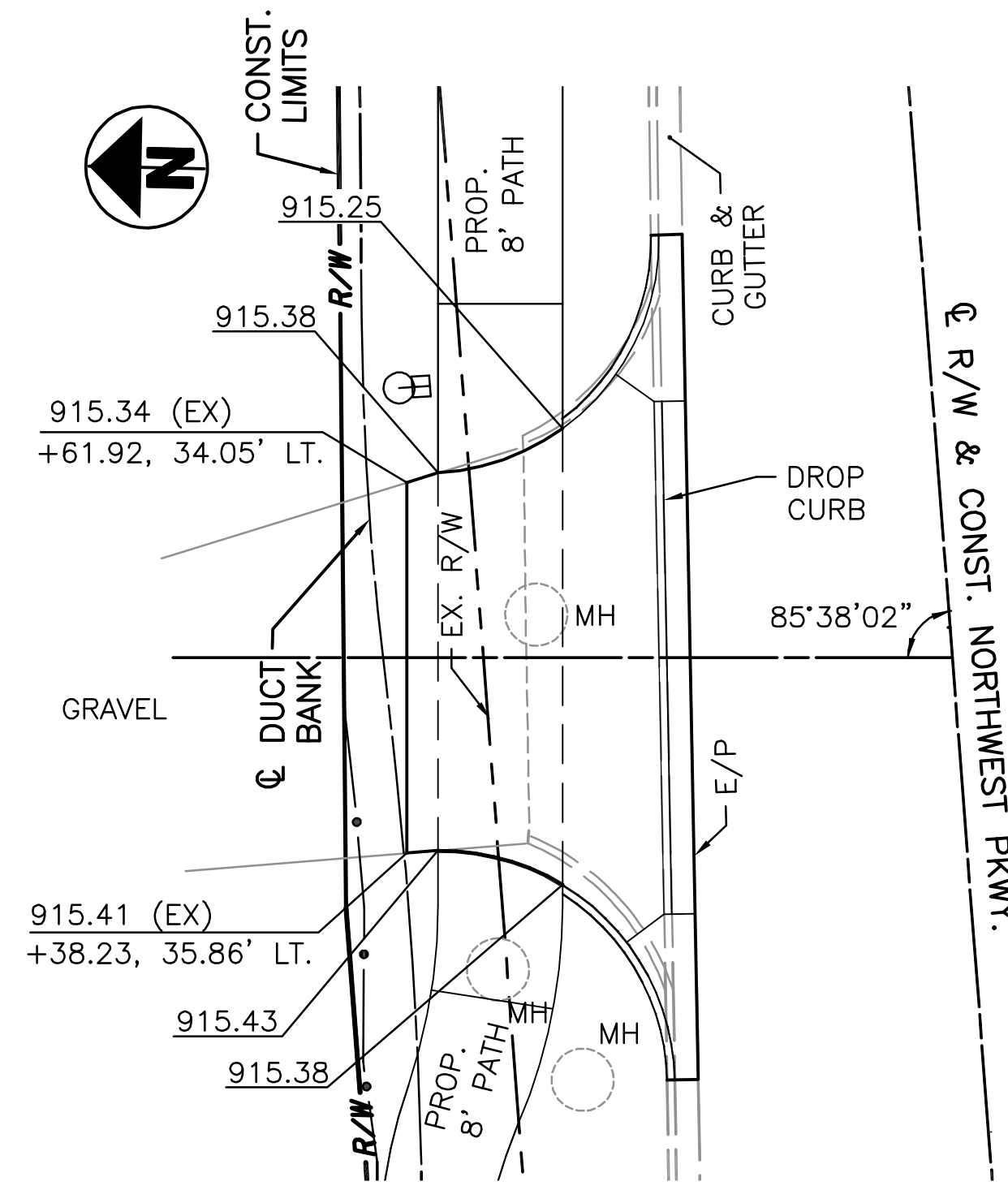
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DRIVEWAY DETAILS

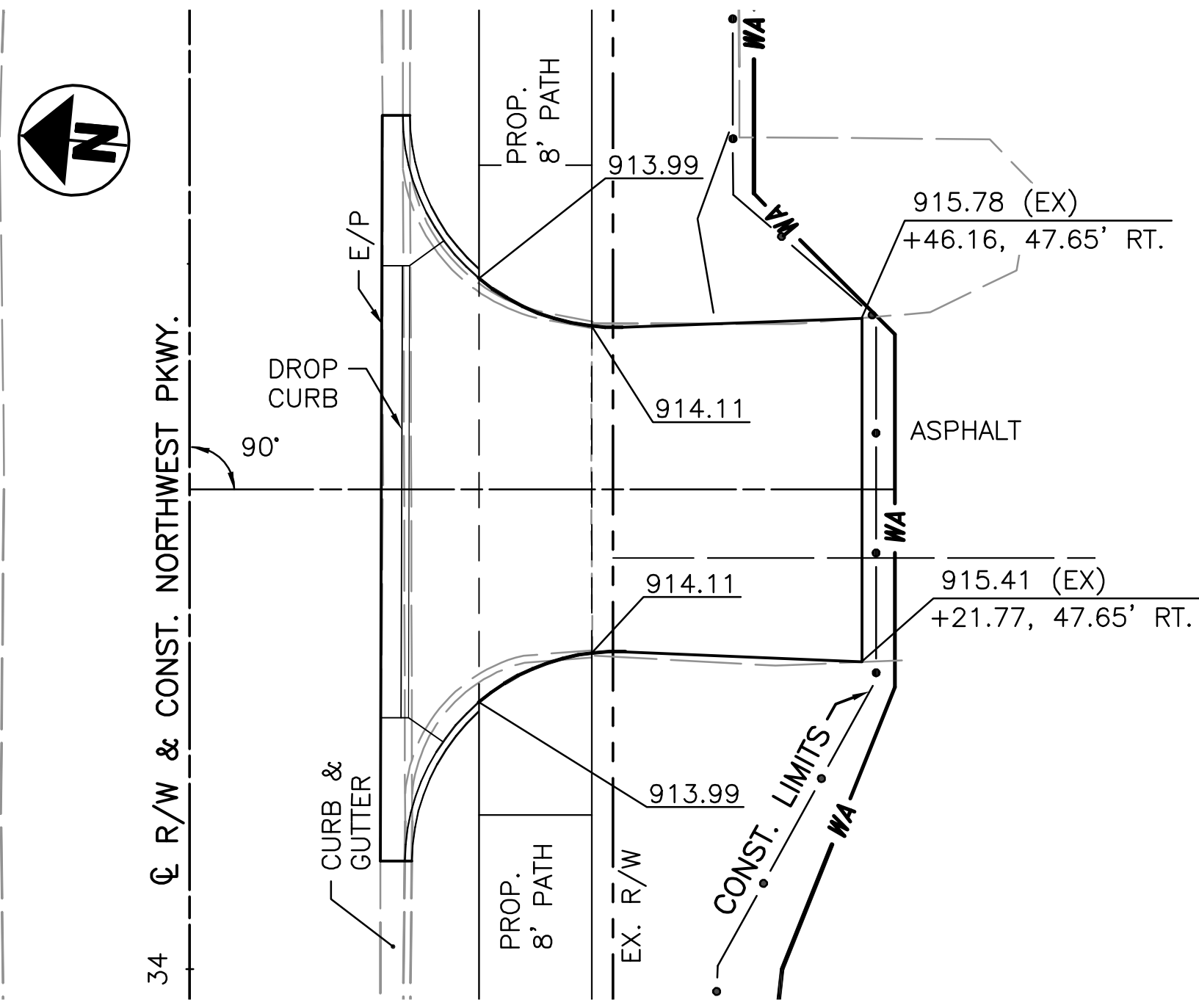
NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS

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44

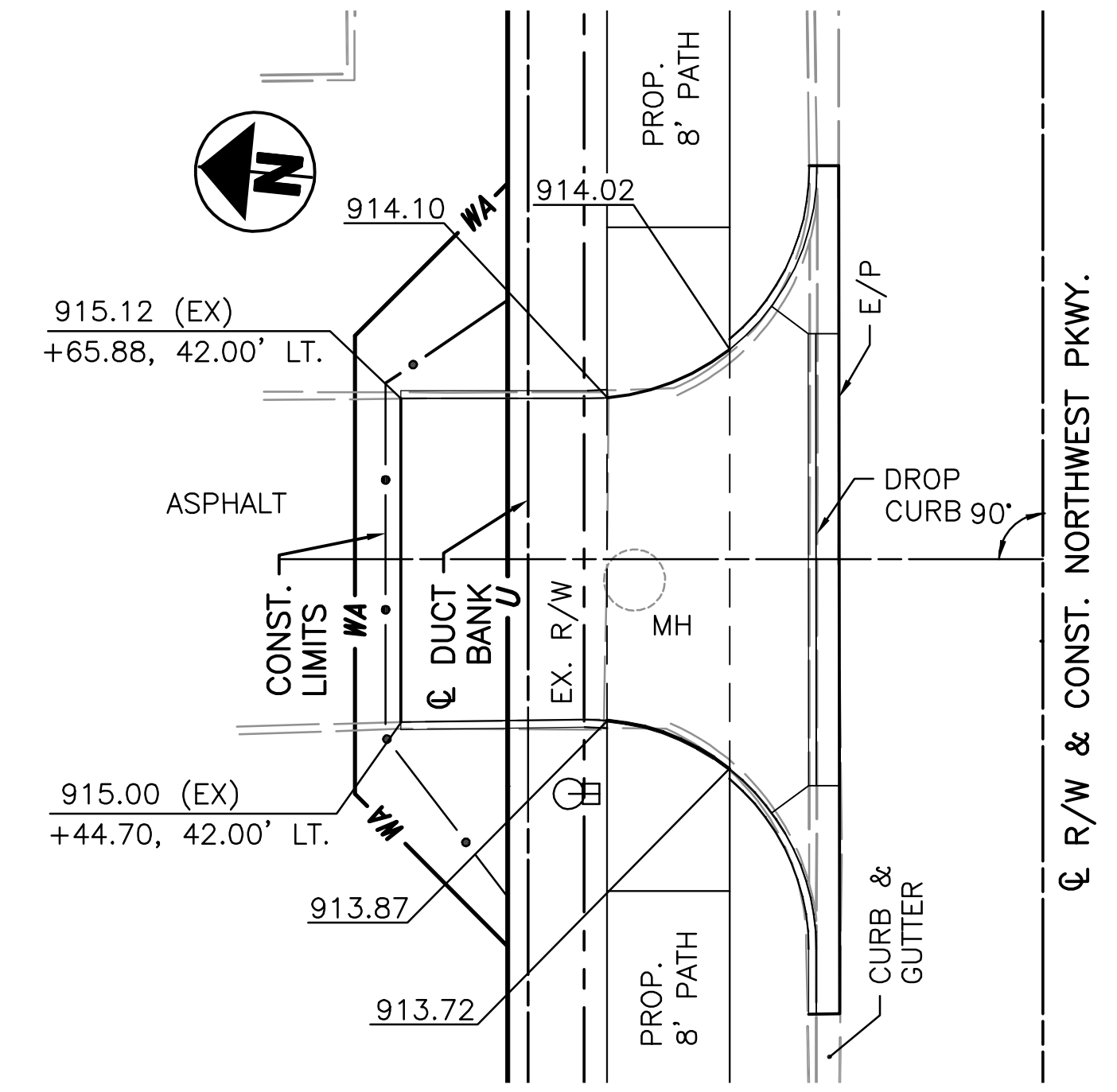
SHKOLNIK\_TODD\_U:\173608874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\173608874\_NW\_Pkwy\_drive\_details01.dwg DRIVEWAY DETAILS - Last Saved: Mar 21, 2018 3:30 PM Plotted: May 03, 2018 4:49 PM



STA. 32+48.08, LT.  
PLAN  
4830 NORTHWEST PARKWAY



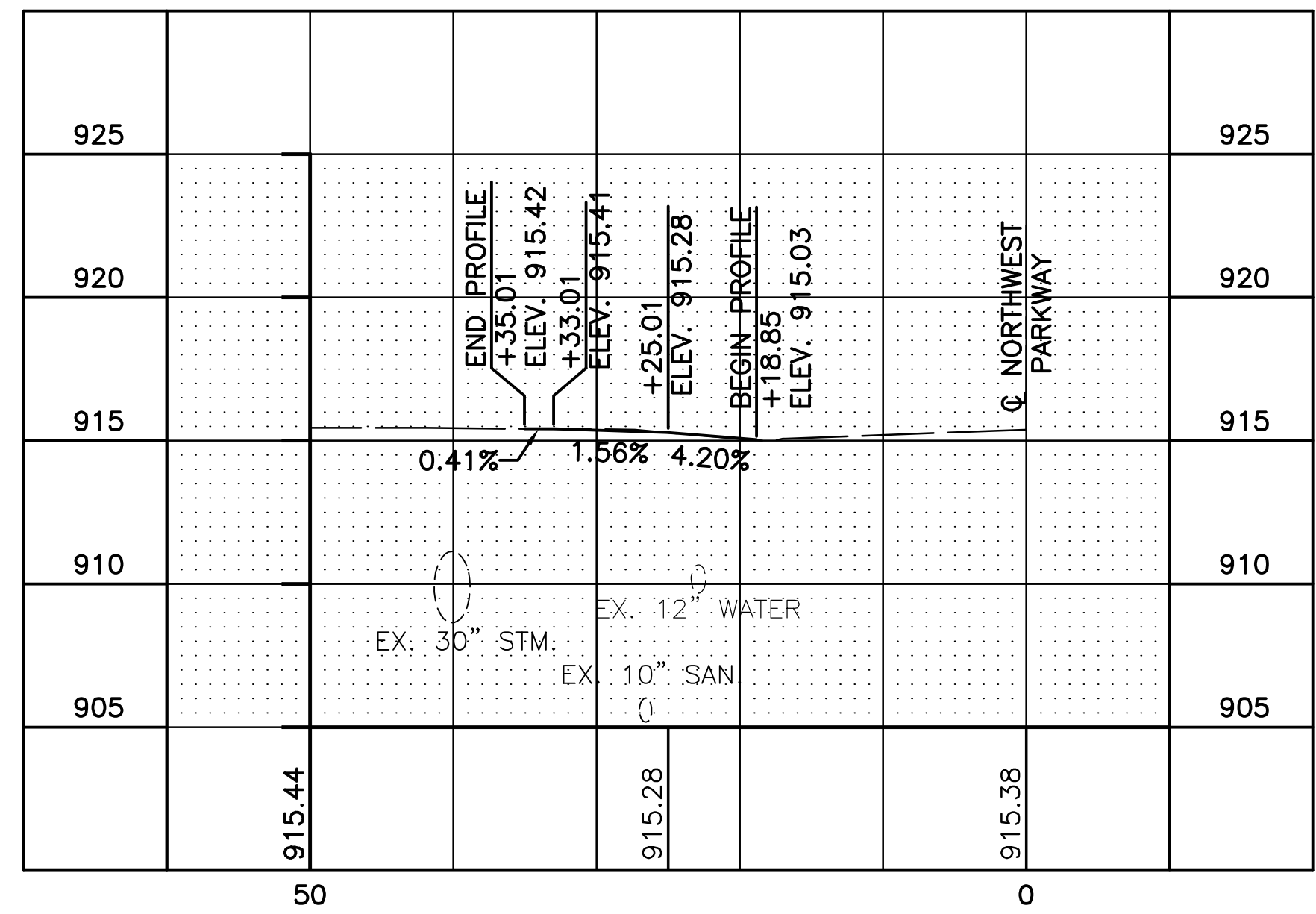
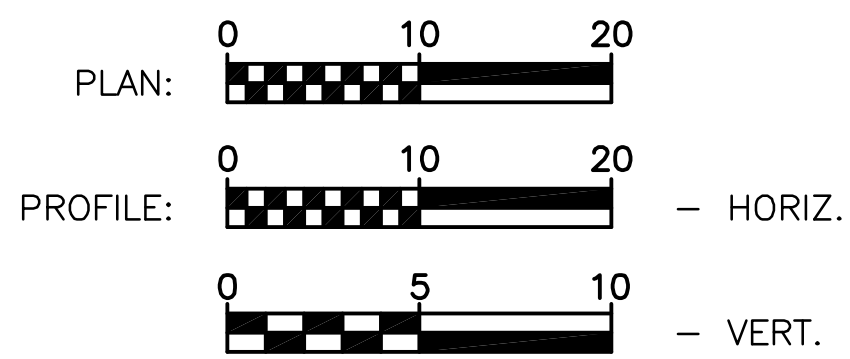
STA. 34+33.94, RT.  
PLAN  
4841-4847 NORTHWEST PARKWAY



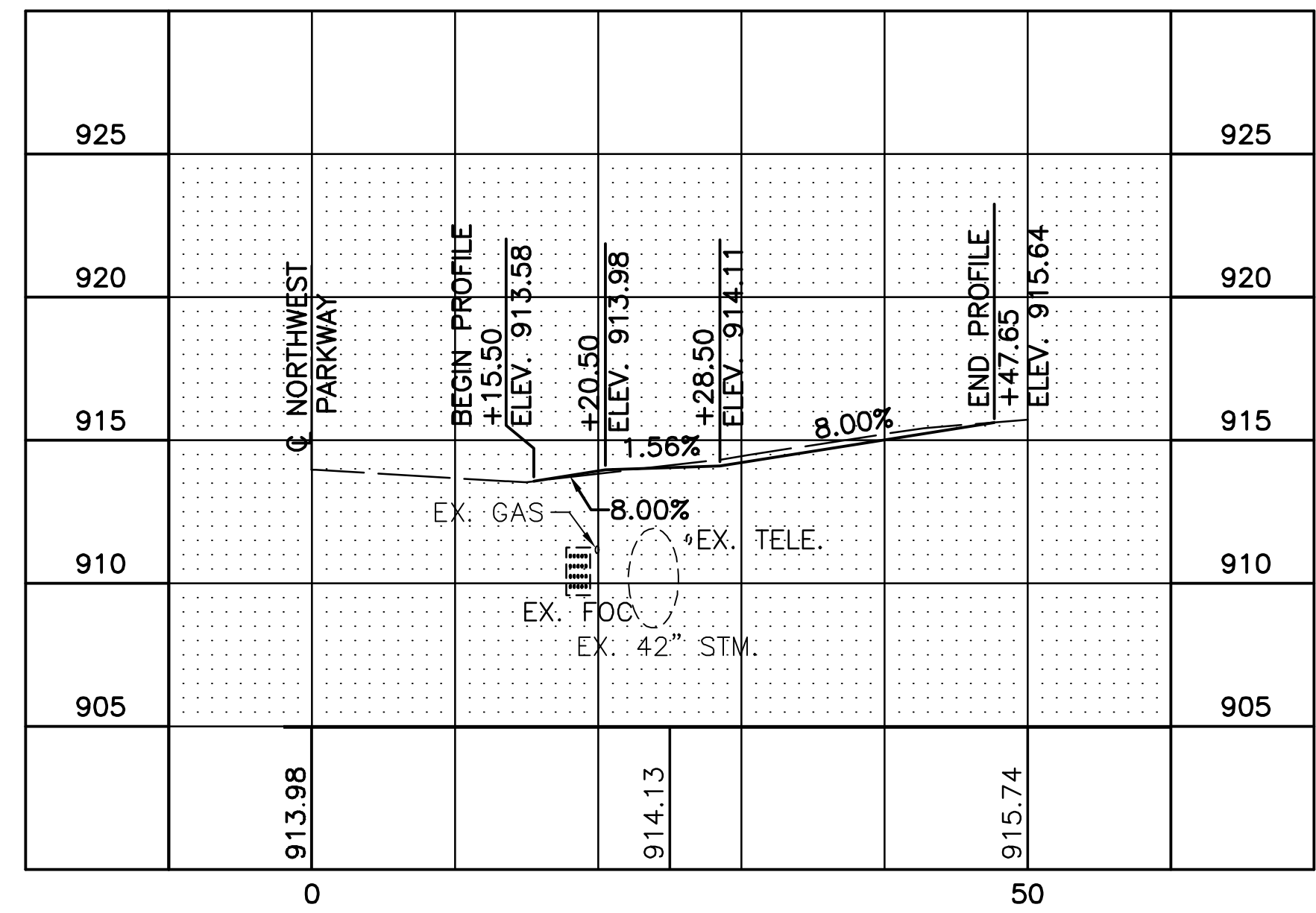
STA. 35+55.30, LT.  
PLAN  
4830 NORTHWEST PARKWAY

**INGRESS AND EGRESS**

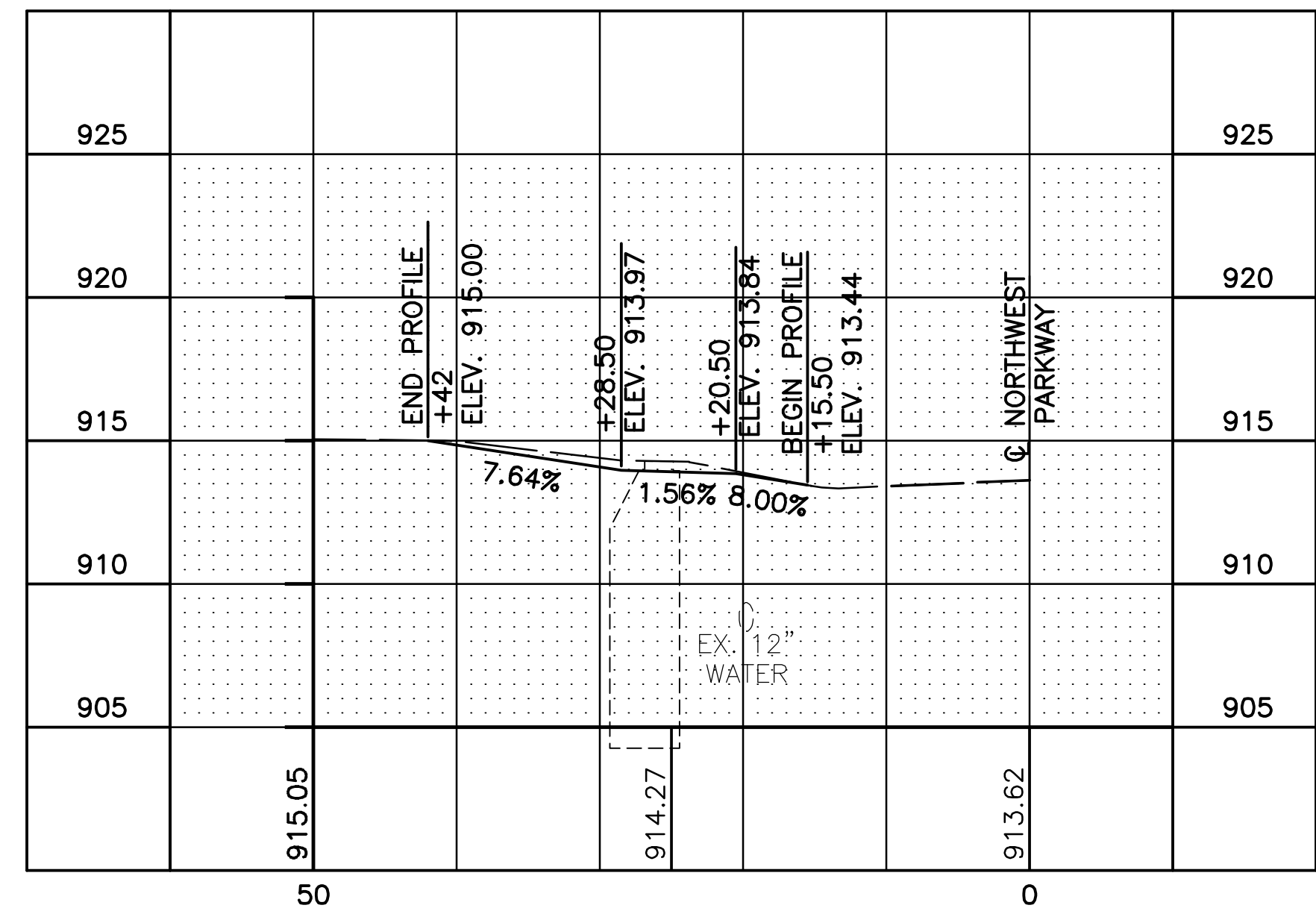
INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



STA. 32+48.08, LT.  
PROFILE  
4830 NORTHWEST PARKWAY



STA. 34+33.94, RT.  
PROFILE  
4841-4847 NORTHWEST PARKWAY



STA. 35+55.30, LT.  
PROFILE  
4830 NORTHWEST PARKWAY

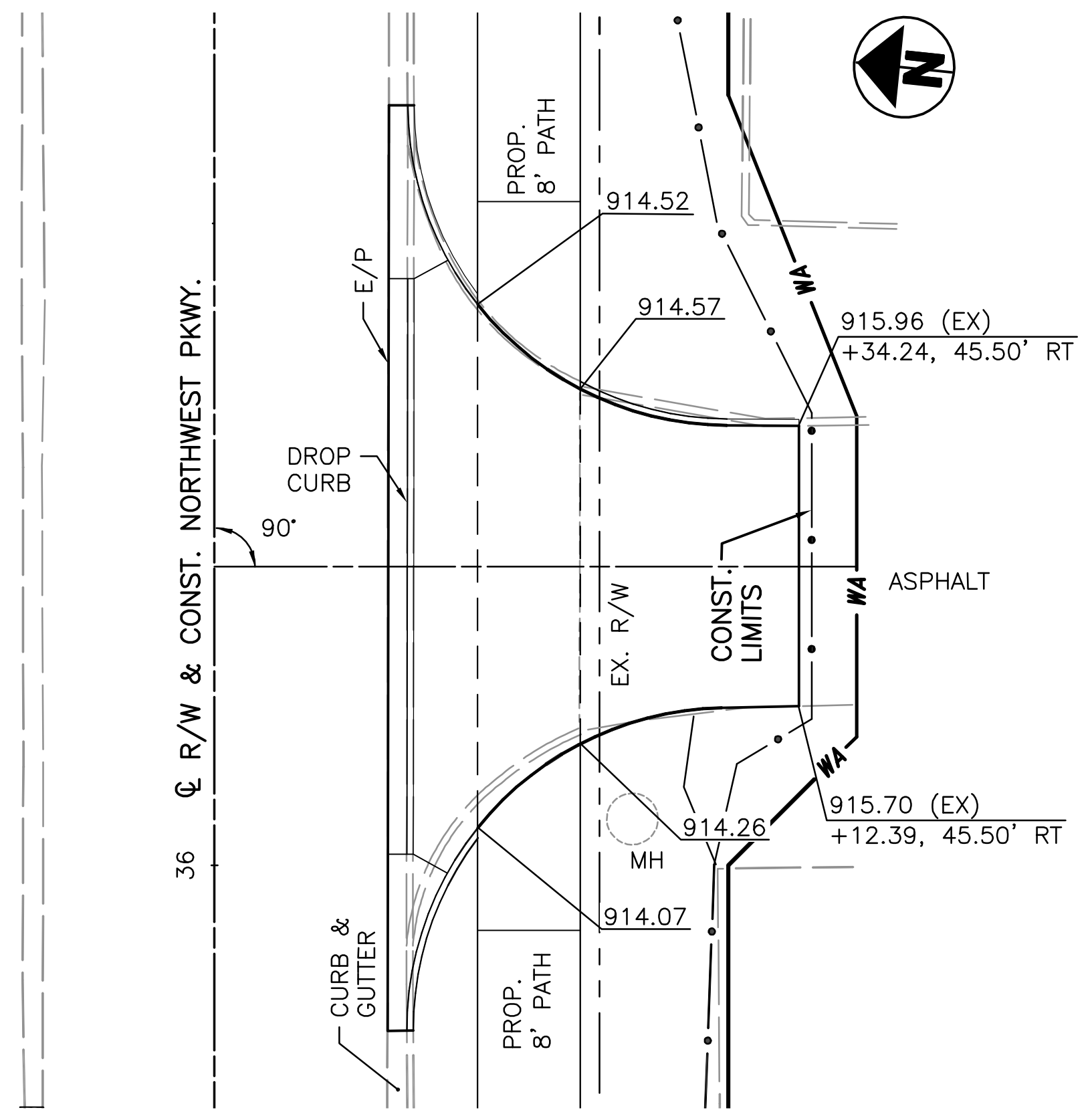
**NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS**

**DRIVEWAY DETAILS**

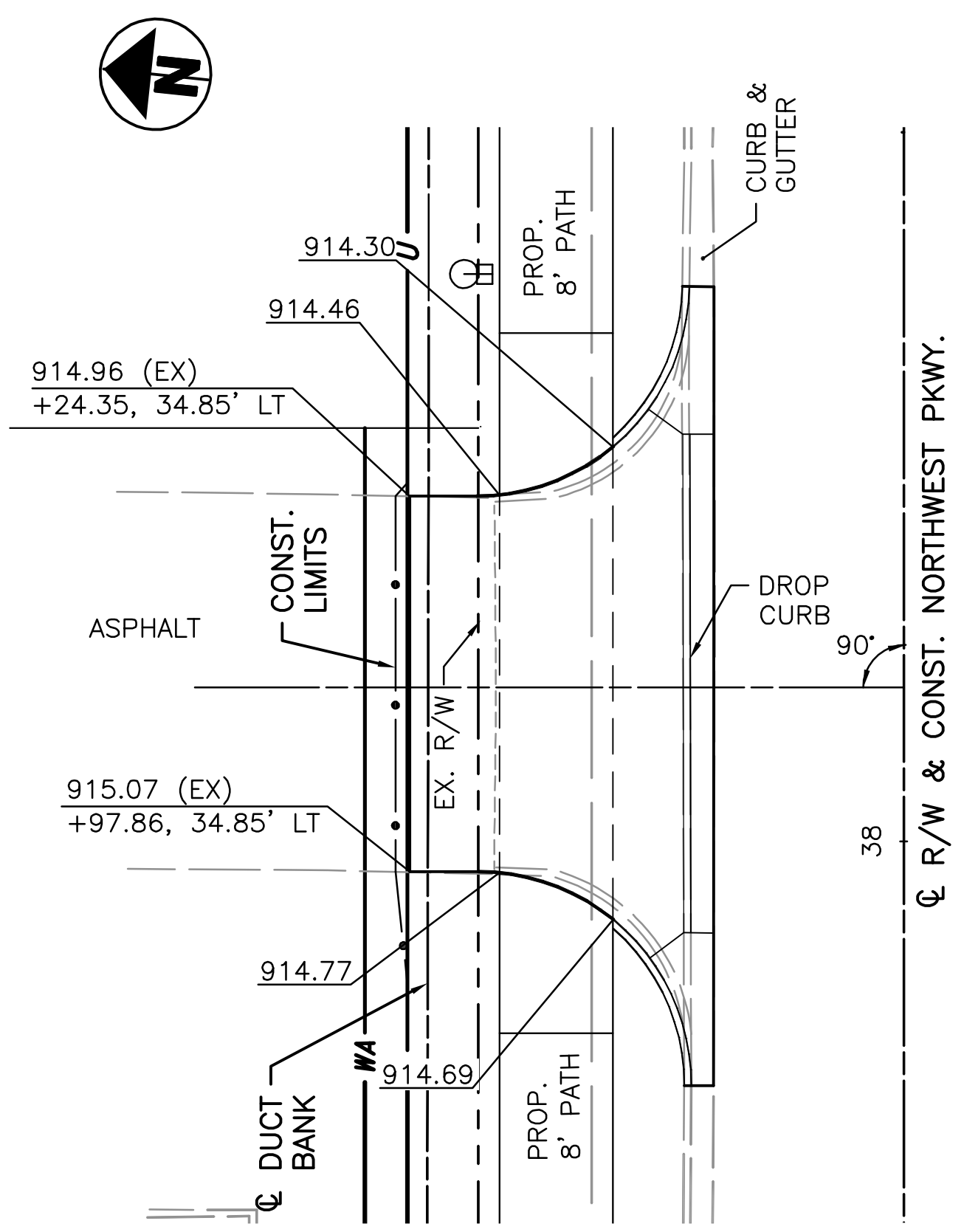
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CHECKED  
TJS

SCALE AS NOTED

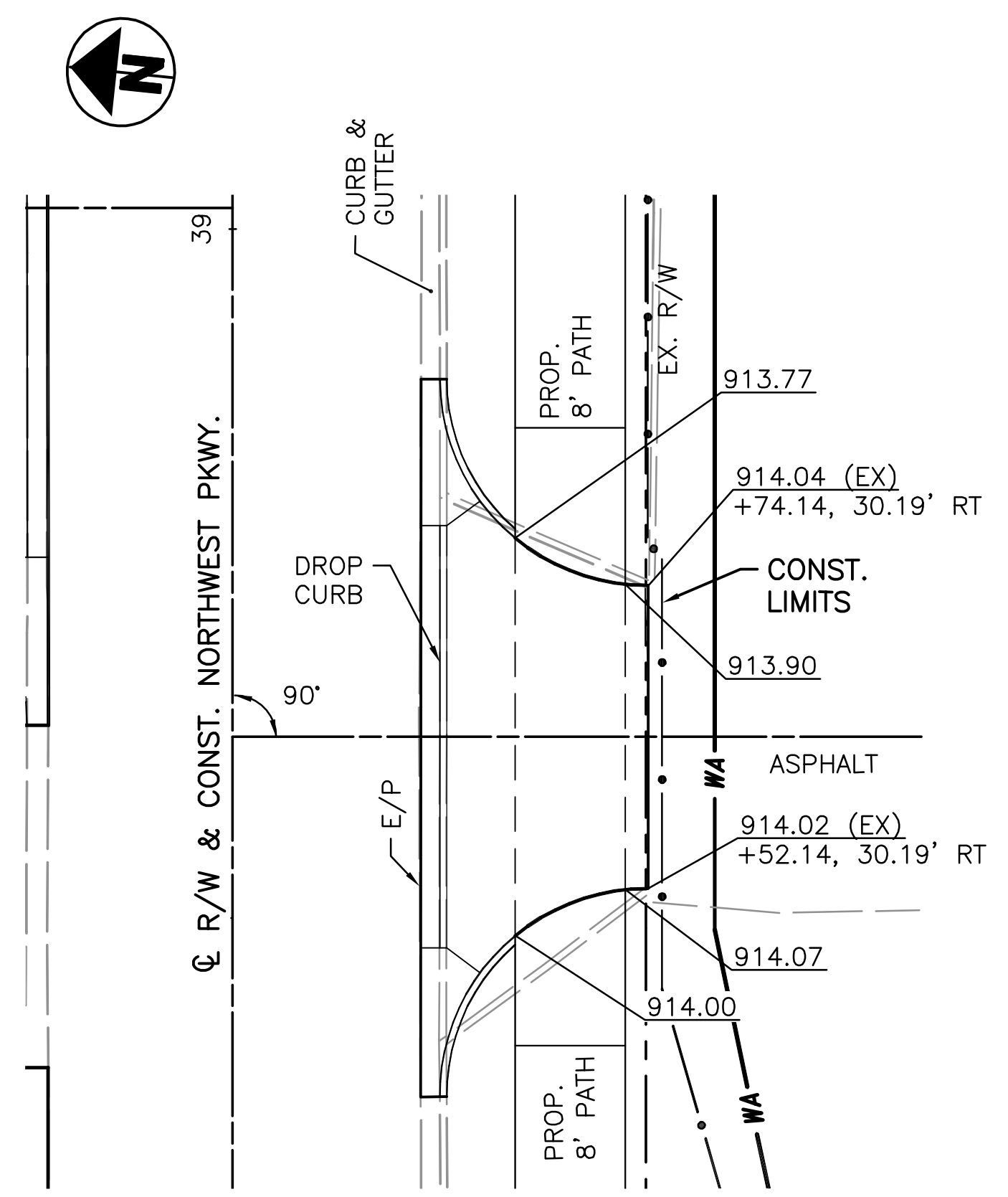
SHKOLNIK\_T00D\_U:\17360874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\details\17360874\_NW\_Pkwy\_drive\_details02.dwg DRIVEWAY DETAILS - Last Saved: Mar 21, 2018 3:30 PM Plotted: May 03, 2018 4:50 PM



STA. 36+23.21, RT.  
PLAN  
4811-4847 NORTHWEST PARKWAY



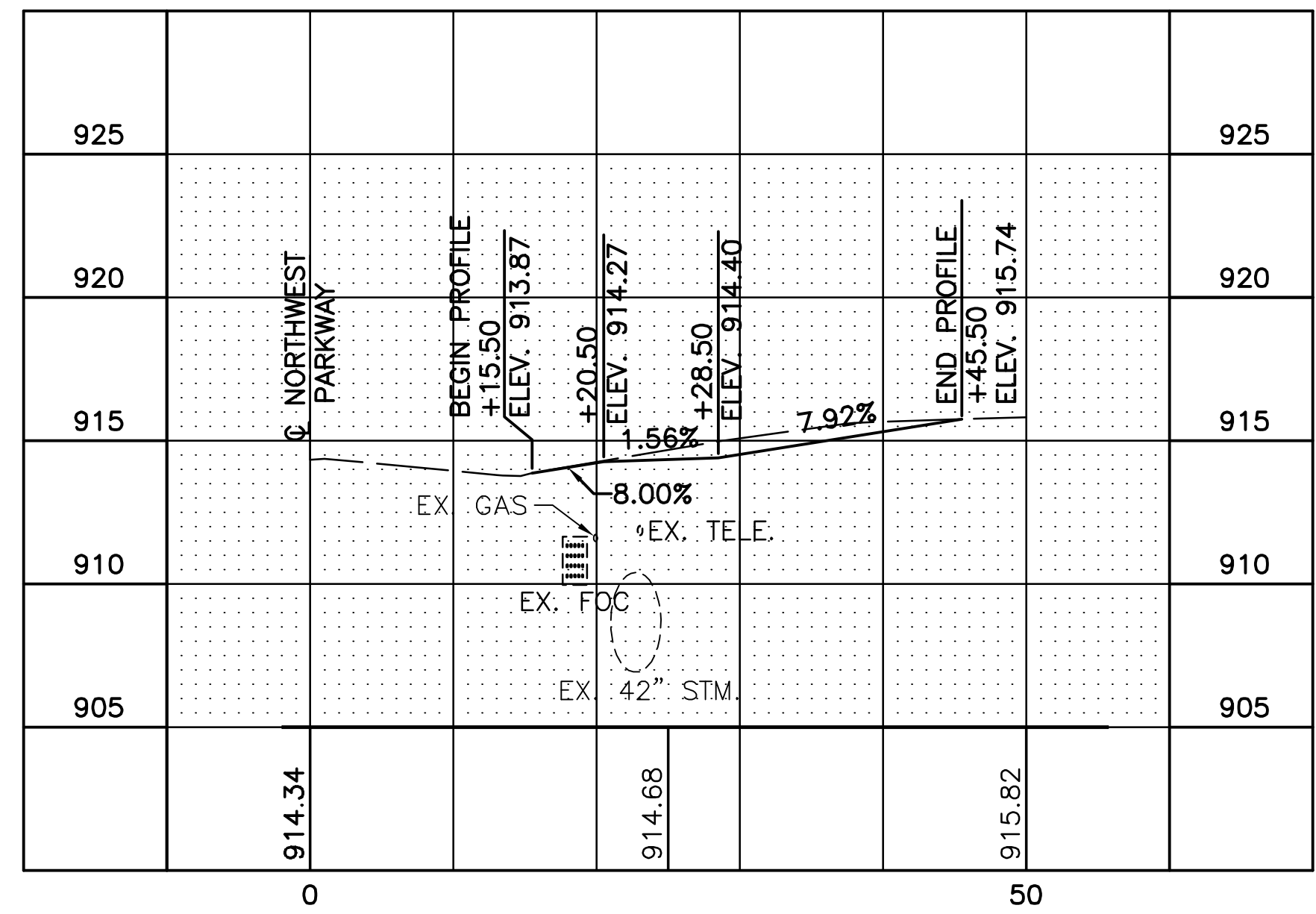
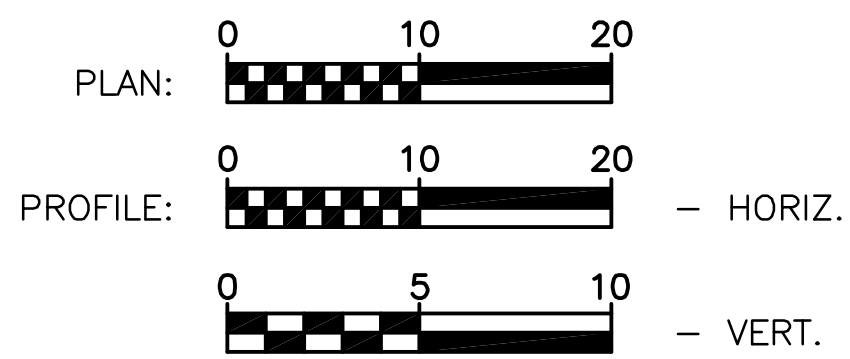
STA. 38+10.79, LT.  
PLAN  
4830 NORTHWEST PARKWAY



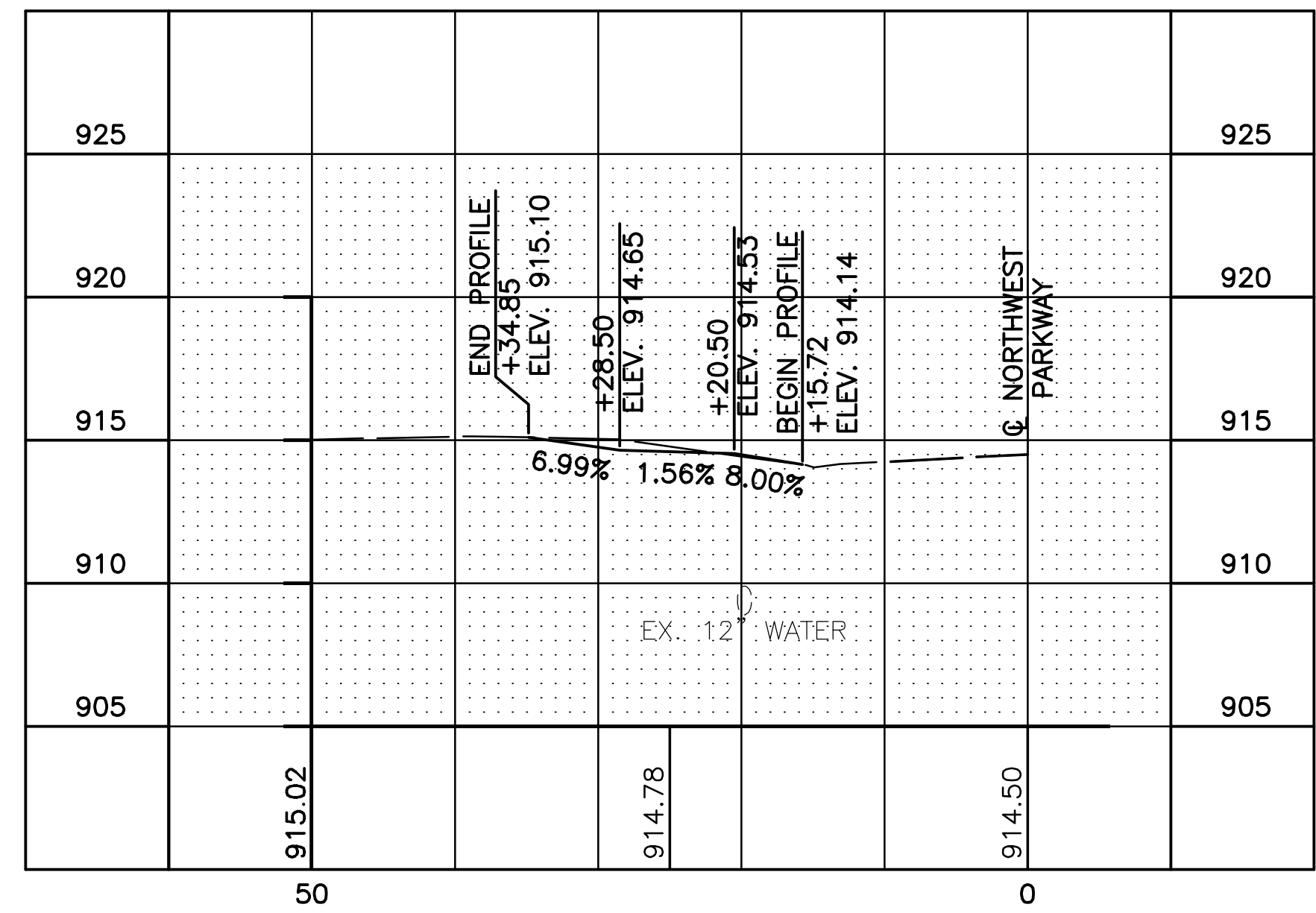
STA. 38+63.07, RT.  
PLAN  
4143-4147 WEAVER COURT

**INGRESS AND EGRESS**

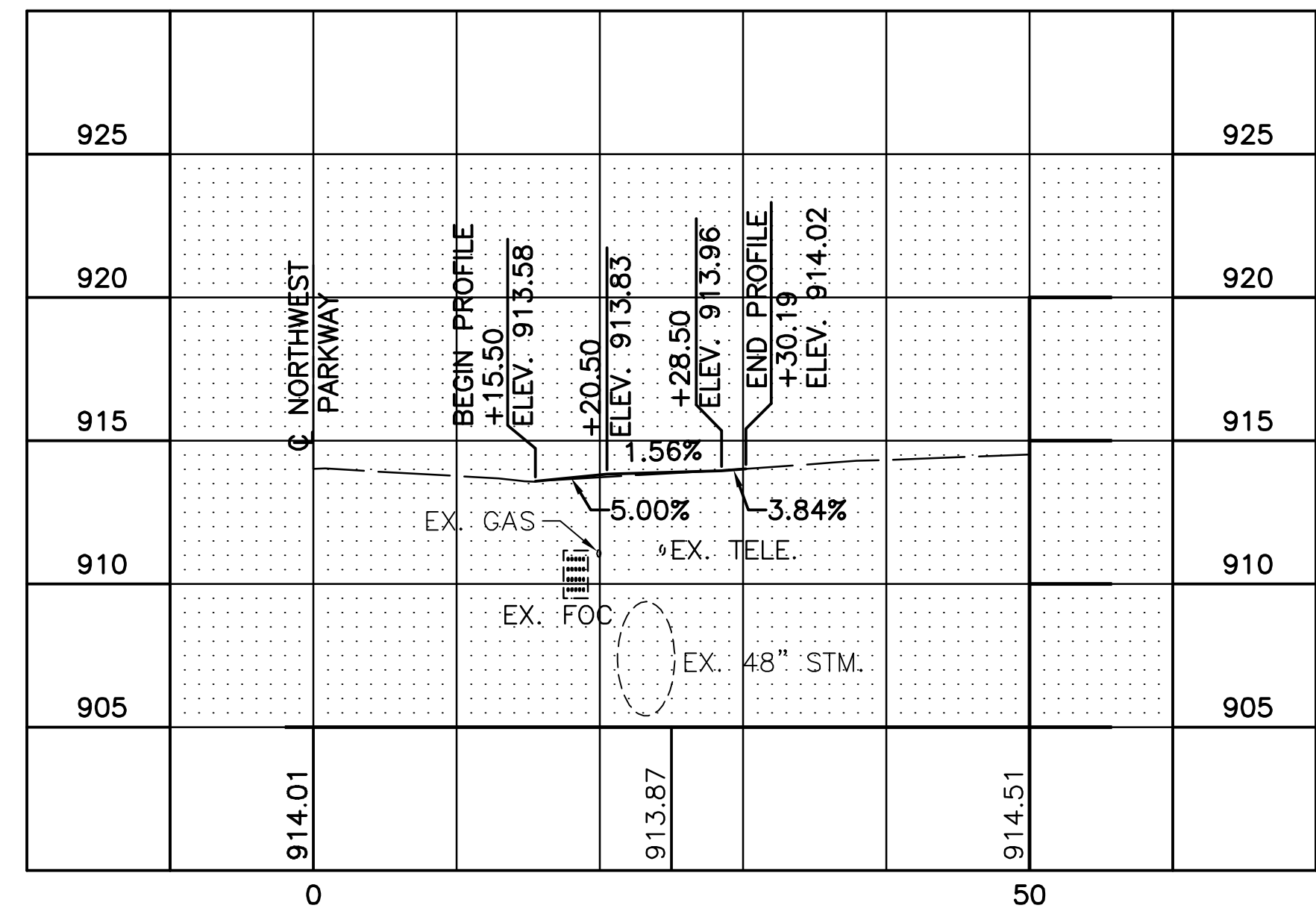
INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



STA. 36+23.27, RT.  
PROFILE  
4811-4847 NORTHWEST PARKWAY



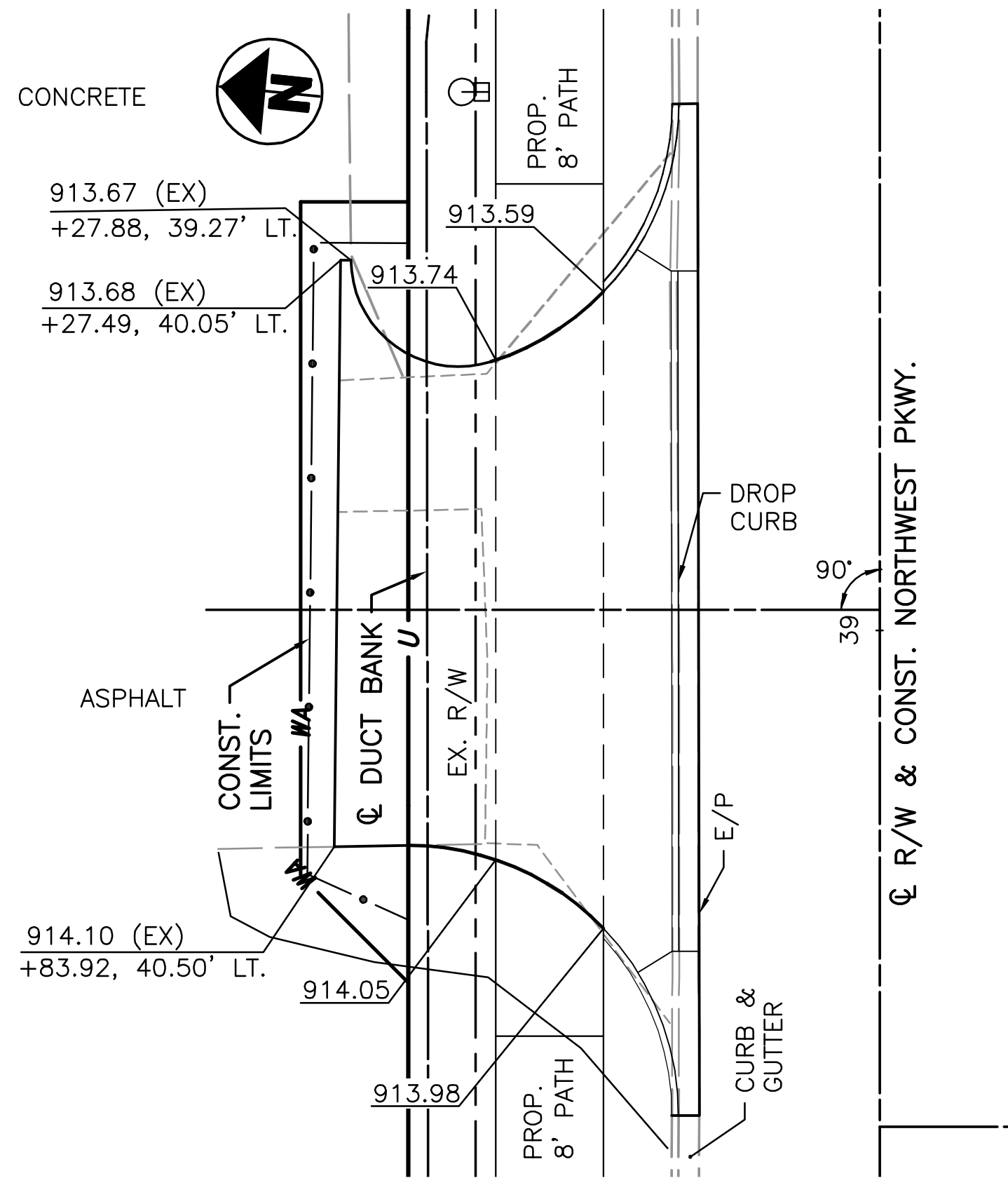
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PROFILE  
4830 NORTHWEST PARKWAY



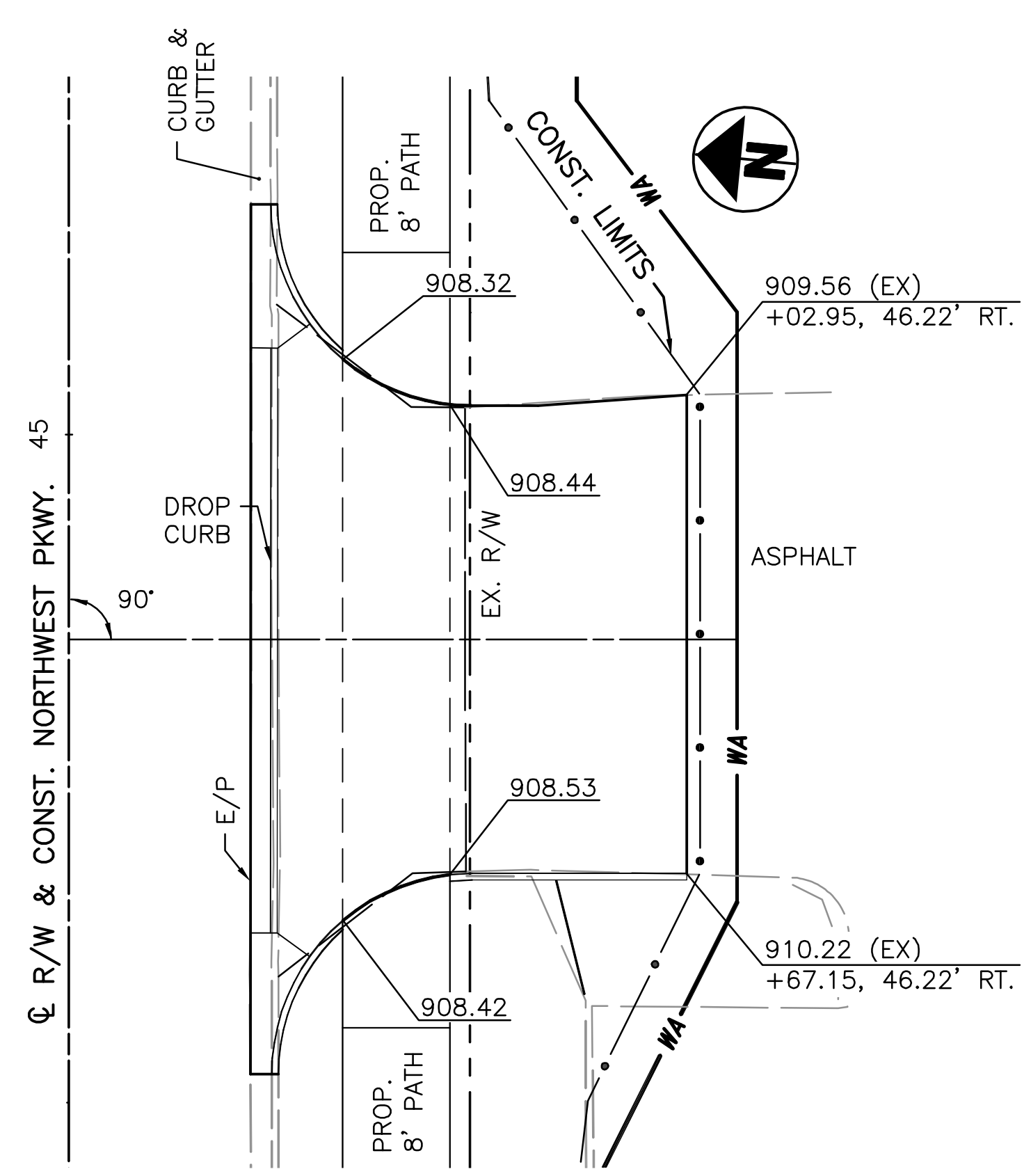
STA. 38+63.07, RT.  
PROFILE  
4143-4147 WEAVER COURT



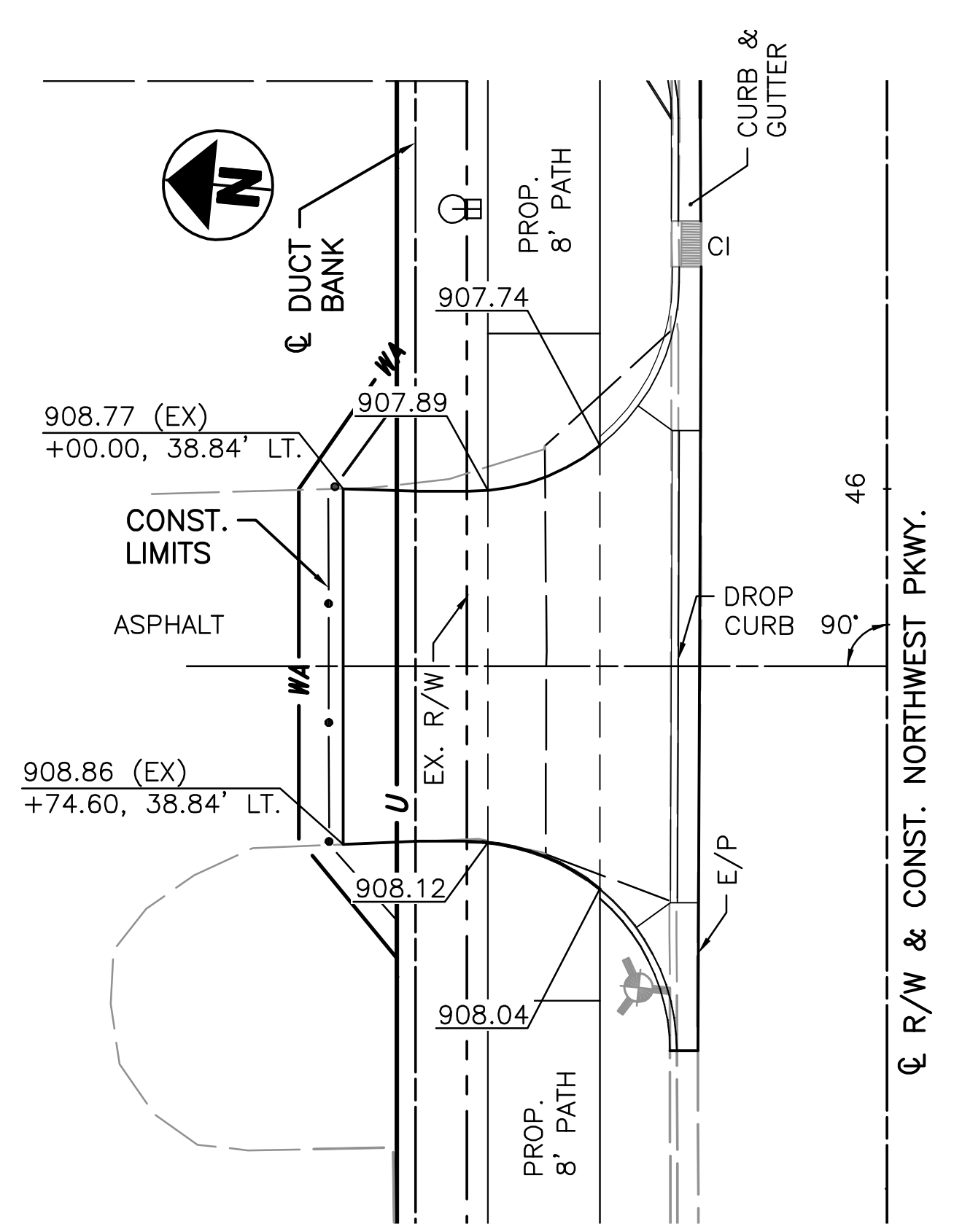
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STA. 39+01.46, LT.  
PLAN  
4770 WEAVER COURT



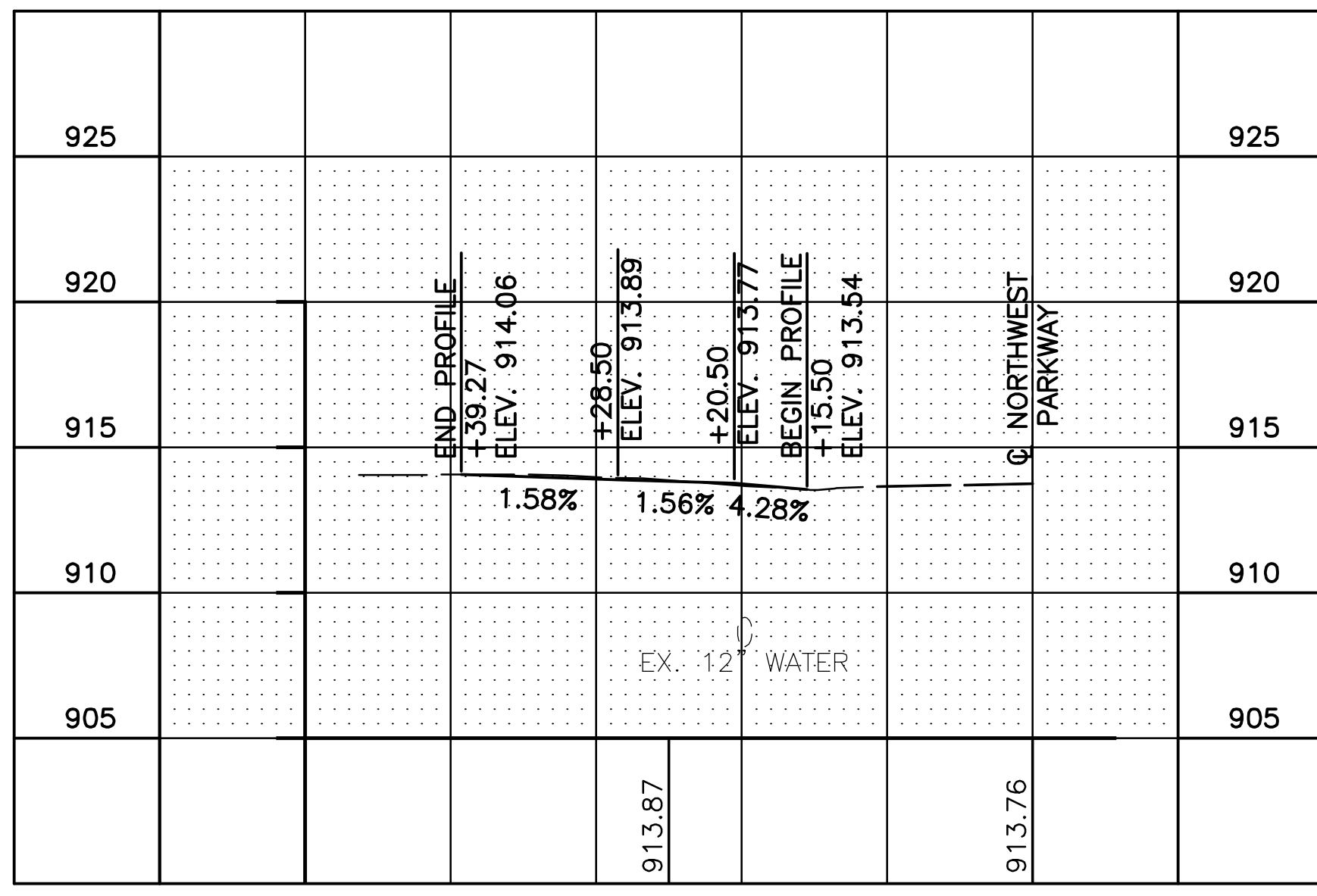
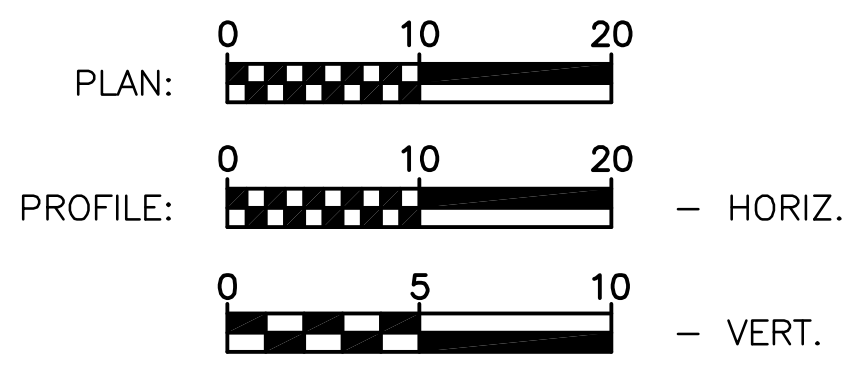
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PLAN  
4731-4751 NORTHWEST PARKWAY



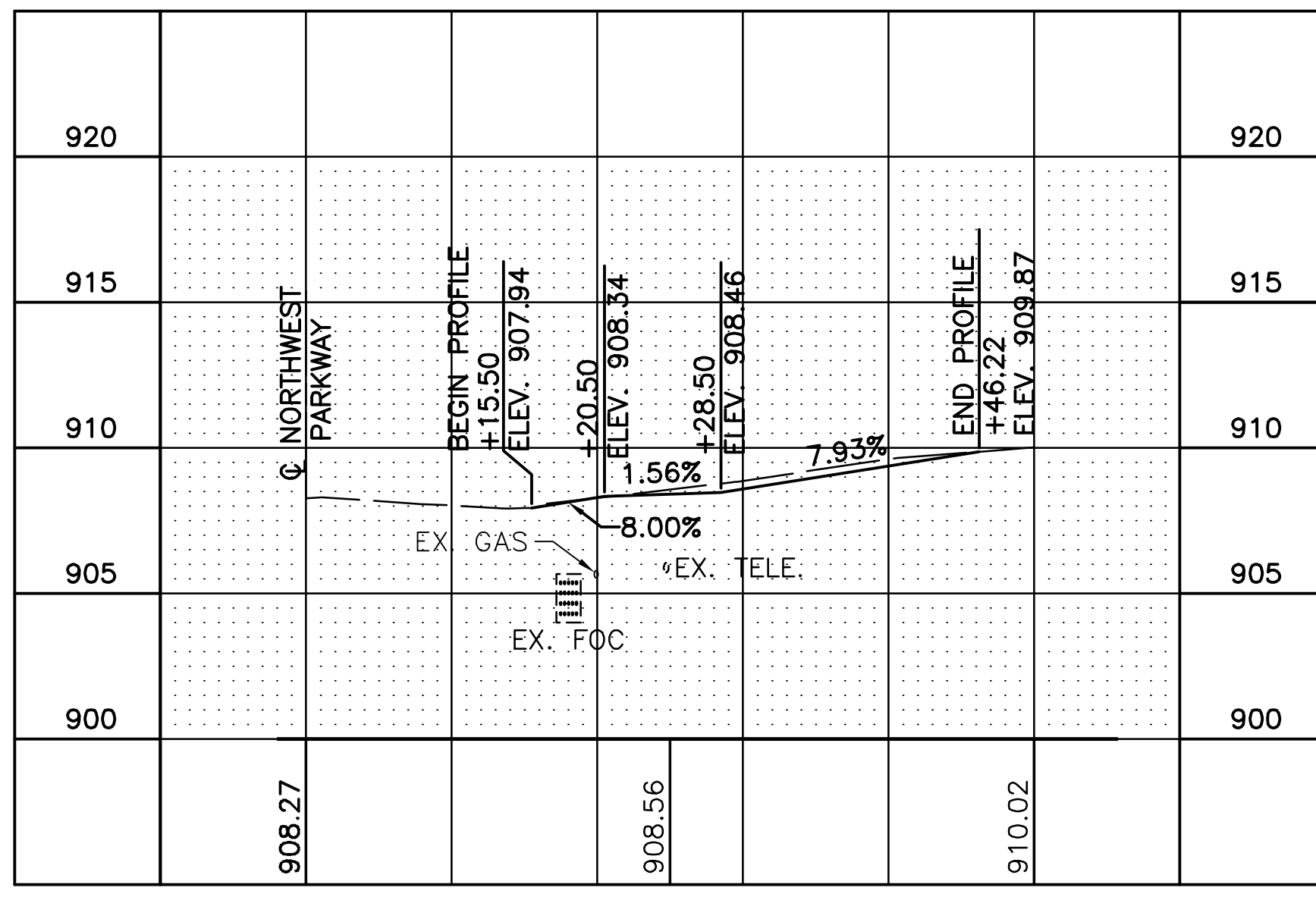
STA. 45+87.25, LT.  
PLAN  
4700 NORTHWEST PARKWAY

**INGRESS AND EGRESS**

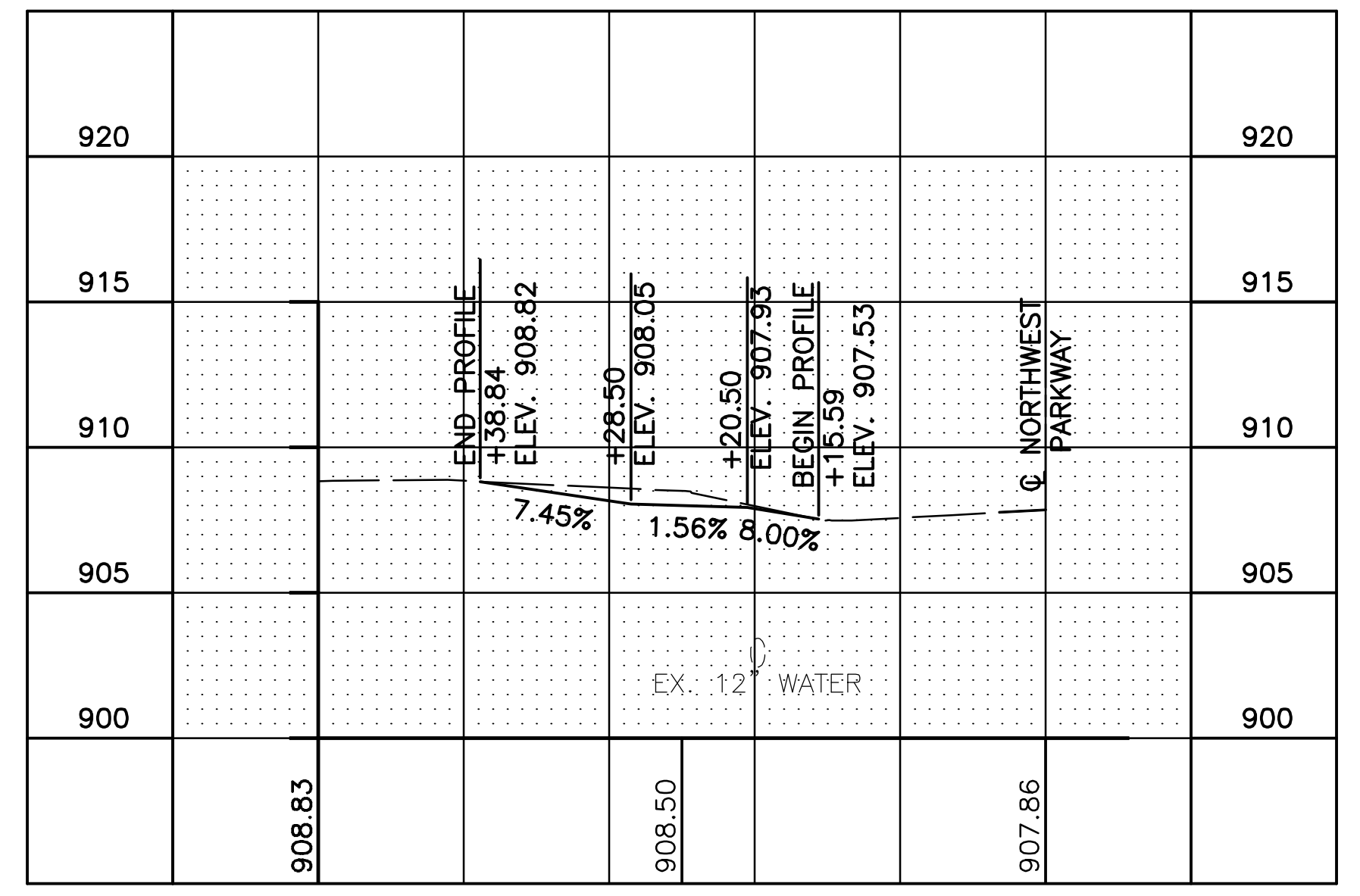
INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



STA. 39+01.46, LT.  
PROFILE  
4770 WEAVER COURT



STA. 44+84.58, RT.  
PROFILE  
4731-4751 NORTHWEST PARKWAY



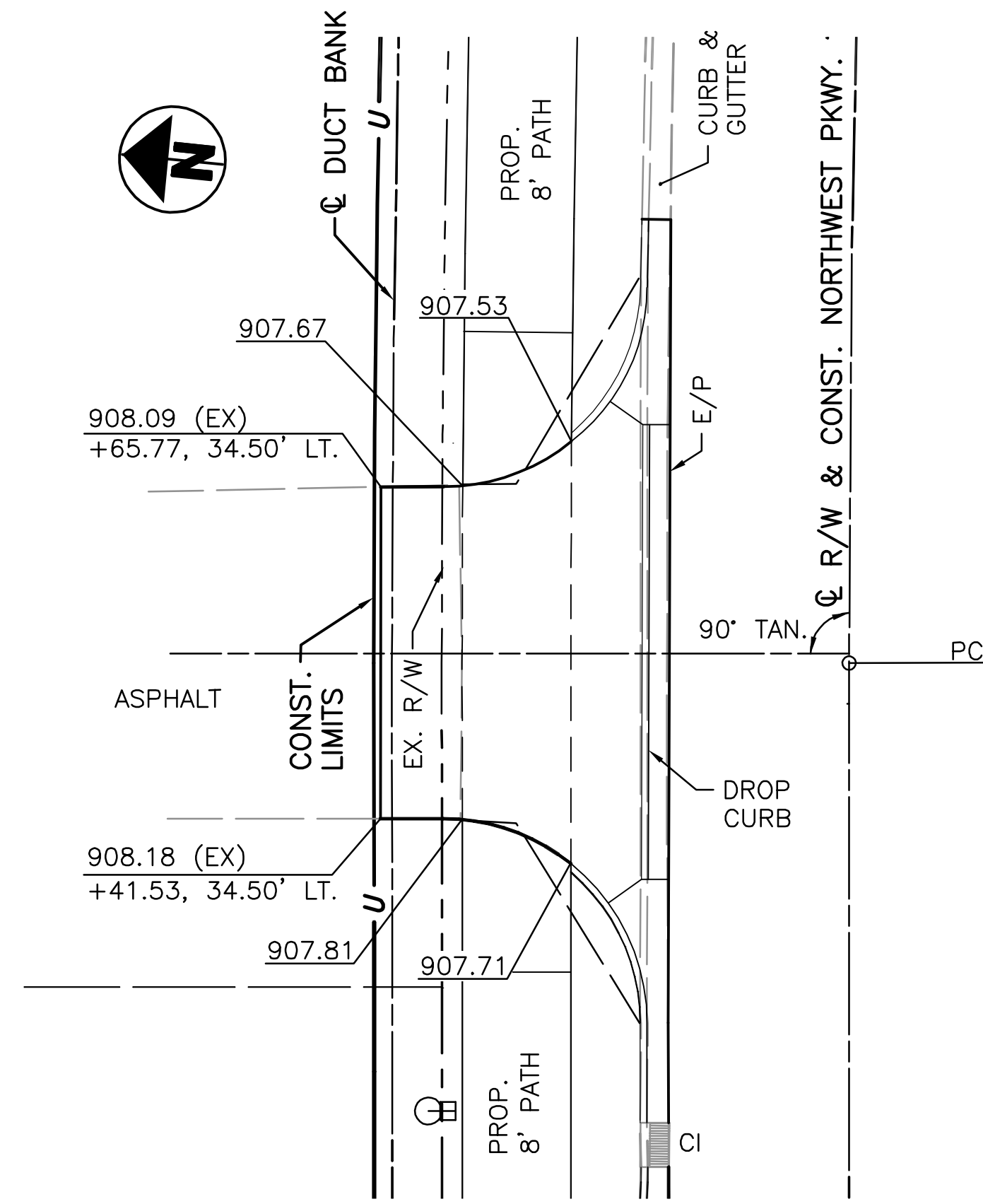
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PROFILE  
4700 NORTHWEST PARKWAY

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

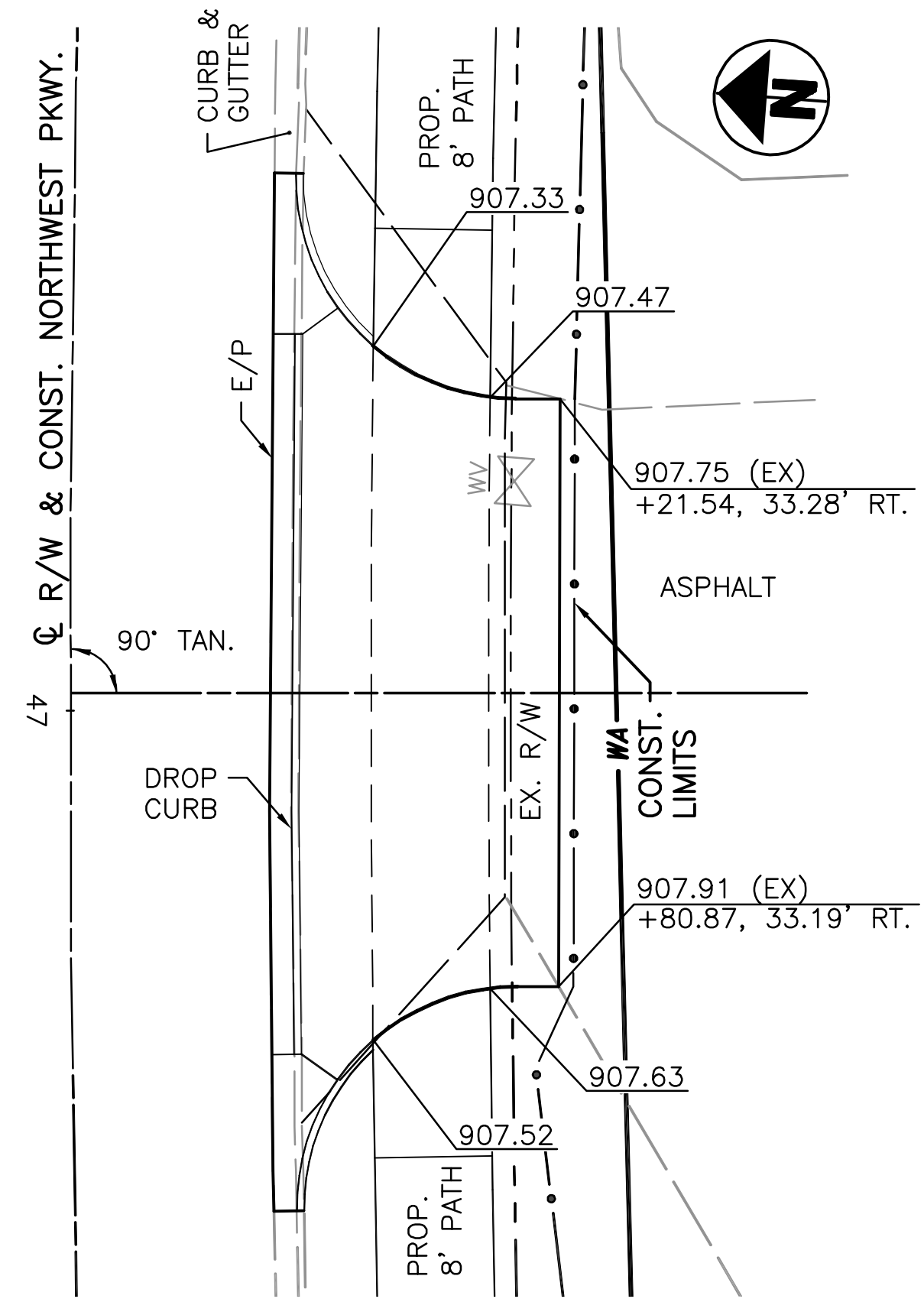
DRIVEWAY DETAILS

CALCULATED  
MRD  
CHECKED  
TJS  
SCALE AS NOTED

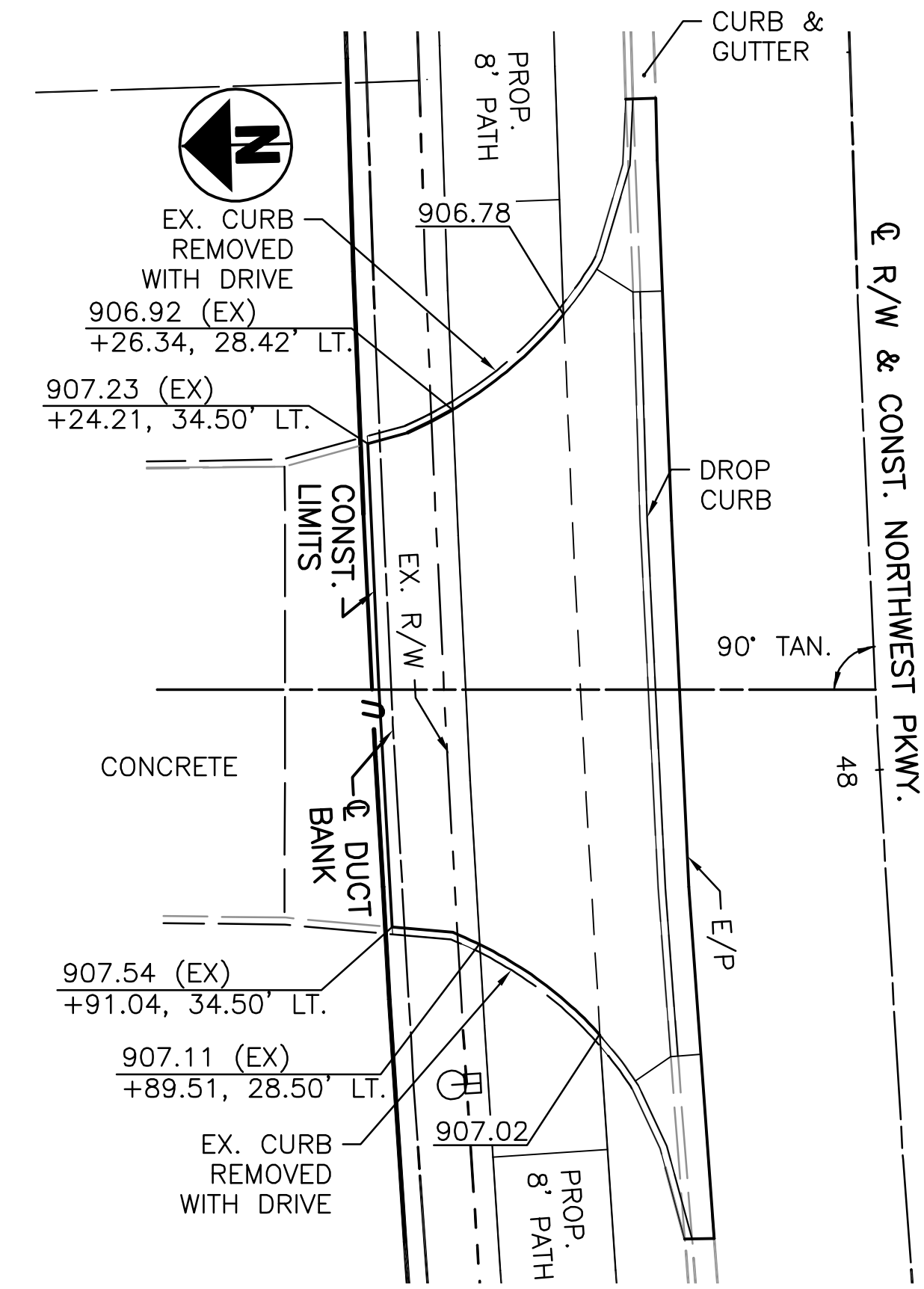
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STA. 46+53.61, LT.  
PLAN  
4700 NORTHWEST PARKWAY



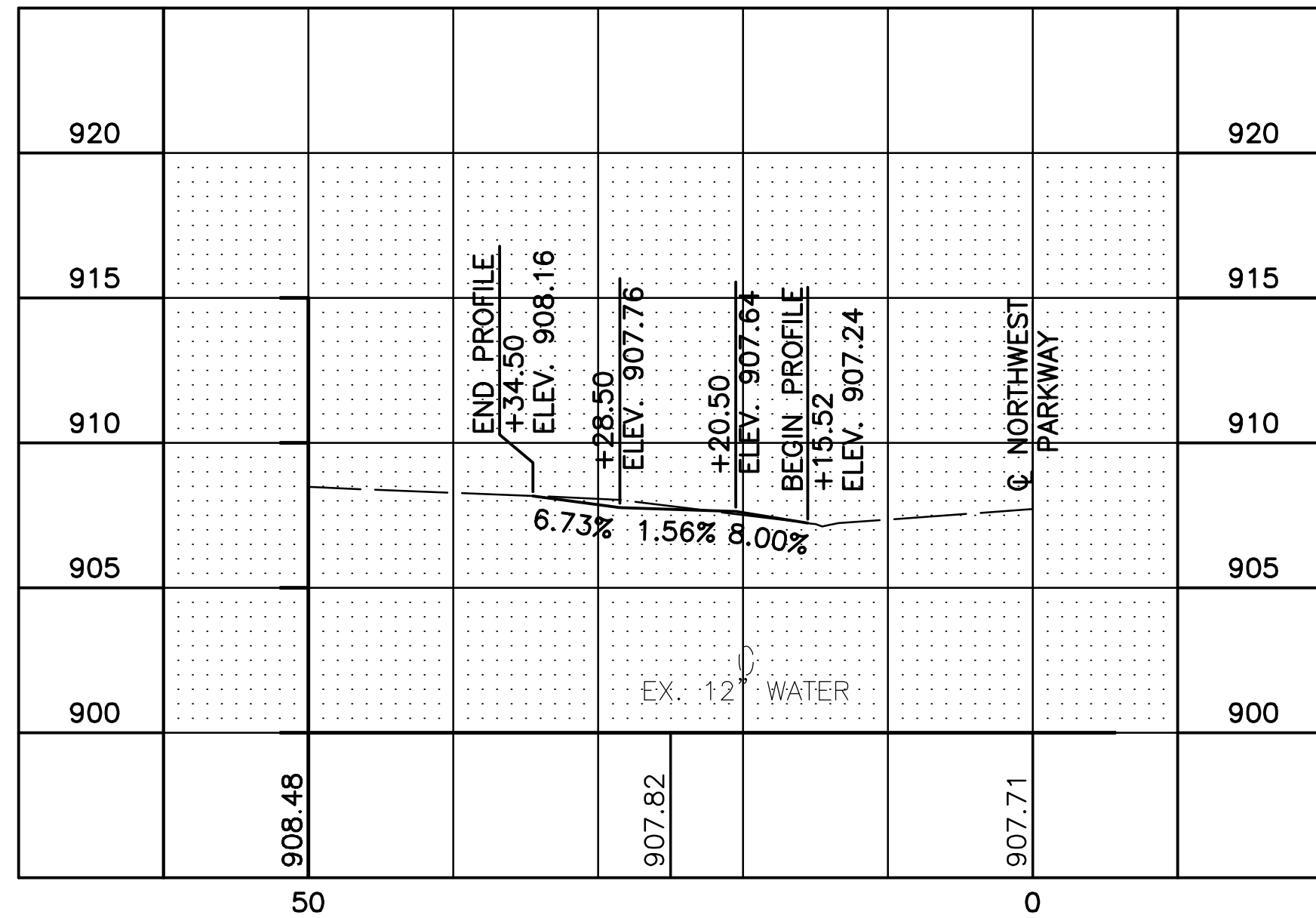
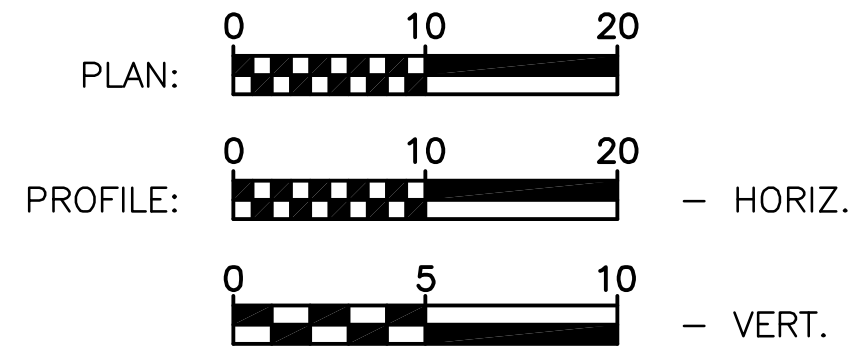
STA. 47+01.13, RT.  
PLAN  
4691-4701 NORTHWEST PARKWAY



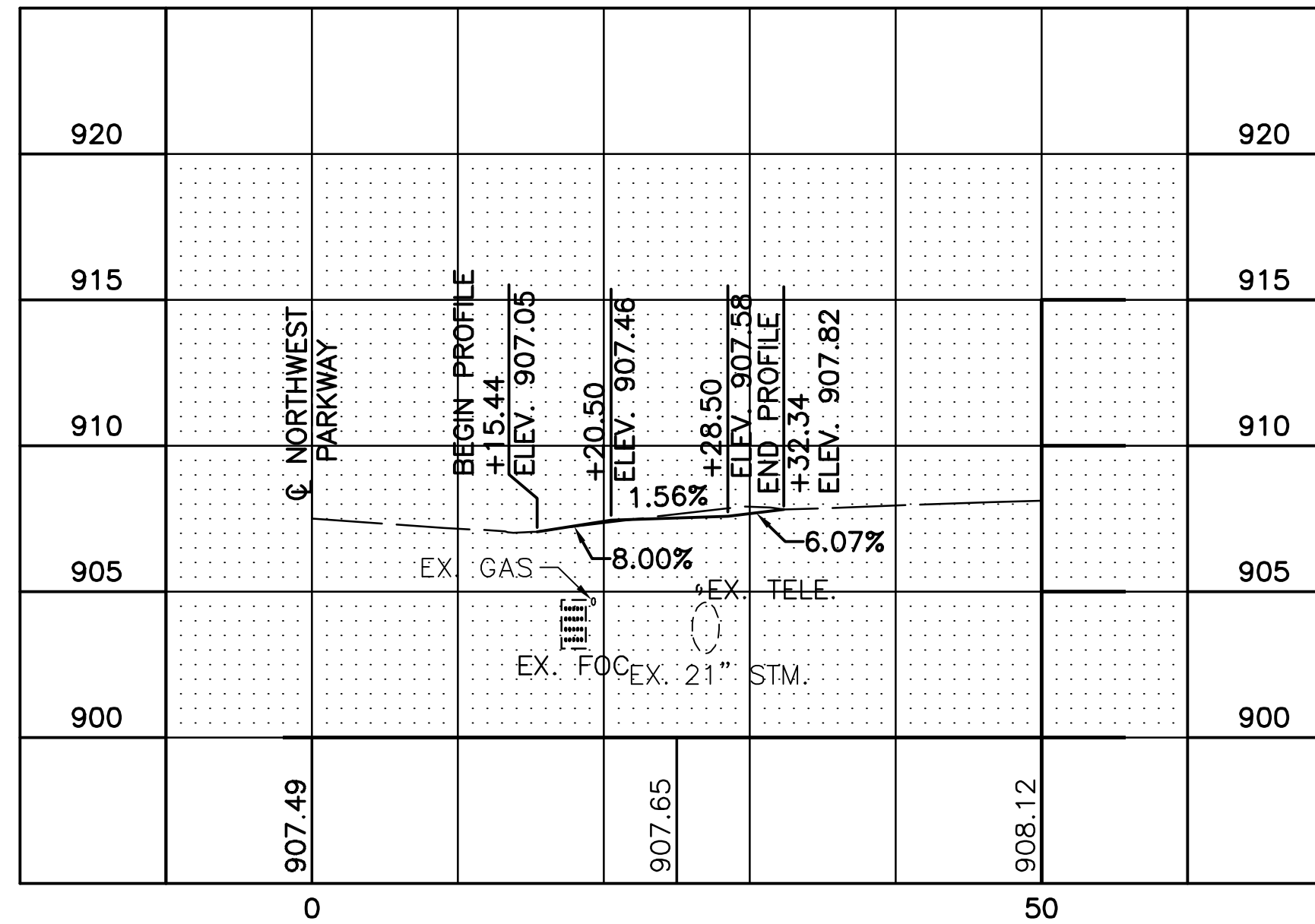
STA. 48+05.51, LT.  
PLAN  
4600 NORTHWEST PARKWAY

**INGRESS AND EGRESS**

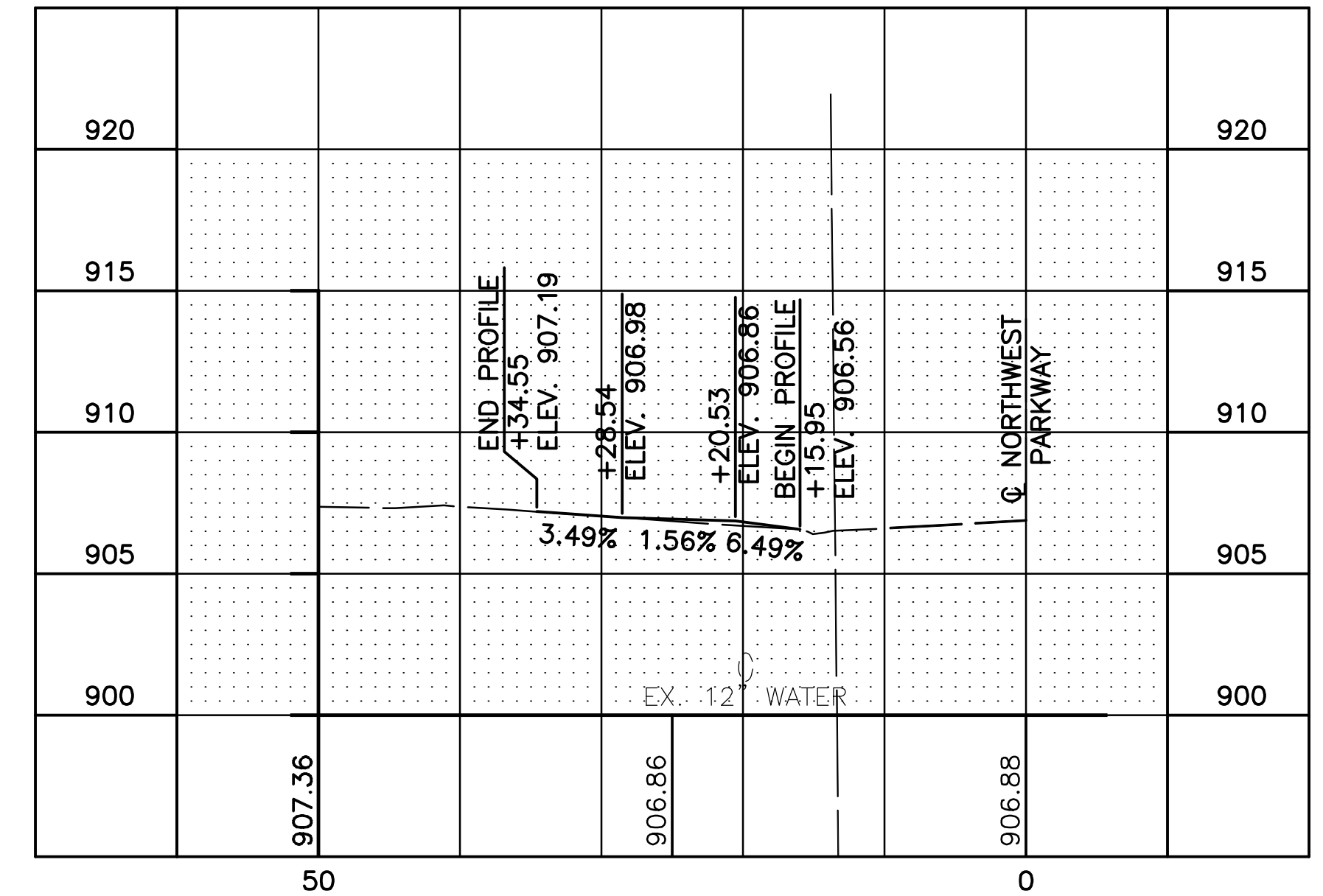
INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



STA. 46+53.61, LT.  
PROFILE  
4700 NORTHWEST PARKWAY



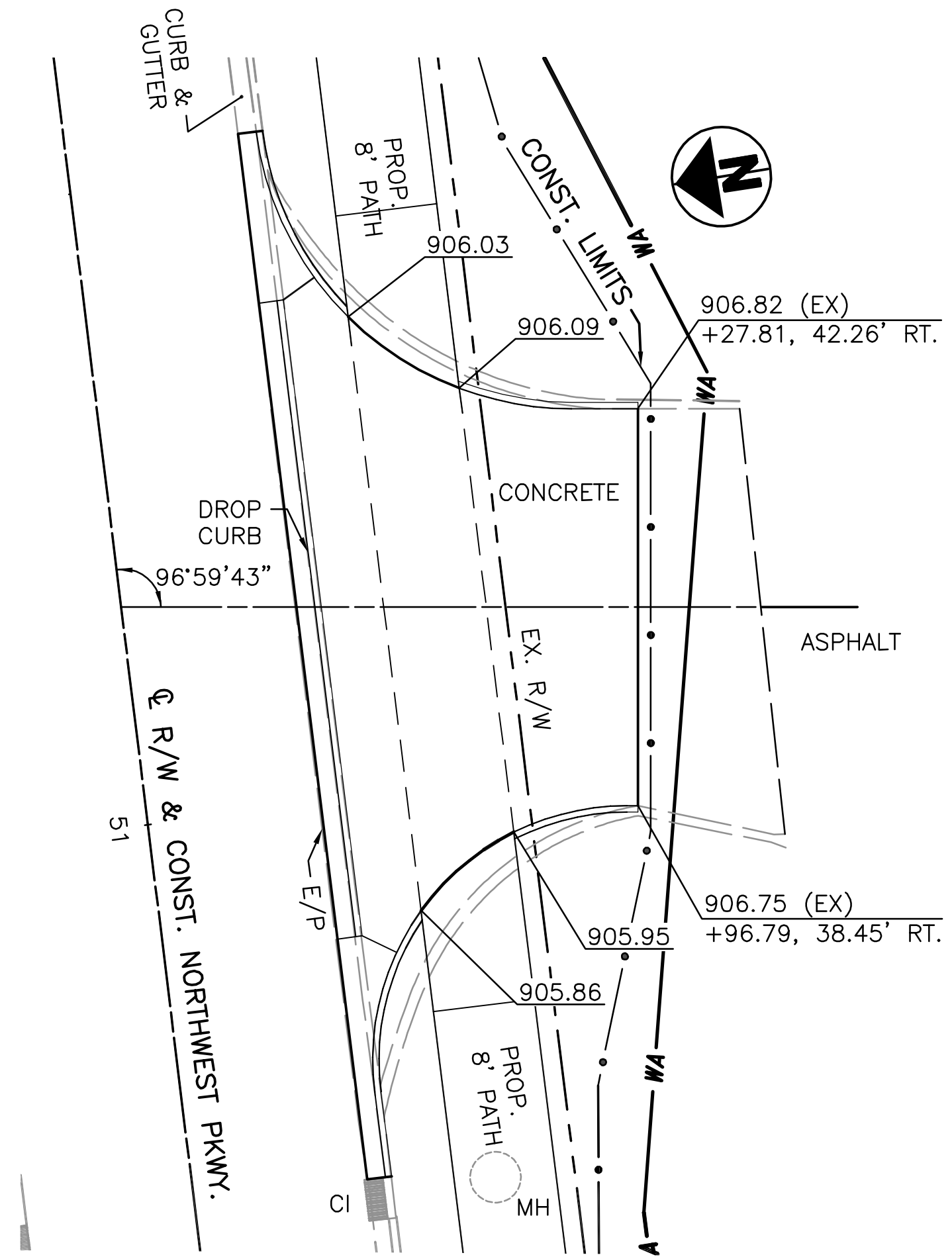
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PROFILE  
4691-4701 NORTHWEST PARKWAY



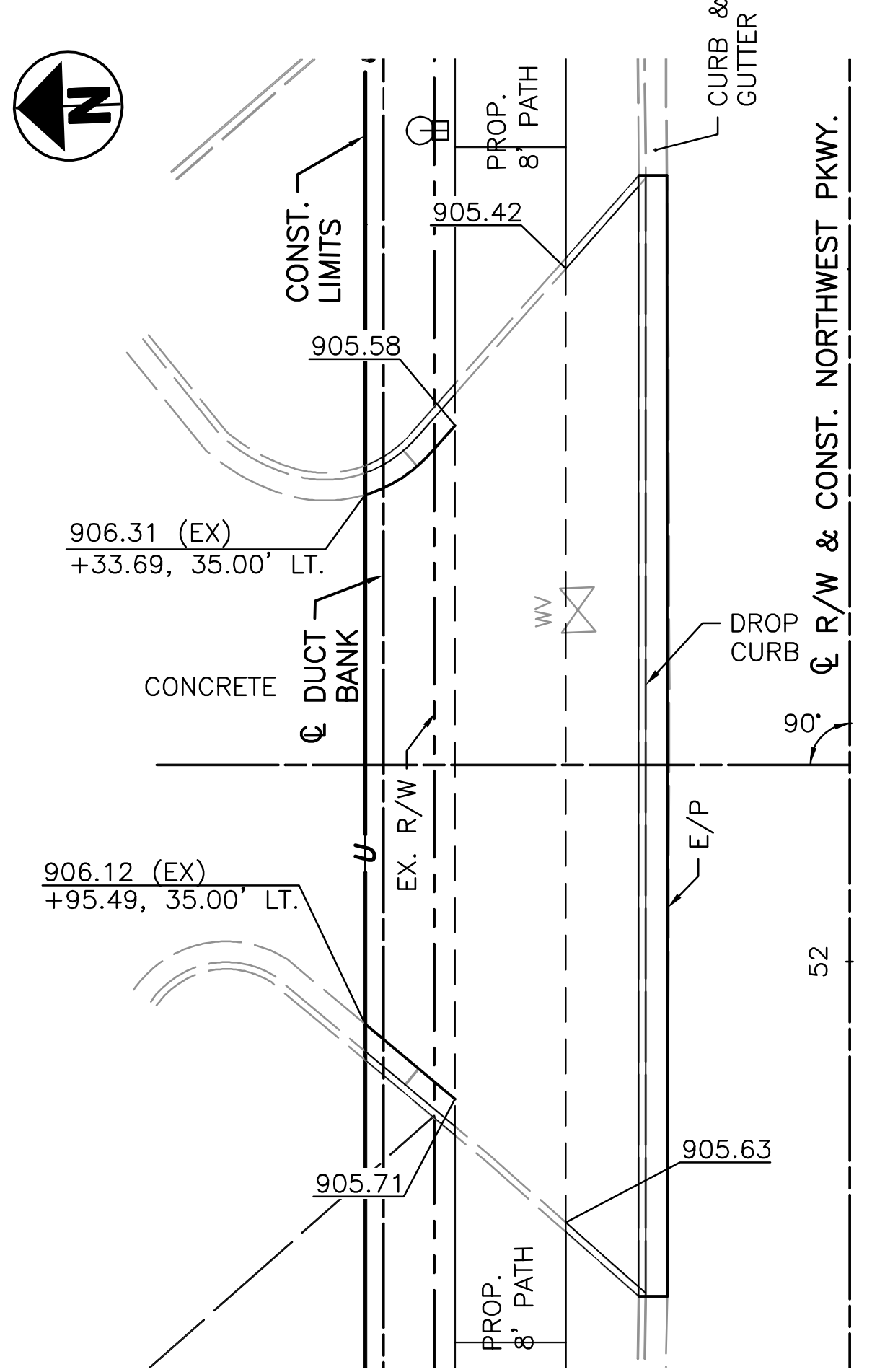
STA. 48+05.51, LT.  
PROFILE  
4600 NORTHWEST PARKWAY

SCALE AS NOTED				
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CALCULATED	MRD	CHECKED	TJS	
DRIVEWAY DETAILS				
NORTHWEST PARKWAY PEDESTRIAN & LIGHTING IMPROVEMENTS				
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38				
44				

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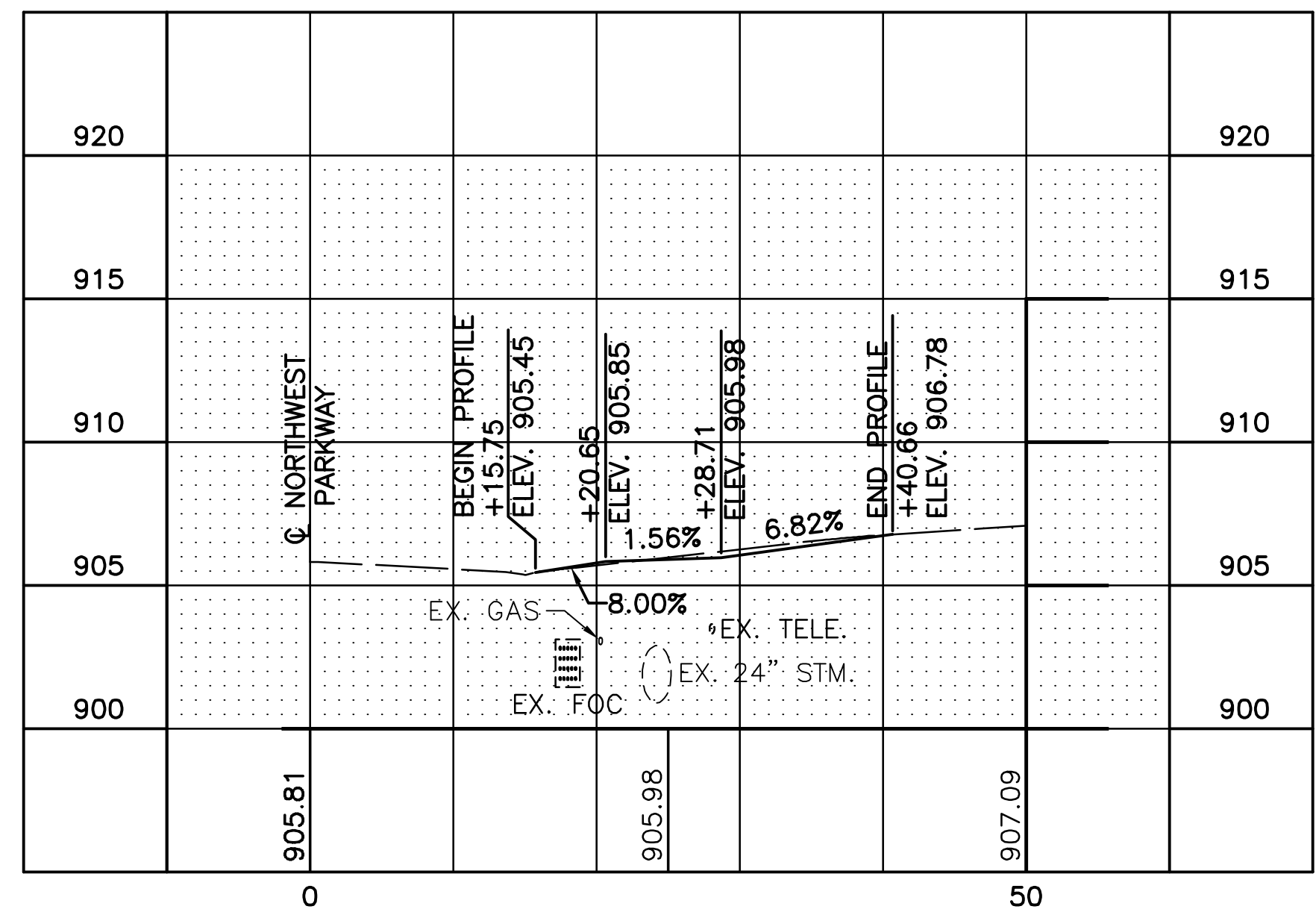
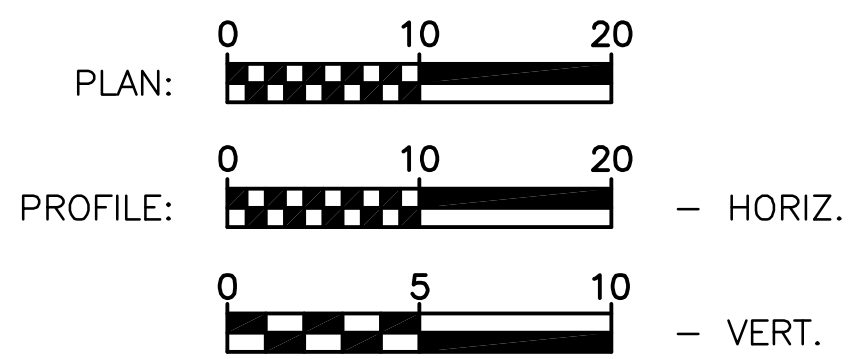


STA. 51+17.15, RT.  
PLAN  
4601-4665 NORTHWEST PARKWAY

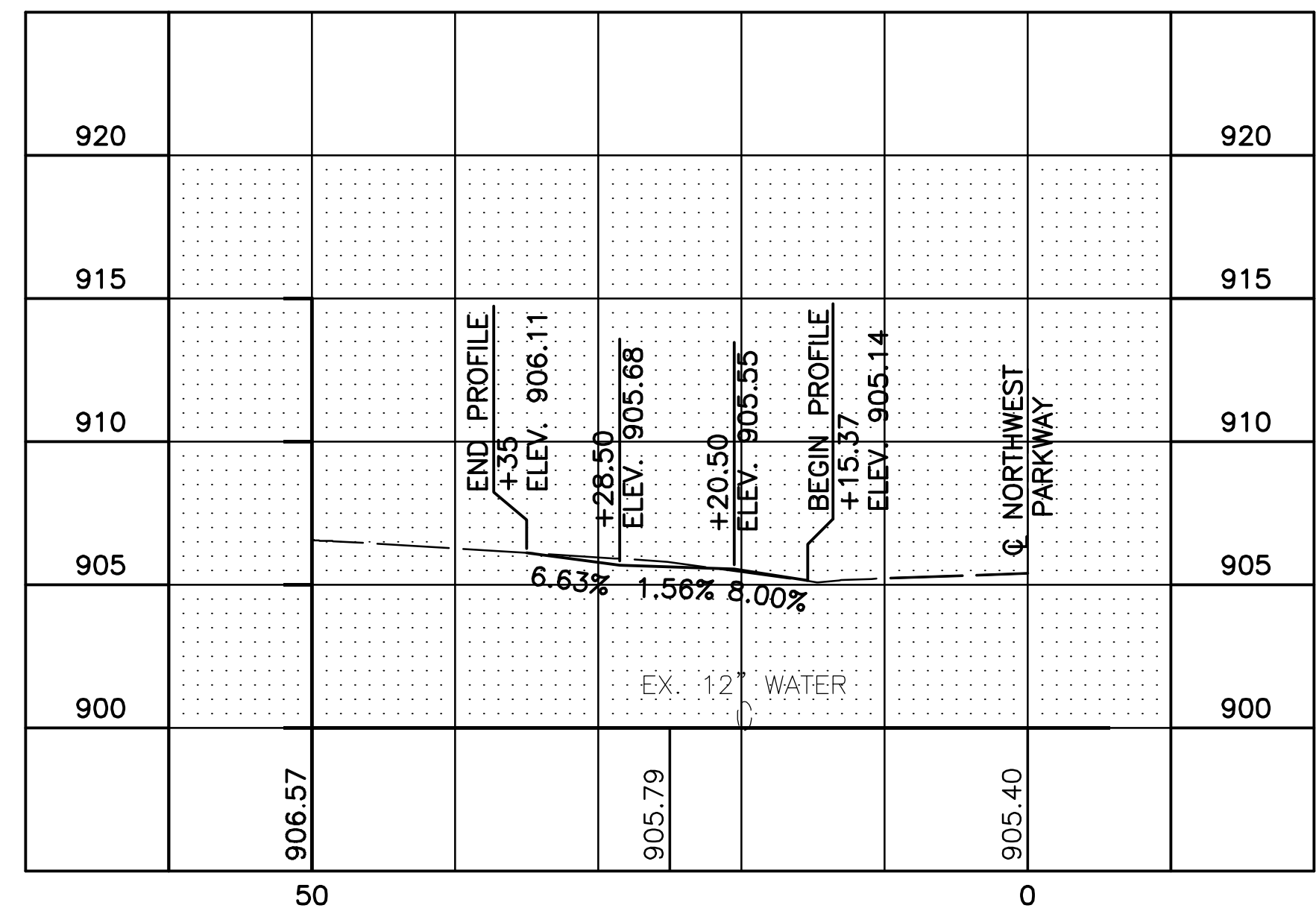


STA. 52+14.12, LT.  
PLAN  
4600 NORTHWEST PARKWAY

**INGRESS AND EGRESS**  
INGRESS & EGRESS FOR ALL DRIVES AND PARKING AREAS SHALL BE MAINTAINED AS PER COLUMBUS CMS 614.02(A). AREAS WITH MULTIPLE DRIVES SHALL HAVE AT LEAST HALF OF THE DRIVES OPEN AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS.



STA. 51+17.15, RT.  
PROFILE  
4601-4665 NORTHWEST PARKWAY



STA. 52+14.12, LT.  
PROFILE  
4600 NORTHWEST PARKWAY



**GENERAL NOTES FOR STREET LIGHTING**

- THE DESIGN AND LAYOUT FOR STREET LIGHTS, UNDERGROUND WIRING AND OTHER PERTINENT EQUIPMENT TO BE USED SHALL BE IN CONFORMANCE WITH GUIDELINES ISSUED BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA), STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER.
- ALL ELECTRIC WORK PERFORMED UNDER THESE SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC), WHICH IS PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION AND IS A UNITED STATES STANDARD FOR THE SAFE INSTALLATION OF ELECTRICAL WIRING AND EQUIPMENT, AND ALL STATE OR LOCAL CODES THAT MAY APPLY, INCLUDING BUT NOT LIMITED TO COLUMBUS ITEM 1000 AND ODOT ITEM 625.
- METERING OF ELECTRICITY FOR STREET LIGHTING IS NOT REQUIRED. STREET LIGHTING DESIGNS SHALL BE COORDINATED WITH THE ELECTRICAL ENERGY SUPPLIER BY THE DESIGN ENGINEER; THE TYPE OF LIGHTING, INCLUDING THE USE OF ALL ADVANCED LIGHTING TECHNOLOGIES, SHALL BE CLEARLY DEFINED IN ORDER TO ESTIMATE ENERGY USE. THE NUMBER AND FORMAT OF RECORD PLANS TO BE SUBMITTED SHALL BE DETERMINED BY THE SUPPLIER OF ELECTRIC ENERGY. ALL SERVICE ENCLOSURES ALONG PUBLIC STREETS SHALL BE PAD-MOUNTED AND SCREENED; ABOVEGROUND POLE OR POST-MOUNTED ASSEMBLIES ARE NOT PERMITTED.
- LIGHTING CONDUIT PARALLEL TO THE STREET SHALL BE LOCATED PER HILLIARD STANDARD DRAWING SL-6. ALL OTHER LIGHTING CONDUIT SHALL BE LOCATED TWO (2) FEET MINIMUM OFF SIDE AND REAR LOT LINES IN A FIVE (5) FOOT MINIMUM EASEMENT. MINIMUM DEPTH FOR CONDUIT IS TWO (2) FEET. ELECTRICAL WARNING TAPE (RED) SHALL BE PROVIDED ONE (1) FOOT OVER TOP OF STREET LIGHT CABLE AND CONDUIT.
- THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S SPECIFICATION SHEETS TO THE CITY ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. MANUFACTURER'S SPECIFICATION SHEETS ARE REQUIRED FOR THE FOLLOWING ITEMS:

- LUMINAIRE
- LAMPS
- POLE
- PHOTOCELL
- SERVICE ENCLOSURE
- PULL BOX
- CONDUIT
- CABLE
- HAND HOLES
- CONTROLS

- FOR EACH NEW PROJECT WHERE STREET LIGHT POLES ARE INSTALLED IN PUBLIC RIGHT-OF-WAY, ADDITIONAL POLES(S), LUMINAIRE(S), AND ALL INCIDENTAL HARDWARE, SHALL BE PROVIDED TO THE CITY OF HILLIARD SERVICE DEPARTMENT FOR MAINTENANCE PURPOSES. THE REQUIRED NUMBER OF SPARES IS BASED ON A RATIO OF 1 SPARE FOR EACH 10 NEW POLES WITH A MINIMUM OF ONE COMPLETE ASSEMBLY (POLE, LUMINAIRE, AND ALL INCIDENTAL HARDWARE) FOR ALL SYSTEMS OF FOUR (4) OR MORE POLES. IF FEWER THAN 4 POLES ARE INSTALLED, THIS REQUIREMENT IS WAIVED. THE FOLLOWING ARE THE NUMBER OF ADDITIONAL POLES, LUMINAIRES, AND INCIDENTAL HARDWARE THAT ARE REQUIRED:

POLES INSTALLED	ADDITIONAL POLES, LUMINAIRES, & HARDWARE TO BE DELIVERED TO CITY
0-3	0
4 - 10	1
11 - 20	2
21 - 30	3
31 - 40	4
MORE THAN 40	5

THESE ADDITIONAL "MATERIAL ONLY" ITEMS SHALL BE CLEARLY DEFINED AS A SEPARATE LINE ITEM IN THE GENERAL SUMMARY OR QUANTITIES. ALL SPARE EQUIPMENT SHALL BE DELIVERED TO THE CITY OF HILLIARD SERVICE DEPARTMENT PRIOR TO ACCEPTANCE OF THE PROJECT. A SIGNED ITEMIZED RECEIPT SHOWING THE ITEMS AND QUANTITIES DELIVERED TO THE CITY SHALL BE PROVIDED BY THE CONTRACTOR TO THE INSPECTOR PRIOR TO ACCEPTANCE AND/OR PAYMENT OF MATERIALS.

- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY THE PUBLIC AUTHORITY HAVING JURISDICTION, INCLUDING A HILLIARD RIGHT-OF-WAY PERMIT. ALL EASEMENTS REQUIRED FOR CONSTRUCTION SHALL BE SECURED AND SUBMITTED TO THE CITY OF HILLIARD FOR RECORDING PRIOR TO COMMENCEMENT OF WORK; NO WORK WHICH REQUIRES AN EASEMENT SHALL PROCEED UNTIL THIS IS COMPLETE.
- THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE SHALL PERFORM INSPECTION OF THE WORK. THE CITY ENGINEER WILL REQUIRE AT LEAST FORTY-EIGHT (48) HOURS' NOTICE BEFORE ANY WORK TAKES PLACE. NO UNDERGROUND CABLE SHALL BE BACKFILLED UNTIL INSPECTED. FAILURE TO REQUEST THE NECESSARY INSPECTION MAY RESULT IN THE REJECTION OF THE WORK AND THE PROJECT.
- THE CONTRACTOR SHALL CONDUCT ELECTRICAL TESTS PER COLS ITEM 625.19.
- THE CONTRACTOR SHALL PROVIDE ONE PAPER COPY AND ONE ELECTRONIC (PDF) COPY OF THE FOLLOWING ITEMS:
  - FINAL "AS-BUILT" DRAWINGS FOR THE LIGHTING SYSTEM
  - AN OPERATIONS & MAINTENANCE (O&M) MANUAL (PAPER COPY IN A 3-RING BINDER) FOR ALL ELECTRICAL ITEMS PROVIDED IN THE PROJECT

- FOLLOWING INSTALLATION OF THE LIGHTING SYSTEM, THE CONTRACTOR SHALL REQUEST FINAL INSPECTION BY THE CITY OF HILLIARD OPERATIONS DIVISION. WITHIN ONE WEEK, THE FINAL INSPECTION WILL BE CONDUCTED, AND A FINAL PUNCH LIST WILL BE ISSUED. UPON COMPLETION OF ALL PUNCH LIST ITEMS, THE CITY, OR THEIR REPRESENTATIVE, WILL OFFICIALLY ACCEPT THE LIGHTING SYSTEM IN WRITING. THIS DATE ESTABLISHES THE BEGINNING OF THE WARRANTY PERIOD.
- THE WARRANTY PERIOD FOR ALL LIGHTING SYSTEMS, MATERIALS, AND/OR OTHER ELECTRIC COMPONENTS IS ONE (1) YEAR UNLESS OTHERWISE EXTENDED IN THE PLANS. ANY POLES, LUMINAIRES OR OTHER EQUIPMENT THAT ARE DAMAGED AS PART OF CONSTRUCTION ACTIVITIES ARE THE SOLE RESPONSIBILITY OF THE DEVELOPER TO REPAIR AND/OR REPLACE, INDEPENDENT OF THE STATUS OF THE WARRANTY PERIOD.

**HIGH VOLTAGE TEST WAIVED**

THE HIGH VOLTAGE TEST SHALL NOT BE PERFORMED ON THE CIRCUITS CONSTRUCTED BY THIS PROJECT, SINCE THE TEST COULD DAMAGE THE PORTION OF THE COMPLETED CIRCUIT WHICH HAS BEEN IN SERVICE PRIOR TO THIS PROJECT.

- ITEM 625 - LIGHT POLE THOROUGHFARE, ATO.8B30, AS PER PLAN
- ITEM 625 - LIGHT POLE FOUNDATION, 24"x7' DEEP, AS PER PLAN
- ITEM 625 - LUMINAIRE, MISC.: GE LIGHTING CATALOGUE #EAN-B-5-D3-7-40-1-B-DKBZ
- ITEM 625 - TRENCH, AS PER PLAN
- ITEM 625 - PULL BOX, AS PER PLAN
- ITEM 625 - LIGHT POLE THOROUGHFARE, ATO.8B30, AS PER PLAN (MATERIAL ONLY SPARE)
- ITEM 625 - LUMINAIRE, MISC.: GE LIGHTING CATALOGUE #EAN-B-5-D3-7-40-1-B-DKBZ (MATERIAL ONLY SPARE)

THE ABOVE ITEMS SHALL CONFORM TO HILLIARD STANDARD DRAWINGS AS NOTED IN THE ITEM DESCRIPTIONS ON THE GENERAL SUMMARY.

**ITEM SPECIAL - DUCT BANK**

THE CONTRACTOR SHALL PROVIDE THE LABOR, TOOLS, EQUIPMENT, AND MATERIALS TO INSTALL CONDUIT BANK IN ACCORDANCE WITH THE PLANS AND AS SPECIFIED HEREIN.

THIS SPECIFICATION COVERS THE ITEMS NEEDED TO INSTALL CONDUIT BANKS INCLUDING, BUT NOT LIMITED TO, CONDUIT, CONDUIT FITTINGS, CONDUIT SPACERS, AND CONTROLLED DENSITY FILL (CDF).

PERFORM ALL WORK ASSOCIATED WITH CONDUIT BANKS IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF GOVERNING AGENCIES HAVING JURISDICTION AND IN ACCORDANCE WITH THESE PLANS AND AS SPECIFIED HEREIN.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 "NATIONAL ELECTRIC CODE (NEC)."

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) C2, "NATIONAL ELECTRIC SAFETY CODE (NEC)."

NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION (NEMA). PROVIDE COMPONENTS WHICH COMPLY WITH THE FOLLOWING STANDARDS: NEMA TC 2, "ELECTRICAL PLASTIC TUBING (EPT) AND CONDUIT (EPC-40 AND EPC-80)", AND NEMA TC 3, "PVC FITTINGS FOR USE WITH RIGID PVC CONDUIT AND TUBING."

UNDERWRITER'S LABORATORY (UL). PROVIDE COMPONENTS WHICH COMPLY WITH THE FOLLOWING STANDARDS: UL 651, "SCHEDULE 40 AND 80 RIGID PVC CONDUIT", AND UL 514. "FITTINGS FOR CONDUIT AND OUTLET BOXES."

FURNISH MANUFACTURER'S PRODUCT DATA, TEST REPORTS, MATERIAL CERTIFICATIONS, AND SAMPLES AS REQUIRED.

SUBMIT PRODUCT DATA FOR THE CONDUIT, CONDUIT FITTINGS, CONDUIT SPACERS, AND CDF. SUBMIT ONE 2-FOOT LONG CONDUIT SAMPLE FOR EACH SIZE OF CONDUIT PROPOSED TO BE INSTALLED ON THIS PROJECT.

DELIVER CONDUITS, CONDUIT FITTINGS, AND CONDUIT SPACERS IN PROPERLY PACKAGED FACTORY FABRICATED TYPE CONTAINERS.

STORE CONDUITS, CONDUIT FITTINGS, AND CONDUIT SPACERS IN A CLEAN DRY SPACE IN ORIGINAL CONTAINERS. PROTECT PRODUCTS FROM WEATHER, DAMAGING FUMES, CONSTRUCTION DEBRIS, AND TRAFFIC.

INFORMATION ON UNDERGROUND UTILITIES AND POSSIBLE OBSTRUCTIONS IN THE PATH OF CONSTRUCTION UNDER THIS SECTION WAS OBTAINED THROUGH INVESTIGATIONS DURING THE DESIGN OF THE PROJECT. THIS INFORMATION IS NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF ACCURACY REGARDING CONDITIONS AND LOCATIONS. THE OWNER WILL ASSUME NO RESPONSIBILITY OF INTERPRETATIONS OR CONCLUSIONS DRAWN FROM THIS INFORMATION.

**MATERIALS**

CONDUIT

PROVIDE SCHEDULE 40 PVC CONDUIT, 90 DEGREES C RATED, AND CONFORMING TO NEMA TC 2 AND UL 651, FOR CONCRETE ENCASEMENT AND IN CONFORMITY WITH NEC ARTICLE 347. THE CONDUIT SIZES ARE SHOWN ON THE PLANS. THE CONDUITS SHALL CARRY A UL LABEL ON EACH 10-FOOT LENGTH. THE CONDUITS SHALL BE IDENTIFIED FOR TYPE AND MANUFACTURER AND SHALL BE TRACEABLE TO LOCATION OF PLANT AND DATE MANUFACTURED. THE MARKINGS SHALL BE LEGIBLE AND PERMANENT. THE CONDUITS SHALL BE MADE FROM POLYVINYL CHLORIDE COMPOUND WHICH INCLUDES INERT MODIFIERS TO IMPROVE WEATHERABILITY AND HEAT DISTORTION. THE CONDUIT SHALL BE HOMOGENEOUS PLASTIC MATERIAL FREE FROM VISIBLE CRACKS, HOLES, OR FOREIGN INCLUSIONS. THE CONDUIT BORE SHALL BE SMOOTH AND FREE OF BLISTERS, NICKS, OR OTHER IMPERFECTIONS WHICH COULD MAR CONDUCTORS OR CABLES.

PROVIDE CONDUIT FITTINGS FOR SCHEDULE 40 PVC CONDUIT CONFORMING TO NEMA TC 3 AND UL 514 WHICH MATE AND MATCH CONDUIT. EACH CONDUIT FITTING SHALL CARRY A UL LABEL. THE CONDUIT FITTINGS SHALL BE IDENTIFIED FOR TYPE AND MANUFACTURER AND SHALL BE TRACEABLE TO LOCATION OF PLANT AND DATE MANUFACTURED. THE MARKINGS SHALL BE LEGIBLE AND PERMANENT. THE CONDUIT FITTINGS SHALL BE MADE FROM POLYVINYL CHLORIDE COMPOUND WHICH INCLUDES INERT MODIFIERS TO IMPROVE WEATHERABILITY AND HEAT DISTORTION. THE CONDUIT FITTINGS SHALL BE HOMOGENEOUS PLASTIC MATERIAL FREE FROM VISIBLE CRACKS, HOLES, OR FOREIGN INCLUSIONS. THE CONDUIT FITTINGS BORE SHALL BE SMOOTH AND FREE OF BLISTERS, NICKS, OR OTHER IMPERFECTIONS WHICH COULD MAR CONDUCTORS OR CABLES.

PROVIDE CONDUIT SPACERS FOR SUPPORTING CONDUITS IN THE CONDUIT BANKS. PROVIDE BASE SPACERS FOR SUPPORTING THE BOTTOM ROW OF CONDUITS IN THE CONDUIT BANKS. PROVIDE INTERMEDIATE SPACERS FOR SUPPORTING ALL ROWS OF CONDUITS ABOVE THE BOTTOM ROW OF CONDUITS IN THE CONDUIT BANKS.

PROVIDE CONDUIT, CONDUIT FITTINGS, AND CONDUIT SPACERS BY ONE OF THE FOLLOWING MANUFACTURERS: CANTEX INDUSTRIES, CARLON ELECTRICAL PRODUCTS, CERTAINTED CORPORATION PIPE AND PLASTICS GROUP, OR APPROVED EQUAL.

CONTROLLED DENSITY FILL (CDF)

PROVIDE CDF FOR ENCASEMENT OF THE CONDUIT BANKS. ENCASEMENT SHALL BE COLUMBUS ITEM 613.

**INSTALLATION**

THE CONTRACTOR SHALL INSTALL THE CONDUIT BANKS AS SHOWN ON THE PLANS. THE LOCATION, SIZE, AND CONFIGURATION OF THE CONDUIT BANKS ARE SHOWN ON THE PLANS AND DETAILS. IN ALL CASES, THE CONDUIT BANKS SHALL BE INSTALLED A MINIMUM OF 24 INCHES BELOW FINAL GRADE. COORDINATE THE INSTALLATION OF THE CONDUIT BANKS WITH OTHER WORK.

INSTALL CONDUITS IN COMPLIANCE WITH THE NEC, THE NESC, AND THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

THE CONTRACTOR SHALL EXCAVATE TRENCHES TO UNIFORM WIDTH, SUFFICIENTLY WIDE TO INSTALL THE CONDUIT BANKS. THE TRENCH WIDTH SHALL BE MINIMIZED AND THE TRENCH DEPTH SHALL BE AS SHOWN IN THE PLANS. WHERE ROCK IS ENCOUNTERED, CARRY EXCAVATION 6 INCHES BELOW REQUIRED ELEVATION AND BACKFILL WITH A 6-INCH LAYER OF CRUSHED STONE OR GRAVEL PRIOR TO INSTALLATION OF THE CONDUIT BANKS.

THE CONTRACTOR SHALL INSTALL THE CONDUIT BANKS IN THE OPEN TRENCHES. THE BOTTOM ROW OF CONDUITS IN THE CONDUIT BANKS SHALL BE INSTALLED ON THE INTERLOCKING BASE SPACERS. EACH ROW OF CONDUITS ABOVE THE BOTTOM ROW OF CONDUITS SHALL BE INSTALLED ON THE INTERLOCKING INTERMEDIATE SPACERS. ALL BASE AND INTERMEDIATE SPACERS SHALL BE INTERLOCKED TO PROVIDE MAXIMUM STRENGTH AND SUPPORT TO THE CONDUIT BANKS. ALL BASE AND INTERMEDIATE SPACERS SHALL BE SIZED TO HOLD THE SIZE OF CONDUITS THAT THEY ARE SUPPORTING. THE MAXIMUM LONGITUDINAL SPACING BETWEEN EACH SET OF SPACERS IS 5 FEET. THE CONTRACTOR SHALL NOT EXCEED THE MAXIMUM LONGITUDINAL SPACING OF 5 FEET BETWEEN EACH SET OF SPACERS. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN PLACING THE CONDUITS AND CONDUIT SPACERS IN THE CONDUIT BANKS. THE CONTRACTOR SHALL NOT ALLOW WORKERS TO WALK ON TOP OF THE CONDUIT BANK OR ITEMS TO BE DROPPED ONTO THE CONDUIT BANK. THIS IS TO AVOID DAMAGE TO THE CONDUIT AND CONDUIT SPACERS.

THE CONTRACTOR SHALL JOIN EACH CONDUIT SECTION AND CONDUIT FITTING TOGETHER WITH SOLVENT CEMENT. THE CONDUIT ENDS AND CONDUIT FITTINGS SHALL BE CLEAN AND DRY BEFORE APPLYING THE SOLVENT CEMENT. FOLLOW THE CONDUIT MANUFACTURER'S RECOMMENDATIONS FOR USING THE SOLVENT CEMENT. ALL CONDUIT JOINTS SHALL PROVIDE A WATERTIGHT SEAL CAPABLE OF SUSTAINING A HYDROSTATIC PRESSURE OF 25 POUNDS PER SQUARE INCH (PSI) FOR 12 HOURS.

SHKOLNIK, TODD I:\17369874\Task 15 - Northwest Parkway\_MJP\_Study\design\plan set\17369874\NW\_gp.dwg LIGHTING AND DUCT BANK Lot Saved: Apr 12, 2018, 11:39 AM Plotted: May 03, 2018, 4:51 PM

CALCULATED  
MRD  
CHECKED  
TJS

LIGHTING AND DUCT BANK  
GENERAL NOTES

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

**INSTALLATION CONTINUED**

NOTE: DETAILS ARE NOT TO SCALE.

THE CONTRACTOR SHALL SECURELY ANCHOR THE CONDUIT BANKS TO THE BOTTOM OF THE TRENCH TO PREVENT THE CONDUIT BANKS FROM FLOATING WHEN THE CDF IS PLACED AROUND THE CONDUIT BANKS. AT A MINIMUM, THE CONDUIT BANKS SHALL BE ANCHORED EVERY 5 FEET AT EACH SET OF CONDUIT SPACERS.

THE CONTRACTOR SHALL CAREFULLY PLACE THE CDF AROUND THE CONDUITS IN THE CONDUIT BANKS SO AS NOT TO DAMAGE THE CONDUITS AND CONDUIT SPACERS AND DISPLACE THE CONDUIT BANK WITHIN THE TRENCH. THE CONTRACTOR SHALL ADJUST THE DELIVERY CHUTE SO THE FALL OF CDF INTO THE TRENCH IS MINIMAL. THE CONTRACTOR SHALL USE A SPLASH BOARD TO DIVERT THE FLOW OF CDF AWAY FROM THE TRENCH WALLS AND AVOID DISLODGING SOIL AND STONES. THE CONTRACTOR SHALL CAREFULLY PLACE THE CDF AROUND EACH CONDUIT IN THE CONDUIT BANKS SO THAT THERE ARE NO VOIDS IN THE ENCASUREMENT AND THAT A MINIMUM OF 3 INCHES OF COVER IS MAINTAINED AROUND EACH CONDUIT IN THE CONDUIT BANKS.

AFTER THE CDF HAS CURED, THE CONTRACTOR SHALL BACKFILL OVER THE CONDUIT BANKS. THE BACKFILL SHALL BE IN ACCORDANCE WITH COLUMBUS 603.10. AREAS WITHIN 5 FEET OF OR UNDER PAVEMENT SHALL BE BACKFILLED PER COLUMBUS 912, EXCEPT THAT THE GRANULAR MATERIAL SHALL BE BROUGHT UP TO THE TOP OF THE SUBGRADE. AREAS 5 FEET OUTSIDE THE PAVEMENT SHALL BE BACKFILLED PER COLUMBUS 911.

THE CONTRACTOR SHALL USE EXTREME CARE IN ALL ASPECTS OF THE CONSTRUCTION OF THE CONDUIT BANKS. THE CONDUIT BANKS SHALL NOT BE DISPLACED BY THE PLACEMENT OF CDF AND SHALL BE FREE OF VOIDS IN THE ENCASUREMENT; FREE OF DAMAGE TO THE CONDUITS AND SPACERS; AND FREE OF BULGES, DEFORMATIONS, BURRS, BREAKS, AND ROUGH EDGES IN THE CONDUITS. ANY REPAIRS AND/OR REPLACEMENTS TO SECTIONS OF THE CONDUIT BANKS DEEMED NECESSARY BY THE CITY SHALL BE AT THE CONTRACTOR'S OWN EXPENSE WITH NO ADDITIONAL COMPENSATION FROM THE CITY. THE CITY HAS THE RIGHT TO REQUIRE ADDITIONAL TESTING (INCLUDING VIDEOTAPING THE INSIDE OF THE CONDUITS) AND UNCOVERING OF WORK TO VERIFY THAT THE CONDUIT BANKS ARE INSTALLED PER THESE SPECIFICATIONS. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF THE ADDITIONAL TESTING AND UNCOVERING OF WORK IF THE CITY DETERMINES THAT THE CONDUIT BANKS WERE NOT INSTALLED PER THESE SPECIFICATIONS.

THE CONTRACTOR SHALL REMOVE DEBRIS, DIRT, AND OBSTRUCTIONS FROM EACH CONDUIT RUN IN EACH CONDUIT BANK BY PASSING A WIRE BRUSH (SIZED PER THE CONDUIT MANUFACTURER'S RECOMMENDATIONS) FOLLOWED BY A FLEXIBLE IRON MANDREL (SIZED AT 95 PERCENT OF THE NOMINAL INSIDE DIAMETER OF THE CONDUIT) THROUGH EACH CONDUIT RUN. THE WIRE BRUSH SHALL BE PULLED A SECOND TIME THROUGH EACH CONDUIT AFTER THE MANDREL HAS BEEN PULLED THROUGH. IMMEDIATELY FOLLOWING THIS, EACH CONDUIT END SHALL BE CAPPED TO KEEP OUT ALL DEBRIS, DIRT, AND OBSTRUCTIONS.

THE CONTRACTOR SHALL INSTALL AN AIRCRAFT CABLE TYPE PULL WIRE IN EACH CONDUIT IN EACH CONDUIT RUN. PROVIDE A MINIMUM OF 10 FEET OF ADDITIONAL PULL WIRE AT EACH END.

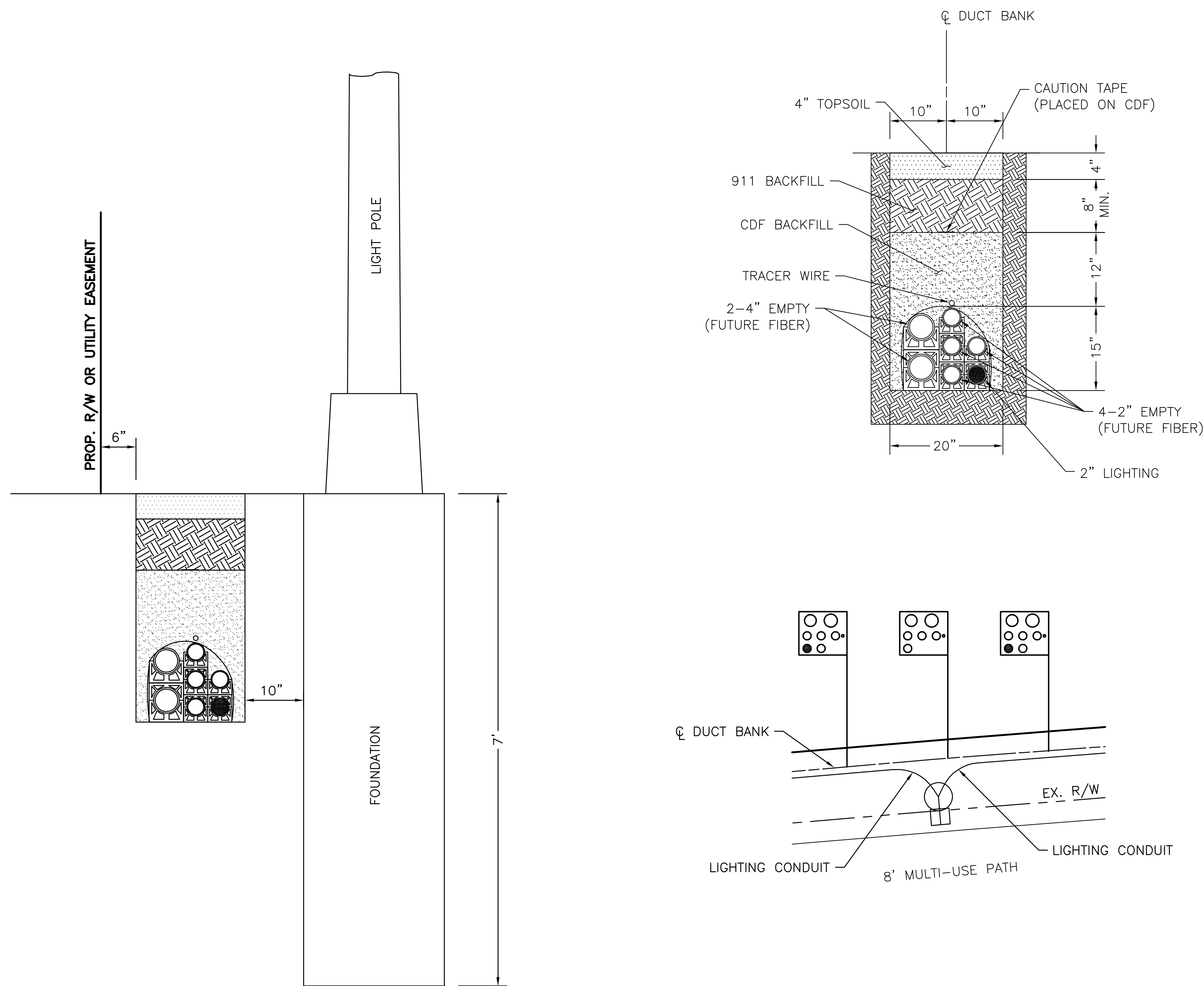
TRACER WIRE FOR THE DUCT BANK SHALL BE INSTALLED AS SHOWN ON THE DETAILS.

**BASIS OF PAYMENT**

PAYMENT FOR ACCEPTED QUANTITIES AS PROVIDED ABOVE WILL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT FOR ITEM SPECIAL - DUCT BANK. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, AND OTHER INCIDENTALS NECESSARY TO FURNISH AND INSTALL THE DUCT BANK.

**ITEM 625 - PULL BOX, 725.06, 4'x4', AS PER PLAN**

DUCT BANK PULL BOXES SHALL BE MODEL #CVG484836S???, MANUFACTURED BY MACLEAN HIGHLINE, 2300 HIGHWAY 11 NORTH, SWEETWATER, TENNESSEE 37874 (803-628-4380), OR APPROVED EQUAL. THE LOGO SHALL READ "HILLIARD".



SHKOLNIK, TODD I:\17369874\Task 15 - Northwest Parkway\_MJP\_Study\design\plan\_set\17369874\NW\_gm.dwg LIGHTING AND DUCT BANK Last Saved: Apr 12, 2018, 11:39 AM Plotted: May 03, 2018, 4:51 PM

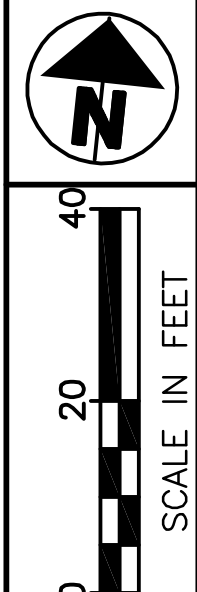
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TJS

LIGHTING AND DUCT BANK  
GENERAL NOTES AND DETAILS

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS



SHKOLNIK, TODD L:\17369874\Task 15 - Northwest Parkway\_MUP\_Study\design\plan\_set\lighting\17369874NW\_ID01.dwg LIGHTING PLAN - NORTHWEST PARKWAY Last Saved: Mar 22, 2018 11:46 AM Plotted: May 03, 2018 4:51 PM



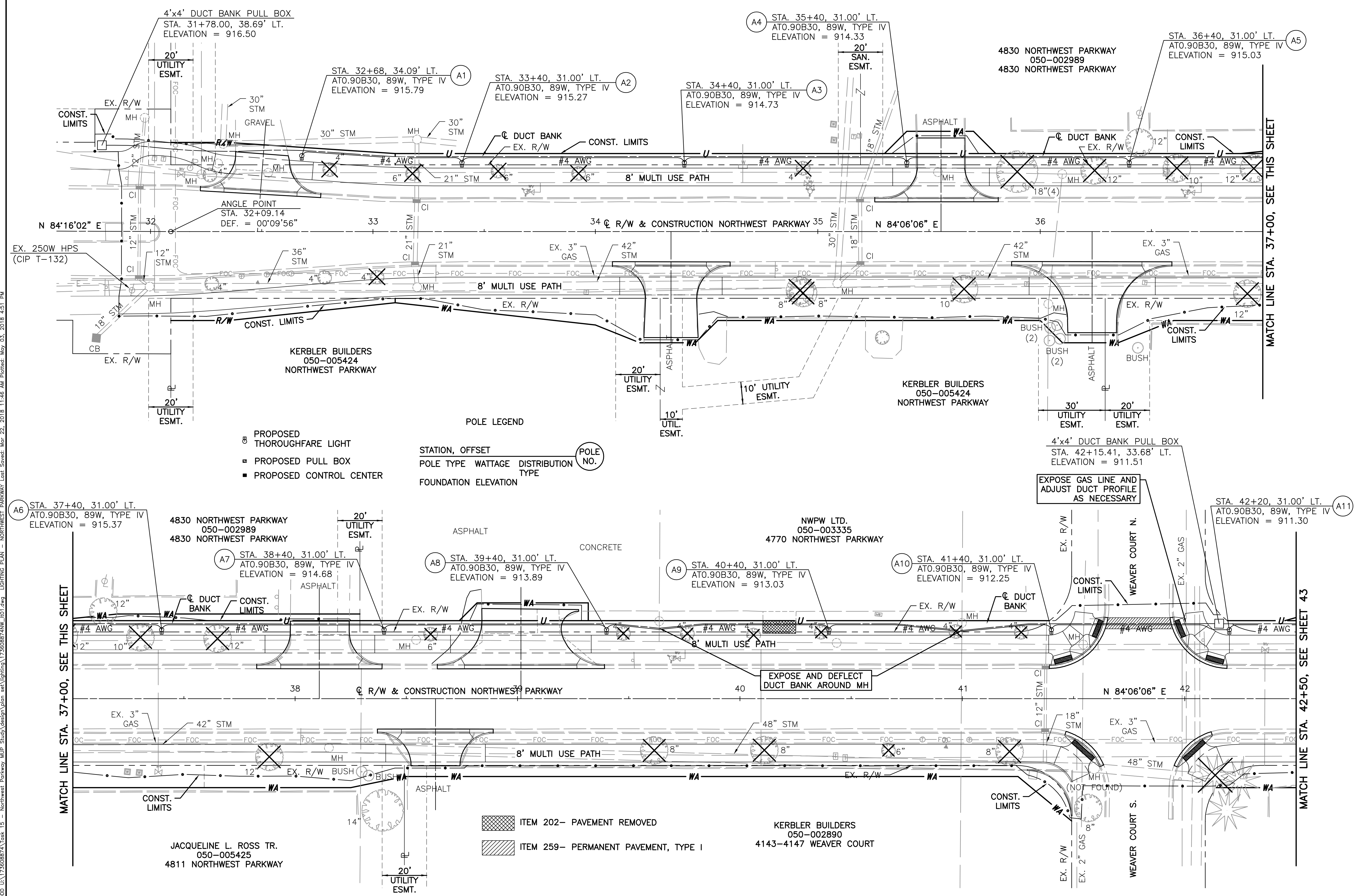
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MRD  
CHECKED  
TJS

LIGHTING PLAN - NORTHWEST PARKWAY  
STA. 31+67.59 TO STA. 42+00

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

42  
44

P-919



- ☐ PROPOSED THOROUGHFARE LIGHT
- ☐ PROPOSED PULL BOX
- ☐ PROPOSED CONTROL CENTER

STATION, OFFSET  
POLE TYPE WATTAGE DISTRIBUTION TYPE  
FOUNDATION ELEVATION

- ▨ ITEM 202- PAVEMENT REMOVED
- ▨ ITEM 259- PERMANENT PAVEMENT, TYPE I

MATCH LINE STA. 37+00, SEE THIS SHEET

MATCH LINE STA. 37+00, SEE THIS SHEET

MATCH LINE STA. 42+50, SEE SHEET 43

4830 NORTHWEST PARKWAY  
050-002989  
4830 NORTHWEST PARKWAY

STA. 36+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 915.03

A4 STA. 35+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 914.33

A1 STA. 32+68, 34.09' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 915.79

A2 STA. 33+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 915.27

A3 STA. 34+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 914.73

4'x4' DUCT BANK PULL BOX  
STA. 31+78.00, 38.69' LT.  
ELEVATION = 916.50

4'x4' DUCT BANK PULL BOX  
STA. 42+15.41, 33.68' LT.  
ELEVATION = 911.51

A11 STA. 42+20, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 911.30

A6 STA. 37+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 915.37

4830 NORTHWEST PARKWAY  
050-002989  
4830 NORTHWEST PARKWAY

A7 STA. 38+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 914.68

A8 STA. 39+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 913.89

A9 STA. 40+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 913.03

A10 STA. 41+40, 31.00' LT.  
ATO.90B30, 89W, TYPE IV  
ELEVATION = 912.25

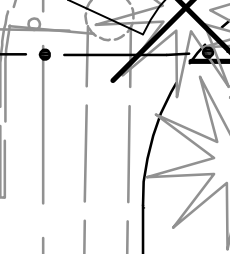
NWPW LTD.  
050-003335  
4770 NORTHWEST PARKWAY

JACQUELINE L. ROSS TR.  
050-005425  
4811 NORTHWEST PARKWAY

KERBLER BUILDERS  
050-002890  
4143-4147 WEAVER COURT

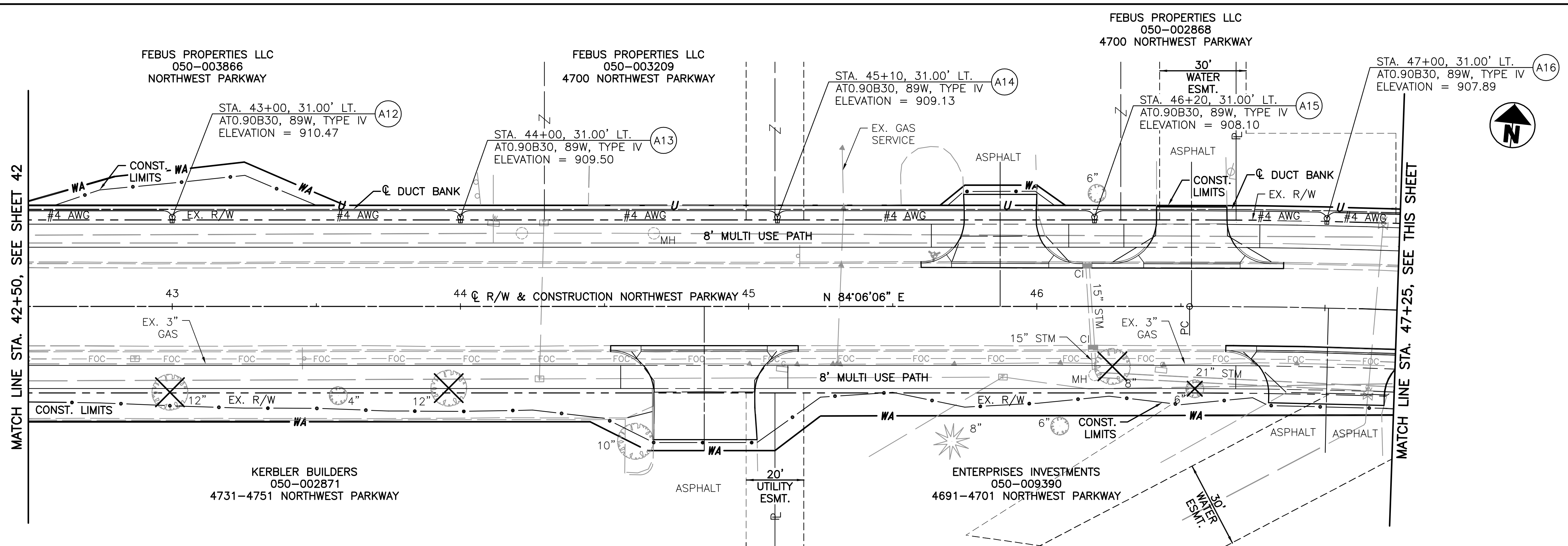
WEAVER COURT S.

WEAVER COURT N.





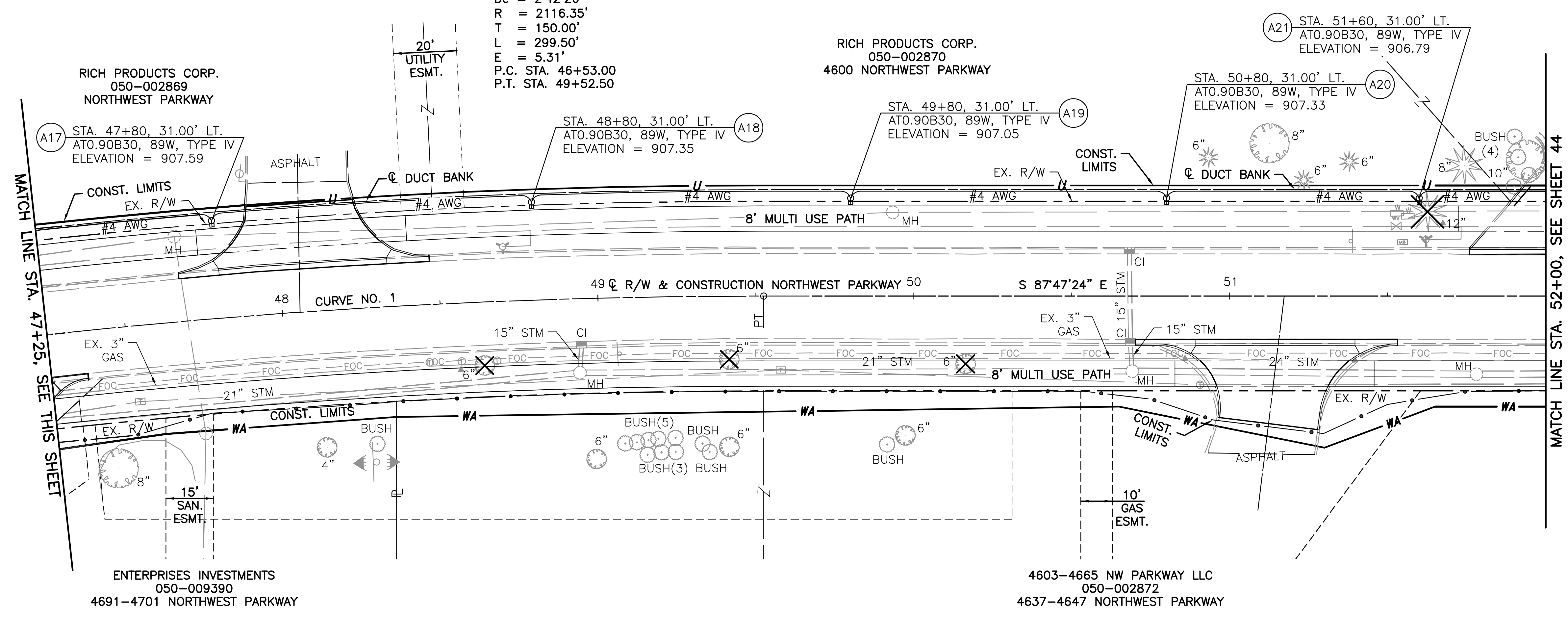
SHKOLNIK\_TODD\_U:\17369874\Task\_15 - Northwest Parkway\_MUP\_Study\design\plan\_set\lighting\17369874NW\_L02.dwg LIGHTING PLAN - NORTHWEST PARKWAY Last Saved: Mar 22, 2018 11:46 AM Plotted: May 03, 2018 4:51 PM



**CURVE DATA**  
**NORTHWEST PARKWAY**  
**CURVE NO. 1**  
 P.I. STA. 48+03.00  
 $\Delta = 8^{\circ}06'30''$   
 $D_c = 2^{\circ}42'26''$   
 $R = 2116.35'$   
 $T = 150.00'$   
 $L = 299.50'$   
 $E = 5.31'$   
 P.C. STA. 46+53.00  
 P.T. STA. 49+52.50

- ⊗ PROPOSED THOROUGHFARE LIGHT
- ⊠ PROPOSED PULL BOX
- PROPOSED CONTROL CENTER

STATION, OFFSET (POLE NO.)  
 POLE TYPE WATTAGE DISTRIBUTION TYPE  
 FOUNDATION ELEVATION



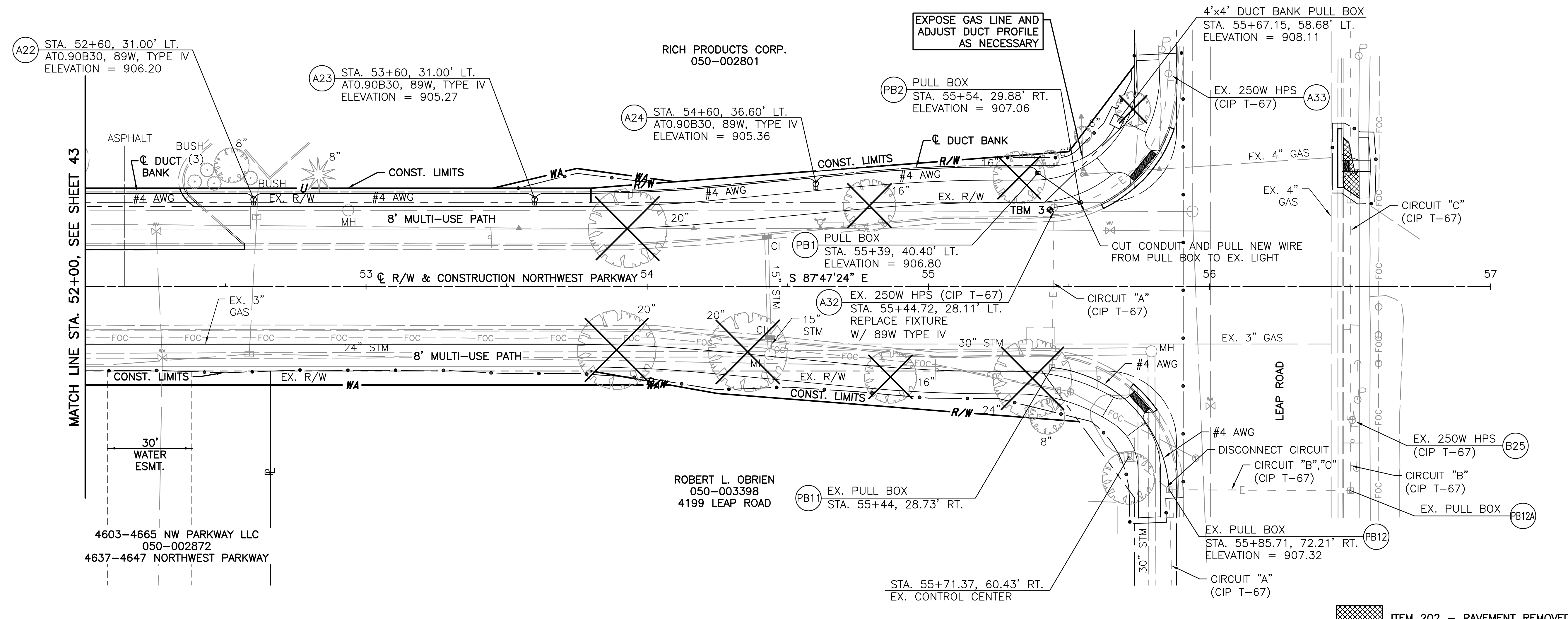
LIGHTING PLAN - NORTHWEST PARKWAY  
 STA. 42+00 TO STA. 52+00

NORTHWEST PARKWAY  
 PEDESTRIAN & LIGHTING  
 IMPROVEMENTS

43  
44

P-919

SHKOLNIK\_T00D\_U:\17369874\Task\_15 - Northwest Parkway\_MJP\_Study\design\plan\_set\lighting\17369874NW\_LIGHTING\_PLAN - NORTHWEST PARKWAY.dwg LIGHTING PLAN - NORTHWEST PARKWAY Lot Saved: Mar 22, 2018 11:46 AM Plotted: May 03, 2018 4:52 PM



MATCH LINE STA. 52+00, SEE SHEET 43

A22 STA. 52+60, 31.00' LT.  
AT0.90B30, 89W, TYPE IV  
ELEVATION = 906.20

A23 STA. 53+60, 31.00' LT.  
AT0.90B30, 89W, TYPE IV  
ELEVATION = 905.27

A24 STA. 54+60, 36.60' LT.  
AT0.90B30, 89W, TYPE IV  
ELEVATION = 905.36

PB2 PULL BOX  
STA. 55+54, 29.88' RT.  
ELEVATION = 907.06

4'x4' DUCT BANK PULL BOX  
STA. 55+67.15, 58.68' LT.  
ELEVATION = 908.11

PB1 PULL BOX  
STA. 55+39, 40.40' LT.  
ELEVATION = 906.80

A32 EX. 250W HPS (CIP T-67)  
STA. 55+44.72, 28.11' LT.  
REPLACE FIXTURE  
W/ 89W TYPE IV

PB11 EX. PULL BOX  
STA. 55+44, 28.73' RT.

STA. 55+71.37, 60.43' RT.  
EX. CONTROL CENTER

PB12 EX. PULL BOX  
STA. 55+85.71, 72.21' RT.  
ELEVATION = 907.32

B25 EX. 250W HPS (CIP T-67)  
CIRCUIT "B"  
(CIP T-67)

PB12A EX. PULL BOX

4603-4665 NW PARKWAY LLC  
050-002872  
4637-4647 NORTHWEST PARKWAY

ROBERT L. OBRIEN  
050-003398  
4199 LEAP ROAD

RICH PRODUCTS CORP.  
050-002801

- ⊕ PROPOSED THOROUGHFARE LIGHT
- ▣ PROPOSED PULL BOX
- PROPOSED CONTROL CENTER

STATION, OFFSET  
POLE TYPE WATTAGE DISTRIBUTION  
TYPE  
FOUNDATION ELEVATION

POLE NO.

ITEM 202 - PAVEMENT REMOVED

SCALE IN FEET

0 20 40

CALCULATED  
MRD  
CHECKED  
TJS

NORTHWEST PARKWAY  
PEDESTRIAN & LIGHTING  
IMPROVEMENTS

LIGHTING PLAN - NORTHWEST PARKWAY  
STA. 52+00 TO STA. 56+57.10