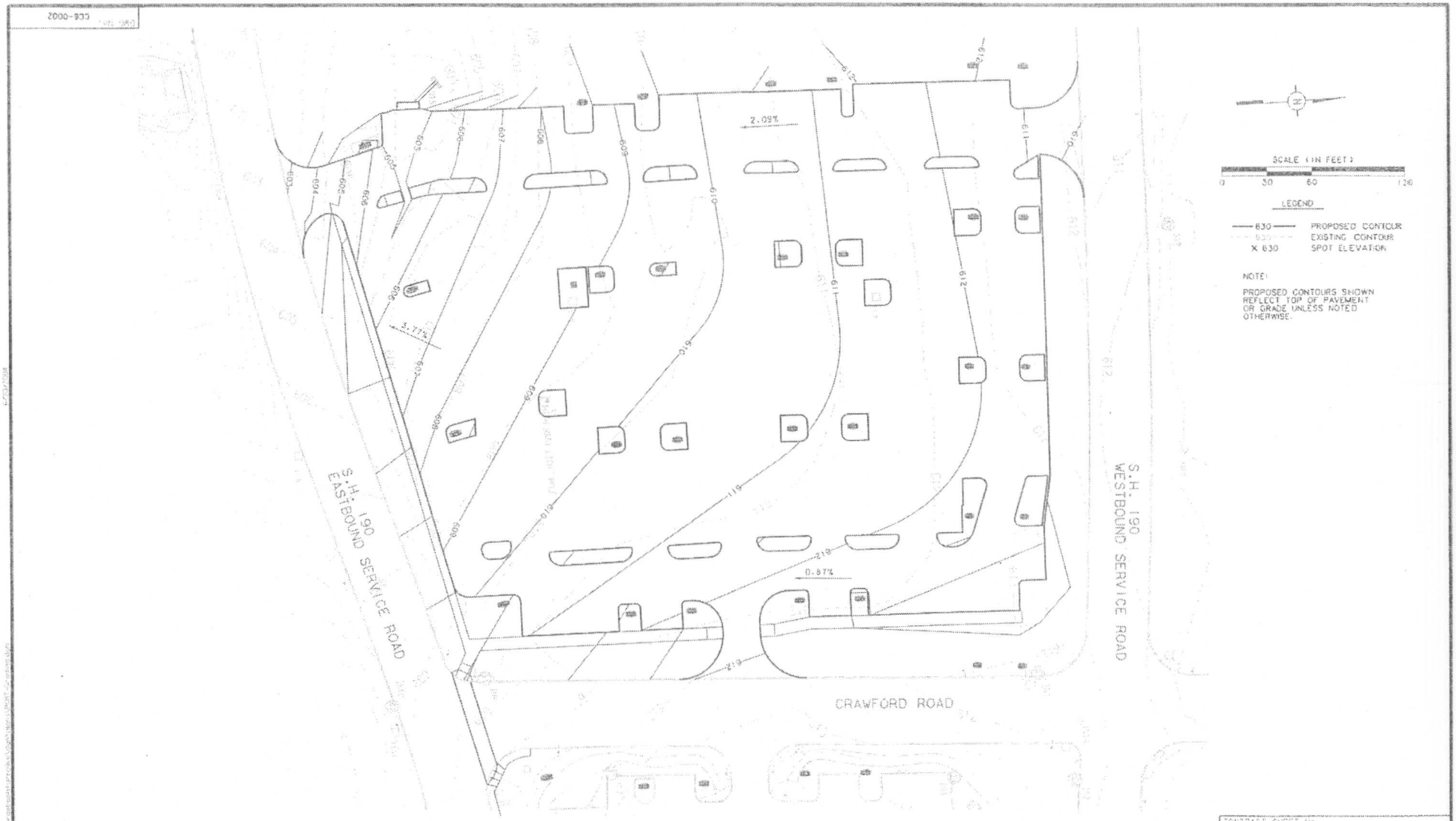
EXHIBIT C



REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III
57339
LICENSED PROFESSIONAL ENGINEER

BRIDGEFARMER & ASSOCIATES, INC
CONSULTING ENGINEERS
DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	AS SHOWN
DESIGN	K. HINTON
DRAWN	K. HINTON
CHECKED	S. FORSYTHE
IN CHARGE	S. FORSYTHE
DATE	JUNE 2008

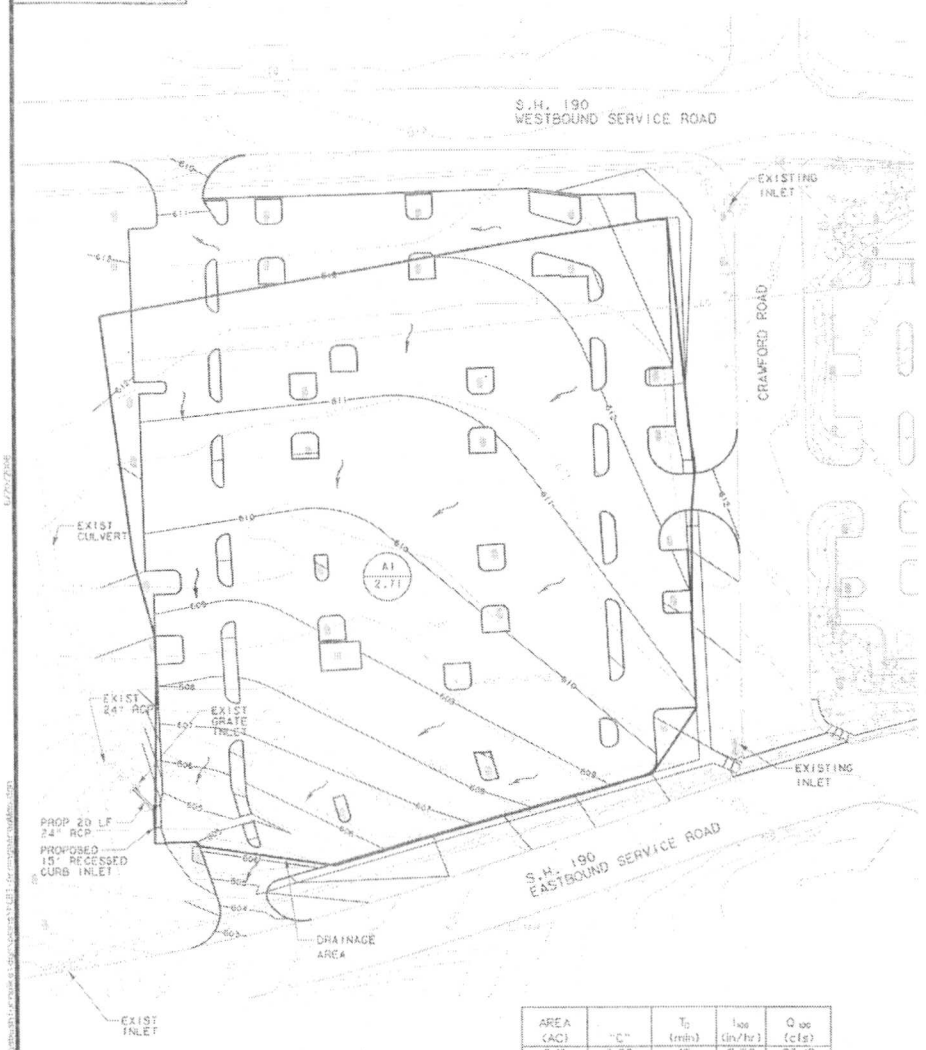
CONTRACT SHEET NO. 15 OF 52

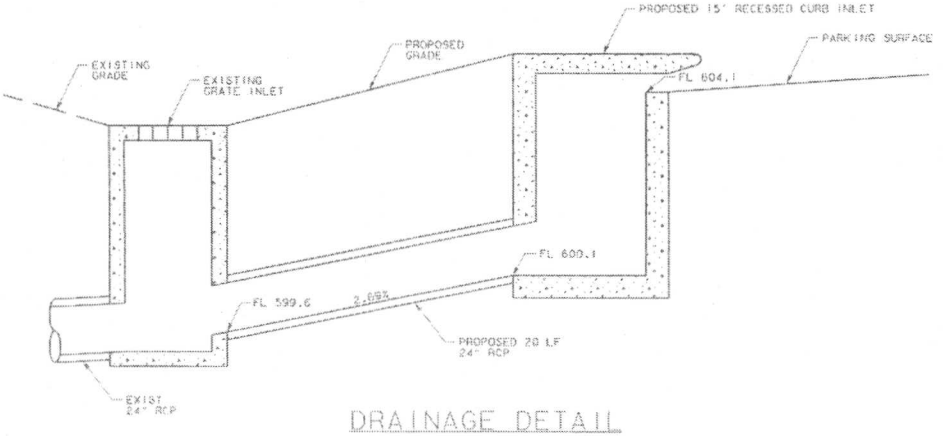
DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION

GRADING PLAN

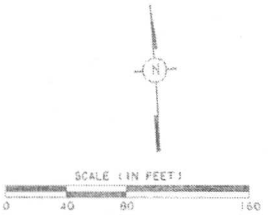
CONTRACT | PROJ. NO. CC6-0002 | REV.

EXHIBIT C





DRAINAGE DETAIL
N.T.S



AREA (AC)	"C"	T_0 (min)	I_{100} (in/hr)	Q_{100} (cfs)
3.15	0.90	10	8.58	25.18

NOTE:

1. PROP 15' RECESSED CURB INLET (SEE NCTCOG STD DWGS NO. 6030A, B, C AND D FOR DETAILS)

REV.	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV.	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING E. FORSYTHE II
57339
LICENSED PROFESSIONAL ENGINEER

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • MESQUITE

MOBILITY PROGRAMS DEVELOPMENT

DART

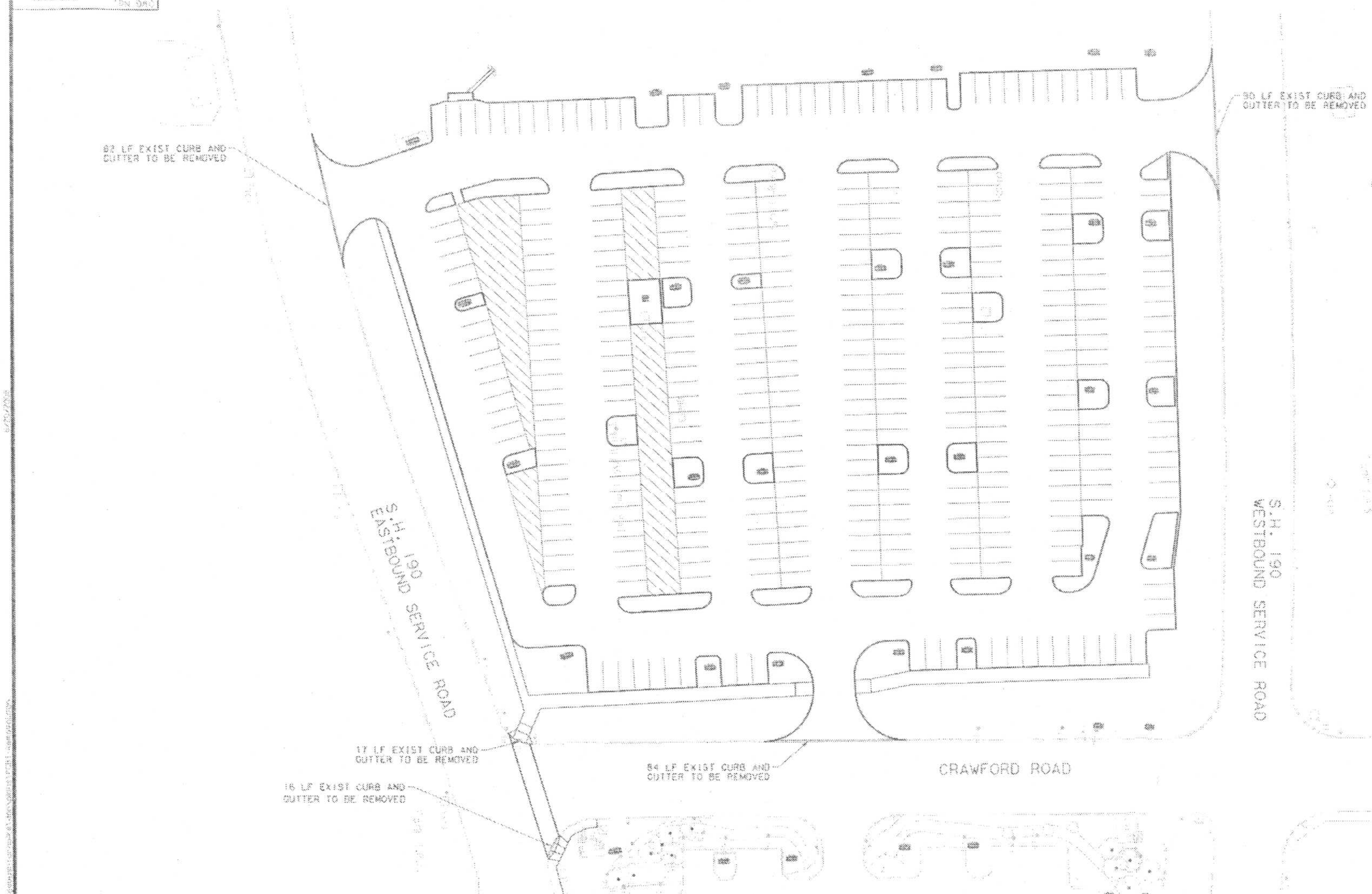
DESIGN	AS SHOWN
DRAWN	M. HINTON
CHECKED	M. HINTON
QUALITY CHECK	S. FORSYTHE
PROJECT MANAGER	S. FORSYTHE
DATE	JUNE 2005

CONTRACT SHEET NO. 16 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
DRAINAGE PLAN AND PROFILE

CONTRACT | DWG. NO. CCG-0003 | REV. D

EXHIBIT C



SCALE (IN FEET)
0 30 60 120

NOTES:

1. CONTRACTOR TO PROTECT ALL ELECTRICAL BOXES, BRIDGE COLUMNS, HIGH MAST ILLUMINATION, AND EXISTING SIGNS (UNLESS OTHERWISE NOTED).

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III
57339

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT
DART

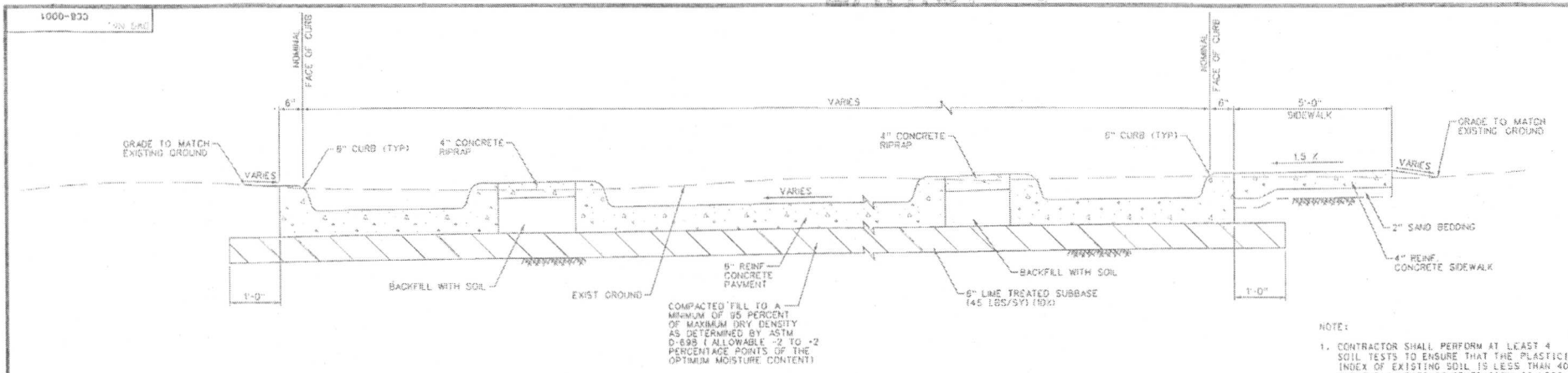
SCALE: AS SHOWN
DRAWN: K. HINTON
DESIGNED: K. HINTON
CHECKED: S. FORSYTHE
IN CHARGE: S. FORSYTHE
DATE: JUNE 2008

CONTRACT SHEET No. 17 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
DEMOLITION PLAN

CONTRACT
DWG No. CCT-0001
REV 0

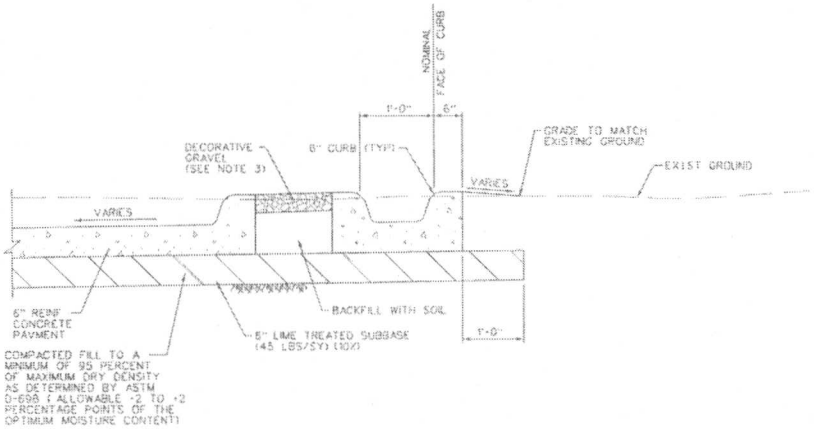
EXHIBIT C



A CC1-0001 SECTION
SCALE: N.T.S.

NOTE:

1. CONTRACTOR SHALL PERFORM AT LEAST 4 SOIL TESTS TO ENSURE THAT THE PLASTICITY INDEX OF EXISTING SOIL IS LESS THAN 40 AND THE SULFATE CONCENTRATION IS LESS THAN 3000 PPM BEFORE LIME APPLICATION.
2. CONTRACTOR SHALL CONTACT THE ENGINEER FOR A REVISED PAVEMENT DESIGN IF THE ABOVE REQUIREMENTS ARE NOT SATISFIED.
3. SEE LANDSCAPING PLANTING SHEETS FOR DECORATIVE GRAVEL DETAILS, LOCATIONS, ETC.



B CC1-0001 SECTION
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III 57339 REGISTERED PROFESSIONAL ENGINEER 06/30/08

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	AS SHOWN
DRAWN	M. HINTON
DESIGNED	M. HINTON
CHECKED	S. FORSYTHE
QA/QC	S. FORSYTHE
DATE	JUNE 2008

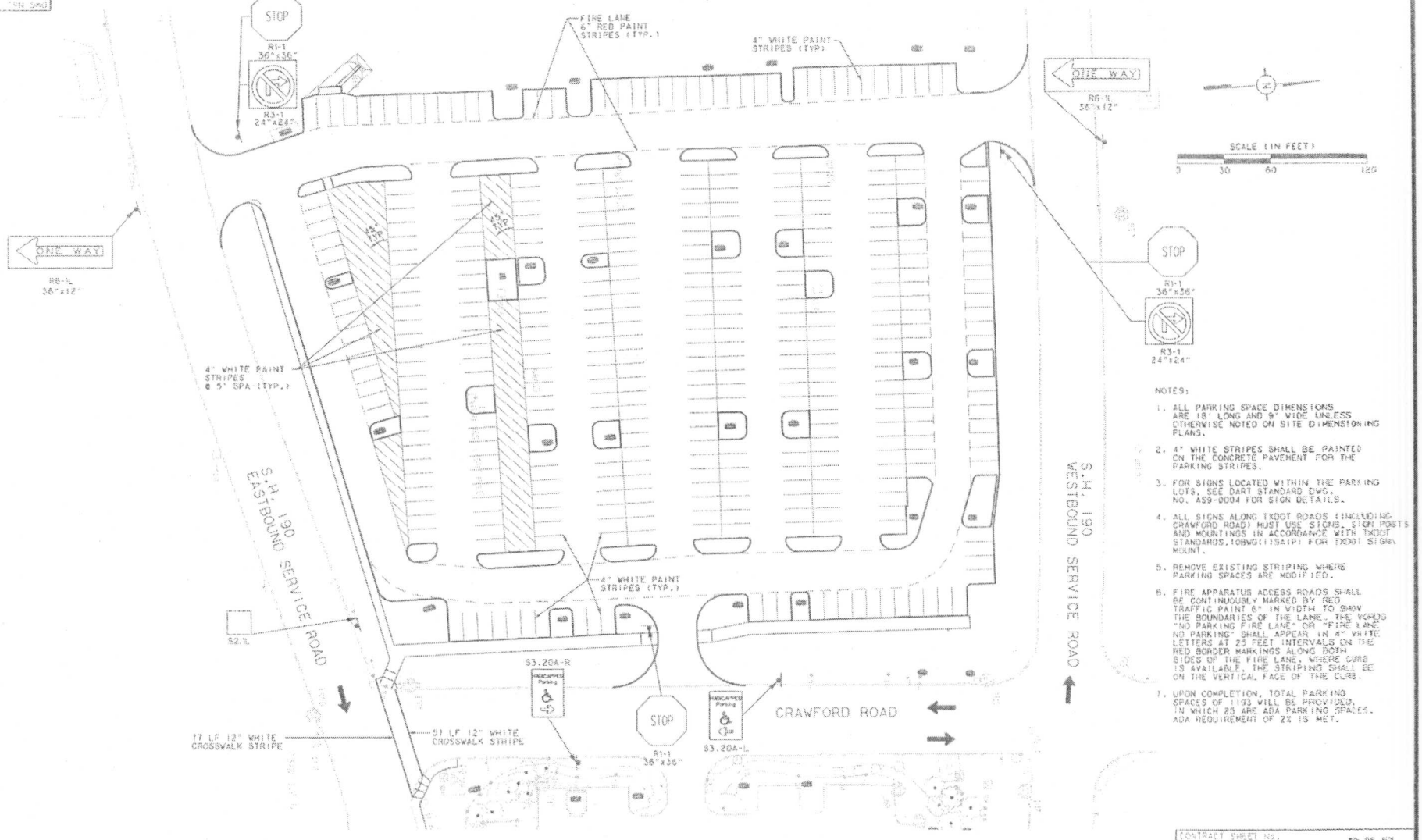
CONTRACT SHEET No. 18 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION

TYPICAL SECTIONS

CONTRACT	DWG NO.	REV
	CC8-0001	0

EXHIBIT C



NOTES:

1. ALL PARKING SPACE DIMENSIONS ARE 18' LONG AND 9' WIDE UNLESS OTHERWISE NOTED ON SITE DIMENSIONING PLANS.
2. 4" WHITE STRIPES SHALL BE PAINTED ON THE CONCRETE PAVEMENT FOR THE PARKING STRIPES.
3. FOR SIGNS LOCATED WITHIN THE PARKING LOTS, SEE DART STANDARD DWG. NO. AS9-0004 FOR SIGN DETAILS.
4. ALL SIGNS ALONG TXDOT ROADS (INCLUDING CRAWFORD ROAD) MUST USE SIGNS, SIGN POSTS AND MOUNTINGS IN ACCORDANCE WITH TXDOT STANDARDS. (OBWG(1)15A(P) FOR TXDOT SIGNS MOUNT.
5. REMOVE EXISTING STRIPING WHERE PARKING SPACES ARE MODIFIED.
6. FIRE APPARATUS ACCESS ROADS SHALL BE CONTINUOUSLY MARKED BY RED TRAFFIC PAINT 6" IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS "NO PARKING FIRE LANE" OR "FIRE LANE NO PARKING" SHALL APPEAR IN 4" WHITE LETTERS AT 25 FEET INTERVALS ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE. WHERE CURB IS AVAILABLE, THE STRIPING SHALL BE ON THE VERTICAL FACE OF THE CURB.
7. UPON COMPLETION, TOTAL PARKING SPACES OF 1193 WILL BE PROVIDED, IN WHICH 25 ARE ADA PARKING SPACES. ADA REQUIREMENT OF 2% IS MET.

CONTRACT SHEET NO. 19 OF 92

NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP

NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE, III
57339
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

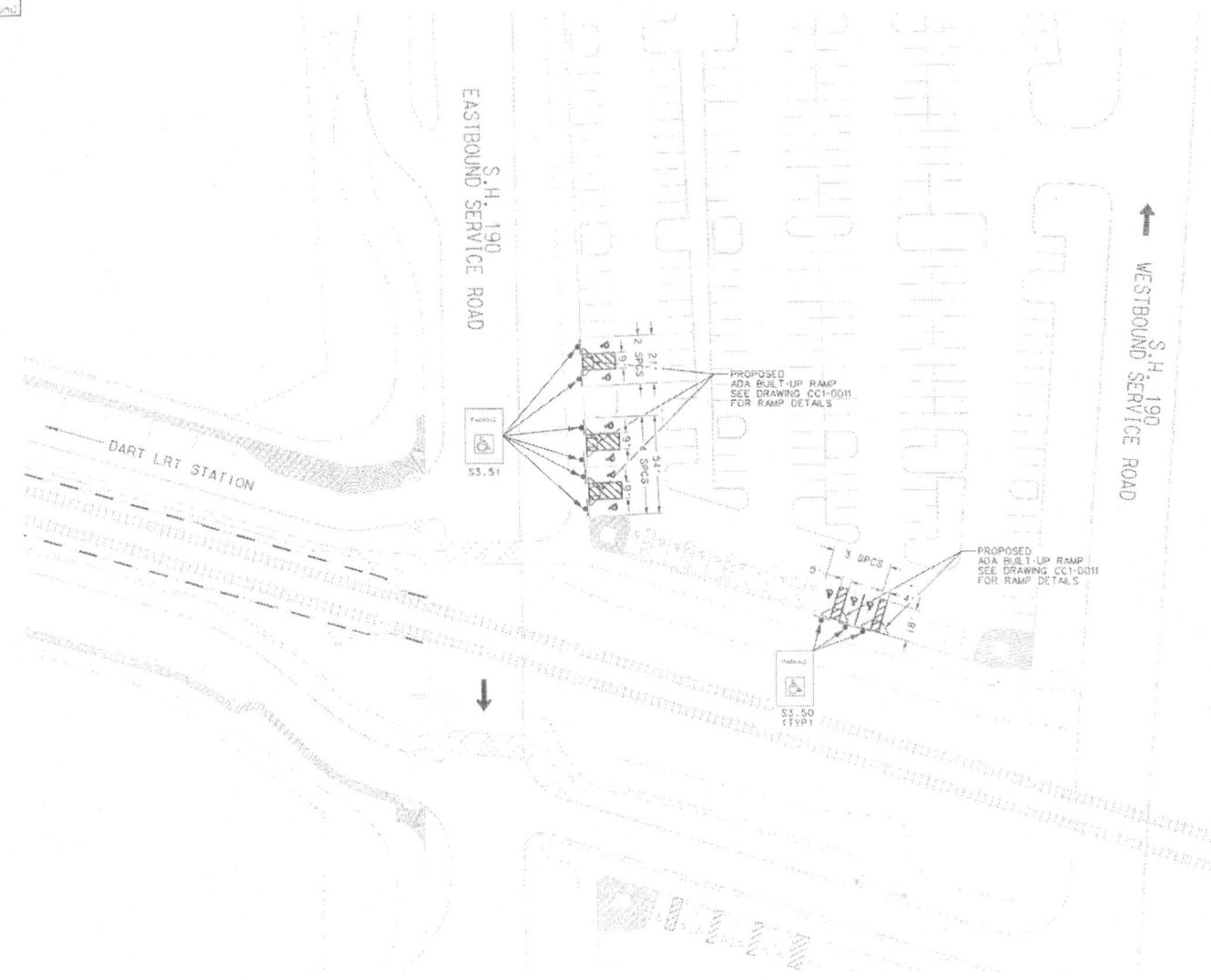
DART

SCALE	AS SHOWN
DESIGNED	K. HINTON
DRAWN	K. HINTON
CHECKED	S. FORSYTHE
QA/QC	S. FORSYTHE
DATE	JUNE 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
SITE SIGNAGE AND PAVEMENT MARKING PLAN SHEET 1 OF 2

CONTRACT | DWG. NO. WEJ-0901 | REV

EXHIBIT C



NOTES:

1. REMOVE EXISTING STRIPING WHERE PARKING SPACES ARE MODIFIED.
2. MATCH PROPOSED SIGNS WITH EXISTING SIGNS.
3. PROPOSED SIGNS ON THIS SHEET ARE TYPICALLY S3.50 UNLESS OTHERWISE NOTED.
4. SEE DART STANDARD DWG NO. AS9-0004 FOR SIGN DETAILS.
5. PROPOSED HANDICAP STRIPING SHALL BE BLUE.

CONTRACT SHEET NO. 20 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III
57339
LICENSED PROFESSIONAL ENGINEER
06-08

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

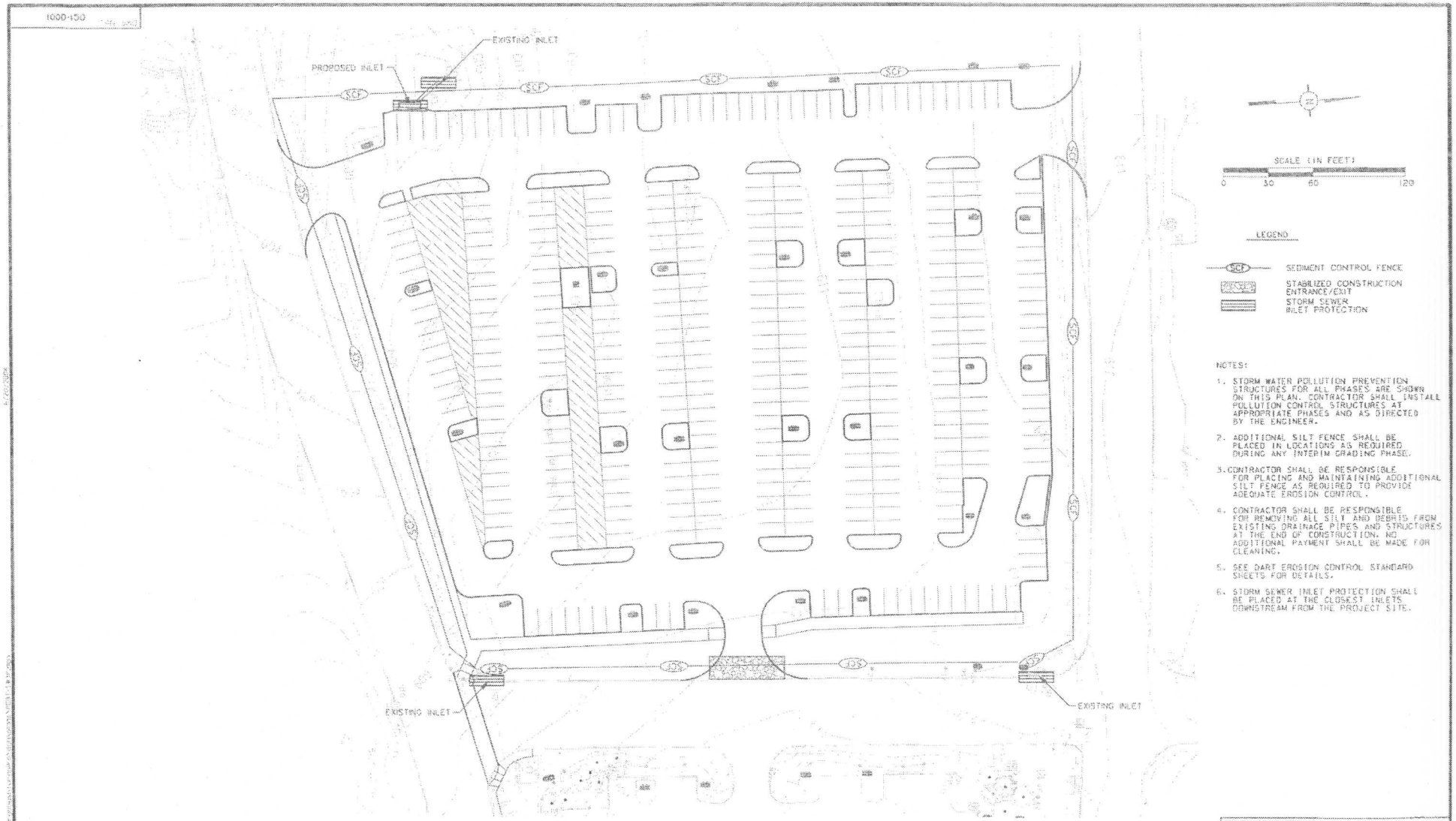
DART

SCALE	AS SHOWN
DRAWN	M. WINTON
DESIGNED	M. WINTON
CHECKED	S. FORSYTHE
P.E. SEAL	S. FORSYTHE
DATE	JUNE 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
SITE SIGNAGE AND PAVEMENT MARKING PLAN SHEET 2 OF 2

CONTRACT | DWG NO. WC3-0002 | REV 0

EXHIBIT C



NOTES:

1. STORM WATER POLLUTION PREVENTION STRUCTURES FOR ALL PHASES ARE SHOWN ON THIS PLAN. CONTRACTOR SHALL INSTALL POLLUTION CONTROL STRUCTURES AT APPROPRIATE PHASES AND AS DIRECTED BY THE ENGINEER.
2. ADDITIONAL SILT FENCE SHALL BE PLACED IN LOCATIONS AS REQUIRED DURING ANY INTERIM GRADING PHASE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING AND MAINTAINING ADDITIONAL SILT FENCE AS REQUIRED TO PROVIDE ADEQUATE EROSION CONTROL.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM EXISTING DRAINAGE PIPES AND STRUCTURES AT THE END OF CONSTRUCTION. NO ADDITIONAL PAYMENT SHALL BE MADE FOR CLEANING.
5. SEE DART EROSION CONTROL STANDARD SHEETS FOR DETAILS.
6. STORM SEWER INLET PROTECTION SHALL BE PLACED AT THE CLOSEST INLETS DOWNSTREAM FROM THE PROJECT SITE.

CONTRACT SHEET NO.: 21 OF 52

REV	DATE	DESCRIPTION	BY	END	CHK	APP

REV	DATE	DESCRIPTION	BY	END	CHK	APP

STERLING E. FORSYTHE III
57330
REGISTERED PROFESSIONAL ENGINEER

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS ◆ AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	AS SHOWN
DRAWN	K. HINTON
APPROVED	K. HINTON
CHECKED	S. FORSYTHE
ENGINEER	S. FORSYTHE
DATE	JUNE 2020

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
SEDIMENT AND EROSION CONTROL SHEET

CONTRACT	DWG. NO.	REV.
	001-00081	0

EXHIBIT C

2000-100 MIN. (PAT)

STORM WATER POLLUTION PREVENTION PLAN: PARK AND RIDE FACILITIES EXPANSION PGBT STATION

I. SITE DESCRIPTION

PROJECT DESCRIPTION: CONSTRUCTION OF ADDITIONAL APPROXIMATELY 379 PARKING SPACES FOR DART PGBT STATION.

PROJECT LIMITS: BOUNDED BY CRAWFORD STREET ON THE EAST, SH 190 WESTBOUND SERVICE ROAD ON THE NORTH, SH 190 EASTBOUND SERVICE ROAD ON THE SOUTH AND APPROXIMATELY 400 FT WEST OF CRAWFORD STREET, LOCATED WEST OF THE EXISTING PGBT PARKING FACILITY.

LATITUDE: 33° 00'14" LONGITUDE: 96° 42'10"

THE STANDARD INDUSTRIAL CLASSIFICATION FOR THIS PROJECT IS: 1771.

NATURE OF THE CONSTRUCTION ACTIVITY: CONSTRUCTION OF ADDITIONAL PARKING.

POTENTIAL POLLUTANTS AND SOURCES: POTENTIAL POLLUTANTS COULD INCLUDE BUT ARE NOT LIMITED TO SILT FROM CLEARING, GRUBBING, CONSTRUCTION EQUIPMENT, AND STOCKPILES, WASTE CONCRETE, RESIDUAL SOLIDS FROM CONCRETE TRUCK AND CHUTE CLEANOUT, CONCRETE CURING COMPOUNDS, FORM OIL, PAINT, AND PETROLEUM PRODUCTS, GREASE, OIL, GASOLINE AND OTHER AUTOMOTIVE FLUIDS LEAKING FROM VEHICLES AND CONSTRUCTION EQUIPMENT AT THE SITE ARE ALSO POTENTIAL POLLUTANTS. DEBRIS FROM THE DEMOLITION OF EXISTING FACILITIES AND PAVEMENT, THE WATER USED TO AID IN THE DEMOLITION OF EXISTING FACILITIES AND PAVEMENT, AND ANY OTHER CHEMICALS USED TO PREPARE THE SITE FOR CONSTRUCTION ARE POTENTIAL POLLUTANTS AND THE CONTRACTOR IS REQUIRED TO PROVIDE PLANS FOR APPROPRIATE CONTAINMENT.

INTENDED SEQUENCE OF MAJOR SITE ACTIVITIES: PREPARATION OF SITE: CLEARING AND GRUBBING, REMOVAL OF EXISTING PAVING AND DRIVEWAYS, GRADING

NOTE: CONTRACTOR WILL ATTACH ITS CONSTRUCTION SCHEDULE IF ITS ACTIVITIES WILL DIFFER IN ORDER OR SCOPE FROM THOSE PROVIDED ABOVE.

TOTAL PROJECT AREA:

OVERALL SITE: ~4.27 ACRES

SOILS LIKELY TO BE ENCOUNTERED DURING CONSTRUCTION: ERODIBILITY ("K") FACTORS

CLAY	0.32
FINE SANDY LOAM	0.32

RUNOFF COEFFICIENT: BEFORE CONSTRUCTION ~0.3, AFTER CONSTRUCTION ~0.9 .

NAME OF RECEIVING WATERS: SPRING CREEK

NAME OF ADJACENT WETLANDS: NO ADJACENT WETLANDS OR SURFACE WATERS.

II. EROSION AND SEDIMENT CONTROLS

THE EROSION AND SEDIMENT CONTROLS PRESENTED IN THE BASELINE SWP3 HAVE BEEN DESIGNED TO RETAIN SEDIMENT ON-SITE TO THE GREATEST EXTENT PRACTICABLE BASED ON THE ANTICIPATED TYPE AND SEQUENCE OF CONSTRUCTION ACTIVITIES, TOPOGRAPHY, SOIL TYPE, AND RAINFALL.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONTROLS ARE INSTALLED AS DEPICTED. A LOG INDICATING THE DATE OF BMP INSTALLATION SHALL BE INCLUDED IN THE SWP3. IF CONTROLS FAIL TO PERFORM AS ORIGINALLY INTENDED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP, PROPOSE, AND INSTALL ALTERNATE CONTROLS THAT WILL BETTER LIMIT THE OFF-SITE TRANSPORT OF SEDIMENT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ENSURING THAT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION MATERIALS ARE NOT TRANSFERRED FROM THE SITE.

SHOULD ANY DEWATERING OF SITE UTILITY TRENCHES BECOME NECESSARY DURING THE DURATION OF THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FILTERING DEVICES FOR THE PREVENTION OF DOWNSTREAM SILTATION IN ACCORDANCE WITH ALL NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), TCEQ, EPA, AND OTHER APPLICABLE REQUIREMENTS.

THE FOLLOWING TEMPORARY SOIL STABILIZATION PRACTICES WILL BE USED ON THE PROJECT SITE:

- SEEDING;
- MULCHING;
- SODDING;
- TREE PROTECTION;
- VEGETATIVE BUFFER STRIPS;
- EROSION CONTROL MATTING;
- WATTLES;
- SILT FENCING;
- PAVEMENT SWEEPING;
- THE CONTRACTOR MAY PROPOSE ADDITIONAL MEASURES TO IMPROVE STABILIZATION.

DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE EITHER TEMPORARILY OR PERMANENTLY CEASED WILL BE STABILIZED WITHIN 14 DAYS, UNLESS ACTIVITIES ARE SCHEDULED TO RESUME WITHIN 21 DAYS. ONE OF THE "TEMPORARY SOIL STABILIZATION PRACTICES" INDICATED ABOVE MUST BE USED. IN ADDITION, TRIANGULAR SEDIMENT FILTER DIKES AND STONE DITCH CHECKS SHALL BE PLACED AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON STANDARD DRAWING NO. 031-0002, IMMEDIATELY UPON COMPLETION OF ROUGH GRADING AND SHALL REMAIN IN PLACE UNTIL THE BEGINNING OF PAVEMENT SUBGRADING PREPARATION.

THE FOLLOWING PERMANENT SOIL STABILIZATION PRACTICES WILL BE USED ON THE PROJECT SITE:

- SEEDING;
- MULCHING OR HYDROMULCHING;
- SODDING;
- PLACEMENT OF RIPRAP;
- USE OF GABIONS;
- INSTALLATION OF GEOTECTILE FABRICS;
- GRASS/NATIVE VEGETATION;
- ASPHALT/CONCRETE PARKING LOTS, DRIVEWAYS, WALKWAYS, SLAB FOUNDATION, ENTRANCES, ETC.;
- CONCRETE CURBING;
- THE CONTRACTOR MAY PROPOSE ADDITIONAL MEASURES TO IMPROVE STABILIZATION.

THE CONTRACTOR MUST INDICATE THE LOCATION AND DATE OF INSTALLATION OF ANY SEEDING, MULCHING, SODDING, OR EROSION CONTROL MATTING ON THE SITE MAP.

THE FOLLOWING STRUCTURAL BEST MANAGEMENT PRACTICES (BMPS) WILL BE USED ON THE PROJECT SITE:

- SILT FENCE;
- STORM SEWER INLET PROTECTION;
- CONSTRUCTION ENTRANCE STABILIZATION;
- THE CONTRACTOR MAY PROPOSE ADDITIONAL MEASURES TO IMPROVE STABILIZATION.

NOTE: SEDIMENT BASINS ARE NOT APPROPRIATE BASED ON THE SIZE OF THIS SITE.

III. SITE HOUSEKEEPING BEST MANAGEMENT PRACTICES

TEMPORARY STOCKPILES: THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL STOCKPILES. STOCKPILES USED FOR THE TEMPORARY STORAGE OF TOPSOIL, FILL SOILS, OR OTHER MATERIAL WILL BE LOCATED IN SUCH A MANNER AS TO PREVENT EROSION BY STORM WATER. IN ADDITION, SILT FENCE OR OTHER FILTRATION DEVICE WILL BE PLACED DOWN GRADIENT TO PREVENT STORM WATER FROM TRANSPORTING THE MATERIAL OFF-SITE. THE CONTRACTOR MUST INCLUDE AND UPDATE AS NEEDED THE LOCATION OF STOCKPILES, BORROWS, AND FILLS MATERIAL OF BOTH ON-SITE AND OFF-SITE MATERIAL STORAGE AREAS ON THE SITE MAP CONTAINED IN THE SWP3.

OFF-SITE VEHICLE TRACKING: OFF-SITE TRACKING OF CONSTRUCTION SITE SEDIMENTS OR OTHER SUBSTANCES WILL BE MINIMIZED. STABILIZED CONSTRUCTION ENTRANCES AND FREQUENT SWEEPING OF ADJACENT STREETS WILL BE USED TO CONTROL AND MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENT AND DUST GENERATION.

HAZARDOUS AND REGULATED MATERIALS: ANY PRODUCTS OR MATERIALS IN THE FOLLOWING CATEGORIES WILL BE CONSIDERED AS POTENTIALLY HAZARDOUS OR TOXIC: FUELS, LUBRICANTS, SOLVENTS, PAINTS, FERTILIZERS, PESTICIDES, HERBICIDES, MORTAR MIXES, CONCRETE, OR CEMENT MIXES, ASPHALTIC PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, CONCRETE CURING COMPOUNDS AND ADDITIVES, AND OTHER UNSPECIFIED CHEMICALS. IF ANY OF THESE PRODUCTS, MATERIALS, OR CHEMICALS ARE MAINTAINED ON-SITE, THEY WILL BE STORED IN A MANNER THAT PROTECTS THEM FROM EXPOSURE TO STORM WATER AND FACILITATES CONTAINMENT. ABSORBENT MATERIALS WILL BE KEPT ON-SITE FOR USE IN THE EVENT OF A SPILL.

THE CONTRACTOR MUST MAINTAIN IN THE SWP3 A LIST OF HAZARDOUS AND/OR REGULATED MATERIAL KEPT ON-SITE. THE LOCATION OF ALL LISTED MATERIALS AND SPILL CLEAN-UP SUPPLIES SHALL BE SHOWN ON THE SITE MAP.

SPILLS: THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A PROTOCOL FOR HANDLING SPILLS OF HAZARDOUS AND/OR REGULATED PRODUCTS. THE SWP3 MUST CONTAIN A LOG OF SPILLS AT THE SITE AS WELL AS THE CONTACT INFORMATION OF APPROPRIATE PERSONNEL TO BE CALLED IN THE EVENT OF A SPILL.

IF A SPILL OF HAZARDOUS AND/OR REGULATED PRODUCTS, MATERIALS, OR CHEMICALS DOES OCCUR, THE CONTRACTOR SHALL, AFTER CONTAINMENT AND CLEANUP OF THE SPILL, NOTIFY ALL PROPER REGULATORY AUTHORITIES AS REQUIRED BY THE NATURE OF THE SPILL. THE CONTRACTOR SHALL FILE IN THE SWP3 A REPORT THAT DESCRIBES THE NATURE, QUANTITY, LOCATION, AND CAUSE OF THE SPILL, AND THE ACTIONS TAKEN TO PREVENT SIMILAR SPILLS IN THE FUTURE. THE AUTHORITY AND DART-5 CONTRACTING OFFICER SHALL BE CONTACTED IMMEDIATELY IN THE EVENT OF A SPILL.

STABILIZED CONSTRUCTION ENTRANCE: CONSTRUCTION TRAFFIC SHOULD ENTER AND EXIT THE SITE AT A STABILIZED CONSTRUCTION ENTRANCE.

CONSTRUCTION STORAGE: CONSTRUCTION STAGING AREAS, HAUL ROADS, JOBSITE OFFICE TRAILERS LOCATION, AND VEHICLE AND/OR EQUIPMENT PARKING AREAS THAT HAVE MORE THAN 25 VEHICLE TRIPS PER DAY WILL BE GRAVELED AS WELL AS MONITORED FOR VEHICLE TRACKING AND FUGITIVE DUST GENERATION.

CONTROL OF DUST AND DEBRIS: FUGITIVE DUST, INCLUDING DUST GENERATED FORM SOIL STABILIZATION OPERATIONS OR VEHICLE TRACKING, WILL BE CONTROLLED BY USING WATER. ANY EXCESS OR RUNOFF WATER USED TO CONTROL DUST WILL FIRST BE ROUTED TO A SEDIMENT TRAPPING DEVICE BEFORE LEAVING THE SITE. CONCRETE SLURRY RESULTING FROM CONCRETE SAWING SHALL BE REMOVED TO REDUCE DUST AND CONTAMINATION OF RUNOFF. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, THE SITE SHALL BE STABILIZED TO REDUCE DUST.

CONTROL OF SEDIMENTS: SEDIMENT THAT ACCUMULATES IN SEDIMENT TRAPPING DEVICES, SUCH AS SILT FENCE, INLET PROTECTION, AND DETENTION BASINS, SHALL BE REMOVED AS NECESSARY TO PREVENT STORM WATER FROM CARRYING IT OFF-SITE.

EQUIPMENT MAINTENANCE AND REPAIR: BOTH ON- AND OFF-SITE EQUIPMENT MAINTENANCE AND REPAIR AREAS MUST BE DESCRIBED IN THE SWP3 AND DEPICTED ON THE SITE MAP. ON-SITE ACTIVITIES WILL BE RESTRICTED TO AREAS THAT EITHER DRAIN INTO A SUMP PIT OR OTHER POLLUTANT-TRAPPING DEVICE, OR ARE NOT EXPOSED TO STORM WATER.

SOLID WASTE: THE CONTRACTOR MUST DEVELOP CONTROLS TO LIMIT THE OFF-SITE TRANSPORT OF LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION MATERIALS. ALL SUCH MATERIALS SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF THE PROJECT.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED ON-SITE IN PORTABLE UNITS PLACED AT LOCATIONS CONVENIENT FOR CONSTRUCTION SITE PERSONNEL. THE LOCATION OF PORTABLE UNITS WILL BE DEPICTED ON THE SITE MAP. PORTABLE UNITS WILL BE MAINTAINED AND SANITARY WASTE PROPERTY DISPOSED OF BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY LOCAL REGULATIONS.

IV. MAINTENANCE PROCEDURES

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF REPAIR, REPLACEMENT, OR CLEANING OF A STRUCTURAL PRACTICE OR CONTROL IS REQUIRED, IT WILL BE ADDRESSED AS SOON AS PRACTICABLE BEFORE THE NEXT EXPECTED RAINFALL EVENT, AND NO LATER THAN 7 DAYS FOLLOWING THE OBSERVATION. THE SWP3 SHALL CONTAIN A LOG OF ALL MAINTENANCE ACTIVITIES SUCH AS REPAIR, REPLACEMENT, CLEANING OF CONTROLS, AND THE EXECUTION OF BMPS I.E., SWEEP OF PARKING LOTS, ETC.

CONTRACT SHEET NO.: 22 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III 97339 LICENSED PROFESSIONAL ENGINEER

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

DART

DESIGNED	N.T.B.
DRAWN	M. HINTON
CHECKED	M. HINTON
QUALITY CK	D. FORSYTHE
PROJECT MGR	D. FORSYTHE
DATE	JUNE 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
STORM WATER POLLUTION PREVENTION PLAN NOTES
SHEET 1 OF 2

CONTRACT NO.: 001-0002 REV: 0

EXHIBIT C

0003-130 ON 940

STORM WATER POLLUTION PREVENTION PLAN: PARK AND RIDE FACILITIES EXPANSION PGBT STATION

LOCATIONS ON THE SITE ADJACENT TO SURFACE WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS, OR OFF-SITE AREAS SUBJECT TO VEHICLE TRACKING OF SEDIMENTS WILL RECEIVE THE HIGHEST MAINTENANCE PRIORITY, FOLLOWED BY THE PROTECTION OF DRAINAGE WAYS AND STORM SEWER INLETS AND OUTFALLS.

EROSION AND SEDIMENT CONTROLS THAT HAVE BEEN INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED BY THE CONTRACTOR IMMEDIATELY UPON DISCOVERY.

V. INSPECTION PROCEDURES

INSPECTIONS MUST BE CONDUCTED BY THE CONTRACTOR AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.

AS AN ALTERNATIVE TO THE ABOVE-DESCRIBED INSPECTION SCHEDULE, AN INSPECTION MUST OCCUR AT LEAST ONCE EVERY 7-CALENDAR DAYS. IF THIS ALTERNATIVE SCHEDULE IS DEVELOPED, THE INSPECTION MUST OCCUR ON A SPECIFICALLY DEFINED DAY, REGARDLESS OF WHETHER OR NOT THERE HAS BEEN A RAINFALL EVENT SINCE THE PREVIOUS INSPECTION.

THE CONTRACTOR'S ENVIRONMENTAL COMPLIANCE MANGER MUST INSPECT ALL DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT REACHED FINAL STABILIZATION. THE INSPECTION SHALL COVER ALL AREAS WHERE MATERIALS ARE STORED AND STOCKPILED, AREAS WHERE VEHICLES ENTER OR EXIT THE SITE, AND AREAS WHERE TEMPORARY AND PERMANENT SOIL STABILIZATION PRACTICES HAVE BEEN IMPLEMENT, BUT HAVE NOT YET REACHED FINAL STABILIZATION. ALL STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES AND BEST MANAGEMENT PRACTICES (BMP) SHALL BE INSPECTED TO ENSURE THAT THEY HAVE BEEN INSTALLED CORRECTLY, ARE OPERATING PROPERLY, AND ARE SUFFICIENT IN REDUCING SEDIMENTS FROM TRAVELING OFF-SITE.

SHOULD AN INSPECTION OR OTHER OBSERVATION INDICATE THAT A BMP HAS BEEN DAMAGED, USED INCORRECTLY, OR IS PERFORMING INADEQUATELY, IT WILL BE REPLACED OR MODIFIED AS SOON AS PRACTICABLE BEFORE THE NEXT EXPECTED RAINFALL EVENT, AND NO LATER THAN 7 DAYS FOLLOWING THE OBSERVATION. SHOULD THE INSTALLATION, MAINTENANCE, REPLACEMENT, OR REPAIR OF A BMP REQUIRE LONGER THAN THE PERMITTED 7 DAYS, A STATEMENT SHALL BE INCLUDED IN THE SWP3 THAT DESCRIBES THE SITUATION AND THE REASON WHY THE SITUATION CANNOT BE ADDRESSED WITHIN THE ALLOTTED TIME. A TEMPORARY SOLUTION OR MANAGEMENT PRACTICE THAT WILL TEMPORARY ADDRESS THE PROBLEM, AND AN IMPLEMENTATION SCHEDULE FOR THE BMP. THE CONTRACTOR SHALL INSTALL ALL CONTROLS AND CONDUCT MAINTENANCE AS IS NECESSARY TO ENSURE COMPLIANCE WITH THE TPDES GENERAL PERMIT NUMBER TXR150000.

THE CONTRACTOR, AS THE OPERATOR WITH DAY-TO-DAY CONTROL OF THE SITE, SHALL BE DELEGATED THE RESPONSIBILITY OF MAKING ALL MODIFICATIONS TO THE SWP3. MODIFICATIONS WILL BE BASED ON THE RESULTS OF INSPECTIONS AND ARE INTENDED TO BETTER PREVENT POLLUTANTS FROM BEING CARRIED OFF-SITE BY RUNOFF. REVISION OF THE SWP3 MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION.

A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAMES AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATES OF THE INSPECTION, AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWP3 WILL BE MADE AND RETAINED AS PART OF THE SWP3. MAJOR OBSERVATIONS WILL INCLUDE:

- THE LOCATIONS OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
- LOCATIONS OF BMPS THAT NEED TO BE MAINTAINED;
- LOCATIONS OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION; AND
- THE LOCATIONS WHERE ADDITIONAL BMPS ARE NEEDED.

ACTION TAKEN AS A RESULT OF INSPECTIONS MUST BE DESCRIBED AND RETAINED AS PART OF THE SWP3. REPORTS MUST IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE A REPORT DOES NOT IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE, THE REPORT MUST CONTAIN A CERTIFICATION THAT THE SITE IS IN COMPLIANCE WITH THE SWP3 AND THE TCEQ TPDES GENERAL PERMIT TXR150000. THE INSPECTION REPORT MUST BE SIGNED BY THE CONTRACTORS ENVIRONMENTAL COMPLIANCE MANAGER, WHO HAS BEEN DELEGATED SIGNATORY AUTHORITY AS REQUIRED IN 30 TAC §305.128 (RELATING TO SIGNATORIES TO REPORTS).

VI. NON-STORM WATER DISCHARGES

THE FOLLOWING INDICATED NON-STORM WATER DISCHARGES MIGHT OCCUR ON THIS PROJECT. CARE WILL BE EXERCISED TO PREVENT SEDIMENT OR OTHER POLLUTANTS FROM BEING RELEASED OFF-SITE AS PART OF THESE DISCHARGES.

- UNCONTAMINATED WATER USED TO CONTROL DUST;
- WATER FOR REMOVING DIRT FROM VEHICLES OR EQUIPMENT TO REDUCE OFF-SITE TRACKING;
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS (NOT INCLUDING HYPERCHLORINATED WATER);
- IRRIGATION SYSTEM DRAINAGE.

THE FOLLOWING NON-STORM WATER DISCHARGES WILL NOT BE RELEASED FROM THE CONSTRUCTION SITE. THEY WILL BE DISCHARGED ON-SITE INTO A SUMP PIT, SEDIMENT TRAP, OR OTHERWISE INTO AN AREA WITH PROTECTED STORM SEWER INLETS.

- CONCRETE TRUCK MIXER AND DELIVERY CHUTE WASH;
- CONCRETE SLURRY FROM PAVEMENT SAWING, CUTTING, OR GRIND;
- DISCHARGE FROM GENERAL SITE DEWATERING ACTIVITIES. THIS INCLUDES STORM WATER OR RUNOFF ACCUMULATED IN TEMPORARY LOW SPOTS OR OPEN EXCAVATIONS.

VII. THREATENED AND ENDANGERED SPECIES INFORMATION

THE PROPOSED PROJECT IS NOT EXPECTED TO JEOPARDIZE THE CONTINUED EXISTENCE OF ANY FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES. IT IS ALSO NOT EXPECTED TO DESTROY OR ADVERSELY MODIFY THEIR CRITICAL HABITAT. NO THREATENED, ENDANGERED SPECIES OR CRITICAL HABITAT EXISTS WITHIN, OR IN PROXIMITY TO, THE PROPOSED CONSTRUCTION ACTIVITY OF SAID PROJECT.

VIII. HISTORIC PROPERTIES INFORMATION

THE HISTORICAL PROPERTIES DATABASE (WWW.NR.NPS.GOV) WAS QUERIED IN ORDER TO DETERMINE A HISTORICAL VALUE ASSESSMENT PER THE REQUIREMENTS OF SECTION 106 OF THE HISTORICAL PRESERVATION ACT. THE PROPERTIES INVOLVED IN THIS PROJECT DID NOT INDICATE HISTORICAL SIGNIFICANCE.

IX. BASELINE PLAN

THIS "STORM WATER POLLUTION PREVENTION PLAN" (SWP3) ALONG WITH THE TECHNICAL SPECIFICATIONS AND DRAWINGS LISTED BELOW, CONSTITUENTS THE ENTIRE BASELINE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT.

1. SPECIFICATION SECTION 01560, "ENVIRONMENTAL PROTECTION";
2. SPECIFICATION SECTION 01562, "SOIL EROSION AND SEDIMENT CONTROL";
3. TEMPORARY EROSION AND SEDIMENT CONTROL PLAN SHEETS;
4. STANDARD EROSION AND SEDIMENT CONTROL DETAILS;
5. LETTER OF DELEGATION.

THIS BASELINE SWP3 MUST BE REVISED AND UPDATED BY THE CONTRACTOR PER REGULATORY REQUIREMENTS, AS NECESSARY, TO REFLECT THE PROGRESS AND STAGING OF CONSTRUCTION ON THIS PROJECT. THE LETTER OF DELEGATION (OF CHANGE) DELEGATES AUTHORITY AND RESPONSIBILITY TO THE CONTRACTOR TO MAKE CHANGES TO THE BASELINE SWP3.

THE CONTRACTOR SHALL ENSURE THAT THE SWP3 INCLUDES ALL ITEMS REQUIRED BY THE TCEQ TPDES GENERAL PERMIT TXR150000, PART III, SECTION F. THIS INCLUDES ADDING AND UPDATING THE FOLLOWING ITEMS (WHEN APPLICABLE) ON THE SITE MAP:

1. OFFSITE BORROW AND FILL AREAS;
2. DISTURBED AREAS AND NON-DISTURBED AREAS;
3. EQUIPMENT STORAGE AREAS;
4. ONSITE WASTE AND TRASH STORAGES;
5. FUELING AREAS.

UPON COMPLETION OF FINAL GRADING, DISTURBED AREAS SHALL BE REVEGETATED WITH AN APPROPRIATE SEASONAL SEED MIX. BMPS, SUCH AS SILT FENCE AND INLET PROTECTION, SHALL REMAIN IN PLACE UNTIL VEGETATION HAS REACHED 70% OF PRECONSTRUCTION LEVELS.

X. CERTIFICATION STATEMENT

IN ACCORDANCE WITH THE SIGNATORY REQUIREMENTS OF THE TPDES GENERAL PERMIT NUMBER TXR150000, WHICH AUTHORIZES STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, THE FOLLOWING CERTIFICATION STATEMENT IS EXECUTED BY THE INDIVIDUAL WHOSE NAME, TITLE, AND SIGNATURE IS AFFIXED BELOW. THIS CERTIFICATION IS VALID ONLY FOR THE BASELINE PLAN DOCUMENTS LISTED IN PART IX ABOVE OR AS OTHERWISE REVISED BY DART.

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

Kooroush Olyai, P.E. — NAME
7/1/2008 — DATE
Assistant Vice President — TITLE
SIGNATURE

CONTRACT SHEET NO. 23 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STATE OF TEXAS — STERLING C. FORSYTHE III — 57339 — LICENSED PROFESSIONAL ENGINEER

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

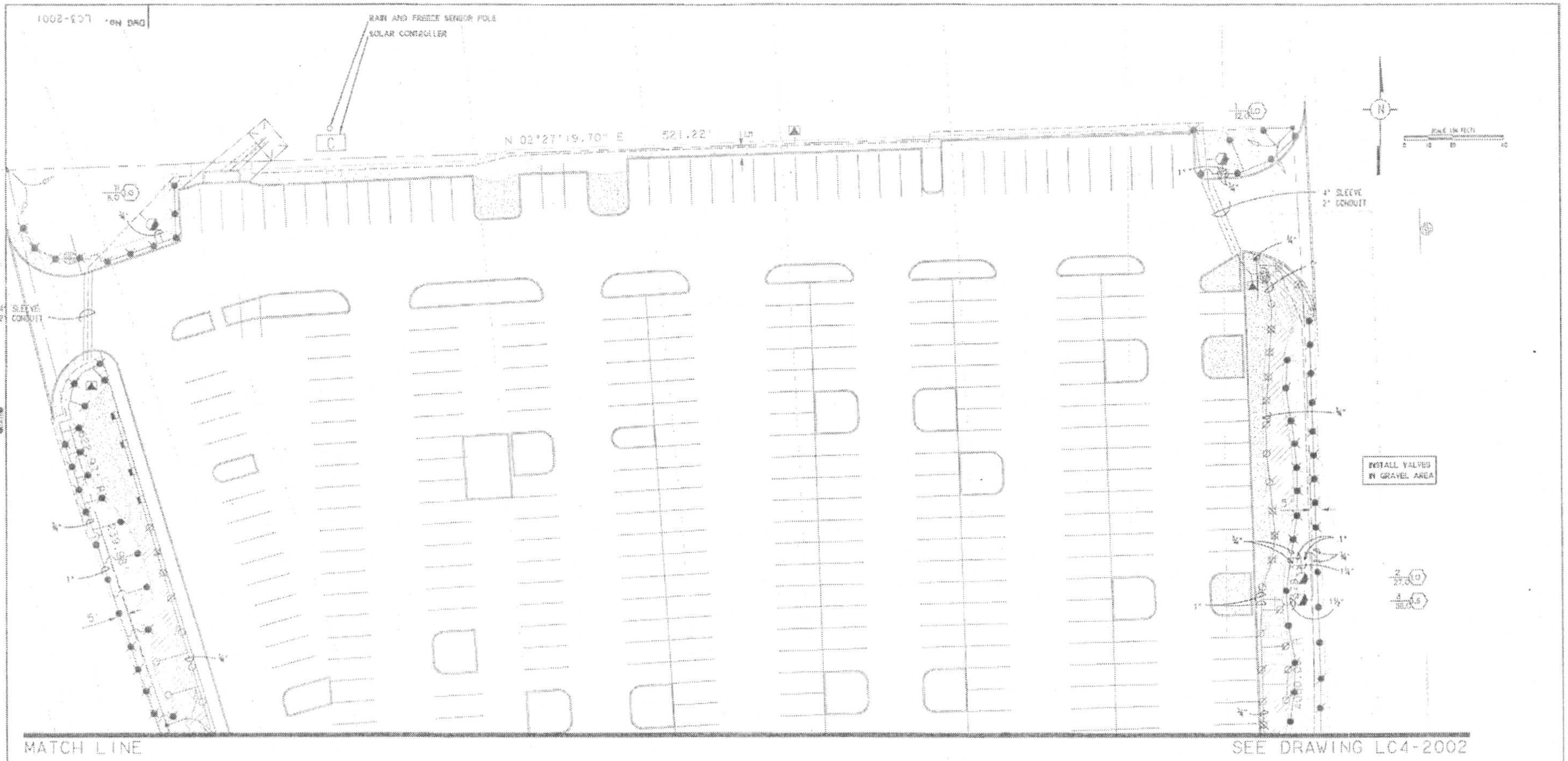
DART

DES.	K.T.O.
DRAWN	W. HINTON
CHECKED	W. HINTON
QUANT.	S. FORSYTHE
S. CHECK	S. FORSYTHE
DATE	JUNE 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
STORM WATER POLLUTION PREVENTION PLAN NOTES
SHEET 2 OF 2

CONTRACT — DWG. NO. 0003-0003 — REV. 0

EXHIBIT C



NOTES:

1. REFER TO DRAWINGS LS1-0010 TO LS1-0014 FOR IRRIGATION LEGEND AND DETAILS.
2. SLEEVES MUST BE PLACED PRIOR TO PAVING.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP	REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

SCOTT E. HORNICK 6696 — 06-20-08

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS

CAYE COOK & ASSOCIATES

MOBILITY PROGRAMS DEVELOPMENT — DART

SCALE	AS SHOWN
DRAWN	S. HORNICK
DESIGNED	S. HORNICK
CHECKED	S. HORNICK
IN CHARGE	S. FORSYTHE
DATE	APR 2008

CONTRACT SHEET No. 24 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
PGBT STATION IRRIGATION PLAN
SHEET 1 OF 2

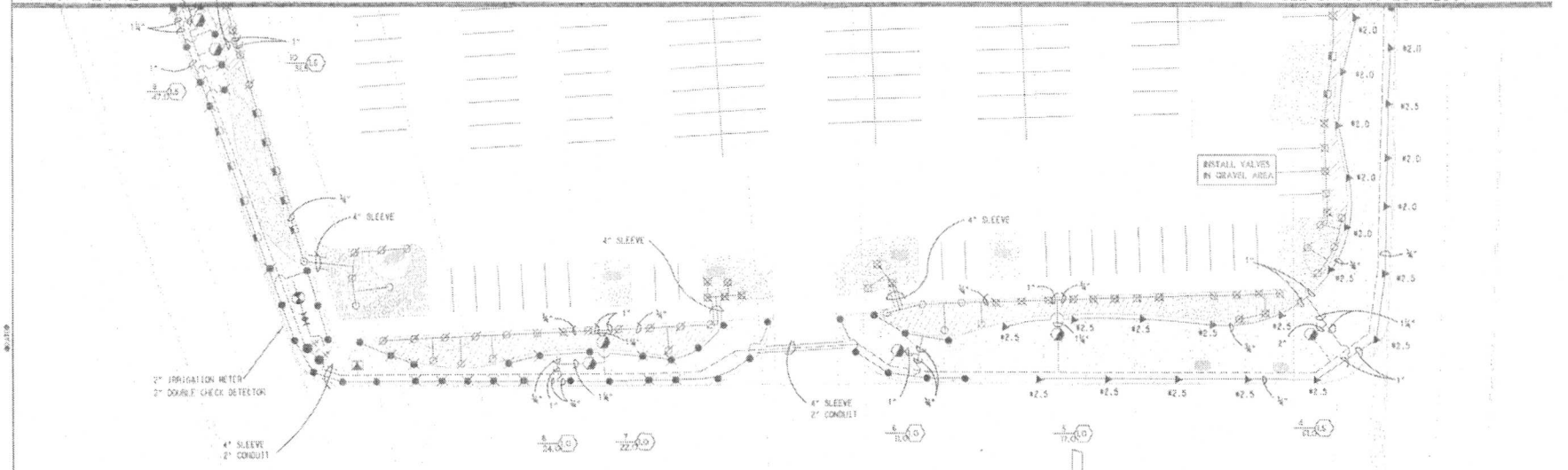
CONTRACT — DWG No. LC3-2001 — REV 0

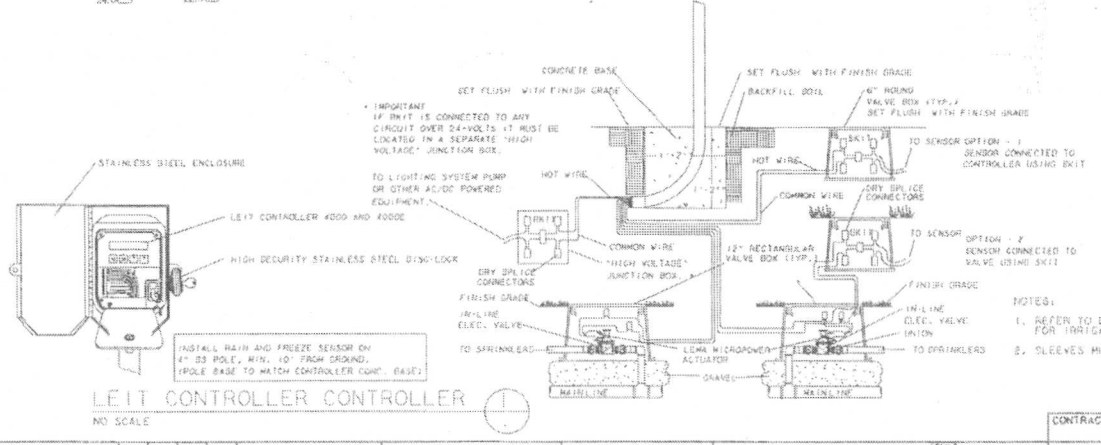
LC3-2002 "ON BAG"

EXHIBIT L

MATCH LINE

SEE DRAWING LC4-2001





LEIT CONTROLLER CONTROLLER (1)

NO SCALE

NOTES:
1. REFER TO DRAWINGS LS1-0010 TO LS1-0014 FOR IRRIGATION LEGEND AND DETAILS.
2. SLEEVES MUST BE PLACED PRIOR TO PAVING.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
1	06-20-08	REVISED PER CITY COMMENTS	SH	SH	SH	SH

SCOTT E. HORNICK 6896 LICENSED LANDSCAPE ARCHITECT 06-20-08

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS DALLAS / AUSTIN

CAYE COOK & ASSOCIATES

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	AS SHOWN
DRAWN	S. HORNICK
DESIGNED	S. HORNICK
CHECKED	S. HORNICK
IN CHARGE	B. FORSYTHE
DATE	JUN 2008

CONTRACT SHEET NO. 25 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
PGBT STATION IRRIGATION PLAN
SHEET 2 OF 2

CONTRACT | DWG NO. LC3-2002 | REV 1

EXHIBIT C

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

BRIDGEFARMER & ASSOCIATES, INC
CONSULTING ENGINEERS
DALLAS/AUSTIN

CAYE COOK & ASSOCIATES
Dallas, TX 75206 214 739 9100

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	1"=20'-0"
DRAWN	K. SHEFFY
DESIGNED	C. COOK
CHECKED	M. KENDALL
IN CHARGE	S. FORSYTHE
DATE	JAN 2009

CONTRACT SHEET No. 26 OF 52

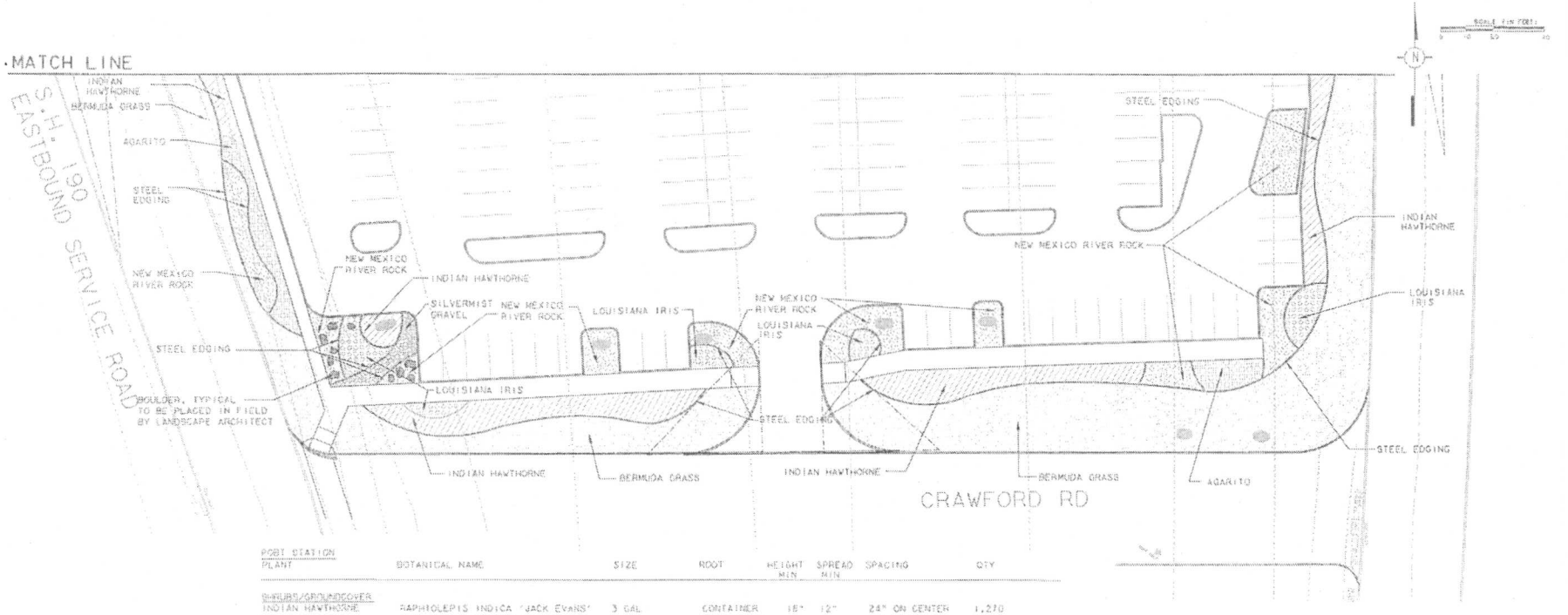
DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
LANDSCAPE PLANTING
SHEET 1 OF 2

CONTRACT | DWG NO. LC4-2001 | REV C

EXHIBIT (

LC4-2002

*RN DAO



PGBT STATION PLANT	BOTANICAL NAME	SIZE	ROOT	HEIGHT MIN	SPREAD MIN	SPACING	QTY
SHRUBS/GROUNDCOVER							
INDIAN HAWTHORNE	RAPHIOLEPIS INDICA 'JACK EVANS'	3 GAL	CONTAINER	18"	12"	24" ON CENTER	1,270
LOUISIANA IRIS	IRIS CV. 'BLUE BAYOU'	1 GAL	CONTAINER			18" ON CENTER	677
AGARITO	BERBERIS TRIFOLATA	3 GAL	CONTAINER	18"	12"	24" ON CENTER	475
LIRIOPE	LIRIOPE MUSCARI	4" POT	CONTAINER	8"	4"	10" ON CENTER	436
LAWN							
'CELEBRATION' BERMUDA	CYNODON DACTYLON CV.	SOLID SOD					20,041 SF
MISCELLANEOUS							
STEEL EDGING		HEAVY GAUGE					1,463 LF
NEW MEXICO RIVER ROCK		MEDIUM, PASSING 1-1/2" SIEVE					5,871 SF
CRUSHED GRANITE 'SILVERMIST' (NOTE 1)		PASSING 1/2" SIEVE					277 SF
MOSSY BOULDER (NOTE 2)		300-400# EACH; 2.0 TONS TOTAL					

NOTE 1:
DECORATIVE GRAVELS
SILVERMIST GRAVEL SHALL BE MIN. 4" DEPTH.
NEW MEXICO RIVER ROCK SHALL BE MIN 5" DEPTH.
TOP OF GRAVEL SHALL BE FLUSH WITH ADJACENT GRADE.
UNDERLAY GRAVEL/ RIVER ROCK WITH 2 LAYERS OF FILTER FABRIC (EA. LAYER PERPENDICULAR TO OTHER) ON COMPACTED SOIL BASE THOROUGHLY FREE OF WEEDS.
WASH GRAVELS BEFORE AND AFTER INSTALLATION.
NOTE 2:
MOSSY BOULDER AS SUPPLIED BY CUSTOM STONE SUPPLY OR APPROVED EQUAL.

NOTES:
REFER TO DRAWING LS1-0005 AND LS1-0004 FOR PLANTING DETAILS.

SOIL AMENDMENT SCHEDULE (REFER TO SECTION 02910)

1. SEEDED AND SODDED AREAS - INSTALL 1/2 INCH SANDY LOAM AND 1/2 INCH COMPOST MIX FOR SEED AND SOD BED.

2. PLANTING BEDS - INSTALL 2" SANDY LOAM AND 2" COMPOST, TILL TO A DEPTH OF 8".

CONTRACT SHEET No. 27 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

BRIDGEFARMER & ASSOCIATES, INC. CONSULTING ENGINEERS DALLAS • AUSTIN

CAYE COOK & ASSOCIATES
9400 N. Central Expy. Suite 1512
Dallas, TX 75231 214-739-8100

MOBILITY PROGRAMS DEVELOPMENT

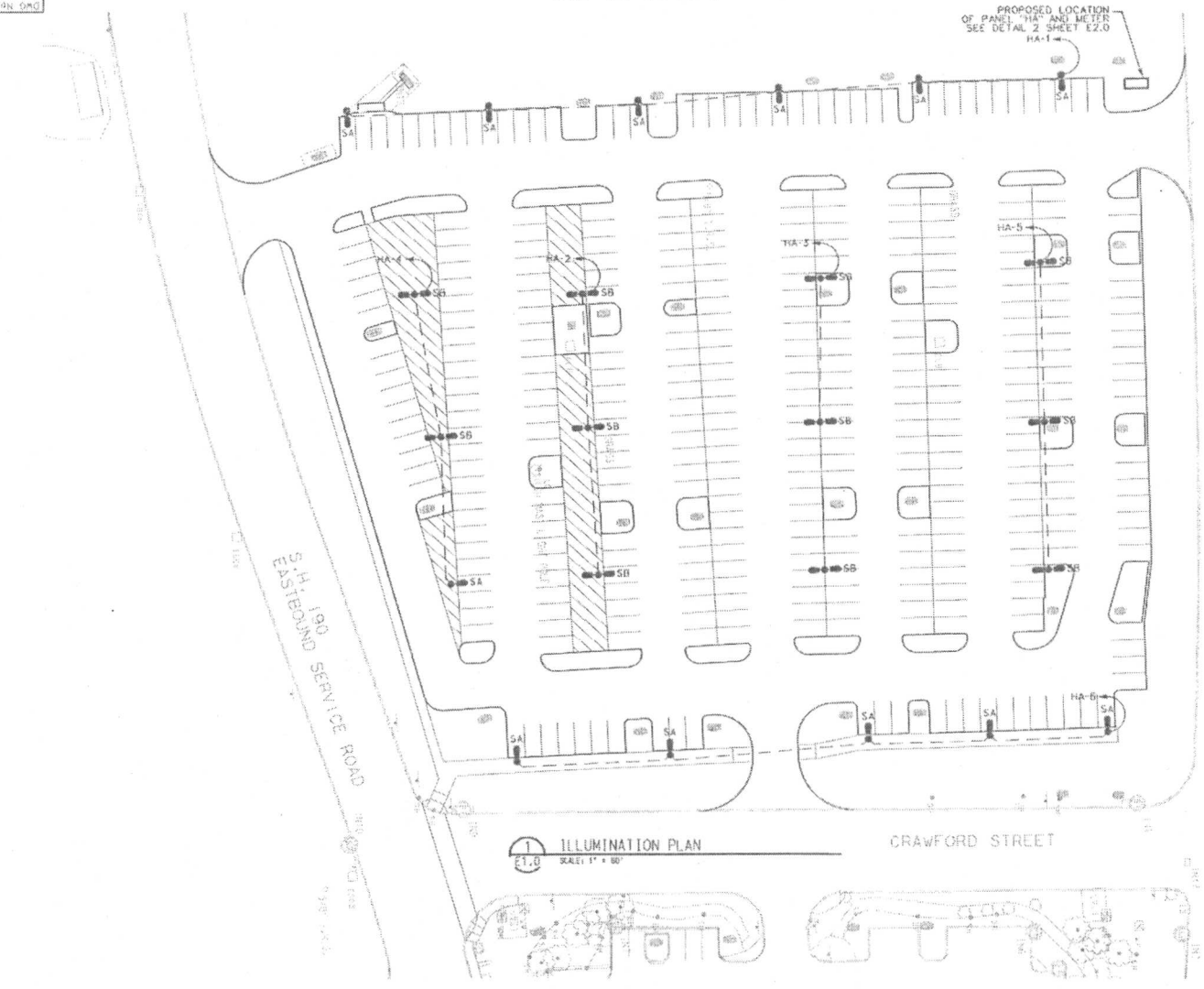
DART

SCALE	1"=20'-0"
DRAWN	K. SHEFFY
DESIGNED	C. COOK
CHECKED	M. KENDALL
IN CHARGE	S. FORSYTHE
DATE	JULY 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
LANDSCAPE PLANTING
SHEET 2 OF 2

CONTRACT | DWG No. LC4-2002 | REV 0

EXHIBIT C



1 E1.0 ILLUMINATION PLAN
SCALE: 1" = 60'

SCALE (IN FEET)
0 30 60 120

NOTES:

1. COORDINATE LOCATION OF EXTERIOR PANEL AND METER BASE WITH OWNER AND UTILITY CO. VERIFY REQUIREMENTS.
2. THESE PLANS ARE SCHEMATIC. VERIFY EQUIPMENT LOCATION AND CONDUIT ROUTING, ETC. PRIOR TO BID.
3. PROVIDE AND INSTALL LIGHTING CONTROLS IN NEMA 3R LOCKING ENCLOSURE MOUNTED ON UNISTRUT. LIGHTING CONTROLS SHALL CONSIST OF CONTACTOR, PHOTOCELL, TIMER AND HAND-OFF-AUTOMATIC SWITCH TO BYPASS LIGHTING CONTACTOR. LIGHTS COME ON BY PHOTOCELL AND OFF BY TIMER UNLESS SPECIFIED BY OWNER.
4. ALL WIRING, SUPPORTS AND EQUIPMENT SHALL CONFORM TO LOCAL, STATE AND FEDERAL CODES.
5. ALL ELECTRICAL EQUIPMENT SHALL BE SUPPLIED IN NEMA 3R LOCKING ENCLOSURES. PROVIDE LOCKING DEVICE FOR METER. COORDINATE LOCKING DEVICES WITH OWNER.
6. REFER TO DART STANDARD SHEET ES2-0003 FOR DETAILS.
7. TOTAL POLE HEIGHT SHALL MATCH EXISTING PARKING LOT POLE HEIGHTS.
8. PROVIDE AND INSTALL LIGHTNING PROTECTION PER SPECIFICATION SECTION 16670.
9. METER SHALL BE LOCATED ON BACK OF UNISTRUT AND PANELBOARD UNLESS REQ'D TO BE PLACED ELSEWHERE BY UTILITY COMPANY OR OWNER.
10. PROVIDE AND INSTALL HOUSE SIDE SHIELDS ON FIXTURES AS REQUIRED BY JURISDICTION HAVING AUTHORITY.
11. ALL CIRCUITS SHALL CONTAIN A GROUNDING CONDUCTOR. CONDUITS SYSTEM SHALL NOT BE USED AS GROUNDING NETWORK. ALL GROUNDING SHALL BE IN STRICT COMPLIANCE WITH ARTICLE NO. 250 OF THE NATIONAL ELECTRIC CODE.
12. ENSURE HIGHEST BREAKER IS 6'-7" OR LESS FROM CONCRETE BASE.
13. WIRE AND CONDUIT SIZES SHALL BE SIZED TO COMPENSATE FOR VOLTAGE DROP PER THE NEC.
14. PANELBOARD COVER SHALL NOT BE IMPEDED BY THE ELECTRICAL ENCLOSURE STRUCTURE. PROVIDE STORAGE TUBE IN ELECTRICAL ENCLOSURE FOR PRINTS.
15. RMS RATING MUST BE EQUAL TO OR GREATER THAN AVAILABLE SHORT CIRCUIT CURRENT. VERIFY FOR SPECIFIC SITE WITH ELECTRIC UTILITY.

CONTRACT SHEET NO. 28 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
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BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • AUSTIN

STATE OF TEXAS
SHARIN NEMATI
83729
LICENSED
PROFESSIONAL ENGINEER
7/10/08

MOBILITY PROGRAMS DEVELOPMENT

DART

SCALE	VARIES
DRAWN	W. VAN INN.
DESIGNED	A. NEMATI
CHECKED	M. NEMATI
N. CHARGE	S. NEMATI
DATE	JUN 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
ILLUMINATION PLAN

CONTRACT | DWG NO. E1.0 | REV 0

EXHIBIT C

PANEL "HA"

277/480 VOLTS, 3-PHASE, 4-WIRE, 100 AMP LUGS

22,000 A.I.C.

SERVES	No. CONDUCTORS/ SIZE#	POLE/ AMPS	VA A	VA B	VA C	CKT NO.		VA A	VA B	VA C	POLE/ AMPS	No. CONDUCTORS/ SIZE#	SERVES
LIGHTING	2#6, 1#10G, 1"C	1/35	2760			1	2	2760			1/35	2#6, 1#10G, 1"C	LIGHTING
LIGHTING	2#6, 1#10G, 1"C	1/35		2760		3	4		2300		1/35	2#6, 1#10G, 1"C	LIGHTING
LIGHTING	2#8, 1#10G, 1"C	1/20			2760	5	6			2300	1/35	2#6, 1#10G, 1"C	LIGHTING
SPARE						7	8						SPARE
SPARE						9	10						SPARE
SPARE						11	12						SPARE

CONNECTED BUS A: 4920 VA
CONNECTED BUS B: 4760 VA
CONNECTED BUS C: 4760 VA
CONNECTED TOTAL: 14440 VA

MAIN 100A

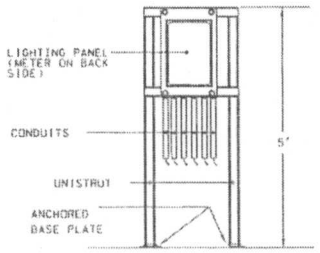
DEMAND KVA: 18.05

DEMAND AMPS: 21.71

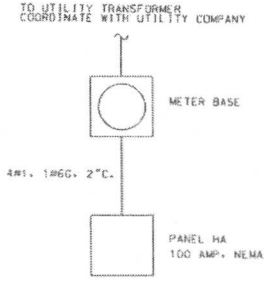
1 E2.0 PANEL BOARD SCHEDULE
SCALE: NOT TO SCALE

SYMBOL	MANUFACTURER	FIXTURE	LAMP
SA	KIM LIGHTING	1A/AR4-400MH-277	1-400W
SB	KIM LIGHTING	2I/AR4-400MH-277	1-400W

POLE: 20 FOOT POLE WITH 3 FOOT ANCHOR BASE, 23 TOTAL FEET
REFER TO DART FACILITIES STANDARD DRAWING ES2-0003 DETAIL 1.



2 E2.0 UNISTRUT AND PANEL DETAIL
SCALE: NOT TO SCALE



3 E2.0 ELECTRICAL ONE LINE DIAGRAM
SCALE: NOT TO SCALE

CONTRACT SHEET No. 29 OF 52

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
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3						
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5						
6						

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
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2						
3						
4						
5						
6						

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS ♦ AUSTIN

STATE OF TEXAS
SHAHIN NEMATI
83729
LICENSED
PROFESSIONAL ENGINEER
7/10/08

MOBILITY PROGRAMS DEVELOPMENT

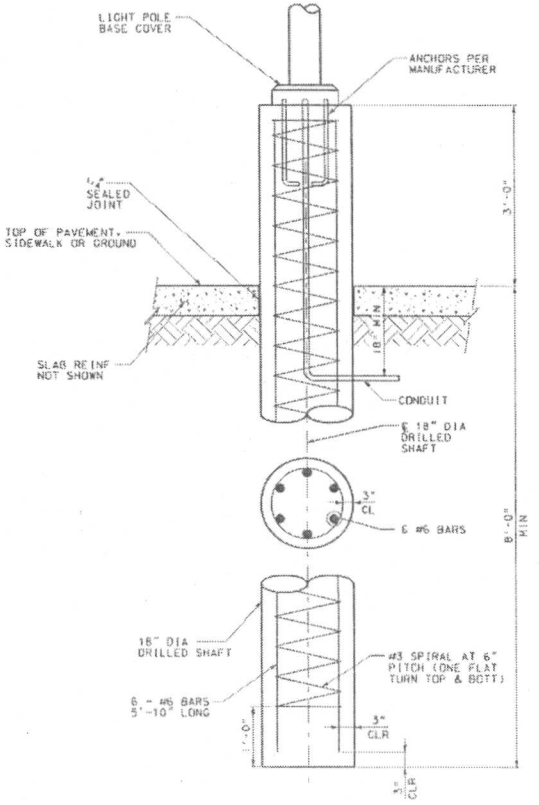
DART

SCALE	N.T.S.
DRAWN	M. VAN HAL
DESIGNED	A. NEMATI
CHECKED	M. NEMATI
IN CHARGE	S. NEMATI
DATE	JUN 2008

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
ELECTRICAL DETAILS

CONTRACT	DWG NO.	REV
	E2.0	0

EXHIBIT C



TYPICAL LIGHT POLE FOUNDATION
SCALE: 1" = 2'-0"

SCALE (IN FEET)
0 1 2 4

NOTES:

1. DESIGN BASED ON ALLOWABLE SOIL PRESSURE = 1.5 KSF.
2. CONCRETE:
   MIX S-2
   CHAMFER ALL EXPOSED EDGES 3/4 ".
3. REINFORCING:
   CONFORM TO ASTM A615 GRADE 60.
4. COORDINATE WITH ELECTRICAL DRAWINGS FOR LOCATION OF ANCHOR BOLTS, CONDUIT SIZE, CONDUIT LOCATION, ETC.
5. WHEN IN CLOSE PROXIMITY, THE CANOPY SUPPORT SHAFTS SHOULD BE COMPLETED BEFORE CONSTRUCTING THE AUGER-CAST VMB STANCHION SUPPORT PIER.
6. REFER TO ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ELECTRICAL CONDUIT AND GROUNDING REQUIREMENTS.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

STERLING C. FORSYTHE III
57339
LICENSED PROFESSIONAL ENGINEER
10/08

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
DALLAS • AUSTIN

MOBILITY PROGRAMS DEVELOPMENT

DART

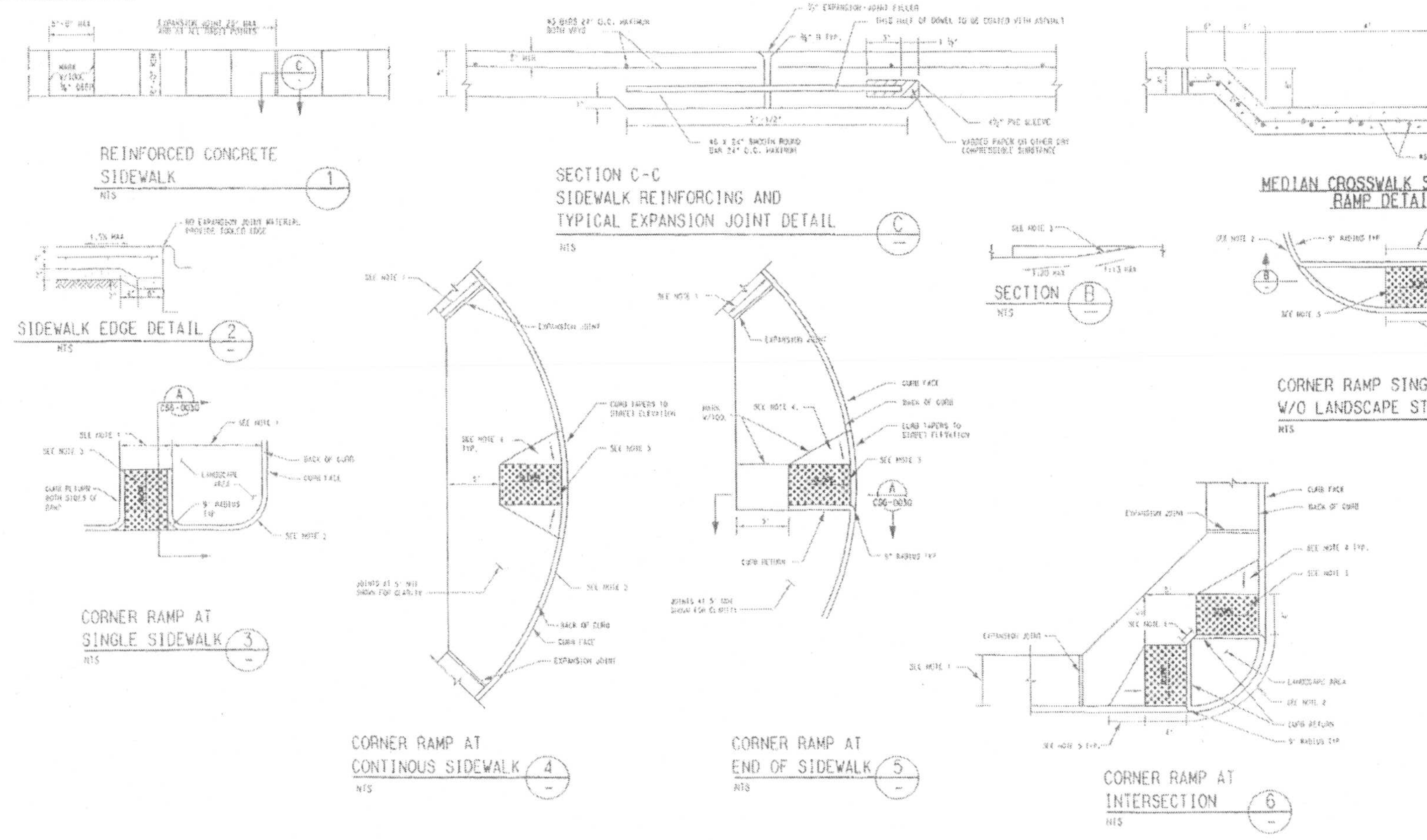
SCALE	AS SHOWN
DRAWN	M. HUNTON
SECTIONED	J. REYNOLDS
CHECKED	M. HUNTON
IN CHARGE	S. FORSYTHE
DATE	JUNE 2008

CONTRACT SHEET No. 231 OF 52

DALLAS AREA RAPID TRANSIT
PGBT STATION
PARK & RIDE EXPANSION
LIGHT POLE FOUNDATION SECTIONS

CONTRACT	DWG NO.	REV
	ES. 0	0

EXHIBIT C



NOTES:

1. DIMENSION SHOWN ON CIVIL SITE PLAN
2. RADIUS SHOWN ON CIVIL SITE PLAN
3. GFAC PANEL PER SPECIFICATION 02xxx. SLOPE PANEL DOWN TO STREET PAVEMENT AND END PANEL AT EDGE OF PAVEMENT. MATCH RAMP ELEVATION TO STREET ELEVATION. ALIGN RAMP CENTERLINE WITH CROSSWALK CENTERLINE. SEE ADDITIONAL GFAC DETAILS SHEET CS6-0030.
4. SLOPE FLARED EDGE TO GFAC. MAX SLOPE 1:10.
5. TAPER CURB DOWN TO STREET ELEVATION
6. THESE DRAWINGS APPLY TO PAVEMENT WITHIN DART PROPERTY. FOR WORK DONE IN THE RIGHT OF WAY OF OTHER JURISDICTIONS SEE SPECIFICATION 02035.
7. MAX SIDEWALK CROSS SLOPE IS 1.5% UNLESS OTHERWISE NOTED.
8. MAX RAMP SLOPE IS 1:12
9. ALL CURB RAMPS WIDTHS SHALL BE 4' MINIMUM, UNLESS OTHERWISE SHOWN ON THE CIVIL DRAWINGS.

SHEET 30 OF 52

CONTRACT SHEET No. 17 OF 301

ACT 21 — CARTER BURGESS, JACOBS CIVIL INC, STV INCORPORATED, KAI ALLIANCE

DART PROJECT

CIVIL STANDARD

PAVEMENT DETAILS
SHEET 2 OF 2

DWG No. CS6-0002

REV 6

EXHIBIT C

8000-GSD

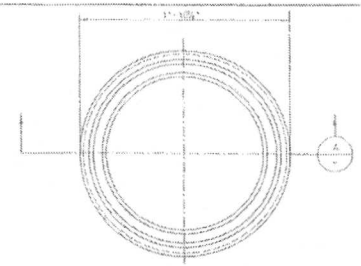
1 ON SHT

TYPICAL CAST COVER LOGO DETAIL 4

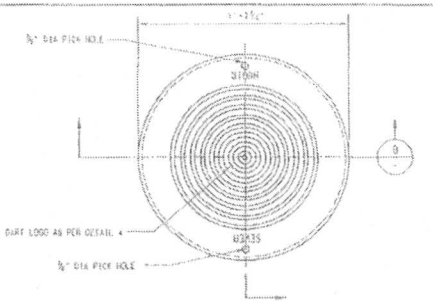
NTS

NOTES:

1. 10" DIAMETER LOGO TO BE CENTERED IN COVERS 16" AND LARGER.
2. LOGO TO BE REDUCED IN SIZE FOR COVERS LESS THAN 18", MINIMUM LOGO DIAMETER TO BE 4".
3. LETTERS WITHIN THE "CHEVRON" SHALL BE ¼" LOWER THAN "CHEVRON".
4. LETTERS OUTSIDE "CHEVRON" SHALL BE RAISED ¼" TO MATCH TOP OF "CHEVRON".



RECESSED INLET FRAME
PLAN



INLET COVER
PLAN

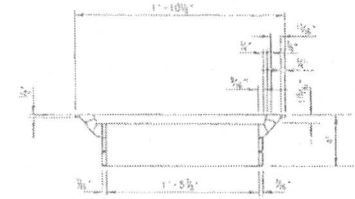
CLASS IV PIPE	
PIPE DIAMETER (INCHES)	TRENCH WIDTH (FEET)
15	3.0
18	3.4
21	3.8
24	4.1
27	4.5
30	4.9
33	5.2
36	5.6
42	6.3
48	7.0
54	7.8
60	8.5
66	9.2
72	10.0
78	10.7
84	11.4
90	12.1
96	12.9

DEPTH OF BEDDING CLASS IV PIPE	
O.D. A FENSTOCK DIAMETER)	D (FEET)
27" OR SMALLER	3"
30" TO 60"	4"
66" AND LARGER	6"

TRENCH WIDTHS ON 1.25 FOOT = 1'-0"

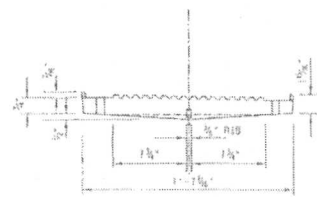
TRENCH WIDTHS SHOWN ARE MINIMUM FOR PROPER PLACEMENT AND COMPACTION OF EMBEDMENT AND BACKFILL.

TRENCH WIDTHS SHOWN WILL BE USED FOR CALCULATION OF ROCK EXCAVATION WHEN DESIGNATED AS A PAY ITEM.



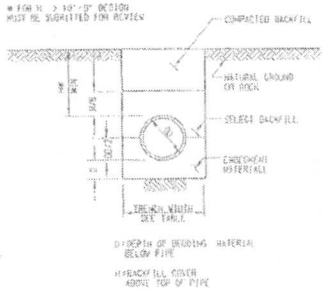
A SECTION

1 RECESSED INLET FRAME



B SECTION

2 INLET COVER



REINFORCED CONCRETE PIPE INSTALLATION 3

NOTES:

1. STORM SEWER PIPE SHALL BE CLASS IV UNLESS OTHERWISE NOTED ON PLANS.
2. STORM SEWER PIPE AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02720, "STORM SEWER SYSTEM".

SHEET 31 OF 52

CONTRACT SHEET No. 22 OF 301

CIVIL STANDARD

MANHOLE COVER DETAILS AND STORM SEWER PIPE EMBEDMENT DETAILS

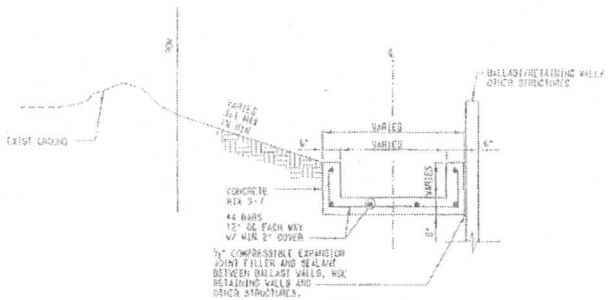
CONTRACT | DWG No. 0365-06108 | REV 0

ACT 21

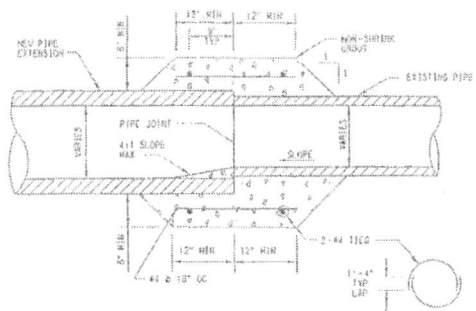
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAI ALLIANCE

DART PROJECT

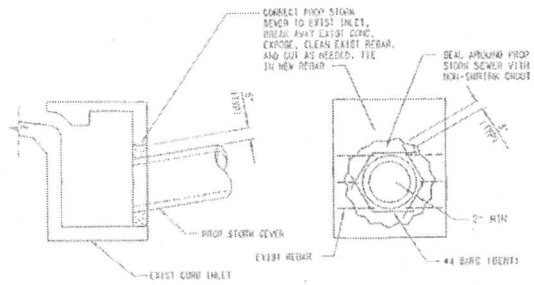
EXHIBIT C



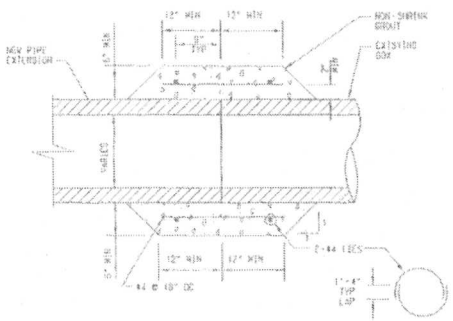
CONCRETE FLUME 1
NO SCALE



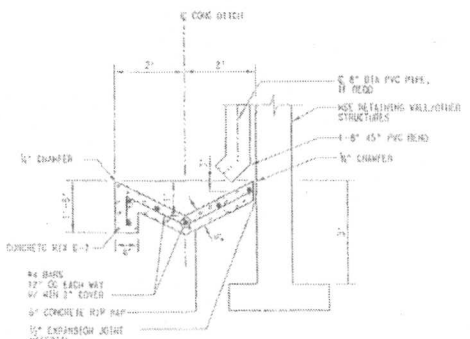
CONCRETE COLLAR FOR A PIPE CONNECTION FOR DISSIMILAR DIAMETERS 2
NO SCALE



PIPE TO INLET CONNECTION DETAIL 3
NO SCALE



CONCRETE COLLAR FOR PIPE CONNECTION 5
NO SCALE



4' WIDE CONC DITCH DETAIL 4
NO SCALE

SHEET 32 OF 52

CONTRACT SHEET No. 27 of 301

CIVIL STANDARD

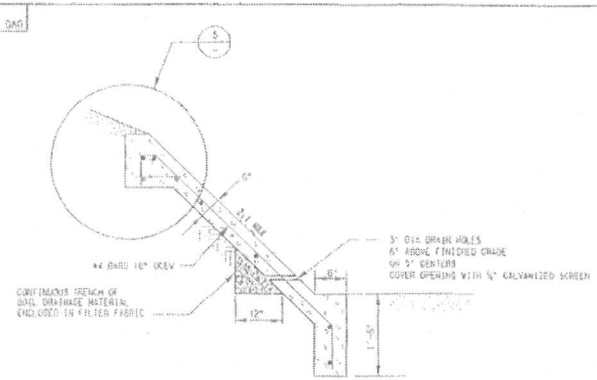
GUIDEWAY DRAINAGE DRAINAGE DETAILS SHEET 2 OF 6

CONTRACT | DWG No. C06-0013 | REV 0

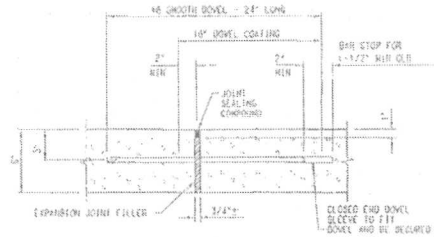
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAL ALLIANCE

DART PROJECT

EXHIBIT C



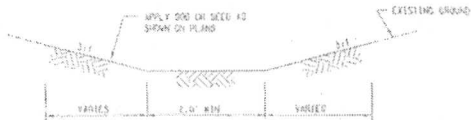
CONCRETE SLOPE PROTECTION 3
NO SCALE



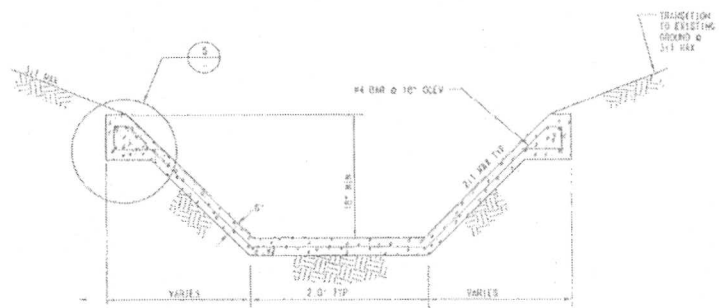
EXPANSION JOINT FOR
CONCRETE SLOPE PROTECTION 4

GENERAL NOTES:

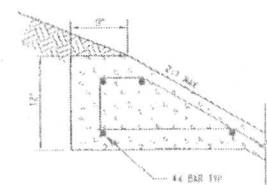
1. CONCRETE TO BE MIX "S-1".
2. CONCRETE DITCH TO BE PLACED ON UNDISTURBED SOIL OR SELECT FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY.
3. EXPANSION JOINTS SHALL BE PLACED IN THE CONCRETE SLOPE PROTECTION AT 60' CENTERS (MAX).



UNLINED DITCH (TYPICAL) 1
NO SCALE



CONCRETE LINED TRAPEZOIDAL DITCH 2
NO SCALE



DITCH FOOTING DETAIL 5
NO SCALE

SHEET 33 OF 52

CONTRACT SHEET NO. 28 OF 307

ACT 211
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAI ALLIANCE

DART PROJECT

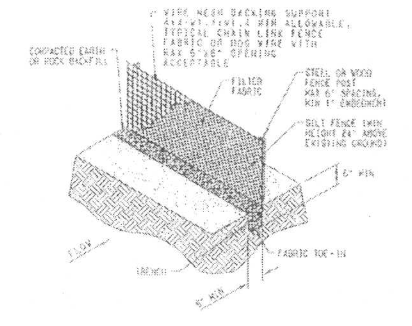
CIVIL STANDARD

GUIDEWAY DRAINAGE
DRAINAGE DETAILS
SHEET 4 OF 6

CONTRACT | CAD NO. C96-0015 | REV 0

EXHIBIT C

SILT FENCE

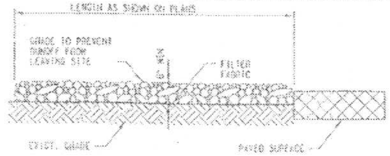


ISOMETRIC PLAN VIEW
NO SCALE

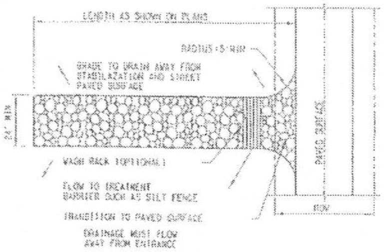
NOTES:

1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 1 FOOT.
2. THE TOE OF THE SILT FENCE MUST BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVED SURFACES), WEIGHT FABRIC FLAP WITH WASHED FILTER STONE ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6" DEEP AND 6" WIDE TO ALLOW FOR THE SILT FENCE TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION TO EACH STEEL SUPPORT OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED, WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE AT MAXIMUM 14-DAY INTERVALS AND AFTER EACH ½" RAINFALL EVENT. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY BY THE CONTRACTOR, AS NEEDED OR DIRECTED.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
7. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR PERMANENT SITE DRAINAGE CONFIGURATION.
8. SILT FENCE CAN BE USED AS PERIMETER PROTECTION OR FOR STORM INLET PROTECTION.

STABILIZED CONSTRUCTION ENTRANCE



PROFILE VIEW
NO SCALE

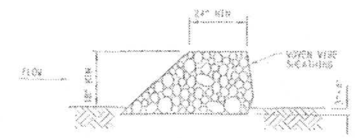


PLAN VIEW
NO SCALE

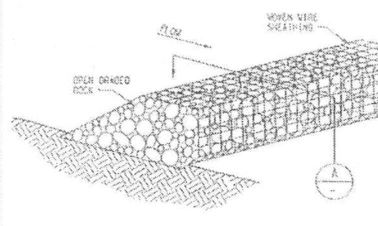
NOTES:

1. STONE SHALL BE 3" TO 5" DIAMETER CRUSHED ROCK OR SIMILARLY SIZED CRUSHED PORTLAND CEMENT CONCRETE.
2. LENGTH SHALL BE AS SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 30 FEET FOR RESTRICTED RAIL CORRIDOR ACCESS AREAS. THE MINIMUM LENGTH IN ALL OTHER CASES SHALL BE 50 FEET.
3. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS AND SHALL BE 24' MINIMUM.
4. THE THICKNESS SHALL NOT BE LESS THAN 6".
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, WASHED, DROPPED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED DAILY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
8. IF A WASH RACK IS INCORPORATED IN THE ENTRANCE, ITS RUNOFF MUST FLOW TO A FILTER BARRIER OR SEDIMENT TRAP.

ROCK BERM



SECTION (A)
NO SCALE

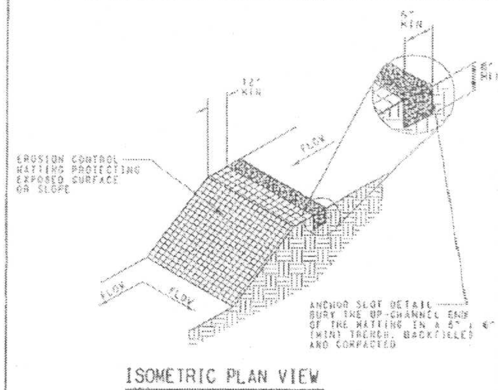


ISOMETRIC PLAN VIEW
NO SCALE

NOTES:

1. USE ONLY OPEN GRADED ROCK 4" TO 8" IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3" TO 5" IN DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAXIMUM OPENING OF 1" AND A MINIMUM WIRE SIZE OF 20 GAUGE, AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3" TO 4" DEEP.
3. THE ROCK BERM SHALL BE INSPECTED AT MAXIMUM 14-DAY INTERVALS AND AFTER EACH ½" RAINFALL EVENT, AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO WASHOUT, CONSTRUCTION DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
5. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
6. ROCK BERMS SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.

EROSION CONTROL MATTING



ISOMETRIC PLAN VIEW
NO SCALE

NOTES:

1. STRIPS OF MATTING SHALL BE INSTALLED PARALLEL TO THE DIRECTION OF FLOW OVER THE SURFACE WHICH IS TO BE PROTECTED.
2. THE UP-CHANNEL END OF THE MATTING SHALL BE BURIED IN A TRENCH MEASURING 6" DEEP AND 6" WIDE FOR THE ENTIRE WIDTH OF THE END. THE SOIL SHALL BE BACKFILLED INTO THE TRENCH AND TAMPED FIRMLY. STAPLES SHALL BE PLACED EVERY 12" ALONG THE END OF THE MATTING. SAID TRENCH WILL BE POSITIONED A MINIMUM OF 12" BACK FROM THE TOP EDGE OF THE SLOPE.
3. EDGES OF ADJACENT STRIPS OF MATTING SHALL BE OVERLAPPED A MINIMUM OF 4" AND SHALL BE STAPLED EVERY 3 FEET ALONG THE OVERLAP.
4. WHEN JOINING STRIPS OF MATTING END TO END, A TRENCH SIMILAR TO THE ONE DUG AT THE BEGINNING OF THE ORIGINAL STRIP SHALL BE DUG WITH THE UP-CHANNEL END OF THE NEW STRIP PLACED IN THE TRENCH IN A LIKE MANNER AS WAS THE BEGINNING END OF THE ORIGINAL STRIP. THE END OF THE STRIP BEING FOLDED UNDER AT LEAST 12". STAPLES SHALL BE INSTALLED AT 12" INTERVALS ALONG THE WIDTH OF THE STRIP NOT MORE THAN 6" FROM THE TRENCH.
5. IN SITUATIONS WHERE ERODIBLE SOILS, STEEP SLOPES OR HIGH VELOCITY FLOWS ARE ENCOUNTERED, A FOLD OF THE MATTING SHALL BE INSERTED INTO A 6" TRENCH AND TAMPED FIRMLY. STAPLES SHALL BE INSTALLED AT 12" INTERVALS ALONG THE TRENCH.
6. STAPLES FOR ANCHORING SOIL STABILIZING MATERIALS SHALL BE MADE OF 10 GAUGE WIRE OR HEAVIER. THEY SHALL BE 6" TO 10" IN LENGTH, WITH THE LONGER STAPLES BEING USED IN LOOSE OR OR UNSTABLE SOILS. THERE SHALL BE ONE STAPLE FOR EACH FOUR (4) SQUARE FEET OF MATTING TO ASSURE PROPER BONDING BETWEEN THE SOIL AND THE MAT MATERIAL.
7. EROSION CONTROL MATTING SHOULD BE USED IN DITCH FLOWLINES TO HELP STABILIZE SOILS AND PROMOTE REVEGETATION. IT CAN ALSO BE USED IN BACK OF CURBS IN LIEU OF SOD STRIPS TO HELP PREVENT EROSION PRIOR TO PERMANENT STABILIZATION.

SHEET 34 OF 52

CONTRACT SHEET No. 45 OF 301

ACT 211
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAI ALLIANCE

DART PROJECT

DART

CIVIL STANDARD

EROSION AND SEDIMENT CONTROL DETAILS
SHEET 1 OF 6

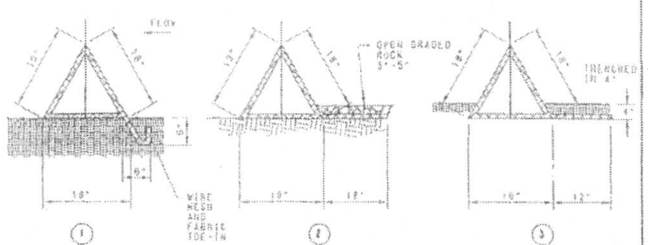
DWG No. DS1-0001

REV 0

EXHIBIT C

TRIANGULAR SEDIMENT FILTER DIKE	DIVERSION DIKE	STONE DITCH CHECK

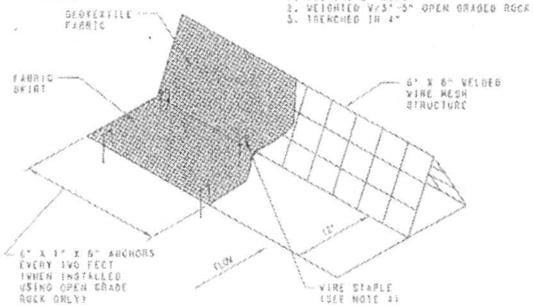
TRIANGULAR SEDIMENT FILTER DIKE



CROSS SECTIONS OF INSTALLATION OPTIONS

NO SCALE

1. TOE-IN, 6" MIN.
2. WEIGHTED W/3"-5" OPEN GRADED ROCK
3. TRENCHED IN 4"



ISOMETRIC PLAN VIEW

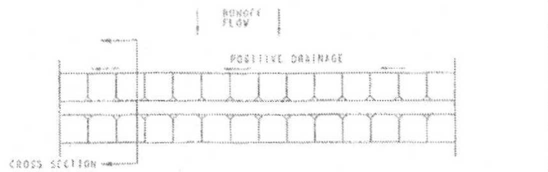
WIRE STAPLE (SEE NOTE 4)

NO SCALE

NOTES:

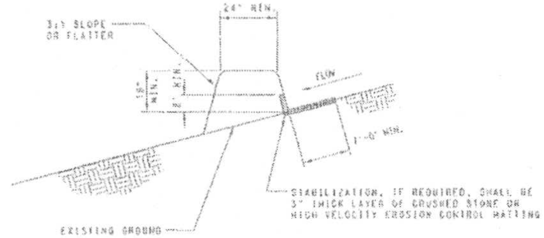
1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE, AND FABRIC SHALL BE OVERLAPPED A MINIMUM OF 12".
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 3" TO 5" DIAMETER OPEN GRADED ROCK, OR TOED IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED TO A DEPTH OF 4".
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6" WIRE STAPLES ON 2-FOOT CENTERS ON BOTH EDGES AND SKIRTS.
5. FILTER MATERIAL SHALL BE LAPPED OVER 6" TO COVER DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS OR WIRE TIES EVERY 2 FEET, TOP AND MIDSECTION.
6. THE DIKE STRUCTURE SHALL BE 6 GAUGE, 6" X 6" WIRE MESH, 18" LONG ON EACH SIDE.
7. INSPECTION SHALL BE MADE AT MAXIMUM 14-DAY INTERVALS AND AFTER EACH½" RAINFALL EVENT, AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE DIKE, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT OF THE SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS STATED ABOVE.

DIVERSION DIKE



PLAN VIEW

NO SCALE



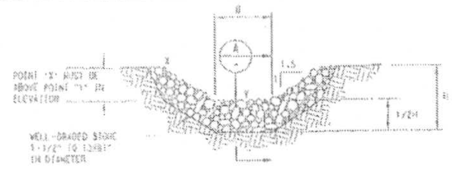
CROSS SECTION

NO SCALE

NOTES:

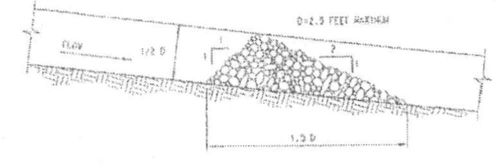
1. ALL DIKES SHALL BE PLACED IN 8" LIFTS OR LESS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO A CONTROLLED OUTLET.
3. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A ROCK BERM OR TEMPORARY SEDIMENT TRAP, OR TO AN AREA PROTECTED BY ANY OTHER SEDIMENT CONTAINMENT MEASURES.
5. STABILIZATION IS REQUIRED WHEN VELOCITIES EXCEED 6 FEET PER SECOND OR WHEN GRADES EXCEED 2%. STABILIZATION SHALL BE CRUSHED STONE PLACED IN A LAYER OF AT LEAST 3" THICKNESS OR HIGH VELOCITY EROSION CONTROL MATTING TOED IN 4 INCHES. VEGETATION MAY BE USED FOR VELOCITIES LESS THAN 6 FEET PER SECOND.
6. INSPECTION SHALL BE CONDUCTED AT MAXIMUM 14-DAY INTERVALS AND AFTER EACH½" RAINFALL EVENT.

STONE DITCH CHECK



VIEW LOOKING UPSTREAM

NO SCALE



SECTION

NO SCALE

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

SPACING BETWEEN DITCH CHECKS

NO SCALE

NOTES:

1. STONE DITCH CHECKS CAN BE USED IN MODERATELY SIZED LINEAR DRAINAGE CHANNELS THAT HAVE POTENTIALLY EROSIVE VELOCITIES. STONE DITCH CHECKS SHALL NOT BE USED IN LIVE STREAM CHANNELS.
2. STONE CAN BE CRUSHED ROCK OR RECYCLED CONCRETE AND SHALL BE WELL-GRADED. SIZE SHALL RANGE FROM 1-1/2" IN DIAMETER THROUGH A MAXIMUM IN INCHES EQUAL TO THREE TIMES THE WIDTH OF THE DRAINAGE CHANNEL BOTTOM IN FEET.
3. STONE DITCH CHECKS SHOULD BE INSPECTED AT MAXIMUM 14-DAY INTERVALS AND AFTER EACH RAINFALL EVENT OF ½" OR GREATER. REMOVE SEDIMENT FROM THE UPSTREAM SIDE OF THE DITCH CHECK WHEN ITS DEPTH REACHES ONE-HALF OF THE HEIGHT. REPLACE MISSING OR DISLODGED STONE AS REQUIRED IN ORDER TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.
4. IF EROSION OCCURS IN THE CHANNEL WALL ADJACENT TO THE DITCH CHECK, EROSION CONTROL MATTING SHOULD BE USED TO HELP STABILIZE THE EMBANKMENT.

SHEET 35 OF 52

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ACT 21 — CARTER BURGESS, JACOBS CIVIL INC, STV INCORPORATED, HAI ALLIANCE

DART PROJECT

CIVIL STANDARD

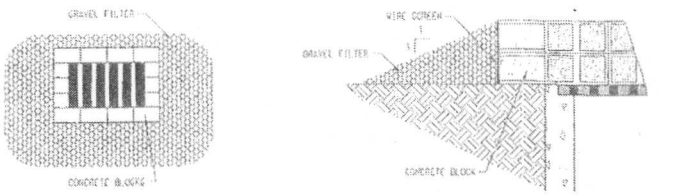
EROSION AND SEDIMENT CONTROL DETAILS

SHEET 2 OF 6

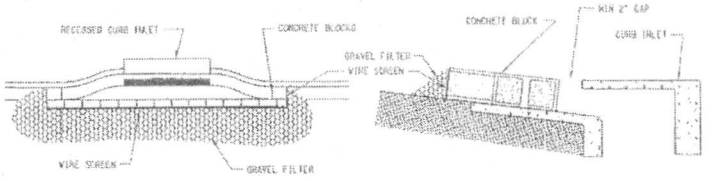
DWG NO. 0S1-0002 REV 0

EXHIBIT C

BLOCK AND GRAVEL INLET PROTECTION



DROP INLET PROTECTION
NO SCALE

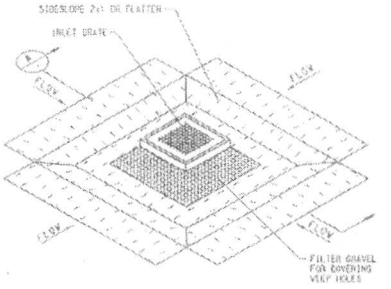


RECESSED CURB INLET PROTECTION
NO SCALE

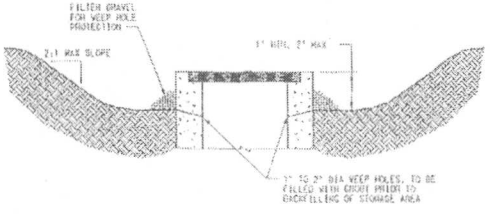
NOTES:

1. BLOCK AND GRAVEL PROTECTION IS USED WHEN FLOWS EXCEED 0.5 CUBIC FEET PER SECOND AND IT IS NECESSARY TO ALLOW FOR OVERTOPPING TO PREVENT FLOODING. THIS FORM OF PROTECTION IS ALSO USEFUL FOR CURB TYPE INLETS AS IT WORKS WELL IN PAVED AREAS.
2. CONCRETE BLOCKS ARE TO BE PLACED ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH ENDS ABUTTING. OPENINGS IN THE BLOCKS SHALL FACE OUTWARD, NOT UPWARD. WIRE MESH SHALL THEN BE PLACED OVER THE OUTSIDE FACE OF THE BLOCKS COVERING THE HOLE.
3. FILTER STONE SHALL BE PILED AGAINST THE WIRE MESH TO THE TOP OF THE BLOCKS WITH THE BASE OF THE STONE BEING A MINIMUM OF 18" FROM THE BLOCKS.
4. FILTER STONE SHALL CONSIST OF 1-1/2" OR 2" DIAMETER CLEAN CRUSHED ROCK.
5. WHEN FILTER STONE BECOMES CLOGGED, THE STONE MUST BE REMOVED AND CLEANED IN A PROPER MANNER OR REPLACED WITH NEW STONE AND PILED BACK AGAINST THE WIRE MESH.

EXCAVATED IMPOUNDMENT INLET PROTECTION



ISOMETRIC PLAN VIEW
NO SCALE



SECTION A
NO SCALE

NOTES:

1. EXCAVATED IMPOUNDMENT PROTECTION AROUND A DROP INLET MAY BE USED FOR PROTECTION AGAINST SEDIMENT ENTERING A STORM DRAIN INLET. WITH THIS METHOD, IT IS NECESSARY TO INSTALL WEEP HOLES TO ALLOW THE IMPOUNDMENT TO DRAIN COMPLETELY. THE IMPOUNDMENT SHALL BE SIZED TO PROVIDE A STORAGE VOLUME FOR RUNOFF FROM BETWEEN 1800 TO 3600 CUBIC FEET PER ACRE OF DISTURBED AREA ENTERING THE INLET.
2. THE IMPOUNDMENT SHALL HAVE A MINIMUM DEPTH OF ONE FOOT AND A MAXIMUM DEPTH OF 2 FEET AS MEASURED FROM THE TOP OF THE INLET, AND SHALL HAVE SIDESLOPES OF 2:1 OR FLATTER.
3. FILTER GRAVEL SHALL CONSIST OF 1-1/2" OR 2" DIAMETER CLEAN CRUSHED ROCK. A 36 SQ IN. OF WIRE SCREEN SHALL PROTECT EACH WEEP HOLE.
4. FILTER GRAVEL COVERING WEEP HOLES MUST BE INSPECTED FREQUENTLY AND REPLACED WHEN IT BECOMES CLOGGED WITH SEDIMENT.
5. WHEN STORAGE CAPACITY OF IMPOUNDMENT HAS BEEN REDUCED BY ONE-HALF, THE SILT SHALL BE REMOVED AND DISPOSED OF IN A PROPER MANNER.

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CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
BAS ALLIANCE

DART PROJECT

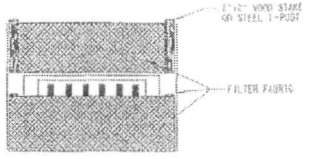
CIVIL STANDARD

EROSION AND SEDIMENT CONTROL DETAILS SHEET 3 OF 6

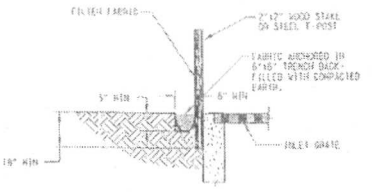
CONTRACT | DWG No. 001-00013 | REV 6

EXHIBIT C

FILTER FABRIC BARRIER INLET PROTECTION

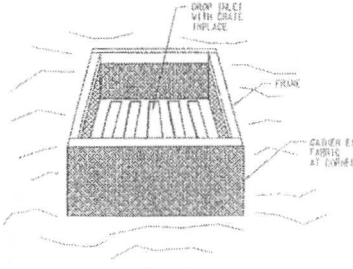


PERSPECTIVE VIEW

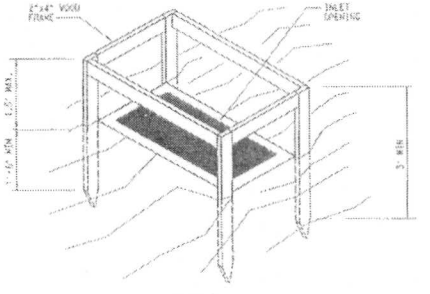


ELEVATION VIEW

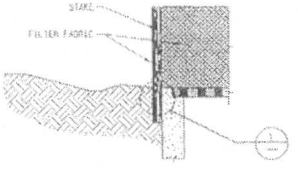
STANDARD INSTALLATION
NO SCALE



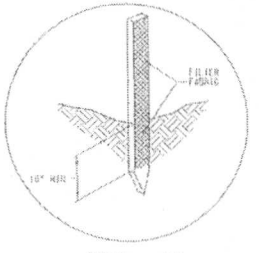
INSTALLED PERSPECTIVE VIEW



FABRICATION PERSPECTIVE VIEW



ELEVATION VIEW



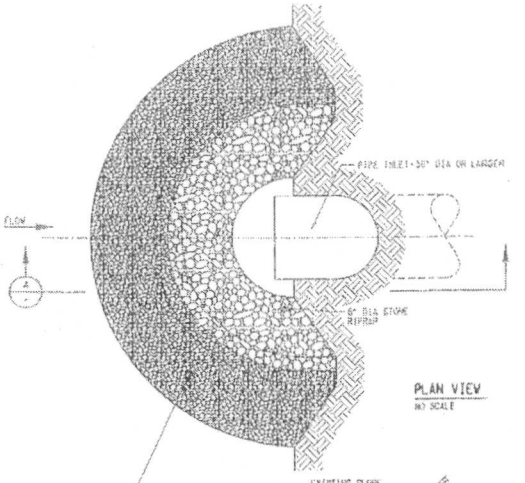
DETAIL 1/1

ALTERNATE INSTALLATION
NO SCALE

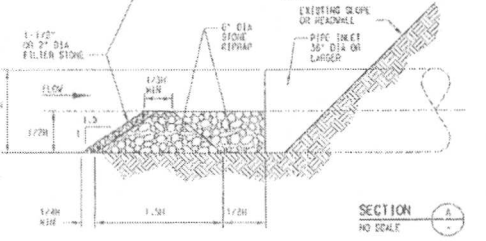
NOTES:

1. FILTER FABRIC BARRIER INLET PROTECTION IS APPROPRIATE WHEN THE DRAINAGE AREA IS LESS THAN ONE ACRE, THE BASIN SLOPE IS LESS THAN 5% AND SHEET FLOWS DO NOT EXCEED 1.0 CUBIC FOOT PER SECOND. THIS TYPE OF PROTECTION IS NOT APPLICABLE IN PAVED AREAS AND SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS FROM GUTTERS OR PAVED MEDIANS.
2. FILTER FABRIC SHALL CONSIST OF NYLON REINFORCED POLYESTER NETTING SUPPORTED BY WOOD OR GALVANIZED STEEL POSTS OF A MINIMUM DEPTH OF 18 INCHES AND SPACED NOT MORE THAN 6 FEET ON CENTER.
3. A 6" WIDE TRENCH IS TO BE CUT 6" DEEP AT THE TOE OF THE FENCE TO ALLOW THE FABRIC TO BE LAID BELOW THE SURFACE AND BACKFILLED WITH COMPACTED EARTH OR GRAVEL. THIS ENTRENCHMENT PREVENTS ANY BYPASS OF RUNOFF UNDER THE FENCE.
4. ACCUMULATED SILT SHALL BE REMOVED WHEN IT ATTAINS A DEPTH OF ONE HALF THE HEIGHT OF THE FILTER FABRIC. THE SILT SHALL BE DISPOSED OF IN AN APPROVED MANNER.
5. FILTER FABRIC MAY BE REINFORCED BY INSTALLING BACKING SUPPORT OF WIRE MESH, CHAIN LINK FENCE FABRIC OR HOG WIRE - SEE SILT FENCE EROSION AND SEDIMENT CONTROL DETAIL, SHEET 1 OF 6.

PIPE INLET PROTECTION



PLAN VIEW
NO SCALE



SECTION A/1
NO SCALE

NOTES:

1. PIPE INLET PROTECTION CAN BE USED FOR EXISTING OR NEWLY CONSTRUCTED STORM DRAIN OR CULVERT PIPES THAT ARE CHARACTED TO RELATIVELY HEAVY STORM WATER FLOWS AND WHERE AN OVERFLOW CAPABILITY IS REQUIRED.
2. FILTER STONE SHALL BE CLEAN 1-1/2" OR 2" DIAMETER CRUSHED ROCK OR RECYCLED CONCRETE. STONE RIPRAP CAN ALSO BE NATURAL OR RECYCLED MATERIAL AND SHALL BE 6" IN DIAMETER.
3. PIPE INLET PROTECTION DEVICES SHOULD BE INSPECTED AT MAXIMUM 14-DAY INTERVALS AND FOLLOWING EACH ½" RAIN EVENT. REMOVE SEDIMENT FROM THE UPSTREAM SIDE OF THE DEVICE WHEN ITS DEPTH REACHES A MAXIMUM OF ONE HALF THE HEIGHT OF THE FILTER STONE.
4. FILTER STONE SURFACE CAN BE CLEANED BY RAKING, BUT REPEATED SEDIMENT BUILD-UP WILL REQUIRE REPLACEMENT OF THE FILTER STONE SURROUNDING THE PIPE INLET.

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CONTRACT SHEET No. 48 OF 301

NO.	BY	DATE	DESCRIPTION

ACT 211
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAI ALLIANCE

DART PROJECT

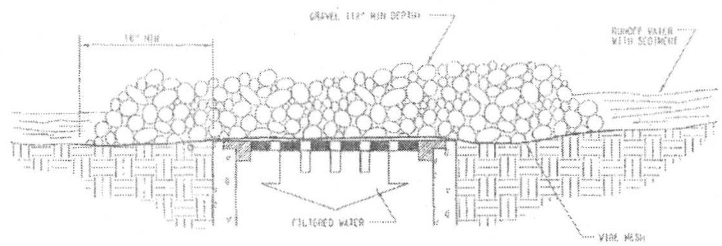
CIVIL STANDARD

EROSION AND SEDIMENT CONTROL DETAILS SHEET 4 OF 6

CONTRACT | DWG No. 051-0004 | REV 0

EXHIBIT C

WIRE MESH AND GRAVEL DROP INLET PROTECTION



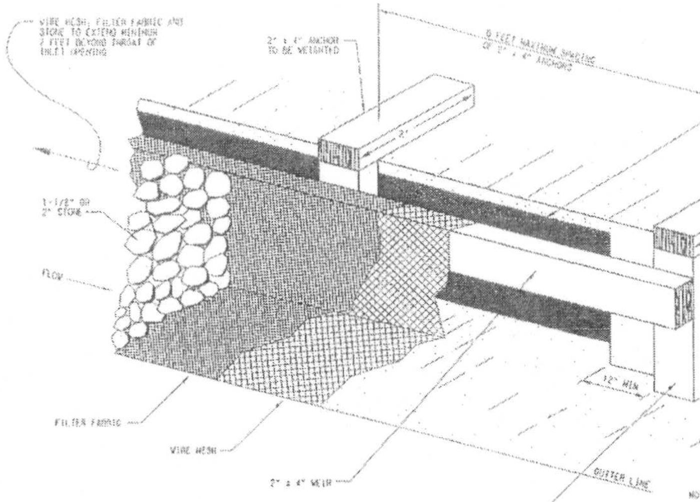
PROFILE VIEW

NO SCALE

NOTES:

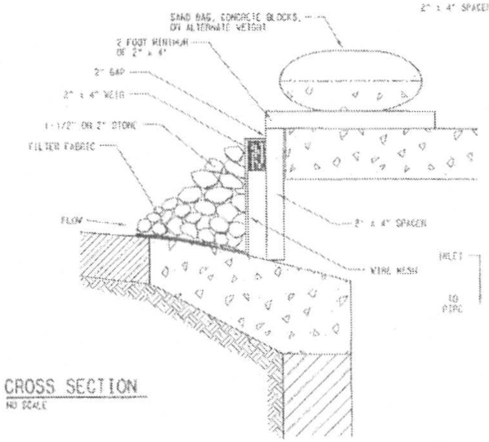
1. THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE TEMPORARY PONDING AROUND THE DROP INLET STRUCTURE MIGHT CAUSE EXCESSIVE WATER DEPTH AND AFFECT UNPROTECTED AREAS.
2. WIRE MESH AND GRAVEL PROTECTION IS USED WHEN FLOWS EXCEED 0.5 CUBIC FEET PER SECOND AND CONSTRUCTION TRAFFIC MAY OCCUR OVER THE INLET.
3. WIRE MESH SHALL BE PLACED ACROSS THE OPENING OF THE INLET WITH AT LEAST AN 18" EXTENSION BEYOND THE OPENING OF THE INLET.
4. GRAVEL SHALL BE PLACED AROUND AND OVER THE INLET SUCH THAT A 12" LAYER OF STONE COVERS THE OPENING OF THE INLET AND EXTENDS AT LEAST 18" BEYOND THE INLET IN ALL DIRECTIONS.
5. GRAVEL SHALL CONSIST OF CLEAN 3" TO 5" DIAMETER CRUSHED ROCK.
6. FOR AREAS SUBJECTED TO HIGH FLOWS OR HIGH VELOCITIES, INSPECT THE PROTECTION ON A REGULAR BASIS TO ENSURE INTEGRITY OF THE GRAVEL FILTER.
7. WHEN GRAVEL FILTER BECOMES CLOGGED WITH SEDIMENT, THE GRAVEL MUST BE REMOVED AND CLEANED IN A PROPER MANNER OR REPLACED WITH NEW GRAVEL.

STORM SEWER INLET PROTECTION



ISOMETRIC PLAN VIEW

NO SCALE



CROSS SECTION

NO SCALE

NOTES:

1. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MIN WIDTH BY INLET THROAT LENGTH PLUS 4 FEET) TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2 FEET) AS SHOWN ON THE DETAIL DRAWING.
2. PLACE A PIECE OF APPROVED FILTER FABRIC OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" x 4" WEIR WITH WIRE TIES SPACED EVERY 6", ALL DIRECTIONS.
3. SECURELY NAIL THE 2" x 4" WEIR TO APPROXIMATELY 9" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WEIR AND INLET FACE (MAX 6 FEET APART). LEAVE A 2" GAP AT THE TOP OF THE WEIR FOR OVERFLOW.
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL 2 FOOT LENGTHS OF 2" x 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS. THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
5. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 12" BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE WIRE MESH AND FILTER FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 1-1/2" OR 2" STONE (CRUSHED AGGREGATE) OVER THE WIRE MESH AND FILTER FABRIC IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER FABRIC.
7. ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY INSTALLING TEMPORARY EARTH OR SANDBAG DIKES DIRECTING FLOW INTO INLET, IF NECESSARY.
8. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER FABRIC AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.

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ACT 2II — CARTER BURGESS, JACOBS CIVIL INC, STV INCORPORATED, K&I ALLIANCE

DART PROJECT

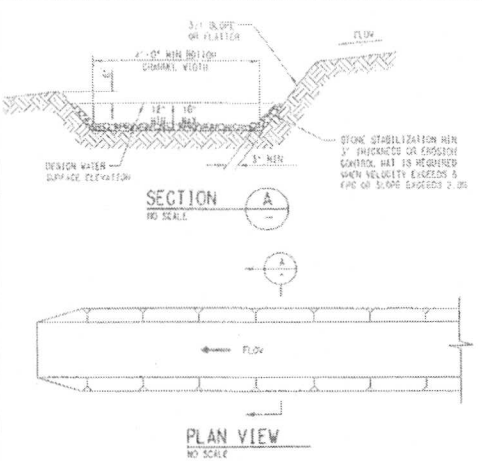
CIVIL STANDARD

EROSION AND SEDIMENT CONTROL DETAILS SHEET 5 OF 6

CONTRACT | DWG No. GS1-0003 | REV 0

EXHIBIT C

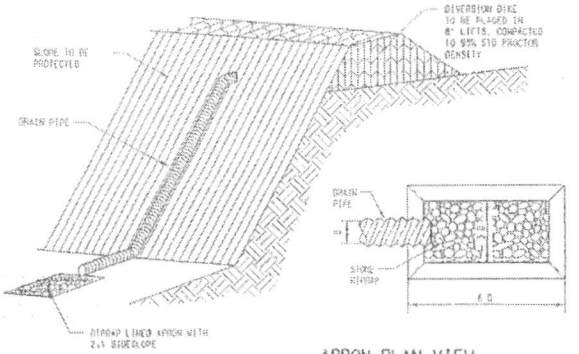
INTERCEPTOR SWALE

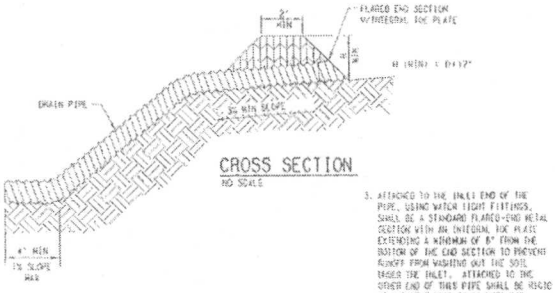


NOTES:

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
2. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS-SECTION AS REQUIRED TO MEET CRITERIA SPECIFIED HEREIN AND BE FREE OF PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROVED SPOILS SITE SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
5. THE OR-SITE LOCATION MAY NEED TO BE ADJUSTED TO MEET FIELD CONDITIONS IN ORDER TO UTILIZE THE MOST SUITABLE OUTLET.
6. STABILIZATION IS REQUIRED WHEN VELOCITIES EXCEED 6 FEET PER SECOND OR WHEN GRADES EXCEED 5%. STABILIZATION SHALL BE CRUSHED STONE PLACED IN A LAYER AT LEAST 3" THICK OR USE HIGH VELOCITY EROSION CONTROL MATTING. VEGETATION MAY BE USED FOR VELOCITIES LESS THEN 6 FEET PER SECOND.
7. MINIMUM COMPACTION FOR THE SWALE SHALL BE 90 % STANDARD PROCTOR.

PIPE SLOPE DRAIN

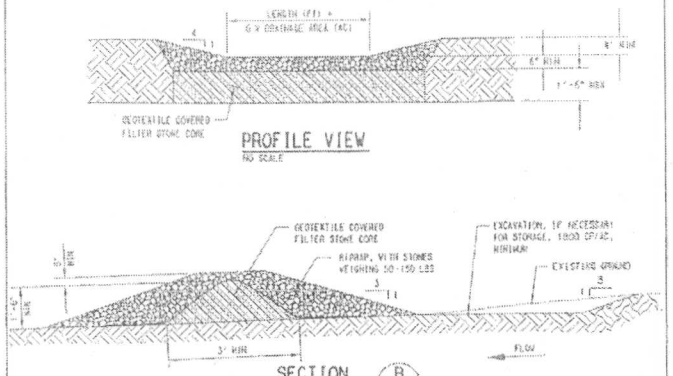


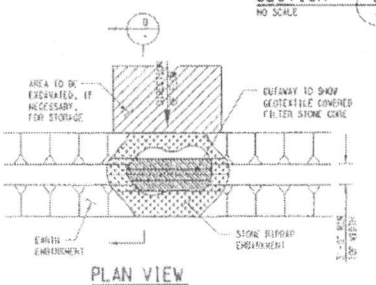


NOTES:

1. THE DRAIN PIPE SHALL BE MADE OF ANY MATERIAL, RIGID OR FLEXIBLE, WHICH IS CAPABLE OF CONVEYING RUNOFF, HOWEVER, CORRUGATED GALVANIZED METAL PIPE IS RECOMMENDED WITH WATER TIGHT CONNECTING BANDS. REGARDLESS OF MATERIAL, THE DRAIN PIPE SHALL BE COMPLETELY WATER TIGHT SO THAT NO WATER LEAKS OVER THE SLOPE TO BE PROTECTED.
2. A DIVERSION DIKE SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE WHICH IS TO BE PROTECTED. THIS DIKE SHALL BE SIZED SO THAT NO RUNOFF WILL OVERTOP IT. A RIGID EXTENSION OF PIPE SHALL BE INSTALLED THROUGH THE DIKE WITH LENGTH AS NECESSARY TO COMPLETELY TRAVERSE THE DIKE SECTION.
3. ATTACHED TO THE INLET END OF THE PIPE, USING WATER TIGHT FITTINGS, SHALL BE A STANDARD FLARED-END METAL SECTION WITH AN INTEGRAL TOE PLATE EXTENDING A MINIMUM OF 6" FROM THE BOTTOM OF THE END SECTION TO PREVENT RUNOFF FROM WASHING OUT THE SOIL UNDER THE INLET. ATTACHED TO THE OTHER END OF THIS PIPE SHALL BE RIGID OR FLEXIBLE PIPE TO BE USED FOR CONTAINMENT OF THE RUNOFF FROM THE TOP OF THE SLOPE TO THE BOTTOM.
4. PIPE SHALL BE SECURED WITH HOLD-DOWN GROMMETS SPACED 10 FEET OR LESSER.
5. A RIPRAP LINED APRON WITH 2:1 SIDE-SLOPES SHALL BE EXCAVATED TO ACCEPT THE RUNOFF FROM THE PIPE AND DISSIPATE THE ENERGY OF THE FLOW. THE WIDTH OF THE BOTTOM OF THE APRON SHALL BE 3 TIMES THE PIPE DIAMETER, AND THE LENGTH SHALL BE A MINIMUM OF 6 TIMES THE PIPE DIAMETER. THE APRON SHALL BE A MINIMUM OF 12" IN DEPTH AND SHALL BE LINED WITH RIPRAP WEIGHING BETWEEN 50 AND 150 POUNDS PER STONE AT A THICKNESS OF 12" MINIMUM. THE APRON SHALL BE DESIGNED SO THAT THE RELEASED FLOW HAS A VELOCITY LESS THAN 5 FEET PER SECOND AND IS NOT CONCENTRATED IN ANY WAY.

STONE OUTLET SEDIMENT TRAP





NOTES:

1. PLACE FILL MATERIAL IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE THE OPTIMUM MOISTURE CONTENT OF THE MATERIAL. COMPACT EACH LAYER TO 95% STANDARD PROCTOR DENSITY. DO NOT PLACE FILL MATERIAL ON FROZEN SURFACES THAT ARE MUDDY.
2. SIDESLOPES FOR THE EMBANKMENT ARE TO BE 3:1. A GAP 10 TO BE LEFT IN THE EMBANKMENT IN THE LOCATION WHERE THE NATURAL CONFLUENCE OF RUNOFF CROSSES THE EMBANKMENT LINE. THE GAP IS TO HAVE A WIDTH 10 FEET FOUR TO 6 TIMES THE DRAINAGE AREA IN ACRES.
3. A CORE OF 1-1/2" OR 2" FILTER STONE HAVING A MINIMUM HEIGHT OF 1.5 FEET AND A MINIMUM WIDTH AT THE BASE OF 3 FEET SHALL BE PLACED ACROSS THE OPENING OF THE EARTH EMBANKMENT AND SHALL BE COVERED BY GEOTEXTILE FABRIC, (A TRIPLE LAYER IS RECOMMENDED) WHICH SHALL EXTEND A MINIMUM DISTANCE OF 2 FEET IN EITHER DIRECTION FROM THE SIDE OF THE FILTER STONE CORE.
4. STONE RIPRAP SHALL BE PLACED OVER THE GEOTEXTILE AND IS TO HAVE A GRADATION WHICH MATCHES THAT OF THE EARTH EMBANKMENT OF 2:1, AND SHOULD COVER THE GEOTEXTILE/FILTER STONE CORE A MINIMUM OF 6" WHEN INSTALLATION IS COMPLETE.
5. ACCUMULATED SILT SHALL BE REMOVED FROM BEHIND THE EMBANKMENT WHEN THE LEVEL OF SILT IS ONE FOOT BELOW THE TOP OF THE STONE RIPRAP AT ITS LOWEST POINT. SILT SHALL BE DISPOSED OF AT AN APPROVED SITE IN SUCH A MANNER SO AS NOT TO CONTRIBUTE TO ADDITIONAL SEDIMENT LOADINGS.
6. OUTLET FROM SEDIMENT TRAP MUST DRAIN INTO A STABILIZED AREA.

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CONTRACT SHEET No. 50 OF 107

REV.	BY	DATE	DESCRIPTION

ACT 211
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAE ALLIANCE

DART PROJECT

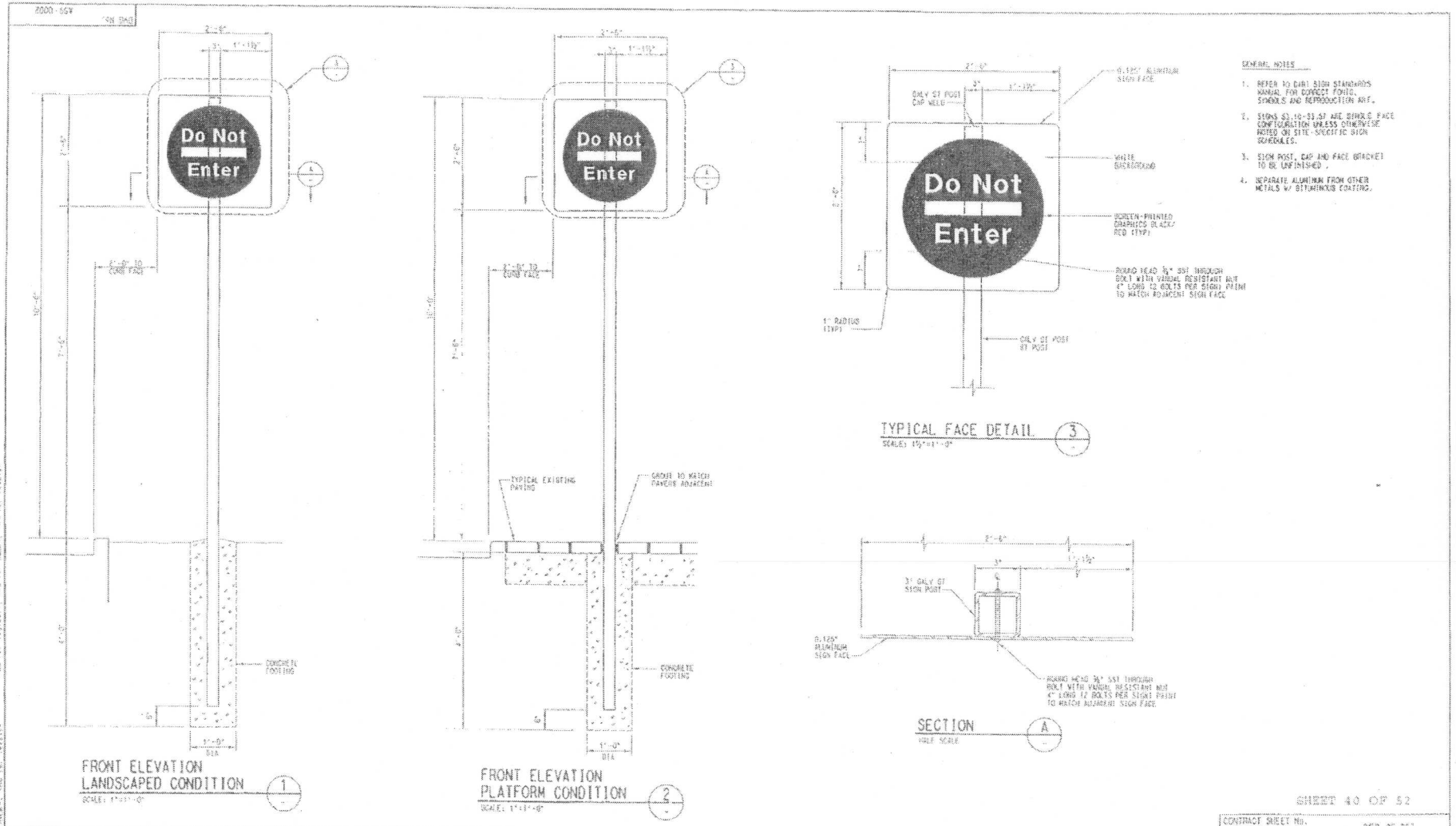
DART

CIVIL STANDARD

EROSION AND SEDIMENT CONTROL DETAILS SHEET 6 OF 6

CONTRACT | DWG No. 031-0004

EXHIBIT C



SHEET 40 OF 52

CONTRACT SHEET No. 259 OF 501

ACT 21
CARTER BURGESS
JACOBS CIVIL INC
STV INCORPORATED
KAI ALLIANCE

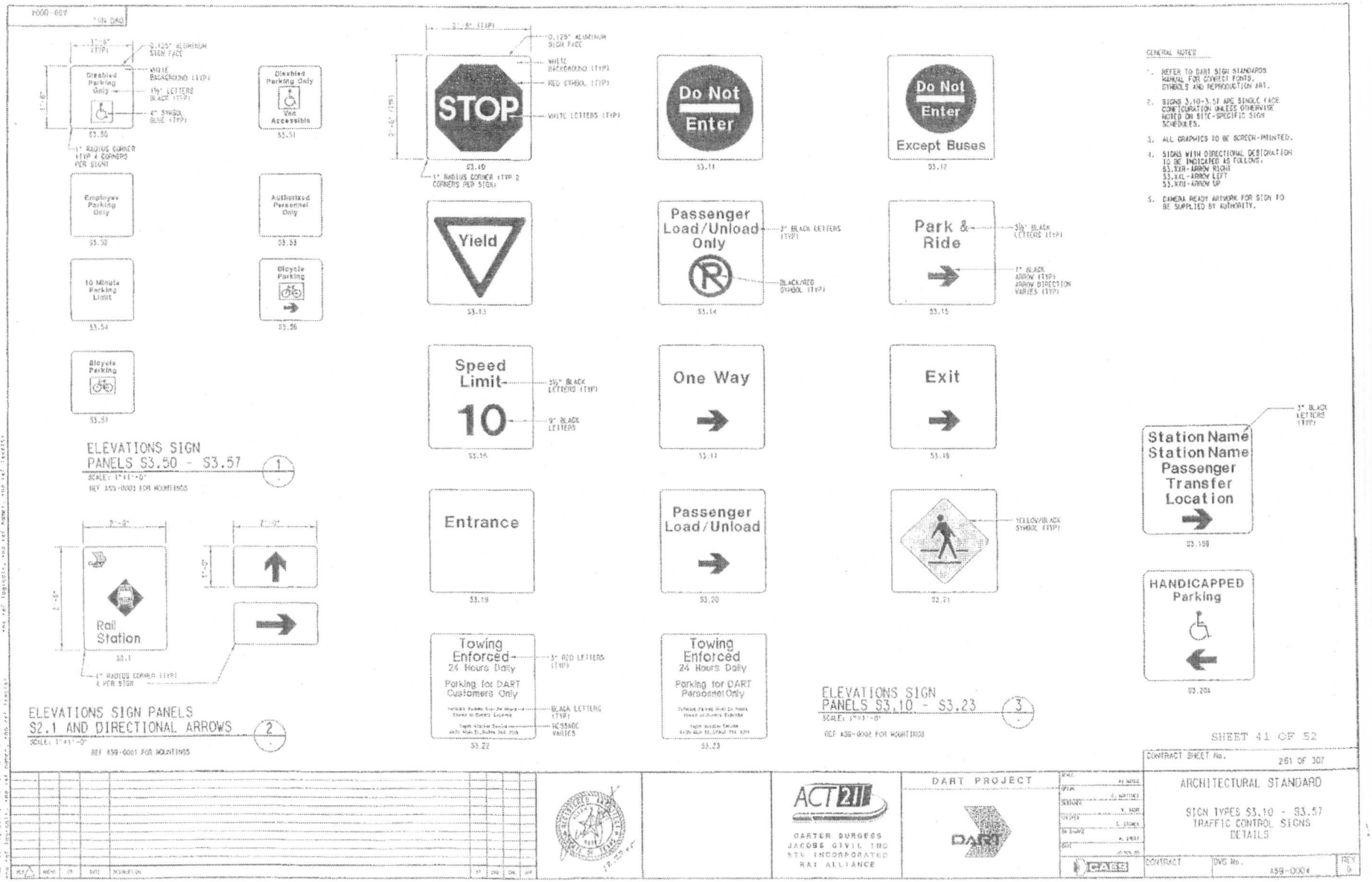
DART PROJECT

ARCHITECTURAL STANDARD

SIGN TYPES S3.10 - S3.25
TRAFFIC CONTROL SIGNS
ELEVATIONS, DETAILS, SECTIONS

CONTRACT | DWG No. ASB-0002 | REV 0

EXHIBIT C



SHEET 41 OF 52

CONTRACT SHEET No. 261 OF 307

ACT 211

CARTER BURGESS
JACOBS GIVIL INC
STV INCORPORATED
RAIL ALLIANCE

DART PROJECT

ARCHITECTURAL STANDARD

SIGN TYPES S3.10 - S3.57
TRAFFIC CONTROL SIGNS
DETAILS

CONTRACT | DWG No. A99-0004 | REV 0

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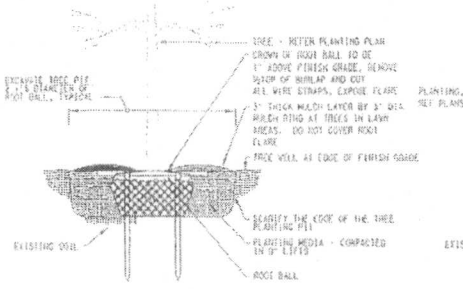
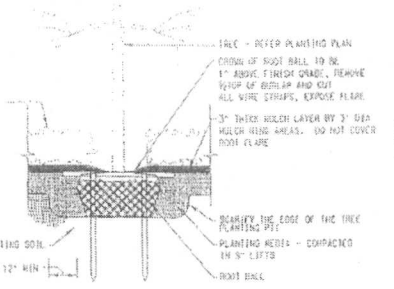
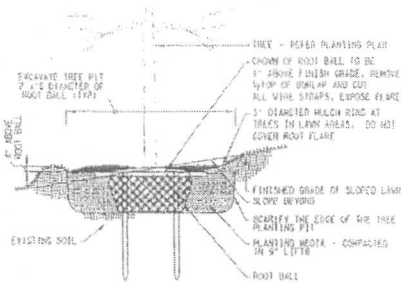


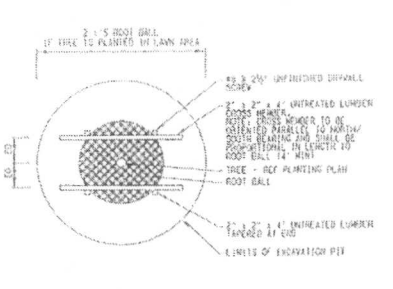
TREE PLANTING IN LAWN 1



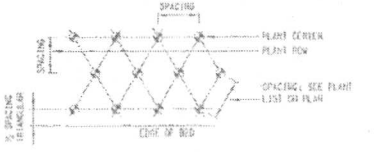
TREE PLANTING IN PLANTING BED 2



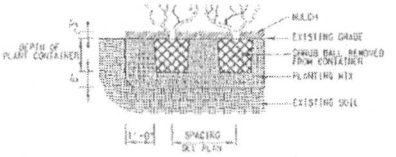
TREE PLANTING ON SLOPE LAWN 3



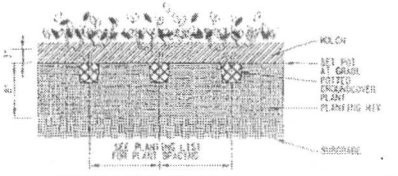
TREE STAKING - PLAN 4



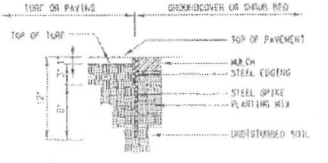
PLANT SPACING - PLAN 5



SHRUB PLANTING 6



GROUNDCOVER PLANTING 7



STEEL EDGING - SECTION 8

NOTES:

1. FOR TREE PLANTING AT PLATFORM, REFER TO DETAILS 1 AND 2 ON LS1-0001

SHEET 42 OF 52

CONTRACT SHEET NO. 289 OF 301

CAYE COOK & ASSOCIATES

CARTER BURGESS JACOBS CIVIL INC CTV INCORPORATED M&T ALLIANCE

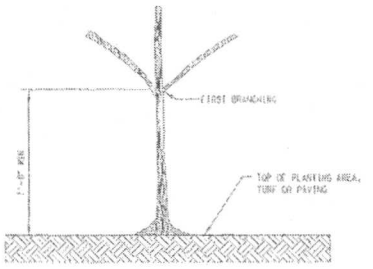
DART PROJECT

LANDSCAPE STANDARD

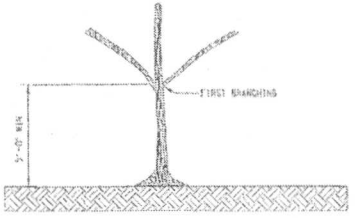
PLANTING DETAILS SHEET 1 OF 2

CONTRACT DWG NO. LS1-0003 REV 0

EXHIBIT C



TREE TRUNK TYPE 1 — 1



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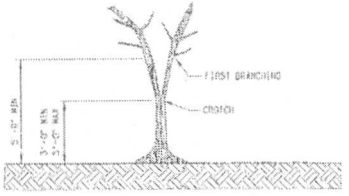

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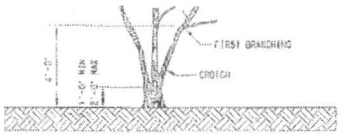
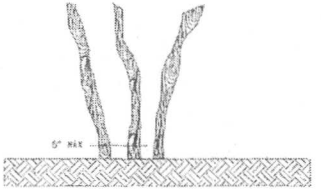
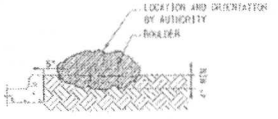


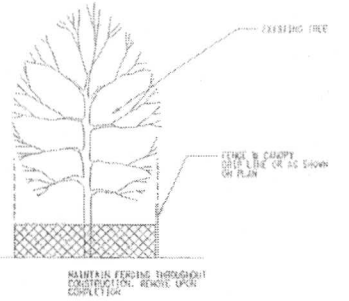
TREE TRUNK TYPE 4 — 4



TREE TRUNK TYPE 5 — 5



BOULDER INSTALLATION SECTION — 6



EXISTING TREE PROTECTION DETAIL — 7

NOTES:
1. IF NO TRUNK TYPE IS SPECIFIED USE TYPE 1 OR 2

SHEET 43 OF 52

CONTRACT SHEET No. 300 OF 301

CAYE COOK & ASSOCIATES

ACT 21 — CARTER BURGESS JACOBS CIVIL ING STV INCORPORATED KAI ALLIANCE

DART PROJECT

LANDSCAPE STANDARD

PLANTING DETAILS SHEET 2 OF 2

CONTRACT | DWG No. L91-0904 | REV 0

EXHIBIT C

0400-101

10th GAD

EQUIPMENT LEGEND

SYMBOLS	NAME	MANUFACTURER	MODEL No.	NOTES
WM	WATER METER			1. PROVIDED BY CITY.
	DOUBLE CHECK ASSEMBLY	FEBCO	805Y	1. SEE DETAIL LS1-0012/2 2. OR EQUAL SUBSTITUTION IF APPROVED
	DOUBLE CHECK CONCRETE VALVE BOX	OLD CASTLE PRECAST CONCRETE	06T	1. SEE DETAIL LS1-0012/2 2. IRON LID 3. USE MANUFACTURED EXTENSIONS 4. OR EQUAL SUBSTITUTION IF APPROVED
C	CONTROLLER	RAIN BIRD	ESP-MC-XX	1. SEE DETAIL LS1-0014/2 OR LS1-0014/4 2. SEE DRAWING FOR SIZE OF CONTROLLER 3. INSTALL IN CABINET AS DETAILED 4. INSTALL FREEZE AND TEMPERATURE SENSORS AS DETAILED 5. INSTALL REMOTE CONTROL TECHNOLOGY PERMANENT RECEIVER CARD #01990, FRANCIS ANTENNA, #01970, WITH SIDE MOUNT #01051 6. NO SUBSTITUTION WILL BE APPROVED
C	BATTERY CONTROLLER	RAIN BIRD	1803	1. PROVIDE 1 1803FTUS FIELD TRANSMITTER 2. INSTALL 9V ALKALINE BATTERY AS PER MANUFACTURER'S DIR 3. REPLACE BATTERY YEARLY
	CONTROLLER SURGE PROTECTOR	INTERMATIC	AD240I	1. INSTALL ON THE 120 VOLT POWER INSIDE THE CABINET 2. OR EQUAL SUBSTITUTION IF APPROVED
	MAINTENANCE RADIO TRANSMITTER	IRC	01035	1. NO SUBSTITUTION WILL BE APPROVED
	STAINLESS STEEL CONTROLLER CABINET	RAIN BIRD	PEDESTSSWBV	1. SEE DETAIL LS1-0014/2 AND LS1-0014/3 2. NO SUBSTITUTION WILL BE APPROVED
	WIRELESS TEMPERATURE AND RAIN SENSOR	HUNTER	WSC	1. SEE DETAIL LS1-0014/6 2. INSTALL ONE SENSOR AT EACH CONTROLLER 3. OR EQUAL SUBSTITUTION IF APPROVED
	WIRE SPLICES	SNOTCH	DBY	1. SEE DETAIL LS1-0014/1 2. SET IN SOLENOID VALVE BOXES OR AS NOTED BELOW 3. NO SUBSTITUTION WILL BE APPROVED
	WIRE SPLICE BOX	ANCHOR - PLASTIC	1864SD	1. OVERLAPPING LID 2. COLOR - GREEN LID, BLACK BODY 3. OR EQUAL SUBSTITUTION IF APPROVED
	SOLENOID VALVE	RAIN BIRD	PEB	1. SEE DETAIL LS1-0012/4 OR 5 2. SET 1 BALL VALVE ON PRESSURE SIDE OF SOLENOID VALVE. THE BALL VALVE IS THE SAME AS THE SOLENOID VALVE. 3. SEE DRAWING FOR SIZES 4. NO SUBSTITUTION WILL BE APPROVED
	DC LATCHING SOLENOID VALVE	RAIN BIRD	PER W/TBOSPHOL SOLENOID	
	SOLENOID VALVE BALL VALVE	SPEARS	VARIES	1. SEE DETAIL LS1-0012/4 OR 5 2. SIZE TO MATCH SOLENOID VALVE
	SOLENOID VALVE BOX IN GRASS AND GROUND COVER	ANCHOR - PLASTIC	1324GB	1. SEE DETAIL LS1-0012/5 2. DROP IN LID 3. DOUBLE KNOCK OUTS 4. COLOR - GREEN LID AND BODY 5. VALVE BOX EXTENSION ARE REQUIRED 6. OR EQUAL SUBSTITUTION IF APPROVED
	SOLENOID VALVE BOX IN LAWN AREAS	OLD CASTLE PRECAST CONCRETE	07T	1. SEE DETAIL LS1-0012/4 2. IRON LID 3. USE MANUFACTURED EXTENSIONS 4. OR EQUAL SUBSTITUTION IF APPROVED

SYMBOLS	NAME	MANUFACTURER	MODEL No.	NOTES
	MASTER VALVE	RAIN BIRD	PEB	1. SEE DETAIL LS1-0012/4 2. SEE DRAWINGS FOR SIZES 3. NO SUBSTITUTION WILL BE APPROVED
	MASTER VALVE BOX	OLD CASTLE PRECAST CONCRETE	06T	1. SEE DETAIL LS1-0012/4 2. IRON LID 3. VALVE BOX EXTENSION ARE ACCEPTED - USE MANUFACTURED UNIT 4. OR EQUAL SUBSTITUTION IF APPROVED
	BRASS GATE VALVE	NIBCO	T-211	1. SEE DETAIL LS1-0012/4
	BRASS GATE VALVE BOX	OLD CASTLE PRECAST CONCRETE	06T	1. SEE DETAIL LS1-0012/4 2. IRON LID 3. USE MANUFACTURED EXTENSIONS 4. OR EQUAL SUBSTITUTION IF APPROVED
	PLATFORM HOSE BIBB	ZURN	Z-1366-17	1. SEE DETAIL LS1-0012/1 2. NO SUBSTITUTION WILL BE APPROVED 3. PROVIDE 6 KEYS TOTAL
	3/4" QUICK COUPLER	RAIN BIRD	33DNP	1. SEE DETAIL LS1-0012/6 2. PROVIDE O-RING SWING JOINT 3. SET 1 BALL VALVE BETWEEN MAINLINE AND O-RING SWING JOINT 4. NO SUBSTITUTION WILL BE APPROVED
	QUICK COUPLER O-RING SWING JOINT	SPEARS	SWING JOINT RISER	1. CONNECT ALL QUICK COUPLERS TO PIPING 2. OR EQUAL SUBSTITUTION IF APPROVED
	3/4" QUICK COUPLER KEYS	RAIN BIRD	33K	1. PROVIDE 1 KEY PER STATION 2. SET IN THE CONTROLLER BASE 3. PROVIDE 1 HOSE SWIVEL WITH KEY 4. NO SUBSTITUTION WILL BE APPROVED
	3/4" HOSE SWIVEL	RAIN BIRD	SH-4	1. PROVIDE 1 PER KEY 2. NO SUBSTITUTION WILL BE APPROVED
	QUICK COUPLER VALVE BOX	OLD CASTLE PRECAST CONCRETE	07T	1. SEE DETAIL LS1-0012/8 2. IRON LID 3. USE MANUFACTURED EXTENSIONS 4. OR EQUAL SUBSTITUTION IF APPROVED
	TURF ROTOR	HUNTER	I-20 ULTRA	1. SEE DETAIL LS1-0013/1 2. ATTACH TO PIPE WITH A SWING JOINT 3. NOZZLE SELECTION NOTED ON DRAWINGS 4. NO SUBSTITUTION WILL BE APPROVED
	TURF ROTOR	HUNTER	I-20 SHORT RADIUS NOZZLE	1. SEE DETAIL LS1-0013/1 2. ATTACH TO PIPE WITH A SWING JOINT 3. NOZZLE SELECTION NOTED ON DRAWINGS 4. NO SUBSTITUTION WILL BE APPROVED
	TURF ROTOR O-RING SWING JOINT	SPEARS	SWING JOINT RISER	1. CONNECT ALL ROTORS TO PIPING 2. OR EQUAL SUBSTITUTION IF APPROVED

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NO.	DATE	BY	DESCRIPTION	BY	CHK	APP

CATE COOK & ASSOCIATES

8080 North Stemmons Freeway, Suite 1004, Dallas, TX 75247 214-760-9100

ACT 211

CARTER BURGESS JACOBS CIVIL INC STV INCORPORATED RAT ALLIANCE

DART PROJECT

DART

LANDSCAPE STANDARD

IRRIGATION LEGEND AND GENERAL NOTES SHEET 1 OF 2

CONTRACT | DWG No. LS1-0010 | REV 6

EXHIBIT (

SYMBOL	NAME	MANUFACTURER	MODEL No.	NOTES
	4" POP-UP SPRAY HEAD	RAIN BIRD	1804-SAM-PRS	1. SEE DETAIL LS1-0013 /4 2. INSTALL WITH COBRA FLEX TUBING 3. NO SUBSTITUTION WILL BE APPROVED 4. NOZZLES AS SHOWN BELOW
	15' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	12' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	10' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	STRIP NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	6" POP-UP SPRAY HEAD	RAIN BIRD	1806-SAM-PRS	1. SEE DETAIL LS1-0013 /4 2. INSTALL WITH COBRA FLEX TUBING 3. NO SUBSTITUTION WILL BE APPROVED 4. NOZZLES AS SHOWN BELOW
	15' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	12' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	10' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	STRIP NOZZLE	RAIN BIRD		
	12" POP-UP SPRAY HEAD	RAIN BIRD	1812-SAM-PRS	1. SEE DETAIL LS1-0013 /2 AND LS1-0013 /3 2. INSTALL WITH COBRA FLEX TUBING 3. NO SUBSTITUTION WILL BE APPROVED 4. NOZZLES AS SHOWN BELOW
	15' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	12' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	10' DIAMETER NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	STRIP NOZZLE	RAIN BIRD		1. PLASTIC MPR NOZZLE WITH SCREENS
	BUBBLER HEAD	RAIN BIRD PRESSURE COMPENSATING FULL CIRCLE	1404	1. SEE DETAIL LS1-0013 /5 OR LS1-0013 /7 2. MOUNT ON COBRA FLEXIBLE TUBING 3. OR EQUAL SUBSTITUTION IF APPROVED
	BUBBLER HEAD FLEX TUBING	COBRA MANUFACTURE		1. SEE DETAIL LS1-0013 /6 2. 4" MINIMUM LENGTH 3. OR EQUAL SUBSTITUTION IF APPROVED
	BUBBLER HEAD ON POP-UP	RAIN BIRD	1806-SAM-PRS WITH 1401 NOZZLE AND PA-80 ADAPTER	1. SEE DETAIL LS1-0013 /4 2. NO SUBSTITUTIONS WILL BE APPROVED
	MAINLINE PIPE			1. SEE DETAIL LS1-0012 /3 2. CLASS 200 PVC 3. 3" DIAMETER AND LARGER SHALL HAVE RUBBER GASKET JOINTS 4. 2.5" DIAMETER AND SMALLER SHALL HAVE SOLVENT WELDED JOINTS 5. OR EQUAL SUBSTITUTION IS APPROVED
	LATERAL PIPE			1. SEE DETAIL LS1-0012 /3 2. CLASS 200 PVC 3. SOLVENT WELDED JOINTS 4. OR EQUAL SUBSTITUTION IF APPROVED

815 — CONTROLLER STATION ASSIGNMENT
(2.0) — VALVE SIZE, DIAMETER IN INCHES
63.6 — FLOW THROUGH THE VALVE IN GALLONS PER MINUTE

1. THE VALVES WILL BE ASSIGNED TO THE CONTROLLER IN THE SEQUENCE SHOWN ON IRRIGATION DRAWINGS UNLESS APPROVED BY CDTA

SYSTEM NOTES

1. FIELD VERIFY ALL DIMENSIONS PRIOR TO ENCOUNTING WORK. IF DISCREPANCIES EXIST, NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE BEFORE PROCEEDING

2. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND OBTAINING ALL PERMITS/FEES REQUIRED TO INSTALL THIS SYSTEM ACCORDING TO CODE

3. THE IRRIGATION DESIGN IS DIAGRAMMATIC IN SOME AREAS FOR GRAPHIC CLARITY. ALL EQUIPMENT SHOWN WITHIN PAVING SHALL BE INSTALLED IN THE ADJACENT LANDSCAPE AREA. HEAD LOCATIONS ARE APPROXIMATE

4. THE 120 VOLT POWER FOR EACH CONTROLLER IS EXISTING AS SHOWN. HARD WIRE THE 120 VOLT POWER INTO THE PROPOSED CONTROLLER LOCATION VIA METAL CONDUIT WHEN ABOVE GRADE AND PVC CONDUIT WHEN BELOW

5. VALVE WIRE SHALL BE A MINIMUM #14 U.L.-UF SINGLE STRAND COPPER, NO SPLICES SHALL BE BURIED. COIL WIRE EVERY 100 LF FOR EXPANSION AND CONTRACTION AND AT ALL TURNS

6. ALL PIPING SHALL BE FLUSHED OF DEBRIS BEFORE INSTALLING HEADS

7. SET VALVE BOXES AND HEADS LEVEL AND PERPENDICULAR TO THE FINISH GRADE. COMPACT SOIL FIRMLY AROUND EACH HEAD FOR STABILITY. ADJUST EACH NOZZLE TO OPERATE IN THE BEST ARC FOR SITE CONDITIONS

8. THE STATIC WATER PRESSURE MUST BE TAKEN BEFORE INSTALLATION OF THE SYSTEM BEGINS. THE STATIC READING SHOULD BE GREATER THAN 60 PSI. IF STATIC PRESSURE IS LESS THAN 60 PSI NOTIFY THE CONTRACTING OFFICER, FAILURE TO DO SO WILL HOLD THE CONTRACTOR RESPONSIBLE FOR ALL MODIFICATION COSTS TO THE SYSTEM

9. DO NOT SCHEDULE OPERATION OF CONTROLLERS TO OVERLOAD THE PIPING SYSTEM 15 FPS MAX FLOW OR THE ELECTRICAL SUPPLY SYSTEM

10. IF THE CONTROLLER IS WITHIN A PAVED AREA, PROVIDE A SLEEVE FROM THE CONTROLLER TO THE NEAREST PLANTING AREA. SLEEVE TO BE PVC SCHED 40 PIPE BURIED 18" DEEP HAVING A LONG RADIUS SWEEP AND A NYLON PULL CORD. REFER TO THE SLEEVING SCHEDULE LS1-0011 /6 FOR THE MINIMUM SIZES OF SLEEVES TO BE INSTALLED

11. IRRIGATION CONTRACTOR TO PROVIDE THE CORRECT NOZZLE ON ALL SPRAY HEADS TO MINIMIZE WATER BEING THROWN ONTO THE HARDSCAPE AND TRACKS. THE ACTUAL SHAPE OF THE PLANTING AREAS MAY VARY IN THE FIELD DUE TO THE INSTALLATION OF THE PAVING MATERIALS USE VARIABLE ARC NOZZLES ONLY WHERE NECESSARY

12. ALL SLEEVES ARE EXISTING UNLESS NOTED

13. ALL WATER METERS ARE EXISTING UNLESS NOTED

14. CONTRACTOR TO USE CAUTION WHEN TRENCHING AROUND TPSS SITES BECAUSE OF "GROUNDING GRID" BELOW THE FINISHED GRADE HAVE A "LOCATE" COMPANY MARK THE GRID LOCATION BEFORE ANY TRENCHING IS BEGUN

15. NO VALVES SHALL BE PLACED IN LAWN AREAS UNLESS NOTED OTHERWISE

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CONTRACT SHEET No. 302 OF 307

CAYE COOK & ASSOCIATES

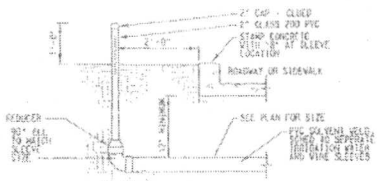
ACT 211 — CARTER BURGESS JACOBS CIVIL INC STV INCORPORATED HNTB ALLIANCE

DART PROJECT

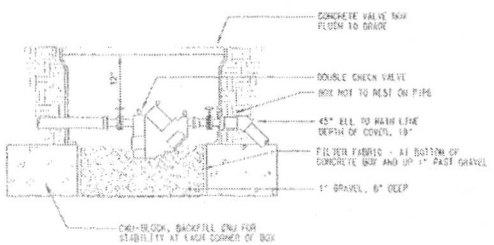
LANDSCAPE STANDARD
IRRIGATION
LEGEND AND GENERAL NOTES
SHEET 2 OF 2

CONTRACT | DWG No. LS1-0011 | REV 0

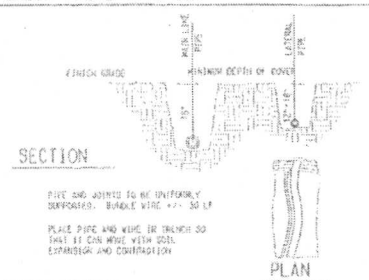
EXHIBIT C



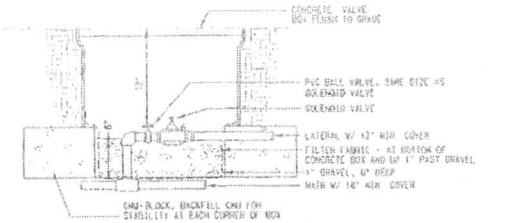
IRRIGATION SERVICE SLEEVE — 1



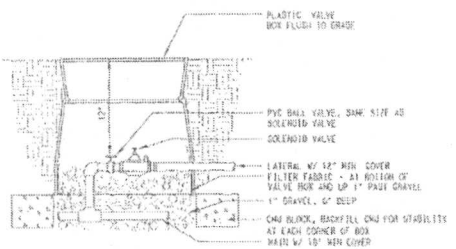
DOUBLE CHECK VALVE ASSEMBLY — 2



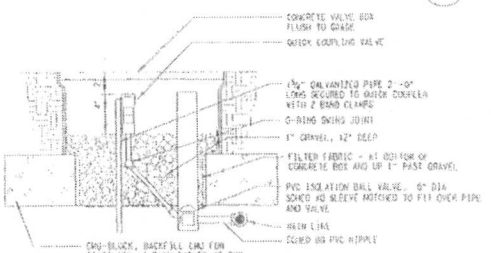
TRENCH DEPTH DETAIL — 3



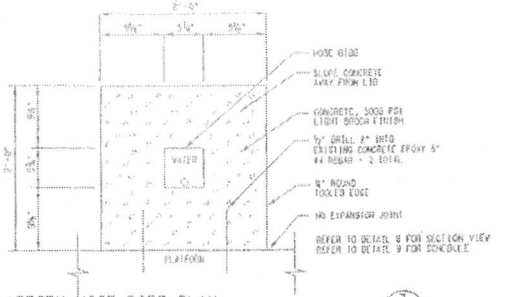
SOLENOID OR MASTER OR ISOLATION VALVE IN CONCRETE VALVE BOX — 4



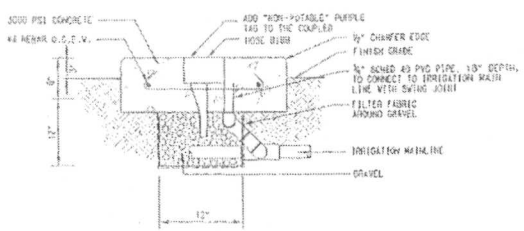
SOLENOID OR MASTER OR ISOLATION VALVE IN PLASTIC VALVE BOX — 5



QUICK COUPLING VALVE DETAIL — 6



PLATFORM HOSE BIBB PLAN — 7



PLATFORM HOSE BIBB SECTION — 8

HOSE BIBB SCHEDULE

DESIGNATION	PLATFORM HOSE BIBB
TYPE FIXTURE	HOSE BIBB
FIXTURE MATERIAL	BRONZE
OPENING SIZE	¾" / ¾"
MANUFACTURER	ZURN
MODEL No	No Z-1366-SS W/ TAPPED COPPER DRAIN HOLE

NOTE:
DEPTH OF BURY FOR INLET IS 12 INCHES, STUBOUT TO 12 INCHES PAST INSIDE WALL FROM PLATFORM CONCRETE HOSE BIBB HOLDER. PROVIDE 1 CUBIC FOOT OF GRAVEL BELOW DRAIN HOLES. HINGED LOCKING COVER WILL BE CLEARLY AND PERMANENTLY LABELED INSIDE COVER IN ¾" TALL LETTERING "DRAIN UNSAFE WATER". FIXTURE WILL BE CAST IN PLACE TO BE FLUSH WITH SURFACE AND TO ALLOW WATER DRAINAGE FROM BOTH COVER AND COPPER DRAIN HOLE INTO GRAVEL. CONNECT HOSE BIBB TO IRRIGATION MAIN LINE.

PLATFORM HOSE BIBB SCHEDULE — 9

SHEET 46 OF 52 | CONTRACT SHEET No. 303 OF 301

CAYE COOK & ASSOCIATES

CARTER BURGESS JACOBS CAYIL INC LTV INCORPORATED KAI ALLIANCE

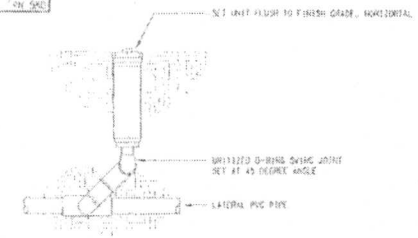
DART PROJECT

LANDSCAPE STANDARD

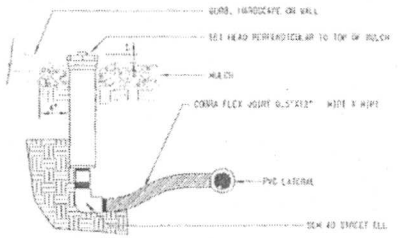
IRRIGATION DETAILS - SHEET 1 OF 4

CONTRACT | NEWS No. LSI-0012 | REV 0

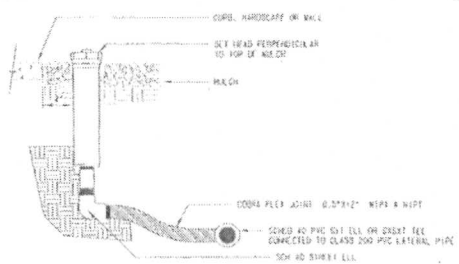
EXHIBIT C



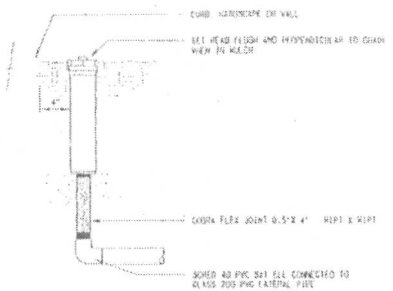
ROTARY HEAD DETAIL 1
NO SCALE



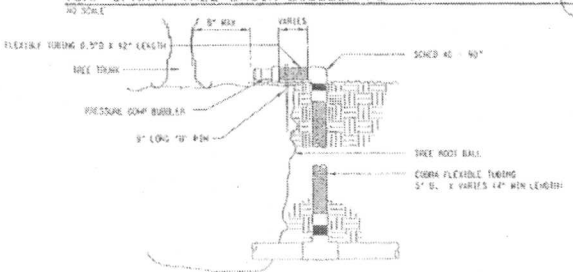
12" RISE SPRAY HEAD CONNECTED TO LATERAL AT 12" DEPTH 2
NO SCALE



12" RISE SPRAY HEAD CONNECTED TO LATERAL AT 18" DEPTH 3
NO SCALE



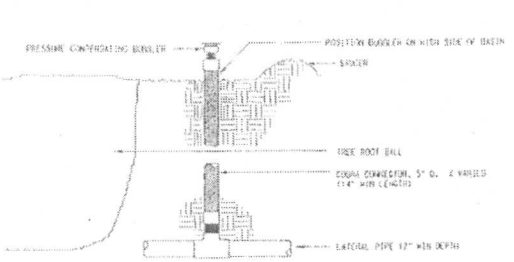
TURF SPRAY/ TREE BASIN BUBBLER POP-UP 4
NO SCALE



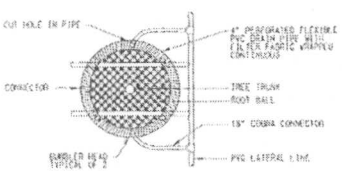
BUBBLER UNIT UNDER GRATE 5
NO SCALE

PVC PIPE SIZE	PVC SLEEVE SIZE, SCH 40	MAX NUMBER OF #12 WIRES	SCHED 40 PVC SLEEVE
0.75"	2.0"	9	1.0"
1.0"	2.5"	11	1.25"
1.25"	3.0"	23	1.5"
1.5"	3.0"	38	2.0"
2.0"	4.0"	54	2.5"
2.5"	6.0"		
3.0"	6.0"		
4.0"	8.0"		

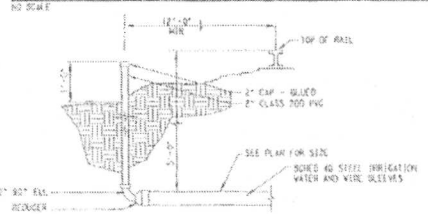
SLEEVING SCHEDULE 6
NO SCALE



BUBBLER UNIT IN TREE BASIN 7
NO SCALE



IRRIGATION W/FLEXIBLE PERFORATED PVC 8
NO SCALE



EXISTING IRRIGATION SERVICE SLEEVE UNDER RAIL 9
NO SCALE

SHEET 47 OF 52

CONTRACT SHEET No. 304 OF 307

CAYE COOK & ASSOCIATES

ACT 21 — CARTER BURGESS JACOBS CIVIL INC STV INCORPORATED KAI ALLIANCE

DART PROJECT

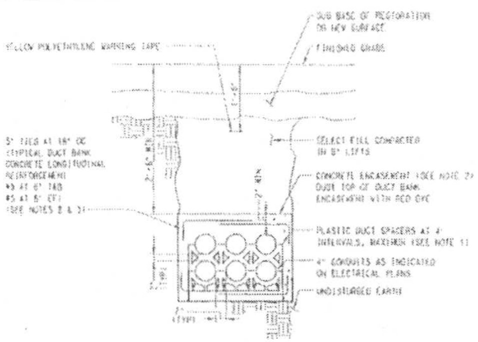
LANDSCAPE STANDARD

IRRIGATION DETAILS SHEET 2 OF 4

CONTRACT | DWG No. LSI-0013 | REV 3

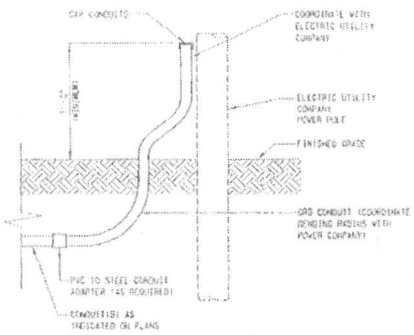
EXHIBIT C

2000-233



TYPICAL REINFORCED CONCRETE ENCASED CONDUIT DUCT BANK - DETAIL (1)

NO SCALE

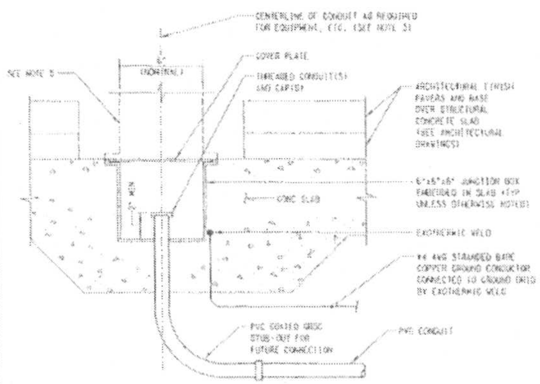


DUCT BANK TERMINATION AT UTILITY POLE - DETAIL (2)

NO SCALE

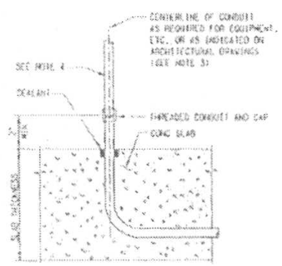
NOTES:

1. PLASTIC BASE CONDUIT SPACERS SHALL BE PLACED LONGITUDINALLY AT 4'-0" ON CENTERS, MAXIMUM.
2. REFER TO DIVISION 3 OF SPECIFICATIONS FOR CONCRETE REQUIREMENTS.
3. CONDUIT/DUCT LOCATIONS, LAYOUTS AND ROUTING AS SHOWN ON ELECTRICAL PLANS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR INSTALLED LOCATIONS, LAYOUT, ROUTING AND INSTALLATION OF ALL RACEWAY SYSTEMS AND/OR DUCT BANK CONFIGURATIONS IN ACCORDANCE WITH CHAPTER 3 OF THE NATIONAL ELECTRICAL CODE, AND ACTUAL FIELD CONDITIONS. CONDUIT/DUCT SYSTEMS ROUTED BELOW ROADWAYS AND TRACKS SHALL BE REINFORCED CONCRETE ENCASED.
4. PROVIDE CONDUIT COUPLING AND EXTEND CONDUIT UP TO EQUIPMENT AS NECESSARY IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS, AT THE TIME OF EQUIPMENT INSTALLATION ONLY.
5. PROVIDE JUNCTION BOX EXTENSION UP TO EQUIPMENT AS NECESSARY, IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS, AT THE TIME OF EQUIPMENT INSTALLATION ONLY.



TYPICAL EQUIPMENT STUB-OUT - DETAIL (3)

NO SCALE



TYPICAL CONDUIT STUB UP - DETAIL (4)

NO SCALE

SHEET 48 OF 52

CONTRACT SHEET No. 219 OF 307

GERARD & ASSOCIATES CONSULTING ENGINEERS

ACT 211 — CARTER BURGESS, JACOBS CIVIL INC, STV INCORPORATED, KAI ALLIANCE

DART PROJECT

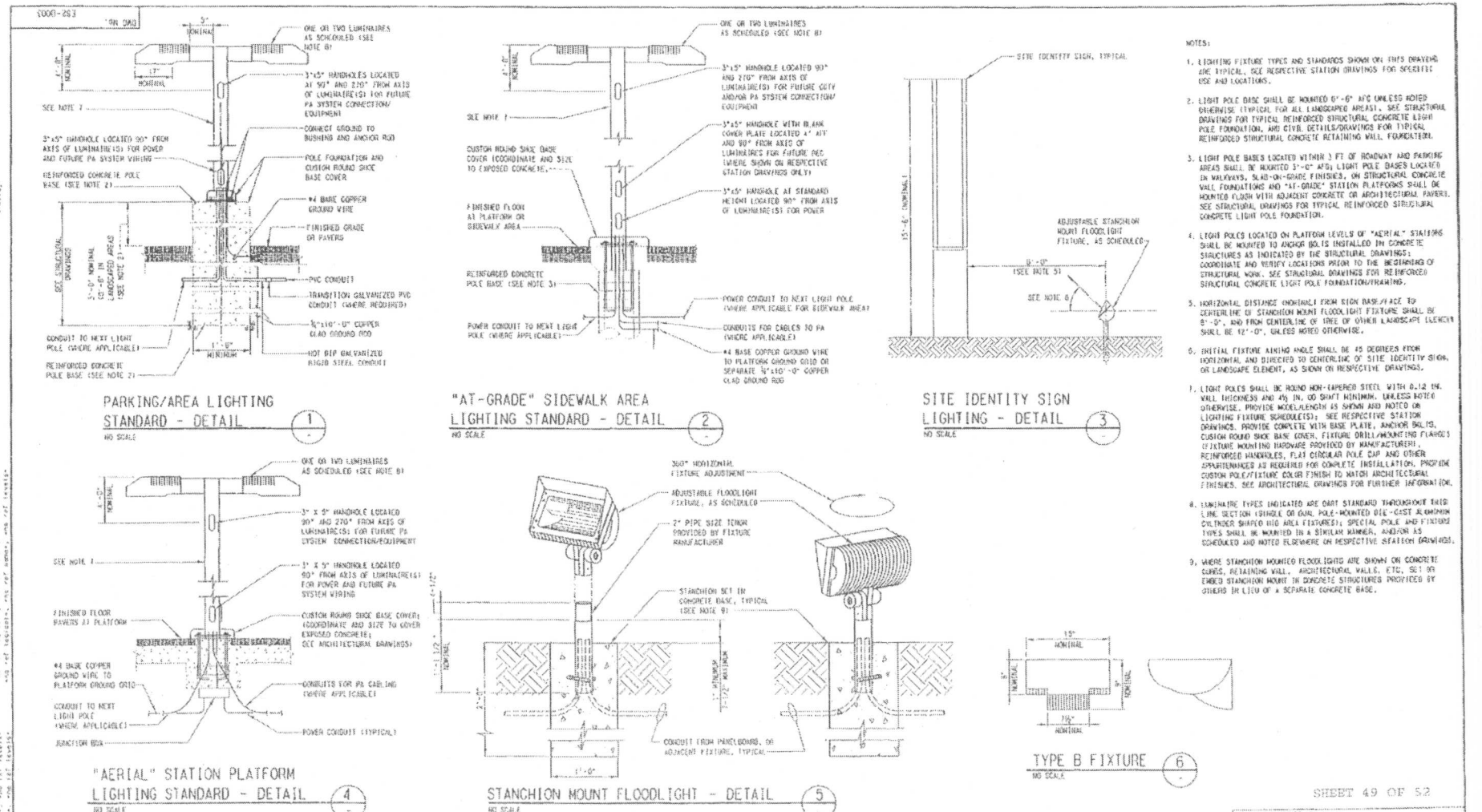
CAES

ELECTRICAL STANDARD

MISCELLANEOUS ELECTRICAL DETAILS SHEET 2 OF 6

CONTRACT	DWG No.	REV
	ES2-0002	0

EXHIBIT C



SHEET 49 OF 52

CONTRACT SHEET NO. 200 OF 307

GERARD & ASSOCIATES CONSULTING ENGINEERS

CARTER BURGESS JACOBS GIVIL INC GTY INCORPORATED MAT ALLIANCE

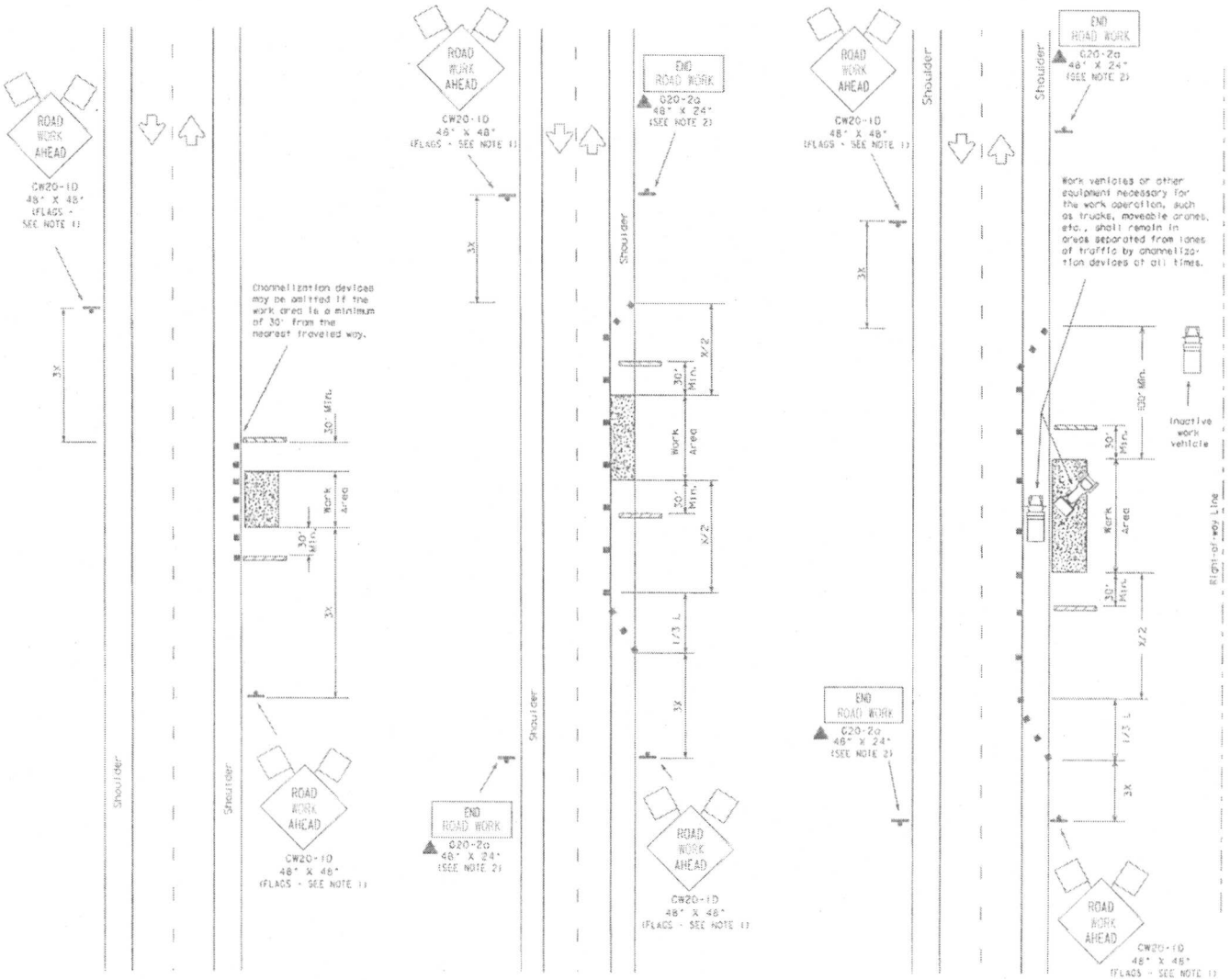
DART PROJECT

ELECTRICAL STANDARD

MISCELLANEOUS ELECTRICAL DETAILS SHEET 3 OF 6

CONTRACT DWG No. E92-0003 REV 0

EXHIBIT C



TCP (2-1a)

Work Area Near Shoulder

TCP (2-1b)

Work Area on Shoulder

TCP (2-1c)

Work Vehicles on Shoulder

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag

Heavy Work Vehicle Truck Mounted Attenuator

Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign

Flagger Sign Post

Posted Speed *	Formula	Minimum Desirable Taper Lengths * ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	* 600'
65		650'	715'	780'	65'	130'-165'	* 700'
70		700'	770'	840'	70'	140'-175'	* 800'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE*				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES:

1. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. Type III barricades are required on both sides of work area at all times. (See BC Standards for barricade details.)
4. Stockpiled material should be placed a minimum 30' from nearest traveled way.
5. On high speed facilities advance warning signs should be installed approximately 3X from the work area or from the beginning of a taper or shoulder taper. On low speed facilities the advance warning sign should be placed on the "X" minimum distance.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

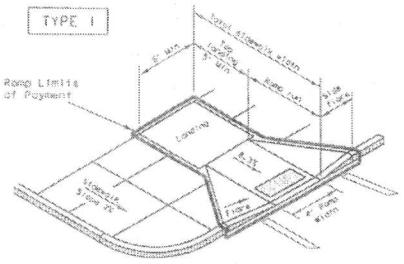
Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail: TRF-STANDARD@mail.gw.dot.state.tx.us

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

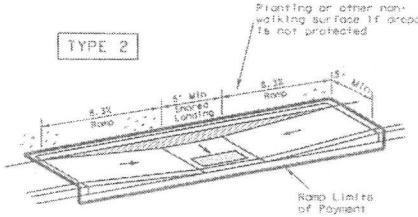
TRAFFIC CONTROL PLAN

TCP(2-1)-98

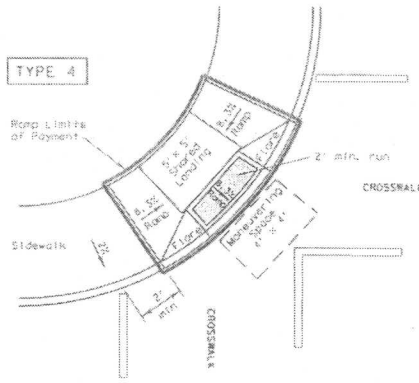
EXHIBIT C



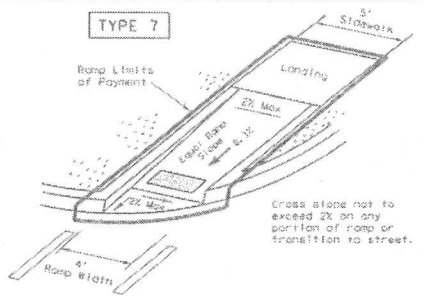
PERPENDICULAR CURB RAMP



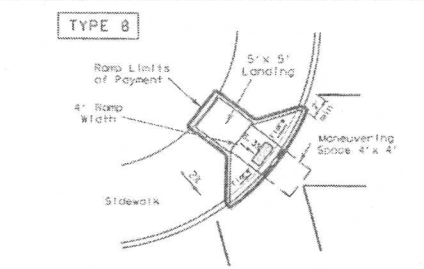
PARALLEL CURB RAMP
(Use only where water will not pond in the landing.)



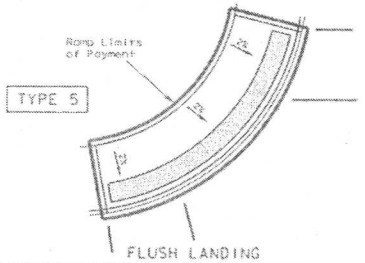
DIAGONAL COMBINATION CURB RAMP
Perpendicular to the Tangent of the Curb
Radius and Contained in Crosswalk



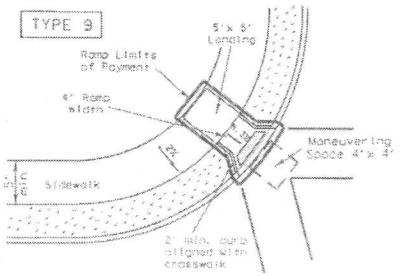
DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk set back from curb)



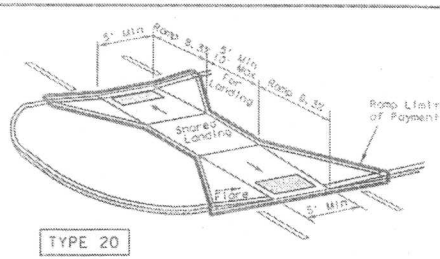
DIAGONAL CURB RAMP (FLARED SIDES)

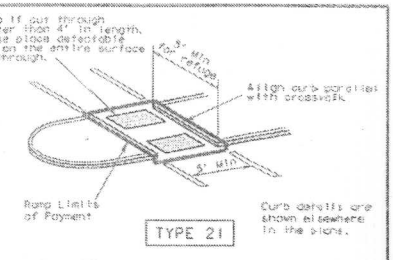


FLUSH LANDING

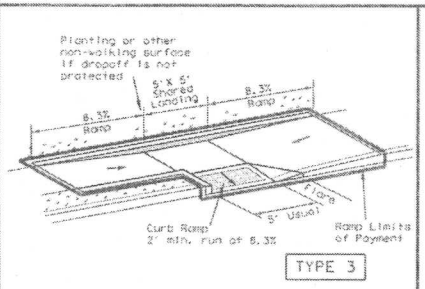


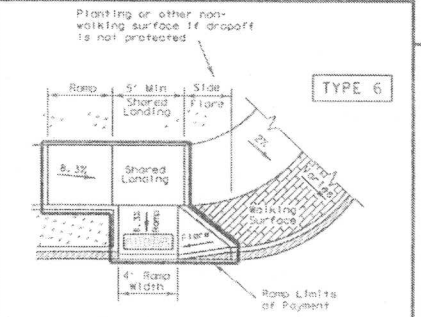
DIAGONAL CURB RAMP (RETURNED CURB)



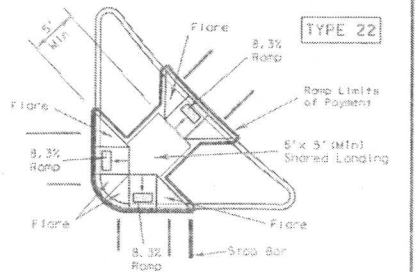


CURB RAMPS AT MEDIAN ISLANDS

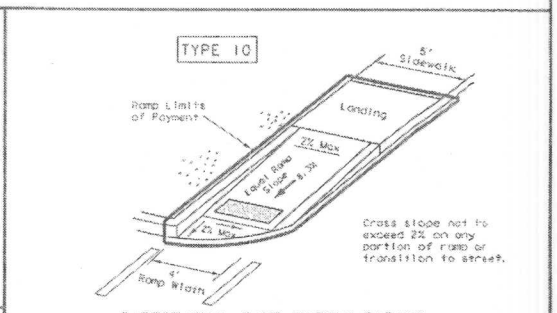




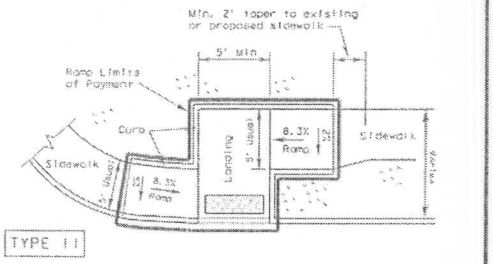
COMBINATION CURB RAMPS



COMBINATION ISLAND RAMPS



DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk adjacent to curb)



OFFSET PARALLEL CURB RAMP

NOTES:
See General Notes on sheet 2 of 4 for more information.

* Denotes planting or non-walking surface.

Texas Department of Transportation
Design Division (Roadway)

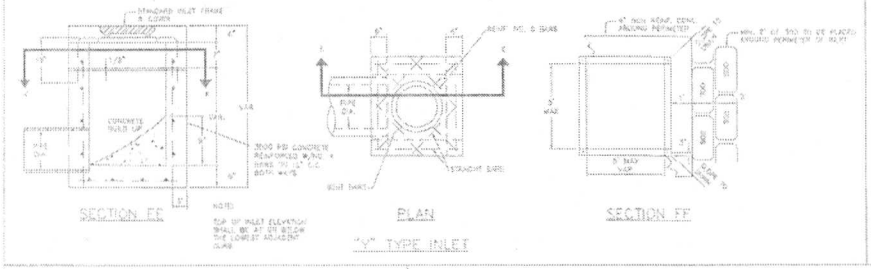
PEDESTRIAN FACILITIES
CURB RAMPS

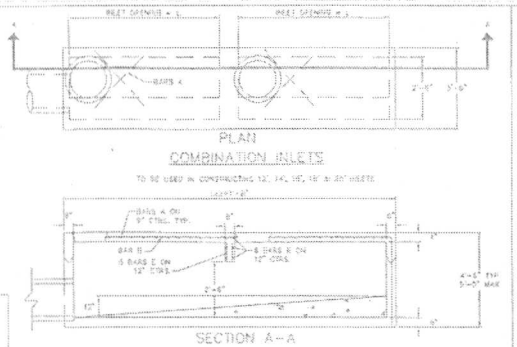
PED-05

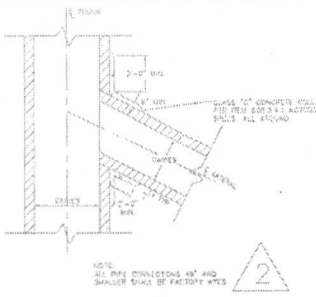
SHEET 1 OF 4

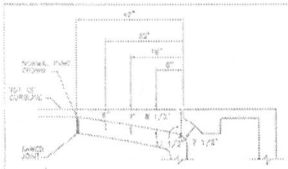
FILE	ped05_1.dgn	DN: EH	CK:	DW: BGD	CK:
© TxDOT March 2005		CK:	FEDERAL AID PROJECT		SHEET
REVISIONS					
		DISTRICT	CONTROL	SECT	JOB	HIGHWAY

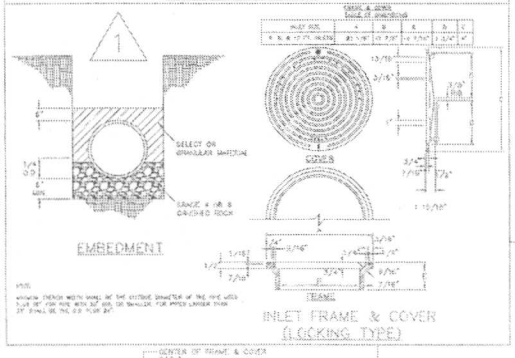
EXHIBIT C

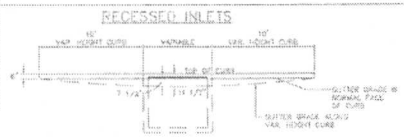


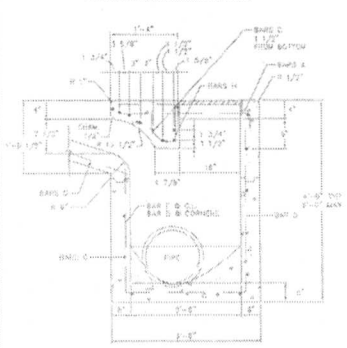


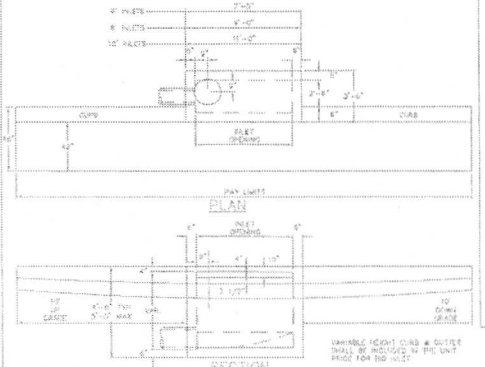


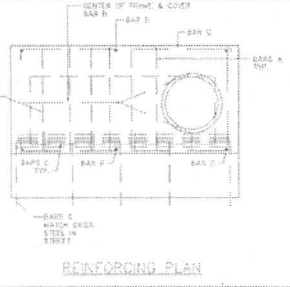


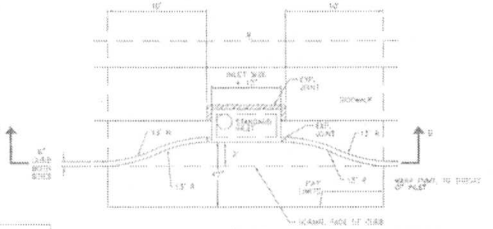


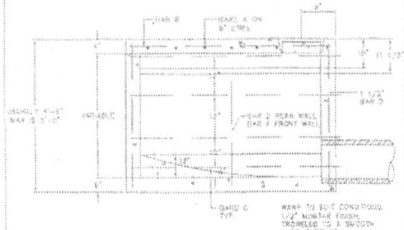


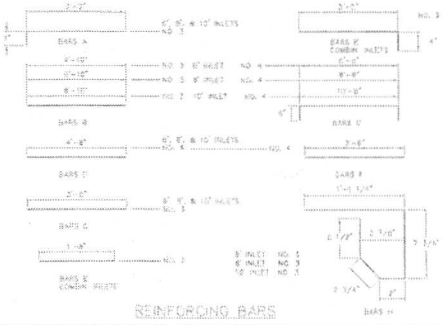












GENERAL NOTES

1. ALL CONCRETE SHALL BE CLASS "A".
2. CONCRETE SHALL HAVE A TROWEL AND BRUSH FINISH.
3. EXPANSION JOINT MATERIAL SHALL BE PLACED BETWEEN INLET STRUCTURE AND CURB.
4. PIPES SHALL ONLY CONNECT TO THE ENDS OR SIDES OF INLETS.
5. ALL PIPE CONNECTIONS 48" AND SMALLER SHALL BE FACTORY WYES.
6. REINFORCING STEEL - NO. 3 X'S' O.C.E.W. EQUALLY SPACED HORIZONTALLY IN INLET FLOOR/TOP.
7. ALL PIPE JOINTS SHALL HAVE ENTRANCE OF JOINT MATERIAL 360° ON INSIDE OF PIPE.
8. NO PRECAST STRUCTURES ALLOWED FOR STORM SEWER.
9. SEE SHEET C-10 FOR STORM SEWER MANHOLE DETAILS.
10. SEE C-9 FOR ALLEY INLETS.

STANDARD CONSTRUCTION DETAILS
STORM SEWER
CITY OF RICHARDSON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	SHEET NO
CDR	MSR	7-05	NTS		C-5

SHEET 53 OF 52

(NO ADDITIONS OR CHANGES TO STANDARD DETAIL SHEETS UNLESS APPROVED BY CITY OF RICHARDSON)

1 07 APR 05 -- EMBEDMENT DETAIL REVISED 2 12 DEC 08 -- CONCRETE REVISED

Texas Department of Transportation

EXHIBIT D

CERTIFICATE OF INSURANCE (TxDOT Form 1560)

EXHIBIT D

DART

CERTIFICATE OF SELF INSURANCE

ISSUE DATE (MM/DD/YY)

November 11, 2008

INSURED

Dallas Area Rapid Transit Authority
(DART)
1401 Pacific Avenue
Dallas, Texas 75266

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER.

COVERAGES

THIS IS TO CERTIFY PROGRAMS OF SELF INSURANCE FOR COVERAGES LISTED BELOW ARE IN OPERATION. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MY BE ISSUED OR MAY PERTAIN. THE SELF INSURANCE AFFORDED BY THE PROGRAM DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH PROGRAMS.

TYPE OF INSURANCE	EFFECTIVE DATE (MM/DD/YY)	EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS		
				EACH OCCURRENCE	AGGREGATE
COMMERCIAL GENERAL LIABILITY OCCURRENCE FORM	N/A	N/A	BODILY INJURY PROPERTY DAMAGE	$300,000 $100,000	$300,000 $100,000
AUTOMOBILE LIABILITY ANY AUTO (INCLUDING BUSES)	N/A	N/A	BODILY INJURY PER PERSON $100,000 BODILY INJURY PER ACCIDENT $300,000 PROPERTY DAMAGE $100,000		
WORKERS COMPENSATION EMPLOYERS LIABILITY	11/1/08	11/1/09	STATUTORY SELF-INSURED		

RE:

SPECIAL COMMENTS

***The Authority has limited liability as stated under the Texas Tort Claims Act, Section 101.001 Et. Seq., Civil Practice & Remedies Code.**

Certificate Holder

Should any of the above-described programs be cancelled or materially changed,

The Authority will endeavor to mail 30 days written notice to the certificate holder named to the left, but failure to mail such notice shall impose no obligation upon the Authority, its agents or representatives.

Nery Armbruster per Sue Mullaney
DART Sr. Manager Risk Management Programs

080133

Dallas Area Rapid Transit

RESOLUTION

RESOLUTION

of the

DALLAS AREA RAPID TRANSIT
(Executive Committee)

Approval of a Multiple Use Agreement Between DART, Texas Department of Transportation (TxDOT) and North Texas Tollway Authority (NTTA) for Parking Expansion and continued use of property Under SH 190 (President George Bush Turnpike) at US 75 (Central Expressway)

WHEREAS, TxDOT and NTTA recognize DART's new request for facility expansion and the continued use of this area as a public parking lot to serve DART's light rail station and its benefits to regional transportation in the area; and

WHEREAS, TxDOT and NTTA agree that DART may have immediate access to the area for design and construction activities of said parking expansion upon the execution by all parties of a Multiple Use Agreement; and

WHEREAS, under new terms of the Multiple Use Agreement, the usage period is indefinite with TxDOT, NTTA and DART having the ability to cancel the agreement upon notice, and upon the exercise of any such right, DART will vacate and restore the area to original condition within a specific time agreeable to all parties; and

WHEREAS, DART, TxDOT and NTTA understand that the terms and conditions of the Multiple Use Agreement are subject to legal review and approval by DART's Board of Directors, NTTA's Board of Directors, and TxDOT Management; and

WHEREAS, no real estate purchase is required for this parking lot expansion project and no user fees will be collected by the STATE or NTTA for use of this area by DART; and

WHEREAS, there is no cost incurred by DART for this agreement. Under the terms of this Multi Use Agreement, DART is not permitted to collect fees for parking at this facility. If in the future the DART Board adopts a fee-paid parking lot policy, the parties to this agreement will need to enter a separate new revenue sharing agreement.

NOW, THEREFORE, BE IT RESOLVED by the Dallas Area Rapid Transit Board of Directors that the President/Executive Director or his designee is authorized to execute a Multiple Use Agreement with the Texas Department of Transportation (TxDOT) and the North Texas Tollway Authority (NTTA), subject to legal review, for the use of property under SH 190 (President George Bush Turnpike) at US 75 (Central Expressway) in substantially the form as shown in Attachment 1 to this resolution.

080133

Approval of a Multiple Use Agreement Between DART, Texas Department of Transportation (TxDOT) and North Texas Tollway Authority (NTTA) for Parking Expansion and continued use of property Under SH 190 (President George Bush Turnpike) at US 75 (Central Expressway)

John C. Danish
Secretary

Randall Chrisman
Chair

APPROVED AS TO FORM:

DART Counsel

ATTEST:

Gary C. Thomas
President/Executive Director

September 9, 2008
Date

9/9/2008-12:50 PM

NTTA®

NORTH TEXAS TOLLWAY AUTHORITY

RESOLUTION NO. 07-142

A RESOLUTION AUTHORIZING A MULTIPLE USE AGREEMENT WITH DALLAS AREA RAPID TRANSIT AND THE TEXAS DEPARTMENT OF TRANSPORTATON REGARDING PROPERTY LOCATED BENEATH THE PGBT AND US 75 INTERCHANGE.
November 20, 2007

WHEREAS, the North Texas Tollway Authority (the "NTTA") is a regional tollway authority governed by Chapter 366 of the Texas Transportation Code; and

WHEREAS, the NTTA operates a turnpike project known as the President George Bush Turnpike ("PGBT"), which cross over a highway project designated as US 75 that is operated by the Texas Department of Transportation ("TxDOT"); and

WHEREAS, pursuant to a multiple use agreement between the NTTA, TxDOT, and Dallas Area Rapid Transit ("DART"), DART operates a parking facility beneath the interchange of the PGBT and US 75, to the west of Plano Road and east of US 75; and

WHEREAS, the term of the multiple use agreement expired in 2007, and DART proposes to enter into a new agreement that permits DART to continue to operate the parking facility and to construct an expansion of the facility, as shown on Exhibit "A" attached hereto and incorporated herein for all purposes; and

WHEREAS, the NTTA and TxDOT each owns property interests where the parking facility and proposed expansion are located; and

WHEREAS, the NTTA has reviewed and evaluated the construction and operation plans of the parking facility and proposed expansion and does not find any material threat to the operational or structural integrity of the PGBT as a result of such construction and operation; and

WHEREAS, the NTTA, DART and TxDOT desire to enter into a multiple use agreement to permit DART to construct and operate the expanded parking facility;

NOW, THEREFORE BE IT RESOLVED, that the NTTA Board of Directors authorizes the Executive Director to enter into a multiple use agreement with DART and TxDOT to permit DART to construct, expand, and operate a DART parking facility beneath the PGBT/US 75 Interchange to the west of Plano Road and east of US 75, which agreement shall be terminable by any party at any time.

ATTEST:

Paul N. Wageman, Chairman

Debra L. Smith, Secretary