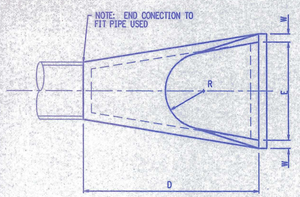
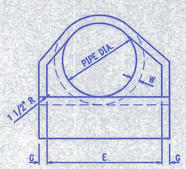
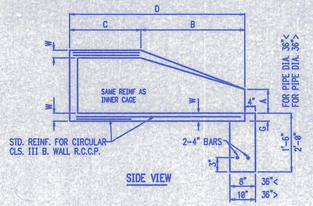


TOP VIEW



END VIEW

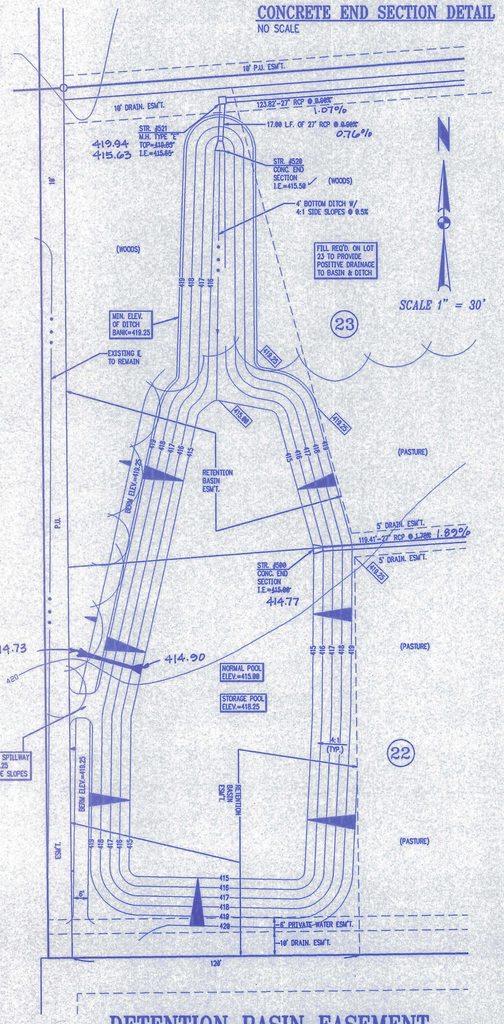


SIDE VIEW

PIPE DIA.	WGT. (LBS)	WALL	A	B	C	D	E	G	R	SLOPE
12"	538	2"	5"	2'-0"	4'-7/8"	4'-7"	2'-0"	2"	9"	2:1
15"	748	2 1/4"	6"	2'-3"	3'-10"	4'-7"	2'-6"	2 1/4	11"	2:1
18"	998	2 1/2"	10"	2'-3"	3'-10"	4'-7"	3'-0"	2 1/2	12"	2:1
21"	1288	2 3/4"	10"	2'-11"	3'-2"	4'-7"	3'-6"	2 3/4"	13"	2:1
24"	1528	3"	10"	3'-7 1/2"	2'-8"	4'-7"	4'-0"	3"	14"	2:1
27"	1938	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	14 1/2"	3:1
30"	2198	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	15"	3:1
33"	3288	3 3/4"	1'-1 1/2"	4'-10 1/2"	1'-3 1/4"	6'-1 3/4"	5'-6"	3 3/4"	17 1/2"	3:1
36"	4108	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	4"	20"	3:1
42"	5388	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4 1/2"	22"	3:1
48"	6558	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	5"	22"	3:1
54"	8248	5 1/2"	2'-3"	5'-3"	2'-11"	8'-2"	7'-6"	5 1/2"	24"	2:1
60"	8738	6"	2'-11"	5'-0"	3'-3"	8'-3"	8'-0"	5"	*	2:1
66"	10710	6 1/2"	2'-6"	6'-0"	2'-3"	8'-3"	8'-6"	5 1/2"	*	2:1
72"	12520	7"	3'-0"	6'-6"	1'-9"	8'-3"	9'-0"	6"	*	1.86:1
78"	14770	7 1/2"	3'-0"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	*	1.82:1
84"	18160	8"	3'-0"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	*	1.5:1

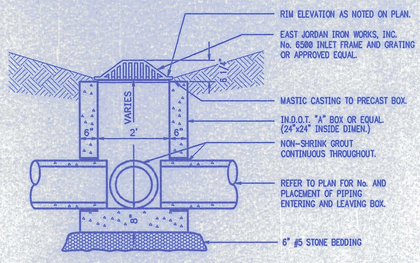
CONCRETE END SECTION DETAIL

NO SCALE



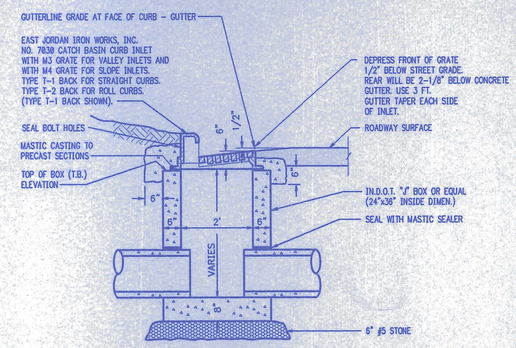
DETENTION BASIN EASEMENT

SCALE: 1"=20'



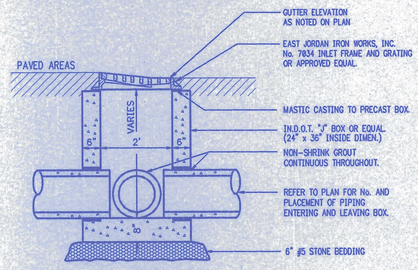
AREA INLET-TYPE "A" DETAIL

SCALE: 1/2"=1'-0"



CURB INLET DETAIL

SCALE: 1/2"=1'-0"



AREA INLET-TYPE "J" DETAIL

SCALE: 1/2"=1'-0"

MANHOLE-TYPE "A" DETAIL

SCALE: 1/2"=1'-0"

TYPICAL DITCH SECTION

SCALE: 1"=2'

RECORD DRAWING

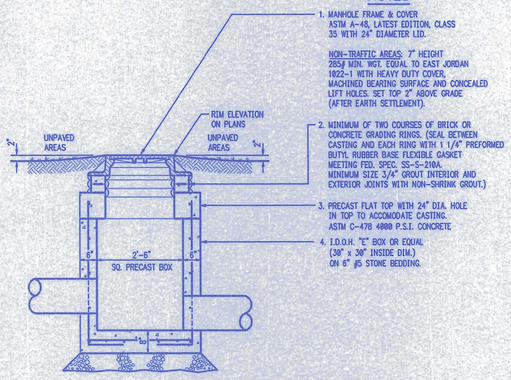
STORM 8-21-97

NOTES

1. MANHOLE FRAME & COVER ASTM A-48, LATEST EDITION, CLASS 35 WITH 24" DIAMETER LID.

NON-TRAFFIC AREAS: 7" HEIGHT 285# MIN. WGT. EQUAL TO EAST JORDAN 1022-1 WITH HEAVY DUTY COVER, MACHINED BEARING SURFACE AND CONCEALED LIFT HOLES. SET TOP 2" ABOVE GRADE (AFTER EARTH SETTLEMENT).

2. MINIMUM OF TWO COURSES OF BRICK OR CONCRETE GRADING RINGS. (SEAL BETWEEN CASTING AND EACH RING WITH 1 1/4" PREFORMED BUTYL RUBBER BASE FLEXIBLE GASKET MEETING FED. SPEC. SS-S-210A. MINIMUM SIZE 3/4" GROUT INTERIOR AND EXTERIOR JOINTS WITH NON-SHRINK GROUT.)
3. PRECAST FLAT TOP WITH 24" DIA. HOLE IN TOP TO ACCOMODATE CASTING. ASTM C-478 4000 P.S.I. CONCRETE
4. I.D.O.H. "E" BOX OR EQUAL (30" x 36" INSIDE DIM.) ON 6" #5 STONE BEDDING.



MANHOLE-TYPE "E" DETAIL

SCALE: 1/2"=1'-0"

NOTES

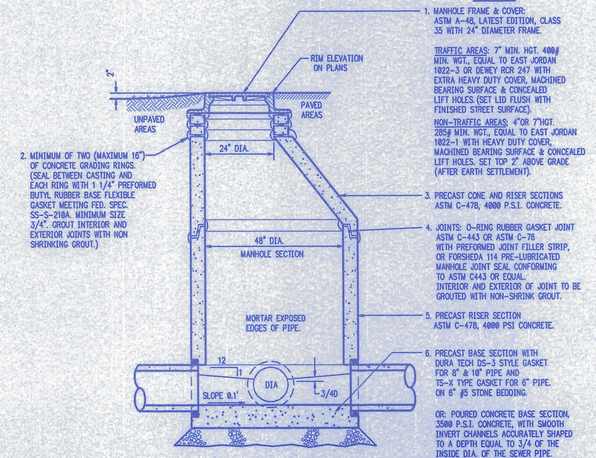
1. MANHOLE FRAME & COVER: ASTM A-48, LATEST EDITION, CLASS 35 WITH 24" DIAMETER FRAME.

TRAFFIC AREAS: 7" MIN. HGT. 400# MIN. WGT., EQUAL TO EAST JORDAN 1022-3 OR DEWEY ROM 247 WITH EXTRA HEAVY DUTY COVER, MACHINED BEARING SURFACE & CONCEALED LIFT HOLES (SET LID FLUSH WITH FINISHED STREET SURFACE).

NON-TRAFFIC AREAS: 4"OR 7"HGT. 285# MIN. WGT., EQUAL TO EAST JORDAN 1022-1 WITH HEAVY DUTY COVER, MACHINED BEARING SURFACE & CONCEALED LIFT HOLES. SET TOP 2" ABOVE GRADE (AFTER EARTH SETTLEMENT).

2. MINIMUM OF TWO (MAXIMUM 16") OF CONCRETE GRADING RINGS. (SEAL BETWEEN CASTING AND EACH RING WITH 1 1/4" PREFORMED BUTYL RUBBER BASE FLEXIBLE GASKET MEETING FED. SPEC. SS-S-210A. MINIMUM SIZE 3/4" GROUT INTERIOR AND EXTERIOR JOINTS WITH NON SHRINKING GROUT.)
3. PRECAST CONE AND RISER SECTIONS ASTM C-478, 4000 P.S.I. CONCRETE.
4. JOINTS: O-RING RUBBER GASKET JOINT ASTM C-443 OR ASTM C-76 WITH PREFORMED JOINT FILLER STRIP, OR FORSHEDA 114 PRE-LUBRICATED MANHOLE JOINT SEAL CONFORMING TO ASTM C443 OR EQUAL. INTERIOR AND EXTERIOR OF JOINT TO BE GROUTED WITH NON-SHRINK GROUT.
5. PRECAST RISER SECTION ASTM C-478, 4000 PSI CONCRETE.
6. PRECAST BASE SECTION WITH DURA TECH DS-3 STYLE GASKET FOR 8" & 10" PIPE AND TS-X TYPE GASKET FOR 6" PIPE. ON 6" #5 STONE BEDDING.

OR: POURED CONCRETE BASE SECTION, 3500 P.S.I. CONCRETE, WITH SMOOTH INVERT CHANNELS ACCURATELY SHAPED TO A DEPTH EQUAL TO 3/4 OF THE INSIDE DIA. OF THE SEWER PIPE. MANHOLE SHELF TO SLOPE TOWARDS CHANNEL AT 1:12, MINIMUM BASE OVERHANG 6". PIPE TO BE CAST INTO POURED BASE USING A RUBBER GASKET WATER STOP.



MANHOLE-TYPE "48"

SCALE: 1/2"=1'-0"

GENERAL NOTES

- THE FOLLOWING LOCAL GOVERNMENTAL AGENCY SHALL BE NOTIFIED 24 HOURS PRIOR TO BEGINNING WORK AND ON A DAILY BASIS THEREAFTER WHEN PERFORMING THE WORK LISTED BELOW:

⚠ STORM SEWERS, STREET SUBGRADE, STREETS
VANDERBURGH COUNTY ENGINEER 435-5773

GENERAL SITE

- WORK COVERS ALL EARTHWORK, SEWERS, PAVING AND OTHER RELATED WORK FOR THE DEVELOPMENT OF "CYPRESS CREEK".
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF MUNICIPAL AUTHORITIES WHICH BEAR ON THE PERFORMANCE OF THE WORK.
- ALL FIELD ENGINEERING SHALL BE SUPPLIED BY THE OWNER.

EXCAVATING

- ROADWAY SUBGRADE COMPACTION TESTS SHALL BE PERFORMED AT CONTRACTORS EXPENSE.
- SUFFICIENT SOIL SAMPLES ARE TO BE TAKEN FROM THE ROADWAY SUBGRADE AFTER THE TOPSOIL IS REMOVED OR FROM BORROW AREAS IN ORDER TO OBTAIN ACCURATE PROCTOR VALUES FOR SUBSEQUENT SUBGRADE DENSITY TESTING.
- SUBGRADE IS TO BE COMPACTED IN ACCORDANCE WITH COUNTY HIGHWAY STANDARDS.
- SUBGRADE DENSITY IS TO BE TESTED AT A MINIMUM OF ONE TEST PER SECTION OF ROADWAY CONNECTED BY AN INTERSECTION. OTHERS MAY BE REQUESTED AT THE DISCRETION OF THE INSPECTOR OR ENGINEER.
- DRAWINGS DO NOT REPRESENT A BALANCE BETWEEN BORROW AND FILL MATERIAL.

STORM SEWERS

- STORM DRAINAGE SYSTEM TO BE IN TEMPORARY SERVICE FOR SITE DRAINAGE DURING CONSTRUCTION AND MUST BE CLEANED BEFORE CONSIDERATION FOR MAINTENACE ACCEPTANCE.
- PRODUCT CERTIFICATIONS OR REPORTS ARE TO BE OBTAINED BY THE DEVELOPER FROM THE CONCRETE SUPPLIER AND MADE AVAILABE TO THE COUNTY HIGHWAY ENGINEER'S INSPECTOR OR OFFICE.
- ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 76-79.
- STORM SEWER PIPE SHALL CONFORM TO RCP CLASS III WITH O-RING RUBBER GASKET JOINTS. RUBBER GASKETS SHALL CONFORM TO ASTM C 473-79.
- ALL LENGTHS OF RCP STORM SEWER TERMINATING OR BEGINNING WITH CONCRETE END SECTIONS REFER TO THE DISTANCE FROM THE CENTERLINE OF STRUCTURE TO THE FLOWLINE OF THE CONCRETE END SECTION.

PAVEMENT

- PRODUCT CERTIFICATIONS OR REPORTS ARE TO BE OBTAINED BY THE DEVELOPER FROM THE CONCRETE SUPPLIER AND MADE AVAILABE TO THE COUNTY HIGHWAY ENGINEER'S INSPECTOR OR OFFICE.
- ALL CONCRETE TESTS SHALL BE PERFORMED AT CONTRACTOR'S EXPENSE.
- A MINIMUM OF ONE SET (THREE CYLINDERS) OF CONCRETE SAMPLES ARE TO BE TAKEN EACH DAY FOR STRENGTH TESTING. OTHERS MAY BE REQUESTED AT THE DISCRETION OF THE INSPECTOR OR ENGINEER.
- IF NECESSARY, PAVEMENT CORES WILL BE TAKEN AT THE EXPENSE OF CONTRACTOR IN IN ACCORDANCE WITH IDOH STANDARDS.
- ALL JOINTS AND ANY CRACKS IN THE PAVEMENT SHALL BE FILLED WITH JOINT SEALER.

STORM STRUCTURE TABLE

STR. #500	27" CONC. END SECTION	N/A	N/A
STR. #501	M.H. TYPE "E"	EAST JORDAN #8313	TYPE A
STR. #502	M.H. TYPE "48"	EAST JORDAN #10221	H.D. COVER
STR. #503	15" CONC. END SECTION	N/A	N/A
STR. #504	A.I. TYPE "A"	EAST JORDAN #6500	N/A
C.I. #506	"J" BOX	EAST JORDAN #7030	TYPE M3
C.I. #507	"J" BOX	EAST JORDAN #7030	TYPE M3
STR. #508	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
STR. #509	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
C.I. #510	"J" BOX	EAST JORDAN #7030	TYPE M4
C.I. #511	"J" BOX	EAST JORDAN #7030	TYPE M4
STR. #512	12" CONC. END SECTION	N/A	N/A
A.I. #513	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
STR. #514	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
C.I. #515	"J" BOX	EAST JORDAN #7030	TYPE M4
C.I. #516	"J" BOX	EAST JORDAN #7030	TYPE M4
STR. #517	18" CONC. END SECTION	N/A	N/A
STR. #520	27" CONC. END SECTION	N/A	N/A
STR. #521	M.H. TYPE "E"	EAST JORDAN #8313	TYPE A
C.I. #522	"J" BOX	EAST JORDAN #7030	TYPE M3
C.I. #523	"J" BOX	EAST JORDAN #7030	TYPE M3
STR. #524	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
STR. #525	A.I. TYPE "A"	EAST JORDAN #6500	N/A
STR. #526	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
C.I. #527	"J" BOX	EAST JORDAN #7030	TYPE M3
C.I. #528	"J" BOX	EAST JORDAN #7030	TYPE M3
A.I. #529	A.I. TYPE "J"	EAST JORDAN #7034	TYPE M
C.I. #530	"J" BOX	EAST JORDAN #7030	TYPE M3
STR. #531	A.I. TYPE "A"	EAST JORDAN #6500	N/A
STR. #532	18" CONC. END SECTION	N/A	N/A
STR.# 533	M.H. TYPE "A"	EAST JORDAN #8308	TYPE A
C.I. #534	"J" BOX	EAST JORDAN #7030	TYPE M3
STR. #535	18" CONC. END SECTION	N/A	N/A

Written dimensions on these drawings shall have precedence over scale dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and SITECON, Inc. must be notified of any variations from the dimensions and conditions shown by these drawings.

SITECON, Inc.
Engineers-Surveyors
600 S.E. Eighth Street Suite 2
Evansville, Indiana 47713
(812) 423-2320

Project: CYPRESS CREEK

Sheet Title: STORM DETAIL

Revisions

No.	By	Date	Description
1	JDW	8-25-94	TYPICAL DITCH SECTION & NOTE/CATION NOTE

CHRISTOPHER LEE NEAL REGISTERED 19360122 STATE OF INDIANA PROFESSIONAL ENGINEER

Scale: AS NOTED

Designed By: K.J.P	Job Number: 1-94-3-1
Drawn By: JDW	Date: 8-16-94
Checked By:	Filename: STORDET.DWG

Sheet Number: DE-3