

**CAPITAL
TRACK**
ROLL HANDLING EQUIPMENT

Timeless Technology™

INSTALLATION INSTRUCTIONS

Low Profile Track System

CAPITAL TRACK COMPANY
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Capital Track Company

INSTALLATION INSTRUCTIONS

Low Profile Track System

1. Remove any trench debris and sweep out trenches.
2. Install and grout Transfer Car rails (See Press Manufacturer's Transfer Pit Drawing).
3. Install Pit Switch Activator Cam on Transfer Car (if used). Refer to Capital Track Drawing #ID-6 'Pit Switch Cam Installation Instruction'.
4. Install Transfer Car on rails.
5. Locate turntable centerlines using press centerline and transfer pit load position center line (See Press Manufacturer's Reel Room Plan Drawing).
6. After finding turntable centerlines lower turntables into position. All outer Turntable rings are marked as a matched set. Care must be exercised not to mix outer rings and turntables (See Capital Track Drawing #ID-4, illustration 'A').
7. Using Jack Bolts provided by Capital Track, level turntables flush with reel room floor (Capital Track Drawing #ID-4).
8. Recheck turntable centerlines.
9. Starting with the straight track piece # "1A", caulk or duct tape all flat plate on bottom of all straight track to prevent grout inclusions into track system. Remove 1/4" x 1 1/2" flat shipping bars. Mount leveling steel provided by others (Short pieces of angle or channel are used to straddle trench to suspend track. Refer to Manufacturer's Reel Room Plan Drawing).
10. Remove turntable Jack Bolt **Nuts** only.
11. Lower straight track with leveling steel mounted into track trench over turntable Jack Bolts.
12. Measure centerline turntable to end of straight track for proper length. Match Capital Track numbers marked on all track pieces. Refer to Capital Track

Installation Drawing and Manufacturer's Reel Room Plan Drawing for proper lengths.

13. Using Jack Bolt Washers and Nuts, tighten straight track into position on turntables.
14. To insure that track does not move during installation or grouting, lag level steel to reel room floor.
15. Follow track installation drawing and install all track lengths in this same manner.
16. Pipe and wire transfer pit switches. Refer to Capital Track Drawing #ID-3 and Capital Track Wiring Diagram Drawing #ID-5.
17. Once track system is set, leveled and centered, mount outer turntable rings alternation 4 of the 8 bolts provided by Capital Track for removal later. Apply a substance to prevent grout from adhering to outer ring (Capital Track Drawing #ID-4).
18. Use foam concrete forming block out material and caulk to fill any areas where grout could seep into track system (provided by Capital Track as an option).
19. The track system can be grouted in 1 pour using the foam block out option or up to 3 pours depending on the forming method used in the turntable area (See Capital Track Drawing #ID-2). Concrete forming foam can be used for block-outs. Cut to shape and caulk all joints.
20. Once the system is grouted, allow grout to complete cure (approximately 28 days). Do not roll any heavy material or machinery over track as there is a potential of collapse. Always use a support plate when crossing track with heavy loads.
21. Paint Track System.
22. Should the optional forming foam by Capital Track not be purchased the installation time is directly proportional to the forming expertise of the grouting contractor.

NOTICE TO THE TRACK INSTALLER:

After placing the $\frac{3}{4}$ " diameter ball bearings in the turntable base pour a generous quantity of 10W30 oil over all of the bearings.

NOTICE TO REEL ROOM MAINTENANCE:

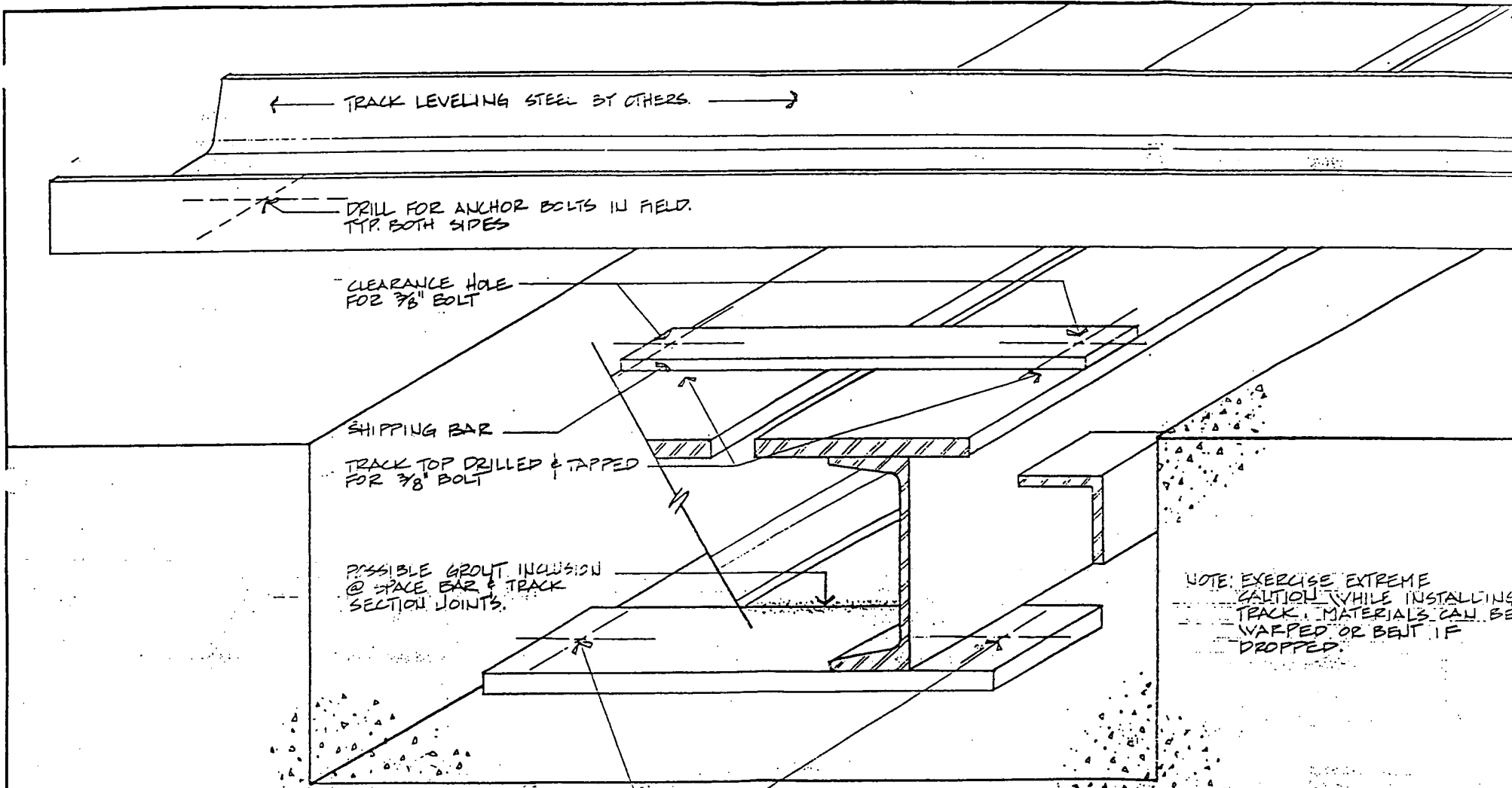
Periodically remove $\frac{3}{4}$ " ball bearings from the turntable, clean upper and lower bearing race. After replacing the ball bearings pour fresh 10W30 oil over the ball bearings.

Capital Track Company

INSTALLATION INSTRUCTIONS

Low Profile Turntable

1. All outer turntable rings are marked as a matched set. Care must be exercised not to mix outer rings and turntables. (See Capital Track Drawing #ID-4, illustration'A')
2. Coat the bottom of the outer ring to prevent grout from adhering to ring.
3. After grout has set (not necessarily cured) remove outer ring and perform the following:
 - a. Cut all tabs (8 total) which will separate the outer ring into four pieces. Grind smooth and parallel cut or grind a rounded relief on all corners of a 4-way turntable, three on a 3-way turntable and two on a 2-way turntable. Note: Alignment parallel and perpendicular to track is critical and must be accomplished at this stage. (See Capital Track Drawing #ID-4 illustrations "B" and "E")
 - b. Cut all tabs (8 total) out of the turntable top and cut or grind smooth and parallel. Cut or grind a rounded relief on all inside and outside corners.
 - c. Align each piece of outer ring parallel with the straight track. Center punch the straight track using the pre-drilled and counter sunk holes in the outer ring as a template. Drill and tap for bolts provided by Capital Track. In 3-way and 2-way situations use a Hilti (or similar) concrete anchor (See Capital Track Drawing #ID-4, illustration'a").
 - d. It is now possible to perform Preventative Maintenance without removing the entire turntable assembly. One plate can be removed (debris removal, lubrication, vacuuming of water, etc. can be performed).
4. Turntables located in a corner (2-Way) weld a small tab (stop) at the dead-end locations (See Capital Track Drawing #ID-4, illustration "C").
5. Install a similar stop at the dead-end location of 3-way turntables (See Capital Track #ID-4, illustration "C").

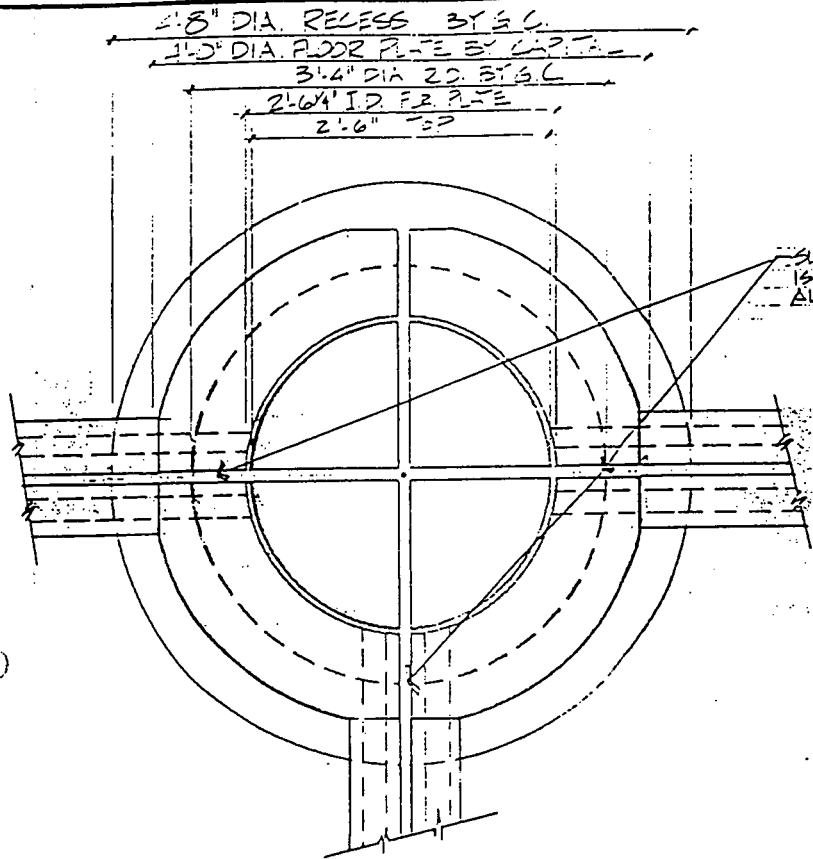


NOTE: EXERCISE EXTREME CAUTION WHILE INSTALLING TRACK. MATERIALS CAN BE WARPED OR BENT IF DROPPED.

ALTERNATE METHOD OF LEVELING. DRILL & TAP FOR 1/2" BOLT IN FIELD.

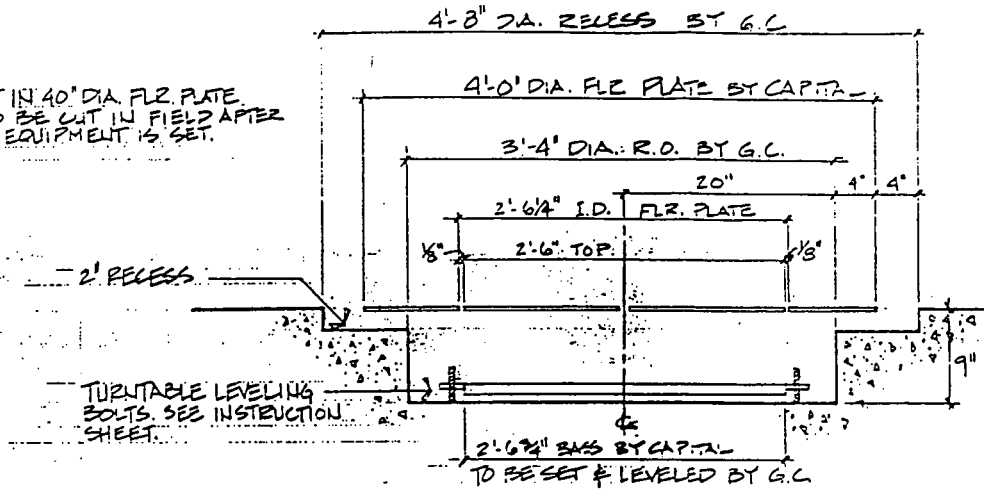
TOLERANCES (EXCEPT AS NOTED)	REVISIONS		
	NO.	DATE	BY
DECIMAL	1		
±	2		
FRACTIONAL	3		
±	4		
ANGULAR	5		
±	6		

CAPITAL TRACK COMPANY		
TYP. SECTION THROUGH TRACK		
DRAWN SAL	SCALE NONE	MATERIAL
CHK'D	DATE 2-23-98	DRAWING NO.
TRACED	APP'D	ID-1



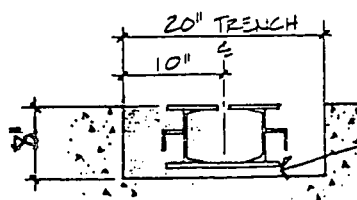
PLAN VIEW OF TURNTABLE INTERSECTION
SCALE: 1" = 1'-0"

SLOT IN 40" DIA. FLR. PLATE IS TO BE CUT IN FIELD AFTER ALL EQUIPMENT IS SET.



TYP. TRENCH FOR TURNTABLE
SCALE: 1" = 1'-0"

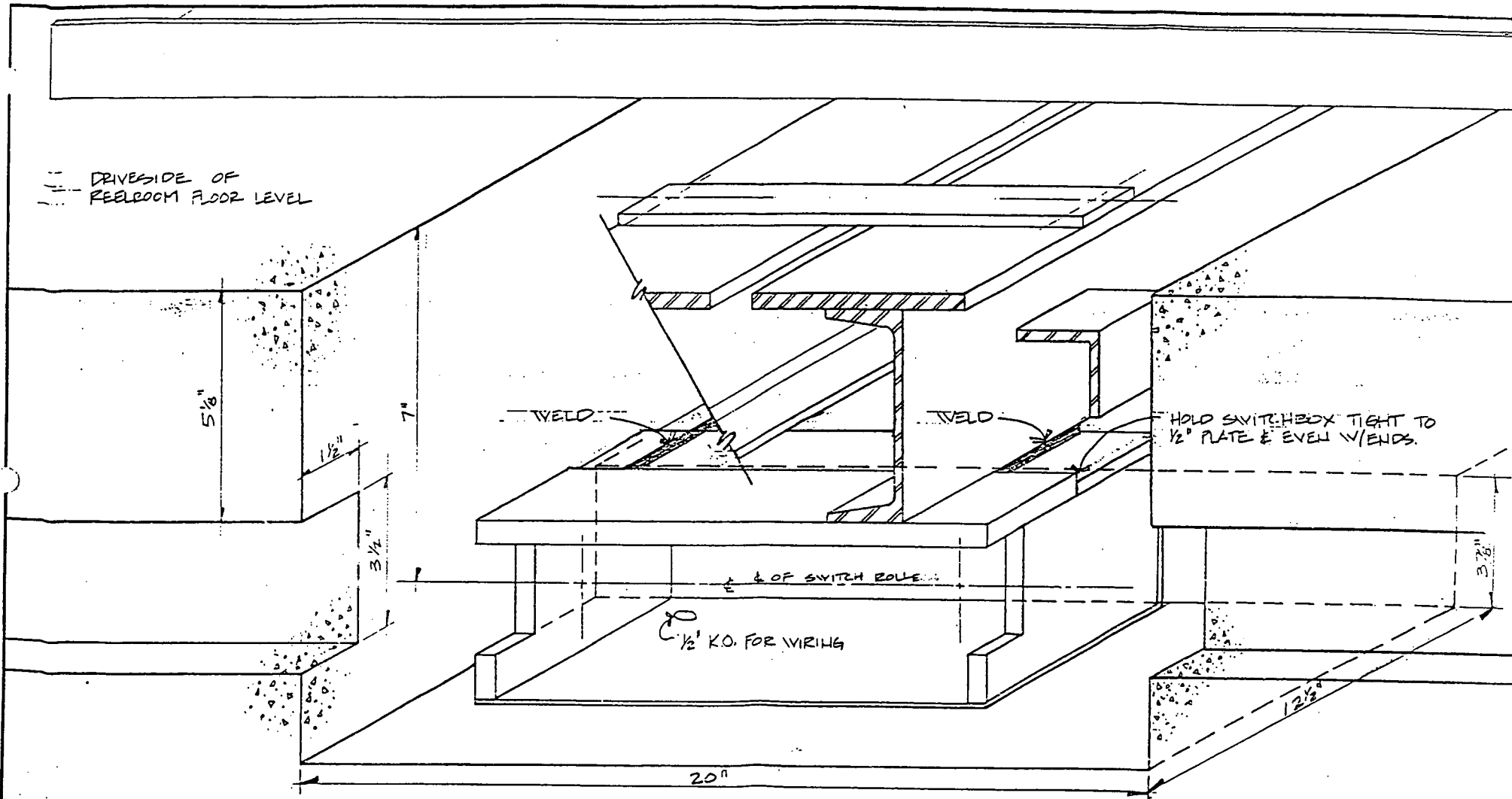
G.C. TO FILL WITH GROUT AFTER TRACK & TURNTABLE ARE SET & LEVELLED.



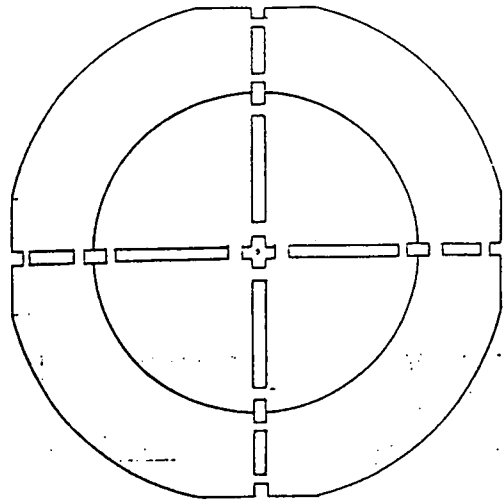
G.C. TO SHIM & LEVEL TRACK TO PROPER HGT. BEFORE GROUTING.

TYP. SECTION OF TRENCH & STRAIGHT TRACK
SCALE: 1" = 1'-0"

TOLERANCES (UNLESS AS NOTED)	REVISIONS			CAPITAL TRACK COMPANY		
	NO.	DATE	BY	TYP. LOW PROFILE TRACK SYS TRENCHES		
DECIMAL	1			DRAWN BY SAL	SCALE AS NOTED	MATERIAL
±	2					
FRACTIONAL	3			CHK'D	DATE 2-25-98	DRAWING NO. ID-2
±	4					
ANGULAR	5			TRACED		
±						

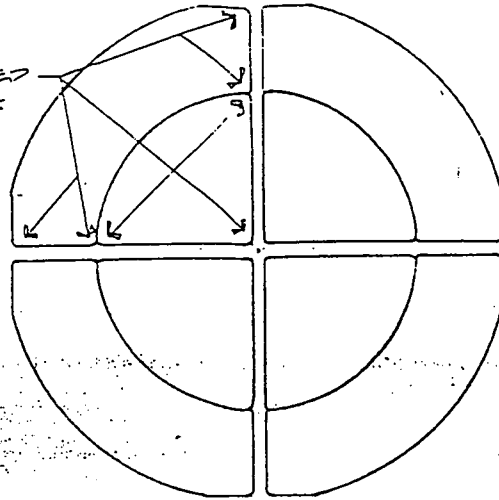


TOLERANCES (EXCEPT AS NOTED)	REVISIONS			DRAWN BY SAL	SCALE 1/4" = 1"	MATERIAL
	DECIMAL	NO.	DATE			
±	1					
±	2					
FRACTIONAL	3					
±	4			CHK'D	DATE 2-25-98	DRAWING NO. ID-3
ANGULAR	5			TRACED	APP'D	
±	6					



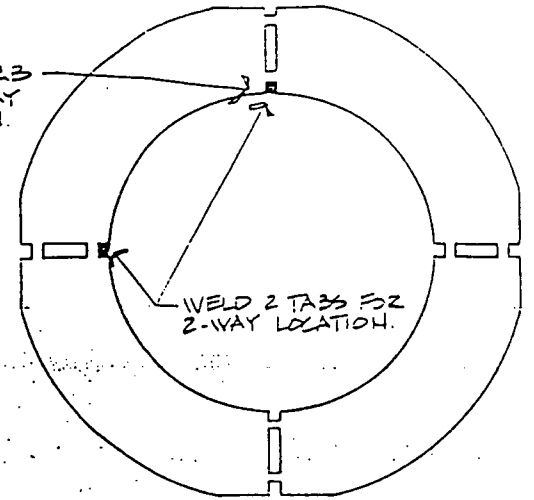
A

GRIND ROUNDED
RELIEF ON ALL
CORNERS.



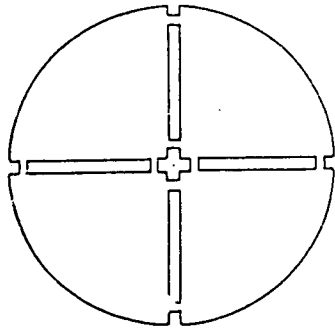
B

WELD TAB
FOR 3-WAY
LOCATION.



C

WELD 2 TABS FOR
2-WAY LOCATION.

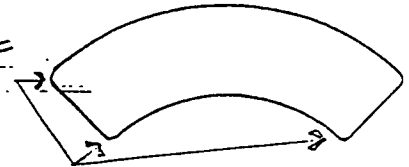


D



E

ROUNDED RELIEF
ON ALL CORNERS.

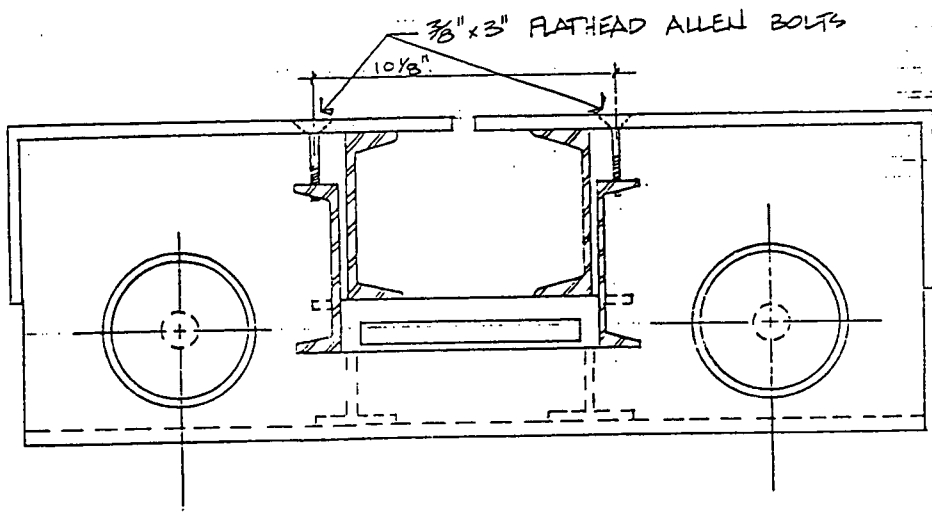


F

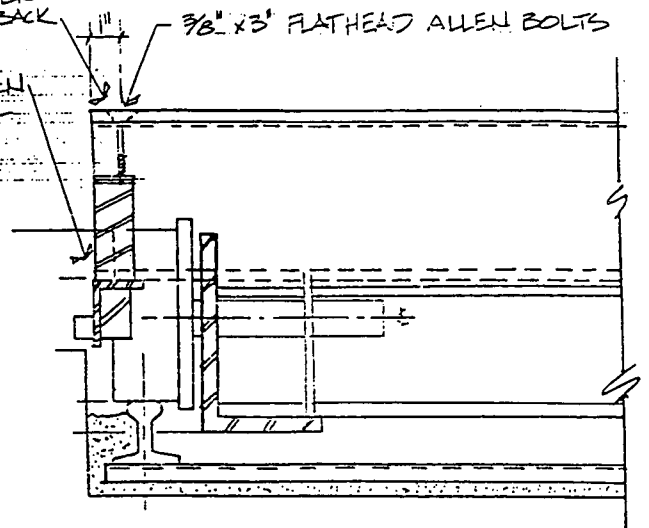
TOLERANCES (EXCEPT AS NOTED)	REVISIONS			CAPITAL TRACK COMPANT.		
	NO.	DATE	BY	TURNTABLE FLOOR PLATE		
DECIMAL	1			DRAWN BY	SCALE	MATERIAL
±	2			SAL	N/A	
FRACTIONAL	3			CHK'D	DATE	DRAWING NO.
±	4				2-25-98	ID4
ANGULAR	5			TRACED	APP'D	
±						

- 1) ALLEN BOLTS ARE SHIPPED ATTACHED TO CAM BUT NOT TIGHTENED, WHICH ALLOWS CAM ASSEMBLY TO TILT OUT OF THE WAY WHEN INSTALLING AND REMOVING TRANSFER TABLE FROM PIT.
- 2) FOR OPERATION, TIGHTEN ALLEN BOLTS. THE COUNTERSUNK HOLES SHOULD ALIGN CAM ANGLE EVEN WITH END OF TRANSFER TABLE CHANNELS.

- 1.) TO INSTALL OR REMOVE TRANSFER TABLE, LOOSEN BOLTS AND TILT CAM BACK
- 2.) HOLD CAM ANGLE EVEN WITH END OF CHANNEL AND TIGHTEN BOLTS



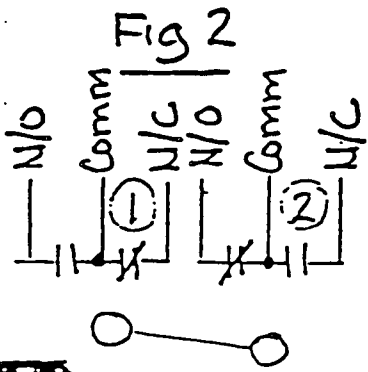
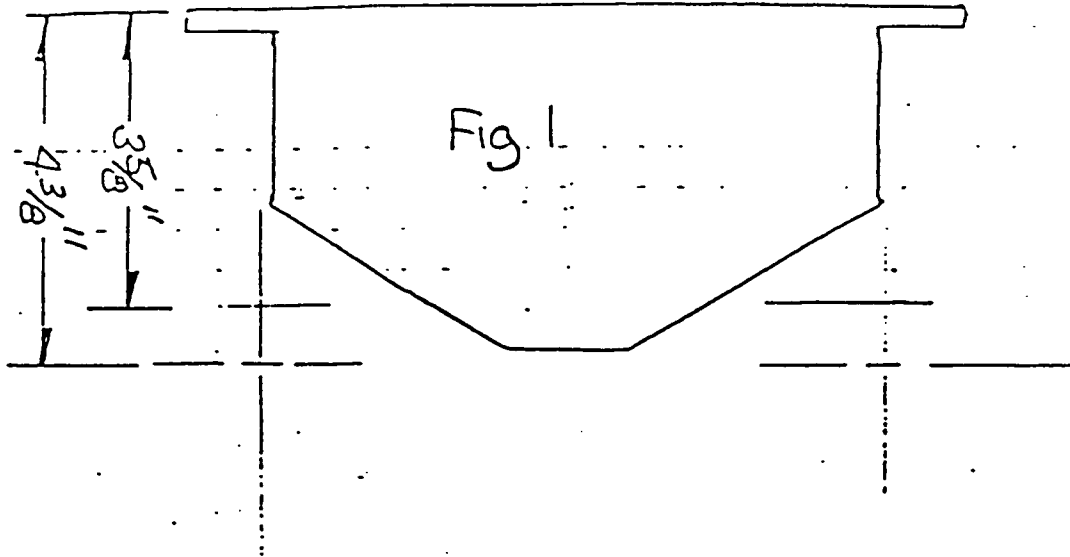
END VIEW



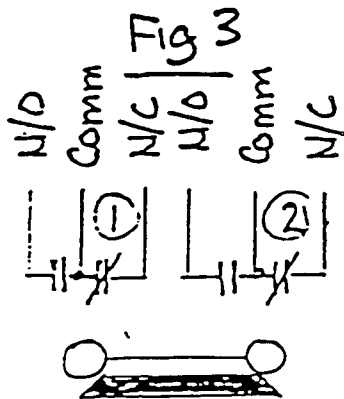
SECTION A-A

TOLERANCES (EXCEPT AS NOTED)	REVISIONS			CAPITAL TRACK COMPANY		
	NO.	DATE	BY			
DECIMAL	1			PIT SWITCH CAM		
±	2					
FRACTIONAL	3			DRAWN BY	SCALE	MATERIAL
±	4			SAL	H/A	
ANGULAR	5			CHK'D	DATE	DRAWING NO.
±	6			TRACED	2-25-98	ID-6
					APP'D	

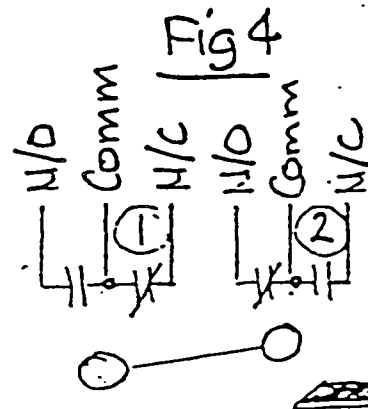
Transfer Car Switch



transfer car
left of
center



Centered



Transfer car
Right of
Center

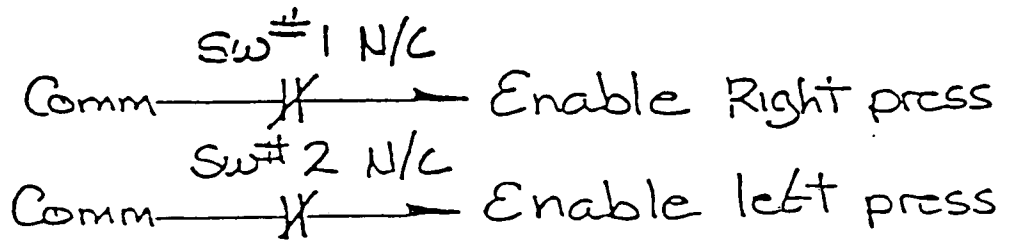
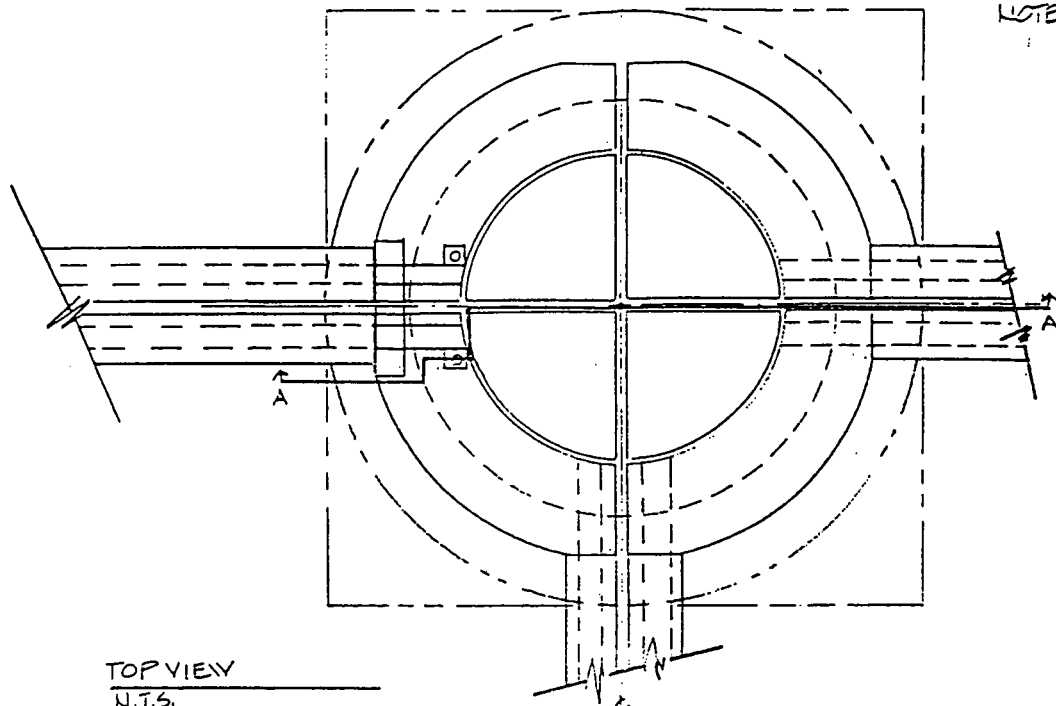


Fig 2 Right Enable

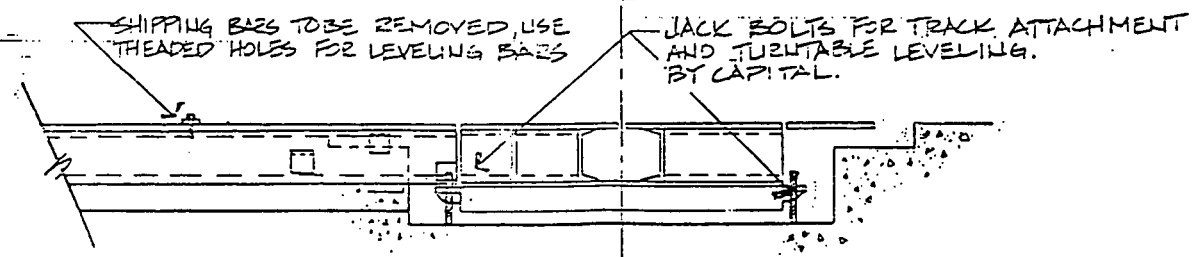
Fig 3 Left & Right Enable

Fig 4 Left Enable

NOTE: REFER TO INSTALLATION INSTRUCTIONS #5 THRU #17 FOR TURNABLE & TRACK INSTALLATION.

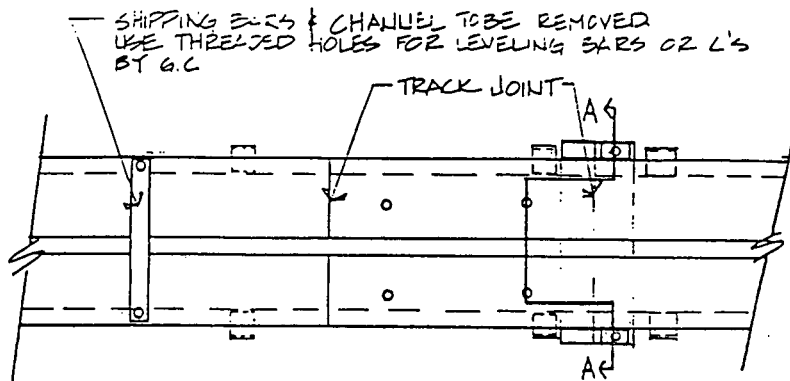


TOP VIEW
N.T.S.

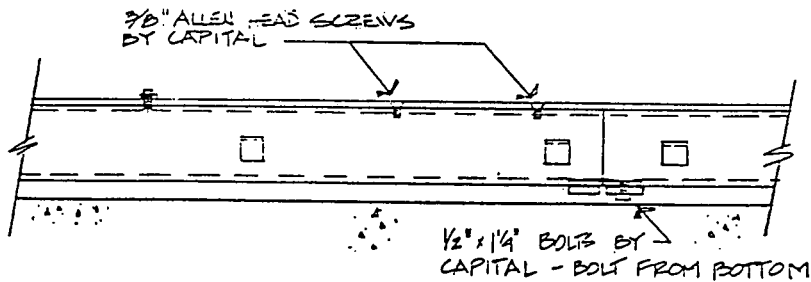


SIDE VIEW SECTION A-A
N.T.S.

TOLERANCES (UNLESS NOTED)	REVISIONS			CAPITAL TRACK CO.		
	NO.	DATE	BY	SCALE	MATERIAL	DRAWING NO.
DECIMAL	1			N.T.S.		TURNABLE & STRAIGHT TRACK
2	2					
FRACTIONAL	3			DRAWN BY		
2				SCALE		
ANGULAR	4			DATE	4-3-95	DRAWING NO.
2	5			TRACED	APP'D	11D-7



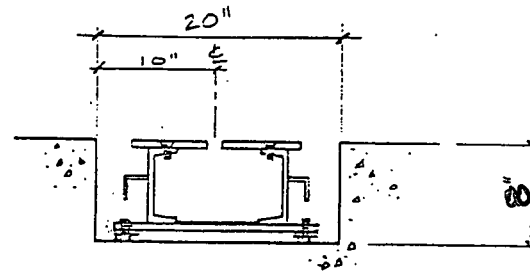
TOP VIEW
N.T.S.



SIDE VIEW
N.T.S.

NOTE: REFER TO INSTALLATION INSTRUCTION SHEETS & PHOTO'S

1. SLIDE TRACK PIECES TOGETHER & ATTACH $1/2 \times 1/4$ " BOLTS EA SIDE FROM THE BOTTOM UP. MAKE SURE TRACK IS STRAIGHT.
2. LEVEL TRACK USING SHIMS, AND 4" OR BETTER BARS OR L'S PROVIDED BY G.C. - USING THREADED HOLES ON TOP OF TRACK. (AFTER REMOVING SHIPPING BARS) AND SUSPEND TRACK ON PRESS ROOM FLOOR.
3. TIGHTEN ALLEN HEAD SCREWS AFTER STRAIGHTENING & LEVELING. MAKING SURE TOP OF TRACK FLATS ARE EVEN.



SECTION @ TRENCH A-A
N.T.S.

TOLERANCES (ACCEPT AS NOTED)	REVISIONS			CAPITAL TRACK CO.		
	NO.	DATE	BY			
DECIMAL	1			LOW PROFILE STEEL TRACK		
±	2					
FRACTIONAL	3			DRAWN BY SAL	SCALE N.T.S.	MATERIAL
±	4			CHECK'D	DATE 4-3-93	DRAWING NO
ANGULAR	5			TRACED	APP'D	1D-3

Capital Track Company

WARRANTY INFORMATION

Cast Iron Track Systems and Low Profile Track Systems

Warranty

Capital Track Company warrants the quality of materials to be free from significant defects and/or quality of workmanship; provided, however that this material warranty shall not extend beyond one calendar year from the date of invoice. We will not sustain any claim for improper installation, installation performed by unqualified persons, consequential damages, loss of time or labor charges or expense in making repairs or adjustments. Our liability is limited to defective material or defective repairs made in our plant, Columbus, Ohio.

Limitations on Warranty and Remedies.

The above warranty provisions constitute Capital Track Company's entire warranty with respect to the material. All other warranties, expressed or implied, including warranties of merchantability or fitness for purpose, are hereby expressly disclaimed by Capital Track Company.

Capital Track Company shall not be responsible for any consequential damages or for any direct or indirect loss (including economic loss), damage or delay caused by non-operation of the equipment, nor shall it be responsible for damage caused by negligence of others or by any act or omission of others, whether arising under contract or tort.

Conditions of Sale

All technical advice and recommendations are furnished by the seller gratis, and are believed by the seller to be reliable. They are intended for use by persons having skill and know how, at their own risk. Seller assumes no responsibility for damages incurred from their use by the buyer.

From and after the date of shipment, the buyer assumes all liability and expense because of injury, sickness or death sustained by any person, or damage to or destruction of property arising from the use of the equipment sold hereunder.

Custody & Control of the Equipment

Capital Track Company does not assume custody or control of the Equipment by reason of this sale. The Customer remains responsible for supervising the installation and use of the Equipment at all times and shall provide attendant personnel, warning signs and other controls and cautions as may be necessary or desirable to insure the safety of persons and property in or about the Equipment.

Indemnity Provisions

Each party, Customer and Capital Track Company, hereby agree to indemnify and hold the other harmless from and against any liability, claims and demands on account of injury to persons, including death resulting there from, and damage to proper arising out of the negligence or intentional acts of the party providing the indemnity or any of its employees or agents. However, neither party shall be obligated to indemnify the other party against the results of such party's own negligence or intentional acts.

Litigation Defense

Each party shall pay all attorneys' fees and all other expenses and promptly discharge any judgment arising from any cause for which such party has an obligation to indemnify the other hereunder, in the event litigation is instituted, alleging liability on the part of both Capital Track Company and the Customer, and in the further event it cannot be determined which party (if an) has liability, the Capital Track Company shall provide its own defense (including attorneys' fees and expenses) of such action, subject to reimbursement in the event it subsequently is determined that either party was solely liable for the injury or damage alleged in such litigation. Nothing contained herein regarding cross-indemnification by the parties shall preclude either (the "Moving Party"), whether Capital Track Company or the Customer, from asserting a third party claim against the other in the event the Moving Party believes, reasonably and in good faith that the other party is liable, in whole or in part, for the damage alleged in any litigation filed against the Moving Party.

Force Majeure

No failure or omission by Capital Track Company or the Customer in their performance of any obligation contained in the Agreement shall be deemed a breach thereof if the same arises from any cause beyond the control and without the fault of negligence of such party, including without limitation the following causes ("force majeure"): fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, epidemic, quarantine, restrictions, strike, lockout, disputes with workers, labor shortages, transportation shortages, embargoes or other failures or delays in transportation, exhaustion or unavailability or delays in the delivery of any

product or material necessary to performance hereof, unavailability or delays in the delivery transportation facility, governmental or other regulations, restrictions or orders; provided, however that the party claiming force majeure shall continue performance with the utmost dispatch whenever any such causes are removed. Any party claiming the defense of force majeure for any failure or omission hereunder shall give prompt notice, in writing, to the other party as soon as practical after the party claiming the defense of force majeure learns of such cause.

Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio without regard to its conflict of laws rules.