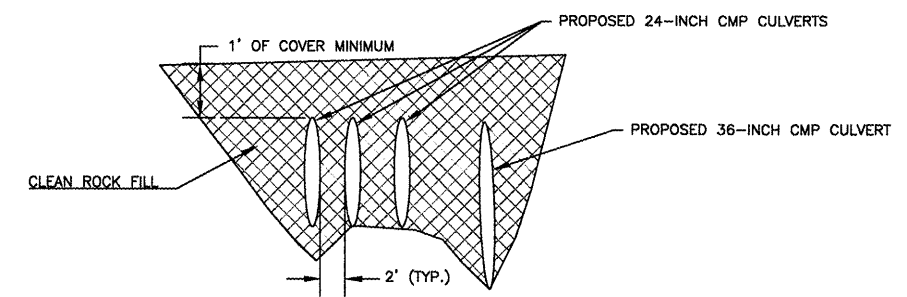
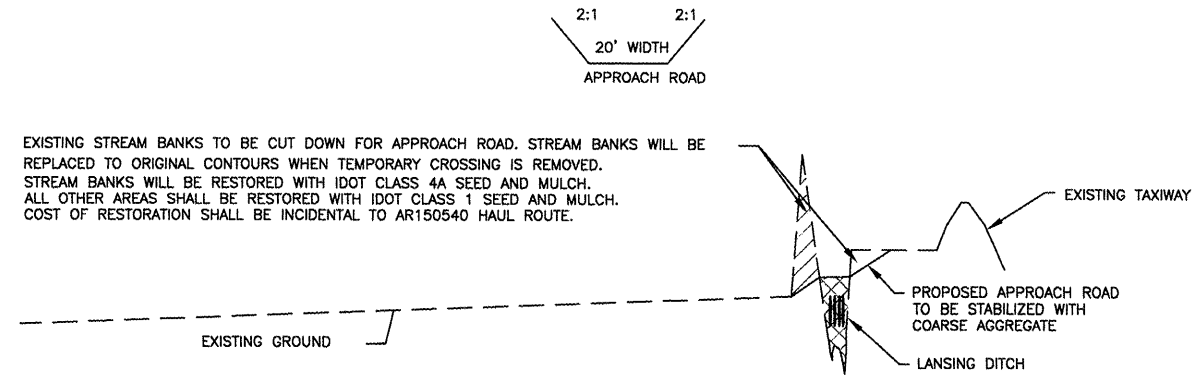


SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
AR108158	1/C #8 5 KV UG CABLE IN UD	LF	3,250	
AR110504	4-WAY CONCRETE ENCASED DUCT	LF	55	
AR125410	MITL - STAKE MOUNTED	EACH	32	
AR125415	MITL - BASE MOUNTED	EACH	5	
AR125442	TAXI GUIDANCE SIGN, 2 CHARACTER	EACH	2	
AR125443	TAXI GUIDANCE SIGN, 3 CHARACTER	EACH	2	
AR125470	MODIFY EXISTING SIGN PANEL	EACH	1	
AR125901	REMOVE STAKE MOUNTED LIGHT	EACH	8	
AR150510	ENGINEER'S FIELD OFFICE	LS	1	
AR150520	MOBILIZATION	LS	1	
AR150540	HAUL ROUTE	LS	1	
AR151450	CLEARING AND GRUBBING	ACRE	0.12	
AR152410	UNCLASSIFIED EXCAVATION	CY	28,000	
AR152540	SOIL STABILIZATION FABRIC	SY	5,550	
AR156510	SILT FENCE	LF	4,150	
AR156511	DITCH CHECK	EACH	13	
AR156520	INLET PROTECTION	EACH	18	
AR156531	EROSION CONTROL BLANKET	SY	6,000	
AR156540	RIPRAP	SY	6	
AR163000	TEMPORARY CONSTRUCTION FENCE	LF	675	
AR201610	BITUMINOUS BASE COURSE	TON	775	
AR208515	POROUS GRANULAR EMBANKMENT	CY	1,325	
AR209611	CRUSHED AGG BASE COURSE - 11"	SY	5,550	
AR401610	BITUMINOUS SURFACE COURSE	TON	550	
AR401650	BITUMINOUS PAVEMENT MILLING	SY	950	
AR401900	REMOVE BITUMINOUS PAVEMENT	SY	20	
AR602510	BITUMINOUS PRIME COAT	GAL	1,620	
AR603510	BITUMINOUS TACK COAT	GAL	900	
AR620520	PAVEMENT MARKING - WATERBORNE	SF	900	
AR620525	PAVEMENT MARKING - BLACK BORDER	SF	175	
AR620900	PAVEMENT MARKING REMOVAL	SF	210	
AR701512	12" RCP, CLASS IV	LF	635	
AR701518	18" RCP, CLASS IV	LF	50	
AR705526	6" PERFORATED UNDERDRAIN W/SOCK	LF	2,400	
AR751540	MANHOLE 4'	EACH	1	
AR751605	CATCH BASIN - SPECIAL	EACH	1	
AR751983	RECONSTRUCT MANHOLE	EACH	3	
AR752618	CONCRETE HEADWALL 18"	EACH	2	
AR752812	SLOPE BOX INLET 12"	EACH	5	
AR752900	REMOVE END SECTION	EACH	1	
AR800894	RETROFIT EXIST MITL OR TXY SIGN	EACH	4	
AR901510	SEEDING	ACRE	11.0	
AR908510	MULCHING	ACRE	9.8	



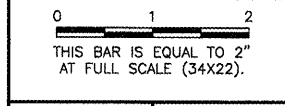
TEMPORARY DITCH CROSSING DETAILS
 N.T.S.

TEMPORARY DITCH CROSSING NOTES

- DESCRIPTION OF TEMPORARY ROAD CROSSING
1. THE TEMPORARY ROAD CROSSING WILL REMAIN INSTALLED FOR ONE CONSTRUCTION SEASON.
 2. THE SITE OF THE TEMPORARY ROAD CROSSING WILL BE RESTORED TO ORIGINAL TOPOGRAPHY AND STABILIZED WITHIN FIVE (5) DAYS AFTER TERMINATION OF ITS INTENDED USE OR AT THE END OF THE CONSTRUCTION SEASON, WHICHEVER COMES FIRST.
 3. THE TEMPORARY ROAD WILL CROSS THE LANSING DITCH AT A RIGHT ANGLE TO THE STREAM.
 4. THE PROPOSED CULVERTS WILL PROVIDE A WATERWAY AREA SUFFICIENT TO ADEQUATELY DISCHARGE THE NORMAL FLOW OF THE WATERCOURSE OR STREAM, AND WILL BE OF SUFFICIENT LENGTH TO EXTEND BEYOND THE TOE OF THE CLEAN ROCK FILL.
 5. THE PROPOSED MULTIPLE CULVERTS MINIMIZE THE PLACEMENT OF EXCESSIVE FILL. EXCAVATION OF THE STREAM BANKS CANNOT BE AVOIDED AS THE 2:1 SLOPES ARE TOO STEEP FOR HEAVY CONSTRUCTION EQUIPMENT TO TRAVERSE.
 6. ROAD EMBANKMENTS SHALL CONSIST OF ONLY CLEAN ROCK MATERIAL TO PREVENT STREAM CHANNEL SEDIMENTATION DURING PLACEMENT, REMOVAL AND PERIODS OF OVERTOPPING.
 7. ALL LABOR, MATERIALS, EQUIPMENT AND ANY INCIDENTALS NECESSARY TO COMPLETE TEMPORARY STREAM CROSSING SHALL BE INCIDENTAL TO AR150540 HAUL ROUTE.
- INSPECTION AND MAINTENANCE
1. INSPECT AND VERIFY THAT THE TEMPORARY STREAM CROSSING BMPs ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDER WAY, INSPECT WEEKLY DURING THE RAINY SEASON AND AT TWO WEEK INTERVALS IN THE NON-RAINY SEASON TO VERIFY CONTINUED BMP IMPLEMENTATION.
 2. CHECK FOR BLOCKAGE IN THE CHANNEL, SEDIMENT BUILDUP OR TRAPPED DEBRIS IN CULVERTS.
 3. CHECK FOR CHANNEL SCOUR, RIPRAP DISPLACEMENT, OR PIPING IN THE SOIL.
 4. CHECK FOR STRUCTURAL WEAKENING OF THE TEMPORARY CROSSINGS, SUCH AS CRACKS, AND UNDERMINING OF FOUNDATIONS.
 5. REMOVE SEDIMENT THAT COLLECTS IN CULVERTS PERIODICALLY AND AFTER HEAVY RAIN EVENTS. REPLACE LOST OR DISPLACED AGGREGATE FROM INLETS AND OUTLETS OF CULVERTS AND CELLULAR CONFINEMENT SYSTEMS.
 6. REMOVE TEMPORARY CROSSING PROMPTLY WHEN THE TAXIWAY EXTENSION PROJECT IS COMPLETED.

REVISIONS

NUMBER	BY	DATE



LANSING MUNICIPAL AIRPORT
LANSING, ILLINOIS
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
SUMMARY OF QUANTITIES/
TEMPORARY DITCH CROSSING DETAILS

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Lansing Municipal Airport

DESIGN BY:	ARM
DRAWN BY:	JRO
CHECKED BY:	ARM
APPROVED BY:	ARM
DATE:	02/27/09
JOB No:	05297-02
IL PROJECT: IGQ-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 2 OF 30 SHEETS	

GENERAL NOTES

1. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.
2. ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2E (LATEST EDITION) SAFETY DURING CONSTRUCTION.
3. CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.
4. THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.
5. ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.
6. THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE ENGINEER.
7. WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE AS APPROVED BY THE ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
8. THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.
9. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO AR150520 MOBILIZATION.
10. MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
11. FOR WORK ON AIRPORT PROPERTY: PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO AR150520 MOBILIZATION. BARRICADES AT 10-FOOT CENTERS WITH ONE ORANGE FLAG (24" x 24") BETWEEN EACH SET OF BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A FLASHING RED LIGHT AND CONFORM TO IDOT STANDARD 702001, TYPE II. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO AR150520 MOBILIZATION.
12. THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER (S) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL, THIS SHEET.
15. IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE ENGINEER IMMEDIATELY.
16. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.
17. THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE AN EXCAVATOR TRUCK WHICH HAS A MAXIMUM HEIGHT OF 25 FEET.
18. IF RUNWAY NUMERALS ARE PRESENT DURING CONSTRUCTION THEN CONTRACTOR SHALL PLACE CLOSED RUNWAY MARKER OVER NUMERALS AS DETAILED, OTHERWISE PLACE RUNWAY CLOSED MARKER IN TURF AT ENDS OF RUNWAY AS DETAILED.
19. LANSING MUNICIPAL AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
20. APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT AND THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

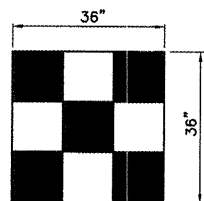
21. MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT. THE RESTORATION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO AR150520 MOBILIZATION.
22. LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM POINT TO POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
23. COORDINATION MEETINGS - THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
24. THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
25. DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT. EXISTING LANSING DRAINAGE FLOWS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
26. VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN 65.5' FROM ACTIVE TAXIWAYS AND 200' FROM ACTIVE RUNWAYS UNLESS OTHERWISE APPROVED BY THE AIRPORT MANAGER.
27. CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 SURFACES OR RUNWAY AND TAXIWAY SAFETY AREAS.
28. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE.
29. COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE DESIGN ENGINEER ASSUME ANY RESPONSIBILITY WHATEVER IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE RESIDENT ENGINEER AND THE AIRPORT MANAGER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.
30. ALL AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTORS WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MANAGER AND/OR AIRPORT MAINTENANCE. ANY DEFICIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

CONTRACTOR CROSSING RUNWAY AND TAXIWAY AIR OPERATIONS AREA (A.O.A.)

ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A FULL TIME CROSSING GUARD IN RADIO CONTACT WITH THE AIR TRAFFIC SHALL BE FURNISHED BY THE CONTRACTOR FOR MOVEMENTS OF VEHICLES OR EQUIPMENT TO AND FROM THE WORK ZONE. THE RADIO OPERATOR SHALL BE FAMILIAR WITH AIRPORT GROUND CONTROL PROCEDURES AND DEMONSTRATE KNOWLEDGE OF SAME TO THE AIRPORT. THE AIRPORT RESERVES THE RIGHT TO APPROVE THE CROSSING GUARDS. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF MUNICIPAL FINES (\$500 PER OCCURENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.

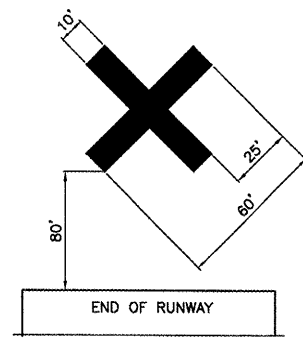
ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER AT NO ADDITIONAL COST TO THE OWNER. PAVEMENT SHALL BE CONTINUALLY SWEEPED TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS. THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.



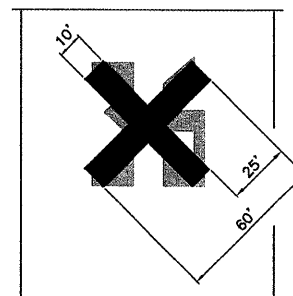
CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL ORANGE AND WHITE CHECKERED FLAG

NOT TO SCALE



OFF PAVEMENT CLOSED RUNWAY MARKER DETAIL

NO SCALE



ON PAVEMENT CLOSED RUNWAY MARKER DETAIL

NO SCALE

CLOSED RUNWAY MARKER DETAIL NOTES

1. CLOSED RUNWAY MARKERS SHALL BE YELLOW.
2. MARKERS SHALL BE MATERIAL APPROVED BY THE ENGINEER.
3. CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION
4. MARKERS ON PAVEMENT SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
5. COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING A YELLOW CROSS AT THE LOCATION AND DIMENSIONS DETAILED ON THIS SHEET. THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.

LIMITATIONS ON CONSTRUCTION WITHIN AIRPORT OPERATIONS AREA (A.O.A.)

RUNWAYS:

ANY WORK WITHIN 200' OF THE CENTERLINE OF AN ACTIVE RUNWAY SHALL EITHER BE DONE ON WEEKENDS, OFF-PEAK DAYTIME OR NIGHTTIME HOURS, LOCAL TIME AS SHOWN ON THE SEQUENCE OF CONSTRUCTION PLAN SHEETS. ON ANY DAY WHEN CONSTRUCTION IS WITHIN 200' OF THE CENTERLINE OF THE RUNWAY, THE RUNWAY SHALL BE CLOSED. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

STEEL PLATES IF NECESSARY SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE A.O.A. IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT.

TAXIWAYS / TAXILANES / APRONS:

CONSTRUCTION WILL BE ALLOWED UP TO THE EDGE OF PAVEMENTS WITHOUT CLOSURE ON A LIMITED BASIS. WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF GREATER THAN 3-INCHES SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TWO (2) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

NOTE - ALL PHASES

ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLEING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

**DESIGN AIRCRAFT APPROACH CATEGORY: B
DESIGN AIRPORT GROUP: II**

MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT: 25'

POINT "A"
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 18/36
LATITUDE: 41°31'30.89"N (NAD 83)
LONGITUDE: 87°31'40.75"W (NAD 83)
EXISTING ELEVATION: 617.5

POINT "B"
NEAREST POINT ON CONSTRUCTION SITE TO ACTIVE RUNWAY 9/27
LATITUDE: 41°32'24.85"N (NAD 83)
LONGITUDE: 87°32'15.46"W (NAD 83)
EXISTING ELEVATION: 615.0

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE SPECIAL PROVISIONS SECTION 30-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS.

LA038

PATH: K:\0329702\sheets\
FILE: seqnotes.dwg
UPDATE BY: johse
SURVEY BOOK #
XREF DWG:
XREF DWG:
DATE: Fri 3/26/04 2:50pm

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LANSING MUNICIPAL AIRPORT
LANSING, ILLINOIS
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

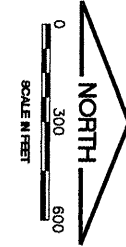
SEQUENCE OF CONSTRUCTION
GENERAL NOTES AND DETAILS

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DRAWN BY:	JRO
CHECKED BY:	ARM
APPROVED BY:	ARM
DATE:	02/27/09
JOB No:	05297-02
IL PROJECT:	IG0-3681
A.I.P. PROJECT:	3-17-0121-B26
SHEET	4 OF 30 SHEETS



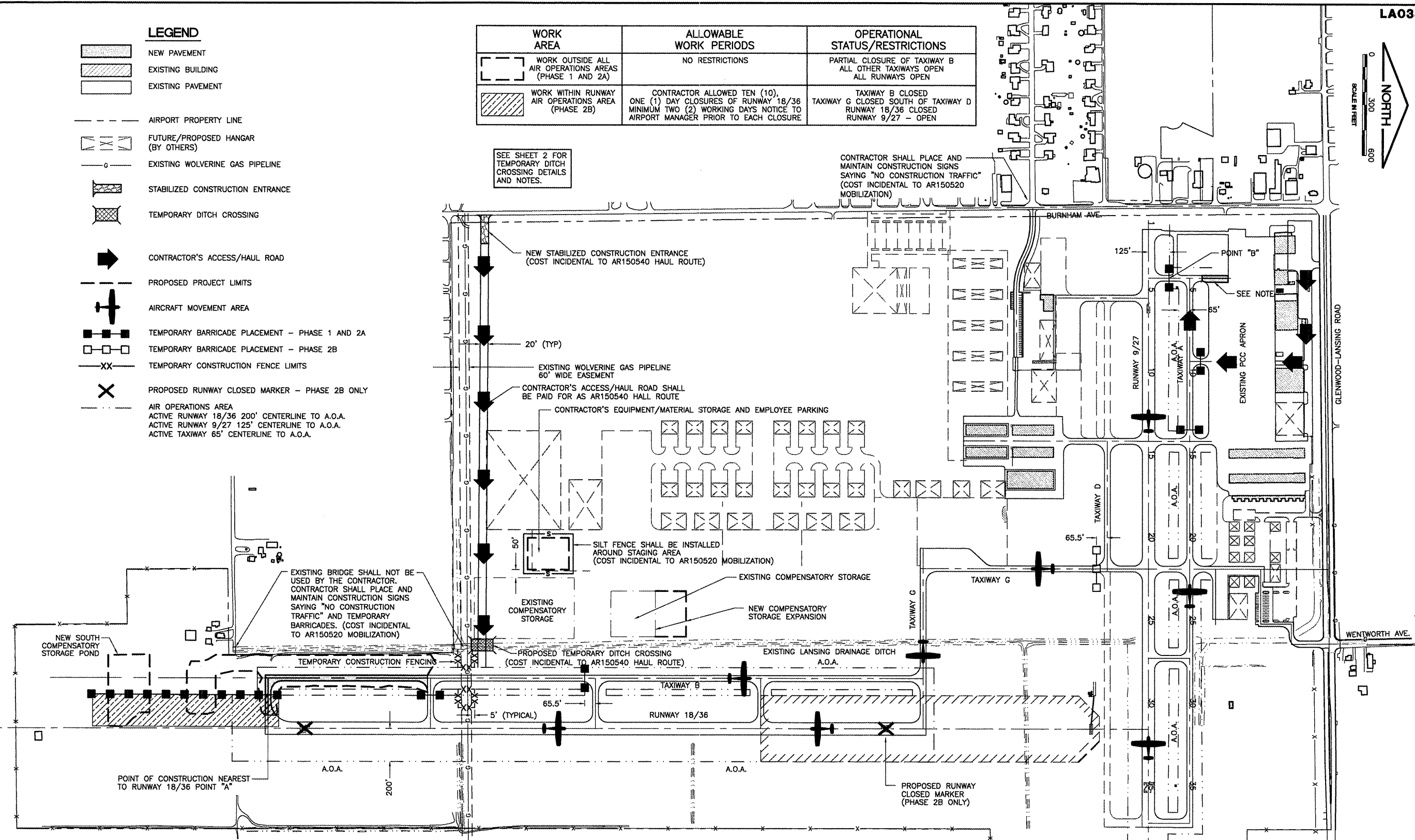
LEGEND

- NEW PAVEMENT
- EXISTING BUILDING
- EXISTING PAVEMENT
- AIRPORT PROPERTY LINE
- FUTURE/PROPOSED HANGAR (BY OTHERS)
- EXISTING WOLVERINE GAS PIPELINE
- STABILIZED CONSTRUCTION ENTRANCE
- TEMPORARY DITCH CROSSING
- CONTRACTOR'S ACCESS/HAUL ROAD
- PROPOSED PROJECT LIMITS
- AIRCRAFT MOVEMENT AREA
- TEMPORARY BARRICADE PLACEMENT - PHASE 1 AND 2A
- TEMPORARY BARRICADE PLACEMENT - PHASE 2B
- TEMPORARY CONSTRUCTION FENCE LIMITS
- PROPOSED RUNWAY CLOSED MARKER - PHASE 2B ONLY
- AIR OPERATIONS AREA**
 ACTIVE RUNWAY 18/36 200' CENTERLINE TO A.O.A.
 ACTIVE RUNWAY 9/27 125' CENTERLINE TO A.O.A.
 ACTIVE TAXIWAY 65' CENTERLINE TO A.O.A.

WORK AREA	ALLOWABLE WORK PERIODS	OPERATIONAL STATUS/RESTRICTIONS
WORK OUTSIDE ALL AIR OPERATIONS AREAS (PHASE 1 AND 2A)	NO RESTRICTIONS	PARTIAL CLOSURE OF TAXIWAY B ALL OTHER TAXIWAYS OPEN ALL RUNWAYS OPEN
WORK WITHIN RUNWAY AIR OPERATIONS AREA (PHASE 2B)	CONTRACTOR ALLOWED TEN (10), ONE (1) DAY CLOSURES OF RUNWAY 18/36 MINIMUM TWO (2) WORKING DAYS NOTICE TO AIRPORT MANAGER PRIOR TO EACH CLOSURE	TAXIWAY B CLOSED TAXIWAY G CLOSED SOUTH OF TAXIWAY D RUNWAY 18/36 CLOSED RUNWAY 9/27 - OPEN

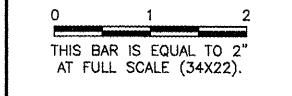
SEE SHEET 2 FOR TEMPORARY DITCH CROSSING DETAILS AND NOTES.

CONTRACTOR SHALL PLACE AND MAINTAIN CONSTRUCTION SIGNS SAYING "NO CONSTRUCTION TRAFFIC" (COST INCIDENTAL TO AR150520 MOBILIZATION)



REVISIONS

NUMBER	BY	DATE



**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 SEQUENCE OF CONSTRUCTION
 PER AC 150/5370-2E (LATEST EDITION)**

- PHASE 1**
- PLACE BARRICADES AND SIGNS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
 - MARK GAS LINE/EASEMENT AND AIR OPERATIONS AREA (A.O.A.) WITH LATHE AND RIBBON AS SHOWN OR AS DIRECTED BY THE ENGINEER.
 - CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
 - CONSTRUCT HAUL ROAD.
 - CONSTRUCT CONTRACTOR STAGING AREA.
 - CONSTRUCT TEMPORARY DITCH CROSSING.
 - MEGGAR EXISTING AIRFIELD CABLES
 - PLACE SILT FENCE AND TEMPORARY INLET PROTECTION.
 - PLACE TEMPORARY CONSTRUCTION FENCING ALONG GAS PIPELINE EASEMENT AS SHOWN OR AS DIRECTED BY THE ENGINEER.

- SUGGESTED SEQUENCE OF CONSTRUCTION**
- PHASE 2A**
- STRIP TOPSOIL AND PLACE EMBANKMENT FILL.
 - PLACE STORM SEWER.
 - PLACE ADDITIONAL TEMPORARY STORM WATER PROTECTION MEASURES AS NEEDED.
 - REMOVE EXCESS FILL MATERIAL.
 - PLACE STONE BASE/BITUMINOUS BASE COURSE/BITUMINOUS SURFACE COURSE.
 - PLACE AIRFIELD LIGHTING AND CABLE.
 - PLACE SEEDING/EROSION CONTROL BLANKET/MULCHING.
 - CLEAN PAVEMENTS/REMOVE BARRICADES/OPEN PAVEMENT.

- PHASE 2B**
- PLACE BARRICADES AND CLOSED RUNWAY MARKERS.
 - STRIP TOPSOIL AND PLACE EMBANKMENT FILL.
 - PLACE STONE BASE/BITUMINOUS BASE COURSE/BITUMINOUS SURFACE COURSE
 - PLACE AIRFIELD LIGHTING AND CABLE.
 - PLACE SEEDING/EROSION CONTROL BLANKET/MULCHING.
 - CLEAN PAVEMENT/REMOVE BARRICADES AND CLOSED RUNWAY MARKERS/OPEN PAVEMENT.

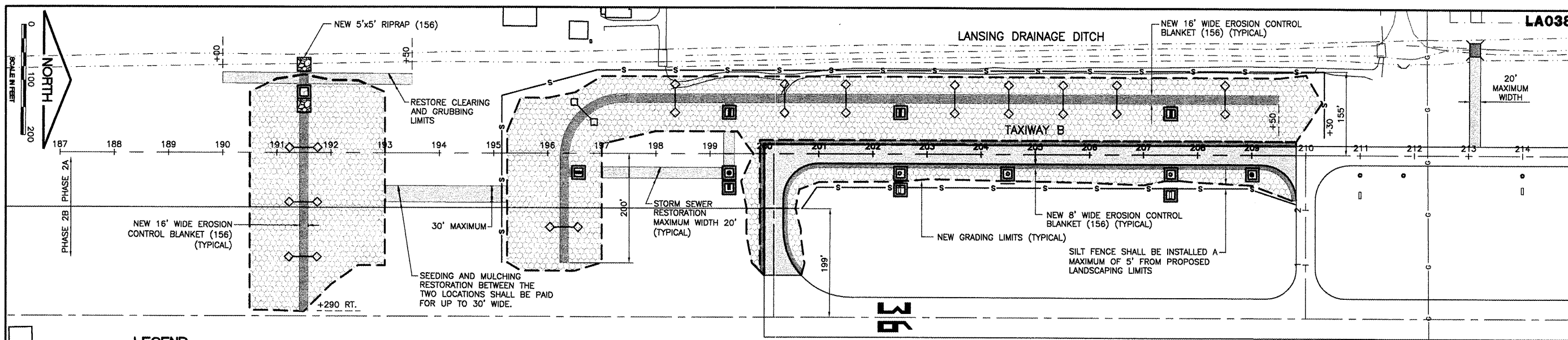
NOTE
 CONTRACTOR SHALL MILL 800 SY OF BITUMINOUS PAVEMENT AN AVERAGE DEPTH OF 2" AND REPLACE WITH BITUMINOUS SURFACE COURSE. ALL WORK SHALL BE PERFORMED DURING PHASE 2A OF THIS PROJECT. CONTRACTOR SHALL COORDINATE SEQUENCE AND REMOVAL LIMITS WITH AIRPORT MANAGER AND RESIDENT ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

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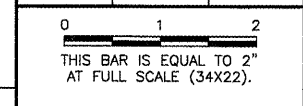
Lansing Municipal
airport

DESIGN BY:	ARM
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IL. PROJECT: IGQ-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 5 OF 30 SHEETS	



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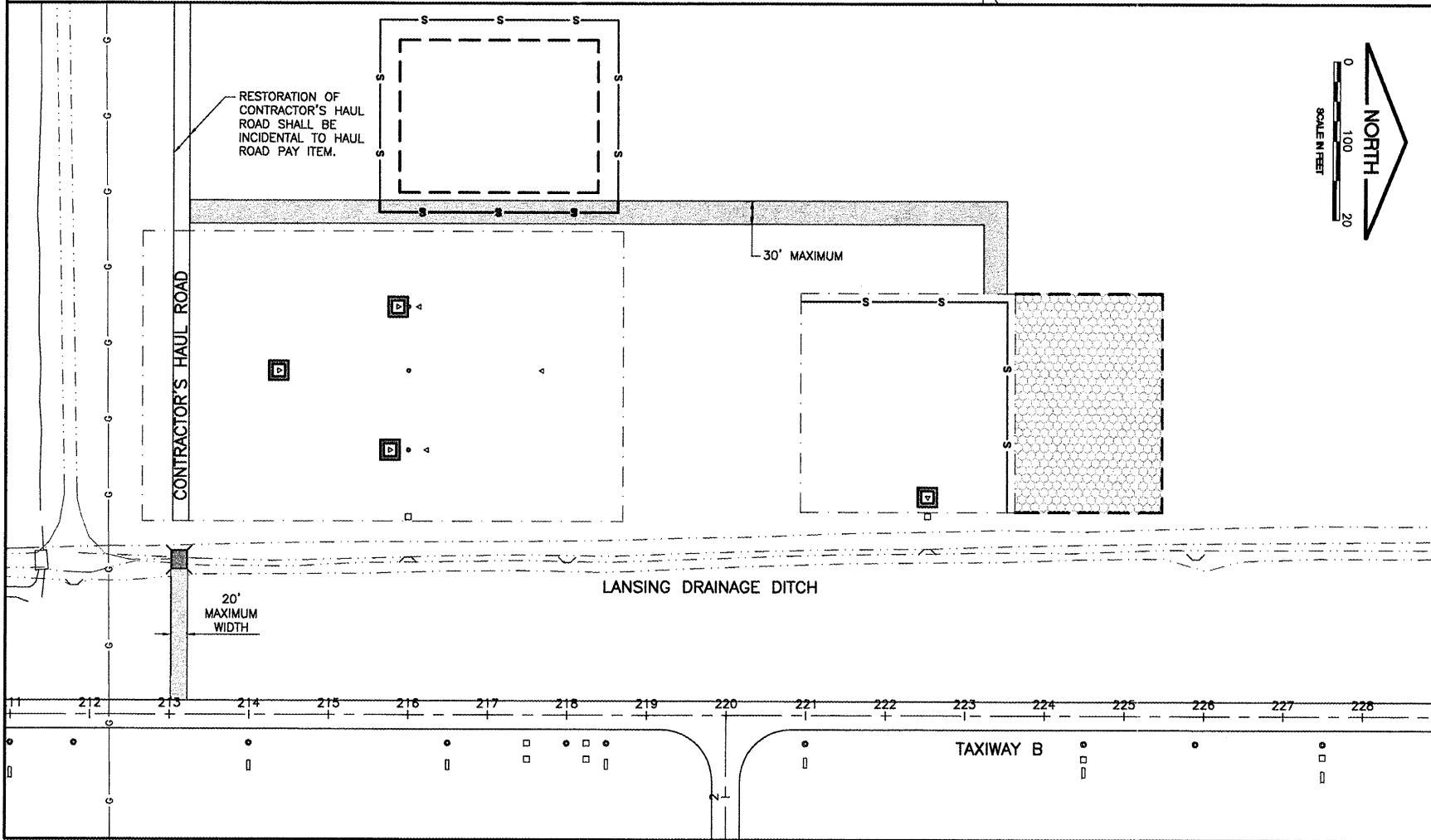
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NUMBER	BY	DATE



- LEGEND**
- NEW PAVEMENT
 - NEW SEEDING (901) AND MULCHING (908)
 - NEW EROSION CONTROL BLANKET (156) AND SEEDING (701)
 - NEW SILT FENCE (156)
 - NEW GRADING LIMITS
 - NEW INLET PROTECTION (156)
 - TEMPORARY DITCH CROSSING
 - NEW DITCH CHECKS

SEED TABLE		
IDOT CLASS-TYPE	SEED MIXTURE	RATE (LB/ACRE)
1 (LAWN MIXTURE)	KENTUCKY BLUEGRASS	100
	PERENNIAL RYEGRASS	60
	CREeping RED FESCUE	40
* 4A (LOW PROFILE NATIVE GRASS)	LITTLE BLUE STEM	5
	SIDE-OATS GRAMA	5
	WILD RYE	1
	PRAIRIE DROPSEED	0.5
	ANNUAL RYEGRASS	25
	OATS, SPRING PERENNIAL RYEGRASS	15

* IDOT CLASS-4A SEED SHALL BE USED TO RESTORE ALL DISTURBED AREAS ALONG THE LANSING DRAINAGE DITCH BANKS. NO DIRECT PAYMENT SHALL BE MADE. COST SHALL BE INCIDENTAL TO RESPECTIVE PAY ITEM.



NOTES

- SILT FENCE SHALL BE PLACED AROUND ALL STORM SEWER INLETS AS DETAILED ON THE PLANS TO MINIMIZE SOIL INTRUSION INTO THE STORM SEWER SYSTEM (SEE DETAIL).
- THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMIT FOR CONSTRUCTION SITE ACTIVITIES.
- ALL PROJECT AREAS, INCLUDING STOCKPILES, ABANDONED HAUL ROADS AND STAGING AREAS, AS SHOWN ON THE PLANS, SHALL HAVE 4 INCHES OF TOPSOIL PLACED AND BE SEEDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS. AREAS DISTURBED OUTSIDE THE PROJECT LIMITS WILL BE SEEDED AND MULCHED BY THE CONTRACTOR AT HIS COST AND RESTORED TO ORIGINAL CONDITIONS.
- FOR DETAILS, SEE STORMWATER POLLUTION PREVENTION NOTES AND DETAILS SHEET.
- FOR EXACT LOCATIONS OF INLETS, SEE DRAINAGE PLAN SHEETS.
- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH 1/2" RAIN EVENT.
- THE CONTRACTOR SHALL HAVE A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN ON THE SITE AT ALL TIMES.
- ANY FIELD/DRAIN TILES THAT ARE DAMAGED IN ANY WAY SHALL BE IMMEDIATELY REPAIRED ACCORDING TO THE PLANS/SPECIFICATIONS AND SHALL BE PROTECTED FROM SEDIMENT-LADEN WATER.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
- DURING DEWATERING OPERATION, WATER SHALL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. COSTS OF DEWATERING, SEDIMENT BASINS AND SILT TRAPS ARE INCIDENTAL TO THE CONTRACT. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED FEBRUARY 2002.
- WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL.
- IN AREAS WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WORK HAS TEMPORARILY CEASED, TEMPORARY STABILIZATION SHALL OCCUR BY THE 14TH DAY AFTER WORK HAS CEASED.

**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 STORM WATER POLLUTION PREVENTION PLAN**

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Lansing Municipal Airport

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APPROVED BY:	
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JOB No:	05297-02
IL PROJECT:	IGQ-3681
A.I.P. PROJECT:	3-17-0121-B26
SHEET	6 OF 30 SHEETS

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE WITH NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIMEFRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING, WHICH WILL BE THE CONTRACTOR'S COST. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THE PLANS.

SITE DESCRIPTION

THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:

THIS PROJECT CONSISTS OF CONSTRUCTING A NEW APRON TAXIWAY EXTENSION AT THE LANSING MUNICIPAL AIRPORT. THE PROJECT INCLUDES EXCAVATION, EMBANKMENT, DRAINAGE, VARIOUS PAVEMENT ITEMS, FENCING, ELECTRICAL IMPROVEMENTS AND OTHER MISCELLANEOUS CONSTRUCTION WORK.

THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS EXCAVATION AND GRADING:

- EXCAVATION AND EMBANKMENT WILL BE COMPLETED WITHIN THE PROJECT LIMITS TO GRADE OUT FOR THE PROPOSED DRAINAGE AND PAVEMENT IMPROVEMENTS.
- UNDERDRAIN INSTALLATION AND MANHOLE ADJUSTMENTS.
- PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL, SUCH AS PERIMETER SILT FENCE AND INLET PROTECTION.
- PAVEMENT CONSTRUCTION.
- FENCING AND ELECTRICAL IMPROVEMENTS.
- FINAL GRADING AND OTHER MISCELLANEOUS ITEMS.
- PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS SEEDING AND MULCHING.

AREA OF CONSTRUCTION SITE

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 27.8 ACRES OF WHICH 27.8 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

- INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM TOPOGRAPHIC SURVEYS AND SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
- PROJECT PLAN DOCUMENTS, SPECIFICATION AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE:

THE CONSTRUCTION SITE DRAINS INTO THE LANSING DRAINAGE DITCH THROUGH A STORM SEWER SYSTEM.

SEDIMENTATION AND EROSION CONTROL NOTES

THE WILL/SOUTH COOK SOIL AND WATER CONSERVATION DISTRICT (SWCD) IS RESPONSIBLE FOR CONDUCTING SITE VISITS AND VERIFYING THAT THE PRACTICES ARE WORKING PROPERLY AND DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE SWCD THE CONTRACTOR WILL IMPLEMENT THE PRACTICES IN A TIMELY MANNER. THE ADDITIONAL PRACTICES (IF REQUIRED) SHALL BE COORDINATED WITH THE RESIDENT ENGINEER BEFORE WORK BEGINS.

THE WILL/SOUTH COOK SOIL AND WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO FINAL INSPECTION.

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE RESIDENT ENGINEER.

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.

THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE SEEDING AND MULCHING AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, INLET PROTECTION AND PERIMETER SILT FENCE SHALL BE INSTALLED AS CALLED OUT IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

- WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
- EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED, AT THE CONTRACTORS EXPENSE, IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.
- AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - CONSTRUCT DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.
 - BUILD NECESSARY EMBANKMENT AT CULVERT/STORM SEWER LOCATIONS AND THEN EXCAVATE AND PLACE PIPE.
 - EXCAVATED AREAS AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED, AT THE CONTRACTOR'S COST, IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR SEVEN DAYS.
- CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION AND EROSION CONTROL ITEMS.
- THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS ARE SEEDED AND ESTABLISHED.

ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.

MAINTENANCE AFTER CONSTRUCTION

CONSTRUCTION IS COMPLETE AFTER FINAL ACCEPTANCE BY THE ILLINOIS DIVISION OF AERONAUTICS. MAINTENANCE UP TO THIS DATE WILL BE REQUIRED BY THE CONTRACTOR.

CONTRACTORS

- THE STORM WATER POLLUTION PREVENTION PLAN MUST CLEARLY IDENTIFY FOR EACH MEASURE IDENTIFIED IN THE PLAN, THE CONTRACTOR(S) OR SUBCONTRACTOR(S) THAT WILL IMPLEMENT THE MEASURE. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST SIGN A COPY OF THE CERTIFICATION STATEMENT IN PARAGRAPH 2 BELOW IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THIS PERMIT. ALL CERTIFICATIONS MUST BE INCLUDED IN THE STORM WATER POLLUTION PREVENTION PLAN EXCEPT FOR OWNERS THAT ARE ACTING AS CONTRACTOR.
- CERTIFICATION STATEMENT. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH PARAGRAPH 1 ABOVE SHALL SIGN A COPY OF THE FOLLOWING CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT THE SITE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (1LR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

THE CERTIFICATION MUST INCLUDE THE NAME AND TITLE OF THE PERSON PROVIDING THE SIGNATURE IN ACCORDANCE WITH PART VI.G OF THIS PERMIT; THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE CONTRACTING FIRM; THE ADDRESS (OR OTHER IDENTIFYING DESCRIPTION) OF THE SITE; AND THE DATE THE CERTIFICATION IS MADE.

CONTRACTOR CERTIFICATION

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (1LR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

GENERAL CONTRACTOR

SIGNATURE _____ TITLE _____ DATE _____
 COMPANY _____

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 UPDATE BY: tmarin
 SURVEY BOOK #
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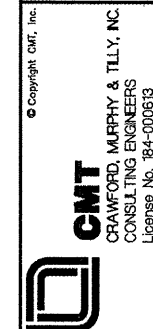
REVISIONS

NUMBER	BY	DATE
1	ARM	6/10/05

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 THIS BAR IS EQUAL TO 2'
 AT FULL SCALE (34X22).

LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

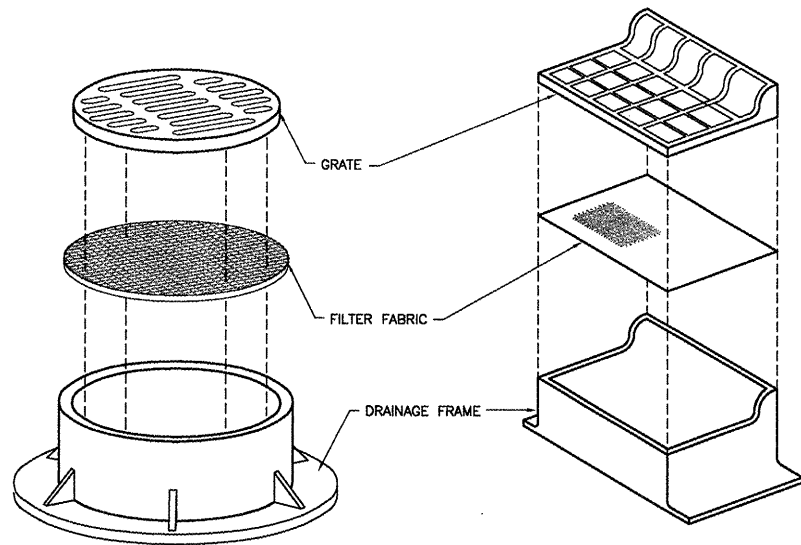
STORM WATER POLLUTION PREVENTION
 PLAN NOTES



DESIGN BY: ARM
 DRAWN BY: JRO
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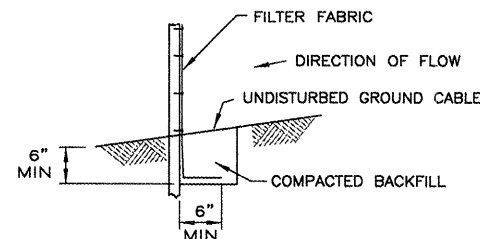
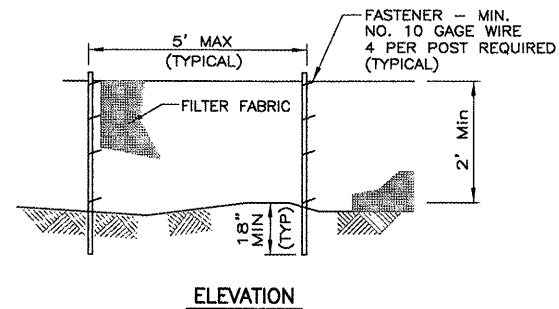
SHEET 7 OF 30 SHEETS



NOTES:

1. FILTER WRAP TO BE PLACED IN ALL SLOPE BOXES, INLETS, MANHOLES, TRENCH DRAINS AND CATCH BASINS LOCATED IN PAVED AREAS AND NONPAVED AREAS.
2. FABRIC SHALL BE IN CONFORMANCE WITH MATERIALS SPECIFIED FOR FABRIC FENCE.
3. FABRIC SHALL OVERLAY FRAME BY 2-INCH (MINIMUM).
4. CONTRACTOR SHALL CLEAR DEBRIS AND SILT AS REQUIRED FROM FABRIC TO MAINTAIN DRAINAGE THROUGH THE STRUCTURE.
5. FABRIC SHALL REMAIN IN PLACE UNTIL TURFED AREAS HAVE DEVELOPED A MINIMUM OF 80% OF COVERAGE.
6. COST OF FILTER WRAP SHALL BE CONSIDERED INCIDENTAL TO AR156000 EROSION CONTROL.

DRAINAGE STRUCTURE FILTER WRAP
NOT TO SCALE



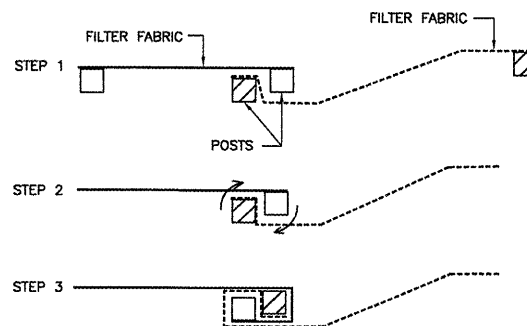
FABRIC ANCHOR DETAIL
NOT TO SCALE
FROM NRCS STANDARD DRAWING NO. IL-620

NOTES:

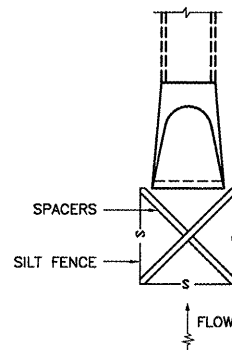
1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFIED FOR ITEM AR156000 EROSION CONTROL IN THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE, SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.
4. SILT FENCE SHALL BE INSTALLED PER STORM WATER POLLUTION PREVENTION PLAN OR AS DIRECTED BY THE ENGINEER.
5. FENCE POSTS SHALL BE EITHER STANDARD STEEL POSTS OR WOOD POSTS WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN..
6. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
7. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
8. DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.

NOTES FOR ALL INLET PROTECTION

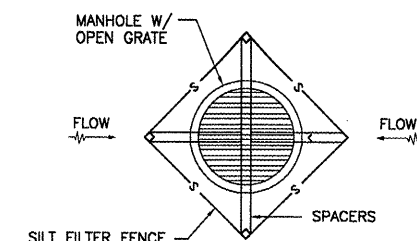
1. SILT FENCE AND SPACERS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT WILL BE INCLUDED IN THE UNIT PRICE FOR INLET PROTECTION.
2. INSPECTION SHALL BE FREQUENT AND REPAIR / REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
3. AFTER FINAL APPROVAL OF THE ENGINEER, SILT FENCE MAY BE REMOVED. CONTRACTOR SHALL PLACE SEED AND MULCH OVER THE DISTURBED AREAS.
4. SILT FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFIED FOR ITEM AR156000 EROSION CONTROL IN THE ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.



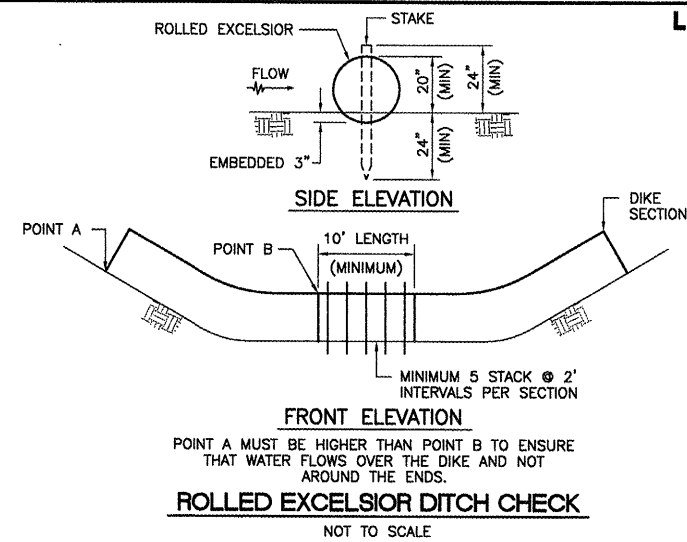
ATTACHING TWO SILT FENCES
NOT TO SCALE
FROM NRCS STANDARD DRAWING NO. IL-620



INLET PROTECTION (END SECTION)
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IDOT STANDARD 280001-03



INLET PROTECTION (INLET/MANHOLES)
NOT TO SCALE
IDOT STANDARD 280001-03



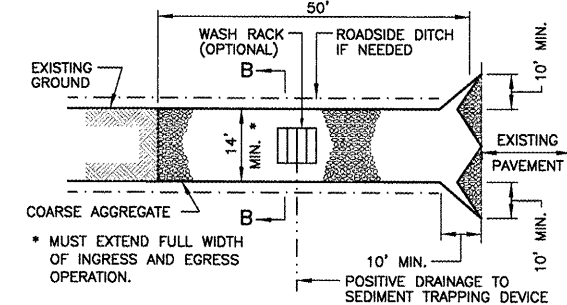
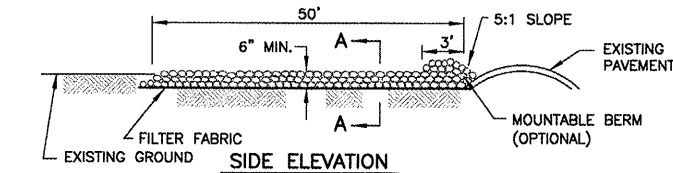
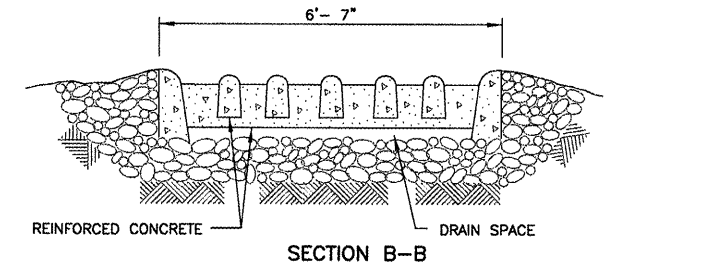
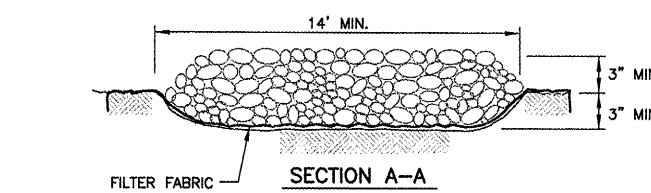
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REVISIONS

NUMBER	BY	DATE

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THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).



STABILIZED CONSTRUCTION ENTRANCE
FROM NRCS STANDARD DRAWING NO. IL-630

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFIED UNDER SECTION 1080.03, OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATION, CA-1, CA-2, CA-3 OR CA-4. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND SHALL BE INCIDENTAL TO THE CONTRACT.
4. MINIMUM WIDTH IS 14' FOR ONE-WAY TRAFFIC AND 20' FOR TWO WAY TRAFFIC. TWO-WAY TRAFFIC WIDTHS SHALL BE INCREASED A MINIMUM OF 4' FOR TRAILER TRAFFIC. DEPENDING ON THE TYPE OF VEHICLE OR EQUIPMENT, SPEED, LOADS, CLIMATIC AND OTHER CONDITIONS UNDER WHICH VEHICLES AND EQUIPMENT OPERATE AN INCREASE IN THE MINIMUM WIDTHS MAY BE REQUIRED.
5. ROADWAY SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE.
6. IF WASH RACK ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
7. THE STABILIZED CONSTRUCTION ENTRANCE SHALL NOT BE PAID FOR BUT WILL BE CONSIDERED INCIDENTAL TO ITEM AR150540 HAUL ROUTE.

LANSING MUNICIPAL AIRPORT
LANSING, ILLINOIS
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

STORM WATER POLLUTION PREVENTION
PLAN DETAILS

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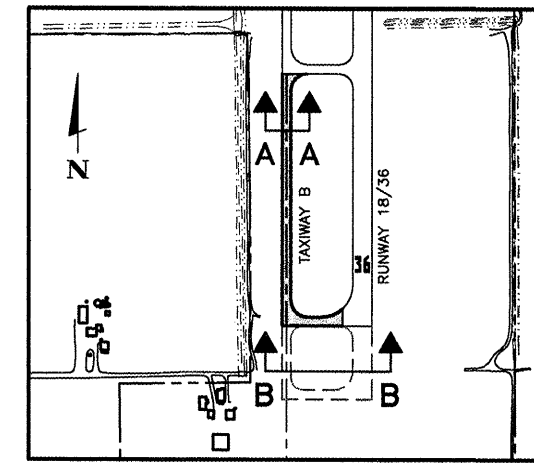
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Drawn BY: JRO
Checked BY: ARM
Approved BY: ARM
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JOB No: 05297-02

IL PROJECT: IGQ-3681
A.I.P. PROJECT: 3-17-0121-B26

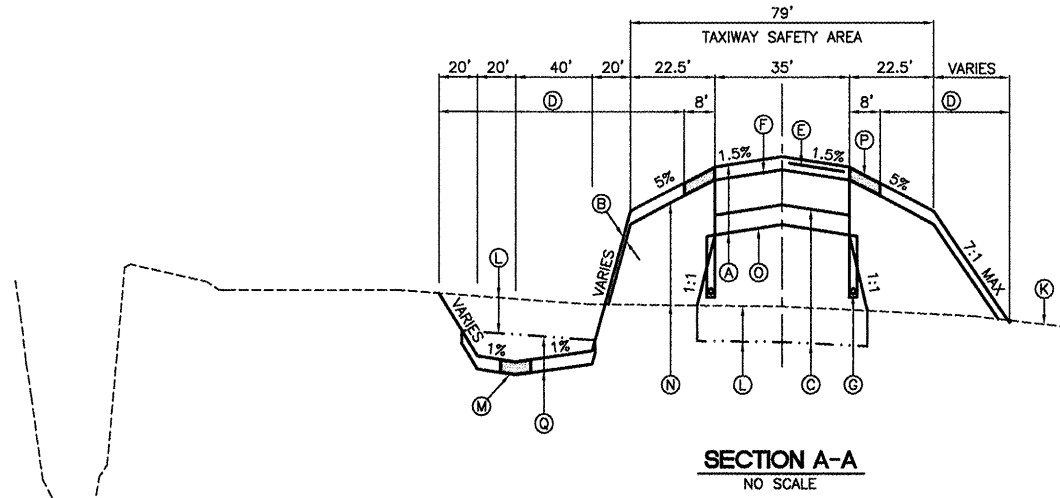
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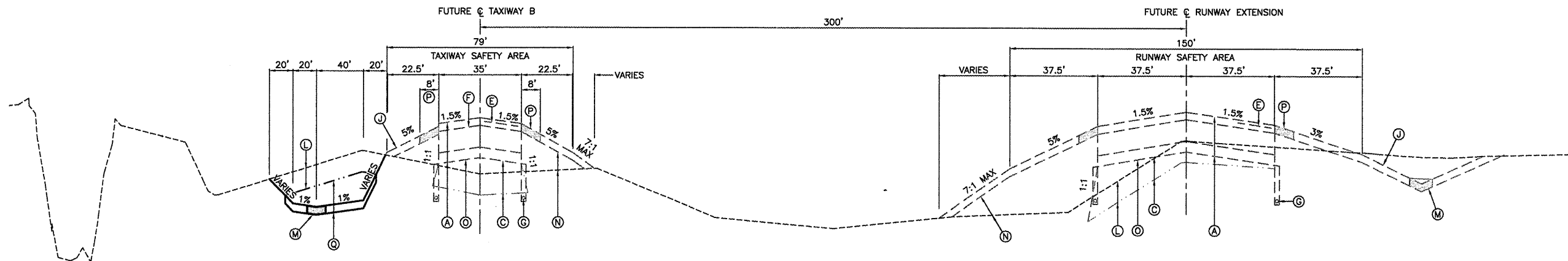
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 AT FULL SCALE (34X22).



KEY MAP



SECTION A-A
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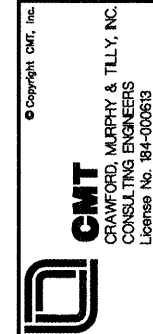


SECTION B-B
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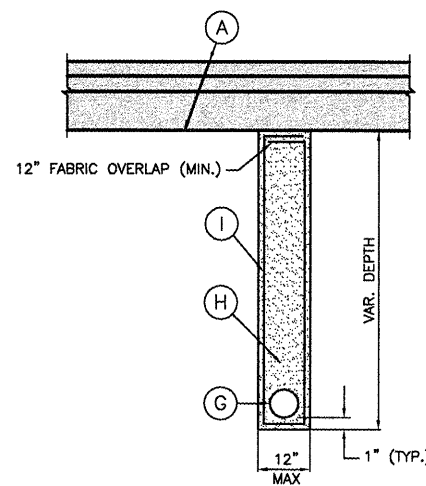
LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

TYPICAL SECTIONS

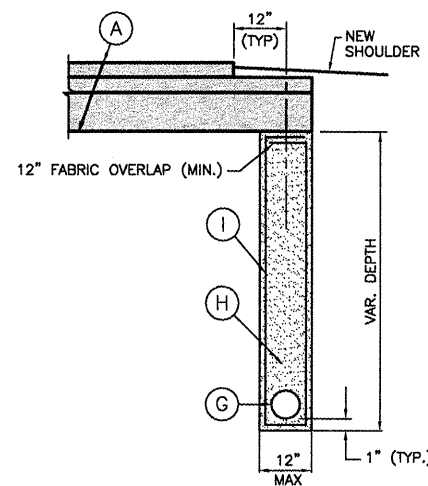
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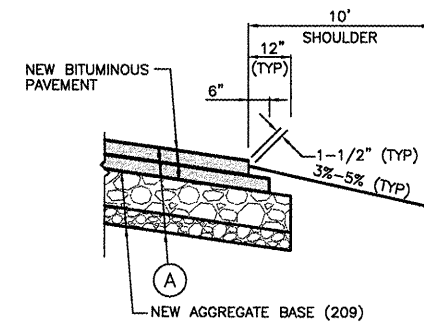
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IL PROJECT: IGQ-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET	9 OF 30 SHEETS



UNDERDRAIN DETAIL - PAVED AREAS
 NO SCALE



UNDERDRAIN DETAIL -
 EDGE OF PAVEMENT AREAS
 NO SCALE



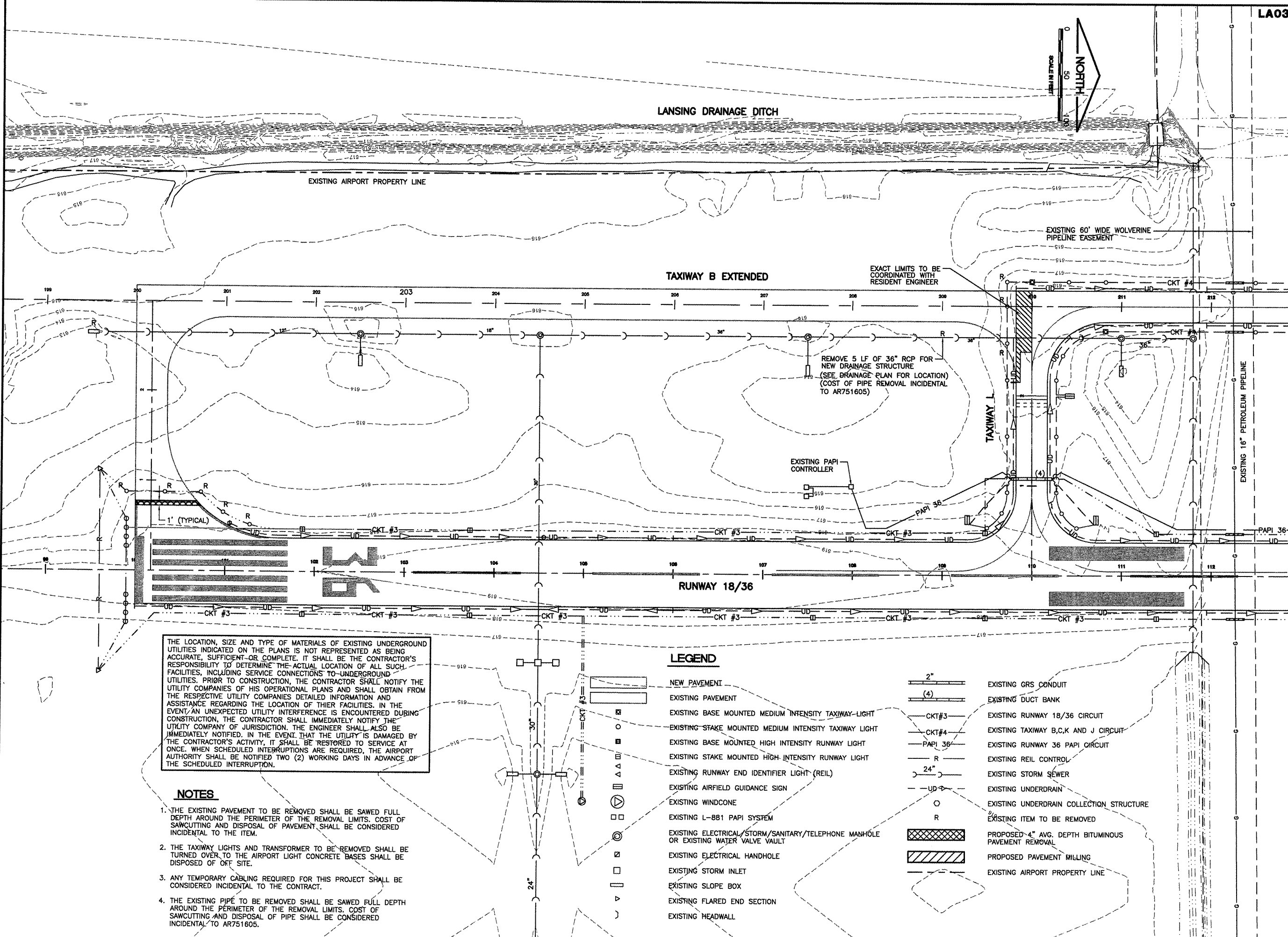
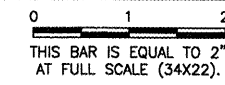
AIRFIELD PAVEMENT EDGE DETAIL
 NO SCALE

LEGEND

- (A) NEW TAXIWAY PAVEMENT STRUCTURE
 1.5" BITUMINOUS SURFACE COURSE (401)
 2.5" BITUMINOUS BASE COURSE (201)
 11" CRUSHED AGGREGATE BASE COURSE (209)
 6" POROUS GRANULAR EMBANKMENT (208)
- (B) NEW TOPSOIL PLACEMENT (4' MIN.)(905)
- (C) NEW EMBANKMENT FILL (152)
- (D) NEW SEEDING AND MULCHING (901 AND 908)
- (E) NEW TACK COAT (603)
- (F) NEW PRIME COAT (602)
- (G) NEW 6" C.P.P.U.P. W/ SOCK (705)
- (H) NEW POROUS BACKFILL (705) COST INCIDENTAL TO PROPOSED UNDERDRAIN
- (I) NEW UNDERDRAIN TRENCH FABRIC ENVELOPE (705) COST INCIDENTAL TO UNDERDRAIN
- (J) NEW GROUNDLINE
- (K) EXISTING GROUNDLINE
- (L) NEW 12" AVERAGE TOPSOIL STRIPPING (152)
- (M) NEW 16' WIDE EROSION CONTROL BLANKET (156)
- (N) NEW SHOULDER FILL (152)
- (O) NEW SOIL STABILIZATION FABRIC (152)
- (P) NEW 8' WIDE EROSION CONTROL BLANKET (156)
- (Q) NEW UNCLASSIFIED EXCAVATION (152)

REVISIONS

NUMBER	BY	DATE



THE LOCATION, SIZE AND TYPE OF MATERIALS OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE REGARDING THE LOCATION OF THEIR FACILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. IN THE EVENT THAT THE UTILITY IS DAMAGED BY THE CONTRACTOR'S ACTIVITY, IT SHALL BE RESTORED TO SERVICE AT ONCE. WHEN SCHEDULED INTERRUPTIONS ARE REQUIRED, THE AIRPORT AUTHORITY SHALL BE NOTIFIED TWO (2) WORKING DAYS IN ADVANCE OF THE SCHEDULED INTERRUPTION.

NOTES

1. THE EXISTING PAVEMENT TO BE REMOVED SHALL BE SAWED FULL DEPTH AROUND THE PERIMETER OF THE REMOVAL LIMITS. COST OF SAWCUTTING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM.
2. THE TAXIWAY LIGHTS AND TRANSFORMER TO BE REMOVED SHALL BE TURNED OVER TO THE AIRPORT LIGHT CONCRETE BASES SHALL BE DISPOSED OF OFF SITE.
3. ANY TEMPORARY CABLING REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. THE EXISTING PIPE TO BE REMOVED SHALL BE SAWED FULL DEPTH AROUND THE PERIMETER OF THE REMOVAL LIMITS. COST OF SAWCUTTING AND DISPOSAL OF PIPE SHALL BE CONSIDERED INCIDENTAL TO AR751605.

LEGEND

- | | | | |
|--|--|--|--|
| | NEW PAVEMENT | | EXISTING GRS CONDUIT |
| | EXISTING PAVEMENT | | EXISTING DUCT BANK |
| | EXISTING BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT | | EXISTING RUNWAY 18/36 CIRCUIT |
| | EXISTING STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT | | EXISTING TAXIWAY B,C,K AND J CIRCUIT |
| | EXISTING BASE MOUNTED HIGH INTENSITY RUNWAY LIGHT | | EXISTING RUNWAY 36 PAPI CIRCUIT |
| | EXISTING STAKE MOUNTED HIGH INTENSITY RUNWAY LIGHT | | EXISTING REIL CONTROL |
| | EXISTING RUNWAY END IDENTIFIER LIGHT (REIL) | | EXISTING STORM SEWER |
| | EXISTING AIRFIELD GUIDANCE SIGN | | EXISTING UNDERDRAIN |
| | EXISTING WINDCONE | | EXISTING UNDERDRAIN COLLECTION STRUCTURE |
| | EXISTING L-881 PAPI SYSTEM | | EXISTING ITEM TO BE REMOVED |
| | EXISTING ELECTRICAL/STORM/SANITARY/TELEPHONE MANHOLE OR EXISTING WATER VALVE VAULT | | PROPOSED 4" AVG. DEPTH BITUMINOUS PAVEMENT REMOVAL |
| | EXISTING ELECTRICAL HANDHOLE | | PROPOSED PAVEMENT MILLING |
| | EXISTING STORM INLET | | EXISTING AIRPORT PROPERTY LINE |
| | EXISTING SLOPE BOX | | |
| | EXISTING FLARED END SECTION | | |
| | EXISTING HEADWALL | | |

**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS**
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
EXISTING CONDITIONS/PROPOSED REMOVALS

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 DRAWN BY: JRO
 CHECKED BY: ARM
 APPROVED BY: ARM
 DATE: 02/27/09
 JOB No: 05297-02

IL PROJECT: 16Q-3681
 A.I.P. PROJECT: 3-17-0121-B26

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LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

PLAN AND PROFILE
 TAXIWAY BRAVO
 STA. 200+00 TO STA. 210+00

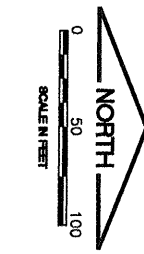
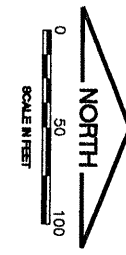
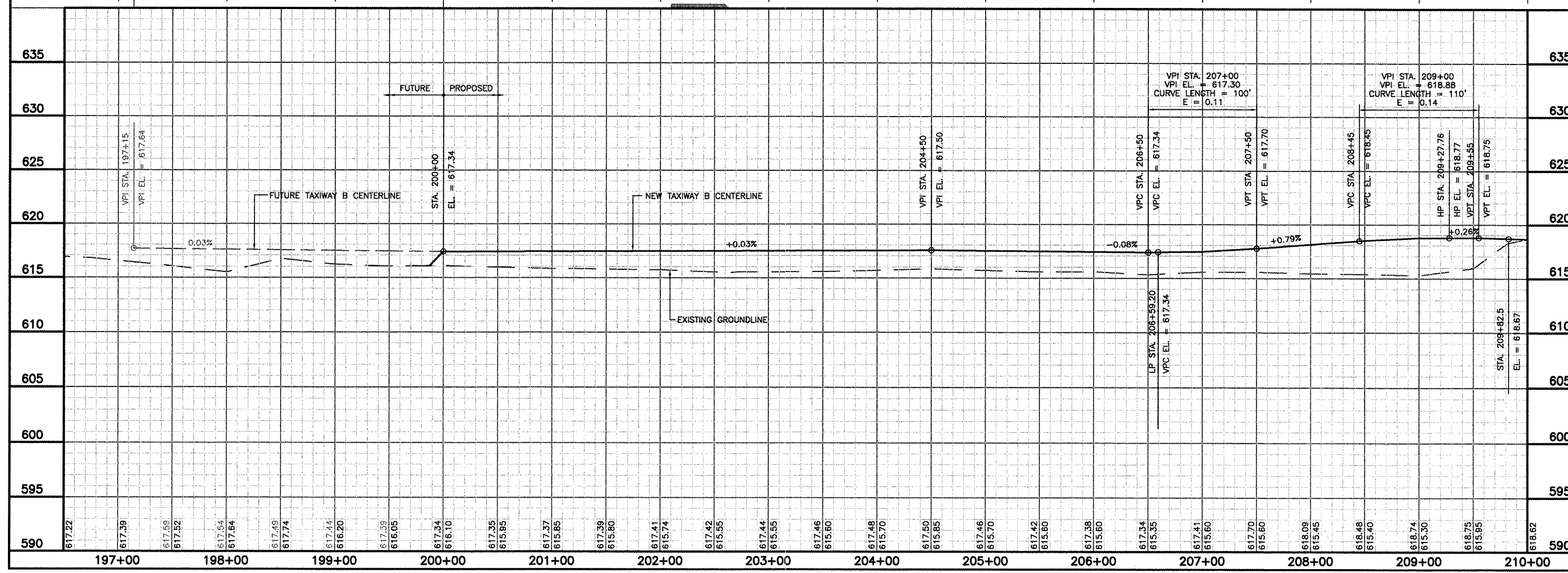
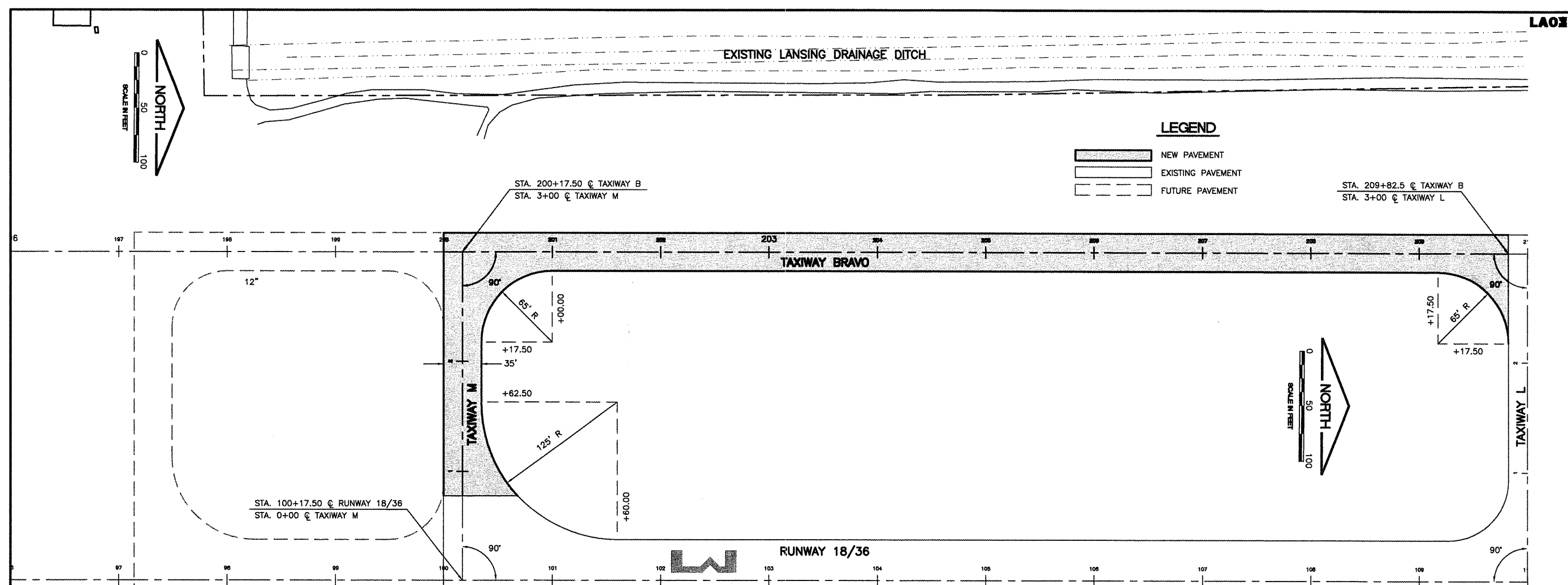
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Lansing Municipal
airport

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APPROVED BY:	ARM
DATE:	02/27/09
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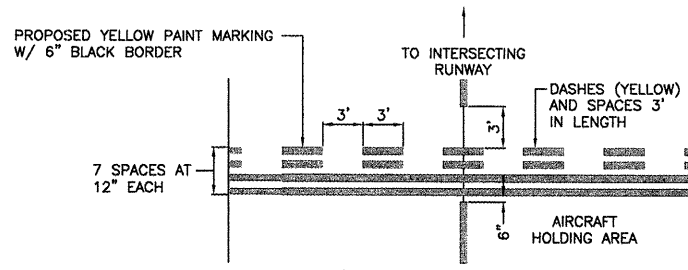
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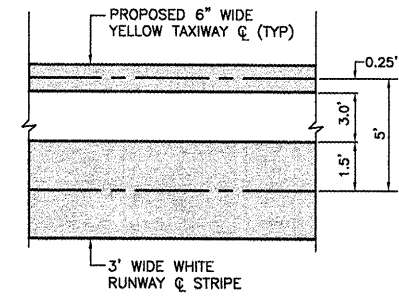
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AIRFIELD SIGNAGE SCHEDULE						
PROPOSED SIGN NUMBER	PROPOSED NUMBER CHARACTERS	PROPOSED SIGN FACE	EXISTING SIGN LEGEND	PROPOSED SIGN LEGEND	PROPOSED SIGN TYPE	PROPOSED SIGN LOCATION
S1	3	E W	N/A	W XNY18 M 36	2,0 2,1	STA. 2+00, 37.5' RT Q TAXIWAY M
S2	2	N S	N/A	BLANK	3 0	STA 101+60, 57.5' LT Q RUNWAY 18/36
* S3	N/A	E W	L 18-36	L XNY18 L 18-36	2,0 N/C	STA. 2+00, 37.5' RT Q TAXIWAY L
S4	2	E W	N/A	BLANK	3 0	STA 2+34.5, 40' LT. Q TAXIWAY M
S5	3	E W	N/A	BLANK	3 0	STA 2+34.5, 40' LT. Q TAXIWAY L

* EXISTING SIGN TO BE MODIFIED WAS MANUFACTURED BY STANDARD SIGNS.



RUNWAY HOLDING POSITION MARKER
NOT TO SCALE



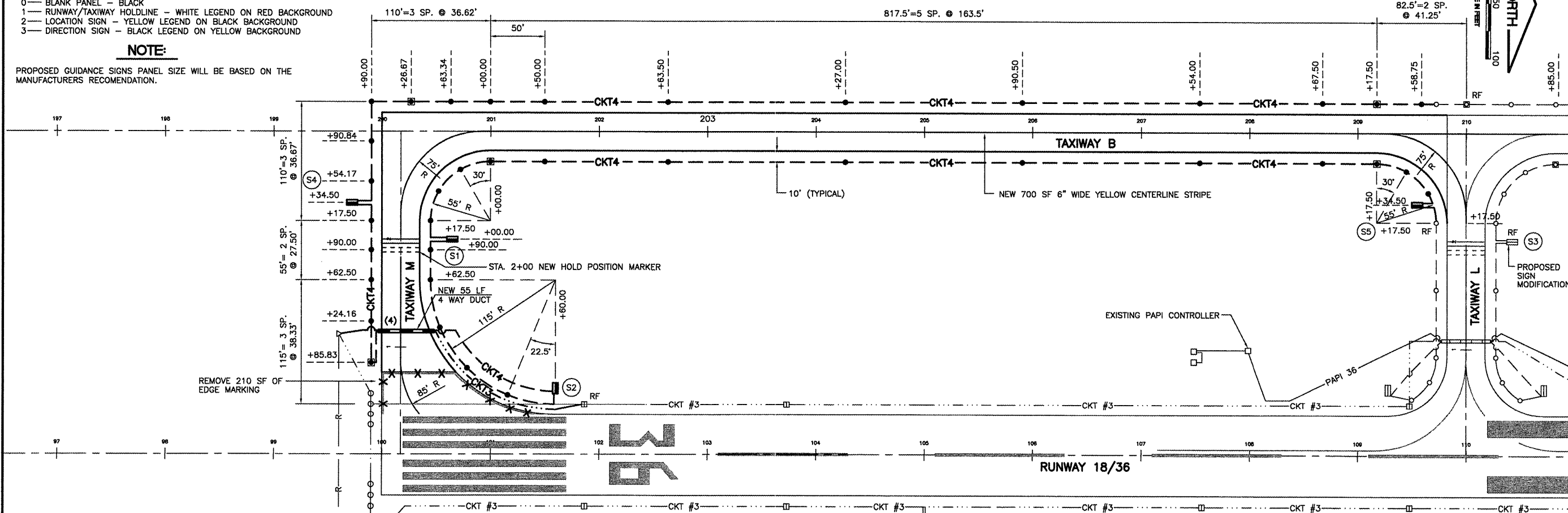
TAXIWAY TANGENT DETAIL
NOT TO SCALE

PROPOSED SIGN TYPE LEGEND

- 0 — BLANK PANEL — BLACK
- 1 — RUNWAY/TAXIWAY HOLDLINE — WHITE LEGEND ON RED BACKGROUND
- 2 — LOCATION SIGN — YELLOW LEGEND ON BLACK BACKGROUND
- 3 — DIRECTION SIGN — BLACK LEGEND ON YELLOW BACKGROUND

NOTE:

PROPOSED GUIDANCE SIGNS PANEL SIZE WILL BE BASED ON THE MANUFACTURERS RECOMMENDATION.



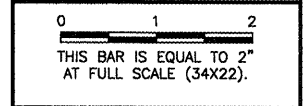
LIGHTING NOTES

1. CONNECT PROPOSED CABLE TO EXISTING CABLE AT HANDHOLE, GUIDANCE SIGN, TAXIWAY LIGHT, RUNWAY LIGHT OR SPLICE CAN. THE COST OF SPLICING SHALL BE INCIDENTAL TO AIRFIELD LIGHTING CABLE INSTALLATION.
2. THE CONTRACTOR SHALL VERIFY THAT THE EXISTING RUNWAY/TAXIWAY LIGHTING CIRCUITS ARE OPERATIONAL AT THE END OF EACH WORKING DAY.
3. THE ROUTING OF PROPOSED AND EXISTING CABLE SHOWN IS FOR INFORMATION ONLY. THE EXACT ROUTING SHALL BE FIELD COORDINATED WITH THE RESIDENT ENGINEER.
4. ANY EXISTING CABLE MARKERS THAT ARE DISTURBED SHALL BE REMOVED AND REINSTALLED AT THE SAME LOCATION. COST SHALL BE INCIDENTAL TO GRADING.
5. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CABLING AND SPLICING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
6. AT ANY LOCATION WHERE THE PROPOSED DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
7. CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
8. EACH CABLE SHALL HAVE A MINIMUM OF 6' SLACK IN EACH ELECTRICAL HANDHOLE/MANHOLE AND SHALL BE TAGGED AND PAID FOR PER LINEAL FOOT. ALL OTHER CABLE SLACK IN LIGHTS AND SPLICE CANS WILL BE INCIDENTAL TO THE LIGHT OR SPLICE CAN.
9. INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.

LEGEND

- EXISTING BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- EXISTING STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- EXISTING STAKE MOUNTED MEDIUM INTENSITY RUNWAY LIGHT
- EXISTING BASE MOUNTED MEDIUM INTENSITY RUNWAY LIGHT
- EXISTING STAKE MOUNTED THRESHOLD LIGHT
- EXISTING BASE MOUNTED THRESHOLD LIGHT
- EXISTING CONCRETE ENCASED DUCT BANK (NUMBER OF WAYS)
- EXISTING GRS CONDUIT (CONDUIT SIZE NOTED)
- EXISTING WIND CONE
- EXISTING AIRFIELD GUIDANCE SIGN
- PROPOSED CONCRETE ENCASED ELECTRICAL DUCT, # OF WAYS NOTED.
- EXISTING RUNWAY END IDENTIFIER LIGHT (REIL)
- EXISTING RUNWAY END IDENTIFIER LIGHT (REIL) CONTROL CABLES
- NEW CIRCUIT #3, 1/C #8 5KV L-824 TYPE C CABLE IN 3/4" UNIT DUCT
- NEW CIRCUIT #4, 1/C #8 5KV L-824 TYPE C CABLE IN 3/4" UNIT DUCT
- NEW STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- NEW BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
- NEW AIRFIELD GUIDANCE SIGN
- RETROFIT EXISTING MITL OR GUIDANCE SIGN
- EXISTING RUNWAY 18/36 CIRCUIT
- EXISTING TAXIWAY B CIRCUIT
- EXISTING RUNWAY 36 PAPI CIRCUIT
- EXISTING PRECISION APPROACH PATH INDICATORS (PAPI)

REVISIONS		
NUMBER	BY	DATE

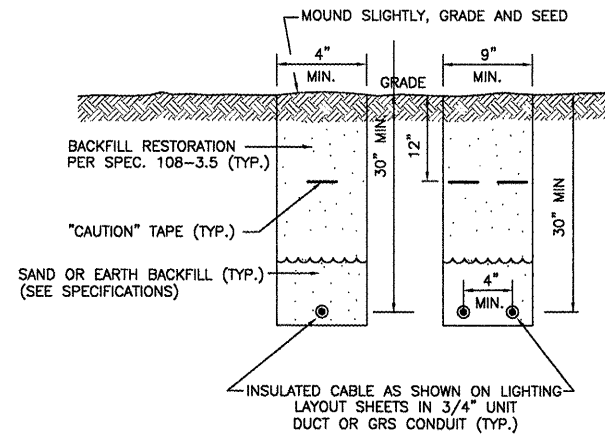


LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

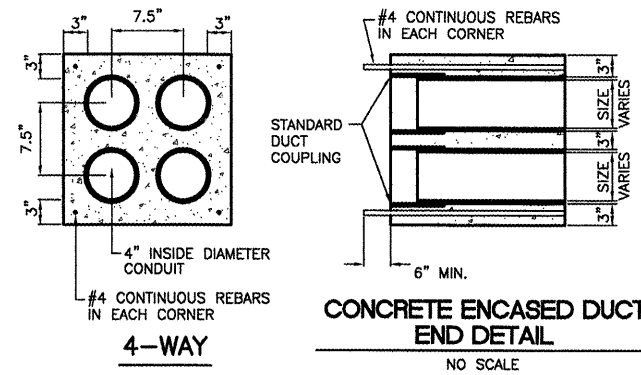
LIGHTING AND PAVEMENT MARKING PLAN

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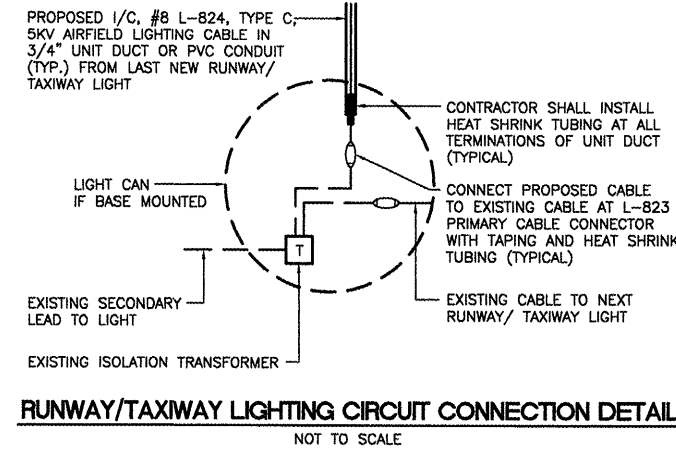
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JOB No:	05297-02
IL PROJECT:	IG0-3681
A.I.P. PROJECT:	3-17-0121-B26
SHEET 12 OF 30 SHEETS	



TURF AREA CABLE TRENCH DETAIL
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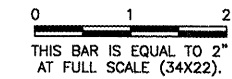


CONCRETE ENCASED DUCT BANKS
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RUNWAY/TAXIWAY LIGHTING CIRCUIT CONNECTION DETAIL
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REVISIONS		
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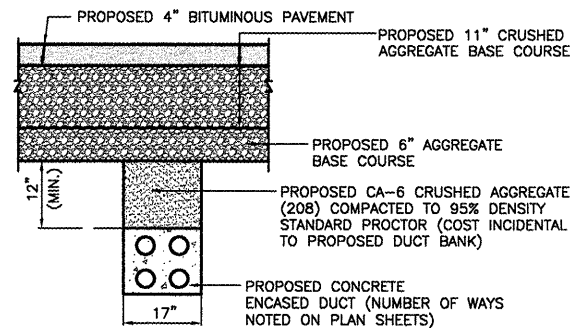


NOTES

- TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 4" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
- DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
- ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL.

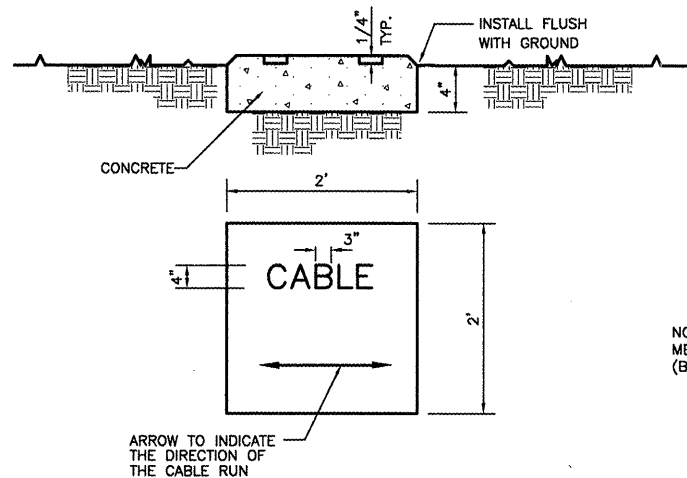
NOTES:

- DIMENSIONS ARE MINIMUM.
- CONCRETE SHALL CONFORM TO ITEM 610.
- ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
- TOP OF CONCRETE ENCASEMENT IN TURF AREAS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE.
- 4" SPLIT DUCT SHALL BE CONCRETE ENCASED WITH 3" MINIMUM CONCRETE SURROUNDING 4" CONDUIT. COST INCIDENTAL TO SPLIT DUCT.
- PROVIDE PULL STRING AND CAPS FOR UNUSED DUCTS.



CONCRETE ENCASED DUCT BACKFILL
 NOT TO SCALE

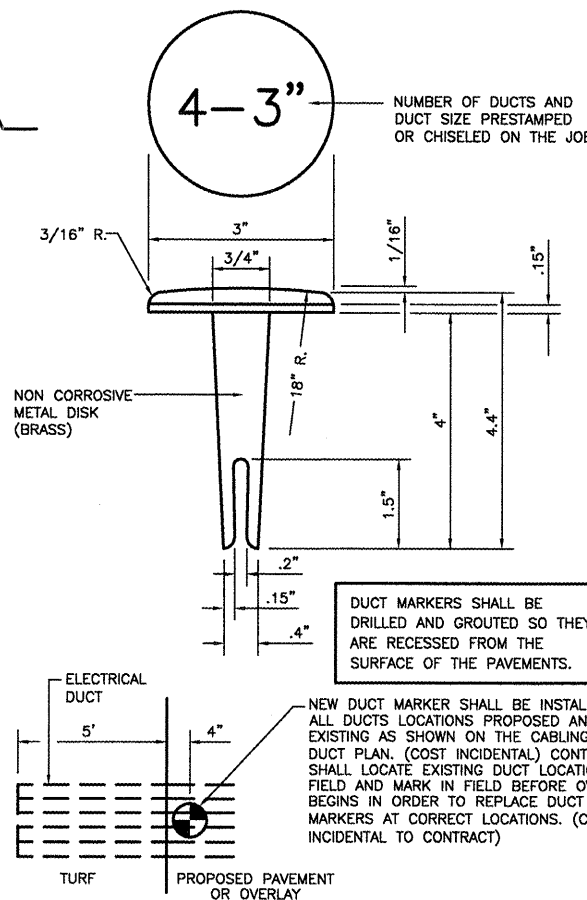
NOTE: INSTALL PROPOSED DUCT TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.



TURF CABLE MARKER DETAIL
 NO SCALE

NOTES

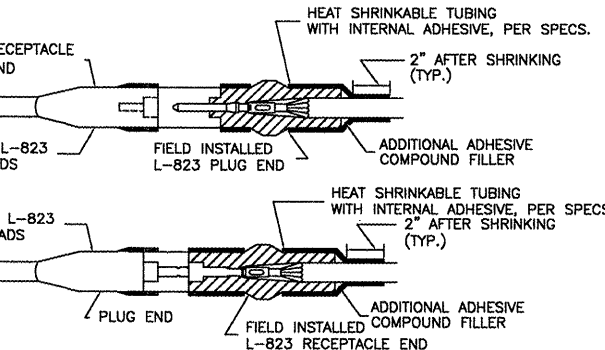
- CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE CABLE RUN.
- ITEM 610 CONCRETE SHALL BE USED.
- ALL EXPOSED EDGES SHALL BE EDGED WITH A 1/4" RADIUS TOOL.
- THE COST OF FURNISHING AND INSTALLING NEW MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
- 0.049 CU. YD. CONCRETE PER MARKER.
- CONTRACTOR SHALL LOCATE EXISTING CABLE MARKERS IN THE FIELD BEFORE SHOULDER ADJUSTMENT BEGINS IN ORDER TO REPLACE CABLE MARKERS AT CORRECT LOCATIONS (COST INCIDENTAL TO CONTRACT).



DUCT MARKER DETAIL
 NOT TO SCALE

DUCT MARKERS SHALL BE DRILLED AND GROUTED SO THEY ARE RECESSED FROM THE SURFACE OF THE PAVEMENTS.

NEW DUCT MARKER SHALL BE INSTALLED AT ALL DUCTS LOCATIONS PROPOSED AND EXISTING AS SHOWN ON THE CABLING AND DUCT PLAN. (COST INCIDENTAL) CONTRACTOR SHALL LOCATE EXISTING DUCT LOCATIONS IN FIELD AND MARK IN FIELD BEFORE OVERLAY BEGINS IN ORDER TO REPLACE DUCT MARKERS AT CORRECT LOCATIONS. (COST INCIDENTAL TO CONTRACT)



TYPE C AND D - CABLE SPLICE

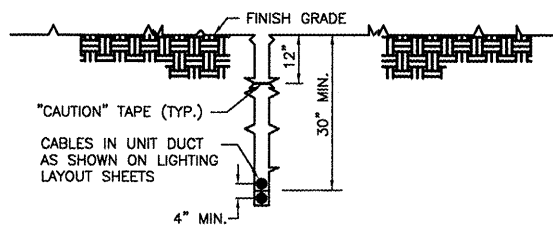
FOR SPLICES AT RUNWAY/TAXIWAY LIGHTS AND SIGNS
 NOT TO SCALE

CABLE SPLICE NOTES

- INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
- WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
- THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.

GENERAL NOTES:

- THE CONCRETE BASE FOR BASE MTD. LIGHTS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (610).
- TRANSFORMER HOLDER SHALL BE ANY COMMERCIALY AVAILABLE BRICK.
- BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
- ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
- TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
- ALL SIGNS, LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT MANAGER, THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE AT NO ADDITIONAL COST.
- TAXIWAY LIGHTS SHALL HAVE A BLUE LENS, RUNWAY LIGHTS SHALL HAVE A CLEAR OR 180° AMBER/CLEAR LENS AS DESIGNATED ON PLANS.
- DUCT MARKERS SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.
- CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.



CABLE IN UNIT DUCT - PLOWED
 NOT TO SCALE

NOTE: CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.

LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

ELECTRICAL DETAILS - SHEET 1

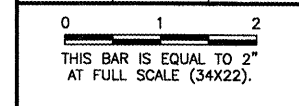
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JOB No:	05297-02
IL PROJECT: IGQ-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 13 OF 30 SHEETS	

REVISIONS

NUMBER	BY	DATE



LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

ELECTRICAL DETAILS - SHEET 2

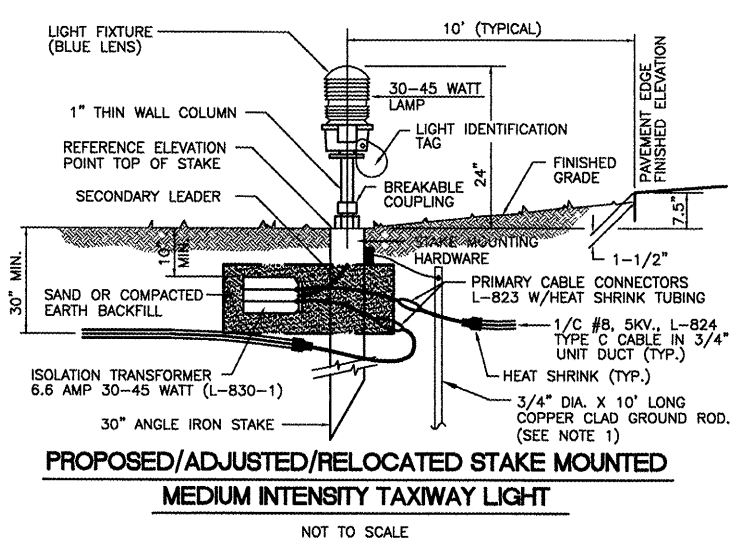
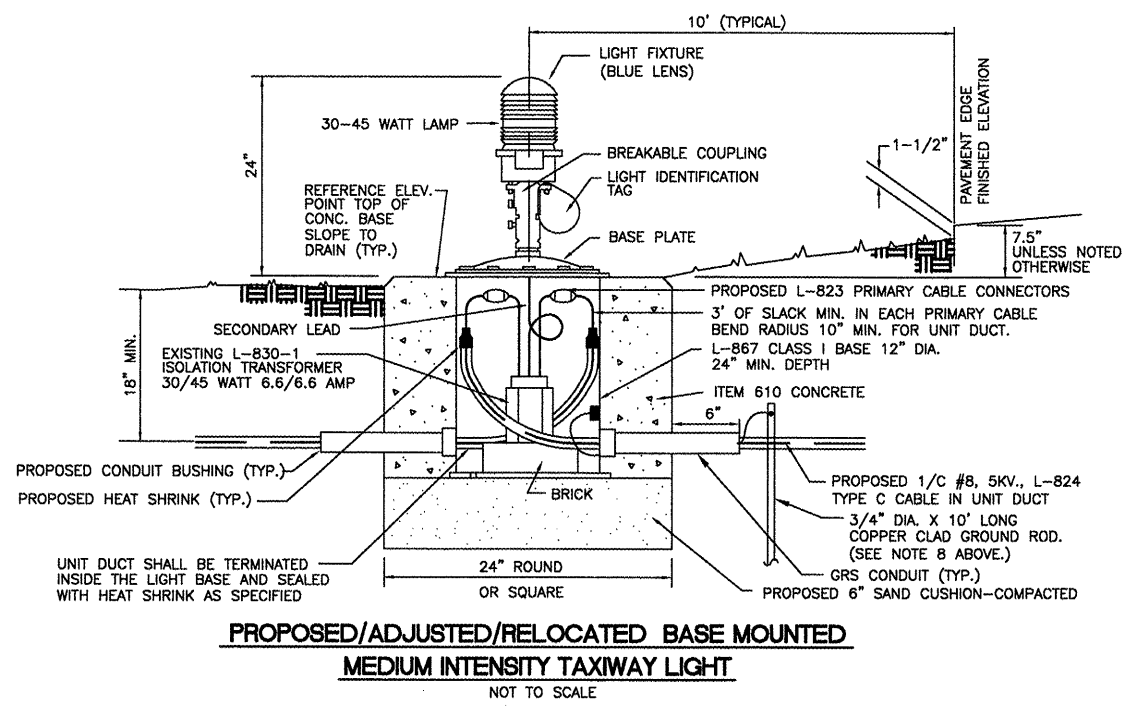
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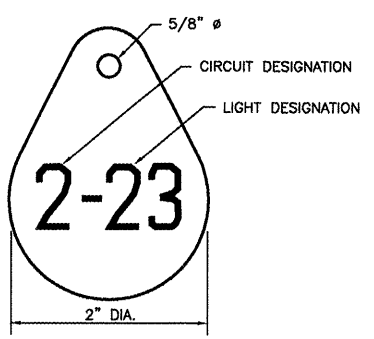
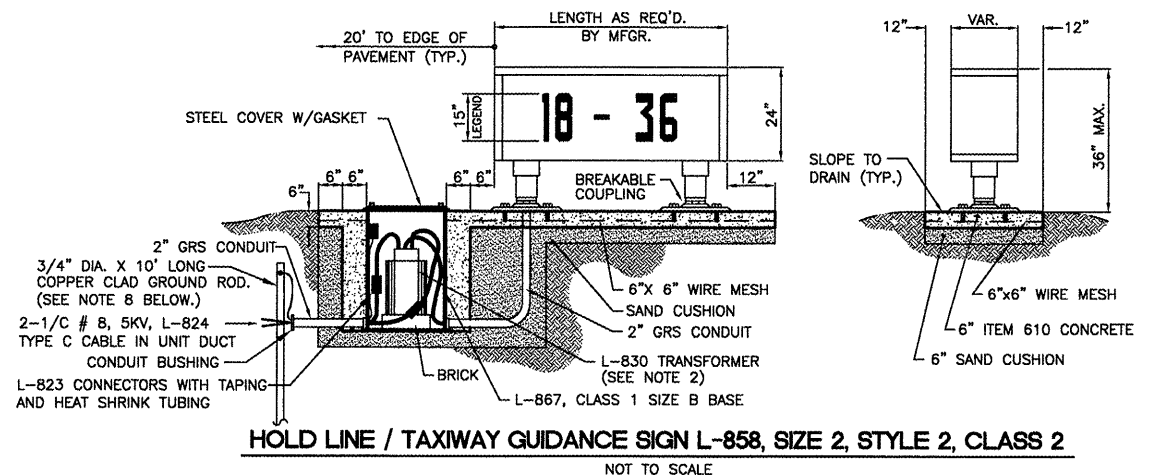
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IL PROJECT: IGQ-3681
 A.I.P. PROJECT: 3-17-0121-B26



GENERAL NOTES:

- INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD.



NOTES:

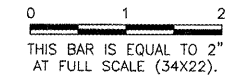
- INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH A SET SCREW.
- NUMERALS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. ALL EXISTING AND PROPOSED TAXIWAY AND RUNWAY LIGHTS SHALL BE TAGGED AS DIRECTED BY THE RESIDENT ENGINEER. ALL LIGHTS ON EXISTING CIRCUITS THAT HAVE LIGHTING IMPROVEMENTS (PROPOSED OR RELOCATED LIGHTS) SHALL BE RETAGGED.
- COST OF TAGGING LIGHTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

SIGNAGE NOTES

- ALL SIGNS ARE LUMACURVE 2-SIDED SIGNS BY STANDARD SIGNS OR APPROVED EQUAL.
- TRANSFORMER WATTAGE AS RECOMMENDED BY MANUFACTURER.
- LIGHTED SIGNS SHALL BE BASE MOUNTED ONLY.
- UNIT DUCT SHALL BE TERMINATED IN THE CAN AND SEALED TO THE CABLE WITH HEAT SHRINK AS SPECIFIED.
- THE NUMBER OF MODULES PER SIGN SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWING INCLUDING SIGN, COLOR, SIZE AND PROPOSED LEGEND, IN ENOUGH DETAIL AND DETERMINE PROPOSED SPACING AND OTHER INFORMATION REQUIRED BY SPECIAL PROVISIONS. CONTRACTOR TO VERIFY PROPOSED SIGN LOCATIONS AND ORIENTATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.
- WHEN EXISTING SIGNS ARE PROPOSED TO BE RETROFITTED WITH NEW SIGN PANELS, THE SIGN PANELS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF ADVISORY CIRCULAR 150/5340-18 (LATEST EDITION). THE CONTRACTOR SHALL VERIFY THAT THE PROPOSED SIGN PANELS ARE COMPATIBLE WITH THE EXISTING SIGN ASSEMBLIES WHICH ARE LUMACURVE BY STANDARD SIGNS.
- INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD.

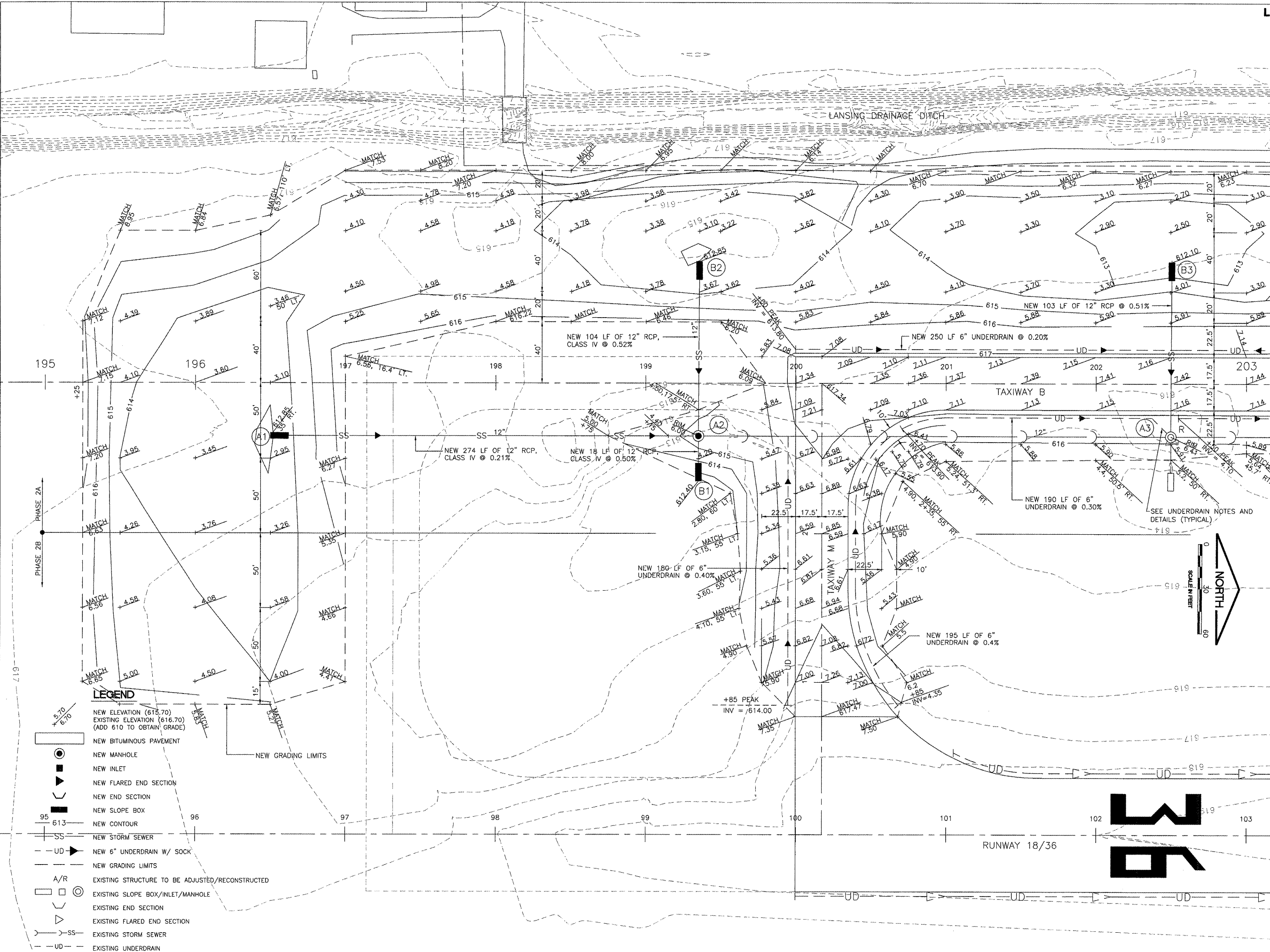
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LANSING MUNICIPAL AIRPORT
LANSING, ILLINOIS
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

GRADING AND DRAINAGE PLAN -
SHEET 1



LEGEND

- NEW ELEVATION (615.70)
EXISTING ELEVATION (616.70)
(ADD 610 TO OBTAIN GRADE)
- NEW BITUMINOUS PAVEMENT
- NEW MANHOLE
- NEW INLET
- NEW FLARED END SECTION
- NEW END SECTION
- NEW SLOPE BOX
- NEW CONTOUR
- NEW STORM SEWER
- NEW 6" UNDERDRAIN W/ SOCK
- NEW GRADING LIMITS
- EXISTING STRUCTURE TO BE ADJUSTED/RECONSTRUCTED
- EXISTING SLOPE BOX/INLET/MANHOLE
- EXISTING END SECTION
- EXISTING FLARED END SECTION
- EXISTING STORM SEWER
- EXISTING UNDERDRAIN

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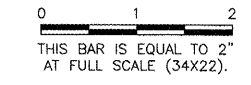
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APPROVED BY:	ARM
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JOB No:	05297-02
IL PROJECT: IGO-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 15 OF 30 SHEETS	

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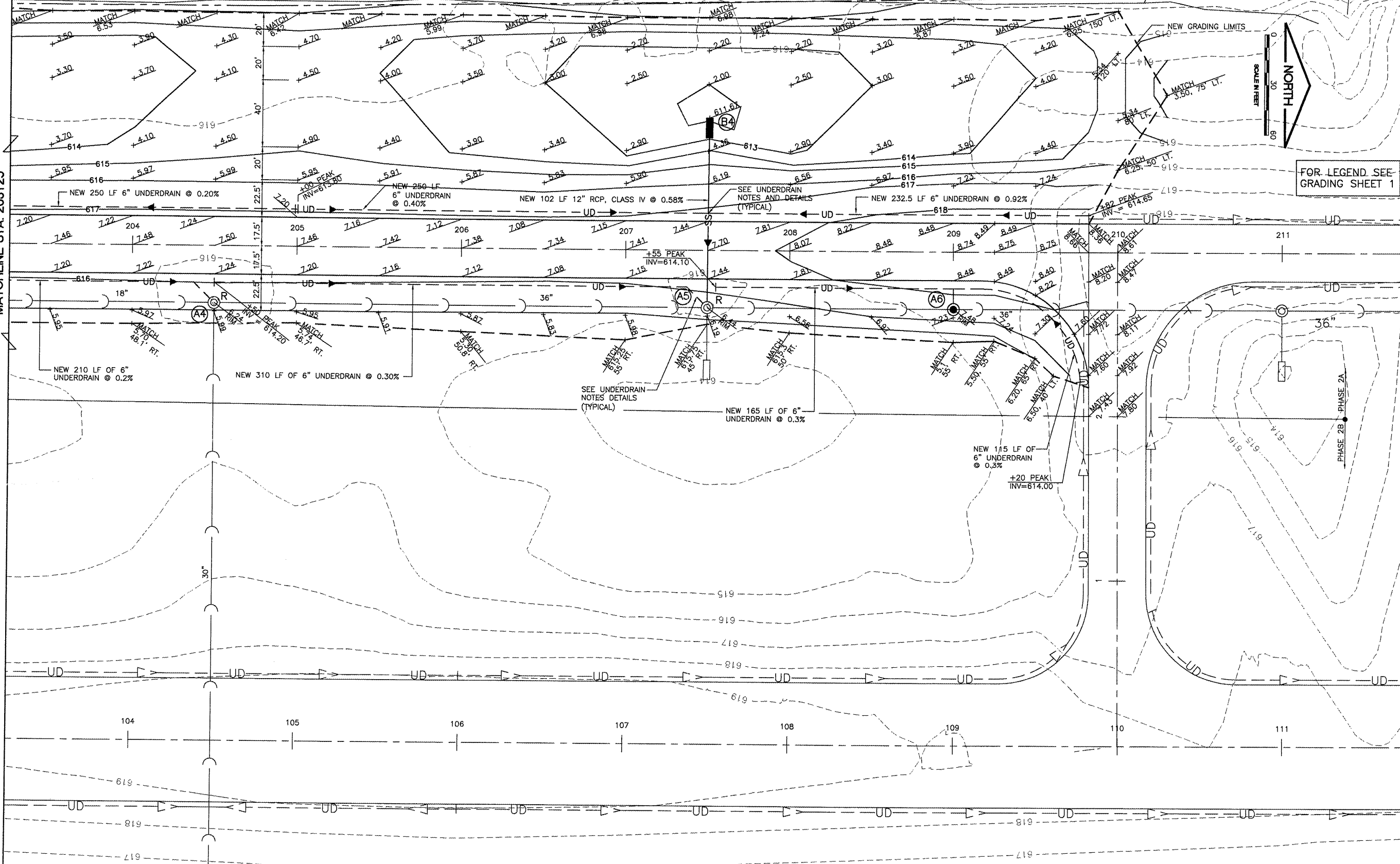
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e-topo.dwg

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FOR LEGEND SEE GRADING SHEET 1

LANSING MUNICIPAL AIRPORT
LANSING, ILLINOIS
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

GRADING AND DRAINAGE PLAN -
SHEET 2

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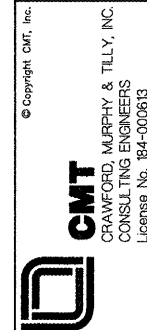
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0 1 2
 THIS BAR IS EQUAL TO 2"
 AT FULL SCALE (34X22).

LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

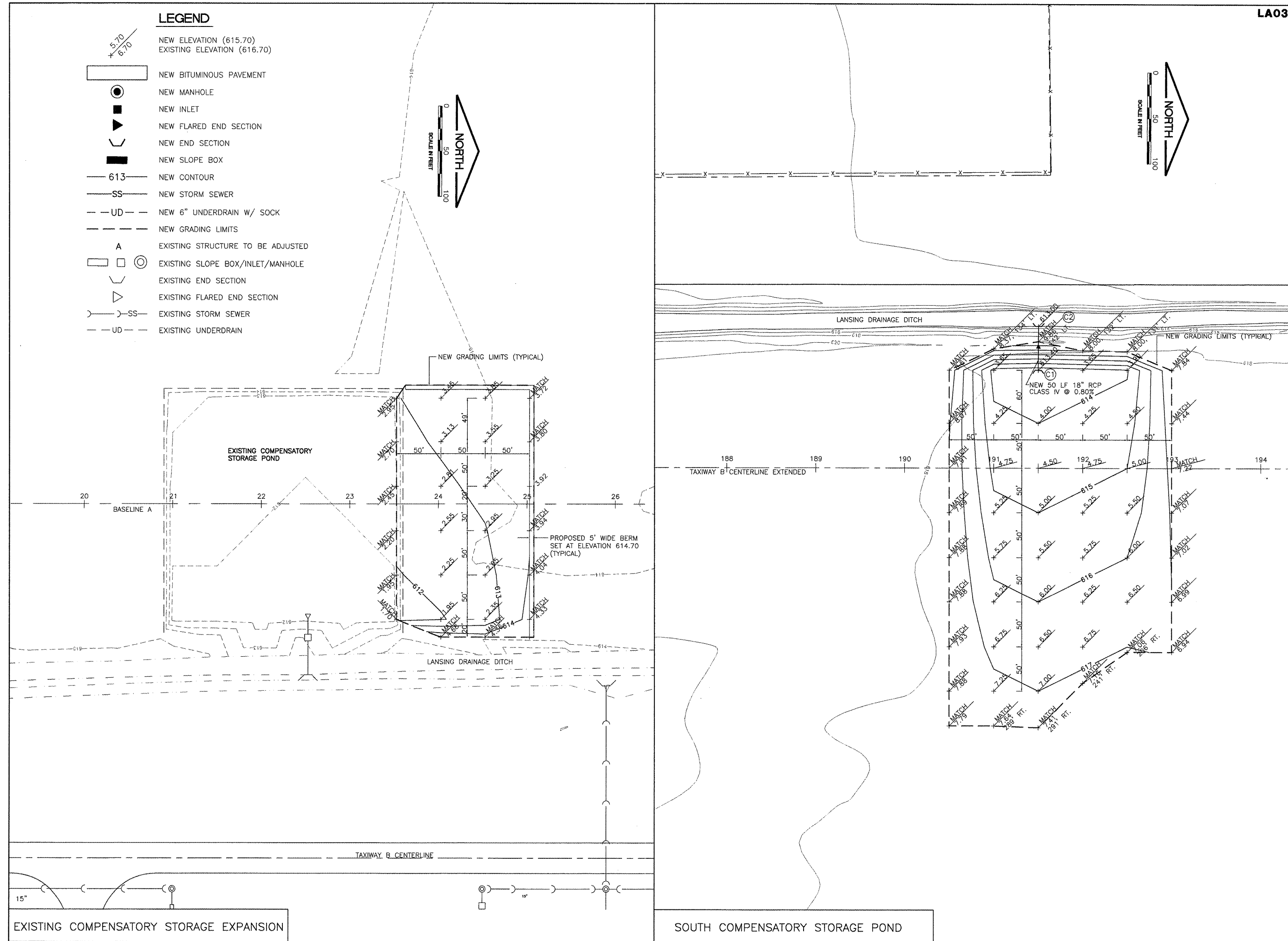
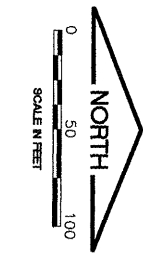
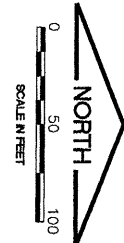
GRADING AND DRAINAGE PLAN -
 SHEET 3



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A.I.P. PROJECT:	3-17-0121-B26
SHEET	17 OF 30 SHEETS

LEGEND

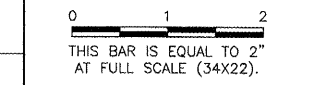
- NEW ELEVATION (615.70)
- EXISTING ELEVATION (616.70)
- NEW BITUMINOUS PAVEMENT
- NEW MANHOLE
- NEW INLET
- NEW FLARED END SECTION
- NEW END SECTION
- NEW SLOPE BOX
- 613 NEW CONTOUR
- NEW STORM SEWER
- NEW 6" UNDERDRAIN W/ SOCK
- NEW GRADING LIMITS
- A EXISTING STRUCTURE TO BE ADJUSTED
- EXISTING SLOPE BOX/INLET/MANHOLE
- EXISTING END SECTION
- EXISTING FLARED END SECTION
- EXISTING STORM SEWER
- EXISTING UNDERDRAIN



EXISTING COMPENSATORY STORAGE EXPANSION

SOUTH COMPENSATORY STORAGE POND

REVISIONS		
NUMBER	BY	DATE



**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36**

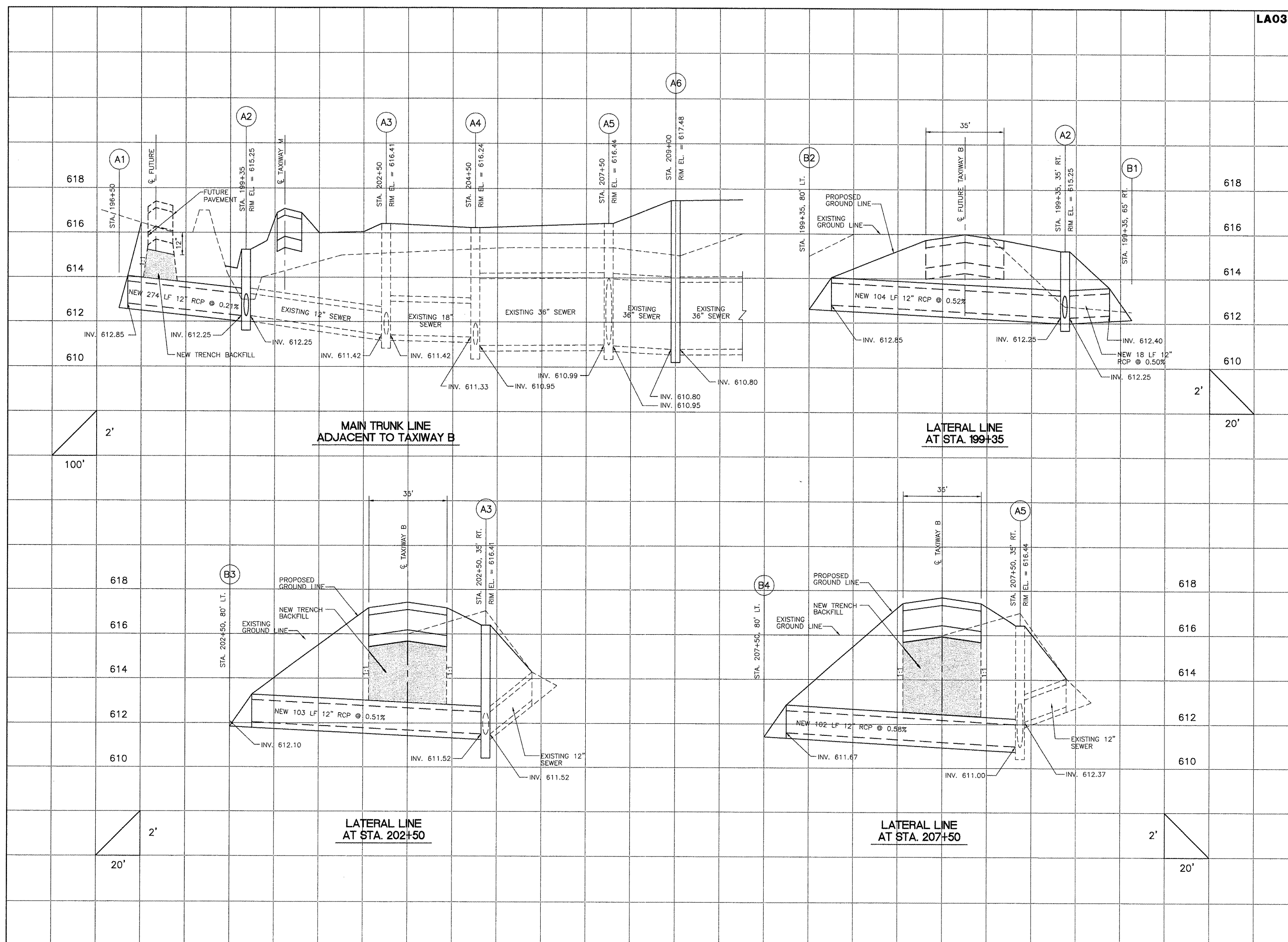
STORM SEWER PROFILES

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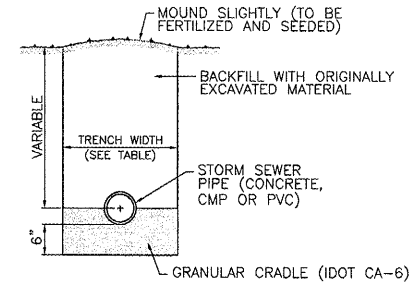


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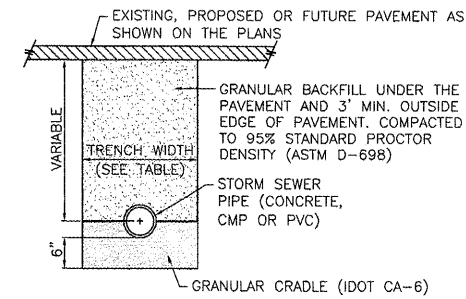
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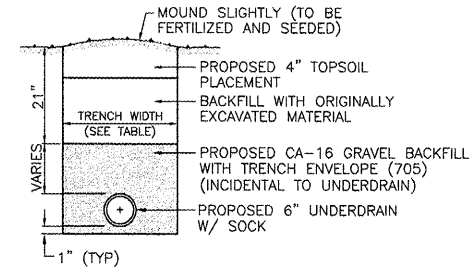
INSIDE DIAMETER OF STORM SEWER (INCHES)	MAXIMUM TRENCH WIDTH
6	3'-7"
8	3'-9"
12	4'-2"
15	4'-6"
18	4'-9"
21	5'-0"
24	5'-4"
27	5'-7"
30	5'-11"
36	6'-6"
42	7'-1"
48	7'-8"
54	8'-3"
60	8'-10"
66	9'-5"
72	10'-0"
78	10'-7"
84	11'-2"
90	11'-9"
96	12'-4"
102	12'-11"
108	13'-6"



NON-PAVED AREAS



ALL PAVED AREAS

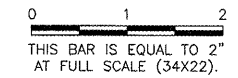


NON-PAVED AREAS AT UNDERDRAIN OUTLET

TRENCH DETAILS - STORM SEWER
 NOT TO SCALE

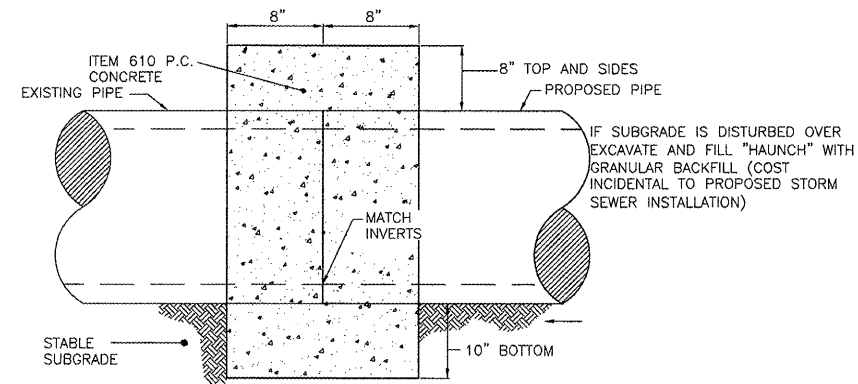
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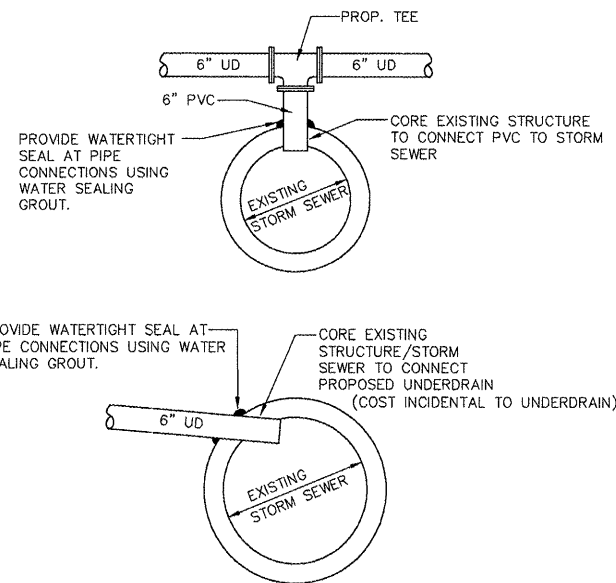
LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

DRAINAGE DETAILS - SHEET 1



NOTE: COST INCIDENTAL TO INSTALLATION OF PROPOSED PIPE

CONCRETE COLLAR - STORM SEWER
 NOT TO SCALE



UNDERDRAIN CONNECTION DETAILS
 NOT TO SCALE

NOTE: ALL UNDERDRAIN CONNECTIONS, FITTINGS, TEES, AND ELBOWS USED FOR CONNECTIONS TO PROPOSED/EXISTING STRUCTURES AND STORM SEWERS, SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED UNDERDRAIN.

UNDER DRAIN NOTES:

- CONTRACTOR SHALL FIELD VERIFY UNDERDRAIN INSPECTION HOLES INVERTS BEFORE INSTALLING UNDERDRAIN.
- ALL UNDERDRAIN CONNECTIONS, TEES, BENDS, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE UNDERDRAIN.
- UNDERDRAIN CONFLICTS WITH THE EXISTING CONDITIONS SHALL BE RESOLVED AND SHALL BE INCIDENTAL TO THE COST OF THE UNDERDRAIN.
- UNDERDRAIN SLOPES FOLLOW EDGE OF PAVEMENT SLOPES UNLESS NOTED OTHERWISE.
- INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.

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SHEET	19 OF 30 SHEETS

MWRDGC GENERAL NOTES (APPLIES TO ALL SANITARY SEWER)

1. THE MWRDGC SEWER PERMIT SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) DAYS PRIOR TO THE COMMENCEMENT OF WORK (CALL 708-588-4055).
2. ELEVATION DATUM IS USGS.
3. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
4. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
5. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO:

DUCTILE IRON PIPE ASTM A-21.5
 PVC ASTM D 3034 SDR26
 RCP ASTM C-26

JOINT SPECIFICATIONS SHALL CONFORM TO THE FOLLOWING.

DUCTILE IRON PIPE ASTM A-21.11
 PVC ASTM D 3212
 RCP ASTM C-443

6. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS) REQUIRES STONE BEDDING WITH STONE 1/4" TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

7. "BAND SEAL" OF SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR MATERIALS.

8. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED.
1. CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SEWER TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUB-WYE SADDLE OR HUB-TEE SADDLE.
 2. REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL AND REPLACE WITH A WYE OR TEE BRANCH SECTION).
 3. WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND-SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

9. WHEREVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATER MAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATER MAIN SHALL BE 18 INCHES, FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATER MAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATER MAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED ABOVE CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS.

10. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

11. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

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STORM SEWER SCHEDULE

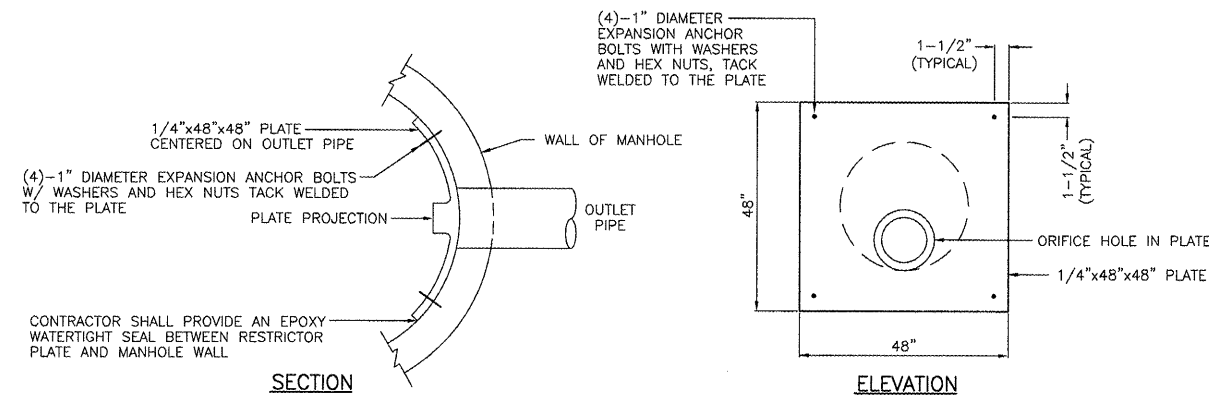
STRUCTURE NO.	STATION / OFFSET	DESCRIPTION	RIM	INVERT
A1	STA. 196+50, 35' RT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.85
A2	STA. 199+35, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	TAXIWAY A-4 MANHOLE W/ TYPE 1 FRAME AND GRATE - CLOSED	616.00	PROPOSED 12" NORTH = 612.25 PROPOSED 12" SOUTH = 612.25 PROPOSED 12" EAST = 612.25 PROPOSED 12" WEST = 612.25
A3	STA. 202+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-4 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.41 EXISTING = 617.52	EXISTING 18" NORTH = 611.42 EXISTING 12" SOUTH = 611.42 EXISTING 12" EAST = 611.52 PROPOSED 12" WESTH = 611.52 PROPOSED 6" UNDERDRAIN = 613.33
A4	STA. 204+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-7 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.24 EXISTING = 617.49	EXISTING 36" NORTH = 610.95 EXISTING 18" SOUTH = 611.33 EXISTING 30" EAST = 611.33 PROPOSED 6" UNDERDRAIN = 613.65
A5	STA. 207+50, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	EXISTING TYPE A-6 MANHOLE TO BE RECONSTRUCTED	PROPOSED = 616.44 EXISTING = 617.83	EXISTING 36" NORTH = 610.95 EXISTING 36" SOUTH = 610.99 EXISTING 12" EAST = 612.37 PROPOSED 12" WEST = 611.00 PROPOSED 6" UNDERDRAIN = 613.27
A6	STA. 209+00, 35' RT. CENTERLINE TAXIWAY BRAVO (SEE NOTES BELOW)	CATCH BASIN SPECIAL - 5' DIA. W/ TYPE 1 FRAME AND GRATE - CLOSED W/ 1" RESTRICTOR PLATE	PROPOSED = 617.48	PROPOSED 36" NORTH = 610.80 PROPOSED 36" SOUTH = 610.80 PROPOSED 6" UNDERDRAIN = 613.60
B1	STA. 199+35, 65' RT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.40
B2	STA. 199+35, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.85
B3	STA. 202+50, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	612.10
B4	STA. 207+50, 80' LT. CENTERLINE TAXIWAY BRAVO	12" SLOPE BOX INLET W/ GRATE	-	611.67
C1	STA. 191+50, 110' LT. CENTERLINE TAXIWAY BRAVO	18" CONCRETE END SECTION	-	613.40
C2	STA. 191+50, 160' LT. CENTERLINE TAXIWAY BRAVO	18" CONCRETE END SECTION	-	613.00

NOTE: 1. CONTRACTOR SHALL VERIFY ALL EXISTING STRUCTURE RIMS/INVERTS PRIOR TO ORDERING MATERIALS.
 2. EXISTING DRAINAGE STRUCTURES TO BE ADJUSTED/RECONSTRUCTED SHALL HAVE THEIR GRATES REPLACED WITH A CLOSED LID. EACH NEW GRATE SHALL BE CONSIDERED INCIDENTAL TO ITEM AR751983 RECONSTRUCT MANHOLE.

RESTRICTOR PLATE SCHEDULE	
STRUCTURE NO.	RESTRICTOR DIAMETER
A6	6.6"

NOTE

1. ALL MANHOLES WITHIN FLOODPLAIN WILL HAVE BOLT DOWN LIDS.
2. ALL REINFORCED CONCRETE STORM SEWER SHALL HAVE RUBBER GASKET JOINTS MEETING ASTM C361 OR ASTM C443 WITHIN TEN (10) FEET OF EITHER SIDE OF A WATERMAIN CROSSING.



RESTRICTOR PLATE DETAIL

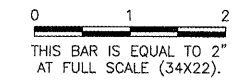
N.T.S.

NOTES

1. THE RESTRICTOR PLATE AND FASTENERS SHALL BE FABRICATED IN STAINLESS STEEL OR DUCTILE IRON.
2. THE PLATE SHALL BE CURVED TO MATCH THE INSIDE RADIUS OF THE MANHOLE/CATCH BASIN.
3. THE DEPTH OF THE ANCHOR BOLTS SHALL BE EMBEDDED AT LEAST 6 INCHES INTO THE STRUCTURE WALL.
4. LENGTH OF PROJECTION SHALL BE 1 x DIAMETER OF PIPE. PROJECTION PIPE SHALL BE WELDED OR OTHERWISE PERMANENTLY SECURED TO THE PLATE.

REVISIONS

NUMBER	BY	DATE



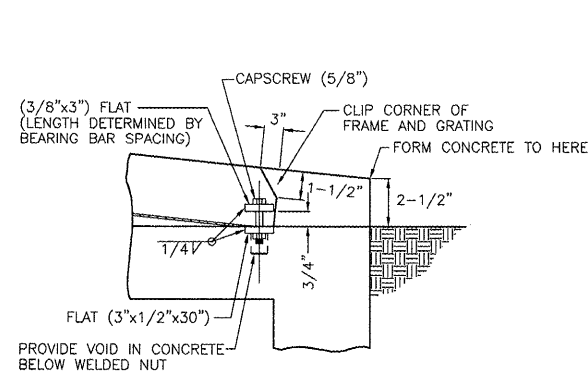
LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

DRAINAGE DETAILS AND SCHEDULE
 SHEET 2

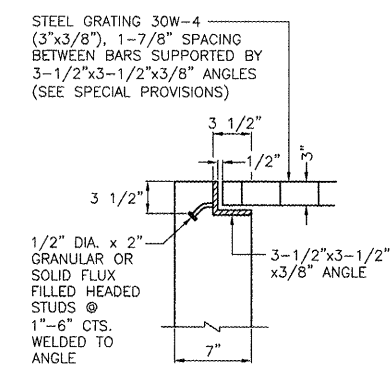
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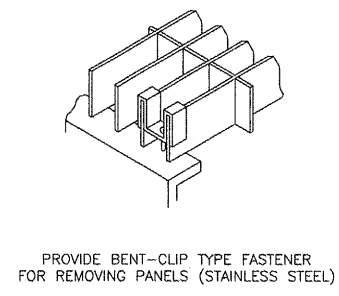
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CHECKED BY:	
APPROVED BY:	
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JOB No:	05297-02
IL PROJECT:	IGQ-3681
A.I.P. PROJECT:	3-17-0121-B26
SHEET	20 OF 30 SHEETS



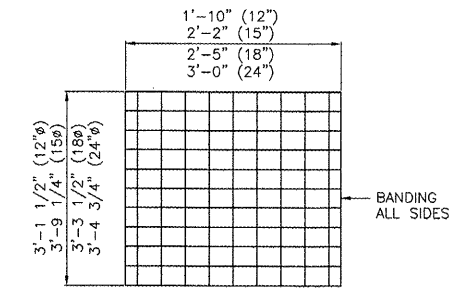
DETAIL A
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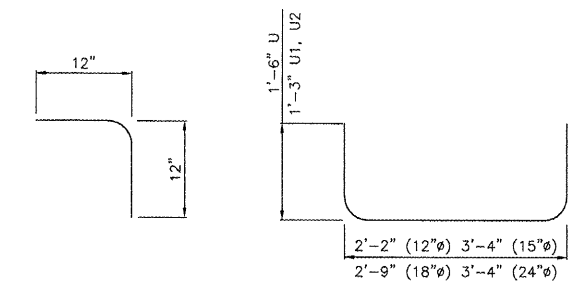
SECTION-B
NO SCALE



SADDLE CLIP
NO SCALE



GRATING DETAILS - PLAN VIEW
NO SCALE
 ONE SECTION OF GRATING DETAILED.
 TOTAL OF 3 SECTIONS REQUIRED FOR 12" & 15".
 TOTAL OF 4 SECTIONS REQUIRED FOR 18"
 TOTAL OF 5 SECTIONS REQUIRED FOR 24".
 SEE SPECIAL PROVISIONS FOR FURTHER DETAILS.



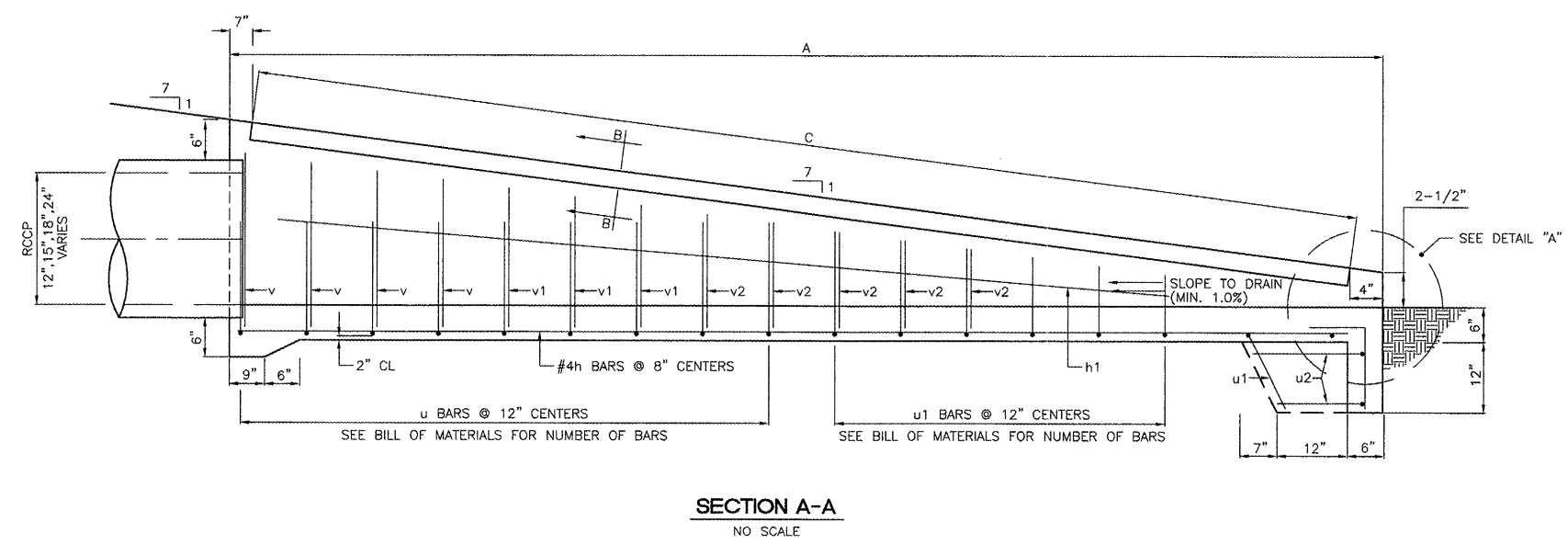
BAR L
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BAR U, U1 AND U2
NO SCALE

BILL OF MATERIALS
INLET BOX

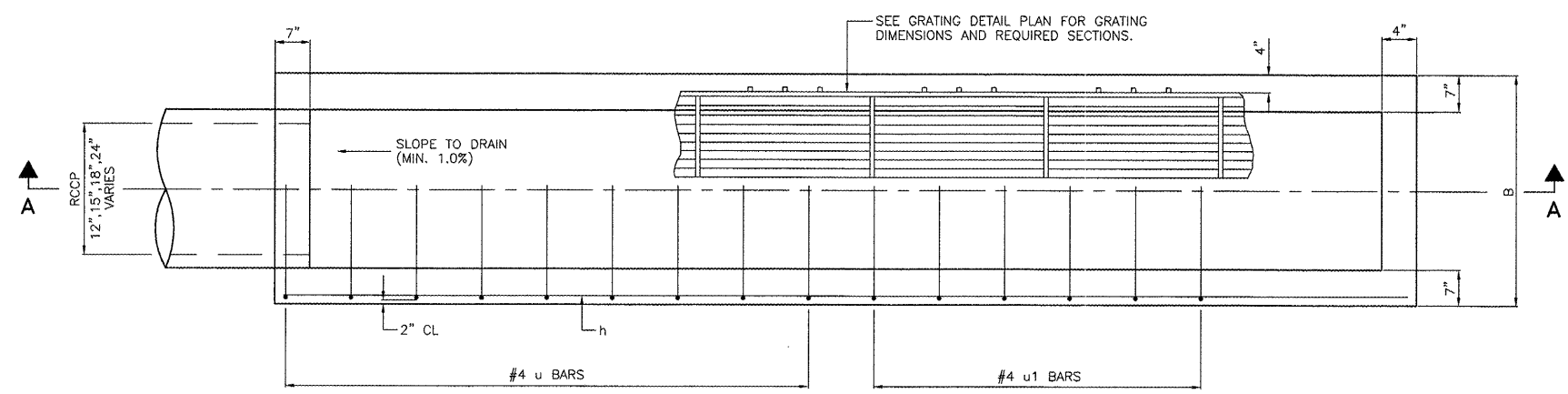
TYPE	BAR	QUANTITY	SIZE	LENGTH
12"	h	4	#4	9'-11"
15"	h	4	#4	11'-7"
18"	h	6	#4	13'-8"
24"	h	6	#4	17'-6"
12"	h1	2	#4	8'-0"
15"	h1	2	#4	10'-0"
18"	h1	2	#4	12'-0"
24"	h1	2	#4	15'-0"
12"	L	4	#4	2'-0"
15"	L	4	#4	2'-0"
18"	L	4	#4	2'-0"
24"	L	4	#4	2'-0"
12"	U	4	#4	5'-2"
15"	U	6	#4	5'-6"
18"	U	8	#4	5'-9"
24"	U	12	#4	6'-4"
12"	U1	4	#4	4'-8"
15"	U1	3	#4	5'-0"
18"	U1	4	#4	5'-3"
24"	U1	4	#4	5'-10"
12"	U2	2	#4	4'-8"
15"	U2	2	#4	5'-0"
18"	U2	2	#4	5'-3"
24"	U2	2	#4	5'-10"
12"	V	4	#4	1'-4"
15"	V	4	#4	1'-8"
18"	V	6	#4	1'-10"
24"	V	6	#4	2'-5"
12"	V1	-	#4	-
15"	V1	4	#4	1'-4"
18"	V1	6	#4	1'-5"
24"	V1	6	#4	2'-0"
12"	V2	-	#4	-
15"	V2	-	#4	-
18"	V2	-	#4	-
24"	V2	8	#4	1'-6"
CONCRETE STRUCTURES				
12"φ		CU.YD.	2	
15"φ		CU.YD.	2	
18"φ		CU.YD.	3	
24"φ		CU.YD.	3	
REINFORCEMENT BARS				
12"φ		POUND	85	
15"φ		POUND	100	
18"φ		POUND	145	
24"φ		POUND	200	
GRATING				
12"φ		SQ.FT.	18	
15"φ		SQ.FT.	25	
18"φ		SQ.FT.	32	
24"φ		SQ.FT.	51	

TABLE OF DIMENSIONS

DIMENSION	12"φ	15"φ	18"φ	24"φ
A	10'-3"	12'-1"	14'-0"	17'-0"
B	2'-6"	2'-10"	2'-11"	3'-8"
C	9'-5"	11'-4"	13'-3"	17'-1"



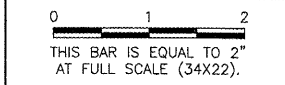
SECTION A-A
NO SCALE



PLAN
NO SCALE

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SLOPE BOX INLET DETAILS







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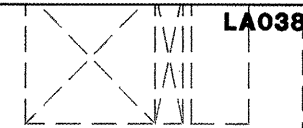
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 APPROVED BY: ARM
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 IL PROJECT: IGQ-3681
 A.I.P. PROJECT: 3-17-0121-B26
 SHEET 21 OF 30 SHEETS

GENERAL EARTHWORK NOTES:

- ALL EARTHWORK QUANTITIES ARE CALCULATED BASED ON THE MATERIAL IN ITS INITIAL OR FINAL POSITION AS SHOWN IN THE PLANS AND QUANTIFIED BY METHOD OF AVERAGE END AREAS. SHRINKAGE FACTORS HAVE BEEN ESTIMATED AND ARE INCLUDED FOR THE UNCLASSIFIED EXCAVATION DISPOSAL QUANTITY AND NO CHANGES IN PAYMENT WILL BE MADE FOR ANY VARIATIONS IN SHRINKAGE.
- ALL HAUL ROADS TO BE CONSTRUCTED FOR THE PROJECT WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO AR150540 HAUL ROUTE.
- SURPLUS MATERIALS SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR. COST OF EXCAVATION AND DISPOSAL OF EXCESS MATERIALS SHALL BE PAID FOR AS UNCLASSIFIED EXCAVATION.
- CONTRACTOR'S HAUL ROADS IN TURFED AREAS SHALL BE RESTORED WITH 4" MINIMUM OF TOPSOIL PLACED. CONTRACTOR'S HAUL ROADS IN FARMED AREAS SHALL BE RESTORED WITH 12" MINIMUM OF TOPSOIL PLACED. ALL HAUL ROAD RESTORATION SHALL BE INCIDENTAL TO THE AR150540 HAUL ROUTE.
- WHEN THE VOLUME OF UNCLASSIFIED EXCAVATION IS NOT SUFFICIENT FOR EMBANKMENT FILL, IT SHALL BE SUPPLIED FROM THE COMPENSATORY STORAGE PONDS.
- EMBANKMENT FILL IS INCIDENTAL TO UNCLASSIFIED EXCAVATION. TOPSOIL STRIPPING, TOPSOIL PLACEMENT AND SHOULDER FILL IS INCIDENTAL TO UNCLASSIFIED EXCAVATION.
- EXISTING BERMS SHALL REMAIN IN PLACE AT THE LANSING DRAINAGE DITCH, UNLESS NOTED OTHERWISE.
- BORROW AREA SHALL HAVE 4" MINIMUM OF TOPSOIL PLACED AND SEEDED AND MULCHED. SEEDING AND MULCHING SHALL BE PAID UNDER ITEMS 901 AND 908, RESPECTIVELY. CONTRACTOR'S HAUL ROADS TO THE BORROW SITE SHALL HAVE 4" MINIMUM OF TOPSOIL PLACED AND SEEDED AND MULCHED (COST INCIDENTAL).
- AREAS OF UNSUITABLE MATERIAL (UNCLASSIFIED EXCAVATION) SHALL BE AS DESIGNATED BY THE ENGINEER. THE QUANTITY OF UNSUITABLE MATERIAL SHALL NOT BE USED AS EMBANKMENT FILL MATERIAL UNLESS AUTHORIZED BY THE ENGINEER.
- CONTRACTOR IS REQUIRED TO CONSTRUCT THE PROPOSED COMPENSATORY STORAGE POND EXPANSION NO HIGHER THAN THE LINES AND GRADES SHOWN TO MEET COMPENSATORY STORAGE VOLUME REQUIREMENTS PER THE IDOT OFFICE OF WATER RESOURCES PERMIT.

LEGEND

-  NEW PAVEMENT
-  EXISTING BUILDING
-  EXISTING PAVEMENT
-  AIRPORT PROPERTY LINE
-  FUTURE/PROPOSED HANGAR (BY OTHERS)
-  EXISTING 16" WOLVERINE PETROLEUM PIPELINE

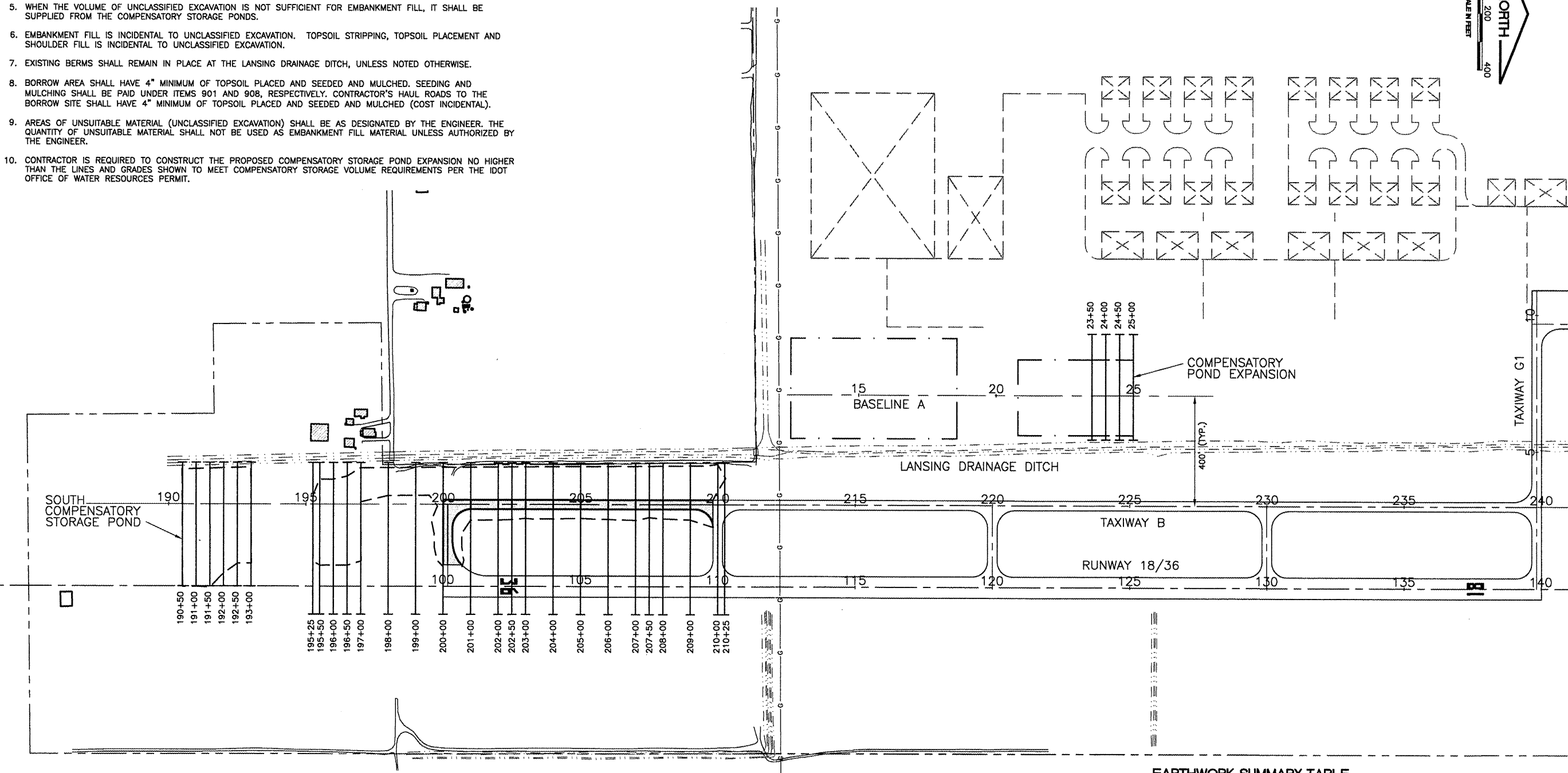


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 THIS BAR IS EQUAL TO 2"
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**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS**
PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
**INDEX TO CROSS SECTIONS/
 EARTHWORK SUMMARY**

EARTHWORK SUMMARY TABLE

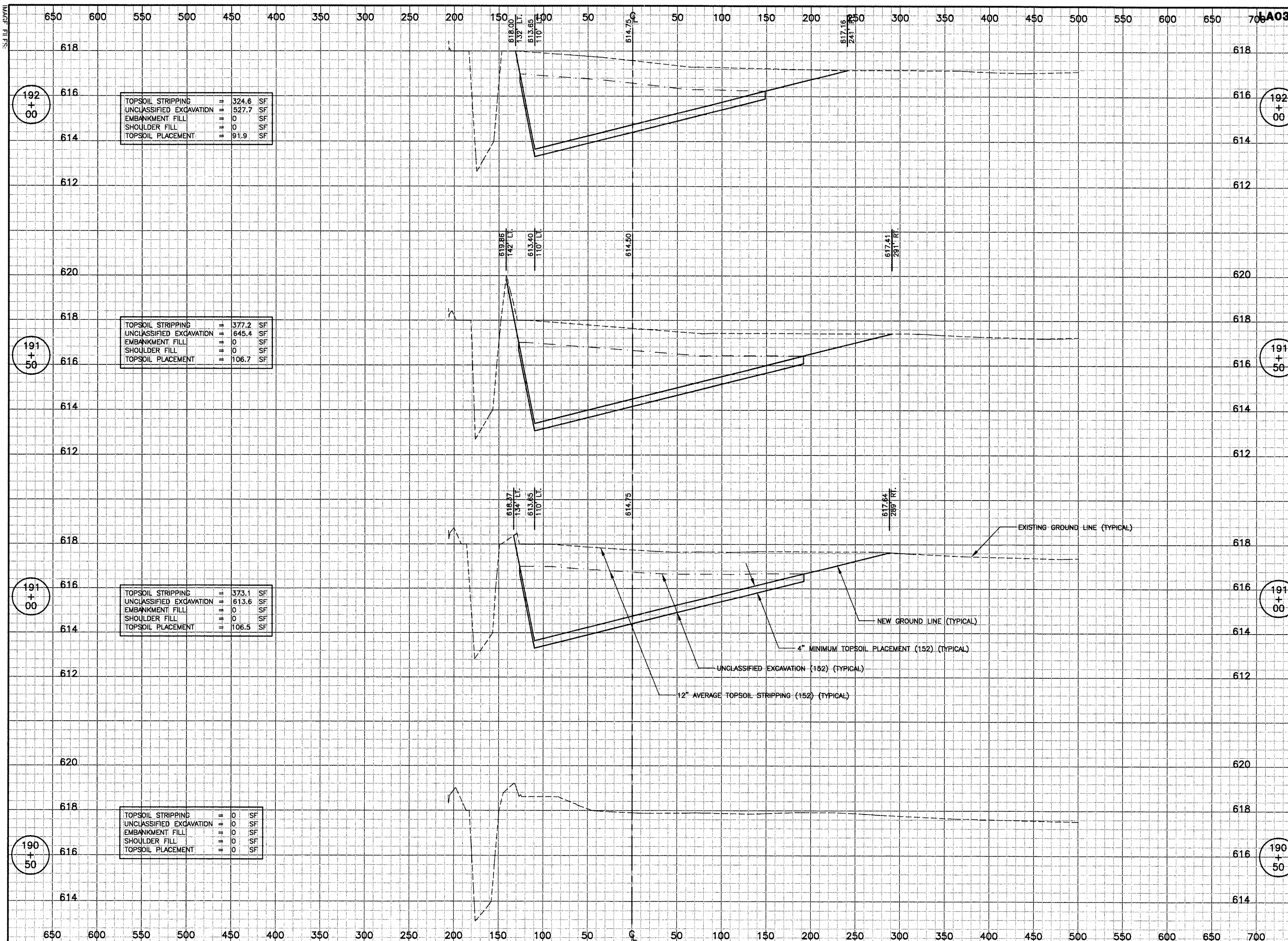
LOCATION	TOPSOIL STRIPPING INITIAL POSITION (CUBIC YARD)	TOPSOIL PLACEMENT FINAL POSITION (CUBIC YARD)	SHOULDER FILL FINAL POSITION (CUBIC YARD)	EXCAVATION UNCLASSIFIED INITIAL POSITION (CUBIC YARD)	EMBANKMENT FILL FINAL POSITION (CUBIC YARD)
TAXIWAY B EXTENSION	8,026	2,715	2,196	10,324	1,724
SOUTH COMPENSATORY STORAGE POND	2,525	713	-	4,079	-
COMPENSATORY POND EXPANSION	894	621	-	692	-
UNSUITABLE MATERIAL	-	-	-	400	-
TOTALS	11,445	4,049	2,196	15,495	1,724
EXCESS MATERIAL	-	6,946	-	11,027	-

NOTES: 1. UNCLASSIFIED EXCAVATION TO BE DISPOSED SHALL BE COMPUTED USING 10% SHRINKAGE FOR TOPSOIL PLACEMENT AND SHOULDER FILL AND 15% SHRINKAGE FOR EMBANKMENT FILL.

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 A.I.P. PROJECT: 3-17-0121-B26
 SHEET 22 OF 30 SHEETS



TOPSOIL STRIPPING	=	324.6	SF
UNCLASSIFIED EXCAVATION	=	527.7	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	91.9	SF

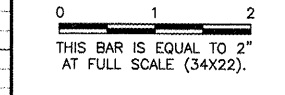
TOPSOIL STRIPPING	=	377.2	SF
UNCLASSIFIED EXCAVATION	=	645.4	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	106.7	SF

TOPSOIL STRIPPING	=	373.1	SF
UNCLASSIFIED EXCAVATION	=	613.6	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	106.5	SF

TOPSOIL STRIPPING	=	0	SF
UNCLASSIFIED EXCAVATION	=	0	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	0	SF

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**LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 SOUTH COMPENSATORY STORAGE POND
 STA. 190+50 TO STA. 192+00**

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SHEET 23 OF 30 SHEETS	

MARK FILE:

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0 1 2
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 AT FULL SCALE (34X22).

194
+
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194
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193
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193
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193
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193
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192
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192
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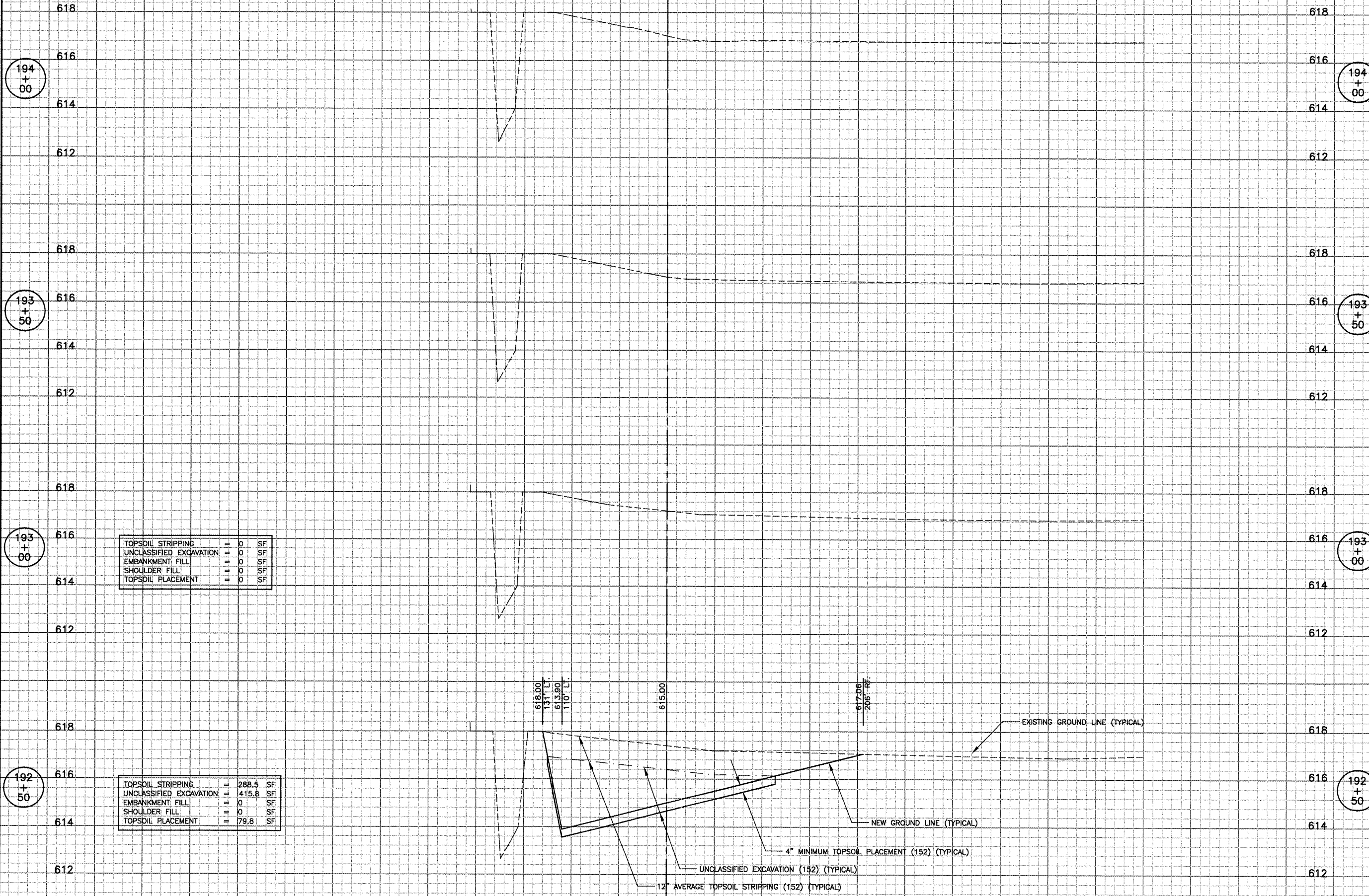
LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 CROSS SECTIONS
 SOUTH COMPENSATORY STORAGE POND
 STA. 192+50 TO STA. 194+00

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TOPSOIL STRIPPING	0	SF
UNCLASSIFIED EXCAVATION	0	SF
EMBANKMENT FILL	0	SF
SHOULDER FILL	0	SF
TOPSOIL PLACEMENT	0	SF

TOPSOIL STRIPPING	288.5	SF
UNCLASSIFIED EXCAVATION	419.8	SF
EMBANKMENT FILL	0	SF
SHOULDER FILL	0	SF
TOPSOIL PLACEMENT	79.8	SF

618.00
 131' LT.
 613.90
 110' LT.
 615.00
 617.00
 206' RT.

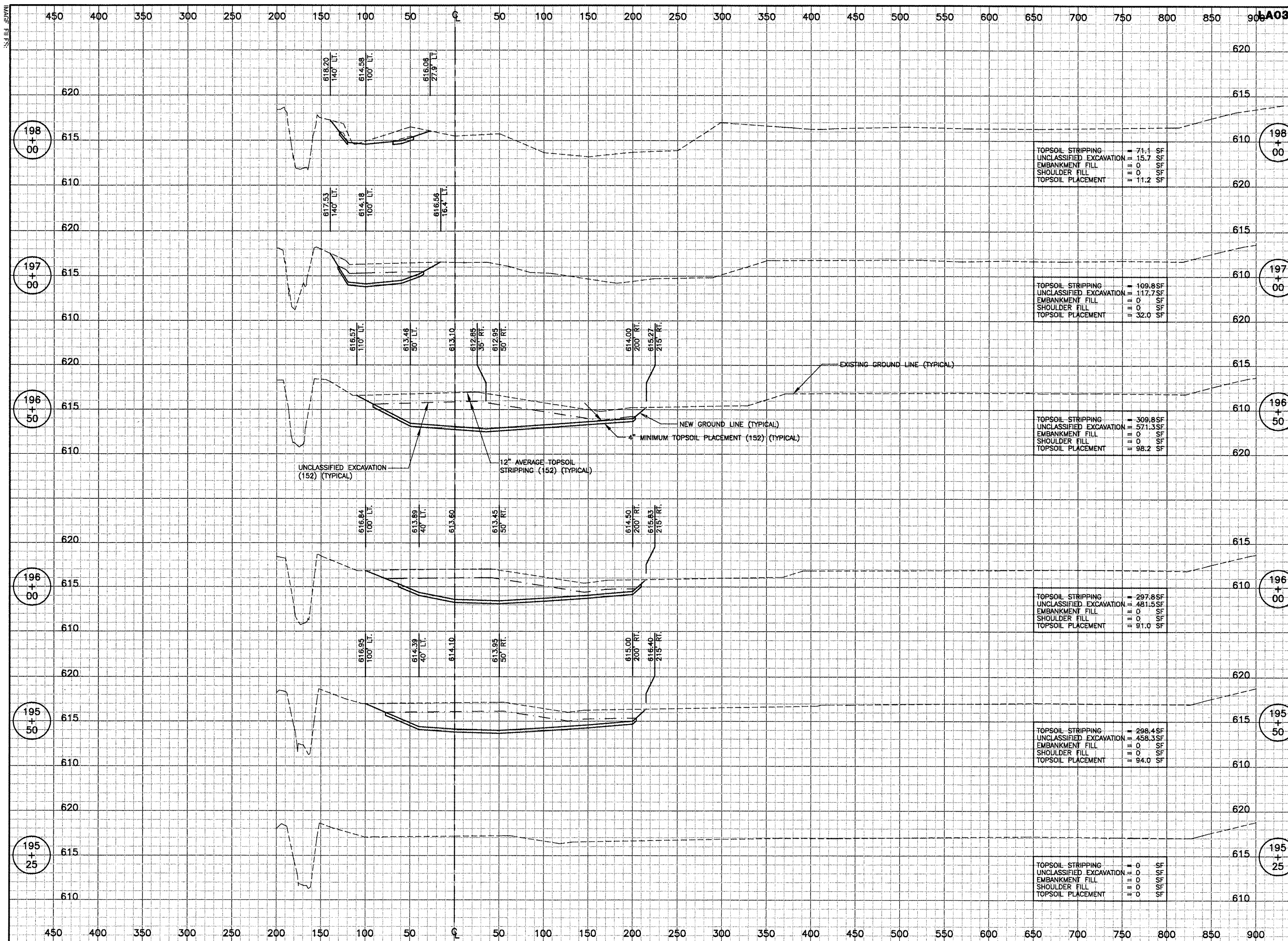
EXISTING GROUND-LINE (TYPICAL)

NEW GROUND LINE (TYPICAL)

4" MINIMUM TOPSOIL PLACEMENT (152) (TYPICAL)

UNCLASSIFIED EXCAVATION (152) (TYPICAL)

12" AVERAGE TOPSOIL STRIPPING (152) (TYPICAL)



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LANSING MUNICIPAL AIRPORT
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 CROSS SECTIONS
 TAXIWAY B
 STA. 195+25 TO STA. 198+00

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SHEET 25 OF 30 SHEETS	

TOPSOIL STRIPPING	=	71.1	SF
UNCLASSIFIED EXCAVATION	=	15.7	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	11.2	SF

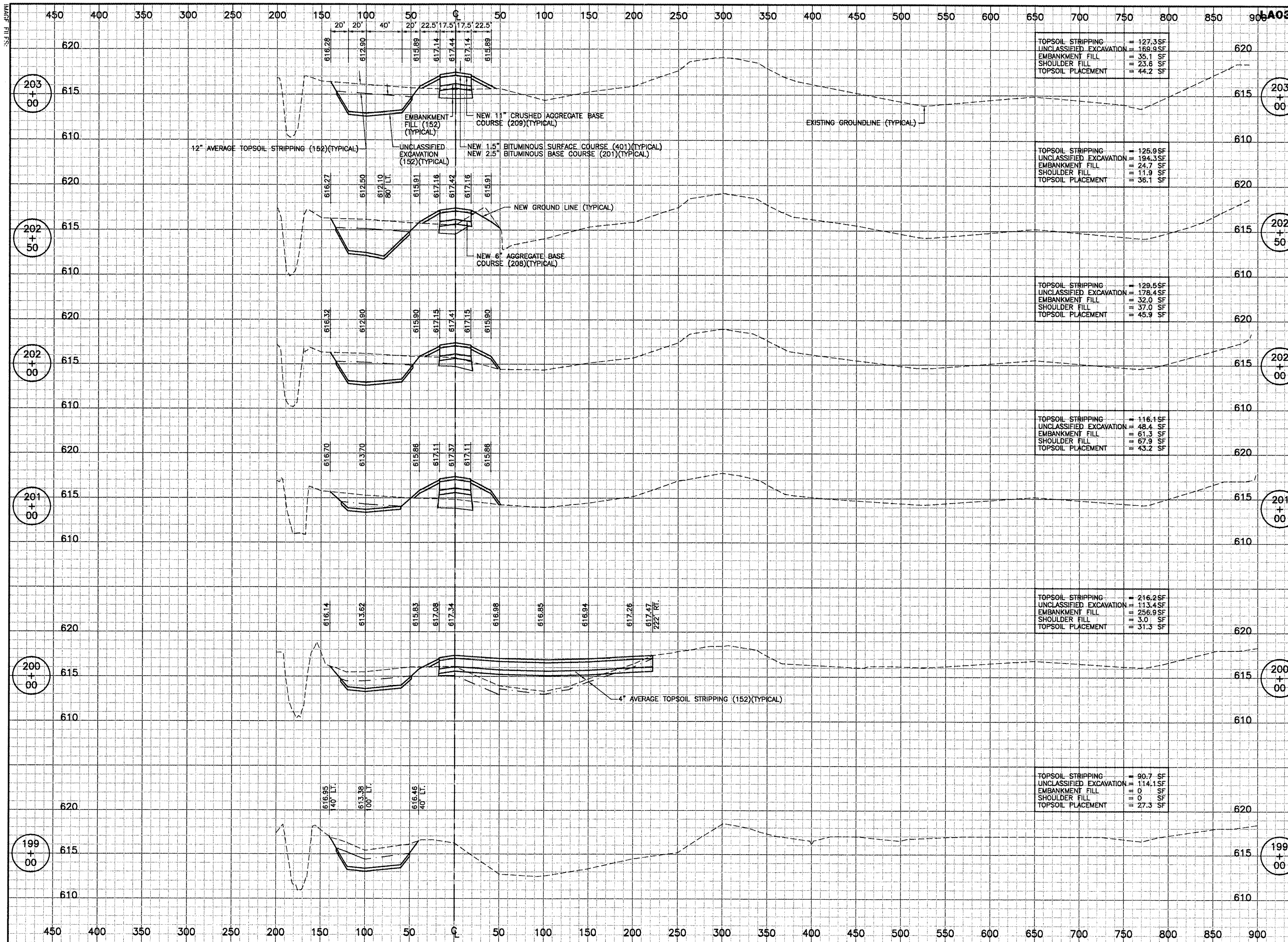
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UNCLASSIFIED EXCAVATION	=	117.7	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	32.0	SF

TOPSOIL STRIPPING	=	309.85	SF
UNCLASSIFIED EXCAVATION	=	571.3	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	98.2	SF

TOPSOIL STRIPPING	=	297.85	SF
UNCLASSIFIED EXCAVATION	=	481.5	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	91.0	SF

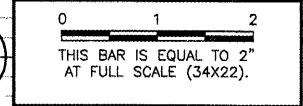
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UNCLASSIFIED EXCAVATION	=	458.3	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	94.0	SF

TOPSOIL STRIPPING	=	0	SF
UNCLASSIFIED EXCAVATION	=	0	SF
EMBANKMENT FILL	=	0	SF
SHOULDER FILL	=	0	SF
TOPSOIL PLACEMENT	=	0	SF



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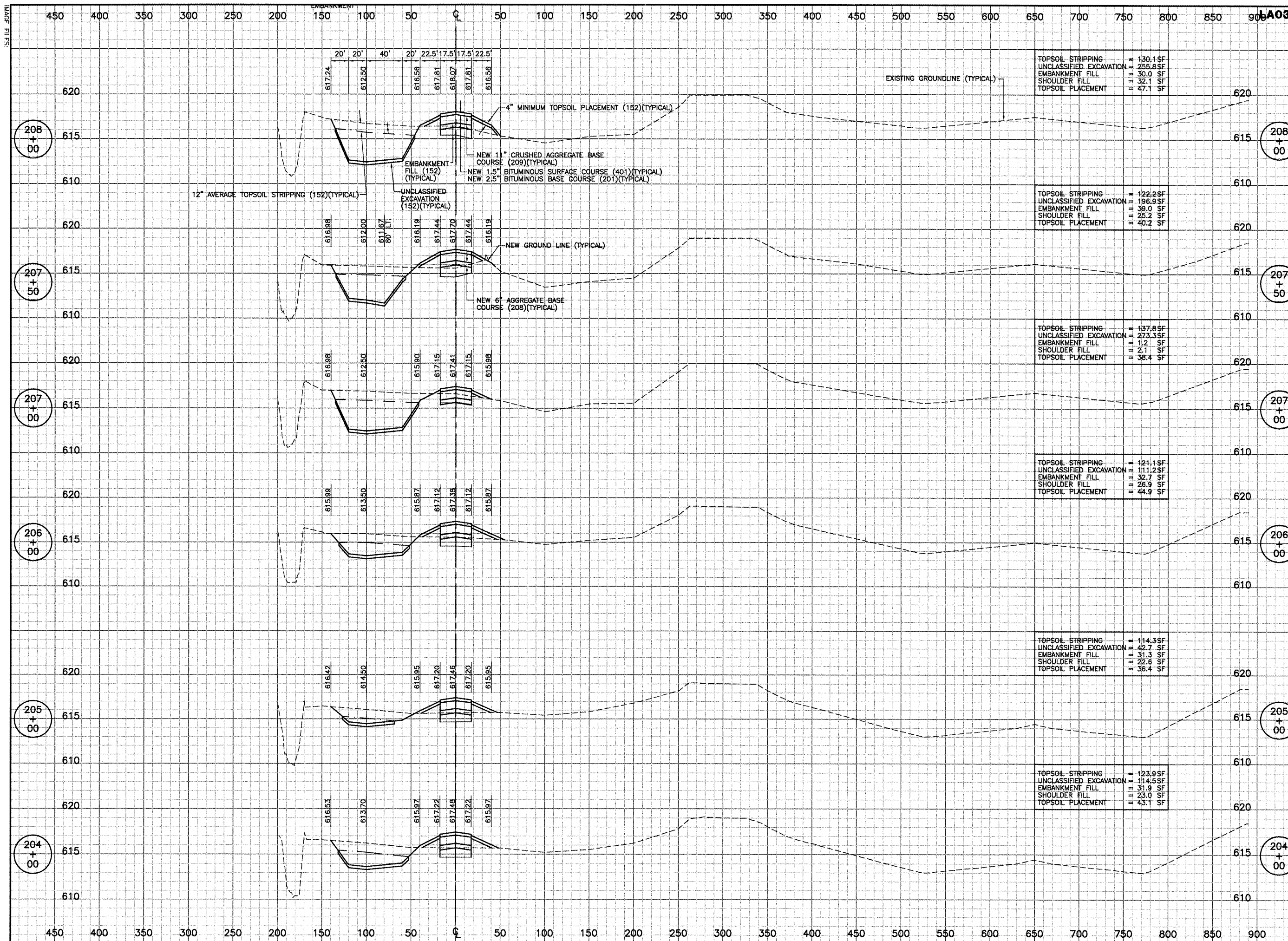
REVISIONS		
NUMBER	BY	DATE



LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 CROSS SECTIONS
 TAXIWAY B
 STA. 199+00 TO STA. 203+00

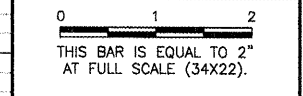
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DATE:	02/27/09
JOB No:	05297-02
IL. PROJECT: IGQ-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 26 OF 30 SHEETS	



LA038
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 SURVEY BOOK #
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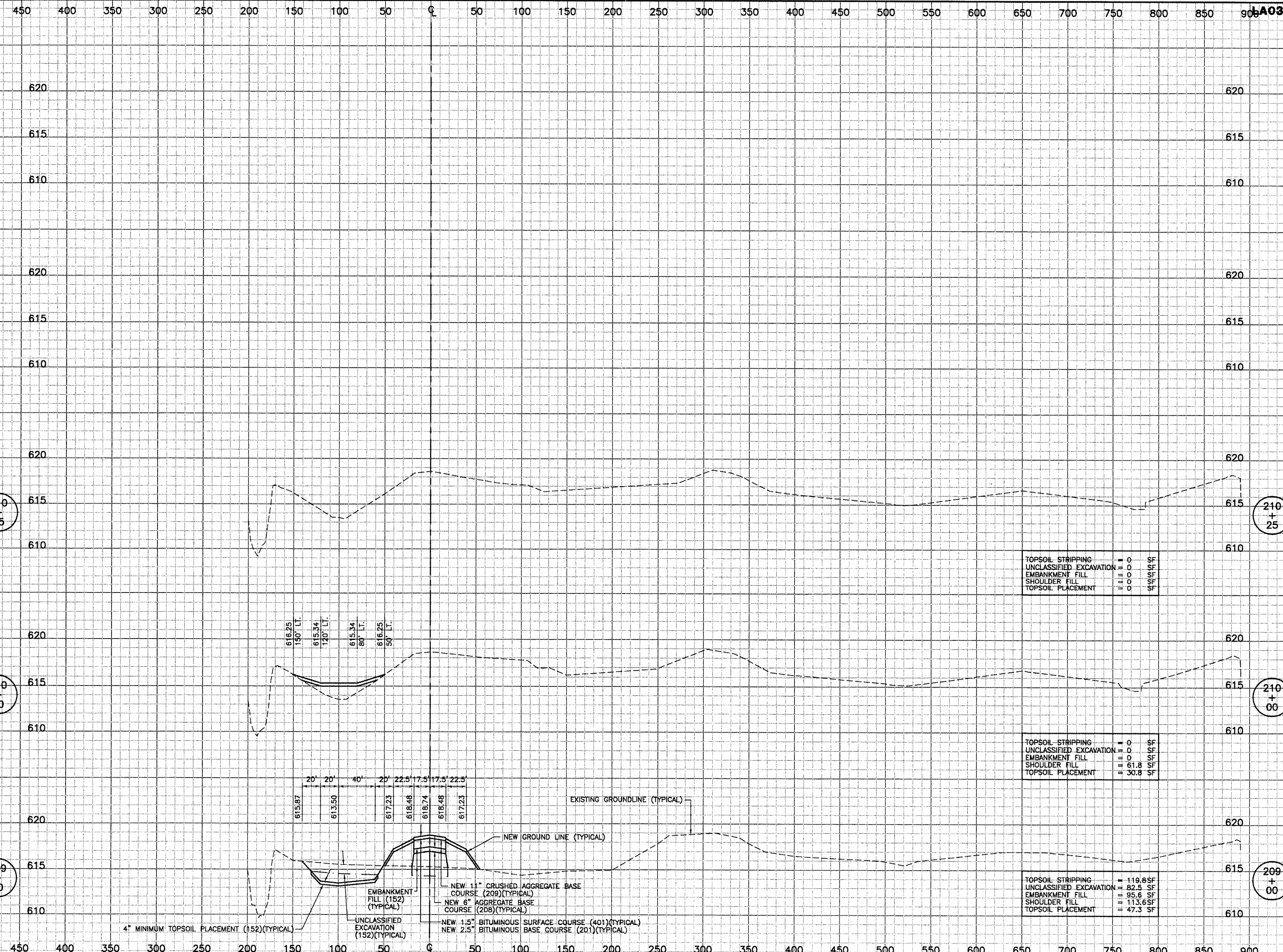


LANSING MUNICIPAL AIRPORT
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 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 CROSS SECTIONS
 TAXIWAY B
 STA. 204+00 TO STA. 208+00

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SHEET 27 OF 30 SHEETS	

MADE FILE

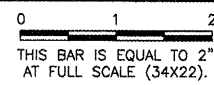


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LANSING MUNICIPAL AIRPORT
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 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

CROSS SECTIONS
 TAXIWAY B
 STA. 209+00 TO STA. 210+25

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IL PROJECT: IGQ-3681
 A.I.P. PROJECT: 3-17-0121-B26

MAJOR FILE

650 600 550 500 450 400 350 300 250 200 150 100 50 0 50 100 150 200 250 300 350 400 450 500 550 600 650 700

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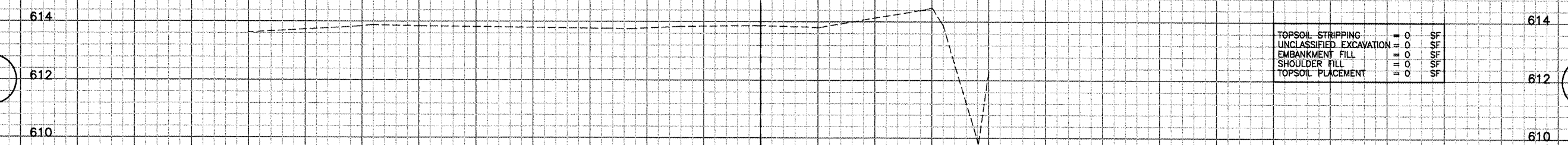
25
+
50

25
+
50

TOPSOIL STRIPPING	= 0	SF
UNCLASSIFIED EXCAVATION	= 0	SF
EMBANKMENT FILL	= 0	SF
SHOULDER FILL	= 0	SF
TOPSOIL PLACEMENT	= 0	SF

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0 1 2
 THIS BAR IS EQUAL TO 2"
 AT FULL SCALE (34X22).

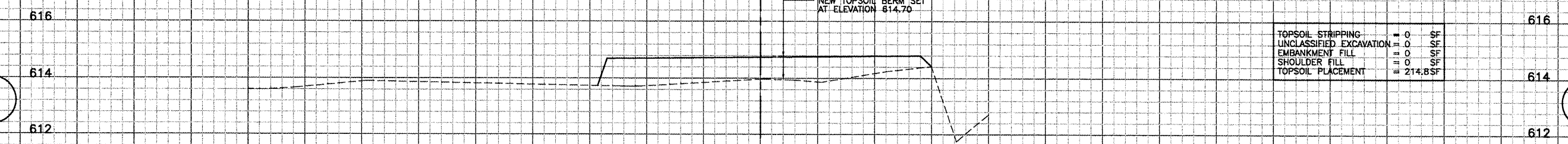


NEW TOPSOIL BERM SET
 AT ELEVATION 614.70

TOPSOIL STRIPPING	= 0	SF
UNCLASSIFIED EXCAVATION	= 0	SF
EMBANKMENT FILL	= 0	SF
SHOULDER FILL	= 0	SF
TOPSOIL PLACEMENT	= 214.8	SF

25
+
00

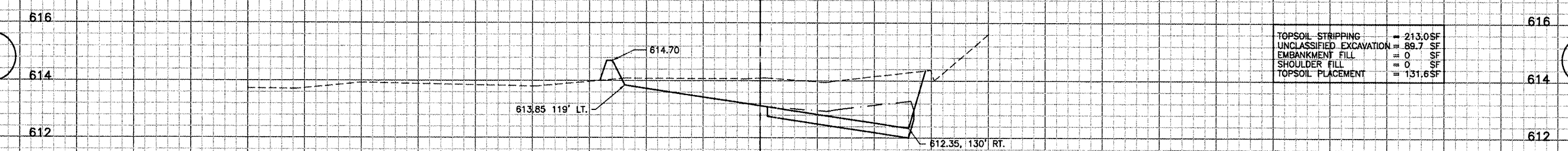
25
+
00



TOPSOIL STRIPPING	= 213.05	SF
UNCLASSIFIED EXCAVATION	= 89.7	SF
EMBANKMENT FILL	= 0	SF
SHOULDER FILL	= 0	SF
TOPSOIL PLACEMENT	= 131.6	SF

24
+
50

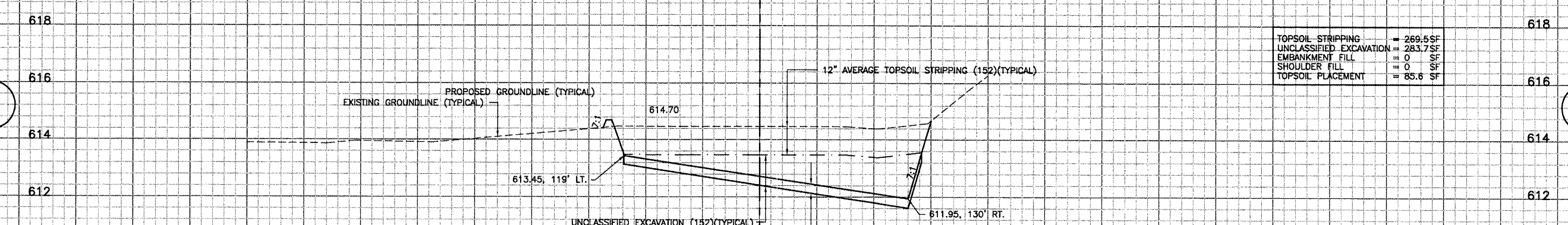
24
+
50



TOPSOIL STRIPPING	= 269.5	SF
UNCLASSIFIED EXCAVATION	= 283.7	SF
EMBANKMENT FILL	= 0	SF
SHOULDER FILL	= 0	SF
TOPSOIL PLACEMENT	= 85.6	SF

24
+
00

24
+
00



PROPOSED GROUNDLINE (TYPICAL)
 EXISTING GROUNDLINE (TYPICAL)

12" AVERAGE TOPSOIL STRIPPING (152)(TYPICAL)

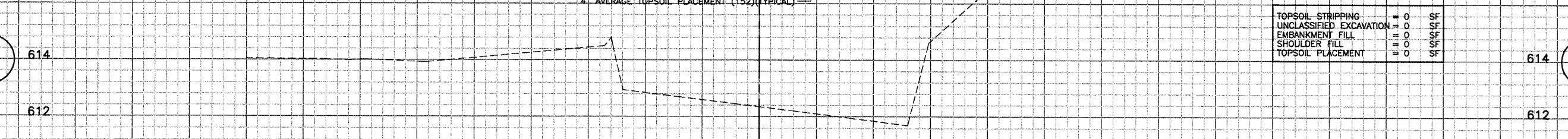
UNCLASSIFIED EXCAVATION (152)(TYPICAL)

4" AVERAGE TOPSOIL PLACEMENT (152)(TYPICAL)

TOPSOIL STRIPPING	= 0	SF
UNCLASSIFIED EXCAVATION	= 0	SF
EMBANKMENT FILL	= 0	SF
SHOULDER FILL	= 0	SF
TOPSOIL PLACEMENT	= 0	SF

23
+
50

23
+
50



LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36
 COMPENSATORY STORAGE EXPANSION
 STA. 23+50 TO STA. 25+50

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APPROVED BY:	ARM
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IL PROJECT: IGO-3681 A.I.P. PROJECT: 3-17-0121-B26	
SHEET 29 OF 30 SHEETS	

650 600 550 500 450 400 350 300 250 200 150 100 50 0 50 100 150 200 250 300 350 400 450 500 550 600 650 700

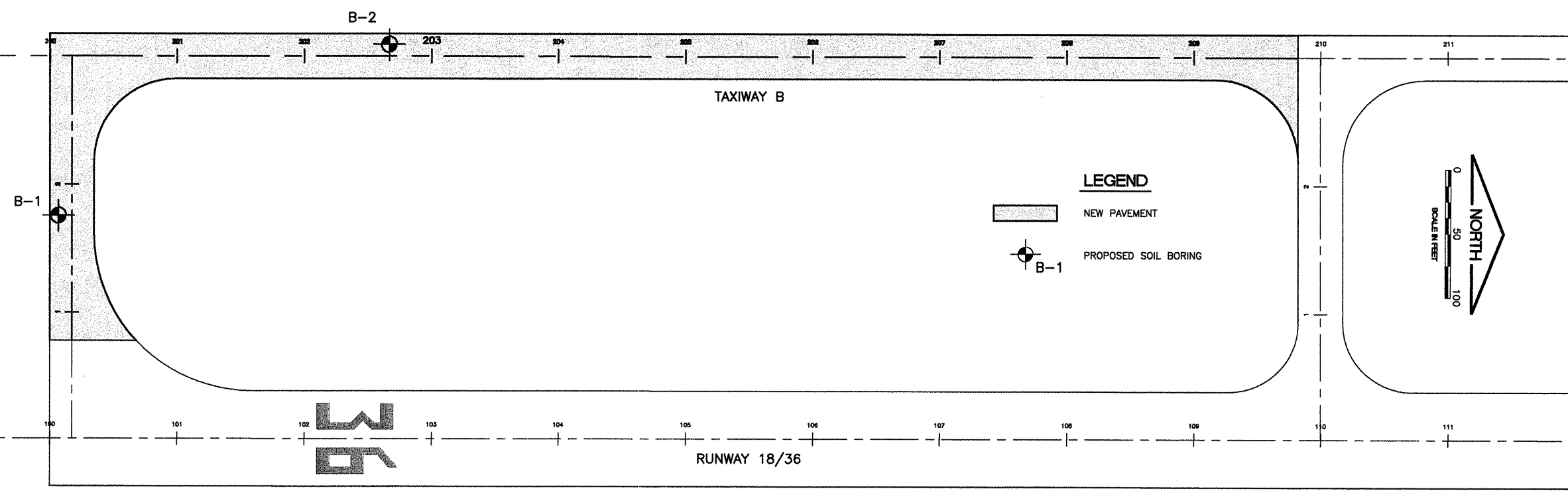
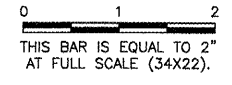
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 SURVEY BOOK #
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 tb.dwg

GEOTECHNICAL LAYOUT TABLE					
BORING NO.	LOCATION	NORTHING	EASTING	DEPTH	ELEVATION
B-1	199+89.4, 124.3' RT. CENTERLINE TAXIWAY B	1770564.7423	720443.1217	10'	613.87
B-2	202+49.6, 9.0' LT. CENTERLINE TAXIWAY B	1770824.0703	720308.0628	10'	615.54

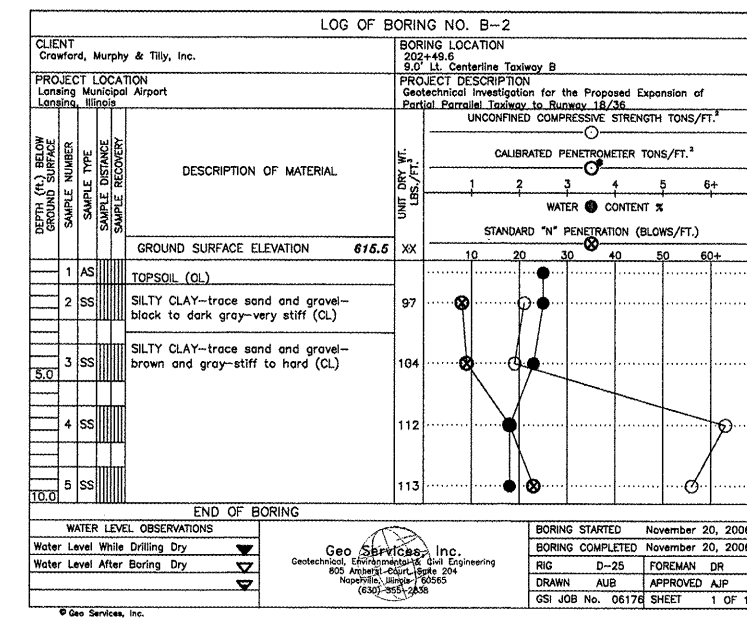
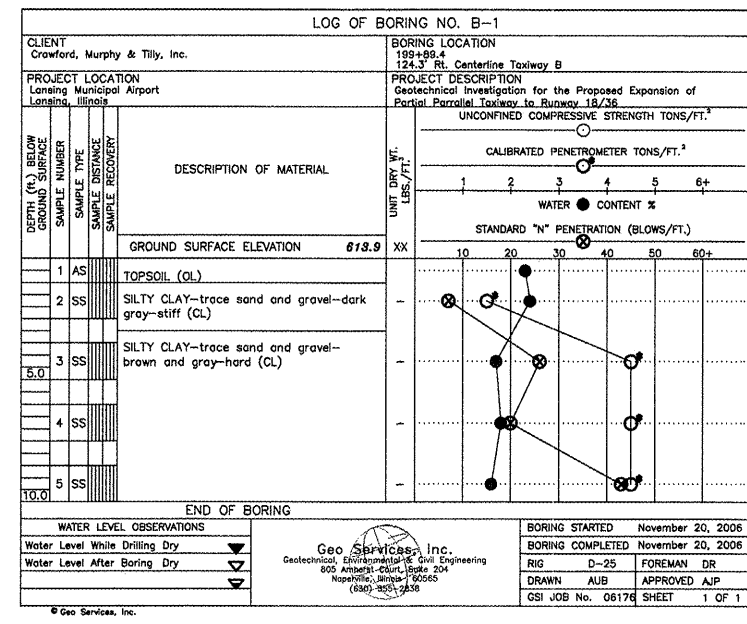
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LANSING MUNICIPAL AIRPORT
 LANSING, ILLINOIS
 PARTIAL PARALLEL TAXIWAY TO RUNWAY 18/36

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IL PROJECT: IGQ-3681	
A.I.P. PROJECT: 3-17-0121-B26	

SHEET 30 OF 30 SHEETS