

Quality Control / Quality Assurance

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NCC

September 19, 2018

Quality Control - What is it?

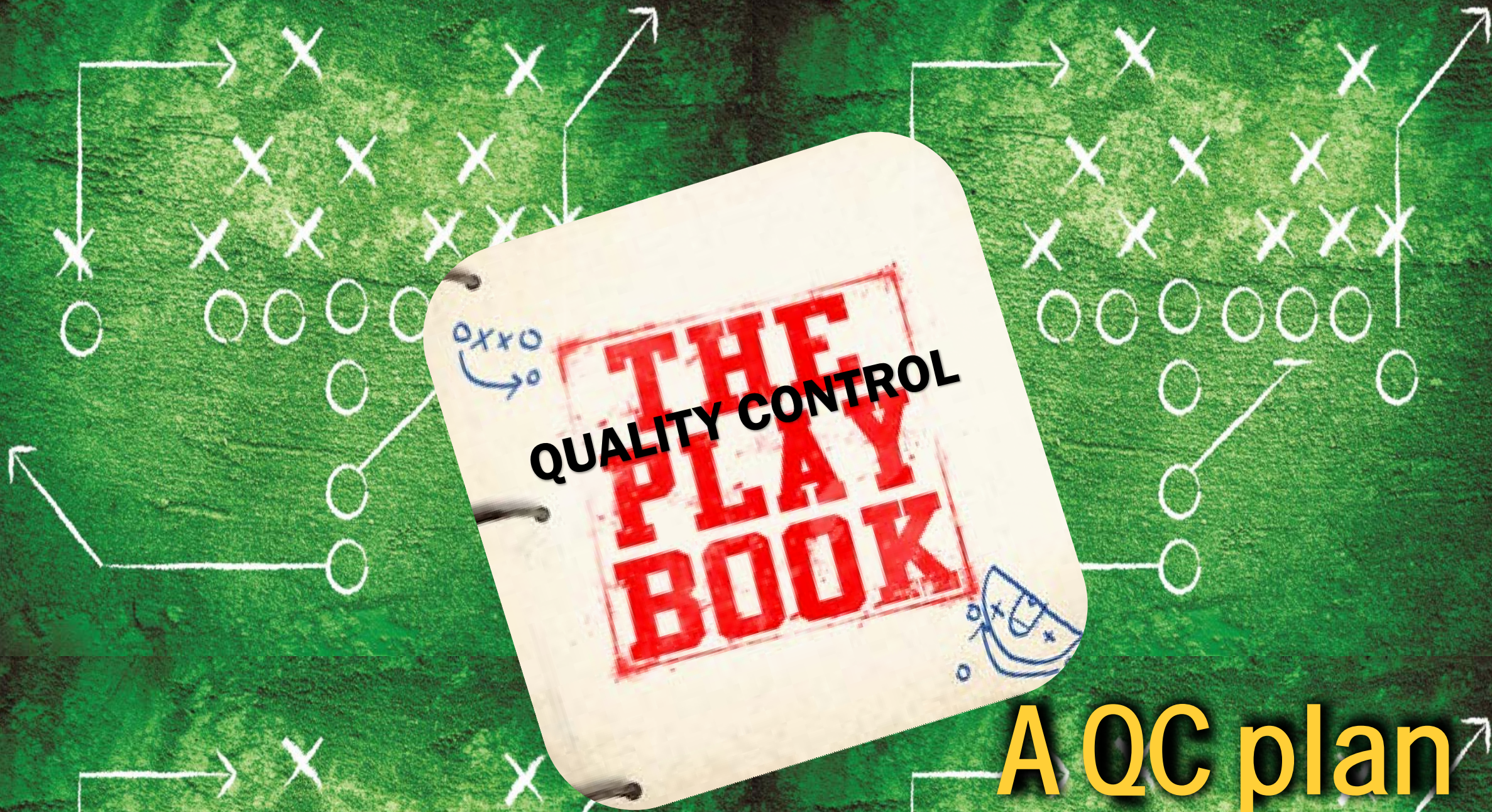
- QA or QC its all the same!
- A bunch of testing that slows down the project!
- If we keep running the test we are bound to get one to pass sooner or later!
- You have so much paper work that it has got to be good!
- The weather changes all the time, but we always do what we always do!

Defined Roles

- Quality Control – Contractor Responsibility
 - Construct the project so that it complies with the project plans and specifications
 - Develop, operate and communicate a comprehensive plan to complete the work
 - Adjust plan as necessary to maintain control of the construction process
 - Testing so that only complying materials are incorporated in the work
 - A test of a batch of concrete – Utilize, Modify or Reject
- Quality Assurance – Owner Responsibility
 - Pay for acceptable completed work
 - Be in position to witness
 - Confirm compliance with plans and specifications
 - Testing utilized to measure for level of PAYMENT
 - A test represents a subplot of concrete – not just one truck

Quality Control Plan/Program

- Section 100: lists contract requirements – specific certifications requirements, but not very specific on details
- Does a QC Plan = Testing Plan?
- Who writes the Plan? – supplier, testing company, estimator, project manager, foreman?
- Who approves the QC Plan? – Engineer?
- What does a good QC Plan look like? – Thick heavy book, color cover?
- Is it used? If yes, who uses it? – or is it stuck under the seat of the pickup



A QC plan

What is it? – A Plan of Action

- Many different plays – not all uses in every game
- Each play has specific purpose – down / distance / anticipated defense
- It organizes what each player does
- Must be memorized – might be the hardest thing a player must do
- They do dry runs to check the plan – Practice!

Note: It does not change the rule book

How is it written?

- Coaches & players study the opponent – what needs to be done to get the job done
- Covers what they expect to see
 - Running plays – block down field
 - Passing plays – drop back to block
 - Blitzes – must pick up speed
- Plays are designed for different weather conditions
 - Season starts in hot summer
 - Season concluded in very cold winter games
 - They even play in the rain!

How is it written?

- Players can contribute ideas on how to deal with their task
 - I can beat this guy
- The coach makes the final call.

How is it used?

- Play called in the huddle
- Each player must know his task and where to line up
- The team comes to the line
- Quarterback looks at the defense – Is it what he expects to see? does it fit the play as called?
 - If yes – run the play
 - If no - call an audible or call time out
 - Kickers count to 10 – check to see if everyone is there

Does the playbook ever change? – Yes!!!

- During a time-out
- During half time
- While you are on the sidelines – you see them with photos and I-pads
- Changes must be communicated to all of the players

Note: the rule book still does not change!

What about QC testing?

- Coaches in the press box are the QC testers
 - Did the players run the right way?
 - Did they do their job?
 - Who is getting beat?
- Have you seen follow up communication on the sideline?

What about QA Testing?

- The officials are the QA inspectors and testing personnel
- Did the ball cross the line? Yes / No
- Were players off-side?
- Did you move to the proper spot so you could see & make the right call?
- Instant replay – dispute resolution!

The officials do not play in the game – they are not supposed to be deciding who wins the game

Who is the opponent?

- Not the Engineer – he is the head referee
- The Project
 - Plans
 - Specifications
- The weather
- The calendar
- Sometimes it is history – we can't always do what we have always done

Is the NFL Playbook really used?

- Wall Street Journal – great sports section – January 14, 2015

Quick, Bill Belichick has a few questions for you: Describe the third player from the left on the Colts kickoff coverage team. Is he fast? Is he strong enough to run over you? Where did he play in college?

Woops, you took too long to answer. Belichick is now angry at you!

Is it used?

- They practice it every day – it is second nature to them
- Super Bowl Interception

Malcolm Butler: When they lined up I knew which play they were going to run and I knew the point that I needed to beat the receiver to.

Malcolm knew the play book of Seattle

Contractors

- Do you plan your work?
- Can someone else like an inspector tell that you do?
- Do job conditions change? They do in Michigan – can you call an audible?
- Do you train your people on the plan?

Agency

- Do you know what the rules are on your projects?
- Do you have a plan for inspection?
- Are you in a good position to make the proper call?

Final thoughts

- Working a plan is much more fun than getting kicked in the gut at every turn
- We do see many tough projects constructed in tight schedule windows so many are doing a nice job.
- QC Plans cover every aspect of the operations – Process Control is much more than just a testing plan