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SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNITS	BID QUANTITY			CHANGE ORDERS
			TOTAL	AIP	NON-AIP	
SP-314	Contractor Furnished Insurance	LS	1			
P-101-1	Mobilization	LS	1			
P-102-1	Safety and Security	MO	6			
P-104-2	Demolition	LS	1			
P-151-1	Clearing & Grubbing	AC	16.0			
P-152-1	Unclassified Excavation	CY	32,502			
P-155-1	Lime Treated Subgrade, 9"	SY	1,935			
P-155-3	Lime	TON	46			
P-156-1	Temporary Air and Water Pollution, Soil Erosion and Siltation	LS	1			
P-209-1	Aggregate Base Course, 6"	SY	1,935			
P-401-1	Plant Mix Bituminous Pavements	TON	213			
P-602-1	Bituminous Prime Coat	GAL	484			
D-701-1	2-BBL, 60 Inch RCP	LF	927			
D-701-2	2-BBL, 66 Inch RCP	LF	1,037			
D-701-3	36 Inch RCP	LF	85			
D-701-4	24 Inch RCP	LF	58			
D-751-1	Storm Sewer Manholes	EA	6			
D-751-2	Inlet	EA	1			
D-752-2	Sloping Inlet (TxDOT Type S)	EA	2			
D-752-1	Headwall (TxDOT CH-11, Type A, for 2-BBL, 60 Inch RCP)	EA	1			
XXX	Gabion Outlet Structure	LS	1			
TxDOT-432	Type F stone Rip Rap	SY	493.0			
T-901-1	Seeding	SY	75,787			
T-904-1	Sodding	SY	9,125			
T-905-1	Topsoiling	SY	84,912			
T-908-1	Mulching	SY	84,912			
L-108	Trench and Backfill for DEB Cable, Complete	LF	2,300			
L-108	1C #2 600V Cable, installed in Conduit or Duct	LF	5,600			
L-108	1C #4 600V Cable, installed in Conduit or Duct	LF	4,500			
L-108	1C #6 600V Cable, installed in Conduit or Duct	LF	4,200			
L-108	1C #8 600V Cable, installed in Conduit or Duct	LF	1,100			
L-108	1C #10 600V Cable, installed in Conduit or Duct	LF	250			
L-108	3C #12 UF 600V Cable, DEB	LF	300			
L-108	6 Pair #19 600V Control Cable, installed in Conduit or Duct	LF	2,200			
L-108	12 Pair #19 600V Control Cable, DEB	LF	1,900			
L-108	RG-333 Coax Cable, DEB	LF	600			
L-108	Cable terminations, all stations, including MALSR P&C distribut	LS	1			
L-108	No. 6, 5KV, L-824C Cable installed in Duct or Conduit	LF	250			
L-108	No. 8 B5DC Stranded Counterpoise Wire with Ground Rods & C	LF	6,800			
L-110	1-Way, 2-Inch Schedule 40 PVC Conduit, DEB, including Trench	LF	1,800			
L-110	2-Way, 2-Inch Schedule 40 PVC Conduit, DEB, including Trench	LF	2,000			
L-110	2-Way, 2-Inch Schedule 40 PVC, Concrete Encased, including T	LF	30			
L-110	1-Way, 2-Inch Galvanized Rigid Steel Conduit Bore, Complete	LF	65			
L-110	L-867D Junction Can, Complete	EA	3			
L-110	L-867D Junction Can Plaza, 2 Cans, Complete	EA	11			
L-110	Adjust Existing Handhole, Complete	EA	1			
L-121	L-867B MIRL Base, including Concrete Encasement, Complete	EA	8			
L-121	L-861 MIRL Lens, Complete	EA	8			
L-121	Remove, Store, and Reinstall Existing MIRL Fixtures & Transfom	EA	8			
L-131	L-880 PAPI, Style A, 3 Lamps/Box, Complete	LS	2			
L-131	North PAPI Power Service, Complete	LS	1			
L-131	South PAPI Power Service, Complete	LS	1			
L-1005	Crushed Aggregate Walkways, Road Repair, or Turnaround, 6" C	SY	420			
L-1010	Remove Existing MALS EMT Station 10+00, including Foundatio	EA	1			
L-1010	Remove Existing MALS Aluminum LIR Station, MG-20, including	EA	2			
L-1010	Remove Existing RAIL Aluminum LIR Stations, MG-30 including	EA	4			
L-1010	Remove Existing RAIL Aluminum LIR Stations, MG-40 including	EA	1			
L-1010	Furnish and install MALS Distribution Panel, including Foundatio	EA	1			
L-1010	Furnish and install MALS EMT Station 10+00 (3 bars), including	EA	1			
L-1010	Furnish and install MALS MG-20 Fiberglass LIR Station, includin	EA	2			
L-1010	Furnish and install RAIL MG-20 Fiberglass LIR Stations, includin	EA	3			
L-1010	Furnish and install RAIL MG-30 Fiberglass LIR Stations, includin	EA	2			

	CUT	FILL
ESA	23276	28253
DITCH FILLING	2	2761
OUTLET	200	1489
TOTAL	23478	32503

CONTRACTOR'S SAFETY AND SECURITY REQUIREMENTS

SAFETY NOTES

- THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT IN THIS ACTIVE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES ON SAFETY SPECIFIED IN SPECIAL PROVISIONS OF THE CONTRACT DOCUMENTS AND ADVISORY CIRCULAR 150/15370-2C.
- ALL CONTRACTOR VEHICLES THAT ARE AUTHORIZED TO OPERATE N THE AIRPORT OUTSIDE OF THE DESIGNATED CONSTRUCTION AREA ARE LIMITED TO HAUL ROUTES AS SPECIFIED ON THE PLANS. CONTRACTOR VEHICLES IN THE ACTIVE AIRCRAFT OPERATIONS AREA (AOA) SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3' X 3' OR LARGER, ORANGE AND WHITE CHECKERBOARD FLAG, EACH CHECKERBOARD COLOR BEING 1' SQUARE, OR A FLASHING AMBER (YELLOW) DOME TYPE LIGHT, AND ESCORTED UNDER THE CONTROL OF THE CONTRACTOR MOBILE (TWO-WAY) RADIO OPERATOR ON THE JOB AT ALL TIMES. DURING DAYTIME OPERATIONS THE MOBILE OPERATOR SHALL BE IN CONSTANT CONTACT WITH ATCT GROUND CONTROL. ANY VEHICLE OPERATING IN THE ACTIVE AOA DURING THE HOURS OF DARKNESS SHOULD BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
- ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS AND INSTRUMENT APPROACH CLEAR ZONES SHALL DO SO UNDER THE DIRECT CONTROL OF A FLAGMAN WHO IS IN DIRECT (TWO-WAY) RADIO COMMUNICATION WITH THE GROUND CONTROLLER OF THE AIR TRAFFIC CONTROL TOWER, ON GROUND CONTROL FREQUENCY. THE FLAGMAN AND RADIO OPERATOR SHALL BE TRAINED AND INSTRUCTED BY AIRPORT MANAGEMENT IN THE REGULATIONS GOVERNING OPERATIONS ON THE AOA. THE FLAGMAN AND RADIO OPERATOR SHALL REMAIN WITH HIS VEHICLE AT ALL TIMES. CONTRACTOR SHALL FURNISH FLAGMEN EQUIPPED WITH TWO-WAY RADIOS AS WELL AS FURNISHING A TWO-WAY TO BE UTILIZED BY THE ENGINEER. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC.
- NO RUNWAY, TAXIWAY, APRON OR AIRPORT ROADWAY SHALL BE CLOSED OR THRESHOLD DISPLACED WITHOUT WRITTEN APPROVAL OF THE AIRPORT TRANSMITTED BY THE ENGINEER TO ENABLE NECESSARY "NOTICES TO AIRMEN" (NOTAM) OR ADVISORIES TO AIRPORT SERVICES OR TENANTS. A MINIMUM OF 48 HOURS NOTICE OF REQUESTED CLOSING SHALL BE DIRECTED TO THE ENGINEER, WHO WILL COORDINATE THE REQUEST WITH THE OWNER. DAILY COORDINATION BETWEEN THE AIR TRAFFIC GROUND CONTROLLER, ENGINEER'S REPRESENTATIVE AND CONTRACTOR'S SUPERINTENDENT SHALL BE MAINTAINED TO ESTABLISH THE LIMITS OF CONSTRUCTION FOR THAT DAY.
- ANY CONSTRUCTION ACTIVITY WITHIN 200' OF AN ACTIVE RUNWAY EDGE OR 50' FROM AN ACTIVE TAXIWAY EDGE OR OPEN EXCAVATIONS IN EXCESS OF 1 1/2' INCHES DEEP WITHIN THE ABOVE AREAS, WILL REQUIRE CLOSURE OF THE AFFECTED RUNWAY OR TAXIWAY, UNLESS OTHERWISE APPROVED BY THE OWNER. CLOSURE REQUIRED THE SAME PROVISIONS AS PARAGRAPH FOUR ABOVE. SEE PHASING NOTES SHEET G1.4 FOR ADDITIONAL CLOSURE REQUIREMENTS.
- STOCKPILED MATERIALS SHOULD BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENTS RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 12 MPH.
- OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF RESTRICTED VISIBILITY AND DARKNESS.
- DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEARS, PROPELLERS OR BEING INGESTED IN JET ENGINES SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS. IF THESE MATERIALS ARE OBSERVED TO BE ON ACTIVE AIRCRAFT MOVEMENT AREAS, THEY WILL BE REMOVED IMMEDIATELY AND OR CONTINUOUSLY DURING CONSTRUCTION. CONTRACTOR IS REQUIRED TO MAINTAIN ON SITE A POWER SWEEPER WITH VACUUM ABILITIES TO MAINTAIN THE AREA DEBRIS FREE. THIS REQUIREMENT IS OF THE UTMOST IMPORTANCE. ANY DAMAGE TO AIRCRAFT AS A RESULT OF NONCOMPLIANCE WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE ENGINEER WILL ARRANGE WITH THE OWNER FOR INSPECTION PRIOR TO OPENING FOR AIRCRAFT USE ANY RUNWAY OR TAXIWAY THAT HAS BEEN CLOSED FOR WORK, ON OR ADJACENT THERETO, OR THAT HAS BEEN USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR. PRIOR TO OPENING ANY RUNWAY OR TAXIWAY, AN INSPECTOR DULY AUTHORIZED BY THE CITY SHALL INSPECT AND APPROVE THE RUNWAY OR TAXIWAYS FOR USE.
- THE CONTRACTOR'S SECURITY OFFICER (C.S.O.) WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL STATE AND FEDERAL SAFETY REGULATIONS. PRIOR TO BEGINNING WORK, THE C.S.O. SHALL PROVIDE THE ENGINEER AN OUTLINE OF A PROPOSED SAFETY AND FIRE PROTECTION PLAN FOR ALL WORK CONTEMPLATED UNDER THE CONTRACT AND CONDUCT AT LEAST ONE SAFETY MEETING UNDER THE CONTRACT FOR EACH SHIFT AND REQUIRE THE ATTENDANCE OF ALL SUPERVISORS AT SUCH MEETINGS. COPIES OF THE MINUTES OF SAFETY MEETINGS SHALL BE KEPT ON FILE IN THE CONTRACTOR'S FIELD OFFICE AND AVAILABLE UPON DEMAND BY THE ENGINEER.

SECURITY NOTES

- GENERAL INTENT: IT IS INTENDED THAT THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE AIRPORT SECURITY PLAN AND WITH THE SECURITY REQUIREMENTS SPECIFIED HEREIN. THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER IN WRITING, THE NAME OF HIS "CONTRACTOR SECURITY OFFICER" (C.S.O.). THE C.S.O. SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS FOR THE CONTRACT. THE C.S.O. SHALL NOT BE THE PROJECT SUPERINTENDENT.
 - CONTRACTOR PERSONNEL SECURITY ORIENTATION: THE CONTRACTOR SECURITY OFFICER SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS AND, FROM TIME TO TIME, OTHER SECURITY PROVISIONS ADOPTED BY THE OWNER. ALL NEW CONTRACTOR EMPLOYEES SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREA. THE CONTRACTOR PERSONNEL SECURITY OFFICER SHALL BE REQUIRED TO ATTEND THE PRECONSTRUCTION MEETING BEFORE THE PROJECT BEGINS.
 - ACCESS TO THE SITE: CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON PLANS. NO OTHER ACCESS POINTS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER. ALL CONTRACTOR TRAFFIC AUTHORIZED TO ENTER THE SITE SHALL BE EXPERIENCED IN THE ROUTE OR GUIDED BY CONTRACTOR PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE, AND FOR THE OPERATIONS OF THE ACCESS GATE TO THE SITE. A CONTRACTOR'S FLAGMAN OR TRAFFIC CONTROL PERSON SHALL MONITOR AND COORDINATE ALL CONTRACTOR TRAFFIC AT THE ACCESS GATE WITH SECURITY. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR IMMEDIATE CLEAN UP OF ANY DEBRIS DEPOSITED ALONG THE ACCESS ROUTE AS A RESULT OF HIS CONSTRUCTION TRAFFIC. DIRECTION SIGNING AT THE ACCESS GATE ALONG THE DELIVERY ROUTE TO THE STORAGE AREA, PLANT SITE OR WORK SITE SHALL BE AS DIRECTED BY THE ENGINEER. ANY SIGN PLACED IN THE COURSE OF THE PROJECT SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE APPLICABLE FAA ADVISORY CIRCULAR, OR AS APPROVED IN WRITING FROM SHOP DRAWINGS SUBMITTED TO THE ENGINEER PRIOR TO SIGN PLACEMENT.
 - MATERIALS DELIVERY TO THE SITE: ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE WORK SITE WILL USE AS A DELIVERY ADDRESS, THE STREET NAME ASSIGNED TO THE ACCESS POINT AT THE CONTRACTOR'S STORAGE SITE AT THE AIRPORT.
 - CONSTRUCTION AREA LIMITS: THE LIMITS OF CONSTRUCTION, MATERIAL STORAGE AREAS, PLANT SITE, EQUIPMENT STORAGE AREA, PARKING AREA AND OTHER AREAS DEFINED AS REQUIRED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION SHALL BE MARKED BY THE CONTRACTOR. THE CONTRACTOR SHALL ERRECT AND MAINTAIN AROUND THE PERIMETER OF THESE AREAS SUITABLE FENCING, MARKING AND/OR WARNING DEVICES VISIBLE FOR DAY/NIGHT USE. TEMPORARY BARRICADES, FLAGGING AND FLASHING WARNING LIGHTS WILL BE REQUIRED AT CRITICAL ACCESS POINTS. TYPE OF MARKING AND WARNING DEVICES SHALL BE APPROVED BY THE OWNER, THROUGH THE ENGINEER.
 - IDENTIFICATION PERSONNEL: ALL EMPLOYEES OF CONTRACTOR OR SUBCONTRACTORS REQUIRING ACCESS TO THE CONSTRUCTION SITE ARE REQUIRED TO BE SUPPLIED WITH IDENTIFICATION BADGES, IDENTIFIABLE HARD HATS, OR OTHER IDENTIFICATION AS APPROVED BY THE ENGINEER, TO BE WORN AT ALL TIMES WHILE WITHIN THE AREA.
 - IDENTIFICATION VEHICLES: THE CONTRACTOR, THROUGH THE CONTRACTOR SECURITY OFFICER, SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE AND SHALL ISSUE A PERMIT TO EACH VEHICLE TO BE MADE AVAILABLE UPON DEMAND BY THE ENGINEER. VEHICLES DELIVERING MATERIALS TO THE CONTRACTOR'S SITE SHALL PICK UP A TEMPORARY PASS AT THE ACCESS GATE AND SURRENDER SAME UPON LEAVING THE GATE. VEHICLE PERMITS SHALL BE ASSIGNED IN A MANNER TO ASSURE POSITIVE IDENTIFICATION AT ALL TIMES.
- IN LIEU OF ISSUING INDIVIDUAL VEHICLE PERMITS, THE C.S.O. CAN REQUIRE EACH VEHICLE TO DISPLAY A LARGE COMPANY SIGN ON BOTH SIDES OF VEHICLE AND ADVISE SECURITY AND OPERATIONS THROUGH THE ENGINEER, WITH A CURRENT LIST OF COMPANIES AUTHORIZED TO ENTER AND CONDUCT WORK ON THE AIRPORT. CONTRACTOR EMPLOYEE PERSONAL VEHICLES SHALL BE RESTRICTED TO THE CONTRACTOR'S STORAGE AREA AND ARE NOT ALLOWED ON THE AIRFIELD AT ANY TIME.

XREF: XREF:

E701075/CADD/SHEETFILES

PROJECT NAME	RUNWAY 15 ESA GRADING
DRAWING TITLE	QUANTITIES
DRAWING NO.	G1.2
DATE	12/8/00
PROJECT NO.	ADDISON AIRPORT
BID NO.	E701075.00
URS NO.	K.H.
DESIGN	K.H.
DRAWN	K.H.
CHECKED	T.S.
SCALE	AS SHOWN
BY	
AUTH	
REVISIONS	
DATE	

URS Greiner Woodward Clyde
4100 Armon Center Boulevard, Suite 108
Fort Worth, TX 76155
www.urscorp.com